

MANN+HUMMEL ENTARON XD The flexible all-rounder for your high flow requirements



ENTARON XD: developed for high requirements

The new ENTARON XD series from MANN+HUMMEL sets new standards for two-stage air cleaners. This series combines the best characteristics of the successful and proven EUROPICLON® and NLG air cleaners with a number of innovative new ideas. This makes the ENTARON XD the new benchmark for two-stage tangential air cleaners.



The advantages at a glance:

- Excellent flexibility via variable modular design
- Economic filter system through combination of standard parts
- Corrosion-free and robust housing through use of fibre-glass reinforced plastic
- · Easy handling with tool-free filter element replacement
- Total reliability through robust elements and a new sealing system
- Eco-friendly disposal through metal-free filter element (fully incinerable)
- Easy adaptation to different machines through different connection positions
- Quick first installation on vehicle through screw threads integrated in housing
- Suitable for use in extreme conditions due to especially robust construction and materials

Robust housing

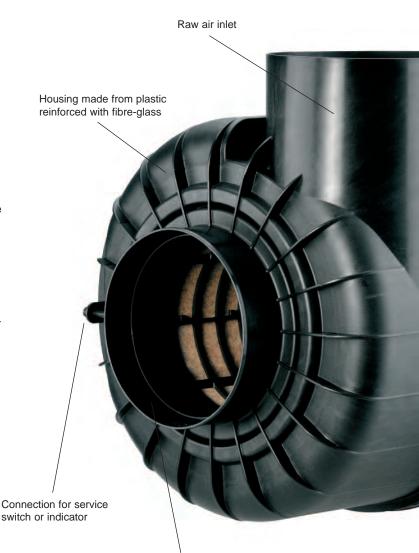
The housing of the new ENTARON XD is reinforced with FEM-designed strengthening ribs and made from plastic reinforced with fibre-glass. This means the filter is able to handle extreme physical conditions and at the same time is resistant to corrosion.

The filter construction consists of three elements with the main housing attached to the connections using a special welding process. This welding ensures a robust and reliable joint and at the same time enables unlimited possible orientations of the connection to the integrated bracket. This achieves an extremely high flexibility and enables adaptation of the filter to almost all installation situations.

The clean air outlet is also reinforced as standard with a metal ring which allows a tightening torque on the hose clamps of up to 15 Nm.

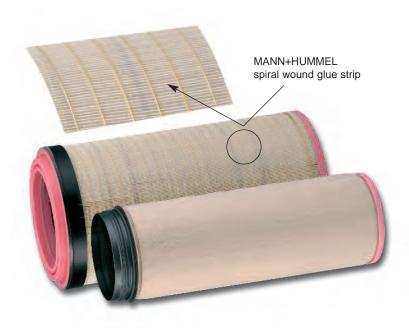
Naturally the standard version also has an integrated connection port for a service switch or indicator.

The high pre-separation efficiency of over 85 % makes the new ENTARON XD ideal for applications with heavy dust loads. This value of 85% sets the standard for its size filter class with comparable competitor products only able to achieve a much lower value. This high pre-separation efficiency also eliminates the need for an additional external pre-separator.



Clean air outlet (reinforced with metal ring as standard)

High performance filter elements



The filter elements of the new ENTARON XD are thoughtfully designed to handle demanding applications:

- A new sealing system ensures reliable sealing between the elements and housing.
- A robust middle tube made from plastic einforces the filter element and therefore protects the machine and the engine.
- · The ENTARON XD uses a filter medium which simultaneously offers dramatically improved separation efficiency and a long service life.
- The MANN+HUMMEL spiral wound glue strip stabilizes the pleat ends and thus ensures that the element can achieve its full performance under all operating conditions. An advantage only available as standard from MANN+HUMMEL.
- The safety element in the ENTARON XD is screwed to the housing to prevent the possibility of unintentional removal and to ensure reliable function of the filter.



Clever details

Color-coded fasteners simplify handling and are easy to understand even when visibility conditions are unfavorable.

The fasteners can also be locked using special snap-in noses so they are no longer in the way when removing or attaching the cover. Another user-friendly and clever detail from MANN+HUMMEL.

