

# Type F—Pumptrol™ Water Pump Pressure

Class 9013 / Refer to Catalog 9034CT9701



#### Table 22 56: Pressure Codes (7)

14510 2210011 1000410 00400 [1]					
Standard Action Devices		Reverse Act	Reverse Action Devices		
Settings	Code	ode Settings			
5–21 psi	J15	10–5 psi	J36		
8–20 psi	J16	22-12 psi	J22		
20–40 psi	J20	22–16 psi	J19		
20–50 psi	J18	35–20 psi	J70		
30–50 psi	J21	40–20 psi	J23		
40–60 psi	J24	50–30 psi	J35		
50–70 psi	J33	150, 120 poi	J64[8]		
60–80 psi	J25	150–120 psi			
Specify other pressure	J99[8]	Specify other pressure	J99[8]		

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

Туре	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
Min36 °C (-33 °F) Max. +125 °C (+257 °F)	Min36 °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 Select the pressure code from the Pressure Code table above, at 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 from Table 22.61, add the appropriate Form letter to the Class and Type. Arrange the Form letters in alphabetical order when ordering more than one special feature.

Electrical Ratings: see Dimensions: see Renewal Parts Kits





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 Tor 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	Approximate	Cut-in		2	Pole
Range	Adjustable	Range (psig)	Pressure Connection	NEMA 1	NEMA 3R[9]
(psig)	Differential (psig)			Type	Type
		5–45	1/4" NPSF internal	FSG2	FSW2
	45.00		1/4" NPT external	FSG9	FSW9
20–65	15–30		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)		
	20–30	5–60	1/4" NPSF internal	FYG2	FYW2
25–80			1/4" NPT external	FYG9	FYW9
			1/4" bayonet (barbed)	FYG10	FYW10
			90° elbow 1/4" bayonet	FYG20	FYW20
39-80	20-30	19-60	(FYG1 through 20 with Form M4 is only available in this range)		
20-50	10–30	10-30	1/4" NPSF internal	FYG22	FYW22
20-60	10-30	10-45	1/4" NPT external	FYG29	FYW29
9-40	6-30	3–10	1/4" NPSF internal	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	Approximate Adjustable		1-Pole	2-Pole	
Range (psig)	Differential (psig)	(psig)			Туре
		8–45	1/4" NPSF internal	FRG12	FRG2
23-65	15–30		3/8" NPSF internal	FRG13	FRG3
			1/4" NPT external	FRG19	FRG9
	6–20	4–25	1/4" NPSF internal	FRG32	FRG22
10-45			3/8" NPSF internal	FRG33	FRG23
			1/4" NPT external	FRG39	FRG29
	5, Fixed 1–9		1/4" NPSF internal	FRG52	FRG42
6-14		1–9	3/8" NPSF internal	FRG53	FRG43
			1/4" NPT external	FRG59	FRG49
40–100	20–30	20–80	1/4" NPSF internal	FRG72	FRG62
40-100			3/8" NPSF internal	FRG73	FRG63
	30–45	35–120	1/4" NPSF internal	FRG92	FRG82
65-150			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

[10]

Description	Applies to Types	Form	
Bulk package	All Type F	[11]	
One normally open—one normally closed contact	FRG 2-Pole only	Н	
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[12]	
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	
Available only on Types FSG2, FYG2, FRG2, FSG•2, FYG•2, FRG•2	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 only)	FSG, FYG	U	
Slip-on connectors (line and load terminals)	FSG, FYG	U2	
Black cover	FSG, FYG	Z22	

- Existence of a code does not imply that the code is available for any or all devices.
- [8] Minimum order quantity is 4 pieces
- Must be mounted in vertical position to maintain enclosure rating.
- Some product configurations are not available—contact your Schneider Electric representative for details [10]
- 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. **[111**]
- Nylon pulsation plug can be field installed on types having 1/4" NPSF internal connector. Part number 1530S6G1 is one bag of 50 plugs.