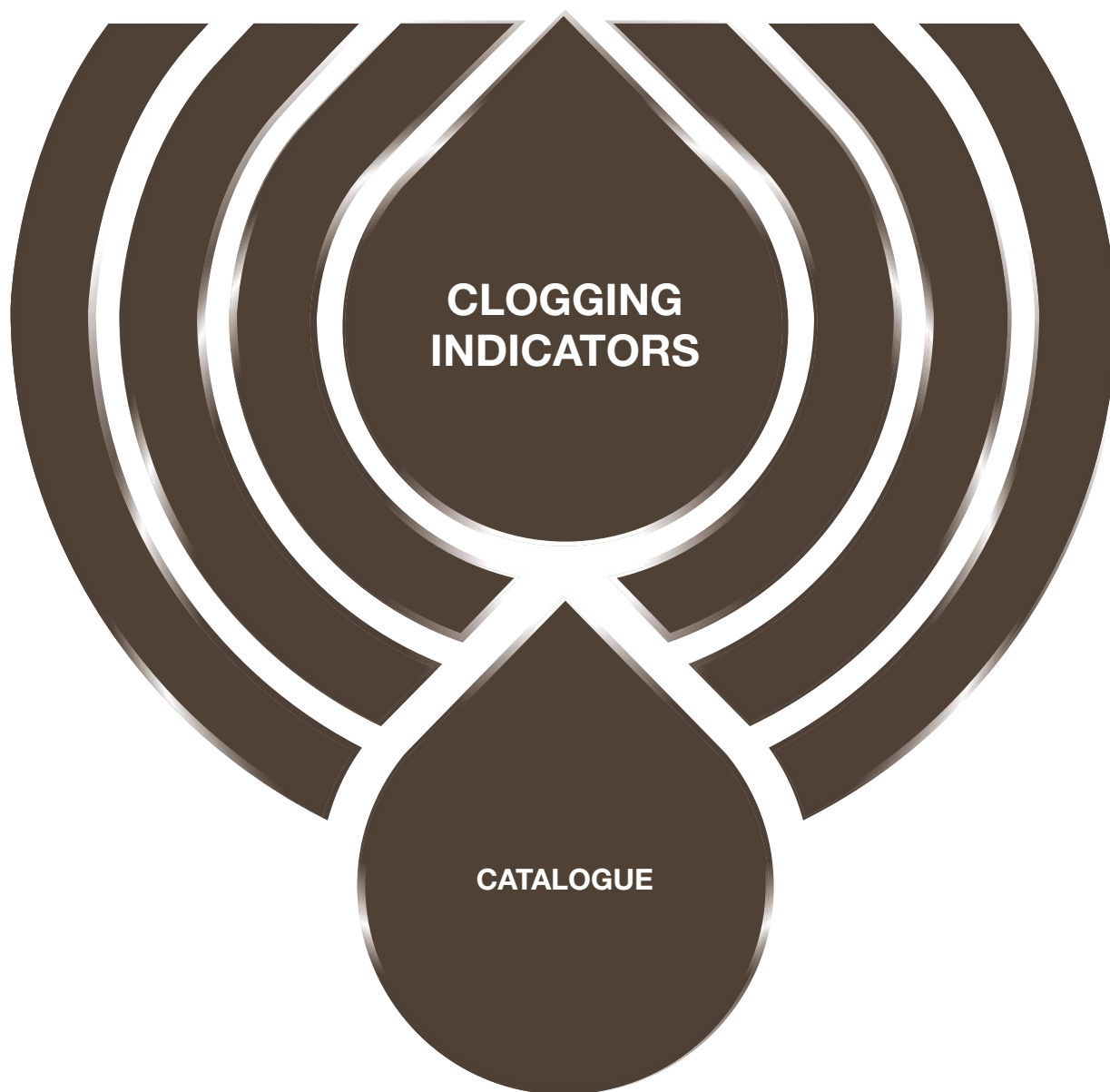




MPFILTRI®

PASSION TO PERFORM

Clogging indicators are devices that check the life time of the filter elements. They measure the pressure drop through the filter element directly connected to the filter housing.

These devices trip when the clogging of the filter element causes a pressure drop increasing across the filter element.

Filter elements are efficient only if their Dirt Holding Capacity is fully exploited. This is achieved by using filter housings equipped with clogging indicators.

The indicator is set to alarm before the element becomes fully clogged.

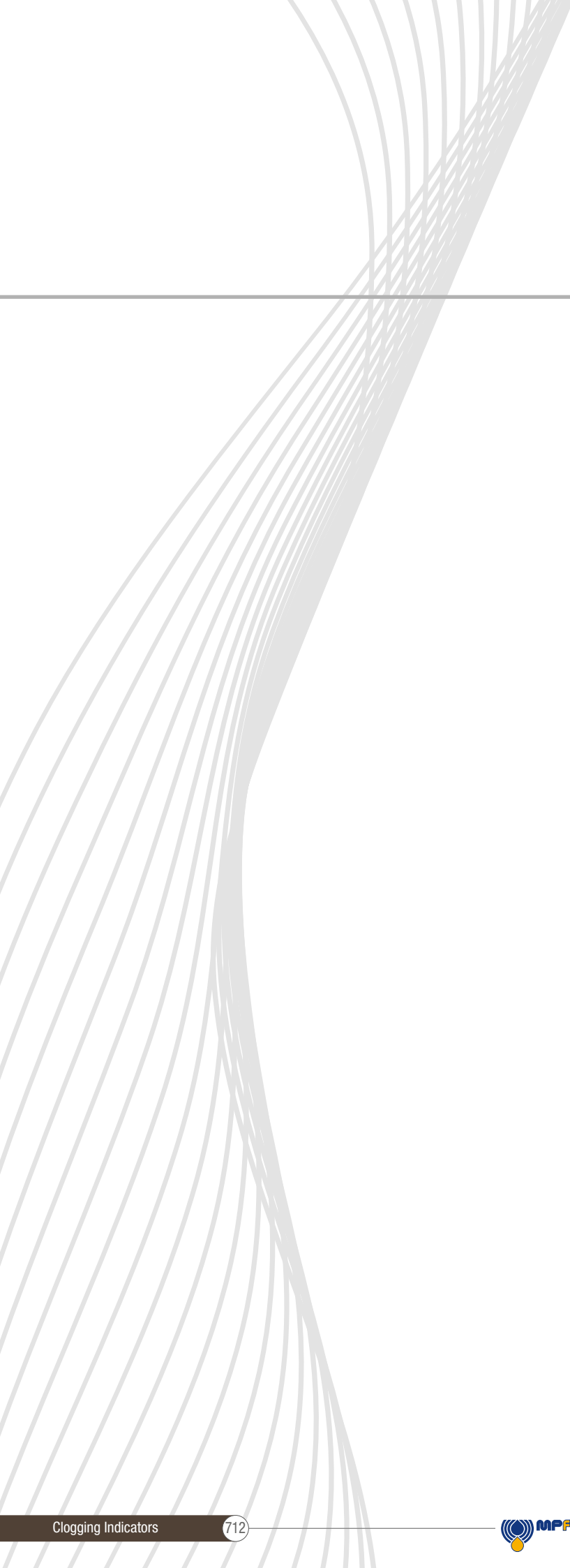
MP Filtri can supply indicators of the following designs:

- Vacuum switches and gauges
- Pressure switches and gauges
- Differential pressure indicators

These type of devices can be provided with a visual, electrical or both signals. The electronic differential pressure clogging indicator is also available. It provides both analogical 4-20 mA output and digital warning (75% of clogging) and alarm (clogging) outputs.

In the following pages you can find a reference guide about the types of clogging indicators available in the different families of MP Filtri's Hydraulic Filtration range of products.





DESIGNATION, ORDERING CODES & TECHNICAL DATA

INDEX

	Page
QUICK REFERENCE GUIDE	714
CLOGGING INDICATORS ORDERING CODES	
SUCTION FILTERS INDICATORS	719
RETURN FILTERS INDICATORS	720
RETURN / SUCTION FILTERS INDICATORS	722
SPIN-ON FILTERS INDICATORS	724
LOW & MEDIUM PRESSURE FILTERS INDICATORS	726
HIGH PRESSURE FILTERS INDICATORS	727
STAINLESS STEEL HIGH PRESSURE FILTERS INDICATORS	728
FILTERS FOR POTENTIALLY EXPLOSIVE ATMOSPHERE INDICATORS	729
TECHNICAL DATA	
VACUUM INDICATORS	730
BAROMETRIC (PRESSURE) INDICATORS	732
DIFFERENTIAL PRESSURE INDICATORS	736
PLUGS	737

QUICK REFERENCE GUIDE

Ordering codes

Filter family	Filter series	Visual indicators	Electrical indicators	Electronic / Electrical-Visual indicators
SUCTION FILTERS	ELIXIR® SFEX060-110	VVB20P01	VEB21AA50P01	VLB21AA51P01
		VVS20P01		VLB21AA52P01 VLB21AA53P01 VLB21AA71P01
	SFMC250	VVA20P01	VEA21xA50P01 VEA21xA50P01UL	VLA21xA51P01
		VVR20P01		VLA21xA52P01 VLA21xA53P01 VLA21xA71P01
RETURN FILTERS	Without bypass	SFSC 500 - 503 - 504 - 505 SFSC 510 - 535 - 540	VVA20P01 VVR20P01	VLA21xA51P01 VLA21xA52P01 VLA21xA53P01 VLA21xA71P01
	With bypass 1.75 bar	ELIXIR® RFEX060-080-110-160	BVA14P01 BVR14P01 BVP15HP01 BVQ15HP01	BEA15HA50P01 BEA15HA50P01UL BEM15HA41P01
	Without bypass	ELIXIR® RFEX060-080-110-160	BVA25P01 BVR25P01 BVP20HP01 BVQ20HP01	BEA20HA50P01 BEA20HA50P01UL BEM20HA41P01
	With bypass 1.75 bar	MDH 250	BVA14P01 BVR14P01 BVP15HP01 BVQ15HP01 DVS12HP01	BEA15HA50P01 BEA15HA50P01UL BEM15HA41P01 DES12HA10P01 DES12HA30P01 DES12HA80P01
	With bypass 3 bar	MDH 250	BVA25P01 BVR25P01 BVP20HP01 BVQ20HP01 DVS25HP01	BEA20HA50P01 BEA20HA50P01UL BEM20HA41P01 DES25HA10P01 DES25HA30P01 DES25HA80P01
	With bypass 1.75 bar	MPFX MPTX MPF MPT MPH	BVA14P01 BVR14P01 BVP15HP01 BVQ15HP01	BEA15HA50P01 BEA15HA50P01UL BEM15HA41P01
	With bypass 3 bar	MPFX MPTX MPF MPT	BVA25P01 BVR25P01 BVP20HP01 BVQ20HP01	BEA20HA50P01 BEA20HA50P01UL BEM20HA41P01
	With bypass 2.5 bar	MPH		
	With bypass 4.5 bar	MPLX	DVA20xP01 DVM20xP01	DEA20xA50P01 DEA20xA50P01UL DEM20xx10P01 DEM20xx20P01 DEM20xx30P01 DEM20xx35P01 DEU20VA50P01UL
	With bypass 2.4 bar	FRI		DLA20xA51P01 DLA20xA52P01 DLA20xA71P01 DLE20xA50P01 DLE20xF50P01 DTA20xF70P01

Filter family	Filter series	Visual indicators	Electrical indicators	Electronic / Electrical-Visual indicators
RETURN / SUCTION FILTERS	With bypass valve 2.5 bar	MRSX 116 - 165 - 166 Suction line	VVB20P01 VVS20P01	VEB21AA50P01 VLB21AA51P01 VLB21AA52P01 VLB21AA53P01 VLB21AA71P01
		MRSX 116 - 165 - 166 Return line	BVA25P01 BVR25P01 BVP20HP01 BVQ20HP01	BEA20HA50P01 BEA20HA50P01UL BEM20HA41P01 BET25HF10P01 BET25HF30P01 BET25HF50P01 BLA20HA51P01 BLA20HA52P01 BLA20HA53P01 BLA20HA71P01
	With bypass valve 2.5 bar	LMP 124 MULTIPORT	BVA25P01 BVR25P01 BVP20HP01 BVQ20HP01 DVA20xP01 DVM20xP01	BEA20HA50P01 BEA20HA50P01UL BEM20HA41P01 BET25HF10P01 BET25HF30P01 BET25HF50P01 DLA20xA51P01 DLA20xA52P01 DLA20xA71P01 DLE20xA50P01 DLE20xF50P01 DTA20xF70P01
SPIN-ON FILTERS	Suction line	MPS 050 - 070 - 100 - 150 MPS 200 - 250 - 300 - 350	WVB20P01 VVS20P01	VEB21AA50P01 VLB21AA51P01 VLB21AA52P01 VLB21AA53P01 VLB21AA71P01
	Return line	MPS 050 - 070 - 100 - 150 MPS 200 - 250 - 300 - 350 MST 050 - 070 - 100 - 150	BVA14P01 BVR14P01 BVP15HP01 BVQ15HP01	BEA15HA50P01 BEA15HA50P01UL BEM15HA41P01 BLA15HA51P01 BLA15HA52P01 BLA15HA53P01 BLA15HA71P01
	In-line	MPS 051 - 071 - 101 - 151 MPS 301 - 351 MSH 050 - 070 - 100 - 150	DVA12xP01 DVM12xP01 DVA20xP01 DVM20xP01	DEA12xA50P01 DEM12xAxxP01 DLA12xA51P01 DLA12xA52P01 DLA12xA71P01 DLA20xA51P01 DLA20xA52P01 DLA20xA71P01 DLE12xA50P01 DLE12xF50P01 DLE20xF50P01 DLE20xF50P01 DTA12xF70P01 DTA20xF70P01

QUICK REFERENCE GUIDE

Ordering codes

Filter family	Filter series	Visual indicators	Electrical indicators	Electronic / Electrical-Visual indicators	
LOW & MEDIUM PRESSURE FILTERS	ELIXIR® LFEX 060-080-110-160	DVS25HP01	DES25HA10P01 DES25HA30P01 DES25HA80P01		
	LMP 110 LMP 112 - 116 - 118 - 119 MULTIPORT LMP 120 - 122 - 123 MULTIPORT LMP 210 - 211 - LDP LMP 400 - 401 & 430 - 431 LMP 900 - 901 LMP 902 - 903	DVA20xP01 DVM20xP01	DEA20xA50P01 DEM20xx10P01 DEM20xx20P01 DEM20xx30P01 DEM20xx35P01	DLA20xA51P01 DLA20xA52P01 DLA20xA71P01 DLE20xA50P01 DLE20xF50P01	
	LMP 950 - 951 LMP 952 - 953 - 954 LMD 211 - 400 - 401 - 431 - 951 - LDD		DEU20VA50P01UL	DTA20xF70P01	
	With bypass valve 3.5 bar				
	With bypass valve 2.5 bar	LPH 630 DVA20xP01 DVM20xP01	DEA20xA50P01 DEM20xx10P01 DEM20xx20P01 DEM20xx30P01 DEM20xx35P01 DEU20VA50P01UL	DLA20xA51P01 DLA20xA52P01 DLA20xA71P01 DLE20xA50P01 DLE20xF50P01 DTA20xF70P01	
	With bypass valve 1.75 bar	LPH 630 DVA12xP01 DVM12xP01	DEA12xA50P01 DEM12xx10P01 DEM12xx20P01 DEM12xx30P01 DEM12xx35P01	DLA12xA51P01 DLA12xA52P01 DLA12xA71P01 DLE12xA50P01 DLE12xF50P01 DTA12xF70P01	
	ELIXIR® LFEX 060-080-110-160	DVS40HP01	DES40HA10P01 DES40HA30P01 DES40HA80P01		
	LMP 110 LMP 112 - 116 - 118 - 119 MULTIPORT LMP 120 - 122 - 123 MULTIPORT LMP 210 - 211 - LDP LMP 400 - 401 & 430 - 431 LMP 900 - 901 LMP 902 - 903 LMP 950 - 951 LMP 952 - 953 - 954 LMD 211 - 400 - 401 - 431 - 951 - LDD LPH 630	DVA50xP01 DVM50xP01	DEA50xA50P01 DEM50xx10P01 DEM50xx20P01 DEM50xx30P01 DEM50xx35P01 DEU50VA50P01UL	DLA50xA51P01 DLA50xA52P01 DLA50xA71P01 DLE50xA50P01 DLE50xF50P01 DTA50xF70P01	
	Without bypass valve				
	HIGH PRESSURE FILTERS	With bypass valve 6 bar	FMP 039 - 065 - 135 - 320 FHP 010 - 011 - 065 - 135 - 350 - 351 - 500 FMMX 050 - 150 FMM 050 - 150 FHA 051 FHM 006 - 007 - 010 - 050 - 065 - 135 - 320 - 500 FHB 050 - 135 - 320 FHF 325 FHD 021 - 051 - 326 - 333	DVA50xP01 DVM50xP01	DEA50xA50P01 DEM50xx10P01 DEM50xx20P01 DEM50xx30P01 DEM50xx35P01 DEU50VA50P01UL
Without bypass valve		FMP 039 - 065 - 135 - 320 FHP 010 - 011 - 065 - 135 - 350 - 351 - 500 FMMX 050 - 150 FMM 050 - 150 FHA 051 FHM 006 - 007 - 010 - 050 - 065 - 135 - 320 - 500 FHB 050 - 135 - 320 FHF 325 FHD 021 - 051 - 326 - 333	DVA70xP01 DVA95xP01 DVM70xP01 DVM95xP01	DEA70xA50P01 DEA95xA50P01 DEM70xx10P01 DEM70xx20P01 DEM70xx30P01 DEM70xx35P01 DEU70VA50P01UL DEM95xx10P01 DEM95xx20P01 DEM95xx30P01 DEM95xx35P01	DLA70xA51P01 DLA70xA52P01 DLA70xA71P01 DLA95xA51P01 DLA95xA52P01 DLA95xA71P01 DLE70xA50P01 DLE70xF50P01 DLE95xA50P01 DLE95xF50P01 DTA70xF70P01 DTA95xF70P01

