

Clogging Indicators for Process Filters

Clogging indicators for HYDAC process filters are designed to indicate visually and/or electrically when the filter elements have to be cleaned or changed. The use of clogging indicators guarantees both the operational safety of the system and the efficient utilisation of the filter elements.



DIFFERENTIAL PRESSURE INDICATOR

1.1. DESCRIPTION

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.

In the standard model all parts in contact with the medium are made from stainless steel and the seals are in FPM (Viton).

1.2. TORQUE RATING - DIFFERENTIAL PRESSURE INDICATORS

Note:

The clogging indicators must only be tightened or adjusted on the hexagons.

PVD...B.1 : SW 27

PVD...C.0: SW 30

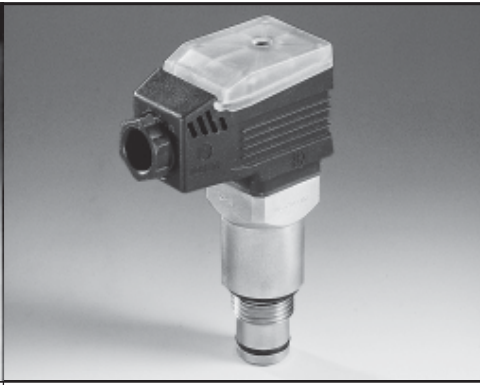
PVD...D.0/L...: SW 30

Max. torque rating: 100 Nm

2.1. TECHNICAL SPECIFICATIONS



General details	
Designation of clogging indicator	PVD..B.1
Suitable for filter types	all PFL, PFM, PRFL / PRFLD, ENF, EDF, PDFDK for other types, please contact our sales/technical department
Weights	110 g
Type of indication	visual, green/red band, automatic re-set
Hydraulic details	
Cracking pressure or indication range	1 bar ± 10 % 3 bar ± 10 % 1.5 bar ± 10 % 5 bar ± 10 % 2 bar ± 10 % 8 bar ± 10 %
Permiss. operating pressure	420 bar
Permiss. operating temperature	-10 °C to +100 °C
Accuracy class	–
Electrical details	
Switching type	–
Max. switching voltage	–
Electrical connection	–
Max. switching output at resistive load	–
Switching capacity*	–
Safety type (to DIN 40050)	–
Symbols	
<p>* High voltage peaks sometimes occur when inductances are switched off. Therefore the use of protection diodes should be considered.</p>	



PVD..C.0

PVD..D.0/-L..

V01..VZ.0

all PFL, PFM, PRFL/PRFLD, PRFS/PRFSD
for other types, please contact our sales/technical department

all PFL, PFM, PRFL/ PRFLD, EDF, PRFS/PRFSD
for other types, please contact our sales/technical department

all PRFL/ PRFLD, PRFS/PRFSD
for other types, please contact our sales/technical department

220 g

250 g

650 g

electrical switch

visual/ electrical
(visual = light)

visual/analogue and 1 electrical switching contact at 75 % and 100 % of the cracking pressure

1 bar ± 10 % 3 bar ± 10 %
1.5 bar ± 10 % 5 bar ± 10 %
2 bar ± 10 % 8 bar ± 10 %

1 bar ± 10 % 3 bar ± 10 %
1.5 bar ± 10 % 5 bar ± 10 %
2 bar ± 10 % 8 bar ± 10 %

0.8 bar +-10%
2 bar +-10%
4.3 bar +-10%

420 bar

420 bar

160 bar

-30 °C to +100 °C

-10 °C to +100 °C

-10 °C to +100 °C

-

-

-

N/C or N/O contact
(change-over)

N/C or N/O contact
(change-over)

