

Suitable indicator types

V VACUUM INDICATORS

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

They measure the pressure downstream of the filter element.

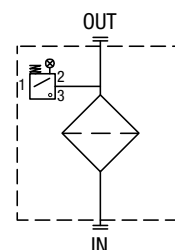
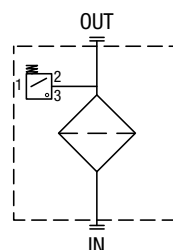
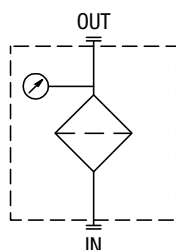
Standard items are produced with R 1/4" EN 10226 connection.

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

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

Example:

V VVB20P01



B BAROMETRIC INDICATORS

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

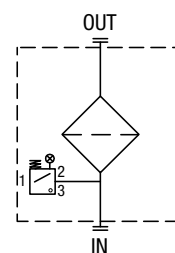
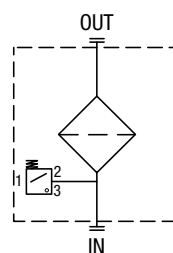
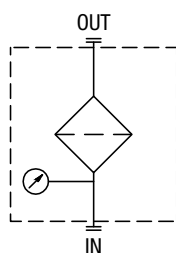
They measure the pressure upstream of the filter element.

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

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

Example:

B BVA14P01



D 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).

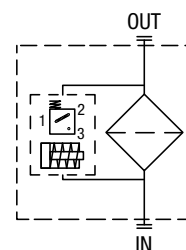
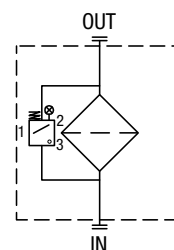
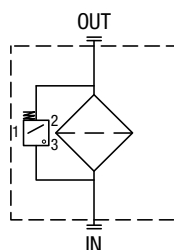
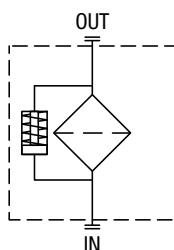
Standard items are produced with special connection G 1/2" size.

Also available in Stainless Steel models.

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

Example:

D DVA20xP01

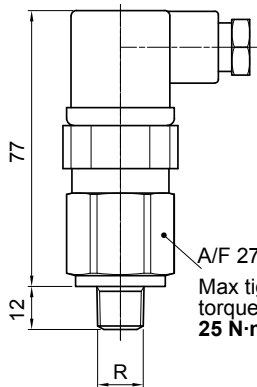


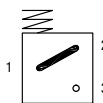
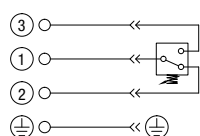
Designation & Ordering code

VACUUM INDICATORS									
Series		Configuration example 1:							
VE Electrical vacuum indicator		VE	A	21	V	A	50	P01	EX
VL Electrical/Visual vacuum indicator		Configuration example 2:							
VV Vacuum gauge		VL	B	21	A	A	71	P01	
		Configuration example 3:							
		VV	R	20				P01	
Type VE - VL		Type VV		SF2	SFEX				
A Connection EN 10226 - R1/4"		A Axial connection EN 10226 - R1/4"		•	-				
B Connection EN 10226 - R1/8"		B Axial connection EN 10226 - R1/8"		-	•				
		R Radial connection EN 10226 - R1/4"		•	-				
		S Radial connection EN 10226 - R1/8"		-	•				
Vacuum setting		VE	VL	VV					
20 -0.16 bar		-	-	•					
21 -0.21 bar		•	•	-					
Seals		VEA - VLA		VEB - VLB					
A NBR		•		•					
V FPM		•		-					
Thermostat		VE	VL						
A Without		•	•						
Electrical connections		VE	VL						
50 Connection EN 175301-803		•	-						
51 Connection EN 175301-803, transparent base with lamps 24 Vdc		-	•						
52 Connection EN 175301-803, transparent base with lamps 110 Vdc		-	•						
53 Connection EN 175301-803, transparent base with lamps 230 Vdc		-	•						
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc		-	•						
Option									
P01 MP Filtri standard									
Pxx Customized									
Certifications		VE	VL	VV					
Without		•	•	•					
EX ATEX certification		•	-	-					

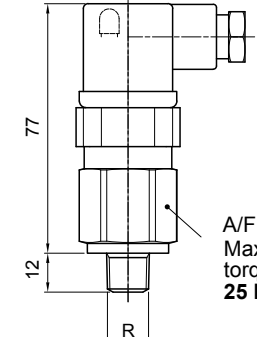
VACUUM INDICATORS

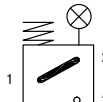
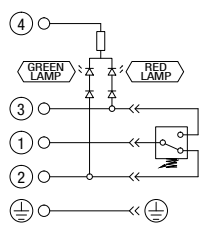
Technical data

VE*50	
Electrical Vacuum Indicator Connection: EN 175301-803	
R	Ordering code
EN 10226 - R1/4"	VE A 21 x A 50 P01 VE A 21 x A 50 P01 EX
EN 10226 - R1/8"	VE B 21 A A 50 P01 VE B 21 A A 50 P01 EX
	
