

Catalogue 1 STAUFF Clamps



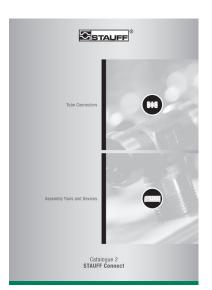
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#### Catalogue 1 **STAUFF Clamps**

- 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



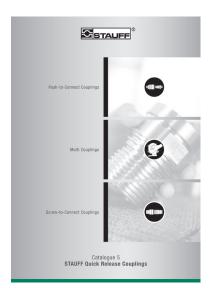
Catalogue 3 **STAUFF Flanges** 

- 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





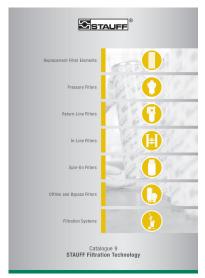
Catalogue 7 **STAUFF Test** 

- Test Couplings
- Test Adaptors
- Test Hoses and Connectors



Catalogue 8 **STAUFF Diagtronics** 

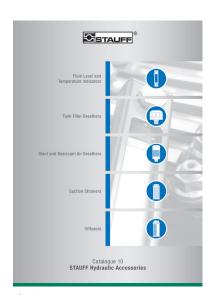
- Pressure Gauges
- Hydraulic Testers
- Oil Analysis Equipment



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 40000 standard products as well as numerous special and system solutions according to customer's specifications or based on our in-house development.

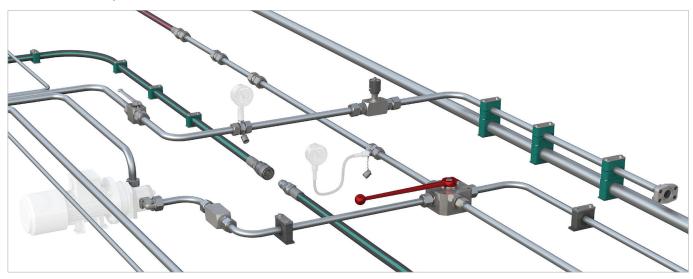
All STAUFF products undergo relevant testing in accordance with international regulations and are governed by the high standards of the in-house quality management system. Furthermore, many items have received certifications and approvals from various international institutes, organisations and authorities 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 0HSAS – 18001:2007

#### **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

6

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.

The portfolio is completed by components for shutting-off, regulating, throttling and measuring fluid media.

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.

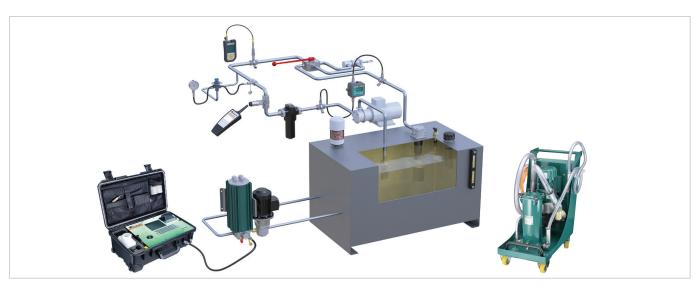
If desired, Original Equipment Manufacturers can be supported with value-added services, from **technical consultation** to **pre-assembly, assembly and kitting** as well as **logistics services**:

- 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
- Russian Maritime Register of Shipping
- 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.

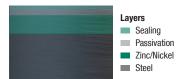








#### **STAUFF Zinc/Nickel Coating**



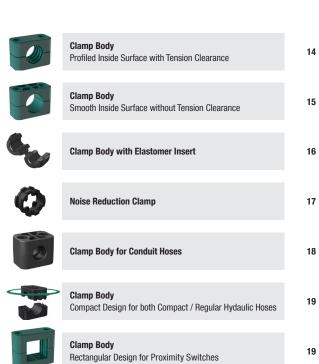
With at least 1200 hours resistance against red rust, the STAUFF Zinc/Nickel surface coating offers excellent surface protection – even after transport, handling and assembly. This was confirmed by testing in the salt-spray chamber according to DIN EN ISO 9227.

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





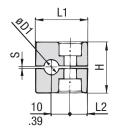


03	Weld Plate SP	20	V 62 V	Cover Plate DP	26
-	Elongated Weld Plate SPV	20	1	Hexagon Head Bolt for use with Cover Plate DP  AS	26
0 64 4	Twin Weld Plate DSP	21		Safety Washer (DIN 93)	27
0 30	Group Weld Plate	21		Safety Washer (DIN 463)	27
	Angled Weld Plate WSP	22	1	Socket Cap Screw IS	28
0 0	BSP	22	1	Slotted Head Screw	28
	Clamp Body for Multi-Group Weld Plates	23	1	Hexagon Head Bolt for use with Insert ES / EP  AS	28
639393	Multi-Group Weld Plate  RAP-MGR	23	9	Insert ES / EP	28
	Hexagon Rail Nut SM / SMG	24	===	Safety Locking Plate SIG	29
	Mounting Rail TS	24	1	Stacking Bolt AF	29
S. C.	Channel Rail Adaptor CRA	25		Clamp Assemblies	30

#### Clamp Body • Profiled Design

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





L2 L1

**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

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: SA



#### Aluminium

Colour: Self-Colour

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

See pages 154 / 155 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 156 / 157 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

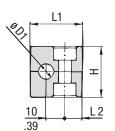
Group		Outside	Diameter	Nominal	Rore	Ordering Codes	Dimens	ions				
-		Pipe / Tu		Hommu	Copper Tube	(2 Clamp Halves)						
STAUFF	_	Ø D1		Pipe	ASTM B88	, , ,	( ,,					
ST	N	(mm)	(in)	(in)	(in)	( <b>**</b> = Material)	L1	L2	Н	S min.	Width	
		6				106-**						
		6,4	1/4			106.4-**						
1	0	8	5/16			108-**	28	9,5	27	0,4	30	
	0	9,5	3/8		1/4	109.5-**	1.10	.37	1.06	.02	1.18	
		10		1/8		110-**						
		12				112-**						
		6				106A-**						
		6,4	1/4			106.4A- <b>**</b>						
1A	1	8	5/16			108A-**	37	20	27	0,4	30	
		9,5	3/8		1/4	109.5A- <b>**</b>	1.46	.79	1.06	.02	1.18	
		10		1/8		110A-**						
		12	1.00		0.40	112A-**						
		12,7	1/2	4/4	3/8	212.7-**						
		13,5		1/4		213.5-**						
	0	14				214-**	42	26	33	0,6	30	
2	2	15	F /0		1/0	215-**	1.65	1.02	1.30	.02	1.18	
		16	5/8	3/8	1/2	216- <b>**</b> 217.2- <b>**</b>						
		17,2		3/8								
		18 19	3/4			218-**						
		20	3/4			319- <b>**</b> 320- <b>**</b>						
	3	21,3		1/2		321.3-**	50	33	36	0.0	30	
3		22	7/8	1/2	3/4	322-**	1.97	1.30	1.42	0,6	1.18	
		25	1/0		3/4	325-**	1.37	1.50	1.42	.02	1.10	
		25,4	1			325.4-**						
		26,9	1	3/4		426.9-**						
		28		3/4		428- <b>**</b>						
4	4	28,6			1	428.6-**	59	40	42	0,6	30	
7	-	30				430-**	2.32	1.57	1.65	.02	1.18	
		32				432-**						
		32	1-1/4			532-**						
		33,7	, .	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			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-**						
		57,2	2-1/4			757.2-**						
		60,3		2		760.3-**						
7	7	63,5	2-1/2			763.5- <b>**</b>	121	94	93	0,8	30	
7	1	70	2-3/4			770-**	4.76	3.70	3.66	.03	1.18	
		73		2-1/2 (ANS	SI B 36-10)	773-**						
		76,1	3	2-1/2 (DIN	EN 10220)	776.1-**						
0	0	88,9		3		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	

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.

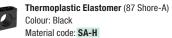
1
06
PP-H

#### **Standard Materials**









See pages 154 / 155 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 156 / 157 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
- $\, \blacksquare \,$  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

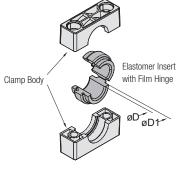
Group		Outside Dian	neter	Ordering Codes	Dimensions					
-		Hose		(2 Clamp Halves)	(mm/in)					
STAUFF	-	Ø D1 (mm) (in)								
ST	言			(**-H = Material)	L1	L2	H	Width		
		6		106-**-H						
		6,4	1/4	106.4-**-H						
_		8	5/16	108-**-H	28	9,5	26	30		
1	0	9,5	3/8	109.5-**-H	1.10	.37	1.02	1.18		
		10		110-**-H						
		12		112-**-H						
		6		106A-**-H						
		6,4	1/4	106.4A-**-H						
1A	4	8	5/16	108A-**-H	37	20	26	30		
IA	1	9,5	3/8	109.5A-**-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	40	26	20	20		
2	2	15		215-**-H	42 1.65	26 1.02	32 1.26	30 1.18		
		16	5/8	216-**-H	1.00	1.02	2 1.20	1.10		
		17,2		217.2-**-H						
		18		218-**-H						
2		19	3/4	319-**-H						
		20		320-**-H						
	2	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-**-H						
		26,9		426.9-**-H						
4	,	28		428- <b>**</b> -H	59	40	41,5	30		
4	4	30		430-**-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-**-H						
E	_	35		535- <b>**</b> -H	71	52	56,5	30		
5	5	38	1-1/2	538- <b>★</b> ★-H	2.80	2.05	2.22	1.18		
		40		540-**-H						
		42		542- <b>**</b> -H						
		44,5	1-3/4	644.5-**-H						
c	6	48,3		648.3-**-H	86	66	64,5	30		
6	6	50,8	2	650.8-**-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-**-H						
7	7	63,5	2-1/2	763.5- <b>**</b> -H	121	94	92	30		
7	1	70	2-3/4	770- <b>**</b> -H	4.76	3.70	3.62	1.18		
		73		773-**-H						
		76,1	3	776.1-**-H						
0		88,9		888.9- <b>**</b> -H	147	120	116	30		
8	8	102	4	8102L-**-H	5.79	4.72	4.57	1.18		
		102	4	01U2L-本本-N	1		1			

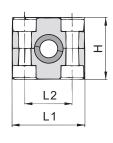
Additional outside diameters are available upon request. Please contact STAUFF for further information.



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







Ordering Codes	
Clamp Assembly	*4*06-*PP-R
One assembly is consisting of one	clamp body and one insert.
* STAUFF Group * Exact outside diameter Ø D (m * Material code (see below)	m) 4 PP-R
Clamp Body	*4-*PP-R
One clamp body is consisting of	two clamp halves.
* STAUFF Group * Material code (see below)	4 PP-R
Elastomer Insert	*RI-*06-*4/4S
* Elastomer Insert  * Exact outside diameter Ø D (m  * STAUFF Group 4 (Standard) 6 (Standard)	,

#### **Standard Materials**



Polypropylene Colour: Black Material code: PP-R



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



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

See pages 154 / 155 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 156 / 157 for material properties and technical 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

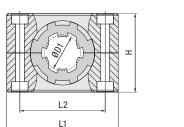
		Ordering Codes	(**R = Clamp I	Body Material)	Dimen	sions					
ᄠ		Pipe / To	ube / Hose	Clamp Assembly (Clamp Body +	Clamp Body	Insert *	(mm/in)				
STAUFF	DIN	(mm) (in) Insert) (2 Clamp Halves)			Ø D1	L1	L2	Н	Width		
		6		406- <b>**</b> -R		RI-06-4/4S					
		8	5/16	408- <b>**</b> -R	R	RI-08-4/4S					
		10		410- <b>**</b> -R		RI-10-4/4S					
		12		412- <b>**</b> -R		RI-12-4/4S					
		12,7	1/2	412.7- <b>**</b> -R		RI-12.7-4/4S			40	41,2	
4	4	14		414- <b>**</b> -R		RI-14-4/4S	.98	2.32			1.18
		15		415- <b>**</b> -R		RI-15-4/4S					
		16	5/8	416- <b>**</b> -R		RI-16-4/4S					
		17,2		417.2- <b>**</b> -R		RI-17.2-4/4S					
		18		418- <b>**</b> -R		RI-18-4/4S					
		19	3/4	419- <b>**</b> -R		RI-19-4/4S					
		20		620- <b>**</b> -R		RI-20-6/5S					
		21,3		621.3- <b>**</b> -R		RI-21.3-6/5S					
		22	7/8	622- <b>**</b> -R		RI-22-6/5S					
6	6	25		625- <b>**</b> -R	C shall D	RI-25-6/5S	38	86	66	64,5	30
0	О	26,9		626.9- <b>**</b> -R	6- <b>**</b> -R	RI-26.9-6/5S	1.50	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					

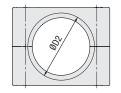
\* Elastomer Inserts for Standard Series clamp bodies, STAUFF Group 4 also fit into Heavy Series clamp bodies, STAUFF Group 4S. Elastomer Inserts for Standard Series clamp bodies, STAUFF Group 6 also fit into Heavy Series clamp bodies, STAUFF Group 5S.

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



# Noise Reduction Clamp Type NRC









Pipe / Tube			Pipe / Tube Clamp Assembly Clamp Body NRC Insert			Dimensions (mm/in)							
ST/	N O	(mm)	(in)	NRC Insert)	(2 Clamp Halves)	(2 Insert Halves)	ØD2	ØD3	L1	L2	Н	Width	
		6		206-PP-NRC		RI-NRC-6-2							
		8	5/16	208-PP-NRC		RI-NRC-8-2							
2	2	10		210-PP-NRC	2-PP-NRC	RI-NRC-10-2	.98	26 1.02	42 1.65	26 1.02	32 1.26	30 1.18	
		12		212-PP-NRC		RI-NRC-12-2			1.00		1120		
		12,7	1/2	212.7-PP-NRC		RI-NRC-12.7-2							
		14		314-PP-NRC		RI-NRC-14-3					35,5 1.40		
3	3	15		315-PP-NRC	3-PP-NRC	RI-NRC-15-3	1.10	29	50 1.97	33 1.30		30 1.18	
		16	5/8	316-PP-NRC		RI-NRC-16-3							
4	4	18		418-PP-NRC	4-PP-NRC	RI-NRC-18-4	34	35	59	40	41,5	30	
4	4	20		420-PP-NRC	4-FF-NNG	RI-NRC-20-4	1.34	1.38	2.32	1.57	1.63	1.18	
		21,3		521.3-PP-NRC		RI-NRC-21.3-5				52 2.05	56,5		
		22	7/8	522-PP-NRC		RI-NRC-22-5							
		25		525-PP-NRC		RI-NRC-25-5							
5	5	26,9		526.9-PP-NRC	5-PP-NRC	RI-NRC-26.9-5	1.93	50 1.97	71 2.80			30 1.18	
		28		528-PP-NRC		RI-NRC-28-5	1.50						
		30		530-PP-NRC		RI-NRC-30-5							
		32	1-1/4	532-PP-NRC		RI-NRC-32-5							
		33,7		633.7-PP-NRC		RI-NRC-33.7-6							
		35		635-PP-NRC		RI-NRC-35-6							
6	6	38	1-1/2	638-PP-NRC	6-PP-NRC	RI-NRC-38-6	60 2.36	61 2.40	86 3.39	66 2.60	64,5 2.54	30 1.18	
		40		640-PP-NRC		RI-NRC-40-6					'		
		42		642-PP-NRC		RI-NRC-42-6							

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
- $\blacksquare$  Suitable for the most common outside diameters from 6 to 42 mm and from  $\,\,1\!\!/_{2}$  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

\* Exact outside diameter Ø D1 (mm) 12

\* Material code (see below) PP-NRC

#### NRC Clamp Body \*2-\*PP-NRC

One NRC clamp body is consisting of two clamp halves.

\* STAUFF Group 2
\* Material code (see below) PP-NRC

#### NRC Elastomer Insert \*RI-NRC-\*12-\*2

One NRC elastomer insert is consisting of two insert halves.

#### **Standard Materials**



Polypropylene Colour: Black Material code: PP-NRC



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

See pages 154 / 155 for material properties and technical information.

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

#### **Special Materials**

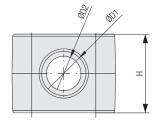
Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

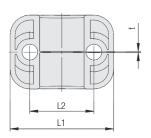
See pages 156 / 157 for material properties and technical information.



#### **Clamp Body for Conduit Hoses Type CHC**







#### **Ordering Codes**

#### **Clamp Body** \*2\*12-\*PA-CHC

One clamp body is consisting of two clamp halves.

* STAUFF Group	2
* Nominal Size of the Conduit Hose	12
* Material code (see below)	PA-CHC

#### **Standard Materials**



Polyamide Colour: Black Material code: PA-CHC

See pages 154 / 155 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 156 / 157 for material properties and technical information.

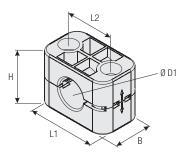
#### **Product Features**

- Design of the inside surface of the clamp body prevents corrugated conduit hoses from sliding
- Chamfered edges avoid damaging of the conduit hoses
- Available for all commonly used nominal sizes
- Excellent weathering resistance, even under extreme conditions

Group		Nominal Size Ordering Codes Dimensions												
STAUFF	_	Conduit Hose	(2 Clamp Halves)	(mm/in)										
ST	DIN			ØD1	ØD2	t	L1	L2	Н	Width				
		10	210-PA-CHC	13	11	0,5	42	26	32	30				
2	2	10	210-FA-0110	.51	.43	.02	1.65	1.02	1.26	1.18				
2	2	12	212-PA-CHC	16	13,5	0,5	42	26	32	30				
		12	212-FA-0110	.63	.53	.02	1.65	1.02	1.26	1.18				
3	3	17	317-PA-CHC	21,5	18	0,7	50	33	35,5	30				
3	3		317-FA-GIIG	.85	.71	.03	1.97	1.30	1.40	1.18				
4	4	23	423-PA-CHC	29	24,5	0,7	59	40	41,5	30				
4	4	23	423-FA-UHU	1.14	.96	.03	2.32	1.57	1.63	1.18				
		20	20	20	20	29	529-PA-CHC	35	30,5	1,0	71	52	56,5	30
5	5	29	329-FA-UNU	1.38	1.20	.04	2.80	2.05	2.22	1.18				
3	3	36	536-PA-CHC	43	38,5	1,0	71	94	92	30				
		30	330-FA-UNU	1.69	1.52	.04	2.80	2.05	2.22	1.18				
6	6	48	648-PA-CHC	55	49,5	1,0	86	66	64,5	30				
U	U	40	040-FA-000	2.17	1.95	.51	3.39	2.60	2.54	1.18				

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







(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

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

30

1.18

- \* 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.

**Outside Diameter** 

(in)

.69

.81

93

**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 156 / 157 for material properties and technical information.

#### **Standard Materials**



Polypropylene Colour: Black

Material code: PP-H-CC-BK

See pages 154 / 155 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**

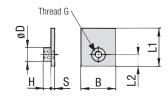
- Outer dimensions of clamp body according to Standard Series, STAUFF Group 5
- For proximity switches according to DIN EN 60947-5-2 or similar, rectangular construction, with a square of 40 mm x 40 mm / 1.57 in x 1.57 in or 40 mm x 36 mm / 1.57 in x 1.42 in
- For proximity switches according to DIN 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

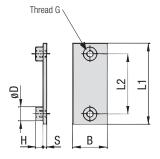
#### Clamp Body • Rectangular Design Type VK



#### **Single Weld Plate Type SP**







STAUFF Group 1

STAUFF Group 1A to 8

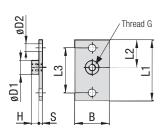
Ordering Co	odes	
Weld Plate	*SP-*1-*M-*	W2
* Single Weld Plat	e	SP
* STAUFF Group		1
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U
* Material code	Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated	W2 W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4
	Stainless Steel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

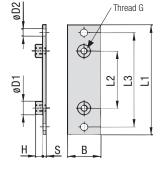
Group		Dimensions (m	m/in)						Ordering Codes
STAUFF	DIN	Thread G	L1	L2	В	S	Н	ØD	(Standard Options)
1	0	M6	31,5	10	30	3	6,5	12	SP-1-M-W2
1	U	1/4-20 UNC	1.24	0.39	1.18	.12	.26	.47	SP-1-U-W2
1A	1	M6	36	20	30	3	6,5	12	SP-1A-M-W2
IA	1	1/4-20 UNC	1.42	0.79	1.18	.12	.26	.47	SP-1A-U-W2
2	2	M6	42	26	30	3	6,5	12	SP-2-M-W2
2		1/4-20 UNC	1.65	1.02	1.18	.12	.26	.47	SP-2-U-W2
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	4	1/4-20 UNC	2.36	1.57	1.18	.12	.26	.47	SP-4-U-W2
5	_	M6	71	52	30	3	6,5	12	SP-5-M-W2
5	5	1/4-20 UNC	2.80	2.05	1.18	.12	.26	.47	SP-5-U-W2
c	6	M6	88	66	30	3	6,5	12	SP-6-M-W2
6	O	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
7	7	1/4-20 UNC	4.80	3.70	1.18	.20	.26	.47	SP-7-U-W2
0	0	M6	148	120	30	5	6,5	12	SP-8-M-W2
8	8	1/4-20 UNC	5.83	4.72	1.18	.20	.26	.47	SP-8-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.

#### **Elongated Weld Plate Type SPV**







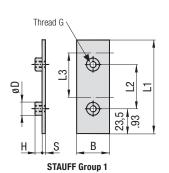
STAUFF Group 1

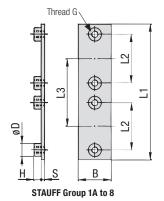
STAUFF Group 1A to 8

			Group		Dimensions (mm/in)									Ordering Codes	
Ordering C	odes		STAUFF	DIN	Thread G	L1	L2	L3	В	S	Н	ØD1	ØD2	(Standard Options)	
				0	M6	58	24,5	44	30	3	6,5	12	6,5	SPV-1-M-W2	
Weld Plate *SPV-*1-*M-*W2		N2	'	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	
* Elongated Weld	* Elongated Weld Plate SPV			'	1/4-20 UNC	2.52	.79	1.97	1.18	.12	.26	.47	.26	SPV-1A-U-W2	
Ů			2	2	M6	70	26	56	30	3	6,5	12	6,5	SPV-2-M-W2	
* STAUFF Group 1		1	2	4	1/4-20 UNC	2.76	1.02	2.20	1.18	.12	.26	.47	.26	SPV-2-U-W2	
* Thread code	Metric ISO thread	М	3	3	M6	78	33	64	30	3	6,5	12	6,5	SPV-3-M-W2	
	Unified coarse (UNC) thread	U		3	1/4-20 UNC	3.07	1.30	2.52	1.18	.12	.26	.47	.26	SPV-3-U-W2	
	` '	` ′		4	4	M6	87	40	73	30	3	6,5	12	6,5	SPV-4-M-W2
* Material code	Carbon Steel, phosphated	W2 4	4	4	1/4-20 UNC	3.43	1.57	2.87	1.18	.12	.26	.47	.26	SPV-4-U-W2	
	Carbon Steel, zinc/nickel-plated	W3	5	5	M6	100	52	86	30	3	6,5	12	6,5	SPV-5-M-W2	
	Stainless Steel V2A		3	5	1/4-20 UNC	3.94	2.05	3.39	1.18	.12	.26	.47	.26	SPV-5-U-W2	
	1.4301 / 1.4305 (AISI 304 / 303)	W4	6	6	M6	115	66	100	30	3	6,5	12	6,5	SPV-6-M-W2	
	Stainless Steel V4A	W5	O	U	1/4-20 UNC	4.53	2.60	3.94	1.18	.12	.26	.47	.26	SPV-6-U-W2	
	1.4401 / 1.4571 (AISI 316 / 316 T		7	7	M6	150	94	136	30	5	6,5	12	6,5	SPV-7-M-W2	
	( (		/	1	1/4-20 UNC	5.91	3.70	5.35	1.18	.20	.26	.47	.26	SPV-7-U-W2	
			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	

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.







#### Twin Weld Plate for 2 Clamp Bodies Type DSP

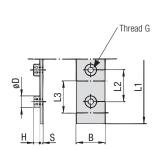


Group		Dimensions (mm	/in)							Ordering Codes
STAUFF	DIN	Thread G	L1	L2	L3	В	S	Н	ØD	(Standard Options)
1	0	M6	87	40	40	30	3	6.5	12	DSP-1-40-M-W2
'	U	1/4-20 UNC	3.43	1.57	1.57	1.18	.12	.26	.47	DSP-1-40-U-W2
1A	1	M6	77	20	37	30	3	6.5	12	DSP-1A-37-M-W2
IA	'	1/4-20 UNC	3.03	.79	1.46	1.18	.12	.26	.47	DSP-1A-37-U-W2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

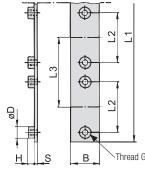
All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

Ordering Codes  Weld Plate *DSP-*1-*40-*M-*W2									
Weiu Flate	D3F- 1- 40- WI-	VVZ							
* Twin Weld Plate	for 2 Clamp Bodies	DSP							
* STAUFF Group									
* Pipe center spa	cing L3 (mm)	40							
* 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)







STAUFF Group 1A to 8

	Group Weld Plate for 5 or 10 Clamp Bodies Type RAP
7	00 00
\Threa	d G

**Ordering Codes** 

Group		Dimensions (mm)	/ <sub>in</sub> )							Ordering Codes
STAUFF	DIN	Thread G	L1	L2	L3	В	S	Н	ØD	(Standard Options)
1	4	M6	314	31	31	30	4	6,5	12	RAP-1-31-10-M-W1
'	0	1/4-20 UNC	12.36	1.22	1.22	1.18	.16	.26	.47	RAP-1-31-10-U-W1
4.0	4	M6	373	20	37	30	4	6,5	12	RAP-1A-37-10-M-W1
IA	<b>1A</b> 1	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	2	1/4-20 UNC	17.40	1.02	1.73	1.18	.16	.26	.47	RAP-2-44-10-U-W1
3	3 3	M6	521	33	52	30	4	6,5	12	RAP-3-52-10-M-W1
3	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
O	O	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.

0400	
*RAP-*1-*31-*10-*M-	*W1
e for 5 or 10 Clamp Bodies	RAP
	1
cing L3 (mm)	31
ps	10
Metric ISO thread Unified coarse (UNC) thread	M U
Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated	W2 W3
Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A	W4
	*RAP-*1-*31-*10-*M- e for 5 or 10 Clamp Bodies  sing L3 (mm) ps  Metric ISO thread Unified coarse (UNC) thread Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)

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

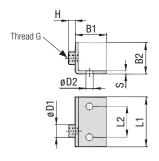
Dimensional drawings: All dimensions in mm (in).

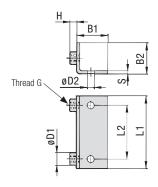


#### **Angled Weld Plate Type WSP**

**Ordering Codes** 







STAUFF Group 1

STAUFF Group 1A to 6

# \*WSP-\*1-\*M-\*W1 **Weld Plate** \* Americal World Di

* Angled Weld Pla	te	WSF
* STAUFF Group		1
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M
* Material code	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4

Stainless Steel V4A

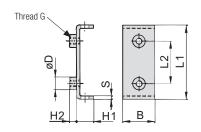
1.4401 / 1.4571 (AISI 316 / 316 Ti) **W5** 

Group		Dimensions (m	m/in)	Dimensions (mm/in)										
STAUFF	DIN	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-W1			
'	U	1/4-20 UNC	1.18	.55	1.18	1.18	.12	.26	.47	.26	WSP-1-U-W1			
1A	1	M6	36	20	30	30	3	6,5	12	6,5	WSP-1A-M-W1			
IA	<b>1A</b> 1	1/4-20 UNC	1.26	.79	1.18	1.18	.12	.26	.47	.26	WSP-1A-U-W1			
2	2	M6	42	26	30	30	3	6,5	12	6,5	WSP-2-M-W1			
2	2	1/4-20 UNC	1.65	1.02	1.18	1.18	.12	.26	.47	.26	WSP-2-U-W1			
3	3	M6	50	33	30	30	3	6,5	12	6,5	WSP-3-M-W1			
3		1/4-20 UNC	1.97	1.30	1.18	1.18	.12	.26	.47	.26	WSP-3-U-W1			
4	4	M6	60	40	30	30	3	6,5	12	6,5	WSP-4-M-W1			
4	4	1/4-20 UNC	2.36	1.57	1.18	1.18	.12	.26	.47	.26	WSP-4-U-W1			
5	5	M6	70	52	30	30	3	6,5	12	6,5	WSP-5-M-W1			
5	5	1/4-20 UNC	2.76	2.05	1.18	1.18	.12	.26	.47	.26	WSP-5-U-W1			
c	C	M6	88	66	30	30	3	6,5	12	6,5	WSP-6-M-W1			
6	6	1/4-20 UNC	3.46	2.60	1.18	1.18	.12	.26	.47	.26	WSP-6-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.

#### **Bridge Weld Plate Type BSP**





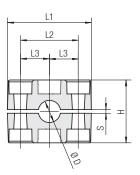
#### **Ordering Codes**

or dorning o		
Weld Plate	*BSP-*1A-*M-*	W1
* Bridge Weld Plat	ie	BSP
* STAUFF Group		1A
* 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

Group		Dimensions (mm	/in <b>)</b>							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-W1
IA	ı	1/4-20 UNC	1.89	.79	1.18	.12	.52	.26	.47	BSP-1A-U-W1
2	0	M6	54	26	30	3	13	6,5	12	BSP-2-M-W1
2	2	1/4-20 UNC	2.13	1.02	1.18	.12	.52	.26	.47	BSP-2-U-W1
3	<b>3</b> 3	M6	62	33	30	3	13	6,5	12	BSP-3-M-W1
3	3	1/4-20 UNC	2.44	1.30	1.18	.12	.52	.26	.47	BSP-3-U-W1
4	4	M6	71	40	30	3	13	6,5	12	BSP-4-M-W1
4	4	1/4-20 UNC	2.80	1.57	1.18	.12	.52	.26	.47	BSP-4-U-W1
5	5	M6	85	52	30	3	13	6,5	12	BSP-5-M-W1
5	5	1/4-20 UNC	3.35	2.05	1.18	.12	.52	.26	.47	BSP-5-U-W1
6	6	M6	98	66	30	3	13	6,5	12	BSP-6-M-W1
O	U	1/4-20 UNC	3.86	2.60	1.18	.12	.52	.26	.47	BSP-6-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 5**

Group		Outside Diameter		Nominal Bore		Ordering Codes	Dimensions (mm/in)					
		Pipe / Tube		Copper Tube		(2 Clamp						
		Ø D		Pipe	ASTM B88	Halves)						
STAUFF	DIN	(mm)	(in)	(in)	(in)	( <b>*</b> * = 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
5	3	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- <b>★</b> ★-MGR						
		38	1-1/2			538-**-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



Polyamide Colour: Black Material code: PA-MGR

See pages 154 / 155 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  ${\bf 5}$ (type MGR, see above) covering a diamater range from 20 m



netal parts (bol	o 42 mm / 1.65 in. ts, cover plates) o leid Plate RAP-M	of these gro	oups can be			H	B B	Thread G
Number of	Dimensions (mm	/in <b>)</b>						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-V
О	1/4-20 UNC	1.02	6.14	1.18	.16	.26	.47	RAP-MGR-25-156-U-W
9	M6	26	234	30	4	6,5	12	RAP-MGR-25-234-M-\
9	1/4-20 UNC	1.02	9.21	1.18	.16	.26	.47	RAP-MGR-25-234-U-V
	M6	26	312	30	1	6.5	12	RAP_MCR_25_312_M_V

igotimes

W1 6 W1 W1 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 M6 6,5 12 RAP-MGR-25-390-M-W1 26 390 30 4 15 1/4-20 UNC 1.02 15.35 1.18 .16 .26 .47 RAP-MGR-25-390-U-W1 RAP-MGR-25-520-M-W1 M6 26 520 30 6,5 12 20 1/4-20 UNC 1.02 20.47 1.18 .16 .26 .47 RAP-MGR-25-520-U-W1 M6 26 700 30 6,5 12 RAP-MGR-25-700-M-W1 27 1/4-20 UNC 1.02 27.55 1.18 .16 RAP-MGR-25-700-U-W1

Cover a diamater range from  $8\,\text{mm}$  (.31 in) to  $42\,\text{mm}$  (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**



Weld Plate	*RAP-MGR-*25-*156-*M-*W1

**Ordering Codes** 

* Multi Group Weld	d Plate R.	AP-MGR
* Suitable for STAI	JFF Group 2 and 5 (only type MG	R) <b>25</b>
* Length L4 (mm)	156 (with 6 weld nuts)	156
	234 (with 9 weld nuts)	234
	312 (with 12 weld nuts)	312
	390 (with 15 weld nuts)	390
	520 (with 20 weld nuts)	520
	700 (with 27 weld nuts)	700
* Thread code	Metric ISO thread	М
	Unified coarse (UNC) thread	U
* Material code	Carbon Steel, uncoated	W1

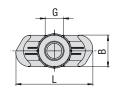
Stainless Steel V4A

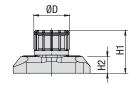
1.4401 / 1.4571 (AISI 316 / 316 Ti)



# (for Use with Mounting Rail TS) Type SM / SMG







#### **Ordering Codes** Hexagon Rail Nut \*SM-\*1-8/1D-\*M-\*W3 \* Hexagon Rail Nut Carbon Steel Stainless Steel SMG \* STAUFF Group 1 to 8 (DIN Group 0 to 8) 1-8/1D Metric ISO thread \* Thread code M Unified coarse (UNC) thread U \* 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		Dimensions (mr	¹/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
_	7	1/4–20 UNC 1.00	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 / SMG)

#### Type TS









Mounting Rail TS-11

Mounting Rail TS-14

Mounting Rail TS-30

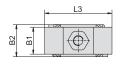
Ordering C	odes	
Mounting Ra	il *TS-*11-*1M-*	W1
* Mounting Rail		TS
* Height of rail	11 mm / .43 in 14 mm / .55 in 30 mm / 1.18 in	11 14 30
* Length of rail	1 m / 3.28ft 2 m / 6.56ft	1M 2M
	Alternative lengths available upon req Contact STAUFF for further informa	
* Material code	Carbon Steel, uncoated 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

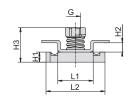
Group		Dimensions (mm/in)			Ordering Codes (Standard Options)			
STAUFF	DIN	B1	B2	S	Length of Rail: 1 m / 3.28ft	Length of Rail: 2m / 6.56ft		
1	0							
1A	1				Height 11 mm / .43 in TS-11-1M-W1	Height 11 mm / .43 in TS-11-2M-W1		
2	2							
3	3							
4	4	1.10	.43	.08	Height 14 mm / .55 in TS-14-1M-W1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



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







Group STAUFF	DIN	Dimensions (mm Thread G	/in) L1	L2	L3	B1	B2	H1	H2	НЗ	Ordering Codes (Standard Options)	
1	0											
1A	1											
2	2											
3	3											
4	4						.63	19 .75	6 .24	5,5 .22	20,5	CRA-1-8/1D-M-W3 CRA-1-8/1D-U-W3
5	5	171 20 0110	.50	1.00		.00					S.I.A. 1 5/15 C W	
6	6											
7	7											
8	8											

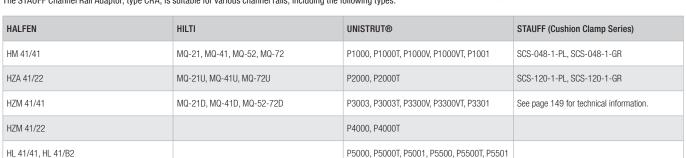
Ordering Codes							
Adaptor	*CRA-*1-8/1D-*M	-*W3					
* Channel Rail Ad	aptor	CRA					
* STAUFF Group	1 to 8 (DIN Group 0 to 8)	1-8/1D					
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U					
* Material code	Carbon Steel, zinc/nickel-plated	W3					
	Stainless Steel V4A 1.4401 / 1.4571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

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

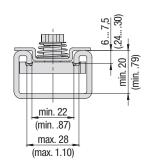
All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

# **Compatibility with Channel Rails**

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



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



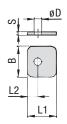
Basic dimensional requirements for channel rails to be used with STAUFF Channel Rail Adaptors, type CRA

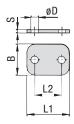
Dimensional drawings: All dimensions in mm (in).



