

Breather filters for hydraulic filtration



- ✓ Easy to service
- ✓ Robust housing
- ✓ Filtration performance over 99.5 %

MANN+HUMMEL Breather filters for hydraulic filtration

Description

Our **highly effective hydraulic oil filter portfolio** remove harmful particles from hydraulic oil thanks to their **strong separation performance** – with the aim of reducing machine and equipment wear and **downtime**, and also extending their **service life**. In this way, hydraulic oil components such as pumps, valves and cylinders are effectively protected over the long term – for high-performance and clean hydraulic oil systems.

Our two-way ventilation air cleaners ensure that during the pressure compensation of hydraulic tanks, liquid tanks and gearboxes there is no contamination from incoming particles. With a filtration performance of over 99.5 % the purity class of the fluid can be reliably maintained

Advantages

- Single-stage air cleaners for low flow resistance
- Two types available (with or without pressure control valve)
- Volume flow rates possible up to 15 m³/min
- Dry air cleaner with star-pleated element
- Easy to service
- Robust housing

As an option, metal-free air cleaners of the Picolino range can be used



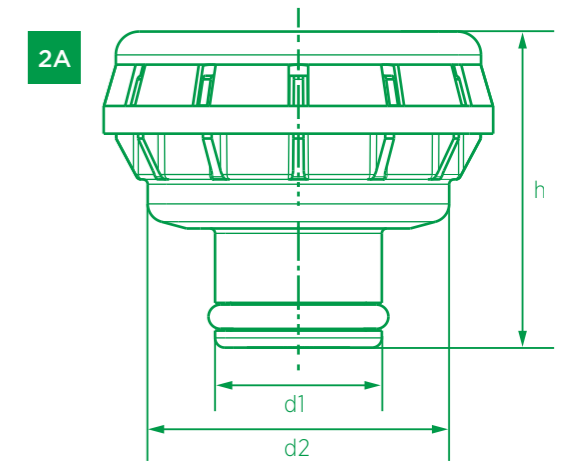
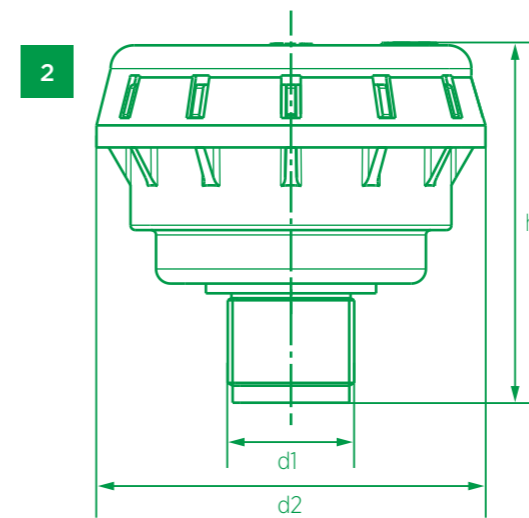
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Technical specification

