



Catalogue 1 STAUFF Clamps

## Germany

Walter Stauffenberg GmbH & Co. KG Im Ehrenfeld 4 58791 Werdohl

## www.stauff.com

STAUFF products and services are globally available through wholly-owned subsidiaries and a tight network of authorised distributors and representatives in all major industrial regions of the world.

You can find detailed contact information on the last two pages of this product catalogue or at www.stauff.com/contact.

Please note: Unless otherwise stated, all data and figures in this product catalogue are approximate values and are only valid as references, which are not binding (also in respect to any third parties' rights of protection) and thus do not release the customer / user from checking and testing the suitability of the products for the foreseen purposes. Therefore, data and figures can only be used in a limited sense for construction purposes.

The application of the products is beyond the control possibilities of the manufacturer and, therefore, is exclusively subject to the responsibility of the customer / user.

In the event that a liability is nevertheless considered, any compensation will be limited to the value of the goods supplied by the manufacturer and used by the customer / user. As a matter of course, the manufacturer guarantees the perfect quality of all products in accordance with the General Terms and Conditions of Business and Sale.

Subject to modifications due to the ongoing development and improvement of the products.

With the publication of this product catalogue, previous editions are no longer valid.

C



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Catalogue 1 **STAUFF Clamps** 

- Block Clamps
- Special Clamps
- Light Series Clamps
- Saddle Clamps
- U-Bolt Clamps
- Metal Clamps
- Construction Series



Catalogue 2 **STAUFF Connect** 

- Tube Connectors
- Assembly Tools and Devices



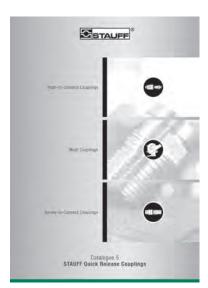
Catalogue 3 **STAUFF Flanges** 

- SAE Flanges
- Gear Pump Flanges



Catalogue 4 **STAUFF Hose Connectors** 

- Hose Connectors
- High-Pressure Hose Connectors



Catalogue 5 **STAUFF Quick Release Couplings** 

- Push-to-Connect Couplings
- Multi Couplings
- Screw-to-Connect Couplings



Catalogue 6 **STAUFF Valves** 

- Two-Way Ball Valves
- Multi-Way Ball Valves
- Flow Control and Check Valves
- Gauge Isolator Valves





Catalogue 7 **STAUFF Test** 

- Test Couplings
- Test Adaptors
- Test Hoses and Connectors



Catalogue 8 **STAUFF Diagtronics** 

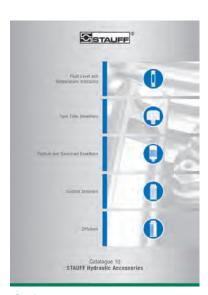
- Pressure Gauges
- Hydraulic Testers
- Oil Analysis Equipment



Catalogue 9

## **STAUFF Filtration Technology**

- Replacement Filter Elements
- Pressure Filters
- Return-Line Filters
- In-Line Filters
- Spin-On Filters
- Offline and Bypass Filters
- Filtration Systems



Catalogue 10

## **STAUFF Hydraulic Accessories**

- Fluid Level and Temperature Indicators
- Tank Filler Breathers
- Giant and Desiccant Air Breathers
- Suction Strainers
- Diffusors



For more than 50 years, the companies of STAUFF Group have been developing, manufacturing and distributing pipework equipment and hydraulic components for mechanical and plant engineering and for service and industrial maintenance.

In addition to mobile and industrial hydraulic machinery, typical applications also include commercial and special purpose vehicles, rail transportation and energy technology. Likewise, STAUFF products are used in marine, oil and gas applications and in the process, food and chemical industries.

The overall range currently includes about 50000 standard products as well as numerous special and system solutions according to customer's specifications or based on our in-house development.

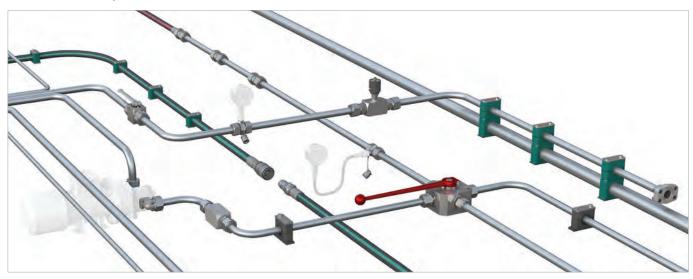
All STAUFF products undergo relevant testing in accordance with international regulations and are governed by the high standards of the in-house quality management system. Furthermore, many items have received certifications and approvals from various international institutes, organisations and authorities who have independently confirmed the quality and performance of the products.

Wholly-owned manufacturing, sales and service facilities in 18 countries and a tight global network of authorised distribution partners ensure high presence and service paired with a maximum of availability.



Quality Management – ISO 9001:2015 Environmental Management – ISO 14001:2015 Safety Management – ISO 45001:2018 Energy Management – ISO 50001:2018

## **STAUFF LINE** Components



With the seven dedicated STAUFF Line product groups

- STAUFF Clamps
- STAUFF Connect
- STAUFF Flanges
- STAUFF Hose Connectors
- STAUFF Quick Release Couplings
- STAUFF Valves
- STAUFF Test

from own, in-house development and manufacturing, the companies of the STAUFF Group provide a comprehensive range of components for fastening and connecting pipes, tubes and hoses for mobile and industrial hydraulic applications and many other industries.

In order to perfectly match each other, STAUFF Line products are designed and offered on a high, uniform level of quality. A large proportion of the range made from steel comes as standard with the premium STAUFF Zinc/Nickel surface coating, which is also optionally available for many of the other components.

This coating offers the most reliable surface protection far beyond the previous market standards – even after transport, handling and assembly of the components – and meets all current legal requirements.

If desired, Original Equipment Manufacturers can be supported with value-added services, from **technical consultation** to **pre-assembly**, **assembly and kitting** as well as **logistics services**:

- Support with the selection of suitable standard components and ordering options; provision of customised solutions according to customer's specifications or based on our in-house development from prototyping to large scale production
- Analysis and optimization of existing and design and developments of new systems aimed at increasing the efficiency and performance of machines and equipment and creating value for customers by reducing the total cost
- Pre-assembly, assembly and kitting of individual components to customer-specific system modules
- Individually coordinated procurement solutions
  (e.g. web shop and electronic data interchange) and
  supply models (e.g. from warehousing of customised
  components to Kanban logistics and just-in-time delivery
  of pre-fabricated system modules to the assembly lines of
  the customers) aimed at optimising material flows



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Aligned with the needs of the market, the product groups

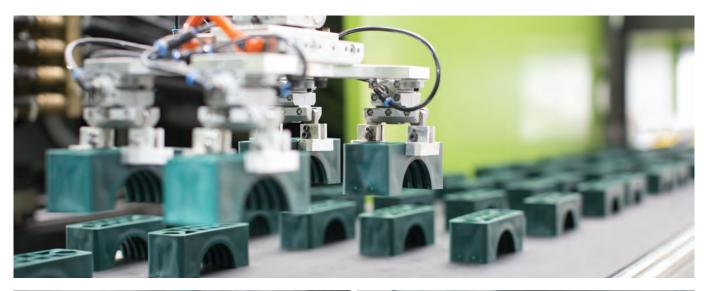
- STAUFF Test
- STAUFF Diagtronics
- STAUFF Filtration Technology
- STAUFF Hydraulic Accessories

include a comprehensive range of analogue and digital measuring equipment and devices, filtration systems and replacement filter elements as well as accessories for the construction of tanks, reservoirs, power packs and gear boxes in mobile and industrial hydraulics.

The offer is completed by relevant value-added services:

- Support with the selection of suitable components and ordering options; provision of customised solutions according to customer's specifications or based on our in-house development – from prototyping to large scale production
- Analysis of existing hydraulic circuits aimed at filtration systems, tank components and monitoring devices that perfectly match to the specific requirements, and developing integrated concepts to increase the efficiency and performance of machines and equipment
- Individually coordinated **procurement solutions** and **supply models**









## **STAUFF Clamps**

For more than 50 years, STAUFF Clamps symbolise quick and easy as well as secure installation of pipes, tubes, hoses, cables and other flexible and rigid components with outside diameters up to 1016 mm / 40.00 inch.

Their vibration and noise reducing features are appreciated as being an important contribution to environmental protection and occupational health and safety.

The processing of fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94) is only one of the many particular strengths of STAUFF.

STAUFF guarantees prompt service, even for customised solutions according to customer's specifications or based on our in-house development.

For selected types and series, independent certificates and approvals can be provided:

- American Bureau of Shipping
- Bureau Veritas
- Department of the Navy, New York
- Germanischer Lloyd
- Lloyd's Register of Shipping
- Registro Italiano Navale
- Technischer Überwachungsverein
- United States Coast Guard

For the finishing of the range of pipe, tube, hose and cable clamps as well as metal hardware in carbon steel, STAUFF relies on the STAUFF Zinc/Nickel surface coating which has proven successful for many years. It provides reliable surface protection – even after transport, handling and assembly - and meets all current legal requirements.

Versions in stainless steel V2A and V4A are generally available from stock. Alternative materials and surfaces are available on request.

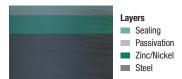








## **STAUFF Zinc/Nickel Coating**



With at least 1200 hours resistance against red rust, the STAUFF Zinc/Nickel surface coating offers excellent surface protection – even after transport, handling and assembly. This was confirmed by testing in the salt-spray chamber according to DIN EN ISO 9227.

Users across all industries and applications benefit from sophisticated technology, which has been developed for and used by the very demanding automotive industry for many years now and that is already the proven standard for a large proportion of STAUFF components since 2007.

- At least 1200 hours resistance to red rust / base metal corrosion under practical conditions in the salt-spray chamber according to DIN EN ISO 9227
- White rust occurs only by way of a slight grey haze
- Surpassing the requirements of the corrosion protection class K5 as defined by the VDMA, the German Engineering Association (360 hours resistance to white rust / 720 hours resistance to red rust)
- Free of hexavalent chrome Cr(VI)
- ELV compliant according to 2000/53/EC (End of Life Vehicles Directive)
- REACH compliant according to 1907/2006/EC (Registration, Evaluation, Authorisation and Restriction of Chemicals)
- RoHS compliant according to 2002/95/EC (Restrictions of the Use of Hazardous Substances)

- Appealing colour scheme with a bright semi-gloss surface finish – comparable to Stainless Steel
- Significantly reduced tendency to corrosion by contact with other metals (such as Aluminium and Stainless Steel)
- Improved abrasion resistance due to the ductility / plastic deformability of the coating
- Little to no risk of triggering allergies nickel release is down to only a fraction of the statutory limits relating to objects which come into direct and prolonged contact with the skin (independent results of the reference test method according DIN EN 1811 are available on request)
- Good paint adhesion properties
- Resistance against all commonly used hydraulic media





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- Also suitable for mobile devices

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\* may require a suitable app



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## www.stauff.com

With the STAUFF Digital Platform available at www.stauff.com, commercial customers and users of STAUFF products can not only inform themselves in all detail about the 50000 components typically available from stock, but also directly purchase these online without complex registration.

General information about the companies of STAUFF Group, latest business and product news as well as complete global contact details also be available.

## Main Functionalities of the STAUFF Digital Platform:



## Around the clock

Check stock availability and pricing for STAUFF products in real time



## **Cross references**

Search by article designations of other manufacturers / suppliers



## Live chat

Get directly in touch with the STAUFF customer service and sales team



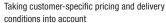
## **CAD** database

Download 3D models and 2D drawings for STAUFF products

## Advantages as a Registered User of the STAUFF Digital Platform:



## Purchase STAUFF products





## Ordering w/o searching

Quick ordering by entering article number, quantity and requested delivery date



## File upload

Direct upload of orders with multiple positions in CSV or Excel file format



## Notepad function

Create project lists to save interesting products for later

## www.stauff.com/cad

Immediate access to and free download of 3D models and 2D drawings for a growing number of STAUFF products

## www.filterinterchange.com

Online database for the quick and easy identification and interchange of almost all common brands and types of replacement filter elements

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www.linkedin.com/company/stauff



## Youtube

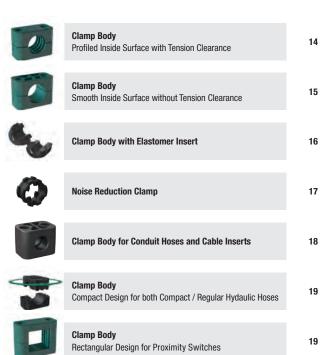
www.youtube.com/stauffgroup



## **STAUFF Newsletters**

Automatic e-mail notifications about latest news from STAUFF www.stauff.com/newsletter





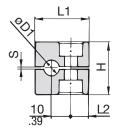


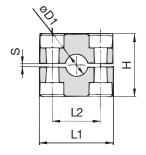
-	Weld Plate SP	20		Cover Plate DP	28
-	Elongated Weld Plate SPV	20	1	Hexagon Head Bolt for use with Cover Plate DP  AS	28
-	Twin Weld Plate DSP	21	0	Safety Washer (DIN 93) SI	29
2 33	Group Weld Plate RAP	21	_	Safety Washer (DIN 463) SI	29
B 0	Angled Weld Plate WSP	22	1	Socket Cap Screw	30
00	BSP	22	1	Slotted Head Screw	30
	Clamp Body for Multi-Group Weld Plates	23	1	Hexagon Head Bolt for use with Insert ES / EP  AS	30
030303	Multi-Group Weld Plate  RAP-MGR	23	9	Insert ES / EP	30
	Hexagon Rail Nut	24	-	Safety Locking Plate SIG	31
	Mounting Rail TS	24	1	Stacking Bolt AF	31
	Fastening Adaptor SWG-MRA	25		Clamp Assemblies	32
E.	Channel Rail Adaptor CRA	26			

## Clamp Body - Profiled Design

## **Profiled Inside Surface with Tension Clearance**







**STAUFF Group 1** 

**STAUFF Group 1A to 8** 

## **Ordering Codes**

Clamp Body	*1*06-*PP
Clamp Body, STAUFF Group 1A	*1*06A-*PP

One clamp body is consisting of two clamp halves.

* STAUFF Group	1
* Exact outside diameter Ø D1 (mm)	06
* Material code (see below)	PP

## **Standard Materials**



## Polypropylene Colour: Green





Polypropylene Colour: Black Material code: PP-BK



Polyamide Colour: Black Material code: PA



Thermoplastic Elastomer (87 Shore-A) Colour: Black Material code: SA87



Aluminium Colour: Self-Colour

Material code: AL (STAUFF Group 1A to 6)

See pages 178 / 179 for material properties and technical

## **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 180 / 181 for material properties and technical information.

## **Product Features**

- Proven, tested and trusted product in various markets
- Recommended for the safe installation of rigid pipes and tubes
- Available for all commonly used pipe and tube outside diameters
- Environmental protection due to vibration/noise reducing design
- Excellent weathering resistance, even under extreme conditions

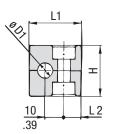
Group		Outoido	Diameter	Nominal	Doro	Ordering Codes	Dimon	oiono				
		Outside Diameter Pipe / Tube		INUIIIIIai	Copper Tube	(2 Clamp Halves)	(mm/in)					
뜰		Ø D1	шос	Pipe	ASTM B88	(2 olamp riaivos)	( / III)					
STAUFF	N	(mm)	(in)	(in)	(in)	(** = Material)	L1	L2	Н	S min.	Width	
		6	()	()	()	106-**				0	1114411	
		6,4	1/4			106.4-**						
		8	5/16			108-**	28	9,5	27	0,4	30	
1	0	9,5	3/8		1/4	109.5-**	1.10	.37	1.06	.02	1.18	
		10	0,0	1/8		110-**						
		12		.,,		112-**						
		6				106A-**						
		6,4	1/4			106.4A-**						
		8	5/16			108A-**	37	20	27	0,4	30	
1A	1	9,5	3/8		1/4	109.5A- <b>**</b>	1.46	.79	1.06	.02	1.18	
		10		1/8		110A- <b>**</b>						
		12				112A- <b>**</b>						
		12,7	1/2		3/8	212.7-**						
		13,5		1/4		213.5-**						
		14		., .		214-**						
2	2	15				215-**	42	26	33	0,6	30	
_	_	16	5/8		1/2	216-**	1.65	1.02	1.30	.02	1.18	
		17,2	0,0	3/8	.,,_	217.2-**						
		18		0,0		218-**						
		19	3/4			319-**						
		20	0/1			320-**						
		21,3		1/2		321.3-**	50	33	36	0,6	30	
3	3	22	7/8	1/2	3/4	322-**	1.97	1.30	1.42	.02	1.18	
		25	170		0/ 1	325-**	1101	1.00		102		
		25,4	1			325.4-**						
		26,9	'	3/4		426.9-**						
		28		0/ 4		428-**						
4	4	28,6			1	428.6-**	59	40	42	0,6	30	
	ļ ·	30				430-**	2.32	1.57	1.65	.02	1.18	
		32				432-**						
		32	1-1/4			532-**						
		33,7	1 1/1	1		533.7-**						
		35			1-1/4	535-**						
5	5	38	1-1/2		, .	538-**	71	52	58	0,8	30	
		40	/ _			540-**	2.80	2.05	2.28	.03	1.18	
		41,3			1-1/2	541.3-**						
		42		1-1/4		542- <b>**</b>						
		44,5	1-3/4	1		644.5-**						
		48,3		1-1/2		648.3-**	86	66	66	0,8	30	
6	6	50,8	2			650.8-**	3.39	2.60	2.60	.03	1.18	
		54	_		2	654-**	2.20					
		57,2	2-1/4		_	757.2-**						
		60,3	, .	2		760.3-**						
		63,5	2-1/2	_		763.5- <b>**</b>	121	94	93	0,8	30	
7	7	70	2-3/4			770- <b>**</b>	4.76	3.70	3.66	.03	1.18	
		73	2 0/ 7	2-1/2 (ΔN	SI B 36-10)	773-**	0	0.70	0.50	.03		
		76,1	3		I EN 10220)	776.1-**						
		88,9	J	3	* LIN 10220)	888.9-**	147	120	118	0,8	30	
8	8	102	4	3-1/2		8102L-**	5.79	4.72	4.65	.03	1.18	
		102	7	U-1/Z		0102L-44	0.10	7.12	4.00	.00	1.10	

Additional outside diameters are available upon request. Please contact STAUFF for further information.

Dimensional drawings: All dimensions in mm (in).







## **STAUFF Group 1**

## L2 L1

**STAUFF Group 1A to 8** 



**Smooth Inside Surface without Tension Clearance** 

Clamp Body • Type H

## **Ordering Codes**

Clamp Body \*1\*06-\*PP-H
Clamp Body, STAUFF Group 1A \*1\*06A-\*PP-H

One clamp body is consisting of two clamp halves.

* STAUFF Group	1
* Exact outside diameter Ø D1 (mm)	06
* Material code (see below)	PP-H
Material code (see below)	

## **Standard Materials**









See pages 178 / 179 for material properties and technical information.

## **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 180 / 181 for material properties and technical information.

## **Product Features**

- Proven, tested and trusted product in various markets
- Recommended for the safe installation of hoses and cables
- Chamfered edges avoid damaging of the hoses and cables
- Available for all commonly used hose and cable outside diameters
- Excellent weathering resistance, even under extreme conditions

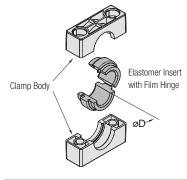
Group		Outside Dian	neter	Ordering Codes	Dimensions				
STAUFF		Hose		(2 Clamp Halves)	(mm/in)				
Ŋ.	z	Ø D1							
S	DIN	(mm)	(in)	(**-H = Material)	L1	L2	H	Width	
		6		106-**-H					
		6,4	1/4	106.4- <b>**</b> -H					
1	0	8	5/16	108-**-H	28	9,5	26	30	
	0	9,5	3/8	109.5- <b>**</b> -H	1.10	.37	1.02	1.18	
		10		110- <b>**</b> -H					
		12		112- <b>**</b> -H					
		6		106A-**-H					
		6,4	1/4	106.4A- <b>★★</b> -H					
1A	1	8	5/16	108A-**-H	37	20	26	30	
IA	'	9,5	3/8	109.5A- <b>★</b> ★-H	1.46	.79	1.02	1.18	
		10		110A-**-H					
		12		112A-**-H					
		12,7	1/2	212.7-**-H					
		13,5		213.5-**-H					
		14		214-**-H	42	26	32	30	
2	2	15		215-**-H	1.65	1.02	1.26	1.18	
		16	5/8	216-**-H	1.00	1.02	1.20	1.10	
		17,2		217.2-**-H					
		18		218-**-H					
		19	3/4	319- <b>**</b> -H					
		20		320- <b>**</b> -H					
3	3	21,3		321.3-**-H	50	33	35,5	30	
3	3	22	7/8	322- <b>**</b> -H	1.97	1.30	1.40	1.18	
		25		325- <b>**</b> -H					
		25,4	1	325.4- <b>**</b> -H					
		26,9		426.9- <b>**</b> -H					
4	4	28		428- <b>★★</b> -H	59	40	41,5	30	
4	4	30		430- <b>**</b> -H	2.32	1.57	1.63	1.18	
		32		432- <b>**</b> -H					
		32	1-1/4	532- <b>**</b> -H					
		33,7		533.7- <b>**</b> -H					
5	5	35		535- <b>**</b> -H	71	52	56,5	30	
J	J	38	1-1/2	538- <b>**</b> -H	2.80	2.05	2.22	1.18	
		40		540- <b>**</b> -H					
		42		542- <b>**</b> -H					
		44,5	1-3/4	644.5- <b>**</b> -H					
6	6	48,3		648.3- <b>**</b> -H	86	66	64,5	30	
U	U	50,8	2	650.8- <b>**</b> -H	3.39	2.60	2.54	1.18	
		54		654- <b>**</b> -H					
		57,2	2-1/4	757.2- <b>**</b> -H					
		60,3		760.3- <b>**</b> -H					
7	7	63,5	2-1/2	763.5- <b>**</b> -H	121	94	92	30	
'	1	70	2-3/4	770- <b>**</b> -H	4.76	3.70	3.62	1.18	
		73		773- <b>**</b> -H					
		76,1	3	776.1- <b>**</b> -H					
0	0	88,9		888.9-**-H	147	120	116	30	
8	8	102	4	8102L-**-H	5.79	4.72	4.57	1.18	

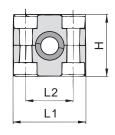
Additional outside diameters are available upon request. Please contact STAUFF for further information.



## **Clamp Body with Elastomer Insert Type RI**







Ordering Codes					
Clamp Assembly *4*	06-*PP-R				
One assembly is consisting of one clamp bod	y and one insert.				
* STAUFF Group  * Exact outside diameter Ø D (mm)  * Material code (see below)  * Insert  * # = Special Number (only STAUFF Group)	4 06 PP R 410053				
Clamp Body *4-*PP-R					
One clamp body is consisting of two clamp	halves.				
* STAUFF Group * Insert * # = Special Number (only STAUFF Group)	4 R 410053				
Elastomer Insert *RI-*06-*4/	4S-*SA73				
* Elastomer Insert  * Exact outside diameter Ø D (mm)  * STAUFF Group 4 (DIN)  5 (STAUFF)  6 (DIN)  6 (STAUFF)	RI 06 4/4S 5 6/5S 6				
* Material code (see below)	SA73				

Group	up Outside Diameter Pipe / Tube / Hose		Ordering Codes (: Clamp Assembly	<b>★</b> = Material) Clamp Body	Insert *	Dimensions (mm/in)					
STAUFF		Ø D		(Clamp Body +							
ST	N O	(mm)	(in)	Insert)	(2 Clamp Halves)		L1	L2	Н	Width	
		6		406- <b>≭</b> -R		RI-06-4/4S-*					
		8	5/16	408- <b>∗</b> -R		RI-08-4/4S-*					
		10		410-*-R		RI-10-4/4S-*					
		12		412-*-R		RI-12-4/4S-*					
		12,7	1/2	412.7-*-R		RI-12.7-4/4S-*	59	40	41.2	30	
4	4	14		414-*-R	4- <b>≭</b> -R	RI-14-4/4S-*	2.32	1.57	1.62	1.18	
		15		415- <b>≭</b> -R		RI-15-4/4S-*	2.32	1.07	1.02	1.10	
		16	5/8	416-*-R		RI-16-4/4S-*					
		17,2		417.2-*-R		RI-17.2-4/4S-*					
		18		418-*-R		RI-18-4/4S-*					
		19	3/4	419-*-R		RI-19-4/4S-*					
		20		520- <b>≭</b> -R-#		RI-20-5-*-#					
		21,3		521.3-*-R-#		RI-21.3-5-*-#					
		22	7/8	522- <b>∗</b> -R-#		RI-22-5-*-#					
_		25		525- <b>≭</b> -R-#	E D	RI-25-5-*-#	71	52	67	30	
5		26,9		526.9-*-R-#	5- <b>≭</b> -R-#	RI-26.9-5-*-#	2.80	2.05	2.64	1.18	
		28		528- <b>≭</b> -R-#		RI-28-5-*-#					
		30		530- <b>≭-</b> R-#		RI-30-5-*-#					
		32	1-1/4	532- <b>≭</b> -R-#		RI-32-5-*-#					
		20		620- <b>≭</b> -R		RI-20-6/5S-*					
		21,3		621.3-*-R		RI-21.3-6/5S-*					
		22	7/8	622- <b>≭</b> -R		RI-22-6/5S-*					
6	6	25		625- <b>≭</b> -R	6- <b>≭</b> -R	RI-25-6/5S-*	86	66	64,5	30	
0	0	26,9		626.9- <b>*</b> -R	0- <b>주</b> -N	RI-26.9-6/5S-*	3.39	2.60	2.54	1.18	
		28		628- <b>≭</b> -R		RI-28-6/5S-*					
		30		630- <b>≭</b> -R		RI-30-6/5S-*					
		32	1-1/4	632- <b>∗</b> -R		RI-32-6/5S-*					
		35		635- <b>*</b> -R-#		RI-35-6-*-#					
c		38		638- <b>*</b> -R-#	C at D #	RI-38-6-*-#	86	66	65	30	
6		40		640- <b>*</b> -R-#	6- <b>≭</b> -R-#	RI-40-6-*-#	3.39	2.60	2.56	1.18	
		42		642- <b>*</b> -R-#		RI-42-6-*-#					

## **Standard Materials**



## Polypropylene Colour: Black Material code: PP-R

\* # = Special Number (only STAUFF Group)



## Polyamide Colour: Black Material code: PA-R



Elastomer Insert Thermoplastic Elastomer (73 Shore-A) Colour: Black

Material code: SA73

See pages 178 / 179 for material properties and technical information.

## **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 180 / 181 for material properties and technical information.

\* Elastomer Inserts for Standard Series clamp bodies, STAUFF Group 4 also fit into Heavy Series clamp bodies, STAUFF Group 4S. Elastomer Inserts for Standard Series clamp bodies, STAUFF Group 6 also fit into Heavy Series clamp bodies, STAUFF Group 5S.

Additional outside diameters are available upon request. Please contact STAUFF for further information.

## **Product Features**

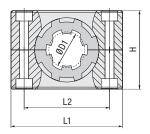
410053

- Proven, tested and trusted product in various markets
- Either for the extra vibration/noise reducing installation of pipes and tubes or the extra gentle installation of hoses and cables
- Available for all commonly used outside diameters
- Excellent weathering resistance, even under extreme conditions



## Noise Reduction Clamp Type NRC





Grou	oup Outside Diameter		Ordering Codes (*	= Material)		Dime	Dimensions					
Щ.		Pipe / Tube		Tube Clamp Assembly Clamp Body NRC Insert			(mm/in)					
STAUFF	_	Ø D1		(Clamp Body +								
ST	NI O	(mm)	(in)	NRC Insert)	(2 Clamp Halves)	(2 Insert Halves)	L1	L2	Н	Width		
		6		206- <b>≭</b> -NRC		RI-NRC-6-2-*						
		8	5/16	208- <b>≭</b> -NRC		RI-NRC-8-2-*	42	26	32	30		
2	2	10		210- <b>≭</b> -NRC	2-*-RI-S/NRC	RI-NRC-10-2-*	1.65	1.02	1.26	1.18		
		12		212-*-NRC		RI-NRC-12-2-*	1.00	1.02	1.20	1.10		
		12,7	1/2	212.7-*-NRC		RI-NRC-12.7-2-*						
		14		314- <b>≭</b> -NRC		RI-NRC-14-3- <b>★</b>	50	33	35.5	30		
3	3	15		315- <b>≭</b> -NRC	3-*-RI-S/NRC	RI-NRC-15-3-*	1.97	1.30	1.40	1.18		
		16	5/8	316- <b>≭</b> -NRC		RI-NRC-16-3-*	1.37	1.00	1.40	1.10		
4	4	18		418- <b>≭</b> -NRC	4-*-RI-S/NRC	RI-NRC-18-4-*	59	40	41,5	30		
4	4	20		420- <b>★</b> -NRC	4- <b>ক</b> -ni-3/Nnc	RI-NRC-20-4-*	2.32	1.57	1.63	1.18		
		21,3		521.3-*-NRC		RI-NRC-21.3-5-*						
		22	7/8	522- <b>≭</b> -NRC		RI-NRC-22-5-*						
		25		525- <b>≭</b> -NRC	5-*-RI-S/NRC	RI-NRC-25-5-*	71	52	56,5	30		
5	5	26,9		526.9-*-NRC		RI-NRC-26.9-5-*	2.80	2.05	2.22	1.18		
		28		528- <b>≭</b> -NRC		RI-NRC-28-5- <b>≭</b>	2.00	2.00	2.22	1.10		
		30		530- <b>★</b> -NRC		RI-NRC-30-5-*						
		32	1-1/4	532- <b>≭</b> -NRC		RI-NRC-32-5-*						
		33,7		633.7-*-NRC		RI-NRC-33.7-6-★						
		35		635- <b>≭</b> -NRC		RI-NRC-35-6- <b>≭</b>	86	66	64,5	30		
6	6	38	1-1/2	638- <b>≭</b> -NRC	6- <b>≭</b> -RI-S/NRC	RI-NRC-38-6-*	3.39	2.60	2.54	1.18		
		40		640- <b>≭</b> -NRC		RI-NRC-40-6- <b>≭</b>	0.00	2.00	2.04	1.10		
		42		642-*-NRC		RI-NRC-42-6-*						
		45,5		745.5M-*-NRC		RI-NRC-45.5-7M- <b>★</b>						
		48		748M-*-NRC		RI-NRC-48-7M-*						
		51		751M-*-NRC		RI-NRC-51-7M-*						
7M		53,4		753.4M-*-NRC	7M-*-RI-S/NRC	RI-NRC-53.4-7M-*	123	100	100	40		
/ IVI		57		757M- <b>≭</b> -NRC	/W-4-111-3/WIIG	RI-NRC-57-7M-*	4.84	3.94	3.94	1.57		
		60		760M- <b>*</b> -NRC		RI-NRC-60-7M-*						
		63,5		763.5M- <b>≭</b> -NRC		RI-NRC-63.5-7M-*						
	/	65		765M- <b>≭</b> -NRC		RI-NRC-65-7M-★						
	/	70		870M- <b>*</b> -NRC		RI-NRC-70-8M-★						
	/	72		872M- <b>≭</b> -NRC		RI-NRC-72-8M-★	165	140	135	45		
8M	/	76		876M- <b>≭</b> -NRC	8M- <b>*</b> -RI-S/NRC	RI-NRC-76-8M-★	6.50	5.51	5.31	1.77		
	1/	80		880M- <b>*</b> -NRC		RI-NRC-80-8M-*	0.50	0.01	0.01	1.//		
	/	88,9		888.9M-*-NRC		RI-NRC-88.9-8M-*						

Additional outside diameters are available upon request. Please contact STAUFF for further information.

## **Product Features**

- Designed for the noise and vibration reducing installation of pipes and tubes
- ullet Suitable for the most common outside diameters from 6 to 42 mm and from  $\,1/4$  to 1  $\,1/2$  inch respectively
- Working principle based on a specially shaped, two-part elastomer insert, which mechanically
  absorbs vibration in the pipe or tube and as a result reduces noises arising to a minimum
- Elastomer insert is in particular distinguished by how little of its surface is in contact
  with the pipe or tube as well as with the clamp body
- Light tension of the elastomer insert in mounted condition provides the necessary clamping force
- Tongue-groove contour of the elastomer insert and the clamp body (which is reversed and thus diverges
  from standard DIN 3015 clamps with elastomer insert) enables the system to be used for the maximum
  range of outside diameters per clamp size, which contributes to flexibility, versatility and optimisation
  of the required installation space

## **Ordering Codes**

## Clamp Assembly \*2\*12-\*PP-NRC

One assembly is consisting of one clamp body and one insert.

\* STAUFF Group 2
\* Exact outside diameter Ø D1 (mm) 12
\* Material code (see below) PP
\* Insert NRC

## NRC Clamp Body \*2-\*PP-\*RI-S/NRC

One NRC clamp body is consisting of two clamp halves.

\* STAUFF Group 2

\* Material code (see below) PP

\* Clamp Design RI-S/NRC

## **NRC Elastomer Insert**

## \*RI-NRC-\*12-\*2-\*SA73

One NRC elastomer insert is consisting of two insert halves.

 \* NRC Elastomer Insert
 RI-NRC

 \* Exact outside diameter ØD1 (mm)
 12

 \* STAUFF Group
 2

 \* Material code
 SA73

## **Standard Materials**



Polypropylene Colour: Black Material code: PP



Thermoplastic Elastomer (73 Shore-A)

Colour: Black Material code: **SA73** 

See pages 178 / 179 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

## **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

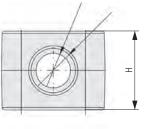
See pages 180 / 181 for material properties and technical information.

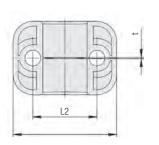
## STAUFF®

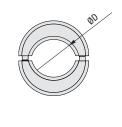
## Clamp Body for Conduit Hoses and Cable Inserts

**Type CHC** 









## **Ordering Codes**

## **Clamp Assembly**

## \*3\*17-\*10/14-\*PA-CHC\*SA80-V0

One assembly is consisting of one clamp body and one insert. (consisting of two halves).

* STAUFF Group	3
* Nominal Size of the Conduit Hose	17
* Diameter Range Cable ØD (mm)	10/14
* Material code clamp body (see below)	PA-CHC
* Material code insert (see below)	SA80-V0

## **CHC Clamp Body**

## \*3\*17-\*PA-CHC

One CHC Clamp Body is consisting of two clamp halves.

* STAUFF Group	3
* Nominal Size of the Conduit Hose	17
* Material code clamp body (see below)	PA-CHC

## **CHC Elastomer Insert**

## \*RI-CHC-\*10/14\*3\*SA80-V0

One CHC Elastomer Insert is consisting of two insert halves.

* CHC Elastomer insert	RI-CHC
* Diameter Range Cable ØD (mm)	10/14
* STAUFF Group	3
* Material code insert (see below)	SA80-V0

	Group Nominal ØD ("""/") Ordering Codes (★ = Material)  Lamp Body CHO  Clamp Body CHO				CHC-Insert Dimensions ("""/in)								
STAUFF	NO	Conduit Hose		(Clamp Body + Insert)	(2 Halves)	(2 Halves)	ØD1	ØD2	t	L1	L2	Н	Width
		10			210-*								
2	2		6 8	212-6/8-*-*		RI-CHC-6/8-2-*	13 .51	11	0,5		26 1.02		30
		12	8 10	212-8/10-*-*	212-*	RI-CHC-8/10-2-*	16	13,5	.02	1.00	1.02	12 1.20 1	1.10
3	3	17	7 10 .2839	317-7/10-*-*	317-*	RI-CHC-7/10-3-*	21,5	18	0,7	50	33	35,5	30
3	J	''	10 14 .3955	317-10/14-*-*		RI-CHC-10/14-3-*	.85	.71	.03	1.97	1.30	1.40	1.18
4	4	23	14 18 .5571	423-14/18-*-*	423-*	RI-CHC-14/18-4-*	29	24,5	0,7	59	40	41,5	30
4	4	23	18 20 .7179	423-18/20-*-*		RI-CHC-18/20-4-*	1.14	.96	.03	2.32	1.57	1.63	1.18
		29			529 <b>-*</b>								
5	5		20 26,9 .791.06	536-20/26.9-*-*		RI-CHC-20/26.9-5-*	35 1.38	30,5			52 2.05	56,5 2.22	
		36	26,9 33,7 1.06 1.33	536-26.9/33.7-*-*		RI-CHC-26.9/33.7- 5-*	43	38,5					
6	6	48	33,7 42 1.33 1.65		648-*		55	49,5	_		66 2.60	64,5 2.54	

Additional outside diameters are available upon request. Please contact STAUFF for further information.

## **Product Features**

- Design of the inside surface of the clamp body prevents corrugated conduit hoses from sliding
- Elastomer Insert for the safe and damage-free installation of single cables as an option
- Chamfered edges avoid damaging of the conduit hoses
- Available for all commonly used nominal sizes
- Excellent weathering resistance, even under extreme conditions

## **Materials**



## Polyamide Colour: Black Material code: PA-CHC



## fire-proof clamp body material made of Polyamide

Colour: Black

Material code: PA-VO-CHC-BK



Elastomer Insert



**Thermoplastic Elastomer** (73 Shore-A) Colour: Black



Elastomer Insert

Material code: SA73



fire-proof clamp body material made of Thermoplastic Elastomer (86 Shore-A)

Colour: White Material code: **SA80-V0** 

See pages 178 / 179 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

## Recommended Bolt Lengths (Socket Cap Screw IS)

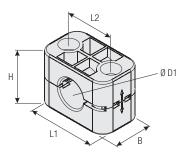
for use without Cover Plate DP, assembly with Weld Plate SP, Hexagon Rail Nut SM and Channel Rail Adaptor CRA.

Group STAUFF	DIN	Metric ISO thread	Unified coarse (UNC) thread
2	2	M6 x 25	1/4–20 UNC x 1
3	3	M6 x 30	1/4–20 UNC x 1-1/8
4	4	M6 x 35	1/4-20 UNC x 1-3/8
5	5	M6 x 50	1/4–20 UNC x 2
6	6	M6 x 60	1/4–20 UNC x 2-1/2

See page 30 for further information on ordering.









(in)

.75

.87

1.00

**Outside Diameter** 

Regular Hose

Ø D1

(mm)

19

22,2

25,4

# 11

For Use with Compact Hose (Upper Clamp Half rotated by 180°)

35,5

1.30 1.40

Regular Hose Compact Hose B

34

1.34

30

1.18

Dimensions (mm/in)

L2

50 33

1.97



Clamp Body • Compact Design

**Type CC** 

3

## **Ordering Codes**

**Clamp Body** \*3\*19-\*PP-H-CC-BK

One clamp body is consisting of two clamp halves.

- \* STAUFF Group
- \* Outside diameter Ø D1 (mm) of regular hose 19
- \* Material code (see below) PP-H-CC-BK

Additional outside diameters are available upon request. Please contact STAUFF for further information.

93

**Outside Diameter** 

(in)

.69

**Compact Hose** 

Ø D2

(mm)

17.4

20,6

23.7

## **Product Features**

Group

3

NIC

3

- Only one clamp body required for two different hose diameters (compact hose + regular hose)
- Rotate upper clamp half by 180° and use clamp body to fasten compact hoses instead of regular hoses
- · Available for three different combinations of outside hose diamaters
- Outer dimensions according to DIN 3015, Part 1
- Effective cost reduction due to lower inventories

## **Special Materials**

**Ordering Codes** 

(2 Clamp Halves)

319-\*\*-\*-CC-BK

322.2-\*\*-\*-CC-BK

325.4-\*\*-\*-CC-BK

(\*\*-\* = Material) L1

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 180 / 181 for material properties and technical information.

## **Standard Materials**



Polypropylene Colour: Black Material code: PP-H-CC-BK

See pages 178 / 179 for material properties and technical information.

## **Ordering Codes**

One clamp body is consisting of two clamp halves.

## **Clamp Body**

540-40-PP-VK

Rectangular design with a square of 40 mm x 40 mm / 1.57 in x 1.57 in

## **Clamp Body**

540-36-PP-VK

Rectangular design with a square of 40 mm x 36 mm / 1.57 in x 1.42 in

Please replace PP by PA to order a clamp body made of Polyamide instead of Polypropylene.

## **Product Features**

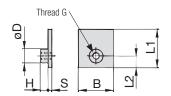
- Outer dimensions of clamp body according to Standard Series, STAUFF Group 5
- For proximity switches according to DIN EN 60947-5-2 or similar, rectangular construction, with a square of 40 mm x 40 mm / 1.57 in x 1.57 in or 40 mm x 36 mm / 1.57 in x 1.42 in
- For proximity switches according to DIN EN 60947-5-2 or similar, round construction, please use Standard Series clamp body, STAUFF Group 4, with the diameter required (e.g. 430-PP)
- Use with Hexagon Rail Nut SM and Mounting Rail TS to provide axial and horizontal position adjustment by loosening the bolts

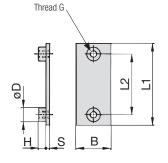
## Clamp Body • Rectangular Design Type VK



## **Single Weld Plate Type SP**







STAUFF Group 1

STAUFF Group 1A to 8 (7M / 8M)

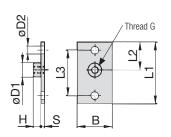
Ordering Co	odes	
Weld Plate	*SP-*1-*M-*	W2
* Single Weld Plat	e	SP
* STAUFF Group		1
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U
* Material code	Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated	W2 W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5
	Aluminium EN AW-6060 (Dimension S: 5 mm / .20 in)	W85

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

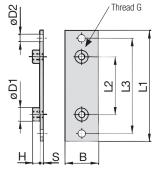
Group		Dimensions ("	ım/in)						Ordering Codes
STAUFF	DIN	Thread G	L1	L2	В	S	Н	ØD	(Standard Options)
4	0	M6	31,5	10	30	3	6,5	12	SP-1-M-W2
1	0	1/4-20 UNC	1.24	0.39	1.18	.12	.26	.47	SP-1-U-W2
4 A	4	M6	36	20	30	3	6,5	12	SP-1A-M-W2
1A	1	1/4-20 UNC	1.42	0.79	1.18	.12	.26	.47	SP-1A-U-W2
_	0	M6	42	26	30	3	6,5	12	SP-2-M-W2
2	2	1/4-20 UNC	1.65	1.02	1.18	.12	.26	.47	SP-2-U-W2
3	3	M6	50	33	30	3	6,5	12	SP-3-M-W2
3	3	1/4-20 UNC	1.97	1.30	1.18	.12	.26	.47	SP-3-U-W2
4	4	M6	60	40	30	3	6,5	12	SP-4-M-W2
4		1/4-20 UNC	2.36	1.57	1.18	.12	.26	.47	SP-4-U-W2
5	5	M6	71	52	30	3	6,5	12	SP-5-M-W2
3	3	1/4-20 UNC	2.80	2.05	1.18	.12	.26	.47	SP-5-U-W2
6	6	M6	88	66	30	3	6,5	12	SP-6-M-W2
0	О	1/4-20 UNC	3.46	2.60	1.18	.12	.26	.47	SP-6-U-W2
7	7	M6	122	94	30	5	6,5	12	SP-7-M-W2
1	1	1/4-20 UNC	4.80	3.70	1.18	.20	.26	.47	SP-7-U-W2
8	8	M6	148	120	30	5	6,5	12	SP-8-M-W2
)	0	1/4-20 UNC	5.83	4.72	1.18	.20	.26	.47	SP-8-U-W2
7M		M10	125	100	40	8	5,3	14	SP-7M-M-W2
/ IVI		3/8-16 UNC	4.92	3.94	1.58	.31	.21	.55	SP-7M-U-W2
OM		M10	165	140	45	8	5,3	14	SP-8M-M-W2
8M		3/8-16 UNC	6.50	5.51	1.77	.31	.21	.55	SP-8M-U-W2

## **Elongated Weld Plate Type SPV**





STAUFF Group 1



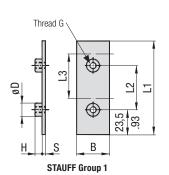
STAUFF Group 1A to 8 (7M / 8M)

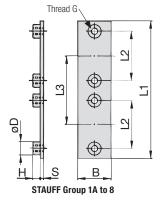
Ordering C	odes	
Weld Plate	*SPV-*1-*M-*	W2
* Elongated Weld	Plate	SPV
* STAUFF Group		1
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U
* Material code	Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated	W2 W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

Group		Dimensions (mr	Ordering Codes								
STAUFF	DIN	Thread G	L1	L2	L3	В	S	Н	ØD1	ØD2	(Standard Options)
1	0	M6	58	24,5	44	30	3	6,5	12	6,5	SPV-1-M-W2
1	U	1/4-20 UNC	2.28	.96	1.73	1.18	.12	.26	.47	.26	SPV-1-U-W2
1A	1	M6	64	20	50	30	3	6,5	12	6,5	SPV-1A-M-W2
IA		1/4-20 UNC	2.52	.79	1.97	1.18	.12	.26	.47	.26	SPV-1A-U-W2
2	2	M6	70	26	56	30	3	6,5	12	6,5	SPV-2-M-W2
2	2	1/4-20 UNC	2.76	1.02	2.20	1.18	.12	.26	.47	.26	SPV-2-U-W2
3	3	M6	78	33	64	30	3	6,5	12	6,5	SPV-3-M-W2
3	3	1/4-20 UNC	3.07	1.30	2.52	1.18	.12	.26	.47	.26	SPV-3-U-W2
4		M6	87	40	73	30	3	6,5	12	6,5	SPV-4-M-W2
4	4	1/4-20 UNC	3.43	1.57	2.87	1.18	.12	.26	.47	.26	SPV-4-U-W2
5	5	M6	100	52	86	30	3	6,5	12	6,5	SPV-5-M-W2
5		1/4-20 UNC	3.94	2.05	3.39	1.18	.12	.26	.47	.26	SPV-5-U-W2
6	6	M6	115	66	100	30	3	6,5	12	6,5	SPV-6-M-W2
О	0	1/4-20 UNC	4.53	2.60	3.94	1.18	.12	.26	.47	.26	SPV-6-U-W2
7	7	M6	150	94	136	30	5	6,5	12	6,5	SPV-7-M-W2
1	1	1/4-20 UNC	5.91	3.70	5.35	1.18	.20	.26	.47	.26	SPV-7-U-W2
0	0	M6	178	120	162	30	5	6,5	12	6,5	SPV-8-M-W2
8	8	1/4-20 UNC	7.01	4.72	6.38	1.18	.20	.26	.47	.26	SPV-8-U-W2
714		M10	180	155	100	40	8	15,7	17,8	12	SPV-7M-M-W2
7M		3/8-16 UNC	7.09	6.10	3.94	1.57	.31	.62	.70	.47	SPV-7M-U-W2
8M		M10	220	195	140	45	8	15,7	17,8	12	SPV-8M-M-W2
OIVI		3/8-16 UNC	8.66	7.68	5.51	1.77	.31	.62	.70	.47	SPV-8M-U-W2







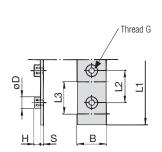
## Twin Weld Plate for 2 Clamp Bodies Type DSP



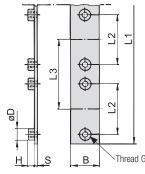
Group		Dimensions (mm	/in)							Ordering Codes
STAUFF	DIN	Thread G	L1	L2	L3	В	S	Н	ØD	(Standard Options)
1	0	M6	87	40	40	30	3	6.5	12	DSP-1-40-M-W2
'	0	1/4-20 UNC	3.43	1.57	1.57	1.18	.12	.26	.47	DSP-1-40-U-W2
1A	1	M6	77	20	37	30	3	6.5	12	DSP-1A-37-M-W2
IA	1	1/4-20 UNC	3.03	.79	1.46	1.18	.12	.26	.47	DSP-1A-37-U-W2
2	2	M6	86	26	44	30	3	6.5	12	DSP-2-44-M-W2
2		1/4-20 UNC	3.39	1.02	1.73	1.18	.12	.26	.47	DSP-2-44-U-W2
3	3	M6	102	33	52	30	3	6.5	12	DSP-3-52-M-W2
3		1/4-20 UNC	4.02	1.30	2.05	1.18	.12	.26	.47	DSP-3-52-U-W2
4	4	M6	120	40	60	30	3	6.5	12	DSP-4-60-M-W2
4	4	1/4-20 UNC	4.72	1.57	2.36	1.18	.12	.26	.47	DSP-4-60-U-W2
5	5	M6	145	52	75	30	3	6.5	12	DSP-5-75-M-W2
5	5	1/4-20 UNC	5.71	2.05	2.95	1.18	.12	.26	.47	DSP-5-75-U-W2
c	6	M6	178	66	90	30	3	6.5	12	DSP-6-90-M-W2
6	6	1/4-20 UNC	7.01	2.60	3.54	1.18	.12	.26	.47	DSP-6-90-U-W2

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

## **Ordering Codes** \*DSP-\*1-\*40-\*M-\*W2 **Weld Plate** \* Twin Weld Plate for 2 Clamp Bodies DSP \* STAUFF Group 1 \* Pipe center spacing L3 (mm) 40 \* Thread code Metric ISO thread Unified coarse (UNC) thread Carbon Steel, phosphated W2 \* Material code Carbon Steel, zinc/nickel-plated W3 Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)







STAUFF Group 1A to 8

7 7	Group Weld Plate for 5 or 10 Clamp Bodies Type RAP
Thread G	6 66 9

Group		Dimensions (mm)	Ordering Codes							
STAUFF	DIN	Thread G	L1	L2	L3	В	S	Н	ØD	(Standard Options)
1	0	M6	314	31	31	30	4	6,5	12	RAP-1-31-10-M-W1
'	U	1/4-20 UNC	12.36	1.22	1.22	1.18	.16	.26	.47	RAP-1-31-10-U-W1
1A	1	M6	373	20	37	30	4	6,5	12	RAP-1A-37-10-M-W1
IA	I	1/4-20 UNC	14.69	.79	1.46	1.18	.16	.26	.47	RAP-1A-37-10-U-W1
2	2	M6	442	26	44	30	4	6,5	12	RAP-2-44-10-M-W1
2		1/4-20 UNC	17.40	1.02	1.73	1.18	.16	.26	.47	RAP-2-44-10-U-W1
3	3	M6	521	33	52	30	4	6,5	12	RAP-3-52-10-M-W1
3		1/4-20 UNC	20.51	1.30	2.05	1.18	.16	.26	.47	RAP-3-52-10-U-W1
4	4	M6	300	40	60	30	4	6,5	12	RAP-4-60-5-M-W1
4	4	1/4-20 UNC	11.81	1.57	2.36	1.18	.16	.26	.47	RAP-4-60-5-U-W1
5	5	M6	378	52	75	30	4	6,5	12	RAP-5-75-5-M-W1
3	5	1/4-20 UNC	14.88	2.05	2.95	1.18	.16	.26	.47	RAP-5-75-5-U-W1
6	6	M6	450	66	90	30	4	6,5	12	RAP-6-90-5-M-W1
U	6	1/4-20 UNC	17.72	2.60	3.54	1.18	.16	.26	.47	RAP-6-90-5-U-W1

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

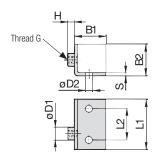
Ordering Codes								
Weld Plate *RAP-*1-*31-*10-*M-*V								
* Group Weld Plate	e for 5 or 10 Clamp Bodies	RAP						
* STAUFF Group		1						
* Pipe center spacing L3 (mm)								
* Number of clamps								
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U						
* Material code	Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated	W2 W3						
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W4 W5						

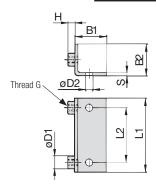
Dimensional drawings: All dimensions in mm (in).



## **Angled Weld Plate Type WSP**







STAUFF Group 1

STAUFF Group 1A to 6 (7M / 8M)

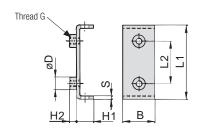
Ordering Co	odes	
Weld Plate	*WSP-*1-*M-*	W2
* Angled Weld Pla	te	WSP
* STAUFF Group		1
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U
* Material code	Carbon Steel, phosphated	W2
	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

Group STAUFF DIN		Dimensions (m	m/in)								Ordering Codes
		Thread G	L1	L2	B1	B2	S	Н	ØD1	ØD2	(Standard Options)
1	0	M6	30	14	30	30	3	6,5	12	6,5	WSP-1-M-W2
'	U	1/4-20 UNC	1.18	.55	1.18	1.18	.12	.26	.47	.26	WSP-1-U-W2
1A	1	M6	36	20	30	30	3	6,5	12	6,5	WSP-1A-M-W2
IA		1/4-20 UNC	1.26	.79	1.18	1.18	.12	.26	.47	.26	WSP-1A-U-W2
2	2	M6	42	26	30	30	3	6,5	12	6,5	WSP-2-M-W2
2	2	1/4-20 UNC	1.65	1.02	1.18	1.18	.12	.26	.47	.26	WSP-2-U-W2
3	3	M6	50	33	30	30	3	6,5	12	6,5	WSP-3-M-W2
3	3	1/4-20 UNC	1.97	1.30	1.18	1.18	.12	.26	.47	.26	WSP-3-U-W2
4	4	M6	60	40	30	30	3	6,5	12	6,5	WSP-4-M-W2
4	4	1/4-20 UNC	2.36	1.57	1.18	1.18	.12	.26	.47	.26	WSP-4-U-W2
5	5	M6	70	52	30	30	3	6,5	12	6,5	WSP-5-M-W2
Э	5	1/4-20 UNC	2.76	2.05	1.18	1.18	.12	.26	.47	.26	WSP-5-U-W2
c	C	M6	88	66	30	30	3	6,5	12	6,5	WSP-6-M-W2
6	6	1/4-20 UNC	3.46	2.60	1.18	1.18	.12	.26	.47	.26	WSP-6-U-W2
784		M10	125	100	50	50	8	5,3	14	6,5	WSP-7M-M-W2
7M		3/8-16 UNC	4.92	3.94	1.97	1.97	.31	.21	.55	.26	WSP-7M-U-W2
OM		M10	165	140	50	50	8	5,3	14	6,5	WSP-8M-M-W2
8M		3/8-16 UNC	6.50	5.51	1.97	1.97	.31	.21	.55	.26	WSP-8M-U-W2

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

## **Bridge Weld Plate Type BSP**



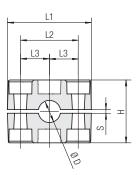


Ordering Codes								
l-*W2	*BSP-*1A-*M-	Weld Plate						
BSP	te	* Bridge Weld Pla						
1A		* STAUFF Group						
M U	Metric ISO thread Unified coarse (UNC) thread	* Thread code						
W2	Carbon Steel, phosphated	* Material code						
d <b>W3</b>	Carbon Steel, zinc/nickel-plated							
W5	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316							

Group		Dimensions (mm	/in)							Ordering Codes
STAUFF	DIN	Thread G	L1	L2	В	S	H1	H2	ØD	(Standard Options)
1A	1	M6	48	20	30	3	13	6,5	12	BSP-1A-M-W2
IA		1/4-20 UNC	1.89	.79	1.18	.12	.52	.26	.47	BSP-1A-U-W2
2	2	M6	54	26	30	3	13	6,5	12	BSP-2-M-W2
2	2	1/4-20 UNC	2.13	1.02	1.18	.12	.52	.26	.47	BSP-2-U-W2
3	3	M6	62	33	30	3	13	6,5	12	BSP-3-M-W2
3		1/4-20 UNC	2.44	1.30	1.18	.12	.52	.26	.47	BSP-3-U-W2
4	4	M6	71	40	30	3	13	6,5	12	BSP-4-M-W2
4	4	1/4-20 UNC	2.80	1.57	1.18	.12	.52	.26	.47	BSP-4-U-W2
5	5	M6	85	52	30	3	13	6,5	12	BSP-5-M-W2
5	3	1/4-20 UNC	3.35	2.05	1.18	.12	.52	.26	.47	BSP-5-U-W2
G	6	M6	98	66	30	3	13	6,5	12	BSP-6-M-W2
6	О	1/4-20 UNC	3.86	2.60	1.18	.12	.52	.26	.47	BSP-6-U-W2

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.  $Alternative\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.\ Contact\ STAUFF\ for\ further\ information.$ 





## **STAUFF Group 5**

Group		Outside Diameter Pipe / Tube Ø D		Nominal Bore Copper Tube Pipe ASTM B88		Ordering Codes (2 Clamp Halves)	Dimensions (mm/ <sub>In</sub> )					
STAUFF	DIN	(mm)	(in)	(in)	(in)	(** = Material)	L1	L2	L3	Н	S min.	Width
		20				520-**-MGR						
		21,3		1/2		521.3-**-MGR						
		22			3/4	522-**-MGR						
		23				523-**-MGR						
		25				525-**-MGR						
		26,9		3/4		526.9- <b>**</b> -MGR						
5	5	28				528-**-MGR	71	52	26	58	0,8	30
3	5	30				530-**-MGR	2.80 2.05		1.02	2.28	.03	1.18
		32	1-1/4			532-**-MGR						
		33,7		1		533.7-**-MGR						
		35			1-1/4	535-**-MGR						
		38	1-1/2			538- <b>**</b> -MGR						
		40				540-**-MGR						
		42		1-1/4		542-**-MGR						

Additional outside diameters are available upon request. Please contact STAUFF for further information.

## Clamp Body for Multi-Group Weld Plate Type MGR



Ordering Codes
Clamp Body *5*20-*PP-MGR
One clamp body is consisting of two clamp halves.
* STAUFF Group 5  * Exact outside diameter Ø D1 (mm) 20  * Material code (see below) PP-MGR

## **Standard Materials**



Polypropylene Colour: Green Material code: PP-MGR



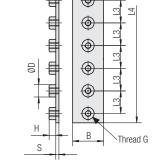
Colour: Black Material code: PA-MGR

See pages 178 / 179 for properties and technical information.

Multi-Group Weld Plates (type RAP-MGR) are designed to be used in combination with Standard Series clamp bodies, STAUFF Group 2 (regular types, see pages 14 ff.) covering a diamater range from 8 mm / .31 in to 18 mm / .71 in, as well as Standard Series clamp bodies, STAUFF Group 5 (type MGR, see above) covering a diamater range from 20 mm / .79 in to 42 mm / 1.65 in. Thus, all Standard Series metal parts (bolts, cover plates) of these groups can be used.



Multi-Group Weld Plate RAP-MGR-25-312-M-W1



Number of	Dimensions (m	Ordering Codes						
Weld Nuts	Thread G	L3	L4	В	S	Н	ØD	(Standard Options)
6	M6	26	156	30	4	6,5	12	RAP-MGR-25-156-M-W1
ь	1/4-20 UNC	1.02	6.14	1.18	.16	.26	.47	RAP-MGR-25-156-U-W1
9	M6	26	234	30	4	6,5	12	RAP-MGR-25-234-M-W1
	1/4-20 UNC	1.02	9.21	1.18	.16	.26	.47	RAP-MGR-25-234-U-W1
12	M6	26	312	30	4	6,5	12	RAP-MGR-25-312-M-W1
12	1/4-20 UNC	1.02	12.28	1.18	.16	.26	.47	RAP-MGR-25-312-U-W1
15	M6	26	390	30	4	6,5	12	RAP-MGR-25-390-M-W1
10	1/4-20 UNC	1.02	15.35	1.18	.16	.26	.47	RAP-MGR-25-390-U-W1
20	M6	26	520	30	4	6,5	12	RAP-MGR-25-520-M-W1
20	1/4-20 UNC	1.02	20.47	1.18	.16	.26	.47	RAP-MGR-25-520-U-W1
27	M6	26	700	30	4	6,5	12	RAP-MGR-25-700-M-W1
21	1/4-20 UNC	1.02	27.55	1.18	.16	.26	.47	RAP-MGR-25-700-U-W1

Cover a diamater range from 8 mm (.31 in) to 42 mm (1.65 in) with only one Group Weld Plate!

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

## Multi-Group Weld Plate for Clamp Body Sizes 2 and 5 (Type MGR) Type RAP-MGR



**Ordering Codes** 

Weld Plate	*RAP-MGR-*25-*156-*M-	*W1						
* Multi Group Weld Plate RAP-								
* Suitable for STAI	JFF Group 2 and 5 (only type MGR)	25						
* Length L4 (mm)	156 (with 6 weld nuts) 234 (with 9 weld nuts) 312 (with 12 weld nuts) 390 (with 15 weld nuts) 520 (with 20 weld nuts) 700 (with 27 weld nuts)	156 234 312 390 520 700						
* Thread code	Metric ISO thread	M						

\* Material code Carbon Steel, uncoated **W1**Stainless Steel V4A

1.4401 / 1.4571 (AISI 316 / 316 Ti) **W5** 

Unified coarse (UNC) thread

U

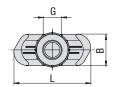


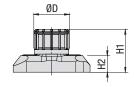
## **Hexagon Rail Nut**

(for Use with Mounting Rail TS)

## **Type SM**







## **Ordering Codes** Hexagon Rail Nut \*SM-\*1-8/1D-\*M-\*W3 \* Hexagon Rail Nut \* STAUFF Group 1 to 8 (DIN Group 0 to 8) 1-8/1D \* Thread code Metric ISO thread Unified coarse (UNC) thread \* Material code Carbon Steel, zinc/nickel-plated Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A

1.4401 / 1.4571 (AISI 316 / 316 Ti)

Group		Dimensions (mn	<sup>1</sup> /in)					Ordering Codes
STAUFF	DIN	Thread G	L	В	H1	H2	ØD	(Standard Options)
1	0							
1A	1							
2	2							
3	3							
4	4	M6	25,5	10,4	14,2	5,5	12	SM-1-8/1D-M-W3
_		1/4-20 UNC	1.00 .41	.41	.56	.22	.47	SM-1-8/1D-U-W3
5	5							
6	6							
7	7							
8	8							

Hexagon Rail Nuts, type SM-1-8/1D are also suitable for Twin Series, STAUFF Group 1D.

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

## **Mounting Rail**

(for Use with Hexagon Rail Nut SM)

## Type TS









**Mounting Rail TS-11** 

**Mounting Rail TS-14** 

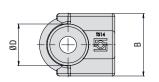
**Mounting Rail TS-30** 

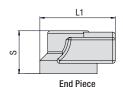
Ordering Codes							
Mounting Ra	il *TS-*11-*1M-*	W1					
* Mounting Rail		TS					
* Height of rail	11 mm / .43 in 14 mm / .55 in 30 mm / 1.18 in	11 14 30					
* Length of rail	1 m / 3.28 ft 2 m / 6.56 ft	1M 2M					
	Alternative lengths available upon requestrated STAUFF for further informat						
* Material code	Carbon Steel, uncoated Carbon Steel, hot-dip galvanised	W1 W98					
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W4 W5					

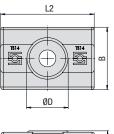
Group STAUFF	DIN	Dimensions (mm/ <sub>in</sub> ) B1 B2 S			Ordering Codes (Standard Options)  Length of Rail: 1 m / 3.28ft Length of Rail: 2 m / 6.56ft				
1	0								
1A	1				Height 11 mm / .43 in TS-11-1M-W1	Height 11 mm / .43 in TS-11-2M-W1			
2	2			2 .08					
3	3		.43		Height 14 mm / .55 in TS-14-1M-W1	Height 14 mm / .55 in TS-14-2M-W1			
4	4	1.10							
5	5								
6	6					Height 30 mm / 1.18 in TS-30-2M-W1			
7	7				Height 30 mm / 1.18 in TS-30-1M-W1				
8	8								

Mounting Rails, type TS-11/14/30 are suitable for all Standard Series and Twin Series group sizes.  $Alternative\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.\ Contact\ STAUFF\ for\ further\ information.$ 









S

Intermediate Piece/Connector

Group		Dimens	sions (mm	¹/in)			Ordering Code	Ordering Code	
STAUFF	DIN	ØD	L1	L2	В	S	(End Piece)	(Intermediate Piece/Connector)	
1 bis 8	0 bis 8	16	29	36 1.42	.94	16,5 .65	SWG-MRA-TS14-S-A	SWG-MRA-TS14-D-A	

Fastening Adaptor, type SWG-MRA are also suitable for Twin Series.

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

## Fastening Adaptor (for Use with Mounting Rail TS) Type SWG-MRA



Intermediate Piece/Connector

Ordering Code							
Fastening Adaptor *SWG-MRA-*TS14-*S-*A							
* Fastening Adaptor	SWG-MRA						
* for Mounting Rail TS14	TS14						
* End Piece	S						
Intermediate Piece/Connector	D						
* Version	А						

## **Product Features**

Fastening Adaptor for Direct Screw Mounting of STAUFF Mounting Rails Type TS-14 with Weld Studs M6 and Bolts M6 or 1/4–20 UNC (Support Sleeve / Washer Recommended)

Material: Polyamide

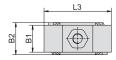
## **Instructions for Use**

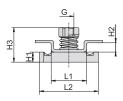
- Are pressed into the side of the Mounting Rail TS-14 and bolted to the installation
- Positioning of the mounting rail 2 mm above the installation
- Initially designed for use with weld studs with internal thread M6
- Can also be used with M6 bolts depending on the load, an internal support sleeve
   (e.g. 1130023624 LBBU-HUE-1/1D-SP-M6/U1/4-W3) and/or washer may be required
- Maximum recommended distance between two fastening adapters of 222 mm
- (corresponds to a length of the mounting rail of 200 mm)
- In case of doubt, please consult STAUFF for information on maximum static and dynamic loads

## **Channel Rail Adaptor**

(for Use with Various Channel Rails) **Type CRA** 







Ordering Codes								
Adaptor	*CRA-*1-8/1D-*M-	-*W3						
* Channel Rail Ada	aptor	CRA						
* STAUFF Group	1 to 8 (DIN Group 0 to 8)	1-8/1D						
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U						
* Material code	Carbon Steel, zinc/nickel-plated	W3						
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316	Ti) <b>W5</b>						

Group		Dimensions (mm	/in <b>)</b>								Ordering Codes
STAUFF	DIN	Thread G	L1	L2	L3	B1	B2	H1	H2	Н3	(Standard Options)
1	0										
1A	1										
2	2										
3	3										
4	4	M6 1/4–20 UNC	.83	35 1.38	40 1.57	.63	19 .75	6 .24	5,5	20,5	CRA-1-8/1D-M-W3 CRA-1-8/1D-U-W3
5	5										
6	6										
7	7										
8	8										
7M		M8	21	35	38	80	19	9	5,5	23,5	CRA-7-8ML-M-W3
8M		5/16–18 UNC	.83	1.38	1.50	3.15	.75	.3	.22	.93	CRA-7-8ML-U-W3

The Channel Rail Adaptor, type CRA 1-8/1D is also suitable for Twin Series, STAUFF Group 1D.

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

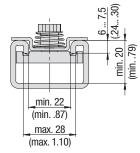
## **Compatibility with Channel Rails**

The STAUFF Channel Rail Adaptor, type CRA, is suitable for various channel rails, including the following types:



HALFEN	HILTI	UNISTRUT®	STAUFF (Cushion Clamp Series)
HM 41/41	MQ-21, MQ-41, MQ-52, MQ-72	P1000, P1000T, P1000V, P1000VT, P1001	SCS-048-1-PL, SCS-048-1-GR
HZA 41/22	MQ-21U, MQ-41U, MQ-72U	P2000, P2000T	SCS-120-1-PL, SCS-120-1-GR
HZM 41/41	MQ-21D, MQ-41D, MQ-52-72D	P3003, P3003T, P3300V, P3300VT, P3301	See page 149 for technical information.
HZM 41/22		P4000, P4000T	
HL 41/41, HL 41/B2		P5000, P5000T, P5001, P5500, P5500T, P5501	

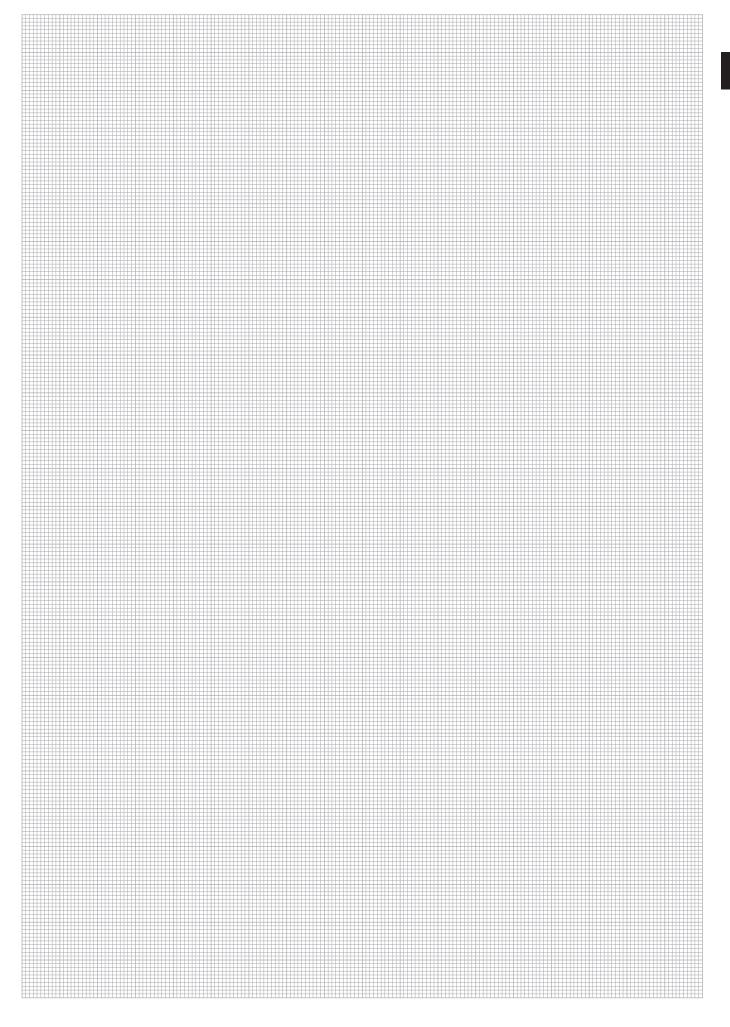
To check the compatibility with additional types of channel rail, please compare the dimensions with the following drawing before use.



