



Indicatori di
vuoto MP Filtri



 HYDRAULIC
COMPONENTS
& FLUID CONTAMINATION
CONTROL

VACUUM INDICATORS

**CLOGGING
INDICATORS**



V ACUUM INDICATORS

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

They measure the pressure downstream of the filter element.

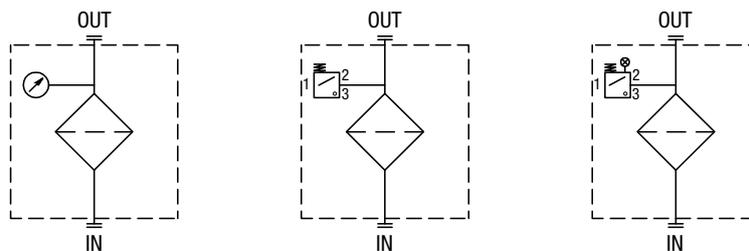
Standard items are produced with R 1/4" EN 10226 connection.

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

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

Example:

V VVB20P01



Vacuum Indicators



DESIGNATION, ORDERING CODES & TECHNICAL DATA

INDEX

CLOGGING INDICATORS ORDERING CODES	Page
SUCTION FILTERS	3
RETURN / SUCTION FILTERS	4
SPIN-ON FILTERS	5
TECHNICAL DATA VACUUM INDICATORS	
VE*50 (EX)	6
VEA50 UL	6
VL*51 - VL*52 - VL*53	6
VL*71	7
VVA - VVB	7
VVR - VVS	7

APPLICABLE VACUUM INDICATORS BY FILTER SERIES

Filter Series	VEA	VEB	VLA	VLB	VVA	VVB	VVR	VVS
STRC	-	-	-	-	-	-	-	-
MPAC	-	-	-	-	-	-	-	-
SFEX	-	•	-	•	-	•	-	•
SFMC	•	-	•	-	•	-	•	-
SFSC	•	-	•	-	•	-	•	-

VACUUM INDICATORS

Series	Configuration example 1:	VE	A	21	V	A	50	P01	EX
VE Electrical vacuum indicator	Configuration example 2:	VL	B	21	A	A	71	P01	
VL Electrical/Visual vacuum indicator	Configuration example 3:	VV	R	20				P01	
VV Vacuum gauge									

Type VE - VL	Type VV	SFxC	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	VVA	VVB	VVR	VVS
20 0.20 bar	-	-	•	•	•	•
21 0.21 bar	•	•	-	-	-	-

Seals	VEA - VLA	VEB - VLB	VV
A NBR	•	•	-
V FPM	•	-	-

Thermostat	VE	VL	VV
A Without	•	•	-

Electrical connections	VE	VL	VV
50 Connection EN 175301-803	•	-	-
51 Connection EN 175301-803, transparent base with lamps 24 Vdc	-	•	-
52 Connection EN 175301-803, transparent base with lamps 110 Vdc	-	•	-
53 Connection EN 175301-803, transparent base with lamps 230 Vac	-	•	-
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	•	-

Option
P01 MP Filtri standard
Pxx Customized

Certifications	VEA21A	VEA21V	VEB	VL	VV
Without	•	•	•	•	•
EX ATEX certification	•	•	•	-	-
UL UL certification	•	-	-	-	-

Designation & Ordering code

APPLICABLE VACUUM INDICATORS BY FILTER SERIES

Filter Series	VEB	VLB	VVB	VVS
MRSX	•	•	•	•
LMP124	-	-	-	-

VACUUM INDICATORS

Series	Configuration example 1:	VE	B	21	V	A	50	P01	EX
VE Electrical vacuum indicator	Configuration example 2:	VL <td>B <td>21 <td>A <td>A <td>71 <td>P01 <td></td> </td></td></td></td></td></td>	B <td>21 <td>A <td>A <td>71 <td>P01 <td></td> </td></td></td></td></td>	21 <td>A <td>A <td>71 <td>P01 <td></td> </td></td></td></td>	A <td>A <td>71 <td>P01 <td></td> </td></td></td>	A <td>71 <td>P01 <td></td> </td></td>	71 <td>P01 <td></td> </td>	P01 <td></td>	
VL Electrical/Visual vacuum indicator	Configuration example 3:	VV <td>S <td>20</td> <td></td> <td></td> <td></td> <td>P01</td> <td></td> </td>	S <td>20</td> <td></td> <td></td> <td></td> <td>P01</td> <td></td>	20				P01	
VV Vacuum gauge									

