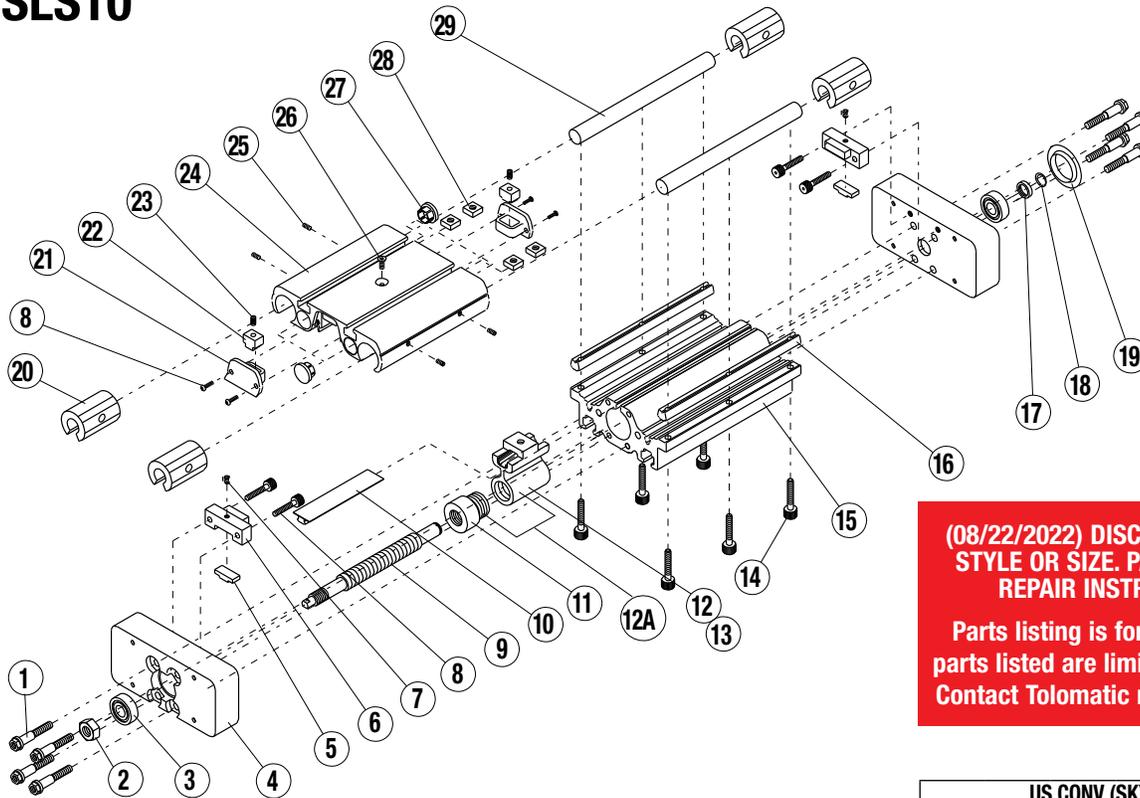


1" Screw-Drive Actuators (Slide Style) SLS10

Models: SN01 SN02 SNA02 SN05
SN12 SN25 BN08 BNL08



(08/22/2022) DISCONTINUED PRODUCT STYLE OR SIZE. PARTS SHEET IS FOR REPAIR INSTRUCTIONS ONLY.

Parts listing is for reference only. All parts listed are limited to stock on hand. Contact Tolomatic regarding availability.

