

FZP series

Maximum working pressure up to 42 Mpa (420 bar) - Flow rate up to 160 l/min



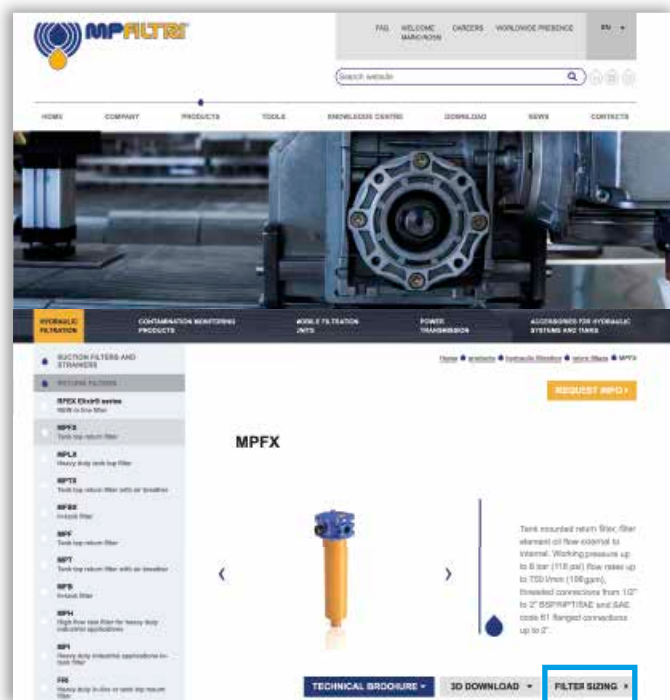
TYPICAL FILTER SIZING Selection Software

Step ①

Select "FILTER SIZING SOFTWARE" after login

OR

Select "FILTER SIZING" after login from a product page



Choose the type of filter family.
Enter the main data for sizing the filter
then push CALCULATE.

Step ②

Enter the main data for sizing the filter
then push CALCULATE.

PRODUCT SELECTION POWER TRANSMISSION SOFTWARE FILTER SIZING SOFTWARE

SUCTION LOW & MEDIUM PRESSURE HIGH PRESSURE
RETURN/SUCTION RETURN STAINLESS STEEL HIGH PRESSURE

Working Pressure (bar) * 5 Flow rate (l/min) * 90 DP max of the project (bar) * 0.5 Fluid Working Temperature (°C) * 40

Fluid * HLP - Mineral oils Fluid type * ISO VG 46 (SUS 216) Viscosity (cst) * 46 Viscosity (SUS) * 216

Filtration * A20 - 20 µm absolute inorganic microfibre Connection Type * G 1"

CALCULATE

PRODUCT SELECTION POWER TRANSMISSION SOFTWARE FILTER SIZING SOFTWARE

SUCTION LOW & MEDIUM PRESSURE HIGH PRESSURE
RETURN/SUCTION RETURN STAINLESS STEEL HIGH PRESSURE

Product: MPFX Working Pressure (bar) * 5 Flow rate (l/min) * 90 DP max of the project (bar) * 0.5 Fluid Working Temperature (°C) * 40

Fluid * HLP - Mineral oils Fluid type * ISO VG 46 (SUS 216) Viscosity (cst) * 46 Viscosity (SUS) * 216

Filtration * A20 - 20 µm absolute inorganic microfibre Connection Type * G 1"

CALCULATE

Step ③

Select the desired options to choose the appropriate filter type for the application.

Working Pressure 8 (bar) Fluid HLP
Flow rate 90 (l/min) Fluid type ISO VG 46 (SUS 216)
DP max of the project 0.5 (bar) Seal A - NBR
Working Temperature 40 (°C) Optional seals V - FPM
Filtration 25 µm absolute inorganic microfibre Working Temperature with options -20 + 110 (°C)
Connection Type G 1" Viscosity 46 (cst) - 216 (SUS)

NEW SEARCH

Filter type MPFX: Tank top mounting - (Pmax) 1 Valve B: 1.75 bar System Seal A: NBR X RESET
Option1 Single or duplex DIN Standard NOT APPLICABLE Indicator Visual

CSV Excel Show 10 entries Search:

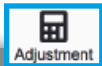
Image	Code	Press bar	Qmax l/min	Qmax gpm	DP bar	Housing DP psi	Element DP psi	Connection	Seal	Link				
	MPFX-100-3-A-G3-A20-HBP51	8	116	30.74	25.3	0.47	7	0.12	2	0.35	5	G 1"	A	Adjustment Report
	MPFX-100-3-A-G3-A20-HBP21	8	116	30.74	25.3	0.47	7	0.12	2	0.35	5	G 1"	A	Adjustment Report

Step 4

Choose the most suitable filter from the proposed list.

Step 5

It is possible to change the filter modifying every parameter.



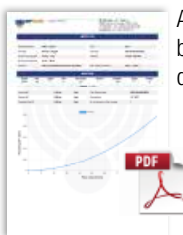
A SAVE YOUR FILTER'S REPORT



B MANUAL EDIT



SAVE IN YOUR ARCHIVE
typing your reference data and then SAVE AS PDF



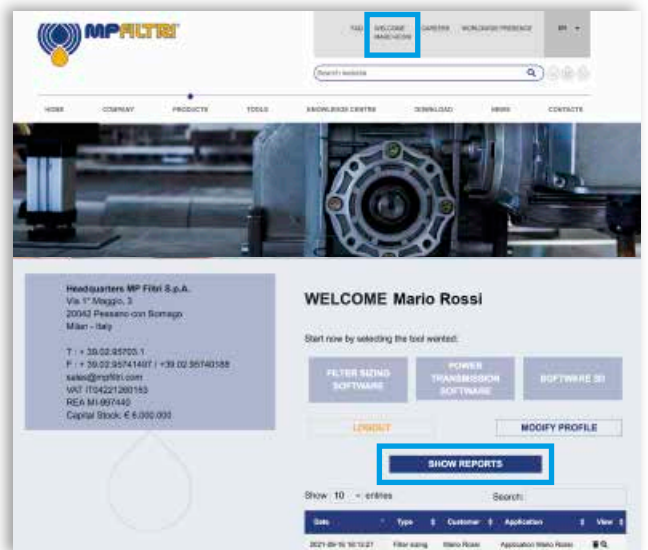
A new
browser window
displays the pdf

see **A**

Close the report window



By clicking your WELCOME button,
the SHOW REPORTS is displayed: select it to see your filters list.



Stainless steel high pressure filters

In-line

Maximum working pressure up to 42 Mpa (420 bar)

Flow rate up to 160 l/min

FZP is a range of stainless steel high pressure filter for protection of sensitive components in high pressure hydraulic systems placed in difficult environmental conditions.

They are directly connected to the lines of the system through the hydraulic fittings.

Available features:

- 1 1/4" female threaded connections, for a maximum flow rate of 160 l/min
- Fine filtration rating, to get a good cleanliness level into the system
- Bypass valve, to relieve excessive pressure drop across the filter media
- Low collapse filter element with external support "R", for filter element protection against the back pressure caused by the check valve or the reverse flow in filters provided with the bypass valve
- High collapse filter element with external support "S", for filter element protection against the back pressure caused by the check valve or the reverse flow in filters not provided with the bypass valve
- High collapse filter element "U", for use with aggressive fluids
- Visual, electrical and electronic differential clogging indicators

Common applications:

- Off-shore equipment
- Water filtration systems
- Systems with strong or corrosive environmental conditions
- Systems with corrosive fluids

Filter housing materials

- Head: AISI 316L
- Housing: AISI 316L
- Bypass valve: AISI 316L

Seals

- Standard NBR series A (-25 °C to +110 °C)
- Optional FPM series V (-20 °C to +120 °C)
- Optional MFQ series F (-50 °C to +120 °C)

Bypass valve

Opening pressure 6 bar \pm 10%

Temperature

From -50 °C to +120 °C

Note

FZP filters are provided for vertical mounting

Δp element type

Fluid flow through the filter element from OUT to IN

Microfibre filter elements - series R: 20 bar.

