Model CDM-3801B
Adjustable Snap Acting Pressure Switch

Bulletin SSIN014 Issue/Rev. 0.2 (10/18)

The **INVALCO Model CDM** is a diaphragm-operated Pressure Switch for pneumatic or hydraulic control. The unit is equipped with one or two snap-acting three-way Micro Valves® to provide on/off output to one or more controlled circuits. Since the Micro Valves® are completely isolated from the diaphragm, and also isolated from each other, various control output pressures and media may be used in the same CDM pilot.

Operation

Process pressure is applied to the upper diaphragm chamber, causing the stem to lower against the spring. When the upper drive collar has been dropped sufficiently, the Micro Valve® will snap, thereby reversing the control circuit. As process pressure decreases, the lower drive collar will raise, contacting the toggle arm which causes the Micro Valve to snap to its "normal" position.

Special Applications

Differential pressure control is another process variable which can cause actuation of the Micro Valve. In this application, the lower process pressure is applied below the diaphragm with the higher pressure above the diaphragm. The Micro Valve will now be tripped by a change in the differential between two process pressures. In this application, the maximum static pressure applied to either side of the diaphragm must be limited to 100 psig.

Materials of Construction

Diaphragm Case and Case
Aluminum

Micro Valve®
- Aluminum body, stainless trim, Nitrile inserts and seals.
- Other materials available on special order.

Stem and Bushing
Stainless and brass

Micro Valve® Flow Characteristics
Type 38F1, ⅛" Orifice @ 100 psig.

Maximum Working Pressure
- Micro Valve: 100 psig.

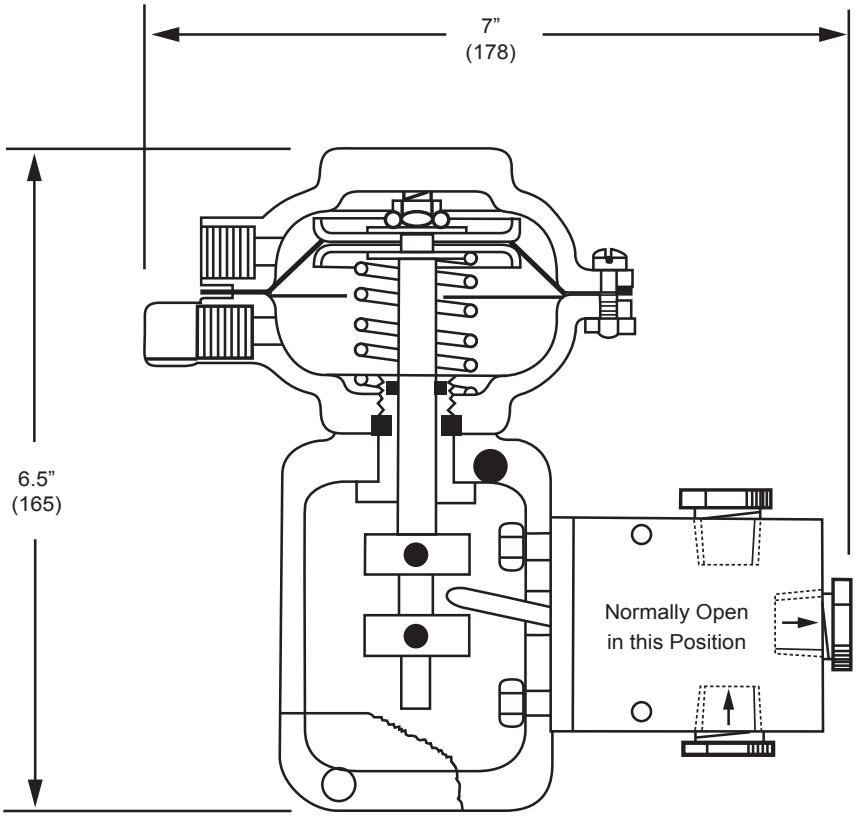
Ordering Information

To Order, specify part number and catalog model number. Micro Valve® is a registered trademark of Barworth Corporation.

