

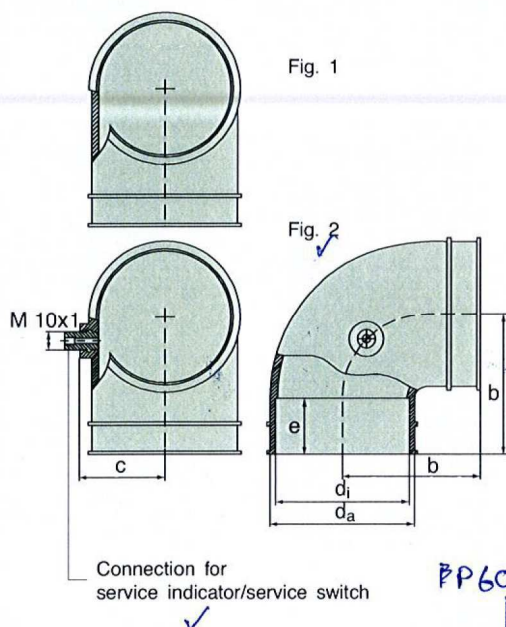
Air connecting parts

Elbow pipes



90° elbows

Operating temperature:
-40 °C to +100 °C



Part No.	Fig.	Dimensions in mm (Dimensions in inches)					Connection for
		b	c	d _i	d _a	e	
39 100 25 999	1	57	—	50	55	25	—
39 100 25 979	2	(2.24)	33 (1.30)	(1.97)	(2.17)	(0.98)	M 10x1
39 200 25 999	1	62	—	60	65	25	—
39 200 25 979	2	(2.44)	38 (1.50)	(2.36)	(2.56)	(0.98)	M 10x1
39 300 25 999	1	72	—	70	75	28	—
39 300 25 979	2	(2.83)	43 (1.69)	(2.76)	(2.95)	(1.10)	M 10x1
39 400 25 999	1	77	—	80	85	30	—
39 400 25 979	2	(3.03)	48 (1.89)	(3.15)	(3.35)	(1.18)	M 10x1
39 215 25 999	1	77	—	89	94	25	—
39 215 25 979	2	(3.03)	—	(3.5)	(3.7)	(0.99)	—
39 500 25 999	1	92	—	100	105	35	—
39 500 25 979	2	(3.62)	58 (2.28)	(3.94)	(4.13)	(1.38)	M 10x1
39 600 25 999	1	89	—	110	119	27	—
39 600 25 979	2	(3.50)	63 (2.48)	(4.33)	(4.69)	(1.06)	M 10x1
39 700 25 999	1	98.5	—	130	135	27	—
39 700 25 979	2	(3.88)	75 (2.95)	(5.12)	(5.32)	(1.06)	M 10x1
39 800 25 999	1	108.5	—	150	155	27	—
39 800 25 979	2	(4.27)	83 (3.27)	(5.91)	(6.10)	(1.06)	M 10x1
39 930 25 999	1	170	—	180	196	30	—
39 930 25 979	2	(6.69)	98.5 (3.88)	(7.08)	(7.71)	(1.18)	M 10x1

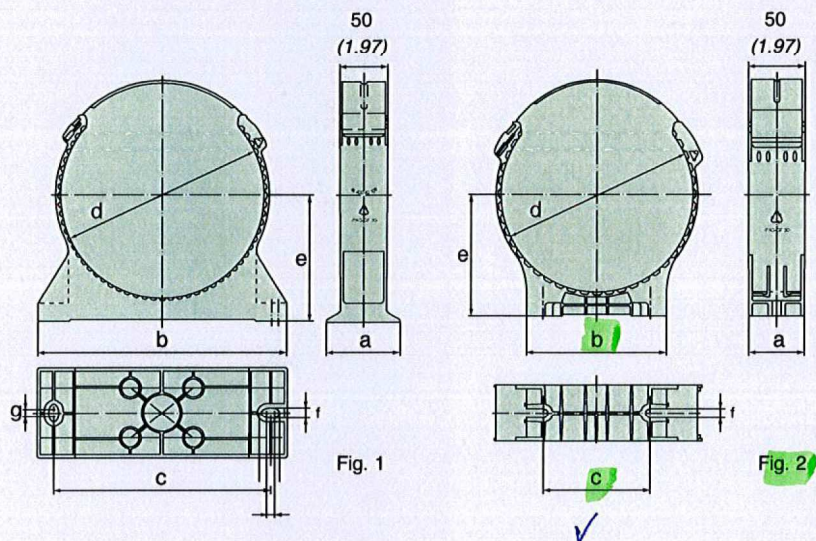
PP600
EP100 *

EUROPICLON

Brackets

The brackets are especially designed for the external surface of the Europiclone housing and allow vibration-free mounting of the air cleaner.

