

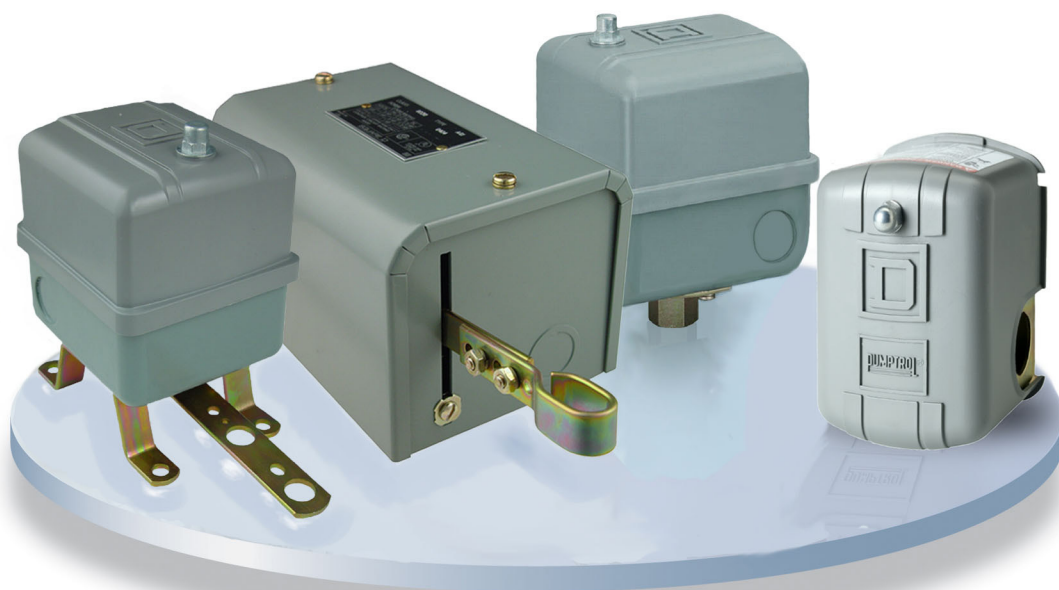
Commercial Pressure and Float Switches for Power Circuits

Catalog

9034CT9701R01/11

Class 9013, 9036, 9037, 9038

PUMPTROL™



SQUARE D

by **Schneider** Electric

Commercial Pressure and Float Switches for Power Circuits

Electromechanical Pressure Switches, Class 9013 Types F and G

Types FRG, FHG, and G

Table 4: Environment

Type	FRG	FHG	G
Conforming to Standards	UL 508, NEC Article 430-84, ANSI/NSF Standard 61, FDA 21CFR.2600		
Product approvals	UL File E12158 CCN NKPZ , CSA File LR 25490 Class 321106		
Degree of protection	IP20, NEMA Type 1. NEMA Type 3R (only Types G•B) must be mounted in vertical position to maintain enclosure rating		
Operating position	IP20 and NEMA Type 1 in any position, NEMA Type 3R in the vertical position only		
Operating rate	10 cycles/m		
Repeat accuracy	±3% of the range		
Ambient air temperature			
Storage	-22 to 158 °F (-30 to 70 °C)		
Operation	-22 to 257 °F (-30 to 125 °C)		
Fluids Controlled	Fresh water (or sea water with Form Q)		
Materials	Cover: polypropylene, Noryl thermoplastic resin or equivalent for Type 3R, Component material in contact with fluid: flange, zinc plated or equivalent (fluid entry), nitrile or equivalent rubber (diaphragm)		
Fluid connection	1/8" NPSF internal, 1/4" NPSF internal, 1/2" NPT external, 1/4" bayonet (barbed), 90° elbow 1/4" bayonet, four-way flange, 3/8" NPSF internal, 1/4" flare and other specials		
Electrical connection	2 open side entries, 0.88 in. diameter, with two flats		3 knockouts for 1/2" conduit

Table 5: Contact Block Characteristics

Type of contacts	One 2 pole, 2 N.C. (4 terminal) contacts, snap action Type FRG: 1 or 2 pole, 2 N.O. (2 or 4 terminal) contacts, snap action
Resistance across terminals	< 25 mΩ
Short-circuit protection	5,000 A
Connection	Screw clamp terminals. Clamping capacity up to 10 AWG (5.261 mm ²)
Electrical durability	100,000 cycles
Mechanical durability	300,000 cycles (actual product life will vary based on electrical load, duty cycle, application, and environmental conditions)

