



Series
1241

Flanged Chamber

External Mount, Pressure to 1440 psig (99 bar), Hermetically Sealed
Switches and Temperature to 475°F (246°C)



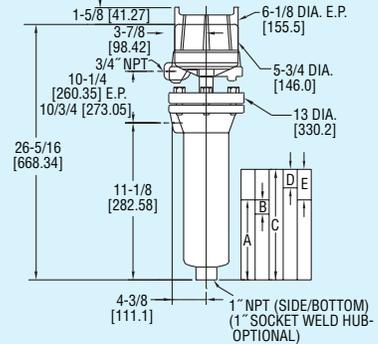
Series 1243 has one vertical and one horizontal flanged connection (1" RF forged steel – ANSI specifications).



Series 1241 has one vertical and one horizontal 1" NPT pipe connection. 1" socket weld optional.

"A" is the level at which single (or lower stage) operates on level rise.
"B" is the operating differential single (or lower stage) — drop in level to restore switch to original position.
"C" is the level at which the upper stage operates on level rise.
"D" is the operating differential of upper stage — drop in level to restore switch to position.
"E" — the increase in level above "A" to operate upper stage.

Repeatability ±61/49 (6.4 mm)



Series 1244 has two vertical flanges (1" RF forged steel – ANSI specifications).

Switch Level Change Single Stage Operation

Switch Level Change Two Stage Operation

	SP GR	A**	B	A**	B	C	D	E	Ordering Code
MIN SP GR 0.6 1440 psi (99 bar) @ 100°F (38°C)	1.0	6" (152.4 mm)	15/16" (23.81 mm)	6" (152.4 mm)	15/16" (23.81 mm)	7-1/8" (180.98 mm)	13/16" (20.64 mm)	1-1/8" (28.58 mm)	C1-60
1275 psi (87.9 bar) @ 475°F (246°C)	0.6	6-9/16" (166.69 mm)	1-1/4" (31.75 mm)	6-9/16" (166.69 mm)	1-1/4" (31.75 mm)	7-11/16" (195.26 mm)	1" (25.4 mm)	1-1/8" (28.58 mm)	

***A" is not adjustable.

A removable stainless steel float enclosed in a flanged carbon steel chamber is featured in the durable, field proven 1241 series. External side mount series includes 1" NPT process connections as standard or 1" flanges as options. Pressure and temperature limits are 1440 psi (99 bar) at 100°F (38°C) and 1275 psi (87.9 bar) at 475°F (246°C). Minimum specific gravity for all models is 0.60. The models shown can be ordered with a variety of electrical arrangements including SPST, SPDT, or DPDT circuits in hermetically sealed snap action or mercury contacts. Switches can be ordered open on level rise or fall. Single pole double throw electrically independent circuits are available as well as low current or high DC current applications. A full range of enclosures are offered including general purpose NEMA-1; weatherproof NEMA-4X; (explosion-proof) and (explosion-proof - vapor-proof) groups B, C, D, E, F, G, NEMA-7-9.

APPLICATIONS

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

SPECIFICATIONS

Minimum Specific Gravity: 0.60.

Switch Type: Snap action or mercury switch. 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 (flanges optional); See model chart.

Enclosure Rating: See model chart.

Enclosure:

G, painted steel and aluminum;

WT, painted steel, aluminum and neoprene;

E, aluminum;

EV, aluminum and neoprene.

Wetted Parts: C1 construction. Chamber: carbon steel. Trim: 303SS, 304SS, and 430SS (316SS and 430SS optional).

Weight: 1241, 34 lb (15 kg); 1243, 44 lb (20 kg); 1244, 51 lb (23 kg).

Suggested Specifications

Liquid level control shall be 1241 (1243) (1244) Series with flanged carbon steel chamber. Process connections shall be 1" NPT (socket weld hub) (flanged). Unit shall be suitable for operation at 1440 psi (99 bar) at 100°F (38°C); 1275 psi (87.9 bar) at 475°F (246°C) with a minimum specific gravity of 0.60. Switch mechanism shall be gravity return and shall be activated by a stainless steel float. Circuit shall be (hermetically sealed) snap action (mercury) switch, (SPST) (SPDT) (DPDT). Enclosure shall be general purpose (weatherproof) (explosion-proof) (explosion-proof) (vapor-proof).