ITEM	PART NO. OR CONFIG CODE	DESCRIPTION	US CONV (SK)					METRIC (SM)	
			SN01	SN02	SNA02	SN05	BN(L)08	SN12	SN25
1.	0910-1344	SCREW, HEAD TAPPED, #10-24 (US CONV)	8	8	8	8	8		
	4910-1344	SCREW,S-TAP,M5X0.8X0.62					8	8	8
2.	0910-1482	NUT, FLEXLOC, 5/16-24 (US CONV)	1	1	1	1	1		
	4510-1052	NUT,MACH,M8-1					1	1	1
3.	4510-1060	BALL BEARING, RADIAL, 8MM ID	2	2	2	2	2	2	2
4.	0610-1049	HEAD, MACHINED (US CONV)	2	2	2	2	2		
	0610-1134	HEAD, MACHINED (METRIC)						2	2
5.	0520-1028	BAND CLAMP SLUG	2	2	2	2	2	2	2
6.	0520-9015	BAND CLAMP ASSEMBLY	2	2	2	2	2	2	2
7.	0515-1049	SCREW, SET, #8-32 X .25 LONG	2	2	2	2	2	2	2
8.	3600-1136	BHCS, #6-32 X .50 LONG (US CONV)	8	8	8	8	8		
	4520-1034	SCREW,BHCS,M4-.7 X 12,BLK					8	8	8
19.	RLS SLS10_SK_	SCREW, LEAD (US CONV)	A/R	A/R	A/R	A/R	A/R		
	RLS SLS10_SM_	SCREW, LEAD (METRIC)						A/R	A/R
210.	NDBSLS10_SK_	DUST BAND (US CONV)	A/R	A/R	A/R	A/R	A/R		
	NDBSLS10_SM_	DUST BAND (METRIC)						A/R	A/R

A/R = As Required

NOTE: Replacement Dust Band for SLS manufactured before 05/01/1998, order with number 0910-9017 and specify stroke length (SK) in inches.

Lead Screw Nut Style & Size Stroke Length Motor Orientation Motor Code Aux. Car.

¹ Replacement Lead Screw ordering method: **RLS SLS10** **SK** **LM** **I** **Y** **M** **DC**

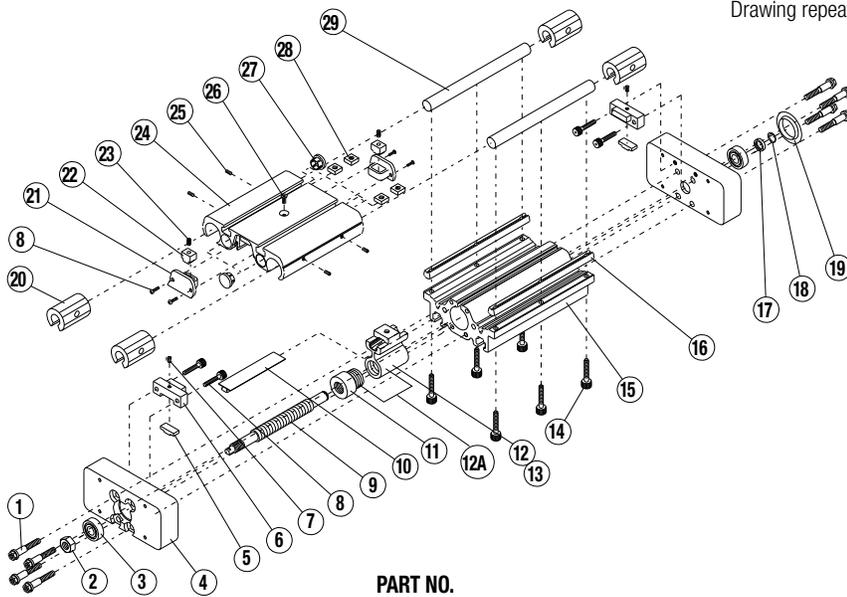
EXAMPLE: **RLS SLS10 BN08 SK211-25 LM I Y M 0 T B D 0 DC7**

² Replacement Dust Band ordering method: **NDB SLS10** **SK** **DC**

EXAMPLE: **NDB SLS10 SK211-25 DC**

Dust band Model & Size Stroke Length Aux. Car.

Auxiliary Carrier Option Note: If replacing a Lead Screw (9), Tube (15.) or Dust Band (10.) on an actuator that has an Auxiliary Carrier, be sure to add "DC ___" to the end of the configuration string when ordering. "DC" indicates the need for additional length and "___" indicates the measurement of space between carriers (in inches [SK] or millimeters [SM] as indicated earlier in the configuration string).