Filter family	Filter series		Visual indicators	Electrical indicators	Electronic / Electrical-Visual indicators
STAINLESS STEEL HIGH PRESSURE FILTERS	With bypass valve 6 bar	FZH 012 - 040	DVZ50xP01	DEZ50xA50P01	DLZ50xA51P01 DLZ50xA52P01
	Without bypass valve	FZH 012 - 040	DVZ70xP01 DVZ95xP01	DEZ70xA50P01 DEZ95xA50P01	DLZ70xA51P01 DLZ70xA52P01 DLZ95xA51P01 DLZ95xA52P01
	With bypass valve 6 bar	FZP 039 - 136 FZB 039 FZM 039 FZD 051	DVX50xP01 DYY50xP01	DEX50xA50P01	DLX50xA51P01 DLX50xA52P01
	Without bypass valve	FZP 039 - 136 FZB 039 FZM 039 FZD 010 - 021 - 051	DVX70xP01 DVX95xP01 DYY70xP01 DYY95xP01	DEX70xA50P01 DEX95xA50P01	DLX70xA51P01 DLX70xA52P01 DLX95xA51P01 DLX95xA52P01
FILTERS FOR POTENTIALLY EXPLOSIVE ATMOSPHERE	With bypass valve 6 bar	FMMX 050 - 150	DVA50xP01 DVM50xP01	DEH50xA48P01 DEH50xA49P01 DEH50xA70P01	
	Without bypass valve	FMMX 050 - 150	DVA70xP01 DVA95xP01 DVM70xP01 DVM95xP01	DEH70xA48P01 DEH70xA49P01 DEH70xA70P01	
	With bypass valve 6 bar	FZP 039 - 136	DVX50xP01 DYY50xP01	DEH50xA48P01 DEH50xA49P01 DEH50xA70P01	
	Without bypass valve	FZP 039 - 136	DVX70xP01 DVX95xP01 DYY70xP01 DYY95xP01	DEH70xA48P01 DEH70xA49P01 DEH70xA70P01	
	With bypass valve 6 bar	FZH 012 - 040	DVZ50xP01		
	Without bypass valve	FZH 012 - 040	DVZ70xP01 DVZ95xP01		

Suitable indicator types

V ACUUM INDICATORS

Vacuum indicators are used on the Suction line to check the efficiency of the filter element.

They measure the pressure downstream of the filter element.

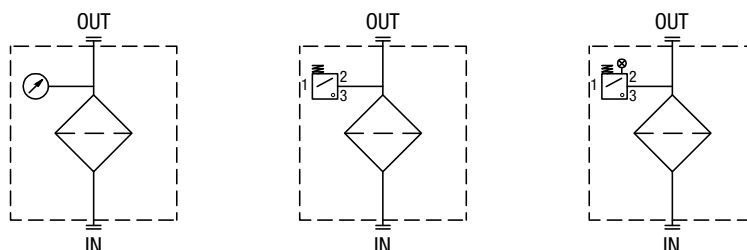
Standard items are produced with R 1/4" EN 10226 connection.

Available products with R 1/8" EN 10226 to be fitted on MPS series.

Vacuum indicators are identified in the Hydraulic Filtration catalogue and in the Quick Reference Guide table by the letter "V".

Example:

V VVB20P01



B BAROMETRIC (PRESSURE) INDICATORS

Pressure indicators are used on the Return line to check the efficiency of the filter element.

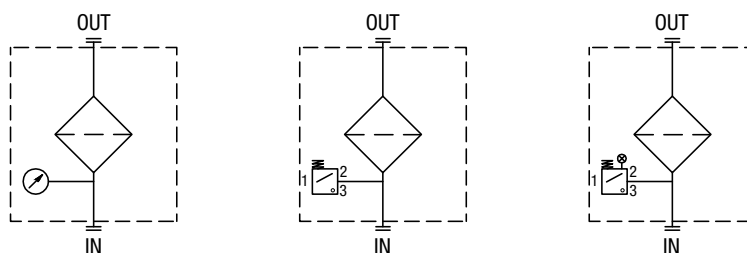
They measure the pressure upstream of the filter element.

Standard items are produced with R 1/8" EN 10226 connection.

Barometric (pressure) indicators are identified in the Hydraulic Filtration catalogue and in the Quick Reference Guide table by the letter "B".

Example:

B BVA14P01



D DIFFERENTIAL PRESSURE INDICATORS

Differential pressure indicators are used on the Pressure line to check the efficiency of the filter element.

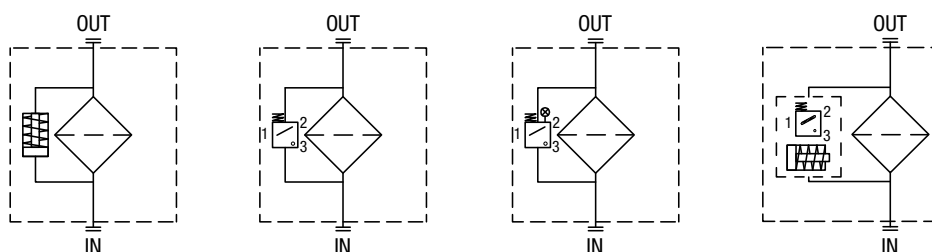
They measure the pressure upstream and downstream of the filter element (differential pressure).

Standard items are produced with special connection G 1/2" size.

Also available in Stainless Steel models. Differential pressure indicators are identified in the Hydraulic Filtration catalogue and in the Quick Reference Guide table by the letter "D".

Example:

D DVA20xP01



Designation & Ordering code

VACUUM INDICATORS											
Series		Configuration example 1:									
VE Electrical vacuum indicator		VE	A	21	V	A	50	P01	EX		
VL Electrical/Visual vacuum indicator		Configuration example 2:									
		VL	B	21	A	A	71	P01			
VV Vacuum gauge		Configuration example 3:									
		VV	R	20							
Type VE - VL		Type VV		SFC	SFEX						
A Connection EN 10226 - R1/4"		A Axial connection EN 10226 - R1/4"		•	-						
B Connection EN 10226 - R1/8"		B Axial connection EN 10226 - R1/8"		-	•						
		R Radial connection EN 10226 - R1/4"		•	-						
		S Radial connection EN 10226 - R1/8"		-	•						
Vacuum setting		VE	VL	VV							
20 -0.16 bar		-	-	•							
21 -0.21 bar		•	•	-							
Seals		VEA - VLA		VEB - VLB							
A NBR		•		•							
V FPM		•		-							
Thermostat		VE	VL								
A Without		•	•								
Electrical connections		VE	VL								
50 Connection EN 175301-803		•	-								
51 Connection EN 175301-803, transparent base with lamps 24 Vdc		-	•								
52 Connection EN 175301-803, transparent base with lamps 110 Vdc		-	•								
53 Connection EN 175301-803, transparent base with lamps 230 Vac		-	•								
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc		-	•								
Option											
P01 MP Filtri standard											
Pxx Customized											
Certifications		VEA21A	VEA21V	VEB	VL	VV					
Without		•	•	•	•	•					
EX ATEX certification		•	•	•	-	-					
UL UL certification		•	-	-	-	-					

Designation & Ordering code

BAROMETRIC (PRESSURE) INDICATORS

Series				Configuration example 1: BEA 15 H A 41 P01 EX									
BE Electrical pressure indicator				Configuration example 2: BLA 20 H A 71 P01									
BL Electrical/Visual pressure indicator				Configuration example 3: BVR 14 P01									
BV Visual pressure indicator				Configuration example 4: BVP 20 H P01									
Type	BE	BL	BV										
A Standard type	•	•	A Axial connection pressure gauge										
M With wired electrical connection	•	-	R Radial connection pressure gauge										
T With thermal switch	•	-	P Visual indicator with automatic reset										
			Q Visual indicator with manual reset										
Pressure setting	BEA-BEM	BET	BLA	BVA-BVR	BVP-BVQ								
14 1.4 bar	-	-	-	•	-								
15 1.5 bar	•	-	•	-	•								
20 2.0 bar	•	•	•	-	•								
25 2.5 bar	-	•	-	•	-								
Seals	BE	BLA	BVA-BVR	BVP-BVQ									
H HNBR	•	•	-	•									
Thermostat	BEA-BEM	BET	BLA										
A Without thermostat	•	-	•										
F With thermostat	-	•	-										
Electrical connections					BEA	BEM	BET	BL					
10 Connection AMP Superseal series 1,5	-	-	•	-									
30 Connection Deutsch DT-04-2-P	-	-	•	-									
41 Connection via four-core cable	-	•	-	-									
50 Connection EN 175301-803	•	-	-	-									
51 Connection EN 175301-803, transparent base with lamps 24 Vdc	-	-	-	•									
52 Connection EN 175301-803, transparent base with lamps 110 Vdc	-	-	-	•									
53 Connection EN 175301-803, transparent base with lamps 230 Vac	-	-	-	•									
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	-	•									
					Option								
					P01 MP Filtri standard								
					Pxx Customized								
Certifications					BEA	BEM-BET	BL	BV					
Without					•	•	•	•					
EX ATEX certification					•	-	-	-					
UL UL certification					•	-	-	-					

DIFFERENTIAL PRESSURE INDICATORS

Series
DE Electrical differential pressure indicator
DL Electrical/Visual differential pressure indicator
DT Electrical differential pressure indicator
DV Visual differential pressure indicator

Configuration example 1:	DE	M	20	H	F	50	P01
Configuration example 2:	DE	U	50	V	A	50	P01
Configuration example 3:	DL	E	20	V	A	71	P01
Configuration example 4:	DT	A	20	H	F	70	P01
Configuration example 5:	DV	M	20	V			P01

Type	DE	DL	DT
A Standard type	•	•	•
M With wired electrical connection	•	-	-
U Standard type 210 bar, UL certified	•	-	-
E For high power supply	-	•	-
S Compact version	•	-	-

DV
A With automatic reset
M With manual reset
S With automatic reset

Pressure setting	DEA	DEM	DEU	DES	DL	DT	DVA	DVM	DVS
12 1.2 bar	-	-	-	•	-	-	-	-	•
20 2.0 bar	•	•	•	-	•	•	•	•	-
25 2.5 bar	-	-	-	•	-	-	-	-	•

Seals	DEA	DEM	DEU	DES	DL	DT	DVA	DVM	DVS
H HNBR	•	•	-	•	•	•	•	•	•
V FPM	•	•	•	-	•	•	•	•	-

Thermostat	DEA	DEM	DEU	DES	DLA	DLE	DT
A Without thermostat	•	•	•	•	•	•	-
F With thermostat	-	•	-	-	-	•	•

Electrical connections	DEA	DEM	DEU	DES	DLA	DLE	DT
10 Connection AMP Superseal series 1.5	-	•	-	•	-	-	-
20 Connection AMP Timer Junior	-	•	-	-	-	-	-
30 Connection Deutsch DT-04-2-P	-	•	-	•	-	-	-
35 Connection Deutsch DT-04-3-P	-	•	-	-	-	-	-
50 Connection EN 175301-803	•	-	•	-	-	•	-
51 Connection EN 175301-803, transparent base with lamps 24 Vdc	-	-	-	-	•	-	-
52 Connection EN 175301-803, transparent base with lamps 110 Vdc	-	-	-	-	•	-	-
70 Connection IEC 61076-2-101 D (M12)	-	-	-	-	-	-	•
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	-	-	•	-	-
80 Connection Stud #10-32 UNF	-	-	-	•	-	-	-

Option
P01 MP Filtri standard
Pxx Customized

Certifications	DEU	OTHERS
Without	-	•
UL UL certification	•	-

PLUGS

Series
T2 Plug
T4 Plug

Seals	T2	T4
A NBR	-	•
H HNBR	•	-
V FPM	•	-

Configuration example	T2	H
-----------------------	----	---

Designation & Ordering code

VACUUM INDICATORS

Series		Configuration example 1: VE A 21 V A 50 P01 EX									
VE Electrical vacuum indicator		Configuration example 2: VL B 21 A A 71 P01									
VL Electrical/Visual vacuum indicator		Configuration example 3: VV R 20 P01									
VV Vacuum gauge											
Type VE - VL		Type VV									
A	Connection EN 10226 - R1/4"	A Axial connection EN 10226 - R1/4"									
B	Connection EN 10226 - R1/8"	B Axial connection EN 10226 - R1/8"									
		R Radial connection EN 10226 - R1/4"									
		S Radial connection EN 10226 - R1/8"									
Vacuum setting		VE	VL	VV							
20	-0.16 bar	-	-	•							
21	-0.21 bar	•	•	-							
Seals		VEA - VLA		VEB - VLB							
A	NBR	•		•							
V	FPM	•		-							
Thermostat		VE	VL								
A	Without thermostat	•		•							
Electrical connections		VE	VL								
50	Connection EN 175301-803	•	-								
51	Connection EN 175301-803, transparent base with lamps 24 Vdc	-	•								
52	Connection EN 175301-803, transparent base with lamps 110 Vdc	-	•								
53	Connection EN 175301-803, transparent base with lamps 230 Vac	-	•								
71	Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	•								
		Option									
		P01 MP Filtri standard									
		Pxx Customized									
Certifications		VEA21A	VEA21V	VEB	VL	VV					
Without		•	•	•	•	•					
EX ATEX certification		•	•	•	-	-					
UL UL certification		•	-	-	-	-					

