

9013 PUMPTROL[®] Commercial Pressure Switches Type F and 9013 Commercial Pressure Switches Type G

Catalog
January

07



Electromechanical Square D Brand 9013 Pressure Switches

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Commercial Pressure Switches

Electromechanical Square D Brand 9013

Conforming to UL508 and CSA

| | | | | |
|---------------------|----------------------|--|---|---|
| Applications | Type of Installation | Power Circuit | Power Circuit | Power Circuit |
| | Controls | Fresh or sea water | Fresh or sea water | Fresh or sea water |
| | Type of Operation | Regulation between 2 thresholds (adjustable differential). Suitable for all pumps. | Detection of a single threshold (non-adjustable differential) | Regulation between 2 thresholds (adjustable differential). For higher HP and pressure requirements. |



| | | | | |
|--|---|---|--|---|
| Family | | PUMPTROL 9013FSG | PUMPTROL 9013FTG | PUMPTROL 9013FYG |
| Size / Range | PSI | 20 - 65 | 20 - 65 | 25 - 80 |
| | BAR | 1.38 - 4.48 | 1.38 - 4.48 | 1.72 - 5.52 |
| Conforming to standards | | NEMA A600 UL508 | UL508 | NEMA A600 UL508 |
| Product certifications | | UL File: E12158 CCN NKPZ CSA File: LR 25490 Class 3211 06 | UL Listed, CSA Certified | UL File: E12158 CCN NKPZ CSA File: LR 25490 Class 3211 06 |
| Dimensions (l x h x w) in inches (mm) | | 3.76 x 2.8 x 2.78 (95.5 x 71.12 x 70.6) | 3.76 x 2.8 x 2.78 (95.5 x 71.12 x 70.6) | 3.76 x 2.8 x 2.78 (95.5 x 71.12 x 70.6) |
| Contact blocks | Snap action contacts | 2 N.C. | 2 N.C. | 2 N.C. |
| Degree of protection | | NEMA Type 1, NEMA Type 3R, and IP20 | NEMA Type 1, NEMA Type 3R, and IP20 | NEMA Type 1, NEMA Type 3R, and IP20 |
| Connections | Electrical | Screw terminals | Screw terminals | Screw terminals |
| Cable Entries | Fluid | Multiple | Multiple | Multiple |
| | | 2 | 2 | 2 |
| Type reference | | 9013FSG●●● | 9013FTG●●● | 9013FYG●●● |
| Characteristics | | Page 8 | Page 8 | Page 8 |
| Interpretation of Reference Numbers | | Page 10 and 11 | Page 12 and 13 | Page 14 and 15 |
| Other versions: | Form B7, one grommet, CE Form B8, two grommets, CE | — — | — — | — — |

| | | |
|---|--|--|
| Power Circuit | Power Circuit | Power Circuit |
| Fresh or sea water | Air only | Water or Air |
| Reverse acting, contacts open on falling pressure (adjustable differential) | Controls electrically driven air compressors, contacts open on rising pressure (non-adjustable differential, adjustable cut-out), diaphragm actuated | Light industrial, with higher electrical ratings for direct control of motors in pumps and compressors, contacts open on rising pressure (adjustable differential) |



| | | |
|---|--|--|
| PUMPTROL 9013FRG | PUMPTROL 9013FHG | 9013G |
| 6 - 150 | 40 - 200 | 10 - 250 |
| 0.41 - 10.34 | 2.76 - 13.79 | 0.69 - 17.24 |
| NEMA A300 UL508 | NEMA A600 UL508 | NEMA A600 UL508 |
| UL File: E12158 CCN NKPZ CSA File: LR 25490 Class 3211 06 | UL Listed, CSA Certified | UL File: E12158 CCN NKPZ (except GHR and GSR) UL File: E12443 CCN NOWT (for GHR and GSR) CSA File: LR 25490 Class 3211 06 (except GHR and GSR) CSA File: LR 26817 Class 3218 05 (for GHR and GSR) |
| 3.76 x 2.8 x 2.78 (95.5 x 71.12 x 70.6) | 3.76 x 2.8 x 2.78 (95.5 x 71.12 x 70.6) | 3.68 x 3.85 x 3.44 (93.47 x 97.79 x 87.37) |
| 2 N.C. | 2 N.C. | 2 N.C. |
| NEMA Type 1, NEMA Type 3R, and IP20 | NEMA Type 1, NEMA Type 3R, and IP20 | NEMA Type 1, NEMA Type 3R, NEMA Type 7, NEMA Type 9, and IP20 |
| Screw terminals Multiple 2 | Screw terminals Multiple 2 | Screw terminals Multiple 3 knock-outs available |

| | | |
|-------------------|-------------------|-----------------|
| 9013FRG●●● | 9013FHG●●● | 9013G●●● |
|-------------------|-------------------|-----------------|

| | | |
|--------------|----------------|--------------|
| Page 9 | Page 9 | Page 9 |
| Page 16 - 19 | Page 20 and 21 | Page 22 - 27 |
| — | — | — |
| — | — | — |

Commercial Pressure Switches

Electromechanical Square D Brand 9013

For power circuits, FSG, FTG, FYG, FRG, FHG, and G

Presentation

The PUMPTROL® 9013 Type F Commercial Pressure Switches are UL Listed and CSA Certified as commercial control equipment. Type G pressure switches are UL Listed and CSA Certified as commercial / light industrial control equipment.

The Type FHG - PUMPTROL® Compressor Pressure Switch is used to control electrically driven air compressors and is diaphragm actuated and has contacts that open on rising pressure.

The Type FSG, FYG, FRG - PUMPTROL® Water Pump Pressure Switches are used to control electrically driven water pumps and have the following features:

The Type FSG is the standard water pump switch, suitable for all types of pumps: jets, submersible, reciprocating, etc.

The Type FYG is designed to meet higher horsepower and pressure requirements. The Type FRG is reverse acting: the contacts open on falling pressure. All are diaphragm actuated.

The Type G Commercial/Light Industrial Pressure Switch is used to control electrically driven water pumps and air compressors. It has higher electrical ratings for direct control of motors in pump and compressor applications. The Type G switch is diaphragm actuated and has contacts that open on rising pressure.

Operating Points

Every pressure switch has two operating points; one on rising pressure and one of falling pressure. The operating point on rising pressure is referred to as the TRIP POINT or cut out for pumps and compressors and the operating point on falling pressure is referred to as the RESET POINT or cut in for pumps and compressors. These operating points are called the SETTINGS of the switch.

Differential

The differential is the difference in pressure between the trip point (cut-out) and the reset point (cut-in). It can be adjustable or non-adjustable.

Example: Cut-in (30 psi) / Cut-out (50 psi) Differential equals 20 psi

Range

The range indicates the pressure limits within which the operating points (settings) can be adjusted. The range is referenced to the operating point on rising pressure (trip point). The differential subtracts from the trip point setting.

During the normal operating cycle, system pressure should never exceed the upper limit of the range when using a diaphragm actuated switch. This will greatly reduce the life of the diaphragm.

Maximum Allowable Pressure

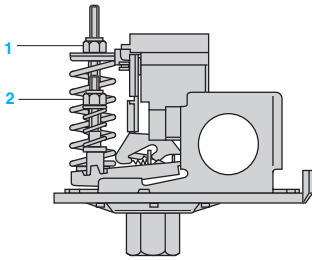
Maximum allowable pressure is the pressure to which a switch can be subjected without causing a change in operating characteristics, shift in settings, or damage to the device.

Pressure surges may occur in a system during the start up of a machine or from valve operation. Surges are not normally detrimental to the life of a switch if the surge is within the maximum allowable pressure rating of the switch. Diaphragm actuated switches should not be subjected to more than 10 surges per day. More frequent surges will greatly reduce the life of the diaphragm.

Commercial Pressure Switches

Electromechanical Square D Brand 9013

For power circuits, FSG, FTG, FYG, FRG, FHG, and G



Settings

Pressure switches with adjustable differential (Types FSG, FYG and FRG)

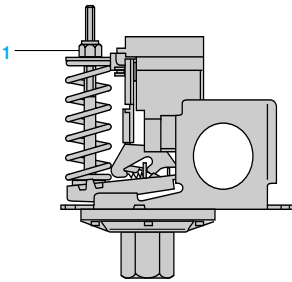
When setting the pressure switch, adjust the switching point on rising pressure first and then the switching point on falling pressure.

Switching point on falling pressure

The switching point on falling pressure is set by adjusting screw-nut **1**.

Switching point on rising pressure

The switching point on rising pressure is set by adjusting screw-nut **2**.



Pressure switches with non-adjustable differential (Types FTG, and FHG)

Only the switching point on rising pressure is adjustable.

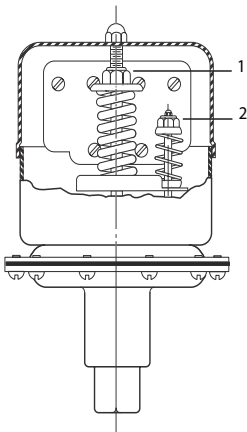
Switching point on rising pressure

The switching point on rising pressure is set by adjusting screw-nut **1**.

Switching point on falling pressure

The switching point on falling pressure is not adjustable.

The difference between the tripping and resetting points of the contact is the differential of the switch (contact differential, friction, etc.).



Pressure switches with adjustable differential (Type G)

When setting the pressure switch, adjust the switching point on rising pressure first and then the switching point on falling pressure.

Switching point on falling pressure

The switching point on falling pressure is set by adjusting screw-nut **1**.

Switching point on rising pressure

The switching point on rising pressure is set by adjusting screw-nut **2**.

Commercial Pressure Switches

Electromechanical Square D Brand 9013

For power circuits, FSG, FTG, FYG

| Environmental characteristics | | |
|-------------------------------|----------|--|
| Pressure switch type | | FSG FTG FYG |
| Conformity to standards | | UL 508, NEC Article 430-84, ANSI /NSF Standard 61, FDA 21CFR.2600 |
| Product Certifications | | UL File E12158 CCN NKPZ , CSA File LR 25490 Class 321106 |
| Protective treatment | | N/A |
| Ambient air temperature | °C | For operation, 0 °C (32 °F) min to 125 °C (257 °F) max For storage, -30 °C (-22 °F) min to 70 °C (158 °F) max |
| 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), diaphragm, nitrile or equivalent rubber |
| Operating position | | NEMA Type 1, and Type IP20 in any position, NEMA Type 3R in the vertical position only |
| Vibration | | — |
| Shock | | — |
| Electric shock | | — |
| Degree of protection | | NEMA Type 1, IP20 and NEMA Type 3R (some references) must be mounted in vertical position to maintain enclosure rating |
| Operating rate | cycles/m | 10 |
| Repeat accuracy | | +/- 3 % of the range |
| Fluid connection | | 1/8" NPSF internal, 1/4" NPSF internal, 1/2" NPT External, 1/4" Bayonet (barbed), 90 deg. Elbow 1/4" Bayonet, Four Way Flange, 3/8" NPSF (Internal), 1/4" Flare, other specials |
| Electrical connection | | 2 open side entries, 3/4" diameter, with two flats |

| Contact block characteristics | | |
|-------------------------------|--------|---|
| Type of contacts | | One 2 pole, 2 N/C (4 terminal) contacts, snap action |
| Resistance across terminals | m Ω | < 25 |
| Terminal referencing | | N/A |
| Short-circuit protection | A | 5,000 |
| Connection | | Screw clamp terminals. Clamping capacity up to #10 AWG (5.261 mm ²) |
| Electrical durability | cycles | 100,000 |
| Mechanical durability | cycles | 300,000 |

| Electrical Ratings | | | | | | | | | | |
|------------------------------------|-------------|--------------------|-------------------|---------------------|-------------------|--------------|---|------------------|-------------------|---------------------|
| 2 Pole | | FSG / FSW | | | FTG | | | FYG | | |
| Power ratings of controlled motors | Voltage | ~ 1-phase | ~ 3-phase | ≡ | ~ 1-phase | ~ 3-phase | ≡ | ~ 1-phase | ~ 3-phase | ≡ |
| | 115 V | 1.1 kW (1.5 HP) | 1.5 kW (2 HP) | 0.18 kW (.25 HP) | 0.75 kW (1 HP) | — | — | 1.5 kW (2 HP) | 2.2 kW (3 HP) | 0.37 kW (.50 HP) |
| | 230 V | 1.5 kW (2 HP) | 2.2 kW (3 HP) | 0.18 kW (.25 HP) | 0.75 kW (1 HP) | — | — | 2.2 kW (3 HP) | 3.7 kW (5 HP) | 0.37 kW (.50 HP) |
| | 460 / 575 V | — | 0.75 kW (1 HP) | — | — | — | — | — | 0.75 kW (1 HP) | — |

