



KLIXON® | Military Qualified 10AT Series

Snap Action Precision Position Switches

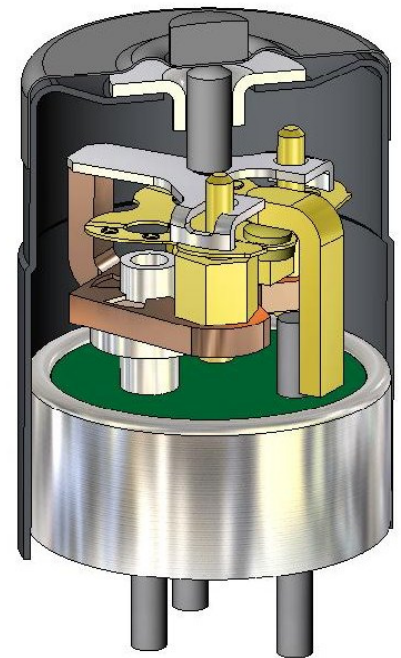
FEATURES

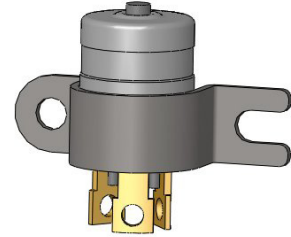
- Stainless steel, hermetic seal construction
- Rated up to 4 amps, 30VDC
- MIL-PRF-8805 qualified
- Various mounting configurations for custom applications
- Excellent shock and vibration resistance
- Distributor stock available

INTRODUCTION

The Klixon® 10AT series are hermetic position switches ideal for extremely harsh and demanding environments as found in aircraft, military, aerospace, and aircraft engines applications. Klixon precision hermetic position switches have been used for over 40 years in a wide range of applications, and can be found on virtually all commercial and military aircraft, as well as various space vehicles and satellites worldwide.

SPECIFICATIONS	
Current Rating, Resistance	4 amps, 28VDC
Current Rating, Inductive	1 amp, 28VDC
Current Rating, Lamp	2 amps, 28VDC
Dielectric Strength	1050 volts (RMS) Terminal to Case, 800 volts (RMS) Terminal to Terminal
Life Cycles	25,000 cycles @ rated load, mechanical life of 100,000 cycles
Ambient Temperature Range	-85°F to +275°F (-65°C to +135°C)
Seal	Hermetic per MIL-PRF-8805, design enclosure 5
Max Leak Rate	1x10 ⁻⁸ C.C. std. HE/sec @ 1 ATM differential
Voltage Drop at 1 amp	0.040 volts max
Insulation	100 megaohms min
Vibration Resistance	65G, 10-2000Hz, .5 DA or 65 G RMS
Shock Resistance	200 G, 6 ms sawtooth