Type VE - VL	Type VV
B Connection EN 10226 - R1/8"	B Axial connection EN 10226 - R1/8"
	S Radial connection EN 10226 - R1/8"

Vacuum setting	VE	VL	VVB	VVS
20 0.20 bar	-	-	•	•
21 0.21 bar	•	•	-	-

Seals	VEB - VLB	VV
A NBR	•	-
V FPM	-	-

Thermostat	VE	VL	VV
A Without	•	•	-

Electrical connections	VE	VL
50 Connection EN 175301-803	•	-
51 Connection EN 175301-803, transparent base with lamps 24 Vdc	-	•
52 Connection EN 175301-803, transparent base with lamps 110 Vdc	-	•
53 Connection EN 175301-803, transparent base with lamps 230 Vac	-	•
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	•

Option
P01 MP Filtri standard
Pxx Customized

Certifications	VEB	VL	VV
Without	•	•	•
EX ATEX certification	•	-	-

APPLICABLE VACUUM INDICATORS BY FILTER SERIES

Filter Series	VEA	VEB	VLA	VLB	VVA	VVB	VVR	VVS
MPS	-	•	-	•	-	•	-	•

VACUUM INDICATORS

Series	Configuration example 1:	VE	B	21	A	A	50	P01	EX
VE Electrical vacuum indicator	Configuration example 2:	VL	B	21	A	A	71	P01	
VL Electrical/Visual vacuum indicator	Configuration example 3:	VV	S	20				P01	
VV Vacuum gauge									

Type VE - VL	Type VV
B Connection EN 10226 - R1/8"	B Axial connection EN 10226 - R1/8"
	S Radial connection EN 10226 - R1/8"

Vacuum setting	VE	VL	VVB	VVS
20 0.20 bar	-	-	•	•
21 0.21 bar	•	•	-	-

Seals	VEA - VLA	VEB - VLB	VV
A NBR	•	•	-
V FPM	•	-	-

Thermostat	VE	VL	VV
A Without	•	•	-

Electrical connections	VE	VL
50 Connection EN 175301-803	•	-
51 Connection EN 175301-803, transparent base with lamps 24 Vdc	-	•
52 Connection EN 175301-803, transparent base with lamps 110 Vdc	-	•
53 Connection EN 175301-803, transparent base with lamps 230 Vac	-	•
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	•

Option	P01	Pxx
P01 MP Filtri standard		
Pxx Customized		

Certifications	VEA21A	VEA21V	VEB	VL	VV
Without	•	•	•	•	•
EX ATEX certification	•	•	•	-	-
UL UL certification	•	-	-	-	-

VACUUM INDICATORS

Technical data

VE*50 (EX)	
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

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
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

Certification: ATEX, IECEx
- Certification included in EX version

VEA50 UL	
Electrical Vacuum Indicator Connection: EN 175301-803	
R	Ordering code
EN 10226 - R1/4"	VE A 21 A A 50 P01 UL

A/F 27
Max tightening torque:
25 N·m

Hydraulic symbol

Electrical symbol

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
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

Certification: UL
- Certification included as standard

VL*51 - VL*52 - VL*53	
Electrical/Visual Vacuum Indicator Connection: EN 175301-803	
51: Transparent base with lamps 24 Vdc 52: Transparent base with lamps 110 Vdc 53: Transparent base with lamps 230 Vac	
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

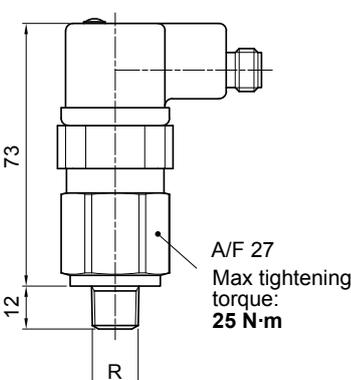
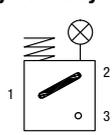
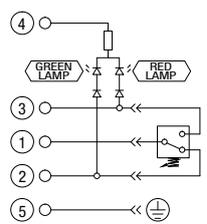
- Body: Brass
- Base: Transparent polyamide
- Contacts: Brass - Polyamide
- Seal: VLA: NBR/FPM
VLB: NBR