Commercial Pressure Switches

Electromechanical Square D Brand 9013

For power circuits, FRG, FHG, and G

Environmental characteristics

| Pressure switch type | | FRG | FHG | G |
|---------------------------|----------|---|-----|-----------------------------|
| Conformity to standards | | UL 508, NEC Article 430-84, ANSI /NSF Standard 61, FDA 21CFR.2600 | | |
| Product Certifications | | UL File E12158 CCN NKPZ , CSA File LR 25490 Class 321106 | | |
| Protective treatment | | N/A | | |
| Ambient air temperature | °C | For operation, 0 °C (32 °F) min to 125 °C (257 °F) max For storage, -30 °C (-22 °F) min to 70 °C (158 °F) max | | |
| 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) | | |
| Operating position | | NEMA Type 1, and Type IP20 in any position, NEMA Type 3R in the vertical position only | | |
| Vibration resistance | | — | | |
| Shock resistance | | — | | |
| Electric shock protection | | — | | |
| Degree of protection | | NEMA Type 1, IP20 and NEMA Type 3R (some references) must be mounted in vertical position to maintain enclosure rating | | |
| Operating rate | cycles/m | 10 | | |
| Repeat accuracy | | +/- 3 % of the range | | |
| Fluid connection | | 1/8" NPSF internal, 1/4" NPSF internal, 1/2"NPT External, 1/4" Bayonet (barbed), 90 deg. Elbow 1/4" Bayonet, Four Way Flange, 3/8" NPSF (Internal), 1/4" Flare, other specials | | |
| Electrical connection | | 2 open side entries, 3/4" diameter, with two flats | | 3 Conduit 1/2" Knockouts |

Contact block characteristics

| | | |
|-----------------------------|--------|---|
| Type of contacts | | One 2 pole, 2 N/C (4 terminal) contacts, snap action |
| Resistance across terminals | m Ω | < 25 |
| Terminal referencing | | N/A |
| Short-circuit protection | A | 5,000 |
| Connection | | Screw clamp terminals. Clamping capacity up to #10 AWG (5.261 mm ²) |
| Electrical durability | cycles | 100,000 |
| Mechanical durability | cycles | 300,000 |

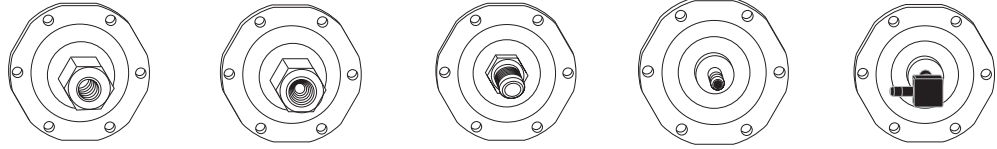
Electrical Ratings

| 1 Pole | | FRG | | | FHG ▲ ■ | | | G | | |
|--|-------------|-------------------|-------------------|---------------------|--------------------|-------------------|---------------------|-------------------|------------------|---------------------|
| Power ratings of controlled motors | Voltage | ~ 1-phase | ~ 3-phase | ≡ | ~ 1-phase | ~ 3-phase | ≡ | ~ 1-phase | ~ 3-phase | ≡ |
| | 32 V | — | — | — | — | — | — | — | — | — |
| Note: Type FRG and G are all Form H | 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) |
| ▲ Includes FHG 2, 3, 4, 9, 12, 13, 14, 19, 42, 44, 49 | 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) | — | — |
| 2 Pole | | ~ 1-phase | ~ 3-phase | ≡ | ~ 1-phase | ~ 3-phase | ≡ | ~ 1-phase | ~ 3-phase | ≡ |
| Note: ■ Includes FHG 22, 24, 29, 32, 33, 34, 39, 52, 54, 59 | 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) | — |

Commercial Pressure Switches

Electromechanical Square D Brand 9013
For power circuits, FSG
2-pole 2 N/C contacts
Degree of protection IP20, NEMA Type 1

Flange Style



Adjustable range of switching point 1.4...4.6 bar (20.3...66.7 psi)
Contacts open on rising pressure

| | | | | | |
|--------------------|--------------------|--------------------|-------------------|-----------------------|-------------------------|
| Differential | Adjustable | | | | |
| Fluid connections | 1/8" NPSF internal | 1/4" NPSF internal | 1/4" NPT external | 1/4" Bayonet (barbed) | 90 ° Elbow 1/4" Bayonet |
| References | | | | | |
| NEMA Type 1, IP20 | 9013FSG1 | 9013FSG2 | 9013FSG9 | 9013FSG10 | 9013FSG20 |
| NEMA Type 3R ■ | 9013FSW1 | 9013FSW2 | 9013FSW9 | 9013FSW10 | 9013FSW20 |
| Fluids controlled | Water | Water | Water | Water | Water |
| Pressure range | | | | | |
| Cut-Out PSIG (bar) | 20-65 (1.4-4.5) | 20-65 (1.4-4.5) | 20-65 (1.4-4.5) | 20-65 (1.4-4.5) | 20-65 (1.4-4.5) |
| Cut-In PSIG (bar) | 5-45 (0.3-3.1) | 5-45 (0.3-3.1) | 5-45 (0.3-3.1) | 5-45 (0.3-3.1) | 5-45 (0.3-3.1) |
| Weight lbs (kg) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) |

Complementary characteristics not shown under general characteristics

| | |
|---|--------------------------------|
| Differential PSIG (bar) | 15-30 (1.03-2.06) |
| Maximum permissible pressure PSIG (bar) | 65 (4.48) |
| Mechanical life | 300,000 operating cycles |
| Cable entry | 2 cable entries 0.88" (22.4mm) |
| Pressure switch type | Diaphragm |

Ordering Information

- 1 Specify Class 9013 Type FSG.
- 2 Select pressure code and add code designation to end of type number. Be sure that pressure code falls within the limits of the device as shown in the device listings.
- 3 If special features are desired, add the appropriate Form letter to the Class and Type. Arrange Form letters in alphabetical sequence when ordering more than one special feature. If no packaging code is indicated, devices will be shipped individually packaged.
- 4 Place packaging code at end of sequence with other forms when ordering.
For standard pack of 20 devices per box C20
Example: 9013FSG2J21MIC20

Pressure Codes

Below is the pressure code table.
Existence of a code does not imply that the code is available for any or all devices.

| Settings | Code |
|---------------------------|------|
| 5-21 PSI | J15 |
| 8-20 PSI | J16 |
| 20-40 PSI | J20 |
| 20-50 PSI | J18 |
| 30-50 PSI | J21 |
| 40-60 PSI | J24 |
| 50-70 PSI | J33 |
| 55-85 PSI | J34 |
| 60-80 PSI | J25 |
| Specify pressure settings | J99 |

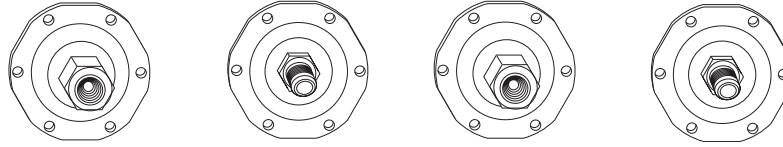
■ Must be mounted in vertical position to maintain enclosure rating.

Commercial Pressure Switches

Electromechanical Square D Brand 9013

For power circuits, FSG
2-pole 2 N/C contacts
Degree of protection IP20, NEMA Type 1

Flange Style



Adjustable range of switching point 1.4...4.6 bar (20.3...66.7 psi)
Contacts open on rising pressure

| | | | | | |
|---------------------------|------------------|------------------|------------------|------------------|-------------------------|
| Differential | Adjustable | | | | |
| Fluid connections | ¼" NPSF internal | ¼"NPT external | ¼" NPSF internal | ¼"NPT external | |
| References | | | | | |
| NEMA Type 1, IP20 | 9013FSG22 | 9013FSG29 | 9013FSG42 | 9013FSG49 | 9013FSG1 - 20 with M4 ♦ |
| NEMA Type 3R ■ | 9013FSW22 | 9013FSW29 | 9013FSW42 | 9013FSW49 | |
| Fluids controlled | Water | Water | Water | Water | Water |
| Pressure range | | | | | |
| Cut-Out PSIG (bar) | 20-50 (1.4-3.5) | 20-60 (1.4-4.1) | 9-30 (0.6-3.1) | 9-30 (0.6-3.1) | 34-65 (2.3-4.5) |
| Cut-In PSIG (bar) | 10-30 (0.7-2.1) | 10-45 (0.7-3.1) | 3-10 (0.2-0.7) | 3-10 (0.2-0.7) | 19-45 (1.3-3.1) |
| Weight lbs (kg) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) |

Complementary characteristics not shown under general characteristics

| | | | | | |
|--|---|-----------------|----------------|----------------|-----------------|
| Differential PSIG (bar) | 10-30 (0.7-2.1) | 10-30 (0.7-2.1) | 6-20 (0.4-1.4) | 6-20 (0.4-1.4) | 15-30 (1.0-2.1) |
| Maximum permissible pressure PSIG (bar) | 50 (3.5) | 60 (4.1) | 30 (2.1) | 30 (2.1) | 65 (4.5) |
| Mechanical life (operating cycles) | 300,000 | | | | |
| Cable entry | 2 cable entries 0.88" (22.4mm) with 0.84" (21.3mm) across flat. | | | | |
| Pressure switch type | Diaphragm | | | | |

Modifications

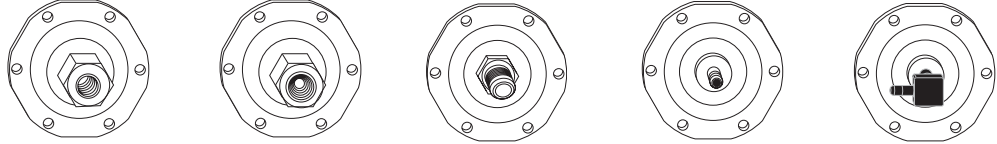
| Descripton | Applies to: | Form Letter |
|---|---------------------------------------|-------------|
| Standard pack of 20 devices per box | All type F | C20 |
| Maintained manual cut-out lever (AUTO-OFF) | FSG, FYG | M1 |
| Low pressure cut-off (AUTO-START-OFF) operates at approximately 10 PSIG below cut-in and will turn off the pump | FSG, FYG (Type 1-20 only) | M4 |
| Pulsation plug (standard on FSG4) | FSG2, 9 | P ♦ |
| Salt water flange (¼ NPSF Internal only) | All type F | Q |
| Plastic flange (max. temp 120 F / max. pressure 80 psi) | FRG, FSG, FYG ¼ NPSF internal only | Q8 |
| ½" conduit bushing - ½" long thread - on left | All type F | T |
| ½" conduit bushing - ½" long thread - on right | All type F | T1 |
| Slip-on connections (load side terminals only) | FSG, FYG | U |
| Slip-on connectors (line and load terminals) | FSG, FYG | U2 |
| Black cover | FSG, FYG | Z22 |

- ♦ Nylon pulsation plug can be field installed on types having 1/4" NPSF internal connector. Part number 1530S6G1 is one bag of 50 plugs.
- Must be mounted in vertical position to maintain enclosure rating.

