

## 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
<b>Function/Enclosure</b>									
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									
<b>Enclosure</b>									
N4 - NEMA, 4X									
<b>Switch Elements For GTA/LTA/PTA Controls</b>									
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									
<b>Single/Dual Switch Elements For GTD/LTD &amp; GTS/LTS Controls</b>									
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									
<b>Capillary Line Length</b>									
<b>Direct Mount</b>									
00 - Direct Mount									
<b>Remote Mount - Capillary with Armor (Consult factory for custom or longer lengths)</b>									
05 - 5'									
10 - 10'									
15 - 15'									
20 - 20'									
25 - 25'									
<b>Thermal System Selection</b>									
<b>Direct Mount</b>									
No entry required for direct mount									
<b>Remote Mount</b>									
A7 - Stainless steel Armor (STD.)									
<b>Remote Mount Bulb Length Selection</b>									
<b>Direct Mount</b>									
S Dim. U Dim.									
For thermowell (ordered separately)									
027	2¾"	N/A							
040	4"	2½"							
060	6"	4½"							
090	9"	7½"							
120	12"	10½"							
<b>Remote Mount</b>									
030	3"	2½"					030		
<b>Options (see Table 1 on page 3) (If choosing an option(s) must include an "X")</b>									
NH - Tagging SS									
<b>Temperature Ranges (see temperature range table on page 3)</b>									
150/260 °F									
150/260F									

## G & L-Series Multifunction Temperature Switches

**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	<a href="#">Traceable calibration certificate</a>	
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 <sup>(1)</sup>	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 <sup>(2)</sup>	260 to 400	900	50-200	20-36	36-60	5-10	6-21	20-36	36-60	5-10	6-21

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

<sup>(2)</sup> Available with remote mount systems only

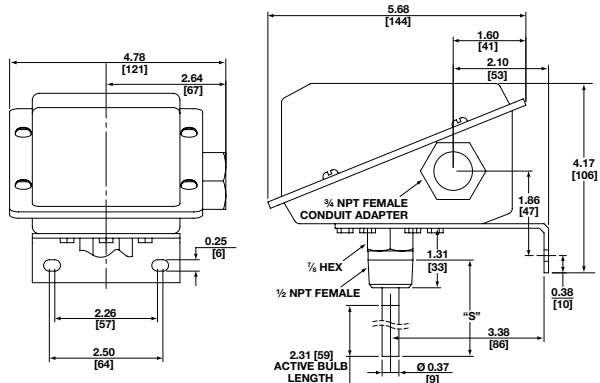
# Data Sheet

## G & L-Series Multifunction Temperature Switches

### G-SERIES DIMENSIONS in [ ] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings

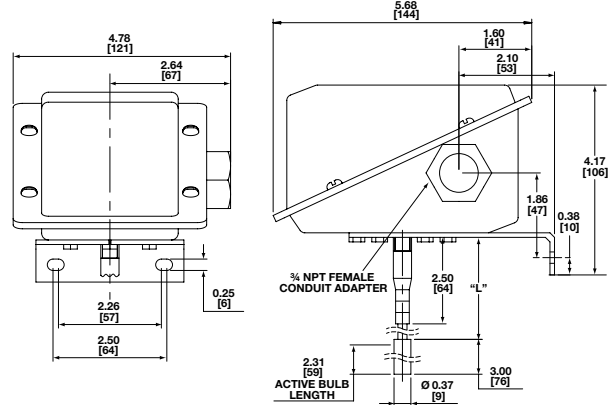
#### TEMPERATURE SWITCH – DIRECT MOUNT



#### "S" Dimensions

2 3/4"	[70]
4"	[102]
6"	[152]
9"	[229]
12"	[305]

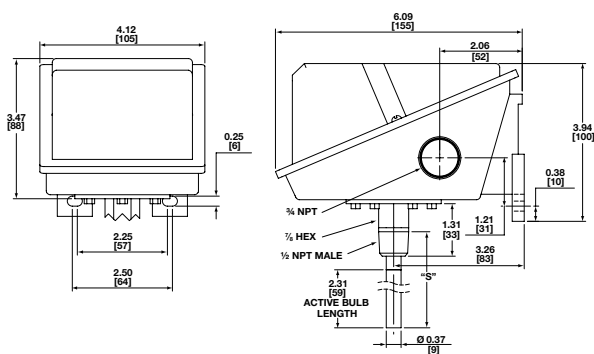
#### TEMPERATURE SWITCH – REMOTE MOUNT



### L-SERIES DIMENSIONS in [ ] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings

#### TEMPERATURE SWITCH – DIRECT MOUNT



#### TEMPERATURE SWITCH – REMOTE MOUNT