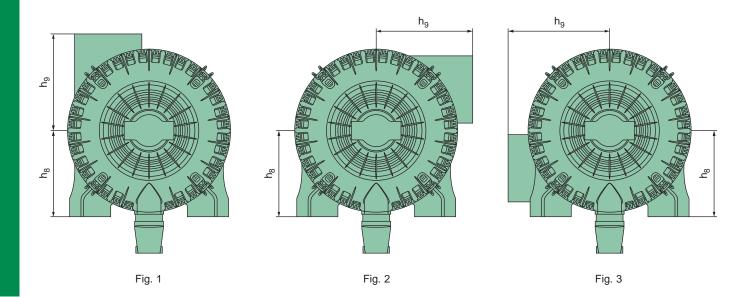


Fasteners (positioned according to customer requirements)

4 through-holes for M10 screw

ENTARON XD

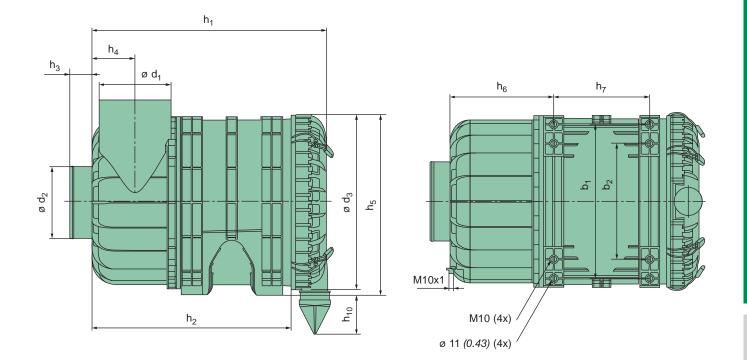
Sizes and part numbers



Size	Flow	Fig.	Part n	umber	Replacement filter element			
	rate [m ³ /min]		without secondary element	with secondary element	MANN-FILTER main element	MANN-FILTER secondary element		
		1	45 722 92 950	45 722 92 910				
ENTARON XD 21	15 - 21	2	45 722 92 951	45 722 92 911	C 25 900	CF 1470		
		3	45 722 92 952	45 722 92 912				
		1	45 920 92 950	45 920 92 910				
ENTARON XD 28	20 - 28	2	45 920 92 951	45 920 92 911	C 28 1300	CF 1750		
		3	45 920 92 952	45 920 92 912				

ENTARON XD

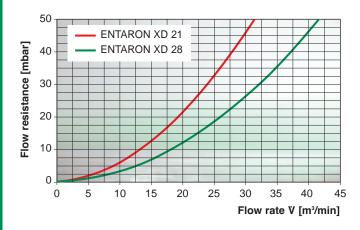
Sizes and part numbers



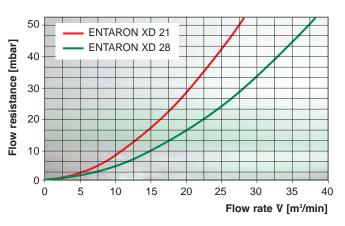
Size	Dimensions in mm [Dimensions in inches]														
	d ₁	d ₂	d ₃	h ₁	h ₂	h ₃	h ₄	h ₅	h ₆	h ₇	h ₈	h ₉	h ₁₀	b ₁	b ₂
ENTARON XD 21	150	150	368	491	426	45	90	375	209	167	193	215	82	320	232
	<i>(</i> 5.91)	<i>(</i> 5.91)	(14.49)	<i>(19.33)</i>	(16.77)	(1.77)	<i>(</i> 3.54)	(14.76)	(8.23)	<i>(</i> 6.57)	<i>(7.60)</i>	(8.46)	<i>(</i> 3.23)	(12.60)	(9.13)
ENTARON XD 28	180	180	397	571	507	45	105	405	238	220	208	245	81	354	266
	<i>(7.09</i>)	<i>(7.09)</i>	(15.63)	(22.48)	(19.96)	(1.77)	<i>(4.13)</i>	(15.94)	<i>(</i> 9.37)	(8.66)	(8.19)	(9.65)	<i>(3.19)</i>	(13.94)	(10.47)