Basic dimensional requirements for channel rails to be used with STAUFF Channel Rail Adaptors, type CRA

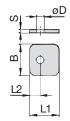
Dimensional drawings: All dimensions in mm (in).

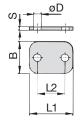




## **Cover Plate Type DP**







STAUFF Group 1

STAUFF Group 1A to 8 (7M / 8M)

Ordering Codes							
<b>Cover Plate</b>	*DP-*1-*	W3					
* Cover Plate		DP					
* STAUFF Group		1					
* Material code	Carbon Steel, zinc/nickel-plated	W3					
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4					
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5					
	Aluminium EN AW-6060	W85					

Group		Dimension	IS (mm/in)				Ordering Codes
STAUFF	DIN	L1	L2	В	S	ØD	(Standard Options)
1	0	28	9,5	30	3	7	DP-1-W3
'	U	1.10	.37	1.18	.12	.28	DF-1-W3
1A	1	34	20	30	3	7	DP-1A-W3
IA	'	1.34	.79	1.18	.12	.28	DF-IA-W3
2	2	40,5	26	30	3	7	DP-2-W3
2	2	1.59	1.02	1.18	.12	.28	DF-2-W3
3	3	48	33	30	3	7	DP-3-W3
3	3	1.89	1.30	1.18	.12	.28	DF-3-W3
4	4	57	40	30	3	7	DP-4-W3
4	4	2.24	1.57	1.18	.12	.28	DI -4-W3
5	5	70	52	30	3	7	DP-5-W3
J	J	2.76	2.05	1.18	.12	.28	DF-3-W3
6	6	86	66	30	3	7	DP-6-W3
U	U	3.39	2.60	1.18	.12	.28	DF-0-W3
7	7	118	94	30	5	7	DP-7-W3
1	1	4.65	3.70	1.18	.20	.28	DF-7-W3
8	8	144	120	30	5	7	DP-8-W3
J	J	5.67	4.72	1.18	.20	.28	Dt-0-M2
7M		125	100	40	8	11	DP-7M-W3
/ IVI		4.92	3.94	1.57	.31	.43	DF -7 IVI-VV3
8M		165	140	45	8	11	DP-8M-W3
OIVI		6.50	5.51	1.77	.31	.43	DL-OIAI-AA9

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

## **Hexagon Head Bolt**

(for Use with Cover Plate DP)

## **Type AS**





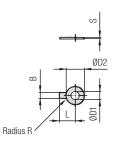
 $\textbf{Hexagon Head Bolt AS} \ (according \ to \ DIN \ 931 \ / \ 933 \ or \ ANSI \ / \ ASME \ B18.2.1.)$ Dimensions applicable only when used with Cover Plate DP

## **Ordering Codes Hexagon Head Bolt** \*AS-\*M6x30-\*W3 \* Type of bolt Hexagon Head Bolt (according to DIN 931 / 933 AS or ANSI / ASME B18.2.1.) $\bigstar$ Thread type and size acc. to dimension table \* Material code Carbon Steel, zinc/nickel-plated Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

Group		Dimensions (mm/in)	Ordering Codes
STAUFF	DIN	Thread G x L	(Standard Options)
1	0	M6 x 30	AS-M6x30-W3
'	U	1/4–20 UNC x 1-1/4	AS-1/4-20UNCx1-1/4-W3
1A	1	M6 x 30	AS-M6x30-W3
IA	1	1/4–20 UNC x 1-1/4	AS-1/4-20UNCx1-1/4-W3
2	2	M6 x 35	AS-M6x35-W3
2	2	1/4–20 UNC x 1-3/8	AS-1/4-20UNCx1-3/8-W3
3	3	M6 x 40	AS-M6x40-W3
3	3	1/4–20 UNC x 1-1/2	AS-1/4-20UNCx1-1/2-W3
4	4	M6 x 45	AS-M6x45-W3
4	4	1/4–20 UNC x 1-7/8	AS-1/4-20UNCx1-7/8-W3
5	5	M6 x 60	AS-M6x60-W3
5	5	1/4–20 UNC x 2-3/8	AS-1/4-20UNCx2-3/8-W3
6	6	M6 x 70	AS-M6x70-W3
0	U	1/4–20 UNC x 2-3/4	AS-1/4-20UNCx2-3/4-W3
7	7	M6 x 100	AS-M6x100-W3
′	<i>'</i>	1/4–20 UNC x 4	AS-1/4-20UNCx4-W3
8	8	M6 x 125	AS-M6x125-W3
0	0	1/4–20 UNC x 4-7/8	AS-1/4-20UNCx4-7/8-W3
7M		M10 x 110	AS-M10x110-W3
/ IVI		3/8-16 UNC x 4-1/3	AS-3/8-16 UNC x 4-1/3-W3
8M		M10 x 145	AS-M10x145-W3
OIVI		3/8-16 UNC x 5-6/8	AS-3/8-16 UNC x 5-6/8-W3





## Safety Washer SI

(Bend longer tab down towards the side of the clamp body and one side up towards one of the flats of the hexagon head bolt)

Group		Dimensions	s (mm/in)		Ordering Codes			
STAUFF	DIN	ØD1	В	ØD2	L	R	S	(Standard Options)
1 to 8	0 to 8	6,4	7	19	18	4	0,5	SI-6.4-DIN93-W3
1 10 0	0 10 6	.25	.28	.75	.71	.16	.02	31-0.4-DIN93-W3

Safety Washers, type SI are used as locking devices to prevent Hexagon Head Bolts, type AS from loosening. Safety Washers, type SI are suitable for all Standard Series group sizes.

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

## **Safety Washer** (for Use with Hexagon Head Bolt AS) Type SI (DIN 93)



## **Ordering Codes**

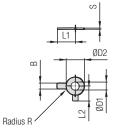
**Safety Washer** \*SI-\*6.4-\*DIN93-\*W3

\* Type of washer Safety washer with 1 tab SI-6.4-DIN93 (according to DIN 93)

\* Material code Carbon Steel, zinc/nickel-plated

Stainless Steel V4A

1.4401 / 1.4571 (AISI 316 / 316 Ti)



## Safety Washer SI

(Bend longer tab down towards the side of the clamp body and shorter tab up towards one of the flats of the hexagon head bolt)

Group Dimensions (mm/in)									Ordering Codes
STAUFF	DIN	ØD1	В	ØD2	L1	L2	R	S	(Standard Options)
1 to 8	0 to 8	6,4	7 .28	12 .47	.71	9 .35	.16	0,5	SI-6.4-DIN463-W3

Safety Washers, type SI are used as locking devices to prevent Hexagon Head Bolts, type AS from loosening. Safety Washers, type SI are suitable for all Standard Series group sizes.

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

**Safety Washer** (for Use with Hexagon Head Bolt AS) Type SI (DIN 463)



## **Ordering Codes**

**Safety Washer** \*SI-\*6.4-\*DIN463-\*W3

\* Type of washer Safety washer with 2 tabs SI-6.4-DIN463

(according to DIN 463)

\* Material code Carbon Steel, zinc/nickel-plated

Stainless Steel V4A

1.4401 / 1.4571 (AISI 316 / 316 Ti)

## **Socket Cap Screw Slotted Head Screw Type IS Type LI**









**Socket Cap Screw IS** 

(according to ISO 4762 or ANSI / ASME B18.3)

**Slotted Head Screw LI** 

(according to ISO 1207 or ANSI / ASME B18.6.3) Dimensions applicable only when used without Cover Plate DP Dimensions applicable only when used without Cover Plate DP

<b>^</b> .		_	
Ilrd	erin	N 1:0	ndac
UIU		y UL	Juca
	,	•	

**Socket Cap Screw** \*IS-\*M6x30-\*W3 \*LI-\*M6x30-\*W3 **Slotted Head Screw** 

\* Type of bolt Socket Cap Screw (according to ISO 4762 or ANSI / ASME B18.3) Slotted Head Screw (according to LI ISO 1207 or ANSI / ASME B18.6.3)

Please note: Socket cap screws IS and slotted head screws LI have to be used in conjunction with washers US, which are available separately.

\* Thread type and size acc. to dimension table

Carbon Steel, zinc/nickel-plated \* Material code W3 Stainless Steel V2A W4 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A

1.4401 / 1.4571 (AISI 316 / 316 Ti)

Group		Dimensions (mm/in)	Ordering Codes (Standard	Options)	
STAUFF	DIN	Thread G x L	Socket Cap Screws	Slotted Head Screws	
1	0	M6 x 20	IS-M6x20-W3	LI-M6x20-W3	
'	U	1/4-20 UNC x 3/4	IS-1/4-20UNCx3/4-W3	LI-1/4-20UNCx3/4-W3	
1A	1	M6 x 20	IS-M6x20-W3	LI-M6x20-W3	
IA		1/4-20 UNC x 3/4	IS-1/4-20UNCx3/4-W3	LI-1/4-20UNCx3/4-W3	
2	2	M6 x 25	IS-M6x25-W3	LI-M6x25-W3	
2	2	1/4-20 UNC x 1	IS-1/4-20UNCx1-W3	LI-1/4-20UNCx1-W3	
3	3	M6 x 30	IS-M6x30-W3	LI-M6x30-W3	
3	3	1/4-20 UNC x 1-1/8	IS-1/4-20UNCx1-1/8-W3	LI-1/4-20UNCx1-1/8-W3	
4	4	M6 x 35	IS-M6x35-W3	LI-M6x35-W3	
4	4	1/4-20 UNC x 1-3/8	IS-1/4-20UNCx1-3/8-W3	LI-1/4-20UNCx1-3/8-W3	
5	5	M6 x 50	IS-M6x50-W3	LI-M6x50-W3	
5	0	1/4-20 UNC x 2	IS-1/4-20UNCx2-W3	LI-1/4-20UNCx2-W3	
		M6 x 60	IS-M6x60-W3	LI-M6x60-W3	
6	6	1/4-20 UNC x 2-1/2	IS-1/4-20UNCx2-1/2-W3	LI-1/4-20UNCx2-1/2-W3	
7	7	M6 x 90	IS-M6x90-W3	ON DECLIFICE ONLY	
7	/	1/4-20 UNC x 3-3/8	IS-1/4-20UNCx3-3/8-W3	ON REQUEST ONLY	
0	0	M6 x 110	IS-M6x110-W3	ON DECLIFICE ONLY	
8	8	1/4-20 UNC x 4-3/8	IS-1/4-20UNCx4-3/8-W3	ON REQUEST ONLY	

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

## **Hexagon Head Bolt Type AS**

## Insert Type ES / EP







**Hexagon Head Bolt AS** 

(according to DIN 931 / 933 or ANSI / ASME B18.2.1.) Dimensions applicable only when used with Inserts EP / ES

	С	)2	_	
_	L	┙		
				±‡
	D	)1		

Insert EP (Polypropylene) Insert ES-W3 (Steel, zinc/nickel-plated) Insert ES-W5 (Stainless Steel V4A)

Group	Group		nsion	s (mm/i	n)	Ordering Codes			
STAUFF	DIN	D1	D2	H ES	H EP	(Standard	d Options		
1 to 8	0 to 8	11,8	6,5	7,8	8,6	ES-W3	EP		

## **Ordering Codes Hexagon Head Bolt** \*AS-\*M6x27-\*W3

\* Type of bolt Hexagon Head Bolt (according to DIN 931 / 933 AS or ANSI / ASME B18.2.1.) \* Thread type and size acc. to dimension table M6x27 \* Material code Carbon Steel, zinc/nickel-plated Stainless Steel V2A W4

1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

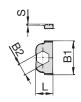
Group		Dimensions (mm/in)	Ordering Codes		
STAUFF	DIN	Thread G x L	(Standard Options)		
1	0	M6 x 27	AS-M6x27-W3		
1	U	1/4-20 UNC x 1-1/8	AS-1/4-20UNCx1-1/8-W3		
1A	1	M6 x 27	AS-M6x27-W3		
IA	'	1/4-20 UNC x 1-1/8	AS-1/4-20UNCx1-1/8-W3		
2	2	M6 x 32	AS-M6x32-W3		
2	2	1/4-20 UNC x 1-3/8	AS-1/4-20UNCx1-3/8-W3		
3	3	M6 x 35	AS-M6x35-W3		
3		1/4-20 UNC x 1-3/8	AS-1/4-20UNCx1-3/8-W3		
4	4	M6 x 42	AS-M6x42-W3		
4		1/4-20 UNC x 1-5/8	AS-1/4-20UNCx1-5/8-W3		
5	5	M6 x 57	AS-M6x57-W3		
Э	Э	1/4-20 UNC x 2-3/8	AS-1/4-20UNC-2-3/8-W3		
6	6	M6 x 65	AS-M6x65-W3		
О	О	1/4-20 UNC x 2-3/4	AS-1/4-20UNCx2-3/4-W3		
7	7	M6 x 95	AS-M6x95-W3		
1		1/4-20 UNC x 4	AS-1/4-20UNCx4-W3		
	0	M6 x 118	AS-M6x118-W3		
8	8	1/4-20 UNC x 4-3/4	AS-1/4-20UNCx4-3/4-W3		

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.





## **Safety Locking Plate** (for Use with Stacking Bolt AF) **Type SIG**







STAUFF Group 1

STAUFF Group 1A to 8 (7M / 8M)

Group		Dimensions	( <sup>mm</sup> /in)	Ordering Codes		
STAUFF	DIN	L	B1	B2	S	(Standard Options)
1	0	16	32	11,2	1	SIG-1-W3
	U	.63	1.26	.44	.04	Siu-i-ws
1A	1	33	28	11,2	1	SIG-1A-W3
IA	I	1.30	1.10	.44	.04	SIU-IA-WS
2	2	39	28	11,2	1	SIG-2-W3
2		1.54	1.10	.44	.04	31U-2-W3
3	3	47	28	11,2	1	SIG-3-W3
3	3	1.85	1.10	.44	.04	310-3-W3
4	4	56	28	11,2	1	SIG-4-W3
4		2.20	1.10	.44	.04	31U-4-W3
5	5	69	28	11,2	1	SIG-5-W3
3		2.72	1.10	.44	.04	31U-3-W3
6	6	85	28	11,2	1	SIG-6-W3
O		3.35	1.10	.44	.04	31U-0-W3
7	7	117	28	11,2	1	SIG-7-W3
1		4.61	1.10	.44	.04	Siu-7-WS
8	8	143	28	11,2	1	SIG-8-W3
U		5.63	1.10	.44	.04	31u-0-W3
7M		125	40	15,2	5	SIG-7M-W3
/ IVI		4.92	1.57	.60	.20	31U-7 IVI-VV3
8M		160	45	15,2	5	SIG-8M-W3
OW		6.30	1.77	.60	.20	JIU-UW-WJ

Ordering Codes						
Safety Locking Plate *SIG-*1-*W						
* Safety Locking	Plate	SIG				
* STAUFF Group		1				
* Material code	Carbon Steel, zinc/nickel-plated	W3				
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4				
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5				

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

# Thread G

Group		Dimensions (mm/in)					Ordering Codes	
STAUFF	DIN	Thread G	L1	L2	L3 min.	Hex	(Standard Options)	
1	0	M6	34	20	12	11	AF-1/1A/1D-M-W3	
1	U	1/4-20 UNC	1.34	.79	.47	.43	AF-1/1A/1D-U-W3	
4.0		M6	34	20	12	11	AF-1/1A/1D-M-W3	
1A	1	1/4-20 UNC	1.34	.79	.47	.43	AF-1/1A/1D-U-W3	
2	2	M6	40	25	12	11	AF-2-M-W3	
2	2	1/4-20 UNC	1.57	.98	.47	.43	AF-2-U-W3	
3	3	M6	44	30	12	11	AF-3-M-W3	
3	3	1/4-20 UNC	1.73	1.18	.47	.43	AF-3-U-W3	
4	4	M6	49	35	12	11	AF-4-M-W3	
4		1/4-20 UNC	1.93	1.38	.47	.43	AF-4-U-W3	
5	5	M6	64	50	12	11	AF-5-M-W3	
3		1/4-20 UNC	2.52	1.97	.47	.43	AF-5-U-W3	
6	6	M6	74	60	12	11	AF-6-M-W3	
O	0	1/4-20 UNC	2.91	2.36	.47	.43	AF-6-U-W3	
7	7	M6	99	85	12	11	AF-7-M-W3	
1	1	1/4-20 UNC	3.90	3.35	.47	.43	AF-7-U-W3	
8	8	M6	124	110	12	11	AF-8-M-W3	
0		1/4-20 UNC	4.88	4.33	.47	.43	AF-8-U-W3	
7M		M10	115	90	15	15	AF-7M-M-W3	
/ IVI		3/8-16 UNC	4.53	3.54	.59	.59	AF-7M-U-W3	
8M		M10	150	125	15	15	AF-8M-M-W3	
OIVI		3/8-16 UNC	5.91	4.92	.59	.59	AF-8M-U-W3	

## **Stacking Bolt**

(for Use with Safety Locking Plate SIG)





* Type of bolt	Stacking Bolt (according to STAUFF Standard)	AF
* STAUFF Group		1
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U
* Material code	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.







## **1** Type of Installation

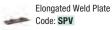
Please select the type of installation (e.g. Weld Plates, Rail Nuts etc.) and add the corresponding Code to position 1 of the order code for your clamp assembly.



Without Installation Equipment Code: none

## **Installation on Weld Plate**







Group Weld Plate (for STAUFF Group 1 to 6 only) Code: RAP

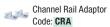


Bridge Weld Plate (for STAUFF Group 1A to 6 only) Code: BSP

## **Installation on Mounting / Channel Rail**



Hexagon Rail Nut Code: SM



## ② Group Size & Diameter

Please select the required group size and diameter and add the corresponding Code to position ② of the order code for your clamp assembly.

Group	Outside	Availahi	lity of Cla	mn	
шоир	Diameter	Availability of Clamp Body Materials & Designs			
STAUFF	P/T/H	Profiled Profiled			
(DIN)	(mm)	Design	Type H	Type RI	Code
(2)	6	•	•	0	106
	6,4	•	•	0	106.4
1	8	•	•	0	108
(0)	9,5	•	•	0	109.5
	10	•	•	0	110
	12	•	•	0	112
	6	•	•	0	106A
	6,4	•	•	0	106.4A
1A	8	•	•	0	108A
(1)	9,5	•	•	0	109.5A
	10	•	•	0	110A
	12	•	•	0	112A
	12,7	•	•	0	212.7
	13,5	•	•	0	213.5
	14	•	•	0	214
<b>2</b> (2)	15	•	•	0	215
(2)	16	•	•	0	216
	17,2	•	•	0	217.2
	18	•	•	0	218
	19	•	•	0	319
	20	•	•	0	320
3	21,3	•	•	0	321.3
(3)	22	•	•	0	322
	25	•	•	0	325
	25,4	•	•	0	325.4
	6	0	0	•	406
	8	0	0	•	408
	10	0	0	•	410
	12	0	0	•	412
	12,7	0	0	•	412.7
	14	0	0	•	414
	15	0	0	•	415
4	16	0	0	•	416
(4)	17,2	0	0	•	417.2
	18	0	0	•	418
	19	0	0	•	419
	26,9	•	•	0	426.9
	28	•	•	0	428
	28,6	•	0	0	428.6
	30	•	•	0	430
	32	•	•	0	432

Group STAUFF	Outside Diameter P/T/H	ameter Body Materials & Designs			
(DIN)	(mm)	Design	Туре Н	Type RI	Code
	32	•	•	0	532
	33,7	•	•	0	533.7
-	35	•	•	0	535
<b>5</b> (5)	38	•	•	0	538
(3)	40	•	•	0	540
	41,3	•	0	0	541.3
	42	•	•	0	542
	20	0	0	•	620
	21,3	0	0	•	621.3
	22	0	0	•	622
	25	0	0	•	625
	26,9	0	0	•	626.9
6	28	0	0	•	628
(6)	30	0	0	•	630
	32	0	0	•	632
	44,5	•	•	0	644.5
	48,3	•	•	0	648.3
	50,8	•	•	0	650.8
	54	•	•	0	654
	57,2	•	•	0	757.2
	60,3	•	•	0	760.3
<b>7</b> (7)	63,5	•	•	0	763.5
	70	•	•	0	770
	73	•	•	0	773
	76,1	•	•	0	776.1
8	88,9	•	•	0	888.9
(8)	102	•	•	0	8102L

Standard Option



Please see pages 34 and 35 with detailed order examples for some of the most popular Standard Series clamp assemblies.

## **3 Clamp Body Design & Material**

Please select the design and material of your clamp body and add the corresponding Code to position ③ of the order code for your clamp assembly.

Please check the availability of the selected clamp body design and material according to the matrix table in ②.

## **Profiled Design**



Polypropylene Code: **PP** 



Polypropylene (Colour: Black) Code: **PP-BK** 



Polyamide Code: PA



Thermoplastic Elastomer (87 Shore-A) Code: **SA87** 



Aluminium

Code: AL (for STAUFF Group 1A to 6 only)

## Type H (Smooth)



Polypropylene Code: **PP-H** 



Polypropylene (Colour: Black) Code: **PP-H-BK** 



Polyamide Code: **PA-H** 



Thermoplastic Elastomer (87 Shore-A)

Code: SA87-H

## Type RI (with Elastomer Insert)



Polypropylene

Code: PP-R (for STAUFF Group 4 and 6 only)



Polyamide

Code: PA-R (for STAUFF Group 4 and 6 only)

See pages 178 / 179 for material properties and technical information.

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards.

## (4) Mounting & Fitting Combination

Please select the mounting and fitting combination (e.g. bolts, screws, cover plates etc.) and add the corresponding Code to position (4) of the order code for your clamp assembly.

## **Installation with Cover Plate and Bolts**

Cover Plate DP with Hexagon Head Bolts AS

Code: DP-AS

Cover Plate DP with Socket Cap Screws IS\* Code: **DP-IS** 

## **Installation with Locking Plate and Bolts**

Safety Locking Plate SIG with Stacking Bolts AF Code: SIG-AF

## **Installation with Inserts and Bolts**

Inserts EP (Plastic) with Hexagon Head Bolts AS Code: **EP-AS** 

Inserts ES (Steel) with Hexagon Head Bolts AS

Code: ES-AS

## **Installation with Bolts only**

Socket Cap Screws IS (Washers US included) Code:  ${f IS}$ 

Slotted Head Screws LI (Washers US included) Code: LI (for STAUFF Group 1 to 6 only)

\* Special lengths of Socket Cap Screws IS required. For exact lenghts, please see details of Hexagon Head Bolt, type AS (for use with Cover Plates DP) on page 28.

## (5) Thread Type

Please select the required thread type and add the corresponding Code to position (5) of the order code for your clamp assembly.

Metric ISO thread

Code: M

Unified coarse (UNC) thread

Code: U

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.

## **6 Material & Surface Finishing**

Please select the required material & surface finishing of the metal parts and add the corresponding Code to position ③ of the order code for your clamp assembly.

Metal parts made of Carbon Steel, zinc/nickel-plated

Metal parts made of Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)

W5

Metal parts made of Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated

W10

Individual combinations of alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

## Assembling & Kitting

If required, please select an additional assembling and kitting option and add the corresponding Code to the last position of the order code for your clamp assembly.

**Components supplied separately** 

Code: **none** (standard option)

Components assembled Code: A (special option)

Components packed in kits
Code: K (special option)





2x Hexagon Head Bolt

Surface: W3 Thread: Metric

1x Cover Plate Surface: W3

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance

1x Single Weld Plate

Surface: W2 Thread: Metric



2x Socket Cap Screw

with Washer Surface: W3 Thread: Metric

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0.D. 12.7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance

1x Single Weld Plate Surface: W2 Thread: Metric



2x Slotted Head Screw

with Washer Surface: W3 Thread: Metric

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0.D. 12.7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance

1x Single Weld Plate

Surface: W2 Thread: Metric

## **Order Code**

## SP-212.7-PP-DP-AS-M-W10

W10 is the standard option for this type of installation.

## **Order Code**

## SP-212.7-PP-IS-M-W10

W10 is the standard option for this type of installation.

## **Order Code**

## SP-212.7-PP-LI-M-W10

 $\boldsymbol{W10}$  is the standard option for this type of installation. Available up to STAUFF Group 6 (DIN Group 6) only.



2x Hexagon Head Bolt

Surface: W3 Thread: Metric

1x Cover Plate

Surface: W3

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance

1x Elongated Weld Plate Surface: W2

Thread: Metric



2x Socket Cap Screw

with Washer Surface: W3 Thread: Metric

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0 D 12 7 mm / 50 in Material: Polypropylene Profiled inside surface with tension clearance

**Elongated Weld Plate** 

Surface: W2 Thread: Metric



2x Slotted Head Screw

with Washer Surface: W3 Thread: Metric

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0 D 12 7 mm / 50 in Material: Polypropylene Profiled inside surface with tension clearance

1x Elongated Weld Plate

Surface: W2 Thread: Metric

## **Order Code**

## SPV-212.7-PP-DP-AS-M-W10

W10 is the standard option for this type of installation.

## **Order Code**

## SPV-212.7-PP-IS-M-W10

W10 is the standard option for this type of installation.

## **Order Code**

## SPV-212.7-PP-LI-M-W10

W10 is the standard option for this type of installation. Available up to STAUFF Group 6 (DIN Group 6) only.



2x Hexagon Head Bolt Surface: W3

Thread: Metric

1x Cover Plate Surface: W3

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance

2x Hexagon Rail Nut

Surface: W3 Thread: Metric



2x Socket Cap Screw

with Washer Surface: W3 Thread: Metric

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0 D 12 7 mm / 50 in Material: Polypropylene Profiled inside surface with tension clearance

2x Hexagon Rail Nut Surface: W3 Thread: Metric



2x Slotted Head Screw

with Washer Surface: W3 Thread: Metric

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0 D 12 7 mm / 50 in Material: Polypropylene Profiled inside surface with tension clearance

2x Hexagon Rail Nut Surface: W3 Thread: Metric

Order Code (Mounting Rail TS not included.)

## SM-212.7-PP-DP-AS-M-W3

W3 is the standard option for this type of installation.

Order Code (Mounting Rail TS not included.)

SM-212.7-PP-IS-M-W3

W3 is the standard option for this type of installation.

Order Code (Mounting Rail TS not included.)

## SM-212.7-PP-LI-M-W3

W3 is the standard option for this type of installation. Available up to STAUFF Group 6 (DIN Group 6) only.





## 2x Hexagon Head Bolt

Surface: W3 Thread: Metric

## 1x Cover Plate

Surface: W3

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) O.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance



## 2x Socket Cap Screw

with Washer Surface: W3 Thread: Metric

## 1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface

with tension clearance



## 2x Slotted Head Screw

with Washer Surface: W3 Thread: Metric

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) Tube-0.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance

M

u

W3

W10

## **Order Code**

## 212.7-PP-DP-AS-M-W3

 $\mbox{\bf W3}$  is the standard option for this type of installation.

## **Order Code**

## 212.7-PP-IS-M-W3

W3 is the standard option for this type of installation.

## **Order Code**

## 212.7-PP-LI-M-W3

W3 is the standard option for this type of installation.

All threaded parts are available with Metric ISO thread or

unified coarse (UNC) thread according to dimension table.

## 2x Stacking Bolt Surface: W3

Surface: W3 Thread: Metric

## 1x Safety Locking Plate Surface: W3

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance



## 1x Socket Cap Screw

with Washer Surface: W3 Thread: Metric

1x Clamp Body (two halves) STAUFF Group 1 (DIN 0) 0.D. 6 mm / .24 in Material: Polypropylene Profiled inside surface with tension clearance Thread: Metric

## 1x Single Weld Plate

Surface: W2 Thread: Metric

## Unified coarse (UNC) thread Material codes

Metric ISO thread

Thread codes

The below listed material codes describe the materials and surface finishings of metal parts that are most relevant for Standard Series clamp assemblies. Individual combinations of alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

Metal parts made of Carbon Steel, zinc/nickel-plated

Metal parts made of Stainless Steel V2A
1.4301 / 1.4305 (AISI 304 / 303)

Metal parts made of Stainless Steel V4A
1.4401 / 1.4571 (AISI 316 / 316 Ti)

W5

Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated

## \_ \_ \_\_ \_\_

**Order Code** 

## 212.7-PP-SIG-AF-M-W3

 $\boldsymbol{W3}$  is the standard option for this type of installation.

## **Order Code\***

## SP-106-PP-IS-M-W10

 $\boldsymbol{W10}$  is the standard option for this type of installation.

## 2x Hexagon Head Bolt

Surface: W3 Thread: Metric



## 2x Insert

Material: Plastic

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance

## 1x Single Weld Plate

Surface: W2 Thread: Metric

## 2x Hexagon Head Bolt

Surface: W3 Thread: Metric

## 2x Insert

Material: Plastic

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance

## 1x Elongated Weld Plate

Surface: W2 Thread: Metric

## **Order Code**

## SP-212.7-PP-EP-AS-M-W10

W10 is the standard option for this type of installation.

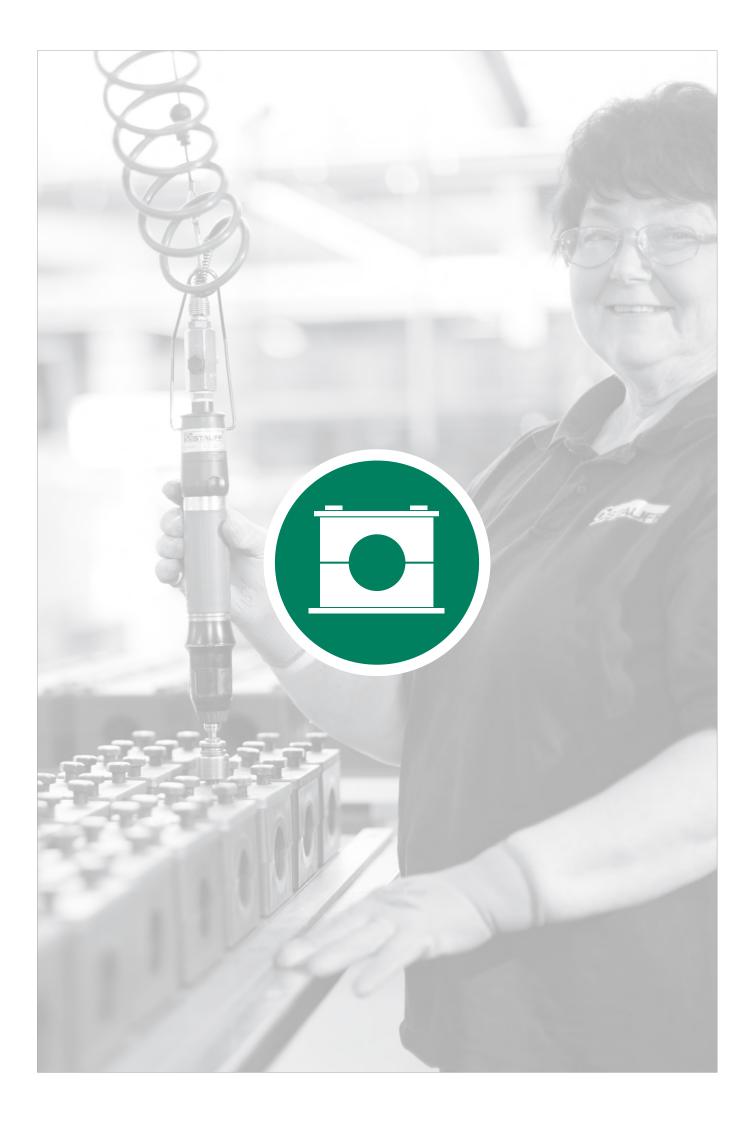
## **Order Code**

## SPV-212.7-PP-EP-AS-M-W10

W10 is the standard option for this type of installation.

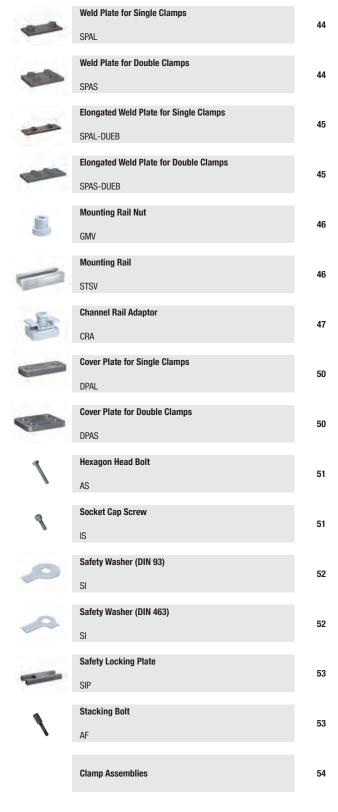
## **Technical Notes**

\* Because of their design, STAUFF Group 1 (DIN Group 0) clamp assemblies only include one single bolt / screw.







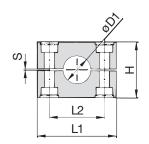




#### Clamp Body • Profiled Design

#### **Profiled Inside Surface with Tension Clearance**





#### **Ordering Codes**

\*3\*006-\*PP **Clamp Body** 

One clamp body is consisting of two clamp halves.

* 1st part of STAUFF Group	3
* Exact outside diameter Ø D1 (mm)	006
* Material code (see below)	PP

#### **Standard Materials**



Polypropylene Colour: Green Material code: PP



Polypropylene Colour: Black Material code: PP-BK



Polyamide Colour: Black Material code: PA



Thermoplastic Elastomer (87 Shore-A)

Colour: Black Material code: SA87



Aluminium Colour: Self-Colour Material code: AL

See pages 178 / 179 for material properties and technical informa-

#### **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 180 / 181 for material properties and technical information.

#### **Product Features**

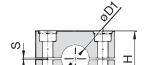
- Proven, tested and trusted product in various markets
- Recommended for the safe installation of rigid pipes and tubes
- Environmental protection due to vibration/noise reducing design
- Excellent weathering resistance, even under extreme conditions

Group		Outside Diameter Nominal Bore			Ordering Codes	Dimensions (mm/in)							
	世		Pipe / Tu	ıbe		Copper Tube							
	STAUFF	NIO	Ø D1		Pipe	ASTM B88	Halves)	L1	L1				
ı	S	0	(mm)	(in)	(in)	(in)	(** = Material)	PP/PA/SA	AL	L2	Н	S min.	Width
			6	4 / 4			3006-**						
			6,4	1/4			3006.4-**						
			8	5/16		4 / 4	3008-**						
			9,5	3/8	1 /0	1/4	3009.5-**						
			10 12		1/8		3010-**						
			12,7	1/2		3/8	3012-**		F.C.	20	20	0.0	20.5
	3S	1		1/2	1/4	3/0	3012.7-**	55 2.16	56 2.20	33 1.30	32 1.26	0,6	30,5
			13,5 14		1/4		3013.5-**	2.10	2.20	1.50	1.20	.02	1.20
			15				3014-**						
			16	5/8		1/2	3015-**						
			17,2	3/6	3/8	1/2	3016- <b>**</b> 3017.2- <b>**</b>						
			18		3/0		3018-**						
			20				3020-**						
1			19	3/4			4019-**						
			20	3/4			4020-**						
			21,3		1/2		4021.3-**						
			22	7/8	1/2	3/4	4022-**						
	4S	2	25	170		0/4	4025-**	70	70	45	48	0,6	30,5
	40		25,4	1			4025.4-**	2.76	2.76	1.77	1.89	.02	1.20
			26,9		3/4		4026.9-**						
			28		0/ 1		4028-**						
			30				4030-**						
ľ			30				5030-**						
			32	1-1/4			5032-**						
			33,7	, .	1		5033.7-**						
			35			1-1/4	5035-**	85	85	60	60	0,6	30.5
	5S	3	38	1-1/2			5038-**	3.35	3.35	2.36	2.36	.02	1.20
			40				5040- <b>**</b>						
			41,3			1-1/2	5041.3- <b>**</b>						
			42		1-1/4		5042- <b>**</b>						
Ì			38	1-1/2			6038-**						
			42		1-1/4		6042-**						
			44,5	1-3/4			6044.5-**						
			48,3		1-1/2		6048.3-**						
			50,8	2			6050.8-**						
			54			2	6054- <b>**</b>	445	100	00	00	0	45
	6S	4	55				6055-**	115 4.53	120 4.72	90 3.54	89 3.50	.08	45 1.77
			57				6057-**	4.00	4.72	3.04	3.00	.00	1.77
			57,2	2-1/4			6057.2-**						
			60,3		2		6060.3-**						
			63,5	2-1/2			6063.5-**						
			65				6065-**						
			70	2-3/4			6070-**						

See page 39 for STAUFF Group 7S to 12S (DIN Group 5 to 10).

Available for all commonly used pipe and tube outside diameters Additional outside diameters are available upon request. Please contact STAUFF for further information.





L2 L1

#### Clamp Body • Profiled Design

**Profiled Inside Surface with Tension Clearance** 



Group Outside Diameter			Diameter	Naminal	Ordering Codes	Dimensions (mm/in)							
	Pipe / Tube Ø D1 (mm) (in)			Bore (2 Clamp			Difficultions ( /m)						
当			Halves) L1		11								
STA	N N	(mm)	(in)	Pipe (in)	(** = Material)	PP/PA	L1 AL	L2	н	C min	Width		
O,	_	60,3	(111)	ripe (III)	7060.3-**	FF/FA	AL	LZ		S IIIIII.	wittii		
		65			7065- <b>**</b>								
		70	2-3/4		7003- <b>**</b>								
		73	2-3/4	2-1/2 (ANSI B 36-10)	7070- <b>**</b>								
7S	5	75		2-1/2 (ANOLD 30-10)	7075- <b>**</b>	154	152	122	120	2	60		
13	J	76,1	3	2-1/2 (DIN EN 10220)	7075- <b>**</b>	6.06	5.98	4.80	4.72	.08	2.36		
		80	J	2-1/2 (DIN LIN 10220)	7070.1- <b>**</b>								
		82,5			7082.5- <b>**</b>								
		88.9	3-1/2	3	7088.9- <b>**</b>								
		88,9	3-1/2	3	8088.9-**								
		100	3-1/2	3	8100-**								
		100	4	3-1/2	8102-**	206							
8S	6	102	4	3-1/2	8108-**		208	168	168	2	80		
03		114	4-1/2	4	8114-**	8.11	8.19	6.61	6.61	.08	3.15		
		127	5	4	8127-**								
		133	0		8133-**								
		127	5		9127-**								
		133	0		9133-**								
		140		5	9140-**								
98	7	152	6	0	9152-**	251	255	205	200	3	91		
30	ļ '	159	0		9159-**	9.88	10.04	8.07	7.87	.12	3.58		
		165			9165-**								
		168		6	9168-**								
		168		6	10168-**								
		177,8		0	10177.8-**								
		193,7			10193.7-**	336	326	265	270	3	120		
10S	8	203	8		10203-**	13.22	12.83	10.43	10.63	.12	4.72		
		216	3		10216-**	, 0.22	.2.00		. 0.00				
		219		8	10219-**								
		219		8	11219-**								
11S	9	273		10	11273-**	470	470	395	410	8	162		
		324		12	11324-**	18.50	18.50	15.55	16.14	.31	6.38		
		356		14	12356-**	630	630	534	530	20	182		
12S	10	406		16	12406-**	24.80	24.80	21.02	20.87	.79	7.16		

#### See page 38 for STAUFF Group 3S to 6S (DIN Group 1 to 4).

Additional outside diameters are available upon request. Please contact STAUFF for further information.

# Ordering Codes Clamp Body \*7\*060.3-\*PP

One clamp body is consisting of two clamp halves.

 \* 1st part of STAUFF Group
 7

 \* Exact outside diameter Ø D1 (mm)
 060.3

 \* Material code (see below)
 PP

#### **Standard Materials**









See pages 178 / 179 for material properties and technical information

#### **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 180 / 181 for material properties and technical information.

#### **Product Features**

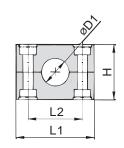
- Proven, tested and trusted product in various markets
- Recommended for the safe installation of rigid pipes and tubes
- Available for all commonly used pipe and tube outside diameters
- Environmental protection due to vibration/noise reducing design
- Excellent weathering resistance, even under extreme conditions

## **ESTAUFF**®

#### Clamp Body • Type H

#### **Smooth Inside Surface without Tension Clearance**





#### **Ordering Codes**

Clamp Body \*3\*006-\*PP-H

One clamp body is consisting of two clamp halves.

* 1st part of STAUFF Group	3
* Exact outside diameter Ø D1 (mm)	006
* Material code (see below)	PP-H

#### **Standard Materials**



Polypropylene Colour: Green Material code: PP-H



Polypropylene Colour: Green Material code: PP-H-BK



Polyamide Colour: Black Material code: PA-H



Thermoplastic Elastomer (87 Shore-A)

Colour: Black Material code: **SA87-H** 

See pages 178 / 179 for material properties and technical information.

#### **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 180 / 181 for material properties and technical information.

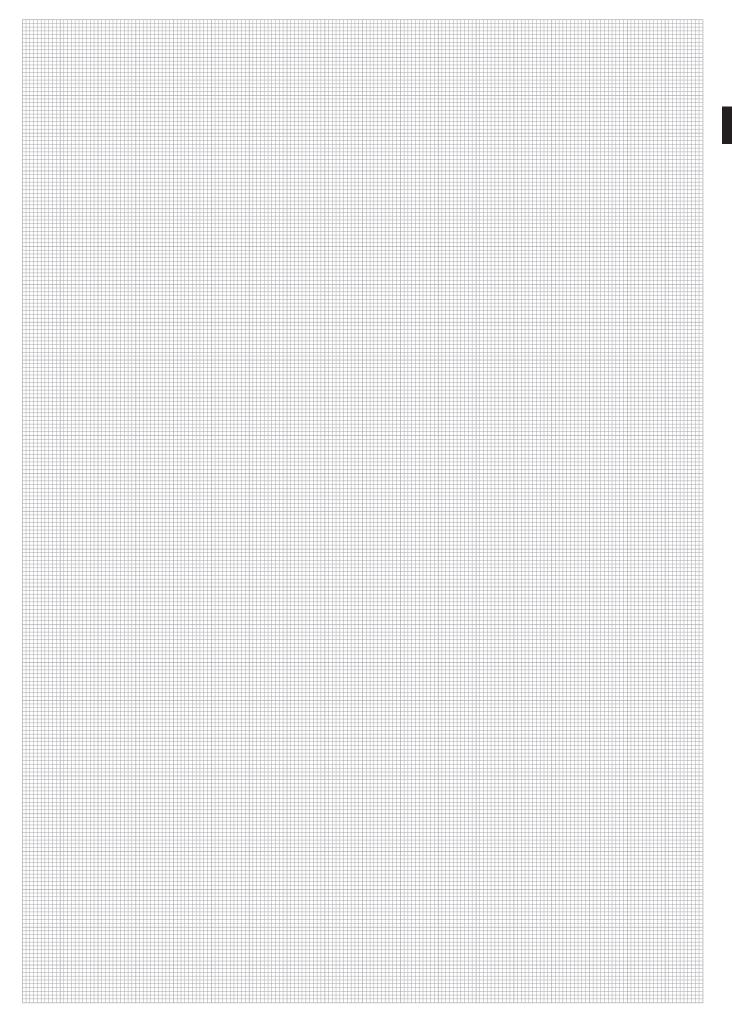
#### **Product Features**

- Proven, tested and trusted product in various markets
- Recommended for the safe installation of hoses and cables
- Chamfered edges avoid damaging of the hose or cable
- Available for all commonly used hose and cable outside diameters
- Excellent weathering resistance, even under extreme conditions

STAUFF Group		Outside Diam Hose Ø D1	neter	Ordering Codes (2 Clamp Halves)	Dimens (mm/in)	Dimensions (mm/ <sub>in</sub> )					
STA	NIO	(mm)	(in)	(**-H = Material)	L1	L2	Н	Width			
0,	_	6	(III)	3006-**-H	LI	LZ	- "	wiutii			
		6,4	1/4	3006.4-**-H							
		8	5/16	3008-**-H							
		9,5	3/8	3009.5-**-H							
		10	3/0	3010-**-H							
		12		3012-**-H							
3S	1	12,7	1/2	3012-7-11 3012.7-**-H	55	33	30,5	30,5			
33	'	13,5	1/2	3013.5-**-H	2.16	1.30	1.20	1.20			
		14		3014-**-H							
		15		3015-**-H							
		16	5/8	3016-**-H							
		17,2	3/0	3017.2-**-H							
		18		3018-**-H							
		19	3/4	4019-**-H							
		20	3/4	4019-**-H							
		21,3		4020-**-H							
		22	7/8	4021.3- <b>**</b> -П	70	45	4C E	30,5			
4S	2	25	1/0	4025-**-H	2.76	1.77	46,5 1.83	1.20			
43	2	25,4	1	4025.4-**-H	2.70	1.77	1.00	1.20			
		26,9	Į.	4025.4-**-H							
		28		4026.9- <b>**</b> -П							
		30		4030-**-H							
		30		4030-★★-H							
		32	1-1/4	5030-**-H							
		33,7	1-1/4	5032-**-H							
		35,7		5035.7-**-H	85	60		20.5			
5S	3	38	1-1/2	5038-**-H	3.35	2.36	58 2.28	30,5 1.20			
		40	1-1/2	5040-**-H	3.33	2.30	2.20	1.20			
		41,3		5040-**-H							
		42		5041.3-**-H							
		38	1-1/2	6038-**-H							
		42	1-1/2	6042-**-H							
		44,5	1-3/4	6044.5-**-H							
		44,5	1-3/4	6044.5-**-H							
			2		115	00	0.7	AE.			
		50,8 55		6050.8-**-H	115 4.53	90 3.54	3.43	45 1.77			
6S	4	57		6055- <b>**</b> -H 6057- <b>**</b> -H	4.00	3.34	3.43	1.77			
		57,2	2-1/4								
		60,3	2-1/4	6057.2- <b>**</b> -H							
			2-1/2	6060.3-**-H							
		63,5	2-1/2	6063.5- <b>**</b> -H							
		65	0.04	6065- <b>**</b> -H							
		70	2-3/4	6070- <b>**</b> -H							

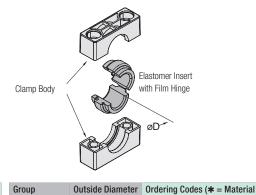
Additional outside diameters are available upon request. Please contact STAUFF for further information.





#### **Clamp Body with Elastomer Insert** Type RI





Ø D

(mm

6

8

(in

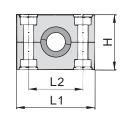
Pipe / Tube / Hose Clamp Assembly Clamp Body

4006-\*-R

4008-**≭**-R

Insert

(Clamp Body +



**Dimensions** 

Ø D1 L1

Insert \*

RI-06-4/4S-\*

RI-08-4/4S-\*

(2 Clamp Halves

#### **Ordering Codes**

#### \*4\*006-\*PP-R **Clamp Assembly**

One assembly is consisting of one clamp body and one insert.

* 1st part of STAUFF Group	4
* Exact outside diameter Ø D (mm)	006
* Material code (see below)	PP-R

#### \*4S-\*PP-R **Clamp Body**

One clamp body is consisting of two clamp halves.

* STAUFF Group	48
* Material code (see below)	PP-R

#### \*DI \*06 \*4/46 \*6479

Elastomer Insert "KI-"Ub-"4/45-"	5A/3
* Elastomer Insert	RI
* Exact outside diameter Ø D (mm)	06
* STAUFF Group 4S (Heavy) and 4 (Standard)	4/4\$
5S (Heavy) and 6 (Standard)	6/5S
6S (Heavy)	6S
7S (Heavy)	<b>7S</b>
8S (Heavy)	88
9S (Heavy)	98
10S (Heavy)	108
* Material code (see below)	SA73

#### **Standard Materials**



Polypropylene Colour: Black Material code: PP-R



**Polyamide** Colour: Black Material code: PA-R



Elastomer Insert 4S to 6S: Thermoplastic Elastomer (73 Shore-A) Material code: SA73

8S to 10S: EPDM (70 Shore-A) Material code: E70 Colour: Black

See pages 178 / 179 for material properties and technical informa-

#### **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 180 / 181 for material properties and technical information.

		8	5/16	4008- <b>≭</b> -K		KI-U8-4/45- <b>▼</b>					
		10		4010- <b>≭</b> -R		RI-10-4/4S-*					
		12		4012- <b>★</b> -R		RI-12-4/4S-*					
		12,7	1/2	4012.7- <b>★</b> -R		RI-12.7-4/4S-*	25	70	45	46,5	30,5
4S	2	14		4014- <b>≭</b> -R	4S- <b>≭</b> -R	RI-14-4/4S-*	.98	2.76	1.77	1.83	1.20
		15		4015- <b>≭</b> -R		RI-15-4/4S-*	.50	2.70	1.//	1.00	1.20
		16	5/8	4016- <b>≭</b> -R		RI-16-4/4S-*					
		17,2		4017.2- <b>★</b> -R		RI-17.2-4/4S-*					
		18		4018- <b>≭</b> -R		RI-18-4/4S-*					
		19	3/4	4019- <b>≭</b> -R		RI-19-4/4S-*					
		20		5020- <b>≭</b> -R		RI-20-6/5S-*					
		21,3		5021.3- <b>≭</b> -R		RI-21.3-6/5S-*					
		22	7/8	5022- <b>≭</b> -R		RI-22-6/5S-*					
5S	3	25		5025- <b>≭</b> -R	5S-*-R	RI-25-6/5S-*	38	85	60	58	30,5
33	3	26,9		5026.9- <b>★</b> -R	33- <b>4</b> -11	RI-26.9-6/5S-*	1.50	3.35	2.36	2.28	1.20
	28		5028- <b>≭</b> -R		RI-28-6/5S-*						
	30		5030- <b>∗</b> -R		RI-30-6/5S-*						
	32	1-1/4	5032- <b>≭</b> -R		RI-32-6/5S-*						
		32	1-1/4	6032- <b>≭</b> -R		RI-32-6S-*					
		33,7		6033.7- <b>≭</b> -R		RI-33.7-6S-*					
		35		6035- <b>∗</b> -R		RI-35-6S-*					
		38,7		6038.7- <b>≭-</b> R		RI-38.7-6S-*					
6S		40		6040- <b>≭</b> -R	6S- <b>*</b> -R	RI-40-6S-*	64	115	90	87	45
	4	42		6042- <b>≭</b> -R		RI-42-6S-*	2.52	4.53	3.54	3.43	1.77
		45,5		6045.5- <b>∗</b> -R		RI-45.5-6S-*	2.02	1.00	0.01	0.10	,
		48		6048- <b>≭</b> -R		RI-48-6S-*					
		51	2	6051- <b>≭</b> -R		RI-51-6S-*					
		53,4		6053.4- <b>≭</b> -R		RI-53.4-6S- <b>★</b>					
		56,4		6056.4- <b>≭</b> -R		RI-56.4-6S-*					
		55		7055- <b>≭</b> -R		RI-55-7S-*					
		57	2-1/4	7057- <b>≭</b> -R		RI-57-7S-*					
		60		7060- <b>≭</b> -R		RI-60-7S- <b>★</b>					
7S	5	63,5	2-1/2	7063.5- <b>≭</b> -R	7S- <b>∗</b> -R	RI-63.5-7S- <b>★</b>	88	154	122	120	60
,,,		65		7065- <b>≭</b> -R	70 4 11	RI-65-7S- <b>★</b>	3.56	6.06	4.80	4.72	2.36
		70	2-3/4	7070- <b>≭</b> -R		RI-70-7S-*					
		72		7072- <b>≭</b> -R		RI-72-7S-*					
		76	3	7076- <b>≭</b> -R		RI-76-7S-*					
		80		8080- <b>≭</b> -R		RI-80-8S-*	114	208	168	168	80
8S	6	88,9	3-1/2	8088.9- <b>*</b> -R	8S- <b>∗</b> -R	RI-88.9-8S-*	4.49	8.11	6.61	6.61	3.15
		102		8102- <b>★</b> -R		RI-102-8S-*		0.11	5.51	3.31	5.10
		114		9114- <b>*</b> -R		RI-114-9S-*	150	251	205	200	91
98	7	133	5-1/4	9133- <b>≭</b> -R	9S- <b>≭</b> -R	RI-133-9S-*	5.91	9.88	8.07	7.87	3.58
		140		9140- <b>≭</b> -R		RI-140-9S-*	0.01	0.00	3.01	7.01	5.50
		150		10150- <b>∗</b> -R		RI-150-10S-*					
10S	8	165		10165- <b>★</b> -R	10S- <b>*</b> -R	RI-165-10S-*	200	336	265	270	120
.00	0	168		10168- <b>∗</b> -R	100-4-11	RI-168-10S-*	7.87	13.22	10.43	10.63	4.72
		172		10172- <b>★</b> -R		RI-172-10S-*	1				

\* Elastomer Inserts for Heavy Series clamp bodies, STAUFF Group 4S also fit into Standard Series clamp bodies, STAUFF Group 4. Elastomer Inserts for Heavy Series clamp bodies, STAUFF Group 5S also fit into Standard Series clamp bodies, STAUFF Group 6.

Additional outside diameters are available upon request. Please contact STAUFF for further information.

#### **Product Features**

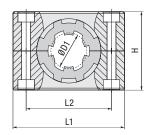
- Proven, tested and trusted product in various markets
- Either for the extra vibration/noise reducing installation of pipes and tubes or the extra gentle installation of hoses and cables
- Available for all commonly used outside diameters
- Excellent weathering resistance, even under extreme conditions











Group	р	Outsid	e Diameter	<b>Ordering Codes</b>	(* = Material)		Dime	imensions				
<u>.</u>		Pipe /	Tube	Clamp Assembly	Clamp Body	NRC Insert	(mm/in	)				
STAUFF	-	Ø D1		(Clamp Body +								
ST	DIN	(mm)	(in)	NRC Insert)	(2 Clamp Halves)	(2 Insert Halves)	L1	L2	Н	Width	Bolts	
		6		3006-PP-NRC		RI-NRC-06-3S-*						
		8	5/16	3008-PP-NRC		RI-NRC-08-3S-*	55 33	33 3	20.5			
3S	1	10		3010-PP-NRC		RI-NRC-10-3S-*	2.17		30,5			
		12		3012-PP-NRC		RI-NRC-12-3S-*	2.17	1.50	1.20			
		12,7	1/2	3012.7-PP-NRC		RI-NRC-12.7-3S-*						
		14		4014-PP-NRC		RI-NRC-14-4S-*						
		15		4015-PP-NRC		RI-NRC-15-4S-*						
		16	5/8	4016-PP-NRC		RI-NRC-16-4S-*						
		17,2		4017.2-PP-NRC		RI-NRC-17.2-4S-*	70	45	48	30,5		
4S	2	18		4018-PP-NRC	4S-PP-RI-S/NRC	RI-NRC-18-4S-*	2.76	1.77	1.89	1.20	M10	
		19	3/4	4019-PP-NRC		RI-NRC-19-4S-*	2.10	1.77	1.03	1.20	IVITO	
		20		4020-PP-NRC		RI-NRC-20-4S-*						
		21,3		4021.3-PP-NRC		RI-NRC-21.3-4S-*						
		22	7/8	4022-PP-NRC		RI-NRC-22-4S-*						
		25		5025-PP-NRC		RI-NRC-25-5S- <b>★</b>						
		26,9		5026.9-PP-NRC		RI-NRC-26.9-5S-*						
5S	3	28		5028-PP-NRC	5S-PP-RI-S/NRC	RI-NRC-28-5S-*	85	60	58			
50	3	30		5030-PP-NRC	30 11 111 0/14110	RI-NRC-30-5S-*	3.35 2.36	2.36	2.28			
		32	1-1/4	5032-PP-NRC		RI-NRC-32-5S-*						
		38	1-1/2	5038-PP-NRC		RI-NRC-38-5S-*						
		33,7		6033.7-PP-NRC		RI-NRC-33.7-6S-*						
		35		6035-PP-NRC		RI-NRC-35-6S-*						
		38	1-1/2	6038-PP-NRC		RI-NRC-38-6S-*						
		38,7		6038.7-PP-NRC		RI-NRC-38.7-6S-*						
		40		6040-PP-NRC		RI-NRC-40-6S-*	115 90	an	85	45		
6S	4	42		6042-PP-NRC	6S-PP-RI-S/NRC	RI-NRC-42-6S-*	4.53	3.54	3.35	1.77	M12	
		45,5		6045.5-PP-NRC		RI-NRC-45.5-6S-*	1.00	0.01	0.00	1.,,		
		48		6048-PP-NRC		RI-NRC-48-6S-*						
		51		6051-PP-NRC		RI-NRC-51-6S-*						
		53,4		6053.4-PP-NRC		RI-NRC-53.4-6S-*						
		57		6057-PP-NRC		RI-NRC-57-6S-*						
		60		6060-PP-NRC		RI-NRC-60-7S-*						
7S	5	63,5		6063.5-PP-NRC	7S-PP-RI-S/NRC	RI-NRC-63,5-7S-*		122	116	60	M16	
, 0		65		6065-PP-NRC	75 11 III-0/NIIU	RI-NRC-65-7S-*	6.06	4.80	4.57	2.36		
		70	2-3/4	6070-PP-NRC		RI-NRC-70-7S-*						
		72		6072-PP-NRC		RI-NRC-72-8S-*						
8S	6	76		6076-PP-NRC	8S-PP-RI-S/NRC	RI-NRC-76-8S-*	206	168	164	80	M20	
30		80		6080-PP-NRC	00 71 111 0/14110	RI-NRC-80-8S-*	8.11	6.61	6.46	3.15	IVIZU	
		88,9	3-1/2	6088.9-PP-NRC		RI-NRC-88.9-8S-*						

Additional outside diameters are available upon request. Please contact STAUFF for further information.

#### **Product Features**

- $\blacksquare$  Designed for the noise and vibration reducing installation of pipes and tubes
- Working principle based on a specially shaped, two-part elastomer insert, which mechanically
  absorbs vibration in the pipe or tube and as a result reduces noises arising to a minimum
- Elastomer insert is in particular distinguished by how little of its surface is in contact
  with the pipe or tube as well as with the clamp body
- Light tension of the elastomer insert in mounted condition provides the necessary clamping force
- Tongue-groove contour of the elastomer insert and the clamp body (which is reversed and thus diverges from heavy series DIN 3015 clamps with elastomer insert) enables the system to be used for the maximum range of outside diameters per clamp size

#### Elastomer Inserts for multi-spiral hydraulic hoses (on request)

- Designed for the noise and vibration reducing installation of multi-spiral hydraulic hoses
- Multi-spiral hydraulic hoses retains a certain defined "freedom of movement" in the radial direction, so that tolerance can be compensated and the outer diameter of the hose can change to the necessary extent due to the pressure pulsation
- Elastomer insert has been adapted to hydraulic hoses in terms of its contour (much larger outlet radii and longitudinal ribs) and elasticity
- Longitudinal ribs in the elastomer insert allow the compensation of changes in the diameter of the hose while at the same time ensuring gentle yet stable fixation

#### \*3\*006-\*PP-\*NRC **Clamp Assembly** One assembly is consisting of one clamp body and one insert. \* STAUFF Group \* Exact outside diameter Ø D1 (mm) 006 \* Material code (siehe unten) \* Insert NRC NRC Clamp Body \*3S-\*PP-\*RI-S/NRC One NRC clamp body is consisting of two clamp halves. \* STAUFF Group \* Material code (see below) \* Clamp Design RI-S/NRC **NRC Elastomer Insert**

**Ordering Codes** 

#### \*RI-NRC-\*06-\*3S-\*SA73

One NRC elastomer insert is consisting of two insert halves.

* NRC Elastomer Insert	RI-NRC
* Exact outside diameter ØD1 (mm)	06
* STAUFF Group	38
* Material code (siehe unten)	SA73

#### **Standard Materials**



Polypropylene Colour: Black Material code: PP



Elastomer Insert

**Thermoplastic Elastomer** (73 Shore-A) Colour: Black

Material code: **SA73** 

See pages 178 / 179 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

#### **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

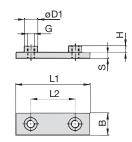
See pages 180 / 181 for material properties and technical information.





#### **Weld Plate for Single Clamps Type SPAL**





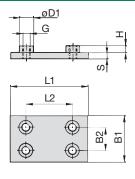
Ordering C	odes	
Weld Plate	*SPAL-*3S-*M-*1	N2
* Weld Plate for S	ingle Clamps S	PAL
* STAUFF Group		3S
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U
* Material code	Carbon Steel, uncoated Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W1 W2 W3 W4

Group		Dimensio	ons (mm/in)						Ordering Codes
STAUFF	DIN	L1	L2	В	S	Н	Thread G	ØD1	(Standard Options)
3S	1	74	33	30	8	8	M10	18	SPAL-3S-M-W2
33	'	2.91	1.30	1.18	.31	.31	3/8-16 UNC	.71	SPAL-3S-U-W2
4S	2	86	45	30	8	8	M10	18	SPAL-4S-M-W2
43		3.39	1.77	1.18	.31	.31	3/8-16 UNC	.71	SPAL-4S-U-W2
5S	3	100	60	30	8	8	M10	18	SPAL-5S-M-W2
33	3	3.94	2.36	1.18	.31	.31	3/8-16 UNC	.71	SPAL-5S-U-W2
6S	4	140	90	45	10	8	M12	20	SPAL-6S-M-W2
03	4	5.51	3.54	1.77	.39	.31	7/16-14 UNC	.78	SPAL-6S-U-W2
7S	5	180	122	60	10	12	M16	24	SPAL-7S-M-W2
13	5	7.09	4.80	2.36	.39	.47	5/8-11 UNC	.94	SPAL-7S-U-W2
8S	6	226	168	80	15	18	M20	30	SPAL-8S-M-W1
03	U	8.90	6.61	3.15	.59	.71	3/4-10 UNC	1.18	SPAL-8S-U-W1
98	7	270	205	90	15	21	M24	35	SPAL-9S-M-W1
93	1	10.63	8.07	3.54	.59	.83	7/8-9 UNC	1.38	SPAL-9S-U-W1
10S	8	340	265	120	25	21	M30	45	SPAL-10S-M-W1
103	0	13.39	10.43	4.72	.98	.83	1-1/8-7 UNC	1.77	SPAL-10S-U-W1
11S	9	520	395	160	30	38	M30	50	SPAL-11S-M-W1
110	9	20.47	15.55	6.30	1.18	1.50	1-1/4-7 UNC	1.97	SPAL-11S-U-W1
120	10	680	534	180	30	38	M30	50	SPAL-12S-M-W1
12S	10	27.16	21.02	7.09	1.18	1.50	1-1/4-7 UNC	1.97	SPAL-12S-U-W1

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### **Weld Plate for Double Clamps Type SPAS**





#### **Ordering Codes**

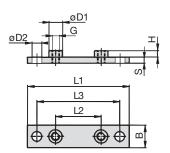
Weld Plate	*SPAS-*3S-*M-*	W2
* Weld Plate for D	ouble Clamps S	PAS
* STAUFF Group		3\$
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U
* Material code	Carbon Steel, uncoated Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated	W1 W2 W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W4 W5

Group		Dimens	ions (mm/	in)						Ordering Codes
STAUFF	DIN	L1	L2	B1	B2	S	Н	Thread G	ØD1	(Standard Options)
3S	1	74	33	60	30,5	8	8	M10	18	SPAS-3S-M-W2
33	'	2.91	1.30	2.36	1.20	.31	.31	3/8-16 UNC	.71	SPAS-3S-U-W2
4S	2	86	45	60	30,5	8	8	M10	18	SPAS-4S-M-W2
45	2	3.39	1.77	2.36	1.20	.31	.31	3/8-16 UNC	.71	SPAS-4S-U-W2
5S	3	100	60	60	30,5	8	8	M10	18	SPAS-5S-M-W2
55	3	3.94	2.36	2.36	1.20	.31	.31	3/8-16 UNC	.71	SPAS-5S-U-W2
6S	4	140	90	90	46	10	8	M12	20	SPAS-6S-M-W2
05	4	5.51	3.54	3.54	1.81	.39	.31	7/16-14 UNC	.78	SPAS-6S-U-W2
7S	5	180	122	120	61	10	12	M16	24	SPAS-7S-M-W2
15	5	7.09	4.80	4.72	2.40	.39	.47	5/8-11 UNC	.94	SPAS-7S-U-W2
8S	6	226	168	160	81	15	18	M20	30	SPAS-8S-M-W1
00	O	8.90	6.61	6.61	3.19	.59	.71	3/4-10 UNC	1.18	SPAS-8S-U-W1
00	7	270	205	180	91	15	21	M24	35	SPAS-9S-M-W1
9S	7	10.63	8.07	7.09	3.58	.59	.83	7/8-9 UNC	1.38	SPAS-9S-U-W1
100	0	340	265	240	121	25	21	M30	45	SPAS-10S-M-W1
10S	8	13.39	10.43	9.45	4.78	.98	.83	1-1/8-7 UNC	1.77	SPAS-10S-U-W1
110	0	520	395	324	166	30	38	M30	50	SPAS-11S-M-W1
11S	9	20.47	15.55	12.76	6.54	1.18	1.50	1-1/4-7 UNC	1.97	SPAS-11S-U-W1
100	10	680	534	364	186	30	38	M30	50	SPAS-12S-M-W1
12S	10	27.16	21.02	14.33	7.32	1.18	1.50	1-1/4-7 UNC	1.97	SPAS-12S-U-W1

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.







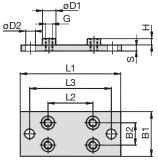
#### **Elongated Weld Plate for Single Clamps Type SPAL-DUEB**



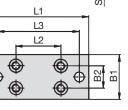
Group		Dimen	sions (m	m/in)							Ordering Codes
STAUFF	DIN	L1	L2	L3	В	S	Н	Thread G	ØD1	ØD2	(Standard Options)
3S	1	113	33	85	30	8	8	M10	18	13	SPAL-DUEB-3S-M-W2
33	'	4.45	1.30	3.35	1.18	.31	.31	3/8-16 UNC	.71	.51	SPAL-DUEB-3S-U-W2
4S	2	125	45	97	30	8	8	M10	18	13	SPAL-DUEB-4S-M-W2
43	2	4.92	1.77	3.82	1.18	.31	.31	3/8-16 UNC	.71	.51	SPAL-DUEB-4S-U-W2
5S	3	140	60	112	30	8	8	M10	18	13	SPAL-DUEB-5S-M-W2
33	3	5.51	2.36	4.41	1.18	.31	.31	3/8-16 UNC	.71	.51	SPAL-DUEB-5S-U-W2
6S	4	187	90	155	45	10	8	M12	20	16	SPAL-DUEB-6S-M-W2
03	4	7.36	3.54	6.10	1.77	.39	.31	7/16-14 UNC	.78	.62	SPAL-DUEB-6S-U-W2
7S	5	238	122	198	60	10	12	M16	24	21	SPAL-DUEB-7S-M-W2
13	3	9.37	4.80	7.80	2.36	.39	.47	5/8-11 UNC	.94	.83	SPAL-DUEB-7S-U-W2
8S	6	309	168	259	80	15	18	M20	30	26	SPAL-DUEB-8S-M-W1
03	0	12.17	6.61	10.20	3.15	.59	.71	3/4-10 UNC	1.18	1.02	SPAL-DUEB-8S-U-W1
98	7	370	205	310	90	15	21	M24	35	31	SPAL-DUEB-9S-M-W1
93	\ '	14.57	8.07	12.20	3.54	.59	.83	7/8-9 UNC	1.38	1.22	SPAL-DUEB-9S-U-W1
10S	8	460	265	400	120	25	21	M30	45	31	SPAL-DUEB-10S-M-W1
103	0	18.11	10.43	15.75	4.72	.98	.83	1-1/8-7 UNC	1.77	1.22	SPAL-DUEB-10S-U-W1
11S	9	590	395	530	160	30	38	M30	50	31	SPAL-DUEB-11S-M-W1
113	J	23.23	15.55	20.87	6.30	1.18	1.50	1-1/4-7 UNC	1.97	1.22	SPAL-DUEB-11S-U-W1
12S	10	750	534	690	180	30	38	M30	50	31	SPAL-DUEB-12S-M-W1
123	10	29.53	21.02	27.17	7.09	1.18	1.50	1-1/4-7 UNC	1.97	1.22	SPAL-DUEB-12S-U-W1

#### **Ordering Codes** Weld Plate \*SPAL-DUEB-\*3S-\*M-\*W2 \* Elongated Weld Plate for Single Clamps SPAL-DUEB \* STAUFF Group 3\$ \* Thread code Metric ISO thread M Unified coarse (UNC) thread U \* Material code Carbon Steel, uncoated W1 Carbon Steel, phosphated W2 Carbon Steel, zinc/nickel-plated W3 Stainless Steel V2A W4 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A W5 1.4401 / 1.4571 (AISI 316 / 316 Ti)

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.