Element series "R":

- End cap: Polyamide
- Core tube: Tinned steel
- External/Internal support: Wire mesh Epox painted
- Media/Support/Pre-filter: Microfibre/Syntetic

Microfibre filter elements - series S: 210 bar.

Element series "S":

- End cap: Tinned steel
- Core tube: Tinned steel
- External support: Wire mesh Epox painted
- Internal support: Wire mesh Stainless steel
- Media/Support/Pre-filter: Microfibre/Syntetic

Stainless Steel Microfibre filter elements series U: 210 bar.

Element series "U":

- End cap: Stainless steel
- Core tube: Stainless steel
- External support: Stainless steel
- Internal support: Stainless steel
- Media/Support/Pre-filter: Microfibre/Syntetic

Weights [kg] and volumes [dm³]

Filter series	Weights [kg]					Volumes [dm³]				
	Length	1	2	3	4	Length	1	2	3	4
FZP 039		-	4.5	5.1	5.6		-	0.19	0.26	0.34
FZP 136		8.3	10.2	11.5	-		0.45	0.78	1.00	-

FILTER ASSEMBLY SIZING Flow rates [l/min]

Filter series	Length	Filter element design - R Series					Filter element design - S-U Series				
		A03	A06	A10	A16	A25	A03	A06	A10	A16	A25
FZP 039	2	19	25	43	50	59	19	23	41	45	55
	3	34	37	53	62	74	31	34	48	52	66
	4	42	46	63	72	81	38	41	55	71	78
FZP 136	1	63	67	102	108	136	47	53	87	89	127
	2	95	100	122	123	159	81	95	113	115	138
	3	122	124	148	150	160	106	116	135	141	151

Maximum flow rate for a complete stainless steel high pressure filter with a pressure drop $\Delta p = 1.5$ bar.

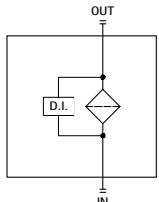
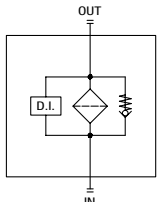
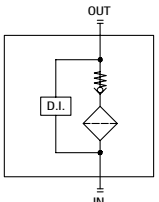
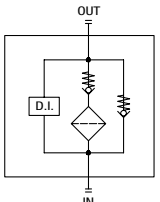
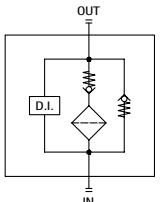
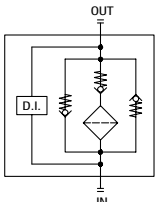
The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.

For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.

You can also calculate the right size using the formulas present on the FILTER SIZING paragraph at the beginning of the full catalogue or at the beginning of the filter family brochure.

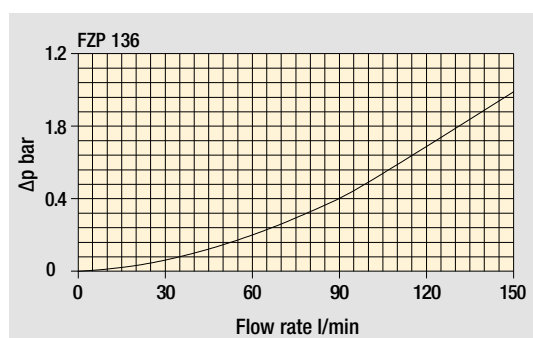
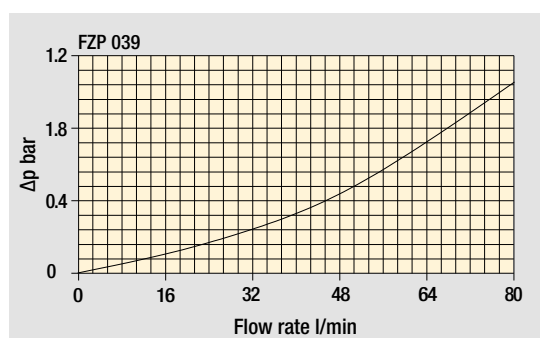
Please, contact our Sales Department for further additional information.

Hydraulic symbols

Filter series	Style S	Style B	Style T	Style D	Style V	Style Z
FZP 039	•	•	•	•	•	•
FZP 136	•	•	-	-	-	-
						

Pressure drop

Filter housings Δp pressure drop



The curves are plotted using mineral oil with density of 0.86 kg/dm³ in compliance with ISO 3968. Δp varies proportionally with density.

Designation & Ordering code

COMPLETE FILTER

Series and size FZP039	Configuration example: FZP039	2	B	F	B	2	A03	U	P01
Length 2 3 4									
Valves S Without bypass B With bypass 6 bar T With check valve, without bypass D With check valve, with bypass 6 bar V With reverse flow, without bypass Z With reverse flow, with bypass 6 bar									
Seals A NBR V FPM F MFQ									
Connections A G 1/2" B 1/2" NPT C SAE 8 - 3/4" - 16 UNF									
Connections for differential indicators 1 Without connection 2 With connection									
Filtration rating (filter media) A03 Inorganic microfiber 3 µm A06 Inorganic microfiber 6 µm A10 Inorganic microfiber 10 µm A16 Inorganic microfiber 16 µm A25 Inorganic microfiber 25 µm									

Element Δp	S	B	T	D	V	Z	Execution
R 20 bar	-	•	-	•	-	•	P01 MP Filtri standard
S 210 bar	•	-	•	-	•	-	Pxx Customized
U 210 bar, stainless steel filter element	•	•	•	•	•	•	

FILTER ELEMENT

Element series and size HP039	Configuration example: HP039	2	A03	F	U	P01
Element length 2 3 4						
Filtration rating (filter media) A03 Inorganic microfiber 3 µm A06 Inorganic microfiber 6 µm A10 Inorganic microfiber 10 µm A16 Inorganic microfiber 16 µm A25 Inorganic microfiber 25 µm						

Seals	Element Δp	S	B	T	D	V	Z	Execution
A NBR	R 20 bar	-	•	-	•	-	•	P01 MP Filtri standard
V FPM	S 210 bar	•	-	•	-	•	-	Pxx Customized
F MFQ	U 210 bar, stainless steel filter element	•	•	•	•	•	•	

