RFEX series

Maximum working pressure up to 1.6 MPa (16 bar) - Flow rate up to 260 l/min

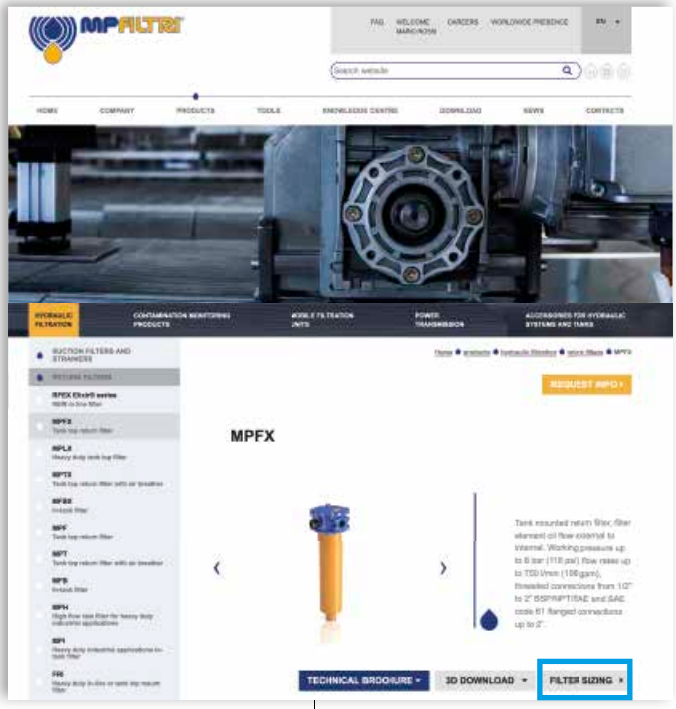
TYPICAL FILTER SIZING Selection Software

Step 1

Select “FILTER SIZING SOFTWARE” after login

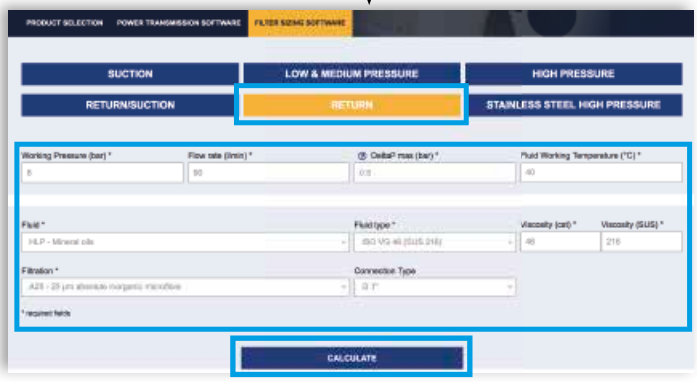
OR

Select “FILTER SIZING” after login from a product page

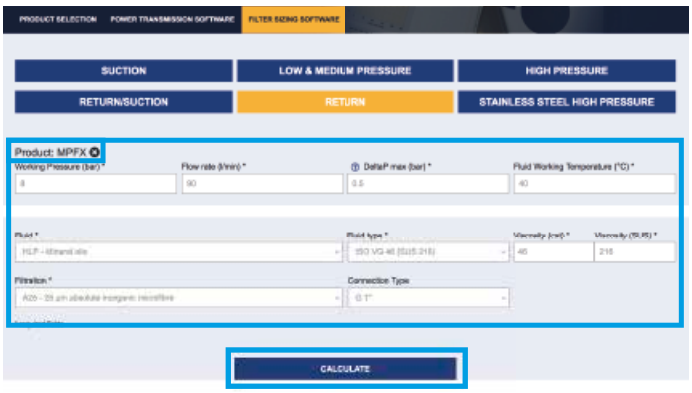


Step 2

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

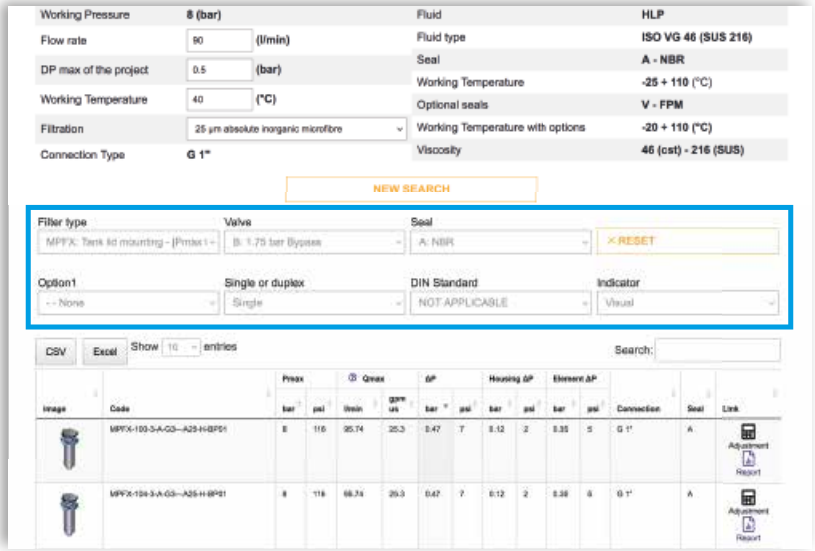


Enter the main data for sizing the filter then push CALCULATE.



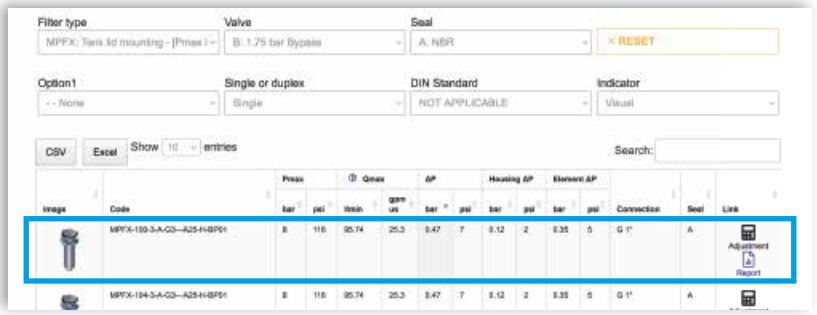
Step 3

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



Step 4

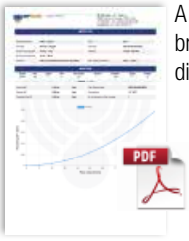
Choose the most suitable filter from the proposed list.



Step 5

A SAVE YOUR FILTER'S REPORT

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

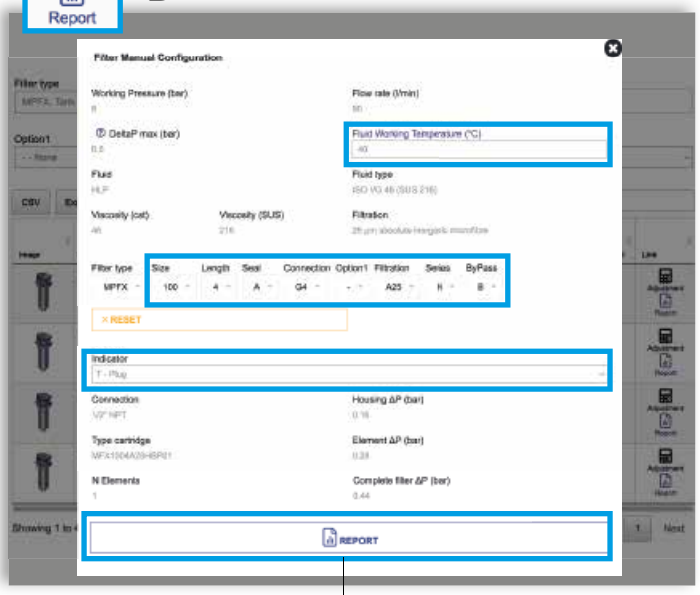


A new
browser window
displays the pdf

Close the report window

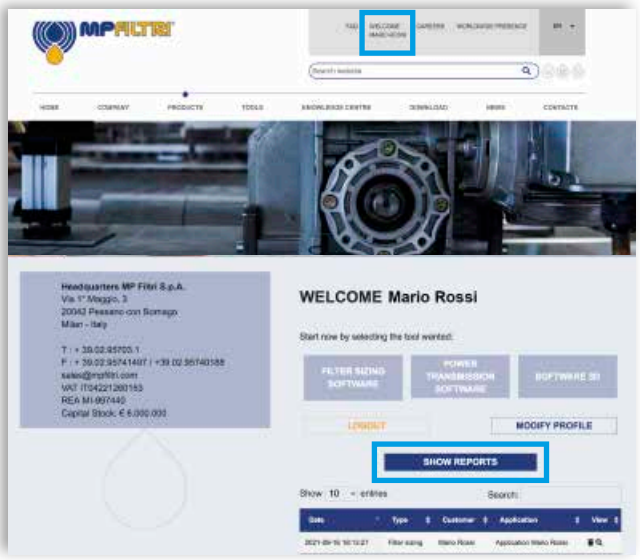
B MANUAL EDIT

It is possible to change the filter
modifying every parameter.



