

3SE International Limit Switches

Position Switches

3SE3 160 / 3SE3 180
Metal enclosure with molded cable, 30 and 40 mm width

Overview

In harsh industrial environments and in installations with limited space, the small 3SE3 160 and 3SE3 180 compact switches are ideal. The switches are already equipped with a molded cable of 2 m in length and can therefore be installed in the smallest spaces.

Both the housing and the actuator head are made of metal and therefore meet the high IP 67 degree of protection. Various actuator heads, in the form of roller plungers, overtravel plungers and roller cranks, are available.

They can be fitted alternatively with snap-action contacts. 1 NO + 1 NC. The NC contact complies with the requirements for positive opening according to IEC 60 947-5-1.

The 3SE3 1 position switch with molded cable is available in different sizes:




- The 3SE3 180 series complies with the EU standard and features a 30 mm wide enclosure with drilled holes at a spacing of 20 mm.
- The 3SE3 160 series meets the requirements of the US market and features a 40 mm wide enclosure with drilled holes at a spacing of 25 mm.

Technical data

Switching frequency	30/min	Degree of protection	IP 67
Rated insulation voltage U_i	500 V	Contact opening	2 x 1.25 mm
Pollution degree	Class 3	Operating speed up to 80% operating distance	
Conventional thermal current I_{th}	10 A	• 3SE3 1.0-.C.	≤ 1 m/s
Ambient temperature	-30 to +85 °C	• 3SE3 1.0-.D.	Vertical ≤ 1 m/s
Mechanical endurance	10 x 10 ⁶ operations		Lateral ≤ 0.5 m/s
Electrical endurance	500 000 operations	• 3SE3 1.0-.G.	≤ 1.5 m/s
Connecting cable (2 m)	PVC-5 x 0.75 mm ² (18 AWG); br-bl: S, bk-bk: NC, ye/gy: 0 V		

Selection and ordering data

2 contacts · Degree of protection IP 67

Actuator		3SE3 1 position switches with 2 snap-action contacts		Weight Approx.
3SE3 180-1C				
3SE3 180-1D	Enclos. width	Ident. No. 11 acc. to EN 50 013		
		Order No.	List Price \$	
			1 unit	kg
		→ 3SE3 180-1C	36.00	0.316
		→ 3SE3 160-1C	73.00	0.332
	• with M 12 thread fixing	→ 3SE3 180-1CJ	42.00	0.335
		→ 3SE3 160-1CJ	75.00	0.351
3SE3 160-1G		→ 3SE3 180-1D	50.00	0.323
		→ 3SE3 160-1D	89.00	0.348
	• with M 12 thread fixing	→ 3SE3 180-1DJ	55.00	0.334
		→ 3SE3 160-1DJ	97.00	0.364
		→ 3SE3 180-1G	37.00	0.366
		→ 3SE3 160-1G	73.00	0.395

→ Positive opening acc. to IEC 60 947-5-1, Appendix K.

Switch blocks and travel

Switch block	Nominal travel	
Internal circuit diagram	0-line reference line acc. to EN 50 041	■ contact closed
Terminal designation acc. to EN 50 013	** positive opening to IEC 60 947-5-1-3	□ contact open
Snap-action contacts 1 NO + 1 NC	3SE3 1.0-1C., -1D.	3SE3 1.0-1G
	BK-BK BN-BU BK-BK BN-BU	BK = black BN = brown BU = blue GN/YE = green/yellow

3SE International Limit Switches

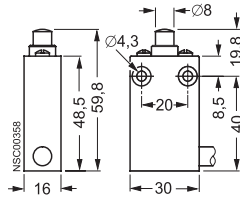
Position Switches

3SE3 160 / 3SE3 180

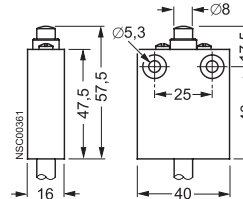
Metal enclosure with molded cable, 30 and 40 mm width

Dimension drawings

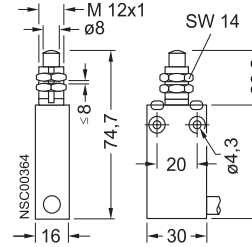
3SE3 180-C



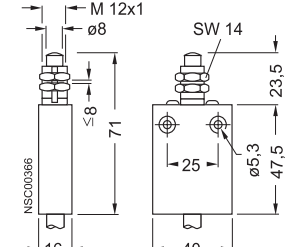
3SE3 160-C



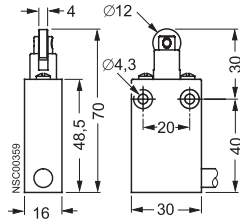
3SE3 180-CJ



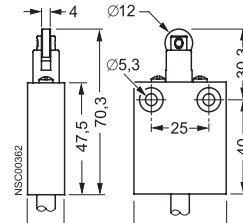
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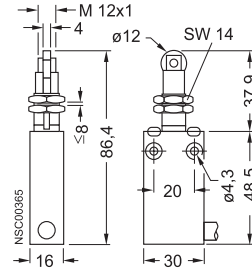
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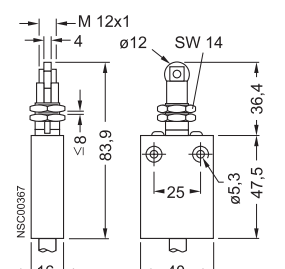
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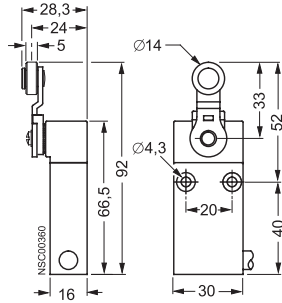
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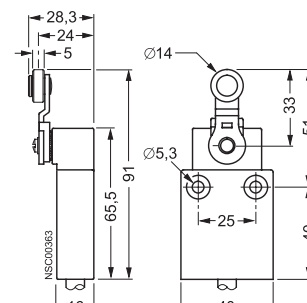
3SE3 160-DJ



3SE3 180-G



3SE3 160-G



All devices with 2 m cable