

Control Circuit Rated Type G Pressure Switches

Class 9012 single stage pressure switches are control circuit rated devices used in pneumatic or hydraulic systems on a wide variety of machine and process applications to protect the equipment and control or monitor the system pressure.

- Type G machine tool switches are available with NEMA Type 4, 4X, and 13 (IEC IP66) enclosure ratings.
- The NEMA 7 and 9 devices are UL listed for use in the following hazardous locations: Class I, Divisions 1 and 2, Groups C and D; and Class II, Divisions 1 and 2, Groups E, F, and G.
- Enclosure materials are cast aluminum.
- To ensure repeatability and minimize setting drift, pressure settings should fall within the middle 80 percent of the pressure range.



9012GAW5
NEMA 4, 4X, 13

Table 22.49: Fixed Differential [5]

NEMA 4, 4X, 13 Enclosure

UL Listed and CSA Certified As Industrial Control Equipment

Range on Decreasing Pressure psig	[6] Approximate Differential at Mid-Range psig	Maximum Allowable Pressure psig	Single Pole Double Throw Catalog No.	Double Pole Double Throw Catalog No.
Diaphragm Actuated—Nitrile (Buna-N) Diaphragm, Zinc Plated Steel Housing				
2–10	0.6 ±0.1	100	9012GDW1	9012GDW21
1–40	1.6 ±0.4	100	9012GDW2	9012GDW22
1.5–75	3.0 ±0.5	240	9012GDW4	9012GDW24
3–150	6.0 ±0.8	475	9012GDW5	9012GDW25
5–250	10.0 ±1.5	750	9012GDW6	9012GDW26
13–425	16 ±3.5	850	9012GEW1	9012GEW21
20–675	27 ±5	2000	9012GEW2	9012GEW22
Piston Actuated—#440 Stainless Steel Piston, #303 Stainless Steel Housing, Viton® Fluorocarbon Diaphragm and O-ring, Teflon® Retaining Ring				
20–1000	59 ±9	10000	9012GFW1	9012GFW21
90–2900	170 ±15	15000	9012GFW2	9012GFW22
170–5600	289 ±55	20000	9012GFW3	9012GFW23
270–9000	495 ±70	25000	9012GFW4	9012GFW24

Table 22.50: Adjustable Differential [5]

NEMA 4, 4X, 13 EnclosureUL Listed and CSA Certified As Industrial Control Equipment

Range on Decreasing Pressure psig	[6] Adjustable Differential Approximate at Mid-Range	Maximum Allowable Pressure psig	Single Pole Double Throw Catalog No.	Double Pole Double Throw Catalog No.
Diaphragm Actuated—Nitrile (Buna-N) Diaphragm, Zinc Plated Steel Housing				
2–10	0.6–2	100	9012GAW1	9012GAW21
1–40	1.6–8	100	9012GAW2	9012GAW22
1.5–75	3.5–15	240	9012GAW4	9012GAW24
3–150	6.0–30	475	9012GAW5	9012GAW25
5–250	10.0–49	750	9012GAW6	9012GAW26
13–425	16–90	850	9012GBW1	9012GBW21
20–675	27–130	2000	9012GBW2	9012GBW22
Piston Actuated—#440 Stainless Steel Piston, #303 Stainless Steel Housing, Viton Fluorocarbon Diaphragm and O-ring, Teflon® Retaining Ring				
20–1000	59–200	10000	9012GCW1	9012GCW21
90–2900	170–560	15000	9012GCW2	9012GCW22
170–5600	289–1260	20000	9012GCW3	9012GCW23
270–9000	495–1900	25000	9012GCW4	9012GCW24

Table 22.51: Fixed Differential

NEMA 7 & 9 Enclosure

Class I & II, Division 1 & 2, Groups C, D, E, F, G

Range on Decreasing Pressure psig	[6] Approximate Differential at Mid-Range psig	Maximum Allowable Pressure psig	Single Pole Double Throw Catalog No.	Double Pole Double Throw Catalog No.
Diaphragm Actuated—Nitrile (Buna-N) Diaphragm, Zinc Plated Steel Housing				
0.2–10	1.0 ±0.1	100	9012GDR1	—
1–40	2.4 ±0.8	100	9012GDR2	9012GDR22
1.5–75	4.5 ±1	240	9012GDR4	9012GDR24
3–150	9 ±1.5	475	9012GDR5	9012GDR25
5–250	15 ±3	750	9012GDR6	9012GDR26
13–425	25 ±7	850	9012GER1	9012GER21
Piston Actuated—#440 Stainless Steel Piston, #303 Stainless Steel Housing, Viton Fluorocarbon Diaphragm and O-ring, Teflon® Retaining Ring				
20–1000	89 ±18	10000	9012GFR1	9012GFR21
90–2900	255 ±30	15000	9012GFR2	9012GFR22
170–5600	578 ±110	20000	9012GFR3	—

Acceptable Wire Sizes: 12–22 AWG
Recommended Terminal Clamp Torque: 7 lb-in
Electrical Rating: see page 22-19
Temperature Rating: see page 22-19
Modifications: see page 22-21
Accessories: see page 22-21
Renewal Parts Kits: see page 22-34
Dimensions: see page 22-20

Table 22.52: Adjustable Differential

NEMA 7 & 9 Enclosure

Class I & II, Division 1 & 2, Groups C, D, E, F, G

Range on Decreasing Pressure psig	[6] Adjustable Differential Approximate at Mid-Range	Maximum Allowable Pressure psig	Single Pole Double Throw Catalog No.	Double Pole Double Throw Catalog No.
Diaphragm Actuated—Nitrile (Buna-N) Diaphragm, Zinc Plated Steel Housing				
0.2–10	1.0–2	100	9012GAR1	9012GAR21
1–40	2.4–8	100	9012GAR2	9012GAR22
1.5–75	4.5–15	240	9012GAR4	9012GAR24
3–150	9–35	475	9012GAR5	9012GAR25
5–250	15–49	750	9012GAR6	9012GAR26
13–425	25–90	850	9012GBR1	9012GBR21
20–675	41–130	2000	9012GBR2	9012GBR22
Piston Actuated—#440 Stainless Steel Piston, #303 Stainless Steel Housing, Viton Fluorocarbon Diaphragm and O-ring, Teflon® Retaining Ring				
20–1000	89–200	10000	9012GCR1	9012GCR21
90–2900	255–560	15000	9012GCR2	—
170–5600	578–1260	20000	9012GCR3	9012GCR23
270–9000	788–1900	25000	9012GCR4	—



File: E12443 Haz. Loc. CCN NOWT G•R
File: E12158 CCN NKPZ G•O, G•G, G•W
File: E12158 CCN NTHT Marine Use, G•W



File: LR25490 Class 3211-03 G•W, G•O, G•G
File: LR26817 Class 3218-02 G•R



Complies with IEC 60957.5.1, 5C8.3.4 when protected with a Bussmann CCKTK-R-10 fuse.

[5] For metric threads, add **M** after the **W** on all types (offered at an additional cost).
To order a Pg13.5 electrical conduit entry and a 1/4"-19 BSP pressure connection, add M12 to the end of the catalog number, as well as adding "M" after "W" for metric threads. For example:
9012GAW1 = 1/2" NPT electrical conduit entry
9012GAWM1 = 20 x 1.5 mm electrical conduit entry
9012GAWM1M12 = Pg13.5 electrical conduit entry and 1/4"-19 BSP pressure connection.

[6] The differential adds to the range setting and determines the operating point on rising pressure.