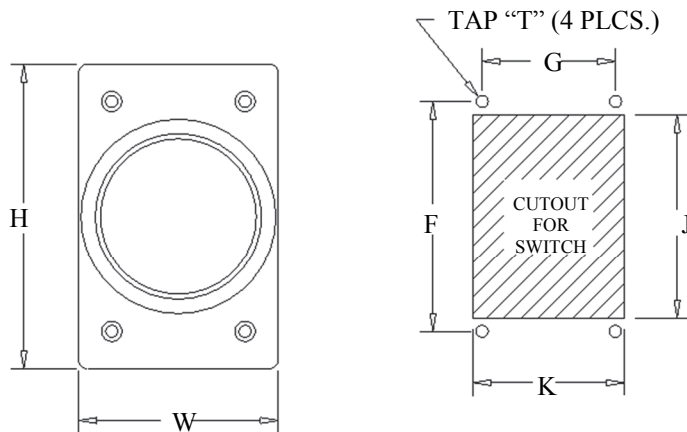


**INSTALLATION INSTRUCTIONS**  
for SINGLE PLUNGER PUSHBUTTON SWITCHES

00222-002	00222-004	00294-001	00294-002	00294-003	00294-004	00662-001	00662-002	00662-003
00662-004	00662-101	00662-103	01307-012	01371-012	01371-112	01371-212	01371-312	01371-412
01371-512	01461-101	01461-102	01461-104	01461-202	01501-012	01508-012	01760-012	01919-012
01920-001	01981-001	02049-001	02049-002	02182-001	02182-101	02221-001	02221-002	02510-001
02510-101	02653-012	02653-112	02911-001	02911-002	02911-004	02911-102	02912-001	03476-001
03476-004	03727-012	03855-001	03855-002	03855-003	04801-012	04960-112	04960-212	04960-302
04960-412	04960-415	04960-442	04960-602	04960-912 *			04662-002 **	

\* Non-Standard Mounting Plan

\*\* Large Mounting Plan Only



Note: See current Specifiers Guide for detailed dimensional drawings of each device.

	<u>English</u>	<u>Metric</u>		
H =	4.31"	109.47 mm		
W =	2.81"	71.37 mm		
F =	3.25"	82.55 mm		
G =	1.88"	47.75 mm		
J =	2.88"	73.15 mm		
K =	2.13"	54.10 mm		
T =	6-32	N/A		
			<b>Large Mounting</b>	
	<u>English</u>	<u>Metric</u>	<u>English</u>	<u>Metric</u>
H* =	4.56	115.82 mm	H** =	5.13" 130.30 mm
W* =	2.81"	71.37 mm	W** =	3.00" 76.20 mm
F* =	3.25"	82.55 mm	F** =	4.50" 114.30 mm
G* =	1.88"	47.75 mm	G** =	2.38" 60.45 mm
J* =	2.88"	73.15 mm	J** =	4.71" 119.63 mm
K* =	2.13"	54.10 mm	K** =	2.53" 64.26 mm
T* =	8-32	N/A	T** =	10-32 N/A

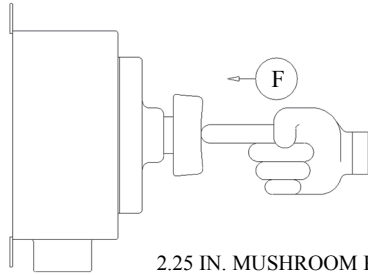
**INSTALLATION:**

1. Observe all SAFETY REQUIREMENTS and PROCEDURES during installation, set-up and running.
2. N.E.C. and local wiring codes MUST be followed at all times.
3. The cable switch MUST be mounted on or in an enclosure (Mounting screws are supplied with each switch).
4. Before wiring be sure to place the supplied gasket on the switch.
5. Wire as required, torque each used terminal screw to 18 in.-lbs. (20.7 cm-kg).
6. After wiring, place the switch into the enclosure taking care to route the wires away from the back of the switch so that they do not become entangled and interfere with the operation of the device.
7. Secure the switch with the mounting screws. Torque to (approx. 7 in./lbs. ~8.06 cm-kg for #6's or 15 in.-lbs. ~17.3 cm-kg for #10's).
8. Wiring SHOULD be through a control circuit.
9. After applying power to the control circuit, operate the device to check for proper installation.

