

FSA Series



Model Code

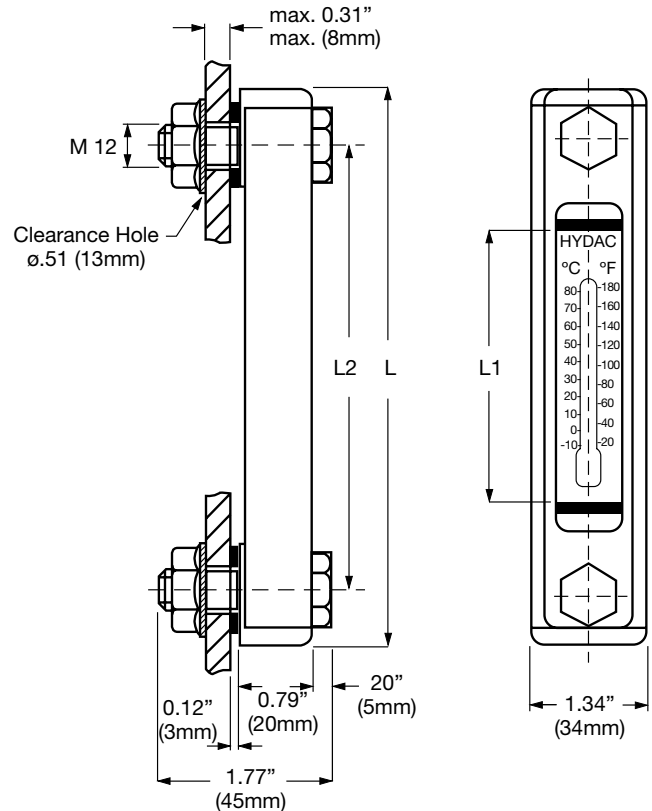
FSA 127 - 1 . 1 / T / 12 -

- Fluid Level Indicator**
 - FSA = Visual level indicator
- Size (Mounting Hole Centers)**
 - 76 = 3 inches
 - 127 = 5 inches
 - 176 = 7 inches
 - 254 = 10 inches
 - 381 = 15 inches
- Seals**
 - 1 = NBR
 - 2 = Fluorocarbon
- Housing Material**
 - 0 = Steel (only for SO14 glass tube construction)
 - 1 = Aluminum
 - 2 = ABS Plastic
- Thermometer**
 - (omit) = No Thermometer
 - T = Built-in Tube
 - FT 100 = Probe Thermometer (100mm-3.94"LG)
 - FT 200 = Probe Thermometer (200mm-7.87"LG)
 - FT 300 = Probe Thermometer (300mm-11.87"LG)
 - TS... = Thermo Switch (see chart on page 141)
- Hex Head Bolt**
 - 12 = M12 x 1.75 Bolt
- Sight Tube Material**
 - (omit) = Polyamide construction (not suitable for water glycols or high water based fluids)
 - SO14 = Glass tube construction

Model Codes containing selections listed in RED italics are non-standard items – Minimum quantities will apply
Contact HYDAC for information and availability

Not all combinations are available

Dimensions

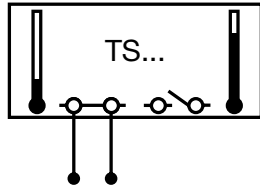
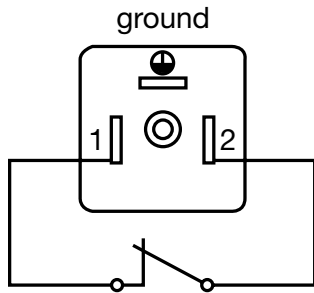


Size	L	L1	L2
76	4.25" (108mm)	1.46" (37mm)	2.99" (76mm)
127	6.26" (159mm)	2.99" (76mm)	5.00" (127mm)
176	8.19" (208mm)	4.92" (125mm)	6.93" (176mm)
254	11.26" (286mm)	7.99" (203mm)	10.00" (254mm)
381	16.26" (413mm)	12.99" (330mm)	15.00" (381mm)

Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.
Dimensions are in inches/(mm) and lbs./(kg.)

Options

Electric Thermo Switch / TS



Contacts **OPEN**
when fluid temperature rises
ABOVE switching temperature

Electrical Specifications

Maximum Voltage

- 50 VAC or DC

Minimum Current

- 50 mA

Contact

- Normally Closed

Switching Tolerance

- $\pm 10^\circ\text{F}$

Hysteresis

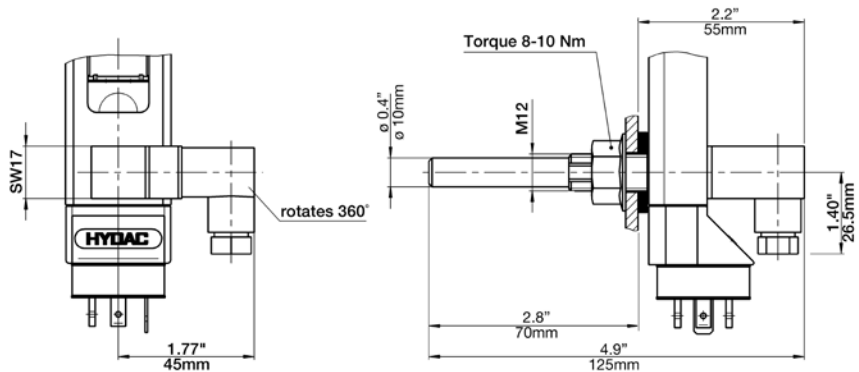
- TS 60/70 27°F (15°C)
- TS 80 36°F (20°C)