Drawing repeated for reference

(08/22/2022) DISCONTINUED PRODUCT STYLE OR SIZE. PARTS SHEET IS FOR REPAIR INSTRUCTIONS ONLY.

Parts listing is for reference only. All parts listed are limited to stock on hand. Contact Tolomatic regarding availability.

ITEM	PART NO. OR CONFIG CODE	DESCRIPTION	US CONV (SK)					METRIC (SM)	
			SN01	SN02	SNA02	SN05	BN(L)08	SN12	SN25
11.	0610-9036	BALL NUT/LEAD SCREW SUB ASS'Y, LOW BACKLASH					A/R		
	0610-9037	BALL NUT/LEAD SCREW SUB ASS'Y, LOW BACKLASH					A/R		
	0910-1430	STANDARD BALL NUT, 8TPI					A/R		
12.	0910-9132	NUT BRACKET	1	1	1	1	1		
12A.	0510-9051	NUT BRACKET ASSEMBLY 2TPI		1	1				
	0510-9052	NUT BRACKET ASSEMBLY ANTI-BACKLASH, 2 TPI		1	1				
	0510-9053	NUT BRACKET ASSEMBLY 1TPI	1						
	0510-9054	NUT BRACKET ASSEMBLY 5TPI				1			
	4510-9045	NUT BRACKET/SOLID NUT ASSEMBLY,25MM							
	4510-9044	NUT BRACKET/SOLID NUT ASSEMBLY,12MM							
13.	N/A	OMNIFIT 1730 (FOR ASSEMBLY REFERENCE ONLY)		A/R	A/R		A/R		
	N/A	LOCTITE 271 (FOR ASSEMBLY REFERENCE ONLY)	A/R			A/R			
14.	0610-1103	SHCS, M4 X 0.7 X 22MM LONG	A/R	A/R	A/R	A/R	A/R		
	0610-1033	SHCS,M4X0.7X20,BLK					A/R	A/R	
1 ² 15.	RTBSLS10_SK_	TUBE, MACHINED (US CONV)	A/R	A/R	A/R	A/R	A/R	A/R	
	RTBSLS10_SM_	TUBE, MACHINED(METRIC)	A/R	A/R	A/R	A/R	A/R	A/R	
16.	0610-1059	V-BLOCK, MACHINED	A/R	A/R	A/R	A/R	A/R	A/R	
17.	4510-1059	CUP, RING RETAINING, Ø.315	1	1	1	1	1	1	
18.	0510-1019	RING, RETAINING, ROUND SECTION, Ø.315	1	1	1	1	1	1	
19.	0510-1012	PLUG, STIMPSON, 1.00 INCH	1	1	1	1	1	1	
20.	0610-1005	LINEAR BEARING	4	4	4	4	4	4	
21.	0610-1012	ENDCAP, CARRIAGE	2	2	2	2	2	2	
22.	4515-1012	BAND INSERT	2	2	2	2	2	2	
23.	4520-1012	SPRING, LEE	2	2	2	2	2	2	
24.	0610-9040	CARRIAGE SUB ASSEMBLY (US CONV)	1	1	1	1	1	1	
	0610-9047	CARRIAGE SUB ASSEMBLY (METRIC)					1	1	
25.	0610-1046	SCREW, SET, M4 X 0.7 X 6 LONG	4	4	4	4	4	4	
26.	2006-1063	SCREW, FLAT HEAD, #10-24 X 3/8 LONG	1	1	1	1	1		
	4410-1016	SFHCS,M5 X 0.8 X 10,BLK						1	
27.	0610-1021	PLUG, HOLE, CHROME	4	4	4	4	4	4	
28.	0610-1042	NUT, SQUARE, 1/4-20	8	8	8	8	8		
	5610-1042	NUT, SQUARE, M6X1.0,ZINC						8	
29.	0610-1060	SHAFT, MACHINED	A/R	A/R	A/R	A/R	A/R	A/R	