From size 700 it is necessary to use two brackets.



Part No.	Suitable for Europiclone	Fig.	Dimensions in mm (<i>Dimensions in inches</i>)						
			a	b	c	d	e	f	g
39 050 40 959	45 05x 92 ...	1	40 (1.57)	137 (5.39)	116 (4.57)	122 (4.80)	85.7 (3.37)	9 (0.35)	-
39 100 40 999	45 100 92 ...	1	60 (2.36)	205 (8.07)	175 (6.89)	156 (6.14)	105 (4.13)	8.5 (0.33)	15.5 (0.61)
39 200 40 999	45 200 92 ...	1	80 (3.15)	220 (8.66)	190 (7.48)	171 (6.73)	110 (4.33)	8.5 (0.33)	15.5 (0.61)
39 300 40 999	45 300 92 ...	1	80 (3.15)	250 (9.84)	220 (8.66)	201 (7.91)	125 (4.92)	8.5 (0.33)	15.5 (0.61)
39 400 40 999	45 400 92 ...	1	80 (3.15)	270 (10.63)	240 (9.45)	221 (8.70)	135 (5.32)	8.5 (0.33)	15.5 (0.61)
39 500 40 999	45 500 92 ...	1	80 (3.15)	310 (12.20)	280 (11.02)	262 (10.32)	155 (6.10)	8.5 (0.33)	15.5 (0.61)
39 600 40 999	45 600 92 ...	1	80 (3.15)	345 (13.58)	315 (12.40)	296 (11.65)	173 (6.81)	8.5 (0.33)	15.5 (0.61)
39 700 40 999	45 700 92 ...	1	80 (3.15)	385 (15.16)	355 (13.98)	326 (12.83)	206 (8.11)	8.5 (0.33)	7.0 (0.28)
39 800 40 999	45 800 92 ...	1	80 (3.15)	452 (17.80)	422 (16.61)	391 (15.39)	220 (8.66)	8.5 (0.33)	7.0 (0.28)
39 100 40 989	45 100 92 ...	2	50 (1.97)	110 (4.33)	80 (3.15)	156 (6.14)	100 (3.94)	8.5 (0.33)	-
39 200 40 989	45 200 92 ...	2	50 (1.97)	125 (4.92)	95 (3.74)	171 (6.73)	106 (4.17)	8.5 (0.33)	-
39 300 40 989	45 300 92 ...	2	50 (1.97)	140 (5.51)	110 (4.33)	201 (7.91)	121 (4.76)	8.5 (0.33)	-
39 400 40 989	45 400 92 ...	2	50 (1.97)	157 (6.18)	127 (5.00)	221 (8.70)	132 (5.20)	8.5 (0.33)	-
39 500 40 989	45 500 92 ...	2	50 (1.97)	182 (7.17)	152 (5.98)	262 (10.32)	153 (6.02)	8.5 (0.33)	-
39 600 40 989	45 600 92 ...	2	50 (1.97)	182 (7.17)	152 (5.98)	296 (11.65)	173 (6.81)	8.5 (0.33)	-
39 700 40 989	45 700 92 ...	2	50 (1.97)	233 (9.17)	203 (7.99)	326 (12.83)	206 (8.11)	8.5 (0.33)	-
39 800 40 989	45 800 92 ...	2	50 (1.97)	233 (9.17)	203 (7.99)	391 (15.39)	221 (8.70)	8.5 (0.33)	-

Service switches

Electrical monitoring of the level of accumulated dirt

The electrical service switch monitors the level of accumulated dirt in the air cleaner and sends an electrical signal when maintenance is required.

This enables constant supervision of the state of the air cleaner and maintenance only takes place when it is really necessary. This removes potential damage to equipment which may

occur through frequent and careless maintenance actions.

Models

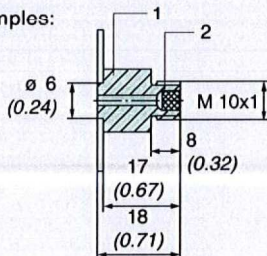
MANN+HUMMEL service switches are available with a number of different connection threads and plug connectors versions (Adapter from M10x1 to 1/8"-27 NPT).