ENTARON XD Characteristics and specifications

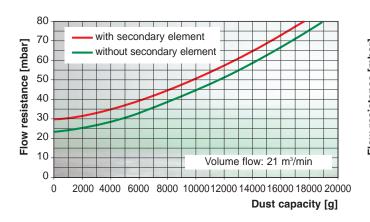
... for flow rates according ISO 5011 without secondary element



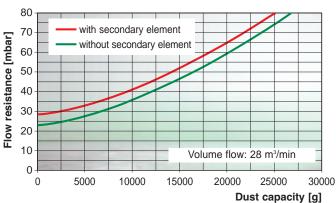
... for flow rates according ISO 5011 with secondary element



... for dust capacity according ISO 5011 Dust capacity ENTARON XD 21



... for dust capacity according ISO 5011 Dust capacity ENTARON XD 28



Further specifications:

Operating temperatures Continuous operation	-30 °C to +90 °C			
·	+110 °C short-term			
Tightening torque for mounting screws	10 Nm			
Tightening torque for hose clamp (on clean side)	max. 15 Nm			
Housing material	PP GF 30			



Accessories

The following accessories are suitable for use with the ENTARON XD.

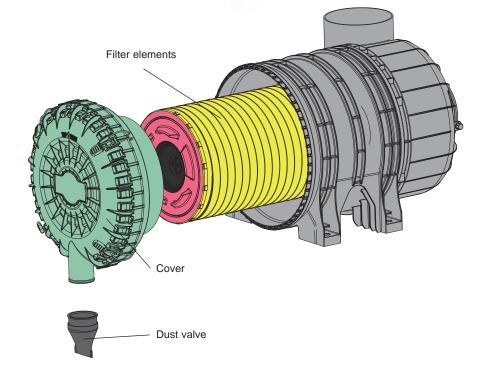
The full range of MANN+HUMMEL accessories is listed in our main catalogue for air cleaners (part no. 19 941 10 101). There you can see our range of service switches and indicators. These indicators inform you of the ideal time to replace the ENTARON XD filter element, therefore saving you money.



Size	Rain cap	Part no. Straight connectors	90° elbow
ENTARON XD 21	39 190 67 910	39 800 27 999	39 800 25 999
ENTARON XD 28	39 220 67 9 <mark>1</mark> 0	39 930 <mark>27 999</mark>	39 930 25 999

Spare parts

The following is a list of suitable spare parts for the ENTARON XD.



1	Size	Part Cover	t no. Dust valve	Replacement MANN-FILTER main element	filter element MANN-FILTER secondary element	
	ENTARON XD 21	45 722 17 909	39 000 40 731	C 25 900	CF 1470	
1	ENTARON XD 28	45 920 17 909	39 000 40 731	C 28 1300	CF 1750	



MANN+HUMMEL Group

The MANN+HUMMEL Group is an international company with its headquarters in Ludwigsburg, Germany. The group employs approx. 11,500 people worldwide at more than 41 locations.

The company develops, produces and sells technically complex components for the automotive and other industries. A key area is high quality filtration products for vehicles, engines and industrial applications. The OEM business with global market leaders and producers of vehicles, machines and installations defines the quality and performance of the group. Filters for the international aftermarket are sold under numerous international brands as well as under the MANN-FILTER brand.

MANN+HUMMEL Industrial Filters

The Industrial Filters Business Unit with its headquarters in Speyer, Germany is specialised in meeting the requirements of off-highway vehicle and engine applications, compressed air and vacuum technology, mechanical engineering and plant construction. For these and other industrial fields MANN+HUMMEL Industrial Filters offers high performance products for the filtration and separation of air, gases and liquids.



MANN+HUMMEL GMBH, Business Unit Industrial Filters 67346 Speyer, Germany, Telephone +49 (62 32) 53-80, Fax +49 (62 32) 53-88 99 E-Mail: if.info@mann-hummel.com, Internet: www.mann-hummel.com