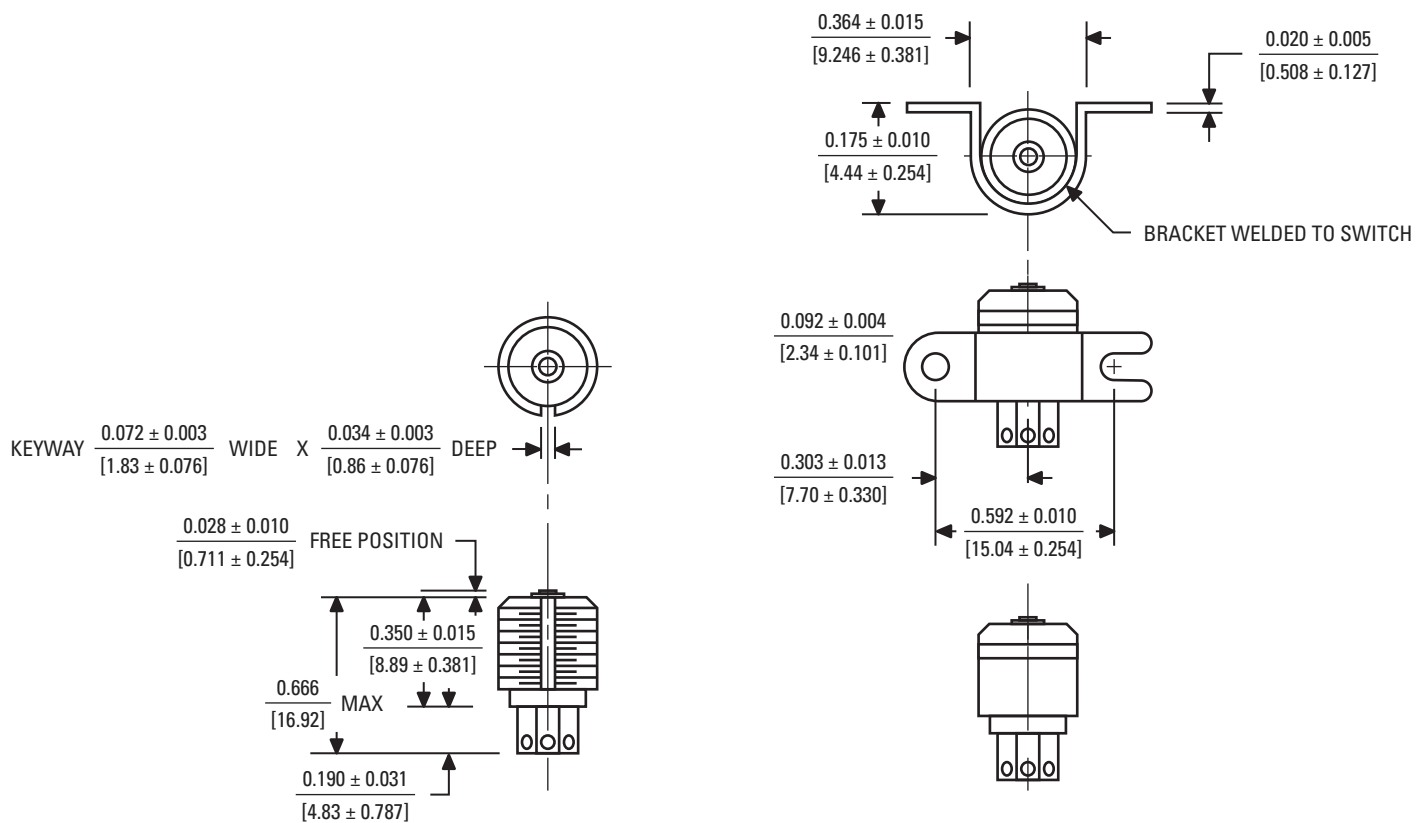


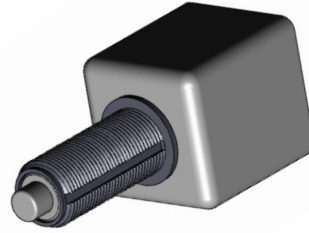
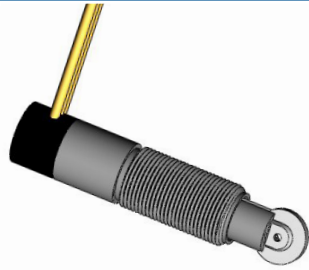


MIL-S-8805 CROSS REFERENCE CHART

Mil Spec	Sensata PN	Poles	Configuration	Wire Leads	Threaded Mount	Actuating Force	Movement Differential	Pretravel	Overtravel	Release Force
M8805/68-022	10AT117-01	SPDT	Flat Plunger	No Wires	None	30 oz max	0.005" max	0.009" max	0.002" min	4 oz min
M8805/68-023	10AT17-01	SPDT	Flat Plunger	No Wires	7/16-32NS-2A THD	30 oz max	0.005" max	0.009" max	0.002" min	4 oz min
M8805/68-024	10AT17-02-10	SPDT	Flat Plunger	Parallel	7/16-32NS-2A THD	30 oz max	0.005" max	0.009" max	0.002" min	4 oz min
M8805/68-025	10AT17-03-10	SPDT	Flat Plunger	90° Angle	7/16-32NS-2A THD	30 oz max	0.005" max	0.009" max	0.002" min	4 oz min
M8805/68-026	10AT15-01	SPDT	Flat Plunger	No Wires	Bracket Mount	30 oz max	0.005" max	0.009" max	0.002" min	4 oz min
M8805/68-027	10AT15-02-10	SPDT	Flat Plunger	Parallel	Bracket Mount	30 oz max	0.005" max	0.009" max	0.002" min	4 oz min
M8805/68-028	10AT15-03-10	SPDT	Flat Plunger	90° Angle	Bracket Mount	30 oz max	0.005" max	0.009" max	0.002" min	4 oz min