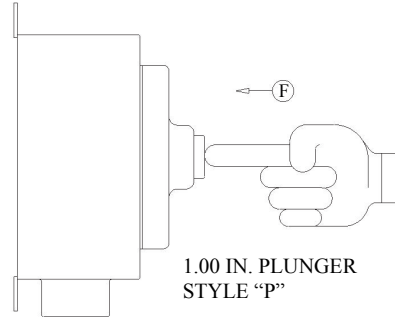
**MAINTENANCE:**

1. Regular Preventive Maintenance inspections are recommended.
2. Some conditions to watch for are:
  - a. Physical damage to the device.
  - b. Frayed wiring.
  - c. Any loose components.
  - d. Any worn components.
3. If other assistance is desired please contact the factory.

**SPECIFICATIONS / APPROVALS**  
for SINGLE PLUNGER PUSHBUTTON SWITCHES



2.25 IN. MUSHROOM PLUNGER  
STYLE "Msh"



1.00 IN. PLUNGER  
STYLE "P"

F = The value of force, in pounds, which trips the switch.

Catalog Number	Contact Arrangement	Plunger Operator		Positive Break	F LBS.
		Style	Color		
00222-002	#66 (1 NC)	M	Red	Yes	4.3
00222-004	#66 (1 NC)	M	Yellow	Yes	4.3
00294-001	#09 (1NO + 1NC)	P	Black	Yes	4.3
00294-002	#09 (1NO + 1NC)	P	Red	Yes	4.8
00294-003	#09 (1NO + 1NC)	P	Green	Yes	4.3
00294-004	#09 (1NO + 1NC)	P	Yellow	Yes	4.3
00662-001	#09 (1NO + 1NC)	M	Black	Yes	4.3
00662-002	#09 (1NO + 1NC)	M	Red	Yes	4.8
00662-003	#09 (1NO + 1NC)	M	Green	Yes	4.3
00662-004	#09 (1NO + 1NC)	M	Yellow	Yes	4.3
00662-101	#09 (1NO + 1NC)	M	Black	Yes	3.0
00662-103	#09 (1NO + 1NC)	M	Green	Yes	3.0
01307-012	#09 (1NO + 1NC)	M	Chrome	Yes	9.0
01371-012	#09 (1NO + 1NC)	M	Chrome	Yes	5.2
01371-112	#09 (1NO + 1NC)	M	Chrome	Yes	5.2
01371-212	#09 (1NO + 1NC)	M	Chrome	Yes	5.3
01371-312	#63 (1 NO)	M	Chrome	Yes	5.3
01371-412	#63 (1 NO)	M	Chrome	Yes	5.3
01371-512	#63 (1 NO)	M	Chrome	Yes	5.3
01461-101	#10 (2 NO)	M	Black	No	3.0
01461-102	#10 (2 NO)	M	Red	No	5.5
01461-104	#10 (2 NO)	M	Yellow	No	3.0
01461-202	#11 (2 NC)	M	Red	Yes	5.5
01501-012	#09 (1NO + 1NC)	M	Chrome	Yes	2.2
01508-012	#10 (2 NO)	M	Chrome	Yes	2.5
01760-012	#54 (1NO + 1NC)	M	Chrome	Yes	8.4
01919-012	#54 (1NO + 1NC)	M	Chrome	Yes	5.0
01920-001	#09 (1NO + 1NC)	P	Black	Yes	2.2
01981-001	#62 (1NO + 1NC)	M	Black	Yes	11.5
02049-001	#09 (1NO + 1NC)	M	Black	Yes	10.0