Commercial Pressure Switches

Electromechanical Square D Brand 9013
For power circuits, FTG
2-pole 2 N/C contacts
Degree of protection IP20, NEMA Type 1

Flange Style



Non-adjustable range of switching point
Contacts open on rising pressure

| | | | | | |
|---------------------------|--------------------|--------------------|-------------------|-----------------------|-------------------------|
| Differential | Non-adjustable | | | | |
| Fluid connections | 1/8" NPSF internal | 1/4" NPSF internal | 1/4" NPT external | 1/4" Bayonet (barbed) | 90 ° Elbow 1/4" Bayonet |
| References | | | | | |
| NEMA Type 1, IP20 | 9013FTG1 | 9013FTG2 | 9013FTG9 | 9013FTG10 | 9013FTG20 |
| NEMA Type 3R ■ | 9013FTW1 | 9013FTW2 | 9013FTW9 | 9013FTW10 | 9013FTW20 |
| Fluids controlled | Water | Water | Water | Water | Water |
| Pressure range | | | | | |
| Cut-Out PSIG (bar) | 20-65 (1.4-4.5) | 20-65 (1.4-4.5) | 20-65 (1.4-4.5) | 20-65 (1.4-4.5) | 20-65 (1.4-4.5) |
| Cut-In PSIG (bar) | N/A | N/A | N/A | N/A | N/A |
| Weight lbs (kg) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) |

Complementary characteristics not shown under general characteristics

| | |
|--|---|
| Differential PSIG (bar) | 20 (1.4) |
| Maximum permissible pressure PSIG (bar) | 65 (4.5) |
| Mechanical life | 300, 000 operating cycles |
| Cable entry | 2 cable entries 0.88" (22.4mm) with 0.84" (21.3mm) across flat. |
| Pressure switch type | Diaphragm |

Ordering Information

- 1 Specify Class 9013 Type FTG.
- 2 Select pressure code and add code designation to end of type number. Be sure that pressure code falls within the limits of the device as shown in the device listings.
- 3 If special features are desired, add the appropriate Form letter to the Class and Type. Arrange Form letters in alphabetical sequence when ordering more than one special feature. If no packaging code is indicated, devices will be shipped individually packaged.
- 4 Place packaging code at end of sequence with other forms when ordering. Sold in lots or multiples of 500.
Example: 9013FTG2J21C500

Pressure Codes

Below is the pressure code table.
Existence of a code does not imply that the code is available for any or all devices.

| Settings | Code |
|---------------------------|------|
| 5-21 PSI | J15 |
| 8-20 PSI | J16 |
| 20-40 PSI | J20 |
| 20-50 PSI | J18 |
| 30-50 PSI | J21 |
| 40-60 PSI | J24 |
| 50-70 PSI | J33 |
| 55-85 PSI | J34 |
| 60-80 PSI | J25 |
| Specify pressure settings | J99 |

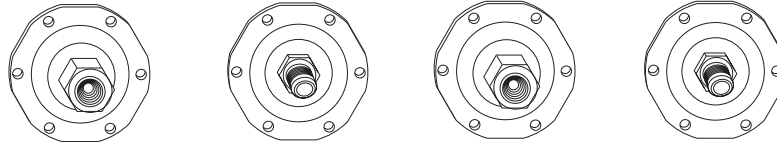
■ Must be mounted in vertical position to maintain enclosure rating.

Commercial Pressure Switches

Electromechanical Square D Brand 9013

For power circuits, FTG
2-pole 2 N/C contacts
Degree of protection IP20, NEMA Type 1

Flange Style



Non-adjustable range of switching point
Contacts open on rising pressure

| | | | | |
|--|---|-------------------|--------------------|-------------------|
| Differential | Non-adjustable | | | |
| Fluid connections | 1/4" NPSF internal | 1/4" NPT external | 1/4" NPSF internal | 1/4" NPT external |
| References | | | | |
| NEMA Type 1, IP20 | 9013FTG22 | 9013FTG29 | 9013FTG42 | 9013FTG49 |
| NEMA Type 3R ■ | 9013FTW22 | 9013FTW29 | 9013FTW42 | 9013FTW49 |
| Fluids controlled | Water | Water | Water | Water |
| Pressure range | | | | |
| Cut-Out PSIG (bar) | 20-50 (1.4-3.5) | 20-60 (1.4-4.1) | 9-30 (0.6-3.1) | 9-30 (0.6-3.1) |
| Cut-In PSIG (bar) | N/A | N/A | N/A | N/A |
| Weight lbs (kg) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) |
| Complementary characteristics not shown under general characteristics | | | | |
| Differential PSIG (bar) | 20 (1.4) | 15 (1.0) | 20 (1.4) | 20 (1.4) |
| Maximum permissible pressure PSIG (bar) | 50 (3.5) | 60 (4.1) | 30 (3.1) | 30 (3.1) |
| Mechanical life (operating cycles) | 300,000 | | | |
| Cable entry | 2 cable entries 0.88" (22.4mm) with 0.84" (21.3mm) across flat. | | | |
| Pressure switch type | Diaphragm | | | |

Modifications

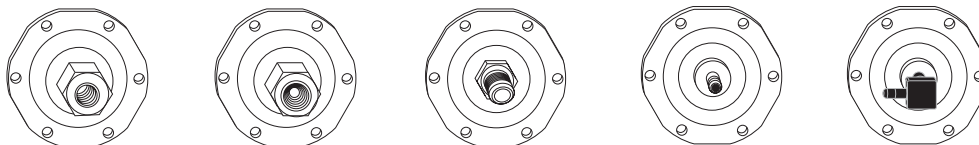
| Description | Applies to: | Form Letter |
|--|-------------------|-------------|
| Standard pack of 500 devices per box | All type FTG | C500 |
| Pulsation plug | FTG2, 9 | P ◆ |
| 1/2" conduit bushing - 1/2" long thread - on left | All type FTG | T |
| 1/2" conduit bushing - 1/2" long thread - on right | All type FTG | T1 |
| Slip-on connectors (line and load terminals) | All type FTG, FYG | U2 ▲ |
| Black cover | FTG, FYG | Z22 |

- ◆ Nylon pulsation plug can be field installed on types having 1/4" NPSF internal connector. Part number 1530S6G1 is one bag of 50 plugs.
- Must be mounted in vertical position to maintain enclosure rating.
- ▲ Slip-on connections on load side is standard

Commercial Pressure Switches

Electromechanical Square D Brand 9013
For power circuits, FYG
2-pole 2 N/C contacts
Degree of protection IP20, NEMA Type 1

Flange Style



Adjustable range of switching point
Contacts open on rising pressure

| | | | | | |
|--------------------|--------------------|--------------------|-------------------|-----------------------|-------------------------|
| Differential | Adjustable | | | | |
| Fluid connections | 1/8" NPSF internal | 1/4" NPSF internal | 1/4" NPT external | 1/4" Bayonet (barbed) | 90 ° Elbow 1/4" Bayonet |
| References | | | | | |
| NEMA Type 1, IP20 | 9013FYG1 | 9013FYG2 | 9013FYG9 | 9013FYG10 | 9013FYG20 |
| NEMA Type 3R ■ | 9013FYW1 | 9013FYW2 | 9013FYW9 | 9013FYW10 | 9013FYW20 |
| Fluids controlled | Water | Water | Water | Water | Water |
| Pressure range | | | | | |
| Cut-Out PSIG (bar) | 25-80 (1.7-5.5) | 25-80 (1.7-5.5) | 25-80 (1.7-5.5) | 25-80 (1.7-5.5) | 25-80 (1.7-5.5) |
| Cut-In PSIG (bar) | 5-60 (0.3-4.1) | 5-60 (0.3-4.1) | 5-60 (0.3-4.1) | 5-60 (0.3-4.1) | 5-60 (0.3-4.1) |
| Weight lbs (kg) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) |

Complementary characteristics not shown under general characteristics

| | |
|---|---|
| Differential PSIG (bar) | 20-30 (1.4-2.1) |
| Maximum permissible pressure PSIG (bar) | 80 (5.5) |
| Mechanical life | 300, 000 operating cycles |
| Cable entry | 2 cable entries 0.88" (22.4mm) with 0.84" (21.3mm) across flat. |
| Pressure switch type | Diaphragm |

Ordering Information

Pressure Codes

- 1 Specify Class 9013 Type FYG.
- 2 Select pressure code and add code designation to end of type number. Be sure that pressure code falls within the limits of the device as shown in the device listings.
- 3 If special features are desired, add the appropriate Form letter to the Class and Type. Arrange Form letters in alphabetical sequence when ordering more than one special feature.
- 4 Place packaging code at end of sequence with other forms when ordering. If no packaging code is indicated, devices will be shipped individually packaged.
For standard pack of 20 devices per box C20
Example: 9013FYG2J21C20

Below is the pressure code table.
Existence of a code does not imply that the code is available for any or all devices.

| Settings | Code |
|--------------------------|------|
| 5-21 PSI | J15 |
| 8-20 PSI | J16 |
| 20-40 PSI | J20 |
| 20-50 PSI | J18 |
| 30-50 PSI | J21 |
| 40-60 PSI | J24 |
| 50-70 PSI | J33 |
| 55-85 PSI | J34 |
| 60-80 PSI | J25 |
| Specify pressure setting | J99 |

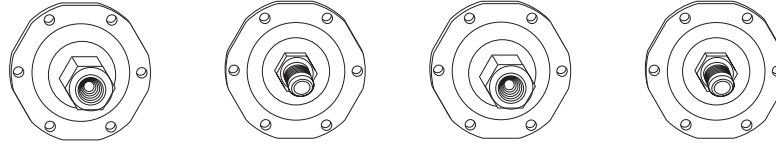
■ Must be mounted in vertical position to maintain enclosure rating.

