JERGUSON®
A PRODUCT OF CLARK-RELIANCE

JMLS
Horizontal Mount
Magnetic Level Switch

Section:	JS100
Bulletin:	JS100.02
Date:	8/2016

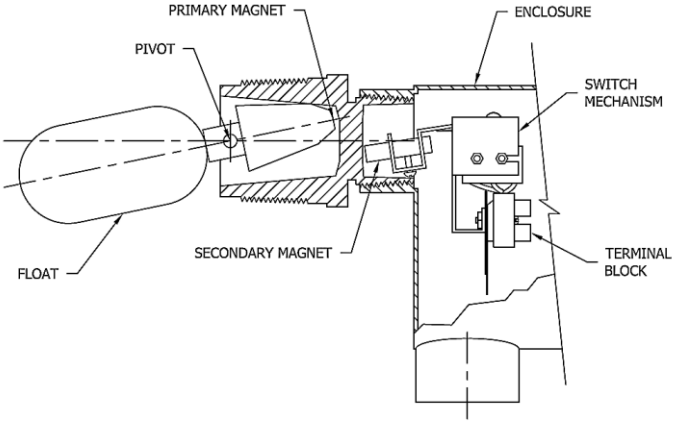


FEATURES

- **Magnetic Snap-Action**
- **All 316SS Wetted Parts**
- **SPDT or DPDT Contacts**
- **Integral Conduit Box**
- **Magnetic Latching**
- **CSA Certified, Class I, Grp. C&D, NEMA 4X**
- **Single Seal Per ISA 12.27.07-2011**

OPERATION

Operation is achieved using the time proven principle of repelling magnetic forces.



One permanent magnet, the primary magnet, forms part of a float assembly which rises and falls with changing liquid level. The secondary magnet is positioned within the enclosure so that the adjacent poles of the two magnets repel each other through a non-magnetic, stainless steel barrier. A change in liquid level moves the float through its permissible range of travel causing the float magnet to pivot and repel the switch magnet. The resulting snap action of the repelling magnets actuates the switch.

TYPICAL APPLICATIONS

Petroleum Processing
Fuels, lubricating oils, hydraulic fluids, separators, treaters, crude oil, fuel-water interfaces.

Chemical Processing
Acids, alkalis, ammonia, paint, lacquer, peroxides, alcohols, printing inks, freon.

Food Processing
Beverages, fruit juices, cooking oils.

Pharmaceutical and Cosmetic
Liquids, emulsions, lotions, solutions.

Marine Operations
Fuel oil, hydraulic fluid, bilge level alarms, sea water, coolant, condensate levels, cargo levels.

Reactor Operation
Level control, alarm signaling.

Cryogenic Liquids
Liquid methane, nitrogen, carbon dioxide, oxygen.

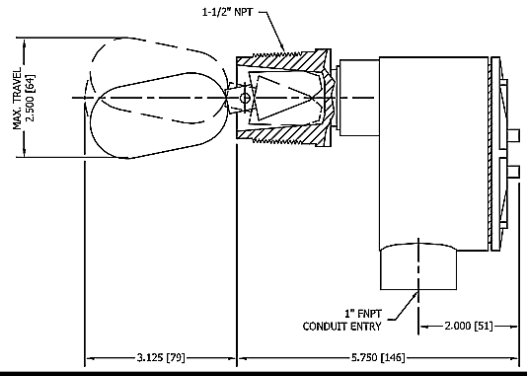
Water Industry
Flood control, reservoir levels.

General
Leak detection, overflow alarm, low level alarm in evaporators.

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JMLS Horizontal Mount Magnet Level Switch

DIMENSIONS AND SPECIFICATIONS – TYPICAL JMLS2100



PRESSURE RATING	MIN. S.G.	AMBIENT MAX. TEMP	DIFFERENTIAL @ MIN. S.G.	CERTIFICATION
1500 PSIG	0.50	122ºF (50ºC)	Nominal 1"	CSA CLASS I, GROUP C & D, NEMA 4X

MODEL SELECTION GUIDE

MAGNETIC LEVEL SWITCH

JMLS	CODE	BODY MATERIAL	TRIM MATERIAL
	2	T-316 SST	T-316 SST

CODE	SWITCH FORM AND FUNCTION	MAX. AMBIENT TEMP	MAX. RECOMMENDED PROCESS TEMP	SWITCH RATING
1	SPDT STANDARD SWITCH	122^{0}F (50^{0}C)	705^{0}F (375^{0}C)	5A @ 120/240 VAC
2	DPDT STANDARD SWITCH	122^{0}F (50^{0}C)	705^{0}F (375^{0}C)	3(5)A @ 24 VDC[1]
3	SPDT HIGH AMP RATING	122^{0}F (50^{0}C)	705^{0}F (375^{0}C)	11A @ 120/240 VAC
4	DPDT HIGH AMP RATING	122^{0}F (50^{0}C)	705^{0}F (375^{0}C)	1(2) A @ 24 VDC[1]
7	SPDT HERMETICALLY SEALED	122^{0}F (50^{0}C)	705^{0}F (375^{0}C)	2A @ 120 VAC (N.R. @ 240 VAC)
8	DPDT HERMETICALLY SEALED	122^{0}F (50^{0}C)	705^{0}F (375^{0}C)	3(5)A @ 24 VDC[1]
9	SPDT GOLD PLATED	122^{0}F (50^{0}C)	705^{0}F (375^{0}C)	1A @ 120 VAC 0.2A @ 240 VAC
0	DPDT GOLD PLATED	122^{0}F (50^{0}C)	705^{0}F (375^{0}C)	0.5(1) @ 24 VDC

CONNECTION	PRESSURE RATING	CODE	
1 1/2" NPT	1500 PSIG @ 100^{0}F	00	
2" NPT	1500 PSIG @ 100^{0}F	70	
		CARBON STEEL	316SS
2 1/2" 150# RF THREADED	285 PSIG @ 100^{0}F	11	13
2 1/2" 300# RF THREADED	740 PSIG @ 100^{0}F	21	23
2 1/2" 600# RF THREADED	1480 PSIG @ 100^{0}F	31	33
3" 150# RF THREADED	285 PSIG @ 100^{0}F	41	43
3" 300# RF THREADED	740 PSIG @ 100^{0}F	51	53
3" 600# RF THREADED	1480 PSIG @ 100^{0}F	61	63

CODE		MIN. SG SS FLOAT	MIN. SG POLY FLOAT
FExxx[2]	FLOAT EXTENSION (INCHES)	VARIES	VARIES
FE 0800	FLOAT EXTENSION 8.00"	0.89	0.82
FE 0600	FLOAT EXTENSION 6.00"	0.85	0.78
FE 0400	FLOAT EXTENSION 4.00"	0.79	0.73
FE 0300	FLOAT EXTENSION 3.00"	0.73	0.69
P	POLYPROPYLENE FLOAT	MIN SG = 0.40 (NO FLOAT EXT); MAX PROCESS TEMP = 250^{0}F	
BW	BACK WELDED FLANGE		

JMLS	2	1	00	TYPICAL MODEL NUMBER

[1]DC Rating = Inductive Listed before Resistive EX: 3(5) = 3A Inductive or 5A Resistive @ 24 VDC
[2]NOTE: EX., FE0225 = 2-1/4" Extension

JERGUSON®

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