

0-6092 psi
0-420 bar



General

The PVD Clogging Indicators for Process Filters are designed to indicate visually and/or electronically when the filter elements must be cleaned or changed. The use of clogging indicators guarantees both the operational safety of the system and the efficient utilization of the filter elements.

Seals

V (=Viton) or T (=FEP encapsulated)

Construction

Differential pressure indicators are used on all process filters. They react to the pressure differential between the filter inlet and filter outlet, which rises as the level of contamination in the element increases.

Simplest fitting of the differential pressure indicator:

G1/2" cavity
(acc. Schroeder's works standard HN 28-22)

The differential pressure indicator type V01 is piped up separately.

For duplex filter housings, the differential pressure indicators are connected using an adapter block.

Special Indicators

Electrical ATEX indicators:

Optional: electrical indicator for process filters for use in potentially explosive atmospheres subject to the ATEX equipment directive 94/9/EC and the ATEX operator directive 1999/92/EC.

Torque Values - Differential Pressure Indicators

Note: The clogging indicators must only be tightened or adjusted on the spanner flats.

- PVD..B.1: SW27
 - PVD..C.0: SW30
 - PVD..D.0/L...: SW30
- max. torque value: 100 Nm

Clogging Indicators According To Filter Type

Type	Filter Types				
	PRFL PRFLD	PRFS PRFSD	PFM PFH	EDF	PMRF PMRFD
PVD ..B	•	•	•	•	•
PVD ..C	•	•	•	•	•
PVD ..D	•	•	•	•	•
V01 ..VZ	•	•	On Request		•
Differential Pressure Gauge	•	•	On Request		•

Clogging Indicators for Process Filters

PVD



Type Of Indication: Visual, red/green band
Automatic reset

Weight: 110 g

Cracking Pressure Or Indication Range:
1 bar ± 10% 3 bar ± 10%
1.5 bar ± 10% 5 bar ± 10%
2 bar ± 10% 8 bar ± 10%

Perm. Operating Pressure: 6092 psi (420 bar)

Perm. Temperature Range: -20°C to 100°C

Thread: G 1/2

Max. Torque Value: 100 Nm

Switching Type: -

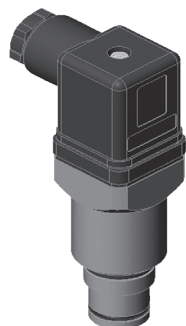
Max. Switching Voltage: -

Electrical Connection: -

Max. Switching Voltage At Resistive Load: -

Switching Capacity: -

Protective Class Acc. DIN 40050: -



Type Of Indication: Electrical switch

Weight: 220 g

Cracking Pressure Or Indication Range:
1 bar ± 10% 3 bar ± 10%
1.5 bar ± 10% 5 bar ± 10%
2 bar ± 10% 8 bar ± 10%

Perm. Operating Pressure: 6092 psi (420 bar)

Perm. Temperature Range: -20°C to 100°C

Thread: G 1/2

Max. Torque Value: 100 Nm

Switching Type: N/C or N/O (change-over contacts)

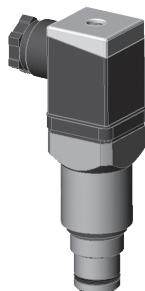
Max. Switching Voltage: 230 V

Electrical Connection: Male Connection M20x1.5 acc. EN 50262
Female Connector acc. DIN 43650

Max. Switching Voltage At Resistive Load: 60 W =
100 VA ~

Switching Capacity: Ohmic 3 A at 24 V =
Ohmic 0.03 to 5 A at max. 230 V ~

Protective Class Acc. DIN 40050: IP 65 (only if the connector is wired and fitted correctly)



Type Of Indication: Visual indicator and electrical switch

Weight: 250 g

Cracking Pressure Or Indication Range:
1 bar ± 10% 3 bar ± 10%
1.5 bar ± 10% 5 bar ± 10%
2 bar ± 10% 8 bar ± 10%

Perm. Operating Pressure: 6092 psi (420 bar)