Commercial Pressure Switches

Electromechanical Square D Brand 9013

For power circuits, FYG
2-pole 2 N/C contacts
Degree of protection IP20, NEMA Type 1

Flange Style



Adjustable range of switching point
Contacts open on rising pressure

| | | | | | |
|---------------------------|--------------------|-------------------|--------------------|------------------|-------------------------------|
| Differential | Adjustable | | | | |
| Fluid connections | 1/4" NPSF internal | 1/4" NPT external | 1/4" NPSF internal | 1/4"NPT external | |
| References | | | | | |
| NEMA Type 1, IP20 | 9013FYG22 | 9013FYG29 | 9013FYG42 | 9013FYG49 | 9013FYG1 - 20 FYG20 with M4 ♦ |
| NEMA Type 3R ■ | 9013FYW22 | 9013FYW29 | 9013FYW42 | 9013FYW49 | |
| Fluids controlled | Water | Water | Water | Water | Water |
| Pressure range | | | | | |
| Cut-Out PSIG (bar) | 25-50 (1.7-3.5) | 20-60 (1.4-4.1) | 9-40 (0.6-2.8) | 9-40 (0.6-2.8) | 39-80 (2.1-5.5) |
| Cut-In PSIG (bar) | 10-30 (0.7-2.1) | 10-45 (0.7-3.1) | 3-10 (0.2-0.7) | 3-10 (0.2-0.7) | 19-60 (1.3-4.1) |
| Weight lbs (kg) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) |

Complementary characteristics not shown under general characteristics

| | | | | | |
|--|---|-----------------|----------------|----------------|-----------------|
| Differential PSIG (bar) | 10-30 (0.7-3.1) | 10-30 (0.7-3.1) | 6-20 (0.4-1.4) | 6-20 (0.4-1.4) | 20-30 (1.4-2.1) |
| Maximum permissible pressure PSIG (bar) | 50 (3.5) | 60 (4.1) | 40 (2.8) | 40 (2.8) | 80 (5.5) |
| Mechanical life (operating cycles) | 300,000 | | | | |
| Cable entry | 2 cable entries 0.88" (22.4mm) with 0.84" (21.3mm) across flat. | | | | |
| Pressure switch type | Diaphragm | | | | |

Modifications

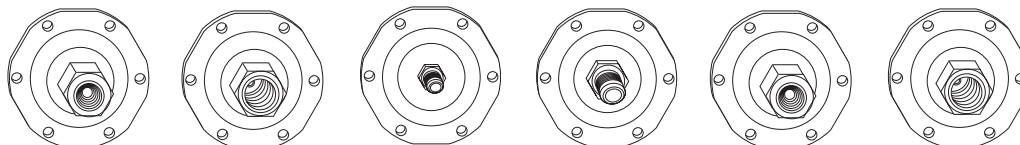
| Descriptor | Applies to: | Form Letter |
|---|---------------------------------------|-------------|
| Standard pack of 20 devices per box | All Type F | C20 |
| Maintained manual cut-out lever (AUTO-OFF) | FSG, FYG | M1 |
| Low pressure cut-off (AUTO-START-OFF) operates at approximately 10 PSIG below cut-in and will turn off the pump | FSG, FYG (Type 1-20 only) | M4 |
| Pulsation plug (standard on FYG4) | FYG2, 9 | P ♦ |
| Salt water flange (¼ NPSF Internal only) | All Type F | Q |
| Plastic flange (max. temp 120 F / max. pressure 80 psi) | FRG, FSG, FYG ¼ NPSF internal only | Q8 |
| ½" conduit bushing - ½" long thread - on left | All type F | T |
| ½" conduit bushing - ½" long thread - on right | All type F | T1 |
| 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 |

- ♦ Nylon pulsation plug can be field installed on types having 1/4" NPSF internal connector. Part number 1530S6G1 is one bag of 50 plugs.
- Must be mounted in vertical position to maintain enclosure rating.

Commercial Pressure Switches

Electromechanical Square D Brand 9013
For power circuits, FRG
1 or 2-pole 2 N/O contacts
Degree of protection IP20, NEMA Type 1

Flange Style



Adjustable range of switching point
Contacts open on falling pressure

| | | | | | | |
|---------------------------------|--------------------|--------------------|------------------|-------------------|--------------------|--------------------|
| Differential | Adjustable | | | | | |
| Fluid connections | 1/4" NPSF internal | 3/8" NPSF internal | 1/4" Flare | 1/4" NPT external | 1/4" NPSF internal | 3/8" NPSF internal |
| References | | | | | | |
| NEMA Type 1, IP20 1 pole | 9013FRG12 | 9013FRG13 | 9013FRG18 | 9013FRG19 | 9013FRG32 | 9013FRG33 |
| NEMA Type 1, IP20 2 pole | 9013FRG2 | 9013FRG3 | 9013FRG8 | 9013FRG9 | 9013FRG22 | 9013FRG23 |
| Fluids controlled | Water | Water | Water | Water | Water | Water |
| Pressure range | | | | | | |
| Cut-Out PSIG (bar) | 8-45 (0.6-3.1) | 8-45 (0.6-3.1) | 8-45 (0.6-3.1) | 8-45 (0.6-3.1) | 4-25 (0.3-1.7) | 4-25 (0.3-1.7) |
| Cut-In PSIG (bar) | 23-65 (1.6-4.5) | 23-65 (1.6-4.5) | 23-65 (1.6-4.5) | 23-65 (1.6-4.5) | 10-45 (0.7-3.1) | 10-45 (0.7-3.1) |
| Weight lbs (kg) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) |

Complementary characteristics not shown under general characteristics

| | | | | | | |
|--|---|-----------------|-----------------|-----------------|----------------|----------------|
| Differential PSIG (bar) | 15-30 (1.0-2.1) | 15-30 (1.0-2.1) | 15-30 (1.0-2.1) | 15-30 (1.0-2.1) | 6-20 (0.4-1.4) | 6-20 (0.4-1.4) |
| Maximum permissible pressure PSIG (bar) | 65 (4.5) | 65 (4.5) | 65 (4.5) | 65 (4.5) | 45 (3.1) | 45 (3.1) |
| Mechanical life | 300,000 operating cycles | | | | | |
| Cable entry | 2 cable entries 0.88" (22.4mm) with 0.84" (21.3mm) across flat. | | | | | |
| Pressure switch type | Diaphragm | | | | | |

Ordering Information

Pressure Codes

- 1 Specify Class 9013 Type FRG.
- 2 Select pressure code and add code designation to end of type number. Be sure that pressure code falls within the limits of the device as shown in the device listings.
- 3 If special features are desired, add the appropriate Form letter to the Class and Type. Arrange Form letters in alphabetical sequence when ordering more than one special feature.
- 4 Place packaging code at end of sequence with other forms when ordering. If no packaging code is indicated, devices will be shipped individually packaged.
For standard pack of 20 devices per box C20
Example: 9013FRG19M3J23C20

Below is the pressure code table.
Existence of a code does not imply that the code is available for any or all devices.

| Settings | Code |
|--------------------------|------|
| 8.5-5.5 PSI | J17 |
| 10-5 PSI | J36 |
| 22-12 PSI | J22 |
| 22-16 PSI | J19 |
| 35-20 PSI | J70 |
| 40-20 PSI | J23 |
| 50-30 PSI | J35 |
| 80-60 PSI | J32 |
| 100-80 PSI | J51 |
| 150-120 | J64 |
| Specify pressure setting | J99 |

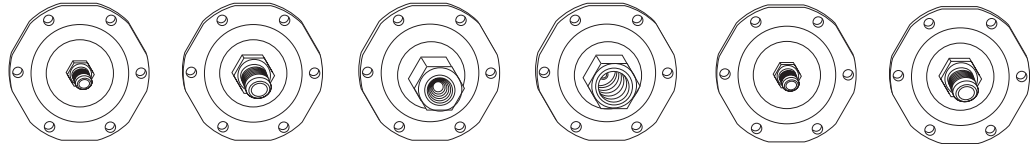
Commercial Pressure Switches

Electromechanical Square D Brand 9013

For power circuits, FRG

1 or 2-pole 2 N/O contacts Degree of protection IP20,
NEMA Type 1

Flange Style



Adjustable range of switching point
Contacts open on falling pressure

| Differential | Adjustable | | | Non-adjustable | | |
|--------------------------|------------------|-------------------|--------------------|--------------------|------------------|-------------------|
| Fluid connections | 1/4" Flare | 1/4" NPT external | 1/4" NPSF internal | 3/8" NPSF internal | 1/4" Flare | 1/4" NPT external |
| References | | | | | | |
| NEMA Type 1, IP20 1 pole | 9013FRG38 | 9013FRG39 | 9013FRG52 ▶ | 9013FRG53 ▶ | 9013FRG58 ▶ | 9013FRG59 ▶ |
| NEMA Type 1, IP20 2 pole | 9013FRG28 | 9013FRG29 | 9013FRG42 ▶ | 9013FRG43 ▶ | 9013FRG48 ▶ | 9013FRG49 ▶ |
| Fluids controlled | Water | Water | Water | Water | Water | Water |
| Pressure range | | | | | | |
| Cut-Out PSIG (bar) | 4-25 (0.3-1.7) | 4-25 (0.3-1.7) | 1-11 (0.1-0.8) | 1-11 (0.1-0.8) | 1-11 (0.1-0.8) | 1-11 (0.1-0.8) |
| Cut-In PSIG (bar) | 10-45 (0.7-3.1) | 10-45 (0.7-3.1) | 6-14 (0.4-1.0) | 6-14 (0.4-1.0) | 6-14 (0.4-1.0) | 6-14 (0.4-1.0) |
| Weight lbs (kg) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) |

Complementary characteristics not shown under general characteristics

| | | | | | | |
|---|---|----------------|----------|----------|----------|----------|
| Differential PSIG (bar) | 6-20 (0.4-1.4) | 6-20 (0.4-1.4) | 5 (0.3) | 5 (0.3) | 5 (0.3) | 5 (0.3) |
| Maximum permissible pressure PSIG (bar) | 45 (3.1) | 45(3.1) | 14 (1.0) | 14 (1.0) | 14 (1.0) | 14 (1.0) |
| Mechanical life (operating cycles) | 300,000 | | | | | |
| Cable entry | 2 cable entries 0.88" (22.4mm) with 0.84" (21.3mm) across flat. | | | | | |
| Pressure switch type | Diaphragm | | | | | |

Modifications

| Descripton | Applies to: | Form Letter |
|---|---------------------------------------|-------------|
| Standard pack of 20 devices per box | All Type F | C20 |
| One normally open / One normally closed contact | FRG (2 pole only) | H |
| Momentary manual cut-in lever (AUTO-START) | FRG2-59 only | M3 |
| Maintained manual cut-in lever (AUTO-ON) | FRG2-59 only | M5 |
| Pulsation plug | FRG2, 9 | P ♦ |
| Salt water flange (¼ NPSF Internal only) | All Type F | Q |
| Plastic flange (max. temp 120 F / maz. pressure 80 psi) | FRG, FSG, FYG ¼ NPSF internal only | Q8 |
| ½" conduit bushing - ½" long thread - on left | All type F | T |
| ½" conduit bushing - ½" long thread - on right | All type F | T1 |
| Black cover | FSG, FYG, FRG | Z22 |

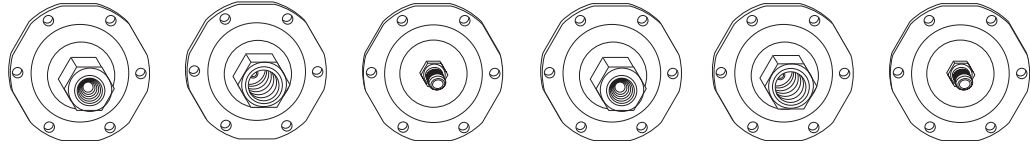
♦ Nylon pulsation plug can be field installed on types having 1/4" NPSF internal connector. Part number 1530S6G1 is one bag of 50 plugs.

