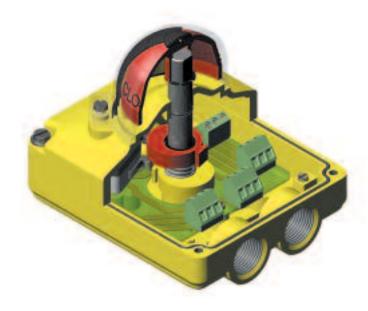
# SONIC TORQUE®



### LIMIT SWITCH

#### INTRODUCTION

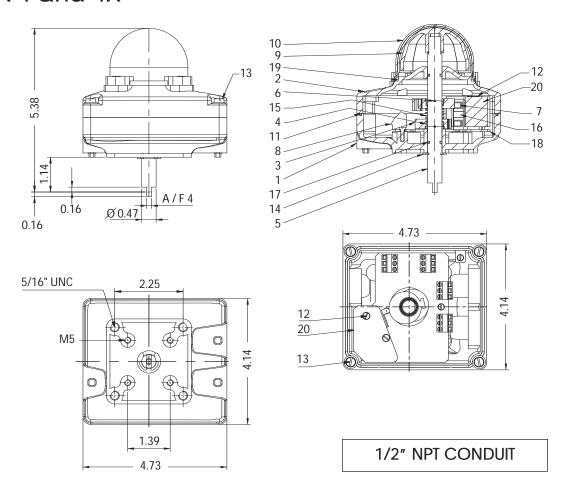
The Sonic Torque SLS series provides a compact design and low cost solution to visual and electrical indication of rotary valve and actuator position



#### **FEATURES:**

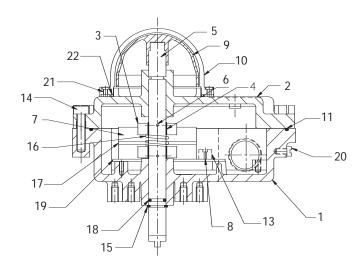
- Die Cast Aluminum housing is Powder coated for superior corrosion resistance
- Housings have captive cover bolts
- Dome is made from Polycarbonate and is shatterproof
- · Unique two piece molded indicator helps for long life and flexibility
- Sonic Set cams are serrated to lock together ensuring settings are secured against vibration
- Color coded to ease wiring
- Special Printed Circuit Board eliminates all wiring from the switch element to the terminal. Provides protection against short circuits
- Complies to NAMUR mounting standards
- UL listed, for both NEMA 4 / 4X and NEMA 7 / 9
- NEMA 7/9 Class I Groups C&D, Class II Groups E,F &G Divisions 1 and 2
- Wide range of NAMUR pattern mounting kits
- Temperature range: -20°C to 80°C (176°F)
- Stainless steel brackets are available
- Solenoid termination inside the switch box possible

#### NEMA 4 and 4X

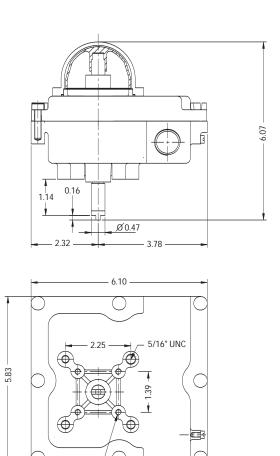


PART NO.	QTY	PART DESCRIPTION	STANDARD MATERIAL			
1	1	HOUSING	Aluminum (LM-6)			
2	1	COVER	Aluminum (LM-6)			
3	2	CAM	Polycarbonate			
4	2	CAM-LOCK	Delrin			
5	1	SHAFT	Stainless Steel 304			
6	2	SPRING DOWEL	Spring Steel			
7	2	MICROSWITCH (SPDT)	Honeywell / Cherry			
8	4	THREE WAY TERMINAL BLOCK				
9	1	INDICATOR	ABS			
10	1	INDICATOR COVER	Polycarbonate			
11	1	GASKET	NBR			
12	2	MICROSWITCH BOLTS	Stainless Steel 304			
13	4	NON FALLING BOLTS	Stainless Steel 304			
14	1	"E" TYPE CIRCLIP	Spring Steel			
15	1	SPRING	Stainless Steel 302			
16	1	PAD	PA6			
17	1	O-RING	NBR			
18	1	CIRCUIT DIAGRAM	-			
19	1	O-RING	NBR			
20	1	MICROSWITCH COVER	PA6			