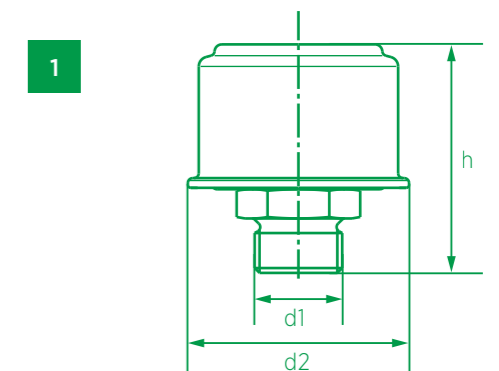
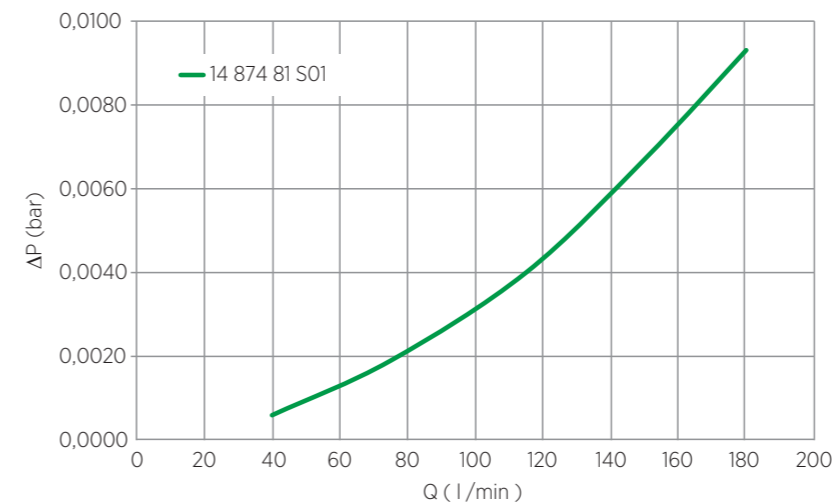
Volume flow range	0.15 m ³ /min to 15 m ³ /min
Operating temperature	Continuous: -30 °C to +100 °C Short term: +120 °C
Hydraulic fluid compatibility	Hydraulic fluids (ISO2943): Mineral oils (acc. to ISO 6743/4 in combination with ISO 11158), UTTO and STOU-Oils (mineral oil based), synthetic esters (acc. DIN ISO 15380) and other hydraulic oils on request
Housing material	Poly propylene, PA glass fiber reinforced, Steel
Filter efficiency	2 µm @ 99.5 % (following ISO 5011)
Double check valve	Optional 0.35±0.15 bar (only for part number 45 003 62 901)
Pressure drop @ nominal flow rate	≤ 16 mbar for air In
Filter element	Star pleated element Metal free element for PICOLINO series
Filter media material	Cellulose
Sealing material	NBR for external sealing / Foam rubber for internal sealing
Dip stick integration	Optional (Only for PN : 45 003 65 900, 45 003 62 901 & 45 003 62 902)

Part number	Nominal flow rate (m ³ /min)	Dimensions OD X Length (mm)	Connections to the tank	Housing material
14 874 81 S01 (Figure - 1)	0.15	d2 = Ø45.6 h = 47	d1 = M18 x 1.5 Male thread	Steel
45 003 65 900 (Figure - 2A)	-	d2 = Ø80 h = 65	d1 = Ø35 mm O-ring interface assembly with metal clamp	Poly propylene
45 003 62 902 (Figure - 2)	0.17	d2 = Ø80 h = 73.5	d1 = R 3/4 Male thread	PA Glass fiber reinforced
45 003 62 901 (Figure - 2)	0.17	d2 = Ø80 h = 73.5	d1 = R 3/4 Male thread	PA Glass fiber reinforced

- Entire part to be changed during service / Non- replaceable filter element
- Double check valve with opening pressure of 0.35±0.15 bar (only for part number 45 003 62 901)
- Dip stick integration possible as per the request for PN: 45 003 65 900, 45 003 62 901 & 45 003 62 902, min. Qty requirement is applicable