BAROMETRIC (PRESSURE) INDICATORS

Series				Configuration example 1: BE M 15 H A 41 P01 EX									
BE Electrical pressure indicator				Configuration example 2: BL A 20 H A 71 P01									
BL Electrical/Visual pressure indicator				Configuration example 3: BV R 14 P01									
BV Visual pressure indicator				Configuration example 4: BV P 20 H P01									
Type		BE	BL	BV									
A	Standard type	•	•	A	Axial connection pressure gauge								
M	With wired electrical connection	•	-	R	Radial connection pressure gauge								
T	With thermal switch	•	-	P	Visual indicator with automatic reset								
				Q	Visual indicator with manual reset								
Pressure setting		BEA-BEM	BET	BLA	BVA-BVR	BVP-BVQ							
14	1.4 bar	-	-	-	•	-							
15	1.5 bar	•	-	•	-	-							
20	2.0 bar	•	•	•	-	•							
25	2.5 bar	-	•	-	•	-							
Seals		BE	BLA	BVP-BVQ									
H	HNBR	•	•	•									
Thermostat		BEA-BEM	BET	BLA									
A	Without thermostat	•	-	•									
F	With thermostat	-	•	-									
Electrical connections		BEA	BEM	BET	BL								
10	Connection AMP Superseal series 1.5	-	-	•	-								
30	Connection Deutsch DT-04-2-P	-	-	•	-								
41	Connection via four-core cable	-	•	-	-								
50	Connection EN 175301-803	•	-	•	-								
51	Connection EN 175301-803, transparent base with lamps 24 Vdc	-	-	-	•								
52	Connection EN 175301-803, transparent base with lamps 110 Vdc	-	-	-	•								
53	Connection EN 175301-803, transparent base with lamps 230 Vac	-	-	-	•								
71	Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	-	•								
Option													
P01	MP Filtri standard												
Pxx	Customized												
Certifications		BEA	BEM-BET	BL	BV								
Without		•	•	•	•								
EX ATEX certification		•	-	-	-								
UL UL certification		•	-	-	-								

DIFFERENTIAL PRESSURE INDICATORS

Series	Configuration example 1:									
DE Electrical differential pressure indicator	Configuration example 2:									
DL Electrical/Visual differential pressure indicator	Configuration example 3:									
DT Electronic differential pressure indicator	Configuration example 4:									
DV Visual differential pressure indicator	Configuration example 5:									
										</

PLUGS

Series	Configuration example T2 H	
T2 Plug		
Seals		
H HNBR		
V FPM		

Designation & Ordering code

VACUUM INDICATORS

Series	Configuration example 1:	VE	B	21	A	A	50	P01	EX
VE Electrical vacuum indicator	Configuration example 2:	VL	B	21	A	A	71	P01	
VL Electrical/Visual vacuum indicator	Configuration example 3:	VV	S	20				P01	
VV Vacuum gauge									
Type VE - VL	Type VV								
B Connection EN 10226 - R1/8"	B Axial connection EN 10226 - R1/8"								
	S Radial connection EN 10226 - R1/8"								
Vacuum setting	VE	VL	VV						
20 -0.16 bar	-	-	•						
21 -0.21 bar	•	•	-						
Seals	VE	VL							
A NBR	•	•							
Thermostat	VE	VL							
A Without thermostat	•	•							
Electrical connections	VE	VL							
50 Connection EN 175301-803	•	-							
51 Connection EN 175301-803, transparent base with lamps 24 Vdc	-	•							
52 Connection EN 175301-803, transparent base with lamps 110 Vdc	-	•							
53 Connection EN 175301-803, transparent base with lamps 230 Vac	-	•							
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	•							
Option									
P01 MP Filtri standard									
Pxx Customized									
Certifications	VEB	VL	VV						
Without	•	•	•						
EX ATEX certification	•	-	-						
UL UL certification	-	-	-						

BAROMETRIC (PRESSURE) INDICATORS

Series	Configuration example 1:	BE	M	15	H	A	41	P01	
BE Electrical pressure indicator	Configuration example 2:	BL	A	20	H	A	71	P01	
BL Electrical/Visual pressure indicator	Configuration example 3:	BV	R	14				P01	
BV Visual pressure indicator	Configuration example 4:	BV	P	20	H			P01	
Type	BE	BL	BV						
A Standard type	•	•	A Axial connection pressure gauge						
M With wired electrical connection	•	-	R Radial connection pressure gauge						
			P Visual indicator with automatic reset						
			Q Visual indicator with manual reset						
Pressure setting	BEA-BEM	BLA	BVA-BVR	BVP-BVQ					
14 1.4 bar	-	-	•	-					
15 1.5 bar	•	•	-	-					
20 2 bar	•	•	-	•					
25 2.5 bar	-	-	•	-					
Seals	BE	BLA	BVA-BVR	BVP-BVQ					
H HNBR	•	•	-	•					
Thermostat	BEA-BEM	BLA	BV						
A Without thermostat	•	•	-						
Electrical connections	BEA	BEM	BL						
10 Connection AMP Superseal series 1.5	-	-	-						
30 Connection Deutsch DT-04-2-P	-	-	-						
41 Connection via four-core cable	-	•	-						
50 Connection EN 175301-803	•	-	-						
51 Connection EN 175301-803, transparent base with lamps 24 Vdc	-	-	•						
52 Connection EN 175301-803, transparent base with lamps 110 Vdc	-	-	•						
53 Connection EN 175301-803, transparent base with lamps 230 Vac	-	-	•						
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	•						
Option									
P01 MP Filtri standard									
Pxx Customized									
Certifications	BEA	BEM-BET	BL	BV					
Without	•	•	•	•					
EX ATEX certification	•	-	-	-					
UL UL certification	•	-	-	-					

DIFFERENTIAL PRESSURE INDICATORS

Series				Configuration example 1:							Configuration example 2:		Configuration example 3:		Configuration example 4:		Configuration example 5:	
DE Electrical differential pressure indicator				DE	U	50	V	A	50	P01	UL							
DL Electrical/Visual differential pressure indicator				DL	E	20	V	A	71	P01								
DT Electronic differential pressure indicator				DT	A	50	H	F	70	P01								
DV Visual differential pressure indicator				DV	M	70	V			P01								
Type	DE	DL	DT	DV														
A Standard type	•	•	•	A With automatic reset														
M With wired electrical connection	•	-	-	M With manual reset														
U Standard type 210 bar, UL certified	•	-	-															
E For high power supply	-	•	-															
Pressure setting	DEA	DEM	DEU	DLA	DLE	DTA	DVA	DVM										
12 1.2 bar	•	•	-	•	•	•	•	•										
20 2.0 bar	•	•	•	•	•	•	•	•										
Seals	DEA	DEM	DEU	DLA	DLE	DTA	DVA	DVM										
H HNBR	•	•	-	•	•	•	•	•										
V FPM	•	•	•	•	•	•	•	•										
Thermostat	DEA	DEM	DEU	DLA	DLE	DT												
A Without thermostat	•	•	•	•	•	-												
F With thermostat	-	•	-	-	•	•												
Electrical connections				DEA	DEM	DEU	DLA	DLE	DT									
10 Connection AMP Superseal series 1.5				-	•	-	-	-	-									
20 Connection AMP Timer Junior				-	•	-	-	-	-									
30 Connection Deutsch DT-04-2-P				-	•	-	-	-	-									
35 Connection Deutsch DT-04-3-P				-	•	-	-	-	-									
50 Connection EN 175301-803				•	-	•	-	•	-									
51 Connection EN 175301-803, transparent base with lamps 24 Vdc				-	-	-	•	-	-									
52 Connection EN 175301-803, transparent base with lamps 110 Vdc				-	-	-	•	-	-									
70 Connection IEC 61076-2-101 D (M12)				-	-	-	-	-	•									
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc				-	-	-	•	-	-									
Option																		
P01 MP Filtri standard																		
Pxx Customized																		
Certifications				DEU	OTHERS													
Without				-	•													
UL UL certification				•	-													

PLUGS

Series		Configuration example	
T2 Plug		T2	H
Seals			
H HNBR			
V FPM			

CLOGGING INDICATORS LOW & MEDIUM PRESS. FILTERS

Designation & Ordering code

DIFFERENTIAL PRESSURE INDICATORS

Series										
DE Electrical differential pressure indicator										
DL Electrical/Visual differential pressure indicator										
DT Electronic differential pressure indicator										
DV Visual differential pressure indicator										

Configuration example 1:	DE	M	20	H	F	50	P01
Configuration example 2:	DE	U	50	V	A	50	P01
Configuration example 3:	DL	E	50	V	A	71	P01
Configuration example 4:	DT	A	20	H	F	70	P01
Configuration example 5:	DV	M	50	V			P01

Type	DE	DL	DT	DV
A Standard type	•	•	•	A With automatic reset
M With wired electrical connection	•	-	-	M With manual reset
U Standard type 210 bar, UL certified	•	-	-	S With automatic reset
E For high power supply	-	•	-	
S Compact version	•	-	-	

Pressure setting	DEA	DEM	DEU	DES	DLA	DLE	DTA	DVA	DVM	DVS
12 1.2 bar	•	•	-	•	•	•	•	•	•	•
20 2.0 bar	•	•	•	-	•	•	•	•	•	-
25 2.5 bar	-	-	-	-	-	-	-	-	-	•
40 4.0 bar	-	-	-	•	-	-	-	-	-	•
50 5.0 bar	•	•	•	-	•	•	•	•	•	-

Seals	DEA	DEM	DEU	DES	DL	DT	DVA	DVM	DVS
H HNBR	•	•	-	•	•	•	•	•	•
V FPM	•	•	•	-	•	•	•	•	-

Thermostat	DEA	DEM	DEU	DES	DLA	DLE	DT
A Without thermostat	•	•	•	•	•	•	-
F With thermostat	-	•	-	-	-	•	•

Electrical connections	DEA	DEM	DEU	DES	DLA	DLE	DT
10 Connection AMP Superseal series 1.5	-	•	-	•	-	-	-
20 Connection AMP Timer Junior	-	•	-	-	-	-	-
30 Connection Deutsch DT-04-2-P	-	•	-	•	-	-	-
35 Connection Deutsch DT-04-3-P	-	•	-	-	-	-	-
50 Connection EN 175301-803	•	-	•	-	-	•	-
51 Connection EN 175301-803, transparent base with lamps 24 Vdc	-	-	-	-	•	-	-
52 Connection EN 175301-803, transparent base with lamps 110 Vdc	-	-	-	-	•	-	-
70 Connection IEC 61076-2-101 D (M12)	-	-	-	-	-	-	•
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	-	-	•	-	-
80 Connection Stud #10-32 UNF	-	-	-	•	-	-	-

Option

P01 MP Filtri standard

Pxx Customized

Certifications	DEU	OTHERS
Without	-	•
UL UL certification	•	-

PLUGS

Series			Configuration example	T2	H
T2 Plug					
T4 Plug					
Seals	T2	T4			
A NBR	-	•			
H HNBR	•	-			
V FPM	•	-			

DIFFERENTIAL PRESSURE INDICATORS

Series				Configuration example 1:									
DE Electrical differential pressure indicator				Configuration example 2:		DE	U	50	V	A	50	P01	UL
DL Electrical/Visual differential pressure indicator				Configuration example 3:		DL	E	20	V	A	71	P01	
DT Electronic differential pressure indicator				Configuration example 4:		DT	A	50	H	F	70	P01	
DV Visual differential pressure indicator				Configuration example 5:		DV	M	70	V		P01		
Type				DE	DL	DT	DV						
A Standard type				•	•	•	A With automatic reset						
M With wired electrical connection				•	-	-	M With manual reset						
U Standard type 210 bar, UL certified				•	-	-							
E For high power supply				-	•	-							
Pressure setting				DEA	DEM	DEU	DLA	DLE	DTA	DVA	DVM		
50 5.0 bar				•	•	•	•	•	•	•	•		
70 7.0 bar				•	•	•	•	•	•	•	•		
95 9.5 bar				•	•	-	•	•	•	•	•		
Seals				DEA	DEM	DEU	DLA	DLE	DTA	DVA	DVM		
H HNBR				•	•	-	•	•	•	•	•		
V FPM				•	•	•	•	•	•	•	•		
Thermostat				DEA	DEM	DEU	DLA	DLE	DT				
A Without thermostat				•	•	•	•	•	-				
F With thermostat				-	•	-	-	•	•				
Electrical connections				DEA	DEM	DEU	DLA	DLE	DT				
10 Connection AMP Superseal series 1.5				-	•	-	-	-	-				
20 Connection AMP Timer Junior				-	•	-	-	-	-				
30 Connection Deutsch DT-04-2-P				-	•	-	-	-	-				
35 Connection Deutsch DT-04-3-P				-	•	-	-	-	-				
50 Connection EN 175301-803				•	-	•	-	•	-				
51 Connection EN 175301-803, transparent base with lamps 24 Vdc				-	-	-	•	-	-				
52 Connection EN 175301-803, transparent base with lamps 110 Vdc				-	-	-	•	-	-				
70 Connection IEC 61076-2-101 D (M12)				-	-	-	-	-	•				
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc				-	-	-	•	-	-				
Option													
P01 MP Filtri standard													
Pxx Customized													

PLUGS

Series		Configuration example	
T2 Plug		T2	H
Seals			
H HNBR			
V FPM			

CLOGGING INDICATORS

STAINLESS STEEL HIGH PRESSURE FILTERS

Designation & Ordering code

DIFFERENTIAL PRESSURE INDICATORS

Series					Configuration example 1:						
DE Electrical differential pressure indicator					DE	Z	50	H	A	50	P01
DL Electrical / Visual differential pressure indicator					DL	X	70	V	A	52	P01
DV Visual differential pressure indicator											
Type											
X	Stainless steel standard type 420 bar	•	•	•							
Y	Stainless steel optional type 420 bar	-	-	•							
Z	Stainless steel 700 bar (only for FZH)	•	•	•							
Pressure setting											
50	5.0 bar	•	•	•							
70	7.0 bar	•	•	•							
95	9.5 bar	•	•	•							
Seals											
H	HNBR	•	•	•							
V	FPM	-	-	•							
F	MFQ	•	•	-							
Thermostat											
A	Without thermostat	•	•	•							
Electrical connections					DEX	DEZ	DL				
50	Connection EN 175301-803	•	•	-							
51	Connection EN 175301-803, transparent base with lamps 24 Vdc	-	-	•							
52	Connection EN 175301-803, transparent base with lamps 110 Vdc	-	-	•							
Option											
P01 MP Filtri standard											
Pxx Customized											

PLUGS

Series					Configuration example	
X2 Stainless Steel plug 420 bar					X2	H
X3 Stainless Steel plug 700 bar (only for FZH)						
Seals						
H	HNBR					
V	FPM					
F	MFQ					

FILTERS FOR POTENTIALLY EXPLOSIVE ATMOSPHERE

Designation & Ordering code

DIFFERENTIAL PRESSURE INDICATORS

Series	Configuration example 1:									
DE Electrical differential pressure indicator	DE	H	50	F	A	48	P01			
Series	Configuration example 2:									
DV Visual differential pressure indicator	DV	X	70	V			P01			
Type	DE	DV								
A With automatic reset	-	•								
M With manual reset	-	•								
H Stainless steel hazardous area 420 bar	•	-								
X Stainless steel standard type 420 bar	-	•								
Y Stainless steel optional type 420 bar	-	•								
Pressure setting	DEH	DVA	DVM	DVX	DVY					
50 5.0 bar	•	•	•	•	•					
70 7.0 bar	•	•	•	•	•					
95 9.5 bar	-	•	•	•	•					
Seals	DEH	DVA	DVM	DVX	DVY					
H HNBR	-	•	•	•	•					
V FPM	•	•	•	•	•					
F MFQ	•	-	-	-	-					
Thermostat	DEH									
A Without thermostat	•									
T With thermostat	-									
Electrical connections	DEH									
48 Connection via three-core cable - fitting M20x1.5	•									
49 Connection via four-core cable - fitting 1/2" NPT	•									
70 Connection IEC 61076-2-101 D (M12)	•									
Option										
P01 MP Filtri standard										
Pxx Customized										

PLUGS

Series				Configuration example	X2	H
T2 Plug						
X2 Stainless Steel plug 420 bar						
X3 Stainless Steel plug 700 bar (only for FZH)						
Seals		T2	X2	X3		
H	HNBR	•	•	•		
V	FPM	•	•	•		
F	MFQ	-	•	•		