see **A**

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



MYCLEAN

THE X CONCEPT FOR OUR FILTERS

**Protect the performance of your system with MYclean.
Quality and efficiency are fundamental for MP Filtri:
this exclusive new filter element possesses polygon shape geometry and specific seal that ensures only original spare parts can be used - ensuring correct operation and higher system reliability.**

RFEX series

with MYCLEAN FEX Filter Element

- **Protects the machine from improper use of non-original products.**
- **Safety of constant quality protection & reliability**

With exclusive filter element you are sure that only MP Filtri filter elements can be used, ensuring the best cleaning level of the oil due to the use of originals filter elements.

The products identified as RFEX are protected by:

- Italian Patent n° 102014902261205
- Canadian Patent n° 2,937,258
- European Patent n° 16181725.9
- US Patent n° 15/224,337

RFEX GENERAL INFORMATION

Description

Return filter

Maximum working pressure up to 1.6 MPa (16 bar)
Flow rate up to 260 l/min

RFEX is a range of return filters for protection of the reservoir against the system contamination.
They are mounted in line to limit aeration or foam generation into the reservoir.

Available features:
- Female threaded connections up to 1 1/4" and flanged connections up to 1 5/8", for a maximum flow rate of 260 l/min
- Fine filtration rating, to get a good cleanliness level into the reservoir
- Bypass valve, to relieve excessive pressure drop across the filter media
- Visual, electrical, axial and radial pressure gauges
- MYclean interface connection for the filter element, to protect the product against non-original spare parts
- External protective wrap, to optimize the flow through the element and to save the element efficiency against non-proper handling

Common applications:
- Light Industrial equipment
- Mobile application

Technical data

Filter housing materials
- Head: Aluminium
- Bypass valve: Polyamide - Steel
- Bowl: Polyamide

Bypass valve
Opening pressure 175 kPa (1.75 bar) ±10%

Δp element type
- Microfibre filter elements - series N: 8 bar
- Fluid flow through the filter element from OUT to IN

Seals
Standard NBR series A

Temperature
From -25 °C to +110 °C

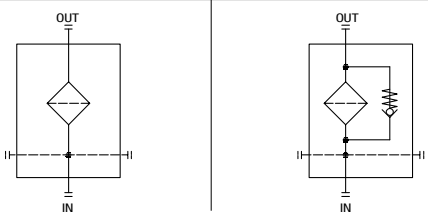
Note
RFEX filters are provided for vertical mounting

Weights [kg] and volumes [dm³]

Filter series	Weights [kg]	Volumes [dm³]
RFEX 060	1.00	0.60
RFEX 080	1.15	0.80
RFEX 110	1.90	1.60
RFEX 160	2.10	2.00

Hydraulic symbols

Filter series	Style S	Style B
RFEX 060	•	•
RFEX 080	•	•
RFEX 110	•	•
RFEX 160	•	•



FILTER ASSEMBLY SIZING
Flow rates [l/min]

Filter element design - N Series

Filter series	A10	A16	A25	M60	M90	P10	P25
RFEX 060	52	53	55	71	72	54	59
RFEX 080	59	59	62	73	74	65	68

Connections of filter under test G 3/4”

Filter series	A10	A16	A25	M60	M90	P10	P25
RFEX 060	60	61	64	87	89	62	77
RFEX 080	69	70	75	91	92	79	93

Connections of filter under test G 1”

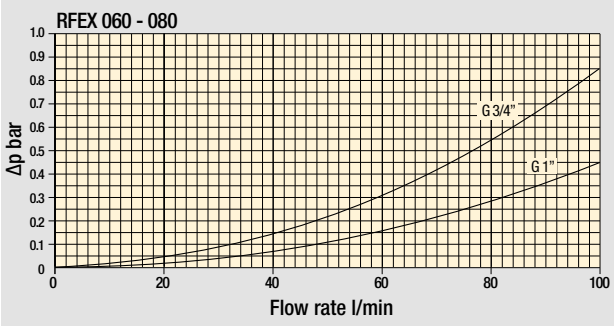
Filter series	A10	A16	A25	M60	M90	P10	P25
RFEX 110	141	153	172	250	252	186	196
RFEX 160	166	168	191	255	256	207	215

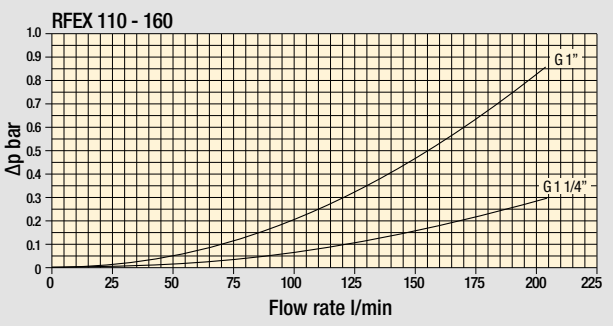
Connections of filter under test G 1 1/4”

Maximum flow rate for a complete return filter with a pressure drop Δp = 0.5 bar.
The reference fluid has a kinematic viscosity of 30 mm^2/s (cSt) and a density of 0.86 kg/dm^3.
For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.
Please, contact our Sales Department for further additional information.

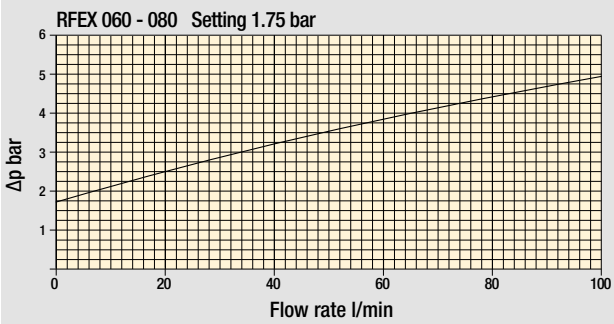
Pressure drop

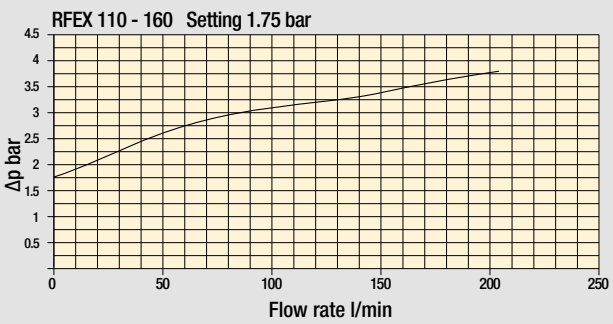
Filter housings
Δp pressure drop





Bypass valve
pressure drop





The curves are plotted using mineral oil with density of 0.86 kg/dm^3 in compliance with ISO 3968.
Δp varies proportionally with density.