CLOGGING INDICATORS

See page 687

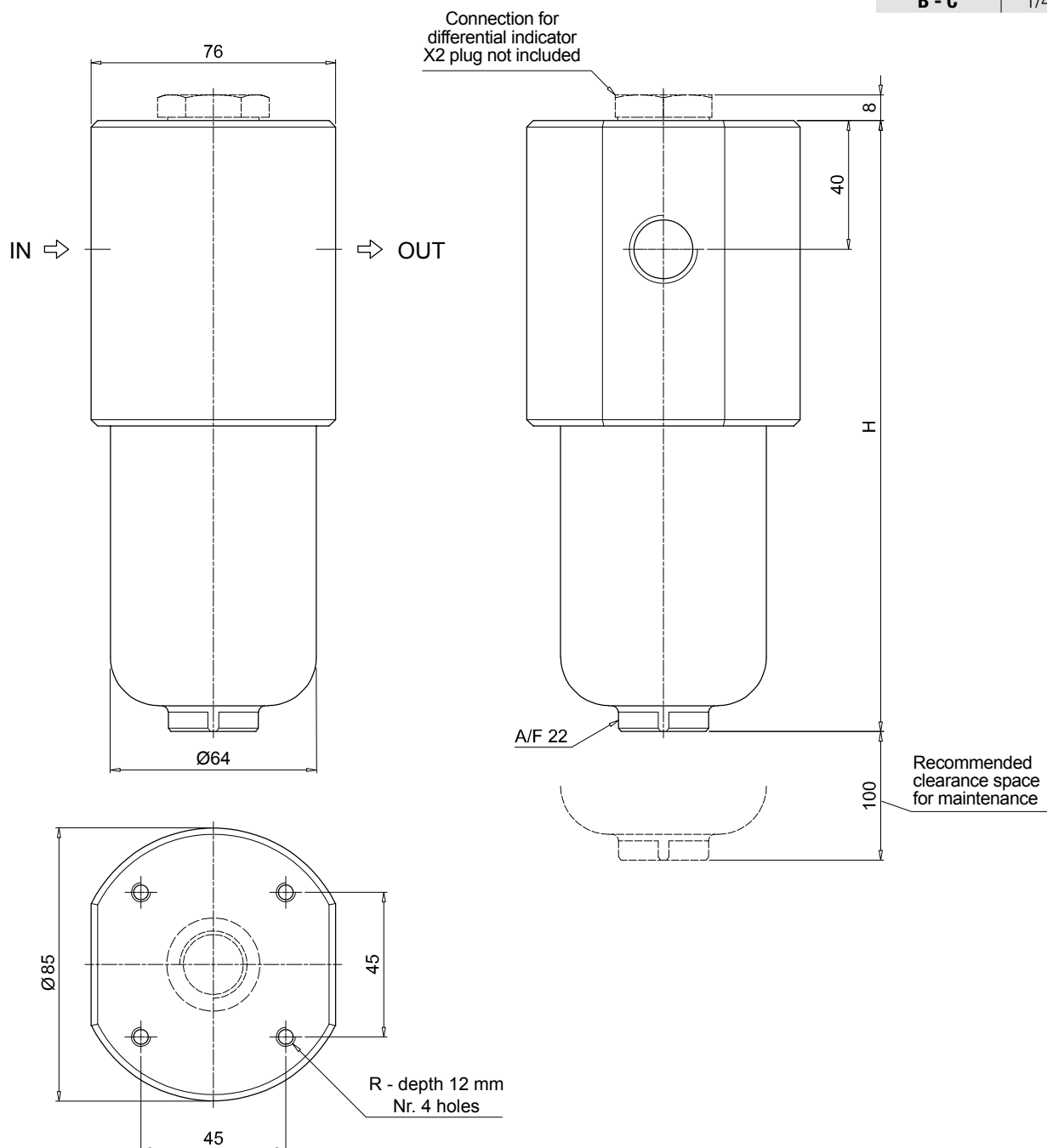
DEX Electrical differential indicator

DLX Electrical / visual differential indicator

DVX Visual differential indicator

DVY Visual differential indicator

X2 Plug



FZP039	
Filter length	H [mm]
2	179
3	222
4	266
Connections	R
A	M6
B - C	1/4" UNC

Designation & Ordering code

COMPLETE FILTER

Series and size	Configuration example: FZP136										1	B	A	B	6	A03	R	P01	
FZP136																			
Length																			
1	2	3																	
Bypass valve																			
S	Without bypass																		
B	With bypass 6 bar																		
Seals																			
A	NBR																		
V	FPM																		
F	MFQ																		
Connections																			
A	G 3/4"																		
B	3/4" NPT																		
C	SAE 12 - 1 1/16" - 12 UN																		
D	G 1"																		
E	1" NPT																		
F	SAE 16 - 1 5/16" - 12 UN																		
G	G 1 1/4"																		
H	1 1/4" NPT																		
I	SAE 20 - 1 5/8" - 12 UN																		
Connections for differential indicators																			
1	Without connection																		
6	With two connections on both sides																		
Filtration rating (filter media)																			
A03	Inorganic microfiber 3 µm																		
A06	Inorganic microfiber 6 µm																		
A10	Inorganic microfiber 10 µm																		
A16	Inorganic microfiber 16 µm																		
A25	Inorganic microfiber 25 µm																		

Element Δp	Valves	
	S	B
R 20 bar	-	•
S 210 bar	•	-
U 210 bar, stainless steel filter element	•	•

Execution	
P01	MP Filtri standard
Pxx	Customized

FILTER ELEMENT

Element series and size	Configuration example: HP135						1	A03	A	R	P01
HP135											
Element length											
1	2	3									
Filtration rating (filter media)											
A03	Inorganic microfiber 3 µm										
A06	Inorganic microfiber 6 µm										
A10	Inorganic microfiber 10 µm										
A16	Inorganic microfiber 16 µm										
A25	Inorganic microfiber 25 µm										

Seals	Element Δp	Valves	
		S	B
A NBR	R 20 bar	-	•
V FPM	S 210 bar	•	-
F MFQ	U 210 bar, stainless steel filter element	•	•

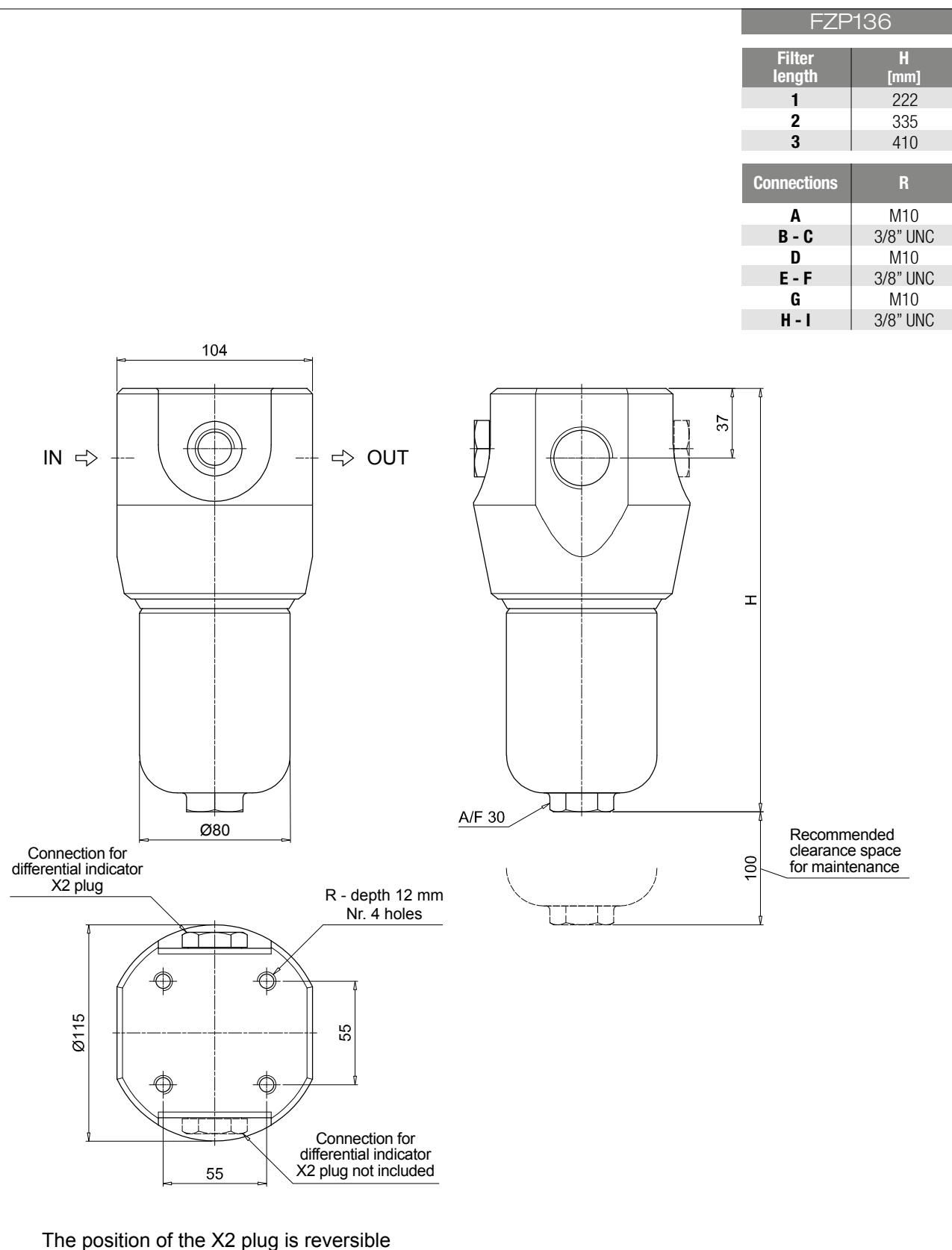
Execution	
P01	MP Filtri standard
Pxx	Customized