Commercial Pressure Switches

Electromechanical Square D Brand 9013

For power circuits, FRG
1 or 2-pole 2 N/O contacts Degree of protection IP20,
NEMA Type 1

Flange Style



Adjustable range of switching point
Contacts open on falling pressure

| | | | | | | |
|--|---|--------------------|------------------|--------------------|--------------------|-------------------|
| Differential | Adjustable | | | | | |
| Fluid connections | 1/4" NPSF internal | 3/8" NPSF internal | 1/4" Flare | 1/4" NPSF internal | 3/8" NPSF internal | 1/4" Flare |
| References | | | | | | |
| NEMA Type 1, IP20 1 pole | 9013FRG72 | 9013FRG73 | 9013FRG78 | 9013FRG92 | 9013FRG93 | 9013FRG98 |
| NEMA Type 1, IP20 2 pole | 9013FRG62 | 9013FRG63 | 9013FRG68 | 9013FRG82 | 9013FRG83 | 9013FRG88 |
| Fluids controlled | Water | Water | Water | Water | Water | Water |
| Pressure range | | | | | | |
| Cut-Out PSIG (bar) | 20-75 (1.4-5.2) | 20-75 (1.4-5.2) | 20-75 (1.4-5.2) | 35-120 (2.4-8.3) | 35-120 (2.4-8.3) | 35-120 (2.4-8.3) |
| Cut-In PSIG (bar) | 40-100 (2.8-6.9) | 40-100 (2.8-6.9) | 40-100 (2.8-6.9) | 65-150 (4.5-10.3) | 65-150 (4.5-10.3) | 65-150 (4.5-10.3) |
| Weight lbs (kg) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) |
| Complementary characteristics not shown under general characteristics | | | | | | |
| Differential PSIG (bar) | 20-30 (1.4-2.1) | 20-30 (1.4-2.1) | 20-30 (1.4-2.1) | 30-45 (2.1-3.1) | 30-45 (2.1-3.1) | 30-45 (2.1-3.1) |
| Maximum permissible pressure PSIG (bar) | 100 (6.9) | 100 (6.9) | 100 (6.9) | 150 (10.3) | 150 (10.3) | 150 (10.3) |
| Mechanical life | 300,000 operating cycles | | | | | |
| Cable entry | 2 cable entries 0.88" (22.4mm) with 0.84" (21.3mm) across flat. | | | | | |
| Pressure switch type | Diaphragm | | | | | |

Ordering Information

- 1 Specify Class 9013 Type FRG.
- 2 Select pressure code and add code designation to end of type number. Be sure that pressure code falls within the limits of the device as shown in the device listings.
- 3 If special features are desired, add the appropriate Form letter to the Class and Type. Arrange Form letters in alphabetical sequence when ordering more than one special feature. If no packaging code is indicated, devices will be shipped individually packaged.
- 4 Place packaging code at end of sequence with other forms when ordering.
For standard pack of 20 devices per box C20
For individual packaged devices leave blank
Example: 9013FRG72J23C20

Pressure Codes

Below is the pressure code table.
Existence of a code does not imply that the code is available for any or all devices.

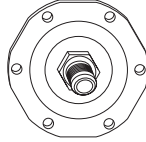
| Settings | Code |
|--------------------------|------|
| 8.5-5.5 PSI | J17 |
| 10-5 PSI | J36 |
| 22-12 PSI | J22 |
| 22-16 PSI | J19 |
| 35-20 PSI | J70 |
| 40-20 PSI | J23 |
| 50-30 PSI | J35 |
| 80-60 PSI | J32 |
| 100-80 PSI | J51 |
| 150-120 | J64 |
| Specify pressure setting | J99 |

Commercial Pressure Switches

Electromechanical Square D Brand 9013

For power circuits, FRG
1 or 2-pole 2 N/O contacts Degree of protection IP20,
NEMA Type 1

Flange Style



Adjustable range of switching point

Contacts open on falling pressure

| | |
|-------------------|-------------------|
| Differential | Adjustable |
| Fluid connections | 1/4" NPT external |

References

| | |
|--------------------------|--------------------|
| NEMA Type 1, IP20 1 pole | 9013FRG99 |
| NEMA Type 1, IP20 2 pole | 9013FRG89 |
| Fluids controlled | Water |
| Pressure range | |
| Cut-Out PSIG (bar) | 35-120 (2.4-8.3) |
| Cut-In PSIG (bar) | 60-150 (4.14-10.3) |
| Weight lbs (kg) | 0.75 lbs (0.340) |

Complementary characteristics not shown under general characteristics

| | |
|---|---|
| Differential PSIG (bar) | 30-45 (2,1-3.1) |
| Maximum permissible pressure PSIG (bar) | 150 (10.3) |
| Mechanical life (operating cycles) | 300,000 |
| Cable entry | 2 cable entries 0.88" (22.4mm) with 0.84" (21.3mm) across flat. |
| Pressure switch type | Diaphragm |

Modifications

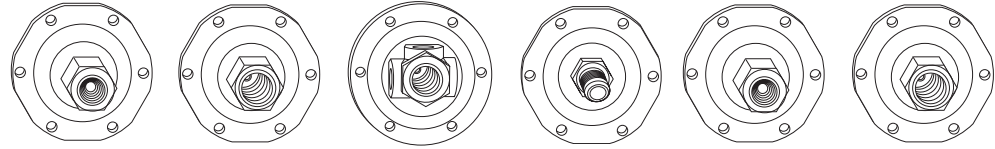
| Descriptor | Applies to: | Form Letter |
|---|---------------------------------------|-------------|
| Standard pack of 20 devices per box | All Type F | C20 |
| One normally open / One normally closed contact | FRG (2 pole only) | H |
| Momentary manual cut-in lever (AUTO-START) | FRG2-59 only | M3 |
| Maintained manual cut-in lever (AUTO-ON) | FRG2-59 only | M5 |
| Pulsation plug | FRG2, 9 | P ♦ |
| Salt water flange (¼ NPSF Internal only) | All Type F | Q |
| Plastic flange (max. temp 120 F / max. pressure 80 psi) | FRG, FSG, FYG ¼ NPSF internal only | Q8 |
| ½" conduit bushing - ½" long thread - on left | All type F | T |
| ½" conduit bushing - ½" long thread - on right | All type F | T1 |
| Black cover | FSG, FYG | Z22 |

♦ Nylon pulsation plug can be field installed on types having 1/4" NPSF internal connector. Part number 1530S6G1 is one bag of 50 plugs.

Commercial Pressure Switches

Electromechanical Square D Brand 9013
For power circuits FHG, Compressor
2-pole 2 N/C contacts
Degree of protection IP20, NEMA Type 1

Flange Style



Adjustable range of switching point
Contacts open on rising pressure

| | | | | | | |
|--|--------------------|--------------------|-------------------|-------------------|--------------------|--------------------|
| Differential | Non-adjustable | | | | | |
| Pressure connections | 1/4" NPSF internal | 3/8" NPSF internal | 1/4" 4 way flange | 1/4" NPT external | 1/4" NPSF internal | 3/8" NPSF internal |
| References | | | | | | |
| NEMA Type 1, IP20 - 2 pole - Lower hp | 9013FHG2 | 9013FHG3 | 9013FHG44 | 9013FHG9 | 9013FHG12 | 9013FHG13 |
| NEMA Type 1, IP20 - 2 pole -Higher hp | 9013FHG22 | — | 9013FHG24 | 9013FHG29 | 9013FHG32 | 9013FHG33 |
| Controls | Air | Air | Air | Air | Air | Air |
| Pressure range | | | | | | |
| Adjustable Cut-Out PSIG (bar) | 40-100 (2.8-6.9) | 40-100 (2.8-6.9) | 40-100 (2.8-6.9) | 40-100 (2.8-6.9) | 70-150 (4.8-10.3) | 70-100 (4.8-10.3) |
| Weight lbs (kg) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) |

Complementary characteristics not shown under general characteristics

| | | | | | | |
|--|---|-----------|-----------|-----------|------------|------------|
| Differential PSIG (bar) Non-adjustable | 20 (1.4) | 20 (1.4) | 20 (1.4) | 20 (1.4) | 30 (2.1) | 30 (2.1) |
| Maximum permissible pressure PSIG (bar) | 100 (6.9) | 100 (6.9) | 100 (6.9) | 100 (6.9) | 150 (10.3) | 150 (10.3) |
| Mechanical life | 300, 000 operating cycles | | | | | |
| Cable entry | 2 cable entries 0.88" (22.4mm) with 0.84" (21.3mm) across flat. | | | | | |
| Pressure switch type | Diaphragm | | | | | |

Ordering Information

Pressure Codes

Below is the pressure code table.
Existence of a code does not imply that the code is available for any or all devices.

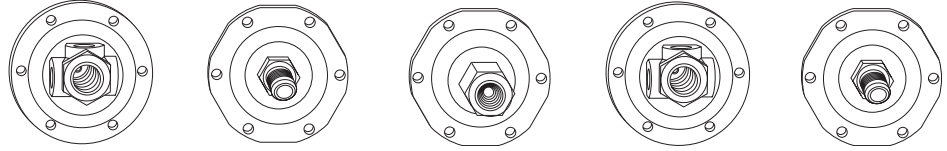
- Specify Class 9013 Type FHG.
- Select pressure code and add code designation to end of type number. Be sure that pressure code falls within the limits of the device as shown in the device listings.
- If special features are desired, add the appropriate Form letter to the Class and Type. Arrange Form letters in alphabetical sequence when ordering more than one special feature. If no packaging code is indicated, devices will be shipped individually packaged.
- Place packaging code at end of sequence with other forms when ordering.
For standard pack of 20 devices per box C20
Example: 9013FHG19J52MIXC20

| Settings | Code |
|--------------------------|------|
| Off at 100 PSI | J27 |
| Off at 110 PSI | J37 |
| Off at 115 PSI | J38 |
| Off at 120 PSI | J69 |
| Off at 125 PSI | J52 |
| Off at 135 PSI | J39 |
| Off at 140 PSI | J68 |
| Off at 150 PSI | J55 |
| Off at 155 PSI | J40 |
| Off at 175 PSI | J59 |
| Specify pressure setting | J99 |

Commercial Pressure Switches

Electromechanical Square D Brand 9013
For power circuits FHG, Compressor
2-pole 2 N/C contacts
Degree of protection IP20, NEMA Type 1

Flange Style



Adjustable range of switching point
Contacts open on rising pressure

| | | | | | |
|--|---|-------------------|--------------------|--------------------|--------------------|
| Differential | Non-adjustable | | | | |
| Pressure connections | Four way flange | 1/4" NPT external | 1/4" NPSF internal | Four way flange | 1/4" NPT external |
| References | | | | | |
| NEMA Type 1, IP20 - 2 pole - Lower hp | 9013FHG14 | 9013FHG19 | 9013FHG42 | 9013FHG44 | 9013FHG49 |
| NEMA Type 1, IP20 - 2 pole - Higher hp | 9013FHG34 | 9013FHG39 | 9013FHG52 | 9013FHG54 | 9013FHG59 |
| Controls | Air | Air | Air | Air | Air |
| Pressure range | | | | | |
| Adjustable Cut-Out PSIG (bar) | 70-150 (4.8-10.3) | 70-150 (4.8-10.3) | 100-200 (6.9-13.8) | 100-200 (6.9-13.8) | 100-200 (6.9-13.8) |
| Weight lbs (kg) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) | 0.75 lbs (0.340) |
| Complementary characteristics not shown under general characteristics | | | | | |
| Differential PSIG (bar) Non-adjustable | 30 (2.1) | 30 (2.1) | 40 (2.8) | 40 (2.8) | 40 (2.8) |
| Maximum permissible pressure PSIG (bar) | 150 (10.3) | 150 (10.3) | 200 (13.8) | 200 (13.8) | 200 (13.8) |
| Mechanical life (operating cycles) | 300,000 | | | | |
| Cable entry | 2 cable entries 0.88" (22.4mm) with 0.84" (21.3mm) across flat. | | | | |
| Pressure switch type | Diaphragm | | | | |