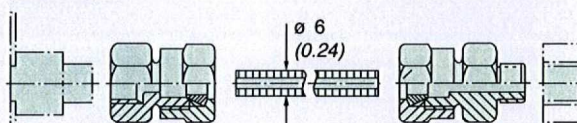
Accessories for external mounting

Installation examples:

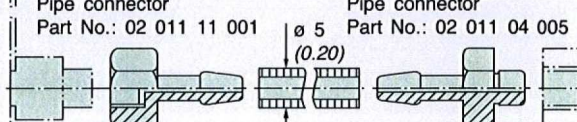
Connection on air cleaner (generally existing)



Parts for pipe connection



Parts for hose connection



Pipe connector Part No.: 02 011 11 001

Pipe connector Part No.: 02 011 04 005

Hose connector Part No.: 39 000 47 211

Hose connector Part No.: 39 000 47 221

For retro-fitting in the clean air pipe

- 1 Connection nipple Part No.: 21 010 15 121
- 2 Felt disc Part No.: 23 005 31 171

Ensure that the felt disc is fitted to the nipple before installing.

Specifications

- Material: polyamide 6 GF 30
- Permissible operating temperature: -30 °C to + 120 °C
- Switching pressure (negative pressure): 35 mbar to 80 mbar (3.5 kPa to 8.0 kPa)
- Max. switching capacity: 6W/24V DC (ohmniq load, $U_{max} = 24V$, $I_{max} = 0.25 A$)

Technical instructions

Thanks to the completely insulated and fully enclosed contact insert, the switch is insensitive to dust or humidity. The system is not mechanical but pressure-dependent so that possible tolerances of

the components do not affect the accuracy of the switch. The heart of the system is a kick-over spring that makes readjustment of the switching point unnecessary. The spring contacts are not

affected by contact erosion. As a result of the hysteresis between the points for switching and switching back, contact fluttering is reduced to a minimum. The service switch should not be

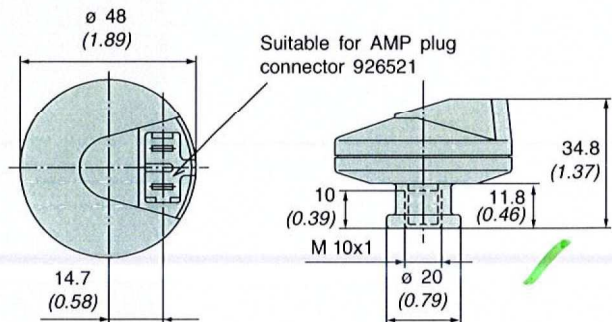
fitted in a hanging position so as to prevent ingress of any condensed water into the air pipe.

Service switches

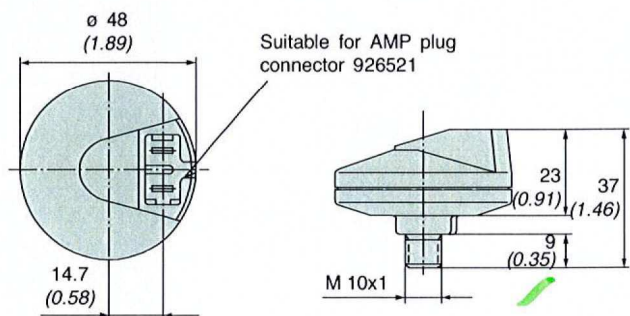
with connection for flat plug (Protection class: IP21)



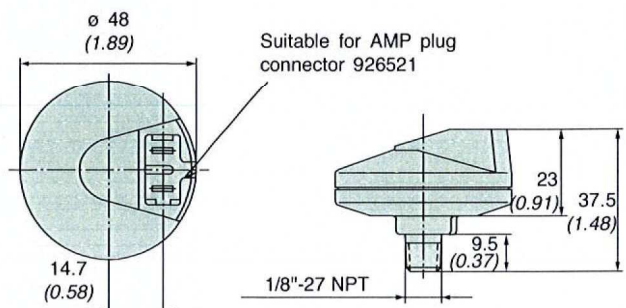
Service switch internal thread M 10x1		
Part No.	switches at gauge pressure [mbar]	[kPa]
39 035 70 902	35±3	3.5±0.3
39 050 70 902	50±3	5.0±0.3
39 055 70 902	55±3	5.5±0.3
39 060 70 902	60±3	6.0±0.3
39 065 70 902	65±3	6.5±0.3
39 070 70 902	70±4	7.0±0.4
39 080 70 902	80±4	8.0±0.4