DIMENSIONAL DRAWINGS – Threaded Mount (10AT17-01), Basic Switch (10AT117-01), Bracket Mount (10AT15-01), Flat Plunger

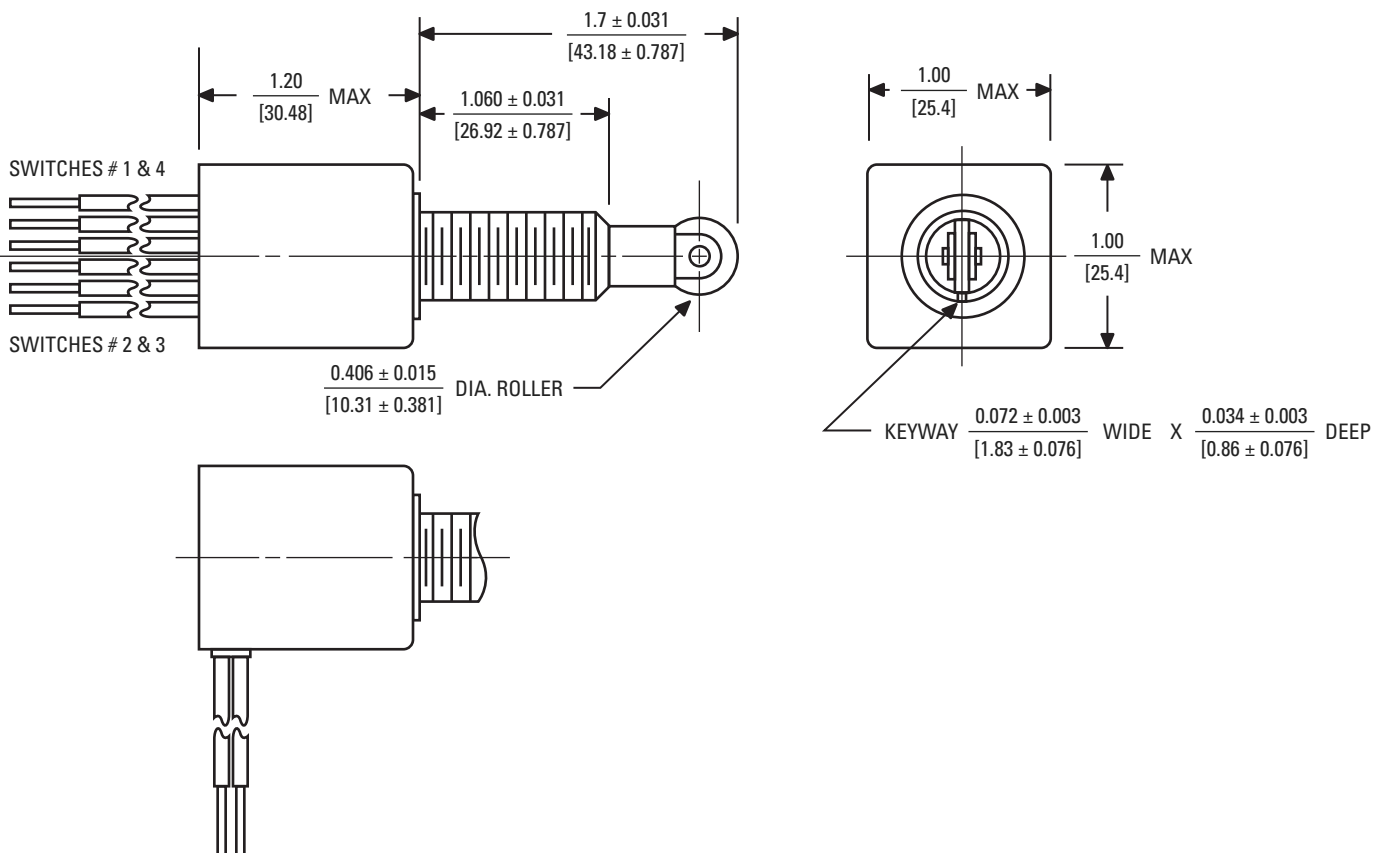


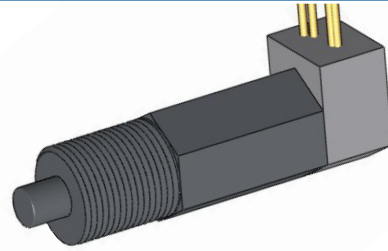
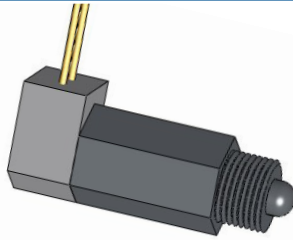


