

# Vickers®

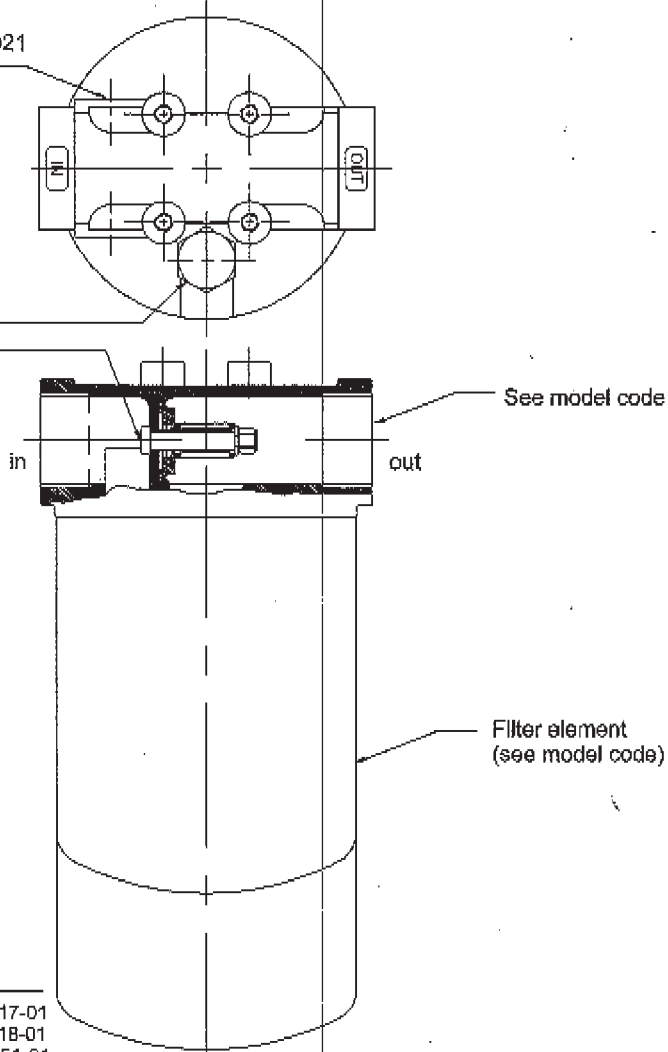
Service Data Filters

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

# EATON

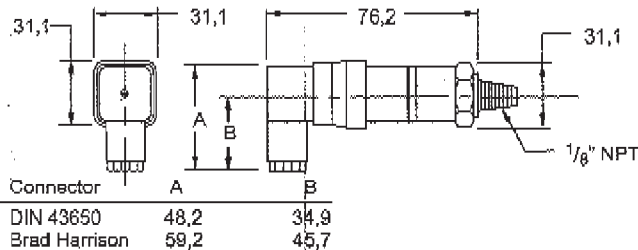
Upstream pressure indicator for M021  
(1/8" NPTF plug - both sides)

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

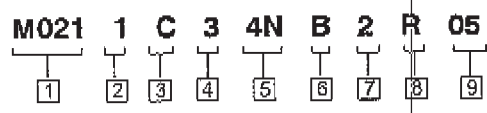


Eaton Hydraulics, Incorporated  
14616 Lone Oak Road  
Eden Prairie, MN 55344  
U.S.A.

5057.23/EN/1298/S

*code*

# 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 1/4" to ISO 228  
**P** - 1 1/4" NPT

**4 Valve bypass setting**  
 3 - Bypass set at 1,75 ± 0,21 bar  
 4 - Bypass set at 3,5 ± 0,35 bar

**Indicator Selection Guide**

Bypass	M021	Head Type	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 Δ P 1,0 ± 0,3 bar  
**D** - Electrical/visual Δ P 2,5 ± 0,35 bar  
**F** - Electrical/visual Δ P 1,0 ± 0,3 bar thermal lockout (38°C)  
**G** - Electrical/visual Δ P 2,5 ± 0,3 bar thermal lockout (38°C)  
**J** - No ΔP indicator  
**K** - Visual ΔP Indicator with 1,0 ± 0,3 bar actuation & thermal lockout (38°C)  
**L** - Visual ΔP indicator with 2,5 ± 0,35 bar actuation & thermal lockout (38°C)  
**M** - Visual ΔP Indicator w/ 2,5 ± 0,35 bar, thermal lockout (38°C) and surge control  
**Q** - Electrical ΔP switch with 1,0 ± 0,3 bar actuation  
**R** - Electrical ΔP switch with 2,5 ± 0,35 bar actuation  
**X** - Electrical/visual Δ P 1,0 ± 0,3 bar thermal lockout (38°C) & surge control  
**Y** - Electrical/visual Δ P 2,5 ± 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.*

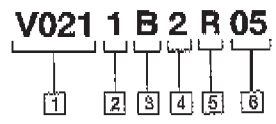
**S50** -Head sub-assembly only (No element, bowl or indicator)

**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.

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