

Model CADMEX

Adjustable Range Pressure Switch

Bulletin SSIN013 Issue/Rev. 0.1 (8/17)

The **INVALCO Model CADMEX** is furnished with an explosion-proof Micro Switch providing dependable operating for systems requiring electrical control. The standard Micro Switch has SPDT contacts and UL and CSA hazardous area approval. An optional switch arrangement is available with DPDT contacts and spring-loaded design. The DPDT Micro Switch does not have the adjustable differential capability of the SPDT and, therefore, is actuated and released at approximately the same pressure. The CADMEX is offered with a choice of four spring ranges providing a wide range of flexibility in application.

Operation

Process pressure is applied to the lower diaphragm chamber, causing the stem to rise against the adjustable upper spring. When the lower drive collar has been raised sufficiently, the Micro Switch will operate. As process pressure decreases, the upper drive collar will lower, which causes the Micro Switch to snap back to its original position.

Application

The CADMEX Series may be used to alarm or control an overpressure or under pressure or to cycle the process between two pressures. The CADMEX is easily converted to a manual reset style by removing one of the drive collars. A special seal, which is placed around the adjustment screw, is available permitting pressure to be applied to the upper diaphragm port as well as the lower port. This allows the switch to be actuated by the differential in pressure between two processes.

Settings

Any spring may be set to actuate below its stated range, but because heavier springs are less sensitive, it is recommended that the range be selected to most closely match the application. Pressure switches will be factory set to the mid-point of range specified.



Standard Specifications

Maximum Working Pressure

100 psi

Control Switch

Micro Switch, explosion-proof SPDT (DPDT optional),
15 amps @ 125, 250, 480 Vac. 1/2 amp @ 125 Vdc.
1/4 amp @ 150 Vdc.