#### **Cover Plate Type DP**







STAUFF Group 1

STAUFF Group 1A to 8

Ordering C	odes	
Cover Plate	*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		Dimensions (	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-1M-W3
2	2	40,5	26	30	3	7	DP-2-W3
2		1.59	1.02	1.18	.12	.28	DF-2-W3
3	3	48	33	30	3	7	DP-3-W3
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	DF-4-W3
5	5	70	52	30	3	7	DP-5-W3
3	5	2.76	2.05	1.18	.12	.28	DF-0-W0
6	6	86	66	30	3	7	DP-6-W3
О	О	3.39	2.60	1.18	.12	.28	DP-0-W3
7	7	118	94	30	5	7	DP-7-W3
,	1	4.65	3.70	1.18	.20	.28	DF-1-1W3
8	8	144	120	30	5	7	DP-8-W3
0	0	5.67	4.72	1.18	.20	.28	DL-0-M9

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

#### **Hexagon Head Bolt**

**Ordering Codes** 

(for Use with Cover Plate DP)

#### **Type AS**



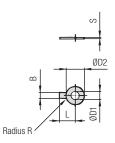


 $\textbf{Hexagon Head Bolt AS} \ (according to \ DIN\ 931\ /\ 933\ or\ ANSI\ /\ ASME\ B18.2.1.)$ Dimensions applicable only when used with Cover Plate DP

Group STAUFF	DIN	Dimensions ("""/in) Thread G x L	Ordering Codes (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	E	M6 x 60	AS-M6x60-W3
э	5	1/4–20 UNC x 2-3/8	AS-1/4-20UNCx2-3/8-W3
•	0	M6 x 70	AS-M6x70-W3
6	6	1/4–20 UNC x 2-3/4	AS-1/4-20UNCx2-3/4-W3
-	7	M6 x 100	AS-M6x100-W3
7	7	1/4–20 UNC x 4	AS-1/4-20UNCx4-W3
0	0	M6 x 125	AS-M6x125-W3
8	8	1/4–20 UNC x 4-7/8	AS-1/4-20UNCx4-7/8-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 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 8	.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**

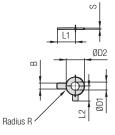
\*SI-\*6.4-\*DIN93-\*W3 **Safety Washer** 

\* 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		Dimension	1s ( <sup>mm</sup> /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	4 .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 W3

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

Ordering	Codes
----------	-------

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

\* 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
1	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	F	M6 x 50	IS-M6x50-W3	LI-M6x50-W3
5	5	1/4-20 UNC x 2	IS-1/4-20UNCx2-W3	LI-1/4-20UNCx2-W3
6	6	M6 x 60	IS-M6x60-W3	LI-M6x60-W3
0	0	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 DECLIFET ONLY
7	1	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



**Ordering Codes** 

**Hexagon Head Bolt** 



\*AS-\*M6x27-\*W3



**Hexagon Head Bolt AS** 

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

_		D	2	_	_
					- =
	_	D	1		

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

Group		Dime	ension	s (mm/ii	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

* Type of bolt Hexagon Head Bolt		
(according to DIN 9	31 / 933	AS
or ANSI / ASME B18	3.2.1.)	
* Thread type and size acc. to dimensi	on table <b>M6</b> 3	x27
* Material code Carbon Steel, zinc/	nickel-plated	W3
Stainless Steel V2A		W4
1.4301 / 1.4305 (A	ISI 304 / 303)	W4
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
'	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
5		1/4-20 UNC x 2-3/8	AS-1/4-20UNC-2-3/8-W3
6	6	M6 x 65	AS-M6x65-W3
O	О	1/4-20 UNC x 2-3/4	AS-1/4-20UNCx2-3/4-W3
7	7	M6 x 95	AS-M6x95-W3
7	7	1/4-20 UNC x 4	AS-1/4-20UNCx4-W3
0	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

Group		Dimensions	(mm/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	'	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	316-3-W3
4	4	56	28	11,2	1	SIG-4-W3
4	4	2.20	1.10	.44	.04	516-4-W3
5		69	28	11,2	1	SIG-5-W3
5	5	2.72	1.10	.44	.04	516-5-W3
6	6	85	28	11,2	1	SIG-6-W3
O	O	3.35	1.10	.44	.04	510-0-W3
7	7	117	28	11,2	1	CIC 7 WO
7	7	4.61	1.10	.44	.04	SIG-7-W3
0	0	143	28	11,2	1	CIC O WO
8	8	5.63	1.10	.44	.04	SIG-8-W3

Ordering Codes							
Safety Locking Plate *SIG-*1-*V							
* Safety Locking I	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 Hex

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



**Ordering Codes** 

Group		Dimensions (	nm/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
1A	1	M6	34	20	12	11	AF-1/1A/1D-M-W3
IA		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		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	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
5	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	O	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
0	0	M6	124	110	12	11	AF-8-M-W3
8	8	1/4-20 UNC	4.88	4.33	.47	.43	AF-8-U-W3

	,,	
* 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

Stacking Bolt \*AF-\*1/1A/1D-\*M-\*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.







#### 1 Type of Installation

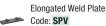
Please select the type of installation (e.g. Weld Plates, Rail Nuts etc.) and add the corresponding Code to position 1 of the order code for your clamp assembly.



Without Installation Equipment Code: none

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

Single Weld Plate Code: SP



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

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

Angled Weld Plate (for STAUFF Group 1 to 6 only)

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

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



A Hexagon Rail Nut Code: SM (Carbon Steel) Code: SMG (Stainless Steel)

Channel Rail Adaptor Code: CRA

#### 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	
droup			•	•	
STAUFF	Diameter P / T / H	Profiled	aterials &	Designs	
(DIN)	(mm)	Design	Type H	Type RI	Code
(DIIV)	6	-		O	106
	6,4	•	•	0	106.4
	8	•	•	0	108.4
<b>1</b> (0)	9,5			0	109.5
(0)		•	•	0	
	10	•	•	0	110 112
	12	•			
	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
2	14	•	•	0	214
(2)	15	•	•	0	215
(-)	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		lity of Cla iterials &		
(DIN)	(mm)	Design	Type H	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
7	63,5	•	•	0	763.5
(7)	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 32 and 33 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: SA



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: SA-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 154 / 155 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: 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 page26.

#### (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, 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

W10

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: 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

 $\ensuremath{\mathbf{W10}}$  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

#### 1x Elongated Weld Plate

Surface: W2 Thread: Metric



#### 2x Slotted Head Screw

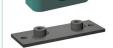
with Washer Surface: W3 Thread: Metric

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) 0.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

#### **Order Code**

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

 ${\bf W3}$  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.

#### 2x Stacking Bolt

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

#### **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

#### M u

#### **Material codes**

**Technical Notes** 

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 W4 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

\* Because of their design, STAUFF Group 1 (DIN Group 0)

clamp assemblies only include one single bolt / screw.

#### W10

W3

## **Order Code**

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

W3 is the standard option for this type of installation.

#### Order Code\*

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

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 Elongated Weld Plate

Surface: W2 Thread: Metric



Surface: W2 Thread: Metric

#### **Order Code**

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

W10 is the standard option for this type of installation.

#### 2x Hexagon Head Bolt

Surface: W3 Thread: Metric

#### 2x Insert

Material: Plastic

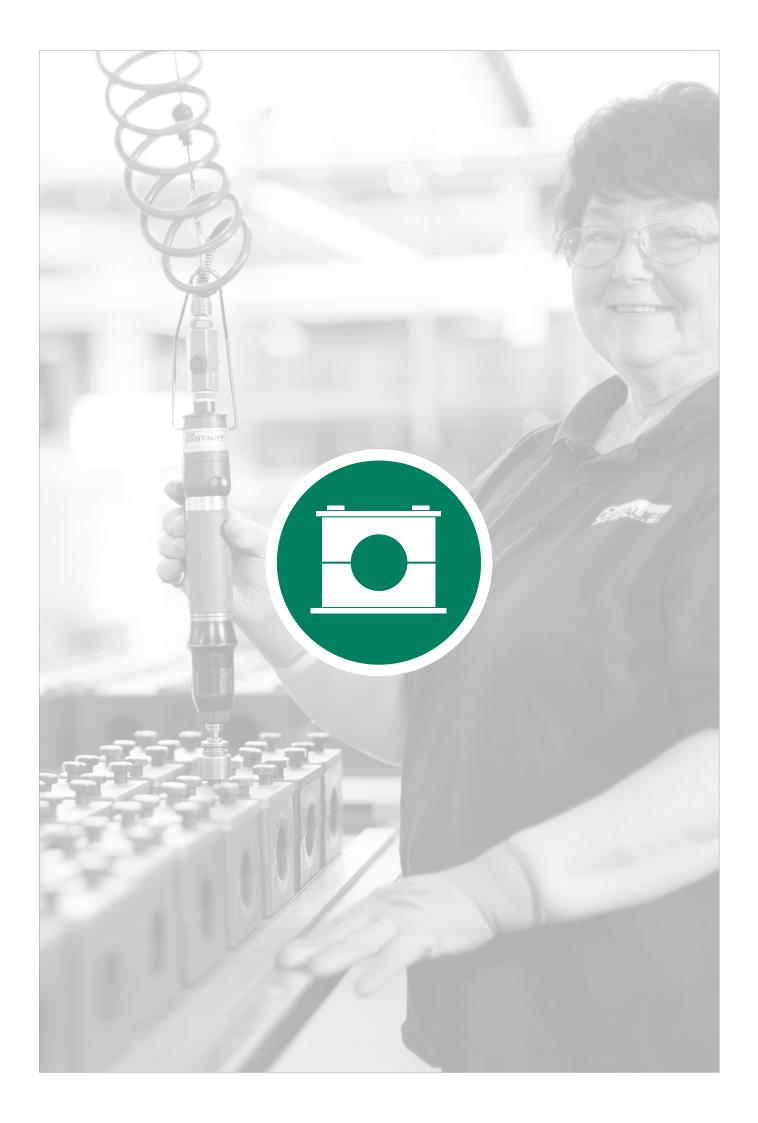
1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance

#### 1x Single Weld Plate

#### **Order Code**

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

W10 is the standard option for this type of installation.







Clamp Body

Profiled Inside Surface with Tension Clearance



36

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**Weld Plate for Single Clamps** 

SPAL





Clamp Body

Smooth Inside Surface without Tension Clearance



**Weld Plate for Double Clamps** 

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**Clamp Body with Elastomer Insert** 



**Elongated Weld Plate for Single Clamps** 

SPAL-DUEB



SPAS-DUEB



**Mounting Rail Nut** 

GMV



STSV

**Channel Rail Adaptor** 

CRA

**Cover Plate for Single Clamps** 

DPAL



DPAL



AS

**Socket Cap Screw** 

IS

Safety Washer (DIN 93)

Safety Washer (DIN 463)

Safety Locking Plate

Stacking Bolt

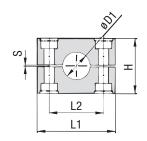
AF

Clamp Assemblies

#### 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





Aluminium Colour: Self-Colour Material code: AL

See pages 154 / 155 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 156 / 157 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	Nomin	al Bore	Ordering Codes	Dimens	sions ( <sup>m</sup>	<sup>m</sup> /in)			
#		Pipe / To	ube		Copper Tube	(2 Clamp						
STAUFF	z	Ø D1		Pipe	ASTM B88	Halves)	L1	L1				
ST	DIN	(mm)	(in)	(in)	(in)	( <b>**</b> = Material)	PP/PA/SA	AL	L2	Н	S min.	Width
		6				3006-**						
		6,4	1/4			3006.4-**						
		8	5/16			3008-**						
		9,5	3/8		1/4	3009.5-**						
		10		1/8		3010-**						
		12				3012-**						
3S	1	12,7	1/2		3/8	3012.7-**	55	56	33	32	0,6	30,5
00	ļ '	13,5		1/4		3013.5-**	2.16	2.20	1.30	1.26	.02	1.20
		14				3014-**						
		15				3015-**						
		16	5/8		1/2	3016-**						
		17,2		3/8		3017.2-**						
		18				3018-**						
		20				3020-**						
		19	3/4			4019-**						
		20				4020-**						
		21,3		1/2		4021.3-**						
		22	7/8		3/4	4022-**	70	70	45	48	0,6	30,5
4S	2	25				4025-**	2.76	2.76	1.77	1.89	.02	1.20
		25,4	1			4025.4- <b>**</b>	20	20		1100	.02	
		26,9		3/4		4026.9-**						
		28				4028-**						
		30				4030-**						
		30				5030-**						
		32	1-1/4			5032-**						
		33,7		1		5033.7-**						
5S	3	35			1-1/4	5035-**	85	85	60	60	0,6	30.5
		38	1-1/2			5038-**	3.35	3.35	2.36	2.36	.02	1.20
		40				5040-**						
		41,3			1-1/2	5041.3-**						
		42		1-1/4		5042-**						
		38	1-1/2			6038-**						
		42		1-1/4		6042-**						
		44,5	1-3/4			6044.5- <b>**</b>						
		48,3		1-1/2		6048.3-**						
		50,8	2			6050.8-**						
		54			2	6054-**	115	120	90	89	2	45
6S	4	55				6055-**	4.53	4.72	3.54	3.50	.08	1.77
		57				6057-**						
		57,2	2-1/4			6057.2-**						
		60,3	0.4.5	2		6060.3-**						
		63,5	2-1/2			6063.5-**						
		65				6065-**						
		70	2-3/4			6070-**						

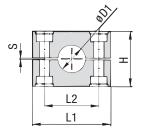
See page 37 for STAUFF Group 7S to 12S (DIN Group 5 to 10).

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



#### Clamp Body • Profiled Design

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





Group		Outside	Diameter	Nominal	Ordering Codes	Dimen	sions (mn	¹/ <sub>in</sub> )			
	Pipe / Tube		Bore	(2 Clamp			,,				
≒ ≒	_	Ø D1		20.0	Halves)	L1	L1				
STAUFF	N	(mm)	(in)	Pipe (in)	( <b>**</b> = Material)	PP/PA	AL	L2	н	S min.	Width
		60,3	()	, , , , , , , , , , , , , , , , , , ,	7060.3-**					-	
		65			7065-**						
		70	2-3/4		7070-**						
		73		2-1/2 (ANSI B 36-10)	7073-**						
7S	5	75		,	7075-**	154	152	122	120	2	60
		76,1	3	2-1/2 (DIN EN 10220)	7076.1-**	6.06	5.98	4.80	4.72	.08	2.36
		80		,	7080-**						
		82,5			7082.5-**						
		88,9	3-1/2	3	7088.9-**						
		88,9	3-1/2	3	8088.9-**						
		100			8100-**						
		102	4	3-1/2	8102-**	000	000	100	100	0	00
88	6	108			8108-**	206 8.11	208 8.19	168 6.61	168 6.61	.08	80 3.15
		114	4-1/2	4	8114-**	0.11	0.19	0.01	0.01	.00	0.10
		127	5		8127-**						
		133			8133-**						
		127	5		9127-**		255 10.04		200 7.87	3 .12	
		133			9133-**						
		140		5	9140-**	251		205 8.07			91
98	7	152	6		9152-**	9.88					3.58
		159			9159-**	3.00					3.36
		165			9165-**						
		168		6	9168-**						
		168		6	10168-**						
		177,8			10177.8-**						
10S	8	193,7			10193.7-**	336	326	265	270	3	120
100		203	8		10203-**	13.22	12.83	10.43	10.63	.12	4.72
		216			10216-**						
		219		8	10219-**						
		219		8	11219-**	470	470	395	410	8	162
11S	9	273		10	11273-**	18.50	18.50	15.55	16.14	.31	6.38
		324		12	11324-**			10.00			3.00
12S	10	356		14	12356-**	630	630	534	530	20	182
123	10	406		16	12406-**	24.80	24.80	21.02	20.87	.79	7.16

#### See page 36 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  $154 \, / \, 155$  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 156 / 157 for material properties and technical information.

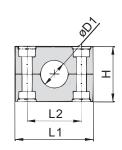
#### **Product Features**

- 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

#### 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





Material code: PP-H-BK





See pages 154 / 155 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 156 / 157 for material properties and technical information.

#### **Product Features**

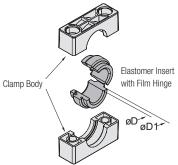
- Proven, tested and trusted product in various markets
- Recommended for the safe installation of hoses and cables
- Chamfered edges avoid damaging of the hose or cable
- Available for all commonly used hose and cable outside diameters
- Excellent weathering resistance, even under extreme conditions

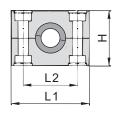
Group Group		Outside Diam Hose Ø D1	neter	Ordering Codes (2 Clamp Halves)	Dimensi (mm/in)	ions		
ST	DIN	(mm)	(in)	(**-H = Material)	L1	L2	Н	Width
		6		3006-**-H				
		6,4	1/4	3006.4-**-H				
		8	5/16	3008-**-H				
		9,5	3/8	3009.5-**-H				
		10		3010-**-H				
		12		3012-**-H	55	33	30,5	30,5
3S	1	12,7	1/2	3012.7-**-H	2.16	1.30	1.20	1.20
		13,5		3013.5- <b>**</b> -H	2.10	1.00	1.20	1.20
		14		3014- <b>**</b> -H				
		15		3015- <b>**</b> -H				
		16	5/8	3016- <b>**</b> -H				
		17,2		3017.2- <b>**</b> -H				
		18		3018- <b>**</b> -H				
		19	3/4	4019- <b>**</b> -H				
		20		4020- <b>**</b> -H				
		21,3		4021.3- <b>**</b> -H			40.5	
		22	7/8	4022- <b>**</b> -H	70	45	46,5	30,5
4S	2	25		4025- <b>**</b> -H	2.76	1.77	1.83	1.20
		25,4	1	4025.4- <b>**</b> -H				
		26,9		4026.9- <b>**</b> -H				
		28		4028- <b>**</b> -H				
		30		4030- <b>**</b> -H				
		30		5030- <b>**</b> -H				
		32	1-1/4	5032- <b>**</b> -H				
		33,7		5033.7- <b>**</b> -H				
5S	3	35	1.1/0	5035- <b>**</b> -H	85	60	58	30,5
		38	1-1/2	5038-**-H	3.35	2.36	2.28	1.20
		40		5040- <b>**</b> -H	-			
		41,3		5041.3- <b>**</b> -H				
		42	1.1/0	5042-**-H				
		38	1-1/2	6038-**-H				
		42	1.0//	6042-**-H				
		44,5 48,3	1-3/4	6044.5- <b>**</b> -H				
		50,8	2	6048.3-**-H 6050.8-**-H	115	90	87	45
		55		6055-**-H	4.53	3.54	3.43	45 1.77
6S	4	57		6057-**-H	4.00	3.54	3.43	1.77
		57,2	2-1/4	6057.2-**-H				
		60,3	2-1/4	6060.3- <b>**</b> -Н				
		63,5	2-1/2	6063.5-**-H				
		65	2-1/2	6065-**-H				
		70	2-3/4	6070-**-H				
		70	2-3/4	00/0-ችች-⊓				

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

www.stauff.com/1/en/#38







#### Clamp Body with Elastomer Insert Type RI



Group		Outside	Diameter	Ordering Codes	(**R = Clamp	Body Material	Dime	nsions			
			ube / Hose	_	Clamp Body	Insert *	(mm/in)				
STAUFF		Ø D		(Clamp Body +			( ,,				
ST/		(mm	(in	Insert	(2 Clamp Halves		Ø D1	L1	L2	н	Width
		6		4006-**-R	( P	RI-06-4/4S					
		8	5/16	4008-**-R		RI-08-4/4S					
		10		4010- <b>**</b> -R		RI-10-4/4S					
		12		4012-**-R		RI-12-4/4S					
		12,7	1/2	4012.7-**-R		RI-12.7-4/4S	0.5	70		40.5	00.5
4S	2	14		4014-**-R	4S-**-R	RI-14-4/4S	.98	70	45 1.77	46,5	30,5
		15		4015-**-R		RI-15-4/4S	.90	2.76	1.//	4.83	1.20
		16	5/8	4016-**-R		RI-16-4/4S					
		17,2		4017.2-**-R		RI-17.2-4/4S					
		18		4018-**-R		RI-18-4/4S					
		19	3/4	4019- <b>**</b> -R		RI-19-4/4S					
		20		5020-**-R		RI-20-6/5S					
		21,3		5021.3-**-R		RI-21.3-6/5S		85 3.35			
		22	7/8	5022-**-R	5S-**-B	RI-22-6/5S					
5S	3	25		5025-**-R		RI-25-6/5S	38		60	58	30,5
55	3	26,9		5026.9-**-R		RI-26.9-6/5S	1.50		2.36	2.28	1.20
		28		5028-**-R		RI-28-6/5S					
		30		5030- <b>**</b> -R		RI-30-6/5S					
		32	1-1/4	5032-**-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	64				
		38,7		6038.7- <b>**</b> -R		RI-38.7-6S					
		40		6040- <b>**</b> -R		RI-40-6S		115	90	87	45
6S	4	42		6042- <b>**</b> -R	6S-**-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	4.33	3.34	0.40	1.77
		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					
		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					
7S	5	63,5	2-1/2	7063.5- <b>**</b> -R	7S-**-R	RI-63.5-7S	88	154	122	120	60
		65		7065- <b>**</b> -R	70 44 11	RI-65-7S	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-**-R	RI-88.9-8S	4.49	8.11	6.61	6.61	3.15
		102		8102-**-R		RI-102-8S		• • • • • • • • • • • • • • • • • • • •			
		114		9114-**-R		RI-114-9S	150	251	205	200	91
98	7	133	5-1/4	9133-**-R	9S-**-R	RI-133-9S	5.91	9.88	8.07	7.87	3.58
		140		9140-**-R		RI-140-9S					
		150		10150- <b>**</b> -R		RI-150-10S					
108	8	165		10165- <b>**</b> -R	10S-**-R	RI-165-10S	200	336	265	270	120
	*	168		10168- <b>**</b> -R		RI-168-10S	7.87	13.22	10.43	10.63	4.72
		172		10172- <b>**</b> -R		RI-172-10S					

\* 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.

Clamp Assem	ıbly	*4*006-*PP-R
One assembly is co	nsisting of one clar	np body and one insert.
* 1st part of STAUF  * Exact outside dia  * Material code (s	ameter Ø D (mm)	4 006 PP-R
Clamp Body		*4S-*PP-R
One clamp body is	consisting of two	clamp halves.
* STAUFF Group * Material code (s	ee below)	4S PP-R
Elastomer Ins	ert	*RI-*06-*4/4S
* Elastomer Insert * Exact outside dia * STAUFF Group	ameter Ø D (mm)	,
	6S (Heavy)	68

7S (Heavy)

8S (Heavy)

9S (Heavy)

10S (Heavy)

#### **Standard Materials**

**Ordering Codes** 







Elastomer Insert 4S to 6S: **Thermoplastic Elastomer** (73 Shore-A) 7S to 10S: **EPDM** (70 Shore-A) Colour: Black

See pages 154 / 155 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 156 / 157 for material properties and technical 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

**7S** 

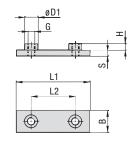
88

98

10S

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





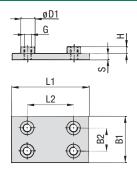
Urdering C	oaes	
Weld Plate	*SPAL-*3S-*M-*	W2
* Weld Plate for S	ingle Clamps	SPAL
* STAUFF Group		3\$
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U
* Material code	Carbon Steel, uncoated Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated	W1 W2 W3
	Stainless Steel V2A 1.4301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

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
48	2	86	45	30	8	8	M10	18	SPAL-4S-M-W2
43	2	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
73	3	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
95	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
119	9	20.47	15.55	6.30	1.18	1.50	1-1/4-7 UNC	1.97	SPAL-11S-U-W1
100	10	680	534	180	30	38	M30	50	SPAL-12S-M-W1
128	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**

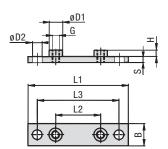
Weld Plate	*SPAS-*3S-*M-*	W2
* Weld Plate for D	ouble Clamps	SPAS
* STAUFF Group		3\$
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U
* Material code	Carbon Steel, uncoated Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated	W1 W2 W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304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

Group		Dimens	sions ( <sup>mm</sup> /	/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
<b>4S</b> 2		86	45	60	30,5	8	8	M10	18	SPAS-4S-M-W2
4S	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
บอ	3	3.94	2.36	2.36	1.20	.31	.31	3/8-16 UNC	.71	SPAS-5S-U-W2
20	4	140	90	90	46	10	8	M12	20	SPAS-6S-M-W2
SS 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
75	5	7.09	4.80	4.72	2.40	.39	.47	5/8-11 UNC	.94	SPAS-7S-U-W2
BS	6	226	168	160	81	15	18	M20	30	SPAS-8S-M-W1
00	О	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	_	520	395	324	166	30	38	M30	50	SPAS-11S-M-W1
I <b>1S</b> 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.







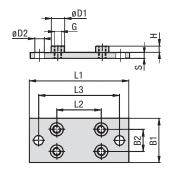
# Elongated Weld Plate for Single Clamps Type SPAL-DUEB

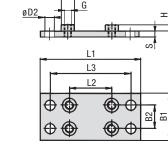


Group		Dimen	sions (m	m/in)							Ordering Codes
STAUFF	DIN	L1	L2	L3	В	S	Н	Thread G	ØD1	ØD2	(Standard Options)
3S	1	113	33	85	30	8	8	M10	18	13	SPAL-DUEB-3S-M-W2
33	'	4.45	1.30	3.35	1.18	.31	.31	3/8-16 UNC	.71	.51	SPAL-DUEB-3S-U-W2
4S	2	125	45	97	30	8	8	M10	18	13	SPAL-DUEB-4S-M-W2
45	2	4.92	1.77	3.82	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
55	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
05	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
15	5	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
95	<i>'</i>	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
105	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
119	9	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
100	10	750	534	690	180	30	38	M30	50	31	SPAL-DUEB-12S-M-W1
12S	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.





øD1

## STAUFF Group 3S to 9S

STAUFF Group 10S to 12S

Group		Dimer	isions (	(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
43	2	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
33	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	3	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
03	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
93	1	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	0	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
110	9	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.

# Elongated Weld Plate for Double Clamps Type SPAS-DUEB





Design for STAUFF Group 10S to 12S

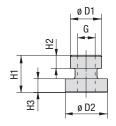
## **Ordering Codes**

## Weld Plate \*SPAS-DUEB-\*3S-\*M-\*W2

* 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

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







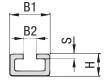
#### **Ordering Codes Mounting Rail Nut** \*GMV-\*3-5S\*M-\*W3 \* Mounting Rail Nut GMV \* STAUFF Group 3S to 5S (DIN Group 1 to 3) 3-5S 6S (DIN Group 4) 6S \* Thread code Metric ISO thread M U Unified coarse (UNC) thread \* Material code Carbon Steel, zinc/nickel-plated W3 Stainless Steel V2A 1.4301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

Group		Dimensio	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
45	2	.70	.94	.83	.30	.29	3/8-16 UNC	GMV-3-5S-U-W3
5S	3							
cc	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.  $\label{thm:linear_equal} \textbf{Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.}$ 

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





Ordering C	odes	
Mounting Ra	il *STSV-*1M-*\	W1
* Mounting Rail	S	TSV
* Length of rail	1 m / 3.28ft 2 m / 6.56ft	1M 2M
	Alternative lengths available upon requ Contact STAUFF for further informat	
* 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

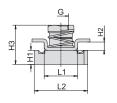
Group STAUFF	DIN	Dimension B1	s ( <sup>mm</sup> / <sub>in</sub> ) B2	Н	S	Ordering Codes (Standard Options)  Length of Rail: 1 m / 3.28ft   Length of Rail: 2 m / 6.56ft				
3\$	1									
48	2	40	13	22	5	0.707 444 114	0707 077 77			
5S	3	1.57	.51	.86	.19	STSV -1M-W1	STSV -2M-W1			
6S	4									

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 STAUFF	DIN	Dimensions (mr Thread G	<sup>n</sup> /in) <b>L1</b>	L2	L3	B1	B2	H1	H2	НЗ	Ordering Codes (Standard Options)
38	1	Timoda a				51	DL .		112	110	(Standard Options)
48	2	M10 3/8–16 UNC	22 .87	35 1.38	38 1.50	22	20,5	9,2	5,5	27,5	CRA-3-5S-M-W3 CRA-3-5S-U-W3
58	3	3/0 10 0140	.07	1.50	1.50	.07	.01	.00	.22	1.00	011A 0 00 0 W0
6S	4	M12	21,5	35	45	25	19	9,2	5	27,5	CRA-6S-M-W3
03	4	7/16-14 UNC	.85	1.38	1.77	.98	.75	.36	.20	1.08	CRA-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.