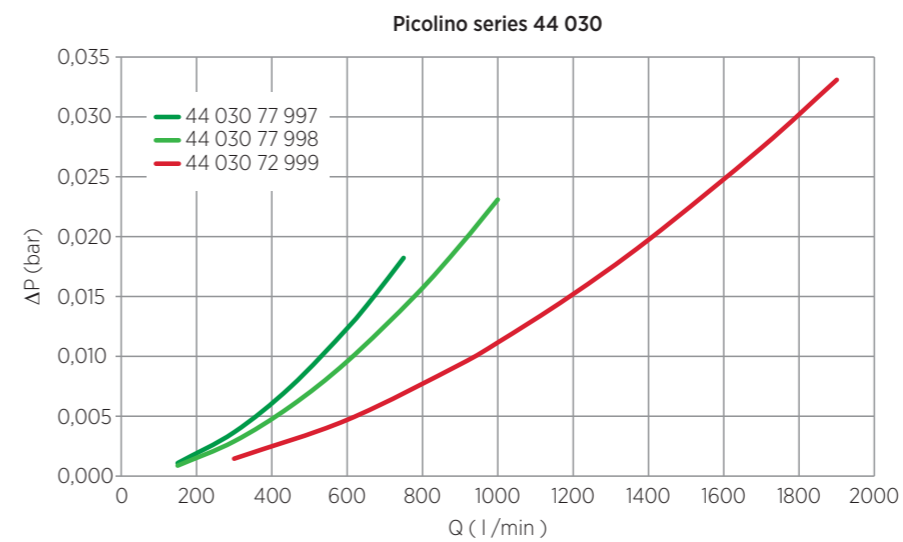
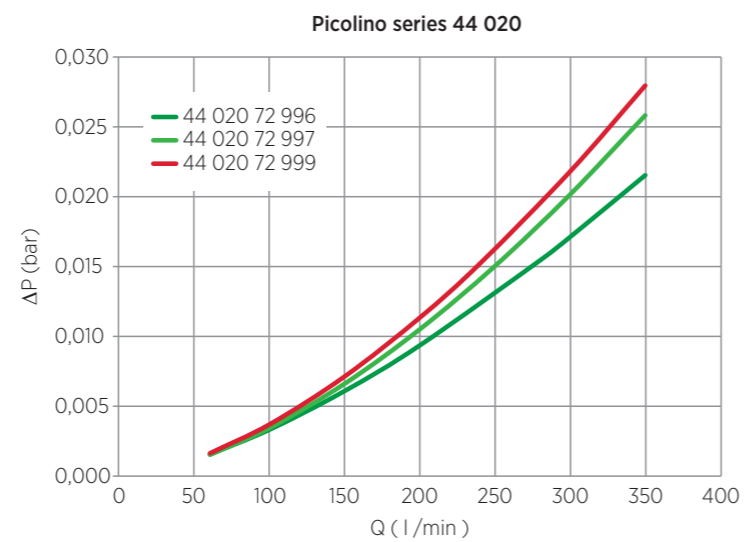
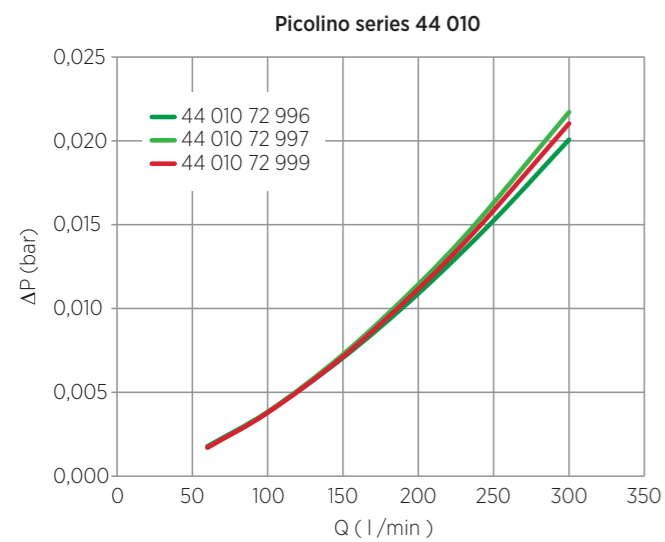
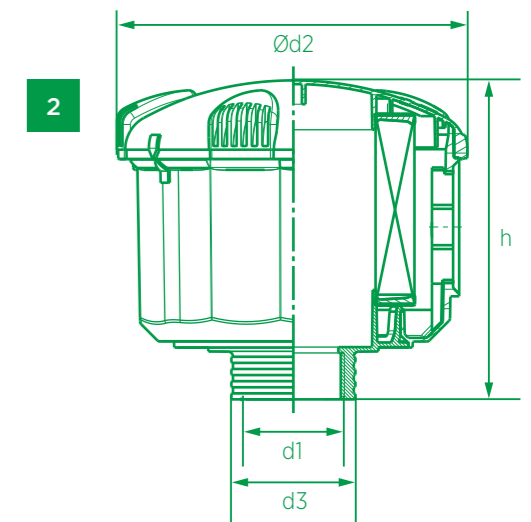
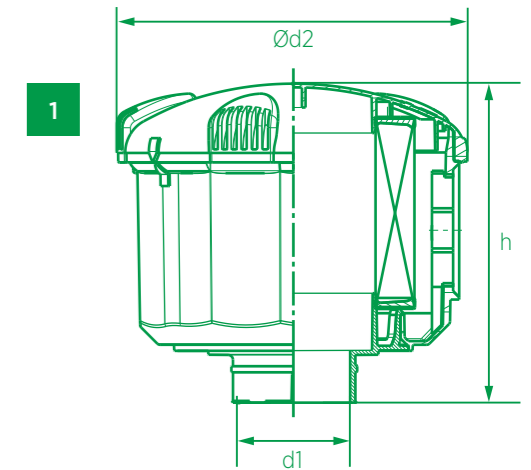
14 874 81 S01 (Figure - 1)
Flow VS Initial pressure drop



