

G & L-Series Multifunction Temperature Switches

FEATURES

- Precision SPDT or DPDT snap-acting micro switch
- Setpoint adjustable from 0 -100% of range
- Single or dual adjustable set points
- Choice of temperature ranges (from -40 °F to 750 °F)
- Fixed or adjustable deadband
- Direct or remote reading thermal systems
- Wide selection of switch elements

TYPICAL USES

- Refineries
- Chemical and petrochemical plants
- Pulp and paper mills
- Power plants
- Steel mills
- Water and sewage treatment plants
- Pumps, compressors and turbines
- Dairies and breweries
- Boilers and burners
- Reverse osmosis systems and filters
- Filters and presses
- Paint spraying equipment
- Specialized OEM equipment
- Pharmaceutical plants

PERFORMANCE SPECIFICATIONS

Set Repeatability (Accuracy):	±1% of span
Switch Type:	SPDT or 2 SPDT with independent setpoints, or 2 SPDT acting as DPDT (optional) -XC2
Setpoint and Deadband:	Single setpoint, fixed deadband Single setpoint, adjustable deadband Independent setpoint, fixed deadband
Enclosure Ratings:	NEMA 4X, IP66
Enclosure Material:	G-Series - 316L Stainless steel L-Series - Epoxy coated aluminum
Process Connection:	Direct Mount: ½ NPT Male Remote Mount: None Optional XBX ½ NPT Male as shown in above image
Electrical Termination:	¾ NPT Female
Direct Mount:	Stem lengths from 2¾" to 12"
Remote Mount:	Capillary lengths from 5' to 25' (5 ft. increments)
Approvals:	Watertight: L Series - UL, CSA, CE/UKCA, RoHS G Series - UL, CSA, CE, RoHS



L-Series
Direct Mount

L-Series
Remote Mount
(Shown with optional XBX-½" male bushing)



G-Series
Direct Mount



G-Series
Remote Mount
(Shown with optional XBX-½" male bushing)



KEY BENEFITS

- 316 SS (G-series) or epoxy-coated aluminum (L-series) enclosures provide added protection in harsh environments
- Designed for use in wide range of applications
- Easily configurable to meet your application requirements
- Hermetically sealed micro switches offer improved reliability and safety (UL Class I Div II approval)

WETTED COMPONENTS

Direct Mount	Remote Mount
316 Stainless steel	Bulb capillary: 316 SS Spiral armor: 302 SS