Service switch external thread M 10x1		
Part No.	switches at gauge pressure [mbar]	[kPa]
39 035 70 952	35±3	3.5±0.3
39 050 70 952	50±3	5.0±0.3
39 055 70 952	55±3	5.5±0.3
39 060 70 952	60±3	6.0±0.3
39 065 70 952	65±3	6.5±0.3
39 070 70 952	70±4	7.0±0.4
39 080 70 952	80±4	8.0±0.4



Service switch external thread 1/8"-27 NPT		
Part No.	switches at gauge pressure [mbar]	[kPa]
39 035 70 962	35±3	3.5±0.3
39 050 70 962	50±3	5.0±0.3
39 055 70 962	55±3	5.5±0.3
39 060 70 962	60±3	6.0±0.3
39 065 70 962	65±3	6.5±0.3
39 080 70 962	80±4	8.0±0.4

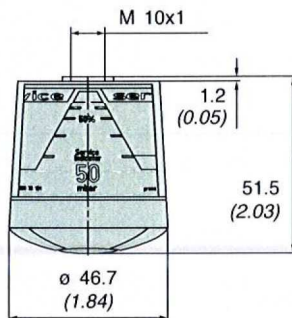


Service indicators

Level of dirt accumulation readable at any time

The MANN+HUMMEL service indicator allows you to read the current level of dirt accumulation in the air cleaner, even when the engine is not in operation. The yellow indicating piston catches on a scale of 12 snap-in positions. In the triangular display, the remaining service life of the filter is displayed, in relation to the increased clogging of the filter element.

The service indicator is insensitive to the intake air pulsations of the engine, excluding the possibility of a false indication. Maintenance is necessary when the yellow piston reaches the red zone. After maintenance has been carried out, the indicator level is readjusted to "zero" by pressing the reset button.



Part No.	snaps into place at gauge pressure	
	[mbar]	[kPa]
39 035 70 911	35±3	3.5±0.3
39 050 70 911	50±4	5.0±0.4
39 050 70 931*	50±4	5.0±0.4
39 060 70 911	60±4	6.0±0.4
39 065 70 911	65±5	6.5±0.5
39 080 70 911	80±5	8.0±0.5
39 080 70 931*	80±5	8.0±0.5

Specifications

- Material: PC
- Permissible operating temperature: -30 °C to +100 °C
- Switching pressure (negative pressure): 35 mbar to 80 mbar (3.5 kPa to 8 kPa)
- * readable in vertical position

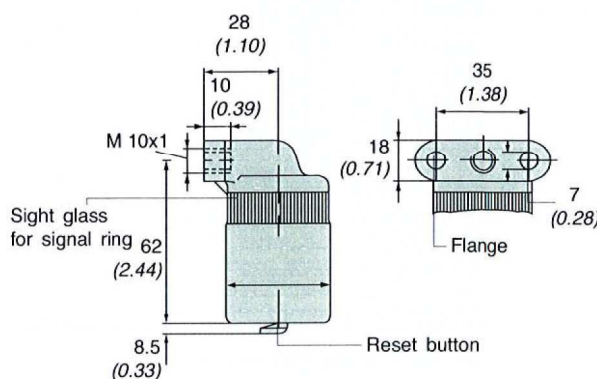
Service indicators with 90° flange

The 90° connecting flange allows nearly any fitting position. The red indicating piston snaps into position upon reaching the maximum value possible, signalling that maintenance is needed. After maintenance has been carried out, the indicating piston is readjusted to the start position by pressing the reset button.

Part No.	snaps into place at gauge pressure	
	[mbar]	[kPa]
39 000 62 924	35±3	3.5±0.3
39 000 62 925	50±6	5.0±0.6
39 000 62 926	65±7	6.5±0.7
39 000 62 927	80±8	8.0±0.8

Specifications

- Material: PA
- Permissible operating temperature: -40 °C to +100 °C
- Switching pressure (negative pressure): 35 mbar to 80 mbar (3.5 kPa to 8 kPa)



EUROPICLON Brackets

The brackets are especially designed for the external surface of the Europiclone housing and allow vibration-free mounting of the air cleaner.

From size 700 it is necessary to use two brackets.