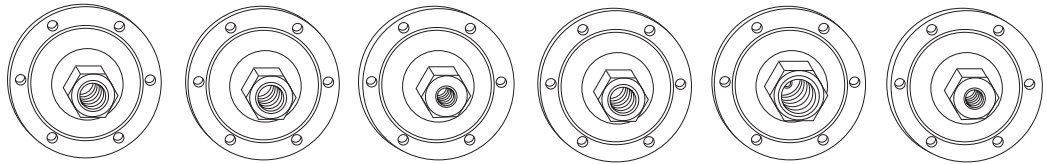
Modifications

| Descripton | Form Letter |
|---|---------------------------|
| Standard pack of 20 devices per box | C20 |
| Addition of a second ground screw | G4 |
| Maintained manual cut-out lever (AUTO-OFF) | M1 |
| Pulsation plug (copper) | P (not field installable) |
| 1/2" conduit bushing - 1/2" long thread - on left | T |
| 1/2" conduit bushing - 1/2" long thread - on right | T1 |
| Slip-on connections (load side terminals only) | U |
| Slip-on connectors (line and load terminals) | U2 |
| Factory sealed range stud | W |
| Two-way pressure release valve | X |
| Quick connect two-way pressure release valve (for use with Polyflow Tubing) | X1 |
| Black cover | Z22 |

Commercial Pressure Switches

Electromechanical Square D Brand 9013
For power circuits, G
2-pole 2 N/C contacts
Degree of protection IP20, NEMA Type 1, 3R, 7 & 9

Flange Style



Adjustable range of switching point

Contacts open on rising pressure

2 Pole

| | | | | | | |
|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Fluid connections | 1/4" NPSF internal | 1/4" NPSF internal | 1/8" NPSF internal | 1/4" NPSF internal | 3/8" NPSF internal | 1/8" NPSF internal |
|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|

References

| | | | | | | |
|------------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| NEMA Type 1, IP20 | 9013GMG2 | | 9013GSG1 | 9013GSG2 | 9013GSG3 | |
| NEMA Type 3R ■ | | 9013GSB2 | | | | |
| NEMA Type 7, NEMA Type 9 | | | | | | 9013GSR1 |
| Fluids / Pressure controlled | Water or Air | Water or Air | Water or Air | Water or Air | Water or Air | Water or Air |
| Pressure range | | | | | | |
| Cut-Out PSIG (bar) | 10-35 (0.7-2.4) | 20-80 (1.4-5.5) | 20-80 (1.4-5.5) | 20-80 (1.4-5.5) | 20-80 (1.4-5.5) | 20-80 (1.4-5.5) |
| Cut-In PSIG (bar) | 5.5-30.5 (0.4-2.1) | 5-60 (0.4-4.1) | 5-60 (0.4-4.1) | 5-60 (0.4-4.1) | 5-60 (0.4-4.1) | 5-50 (0.4-4.1) |
| Weight lbs (kg) | 2 lbs (0.91) | 2 lbs (0.91) | 2 lbs (0.91) | 2 lbs (0.91) | 2 lbs (0.91) | 8 lbs (3.62) |

Complementary characteristics not shown under general characteristics

| | | | | | | |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------|
| Differential PSIG (bar) | 4-8 (0.3-0.6) | 15-30 (1.0-2.1) | 15-30 (1.0-2.1) | 15-30 (1.0-2.1) | 15-30 (1.0-2.1) | 20-40 (1.4-2.8) |
| Maximum permissible pressure PSIG (bar) | 35 (2.4) | 80 (5.5) | 80 (5.5) | 80 (5.5) | 80 (5.5) | 80 (5.5) |
| Mechanical life | 300,000 operating cycles | | | | | |
| Cable entry | 3 Conduit 1/2" Knockouts | 3 Conduit 1/2" Knockouts | 3 Conduit 1/2" Knockouts | 3 Conduit 1/2" Knockouts | 3 Conduit 1/2" Knockouts | 2 3/4"-14NPT |
| Pressure switch type | Diaphragm | | | | | |

Ordering Information

Pressure Codes

Below is the pressure code table.
Existence of a code does not imply that the code is available for any or all devices.

| Settings | Code |
|--------------------------|------|
| 20-40 PSI | J20 |
| 30-50 PSI | J21 |
| 40-20 PSI | J23 |
| 40-60 PSI | J24 |
| 60-80 PSI | J25 |
| 70-90 PSI | J26 |
| 70-100 PSI | J28 |
| 75-100 PSI | J29 |
| 80-100 PSI | J30 |
| 90-120 PSI | J31 |
| 100-80 PSI | J51 |
| 100-125 PSI | J53 |
| 110-125 PSI | J54 |
| 110-150 PSI | J56 |
| 120-150 PSI | J57 |
| 125-150 PSI | J58 |
| 125-175 PSI | J60 |
| 130-175 PSI | J61 |
| 140-170 PSI | J66 |
| 140-175 PSI | J62 |
| 145-175 PSI | J63 |
| 150-120 PSI | J64 |
| 150-175 PSI | J67 |
| 215-250 PSI | J65 |
| Specify pressure setting | J99 |

- 1 Specify Class 9013 Type G.
- 2 Select pressure code and add code designation to end of type number. Be sure that pressure code falls within the limits of the device as shown in the device listings.
- 3 If special features are desired, add the appropriate Form letter to the Class and Type. Arrange Form letters in alphabetical sequence when ordering more than one special feature.
- 4 Place packaging code at end of sequence with other forms when ordering. If no packaging code is indicated, devices will be shipped individually packaged.
For standard pack of 10 devices per box C10
Available on GHB, GHG, GSB, and GSG

See page 23 for Form C10.

- Must be mounted in vertical position to maintain enclosure rating.

Commercial Pressure Switches

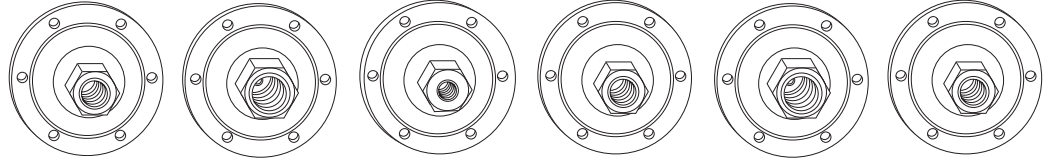
Electromechanical Square D Brand 9013

For power circuits, G

2-pole 2 N/C contacts

Degree of protection IP20, NEMA Type 3R, 4, 7 & 9

Flange Style



Adjustable range of switching point

Contacts open on rising pressure

| | | | | | | |
|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Fluid connections | 1/4" NPSF internal | 3/8" NPSF internal | 1/8" NPSF internal | 1/4" NPSF internal | 3/8" NPSF internal | 1/4" NPSF internal |
|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|

References

| | | | | | | |
|------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| NEMA Type 3R | | | | | | 9013GHB2 |
| NEMA Type 4 | | | | | | |
| NEMA Type 7, NEMA Type 9 | 9013GSR2 | 9013GSR3 | 9013GSW1 | 9013GSW2 | 9013GSW3 | |
| Fluids / Pressure controlled | Water or Air | Water or Air | Water or Air | Water or Air | Water or Air | Water or Air |
| Pressure range | | | | | | |
| Cut-Out PSIG (bar) | 20-80 | 20-80 | 20-80 | 20-80 | 20-80 | 60-200 |
| Cut-In PSIG (bar) | 5-50 | 5-50 | 5-50 | 5-50 | 5-50 | 40-170 |
| Weight lbs (kg) | 8 lbs (3.62) | 8 lbs (3.62) | 8 lbs (3.62) | 8 lbs (3.62) | 8 lbs (3.62) | 2 lbs (0.91) |

Complementary characteristics not shown under general characteristics

| | | | | | | |
|---|------------------|------------------|------------------|------------------|------------------|-----------------------------|
| Differential PSIG (bar) | 20-40 (1.4-2.8) | 20-40 (1.4-2.8) | 20-40 (1.4-2.8) | 20-40 (1.4-2.8) | 20-40 (1.4-2.8) | 20-40 (1.4-2.8) |
| Maximum permissible pressure PSIG (bar) | 80 (5.5) | 80 (5.5) | 80 (5.5) | 80 (5.5) | 80 (5.5) | 200 (13.8) |
| Mechanical life (operating cycles) | 300,000 | | | | | |
| Cable entry | 2 3/4"-14 NPT | 2 3/4"-14 NPT | 2 3/4"-14 NPT | 2 3/4"-14 NPT | 2 3/4"-14 NPT | 3 Conduit 1/2" Knockouts |
| Pressure switch type | Diaphragm | | | | | |

Modifications

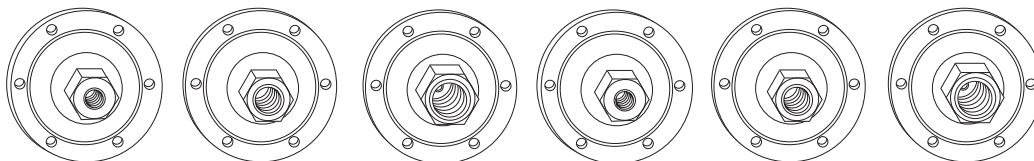
| Description | Applies to: | Form Letter |
|---|---|---------------------------|
| Standard pack of 10 devices per box | GHB, GHG, GSB, GSG | C10 |
| 3-Way lever (On-Auto-Off) not compatible with Form X | GHG, GMG, GSG | E |
| One normally open / One normally closed contact | All type G | H ● |
| Pulsation plug (copper) | All type G | P (not field installable) |
| Reverse action / Two normally open contacts | All type G | R ● |
| Slip-on connectors (load side terminals only) | All type G | U |
| Slip-on connectors (line and load terminals) | All type G | U2 |
| 2-Way pressure release valve (not compatible with Form E) | GHB, GMG, GSB, GHG, GSG, GHR, GHW, GSR, GSW | X |
| 1/4" Male pipe thread on pressure connection | All type G | Z |
| 1/2" - 14 NPT external | All type G | Z16 |
| 1/4" - 18 NPT internal | | |
| 3/8" Male pipe thread on pressure connection | All type G | Z23 |

● Cannot order Form R when ordering Form H

Commercial Pressure Switches

Electromechanical Square D Brand 9013
For power circuits G
2-pole 2 N/C contacts
Degree of protection IP20, NEMA Type 1, 7 & 9

Flange Style



Adjustable range of switching point
Contacts open on rising pressure
2 Pole

| | | | | | | |
|--------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Fluid connections | 1/8" NPSF internal | 1/4" NPSF internal | 3/8" NPSF internal | 1/8" NPSF internal | 1/4" NPSF internal | 3/8" NPSF internal |
|--------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|

References

| | | | | | | |
|-------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| NEMA Type 1, IP20 | 9013GHG1 | 9013GHG2 | 9013GHG3 | | | |
| NEMA Type 7, NEMA Type 9 | | | | 9013GHR1 | 9013GHR2 | 9013GHR3 |
| Fluids / Pressure controlled | Water or Air | Water or Air | Water or Air | Water or Air | Water or Air | Water or Air |
| Pressure range | | | | | | |
| Cut-Out PSIG (bar) | 60-200 | 60-200 | 60-200 | 65-200 | 65-200 | 65-200 |
| Cut-In PSIG (bar) | 40-170 | 40-170 | 40-170 | 35-150 | 35-150 | 35-150 |
| Weight lbs (kg) | 2 lbs (0.91) | 2 lbs (0.91) | 2 lbs (0.91) | 8 lbs (3.62) | 8 lbs (3.62) | 8 lbs (3.62) |

Complementary characteristics not shown under general characteristics

| | | | | | | |
|--|-----------------------------|-----------------------------|-----------------------------|------------------|------------------|------------------|
| Differential PSIG (bar) | 20-40 (1.4-2.8) | 20-40 (1.4-2.8) | 20-40 (1.4-2.8) | 30-50 (2.1-3.5) | 30-50 (2.1-3.5) | 30-50 (2.1-3.5) |
| Maximum permissible pressure PSIG (bar) | 80 (5.5) | 80 (5.5) | 80 (5.5) | 80 (5.5) | 80 (5.5) | 200 (13.8) |
| Mechanical life | 300,000 operating cycles | | | | | |
| Cable entry | 3 Conduit 1/2" Knockouts | 3 Conduit 1/2" Knockouts | 3 Conduit 1/2" Knockouts | 2 3/4"-14 NPT | 2 3/4"-14 NPT | 2 3/4"-14 NPT |
| Pressure switch type | Diaphragm | | | | | |

