

3SE03 North American Limit Switches

Selection



**Non-safety
Modular, plug-in metal housing**

Complete switches without lever - threaded cable entry:

	Plug-In module type	Standard single pole 1 NO + 1 NC (3SE03-SA)	Standard double pole 2 NO + 2 NC (3SE03-SB)	
	Receptacle type surface mount	Single pole (3SE03-RA) 	Double pole (3SE03-RB) 	
Operating head type		Composite catalog number consisting of head, module and receptacle		
		Catalog number	Catalog number	
	Side rotary CW and CCW operation convertible to CW only or CCW only	Standard momentary (3SE03-DR1)	3SE03-AR1^①	3SE03-BR1
		Standard maintained (3SE03-DM1)	3SE03-AM1	3SE03-BM1
		Low torqued momentary (3SE03-DL1)	3SE03-AL1	3SE03-BL1
	Plain side plunger	Momentary (3SE03-DS1)	3SE03-AS1	3SE03-BS1
	Roller side plunger	Momentary (3SE03-DS3)	3SE03-AS3	3SE03-BS3
	Two-sided plunger	Maintained (3SE03-DH1)	3SE03-AH1	3SE03-BH1
	Plain top plunger	Momentary (3SE03-DT1)	3SE03-AT1	3SE03-BT1
	Roller top plunger	Momentary (3SE03-DT3)	3SE03-AT3	3SE03-BT3
	Wobble head (without lever)	Momentary (3SE03-DW1)	3SE03-AW1	3SE03-BW1

	Plug-In module type	Center neutral Double pole 2 NO + 2 NC (3SE03-SN)
	Receptacle type surface mount	Center neutral (3SE03-RB)
Operating head type		Composite catalog number consisting of head, module and receptacle
		Catalog number
	Side rotary (momentary)	Center Neutral (3SE03-DN1) (3SE03-DN2) 3SE03-NN1^① 3SE03-NN2^②

① 5° pretravel to operate contacts.

② 15° pretravel to operate contacts.



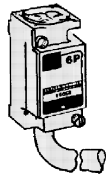
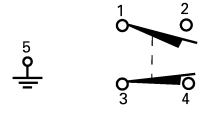
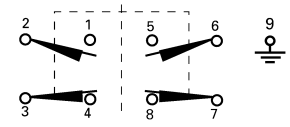
3SE03 North American Limit Switches








Selection

Non-safety
NEMA type 6P submersible, prewired receptacle

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Complete switches without lever - prewired cable:

 <p>Switch body type—8 foot cable</p>	<p>Single pole 1 NO + 1 NC (3SE03-SA6P)</p> <p>Cable color code 1 - White 2 - Black 3 - Red 4 - Orange 5 - Green</p>	<p>Double pole 2 NO + 2 NC (3SE03-SB6P)</p> <p>Cable color code 1 - White 6 - Pink 2 - Black 7 - Yellow 3 - Red 8 - Blue 4 - Orange 9 - Green 5 - Brown</p>
		

Operating head type		Composite catalog number consisting of head and switch body	
		Catalog number	Catalog number
 <p>Side rotary CW and CCW operation convertible to CW only or CCW only</p>	Standard momentary (3SE03-DR1)	3SE03-AR16P	3SE03-BR16P
	Standard maintained (3SE03-DM1)	3SE03-AM16P	3SE03-BM16P
	Low torqued momentary (3SE03-DL1)	3SE03-AL16P	3SE03-BL16P
 <p>Plain side plunger</p>	Momentary (3SE03-DS1)	3SE03-AS16P	3SE03-BS16P
 <p>Roller side plunger</p>	Momentary (3SE03-DS3)	3SE03-AS36P	3SE03-BS36P
 <p>Two-sided plunger</p>	Maintained (3SE03-DH1)	3SE03-AH16P	Not available
 <p>Plain top plunger</p>	Momentary (3SE03-DT1)	3SE03-AT16P	3SE03-BT16P
 <p>Roller top plunger</p>	Momentary (3SE03-DT3)	3SE03-AT36P	3SE03-BT36P
 <p>Wobble head (without lever)</p>	Momentary (3SE03-DW1)	3SE03-AW16P	3SE03-BW16P