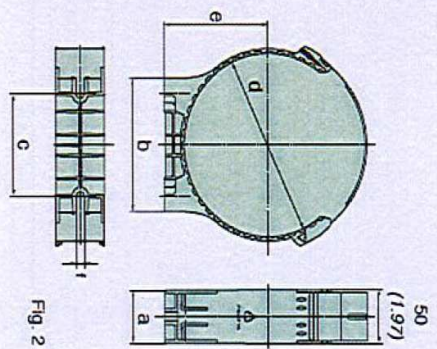
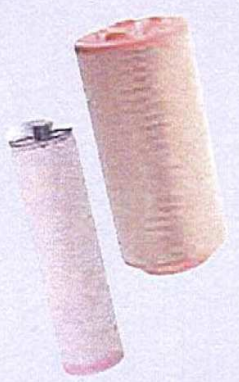
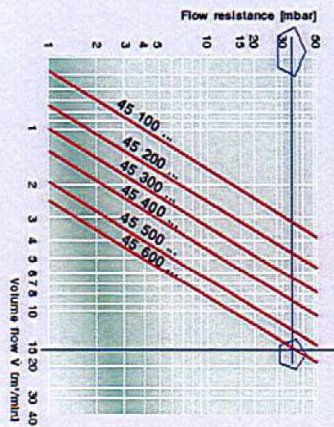


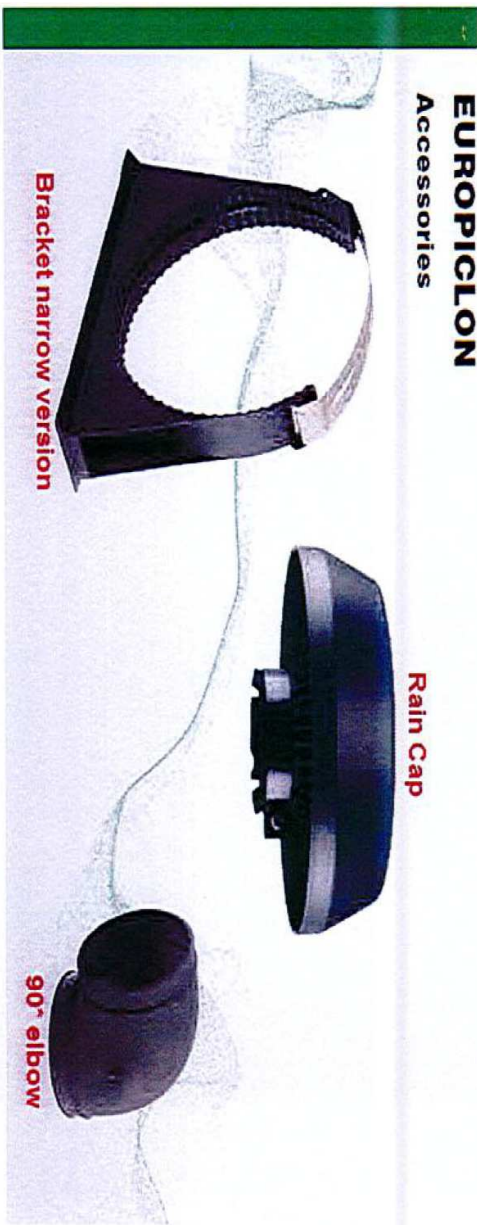
Fig. 2

EUROPICLON 100 to 600 Flow characteristics with secondary element

... for flow rates as per ISO 5011



EUROPICLON Accessories



Filter size	Rain cap design A* (p. 103)	Straight pipe (p. 104)		90° elbow (p. 103)	
		without connection	with connection	without connection	with connection
Europiclone 50	39 014 87 910	-	39 100 27 970	-	39 100 25 970
Europiclone 100	39 020 87 910	39 200 27 990	39 200 27 970	39 200 25 990	39 200 25 970
Europiclone 200	39 028 87 910	39 300 27 990	39 300 27 970	39 300 25 990	39 300 25 970
Europiclone 300	39 040 87 910	39 400 27 990	39 400 27 970	39 400 25 990	39 400 25 970
Europiclone 400	39 056 87 910	39 500 27 990	39 500 27 970	39 500 25 990	39 500 25 970
Europiclone 500	39 080 87 910	39 600 27 990	39 600 27 970	39 600 25 990	39 600 25 970
Europiclone 600	39 100 87 910	39 700 27 990	39 700 27 970	39 700 25 990	39 700 25 970
Europiclone 700**	39 180 87 910	39 800 27 990	39 800 27 970	39 800 25 990	39 800 25 970
Europiclone 800**	39 180 87 910	39 800 27 990	39 800 27 970	39 800 25 990	39 800 25 970

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