Designation & Ordering code

COMPLETE FILTER

Configuration example : RFEX060 | B | A | A | 6 | A10 | N | P01

Series and size
- **RFEX060** Filter featuring MYCLEAN Filter Element
- **RFEX080** Filter featuring MYCLEAN Filter Element

Bypass valve
- **S** Without bypass
- **B** 1.75 bar

Seals and treatments
- **A** NBR

Connections
- **A** G 3/4”
- **B** G 1”
- **C** 3/4” NPT
- **D** 1” NPT
- **E** SAE 12 - 1 1/16” - 12 UN
- **F** SAE 16 - 1 5/16” - 12 UN

Connection for clogging indicator
- **6** With plugged connections

Filtration rating

A10	Inorganic microfiber	10 µm	**P10**	Resin impregnated paper	10 µm
A16	Inorganic microfiber	16 µm	**P25**	Resin impregnated paper	25 µm
A25	Inorganic microfiber	25 µm			
M60	Wire mesh	60 µm			
M90	Wire mesh	90 µm			

Element Δp
- **N** 8 bar

Execution
- **P01** MP Filtri standard
- **Pxx** Customized

FILTER ELEMENT

Configuration example: FEX060 | A10 | A | N | P01

Element series and size
- **FEX060** Filter Element with MYCLEAN feature
- **FEX080** Filter Element with MYCLEAN feature

Filtration rating

A10	Inorganic microfiber	10 µm	**P10**	Resin impregnated paper	10 µm
A16	Inorganic microfiber	16 µm	**P25**	Resin impregnated paper	25 µm
A25	Inorganic microfiber	25 µm			
M60	Wire mesh	60 µm			
M90	Wire mesh	90 µm			

Seals and treatments
- **A** NBR

Element Δp
- **N** 8 bar

Execution
- **P01** MP Filtri standard
- **Pxx** Customized

CLOGGING INDICATORS

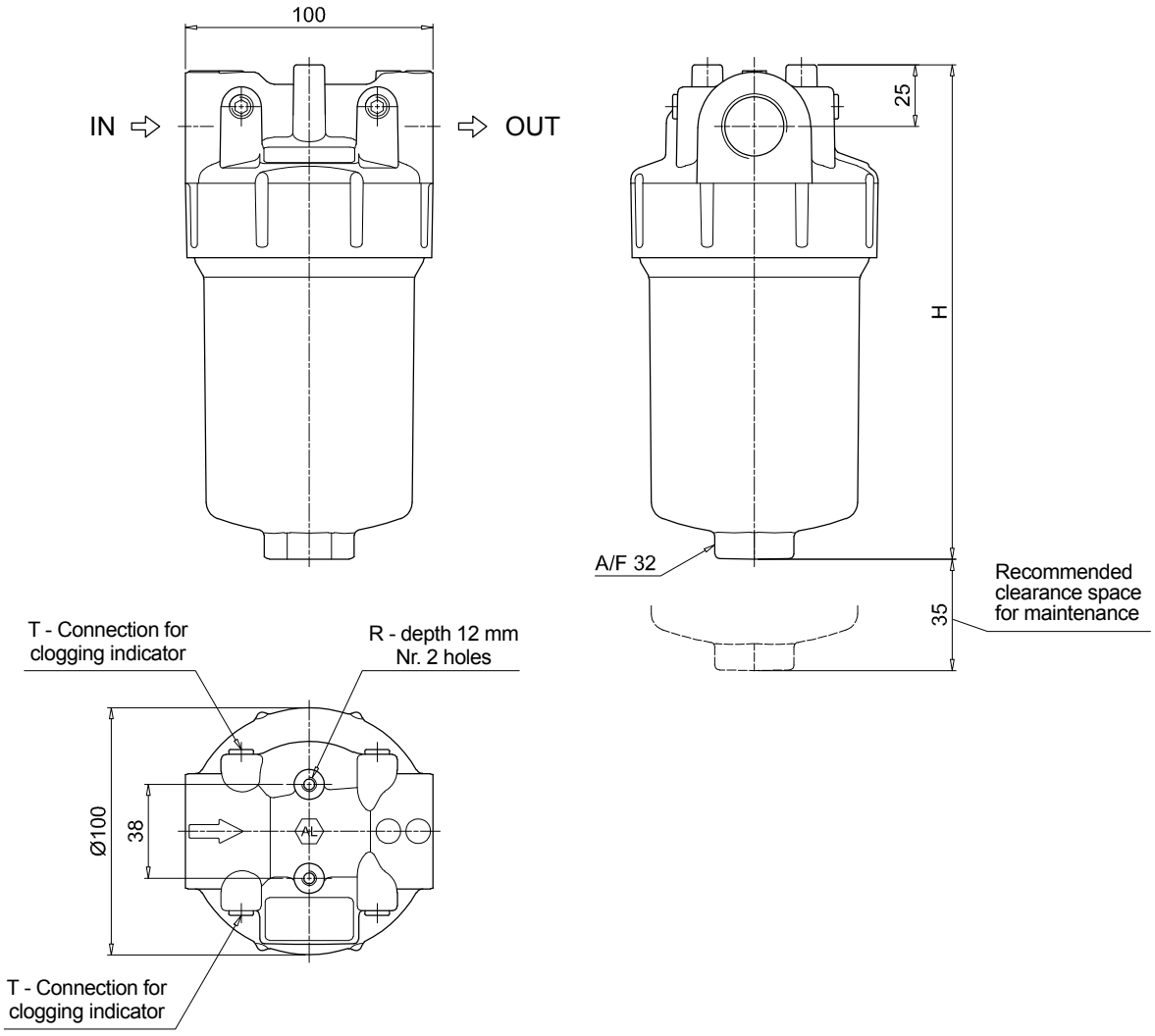
See page 266

- **BEA** Electrical pressure indicator
- **BEM** Electrical pressure indicator
- **BLA** Electrical / visual pressure indicator
- **BVA** Axial pressure gauge
- **BVR** Radial pressure gauge
- **BVP** Visual pressure indicator with automatic reset
- **BVQ** Visual pressure indicator with manual reset

Dimensions

Filter size	H [mm]
060	202
080	265

Connections	T	R
A	G 1/8"	M6
B	G 1/8"	M6
C	1/8" NPT	1/4" UNC
D	1/8" NPT	1/4" UNC
E	1/8" NPT	1/4" UNC
F	1/8" NPT	1/4" UNC



Designation & Ordering code

COMPLETE FILTER

Configuration example : RFEX110 | B | A | A | 6 | A10 | N | P01

Series and size
- **RFEX110** Filter featuring MYCLEAN Filter Element
- **RFEX160** Filter featuring MYCLEAN Filter Element

Bypass valve
- **S** Without bypass
- **B** 1.75 bar

Seals and treatments
- **A** NBR

Connections
- **A** G 1”
- **B** G 1 1/4”
- **C** 1” NPT
- **D** 1 1/4” NPT
- **E** SAE 16 - 1 5/16” - 12 UN
- **F** SAE 20 - 1 5/8” - 12 UN

Connection for clogging indicator
- **6** With plugged connections

Filtration rating

A10	Inorganic microfiber	10 µm	**P10**	Resin impregnated paper	10 µm
A16	Inorganic microfiber	16 µm	**P25**	Resin impregnated paper	25 µm
A25	Inorganic microfiber	25 µm			
M60	Wire mesh	60 µm			
M90	Wire mesh	90 µm			

Element Δp
- **N** 8 bar

Execution
- **P01** MP Filtri standard
- **Pxx** Customized

FILTER ELEMENT

Configuration example: FEX110 | A10 | A | N | P01

Element series and size
- **FEX110** Filter Element with MYCLEAN feature
- **FEX160** Filter Element with MYCLEAN feature

Filtration rating

A10	Inorganic microfiber	10 µm	**P10**	Resin impregnated paper	10 µm
A16	Inorganic microfiber	16 µm	**P25**	Resin impregnated paper	25 µm
A25	Inorganic microfiber	25 µm			
M60	Wire mesh	60 µm			
M90	Wire mesh	90 µm			