STAUFF Group 3S to 9S



<u>øD</u>1 G L3 L2 B2

STAUFF Group 10S to 12S

**Elongated Weld Plate for Double Clamps Type SPAS-DUEB** 



Group		Dimer	sions (	(mm/in)								Ordering Codes
STAUFF	DIN	L1	L2	L3	B1	B2	S	Н	Thread G	ØD1	ØD2	(Standard Options)
3S	1	113	33	85	60	30,5	8	8	M10	18	13	SPAS-DUEB-3S-M-W2
33	'	4.45	1.30	3.35	2.36	1.20	.31	.31	3/8-16 UNC	.71	.51	SPAS-DUEB-3S-U-W2
4S	2	125	45	97	60	30,5	8	8	M10	18	13	SPAS-DUEB-4S-M-W2
40		4.92	1.77	3.82	2.36	1.20	.31	.31	3/8-16 UNC	.71	.51	SPAS-DUEB-4S-U-W2
5S	3	140	60	112	60	30,5	8	8	M10	18	13	SPAS-DUEB-5S-M-W2
JJ	3	5.51	2.36	4.41	2.36	1.20	.31	.31	3/8-16 UNC	.71	.51	SPAS-DUEB-5S-U-W2
6S	4	187	90	155	90	46	10	8	M12	20	16	SPAS-DUEB-6S-M-W2
03	4	7.36	3.54	6.10	3.54	1.81	.39	.31	7/16-14 UNC	.78	.62	SPAS-DUEB-6S-U-W2
7S	5	238	122	198	120	61	10	12	M16	24	21	SPAS-DUEB-7S-M-W2
13	J	9.37	4.80	7.80	4.72	2.40	.39	.47	5/8-11 UNC	.94	.83	SPAS-DUEB-7S-U-W2
8S	6	309	168	259	160	81	15	18	M20	30	26	SPAS-DUEB-8S-M-W1
00	U	12.17	6.61	10.20	6.61	3.19	.59	.71	3/4-10 UNC	1.18	1.02	SPAS-DUEB-8S-U-W1
98	7	370	205	310	180	91	15	21	M24	35	31	SPAS-DUEB-9S-M-W1
90	′	14.57	8.07	12.20	7.09	3.58	.59	.83	7/8-9 UNC	1.38	1.22	SPAS-DUEB-9S-U-W1
10S	8	460	265	400	240	121	25	21	M30	45	31	SPAS-DUEB-10S-M-W1
103	O	18.11	10.43	15.75	9.45	4.78	.98	.83	1-1/8-7 UNC	1.77	1.22	SPAS-DUEB-10S-U-W1
11S	9	590	395	530	324	166	30	38	M30	50	31	SPAS-DUEB-11S-M-W1
113	J	23.23	15.55	20.87	12.76	6.54	1.18	1.50	1-1/4-7 UNC	1.97	1.22	SPAS-DUEB-11S-U-W1
12S	10	750	534	690	364	186	30	38	M30	50	31	SPAS-DUEB-12S-M-W1
123	10	29.53	21.02	27.17	14.33	7.32	1.18	1.50	1-1/4-7 UNC	1.97	1.22	SPAS-DUEB-12S-U-W1

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.



Ordering C	odes	
Weld Plate *	SPAS-DUEB-*3S-*M-*V	<b>V2</b>
* Elongated Weld	Plate for Double Clamps SPAS-D	UEB
* STAUFF Group		3S
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U
* Material code	Carbon Steel, uncoated Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated	W1 W2 W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W4 W5

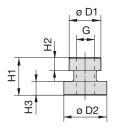
## **E**STAUFF ®

# **Mounting Rail Nut** (for Use with Mounting Rail STSV)

(for Use with Mounting Rail STSV) **Type GMV** 









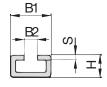
#### **Ordering Codes Mounting Rail Nut** \*GMV-\*3-5S\*M-\*W3 \* Mounting Rail Nut GMV \* STAUFF Group 3S to 5S (DIN Group 1 to 3) 3-5S 6S (DIN Group 4) 6S \* Thread code Metric ISO thread M U Unified coarse (UNC) thread \* Material code Carbon Steel, zinc/nickel-plated W3 Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

Group		Dimension	IS ( <sup>mm</sup> /in)	Ordering Codes				
STAUFF	DIN	ØD1	ØD2	H1	H2	Н3	Thread G	(Standard Options)
3S	1							
4S	2	17,8	24	21	7,6	7,4	M10	GMV-3-5S-M-W3
43	۷	.70	.94	.83	.30	.29	3/8-16 UNC	GMV-3-5S-U-W3
5S	3							
00	4	19,8	24	23	8,8	8,8	M12	GMV-6S-M-W3
6S	4	.78	.94	.91	.35	.35	7/16-14 UNC	GMV-6S-U-W3

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### Mounting Rail (for Use with Mounting Rail Nut GMV) Type STSV





Ordering C	odes	
Mounting Rai	il *STSV-*1M-*	W1
* Mounting Rail		STSV
* Length of rail	1 m / 3.28ft 2 m / 6.56ft	1M 2M
	Alternative lengths available upon rec Contact STAUFF for further informa	
* Material code	Carbon Steel, uncoated	W1
	Carbon Steel, zinc-plated, blue-chromated	W32
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

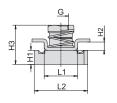
Group		Dimension	S ( <sup>mm</sup> / <sub>in</sub> )			Ordering Codes (Standard Options)		
STAUFF	DIN	B1	B2	Н	S	Length of Rail: 1 m / 3.28ft	Length of Rail: 2m / 6.56ft	
3\$	1							
<b>4</b> S	2	40	13	22	5	STSV -1M-W1	STSV -2M-W1	
5S	3	1.57	.51	.86	.19	212A -1IAI-AA I	313V -2IVI-W I	
6S	4							

 $Alternative\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.\ Contact\ STAUFF\ for\ further\ information.$ 



#### Channel Rail Adaptor (for Use with Various Channel Rails) Type CRA





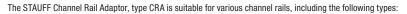


Group		Dimensions (mn	Ordering Codes								
STAUFF	DIN	Thread G	L1	L2	L3	B1	B2	H1	H2	Н3	(Standard Options)
3S	1										
4S	2	M10	22	35	38	22	20,5	9,2	5,5	27,5	CRA-3-5S-M-W3
43	2	3/8-16 UNC	.87	1.38	1.50	.87	.81	.36	.22	1.08	CRA-3-5S-U-W3
5S	3										
6S	4	M12	21,5	35	45	25	19	9,2	5	24,5	CRA-6S-M-W3
00	7	7/16–14 UNC	.85	1.38	1.77	.98	.75	.36	.20	.57	CRA-6S-U-W3

**Ordering Codes** \*CRA-\*3-5S-\*M-\*W3 **Adaptor** \* Channel Rail Adaptor CRA \* STAUFF Group 3S to 5S (DIN Group 1 to 3) 3-5S 6S (DIN Group 4) 6S \* Thread code Metric ISO thread M Unified coarse (UNC) thread U \* Material code Carbon Steel, zinc/nickel-plated W3 Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

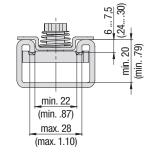
#### **Compatibility with Channel Rails**





HALFEN	HILTI	UNISTRUT®	STAUFF (Cushion Clamp Series)
HM 41/41	MQ-21, MQ-41, MQ-52, MQ-72	P1000, P1000T, P1000V, P1000VT, P1001	SCS-048-1-PL, SCS-048-1-GR
HZA 41/22	MQ-21U, MQ-41U, MQ-72U	P2000, P2000T	SCS-120-1-PL, SCS-120-1-GR
HZM 41/41	MQ-21D, MQ-41D, MQ-52-72D	P3003, P3003T, P3300V, P3300VT, P3301	See page 149 for technical information.
HZM 41/22		P4000, P4000T	
HL 41/41, HL 41/B2		P5000, P5000T, P5001, P5500, P5500T, P5501	

Contact STAUFF to check compatibility with additional types of channel rails.



Basic dimensional requirements for channel rails to be used with STAUFF Channel Rail Adaptors, type CRA

#### Recommended Bolt Lengths when using the Channel Rail Adaptor, Type CRA

Group		Hexagon Head Bolts AS (used with Cove	r Plates DPAL or DPAS)	Socket Cap Screws IS (used without Cover Plates DPAL or DPAS)			
STAUFF	DIN	Metric ISO thread	Unified coarse (UNC) thread	Metric ISO thread	Unified coarse (UNC) thread		
3S	1	M10 x 40	3/8-16 UNC x 1-1/2	M10 x 25	3/8–16 UNC x 1		
<b>4</b> S	2	M10 x 55	3/8–16 UNC x 2-1/4	M10 x 40	3/8–16 UNC x 1-1/2		
5S	3	M10 x 65	3/8-16 UNC x 2-3/4	M10 x 50	3/8–16 UNC x 2		
6S	4	M12 x100	7/16–14 UNC x 3-3/4	M12 x 75	7/16–14 UNC x 3		

Clamp assemblies including Channel Rail Adaptors, type CRA are supplied with the recommended bolt lengths by default. See page 48 for further information on ordering.

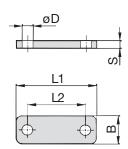






#### **Cover Plate for Single Clamps Type DPAL**





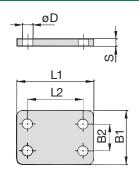
Ordering C	odes
<b>Cover Plate</b>	*DPAL-*3S-*W2
* Cover Plate for	Single Clamps DPAL
* STAUFF Group	3\$
* Material code	Carbon Steel, uncoated W1 Carbon Steel, phosphated W2 Carbon Steel, zinc/nickel-plated W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) <b>W4</b>
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) <b>W5</b>
	Aluminium EN AW-6060 (for group sizes 3S to 5S only) <b>W85</b>

Group		Dimensions (	<sup>nm</sup> /in)		Ordering Codes		
STAUFF	DIN	L1	L2	В	S	ØD	(Standard Options)
3S	1	55	33	30	8	11	DPAL-3S-W2
33	'	2.16	1.30	1.18	.31	.43	DFAL-33-WZ
4S	2	70	45	30	8	11	DPAL-4S-W2
40	2	2.76	1.77	1.18	.31	.43	DFAL-43-W2
5S	3	85	60	30	8	11	DPAL-5S-W2
33	3	3.35	2.36	1.18	.31	.43	DFAL-33-WZ
6S	4	115	90	45	10	14	DPAL-6S-W2
03	4	4.53	3.54	1.77	.39	.55	DFAL-03-W2
7S	5	152	122	60	10	19	DPAL-7S-W2
13	5	5.98	4.80	2.36	.39	.75	DFAL-73-WZ
8S	6	206	168	80	15	22	DPAL-8S-W1
03	O	8.11	6.61	3.15	.59	.87	DLAT-09-MI
98	7	251	205	90	15	26	DPAL-9S-W1
93	1	9.88	8.07	3.54	.59	1.02	DEAL-39-WI
10S	8	320	265	120	25	35	DPAL-10S-W1
103	0	12.60	10.43	4.72	.98	1.38	DLAT-109-M1
11S	9	470	395	160	30	35	DPAL-11S-W1
119	9	18.50	15.55	6.30	1.18	1.38	DLAT-119-M1
100	10	630	534	180	30	35	DDAL 10C W1
12S	10	24.80	21.02	7.09	1.18	1.38	DPAL-12S-W1

 $Alternative\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.\ Contact\ STAUFF\ for\ further\ information.$ 

#### **Cover Plate for Double Clamps Type DPAS**





Ordering Codes						
<b>Cover Plate</b>	*DPAS-*3S-	*W2				
* Cover Plate for	Double Clamps	DPAS				
* STAUFF Group		3S				
* Material code	Carbon Steel, uncoated	W1				
	Carbon Steel, phosphated	W2				
	Carbon Steel, zinc/nickel-plated	W3				
	Stainless Steel V2A					
	1.4301 / 1.4305 (AISI 304 / 303)	W4				
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 T	, <b>W5</b>				
		.,				

Group		Dimensions	S ( <sup>mm</sup> / <sub>in</sub> )					Ordering Codes
STAUFF	DIN	L1	L2	B1	B2	S	ØD	(Standard Options)
20	1	55	33	60	30,5	8	11	DPAS-3S-W2
3S 1	2.16	1.30	2.36	1.20	.31	.43	DFA3-33-W2	
4S	2	70	45	60	30,5	8	11	DPAS-4S-W2
40		2.76	1.77	2.36	1.20	.31	.43	DFA3-43-W2
5S	3	83	60	60	30,5	8	11	DPAS-5S-W2
33	3	3.27	2.36	2.36	1.20	.31	.43	DFA3-33-W2
6S	4	115	90	90	46	10	14	DPAS-6S-W2
03	4	4.53	3.54	3.54	1.81	.39	.55	DFA3-03-W2
7S	5	152	122	120	61	10	19	DPAS-7S-W2
73	0	5.98	4.80	4.72	2.40	.39	.75	DI A5-75-W2
8S	6	206	168	160	81	15	22	DPAS-8S-W1
00	U	8.11	6.61	6.61	3.19	.59	.87	DI A5-05-W I
98	7	251	205	180	91	15	26	DPAS-9S-W1
30	'	9.88	8.07	7.09	3.58	.59	1.02	DI A3-93-W I
10S	8	320	265	240	121	25	35	DPAS-10S-W1
100	O	12.60	10.43	9.45	4.78	.98	1.38	DI A3-103-W1
11S	9	470	395	321	166	30	35	DPAS-11S-W1
113	9	18.50	15.55	12.64	6.54	1.18	1.38	DI A0-110-W1
12S	10	630	534	361	186	30	35	DPAS-12S-W1
123	10	24.80	21.02	14.21	7.32	1.18	1.38	DF M3-123-W I

 $\label{thm:linear_all_all_all_all} \textbf{Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.}$ 

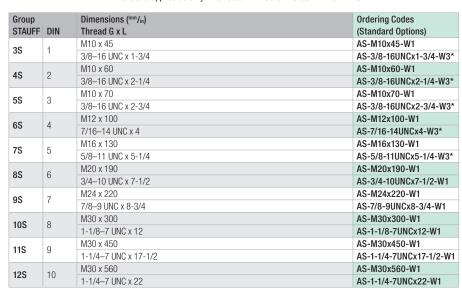


#### Hexagon Head Bolt Type AS



#### Hexagon Head Bolt AS

(according to DIN 931 / 933 or ANSI / ASME B18.2.1.) Dimensions applicable only when used with Cover Plates DPAL or DPAS





### **Ordering Codes**

#### Hexagon Head Bolt \*AS-\*M10x70-\*W1

noxagon noa	a bott Tio IIII oxio	
* Type of bolt	Hexagon Head Bolt (according to DIN 931 / 933 or ANSI / ASME B18.2.1.)	AS
* Thread type and	size acc. to dimension table M10	)x70
* Material code	Carbon Steel, uncoated Carbon Steel, zinc/nickel-plated	W1 W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

 Standard finishing option for Heavy Series group sizes 3S to 7S in North America is W3 (Carbon Steel, zinc/nickel-plated).

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### Socket Cap Screw Type IS



#### Socket Cap Screw IS

(according to ISO 4762 or ANSI / ASME B18.3)

Dimensions applicable only when used without Cover Plates

Group STAUFF	DIN	Dimensions (mm/ <sub>in</sub> ) Thread G x L	Ordering Codes (Standard Options)
3S	1	M10 x 30	IS-M10x30-W1
33		3/8-16 UNC x 1	IS-3/8-16UNCx1-W3*
40	0	M10 x 40	IS-M10x40-W1
4S	2	3/8-16 UNC x 1-3/4	IS-3/8-16UNCx1-3/4-W3*
	0	M10 x 50	IS-M10x50-W1
5S	3	3/8-16 UNC x 2	IS-3/8-16UNCx2-W3*
00	4	M12 x 80	ISM12x80-W1
6S	4	7/16–14 UNC x 3-1/4	IS-7/16-14UNCx3-1/4-W3*

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

\* Standard finishing option in North America is W3 (Carbon Steel, zinc/nickel-plated).



#### **Ordering Codes**

#### Socket Cap Screw \*IS-\*M10x50-\*W1

(ac	cket Cap Screw ccording to ISO 4762 IS ANSI / ASME B18.3)
* Thread type and siz	e acc. to dimension table M10x50
	rbon Steel, uncoated W1 rbon Steel, zinc/nickel-plated W3
	ainless Steel V2A 4301 / 1.4305 (AISI 304 / 303) <b>W4</b>
	ainless Steel V4A 4401 / 1.4571 (AISI 316 / 316 Ti) <b>W5</b>



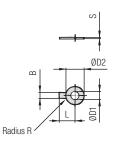
## **E**STAUFF ®

#### **Safety Washer**

(for Use with Hexagon Head Bolt AS)

#### Type SI (DIN 93)





#### Safety Washer SI

(Bend longer tab down towards the side of the clamp body and one side up towards one of the flats of the hexagon head bolt)

# Ordering Codes Safety Washer \*SI-\*10.5-\*DIN93-\*W3 \* Safety Washer \$I \* Exact inner diameter ØD1 (mm) 10.5 \* Type of washer Safety washer with 1 tab (according to DIN 93) DIN 93 \* Material code Carbon Steel, zinc/nickel-plated W3 Stainless Steel V4A (1.4401 / 1.4571 (AISI 316 / 316 Ti) W5

Group		Dimension	S (mm/in)	Ordering Codes				
STAUFF	DIN	ØD1	В	ØD2	L	R	S	(Standard Options)
3S	1	10,5	10	26	22	4	0,75	SI-10.5-DIN93-W3
33	1	.41	.39	1.02	.87	.16	.03	21-10.3-M32-M3
46	2	10,5	10	26	22	4	0,75	SI-10.5-DIN93-W3
<b>4S</b> 2	2	.41	.39	1.02	.87	.16	.03	31-10.3-DIN93-W3
5S	3	10,5	10	26	22	4	0,75	SI-10.5-DIN93-W3
J3	3	.41	.39	1.02	.87	.16	.03	31-10.3-DIN93-W3
6S	4	13	12	30	28	6	1	SI-13-DIN93-W3
03	4	.51	.47	1.18	1.10	.24	.04	31-13-DIN32-W3
7S	5	17	15	36	32	6	1	SI-17-DIN93-W3
13	5	.67	.59	1.42	1.26	.24	.04	21-17-DINA2-M2
8S	6	21	18	42	36	6	1	SI-21-DIN93-W3
03	б	.83	.71	1.65	1.42	.24	.04	31-21-DIN93-W3
9S	7	25	20	50	42	6	1	SI-25-DIN93-W3
93	1	.98	.79	1.97	1.65	.24	.04	31-23-DIN93-W3
10S	8	31	26	63	52	10	1,6	SI-31-DIN93-W3
105	0	1.22	1.02	2.48	2.05	.39	.06	21-31-DIM32-M3
11S	9	31	26	63	52	10	1,6	SI-31-DIN93-W3
113	9	1.22	1.02	2.48	2.05	.39	.06	21-31-1011193-W3
100	10	31	26	63	52	10	1,6	SI-31-DIN93-W3
12S	10	1.22	1.02	2.48	2.05	.39	.06	21-31-DIM33-M3

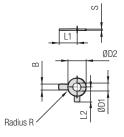
Safety Washers, type SI are used as locking devices to prevent Hexagon Head Bolts, type AS from loosening. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

## **Safety Washer**

(for Use with Hexagon Head Bolt AS)

#### Type SI (DIN 463)





#### Safety Washer SI

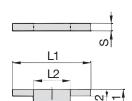
(Bend longer tab down towards the side of the clamp body and shorter tab up towards one of the flats of the hexagon head bolt)

Ordering Co	odes	
Safety Washer	*SI-*10.5-*DIN463-*\	N3
* Safety Washer		SI
* Exact inner diam	neter ØD1 (mm)	10.5
* Type of washer	Safety washer with 2 tabs (according to DIN 463)	463
* Material code	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

Group		Dimensio	ns (mm/in)						Ordering Codes
STAUFF	DIN	ØD1	В	ØD2	L1	L2	R	S	(Standard Options)
3S	1	10,5	10	21	22	13	4	0,75	SI-10.5-DIN463-W3
33	'	.41	.39	.83	.87	.51	.16	.03	SI-10.5-DIN463-W3
4S	2	10,5	10	21	22	13	4	1	\$1_10 F_DINA62_W2
43		.41	.39	.83	.87	.51	.16	.04	SI-10.5-DIN463-W3
5S	3	10,5	10	21	22	13	4	1	SI-10.5-DIN463-W3
33	J	.41	.39	.83	.87	.51	.16	.04	31-10.3-DIN403-W3
6S	4	13	12	24	28	15	6	1	SI-13-DIN463-W3
03	4	.51	.47	.94	1.10	.59	.24	.04	31-13-DIN403-W3
7S	5	17	15	30	32	18	6	1	SI-17-DIN463-W3
13	J	.67	.59	1.18	1.26	.71	.24	.04	31-17-DIN403-W3
8S	6	21	18	37	36	21	6	1	SI-21-DIN463-W3
03	U	.83	.71	1.46	1.42	.83	.24	.04	31-21-DIN403-W3
98	7	25	20	44	42	25	6	1	SI-25-DIN463-W3
93	′	.98	.79	1.73	1.65	.98	.24	.04	31-25-DIN463-W3
10S	8	31	26	56	52	32	10	1,6	SI-31-DIN463-W3
103	O	1.22	1.02	2.20	2.05	1.26	.39	.06	31-31-DIN403-W3
11S	9	31	26	56	52	32	10	1,6	SI-31-DIN463-W3
113	9	1.22	1.02	2.20	2.05	1.26	.39	.06	31-31-DIN403-W3
12S	10	31	26	56	52	32	10	1,6	SI-31-DIN463-W3
123	10	1.22	1.02	2.20	2.05	1.26	.39	.06	01-01-D114-03-W3

Safety Washers, type SI are used as locking devices to prevent Hexagon Head Bolts, type AS from loosening. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.





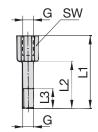




Group		Dimensions (	mm/in)	Ordering Codes			
STAUFF	DIN	L1	L2	B1	B2	S	(Standard Options)
3S	1	57	13	30	15,2	8	SIP-3S-W2
33	'	2.24	.51	1.18	.60	.31	31F-33-W2
4S	2	70	26	30	15,2	8	SIP-4S-W2
43	2	2.76	1.02	1.18	.60	.31	31F-43-W2
5S	3	85	40	30	15,2	8	SIP-5S-W2
55	3	3.35	1.57	1.18	.60	.31	31P-33-W2
6S	4	116	68	45	17,2	10	SIP-6S-W2
05	4	4.57	2.68	1.77	.68	.39	31P-03-W2
7S	_	153	96	60	22	10	SIP-7S-W2
15	5	6.02	3.78	2.36	.87	.39	31P-73-W2
00	6	206	130	80	28	15	SIP-8S-W1
8S	6	8.11	5.12	3.15	1.10	.59	317-83-W I
00	7	251	166	90	31	15	SIP-9S-W1
9S	/	9.88	6.54	3.54	1.22	.59	51P-95-W1
100	0	317	205	120	49	25	CID 10 C W1
10S	8	12.48	8.07	4.72	1.93	.98	SIP-10-S-W1

Ordering Codes Safety Locking Plate *SIP-*3S-*W2						
* Safety Locking	Plate	SIP				
* STAUFF Group		3S				
* Material code	Carbon Steel, uncoated Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated Stainless Steel V2A	W1 W2 W3				
	1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W4 W5				

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.



#### Stacking Bolt (for Use with Safety Locking Plate SIP) Type AF



Group		Dimension	S (mm/in)				Ordering Codes
STAUFF	DIN	L1	L2	L3 min.	Hex	Thread G	(Standard Options)
3S	4	49	25	15	15	M10	AF-3S-M-W2
33	5   1	1.93	.98	.59	.59	3/8-16 UNC	AF-3S-U-W3*
4S	2	65	40	15	15	M10	AF-4S-M-W2
45	2	2.56	1.57	.59	.59	3/8-16 UNC	AF-4S-U-W3*
5S	3	77	51	15	15	M10	AF-5S-M-W2
33	3	3.03	2.01	.59	.59	3/8-16 UNC	AF-5S-U-W3*
6S	4	110	82	18	17	M12	AF-6S-M-W2
05	4	4.33	3.23	.71	.67	7/16-14 UNC	AF-6S-U-W3*
7S	5	144	110	24	22	M16	AF-7S-M-W2
15	5	5.67	4.33	.94	.87	5/8-11 UNC	AF-7S-U-W3*
8S	6	200	150	30	27	M20	AF-8S-M-W2
00	О	7.87	5.91	1.18	1.06	3/4-10 UNC	AF-8S-U-W1*
OC.	7	240	180	50	30	M24	AF-9S-M-W2
9S	7	9.45	7.09	1.97	1.18	7/8-9 UNC	AF-9S-U-W1*
10S	8	331	256	62	46	M30	AF-10S-M-W2
103	0	13.03	10.08	2.44	1.81	1-1/8-7 UNC	AF-10S-U-W1*

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

<sup>\*</sup> Standard finishing option for Heavy Series group sizes 3S to 7S in North America is W3 (Carbon Steel, zinc/nickel-plated). Standard finishing option for Heavy Series group sizes 8S to 10S in North America is W1 (Carbon Steel, uncoated).







#### 1 Type of Installation

Please select the type of installation (e.g. Weld Plates, Rail Nuts etc.) and add the corresponding Code to position ① of the order code for your clamp assembly.



Without Installation Equipment Code: none

#### **Installation on Weld Plate**









#### **Installation on Mounting / Channel Rail**

Mounting Rail Nut
Code: GMV (for STAUFF Group 3S to 6S only)

Channel Rail Adaptor

Code: CRA (for STAUFF Group 3S to 6S only)

#### (2) **Group Size & Diameter**

Please select the required group size and diameter and add the corresponding Code to position ② of the order code for your clamp assembly.

Group STAUFF	Outside Diameter P/T/H	Availabil Body Ma Profiled			
(DIN)	(mm)	Design	Type H	Type RI	Code
	6	•	•	0	3006
	6,4	•	•	0	3006.4
	8	•	•	0	3008
	9,5	•	•	0	3009.5
	10	•	•	0	3010
	12	•	•	0	3012
3S	12,7	•	•	0	3012.7
(1)	13,5	•	•	0	3013.5
	14	•	•	0	3014
	15	•	•	0	3015
	16	•	•	0	3016
	17,2	•	•	0	3017.2
	18	•	•	0	3018
	20	•	0	0	3020

# ② Group Size & Diameter CONTINUATION

Group	Outside	Availabi			
	Diameter	-	terials &	Designs	
STAUFF	P/T/H	Profiled			
(DIN)	(mm)	Design	Type H	Type RI	Code
	6	0	0	•	4006
	8	0	0	•	4008
	10	0	0	•	4010
	12	0	0	•	4012
	12,7	0	0	•	4012.7
	14	0	0	•	4014
	15	0	0	•	4015
	16	0	0	•	4016
4S	17,2	0	0	•	4017.2
(2)	18	0	0	•	4018
,	19	•	•	•	4019
	20	•	•	0	4020
	21,3	•	•	0	4021.3
	22	•	•	0	4022
	25	•	•	0	4025
	25,4	•	•	0	4025.4
	26,9	•	•	0	4026.9
	28	•	•	0	4028
	30	•	•	0	4030
	20	0	0	•	5020
	21,3	0	0	•	5021.3
	22	0	0	•	5022
	25	0	0	•	5025
	26,9	0	0	•	5026.9
	28	0	0	•	5028
5S	30	•	•	•	5030
(3)	32	•	•	•	5032
	33,7	•	•	0	5033.7
	35	•	•	0	5035
	38	•	•	0	5038
	40	•	•	0	5040
	41,3	•	•	0	5041.3
	42	•	•	0	5042
	32	0	0	•	6032
	33,7	0	0	•	6033.7
	35	0	0	•	6035
	38	•	•	0	6038
	38,7	0	0	•	6038.7
	40	0	0	•	6040
	42	•	•	•	6042
6S	44,5	•	•	0	6044.5
(4)	45,5	0	0	•	6045.5
	48	0	0	•	6048
	48,3	•	•	0	6048.3
	50.8	•	•	0	6050.8
	51	0	0	•	6051
	53,4	0	0	•	6053.4
	54	•	0	0	6054
	- ·				2001

# ② Group Size & Diameter CONTINUATION

Group	Outside Diameter		lity of Cla aterials &		
STAUFF	P/T/H	Profiled			
(DIN)	(mm)	Design	Type H	Type RI	Code
,	55	•	•	0	6055
	56,4	0	0	•	6056
	57	•	•	0	6057
6S	57,2	•	•	0	6057
(4)	60,3	•	•	0	6060
	63,5	•	•	0	6063
	65	•	•	0	6065
	70	•	•	0	6070
	55	0	0	•	7055
	57	0	0	•	7057
	60	0	0	•	7060
	60,3	•	0	0	7060
	63,5	0	0	•	7063
	65	•	0	•	7065
70	70	•	0	•	7070
7S (5)	72	0	0	•	7072
(3)	73	•	0	0	7073
	75	•	0	0	7075
	76	0	0	•	7076
	76,1	•	0	0	7076
	80	•	0	0	7080
	82,5	•	0	0	7082
	88,9	•	0	0	7088
	80	0	0	•	8080
	88,9	•	0	•	8088
	100	•	0	0	8100
8S	102	•	0	•	8102
(6)	108	•	0	0	8108
	114	•	0	0	8114
	127	•	0	0	8127
	133	•	0	0	8133
	114	0	0	•	9114
	127	•	0	0	9127
	133	•	0	•	9133
9S	140	•	0	•	9140
(7)	152	•	0	0	9152
	159	•	0	0	9159
	165	•	0	0	9165
	168	•	0	0	9168
	150	0	0	•	1015
	165	0	0	•	1016
	168	•	0	•	1016
10S	172	0	0	•	1017
(8)	177,8	•	0	0	1017
. ,	193,7	•	0	0	1019
	203	•	0	0	1020
	216	•	0	0	1021
	219	•	0	0	1021
11S	219	•	0	0	1121
(9)	273	•	0	0	1127
	324	•	0	0	1132
12S	356	•	0	0	1235
(10)	406	•	0	0	1240

Standard Option



Please see pages 56 and 57 with detailed order examples for some of the most popular Heavy Series clamp assemblies.

#### (3) Clamp Body Design & Material

Please select the design and material of your clamp body and add the corresponding Code to position (3) of the order code for your clamp assembly.

Please check the availability of the selected clamp body design and material according to the matrix table in 2).

#### **Profiled Design**











#### Type H (Smooth)





Polyamide Code: PA-H (for STAUFF Group 3S to 6S only)

> Thermoplastic Elastomer (87 Shore-A) Code: SA87-H (for STAUFF Group 3S to 6S only)

#### **Type RI (with Elastomer Insert)**

Polypropylene Code: PP-R (for STAUFF Group 4S to 10S only)

**Polyamide** Code: PA-R (for STAUFF Group 4S to 10S only)

See pages 178 / 179 for material properties and technical information.

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards

#### (4) Mounting & Fitting Combination

Please select the mounting and fitting combination (e.g. bolts, screws, cover plates etc.) and add the corresponding Code to position (4) of the order code for your clamp assembly.

#### **Installation with Cover Plate and Bolts**

Cover Plate for Single Clamps DPAL with **Hexagon Head Bolts AS** Code: DPAL-AS

Cover Plate for Double Clamps DPAS with Hexagon Head Bolts AS Code: DPAS-AS

Cover Plate for Single Clamps DPAL with Socket Cap Screws IS\*

Code: DPAL-IS (for STAUFF Group 3S to 6S only)

#### **Installation with Locking Plate and Bolts**

Safety Locking Plate SIP with Stacking Bolts AF Code: SIP-AF

#### Installation with Bolts only

Socket Cap Screws IS Code: IS

Special lengths of Socket Cap Screws IS required. For exact lenghts, please see details of Hexagon Head Bolt, type AS (for use with Cover Plates DPAL or DPAS) on page 51.

#### (5) Thread Type

Please select the required thread type and add the corresponding Code to position (5) of the order code for your clamp assembly.

Metric ISO thread Code: M

Unified coarse (UNC) thread Code: II

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.

#### (6) Material & Surface Finishing

Please select the required material & surface finishing of the metal parts and add the corresponding Code to position (6) of the order code for your clamp assembly.

Metal parts made of Carbon Steel, uncoated W1 Metal parts made of Carbon Steel, phosphated W2 Metal parts made of Carbon Steel, zinc/nickel-plated W3 Metal parts made of Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Metal parts made of Stainless Steel V4A W<sub>5</sub> 1.4401 / 1.4571 (AISI 316 / 316 Ti) Weld Plate made of Carbon Steel, phosphated; Other W10 metal parts made of Carbon Steel, zinc/nickel-plated

Weld Plate and Cover Plate made of Carbon Steel, W12 phosphated; Bolts made of Carbon Steel, uncoated

Mounting Rail Nuts made of Carbon Steel, zinc/nickel-plated; Cover Plate made of Carbon Steel, phosphated: W13 Bolts made of Carbon Steel, uncoated

W15

Weld Plate / Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated

Mounting Rail Nuts made of Carbon Steel, zinc/nickel-plated; Cover Plate made of Carbon Steel, phosphated; W16 Bolts made of Carbon Steel, zinc/nickel-plated

Safety Locking Plate made of Carbon Steel, phosphated; Stacking Bolts made of Carbon Steel, zinc/nickel-plated W17

Safety Locking Plate made of Carbon Steel, uncoated; W18 Stacking Bolts made of Carbon Steel, phosphated

Cover Plate made of Carbon Steel, phosphated; W19 Bolts made of Carbon Steel, uncoated

Individual combinations of alternative materials and surface finishings are available upon request. Contact STAUFF for further information

## 7 Assembling & Kitting

If required, please select an additional assembling and kitting option and add the corresponding Code to the last position of the order code for your clamp assembly.

Components supplied separately Code: none (standard option)

Components assembled Code: A (special option)

Components packed in kits Code: K (special option)





#### 2x Hexagon Head Bolt

Surface: W1 Thread: Metric

#### 1x Cover Plate for Single Clamps

Surface: W2

## 1x Clamp Body (two halves)

STAUFF Group 3S (DIN 1) 0.D. 6 mm / .24 in Material: Polypropylene

Profiled inside surface with tension clearance

#### 1x Weld Plate for Single Clamps

Surface: W2 Thread: Metric



**Order Code** 

**Order Code** 

#### 4x Hexagon Head Bolt

Surface: W1 Thread: Metric

#### 1x Cover Plate for Double Clamps

Surface: W2

#### 2x Clamp Body (four halves)

STAUFF Group 3S (DIN 1) 0.D. 6 mm / .24 in Material: Polypropylene

Profiled inside surface with tension clearance

#### 1x Weld Plate for Double Clamps

Surface: W2 Thread: Metric

#### **Order Code**

#### SPAL-3006-PP-DPAL-AS-M-W12

W12 (STAUFF Group 3S to 7S) and W1 (STAUFF Group 8S to 12S) are the standard options for this type of installation.



#### 2x Hexagon Head Bolt

Surface: W1 Thread: Metric

#### 1x Cover Plate for Single Clamps

Surface: W2

#### 1x Clamp Body (two halves)

STAUFF Group 3S (DIN 1) 0.D. 6 mm / .24 in Material: Polypropylene Profiled inside surface with tension clearance

#### 1x Elongated Weld Plate for Single Clamps

Surface: W2 Thread: Metric



SPAS-3006-PP-DPAS-AS-M-W12

are the standard options for this type of installation.

W12 (STAUFF Group 3S to 7S) and W1 (STAUFF Group 8S to 12S)

SPAS-DUEB-3006-PP-DPAS-AS-M-W12

W12 (STAUFF Group 3S to 7S) and W1 (STAUFF Group 8S to 12S)

are the standard options for this type of installation.

Surface: W1 Thread: Metric

#### 1x Cover Plate for Double Clamps

Surface: W2

#### 2x Clamp Body (four halves)

STAUFF Group 3S (DIN 1) 0.D. 6 mm / .24 in Material: Polypropylene

Profiled inside surface with tension clearance

#### 1x Elongated Weld Plate for Double Clamps

Surface: W2 Thread: Metric

#### **Order Code**

#### SPAL-DUEB-3006-PP-DPAL-AS-M-W12

W12 (STAUFF Group 3S to 7S) and W1 (STAUFF Group 8S to 12S) are the standard options for this type of installation.



#### 2x Socket Cap Screw

Surface: W1 Thread: Metric

#### 1x Clamp Body (two halves)

STAUFF Group 3S (DIN 1) 0.D. 6 mm / .24 in Material: Polypropylene Profiled inside surface with tension clearance

#### 1x Weld Plate for Single Clamps

Surface: W2 Thread: Metric



#### 2x Socket Cap Screw

Surface: W1 Thread: Metric

#### 1x Clamp Body (two halves)

STAUFF Group 3S (DIN 1) 0.D. 6 mm / .24 in Material: Polypropylene

Profiled inside surface with tension clearance

#### 1x Elongated Weld Plate for Single Clamps

Surface: W2 Thread: Metric

#### **Order Code**

#### **SPAL-3006-PP-IS-M-W12**

W12 is the standard option for this type of installation. Available up to STAUFF Group 6S (DIN Group 4) only.

#### **Order Code**

#### SPAL-DUEB-3006-PP-IS-M-W12

W12 is the standard option for this type of installation. Available up to STAUFF Group 6S (DIN Group 4) only.





#### 2x Hexagon Head Bolt

Surface: W1 Thread: Metric

#### 1x Cover Plate for Single Clamps

Surface: W2

#### 1x **Clamp Body** (two halves) STAUFF Group 3S (DIN 1)

O.D. 6 mm / .24 in Material: Polypropylene

Profiled inside surface with tension clearance

#### 2x Mounting Rail Nut

Surface: W3 Thread: Metric



#### 2x Socket Cap Screw

Surface: W1 Thread: Metric

#### 1x **Clamp Body** (two halves) STAUFF Group 3S (DIN 1)

O.D. 6 mm / .24 in Material: Polypropylene

Profiled inside surface with tension clearance

#### 2x Mounting Rail Nut

Surface: W3 Thread: Metric

#### Order Code (Mounting Rail STSV not included.)

#### GMV-3006-PP-DPAL-AS-M-W13

**W13** is the standard option for this type of installation. Available up to STAUFF Group 6S (DIN Group 4) only.



#### 2x Hexagon Head Bolt

Surface: W1 Thread: Metric

#### 1x Cover Plate for Single Clamps

Surface: W2

#### 1x **Clamp Body** (two halves) STAUFF Group 3S (DIN 1)

0.D. 6 mm / .24 in

Material: Polypropylene

Profiled inside surface with tension clearance

#### **Thread codes**

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.

Order Code (Mounting Rail STSV not included.)

**W13** is the standard option for this type of installation. Available up to STAUFF Group 6S (DIN Group 4) only.

GMV-3006-PP-IS-M-W13

Metric ISO thread Unified coarse (UNC) thread

#### M U

#### **Material codes**

The below listed material codes describe the materials and surface finishings of metal parts that are most relevant for Heavy Series clamp assemblies. Individual combinations of alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

Metal parts made of Carbon Steel, uncoated Metal parts made of Carbon Steel, phosphated Metal parts made of Carbon Steel, zinc/nickel-plated	W1 W2 W3
Metal parts made of Stainless Steel V2A: 1.4301 / 1.4305 (AISI 304 / 303) Metal parts made of Stainless Steel V4A: 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W4 W5
Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated	W10
Weld Plate and Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated	W12
Mounting Rails Nut made of Carbon Steel, zinc/nickel-plated; Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated	W13
Weld Plate and Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated	W15
Mounting Rail Nuts made of Carbon Steel, zinc/nickel-plated; Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated	W16
Safety Locking Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated	W17
Safety Locking Plate made of Carbon Steel, uncoated; Bolts made of Carbon Steel, phosphated	W18
Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated	W19

#### **Order Code**

#### 3006-PP-DPAL-AS-M-W19

 $\mathbf{W19}$  (STAUFF Group 3S to 7S) and  $\mathbf{W1}$  (STAUFF Group 8S to 12S) are the standard options for this type of installation.



#### 2x Stacking Bolt

Surface: W2 Thread: Metric

#### 1x Safety Locking Plate

Surface: W2

1x **Clamp Body** (two halves) STAUFF Group 3S (DIN 1)

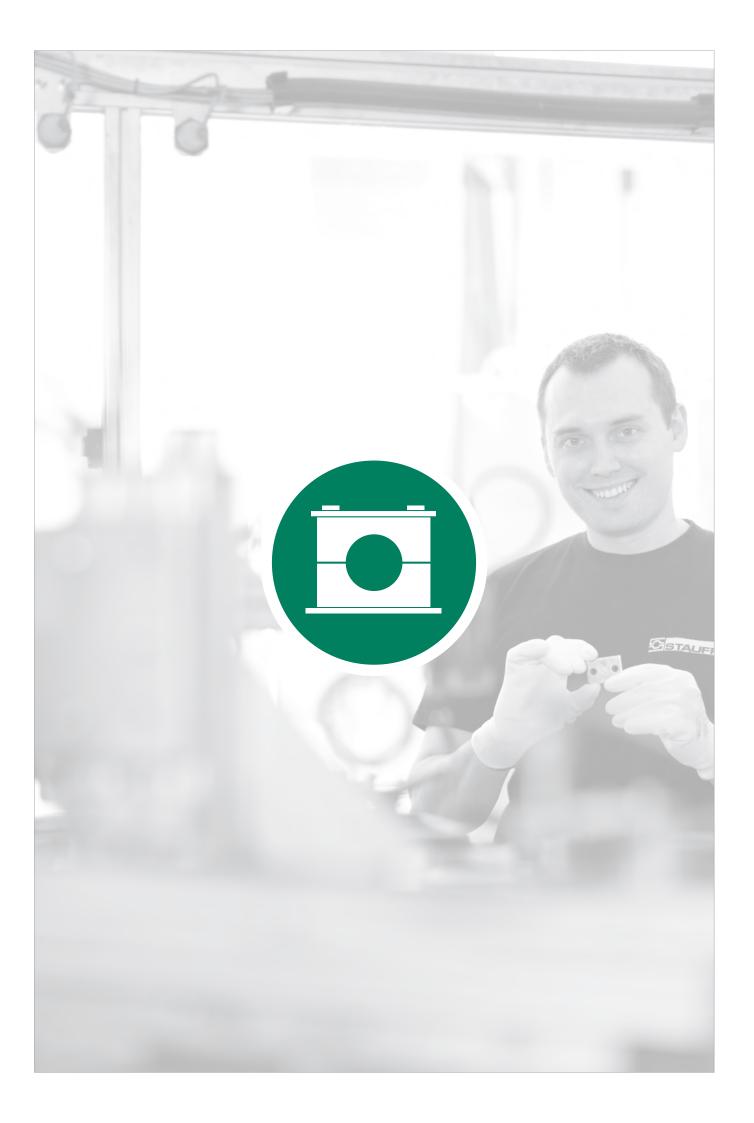
0.D. 6 mm / .24 in Material: Polypropylene

Profiled inside surface with tension clearance

### **Order Code**

#### 3006-PP-SIP-AF-M-W2

 $\begin{tabular}{ll} W2 (STAUFF Group 3S to 7S) and $W18$ (STAUFF Group 8S to 10S) are the standard options for this type of installation. Available up to STAUFF Group 10S (DIN Group 8) only. \\ \end{tabular}$ 







Clamp Body

Profiled Inside Surface with Tension Clearance



Single Weld Plate

SP

**Elongated Weld Plate** 

61

61

62



Clamp Body

Smooth Inside Surface without Tension Clearance

**Group Weld Plate** 

RAP

SI

Hexagon Rail Nut

63

**Mounting Rail** 63 TS

> **Fastening Adaptor** 64 SWG-MRA

**Channel Rail Adaptor** 65 CRA

**Cover Plate** 68 GD

**Hexagon Head Bolt** 68 AS

**Socket Cap Screw** 69 IS

Safety Locking Plate 70

Safety Locking Plate 70 SIV

Stacking Bolt 71

Clamp Assemblies

72



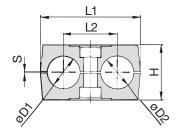
#### Clamp Body • Profiled Design

#### Clamp Body • Type H

Profiled Inside Surface with Tension Clearance Smooth Inside Surface w/o Tension Clearance







#### **Ordering Codes**

#### **Clamp Body**

\*1\*06/06\*-PP

One clamp body is consisting of two clamp halves.

- \* 1st Part of STAUFF Group
- \* Exact outside diameters Ø D1 / Ø D2 (mm)
- \* Material code (see below)

06/06

#### **Designs & Standard Materials**



#### Polypropylene • Profiled Design

Profiled inside surface with tension clearance Colour: Green

Material code: PP



#### Polypropylene • Profiled Design

Profiled inside surface with tension clearance Colour: Black

Material code: PP-BK



#### Polypropylene • Type H

Smooth inside surface without tension clearance Colour: Green

Material code: PP-H



#### Polypropylene • Type H

Smooth inside surface without tension clearance

Colour: Black

Material code: PP-H-BK



#### Polyamide • Profiled Design

Profiled inside surface with tension clearance

Colour: Black

Material code: PA



#### Polyamide • Type H

Smooth inside surface without tension clearance

Colour: Black

Material code: PA-H

See pages 178 / 179 for properties and technical information.

#### **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 180 / 181 for material properties and technical information.

#### **Product Features**

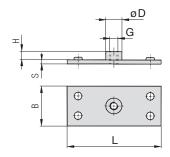
- Proven, tested and trusted product in various markets
- Profiled design recommended for the safe installation of rigid pipes and tubes; type H recommended for the safe installation of bases and cables
- Available for all commonly used pipe and tube outside diameters
- Environmental protection due to vibration/noise reducing design
- Excellent weathering resistance, even under extreme conditions

Group			Diameter	Nomin	al Bore	Ordering Codes	Dime	nsions	(mm/in)			
STAUFF		Pipe / Tul Ø D1 / Ø		Pipe	Copper Tube ASTM B88	(2 Clamp Halves)			Drofilo	d Design	ТитоН	
STA	N	(mm)	(in)	(in)	(in)	(**-* = Material)	L1	L2	Н	S min.		Width
		6				106/06-**-*						
		6,4	1/4			106.4/06.4-**-*						
40		8	5/16			108/08-**-*	36	20	27	0,6	26,5	30
1D	1	9,5	3/8		1/4	109.5/09.5-**-*	1.42	.79	1.06	.02	1.04	1.18
		10		1/8		110/10-**-*						
		12				112/12-**-*						
		12,7	1/2		3/8	212.7/12.7-**-*						
		13,5		1/4		213.5/13.5-**-*						
		14				214/14-**-*						
2D	2	15				215/15-**-*	53	29	1.06	.03	26 1.02	30 1.18
		16	5/8		1/2	216/16-**-*						
		17,2		3/8		217.2/17.2-**-*						
		18				218/18-**-*						
		19	3/4			319/19-**-*						
		20				320/20-**-*						
3D	3	21,3		1/2		321.3/21.3-**-*	67	36	37	0,7	36,5	30
3D	3	22	7/8		3/4	322/22-**-*	2.64	1.42	1.46	.03	1.44	1.18
		25				325/25-**-*						
		25,4	1			325.4/25.4-**-*						
		26,9		3/4		426.9/26.9-**-*	00	45	40	0.7	00	00
4D	4	28				428/28-**-*	80 3.15	45 1.77	40 1.57	.03	38 1.46	30 1.18
		30				430/30-**-*						
		32	1-1/4			532/32-**-*						
		33,7		1		533.7/33.7-**-*						
5D	5	35			1-1/4	535/35-**-*	106	56	53	0,7	52	30
05		38	1-1/2			538/38-**-*	4.17	2.20	2.09	.03	2.04	1.18
		40				540/40-**-*						
		42		1-1/4		542/42-**-*						

Additional outside diameters and combinations of different outside diameters are available upon request. Please contact STAUFF for further information.



#### Single Weld Plate Type SP



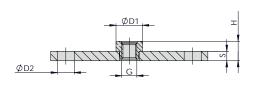


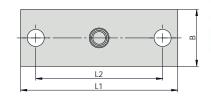
Group		Dimension	S (mm/in)					Ordering Codes
STAUFF	DIN	L	В	S	Н	ØD	Thread G	(Standard Options)
1D	1	37	30	3	6,5	12	M6	SP-1D-M-W2
וט	'	1.46	1.18	.12	.26	.47	1/4-20 UNC	SP-1D-U-W2
2D	2	55	30	5	6	14	M8	SP-2D-M-W2
20	2	2.17	1.18	.20	.24	.55	5/16-18 UNC	SP-2D-U-W2
3D	3	70	30	5	6	14	M8	SP-3D-M-W2
งบ	3	2.76	1.18	.20	.24	.55	5/16-18 UNC	SP-3D-U-W2
4D	4	85	30	5	6	14	M8	SP-4D-M-W2
40	4	3.35	1.18	.20	.24	.55	5/16-18 UNC	SP-4D-U-W2
5D	5	110	30	5	6	14	M8	SP-5D-M-W2
טט	J	4.33	1.18	.20	.24	.55	5/16-18 UNC	SP-5D-U-W2

Ordering Codes									
Weld Plate	*SP-*1D-*M-*\	N2							
* Single Weld Plat	te	SP							
* STAUFF Group		1D							
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U							
* Material code	Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated	W2 W3							
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4							
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5							

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### Elongated Weld Plate Type SPV







Group		Dimensions (mr	n/in)							Ordering Codes	
STAUFF	DIN	Thread G	L1	L2	В	S	Н	ØD1	ØD2	(Standard Options)	
1D	1	M6	64	50	30	3	8,3	11,8	6,5	SPV-1D-M-W3	
1D		1/4-20 UNC	2.52	1.97	1.18	.12	.33	.46	.26	SPV-1D-U-W3	
2D	2	M8	83	67	30	5	10,3	14	9	SPV-2D-M-W3	
20   2	5/16-18 UNC	3.27	2.64	1.18	.20	.41	.55	.35	SPV-2D-U-W3		
3D	3	M8	97	81	30	5	10,3	14	9	SPV-3D-M-W3	
δD	3	5/16-18 UNC	3.82	3.19	1.18	.20	.41	.55	.35	SPV-3D-U-W3	
4D	4	M8	110	94	30	5	10,3	14	9	SPV-4D-M-W3	
4U	4	5/16-18 UNC	4.33	3.70	1.18	.20	.41	.55	.35	SPV-4D-U-W3	
ED.	-	M8	136	120	30	5	10,3	14	9	SPV-5D-M-W3	
<b>5D</b> 5		5/16-18 UNC	5.35	4.72	1.18	.20	.41	.55	.35	SPV-5D-U-W3	

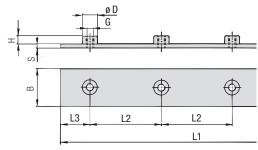
All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### **Ordering Codes** \*SPV-\*1D-\*M-\*W2 **Weld Plate** \* Elongated Weld Plate SPV \* STAUFF Group 1D \* Thread code Metric ISO thread M Unified coarse (UNC) thread Carbon Steel, zinc/nickel-plated W3 \* Material code Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)



#### **Group Weld Plate** for 5 Clamp Bodies **Type RAP**



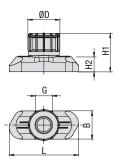


#### **Ordering Codes** Weld Plate \*RAP-\*1D-\*40-\*5-\*M-\*W1 \* Group Weld Plate \* STAUFF Group 1D \* Pipe Center Spacing L2 (mm) 40 \* Number of Clamps 5 \* Thread code Metric ISO thread M Unified coarse (UNC) thread \* Material code Carbon Steel, uncoated W1 Carbon Steel, phosphated W2 Carbon Steel, zinc/nickel-plated W3 Stainless Steel V2A W4 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

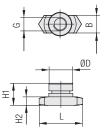
Group		Dimens	sions (mm	/in <b>)</b>						Ordering Codes
STAUFF	DIN	L1	L2	L3	В	S	Н	ØD	Thread G	(Standard Options)
1D	1	196	40	18	30	3	6,5	12	M6	RAP-1D-40-5-M-W1
טו	1	7.72	1.57	.71	1.18	.12	.26	.47	1/4-20 UNC	RAP-1D-40-5-U-W1
2D	2	288	58	28	30	5	6	14	M8	RAP-2D-58-5-M-W1
20	2	11.34	2.28	1.10	1.18	.20	.24	.55	5/16-18 UNC	RAP-2D-58-5-U-W1
3D	3	358	72	35	30	5	6	14	M8	RAP-3D-72-5-M-W1
งบ	3	14.09	2.83	1.37	1.18	.20	.24	.55	5/16-18 UNC	RAP-3D-72-5-U-W1
4D	4	444	90	42	30	5	6	14	M8	RAP-4D-90-5-M-W1
40	4	17.48	3.54	1.65	1.18	.20	.24	.55	5/16-18 UNC	RAP-4D-90-5-U-W1
5D	5	558	112	55	30	5	6	14	M8	RAP-5D-112-5-M-W1
טט	J	21.97	4.41	2.16	1.18	.20	.24	.55	5/16-18 UNC	RAP-5D-112-5-U-W1

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.  $Alternative\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.\ Contact\ STAUFF\ for\ further\ information.$ 





STAUFF Group 1D



STAUFF Group 2D to 5D

# (for Use with Mounting Rail TS) Type SM





**Hexagon Rail Nut** 

STAUFF Group 1D

STAUFF Group 2D to 5D

Group		Dimensions (mm	¹/in)					Ordering Codes
STAUFF	DIN	Thread G	L	В	H1	H2	ØD	(Standard Options)
1D	1	M6	25,5	10,4	14,2	5,5	12	SM-1-8/1D-M-W3
וט	1	1/4-20 UNC	1.00	.41	.56	.22	.47	SM-1-8/1D-U-W3
2D	2							
3D	3	M8	25,5	10,4	13	5	14	SM-2-5D-M-W3
4D	4	5/16–18 UNC	1.00	.41	.51	.20	.55	SM-2-5D-U-W3
5D	5							

The Hexagon Rail Nut, type SM-1-8/1D is also suitable for Standard Series, STAUFF Group 1 to 8.

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### **Ordering Codes** Hexagon Rail Nut \*SM-\*1-8/1D-\*M-\*W3 \* Hexagon Rail Nut \* STAUFF Group 1D (DIN Group 1) 1-8/1D 2D to 5D (DIN Group 2 to 5) 2-5D \* Thread code Metric ISO thread M Unified coarse (UNC) thread U \* Material code Carbon Steel, zinc/nickel-plated W3 Stainless Steel V2A W4 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

## **Mounting Rail**

(for Use with Hexagon Rail Nut SM)

#### **Type TS**





B1 B2 Ø

Mounting Rail TS-11

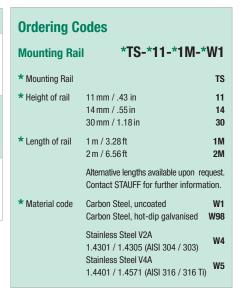
Mounting Rail TS-14

Mounting Rail TS-30

Group		Dimensions (m	m/in)		Ordering Codes (Standard C	ptions)
STAUFF	DIN	B1	B2	S	Length of Rail: 1 m / 3.28ft	Length of Rail: 2m / 6.56ft
1D	1				Height 11 mm / .43 in	Height 11 mm / .43 in TS-11-2M-W1
2D	2					
3D	3	28 1.10	.43	.08	Height 14 mm / .55 in TS-14-1M-W1	Height 14 mm / .55 in TS-14-2M-W1
4D	4					
5D	5				Height 30 mm / 1.18 in TS-30-1M-W1	Height 30 mm / 1.18 in TS-30-2M-W1

Mounting Rails, type TS-11/14/30 are suitable for all Twin Series and Standard Series group sizes.

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.



Dimensional drawings: All dimensions in mm (in).



#### **Fastening Adaptor**

(for Use with Mounting Rail TS)

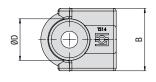
#### **Type SWG-MRA**

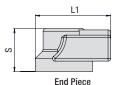


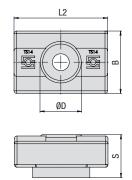
Intermediate Piece/Connector

D

Α







Intermediate Piece/Connector

SWG-MRA
TS14

STAUFF         DIN         ØD         L1         L2         B         S         (End Piece)         (Intermediate Piece/Connect           1D - 5D         0 bis 8         16         29         36         24         16,5         SWG-MRA-TS14-S-A         SWG-MRA-TS14-D-A	Group		Dimei	nsions (™	<sup>n</sup> /in)			Ordering Code	Ordering Code
- 0 bis 8 63 1 14 1 42 94 65 SWG-MRA-TS14-S-A SWG-MRA-TS14-D-A	STAUFF	DIN	ØD	L1	L2	В	S	(End Piece)	(Intermediate Piece/Connector)
63 11/1 1/2 14/1 66		O bio O	16	29	36	24	16,5	CWC MDA TC14 C A	CWC MDA TC14 D A
		U DIS O	.63	1.14	1.42	.94	.65	SWG-MRA-1514-5-A	3WG-MRA-1314-D-A

Fastening Adaptor, type SWG-MRA are also suitable for Twin Series. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### **Product Features**

Intermediate Piece/Connector

\* End Piece

\* Version

Fastening Adaptor for Direct Screw Mounting of STAUFF Mounting Rails Type TS-14 with Weld Studs M6 and Bolts M6 or 1/4-20 UNC (Support Sleeve / Washer Recommended)

Material: Polyamide

#### **Instructions for Use**

- Are pressed into the side of the Mounting Rail TS-14 and bolted to the installation
- Positioning of the mounting rail 2 mm above the installation
- Initially designed for use with weld studs with internal thread M6
- Can also be used with M6 bolts depending on the load, an internal support sleeve (e.g. 1130023624 LBBU-HUE-1/1D-SP-M6/U1/4-W3)
- and/or washer may be required Maximum recommended distance between two fastening adapters of 222 mm
- (corresponds to a length of the mounting rail of 200 mm)



Group

1D

2D

3D

4D

5D

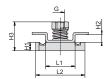
STAUFF DIN

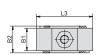
2

3

4

5





Thread G

1/4-20 UNC

5/16-18 UNC

5/16-18 UNC

M6

M8

M8

STAUFF Group 1D

Dimensions (mm/in)

L1

21

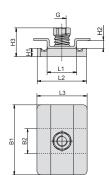
.83

21

.83

21

.83



STAUFF Group 2-3D / 4-5D

Н3

20,5

.81

23,5

.93

23,5

.93

H2

5,5

.22

5,5

5,5

.22

**Ordering Codes** 

(Standard Options)

CRA-1-8/1D-M-W3

CRA-1-8/1D-U-W3

CRA-2-3D-M-W3

CRA-2-3D-U-W3

CRA-4-5D-M-W3

CRA-4-5D-U-W3

## Channel Rail Adaptor (for Use with Various Channel Rails) Type CRA



Ordering Codes							
Adaptor	*CRA-*1-8/1D-*M	-*W3					
* Channel Rail Ad	aptor	CRA					
* STAUFF Group	1D (DIN Group 1) 2D to 3D (DIN Group 2 to 3) 4D to 5D (DIN Group 4 to 5)	1-8/1D 2-3D 4-5D					
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U					
* Material code	Carbon Steel, zinc/nickel-plated	W3					
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316	Ti) <b>W5</b>					

The Channel Rail Adaptor, type CRA 1-8/1D is also suitable for Standard Series, STAUFF Group 1 to 8.

L3

40 | 16

1.57 .63

1.50 | 2.09 | .75

38

1.50 3.15 .75 .3

B1

80

B2 H1

19

.75

19 9

6

.24

.35 .22

L2

35

1.38

35 38 53 19 9

35

1.38

1.38

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

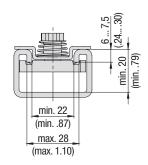
#### **Compatibility with Channel Rails**



The STAUFF Channel Rail Adaptor, type CRA, is suitable for various channel rails, including the following types:

HALFEN	HILTI	UNISTRUT®	STAUFF (Cushion Clamp Series)
HM 41/41	MQ-21, MQ-41, MQ-52, MQ-72	P1000, P1000T, P1000V, P1000VT, P1001	SCS-048-1-PL, SCS-048-1-GR
HZA 41/22	MQ-21U, MQ-41U, MQ-72U	P2000, P2000T	SCS-120-1-PL, SCS-120-1-GR
HZM 41/41	MQ-21D, MQ-41D, MQ-52-72D	P3003, P3003T, P3300V, P3300VT, P3301	See page 149 for technical information.
HZM 41/22		P4000, P4000T	
HL 41/41, HL 41/B2		P5000, P5000T, P5001, P5500, P5500T, P5501	

Contact STAUFF to check compatibility with additional types of channel rails.



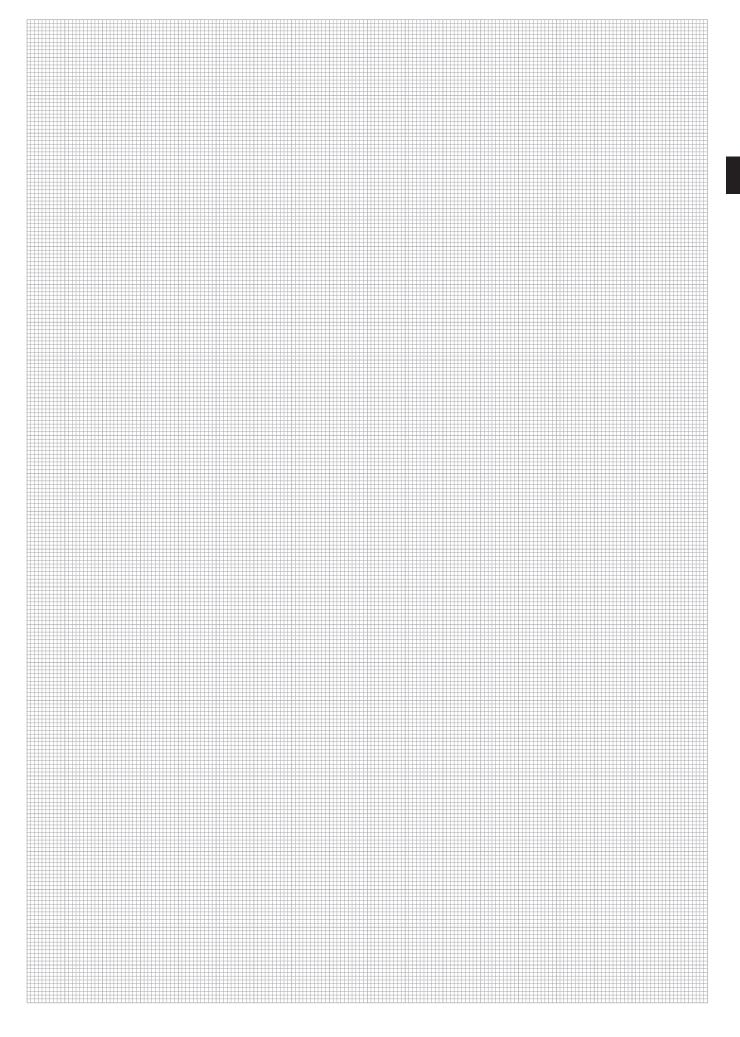
Basic dimensional requirements for channel rails to be used with STAUFF Channel Rail Adaptors, type CRA

Dimensional drawings: All dimensions in mm (in).



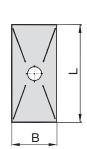


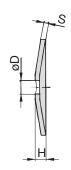




#### **Cover Plate Type GD**







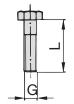
Ordering C	odes	
Cover Plate	*GD-*1D-*\	N3
* Cover Plate		GD
* STAUFF Group		1D
* Material code	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

Group		Dimensions (	<sup>mm</sup> /in)		Ordering Codes		
STAUFF	DIN	L	В	Н	S	ØD	(Standard Options)
1D	1	34	30	7	3	7	GD-1D-W3
טו	<b> </b>	1.34	1.18	.28	.12	.28	dD-ID-W3
2D	2	52	30	7	3	9	GD-2D-W3
20	2	2.05	1.18	.28	.12	.35	GD-2D-W3
20	3	65	30	7	3	9	CD 2D W2
3D	3	2.56	1.18	.28	.12	.35	GD-3D-W3
4D	4	79	30	7	3	9	GD-4D-W3
40	4	3.11	1.18	.28	.12	.35	dD-4D-W3
5D	5	102	30	7	3	9	on the wo
עט	J	4.02	1.18	.28	.12	.35	GD-5D-W3

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### **Hexagon Head Bolt Type AS**





**Hexagon Head Bolt AS** (according to DIN 931 / 933 or ANSI / ASME B18.2.1.) Dimensions applicable only when used with Cover Plate GD

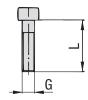
Ordering Codes								
	Hexagon Head Bolt	*AS-*M8x35-*W3						
	(accord	on Head Bolt ding to DIN 931 / 933 AS I / ASME B18.2.1.)						
	* Thread type and size acc	c. to dimension table M8x35						
	* Material code Carbon	Steel, zinc/nickel-plated W3						
	1.4301	ss Steel V2A / 1.4305 (AISI 304 / 303)						
	1.4401	/ 1.4571 (AISI 316 / 316 Ti)						

Group STAUFF	DIN	Dimensions (mm/ $_{\rm in}$ ) Thread G x L	Ordering Codes (Standard Options)
1D	1	M6 x 35	AS-M6x35-W3
טו		1/4–20 UNC x 1-3/8	AS-1/4-20UNCx1-3/8-W3
op.	2	M8 x 35	AS-M8x35-W3
2D	2	5/16–18 UNC x 1-3/8	AS-5/16-18UNCx1-3/8-W3
an.	0	M8 x 45	AS-M8x45-W3
3D	3	5/16–18 UNC x 1-3/4	AS-5/16-18UNCx1-3/4-W3
40	4	M8 x 50	AS-M8x50-W3
4D	4	5/16–18 UNC x 2	AS-5/16-18UNCx2-W3
- FD	_	M8 x 60	AS-M8x60-W3
5D	5	5/16–18 UNC x 2-1/2	AS-5/16-18UNCx2-1/2-W3

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.



# Socket Cap Screw Type IS



#### Socket Cap Screw IS (according to ISO 4762 or ANSI / ASME B18.3) Dimensions applicable only when used with Cover Plate GD



Group STAUFF	DIN	Dimensions ( $^{mm}/_{in}$ ) Thread G x L	Ordering Codes (Standard Options)
1D	1	M6 x 35	IS-M6x35-W3
טו	1	1/4–20 UNC x 1-3/8	IS-1/4-20UNCx1-3/8-W3
<b>2D</b> 2		M8 x 35	IS-M8x35-W3
2υ	2	5/16–18 UNC x 1-3/8	IS-5/16-18UNCx1-3/8-W3
20	3	M8 x 45	IS-M8x45-W3
3D	3	5/16–18 UNC x 1-3/4	IS-5/16-18UNCx1-3/4-W3
4D	4	M8 x 50	IS-M8x50-W3
4υ	4	5/16–18 UNC x 2	IS-5/16-18UNCx2-W3
ED.	E	M8 x 60	IS-M8x60-W3
5D	5	5/16–18 UNC x 2-1/2	IS-5/16-18UNCx2-1/2-W3

Socket Cap Screw *IS-*M8x3	
	5-*W3
* Type of bolt Socket Cap Screw (according to ISO 4762 or ANSI / ASME B18.3)	IS
* Thread type and size acc. to dimension table	M8x35
* Material code Carbon Steel, zinc/nickel-plate	ed W3
Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 30 Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 31	W5

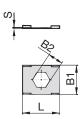
All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.



#### **Safety Locking Plate**

Type SI (for Use with Stacking Bolt AF)





#### Safety Locking Plate SI

(Prevents Stacking Bolt from Loosening)

Ordering C	odes	
Safety Lockin	ng Plate *SI-*1D-*	W3
* Safety Locking	Plate	SI
* STAUFF Group	1D (DIN Group 1) 2D to 5D (DIN Group 2 to 5)	1D 2-5D
* Material code	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

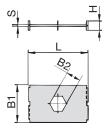
Group STAUFF	DIN	Dimensions (mm/in) L	B1	B2	S	Ordering Codes (Standard Options)
40	4	27	22	11,2	0,5	
1D	1	1.06	.86	.44	.02	SI-1D-W3
2D	2					
3D	3	27	22	12,2	0,5	SI-2-5D-W3
4D	4	1.06	.86	.48	.02	SI-2-5D-W3
5D	5					

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### **Safety Locking Plate**

Type SIV (for Use with Stacking Bolt AF)





#### Safety Locking Plate SIV

(Prevents Stacking Bolt from Loosening and Upper Clamp from Turning)

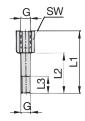
Ordering Co	odes	
Safety Lockin	g Plate *SIV-*1D-*	W3
* Safety Locking F	Plate	SIV
* STAUFF Group	1D (DIN Group 1) 2D to 3D (DIN Group 2 to 3)	1D 2-3D
* Material code	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

	Group	DIN	Dimensions ("		DO.	C		Ordering Codes
1	STAUFF	DIN	L	B1	B2	S	Н	(Standard Options)
١.	1D	1	27	28	11,1	1	7	SIV-1D-W3
	1D 1 1.	1.06	1.10	.44	.04	.27	21A-1D-M2	
2	2D	2	45	28	12,1	1	7	CIV 2 2D W2
3	3D	3	1.77	1.10	.48	.04	.27	SIV-2-3D-W3

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.