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Part number Picolino series	Nominal flow rate (m ³ /min)	Dimensions OD X Length (mm)	Connections to the tank	Service element PN / Sales designation
44 010 72 996 (Figure -2)	0.25	Ød2 = 58 H1 = 61.3	d1 = G1/2 Female thread / d3 = Ø30 interface assembly with metal clamp	45 010 56 124 C410
44 010 72 997 (Figure -2)	0.2	Ød2 = 58 H = 61.2	d1 = G 3/8 Female thread / d3 = Ø25 interface assembly with metal clamp	45 010 56 124 C410
44 010 72 999 (Figure -2)	0.2	Ød2 = 58 H = 60.8	d3 = M18 x 1.5 - Male thread	45 010 56 124 C410
44 020 72 996 (Figure -2)	0.25	Ød2 = 68 H = 62.4	d1 = G1/2 Female thread / d3 = Ø30 interface assembly with metal clamp	45 020 56 124 C420
44 020 72 997 (Figure -2)	0.25	Ød2 = 68 H = 62.4	d1 = G 3/8 Female thread / d3 = Ø25 interface assembly with metal clamp	45 020 56 124 C420
44 020 72 999 (Figure -2)	0.2	Ød2 = 68 H = 61.9	d1 = M18 x 1.5 - male thread	45 020 56 124 C420
44 030 72 999 (Figure -2)	0.8	Ød2 = 101.8 H = 93.9	d1 = G 3/4 Female thread	45 030 56 124 C630
44 030 77 997 (Figure -1)	1.2	Ød2 = 101.8 H = 115.4	d1 = Ø39.3 interface assembly with metal clamp	45 030 56 124 C630
44 030 77 998 (Figure -1)	1.2	Ød2 = 101.8 H = 115.4	d1 = Ø29.5 interface assembly with metal clamp	45 030 56 124 C630

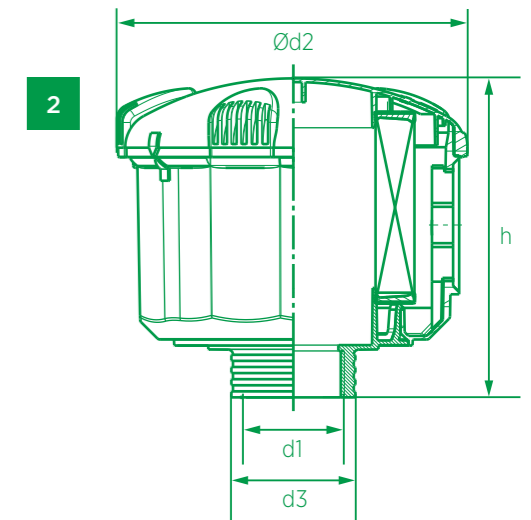
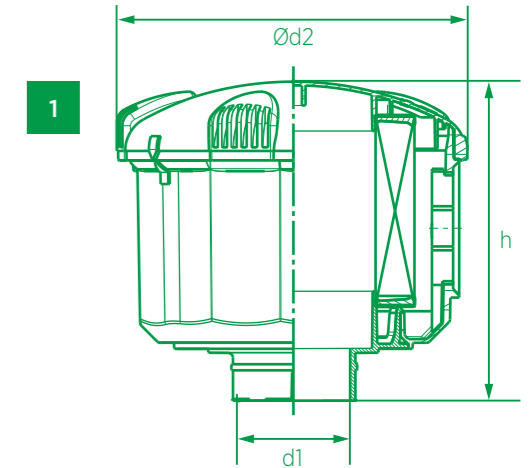
- Replaceable filter element
- Housing material for all Picolino series part number: PA glass fiber reinforced