Seals and treatments
- **A** NBR

Element Δp
- **N** 8 bar

Execution
- **P01** MP Filtri standard
- **Pxx** Customized

CLOGGING INDICATORS

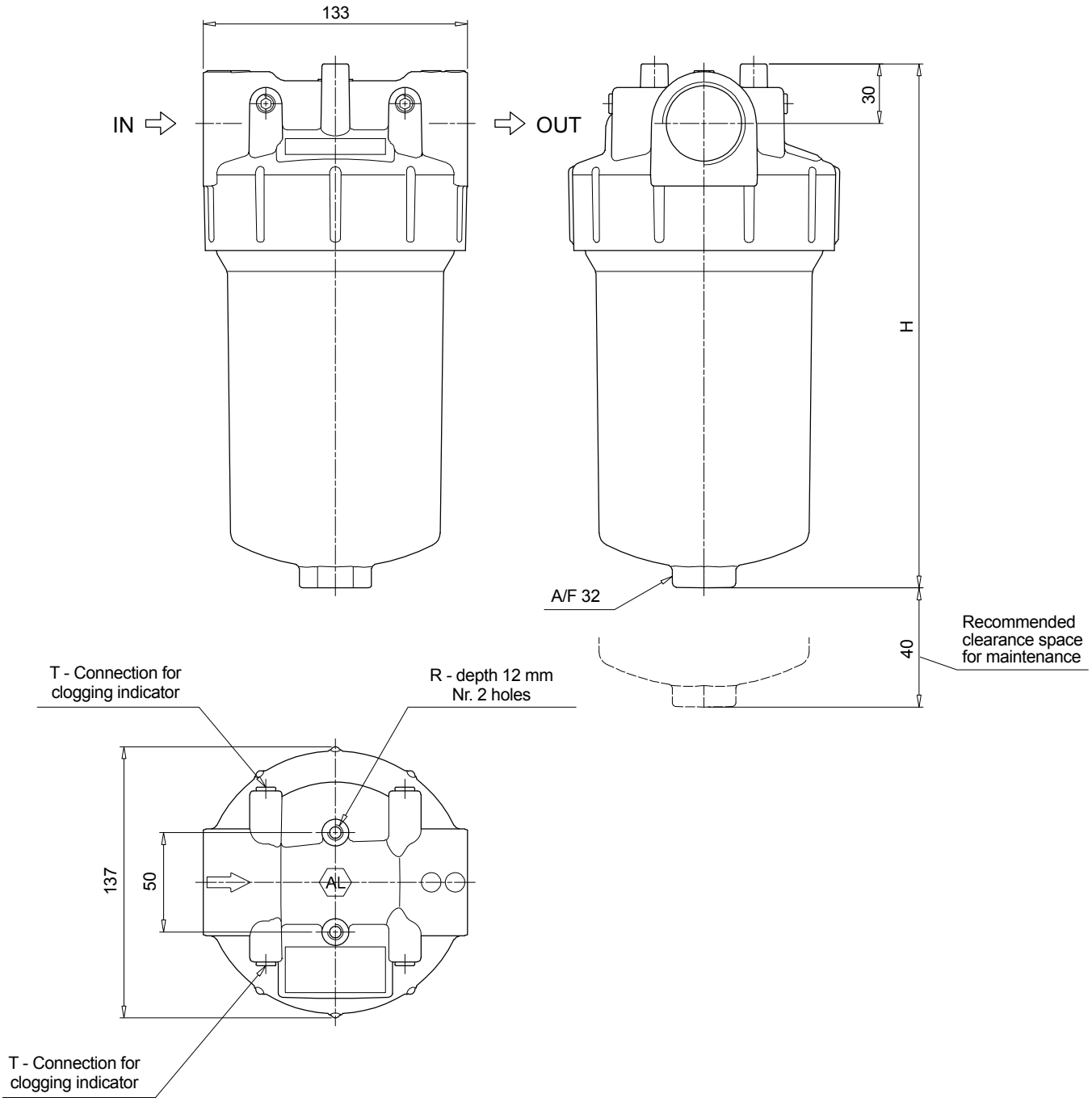
See page 266

- **BEA** Electrical pressure indicator
- **BEM** Electrical pressure indicator
- **BLA** Electrical / visual pressure indicator
- **BVA** Axial pressure gauge
- **BVR** Radial pressure gauge
- **BVP** Visual pressure indicator with automatic reset
- **BVQ** Visual pressure indicator with manual reset

Dimensions

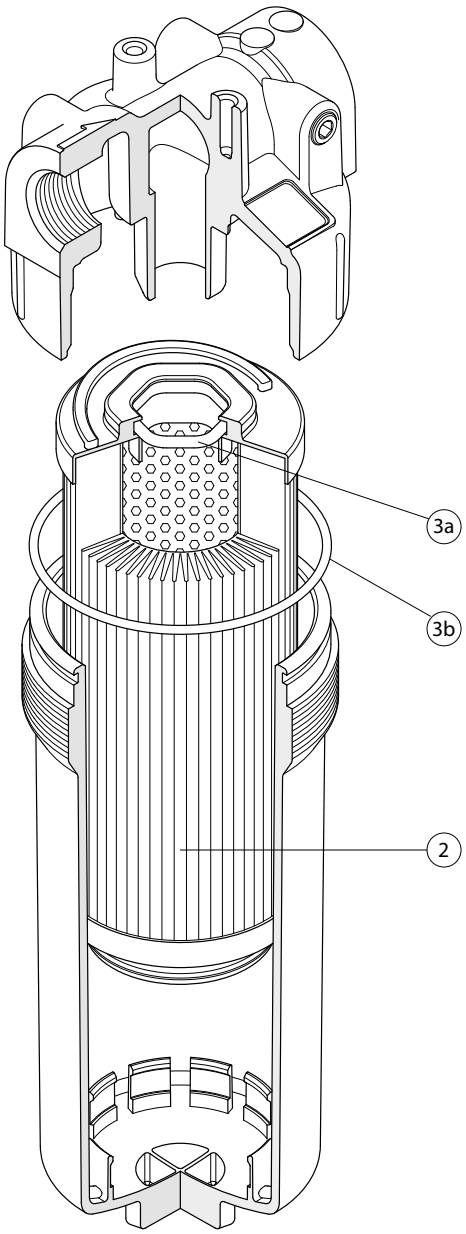
Filter size	H [mm]
110	266
160	315

Connections	T	R
A	G 1/8"	M8
B	G 1/8"	M8
C	1/8" NPT	5/16" UNC
D	1/8" NPT	5/16" UNC
E	1/8" NPT	5/16" UNC
F	1/8" NPT	5/16" UNC



RFEX SPARE PARTS

Order number for spare parts



Item:	Q.ty: 1 pc. (2)	Q.ty: 1 pc. (3) (3a ÷ 3b)
Filter series	**Filter element**	**Seal Kit code number NBR**
RFEX 060-080	See order table	02050771
RFEX 110-160		02050772

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.

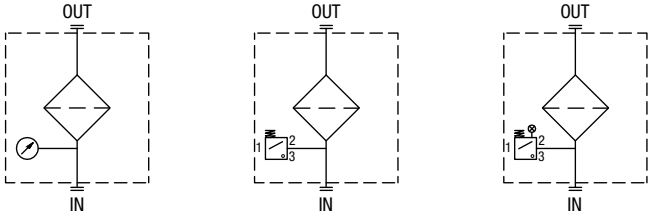
MP Filtri can supply indicators of the following designs:

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

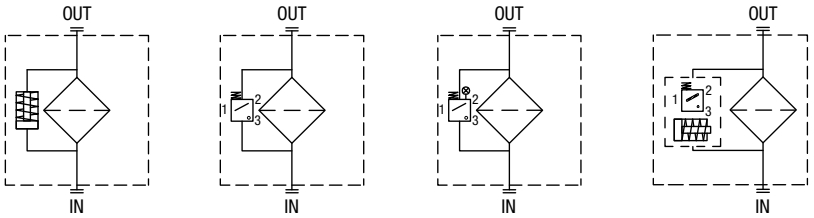
These type of devices can be provided with a visual, electrical or both signals.