# Stacking Bolt (for Use with Safety Locking Plates SI / SIV) Type AF





Group		Dimensions (mr	Ordering Codes				
STAUFF	DIN	Thread G	L1	L2	L3 min.	Hex	(Standard Options)
1D	1	M6	34	20	12	11	AF-1/1A/1D-M-W3
טו	1	1/4-20 UNC	1.33	.78	.47	.43	AF-1/1A/1D-U-W3
an.	2	M8	33	20	12	12	AF-2D-M-W3
2D	2	5/16-18 UNC	1.30	.78	.47	.47	AF-2D-U-W3
3D	3	M8	44	29	12	12	AF-3D-M-W3
งบ	3	5/16-18 UNC	1.73	1.14	.47	.47	AF-3D-U-W3
4D	4	M8	49 34 12 12	12	AF-4D-M-W3		
4U 4		5/16-18 UNC	1.92	1.33	.47	.47	AF-4D-U-W3
5D	5	M8	61	46	12	12	AF-5D-M-W3
טט	υ	5/16-18 UNC	2.40	1.81	.47	.47	AF-5D-U-W3

Ordering Co	odes *AF-*1/1A/1D-*M-*W	/3
* Stacking Bolt		AF
* STAUFF Group		1D
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U
* Material code	Carbon Steel, zinc/nickel-plated	W3
	1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A	W4 W5

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.





Please see page 73 with detailed order examples for some of the most popular Twin Series clamp assemblies.

#### **1** Type of Installation

Please select the type of installation (e.g. weld plates, rail nuts, etc.) and add the corresponding Code to position ① of the order code for your clamp assembly.



Without Installation Equipment

Code: none

#### **Installation on Weld Plate**



Single Weld Plate Code: SP



**Group Weld Plate** 

Code: RAP

#### **Installation on Mounting / Channel Rail**



**Mounting Rail Nut** 

Code: SM

Chan

**Channel Rail Adaptor** 

Code: CRA

#### **2** Group Size & Diameters

Please select the required group size and diameter and add the corresponding Code to position ② of the order code for your clamp assembly.

Group	Outside	Availability of	f Clamp	
	Diameter	<b>Body Material</b>		
STAUFF	P/T/H	Profiled	Туре	
(DIN)	(mm)	Design	Н	Code
	6	•	•	106/06
	6,4	•	•	106.4/06.4
1D	8	•	•	108/08
(1)	9,5	•	•	109.5/09.5
	10	•	•	110/10
	12	•	•	112/12
	12,7	•	•	212.7/12.7
	13,5	•	•	213.5/13.5
o.D.	14	•	•	214/14
<b>2D</b> (2)	15	•	•	215/15
(2)	16	•	•	216/16
	17,2	•	•	217.2/17.2
	18	•	•	218/18
	19	•	•	319/19
	20	•	•	320/20
3D	21,3	•	•	321.3/21.3
(3)	22	•	•	322/22
	25	•	•	325/25
	25,4	•	•	325.4/25.4
4D	26,9	•	•	426.9/26.9
<b>4D</b> (4)	28	•	•	428/28
(4)	30	•	•	430/30
<b>5D</b> (5)	32	•	•	532/32
	33,7	•	•	533.7/33.7
	35	•	•	535/35
	38	•	•	538/38
	40	•	•	540/40
	42	•	•	542/42

#### **3 Clamp Body Design & Material**

Please select the design and material of your clamp body and add the corresponding Code to position ③ of the order code for your clamp assembly.

Please check the availability of the selected clamp body design and material according to the matrix table in ②.

#### **Profiled Design**



Polypropylene

Code: PP

Polypropylene (Colour: Black)
Code: PP-BK



Polyamide Code: PA

#### Type H (Smooth)



Polypropylene Code: PP-H



Polypropylene (Colour: Black) Code: PP-H-BK



Polyamide Code: PA-H

See pages 178 / 179 for material properties and technical information.

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards.

## **4** Mounting & Fitting Combination

Please select the mounting and fitting combination (e.g. Bolts, Cover Plates, etc.) and add the corresponding Code to position ④ of the order code for your clamp assembly.

#### **Installation with Cover Plate and Bolt**

Cover Plate GD with Hexagon Head Bolt AS Code: GD-AS

Cover Plate GD with Socket Cap Screw IS Code: GD-IS

#### **Installation with Locking Plate and Bolt**

Safety Locking Plate SI with Stacking Bolt AF Code: SI-AF

Safety Locking Plate SIV with Stacking Bolt AF

Code: SIV-AF (for STAUFF Group 1D to 3D only)

#### **5** Thread Type

Please select the required thread type and add the corresponding Code to position (5) of the order code for your clamp assembly.

Metric ISO thread

Code: M

Unified coarse (UNC) thread

Code: U

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.

#### **Material & Surface Finishing**

Please select the required material & surface finishing of the metal parts and add the corresponding Code to position **(S)** of the order code for your clamp assembly.

Metal parts made of Carbon Steel, zinc/nickel-plated

Metal parts made of Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)

Metal parts made of Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

W5

W4

Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated

Individual combinations of alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

## Assembling & Kitting

If required, please select an additional assembling and kitting option and add the corresponding Code to the last position of the order code for your clamp assembly.

Components supplied separately Code: none (standard option)

Components assembled

Code: A (special option)

Components packed in kits Code: K (special option)

Standard Option



1x Hexagon Head Bolt

Thread: Metric

Surface: W3

Surface: W3

1x Clamp Body (two halves)

STAUFF Group 1D (DIN 1)

both 0.D. 6 mm / .24 in

Material: Polypropylene

Profiled inside surface

with tension clearance

1x Cover Plate





#### 1x Hexagon Head Bolt

Surface: W3 Thread: Metric

1x Cover Plate

Surface: W3

1x Clamp Body (two halves) STAUFF Group 1D (DIN 1) both 0.D. 6 mm / .24 in Material: Polypropylene Profiled inside surface with tension clearance

#### 1x Weld Plate

Surface: W2 Thread: Metric

#### 106/06-PP-GD-AS-M-W3

W3 is the standard option for this type of installation.

# **Order Code**

W10 is the standard option for this type of installation.

SP-106/06-PP-GD-AS-M-W10



#### 1x Stacking Bolt

Surface: W3 Thread: Metric

#### 1x Safety Locking Plate (Type SI)

Surface: W3 Thread: Metric

### 1x Clamp Body (two halves)

STAUFF Group 1D (DIN 1) both 0.D.  $6\,\text{mm}$  / .24 in Material: Polypropylene Profiled inside surface with tension clearance



#### 1x Stacking Bolt

Surface: W3 Thread: Metric

#### 1x Safety Locking Plate (Type SIV)

Surface: W3 Thread: Metric

#### 1x Clamp Body (two halves)

STAUFF Group 1D (DIN 1) both 0.D. 6 mm / .24 in Material: Polypropylene Profiled inside surface with tension clearance

#### **Order Code**

**Order Code** 

#### 106/06-PP-SI-AF-M-W3

W3 is the standard option for this type of installation.

### **Order Code**

#### 106/06-PP-SIV-AF-M-W3

W3 is the standard option for this type of installation. This type of installation is available up to STAUFF Group 3D only.



#### 1x Hexagon Head Bolt

Surface: W3 Thread: Metric

## 1x Cover Plate

Surface: W3

#### 1x Clamp Body (two halves) STAUFF Group 1D (DIN 1) both 0.D. 6 mm / .24 in Material: Polypropylene

Profiled inside surface with tension clearance

#### 1x Hexagon Rail Nut

Surface: W3 Thread: Metric

#### Order Code (Mounting Rail TS not included.)

#### SM-106/06-PP-GD-AS-M-W3

W3 is the standard option for this type of installation.

#### **Thread Codes**

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.

Metric ISO thread Unified coarse (UNC) thread

# М

#### **Material Codes**

The below listed material codes describe the materials and surface finishings of metal parts that are most relevant for Twin Series clamp assemblies. Individual combinations of alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

Metal parts made of Carbon Steel, zinc/nickel-plated

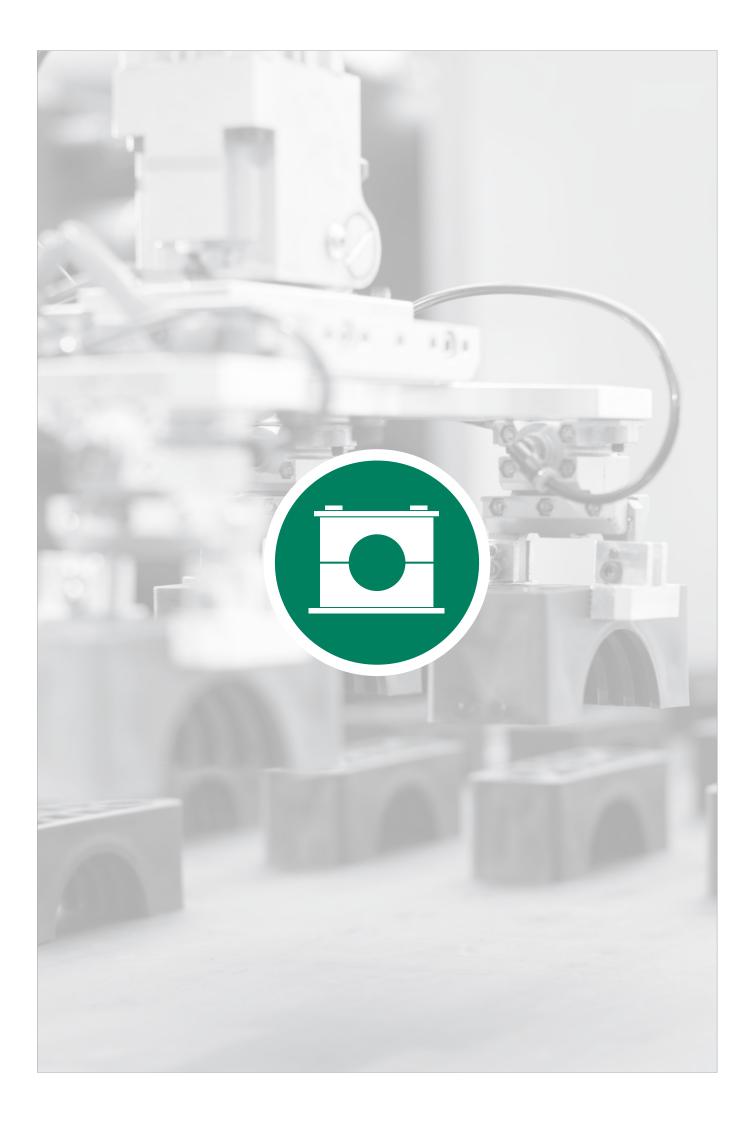
W3

Metal parts made of Stainless Steel V2A: 1.4301 / 1.4305 (AISI 304 / 303) Metal parts made of Stainless Steel V4A: 1.4401 / 1.4571 (AISI 316 / 316 Ti) W4 W5

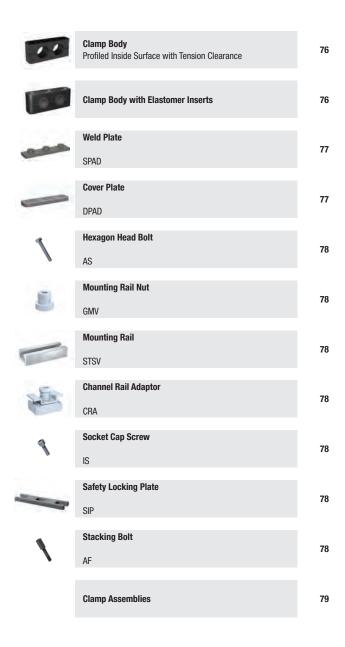
Weld Plate made of Carbon Steel, phosphated

Other metal parts made of Carbon Steel, zinc/nickel-plated

W10



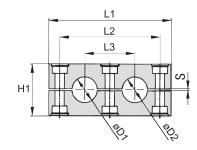




#### Clamp Body • Profiled Design

### **Profiled Inside Surface with Tension Clearance**





Copper Tube (2 Clamp Halves)

### **Ordering Codes**

#### **Clamp Body**

\*4\*012.7/12.7-\*PP

One clamp body is consisting of two clamp halves.

* 1st part of STAUFF Group 4	45-D	21,3		1/2		4021.3/21.3-本本	4.53	3.54	1
* Exact outside diameters Ø D1 / Ø D2 (mm) 012.7/12.7		22			3/4	4022/22-**	4.00	0.04	ľ
* Material code (see below) PP		25,4	1			4025.4/25.4-**			
material 2002 (000 2010H)		26,9		3/4		4026.9/26.9-**			
		32	1-1/4			5032/32-**			
Standard Materials	5S-D	33,7		1		5033.7/33.7-**	145	120	6
	ี บอ-บ	00	1 1/0			F000/00	E 71	170	2

Group

Outside Diameter Nominal Bore



Polypropylene Colour: Green Material code: PP



Polyamide Colour: Black Material code: PA

See pages 178 / 179 for material properties and technical informa-

	Ø D1 / Ø	D2	Pipe	ASTM B88							
STAUFF	(mm)	(in)	(in)	(in)	(** = Material)	L1	L2	L3	H1	S	Width
	12,7	1/2		3/8	4012.7/12.7-**		115 00				
	19	3/4			4019/19-**				48	1.0	
	20				4020/20-**	115		45			30
4S-D	21,3		1/2		4021.3/21.3-**	4.53	90 3.54	1.77	1.89	.05	1.18
	22			3/4	4022/22-**	4.00	3.04				
	25,4	1			4025.4/25.4-**						
	26,9		3/4		4026.9/26.9-**						
	32	1-1/4			5032/32-**						
5S-D	33,7		1		5033.7/33.7-**	145	120	60	60	2,0	30
ขอ-ม	38	1-1/2			5038/38-**	5.71	5.71 4.72	2.36	2.36	.08	1.18
	42		1-1/4		5042/42-**						

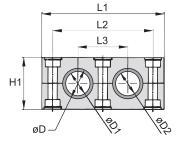
**Ordering Codes** 

Dimensions (mm/in)

Additional outside diameters and Clamp Bodies, type H (smooth inside surface without tension clearance) are available upon request. Please contact STAUFF for further information.

### **Clamp Body with Elastomer Inserts** Type RI





For use with Elastomer Inserts of the Heavy Series, STAUFF Group 4S and 5S (see page 42 for details)

(mm/in)

Ø D

25

.98

38

1.50

L1

115

4.53

145

5.71

12

90

3.54

120

4.72

13

45

60

2.36

1.77

Н1

48

60

2.36

1.89

Width

30

30

1.18

1.18

**Ordering Codes** 

(Clamp Assembly)

(\*\*R = Material)

4006/06-\*\*-R

4008/08-\*\*-R

4010/10-\*\*-R

4012/12-\*\*-R

4014/14-**\*\***-R

4015/15-**\*\***-R

4016/16-\*\*-R

4018/18-\*\*-R

4019/19-\*\*-R

5020/20-\*\*-R

5022/22-\*\*-R

5025/25-\*\*-R

5028/28-\*\*-R

5030/30-\*\*-R

5021.3/21.3-\*\*-R

5026.9/26.9-\*\*-R

4017.2/17.2-\*\*-R

4012.7/12.7-**\*\***-R

## **Ordering Codes**

### **Clamp Assembly**

\*4\*006/06-\*PP-R

One assembly is consisting of one clamp body and two inserts.

- \* 1st part of STAUFF Group
- \* Exact outside diameters Ø D1 / Ø D2 (mm) 006/06
- \* Material code (see below)

PP-R

Group

**STAUFF** 

4S-D

5S-D

**Outside Diameter** 

Pipe / Tube / Hose

(in)

5/16

1/2

5/8

3/4

7/8

1-1/4

Ø D1 / Ø D2

(mm)

8

10

12

14

15

16 17,2

18

19

20

22

25

28

30

32

26.9

21,3

12,7

#### **Standard Materials**



Polypropylene Colour: Black Material code: PP-R



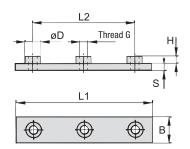
Polyamide Colour: Black Material code: PA-R



Thermoplastic Elastomer (73 Shore-A) Colour: Black

5032/32-\*\*-R See pages 178 / 179 for properties and technical information. Additional outside diameters are available upon request. Please contact STAUFF for further information.





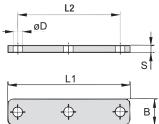




Group	Dimensio	ons ( <sup>mm</sup> /in)	Ordering Codes					
STAUFF	L1	L2	В	S	Н	Thread G	ØD	(Standard Options)
4S-D	130	90	30	8	8,5	M10	18	SPAD-4S-M-W1
45-D	5.12	3.54	1.18	.31	.33	3/8-16 UNC	.71	SPAD-4S-U-W2*
5S-D	160	120	30	8	8,5	M10	18	SPAD-5S-M-W1
ขจ-ม	6.30	4.72	1.18	.31	.33	3/8-16 UNC	.71	SPAD-5S-U-W2*

All threaded parts are available with Metric ISO thread or unified Coarse (UNC) thread according to dimension table.  $Alternative\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.\ Contact\ STAUFF\ for\ further\ information.$ 

#### **Ordering Codes** \*SPAD-\*4S-\*M-\*W1 **Weld Plate** \* Weld Plate SPAD \* STAUFF Group **4S** 4S-D 5S-D **5S** \* Thread code Metric ISO thread M U Unified coarse (UNC) thread \* Material code Carbon Steel, uncoated W1 Carbon Steel, phosphated W2 Carbon Steel, zinc/nickel-plated W3 Stainless Steel V2A W4 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)



_			
øD			
	Щ		
1	L1	sī	
			-
igoplus	$\Phi$	Ф в	

	roup	Dimensions (mr	<b>65</b>	Ordering Codes			
5	TAUFF	L1	L2	В	S	ØD	(Standard Options)
4	c	115	90	30	8	11	DPAD-4S-W1*
4	3	4.53	3.54	1.18	.31	.43	DFAD-43-W1
5	c	145	120	30	8	11	DPAD-5S-W1*
5	5	5.71	4.72	1.18	.31	.43	DPAD-55-W I

All threaded parts are available with Metric ISO thread or unified Coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

## **Cover Plate Type DPAD**



Ordering C	odes	
Cover Plate	*DPAD-*4S-*	W1
* Cover Plate	C	PAD
* STAUFF Group	4S-D 5S-D	4S 5S
* Material code	Carbon Steel, uncoated Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated	W1 W2 W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W4 W5

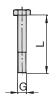
<sup>\*</sup> Standard finishing option in North America is W2 (Carbon Steel, phosphated).

<sup>\*</sup> Standard finishing option in North America is W3 (Carbon Steel, phosphated).



### **Hexagon Head Bolt Type AS**





**Hexagon Head Bolt AS** 

(according to DIN 931 / 933 or ANSI / ASME B18.2.1.) Dimensions applicable only when used with Cover Plate DPAD

Ordering C	odes	
Hexagon Hea	d Bolt *AS-*M10x70-*	W1
* Type of bolt	Hexagon Head Bolt (according to DIN 931 / 933 or ANSI / ASME B18.2.1.)	AS
* Thread type and	size acc. to dimension table M1	0x70
* Material code	Carbon Steel, uncoated Carbon Steel, zinc/nickel-plated	W1 W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A	W4

1.4401 / 1.4571 (AISI 316 / 316 Ti)

Group STAUFF			Ordering Codes (Standard Options)
<b>4S</b> 2		M10 x 60	AS-M10x60-W1
43	2	3/8–16 UNC x 2-1/4	AS-3/8-16UNCx2-1/4-W3*
5S	3	M10 x 70	AS-M10x70-W1
33	3	3/8-16 UNC x 2-3/4	AS-3/8-16UNCx2-3/4-W3*

All threaded parts are available with Metric ISO thread orunified coarse (UNC) thread according to dimension table.  $Alternative\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.\ Contact\ STAUFF\ for\ further\ information.$ 

If required, use Safety Washers, type SI as locking devices to prevent Hexagon Head Bolts, type AS from loosening. See page 52 for details.

\* Standard finishing option in North America is W3 (Carbon Steel, zinc/nickel-plated).

#### **Further Metal Hardware**

For Use with the Heavy Twin Series



# **Mounting Rail Nut Type GMV**

Heavy Series, STAUFF Group 4S and 5S (See page 46 for details)



**Type STSV** 

(See page 46 for details)



## **Channel Rail Adaptor Type CRA**

Heavy Series, STAUFF Group 4S and 5S (See page 47 for details)



# **Socket Cap Screw** Type IS

Heavy Series, STAUFF Group 4S and 5S (See page 51 for details)



# **Safety Locking Plate Type SIPD**

Heavy Twin Series, STAUFF Group 4S-D and 5S-D (Contact STAUFF for details)



## **Stacking Bolt** Type AF

Heavy Series, STAUFF Group 4S and 5S (See page 53 for details)







## **1** Type of Installation

Please select the type of installation (e.g. Weld Plates, Rail Nuts etc.) and add the corresponding Code to position ① of the order code for your clamp assembly.



Without Installation Equipment

Code: none

#### **Installation on Weld Plate**



**Single Weld Plate** Code: SPAD

#### **Installation on Mounting / Channel Rail**



**Mounting Rail Nut** Code: GMV



Channel Rail Adaptor

Code: CRA

# 2 Group Size & Diameters

Please select the required group size and diameter and add the corresponding Code to position 2 of the crder code for your clamp assembly.

Group	Outside Diameter	Availability Body Materia		
	P/T/H	Profiled		
STAUFF	(mm)	Design	Type RI	Code
	6	0	•	4006/06
	8	0	•	4008/08
	10	0	•	4010/10
	12	0	•	4012/12
	12,7	•	•	4012.7/12.7
	14	0	•	4014/14
	15	0	•	4015/15
4S-D	16	0	•	4016/16
45-D	17,2	0	•	4017.2/17.2
	18	0	•	4018/18
	19	•	•	4019/19
	20	•	0	4020/20
	21,3	•	0	4021.3/21.3
	22	•	0	4022/22
	25,4	•	0	4025.4/25.4
	26,9	•	0	4026.9/26.9
	20	0	•	5020/20
	21,3	0	•	5021.3/21.3
	22	0	•	5022/22
	25	0	•	5025/25
	26,9	0	•	5026.9/26.9
5S-D	28	0	•	5028/28
	30	0	•	5030/30
	32	•	•	5032/32
	33,7	•	0	5033.7/33.7
	38	•	0	5038/38
	42	•	0	5042/42

Standard Option

## 3 Clamp Body Design & Material

Please select the design and material of your clamp body and add the corresponding Code to position 3 of the order code for your clamp assembly.

Please check the availability of the selected clamp body design and material according to the matrix table in 2.

#### **Profiled Design**





#### Type RI (with Elastomer Insert)



Polypropylene Code: PP-R



Clamp Bodies, Type H (smooth Inside surface without tension clearance) are available upon request.

# 4 Mounting & Fitting Combination

Please contact STAUFF for further information.

Please select the mounting and fitting combination (e.g. Bolts, Cover Plates etc.) and add the corresponding Code to position ④ of the order code for your clamp assembly.

#### **Installation with Cover Plate and Bolts**

Cover Plate DPAD with Hexagon Head Bolt AS Code: DPAD-AS

#### Installation with Locking Plate and Bolts

Safety Locking Plate SIPD with Stacking Bolt AF Code: SIPD-AF

### **5** Thread Type

Please select the required thread type and add the corresponding Code to position 5 of the order code for your clamp assembly.

Metric ISO thread Code: M

Unified coarse (UNC) thread Code: U

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.

## **6 Material & Surface Finishing**

Please select the required material & surface finishing of the metal parts and add the corresponding Code to position 6 of the order code for your clamp assembly.

Metal parts made of Carbon Steel, uncoated W1

Metal parts made of Carbon Steel, phosphated W2

Metal parts made of Carbon Steel, zinc/nickel-plated W3

Metal parts made of Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)

Metal parts made of Stainless Steel V4A W5 1.4401 / 1.4571 (AISI 316 / 316 Ti)

Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated

W12

W15

W16

W19

Weld Plate and Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated

Mounting Rail Nuts made of Carbon Steel, zinc/nickel-plated; Cover Plate made of Carbon Steel, phosphated: W13 Bolts made of Carbon Steel, uncoated

Weld Plate / Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated

Mounting Rail Nuts made of Carbon Steel, zinc/nickel-plated: Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated

Safety Locking Plate made of Carbon Steel, phosphated; W17 Bolts made of Carbon Steel, zinc/nickel-plated

Safety Locking Plate made of Carbon Steel, uncoated; W18 Bolts made of Carbon Steel, phosphated

Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated

Individual combinations of alternative materials and surface finishings are available upon request. Contact STAUFF for further information

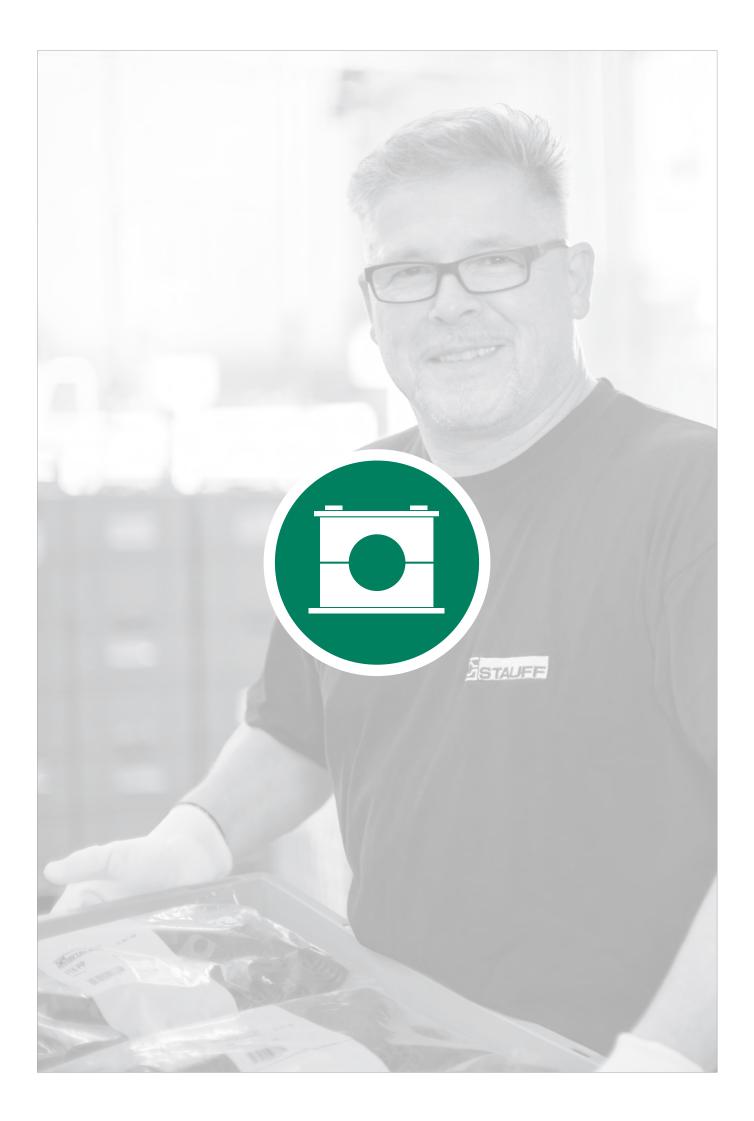
# **7 Assembling & Kitting**

If required, please select an additional assembling and kitting option and add the corresponding Code to the last position of the order code for your clamp assembly.

**Components Supplied Separately** Code: none (Standard Option)

**Components Assembled** Code: A (Special Option)

**Components Packed in Kits** Code: K (Special Option)





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## **STAUFF ACT Anti-Corrosion Technology**



Crevice corrosion formed under a regular plastic clamp



Crevice corrosion formed under a regular plastic clamp



#### **Stainless Steel Pipework**

Stainless steel pipework on oil and gas platform and processing plants (that are located offshore and up to 50 km inland) is used over a wide range of temperature, flow and pressure conditions, e.g. for process instrumentation and sensing, as well as for chemical inhibition, hydraulic or utility lines.

The typical tubing material selected for these particular applications is AISI 316 stainless steel, although in more recent times other tube materials have been utilized to try and counteract the offshore corrosion issue.

In all major offshore oil and gas regions - including the Gulf of Mexico, the North Sea, the Gulf of Guinea and the China Sea corrosion of AISI 316 stainless steel pipework can be observed, and has been a researched and well documented problem as well as a costly and time consuming issue with regard to maintenance processes for many years.

#### **Pitting Corrosion**

One of the most prevalent forms of localised corrosion is pitting corrosion: Under certain specific conditions - particularly involving chlorides (such as sodium chloride in seawater) and exacerbated by elevated temperatures - small pits can form in a stainless steel surface.

Dependent upon both the environment and the stainless steel itself, these pits may continue to grow and eventually lead to perforation of tubing walls and leaks, while the majority of the surface may still be totally unaffected.

Pitting corrosion is often quite easy to recognise: small individual pits and - in later stages - sometimes deeper and connected pits can be observed by visual inspection with the unaided eye.

#### **Crevice Corrosion**

Another dominant type is crevice corrosion, which is a lot more difficult to observe: It usually tends to occur in shielded areas such as crevices, formed under gaskets, washers, fastener heads, insulating material, surface deposits, disbonded coatings, threads and lap joints.

Pipe clamps made of plastic in particular have also been prone to inducing crevice corrosion in the past, because the plastic deforms around the tubing and creates even tighter crevices.

Crevice corrosion is always initiated by changes in the local chemistry within the shielded area, usually associated with a stagnant solution on the micro-environmental level:

- Trapped seawater becomes stagnant
- Depletion of inhibitor and oxygen
- A shift to acid conditions
- Build-up of aggressive ion species (such as sodium chloride in seawater)
- Accelerated corrosion process

Crevice corrosion can have serious and adverse consequences eventually leading to perforation of tubing walls and the escape of highly flammable and hazardous fluids and chemicals

#### **Material Selection**

Hence, the selection of proper materials and the use of robust design and safe construction practices are mandatory, even if crevices are sometimes difficult or even impossible to avoid in tubing installations when using regular types of tubing supports and clamps.

This is where STAUFF ACT Clamps come into play ...

#### **Corrosion Facts**

Corrosion in general is a naturally occurring phenomenon commonly defined as the deterioration of a substance (usually a metal) or its properties because of a reaction with its environment. Like other natural hazards, corrosion can cause not only expensive but also dangerous damage to almost everything from automobiles, home appliances and drinking water systems to pipelines, bridges and public buildings.

Figures provided by the U.S. National Climatic Data Center underline that major weather related disasters the U.S. incurred total losses of averaging USD 17 billion annually (1980 - 2001). According to U.S. corrosion studies, the estimated direct cost of metallic corrosion in general was USD 276 billion on an annual basis in 1998. This represented 3.1% of the U.S. Gross Domestic Product.

Direct corrosion costs associated with the domestic oil and gas production activities in the U.S. were determined to be about USD 1,4 billion annually, with USD 0,6 billion attributed to surface piping and facility costs, USD 0,5 billion to downhole tubing, and USD 0,3 billion to capital expenditures related to corrosion.

The U.S. refineries represent approximately 23% of the world's petroleum production in 1996 supplying more than 18 million barrels of refined petroleum products per day, with a total corrosion related direct cost of USD 3,7 billion. Maintenance expenses make up USD 1,8 billion of this total, vessel expenses are USD 1,4 billion and fouling costs are approximately USD 0,5 billion annually.

Source of Information: Report No. FHWA-RD-01-156, September 2001 Corrosion Costs and Preventive Strategies in the United States Report by CC Technologies Laboratories, Inc. to Federal Highway ation Office of Infrastructure Research and Development





#### **Main Features**

Efficient Prevention of Crevice Corrosion under Pipe Clamps on Stainless Steel Pipework Middle- and Long-Term Cost Savings due to Extended Service and Maintenance Intervals

#### Construction based on STAUFF Clamps

- Design based on Original STAUFF Clamps according to DIN 3015, Parts 1 and 3 (Standard Series and Twin Series), the tried and tested industry standard for several decades
- Covering the most commonly used metric and imperial pipe diameters from 6 mm to 42 mm (from 1/4 inch to 1 1/2 inch)
- · Alternative configurations and pipe diameters on request
- Installation time reduction (compared to alternative designs)

#### **Independent Testing and Approval**

- Subject to stringent testing at the STAUFF in-house laboratories located in Werdohl (Germany)
- Salt spray tests according to ASTM B117 applied in controlled laboratory environments
- Long-term field tested on a rig in the Dutch sector of the North Sea
- Tests results independently assessed by Centre for Corrosion Technolog at Sheffield Hallam University
- · Fully detailed, independent test reports available on request

#### **Innovative Design and Materials**

- Material and design in compliance with section 7.3 (Tubing Installation) of the Norwegian offshore standard Norsok Z-010 (Revision 3, published in October 2000), API RP 552 and NACE SP 0108-2008 (section 13)
- Clamp body made of flame-retardant PP-V0 plastic material; tested and V0 classified according to UL 94
- ② Integrated ACE anti-corrosion elastomer strips avoid the accumulation of seawater between clamp body and pipe
- 3 Drainage channels aid the dispersal of seawater (self-draining)







- 4 ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling (delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport)
- High UV stability of the clamp body material; resistant against seawater, rain and oil
- Suitable for continuous exposure to temperatures from -25 °C to +80 °C (from -13 °F to +176 °F)
- To be used in sub-sea and top-side environments;
   alleviating the requirement for two different products



Salt-spray testing of ACT Mounting Hardware (above of the picture) compared to contaminated hardware made of Stainless Steel V4A (below of the picture)

#### Design

STAUFF ACT Clamps are an innovatively designed solution for the installation of instrumentation pipework where anti-corrosion properties are of paramount importance (e.g. in the fields of offshore oil and gas exploration and processing).

The design – based on the tried and tested STAUFF Clamps according to DIN 3015 – offers installation time reduction and long term cost savings due to extended service intervals.

The STAUFF ACT clamp body design is available for the Standard Series (DIN 3015, Part 1) and the Twin Series (DIN 3015, Part 3) to cover the most commonly used metric and imperial pipe diameters from 6 mm to 42 mm (1/4 inch to 1 1/2 inch).

#### **Development**

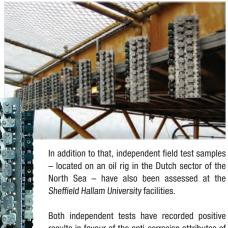
Throughout their development, STAUFF ACT Clamps have been subject to stringent testing at the STAUFF in-house laboratories located in Werdohl, Germany.

In order to ensure credibility of the product, the development process has also involved independent testing.



To achieve this, the services of the Centre for Corrosion Technology at Sheffield Hallam University's Materials and Engineering Research Institute have been utilized, applying advanced techniques with equipment such as high resolution surface metrology and form measurement systems.

In a controlled laboratory environment, continous hot salt spray tests according to ASTM B117 have been applied for periods of 2000 hours to various clamp configurations holding AISI 316 stainless steel tubing.



Both independent tests have recorded positive results in favour of the anti-corrosion attributes of the STAUFF ACT Clamp. Fully detailed test reports are available upon request.

#### **Conformity**

Using flame-retardant PP-V0 plastic material for the clamp body and ACE anti-corrosion elastomer material for the rubber strips, STAUFF ACT Clamps have been constructed in compliance with section 7.3 (Tubing Installation) of the Norwegian offshore standard Norsok Z-010 (Revision 3, published in October 2000). They also comply with Norsok I-001 (Revision 4, published in January 2010), API RP 552 and NACE SP 0108-2008 (section 13).

#### **The Norsok Organisation**



Norsok is a Norwegian industry initiative to add value, reduce cost and lead time and remove unnecessary activities in offshore field developments and operations.

The Norsok standards are developed by the Norwegian petroleum industry and are jointly issued by the Norwegian Oil Industry Association (OLF) and the Federation of Norwegian Engineering Industries (TBL). They are administered by the Norwegian Technology Standards Institution (NTS).

The purpose of the Norsok industry standards is to replace the individual oil company specifications for use in existing and future petroleum industry developments, subject to the individual company's review and application.

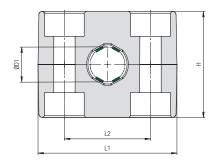
## Standard Series according to DIN 3015, Part 1

### **ACT Clamp Body**





Integrated Rubber Strips made of Anti-Corrosion Elastomer (ACE)



# **Ordering Codes**

\*2-\*12.7-\*ACT \*1-\*06.4A-\*ACT **Clamp Body** Clamp Body, STAUFF Group 1A

One clamp body consists of two identical clamp halves, each with two integrated rubber strips.

* STAUFF Group		2
* Exact outside diam	eter Ø D1 (mm)	12.7
* Material code	Size 1A - 5	ACT
	Size 7M / 8M	ACT-A

Group S	ize	Outside Ø D1	Diameter	Ordering Code	Packaging Unit	Dimen	Dimensions (mm/in)		
STAUFF	DIN	(mm)	(in)	(2 Clamp Halves)	(in pieces / bag)	L1	L2	Н	Width
		3,2	1/8	103.2A-ACT	25				
		6		106A-ACT	25				
		6,4	1/4	106.4A-ACT	25	37	20	26	30
1A	1	8		108A-ACT	25	1.46	.79	1.06	1.18
		9,5	3/8	109.5A-ACT	25	1.40	.79	1.00	1.10
		10		110A-ACT	25				
		12		112A-ACT	25				
		12,7	1/2	212.7-ACT	25				
		14		214-ACT	25				
0	0	14,3	9/16	214.3-ACT	25	42	26	32	30
2	2	15		215-ACT	25	1.65	1.02	1.30	1.18
		16	5/8	216-ACT	25				
		18		218-ACT	25				
		19	3/4	319-ACT	25				
		20		320-ACT	25		00 05 5	05.5	00
3	3	21,3		321.3-ACT	25	50	33	35,5	30
		25		325-ACT	25	1.97	1.30	1.42	1.18
		25,4	1	325.4-ACT	25				
		26,9		426.9-ACT	25	50	40	40	00
4	4	28		428-ACT	25	59 2.32	40 1.57	1,65	30 1.18
		30		430-ACT	25	2.32	1.57	1,00	1.10
		32	1 1/4	532-ACT	25				
_	_	35		535-ACT	25	71	52	58	30
5	5	38	1 1/2	538-ACT	25	2.80	2.05	2.28	1.18
		42		542-ACT	25				
	/	44,5		744.5M-ACT-A	25				
714	/	48,3		748.3M-ACT-A	25	125	100	100	40
7M	/	60,3		760.8M-ACT-A	25	4.92	3.94	3.94	1.57
	/	65		765M-ACT-A	25				
	/	70		870M-ACT-A	25				
014		73		873M-ACT-A	25	165	140	135	45
8M		76,1		876.1M-ACT-A	25	6.50	5.51	5.31	1.77
	/	88,9		888.9M-ACT-A	25				

Additional sizes and outside diameters are available upon request.  $\label{prop:prop:prop:prop:prop:state} \mbox{Please contact STAUFF for further information.}$ 







# **ACT Mounting Hardware** Installation on Single Weld Plates

Required components (for use with single weld plate):

- 2 ACT Hexagon Head Bolts AS...W55
- 1 ACT Cover Plate DP...W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Single Weld Plate SP...W55

Before welding, always make sure that the designated position of the ACT Weld Plate is suitable for the expected loads.

### **ACT Mounting Hardware** Material Properties and Handling Instructions

ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com/act/assembly

# **ACT Hexagon Head Bolt** Type AS ... W55 (according to DIN 931 / 933)

Dimensions (mm/in)

Thread G x L M6 x 30

M6 x 1.18 M6 x 35

M6 x 1.38 M6 x 40

M6 x 1.57 M6 x 45

M6 x 1.77 M6 x 60

M6 x 2.36 M10 x 110

M10 x 4.33 M10 x 145

M10 x 5.71



Group STAUFF DIN

3

5

7M

8M

2

3

4

5



Dimensions applicable only when used with Cover Plate DP and Weld Plate SP

Ordering Code

AS-M6x30-W55

AS-M6x35-W55

AS-M6x40-W55

AS-M6x45-W55

AS-M6x60-W55

AS-M10x110-W55

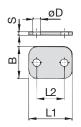
AS-M10x145-W55

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ackaging Unit in pieces / bag)	G:
5	1/
5	2
5	3
5	4
5	5
5	71
15	81

# **ACT Cover Plate Type DP ... W55**

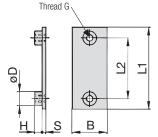




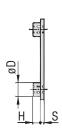
Group STAUFF DIN		Dimen	sions ( <sup>m</sup>	m/in)		Ordering Code	Packaging Unit	
STAUFF	DIN	L1	L2	В	S	ØD		(in pieces / bag)
1A	1	34	20	30	3	7	DP-1A-W55	25
IA	'	1.34	.79	1.18	.12	.28	DF-IA-W33	20
2	2	40,5	26	30	3	7	DP-2-W55	25
	2	1.59	1.02	1.18	.12	.28	DF-2-W55	20
3	3	48	33	30	3	7	DP-3-W55	25
3	3	1.89	1.30	1.18	.12	.28	DF-3-W33	20
4	4	57	40	30	3	7	DP-4-W55	25
4	4	2.24	1.57	1.18	.12	.28	DF-4-W55	20
5	5	70	52	30	3	7	DP-5-W55	25
3	5	2.76	2.05	1.18	.12	.28	DF-3-W33	20
7M		125	100	40	8	11	DP-7M-W55	25
/ IVI		4.92	3.94	1.57	.31	.43	DF-71VI-VV33	20
8M		165	140	45	8	11	DP-8M-W55	25
OIVI		6.50	5.51	1.77	.31	.43	DL-OM-MOO	20

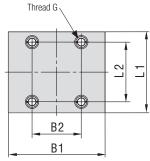
# **ACT Single Weld Plate Type SP ... W55**





<b>ACT Double Weld Plate</b>
Type SPD W55





	H S D	

Group		Dime	ensior	ıs ( <sup>mm</sup>	/in)				Ordering Code	Packaging Unit
STAUFF	DIN	G	L1	L2	В	S	Н	ØD		(in pieces / bag)
1A	1	M6	36	20	30	3	6,5	12	SP-1A-M-W55	25
IA	ı	IVIO	1.42	0.79	1.18	.12	.26	.47	3F-1A-101-W33	20
2	2	M6	42	26	30	3	6,5	12	SP-2-M-W55	25
		IVIO	1.65	1.02	1.18	.12	.26	.47	3F-2-W-W33	20
3	3	M6	50	33	30	3	6,5	12	SP-3-M-W55	25
3	J		1.97	1.30	1.18	.12	.26	.47	31 -3-W-W33	20
4	4	M6	60	40	30	3	6,5	12	SP-4-M-W55	25
7	7	1410	2.36	1.57	1.18	.12	.26	.47	31 -4-IVI-W33	20
5	5	M6	71	52	30	3	6,5	12	SP-5-M-W55	25
3	J	IVIO	2.80	2.05	1.18	.12	.26	.47	31 -3-IVI-W33	20
7M		M10	125	100	40	8	5,3	14	SP-7M-M-W55	25
7 IVI		IVITU	4.92	3.94	1.58	.31	.21	.55	3F-7 IVI-IVI-VV33	20
8M		M10	165	140	45	8	5,3	14	SP-8M-M-W55	25
OIVI		IVITU	6.50	5.51	1.77	.31	.21	.55	Sr-oivi-IVI-WSS	20

Group		Dimensions (mm/in)								Ordering Code	Packaging Unit
STAUFF	DIN	G	L1	L2	B1	B2	S	Н	ØD		(in pieces / bag)
1A	1	M6	36	20	60	30,5	3	6,5	12	SPD-1A-M-W55	25
IA	1	IVIO	1.42	0.79	2.36	1.20	.12	.26	.47	SFD-IA-IVI-WSS	25
2	2	M6	42	26	60	30,5	3	6,5	12	SPD-2-M-W55	25
2	2	IVIO	1.65	1.02	2.36	1.20	.12	.26	.47	3PD-2-WI-W33	20
2	3	M6	50	33	60	30,5	3	6,5	12	SPD-3-M-W55	25
3	3	IVIO	1.97	1.30	2.36	1.20	.12	.26	.47	25D-2-INI-M22	25



Alternative types of weld plates are available upon request. Please contact STAUFF for further information.







### **ACT Mounting Hardware** Installation on Mounting Rails

Required components (for use with single weld plate):

- 2 ACT Hexagon Head Bolts AS...W55
- 1 ACT Cover Plate DP...W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 2 ACT Hexagon Rail Nuts, SM...W55
- 1 ACT Mounting Rail, TS...W55

Before welding, always make sure that the designated position of the ACT Weld Plate is suitable for the expected loads.

### **ACT Mounting Hardware** Material Properties and Handling Instructions

ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com/act/assembly

# **ACT Hexagon Head Bolt** Type AS ... W55 (according to DIN 931 / 933)



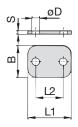


Dimensions applicable only when used with Cover Plate DP and Weld Plate SP

Group STAUFF	DIN	Dimensions (mm/in) Thread G x L	Ordering Code	Packaging Unit (in pieces / bag)
1A	1	M6 x 30 M6 x 1.18	AS-M6x30-W55	25
2	2	M6 x 35 M6 x 1.38	AS-M6x35-W55	25
3	3	M6 x 40 M6 x 1.57	AS-M6x40-W55	25
4	4	M6 x 45 M6 x 1.77	AS-M6x45-W55	25
5	5	M6 x 60 M6 x 2.36	AS-M6x60-W55	25

# **ACT Cover Plate Type DP ... W55**



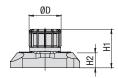


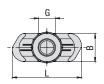
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Group		Dimen	sions (m	ım/in)		Ordering Code	Packaging Unit	
STAUFF	DIN	L1	L2	В	S	ØD		(in pieces / bag)
1A	1	34	20	30	3	7	DP-1A-W55	25
IA	'	1.34	.79	1.18	.12	.28	DF-IA-W55	25
2	2	40,5	26	30	3	7	DP-2-W55	25
2	2	1.59	1.02	1.18	.12	.28	DF-2-W55	20
3	3	48	33	30	3	7	DP-3-W55	25
3	3	1.89	1.30	1.18	.12	.28	DF-3-W33	20
4	4	57	40	30	3	7	DP-4-W55	25
4	4	2.24	1.57	1.18	.12	.28	DP-4-W00	20
E	E	70	52	30	3	7	DD E WEE	05
5	5	2.76	2.05	1.18	.12	.28	DP-5-W55	25

# **Hexagon Rail Nut** (for Use with Mounting Rail TS) Type SM









(for Use with Hexagon Rail Nut SM)

**Mounting Rail** 

Type TS





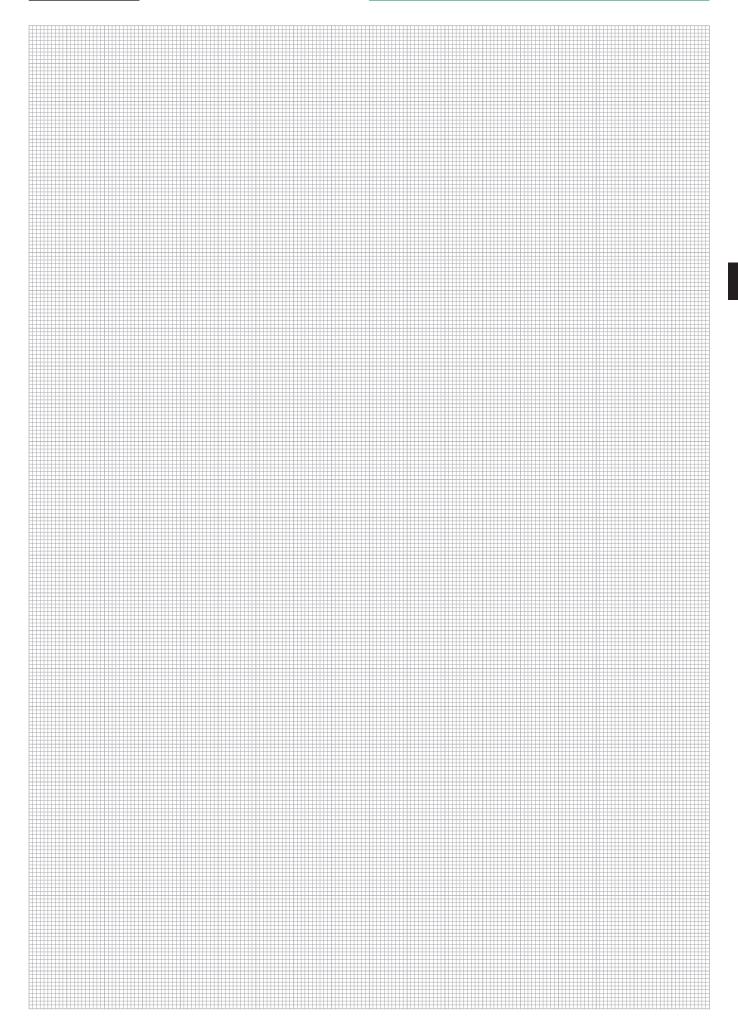
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Group		Dimensions	(mm/in)					Ordering Codes
STAUFF	DIN	Thread G	L	В	H1	H2	ØD	(Standard Options)
1A	1							
2	2							
3	3	M6	25,5	10,4	14,2	5,5	12	SM-1-8/1D-M-W55
			1.00	.41	.56	.22	.47	
4	4							
5	5							

**Mounting Rail TS-11** 

Mounting Rail TS-14

ATTAC								
Group		Dimens	ions ( <sup>mm</sup>	/in)	Ordering Codes (Standard Options)			
STAUFF	DIN	B1	B2	S				
1A	1				Length of Rail	Length of Rail		
2	2				Height 11 mm / .43 in	Height 11 mm / .43 in		
2	3	28	11	2				
3	3	1.10	.43	.08				
4	4				Length of Rail 1 m / 3.28ft Height 14 mm / .55 in	Length of Rail 2m / 6.56ft Height 14 mm / .55 in		
5	5				TS-14-1M-W55	TS-14-2M-W55		









### **ACT Mounting Hardware** Multi-Level Installation (with Weld Plate)

Required components for each level:

- 2 ACT Stacking Bolt AF...W55
- 1 ACT Safety Locking Plate SIG...ACT-W55
- 1 ACT Clamp Body (2 Clamp Halves)

The upper layer is secured by a cover plate and hexagon head bolts. The lower layer has to be mounted to a weld plate (with a recommended maximum of two levels in total).



### **ACT Mounting Hardware** Material Properties and Handling Instructions

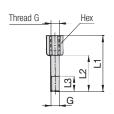
ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com/act/assembly

# **ACT Stacking Bolt Type AF ... W55**





Control Con-								
Group		Dim	ensior	ıs ( <sup>mm</sup> /	in)		Ordering Code	Packaging Unit
STAUFF	DIN	G	L1	L2	L3 min.	Hex		(in pieces / bag)
1A	4	M6	34	20	12	11	AF-1/1A/1D-M-W55	25
IA	1	IVIO	1.34	.79	.47	.43	AF-I/IA/ID-W-W33	20
2	2	M6	40	26	12	11	AF-2-M-W55	25
2	2	IVIO	1.57	1.24	.47	.43	AF-Z-IVI-WJJ	20
3	3	M6	44	30	12	11	AF-3/AF-HKSK-1A-M-W55	25
3	3	IVIO	1.73	1.18	.47	.43	AF-3/AF-IINSK-IA-WI-W33	20
4	4	M6	49	35	12	11	AF-4/AF-HKSK-1D-M-W55	25
4	4	IVIO	1.93	1.38	.47	.43	AF-4/AF-HN3N-ID-WI-W33	20
5	5	M6	64	50	12	11	AF-5-M-W55	25
Ü	Ü	IVIO	2.52	1.97	.47	.43	AF-U-IVI-WUU	20

# **ACT Safety Locking Plate** Type SIG ... ACT-W55







Group		Dimens	ions (mm)	/in)		Ordering Code	Packaging Unit
STAUFF	DIN	L	B1	B2	S		(in pieces / bag)
1A	4	33	28	11,2	2	SIG-1A-ACT-W55	25
IA		1.30	1.10	.44	.08	SIG-IA-ACI-WSS	20
2	2	39	28	11,2	2	SIG-2-ACT-W55	25
2	2	1.54	1.10	.44	.08	310-2-AC1-W33	20
3	3	47	28	11,2	2	SIG-3-ACT-W55	25
3	3	1.85	1.10	.44	.08	310-3-AC1-W33	20
4	4	56	28	11,2	2	SIG-4-ACT-W55	25
4	4	2.20	1.10	.44	.08	31U-4-AC1-W33	20
5	5	69	28	11,2	2	SIG-5-ACT-W55	25
3	i o	2.72	1.10	.44	.08	310-3-AC1-W33	20







### **ACT Mounting Hardware** Installation with Channel Rail Adaptors

#### **Required components:**

- 2 ACT Hexagon Head Bolts AS...W55
- 1 ACT Cover Plate DP...W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 2 ACT Channel Rail Adaptors CRA...W55

Suitable for various brands and types of channel rails (including Halfen, Hilti, Unistrut® etc.).

# Waterial Code W55

# **ACT Mounting Hardware**Material Properties and Handling Instructions

ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps.

Details: www.stauff.com/act/assembly

# ACT Hexagon Head Bolt Type AS ... W55 (according to DIN 931 / 933)



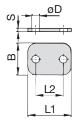


Dimensions applicable only when used with Cover Plate DP and Weld Plate SP

Group STAUFF	DIN	Dimensions (mm/in) Thread G x L	Ordering Code	Packaging Unit (in pieces / bag)
1A	1	M6 x 30 M6 x 1.18	AS-M6x30-W55	25
2	2	M6 x 35 M6 x 1.38	AS-M6x35-W55	25
3	3	M6 x 40 M6 x 1.57	AS-M6x40-W55	25
4	4	M6 x 45 M6 x 1.77	AS-M6x45-W55	25
5	5	M6 x 60 M6 x 2.36	AS-M6x60-W55	25

# **ACT Cover Plate Type DP ... W55**



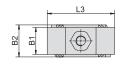


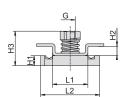
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Group		Dimen	sions ( <sup>m</sup>	m/in)			Ordering Code	Packaging Unit
STAUFF	DIN	L1	L2	В	S	ØD		(in pieces / bag)
1A	1	34	20	30	3	7	DP-1A-W55	25
IA	1	1.34	.79	1.18	.12	.28	DF-IA-W55	20
2	2	40,5	26	30	3	7	DP-2-W55	25
2	2	1.59	1.02	1.18	.12	.28	DF-2-W55	20
3	3	48	33	30	3	7	DP-3-W55	25
3	3	1.89	1.30	1.18	.12	.28	DF-3-W33	20
4	4	57	40	30	3	7	DP-4-W55	25
4	4	2.24	1.57	1.18	.12	.28	DF-4-W55	20
5	5	70	52	30	3	7	DP-5-W55	25
Э	5	2.76	2.05	1.18	.12	.28	DP-5-W55	20

# ACT Channel Rail Adaptor Type CRA ... W55

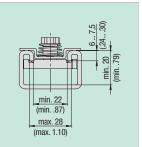






### Suitability Chart for ACT Channel Rail Adaptors in the Standard Series

The STAUFF Channel Rail Adaptor, type CRA, is suitable for various brands and types of channel rails (including Halfen, Hilti, Unistrut® etc.). The drawing describes the basic dimensional requirements for channel rails to be used with STAUFF Channel Rail Adaptors, type CRA.



In case of doubt, please do not he itate to contact STAUFF prior to field application.

Group		Dimensions	(mm/in)			Ordering Code	Packaging Unit					
STAUFF	DIN	G	L1	L2	L3	B1	B2	H1	H2	H3		(in pieces / bag)
1A	1											
2	2											
3	3	M6	.83	35 1.38	40 1.57	.63	.75	.24	5,5	20,5	CRA-1-8/1D-M-W55	25
4	4		.00	1.00	1.07	.00	.70			.01		
5	5											





### **ACT Mounting Hardware** Installation in Field Trays / Cable Ladders

#### Required components:

- 2 ACT Self-Locking Nuts MUS-HKS ... W55
- 1 ACT Cover Plate DP ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 2 ACT Hammerhead Bolts HKS ... W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.

# Waterial Code W55

# **ACT Mounting Hardware**Material Properties and Handling Instructions

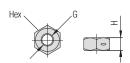
ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com/act/assembly

# All-Metal Self-Locking ACT Nut Type MUS-HKS ... W55 (similar to DIN 980 / Biloc)

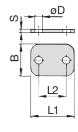






**ACT Cover Plate** 

**Type DP ... W55** 



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For use with ACT Hammerhead Bolts HKS ... W55

Group STAUFF	DIN	Dimensions Thread G	S ( <sup>mm</sup> / <sub>in</sub> )	Hex	Ordering Code	Packaging Unit (in pieces / bag)
1A	1					
2	2					
3	3	M6	5	10	MUS-HKS-M6-W55	25
4	4		.20	.39		
5	5					

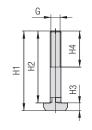
#### Ordering Code **Packaging Unit** Group Dimensions (mm/in) (in pieces / bag) ØD STAUFF DIN 12 34 20 30 3 1A DP-1A-W55 25 .28 1.34 .79 1.18 .12 40.5 26 30 3 DP-2-W55 25 1.59 1.02 1.18 .12 .28 48 33 30 3 3 DP-3-W55 25 .12 1 89 1.30 .28 1 18 57 40 30 4 DP-4-W55 25 2.24 1.57 1.18 .12 .28 70 52 30 3 5 5 DP-5-W55 25

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# ACT Hammerhead Bolt Type HKS ... W55





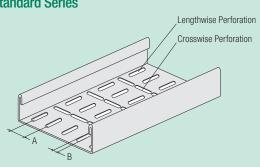


For use with Self-Locking ACT Nuts MUS-HKS  $\dots$  W55

Group		Dim	ensior	1 <b>s (</b> mm/i	n)		Ordering Code	Packaging Unit		
STAUFF	DIN	G	H1	H2	Н3	H4 min	В	L		(in pcs. / bag)
1A	1	M6	44,3	40	4,3	20	6,1	13,3	HKS-M6x40-W55	25
IA	'	IVIO	1.74	1.57	.17	.79	.24	.52	HKS-INIDX4U-WSS	20
2	2	M6	49,3	45	4,3	20	6,1	13,3	HKS-M6x45-W55	25
	2	IVIO	1.94	1.77	.17	.79	.24	.52	HK3-W0X45-W55	20
3	3	M6	54,3	50	4,3	20	6,1	13,3	HKS-M6x50-W55	25
3	3	IVIO	2.14	1.97	.17	.79	.24	.52	HK3-MOX30-W33	20
4	4	M6	59,3	55	4,3	20	6,1	13,3	HKS-M6x55-W55	25
4	4	IVIO	2.33	2.17	.17	.79	.24	.52	HK3-WGX55-W55	20
5	5	M6	74,3	70	4,3	20	6,1	13,3	HKS-M6x70-W55	25
3	J)	IVIO	2.93	2.76	.17	.79	.24	.52	HK3-WGX/U-W33	20

### Suitability Chart for ACT Hammerhead Bolts in the Standard Series

2.05 1.18



ACT Hammerhead Bolts are suitable for field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations that meet the following requirements:

- Dimension A: Equal to the bolt center spacing of the clamp assembly
- Dimension B: 6,2 mm ... 7,0 mm / .24 in ... .28 in (Min ... Max)

In case of doubt, please do not hesitate to contact STAUFF prior to field application.





# **ACT Mounting Hardware**Multi-Level Installation (with Stacking & Hammerhead Bolts)

Required components (for a recommended maximum of two levels in total):

- 2 ACT Self-Locking Nuts MUS-HKS ... W55
- 1 ACT Cover Plate DP ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Safety Locking Plate SIG...ACT-W55
- 2 ACT Stacking Bolts AF-HKSK...W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 2 ACT Hammerhead Bolts HKSK ... W55

# Material Code W55

# **ACT Mounting Hardware**Material Properties and Handling Instructions

ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

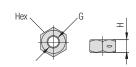
ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps.

<u>Details: www.stauff.com/act/assembly</u>

# All-Metal Self-Locking ACT Nut Type MUS-HKS ... W55 (similar to DIN 980 / Biloc)

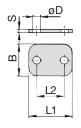






**ACT Cover Plate** 

**Type DP ... W55** 





For use with ACT Stacking Bolts AF-HKS ... W55

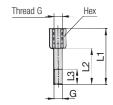
Group		Dimensions	s (mm/in)		Ordering Code	Packaging Unit
STAUFF	DIN	Thread G	Н	Hex		(in pieces / bag)
1A	1					
2	2	M6	5 .20	10 .39	MUS-HKS-M6-W55	25
3	3					

# Rost frei

Group		Dimen	sions (		Ordering Code	Packaging Unit		
STAUFF	DIN	L1	L2	В	S	ØD		(in pieces / bag)
1A	1	34	20	30	3	7	DP-1A-W55	25
IA	'	1.34	.79	1.18	.12	.28	DF-IA-W55	20
2	2	40,5	26	30	3	7	DP-2-W55	25
2	2	1.59	1.02	1.18	.12	.28	DF-2-W55	20
3	3	48	33	30	3	7	DP-3-W55	25
3	3	1.89	1.30	1.18	.12	.28	DL-9-M33	20

# ACT Stacking Bolt Type AF-HKSK ... W55





For use with Self-Locking ACT Nuts MUS-HKS ... W55

Group		Dime	nsions	(mm/in	)		Ordering Code	Packaging Unit
STAUFF	DIN	G	L1	L2	L3 min.	Hex		(in pieces / bag)
1A	1	M6	44	30	12	11	AF-3/AF-HKSK-1A-M-W55	25
IA	1	IVIO	1.73	1.18	.47	.43	AL-2/AL-UK2V-1A-INI-M22	20
2	2	M6	54	40	12	11	AF-HKSK-2/3-M-W55	25
2	2	IVIO	2.13	1.57	.47	.43	AF-IINSK-Z/S-IVI-WSS	20
3	3	M6	54	40	12	11	AF-HKSK-2/3-M-W55	25
3	J	IVIO	2.13	1.57	.47	.43	AF-IINSK-2/3-IVI-W33	20

# ACT Safety Locking Plate Type SIG ... ACT-W55



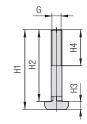




Group			ions (mm)	/ <sub>in</sub> )		Ordering Code	Packaging Unit
STAUFF	DIN	L	B1	B2	S		(in pieces / bag)
1A	4	33	28	11,2	2	SIG-1A-ACT-W55	25
IA		1.30	1.10	.44	.08	SIG-IA-ACI-WOO	20
2	2	39	28	11,2	2	SIG-2-ACT-W55	25
2	2	1.54	1.10	.44	.08	31U-2-AU1-W33	20
3	3	47	28	11,2	2	SIG-3-ACT-W55	25
٥	٥	1.85	1.10	.44	.08	31U-3-AU1-W33	20

## ACT Hammerhead Bolt Type HKSK ... W55







Group		Dim	ensior	ıs (mm/	in)				Ordering Code	<b>Packaging Unit</b>
STAUFF	DIN	G	H1	H2	Н3	H4 min	В	L		(in pcs. / bag)
1A	1	M6	29,3	25	4,3	20	6,1	13,3	HKSK-M6x25-W55	25
IA	'	IVIO	1.15	.98	.17	.79	.24	.52	TIKSK-WOX25-W55	20
2	2	M6	36,3	32	4,3	20	6,1	13,3	HKSK-M6x32-W55	25
2		IVIO	1.43	1.26	.17	.79	.24	.52	HNSK-WOX32-W33	20
3	3	M6	39,3	35	4,3	20	6,1	13,3	HKSK-M6x35-W55	25
3	3	IVIO	1.55	1.38	.17	.79	.24	.52	UV2V-INIDX33-M33	20





## **ACT Mounting Hardware** Multi-Level Installation in Field Trays /

Cable Ladders (with Hammerhead Bolts)

Required components (for a recommended maximum of two levels in total):

- 2 ACT Self-Locking Nuts MUS-HKS ... W55
- 1 ACT Cover Plate DP ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Clamp Body (2 Clamp Halves)
- 2 ACT Hammerhead Bolts HKSV ... W55

# **ACT Mounting Hardware**

Material Properties and Handling Instructions

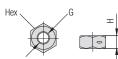
ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

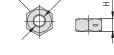
ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com/act/assembly

# **All-Metal Self-Locking ACT Nut** Type MUS-HKS ... W55 (similar to DIN 980 / Biloc)







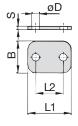


For use with ACT Hammerhead Bolts HKS ... W55

Group		Dimensions	s (mm/in)		Ordering Code	Packaging Unit
STAUFF	DIN	Thread G	Н	Hex		(in pieces / bag)
1A	1					
2	2	M6	5 .20	10 .39	MUS-HKS-M6-W55	25
3	3					

# **ACT Cover Plate Type DP ... W55**



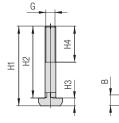




Group		Dimen	sions ( <sup>m</sup>	m/in)			Ordering Code	Packaging Unit
STAUFF	DIN	L1	L2	В	S	ØD		(in pieces / bag)
1A	1	34	20	30	3	7	DP-1A-W55	25
IA	'	1.34	.79	1.18	.12	.28	DF-IA-W55	20
2	2	40,5	26	30	3	7	DP-2-W55	25
2	2	1.59	1.02	1.18	.12	.28	DF-2-W55	20
3	3	48	33	30	3	7	DP-3-W55	25
٥	3	1.89	1.30	1.18	.12	.28	DL-9-M22	20

## **ACT Hammerhead Bolt** Type HKSV ... W55



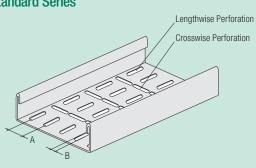




For use with Self-Locking ACT Nuts MUS-HKS ... W55

Group	Group		ensions	s ( <sup>mm</sup> / <sub>in</sub>	)		Ordering Code	Packaging Unit		
STAUFF	DIN	G	H1	H2	Н3	H4 min	В	L		(in pcs. / bag)
1 /	4	M6	68,3	64	4,3	20	6,1	13,3	HKSV-M6x64-W55	0.E
1A	'	IVIO	2.69	2.52	.17	.79	.24	.52	HKSV-IVIDX04-W55	20
2	2	MC	80,3	76	4,3	20	6,1	13,3	HKSV-M6x76-W55	0.E
2	2	M6	3.16	2.99	.17	.79	.24	.52	HKSV-Mbx/6-W55	25
3	3	M6	87,3	83	4,3	20	6,1	13,3	HIVOV Mo-OO WEE	0.5
3	3	IVIO	3.44	3.27	.17	.79	.24	.52	HKSV-M6x83-W55	25

### **Suitability Chart for ACT Hammerhead Bolts** in the Standard Series



ACT Hammerhead Bolts are suitable for field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations that meet the following requirements:

- Dimension A: Equal to the bolt center spacing of the clamp assembly
- Dimension B: 6,2 mm ... 7,0 mm / .24 in ... .28 in (Min ... Max)

In case of doubt, please do not hesitate to contact STAUFF prior to field application.





#### Installation on Weld Plate

Required components:

- 2 Hexagon Head Bolts AS...W55
- 1 Cover Plate DP...W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 Single Weld Plate SP...W55

Before welding, always make sure that the designated position of the weld plate is suitable for the expected loads.



#### Multi-Level Installation (with Weld Plate)

Required components (for each level) for a maximum of two levels in total:

- 2 Stacking Bolt AF...W55
- 1 Safety Locking Plate SIG...ACT-W55
- 1 ACT Clamp Body (2 Clamp Halves)

The upper layer has to be secured by a cover plate and hexagon head bolts. The lower level has to be mounted to a weld plate.

#### **Order Code**

#### SP-110a-ACT-DP-AS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

**Installation with Channel Rail Adaptors** 

Required components:

- 2 Hexagon Head Bolts AS...W55
- 1 Cover Plate DP...W55
- 1 Clamp Body (2 Clamp Halves)
- 2 Channel Rail Adaptors CRA...W55

Suitable for various brands and types of channel rails (including Halfen, Hilti, Unistrut® etc.).

#### **Order Code**

#### 110a-ACT-SIG-AF-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

# Installation in Field Trays / Cable Ladders

Required components:

- 2 Self-Locking Nuts MUS-HKS ... W55
- 1 Cover Plate DP ... W55
- 1 Clamp Body (2 Clamp Halves)
- 2 Hammerhead Bolts HKS ... W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.



**Order Code** 

#### CRA-110a-ACT-DP-AS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

### **Order Code**

#### HKS-110a-ACT-DP-MUS-M-W55

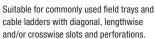
W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.



#### **Multi-Level Installation** in Field Trays / Cable Ladders

Required components (for a maximum of two levels in total):

- 2 Self-Locking Nuts MUS-HKS ... W55
- 1 Cover Plate DP ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 Safety Locking Plate SIG...ACT-W55
- 2 Stacking Bolts AF-HKSK...W55
- 1 ACT Clamp Body (2 Clamp Halves) 2 Hammerhead Bolts HKSK ... W55



Upper Level: HKSK-212.7-ACT-DP-MUS-M-W55 Lower Level: 212.7-ACT-SIG-AF-HKSK-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.



#### **Multi-Level Installation** in Field Trays / Cable Ladders

Required components (for a maximum of two levels in total):

- 2 Self-Locking Nuts MUS-HKS ... W55
- 1 Cover Plate DP ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Clamp Body (2 Clamp Halves)
- 2 Hammerhead Bolts HKSV ... W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.

