## IQORON VP

## Two-stage air cleaner





## Innovation through experience

The IQORON VP range from MANN+HUMMEL offers a uniquely flexible filtration concept which shows its strengths especially in extremely dusty environments.



The core element of the compact air cleaner series is the innovative filter element concept called Vario-Pleat. MANN+HUMMEL exploited its many years of experience working with customer specifications in the development of this technology and in the process filed patents for a number of solutions. The result is impressive as VarioPleat provides a particularly high power density with filter systems with an axial air flow. The height of the pleats of the filter element can be individually adjusted to realize elements with large pleat steps and gradual transitions. The variable pleat technology enables efficient air routing and compared to similar technologies provides a low flow resistance. The design and stabilization measures of the element reduce the risk that the pleats are clogged by coarse particles.

## Best in class two-stage air cleaner IQORON VP







The IQORON VP series was developed for construction and agricultural machinery, mobile compressors, stackers and mobile cranes which have to operate under heavy dust conditions.

#### **Product features**

- 3 sizes for air flows from 14 to 33 m<sup>3</sup>/min available in horizontal and vertical versions
- Two-stage air cleaner, as an option also available as a single-stage air cleaner
- Ability to separate functions of pre-separation and main filtration
- Connections for service switch on both sides
- Multi-cyclone block and intake hood\* can as required be turned by 180°
- Water discharge or improved protection against ingress of water possible
- The multi-cyclone dust pre-separator can be disassembled and cleaned in case of dust clogging

### Their advantages over existing solutions on the market

- Innovative VARIOPLEAT technology: numerous patents in many countries
- Horizontal and vertical operation possible without loss of performance
- Operation with or without scavenging possible
- No face clogging of the filter element surface
- Up to 70% longer service life (without scavenging)
- With scavenging the pre-separation efficiency can be considerably increased to over 90%.
  The suction vacuum which makes this possible enables easier and less expensive installations (e.g. smaller blower)
- Simple and quick servicing of the elements
- Cleanable Multi-cyclone block and filter element
- Slim design requires approx. 15% less space
- Short airflow channels to engine through 45° clean air inlet
- Modular design offers excellent application flexibility

<sup>\*</sup> on request

# The power pack among the compact air cleaners







#### Housing

Slim and robust design. The housing can be fitted in a vertical or horizontal position without loss of performance. It is extremely robust and is made of plastic reinforced with fiber glass. The slim design was designed for extremely tight installation spaces. The numerous mounting possibilities with threaded inserts make it easy to mount the air cleaner.



#### Multi-Cyclone Pre-Separator

**Further increase in performance.** Equipped with high arrestance multi-cyclone technology, operation is possible with or without scavenging with vertical and horizontal fitting. With scavenging the pre-separation efficiency can be increased considerably to over 90%.



Clean Air Connection

45° clean air port. Selectable port direction

enables short air flow route with minimum

flow resistance.



#### Variopleat Filter Element

Innovative unique feature. Thanks to variable pleat heights the element achieves a high filtration performance and simultaneously low pressure drop. There are numerous patents in many countries.



#### Secondary Element

Additional security. The secondary element has an absolutely firm position. A plastic screen protects the clean side of the filter and a robust handle helps assembly and disassembly.





**Maintenance sensors**. Connections for sensors on both sides in protected position.



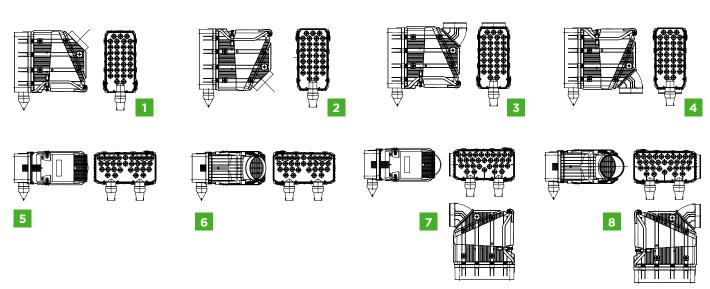




#### 7 Servicing

**Service-friendly system.** Easy access from the side and low assembly forces thanks to a new fastening system. The main and secondary elements are equipped with handles and therefore easier to deal with.

