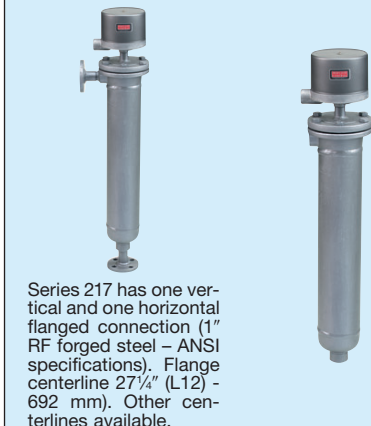




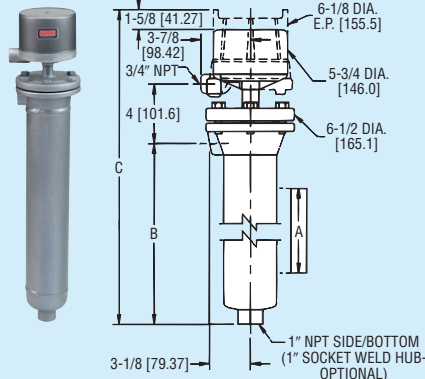
Series 215

Flanged Chamber

Adjustable Deadband 12" to 24". Pressure to 450 psig (31 bar).
Temperature to 500°F (260°C). Hermetically Sealed Switches.



Series 217 has one vertical and one horizontal flanged connection (1" RF forged steel - ANSI specifications). Flange centerline 27 1/4" (L12) - 692 mm). Other centerlines available.



Series 215 is connected with one vertical and one horizontal 1" NPT connection. 1" socket weld optional.

Operation Section

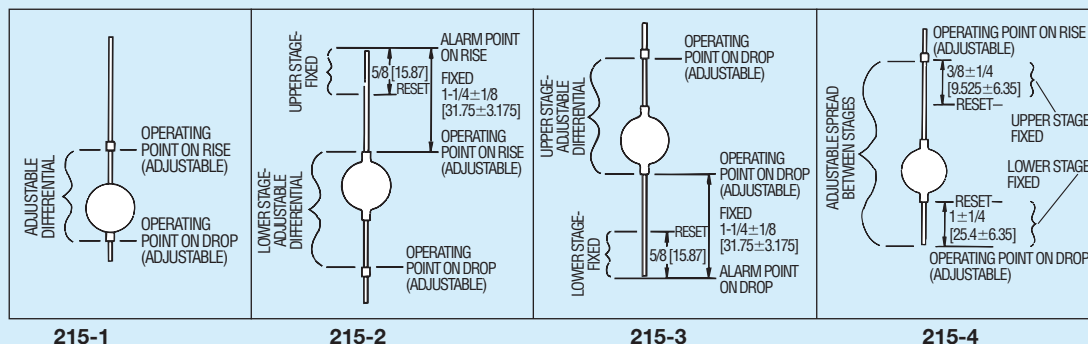
TYPE NO.	*SUFFIX NUMBER	ADJUSTABLE LEVEL CHANGE DIMENSION "A"		CHAMBER DIMENSION "B"	OVERALL CONTROL DIMENSION "C"
215---- G, WT	L12	12" max (305 mm)	1 1/2" min. (38 mm)	24 7/16" (621 mm)	32 7/8" (835 mm)
	L24	24" max (610 mm)	1 1/2" min. (38 mm)	36 7/16" (926 mm)	44 7/8" (1140 mm)
215---- E, EV	L12	12" max (305 mm)	1 1/2" min. (38 mm)	24 7/16" (621 mm)	34 9/16" (878 mm)
	L24	24" max (610 mm)	1 1/2" min. (38 mm)	36 7/16" (926 mm)	46 9/16" (1184 mm)

* Consult factory for longer lengths. Adjustable 12" differential is standard.
Minimum differential is based on a specific gravity of 1.0 and may vary by type of control and specific gravity of liquid used.

Operation Section



Series 218 has two vertical flanges (1" RF forged steel - ANSI specifications). Flange centerline 27 1/4" (L12) - 689 mm). Other centerlines available.