#### **Order Codes**

Upper Level: 212.7-ACT (Clamp Body only) Lower Level: HKSV-212.7-ACT-DP-MUS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

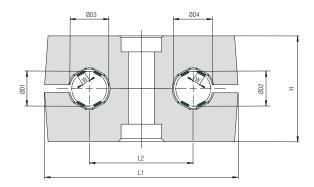
**Order Codes** 

## Twin Series according to DIN 3015, Part 3 **ACT Clamp Body**





Integrated Rubber Strips made of Anti-Corrosion Elastomer (ACE)



# **Ordering Codes**

### **Clamp Body**

\*2\*12.7/12.7-\*ACT

One clamp body consists of two identical clamp halves, each with four integrated rubber strips.

- \* 1st Part of STAUFF Group
- \* Exact outside diameters Ø D1 / Ø D2 (mm) 12.7/12.7

	LAGOT OUTSIDE CICITOTOTO DE 1 / DE (IIIII)	12.1/12.1
*	Material code	ACT

Group S	ize			Ordering Code	Packaging Unit		nsions (	( <sup>mm</sup> /in)			
STAUFF	DIN	ØD1/ØD (mm)	(in)	(2 Clamp Halves)	(in pieces / bag)	ØD3/ ØD4	W	L1	L2	Н	Width
		6		106/06-ACT	25	9 .35	1,4				
		6,4	1/4	106.4/06.4-ACT	25	9,4	1,5				
1D	1	9,5	3/8	109.5/09.5-ACT	25	12,5	2,2	36 1.42	20	26,6	30 1.18
		10		110/10-ACT	25	13 .51	2,3				
		12		112/12-ACT	25	.59	2,8				
		12,7	1/2	212.7/12.7-ACT	25	15,7	3,5				
2D	2	14		214/14-ACT	25	.67	3,5	53 2.09	29 1.14	26,6	30 1.18
		16		216/16-ACT	25	19 .75	3,5				
		18		318/18-ACT	25	.83	3,5				
		19	3/4	319/19-ACT	25	.87	3,5				
3D	3	20		320/20-ACT	25	23 .91	3,5	67	36	36,6	30 1.18
		21,3		321.3/21.3-ACT	25	24,3	3,5				
		25,4	1	325.4/25.4-ACT	25	28,4	3,5	-			

Additional outside diameters and combinations of different outside diameters are available upon request. Please contact STAUFF for further information.







### **ACT Mounting Hardware** Installation on Single Weld Plates

#### **Required components:**

- 1 ACT Hexagon Head Bolt AS...W55
- 1 ACT Cover Plate GD...W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Single Weld Plate SP...W55

Before welding, always make sure that the designated position of the ACT Weld Plate is suitable for the expected loads.

# Waterial Code W55

# **ACT Mounting Hardware**Material Properties and Handling Instructions

ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. <u>Details: www.stauff.com/act/assembly</u>

# ACT Hexagon Head Bolt Type AS ... W55 (according to DIN 931 / 933)



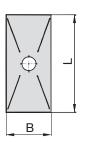


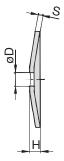
Dimensions applicable only when used with Cover Plate GD and Weld Plate SP

Group STAUFF	DIN	Dimensions (mm/in) Thread G x L	Ordering Code	Packaging Unit (in pieces / bag)
1D	1	M6 x 35 M6 x 1.38	AS-M6x35-W55	25
2D	2	M8 x 35 M8 x 1.38	AS-M8x35-W55	25
3D	3	M8 x 45 M8 x 1.77	AS-M8x45-W55	25

# **ACT Cover Plate Type GD ... W55**





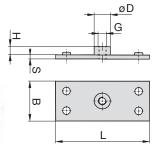


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Group		Dimen	sions ( <sup>m</sup>	m/in)			Ordering Code	Packaging Unit
STAUFF	DIN	L	В	Н	S	ØD		(in pieces / bag)
1D	4	34	30	7	3	7	GD-1D-W55	25
טו	1	1.34	1.18	.28	.12	.28	GD-1D-W55	20
2D	2	52	30	7	3	9	GD-2D-W55	25
20	2	2.05	1.18	.28	.12	.35	GD-2D-W55	20
20	3	65	30	7	3	9	GD-3D-W55	25
3D	3	2.56	1.18	.28	.12	.35	GD-3D-W33	20

## ACT Single Weld Plate Type SP ... W55







Group			nsions	(mm/in)			Ordering Code	Packaging Unit	
STAUFF	DIN	G	L	В	S	Н	ØD		(in pieces / bag)
1D	4	M6	37	30	3	6,5	12	SP-1D-M-W55	25
עו		IVIO	1.46	1.18	.12	.26	.47	26-10-M-M22	20
OD	0	M8	55	30	5	6	14	SP-2D-M-W55	0.5
2D	2	IVIO	2.17	1.18	.20	.24	.55	5P-2D-WI-W55	25
2D	2	M8	70	30	5	6	14	SP-3D-M-W55	25
3D	3	IVIO	2.76	1.18	.20	.24	.55	26-3D-INI-M22	20



### **ACT Mounting Hardware** Installation on Mounting Rails

#### **Required components:**

- 1 ACT Hexagon Head Bolt AS...W55
- 1 ACT Cover Plate GD...W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Hexagon Rail Nuts, SM...W55
- 1 ACT Mounting Rail, TS...W55

Before welding, always make sure that the designated position of the ACT Weld Plate is suitable for the expected loads.

### **ACT Mounting Hardware** Material Properties and Handling Instructions

ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com/act/assembly

# **ACT Hexagon Head Bolt** Type AS ... W55 (according to DIN 931 / 933)



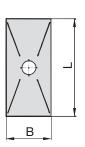


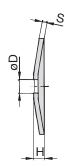
Dimensions applicable only when used with Cover Plate GD and Weld Plate SP

Group STAUFF	DIN	Dimensions (mm/in) Thread G x L	Ordering Code	Packaging Unit (in pieces / bag)
1D	1	M6 x 35 M6 x 1.38	AS-M6x35-W55	25
2D	2	M8 x 35 M8 x 1.38	AS-M8x35-W55	25
3D	3	M8 x 45 M8 x 1.77	AS-M8x45-W55	25

# **ACT Cover Plate Type GD ... W55**







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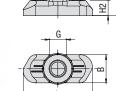
Group		Dimen	sions ( <sup>m</sup>	m/in)			Ordering Code	Packaging Unit
STAUFF	DIN	L	В	Н	S	ØD		(in pieces / bag)
1D	4	34	30	7	3	7	GD-1D-W55	25
טו	1	1.34	1.18	.28	.12	.28	GD-1D-W55	20
2D	2	52	30	7	3	9	GD-2D-W55	25
20	2	2.05	1.18	.28	.12	.35	GD-2D-W55	20
20	3	65	30	7	3	9	GD-3D-W55	25
3D	3	2.56	1.18	.28	.12	.35	GD-3D-W33	20

## **Hexagon Rail Nut**

(for Use with Mounting Rail TS) Type SM







**Mounting Rail** 

(for Use with Hexagon Rail Nut SM) **Type TS** 







STAUFF Group 1D

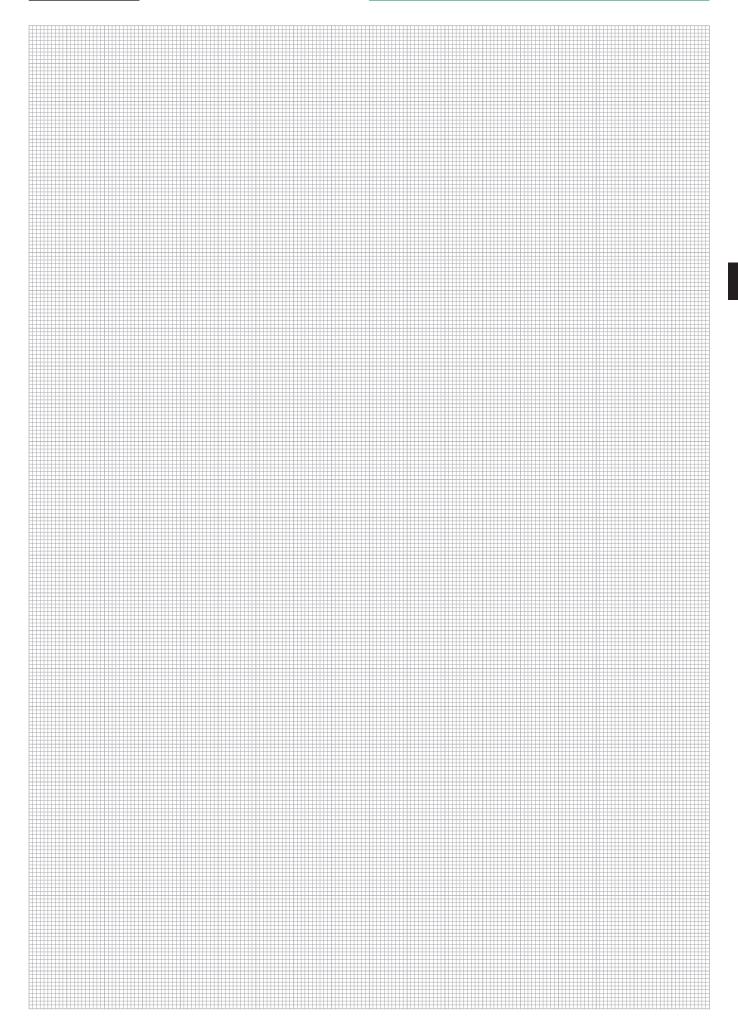
Group		Dimension	s (mm/in)					Ordering Codes
STAUFF	DIN	Thread G	L	В	H1	H2	ØD	(Standard Options)
1D	1	M6	25,5	10,4	14,2	5,5	12	SM-1-8/1D-M-W55
טו	ı	IVIO	1.00	.41	.56	.22	.47	3W-1-0/1D-W-W33
2D	2	MO		10,4	13	5	14	SM-2-5D-M-W55
2υ	2	M8	1.00	.41	.51	.20	.55	3W-2-3D-W-W33
3D	3	M8	25,5	10,4	13	5	14	SM-2-5D-M-W55
טט	J	IVIO	1.00	.41	.51	.20	.55	3IVI-2-3D-IVI-W33

Mounting Rail TS-11

**Mounting Rail TS-14** 

Group		Dimens	ions (mm	/in)	Ordering Codes (Standa	ard Options)
STAUFF	DIN	B1	B2	S		
1D	1				Length of Rail 1 m / 3.28ft Height 11 mm / .43 in	Length of Rail 2 m / 6.56ft Height 11 mm / .43 in
2D	2	28	11	2	TS-11-1M-W55	TS-11-2M-W55
20	2	1.10	.43	.08	Length of Rail	Length of Rail
3D	3				1 m / 3.28ft Height 14 mm / .55 in TS-14-1M-W55	2m / 6.56ft Height 14 mm / .55 in TS-14-2M-W55









### **ACT Mounting Hardware** Multi-Level Installation (with Weld Plate)

Required components for each level:

- 1 ACT Stacking Bolt AF...W55
- 1 ACT Safety Locking Plate SIV...ACT
- 1 ACT Clamp Body (2 Clamp Halves)

The upper layer is secured by a cover plate and hexagon head bolts. The lower layer has to be mounted to a weld plate (with a recommended maximum of two levels in total).



### **ACT Mounting Hardware** Material Properties and Handling Instructions

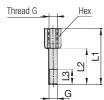
ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com/act/assembly

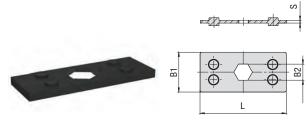
# **ACT Stacking Bolt Type AF ... W55**







# **ACT Safety Locking Plate** Type SIV ... ACT



Made of flame-retardant PP-V0 plastic material; tested and V0 classified according to UL 94

le	Packaging Unit	Group		Dimens	ions (mm/	'in)		Order Code	Packaging Unit
	(in pieces / bag)	STAUFF	DIN	L	B1	B2	S		(in pieces / bag)
D-M-W55	25	1D	4	34	30	11,2	2	SIV-1D-PP-V0-ACT	25
D-INI-M33	20	עו	'	1.39	1.18	.44	.08	SIV-ID-PP-VU-ACI	25
-W55	25	2D	2	52	30	12,1	2	SIV-2D-PP-V0-ACT	25
·woo	20	20	2	2.05	1.18	.48	.08	31V-2D-FF-VU-ACT	20
-W55	0E	2D	2	65	30	12,1	2	CIV OD DD VO ACT	25
-woo	25	3D	3	2.56	1.18	.48	.08	SIV-3D-PP-V0-ACT	20







### **ACT Mounting Hardware** Installation with Channel Rail Adaptors

#### **Required components:**

- 1 ACT Hexagon Head Bolt AS...W55
- 1 ACT Cover Plate GD...W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Channel Rail Adaptor CRA...W55

Suitable for various brands and types of channel rails (including Halfen, Hilti, Unistrut® etc.).

# Material Godd

# **ACT Mounting Hardware**Material Properties and Handling Instructions

ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps.

<u>Details: www.stauff.com/act/assembly</u>

# ACT Hexagon Head Bolt Type AS ... W55 (according to DIN 931 / 933)



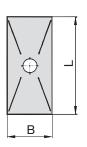


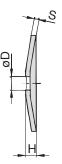
Dimensions applicable only when used with Cover Plate GD and Weld Plate SP

Group STAUFF	DIN	Dimensions (mm/in) Thread G x L	Ordering Code	Packaging Unit (in pieces / bag)
1D	1	M6 x 35 M6 x 1.38	AS-M6x35-W55	25
2D	2	M8 x 35 M8 x 1.38	AS-M8x35-W55	25
3D	3	M8 x 45 M8 x 1.77	AS-M8x45-W55	25

# **ACT Cover Plate Type GD ... W55**





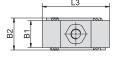


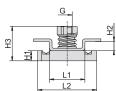
-11	_		1
п	R	ost	
п	46	100	٢
-5	٠٠٠	100	è

Group		Dimen	sions ( <sup>m</sup>	m/in)		Ordering Code	Packaging Unit	
STAUFF	DIN	L	В	Н	S	ØD		(in pieces / bag)
1D	1	34	30	7	3	7	GD-1D-W55	25
טו	1	1.34	1.18	.28	.12	.28	GD-1D-W55	20
2D	2	52	30	7	3	9	GD-2D-W55	25
20	2	2.05	1.18	.28	.12	.35	GD-2D-W55	20
3D	3	65	30	7	3	9	GD-3D-W55	25
SD	3	2.56	1.18	.28	.12	.35	GD-3D-W33	20

## Channel Rail Adaptor Type CRA ... W55

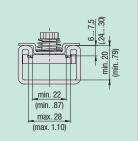






## Suitability Chart for ACT Channel Rail Adaptors in the Twin Series

The STAUFF Channel Rail Adaptor, type CRA, is suitable for various brands and types of channel rails (including Halfen, Hilti, Unistrut® etc.). The drawing describes the basic dimensional requirements for channel rails to be used with STAUFF Channel Rail Adaptors, type CRA.



In case of doubt, please do not hesitate to contact STAUFF prior to field application.

Group		Dimensions	S (mm/in)			Order Code	Packaging Unit					
STAUFF	DIN	G	L1	L2	L3	B1	B2	H1	H2	Н3		(in pieces / bag)
1D	4	M6	21	35	40	16	19	6	5,5	20,5	CRA-1-8/1D-M-W55	O.E.
1D	ı	IVIO	.83	1.38	1.57	.63	.75	.24	.22	.81	CRA-1-8/ ID-W-W33	25
2D	2	- M8	21	35	38	53	19	9	5,5	23,5	CRA-2-3D-M-W55	05
3D	3	IVIO	.83	1.38	1.50	2.09	.75	.35	.22	.93	ONA-2-3D-IVI-W55	25



# **ACT Mounting Hardware**





#### **Required components:**

- 1 ACT Self-Locking Nut MUS-HKS ... W55
- 1 ACT Cover Plate GD ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Hammerhead Bolt HKS ... W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.

# **Material Code**

### **ACT Mounting Hardware** Material Properties and Handling Instructions

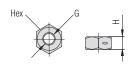
ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com/act/assembly

# **All-Metal Self-Locking ACT Nut** Type MUS-HKS ... W55 (similar to DIN 980 / Biloc)

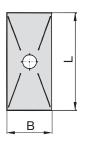


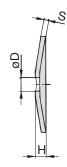




**ACT Cover Plate** 

**Type GD ... W55** 







For use with ACT Hammerhead Bolts HKS ... W55

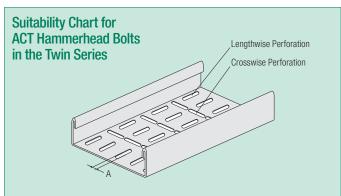
For use with Self-Locking ACT Nuts MUS-HKS ... W55

Group		Dimension	ıs ( <sup>mm</sup> /in)		Ordering Code	Packaging Unit
STAUFF	DIN	Thread G	Н	Hex		(in pieces / bag)
1D	1	M6	5	10	MUS-HKS-M6-W55	25
ID	1	IVIO	.20	.39	INIO9-UK9-INIO-M33	20
2D	2	M8	6,5	13	MUS-HKS-M8-W55	25
3D	3	IVIO	.26	.51	CCM-9IAI-CVII-COIM	20

Group		Dimen	sions ("	ım/in)		Ordering Code	Packaging Unit	
STAUFF	DIN	L	В	Н	S	ØD		(in pieces / bag)
1D	1	34	30	7	3	7	GD-1D-W55	25
טו	'	1.34	1.18	.28	.12	.28	GD-1D-W33	20
2D	2	52	30	7	3	9	GD-2D-W55	25
20	2	2.05	1.18	.28	.12	.35	GD-2D-W55	20
3D	3	65	30	7	3	9	GD-3D-W55	25
30	3	2.56	1.18	.28	.12	.35	GD-3D-W33	20

# **ACT Hammerhead Bolt Type HKS ... W55** 도

Group		Dim	ensior	is ( <sup>mm</sup> /i	n)		Ordering Code	Packaging Unit		
STAUFF	DIN	G	H1	H2	Н3	H4 min	В	L		(in pcs. / bag)
40	_	140	49,3	45	4,3	20	6,1	13,3	45 WEE	0.5
1D	1	M6	1.94	1.77	.17	.79	.24	.52	HKS-M6x45-W55	25
2D	2	M8	49,3	45	4,3	20	6	13,3	HKS-M8x45-W55	25
20	2	IVIO	1.94	1.77	.17	.79	.24	.52	HKS-WOX45-W55	20
3D	3	M8	59,3	55	4,3	20	6	13,3	HKS-M8x55-W55	25
SD	3	IVIO	2.33	2.17	.17	.79	.24	.52	UK9-MOX33-M33	20



ACT Hammerhead Bolts are suitable for field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations that meet the following requirements:

■ Dimension A: 6,2 mm ... 7,0 mm / .24 in ... .28 in (Min ... Max)

In case of doubt, please do not hesitate to contact STAUFF prior to field application.





# **ACT Mounting Hardware**Multi-Level Installation (with Stacking & Hammerhead Bolts)

Required components (for a recommended maximum of two levels in total):

- 1 ACT Self-Locking Nut MUS-HKS ... W55
- 1 ACT Cover Plate GD ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Stacking Bolt AF-HKSK...W55
- 1 ACT Safety Locking Plate SIV...ACT
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Hammerhead Bolt HKSK ... W55

# Waterial Code W55

# **ACT Mounting Hardware**Material Properties and Handling Instructions

ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

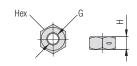
ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps.

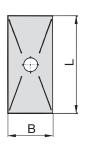
<u>Details: www.stauff.com/act/assembly</u>

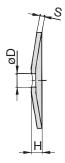
# All-Metal Self-Locking ACT Nut Type MUS-HKS ... W55 (similar to DIN 980 / Biloc)













For use with ACT Stacking Bolts AF-HKS ... W55

Group		Dimension	ıs ( <sup>mm</sup> /in)		Ordering Code	Packaging Unit
STAUFF	DIN	Thread G	Н	Hex		(in pieces / bag)
1D	1	M6	5	10	MUS-HKS-M6-W55	25
טו		IVIO	.20	.39	INIO2-UV2-INIO-M22	20
2D	2	M8	6,5	13	MUS-HKS-M8-W55	25
3D	3	IVIO	.26	.51	INIOS-INIS-INIO-WOO	20

### Rost frei

**ACT Cover Plate** 

**Type GD ... W55** 

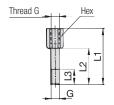
Group		Dimen	sions ("	ım/ <sub>in</sub> )		Ordering Code	Packaging Unit	
STAUFF	DIN	L	В	Н	S	ØD		(in pieces / bag)
1D	1	34	30	7	3	7	GD-1D-W55	25
וט	1	1.34	1.18	.28	.12	.28	GD-1D-W55	20
2D	2	52	30	7	3	9	GD-2D-W55	25
20	2	2.05	1.18	.28	.12	.35	GD-2D-W55	
20	2	65	30	7	3	9	GD-3D-W55	O.F.
3D	3	2.56	1.18	.28	.12	.35	นบ-งบ-พจจ	25

# ACT Stacking Bolt Type AF-HKSK ... W55



Rost frei

3D



For use with Self-Locking ACT Nuts MUS-HKS ... W55

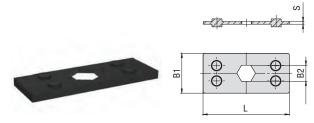
**AF-5D/AF-HKSK-3D-M-W55** 25

Control of the Control								
Group		Dim	ension	is (mm/	in)		Order Code	Packaging Unit
STAUFF	DIN	G	L1	L2	L3 min.	Hex		(in pieces / bag)
1D	1	M6	49	35	12	11	AF-4/AF-HKSK-1D-M-W55	25
ID	1	IVIO	1.93	1.38	.47	.43	AF-4/AF-INSK-ID-WI-WOO	20
2D	2	M8	50	37	11	12	AF-HKSK-2D-M-W55	25
20	2	IVIO	1 97	1 47	43	47 AF-HK5K-2D-M-W55		20

12

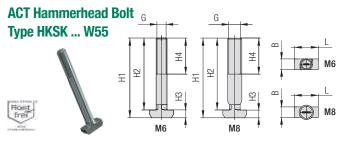
.47

# ACT Safety Locking Plate Type SIV ... ACT



Made of flame-retardant PP-V0 plastic material; tested and V0 classified according to UL 94

Group		Dimens	ions (mm)	/in)		Order Code	Packaging Unit
STAUFF	DIN	L	B1	B2	S		(in pieces / bag)
1D	1	34	30	11,2	2	SIV-1D-PP-V0-ACT	25
עו	1	1.39	1.18	.44	.08	SIV-ID-PP-VU-ACI	20
2D	2	52	30	12,1	2	SIV-2D-PP-V0-ACT	25
20	2	2.05	1.18	.48	.08	SIV-ZD-PP-VU-ACI	20
3D	2	65	30	12,1	2	SIV-3D-PP-V0-ACT	25
30	3	2.56	1.18	.48	.08	211-3D-PP-VU-ACT	20



Group Dimensions (mm/in)								Ordering Code	Packaging Unit		
STAUFF	DIN	G	H1	H2	Н3	H4 min	В	L		(in pcs. / bag)	
1D	4	MC	29,3	25	4,3	20	6,1	13,3	HKSK-M6x25-W55	O.E.	
טו	ı	M6	1.15	.98	.17	.79	.24	.52		20	
2D	2	M8	32,3	28	4,3	20	6	13,3	HKSK-M8x28-W55	٥٢	
20	2	IVIO	1.27	1.10	.17	.79	.24	.52	UK9K-INIQX56-M33	20	
20	2	M8	42,3	38	4,3	20	6	13,3	HKSK-M8x38-W55	05	
3D 3		IVIO	1.67	1.50	.17	.79	.24	.52	UKSK-MOX30-M33	20	

46 15

2.40 | 1.81 | .59

M8





### **ACT Mounting Hardware** Multi-Level Installation in Field Trays / Cable Ladders (with Hammerhead Bolts)

Required components (for a recommended maximum of two levels in total):

- 1 ACT Self-Locking Nut MUS-HKS ... W55
- 1 ACT Cover Plate GD ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Safety Locking Plate SIV-ACT
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Hammerhead Bolt HKSV ... W55

### **ACT Mounting Hardware** Material Properties and Handling Instructions

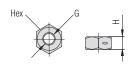
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ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com/act/assembly

# **All-Metal Self-Locking ACT Nut** Type MUS-HKS ... W55 (similar to DIN 980 / Biloc)

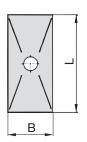


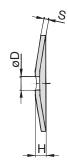




**ACT Cover Plate** 

**Type GD ... W55** 







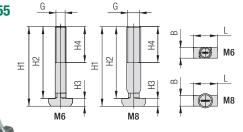
For use with ACT Hammerhead Bolts HKS ... W55

Group		Dimension	ıs ( <sup>mm</sup> / <sub>in</sub> )		Ordering Code	Packaging Unit
STAUFF	DIN	Thread G	Н	Hex		(in pieces / bag)
1D	1	M6	5	10	MUS-HKS-M6-W55	25
ID	1	IVIO	.20	.39	MIOS-HKS-MIO-WSS	20
2D	2	M8	6,5	13	MUS-HKS-M8-W55	25
3D	3	IVIO	.26	.51	MOS-UKS-MO-WSS	20

Group		Dimen	sions ("	ım/ <sub>in</sub> )		Ordering Code	Packaging Unit	
STAUFF	DIN	L	В	Н	S	ØD		(in pieces / bag)
10	4	34	30	7	3	7	GD-1D-W55	25
1D	1	1.34	1.18	.28	.12	.28	GD-1D-W55	20
2D	0	52	30	7	3	9	GD-2D-W55	25
20	2	2.05	1.18	.28	.12	.35	GD-2D-W55	
20	2	65	30	7	3	9	GD-3D-W55	QE.
3D	3	2.56	1.18	.28	.12	.35	GD-3D-W33	25

### **ACT Hammerhead Bolt**



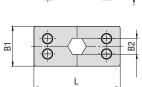


For use with Self-Locking ACT Nuts MUS-HKS ... W55

of both cold bearing	The second second												
Group Dimensions (mm/in)									Ordering Code	Packaging Unit			
STAUFF	DIN	G	H1	H2	Н3	H4 min	В	L		(in pcs. / bag)			
1D	4	M6	76,3	72	4,3	20	6,1	13,3	HKSV-M6x72-W55	0E			
טו	1	IVIO	3.00	2.83	.17	.79	.24	.52	UK9A-MOX15-M33	20			
2D	2	M8	77,3	73	4,3	20	6	13,3	HKSV-M8x73-W55	25			
20	2	IVIO	3.04	2.87	.17	.79	.24	.52	HK3V-W0X73-W33	20			
3D	3	M8	97,3	93	4,3	20	6	13,3	HKSV-M8x93-W55	25			
JU	J	IVIO	3.83	3.66	.17	.79	.24	.52	TIKSV-WOX93-W33	20			

## **ACT Safety Locking Plate** Type SIV ... ACT





Made of flame-retardant PP-V0 plastic material; tested and V0 classified according to UL 94

Group		Dimens	sions (mm)	/in)		Order Code	Packaging Unit	
STAUFF	DIN	L	B1	B2	S		(in pieces / bag)	
1D	4	34	30	11,2	2	SIV-1D-PP-V0-ACT	25	
טו	'	1.39	1.18	.44	.08	SIV-ID-PP-VU-ACI	20	
2D	0	52	30	12,1	2	SIV-2D-PP-V0-ACT	25	
20	2	2.05	1.18	.48	.08	51V-2D-PP-VU-AC1	20	
2D	2	65	30	12,1	2	SIV-3D-PP-V0-ACT	0E	
3D	3	2.56	1.18	.48	.08	31V-3D-PP-VU-ACT	25	





#### Installation on Weld Plate

Required components:

- 1 Hexagon Head Bolt AS...W55
- 1 Cover Plate GD...W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 Single Weld Plate SP...W55

Before welding, always make sure that the designated position of the weld plate is suitable for the expected loads.



#### Multi-Level Installation (with Weld Plate)

Required components (for each level) for a maximum of two levels in total:

- 1 Stacking Bolt AF...W55
- 1 Safety Locking Plate SIG...W55
- 1 ACT Clamp Body (2 Clamp Halves)

The upper layer has to be secured by a cover plate and hexagon head bolts. The lower level has to be mounted to a weld plate.

#### **Order Code**

#### SP-110/10-ACT-GD-AS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.



#### Installation with Channel Rail Adaptors

Required components:

- 1 Hexagon Head Bolt AS...W55
- 1 Cover Plate GD...W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 Channel Rail Adaptor CRA...W55

Suitable for various brands and types of channel rails (including Halfen, Hilti, Unistrut® etc.).

# 110/10-ACT-SIV-ACT-AF-M-W55

**Order Code** 

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

#### Installation in Field Trays / Cable Ladders

Required components:

- 1 Self-Locking Nut MUS-HKS ... W55
- 1 Cover Plate GD ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 Hammerhead Bolt HKS ... W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.



#### CRA-110/10-ACT-GD-AS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

### **Order Code**

#### HKS-110/10-ACT-GD-MUS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.



# Multi-Level Installation in Field Trays / Cable Ladders

Required components (for a maximum of two levels in total):

- 1 Self-Locking Nut MUS-HKS ... W55
- 1 Cover Plate GD ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 Stacking Bolt AF-HKSK...W55 1 Safety Locking Plate SIV...ACT
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 Hammerhead Bolt HKSK ... W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.



# Multi-Level Installation in Field Trays / Cable Ladders

Required components (for a maximum of two levels in total):

- 1 Self-Locking Nut MUS-HKS ... W55
- 1 Cover Plate GD ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 Safety Locking Plate SIV-ACT
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 Hammerhead Bolt HKSV ... W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.

#### **Order Codes**

Upper Level: HKSK-212.7/12.7-ACT-GD-MUS-M-W55 Lower Level: 212.7/12.7-ACT-SIV-ACT-AF-HKSK-M-W55

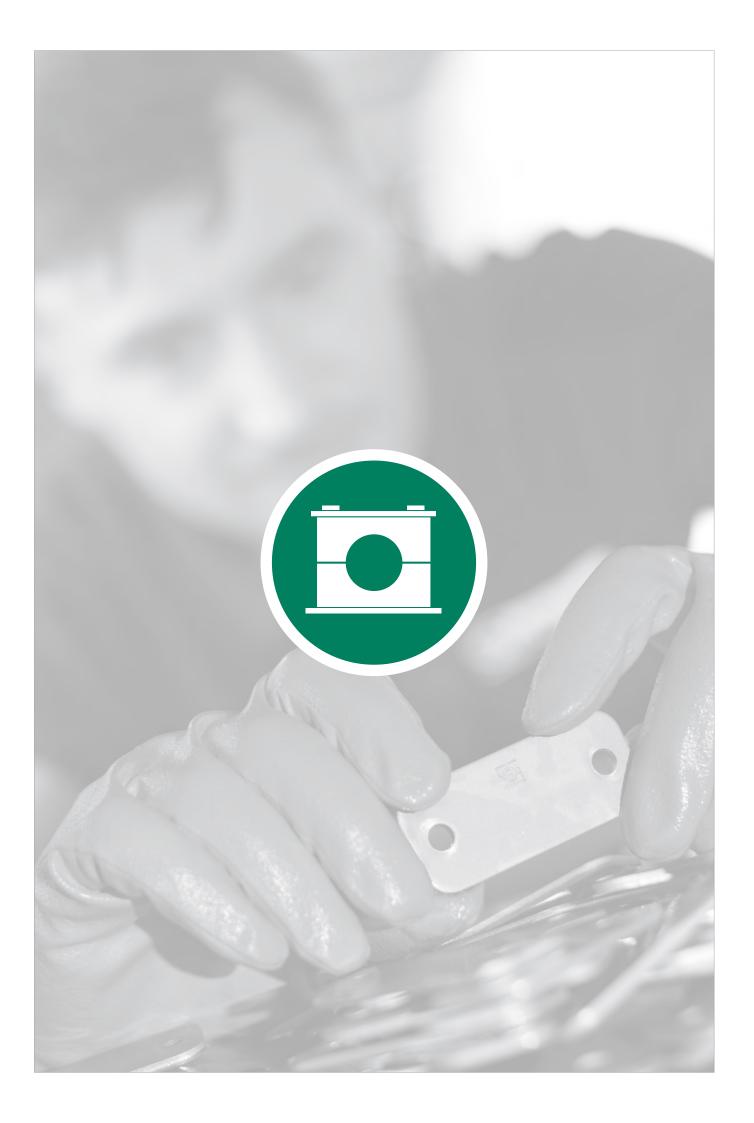
W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

#### **Order Codes**

Upper Level: HKSV-212.7/12.7-ACT-GD-MUS-M-W55

Lower Level: 212.7/12.7-ACT-SIV-ACT

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.





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	Weld Stud with Female Thread SWG-SF	106
	Distance Plate for DIN 3015 Clamps SWG-DIP	107
	Cable Tie Holder SWG-CTH-11-M6	107
	Cable Tie / Tension Belt Holder SWG-CTH-30-M6-1	107
	Cable Tie / Tension Belt Holder SWG-CTH-30-M6-2	107
	Fastening Adaptor SWG-MRA	108
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	Distance Tube DIT-SR6-SWG	109
	Stud Retainer SWG-SR6	109
	Ground Cable SWG-GC	109

# **E**STAUFF ®

### STAUFF SWG Stud Welding System

In many areas, stud welding is considered to be the most economic fastening method for components and is sometimes even the only technically feasible solution. Because the stud is joined with the substructure over the entire surface of the stud, a high strength of the ioint can be achieved.

STAUFF is now using this proven principle for the installation of pipe, tube, hose and cable clamps in the Standard Series (according to DIN 3015, part 1) as well as in the Twin Series (according to DIN 3015, part 3) with M6 mounting thread, where female threaded weld studs replace the regular weld plates; distance plates made from plastic provide the necessary spacing between the clamp bodies and the substructure.

If required, the system can also be adopted for alternative fastening methods, e.g. for clamping belts, cable ties or conduit hoses.

In addition to the individual components – weld studs, distance plates, clamp bodies and metal hardware required – STAUFF also provides the correspondingly designed assembly tools such as the weld inverter and the weld gun with distance tube, stud retainer and distance adaptor for DIN 3015 clamps. The lightweight and compact weld inverter works without high-voltage current.

Thanks to increased productivity and flexibility for the installation of clamps, the system offers considerable savings potentials for users with significant processing volumes, especially when working in horizontal or overhead position. The amount of rework on welding locations can be significantly decreased, and material distortion is reduced to a minimum through low thermal stress

The joint of the weld stud with the substructure impresses in particular with a high degree of strength and safety, which is at least at the same level as for regular weld plates.

- Developed and optimised to the functions of original STAUFF Clamps in the Standard Series (DIN 3015, Part 1)
- Versatile combination and adaptation options available (e.g. fastening elements for conduit hoses, clamping belts and cable ties)
- All installation options are fully covered by only one weld stud
- Significant time and cost savings by a quicker welding process and reduced rework on welding locations
- Material distortion reduced to a minimum through low thermal stress (particularly significant when handling thin metal sheets)
- High degree of safety and protection against corrosion due to a welded joint over the whole surface
- Lightweight and compact designed welding inverter
- By default no shielding gas or ceramic ferrule required
- Works without high-voltage current





- Clamp body and standard mounting hardware according to DIN 3015-1/3 (Standard and Twin Series)
- 2 Distance plate
- 3 Weld studs with female threads
- Base material and surface suitable for stud welding



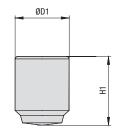
Reduction of the assembly time per clamp\*

Assembly using the stud welding system 23%

\*For a typical assembly procedure in production environments.

# Weld Stud with Female Thread Type SWG-SF





**Order Codes** 

(Standard Options)

SWG-SF-M6x11x14-W124

## **Ordering Codes**

106

Weld Stud \*SWG-SF-\*M6x11x14-\*W124

\* Weld Stud with Female Thread

\* Thread code Metric ISO thread M6x11x14

Unified coarse

\* Material code Steel 4.8 with galvanised

copper coating C1E W124
(DIN EN ISO 4042)

1 8	0 8	1/4-20 UNC	11	14	SWG-SF-UNC1/4-20x11x14-W124	100
		1/4-20 UNG	.43	.55	3WU-3F-UNG1/4-2UX11X14-W124	100

Alternative materials are available upon request. Please contact STAUFF for further information.

Н1

14

.55

ØD1

11

.43

Dimensions (1

Thread G

M6

Maximum torque rating: 6 N·m / 4.43 ft·lb. Specific series can further limit the torque rating. The maximum loads in pipe direction listed on page 185 reduce accordingly. In case of doubt, please contact STAUFF in advance.



Packaging Units

(in pcs. / per bag)

100

Group
STAUFF DIN

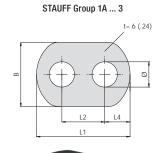
SWG-SF

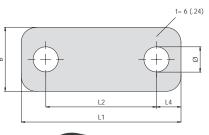


# Distance Plate for DIN 3015 Clamps Type SWG-DIP

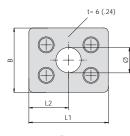
STAUFF Group 1

t = 6 (.24)





STAUFF Group 4 ... 8



STAUFF Group 1D





Group		Pipe/Tube-Ø (mm/in)	Dimens	sions (mm	¹/ <sub>in</sub> )			Order Codes	Packaging Units
STAUFF	DIN	Clamp Body	L1	L2*	L4	В	Ø	(Standard Options)	(in pcs. / per bag)
1	0	6 12	29	10,5	10,5	30	11,8	SWG-DIP-1-PP-BK	25
	U	.2448	1.14	.41	.41	1.18	.46	SWG-DIF-I-FF-DK	23
1A	1	6 12	43,5	20	11,8	30	11,8	SWG-DIP-1A-PP-BK	25
In I	.2448	1.71	.79	.46	1.18	.46	SWU-DII - IA-I I - DK	23	
2	2	12,7 18	48,5	26	11,3	30	11,8	SWG-DIP-2-PP-BK	25
	2	.5071	1.90	1.02	.44	1.18	.46	SWU-DIF-2-FF-DK	23
3	3	19 25,4	56,5	33	11,8	30	11,8	SWG-DIP-3-PP-BK	25
J	3	.75 1.00	2.22	1.30	.46	1.18	.46	SWU-DIF-S-FF-DK	23
4	4	26,9 32	62	40	11	30	11,8	SWG-DIP-4-PP-BK	25
4	4	1.06 1.26	2.44	1.57	.43	1.18	.46	SWU-DIF-4-FF-DK	23
5	5	32 42	75	52	11,5	30	11,8	SWG-DIP-5-PP-BK	25
J	J	1.26 1.65	2.95	2.05	.45	1.18	.46	SWU-DIF-S-FF-DK	23
6	6	44,5 54	88	66	11	30	11,8	SWG-DIP-6-PP-BK	25
0	U	1.75 2.12	3.46	2.60	.43	1.18	.46	SWU-DIF-0-FF-DK	23
7	7	57,2 76,1	121	94	13,5	30	11,8	SWG-DIP-7-PP-BK	10
1	′	2.25 3.00	4.76	3.70	.53	1.18	.46	SWU-DIF-7-FF-DK	10
8	8	88,9 102	147	120	13,5	30	11,8	SWG-DIP-8-PP-BK	10
0	0	3.50 4.00	5.78	4.72	.53	1.18	.46	SWU-DIF-O-FF-DK	10
1D	1	6 12	37	18,5	-	30	11,8	SWG-DIP-1D-PP-BK	25
יוו		.2448	1.45	.73	-	1.18	.46	OWG-DII -ID-FF-DK	23

Ordering Codes

Distance Plate \*SWG-DIP\*2\*PP-BK

\* Distance Plate SWG-DIP

\* STAUFF Group 2

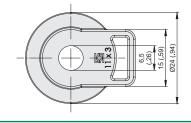
\* Material code Polypropylene (Colour: Black) PP-BK

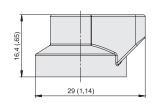
 $*\pm0,1(.003)$ 

Material: Polyamide (reinforced)

Suitable for hexagon socket button cap screws M6x12 (ISO 7380-1)

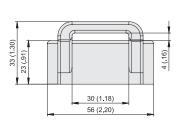
Standard packaging unit: 25 pcs.

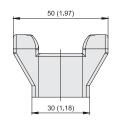




## Cable Tie Holder Type SWG-CTH-11-M6







96 6 (.26) 30mm/| Walneh

26 (1.02)

Cable Tie / Tension Belt Holder
Type SWG-CTH-30-M6-1



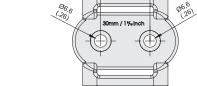
Material: Polyamide (reinforced)

Suitable for socket cap screws M6x12 (ISO 4762) or hexagon socket button cap screws M6x12 (ISO 7380-1)

Standard packaging unit: 25 pcs.

Dimensional drawings: All dimensions in mm (in).





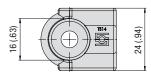
Cable Tie / Tension Belt Holder Type SWG-CTH-30-M6-2

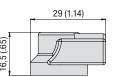


## **Fastening Adaptor** (for Use with Mounting Rail TS)

# Type SWG-MRA-TS14-S-A

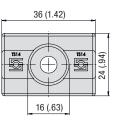






# **Fastening Adaptor** (for Use with Mounting Rail TS) Type SWG-MRA-TS14-D-A





#### **Product Features**

Fastening Adaptor for Direct Screw Mounting of STAUFF Mounting Rails Type TS-14 with Weld Studs M6 and Bolts M6 or 1/4-20 UNC (Support Sleeve / Washer Recommended). For more information, please see Page 25.

Material: Polyamide

#### **Product Features**

Fastening Adaptor for Direct Screw Mounting of STAUFF Mounting Rails Type TS-14 with Weld Studs M6 and Bolts M6 or 1/4-20 UNC (Support Sleeve / Washer Recommended). For more information, please see Page 25.

Material: Polyamide

### Starterkit Type Kit-SWG-WI06-Starter



#### Starterkit including:

- 1 Weld Inverter SWG-WI06
- 1 Weld Gun SWG-WG
- 1 Ground Cable SWG-GC
- 1 Distance Tube DIT-SR6-SWG-WG30 (for STAUFF Groups 2 to 8)
- 5 Stud Retainer SWG-SR6
- 1 Toolkit (Box Spanner/Hex Wrench)
- Operating Manual (English / German)

#### **Required Accessories:**

- Distance Adaptor SWG-AGS-... for DIN 3015 Clamps
- Weld Stud SWG-SF
- Distance Tube DIT-SR6-SWG-WG25 (for STAUFF Group 1A, if required)

# **Weld Inverter Type SWG-WI06**



#### **Characteristics**

- Works without high-voltage current
- No heavy extension cords required
- Extremely powerful and robust
- Compact in design
- Lightweight with only 18 kg / 40 lbs
- Welding current: 100 ... 650 A (stepless control)
- Welding time: 5 ... 200 ms (stepless control)
- Connection Cable: 3 m / 9.84 ft

# **Required Accessories**

- Weld Gun SWG-WG and Accessories
- Ground Cable SWG-GC

#### **Technical Data**

### **Primary Power**

■ 100 V to 240 V, 1 phase, 50/60 Hz, 16 AT

#### **Primary Plug**

■ 16 A 2-pin grounded safety plug (plug type F CEE 7/4) **IP Code** 

■ IP 44 (also permits operation outdoors)

#### **Ambient Temperature Limits**

■ ±0 °C ... +40 °C / +32 °F ... +104 °F

Dimensions (L x W x H)

■ 474 x 337 x 351 mm / 18.66 x 13.27 x 13.82 in

## **Weld Gun - Arc Ignition Type SWG-WG**



#### **Characteristics**

- Compact in design
- Lightweight with only 0,8 kg / 1.8 lbs (without cable)
- Ergonomic handle
- Comfortable setup
- Connection Cable: 5 m / 16.40 ft

#### **Required Accessories**

- Distance Adaptor SWG-AGS-... for DIN 3015 Clamps
- Distance Tube **DIT-SR6-SWG-WG30** (for STAUFF Groups 2 to 8)
- Distance Tube DIT-SR6-SWG-WG25 (for STAUFF Group 1A)
- Stud Retainer SWG-SR6

#### **Technical Data**

Adjustment range 3 mm / .11 in, lockable Workplace noise level

■ Up to 90 dB (A) may occur during welding Dimensions (L x W x H)

■ 200 x 65 x 140 mm / 7.87 x 2.56 x 5.51 in (without cable, without distance tube)





# **Distance Adaptor Type SWG-AGS**

Group STAUFF	DIN	for use with	Ordering Codes
1	0	Distance Tube Type A	NO DISTANCE ADAPTOR REQUIRED
1A	1	Distance Tube Type A	SWG-AGS-1A
2	2	Distance Tube Type B	SWG-AGS-2
3	3	Distance Tube Type B	SWG-AGS-3
4	4	Distance Tube Type B	SWG-AGS-4
5	5	Distance Tube Type B	SWG-AGS-5
6	6	Distance Tube Type B	SWG-AGS-6
7	7	Distance Tube Type B	SWG-AGS-7
8	8	Distance Tube Type B	SWG-AGS-8
1D	1D	Distance Tube Type A	NO DISTANCE ADAPTOR REQUIRED



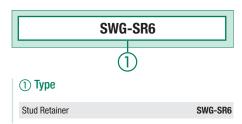
# **Distance Tube Type DIT-SR6-SWG**

Ту	pe	for use with	Ordering Codes
Α		Distance Adaptor SWG-AGS-1A	DIT-SR6-SWG-WG25
В		Distance Adaptor SWG-AGS-28	DIT-SR6-SWG-WG30



# **Stud Retainer Type SWG-SR6**

#### **Order Code**

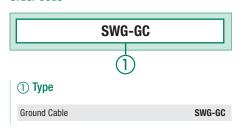


Standard packaging unit: 5 pcs.



# **Ground Cable Type SWG-GC**

# **Order Code**



# Characteristics

- Cable length: 5 m / 16.40 ft
- Equipped with 2 vice grips 10"







	Introduction	112
	Clamp Body Multi-Line Clamps  MLC (2 Lines)	114
	Clamp Body Multi-Line Clamps  MLC (3 Lines)	115
0.000	Clamp Body Multi-Line Clamps  MLC (4 Lines)	116
6 ( ) ( )	Clamp Body Multi-Line Clamps  MLC (6 Lines)	117
	Single Weld Plate for Multi-Line Clamps  SP-MLC	118
	Cover Plate for Multi-Line Clamps  DP-MLC	119
T	Hexagon Head Bolt AS	120
	Stacking Bolt  AF	120
	Safety Locking Plate SIG	121
	Hexagon Rail Nut SM	122
	Mounting Rail TS	122
A STATE OF THE PARTY OF THE PAR	Channel Rail Adaptor CRA	123
	Examples of Assembly	124







## **Product Description**

Multi-Line Clamps of the Type MLC from STAUFF enable the simple and at the same time safe fastening of either 2, 3, 4 or 6 individual lines with only one clamp body.

Based on the Original STAUFF Clamps of the Standard Series according to DIN 3015 (Part 1), they are available in 3 different sizes for all common metric and imperial diameters from 6 mm to 25,4 mm (1/4" to 1"). Alternative outside diameters and various diameter combinations are available on request.

Clamp bodies are made of Polypropylene (PP), Polyamide (PA) or Polyamide with preventive fire protection (PA-V0) as standard.

In addition to Carbon Steel (phosphated, STAUFF material code W2 or Zinc/Nickel-plated, STAUFF material code W3), Stainless Steel V4A - 1.4401 / 1.4571 or AISI 316 / 316 Ti (STAUFF material code W5) is used as material for metal parts such as cover plates and welding plates.

Alternative materials and surface finishings are available upon request.

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread.

#### **Features**

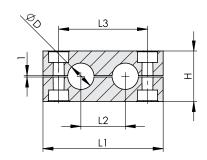
- For the safe fastening of tubes, pipes, hoses, cables and other components
- Vibration- and noise reduction as an important contribution to preventive environmental protection, health and safety
- Orderly and clear installation of lines
- Quick and easy assembly
- Reduced assembly times due to fewer individual components
- Compact and thus space-saving and weight-reducing design
- Can be combined with selected metal parts of the Standard Series according to DIN 3015 (Part 1), including:
  - Hexagon Head Bolts Type AS
  - Stacking Bolts Type AF and Safety Locking Plates Type SIG
  - Hexagon Rail Nuts Type SM and Mounting Rails Type TS
  - Channel Rail Adaptors Type CRA
  - and more





# Clamp Body Multi-Line Clamps Smooth Inside Surface with Tension Clearance Type MLC (for 2 lines)





# **Ordering Codes**

#### Clamp Body (with indentical diameters)

\*MLC-\*1-\*02B-\*06-\*PP-\*HV

One clamp body is consisting of two clamp halves.

* Clamp Type	MLC
* STAUFF Group	1
* Number of lines and bolts	02B
* Exact outside diameter Ø D (mm)	06
* Material code (see below)	PP
* Inside Surface Type	
Smooth Inside Surface (Standard Option)	HV
Profiled Inside Surface (Upon Request)	without

# Clamp Body (with different diameters)

\*MLC-\*1-\*02B-\*06/12-\*PP-\*HV

#### **Standard Materials**



Polypropylene Colour: Black Material code: PP



Polyamide Colour: Black Material code: PA





Colour: Black Material code: PA-VO

See pages 178 / 179 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

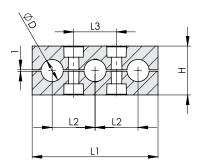
STAUFF	Outside Diameter Pipe / Tube Ø D		Dimensions (mm/jin)				Number of Bolts (B)	Ordering Code Standard Option (2 Clamp Halves)
S	(mm)	(in)	L1	L2	L3	Н		(** = Material)
	6							MLC-1-02B-06-**-HV
	6,4							MLC-1-02B-06.4-**-HV
1	8		60,5	20	40	27	2	MLC-1-02B-08-**-HV
'	9,5		2.38	.79	1.57	1.06		MLC-1-02B-09.5-**-HV
	10	1/8						MLC-1-02B-10-**-HV
	12							MLC-1-02B-12-**-HV
	10							MLC-2-02B-10-**-HV
	12							MLC-2-02B-12-**-HV
	12,7			29	58 2.28	33 1.30	2	MLC-2-02B-12.7-**-HV
	13,5	1/4	78,5 3.09					MLC-2-02B-13.5-**-HV
2	14							MLC-2-02B-14-**-HV
	15							MLC-2-02B-15-**-HV
	16							MLC-2-02B-16-**-HV
	17,2							MLC-2-02B-17.2-**-HV
	18							MLC-2-02B-18-**-HV
	15							MLC-3-02B-15-**-HV
	16							MLC-3-02B-16-**-HV
	17,2	3/8						MLC-3-02B-17.2-**-HV
	18							MLC-3-02B-18-**-HV
	19		92,5	36	72	37		MLC-3-02B-19-**-HV
3	20		3.64	1.42	2.83	1.46	2	MLC-3-02B-20-**-HV
	21,3	1/2	0.0 .		2.00			MLC-3-02B-21.3-**-HV
	22							MLC-3-02B-22-**-HV
	23							MLC-3-02B-23-**-HV
	25							MLC-3-02B-25-**-HV
	25,4							MLC-3-02B-25.4-**-HV

Additional outside diameters and various diameter combinations are available upon request. Please contact STAUFF for further information.





Croup Outside Diameter Dimension



Pipe / Tube	Group		Diameter	Dimensi	ons			Number of	Ordering Code
1	监		ube	(mm/in)				Bolts	•
1	TAI	Ø D						(B)	(2 Clamp Halves)
1	S	(mm)	(in)	L1	L2	L3	Н		(** = Material)
1 8 56 20 20 27 1.06 9,5 2.20 .79 .79 1.06 10 1/8 12		6							MLC-1-03B-06-**-HV
1 9,5		6,4							MLC-1-03B-06.4-**-HV
9,5	1	8			20	20	27	9	MLC-1-03B-08-**-HV
12	'	9,5		2.20	.79	.79	1.06		MLC-1-03B-09.5-**-HV
10		10	1/8						MLC-1-03B-10-**-HV
12		12							MLC-1-03B-12-**-HV
12,7 13,5 1/4 14 15 16 16 17,2 3/8 18 15 16 16 17,2 3/8 18 19 20 21 21,3 1/2 22 23 25 29 29 33 29 33 29 33 29 33 29 29 33 29 33 29 29 33 20 4.17 1.14 1.30 20 21,3 1/2 22 23 25 29 29 33 29 33 29 29 33 29 29 33 29 29 33 29 29 33 29 29 33 29 29 33 29 29 33 29 29 33 29 29 33 29 29 33 29 29 33 29 29 33 29 29 33 29 29 33 29 4.14 1.30 29 29 33 29 29 33 29 4.17 1.44 1.30 29 29 33 29 4.17 1.42 1.44 1.30 29 29 38 29 29 38 29 29 38 29 29 38 29 29 38 38 4.17 1.44 1.44 1.30 29 29 40 4.17 1.42 1.42 1.46 40 40 40 40 40 40 40 40 40 40 40 40 40									MLC-2-03B-10-**-HV
2		12						2	MLC-2-03B-12-**-HV
2 14 85 29 29 33		12,7							MLC-2-03B-12.7-**-HV
2		13,5	1/4	05					MLC-2-03B-13.5-**-HV
15   MLC-2-03B-15-**-HV   MLC-2-03B-16-**-HV   MLC-2-03B-16-**-HV   MLC-2-03B-16-**-HV   MLC-2-03B-17.2-**-HV   MLC-2-03B-18-**-HV   MLC-2-03B-18-**-HV   MLC-3-03B-15-**-HV   MLC-3-03B-15-**-HV   MLC-3-03B-16-**-HV   MLC-3-03B-16-**-HV   MLC-3-03B-18-**-HV   MLC-3-03B-18-**-HV   MLC-3-03B-18-**-HV   MLC-3-03B-18-**-HV   MLC-3-03B-21.3-**-HV   MLC-3-03B-21.3-**-HV   MLC-3-03B-21.3-**-HV   MLC-3-03B-22-**-HV   MLC-3-03B-22-**-H	2	14							MLC-2-03B-14-**-HV
17,2 3/8 18 15 16 17,2 18 19 20 21,3 1/2 22 23 25  MLC-2-03B-17.2-**+HV MLC-2-03B-18-**+HV MLC-3-03B-15-**+HV MLC-3-03B-15-**+HV MLC-3-03B-16-**+HV MLC-3-03B-17.2-**+HV MLC-3-03B-18-**+HV MLC-3-03B-18-**+HV MLC-3-03B-19-**+HV MLC-3-03B-21.3-**+HV MLC-3-03B-21.3-**+HV MLC-3-03B-22-**+HV MLC-3-03B-22-**+HV MLC-3-03B-25-**+HV		15		0.00					MLC-2-03B-15-**-HV
18		16							MLC-2-03B-16-**-HV
15 16 17,2 18 19 20 21,3 1/2 22 23 25  106 36 36 36 37 1.42 1.42 1.42 1.46  MLC-3-03B-15-**-HV MLC-3-03B-16-**-HV MLC-3-03B-17-2-**-HV MLC-3-03B-18-**-HV MLC-3-03B-19-**-HV MLC-3-03B-20-**-HV MLC-3-03B-21.3-**-HV MLC-3-03B-22-**-HV MLC-3-03B-22-**-HV MLC-3-03B-25-**-HV		17,2	3/8						MLC-2-03B-17.2-**-HV
16 17,2 18 19 106 36 36 37 20 21,3 1/2 22 23 25  106 36 36 37 1.42 1.42 1.42 1.46  MLC-3-03B-16-**-HV MLC-3-03B-17.2-**-HV MLC-3-03B-18-**-HV MLC-3-03B-19-**-HV MLC-3-03B-20-**-HV MLC-3-03B-21.3-**-HV MLC-3-03B-22-**-HV MLC-3-03B-25-**-HV		18							MLC-2-03B-18-**-HV
17,2 18 19 106 36 36 37 20 21,3 1/2 22 23 25 4.17 1.42 1.42  1.42  1.42  1.46  MLC-3-03B-17.2-**-HV MLC-3-03B-18-**-HV MLC-3-03B-19-**-HV MLC-3-03B-21.3-**-HV MLC-3-03B-21.3-**-HV MLC-3-03B-22-**-HV MLC-3-03B-22-**-HV MLC-3-03B-25-**-HV		15							MLC-3-03B-15-**-HV
18		16							MLC-3-03B-16-**-HV
19 106 36 36 37 20 4.17 1.42 1.42 1.46 MLC-3-03B-19-**-HV MLC-3-03B-20-**-HV MLC-3-03B-21.3-**-HV MLC-3-03B-22-**-HV MLC-3-03B-22-**-HV MLC-3-03B-23-**-HV MLC-3-03B-25-**-HV		17,2							MLC-3-03B-17.2-**-HV
3 20 106 36 36 37 21,3 1/2 4.17 1.42 1.46 2		18							MLC-3-03B-18-**-HV
3 20 4.17 1.42 1.46 2 MLC-3-03B-20-**-HV MLC-3-03B-21-3-**-HV MLC-3-03B-22-**-HV MLC-3-03B-22-**-HV MLC-3-03B-22-**-HV MLC-3-03B-23-**-HV MLC-3-03B-25-**-HV		19		106	26	26	27		MLC-3-03B-19-**-HV
21,3 1/2 22 MLC-3-03B-21.3-**-HV 23 MLC-3-03B-22-**-HV 25 MLC-3-03B-25-**-HV	3	20					_	2	MLC-3-03B-20-**-HV
23 MLC-3-03B-23-**-HV 25 MLC-3-03B-25-**-HV		21,3	1/2	4.17	1.42	1.42	1.40		MLC-3-03B-21.3-**-HV
25 MLC-3-03B-25-**-HV		22							MLC-3-03B-22-**-HV
		23							MLC-3-03B-23-**-HV
25,4 MLC-3-03B-25.4-**-HV		25							MLC-3-03B-25-**-HV
		25,4							MLC-3-03B-25.4-**-HV

Additional outside diameters and various diameter combinations are available upon request. Please contact STAUFF for further information.

# Clamp Body Multi-Line Clamps Smooth Inside Surface with Tension Clearance Type MLC (for 3 lines)



# **Ordering Codes**

**Clamp Body** (with indentical diameters)

\*MLC-\*1-\*03B-\*06-\*PP-\*HV

One clamp body is consisting of two clamp halves.

* Clamp Type	MLC
* STAUFF Group	1
* Number of lines and bolts	03B
* Exact outside diameter Ø D (mm)	06
* Material code (see below)	PP
* Inside Surface Type	
Smooth Inside Surface (Standard Option)	HV
Profiled Inside Surface (Upon Request)	without

#### Clamp Body (with different diameters)

\*MLC-\*1-\*03B-\*06/12/08-\*PP-\*HV

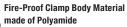
## **Standard Materials**



Polypropylene Colour: Black Material code: PP









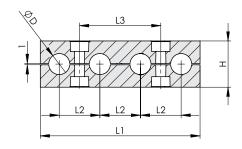
See pages 178 / 179 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.



# Clamp Body Multi-Line Clamps Smooth Inside Surface with Tension Clearance Type MLC (for 4 lines)





# **Ordering Codes**

#### Clamp Body (with indentical diameters)

\*MLC-\*1-\*04B-\*06-\*PP-\*HV

One clamp body is consisting of two clamp halves.

* Clamp Type	MLC
* STAUFF Group	1
* Number of lines and bolts	04B
* Exact outside diameter Ø D (mm)	06
* Material code (see below)	PP
* Inside Surface Type	
Smooth Inside Surface (Standard Option)	HV
Profiled Inside Surface (Upon Request)	without

#### Clamp Body (with different diameters)

\*MLC-\*1-\*04B-\*06/12/08/10-\*PP-\*HV

## **Standard Materials**



Polypropylene Colour: Black Material code: PP



Polyamide Colour: Black Material code: PA



Fire-Proof Clamp Body Material made of Polyamide

Colour: Black Material code: PA-VO

See pages 178 / 179 for material properties and technical information.

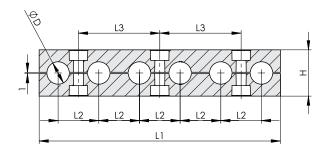
Alternative materials are available upon request. Please contact STAUFF for further information.

STAUFF	Outside Diameter Pipe / Tube Ø D		Dimensions (mm/in)				Number of Bolts (B)	Ordering Code Standard Option (2 Clamp Halves)
S	(mm)	(in)	L1	L2	L3	Н		(** = Material)
	6							MLC-1-04B-06-**-HV
	6,4							MLC-1-04B-06.4-**-HV
1	8		76	20	40	27	2	MLC-1-04B-08-**-HV
'	9,5		2.99	.79	1.57	1.06		MLC-1-04B-09.5-**-HV
	10	1/8						MLC-1-04B-10-**-HV
	12							MLC-1-04B-12-**-HV
	10							MLC-2-04B-10-**-HV
	12							MLC-2-04B-12-**-HV
	12,7			29	58 2.28	33 1.30	2	MLC-2-04B-12.7-**-HV
	13,5	1/4	114 4.49					MLC-2-04B-13.5-**-HV
2	14							MLC-2-04B-14-**-HV
	15							MLC-2-04B-15-**-HV
	16							MLC-2-04B-16-**-HV
	17,2	3/8						MLC-2-04B-17.2-**-HV
	18							MLC-2-04B-18-**-HV
	15							MLC-3-04B-15-**-HV
	16							MLC-3-04B-16-**-HV
	17,2							MLC-3-04B-17.2-**-HV
	18							MLC-3-04B-18-**-HV
	19		142	36	72	37		MLC-3-04B-19-**-HV
3	20		5.59	1.42	2.83	1.46	2	MLC-3-04B-20-**-HV
	21,3	1/2	0.00	1.12	2.00	1.10		MLC-3-04B-21.3-**-HV
	22							MLC-3-04B-22-**-HV
	23							MLC-3-04B-23-**-HV
	25							MLC-3-04B-25-**-HV
	25,4							MLC-3-04B-25.4-**-HV

Additional outside diameters and various diameter combinations are available upon request. Please contact STAUFF for further information.







#### Clamp Body Multi-Line Clamps Smooth Inside Surface with Tension Clearance Type MLC (for 6 lines)



Group				ons			Number of	Ordering Code
世	Pipe / Tube		(mm/in)				Bolts	Standard Option
STAUFF	Ø D						(C)	(2 Clamp Halves)
S	(mm)	(in)	L1	L2	L3	Н		(** = Material)
	6							MLC-1-06C-06-**-HV
	6,4							MLC-1-06C-06.4-**-HV
1	8		116	20	40	27	3	MLC-1-06C-08-**-HV
'	9,5		4.57	.79	1.57	1.06	3	MLC-1-06C-09.5-**-HV
	10	1/8						MLC-1-06C-10-**-HV
	12							MLC-1-06C-12-**-HV
	10							MLC-2-06C-10-**-HV
	12					33	3	MLC-2-06C-12-**-HV
	12,7			29	58			MLC-2-06C-12.7-**-HV
	13,5	1/4	172					MLC-2-06C-13.5-**-HV
2	14		6.77	1.14	2.28	1.30		MLC-2-06C-14-**-HV
	15							MLC-2-06C-15-**-HV
	16							MLC-2-06C-16-**-HV
	17,2	3/8						MLC-2-06C-17.2-**-HV
	18							MLC-2-06C-18-**-HV
	15							MLC-3-06C-15-**-HV
	16							MLC-3-06C-16-**-HV
	17,2							MLC-3-06C-17.2-**-HV
	18							MLC-3-06C-18-**-HV
	19		214	36	72	37		MLC-3-06C-19-**-HV
3	20		8.43	1.42	2.83	1 46	3	MLC-3-06C-20-**-HV
	21,3	1/2	0.43	1.42	2.00	1.40		MLC-3-06C-21.3-**-HV
	22							MLC-3-06C-22-**-HV
	23							MLC-3-06C-23-**-HV
	25							MLC-3-06C-25-**-HV
	25,4							MLC-3-06C-25.4-**-HV

Additional outside diameters and various diameter combinations are available upon request. Please contact STAUFF for further information.

#### **Ordering Codes** Clamp Body (with indentical diameters) \*MLC-\*1-\*06C-\*06-\*PP-\*HV One clamp body is consisting of two clamp halves. \* Clamp Type MLC \* STAUFF Group \* Number of lines and bolts 06C \* Exact outside diameter Ø D (mm) 06 \* Material code (see below) PP \* Inside Surface Type Smooth Inside Surface (Standard Option) Profiled Inside Surface (Upon Request) without

# Clamp Body (with different diameters)

\*MLC-\*1-\*06C-\*06/12/08/10/12/12-\*PP-\*HV

## **Standard Materials**





# Fire-Proof Clamp Body Material made of Polyamide

Colour: Black
Material code: PA-VO

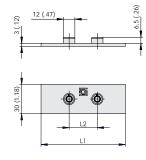
See pages 178 / 179 for material properties and technical information.

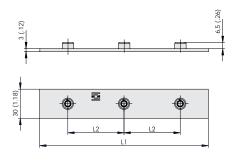
Alternative materials are available upon request. Please contact STAUFF for further information.



# **Single Weld Plate for Multi-Line Clamps Type SP-MLC**







2 Welding Nuts (B)

3 Welding Nuts (C)

	Ordering Co
	Single Weld Pl
*78-*W2	*SP-MLC-*1-*
ne Clamps SP-MLC 1 04B	* Single Weld Plate * STAUFF Group * Number of lines a in Clamp Body
thread M rse (UNC) thread U	* Thread code
78 el, phosphated W2 eel V4A W5	
4571 (AISI 316 / 316 Ti)	

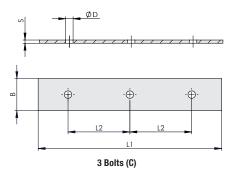
Group	Number of	Number of	Dimensions (mm	/ <sub>in</sub> )		Ordering Codes
STAUFF	Lines in Clamp Body	Welding Nuts	Thread G	L1	L2	(Standard Options)
	2		M6	62,5	40	SP-MLC-1-02B-M-62.5-W2
	۷		1/4-20 UNC	2.46	1.57	SP-MLC-1-02B-U-62.5-W2
	3	2	M6	58	20	SP-MLC-1-03B-M-58-W2
1	3		1/4-20 UNC	2.28	.79	SP-MLC-1-03B-U-58-W2
'	4		M6	78	40	SP-MLC-1-04B-M-78-W2
	4		1/4-20 UNC	3.07	1.57	SP-MLC-1-04B-U-78-W2
	6	3	M6	118	40	SP-MLC-1-06C-M-118-W2
	0	3	1/4-20 UNC	4.46	1.57	SP-MLC-1-06C-U-118-W2
	2	2	M6	80	58	SP-MLC-2-02B-M-80-W2
	۷		1/4-20 UNC	3.15	2.28	SP-MLC-2-02B-U-80-W2
	3		M6	87	29	SP-MLC-2-03B-M-87-W2
2			1/4-20 UNC	3.43	1.14	SP-MLC-2-03B-U-87-W2
2	4		M6	116	58	SP-MLC-2-04B-M-116-W2
	4		1/4-20 UNC	4.57	2.28	SP-MLC-2-04B-U-116-W2
	6	3	M6	174	58	SP-MLC-2-06C-M-174-W2
	0		1/4-20 UNC	6.85	2.28	SP-MLC-2-06C-U-174-W2
	2		M6	94,5	72	SP-MLC-3-02B-M-94.5-W2
	۷		1/4-20 UNC	3.72	2.83	SP-MLC-3-02B-U-94.5-W2
	3	2	M6	108	36	SP-MLC-3-03B-M-108-W2
3	3		1/4-20 UNC	4.25	1.41	SP-MLC-3-03B-U-108-W2
J	4		M6	144	72	SP-MLC-3-04B-M-144-W2
	4		1/4-20 UNC	5.67	2.83	SP-MLC-3-04B-U-144-W2
	6	3	M6	216	72	SP-MLC-3-06C-M-216-W2
	U	3	1/4-20 UNC	8.50	2.83	SP-MLC-3-06C-U-216-W2

 $All\ threaded\ parts\ are\ available\ with\ Metric\ ISO\ thread\ or\ unified\ coarse\ (UNC)\ thread\ according\ to\ dimension\ table.$ Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.