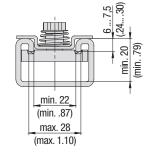
#### **Ordering Codes** \*CRA-\*3-5S-\*M-\*W3 **Adaptor** \* Channel Rail Adaptor CRA \* STAUFF Group 3S to 5S (DIN Group 1 to 3) 3-5S 6S (DIN Group 4) **6S** \* Thread code Metric ISO thread M Unified coarse (UNC) thread U \* Material code Carbon Steel, zinc/nickel-plated W3 Stainless Steel V4A 1.4401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

## **Compatibility with Channel Rails**

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



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

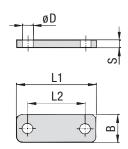
Group		Hexagon Head Bolts AS (used with Cove	r Plates DPAL or DPAS)	Socket Cap Screws IS (used without Cover Plates DPAL or DPAS)				
STAUFF	DIN	Metric ISO thread	Unified coarse (UNC) thread	Metric ISO thread	Unified coarse (UNC) thread			
3S	1	M10 x 40	3/8-16 UNC x 1-1/2	M10 x 25	3/8–16 UNC x 1			
<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**





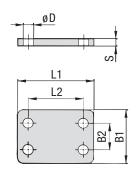
Ordering C	odes
Cover Plate	*DPAL-*3S-*W2
* Cover Plate for	Single Clamps DPAL
* STAUFF Group	3S
* Material code	Carbon Steel, uncoated W1
	Carbon Steel, phosphated W2
	Carbon Steel, zinc/nickel-plated W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A
	1.4401 / 1.4571 (AISI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

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-WZ
5S	3	85	60	30	8	11	DPAL-5S-W2
JJ	3	3.35	2.36	1.18	.31	.43	DFAL-33-WZ
6S	4	115	90	45	10	14	DPAL-6S-W2
00	4	4.53	3.54	1.77	.39	.55	DFAL-03-WZ
70	5	152	122	60	10	19	DPAL-7S-W2
7S		5.98	4.80	2.36	.39	.75	DFAL-7 3-WZ
8S	6	206	168	80	15	22	DPAL-8S-W1
00	0	8.11	6.61	3.15	.59	.87	DFAL-03-WT
98	7	251	205	90	15	26	DPAL-9S-W1
93	1	9.88	8.07	3.54	.59	1.02	DFAL-93-W1
10S	8	320	265	120	25	35	DPAL-10S-W1
103	0	12.60	10.43	4.72	.98	1.38	DFAL-109-W1
11S	9	470	395	160	30	35	DPAL-11S-W1
113	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 C	odes	
Cover Plate	*DPAS-*3S-*	W2
* Cover Plate for I	Double Clamps I	DPAS
* STAUFF Group		3S
* 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		Dimension	ns ( <sup>mm</sup> / <sub>in</sub> )	Ordering Codes				
STAUFF	DIN	L1	L2	B1	B2	S	ØD	(Standard Options)
3S	1	55	33	60	30,5	8	11	DPAS-3S-W2
38	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
45	2	2.76	1.77	2.36	1.20	.31	.43	DPA5-45-W2
5S	3	83	60	60	30,5	8	11	DPAS-5S-W2
55	3	3.27	2.36	2.36	1.20	.31	.43	DPA5-55-W2
6S	4	115	90	90	46	10	14	DDAC CC WO
05	4	4.53	3.54	3.54	1.81	.39	.55	DPAS-6S-W2
7S	5	152	122	120	61	10	19	DPAS-7S-W2
15	5	5.98	4.80	4.72	2.40	.39	.75	DPA5-75-W2
8S	6	206	168	160	81	15	22	DPAS-8S-W1
00	О	8.11	6.61	6.61	3.19	.59	.87	DPA5-05-W I
98	7	251	205	180	91	15	26	DPAS-9S-W1
95	/	9.88	8.07	7.09	3.58	.59	1.02	DPA5-95-W1
10S	0	320	265	240	121	25	35	DPAS-10S-W1
105	8	12.60	10.43	9.45	4.78	.98	1.38	DLW2-102-M1
11S	9	470	395	321	166	30	35	DPAS-11S-W1
110	9	18.50	15.55	12.64	6.54	1.18	1.38	DLW2-119-M1
100	10	630	534	361	186	30	35	DDAC 10C W1
12S	10	24 80	21.02	14 21	7.32	1 18	1.38	DPAS-12S-W1

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



## 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

gonou.		
* 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 ( $^{\text{mm}}/_{\text{in}}$ ) Thread G x L	Ordering Codes (Standard Options)
3S	1	M10 x 30	IS-M10x30-W1
33	1	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

* Type of Bolt	(according to ISO 4762	I!
	or ANSI / ASME B18.3)	Is
* Thread type and	d size acc. to dimension table	M10x50
* Material code	Carbon Steel, uncoated	W <sup>-</sup>

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) **W5** 

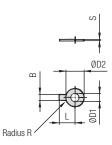


## **Safety Washer**

(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	SI						
* Exact inner diameter ØD1 (mm)							
	Safety washer with 1 tab (according to DIN 93)						
* Material code	Carbon Steel, zinc/nickel-plated W3						
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) <b>W5</b>						

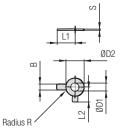
Group		Dimensi	ons ( <sup>mm</sup> /in)	Ordering Codes				
STAUFF	DIN	ØD1	В	ØD2	L	R	S	(Standard Options)
3S	1	10,5	10	26	22	4	0,75	SI-10.5-DIN93-W3
33	1	.41	.39	1.02	.87	.16	.03	31-10.3-W3
4S	2	10,5	10	26	22	4	0,75	SI-10.5-DIN93-W3
43	2	.41	.39	1.02	.87	.16	.03	31-10.3-W3
5S	3	10,5	10	26	22	4	0,75	SI-10.5-DIN93-W3
JJ	J	.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-DIM33-W3
7S	5	17	15	36	32	6	1	SI-17-DIN93-W3
13	3	.67	.59	1.42	1.26	.24	.04	21-17-DIN32-M2
8S	6	21	18	42	36	6	1	SI-21-DIN93-W3
03	U	.83	.71	1.65	1.42	.24	.04	31-21-011493-443
9S	7	25	20	50	42	6	1	SI-25-DIN93-W3
93	1	.98	.79	1.97	1.65	.24	.04	31-23-DIM32-M3
10S	8	31	26	63	52	10	1,6	SI-31-DIN93-W3
103	0	1.22	1.02	2.48	2.05	.39	.06	91-91-0111893-W3
11S	9	31	26	63	52	10	1,6	SI-31-DIN93-W3
110	9	1.22	1.02	2.48	2.05	.39	.06	21-31-011183-W3
12S	10	31	26	63	52	10	1,6	SI-31-DIN93-W3
125	10	1.22	1.02	2.48	2.05	.39	.06	91-91-M83-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)

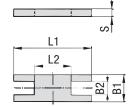
Ordering Codes								
Safety Washer	*SI-*10.5-*DIN463-*	W3						
* Safety Washer		SI						
* Exact inner diam	eter ØD1 (mm)	10.5						
* Type of washer	Safety washer with 2 tabs (according to DIN 463)	l 463						
* Material code	Carbon Steel, zinc/nickel-plated	W3						
	Stainless Steel V4A 1.4401 / 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	31-10.3-DIN403-W3
10	2	10,5	10	21	22	13	4	1	SI-10.5-DIN463-W3
<b>4S</b> 2	.41	.39	.83	.87	.51	.16	.04	31-10.3-DIN403-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-D11403-W3
7S	5	17	15	30	32	18	6	1	SI-17-DIN463-W3
13	5	.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	O	.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	31-23-DIN403-W3
108	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	31-31-WINA03-M2

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





Group		Dimension	IS ( <sup>mm</sup> /in)	Ordering Codes			
STAUFF	DIN	L1	L2	B1	B2	S	(Standard Options)
3S 1	4	57	13	30	15,2	8	SIP-3S-W2
	'	2.24	.51	1.18	.60	.31	31F-33-W2
4S	2	70	26	30	15,2	8	SIP-4S-W2
45	2	2.76	1.02	1.18	.60	.31	51P-45-W2
EC	2	85	40	30	15,2	8	SIP-5S-W2
<b>5S</b> 3	3.35	1.57	1.18	.60	.31	SIP-55-W2	
6S	4	116	68	45	17,2	10	SIP-6S-W2
05	4	4.57	2.68	1.77	.68	.39	SIP-05-W2
7S	5	153	96	60	22	10	SIP-7S-W2
15	5	6.02	3.78	2.36	.87	.39	SIP-75-W2
8S	6	206	130	80	28	15	SIP-8S-W1
00	О	8.11	5.12	3.15	1.10	.59	215-92-M I
00	_	251	166	90	31	15	CID OC WII
9S	7	9.88	6.54	3.54	1.22	.59	SIP-9S-W1
100	0	317	205	120	49	25	OID 40 C W4
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 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W1 W2 W3 W4				

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**

\*AF-\*3S-\*M-\*W2

AF

**3S** 

M

U

W1

W2

W3

W4

W5



Metric ISO thread

Unified coarse (UNC) thread

Carbon Steel, uncoated

Stainless Steel V2A

Carbon Steel, phosphated

Carbon Steel, zinc/nickel-plated

1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A

1.4401 / 1.4571 (AISI 316 / 316 Ti)

**Ordering Codes** 

**Stacking Bolt** \* Stacking Bolt

\* STAUFF Group

\* Thread code

\* Material code

Group		Dimensions	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		1.93	.98	.59	.59	3/8-16 UNC	AF-3S-U-W3*
40	0	65	40	15	15	M10	AF-4S-M-W2
<b>4S</b>	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
55	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	-	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*
00	0	200	150	30	27	M20	AF-8S-M-W2
8S	6	7.87	5.91	1.18	1.06	3/4-10 UNC	AF-8S-U-W1*
00	7	240	180	50	30	M24	AF-9S-M-W2
98	7	9.45	7.09	1.97	1.18	7/8-9 UNC	AF-9S-U-W1*
100	0	331	256	62	46	M30	AF-10S-M-W2
10S	8	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.

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  $\ensuremath{\textcircled{1}}$  of the order code for your clamp assembly.



**Without Installation Equipment** Code: none

## **Installation on Weld Plate**



**Weld Plate for Single Clamps** Code: SPAL



**Weld Plate for Double Clamps** 





**Elongated Weld Plate for Single Clamps** 

Code: SPAL-DUEB



**Elongated Weld Plate for Double Clamps** 

Code: SPAS-DUEB

## **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 Availability of Clamp

Group	Diameter	Availabi			
CTALLES	Diameter	Body Ma Profiled			
STAUFF	P/T/H	Town : Di	0-4-		
(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
	31	_			3007

## (2) Group Size & Diameter CONTINUATION

Group	Outside Diameter	Body Ma	lity of Cla aterials &		
STAUFF	P/T/H	Profiled	T 11	T DI	01
(DIN)	(mm)	Design	Type H	Type RI	Code
	55	•	•	0	6055
	56,4	0	0	•	6056
	57	•	•	0	6057
6S (4)	57,2	•	•	0	605
(4)	60,3	•	•	0	6060
(+)	63,5	•	•	0	6063
	65	•	•	0	606
	70	•	•	0	6070
	55 57	0	0	•	705
				•	7057
	60	0	0	•	7060
	60,3	•	0	0	7060
	63,5	0	0	•	7063
	65	•	0	•	706
7S	70	•	0	•	7070
(5)	72	0	0	•	7072
	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	•	808
	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	•	8133
	114	0	0		9114
	127	•	0	0	9127
00	133 140	•	0	•	9133
9S (7)			0	0	
(1)	152	•	0	0	9152
	159 165	•	0	0	9159
	168	•	0	0	9168
	150	0	0	•	1015
	165	0	0	•	1016
	168	•	0	•	1016
	172	0	0	•	1017
10S	177,8		0	0	
(8)	193,7	•	0	0	1017
	203		0	0	1019
	216		0	0	1020
	219		0	0	102
	219		0	0	1121
11S	273		0	0	1127
(9)	324		0	0	1132
12S	356		0	0	1235
(10)	406	-	0	0	1240

Standard Option



Please see pages 50 and 51 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: SA-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 154 / 155 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 45.

## (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

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)

W15





#### 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



#### 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

**Order Code** 

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



## 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 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



# **Order Code**

## 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.



## 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**

50

## **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) 0.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)

O.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)

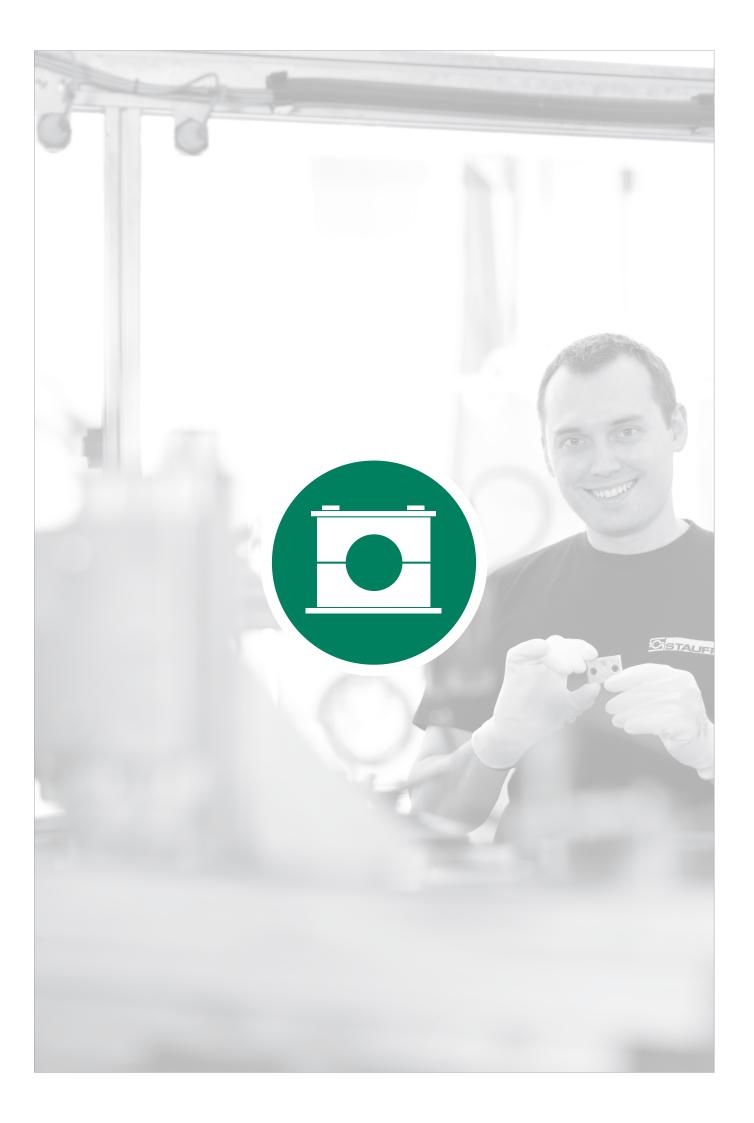
O.D. 6 mm / .24 in Material: Polypropylene

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}$ 



55

55





Clamp Body

Profiled Inside Surface with Tension Clearance



54

Single Weld Plate

SP

**Group Weld Plate** 

RAP

**Hexagon Rail Nut** 

SM / SMG

56

TS

**Mounting Rail** 56

**Channel Rail Adaptor** CRA

**Cover Plate** 58 GD

**Hexagon Head Bolt** 58 AS

**Socket Cap Screw** 59 IS

Safety Locking Plate 60

Safety Locking Plate 60 SIV

Stacking Bolt AF

Clamp Assemblies



Clamp Body

Smooth Inside Surface without Tension Clearance



62

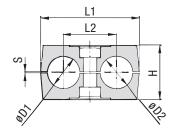
## Clamp Body • Profiled Design

## 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 154 / 155 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 156 / 157 for material properties and technical information.

#### **Product Features**

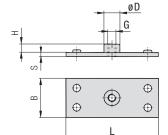
- Proven, tested and trusted product in various markets
- Profiled design recommended for the safe installation of rigid pipes and tubes; type H recommended for the safe installation of hoses and cables
- Available for all commonly used pipe and tube outside diameters
- Environmental protection due to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

Group			Diameter be / Hose	Nomin	al Bore Copper Tube	Ordering Codes (2 Clamp Halves)						
STAUFF	_	Ø D1 / Ø		Pipe	ASTM B88	(2 Glamp Haives)			Profile	d Design	TypeH	
ST/	N O	(mm)	(in)	(in)	(in)	(**-* = Material)	L1	L2	Н	S min.		Width
		6				106/06-**-*						
		6,4	1/4			106.4/06.4-**-*						
1D	1	8	5/16			108/08-**-*	36	20	27	0,6	26,5	30
טו	'	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-**-*				0,7	26	
		14				214/14-**-*		29	27			
2D	2	15				215/15-**-*	53 2.09					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
35	0	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-**-*						
4D	4	28				428/28-**-*	3.15	45	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
35	3	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

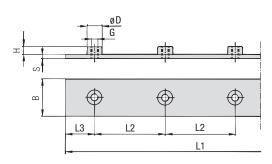




STAUFF         DIN         L         B         S         H         ØD         Thread G         (Standard Op           1D         37         30         3         6,5         12         M6         SP-1D-M-W2           1.46         1.18         .12         .26         .47         1/4-20 UNC         SP-1D-U-W2           2D         2         55         30         5         6         14         M8         SP-2D-M-W2	2
1D 1 1.46 1.18 .12 .26 .47 1/4–20 UNC SP-1D-U-W2 55 30 5 6 14 M8 SP-2D-M-W2	
1.46 1.18 .12 .26 .47 1/4–20 UNC SP-1D-U-W2 55 30 5 6 14 M8 SP-2D-M-W2	
	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	2
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	2
3.35 1.18 .20 .24 .55 5/16–18 UNC <b>SP-4D-U-W2</b>	
5D 5 110 30 5 6 14 M8 SP-5D-M-W2	2
4.33 1.18 .20 .24 .55 5/16–18 UNC SP-5D-U-W2	!

Ordering Codes								
Weld Plate *SP-*1D-*M-*W								
* Single Weld P	late SP							
* STAUFF Group	1 <b>D</b>							
* Thread code	Metric ISO thread M Unified coarse (UNC) thread U							
* Material code	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>							

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 Weld Plate for 5 Clamp Bodies Type RAP

Group	pup Dimensions (mm/in)						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
וט	'	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
зи	3	14.09	2.83	1.37	1.18	.20	.24	.55	5/16-18 UNC	RAP-3D-72-5-U-W1
40	4	444	90	42	30	5	6	14	M8	RAP-4D-90-5-M-W1
4D	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.

odes *RAP-*1D-*40-*5-*M-*	W1					
te	RAP					
	1D					
* Pipe Center Spacing L2 (mm)						
* Number of Clamps						
Metric ISO thread	М					
Unified coarse (UNC) thread	U					
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	14/5					
1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5					
	*RAP-*1D-*40-*5-*M-* te  acing L2 (mm) nps  Metric ISO thread Unified coarse (UNC) thread Carbon Steel, uncoated Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A					

## **Hexagon Rail Nut**

(for Use with Mounting Rail TS)

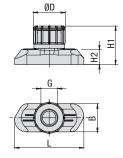
## Type SM / SMG



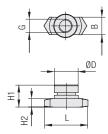


STAUFF Group 1D

STAUFF Group 2D to 5D



STAUFF Group 1D



STAUFF Group 2D to 5D

## **Ordering Codes**

## Hexagon Rail Nut \*SM-\*1-8/1D-\*M-\*W3

* Hexagon Rail Nu	ıt	
	Carbon Steel	SM
	Stainless Steel	SMG
* 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)	VV-+
	Stainless Steel V4A	W5
	1.4401 / 1.4571 (AISI 316 / 316	Ti)

Group		Dimensions (mr		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	ı	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.

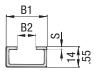
## **Mounting Rail**

(for Use with Hexagon Rail Nut SM / SMG)

## **Type TS**









**Mounting Rail TS-11** 

**Mounting Rail TS-14** 

Mounting Rail TS-30

Ordering C	odes	
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 recontact STAUFF for further information	•
* 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		Dimensions (mm/in)			Ordering Codes (Standard Options)		
STAUFF	DIN	B1	B2	S	Length of Rail: 1 m / 3.28ft	Length of Rail: 2 m / 6.56 ft	
1D	1				Height 11 mm / .43 in TS-11-1M-W1	Height 11 mm / .43 in TS-11-2M-W1	
2D	2				10 11 Zm W1		
3D	3	28 11 2 Height 14mm / .55 1.10 .43 .08 <b>TS-14-1M-W1</b>		Height 14 mm / .55 in TS-14-1M-W1	Height 14 mm / .55 in TS-14-2M-W1		
4D	4			Height 20 mm / 1.10 in	Height 20 mm / 1 10 in		
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).



Group

1D

2D

3D

4D

5D

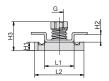
STAUFF DIN

2

3

4

5





Thread G

1/4-20 UNC

5/16-18 UNC

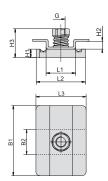
5/16-18 UNC

M8

M8

STAUFF Group 1D

Dimensions (mm/in)



STAUFF Group 2-3D / 4-5D

Н3

20,5

.81

23,5

.93

23,5

H2

5,5

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.

L2

35

1.38 | 1.57 | .63

35

35

1.38

1.38

21

.83

21

.83

21

.83

L3

40 | 16

38 53

38 80

1.50 3.15 .75 .3

1.50 2.09 .75

B1

B2

19 6

.75

19 9

19 9

H1

.24 .22

.35 .22

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.

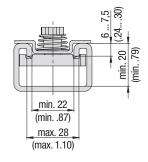


## **Compatibility with Channel Rails**

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.

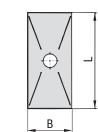


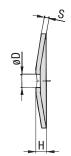
Basic dimensional requirements for channel rails to be used with STAUFF Channel Rail Adaptors, type CRA

Dimensional drawings: All dimensions in mm (in).



## **Cover Plate Type GD**







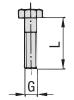
Ordering C	odes	
Cover Plate	*GD-*1D-*\	N3
* Cover Plate		GD
* STAUFF Group		1D
* Material code	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W4 W5
	Cover Plate  * Cover Plate  * STAUFF Group	* Cover Plate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

Group		Dimension	S (mm/in)	<sup>im</sup> /in)			Ordering Codes
STAUFF	DIN	L	В	Н	S	ØD	(Standard Options)
1D	1	34	30	7	3	7	GD-1D-W3
IU		1.34	1.18	.28	.12	.28	dD-ID-W3
2D	2	52	30	7	3	9	GD-2D-W3
2υ	2	2.05	1.18	.28	.12	.35	GD-2D-W3
an.	3	65	30	7	3	9	GD-3D-W3
3D	3	2.56	1.18	.28	.12	.35	นบ-งบ-พง
4D	4	79	30	7	3	9	GD-4D-W3
4D	ID 4	3.11	1.18	.28	.12	.35	GD-4D-W3
ED.	5	102	30	7	3	9	GD-5D-W3
5D	5	4.02	1.18	.28	.12	.35	นบ-อบ-พ3

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

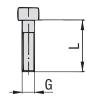
## **Ordering Codes Hexagon Head Bolt** \*AS-\*M8x35-\*W3 \* Type of bolt Hexagon Head Bolt (according to DIN 931 / 933 AS or ANSI / ASME B18.2.1.) \* Thread type and size acc. to dimension table \* Material code Carbon Steel, zinc/nickel-plated Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

Group STAUFF	DIN	Dimensions ( $^{\text{mm}}/_{\text{in}}$ ) 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
2D	0	M8 x 35	AS-M8x35-W3
20	<b>D</b> 2	5/16–18 UNC x 1-3/8	AS-5/16-18UNCx1-3/8-W3
an.	3	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
עו	ı	1/4–20 UNC x 1-3/8	IS-1/4-20UNCx1-3/8-W3
2D	2	M8 x 35	IS-M8x35-W3
20	2	5/16–18 UNC x 1-3/8	IS-5/16-18UNCx1-3/8-W3
an.		M8 x 45	IS-M8x45-W3
3D	3	5/16–18 UNC x 1-3/4	IS-5/16-18UNCx1-3/4-W3
40	4	M8 x 50	IS-M8x50-W3
4D	4	5/16–18 UNC x 2	IS-5/16-18UNCx2-W3
- FD	-	M8 x 60	IS-M8x60-W3
5D	5	5/16–18 UNC x 2-1/2	IS-5/16-18UNCx2-1/2-W3

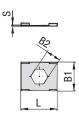
Ordering C	odes	
Socket Cap S	crew *IS-*M8x35-*V	<b>V</b> 3
* Type of bolt	Socket Cap Screw (according to ISO 4762 or ANSI / ASME B18.3)	IS
* Thread type and	size acc. to dimension table M8	x35
* Material code	Carbon Steel, zinc/nickel-plated	W3
	1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A	W4
	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.

## **Safety Locking Plate**

Type SI (for Use with Stacking Bolt AF)





## Safety Locking Plate SI

(Prevents Stacking Bolt from Loosening)

Ordering Codes	
Safety Locking Plate *SI-*1D-*V	N3
* Safety Locking Plate	SI
* STAUFF Group 1D (DIN Group 1) 2D to 5D (DIN Group 2 to 5) 2	1D ?-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

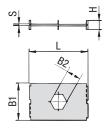
Group STAUFF	DIN	Dimensions (mm/in) L	B1	B2	S	Ordering Codes (Standard Options)
	27 22		11,2 0,5			
1D	1	1.06	.86	.44	.02	SI-1D-W3
2D	2					
3D	3	27	22	12,2	0,5	01.0 50 1110
4D	4	1.06	.86	.48	.02	SI-2-5D-W3
5D	5					

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)

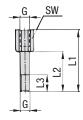
Ordering Co	odes	
Safety Lockin	g Plate *SIV-*1D-*	W3
* Safety Locking F	Plate	SIV
* STAUFF Group	1D (DIN Group 1) 2D to 3D (DIN Group 2 to 3)	1D 2-3D
* Material code	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

Group		Dimensions ("		Ordering Codes			
STAUFF	DIN	L	B1	B2	S	Н	(Standard Options)
<b>1</b> D	1	27	28	11,1	1	7	SIV-1D-W3
1D		1.06	1.10	.44	.04	.27	21A-1D-M3
2D	2	45	28	12,1	1	7	elv a an wa
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 (mi	m/in)				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
עו	ו עו	1/4-20 UNC	1.33	.78	.47	.43	AF-1/1A/1D-U-W3
2D	0	M8	33	20	12	12	AF-2D-M-W3
2υ	<b>PD</b> 2	5/16-18 UNC	1.30	.78	.47	.47	AF-2D-U-W3
3D		M8	44	29	12	12	AF-3D-M-W3
ЗU	3	5/16-18 UNC	1.73	1.14	.47	.47	AF-3D-U-W3
4D	4	M8	49	34	12	12	AF-4D-M-W3
4υ	4	5/16-18 UNC	1.92	1.33	.47	.47	AF-4D-U-W3
5D	-	M8	61	46	12	12	AF-5D-M-W3
טט	5	5/16-18 UNC	2.40	1.81	.47	.47	AF-5D-U-W3

Ordering Co		N3
* 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
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	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 63 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 (Carbon Steel) Code: SMG (Stainless Steel)



**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		Availability o	•	
		<b>Body Material</b>	s & Designs	
STAUFF	P/T/H	Profiled	Type	
(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
	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
	26,9	•	•	426.9/26.9
<b>4D</b> (4)	28	•	•	428/28
(4)	30	•	•	430/30
	32	•	•	532/32
	33,7	•	•	533.7/33.7
5D	35	•	•	535/35
(5)	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



## Type H (Smooth)



Polypropylene (Colour: Black)





See pages 154 / 155 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.

## **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, zinc/nickel-plated

Metal parts made of Stainless Steel V2A W4 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

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

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



#### 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

## **Order Code**

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

W10 is the standard option for this type of installation.



#### 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 mm / .24 in Material: Polypropylene Profiled inside surface with tension clearance



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

W3 is the standard option for this type of installation.

**Order Code** 

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**

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

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



## 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 O.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 W4

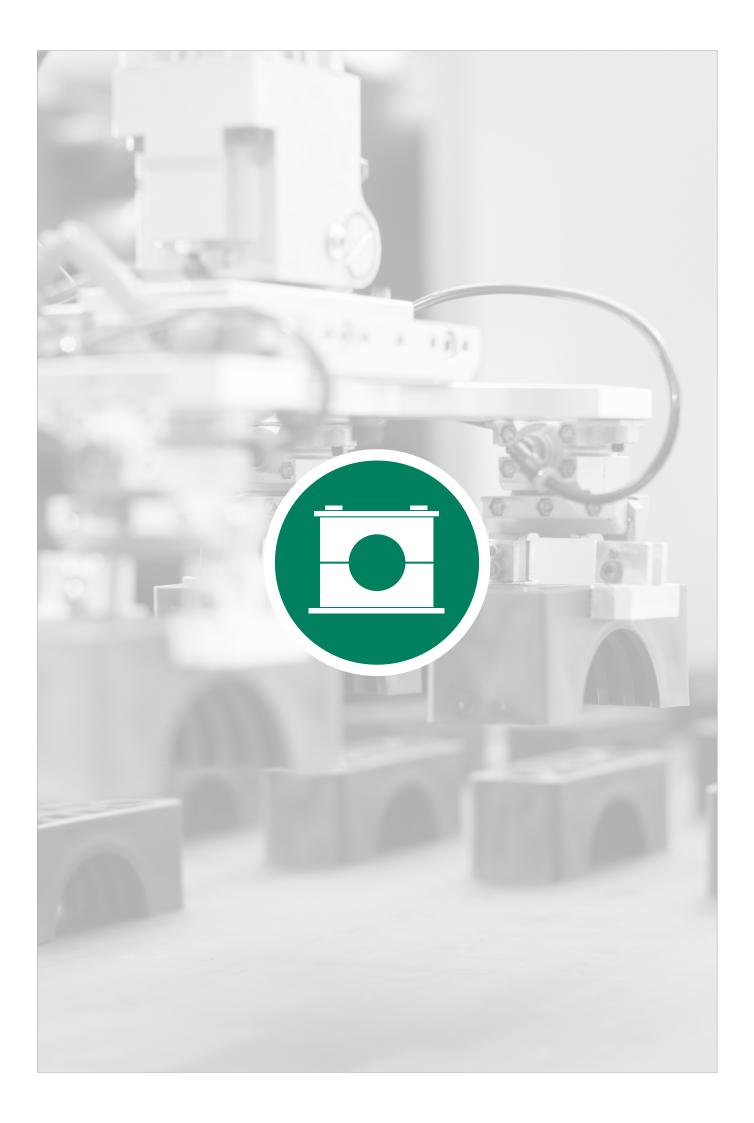
Metal parts made of Stainless Steel V2A: 1.4301 / 1.4305 (AlSI 304 / 303) Metal parts made of Stainless Steel V4A: 1.4401 / 1.4571 (AlSI 316 / 316 Ti)

W5

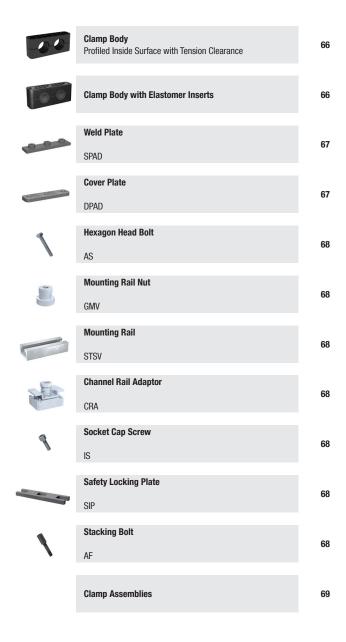
Weld Plate made of Carbon Steel, phosphated

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

W10



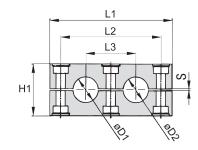




## Clamp Body • Profiled Design

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





## **Ordering Codes**

#### **Clamp Body**

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

One clamp body is consisting of two clamp halves.

- \* 1st part of STAUFF Group
- \* Exact outside diameters Ø D1 / Ø D2 (mm) 012.7/12.7
- \* Material code (see below)

_			
Stand	lard	Mater	ials



Polypropylene Colour: Green Material code: PP



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

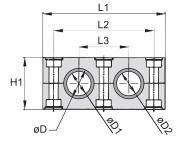
See pages 154 / 155 for material properties and technical information.

Group	Outside Diameter		Nominal Bore		Ordering Codes	Dimer	Dimensions (mm/in)				
	Pipe / Tube			Copper Tube	` ' '						
	Ø D1 / Ø		Pipe	ASTM B88							
STAUFF	(mm)	(in)	(in)	(in)	( <b>**</b> = Material)	L1	L2	L3	H1	S	Width
	12,7	1/2		3/8	4012.7/12.7-**						
	19 3/4		4019/19-**								
	20				4020/20-**	115	90	45	48	1.0	30
4S-D	21,3		1/2		4021.3/21.3-**	115				1,2	
	22			3/4	4022/22-**	4.53	3.54	1.77	1.89	.05	1.18
	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	4.72	2.36	2.36	.08	1.18
	42		1-1/4		5042/42-**						

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 39 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

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

4017.2/17.2-\*\*-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

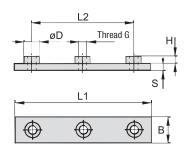


Thermoplastic Elastomer (73 Shore-A)

Colour: Black

5032/32-\*\*-R See pages 154 / 155 for properties and technical information. Additional outside diameters are available upon request. Please contact STAUFF for further information.





## Weld Plate Type SPAD

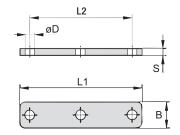


Group	Dimensio	ons (mm/in)		Ordering Codes				
STAUFF	L1	L2	В	S	Н	Thread G	ØD	(Standard Options)
4S-D	130	90	30	8	8,5	M10	18	SPAD-4S-M-W1
45-D	5.12	3.54	1.18	.31	.33	3/8-16 UNC	.71	SPAD-4S-U-W2*
5S-D	160	120	30	8	8,5	M10	18	SPAD-5S-M-W1
อ9-ท	6.30	4.72	1.18	.31	.33	3/8-16 UNC	.71	SPAD-5S-U-W2*

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.

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

Ordering C	odes	
Weld Plate	*SPAD-*4S-*M-*\	W1
* Weld Plate	s	PAD
* STAUFF Group	4S-D 5S-D	4S 5S
* 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



# Cover Plate Type DPAD



Group	Dimensions	, ,	Ordering Codes			
STAUFF	L1	L2	В	S	ØD	(Standard Options)
4S	115	90	30	8	11	DPAD-4S-W1*
45	4.53	3.54	1.18	.31	.43	DPAD-45-W1"
5S	145	120	30	8	11	DPAD-5S-W1*
33	5.71	4.72	1.18	.31	.43	DPAD-32-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.

 $^{\star}\,$  Standard finishing option in North America is W3 (Carbon Steel, phosphated).

Ordering Codes										
<b>Cover Plate</b>	*DPAD-*4S-*W1									
* Cover Plate	D	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								



## **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 Codes Hexagon Head Bolt *AS-*M10x70-*W1								
* Thread type and	d size acc. to dimension table M1	0x70	,					
* Material code	Carbon Steel, uncoated Carbon Steel, zinc/nickel-plated	W1 W3	,					
	Stainless Steel V2A	WA	١					

1.4301 / 1.4305 (AISI 304 / 303)

1.4401 / 1.4571 (AISI 316 / 316 Ti)

Stainless Steel V4A

Group STAUFF	DIN	Dimensions ( $^{\text{mm}}/_{\text{ln}}$ ) Thread G x L	Ordering Codes (Standard Options)
4S	2	M10 x 60	AS-M10x60-W1
43	2	3/8-16 UNC x 2-1/4	AS-3/8-16UNCx2-1/4-W3*
EC	3	M10 x 70	AS-M10x70-W1
5S	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 46 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 42 for details)



## **Mounting Rail Type STSV**

**Heavy Series** (See page 42 for details)



## **Channel Rail Adaptor Type CRA**

Heavy Series, STAUFF Group 4S and 5S (See page 43 for details)



## **Socket Cap Screw** Type IS

Heavy Series, STAUFF Group 4S and 5S (See page 45 for details)



## **Safety Locking Plate Type SIPD**

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

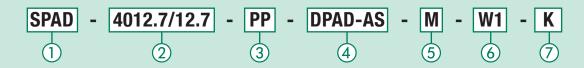


## **Stacking Bolt** Type AF

Heavy Series, STAUFF Group 4S and 5S (See page 47 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 P/T/H	Availability Body Materi 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)





Clamp Bodies, Type H (smooth Inside surface without tension clearance) are available upon request. Please contact STAUFF for further information.

# 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 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 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

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; 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.

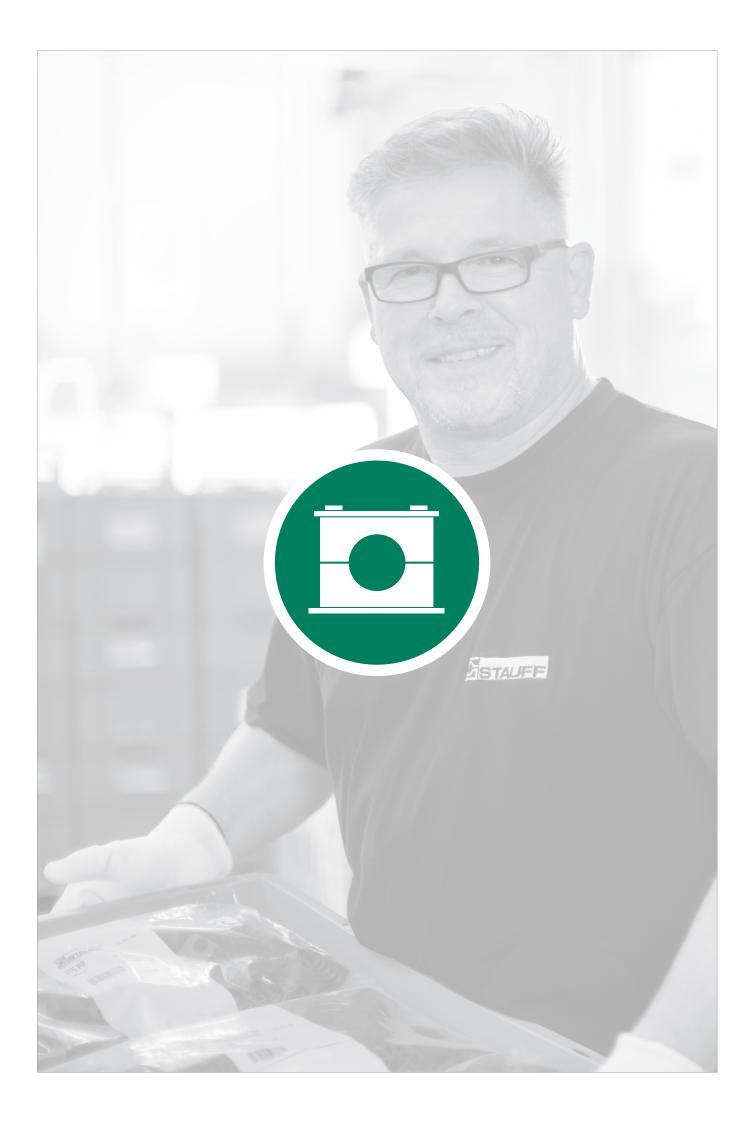
## **Components Supplied Separately**

Code: none (Standard Option)

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

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

W19





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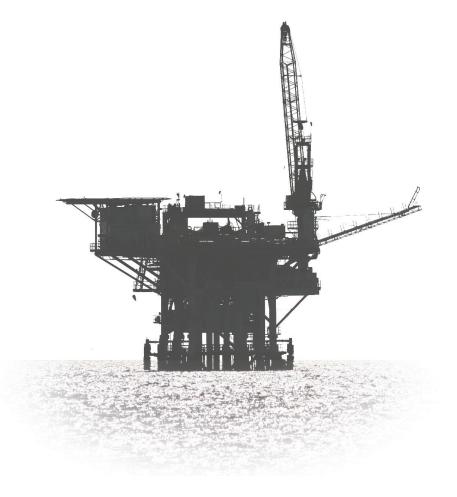
## **STAUFF ACT Anti-Corrosion Technology**



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 pinework 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)
- 1 Clamp body made of flame-retardant PP-VO 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

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**

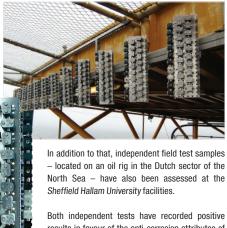
Throughout their development, STAUFF ACT Clamps have been subject to stringent testing at the STAUFF in-house laboratories located in Werdohl, Germany.

