



## AT SERIES | POSITION SWITCHES

SNAP ACTION PRECISION POSITION SWITCHES (RATED 4 AMPS @ 28VDC)

### Features

- Qualified per MIL-PRF-8805, Enclosure Symbol 5
- Hermetically sealed with dry nitrogen gas backfill
- Proven snap-action switching, reliable performance and long life
- Excellent shock and vibration resistance
- Switching up to 4 amps
- Optimal for low level circuits
- Temperature range between -275°F and 450°F
- Small, lightweight axis-symmetric design for robustness and reliability
- Single and multiple pole designs available
- Various mounting configurations for custom applications
- Sealed and unsealed plunger options
- Wide range of side plate designs for narrow width applications
- PMA Approvals for various commercial aircraft
- Customer approvals for space and military applications



### Introduction

KLIXON® hermetic snap-action position switches are 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 55 years in a wide range of applications. Our switches are found on virtually all commercial and military aircraft, as well as various space vehicles and satellites worldwide.

Our design library has over 2,000 switch package designs which allow for “off-the-shelf” solutions to meet most application needs. Custom designs are also available if the customer’s application requires different form factors, or actuation methods. We offer a wide choice of precision position switches ideally suited for mission-critical applications that require accurate switching in extreme temperatures, high vibration and shock environments, or in the presence of typical aerospace fluids including but not limited to coolants, oils, hydraulic fluid, fuel, and de-icing fluids.

### Applications

<b>AT Series</b>	<ul style="list-style-type: none"> <li>• Flight Control Actuators</li> <li>• Landing Gear Steering</li> <li>• Landing Gear Down &amp; Locked</li> </ul>	<ul style="list-style-type: none"> <li>• Engine Start Quadrant</li> <li>• Helicopter Litter Door Latch</li> <li>• Helicopter Rotor Brake</li> </ul>	<ul style="list-style-type: none"> <li>• Helicopter Rotor Brake</li> <li>• APU Valve Indication</li> <li>• Throttle Grip Control</li> </ul>	<ul style="list-style-type: none"> <li>• Satellite Applications</li> <li>• Satellite Arm Extended</li> <li>• Parachute Release</li> </ul>
<b>3AT Series</b>	<ul style="list-style-type: none"> <li>• Engine Start Valves</li> <li>• Bleed Air Valves</li> </ul>	<ul style="list-style-type: none"> <li>• Env. Control Systems Valve</li> <li>• Avionics Cooling Valves</li> </ul>	<ul style="list-style-type: none"> <li>• Anti-Icing Valves</li> <li>• Fuel Valves</li> </ul>	<ul style="list-style-type: none"> <li>• Thrust Reverser</li> <li>• Flap Assembly</li> </ul>
<b>4AT Series</b>	<ul style="list-style-type: none"> <li>• Liquid Oxygen Valves</li> <li>• Solar Array Position</li> </ul>	<ul style="list-style-type: none"> <li>• Satellite Antenna Position</li> <li>• Mars Observer</li> </ul>	<ul style="list-style-type: none"> <li>• International Space Station Applications</li> <li>• Lunar Rover Release &amp; Power Up</li> </ul>	
<b>10AT Series (MIL-PRF-8805)</b>	<ul style="list-style-type: none"> <li>• Gearbox</li> <li>• Blade Fold Indication</li> <li>• Landing Gear Indication</li> <li>• Steering Wheel Switch</li> </ul>	<ul style="list-style-type: none"> <li>• Ejection Seat Armed</li> <li>• Cargo Handling Systems</li> <li>• Helicopter Rotor Condition</li> <li>• Helicopter Door Indication</li> </ul>	<ul style="list-style-type: none"> <li>• Antenna Position</li> <li>• Throttle Quadrant</li> <li>• Thrust Reverser</li> <li>• Flight Control Actuators</li> </ul>	<ul style="list-style-type: none"> <li>• EVA Space Suit</li> <li>• Space Capsule Controls</li> <li>• Inertial Upper Stage</li> <li>• Weapons Systems</li> </ul>

### Nomenclature

Precision hermetic position switches are sometimes referred to as:

- Position switches
- Aircraft switches
- Miniature switches
- Hermetic switches
- Aerospace switches
- Sensitive switches
- Limit switches
- Military switches
- Switches



# SPECIFICATIONS

## Performance & Actuation Characteristics Chart

		AT		3AT	4AT	10AT
<b>Device Type</b>		Standard		High Temperature	Low Temperature	High Amperage
<b>Maximum Actuating Force (STP)</b>		20 oz		20 oz	28 oz	30 oz
<b>Minimum Release Force (STP)</b>		4 oz		4 oz	1 oz	1 oz
<b>Maximum Pretravel</b>		0.009"		0.009"	0.009"	0.009"
<b>Maximum Movement Differential</b>		0.003"		0.003"	0.003"	0.003"
<b>Minimum Overtravel</b>		0.002"		0.002"	0.002"	0.002"
<b>Overtravel Stop</b>		No		No	No	No
<b>Maximum Force on Actuator</b>		5 lb		5 lb	5 lb	5 lb
<b>Current Ratings in Amps (28VDC)</b>	<b>Resistance</b>	3	1	1	3	4
	<b>Inductive</b>	1	½	½	1	1
	<b>Lamp</b>	1	½	½	1	2
<b>Minimum Life @ Rated Load</b>		25K	50K	25K	25K	25K
<b>Minimum Mechanical Life Cycles</b>		100K		100K	50K	50K
<b>Ambient Temperature Range</b>		-65°F to 275°F (-53.8°C to 135°C)		-65°F to 450°F (-53.8°C to 232.2°C)	-275°F to 275°F (-170.5°C to 135°C)	-85°F to 275°F (-65°C to 135°C)
<b>Dielectric Strength</b> Terminal to Case Terminal to Terminal		1000 VRMS 800 VRMS		500 VRMS 500 VRMS	1000 VRMS 800 VRMS	1000 VRMS 800 VRMS
<b>Max Leakage</b>		1 x 10 <sup>-8</sup> Std. cc He/Sec @ 1 atmosphere differential				
<b>Shock Resistance</b>		200G, 6 ms sawtooth				
<b>Vibration Resistance</b>		65G, 10-2000Hz, .5DA or 65GTMS				
<b>Insulation Resistance @ 500VDC</b>		100 Megohms				
<b>Voltage Drop @ 1 amp</b>		0.04		0.12	0.04	0.04
<b>SEAL (MIL-S-8805)</b>		Design Enclosure 5				
<b>Backfill</b>		Dry nitrogen with 10% helium				

### NOTE FOR DRAWINGS

1. Because of restricted space we can only show a small percentage of our switch packages and dimensional drawings. Please contact the factory if you do not see the solution you need, or if you require more detailed envelope drawings.
2. Unless otherwise noted, standard leads are AWG #20 per MIL-W-22759/9.
3. All exposed materials on packaged designs are corrosion resistant steel with the exception of the side plates on Style 7 switches which are anodized aluminum alloy.
4. All hardware provided is corrosion resistant steel.

### Technical Terms

#### Electrical Life

The minimum number of cycles allowable for a switch under a specified combination of electrical load, actuation and environmental criteria. Usually specified for the maximum current and temperature rating of the switch.

#### Mechanical Life

The minimum number of cycles allowable for a switch with no electrical load, and a specified combination of actuation and environmental criteria.

#### Contact Erosion

A general loss of material from one or both surfaces of a pair of mating contacts. This is as a result of switching electrical loads.

## Technical Terms (cont.)

### Pole

The number of completely separate circuits contained in a switch. A single pole switch can control only one circuit at a time. A double pole switch can control two independent circuits at the same time.

### Throw

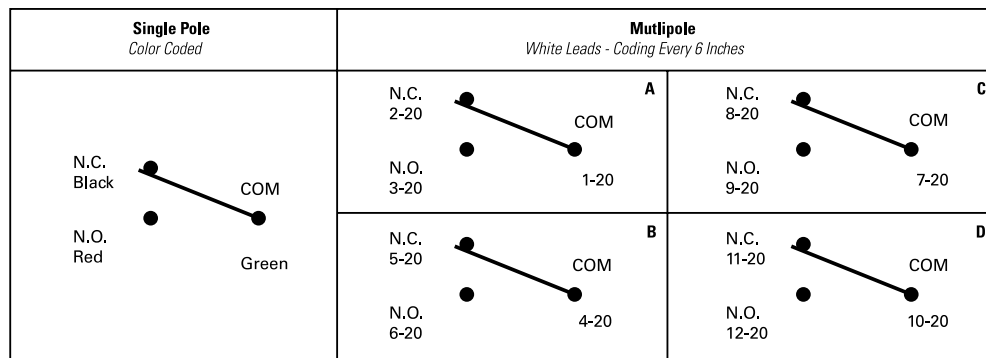
The number of circuits that each individual pole of a switch can control. The number of throws is completely independent of the number of poles.

### Contact Resistance

The resistance offered to flow of current during its passage between electrical contacts. For practical reasons, lead and terminal resistance may be included in the actual measurement, as well as the contact resistance proper.

### Termination Leads or Connectors

Sensata uses 20 gauge wire per MIL-W-22759 as shown below. Alternative gauges, MIL specs and color coding schemes are available upon request. Sensata will also provide switches with connectors to meet customer application needs.



**Terminal Identification**  
 Red = Normally Open  
 Green = Common  
 Black = Normally Closed

**Wire Leads**  
 AWG 20 MIL-W-22759/9

**NOTE:**  
 Diagrams show circuits when actuator is in free position.

### Dielectric Withstanding Voltage \*

The maximum voltage that a switch can withstand between specified points without leakage current exceeding a specified value.

### Insulation Resistance \*

The resistance offered by the insulating members of a component part to a direct voltage tending to produce a leakage current through or on the surface of these members. Insulation resistance should not be considered the equivalent of dielectric withstanding voltage.

### Loads

Three types of loads associated with electrical switches are: resistive, inductive and lamp. Of concern when discussing loads are their effect on the switch contacts.

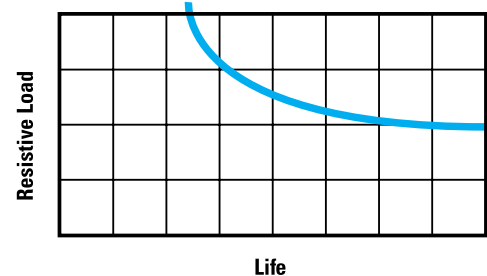
### Resistive

Purely resistive loads are the easiest to switch. Contact life is maximized when switching purely resistive loads because contact erosion is minimized.

