

BAROMETRIC PRESSURE INDICATORS

**CLOGGING
INDICATORS**



B BAROMETRIC (PRESSURE) INDICATORS

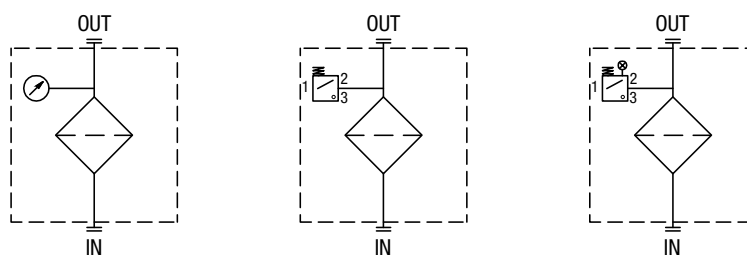
Pressure indicators are used on the Return line to check the efficiency of the filter element. They measure the pressure upstream of the filter element.

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

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

Example:

B BVA14P01



Barometric Indicators



DESIGNATION, ORDERING CODES & TECHNICAL DATA

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APPLICABLE BAROMETRIC (PRESSURE) INDICATORS BY FILTER SERIES

Filter Series	BEA	BEM	BET	BLA	BVA	BVR	BVP	BVQ
RFEX	•	•	-	•	•	•	•	•
MPFX	•	•	•	•	•	•	•	•
MPLX	-	-	-	-	-	-	-	-
MPTX	•	•	•	•	•	•	•	•
MFBX	-	-	-	-	-	-	-	-
MPF	•	•	•	•	•	•	•	•
MPT	•	•	•	•	•	•	•	•
MFB	-	-	-	-	-	-	-	-
MDH	•	•	•	•	•	•	•	•
MPH	•	•	-	•	•	•	•	•
MPI	-	-	-	-	-	-	-	-
FRI (all sizes, except 255)	-	-	-	-	-	-	-	-
FRI 255	•	•	-	•	•	•	•	•
RF2	-	-	-	-	-	-	-	-

BAROMETRIC (PRESSURE) INDICATORS

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

Designation & Ordering code

APPLICABLE BAROMETRIC (PRESSURE) INDICATORS BY FILTER SERIES

Filter Series	BEA	BEM	BET	BLA	BVA	BVR	BVP	BVQ
MRSX	•	•	•	•	•	•	•	•
LMP124	•	•	•	•	•	•	•	•

BAROMETRIC (PRESSURE) INDICATORS

Series	Configuration example 1:	BE	M	15	H	A	41	P01	EX
BE Electrical pressure indicator	Configuration example 2:	BL	A	20	H	A	71	P01	
BL Electrical/Visual pressure indicator	Configuration example 3:	BV	R	14				P01	
BV Visual pressure indicator	Configuration example 4:	BV	P	20	H			P01	

Type	BE	BL	BV
A Standard type	•	•	A Axial connection pressure gauge
M With wired electrical connection	•	-	R Radial connection pressure gauge
T With thermal switch	•	-	P Visual indicator with automatic reset
			Q Visual indicator with manual reset

Pressure setting	BEA-BEM	BET	BLA	BVA-BVR-BVE-BVH	BVP-BVQ-BVN-BVO
14 1.4 bar	-	-	-	•	-
15 1.5 bar	•	-	•	-	•
20 2.0 bar	•	•	•	-	•
25 2.5 bar	-	•	-	•	-

Seals	BE	BLA	BVA-BVR-BVE-BVH	BVP-BVQ-BVN-BVO
H HNBR	•	•	-	•

Thermostat	BEA-BEM	BET	BLA	BV
A Without thermostat	•	-	•	-
F With thermostat	-	•	-	-

Electrical connections	BEA	BEM	BET	BL
10 Connection AMP Superseal series 1.5	-	-	•	-
30 Connection Deutsch DT-04-2-P	-	-	•	-
41 Connection via four-core cable	-	•	-	-
50 Connection EN 175301-803	•	-	•	-
51 Connection EN 175301-803, transparent base with lamps 24 Vdc	-	-	-	•
52 Connection EN 175301-803, transparent base with lamps 110 Vdc	-	-	-	•
53 Connection EN 175301-803, transparent base with lamps 230 Vac	-	-	-	•
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	-	•