#### NEMA 4, 4X, 7 and 9



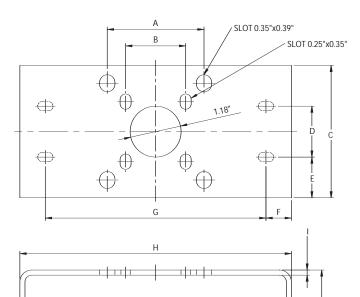


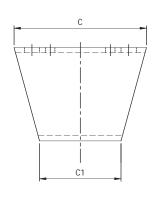


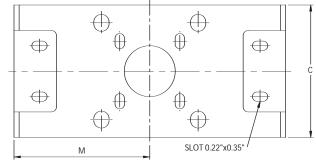
M5

PART NO.	QTY	PART DESCRIPTION	STANDARD MATERIAL			
1	1	HOUSING	Aluminum (LM-6)			
2	1	COVER	Aluminum (LM-6)			
3	2	CAM	PA6			
4	2	CAM-LOCK	Delrin			
5	1	SHAFT	Stainless Steel 304			
6	2	SPRING DOWEL	Spring Steel			
7	2	MICROSWITCH (SPDT)	Honeywell / Cherry			
8	4	CONNECTOR STRIP- 6 WAY	PA6			
9	1	INDICATOR	ABS			
10	1	INDICATOR COVER	Polycarbonate			
11	1	GASKET	NBR			
12	2	MICROSWICTH BOLTS	Stainless Steel 304			
13	2	CONN. STRIP BOLTS	Stainless Steel 304			
14	8	NON FALLING BOLTS	Stainless Steel 304			
15	1	"E" TYPE CIRCLIP	Spring Steel			
16	1	SPRING	Stainless Steel 302			
17	1	PAD	PA6			
18	1	O-RING	NBR			
19	1	PCB				
20	2	EARTHING BOLTS	Stainless Steel 304			
21	4	PHILIPS HEAD BOLTS	Stainless Steel 304			
22	1	O-RING	NBR			

#### BRACKET DIMENSIONS

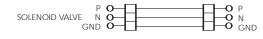






CODE	A	В	С	<b>C1</b>	D	E	F	G	Н	I	J	K	L	M
M1	2.24	1.39	3.07	1.90	1.18	0.94	0.59	3.15	4.33	0.12	1.77	0.98	2.36	2.17
M2	2.24	1.39	3.07	1.90	1.18	0.94	0.59	3.15	4.33	0.12	2.17	0.98	2.36	2.17
М3	2.24	1.39	3.07	1.90	1.18	0.94	0.59	5.12	6.30	0.12	2.17	0.98	4.33	3.15
M4	2.24	1.39	3.07	1.90	1.18	0.94	0.59	5.12	6.30	0.12	2.96	0.98	4.33	3.15

#### WIRING DIAGRAM NEMA 4, 4X, 7 AND 9



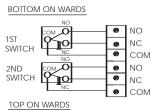
SOLENOID CONTROL SIGNAL

#### **MECHANICAL SWITCHES**

SWITCH (BOTTOM)

USE YELLOW CAM FOR VALVE OPEN CONDITION

SWITCH (TOP) USE RED CAM FOR VALVE CLOSE CONDITION



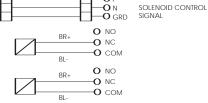
**PROXIMITY SWITCHES** 

N O-GRD O-SWITCH USE YELLOW CAM FOR 1ST SWITCH (BOTTOM) VALVE OPEN CONDITION

SOLENOID VALVE

SWITCH (TOP)

LISE RED CAM FOR VALVE CLOSE CONDITION



## SONIC TORQUE®







#### **HOW TO ORDER**

MODEL	<u>rating</u>	BRACKET		
SL	XS4MH10 = NEMA 4 MECHANICAL S9MH10 = NEMA 7/9 MECHANICAL XS4PPF8 = NEMA 4 PROXIMITY S9PPF2 = NEMA 7/9 PROXIMITY	M1 M2 M3 M4		
	- <u>SLS XS4MH10 M1</u> -			



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