CLOGGING INDICATORS

See page 683

DEX	Electrical differential indicator
DLX	Electrical / visual differential indicator
DVX	Visual differential indicator

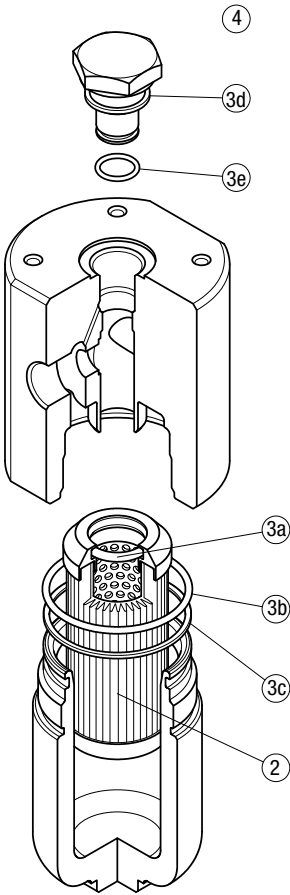
DVY	Visual differential indicator
X2	Plug



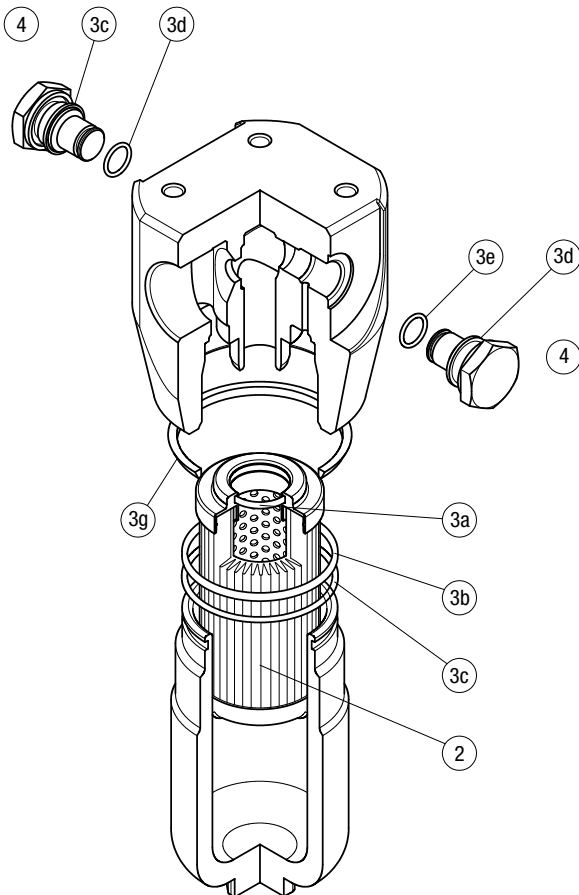
FZP SPARE PARTS

Order number for spare parts

FZP 039



FZP 136



Q.ty: 1 pc.		Q.ty: 1 pc.		Q.ty: 1 pc.	
Item:	2	3 (3a ÷ 3g)		4	
Filter series	Filter element	Seal Kit code number		Indicator connection plug	
		NBR	FPM	NBR	FPM
FZP 039	See order table	02050299	02050300	X2H	X2V
FZP 136		02050636	02050637		

Clogging indicators

Introduction

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

These devices trip when the clogging of the filter element causes an increase in pressure drop across the filter element.

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

MP Filtri can supply indicators of the following designs:

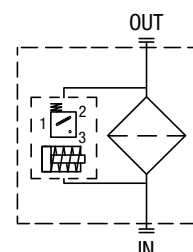
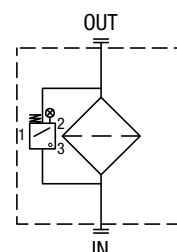
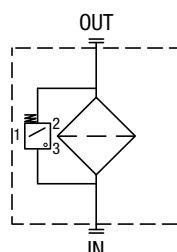
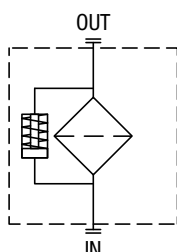
- Vacuum switches and gauges
- Pressure switches and gauges
- Differential pressure indicators

These type of devices can be provided with a visual, electrical or both signals.

Suitable indicator types

DIFFERENTIAL INDICATORS

Differential 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.



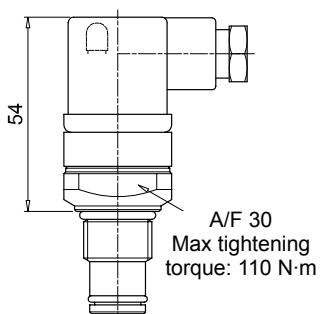
Quick reference guide

Filter family	Filter series	Visual indicators	Electrical indicators	Electrical / Visual indicators
STAINLESS STEEL HIGH PRESSURE FILTERS	With bypass valve 6 bar FZH 012 - 040	DVZ50xP01	DEZ50xA50P01	
	Without bypass valve FZH 012 - 040	DVZ70xP01 DVZ95xP01	DEZ70xA50P01 DEZ95xA50P01	
	With bypass valve 6 bar FZP 039 - 136 FZB 039 FZM 039 FZD 051	DVX50xP01 DVY50xP01	DEX50xA50P01	DLX50xA51P01 DLX50xA52P01
	Without bypass valve FZP 039 - 136 FZB 039 FZM 039 FZD 010 - 021 - 051	DVX70xP01 DVX95xP01 DVY70xP01 DVY95xP01	DEX70xA50P01 DEX95xA50P01	DLX70xA51P01 DLX70xA52P01 DLX95xA51P01 DLX95xA52P01