Option

P01	MP Filtri standard
Pxx	Customized

Certifications	BEA	BEM-BET	BL	BV
Without	•	•	•	•
EX ATEX certification	•	-	-	-
UL UL certification	•	-	-	-

APPLICABLE BAROMETRIC (PRESSURE) INDICATORS BY FILTER SERIES

Filter Series	BEA	BEM	BET	BLA	BVA	BVR	BVP	BVQ
MPS	•	•	•	•	•	•	•	•

BAROMETRIC (PRESSURE) INDICATORS

Series	Configuration example 1:	BE	M	15	H	A	41	P01
BE Electrical pressure indicator	Configuration example 2:	BL	A	20	H	A	71	P01
BL Electrical/Visual pressure indicator	Configuration example 3:	BV	R	14				P01
BV Visual pressure indicator	Configuration example 4:	BV	P	20	H			P01

Type	BE	BL	BV
A Standard type	•	•	A Axial connection pressure gauge
M With wired electrical connection	•	-	R Radial connection pressure gauge
			P Visual indicator with automatic reset
			Q Visual indicator with manual reset

Pressure setting	BEA-BEM	BET	BLA	BVA-BVR-BVE-BVH	BVP-BVQ-BVN-BVO
14 1.4 bar	-	-	-	•	-
15 1.5 bar	•	-	•	-	•
20 2.0 bar	•	•	•	-	•
25 2.5 bar	-	•	-	•	-

Seals	BE	BLA	BVA-BVR-BVE-BVH	BVP-BVQ-BVN-BVO
H HNBR	•	•	-	•

Thermostat	BEA-BEM	BET	BLA	BV
A Without thermostat	•	-	•	-
F With thermostat	-	•	-	-

Electrical connections	BEA	BEM	BL
10 Connection AMP Superseal series 1.5	-	-	-
30 Connection Deutsch DT-04-2-P	-	-	-
41 Connection via four-core cable	-	•	-
50 Connection EN 175301-803	•	-	-
51 Connection EN 175301-803, transparent base with lamps 24 Vdc	-	-	•
52 Connection EN 175301-803, transparent base with lamps 110 Vdc	-	-	•
53 Connection EN 175301-803, transparent base with lamps 230 Vac	-	-	•
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	•

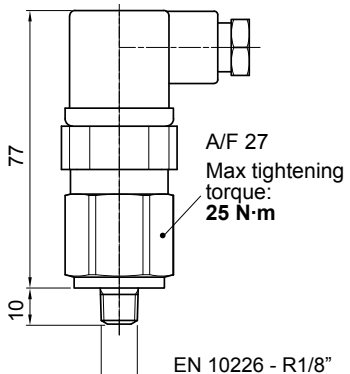
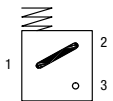
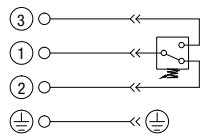
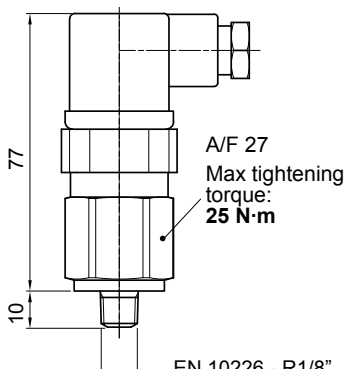
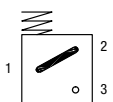
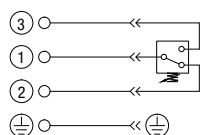
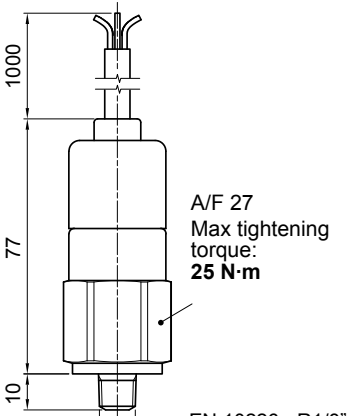
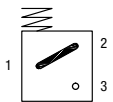
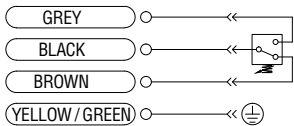
Option

