



LIQUID Level Switches

SERIES	L4	L6	L8	L10	F7-MLK	F6 & F7	F6 & F7	F7-MM
Service	Liquids	Liquids	Liquids	Liquids	Liquids	Liquids	Liquids	Liquids
Wetted Materials	316 SS	304 SS	316 SS	304 SS	Buna-N/Brass	Polypropylene, 316 SS, or Buna-N*	Polypropylene, 316 SS, or Buna-N*	Brass or 316 SS
Temperature Limits	275°F (135°C)	220°F (105°C)	212°F (100°C)	200°F (93°C)	221°F (105°C)	176°F (80°C) or higher*	176°F (80°C) or higher*	180°F (82.2°C) or higher*
Pressure Limits	2000 psig with option bar	2000 psi (138 bar)	150 PSIG (10.34 bar)	2000 (137.137.8 bar)	150 psig (10 bar)	50 psig (3 bar) or higher*	15 psig (1 bar) or higher*	1000 psi (68.95 bar)
Process Connection	1-1/2" or 2-1/2" male NPT	1" male NPT or 1" female NPT with external float	1" male NPT	1" male NPT	2" male NPT	M16x2, 18" male NPT, 1/2" male NPT, 3/4" female NPT, or 3/8"-24" UNF-2A*	1/8" or 1/4" male NPT*	1/8", 3/4", or 1" male NPT, 3-5/8" flange, 1-5/16-12UNF-2A, 3/8"-24 thread, or 2" male NPT with 1/2" conduit
Min. Specific Gravity	0.7	0.9	0.6	0.9	0.45	0.45 or higher*	0.45 or higher*	0.45
Output	SPDT or DPDT	SPDT or DPDT	SPDT	SPST	SPST	SPST	SPST	SPST
Mounting Orientation	Horizontal with optional vertical	Horizontal	Horizontal	Horizontal	Vertical	Horizontal	Vertical	Vertical
Agency Approvals	ATEX, CE, CSA, FM, IECEx,UL	ATEX, CE, CSA, FM, IECEx, KTL, UL	CE, cURus	CE, cURus	N/A	N/A	CE, UL*	N/A

*Varies per product

LIQUID Level Switches

SERIES	F7-MS	123	102	CFS2	FSW2	OLS	B-190	CLS2	CLS1
Service	Liquids	Liquids	Liquids	Liquids	Liquids	Liquids	Liquids	Liquids, powder, bulk materials	Solids, liquids, slurries
Wetted Materials	Brass or 316 SS	304 SS	Cast iron	Polypropylene	Polypropylene	316 SS, Polysulfone or PFA	316 SS	316 SS	CPVC
Temperature Limits	Buna-N floats: 180°F (82.2°C) in oil, 230°F (110°C) in water; SS floats: 300°F (148.9°C)	365°F (185°C)	425°F (218°C)	122°F (50°C)	122°F (50°C)	200°F (93.3°C)	200°F (93.3°C)	185°F (85°C)	240°F (116°C)
Pressure Limits	750 psi (51.7 bar)	150 psig (10.34 bar)	400 psig (27.6 bar)	14.5 psi (1 bar)	29 psi (2 bar)	1000 psig (69 bar)	125 psig (8.6 bar)	365 psi (25 bar)	30 psig (2.06 bar)
Process Connection	1/2", 1-1/4", 2", or 3" 150# flange	1" female NPT	1" female NPT	N/A	N/A	1/2" male NPT	4" 125 # cast iron flange	3/4", 1", or 1-1/2" male NPT or BSPT or 1-1/2" or 2" sanitary clamp	1" male NPS
Min. Specific Gravity	0.55	0.88	0.6	0.6	0.6	N/A	0.5	N/A	N/A
Output	SPST or SPDT	SPDT, DPDT or (2) SPDT	SPDT, DPDT or (2) SPDT	SPST or SPDT	SPST or SPDT	NPN open collector	SPST or SPDT	DPDT	SPDT
Mounting Orientation	Vertical ±30°	Vertical	Vertical	Horizontal	Vertical	Any position	Vertical	Vertical or horizontal	Vertical or horizontal
Agency Approvals	N/A	CSA, UL	UL	CE, UL/CSA	CE	N/A	UL	CE, cULus	N/A