Suitable indicator types

BAROMETRIC 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.



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.



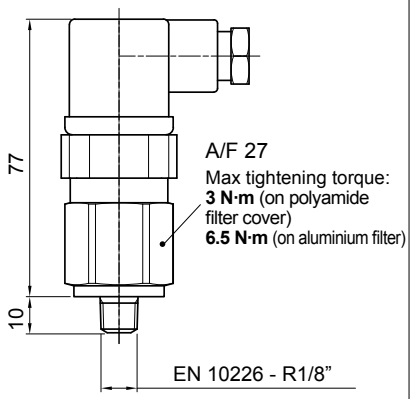
Quick reference guide

Filter family	Filter series		Visual indicators	Electrical indicators	Electrical / Visual indicators
RETURN FILTERS	With bypass 1.75 bar	ELIXIR® RFEX060-080-110-160	BVA14P01 BVR14P01 BVP15HP01 BVQ15HP01	BEA15HA50P01 BEM15HA41P01	BLA15HA51P01 BLA15HA52P01 BLA15HA53P01 BLA15HA71P01
	Without bypass	ELIXIR® RFEX060-080-110-160	BVA25P01 BVR25P01 BVP20HP01 BVQ20HP01	BEA20HA50P01 BEM20HA41P01	BLA20HA51P01 BLA20HA52P01 BLA20HA53P01 BLA20HA71P01
	With bypass 1.75 bar	MDH 250	BVA14P01 BVR14P01 BVP15HP01 BVQ15HP01 DVS12HP01	BEA15HA50P01 BEM15HA41P01 DES12HA10P01 DES12HA30P01 DES12HA80P01	BLA15HA51P01 BLA15HA52P01 BLA15HA53P01 BLA15HA71P01
	With bypass 3 bar	MDH 250	BVA25P01 BVR25P01 BVP20HP01 BVQ20HP01 DVS25HP01	BEA20HA50P01 BEM20HA41P01 DES25HA10P01 DES25HA30P01 DES25HA80P01	BLA20HA51P01 BLA20HA52P01 BLA20HA53P01 BLA20HA71P01
	With bypass 1.75 bar	MPFX MPTX MPF MPT MPH	BVA14P01 BVR14P01 BVP15HP01 BVQ15HP01	BEA15HA50P01 BEM15HA41P01	BLA15HA51P01 BLA15HA52P01 BLA15HA53P01 BLA15HA71P01
	With bypass 3 bar	MPFX MPTX MPF MPT	BVA25P01 BVR25P01 BVP20HP01 BVQ20HP01	BEA20HA50P01 BEM20HA41P01	BLA20HA51P01 BLA20HA52P01 BLA20HA53P01 BLA20HA71P01
	With bypass 2.5 bar	MPH			
	With bypass 4.5 bar	MPLX	DVA20xP01 DVM20xP01	DEA20xA50P01 DEM20XX10P01 DEM20XX20P01 DEM20XX30P01 DEM20XX35P01 DTA20xF70P01	DLA20xA51P01 DLA20xA52P01 DLA20xA71P01 DLE20xA50P01 DLE20xF50P01
	With bypass 2.4 bar	FRI			

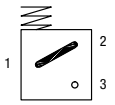
BEA*50

Electrical Pressure Indicator

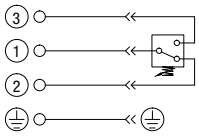
Settings	Ordering code
1.5 bar ±10%	BE A 15 H A 50 P01
2.0 bar ±10%	BE A 20 H A 50 P01



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 HFA, HFB, HFC according to ISO 2943
- Degree of protection: IP65 according to EN 60529

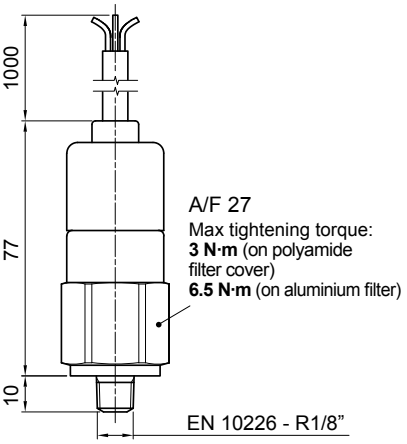
Electrical data

- Electrical connection: EN 175301-803
- Resistive load: 5 A / 14 Vdc
  4 A / 30 Vdc
  5 A / 125 Vac
  4 A / 250 Vac
- Available ATEX product: I M1 Ex ia I Ma
  II 1GD Ex ia IIC TX Ga Ex ia IIIC TX °C Da
- CE certification

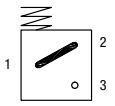
BEM*41

Electrical Pressure Indicator

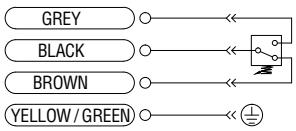
Settings	Ordering code
1.5 bar ±10%	BE M 15 H A 41 P01
2.0 bar ±10%	BE M 20 H A 41 P01



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 HFA, HFB, HFC according to ISO 2943
- Degree of protection: IP67 according to EN 60529

Electrical data

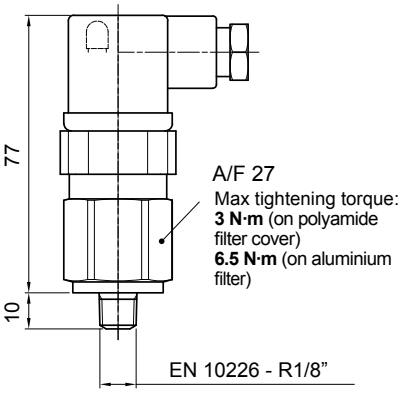
- Electrical connection: Four-core cable
- Resistive load: 5 A / 14 Vdc
  4 A / 30 Vdc
  5 A / 125 Vac
  4 A / 250 Vac
- CE certification

On request this indicator can be provided with main connectors in use for wirings.

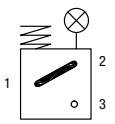
BL*51 - BL*52 - BL*53

Electrical/Visual Pressure Indicator

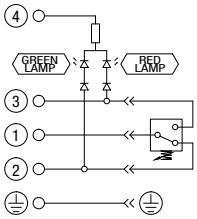
Settings	Ordering code
1.5 bar ±10%	BL A 15 H A xx P01
2.0 bar ±10%	BL A 20 H A xx P01



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 HFA, HFB, HFC according to ISO 2943
- Degree of protection: IP65 according to EN 60529

Electrical data

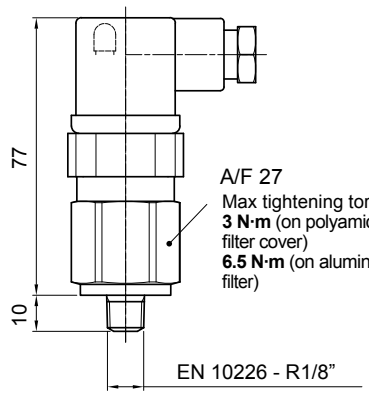
- Electrical connection: EN 175301-803

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

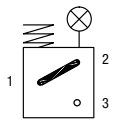
BL*71

Electrical/Visual Pressure Indicator

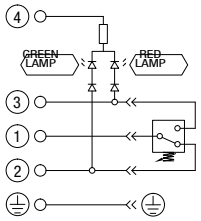
Settings	Ordering code
1.5 bar ±10%	BL A 15 H A 71 P01
2.0 bar ±10%	BL A 20 H A 71 P01



Hydraulic symbol



Electrical symbol



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

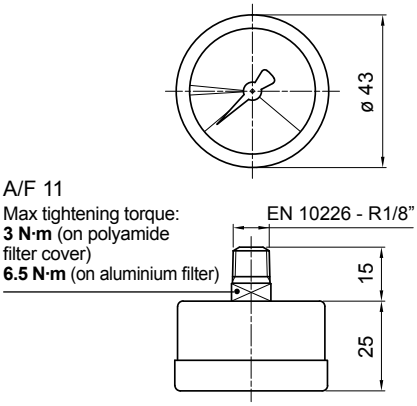
Technical data
- Max working pressure: 40 bar
- Proof pressure: 60 bar
- Working temperature: From -25 °C to +80 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943
- Degree of protection: IP65 according to EN 60529