A/F 27 Max tightening torque: 25 N·m	

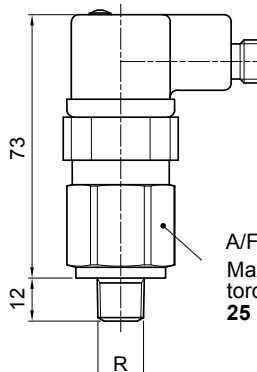
Hydraulic symbol	
	
Electrical symbol	
	
	
- Certification: ATEX, IECEx - Certification included in EX version	

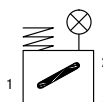
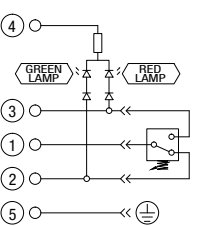
Materials	
- Body:	Brass
- Base:	Black polyamide
- Contacts:	Silver
- Seal:	VEA: NBR/FPM VEB: NBR
Technical data	
- Vacuum setting:	0.21 bar ±10%
- Max working pressure:	10 bar
- Proof pressure:	15 bar
- Working temperature:	From -25 °C to +80 °C
- Compatibility with fluids:	Mineral oils, Synthetic fluids 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
- CE certification	
- Available Atex product:	II 1GD Ex ia IIC Tx Ex ia IIIC Tx °C X

VL*51 - VL*52 - VL*53	
Electrical/Visual Vacuum Indicator 51: Connection EN 175301-803, transparent base with lamps 110 Vdc 52: Connection EN 175301-803, transparent base with lamps 24 Vdc 53: Connection EN 175301-803, transparent base with lamps 230 Vdc	
R	Ordering code
EN 10226 - R1/4"	VL A 21 x A xx P01
EN 10226 - R1/8"	VL B 21 A A xx P01
	
A/F 27 Max tightening torque: 25 N·m	

Hydraulic symbol	
	
Electrical symbol	
	

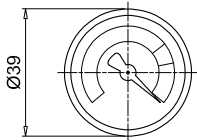
Materials	
- Body:	Brass
- Base:	Transparent polyamide
- Contacts:	Brass - Polyamide
- Seal:	VLA: NBR/FPM VLB: NBR
Technical data	
- Vacuum setting:	0.21 bar ±10%
- Max working pressure:	10 bar
- Proof pressure:	15 bar
- Working temperature:	From -25 °C to +80 °C
- Compatibility with fluids:	Mineral oils, Synthetic fluids 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

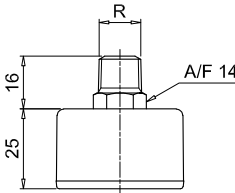
VL*71	
Electrical/Visual Vacuum Indicator Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	
Connections	Indicator code
EN 10226 - R1/4"	VL A 21 x A 71 P01
EN 10226 - R1/8"	VL B 21 A A 71 P01
	
A/F 27 Max tightening torque: 25 N·m	

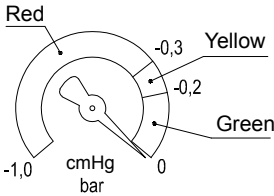
Hydraulic symbol	
	
Electrical symbol	
	

Materials	
- Body:	Brass
- Base:	Black polyamide
- Contacts:	Silver
- Seal:	VLA: NBR/FPM VLB: NBR
Technical data	
- Vacuum setting:	0.21 bar ±10%
- Max working pressure:	10 bar
- Proof pressure:	15 bar
- Working temperature:	From -25 °C to +80 °C
- Compatibility with fluids:	Mineral oils, Synthetic fluids 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 (black base)
- Resistive load:	0.4 A / 24 Vdc

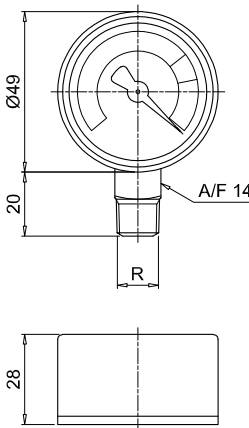
VVA - VVB	
Axial Vacuum Gauge	
R	Ordering code
EN 10226 - R1/4"	VVA 20 P01
EN 10226 - R1/8"	VVB 20 P01

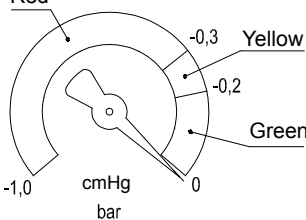




Hydraulic symbol	
	
Dial scale	
	
Conversion to SI units	
[cmHg]	[bar]
-12	-0.16
-18	-0.24
-76	-1.01

Materials	
- Case:	Black plastic
- Window:	Clear plastic
- Dial:	White plastic
- Pointer:	Black plastic
- Pressure connection:	Cu-alloy
- Pressure element:	Bourdon tube Cu-alloy soft soldered, C type
- Movement:	Cu-alloy
Technical data	
- Max working pressure:	Steady: -0.7 bar Fluctuating: -0.6 bar Short time: -1.0 bar
- Working temperature:	Ambienti from -40 °C to +60 °C Fluid max + 60 °C Storage from -40 °C to +60 °C
- Compatibility with fluids:	Mineral oils, Synthetic fluids HFA, HFB and HFC according to ISO 2943
- Accuracy:	Class 2.5 according to EN 13190
- Degree of protection:	IP31 according to EN 60529

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

Hydraulic symbol	
	
Dial scale	
	
Conversion to SI units	
[cmHg]	[bar]
-12	-0.16
-18	-0.24
-76	-1.01

Materials	
- Case:	Black plastic
- Window:	Clear plastic
- Dial:	White plastic
- Pointer:	Black plastic
- Pressure connection:	Cu-alloy
- Pressure element:	Bourdon tube Cu-alloy soft soldered, C type
- Movement:	Cu-alloy
Technical data	
- Max working pressure:	Steady: -0.7 bar Fluctuating: -0.6 bar Short time: -1.0 bar
- Working temperature:	Ambienti from -40 °C to +60 °C Fluid max + 60 °C Storage from -40 °C to +60 °C
- Compatibility with fluids:	Mineral oils, Synthetic fluids HFA, HFB and HFC according to ISO 2943
- Accuracy:	Class 2.5 according to EN 13190
- Degree of protection:	IP31 according to EN 60529