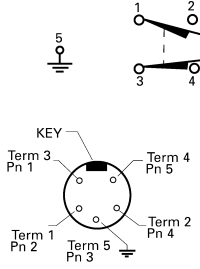
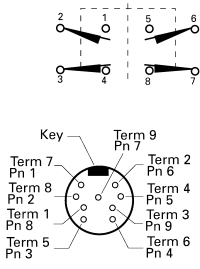
3SE03 North American Limit Switches








Selection



**Non-safety
NEMA type 6P submersible, prewired receptacle**

Complete switches without lever - prewired receptacle with pin connector:

 <p>Switch Body Type—prewired receptacle with pin connector</p>	<p>Single pole 1 NO + 1 NC (3SE03-SA6PC)</p> 	<p>Double pole 2 NO + 2 NC (3SE03-SB6PC)</p> 
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Operating head type		Composite catalog number consisting of head and switch body	
		Catalog number	Catalog number
 <p>Side rotary CW and CCW operation convertible to CW only or CCW only</p>	Standard momentary (3SE03-DR1)	3SE03-AR16PC	3SE03-BR16PC
	Standard maintained (3SE03-DM1)	3SE03-AM16PC	3SE03-BM16PC
	Low torqued momentary (3SE03-DL1)	3SE03-AL16PC	3SE03-BL16PC
 <p>Plain side plunger</p>	Momentary (3SE03-DS1)	3SE03-AS16PC	3SE03-BS16PC
 <p>Roller side plunger</p>	Momentary (3SE03-DS3)	3SE03-AS36PC	3SE03-BS36PC
 <p>Two-sided plunger</p>	Maintained (3SE03-DH1)	3SE03-AH16PC	Not available
 <p>Plain top plunger</p>	Momentary (3SE03-DT1)	3SE03-AT16PC	3SE03-BT16PC
 <p>Roller top plunger</p>	Momentary (3SE03-DT3)	3SE03-AT36PC	3SE03-BT36PC
 <p>Wobble head (without lever)</p>	Momentary (3SE03-DW1)	3SE03-AW16PC	3SE03-BW16PC





3SE03 North American Limit Switches

Selection



Non-safety
Modular, plug-in and NEMA 6P submersible

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Components:

 <p>Plug-in module</p>	Plug-in module	Catalog number
	Standard single pole 1 NO + 1 NC	3SE03-SA
	Standard double pole 2 NO + 2 NC	3SE03-SB
	Center neutral 2 NO + 2 NC ^①	3SE03-SN
 <p>Receptacle</p>	Receptacle for plug-in module	Catalog number
	Single pole 1 NO + 1 NC (5 terminals)	3SE03-RA
	Single pole 2 NO + 2 NC (9 terminals)	3SE03-RB

Switch body—NEMA type 6P submersible:

 <p>Prewired cable</p>	Switch body	Prewired cable 8 foot length	Prewired receptacle with pin connector
		Catalog number	Catalog number
	Single pole 1 NO + 1 NC	3SE03-SA6P	—
	Single pole 2 NO + 2 NC	3SE03-SB6P	—
 <p>Prewired receptacle</p>	Single pole 1 NO + 1 NC	—	3SE03-SA6PC
	Single pole 2 NO + 2 NC	—	3SE03-SB6PC

Operating heads^②:

 		Nominal operating data						
Operating head type		Total travel	Pretravel	Operating force	Release position	Minimum return force	Operating temp range^④	Catalog Number
 <p>Side rotary^⑤</p>	Standard momentary ^⑥	90°	5°	3 lb-in.	2°	4.5 oz-in.	1	3SE03-DR1
	Low torqued momentary ^⑥	90°	15°	1.5 lb-in.	6°	2.5 oz-in.	1	3SE03-DL1
	Standard maintained	90°	50°	3 lb-in.	50°	—	2	3SE03-DM1
 <p>Plain side plunger</p>	Momentary	0.25 in.	0.065 in.	4 lbs	0.03 in.	8 oz.	2	3SE03-DS1
 <p>Roller side plunger</p>	Momentary ^⑦	0.25 in.	0.065 in.	4 lbs	0.03 in.	8 oz.	2	3SE03-DS3
 <p>Two-sided plunger</p>	Maintained	0.32 in.	0.2 in.	5 lbs	0.13 in.	5 oz.	2	3SE03-DH1
 <p>Plain top plunger</p>	Momentary	0.28 in.	0.04 in.	4 lbs	0.02 in.	8 oz.	3	3SE03-DT1
 <p>Roller top plunger</p>	Momentary	0.28 in.	0.04 in.	4 lbs	0.02 in.	8 oz.	3	3SE03-DT3
 <p>Wobble head^⑧</p>	Momentary	15°	10°	2 lbs	6°	2.4 oz-in.	3	3SE03-DW1
 <p>Center neutral^⑨</p>	Momentary	90°	5°	1.8 lbs	2°	2.5 oz-in.	1	3SE03-DN1
		90°	15°	1.8 lbs	2°	2.5 oz-in.	1	3SE03-DN2

① For use with 3SE03-DN1, -DN2 operating heads and 3SE03-RB receptacle only.

② For use with modular, Plug-in and NEMA Type 6P.

③

④ Refer to "Operating Temperature", Catalog page 9/152 for Temperature Ranges.

⑤ Without Operating Levers.

⑥ CW and CCW operation. Convertible to CW or CCW operation only.

⑦ Convertible—Horizontal to Vertical.

⑧ Requires Lever.

⑨ For use with 3SE03-SN plug-in module only.

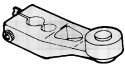
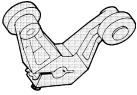
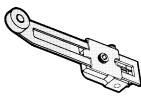
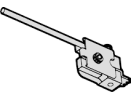
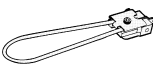
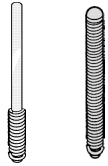
3SE03 North American Limit Switches

Selection


Non-safety
Modular, plug-in metal housing



Levers for plug-in and non-plug-in versions—most widely used

Description	Length ^①	Roller mounted on side of lever	Roller material	Roller diameter	Roller face width	Max required return torque (oz-in.) ^②	Catalog Number
	1.5 (38)	Front	Nylatron	0.75 (19)	0.31 (8)	0.53	3SX03-KL200
	1.5 (38)	Front	Cast aluminum	0.75 (19)	0.31 (8)	1.10	3SX03-KL355
	1.5 (38)	Back	Cast aluminum	0.75 (19)	0.31 (8)	1.10	3SX03-KL579
	1.5 (38)	Back / back	Nylatron	0.75 (19)	0.31	–	3SX03-KL204
	1–3.5 (25–89)	Front	Nylatron	0.75 (19)	0.31 (8)	1.90 ^⑤	3SX03-KL201
	1–3.5 (25–89)	Front	Metal	0.75 (19)	0.31 (8)	3.40 ^⑤	3SX03-KL538
	9 (229)	–	Stainless steel	–	–	7.00 ^⑤	3SX03-KL220
	Adjustable spring rod	12.125 (308)	–	Nylon	–	3.50 ^⑤	3SX03-KL556
	6 (152)	–	Nylatron	–	–	0.40	3SX03-KL142
Levers							
	Rod	–	–	Nylon	–	–	3SX03-KW2
	Coil spring	–	–	Coil spring	–	–	3SX03-KW4
	For plunger actuated switches wobble actuators	^⑥					