# 2 Bolts (B)



# **Cover Plate for Multi-Line Clamps Type DP-MLC**



Group	Number of Dimensions (mm/in)					Ordering Codes		
STAUFF	Lines in Clamp Body	Bolts	L1	L2	В	D	S	(Standard Options)
	2		60,5	40				DP-MLC-1-02B-60.5-W3
			2.38	1.57				5. III20 1 025 0010 110
	3	2	56	20				DP-MLC-1-03B-56-W3
1		_	2.20	.79				
	4		76	40				DP-MLC-1-04B-76-W3
	·		2.99	1.57				
	6	3	116	40				DP-MLC-1-06C-116-W3
	0	0	4.57	1.57				
	2	2	78,5	58				DP-MLC-2-02B-78.5-W3
			3.09	2.28				5. III20 2 025 7 010 110
	3		85	29				DP-MLC-2-03B-85-W3
2			3.35	1.14	30	7	3	
_	4		114	58	1.18	.28	.12	DP-MLC-2-04B-114-W3
			4.49	2.28				5. III20 2 0 15 11 110
	6	3	172	58				DP-MLC-2-06C-172-W3
			6.77	2.28				DI IIIEO E 000 II E 110
	2		92,5	72				DP-MLC-3-02B-92.5-W3
			3.64	2.83				DI MEG O CED CEIO NO
	3	2	106	36				DP-MLC-3-03B-106-W3
3		_	4.17	1.42				DI III20 0 00D 100 110
	4		142	72				DP-MLC-3-04B-142-W3
	•		5.59	2.83				520 0 0 1D 11E 110
	6	3	214	72				DP-MLC-3-06C-214-W3
		J	8.43	2.83				520 0 000 E11 110

Ordering C	odes				
Cover Plate					
*DP-MLC-*1-	*04B-*76-*W3				
* Cover Plate for Multi-Line Clamps  * STAUFF Group  * Number of lines and bolts					
in Clamp Body	and botto	04B			
* Length * Material code	Carbon Steel, zinc/nickel-plated Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316	76 W3 Fi) W5			

 $Alternative\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.\ Contact\ STAUFF\ for\ further\ information.$ 

# STAUFF ®

# **Hexagon Head Bolt**

(for Use with Cover Plate DP-MLC)

## **Type AS**





Hexagon Head Bolt AS (according to DIN 931 / 933 or ANSI / ASME B18.2.1.)
Dimensions applicable only when used with Cover Plate DP-MLC

Ordering Codes	STAU
Hexagon Head Bolt	1
	2

\* Hexagon Head Bolt (according to DIN 931 / 933 or ANSI / ASME B18.2.1.)

\* Thread type and size acc. to dimension table M6x30

\* Material code Carbon Steel, zinc/nickel-plated Stainless Steel V4A

1.4401 / 1.4571 (AISI 316 / 316 Ti) wb

Group	Dimensions (mm/in)	Ordering Codes
STAUFF	Thread G x L	(Standard Options)
1	M6 x 30	AS-M6x30-W3
'	1/4–20 UNC x 1-1/4	AS-1/4-20UNCx1-1/4-W3
2	M6 x 35	AS-M6x35-W3
2	1/4-20 UNC x 1-3/8	AS-1/4-20UNCx1-3/8-W3
3	M6 x 40	AS-M6x40-W3
3	1/4–20 UNC x 1-1/2	AS-1/4-20UNCx1-1/2-W3

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

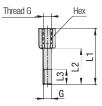
# **Stacking Bolt**

\*AS-\*M6x30-\*W3

(for Use with Safety Locking Plate SIG)

#### Type AF





# **Ordering Codes**

#### **Stacking Bolt**

#### \*AF-\*1/1A/1D-\*M-\*W3

\* Stacking Bolt
(according to STAUFF Standard-Series)

\* STAUFF Group

\* Thread code
Unified coarse (UNC) thread
Unified coarse (UNC) thread
Unified Stainless Steel V4A
1.4401 / 1.4571 (AISI 316 / 316 Ti)

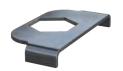
Group	Dimensions (	mm/in)			Ordering Codes	
STAUFF	TAUFF Thread G L1 L2		L2	L2 L3 min. Hex		(Standard Options)
4	M6	34	20	12	11	AF-1/1A/1D-M-W3
•	1/4-20 UNC	1.34	.79	.47	.43	AF-1/1A/1D-U-W3
2	M6	40	25	12	11	AF-2-M-W3
2	1/4-20 UNC	1.57	.98	.47	.43	AF-2-U-W3
3	M6	44	30	12	11	AF-3-M-W3
3	1/4-20 UNC	1.73	1.18	.47	.43	AF-3-U-W3

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.



# **Safety Locking Plate**

(for Use with Stacking Bolt AF) **Type SIG** 





STAUFF Group 1

Group	Dimensions (mm/in	•		Ordering Code	
STAUFF	L	B1	B2	S	(Standard Option)
1					
2	.63	32 1.26	11,2 .44	.04	SIG-1-W3
3					

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

# **Ordering Codes**

# **Safety Locking Plate**

# \*SIG-\*1-\*W3

- \* Safety Locking Plate SIG (according to STAUFF Standard-Series) \* STAUFF Group \* Material code Carbon Steel, zinc/nickel-plated W3
  - Stainless Steel V4A W5 1.4401 / 1.4571 (AISI 316 / 316 Ti)

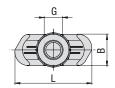


# **Hexagon Rail Nut**

(for Use with Mounting Rail TS)

# Type SM





25,5

1.00

10,4

.41

Dimensions (mm/in)

Thread G

1/4-20 UNC

M6

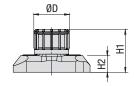
Group

STAUFF

1

2

3



12

.47

**Ordering Codes** 

(Standard Options)

SM-1-8/1D-M-W3

SM-1-8/1D-U-W3

# **Ordering Codes**

#### **Hexagon Rail Nut**

# \*SM-\*1-8/1D-\*M-\*W3

Hexagon Rail Nut	t	SM
(according to STA	AUFF Standard-Series)	SIVI
* STAUFF Group	1 to 8	1-8/1D
* Thread code	Metric ISO thread	M
	Unified coarse (UNC) thread	U
* Material code	Carbon Steel, zinc/nickel-plated	W3

Stainless Steel V4A

1.4401 / 1.4571 (AISI 316 / 316 Ti)

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.  $Alternative\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.\ Contact\ STAUFF\ for\ further\ information.$ 

14,2

.56

.22

# **Mounting Rail**

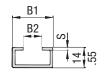
(for Use with Hexagon Rail Nut SM)

# **Type TS**





Mounting Rail TS-11



**Mounting Rail TS-14** 



**Mounting Rail TS-30** 

# **Ordering Codes**

## **Mounting Rail**

#### \*TS-\*11-\*1M-\*W98

Mounting Rail (according to S'	TAUFF Standard-Series)	TS
* Height of rail	11 mm / .43 in	11
	14 mm / .55 in	14
	30 mm / 1.18 in	30
* Length of rail	1 m / 3.28ft	1M
	2 m / 6.56 ft	2M
	Alternative lengths available upon	request.
	Contact STAUFF for further inforr	nation.

\* Werkstoff Carbon Steel, hot-dip galvanised Stainless Steel V4A

1.4401 / 1.4571 (AISI 316 / 316 Ti) **W5** 

Group	Dimensions (	<sup>mm</sup> /in)		Ordering Codes (Standard Options)				
STAUFF	B1	B2	S	Length of rail: 1 m / 3.28ft	Length of rail: 2m / 6.56ft			
1				Height 11 mm / .43 in TS-11-1M-W98	Height 11 mm / .43 in TS-11-2M-W98			
2	28 1.10	.43	2 .08	Height 14 mm / .55 in TS-14-1M-W98	Height 14 mm / .55 in TS-14-2M-W98			
3				Height 30 mm / 1.18 in TS-30-1M-W98	Height 30 mm / 1.18 in TS-30-2M-W98			

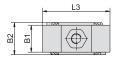
Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

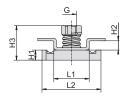


# **Channel Rail Adaptor**

(for Use with Various Channel Rails)









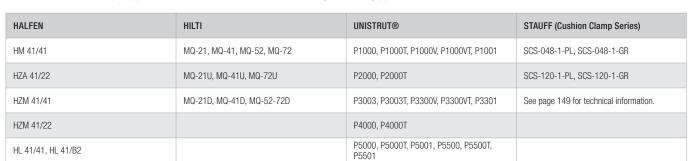
Group		Dimensions (mm/in)								Ordering Codes	
STAUFF	DIN	Thread G	L1	L2	L3	B1	B2	H1	H2	Н3	(Standard Options)
1	0										
2	0	M6	21	35	40	16	19	6	5,5	20,5	CRA-1-8/1D-M-W3
2	2	1/4-20 UNC	.83	1.38	1.57	.63	.75	.24	.22	.81	CRA-1-8/1D-U-W3
3	3										

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.  $Alternative\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.\ Contact\ STAUFF\ for\ further\ information.$ 

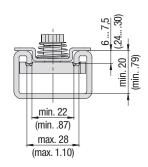
Ordering Codes								
Adaptor	*CRA-*1-8/1D-*M-	*W3						
* Channel Rail Ad	aptor	CRA						
* STAUFF Group	1 to 8	1-8/1D						
* Thread code	Metric ISO thread	M						
	Unified coarse (UNC) thread	U						
* Material code	Carbon Steel, zinc/nickel-plated	W3						
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316	Τi) <b>W5</b>						

#### **Compatibility with Channel Rails**





To check the compatibility with additional types of channel rail, please compare the dimensions with the following drawing before use.



Basic dimensional requirements for channel rails to be used with STAUFF Channel Rail Adaptors, type CRA

#### **Examples of Assembly**

# **Direct Assembly**



#### 2x Hexagon Head Bolt

Material code: W3 / W5 Thread: Metric / UNC

#### 1x Cover Plate

Material code: W3 / W5

1x Clamp Body (2 Clamp Halves) STAUFF Group 1 / 2 / 3 Material code: PP / PA / PA-V0 Smooth Inside Surface with Tension Clearance

# **Single Weld Plate Assembly**



#### 2x Hexagon Head Bolt

Material code: W3 / W5 Thread: Metric / UNC

#### 1x Cover Plate

Material code: W3 / W5

#### 1x Clamp Body (2 Clamp Halves)

STAUFF Group 1 / 2 / 3 Material code: PP / PA / PA-V0 Smooth Inside Surface with Tension Clearance

#### 1x Single Weld Plate

Material code: W2 / W5 Thread: Metric / UNC

# **Mounting Rail Assembly**



#### 2x Hexagon Head Bolt

Material code: W3 / W5 Thread: Metric / UNC

#### 1x Cover Plate

Material code: W3 / W5

#### 1x Clamp Body (2 Clamp Halves)

STAUFF Group 1 / 2 / 3 Material code: PP / PA / PA-V0 Smooth Inside Surface with Tension Clearance

## 2x Hexagon Rail Nut

Material code: W3 / W5 Thread: Metric / UNC

#### **Mounting Rail**

Material code: W98 / W5

Height: 11 mm (.43 in) /

14 mm (.55 in) / 30 mm (1.18 in)

Length: 1 m (3.28 ft) /

2 m (6.56 ft)

# **Stacking Assembly**



# 2x Hexagon Head Bolt

Material code: W3 / W5 Thread: Metric / UNC

#### 1x Cover Plate

Material code: W3 / W5

# 2x Clamp Body (4 Clamp Halves)

STAUFF Group 1 / 2 / 3 Material code: PP / PA / PA-V0 Smooth Inside Surface with Tension Clearance

# 2x Safety Locking Plate

Material code: W3 / W5

#### 2x Stacking Bolt

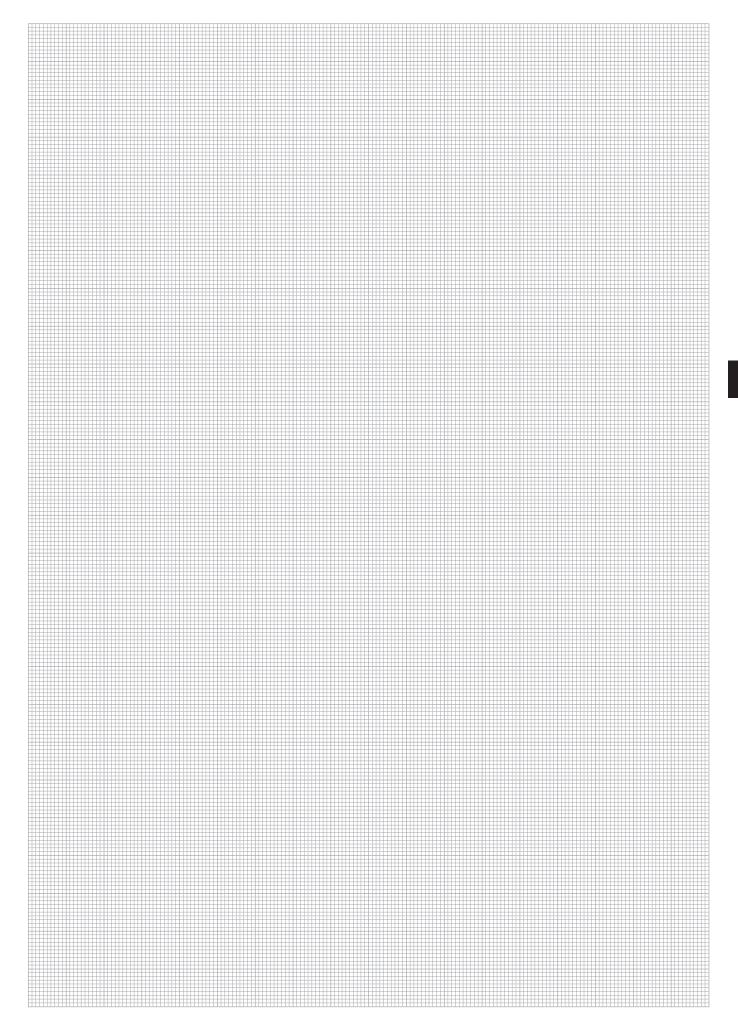
Material code: W3 / W5 Thread: Metric / UNC

# 1x Single Weld Plate

Material code: W2 / W5 Thread: Metric / UNC











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	Enquiry Form for Custom-Designed Special Clamps	133

# **Machined Versions**

Custom-designed clamping systems for pipes, tubes, hoses, cables and other components according to customer's  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ specifications or based on STAUFF developments, made of thermoplastics, metals and non-ferrous metals.



















































# STAUFF

# **Injection Moulded Versions** (Flexi Clamps)

Custom-designed clamping systems for pipes, tubes, hoses, cables and other components according to customer's specifications or based on STAUFF developments, made of Polypropylene, Polyamide and other thermoplastics.



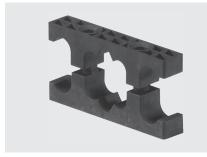


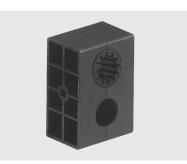














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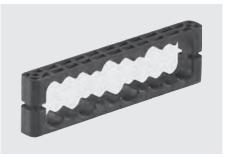










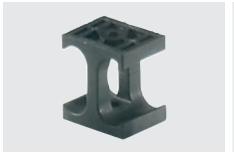


















# **Metal Versions and Accessories**

Metal versions of custom-designed clamping systems for pipes, tubes, hoses, cables and other components as well as accessories such as weld plates, cover plates, bolts as well as elastomer inserts.









# **3D-Printed Special Clamps**

Rapid online quoting and unrivalled fast production and delivery of prototypes and components in small batches

STAUFF offers rapid online quoting and unrivalled fast production and delivery of fully functional and durable prototypes and small batches of STAUFF clamps for the secure fastening of pipes, tubes, hoses, cables and other components in hydraulics and other industrial applications.

And that's how simple it works: Upload the CAD model, select options such as material and colour, get your individual price per piece immediately, specify the quantity, and place the order online. You will typically receive your components within a few working days and pay conveniently by invoice.

STAUFF product specialists will be happy to advise you free of charge on the design optimisation of components and provide  $% \left( x\right) =\left( x\right) +\left( x\right)$ support in transferring prototypes to large-batch production.

www.stauff.protiq.com







# **Enquiry Form for Custom-Designed Special Clamps**

Please use the following form as a guideline when preparing an enquiry for a custom-designed special clamp. Scan or copy the page from the catalogue, print and complete it with

as much information as possible, before sending it by email of fax to the closest STAUFF branch office. If possible, please also provide a sketch / drawing and let us know the quanti-

ties required, and if the enquiry is for a one-time or recurring demand. We look forward to hearing from you, and are always available for consultation, when required.

Application Information						
Area of use	□ Indoor	☐ Outdoor				
Ambient temperature	Lowest □ °C / □ °F	Highest □ °C / □ °F				
Resistance against particular media	□ No	☐ Yes ☐ Mineral oils ☐ Other oils ☐ Benzine ☐ Weak acids ☐ Solvents ☐ Alcohols ☐ Seawater ☐ Other media ☐ Other M				
Fire protection requirements	□ No	☐ Yes ☐ UL94 ☐ BS 6853 ☐ Other standard				
Material preference for the clamp body	y □ Polypropylene □ Aluminium □ Stainless Steel □ V2A □ V4A	☐ Polyamide ☐ Steel ☐ Other material				
Design Information						
Type of line	☐ Pipe / tube ( <u>fixed</u> installation) ☐ Hose ☐ Cable ☐ Other components	☐ Pipe / tube ( <u>sliding</u> installation) ☐ Conduit Hose ☐ Mix of different types of lines				
Maximum dimensions of clamp body	Length x Width x H	leight 🗆 mm / 🗆 inch				
Total number of lines						
Diameters per line	Line 1	Further comments				
Preferred centre distance of the lines		mm / $\square$ inch				
Preferred number of screw holes						
Information on Mounting Hardw	are					
Preferred type of bolts	☐ Hexagon head bolts (with cover plate) ☐ Socket cap crews (with cover plate) ☐ Socket cap crews (w/o cover plate)	<ul> <li>□ with metric threads</li> <li>□ with UNC threads</li> <li>□ with metric threads</li> <li>□ with UNC threads</li> <li>□ with UNC threads</li> </ul>				
Preferred type of installation	☐ Welding (using a weld plate) ☐ Direct screw-fastening ☐ Mounting rail (using a rail nut / adaptor	☐ Welding (using weld studs) ☐ Adhesive bonded fastening or)				
Material preference for the hardware	☐ Steel	☐ Stainless Steel ☐ V2A ☐ V4A				





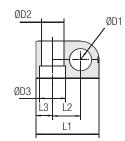


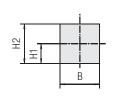
# STAUFF ®

# Clamp Body • Single Design Type LBBU









Size 2 in slotted design

Size 1 and 3 with film hinge

#### **Ordering Codes**

#### Clamp Body \*LBBU-\*1\*06-\*SA87-\*M8/U5/16

* Light Series LBBU	LBBU
* STAUFF Group	1
* Exact outside diameter Ø D1 (mm)	06
* Material code (see below) Size 1 and 3	SA87
Size 2	SA73
* Thread code (suitable for bolts M8 and U5/16)	M8/U5/16

#### **Standard Materials**



**Thermoplastic Elastomer** (87 Shore-A) Colour: Black

Material code: SA87 (Size 1 and 3) Material code: SA73 (Size 2)

See pages 178 / 179 for material properties and technical information

Alternative materials are available upon request. Please contact STAUFF for further information.

# **Product Features**

- Compact and light-weight design for applications in which space is limited
- Available in 3 different sizes and covering all standard metric and imperial diameters between 4 mm and 32 mm
- Vibration-damping and noise-reducing clamp body material with UV, ozone and weathering-resistant characteristics
- Embedded metal sleeve to ensure stability of the clamp assembly

Group		Diameter ibe / Hose	Nominal Bore Pipe	Ordering Codes I (1 Clamp Body) (		nsions						
STAUFF	(mm)	(in)	(in)		Ø D2	Ø D3	L1	L2	L3	H1	H2	В
	6			LBBU-106-SA87-M8/U5/16								
	6,4	1/4		LBBU-106.4-SA87-M8/U5/16								
	8	5/16		LBBU-108-SA87-M8/U5/16								
1	9,5	3/8		LBBU-109.5-SA87-M8/U5/16	12	14	34	15	9	10	20	20
	10		1/8	LBBU-110-SA87-M8/U5/16	.47	.55	1.34	.59	.35	.39	.79	.79
	11			LBBU-111-SA87-M8/U5/16								
	12			LBBU-112-SA87-M8/U5/16								
	12,7	1/2		LBBU-112.7-SA87-M8/U5/16								
	10		1/8	LBBU-210-SA87-M8/U5/16								
	11			LBBU-211-SA87-M8/U5/16								
	12			LBBU-212-SA87-M8/U5/16								
	12,7	1/2		LBBU-212.7-SA87-M8/U5/16								
	13,5		1/4	LBBU-213.5-SA87-M8/U5/16								
2	14			LBBU-214-SA87-M8/U5/16	20	14	39	18	9	12	24	20
_	15			LBBU-215-SA87-M8/U5/16	.47	.55	1.54	.71	.35	.47	.94	.79
	16	5/8		LBBU-216-SA87-M8/U5/16								
	17,2		3/8	LBBU-217.2-SA87-M8/U5/16								
	18			LBBU-218-SA87-M8/U5/16								
	19	3/4		LBBU-219-SA87-M8/U5/16								
	20			LBBU-220-SA87-M8/U5/16								
	21,3			LBBU-321.3-SA87-M8/U5/16								
	22	7/8		LBBU-322-SA87-M8/U5/16								
	23			LBBU-323-SA87-M8/U5/16								
3	25			LBBU-325-SA87-M8/U5/16	12	14	57,5	23,5	15	20	40	30
3	25,4	1		LBBU-325.4-SA87-M8/U5/16	.47	.55	2.26	.93	.59	.79	1.57	1.18
	28			LBBU-328-SA87-M8/U5/16								
	30			LBBU-330-SA87-M8/U5/16								
	32	1-1/4		LBBU-332-SA87-M8/U5/16								

Additional outside diameters are available upon request. Please contact STAUFF for further information.



# Type of Mounting SP (with Weld Plate LBBU-SP)

,

- Clamp assembly consisting of:
- 1 Hexagon Head Bolt AS1 Cover Plate LBBU-DP
- 1 Sleeve LBBU-HUE
- 1 Clamp Body LBBU
- 1 Weld Plate LBBU-SP



#### Type of Mounting SM

(with Hexagon Rail Nut SM-2-5D)

Clamp assembly consisting of:

- 1 Hexagon Head Bolt AS
- 1 Cover Plate LBBU-DP
- 1 Sleeve LBBU-HUE
- 1 Clamp Body LBBU
- 1 Hexagon Rail Nut SM-2-5D (for use with Mounting Rail TS, see page 24 for details)



#### Type of Mounting PM

(for panel mounting without Weld Plate or Hexagon Rail Nut)

Clamp assembly consisting of:

- 1 Hexagon Head Bolt AS
- 1 Cover Plate LBBU-DP
- 1 Sleeve LBBU-HUE
- 1 Clamp Body LBBU

#### **Order Code**

# LBBU-SP-322-SA87-DP-AS-M8-W10

W10 (Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated) is the standard option for this type of installation. For UNC threads / bolts, please replace M8 by U5/16.

# Order Code (Mounting Rail TS not included.) LBBU-SM-322-SA87-DP-AS-M8-W3

W3 (Metal parts made of Carbon Steel, zinc/nickel-plated) is the standard option for this type of installation.
For UNC threads / bolts, please replace M8 by U5/16.

#### Order Code

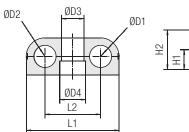
# LBBU-PM-322-SA87-DP-AS-M8-W3

W3 (Metal parts made of Carbon Steel, zinc/nickel-plated) is the standard option for this type of installation.
For UNC threads / bolts, please replace M8 by U5/16.

Alternative sizes (e.g. for bolts M6 and 1/4–20 UNC), materials and surface finishings are available upon request.



# Clamp Body • Twin Design **Type LBBU**







Size 1D and 3D with film hinge

Size 2D in slotted design

Group		Diameters				nsions					
		be / Hose	Bore	(1 Clamp Body)	(mm/in)						
	Ø D1 / Ø		Pipe								
STAUFF	(mm)	(in)	(in)		Ø D3	Ø D4	L1	L2	H1	H2	В
	4			LBBU-104/04-SA87-M8/U5/16							
	6			LBBU-106/06-SA87-M8/U5/16							
	6,4	1/4		LBBU-106.4/06.4-SA87-M8/U5/16		14	50				
	8	5/16		LBBU-108/08-SA87-M8/U5/16	12			30	10	20	20
1D	9,5	3/8		LBBU-109.5/09.5-SA87-M8/U5/16	.47	.55	1.97	1.18		.79	.79
	10		1/8	LBBU-110/10-SA87-M8/U5/16	,	.00	1.07	1.10		.,,	., 0
	11			LBBU-111/11-SA87-M8/U5/16							
	12			LBBU-112/12-SA87-M8/U5/16							
	12,7	1/2		LBBU-112.7/12.7-SA87-M8/U5/16							
	10		1/8	LBBU-210/10-SA87-M8/U5/16							
	11			LBBU-211/11-SA87-M8/U5/16							
	12			LBBU-212/12-SA87-M8/U5/16							
	12,7	1/2		LBBU-212.7/12.7-SA87-M8/U5/16							
	13,5		1/4	LBBU-213.5/13.5-SA87-M8/U5/16							
2D	14			LBBU-214/14-SA87-M8/U5/16	12	14	59	35	12	24	20
20	15			LBBU-215/15-SA87-M8/U5/16	.47	.55	2.32	1.38	.47	.94	.79
	16	5/8		LBBU-216/16-SA87-M8/U5/16							
	17,2		3/8	LBBU-217.2/17.2-SA87-M8/U5/16							
	18			LBBU-218/18-SA87-M8/U5/16							
	19	3/4		LBBU-219/19-SA87-M8/U5/16							
	20			LBBU-220/20-SA87-M8/U5/16							
	21,3			LBBU-321.321.3-SA87-M8/U5/16							
	22	7/8		LBBU-322/22-SA87-M8/U5/16							
	23			LBBU-323/23-SA87-M8/U5/16							
3D	25			LBBU-325/25-SA87-M8/U5/16	12	14	86	47	20	40	30
טט	25,4	1		LBBU-325.4/25.4-SA87-M8/U5/16	.47	.55	3.39	1.85	.79	1.57	.79
	28			LBBU-328/28-SA87-M8/U5/16							
	30			LBBU-330/30-SA87-M8/U5/16							
	32	1-1/4		LBBU-332/32-SA87-M8/U5/16							

Additional outside diameters and combinations of different outside diameters are available upon request. Please contact STAUFF for further information.

# **Ordering Codes**

#### Clamp Body \*LBBU-\*1\*06/06-\*SA87-\*M8/U5/16

* Light Series LBBU LBBU	
* 1st Part of STAUFF Group	1
* Exact outside diameters Ø D1 / Ø D2 (mm)	06/06
* Material code (see below) Size 1D and 3D	SA87
Size 2D	SA73
* Thread code (suitable for bolts M8 and U5/16)	M8/U5/16

#### **Standard Materials**



Thermoplastic Elastomer (87 Shore-A)

Colour: Black

Material code: SA87 (Size 1D and 3D) Material code: SA73 (Size 2D)

See pages 178 / 179 for material properties and technical informa-

Alternative materials are available upon request. Please contact STAUFF for further information.

#### **Product Features**

- Compact and light-weight design for applications in which space is limited
- · Available in 3 different sizes and covering all standard metric and imperial diameters between 4 mm and 32 mm
- Vibration-damping and noise-reducing clamp body material with UV, ozone and weathering-resistant characteristics
- · Embedded metal sleeve to ensure stability of the clamp assembly



# Type of Mounting SP

(with Weld Plate LBBU-SP)

Clamp assembly consisting of:

- 1 Hexagon Head Bolt AS
- 1 Cover Plate LBBU-DP 1 Sleeve LBBU-HUE
- 1 Clamp Body LBBU
- 1 Weld Plate LBBU-SP



#### Type of Mounting SM

(with Hexagon Rail Nut SM-2-5D)

Clamp assembly consisting of:

- 1 Hexagon Head Bolt AS
- 1 Cover Plate LBBU-DP
- 1 Sleeve LBBU-HUE
- 1 Clamp Body LBBU
- 1 Hexagon Rail Nut SM-2-5D (for use with Mounting Rail TS, see page 24 for details)



## Type of Mounting PM

(for panel mounting without Weld Plate or Hexagon Rail Nut)

Clamp assembly consisting of:

- 1 Hexagon Head Bolt AS
- 1 Cover Plate LBBU-DP
- 1 Sleeve LBBU-HUE
- 1 Clamp Body LBBU

#### **Order Code**

# LBBU-SP-322/22-SA87-DP-AS-M8-W10

W10 (Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated) is the standard option for this type of installation. For UNC threads / bolts, please replace M8 by U5/16.

#### Order Code (Mounting Rail TS not included.) LBBU-SM-322/22-SA87-DP-AS-M8-W3

W3 (Metal parts made of Carbon Steel, zinc/nickel-plated) is the standard option for this type of installation. For UNC threads / bolts, please replace M8 by U5/16.

#### **Order Code**

LBBU-PM-322/22-SA87-DP-AS-M8-W3

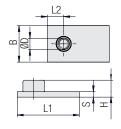
W3 (Metal parts made of Carbon Steel, zinc/nickel-plated) is the standard option for this type of installation. For UNC threads / bolts, please replace M8 by U5/16.

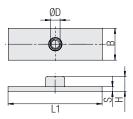
Alternative sizes (e.g. for bolts M6 and 1/4-20 UNC), materials and surface finishings are available upon request.

# STAUFF ®

# Weld Plate Type LBBU-SP







STAUFF Group 1 to 3

STAUFF Group 1D to 3D

Ordering Codes									
Weld Plate	*LBBU-SP-*1D-	*M8-*W2							
* Light Series LBI	BU	LBBU							
* Weld Plate		-SP							
* STAUFF Group		1D							
* Thread code	Metric ISO thread: M8 UNC thread: 5/16–18 UNC	M8 U5/16							
* Material code	Carbon Steel, phosphated	W2							

Group	Dimensio	ons (mm/in)		Ordering Codes				
STAUFF	Ø D	L1	L2	Н	В	S	Thread G	(Standard Options)
1	14	34	9	10,3	20	5	M8	LBBU-SP-1-M8-W2
'	.55	1.34	.35	.41	.79	.20	5/16-18 UNC	LBBU-SP-1-U5/16-W2
2	14	39	9	10,3	20	5	M8	LBBU-SP-2-M8-W2
2	.55	1.54	.35	.41	.79	.20	5/16-18 UNC	LBBU-SP-2-U5/16-W2
3	14	57,5	15	10,3	30	5	M8	LBBU-SP-3-M8-W2
3	.55	2.26	.59	.41	1.18	.20	5/16-18 UNC	LBBU-SP-3-U5/16-W2
1D	14	50	\ /	10,3	20	5	M8	LBBU-SP-1D-M8-W2
ID	.55	1.97		.41	.79	.20	5/16-18 UNC	LBBU-SP-1D-U5/16-W2
2D	14	59		10,3	20	5	M8	LBBU-SP-2D-M8-W2
20	.55	2.32		.41	.79	.20	5/16-18 UNC	LBBU-SP-2D-U5/16-W2
3D	14	86		10,3	30	5	M8	LBBU-SP-3D-M8-W2
SU	.55	3.39	/ \	.41	1.18	.20	5/16-18 UNC	LBBU-SP-3D-U5/16-W2

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative sizes (e.g. for bolts M6 and 1/4–20 UNC), materials and surface finishings are available upon request.

# Sleeve Type LBBU-HUE





Dimensions applicable only when used with Weld Plate LBBU-SP (**Type of Mounting SP**)

Group	Dimer	nsions (	(mm/in)	Ordering Codes
STAUFF	ØD1	ØD2	L	(Standard Options)
1	12	9	13,5	LBBU-HUE-1/1D-SP-
'	.47	.35	.53	M8/U5/16-W3
2	12	9	17,5	LBBU-HUE-2/2D-SP-
2	.47	.35	.69	M8/U5/16-W3
3	12	9	33,5	LBBU-HUE-3/3D-SP-
3	.47	.35	1.32	M8/U5/16-W3
1D	12	9	13,5	LBBU-HUE-1/1D-SP-
ID	.47	.35	.53	M8/U5/16-W3
2D	12	9	17,5	LBBU-HUE-2/2D-SP-
20	.47	.35	.69	M8/U5/16-W3
3D	12	9	33,5	LBBU-HUE-3/3D-SP-
טט	.47	.35	1.32	M8/U5/16-W3

Dimensions applicable only when used with Hexagon Rail Nut SM-2-5D (**Type of Mounting SM**)

Group	Dime	nsions	(mm/in)	Ordering Codes
STAUFF	ØD1	ØD2	L	(Standard Options)
1	12	9	12,8	LBBU-HUE-1/1D-SM-
'	.47	.35	.50	M8/U5/16-W3
2	12	9	16,8	LBBU-HUE-2/2D-SM
2	.47	.35	.66	M8/U5/16-W3
3	12	9	32,8	LBBU-HUE-3/3D-SM-
3	.47	.35	1.29	M8/U5/16-W3
1D	12	9	12,8	LBBU-HUE-1/1D-SM-
IU	.47	.35	.50	M8/U5/16-W3
2D	12	9	16,8	LBBU-HUE-2/2D-SM-
20	.47	.35	.66	M8/U5/16-W3
3D	12	9	32,8	LBBU-HUE-3/3D-SM-
30	.47	.35	1.29	M8/U5/16-W3

Dimensions applicable only when used for panel mounting without Weld Plate or Hexagon Rail Nut (**Type of Mounting PM**)

Group	Dime	nsions (	(mm/in)	Ordering Codes
STAUFF	ØD1	01 ØD2 L		(Standard Options)
1	12	9	18,8	LBBU-HUE-1/1D-PM-
'	.47	.35	.74	M8/U5/16-W3
2	12	9	22,7	LBBU-HUE-2/2D-PM-
2	.47	.35	.89	M8/U5/16-W3
3	12	9	38,8	LBBU-HUE-3/3D-PM-
3	.47	.35	1.53	M8/U5/16-W3
1D	12	9	18,8	LBBU-HUE-1/1D-PM-
IU	.47	.35	.74	M8/U5/16-W3
2D	12	9	22,7	LBBU-HUE-2/2D-PM-
20	.47	.35	.89	M8/U5/16-W3
3D	12	9	38,8	LBBU-HUE-3/3D-PM-
SD	.47	.35	1.53	M8/U5/16-W3

 $Alternative\ sizes\ (e.g.\ for\ bolts\ M6\ and\ 1/4-20\ UNC),\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.$ 



Group

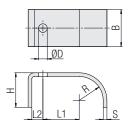
STAUFF

2

3

1D

# **Cover Plate Type LBBU-DP**



STAUFF Group 1 to 3

.35

.35

15

.59

Dimensions (mm/in)

15

.59

18

.71

23.5

.93

30

1.18

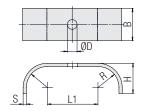
Ø D

.35

.35

.35

.35



STAUFF Group 1D to 3D

S

3

.12

3

3

.12

.12

3

.12

**Ordering Codes** 

(Standard Options)

LBBU-DP-1-M8/U5/16-W3

LBBU-DP-2-M8/U5/16-W3

LBBU-DP-3-M8/U5/16-W3

LBBU-DP-1D-M8/U5/16-W3



Ordering Codes								
<b>Cover Plate</b>	*LBBU-DP-*1D-*M8/U	5/16-*W3						
* Light Series LB	ВИ	LBBU						
* Cover Plate		-DP						
* STAUFF Group		1D						
* Thread code (su	itable for bolts M8 and U5/16)	M8/U5/16						
* Material code	Carbon Steel, zinc/nickel-pla	ited W3						

an	9	35	\	$\checkmark$	12	20	20	3	L DDLL DD OD MO/UE/16 WO
2D	.35	1.38	/	$\wedge$	.47	.79	.79	.12	LBBU-DP-2D-M8/U5/16-W3
2D	9	47			19,5	28	20	3	LBBU-DP-3D-M8/U5/16-W3
3D	.35	1.85			.77	.63	.79	.12	LDDU-DP-3D-INI8/U3/10-W3

16

.63

20

.79

28

1.10

16

.63

20

.79

20

.79

30

1.18

20

.79

Alternative sizes (e.g. for bolts M6 and 1/4-20 UNC), materials and surface finishings are available upon request.

10

.39

12

.47

.77

10

.39

19,5

# **Hexagon Head Bolt Type AS**



# **Hexagon Head Bolt AS**

(according to DIN 931 / 933 or ANSI / ASME B18.2.1.) Dimensions applicable only when used with Weld Plate LBBU-SP (Type of Mounting SP) or Hexagon Rail Nut SM-2-5D (Type of Mounting SM)

Group	Dimensions (mm/in)	Ordering Codes
STAUFF	Thread G x L	(Standard Options)
1	M8 x 25	AS-M8x25-W3
'	5/16-18 UNC x 1	AS-U5/16-18x1-W3
2	M8 x 28	AS-M8x28-W3
2	5/16-18 UNC x 1-1/8	AS-U5/16-18x1-1/8-W3
3	M8 x 45	AS-M8x45-W3
3	5/16-18 UNC x 1-3/4	AS-U5/16-18x1-3/4-W3
1D	M8 x 25	AS-M8x25-W3
ID	5/16-18 UNC x 1	AS-U5/16-18x1-W3
2D	M8 x 28	AS-M8x28-W3
20	5/16-18 UNC x 1-1/8	AS-U5/16-18x1-1/8-W3
3D	M8 x 45	AS-M8x45-W3
υU	5/16-18 UNC x 1-3/4	AS-U5/16-18x1-3/4-W3

#### **Hexagon Head Bolt AS**

(according to DIN 931 / 933 or ANSI / ASME B18.2.1.) Dimensions applicable only when used for panel mounting without Weld Plate or Hexagon Rail Nut (Type of Mounting PM)

Group STAUFF	Dimensions (mm/in) Thread G x L	Ordering Codes (Standard Options)
1	M8 x 30	AS-M8x30-W3
'	5/16-18 UNC x 1-1/4	AS-U5/16-18x1-1/4-W3
2	M8 x 35	AS-M8x35-W3
2	5/16-18 UNC x 1-3/8	AS-U5/16-18x1-3/8-W3
3	M8 x 50	AS-M8x50-W3
3	5/16-18 UNC x 2	AS-U5/16-18x2-W3
1D	M8 x 30	AS-M8x30-W3
ID	5/16-18 UNC x 1-1/4	AS-U5/16-18x1-1/4-W3
2D	M8 x 35	AS-M8x35-W3
ZU	5/16-18 UNC x 1-3/8	AS-U5/16-18x1-3/8-W3
2D	M8 x 50	AS-M8x50-W3
3D	5/16-18 UNC x 2	AS-U5/16-18x2-W3

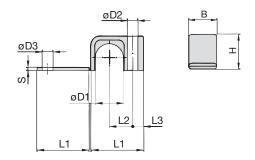
Ordering Co	odes	
Hexagon Head	d Bolt *AS-*M8x25	-*W3
* Type of bolt	Hexagon Head Bolt (according to DIN 931 / 933 or ANSI / ASME B18.2.1.)	AS
* Thread code	Thread dimension according to dimension table	M8x25
* Material code	Carbon Steel, zinc/nickel-plated	W3

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.  $Alternative \ sizes \ (e.g.\ for\ bolts\ M6\ and\ 1/4-20\ UNC),\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.$ 



# Clamp Body • Single Design Type LB





# **Ordering Codes**

Clamp Body	*LB-*1*03	.2-*PP
* Light Series:  * STAUFF Group  * Exact outside di  * Material code (s	` '	LB 1 03.2 PP

# **Standard Materials**



Polypropylene Colour: Black Material code: PP



Polyamide Colour: Yellow Material code: PA

See pages 178 / 179 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

# **Applications**

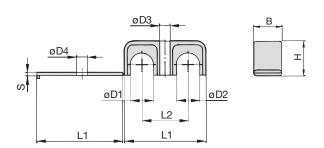
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Group	Outside I Pipe / Tu Ø D1	Diameter be / Hose	Nominal Bore Pipe	Ordering Codes (1 Clamp Body)	Dimensions (************************************							
STAUFF	(mm)	(in)	(in)	(** = Material)	L1	L2	L3	В	Н	S	Ø D2	Ø D3
	3,2	1/8		LB-103.2-**								
1	6			LB-106-**	22	9	6,5	12	10,5	2	6,8	7
'	6,4	1/4		LB-106.4-**	.87	.35	.26	.47	.41	.08	.27	.28
	8			LB-108-**								
	9,5	3/8		LB-209.5-**								
2	10		1/8	LB-210-**	27	11	7	16	15	2	6,8	7
_	11,1			LB-211.1-**	1.06	.43	.28	.63	.59	.08	.27	.28
	12			LB-212-**								
	12,7	1/2		LB-312.7-**								
	13,5		1/4	LB-313.5-**								
	14			LB-314-**	34	15	7	20	22,5	2	6,8	7
3	15			LB-315-**	1.34	.59	.28	.79	.89	.08	.27	.28
	16	5/8		LB-316-**	1.54	.00	.20	.13	.03	.00	.21	.20
	17,2		3/8	LB-317.2-**								
	18			LB-318-**								
	19	3/4		LB-419-**								
	20			LB-420-**								
4	21,3		1/2	LB-421.3-**	42	19	7	20	30	2	6,8	7
7	22			LB-422-**	1.65	.75	.28	.79	1.18	.08	.27	.28
	25			LB-425-**								
	25,4	1		LB-425.4-**								

 $Additional\ outside\ diameters\ are\ available\ upon\ request.\ Please\ contact\ STAUFF\ for\ further\ information.$ 







# Clamp Body • Twin Design Types LBG / LBU



Group		Diameters be / Hose D2	Nominal Bore Pipe	Ordering Codes (1 Clamp Body)	Dimensions (mm/ <sub>in</sub> )						
STAUFF	(mm)	(in)	(in)	(** = Material)	L1	L2	В	Н	S	Ø D3	Ø D4
	3,2	1/8		LBG-103.2/03.2-**							
1	6			LBG-106/06-**	31	18	12	10,5	2	6,8	7
•	6,4	1/4		LBG-106.4/06.4-**	1.22	.71	.47	.41	.08	.27	.28
	8			LBG-108/08-**							
	9,5	3/8		LBG-209.5/09.5-**							
2	10		1/8	LBG-210/10-**	39	22	16	15	2	6,8	7
2	11,1			LBG-211.1/11.1-**	1.54	.87	.63	.59	.08	.27	.28
	12			LBG-212/12-**							
	12,7	1/2		LBG-312.7/12.7-**							
	13,5		1/4	LBG-313.5/13.5-**							
	14			LBG-314/14-**	53	30	20	22,5	2	6.0	7
3	15			LBG-315/15-**	2.09	1.18	.79	.89	.08	6,8	.28
	16	5/8		LBG-316/16-**	2.03	1.10	.13	.03	.00	.21	.20
	17,2		3/8	LBG-317.2/17.2-**							
	18			LBG-318/18-**							
	19	3/4		LBG-419/19-**							
	20			LBG-420/20-**							
4	21,3		1/2	LBG-421.3/21.3-**	70	38	20	30	2	6,8	7
4	22			LBG-422/22-**	2.76	1.50	.79	1.18	.08	.27	.28
	25			LBG-425/25-**							
	25,4	1		LBG-425.4/25.4-**							

Additional outside diameters and combinations of different outside diameters (Clamp Body, Type LBU) are available upon request.

Please contact STAUFF for further information.

#### 

#### **Standard Materials**



See pages 178 / 179 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

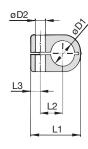
#### **Applications**

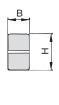
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# Clamp Body • Single Design Type LN







# **Ordering Codes**

Clamp Body	*LN-*1*06-*P					
* Light Series:  * STAUFF Group  * Exact outside di  * Material code (s	Clamp Body / Single Design ameter Ø D1 (mm) see below)	LN 1 06 PP				

# **Standard Materials**



Polypropylene Colour: Green Material code: PP



Polyamide Colour: Black Material code: PA

See pages 178 / 179 for material properties and technical information

Alternative materials are available upon request. Please contact STAUFF for further information.

# **Applications**

 Pneumatics, Instrumentation and Automotive Technology, Machine Tool Industry, Lubrication, Mechanical Engineering

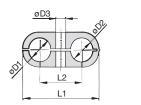
Group		Diameter be / Hose	Nominal Bore Pipe	Ordering Codes (1 Clamp Body)	Dimensions (mm/in)					
STAUFF	(mm)	(in)	(in)	(** = Material)	L1	L2	L3	В	Н	Ø D2
	6			LN-106-**	22	9	7	14,5	13,5	6,8
1	6,4	1/4		LN-106.4-**	.87	.35	.28	.57	.53	.27
	8			LN-108-**	.07	.00	.20	.01	.00	.21
	8			LN-208-**						
	9,5	3/8		LN-209.5-**	27	11	7	14,5	18,5	6,8
2	10		1/8	LN-210-**	1.06	.43	.28	.57	.73	.27
	12			LN-212-**	1.00	.40	.20	.01	.70	.21
	12,7	1/2		LN-212.7-**						
	10		1/8	LN-310-**			7	14,5		
	12			LN-312-**					23,5	
	12,7	1/2		LN-312.7-**	33	15				6,8
3	13,5		1/4	LN-313.5-**	1.30	.59	.28	.57	.93	.27
	14			LN-314-**	1.00	.00				1.21
	15			LN-315-**						
	16	5/8		LN-316-**						
	14			LN-414-**						
	15			LN-415-**						
	16	5/8		LN-416-**						
	17,2		3/8	LN-417.2-**	40	19	7	14,5	30,5	6,8
4	18			LN-418-**	1.57	.75	.28	.57	1.20	.27
	19	3/4		LN-419-**	1.07	.70	.20	.01	1.20	.21
	20			LN-420-**						
	21,3		1/2	LN-421.3-**						
	22			LN-422-**						

 $\label{thm:local_problem} \mbox{Additional outside diameters are available upon request. Please contact STAUFF for further information.}$ 





# Clamp Body • Twin Design Type LNGF / LNUF







Group	Outside Diameters Pipe / Tube / Hose Ø D1 / Ø D2		Nominal Bore Pipe	Ordering Codes (1 Clamp Body)	Dimensions (mm/in)				
STAUFF	(mm)	(in)	(in)	(** = Material)	L1	L2	В	Н	Ø D3
	6			LNGF-106/06-**	32	18	14,5	13,5	6.8
1	6,4	1/4		LNGF-106.4/06.4-**	1.26	.70	.57	.53	.27
	8			LNGF-108/08-**	1.20	.70	.01	.00	.21
	8			LNGF-208/08-**					
	9,5	3/8		LNGF-209.5/09.5-**	41	22	14,5	18,5	6,8
2	10		1/8	LNGF-210/10-**	1.61	.86	.57	.73	.27
	12			LNGF-212/12-**	1.01	.00	.01	.75	.21
	12,7	1/2		LNGF-212.7/12.7-**					
	10		1/8	LNGF-310/10-**					
	12			LNGF-312/12-**					
	12,7	1/2		LNGF-312.7/12.7-**	54	30	14,5	23,5	6,8
3	13,5		1/4	LNGF-313.5/13.5-**	2.13	1.18	.57	.93	.27
	14			LNGF-314/14-**	2.10	1.10	.01	.50	.21
	15			LNGF-315/15-**					
	16	5/8		LNGF-316/16-**					
	14			LNGF-414/14-**					
	15			LNGF-415/15-**					
	16	5/8		LNGF-416/16-**					
	17,2		3/8	LNGF-417.2/17.2-**	70	38	14,5	30,5	6,8
4	18			LNGF-418/18-**	2.76	1.50	.57	1.20	.27
	19	3/4		LNGF-419/19-**	2.10	1.00	.01	1.20	.21
	20			LNGF-420/20-**					
	21,3		1/2	LNGF-421.3/21.3-**					
	22			LNGF-422/22-**					

Additional outside diameters and combinations of different outside diameters (Clamp Body, type LNUF) are available upon request. Please contact STAUFF for further information.

# Ordering Codes Clamp Body \*LNGF-\*1\*06/06-\*PP \* Light Series: Clamp Body / Twin Design with identical diameters Clamp Body / Twin Design with different diameters \* STAUFF Group the Exact outside diameters Ø D1 / Ø D2 (mm) PP

#### **Standard Materials**



Polypropylene Colour: Green Material code: PP



Polyamide Colour: Black Material code: PA

See pages 178 / 179 for material properties and technical information.

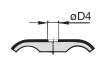
Alternative materials are available upon request.

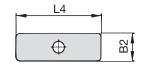
Please contact STAUFF for further information.

#### **Applications**

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# Cover Plate Type DPL



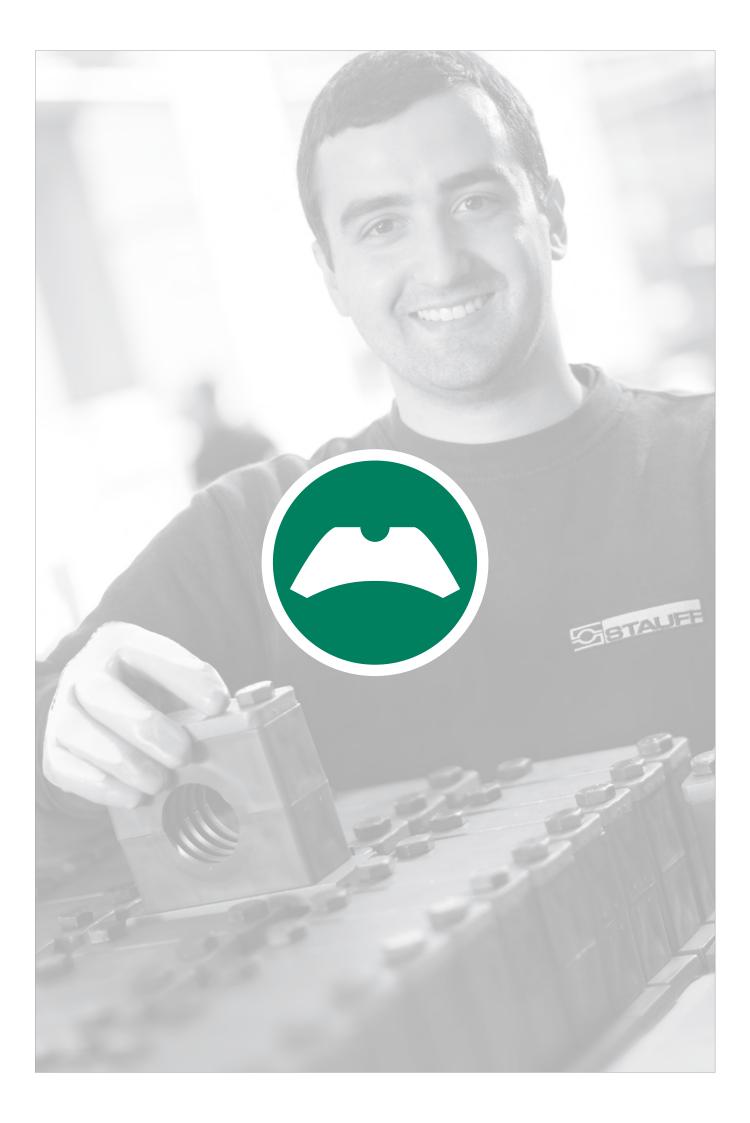




Group	Dimensions (mm/in)		Ordering Codes	
STAUFF	L4	B2	Ø D4	(Standard Options)
1	29,5	15,5	6,8	DPL-1-W3
'	1.16	.61	.27	DFL-1-W3
2	40	15,5	6,8	DPL-2-W3
2	1.57	.61	.27	DPL-2-W3
2	51	16	6,8	DDI 2 W2
3	2.01	.63	.27	DPL-3-W3
	63,5	16	6,8	DDI 4 WO
4	2.50	.63	.27	DPL-4-W3

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information. Please note: The maximum tightening torque for bolts is 2,5 N·m (1.85 ft·lb).









## **Saddle / Piggyback Clamps Type ZR**

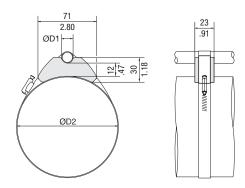


Order Code	
Saddle Clamp	ZR-518-SA73-BK

**Standard Material** 

Thermoplastic Elastomer (73 Shore-A) Colour: Black

See pages 178 / 179 for properties and technical information.



Min/Max Outs Pipe / Tube	ide Diameters *			Tightening Strap Dimensions (Not Included in Scope of Delivery)					
Ø D1 (mm) (in)		Ø D2 (mm) (in)		Length (mm) (in)		Width (mm)	(in)		
,	,	50 70	1.96 2.76	196 254	7.71 10.00	,	.51		
		60 80	2.36 3.15	225 284	8.86 11.18				
		70 90	2.76 3.54	254 314	10.00 12.36				
		80 105	3.15 4.13	284 359	11.18 14.13				
10 22	.3987	90 120	3.54 4.72	314 404	12.36 15.90	13			
		105 140	4.13 5.51	359 464	14.13 18.27				
		125 160	4.92 6.30	419 525	16.50 20.66				
		145 180	5.71 7.09	479 586	18.86 23.07				
		165 200	6.50 7.87	540 647	21.26 25.47				

<sup>\*</sup> Ø D1 depending on Ø D2!

# **Saddle / Piggyback Clamps**

Type ZR saddle clamps from STAUFF allow direct fixing and safe guiding of pipes, tubes and hoses on hydraulic cylinders and other round or oval structures, without causing damage to their strength or integrity as with screw-fixing or welding and without preparation or reworking of the surface coating. The simple system also allows a pipe, tube or hose with a small outer diameter to be installed on top of a significantly larger one.

The position can be adjusted at any time thanks to free axial and radial positioning of the clamps on the structure. This also makes the system suitable for retrofitting.

The standard version ZR-518 made of thermoplastic elastomer material covers diameters in a range from 50 to 200 mm / 1.96 to 7.87 in for the cylinder and from 10 to 22 mm / .39 to .87 inch for the attached tube or hose. The diameters to be covered are used to calculate the overall length of the required tightening straps or the dimensions of the steel strap or worm drive hose clamp, e.g. according to DIN 3017.

STAUFF meets deviating requirements with numerous other variants which were implemented in the past and can be manufactured again at any time.

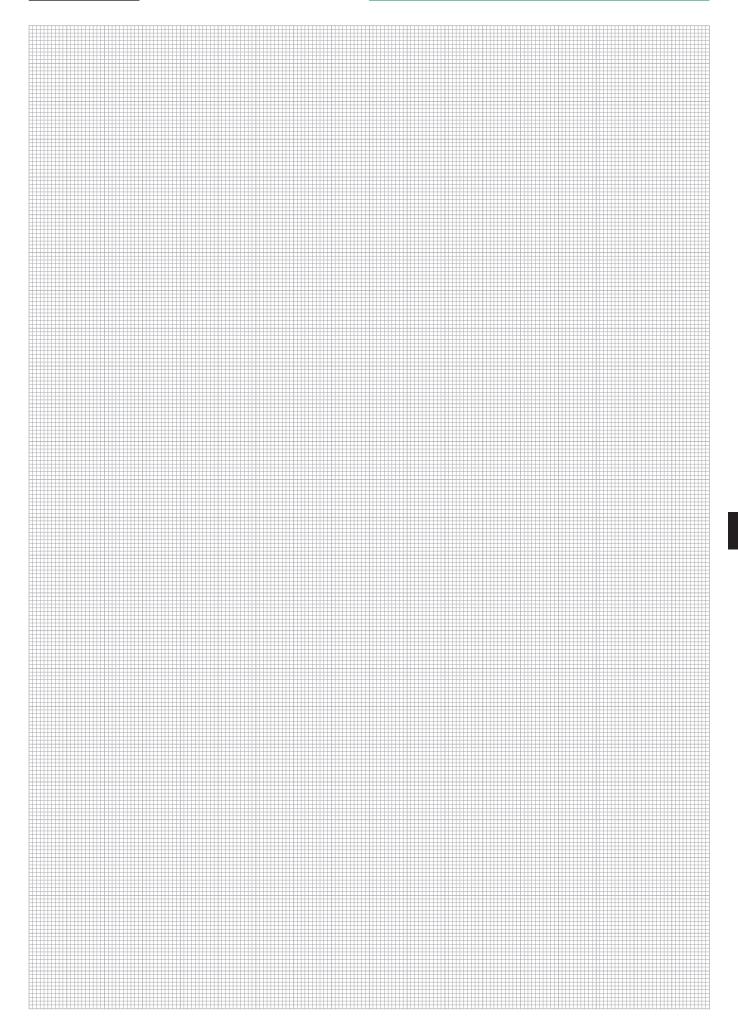
If required, customised clamps can be developed for specific requirements or manufactured based on drawings and models provided.

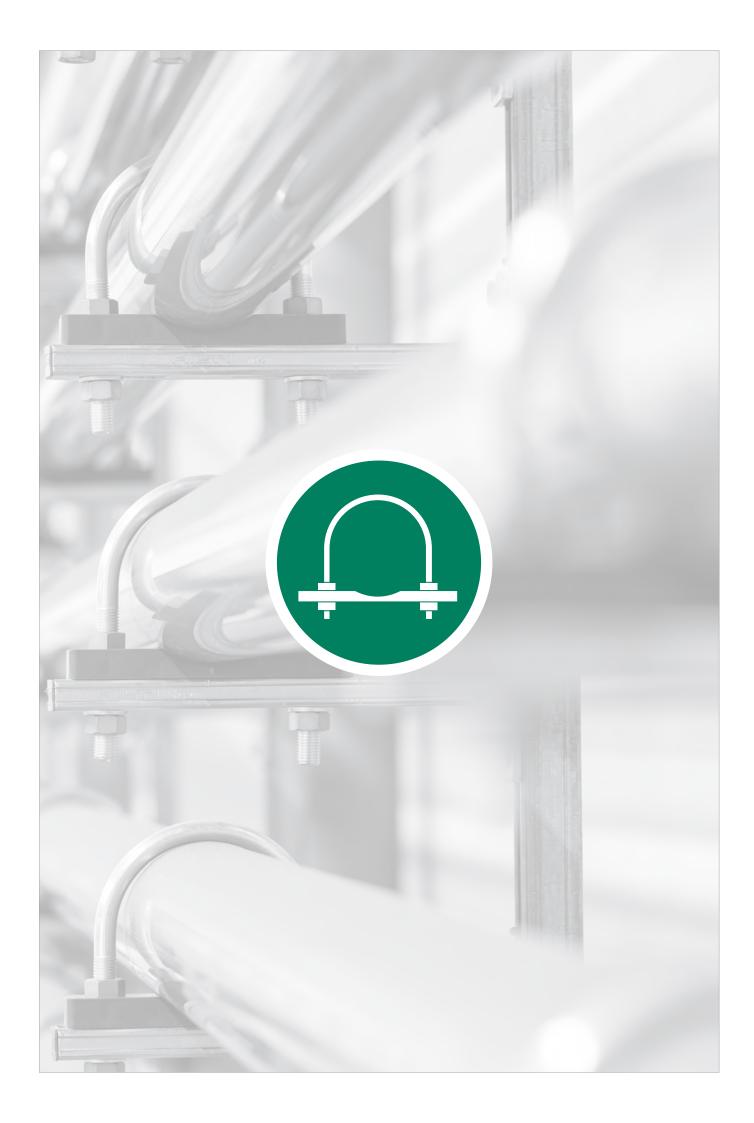
Please contact STAUFF for further information.



Dimensional drawings: All dimensions in mm (in).







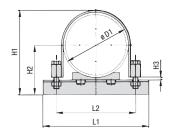


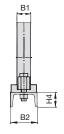


# Flat Steel U-Bolt with Plastic Pipe Saddle (Short) and U-Profile

Type FB+RUK (To be used as Fixed Point Clamps only)







Flat Steel U-Bolt (type FB) with Plastic Pipe Saddle (type RUK), U-Profile and Hexagon Head Bolts

# **Ordering Codes**

#### Clamp Assembly \*FB+RUK-\*48.3-\*PP-\*W56

One clamp assembly is consisting of one Flat Steel U-Bolt (type FB), one Plastic Pipe Saddle (type RUK), one U-Profile (to DIN 1026) with two Nuts (to DIN EN ISO 4032) and two Hexagon Head Bolts (to DIN EN ISO 4014 / 4017).

*	Clamp A	Assemb	ıly (	as I	listed	above)	

FB+RUK 48.3

\* Exact outside diameter Ø D1 (mm)

\* Material of Pipe Saddle (see below) PP

\* Material code

Please note:

W56

Please note: The U-Profile (to DIN 1026) is made of

Carbon Steel, uncoated.
Flat Steel U-Bolt and Bolts made of

Stainless Steel V4A.

All items are supplied assembled.

# **Standard Materials for Plastic Pipe Saddles**



Polypropylene Colour: Green Material code: PP



Polyamide Colour: Black Material code: PA

See pages 178 / 179 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

#### **Applications**

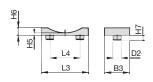
- Standing or hanging installation of pipes and tubes on beams, profiles and consoles
- Design with two threaded ends allows for ideal adaptation to suit the exact outer diameter of the pipe or tube

			(Ly	pe nuk),	U-Profile a	ани пехау	UII NEAU D	OUILS			
Diameter Nominal	Pipe / To	Outside Diameter Pipe / Tube Ø D1			Dimensions (mm/in)  Flat Steel U-Bolt (Type FB)						
DN	(mm)	(in)	Pipe (in)	L1	L2	н Н1	H2	Н3	B1	(DIN 1026) B2 x H4	
	, ,	, ,	1 ,	100	76	95	67	5	20 x 3	50 x 38	
40	48,3	1.93	1-1/2	3.94	2.99	3.74	2.64	.20	.78 x .12	1.97 x 1.50	
		0.00		115	85	103	71,5	5	20 x 3	50 x 38	
50	57	2.28		4.53	3.35	4.06	2.81	.20	.78 x .12	1.97 x 1.50	
50	CO 0	0.41	0	115	88	106	73,2	5	20 x 3	50 x 38	
	60,3	2.41	2	4.53	3.46	4.17	2.88	.20	.78 x .12	1.97 x 1.50	
CE	70.1	3.04	2-1/2	132	104	122	81	5	20 x 3	50 x 38	
65	76,1	3.04	2-1/2	5.20	4.09	4.80	3.19	.20	.78 x .12	1.97 x 1.50	
80	88,9	3.56	3	160	121	146	97,5	8	40 x 4	80 x 45	
00	00,9	3.30	3	6.30	4.76	5.75	3.84	.31	1.57 x .16	3.15 x 1.77	
	108	4.32		170	140	165	107	8	40 x 4	80 x 45	
100	100	7.02		6.69	5.51	6.50	4.21	.31	1.57 x .16	3.15 x 1.77	
100	114,3	4.57	4	180	147	171	110	8	40 x 4	80 x 45	
	114,5	4.07	7	7.09	5.79	6.73	4.33	.31	1.57 x .16	3.15 x 1.77	
	133	5.32		210	165	190	119,5	8	40 x 4	80 x 45	
125	100	0.02		8.27	6.50	7.48	4.70	.31	1.57 x .16	3.15 x 1.77	
120	139,7	5.59	5	210	172	197	123	8	40 x 4	80 x 45	
	139,7	0.00	0	8.27	6.77	7.76	4.84	.31	1.57 x .16	3.15 x 1.77	
	159	6.36		265	201	220	132,5	8	40 x 6	80 x 45	
150	100	0.00		1.43	7.91	8.66	5.22	.31	1.57 x .24	3.15 x 1.77	
100	168,3	6.73	6	275	211	230	137	8	40 x 6	80 x 45	
	100,0	0.70	0	1.83	8.31	9.06	5.39	.31	1.57 x .24	3.15 x 1.77	
175	193,7	7.75		305	236	255	150	8	40 x 6	80 x 45	
170	150,7	7.70		12.01	9.29	1.04	5.91	.31	1.57 x .24	3.15 x 1.77	
	216	8.64		320	258	277	161	8	40 x 6	80 x 45	
200	210	0.04		12.60	10.16	1.91	6.34	.31	1.57 x .24	3.15 x 1.77	
200	219,1	8.76	8	320	261	280	162,5	8	40 x 6	80 x 45	
	210,1	0.70		12.60	1.28	11.02	6.40	.31	1.57 x .24	3.15 x 1.77	
	267	10.68		380	324	328	186,5	8	40 x 8	80 x 45	
250		10.00		14.96	12.76	12.91	7.34	.31	1.57 x .31	3.15 x 1.77	
200	273	10.92	10	385	330	334	189,5	8	40 x 8	80 x 45	
	270	10.02	10	15.16	12.99	13.15	7.46	.31	1.57 x .31	3.15 x 1.77	
	318	12.72		440	375	382	212	8	40 x 8	80 x 45	
300	0.0	12.112		17.32	14.76	15.04	8.35	.31	1.57 x .31	3.15 x 1.77	
	323,9	12.96	12	450	381	390	215	8	40 x 8	80 x 45	
	,-			17.72	15.00	15.35	8.46	.31	1.57 x .31	3.15 x 1.77	
	355,6	14.22	14	480	417,5	421	235	12	60 x 8	100 x 50	
350	,-			18.90	16.44	16.57	9.25	.47	2.36 x .31	3.94 x 1.97	
	368	14.72		490	430	434	242	12	60 x 8	100 x 50	
				19.29	16.93	17.09	9.53	.47	2.36 x .31	3.94 x 1.97	
	406,4	16.26	16	550	468,5	472	261	12	60 x 8	100 x 50	
				21.65	18.44	18.58	10.28	.47	2.36 x .31	3.94 x 1.97	
400	419	16.76		550	481	485	267,5	12	60 x 8	100 x 50	
				21.65	18.94	19.09	10.53	.47	2.36 x .31	3.94 x 1.97	
	457	18.28	18	585	519	523	286,5	12	60 x 8	100 x 50	
	407			23.03	20.43	20.59	11.28	.47	2.36 x .31	3.94 x 1.97	
	508	20.32	20	630	570	574	312	12	60 x 8	100 x 50	
500				24.80	22.44	22.60	12.28	.47	2.36 x .31	3.94 x 1.97	
	521	20.84		640	583	587	319	12	60 x 8	100 x 50	
				25.20	22.96	23.11	12.56	.47	2.36 x .31	3.94 x 1.97	

 $\label{thm:linear_equal} \textbf{Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.}$ 



## Flat Steel U-Bolt with Plastic Pipe Saddle (Short) and U-Profile (To be used as Fixed Point Clamps only) Type FB+RUK





## Plastic Pipe Saddle (type RUK)

(For size DN 40, dimension L4 is staggered by 90°)

**Hexagon Head Bolt AS** (according to DIN EN ISO 4014 / 4017)

(For	size DN 40	), dimensio	n L4 is sta	(according to DIN EN ISO 4014 / 4017)								
Diameter Nominal	Outside Pipe / Tu	Diameter be	Nominal Bore	Dimen	Dimensions ( <sup>mm</sup> / <sub>in</sub> )  Hexagon Head Bolt							
DN (mm) (in) Pipe (in)			Plastic Pipe Saddle (type RUK) L3 L4 B3 D2 H5 H6 H7							(DIN EN ISO 4014 / 4017) Thread G x L		
40	40.0	1.00	1.1/0	24	25	35	8	5	8	5	M10 10	
40	48,3	1.93	1-1/2	.94	.98	1.38	.31	.20	.31	.20	M10 x 40	
	57	2.28		38	25	50	10	5	10	6	M10 x 40	
50	37	2.20		1.50	.98	1.97	.39	.20	.39	.24	W110 X 40	
30	60,3	2.41	2	38	25	50	10	5	10	6	M10 x 40	
	00,5	2.41		1.50	.98	1.97	.39	.20	.39	.24	W110 X 40	
65	76,1	3.04	2-1/2	38	25	50	10	5	10	6	M10 x 40	
00	70,1	0.01	2 1/2	1.50	.98	1.97	.39	.20	.39	.24	INTO X TO	
80	88,9	3.56	3	75	40	70	15	8	17	10	M 12 x 55	
	,-		_	2.95	1.57	2.76	.59	.31	.67	.39		
	108	4.32		75	40	70	15	8	17	10	M 12 x 55	
100				2.95	1.57	2.76	.59	.31	.67	.39		
	114,3	4.57	4	75	40	70	15	8	17	10	M 12 x 55	
				2.95	1.57	2.76	.59	.31	.67	.39		
	133	5.32		75	40	70	15	8	17	10	M 12 x 55	
125				2.95	1.57	2.76	.59	.31	.67	.39		
	139,7	5.59	5	75	40	70	15	8	17	10	M 12 x 55	
				2.95	1.57	2.76	.59	.31	.67	.39		
	159	6.36		140	90	75	25	8	26	10	M 16 x 75	
150				5.51	3.54	2.95	.98	.31	1.02	.39		
	168,3	6.73	6	140	90	75	25	.31	26	10	M 16 x 75	
				5.51	3.54	2.95	.98		1.02	.39		
175	193,7	7.75		140	90	75	25	8	26 1.02	10	M 16 x 75	
				5.51	3.54 90	2.95 75	.98 25	.31	26	.39		
	216	8.64		5.51	3.54	2.95	.98	.31	1.02	.39	M 16 x 75	
200				140	90	75	25	8	26	10		
	219,1	8.76	8	5.51	3.54	2.95	.98	.31	1.02	.39	M 16 x 75	
				140	90	75	25	8	26	10		
	267	10.68		5.51	3.54	2.95	.98	.31	1.02	.39	M 20 x 80	
250				140	90	75	25	8	26	10		
	273	10.92	10	5.51	3.54	2.95	.98	.31	1.02	.39	M 20 x 80	
				220	150	75	30	8	32	10		
	318	12.72		8.66	5.91	2.95	1.18	.31	1.26	.39	M 20 x 80	
300		10.55	40	220	150	75	30	8	32	10	1100 00	
	323,9	12.96	12	8.66	5.91	2.95	1.18	.31	1.26	.39	M 20 x 80	
	055.0	44.00	44	220	150	75	30	8	32	10	M 04 400	
050	355,6	14.22	14	8.66	5.91	2.95	1.18	.31	1.26	.39	M 24 x 100	
350	000	14.70		220	150	75	30	8	32	10	M 04 ·· 100	
	368	14.72		8.66	5.91	2.95	1.18	.31	1.26	.39	M 24 x 100	
	406.4	16.06	16	220	150	75	30	8	32	10	M 24 v 100	
	406,4	16.26	16	8.66	5.91	2.95	1.18	.31	1.26	.39	M 24 x 100	
400	419	16.76		220	150	75	30	8	32	10	M 24 v 100	
400	419	16.76		8.66	5.91	2.95	1.18	.31	1.26	.39	M 24 x 100	
	457	18.28	18	220	150	75	30	8	32	10	M 24 v 100	
	457	10.20	10	8.66	5.91	2.95	1.18	.31	1.26	.39	M 24 x 100	
	508	20.32	20	220	150	75	30	8	32	10	M 24 x 100	
500	300	20.32	20	8.66	5.91	2.95	1.18	.31	1.26	.39	IVI 24 X 100	
300	521	20.84		220	150	75	30	8	32	10	M 24 x 100	
	321	20.04		8.66	5.91	2.95	1.18	.31	1.26	.39	111 LT A 100	



Flat Steel U-Bolt	*FB-*A-48.3-*W1
* Flat Steel U-Bolt	FB

**Ordering Codes** 

\* Exact outside diameter Ø D1 (mm) A-48.3

\* Material code Carbon Steel, uncoated W1 Carbon Steel, zinc-plated, W32

blue-chromated Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

only Plastic Pipe Saddle \*RUK-\*48.3-\*PP

\* Plastic Pipe Saddle (Short) RUK \* Exact outside diameter Ø D1 (mm) 48.3

\* Material of Pipe Saddle (see below) PP

Please note: All items are supplied assembled.