VACUUM INDICATORS

Technical data

VE*50 (EX) Electrical Vacuum Indicator Connection: EN 175301-803 <table><tr><th>R</th><th>Ordering code</th></tr><tr><td>EN 10226 - R1/4"</td><td>VE A 21 x A 50 P01 VE A 21 x A 50 P01 EX</td></tr><tr><td>EN 10226 - R1/8"</td><td>VE B 21 A A 50 P01 VE B 21 A A 50 P01 EX</td></tr></table> A/F 27 Max tightening torque: 25 N·m		R	Ordering code	EN 10226 - R1/4"	VE A 21 x A 50 P01 VE A 21 x A 50 P01 EX	EN 10226 - R1/8"	VE B 21 A A 50 P01 VE B 21 A A 50 P01 EX	Hydraulic symbol Electrical symbol - Certification: ATEX, IECEx - Certification included in EX version	Materials - Body: - Base: - Contacts: - Seal: Brass Black polyamide Silver VEA: NBR/FPM VEB: NBR Technical data - Vacuum setting: - Max working pressure: - Proof pressure: - Working temperature: - Compatibility with fluids: - Degree of protection: 0.21 bar ±10% 10 bar 15 bar From -25 °C to +80 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 IP65 according to EN 60529 Electrical data - Electrical connection: - Resistive load: - CE certification - Available Atex product: EN 175301-803 5 A / 14 Vdc 4 A / 30 Vdc 5 A / 125 Vac 4 A / 250 Vac II 1GD Ex ia IIC Tx Ex ia IIIC Tx °C X
R	Ordering code								
EN 10226 - R1/4"	VE A 21 x A 50 P01 VE A 21 x A 50 P01 EX								
EN 10226 - R1/8"	VE B 21 A A 50 P01 VE B 21 A A 50 P01 EX								
VEA50 UL Electrical Vacuum Indicator Connection: EN 175301-803 <table><tr><th>R</th><th>Ordering code</th></tr><tr><td>EN 10226 - R1/4"</td><td>VE A 21 A A 50 P01 UL</td></tr></table> A/F 27 Max tightening torque: 25 N·m		R	Ordering code	EN 10226 - R1/4"	VE A 21 A A 50 P01 UL	Hydraulic symbol Electrical symbol - Certification: UL - Certification included in EX version	Materials - Body: - Base: - Contacts: - Seal: Brass Black polyamide Silver VEA: NBR/FPM VEB: NBR Technical data - Vacuum setting: - Max working pressure: - Proof pressure: - Working temperature: - Compatibility with fluids: - Degree of protection: 0.21 bar ±10% 10 bar 15 bar From -25 °C to +80 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 IP65 according to EN 60529 Electrical data - Electrical connection: - Resistive load: - CE certification - Available Atex product: EN 175301-803 5 A / 14 Vdc 4 A / 30 Vdc 5 A / 125 Vac 4 A / 250 Vac II 1GD Ex ia IIC Tx Ex ia IIIC Tx °C X		
R	Ordering code								
EN 10226 - R1/4"	VE A 21 A A 50 P01 UL								
VL*51 - VL*52 - VL*53 Electrical/Visual Vacuum Indicator Connection: EN 175301-803 51: Transparent base with lamps 24 Vdc 52: Transparent base with lamps 110 Vdc 53: Transparent base with lamps 230 Vac <table><tr><th>R</th><th>Ordering code</th></tr><tr><td>EN 10226 - R1/4"</td><td>VL A 21 x A xx P01</td></tr><tr><td>EN 10226 - R1/8"</td><td>VL B 21 A A xx P01</td></tr></table> A/F 27 Max tightening torque: 25 N·m		R	Ordering code	EN 10226 - R1/4"	VL A 21 x A xx P01	EN 10226 - R1/8"	VL B 21 A A xx P01	Hydraulic symbol Electrical symbol	Materials - Body: - Base: - Contacts: - Seal: Brass Transparent polyamide Brass - Polyamide VLA: NBR/FPM VLB: NBR Technical data - Vacuum setting: - Max working pressure: - Proof pressure: - Working temperature: - Compatibility with fluids: - Degree of protection: 0.21 bar ±10% 10 bar 15 bar From -25 °C to +80 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 IP65 according to EN 60529 Electrical data - Electrical connection: - Type - Lamps - Resistive load: EN 175301-803 51 52 53 24 Vdc 110 Vdc 230 Vac 1 A / 24 Vdc 1 A / 110 Vdc 1 A / 230 Vac
R	Ordering code								
EN 10226 - R1/4"	VL A 21 x A xx P01								
EN 10226 - R1/8"	VL B 21 A A xx P01								

VL*71	
Electrical/Visual Vacuum Indicator Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	
Connections	Indicator code
EN 10226 - R1/4"	VL A 21 x A 71 P01
EN 10226 - R1/8"	VL B 21 A A 71 P01

A/F 27
Max tightening
torque:
25 N·m

Hydraulic symbol

Electrical symbol

Materials

- Body: Brass
- Base: Black polyamide
- Contacts: Silver
- Seal: VLA: NBR/FPM
VLB: NBR

Technical data

- Vacuum setting: 0.21 bar ±10%
- Max working pressure: 10 bar
- Proof pressure: 15 bar
- Working temperature: From -25 °C to +80 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids
HFB and HFC according to ISO 2943
- Degree of protection: IP65 according to EN 60529

Electrical data

- Electrical connection: IEC 61076-2-101 D (M12)
- Lamps: 24 Vdc (black base)
- Resistive load: 0.4 A / 24 Vdc

VVA - VVB	
Axial Vacuum Gauge	
R	Ordering code
EN 10226 - R1/4"	VVA 20 P01
EN 10226 - R1/8"	VVB 20 P01

A/F 14

Hydraulic symbol

Dial scale

Conversion to SI units

[cmHg]	[bar]
-12	-0.16
-18	-0.24
-76	-1.01

Materials

- Case: Black plastic
- Window: Clear plastic
- Dial: White plastic
- Pointer: Black plastic
- Pressure connection: Cu-alloy
- Pressure element: Bourdon tube Cu-alloy soft soldered, C type
- Movement: Cu-alloy

Technical data

- Max working pressure: Steady: -0.7 bar
Fluctuating: -0.6 bar
Short time: -1.0 bar
- Working temperature: Ambient from -40 °C to +60 °C
Fluid max + 60 °C
Storage from -40 °C to +60 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids
HFB and HFC according to ISO 2943
- Accuracy: Class 2.5 according to EN 13190
- Degree of protection: IP31 according to EN 60529

VVR - VVS		
Radial Vacuum Gauge		
R	A/F	Ordering code
EN 10226 - R1/4"	14	VVR 20 P01
EN 10226 - R1/8"	11	VVS 20 P01

A/F 14

Hydraulic symbol

Dial scale

Conversion to SI units

[cmHg]	[bar]
-12	-0.16
-18	-0.24
-76	-1.01

Materials

- Case: Black plastic
- Window: Clear plastic
- Dial: White plastic
- Pointer: Black plastic
- Pressure connection: Cu-alloy
- Pressure element: Bourdon tube Cu-alloy soft soldered, C type
- Movement: Cu-alloy

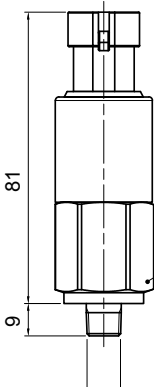
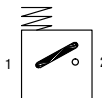
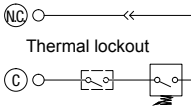
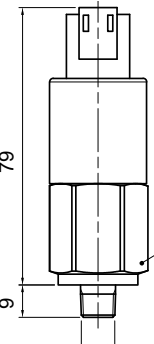
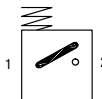
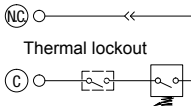
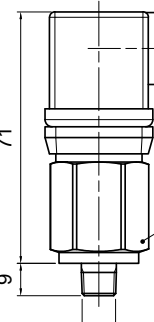
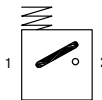
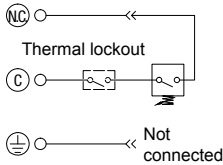
Technical data

- Max working pressure: Steady: -0.7 bar
Fluctuating: -0.6 bar
Short time: -1.0 bar
- Working temperature: Ambient from -40 °C to +60 °C
Fluid max + 60 °C
Storage from -40 °C to +60 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids
HFB and HFC according to ISO 2943
- Accuracy: Class 2.5 according to EN 13190
- Degree of protection: IP31 according to EN 60529

BAROMETRIC (PRESSURE) INDICATORS

Dimensions

BEA*50 (EX) Electrical Pressure Indicator Connection EN 175301-803 <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.5 bar ±10%</td><td>BE A 15 HA 50 P01 BE A 15 HA 50 P01 EX</td></tr><tr><td>2.0 bar ±10%</td><td>BE A 20 HA 50 P01 BE A 20 HA 50 P01 EX</td></tr></table>		Settings	Ordering code	1.5 bar ±10%	BE A 15 HA 50 P01 BE A 15 HA 50 P01 EX	2.0 bar ±10%	BE A 20 HA 50 P01 BE A 20 HA 50 P01 EX	Hydraulic symbol Electrical symbol - Certification: ATEX, IECEx - Certification included in EX version	Materials - Body: Brass - Base: Black polyamide - Contacts: Silver - Seal: HNBR Technical data - Max working pressure: 40 bar - Proof pressure: 60 bar - Working temperature: From -25 °C to +80 °C - Compatibility with fluids: Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 - Degree of protection: IP65 according to EN 60529 Electrical data - Electrical connection: EN 175301-803 - Resistive load: 5 A / 14 Vdc 4 A / 30 Vdc 5 A / 125 Vac 4 A / 250 Vac - CE certification - Available Atex product: I M1 Ex ia I Ma II 1GD Ex ia IIC Tx Ex ia IIIC Tx °C X
Settings	Ordering code								
1.5 bar ±10%	BE A 15 HA 50 P01 BE A 15 HA 50 P01 EX								
2.0 bar ±10%	BE A 20 HA 50 P01 BE A 20 HA 50 P01 EX								
BEA*50 UL Electrical Pressure Indicator Connection EN 175301-803 <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.5 bar ±10%</td><td>BE A 15 HA 50 P01 UL</td></tr><tr><td>2.0 bar ±10%</td><td>BE A 20 HA 50 P01 UL</td></tr></table>		Settings	Ordering code	1.5 bar ±10%	BE A 15 HA 50 P01 UL	2.0 bar ±10%	BE A 20 HA 50 P01 UL	Hydraulic symbol Electrical symbol - Certification: UL - Certification included in EX version	Materials - Body: Brass - Base: Black polyamide - Contacts: Silver - Seal: HNBR Technical data - Max working pressure: 40 bar - Proof pressure: 60 bar - Working temperature: From -25 °C to +80 °C - Compatibility with fluids: Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 - Degree of protection: IP65 according to EN 60529 Electrical data - Electrical connection: EN 175301-803 - Resistive load: 5 A / 14 Vdc 4 A / 30 Vdc 5 A / 125 Vac 4 A / 250 Vac - CE certification - Available Atex product: I M1 Ex ia I Ma II 1GD Ex ia IIC Tx Ex ia IIIC Tx °C X
Settings	Ordering code								
1.5 bar ±10%	BE A 15 HA 50 P01 UL								
2.0 bar ±10%	BE A 20 HA 50 P01 UL								
BEM*41 Electrical Pressure Indicator Connection via four-core cable <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.5 bar ±10%</td><td>BE M 15 HA 41 P01</td></tr><tr><td>2.0 bar ±10%</td><td>BE M 20 HA 41 P01</td></tr></table>		Settings	Ordering code	1.5 bar ±10%	BE M 15 HA 41 P01	2.0 bar ±10%	BE M 20 HA 41 P01	Hydraulic symbol Electrical symbol	Materials - Body: Brass - Base: Black polyamide - Contacts: Silver - Seal: HNBR Technical data - Max working pressure: 40 bar - Proof pressure: 60 bar - Working temperature: From -25 °C to +80 °C - Compatibility with fluids: Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 - Degree of protection: IP67 according to EN 60529 Electrical data - Electrical connection: Four-core cable - Resistive load: 5 A / 14 Vdc 4 A / 30 Vdc 5 A / 125 Vac 4 A / 250 Vac - CE certification On request this indicator can be provided with main connectors in use for wirings.
Settings	Ordering code								
1.5 bar ±10%	BE M 15 HA 41 P01								
2.0 bar ±10%	BE M 20 HA 41 P01								

BET*F10 Electrical Pressure Indicator Connection AMP Superseal series 1.5 <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>2.0 bar ±10%</td><td>BET 20 H F 10 P01</td></tr><tr><td>2.5 bar ±10%</td><td>BET 25 H F 10 P01</td></tr></table>  A/F 24 Max tightening torque: 30 N·m EN 10226 - R1/8"		Settings	Ordering code	2.0 bar ±10%	BET 20 H F 10 P01	2.5 bar ±10%	BET 25 H F 10 P01	Hydraulic symbol  Electrical symbol 	Materials - Body: - Base: - Contacts: - Seal: Brass Black polyamide Silver HNBR Technical data - Max working pressure: - Proof pressure: - Working temperature: - Compatibility with fluids: - Degree of protection: 10 bar 15 bar From -25 °C to +100 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 IP65 according to EN 60529 Electrical data - Electrical connection: - Resistive load: - Thermostat condition: - CE certification AMP Superseal series 1.5 0.5 A / 48 Vdc Open up to 30 °C
Settings	Ordering code								
2.0 bar ±10%	BET 20 H F 10 P01								
2.5 bar ±10%	BET 25 H F 10 P01								
BET*F30 Electrical Pressure Indicator Deutsch DT-04-2-P <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>2.0 bar ±10%</td><td>BET 20 H F 30 P01</td></tr><tr><td>2.5 bar ±10%</td><td>BET 25 H F 30 P01</td></tr></table>  A/F 24 Max tightening torque: 30 N·m EN 10226 - R1/8"		Settings	Ordering code	2.0 bar ±10%	BET 20 H F 30 P01	2.5 bar ±10%	BET 25 H F 30 P01	Hydraulic symbol  Electrical symbol 	Materials - Body: - Base: - Contacts: - Seal: Brass Black polyamide Silver HNBR Technical data - Max working pressure: - Proof pressure: - Working temperature: - Compatibility with fluids: - Degree of protection: 10 bar 15 bar From -25 °C to +100 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 IP65 according to EN 60529 Electrical data - Electrical connection: - Resistive load: - Thermostat condition: - CE certification Deutsch DT-04-2-P 0.5 A / 48 Vdc Open up to 30 °C
Settings	Ordering code								
2.0 bar ±10%	BET 20 H F 30 P01								
2.5 bar ±10%	BET 25 H F 30 P01								
BET*F50 Electrical Pressure Indicator Connection EN 175301-803 <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>2.0 bar ±10%</td><td>BET 20 H F 50 P01</td></tr><tr><td>2.5 bar ±10%</td><td>BET 25 H F 50 P01</td></tr></table>  A/F 24 Max tightening torque: 30 N·m EN 10226 - R1/8"		Settings	Ordering code	2.0 bar ±10%	BET 20 H F 50 P01	2.5 bar ±10%	BET 25 H F 50 P01	Hydraulic symbol  Electrical symbol 	Materials - Body: - Base: - Contacts: - Seal: Brass Black polyamide Silver HNBR Technical data - Max working pressure: - Proof pressure: - Working temperature: - Compatibility with fluids: - Degree of protection: 10 bar 15 bar From -25 °C to +100 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 IP65 according to EN 60529 Electrical data - Electrical connection: - Resistive load: - Thermostat condition: - CE certification EN 175301-803 0.5 A / 48 Vdc Open up to 30 °C
Settings	Ordering code								
2.0 bar ±10%	BET 20 H F 50 P01								
2.5 bar ±10%	BET 25 H F 50 P01								

BAROMETRIC (PRESSURE) INDICATORS

Dimensions

BL*51 - BL*52 - BL*53	
Electrical/Visual Pressure Indicator Connection: EN 175301-803	
51: Transparent base with lamps 24 Vdc 52: Transparent base with lamps 110 Vdc 53: Transparent base with lamps 230 Vac	
Settings	Ordering code
1.5 bar ±10%	BL A 15 H A xx P01
2.0 bar ±10%	BL A 20 H A xx P01

BL*71	
Electrical/Visual Pressure Indicator Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	
Settings	Ordering code
1.5 bar ±10%	BL A 15 H A 71 P01
2.0 bar ±10%	BL A 20 H A 71 P01

BVA	
Axial Pressure Gauge	
Settings	Ordering code
1.4 bar ±10%	BV A 14 P01
2.5 bar ±10%	BV A 25 P01