### Inductive

Inductive loads result in the most contact erosion. This is due to the tendency of the current to continue traveling across the contact while opening, causing arcing.

Life Expectancy vs Current



\* Insulation resistance measurements should not be considered to be equivalent to dielectric withstand voltage tests. A clear, dry insulation may have a high insulation resistance and yet possess a mechanical fault that would cause failure in the dielectric withstand voltage test. Conversely, a dirty, deteriorated insulation with a low insulation resistance might not break down under a high potential of a DWV test.

## Technical Terms (cont.)

### Lamp

In-rush current is the condition that result in the lamp load rating. The resistance rating of a lamp is normally specified when the lamp is hot. However, when the lamp is cold the resistance is low. This in-rush current can be 10 times the normal current, resulting in welding of the contacts.

### Low Level Circuit

Low level circuits are classified in MIL-8805 as those with resistive loads less than 10mA at 30mV. The use of gold plated contacts and the hermetic enclosure of the switch contacts afford an ideal environment for switching low level loads.

### Pretravel

The distance the button moves from the free position to the actuation point.

### Free Position

The position of the button when there is no external force other than gravity applied to it.

### Actuation Point

The position of the button at which the movable contact snaps from the normally closed contact position to the normally open contact position.

### Release Position

The position of the button at which the movable contact snaps from the normally open contact position to the normally closed contact position.

### Maximum Overtravel Position

The position of the button when the positive overtravel stop is reached. Further overtravel would damage the switch.

### Actuation Force

The force which must be applied to the button to cause the movable contact to snap from the normally closed contact position to the normally open contact position.

### Release Force

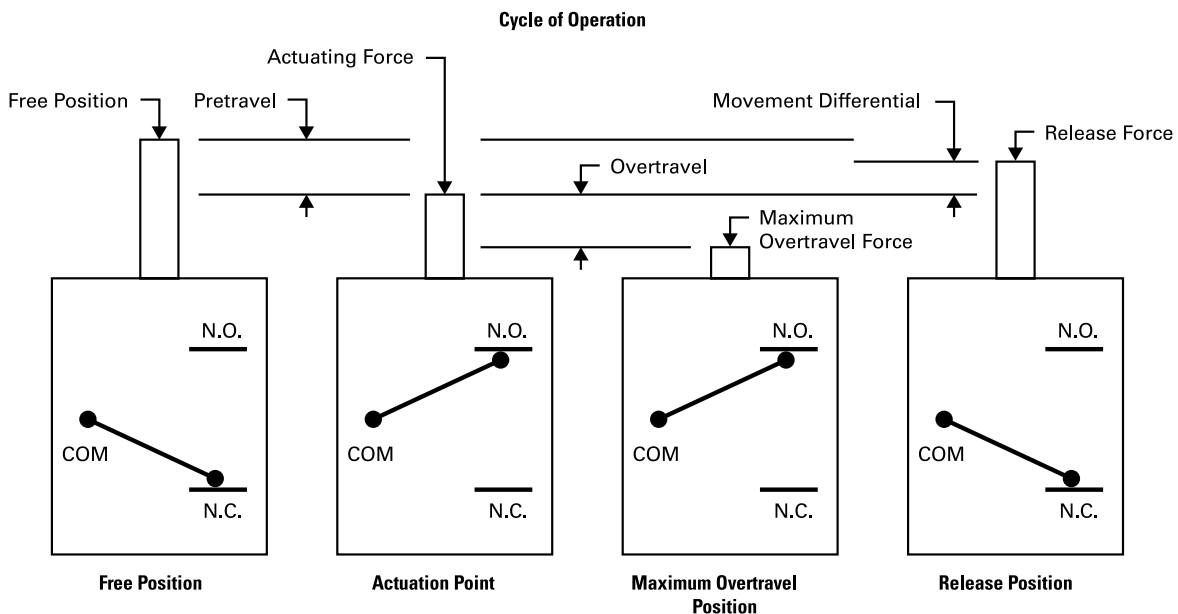
The level to which the force on the button must be reduced to allow the contacts to snap from the normally open position to the normally closed contact position.

### Overtravel

The distance that the button can travel beyond the actuation point.

### Movement Differential

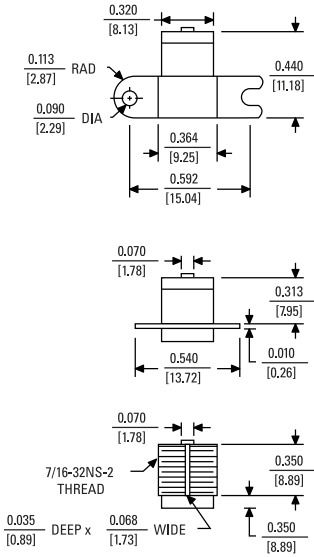
The distance the button moves from the actuation point to the release point.





# DIMENSIONS AND ORDERING OPTIONS

All dimensions are in millimeters.

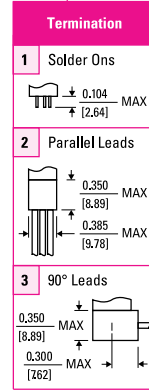


## BASIC "AT", BRACKET/FLANGE/THREADS, 1 POLE

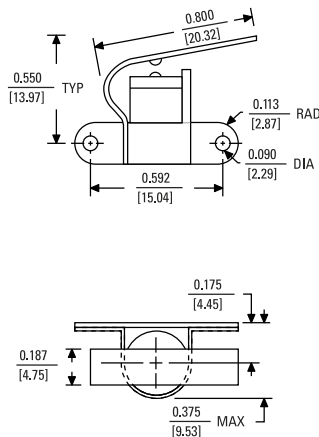
3AT47 - 13 - 6

	Basic Switch & Actuator/Body Style			
	AT373	3AT46	4AT48	10AT15
	AT104	3AT47	4AT49	10AT124
	AT362	3AT48	4AT64	10AT17
	<i>std</i>	<i>hi temp</i>	<i>low temp</i>	<i>hi amp</i>
Bracket	20 oz	20 oz	28 oz	30 oz
Flange	1 oz	1 oz	1 oz	4 oz
Threads				
Actuating Force (max)				
Release Force (max)				
Pretravel (max)		.009"	(0.23mm)	
Movement Diff. (max)		.003" (0.08mm)		.005" (0.13mm)
Overtravel (min)		.003" (0.38mm)		
Positive Overtravel Stop	No	No	No	No
Max. Force on Actuator approx. Weight (no leads)	5 lb	5 lb	5 lb	5 lb
	0.15 oz	0.15 oz	0.15 oz	0.15 oz

Operation	
0	SPDT
1	SPST, N.C.
2	SPST, N.O.



Lead Length	
1	6" (153mm)
2	12" (305mm)
3	18" (458mm)
4	24" (610mm)
5	30" (762mm)
6	36" (915mm)
7	42" (1067mm)
8	48" (1220mm)
9	60" (1524mm)
10	72" (1829mm)

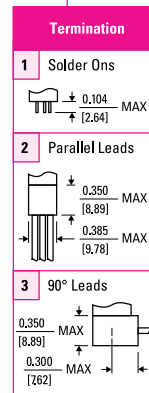


## BASIC "AT", RIGHT HAND ACTUATOR, 1 POLE

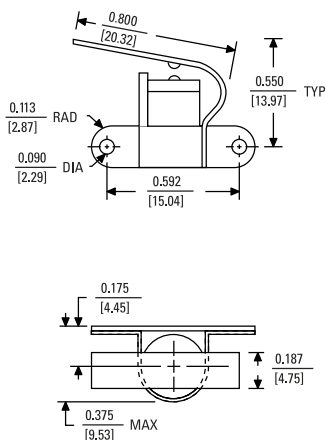
AT289 - 22 - 5

	Basic Switch & Actuator/Body Style			
	AT289	3AT40	4AT43	10AT27
	<i>std</i>	<i>hi temp</i>	<i>low temp</i>	<i>hi amp</i>
Actuating Force (max)	24 oz	24 oz	35 oz	35 oz
Release Force (max)	1 oz	1 oz	1 oz	4 oz
Pretravel (max)		.250" (6.35mm)		
Movement Diff. (max)		.050" (1.27mm)		
Overtravel (min)		.015" (0.38mm)		
Positive Overtravel Stop	Yes	Yes	Yes	Yes
Max. Force on Actuator approx. Weight (no leads)	5 lb	5 lb	5 lb	5 lb
	0.18 oz	0.18 oz	0.18 oz	0.18 oz

Operation	
0	SPDT
1	SPST, N.C.
2	SPST, N.O.



Lead Length	
1	6" (153mm)
2	12" (305mm)
3	18" (458mm)
4	24" (610mm)
5	30" (762mm)
6	36" (915mm)
7	42" (1067mm)
8	48" (1220mm)
9	60" (1524mm)
10	72" (1829mm)

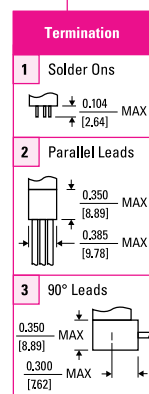


## BASIC "AT", LEFT HAND ACTUATOR, 1 POLE

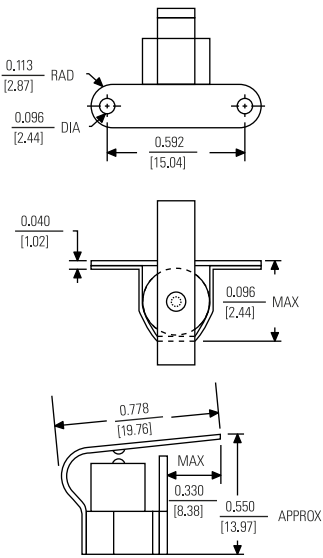
AT290 - 22 - 4

	Basic Switch & Actuator/Body Style			
	AT290	3AT41	4AT44	10AT28
	<i>std</i>	<i>hi temp</i>	<i>low temp</i>	<i>hi amp</i>
Actuating Force (max)	24 oz	24 oz	35 oz	35 oz
Release Force (max)	1 oz	1 oz	1 oz	4 oz
Pretravel (max)		.250" (6.35mm)		
Movement Diff. (max)		.050" (1.27mm)		
Overtravel (min)		.015" (0.38mm)		
Positive Overtravel Stop	Yes	Yes	Yes	Yes
Max. Force on Actuator approx. Weight (no leads)	5 lb	5 lb	5 lb	5 lb
	0.18 oz	0.18 oz	0.18 oz	0.18 oz

Operation	
0	SPDT
1	SPST, N.C.
2	SPST, N.O.