Expected Life Cycle

- at 25 A / 50 V 10,000 cycles
- at 0.5 A / 50 V 100,000 cycles

Thermo Switch - TS...

Detail of Lower Connection
for Probe Thermometer (FT...) see chart below



Thermo Switches (Normally Closed Contact)

Thermo Switch Code	Model Code	Part Number	Switch Opens @	Switch Closes @	Mounting Thread
TS60	TS-L-60/X/12 THERMO-SWITCH	03252752	60°C/140°F	45°C/113°F	M 12
TS70	TS-L-70/X/12 THERMO-SWITCH	03252766	70°C/158°F	55°C/131°F	M 12
TS80	TS-L-80/X/12 THERMO-SWITCH	03252767	80°C/176°F	60°C/140°F	M 12

Probe Thermometer / FT Features

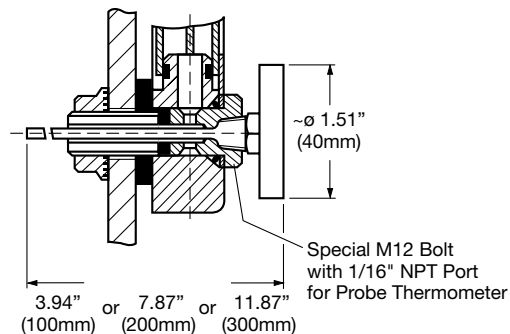
- Analog dial type thermometer for visual temperature indication

Temperature Range (Dual Scale)

- 0° to 212°F
- 0° to 100°C



Detail of Lower Connection



Probe Thermometers Temperature Range 32° to 212°F (0° to 100°C)

Thermo Switch Code	Model Code	Part Number	Mounting Thread
FT100	FT-100 TEMP PROBE W/M12 BOLT	02067556	M 12
FT200	FT-200 TEMP PROBE W/M12 BOLT	00086740	M 12
FT300	FT-300 TEMP PROBE W/M12 BOLT	00086741	M 12

Technical Data

Material	
Housing	Anodized Aluminum or ABS Plastic
Sight Tube	Polyamide or Glass
Seals	Fluorocarbon, NBR
Nuts / Bolts	Steel, Zinc plated
Fluid Temperature	-4° to 176°F (-20° to 80°C)
Maximum Pressure	14.5 PSI (1 BAR)
Thermometer Range	
Type T (FSA only)	14° to 176°F (-10° to 80°C)
Type FT100	32° to 212°F (0° to 100°C)
Type FT200	32° to 212°F (0° to 100°C)
Type FT300	32° to 212°F (0° to 100°C)
Bolting Torque	Max. 8 LB-FT+1 (10 Nm +2) see installation instructions below

Recommended Installation Process

1. Drill mounting holes (13 mm) according to dimension L2.
2. Torque the Nut, item 9, to 8+ 1 LB-FT. If it is not possible to torque the nut, the bolt head must be torqued. To avoid damaging the indicator a washer is recommended to be used under the bolt head. This washer is available from HYDAC: Part Number 00001689. Washer Dimensions: øD 18.8 mm, ID 13.10 mm, 0.5 mm thick

Component Parts

Item	Description	Part No.	Quantity	
			FSA	FSK
1	Housing	-	1	1
2	Name Plate	-	1	-
3	Tube	-	1	1
4*	O-ring 13X2.5	FPM-70 (Fluorocarbon)	00601916	2
		NBR-70 (Buna)	00601047	2
5	Tube Connector	-	2	2
6*	O-ring 12.3X2.4	FPM-70 (Fluorocarbon)	00601531	2
		NBR-70 (Buna)	00601045	2
7*	Washer FSA/FSK	FPM (Fluorocarbon)	22183158	2
		NBR (Buna)	00271948	2
8*	Bolt M12 SW17 FSA	22183153	2	2
9*	Nut Hex M12 FSA	22183151	2	2
10	Thermometer (In Tube)	-	1	-
11*	Probe Thermometer	See pg. 141	1	1
12*	Bolt FSA/K M12 SW17 for FT Temp Probe	03126743	1	1
13	Magnetic Float	-	-	1
14	Base Assembly w/Type "C" Switch	-	-	1
15	Base Assembly w/Type "O" Switch	-	-	1
16*	Washer FSA/FSK Steel	00001689	2	2

* items may be purchased individually.

Items listed in RED are not sold as spare parts.

FSA & FSK

FSK Only