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

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).

are available upon request.

#### **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.

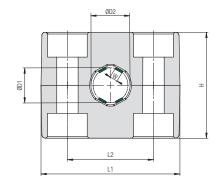
## Standard Series according to DIN 3015, Part 1

## **ACT Clamp Body**





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



## **Ordering Codes**

Clamp Body, STAUFF Group 1A

\*2-\*12.7-\*ACT \*1-\*06.4A-\*ACT

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

\* STAUFF Group \* Exact outside diameter Ø D1 (mm) \* Material code

_
12.7
ACT

Group S	ize	Outside I Ø D1	Diameter	Ordering Code	Packaging Unit	Dimer	Dimensions (mm/in)					
STAUFF	DIN	(mm)	(in)	(2 Clamp Halves)	(in pieces / bag)	ØD2	W	L1	L2	Н	Width	
		6		106A-ACT	25	9 .35	1,4					
1A 1		6,4	1/4	106.4A-ACT	25	9,4	1,5					
		8		108A-ACT	25	11,0						
	1	9,5	3/8	109.5A-ACT	25	12,5	2,2					
		10		110A-ACT	25	13	2,3					
		12		112A-ACT	25	15	2,8	2,8				
		12,7	1/2	212.7-ACT	25	15,7	3,5					
		14		214-ACT	25	17	3,5					
		14,3	9/16	214.3-ACT	25	17,3	3,5	40				
2	2	15		215-ACT	25	18	3,5	_				
		16	5/8	216-ACT	25	19	3,5					
		18		218-ACT	25	21	3,5					
		19	3/4	319-ACT	25	22	3,5					
		20		320-ACT	25	23	3,5					
3	3	21,3		321.3-ACT	25	24,3	3,5				_	
		25		325-ACT	25	28	3,5	1.97				
		25,4	1	325.4-ACT	25	28,4	3,5					
		26,9		426.9-ACT	25	31,1	6,0					
4	4	28		428-ACT	25	1.22 32,2	6,0	59	40	42	30	
		30		430-ACT	25	34,2	.24	2.32	1.57	1,65	1.18	
		32	1 1/4	532-ACT	25	1.35	.24					
		35		535-ACT	25	1.43	.28					
5	5	38	1 1/2	538-ACT	25	1.54	.28	2.80	52 2.05	58 2.28	30 1.18	
		42	, _	542-ACT	25	1.66 46,2 1.82	.31 8 .31					

Additional sizes and outside diameters are available upon request. 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.

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





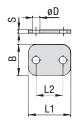
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**ACT Cover Plate** 

**Type DP ... W55** 



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	INOX

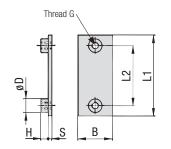
Group STAUFF	DIN	Dimensions (mm/in) Thread G x L	Ordering Code	Packaging Unit (in pieces / bag)
1A	1	M6 x 30 M6 x 1.18	AS-M6x30-W55	25
2	2	M6 x 35 M6 x 1.38	AS-M6x35-W55	25
3	3	M6 x 40 M6 x 1.57	AS-M6x40-W55	25
4	4	M6 x 45 M6 x 1.77	AS-M6x45-W55	25
5	5	M6 x 60 M6 x 2.36	AS-M6x60-W55	25

frei
STAINLESS STEEL
STAINLESS STEEL
Group

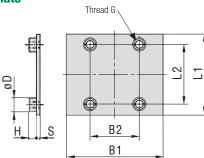
Group		Dimen	sions ( <sup>m</sup>	m/in)			Ordering Code	Packaging Unit
STAUFF	DIN	L1	L2	В	S	ØD		(in pieces / bag)
1A	1	34	20	30	3	7	DP-1A-W55	25
IA	1	1.34	.79	1.18	.12	.28	DF-IA-W55	23
2	2	40,5	26	30	3	7	DP-2-W55	25
	2	1.59	1.02	1.18	.12	.28	DF-2-W33	20
3	3	48	33	30	3	7	DP-3-W55	25
J	J	1.89	1.30	1.18	.12	.28	DF-3-W33	23
4	4	57	40	30	3	7	DP-4-W55	25
4	4	2.24	1.57	1.18	.12	.28	DF-4-W33	20
5	5	70	52	30	3	7	DP-5-W55	25
3	3	2.76	2.05	1.18	.12	.28	DF-0-W00	20

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











Group	Dime	ensior	ıs (mm	/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	1	IVIO	1.42	0.79	1.18	.12	.26	.47	3F-1A-W-W33	20
2	2	M6	42	26	30	3	6,5	12	SP-2-M-W55	25
2	2	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	3	IVIO	1.97	1.30	1.18	.12	.26	.47	35-3-101-0033	25
4	4	M6	60	40	30	3	6,5	12	SP-4-M-W55	25
4	4	IVIO	2.36	1.57	1.18	.12	.26	.47	3F-4-IVI-VV33	20
5	5	M6	71	52	30	3	6,5	12	SP-5-M-W55	25
5	5	IVIO	2.80	2.05	1.18	.12	.26	.47	5P-5-IVI-VV55	20

ØD	Ordering Code	Packaging Unit (in pieces / bag)	(
12			
.47	SP-1A-M-W55	25	1
12			
.47	SP-2-M-W55	25	2
12	CD O M WEE	0.5	,
.47	SP-3-M-W55	25	3
12	SP-4-M-W55	25	
.47	5P-4-IVI-W55	20	
12	SP-5-M-W55	25	
.47	3F-3-W-W33	20	

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

Group	Dimensions (mm/in)							Ordering Code	<b>Packaging Unit</b>		
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		
2	2	M6	42	26	60	30,5	3	6,5	12	SPD-2-M-W55	25
2	۷	IVIO	1.65	1.02	2.36	1.20	.12	.26	.47		
3	3	M6	50	33	60	30,5	3	6,5	12	SPD-3-M-W55	25
3	٥	IVIO	1.97	1.30	2.36	1.20	.12	.26	.47		20





### **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

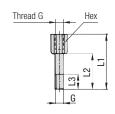
ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

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.

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





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







Group		Dime	nsions (	mm/in)	Ordering Code Packaging Uni					
STAUFF	DIN	G	L1	L2	L3 min.	Hex		(in pieces / bag)		
1A	1	M6	34	20	12	11	AF-1/1A/1D-M-W55	25		
IA	1	IVIO	1.34	.79	.47	.43	AF-1/1A/1D-W-W33	20		
2	2	M6	40	26	12	11	AF-2-M-W55	25		
		IVIO	1.57	1.24	.47	.43	AI -2-IVI-VV33	23		
3	3	M6	44	30	12	11	AF-3-M-W55	25		
J	3	IVIO	1.73	1.18	.47	.43	AI -3-IVI-VV33	23		
4	4	M6	49	35	12	11	AF-4-M-W55	25		
4	4	IVIO	1.93	1.38	.47	.43	AI -4-IVI-VVJJ	23		
5	5	M6	64	50	12	11	AF-5-M-W55	25		
J	J	IVIO	2.52	1.97	.47	.43	AI -D-IVI-VVDD	23		

Group		Dimens	ions ( <sup>mm</sup> /	'in)		Ordering Code	Packaging Unit
STAUFF	DIN	L	B1	B2	S		(in pieces / bag)
1A	1	33	28	11,2	2	SIG-1A-ACT-W55	25
IA	'	1.30	1.10	.44	.08	SIG-TA-AGT-WSS	20
2	2	39	28	11,2	2	SIG-2-ACT-W55	25
2	2	1.54	1.10	.44	.08	310-2-A01-W33	20
3	3	47	28	11,2	2	SIG-3-ACT-W55	25
J	J	1.85	1.10	.44	.08	310-3-A01-W33	20
4	4	56	28	11,2	2	SIG-4-ACT-W55	25
4	4	2.20	1.10	.44	.08	310-4-A01-W33	20
5	5	69	28	11,2	2	SIG-5-ACT-W55	25
5	5	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.).

## 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.

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



Group STAUFF DIN 1A 1

3

345

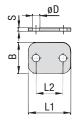


Dimensions applicable only when used with Cover Plate DP and Weld Plate SP

N	Dimensions (mm/in) Thread G x L	Ordering Code	Packaging Unit (in pieces / bag)
	M6 x 30 M6 x 1.18	AS-M6x30-W55	25
	M6 x 35 M6 x 1.38	AS-M6x35-W55	25
	M6 x 40 M6 x 1.57	AS-M6x40-W55	25
	M6 x 45 M6 x 1.77	AS-M6x45-W55	25
	M6 x 60	AS-M6x60-W55	25

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





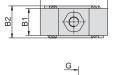


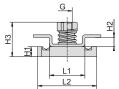
Group		Dimen	sions ("	ım/ <sub>in</sub> )			Ordering Code	Packaging Unit
STAUFF	DIN	L1	L2	В	S	ØD		(in pieces / bag)
1A	1	34	20	30	3	7	DP-1A-W55	25
IA	1	1.34	.79	1.18	.12	.28	DF-IA-W55	20
2	2	40,5	26	30	3	7	DP-2-W55	25
2	2	1.59	1.02	1.18	.12	.28	DF-2-W55	20
3	3	48	33	30	3	7	DP-3-W55	25
3	3	1.89	1.30	1.18	.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
5	5	2.76	2.05	1.18	.12	.28	มห-อ-พออ	25

## ACT Channel Rail Adaptor Type CRA ... W55

M6 x 2.36

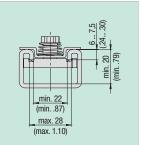






### Suitability Chart for ACT Channel Rail Adaptors in the Standard Series

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 hesitate to contact STAUFF prior to field application.

Group		Dimensions	( <sup>mm</sup> / <sub>in</sub> )		Ordering Code	Packaging Unit						
STAUFF	DIN	G	L1	L2	L3	B1	B2	H1	H2	Н3		(in pieces / bag)
1A	1											
2	2											
3	3	M6	21	35	40	16	19	6	5,5	20,5	CRA-1-8/1D-M-W55	25
			.83	1.38	1.57	.63	.75	.24	.22	.81	0 0,	20
4	4											
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

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

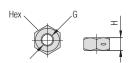
ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

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.

# All-Metal Self-Locking ACT Nut Type MUS-HKS ... W55 (similar to DIN 980 / Biloc)

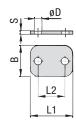






**ACT Cover Plate** 

**Type DP ... W55** 





For use with ACT Hammerhead Bolts HKS ... W55

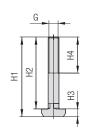
Group STAUFF	DIN	Dimensions Thread G	is ( <sup>mm</sup> / <sub>in</sub> )	Hex	Ordering Code	Packaging Unit (in pieces / bag)
1A	1					
2	2					
3	3	M6	5 .20	10	MUS-HKS-M6-W55	25
4	4			.59		
5	5					

## Rost frei

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	23
2	2	40,5	26	30	3	7	DP-2-W55	25
	2	1.59	1.02	1.18	.12	.28	DF-2-W33	20
3	3	48	33	30	3	7	DP-3-W55	25
3	J	1.89	1.30	1.18	.12	.28	DF-3-W33	23
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
J	J	2.76	2.05	1.18	.12	.28	DL-0-M22	20

## ACT Hammerhead Bolt Type HKS ... W55



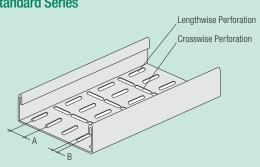




For use with Self-Locking ACT Nuts MUS-HKS  $\dots$  W55

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	1	IVIO	1.74	1.57	.17	.79	.24	.52	HK3-W0X40-W33	20
2	2	M6	49,3	45	4,3	20	6,1	13,3	HKS-M6x45-W55	25
2	2	IVIO	1.94	1.77	.17	.79	.24	.52	HK3-W0X43-W33	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	25
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	MG	74,3	70	4,3	20	6,1	13,3	HKS-M6x70-W55	25
i)	Ü	M6	2.93	2.76	.17	.79	.24	.52	UK9-MOX/0-M33	20

### 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:

- $\blacksquare$  **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

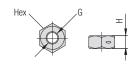
ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

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.

# All-Metal Self-Locking ACT Nut Type MUS-HKS ... W55 (similar to DIN 980 / Biloc)

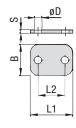






**ACT Cover Plate** 

**Type DP ... W55** 





For use with ACT Stacking Bolts AF-HKS ... W55

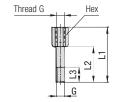
Group		Dimensions	(mm/in)		Ordering Code	Packaging Unit
STAUFF	DIN	Thread G	Н	Hex		(in pieces / bag)
1A	1					
2	2	M6	5 .20	10 .39	MUS-HKS-M6-W55	25
3	3					

# Rost

Group		Dimen	sions ( <sup>m</sup>	ım/ <sub>in</sub> )			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	DF-3-W33	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	4	M6	44	30	12	11	AF-HKSK-1A-M-W55	0E
IA	1	IVIO	1.73	1.18	.47	.43	AL-UVSV-IN-IN-MOO	20
2	2	M6	54	40	12	11	AF-HKSK-2-M-W55	25
2	2	IVIO	2.13	1.57	.47	.43	AF-HK3K-Z-IVI-W33	20
3	3	M6	54	40	12	11	AF-HKSK-3-M-W55	25
J	J	IVIO	2.13	1.57	.47	.43	AL-UVOV-9-INI-MOO	20

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





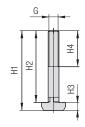


Group		Dimens	sions (mm	/in <b>)</b>		Ordering Code	Packaging Unit
STAUFF	DIN	L	B1	B2	S		(in pieces / bag)
1A	1	33	28	11,2	2	SIG-1A-ACT-W55	25
IA		1.30	1.10	.44	.08	SIG-TA-ACT-WSS	20
2	2	39	28	11,2	2	SIG-2-ACT-W55	25
2	2	1.54	1.10	.44	.08	31U-2-AU1-W33	20
3	3	47	28	11,2	2	SIG-3-ACT-W55	25
3	3	1.85	1.10	.44	.08	310-3-AC1-W33	20

## ACT Hammerhead Bolt Type HKSK ... W55









Group		Dim	Dimensions (mm/in) Ordering Code Packaging Unit									
STAUFF	DIN	G	H1	H2	Н3	H4 min	В	L		(in pcs. / bag)		
1A	4	M6	29,3	25	4,3	20	6,1	13,3	HKSK-M6x25-W55	25		
IA	'	IVIO	1.15	.98	.17	.79	.24	.52	HKSK-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		
٥	٥	IVIO	1.55	1.38	.17	.79	.24	.52	ULON-INIOX30-M30	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

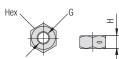
ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

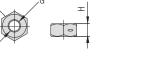
ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

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.

## **All-Metal Self-Locking ACT Nut** Type MUS-HKS ... W55 (similar to DIN 980 / Biloc)







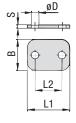


For use with ACT Hammerhead Bolts HKS ... W55

Group		Dimensions			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**



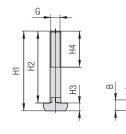




Group		Dimen	sions ( <sup>m</sup>	ım/ <sub>in</sub> )			Ordering Code	Packaging Unit
STAUFF	DIN	L1	L2	В	S	ØD		(in pieces / bag)
1A	1	34	20	30	3	7	DP-1A-W55	25
IA	'	1.34	.79	1.18	.12	.28	DF-IA-W55	20
2	2	40,5	26	30	3	7	DP-2-W55	25
2	2	1.59	1.02	1.18	.12	.28	DF-2-W55	20
3	3	48	33	30	3	7	DP-3-W55	25
3	3	1.89	1.30	1.18	.12	.28	DF-3-W33	20

## **ACT Hammerhead Bolt** Type HKSV ... W55

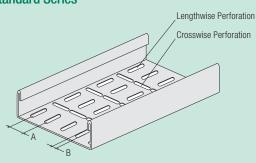




For use with Self-Locking ACT Nuts MUS-HKS ... W55

Group	Group Dimensions (mm/in)								Ordering Code	Packaging Unit	
STAUFF	DIN	G	H1	H2	Н3	H4 min	В	L		(in pcs. / bag)	
1A	4	M6	68,3	64	4,3	20	6,1	13,3	HKSV-M6x64-W55	0.E	
IA	'	IVIO	2.69	2.52	.17	.79	.24	.52	UK9A-MOX04-M33	20	
0	2	MC	80,3	76	4,3	20	6,1	13,3	HKSV-M6x76-W55	O.F.	
2	2	M6	3.16	2.99	.17	.79	.24	.52	UV2A-INIOX10-M23	20	
3	3	M6	87,3	83	4,3	20	6,1	13,3	HIVOV MOVOS WEE	0E	
3	J	IVIO	3.44	3.27	.17	.79	.24	.52	HKSV-M6x83-W55	20	

### **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
- 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):

- 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: 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.

#### **Order Codes**

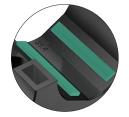
Upper Level: 212.7-ACT (Clamp Body only) Lower Level: HKSV-212.7-ACT-DP-MUS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

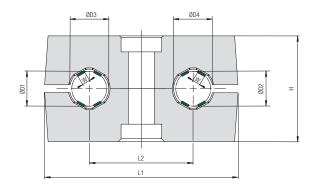


# Twin Series according to DIN 3015, Part 3 **ACT Clamp Body**





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

\* Material code

ACT

2

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 .79	26,6	30 1.18
		10		110/10-ACT	25	13 .51	2,3				
		12		112/12-ACT	25	15 .59	2,8				
0.0	2	12,7	1/2	212.7/12.7-ACT	25	15,7	3,5	53	29	26,6	30
2D	2	14		214/14-ACT	25	.67	3,5	2.09	1.14	1.05	1.18
		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 2.64	36 1.42	36,6 1.44	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.

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



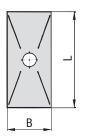


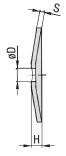
Dimensions applicable only when used with Cover Plate GD and Weld Plate SP

Group STAUFF	DIN	Dimensions (mm/in) Thread G x L	Ordering Code	Packaging Unit (in pieces / bag)
1D	4	M6 x 35	AS-M6x35-W55	25
וט	1	M6 x 1.38	AS-IVIOX35-W35	23
2D	2	M8 x 35	AS-M8x35-W55	25
20	2	M8 x 1.38	AS-IVIOX35-W35	20
3D	3	M8 x 45	AS-M8x45-W55	25
טט	٥	M8 x 1.77	AS-IVIOX43-W33	20

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





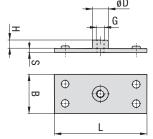


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Group		Dimen	sions ("	ım/ <sub>in</sub> )			Ordering Code	Packaging Unit
STAUFF	DIN	L	В	Н	S	ØD		(in pieces / bag)
1D	1	34	30	7	3	7	GD-1D-W55	25
טו	1	1.34	1.18	.28	.12	.28	GD-1D-W55	20
2D	2	52	30	7	3	9	GD-2D-W55	25
20	2	2.05	1.18	.28	.12	.35	GD-2D-W55	20
3D	3	65	30	7	3	9	GD-3D-W55	25
SD	3	2.56	1.18	.28	.12	.35	นบ-งบ-พจจ	25

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







(	Group		Dime	nsions	(mm/in)				Ordering Code	Packaging Unit
9	STAUFF	DIN	G	L	В	S	Н	ØD		(in pieces / bag)
Γ,	ID	1	M6	37	30	3	6,5	12	SP-1D-M-W55	25
Ľ	טו	ı	IVIO	1.46	1.18	.12	.26	.47	3F-1D-W33	20
,	חי	2	M8	55	30	5	6	14	SP-2D-M-W55	25
4	עצ	2	IVIO	2.17	1.18	.20	.24	.55	5P-2D-IVI-W55	20
	3D	3	M8	70	30	5	6	14	SP-3D-M-W55	25
	טט	3	IVIO	2.76	1.18	.20	.24	.55	3F-3D-W-W33	20





## **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

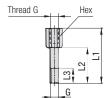
ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

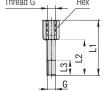
ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

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.

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

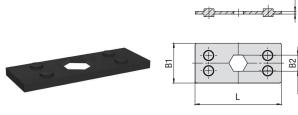






# Type SIV ... ACT

**ACT Safety Locking Plate** 



Made of flame-retardant PP-V0 plastic material; tested and V0 classified according to UL 94

Group		Dimen	sions (	<sup>mm</sup> /in)			Order Code	Packaging Unit
STAUFF	DIN	G	L1	L2	L3 min.	Hex		(in pieces / bag)
1D	1	M6	34	20	12	11	AF-1/1A/1D-M-W55	25
IU	ı	IVIO	1.33	.78	.47	.43	AF-1/1A/1D-W-W33	20
2D	2	M8	33	20	11	12	AF-2D-M-W55	25
20	2	IVIO	1.30	.78	.43	.47	AF-ZD-IVI-W33	20
3D	3	M8	44	29	15	12	AF-3D-M-W55	25
30	3	IVIO	1.73	1.14	.59	.47	AL-3D-IAI-M33	20

Group		Dimens	ions ( <sup>mm</sup> ,	/ <sub>in</sub> )		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	
טו		1.39	1.18	.44	.08	SIV-ID-FF-VU-ACI	20	
2D	2	52	30	12,1	2	SIV-2D-PP-V0-ACT	25	
20		2.05	1.18	.48	.08	31V-2D-FF-VU-AG1	20	
3D	3	65	30	12,1	2	SIV-3D-PP-V0-ACT	25	
JU	J	2.56	1.18	.48	.08	314-3D-LL-A01	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 Gode 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.

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



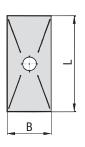


Dimensions applicable only when used with Cover Plate GD and Weld Plate SP

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





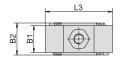


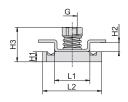
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Group		Dimen	sions (	ım/in)			Ordering Code	Packaging Unit
STAUFF	DIN	L	В	Н	S	ØD		(in pieces / bag)
1D	4	34	30	7	3	7	GD-1D-W55	25
טו	1	1.34	1.18	.28	.12	.28	GD-1D-W55	20
2D	2	52	30	7	3	9	GD-2D-W55	25
20	2	2.05	1.18	.28	.12	.35	GD-2D-W55	20
3D	3	65	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

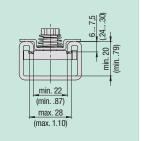






## Suitability Chart for ACT Channel Rail Adaptors in the Twin Series

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	(mm/in)		Order Code	Packaging Unit						
STAUFF	DIN	G	L1	L2	L3	B1	B2	H1	H2	Н3		(in pieces / bag)
1D	4	MC	21	35	40	16	19	6	5,5	20,5	CRA-1-8/1D-M-W55	O.E.
טו	1	M6	.83	1.38	1.57	.63	.75	.24	.22	.81	CKA-1-6/ ID-WI-W33	25
2D	2	M8	21	35	38	53	19	9	5,5	23,5	CRA-2-3D-M-W55	0.5
3D	3	IVIO	.83	1.38	1.50	2.09	.75	.35	.22	.93	GRA-2-3D-M-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

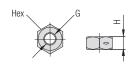
ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

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.

## **All-Metal Self-Locking ACT Nut** Type MUS-HKS ... W55 (similar to DIN 980 / Biloc)

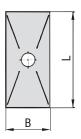


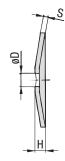




**ACT Cover Plate** 

**Type GD ... W55** 







For use with ACT Hammerhead Bolts HKS ... W55

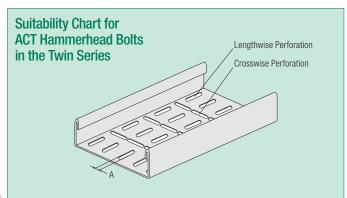
For use with Self-Locking ACT Nuts MUS-HKS ... W55

Group		Dimension	ıs ( <sup>mm</sup> / <sub>in</sub> )		Ordering Code	Packaging Unit
STAUF	F DIN	Thread G	Н	Hex		(in pieces / bag)
1D	4	M6	5	10	MUS-HKS-M6-W55	25
ID	'	IVIO	.20	.39	INIO2-UK2-INIO-M22	20
2D	2	M8	6,5	13	MUS-HKS-M8-W55	25
3D	3	IVIO	.26	.51	MOS-UKS-MO-MSS	20

Group		Dimen	sions (m	<sup>ım</sup> /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	23
2D	2	52	30	7	3	9	GD-2D-W55	25
2υ	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** 둪

STAINLESS STEEL										
Group		Dim	ensior		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		0.5
1D	ı	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	HK3-WOX33-W33	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

## W55

## ACT Mounting Hardware

Material Properties and Handling Instructions

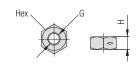
ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

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.

# All-Metal Self-Locking ACT Nut Type MUS-HKS ... W55 (similar to DIN 980 / Biloc)

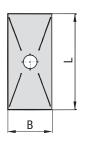


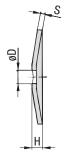




**ACT Cover Plate** 

**Type GD ... W55** 







For use with ACT Stacking Bolts AF-HKS ... W55

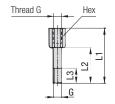
Group		Dimension	ıs ( <sup>mm</sup> / <sub>in</sub> )		Ordering Code	Packaging Unit
STAUF	F DIN	Thread G	Н	Hex		(in pieces / bag)
1D	4	M6	5	10	MUS-HKS-M6-W55	25
ID	'	IVIO	.20	.39	INIO2-UK2-INIO-M22	20
2D	2	M8	6,5	13	MUS-HKS-M8-W55	25
3D	3	IVIO	.26	.51	MOS-UKS-MO-MSS	20

## Rost

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
עו	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	0	65	30	7	3	9	GD-3D-W55	O.E.
3D	3	2.56	1.18	.28	.12	.35	GD-3D-W33	25

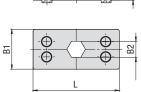
# ACT Stacking Bolt Type AF-HKSK ... W55





ACT Safety Locking Plate
Type SIV ... ACT



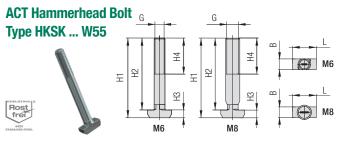


For use with Self-Locking ACT Nuts MUS-HKS ... W55

Group		Dimen	sions ( <sup>m</sup>	m/in)			Order Code	Packaging Unit
STAUFF	DIN	G	L1	L2	L3 min.	Hex		(in pieces / bag)
1D	1	M6	49	35	12	11	AF-HKSK-1D-M-W55	25
ID	1	IVIO	1.93	1.38	.47	.43	AF-IIKSK-ID-WI-WSS	23
2D	2	M8	50	37	11	12	AF-HKSK-2D-M-W55	25
20	2	IVIO	1.97	1.47	.43	.47	AF-IINON-ZU-IVI-WOO	20
3D	3	M8	61	46	15	12	AF-HKSK-3D-M-W55	25
SD	3	IVIO	2.40	1.81	.59	.47	AL-UKOK-OD-IM-MOO	20

Made of flame-retardant PP-V0 plastic material; tested and V0 classified according to UL 94

Group		Dimens	ions ( <sup>mm</sup> /	'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
ID	1	1.39	1.18	.44	.08	SIV-ID-FF-VU-ACI	20
2D	2	52	30	12,1	2	SIV-2D-PP-V0-ACT	25
20	2	2.05	1.18	.48	.08	31V-2D-FF-VU-AG1	20
3D	3	65	30	12,1	2	SIV-3D-PP-V0-ACT	25
30	3	2.56	1.18	.48	.08	211-3D-PP-VU-ACT	25



Group		Dim	ensior	IS ( <sup>mm</sup> /i	in)				Ordering Code	<b>Packaging Unit</b>
STAUFF	DIN	G	H1	H2	Н3	H4 min	В	L		(in pcs. / bag)
1D	4	M6	29,3	25	4,3	20	6,1	13,3	HKSK-M6x25-W55	O.E.
טו	'	IVIO	1.15	.98	.17	.79	.24	.52	HKSK-WOX20-W00	20
2D	2	M8	32,3	28	4,3	20	6	13,3	HKSK-M8x28-W55	O.E.
20		IVIO	1.27	1.10	.17	.79	.24	.52	UK9V-MOX50-M33	20
3D	2	M8	42,3	38	4,3	20	6	13,3	HKSK-M8x38-W55	O.E.
SD	3	IVIO	1.67	1.50	.17	.79	.24	.52	UKSK-MOX30-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):

- 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

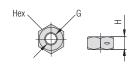
ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

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.

## **All-Metal Self-Locking ACT Nut** Type MUS-HKS ... W55 (similar to DIN 980 / Biloc)

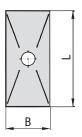


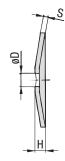




**ACT Cover Plate** 

**Type GD ... W55** 







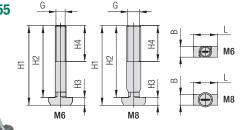
For use with ACT Hammerhead Bolts HKS ... W55

Group		Dimension	ns (mm/in)		Ordering Code	Packaging Unit
STAUFF	DIN	Thread G	Н	Hex		(in pieces / bag)
1D	4	M6	5	10	MUS-HKS-M6-W55	25
טו	1	IVIO	.20	.39	INIO9-UV9-INIO-M33	20
2D	2	M8	6,5	13	MUS-HKS-M8-W55	25
3D	3	IVIO	.26	.51	INIOS-IINO-IVIO-WOO	20

Group Dimensions (mm/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	25

### **ACT Hammerhead Bolt**



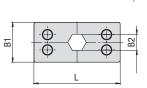


For use with Self-Locking ACT Nuts MUS-HKS ... W55

STAINLESS STEEL	STAINLESS STEEL										
Group Dimensions (mm/in)									Ordering Code	<b>Packaging Unit</b>	
STAUFF	DIN	G	H1	H2	Н3	H4 min	В	L		(in pcs. / bag)	
10	4	MC	76,3	72	4,3	20	6,1	13,3	HIVOV MOVZO WEE	O.E.	
1D	'	M6	3.00	2.83	.17	.79	.24	.52	HKSV-M6x72-W55	25	
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	HKSV-WOX73-WSS	20	
3D	3	M8	97,3	93	4,3	20	6	13,3	HKSV-M8x93-W55	25	
SD	J	IVIO	3.83	3.66	.17	.79	.24	.52	HK3V-IMOX93-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	ions (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	25
2D	0	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
่วบ	3	2.56	1.18	.48	.08	31V-3D-PP-VU-ACT	20





#### 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



- 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.).

### **Order Code**

#### 110/10-ACT-SIV-ACT-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:

- 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.



### **Order Code**

### CRA-110/10-ACT-GD-AS-M-W55

 $\textbf{W55} \ \text{is the recommended option for metal hardware to be used with STAUFF ACT Clamps.}$ 

## **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

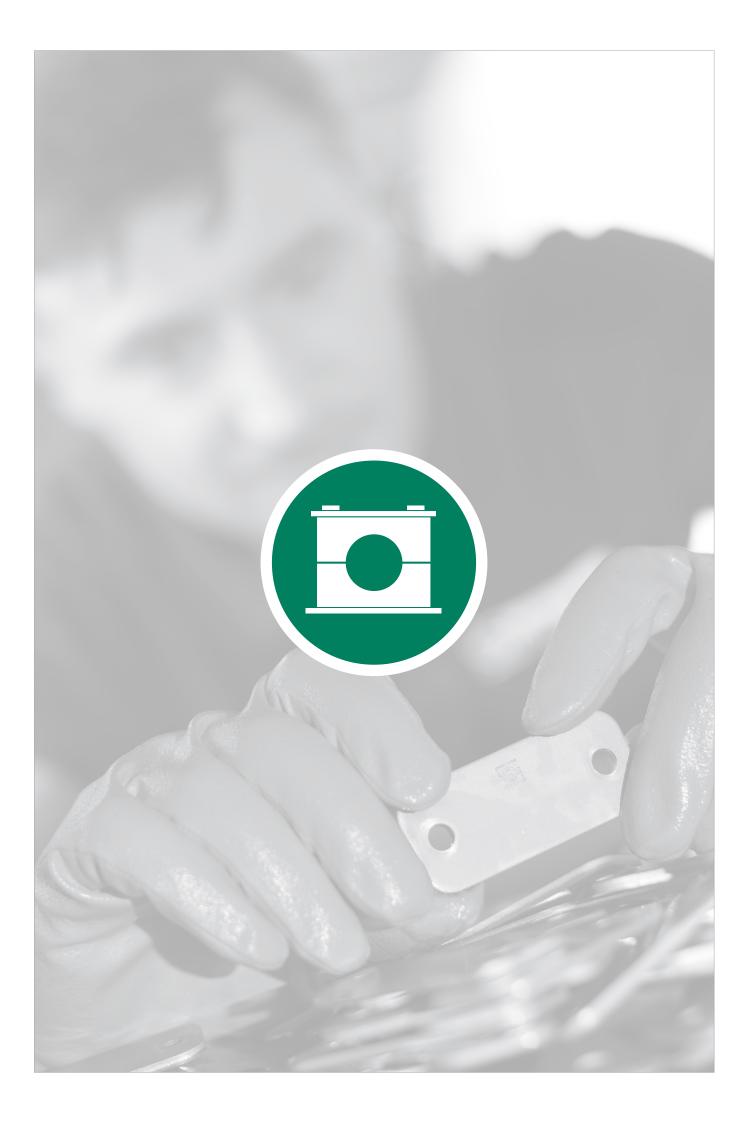
W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

#### **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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	Distance Tube	95
	DIT-SR6-SWG	
A Marie Constant	Stud Retainer	95
-	SWG-SR6	
	Ground Cable	95
	SWG-GC	-



### **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





- 1 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
- 4 Base material and surface suitable for stud welding



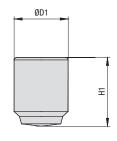
**Reduction of the** assembly time per clamp\*

> Assembly using the stud welding system 23%

\*For a typical assembly procedure in production environments.