Lead Length	
1	6" (153mm)
2	12" (305mm)
3	18" (458mm)
4	24" (610mm)
5	30" (762mm)
6	36" (915mm)
7	42" (1067mm)
8	48" (1220mm)
9	60" (1524mm)
10	72" (1829mm)



### BASIC "AT", CENTRAL ACTUATOR, 1 POLE

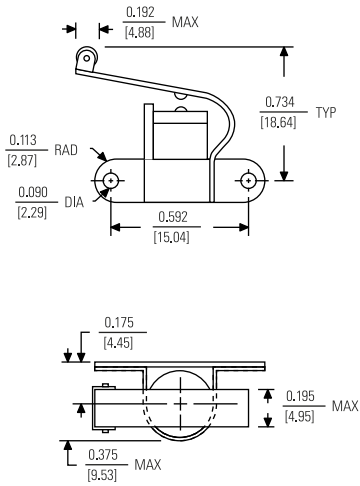
3AT53 - 2 1 - 4

	Basic Switch & Actuator/Body Style			
	AT294	3AT53	4AT50	10AT29
	<i>std</i>	<i>hi temp</i>	<i>low temp</i>	<i>hi amp</i>
Actuating Force (max)	24 oz	24 oz	35 oz	35 oz
Release Force (max)	1 oz	1 oz	1 oz	4 oz
Pretravel (max)	.250" (6.35mm)			
Movement Diff. (max)	.050" (1.27mm)			
Overtravel (min)	.015" (0.38mm)			
Positive Overtravel Stop	Yes	Yes	Yes	Yes
Max. Force on Actuator approx. Weight (no leads)	5 lb	5 lb	5 lb	5 lb
	0.2 oz	0.2 oz	0.2 oz	0.2 oz

Operation	
0	SPDT
1	SPST, N.C.
2	SPST, N.O.

Termination	
1	Solder Pins 
2	Parallel Leads 
3	90° Leads 

Lead Length	
1	6" (153mm)
2	12" (305mm)
3	18" (458mm)
4	24" (610mm)
5	30" (762mm)
6	36" (915mm)
7	42" (1067mm)
8	48" (1220mm)
9	60" (1524mm)
10	72" (1829mm)



### BASIC "AT", LEFT HAND ACTUATOR, 1 POLE

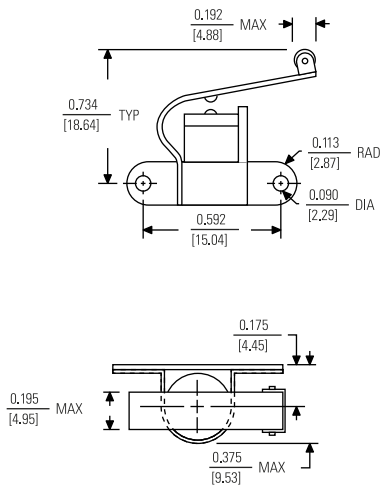
AT292 - 1 2 - 5

	Basic Switch & Actuator/Body Style			
	AT292	3AT43	4AT46	10AT31
	<i>std</i>	<i>hi temp</i>	<i>low temp</i>	<i>hi amp</i>
Actuating Force (max)	24 oz	24 oz	35 oz	35 oz
Release Force (max)	1 oz	1 oz	1 oz	4 oz
Pretravel (max)	.250" (6.35mm)			
Movement Diff. (max)	.050" (1.27mm)			
Overtravel (min)	.015" (0.38mm)			
Positive Overtravel Stop	Yes	Yes	Yes	Yes
Max. Force on Actuator approx. Weight (no leads)	5 lb	5 lb	5 lb	5 lb
	0.18 oz	0.18 oz	0.18 oz	0.18 oz

Operation	
0	SPDT
1	SPST, N.C.
2	SPST, N.O.

Termination	
1	Solder Pins 
2	Parallel Leads 
3	90° Leads 

Lead Length	
1	6" (153mm)
2	12" (305mm)
3	18" (458mm)
4	24" (610mm)
5	30" (762mm)
6	36" (915mm)
7	42" (1067mm)
8	48" (1220mm)
9	60" (1524mm)
10	72" (1829mm)



### BASIC "AT", RIGHT HAND ACTUATOR, 1 POLE

AT291 - 2 2 - 2

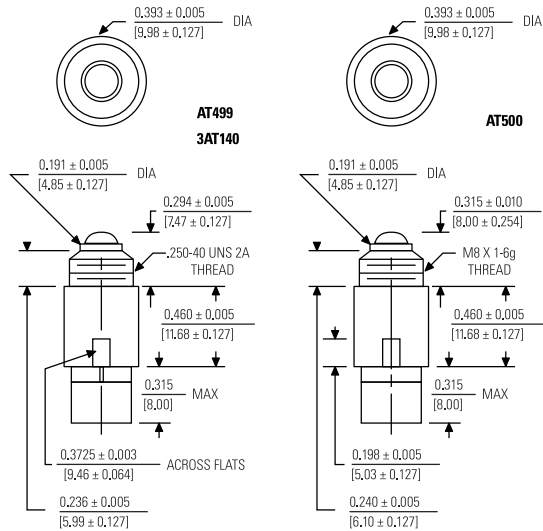
	Basic Switch & Actuator/Body Style			
	AT291	3AT42	4AT45	10AT30
	<i>std</i>	<i>hi temp</i>	<i>low temp</i>	<i>hi amp</i>
Actuating Force (max)	24 oz	24 oz	35 oz	35 oz
Release Force (max)	1 oz	1 oz	1 oz	4 oz
Pretravel (max)	.250" (6.35mm)			
Movement Diff. (max)	.050" (1.27mm)			
Overtravel (min)	.015" (0.38mm)			
Positive Overtravel Stop	Yes	Yes	Yes	Yes
Max. Force on Actuator approx. Weight (no leads)	5 lb	5 lb	5 lb	5 lb
	0.2 oz	0.2 oz	0.2 oz	0.2 oz

Operation	
0	SPDT
1	SPST, N.C.
2	SPST, N.O.

Termination	
1	Solder Pins 
2	Parallel Leads 
3	90° Leads 

Lead Length	
1	6" (153mm)
2	12" (305mm)
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6	36" (915mm)
7	42" (1067mm)
8	48" (1220mm)
9	60" (1524mm)
10	72" (1829mm)

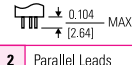
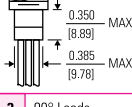
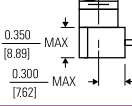
## THREADED HEX BODY, FLAT & ROUND PLUNGER, 1 POLE



**AT500 - 2 2 - 10**

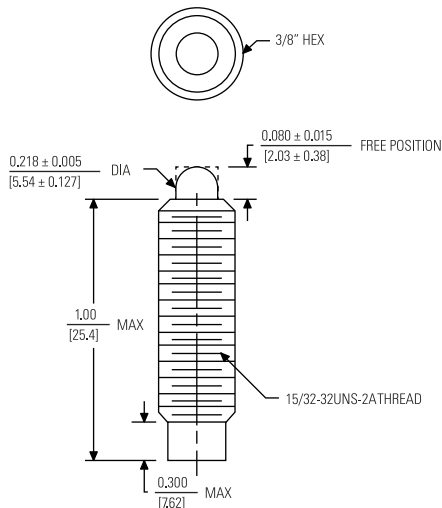
Basic Switch & Actuator/Body Style		
AT499	3AT140	AT500
std	hi temp	std
Actuating Force (max)		
20 oz		
Release Force (max)		
4 oz		
Pretravel (max)		
.010" (.254mm)		
Movement Diff. (max)		
.006" (.152mm)		
Overtravel (min)		
.040" (1.02mm)		
Positive Overtravel Stop		
Yes		
Max. Force on Actuator		
10 lbs		
Approx. Weight (no leads)		
0.2 oz		

Operation	
0	SPDT
1	SPST, N.C.
2	SPST, N.O.

Termination	
1	Solder Pins 
2	Parallel Leads 
3	90° Leads 

Lead Length	
1	6" (153mm)
2	12" (305mm)
3	18" (458mm)
4	24" (610mm)
5	30" (762mm)
6	36" (915mm)
7	42" (1067mm)
8	48" (1220mm)
9	60" (1524mm)
10	72" (1829mm)

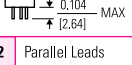
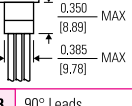
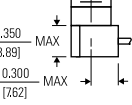
## THREADED HEX BODY, FLAT & ROUND PLUNGER, 1 POLE



**10AT384 - 2 2 - 10**

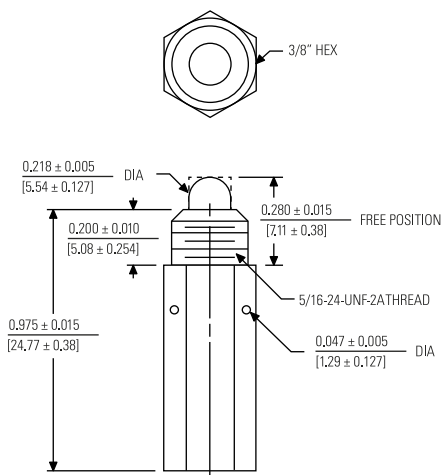
Basic Switch & Actuator/Body Style		
AT414	3AT141	10AT384
std	hi temp	hi amp
Actuating Force (max)		
20 oz		
Release Force (max)		
1 oz		
Pretravel (max)		
.010" (.254mm)		
Movement Diff. (max)		
.005" (.127mm)		
Overtravel (min)		
.060" (1.52mm)		
Positive Overtravel Stop		
Yes		
Max. Force on Actuator		
30 lb		
Approx. Weight (no leads)		
0.7 oz		

Operation	
0	SPDT
1	SPST, N.C.
2	SPST, N.O.