Model Chart - Series 1241

Example	1241	WT	7810	10	HF	C1	60		1241-WT-7810-C1-60. Liquid level control. Flanged carbon steel chamber. Weather-proof enclosure. SPDT snap switch, fixed deadband, automatic reset. Operating pressure 1440 psig (99 bar) at 100°F (38°C) 1275 psi (87.9 bar) at 475°F (246°C). Side/bottom process connections, 1" NPT. Minimum specific gravity 0.60.
Enclosure		G WT E EV							General purpose, NEMA-1. Weather-proof NEMA-3R, 4, 4X. Explosion-proof NEMA-7, 9. Class I Groups B, C, D. Class II Groups E, F, G. Explosion-proof, vapor-proof NEMA-7, 9. Class I Groups B, C, D. Class II Groups E, F, G.
Circuits (For electrical circuits see charts A & B below)			48XX 48XX 78XX 78XX 78XXHM 98XX 98XX 10XX 10XX	XX XX XX XX					Single stage. Mercury switch. See chart A. Two stage. Mercury switch. See chart A. Single stage. Snap switch. See chart B. Two stage. Snap switch. See chart B. Hermetically sealed snap switch. See chart B. 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. Two stage. High capacity DC snap switch. Use heat fins (HF) if process temperature exceeds 350°F (177°C). Not to exceed 450°F (232°C). See chart B. Single stage. High temperature snap switch. Continuous rating 800°F (425°C). See Chart B. 211-C1-60 type rated at 175 psi (12 bar). Two stage. High temperature snap switch. Continuous rating 800°F (425°C). See Chart B. 211-C1-60 type rated at 175 psi (12 bar).
Flanged Chamber Construction 1" NPT/HUBS	1241					C1 C1	60		Carbon steel body. Minimum specific gravity 0.60. Side/bottom process connections. 1" NPT hubs. Pressure rating 1440 psig (99 bar) at 100°F (38°C), 1275 psi (87.9 bar) at 475°F (246°C).
Flanged Chamber Construction with Flanged Process Connections	1243 1244					C1 C1	660 660		1" 600# flanges side/bottom process connection. Pressure rating 1440 psi (99 bar) at 100°F (38°C), 1275 psi (87.9 bar) at 475°F (246°C). Minimum specific gravity 0.60. 1" 600# flanges side/side process connection. Pressure rating 1440 psi (99 bar) at 100°F (38°C), 1275 psi (87.9 bar) at 475°F (246°C). Minimum specific gravity 0.60.
Options					HF C216			12	High temperature fins should be considered if ambient temperature is extremely high or if process temperature exceeds 500°F (260°C) for extended periods. 316 SS chamber and trim. 430 SS armature. Breather and drain for E type enclosure. Recommended for high humidity or outdoor service.

Charts A & B - Electrical Circuits and Ratings

Switch Type	Switch Action	Electrical Ratings in AMPS						Ordering Code		
		AC			DC			Single Stage	Two Stage	
		120V	240V	440V	30VDC	125V	250V		Lower	Upper
Chart A	SP-ST Open on level FALL	10	5	3†		10	5	-4821	-4821	-21
Mercury	SP-ST Open on level RISE	10	5	3†		10	5	-4820	-4820	-20
Contacts	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	-4813	-4813	-13
	DP-ST Two switches E.I.* Open on level RISE	10	5	3†		10	5	-4814	-4814	-14
	DP-DT Two SP-DT switches	4	2	1†		4	2	-4806	-4806	-06
	Chart B	SP-DT One switch	12	5	3†		0.5**	0.25**	-7810	-7810
Snap	DP-DT Two SP-DT switches	12	5	3†		0.5**	0.25**	-7806	-7806	-06
Action	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
	DP-DT Two SP-DT switches	2	2			0.4**	0.25**	-1006	1006	-06
Contacts	SP-DT One switch	2	2			0.4**	0.25**	-1010	-1010	-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

LEVEL
Level Switches,
Float