Catalog Number	Contact Arrangement	Plunger Operator		Positive Break	F LBS.
		Style	Color		
02049-002	#09 (1NO + 1NC)	M	Red	Yes	10.0
02182-001	#09 (1NO + 1NC)	M	Black	Yes	12.0
02182-101	#09 (1NO + 1NC)	M	Black	Yes	12.0
02221-001	#09 (1NO + 1NC)	P	Black	Yes	4.3
02221-002	#09 (1NO + 1NC)	P	Red	Yes	4.8
02510-001	#09 (1NO + 1NC)	M	Black	Yes	9.5
02510-101	#09 (1NO + 1NC)	M	Black	Yes	9.5
02653-012	#09 (1NO + 1NC)	M	Chrome	Yes	5.5
02653-112	#09 (1NO + 1NC)	M	Chrome	Yes	2.5
02911-001	#09 (1NO + 1NC)	M	Black	Yes	5.0
02911-002	#09 (1NO + 1NC)	M	Red	Yes	8.5
02911-004	#09 (1NO + 1NC)	M	Yellow	Yes	5.0
02911-102	#09 (1NO + 1NC)	M	Red	Yes	5.0
02912-001	#10 (2 NO)	M	Black	Yes	4.0
03476-001	#09 (1NO + 1NC)	M	Black	Yes	11.5
03476-004	#09 (1NO + 1NC)	M	Yellow	Yes	11.5
03727-012	#10 (2 NO)	M	Chrome	No	3.3
03855-001	#62 (1NO + 1NC)	M	Black	Yes	4.0
03855-002	#62 (1NO + 1NC)	M	Red	Yes	4.0
03855-003	#62 (1NO + 1NC)	M	Green	Yes	4.0
04662-002	#09 (1NO + 1NC)	M	Red	Yes	5.0
04801-012	#54 (1NO + 1NC)	M	Chrome	Yes	8.4
04960-112	#09 (1NO + 1NC)	M	Chrome	Yes	3.8
04960-212	#10 (2 NO)	M	Chrome	No	2.5
04960-302	#11 (2 NC)	M	Red	Yes	4.5
04960-412	#63 (1 NO)	M	Chrome	No	1.5
04960-415	#63 (1 NO)	M	Chrome	No	1.5
04960-442	#63 (1 NO)	M	Chrome	No	1.5
04960-602	#66 (1 NC)	M	Red	Yes	3.8
04960-912	#63 (1 NO)	M	Chrome	No	1.5

These switches comply with:	<b>UL listed</b> PER UL-508; File E 58589 <b>CSA certified</b> PER CSA - C 22.2 No. 14; File LR 3648 <b>Demko (3rd Party) and CE Marked</b> - EN 60947-5-1: 2004 + A1:2009;
IEC Ratings:	Utilization = A 600, AC 15; N 300, DC 13; Ue = 600 vAC; Ue = 250 vDC, Ui = 600 vAC, Uimp = 2.5 kV; Ith = 10A
Temperature:	Operating = 0°C to +55°C (-32°F to +131°F); Storage = -40°C to +85°C (-40°F to +185°F)
Mechanical Life Rating:	1,000,000 operations

**WARNING - DANGER**

These products should only be used where point-of-operation guarding devices have been properly installed and maintained so that all appropriate OSHA and ANSI B11.1 regulations and standards are met. Misapplication of these products on machinery lacking effective point-of-operation safeguards can cause serious injury to the operator of that machinery.

**AVERTISSEMENT - DANGER**

Ces produit doivent seulement être utilisés sur des postes à risque correctement sécurisés et entretenus afin d'être conforme aux standards et réglementations en vigueur (CSA, CLC). Un mauvais usage de ces produits sur des machines et des postes de travail non sécurisés de manière efficace peut causer des blessures graves au technicien maniant ces machines.