BULK Level Switches

SERIES	CLS2	CLS1	VRLS	TFLS	CTF	DBLM	PLS2	PLS	ULTRA-MAG™
Service	Liquids, powder and bulk	Liquids, slurries, powder and bulk	Powder and bulk	Powder and bulk	Powder and bulk	Powder and bulk	Powder and bulk	Powder and bulk	Powder and bulk
Sensing Technology	Capacitance	Capacitance	Vibrating rod	Vibrating tuning fork	Vibrating tuning fork	Rotating paddle	Rotating paddle	Rotating paddle	Magnetic linkage and diaphragm
Wetted Materials	316 SS	CPVC	304 SS	316 SS	304 SS	Polycarbonate	304 SS	316 SS	Aluminum or 304 SS with urethane, Buna-N, PTFE, silicone rubber, polyester, fluoroelastomer, white Buna-N or EPDM diaphragm
Temperature Limits	185°F (85°C)	240°F (116°C)	176°F (80°C)	176°F (80°C)	212°F (100°C)	140°F (60°C)	176°F (80°C)	300°F (148.9°C)	350°F (176°C)
Pressure Limits	365 psi (25 bar)	30 psig (2.06 bar)	150 psi (10 bar)	145 psig (10 bar)	600 psi (40 bar)	N/A	11.6 psi (0.8 bar)	30 psig (2.07 bar)	60 psig (4.14 bar)
Process Connection	3/4", 1", or 1-1/2" male NPT or BSPT or 1-1/2" or 2" sanitary clamp	1" male NPS	1" male NPT	1-1/2" male NPT	1" male NPT	3/4" male NPT, optional flange and 1-1/4" to 3/4" reducer	1-1/4" male NPT	1-1/4" male NPT, optional flange	8-3/8" (212.73 mm) diameter bolt hole circle
Output	DPDT	SPDT	SPDT	SPDT	PNP/NPN	SPDT	SPDT	SPDT or DPDT	SPDT
Mounting Orientation	Vertical or horizontal	Vertical or horizontal	Vertical or horizontal	Vertical or horizontal	Vertical or horizontal	Vertical or horizontal	Vertical or horizontal	Vertical or horizontal	Vertical
Agency Approvals	CE, cULus	N/A	N/A	N/A	N/A	CE	CE, FM	cUL	CSA, UL

SUBMERSIBLE Level Transmitters

SERIES	SBLT2/SBLTX	MBLT	PBLT2/PBLTX	FBLT
Service	Liquids	Liquids	Liquids	Liquids
Wetted Materials	316 SS	316 SS	316 SS	316 SS
Temperature Limits	150°F (66°C)	176°F (80°C)	PBLT2: 180°F (82°C) PBLTX: 176°F (80°C)	176°F (80°C)
Pressure Limits	2x FS	2x FS	2x FS	2x FS
Accuracy	±0.25% FS	±0.25% FS	±0.25% FS	±0.25% FS
Range	0 to 300 psi (10 to 693 ft w.c) (3.2 to 211 m w.c)	0 to 300 psi (10 to 693 ft w.c) (3.2 to 211 m w.c)	0 to 300 psi (10 to 693 ft w.c) (3.2 to 211 m w.c)	0 to 300 psi (10 to 693 ft w.c) (3.2 to 211 m w.c)
Output	4-20 mA	4-20 mA or 0 to 5 V	4-20 mA	4-20 mA
Agency Approvals	SBLT2: CE SBLTX: CE, cULus	CE	PBLT2: CE PBLTX: CE, cULus	CE



CAPACITIVE, ULTRASONIC & FLOAT Level Transmitters



SERIES	CRF2	CLT	ULT	ULSS/ULSM/ULSL
Service	Liquids, powders, bulk material	Liquids	Liquids	Fluids/liquids
Wetted Materials	316 SS	Brass	303 SS	PVDF, FKM
Temperature Limits	Ambient: 185°F (85°C); Process: 250°F (121°C)	180°F (82°C) in water, 230°F (110 °C) in oil, 230°F (110°C) SS floats	140°F (60°C)	140°F (60°C)
Pressure Limits	100 psi (6.9 bar)	150 psig (10 bar)	30 psi (2 bar)	30 psi (2 bar)
Accuracy	±0.25% FS	±1 mm	±0.2% FS	ULSS: ±0.125" (3 mm); ULSM/ULSL: ±0.2% FS
Range	12 to 30 ft (3.7 to 9.1 m)	Options from .5 to 68" (0.01 to 1.73 m)	0 to 24.6 ft (0 to 7.5 m) or 0 to 32.8 ft (0 to 10 m)	ULSS: 0 to 4.1 ft (0 to 1.25 m); ULSM: 0 to 9.8 ft (0 to 3 m); ULSL: 0 to 18 ft (0 to 5.5 m)
Output	4-20 mA	4-20 mA or 0-5 V	4- 20 mA	4-20 mA
Agency Approvals	N/A	N/A	CE, FM	CE