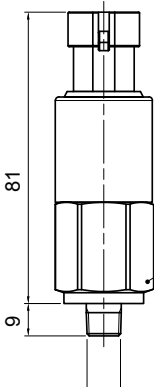
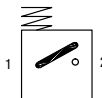
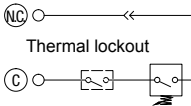
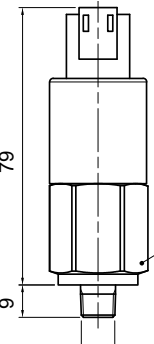
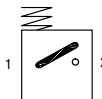
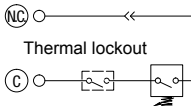
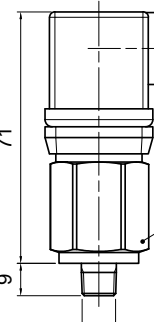
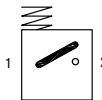
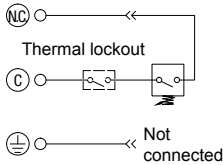
P01	MP Filtri standard
Pxx	Customized

Certifications	BEA	BEM-BET	BL	BV
Without	•	•	•	•
EX ATEX certification	•	-	-	-
UL UL certification	•	-	-	-

BAROMETRIC (PRESSURE) INDICATORS

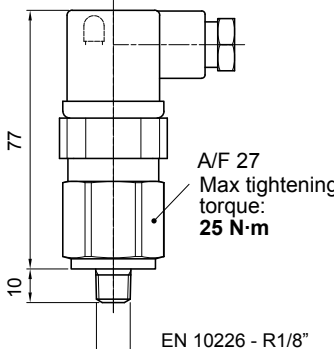
Dimensions

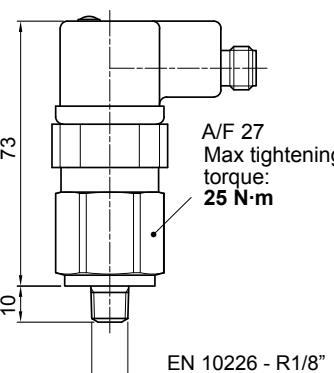
BEA*50 (EX) Electrical Pressure Indicator Connection EN 175301-803 <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>1.5 bar ±10%</td><td>BE A 15 HA 50 P01 BE A 15 HA 50 P01 EX</td></tr><tr><td>2.0 bar ±10%</td><td>BE A 20 HA 50 P01 BE A 20 HA 50 P01 EX</td></tr></table> 		Settings	Ordering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

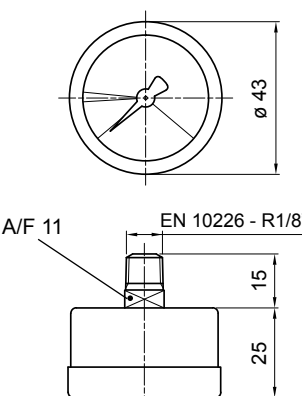
BET*F10 Electrical Pressure Indicator Connection AMP Superseal series 1.5 <table><tr><th>Settings</th><th>Ordering code</th></tr><tr><td>2.0 bar ±10%</td><td>BET 20 H F 10 P01</td></tr><tr><td>2.5 bar ±10%</td><td>BET 25 H F 10 P01</td></tr></table>  A/F 24 Max tightening torque: 30 N·m EN 10226 - R1/8"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

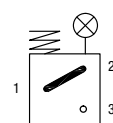
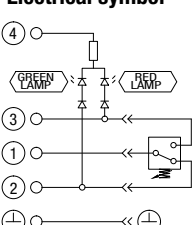
BAROMETRIC (PRESSURE) INDICATORS

