

### 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 22.30: Fixed Differential<sup>[4]</sup>**

**NEMA 4, 4X, 13 Enclosure**

**UL Listed and CSA Certified As Industrial Control Equipment**

Range on Decreasing Pressure psig	[5] Approximate Differential at Mid-Range psig	Maximum Allowable Pressure psig	Single Pole	Double Pole
			Double Throw	Double Throw
Diaphragm Actuated—Nitrile (Buna-N) Diaphragm, Zinc Plated Steel Housing				
2-10	0.6 ±0.1	100	GDW1	GDW21
1-40	1.6 ±0.4	100	GDW2	GDW22
1.5-75	3.0 ±0.5	240	GDW4	GDW24
3-150	6.0 ±0.8	475	GDW5	GDW25
5-250	10.0 ±1.5	750	GDW6	GDW26
13-425	16 ±3.5	850	GEW1	GEW21
20-675	27 ±5	2000	GEW2	GEW22
Piston Actuated—#440 Stainless Steel Piston, #303 Stainless Steel Housing, Viton® Fluorocarbon Diaphragm and O-ring, Teflon® Retaining Ring				
20-1000	59 ±9	10000	GFW1	GFW21
90-2900	170 ±15	15000	GFW2	GFW22
170-5600	289 ±55	20000	GFW3	GFW23
270-9000	495 ±70	25000	GFW4	GFW24

**Table 22.31: Adjustable Differential<sup>[4]</sup>**

**NEMA 4, 4X, 13 Enclosure UL Listed and CSA Certified As**

**Industrial Control Equipment**

Range on Decreasing Pressure psig	[5] Adjustable Differential Approximate at Mid-Range	Maximum Allowable Pressure psig	Single Pole	Double Pole
			Double Throw	Double Throw
Diaphragm Actuated—Nitrile (Buna-N) Diaphragm, Zinc Plated Steel Housing				
2-10	0.6-2	100	GAW1	GAW21
1-40	1.6-8	100	GAW2	GAW22
1.5-75	3.5-15	240	GAW4	GAW24
3-150	6.0-30	475	GAW5	GAW25
5-250	10.0-49	750	GAW6	GAW26
13-425	16-90	850	GBW1	GBW21
20-675	27-130	2000	GBW2	GBW22
Piston Actuated—#440 Stainless Steel Piston, #303 Stainless Steel Housing, Viton® Fluorocarbon Diaphragm and O-ring, Teflon® Retaining Ring				
20-1000	59-200	10000	GCW1	GCW21
90-2900	170-560	15000	GCW2	GCW22
170-5600	289-1260	20000	GCW3	GCW23
270-9000	495-1900	25000	GCW4	GCW24

**Table 22.32: Fixed Differential**

**NEMA 7 & 9 Enclosure**

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

Range on Decreasing Pressure psig	[5] Approximate Differential at Mid-Range psig	Maximum Allowable Pressure psig	Single Pole	Double Pole
			Double Throw	Double Throw
Diaphragm Actuated—Nitrile (Buna-N) Diaphragm, Zinc Plated Steel Housing				
0.2-10	1.0 ±0.1	100	GDR1	GDR21
1-40	2.4 ±0.8	100	GDR2	GDR22
1.5-75	4.5 ±1	240	GDR4	GDR24
3-150	9 ±1.5	475	GDR5	GDR25
5-250	15 ±3	750	GDR6	GDR26
13-425	25 ±7	850	GER1	GER21
20-675	41 ±10	2000	GER2	GER22
Piston Actuated—#440 Stainless Steel Piston, #303 Stainless Steel Housing, Viton® Fluorocarbon Diaphragm and O-ring, Teflon® Retaining Ring				
20-1000	89 ±18	10000	GFR1	GFR21
90-2900	255 ±30	15000	GFR2	GFR22
170-5600	578 ±110	20000	GFR3	GFR23
270-9000	788 ±140	25000	GFR4	GFR24

**Table 22.33: Adjustable Differential**

**NEMA 7 & 9 Enclosure**

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

Range on Decreasing Pressure psig	[5] Adjustable Differential Approximate at Mid-Range	Maximum Allowable Pressure psig	Single Pole	Double Pole
			Double Throw	Double Throw
Diaphragm Actuated—Nitrile (Buna-N) Diaphragm, Zinc Plated Steel Housing				
0.2-10	1.0-2	100	GAR1	GAR21
1-40	2.4-8	100	GAR2	GAR22
1.5-75	4.5-15	240	GAR4	GAR24
3-150	9-35	475	GAR5	GAR25
5-250	15-49	750	GAR6	GAR26
13-425	25-90	850	GBR1	GBR21
20-675	41-130	2000	GBR2	GBR22
Piston Actuated—#440 Stainless Steel Piston, #303 Stainless Steel Housing, Viton® Fluorocarbon Diaphragm and O-ring, Teflon® Retaining Ring				
20-1000	89-200	10000	GCR1	GCR21
90-2900	255-560	15000	GCR2	GCR22
170-5600	578-1260	20000	GCR3	GCR23
270-9000	788-1900	25000	GCR4	GCR24

Acceptable Wire Sizes: 12-22 AWG  
Recommended Terminal Clamp Torque: 7 lb-in  
Electrical Rating page 22-16  
Temperature Rating page 22-16  
Modifications page 22-18  
Accessories page 22-18  
Renewal Parts Kits page 22-30  
Dimensions page 22-17



File: E12443 Haz. Loc.  
File: E12158  
File: E12158

CCN NOWT G-R  
CCN NKPZ G-O, G-G, G-W  
CCN NTHT Marine Use, G-W



File: LR25490  
File: LR26817

Class 3211-03 G-W, G-O, G-G  
Class 3218-02 G\*R

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

[4] 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.

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