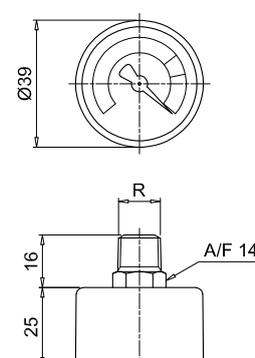
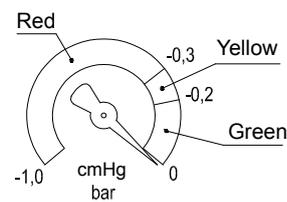
Technical data

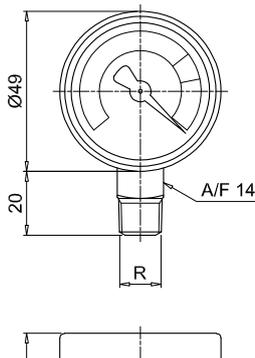
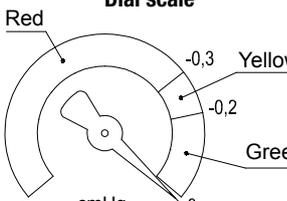
- Vacuum setting: 0.21 bar ±10%
- Max working pressure: 10 bar
- Proof pressure: 15 bar
- Working temperature: From -25 °C to +80 °C
- Compatibility with fluids: Mineral oils, Synthetic fluids
HFB and HFC according to ISO 2943
- Degree of protection: IP65 according to EN 60529

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

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
	
Hydraulic symbol 	
Electrical symbol 	
Materials - Body: Brass - Base: Black polyamide - Contacts: Silver - Seal: VLA: NBR/FPM VL B: NBR	
Technical data - Vacuum setting: 0.21 bar ±10% - Max working pressure: 10 bar - Proof pressure: 15 bar - Working temperature: From -25 °C to +80 °C - Compatibility with fluids: Mineral oils, Synthetic fluids HFB and HFC according to ISO 2943 - Degree of protection: IP65 according to EN 60529	
Electrical data - Electrical connection: IEC 61076-2-101 D (M12) - Lamps: 24 Vdc (black base) - Resistive load: 0.4 A / 24 Vdc	

VVA - VVB									
Axial Vacuum Gauge									
R	Ordering code								
EN 10226 - R1/4"	VVA 20 P01								
EN 10226 - R1/8"	VVB 20 P01								
									
Hydraulic symbol 									
Dial scale 									
Conversion to SI units <table border="1" style="margin: auto;"> <thead> <tr style="background-color: #cccccc;"> <th>[cmHg]</th> <th>[bar]</th> </tr> </thead> <tbody> <tr> <td>-12</td> <td>-0.16</td> </tr> <tr> <td>-18</td> <td>-0.24</td> </tr> <tr> <td>-76</td> <td>-1.01</td> </tr> </tbody> </table>		[cmHg]	[bar]	-12	-0.16	-18	-0.24	-76	-1.01
[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 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 <table border="1" style="margin: auto;"> <thead> <tr style="background-color: #cccccc;"> <th>[cmHg]</th> <th>[bar]</th> </tr> </thead> <tbody> <tr> <td>-12</td> <td>-0.16</td> </tr> <tr> <td>-18</td> <td>-0.24</td> </tr> <tr> <td>-76</td> <td>-1.01</td> </tr> </tbody> </table>			[cmHg]	[bar]	-12	-0.16	-18	-0.24	-76	-1.01
[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 HFB and HFC according to ISO 2943 - Accuracy: Class 2.5 according to EN 13190 - Degree of protection: IP31 according to EN 60529										

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

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

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

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

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

All rights are strictly reserved

WORLDWIDE NETWORK

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



PASSION  PERFORM

in @ o f



mpfiltri.com
Scan or click me!

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

LubeTeam Hydraulic S.r.l.

Administration and Headquarter:

Via Tufara Scautieri, 6
83018 - San Martino Valle Caudina (AV)

Office and Warehouse:

S.S. 7 Appia, Km. 237,00
82011 - Airola BN
ITALY

Tel. +39 0823 950 994

Fax +39 0823 412 546

www.lubeteam.it info@lubeteam.it

Italian VAT / C.F. e P.IVA: 01251720627

Follow us



This document is the property of LubeTeam Hydraulic S.r.l. All data reported here are for the exclusive use of the Receiver. Reproduction is not authorized without writing permission, in all or in part of the content of this document, in accordance to Law 633 art. 171, dated April 22, 1941.

Il presente documento è di proprietà della LubeTeam Hydraulic S.r.l. I dati riportati sono per esclusivo del destinatario. La riproduzione, di tutto o in parte, non è autorizzata senza permesso scritto secondo l'art. 171 della L. 633 del 22 Aprile 1941.