Hydraulic symbol	
Electrical symbol	

Materials	
- Body:	Brass
- Base:	Transparent polyamide
- Contacts:	Silver
- Seal:	HNBR
Technical data	
- Max working pressure:	40 bar
- Proof pressure:	60 bar
- Working temperature:	From -25 °C to +80 °C
- Compatibility with fluids:	Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943
- Degree of protection:	IP65 according to EN 60529
Electrical data	
- Electrical connection:	EN 175301-803
- Type	51 52 53
- Lamps	24 Vdc 110 Vdc 230 Vac
- Resistive load:	1 A / 24 Vdc 1 A / 110 Vdc 1 A / 230 Vac

Hydraulic symbol	
Electrical symbol	

Materials	
- Body:	Brass
- Base:	Black polyamide
- Contacts:	Silver
- Seal:	HNBR
Technical data	
- Max working pressure:	40 bar
- Proof pressure:	60 bar
- Working temperature:	From -25 °C to +80 °C
- Compatibility with fluids:	Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943
- Degree of protection:	IP65 according to EN 60529
Electrical data	
- Electrical connection:	IEC 61076-2-101 D (M12)
- Lamps:	24 Vdc (black base)
- Resistive load:	0.4 A / 24 Vdc

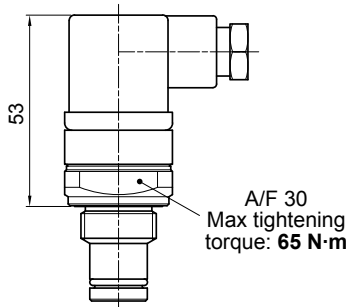
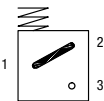
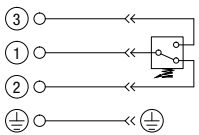
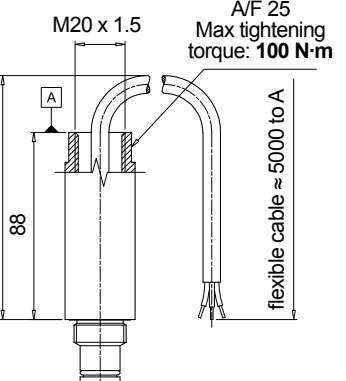
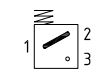
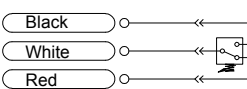
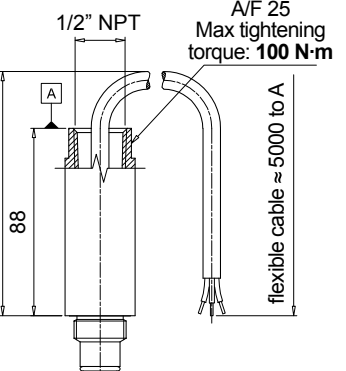
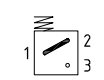
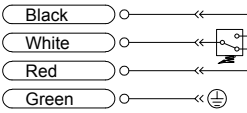
Hydraulic symbol	
Dial scale	
BV A 14 P01	
BV A 25 P01	

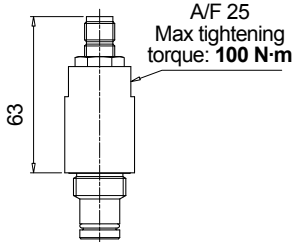
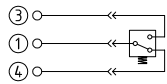
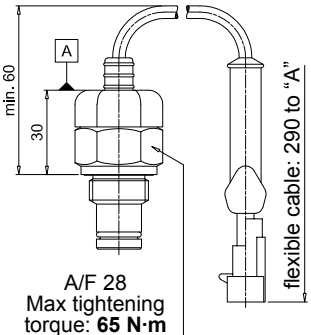
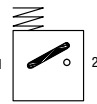
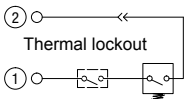
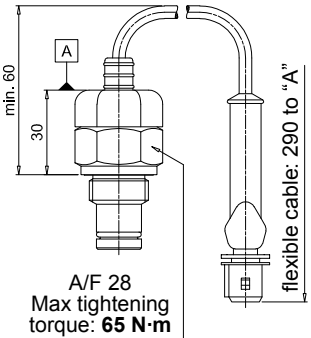
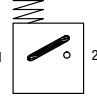
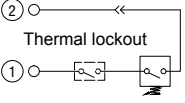
Materials	
- Case:	Painted Steel
- Window:	Clear plastic
- Dial:	Painted Steel
- Pointer:	Black plastic
- Pressure connection:	Brass
- Pressure element:	Bourdon tube Cu-alloy soft soldered, C type
Technical data	
- Max working pressure:	Static: 7 bar Fluctuating: 6 bar Short time: 10 bar
- Working temperature:	Ambient from -40 °C to +60 °C Fluid max +60 °C
- Compatibility with fluids:	Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943
- Accuracy:	Class 2.5 according to EN 13190
- Degree of protection:	IP31 according to EN 60529

BVR Radial Pressure Gauge <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.4 bar ±10%</td><td>BV R 14 P01</td></tr><tr><td>2.5 bar ±10%</td><td>BV R 25 P01</td></tr></table>		Settings	Ordering code	1.4 bar ±10%	BV R 14 P01	2.5 bar ±10%	BV R 25 P01	Hydraulic symbol Dial scale BV R 14 P01 BV R 25 P01	Materials - Case: - Window: - Dial: - Pointer: - Pressure connection: - Pressure element: Painted Steel Clear plastic Painted Steel Black plastic Brass Bourdon tube Cu-alloy soft soldered, C type Technical data - Max working pressure: - Working temperature: - Compatibility with fluids: - Accuracy: - Degree of protection: Static: 7 bar Fluctuating: 6 bar Short time: 10 bar Ambient from -40 °C to +60 °C Fluid max +60 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 Class 2.5 according to EN 13190 IP31 according to EN 60529		
Settings	Ordering code										
1.4 bar ±10%	BV R 14 P01										
2.5 bar ±10%	BV R 25 P01										
BVP - BVQ Visual Pressure Indicator BVP - Automatic reset BVQ - Manual reset <table><tr><th>Setting</th><th>Ordering code</th></tr><tr><td rowspan="2">1.5 bar ±10%</td><td>BV P 15 H P01</td></tr><tr><td>BV Q 15 H P01</td></tr><tr><td rowspan="2">2.0 bar ±10%</td><td>BV P 20 H P01</td></tr><tr><td>BV Q 20 H P01</td></tr></table>		Setting	Ordering code	1.5 bar ±10%	BV P 15 H P01	BV Q 15 H P01	2.0 bar ±10%	BV P 20 H P01	BV Q 20 H P01	Hydraulic symbol Materials - Body: - Cover / internal parts: - Caps: - Seal: Brass Nylon VMQ HNBR Technical data - Reset: - Max working pressure: - Proof pressure: - Working temperature: - Compatibility with fluids: - Degree of protection: BVP - Automatic reset BVQ - Manual reset 10 bar 15 bar From -25 °C to +80 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 IP45 according to EN 60529	Signals Absence of pressure (no indicator) Presence of pressure (green button rises gradually) Clogged filter element (red button risen)
Setting	Ordering code										
1.5 bar ±10%	BV P 15 H P01										
	BV Q 15 H P01										
2.0 bar ±10%	BV P 20 H P01										
	BV Q 20 H P01										

DIFFERENTIAL PRESSURE INDICATORS

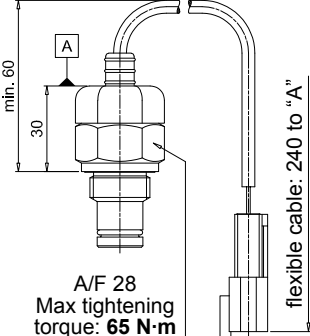
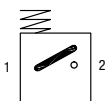
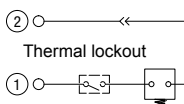
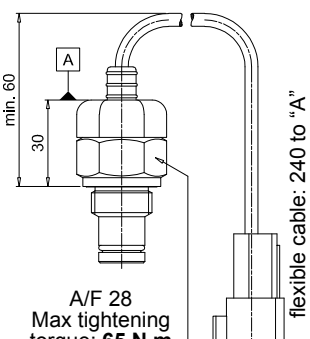
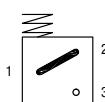
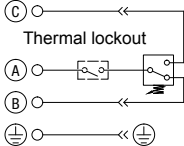
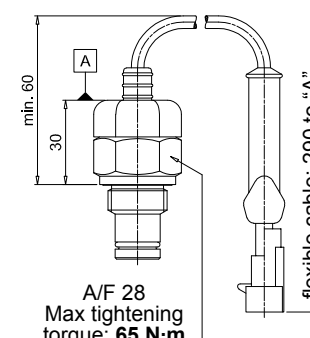
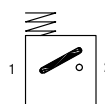
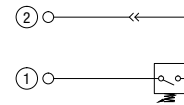
Dimensions

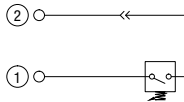
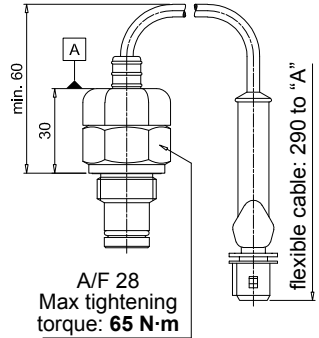
DEA*50 Electrical Differential Pressure Indicator Connection: EN 175301-803 <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.2 bar ±10%</td><td>DE A 12 x A 50 P01</td></tr><tr><td>2.0 bar ±10%</td><td>DE A 20 x A 50 P01</td></tr><tr><td>5.0 bar ±10%</td><td>DE A 50 x A 50 P01</td></tr><tr><td>7.0 bar ±10%</td><td>DE A 70 x A 50 P01</td></tr><tr><td>9.5 bar ±10%</td><td>DE A 95 x A 50 P01</td></tr></table> 		Settings	Ordering code	1.2 bar ±10%	DE A 12 x A 50 P01	2.0 bar ±10%	DE A 20 x A 50 P01	5.0 bar ±10%	DE A 50 x A 50 P01	7.0 bar ±10%	DE A 70 x A 50 P01	9.5 bar ±10%	DE A 95 x A 50 P01	Hydraulic symbol  Electrical symbol 	Materials - Body: - Base: - Contacts: - Seal: Brass Black polyamide Silver HNBR - FPM Technical data - Max working pressure: - Proof pressure: - Burst pressure: - Working temperature: - Compatibility with fluids: - Degree protection: 420 bar 630 bar 1260 bar From -25 °C to +110 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 IP66 according to EN 60529 IP69K according to ISO 20653 Electrical data - Electrical connection: - Resistive load: EN 175301-803 0.2 A / 115 Vdc
Settings	Ordering code														
1.2 bar ±10%	DE A 12 x A 50 P01														
2.0 bar ±10%	DE A 20 x A 50 P01														
5.0 bar ±10%	DE A 50 x A 50 P01														
7.0 bar ±10%	DE A 70 x A 50 P01														
9.5 bar ±10%	DE A 95 x A 50 P01														
DEH*48 Hazardous Area Electrical Differential Pressure Indicator Connection via three-core cable - fitting M20x1.5 <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>2.0 bar ±10%</td><td>DE H 20 x A 48 P01</td></tr><tr><td>5.0 bar ±10%</td><td>DE H 50 x A 48 P01</td></tr><tr><td>7.0 bar ±10%</td><td>DE H 70 x A 48 P01</td></tr></table> 		Settings	Ordering code	2.0 bar ±10%	DE H 20 x A 48 P01	5.0 bar ±10%	DE H 50 x A 48 P01	7.0 bar ±10%	DE H 70 x A 48 P01	Hydraulic symbol  Electrical symbol   Certification / Approvals: ATEX, IECEx, EAC TR CU, INMETRO Certification included as standard	Materials - Body: - Contacts: - Seal: AISI 316L Rhodium FPM - MFQ Technical data - Max working pressure: - Proof pressure: - Burst pressure: - Working temperature: - Compatibility with fluids: - Temperature class: - Degree of protection: - Connection type: - Contact type: 420 bar 630 bar 1260 bar From -60 °C to +125 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 T4 (135 °C) and T6 (85 °C) IP 66/67/68 according to EN 60529 Three-core cable, fitting M20x1.5 SPCO/SPDT (Hermetically sealed - Volt-free contacts) Electrical data - Connection via three-core cable - fitting M20x1.5 - Resistive Load: - Electrical Ratings: - Available ATEX product: 830 mA / 24 Vdc - 180 mA / 110 Vac $U_i = 30$ Vdc / $I_i = 250$ mA / $P_i = 1.3$ W II 1 GD Ex ia IIC T6 Ga -60°C ≤ Ta ≤ 80°C Ex ia IIC T4 Ga -60°C ≤ Ta ≤ 125°C II 2 GD Ex db IIC T6* Gb Ex tb IIIC T85°C* Db (Tamb : = -60°C to +70°C)* IP66/67 * alternative T/Class and ambients T4, T135°C (Tamb = -60°C to +120°C)				
Settings	Ordering code														
2.0 bar ±10%	DE H 20 x A 48 P01														
5.0 bar ±10%	DE H 50 x A 48 P01														
7.0 bar ±10%	DE H 70 x A 48 P01														
DEH*49 Hazardous Area Electrical Differential Pressure Indicator Connection via four-core cable - fitting 1/2" NPT <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>2.0 bar ±10%</td><td>DE H 20 x A 49 P01</td></tr><tr><td>5.0 bar ±10%</td><td>DE H 50 x A 49 P01</td></tr><tr><td>7.0 bar ±10%</td><td>DE H 70 x A 49 P01</td></tr></table> 		Settings	Ordering code	2.0 bar ±10%	DE H 20 x A 49 P01	5.0 bar ±10%	DE H 50 x A 49 P01	7.0 bar ±10%	DE H 70 x A 49 P01	Hydraulic symbol  Electrical symbol   Certification / Approvals: ATEX, IECEx, EAC TR CU, INMETRO, UL/CSA Class I Division 1 Groups A-D, UL/CSA Class II Division 1 Groups E-G Certification included as standard	Materials - Body: - Contacts: - Seal: AISI 316L Rhodium FPM - MFQ Technical data - Max working pressure: - Proof pressure: - Burst pressure: - Working temperature: - Compatibility with fluids: - Temperature class: - Degree of protection: - Connection type: - Contact type: 420 bar 630 bar 1260 bar From -60 °C to +120 °C : ATEX, IECEx, EAC TR CU, INMETRO From -60 °C to +105 °C : UL/CSA Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 T4 (135 °C) and T6 (85 °C) IP 66/67/68 according to EN 60529 Four-core cable, fitting 1/2" NPT SPCO/SPDT (Hermetically sealed - Volt-free contacts) Electrical data - Connection via four-core cable - fitting 1/2" NPT - Resistive Load: - Max voltage - Power - Available ATEX product: 830 mA / 24 Vdc - 180 mA / 110 Vac 150 Vac/dc 20 W II 1 GD Ex ia IIC T6 Ga -60°C ≤ Ta ≤ 80°C Ex ia IIC T4 Ga -60°C ≤ Ta ≤ 125°C II 2 GD Ex db IIC T6* Gb Ex tb IIIC T85°C* Db (Tamb : = -60°C to +70°C)* IP66/67 * alternative T/Class and ambients T4, T135°C (Tamb = -60°C to +120°C)				
Settings	Ordering code														
2.0 bar ±10%	DE H 20 x A 49 P01														
5.0 bar ±10%	DE H 50 x A 49 P01														
7.0 bar ±10%	DE H 70 x A 49 P01														