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

BVA

Axial Pressure Gauge

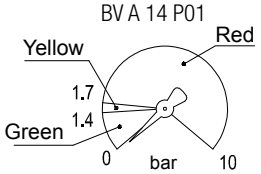
Settings	Ordering code
1.4 bar ±10%	BV A 14 P01
2.5 bar ±10%	BV A 25 P01



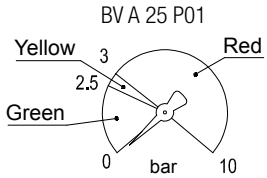
Hydraulic symbol

Dial scale

BV A 14 P01



BV A 25 P01



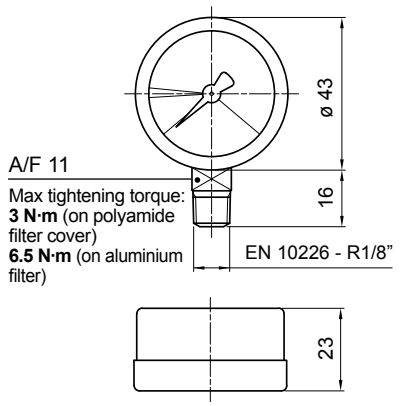
Materials
- Case: Painted Steel
- Window: Transparent plastic
- Dial: Painted Steel
- Pointer: Painted Aluminium
- Pressure connection: Brass
- Pressure element: Bourdon tube Cu-alloy soft soldered

Technical data
- Max working pressure: Static: 7 bar Fluctuating: 6 bar Short time: 10 bar
- Working temperature: From -40 °C to +60 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, 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

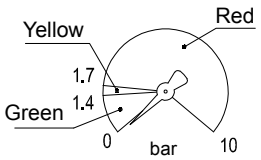
Settings	Ordering code
1.4 bar ±10%	BV R 14 P01
2.5 bar ±10%	BV R 25 P01



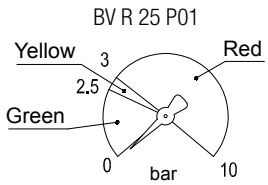
Hydraulic symbol

Dial scale

BV R 14 P01



BV R 25 P01



Materials
- Case: Painted Steel
- Window: Transparent plastic
- Dial: Painted Steel
- Pointer: Painted Aluminium
- Pressure connection: Brass
- Pressure element: Bourdon tube Cu-alloy soft soldered

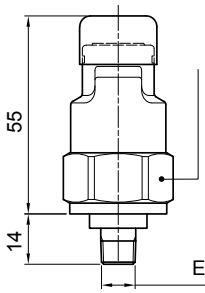
Technical data
- Max working pressure: Static: 7 bar Fluctuating: 6 bar Short time: 10 bar
- Working temperature: From -40 °C to +60 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943
- Accuracy: Class 2.5 according to EN 13190
- Degree of protection: IP31 according to EN 60529

Dimensions

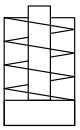
BVP - BVQ

Visual Pressure Indicator

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



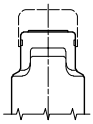
Materials

- Body: Brass
- Cover / internal parts: Polyamide
- Caps: VMQ
- Seal: HNBR

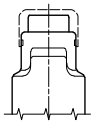
Technical data

- Reset: BVP - Automatic reset; BVQ - Manual reset
- Max working pressure: 10 bar
- Proof pressure: 15 bar
- Working temperature: From -25 °C to +80 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943
- Degree of protection: IP45 according to EN 60529

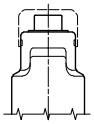
Signals



Absence of pressure (no indicator)



Presence of pressure (green button rises gradually)



Clogged filter element (red button risen)

DESIGNATION & ORDERING CODE

Configuration example 1:	BE	M	15	H	A	41	P01
Configuration example 2:	BL	A	20	H	A	71	P01
Configuration example 3:	BV	R	14				P01
Configuration example 4:	BV	P	20	H			P01

Series

BE Electrical pressure indicator
BL Electrical/Visual pressure indicator
BV Visual pressure indicator

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 2.0 bar	•	•	-	•
25 2.5 bar	-	-	•	-

Seals	BE	BLA	BVA-BVR	BVP-BVQ
H HNBR	•	•	-	•

Thermostat	BEA-BEM	BLA	BV
A Without	•	•	-

Electrical connections	BEA	BEM	BL	BV
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 Vdc	-	-	•	-
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	•	-

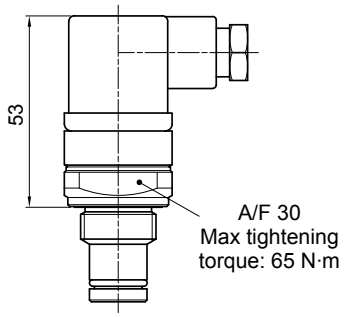
Option

P01 MP Filtri standard
Pxx Customized

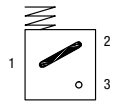
DEA*50

Electrical Differential Indicator

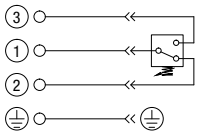
Settings	Ordering code
2.0 bar ±10%	DE A 20 x A 50 P01



Hydraulic symbol



Electrical symbol



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

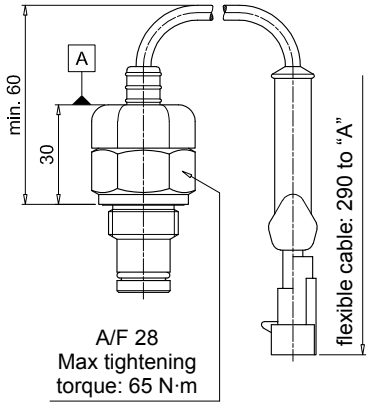
Technical data
- Max working pressure: 420 bar
- Proof pressure: 630 bar
- Burst pressure: 1260 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943
- Degree protection: IP66 according to EN 60529 IP69K according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

Electrical data
- Electrical connection: EN 175301-803
- Resistive load: 0.2 A / 115 Vdc

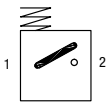
DEM*10

Electrical Differential Indicator

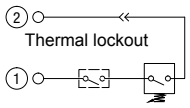
Settings	Ordering code
2.0 bar ±10%	DE M 20 xx 10 P01



Hydraulic symbol



Electrical symbol



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

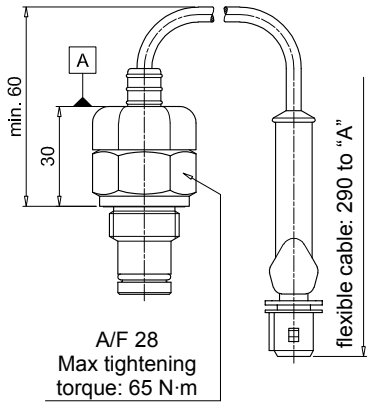
Technical data
- Max working pressure: 420 bar
- Proof pressure: 630 bar
- Burst pressure: 1260 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943
- Degree protection: IP66 according to EN 60529

Electrical data
- Electrical connection: AMP Superseal series 1.5
- Resistive load: 0.2 A / 115 Vdc
- Switching type: Normally open contacts (NC on request)
- Thermal lockout: Normally open up to 30 °C (option "F")

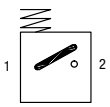
DEM*20

Electrical Differential Indicator

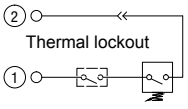
Settings	Ordering code
2.0 bar ±10%	DE M 20 xx 20 P01