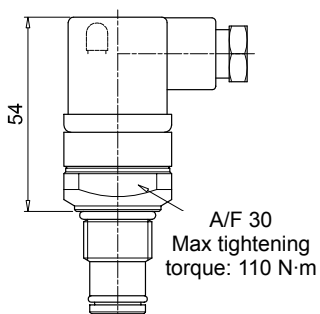
DIFFERENTIAL INDICATORS

Dimensions

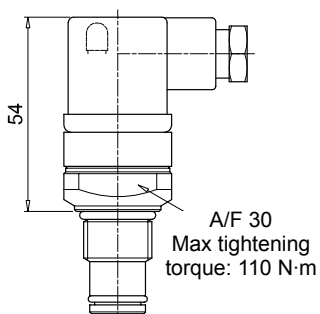
<div>DEX*50</div> <div>Electrical Differential Indicator</div> <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>5.0 bar ±10%</td><td>DE X 50 x A 50 P01</td></tr><tr><td>7.0 bar ±10%</td><td>DE X 70 x A 50 P01</td></tr><tr><td>9.5 bar ±10%</td><td>DE X 95 x A 50 P01</td></tr></table> <div><p>A/F 30 Max tightening torque: 65 N·m</p></div>		Settings	Ordering code	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	<div>Hydraulic symbol</div> <div></div> <div>Electrical symbol</div> <div></div>	<div>Materials</div> <div><div>- Body:</div><div>- Base:</div><div>- Contacts:</div><div>- Seal:</div></div> <div><div>AISI 316L</div><div>Black polyamide</div><div>Silver</div><div>HNBR - MFQ</div></div> <div>Technical data</div> <div><div>- Max working pressure:</div><div>- Proof pressure:</div><div>- Burst pressure:</div><div>- Working temperature:</div><div>- Compatibility with fluids:</div><div>- Degree protection:</div></div> <div><div>420 bar</div><div>630 bar</div><div>1260 bar</div><div>From -25 °C to +110 °C</div><div>Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943</div><div>IP66 according to EN 60529 IP69K according to ISO 20653</div></div> <div>Electrical data</div> <div><div>- Electrical connection:</div><div>- Resistive load:</div></div> <div><div>EN 175301-803</div><div>0.2 A / 115 Vdc</div></div>
Settings	Ordering code										
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										
<div>DEZ*50</div> <div>Electrical Differential Indicator</div> <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>5.0 bar ±10%</td><td>DE Z 50 x A 50 P01</td></tr><tr><td>7.0 bar ±10%</td><td>DE Z 70 x A 50 P01</td></tr><tr><td>9.5 bar ±10%</td><td>DE Z 95 x A 50 P01</td></tr></table> <div><p>A/F 30 Max tightening torque: 110 N·m</p></div>		Settings	Ordering code	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	<div>Hydraulic symbol</div> <div></div> <div>Electrical symbol</div> <div></div>	<div>Materials</div> <div><div>- Body:</div><div>- Base:</div><div>- Contacts:</div><div>- Seal:</div></div> <div><div>AISI 316L</div><div>Black polyamide</div><div>Silver</div><div>HNBR - MFQ</div></div> <div>Technical data</div> <div><div>- Max working pressure:</div><div>- Proof pressure:</div><div>- Burst pressure:</div><div>- Working temperature:</div><div>- Compatibility with fluids:</div><div>- Degree protection:</div></div> <div><div>700 bar</div><div>1050 bar</div><div>2100 bar</div><div>From -25 °C to +110 °C</div><div>Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943</div><div>IP66 according to EN 60529 IP69K according to ISO 20653</div></div> <div>Electrical data</div> <div><div>- Electrical connection:</div><div>- Resistive load:</div></div> <div><div>EN 175301-803</div><div>0.2 A / 115 Vdc</div></div>
Settings	Ordering code										
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										
<div>DLX*51 - DLX*52</div> <div>Electrical/Visual Differential Indicator</div> <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>5.0 bar ±10%</td><td>DL X 50 x A x x P01</td></tr><tr><td>7.0 bar ±10%</td><td>DL X 70 x A x x P01</td></tr><tr><td>9.5 bar ±10%</td><td>DL X 95 x A x x P01</td></tr></table> <div><p>A/F 30 Max tightening torque: 65 N·m</p></div>		Settings	Ordering code	5.0 bar ±10%	DL X 50 x A x x P01	7.0 bar ±10%	DL X 70 x A x x P01	9.5 bar ±10%	DL X 95 x A x x P01	<div>Hydraulic symbol</div> <div></div> <div>Electrical symbol</div> <div></div>	<div>Materials</div> <div><div>- Body:</div><div>- Base:</div><div>- Contacts:</div><div>- Seal:</div></div> <div><div>AISI 316L</div><div>Transparent polyamide</div><div>Silver</div><div>HNBR - MFQ</div></div> <div>Technical data</div> <div><div>- Max working pressure:</div><div>- Proof pressure:</div><div>- Burst pressure:</div><div>- Working temperature:</div><div>- Compatibility with fluids:</div><div>- Degree protection:</div></div> <div><div>420 bar</div><div>630 bar</div><div>1260 bar</div><div>From -25 °C to +110 °C</div><div>Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943</div><div>IP66 according to EN 60529 IP69K according to ISO 20653</div></div> <div>Electrical data</div> <div><div>- Electrical connection:</div><div>- Type</div><div>- Lamps</div><div>- Resistive load:</div></div> <div><div>EN 175301-803</div><div>5152</div><div>24 Vdc110 Vdc</div><div>1 A / 24 Vdc1 A / 110 Vdc</div></div>
Settings	Ordering code										
5.0 bar ±10%	DL X 50 x A x x P01										
7.0 bar ±10%	DL X 70 x A x x P01										
9.5 bar ±10%	DL X 95 x A x x P01										

DLZ*51 - DLZ*52		Hydraulic symbol	Electrical symbol	Materials	Technical data
Electrical/Visual Differential Indicator					
Settings	Ordering code				
5.0 bar ±10%	DL Z 50 x A 50 P01				
7.0 bar ±10%	DL Z 70 x A 50 P01				
9.5 bar ±10%	DL Z 95 x A 50 P01				
					

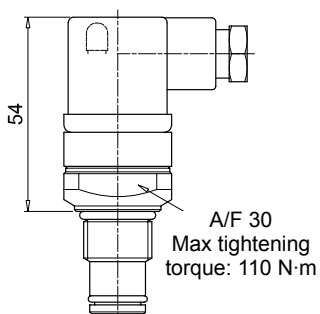
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Settings	Ordering code
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7.0 bar ±10%	DL Z 70 x A 50 P01
9.5 bar ±10%	DL Z 95 x A 50 P01