A/R = As Required

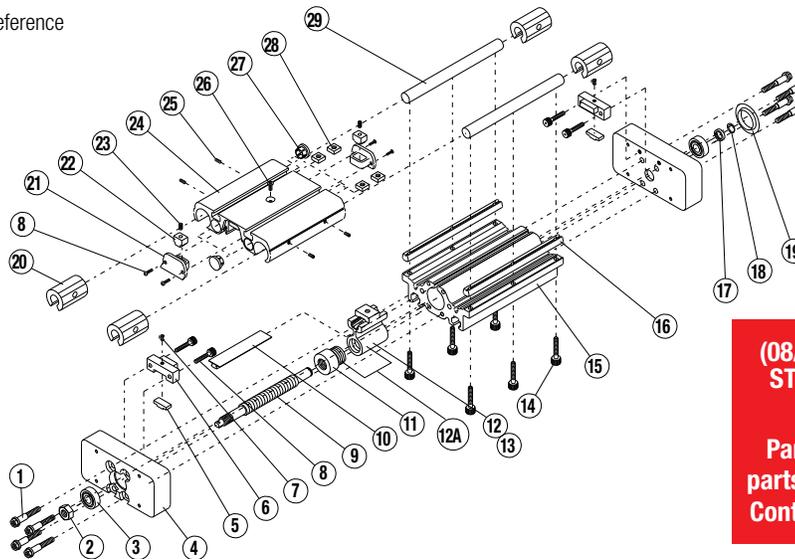
¹ Replacement tube for SLS manufactured **after** October 13, 2007 ordering method: **RTB SLS10 [] [] [] [] SK [] [] [] [] DC []**
EXAMPLE: RTB SLS10 BN08 SK21-25 DC []

² Replacement tube for SLS manufactured **before** October 13, 2007 order with no. 0610-1058 and specify stroke SK ___ in inches

Model & Size Nut Style & Size Stroke Length Aux. Car.

Auxiliary Carrier Option Note: If replacing a Lead Screw (9.), Tube (15.) or Dust Band (10.) on an actuator that has an Auxiliary Carrier, be sure to add "DC ___" to the end of the configuration string when ordering. "DC" indicates the need for additional length and "___" indicates the measurement of space between carriers (in inches [SK] or millimeters [SM] as indicated earlier in the configuration string).

Drawing repeated for reference



**(08/22/2022) DISCONTINUED PRODUCT
STYLE OR SIZE. PARTS SHEET IS FOR
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**Parts listing is for reference only. All
parts listed are limited to stock on hand.
Contact Tolomatic regarding availability.**

Disassembly

1. Remove Slide Actuator from machinery.
2. Remove Screws (#8), and End Caps (#21). *Use care as End Caps are spring loaded.
3. Loosen set screws (#7) in Head Assemblies.
4. Remove Nut (#2) from "drive" side Head. Loosen Screws (#1) in "drive" side Head (#4), then remove Head. Loosen screws in "dead" side Head, then remove Head, Bearing (#3), Plug Protector-Stimpson (#19), Nut Bracket Assembly (#12), and Lead Screw (#9). Unthread Nut Bracket Assembly (#11, #12) from Lead Screw. DO NOT remove nut from leadscrew on actuators equipped with a ball nut, balls will fall out!
5. Remove Screw Sub-Assembly: Remove Plug (#19). Remove Retaining Ring (#18) and Retaining Ring Cup (#17) from "dead" side of Lead Screw. If necessary, remove Bearing (#3) from Lead Screw. Remove screws to detach carriage from nut bracket.
6. Remove Screws (#25), and Bearings (#20), from Carriage (#24).
7. Remove Top Dust Band (#10).
8. (#6) over Slug. Tighten to Head with two Screws (#8) and Loctite #242. Install Set Screw (#7).
9. 14. Move Carriage (#24) to one end of stroke and tighten head bolts (#1) to 70-80 in./lbs. Slide Carriage to opposite side of slide and tighten those head bolts to 70-80 in./lbs.
10. 15. Set Up Lead Screw: Tighten the Nut on the "live" end (motor end) until there is no noticeable axial play in Lead Screw.
11. 16. Test Procedure: Actuate actuator. If Carriage hesitates at any point during the cycle, breakaway is too high. Recommended breakaway for the 1" actuator is a Torque of 25 ounce-inches. Adjust screw torque and alignment as required. Retest.
12. 17. Final Assembly: Locate a Plug (#19) in Head (#4) on dead side end of the Lead Screw (#9).
13. 18. Clean unit thoroughly before reinstalling.