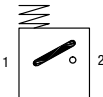
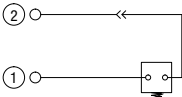
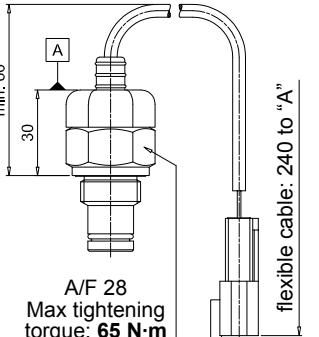
DEH*70 Hazardous Area Electrical Differential Pressure Indicator Connection IEC 61076-2-101 D (M12) <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>2.0 bar ±10%</td><td>DE H 20 x A 70 P01</td></tr><tr><td>5.0 bar ±10%</td><td>DE H 50 x A 70 P01</td></tr><tr><td>7.0 bar ±10%</td><td>DE H 70 x A 70 P01</td></tr></table>  A/F 25 Max tightening torque: 100 N·m 63		Settings	Ordering code	2.0 bar ±10%	DE H 20 x A 70 P01	5.0 bar ±10%	DE H 50 x A 70 P01	7.0 bar ±10%	DE H 70 x A 70 P01	Hydraulic symbol  Electrical symbol   Certification / Approvals: ATEX, IECEx, EAC TR CU, INMETRO - Certification included as standard	Materials - Body: - Contacts: - Seal: AISI 316L with internal engineered resin switch Rhodium FPM - MFQ Technical data - Max working pressure: - Proof pressure: - Burst pressure: - Working temperature: - Compatibility with fluids: - Temperature class: - Degree of protection: - Connection type: IEC 61076-2-101 D (M12) - Contact type: 420 bar 630 bar 1260 bar From -60 °C to +80 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 T6 (85 °C) IP 66/67 according to EN 60529 SPCO/SPDT (Hermetically sealed - Volt-free contacts) Electrical data - Connection IEC 61076-2-101 D (M12) - Resistive Load: - Electrical Ratings: - Available ATEX product: 830 mA / 24 Vdc - 180 mA / 110 Vdc U_i = 30 Vdc I_i = 250 mA P_i = 1.3 W II 1 GD Ex ia IIC T6 Ga -60°C ≤ T_a ≤ 80°C Ex ia IIC T4 Ga -60°C ≤ T_a ≤ 125°C II 2 GD Ex db IIC T6* Gb Ex tb IIIC T85°C* Db (T_{amb} : = -60°C to +70°C)* IP66/67 * alternative T/Class and ambients T4, T135°C (T_{amb} = -60°C to +120°C)				
Settings	Ordering code														
2.0 bar ±10%	DE H 20 x A 70 P01														
5.0 bar ±10%	DE H 50 x A 70 P01														
7.0 bar ±10%	DE H 70 x A 70 P01														
DEM*F10 Electrical Differential Pressure Indicator Connection: AMP Superseal series 1.5 <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.2 bar ±10%</td><td>DE M 12 x F 10 P01</td></tr><tr><td>2.0 bar ±10%</td><td>DE M 20 x F 10 P01</td></tr><tr><td>5.0 bar ±10%</td><td>DE M 50 x F 10 P01</td></tr><tr><td>7.0 bar ±10%</td><td>DE M 70 x F 10 P01</td></tr><tr><td>9.5 bar ±10%</td><td>DE M 95 x F 10 P01</td></tr></table>  A/F 28 Max tightening torque: 65 N·m min. 60 30 flexible cable: 290 to "A"		Settings	Ordering code	1.2 bar ±10%	DE M 12 x F 10 P01	2.0 bar ±10%	DE M 20 x F 10 P01	5.0 bar ±10%	DE M 50 x F 10 P01	7.0 bar ±10%	DE M 70 x F 10 P01	9.5 bar ±10%	DE M 95 x F 10 P01	Hydraulic symbol  Electrical symbol  Thermal lockout	Materials - Body: - Base: - Contacts: - Seal: Brass Black polyamide Silver HNBR - FPM Technical data - Max working pressure: - Proof pressure: - Burst pressure: - Working temperature: - Compatibility with fluids: - Degree protection: 420 bar 630 bar 1260 bar From -25 °C to +110 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 IP66 according to EN 60529 Electrical data - Electrical connection: - Resistive load: - Switching type: - Thermal lockout: AMP Superseal series 1.5 0.2 A / 115 Vdc Normally open contacts (NC on request) Normally open up to 30 °C (option "F")
Settings	Ordering code														
1.2 bar ±10%	DE M 12 x F 10 P01														
2.0 bar ±10%	DE M 20 x F 10 P01														
5.0 bar ±10%	DE M 50 x F 10 P01														
7.0 bar ±10%	DE M 70 x F 10 P01														
9.5 bar ±10%	DE M 95 x F 10 P01														
DEM*F20 Electrical Differential Pressure Indicator AMP Time junior <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.2 bar ±10%</td><td>DE M 12 x F 20 P01</td></tr><tr><td>2.0 bar ±10%</td><td>DE M 20 x F 20 P01</td></tr><tr><td>5.0 bar ±10%</td><td>DE M 50 x F 20 P01</td></tr><tr><td>7.0 bar ±10%</td><td>DE M 70 x F 20 P01</td></tr><tr><td>9.5 bar ±10%</td><td>DE M 95 x F 20 P01</td></tr></table>  A/F 28 Max tightening torque: 65 N·m min. 60 30 flexible cable: 290 to "A"		Settings	Ordering code	1.2 bar ±10%	DE M 12 x F 20 P01	2.0 bar ±10%	DE M 20 x F 20 P01	5.0 bar ±10%	DE M 50 x F 20 P01	7.0 bar ±10%	DE M 70 x F 20 P01	9.5 bar ±10%	DE M 95 x F 20 P01	Hydraulic symbol  Electrical symbol  Thermal lockout	Materials - Body: - Base: - Contacts: - Seal: Brass Black polyamide Silver HNBR - FPM Technical data - Max working pressure: - Proof pressure: - Burst pressure: - Working temperature: - Compatibility with fluids: - Degree protection: 420 bar 630 bar 1260 bar From -25 °C to +110 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 IP66 according to EN 60529 Electrical data - Electrical connection: - Resistive load: - Switching type: - Thermal lockout: AMP Time junior 0.2 A / 115 Vdc Normally open contacts (NC on request) Normally open up to 30 °C (option "F")
Settings	Ordering code														
1.2 bar ±10%	DE M 12 x F 20 P01														
2.0 bar ±10%	DE M 20 x F 20 P01														
5.0 bar ±10%	DE M 50 x F 20 P01														
7.0 bar ±10%	DE M 70 x F 20 P01														
9.5 bar ±10%	DE M 95 x F 20 P01														

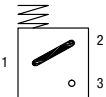
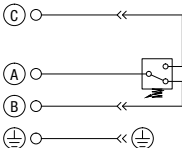
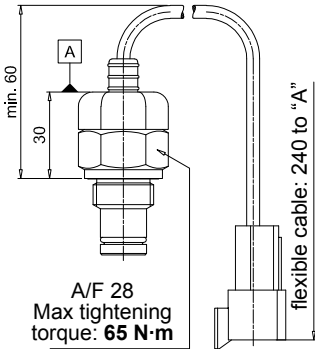
DIFFERENTIAL PRESSURE INDICATORS

Dimensions

DEM*F30 Electrical Differential Pressure Indicator Deutsch DT-04-2-P <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.2 bar ±10%</td><td>DE M 12 x F 30 P01</td></tr><tr><td>2.0 bar ±10%</td><td>DE M 20 x F 30 P01</td></tr><tr><td>5.0 bar ±10%</td><td>DE M 50 x F 30 P01</td></tr><tr><td>7.0 bar ±10%</td><td>DE M 70 x F 30 P01</td></tr><tr><td>9.5 bar ±10%</td><td>DE M 95 x F 30 P01</td></tr></table> 		Settings	Ordering code	1.2 bar ±10%	DE M 12 x F 30 P01	2.0 bar ±10%	DE M 20 x F 30 P01	5.0 bar ±10%	DE M 50 x F 30 P01	7.0 bar ±10%	DE M 70 x F 30 P01	9.5 bar ±10%	DE M 95 x F 30 P01	Hydraulic symbol  Electrical symbol 	Materials - Body: Brass - Base: Black polyamide - Contacts: Silver - Seal: HNBR - FPM Technical data - Max working pressure: 420 bar - Proof pressure: 630 bar - Burst pressure: 1260 bar - Working temperature: From -25 °C to +110 °C - Compatibility with fluids: Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 - Degree protection: IP66 according to EN 60529 Electrical data - Electrical connection: Deutsch DT-04-2-P - Resistive load: 0.2 A / 115 Vdc - Switching type: Normally open contacts (NC on request) - Thermal lockout: Normally open up to 30 °C (option "F")
Settings	Ordering code														
1.2 bar ±10%	DE M 12 x F 30 P01														
2.0 bar ±10%	DE M 20 x F 30 P01														
5.0 bar ±10%	DE M 50 x F 30 P01														
7.0 bar ±10%	DE M 70 x F 30 P01														
9.5 bar ±10%	DE M 95 x F 30 P01														
DEM*F35 Electrical Differential Pressure Indicator Deutsch DT-04-3-P <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.2 bar ±10%</td><td>DE M 12 x F 35 P01</td></tr><tr><td>2.0 bar ±10%</td><td>DE M 20 x F 35 P01</td></tr><tr><td>5.0 bar ±10%</td><td>DE M 50 x F 35 P01</td></tr><tr><td>7.0 bar ±10%</td><td>DE M 70 x F 35 P01</td></tr><tr><td>9.5 bar ±10%</td><td>DE M 95 x F 35 P01</td></tr></table> 		Settings	Ordering code	1.2 bar ±10%	DE M 12 x F 35 P01	2.0 bar ±10%	DE M 20 x F 35 P01	5.0 bar ±10%	DE M 50 x F 35 P01	7.0 bar ±10%	DE M 70 x F 35 P01	9.5 bar ±10%	DE M 95 x F 35 P01	Hydraulic symbol  Electrical symbol 	Materials - Body: Brass - Base: Black polyamide - Contacts: Silver - Seal: HNBR - FPM Technical data - Max working pressure: 420 bar - Proof pressure: 630 bar - Burst pressure: 1260 bar - Working temperature: From -25 °C to +110 °C - Compatibility with fluids: Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 - Degree protection: IP66 according to EN 60529 Electrical data - Electrical connection: Deutsch DT-04-3-P - Resistive load: 0.2 A / 115 Vdc - Switching type: SPDT contact - Thermal lockout: Normally open up to 30 °C (option "F")
Settings	Ordering code														
1.2 bar ±10%	DE M 12 x F 35 P01														
2.0 bar ±10%	DE M 20 x F 35 P01														
5.0 bar ±10%	DE M 50 x F 35 P01														
7.0 bar ±10%	DE M 70 x F 35 P01														
9.5 bar ±10%	DE M 95 x F 35 P01														
DEM*A10 Electrical Differential Pressure Indicator Connection: AMP Superseal series 1.5 <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.2 bar ±10%</td><td>DE M 12 x A 10 P01</td></tr><tr><td>2.0 bar ±10%</td><td>DE M 20 x A 10 P01</td></tr><tr><td>5.0 bar ±10%</td><td>DE M 50 x A 10 P01</td></tr><tr><td>7.0 bar ±10%</td><td>DE M 70 x A 10 P01</td></tr><tr><td>9.5 bar ±10%</td><td>DE M 95 x A 10 P01</td></tr></table> 		Settings	Ordering code	1.2 bar ±10%	DE M 12 x A 10 P01	2.0 bar ±10%	DE M 20 x A 10 P01	5.0 bar ±10%	DE M 50 x A 10 P01	7.0 bar ±10%	DE M 70 x A 10 P01	9.5 bar ±10%	DE M 95 x A 10 P01	Hydraulic symbol  Electrical symbol 	Materials - Body: Brass - Base: Black polyamide - Contacts: Silver - Seal: HNBR - FPM Technical data - Max working pressure: 420 bar - Proof pressure: 630 bar - Burst pressure: 1260 bar - Working temperature: From -25 °C to +110 °C - Compatibility with fluids: Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 - Degree protection: IP66 according to EN 60529 Electrical data - Electrical connection: AMP Superseal series 1.5 - Resistive load: 0.2 A / 115 Vdc - Switching type: Normally open contacts (NC on request)
Settings	Ordering code														
1.2 bar ±10%	DE M 12 x A 10 P01														
2.0 bar ±10%	DE M 20 x A 10 P01														
5.0 bar ±10%	DE M 50 x A 10 P01														
7.0 bar ±10%	DE M 70 x A 10 P01														
9.5 bar ±10%	DE M 95 x A 10 P01														

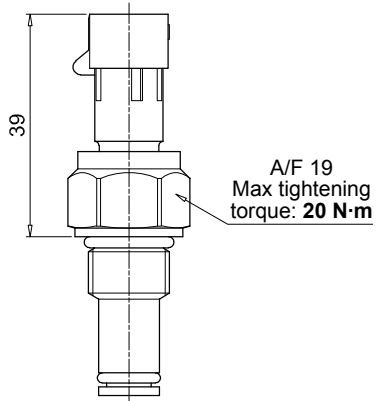
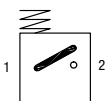
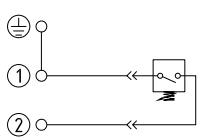
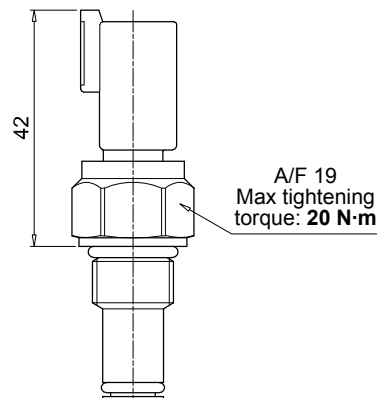
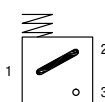
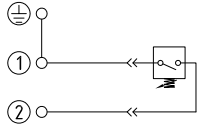
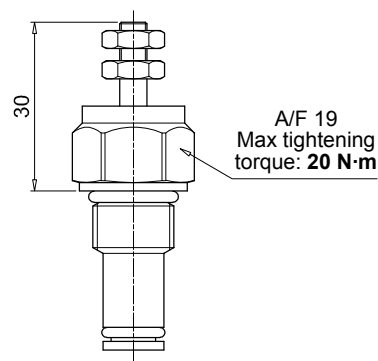
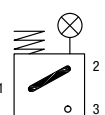
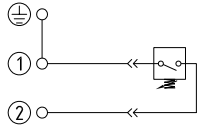
DEM*A20		Hydraulic symbol	Electrical symbol	Materials	Technical data	Electrical data			
Electrical Differential Pressure Indicator AMP Time junior									
Settings	Ordering code								
1.2 bar ±10%	DE M 12 x A 20 P01								
2.0 bar ±10%	DE M 20 x A 20 P01								
5.0 bar ±10%	DE M 50 x A 20 P01								
7.0 bar ±10%	DE M 70 x A 20 P01								
9.5 bar ±10%	DE M 95 x A 20 P01								
									

DEM*A30		Hydraulic symbol	Electrical symbol	Materials	Technical data	Electrical data			
Electrical Differential Pressure Indicator Deutsch DT-04-2-P									
Settings	Ordering code								
1.2 bar ±10%	DE M 12 x A 30 P01								
2.0 bar ±10%	DE M 20 x A 30 P01								
5.0 bar ±10%	DE M 50 x A 30 P01								
7.0 bar ±10%	DE M 70 x A 30 P01								
9.5 bar ±10%	DE M 95 x A 30 P01								
									

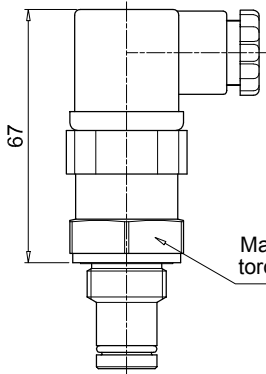
DEM*A35		Hydraulic symbol	Electrical symbol	Materials	Technical data	Electrical data			
Electrical Differential Pressure Indicator Deutsch DT-04-3-P									
Settings	Ordering code								
1.2 bar ±10%	DE M 12 x A 35 P01								
2.0 bar ±10%	DE M 20 x A 35 P01								
5.0 bar ±10%	DE M 50 x A 35 P01								
7.0 bar ±10%	DE M 70 x A 35 P01								
9.5 bar ±10%	DE M 95 x A 35 P01								
									