## **Weld Stud with Female Thread Type SWG-SF**





## **Ordering Codes**

Weld Stud *SWG-SF-*M6x1	1x14-*W124
-------------------------	------------

\* Weld Stud with Female Thread SWG-SF

\* Thread code Metric ISO thread M6x11x14

Unified coarse

(UNC) thread UNC1/4-20x11x14

\* Material code Steel 4.8 with galvanised

copper coating C1E W124 (DIN EN ISO 4042)

droup		שוווופווטוטווס (ייי	/in/		Uluel Codes	rackaying units
STAUFF	DIN	Thread G	ØD1	H1	(Standard Options)	(in pcs. / per bag)
		M6	11	14	SWG-SF-M6x11x14-W124	100
1 8	0 8	IVIO	.43	.55	3WU-3F-WOX11X14-W124	100
1 0	0 0	1/4-20 UNC	11	14	SWG-SF-UNC1/4-20x11x14-W124	100
		1/4-20 UNG	.43	.55	3WG-3F-UNG1/4-2UX11X14-W124	100

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

Dimonoiono (mm/ )

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 161 reduce accordingly. In case of doubt, please contact STAUFF in advance.



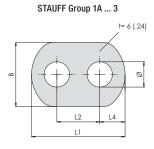
Packaging Unite

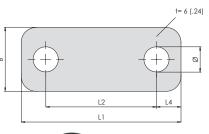
PP-BK



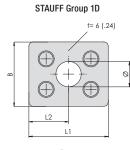
## **Distance Plate for DIN 3015 Clamps Type SWG-DIP**

STAUFF Group 1 t= 6 (.24)





STAUFF Group 4 ... 8









Group		Pipe/Tube-Ø (mm/in)	Dimens	sions (mm	/ <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	SWU-DIF-I-FF-BK	20
1A	1	6 12	43,5	20	11,8	30	11,8	SWG-DIP-1A-PP-BK	25
IA	'	.2448	1.71	.79	.46	1.18	.46	SWU-DIF-IA-FF-DK	23
2	2	12,7 18	48,5	26	11,3	30	11,8	SWG-DIP-2-PP-BK	25
2	2	.5071	1.90	1.02	.44	1.18	.46	SWU-DIF-Z-FF-DK	23
3	3	19 25,4	56,5	33	11,8	30	11,8	SWG-DIP-3-PP-BK	25
3	3	.75 1.00	2.22	1.30	.46	1.18	.46	SWU-DIF-S-FF-DK	25
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	20
5	5	32 42	75	52	11,5	30	11,8	SWG-DIP-5-PP-BK	25
3	5	1.26 1.65	2.95	2.05	.45	1.18	.46	SWU-DIF-3-FF-DK	20
6	6	44,5 54	88	66	11	30	11,8	SWG-DIP-6-PP-BK	25
O	O	1.75 2.12	3.46	2.60	.43	1.18	.46	SWU-DIF-U-FF-DK	20
7	7	57,2 76,1	121	94	13,5	30	11,8	SWG-DIP-7-PP-BK	10
′	′	2.25 3.00	4.76	3.70	.53	1.18	.46	SWG-DIF-7-FF-DK	10
8	8	88,9 102	147	120	13,5	30	11,8	SWG-DIP-8-PP-BK	10
U	U	3.50 4.00	5.78	4.72	.53	1.18	.46	OWU-DII -O-FF-DK	10
1D	1	6 12	37	18,5	-	30	11,8	SWG-DIP-1D-PP-BK	25
ID	1	.2448	1.45	.73	-	1.18	.46	OWU-DIF-ID-FF-DK	23

**Ordering Codes Distance Plate** \*SWG-DIP\*2\*PP-BK \* Distance Plate SWG-DIP \* STAUFF Group 2

Polypropylene (Colour: Black)

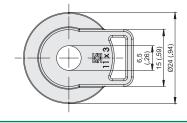
\* Material code

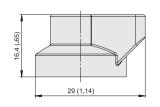
\*  $\pm 0,1(.003)$ 

Material: Polyamide (reinforced)

Suitable for hexagon socket button cap screws M6x12 (ISO 7380-1)

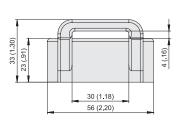
Standard packaging unit: 25 pcs.

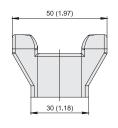


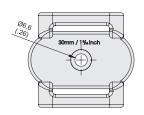


## **Cable Tie Holder** Type SWG-CTH-11-M6









26 (1.02)

**Cable Tie / Tension Belt Holder** Type SWG-CTH-30-M6-1





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).









### **Starterkit Type SWG-WI06-Starterkit**



#### 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  $\textbf{Dimensions} \; (L\; x\; W\; x\; H)$
- 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 <b>Type A</b>	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 <b>Type B</b>	SWG-AGS-6
7	7	Distance Tube <b>Type B</b>	SWG-AGS-7
8	8	Distance Tube <b>Type B</b>	SWG-AGS-8
1D	1D	Distance Tube <b>Type A</b>	NO DISTANCE ADAPTOR REQUIRED



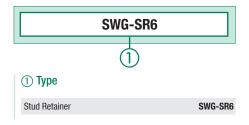
## **Distance Tube Type DIT-SR6-SWG**

Туре	for use with	Ordering Codes
A	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**

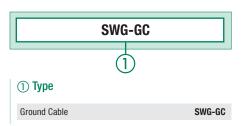


Standard packaging unit: 5 pcs.



**Ground Cable Type SWG-GC** 

### **Order Code**



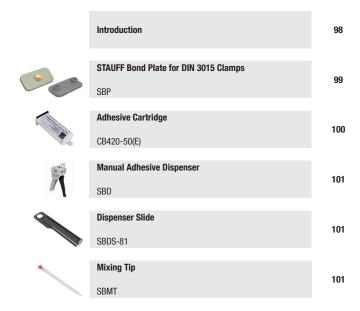
### Characteristics

- Cable length: 5 m / 16.40 ft
- Equipped with 2 vice grips 10"









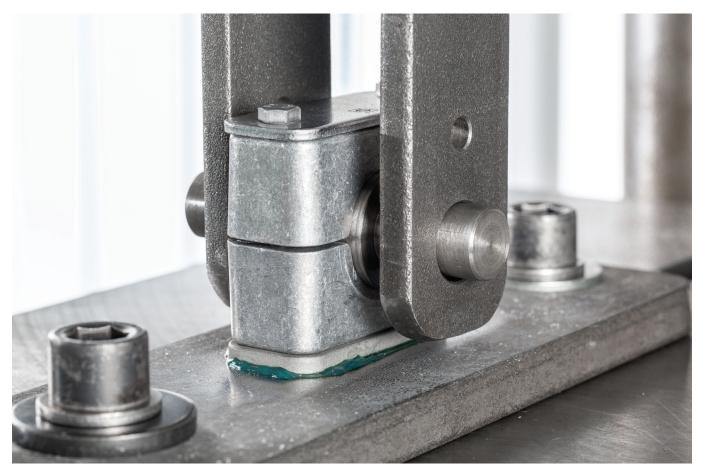
## **STAUFF Bond Adhesive Bonded Fastening**

The innovative STAUFF Bond system allows for pipes, tubes, hoses, cables and other components with outside diameters up to 102 mm / 4.00 in to be adhesively bonded to almost any surface material, such as prepared or unprepared metals, thermoplastics and composites.

It enables assembly and service technicians such as tube fitters to replace expensive and sometimes complicated mechanical fastening methods for STAUFF Clamps such as welding, brazing, bolting and riveting - a crucial benefit especially in safety-critical situations where welding is usually not considered to be an option.

- Reduce cycle time and labor cost during installation
- Eliminate need for hot work, fire watch and gas freeing
- Expensive tools and welding equipment no longer necessary
- No external power supply or electrical power required for installation
- Can be used with a variety of surfaces, especially in safety-critical situations when welding is not an option
- Enhance structural design, strength and integrity
- Reduce number of holes drilled into the structure
- Prevent galvanic corrosion and potential leak paths
- Maximize design and work sequence flexibility
- Facilitate last minute changes and additions
- Simplify subsequent modification and repair





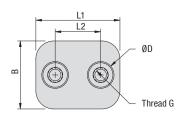


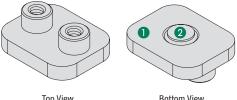


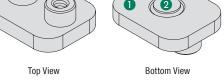


## **STAUFF Bond Plate for DIN 3015 Clamps Type SBP**









 Adhesive to be applied to this primed area of the bond plate 2 Internal dynamic installation fixture providing constant positive pressure and holding the bond plate in position while the advesive cures 1

Group		Diameter (mm/in)	Dimensions (	<sup>mm</sup> /in)						Order Codes	Packaging Unit
STAUFF	DIN	Clamp Body	Thread G	L1	L2	В	S	Н	ØD	(Standard Options)	(in Pieces)
1A	1	6 12	M6	36	20	30	5	11,3	11,8	SBP-1A-M-W5	25
IA	'	.2448	1/4-20 UNC	1.42	.79	1.18	.20	.44	.46	SBP-1A-U-W5	20
2	2	12,7 18	M6	42	26	30	5	11,3	11.8	SBP-2-M-W5	25
2	2	.5071	1/4-20 UNC	1.65	1.02	1.18	.20	.44	.46	SBP-2-U-W5	20
3	3	19 25,4	M6	50	33	30	5	11,3	11,8	SBP-3-M-W5	25
3	3	.75 1.00	1/4-20 UNC	1.97	1.30	1.18	.20	.44	.46	SBP-3-U-W5	25
4	4	26,9 32	M6	60	40	30	5	11,3	11.8	SBP-4-M-W5	25
4	4	1.06 1.26	1/4-20 UNC	2.36	1.57	1.18	.20	.44	.46	SBP-4-U-W5	25
5	5	32 42	M6	71	52	30	5	11,3	11,8	SBP-5-M-W5	25
3	J	1.26 1.65	1/4-20 UNC	2.80	2.05	1.18	.20	.44	.46	SBP-5-U-W5	25
61	6	44,5 54	M6	88	66	30	5	11,3	11.8	SBP-6-M-W5	25
U	U	1.75 2.12	1/4-20 UNC	3.46	2.60	1.18	.20	.44	.46	SBP-6-U-W5	23

Ordering Co	odes		
STAUFF Bond	Plate	*SBP-*2-*N	/I-*W5
* STAUFF Bond Pla	ate		SBP
* STAUFF Group			2
*Thread code	Metric ISO Unified co	) thread arse (UNC) thread	M U
* Material code	Stainless 1.4408 (A		W5

Please note: The bonding surface of the STAUFF Bond Plate is primed with a two-component chemically cured waterborne primer (MIL-PRF-85582) that forms a film that is resistant to chemicals, solvents, moisture and abrasion.

<sup>&</sup>lt;sup>1</sup>Please note: For STAUFF Group 6, STAUFF Bond Plates are equipped with each two internal installation fixtures.

## STAUFF

## Adhesive Cartridge Type CB420-50(E)



#### **Characteristics**

The STAUFF Bond acrylic structural adhesive is a two-component thixotropic paste adhesive (mixing ratio of 10:1) packed in a suitable 35 ml / 1.23 oz dual cartridge.

It is capable of bonding a wide variety of prepared or unprepared metals, engineering thermoplastics and composites, and replacing commonly used mechanical fastening methods such as welding, brazing, bolting and riveting in various industries.

The STAUFF Bond adhesive cures quickly at room temperature and exhibits excellent environmental and chemical resistance.

#### **Ordering Code**



### **Required Accessories**

Adhesive Dispenser, Dispenser Slide, Mixing Tip

Recommended number of STAUFF Bond Plates SBP to be installed with a single Adhesive Cartridge Type CB420-50(E)								
STAUFF Group	1A	2	3	4	5	6	7	8
No. of Bond Plates	25	25	20	20	15	15	5	5

## **Processing instructions**

#### **Cure Time**

15 to 18 minutes to 75% of ultimate strength and 24 hours to 100% of ultimate strength at room temperature of  $+24\ ^{\circ}\text{C}\,/\ +75\ ^{\circ}\text{F}.$ 

#### **Shelf Life**

Minimum 9 months when stored in a dry place and in the original package at temperatures from +13 °C to +24 °C /  $\pm$ 55 °F to +75 °F

Shelf life can be maximized by refrigeration at temperatures from +7 °C to +13 °C / +45 °F to +55 °F.

Do not freeze adhesive!

#### **Temperature**

Operating temperature range from  $-55~^{\circ}\text{C}$  to  $+121~^{\circ}\text{C}$  /  $-67~^{\circ}\text{F}$  to  $+240~^{\circ}\text{F}$ .

Pay attention to the expiry dates printed on the cartridges.

Alternative types of adhesives are available on request. Please contact STAUFF for further information.

Find the safety data sheets at www.stauff.com/en/bond/sds

#### **Installation Guideline**

### **Surface Preparation**

Thorough surface preparation is an essential part of adhesive bonding and at least as important as the actual installation.

Lightly abrade glossy surfaces to improve the adhesive bond strength. Just prior to adhesive application, clean surfaces with solvent using clean and lintless rags or paper towels. Do not use shop towels, rags or paper wipes contaminated with oil, soap or reclaimed solvents.

Clean one small area at a time, then dry with a clean cloth before the solvent evaporates to prevent re-deposition of contaminants. To maintain a clean solvent supply, always pour the solvent onto the washing cloth.

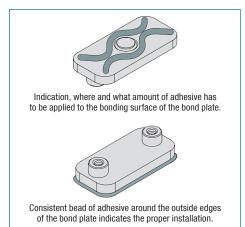
You may also want to clean the bottom of the bond plate prior to adhesive preparation. Use a clean cloth saturated with solvent to wipe the part with a single circular motion. Use caution not to disturb the internal fixture.

Safety note: Always wear gloves and protective glasses!

### **Dispensing Directions**

- Place the cartridge into the retaining lip on the dispensing gun. Mark the position of the cap of the cartridge, remove it by turning counter-clockwise and keep it for later use. When reclosing the cartridge, the cap must be used in the exact same position as it was before to avoid unwanted mixing and curing.
- Activate the dispensing gun slightly to extrude a small amount of adhesive onto scrap material to ensure adequate flow of both components. Attach the mixing tip to the adhesive cartridge and dispense a small line of adhesive onto scrap material to ensure adequate mixing.
- 3 Remove the protective foil from the internal dynamic installation fixture(s) of the bond plate.
- Apply suitable amount of adhesive to the bonding surface of the bond plate (see drawing on the left), position the part in the desired location on the surface and press lightly on the center of the bond plate to actuate the installation fixture(s), which will provide constant positive pressure and hold the bond plate in position while the advesive cures.

- A consistent bead of adhesive around the outside edges of the bond plate indicates proper installation and is a good visual quality assurance check.
- When not in use, remove and dispose the mixing tip and replace the cap to preserve remaining adhesive.



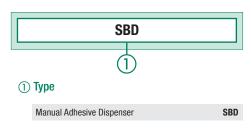
Selection, proper application and correct installation of the products are the user's responsibility!





## **Manual Adhesive Dispenser Type SBD**

### **Ordering Code**



#### **Characteristics**

The STAUFF Bond Manual Adhesive Dispenser has been designed for use with STAUFF Bond dual adhesive cartridges. It is paired with a specific slide for dispensing adhesives with the correct mixing ratio.



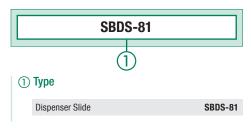
#### **Required Accessories**

■ Dispenser Slide, Mixing Tip

## **Dispenser Slide Type SBDS-81**

**Mixing Tip Type SBMT** 

### **Ordering Code**



### **Characteristics**

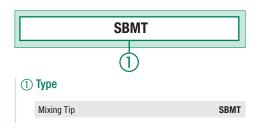
The STAUFF Dispenser Slide is used in combination with the Manual Adhesive Dispenser and provides the required mixing ratio for the dispensing adhesives.



### **Required Accessories**

■ Adhesive Dispenser, Mixing Tip

#### **Ordering Code Characteristics**



The STAUFF Mixing Tip is designed to twist and lock onto the end of the adhesive cartridge. It does not only provide prope interleaving of pre-portioned components but additionally pre-phasing to ensure optimum mix uniformity.

separating the individual adhesive components until they rea the integral mixer. If open time of adhesive in the mixing tip exceeds the adhesive pot life, the adhesive will become cure in the tip, preventing further dispensing. Removal of the use  $\!\omega$ tip and replacement with a fresh tip is as simple as twisting to remove the cured tip, wiping off the end of the cartridge, and twisting a new tip in place.

To prevent pre-mix of the adhesive, the tip integrates a barri



Standard packaging unit: 50 pcs.

#### **Required Accessories**

■ Adhesive Dispenser, Dispenser Slide





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## **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.







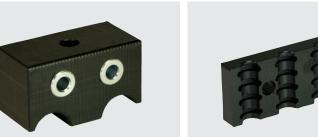














































## **Injection Moulded Versions** (Flexi Clamps)

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.



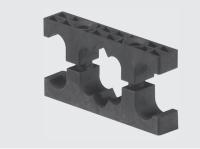














































## **Metal Versions and Accessories**

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, botts as well as elastomer inserts.









## **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  $% \left( \mathbf{r}\right) =\mathbf{r}^{\prime }$ 

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

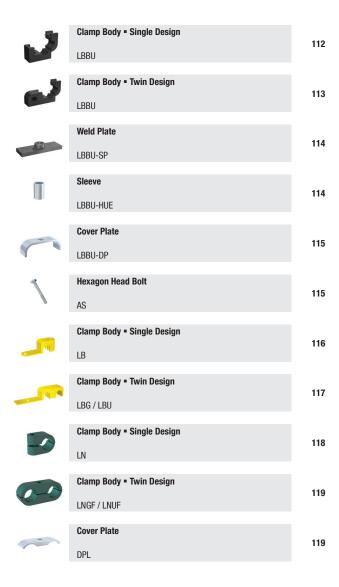
quantities required, and if the enquiry is for a one-time or recurring demand. We look forward to hearing from you, and are always available for consultation, when required.

<b>Application Information</b>								
Area of use	□ Indoor		□ Outdoor					
Ambient temperature	Lowest \_ \cap \cdot C /	□°F	Highest _	□ °C / □ °F				
Resistance against particular media	□ No		☐ Yes	☐ Mineral oils ☐ Other oils ☐ Benzine ☐ Weak acids ☐ Solvents ☐ Alcohols ☐ Seawater ☐ Other media				
Fire protection requirements	□ No		☐ Yes	☐ UL94 ☐ BS 6853 ☐ Other standard				
Material preference for the clamp body ☐ Polypropylene ☐ Aluminium ☐ Stainless Steel ☐ V2A ☐ V4A				☐ Polyamide ☐ Steel ☐ Other material				
Design Information								
Type of line	☐ Pipe / tube ( <u>fixed</u> installated 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	eight					
Total number of lines								
Diameters per line	Line 1	□ inch	Further confurther con	omments omments omments omments omments omments omments omments				
Preferred centre distance of the lines			mm / 🔲 in	ch				
Preferred number of screw holes								
Information on Mounting Hardw	are							
Preferred type of bolts	☐ Hexagon head bolts (with ☐ Socket cap crews (with co ☐ Socket cap crews (w/o co	over plate)	☐ with n	netric threads				
Preferred type of installation	☐ Welding (using a weld plat☐ Direct screw-fastening☐ Mounting rail (using a rail☐ Welling a rail☐ Welling (using a rail☐ Mounting rail (using a well plate) (using a well pl		☐ Adhes	ng (using weld studs) ive bonded fastening				
Material preference for the hardware	☐ Steel		☐ Stainle	ess Steel 🗆 V2A 🗆 V4A				





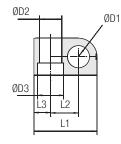


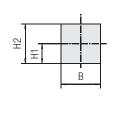




## Clamp Body • Single Design Type LBBU







## **Ordering Codes**

#### Clamp Body \*LBBU-\*1\*06-\*SA-\*M8/U5/16

* Light Series LBBU	LBBU
* STAUFF Group	1
* Exact outside diameter Ø D1 (mm)	06
* Material code (see below)	SA
* Thread code (suitable for bolts M8 and U5/16)	M8/U5/16

#### **Standard Materials**



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

See pages 154 / 155 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
- Advanced design with a film hinge allows the top part of the Plastic clamp body to open up and insert or replace the pipe, tube or hose without the use of force
- Embedded metal sleeve to ensure stability of the clamp assembly

Group	Outside Diameter Nominal Pipe / Tube / Hose Bore Ø D1 Pipe			Ordering Codes (1 Clamp Body)	Dimensions (mm/ <sub>In</sub> )							
STAUFF	(mm)	(in)	(in)		Ø D2	Ø D3	L1	L2	L3	H1	H2	В
	6			LBBU-106-SA-M8/U5/16								
	6,4	1/4		LBBU-106.4-SA-M8/U5/16								
	8	5/16		LBBU-108-SA-M8/U5/16								
1	9,5	3/8		LBBU-109.5-SA-M8/U5/16	12	14	34	15	9	10	20	20
	10		1/8	LBBU-110-SA-M8/U5/16	.47	.55	1.34	.59	.35	.39	.79	.79
	11			LBBU-111-SA-M8/U5/16								
	12			LBBU-112-SA-M8/U5/16								
	12,7	1/2		LBBU-112.7-SA-M8/U5/16								
	4			LBBU-204-SA-M8/U5/16								
	6			LBBU-206-SA-M8/U5/16			39	18	9	12	24	20
	6,4	1/4		LBBU-206.4-SA-M8/U5/16								
	8	5/16		LBBU-208-SA-M8/U5/16								
	9,5	3/8		LBBU-209.5-SA-M8/U5/16								
	10		1/8	LBBU-210-SA-M8/U5/16								
	11			LBBU-211-SA-M8/U5/16								
	12			LBBU-212-SA-M8/U5/16	12	14						
2	12,7	1/2		LBBU-212.7-SA-M8/U5/16	.47	.55	1.54	.71	.35	.47	.94	.79
	13,5		1/4	LBBU-213.5-SA-M8/U5/16	. 77	.50	1.04		.50		.01	.13
	14			LBBU-214-SA-M8/U5/16								
	15			LBBU-215-SA-M8/U5/16								
	16	5/8		LBBU-216-SA-M8/U5/16								
	17,2		3/8	LBBU-217.2-SA-M8/U5/16								
	18			LBBU-218-SA-M8/U5/16								
	19	3/4		LBBU-219-SA-M8/U5/16								
	20			LBBU-220-SA-M8/U5/16								
	21,3			LBBU-321.3-SA-M8/U5/16								
3	22	7/8		LBBU-322-SA-M8/U5/16								
	23			LBBU-323-SA-M8/U5/16								
	25			LBBU-325-SA-M8/U5/16	12	14	57,5	23,5	15	20	40	30
3	25,4	1		LBBU-325.4-SA-M8/U5/16	.47	.55	2.26	.93	.59	.79	1.57	1.18
	28			LBBU-328-SA-M8/U5/16								
	30			LBBU-330-SA-M8/U5/16								
	32	1-1/4		LBBU-332-SA-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 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-DP1 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-216-SA-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-216-SA-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-216-SA-DP-AS-M8-W3

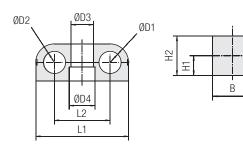
W3 (Metal parts made of Carbon Steel, zinc/nickel-plated) is the standard option for this type of installation.
For UNC threads / bolts, please replace M8 by U5/16.

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**





Group	Outside Diameters Pipe / Tube / Hose Ø D1 / Ø D2		Nominal Bore Pipe	(1 Clamp Body) (mm/in)							
STAUFF	(mm)	(in)	(in)		Ø D3	Ø D4	L1	L2	H1	H2	В
	4			LBBU-104/04-SA-M8/U5/16							
	6			LBBU-106/06-SA-M8/U5/16							
	6,4	1/4		LBBU-106.4/06.4-SA-M8/U5/16							
	8	5/16		LBBU-108/08-SA-M8/U5/16	12	14	50	30	10	20	20
1D	9,5	3/8		LBBU-109.5/09.5-SA-M8/U5/16	.47	.55	1.97	1.18	.39	.79	.79
	10		1/8	LBBU-110/10-SA-M8/U5/16		.00	1.07	1.10	.00	.,,	., 0
	11			LBBU-111/11-SA-M8/U5/16							
	12			LBBU-112/12-SA-M8/U5/16							
	12,7	1/2		LBBU-112.7/12.7-SA-M8/U5/16							
	4			LBBU-204/04-SA-M8/U5/16							
	6			LBBU-206/06-SA-M8/U5/16							
	8	5/16		LBBU-208/08-SA-M8/U5/16							
	9,5	3/8		LBBU-209.5/9.5-SA-M8/U5/16							
	10		1/8	LBBU-210/10-SA-M8/U5/16							
	11			LBBU-211/11-SA-M8/U5/16							
	12			LBBU-212/12-SA-M8/U5/16							
2D	12,7	1/2		LBBU-212.7/12.7-SA-M8/U5/16	12	14	59	35	12	24	20
20	13,5		1/4	LBBU-213.5/13.5-SA-M8/U5/16		.55	2.32	1.38	.47	.94	.79
	14			LBBU-214/14-SA-M8/U5/16							
	15			LBBU-215/15-SA-M8/U5/16							
	16	5/8		LBBU-216/16-SA-M8/U5/16							
	17,2		3/8	LBBU-217.2/17.2-SA-M8/U5/16							
	18			LBBU-218/18-SA-M8/U5/16							
	19	3/4		LBBU-219/19-SA-M8/U5/16							
	20			LBBU-220/20-SA-M8/U5/16							
	21,3			LBBU-321.321.3-SA-M8/U5/16							
	22	7/8		LBBU-322/22-SA-M8/U5/16							
	23			LBBU-323/23-SA-M8/U5/16							
3D	25			LBBU-325/25-SA-M8/U5/16	12	14	86	47	20	40	30
שט	25,4	1		LBBU-325.4/25.4-SA-M8/U5/16	.47	.55	3.39	1.85	.79	1.57	.79
	28			LBBU-328/28-SA-M8/U5/16							
	30			LBBU-330/30-SA-M8/U5/16							
	32	1-1/4		LBBU-332/32-SA-M8/U5/16							

## **Ordering Codes**

#### Clamp Body \*LBBU-\*1\*06/06-\*SA-\*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)	SA
* Thread code (suitable for bolts M8 and U5/16)	M8/U5/16

#### **Standard Materials**



Thermoplastic Elastomer (87 Shore-A)

Colour: Black Material code: SA

See pages 154 / 155 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
- · Advanced design with a film hinge allows the top part of the Plastic clamp body to open up and insert or replace the pipe, tube or hose without the use of force
- Embedded metal sleeve to ensure stability of the clamp assembly

Additional outside diameters and combinations of different 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 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-216/16-SA-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-216/16-SA-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-216/16-SA-DP-AS-M8-W3

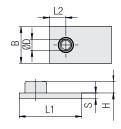
W3 (Metal parts made of Carbon Steel, zinc/nickel-plated) is the standard option for this type of installation. For UNC threads / bolts, please replace M8 by U5/16.

Alternative sizes (e.g. for bolts M6 and 1/4-20 UNC), materials and surface finishings are available upon request.



#### **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
1	.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
טט	.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	Dimensions (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-		
וט	.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	Dimensions (mm/in)			Ordering Codes
STAUFF	ØD1 ØD2 L		L	(Standard Options)
1	12	9 12,8 <b>LBBU-I</b>		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-
ID	.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

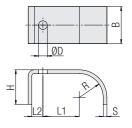
Dimensions applicable only when used for panel mounting without Weld Plate or Hexagon Rail Nut (Type of Mounting PM)

Group	Dime	nsions	(mm/in)	Ordering Codes
STAUFF	ØD1	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-
טו	.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-
SU	.47	.35	1.53	M8/U5/16-W3

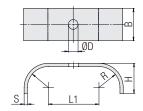
 $Alternative\ sizes\ (e.g.\ for\ bolts\ M6\ and\ 1/4-20\ UNC),\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.$ 



#### **Cover Plate Type LBBU-DP**







STAUFF Group 1D to 3D



Ordering Codes					
Cover Plate	*LBBU-DP-*1D-*M8/U5/16-*W3				
* Light Series LBE	BU LBBU				
* Cover Plate	-DP				
* STAUFF Group	1D				
* Thread code (sui	table for bolts M8 and U5/16) M8/U5/16				
* Material code	Carbon Steel, zinc/nickel-plated W3				

Group	Dimensions (mm/in)							Ordering Codes
STAUFF	Ø D	L1	L2	R	Н	В	S	(Standard Options)
1	9	15	9	10	16	20	3	LBBU-DP-1-M8/U5/16-W3
'	.35	.59	.35	.39	.63	.79	.12	LBB0-DF-1-W0/03/10-W3
2	9	18	9	12	20	20	3	LBBU-DP-2-M8/U5/16-W3
2	.35	.71	.35	.47	.79	.79	.12	LBB0-DF-2-W0/03/10-W3
3	9	23,5	15	19,5	28	30	3	LBBU-DP-3-M8/U5/16-W3
3	.35	.93	.59	.77	1.10	1.18	.12	LBBU-DF-3-W6/U3/10-W3
1D	9	30	/	10	16	20	3	LBBU-DP-1D-M8/U5/16-W3
וט	.35	1.18		.39	.63	.79	.12	LBBU-DF-1D-W6/05/10-W3
2D	9	35		12	20	20	3	LBBU-DP-2D-M8/U5/16-W3
20	.35	1.38		.47	.79	.79	.12	LBBU-DF-2D-W6/U3/10-W3
3D	9	47		19,5	28	20	3	LBBU-DP-3D-M8/U5/16-W3
งบ	.35	1.85	/ \	.77	.63	.79	.12	LDDU-UF-3U-W0/U3/10-W3

Alternative sizes (e.g. for bolts M6 and 1/4-20 UNC), materials and surface finishings are available upon request.

#### **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
	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
טו	5/16-18 UNC x 1-1/4	AS-U5/16-18x1-1/4-W3
an	M8 x 35	AS-M8x35-W3
2D	5/16-18 UNC x 1-3/8	AS-U5/16-18x1-3/8-W3
an.	M8 x 50	AS-M8x50-W3
3D	5/16-18 UNC x 2	AS-U5/16-18x2-W3

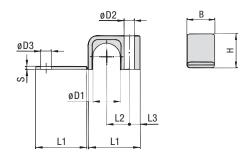
**Ordering Codes** \*AS-\*M8x25-\*W3 **Hexagon Head Bolt** Hexagon Head Bolt \* Type of bolt (according to DIN 931 / 933 AS or ANSI / ASME B18.2.1.) Thread dimension according \* Thread code M8x25 to dimension table \* Material code Carbon Steel, zinc/nickel-plated W3

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	Clamp Body / Single Design ameter Ø D1 (mm) see below)	LB 1 03.2 PP

#### **Standard Materials**



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



#### Polyamide Colour: Yellow Material code: PA

See pages 154 / 155 for material properties and technical information.

Alternative materials are available upon request.  $\label{thm:please contact STAUFF} Please \ contact \ STAUFF \ for \ further \ information.$ 

#### **Applications**

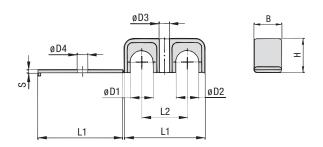
• Pneumatics, Instrumentation and Automotive Technology, Machine Tool Industry, Lubrication, Mechanical Engineering

Group	Outside I Pipe / Tul Ø D1	Diameter be / Hose	Nominal Bore Pipe	Ordering Codes (1 Clamp Body)	Dimensions (mm/m)							
STAUFF	(mm)	(in)	(in)	( <b>★</b> ★ = 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
2	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-**	1.04	.59	.20	.79	.09	.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
4	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



		Ordering Codes (1 Clamp Body)	Dimens (mm/in)	sions	ions						
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
	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	6.8	7
3	15			LBG-315/15-**	2.09	1.18	.79	.89	.08	.27	.28
	16	5/8		LBG-316/16-**	2.03	1.10	.13	.09	.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.

# Ordering Codes Clamp Body \*LBG-\*1\*03.2/03.2-\*PP \*Light Series: Clamp Body / Twin Design with identical diameters Clamp Body / Twin Design with different diameters \*STAUFF Group LBU \*Exact outside diameters Ø D1 / Ø D2 (mm) 03.2/03.2 \*Material code (see below) PP

#### **Standard Materials**



Material code: PA

See pages 154 / 155 for material properties and technical information.

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

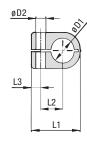
#### **Applications**

 Pneumatics, Instrumentation and Automotive Technology, Machine Tool Industry, Lubrication, Mechanical Engineering



#### **Clamp Body • Single Design Type LN**







## **Ordering Codes**

Clamp Body	*LN-*1*(	06-*PP
* Light Series:  * STAUFF Group  * Exact outside dia  * Material code (se	` '	LN 1 06 PP

#### **Standard Materials**



Polypropylene Colour: Green Material code: PP



Polyamide Colour: Black Material code: PA

See pages 154 / 155 for material properties and technical information.

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

#### **Applications**

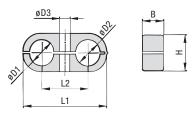
• Pneumatics, Instrumentation and Automotive Technology, Machine Tool Industry, Lubrication, Mechanical Engineering

Group		Diameter lbe / 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	.07	.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	.59	.27
	12			LN-212-**	1.00	.40	.20	.07	.00	.21
	12,7	1/2		LN-212.7-**						
	10		1/8	LN-310-**						
	12			LN-312-**						
	12,7	1/2		LN-312.7-**	33	15	7	14,5	23,5	6,8
3	13,5		1/4	LN-313.5-**	1.30	.59	.28	.57	.93	.27
	14			LN-314-**	1.00	.00	.20	.57	.00	.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	115	30.5	6.0
4	18			LN-418-**	1.57	.75	.28	14,5 .57	1.20	.27
	19	3/4		LN-419-**	1.07	.13	.20	.51	1.20	.21
	20			LN-420-**						
	21,3		1/2	LN-421.3-**						
	22			LN-422-**						





# Clamp Body • Twin Design Type LNGF / LNUF





Group			Nominal Ordering Codes Bore (1 Clamp Body) Pipe		Dimensions ("""/ <sub>in</sub> )							
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	.51	.00	.21			
	8			LNGF-208/08-**								
	9,5	3/8		LNGF-209.5/09.5-**	41	22	115	18.5	6.0			
2	10		1/8	LNGF-210/10-**	1.61	.86	.57	.73	6,8			
	12			LNGF-212/12-**	1.01	.00	.57	.73	.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	115	00 5	6.0			
3	13,5		1/4	LNGF-313.5/13.5-**	2.13	1.18	14,5 .57	23,5	6,8			
	14			LNGF-314/14-**	2.13	1.10	.57	.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	115	20 5	6.0			
4	18			LNGF-418/18-**	2.76	1.50	14,5 .57	30,5 1.20	6,8			
	19	3/4		LNGF-419/19-**	2.70	1.50	.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 1 Exact outside diameters Ø D1 / Ø D2 (mm) 66/06 \*Material code (see below) PP

#### **Standard Materials**





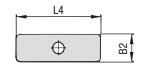
See pages 154/155 for material properties and technical information. Alternative materials are available upon request. Please contact STAUFF for further information.