MIL-S-8805 CROSS REFERENCE CHART

Mil Spec	Sensata PN	Poles	Configuration	Wire Leads	Threaded Mount	Actuating Force	Movement Differential	Pretravel	Overtravel	Release Force
M8805/70-033	10AT372-32-10	2PDT	Flat Plunger	Parallel	15/32-32NS-2A THD	160 oz max	0.020" max	0.020" to 0.030"	0.200" min	16 oz min
M8805/70-034	10AT373-32-10	2PDT	Roller Plunger	Parallel	15/32-32NS-2A THD	160 oz max	0.020" max	0.020" to 0.030"	0.200" min	16 oz min
M8805/70-035	10AT372-33-10	2PDT	Flat Plunger	90° Angle	15/32-32NS-2A THD	160 oz max	0.020" max	0.020" to 0.030"	0.200" min	16 oz min
M8805/70-036	10AT373-33-10	2PDT	Roller Plunger	90° Angle	15/32-32NS-2A THD	160 oz max	0.020" max	0.020" to 0.030"	0.200" min	16 oz min
M8805/70-037	10AT375-102-10	4PDT	Flat Plunger	Parallel	15/32-32NS-2A THD	160 oz max	0.020" max	0.020" to 0.030"	0.200" min	16 oz min
M8805/70-038	10AT374-102-10	4PDT	Roller Plunger	Parallel	15/32-32NS-2A THD	160 oz max	0.020" max	0.020" to 0.030"	0.200" min	16 oz min
M8805/70-039	10AT375-103-10	4PDT	Flat Plunger	90° Angle	15/32-32NS-2A THD	160 oz max	0.020" max	0.020" to 0.030"	0.200" min	16 oz min
M8805/70-040	10AT374-103-10	4PDT	Roller Plunger	90° Angle	15/32-32NS-2A THD	160 oz max	0.020" max	0.020" to 0.030"	0.200" min	16 oz min

DIMENSIONAL DRAWINGS – Threaded Mount, Roller Plunger, 4PDT Configuration (10AT374-102-10 & 10AT374-103-10)