230 V

24V, 220V depending on type of light insert

75% contact, N/O
100% contact, change-over

plug connection, PG 11,
socket to DIN 43650

plug connection, PD11,
socket to DIN 43650

threaded connection, PD11

60 W =
100 VA~

100VA/ 60W

75% contact 120VA/ 120W
100% contact 60VA/ 30W

ohmic 3 A at 24 V =
ohmic 0.03 to 5 A at max. 230 V ~

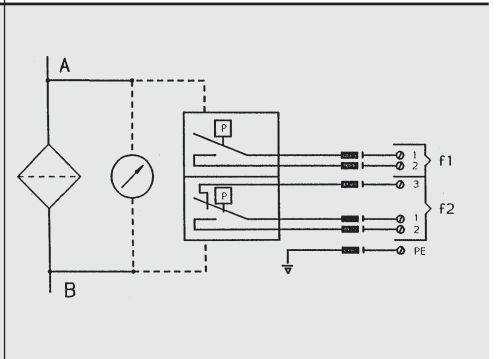
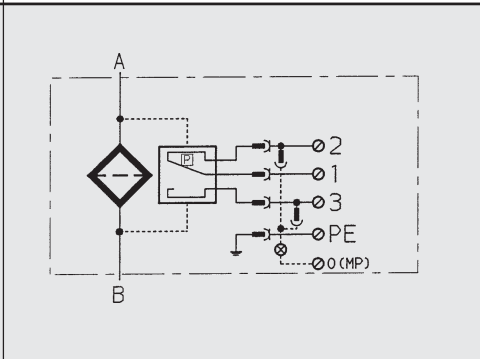
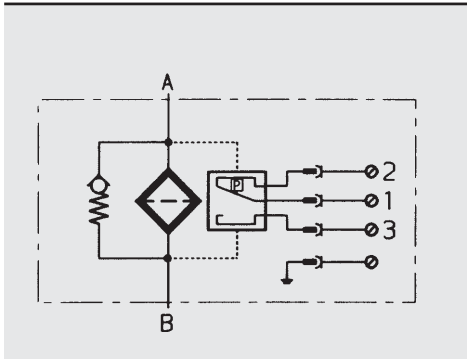
ohmic 3A at 24V=
ohmic 5A at 220V~

ohmic 2.5 A at 24V=
ohmic 1 A at 250V~

IP 65 (only if the plug is wired and fitted correctly)

IP 65

IP 55





Differential pressure gauge DS11

all PRFL/ PRFLD, PRFS/PRFSD, RF3 for other types, please contact our sales/technical department

1.2 - 3.5 kg

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

0 - 1.6 bar
0 - 4 bar on request

25 bar, 40 bar on request

-10 °C to +70 °C

± 2.5 % of the final value of the measurement range

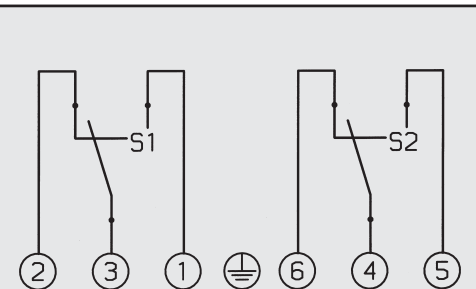
Change-over contacts

U~max. = 250 V AC
U=max. = 30 V DC

hard-wired numbered cable, cable connector, 7 pole plug-in connection

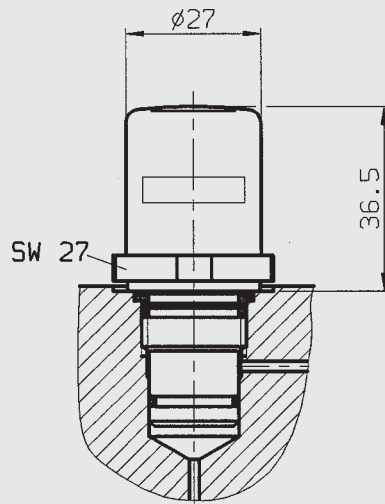
$I_{max.} = 5 A, P_{max.} = 250 VA$
 $I_{max.} = 0.4 A, P_{max.} = 10W$