#### **Standard Materials for Plastic Pipe Saddles**



#### Polypropylene Colour: Green

Material code: PP



Colour: Black Material code: PA

See pages 178 / 179 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

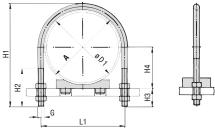
## **Applications**

- Standing or hanging installation of pipes and tubes on beams, profiles and consoles
- Design with two threaded ends allows for ideal adaptation to suit the exact outer diameter of the pipe or tube

# STAUFF®

# Round Steel U-Bolt with Plastic Pipe Saddle (Short) Type RB+RUK





Recommended Installation <DN25

Round Steel U-Bolt (type RB) with Plastic Pipe Saddle (type RUK)

Recommended Installation >DN25

## **Ordering Codes**

#### Clamp Assembly \*RB+RUK-\*48.3-\*PP-\*W1

One clamp assembly is consisting of one Round Steel U-Bolt (type RB), one Plastic Pipe Saddle (type RUK) and four Nuts (to DIN EN ISO 4032).

* Clamp Assembly (as listed above) RB-										
	* Exact outside diar	48.3								
	* Material of Pipe Saddle (see below)									
		Carbon Steel, uncoated Carbon Steel, zinc-plated, blue-chromated	W1 W32							
		Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 31	6 Ti) <b>W5</b>							

Please note: All items are supplied non-assembled.

#### **Standard Materials for Plastic Pipe Saddles**



Polypropylene Colour: Green Material code: PP



Polyamide Colour: Black Material code: PA

See pages 178 / 179 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

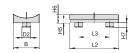
#### **Applications**

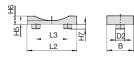
- Standing or hanging installation of pipes and tubes on beams, profiles and consoles
- Design with two threaded ends allows for ideal adaptation to suit the exact outer diameter of the pipe or tube

			Nominal Bore	Dimensions (mm/in)							
	Ø D1		Pipe			t (Type RB)		110		TI 10	
DN	(mm)	(in)	(in)	Α	L1	H1	H2	H3	H4	Thread G	
	25	.98		30	1.57	73,5 2.89	1.61	30 1.18	17,5 .69	M10	
20				1.18	40	73,5	41	30	18,5		
	26,9	1.06	3/4		1.57	2.89	1.61	1.18	.73	M10	
	30	1.18			48	81	48	30	20	M10	
25	30	1.10		38	1.89	3.19	1.89	1.18	.79	IVITO	
20	33,7	1.33	1	1.50	48	81	48	30	22	M10	
	,				1,89	3,19	1,89	1,18	.87		
	38	1.50		46	56 2.20	89 3.50	1.89	30 1.18	.94	M10	
32				1.81	56	89	48	30	26,2		
	42,4	1.69	1-1/4		2.20	3.50	1.89	1.18	1.03	M10	
	44,5	1.76			62	100	55	35	27,2	M10	
40	44,3	1.70		52	2.44	3.94	2.17	1.38	1.07	IVITO	
	48,3	1.90	1-1/2	2.05	62	100	55	35	29	M10	
					2.44 76	3.94	2.17 63	1.38	1.14		
	57	2.28		64	2.99	4.65	2.48	1.54	33,5 1.32	M12	
50				2.52	76	118	63	39	35,2		
	60,3	2.41	2	2.02	2.99	4.65	2.48	1.54	1.39	M12	
65	76,1	3.04	2-1/2	82	94	135	77	39	43	M12	
00	70,1	3.04	2-1/2	3.23	3.70	5.31	3.03	1.54	1.69	IVITZ	
80	88,9	3.56	3	94	106	152	82	41	52,5	M12	
	,-			3.70	4.17	5.98	3.23	1.61	2.07	2	
	108	4.32		120	136 5.35	190 7.48	105 4.13	49 1.93	62 2.44	M16	
100				4.72	136	190	105	49	65		
	114,3	4.57	4	2	5.35	7.48	4.13	1.93	2.56	M16	
	100	E 20			164	217	105	49	74,5	M16	
125	133	5.32		148	6.46	8.54	4.13	1.93	2.93	IVITO	
120	139,7	5.59	5	5.83	164	217	105	49	78	M16	
	,				6.46	8.54	4.13	1.93	3.07	-	
	159	6.36		176	192 7.56	247 9.72	105 4.13	51 2.01	87,5 3.44	M16	
150				6.93	192	247	105	51	92		
	168,3	6.73	6		7.56	9.72	4.13	2.01	3.62	M16	
175	193,7	7.75		202	218	273	105	51	105	M16	
175	133,7	1.10		7.96	8.58	10.75	4.13	2.01	4.13	IVITO	
	216	8.64		000	248	311	125	59	116	M20	
200				<b>228</b> 8.98	9.76 248	12.24 311	4.92 125	2.32 59	4.57 117,5		
	219,1	8.76	8	0.30	9.76	12.24	4.92	2.32	4.63	M20	
	007	40.00			303	364	125	59	141,5	1400	
250	267	10.68		282	11.93	14.33	4.92	2.32	5.57	M20	
250	273	10.92	10	11.10	302	364	125	59	144,5	M20	
	2.0	10.02	10		11.89	14.33	4.92	2.32	5.69	WIEG	
	318	12.72		000	352	418	125	62	167	M20	
300				<b>332</b> 13.07	13.86 352	16.46 418	4.92 125	2.44 62	6.57 170		
	323,9	12.96	12	10.07	13.86	16.46	4.92	2.44	6.69	M20	
	055.0	44.00	4.4		402	475	145	70	186	1404	
350	355,6	14.22	14	378	15.83	18.70	5.71	2.76	7.32	M24	
330	368	14.72		14.88	402	475	145	70	192	M24	
	300	2			15.83	18.70	5.71	2.76	7.56		
	406,4	16.26	16	120	452	526	145	70	211	M24	
400				<b>428</b> 16.85	17.80 452	20.71 526	5.71 145	2.76 70	8.31 217,5		
	419	16.76		10.00	17.80	20.71	5.71	2.76	8.56	M24	
	500	20.22	20		554	627	145	70	262	MOA	
500	508	20.32	20	530	21.81	24.69	5.71	2.76	10.31	M24	
	521	20.84		20.87	554	627	145	70	269	M24	
					21.81	24.69	5.71	2.76	10.59		



## **Round Steel U-Bolt with Plastic Pipe Saddle (Short)** Type RB+RUK





#### Plastic Pipe Saddle (type RUK) (For sizes DN 20 to DN 40)

Plastic Pipe Saddle (type RUK) (From size DN 50 on)

	(F	or sizes DN	I 20 to DN 4	(From size DN 50 on)									
Diameter Nominal	Outside Pipe / T	Diameter ube	Nominal Bore	Dimens	Dimensions (mm/ <sub>in</sub> )								
	Ø D1		Pipe	Plastic Pipe Saddle (Type RUK)									
DN	(mm)	(in)	(in)	Α	L2	L3	В	H5	Н6	H7	D2		
	25	.98			35	25	24	5	8	5	8		
20				30	1.38	.98	.94	.20	.31	.20	.31		
	26,9	1.06	3/4	1.18	35	.98	.94	.20	.31	.20	8		
					1.38	25	24	5	8	5	.31		
	30	1.18		38	1.38	.98	.94	.20	.31	.20	.31		
25				1.50	35	25	24	5	8	5	8		
	33,7	1.33	1		1.38	.98	.94	.20	.31	.20	.31		
	20	1.50			35	25	24	5	8	5	8		
32	38	1.50		46	1.38	.98	.94	.20	.31	.20	.31		
02	42,4	1.69	1-1/4	1.81	35	25	24	5	8	5	8		
	12,1	1.00	, .		1.38	.98	.94	.20	.31	.20	.31		
	44,5	1.76		F0	35	25	24	5	8	5	8		
40				52	1.38 35	.98	.94 24	.20 5	.31	.20	.31		
	48,3	1.90	1-1/2	2.05	1.38	.98	.94	.20	.31	.20	.31		
					38	25	50	5	10	6	10		
50	57	2.28		64	1.50	.98	1.97	.20	.39	.24	.39		
50	60.2	2.41	2	2.52	38	25	50	5	10	6	10		
	60,3	2.41	2		1.50	.98	1.97	.20	.39	.24	.39		
65	76,1	3.04	2-1/2	82	38	25	50	5	10	6	10		
00	70,1	0.04	2 1/2	3.23	1.50	.98	1.97	.20	.39	.24	.39		
80	88,9	3.56	3	94	75	40	70	8	17	10	15		
	/ -	1	-	3.70	2.95	1.57	2.76	.31	.67	.39	.59		
	108	4.32		120	75 2.95	1.57	70 2.76	.31	.67	.39	.59		
100				4.72	75	40	70	8	17	10	15		
	114,3	4.57	4	7.72	2.95	1.57	2.76	.31	.67	.39	.59		
					75	40	70	8	17	10	15		
105	133	5.32		148	2.95	1.57	2.76	.31	.67	.39	.59		
125	120.7	5.50	5	5.83	75	40	70	8	17	10	15		
	139,7	5.59	3		2.95	1.57	2.76	.31	.67	.39	.59		
	159	6.36			140	90	75	8	26	10	25		
150				176	5.51	3.54	2.95	.31	1.02	.39	.98		
	168,3	6.73	6	6.93	140	90	75	8	26	10	25		
				202	5.51	3.54 90	2.95 75	.31	1.02	.39	.98 25		
175	193,7	7.75		7.96	5.51	3.54	2.95	.31	1.02	.39	.98		
				7.50	140	90	75	8	26	10	25		
000	216	8.64		228	5.51	3.54	2.95	.31	1.02	.39	.98		
200	210.1	0.76	0	8.98	140	90	75	8	26	10	25		
	219,1	8.76	8		5.51	3.54	2.95	.31	1.02	.39	.98		
	267	10.68			140	90	75	8	26	10	25		
250	-01	10.00		282	5.51	3.54	2.95	.31	1.02	.39	.98		
	273	10.92	10	11.10	140	90	75	8	26	10	25		
					5.51	3.54	2.95	.31	1.02	.39	.98		
	318	12.72		332	220 8.66	150 5.91	75 2.95	.31	32 1.26	.39	30 1.18		
300				13.07	220	150	75	8	32	10	30		
	323,9	12.96	12	10.01	8.66	5.91	2.95	.31	1.26	.39	1.18		
	055.0	14.00	1.4		220	150	75	8	32	10	30		
250	355,6	14.22	14	378	8.66	5.91	2.95	.31	1.26	.39	1.18		
350	368	14.72		14.88	220	150	75	8	32	10	30		
	500	17.12			8.66	5.91	2.95	.31	1.26	.39	1.18		
	406,4	16.26	16	46-	220	150	75	8	32	10	30		
400	,.			428	8.66	5.91	2.95	.31	1.26	.39	1.18		
	419	16.76		16.85	220	150	75	8	32	10	30		
					8.66 220	5.91 150	2.95 75	.31	1.26	.39	1.18		
	508	2.32	20	530	8.66	5.91	2.95	.31	1.26	.39	1.18		
500		1		2.87	220	150	75	8	32	10	30		
	521	2.84		2.07	8.66	5.91	2.95	.31	1.26	.39	1.18		



## **Ordering Codes**

#### Round Steel U-Bolt \*RB-\*A-52-\*W1-\*COMPL

One Round Steel U-Bolt (type RB) inlcludes four Nuts (to DIN EN ISO 4032).

* Round Steel U-Bolt	RE

\* Dimension A (mm) A-52

\* Material code Carbon Steel, uncoated Carbon Steel, zinc-plated,

W32 blue-chromated

Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

#### only Plastic Pipe Saddle \*RUK-\*48.3-\*PP

\* Plastic Pipe Saddle (Short) RUK

\* Exact outside diameter Ø D1 (mm) 48.3 \* Material of Pipe Saddle (see below) PP

#### **Standard Materials for Plastic Pipe Saddles**



Colour: Green Material code: PP



See pages 178 / 179 for material properties and technical informa-

Alternative materials are available upon request. Please contact STAUFF for further information.

#### **Applications**

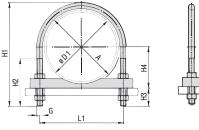
- Standing or hanging installation of pipes and tubes on beams, profiles and consoles
- Design with two threaded ends allows for ideal adaptation to suit the exact outer diameter of the pipe or tube

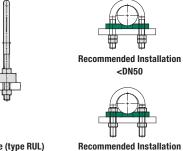


>DN50

## **Round Steel U-Bolt with Plastic Pipe Saddle (Long)** Type RB+RUL







Round Steel U-Bolt (type RB) with Plastic Pipe Saddle (type RUL)

## **Ordering Codes**

#### **Clamp Assembly** \*RB+RUL-\*48.3-\*PP-\*W1

One clamp assembly is consisting of one Round Steel U-Bolt (type RB), one Plastic Pipe Saddle (type RUL) and four Nuts (to DIN EN ISO 4032).

* Clamp Assembly (as listed above) RB+RU									
	* Exact outside diameter Ø D1 (mm) 48.3								
* Material of Pipe Saddle (see below)									
	* Material code Carbon Steel, uncoated W1 Carbon Steel, zinc-plated, blue-chromated W32								
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) <b>W5</b>								
	Please note: All items are supplied non-assembled.								

#### **Standard Materials for Plastic Pipe Saddles**



Polypropylene Colour: Green Material code: PP



Polyamide Colour: Black Material code: PA

See pages 178 / 179 for material properties and technical informa-

Alternative materials are available upon request. Please contact STAUFF for further information.

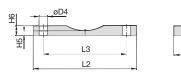
## **Applications**

- Standing or hanging installation of pipes and tubes on beams, profiles and consoles
- Design with two threaded ends allows for ideal adaptation to suit the exact outer diameter of the pipe or tube

Diamotor	Outoido	Diamotor	Nominal	owing! Discouring (mm/ )							
Diameter Nominal	Nominal Pipe / Tube		Bore	, · · ,							
DN	Ø D1 (mm)	(in)	Pipe (in)	Round S	teel U-Bol	t (Type RB H1	) H2	Н3	H4	Thread G	
	25	.98			40	73,5	41	30	17,5	M10	
20				<b>30</b>	1.57	2.89 73,5	1.61	1.18	.69 18.5	1	
	26,9	1.06	3/4	1.10	1.57	2.89	1.61	1.18	.73	M10	
	30	1.18			48	81	48	30	20	M10	
25				<b>38</b> 1.50	1.89	3.19	1.89	1.18	.79 22		
	33,7	1.33	1	1.00	1.89	3.19	1.89	1.18	.87	M10	
	38	1.50		40	56	89	48	30	24	M10	
32				<b>46</b> 1.81	2.20 56	3.50 89	1.89	1.18	.94 26,2		
	42,4	1.69	1-1/4		2.20	3.50	1.89	1.18	1.03	M10	
	44,5	1.76		F0	62	100	55	35	27,2	M10	
40				<b>52</b> 2.05	2.44 62	3.94 100	2.17 55	1.38	1.07		
	48,3	1.90	1-1/2		2.44	3.94	2.17	1.38	1.14	M10	
	57	2.28		64	76 2.99	118 4.65	63 2.48	39	33,5 1.32	M12	
50				<b>64</b> 2.52	76	118	63	1.54	35,2		
	60,3	2.41	2		2.99	4.65	2.48	1.54	1.39	M12	
65	76,1	3.04	2-1/2	<b>82</b> 3.23	94 3.70	135	77	39	43	M12	
				94	106	5.31 152	3.03 82	1.54	1.69 54,5		
80	88,9	3.56	3	3.70	4.17	5.98	3.23	1.54	2.15	M12	
	108	4.32		100	136	190	105 4.13	47	64 2.52	M16	
100				<b>120</b> 4.72	5.35 136	7.48	105	1.85	67		
	114,3	4.57	4		5.35	7.48	4.13	1.85	2.64	M16	
	133	5.32		148	164 6.46	217 8.54	105 4.13	1.85	76,5 3.01	M16	
125		5 50	_	5.83	164	217	105	47	80	1110	
	139,7	5.59	5		6.46	8.54	4.13	1.85	3.15	M16	
	159	6.36		176	192 7.56	247 9.72	105 4.13	47 1.85	91,5 3.60	M16	
150	100.0	0.70		6.93	192	247	105	47	96	1440	
	168,3	6.73	6		7.56	9.72	4.13	1.85	3.78	M16	
175	193,7	7.75		<b>202</b> 7.96	218 8.58	273 10.75	105 4.13	47 1.85	109 4.29	M16	
	016	0.64		7.30	248	311	125	55	120	MOO	
200	216	8.64		228	9.76	12.24	4.92	2.17	4.72	M20	
	219,1	8.76	8	8.98	9.76	311 12.24	125 4.92	55 2.17	121,5 4.78	M20	
	267	10.68			303	364	125	55	145,5	M20	
250	207	10.00		282	11.93	14.33	4.92	2.17	5.73	IVIZU	
	273	10.92	10	11.10	302 11.89	364 14.33	125 4.92	55 2.17	148,5 5.85	M20	
	318	12.72			352	418	125	55	174	M20	
300	310	12.72		332	13.86	16.46	4.92	2.17	6.85	IVIZU	
	323,9	12.96	12	13.07	352 13.86	418 16.46	125 4.92	55 2.17	177 6.97	M20	
	355,6	14.22	14		402	475	145	63	193	M24	
350	333,0	14.22	14	378	15.83	18.70	5.71	2.48	7.60	IVIZ4	
	368	14.72		14.88	402 15.83	475 18.70	145 5.71	63 2.48	199 7.83	M24	
	406,4	16.26	16		452	526	145	63	218	M24	
400	100,4	10.20	10	<b>428</b>	17.80	20.71	5.71	2.48	8.58		
	419	16.76		16.85	452 17.80	526 20.71	145 5.71	63 2.48	224,5 8.84	M24	
	508	20.32	20		554	627	145	63	269	M24	
500	300	20.02		530	21.81	24.69	5.71	2.48	10.59		
	521	20.84		20.87	554 21.81	627 24.69	145 5.71	63 2.48	276 10.87	M24	



# Round Steel U-Bolt with Plastic Pipe Saddle (Long) Type RB+RUL



#### Plastic Pipe Saddle (type RUL)

Diameter Nominal		Diameter	Nominal Bore	Dimensions (mm/n)							
	Pipe / Tube Ø D1		Pipe	Plastic F	Plastic Pipe Saddle (Type RUL)						
DN	(mm)	(in)	(in)	Α	L2	L3	В	H5	H6	Ø D4	
	25	.98			75	40	30	5	12	11	
20				30	2.95	1.57	1.18	.20	.47	.43	
	26,9	1.06	3/4	1.18	75 2.95	1.57	30 1.18	.20	.47	.43	
					80	48	30	5	12	11	
	30	1.18		38	3.15	1.89	1.18	.20	.47	.43	
25				1.50	80	48	30	5	12	11	
	33,7	1.33	1	1.00	3.15	1.89	1.18	.20	.47	.43	
	00	4.50			90	56	30	5	12	11	
32	38	1.50		46	3.54	2.20	1.18	.20	.47	.43	
32	42,4	1.69	1-1/4	1.81	90	56	30	5	12	11	
	42,4	1.03	1-1/4		3.54	2.20	1.18	.20	.47	.43	
	44,5	1.76			95	62	35	5	15	11	
40	,0	1.70		52	3.74	2.44	1.38	.20	.59	.43	
	48,3	1.90	1-1/2	2.05	95	62	35	5	15	11	
	-				3.74	2.44	1.38	.20	.59	.43	
	57	2.28		64	110	76	35	5	15	14	
50				<b>64</b> 2.52	4.33	2.99 76	1.38	.20	.59 15	.55 14	
	60,3	2.41	2	2.02	4.33	2.99	1.38	.20	.59	.55	
				82	135	94	35	5	15	14	
65	76,1	3.04	2-1/2	3.23	5.31	3.70	1.38	.20	.59	.55	
				94	145	106	40	10	20	14	
30	88,9	3.56	3	3.70	5.71	4.17	1.57	.39	.79	.55	
	100	4.00			190	136	40	10	20	18	
100	108	4.32		120	7.48	5.35	1.57	.39	.79	.71	
100	11/1 2	1.57	4	4.72	190	136	40	10	20	18	
	114,3	4.57	4		7.48	5.35	1.57	.39	.79	.71	
	133	5.32			220	164	40	10	20	18	
125	100	0.02		148	8.66	6.46	1.57	.39	.79	.71	
120	139,7	5.59	5	5.83	220	164	40	10	20	18	
	,.	0.00			8.66	6.46	1.57	.39	.79	.71	
	159	6.36		470	250	192	50	12	25	18	
150				<b>176</b> 6.93	9.84	7.56	1.97 50	.47	.98	.71	
	168,3	6.73	6	0.93	250 9.84	7.56	1.97	.47	.98	.71	
				202	270	218	50	12	25	18	
175	193,7	7.75		7.96	10.63	8.58	1.97	.47	.98	.71	
				7.00	315	248	50	12	25	22	
200	216	8.64		228	12.40	9.76	1.97	.47	.98	.87	
200	010.1	0.70	0	8.98	315	248	50	12	25	22	
	219,1	8.76	8		12.40	9.76	1.97	.47	.98	.87	
	267	10.69			370	302	50	12	25	22	
250	267	10.68		282	14.57	11.89	1.97	.47	.98	.87	
_00	273	10.92	10	11.10	370	302	50	12	25	22	
		10.02	10		14.57	11.89	1.97	.47	.98	.87	
	318	12.72			420	352	60	15	30	22	
300				332	16.54	13.86	2.36	.59	1.18	.87	
	323,9	12.96	12	13.07	420	352	60	15	30	22	
					16.54	13.86 402	2.36	.59	1.18	.87	
	355,6	14.22	14	378	480 18.90	15.83	2.36	.59	30 1.18	26 1.02	
350				14.88	480	402	60	15	30	26	
	368	14.72		14.00	18.90	15.83	2.36	.59	1.18	1.02	
					540	452	60	15	30	26	
	406,4	16.26	16	428	21.26	17.80	2.36	.59	1.18	1.02	
400				16.85	540	452	60	15	30	26	
	419	16.76			21.26	17.80	2.36	.59	1.18	1.02	
	500	00.00	00		640	554	60	15	30	26	
500	508	20.32	20	530	25.20	21.81	2.36	.59	1.18	1.02	
500	521	20.04		20.87	640	554	60	15	30	26	
	521	20.84			25.20	21.81	2.36	.59	1.18	1.02	



Ordering Codes  Round Steel U-Bolt*RB-*A-52-*W1-*COMPL								
One Round Steel U-Bolt (type RB) inlcludes four Nuts (to DIN EN ISO 4032).								
* Round Steel U-Bolt RB								
* Dimension A (mm) A-52								
* Material code Carbon Steel, uncoated W1 Carbon Steel, zinc-plated, blue-chromated W32								
Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) <b>W5</b>								
only Plastic Pipe Saddle *RUL-*48.3-*PP								
* Plastic Pipe Saddle (Long) RUL								
* Exact outside diameter Ø D1 (mm) 48.3								
* Material of Pipe Saddle (see below) PP								

#### **Standard Materials for Plastic Pipe Saddles**

# Polypropylene Colour: Green Material code: PP



See pages 178 / 179 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

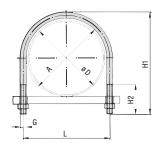
#### **Applications**

- Standing or hanging installation of pipes and tubes on beams, profiles and consoles
- Design with two threaded ends allows for ideal adaptation to suit the exact outer diameter of the pipe or tube



## **Round Steel U-Bolt (without Plastic Pipe Saddle)** Type RBD (DIN 3570, Type A)





Round Steel U-Bolt (type RBD)

## **Ordering Codes**

Clamp Assembly \*RBD-\*A-30-\*W1-\*COMPL

One clamp assembly is consisting of one Round Steel U-Bolt (type RBD according to DIN 3570, Type A) and two Nuts  $\,$ (to DIN EN ISO 4032).

* Clamp Assembly (as listed above) RBD						
★ Dimension A (mm)						
* Material code	Carbon Steel, uncoated Carbon Steel, zinc-plated, blue-chromated	W1 W32				
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 T	<b>W5</b>				
Please note: All ite	ems are supplied non-assembled.					

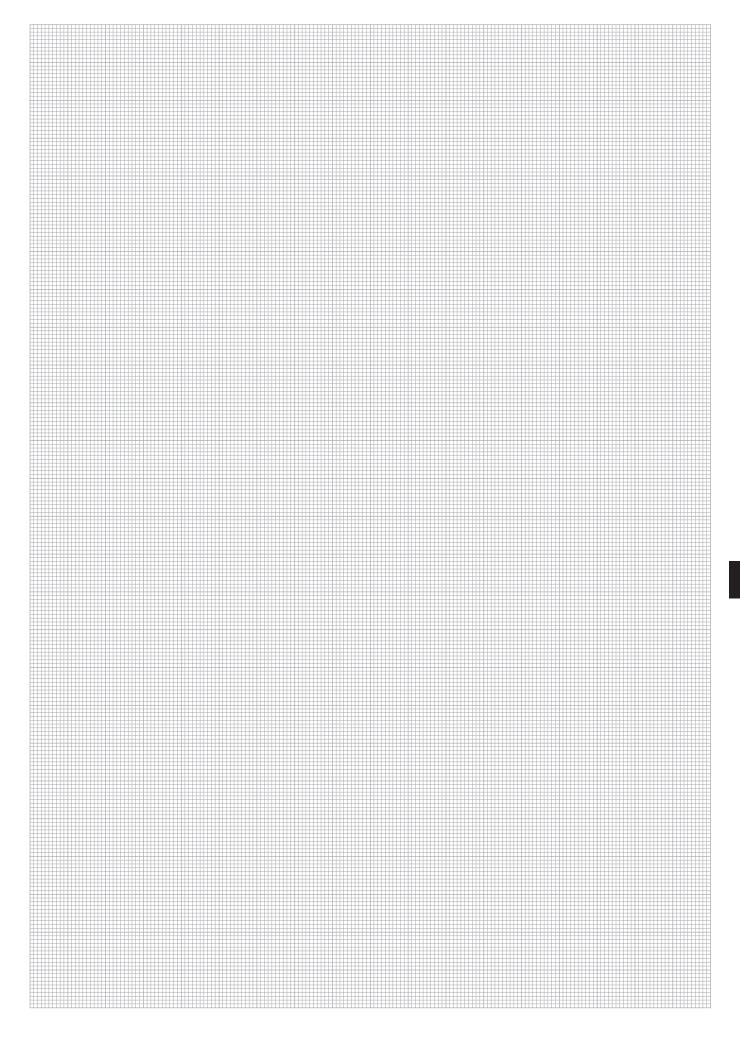
#### **Applications**

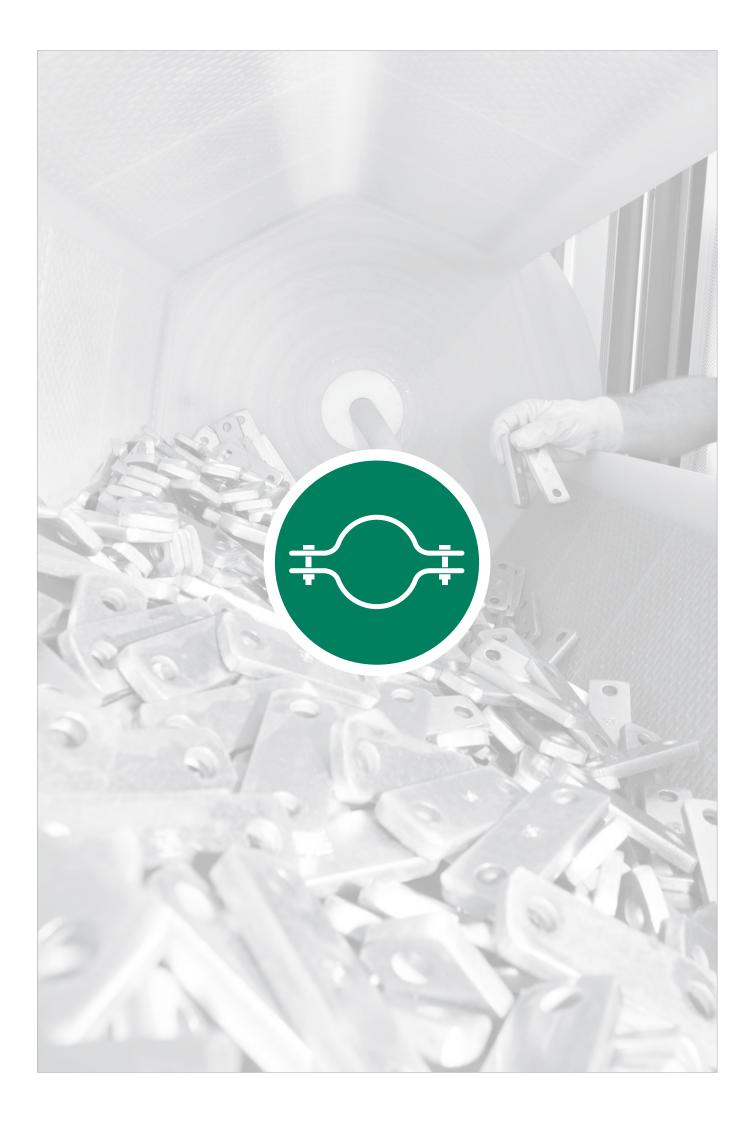
- Standing or hanging installation of pipes and tubes on beams, profiles and consoles
- Design with two threaded ends allows for ideal adaptation to suit the exact outer diameter of the pipe or tube

				Round Ste	el U-Bolt (type	кви)				
Diameter Nominal	Outside   Pipe / Tu		Nominal Bore	Dimensions (mm/in)						
Wollina	Ø D1	DC	Pipe Round Steel U-Bolt (Type RBD)							
DN	(mm)	(in)	(in)	Α	L	H1	H2	Thread G		
	25	.98			40	70	40	M10		
20		.00		1 10	1.57	2.76	1.57			
	26,9	1.06	3/4	1.18	1.57	70 2.76	1.57	M10		
	00	4.40			48	76	40	140		
25	30	1.18		38	1.89	2.99	1.57	M10		
23	33,7	1.33	1	1.50	48	76	40	M10		
	,				1,89	2.99 86	1.57	-		
	38	1.50		46	56 2.20	3.39	1.97	M10		
32	40.4	1.00	1 1/4	1.81	56	86	50	M40		
	42,4	1.69	1-1/4		2.20	3.39	1.97	M10		
	44,5	1.76			62	92	50	M10		
40				<b>52</b> 2.05	2.44 62	3.62 92	1.97 50			
	48,3	1.90	1-1/2	2.00	2.44	3.62	1.97	M10		
	57	2.28			76	109	50	M12		
50	31	2.20		64	2.99	4.29	1.97	IVITZ		
	60,3	2.41	2	2.52	76	109	50	M12		
				82	2.99 94	4.29 125	1.97			
65	76,1	3.04	2-1/2	3.23	3.70	4.92	1.97	M12		
80	88,9	3.56	3	94	106	138	50	M12		
00	00,9	3.30	3	3.70	4.17	5.43	1.97	IVITZ		
	108	4.32		100	136	171	60	M16		
100				<b>120</b> 4.72	5.35	6.73 171	2.36			
	114,3	4.57	4	1.72	5.35	6.73	2.36	M16		
	133	5.32			164	191	60	M16		
125	133	0.02		148	6.46	7.52	2.36	IVITO		
120	139,7	5.59	5	5.83	164	191	60	M16		
					6.46 192	7.52 217	2.36			
450	159	6.36		176	7.56	8.54	2.36	M16		
150	168,3	6.73	6	6.93	192	217	60	M16		
	100,5	0.73	U		7.56	8.54	2.36	IVITO		
175	193,7	7.75		7.06	218	249	2.36	M16		
				7.96	8.58 248	9.80	70			
000	216	8.64		228	9.76	11.14	2.76	M20		
200	219,1	8.76	8	8.98	248	283	70	M20		
	210,1	0.70	0		9.76	11.14	2.76	IVIZO		
	267	10.68		282	303 11.93	334 13.15	70 2.76	M20		
250	070	40.00	40	11.10	302	334	70	1400		
	273	10.92	10		11.89	13.15	2.76	M20		
	318	12.72			352	385	70	M20		
300				332	13.86	15.16	2.76			
	323,9	12.96	12	13.07	352 13.86	385 15.16	70 2.76	M20		
	055.0	14.00	4.4		402	435	70	MOA		
350	355,6	14.22	14	378	15.83	17.13	2.76	M24		
330	368	14.72		14.88	402	435	70	M24		
		2			15.83	17.13	2.76			
	406,4	16.26	16	428	452 17.80	487 19.17	70 2.76	M24		
400	410	10.70		16.85	452	487	70	1404		
	419	16.76			17.80	19.17	2.76	M24		
	508	20.32	20		554	589	70	M24		
500				20.87	21.81	23.19	2.76			
	521	20.84		20.87	554 21.81	589 23.19	70 2.76	M24		











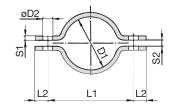




# **Metal Pipe Clamp with Tension Clearance (DIN 3567-A)**

Two-Bolt Design







## **Ordering Codes**

#### Metal Pipe Clamp \*DIN3567-A\*-20\*-W1

One metal pipe clamp is consisting of two clamp halves. Hexagon head bolts and nuts are not included.

* Metal Pipe Clam	DIN3567-A	
* STAUFF Group (	20	
* Material code	Carbon Steel, uncoated	W1
	Carbon Steel, hot-dip galvar	nised W40
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 /	316 Ti) <b>W5</b>

## Clamp Assembly \*DIN3567-A\*-20\*-W1\*-COMPL

One clamp assembly is consisting of two clamp halves, two hexagon head bolts and two hexagon head nuts.

* Metal Pipe Clan	np to DIN 3567, type A	DIN3567-A
* STAUFF Group (	Ø D1)	20
* Material code	Carbon Steel, uncoated	W1
	Carbon Steel, hot-dip galvan	ised W40
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 /	316 Ti) <b>W5</b>

* Clamp assembly with bolts and nuts	COMPL
Please note: All items are supplied non-assembled.	

#### **Applications**

• Installation of pipes, tubes and other construction elements on beams, profiles and consoles

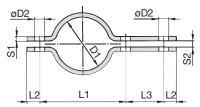
STAUFF Group	Nominal Size		Dimensi	ons ( <sup>mm</sup> /in)	Accessories				
Ø D1	(mm)	Pipe (in)	L1	L2	S1	S2	D2	B1	Hexagon Head Bolts (Hexagon Head Nuts)
	(111111)	(111)	57	15	5	7	11.5	30	(Hexagon Head Nuts)
20	15		2.24	.59	.20	.28	.45	1.18	
22	15		59	15	5	7	11.5	30	
			2.32	.59	.20	.28	.45	1.18	
25			62 2.44	.59	.20	.28	11.5 .45	30 1.18	
	20		66	15	5	7	11.5	30	
27		3/4	2.60	.59	.20	.28	.45	1.18	
30			68	15	5	7	11.5	30	M10 x 30
	25		2.68	.59	.20	.28	.45	1.18	(M10)
34		1	72 2.83	.59	.20	.28	11.5 .45	30 1.18	3/8–16 UNC x 1-1/4 (3/8–16 UNC)
			76	15	5	7	11.5	30	(6/6 16 6/16)
38	32		2.99	.59	.20	.28	.45	1.18	
43	32	1-1/4	82	15	5	7	11.5	30	
		, .	3.23	.59	.20	.28	.45	1.18	
45			84 3.31	.59	.20	.28	.45	30 1.18	
	40		88	15	5	7	11.5	30	
49		1-1/2	3.46	.59	.20	.28	.45	1.18	
57			104	18	6	9	14	40	
37	50		4.09	.71	.24	.35	.55	1.57	
61		2	108 4.25	.71	.24	.35	.55	40 1.57	M12 x 35 (M12)
			122	18	6	9	14	40	7/16–14 UNC x 1-3/8
77	65	2-1/2	4.80	.71	.24	.35	.55	1.57	(7/16–14 UNC)
89	80	3	136	18	6	9	14	40	
00	00	0	5.35	.71	.24	.35	.55	1.57	
108			172 6.77	.94	.31	.43	.71	50 1.97	
	100		178	24	8	11	18	50	
115		4	7.01	.94	.31	.43	.71	1.97	
133			196	24	8	11	18	50	
100	125		7.72	.94	.31	.43	.71	1.97	
140			204	.94	8	.43	18	50	140 45
			8.03	24	.31	11	.71 18	1.97	M16 x 45 (M16)
159	450		8.74	.94	.31	.43	.71	1.97	5/8–11 UNC x 1-3/4
169	150		232	24	8	11	18	50	(5/8–11 UNC)
109			9.13	.94	.31	.43	.71	1.97	
194	175		258	24	.31	11	.71	50	
			10.16	.94 24	8	.43	18	1.97	
216	000		11.02	.94	.31	.43	.71	1.97	
220	200		284	24	8	11	18	50	
220			11.18	.94	.31	.43	.71	1.97	
267			342	30	8	14	23	60	
	250		13.46 348	1.18	.31	.55 14	.91	2.36	
273			13.70	1.18	.31	.55	.91	2.36	M20 x 50
318			392	30	8	14	23	60	(M20)
310	300		15.43	1.18	.31	.55	.91	2.36	3/4-10 UNC x 2
324	555		398	30	8	14	23	60	(3/4-10 UNC)
			15.67 444	1.18	.31	.55 14	.91 23	2.36	
368	350		17.48	1.18	.31	.55	.91	2.36	
407			498	36	10	18	27	70	
407	400		19.61	1.42	.39	.71	1.06	2.76	M24 x 60
419	400		510	36	10	18	27	70	(M24)
			10.08	1.42 36	.39	.71	1.06	2.76	7/8–9 UNC 2-3/8 (7/8–9 UNC)
521	500		614 24.17	1.42	.39	.71	1.06	2.76	(170-3 0140)
			24.17	1.42	.00	1.1	1.00	2.70	

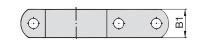




# **Metal Pipe Clamp with Tension Clearance (DIN 3567-B)**

Three-Bolt Design (Extended to One Side)







STAUFF Group	Nomina		Dimens	ions ( <sup>mm</sup> /i	1)					Accessories
Ø D1	(mm)	Pipe (in)	L1	L2	L3	S1	S2	D2	B1	Hexagon Head Bolts (Hexagon Head Nuts)
20			57	15	46	5	7	11.5	30	
	15		2.24 59	.59 15	1.81	.20	.28	.45 11.5	1.18	
22			2.32	.59	1.81	.20	.28	.45	1.18	
25			62	15	46	5	7	11.5	30	
	20		2.44	.59 15	1.81	.20 5	.28	.45 11.5	1.18	
27		3/4	2.60	.59	1.81	.20	.28	.45	1.18	
30			68 2.68	.59	46 1.81	.20	.28	.45	30 1.18	M10 x 30 (M10)
34	25	1	72	15	46	5	7	11.5	30	3/8–16 UNC x 1-1/4
34		1	2.83	.59	1.81	.20	.28	.45	1.18	(3/8–16 UNC)
38			76 2.99	.59	46 1.81	.20	.28	.45	30 1.18	
43	32	1-1/4	82	15	46	5	7	11.5	30	
70		1 1/4	3.23 84	.59 15	1.81	.20	.28	.45 11.5	1.18	
45	40		3.31	.59	1.81	.20	.28	.45	1.18	
49	40	1-1/2	88	15	46	5	7	11.5	30	
			3.46	.59 18	1.81	.20	.28	.45 14	1.18	
57	50		4.09	.71	2.13	.24	.35	.55	1.57	
61	30	2	108	18	54	6	9	14	40	M12 x 35
	0.5	0.470	4.25 122	.71 18	2.13	.24	.35	.55 14	1.57	(M12) 7/16–14 UNC x 1-3/8
77	65	2-1/2	4.80	.71	2.13	.24	.35	.55	1.57	(7/16-14 UNC)
89	80	3	136 5.35	.71	54 2.13	.24	.35	.55	1.57	
100			172	24	70	8	11	18	50	
108	100		6.77	.94	2.76	.31	.43	.71	1.97	
115		4	7.01	.94	70 2.76	.31	.43	.71	50 1.97	
133			196	24	70	8	11	18	50	
100	125		7.72 204	.94	2.76 70	.31	.43	.71 18	1.97	
140			8.03	.94	2.76	.31	.43	.71	1.97	M16 x 45
159			222	24	70	8	11	18	50	(M16)
	150		8.74 232	.94 24	2.76 70	.31	.43	.71 18	1.97 50	5/8–11 UNC x 1-3/4 (5/8–11 UNC)
169			9.13	.94	2.76	.31	.43	.71	1.97	(6/5 11 5/15)
194	175		258	24	70	8	11	18	50	
010			10.16 280	.94 24	2.76 70	.31 8	.43	.71 18	1.97 50	
216	200		11.02	.94	2.76	.31	.43	.71	1.97	
220			284 11.18	.94	70 2.76	.31	.43	.71	50 1.97	
267			342	30	86	8	14	23	60	
201	250		13.46	1.18	3.39	.31	.55	.91	2.36	
273			348 13.70	30 1.18	86 3.39	.31	.55	.91	60 2.36	M20 x 50
318			392	30	86	8	14	23	60	(M20)
	300		15.43 398	1.18	3.39 86	.31	.55	.91	2.36	3/4–10 UNC x 2 (3/4–10 UNC)
324			15.67	1.18	3.39	.31	.55	.91	2.36	(3, 1. 10 0110)
368	350		444	30	86	8	14	23	60	
			17.48 498	1.18	3.39	.31	.55 18	.91 27	2.36	
407	400		19.61	1.42	4.09	.39	.71	1.06	2.76	M24 x 60
419	400		510	36	104	10	18	27	70	(M24)
F04	500		10.08 614	1.42 36	4.09	.39	.71 18	1.06	2.76 70	7/8–9 UNC 2-3/8 (7/8–9 UNC)
521	500		24.17	1.42	4.09	.39	.71	1.06	2.76	

Ordering Codes										
Metal Pipe Clamp *DIN3567-B*-20*-W1										
One metal pipe clamp is consisting of two clamp halves. Hexagon head bolts and nuts are not included.										
* Metal Pipe Clan	np to DIN 3567, type B DIN3	567-B								
* STAUFF Group (	Ø D1)	20								
* Material code	Carbon Steel, uncoated	W1								
	Carbon Steel, hot-dip galvanised	W40								
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 T	<b>W5</b>								
Clamp Assem	bly *DIN3567-B*-20*-W1*-0	COMPL								
•	bly is consisting of two clamp halve ad bolts and three hexagon head nu									
* Metal Pipe Clan	np to DIN 3567, type B DIN3	567-B								
* STAUFF Group (	Ø D1)	20								
* Material code	Carbon Steel, uncoated	W1								
	Carbon Steel, hot-dip galvanised	W40								
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 T	<b>W5</b>								
* Clamp assembl	y with bolts and nuts	OMPL								
Please note: All ite	ems are supplied non-assembled.									

#### **Applications**

 Installation of pipes, tubes and other construction elements on beams, profiles and consoles

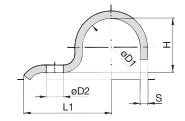


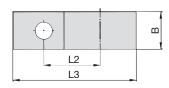


# **Heavy Saddle with Tension Clearance (DIN 1592)**

Single-Bolt Design







Ordering Codes									
Heavy Saddle	*DIN1592-*7-*W66								
* Heavy Saddle to DIN 1592 DIN1									
* STAUFF Group (	Ø D1) <b>7</b>								
* Material code	Carbon Steel, uncoated W1								
	Carbon Steel, zinc-plated and thick-film passivated W66								
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) <b>W5</b>								

## **Applications**

Installation of pipes, tubes, poles and other round components directly on the substrate (floor, wall or ceiling)

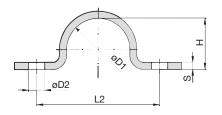
STAUFF Group	Diameter Range		Dimension	Dimensions ( <sup>mm</sup> / <sub>in</sub> )								
Ø D1	(mm)	(in)	L1	L2	L3	Н	D2	В	S			
7	5,5 7	.2228	22	14	27,5	5	6,6	16	2			
<b>'</b>	5,5 1	.2220	.87	.55	1.08	.20	.26	.63	.08			
9	79	.2835	27	18	33,5	6	6,6	20	2			
9	7 9	.2050	1.06	.71	1.32	.24	.26	.79	.08			
13	9,5 13	.3951	40	25	49,5	9	11	25	3			
13	9,5 15	.03 01	1.57	.98	1.95	.35	.43	.98	.12			
15,5	13 15,5	.5161	41	26	52	12	11	25	3			
13,3	13 13,3	.0101	1.61	1.02	2.05	.47	.43	.98	.12			
19	15,5 19	9 .6175	43	28	55,5	15	11	25	3			
19	10,0 19	.01/ 3	1.69	1.10	2.19	.59	.43	.98	.12			
23	20 23	.7991	51	35	67	19	14	30	5			
23	20 23	23 ./991	2.01	1.38	2.64	.75	.55	1.18	.20			
26	23 26	.91 1.02	52	36	70	22	14	30	5			
20	20 20	.01 1.02	2.05	1.42	2.76	.87	.55	1.18	.20			
28,5	26 28,5	1.02 1.12	53	37	73	24	14	30	5			
20,3		1.02 1.12	2.09	1.46	2.87	.94	.55	1.18	.20			
31	28,5 31	1.12 1.22	55	39	75,5	27	14	30	5			
31	20,0 01	1.12 1.22	2.17	1.54	2.97	1.06	.55	1.18	.20			
36	33 36	1.30 1.42	57	41	81	32	14	40	5			
30	30 30	1.00 1.42	2.24	1.61	3.19	1.26	.55	1.57	.20			
39	36 39	1.42 1.54	59	43	83,5	34	14	40	5			
0.0	00 00	1.72 1.07	2.32	1.69	3.29	1.34	.55	1.57	.20			
43	39 43	1.54 1.69	68	48	94,5	38	18	40	5			
40	00 40	1.07 1.00	2.68	1.89	3.72	1.50	.71	1.57	.20			
46	43 46	1.69 1.81	70	50	98	41	18	40	5			
	10 10	1.00 1.01	2.76	1.97	3.86	1.61	.71	1.57	.20			
49	46 49	1.81 1.93	73	53	105,5	44	18	40	8			
43	70 73	1.01 1.00	2.87	2.09	4.15	1.73	.71	1.57	.31			
52 *	49 52	1.93 2.05	76	56	110	47	18	40	8			
J.L	10 02	1.00 2.00	2.99	2.20	4.33	1.85	.71	1.57	.31			
58	53 58	2.09 2.28	78	58	115	52	18	40	8			
30	00 00	2.00 2.20	3.07	2.28	4.53	2.05	.71	1.57	.31			
61	58 61	2.28 2.40	80	60	118,5	57	18	40	8			
JI	00 01	2.20 2.40	3.15	2.36	4.67	2.24	.71	1.57	.31			

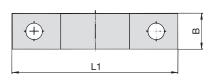
<sup>\*</sup> Similar to DIN 1592.





# Heavy Saddle with Tension Clearance (DIN 1593) Two-Bolt Design







STAUFF Group				Dimensions (mm/in)							
Ø D1	(mm)	(in)	L1	L2	Н	D2	В	S			
7	F	.2228	44	28	5	6,6	16	2			
1	5,5 7	.2220	1.73	1.10	.20	.26	.63	.08			
9	7 9	.2835	48	32	6	6,6	20	2			
9	7 9	.2033	1.89	1.26	.24	.26	.79	.08			
13	9,5 13	.3951	52	36	9	6,6	20	2			
13	3,0 10	.5551	2.05	1.42	.35	.26	.79	.08			
15,5	13 15,5	.5161	56	40	12	6,6	20	2			
10,0	10 10,0	5,5 .5101	2.20	1.57	.47	.26	.79	.08			
19	15.5 19	67 /5	60	44	15	6,6	20	2			
10	10,0 10	.0170	2.36	1.73	.59	.26	.79	.08			
23	20 23	23 .7991	82	56	19	11	25	3			
20	20 20	.7001	3.23	2.20	.75	.43	.98	.12			
26	23 26	.91 1.02	84	58	22	11	25	3			
	20 20	.01 1.02	3.31	2.28	.87	.43	.98	.12			
28,5	26 28,5	1.02 1.12	90	64	24	11	25	3			
20,0	20 20,0	1.02 1.12	3.54	2.52	.94	.43	.98	.12			
31	28.5 31	1.12 1.22	90	64	27	11	25	3			
	20,0 01	1.12 1.22	3.54	2.52	1.06	.43	.98	.12			
36	33 36	36 1.30 1.42	106	80	32	11	30	5			
		7.00 1.42	4.17	3.15	1.26	.43	1.18	.20			
39	36 39	39 1.42 1.54	110	84	34	11	30	5			
			4.33	3.31	1.34	.43	1.18	.20			
43	39 43	1.54 1.69	120	88	38	14	30	5			
			4.72	3.46	1.50	.55	1.18	.20			
46	43 46	1.69 1.81	122	90	41	14	30	5			
			4.80	3.54	1.61	.55	1.18	.20			
49	46 49	1.81 1.93	122	90	44	14	30	5			
			4.80	3.54	1.73	.55	1.18	.20			
58	53 58	2.09 2.28	142	110	52	14	40	5			
			5.59	4.33	2.05	.55	1.57	.20			
61	58 61	2.28 2.40	142	110	57	14	40	5			
			5.59	4.33	2.24	.55	1.57	.20			
71	67 71	2.64 2.80	152 5.98	120	66	14	40	5			
			176	4.72	2.60	.55	1.57	.20			
77	73 77	2.87 3.03	6.93	136	72	18	40	5			
			184	5.35	2.83	.71	1.57	.20			
81	77 81	3.03 3.19	7.24	144	76 2.99	18	1.57	.20			
			198	5.67		.71					
91	88 91	3.39 3.58	7.80	158	85	18	40	8			
			214	6.22	3.35	.71	1.57	.31			
103	99 103	3.90 4.06	8.43	174	98	18	40	8			
				6.85	3.86	.71	1.57	.31			
109	105 109	4.13 4.29	220	180	104	18	40	8			
			8.66	7.09	4.09	.71	1.57	.31			
115	110 115	4.33 4.53	226	186	109	18	40	8			
			8.90	7.32	4.29	.71	1.57	.31			

Ordering Codes								
Heavy Saddle	*DIN1593-*7-	*DIN1593-*7-*W66						
* Heavy Saddle to	DIN 1593	N1593						
* STAUFF Group (	Ø D1)	7						
* Material code	Carbon Steel, uncoated	W1						
	Carbon Steel, zinc-plated and thick-film passivated	W66						
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 7	(i) <b>W5</b>						

## **Applications**

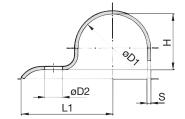
 Installation of pipes, tubes, poles and other round components directly on the substrate (floor, wall or ceiling)

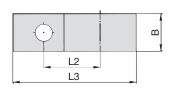


# **Light Saddle with Tension Clearance (DIN 1596)**

Single-Bolt Design







Ordering Codes								
Light Saddle	*DIN1596-*7-*W66	ò						
* Light Saddle to  * STAUFF Group (		6 7						
* Material code	Carbon Steel, uncoated W Carbon Steel, zinc-plated and thick-film passivated W6							
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	5						

## **Applications**

Installation of pipes, tubes, poles and other round components directly on the substrate (floor, wall or ceiling)

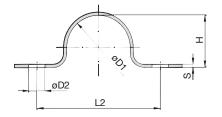
STAUFF Group	Diameter R	ange	Dimension	Dimensions (mm/in)								
Ø D1	(mm)	(in)	L1	L2	L3	Н	D2	В	S			
7	5,5 7	.2228	26	14	31,5	5	6,6	16	2			
1	5,5 /	.2220	1.02	.55	1.24	.20	.26	.63	.08			
9	79	.2835	28	16	34,5	6	6,6	16	2			
9	7 3	.2055	1.10	.63	1.36	.24	.26	.63	.08			
13	9,5 13	.3951	30	18	38,5	9	6,6	20	2			
13	3,3 13	.0501	1.18	.71	1.52	.35	.26	.79	.08			
15,5	13 15,5	.5161	32	20	41,75	12	6,6	20	2			
15,5	10 10,0 .0101	1.26	.79	1.64	.47	.26	.79	.08				
19	15,5 19	.6175	34	22	45,5	15	6,6	20	2			
19	10,0 19	.0173	1.34	.87	1.79	.59	.26	.79	.08			
23	20 23	.7991	43	28	57,5	19	9	25	3			
23	20 23	20 23	20 23	20 23	.7991	1.69	1.10	2.26	.75	.35	.98	.12
26	22 26	22 26	23 26	22 26	.91 1.02	44	29	60	22	9	25	3
20	23 20	.91 1.02	1.73	1.14	2.36	.87	.35	.98	.12			
28,5	26 28,5	1.02	47	32	64,25	24	9	25	3			
20,3	20 20,0	1.12	1.85	1.26	2.53	.94	.35	.98	.12			
31	28,5 31	1.12	47	32	65,5	27	9	25	3			
31	20,0 31	1.22	1.85	1.26	2.58	1.06	.35	.98	.12			
33 *	31 33	1.221.30	56	36	75,5	29	9	25	3			
33	31 33	1.221.30	2.20	1.42	2.97	1.14	.35	.98	.12			
36	33 36	1.30	57	40	78	32	11	30	3			
30	33 30	1.42	2.24	1.57	3.07	1.26	.43	1.18	.12			
39	36 39	1.42	59	42	81,5	34	11	30	3			
39	30 39	1.54	2.32	1.65	3.21	1.34	.43	1.18	.12			
43	39 43	1.54	61	44	85,5	38	11	30	3			
43	39 43	1.69	2.40	1.73	3.37	1.50	.43	1.18	.12			
46	43 46	1.69	62	45	88	41	11	30	3			
40	43 40	1.81	2.44	1.77	3.46	1.61	.43	1.18	.12			
49	46 49	1.81	67	48	95,5	44	14	40	4			
49	40 49	1.93	2.64	1.89	3.76	1.73	.55	1.57	.16			
52 *	49 52	1.93	72	53	102	47	14	40	4			
32	49 52	2.05	2.83	2.09	4.02	1.85	.55	1.57	.16			
E0	53 58	2.09	76	55	107	52	14	40	4			
58	ეკ ეგ	2.28	2.99	2.17	4.21	2.05	.55	1.57	.16			
C1	E0 C1	2.28	77	58	111,5	56	14	40	4			
61	58 61	2.40	3.03	2.28	4.39	2.20	.55	1.57	.16			

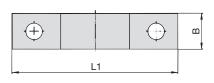
<sup>\*</sup> Similar to DIN 1596.





# **Light Saddle with Tension Clearance (DIN 1597)**Two-Bolt Design







STAUFF Group	Diameter R	ange	Dimension	Dimensions (mm/In)							
Ø D1	(mm)	(in)	L1	L2	Н	D2	В	S			
7	5,5 7	.2228	44	28	5	5,5	16	1,5			
1	0,0 1	.2220	1.73	1.10	.20	.22	.63	.06			
9	79	.2835	48	32	6	5,5	16	1,5			
9	7 9	.2033	1.89	1.26	.24	.22	.63	.06			
13	9,5 13	.3951	52	36	9	5,5	16	1,5			
10	3,5 15	.0501	2.05	1.42	.35	.22	.63	.06			
15,5	13 15,5	.5161	56	40	12	5,5	16	1.5			
13,3	10 10,0	.0101	2.20	1.57	.47	.22	.63	.06			
19	15,5 19	.6175	60	44	15	5,5	16	1.5			
13	13,5 19	.0173	2.36	1.73	.59	.22	.63	.06			
23	20 23	.7991	76	56	19	6,6	20	2			
23	20 23	.7991	2.99	2.20	.75	.26	.79	.08			
26	22 26	23 26 .91 1.02	78	58	22	6,6	20	2			
20	23 20 .91	.91 1.02	3.07	2.28	.87	.26	.79	.08			
20.5	06 00 5	1.02	84	64	24	6,6	20	2			
28,5	26 28,5	1.12	3.31	2.52	.94	.26	.79	.08			
31	28,5 31	1.12	84	64	27	6,6	20	2			
31	20,3 31	1.22	3.31	2.52	1.06	.26	.79	.08			
33 *	31 33	100 100	92	72	29	6,6	20	2			
33	31 33	1.221.30	3.62	2.83	1.14	.26	.79	.08			
20	22 26	1.30	104	80	32	9	25	3			
36	33 36	1.42	4.09	3.15	1.26	.35	.98	.12			
20	26 20	1.42	108	84	34	9	25	3			
39	36 39	1.54	4.25	3.31	1.34	.35	.98	.12			
40	00 40	1.54	112	88	38	9	25	3			
43	39 43	1.69	4.41	3.46	1.50	.35	.98	.12			
40	40 40	1.69	114	90	41	9	25	3			
46	43 46	1.81	4.49	3.54	1.61	.35	.98	.12			
40	40 40	1.81	118	90	44	11	30	3			
49	46 49	1.93	4.65	3.54	1.73	.43	1.18	.12			
FO.*	40 50	1.93	134	106	47	11	30	3			
52 *	49 52	2.05	5.28	4.17	1.85	.43	1.18	.12			
	50 50	2.09	138	110	52	11	30	3			
58	53 58	2.28	5.43	4.33	2.05	.43	1.18	.12			
	50 04	2.28	138	110	56	11	30	3			
61	58 61	2.40	5.43	4.33	2.20	.43	1.18	.12			

Ordering C	odes		
Light Saddle	*DIN1597-	*7-*W66	
* Light Saddle to	DIN 1597	DIN 1597	
* STAUFF Group (	Ø D1)	7	
* Material code	Carbon Steel, uncoated Carbon Steel, zinc-plated and thick-film passivated	W1 W66	
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 3	316 Ti) <b>W5</b>	

#### **Applications**

• Installation of pipes, tubes, poles and other round components directly on the substrate (floor, wall or ceiling)

\* Similar to DIN 1597.

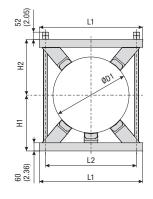


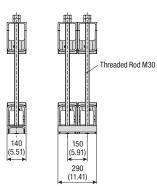




# **Construction Series** Types KS (Single Version) / DKS (Double Version)







Ordering Codes							
Construction	Series *KS-*220-*PA-*	W8					
* Version	Single version Double version						
* Exact outside d	iameter ØD1 (mm)	220					
* Material of Plas	tic Pads (see below)	PA					
* Material Code	Steel, prime coated (grey, RAL 7035)	W8					
Please note: All ite	ems are supplied non-assembled.						

# **Standard Materials for Plastic Pads**



See pages 178 / 179 for material properties and technical information.

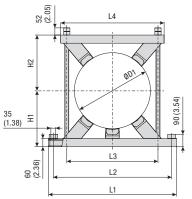
		<del>&lt; `                                   </del>							
Outside Diameter @ Diameter Range	D1 Pipe / Tube	Standard	Standard Diameters		Dimensions (mm/in)				
(mm)	(in)	(mm)	(in)	L1	L2	H1	H2	Pads	
		220	8.66						
000 075	0.00 40.05	247	9.72	420	330	220	220		
220 275	8.66 10.85	267	10.51	16.54	12.99	8.66	8.66	4	
		273	10.75						
		280	11.02						
070 005	10.07 10.00	300	11.81	460	370	240	240	4	
276 325	10.87 12.80	318	12.52	18.11	14.57	9.45	9.45	4	
		323,9	12.75						
		355,6	14.00						
326 370	12.83 14.57	333,0	14.00	510	420	260	260	4	
320 370	12.03 14.37	368	14.49	20.08	16.53	10.23	10.23	4	
		300	14.43						
		390	15.35						
371 425	14.61 16.73	330	10.00	570	480	290	290	4	
3/1 420	14.01 10.75	406,4	16.00	22.44	18.89	11.42	11.42	7	
		400,4	10.00						
		457,2	18.00						
426 485	16.77 19.09	107,2	10.00	620	530	305	305	4	
		470	18.50	24.41	20.87	12.01	12.01	'	
		490	19.29						
486 550	19.13 21.65	508	20.00	680	590	370	370	4	
		521	20.51	26.77	23.23	14.57	14.57		
		546	21.50						
		558,8	22.00	700	070	440	440		
551 630	21.69 24.80			760	670 26.38	410 16.14	410	5	
		609,6	24.00	29.92	20.30 10.14		16.14		
				845	755	452	452		
631 715	24.84 28.15	711	28.00	33.27	29.72	17.80	17.80	5	
				33.21	25.12	17.00	17.00		
				940	850	495	495		
716 800	28.19 31.50	762	30.00	37.00	33.46	19.49	19.49	5	
				01100	00.10	10110	101.10		
				990	900	500	500		
		813	32.00	38.97	35.43	19.69	19.69	5	
		1000	00.07	1200	1100	591,5	593	_	
		1000	39.37	47.24	43.30	, h		5	
		1							
		1010	40.00	1200	1100	602	602	E	
		1016 40.00		47.24	43.30	23.70	23.70	- h	

Alternative outside diameters, materials and surface finishings are available upon request. Contact STAUFF for further information.

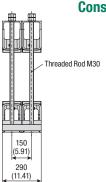
Dimensional drawings: All dimensions in mm (in).















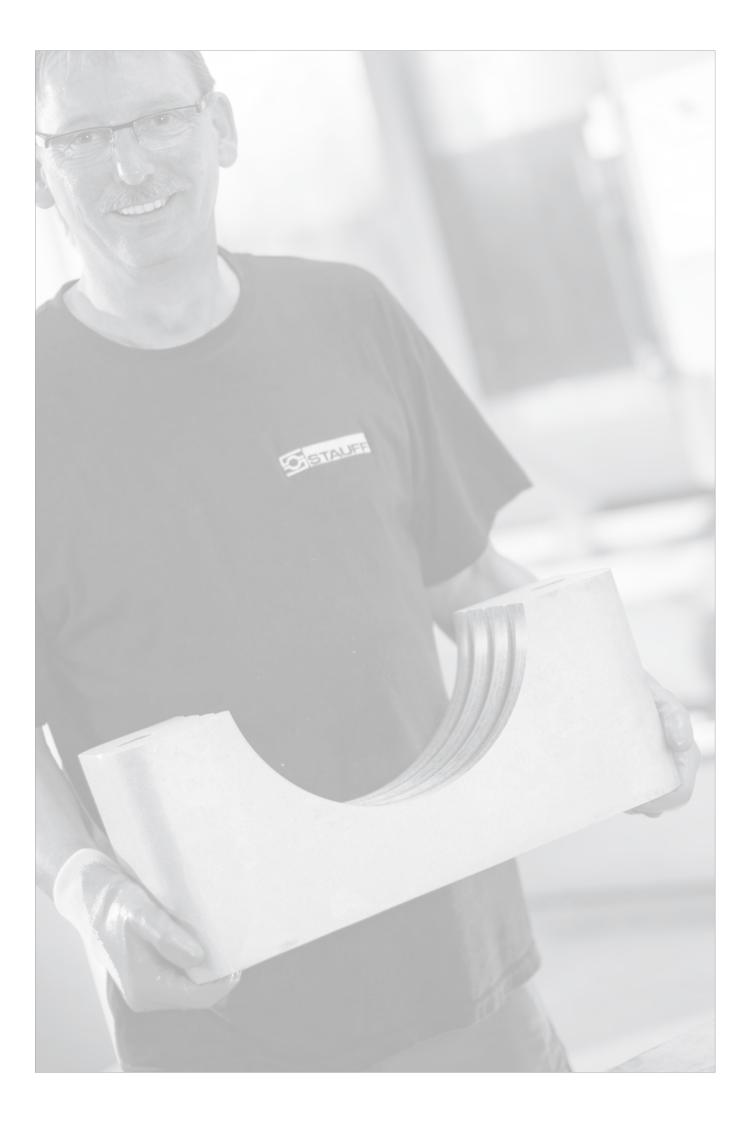
	-	Li	-				<b>▼</b> (	······································	l	
Outside Diameter ( Diameter Range	ØD1 Pipe / Tube	Standard D	Dimensions (mm/in)					No. of Plastic		
_	(:)			14	10	10	1.4	114	110	
(mm)	(in)	(mm)	(in)	L1	L2	L3	L4	H1	H2	Pads
		220	8.66							
220 275	8.66 10.85	247	9.72	580	490	330	420	220	220	4
		267	10.51	22.83	19.29	12.99	16.54	8.66	8.66	
		273	10.75							
		280	11.02							
276 325	10.87 12.80	300	11.81	620	530	370	460	240	240	4
210 020	10.07 12.00	318	12.52	12.52 24.41 20.87	20.87	14.57	18.11	9.45	9.45	7
		323,9	12.75							
226 270	10.00 14.57	355,6	14.00	670	580	420	510	260	260	4
326 370	12.83 14.57	368	14.49	26.38	22.83	16.53	20.08	10.23	10.23	4
		390	15.35	750	640	480	570	290	290	
371 425	14.61 16.73								11.42	4
		406,4	16.00	29.03	23.20	10.09	22.44	11.42	11.42	
		457,2	18.00	00   700   700   500	E20	600	205	205		
426 485	16.77 19.09			800	730	530	620	305 12.01	305	4
		470	18.50	31.50	28.74	20.87	24.41	12.01	12.01	
		490	19.29							
100 550	10.10 01.05	508	20.00	860	790	590	680	370	370	.57 4
486 550	19.13 21.65	521	20.51	33.86 3	31.10	23.23	26.77	14.57	14.57	
		546	21.50							
		558,8	22.00	940	870	670	760	410	410	
551 630	21.69 24.80			37.00	34.25	26.38	29.92	16.14	16.14	5
		609,6	24.00							
631 715	24.84 28.15	711	28.00	1025		755	845	452	452	5
				40.31	37.60	29.72	33.27	17.80	17.80	
				1120	1050	850	940	495	495	
716 800	28.19 31.50	762	30.00						19.49	5
				44.03	41.00	33.40	37.00	13.43	13.43	
				1170	1100	900	990	500	500	
		813	32.00						19.69	5
		1000	39.37	1400	1300			591,5		5
		.555		55.12	51.18	43.30	47.24	23.29	23.34	
				1400	1300	1100	1200	602	602	
		1016	40.00						23.70	5

Ordering Codes							
Construction Series *KSV-*220-*PA-*W8							
* Version	Single version Double version	KSV DKSV					
* Exact outside d	liameter ØD1 (mm)	220					
* Material of Plas	stic Pads (see below)	PA					
* Material Code	Steel, prime coated (grey, RAL 7035)	W8					
Please note: All items are supplied non-assembled.							

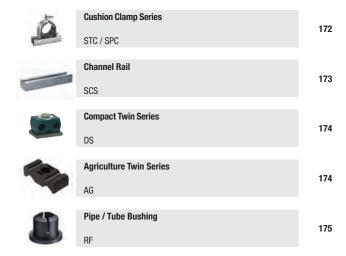
## **Standard Materials for Plastic Pads**



See pages 178 / 179 for material properties and technical information.