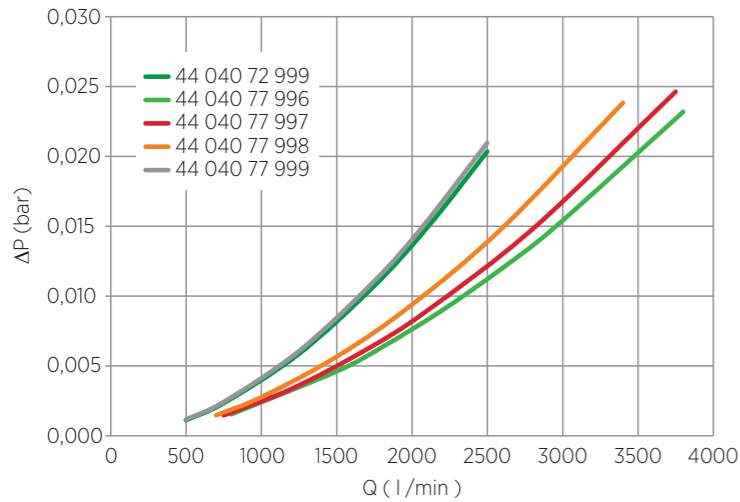
MANN+HUMMEL Breather filters for hydraulic filtration

Part number Picolino series	Nominal flow rate (m ³ /min)	Dimensions OD X Length (mm)	Connections to the tank	Service element PN / Sales designation
44 040 72 999 (Figure -2)	-	Ød2 = 145.3 h = 131.2	d1 = G 1 1/4 Female thread / d3 = Ø51 interface assembly with metal clamp	45 040 56 124 C1140
44 040 77 996 (Figure -1)	3.0	Ød2 = 145.3 h = 136.1	d1 = Ø70 interface assembly with metal clamp	45 040 56 124 C1140
44 040 77 997 (Figure -1)	2.8	Ød2 = 145.3 h = 136.1	d1 = Ø59 interface assembly with metal clamp	45 040 56 124 C1140
44 040 77 998 (Figure -1)	2.6	Ød2 = 145.3 h = 136.1	d1 = Ø51.1 interface assembly with metal clamp	45 040 56 124 C1140
44 040 77 999 (Figure -1)	2.1	Ød2 = 145.3 h = 136.1	d1 = Ø39.3 interface assembly with metal clamp	45 040 56 124 C1140
44 050 72 999 (Figure -2)	2.3	Ød2 = 180.9 h = 187.8	d1 = G 1 1/4 Female thread / d3 = Ø51 interface assembly with metal clamp	45 050 56 124 C1250
44 050 77 996 (Figure -1)	3.5	Ød2 = 180.9 h = 192.7	d1 = Ø70 interface assembly with metal clamp	45 050 56 124 C1250
44 050 77 997 (Figure -1)	3.4	Ød2 = 180.9 h = 192.7	d1 = Ø59 interface assembly with metal clamp	45 050 56 124 C1250
44 050 77 998 (Figure -1)	3.1	Ød2 = 180.9 h = 192.7	d1 = Ø51.1 interface assembly with metal clamp	45 050 56 124 C1250
44 050 77 999 (Figure -1)	2.3	Ød2 = 180.9 h = 192.7	d1 = Ø39.3 interface assembly with metal clamp	45 050 56 124 C1250