Dimensions

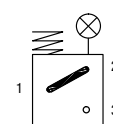
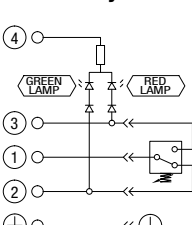
BL*51 - BL*52 - BL*53	
Electrical/Visual Pressure Indicator Connection: EN 175301-803	
51: Transparent base with lamps 24 Vdc 52: Transparent base with lamps 110 Vdc 53: Transparent base with lamps 230 Vac	
Settings	Ordering code
1.5 bar ±10%	BL A 15 H A xx P01
2.0 bar ±10%	BL A 20 H A xx P01
	

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

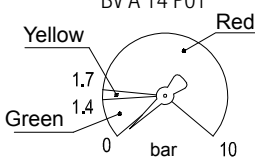
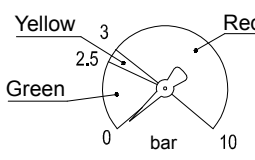
BVA	
Axial Pressure Gauge	
Settings	Ordering code
1.4 bar ±10%	BV A 14 P01
2.5 bar ±10%	BV A 25 P01
	

Hydraulic symbol	
	
Electrical symbol	
	

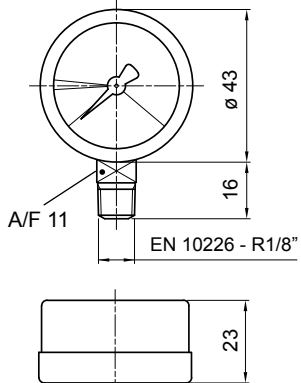
Materials	
- Body:	Brass
- Base:	Transparent polyamide
- Contacts:	Silver
- Seal:	HNBR
Technical data	
- Max working pressure:	40 bar
- Proof pressure:	60 bar
- Working temperature:	From -25 °C to +80 °C
- Compatibility with fluids:	Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943
- Degree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

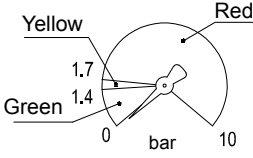
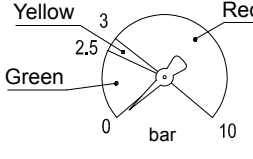
Hydraulic symbol	
	
Electrical symbol	
	

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

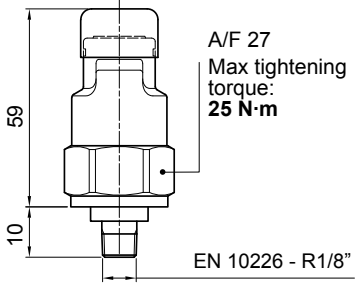
Hydraulic symbol	
	
Dial scale	
BV A 14 P01	
	
BV A 25 P01	
	

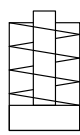
Materials	
- Case:	Painted Steel
- Window:	Clear plastic
- Dial:	Painted Steel
- Pointer:	Black plastic
- Pressure connection:	Brass
- Pressure element:	Bourdon tube Cu-alloy soft soldered, C type
- Movement:	Cu-alloy
Technical data	
- Max working pressure:	Static: 7 bar Fluctuating: 6 bar Short time: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

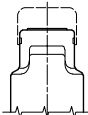
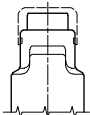
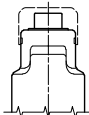
BVR	
Radial Pressure Gauge	
Settings	Ordering code
1.4 bar ±10%	BV R 14 P01
2.5 bar ±10%	BV R 25 P01
	


Dial scale
BV R 14 P01

BV R 25 P01


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

BVP - BVQ	
Visual Pressure Indicator	
BVP - Automatic reset BVQ - Manual reset	
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
	

	
Materials	
- Body:	Brass
- Cover / internal parts:	Nylon
- 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 HFB and 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)

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