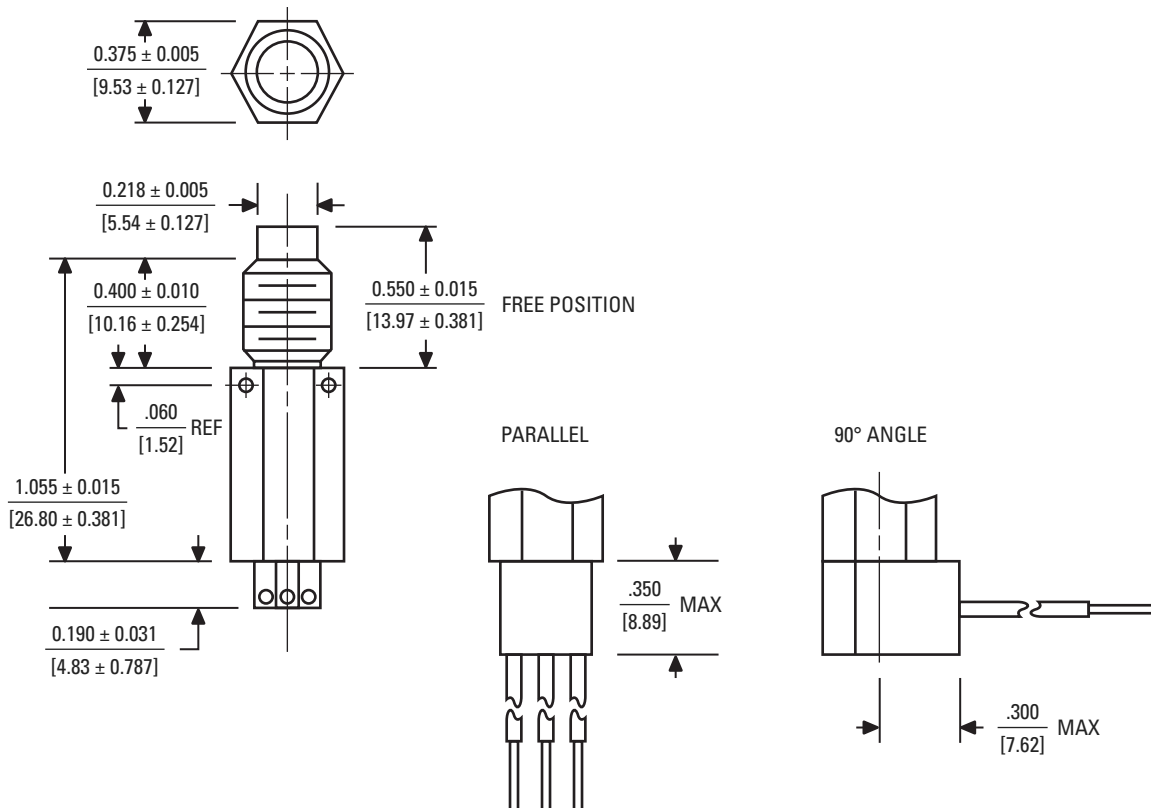


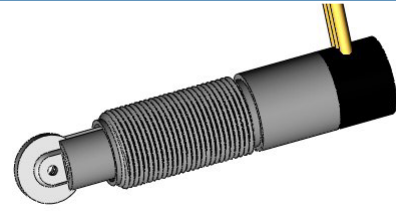
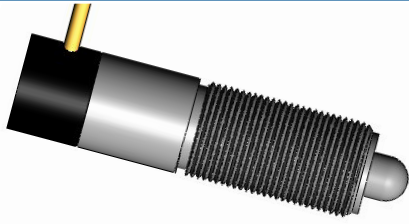


MIL-S-8805 CROSS REFERENCE CHART

Mil Spec	Sensata PN	Poles	Configuration	Wire Leads	Threaded Mount	Actuating Force	Movement Differential	Pretravel	Overtravel	Release Force
M8805/72-033	10AT363-02-10	SPDT	Flat Plunger	Parallel	5/16-24UNF-2A	30 oz max	0.005" max	0.010" max	0.125" min	4 oz min
M8805/72-034	10AT361-02-10	SPDT	Flat Plunger	Parallel	5/16-24UNF-2A Short	30 oz max	0.005" max	0.010" max	0.125" min	4 oz min
M8805/72-035	10AT363-03-10	SPDT	Flat Plunger	90° Angle	5/16-24UNF-2A	30 oz max	0.005" max	0.010" max	0.125" min	4 oz min
M8805/72-036	10AT361-03-10	SPDT	Flat Plunger	90° Angle	5/16-24UNF-2A Short	30 oz max	0.005" max	0.010" max	0.125" min	4 oz min
M8805/72-037	10AT364-02-10	SPDT	Spherical Plunger	Parallel	5/16-24UNF-2A	30 oz max	0.005" max	0.010" max	0.125" min	4 oz min
M8805/72-038	10AT362-02-10	SPDT	Spherical Plunger	Parallel	5/16-24UNF-2A Short	30 oz max	0.005" max	0.010" max	0.125" min	4 oz min
M8805/72-039	10AT364-03-10	SPDT	Spherical Plunger	90° Angle	5/16-24UNF-2A	30 oz max	0.005" max	0.010" max	0.125" min	4 oz min
M8805/72-040	10AT362-03-10	SPDT	Spherical Plunger	90° Angle	5/16-24UNF-2A Short	30 oz max	0.005" max	0.010" max	0.125" min	4 oz min
M8805/73-013	10AT7-02-10	SPDT	Flat Plunger	Parallel	3/8-32 NEF-2A	104 oz max	0.010" max	0.020" max	0.125" min	24 oz min
M8805/73-014	10AT7-03-10	SPDT	Flat Plunger	90° Angle	3/8-32 NEF-2A	104 oz max	0.010" max	0.020" max	0.125" min	24 oz min
M8805/73-015	10AT76-02-10	SPDT	Spherical Plunger	Parallel	3/8-32 NEF-2A	104 oz max	0.010" max	0.020" max	0.125" min	24 oz min
M8805/73-016	10AT76-03-10	SPDT	Spherical Plunger	90° Angle	3/8-32 NEF-2A	104 oz max	0.010" max	0.020" max	0.125" min	24 oz min