# Part numbers and specifications



#### **PART NUMBERS**

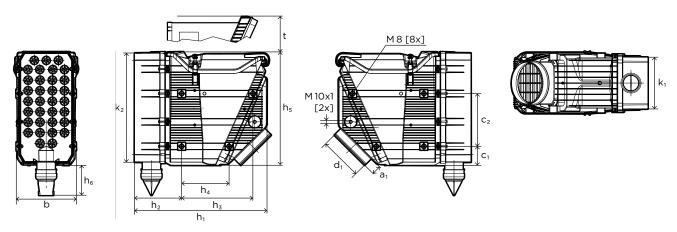
	Nominal		Part number	Replacemer	nt filter element	Weight
MODEL	flow rate [m³/min]	Position	with secondary element	Main element	Secondary element	[kg]
		1	45 919 95 910			
		2	45 919 95 912			
		3*	14 908 91 S01			
IQORON VP 19	14 - 19	4*	45 919 95 920	C 42 003	CF 42 001	8,8
GORON VP 19	14 - 19	5	45 919 95 911	C 42 003	CF 42 001	
		6	45 919 95 913			
		7*	14 908 93 S01			
		8*	14 908 94 S01			
		1	45 925 95 910			
	18 - 25	2	45 925 95 912			
		3*	14 909 38 S01			
		4*	45 925 95 920	0.45.000	OF 45 001	10.1
QORON VP 25		5	45 925 95 911	C 45 002	CF 45 001	10,1
		6	45 925 95 913			
		7*	14 909 39 S01			
		8*	14 909 40 S01			
		1	45 933 95 910			
		2	45 933 95 912			
		3*	14 909 42 S01			
0000N VD 77	04 77	4*	45 933 95 920	0.50.007	CE EQ 001	10.4
QORON VP 33	24 - 33	5	45 933 95 911	C 50 003	CF 50 001	12,4
		6	45 933 95 913			
		7*	14 909 43 S01			
		8*	14 909 44 S01			

 $<sup>^{\</sup>ast}$  Weitere Stutzenausrichtung auf Anfrage möglich

#### **SPECIFICATIONS**

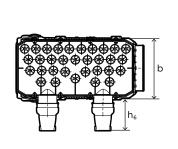
MODEL	Housing	Dust discharge	Tightenir	ig torque	Operating t	Discharge valve	
	material	connection diameter	Hose clamp (clean side)	Threaded insert	Continuous	Short-term	orientation (downwards)
IQORON VP 19							
<b>IQORON VP 25</b>	PP-GF30	PP-GF30 74 mm (2.91 Zoll)	4 Nm	15 Nm	-40 °C to +80 °C	+90 °C	±15°
<b>IQORON VP 33</b>		(=,:: 2011)			23 0		

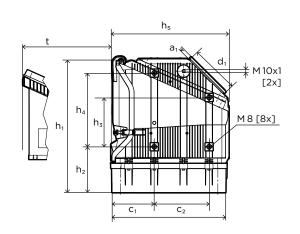
## **Specifications**

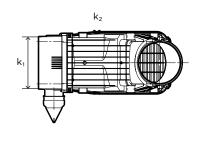


#### **DIMENSIONS**

Model	Dimensions in mm (dimensions in inches)													
	$a_1$	b	<b>c</b> <sub>1</sub>	$c_{\scriptscriptstyle 2}$	$d_1$	$\mathbf{h}_{\scriptscriptstyle{1}}$	h <sub>2</sub>	h <sub>3</sub>	$h_4$	h <sub>5</sub>	$h_6$	$\mathbf{k}_{\scriptscriptstyle{1}}$	$k_2$	t
IQORON VP 19	40	223	63	224	150	540	186	301	200	452	120	185	430	375
	(1,57)	(8,78)	(2,48)	(8,82)	(5,91)	(21,26)	<i>(7,32)</i>	<i>(11,85)</i>	(7,87)	(17,80)	(4,72)	(7,28)	(16,93)	(14,76)
IQORON VP 25	36	253	81	225	180	559	196	302	202	484	128	220	465	400
	(1,42)	(9,96)	(3,19)	(8,86)	(7,09)	(22,01)	<i>(7,72)</i>	(11,89)	(7,95)	(19,06)	(5,04)	(8,66)	(18,31)	(15,75)
IQORON VP 33	45	289	81	256	203	574	188	318	201	523	117	254	490	440
	<i>(1,77)</i>	(11,38)	(3,90)	(20,71)	(7,99)	(22,60)	(7,40)	(12,52)	(7,91)	(20,59)	(4,61)	(10,00)	(19,29)	(17,32)