Termination	
1	Solder Pins 
2	Parallel Leads 
3	90° Leads 

Lead Length	
1	6" (153mm)
2	12" (305mm)
3	18" (458mm)
4	24" (610mm)
5	30" (762mm)
6	36" (915mm)
7	42" (1067mm)
8	48" (1220mm)
9	60" (1524mm)
10	72" (1829mm)

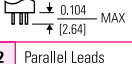
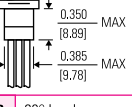
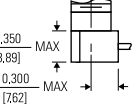
## THREADED HEX BODY, FLAT & ROUND PLUNGER, 1 POLE



**AT394 - 0 3 - 3**

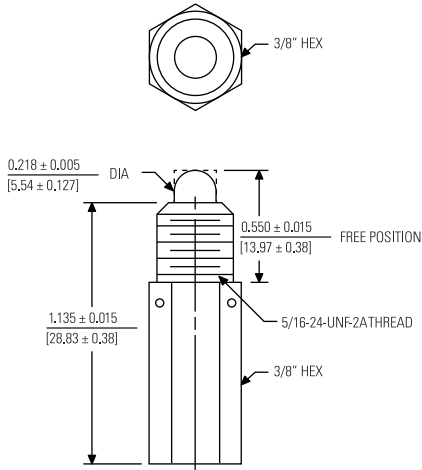
Basic Switch & Actuator/Body Style		
AT393	3AT143	10AT361
AT394	3AT144	10AT362
std	hi temp	hi amp
Actuating Force (max)		
20 oz		
Release Force (max)		
1 oz		
Pretravel (max)		
.010" (.254mm)		
Movement Diff. (max)		
.005" (.127mm)		
Overtravel (min)		
.060" (1.52mm)		
Positive Overtravel Stop		
Yes		
Max. Force on Actuator		
20 lb		
Approx. Weight (no leads)		
0.5 oz		

Operation	
0	SPDT
1	SPST, N.C.
2	SPST, N.O.

Termination	
1	Solder Pins 
2	Parallel Leads 
3	90° Leads 

Lead Length	
1	6" (153mm)
2	12" (305mm)
3	18" (458mm)
4	24" (610mm)
5	30" (762mm)
6	36" (915mm)
7	42" (1067mm)
8	48" (1220mm)
9	60" (1524mm)
10	72" (1829mm)

## THREADED HEX BODY, FLAT & ROUND PLUNGER, 1 POLE



Flat Plunger  
Round Plunger

Actuating Force (max)  
Release Force (max)  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

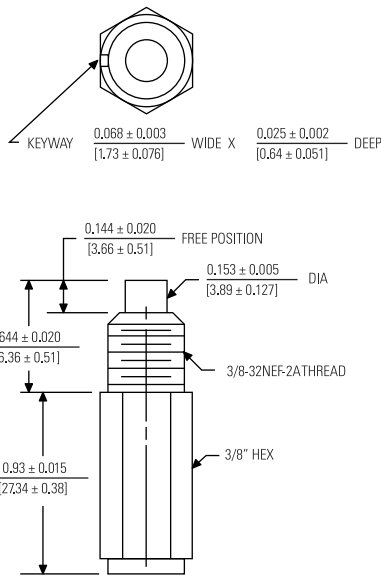
Basic Switch & Actuator/Body Style		
AT395	3AT145	10AT363
std	hi temp	hi amp
20 oz		30 oz
1 oz		4 oz
.010"	(.254mm)	
.005"	(.127mm)	
.125"	(3.18mm)	
Yes		Yes
20 lb		20 lb
0.6 oz		0.6 oz

10AT364 - 0 3 - 10

Operation	
0	SPDT
1	SPST, N.C.
2	SPST, N.O.

Termination	
1	Solder Pins 
2	Parallel Leads 
3	90° Leads 

Lead Length	
1	6" (153mm)
2	12" (305mm)
3	18" (458mm)
4	24" (610mm)
5	30" (762mm)
6	36" (915mm)
7	42" (1067mm)
8	48" (1220mm)
9	60" (1524mm)
10	72" (1829mm)



Actuating Force (max)  
Release Force (max)  
Plunger Seal / MIL-8805  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

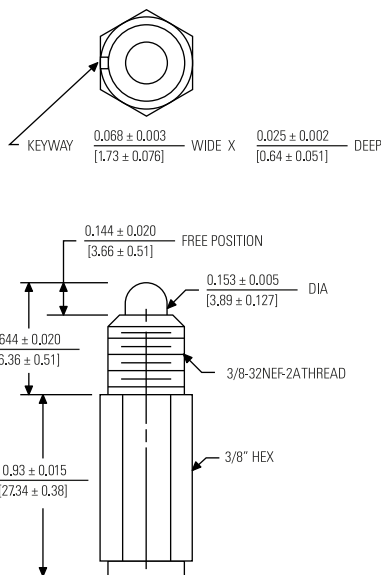
Basic Switch & Actuator/Body Style		
AT268	3AT138	10AT7
std	hi temp	hi amp
104 oz		
24 oz		
Yes		
.010"	(.254mm)	
.005"	(.127mm)	
.060"	(1.52mm)	
Yes		
20 lb		
0.5 oz		

AT268 - 2 2 - 2

Operation	
0	SPDT
1	SPST, N.C.
2	SPST, N.O.

Termination	
1	Solder Pins 
2	Parallel Leads 
3	90° Leads 

Lead Length	
1	6" (153mm)
2	12" (305mm)
3	18" (458mm)
4	24" (610mm)
5	30" (762mm)
6	36" (915mm)
7	42" (1067mm)
8	48" (1220mm)
9	60" (1524mm)
10	72" (1829mm)



Actuating Force (max)  
Release Force (max)  
Plunger Seal / MIL-8805  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

Basic Switch & Actuator/Body Style		
AT269	3AT139	10AT76
std	hi temp	hi amp
104 oz		
24 oz		
Yes		
.020"	(.508mm)	
.010"	(.254mm)	
.125"	(3.18mm)	
Yes		
30 lb		
1.0 oz		

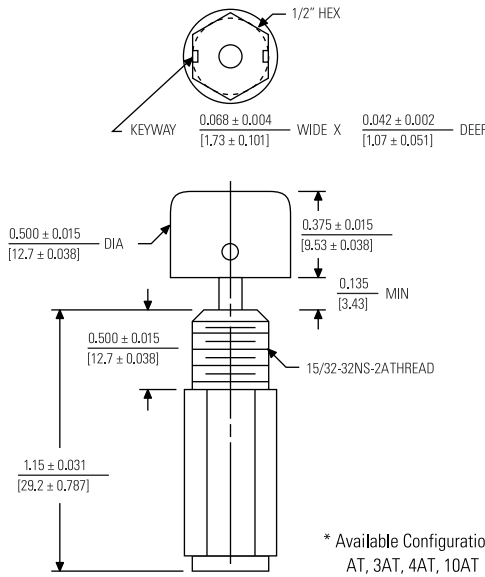
AT269 - 2 2 - 2

Operation	
0	SPDT
1	SPST, N.C.
2	SPST, N.O.

Termination	
1	Solder Pins 
2	Parallel Leads 
3	90° Leads 

Lead Length	
1	6" (153mm)
2	12" (305mm)
3	18" (458mm)
4	24" (610mm)
5	30" (762mm)
6	36" (915mm)
7	42" (1067mm)
8	48" (1220mm)
9	60" (1524mm)
10	72" (1829mm)





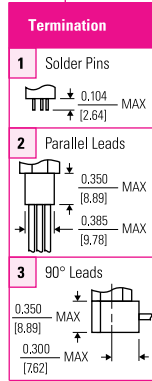
\* 3AT / 4AT versions available

Actuating Force (max)  
Release Force (max)  
Plunger Seal / MIL-S-8805  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

Basic Switch & Actuator/Body Style	
AT224	10AT87
std	hi amp
104 oz	104 oz
24 oz	24 oz
Yes	Yes
.020" (.508mm)	
.010" (.254mm)	
.125" (3.18mm)	
Yes	Yes
30 lb	30 lb
1.1 oz	1.1 oz

AT87 - 0 3 - 9

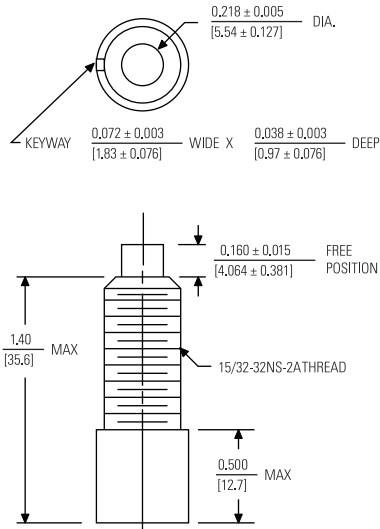
Operation	
0	SPDT
1	SPST, N.C.
2	SPST, N.O.



Lead Length	
1	6" (153mm)
2	12" (305mm)
3	18" (458mm)
4	24" (610mm)
5	30" (762mm)
6	36" (915mm)
7	42" (1067mm)
8	48" (1220mm)
9	60" (1524mm)
10	72" (1829mm)

\* Available Configurations:  
AT, 3AT, 4AT, 10AT

### THREADED, FLAT PLUNGER, 1 POLE

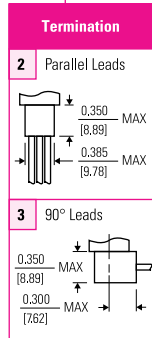


Actuating Force (max)  
Release Force (max)  
Plunger Seal / MIL-S-8805  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

Basic Switch & Actuator/Body Style			
AT400	10AT366	AT403	10AT369
std	hi amp	std	hi amp
20 oz	30 oz	104 oz	112 oz
1 oz	4 oz	24 oz	24 oz
No	No	Yes	Yes
.010" (.254mm)		.020" (.51mm)	
.005" (.127mm)		.005" (.127mm)	
.125" (3.18mm)		.125" (3.18mm)	
Yes	Yes	Yes	Yes
30 lb	30 lb	30 lb	30 lb
1.2 oz	1.2 oz	1.2 oz	1.2 oz

AT403 - 0 2 - 4

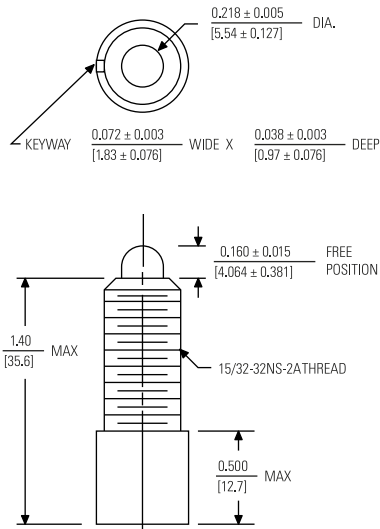
Operation	
0	SPDT
1	SPST, N.C.
2	SPST, N.O.