Data Sheet

G & L-Series Multifunction Temperature Switches

ORDERING CODE	Example:	GTA	N4	H	05	A7	030	XNH	150/260F
Function/Enclosure									
LTS - Temperature control, single setpoint, fixed deadband									
LTA - Temperature control, single setpoint. adjustable deadband									
LTD - Temperature control, Two Independently adjustable setpoint, fixed deadband									
GTS - Temperature control, single setpoint, fixed deadband									
GTA - Temperature control, single setpoint. adjustable deadband									
GTD - Temperature control, Two Independently adjustable setpoint, fixed deadband									
Enclosure									
N4 - NEMA, 4X									
Switch Elements For GTA/LTA/PTA Controls									
H - General purpose - 10A,125/250 Vac, 1/2A, 125 Vdc, 1/4A, 250 Vdc									
J - Hermetically sealed, general purpose - 11A, 125/250 Vac 5A, 30 Vdc									
Single/Dual Switch Elements For GTD/LTD & GTS/LTS Controls									
C/CC - Heavy duty ac - 22A, 125/250 Vac									
F/FF - Sealed environment proof - 15A, 125/250 Vac (estimated dc rating - 4A, 28 Vdc, not UL listed)									
G/GG - General purpose - 15A, 125/250/480 Vac, 1/2A, 125 Vdc, 1/4A, 250 Vdc (not UL listed at 480 Vac)									
J/JJ - Hermetically sealed switch, general purpose - 11A, 125/250 Vac 5A, 30 Vdc									
K/KK - Narrow Deadband - 15A, 125/250 Vac (estimated dc rating - 0.4A, 120 Vdc, not UL listed)									
L/LL - Hermetically Sealed, Gold Contacts - 1A, 125 Vac (available on L series only)									
M/MM - Low level gold contacts, 1A - 125 Vac									
P/PP - Hermetically sealed AC - 5A, 125/250 Vac (estimated dc rating - 2.5A, 28 Vdc, not UL listed)									
S/SS - Heavy Duty DC - 10A, 125 Vac or Vdc, 1/8 HP, 125 Vac or Vdc									
U/UU - Manual Reset, Actuates on Increasing Pressure - 15A, 125/250 Vac, 6A, 130 Vdc									
Y/YY - High Temperature 300 °F Ambient - 15A, 125/250 Vac									
W/WW - Ammonia Service - 5A, 125/250 Vac, 6A, 30 Vdc									
Capillary Line Length									
Direct Mount									
00 - Direct Mount									
Remote Mount - Capillary with Armor (Consult factory for custom or longer lengths)									
05 - 5'									
10 - 10'									
15 - 15'									
20 - 20'									
25 - 25'									
Thermal System Selection									
Direct Mount									
No entry required for direct mount									
Remote Mount									
A7 - Stainless steel Armor (STD.)									
Remote Mount Bulb Length Selection									
Direct Mount									
S Dim. U Dim.									
For thermowell (ordered separately)									
027 2¾" N/A									
040 4" 2½"									
060 6" 4½"									
090 9" 7½"									
120 12" 10½"									
Remote Mount									
030 3" 2½"									
Options (see Table 1 on page 3) (If choosing an option(s) must include an "X")									
NH - Tagging SS									
Temperature Ranges (see temperature range table on page 3)									
150/260 °F									

150/260F

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TABLE 1 - OPTIONS

Code	Description	Notes
BX	½ Male NPT bushing	Remote mount only - seals capillary to thermowell
CH	Chained cover	
FP	Fungus proof	
FS	Factory adjusted setpoint	Setpoint must be given as increasing or decreasing
JL	¾ to ½ reducing bushing	Conduit reducing bushing
K3	Terminal blocks	
LE	6ft Wire leads	
NH	Tagging, stainless steel	
PJ	24 Vdc Pilot light(s), single or dual.	Available with L-series only
PK	Pilot lights	Available with L-Series only
PM	¾" sealed conduit connection with 16" lead wires	
TM	2" Pipe mounting bracket	
C4	Traceable calibration certificate	
2C	DPDT with single setpoint adjustment	Available with LTS and GTS models only

STANDARD TEMPERATURE RANGE SELECTION

Nominal Range		Max. Temperature	Approximate Deadband Switch Element in °F								
°F	°C	°F	LTA-GTA	LTS-GTS				LTD-GTD			
			J,H	G	J,H	K,F	P	G,G	JJ,HH	KK,FF	PP
-40 to 60	-40 to 16	400	8-90	4.0-10	9.0-18	1.5-3	2-5	4.0-10	9.0-18	1.5-3	2-5
0 to 100	-20 to 40	400	30-90	5.0-15	10-30	1.5-5	3-7	5.0-15	10-30	1.5-4.5	3-7
75 to 205	20 to 95	400	34-120	6.0-18	10-34	3-5.5	3-8	6.0-18	10-34	3-5.5	3-8
150 to 260	65 to 125	400	25-100	3-13	9.0-25	1.5-4	3-7	3-13	9.0-25	1.5-4	3-7
235 to 375	110 to 190	500	35-130	6-19	10-35	2-5.5	3-8	6-19	10-35	2-5.5	3-8
350 to 525 ⁽¹⁾	175 to 275	700	40-165	5-27	15-40	3-7	3.5-11	5-27	15-40	3-7	3.5-11
500 to 750 ⁽²⁾	260 to 400	900	50-200	20-36	36-60	5-10	6-21	20-36	36-60	5-10	6-21

NOTE: ⁽¹⁾ N/A with 2 ¾" direct mount stem

⁽²⁾ Available with remote mount systems only

