GUIDANT

Models CMEAQX and CMEAFX Level Controls – Float Operated

Bulletin SSIN008 Issue/Rev. 0.1 (8/17)

The INVALCO Model CMEAQX and CMEAFX Float Controls provide electrical contact switch closure for alarm or control functions. An explosion-proof Micro Switch is actuated by two adjustable yoke-type pusher arms permitting the control range to be easily and accurately adjusted.

With the liquid level below the float the Micro Switch will be in the low level position and will remain there until the float resets to the preset high level. The Micro Switch will reverse positions until the float drops to the preset low level position.

Features and Benefits

- Adjustable span allows for pump up and pump down control. Easy-to-set desired level detection point
- Proven design provides long life and ease of maintenance
- Over 35 years of proven field service demonstrates product reliability

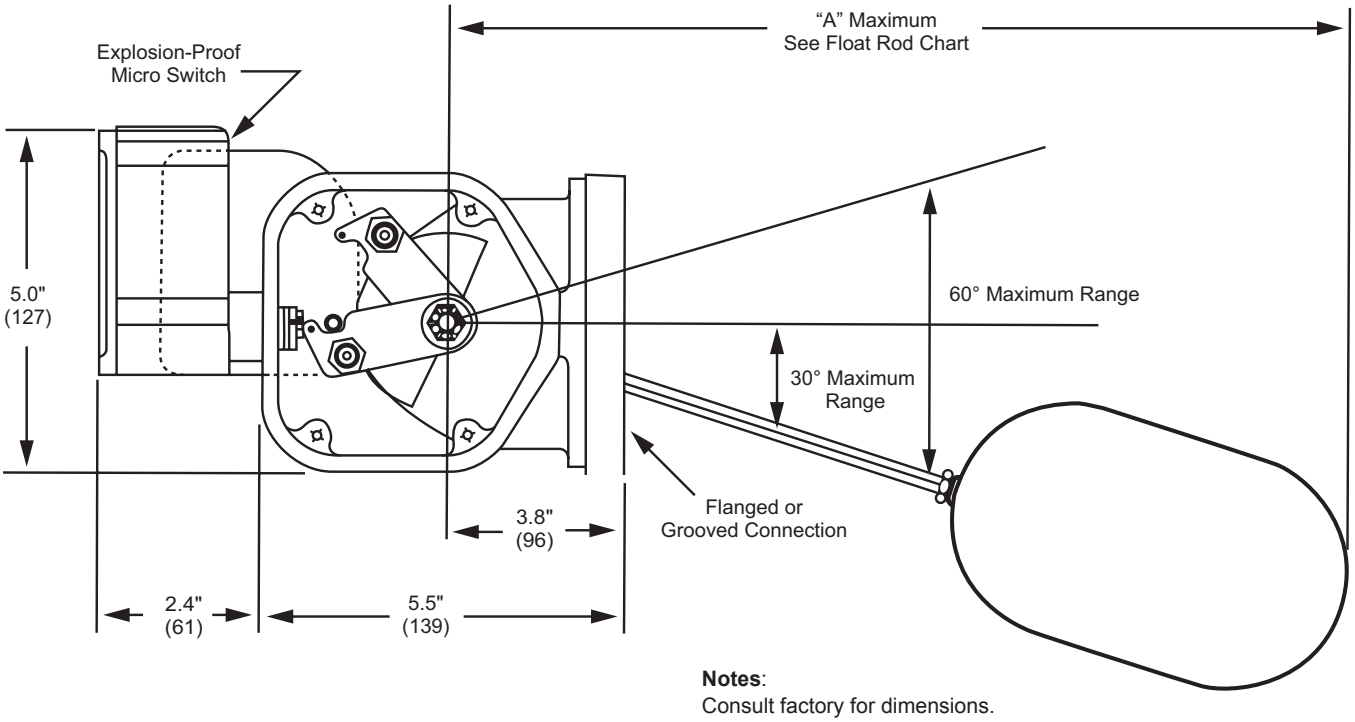
Options

- Steel and ductile iron models are NACE adaptable for use in harsh, corrosive service
- Standard gear stem assembly is 303 Stainless Steel 316 Stainless Steel optional (consult factory)

Specifications

Float
– 316 S. S. – 3-1/2” diameter
Maximum Working
Pressure 300 psig (limited by collapse pressure of float and process connection).
Temperature Limits
-20°F to 250°F
Switch Contacts
– Standard: SPDT, 15 amps @ 125, 250, or 480 Vac, 1/2 amp @ 125 Vdc, 1/4 amp @ 250 Vdc. – Optional: DPDT, 10 amps @ 125 or 250 Vac. – Note: DPDT Switch is not “Gap Action”.
Switch Housing
Explosion-proof
Switch Approval
UL and CSA