#### **Applications**

 Pneumatics, Instrumentation and Automotive Technology, Machine Tool Industry, Lubrication, Mechanical Engineering

# Cover Plate Type DPL





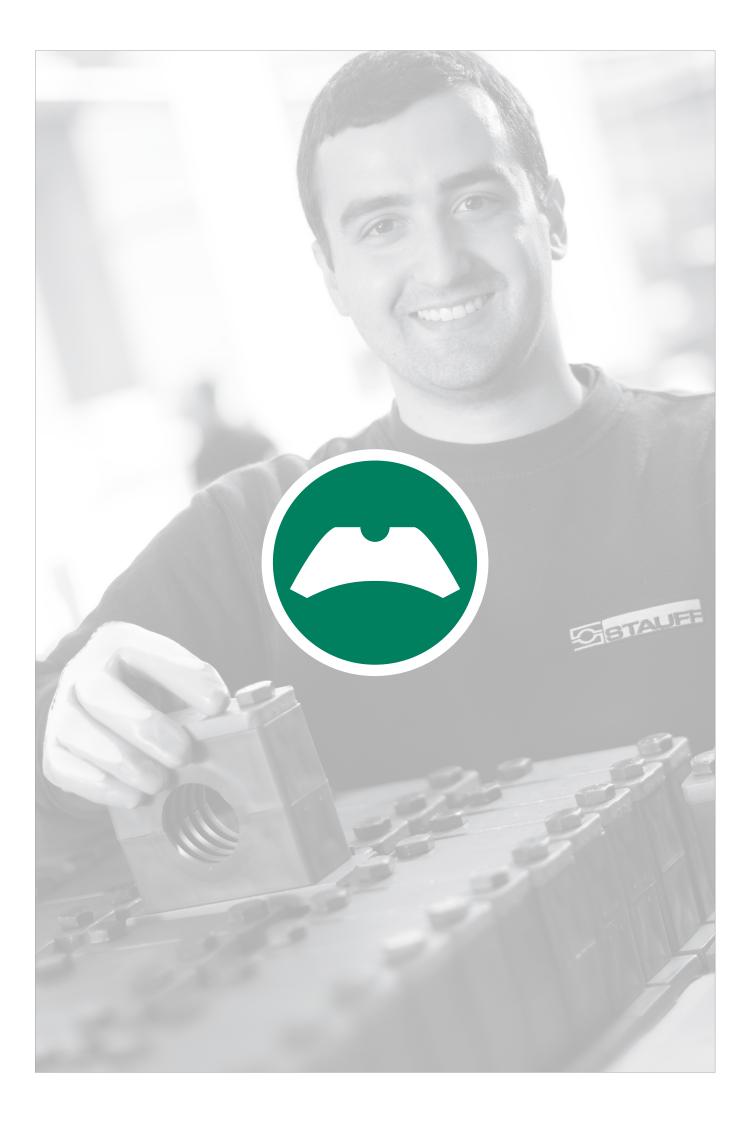


Group	Dimensions (mm/in)		Ordering Codes			
STAUFF	L4	B2	Ø D4	(Standard Options)		
1	29,5	15,5	6,8	DPL-1-W3		
1	1.16	.61	.27	DFL-1-W3		
2	40	15,5	6,8	DDI 2 W2		
2	1.57	.61	.27	DPL-2-W3		
0	51	16	6,8	DDI O WO		
3	2.01	.63	.27	DPL-3-W3		
	63,5	16	6,8	DDI 4 WO		
4	2.50	.63	.27	DPL-4-W3		

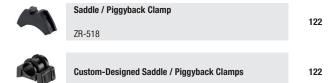
Alternative materials and surface finishings are available upon request. Contact STAUFF for further information. Please note: The maximum tightening torque for bolts is 2,5 N·m (1.85 ft·lb).











#### **Saddle / Piggyback Clamps Type ZR**



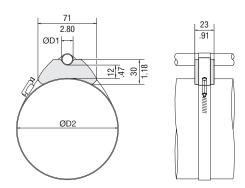
Order Code	
Saddle Clamp	ZR-518-SA73-BK

#### **Standard Material**



Thermoplastic Elastomer (73 Shore-A) Colour: Black

See pages 154 / 155 for properties and technical information.



Min/Max Outs Pipe / Tube	side 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				
		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	.51		
		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.

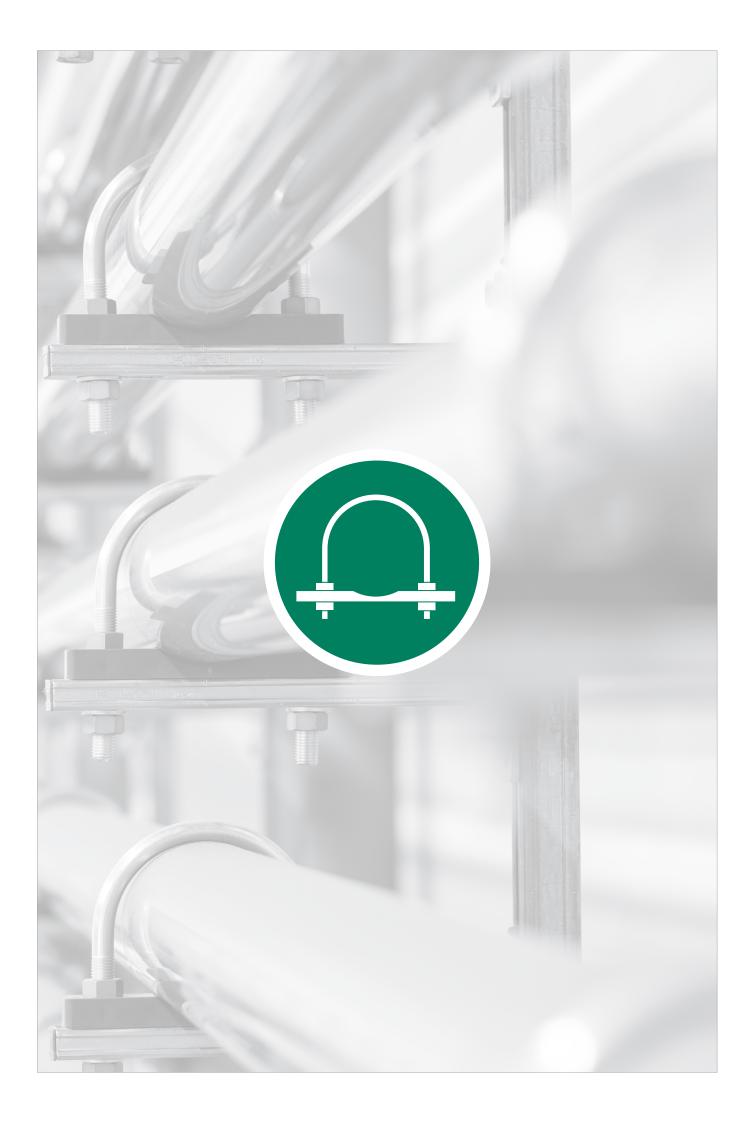
STAUFF meets deviating requirements with numerous other variants which were implemented in the past and can be manufactured again at any time.

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).



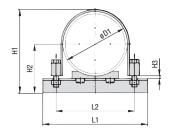


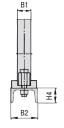


## Flat Steel U-Bolt with Plastic Pipe Saddle (Short) and U-Profile

#### 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-\*W1

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 Assembly	y (as listed above)	FB+RUK
* Exact outside di	ameter Ø D1 (mm)	48.3
* Material of Pipe	Saddle (see below)	PP
* Material code	Carbon Steel, uncoated	W1
	Carbon Steel, zinc-plated, blue-chromated	W33
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316	Ti) <b>W56</b>
Please note:	The U-Profile (to DIN 1026) is m Carbon Steel, uncoated. All item supplied non-assembled.	

#### **Standard Materials for Plastic Pipe Saddles**



Polypropylene Colour: Green





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

See pages 154 / 155 for material properties and technical information.

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

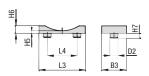
#### **Applications**

- 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

	(туре кик), и-гготие апо нехадоп неао вогтѕ										
Diameter Nominal		Diameter ube	Nominal Bore Pipe	Dimens Flat Ste		U-Profile (DIN 1026)					
DN	(mm)	(in)	(in)	L1	L2	H1	H2	Н3	B1	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	
	F-7	0.00		115	85	103	71,5	5	20 x 3	50 x 38	
F0	57	2.28		4.53	3.35	4.06	2.81	.20	.78 x .12	1.97 x 1.50	
50	60.2	0.41	2	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	
65	76,1	3.04	2-1/2	132	104	122	81	5	20 x 3	50 x 38	
00	70,1	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		3.56	3	160	121	146	97,5	8	40 x 4	80 x 45	
00	00,3 0.00		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	1.02		6.69	5.51	6.50	4.21	.31	1.57 x .16	3.15 x 1.77	
	114,3	4.57	4	180	147	171	110	8	40 x 4	80 x 45	
	,0		'	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		0.02		8.27	6.50	7.48	4.70	.31	1.57 x .16	3.15 x 1.77	
	139,7		5.59	5	210	172	197	123	8	40 x 4	80 x 45
	,.		_	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				1.43	7.91	8.66	5.22	.31	1.57 x .24	3.15 x 1.77	
	168,3	6.73	6	275	211	230	137	8	40 x 6	80 x 45	
	,-		_	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	
	,	,		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				12.60	10.16	1.91	6.34	.31	1.57 x .24	3.15 x 1.77	
	219,1	8.76	8	320	261	280	162,5	8	40 x 6	80 x 45	
				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 3.15 x 1.77	
250				14.96	12.76	12.91 334	7.34	.31	1.57 x .31 40 x 8	3.15 x 1.77 80 x 45	
	273	10.92	10	385 15.16	330 12.99	13.15	189,5 7.46	.31	1.57 x .31	3.15 x 1.77	
				440	375	382	212	8	40 x 8	80 x 45	
	318	12.72		17.32	14.76	15.04	8.35	.31	1.57 x .31	3.15 x 1.77	
300				450	381	390	215	8	40 x 8	80 x 45	
	323,9	12.96	12	17.72	15.00	15.35	8.46	.31	1.57 x .31	3.15 x 1.77	
				480	417,5	421	235	12	60 x 8	100 x 50	
	355,6	14.22	14	18.90	16.44	16.57	9.25	.47	2.36 x .31	3.94 x 1.97	
350				490	430	434	242	12	60 x 8	100 x 50	
	368	14.72		19.29	16.93	17.09	9.53	.47	2.36 x .31	3.94 x 1.97	
				550	468,5	472	261	12	60 x 8	100 x 50	
	406,4	16.26	16	21.65	18.44	18.58	10.28	.47	2.36 x .31	3.94 x 1.97	
				550	481	485	267,5	12	60 x 8	100 x 50	
400	419	16.76		21.65	18.94	19.09	10.53	.47	2.36 x .31	3.94 x 1.97	
				585	519	523	286,5	12	60 x 8	100 x 50	
	457	18.28	18	23.03	20.43	20.59	11.28	.47	2.36 x .31	3.94 x 1.97	
				630	570	574	312	12	60 x 8	100 x 50	
	508	20.32	20	24.80	22.44	22.60	12.28	.47	2.36 x .31	3.94 x 1.97	
500	==:	00 - :		640	583	587	319	12	60 x 8	100 x 50	
	521	20.84		25.20	22.96	23.11	12.56	.47	2.36 x .31	3.94 x 1.97	
		_			_			_			



# 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  $90^\circ)$ 

Hexagon Head Bolt AS
according to DIN EN ISO 4014 / 4017)

(		,	π Ε4 13 3ιαί	(according to DIN LIN 130 40147 4017)								
Diameter Nominal		Diameter be	Nominal Bore		Sions (mn	ĺ	ao DIIV)				Hexagon Head Bolt (DIN EN ISO 4014 / 4017)	
DN	וט ש (mm)	(in)	Pipe (in)	L3	L4	ddle (ty) B3	D2	H5	Н6	H7	Thread G x L	
	, ,		1	24	25	35	8	5	8	5		
40	48,3	1.93	1-1/2	.94	.98	1.38	.31	.20	.31	.20	M10 x 40	
	-7	0.00		38	25	50	10	5	10	6	M10 40	
E0	57	2.28		1.50	.98	1.97	.39	.20	.39	.24	M10 x 40	
50	60,3	2.41	2	38	25	50	10	5	10	6	M10 x 40	
	00,3	2.41		1.50	.98	1.97	.39	.20	.39	.24	WITU X 40	
65	76,1	3.04	2-1/2	38	25	50	10	5	10	6	M10 x 40	
	70,1	0.04	2 1/2	1.50	.98	1.97	.39	.20	.39	.24	WITO X 40	
80	88,9	3.56	3	75	40	70	15	8	17	10	M 12 x 55	
	00,0	0.00		2.95	1.57	2.76	.59	.31	.67	.39	12 % 00	
	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	1.57	70	.59	8	17	10	M 12 x 55	
125				2.95 75	40	2.76 70	15	.31	.67 17	.39		
	139,7	5.59	5	2.95	1.57	2.76	.59	.31	.67	.39	M 12 x 55	
				140	90	75	25	8	26	10		
	159	6.36		5.51	3.54	2.95	.98	.31	1.02	.39	M 16 x 75	
150				140	90	75	25	8	26	10		
	168,3	6.73	6	5.51	3.54	2.95	.98	.31	1.02	.39	M 16 x 75	
				140	90	75	25	8	26	10		
175	193,7	7.75		5.51	3.54	2.95	.98	.31	1.02	.39	M 16 x 75	
				140	90	75	25	8	26	10		
000	216	8.64		5.51	3.54	2.95	.98	.31	1.02	.39	M 16 x 75	
200	010.1	0.70	0	140	90	75	25	8	26	10	M 10 75	
	219,1	8.76	8	5.51	3.54	2.95	.98	.31	1.02	.39	M 16 x 75	
	267	10.68		140	90	75	25	8	26	10	M 20 x 80	
250	207	10.00		5.51	3.54	2.95	.98	.31	1.02	.39	IVI 20 X 00	
200	273	10.92	10	140	90	75	25	8	26	10	M 20 x 80	
	210	10.52	10	5.51	3.54	2.95	.98	.31	1.02	.39	W 20 x 00	
	318	12.72		220	150	75	30	8	32	10	M 20 x 80	
300				8.66	5.91	2.95	1.18	.31	1.26	.39		
	323,9	12.96	12	220	150	75	30	8	32	10	M 20 x 80	
				8.66	5.91	2.95	1.18	.31	1.26	.39		
	355,6	14.22	14	220	150	75	30	8	32	10	M 24 x 100	
350				8.66 220	5.91	2.95 75	1.18	.31	1.26	.39		
	368	14.72		8.66	150 5.91	2.95	1.18	.31	1.26	.39	M 24 x 100	
				220	150	75	30	8	32	10		
	406,4	16.26	16	8.66	5.91	2.95	1.18	.31	1.26	.39	M 24 x 100	
				220	150	75	30	8	32	10		
400	419	16.76		8.66	5.91	2.95	1.18	.31	1.26	.39	M 24 x 100	
		40.00	10	220	150	75	30	8	32	10	1101 100	
	457	18.28	18	8.66	5.91	2.95	1.18	.31	1.26	.39	M 24 x 100	
	500	00.00	00	220	150	75	30	8	32	10	M 04 ·· 100	
E00	508	20.32	20	8.66	5.91	2.95	1.18	.31	M 24	M 24 x 100		
500	521	20.94		220	150	75	30	8	32	10 M 24 x 100	M 24 v 100	
	521	20.84		8.66	5.91	2.95	1.18	.31	1.26	.39	IVI Z4 X TUU	



#### **Ordering Codes**

Flat Steel U-Bolt \*FB-\*A-48.3-\*W1

\* Flat Steel U-Bolt

\* Exact outside diameter Ø D1 (mm) A-48.3

\* Material code Carbon Steel, uncoated W1
Carbon Steel, zinc-plated,
blue-chromated W32

Stainless Steel V4A

1.4401 / 1.4571 (AISI 316 / 316 Ti)

FB

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 non-assembled.

#### **Standard Materials for Plastic Pipe Saddles**



#### Polypropylene

Colour: Green Material code: **PP** 



Colour: Black Material code: **PA** 

See pages 154 / 155 for material properties and technical information.

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

#### **Applications**

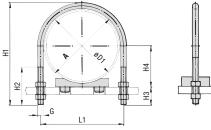
- Standing or hanging installation of pipes and tubes on beams, profiles and consoles
- Design with two threaded ends allows for ideal adaptation to suit the exact outer diameter of the pipe or tube

## STAUFF®

>DN25

# Round Steel U-Bolt with Plastic Pipe Saddle (Short) Type RB+RUK





Recommended Installation <DN25

(type RUK)

Recommended Installation

Round Steel U-Bolt (type RB) with Plastic Pipe Saddle (type RUK)

#### **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 di	ameter Ø D1 (mm)	48.3			
* Material of Pipe	Saddle (see below)	PP			
* Material code	Carbon Steel, uncoated Carbon Steel, zinc-plated, blue-chromated	W1 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 154 / 155 for material properties and technical information.

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

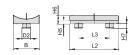
#### **Applications**

- 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

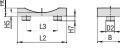
										>DN25
Diameter Outside Diameter Nominal Pipe / Tube		Nominal Bore	Dimensi	Dimensions (mm/in)						
DN	Ø D1	(:)	Pipe			(Type RB)		110	1114	Thursd O
DN	(mm)	(in)	(in)	Α	<b>L1</b>	<b>H1</b> 73,5	<b>H2</b>	<b>H3</b>	H4	Thread G
	25	.98		30	1.57	2.89	1.61	1.18	17,5 .69	M10
20	26.0	1.06	3/4	1.18	40	73,5	41	30	18,5	M10
	26,9	1.06	3/4		1.57	2.89	1.61	1.18	.73	M10
	30	1.18		00	48	81	48	30	20	M10
25				<b>38</b> 1.50	1.89	3.19 81	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			56	89	48	30	24	M10
32	30	1.50		46	2.20	3.50	1.89	1.18	.94	IVITO
	42,4	1.69	1-1/4	1.81	56	89	48	30	26,2	M10
					2.20 62	3.50	1.89	1.18	1.03	
40	44,5	1.76		52	2.44	3.94	2.17	1.38	1.07	M10
40	48,3	1.90	1-1/2	2.05	62	100	55	35	29	M10
	40,5	1.50	1-1/2		2.44	3.94	2.17	1.38	1.14	IVITO
	57	2.28		64	76 2.99	118 4.65	63 2.48	39 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	0.04	2 1/2	3.23	3.70	5.31	3.03	1.54	1.69	IWITZ
80	88,9	3.56	3	<b>94</b> 3.70	106 4.17	152 5.98	82 3.23	1.61	52,5 2.07	M12
				3.70	136	190	105	49	62	
100	108	4.32		120	5.35	7.48	4.13	1.93	2.44	M16
100	114,3	4.57	4	4.72	136	190	105	49	65	M16
	111,0	1.07	<u>'</u>		5.35	7.48	4.13	1.93	2.56	Milo
	133	5.32		148	164 6.46	217 8.54	105 4.13	49 1.93	74,5 2.93	M16
125			_	5.83	164	217	105	49	78	
	139,7	5.59	5		6.46	8.54	4.13	1.93	3.07	M16
	159	6.36			192	247	105	51	87,5	M16
150				176	7.56	9.72	4.13	2.01	3.44	
	168,3	6.73	6	6.93	192 7.56	9.72	105 4.13	2.01	92 3.62	M16
175	100.7	7 75		202	218	273	105	51	105	Mic
175	193,7	7.75		7.96	8.58	10.75	4.13	2.01	4.13	M16
	216	8.64			248	311	125	59	116	M20
200				<b>228</b> 8.98	9.76 248	12.24 311	4.92 125	2.32	4.57 117,5	
	219,1	8.76	8	0.30	9.76	12.24	4.92	2.32	4.63	M20
	267	10.68			303	364	125	59	141,5	M20
250	201	10.00		282	11.93	14.33	4.92	2.32	5.57	IVIZU
	273	10.92	10	11.10	302	364	125	59 2.32	144,5	M20
					11.89 352	14.33 418	4.92 125	62	5.69 167	
000	318	12.72		332	13.86	16.46	4.92	2.44	6.57	M20
300	323,9	12.96	12	13.07	352	418	125	62	170	M20
	323,3	12.30	12		13.86	16.46	4.92	2.44	6.69	IVIZO
	355,6	14.22	14	378	402 15.83	475 18.70	145 5.71	70 2.76	186 7.32	M24
350				14.88	402	475	145	70	192	1404
	368	14.72			15.83	18.70	5.71	2.76	7.56	M24
	406,4	16.26	16		452	526	145	70	211	M24
400	,.			16.05	17.80	20.71	5.71	2.76	8.31	
	419	16.76		16.85	452 17.80	526 20.71	145 5.71	70 2.76	217,5 8.56	M24
	500	00.00	00		554	627	145	70	262	1404
500	508	20.32	20	530	21.81	24.69	5.71	2.76	10.31	M24
500	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 Di	N 20 to DN 4	10)				(From	size DN 50	on)	
Diameter Nominal	Pipe / T	Diameter ube	Nominal Bore	Dimens	ions ( <sup>mm</sup> /in)	)					
	Ø D1		Pipe	Plastic	Pipe Sadd						
DN	(mm)	(in)	(in)	Α	L2	L3	В	H5	Н6	H7	D2
	25	.98			35	25	24	5	8	5	8
20		1.00		30	1.38	.98	.94	.20	.31	.20	.31
20	26,9	1.06	3/4	1.18	35	25	24	5	8	5	8
	,				1.38	.98	.94	.20	.31	.20	.31
25	30	1.18		38	35 1.38	.98	.94	.20	.31	.20	.31
				1.50	35	25	24	5	8	5	8
	33,7	1.33	1	1.00	1.38	.98	.94	.20	.31	.20	.31
		4.50			35	25	24	5	8	5	8
20	38	1.50		46	1.38	.98	.94	.20	.31	.20	.31
32	42,4	1.69	1-1/4	1.81	35	25	24	5	8	5	8
	42,4	1.09	1-1/4		1.38	.98	.94	.20	.31	.20	.31
	44,5	1.76			35	25	24	5	8	5	8
40	11,0	1.70		52	1.38	.98	.94	.20	.31	.20	.31
	48,3	1.90	1-1/2	2.05	35	25	24	5	8	5	8
					1.38	.98	.94	.20	.31	.20	.31
	57	2.28		64	38 1.50	.98	50 1.97	.20	.39	.24	.39
50		1		2.52	38	25	50	5	10	6	10
	60,3	2.41	2	2.02	1.50	.98	1.97	.20	.39	.24	.39
05	70.4	0.04	0.4/0	82	38	25	50	5	10	6	10
65	76,1	3.04	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
00	00,9	3.30	3	3.70	2.95	1.57	2.76	.31	.67	.39	.59
	108	4.32			75	40	70	8	17	10	15
100	100	1.02		120	2.95	1.57	2.76	.31	.67	.39	.59
	114,3	4.57	4	4.72	75	40	70	8	17	10	15
					2.95	1.57	2.76	.31	.67	.39	.59
125	133	5.32		<b>148</b> 5.83	75 2.95	40 1.57	70 2.76	.31	.67	.39	.59
					75	40	70	8	17	10	15
	139,7	5.59	5		2.95	1.57	2.76	.31	.67	.39	.59
	450	0.00			140	90	75	8	26	10	25
150	159	6.36		176	5.51	3.54	2.95	.31	1.02	.39	.98
150	168,3	6.73	6	6.93	140	90	75	8	26	10	25
	100,5	0.73	U		5.51	3.54	2.95	.31	1.02	.39	.98
175	193,7	7.75		202	140	90	75	8	26	10	25
	,			7.96	5.51	3.54	2.95	.31	1.02	.39	.98
	216	8.64		220	140 5.51	90	75	8	26	10	25
200				<b>228</b> 8.98	140	3.54 90	2.95 75	.31	1.02	.39	.98 25
	219,1	8.76	8	0.30	5.51	3.54	2.95	.31	1.02	.39	.98
		10.77			140	90	75	8	26	10	25
050	267	10.68		282	5.51	3.54	2.95	.31	1.02	.39	.98
250	273	10.92	10	11.10	140	90	75	8	26	10	25
	213	10.92	10		5.51	3.54	2.95	.31	1.02	.39	.98
	318	12.72			220	150	75	8	32	10	30
300	0.0	12.12		332	8.66	5.91	2.95	.31	1.26	.39	1.18
	323,9	12.96	12	13.07	220	150	75	8	32	10	30
					8.66	5.91	2.95	.31	1.26	.39	1.18
	355,6	14.22	14	378	220 8.66	150 5.91	75 2.95	.31	32 1.26	.39	30 1.18
350				14.88	220	150	75	8	32	10	30
	368	14.72		1 1.00	8.66	5.91	2.95	.31	1.26	.39	1.18
	460	40.05	46		220	150	75	8	32	10	30
100	406,4	16.26	16	428	8.66	5.91	2.95	.31	1.26	.39	1.18
400	410	16.70		16.85	220	150	75	8	32	10	30
	419	16.76			8.66	5.91	2.95	.31	1.26	.39	1.18
	508	2.32	20		220	150	75	8	32	10	30
500	300	2.02	20	530	8.66	5.91	2.95	.31	1.26	.39	1.18
500	521	2.84		2.87	220	150	75	8	32	10	30
	J-1	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 RB \* Dimension A (mm) A-52

\* Material code Carbon Steel, uncoated Carbon Steel, zinc-plated,

blue-chromated Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

W32

PP

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)

#### **Standard Materials for Plastic Pipe Saddles**



#### Polypropylene

Colour: Green Material code: PP



#### Polyamide

Colour: Black Material code: PA

See pages 154 / 155 for material properties and technical

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

#### **Applications**

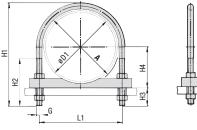
- Standing or hanging installation of pipes and tubes on beams, profiles and consoles
- Design with two threaded ends allows for ideal adaptation to suit the exact outer diameter of the pipe or tube

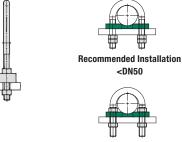


## STAUFF®

# Round Steel U-Bolt with Plastic Pipe Saddle (Long) Type RB+RUL







Round Steel U-Bolt (type RB) with Plastic Pipe Saddle (type RUL)

## stic Pipe Saddle (type RUL) Recommended Installation >DN50

#### **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+R					
	* Exact outside diameter Ø D1 (mm) 48.3				
	* Material of Pipe Saddle (see below) PP				
	* 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 154 / 155 for material properties and technical information.

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

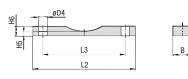
#### **Applications**

- 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

				∪פחע<						>DN30
	Outside Pipe / Tu		Nominal Bore	al Dimensions (mm/in)						
	Ø D1		Pipe			t (Type RB)				
DN	(mm)	(in)	(in)	Α	L1	H1	H2	H3	H4	Thread G
	25	.98		30	40 1.57	73,5 2.89	1.61	30 1.18	17,5 .69	M10
20	00.0	1.00	0/4	1.18	40	73,5	41	30	18.5	Mio
	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				<b>38</b> 1.50	1.89 48	3.19 81	1.89	1.18	.79 22	
	33,7	1.33	1	1.50	1.89	3.19	1.89	1.18	.87	M10
	38	1.50			56	89	48	30	24	M10
32	30	1.50		46	2.20	3.50	1.89	1.18	.94	IVITO
	42,4	1.69	1-1/4	1.81	56	89	48	30	26,2	M10
					2.20	3.50	1.89 55	1.18 35	1.03 27,2	
40	44,5	1.76		52	2.44	3.94	2.17	1.38	1.07	M10
40	48,3	1.90	1-1/2	2.05	62	100	55	35	29	M10
	40,0	1.50	1 1/2		2.44	3.94	2.17	1.38	1.14	WITO
	57	2.28		64	76 2.99	118 4.65	63 2.48	39 1.54	33,5 1.32	M12
50				2.52	76	118	63	39	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	82	94	135	77	39	43	M12
	,.			3.23	3.70	5.31	3.03	1.54	1.69	
80	88,9	3.56	3	<b>94</b> 3.70	106 4.17	152 5.98	82 3.23	39 1.54	54,5 2.15	M12
	100	4.00		0.70	136	190	105	47	64	1440
100	108	4.32		120	5.35	7.48	4.13	1.85	2.52	M16
100	114,3	4.57	4	4.72	136	190	105	47	67	M16
	,-				5.35	7.48	4.13	1.85	2.64 76,5	
	133	5.32		148	6.46	8.54	4.13	1.85	3.01	M16
125	120.7	E E0	5	5.83	164	217	105	47	80	Mic
	139,7	5.59	5		6.46	8.54	4.13	1.85	3.15	M16
	159	6.36		170	192	247	105	47	91,5	M16
150				<b>176</b> 6.93	7.56 192	9.72 247	4.13	1.85 47	3.60 96	
	168,3	6.73	6	0.00	7.56	9.72	4.13	1.85	3.78	M16
175	193,7	7.75		202	218	273	105	47	109	M16
170	100,1	7.70		7.96	8.58	10.75	4.13	1.85	4.29	IMTO
	216	8.64		228	9.76	311 12.24	125 4.92	55 2.17	120 4.72	M20
200	0404	0.70	0	8.98	248	311	125	55	121,5	1400
	219,1	8.76	8		9.76	12.24	4.92	2.17	4.78	M20
	267	10.68			303	364	125	55	145,5	M20
250				<b>282</b> 11.10	11.93 302	14.33 364	4.92 125	2.17 55	5.73 148,5	
	273	10.92	10	11.10	11.89	14.33	4.92	2.17	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	418	125	55	177	M20
					13.86 402	16.46 475	4.92 145	2.17 63	6.97 193	
250	355,6	14.22	14	378	15.83	18.70	5.71	2.48	7.60	M24
350	368	14.72		14.88	402	475	145	63	199	M24
					15.83	18.70	5.71	2.48	7.83	
	406,4	16.26	16	428	452 17.80	526 20.71	145 5.71	63 2.48	218 8.58	M24
400	440	10.70		16.85	452	526	145	63	224,5	MOA
	419	16.76			17.80	20.71	5.71	2.48	8.84	M24
	508	20.32	20	500	554	627	145	63	269	M24
500				<b>530</b> 20.87	21.81 554	24.69 627	5.71 145	2.48	10.59 276	
	521	20.84		20.07	21.81	24.69	5.71	2.48	10.87	M24
										-



#### **Round Steel U-Bolt with Plastic Pipe Saddle (Long)** Type RB+RUL



#### Plastic Pipe Saddle (type RUL)

Diameter	Outside	Diameter	Nominal		ons ( <sup>mm</sup> / <sub>in</sub> )	iule (type n						
Nominal	Pipe / Tu		Bore		, ,	(Tuno DIII.)						
DN	Ø D1 (mm)	(in)	Pipe (in)	Plastic P	ipe Saddle L2	(Type RUL)	В	Н5	Н6	Ø D4		
	25	.98	()		75	40	30	5	12	11		
20	25	.90		30	2.95	1.57	1.18	.20	.47	.43		
	26,9	1.06	3/4	1.18	75	40	30	5	12	11		
	-				2.95 80	1.57 48	1.18	.20 5	.47	.43		
	30	1.18		38	3.15	1.89	1.18	.20	.47	.43		
25	33,7	1.33	1	1.50	80	48	30	5	12	11		
	33,1	1.33	'		3.15	1.89	1.18	.20	.47	.43		
	38	1.50		40	90	56	30	5	12	11		
32				<b>46</b> 1.81	3.54 90	2.20 56	1.18	.20	.47	.43		
	42,4	1.69	1-1/4	1.01	3.54	2.20	1.18	.20	.47	.43		
	44,5	1.76			95	62	35	5	15	11		
40	44,3	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 76	1.38 35	.20	.59 15	.43		
	57	2.28		64	4.33	2.99	1.38	.20	.59	.55		
50	60,3	2.41	2	2.52	110	76	35	5	15	14		
	00,0	2.41			4.33	2.99	1.38	.20	.59	.55		
65	76,1	3.04	2-1/2	82	135	94	35	5	15	14		
				3.23 <b>94</b>	5.31 145	3.70	1.38	.20	.59	.55 14		
80	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	114,3	4.57	4	4.72	190	136	40	10	20	18		
	,				7.48	5.35	1.57	.39	.79 20	.71 18		
	133	5.32		148	8.66	6.46	1.57	.39	.79	.71		
125	120.7	E E0	E	5.83	220	164	40	10	20	18		
	139,7	5.59	5		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	9.84 250	7.56 192	1.97 50	.47	.98 25	.71 18		
	168,3	6.73	6	0.33	9.84	7.56	1.97	.47	.98	.71		
175	102.7	7.75		202	270	218	50	12	25	18		
175	193,7	7.75		7.96	10.63	8.58	1.97	.47	.98	.71		
	216	8.64		000	315	248	50	12	25	22		
200				<b>228</b> 8.98	12.40 315	9.76 248	1.97 50	.47	.98 25	.87		
	219,1	8.76	8	0.30	12.40	9.76	1.97	.47	.98	.87		
	267	10.68			370	302	50	12	25	22		
250	201	10.00		282	14.57	11.89	1.97	.47	.98	.87		
	273	10.92	10	11.10	370	302	50	12	25	22		
					14.57 420	11.89 352	1.97	.47 15	.98	.87		
000	318	12.72		332	16.54	13.86	2.36	.59	1.18	.87		
300	222.0	12.96	12	13.07	420	352	60	15	30	22		
	323,9	12.90	12		16.54	13.86	2.36	.59	1.18	.87		
	355,6	14.22	14	270	480	402	60	15	30	26		
350	-			<b>378</b> 14.88	18.90 480	15.83 402	2.36	.59 15	1.18	1.02		
	368	14.72		14.00	18.90	15.83	2.36	.59	1.18	1.02		
	406.4	16.00	16		540	452	60	15	30	26		
400	406,4	16.26	16	428	21.26	17.80	2.36	.59	1.18	1.02		
100	419	16.76		16.85	540	452	60	15	30	26		
					21.26 640	17.80 554	2.36	.59 15	1.18	1.02		
	508	20.32	20	530	25.20	21.81	2.36	.59	1.18	1.02		
500	E01	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) inIcludes four Nuts (to DIN EN ISO 4032).

	,	
* Round Steel U-I	Bolt	RB
* Dimension A (m	ım)	A-52
* Material code	Carbon Steel, uncoated Carbon Steel, zinc-plated, blue-chromated	W1 W32
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

#### 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



#### **Polyamide** Colour: Black



See pages 154 / 155 for material properties and technical information.