Hydraulic symbol



Electrical symbol



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

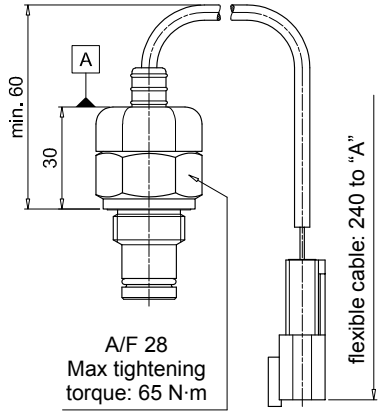
Technical data
- Max working pressure: 420 bar
- Proof pressure: 630 bar
- Burst pressure: 1260 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943
- Degree protection: IP66 according to EN 60529

Electrical data
- Electrical connection: AMP Time junior
- 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")

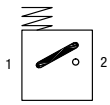
DEM*30

Electrical Differential Indicator

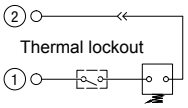
Settings	Ordering code
2.0 bar ±10%	DE M 20 xx 30 P01



Hydraulic symbol



Electrical symbol



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

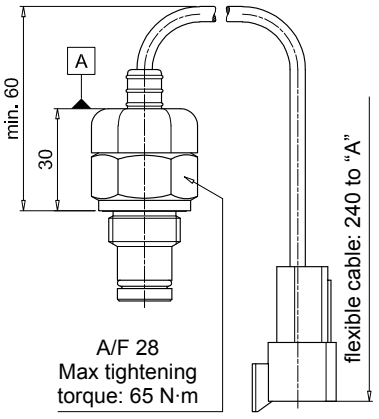
Technical data
- Max working pressure: 420 bar
- Proof pressure: 630 bar
- Burst pressure: 1260 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943
- Degree protection: IP66 according to EN 60529

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")

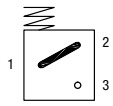
DEM*35

Electrical Differential Indicator

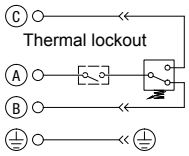
Settings	Ordering code
2.0 bar ±10%	DE M 20 xx 35 P01



Hydraulic symbol



Electrical symbol



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

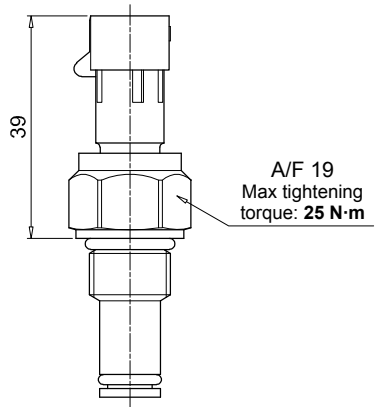
Technical data
- Max working pressure: 420 bar
- Proof pressure: 630 bar
- Burst pressure: 1260 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943
- Degree protection: IP66 according to EN 60529

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")

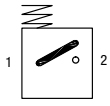
DES*10

Electrical Differential Indicator

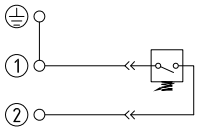
Settings	Ordering code
1.2 bar ±10%	DE S 12 H A 10 P01
2.5 bar ±10%	DE S 25 H A 10 P01



Hydraulic symbol



Electrical symbol



Materials
- Body: Brass
- Internal parts: Brass - Polyamide
- Contacts: Silver
- Seal: HNBR

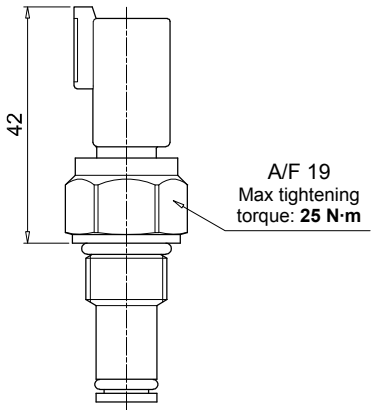
Technical data
- Max working pressure: 16 bar
- Proof pressure: 24 bar
- Burst pressure: 48 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943
- Degree protection: IP67 according to EN 60529

Electrical data
- Electrical connection: AMP Superseal series 1.5
- Resistive load: 0.2 A / 24 Vdc
- Switching type: Normally open contacts (NC on request)

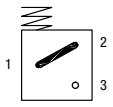
DES*30

Electrical Differential Indicator

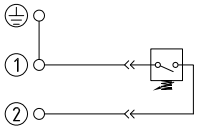
Settings	Ordering code
1.2 bar ±10%	DE S 12 H A 30 P01
2.5 bar ±10%	DE S 25 H A 30 P01



Hydraulic symbol



Electrical symbol



Materials
- Body: Brass
- Internal parts: Brass - Polyamide
- Contacts: Silver
- Seal: HNBR

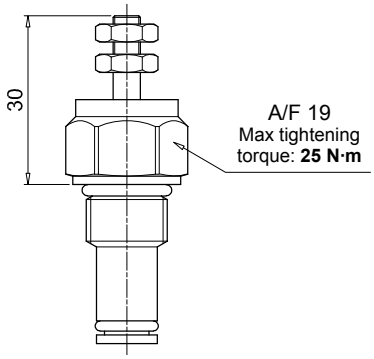
Technical data
- Max working pressure: 16 bar
- Proof pressure: 24 bar
- Burst pressure: 48 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943
- Degree protection: IP67 according to EN 60529

Electrical data
- Electrical connection: Deutsch DT-04-2-P
- Resistive load: 0.2 A / 24 Vdc
- Switching type: Normally open contacts (NC on request)

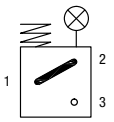
DES*80

Electrical Differential Indicator

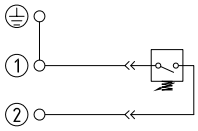
Settings	Ordering code
1.2 bar ±10%	DE S 12 H A 80 P01
2.5 bar ±10%	DE S 25 H A 80 P01



Hydraulic symbol



Electrical symbol



Materials
- Body: Brass
- Internal parts: Brass - Polyamide
- Contacts: Silver
- Seal: HNBR

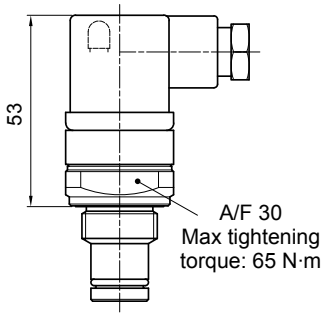
Technical data
- Max working pressure: 16 bar
- Proof pressure: 24 bar
- Burst pressure: 48 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943
- Degree protection: IP67 according to EN 60529

Electrical data
- Electrical connection: Stud #10-32 UNF
- Resistive load: 0.2 A / 24 Vdc
- Switching type: Normally open contacts (NC on request)

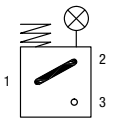
DLA*51 - DLA*52

Electrical/Visual Differential Indicator

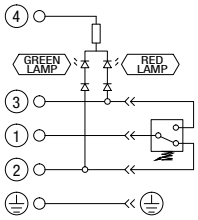
Settings	Ordering code
2.0 bar ±10%	DL A 20 x A xx P01



Hydraulic symbol



Electrical symbol



Materials
- Body: Brass
- Base: Transparent 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 HFA, HFB, HFC according to ISO 2943
- Degree protection: IP66 according to EN 60529 IP69K according to ISO 20653

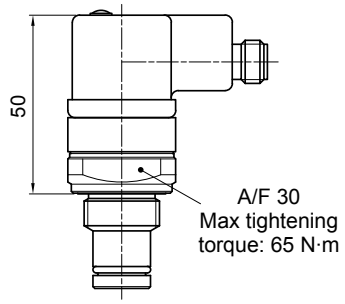
Electrical data
- Electrical connection: EN 175301-803
- Type: 51 / 52
- Lamps: 24 Vdc / 110 Vdc
- Resistive load: 1 A / 24 Vdc / 1 A / 110 Vdc

Dimensions

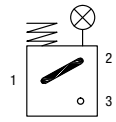
DLA*71

Electrical/Visual Differential Indicator

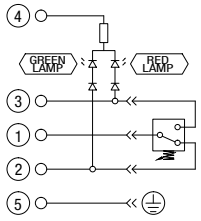
Settings	Ordering code
2.0 bar ±10%	DL A 20 x A 71 P01