Dimensions (mm)

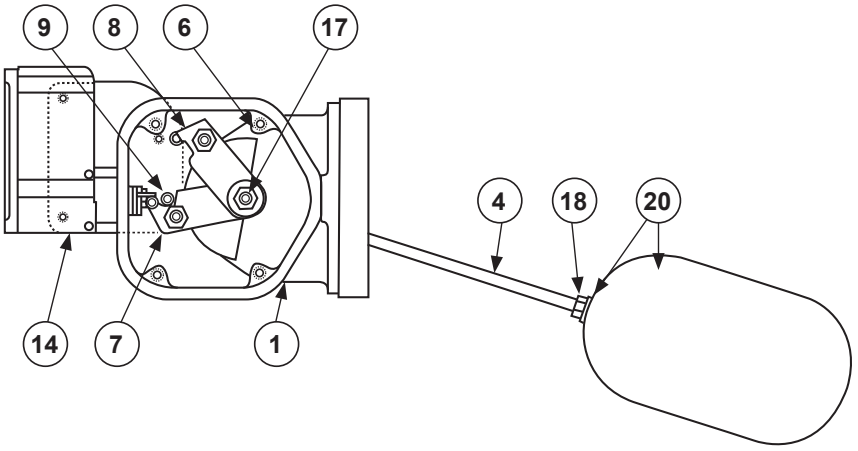


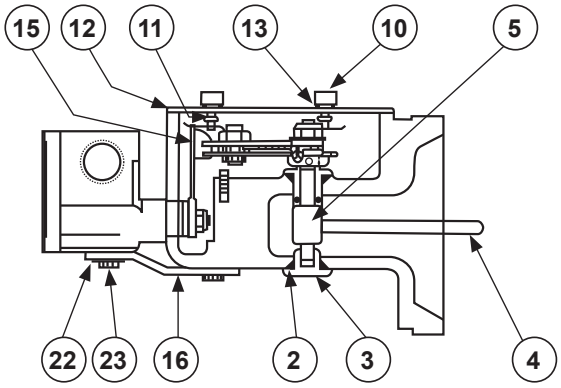
Notes:
Consult factory for dimensions.

*Please consult factory for Part Number and additional information.

Float Rod Chart			
Rod Length	**Part Numbers**		**Dim A.**
	303 S.S.	316 S.S.	
8" (203)	45231080	45233081	13.3" (336)
14" Std. (355)	45231140	45233140	19.3" (488)
20" (507)	45231200	45233202	25.3" (640)
26" (659)	45231260	*	31.3" (793)
32" (811)	45231320	*	37.3" (945)

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





Parts				
Item	**Notes**	**Description**	**Qty.**	**Part No.**
1		Case for CMEAQX-401	1	45012492
		Case for CMEAFX-402S	1	48016381
2	*	O-Ring BUN-112-90	2	67101408
3		Guide Bushing	1	45002016
4		Float Rod	1	Pg 2. Chart
5	*	Gear Stem Assembly 303 S.S. (Std.)	1	48007301
		Gear Stem Assembly 316 S.S. (Optional)	1	48006592
6	*	Gear	1	45002144
7		Left Actuating Arm Assembly	1	49002713
8		Right Actuating Arm Assembly	1	49002716
9		Stop Pin	1	79007418
10		Cover Screw	4	45002307
11		O-Ring BUN-007-90	4	67102309
12		Cover	1	45002390
13		Washer	1	45002228
14	*	Micro Switch, SPDT (Std.)	1	33100542
		Micro Sw itch, DPDT (Optional)	1	33103417
15		Switch Arm	1	49002605
16		Support Plate	1	46000550
17		Nut, 5/16-24 Flexloc	1	65002230
18		Nut, 1/4-20 Hex 303 S.S. (Std.)	1	65002175
		Nut, 1/4-20 Hex 316 S.S. (Optional)	1	65006385
19		Washer 1/4 Lock	1	65006386
20	*	Float Ball	1	45005655
22		Washer No. 10 Lock	4	65003559
23		Screw , 10-32 x 3/8 SHCS	4	65011404

Parts Key: *Recommended spare parts.

Ordering information

Specify part number and catalog model number. Models shown below include 14” float rod length and SPDT switches. Contact the factory for additional options.

Catalog Model Number	Nominal Connection Size, Type, Max. W.P. (psi)	Materials		Part Number
		Body	Float	
CMEAQX-403	4" Grooved (300)	Ductile Iron	316 S.S.	80002501
CMEAFX-402S	4" 150 lb Raised Face Flange (275)*	Cast Steel	316 S.S.	80002304

Note: *At 100°F - For higher temperatures, consult factory.

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.

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