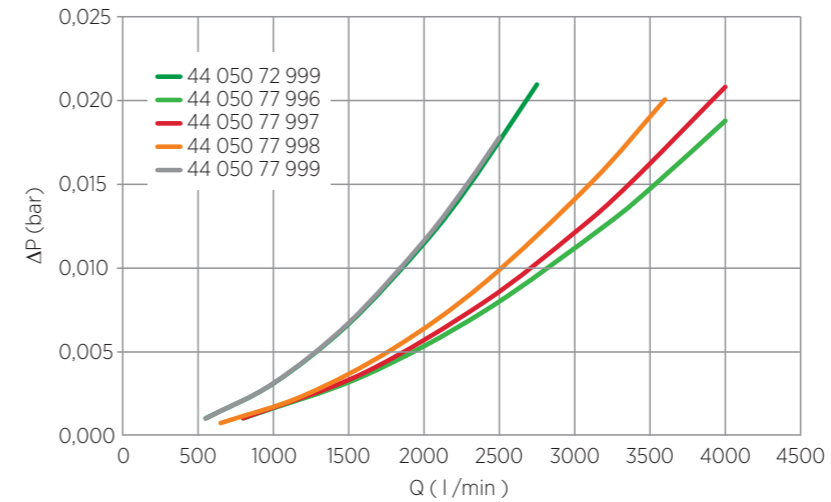
- Replaceable filter element
- Housing material for all Picolino series part number: PA glass fiber reinforced