Levers for plug-in and non-plug-in versions:

Operator	Length ^①	Roller			Max required return torque (oz-in.) ^②	Catalog Number	
		Type	Diameter	Face (width)		Stainless steel	Cast aluminum
	0.87 (22)	Metal	0.75 (19)	0.31 (8)	0.62	–	3SX03-KL39
	1.37 (35)	Metal	0.75 (19)	0.31 (8)	0.95	–	3SX03-KL40
	1.50 (38)	Nylatron	0.75 (19)	1.00 (25)	0.92	–	3SX03-KL337
		Ball bearing	0.69 (17)	0.25 (6)	0.77	–	3SX03-KL531
		Without roller	–	–	0.32	–	3SX03-KL32
	2.00 (51)	Nylatron	0.75 (19)	0.31 (8)	0.71	–	3SX03-KL546
		Nylatron	0.75 (19)	1.00 (25)	1.45	–	3SX03-KL572
		Metal	0.75 (19)	0.31 (8)	1.5	–	3SX03-KL549
	250 (64)	Ball bearing	0.69 (17)	0.25 (6)	1.1	–	3SX03-KL552
		Nylatron	0.75 (19)	0.31 (8)	1.0	–	3SX03-KL547
Nylatron		0.75 (19)	1.00 (25)	1.8	–	3SX03-KL573	
Nylatron		1.5 (38)	0.28 (7)	1.4	–	3SX03-KL575	
Metal		0.75 (19)	0.31 (8)	2.0	–	3SX03-KL550	
Cast aluminum	3.00 (76)	Ball bearing	0.69 (17)	0.25 (6)	1.5	–	3SX03-KL553
	Nylatron	0.75 (19)	0.31 (8)	1.3	–	3SX03-KL548	
	Nylatron	0.75 (19)	1.00 (25)	2.3	–	3SX03-KL574	
	Nylatron	1.5 (38)	0.28 (7)	1.8	–	3SX03-KL576	
	Metal	0.75 (19)	0.31 (8)	2.5	–	3SX03-KL551	
Ball bearing	0.69 (17)	0.25 (6)	1.8	–	3SX03-KL554		

All dimensions shown in inches and (millimeters). For reference purposes only. Not to be used for design or construction purposes.

① Roller lever: Length from the operating shaft axis to the roller axis.
All other: Length from the operating shaft axis to the tip.

② Caution—When selecting lever, required return torque should not exceed minimum return torque in operating head.

③ Cap screw accommodates 3/64 inch Allen wrench.

④ By re-assembling lever minimum can be reduced another 0.50 (13).








⑤ Applies when lever extended to maximum dimension.

⑥ See dimensions page 9/156.




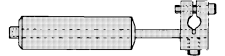


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Levers for plug-in and non-plug-in versions—most widely used

