



### 411SM1



*Actual product appearance may vary.*

**SM Series Subminiature Basic Switch, Single Pole Double Throw (SPDT), 250 Vac, 5 A, Pin Plunger Actuator, Solder Termination**

#### Features

- Long operating life
- Elongated mounting hole for easier, more accurate mounting
- Choice of actuation (plunger, as well as a variety of integral and auxiliary actuators)
- Choice of electrical termination (solder, quick connect, PCB)
- Choice of operating characteristics (sensitive differential travel as low as 0,0254 mm [0.001 in] maximum, low operating force to 0,56 N [2.0 oz] maximum)
- Optional series constructions available (gold contacts for low energy switching, bifurcated gold contacts for maximum reliability, power load switching capability to 11 A)
- MIL-PFR-8805 qualified listings available

#### Description

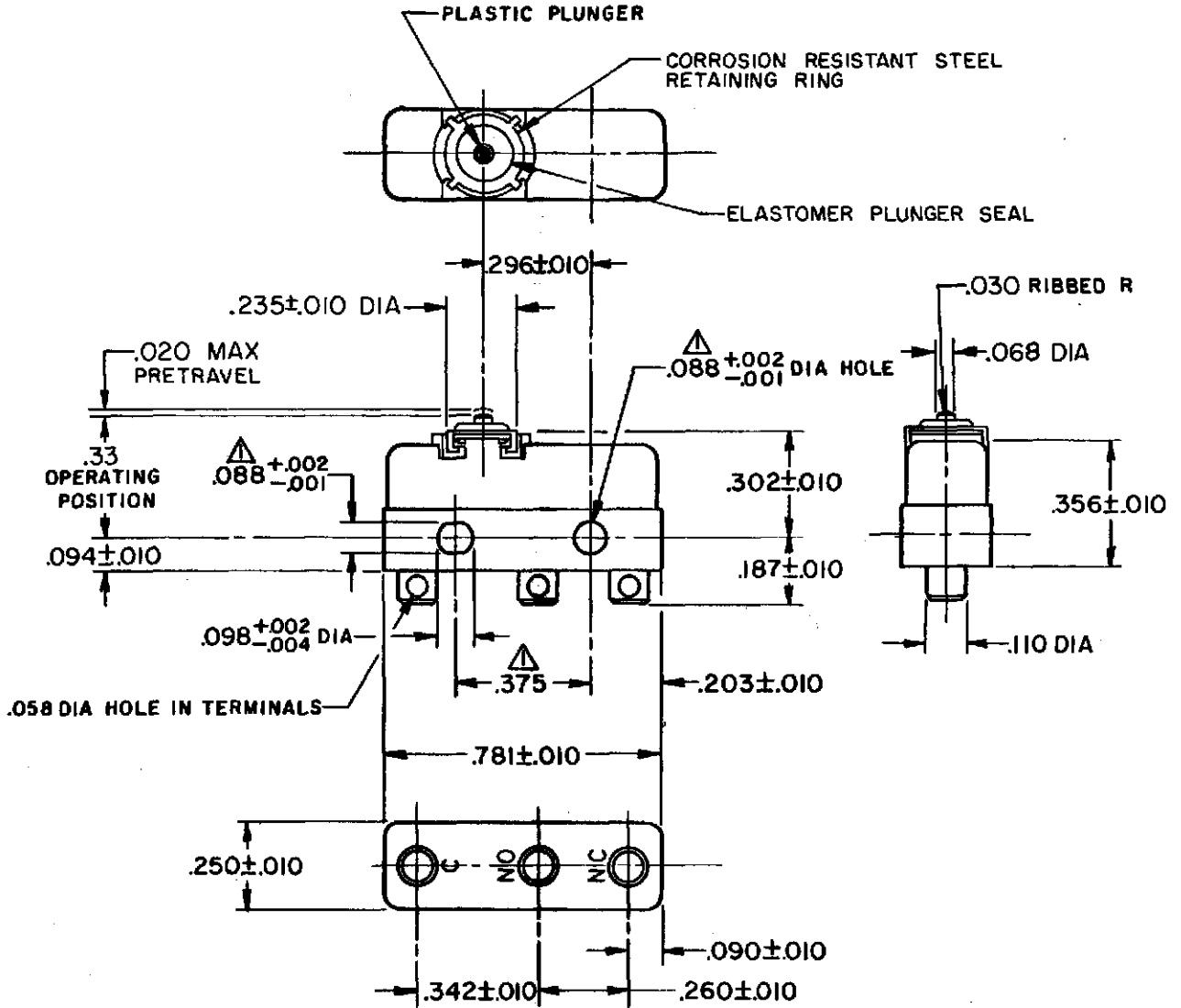
MICRO SWITCH™ SM Series subminiature basic switches are used for simple or precision on/off application needs. The MICRO SWITCH™ SM Series switches are slightly larger than the MICRO SWITCH™ SX Series switches. These switches combine small size and light weight with ample electrical capacity, precision operation and long life.