Ordering Information

Pressure Codes

Below is the pressure code table.
Existence of a code does not imply that the code is available for any or all devices.

| Settings | Code |
|---------------------------|------|
| 20-40 PSI | J20 |
| 30-50 PSI | J21 |
| 40-20 PSI | J23 |
| 40-60 PSI | J24 |
| 60-80 PSI | J25 |
| 70-90 PSI | J26 |
| 70-100 PSI | J28 |
| 75-100 PSI | J29 |
| 80-100 PSI | J30 |
| 90-120 PSI | J31 |
| 100-80 PSI | J51 |
| 100-125 PSI | J53 |
| 110-125 PSI | J54 |
| 110-150 PSI | J56 |
| 120-150 PSI | J57 |
| 125-150 PSI | J58 |
| 125-175 PSI | J60 |
| 130-175 PSI | J61 |
| 140-170 PSI | J66 |
| 140-175 PSI | J62 |
| 145-175 PSI | J63 |
| 150-120 PSI | J64 |
| 150-175 PSI | J67 |
| 215-250 PSI | J65 |
| Specify pressure settings | J99 |

- 1 Specify Class 9013 Type G.
- 2 Select pressure code and add code designation to end of type number. Be sure that pressure code falls within the limits of the device as shown in the device listings.
- 3 If special features are desired, add the appropriate Form letter to the Class and Type. Arrange Form letters in alphabetical sequence when ordering more than one special feature.
- 4 Place packaging code at end of sequence with other forms when ordering. If no packaging code is indicated, devices will be shipped individually packaged.
For standard pack of 10 devices per box C10
Available on GHG, GHG, GSB, and GSG

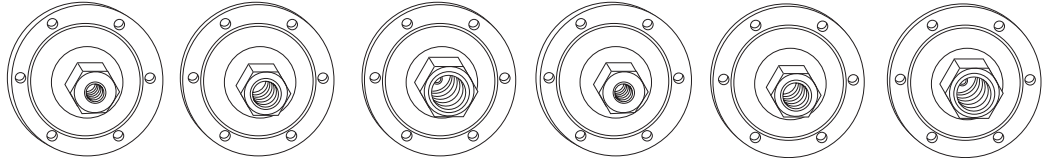
See page 25 for Form C10.

Commercial Pressure Switches

Electromechanical Square D Brand 9013

For power circuits, G
2-pole 2 N/C contacts
Degree of protection IP20, NEMA Type 1, 3R, & 4

Flange Style



Adjustable range of switching point
Contacts open on rising pressure
2 Pole

| | | | | | | |
|--------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Fluid connections | 1/8" NPSF internal | 1/4" NPSF internal | 3/8" NPSF internal | 1/4" NPSF internal | 1/8" NPSF internal | 1/4" NPSF internal |
|--------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|

References

| | | | | | | |
|-------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| NEMA Type 1, IP20 | | | | | 9013GHG4 | 9013GHG5 |
| NEMA Type 3R | | | | 9013GHB5 | | |
| NEMA Type 4 | 9013GHW1 | 9013GHW2 | 9013GHW3 | | | |
| Fluids / Pressure controlled | Water or Air | Water or Air | Water or Air | Water or Air | Water or Air | Water or Air |
| Pressure range | | | | | | |
| Cut-Out PSIG (bar) | 65-200 (4.5-13.8) | 65-200 (4.5-13.8) | 65-200 (4.5-13.8) | 80-250 (5.5-17.2) | 80-250 (5.5-17.2) | 80-250 (5.5-17.2) |
| Cut-In PSIG (bar) | 35-150 (2.4-10.3) | 35-150 (2.4-10.3) | 35-150 (2.4-10.3) | 32-215 (2.2-14.8) | 32-215 (2.2-14.8) | 32-215 (2.2-14.8) |
| Weight lbs (kg) | 8 lbs (3.62) | 8 lbs (3.62) | 8 lbs (3.62) | 2 lbs (0.91) | 2 lbs (0.91) | 2 lbs (0.91) |

Complementary characteristics not shown under general characteristics

| | | | | | | |
|--|------------------|------------------|------------------|-----------------------------|-----------------------------|-----------------------------|
| Differential PSIG (bar) | 30-50 (2.1-3.5) | 30-50 (2.1-3.5) | 30-50 (2.1-3.5) | 25-45 (1.7-3.1) | 25-45 (1.7-3.1) | 25-45 (1.7-3.1) |
| Maximum permissible pressure PSIG (bar) | 200 (13.8) | 200 (13.8) | 200 (13.8) | 250 (17.2) | 250 (17.2) | 250 (17.2) |
| Mechanical life (operating cycles) | 300,000 | | | | | |
| Cable entry | 2 3/4"-14 NPT | 2 3/4"-14 NPT | 2 3/4"-14 NPT | 3 Conduit 1/2" Knockouts | 3 Conduit 1/2" Knockouts | 3 Conduit 1/2" Knockouts |
| Pressure switch type | Diaphragm | | | | | |

Modifications

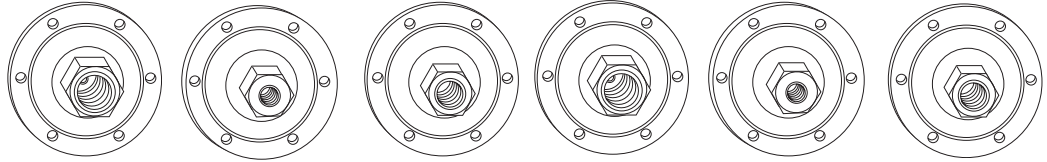
| Description | Applies to: | Form Letter |
|---|---|---------------------------|
| Standard pack of 10 devices per box | GHB, GHG, GSB, GSG | C10 |
| 3-Way lever (On-Auto-Off) not compatible with Form X | GHG, GMG, GSG | E |
| One normally open / One normally closed contact | All type G | H ● |
| Pulsation plug (copper) | All type G | P (not field installable) |
| Reverse action / Two normally open contacts | All type G | R ● |
| Slip-on connectors (load side terminals only) | All type G | U |
| Slip-on connectors (line and load terminals) | All type G | U2 |
| 2-Way pressure release valve (not compatible with Form E) | GHB, GMG, GSB, GHG, GSG, GHR, GHW, GSR, GSW | X |
| 1/4" Male pipe thread on pressure connection | All type G | Z |
| 1/2" - 14 NPT external | All type G | Z16 |
| 1/4" - 18 NPT internal | | |
| 3/8" Male pipe thread on pressure connection | All type G | Z23 |

● Cannot order Form R when ordering Form H

Commercial Pressure Switches

Electromechanical Square D Brand 9013
For power circuits, G
2-pole 2 N/C contacts
Degree of protection IP20, NEMA Type 1, 4, 7 & 9

Flange Style



Adjustable range of switching point
Contacts open on rising pressure
2 Pole

| | | | | | | |
|--------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Fluid connections | 3/8" NPSF internal | 1/8" NPSF internal | 1/4" NPSF internal | 3/8" NPSF internal | 1/8" NPSF internal | 1/4" NPSF internal |
|--------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|

References

| | | | | | | |
|-------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| NEMA Type 1, IP20 | 9013GHG6 | | | | | |
| NEMA Type 4 | | | | | 9013GHW4 | 9013GHW5 |
| NEMA Type 7, NEMA Type 9 | | 9013GHR4 | 9013GHR5 | 9013GHR6 | | |
| Fluids / Pressure controlled | Water or Air | Water or Air | Water or Air | Water or Air | Water or Air | Water or Air |
| Pressure range | | | | | | |
| Cut-Out PSIG (bar) | 80-250 (5.5-17.2) | 80-250 (5.5-17.2) | 80-250 (5.5-17.2) | 80-250 (5.5-17.2) | 80-250 (5.5-17.2) | 80-250 (5.5-17.2) |
| Cut-In PSIG (bar) | 32-215 (2.2-14.8) | 30-190 (2.0-13.1) | 30-190 (2.0-13.1) | 30-190 (2.0-13.1) | 30-190 (2.0-13.1) | 30-190 (2.0-13.1) |
| Weight lbs (kg) | 2 lbs (0.91) | 8 lbs (3.62) | 8 lbs (3.62) | 8 lbs (3.62) | 8 lbs (3.62) | 8 lbs (3.62) |

Complementary characteristics not shown under general characteristics

| | | | | | | |
|--|-----------------------------|-----------------|------------------|------------------|------------------|------------------|
| Differential PSIG (bar) | 25-45 (1.7-3.1) | 40-60 (2.8-4.1) | 40-60 (2.8-4.1) | 40-60 (2.8-4.1) | 40-60 (2.8-4.1) | 40-60 (2.8-4.1) |
| Maximum permissible pressure PSIG (bar) | 250 (17.2) | 250 (17.2) | 250 (17.2) | 250 (17.2) | 250 (17.2) | 250 (17.2) |
| Mechanical life | 300, 000 operating cycles | | | | | |
| Cable entry | 3 Conduit 1/2" Knockouts | 2 3/4"-14NPT | 2 3/4"-14 NPT | 2 3/4"-14 NPT | 2 3/4"-14 NPT | 2 3/4"-14 NPT |
| Pressure switch type | Diaphragm | | | | | |

Ordering Information

Pressure Codes

Below is the pressure code table.
Existence of a code does not imply that the code is available for any or all devices.

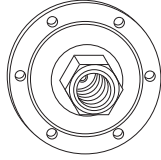
| Settings | Code |
|---------------------------|------|
| 20-40 PSI | J20 |
| 30-50 PSI | J21 |
| 40-20 PSI | J23 |
| 40-60 PSI | J24 |
| 60-80 PSI | J25 |
| 70-90 PSI | J26 |
| 70-100 PSI | J28 |
| 75-100 PSI | J29 |
| 80-100 PSI | J30 |
| 90-120 PSI | J31 |
| 100-80 PSI | J51 |
| 100-125 PSI | J53 |
| 110-125 PSI | J54 |
| 110-150 PSI | J56 |
| 120-150 PSI | J57 |
| 125-150 PSI | J58 |
| 125-175 PSI | J60 |
| 130-175 PSI | J61 |
| 140-170 PSI | J66 |
| 140-175 PSI | J62 |
| 145-175 PSI | J63 |
| 150-120 PSI | J64 |
| 150-175 PSI | J67 |
| 215-250 PSI | J65 |
| Specify pressure settings | J99 |

- 1 Specify Class 9013 Type G.
- 2 Select pressure code and add code designation to end of type number. Be sure that pressure code falls within the limits of the device as shown in the device listings.
- 3 If special features are desired, add the appropriate Form letter to the Class and Type. Arrange Form letters in alphabetical sequence when ordering more than one special feature.
- 4 Place packaging code at end of sequence with other forms when ordering. If no packaging code is indicated, devices will be shipped individually packaged.
For standard pack of 10 devices per box C10
For individual packaged devices leave blank
Available on GHB, GHG, GSB, and GSG

Commercial Pressure Switches

Electromechanical Square D Brand 9013
For power circuits, G
2-pole 2 N/C contacts
Degree of protection IP20, NEMA Type 4, 7, & 9