	
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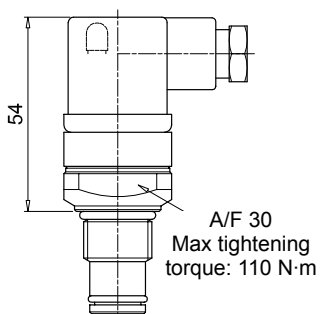
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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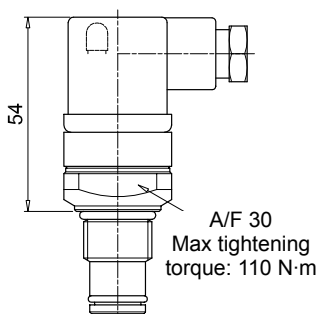
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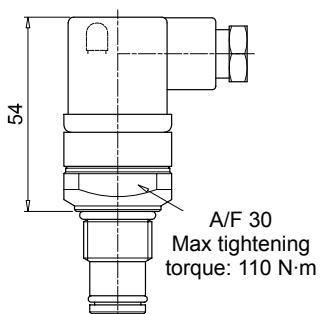
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Settings	Ordering code
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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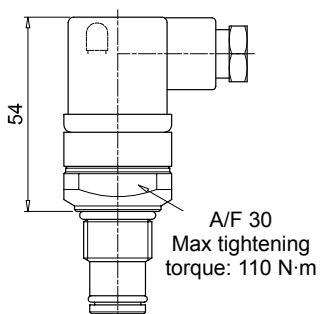
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Settings	Ordering code
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7.0 bar ±10%	DL Z 70 x A 50 P01
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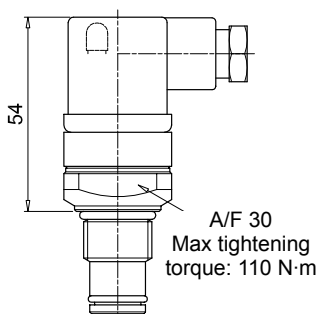
Electrical/Visual Differential Indicator	
Settings	Ordering code
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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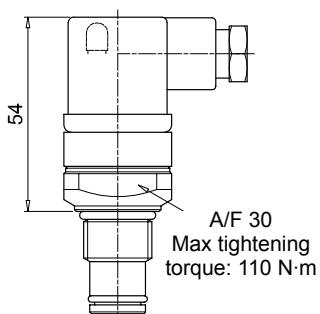
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Settings	Ordering code
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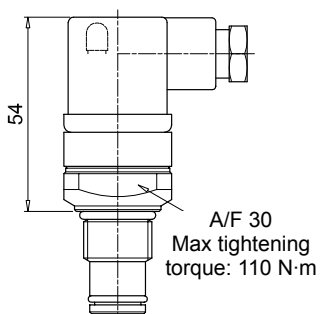
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Settings	Ordering code
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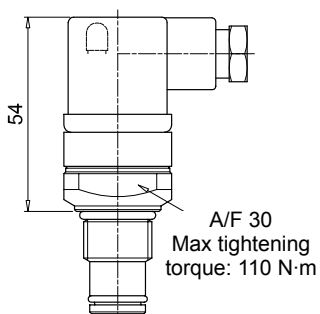
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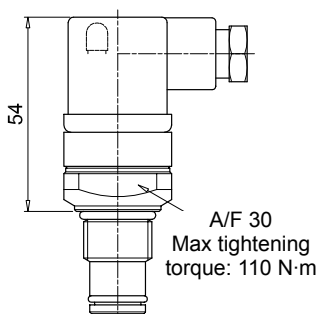
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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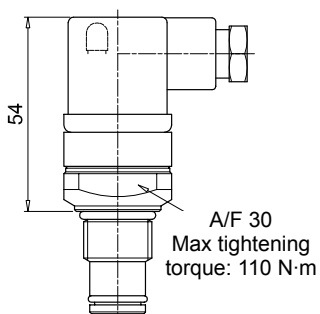
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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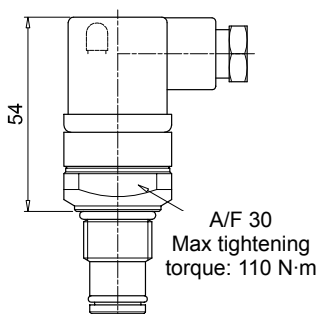
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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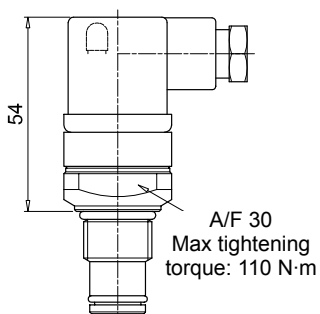
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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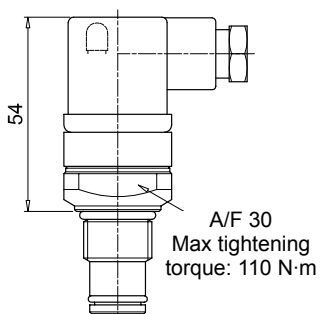
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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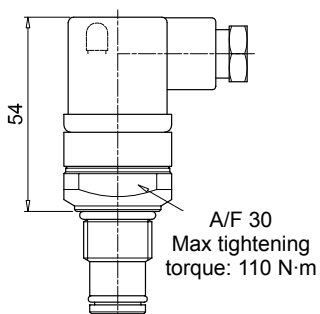
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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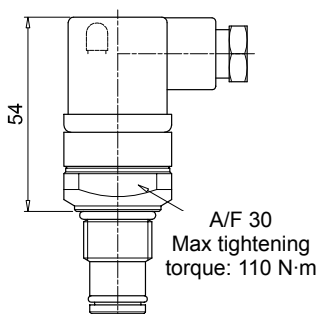
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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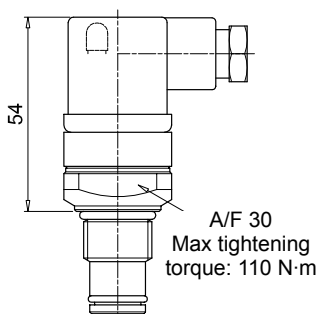
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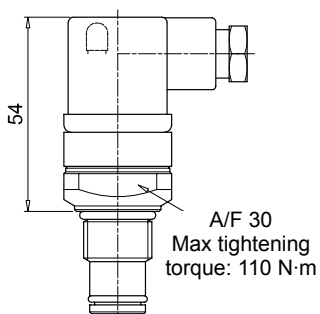
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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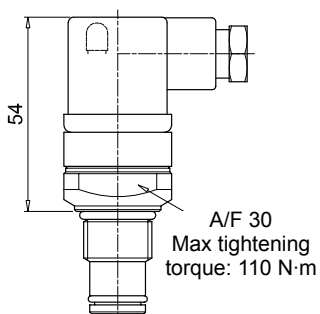
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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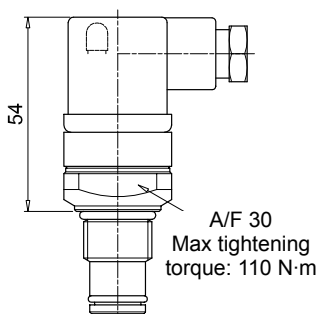
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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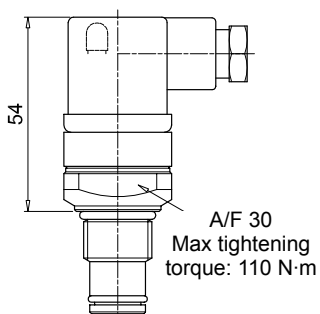
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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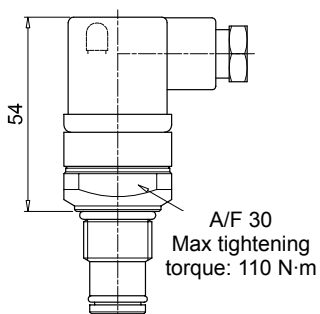
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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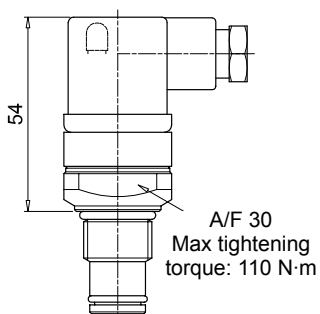
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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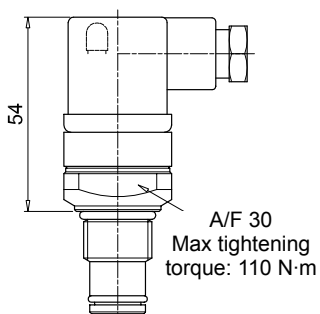
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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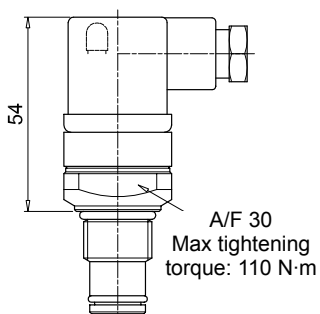
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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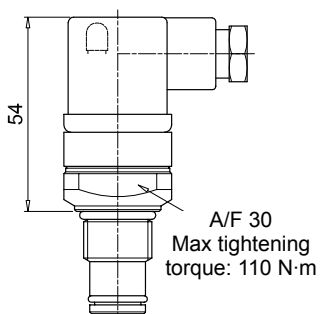
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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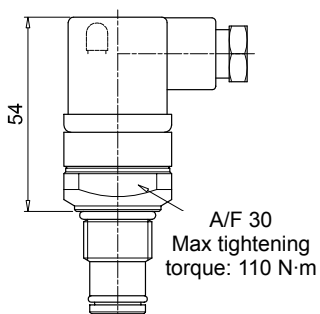
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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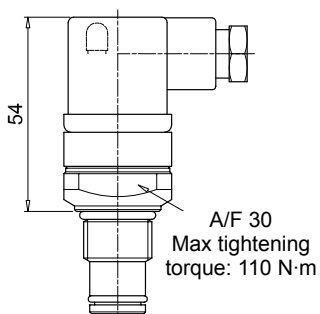
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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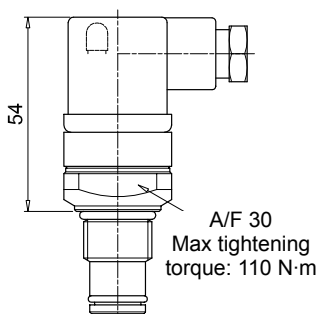
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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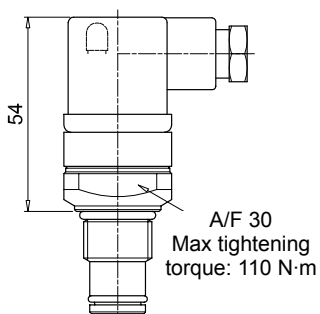
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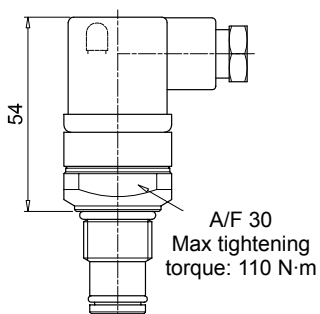
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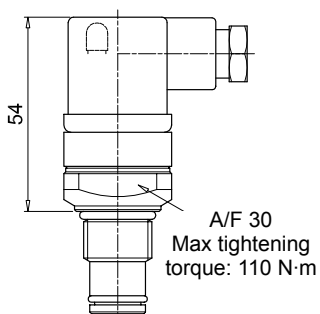
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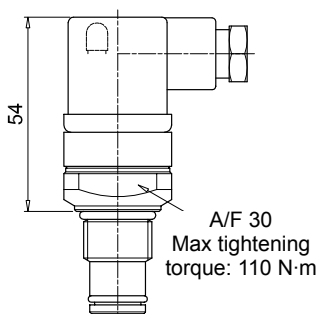
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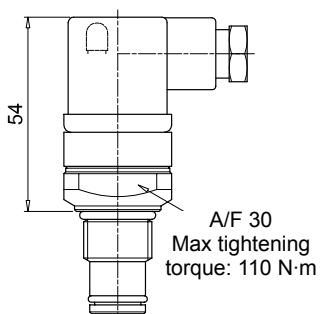
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9.5 bar ±10%	DL Z 95 x A 50 P01