Process Connection

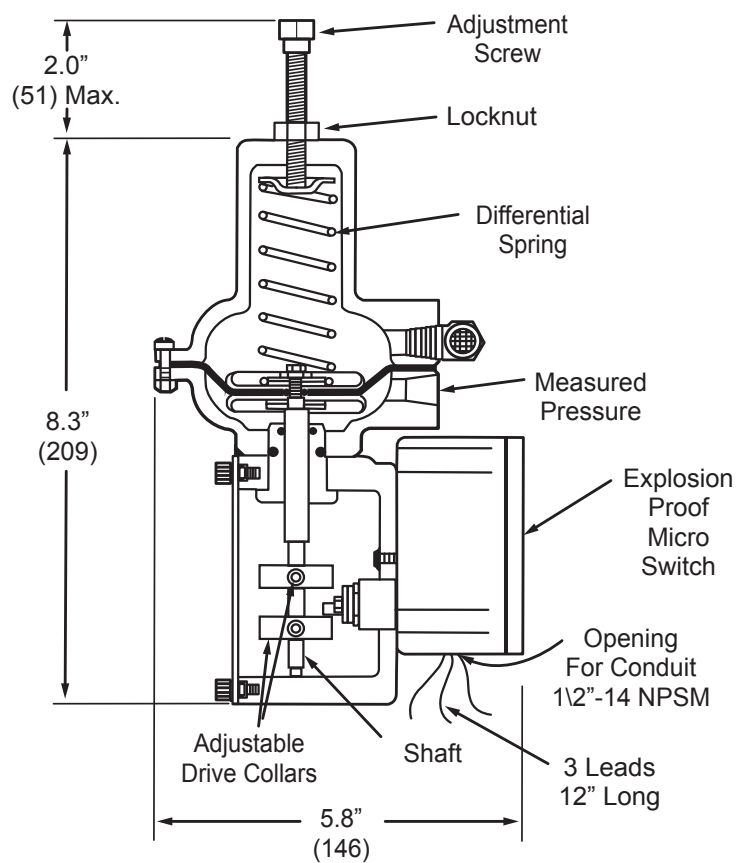
1/4" NPT

Materials

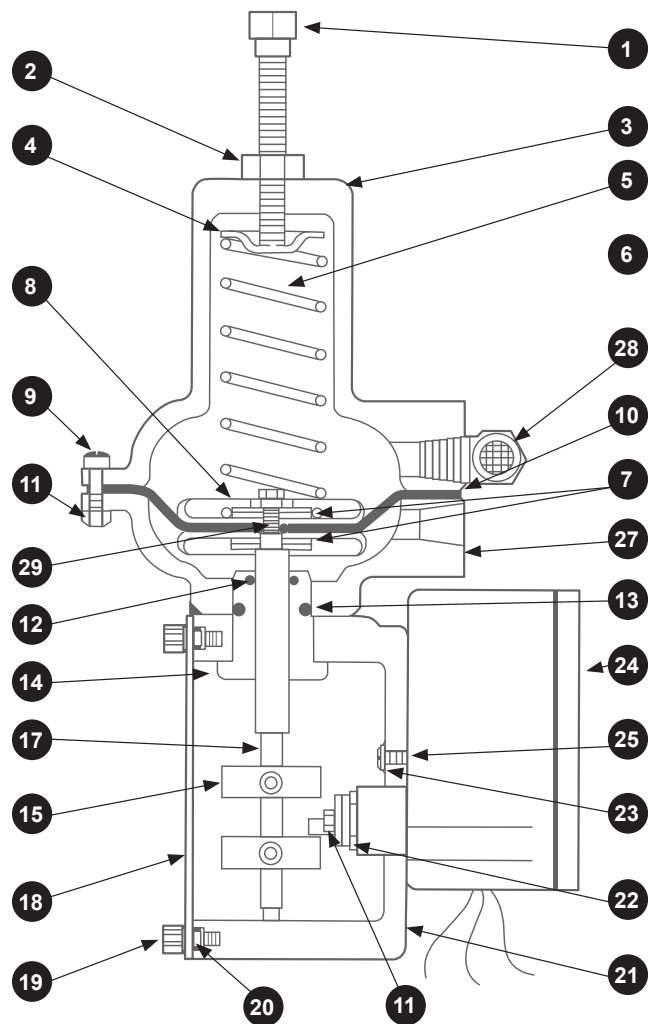
- Diaphragm case - aluminum
- Diaphragm - Buna-N

Dimensions

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



Parts				
Item	N	Description	Qty.	Part No.
1		Screw 3/8-16x2-1/2 SQHSS	1	65003335
2		Nut 3/8-16 Hex Jam	1	65011037
3		Upper Diaphragm Case	1	45002455
4		Upper Spring Rest	1	45003181
5	*	Spring 5-12 psi	1	45003246
		Spring 10-27 psi	1	45004446
		Spring 25-45 psi	1	45005435
		Spring 40-60 psi	1	45005436
6		Nut 1/4-28 Flexloc	1	65003530
7		Washer 2 on Top 2 on Bottom	4	45003186
8		Diaphragm Plate	2	45003159
9		Screw 10-32x5/8 FHMS	8	65011039
10	*	Diaphragm	1	45003158
11		Nut 10-32 Hex	9	65011075
12	*	O-Ring BUN-012-90	1	67102312
13	*	O-Ring BUN-113-90	1	67101636
14		Bushing	1	45006344
15		Set Collar	2	46000909
17		Stem	1	45006340
18		Cover	1	45004876
19		Cover Screw	2	45002307
20		O-Ring BUN-007-90	2	67102309
21		Case	1	46000710
22		Switch Arm	1	46000709
23		Washer No. 10 Lock	2	65007700
24	*	Switch SPDT	1	33100542
		Switch DPDT	1	33110852
25		Screw 10-32x1/2 BHMS	2	65005952
27		Lower Diaphragm Case	1	45002157
28		1/4" Bleeder Filter	1	45002612
29	*	O-Ring BUN-008-90	1	67102310



Parts Key: *Recommended spare parts.

Ordering Information

Catalog Model Number	Switch Contacts	Nominal Spring Range	Actuating Pressure (PSI)*		Span (PSI)*		Part Number
			Minimum	Maximum	Minimum	Maximum	
CADMEX	SPDT	5-12 psi	2.5	11.5	0.5	3.5	80001102
		10-27 psi	4.0	27.5	1.0	10.0	80001104
		25-45 psi	15.0	46.5	3.0	26.0	80001105
		40-60 psi	26.0	63.0	4.5	42.5	80001111
CADMEX	DPDT	5-12 psi	2.5	11.5	0.5	3.5	80001117
		10-27 psi	4.0	27.5	1.0	10.0	80001103
		25-45 psi	15.0	46.5	3.0	26.0	80001118
		40-60 psi	26.0	63.0	4.5	42.5	80001119

The specifications contained herein are subject to change without notice and any user of said specifications should verify from the manufacturer that the specifications are currently in effect. Otherwise, the manufacturer assumes no responsibility for the use of specifications which may have been changed and are no longer in effect.

Contact information is subject to change. For the most current contact information, visit our website at www.fmctechnologies.com/measurementsolutions and click on the "Contact Us" link in the left-hand column.

TechnipFMC.com

FMCTechnologies.com/MeasurementSolutions

© TechnipFMC 2017 SSIN013 Issue/Rev. 0.1 (8/17)

TechnipFMC
FMC Technologies
Measurement Solutions, Inc.
500 North Sam Houston Parkway West,
Suite 100
Houston, Texas 77067 USA
P:+1 281.260.2190

USA Operation
1602 Wagner Avenue
Erie, Pennsylvania 16510 USA
P:+1 814.898.5000

Germany Operation
Smith Meter GmbH
Regentstrasse 1
25474 Ellerbek, Germany
P:+49 4101.304.0