DIMENSIONAL DRAWINGS – Threaded Mount, Flat Plunger, Hex Body Configuration (10AT363-01, 10AT363-02, 10AT363-03)

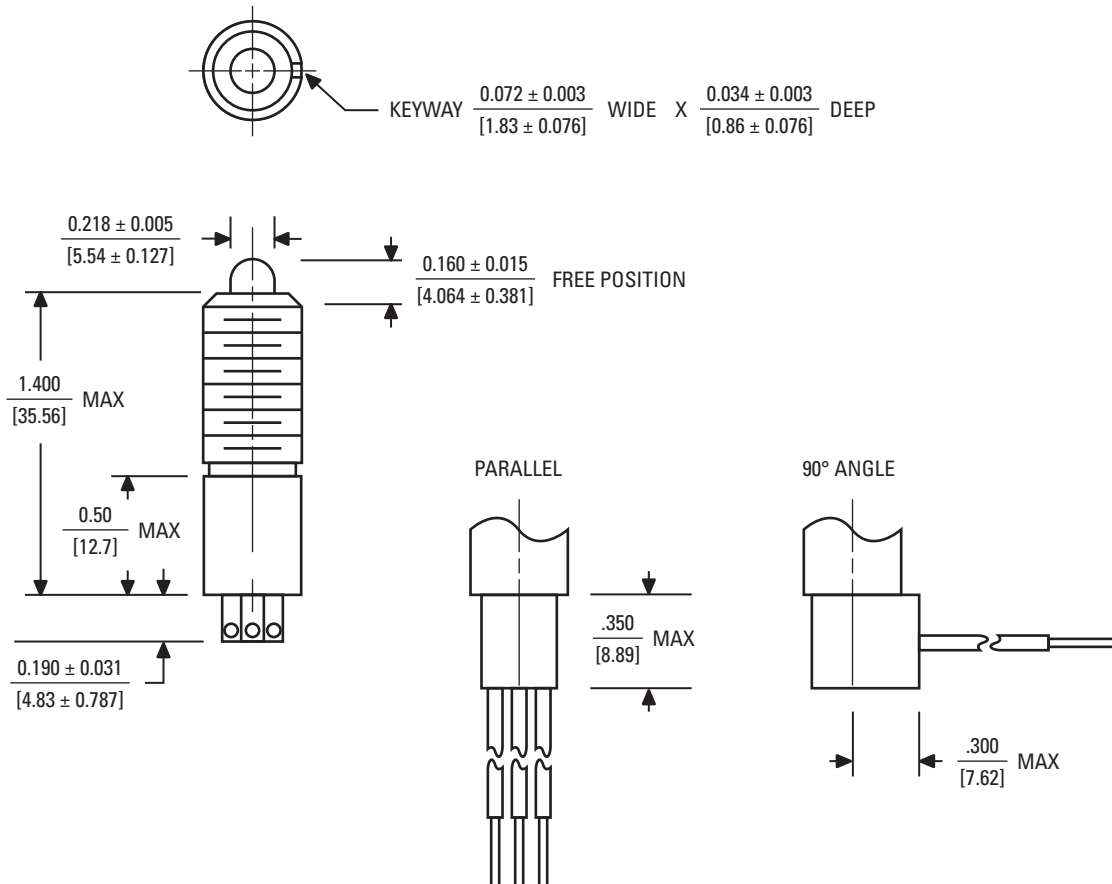




MIL-S-8805 CROSS REFERENCE CHART

Mil Spec	Sensata PN	Poles	Configuration	Wire Leads	Threaded Mount	Actuating Force	Movement Differential	Pretravel	Overtravel	Release Force
M8805/74-035	10AT366-02-10	SPDT	Flat Plunger	Parallel	15/32-32NS-2A	30 oz max	0.005" max	0.010" max	0.125" min	4 oz min
M8805/74-036	10AT368-02-10	SPDT	Roller Plunger	Parallel	15/32-32NS-2A	30 oz max	0.005" max	0.010" max	0.125" min	4 oz min
M8805/74-037	10AT366-03-10	SPDT	Flat Plunger	90° Angle	15/32-32NS-2A	30 oz max	0.005" max	0.010" max	0.125" min	4 oz min
M8805/74-038	10AT368-03-10	SPDT	Roller Plunger	90° Angle	15/32-32NS-2A	30 oz max	0.005" max	0.010" max	0.125" min	4 oz min
M8805/74-039	10AT369-02-10	SPDT	Flat Plunger , O-Ring	Parallel	15/32-32NS-2A	112 oz max	0.005" max	0.020" max	0.125" min	24 oz min
M8805/74-040	10AT371-02-10	SPDT	Roller Plunger, O-Ring	Parallel	15/32-32NS-2A	112 oz max	0.005" max	0.020" max	0.125" min	24 oz min