	
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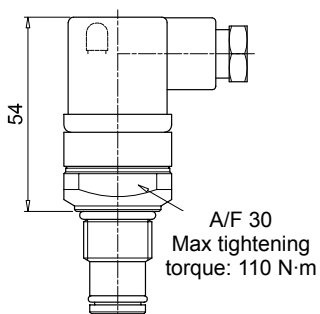
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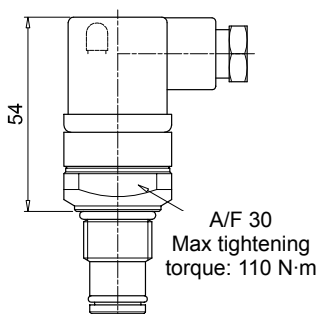
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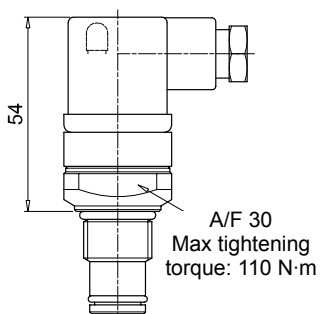
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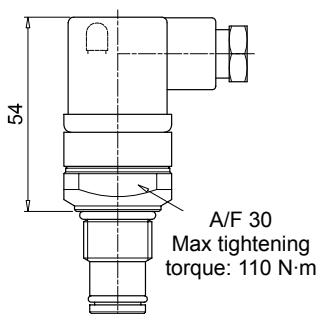
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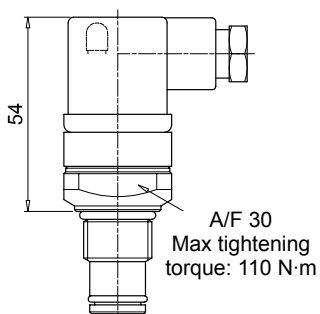
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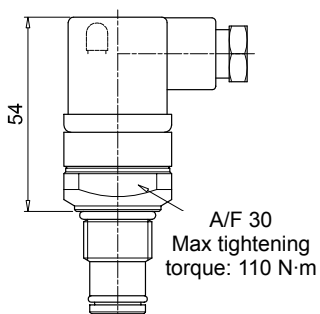
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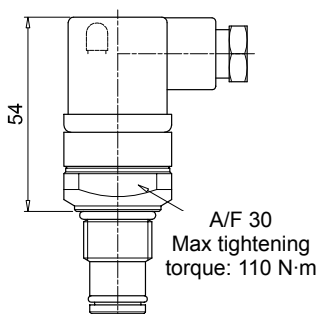
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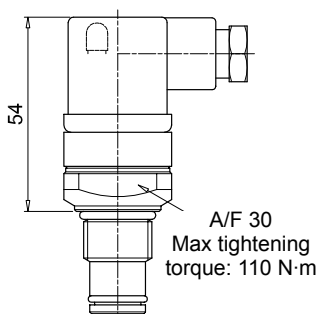
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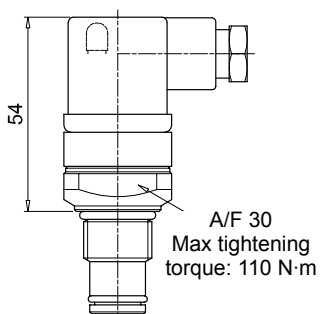
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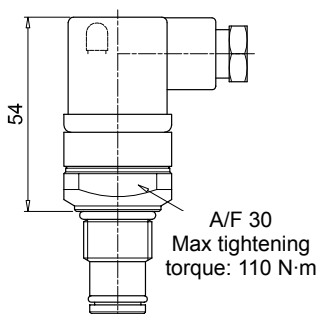
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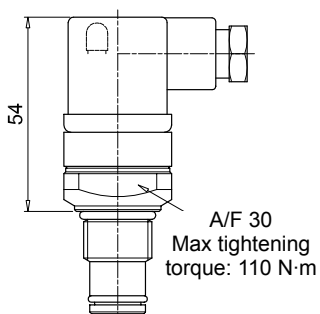
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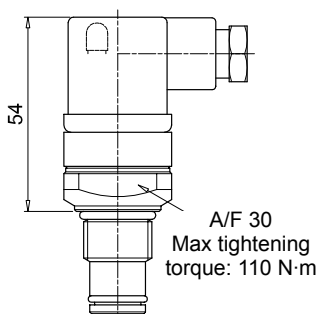
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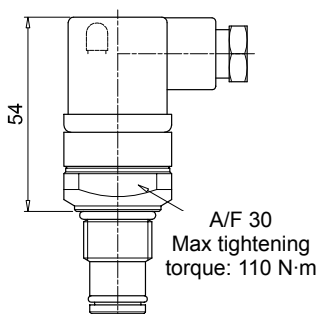
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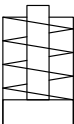
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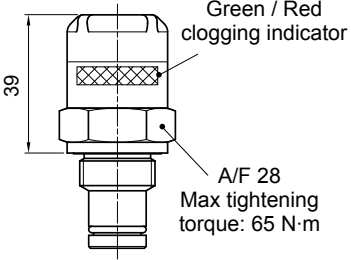
	
