



**Table 22.56: Pressure Codes [6]**

Standard Action Devices		Reverse Action Devices	
Settings	Code	Settings	Code
5–21 psi	J15	8.5–5.5 psi	J17
8–20 psi	J16	10–5 psi	J36
20–40 psi	J20	22–12 psi	J22
20–50 psi	J18	22–16 psi	J19
30–50 psi	J21	35–20 psi	J70
40–60 psi	J24	40–20 psi	J23
50–70 psi	J33	50–30 psi	J35
55–85 psi	J34[7]	80–60 psi	J32[7]
60–80 psi	J25	100–80 psi	J51[7]
Specify other pressure	J99[7]	150–120 psi	J64[7]
		Specify other pressure	J99[7]

**Table 22.58: Maximum Allowable Pressure for All 9013 Switches**

Type	Pressure
FHG, FSG, FYG, FSW, FYW, FRG	220 psig
GHB, GHG, GSB, GSG	300 psig
GMG, GSR, GSW	100 psig
GHR, GHW	250 psig

**Table 22.59: Temperature Limitations for All 9013 Switches**

Operation (Media)	Storage
Min. -36 °C (-33 °F) Max. +125 °C (+257 °F)	Min. -36 °C (-33 °F) Max. +125 °C (+257 °F)

**Ordering Information**

- Specify Class 9013 Type F.
- Select the pressure code from the Pressure Code table above, and add the code designation to the end of the Type number. Ensure that the pressure rating of the code falls within the limits of the device as shown in Table 22.57 and Table 22.60.
- To order special features, add the appropriate Form letter to the Class and Type. Arrange the Form letters in alphabetical order when ordering more than one special feature.

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File E12158 CCN NKPZ      File LR25490  
**NOTE:** Products on this page are UL Listed, however type numbers ending in 8, 10 or 20 (non rigid pressure lines) must have Form T or TI—otherwise these are UL component recognized.

**Type F Pressure Switch Selection and Features**

- Designed for the control of electrically driven water pumps. Diaphragm actuated.
- Type FSG is the standard water pump switch, suitable for all types of pumps: jets, submersible, reciprocating, etc.
- Type FYG is designed to meet higher horsepower and pressure requirements.
- Type FRG is reverse acting: contacts open on falling pressure.

**Table 22.57: Standard Action: Contacts Open On Rising Pressure**

Cut-out Range (psig)	Approximate Adjustable Differential (psig)	Cut-in Range (psig)	Pressure Connection	2 Pole	
				NEMA 1 Type	NEMA 3R[8]
20–65	15–30	5–45	1/4" NPSF internal	FSG2	FSW2
			1/4" NPT external	FSG9	FSW9
			1/4" bayonet (barbed)	FSG10	FSW10
			90° elbow 1/4" bayonet	FSG20	FSW20
20–50	10–30	10–30	1/4" NPSF internal	FSG22	FSW22
20–60	10–30	10–45	1/4" NPT external	FSG29	FSW29
9–30	6–20	3–10	1/4" NPSF internal	FSG42	FSW42
9–30	6–20	3–10	1/4" NPT external	FSG49	FSW49
25–80	20–30	5–60	1/4" NPSF internal	FSG52	—
			1/4" NPT external	FSG59	—
34–65	15–30	19–45	(FSG1 through 20 with Form M4 is only available in this range)		
			1/4" NPSF internal	FYG2	FYW2
			1/4" NPT external	FYG9	FYW9
			1/4" bayonet (barbed)	FYG10	FYW10
25–80	20–30	5–60	90° elbow 1/4" bayonet	FYG20	FYW20
			(FYG1 through 20 with Form M4 is only available in this range)		
			1/4" NPSF internal	FYG22	FYW22
			1/4" NPT external	FYG29	FYW29
20–60	10–30	10–45	1/4" NPSF internal	FYG42	FYW42
9–40	6–30	3–10	1/4" NPSF internal	FYG49	FYW49
9–40	6–30	3–10	1/4" NPT external	FYG42	FYW42
9–40	6–30	3–10	1/4" NPT external	FYG49	FYW49

**Table 22.60: Reverse Action: Contacts Open On Falling Pressure**

Cut-in Range (psig)	Approximate Adjustable Differential (psig)	Cut-out Range (psig)	Pressure Connection	1-Pole	2-Pole
				Type	Type
23–65	15–30	8–45	1/4" NPSF internal	FRG12	FRG2
			3/8" NPSF internal	FRG13	FRG3
			1/4" NPT external	FRG19	FRG9
10–45	6–20	4–25	1/4" NPSF internal	FRG32	FRG22
			3/8" NPSF internal	FRG33	FRG23
			1/4" NPT external	FRG39	FRG29
6–14	5, Fixed	1–9	1/4" NPSF internal	FRG52	FRG42
			3/8" NPSF internal	FRG53	FRG43
			1/4" NPT external	FRG59	FRG49
40–100	20–30	20–80	1/4" NPSF internal	FRG72	FRG62
			3/8" NPSF internal	FRG73	FRG63
			1/4" NPSF internal	FRG92	FRG82
65–150	30–45	35–120	3/8" NPSF internal	FRG93	FRG83
			1/4" NPT external	FRG99	FRG89

**Table 22.61: Special Features and Modifications for Type FSG, FYG & FRG Devices**

Description	Applies to Types	Form
Bulk package	All Type F	[9]
One normally open—one normally closed contact	FRG 2-Pole only	H
Maintained manual cut-out lever (Auto-Off)	FSG, FYG	M1
Momentary manual cut-in lever (Auto-Start)	FRG2-59 only	M3
Low pressure cut-off (Auto-Start-Off) – Operates at approximately 10 psig below cut-in and will turn off the pump	FSG, FYG	M4
Maintained manual cut-in lever (Auto-On)	FRG2-59 only	M5
Pulsation plug (Type 2 & 9 only)	FRG, FSG, FYG	P[10]
Plastic flange (max. temp. 120 °F) (max. pressure 80 psi) Available only on Types FSG2, FYG2, FRG2, FSG*2, FYG*2, FRG*2	FSG*, FYG*, FRG*	Q8
	1/4" NPSF internal only	
1/2" conduit bushing, 1/2" long thread—on left	All Type F	T
Slip-on connectors (load side terminals <i>only</i> )	FSG, FYG	U
Slip-on connectors (line and load terminals)	FSG, FYG	U2
Black cover	FSG, FYG	Z22

[6] Existence of a code does not imply that the code is available for any or all devices.

[7] Minimum order quantity is 4 pieces.

[8] Must be mounted in vertical position to maintain enclosure rating.

[9] For bulk package quantities and Form numbers, see Table 22.62 on page 22-21. If a Form is not specified, devices will be shipped individually packaged.

[10] Nylon pulsation plug can be field installed on types having 1/4" NPSF internal connector.

Part number 1530S6G1 is one bag of 50 plugs.