Assembly

1. Thoroughly clean all components, particularly the bore, slot, and bands.
2. Place two Bearings (#20) on each shaft (#29) with lowest set screw holes facing outward.
3. Assemble nut bracket assembly to the leadscrew.
4. Install Heads: Place Lead Screw sub-assembly ("dead" end) in Head (#4). Secure leadscrew to head with a retaining ring cup (#17) and retaining ring (#18).
5. Plastic Nut Style: Coat Lead Screw with Christolube® MCG405.
6. Ball Nut Style: Coat Lead Screw with Mobil HP Grease.
7. Place assembly in Machined Tube (#15). Install second Head (#4), Bearing (#3) and Nut (#2) on "drive" end. Snug up (do not tighten) four Screws (#1) in each Head.
8. Trim/Install Dust Band: Locate on one head a band clamp slug (#5) and Band Clamp Assembly (#6). (NOTE: Width of Slug should match dust Band width.) Tighten with Screw (#8) and Loctite #242. Insert one end of Dust Band (#10) under Band Clamp assembly and Slug until it is tight to the Head. Install Set Screw (#7) into Band Clamp assembly and tighten against Slug.
9. Install Carriage (#24) over Nut Bracket (#12). Care must be taken to assure key in the bottom of the Carriage (#24) fits into the Nut Bracket (#12) slot and two Bearings (#20) per Shaft (#29) is on either side of the Carriage (#24).
10. Push Bearings (#20) in Carriage (#24) as far as Carriage bores will permit.
11. Install Set Screws (#25). Apply Loctite® #242 to Set Screws (#25) and screw them into Carriage (#24) until they bottom out on Bearings (#20), then back them out one half turn.
12. Install Springs (#23) and Band Inserts (#22) into End Caps (#21) and install in Carriage (#24) ends. Push Springs (#23) down to clear underside of Carriage (#24). Use Screws (#8) to hold End Cap (#21) in place.
13. With tin snips, cut the end of the Band so it nearly butts to the other Head. Place Clamp Slug (#5) on top of Band (next to Head), then place Band Clamp Assembly
14. 15. Slide new Shaft (#29) through Bearings (#20). Replace Screws (#14) loosely, use Loctite® #242 on Screws (#14).
15. 16. Hold Top Dust Band (#10) at open end of Actuator and slide Carriage (#24) to opposing end.
16. 17. Tighten Screws (#14) below Carriage (#24) to 15 inch-pounds minimum.
17. 18. To align Shaft (#29) properly, slide carriage over next Screw (#14) and tighten to 15 inch-pounds minimum. Repeat this until all Screws (#14) are tight.
18. 19. Repeat steps 5 through 11 for second Shaft (#29).
19. 20. Install Head Assembly (#4) to Actuator. If using Square Nuts (#28) be sure they are installed in Tube/Base (#15) before Head is installed. Replace Nut (#2).
20. 21. Loosely install four Screws (#1).
21. 22. Position Carriage (#24) to the end of Actuator with non-removed Head Assembly (#4). Push Carriage (#24) back to other end to remove any slack from Band (#10) and tighten Set Screws in Head Assembly (#4). Tighten Screws (#1) to 100-110 inch-pounds.
22. 23. Run Carriage back and forth along the full stroke to make certain the Slide is properly assembled.
23. 24. Remount the completed Slide Actuator.