#### Potential Applications

- Aerospace
- Instrumentation
- Appliances
- Vending machines
- Timing devices
- Office equipment
- Computer/business equipment
- Test instruments
- Medical/dental equipment
- Communications equipment
- HVAC equipment
- Manually operated devices
- Valves

Product Specifications	
Switch Type	MICRO SWITCH™ Subminiature 12,7 mm H x 6,35 mm W x 20,3 mm L [0.5 in H x 0.25 in W x 0.8 in L]
Sealed	No
Ampere Rating	5 A
Circuitry	Single Pole Double Throw (SPDT)
Actuator	Pin Plunger
Termination	Solder
Operating Temperature Range	-40 °C to 121 °C [-40 °F to 250 °F]
Voltage	250 Vac
Approvals	CE,CSA,UL,ENEC
Contact Type	Silver
Operating Force (O.F.)	0,83 N - 2,09 N [3.0 oz - 7.5 oz]
Release Force (R.F.)	0,28 N [1.0 oz] min.
Pretravel (P.T.)	0,5 mm [0.020 in] max.
Overtravel (O.T.)	0,13 mm [0.005 in] min.
Differential Travel (D.T.)	0,1 mm [0.004 in] max.
Operating Position (O.P.)	8,38 mm ± 0,38 mm [0.330 in ± 0.015 in]
Housing Material	General Purpose Phenolic
High Temperature	204 °C [400 °F]
CE mark	61058-1
UL File #	E12252
CSA File #	LR41372
Agency Approvals and Standards	1054
Mounting Centers	9,65 mm [0.38 in]
Maximum Tightening Torque	0,22 N m [2.0 in lb]
Weight	2,72 g [0.006 lb]
Package Height	12,4 mm [0.49 in]
Package Width	6,35 mm [0.25 in]
Package Length	19,8 mm [0.78 in]
Recommended For	Sealed plunger construction
Availability	Global
UNSPSC Code	30211905
UNSPSC Commodity	30211905 Snap switches
Series Name	SM

CATALOG LISTING  
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 ISSUE 7  
 RELEASE NO. PR-1539-T  
 REPLACES  
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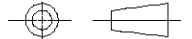



**NOTE -**

- 1- MOUNTING HOLES WILL ACCEPT PINS OR SCREWS OF .087 MAX DIA ON .375±.002 CENTERS
- 2- TERMINALS ARE PLATED FOR SOLDERING
- 3- SWITCH WILL WITHSTAND TEMPERATURES FROM -40° TO +250° F
- 4- TEMPERATURE EXTREMES MAY CAUSE FORCE CHARACTERISTICS TO CHANGE. STATED CHARACTERISTICS ARE FOR ROOM TEMPERATURE
- 5- SEAL CONSTRUCTION PROVIDES SPLASH AND DUST RESISTANCE

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THIRD ANGLE PROJECTION



CHARACTERISTICS 		ELECTRICAL DATA	SCALE FULL	DO NOT SCALE PRINT
OPERATING FORCE - - - - - 3 - 7 1/2 OZ		CONTACT ARRANGEMENT <b>SPDT</b>		
RELEASE FORCE - - - - - 1 OZ MIN		<b>30 VOLTS DC RATING</b>		<b>UNLESS OTHERWISE SPECIFIED TOLERANCES ARE</b>
		INDUCTIVE - - - SEA LEVEL - - - 3 AMP	ONE PLACE (.0) ±.030	
		RESISTIVE - - - SEA LEVEL - - - 5 AMP	TWO PLACE (.00) ±.015	
DIFFERENTIAL TRAVEL - - - .004 MAX			THREE PLACE (.000) ±.005	
OVERTRAVEL - - - - - .005 MIN			ANGLES ±	
		UNDERWRITERS' LAB. INC. LISTED RATING 5A - 250 VAC -L4-	WEIGHT .006 LB MAX	