M8805/74-041	10AT369-03-10	SPDT	Flat Plunger , O-Ring	90° Angle	15/32-32NS-2A	112 oz max	0.005" max	0.020" max	0.125" min	24 oz min
M8805/74-042	10AT371-03-10	SPDT	Roller Plunger, O-Ring	90° Angle	15/32-32NS-2A	112 oz max	0.005" max	0.020" max	0.125" min	24 oz min
M8805/74-043	10AT367-02-10	SPDT	Spherical Plunger	Parallel	15/32-32NS-2A	30 oz max	0.005" max	0.010" max	0.125" min	4 oz min
M8805/74-044	10AT367-03-10	SPDT	Spherical Plunger	90° Angle	15/32-32NS-2A	30 oz max	0.005" max	0.010" max	0.125" min	4 oz min
M8805/74-045	10AT370-02-10	SPDT	Spherical Plunger, O-Ring	Parallel	15/32-32NS-2A	112 oz max	0.005" max	0.020" max	0.125" min	24 oz min
M8805/74-046	10AT370-03-10	SPDT	Spherical Plunger, O-Ring	90° Angle	15/32-32NS-2A	112 oz max	0.005" max	0.020" max	0.125" min	24 oz min

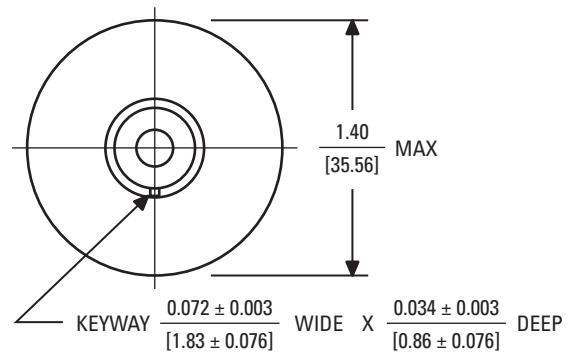
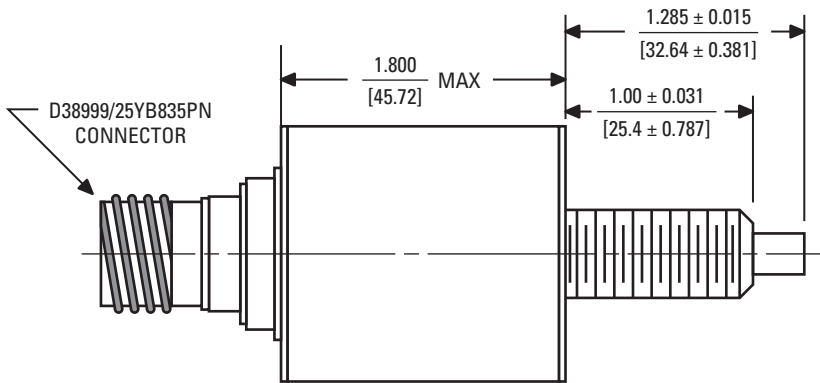
DIMENSIONAL DRAWINGS – Threaded Mount, Spherical Plunger Configuration (10AT367-01, 10AT367-02, 10AT367-03)