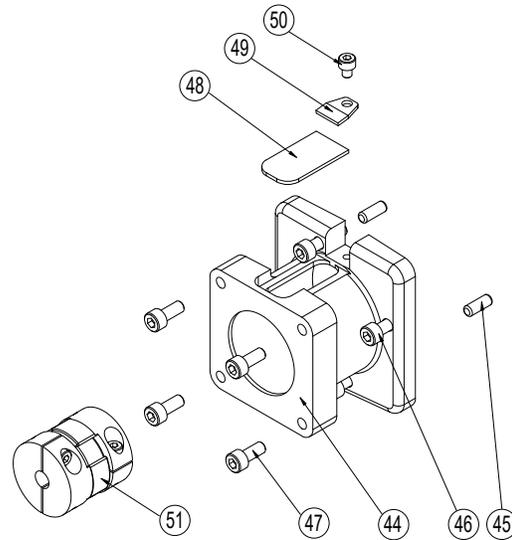
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Loctite® is a registered trademark of the Loctite Corporation, www.loctite.com

In-Line (LMI) Mounting Options

ITEM	PART NO.	DESCRIPTION	QTY
◊44.	CONFIGURED	MOTOR SPACER	1
◊45.	CONFIGURED	DOWEL PIN	2
◊46.	CONFIGURED	SCREW	4
◊47.	CONFIGURED	SCREW	4
◊48.	CONFIGURED	COVER	1
◊49.	CONFIGURED	CLAMP	1
◊50.	CONFIGURED	SCREW	1
◊51.	CONFIGURED	COUPLER	1

◊ Part number varies depending on YMH (Your Motor Here).
 Contact help@tolomatic.com for replacement part number.

A replacement Motor Mount Kit contains all parts listed above.

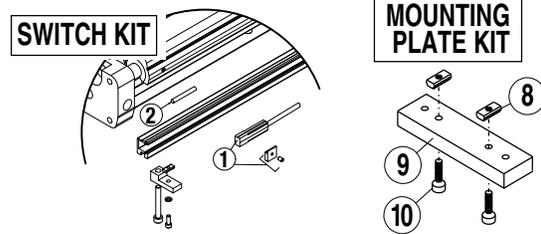


Replacement Motor Mount Kit ordering method: **MMK SLS10** **LMI YM**
EXAMPLE: MMK SLS10 EN08 LMI YMOTBD0
 Motor Mount Kit Model & Size Lead Screw Motor Orientation Motor Code

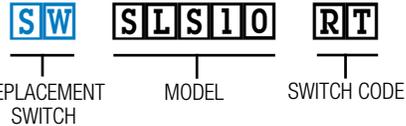
**(08/22/2022) DISCONTINUED PRODUCT
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 parts listed are limited to stock on hand.
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SWITCH KIT			QTY.
0601-9101	Switch Rail Hardware Kit		1
CONFIG. CODE ORDERING			
MOUNTING HARDWARE & FE CONN. INCLUDED			
CODE	DESCRIPTION		
BT	SWITCH ONLY, REED, FORM C, 5M		
BM	SWITCH ONLY, REED, FORM C, MALE CONN.		
RT	SWITCH ONLY, REED, FORM A, 5M		
RM	SWITCH ONLY, REED, FORM A, MALE CONN.		
CT	SWITCH ONLY, TRIAC, 5M		
CM	SWITCH ONLY, TRIAC, MALE CONN.		
KT	SWITCH ONLY, HALL-EFFECT, SINKING, 5M		
KM	SWITCH ONLY, HALL-EFFECT, SINKING, MALE CONN.		
TT	SWITCH ONLY, HALL-EFFECT, SOURCING, 5M		
TM	SWITCH ONLY, HALL-EFFECT, SOURCING, MALE CONN.		
NOTE: When ordered by Config. Code Female connector & all mounting hardware is included			
2.	0910-1238	MAGNET ROD	1



Switch Ordering NOTES: To order field retrofit switch and hardware kits for all Tolomatic actuators: SW (Then the model and bore size, and type of switch required)



(Hardware and Form A Reed switch with 5 meter lead for 1" size SLS actuator)
Mounting hardware is required if replacing switch for any actuator manufactured before 7/1/97

3. SWITCHES

NOTE: Form A Reed Switches should not be used in TTL logic circuits. A voltage drop caused by the L.E.D. indicator will result. For applications where TTL circuits are used, please contact the factory.