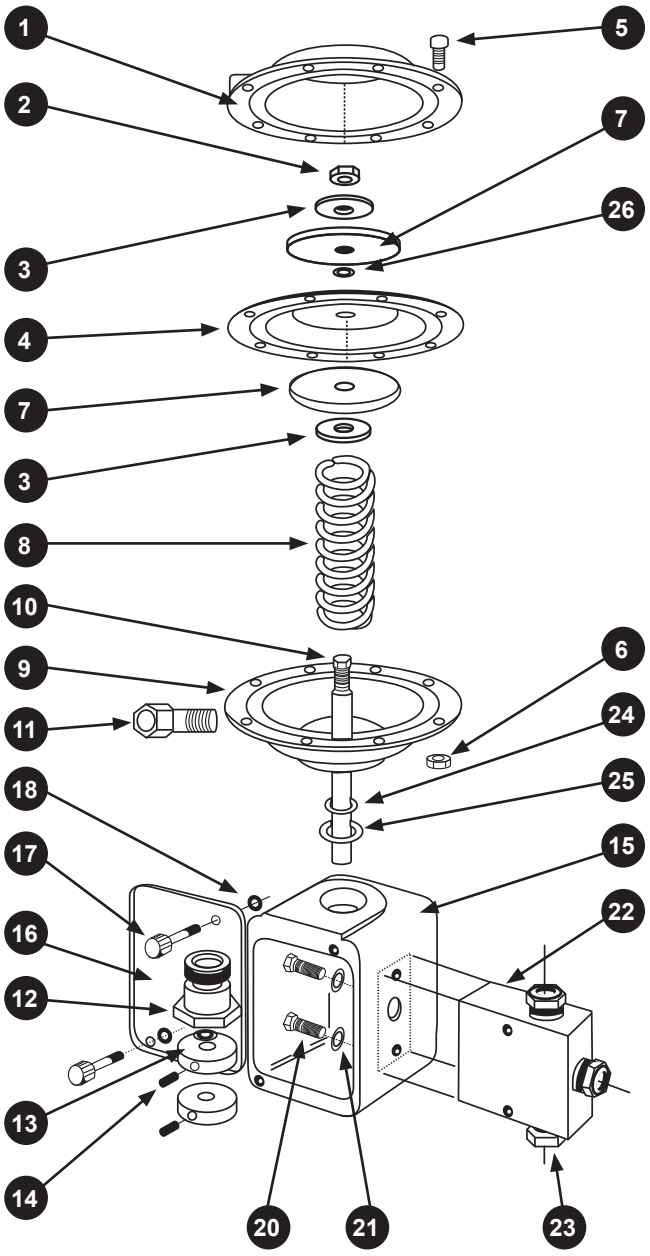
Ordering Information			
Catalog Model Number	**Type Micro Valve**	**Number Micro Valves**	**Part Number**
CDM-3801-B1	Type 38 F1	1	80001208
CDM-3801-B2	3-Way, 3/8" FPT	2	80001209

Dimensions – Inches (mm)

Dimensions – Inches to the nearest tenth (millimeters to the nearest whole mm), each independently dimensioned from engineering drawings.



Parts Diagram



Parts				
		Description	Qty.	Part No.
1		Upper Diaphragm Case	1	45002185
2		Nut 1/4-28 Thin Flexloc	1	65003530
3		Washer	2	45003186
4	*	Diaphragm	1	45003158
5		Screw 10-32 x 5/8 FH	8	65011039
6		Nut 10-32 FHN	8	65011075
7		Diaphragm Plate	2	45003159
8	*	Spring	1	45002261
9		Lower Diaphragm Case	1	45002157
10		Stem	1	45002183
11		Bleeder Filter 1/4" NPT	1	45002612
12		Bushing	1	45005597
13		Set Collar	2	45002191
14		Screw 10-32 x 1/4 SHSC	2	65002147
15		Case (3/8" Micro Valves)	1	45009843
16		Cover	1	45004876
17		Cover Screw 10-24 x 3/4	2	45002307
18		O-Ring BUN-007-90	2	67102309
20		Screw (3/8" mV) 1/4"-20 x 1/2 HHCS	2/mV	65006602
21		Washer (3/8" mV) 1/4" Spring Lock	2/mV	65006386
22	*	3/8" Micro Valve	1-2	87000019
23		Bushing 3/8" Micro Valve	3/mV	45002450
24	*	O-Ring BUN-012-90	1	67102312
25	*	O-Ring BUN-013-90	1	67101636
26	*	O-Ring BUN-008-90	1	67102310

* Recommended spare.

Revisions made to SSIN014 issue/rev. 0.2 (10/18): Parts list corrected on page 3.

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