Lead Length	
1	6" (153mm)
2	12" (305mm)
3	18" (458mm)
4	24" (610mm)
5	30" (762mm)
6	36" (915mm)
7	42" (1067mm)
8	48" (1220mm)
9	60" (1524mm)
10	72" (1829mm)

\* 3AT / 4AT versions available

### THREADED, ROUND PLUNGER, 1 POLE

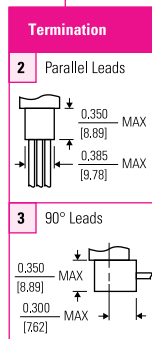


Actuating Force (max)  
Release Force (max)  
Plunger Seal / MIL-S-8805  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

Basic Switch & Actuator/Body Style			
AT401	10AT367	AT404	10AT370
std	hi amp	std	hi amp
20 oz	30 oz	104 oz	112 oz
1 oz	4 oz	24 oz	24 oz
No	No	Yes	Yes
.010" (.254mm)		.020" (.51mm)	
.005" (.127mm)		.005" (.127mm)	
.125" (3.18mm)		.125" (3.18mm)	
Yes	Yes	Yes	Yes
30 lb	30 lb	30 lb	30 lb
1.2 oz	1.2 oz	1.2 oz	1.2 oz

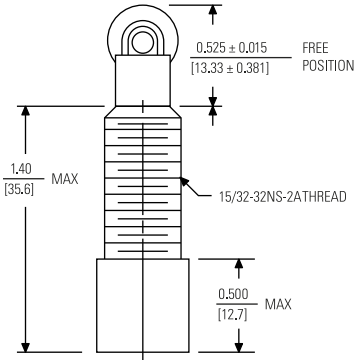
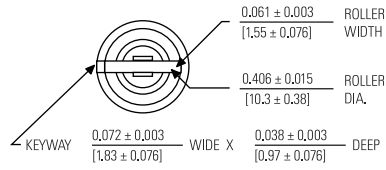
AT401 - 2 3 - 1

Operation	
0	SPDT
1	SPST, N.C.
2	SPST, N.O.



Lead Length	
1	6" (153mm)
2	12" (305mm)
3	18" (458mm)
4	24" (610mm)
5	30" (762mm)
6	36" (915mm)
7	42" (1067mm)
8	48" (1220mm)
9	60" (1524mm)
10	72" (1829mm)

\* 3AT / 4AT versions available



Actuating Force (max)  
Release Force (max)  
Plunger Seal / MIL-S-8805  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

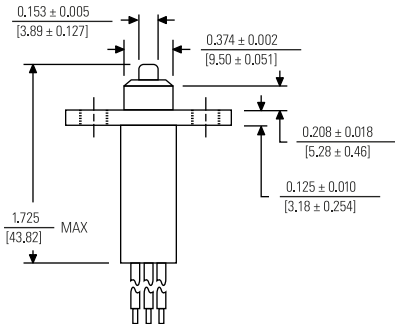
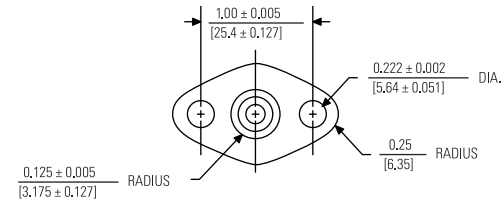
Basic Switch & Actuator/Body Style			
AT402	10AT368	AT405	10AT371
std	hi amp	std	hi amp
20 oz	30 oz	104 oz	112 oz
1 oz	4 oz	24 oz	24 oz
No	No	Yes	Yes
.010" (.254mm)	.020" (.51mm)	.010" (.254mm)	.010" (.254mm)
.005" (.127mm)	.005" (.127mm)	.005" (.127mm)	.005" (.127mm)
.125" (3.18mm)	.125" (3.18mm)	.125" (3.18mm)	.125" (3.18mm)
Yes	Yes	Yes	Yes
30 lb	30 lb	30 lb	30 lb
1.3 oz	1.3 oz	1.3 oz	1.3 oz

### THREADED, ROLLER PLUNGER, 1 POLE

10AT371 - 1 3 - 9

Operation		Termination		Lead Length	
0	SPDT	2	Parallel Leads	1	6" (153mm)
1	SPST, N.C.		2	12" (305mm)	
2	SPST, N.O.		3	90° Leads	
			4	18" (458mm)	
			5	24" (610mm)	
			6	30" (762mm)	
			7	36" (915mm)	
			8	42" (1067mm)	
			9	48" (1220mm)	
			10	60" (1524mm)	
				72" (1829mm)	

\*3AT / 4AT versions available



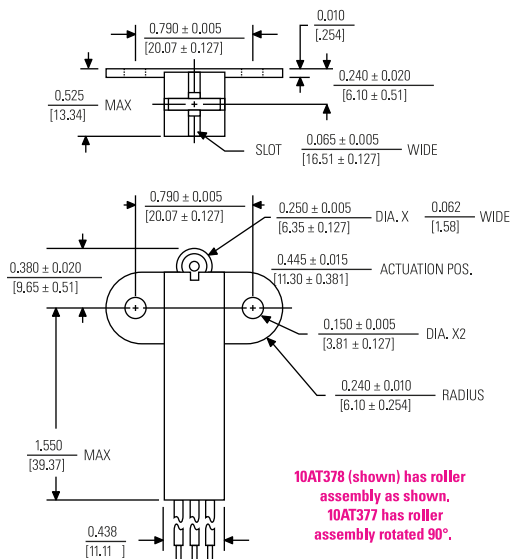
Actuating Force (max)  
Release Force (max)  
Plunger Seal / MIL-S-8805  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

Basic Switch & Actuator/Body Style	
10AT376	
hi amp	
192 oz	
112 oz	
Yes	
.040" (1.02mm)	
.010" (.254mm)	
.125" (3.18mm)	
Yes	
30 lbs	
1.1 oz	

### FLANGE MOUNT, SEALED PLUNGER, 1 POLE

10AT376 - 0 2 - 7

Operation		Termination		Lead Length	
0	SPDT	2	Parallel Leads	1	6" (153mm)
1	SPST, N.C.			2	12" (305mm)
2	SPST, N.O.			3	18" (458mm)
				4	24" (610mm)
				5	30" (762mm)
				6	36" (915mm)
				7	42" (1067mm)
				8	48" (1220mm)
				9	60" (1524mm)
				10	72" (1829mm)



10AT378 (shown) has roller assembly as shown.  
10AT377 has roller assembly rotated 90°.

Actuating Force (max)  
Release Force (max)  
Plunger Seal / MIL-S-8805  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

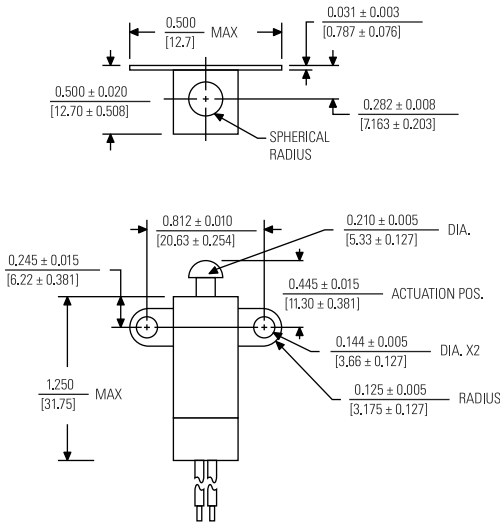
Basic Switch & Actuator/Body Style	
10AT377	10AT378
hi amp	hi amp
30 oz	30 oz
16 oz	16 oz
Yes	Yes
.040" (1.02mm)	
.010" (.254mm)	
.125" (3.18mm)	
Yes	Yes
30 lbs	30 lbs
1.2 oz	1.2 oz

### FLANGE MOUNT, SEALED ROLLER PLUNGER, 1 POLE

10AT377 - 1 2 - 5

Operation		Termination		Lead Length	
0	SPDT	2	Parallel Leads	1	6" (153mm)
1	SPST, N.C.			2	12" (305mm)
2	SPST, N.O.			3	18" (458mm)
				4	24" (610mm)
				5	30" (762mm)
				6	36" (915mm)
				7	42" (1067mm)
				8	48" (1220mm)
				9	60" (1524mm)
				10	72" (1829mm)

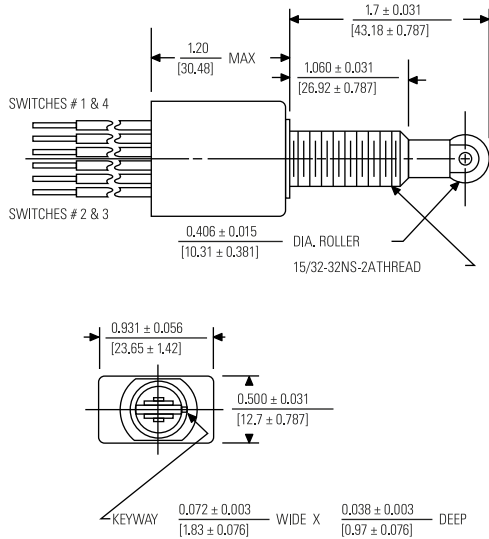
## FLANGE MOUNT, UNSEALED ROUND PLUNGER, 1 POLE



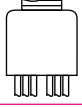
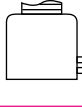
Actuating Force (max)  
Release Force (max)  
Plunger Seal / MIL-S-8805  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

Basic Switch & Actuator/Body Style		Operation		Termination		Lead Length	
<b>10AT379</b>		<b>0</b> SPDT		<b>2</b> Parallel Leads		<b>1</b> 6" (153mm)	
<i>hi amp</i>		<b>1</b> SPST, N.C.				<b>2</b> 12" (305mm)	
30 oz		<b>2</b> SPST, N.O.				<b>3</b> 18" (458mm)	
4 oz						<b>4</b> 24" (610mm)	
No						<b>5</b> 30" (762mm)	
.010" (.254mm)						<b>6</b> 36" (915mm)	
.010" (.254mm)						<b>7</b> 42" (1067mm)	
.060" (1.52mm)						<b>8</b> 48" (1220mm)	
Yes						<b>9</b> 60" (1524mm)	
80 oz						<b>10</b> 72" (1829mm)	
0.6 oz							

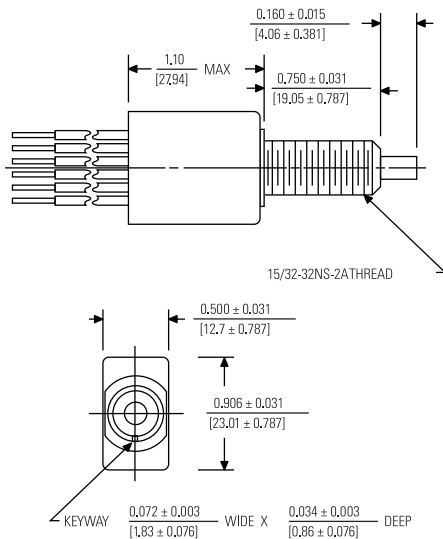
## THREADED, SEALED ROLLER PLUNGER, 2 POLE



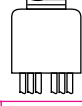
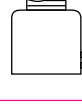
Actuating Force (max)  
Release Force (max)  
Plunger Seal / MIL-S-8805  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