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Electrical/Visual Differential Indicator	
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Electrical/Visual Differential Indicator	
Settings	Ordering code
5.0 bar ±10%	DL Z 50 x A 50 P01
7.0 bar ±10%	DL Z 70 x A 50 P01
9.5	

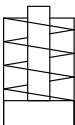
DVX		<h3>Hydraulic symbol</h3> 	<h3>Materials</h3> <ul style="list-style-type: none">- Body: AISI 316L- Internal parts: AISI 316L - Polyamide- Contacts: Silver- Seal: HNBR - MFQ	
<h3>Visual Differential Indicator</h3>				<h3>Technical data</h3> <ul style="list-style-type: none">- Reset: Automatic reset- 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 HFA, HFB, HFC according to ISO 2943- Degree protection: IP65 according to EN 60529
Settings	Ordering code			
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			

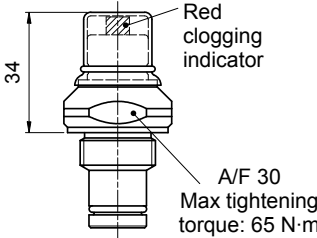


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Green / Red clogging indicator

A/F 28
Max tightening torque: 65 N·m

DVY		<h3>Hydraulic symbol</h3> 	<h3>Materials</h3> <ul style="list-style-type: none">- Body: AISI 316L- Internal parts: AISI 316L - Polyamide- Contacts: Silver- Seal: HNBR - MFQ	
<h3>Visual Differential Indicator</h3>				<h3>Technical data</h3> <ul style="list-style-type: none">- 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 HFA, HFB, HFC according to ISO 2943- Degree protection: IP65 according to EN 60529
Settings	Ordering code			
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			



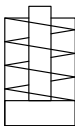
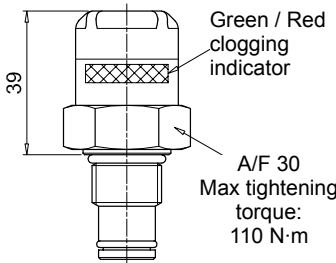
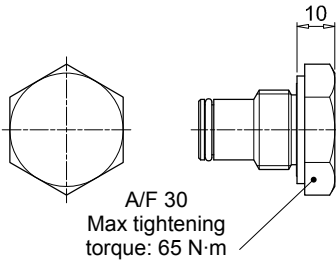
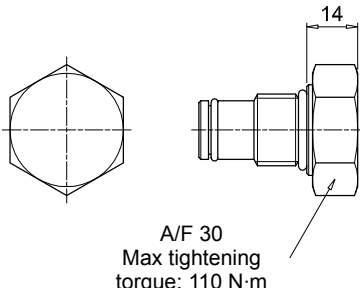
34

Red clogging indicator

A/F 30
Max tightening torque: 65 N·m

DIFFERENTIAL INDICATORS

Dimensions

DVZ		Hydraulic symbol		Materials <ul style="list-style-type: none">- Body: AISI 316L- Internal parts: AISI 316L - Polyamide- Contacts: Silver- Seal: HNBR - MFQ Technical data <ul style="list-style-type: none">- 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 HFA, HFB, HFC according to ISO 2943- Degree protection: IP65 according to EN 60529					
Visual Differential Indicator <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>5.0 bar ±10%</td><td>DV Z 50 x P01</td></tr><tr><td>7.0 bar ±10%</td><td>DV Z 70 x P01</td></tr><tr><td>9.5 bar ±10%</td><td>DV Z 95 x P01</td></tr></table> 					Settings	Ordering code	5.0 bar ±10%	DV Z 50 x P01	7.0 bar ±10%
Settings	Ordering code								
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								
X2		Indicator plug 420 bar <table><tr><th>Seal</th><th>Ordering code</th></tr><tr><td>HNBR</td><td>X2 H</td></tr><tr><td>MFQ</td><td>X2 F</td></tr></table> 	Seal	Ordering code	HNBR	X2 H	MFQ	X2 F	Materials <ul style="list-style-type: none">- Body: AISI 316L- Seal: HNBR / MFQ
Seal	Ordering code								
HNBR	X2 H								
MFQ	X2 F								
X3									
Indicator plug 700 bar (only for FZH) <table><tr><th>Seal</th><th>Ordering code</th></tr><tr><td>HNBR</td><td>X3 H</td></tr><tr><td>MFQ</td><td>X3 F</td></tr></table> 		Seal	Ordering code	HNBR	X3 H	MFQ	X3 F	Materials <ul style="list-style-type: none">- Body: AISI 316L- Seal: HNBR / MFQ	
Seal	Ordering code								
HNBR	X3 H								
MFQ	X3 F								

DIFFERENTIAL INDICATORS

Designation & Ordering code

DESIGNATION & ORDERING CODE - DIFFERENTIAL INDICATORS

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

Type	DE	DL	DV
X Standard type	•	•	•
Z 700 bar	•	•	•
Y Optional type	-	-	•

Pressure setting	
50	5.0 bar
70	7.0 bar
95	9.5 bar

Seals	
H	HNBR
V	FPM

Thermostat	
A	Without thermostat

Electrical connections	DEX	DEZ	DL	DV
48 Connection via three-core cable - fitting M20x1.5	-	-	-	-
49 Connection via four-core cable - fitting 1/2" NPT	-	-	-	-
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)	-	-	-	-

Option	
P01	MP Filtri standard
Pxx	Customized

DESIGNATION & ORDERING CODE - DIFFERENTIAL INDICATOR PLUG

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