

# Industrial Pressure Switches

## Class 9012, Type G–Selection and Modifications



### Adjustable Differential ◊ NEMA Type 4, 4X, 13 Enclosure UL Listed And CSA Certified As Industrial Control Equipment ■

Range On Decreasing Pressure PSIG	▲Adjustable Differential Approximate at Mid Range	Maximum Allowable Pressure PSIG	Single Pole Double Throw	Double Pole Double Throw
			Type	Type
<b>Diaphragm Actuated - Nitrile (Buna-N) Diaphragm, Zinc Plated Steel Housing</b>				
.2 - 10	.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
<b>Piston Actuated – #440 Stainless Steel Piston. #303 Stainless Steel Housing, Fluorocarbon (VITON®) Diaphragm and O-ring, TEFLON® Retaining Ring</b>				
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

◊ For metric threads, add **M** after the **W** on all types.

### Adjustable Differential NEMA Type 7 & 9 Enclosure Class I & II, Division 1 & 2, Groups C, D, E, F, G UL Listed As Industrial Control Equipment ★



Range On Decreasing Pressure PSIG	▲Adjustable Differential Approximate at Mid Range	Maximum Allowable Pressure PSIG	Single Pole Double Throw	Double Pole Double Throw
			Type	Type
<b>Diaphragm Actuated – Nitrile (Buna-N) Diaphragm, Zinc Plated Steel Housing</b>				
.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
<b>Piston Actuated – #440 Stainless Steel Piston. #303 Stainless Steel Housing, Fluorocarbon (VITON®) Diaphragm and O-ring, TEFLON® Retaining Ring</b>				
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

■ UL Marine Listed for use on ships/vessels greater than 65 feet long where ignition protection is not required. Also UL Listed for use in Class II, Division 2, Group G and Class III hazardous locations.

★ UL Marine Listed for use on vessels greater than 65 feet long where ignition protection is required.

▲ Differential adds to range setting and determines operating point on rising pressure.

**NOTE:** When switches are required to be factory set and only one setting is identified, specify whether this setting is on increasing or decreasing pressure.



Marking

Complies with IEC 957.5.1, 5C8.3.4 when protected with a Bussman Class CC KTK-R-10 fuse.



File E12442 CCN NOWT G\*W, G\*R  
File E12158 CCN NKPZ G\*O, G\*G  
File E12443 CCN NTHT (marine use)



File LR 25490 Class 3211 03 G\*W, G\*O, G\*G  
File LR 26817 Class 3218 02 G\*R



# Industrial Vacuum Switches Class 9016, Type GAW

## TYPE GAW

### Sensitive Control Applications

GAW types are provided with double throw contacts; normally open and normally closed circuits allow these controls to be used for standard or reverse action applications.

Standard Controls can be mounted from the front with the bracket provided. Two mounting screws will be required for a firm attachment to any smooth, flat surface. Allowance must be made for flange projection. Controls with Form F modification include two mounting feet with  $\frac{9}{32}$ " mounting holes on  $3\frac{3}{4}$ " centers. Range and Differential adjustments are internal and exposed by removal of the front cover.



Type GAW



File E12443 CCN NOWT



File LR 25490 Type GAW Only  
Class 3211 06

Maximum allowable positive pressure: 100 PSIG.

Diaphragms are oil resisting, nitrile butadiene rubber (BUNA N).

Electrical Ratings and Temperature Limitations – See page 9 for Type G machine tool pressure switches.

### Vacuum Codes

Settings	Code
3-8" HG	J09
16.5-25" HG	J10
17-22" HG	J11
18-23" HG	J12
20-25" HG	J13
Specify other vacuum	J99

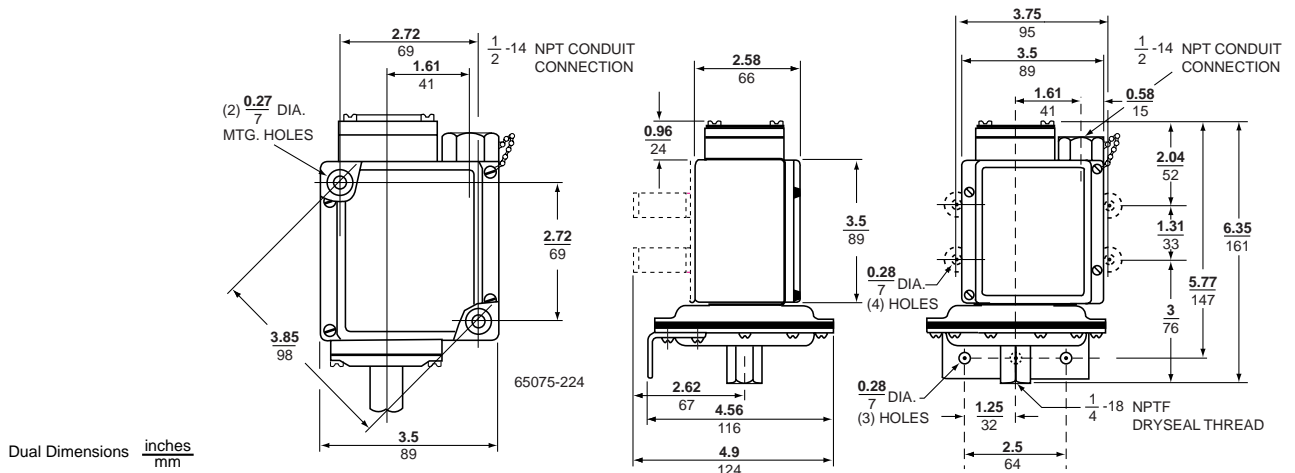
Class 9016				Diaphragm Actuated	
Range on Decreasing Vacuum (Ins. of Hg.)	Adjustable Differential Adds to Range★ (Ins. of Hg.)	Contact Arrangement	Pipe Tap (NPTF)	NEMA Type 4, 4X & 13 Encl.	NEMA Type 7 & 9 ▲
				Type	Type
0-28.7	At Minimum Range.....8-9	1 N.O.-1 N.C.	$\frac{1}{4}$ -18	GAW1	GAR1
	At Mid Range.....1.3-7.4				
0-25	5-20	1 N.O.-1 N.C.	$\frac{1}{4}$ -18	GAW2	N/A
0-28.3	At Minimum Range.....1-9	2 N.O.-2 N.C.	$\frac{1}{4}$ -18	GAW21	GAR21
	At Mid Range.....1.7-7.4				
0-25	5-20	2 N.O.-2 N.C.	$\frac{1}{4}$ -18	GAW22	N/A

★ Add Differential to Range to obtain operating point on increasing vacuum (within vacuum limitations). Differential increases linearly over range.

▲ Min. differential doubles with NEMA Type 7 & 9 enclosures.

### Available Modifications

Modifications	Form
Side conduit hub	B2
Removable conduit hub	B4
Mounting feet (GAW 1+21 Only)	F
VITON® diaphragm	Q14
Range scale window	V1
$\frac{1}{4}$ -18 NPT external thread pressure connection	Z
Fungus proofing per MIL-T-152B with varnishes per MIL-V-173A	Z12
$\frac{1}{2}$ -14 NPT external thread, $\frac{1}{4}$ -18 NPTF internal thread pressure connection (standard actuator only)	Z16



Dual Dimensions  $\frac{\text{inches}}{\text{mm}}$