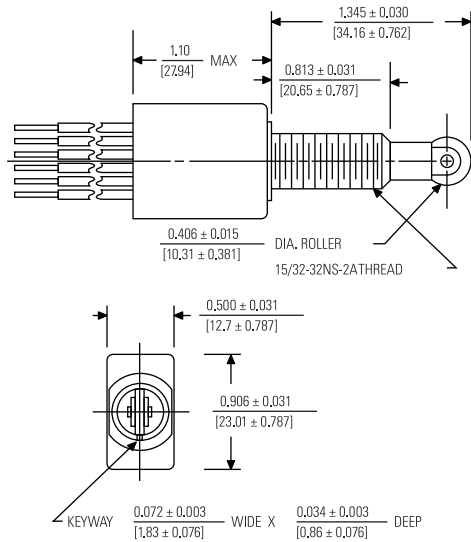
Basic Switch & Actuator/Body Style		Operation		Termination		Lead Length	
<b>3AT147</b>	<b>10AT373</b>	<b>3</b> DPDT		<b>2</b> Parallel Leads		<b>1</b> 6" (153mm)	
<i>hi temp</i>	<i>hi amp</i>	<b>4</b> DPST, N.C.				<b>2</b> 12" (305mm)	
160 oz		<b>5</b> DPST, N.O.				<b>3</b> 18" (458mm)	
16 oz		<b>6</b> DPST, NC/NO				<b>4</b> 24" (610mm)	
Yes						<b>5</b> 30" (762mm)	
.030" (.76mm)						<b>6</b> 36" (915mm)	
.020" (.51mm)						<b>7</b> 42" (1067mm)	
.200" (5.1mm)						<b>8</b> 48" (1220mm)	
Yes						<b>9</b> 60" (1524mm)	
30 lb						<b>10</b> 72" (1829mm)	
3.4 oz							

## THREADED, SEALED FLAT PLUNGER, 2 POLE



Actuating Force (max)  
Release Force (max)  
Plunger Seal / MIL-S-8805  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

Basic Switch & Actuator/Body Style			Operation		Termination		Lead Length	
<b>AT391</b>	<b>3AT148</b>	<b>10AT358</b>	<b>3</b> DPDT		<b>2</b> Parallel Leads		<b>1</b> 6" (153mm)	
<i>std</i>	<i>hi temp</i>	<i>hi amp</i>	<b>4</b> DPST, N.C.				<b>2</b> 12" (305mm)	
160 oz			<b>5</b> DPST, N.O.				<b>3</b> 18" (458mm)	
16 oz			<b>6</b> DPST, N.C./N.O.				<b>4</b> 24" (610mm)	
Yes							<b>5</b> 30" (762mm)	
.030" (.76mm)							<b>6</b> 36" (915mm)	
.020" (.51mm)							<b>7</b> 42" (1067mm)	
.125" (3.18mm)							<b>8</b> 48" (1220mm)	
Yes							<b>9</b> 60" (1524mm)	
30 lb							<b>10</b> 72" (1829mm)	
1.4 oz								

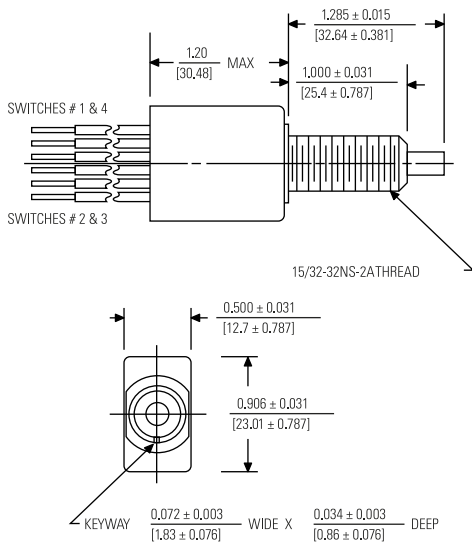


Actuating Force (max)  
Release Force (max)  
Plunger Seal / MIL-S-8805  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

## THREADED, SEALED ROLLER PLUNGER, 2 POLE

AT392 - 4 3 - 2

Basic Switch & Actuator/Body Style		Operation	Termination	Lead Length
<b>AT392</b>	<b>10AT359</b>	<b>3</b> DPDT	<b>2</b> Parallel Leads	<b>1</b> 6" (153mm)
<i>std</i>	<i>hi amp</i>	<b>4</b> DPST, N.C.		<b>2</b> 12" (305mm)
160 oz	160 oz	<b>5</b> DPST, N.O.		<b>3</b> 18" (458mm)
16 oz	16 oz	<b>6</b> DPST, N.C./N.O.		<b>4</b> 24" (610mm)
Yes	Yes			<b>5</b> 30" (762mm)
Pretravel (max)		.030" (.76mm)		
Movement Diff. (max)		.020" (.51mm)		
Overtravel (min)		.125" (3.18mm)		
Positive Overtravel Stop		Yes Yes		
Max Force on Actuator		30 lb 30 lb		
Approx Weight (no leads)		1.4 oz 1.4 oz		

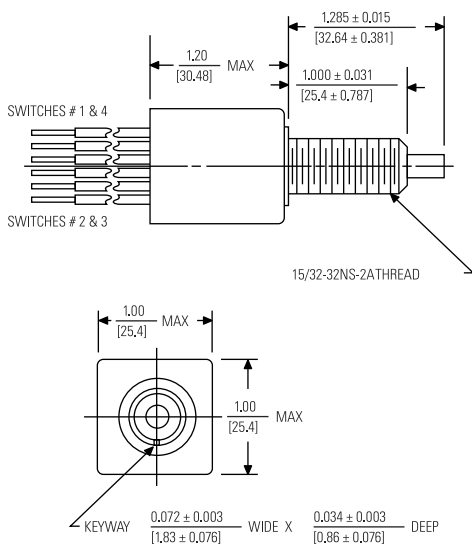


Actuating Force (max)  
Release Force (max)  
Plunger Seal / MIL-S-8805  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

## THREADED, SEALED FLAT PLUNGER, 2 POLE

AT406 - 6 2 - 6

Basic Switch & Actuator/Body Style		Operation	Termination	Lead Length
<b>AT406</b>	<b>10AT372</b>	<b>3</b> DPDT	<b>2</b> Parallel Leads	<b>1</b> 6" (153mm)
<i>hi amp</i>	<i>hi amp</i>	<b>4</b> DPST, N.C.		<b>2</b> 12" (305mm)
160 oz	160 oz	<b>5</b> DPST, N.O.		<b>3</b> 18" (458mm)
16 oz	16 oz	<b>6</b> DPST, N.C./N.O.		<b>4</b> 24" (610mm)
Yes	Yes			<b>5</b> 30" (762mm)
Pretravel (max)		.030" (.76mm)		
Movement Diff. (max)		.020" (.51mm)		
Overtravel (min)		.200" (5.1mm)		
Positive Overtravel Stop		Yes Yes		
Max Force on Actuator		30 lb 30 lb		
Approx Weight (no leads)		1.6 oz 1.6 oz		



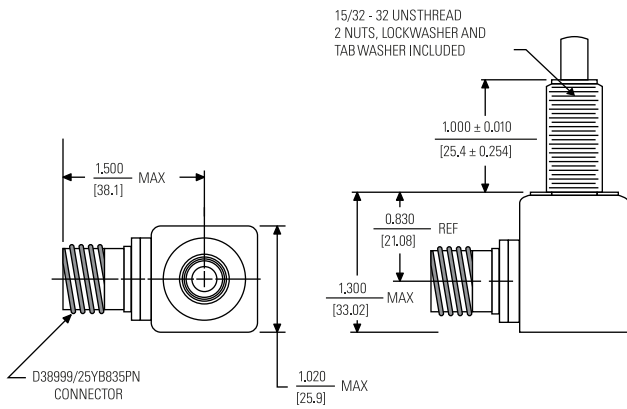
Actuating Force (max)  
Release Force (max)  
Plunger Seal / MIL-S-8805  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

## THREADED, SEALED FLAT PLUNGER, 3 OR 4 POLE

AT409 - 9 2 - 4

Basic Switch & Actuator/Body Style		Operation	Termination	Lead Length
<b>AT409</b>	<b>10AT375</b>	<b>7</b> 3PDT	<b>2</b> Parallel Leads	<b>1</b> 6" (153mm)
<i>hi amp</i>	<i>hi amp</i>	<b>8</b> 3PST, N.C.		<b>2</b> 12" (305mm)
160 oz	160 oz	<b>9</b> 3PST, N.O.		<b>3</b> 18" (458mm)
16 oz	16 oz	<b>10</b> 4PDT		<b>4</b> 24" (610mm)
Yes	Yes	<b>11</b> 4PST, N.C.		<b>5</b> 30" (762mm)
Pretravel (max)		.030" (.76mm)		
Movement Diff. (max)		.020" (.51mm)		
Overtravel (min)		.200" (5.1mm)		
Positive Overtravel Stop		Yes Yes		
Max Force on Actuator		30 lb 30 lb		
Approx Weight (no leads)		3.4 oz 3.4 oz		

## PLUNGER SWITCH, 1 POLE

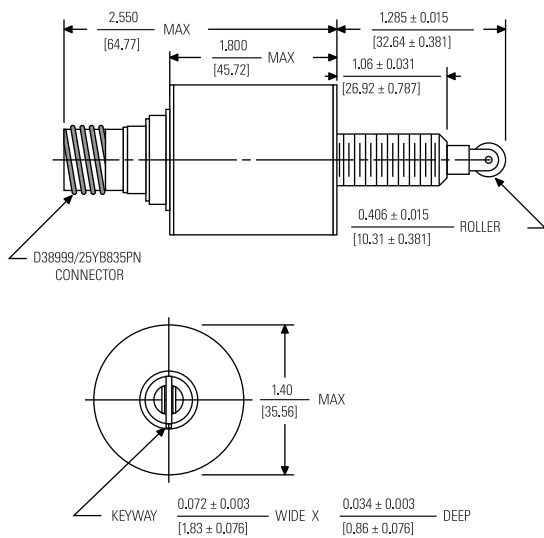


10AT482 - 1

Basic Switch & Actuator/Body Style		Operation	
<b>10AT482</b>		<b>1</b> SPST	
std			
Actuating Force (max)	112 oz		
Release Force (max)	16 oz		
Pretravel (max)	.020" (.508mm)		
Movement Diff. (max)	.010" (.254mm)		
Overtravel (min)	.125" (3.18mm)		
Approx Weight (no leads)	4 oz		

Actuating Force (max)  
Release Force (max)  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Approx Weight (no leads)