Table 6: Electrical Ratings

Type (1 pole) [1]		FRG			FHG			G		
	Voltage	~ 1 Ø Vac	~ 3 Ø Vac	Vdc	~ 1 Ø Vac	~ 3 Ø Vac	Vdc	~ 1 Ø Vac	~ 3 Ø Vac	Vdc
Power ratings of controlled motors [2]	32 V	—	—	—	—	—	—	—	—	—
	115 V	0.75 kW (1 hp)	—	0.18 kW (.25 hp)	1.1 kW (1.5 hp)	1.5 kW (2 hp)	0.18 kW (.25 hp)	0.75 kW (1 hp)	—	0.37 kW (.50 hp)
	230 V	0.75 kW (1 hp)	—	0.18 kW (.25 hp)	1.5 kW (2 hp)	2.2 kW (3 hp)	0.18 kW (.25 hp)	1.5 kW (2 hp)	—	0.37 kW (.50 hp)
	460 / 575 V	—	—	—	—	0.75 kW (1 hp)	—	1.5 kW (2 hp)	—	—
Type (2 pole) [3]		~ 1 Ø Vac	~ 3 Ø Vac	Vdc	~ 1 Ø Vac	~ 3 Ø Vac	Vdc	~ 1 Ø Vac	~ 3 Ø Vac	Vdc
Power ratings of controlled motors	32 V	—	—	0.18 kW (.25 hp)	—	—	—	—	—	—
	115 V	0.75 kW (1 hp)	0.75 kW (1 hp)	0.18 kW (.25 hp)	1.5 kW (2 hp)	2.2 kW (3 hp)	0.37 kW (.50 hp)	1.5 kW (2 hp)	2.2 kW (3 hp)	0.75 kW (1 hp)
	230 V	0.75 kW (1 hp)	0.75 kW (1 hp)	0.18 kW (.25 hp)	2.2 kW (3 hp)	3.7 kW (5 hp)	0.37 kW (.50 hp)	2.2 kW (3 hp)	3.7 kW (5 hp)	0.75 kW (1 hp)
	460 / 575 V	—	—	—	—	0.75 kW (1 hp)	—	3.7 kW (5 hp)	3.7 kW (5 hp)	—

¹ Includes: FHG 2, 3, 4, 9, 12, 13, 14, 19, 42, 44, 49

² Type FRG and G devices include 1 N.O. and 1 N.C. contact (Form H).

³ Includes: FHG 22, 24, 29, 32, 33, 34, 39, 52, 54, 59

Commercial Pressure and Float Switches for Power Circuits

Electromechanical Pressure Switches, Class 9013 Types F and G

Class 9013 Type G Pressure Switches



Example: 9013GHG2J26C10

GH	G	2	J26	C10
Type	Enclosure	Fluid Connection	Code psi	Form Modification [1]
		GH		
GH: 200/250 psi	G: NEMA 1	1: 1/8" NPSF internal 200	J20: 20–40	C10: Standard pack of 10 devices per box GHB, GHG, GSB, GSG
GS: 80 psi	B: NEMA 3R	2: 1/4" NPSF internal 200	J21: 30–50	E: 3-way lever (On-Auto-Off) not compatible with Form X GHG, GMG, GSG
GM: 35 psi	W: NEMA 4	3: 3/8" NPSF internal 200	J23: 40–20	H: 1 N.O. / 1 N.C. contact
	R: NEMA 7, 9	4: 1/8" NPSF internal 250	J24: 40–60	P: Pulsation plug (copper) (not field installable)
		5: 1/4" NPT external 250	J25: 60–80	R: Reverse action / 2 N.O. contacts
		6: 3/8" NPSF internal 250	J26: 70–90	U: Slip-on connections (load side terminals only)
		GS	J28: 70–100	U2: Slip-on connections (line and load side terminals)
		1: 1/8" NPSF internal 80	J29: 75–100	X: 2-way pressure release valve (not compatible with Form E) available on GHB, GMG, GSB, GHG, GSG, GHR, GHW, GSR, GSW
		2: 1/4" NPSF internal 80	J30: 80–100	Z: 1/4" male pipe thread on pressure connection
		3: 3/8" NPSF internal 80	J31: 90–120	Z16: 1/2" - 14 NPT external, 1/4" - 18 NPT internal
		GM	J51: 100–80	
		2: 1/4" NPSF internal 35	J53: 100–125	
			J54: 110–125	
			J56: 110–150	
			J57: 120–150	
			J58: 125–150	
			J60: 125–175	
			J61: 130–175	
			J50: 135–175	
			J66: 140–170	
			J62: 140–175	
			J63: 145–175	
			J64: 150–120	
			J67: 150–175	
			J65: 215–250	
			J99: Specify pressure setting	

¹ Cannot order Form R in combination with Form H.

NOTE: Use this table only to interpret the catalog number. Some combinations are not available.