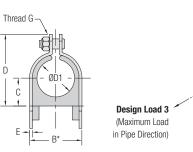


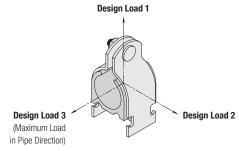


# Clamp Assembly • Types STC / SPC

(for Use with Channel Rail SCS)







	Diameter lbe / Hose	Nominal Bore Pipe	Ordering Codes (1 Clamp Assembly)	Standard Packaging Units	Dimensio (mm/in)	ns				Design (kN/lbf)	Loads	
(mm)	(in)	(in)	(** = Material Code)	pcs.	B*	C	D	E	Thread G	1	2	3
6,4	1/4		STC-025-**-K	24 / box	15,7	5,6	28,2	2	1/4-20 UNC	1,78	0,22	0,22
0,4	1/4		310-023- <b>**</b> -K	247 DOX	.62	.22	1.11	.08	174-20 0110	400	50	50
8	3/8		STC-037-**-K	24 / box	19,1	7,1	31,5	2	1/4-20 UNC	1,78	0,22	0,22
					.75	.28	1.24	.08		400	50	50
12,7	1/2		STC-050-**-K	24 / box	.87	8,6 .34	34,5	2	1/4-20 UNC	1,78	0,22	0,22
					23,1	9,1	1.36 35,8	.08		400 1,78	50 0,22	50 0,22
13,5		1/4	SPC-025-**-K	24 / box	.91	.36	1.41	.08	1/4-20 UNC	400	50	50
					25,4	10,4	38,1	2		1,78	0,22	0,22
16	5/8		STC-062-**-K	24 / box	1.00	.41	1.50	.08	1/4–20 UNC	400	50	50
47.0		0.40	000 007 1.1.1/	0471	27,2	11,4	40,4	2	4/4 00 UNO	2,67	0,33	0,33
17,2		3/8	SPC-037-**-K	24 / box	1.07	.45	1.59	.08	1/4–20 UNC	600	75	75
19	3/4		STC-075-**-K	24 / box	33,8	13,5	45,2	2	1/4-20 UNC	2,67	0,33	0,33
19	3/4		316-0/3-**-K	24 / DUX	1.33	.53	1.78	.08	1/4-20 UNC	600	75	75
21,3		1/2	SPC-050-**-K	24 / box	36,8	15,0	48,5	2	1/4-20 UNC	2,67	0,33	0,33
,5		.,	5. 0 000 P.P. IV	, 55%	1.45	.59	1.91	.08	17 . 20 0140	600	75	75
22,2	7/8		STC-087-**-K	24 / box	36,8	14,7	48,5	2	1/4-20 UNC	2,67	0,33	0,33
,					1.45	.58	1.91	.08		600	75	75
25,4	1		STC-100-**-K	12 / box	42,2 1.66	16,8 .66	51,6 2.03	2,8	1/4-20 UNC	2,67	0,33 75	0,33 75
					45,5	18,3	54,9	2,8		2,67	0,33	0,33
26,9		3/4	SPC-075-**-K	12 / box	1.79	.72	2.16	.11	1/4-20 UNC	600	75	75
					48,8	19,8	58,4	2,8		2,67	0,33	0,33
32	1-1/4		STC-125-**-K	12 / box	1.92	.78	2.30	.11	1/4–20 UNC	600	75	75
					56,4	23,1	69,9	3		2,67	0,33	0,33
33,7		1	SPC-100-**-K	12 / box	2.22	.91	2.75	.12	5/16–18 UNC	600	75	75
20	1 1/0		CTC 450 ded 1/	10 / hov	56,4	23,1	69,9	3	5/16–18 UN	2,67	0,33	0,33
38	1-1/2		STC-150-**-K	12 / box	2.22	.91	2.75	.12	3/10-16 UNC	600	75	75
42		1-1/4	SPC-125-**-K	12 / box	62,7	26,2	77,0	3	5/16–18 UNC	3,56	0,56	0,56
12		, .	01 0 120 4 4 K	12 / 50%	2.47	1.03	3.03	.12	0,10 10 010	800	125	125
48,3		1-1/2	SPC-150-**-K	12 / box	62,7	29,5	83,3	3	5/16–18 UNC	3,56	0,56	0,56
, i					2.47	1.16	3.28	.12		800	125	125
50,8	2		STC-200-**-K	12 / box	69,1	29,5 1.16	83,3 3.28	.12	5/16-18 UNC	3,56	0,56 125	0,56 125
					69,1	35,8	96,0	3		3,56	0,56	0,56
60,3		2	SPC-200-**-K	1 / bag	3.22	1.41	3.78	.12	5/16–18 UNC	800	125	125
					88,1	38,9	102,4	3		3,56	0,56	0,56
63,5	2-1/2		STC-250-**-K	1 / bag	3.47	1.53	4.03	.12	5/16–18 UNC	800	125	125
66.7	0.5/0		CTC OCO AAA K	1 / hag	88,1	38,9	102,4	3	E/1C 10 UNC	3,56	0,56	0,56
66,7	2-5/8		STC-262-**-K	1 / bag	3.47	1.53	4.03	.12	5/16–18 UNC	800	125	125
73		2-1/2	SPC-250-**-K	1 / bag	94,5	42,2	108,5	3	5/16–18 UNC	3,56	0,56	0,56
70		2 1/2	01 0 200 44 K	17 bag	3.72	1.66	4.27	.12	0/10 10 0140	800	125	125
76,2	3		STC-300-**-K	1 / bag	100,8	45,2	114,8	3	5/16–18 UNC	4,45	0,89	0,67
				-	3.97	1.78	4.52	.12		1 000	200	150
88,9		3	SPC-300-**-K	1 / bag	110,7 4.36	50,0 1.97	124,7 4.91	.12	3/8-16 UNC	4,45 1 000	0,89	0,67 150
					126,2	57,9	140,5	3		4,45	0,89	0,67
102		3-1/2	SPC-350-**-K	1 / bag	4.97	2.28	5.53	.12	3/8-16 UNC	1 000	200	150
		1.			138,9	64,3	153,2	3		4,45	0,89	0,67
114		4	SPC-400-**-K	1 / bag	5.47	2.53	6.03	.12	3/8-16 UNC	1 000	200	150
140		E	CDC EOO deste V	1 / hag	164,3	77,0	178,6	3,6	0/0 40 UNO	4,45	0,89	0,67
140		5	SPC-500-**-K	1 / bag	6.47	3.03	7.03	.14	3/8-16 UNC	1 000	200	150
168		6	SPC-600-**-K	1 / bag	189,7	89,7	204,0	3,6	3/8_16 UNC	4,45	0,89	0,67
100		U	OI U-UUU- <b>☆☆-</b> I\	i / bay	7.47	3.53	8.03	.14	3/8-16 UNC	1 000	200	150

<sup>\*</sup> Minimum required for installation.

One clamp assembly is consisting of two carbon steel clamp halves (one with threaded stud), one thermoplastic cushion insert and one lock nut with Nylon insert. Channel rail not included. All threaded parts are only available with unified coarse (UNC) thread. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.



(for Use with Channel Rail SCS)





#### **Standard Materials**



Cushion Insert **Thermoplastic Elastomer** (80 Shore-A) Colour: Black

The cushion material is compatible with most oils, chemicals and cleaning solvents and suitable for applications within a temperature range of -50 °C ... +125 °C (-58 °F ... +257 °F).

Alternative materials are available upon request. Please contact STAUFF for further information.

#### **Product Features**

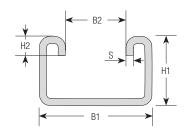
- Clamp assemblies designed to mount directly to 41,3 mm / 1-5/8 in wide strut channels, such as the STAUFF Channel Rail, type SCS
- Suitable for most Fluid Power applications ranging from mobile equipment to industrial machinery
- Reduced horizontal mounting space
- Easy installation and retro fit capability
- Reduces shock and vibration while preventing galvanic corrosion



Clamp Assembly - Types STC / SPC

Ordering Codes							
Clamp Assem	W4-*K						
* Type of clamp	STC (Tube diameters) SPC (Pipe diameters)	STC SPC					
* Pipe / Tube O.D	. (according to dimension table)	125					
* Material code	Carbon Steel, zinc-plated, blue-chromated	W32					
	Stainless Steel V2A 1.4301 (AISI 304)	W4					
	Stainless Steel V4A 1.4401 (AISI 316)	W5					
Assembling	Components packed in kits	K					

#### **Channel Rail • Type SCS**



Dimensions (mm/in)					
B1	B2	H1	H2	S	
41,3	22,2	25,4	7	2,7	
1.63 (1-5/8)	.88 (7/8)	1.00	.28	.11	



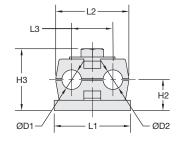
Ordering Codes					
Strut Channel	*SCS-*048-*1-*PL				
* Strut Channel	SCS				
* Length of Rail	1,22 m / 4.00 ft / 48 in <b>048</b> 3,05 m / 10.00 ft / 120 in <b>120</b>				
* Height of Rail	25,4 mm / 1.00 in <b>1</b>				
* Material code	Carbon Steel, uncoated PL				

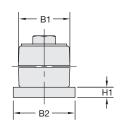
# **E**STAUFF ®

# **Compact Twin Series: Clamp Body Type DS**









# **Ordering Codes**

Clamp Body \*1-\*06/06-\*PP-\*DS

One clamp body is consisting of two clamp halves.

- \* STAUFF Group DS 1
- \* Exact outside diameters Ø D1 / Ø D2 (mm)
- \* Clamp Body Material (Polypropylene)
- \* Compact Twin Series

Outside Diameter Nominal Bore Ordering Codes Dimensions (mm/in) Group Pipe / Tube **Copper Tube** (2 Clamp Halves) Ø D1 / Ø D2 Pipe ASTM B88 STAUFF L1 L2 L3 H1 H2 H3 B1 (mm) (in) (in) (in) 106/06-PP-DS 106.4/06.4-PP-DS 6,4 37 35,5 20 15 30 25 30 DS 1 5/16 108/08-PP-DS 8 1.46 1.40 .79 .20 .59 1.18 .98 1.18 9,5 3/8 1/4 109.5/09.5-PP-DS 10 1/8 110/110-PP-DS

Additional outside diameters are available upon request. Please contact STAUFF for further information.

#### **Compact Twin Series: Metal Hardware**



#### Weld Plate, Type SP-DS

06/06

PP

DS

**SP-DS-1-U-W2** Thread size: 1/4–20 UNC Carbon Steel, phosphated



#### **Cover Plate, Type US-DS**

US-DS-1-W3

Carbon Steel, zinc/nickel-plated



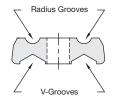
#### **Hexagon Bolt, Type AS**

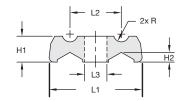
AS-1/4-20UNCx1-W3 Thread size: 1/4–20 UNC Carbon Steel, zinc/nickel-plated

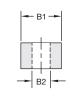
All threaded parts are only available with unified coarse (UNC) thread. Rail mount and stacking assemblies as well as alternative materials and surface finishings are available upon request.

# Agriculture Twin Series: Clamp Body Type AG









Group Min/Max Outside Diameters Pipe / Tube Radius Grooves V-Grooves			Ordering Codes (1 Clamp Body)	Dimensions (mm/in)									
STAUFF	(mm)	(in)	(mm)	(in)		L1	L2	L3	H1	H2	B1	B2	R
2	3 10	.1239	4 15	.2659	215.8/09.6-PP-AG-BK-HV	57,5 2.26	31,7 1.25	14,0	16,0	7,1	25,0 .98	11,0	4,8
3	4 25	.1698	7 20	.2879	324.8/19.5-PP-AG-BK-HV	62,0 2.48	34,5 1.36	14,0 .55	19,0 .75	7,1 .28	32,0 1.26	11,0	12,4 .49

#### **Standard Material**



Polypropylene Colour: Black

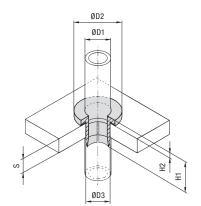
See pages 178 / 179 for properties and technical information.

#### **Product Features**

- Flip the clamp body to choose between the radius grooved or the v-grooved design (suitable for a range of diameters)
- Use M10 or 3/8–16 UNC bolts or screws (preferably with washers) to fasten clamp bodies directly to the machine
- Clamp bodies can be stacked for multi-level assembly

Additional outside diameters are available upon request. Please contact STAUFF for further information.





#### Outside Diameter ØD1 Nominal Bore Wall Thickness **Mounting Bore Dimensions** ØD2 H1 H2 ØD3 (mm) (in) (in) 4 ... 12 18 10 22 4 6 1/4 .16 ... .47 .16 71 87 39 20 22 4 ... 12 12 5/16 .16 ... .47 .47 .79 .16 .87 1/8 Pipe 22 22 14 10 3/8 1/4 Copper Tube (ASTM B88) .87 .16 .16 ... .47 .55 16 24 22 4 4 ... 12 12 1/2 3/8 Copper Tube (ASTM B88) .94 .87 .16 .16 ... .47 .63 26 22 4 ... 12 18 14 1/4 Pipe 1.02 .16 .16 ... .47 87 71 28 22 4 ... 12 20 15 .87 .16 ... .47 .79 1.10 .16 28 22 4 4 ... 12 20 16 1/2 Copper Tube (ASTM B88) 1.10 .87 .16 .16 ... .47 .79 22 30 22 4 ... 12 18 1.18 .87 .16 .16 ... .47 .87 32 22 24 20 3/4 1.26 .87 .16 ... .47 .16 26 34 22 4 4 ... 12 22 7/8 3/4 Copper Tube (ASTM B88) 1.34 .87 .16 .16 ... .47 1.02 38 22 4 ... 12 30 25 1 1.50 .16 .16 ... .47 .87 1.18 41 22 4 ... 12 33 28 1 Copper Tube (ASTM B88) .87 .16 ... .47 1.30 1.61 .16 43 22 4 4 ... 12 34 30 .16 ... .47 1.69 .87 .16 1.39 4 ... 12 40 35 1-1/4 Copper Tube (ASTM B88) 1.89 .87 .16 .16 ... .47 1.57 22 4 4 ... 12 43 1-1/2 38 2.01 .87 .16 .16 ... .47 1.70 47 1-1/4 Pipe 55 1-1/2 Copper Tube (ASTM B88) 2.17 55 22 4 4 ... 12 42 .87 .16 .16 ... .47 1.85

#### Pipe / Tube Bushing • Type SRF



Ord	lering	J Cod	es	

Pipe / Tube Bushing

\*SRF-\*20-\*PP

\* Pipe / Tube Bushing SRF
\* Exact outside diameter Ø D1 (mm) 20
\* Material code (see below) PP

#### **Standard Materials**



Polypropylene Colour: Natural colour

Material code: PP



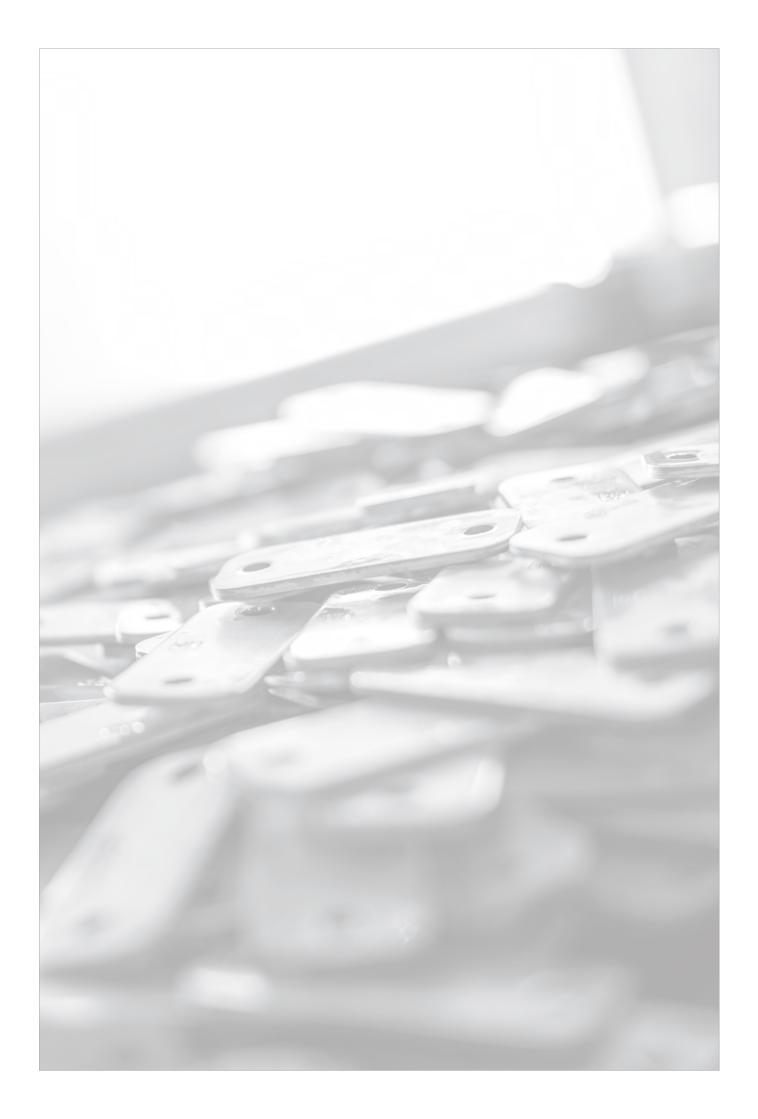
**Thermoplastic Elastomer** (87 Shore-A) Colour: Black

Material code: **SA87** 

See pages 178 / 179 for material properties and technical information.

#### **Product Features**

- Designed to centre the pipe or tube in a through-hole (e.g. for return lines entering the hydraulic reservoir)
- Vibration and noise absorbing element
- Available for all commonly used Metric and imperial pipe and tube diameters from 6 ... 42 mm and 1/4 ... 1-1/2 in
- Easy plug-in installation





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#### **Standard Clamp Body Materials**









Material Code	PP	PA	AL	SA	
Basic Material	Copolymeric Polypropylene	Polyamide	Aluminium AlSi12	Thermoplastic Elastomer	
Standard Colour	Green	Black	Natural	Black	
Mechanical Properties					
Tensile E-Module	1073 N/mm <sup>2</sup> (ISO 527)	> 1400 N/mm <sup>2</sup> (ISO 527)	> 65000 N/mm²	113 N/mm <sup>2</sup> at +23 °C / +73.4 °F (ASTM D412)	
Notch Impact Strength	8 kJ/m² at +23 °C / +73.4 °F (acc. to Charpy / ISO 179 / 1eU)	> 15 kJ/m² at 23 °C / +73.4 °F (acc. to Charpy / ISO 179 / 1eU)			
Low Temperature Notch Impact Strength	3 kJ/m <sup>2</sup> at -20 °C / -4.0 °F (acc. to Charpy / ISO 179 / 1eU)	> 3 kJ/m² at -30 °C / -22.0 °F (acc. to Charpy / ISO 179 / 1eU)			
Tensile Strength at Yield (Tensile Strength)	26 MPa (ISO 527-2)	> 55 MPa (ISO 527)	> 240 MPa (ISO EN 10002)	15,9 MPa (ASTM D412)	
Ball Indentation Hardness (Brinell Hardness)	45,4 MPa (ISO 2039-1)	> 65 MPa (ISO 2039-1)	> 70 HBS		
Shore Hardness				87 A (ISO 868)  Alternative hardnesses are available upon request! Contact STAUFF for details.	
Thermal Properties					
Temperature Resistance (Min Max)	-30 °C +90 °C / -22 °F +194 °F	-40 °C +120 °C / -40 °F +248 °F (Brief exposure up to +140 °C / +284 °F)	up to +300 °C / up to +572 °F	-40 °C +125 °C / -40 °F +257 °F	
Chemical Properties					
Weak Acids	conditionally consistent	conditionally consistent	conditionally consistent	consistent	
Solvents	conditionally consistent	conditionally consistent	conditionally consistent	conditionally consistent	
Benzine	conditionally consistent	consistent	consistent	conditionally consistent	
Mineral Oils	conditionally consistent	consistent	consistent	conditionally consistent	
Other Oils	consistent	consistent	consistent	consistent	
Alcohols	consistent	consistent	consistent	consistent	
Seawater	consistent	consistent	consistent	consistent	



## **Special Clamp Body Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 180 / 181 for material properties and technical information.

The information for the Polyamide material PA have been determined in a conditioned state according to ISO 1110. For Aluminium, the tensile strength (under reversed bending stress) and impact bending strength both rise constantly at decreasing temperatures whilst the value for breaking elongation decreases.

STAUFF preserves the right to supply products made from alternative, but comparable materials with matching technical characteristics.





#### **Standard Clamp Insert Materials**



STAUFF Group 4 and 6 (Standard Series) STAUFF Group 4S to 7S (Heavy Series)



STAUFF Group 8S to 10S (Heavy Series)

SA		EPDM		Material Code
-				
Thermoplastic Elastomer		Ethylene Propylene Diene Monomer		Basic Material
Black		Black		Standard Colour
				Mechanical Properties
16 N/mm² at +23 °C / +73.4 °F (ASTM D412)				Tensile E-Module
				Notch Impact Strength
				Low Temperature Notch Impact Strength
8,3 MPa (ASTM D412)		9,0 MPa (DIN 53504)		Tensile Strength at Yield (Tensile Strength)
				Ball Indentation Hardness (Brinell Hardness)
73 A (ISO 868)	Alternative hardnesses are available upon request! Contact STAUFF for details.	70 A (DIN 53505)	Alternative hardnesses are available upon request! Contact STAUFF for details.	Shore Hardness
				Thermal Properties
-40 °C +125 °C/ -40 °F +257 °F		-50 °C +120 °C / -58 °F +248 °F		Temperature Resistance (Min Max)
				Chemical Properties
consistent		consistent		Weak Acids
conditionally consistent		consistent		Solvents
conditionally consistent		conditionally consistent		Benzine
conditionally consistent		conditionally consistent		Mineral Oils
consistent		conditionally consistent		Other Oils
consistent		consistent		Alcohols
consistent		consistent		Seawater



#### **Special Clamp Insert Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 180 / 181 for material properties and technical information.

STAUFF preserves the right to supply products made from alternative, but comparable materials with matching technical characteristics.



# **Special Clamp Body Materials (Selection)**

#### **Preventive Fire Protection**







Material Code	PA-V0	PP-DA	PA-GF30-USR
Basic Material	Polyamide	Polypropylene	Polyamide
Standard Colour	Black (PA-V0-BK)	White	Black
Mechanical Properties			
Tensile E-Module	1500 MPa (ISO 527-2)	1614 N/mm² (ISO 527) at +23 °C / +73.4 °F: 50 mm/min	8274 MPa (ASTM D638)
Notch Impact Strength	35 kJ/m² at +23 °C / +73.4 °F (acc. to Charpy / ISO 179 / 1eU)	13 kJ/m² at +23 °C / +73.4 °F (acc. to IZOD / ISO 179 / 1eA)	15 kJ/m² (ASTM D256)
Low Temperature Notch Impact Strength		1,5 kJ/m² at -25 °C / -13.0 °F (acc. to IZOD / ISO 179 / 1eA)	
Tensile Strength at Yield (Tensile Strength)	45 MPa (ISO 527-2)	12,4 MPa (ISO 527) at +23 °C / +73.4 °F: 50 mm/min	131 MPa (ASTM D638)
Ball Indentation Hardness (Brinell Hardness)	100 N/mm² (ISO 2039-1)		
Shore Hardness			
Thermal Properties			
Temperature Resistance (Min Max)	-30 °C +120 °C / -22 °F +248 °F	-25 °C +90 °C / -13 °F +194 °F	-30 °C +120 °C / -22 °F +248 °F
Features			
Approvals / Properties	Tested and approved acc. to UL94 ¹ (material thickness: 3 mm)	Tested and approved acc. to UL94 ¹ (material thickness: 3 mm)	Tested and approved acc. to ASTM D638 (material thickness: 1,5 mm)
	Classification: V-0 (Vertical Burning Test)	■ Classification: V-0 (Vertical Burning Test)	■ Classification: V-0 (Vertical Burning Test)
	Tested and approved acc. to EN 45545-2 (material thickness: 3,5 mm)	Tested and approved acc. to Def Stan 07-247  - Assessment: category B	Tested and approved acc. to NFPA 130 (material thickness: 3 mm)
	Requirements set R22 / R23 / R24 / R26 Hazard level HL1 - HL3	Approved by the UK Ministry of Defence (MoD)	• no burning dripping
	Tested and approved acc. to DIN 5510, Part 2 (material thickness: 3 mm)	Low Smoke Zero Halogen (LSZH)	Halogen Free Flame Retardant (HFFR)
	Combustibility classification: S4     Smoke development classification: SR2     Dripping classification: ST2		
	Tested and approved acc. to NF F 16-101 (material thickness: 3 mm)		
	Classification: I3 / F2		
	Low Smoke Zero Halogen (LSZH)		

<sup>&</sup>lt;sup>1</sup>Successful testing and approval according to UL94 (classification V-0) is equivalent to EN 45545-2 (requirements set R26; hazard level HL3). The information for PA-V0 has  $\,$  been determined in a conditioned state according to ISO 1110.

STAUFF preserves the right to supply products made from alternative, but comparable materials with matching technical characteristics.





### **Special Clamp Body Materials (Selection)**

### **Preventive Fire Protection**









PP6853	PP-V0	SA-V0		PP-EC-BK	Material Code				
Polypropylene	Polypropylene	Thermoplastic Elas	tomer	Polypropylene	Basic Material				
White	Black	Natural		Black	Standard Colour				
					Mechanical Properties				
1264 MPa (ICE 60811-1-1)		113 N/mm <sup>2</sup> at +23 °C / +73.4	°F (ASTM D412)		Tensile E-Module				
17 kJ/m² at +23 °C / +73.4 °F (acc. to IZOD / ISO 179 / 1eA)	5 kJ/m² at +23 °C / +73.4 °F (acc. to ISO 180/A)			24 kJ/m² bei +23 °C / +73.4 °F (ISO 179 / 1eA)	Notch Impact Strength				
				10 kJ/m² bei -20 °C / -28.9 °F (ISO 179 / 1eA)	Low Temperature Notch Impact Strength				
25 MPa (ICE 60811-1-1)	24 MPa (ISO 527)	15,9 MPa (ASTM D412)		26 MPa (ISO 527-2)	Tensile Strength at Yield (Tensile Strength)				
					Ball Indentation Hardness (Brinell Hardness)				
		86 A (ISO 868)	Alternative hardnesses are available upon request!		Shore Hardness				
					Thermal Properties				
-25°C +90°C / -13°F +194°F	-25 °C +90 °C / -13 °F +194 °F	-55°C +90°C/-	-67 °F +194 °F		Temperature Resistance (Min Max)				
					Features				
Tested and approved acc. to EN 45545-2 (material thickness: 3 mm)  Requirements set R22 / R23 / R24 / R26  Hazard level HL1 - HL3  Tested and approved acc. to BS 6853 (Code of practice for fire precautions in the design /construction of passenger carrying trains)  Assessment: category 1a  Compliant to the requirements of London Underground / Metronet (standard 2-01001-002: Fire Safety Performance of Materials)  Tested and approved acc. to DIN 5510, Part 2 (material thickness: 25 mm)  Combustibility classification: S4  Smoke development classification: S72  Tested and approved acc. to Def	Tested and approved acc. to UL94 1 (material thickness: 3 mm)  Classification: V-0 (Vertical Burning Test)	Tested and approulus 1 (material thickness Classification: V-Test)	: 3 mm)		Approvals / Properties				

<sup>&</sup>lt;sup>1</sup>Successful testing and approval according to UL94 (classification V-0) is equivalent to EN 45545-2 (requirements set R26; hazard level HL3).

STAUFF preserves the right to supply products made from alternative, but comparable materials with matching technical characteristics.



9-0

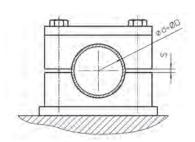
### **Standard Clamp Body Designs**



### **Profiled Design**

### **Profiled Inside Surface with Tension Clearance**

- Available in the Standard, Heavy, Twin and Heavy Twin Series
- · Recommended for the safe installation of rigid pipes or tubes
- · Available for all commonly used outside diameters and nominal sizes
- Vibration/noise reducing and impact absorbing effect towards the direction of the line provided by the grooves on the inside of the clamp bodies
- Clearance S between the clamp halves provides tension of the tube or pipe
- To be used as fixed point clamp preventing the line from sliding (see page 161 for Maximum Loads in Pipe Direction)

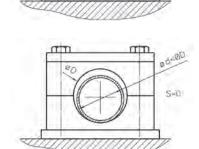




### Type H (Smooth)

### Smooth Inside Surface w/o Tension Clearance

- · Available in the Standard, Heavy and Twin Series
- Recommended for the safe installation of hoses or cables
- · Available for all commonly used outside diameters and nominal sizes
- · Smooth inside surface and chamfered edges avoid damaging of the hose or cable



• Choose the diameter ØD of the clamp body slightly larger (in accordance to your specific requirements) than the outside diameter  $\emptyset d$  of the pipe, tube, hose or cable in order

to use it as a longitudinal guide allowing the line to slide



### Type RI (with Elastomer Insert)

- Available in the Standard, Heavy and Heavy Twin Series
- Recommended for the extra-gentle installation of pipes, tubes, hoses or cables
- Available for all commonly used outside diameters and nominal sizes
- Elastomer insert made of Thermoplastic Elastomer with a hardness of 73 Shore-A provides most effective reduction of vibration and noise caused by vibration



### Rectangular Design • Type VK

- Available in the Standard Series (STAUFF Group 5)
- · Recommended for the safe installation of proximity switches according to DIN EN 60947-5-2 or similar, rectangular construction, with a square of  $40\,\text{mm}\,x\,40\,\text{mm}\,(1.57\,\text{in}\,x\,1.57\,\text{in})$ or 40 mm x 36 mm (1.57 in x 1.42 in)







### **Materials and Surface Finishings of Metal Parts**

### **Materials**

Unless otherwise stated, all metal parts (e.g. weld plates, cover plates, bolts, rail nuts etc.) are made of **Carbon Steel** (surface finishing according to material code).

Besides that, all metal parts are also available **ex stock** in two different stainless steel qualities:

Rost

#### Stainless Steel V2A

- 1.4301 / 1.4305 (AISI 304 / 303)
- Material code: W4

### Stainless Steel V4A

- 1.4401 / 1.4571 (AISI 316 / 316 Ti)
- Material code: W5

#### **Aluminium**

- Aluminium EN AW-6060
- Material code: W85

Alternative materials (e.g. Aluminium) are available upon request. Contact STAUFF for further information.

### **Surface Finishings**

Unless otherwise stated, all metal parts made of Carbon Steel are available with the following standard surface finishings:

### Carbon Steel, uncoated

Material code: W1

#### Carbon Steel, phosphated

- Fe/Znph r 10 according to DIN EN 12476
- Material code: W2

#### Carbon Steel, zinc/nickel-plated

- More than 1200 hours resistance against red rust / base metal corrosion in the salt spray test to DIN EN ISO 9227
- Free of hexavalent chromium Cr(VI)
- RoHS compliant according to 2002/95/EC (Restrictions of the Use of Hazardous Substances)
- ELV compliant according to 2000/53/EC (End of Life Vehicles Directive)
- Material code: W3

Alternative surface finishings are available upon request. Contact STAUFF for further information.



Original STAUFF Cover Plate with Zinc/Nickel-Coating: No signs of corrosion after <u>1200 hours</u> in the salt spray chamber!







Original STAUFF Cover Plates with alternative surface finishings widely-used by competitors in the market (from left to right):

- Galvanisation and blue-chromating after 96 hours
- Galvanisation and yellow-chromating after 192 hours
- Zinc-coating, thick-film passivation and sealing after 192 hours

In all three cases, signs of white and red rust / base metal corrosion are quite clearly visible! Please do not hesitate to contact STAUFF and ask for a detailed report.

### **Thread Conversion Chart**

Metric ISO vs. Unified Coarse (UNC) Thread

## Unless otherwise stated, all threaded parts available with Metric ISO thread or unified coarse (UNC) thread.

### Standard Series (DIN 3015, Part 1)

Group		Thread	
STAUFF	DIN	Metric ISO	<b>Unified Coarse</b>
1 to 8	0 to 8	M6	1/4-20 UNC

### Heavy Series (DIN 3015, Part 2)

Group		Thread	
STAUFF	DIN	Metric ISO	<b>Unified Coarse</b>
3S to 5S	1 to 3	M10	3/8-16 UNC
6S	4	M12	7/16-14 UNC
7S	5	M16	5/8-11 UNC
8S	6	M20	3/4-10 UNC
9S	7	M24	7/8-9 UNC
10S	8	M30	1-1/8-7 UNC
11S to 12S	9 to 10	M30	1-1/4-7 UNC

### Twin Series (DIN 3015, Part 3)

Group		Thread								
STAUFF DIN		Metric ISO	<b>Unified Coarse</b>							
1D	1	M6	1/4-20 UNC							
2D to 5D	2 to 5	M8	5/16-18 LINC							

### **Property Classes / Grades of Bolts and Screws**







**Socket Cap Screw** 



**Slotted Head Screw** 

	Bolt / Screw Type	Material Code	Property Class / Grade Metric ISO Threaded Bolts / Screws	Unified Coarse Threaded Bolts / Screws				
		W1, W2, W3	8.8 (according to DIN EN ISO 898)	5 (according to SAE J429)				
	Hexagon Head Bolt Type AS	W4 A2-70 (according to DIN EN ISO 3506)		AISI 304 / B8 (according to ASTM A193)				
		W5	A4-70 (according to DIN EN ISO 3506)	AISI 316 / B8M (according to ASTM A193)				
		W1, W2, W3	8.8 (according to DIN EN ISO 898)	5 (according to SAE J429)				
	Socket Cap Screw Type IS	W4	A2-70 (according to DIN EN ISO 3506)	AISI 304 / B8 (according to ASTM A193)				
		W5	A4-70 (according to DIN EN ISO 3506)	AISI 316 / B8M (according to ASTM A193)				
		W1, W2, W3	4.8 (according to DIN EN ISO 898)	2 (according to SAE J429)				
	Slotted Head Screw Type LI	W4	A2-70 (according to DIN EN ISO 3506)	AISI 304 / B8 (according to ASTM A193)				
		W5	A4-70 (according to DIN EN ISO 3506)	AISI 316 / B8M (according to ASTM A193)				

Unless otherwise stated, the above mentioned property classes / grades apply as standards for bolts and screws supplied by STAUFF. The information indicate the minimum requirements; higher property classes are available upon request. Contact STAUFF for details.

### **Basic Installation Instructions**



### **Installation on Weld Plate**

Different types of weld plates are available for all STAUFF Clamps according to DIN 3015 as well as for most of the other series and many custom-designed special clamps.

- . Mark the positions of the weld plates to ensure best
- Place weld plates in their designated positions. Please make sure these positions are suitable for the expected
- · Weld the weld plates into position. Elongated weld plates can also be mounted to their positions by using screws
- Push bottom clamp half onto weld plate.
- Insert pipe, tube, hose, cable or any other type of line.
- Place second clamp half and cover plate (optional) on top and mount clamp assembly by using screws or bolts.

Unless otherwise stated, the bolt lengths indicated for clamps according to DIN 3015 refer to the installation on weld plages and mouting rails as well as multi-level (stacking) installation. For direct installation, different lengths may be required.



### **Installation on Mounting Rail**

STAUFF Mounting Rails are available in different heights. STAUFF Rail Nuts are available for all STAUFF Clamps according to DIN 3015 (Heavy Series up to STAUFF Group 6S only) as well as for many custom-designed special clamps.

- Mark the positions of the mounting rails to ensure best alignment.
- Place mounting rails in their designated positions. Please make sure these bases are suitable for the expected loads.
- Weld the mounting rails into position. Mounting rails can also be mounted to their positions by using side-mounting brackets with screws or bolts.
- Insert rail nuts into mounting rail and turn until stop to lock (Standard and Twin Series) or slide in rail nut (Heavy Series).
- · Push bottom clamp half onto rail nuts.
- Insert pipe, tube, hose, cable or any other type of line.
- Place second clamp half and cover plate (optional) on top and mount clamp assembly by using screws or bolts.

The exact positions of the clamp assemblies can still be adjusted before being firmly bolted.



### Multi-Level (Stacking) Installation

Stacking bolts permit the multi-level assembly of clamps of identical group sizes. Safety locking plates inserted between the levels prevent the stacking bolts from turning. The Twin Series also allows stacking of different group sizes (STAUFF Groups 2D to 5D).

- Push bottom clamp half onto weld plate or rail nuts.
- Insert pipe, tube, hose, cable or any other type of line.
- · Place second clamp half.
- Insert stacking bolts into the clamp assembly and tighten using the following tightening torques (or in a way that the clamp halves are in contact with the line over the entire internal contact surface):

Standard Series 1 ... 2 N·m / .75 ... 1.5 ft·lb (hand-tightened)

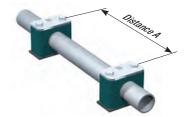
**Heavy Series**  $5 \, \text{N} \cdot \text{m} \, / \, 3.75 \, \text{ft·lb}$ 

Twin Series 1 ... 2 N·m / .75 ... 1.5 ft·lb (hand-tightened)

- Place safety locking plate on top of clamp assembly.
- Proceed with next levels. Top level to be assembled with cover plate and hexagon head bolts using the tightening torques as indivated on page 161.

STAUFF multi-level clamp assemblies can be mounted both to weld plates or to mounting rails (with rail nuts).

### **Recommended Distance between Clamps**



Please note: The recommended distances between clamps stated below are standard values and valid for static loads only.

Outside Diamete	r	Distance A		
(mm)	(in)	(m)	(ft)	
6,0 12,7	.2350	1,00	3,28	
12,7 22,0	.5086	1,20	3,94	
22,0 32,0	.86 1.25	1,50	4,92	
32,0 38,0	1.25 1.50	2,00	6,56	
38,0 57,0	1.5 2.25	2,70	8,86	
57,0 75,0	2.25 2.95	3,00	9,84	
75,0 76,1	2.95 3.00	3,50	11,48	
76,1 88,9	3.00 3.50	3,70	12,14	
88,9 102,0	3.50 4.00	4,00	13,12	
102,0 114,0	4.00 4.50	4,50	14,76	

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Outside Diamete (mm)	r (in)	Distance A (m)	(ft)
114,0 168,0	4.50 6.60	5,00	16,40
168,0 219,0	6.60 8.60	6,00	19,68
219,0 324,0	8.60 12.70	6,70	21,98
324,0 356,0	12.70 14.00	7,00	22,96
356,0 406,0	14.00 16.00	7,50	24,60
406,0 419,0	16.00 16.50	8,20	26,90
419,0 508,0	16.50 20.00	8,50	27,88
508,0 521,0	20.00 20.50	9,00	29,52
521,0 558,0	20.50 22.00	10,00	32,80
558,0 800,0	22.00 31.50	12,50	41,00

### Installation next to Pipe Bends, **Connectors / Couplings and Valves**



Please note the following information on the installation of STAUFF Clamps next to pipe bends, connectors / couplings and valves:

### **Pipe Bends**

Pipe bends should be supported by STAUFF Clamps as close to the bends as possible. Furthermore, it is recommended to design these clamps as fixed point clamps.

### **Connections / Couplings**

The first clamp should be placed directly next to the connector / coupling. This protects the connector  $\slash\hspace{-0.4em}$  coupling from vibrations.

If valves are incorporated in the pipelines, it is recommended that support is provided in front of and behind these valves.

Contact STAUFF for further information.



### **Tightening Torques and Maximum Loads In Pipe Direction**



All tightening torques and maximum loads in pipe direction refer to STAUFF Clamp Bodies (profiled inside surface with tension clearance) with Cover Plates, Weld Plates and Hexagon Head Bolts according to DIN EN ISO 4014/4017 (DIN 931/933).

The max. load in pipe direction (according to DIN 3015-10:1999) is an average value, determined by three tests at  $+23\,^{\circ}\text{C}$  /  $+73.4\,^{\circ}\text{F}$  with a steel pipe according to DIN EN 10220, St37 - rolled surface - taking static friction into consideration.

### Sliding starts when the shown values (F) are reached.

### **Standard Series** (DIN 3015-1:1999)

Group			lt	Polypropylene (PP)				Polyamid	le (PA)			Aluminium (AL)			
		DIN EN ISO 4014/4017 (DIN 931/933) Metric Unified Coarse		Tightenir			n Load rection F	Tightenin	Tightening Torque		Load rection F	Tightening Torque		Maximum Load in Pipe Direction F	
STAUFF	DIN	ISO Thread	(UNC) Thread	(N·m)	(ft·lb)	(kN)	(lbf)	(N·m)	(ft·lb)	(kN)	(lbf)	(N·m)	(ft·lb)	(kN)	(lbf)
1	0	M6	1/4-20 UNC	8	6	0,6	135	10	7	0,6	135	12	9	3,5	787
1A	1	M6	1/4-20 UNC	8	6	1,1	247	10	7	0,7	157	12	9	4,2	944
2	2	M6	1/4-20 UNC	8	6	1,3	292	10	7	0,8	180	12	9	4,3	967
3	3	M6	1/4-20 UNC	8	6	1,4	315	10	7	1,6	360	12	9	4,9	1101
4	4	M6	1/4-20 UNC	8	6	1,5	337	10	7	1,7	382	12	9	5,0	1124
5	5	M6	1/4-20 UNC	8	6	1,9	427	10	7	2,0	450	12	9	7,3	1641
6	6	M6	1/4-20 UNC	8	6	2,0	450	10	7	2,5	562	12	9	8,9	2000
7	7	M6	1/4-20 UNC	8	6	2,3	517	10	7	3,2	719				
8	8	M6	1/4-20 UNC	8	6	2,6	585	10	7	3,5	787				

### Heavy Series (DIN 3015-2:1999)

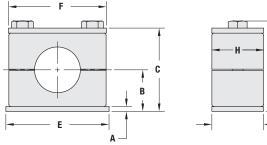
Group		Hexagon Head I	Bolt	Polypro	pylene (PP)			Polyami	de (PA)			Aluminiu	ım (AL)		
		DIN EN ISO 401	4/4017 (DIN 931/933)		Maximum Load		Maximum Load					Maximum Load			
		Metric	Unified Coarse	Tightening Torque		in Pipe Direction F		Tightening Torque		in Pipe Direction F		Tightening Torque		in Pipe Direction F	
STAUFF	DIN	ISO Thread	(UNC) Thread	(N·m)	(ft·lb)	(kN)	(lbf)	(N·m)	(ft·lb)	(kN)	(lbf)	(N·m)	(ft·lb)	(kN)	(lbf)
3S	1	M10	3/8-16 UNC	12	9	1,6	360	20	15	4,2	944	30	22	12,1	2720
4S	2	M10	3/8-16 UNC	12	9	2,9	652	20	15	4,5	1044	30	22	15,1	3395
5S	3	M10	3/8-16 UNC	15	11	3,3	742	25	18	5,1	1146	35	26	15,5	3485
6S	4	M12	7/16–14 UNC	30	22	8,2	1843	40	30	9,3	2090	55	41	29,5	6609
7S	5	M16	5/8-11 UNC	45	33	11,0	2472	55	41	15,8	3551	120	86	34,9	7845
88	6	M20	3/4-10 UNC	80	59	14,0	3147	150	111	21,0	4720	220	162	50,0	11240
98	7	M24	7/8–9 UNC	110	81	28,0	6300	200	148	32,0	7193	250	184	70,6	15871
10S	8	M30	1-1/8-7 UNC	180	133	40,0	8992	350	258	48,0	10790	500	369	84,5	18996
11S	9	M30	1-1/4-7 UNC	200	148	119,0	26752	370	273	125,0	27650	500	369	181,5	40802
12S	10	M30	1-1/4-7 UNC	270	199	168,0	37767	450	332	180,0	40465	600	443	244,5	54965

### Twin Series (DIN 3015-2:1999)

Group		Hexagon Head Bol	t	Polypropylene	(PP)			Polyamide (PA)				
			1017 (DIN 931/933)				Maximum Load			Maximum Load		
		Metric	Unified Coarse	Tightening Tor	que	in Pipe Direction F		Tightening Tor	que	in Pipe Direction F		
STAUFF	DIN	ISO Thread	(UNC) Thread	(N·m)	(N·m) (ft·lb)		(lbf)	(N·m)	(ft·lb)	(kN)	(lbf)	
1D	1	M6	1/4-20 UNC	5	4	0,9	202	5	4	0,9	202	
2D	2	M8	5/16-18 UNC	12	9	2,1	472	12	9	2,2	495	
3D	3	M8	5/16-18 UNC	12	9	1,9	427	12	9	2,0	450	
4D	4	M8	5/16-18 UNC	12	9	2,7	607	12	9	2,9	652	
5D	5	M8	5/16-18 UNC	8	6	1,7	382	8	6	2,5	562	

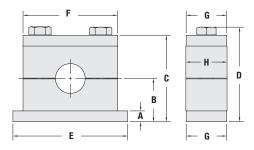
Only for the standard clamp body materials which are listed on page 154. In case of doubt, please contact STAUFF in advance.

### **Dimensions and Weights of Clamp Assemblies**



### Standard Series (DIN 3015, Part 1)

Group		Dimensio	ns ( <sup>mm</sup> / <sub>in</sub> )										Weight per 100 Pcs.
			В		C		D						SP-**-PP-DP-AS
STAUFF	DIN	Α	Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)	E	F	G	H	(kg/lbs)
	0	3	16,5	16	33	32	37	36	31,5	28	30	30	6,20
	0	.12	.65	.63	1.30	1.26	1.46	1.42	1.24	1.10	1.18	1.18	13,64
A	1	3	16,5	16	33	32	37	36	36	34	30	30	8,10
А	1	.12	.65	.63	1.30	1.26	1.46	1.42	1.41	1.33	1.18	1.18	17.82
	2	3	19,5	19	39	38	43	42	42	40,5	30	30	9,40
2	2	.12	.77	0.75	1.54	1.50	1.69	1.65	1.65	1.59	1.18	1.18	20.68
	2	3	21	20,75	42	41,5	46	45,5	50	48	30	30	11,20
3	3	.12	.83	.82	1.65	1.64	1.81	1.80	1.96	1.88	1.18	1.18	24.64
	4	3	24	23,75	48	47,5	52	51,5	60	57	30	30	13,70
	4	.12	.94	.94	1.89	1.87	2.05	2.03	2.36	2.24	1.18	1.18	30.14
;	5	3	32	31,25	64	62,5	68	66,5	71	70	30	30	17,10
,	5	.12	1.26	1.23	2.52	2.46	2.68	2.62	2.79	2.75	1.18	1.18	37.62
i	6	3	36	35,25	72	70,5	76	74,5	88	86	30	30	21,30
,	O	.12	1.42	1.39	2.83	2.78	2.99	2.94	3.46	3.38	1.18	1.18	46.86
,	7	5	51,5	51	103	102	107	106	122	118	30	30	42,10
	1	.20	2.03	2.01	4.06	4.02	4.21	4.17	4.81	4.65	1.18	1.18	92.62
	8	5	64	63	128	126	132	130	148	144	30	30	44,00
3	0	.20	2.52	2.48	5.04	4.96	5.20	5.12	5.83	5.67	1.18	1.18	96.80

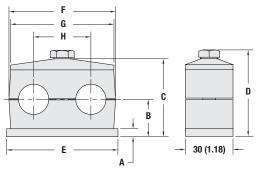


### Heavy Series (DIN 3015, Part 2)

Group		Dimensi	ons (mm/in)											Weight per 1 Pc.
			В		С		D			F				SPAL-**-PP-DPAL-AS
STAUFF	DIN	Α	Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)	E	PP/PA/SA	AL	G	Н	(kg/lbs)
3S	1	8	24	23,25	48	46,5	54,4	52,9	74	55	56	30	30,5	0,32
33	'	.31	.94	.92	1.89	1.83	2.14	2.09	2.91	2.16	2.20	1.18	1.20	.70
4S	2	8	32	31,25	64	62,5	70,4	68,9	86	70	70	30	30,5	0,40
43	2	.31	1.26	1.23	2.52	2.46	2.77	2.72	3.39	2.76	2.76	1.18	1.20	.88
5S	3	8	38	37	76	74	82,4	80,4	100	85	85	30	30,5	0,49
55	3	.31	1.50	1.46	2.99	2.91	3.24	3.17	3.94	3.35	3.35	1.18	1.20	1.08
cc	4	10	54,5	53,5	109	107	116,5	114,5	140	115	120	45	45	1,21
6S	4	.39	2.15	2.11	4.29	4.21	4.59	4.51	5.51	4.53	4.72	1.77	1,77	2.66
7S	E	10	70		140		150		180	154	152	60	60	2,30
15	5	.39	2.76		5.51		5.91		7.09	6.06	5.98	2.36	2,36	5.06
8S	6	15	99		198		210,5		226	206	208	80	80	5,56
65	О	.59	3.90		7.80		8.29		8.90	8.11	8.19	3.15	3.15	12.26
98	7	15	115		230		245		270	251	255	90	91	7,97
95	<i>'</i>	.59	4.53		9.06		9.65		10.63	9.88	10.04	3.54	3.58	17.58
100	0	25	160		320		338,7		340	336	326	120	120	22,16
10S	8	.98	6.30		12.60		13.33		13.39	13.22	12.83	4.72	4.72	48.75
110	0	30	235		470		488,7		520	470	470	160	162	54,11
11S	9	1.18	9.25		18.50		19.24		20.47	18.50	18.50	6.30	6.38	119.04
100	10	30	295		590		608,7		680	630	630	180	182	77,40
12S	10	1.18	11.61		23.23		23.96		26.77	24.80	24.80	7.09	7.16	170.28



### **Dimensions & Weights of Clamp Assemblies**



### Twin Series (DIN 3015, Part 3)

Group		Dimensions	(mm/in)									Weight per 100 Pcs.	
			В		C	C	D						SP-**/**-PP-GD-AS
STAUFF	DIN	Α	Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)	E	F	G	Н	(kg/lbs)
1D	4	3	16,5	16,25	37	36,5	41	40,5	37	36	34	20	7,60
ID	I	.12	.65	.64	1.46	1.44	1.61	1.59	1.46	1.42	1.34	.79	16.72
OD.	0	5	18,5	18,25	39	38,5	44	43,5	55	53	52	29	13,50
2D	2	.20	.73	.72	1.54	1.52	1.73	1.71	2.17	2.09	2.05	1.14	29.70
3D	2	5	23,5	23,25	49	48,5	54	53,5	70	67	65	36	17,70
30	3	.20	.93	.92	1.93	1.91	2.13	2.11	2.76	2.64	2.56	1.42	38.94
4D	4	5	25	24	52	50	57	55	85	80	79	45	20,40
40	4	.20	.98	.94	2.05	1.97	2.24	2.17	3.35	3.15	3.11	1.77	44.88
5D	5	5	31,5	31	65	64	70	69	110	106	102	56	27,70
บบ	5	.20	1.24	1.22	2.56	2.52	2.76	2.72	4.33	4.17	4.02	2.20	60.94

### **Packaging Units (Selection)**

### Standard Series (DIN 3015, Part 1)

### Clamp Bodies (Polypropylene / Polyamide)

Group STAUFF	DIN	Quantity per Bag (in Pcs.)
1 - 6	0 - 6	25
7 + 8	7 + 8	10

### Heavy Series (DIN 3015, Part 2)

### Clamp Bodies (Polypropylene / Polyamide)

Group STAUFF	DIN	Quantity per Bag	
STAULL	מוע	(in Pcs.)	
3S - 6S	1 - 4	20	
7S	5	10	
8S - 12S	6 - 10	1	

### Twin Series (DIN 3015, Part 3)

### Clamp Bodies (Polypropylene / Polyamide)

Group STAUFF	DIN	Quantity per Bag (in Pcs.)
1D - 4D	1 - 4	25
5D	5	10

### Clamp Bodies (Aluminium)

Group STAUFF DIN		Quantity per Bag
STAUFF	DIN	(in Pcs.)
1 - 5	0 - 5	25
6	6	10

### Clamp Bodies (Aluminium)

Group STAUFF	DIN	Quantity per Bag (in Pcs.)
3S - 6S	1 - 4	20
7S	5	10
8S - 12S	6 - 10	1

### Weld Plates (Type SP) Cover Plates (Type GD)

Group		Quantity per Bag
STAUFF	DIN	(in Pcs.)
1D - 4D	1 - 4	25
5D	5	10

## Weld Plates (Type SP) Cover Plates (Type DP)

Group STAUFF	DIN	Quantity per Bag (in Pcs.)
1 - 6	0 - 6	25
7 + 8	7 + 8	10

## Weld Plates (Type SPAL) Cover Plates (Type DPAL)

Group		Quantity per Bag
STAUFF	DIN	(in Pcs.)
3S - 6S	1 - 4	20
7S	5	10
8S - 12S	6 - 10	1

### Hexagon Rail Nut (Type SM) Channel Rail Adaptor (Type CRA)

Group STAUFF	DIN	Quantity per Bag (in Pcs.)
1D	1	50
2D - 5D	2 - 5	25

Contact STAUFF and ask for standard packaging units

for further components or special packaging options.

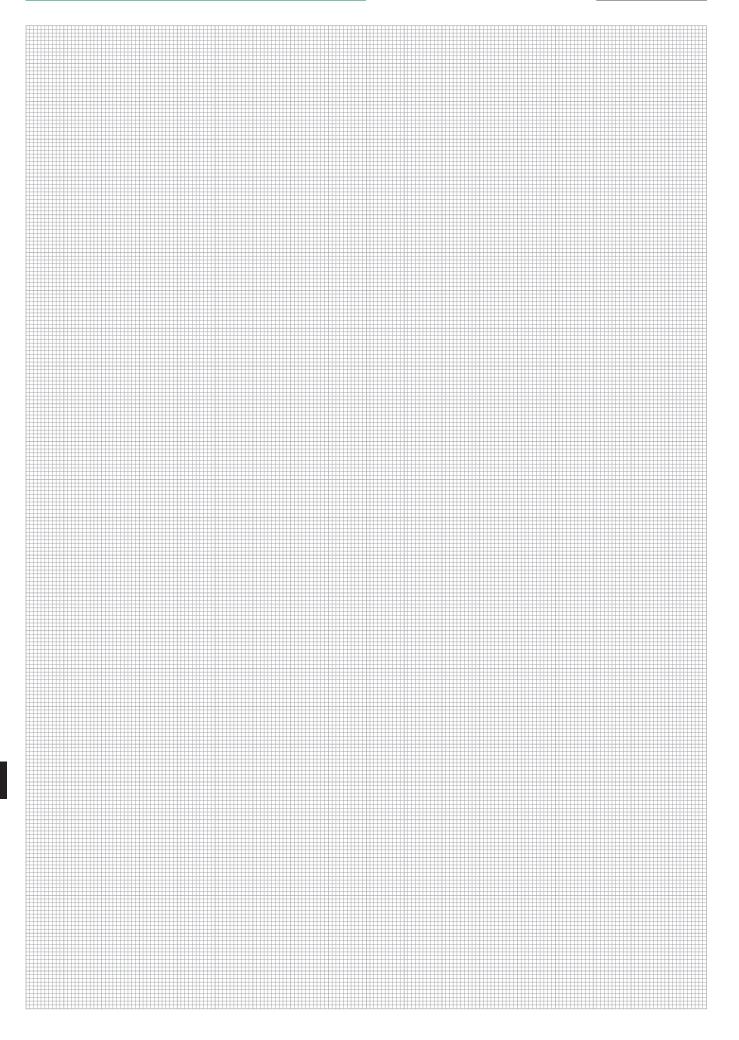
### Hexagon Rail Nut (Type SM) Channel Rail Adaptor (Type CRA)

Group STAUFF	DIN	Quantity per Bag (in Pcs.)
1 - 8	0 - 8	50

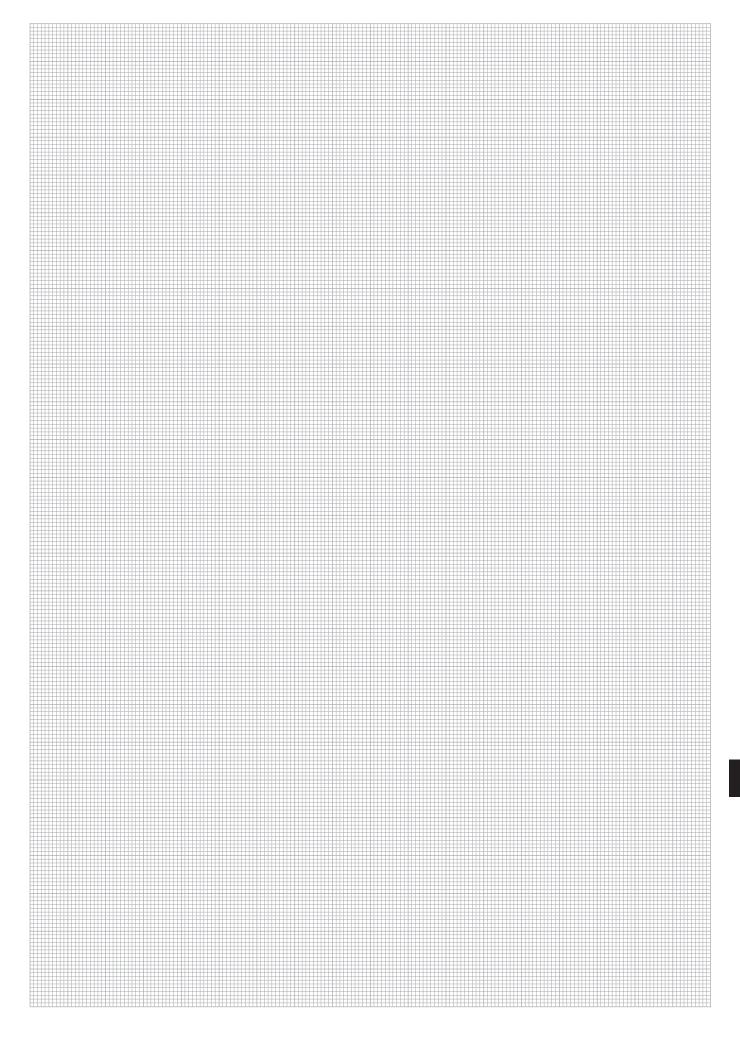
### Mounting Rail Nut (Type GMV) Channel Rail Adaptor (Type CRA)

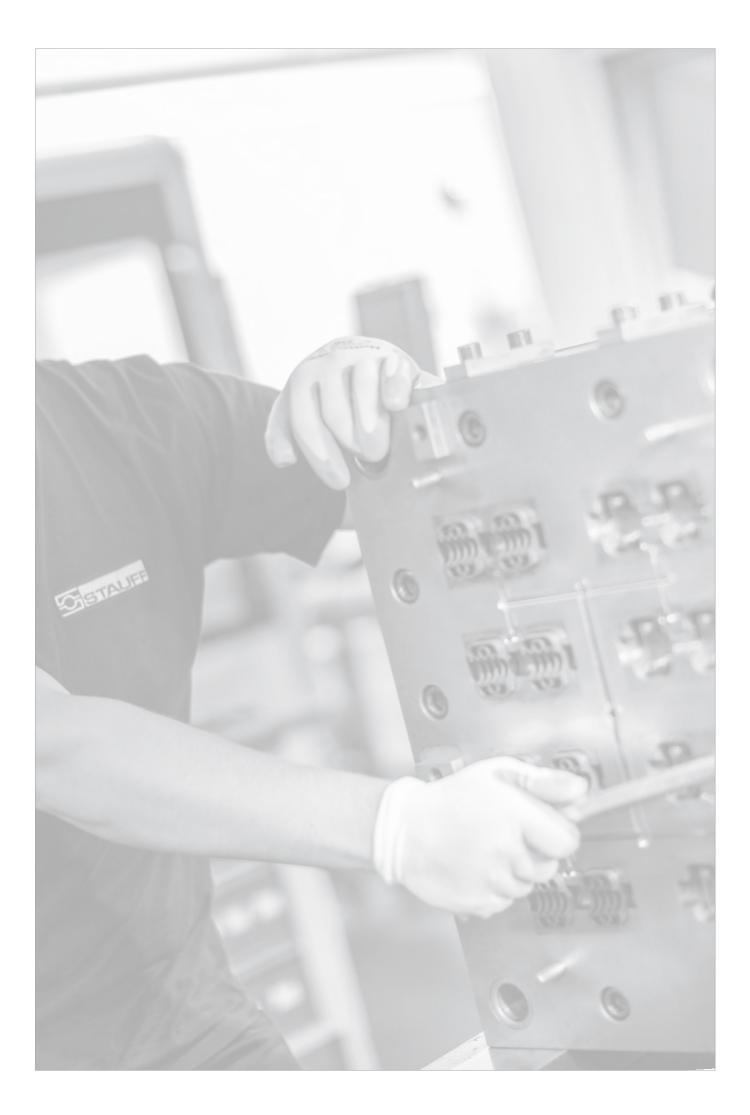
Group STAUFF	DIN	Quantity per Bag (in Pcs.)
3S - 6S	1 - 4	40













**Product-Specific Abbreviations** 192 **Global Contact Directory** 194



### **Product-Specific Abbreviations**

bbreviation	Product Category	Product Description	Pa
CT	STAUFF ACT Clamps	ACT Clamp Body, Standard Series	84
CT	STAUFF ACT Clamps	ACT Clamp Body, Twin Series	94
F	Standard Series	Stacking Bolt	31
F	Heavy Series	Stacking Bolt	53
F	Twin Series	Stacking Bolt	71
F	Heavy Twin Series	Stacking Bolt	78
 .F	Multi-Line Clamps	Stacking Bolt	12
S	Standard Series	Hexagon Head Bolt	28
		•	
S	Heavy Series	Hexagon Head Bolt	51
S	Twin Series	Hexagon Head Bolt	68
S	Heavy Twin Series	Hexagon Head Bolt	78
S	Multi-Line Clamps	Hexagon Head Bolt	12
S	Light Series	Hexagon Head Bolt	13
SP	Standard Series	Bridge Weld Plate	22
		•	
C	Standard Series	Clamp Body, Compact Design	19
HC	Standard Series	Clamp Body for Conduit Hoses and Cable Inserts	18
amp Body	Standard Series	Clamp Body, Profiled Design	14
amp Body	Standard Series	Clamp Body, Type H	15
amp Body	Heavy Series	Clamp Body, Profiled Design	38
amp Body	Heavy Series	Clamp Body, Type H	40
· · · · · · · · · · · · · · · · · · ·	-		
amp Body	Twin Series	Clamp Body, Profiled Design	60
amp Body	Twin Series	Clamp Body, Type H	60
amp Body	Heavy Twin Series	Clamp Body, Profiled Design	76
RA	Standard Series	Channel Rail Adaptor	26
A	Heavy Series	Channel Rail Adaptor	47
RA	Twin Series	Channel Rail Adaptor	65
RA		·	78
	Heavy Twin Series	Channel Rail Adaptor	
RA	Multi-Line Clamps	Channel Rail Adaptor	12
T-SR6-SWG	STAUFF SWG: Stud Welding System	Distance Tube	10
)	Standard Series	Cover Plate	28
PAD	Heavy Twin Series	Cover Plate	77
PAL	Heavy Series	Cover Plate for Single Clamps	50
PAS	Heavy Series	Cover Plate for Double Clamps	50
	-	·	
L	Light Series	Cover Plate	14
P-MLC	Multi-Line Clamps	Cover Plate	1
SP	Standard Series	Twin Weld Plate	2.
)	Standard Series	Insert	30
3	Standard Series	Insert	30
3			15
	Flat Steel and Round Steel U-Bolt Clamps	Flat Steel U-Bolt	
)	Twin Series	Cover Plate	68
ΛV	Heavy Series	Mounting Rail Nut	4
VIV	Heavy Twin Series	Mounting Rail Nut	78
	Standard Series	Socket Cap Screw	30
	Heavy Series	Socket Cap Screw	5
	Twin Series	Socket Cap Screw	69
		•	
	Heavy Twin Series	Socket Cap Screw	75
t-SWG-WI06-Starter	STAUFF SWG: Stud Welding System	Starterkit	11
}	Light Series	Clamp Body, Single Design	1-
BU	Light Series	Clamp Body, Single Design	1:
BU	Light Series	Clamp Body, Twin Design	1:
BBU-DP	Light Series	Cover Plate	1:
BU-HUE	Light Series	Sleeve	1
BU-SP	Light Series	Weld Plate	1
iG .	Light Series	Clamp Body, Twin Design	1
U	Light Series	Clamp Body, Twin Design	1
	Standard Series	Slotted Head Screw	3
	Light Series	Clamp Body, Single Design	1
IGF	-	1 37 0 0	1.
	Light Series	Clamp Body, Twin Design	
IUF	Light Series	Clamp Body, Twin Design	14
GR	Standard Series	Clamp Body for Multi-Group Weld Plate	2
_C	Multi-Line Clamps	Clamp Body (2 Lines) Multi-Line Clamps	1
LC	Multi-Line Clamps	Clamp Body (3 Lines) Multi-Line Clamps	1
_C	Multi-Line Clamps	Clamp Body (4 Lines) Multi-Line Clamps	1
	·		
_C	Multi-Line Clamps	Clamp Body (6 Lines) Multi-Line Clamps	1
IC .	Standard Series	Noise Reduction Clamp	11
RC	Heavy Series	Noise Reduction Clamp	4
<b>∖</b> P	Standard Series	Group Weld Plate	2
IP.	Twin Series	Group Weld Plate	6
AP-MGR	Standard Series	Multi-Group Weld Plate	2:
		·	
3	Flat Steel and Round Steel U-Bolt Clamps	Round Steel U-Bolt	1
	Flat Steel and Round Steel U-Bolt Clamps	Round Steel U-Bolt	1:
3	Flat Steel and Round Steel U-Bolt Clamps	Round Steel U-Bolt (DIN 3570, Type A)	1:
3			
3 3D	·	Clamp Body with Elastomer Insert	10
3 3D	Standard Series	Clamp Body with Elastomer Insert	
B BD I	Standard Series Heavy Series	Clamp Body with Elastomer Insert	10
3 3D	Standard Series	· · ·	



### **Product-Specific Abbreviations**

Abbreviation	Product Category	Product Description	Page
RUL	Flat Steel and Round Steel U-Bolt Clamps	Plastic Pipe Saddle (Long) for Round Steel U-Bolt	155
SI	Twin Series	Safety Locking Plate	70
SI (DIN 463)	Standard Series	Safety Washer (DIN 463)	29
SI (DIN 463)	Heavy Series	Safety Washer (DIN 463)	52
SI (DIN 93)	Standard Series	Safety Washer (DIN 93)	29
SI (DIN 93)	Heavy Series	Safety Washer (DIN 93)	52
SIG	Standard Series	Safety Locking Plate	31
SIG	Multi-Line Clamps	Safety Locking Plate	121
SIP	Heavy Series	Safety Locking Plate	53
SIPD	Heavy Twin Series	Safety Locking Plate Safety Locking Plate	78
SIV	Twin Series	Safety Locking Plate Safety Locking Plate	70
SM	Standard Series	Hexagon Rail Nut	24
M	Twin Series	Hexagon Rail Nut	63
SM	Multi-Line Clamps	Hexagon Rail Nut	122
P	Standard Series	Single Weld Plate	20
P	Twin Series	Single Weld Plate	61
PAD	Heavy Twin Series	Weld Plate	77
PAL	Heavy Series	Weld Plate for Single Clamps	44
PAL-DUEB	Heavy Series	Elongated Weld Plate for Single Clamps	45
PAS	Heavy Series	Weld Plate for Double Clamps	44
PAS-DUEB	Heavy Series	Elongated Weld Plate for Double Clamps	45
P-MLC	Multi-Line Clamps	Single Weld Plate	118
PV	Standard Series	Elongated Weld Plate	20
PV	Twin Series	Elongated Weld Plate	61
TSV	Heavy Series	Mounting Rail	46
TSV	Heavy Twin Series	Mounting Rail	78
WG-AGS	STAUFF SWG: Stud Welding System	Distance Adaptor	109
WG-CTH-11-M6	STAUFF SWG: Stud Welding System	Cable Tie Holder	107
WG-CTH-30-M6-1	STAUFF SWG: Stud Welding System	Cable Tie / Tension Belt Holder	107
WG-CTH-30-M6-2	STAUFF SWG: Stud Welding System	Cable Tie / Tension Belt Holder	107
WG-DIP	STAUFF SWG: Stud Welding System	Distance Plate for DIN 3015 Clamps	107
WG-GC	STAUFF SWG: Stud Welding System	Ground Cable	109
WG-MRA	Standard Series	Fastening Adaptor	25
WG-MRA	Twin Series	Fastening Adaptor	64
WG-SF	STAUFF SWG: Stud Welding System	Weld Stud with Female Thread	106
WG-SR6		Stud Retainer	109
	STAUFF SWG: Stud Welding System		
WG-WG	STAUFF SWG: Stud Welding System	Weld Inverter	108
SWG-WI06	STAUFF SWG: Stud Welding System	Weld Inverter	108
S	Standard Series	Mounting Rail	24
S	Twin Series	Mounting Rail	63
S	Multi-Line Clamps	Mounting Rail	122
K	Standard Series	Clamp Body, Rectangular Design	19
/SP	Standard Series	Angled Weld Plate	22
R-518	Saddle / Piggyback Clamps	Saddle / Piggyback Clamps	146
IN 3567-A	Metal DIN Clamps	Metal Pipe Clamp with Tension Clearance Two-Bolt Design	160
IN 3567-B	Metal DIN Clamps	Metal Pipe Clamp with Tension Clearance Three-Bolt Design (Extended to One Side)	161
IN 1592	Metal DIN Clamps	Heavy Saddle with Tension Clearance Single-Bolt Design	162
IN 1593	Metal DIN Clamps	Heavy Saddle with Tension Clearance Two-Bolt Design	163
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IN 1596	Metal DIN Clamps	Light Saddle with Tension Clearance Single-Bolt Design	164
IN 1597	Metal DIN Clamps	Light Saddle with Tension Clearance Two-Bolt Design	165
S	Construction Series	Construction Series	168
KS	Construction Series	Construction Series	168
SV	Construction Series	Construction Series (for Anchor Bolt Fastening)	169
KSV	Construction Series	Construction Series (for Anchor Bolt Fastening)	169
TC	Other Types of Clamps	Cushion Clamp Series	172
PC	Other Types of Clamps	Cushion Clamp Series	172
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S	Other Types of Clamps  Other Types of Clamps	Compact Twin Series	173
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Standard Series according to DIN 3015, Part 1 **Custom-Designed Special Clamps** Saddle / Piggyback Clamps Flat Steel and Round Steel U-Bolt Clamps



# Catalogue 1 STAUFF Clamps



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