\* Various connectors available



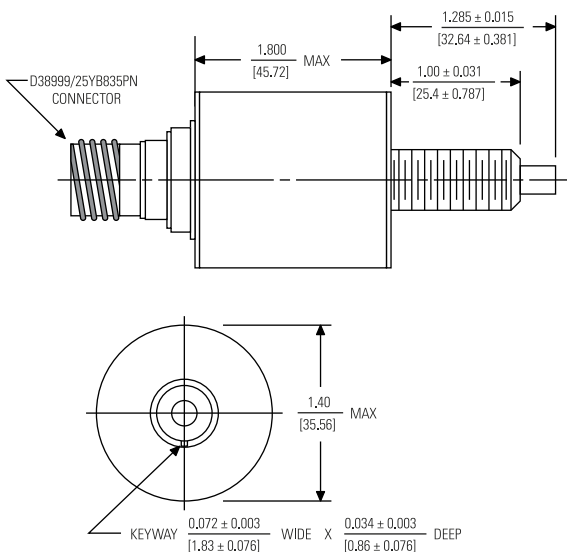
## ROLLER PLUNGER SWITCH, 4 POLE

10AT490 - 1

Basic Switch & Actuator/Body Style		Operation	
<b>10AT490</b>		<b>1</b> 4PDT	
std			
Actuating Force (max)	160 oz		
Release Force (max)	16 oz		
Pretravel (max)	.030" (.76mm)		
Movement Diff. (max)	.020" (.51mm)		
Overtravel (min)	.200" (5.08mm)		
Max Force on Actuator	30 lbs		
Approx Weight (no leads)	5.1 oz		

Actuating Force (max)  
Release Force (max)  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Max Force on Actuator  
Approx Weight (no leads)

\* Various connectors available



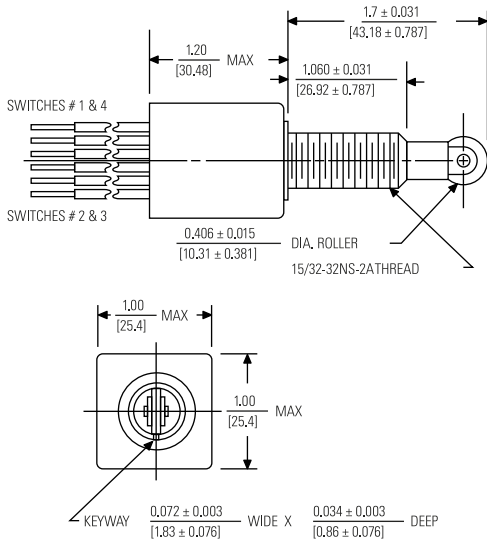
## FLAT PLUNGER SWITCH, 4 POLE

10AT493 - 1

Basic Switch & Actuator/Body Style		Operation	
<b>10AT493</b>		<b>1</b> 4PDT	
std			
Actuating Force (max)	160 oz		
Release Force (max)	16 oz		
Pretravel (max)	.030" (.76mm)		
Movement Diff. (max)	.020" (.51mm)		
Overtravel (min)	.200" (5.08mm)		
Max Force on Actuator	30 lbs		
Approx Weight (no leads)	5.1 oz		

Actuating Force (max)  
Release Force (max)  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Max Force on Actuator  
Approx Weight (no leads)

\* Various connectors available

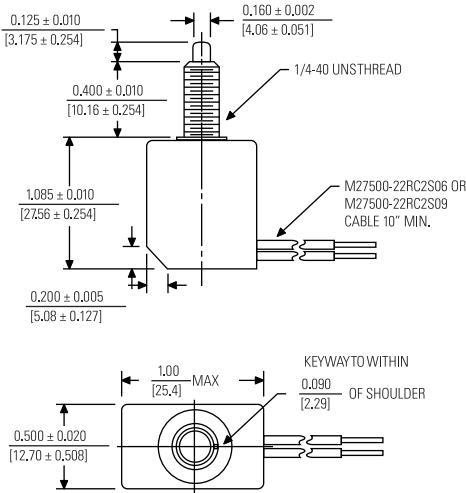


Actuating Force (max)  
Release Force (max)  
Plunger Seal / MIL-S-8805  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

## THREADED, SEALED ROLLER PLUNGER, 3 OR 4 POLE

AT408 - 7 3 - 1

Basic Switch & Actuator/Body Style		Operation	Termination	Lead Length
AT408	10AT374	7 3PDT	2 Parallel Leads	1 6" (153mm)
<i>hi amp</i>	<i>hi amp</i>	8 3PST, N.C.		2 12" (305mm)
160 oz	160 oz	9 3PST, N.O.		3 18" (458mm)
16 oz	16 oz	10 4PDT		4 24" (610mm)
Yes	Yes	11 4PST, N.C.		5 30" (762mm)
.030" (.76mm)		12 4PST, N.O.	6 36" (915mm)	
.020" (.51mm)			7 42" (1067mm)	
.200" (5.1mm)			8 48" (1220mm)	
Yes	Yes		9 60" (1524mm)	
30 lb	30 lb		10 72" (1829mm)	
3.4 oz	3.4 oz			



Actuating Force (max)  
Release Force (max)  
Plunger Seal / MIL-S-8805  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Max Force on Actuator  
Approx Weight (no leads)

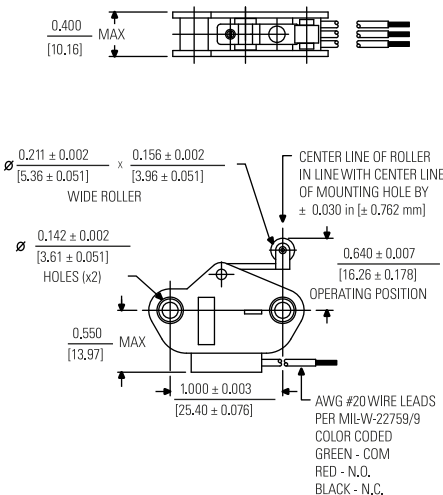
## SMALLEST HERMETIC 2-POLE, PLUNGER (FLAT) SWITCH

10AT503 - 6 3 - 8

Basic Switch & Actuator/Body Style		Operation	Termination	Lead Length
3AT149	10AT503	3 DPDT	3 90° Leads	1 6" (153mm)
<i>hi temp</i>	<i>hi amp</i>	4 DPST, N.C.		2 12" (305mm)
64 oz	16 oz	5 DPST, N.O.		3 18" (458mm)
No		6 DPST, N.C. / N.O.	4 24" (610mm)	
.010" (.254mm)			5 30" (762mm)	
.010" (.254mm)			6 36" (915mm)	
.095" (2.41mm)			7 42" (1067mm)	
20 lbs			8 48" (1220mm)	
1.0 oz			9 60" (1524mm)	
			10 72" (1829mm)	

## SIDE PLATE, RIGHT ARM, 1 POLE

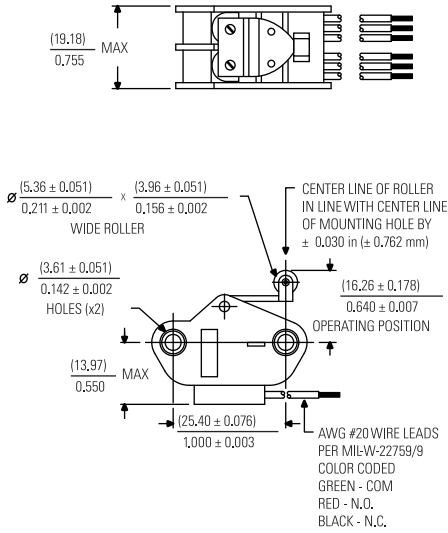
AT355 - 2 3 - 8



Actuating Force (max)  
Release Force (max)  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

Basic Switch & Actuator/Body Style			Operation	Termination	Lead Length
AT355	3AT150	10AT313	0 SPDT	3 90° Leads	1 6" (153mm)
<i>std</i>	<i>hi temp</i>	<i>hi amp</i>	1 SPST, N.C.		2 12" (305mm)
24 oz	4 oz		2 SPST, N.O.		3 18" (458mm)
				4 24" (610mm)	
				5 30" (762mm)	
				6 36" (915mm)	
				7 42" (1067mm)	
				8 48" (1220mm)	
				9 60" (1524mm)	
				10 72" (1829mm)	

### SIDE PLATE, RIGHT ARM, 2 POLE



Actuating Force (max)  
Release Force (max)  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

Basic Switch & Actuator/Body Style	
AT356	10AT314
<i>std</i>	<i>hi amp</i>
48 oz	48 oz
4 oz	4 oz
.040" (1.02mm)	
.040" (1.02mm)	
.125" (3.18mm)	
Yes	Yes
10 lbs	10 lbs
0.70 oz	0.70 oz

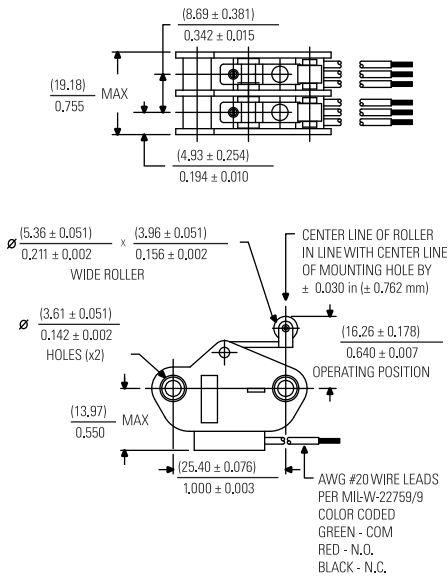
10AT314 - 3 3 - 4

Operation	
3	DPDT
4	DPST, N.C.
5	DPST, N.O.
6	DPST, N.C / N.O.

Termination	
3	90° Leads

Lead Length	
1	6" (153mm)
2	12" (305mm)
3	18" (458mm)
4	24" (610mm)
5	30" (762mm)
6	36" (915mm)
7	42" (1067mm)
8	48" (1220mm)
9	60" (1524mm)
10	72" (1829mm)

### SIDE PLATE, RIGHT ARM, 2 POLE



Actuating Force (max)  
Release Force (max)  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

Basic Switch & Actuator/Body Style	
AT357	10AT315
<i>std</i>	<i>hi amp</i>
24 oz	24 oz
4 oz	4 oz
.040" (1.02mm)	
.030" (.76mm)	
.125" (3.18mm)	
Yes	Yes
10 lbs	10 lbs
0.80 oz	0.80 oz

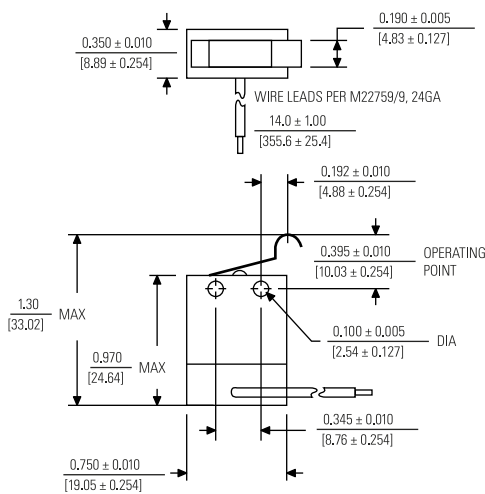
10AT315 - 5 3 - 5

Operation	
3	DPDT
4	DPST, N.C.
5	DPST, N.O.
6	DPST, N.C / N.O.