Perm. Temperature Range: -20°C to 100°C

Thread: G 1/2

Max. Torque Value: 100 Nm

Switching Type: N/C or N/O (change-over contacts)

Max. Switching Voltage: 24, 48, 110, 230 V depending on the light insert

Electrical Connection: Male Connection M20x1.5 acc. EN 50262
Female Connector acc. DIN 43650

Max. Switching Voltage At Resistive Load: 60 W =
100 VA ~

Switching Capacity: Ohmic 3 A at 24 V =
Ohmic 0.03 to 5 A at max. 230 V ~

Protective Class Acc. DIN 40050: IP 65 (only if the connector is wired and fitted correctly)

PVD x B.x

RF3 —
RF3-8

RF5

RF7

RF10

RF4-1

RF4-2

RF4-3

RF12

PVD x C.x

RF14

BTU

ATF-1

ATF-2

ATF-2.5

ATF-3

ATF-3.5

ATF-4

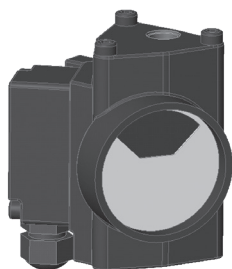
PLF1

PVD x
D.x / -L

PVD

PVD

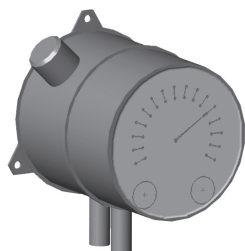
V01 x VZ.x



Type Of Indication: Visual/analogue indicator and 1 electrical switching contact at 75% and 100% of the cracking pressure

Weight:	650 g
Cracking Pressure Or Indication Range:	0.8 bar ± 10% 2.0 bar ± 10% 4.3 bar ± 10%
Perm. Operating Pressure:	2321 psi (160 bar)
Perm. Temperature Range:	-20°C to 100°C
Thread:	G 1/4
Max. Torque Value:	-
Switching Type:	75% - N/O contact 100% - N/C contact
Max. Switching Voltage:	250 V
Electrical Connection:	Threaded connection M20x1.5 acc. EN 50262
Max. Switching Voltage At Resistive Load:	75% contact 100% contact 120 W = 30 W = 120 VA ~ 60 VA ~
Switching Capacity:	Ohmic 2.5 A at 24 V Ohmic 1 A at 250 V
Protective Class Acc. DIN 40050:	IP 55

DS11



Type Of Indication: 2 microswitches, 1-pole change-over contacts, can be adjusted manually to recommended set values

Weight:	1.2 - 3.5 kg
Cracking Pressure Or Indication Range:	0 - 1.6 bar 0 - 4 bar on request
Perm. Operating Pressure:	363 psi (25 bar); 580 psi (40 bar) on request
Perm. Temperature Range:	-10°C to 100°C
Thread:	G 1/4
Max. Torque Value:	-
Switching Type:	Change-over contacts
Max. Switching Voltage:	U~max = 250 V AC U~max = 3- V DC
Electrical Connection:	Hard-wired numbered cable, cable connector, 7 pole plug-in connection
Max. Switching Voltage At Resistive Load:	I _{max} = 5 A, P _{max} = 250VA, I _{max} = 0.4 A, P _{max} = 10 W
Switching Capacity:	-
Protective Class Acc. DIN 40050:	IP 55

Clogging Indicators for Process Filters

PVD

How to Build a Valid Model Number for a BTU:

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5
PVD				

Example: NOTE: One option per box

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5
PVD	2	D.	0	-L24

= PVD-2-D.-0 / -L24

BOX 1	BOX 2	BOX 3																	
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Filter Model Number Selection

- RF3 — RF3-8
- RF5
- RF7
- RF10
- RF4-1
- RF4-2
- RF4-3
- RF12
- RF14
- BTU
- ATF-1
- ATF-2
- ATF-2.5
- ATF-3
- ATF-3.5
- ATF-4
- PLF1
- PLF2
- PVD**