WARNING: An ohmmeter is recommended for testing Reed Switches. NEVER use an incandescent light bulb as a high current rush may damage the switch.

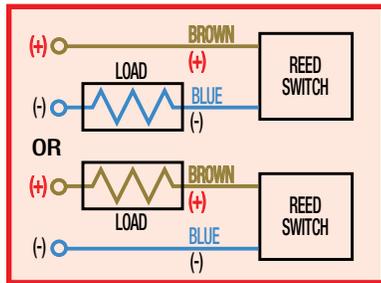
Reed and TRIAC switches are only recommended for signalling position, not directly powering solenoids. For shifting a solenoid, a relay or resistor is recommended between it and the Reed Switch. Switch ratings must not be exceeded at any time.

NOTE: For Hall Effect Switch Magnet, be sure the S pole of the magnet (indicated with black dot) is facing toward the switch (down).

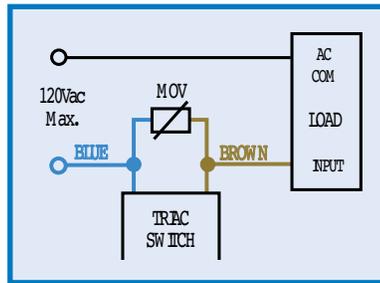
ITEM	US CONV (SK)	METRIC (SM)	DESCRIPTION	QTY.
MOUNTING PLATE KIT				
	0610-9010	0610-9010	KIT Includes all parts listed below (1/4" thick)	
8.	0610-1042	0610-1042	T-NUT	2
9.	0610-1029	0610-1029	MOUNTING PLATE	1
10.	0920-1024	0920-1024	FLAT HEAD CAP SCREW	2
	0610-9045	0610-9045	KIT Includes all parts listed below (1/2" thick)	
8.	0610-1042	0610-1042	T-NUT	2
9.	0610-1070	0610-1070	MOUNTING PLATE	1
10.	2317-1014	2317-1014	SOCKET HEAD CAP SCREW	2

WIRING DIAGRAMS

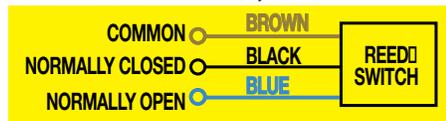
RT & RM DC REED, FORM A



CT & CM AC REED, TRIAC

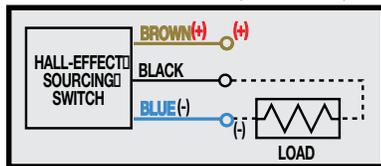


BT & BM DC REED, FORM C

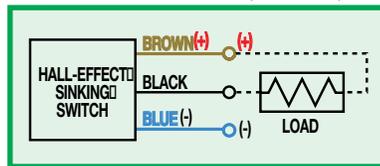


Some actuators may require switch mounting on a specific side of the assembly. Call Tolomatic for details.

TT & TM HALL-EFFECT, SOURCING, PNP



KT & KM HALL-EFFECT, SINKING, NPN



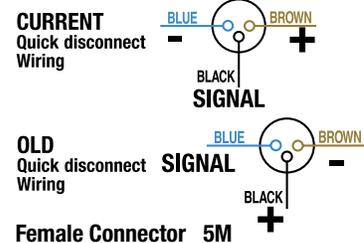
INSTALLATION INFORMATION



THE NOTCHED FACE OF THE SWITCH INDICATES THE SENSING SURFACE AND MUST FACE TOWARD THE MAGNET.

REPLACEMENT OF QD SWITCHES MANUFACTURED BEFORE JULY 1, 1997:

It will be necessary to replace or rewire the female end coupler.



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http://www.Tolomatic.com • Email: Help@Tolomatic.com
Phone: (763) 478-8000 • Fax: (763) 478-8080 • Toll Free: 1-800-328-2174

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