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

#### **Applications**

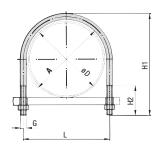
- Standing or hanging installation of pipes and tubes on beams, profiles and consoles
- Design with two threaded ends allows for ideal adaptation to suit the exact outer diameter of the pipe or tube



## STAUFF ®

#### Round Steel U-Bolt (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).

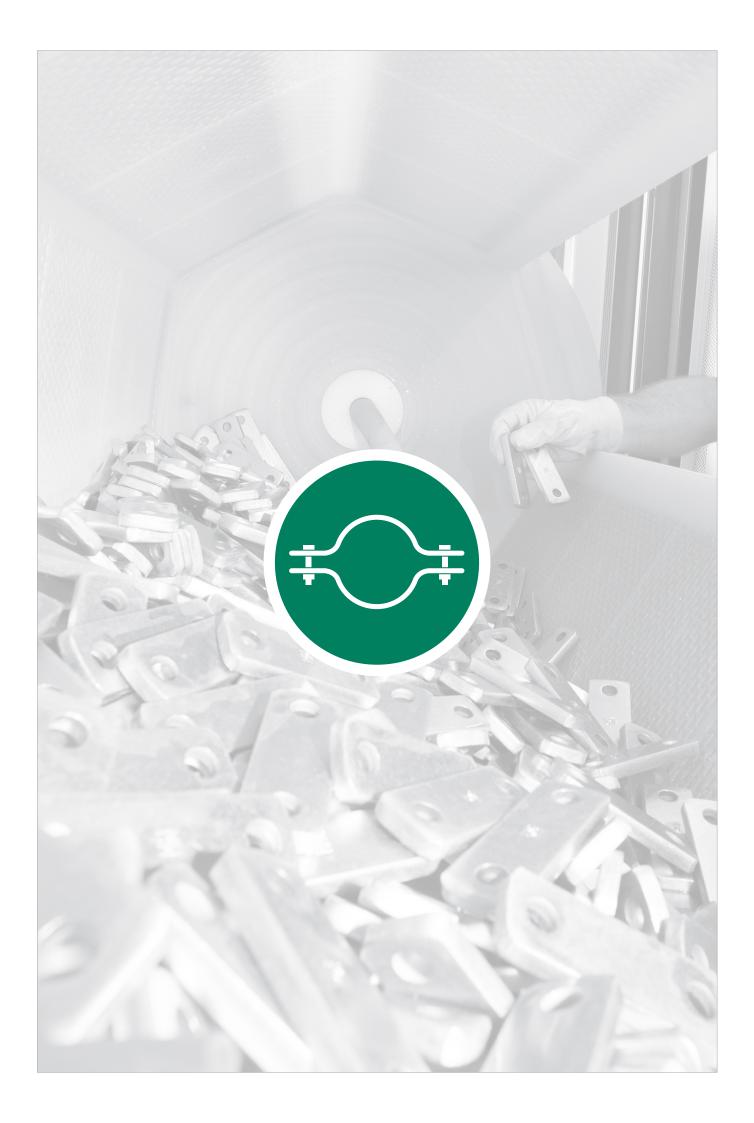
* Clamp Assembl	y (as listed above)	RBD
* Dimension A (m	ım)	A-30
* Material code	Carbon Steel, uncoated Carbon Steel, zinc-plated, blue-chromated	W1 W32
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 T	W5
Please note: All ite	ems are supplied non-assembled.	

#### **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 Steel U-Bolt (type RBD)								
Diameter Nominal	Outside   Pipe / Tu		Nominal Bore	Dimensions ("	<sup>nm</sup> /in)			
Nullillai	Ø D1	ne	Pipe	Round Steel I	I-Bolt (Type RBI	וו		
DN	(mm)	(in)	(in)	A	L	H1	H2	Thread G
	25	.98			40	70	40	M10
20	23	.50		30	1.57	2.76	1.57	IWITO
	26,9	1.06	3/4	1.18	1.57	70 2.76	1.57	M10
					48	76	40	
25	30	1.18		38	1.89	2.99	1.57	M10
25	33,7	1.33	1	1.50	48	76	40	M10
					1,89	2.99	1.57	
	38	1.50		46	56 2.20	3.39	1.97	M10
32	42,4	1.69	1-1/4	1.81	56	86	50	M10
	42,4	1.09	1-1/4		2.20	3.39	1.97	IVITU
	44,5	1.76		F0	62	92	50	M10
40				<b>52</b> 2.05	2.44 62	3.62 92	1.97	
	48,3	1.90	1-1/2	2.00	2.44	3.62	1.97	M10
	57	2.28			76	109	50	M12
50		2.20		64	2.99	4.29	1.97	IVITE
	60,3	2.41	2	2.52	76 2.99	109 4.29	1.97	M12
05		0.04	0.4/0	82	94	125	50	1440
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
				3.70	4.17 136	5.43 171	1.97	
	108	4.32		120	5.35	6.73	2.36	M16
100	114,3	4.57	4	4.72	136	171	60	M16
	114,3	4.07	4		5.35	6.73	2.36	IVITO
	133	5.32		148	164 6.46	191 7.52	2.36	M16
125				5.83	164	191	60	
	139,7	5.59	5		6.46	7.52	2.36	M16
	159	6.36			192	217	60	M16
150				<b>176</b> 6.93	7.56 192	8.54 217	2.36	
	168,3	6.73	6	0.55	7.56	8.54	2.36	M16
175	102.7	7 75		202	218	249	60	M16
1/5	193,7	7.75		7.96	8.58	9.80	2.36	IVITO
	216	8.64		000	248	283	70	M20
200				<b>228</b> 8.98	9.76 248	11.14 283	2.76	
	219,1	8.76	8	0.00	9.76	11.14	2.76	M20
	267	10.68			303	334	70	M20
250				<b>282</b> 11.10	11.93 302	13.15 334	2.76 70	-
	273	10.92	10	11.10	11.89	13.15	2.76	M20
	318	12.72			352	385	70	M20
300	310	12.12		332	13.86	15.16	2.76	IVIZU
	323,9	12.96	12	13.07	352	385 15.16	70	M20
					13.86 402	435	2.76 70	
350	355,6	14.22	14	378	15.83	17.13	2.76	M24
330	368	14.72		14.88	402	435	70	M24
	111				15.83	17.13	2.76	
	406,4	16.26	16	428	452 17.80	487 19.17	70 2.76	M24
400	410	16.70		16.85	452	487	70	M24
	419	16.76			17.80	19.17	2.76	M24
	508	20.32	20	520	554	589	70	M24
500				<b>530</b> 20.87	21.81 554	23.19 589	2.76 70	
	521	20.84			21.81	23.19	2.76	M24





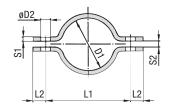


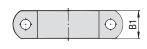


#### **Metal Pipe Clamp with Tension Clearance (DIN 3567-A)**

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	p to DIN 3567, type A	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 galvar	nised 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)
00			76	15	5	7	11.5	30	(6/ 5 / 15 5/15)
38	32		2.99	.59	.20	.28	.45	1.18	
43	02	1-1/4	82	15	5	7	11.5	30	
			3.23 84	.59 15	.20	.28	.45	1.18	
45	10		3.31	.59	.20	.28	.45	1.18	
49	40	1-1/2	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	
	50		4.09 108	.71 18	.24	.35	.55 14	1.57	M12 x 35
61		2	4.25	.71	.24	.35	.55	1.57	(M12)
77	65	2-1/2	122	18	6	9	14	40	7/16–14 UNC x 1-3/8
11	0.0	2-1/2	4.80	.71	.24	.35	.55	1.57	(7/16–14 UNC)
89	80	3	136 5.35	.71	6	9	14	40	
			172	24	.24	.35	.55 18	1.57 50	
108	100		6.77	.94	.31	.43	.71	1.97	
115	100	4	178	24	8	11	18	50	
110		7	7.01	.94	.31	.43	.71	1.97	
133			196 7.72	.94	.31	.43	.71	50 1.97	
440	125		204	24	8	11	18	50	
140			8.03	.94	.31	.43	.71	1.97	M16 x 45
159			222	24	8	11	18	50	(M16)
	150		8.74 232	.94 24	.31	.43	.71 18	1.97 50	5/8–11 UNC x 1-3/4 (5/8–11 UNC)
169			9.13	.94	.31	.43	.71	1.97	(5/6-11 0140)
194	175		258	24	8	11	18	50	
194	175		10.16	.94	.31	.43	.71	1.97	
216			280	24	8	11	18	50	
	200		11.02 284	.94 24	.31	.43	.71 18	1.97	
220			11.18	.94	.31	.43	.71	1.97	
267			342	30	8	14	23	60	
207	250		13.46	1.18	.31	.55	.91	2.36	
273			348	30	8	14	23	60	M00 50
			13.70 392	1.18	.31	.55 14	.91	2.36	M20 x 50 (M20)
318	200		15.43	1.18	.31	.55	.91	2.36	3/4–10 UNC x 2
324	300		398	30	8	14	23	60	(3/4-10 UNC)
J24			15.67	1.18	.31	.55	.91	2.36	
368	350		17.49	30	8	14	23	60 2.36	
			17.48 498	1.18	.31	.55 18	.91 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)
710			10.08	1.42	.39	.71	1.06	2.76	7/8–9 UNC 2-3/8
521	500		614 24.17	36 1.42	.39	18	27	70 2.76	(7/8–9 UNC)
			24.17	1.42	.59	.71	1.06	2.70	



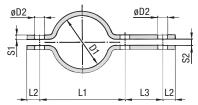
W5

COMPL



#### **Metal Pipe Clamp with Tension Clearance (DIN 3567-B)**

Three-Bolt Design (Extended to One Side)







STAUFF	Nomina	ıl Çizo	Dimons	ions ( <sup>mm</sup> /i	-)					Accessories	
Group	NUIIIII		Dilliells	10115 ( /	n <i>)</i>						
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	1.81	.20	.28	.45	1.18		
22	"		59	15	46	5	7	11.5	30		
			2.32 62	.59 15	1.81	.20	.28	.45	1.18		
25			2.44	.59	1.81	.20	.28	.45	1.18		
07	20	0/4	66	15	46	5	7	11.5	30		
27		3/4	2.60	.59	1.81	.20	.28	.45	1.18		
30			68	15	46	5	7	11.5	30	M10 x 30	
	25		2.68	.59	1.81	.20	.28	.45	1.18	(M10)	
34		1	72	15	46	5	7	11.5	30	3/8–16 UNC x 1-1/4 (3/8–16 UNC)	
			2.83 76	.59 15	1.81	.20	.28	.45	1.18	(3/0-10 0140)	
38			2.99	.59	1.81	.20	.28	.45	1.18		
40	32	4 4 / 4	82	15	46	5	7	11.5	30		
43		1-1/4	3.23	.59	1.81	.20	.28	.45	1.18		
45			84	15	46	5	7	11.5	30		
	40		3.31	.59	1.81	.20	.28	.45	1.18		
49	1.0	1-1/2	88	15	46	5	7	11.5	30		
			3.46	.59	1.81	.20	.28	.45	1.18		
57			4.09	.71	54 2.13	.24	.35	.55	40 1.57		
	50		108	18	54	6	9	14	40	M12 x 35	
61		2	4.25	.71	2.13	.24	.35	.55	1.57	(M12)	
77	CE.	0.1/0	122	18	54	6	9	14	40	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)	
39	80	3	136	18	54	6	9	14	40		
00	00	0	5.35	.71	2.13	.24	.35	.55	1.57		
108			172	24	70	8	11	18	50		
	100		6.77	.94 24	2.76	.31	.43	.71	1.97		
115		4	178 7.01	.94	2.76	.31	.43	.71	1.97		
			196	24	70	8	11	18	50		
133	405		7.72	.94	2.76	.31	.43	.71	1.97		
140	125		204	24	70	8	11	18	50		
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	.94	2.76	.31	.43	.71	1.97	5/8-11 UNC x 1-3/4	
169			232	24	70	8	11	18	50	(5/8–11 UNC)	
			9.13 258	.94	2.76	.31	.43	.71 18	1.97	_	
194	175		10.16	.94	2.76	.31	.43	.71	1.97		
040			280	24	70	8	11	18	50		
216	200		11.02	.94	2.76	.31	.43	.71	1.97		
220	200		284	24	70	8	11	18	50		
-20			11.18	.94	2.76	.31	.43	.71	1.97		
267			342	30	86	8	14	23	60		
	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	
			392	30	86	8	14	23	60	(M20)	
318	000		15.43	1.18	3.39	.31	.55	.91	2.36	3/4–10 UNC x 2	
224	300		398	30	86	8	14	23	60	(3/4–10 UNC)	
324			15.67	1.18	3.39	.31	.55	.91	2.36		
368	350		444	30	86	8	14	23	60		
-00	000		17.48	1.18	3.39	.31	.55	.91	2.36		
407			498	36	104	10	18	27	70		
	400		19.61	1.42	4.09	.39	.71	1.06	2.76	M24 x 60	
419			510	36 1.42	104 4.09	.39	.71	1.06	70 2.76	(M24) 7/8–9 UNC 2-3/8	
			10.08	36	104	10	18	27	70	(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 Clamp to DIN 3567, type B DIN3567-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 Ti) Clamp Assembly \*DIN3567-B\*-20\*W1\*COMPL One clamp assembly is consisting of two clamp halves, three hexagon head bolts and three hexagon head nuts. \* Metal Pipe Clamp to DIN 3567, type B DIN3567-B \* STAUFF Group (Ø D1) -20 \* Material code Carbon Steel, uncoated W1 Carbon Steel, hot-dip galvanised W40

#### **Applications**

 Installation of pipes, tubes and other construction elements on beams, profiles and consoles

Please note: All items are supplied non-assembled.

\* Clamp assembly with bolts and nuts

Stainless Steel V4A

1.4401 / 1.4571 (AISI 316 / 316 Ti)

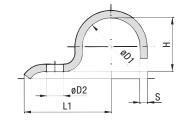


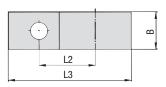


## **Heavy Saddle with Tension Clearance (DIN 1592)**

Single-Bolt Design







Ordering Codes										
	<b>Heavy Saddle</b>	*DIN1592-*7	*DIN1592-*7-*W66							
	* Heavy Saddle to DIN 1592 DIN									
	* STAUFF Group (Ø D1)									
	* 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	<sub>S Ti)</sub> <b>W5</b>							

#### **Applications**

Installation of pipes, tubes, poles and other round components directly on the substrate (floor, wall or ceiling)

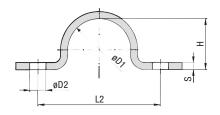
STAUFF Group	Diameter Range		Dimensio	ns ( <sup>mm</sup> /in)					
Ø D1	(mm)	(in)	L1	L2	L3	Н	D2	В	S
7	5,5 7	.2228	22	14	27,5	5	6,6	16	2
′	0,0 /	.2220	.87	.55	1.08	.20	.26	.63	.08
9	79	.2835	27	18	33,5	6	6,6	20	2
9	7 9	.2033	1.06	.71	1.32	.24	.26	.79	.08
13	9,5 13	.3951	40	25	49,5	9	11	25	3
13	9,5 15	.09 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	.6175	43	28	55,5	15	11	25	3
19	10,0 10	1.69	1.10	2.19	.59	.43	.98	.12	
23	20 23	2391	51	35	67	19	14	30	5
23	20 23	.1331	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		.31 1.02	2.05	1.42	2.76	.87	.55	1.18	.20
28,5	<b>26</b> 28,5	1.02 1.12	53	37	73	24	14	30	5
20,5		1.02 1.12	2.09	1.46	2.87	.94	.55	1.18	.20
31	<b>1</b> 28,5 31 1.12	1.12 1.22	55	39	75,5	27	14	30	5
J1	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
00	00 00	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
00	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
10	00 10	1.011.00	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
.0	.0 10	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
	.5 02	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
-00	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
U1	50 01	2.20 2.40	3.15	2.36	4.67	2.24	.71	1.57	.31

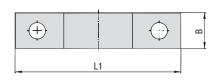
<sup>\*</sup> Similar to DIN 1592.





## Heavy Saddle with Tension Clearance (DIN 1593) Two-Bolt Design







STAUFF Group	Diameter Range		Dimension	Dimensions (mm/m)								
Ø D1	(mm)	(in)	L1	L2	Н	D2	В	S				
-		00 00	44	28	5	6,6	16	2				
7	5,5 7	.2228	1.73	1.10	.20	.26	.63	.08				
•	7 0	00 05	48	32	6	6,6	20	2				
9	7 9	.2835	1.89	1.26	.24	.26	.79	.08				
10	0.5 10	00 51	52	36	9	6,6	20	2				
13	9,5 13	.3951	2.05	1.42	.35	.26	.79	.08				
4F F	10 155	F1 C1	56	40	12	6,6	20	2				
15,5	13 15,5	.5161	2.20	1.57	.47	.26	.79	.08				
10	15.5 10	01 75	60	44	15	6,6	20	2				
9 15,5 19	.6175	2.36	1.73	.59	.26	.79	.08					
00	20 00	70 01	82	56	19	11	25	3				
23	20 23	.7991	3.23	2.20	.75	.43	.98	.12				
0.0	00 00	01 100	84	58	22	11	25	3				
26	23 26	.91 1.02	3.31	2.28	.87	.43	.98	.12				
00 5	00 00 5	1.00 1.10	90	64	24	11	25	3				
28,5	26 28,5	1.02 1.12	3.54	2.52	.94	.43	.98	.12				
0.1	00 5 01	00.5 04	110 100	90	64	27	11	25	3			
31	28,5 31	1.12 1.22	3.54	2.52	1.06	.43	.98	.12				
0.0	00 00	1.00 1.40	106	80	32	11	30	5				
36	33 36	1.30 1.42	4.17	3.15	1.26	.43	1.18	.20				
00	26 20	4.40 4.54	110	84	34	11	30	5				
39	36 39	1.42 1.54	4.33	3.31	1.34	.43	1.18	.20				
	39 43	4.54 4.00	120	88	38	14	30	5				
43		1.54 1.69	4.72	3.46	1.50	.55	1.18	.20				
	43 46		122	90	41	14	30	5				
46			4.80	3.54	1.61	.55	1.18	.20				
	10 10		122	90	44	14	30	5				
49	46 49		4.80	3.54	1.73	.55	1.18	.20				
	F0 F0	0.00 0.00	142	110	52	14	40	5				
58	53 58	2.09 2.28	5.59	4.33	2.05	.55	1.57	.20				
	50 51	0.00	142	110	57	14	40	5				
61	58 61	2.28 2.40	5.59	4.33	2.24	.55	1.57	.20				
	07 74	004 000	152	120	66	14	40	5				
71	67 71	2.64 2.80	5.98	4.72	2.60	.55	1.57	.20				
	70 77	0.07. 0.05	176	136	72	18	40	5				
77	73 77	2.87 3.03	6.93	5.35	2.83	.71	1.57	.20				
		0.00 0.:-	184	144	76	18	40	5				
31	77 81	3.03 3.19	7.24	5.67	2.99	.71	1.57	.20				
	00 -	0.00	198	158	85	18	40	8				
91	88 91	3.39 3.58	7.80	6.22	3.35	.71	1.57	.31				
			214	174	98	18	40	8				
103	99 103	3.90 4.06	8.43	6.85	3.86	.71	1.57	.31				
			220	180	104	18	40	8				
109	105 109	4.13 4.29	8.66	7.09	4.09	.71	1.57	.31				
			226	186	109	18	40	8				
115	110 115	4.33 4.53	8.90	7.32	4.29	.71	1.57	.31				

Ordering Codes										
Heavy Saddle	*DIN1593-*7-*W66									
* Heavy Saddle to	DIN 1593 <b>DIN1593</b>									
* STAUFF Group (	Ø D1) <b>7</b>									
* Material code	Carbon Steel, uncoated W1									
	Carbon Steel, zinc-plated and thick-film passivated <b>W66</b>									
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) <b>W5</b>									

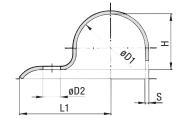
#### **Applications**

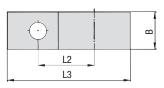
 Installation of pipes, tubes, poles and other round components directly on the substrate (floor, wall or ceiling)

## **Light Saddle with Tension Clearance (DIN 1596)**

Single-Bolt Design







Ordering Codes									
Light Saddle	*DIN1596-*7-*V	*DIN1596-*7-*W66							
* Light Saddle to	DIN 1596 <b>DIN1</b>	596							
* 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 Ti)	W5							

#### **Applications**

Installation of pipes, tubes, poles and other round components directly on the substrate (floor, wall or ceiling)

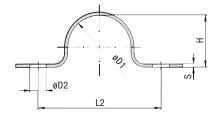
STA Gro	AUFF	Diameter Range		Dimension	IS ( <sup>mm</sup> /in)					
Ø D	1	(mm)	(in)	L1	L2	L3	Н	D2	В	S
7		5,5 7	.2228	26	14	31,5	5	6,6	16	2
		5,5 1	.2220	1.02	.55	1.24	.20	.26	.63	.08
9		79	.2835	28	16	34,5	6	6,6	16	2
3		7 0	.2000	1.10	.63	1.36	.24	.26	.63	.08
13		9,5 13	.3951	30	18	38,5	9	6,6	20	2
10		3,0 10	.0001	1.18	.71	1.52	.35	.26	.79	.08
15,	5	13 15,5	.5161	32	20	41,75	12	6,6	20	2
10,	3	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
13		10,0 10	.0170	1.34	.87	1.79	.59	.26	.79	.08
22	23	20 23	.7991	43	28	57,5	19	9	25	3
20		20 20	.1001	1.69	1.10	2.26	.75	.35	.98	.12
26	<b>26</b> 23 26	.91 1.02	44	29	60	22	9	25	3	
20		25 20	.31 1.02	1.73	1.14	2.36	.87	.35	.98	.12
20	<b>28,5</b> 26 28,5	1.02 1.12	47	32	64,25	24	9	25	3	
20,		20 20,0	1.02 1.12	1.85	1.26	2.53	.94	.35	.98	.12
31		28,5 31	1.12 1.22	47	32	65,5	27	9	25	3
31	JI	20,0 01	1.12 1.22	1.85	1.26	2.58	1.06	.35	.98	.12
22	<b>33</b> * 31 33	21 22	1.221.30	56	36	75,5	29	9	25	3
33		1.221.50	2.20	1.42	2.97	1.14	.35	.98	.12	
36		33 36	1.30 1.42	57	40	78	32	11	30	3
30		33 30	1.30 1.42	2.24	1.57	3.07	1.26	.43	1.18	.12
39		36 39	1.42 1.54	59	42	81,5	34	11	30	3
39		30 33	1.42 1.54	2.32	1.65	3.21	1.34	.43	1.18	.12
43		39 43	1.54 1.69	61	44	85,5	38	11	30	3
40		00 40	1.04 1.03	2.40	1.73	3.37	1.50	.43	1.18	.12
46		43 46	1.69 1.81	62	45	88	41	11	30	3
40		40 40	1.03 1.01	2.44	1.77	3.46	1.61	.43	1.18	.12
49		46 49	1.81 1.93	67	48	95,5	44	14	40	4
73		40 43	1.01 1.33	2.64	1.89	3.76	1.73	.55	1.57	.16
52	*	49 52	1.93 2.05	72	53	102	47	14	40	4
32		¬∂ ∪∠	1.30 2.00	2.83	2.09	4.02	1.85	.55	1.57	.16
58		53 58	2.09 2.28	76	55	107	52	14	40	4
50		JJ JU	2.03 2.20	2.99	2.17	4.21	2.05	.55	1.57	.16
61		59 61	2.28 2.40	77	58	111,5	56	14	40	4
UI	61	58 61	2.20 2.40	3.03	2.28	4.39	2.20	.55	1.57	.16

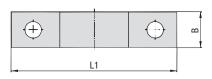
<sup>\*</sup> Similar to DIN 1596.





# **Light Saddle with Tension Clearance (DIN 1597)**Two-Bolt Design







STAUFF Group	Diameter Range		Dimension	IS ( <sup>mm</sup> /in)				
Ø D1	(mm)	(in)	L1	L2	Н	D2	В	S
7	5,5 7	.2228	44	28	5	5,5	16	1,5
	0,0 1	.2220	1.73	1.10	.20	.22	.63	.06
9	7 9	.2835	48	32	6	5,5	16	1,5
3	7 3	.2000	1.89	1.26	.24	.22	.63	.06
13	9,5 13	.3951	52	36	9	5,5	16	1,5
13	9,5 15	.0901	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	.5101	2.20	1.57	.47	.22	.63	.06
19	15,5 19	.6175	60	44	15	5,5	16	1.5
19	15,5 18	.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	23 26	.91 1.02	78	58	22	6,6	20	2
20	23 20	.91 1.02	3.07	2.28	.87	.26	.79	.08
28,5	26 28,5	1.02 1.12	84	64	24	6,6	20	2
20,3	20 20,0	1.02 1.12	3.31	2.52	.94	.26	.79	.08
31	28,5 31	1.12 1.22	84	64	27	6,6	20	2
31	20,0 01	1.12 1.22	3.31	2.52	1.06	.26	.79	.08
33 *	31 33	1.221.30	92	72	29	6,6	20	2
33			3.62	2.83	1.14	.26	.79	.08
36	33 36	1.30 1.42	104	80	32	9	25	3
30	33 30	1.30 1.42	4.09	3.15	1.26	.35	.98	.12
39	36 39	1.42 1.54	108	84	34	9	25	3
39	30 38	1.42 1.04	4.25	3.31	1.34	.35	.98	.12
43	39 43	1.54 1.69	112	88	38	9	25	3
40	33 43	1.04 1.03	4.41	3.46	1.50	.35	.98	.12
46	43 46	1.69 1.81	114	90	41	9	25	3
40	45 40	1.03 1.01	4.49	3.54	1.61	.35	.98	.12
49	46 49	1.81 1.93	118	90	44	11	30	3
49	40 43	1.01 1.33	4.65	3.54	1.73	.43	1.18	.12
52 *	49 52	1.93 2.05	134	106	47	11	30	3
32	43 32	1.95 2.05	5.28	4.17	1.85	.43	1.18	.12
58	53 58	2.09 2.28	138	110	52	11	30	3
50	55 56	2.03 2.20	5.43	4.33	2.05	.43	1.18	.12
61	E0 61	2.20 2.40	138	110	56	11	30	3
61	58 61	2.28 2.40	5.43	4.33	2.20	.43	1.18	.12

Ordering Codes										
Light Saddle	*DIN1597-*	*DIN1597-*7-*W66								
* Light Saddle to D	OIN 1597	DIN 1597								
* STAUFF Group (@	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 / 31	6 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.



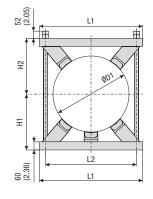


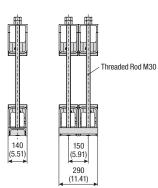


## **E**STAUFF ®

# Construction Series Types KS (Single Version) / DKS (Double Version)







Ordering Codes									
Construction Series *KS-*220-*PA-*W8									
* Version Single version Double version									
* Exact outside di	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 154 / 155 for material properties and technical information.

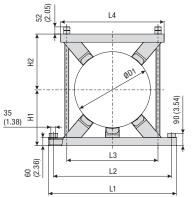
Group	Outside Diamet Diameter Range	er ØD1 Pipe / Tub e	oe Standard Di	ameters	Dimensi	ons (mm/in)			No. of Plastic
STAUFF	(mm)	(in)	(mm)	(in)	L1	L2	H1	H2	Pads
			220	8.66					
	000 075	0.00 40.05	247	9.72	420	330	220	220	
1	220 275	8.66 10.85	267	10.51	16.54	12.99	8.66	8.66	4
			273	10.75					
			280	11.02					
0	070 005	10.07 10.00	300	11.81	460	370	240	240	4
2	276 325	10.87 12.80	318	12.52	18.11	14.57	9.45	9.45	4
			323,9	12.75					
3	326 370	12.83 14.57	355,6	14.00	510	420	260	260	4
3	320 370	12.03 14.37	368	14.49	20.08	16.53	10.23	10.23	4
4	074 405	14.01 10.70	390	15.35	570	480	290	290	4
4	371 425	14.61 16.73	406,4	16.00	22.44	18.89	11.42	11.42	4
_			457,2	18.00	620	530	305	305	
5	426 485	16.77 19.09	470	18.50	24.41	20.87	12.01	12.01	4
			490	19.29					
			508	20.00	680	590	370	370	
6	486 550 19.13 21.65	521	20.51	26.77	23.23	14.57	14.57	4	
			546	21.50					
7	551 630		558,8	22.00	760	670	410	410	- 5
1	331 030	21.09 24.00	609,6	24.00	29.92	26.38	16.14	16.14	3
0	004 745	04.04 00.45	744	00.00	845	755	452	452	
8	631 715	24.84 28.15	711	28.00	33.27	29.72	17.80	17.80	5
9	716 800	28.19 31.50	762	30.00	940	850	495	495	5
Ü		20110 111 0 11100	7.02	00.00	37.00	33.46	19.49	19.49	
					990	900	500	500	
10			813	32.00	38.97	35.43	19.69	19.69	5
			1000	00.0=	1200	1100	591,5	593	_
11			1000	39.37	47.24	43.30	23.29	23.34	5
					1000	4400	000	000	
12			1016	40.00	1200	1100	602	602	5
					47.24	43.30	23.70	23.70	

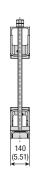
 $Alternative \ outside \ diameters, materials \ and \ surface \ finishings \ are \ available \ upon \ request. \ Contact \ STAUFF \ for \ further \ information.$ 

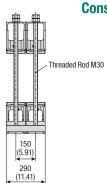
Dimensional drawings: All dimensions in mm (in).















	l← LI →					(11.41)						
Group	Outside Diameter ØD1 Pipe / Tube Diameter Range Standard Diameters				Dimensions (mm/in)						No. of Plastic	
STAUFF	(mm)	(in)	(mm)	(in)	L1	L2	L3	L4	H1	H2	Pads	
1	220 275	8.66 10.85	220 247 267 273	8.66 9.72 10.51 10.75	580	490 19.29	330	420	220	220 8.66	4	
2	276 325	10.87 12.80	280 300 318 323,9	11.02 11.81 12.52 12.75	620 24.41	530 20.87	370 14.57	460 18.11	240 9.45	240 9.45	4	
3	326 370	12.83 14.57	355,6 368	14.00	670 26.38	580 22.83	420 16.53	510 20.08	260 10.23	260 10.23	4	
4	371 425	14.61 16.73	390 406,4	15.35 16.00	750 29.53	640 25.20	480 18.89	570 22.44	290 11.42	290 11.42	4	
5	426 485	16.77 19.09	457,2 470	18.00 18.50	800 31.50	730 28.74	530 20.87	620 24.41	305 12.01	305 12.01	4	
6	486 550	19.13 21.65	490 508 521 546	19.29 20.00 20.51 21.50	860	790 31.10	590 23.23	680 26.77	370 14.57	370 14.57	4	
7	551 630	21.69 24.80	558,8 609,6	22.00	940 37.00	870 34.25	670 26.38	760 29.92	410 16.14	410 16.14	5	
8	631 715	24.84 28.15	711	28.00	1025	955 37.60	755 29.72	845 33.27	452 17.80	452 17.80	5	
9	716 800	28.19 31.50	762	30.00	1120 44.09	1050 41.33		940 37.00	495 19.49	495 19.49	5	
10			813	32.00	1170 46.06	1100 43.30	900 35.43	990 38.97	500 19.69	500 19.69	5	
11			1000	39.37	1400 55.12	1300 51.18			591,5 23.29		5	
12			1016	40.00	1400 55.12	1300 51.18	1100 43.30	1200 47.24	602 23.70	602 23.70	5	

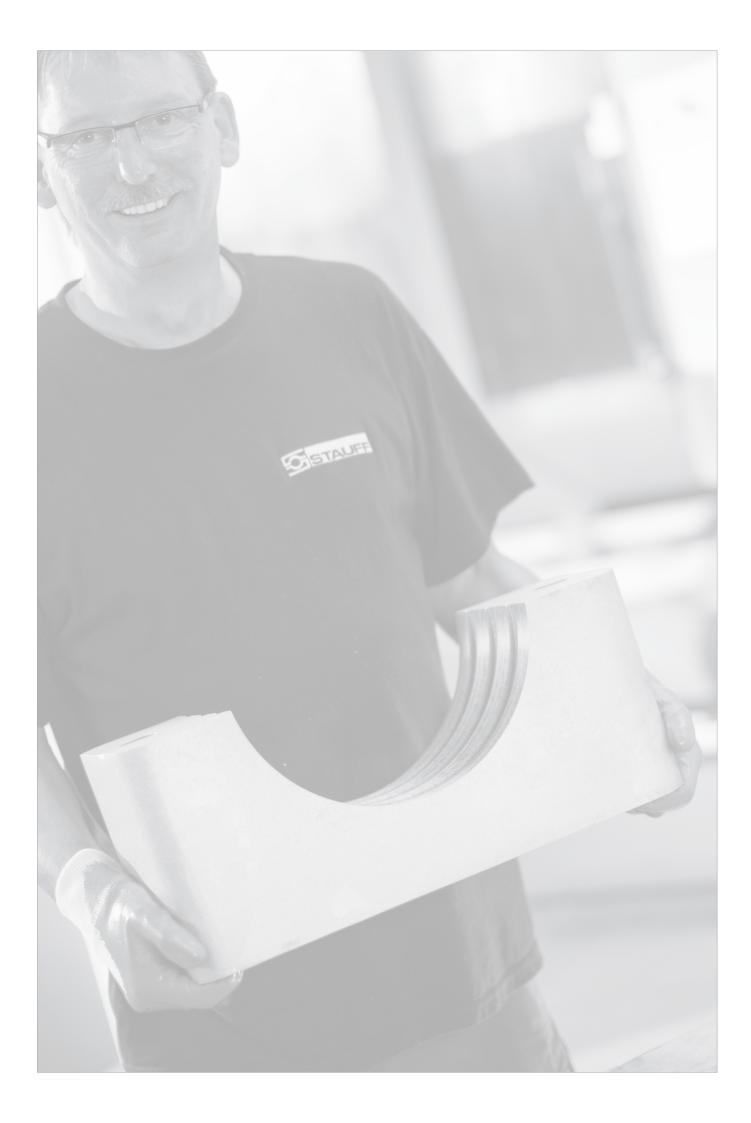
Ordering C	odes									
Construction Series *KSV-*220-*PA-*W8										
* Version	Single version Double version	KSV DKSV								
* Exact outside di	ameter ØD1 (mm)	220								
* Material of Plast	ic Pads (see below)	PA								
* Material Code	Steel, prime coated (grey, RAL 7035)	W8								

#### **Standard Materials for Plastic Pads**

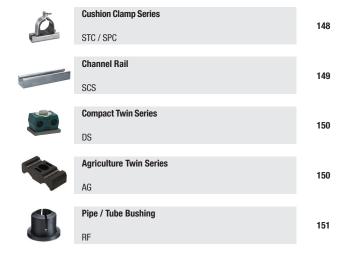
Please note: All items are supplied non-assembled.