Operator	Length ^① Inches (mm)	Roller			Min. required return torque oz-in ^⑤	Catalog no.	
		Type	Diameter In. (mm)	Face width in. (mm)		Stainless steel	Cast aluminum
Roller levers							
 Cast aluminum Roller on reverse side	1.50 (38)	Nylatron	0.75 (19)	0.31 (8)	0.53	—	3SX03-KL310
		Nylatron	1.5 (38)	0.28 (7)	0.96	—	3SX03-KL536
		Ball bearing	0.69 (17)	0.25 (6)	0.77	—	3SX03-KL580
 Stainless steel Offset lever (Inboard roller shown)	1.50 (38) Inboard roller	Nylatron	0.75 (19)	0.31 (8)	0.65	3SX03-KL24	—
		Metal	0.75 (19)	0.31 (8)	1.20	3SX03-KL25	—
		Ball bearing	0.69 (17)	0.25 (6)	0.90	3SX03-KL26	—
	1.50 (38) outboard roller	Nylatron	0.75 (19)	0.31 (8)	0.65	3SX03-KL27	—
		Metal	0.75 (19)	0.31 (8)	1.20	3SX03-KL28	—
		Ball bearing	0.69 (17)	0.25 (6)	0.90	3SX03-KL29	—
Nylatron	0.75 (19)	1 (25)	1.10	3SX03-KL30	—		
 Bantam lever	0.69 (18)	Metal	0.88 (22)	0.19 (5)	0.45	3SX03-KL532	
 Precision adjustment	1.50 (38) ^②	Nylatron	0.75 (19)	0.31 (8)	0.65	3SX03-KL340	
		Metal	0.75 (19)	0.31 (8)	1.20	3SX03-KL465	
		Ball bearing	0.69 (17)	0.25 (6)	0.90	3SX03-KL535	
 Adjustable roller	1–3.75 (25–95) ^③ 1–3.75 (25–95) ^③ 1.62–3.75 (41–95) ^③ 0.50–3.75 (13–95) 1–3.75 (25–95) ^③ 0.50–3.75 (13–95)	Nylatron	0.75 (19)	0.5 (13)	1.90 ^④	3SX03-KL599	
		Nylatron	0.75 (19)	1 (25)	3.10 ^④	3SX03-KL537	
		Nylatron	1.5 (38)	0.28 (7)	2.50 ^④	3SX03-KL443	
		Large nylatron	4 (102)	0.11 (3)	4.50 ^④	3SX03-KL598	
		Ball bearing	0.69 (17)	0.25 (6)	2.50 ^④	3SX03-KL539	
		Without roller	—	—	1.20 ^④	3SX03-KL31	
 Fork lever _ both rollers one side	1.50 (38)	Nylatron	0.75 (19)	1 (25)	—	3SX03-KL543	
		Metal	0.75 (19)	0.31 (8)	—	3SX03-KL544	
		Ball bearing	0.69 (17)	0.25 (6)	—	3SX03-KL545	
 Fork lever _ both rollers outside, one side	1.50 (38)	Nylatron	0.75 (19)	0.31 (8)	—	3SX03-KL203	
		Metal	0.75 (19)	0.31 (8)	—	3SX03-KL541	
		Ball bearing	0.69 (17)	0.25 (6)	—	3SX03-KL542	

Levers for plug-in and non-plug-in versions:

Operator	Length ^① Inches (mm)	Description Inches (mm)	Min. required return force ^⑤ Oz-in.	Catalog no.
 Adjustable rod	5.50 (140) Max. 5.50 (140) Max. 8.75 (222) Max 12 (305) Max. — —	Nylon Rod—0.19 (5) Dia.	0.40 ^④	3SX03-KL399
		Metal Rod—0.12 (3) Dia.	0.92 ^④	3SX03-KL202
		Metal Rod (Square)—0.12 (3) Max.	2.20 ^④	3SX03-KL581
		Steel (Formable) Rod—0.12 (3) Dia.	5.00 ^④	3SX03-KL226
		Clamp Only—0.19 (5) Hole	—	3SX03-KL35
		Clamp Only—0.12 (3) Hole	—	3SX03-KL36
 Spring rod	11.62 (295)	Metal rod	2.80	3SX03-KL421
 Adjustable wire	12.12 (308) max.	Nylon covered wire	1.50 ^④	3SX03-KL533
 Adjustable wide roller lever	3.9 (99)	0.75 (19) Dia. Nylatron Roller 0.19 (30) Dia. Rod	4.50 ^④	3SX03-KL37
Wobble head operators				
See dimensions page 9/156	Stainless steel rod	—	Rod diameter - 0.06 (2)	3SX03-KW3

① Length from operating shaft axis to the roller axis.

② Maximum dimensions, precision adjustable to lesser dimensions.

③ By re-assembling lever minimum can be reduced by 1/2 in.

④ Applies when lever extended to maximum dimension.

⑤ Caution—When selecting lever, required return torque should not exceed minimum return force in operating head.

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