Termination	
3	90° Leads

Lead Length	
1	6" (153mm)
2	12" (305mm)
3	18" (458mm)
4	24" (610mm)
5	30" (762mm)
6	36" (915mm)
7	42" (1067mm)
8	48" (1220mm)
9	60" (1524mm)
10	72" (1829mm)

### LEAF SPRING SWITCH, 1 POLE



Actuating Force (max)  
Plunger Seal / MIL-S-8805  
Pretravel (max)  
Release Force (max)  
Movement Diff. (max)  
Overtravel (min)  
Positive Overtravel Stop  
Max Force on Actuator  
Approx Weight (no leads)

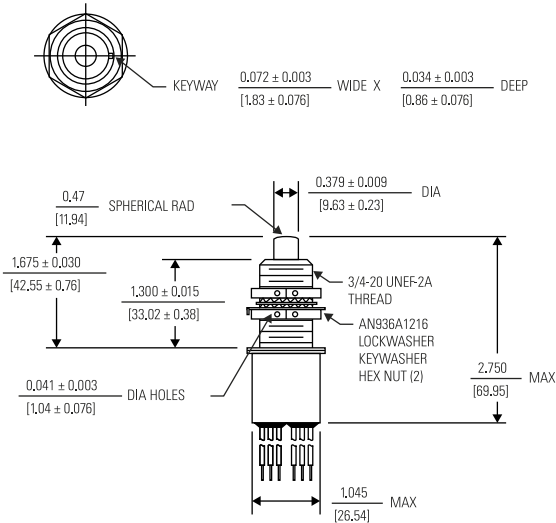
Basic Switch & Actuator/Body Style	
3AT151	10AT505
<i>hi temp</i>	<i>hi amp</i>
20 oz	20 oz
Yes	Yes
.035" (.89mm)	
4.0 oz	
.010" (.254mm)	
.065" (1.65mm)	
Yes	Yes
5 lb	5 lb
0.6 oz	0.6 oz

10AT505 - 0 3 - 1

Operation	
0	SPDT

Termination	
3	90° Leads

Lead Length	
1	6" (153mm)
2	12" (305mm)
3	18" (458mm)
4	24" (610mm)
5	30" (762mm)
6	36" (915mm)
7	42" (1067mm)
8	48" (1220mm)
9	60" (1524mm)
10	72" (1829mm)



### ROUNDED PLUNGER SWITCH, 2 POLE

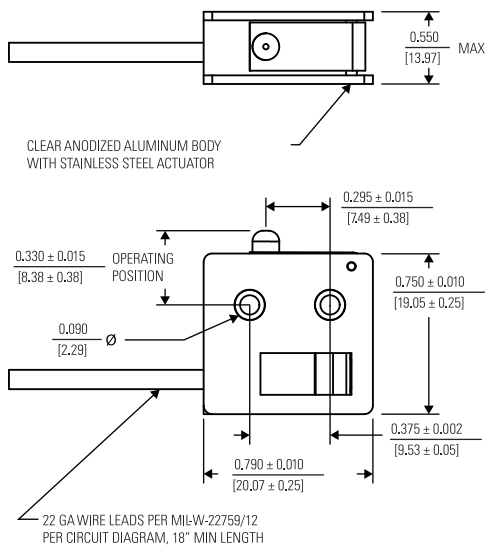
3AT152 - 3 2 - 10

Basic Switch & Actuator/Body Style	Operation	Termination	Lead Length
<b>3AT152</b>	<b>3</b> DPDT	<b>2</b> Parallel Leads	<b>1</b> 6" (153mm)
<b>High Temp (500°F)</b>	<b>4</b> DPST, N.C.		<b>2</b> 12" (305mm)
	<b>5</b> DPST, N.O.		<b>3</b> 18" (458mm)
	<b>6</b> DPST, N.C / N.O.		<b>4</b> 24" (610mm)
			<b>5</b> 30" (762mm)
			<b>6</b> 36" (915mm)
			<b>7</b> 42" (1067mm)
			<b>8</b> 48" (1220mm)
			<b>9</b> 60" (1524mm)
			<b>10</b> 72" (1829mm)

Actuating Force (max)  
Release Force (max)  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Max Force on Actuator  
Approx Weight (no leads)

Ref: MS24594-1 & M8805/41

\* Various connectors available



### SIDE PLATE, 1 POLE

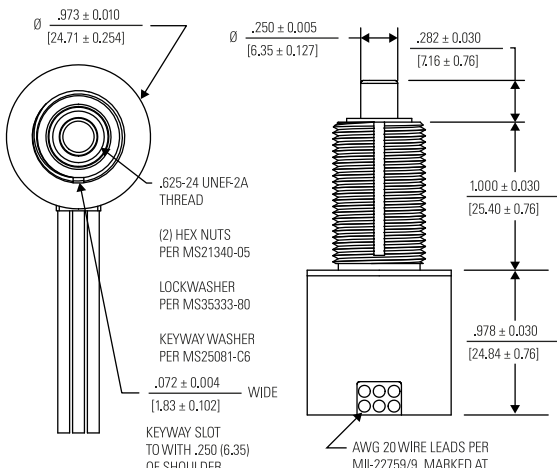
10AT511 - 0 3 - 10

Basic Switch & Actuator/Body Style	Operation	Termination	Lead Length
<b>3AT137</b>	<b>0</b> SPDT	<b>3</b> 90° Leads	<b>1</b> 6" (153mm)
<b>hi temp</b>	<b>1</b> SPST, N.C.		<b>2</b> 12" (305mm)
<b>hi amp</b>	<b>2</b> SPST, N.O.		<b>3</b> 18" (458mm)
			<b>4</b> 24" (610mm)
			<b>5</b> 30" (762mm)
			<b>6</b> 36" (915mm)
			<b>7</b> 42" (1067mm)
			<b>8</b> 48" (1220mm)
			<b>9</b> 60" (1524mm)
			<b>10</b> 72" (1829mm)

Actuating Force (max)  
Release Force (max)  
Movement Diff. (max)  
Overtravel (min)

Ref: MS27216 & M8805/8

\* Various connectors available



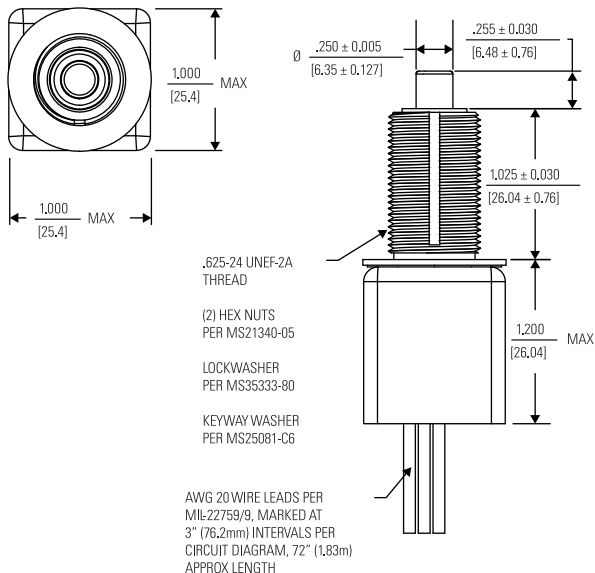
### FLAT PLUNGER SWITCH, 2 POLE

10AT506 - 3 2 - 10

Basic Switch & Actuator/Body Style	Operation	Termination	Lead Length
<b>10AT506</b>	<b>3</b> DPDT	<b>2</b> Parallel Leads	<b>1</b> 6" (153mm)
<b>hi temp</b>	<b>4</b> DPST, N.C.		<b>2</b> 12" (305mm)
	<b>5</b> DPST, N.O.		<b>3</b> 18" (458mm)
	<b>6</b> DPST, N.C / N.O.	<b>3</b> 90° Angle Leads	<b>4</b> 24" (610mm)
			<b>5</b> 30" (762mm)
			<b>6</b> 36" (915mm)
			<b>7</b> 42" (1067mm)
			<b>8</b> 48" (1220mm)
			<b>9</b> 60" (1524mm)
			<b>10</b> 72" (1829mm)

Actuating Force (max)  
Release Force (max)  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Max Force on Actuator  
Approx Weight (no leads)





Actuating Force (max)  
Release Force (max)  
Pretravel (max)  
Movement Diff. (max)  
Overtravel (min)  
Max Force on Actuator  
Approx Weight (no leads)

Basic Switch & Actuator/Body Style	
<b>10AT507</b>	
<i>hi temp</i>	
Actuating Force (max)	96 to 192 oz
Release Force (max)	64 oz
Pretravel (max)	.030" (7.62mm)
Movement Diff. (max)	.010" (.254mm)
Overtravel (min)	.250" (6.35mm)
Max Force on Actuator	192 oz
Approx Weight (no leads)	7.4 oz

Ref: M8805/80-04

## FLAT PLUNGER SWITCH, 3 or 4 POLE

10AT507 - 3 2 - 10

Operation	
<b>7</b>	3PDT
<b>8</b>	3PST, N.C.
<b>9</b>	3PST, N.O.
<b>10</b>	4PDT
<b>11</b>	4PST, N.C.
<b>12</b>	4PST, N.O.

Termination	
<b>2</b>	Parallel Leads
<b>3</b>	90° Angle Leads

Lead Length	
<b>1</b>	6" (153mm)
<b>2</b>	12" (305mm)
<b>3</b>	18" (458mm)
<b>4</b>	24" (610mm)
<b>5</b>	30" (762mm)
<b>6</b>	36" (915mm)
<b>7</b>	42" (1067mm)
<b>8</b>	48" (1220mm)
<b>9</b>	60" (1524mm)
<b>10</b>	72" (1829mm)

\* Various connectors available



## WARNINGS



### HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

**Failure to follow these instructions will result in death or serious injury**

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