Flange Style



Adjustable range of switching point
Contacts open on rising pressure
2 Pole

| | | | | | |
|--|--------------------|--|--|--|--|
| Fluid connections | 3/8" NPSF internal | | | | |
| References | | | | | |
| NEMA Type 4 | 9013GHW6 | | | | |
| NEMA Type 7, NEMA Type 9 | | | | | |
| Fluids / Pressure controlled | Water or Air | | | | |
| Pressure range | | | | | |
| Cut-Out PSIG (bar) | 80-250 (5.5-17.2) | | | | |
| Cut-In PSIG (bar) | 30-190 (2.0-13.1) | | | | |
| Weight lbs (kg) | 8 lbs (3.62) | | | | |
| Complementary characteristics not shown under general characteristics | | | | | |
| Differential PSIG (bar) | 40-60 (2.8-4.1) | | | | |
| Maximum permissible pressure PSIG (bar) | 250 (17.2) | | | | |
| Mechanical life (operating cycles) | 300,000 | | | | |
| Cable entry | 2 3/4"-14 NPT | | | | |
| Pressure switch type | Diaphragm | | | | |

Modifications

| Descripton | Applies to: | Form Letter |
|---|---|---------------------------|
| Standard pack of 10 devices per box | All Type G | C10 |
| 3-Way lever (On-Auto-Off) not compatible with Form X | GHG, GMG, GSG | E |
| One normally open / One normally closed contact | All type G | H ◉ |
| Pulsation plug (copper) | All type G | P (not field installable) |
| Reverse action | All type G | R ◉ |
| Slip-on connectors (load side terminals only) | All type G | U |
| Slip-on connectors (line and load terminals) | All type G | U2 |
| 2-Way pressure release valve (not compatible with Form E) | GHB, GMG, GSB, GHG, GSG, GHR, GHW, GSR, GSW | X |
| 1/4" Male pipe thread on pressure connection | All type G | Z |
| 1/2" - 14 NPT external | All type G | Z16 |
| 1/4" - 18 NPT internal | | |
| 3/8" Male pipe thread on pressure connection | All type G | Z23 |

◉ Cannot order Form R when ordering Form H

Replacement contacts and diaphragms

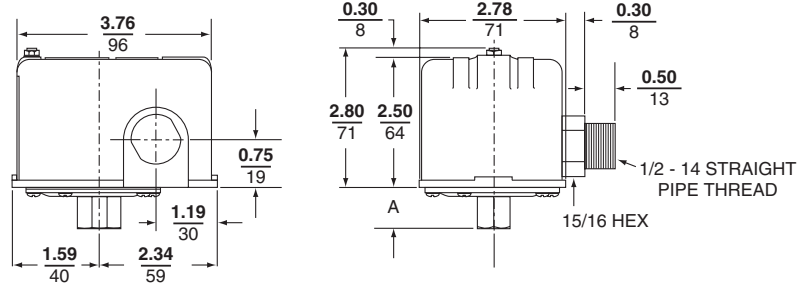
| Descripton | 9998 Type: |
|---|------------|
| Repl. Contact Kit 9013GHG, GSG, GHR, GSR, GMG Series C, All except Forms H & R | PC205 |
| Repl. Contact Kit 9013GHG, GSG, GSR, GMG; 9036GG, GR, GW; 9037GG, GR, GW Series C, Form H only; 9016GVG, Form H | PC206 |
| Repl. Contact Kit 9013GHG, GSG, GHR, GSR, GMG; 9036GR, GW Series C, Form R only; 9016GVG | PC207 |
| Convuluted Diaphragm Assy. 9013GHG, GSG Series C | PC208 |
| Diaphragm Assy. 9013GMG Series C | PC209 |
| Diaphragm Assy. 9013GHW, GSW, GSR, GHR Series C | PC211 |
| Diaphragm Assy. 9013GHG, GSG | PC252 |
| Repl. Contact Kit 9013FSG | PC241 ❖ |
| Repl. Contact Kit 9013FYG | PC242 ❖ |
| Repl. Contact Kit 9013FRG (2 pole) | PC288 ❖ |
| Repl. Contact Kit 9013FRG (1 pole) | PC289 ❖ |
| Repl. Contact Kit 9013FRG (Form H) | PC290 ❖ |

❖ Diaphragm is included.

Commercial Pressure Switches

Electromechanical Square D Brand 9013
Compressor and Water Pump Pressure Switches

Type F PUMPTROL® Compressor and Water Pump Pressure Switches



A Dimension

Switch Type

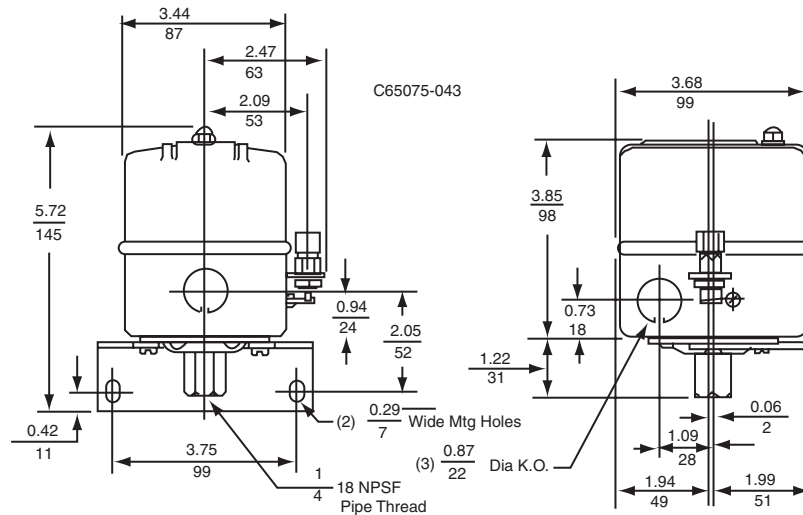
- FSG1, FYG1
- FHG2, 12, 22, 32, 42, 52, FRG2, FSG2, FYG2
- FHG3, 13, 33, FRG3, FSG3, FYG3
- FHG9, 19, 29, 39, 49, 59, FSG9, FYG9

Inches

mm

| | |
|--------|----|
| 1 1/32 | 26 |
| 29/32 | 23 |
| 1 9/32 | 33 |
| 1 3/32 | 28 |

Type G Compressor and Water Pump Pressure Switches



NOTE: Mounting Bracket shown is available as a Class 9049 Type A-52 Kit

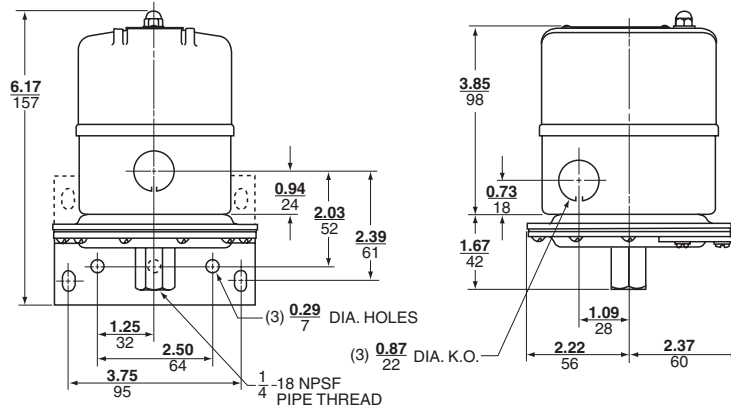
Switch Type

- GHG, GSG - With or Without Form X

Commercial Pressure Switches

Electromechanical Square D Brand 9013
Commercial, Light Industrial Pressure Switches

Type G Compressor and Water Pump Pressure Switches



NOTE: MOUNTING BRACKET SHOWN IS AVAILABLE AS A CLASS 9049 TYPE A-53 KIT.

Switch Type
GMG

| | | |
|-----------------------|-----------------------|----------------------|
| Numerics | 9013FSG2211 | 9013GHW627 |
| 9013GHB223 | 9013FSG2911 | 9013GMG222 |
| 9013GSR122 | 9013FSG4211 | 9013GSB222 |
| 90133GSR223 | 9013FSG4911 | 9013GSG122 |
| 9013FHG220 | 9013FSG910 | 9013GSG222 |
| 9013FHG1220 | 9013FSW110 | 9013GSG322 |
| 9013FHG1320 | 9013FSW1010 | 9013GSR323 |
| 9013FHG1421 | 9013FSW210 | 9013GSW123 |
| 9013FHG1921 | 9013FSW2010 | 9013GSW223 |
| 9013FHG2220 | 9013FSW2211 | 9013GSW323 |
| 9013FHG2420 | 9013FSW2911 | 9013GWW325 |
| 9013FHG2920 | 9013FSW4211 | |
| 9013FHG3220 | 9013FSW4911 | |
| 9013FHG3320 | 9013FSW910 | |
| 9013FHG3320 | 9013FTG112 | |
| 9013FHG3421 | 9013FTG1012 | |
| 9013FHG3921 | 9013FTG212 | |
| 9013FHG4221 | 9013FTG2012 | |
| 9013FHG4420 | 9013FTG2213 | |
| 9013FHG4421 | 9013FTG2913 | |
| 9013FHG4921 | 9013FTG4213 | |
| 9013FHG5221 | 9013FTG4913 | |
| 9013FHG5421 | 9013FTG912 | |
| 9013FHG5921 | 9013FTW112 | |
| 9013FHG920 | 9013FTW1012 | |
| 9013FRG1216 | 9013FTW212 | |
| 9013FRG1316 | 9013FTW2012 | |
| 9013FRG1816 | 9013FTW2213 | |
| 9013FRG1916 | 9013FTW2913 | |
| 9013FRG216 | 9013FTW4213 | |
| 9013FRG2216 | 9013FTW4913 | |
| 9013FRG2316 | 9013FTW912 | |
| 9013FRG2817 | 9013FYG114 | |
| 9013FRG2917 | 9013FYG1-20 w M4 .15 | |
| 9013FRG316 | 9013FYG1014 | |
| 9013FRG3216 | 9013FYG214 | |
| 9013FRG3316 | 9013FYG2014 | |
| 9013FRG3817 | 9013FYG2215 | |
| 9013FRG3917 | 9013FYG2915 | |
| 9013FRG4217 | 9013FYG4215 | |
| 9013FRG4317 | 9013FYG4915 | |
| 9013FRG4817 | 9013FYG914 | |
| 9013FRG4917 | 9013FYW114 | |
| 9013FRG5217 | 9013FYW1014 | |
| 9013FRG5317 | 9013FYW214 | |
| 9013FRG5817 | 9013FYW2014 | |
| 9013FRG5917 | 9013FYW2215 | |
| 9013FRG6218 | 9013FYW2915 | |
| 9013FRG6318 | 9013FYW4215 | |
| 9013FRG6818 | 9013FYW4915 | |
| 9013FRG7218 | 9013FYW914 | |
| 9013FRG7318 | 9013GHB525 | |
| 9013FRG7818 | 9013GHG124 | |
| 9013FRG816 | 9013GHG224 | |
| 9013FRG8218 | 9013GHG324 | |
| 9013FRG8318 | 9013GHG425 | |
| 9013FRG8818 | 9013GHG525 | |
| 9013FRG8919 | 9013GHG626 | |
| 9013FRG916 | 9013GHR124 | |
| 9013FRG9218 | 9013GHR224 | |
| 9013FRG9318 | 9013GHR324 | |
| 9013FRG9818 | 9013GHR426 | |
| 9013FRG9919 | 9013GHR526 | |
| 9013FSG110 | 9013GHR626 | |
| 9013FSG1010 | 9013GHW125 | |
| 9013FSG1-20 w M4 .11 | 9013GHW225 | |
| 9013FSG210 | 9013GHW426 | |
| 9013FSG2010 | 9013GHW526 | |

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