Picolino series 44 040



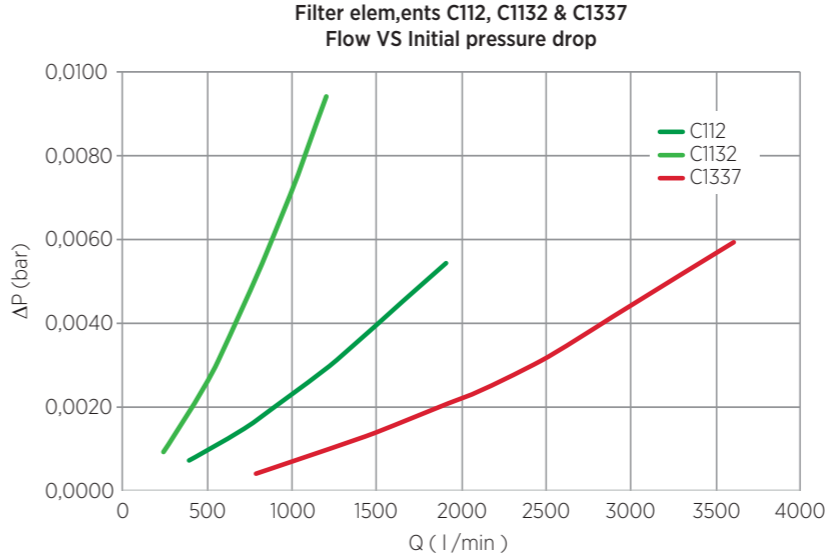
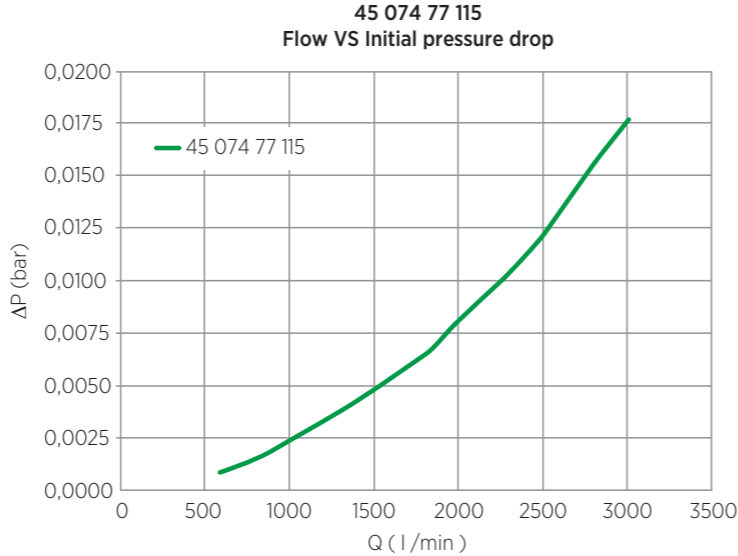
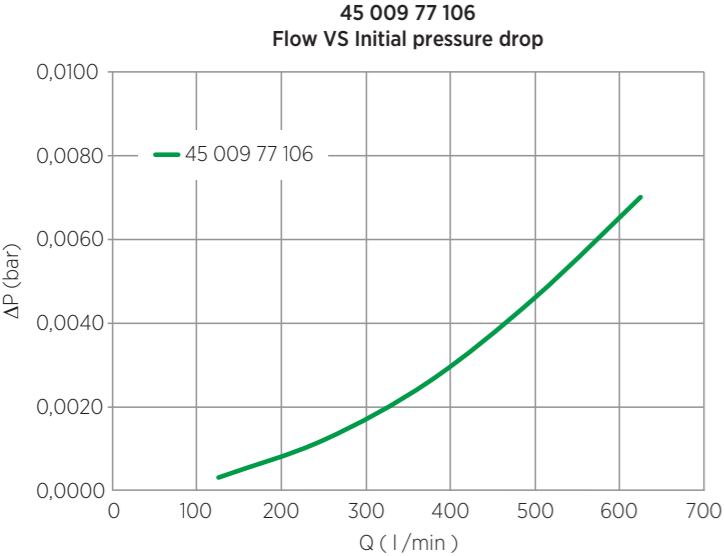
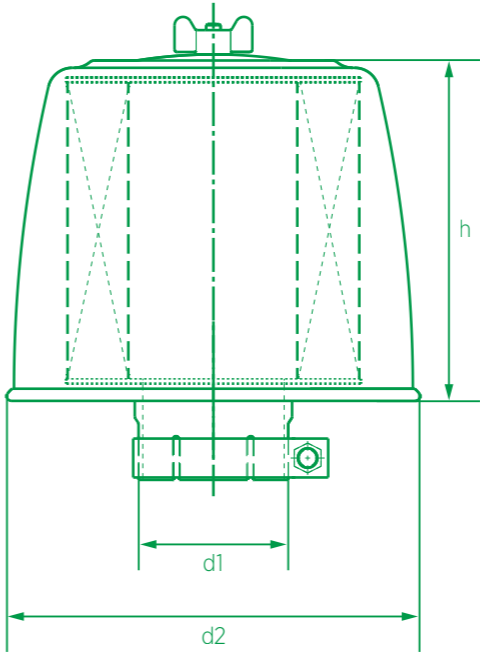
Picolino series 44 050



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Part number Metal filter	Nominal flow rate (m ³ /min)	Dimensions OD X Length (mm)	Connections to the tank	Service element PN / Sales designation	Housing material
45 009 77 106	0.5	d2 = Ø98 h = 110	d1 = Ø20 Interface assembly using clamp	13 091 69 S01 C75/4	Steel
45 021 77 125	2.0	d2 = Ø132 h = 120	d1 = Ø40 Interface assembly using clamp	45 021 52 104 C112	Steel
45 032 77 105	3.5	d2 = Ø132 h = 152	d1 = Ø52 Interface assembly using clamp	45 032 52 106 C1132	Steel
45 037 77 015	4.5	d2 = Ø170 h = 175	d1 = Ø60 Interface assembly using clamp	11 895 86 S01 C1337	Steel
45 074 77 115	8.0	d2 = Ø208 h = 185	d1 = Ø80 Interface assembly using clamp	13 057 54 S01 C1574	Steel
45 138 77 126	15.0	d2 = Ø283 h = 200	d1 = Ø100 Interface assembly using clamp	45 138 54 115 C21 138 / 1	Steel

■ Replaceable filter element





MANN+HUMMEL Contact

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Open the website for more information about our hydraulic oil filter portfolio.



Watch the video of our hydraulic oil filter portfolio.