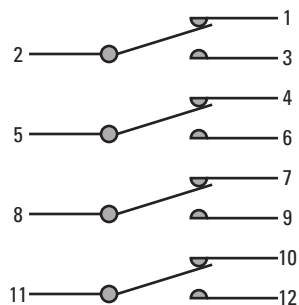
MIL-S-8805 CROSS REFERENCE CHART

Mil Spec	Sensata PN	Poles	Configuration	Connector	Threaded Mount	Actuating Force	Movement Differential	Pretravel	Overtravel	Release Force
M8805/116-022	10AT493-1	4PDT	Flat Plunger	D38999/25YB35PN Connector	15/32-32NS-2A	160 oz max	0.020" max	0.030" max	0.200" min	16 oz min

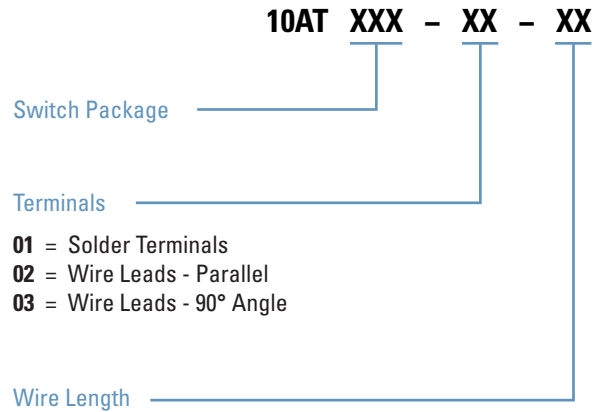
DIMENSIONAL DRAWINGS – Threaded Mount, 4PDT, Flat Plunger Configuration (10AT493)



CIRCUIT DIAGRAM



STANDARD PART NUMBER BUILDER



- 01** = Solder Terminals
- 02** = Wire Leads - Parallel
- 03** = Wire Leads - 90° Angle

No dash # needed if solder terminals

- 1** = 6" (152mm)
- 2** = 12" (305mm)
- 3** = 18" (457mm)
- 4** = 24" (610mm)
- 5** = 30" (762mm)
- 6** = 36" (914mm)
- 7** = 42" (1067mm)
- 8** = 48" (1219mm)
- 9** = 60" (1524mm)
- 10** = 72" (1829mm)

www.sensata.com

China

Sensata Technologies China Co., Ltd
Novel Plaza, 8th Floor
128 Nanjing Road West
SHANGHAI 20003
People's of China
+ 86 (2) 1 23 07 32 31
HVAC-China@list.sensata.com

Japan

Sensata Technologies Japan Ltd.
Sumito Fudosan
Nishi-Shinjuku Bldg.
8-15-17 Nishi-Shinjuku, Shinjuku-ku
TOKYO 160-0023, Japan
+ 81 (3) 53 38 10 03
HVAC-Japan@list.sensata.com

Korea

Sensata Technologies Korea Ltd.
29F, Trade Tower, 159-1
SamSung-Dong, KangNam-Nu
SEOUL 135-729
Republic of Korea
+82 (2) 5513212
HVAC-Korea@list.sensata.com

Europe

Sensata Technologies Holland B.V.
Kolthofsingel 8
7602 EM ALMELO
The Netherlands
+ 31 (546) 87 95 55
HVAC-Europe@list.sensata.com

South America

Sensata Technologies Sensores
Controles Do Brasil Ltda
Rua Azarias de Melo #648 - Taquaral
CAMPINAS - SP Brazil
+ 55 (19) 37 54 11 11
HVAC-SouthAmerica@list.sensata.com

North America

Sensata Technologies Inc.
529 Pleasant Street
Attleboro, MA 02703-0964 USA
1-888-438-2214
sensors@sensata.com



The World Depends on Sensors and Controls

Important Notice: Sensata Technologies (Sensata) reserves the right to make changes to or discontinue any product or service identified in this publication without notice. Sensata advises its customers to obtain the latest version of the relevant information to verify, before placing any orders, that the information being relied upon is current. Sensata assumes no responsibility for infringement of patents or rights of others based on Sensata applications assistance or product specifications since Sensata does not possess full access concerning the use or application of customers' products. Sensata also assumes no responsibility for customers' product designs.

Printed In U.S.A., March 2011