

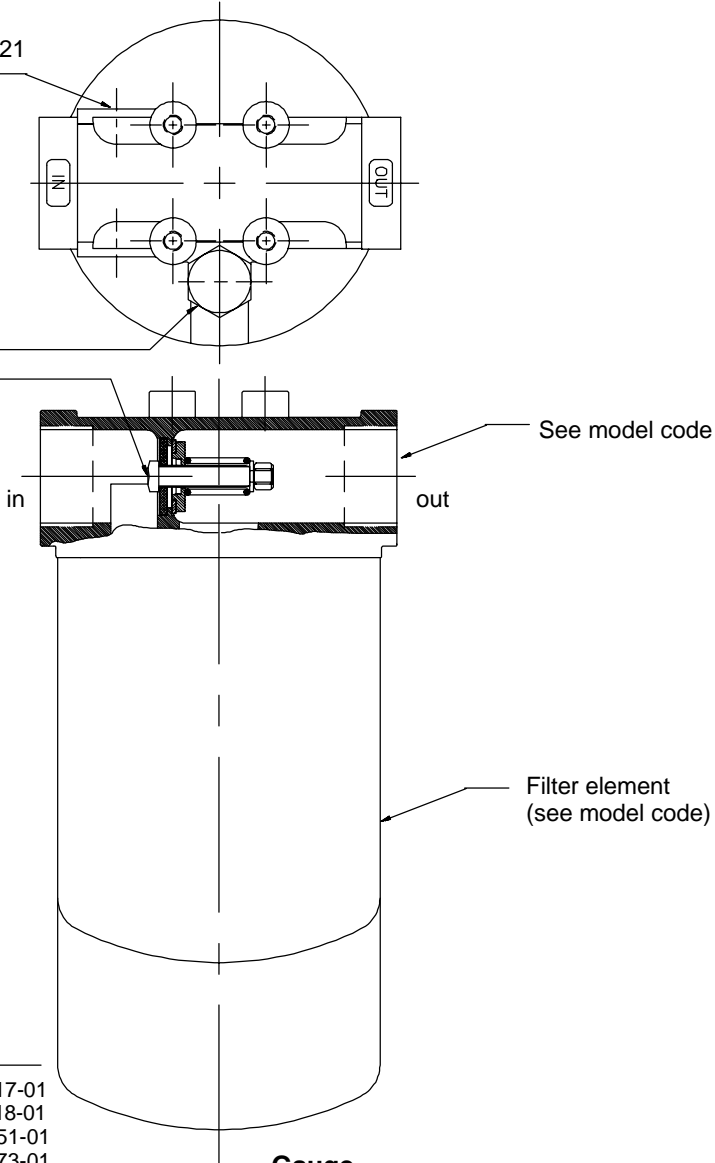
High Performance/Low Pressure Filter Flows to 227 L/min Pressure to 14 bar M021 & M023 Series



Upstream pressure indicator for M021
(1/8" NPTF plug – both sides)

P-227533-01 Port plug
AS568-908 "O" ring
AS568-014 "O" ring
ΔP Indicator for M023
(see model code)

Bypass valve
3,5 bar (shown)
Bypass valve 1,72 bar
(not field serviceable)

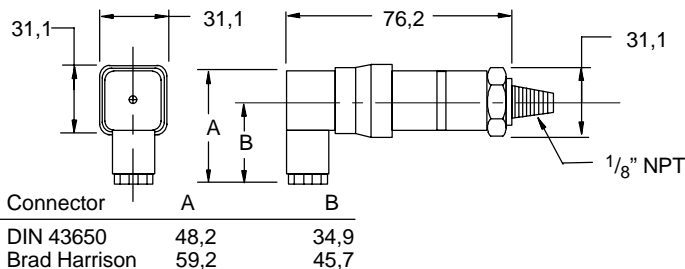
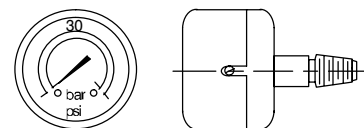


Electrical Switch

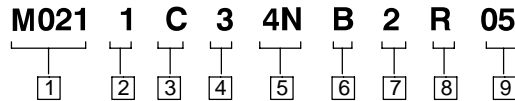
Switch 1,2 bar (18 psi) Brad Harrison	P-234117-01
Switch 2,4 bar (35 psi) Brad Harrison	P-234118-01
Switch 1,2 bar (18 psi) DIN	P-233051-01
Switch 2,4 bar (35 psi) DIN	P-233573-01

Gauge

M021/23 P-232965-01 0-4,1 bar color coded
P-232974-01 0-14 bar



Head Sub Assembly Model Code



1 Filter series

M021 - Machined for pressure gauge only
M023 - Machined for ΔP indicators

NOTE: Filter head M021 is furnished with two ports drilled, tapped and plugged for gauge or switch option.

NOTE: M023 plugged ΔP port machined for indicators.