DIFFERENTIAL PRESSURE INDICATORS

Dimensions

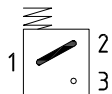
DES*10 Electrical Differential Pressure Indicator AMP Superseal series 1.5 <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.2 bar ±10%</td><td>DE S 12 H A 10 P01</td></tr><tr><td>2.5 bar ±10%</td><td>DE S 25 H A 10 P01</td></tr><tr><td>4.0 bar ±10%</td><td>DE S 40 H A 10 P01</td></tr></table> 	Settings	Ordering code	1.2 bar ±10%	DE S 12 H A 10 P01	2.5 bar ±10%	DE S 25 H A 10 P01	4.0 bar ±10%	DE S 40 H A 10 P01	Hydraulic symbol  Electrical symbol 	Materials - Body: - Internal parts: - Contacts: - Seal: Brass Brass - Polyamide Silver HNBR Technical data - Max working pressure: - Proof pressure: - Burst pressure: - Working temperature: - Compatibility with fluids: - Degree protection: 16 bar 24 bar 48 bar From -25 °C to +110 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 IP67 according to EN 60529 Electrical data - Electrical connection: - Resistive load: - Switching type: AMP Superseal series 1.5 0.2 A / 24 Vdc Normally open contacts (NC on request)
Settings	Ordering code									
1.2 bar ±10%	DE S 12 H A 10 P01									
2.5 bar ±10%	DE S 25 H A 10 P01									
4.0 bar ±10%	DE S 40 H A 10 P01									
DES*30 Electrical Differential Pressure Indicator Deutsch DT-04-2-P <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.2 bar ±10%</td><td>DE S 12 H A 30 P01</td></tr><tr><td>2.5 bar ±10%</td><td>DE S 25 H A 30 P01</td></tr><tr><td>4.0 bar ±10%</td><td>DE S 40 H A 30 P01</td></tr></table> 	Settings	Ordering code	1.2 bar ±10%	DE S 12 H A 30 P01	2.5 bar ±10%	DE S 25 H A 30 P01	4.0 bar ±10%	DE S 40 H A 30 P01	Hydraulic symbol  Electrical symbol 	Materials - Body: - Internal parts: - Contacts: - Seal: Brass Brass - Polyamide Silver HNBR Technical data - Max working pressure: - Proof pressure: - Burst pressure: - Working temperature: - Compatibility with fluids: - Degree protection: 16 bar 24 bar 48 bar From -25 °C to +110 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 IP67 according to EN 60529 Electrical data - Electrical connection: - Resistive load: - Switching type: Deutsch DT-04-2-P 0.2 A / 24 Vdc Normally open contacts (NC on request)
Settings	Ordering code									
1.2 bar ±10%	DE S 12 H A 30 P01									
2.5 bar ±10%	DE S 25 H A 30 P01									
4.0 bar ±10%	DE S 40 H A 30 P01									
DES*80 Electrical Differential Pressure Indicator Stud #10-32 UNF <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.2 bar ±10%</td><td>DE S 12 H A 80 P01</td></tr><tr><td>2.5 bar ±10%</td><td>DE S 25 H A 80 P01</td></tr><tr><td>4.0 bar ±10%</td><td>DE S 40 H A 80 P01</td></tr></table> 	Settings	Ordering code	1.2 bar ±10%	DE S 12 H A 80 P01	2.5 bar ±10%	DE S 25 H A 80 P01	4.0 bar ±10%	DE S 40 H A 80 P01	Hydraulic symbol  Electrical symbol 	Materials - Body: - Internal parts: - Contacts: - Seal: Brass Brass - Polyamide Silver HNBR Technical data - Max working pressure: - Proof pressure: - Burst pressure: - Working temperature: - Compatibility with fluids: - Degree protection: 16 bar 24 bar 48 bar From -25 °C to +110 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 IP67 according to EN 60529 Electrical data - Electrical connection: - Resistive load: - Switching type: Stud #10-32 UNF 0.2 A / 24 Vdc Normally open contacts (NC on request)
Settings	Ordering code									
1.2 bar ±10%	DE S 12 H A 80 P01									
2.5 bar ±10%	DE S 25 H A 80 P01									
4.0 bar ±10%	DE S 40 H A 80 P01									

DEU*50 UL	
Electrical Differential Pressure Indicator	
Connection EN 175301-803	
Settings	Ordering code
2.0 bar $\pm 10\%$	DE U 20 V A 50 P01 UL
5.0 bar $\pm 10\%$	DE U 50 V A 50 P01 UL
7.0 bar $\pm 10\%$	DE U 70 V A 50 P01 UL

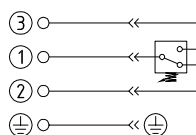


A/F 30
Max tightening
torque: 50 N·m

Hydraulic symbol



Electrical symbol





- Certification: UL
- Certification included as standard

Materials

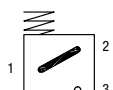
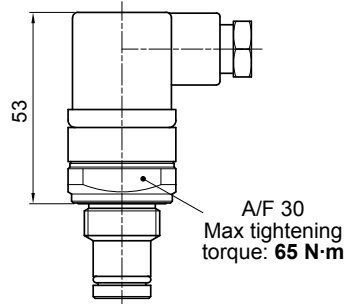
- Body: Brass
- Base: Black Polyamide
- Contacts: Silver
- Seal: FPM

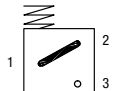
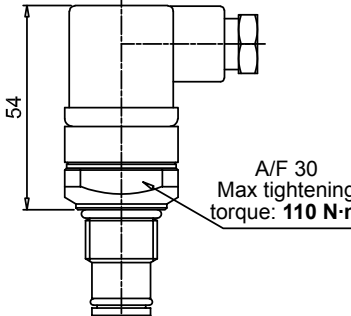
Technical data

- Max working pressure: 210 bar
- Proof pressure: 220 bar
- Burst pressure: 880 bar
- Working temperature: From -25 °C to +85 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids
HFB and HFC according to ISO 2943
- Degree protection: IP65 according to EN 60529

Electrical data

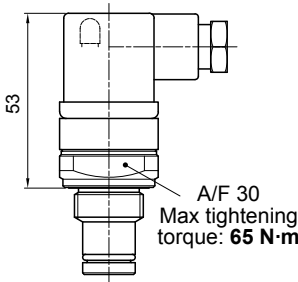
- Electrical connection: EN 175301-803
- Resistive load: 3 A / 30 Vdc
3 A / 125 Vac
3 (3) A / 250 Vac

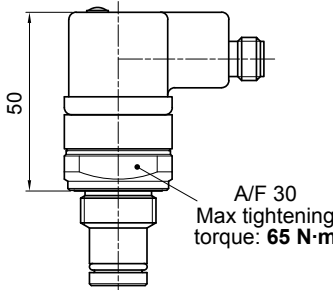
DEX*50		Hydraulic symbol	Materials	
Electrical Differential Pressure Indicator Connection: EN 175301-803				
Settings	Ordering code		- Body: AISI 316L - Base: Black polyamide - Contacts: Silver - Seal: HNBR - MFQ	
1.2 bar ±10%	DE X 12 x A 50 P01			
2.0 bar ±10%	DE X 20 x A 50 P01			
5.0 bar ±10%	DE X 50 x A 50 P01			
7.0 bar ±10%	DE X 70 x A 50 P01			
9.5 bar ±10%	DE X 95 x A 50 P01	Electrical symbol	Technical data	
				- Max working pressure: 420 bar
				- Proof pressure: 630 bar
		- Burst pressure: 1260 bar		
		- Working temperature: From -25 °C to +110 °C		
		- Compatibility with fluids: Mineral oils, Synthetic fluids		
		- Degree protection: IP66 according to EN 60529		
		IP69K according to ISO 20653		
		Electrical data		
		- Electrical connection: EN 175301-803		
		- Resistive load: 0.2 A / 115 Vdc		

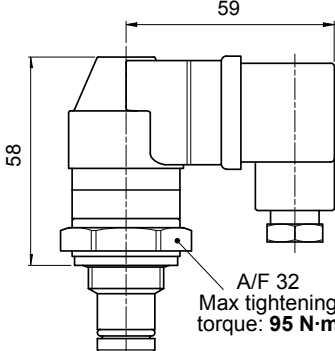
DEZ*50		Hydraulic symbol	Materials	
Electrical Differential Pressure Indicator Connection: EN 175301-803				
Settings	Ordering code		- Body: AISI 316L - Base: Black polyamide - Contacts: Silver - Seal: HNBR - MFQ	
1.2 bar ±10%	DE Z 12 x A 50 P01			
2.5 bar ±10%	DE Z 25 x A 50 P01			
5.0 bar ±10%	DE Z 50 x A 50 P01			
7.0 bar ±10%	DE Z 70 x A 50 P01			
9.5 bar ±10%	DE Z 95 x A 50 P01	Electrical symbol	Technical data	
				- Max working pressure: 700 bar - Proof pressure: 1050 bar - Burst pressure: 2100 bar - Working temperature: From -25 °C to +110 °C - Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943 - Degree protection: IP66 according to EN 60529 IP69K according to ISO 20653
				- Electrical connection: EN 175301-803 - Resistive load: 0.2 A / 115 Vdc

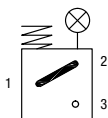
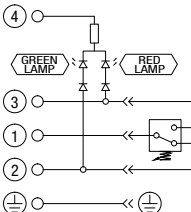
DIFFERENTIAL PRESSURE INDICATORS

Dimensions

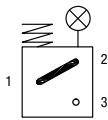
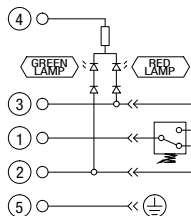
DLA*51 - DLA*52	
Electrical/Visual Differential Pressure Indicator Connection: EN 175301-803	
51: Transparent base with lamps 24 Vdc 52: Transparent base with lamps 110 Vdc	
Settings	Ordering code
1.2 bar ±10%	DL A 12 x A xx P01
2.0 bar ±10%	DL A 20 x A xx P01
5.0 bar ±10%	DL A 50 x A xx P01
7.0 bar ±10%	DL A 70 x A xx P01
9.5 bar ±10%	DL A 95 x A xx P01
	

DLA*71	
Electrical/Visual Differential pressure indicator Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	
Settings	Ordering code
1.2 bar ±10%	DL A 12 x A 71 P01
2.0 bar ±10%	DL A 20 x A 71 P01
5.0 bar ±10%	DL A 50 x A 71 P01
7.0 bar ±10%	DL A 70 x A 71 P01
9.5 bar ±10%	DL A 95 x A 71 P01
	

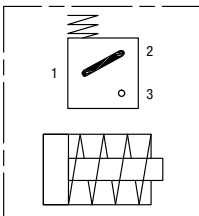
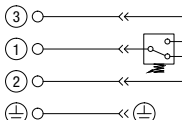
DLE*A50	
Electrical/Visual Differential Pressure Indicator Without term. Connections: EN 175301-803	
Settings	Ordering code
1.2 bar ±10%	DL E 12 x A 50 P01
2.0 bar ±10%	DL E 20 x A 50 P01
5.0 bar ±10%	DL E 50 x A 50 P01
7.0 bar ±10%	DL E 70 x A 50 P01
9.5 bar ±10%	DL E 95 x A 50 P01
	

Hydraulic symbol

Electrical symbol


Materials	Brass Transparent polyamide Silver HNBR - FPM
Technical data	- Max working pressure: 420 bar - Proof pressure: 630 bar - Burst pressure: 1260 bar - Working temperature: From -25 °C to +110 °C - Compatibility with fluids: Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 - Degree protection: IP66 according to EN 60529 IP69K according to ISO 20653
Electrical data	- Electrical connection: EN 175301-803 - Type: 51 52 - Lamps: 24 Vdc 110 Vdc - Resistive load: 1 A / 24 Vdc 1 A / 110 Vdc

Hydraulic symbol

Electrical symbol


Materials	Brass Black polyamide Silver HNBR - FPM
Technical data	- Max working pressure: 420 bar - Proof pressure: 630 bar - Burst pressure: 1260 bar - Working temperature: From -25 °C to +110 °C - Compatibility with fluids: Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 - Degree protection: IP65 according to EN 60529 IP69K according to ISO 20653
Electrical data	- Electrical connection: IEC 61076-2-101 D (M12) - Lamps: 24 Vdc (black base) - Resistive load: 0.4 A / 24 Vdc

Hydraulic symbol

Electrical symbol


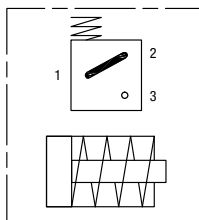
Materials	Brass Black polyamide Silver HNBR - FPM
Technical data	- Max working pressure: 420 bar - Proof pressure: 630 bar - Burst pressure: 1260 bar - Working temperature: From -25 °C to +110 °C - Compatibility with fluids: Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 - Degree protection: IP65 according to EN 60529
Electrical data	- Electrical connections: EN 175301-803 - Resistive load: 5 A / 250 Vac - Available the connector with lamps

DLE*F50
Electrical/Visual Differential Pressure Indicator
 With term. Connections: EN 175301-803

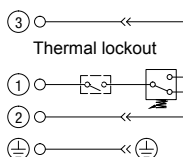
Settings	Ordering code
1.2 bar $\pm 10\%$	DL E 12 x F 50 P01
2.0 bar $\pm 10\%$	DL E 20 x F 50 P01
5.0 bar $\pm 10\%$	DL E 50 x F 50 P01
7.0 bar $\pm 10\%$	DL E 70 x F 50 P01
9.5 bar $\pm 10\%$	DL E 95 x F 50 P01

A/F 32
Max tightening torque: 95 N·m

Hydraulic symbol



Electrical symbol



Materials

- Body: Brass
- Base: Black polyamide
- Contacts: Silver
- Seal: HNBR - FPM

Technical data

- Max working pressure: 420 bar
- Proof pressure: 630 bar
- Burst pressure: 1260 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids
HFB and HFC according to ISO 2943
- Degree protection: IP65 according to EN 60529

Electrical data

- Electrical connections: EN 175301-803
- Resistive load: 5 A / 250 Vac
- Thermal lockout setting: +30 °C

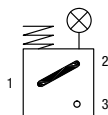
DLX*51 - DLX*52
Electrical/Visual Differential Pressure Indicator
 Connection: EN 175301-803

51: Transparent base with lamps 24 Vdc
 52: Transparent base with lamps 110 Vdc

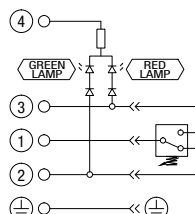
Settings	Ordering code
1.2 bar $\pm 10\%$	DL X 12 x A 5x P01
2.0 bar $\pm 10\%$	DL X 20 x A 5x P01
5.0 bar $\pm 10\%$	DL X 50 x A 5x P01
7.0 bar $\pm 10\%$	DL X 70 x A 5x P01
9.5 bar $\pm 10\%$	DL X 95 x A 5x P01

A/F 30
Max tightening torque: 65 N·m

Hydraulic symbol



Electrical symbol



Materials

- Body: AISI 316L
- Base: Transparent polyamide
- Contacts: Silver
- Seal: HNBR - MFQ

Technical data

- Max working pressure: 420 bar
- Proof pressure: 630 bar
- Burst pressure: 1260 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids
HFB and HFC according to ISO 2943
- Degree protection: IP66 according to EN 60529
IP69K according to ISO 20653

Electrical data

- Electrical connection: EN 175301-803
- Type: 51 52
- Lamps: 24 Vdc 110 Vdc
- Resistive load: 1 A / 24 Vdc 1 A / 110 Vdc

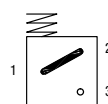
DLZ*51 - DLZ*52
Electrical/Visual Differential Pressure Indicator
 Connection: EN 175301-803

51: Transparent base with lamps 24 Vdc
 52: Transparent base with lamps 110 Vdc

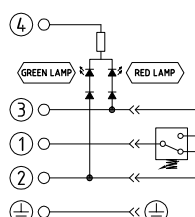
Settings	Ordering code
1.2 bar $\pm 10\%$	DL Z 12 x A 5x P01
2.5 bar $\pm 10\%$	DL Z 25 x A 5x P01
5.0 bar $\pm 10\%$	DL Z 50 x A 5x P01
7.0 bar $\pm 10\%$	DL Z 70 x A 5x P01
9.5 bar $\pm 10\%$	DL Z 95 x A 5x P01

A/F 30
Max tightening torque: 110 N·m

Hydraulic symbol



Electrical symbol



Materials

- Body: AISI 316L
- Base: Transparent polyamide
- Contacts: Silver
- Seal: HNBR - MFQ