#### **DIMENSIONS**

	Dimensions in mm (dimensions in inches)													
Model	a <sub>1</sub>	b	<b>C</b> <sub>1</sub>	C <sub>2</sub>	d <sub>1</sub>	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	h <sub>4</sub>	h <sub>5</sub>	h <sub>6</sub>	<b>k</b> <sub>1</sub>	k <sub>2</sub>	t
IQORON VP 19	40	223	63	224	150	540	186	301	200	452	120	185	430	375
	(1,57)	(8,78)	(2,48)	(8,82)	(5,91)	(21,26)	<i>(7,32)</i>	<i>(11,85)</i>	(7,87)	(17,80)	(4,72)	(7,28)	(16,93)	(14,76)
IQORON VP 25	36	253	81	225	180	550	187	302	202	484	128	220	465	400
	(1,42)	(9,96)	(3,19)	(8,86)	(7,09)	(21,65)	(7,36)	(11,89)	(7,95)	(19,06)	(5,04)	(8,66)	(18,31)	(15,75)
IQORON VP 33	45	289	81	256	203	574	188	318	201	523	117	254	490	440
	(1,77)	(11,38)	(3,90)	(20,71)	(7,99)	(22,60)	<i>(7,40)</i>	(12,52)	(7,91)	(20,59)	(4,61)	(10,00)	(19,29)	(17,32)

### Accessories



#### Combination with DualSPIN XT

The IQORON VP single stage air cleaner can be combined with the DualSpin XT pre-separator for heavy dust loads. The air cleaner system is suitable for installation in a vertical and horizontal position.

The combination of the DualSpin XT with the IQORON VP requires scavenging.

The connecting piece between IQORON VP and DualSpin XT is not included in the MANN+HUMMEL scope of delivery.



#### Air connecting parts

Various versions can be found in the current Air Cleaner catalog.

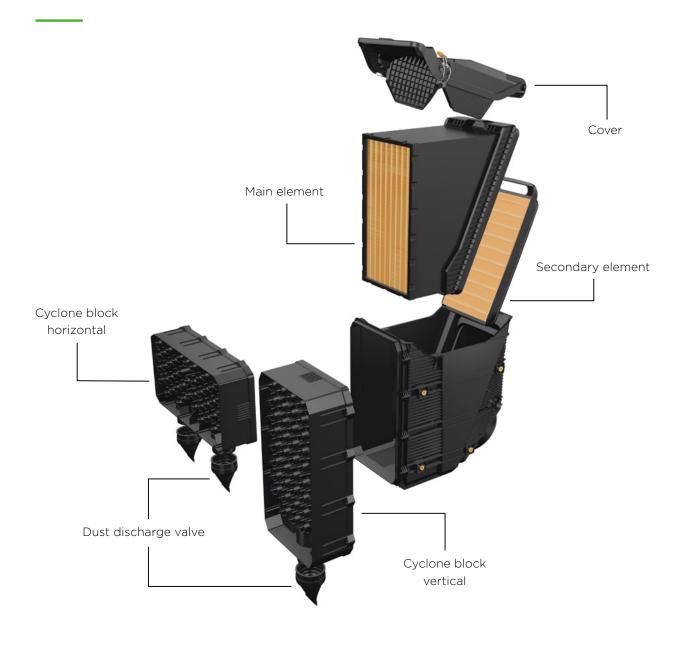


### Service switches - electrical monitoring of the level of accumulated dirt

Various versions can be found in the current Air Cleaner catalog.



## Spare parts



#### **PART NUMBERS**

_		Replacement filter element					
Model	Cyclon	e block	Dust discharge	Cover	Cover seal	Main	Secondary
	vertical	horizontal	valve 1)	Cover	Cover sear	element	element
IQORON VP 19	45 919 47 982	45 919 47 962	39 000 40 291	45 919 17 929	23 355 33 2082)	C 42 003	CF 42 001
IQORON VP 25	45 925 47 982	45 925 47 962	39 000 40 291	45 925 17 929	23 355 33 209	C 45 002	CF 45 001
IQORON VP 33	45 933 47 982	45 933 47 962	39 000 40 291	45 925 17 929	23 355 33 207 2)	C 50 003	CF 50 001

<sup>1)</sup> Extended dust discharge valve available (PN: 39 000 40 991)

<sup>2)</sup> On request





#### MANN+HUMMEL

Schwieberdinger Straße 126 71636 Ludwigsburg

Tel: +49 7141 98-0 Fax: +49 7141 98-2545

kontakt@mann-hummel.com mann-hummel.com