2 Element collapse rating

1 - 10 bar

3 Port options

C - G 1 $\frac{1}{4}$ " to ISO 228
P - 1 $\frac{1}{4}$ " NPT

4 Valve bypass setting

3 - Bypass set at 1,75 \pm 0,21 bar
4 - Bypass set at 3,5 \pm 0,35 bar

Indicator Selection Guide

Bypass	Head Type	
	M021	M023
3	1, 4, 6, 8	C,F,J,K,Q,X
4	1, 2, 7, 9	D,G,J,L,M,R,Y

5 Indicator type

First designator (Differential pressure indicator for M023)

- C** - Electrical/visual ΔP 1,0 \pm 0,3 bar
- D** - Electrical/visual ΔP 2,5 \pm 0,35 bar
- F** - Electrical/visual ΔP 1,0 \pm 0,3 bar thermal lockout (38°C)
- G** - Electrical/visual ΔP 2,5 \pm 0,3 bar thermal lockout (38°C)
- J** - No ΔP indicator
- K** - Visual ΔP indicator with 1,0 \pm 0,3 bar actuation & thermal lockout (38°C)
- L** - Visual ΔP indicator with 2,5 \pm 0,35 bar actuation & thermal lockout (38°C)
- M** - Visual ΔP indicator w/ 2,5 \pm 0,35 bar, thermal lockout (38°C) and surge control
- Q** - Electrical ΔP switch with 1,0 \pm 0,3 bar actuation
- R** - Electrical ΔP switch with 2,5 \pm 0,35 bar actuation
- X** - Electrical/visual ΔP 1,0 \pm 0,3 bar thermal lockout (38°C) & surge control
- Y** - Electrical/visual ΔP 2,5 \pm 0,35 bar thermal lockout (38°C) & surge control

Upstream pressure indicators for H021

- 1** - No indicator – Pipe plug installed
- 2** - 0 to 14 bar pressure gauge
- 4** - 0 to 4 bar pressure gauge
- 6** - Electrical switch, 1,2 bar - Brad Harrison
- 7** - Electrical switch, 2,5 bar - Brad Harrison
- 8** - Electrical switch, 1,2 bar - DIN 43650
- 9** - Electrical switch, 2,5 bar - DIN 43650

Second designator (Receptacle Style)

- B** - 5 pin Brad Harrison (41512)
- H** - DIN 43650 or Hirschman receptacle (GSA plug) 3 poles plus ground
- N** - No receptacle – Use with visual ΔP indicators and gauge options 1, 2 & 4

6 Seal material

B - Buna-N

7 Canister length

mm (inch)

1 - 184 (7)
2 - 286 (11)

NOTE: Water removal element only available in length 2.

S50 -Head sub-assembly only (No element, bowl or indicator)

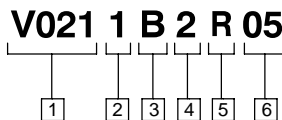
8 Element construction

R - R-Pak (grade 3,5,10,20)
W - W-Pak, Water Removal (grade 10)

9 Fluid cleanliness ratings

Code	Target fluid cleanliness level	Element construction
03	16/14/12	R-Pak
05	18/16/14	R-Pak
10	20/18/15	R-Pak W-Pak
20	22/19/16	R-Pak

Element Model Code



1 Filter element

V021 – For use with M021, M023 & OFRS60 series filters

W021 – Water removal element for use with M021, M022, M023 & OFRS60 series filters

2 Element collapse rating

1 – 10 bar

3 Seal material

B – Buna-N

4 Canister length mm

1 – 184,4
2 – 286,0

NOTE: Water removal element only available in length 2.

5 Element construction

R – R-pak (3,5,10 & 20' grade only)
W – W-pak, water removal (grade 10)

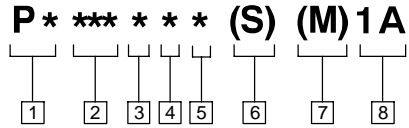
The R-pak media is designed to meet the requirements of Vickers Systemic Contamination Control program and are available in 3, 5, 10 and 20 micron (99% efficient) ratings. Replacement elements are ordered by model code.

6 Fluid cleanliness ratings

Code	Target fluid cleanliness level	Element construction
03	16/14/12 or better	R-pak
05	18/16/14 or better	R-pak
10	20/18/15 or better	R-pak
20	22/19/16 or better	R-pak

The table above assumes limited ingress and a single pass of pump flow through the element. For more detailed information, please consult Vickers Guide to Systemic Contamination Control or contact your local Vickers Distributor.

Differential Pressure Indicator Model Code



1 Style option

PV – Visual
PE – Electrical
PD – Electrical/Visual

2 Actuation pressure option

015 – $1 \pm 0,3$ bar
035 – $2,4 \pm 0,35$ bar
070 – $4,8 \pm 0,5$ bar
(not an option with 330/340 filters)
090 – $6,2 \pm 0,7$ bar
(330/340 filters only)
100 – $6,9 \pm 0,85$ bar

3 Thermal lockout option

N – No thermal lockout
T – Thermal lockout
standard TLO= $80 \pm 20^\circ$ F
($27 \pm 11^\circ$ C)

4 Seal option

1 – Buna-N
2 – Viton

5 Receptacle option

B – 5-pin Brad Harrison (41512)
(not an option with visual indicator)
H – Hirschman (DIN 43650)
(not an option with visual indicator)
N – No receptacle (use with visual indicator)

6 Surge control option

None – No surge control
S – Surge control
(not an option with 330/340 filters)

7 Filter series option

None – Standard
M – 330/340 Filters only

8 Revision level

1A – Original design series (1) and
revision (A)