Technical data

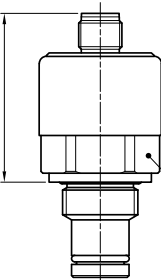
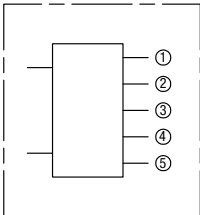
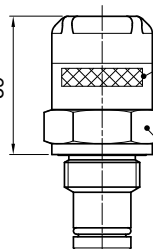
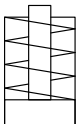
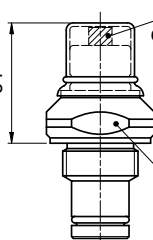
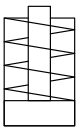
- Max working pressure: 700 bar
- Proof pressure: 1050 bar
- Burst pressure: 2100 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids
HFB and HFC according to ISO 2943
- Degree protection: IP66 according to EN 60529
IP69K according to ISO 20653

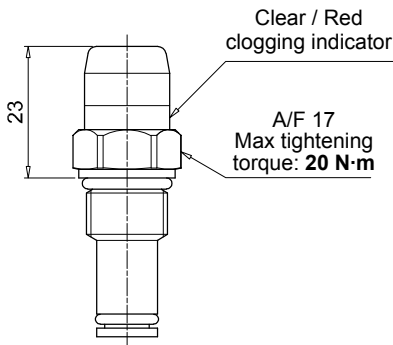
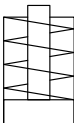
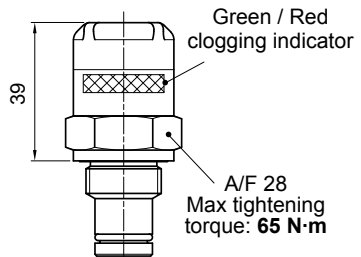
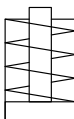
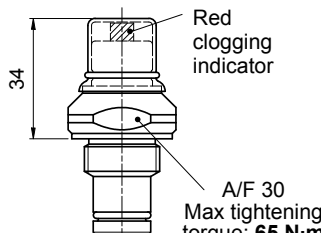
Electrical data

- Electrical connection: EN 175301-803
- Type: 51 52
- Lamps: 24 Vdc 110 Vdc
- Resistive load: 1 A / 24 Vdc 1 A / 110 Vdc

DIFFERENTIAL PRESSURE INDICATORS

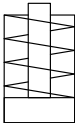
Dimensions

DTA*F70 Electronic Differential Pressure Indicator Connection: IEC 61076-2-101 D (M12) <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.2 bar ±10%</td><td>DT A 12 x F 70 P01</td></tr><tr><td>2.0 bar ±10%</td><td>DT A 20 x F 70 P01</td></tr><tr><td>5.0 bar ±10%</td><td>DT A 50 x F 70 P01</td></tr><tr><td>7.0 bar ±10%</td><td>DT A 70 x F 70 P01</td></tr><tr><td>9.5 bar ±10%</td><td>DT A 95 x F 70 P01</td></tr></table> 47  A/F 30 Max tightening torque: 50 N·m		Settings	Ordering code	1.2 bar ±10%	DT A 12 x F 70 P01	2.0 bar ±10%	DT A 20 x F 70 P01	5.0 bar ±10%	DT A 50 x F 70 P01	7.0 bar ±10%	DT A 70 x F 70 P01	9.5 bar ±10%	DT A 95 x F 70 P01	Hydraulic symbol  Electrical symbol ① ○ ○ +24 Vdc ② ○ ○ 4 ÷ 20 mA ③ ○ ○ 75% - N.O. Digital output ④ ○ ○ 100% - N.O. Digital output ⑤ ○ ○ 0 Vdc	Materials - Body: Brass - Internal parts: Brass - Polyamide - Contacts: Silver - Seal: HNBR - FPM Technical data - Max working pressure: 420 bar - Proof pressure: 630 bar - Burst pressure: 1260 bar - Compatibility with fluids: Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 - Degree protection: IP67 according to EN 60529 Electrical data - Electrical connection: IEC 61076-2-101 D (M12) - Power supply: 24 Vdc - Analogue output: From 4 to 20 mA - Thermal lockout: 30 °C (all output signals stalled up to 30 °C)
Settings	Ordering code														
1.2 bar ±10%	DT A 12 x F 70 P01														
2.0 bar ±10%	DT A 20 x F 70 P01														
5.0 bar ±10%	DT A 50 x F 70 P01														
7.0 bar ±10%	DT A 70 x F 70 P01														
9.5 bar ±10%	DT A 95 x F 70 P01														
DVA Visual Differential Pressure Indicator <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.2 bar ±10%</td><td>DV A 12 x P01</td></tr><tr><td>2.0 bar ±10%</td><td>DV A 20 x P01</td></tr><tr><td>5.0 bar ±10%</td><td>DV A 50 x P01</td></tr><tr><td>7.0 bar ±10%</td><td>DV A 70 x P01</td></tr><tr><td>9.5 bar ±10%</td><td>DV A 95 x P01</td></tr></table> 39  Green / Red clogging indicator A/F 28 Max tightening torque: 65 N·m		Settings	Ordering code	1.2 bar ±10%	DV A 12 x P01	2.0 bar ±10%	DV A 20 x P01	5.0 bar ±10%	DV A 50 x P01	7.0 bar ±10%	DV A 70 x P01	9.5 bar ±10%	DV A 95 x P01	Hydraulic symbol 	Materials - Body: Brass - Internal parts: Brass - Polyamide - Seal: HNBR - FPM Technical data - Reset: Automatic reset - Max working pressure: 420 bar - Proof pressure: 630 bar - Burst pressure: 1260 bar - Working temperature: From -25 °C to +110 °C - Compatibility with fluids: Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 - Degree protection: IP65 according to EN 60529
Settings	Ordering code														
1.2 bar ±10%	DV A 12 x P01														
2.0 bar ±10%	DV A 20 x P01														
5.0 bar ±10%	DV A 50 x P01														
7.0 bar ±10%	DV A 70 x P01														
9.5 bar ±10%	DV A 95 x P01														
DVM Visual Differential Pressure Indicator <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.2 bar ±10%</td><td>DV M 12 x P01</td></tr><tr><td>2.0 bar ±10%</td><td>DV M 20 x P01</td></tr><tr><td>5.0 bar ±10%</td><td>DV M 50 x P01</td></tr><tr><td>7.0 bar ±10%</td><td>DV M 70 x P01</td></tr><tr><td>9.5 bar ±10%</td><td>DV M 95 x P01</td></tr></table> 34  Red clogging indicator A/F 30 Max tightening torque: 65 N·m		Settings	Ordering code	1.2 bar ±10%	DV M 12 x P01	2.0 bar ±10%	DV M 20 x P01	5.0 bar ±10%	DV M 50 x P01	7.0 bar ±10%	DV M 70 x P01	9.5 bar ±10%	DV M 95 x P01	Hydraulic symbol 	Materials - Body: Brass - Internal parts: Brass - Polyamide - Seal: HNBR - FPM Technical data - Reset: Manual reset - Max working pressure: 420 bar - Proof pressure: 630 bar - Burst pressure: 1260 bar - Working temperature: From -25 °C to +110 °C - Compatibility with fluids: Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 - Degree protection: IP65 according to EN 60529
Settings	Ordering code														
1.2 bar ±10%	DV M 12 x P01														
2.0 bar ±10%	DV M 20 x P01														
5.0 bar ±10%	DV M 50 x P01														
7.0 bar ±10%	DV M 70 x P01														
9.5 bar ±10%	DV M 95 x P01														

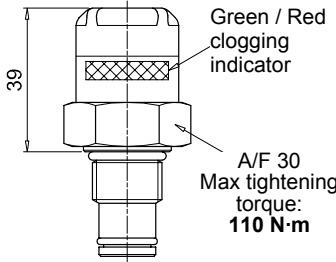
DVS Visual Differential Pressure Indicator <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.2 bar ±10%</td><td>DV S 12 H P01</td></tr><tr><td>2.5 bar ±10%</td><td>DV S 25 H P01</td></tr><tr><td>4.0 bar ±10%</td><td>DV S 40 H P01</td></tr></table>  Clear / Red clogging indicator A/F 17 Max tightening torque: 20 N·m	Settings	Ordering code	1.2 bar ±10%	DV S 12 H P01	2.5 bar ±10%	DV S 25 H P01	4.0 bar ±10%	DV S 40 H P01	Hydraulic symbol 	Materials - Body: - Internal parts: - Seal: Brass Brass - Polyamide HNBR Technical data - Reset: - Max working pressure: - Proof pressure: - Burst pressure: - Working temperature: - Compatibility with fluids: - Degree protection: Automatic reset 16 bar 24 bar 48 bar From -25 °C to +110 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 IP67 according to EN 60529				
Settings	Ordering code													
1.2 bar ±10%	DV S 12 H P01													
2.5 bar ±10%	DV S 25 H P01													
4.0 bar ±10%	DV S 40 H P01													
DVX Visual Differential Pressure Indicator <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.2 bar ±10%</td><td>DV X 12 x P01</td></tr><tr><td>2.0 bar ±10%</td><td>DV X 20 x P01</td></tr><tr><td>5.0 bar ±10%</td><td>DV X 50 x P01</td></tr><tr><td>7.0 bar ±10%</td><td>DV X 70 x P01</td></tr><tr><td>9.5 bar ±10%</td><td>DV X 95 x P01</td></tr></table>  Green / Red clogging indicator A/F 28 Max tightening torque: 65 N·m	Settings	Ordering code	1.2 bar ±10%	DV X 12 x P01	2.0 bar ±10%	DV X 20 x P01	5.0 bar ±10%	DV X 50 x P01	7.0 bar ±10%	DV X 70 x P01	9.5 bar ±10%	DV X 95 x P01	Hydraulic symbol 	Materials - Body: - Internal parts: - Seal: AISI 316L AISI 316L - Polyamide HNBR - MFQ Technical data - Reset: - Max working pressure: - Proof pressure: - Burst pressure: - Working temperature: - Compatibility with fluids: - Degree protection: Automatic reset 420 bar 630 bar 1260 bar From -25 °C to +110 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 IP65 according to EN 60529
Settings	Ordering code													
1.2 bar ±10%	DV X 12 x P01													
2.0 bar ±10%	DV X 20 x P01													
5.0 bar ±10%	DV X 50 x P01													
7.0 bar ±10%	DV X 70 x P01													
9.5 bar ±10%	DV X 95 x P01													
DVY Visual Differential Pressure Indicator <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.2 bar ±10%</td><td>DV Y 12 x P01</td></tr><tr><td>2.0 bar ±10%</td><td>DV Y 20 x P01</td></tr><tr><td>5.0 bar ±10%</td><td>DV Y 50 x P01</td></tr><tr><td>7.0 bar ±10%</td><td>DV Y 70 x P01</td></tr><tr><td>9.5 bar ±10%</td><td>DV Y 95 x P01</td></tr></table>  Red clogging indicator A/F 30 Max tightening torque: 65 N·m	Settings	Ordering code	1.2 bar ±10%	DV Y 12 x P01	2.0 bar ±10%	DV Y 20 x P01	5.0 bar ±10%	DV Y 50 x P01	7.0 bar ±10%	DV Y 70 x P01	9.5 bar ±10%	DV Y 95 x P01	Hydraulic symbol 	Materials - Body: - Internal parts: - Seal: AISI 316L AISI 316L - Polyamide HNBR - MFQ Technical data - Reset: - Max working pressure: - Proof pressure: - Burst pressure: - Working temperature: - Compatibility with fluids: - Degree protection: Manual reset 420 bar 630 bar 1260 bar From -25 °C to +110 °C Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 IP65 according to EN 60529
Settings	Ordering code													
1.2 bar ±10%	DV Y 12 x P01													
2.0 bar ±10%	DV Y 20 x P01													
5.0 bar ±10%	DV Y 50 x P01													
7.0 bar ±10%	DV Y 70 x P01													
9.5 bar ±10%	DV Y 95 x P01													

DIFFERENTIAL PRESSURE INDICATORS

Dimensions

DVZ		Hydraulic symbol		Materials	
Visual Differential Pressure Indicator				- Body:	AISI 316L
				- Internal parts:	AISI 316L - Polyamide
				- Seal:	HNBR - MFQ
				Technical data	
				- Reset:	Automatic reset
				- Max working pressure:	700 bar
		- Proof pressure:	1050 bar		
		- Burst pressure:	2100 bar		
		- Working temperature:	From -25 °C to +110 °C		
		- Compatibility with fluids:	Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943		
		- Degree protection:	IP65 according to EN 60529		

Settings	Ordering code
1.2 bar ±10%	DV Z 12 x P01
2.5 bar ±10%	DV Z 25 x P01
5.0 bar ±10%	DV Z 50 x P01
7.0 bar ±10%	DV Z 70 x P01
9.5 bar ±10%	DV Z 95 x P01

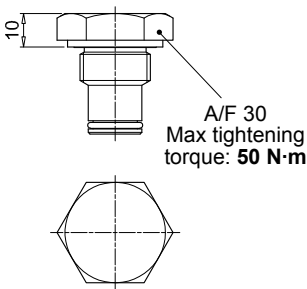


39

Green / Red
clogging
indicator

A/F 30
Max tightening
torque:
110 N·m

T2	
Plug	
Seal	Ordering code
HNBR	T2 H
FPM	T2 V

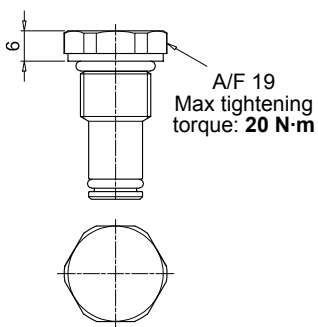


A/F 30
Max tightening
torque: **50 N·m**

Materials

- Body:
Phosphatized steel
- Seal:
HNBR / FPM

T4	
Plug	
Seal	Ordering code
NBR	T4 A

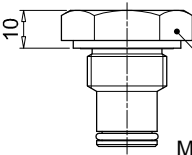


A/F 19
Max tightening torque: **20 N·m**

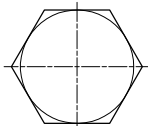
Materials

- Body:
Anodized aluminium
- Seal:
NBR

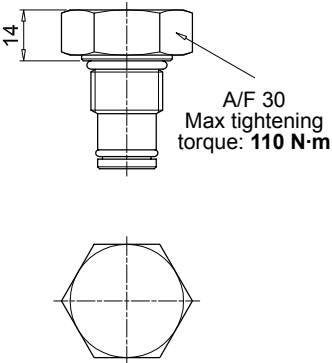
X2		Materials - Body: AISI 316L - Seal: HNBR / FPM / MFQ
Stainless Steel plug 420 bar		
Seal	Ordering code	
HNBR	X2 H	
FPM	X2 V	
MFQ	X2 F	



A/F 30
Max tightening
torque: **50 N·m**



X3	
Stainless Steel plug 700 bar (only for FZH)	
Seal	Ordering code
HNBR	X3 H
FPM	X3 V
MFQ	X3 F



14

A/F 30
Max tightening
torque: **110 N·m**

Materials

- Body:
AISI 316L
- Seal:
HNBR / FPM / MFQ

All data, details and words contained in this publication are provided for use by technically qualified personnel at their discretion, without warranty of any kind.

MP Filtri reserves the right to make modifications to the models and versions of the described products at any time for both technical and/or commercial reasons.

For updated information please visit our website: www.mpfiltri.com

The colors and the pictures of the products are purely indicative.

Any reproduction, partial or total, of this document is strictly forbidden.

All rights are strictly reserved



WORLDWIDE NETWORK

CANADA ♦ CHINA ♦ FRANCE ♦ GERMANY ♦ INDIA ♦ SINGAPORE
UNITED ARAB EMIRATES ♦ UNITED KINGDOM ♦ USA



PASSION T PERFORM

in @ y f



mpfiltri.com
Scan or click me!

MP Filtri reserves the right to make modifications to the models and versions of the described products at any time for both technical and/or commercial reasons.
For updated information please visit our website: www.mpfiltri.com. The colors and the pictures of the products are purely indicative.
Any reproduction, partial or total, of this document is strictly forbidden. All rights are strictly reserved.

MF001000038
EN - 2025.04