IP 54

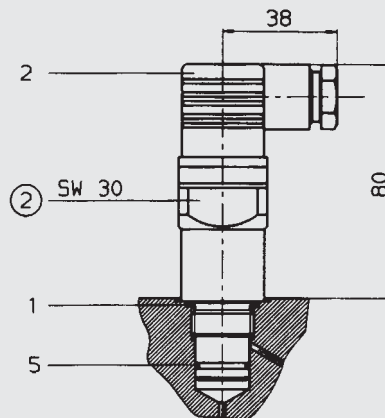


2.2. DIMENSIONS

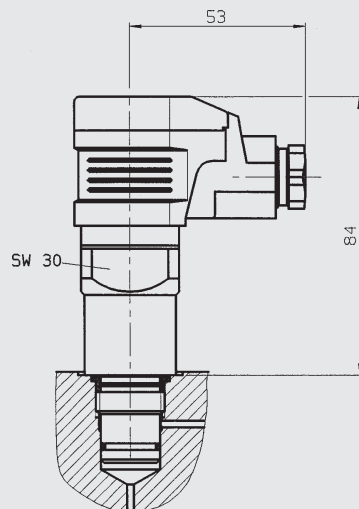
PVD..B1



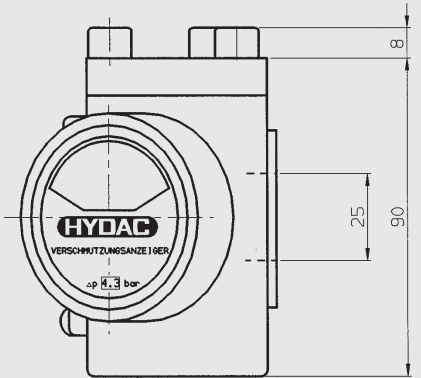
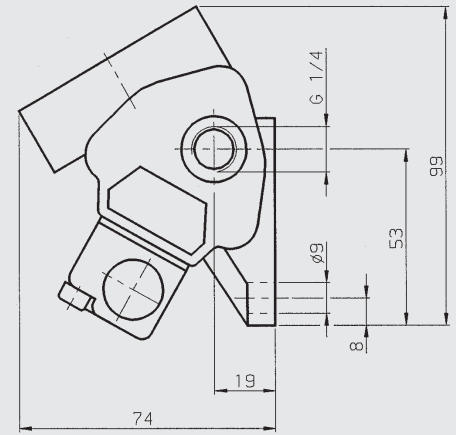
PVD..C.0



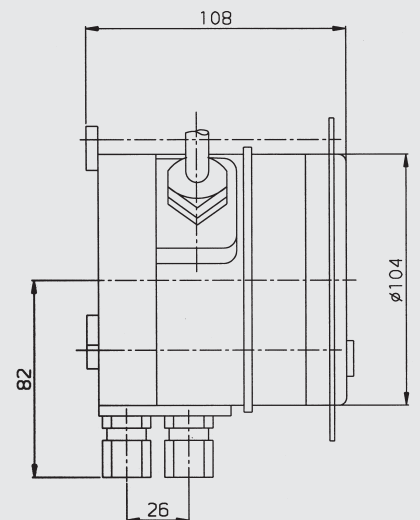
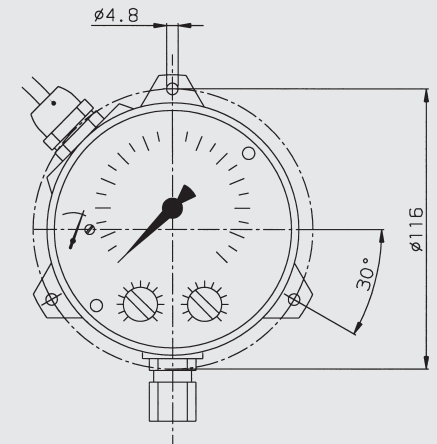
PVD..D.0/-L..



V01..VZ.0



DS 11



3. MODEL CODE

(also order example)

PVD 2 D. 0 / -L24

Differential pressure clogging indicator

PVD clogging indicator
V01 clogging indicator

Cracking pressure

0.8 +0.8 bar (for V01 indicators only)
1 +1 bar (for PVD indicators)
1.5 +1.5 bar (for PVD indicators)
2 +2 bar (all clogging indicators)
3 +3 bar (for PVD indicators)
4.3 +4.3 bar (for V01 indicators only)
5 +5 bar (for PVD indicators only)
8 +8 bar (for PVD indicators only)

Type of clogging indicator

B. visual indicator with automatic re-set
C. electrical indicator
D. visual/electrical indicator
VZ visual/analogue indicator with 75 % and 100 % switching contacts

Modification number

0 all clogging indicators
1 B-type only

Supplementary details (PVD only)

-L24 light with 24 volt supply
-L48 light with 48 volt supply
-L110 light with 110 volt supply
-L220 light with 220 volt supply

4. NOTE

The information in this brochure relates to the operating conditions and applications described.

For applications or operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.

Differential pressure gauge DS11 electrical

Indication range:	0 - 1.6 bar
Permissible operating pressure:	25 bar
Pressure chamber in aluminium:	Order number 639311
Pressure chamber in stainless steel:	Order number 639586
Port connections	1/4" BSP male

Other versions on request