

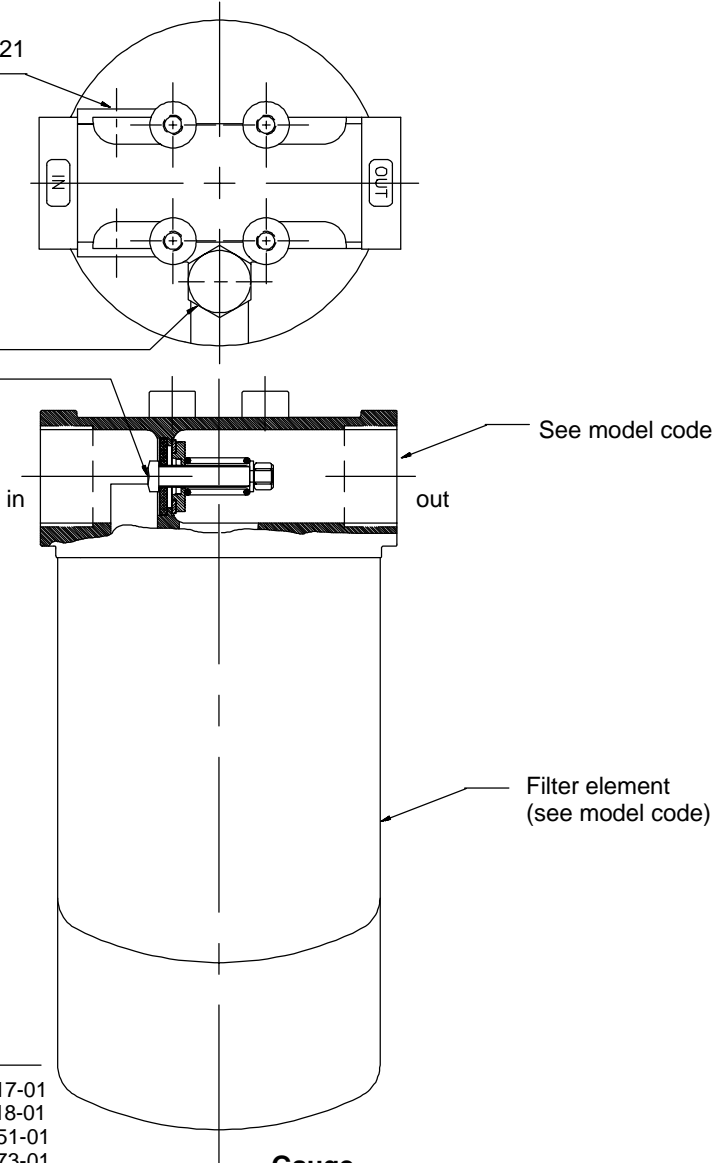
### High Performance/Low Pressure Filter Flows to 227 L/min Pressure to 14 bar M021 & M023 Series



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)

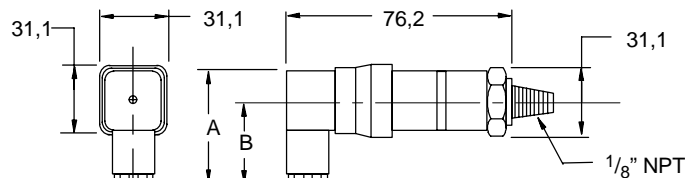
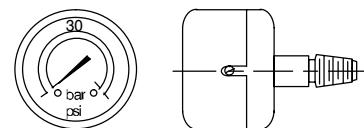


#### Electrical Switch

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

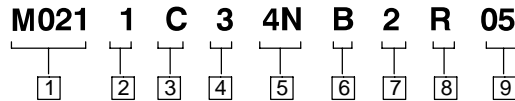
#### Gauge

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



Connector	A	B
DIN 43650	48,2	34,9
Brad Harrison	59,2	45,7

# Head Sub Assembly Model Code



## 1 Filter series

**M021** - Machined for pressure gauge only  
**M023** - Machined for  $\Delta P$  indicators

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

*NOTE: M023 plugged  $\Delta P$  port machined for indicators.*

## 2 Element collapse rating

1 - 10 bar

## 3 Port options

**C** - G 1<sup>1</sup>/<sub>4</sub>" to ISO 228  
**P** - 1<sup>1</sup>/<sub>4</sub>" 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
<b>3</b>	1, 4, 6, 8	C,F,J,K,Q,X
<b>4</b>	1, 2, 7, 9	D,G,J,L,M,R,Y

## 5 Indicator type

**First designator (Differential pressure indicator for M023)**

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

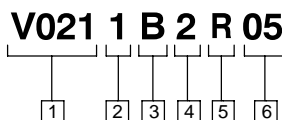
## 8 Element construction

**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
<b>03</b>	16/14/12	R-Pak
<b>05</b>	18/16/14	R-Pak
<b>10</b>	20/18/15	R-Pak W-Pak
<b>20</b>	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.

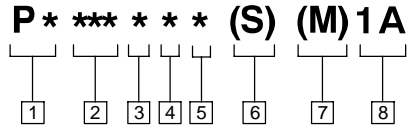
## 6 Fluid cleanliness ratings

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

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## 1 Style option

**PV** – Visual  
**PE** – Electrical  
**PD** – Electrical/Visual

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## 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

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## 3 Thermal lockout option

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

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## 4 Seal option

**1** – Buna-N  
**2** – Viton

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## 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)

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## 6 Surge control option

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

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## 7 Filter series option

**None** – Standard  
**M** – 330/340 Filters only

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## 8 Revision level

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