Level

Adjustable deadband, flanged chamber and side mount are featured in the heavy duty reliable 215 series. A choice of four operating styles are offered: 1. Single stage adjustable deadband suitable for pump operation; 2. Two stage operation with adjustable lower stage, fixed upper stage for pump and high alarm; 3. Fixed lower stage and adjustable upper stage for pump and low alarm; 4. Fixed upper and lower stage for high and low alarm. Alarm stages can also be used for shut-down. Adjustable level changes are available in increments of 12", 24", 36", or 48".

APPLICATIONS

Oil refineries, chemical plants, power generating stations, pumping stations, heat transfer systems, sanitary/waste water facilities, drip legs, hydraulic systems, boilers.

PHYSICAL DATA

Minimum Specific Gravity: 0.60.

Switch Type: Snap action or mercury. See Charts A and B.

Electrical Ratings: See Charts A and B.

Wiring Connections: G, WT or E enclosure, terminal block. EV enclosure, 18" (460 mm) leads.

Process Connections: 1" NPT standard (1" socket weld hubs or flanges optional).

Enclosures: G, painted steel and aluminum. WT, painted steel, aluminum, neoprene. E, aluminum. EV, aluminum and neoprene.

Wetted Parts: C1 construction. Chamber, carbon steel. Float and trim 303SS, 304SS, 430SS.

Weight: 215, 50 lbs (22.7 kg); 217, 60 lbs (27 kg); 218, 67 lbs (30.4 kg).

Suggested Specifications

Liquid level control shall be Mercoid 215 (217) (218) Series with adjustable deadband of (12") (24") (36") (48"). Unit shall be external side mount type. Process connections shall be 1" NPT (socket weld hub) (flanged). Suitable for operation at 450 psig (31 bar) and 100°F (38°C); 300 psig (21 bar) at 500°F (260°C) with a minimum specific gravity of 0.60. Switch mechanism shall be gravity return and shall be activated by a stainless steel float.

MODEL CHART – SERIES 215

EXAMPLE	215-2	WT	7810	10	C1	60		L12	215-2-WT-7810-10-C1-60-L12 Liquid level control, flanged carbon steel chamber. Weather proof enclosure. 2 single pole double throw snap action switches. Lower stage adjustable deadband to operate pump or other devices, upper stage fixed to operate alarm or shutdown. Operating pressure 450 psig (31 bar) at 100°F (38°C) 300 psi (21 bar) at 500°F (260°C). Side/bottom process connection, 1" NPT. Minimum specific gravity 0.60.		
OPERATION	215-1		XXXX						Single stage operation with an adjustable deadband. Suitable for pump operation.	UL	CSA
	215-2		XXXX	XX					Two stage operation. Lower stage has adjustable deadband. Upper stage has fixed deadband. Suitable for pump and high alarm.	UL	CSA
	215-3		XXXX	XX					Two stage operation. Lower stage fixed deadband. Upper stage has adjustable deadband. Suitable for pump and low alarm.	UL	CSA
	215-4		XXXX	XX					Two stage operation. Both stages have fixed deadband with adjustable spread between stages. Suitable for high and low alarm or shutdown.	UL	CSA
ENCLOSURES		G							General purpose, NEMA-1.	UL	CSA
		WT							Weather proof NEMA-3R, 4, 4X.	UL	CSA
		E							Explosion proof NEMA-7, 9. Class I Groups B, C, D. Class II Groups E, F, G. (CSA approved Groups C, D, E, F, G only).	UL	CSA
		EV							Explosion proof, vapor proof NEMA-7, 9. Class I Groups B, C, D. Class II Groups E, F, G. (CSA approved Groups C, D, E, F, G only).	UL	CSA
CIRCUITS (For Electrical Circuits see charts A & B below.)			48XX						Single stage. Mercury switch. See Chart A.		
			48XX	XX					Two stage. Mercury switch. See Chart A.		
			78XX						Single stage. Snap switch. See Chart B.		
			78XX	XX					Two stage. Snap switch. See Chart B.		
			78XXHM						Hermetically sealed snap switch. See Chart B.		
			98XX						Single stage. High capacity DC snap switch. Use heat fins (HF) if process temperature exceeds 350°F (177°C). Do not exceed 450°F (232°C). See Chart B.		
			98XX	XX					Two stage. High capacity DC snap switch. Use heat fins (HF) if process temperature exceeds 350°F (177°C). Do not exceed 450°F (232°C). See Chart B.		
OPTIONS	215				C1	60			Maximum pressure rating 450 psi (31 bar) at 100°F (38°C), and 300 psi (21 bar) at 500°F (260°C).	UL	CSA
								L12 L24	Adjustable level change. 1 1/2" (38mm) minimum, 12" (305mm) maximum. Adjustable level change 1 1/2" (38mm) minimum, 24" (610mm) maximum, 36" (91cm) and 48" (1.22m) available. Consult factory.	UL	CSA
CONSTRUCTION	217				C1	160			1" 150# flanges side/bottom process connection. Pressure rating 275 psi (19 bar) at 100°F (38°C), 150 psi (10 bar) at 500°F (260°C). Minimum specific gravity 0.60.	UL	CSA
	217				C1	360			1" 300# flanges side/bottom process connection. Pressure rating 450 psi (31 bar) at 100°F (38°C), 300 psi (21 bar) at 500°F (260°C). Minimum specific gravity 0.60.	UL	CSA
	217				C1	660			1" 600# flanges side/bottom process connection. Pressure rating 450 psi (31 bar) at 100°F (38°C), 300 psi (21 bar) at 500°F (260°C). Minimum specific gravity 0.60.	UL	CSA
	218				C1	160			1" 150# flanges side/side process connection. Pressure rating 275 psi (19 bar) at 100°F (38°C), 150 psi (10 bar) at 500°F (260°C). Minimum specific gravity 0.60.	UL	CSA
	218				C1	360			1" 300# flanges side/side process connection. Pressure rating 450 psi (31 bar) at 100°F (38°C), 300 psi (21 bar) at 500°F (260°C). Minimum specific gravity 0.60.	UL	CSA
	218				C1	660			1" 600# flanges side/side process connection. Pressure rating 450 psi (31 bar) at 100°F (38°C), 300 Ppsi (21 bar) at 500°F (260°C). Minimum specific gravity 0.60.	UL	CSA
								H2	1" socket weld hub instead of 1" NPT.		