See pages 154 / 155 for material properties and technical information.





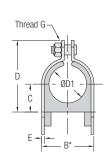


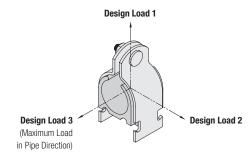


#### Clamp Assembly • Types STC / SPC

(for Use with Channel Rail SCS)







		Ordering Codes (1 Clamp Assembly)	Standard Packaging Units	Dimensions (mm/in)						Design Loads (kN/lbf)			
(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, .	., ,		0.0 020 1.1	217 55%	.62	.22	1.11	.08	17 1 20 0110				
8	3/8		STC-037-**-K	24 / box	19,1	7,1	31,5	2	1/4-20 UNC			0,22	
					.75 22,1	.28 8,6	1.24 34,5	.08					
12,7	1/2		STC-050-**-K	24 / box	.87	.34	1.36	.08	1/4-20 UNC				
					23,1	9,1	35,8	2					
13,5		1/4	SPC-025-**-K	24 / box	.91	.36	1.41	.08	1/4–20 UNC				
4.0	F 10		070 000	24./1	25,4	10,4	38,1	2	4/4 00 1110		0,22		
16	5/8		STC-062-**-K	24 / box	1.00	.41	1.50	.08	1/4–20 UNC	400	50	50	
17,2		3/8	SPC-037-**-K	24 / box	27,2	11,4	40,4	2	1/4-20 UNC	2,67	0,33	0,33	
17,2		3/0	3FG-03/	24 / DUX	1.07	.45	1.59	.08	174-20 0NG	600	75	75	
19	3/4		STC-075-**-K	24 / box	33,8	13,5	45,2	2	1/4-20 UNC		-		
	-, .				1.33	.53	1.78	.08					
21,3		1/2	SPC-050-**-K	24 / box	36,8	15,0	48,5	2	1/4-20 UNC			-	
					1.45 36,8	.59 14,7	1.91 48,5	.08					
22,2	7/8		STC-087-**-K	24 / box	1.45	.58	1.91	.08	1/4-20 UNC		-		
					42,2	16,8	51,6	2,8					
25,4	1		STC-100-**-K	12 / box	1.66	.66	2.03	.11	1/4–20 UNC			-	
20.0		0/4		10.71	45,5	18,3	54,9	2,8	4/4 00 11110	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	
32	1-1/4		CTC 10E ALAL V	12 / box	48,8	19,8	58,4	2,8	1/4-20 UNC	2,67	0,33	0,33	
32	1-1/4		STC-125-**-K	12 / DUX	1.92	.78	2.30	.11	1/4-20 UNC	600	75	75	
33,7		1	SPC-100-**-K	12 / box	56,4	23,1	69,9	3	5/16–18 UNC		0,33	0,33	
00,1		<u>'</u>	010 100 44 K	127 50%	2.22	.91	2.75	.12	0/10/10/0140		_		
38	1-1/2		STC-150-**-K	12 / box	56,4	23,1	69,9	3	5/16–18 UNC				
					2.22	.91	2.75	.12					
42		1-1/4	SPC-125-**-K	12 / box	62,7 2.47	26,2 1.03	77,0 3.03	.12	5/16-18 UNC				
					62,7	29,5	83,3	3					
48,3		1-1/2	SPC-150-**-K	12 / box	2.47	1.16	3.28	.12	5/16–18 UNC				
					69,1	29,5	83,3	3					
50,8	2		STC-200-**-K	12 / box	2.72	1.16	3.28	.12	5/16–18 UNC	800	125	125	
60.2		0	CDC 200 444 K	1 / hog	69,1	35,8	96,0	3	E/10 10 UNO	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	
63,5	2-1/2		STC-250-**-K	1 / bag	88,1	38,9	102,4	3	5/16–18 UNC	3,56	0,56	0,56	
00,0	2 1/2		010 200 44 K	17 bag	3.47	1.53	4.03	.12	0/10 10 0140				
66,7	2-5/8		STC-262-**-K	1 / bag	88,1	38,9	102,4	3	5/16–18 UNC				
,					3.47	1.53	4.03	.12			1,78         0,22         0,2           400         50         50           1,78         0,22         0,2           400         50         50           1,78         0,22         0,2           400         50         50           1,78         0,22         0,2           400         50         50           1,78         0,22         0,2           400         50         50           1,78         0,22         0,2           400         50         50           2,67         0,33         0,3           600         75         75           2,67         0,33         0,3           600         75         75           2,67         0,33         0,3           600         75         75           2,67         0,33         0,3           600         75         75           2,67         0,33         0,3           600         75         75           2,67         0,33         0,3           600         75         75           2,67         0,33         0,3		
73		2-1/2	SPC-250-**-K	1 / bag	94,5 3.72	42,2 1.66	108,5 4.27	.12	5/16–18 UNC			-	
					100,8	45,2	114,8	3					
76,2	3		STC-300-**-K	1 / bag	3.97	1.78	4.52	.12	5/16–18 UNC	1,78         0,22         0,22           400         50         50           2,67         0,33         0,33           600         75         75           2,67         0,33         0,33           600         75         75           2,67         0,33         0,33           600         75         75           2,67         0,33         0,33           600         75         75           2,67         0,33         0,33           600         75         75           2,67         0,33         0,33           600         75         75           2,67         0,33         0,33           600         75         75           2,67         0,33         0,33           600         75         75           2,67         0,33         0,33           600         75         75           2,67         0,33         0,33           600         75         75           3,56         0,56         0,56           800         125         125           3,56         0,56         <	-		
					110,7	50,0	124,7	3					
88,9		3	SPC-300-**-K	1 / bag	4.36	1.97	4.91	.12	3/8–16 UNC	1,78         0,22         0,22           400         50         50           1,78         0,22         0,22           400         50         50           1,78         0,22         0,22           400         50         50           1,78         0,22         0,22           400         50         50           2,67         0,33         0,33           600         75         75           2,67         0,33         0,33           600         75         75           2,67         0,33         0,33           600         75         75           2,67         0,33         0,33           600         75         75           2,67         0,33         0,33           600         75         75           2,67         0,33         0,33           600         75         75           2,67         0,33         0,33           600         75         75           2,67         0,33         0,33           600         75         75           2,67         0,33 <td< td=""><td></td></td<>			
100		0.1/0	CDO 050 4-1-1/	1 / hog	126,2	57,9	140,5	3	0/0 40 UNO				
102		3-1/2	SPC-350-**-K	1 / bag	4.97	2.28	5.53	.12	3/8–16 UNC		200	150	
114		4	SPC-400-**-K	1 / bag	138,9	64,3	153,2	3	3/8-16 UNC				
114		7	OI U-40U- <b>ተተ-</b> Γ\	i / bay	5.47	2.53	6.03	.12	3/0-10 UNC				
140		5	SPC-500-**-K	1 / bag	164,3	77,0	178,6	3,6	3/8-16 UNC				
			2. 0 000 P.P. IX	. , 249	6.47	3.03	7.03	.14	5,5 10 5140				
168 6 <b>SPC-600-**-K</b>	6	SPC-600-**-K	1 / bag	189,7	89,7	204,0	3,6	3/8-16 UNC					
	_	7.47	3.53	8.03	.14		1 000	200	150				

 $<sup>^{\</sup>star}\,$  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**

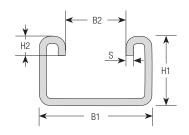
- Clamp assemblies designed to mount directly to 41,3 mm / 1-5/8 in wide strut channels, such as the STAUFF Channel Rail, type SCS
- Suitable for most Fluid Power applications ranging from mobile equipment to industrial machinery
- Reduced horizontal mounting space
- Easy installation and retro fit capability
- Reduces shock and vibration while preventing galvanic corrosion



Clamp Assembly - Types STC / SPC

Ordering C	odes	
Clamp Assem	W4-*K	
* Type of clamp	STC (Tube diameters) SPC (Pipe diameters)	STC SPC
* Pipe / Tube O.D	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						

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



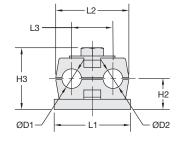
Ordering Codes										
Strut Channel	*SCS-*048-	*1-*PL								
* Strut Channel		SCS								
* Length of Rail	1,22 m / 4.00 ft / 48 in 3,05 m / 10.00 ft / 120 in	048 120								
* Height of Rail	25,4 mm / 1.00 in	1								
* Material code	Carbon Steel, uncoated Carbon Steel, green painted	PL GR								

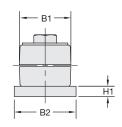
## STAUFF

# **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

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

#### Outside Diameter Nominal Bore Ordering Codes Dimensions (mm/in) Group Pipe / Tube **Copper Tube** (2 Clamp Halves) Ø D1 / Ø D2 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

#### **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



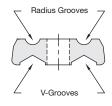
#### **Hexagon Bolt, Type AS**

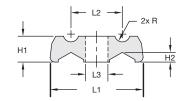
AS-1/4-20UNCx1-W3 Thread size: 1/4–20 UNC Carbon Steel, zinc/nickel-plated

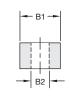
All threaded parts are only available with unified coarse (UNC) thread. Rail mount and stacking assemblies as well as alternative materials and surface finishings are available upon request.

# Agriculture Twin Series: Clamp Body Type AG









Group	Pipe / Tube			Ordering Codes (1 Clamp Body)	Dimens	ions ( <sup>mm</sup> / <sub>in</sub> )							
Radius Grooves STAUFF (mm) (in)			V-Grooves (mm) (in)			L1	L2	L2 L3		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 .43	12,4 .49

#### **Standard Material**



Polypropylene Colour: Black

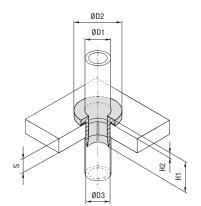
See pages 154 / 155 for properties and technical information.

#### **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 H2 ØD3 (mm) (in) (in) H1 18 4 ... 12 10 22 4 6 1/4 .16 ... .47 71 87 .16 39 20 22 4 ... 12 12 5/16 .16 ... .47 .79 .16 .47 .87 1/8 Pipe 22 22 14 10 3/8 1/4 Copper Tube (ASTM B88) .87 .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 .94 .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 .16 ... .47 1.50 .16 .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 1.69 .87 .16 .16 ... .47 1.39 4 ... 12 40 35 1-1/4 Copper Tube (ASTM B88) 1.89 .16 .16 ... .47 .87 1.57 22 4 4 ... 12 43 1-1/2 38 2.01 .87 .16 ... .47 1.70 .16 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



ura	ering	Codes	
			4005

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

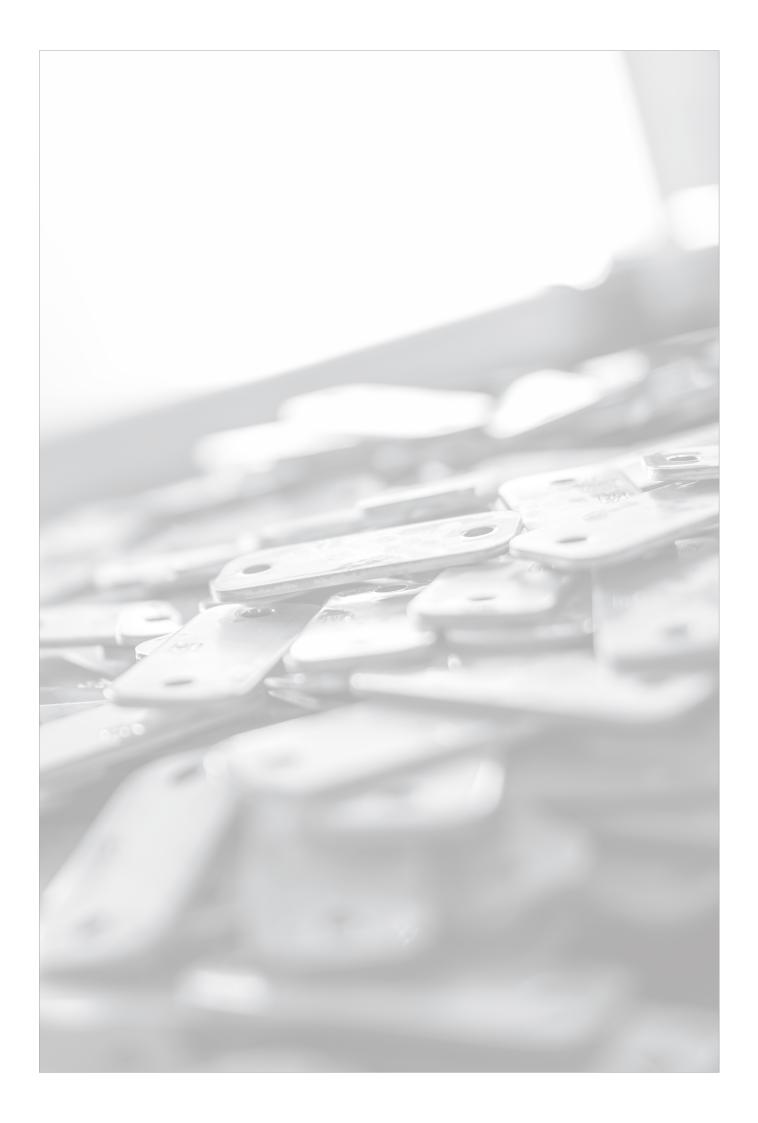


Thermoplastic Elastomer (87 Shore-A) Colour: Black Material code: **SA** 

See pages 154 / 155 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/mm² (ISO 527)	> 1400 N/mm² (ISO 527)	> 65000 N/mm²	113 N/mm² 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/m² 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 co		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 156 / 157 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.





## **Standard Clamp Insert Materials**



STAUFF Group 4 and 6 (Standard Series) STAUFF Group 4S to 6S (Heavy Series)



STAUFF Group 7S 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)	70 A (DIN 53505)	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 156 / 157 for material properties and technical information.





## **Special Clamp Body Materials (Selection)**

## **Preventive Fire Protection**









Material Code	PA-V0	PP-DA	PA-GF30-USR
Basic Material	Polyamide	Polypropylene	Polyamide
Standard Colour	Grey / Black	Weiss	Black

Mechanical Properties			
Tensile E-Module	1500 MPa (ISO 527-2)	1614 N/mm² (ISO 527) bei +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	eatures						
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)				
	<ul><li>Requirements set R22 / R23 / R24 / R26</li><li>Hazard level HL1 - HL3</li></ul>	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: l3 / 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.





## **Special Clamp Body Materials (Selection)**

## **Preventive Fire Protection**







PP6853	PP-V0	SA-V0	Material Code
Polypropylene	Polypropylene	Thermoplastic Elastomer	Basic Material
White	Black	Natural	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)		Notch Impact Strength
			Low Temperature Notch Impact Strength
25 MPa (ICE 60811-1-1)	24 MPa (ISO 527)	15,9 MPa (ASTM D412)	Tensile Strength at Yield (Tensile Strength)
			Ball Indentation Hardness (Brinell Hardness)
		86 A (ISO 868)	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 UL94 ¹ (material thickness: 3 mm)  Classification: V-0 (Vertical Burning Test)	Tested and approved acc. to UL94 ¹ (material thickness: 3 mm)  Classification: V-0 (Vertical Burning Test)	Approvals / Properties
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: SR2  Dripping classification: ST2			
Tested and approved acc. to Def Stan 07-247 ■ Assessment: category B			
Compliant to the requirements of JRMA (Japan Railway Rollingstock & Machinery Association)  Classification: extremely incombustible			
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).



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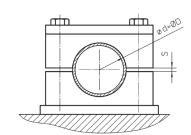
## **Standard Clamp Body Designs**

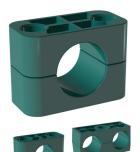


## **Profiled Design**

## **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)

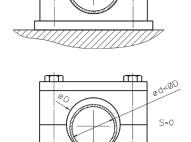




## Type H (Smooth)

#### 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

frei

#### 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	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	Unified Coarse
1D	1	M6	1/4-20 UNC
2D to 5D	2 to 5	M8	5/16-18 UNC

## **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.

## STAUFF

#### **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.

- Place weld plates in their designated positions. Please make sure these positions are suitable for the expected loads
- Mark the positions of the weld plates to ensure best alignment
- Weld the weld plates into position. Elongated weld plates can also be mounted to their positions by using screws or balts
- 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.

- Place mounting rails in their designated positions. Please make sure these bases are suitable for the expected loads.
- Mark the positions of the mounting rails to ensure best alignment.
- 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):

 $\textbf{Standard Series} \quad 1 \ ... \ 2 \ N \cdot m \ / \ .75 \ ... \ 1.5 \ ft \cdot lb \ (hand-tightened)$ 

Heavy Series 5 N·m / 3.75 ft·lb

**Twin Series**  $1 \dots 2 \text{ N·m} / .75 \dots 1.5 \text{ ft·lb}$  (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	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

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 / coupling from vibrations.

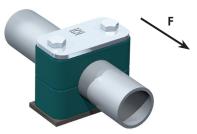
#### Valves

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 °C / +73.4 °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	,		t	Polyprop	ylene (PP)			Polyamid	e (PA)			Aluminiu	m (AL)		
		DIN EN ISO 4014/4017 (DIN 931/933) Metric Unified Coarse					Maximum Load in Pipe Direction F		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)

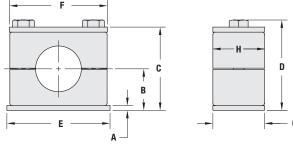
Group		Hexagon Head I	Bolt	Polypro	pylene (PP)			Polyami	de (PA)			Aluminium (AL)				
		DIN EN ISO 401	4/4017 (DIN 931/933)			Maximu	m Load			Maximum Load				Maximum Load		
		Metric	Unified Coarse		ng Torque		Direction F		Tightening Torque		in Pipe Direction F		Tightening Torque		in Pipe Direction F	
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	
118	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)				
		DIN EN ISO 4014/4017 (DIN 931/933)				Maximum Load				Maximum Load		
		Metric	Unified Coarse	Tightening Tor	que	in Pipe Direction	on F	Tightening Tor	que	in Pipe Direction F		
STAUFF	DIN	ISO Thread	(UNC) Thread	(N·m)	(ft·lb)	(kN)	(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	

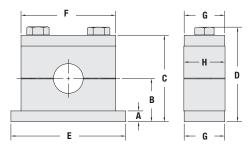
Only for the standard clamp body materials which are listed on page 154. In case of doubt, please contact STAUFF in advance.

## **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		С		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
Λ.	4	3	16,5	16	33	32	37	36	36	34	30	30	8,10
1A	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	.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
;	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
	0	.20	2.52	2.48	5.04	4.96	5.20	5.12	5.83	5.67	1.18	1.18	96.80

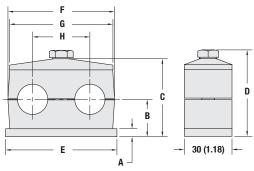


## Heavy Series (DIN 3015, Part 2)

Group		Dimensi	ons ( <sup>mm</sup> / <sub>in</sub> )											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	ı	.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
6S	4	10	54,5	53,5	109	107	116,5	114,5	140	115	120	45	45	1,21
05	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	5	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
00	O	.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	1	.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
11S	9	30	235		470		488,7		520	470	470	160	162	54,11
113	9	1.18	9.25		18.50		19.24		20.47	18.50	18.50	6.30	6.38	119.04
12S	10	30	295		590		608,7		680	630	630	180	182	77,40
123	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		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
טו		.12	.65	.64	1.46	1.44	1.61	1.59	1.46	1.42	1.34	.79	16.72
an.	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		5	23,5	23,25	49	48,5	54	53,5	70	67	65	36	17,70
ЗU	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
4D	4	.20	.98	.94	2.05	1.97	2.24	2.17	3.35	3.15	3.11	1.77	44.88
5D	-	5	31,5	31	65	64	70	69	110	106	102	56	27,70
5D	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		Quantity per Bag
STAUFF	DIN	(in Pcs.)
1 - 6	0 - 6	25
7 + 8	7 + 8	10

## Heavy Series (DIN 3015, Part 2)

## Clamp Bodies (Polypropylene / Polyamide)

Group		Quantity per Bag
STAUFF	DIN	(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		Quantity per Bag
STAUFF	DIN	(in Pcs.)
1D - 4D	1 - 4	25
5D	5	10

## Clamp Bodies (Aluminium)

Group		Quantity per Bag
STAUFF	DIN	(in Pcs.)
1 - 5	0 - 5	25
6	6	10

#### Clamp Bodies (Aluminium)

Group		Quantity per Bag
STAUFF	DIN	(in Pcs.)
3S - 6S	1 - 4	20
7S	5	10
8S - 12S	6 - 10	1

# Weld Plates (Type SP) Cover Plates (Type GD)

Group STAUF	F DIN	Quantity per Bag (in Pcs.)
1D - 4I	<b>D</b> 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	

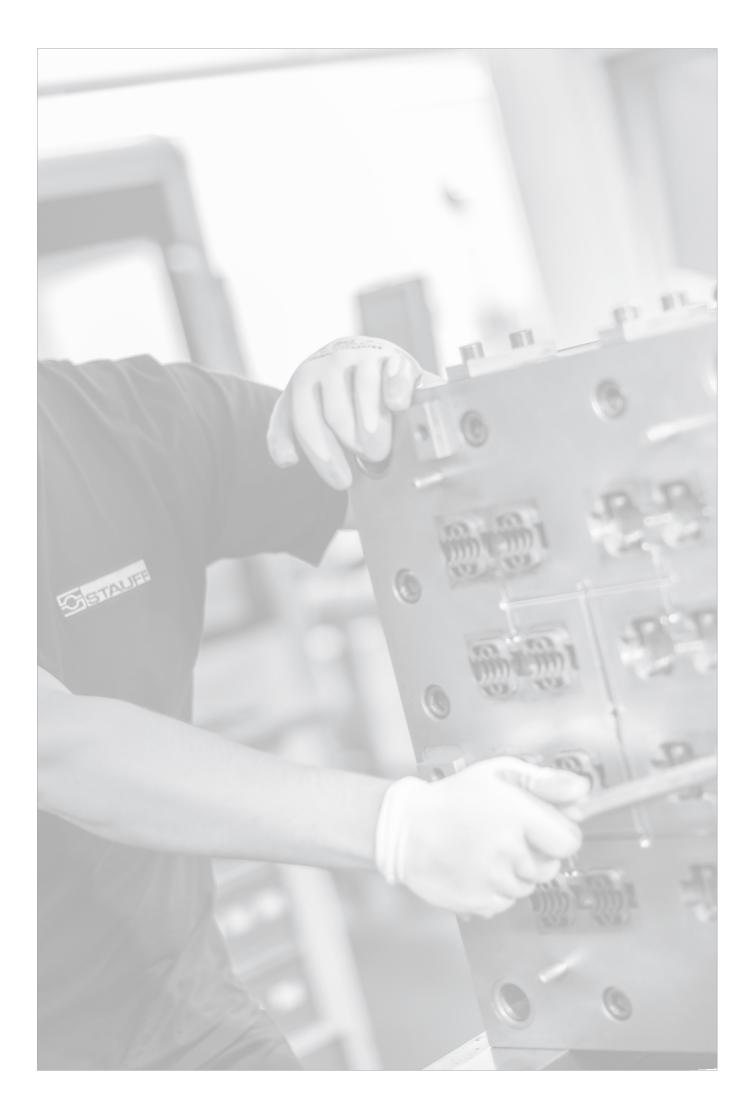
## Hexagon Rail Nut (Type SM) Channel Rail Adaptor (Type CRA)

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

Contact STAUFF and ask for standard packaging units for further components or special packaging options.





**Product-Specific Abbreviations** 168 **Global Contact Directory** 170



## **Product-Specific Abbreviations**

Abbreviation	Product Category	Product Description	Page
ACT	STAUFF ACT Clamps: Anti-Corrosion Technology	Clamp Body - Standard Series	74
ACT	STAUFF ACT Clamps: Anti-Corrosion Technology	Clamp Body - Twin Series	82
AF	Standard Series according to DIN 3015, Part 1	Stacking Bolt	29
AF	Heavy Series according to DIN 3015, Part 2	Stacking Bolt	47
AF	Twin Series according to DIN 3015, Part 3	Stacking Bolt	61
AF	Heavy Twin Series	Stacking Bolt	68
AG	Other Types of Clamps	Agriculture Twin Series	150
AL	Technical Appendix	Standard Clamp Body Material	154
AS	Standard Series according to DIN 3015, Part 1	Hexagon Head Bolt	26
AS	Heavy Series according to DIN 3015, Part 2	Hexagon Head Bolt	45
AS	Twin Series according to DIN 3015, Part 3	Hexagon Head Bolt	59
AS	Heavy Twin Series	Hexagon Head Bolt	68
	-	•	
AS	Light Series	Hexagon Head Bolt	115
BSP CRACO FO	Standard Series according to DIN 3015, Part 1	Bridge Weld Plate	22
CB420-50	STAUFF Bond: Adhesive Bonded Fastening	Adhesive Cartridge	100
CB420-50E	STAUFF Bond: Adhesive Bonded Fastening	Adhesive Cartridge	100
CC	Standard Series according to DIN 3015, Part 1	Clamp Body - Compact Design	19
CHC	Standard Series according to DIN 3015, Part 1	Clamp Body for Conduit Hoses	18
CRA	Standard Series according to DIN 3015, Part 1	Channel Rail Adaptor	25
CRA	Heavy Series according to DIN 3015, Part 2	Channel Rail Adaptor	43
CRA	Twin Series according to DIN 3015, Part 3	Channel Rail Adaptor	58
CRA	Heavy Twin Series	Channel Rail Adaptor	68
DIN1592	Metal DIN Clamps	Heavy Saddle with Tension Clearance - Single-Bolt Design	138
DIN1593	Metal DIN Clamps	Heavy Saddle with Tension Clearance - Two-Bolt Design	139
DIN1596	Metal DIN Clamps	Light Saddle with Tension Clearance - Single-Bolt Design	140
DIN1597	Metal DIN Clamps	Light Saddle with Tension Clearance - Two-Bolt Design	141
DIN3567-A	Metal DIN Clamps	Metal Pipe Clamp with Tension Clearance	136
DIN3567-B	Metal DIN Clamps	Metal Pipe Clamp with Tension Clearance (Extended to One Side)	137
DIT-SR6-SWG	STAUFF SWG: Stud Welding System	Distance Tube	95
DKS	Construction Series	Construction Series Clamp	144
			145
DKSV	Construction Series	Construction Series Clamp (for Anchor Bolt Fastening)	
DP	Standard Series according to DIN 3015, Part 1	Cover Plate	26
DPAL	Heavy Series according to DIN 3015, Part 2	Cover Plate for Single Clamps	44
DPAS	Heavy Series according to DIN 3015, Part 2	Cover Plate for Double Clamps	44
DPAS	Heavy Twin Series	Cover Plate	67
DPL	Light Series	Cover Plate	119
DS	Other Types of Clamps	Compact Twin Series	150
DSP	Standard Series according to DIN 3015, Part 1	Twin Weld Plate	21
EP	Standard Series according to DIN 3015, Part 1	Insert	28
EPDM	Technical Appendix	Standard Clamp Insert Materials	155
ES	Standard Series according to DIN 3015, Part 1	Insert	28
FB	Flat Steel and Round Steel U-Bolt Clamps	Flat Steel U-Bolt	126
GD	Twin Series according to DIN 3015, Part 3	Cover Plate	58
GMV	Heavy Series according to DIN 3015, Part 2	Mounting Rail Nut	42
GMV	Heavy Twin Series	Mounting Rail Nut	68
IS	Standard Series according to DIN 3015, Part 1	Socket Cap Screw	28
IS	Heavy Series according to DIN 3015, Part 2	Socket Cap Screw	45
IS	Twin Series according to DIN 3015, Part 3	Socket Cap Screw	59
KS		,	
	Construction Series	Construction Series Clamp  Construction Series Clamp (for Anabor Belt Fortening)	144
KSV	Construction Series	Construction Series Clamp (for Anchor Bolt Fastening)	145
LBBU	Light Series	Clamp Body - Single Design	112
LBBU	Light Series	Clamp Body - Twin Design	113
LBBU-DP	Light Series	Cover Plate	115
LBBU-HUE	Light Series	Sleeve	114
LBBU-SP	Light Series	Weld Plate	114
LB	Light Series	Clamp Body - Single Design	116
LBG	Light Series	Clamp Body - Twin Design	117
LBU	Light Series	Clamp Body - Twin Design	117
LI	Standard Series according to DIN 3015, Part 1	Slotted Head Screw	28
	Light Series	Clamp Body - Single Design	118
LN			110
LN	-		110
LN LNGF LNUF	Light Series Light Series	Clamp Body - Twin Design Clamp Body - Twin Design	119 119





## **Product-Specific Abbreviations**

Abbreviation	Product Category	Product Description	Page
PA	Technical Appendix	Standard Clamp Body Material	154
PA-V0	Technical Appendix	Special Clamp Body Material	156
PP	Technical Appendix	Standard Clamp Body Material	154
PP6853	Technical Appendix	Special Clamp Body Material	156
PP-DA	Technical Appendix	Special Clamp Body Material	156
PP-V0	Technical Appendix	Special Clamp Body Material	156
RAP	Standard Series according to DIN 3015, Part 1	Group Weld Plate	21
RAP	Twin Series according to DIN 3015, Part 3	Group Weld Plate	55
RAP-MGR	Standard Series according to DIN 3015, Part 1	Multi-Group Weld Plate	23
RB	Flat Steel and Round Steel U-Bolt Clamps	Round Steel U-Bolt	128
RBD	Flat Steel and Round Steel U-Bolt Clamps	Round Steel U-Bolt (DIN 3570, Type A)	132
RF	Other Types of Clamps	Pipe / Tube Bushing	151
RI		Elastomer Insert	16
	Standard Series according to DIN 3015, Part 1		
RI	Heavy Series according to DIN 3015, Part 2	Elastomer Insert	39
RI	Heavy Twin Series	Clamp Body with Elastomer Inserts	66
RUK	Flat Steel and Round Steel U-Bolt Clamps	Plastic Pipe Saddle (Short) for Flat Steel U-Bolts	126
RUK	Flat Steel and Round Steel U-Bolt Clamps	Plastic Pipe Saddle (Short) for Round Steel U-Bolts	128
RUL	Flat Steel and Round Steel U-Bolt Clamps	Plastic Pipe Saddle (Long) for Round Steel U-Bolts	130
SA	Technical Appendix	Standard Clamp Body Material	154
SA	Technical Appendix	Standard Clamp Insert Materials	155
SA-V0	Technical Appendix	Special Clamp Body Material	156
SBD	STAUFF Bond: Adhesive Bonded Fastening	Manual Adhesive Dispenser	101
SBDS-81	STAUFF Bond: Adhesive Bonded Fastening	Dispenser Slide	101
SBMT	STAUFF Bond: Adhesive Bonded Fastening	Mixing Tip	101
SBP	STAUFF Bond: Adhesive Bonded Fastening	STAUFF Bond Plate for DIN 3015 Clamps	99
SCS	Other Types of Clamps	Channel Rail	149
SI	Standard Series according to DIN 3015, Part 1	Safety Washer	27
SI	Heavy Series according to DIN 3015, Part 2	Safety Washer	46
SI	Twin Series according to DIN 3015, Part 3	Safety Locking Plate	60
SI	Heavy Twin Series	Socket Cap Screw	68
SIG	Standard Series according to DIN 3015, Part 1	Safety Locking Plate	29
SIP	Heavy Series according to DIN 3015, Part 2	Safety Locking Plate Safety Locking Plate	47
SIP	Heavy Twin Series	Safety Locking Plate Safety Locking Plate	68
	-		
SIV	Twin Series according to DIN 3015, Part 3	Safety Locking Plate	60
SM	Standard Series according to DIN 3015, Part 1	Hexagon Rail Nut	24
SM	Twin Series according to DIN 3015, Part 3	Hexagon Rail Nut	56
SMG	Standard Series according to DIN 3015, Part 1	Hexagon Rail Nut	24
SMG	Twin Series according to DIN 3015, Part 3	Hexagon Rail Nut	56
SP	Standard Series according to DIN 3015, Part 1	Weld Plate	20
SP	Twin Series according to DIN 3015, Part 3	Single Weld Plate	55
SPAD	Heavy Twin Series	Weld Plate	67
SPAL	Heavy Series according to DIN 3015, Part 2	Weld Plate for Single Clamps	40
SPAL-DUEB	Heavy Series according to DIN 3015, Part 2	Elongated Weld Plate for Single Clamps	41
SPAS-DUEB	Heavy Series according to DIN 3015, Part 2	Weld Plate for Double Clamps	40
SPAS-DUEB	Heavy Series according to DIN 3015, Part 2	Elongated Weld Plate for Double Clamps	41
SPC	Other Types of Clamps	Cushion Clamp	148
SPV	Standard Series according to DIN 3015, Part 1	Elongated Weld Plate	20
STC	Other Types of Clamps	Cushion Clamp	148
STSV	Heavy Series according to DIN 3015, Part 2	Mounting Rail	42
STSV	Heavy Twin Series	Mounting Rail	68
SWG-AGS	STAUFF SWG: Stud Welding System	Distance Adaptor	95
	STAUFF SWG: Stud Welding System	Cable Tie Holder	93
SWG-CTH-11-M6	0 ,		
SWG-CTH-30-M6-1	STAUFF SWG: Stud Welding System	Cable Tie / Tension Belt Holder	93
SWG-CTH-30-M6-2	STAUFF SWG: Stud Welding System	Cable Tie / Tension Belt Holder	93
SWG-DIP	STAUFF SWG: Stud Welding System	Distance Plate for DIN 3015 Clamps	93
SWG-GC	STAUFF SWG: Stud Welding System	Ground Cable	95
SWG-SF	STAUFF SWG: Stud Welding System	Weld Stud with Female Thread	92
SWG-SR6	STAUFF SWG: Stud Welding System	Stud Retainer	95
SWG-WG	STAUFF SWG: Stud Welding System	Weld Gun - Arc Ignition	94
SWG-WI06	STAUFF SWG: Stud Welding System	Weld Inverter	94
SWG-WI06-Starterkit	STAUFF SWG: Stud Welding System	Starterkit	94
TS	Standard Series according to DIN 3015, Part 1	Mounting Rail	24
TS	Twin Series according to DIN 3015, Part 3	Mounting Rail	57
VK	Standard Series according to DIN 3015, Part 1	Clamp Body - Rectangular Design for Proximity Switches	19
WSP	Standard Series according to DIN 3015, Part 1	Angled Weld Plate	22
ZR	Saddle / Piggyback Clamps	Custom-Designed Saddle / Piggyback Clamps	122