Hydraulic symbol



Electrical symbol



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

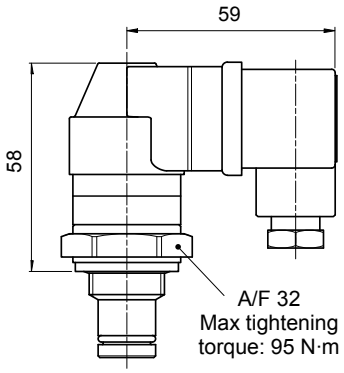
Technical data
- Max working pressure: 420 bar
- Proof pressure: 630 bar
- Burst pressure: 1260 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943
- Degree protection: IP65 according to EN 60529 IP69K according to ISO 20653

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

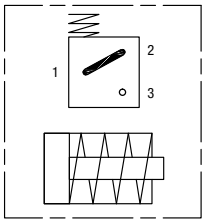
DLE*A50

Electrical/Visual Differential Indicator

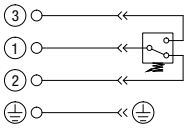
Settings	Ordering code
2.0 bar ±10%	DL E 20 x A 50 P01



Hydraulic symbol



Electrical symbol



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

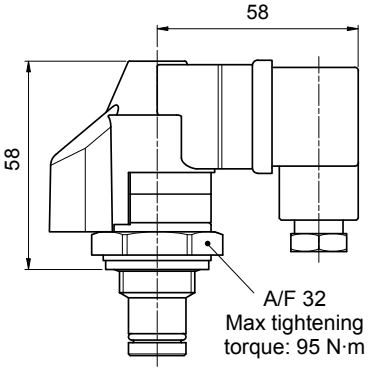
Technical data
- Max working pressure: 420 bar
- Proof pressure: 630 bar
- Burst pressure: 1260 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943
- Degree protection: IP65 according to EN 60529

Electrical data
- Electrical connections: EN 175301-803
- Resistive load: 5 A / 250 Vac
- Available the connector with lamps

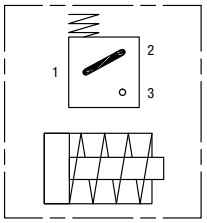
DLE*F50

Electrical/Visual Differential Indicator

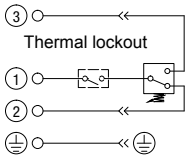
Settings	Ordering code
2.0 bar ±10%	DL E 20 x F 50 P01



Hydraulic symbol



Electrical symbol



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

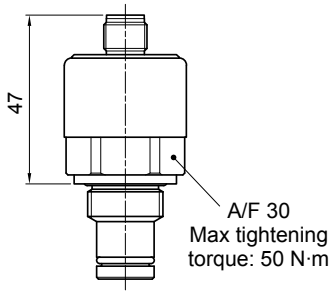
Technical data
- Max working pressure: 420 bar
- Proof pressure: 630 bar
- Burst pressure: 1260 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943
- Degree protection: IP65 according to EN 60529

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

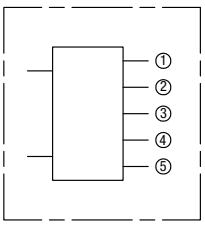
DTA*70

Electrical Differential Indicator

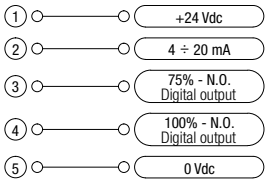
Settings	Ordering code
2.0 bar ±10%	DT A 20 x x 70 P01



Hydraulic symbol



Electrical symbol



Materials
- Body: Brass
- Internal parts: Brass - Nylon
- Contacts: Silver
- Seal: HNBR - FPM

Industry 4.0 READY

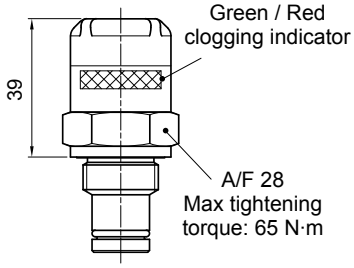
Technical data
- Max working pressure: 420 bar
- Proof pressure: 630 bar
- Burst pressure: 1260 bar
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943
- Degree protection: IP67 according to EN 60529

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)

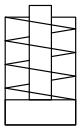
DVA

Visual Differential Indicator

Settings	Ordering code
2.0 bar ±10%	DV A 20 x P01



Hydraulic symbol



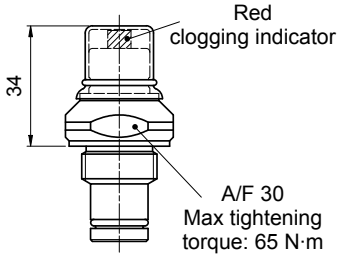
Materials
- Body: Brass
- Internal parts: Brass - Nylon
- Contacts: Silver
- Seal: HNBR - FPM

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 HFA, HFB, HFC according to ISO 2943
- Degree protection: IP65 according to EN 60529

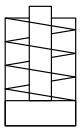
DVM

Visual Differential Indicator

Settings	Ordering code
2.0 bar ±10%	DV M 20 x P01



Hydraulic symbol



Materials
- Body: Brass
- Internal parts: Brass - Nylon
- Contacts: Silver
- Seal: HNBR - FPM

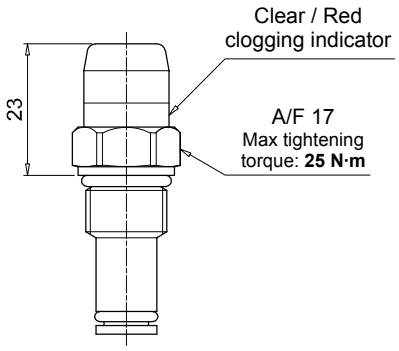
Technical data
- Reset: Manual reset
- Max working pressure: 420 bar
- Proof pressure: 630 bar
- Burst pressure: 1260 bar
- Working temperature: From -25 °C to +110 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids HFA, HFB, HFC according to ISO 2943
- Degree protection: IP65 according to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

Dimensions

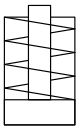
DVS

Visual Differential Indicator

Settings	Ordering code
1.2 bar ±10%	DV S 12 H P01
2.5 bar ±10%	DV S 25 H P01



Hydraulic symbol



Materials

- Body: Brass
- Internal parts: Brass - Polyamide
- Contacts: Silver
- Seal: HNBR

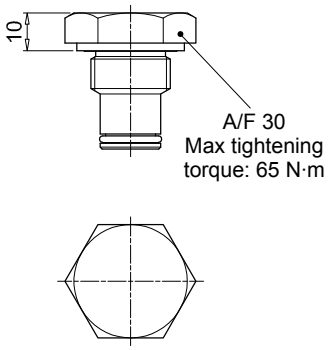
Technical data

- Reset: Automatic reset
- Max working pressure: 16 bar
- Proof pressure: 24 bar
- Burst pressure: 48 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: IP67 according to EN 60529

T2

Indicator plug

Seal	Ordering code
HNBR	T2 H
FPM	T2 V



Materials

- Body: Phosphatized steel
- Seal: HNBR / FPM

DESIGNATION & ORDERING CODE - DIFFERENTIAL INDICATORS

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

Series

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

Type	DE	DL	DT
A Standard type	•	•	•
M With wired electrical connection	•	-	-
E For high power supply	-	•	-
S Compact version	•	-	-

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

Pressure setting	DE	DL	DT	DV
12 1.2 bar	•	-	-	•
20 2.0 bar	•	•	•	•
25 2.5 bar	•	-	-	-

Seals

H	HNBR
V	FPM

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

Electrical connections	DEA	DEM	DLA	DLE	DT	DV
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

DESIGNATION & ORDERING CODE - DIFFERENTIAL INDICATOR PLUG

Configuration example	T2	H

Series

T2	Indicator plug

Seals

H	HNBR
V	FPM