CHARTS A & B - ELECTRICAL CIRCUITS AND RATINGS

SWITCH TYPE	SWITCH ACTION	ELECTRICAL RATINGS IN AMPS						ORDERING CODE			UL	CSA	
		AC			DC			SINGLE STAGE	TWO STAGE				
		120V	240V	440V	30V	125V	250V		LOWER	UPPER			
CHART A Mercury Contacts	SP-ST	Open on level FALL	10	5	3†		10	5	-4820	-4820	-21		
	SP-ST	Open on level RISE	10	5	3†		10	5	-4821	-4821	-20		
	SP-DT	One Switch	4	2	1†		4	2	-4810	-4810	-10		
	SP-DT	Two switches E.I.*	10	5	3†		10	5	-4815	-4815	-15		
	DP-ST	Two switches E.I.* Open on level FALL	10	5	3†		10	5	-4814	-4814	-13		
	DP-ST	Two switches E.I.* Open on level RISE	10	5	3†		10	5	-4813	-4813	-14		
	DP-DT	Two SP-DT switches	4	2	1†		4	2	-4806	-4806	-06		
CHART B Snap Action Contacts	SP-DT	One switch	12	5	3†		0.5**	0.25**	-7810	-7810	-10		
	DP-DT	Two SP-DT switches	12	5	3†		0.5**	0.25**	-7806	-7806	-06		
	SP-DT	One hermetically sealed switch	5	5		5**			-7810HM	-7810HM	-10HM		
	DP-DT	Two hermetically sealed SP-DT switches	5	5		5**			-7806HM	-7806HM	-06HM		
	DP-DT	Two SP-DT switches	10	3			10‡	3‡	-9806	-9806	-06		
	SP-DT	One switch	10	3			10‡	3‡	-9810	-9810	-10		

*Electrically Independent †Available on special order. Change 1st digit in Ordering Code from 4 to 5 or 7 to 8
‡10 Amp inductive (Polarized) at 125 VDC i.e. -4820 becomes -5820, -7810 becomes -8810, etc.
**Resistive