SIEMENS

Product data sheet 3SE5312-0SD11



SAFETY POSITION SWITCHES WITH SOLENOID INTERLOCKING LOCK. FORCE 2600N,5 APPR. DIR. METAL HOUSING,3X(M20X1.5) SPRING-LOCKED, AUXILIARY RELEASE ON FRONT MAGNET VOLTAGE 24V DC,

MONITOR. OF ACTUATOR 2NC/1NO, MONITOR. OF MAGNET 2NC/1NO

General technical data:		
Explosion protection category for dust		none
Supply voltage		
of the magnet coil	V	24
Relative ON period		
of the magnet coil	%	100
Recorded real power		
of the magnet coil	W	3.5
Insulation voltage		
rated value	V	250
Degree of pollution		class 3
Thermal current	А	6
Operating current		
• at AC-15		
• at 24 V / rated value	Α	6
at 125 V / rated value	Α	3
• at 230 V / rated value	Α	1.5
• at DC-13		
• at 24 V / rated value	Α	3
at 125 V / rated value	Α	0.55

Continuous current A B C 6 C • of the glow DIAZED fuse link 10 0 • of the Quick DIAZED fuse link A D.5 • of the Characteristic circuit breaker A D.5 Mechanical operating cycles as operating time 1,000,000 • whit centactor SRH11, SRT1016, SRT1017, SRT1024, SRT1025, SRT10264, SRT1025, SRT10264,	• at 230 V / rated value	Α	0.27
* of the Quick DIAZED fuse link of the C characteristic circuit breaker Mechanical operating cycles as operating time / typical Electrical operating cycles as operating time / typical with contacts 78H11, 3RT1016, 3RT1017, 3RT1024, 3RT1025, 3RT1026 / typical Electrical operating cycles in one hour with contactor 3RH11, 3RT1016, 3RT1017, 3RT1024, 3RT1025, 3RT1026 / typical Electrical operating cycles in one hour with contactor 3RH11, 3RT1016, 3RT1017, 3RT1024, 3RT1025, 3RT1025, 3RT1026 / typical Electrical operating cycles in one hour of the contact accuracy of the contact element of the contact element of NC contacts of NC conta	Continuous current		
Number of NC contacts In or the position surveillance of the activation element In or the positive opening In or	• of the slow DIAZED fuse link	Α	6
Mechanical operating cycles as operating time / typical	of the quick DIAZED fuse link	Α	10
Electrical operating cycles as operating time 1,000,000 with contactor 3RH11, 3RT1016, 3RT1017, 3RT1024, 3RT1025, 3RT1026 / typical 1,000,000 Electrical operating cycles in one hour 6,000 with contactor 3RH11, 3RT1016, 3RT1017, 3RT1024, 3RT1025, 3RT1025, 3RT1026 mm 0,05 Repeat accuracy mm 0,05 Design of the contact element mm 0,05 Number of NC contacts 5 2 • for the position surveillance of the locking element 2 2 Number of NC contacts 5 1 • for the position surveillance of the activation element 1 1 Number of NO contacts 1 1 • for the position surveillance of the activation element 1 1 Number of NO contacts 1 1 • for the position surveillance of the activation element 1 1 Design of the switching function 0.35 mm / 5g 30g / 11 ms Resistance against vibration 0.35 mm / 5g 30g / 11 ms Resistance against vibration metal metal • of the enclosure metal	of the C characteristic circuit breaker	Α	0.5
with contactor 3RH11, 3RT1016, 3RT1017, 3RT1024, 3RT1025, 3RT1026 / typical Electrical operating cycles in one hour with contactor 3RH11, 3RT1016, 3RT1017, 3RT1024, 3RT1025, 3RT1026 Repeat accuracy	Mechanical operating cycles as operating time / typical		1,000,000
Biedrical operating cycles in one hour • with contactor 3RH11, 3RT1016, 3RT1017, 3RT1024, 3RT1025, 3RT1026 Repeat accuracy mm 0.05 Resign of the contact element Number of NC contacts • for the position surveillance of the locking element • for the position surveillance of the activation element Number of NC contacts • for the position surveillance of the activation element Number of NC contacts • for the position surveillance of the activation element Number of NC contacts • for the position surveillance of the activation element Number of NC contacts • for the position surveillance of the activation element Number of NC contacts • for the position surveillance of the activation element Design of the switching function Resistance against vibration Resistance against vibration Aubient temperature • during operating • during storage • "C" -25 +60 • during storage • "C" -40 +80 Width of the sensor Material • of the enclosure of the switch head Design of the operating mechanism Actuating speed mm/s / m/s	Electrical operating cycles as operating time		
with contactor 3RH11, 3RT1016, 3RT1017, 3RT1024, 3RT1025, 3RT1026 Repeat accuracy			1,000,000
Repeat accuracy Design of the contact element Number of NC contacts • for the position surveillance of the locking element • for the position surveillance of the activation element • for the position surveillance of the activation element • for the position surveillance of the locking element • for the position surveillance of the activation element • for the position surveillance of the locking element • for the position surveillance of the locking element • for the position surveillance of the locking element • for the position surveillance of the activation element • for the position surveillance of the activation element • for the position surveillance of the activation element • for the position surveillance of the activation element • during surveillance of the activation element • during operating • during operating • during operating • during storage • C 25 +60 • during storage • C 40 +80 Width of the sensor Material Material • of the enclosure Material of the enclosure / of the switch head Design of the operating mechanism Actuating speed Material of the enclosure / of the switch head Design of the operating mechanism Actuating speed Minimum actuating force N 30 Protection class IP mounting position Cable gland version Design of the electrical connection S (3 KM20 x 1.5)	Electrical operating cycles in one hour		
Design of the contact element Number of NC contacts • for the position surveillance of the locking element • for the position surveillance of the activation element • for the position surveillance of the locking element • for the position surveillance of the locking element • for the position surveillance of the locking element • for the position surveillance of the locking element • for the position surveillance of the activation element • for the position surveillance of the activation element • for the position surveillance of the activation element • for the position surveillance of the activation element • design of the switching function Resistance against vibration Resistance against vibration • during operating • during operating • during operating • during storage • C -25 +60 • during storage • C -40 +80 Width of the sensor mam • data Material • of the enclosure / of the switch head Design of the operating mechanism Actuating speed mm/s / m/s 0.4 1.5 Minimum actuating force Protection class IP mounting position Cable gland version Design of the electrical connection slow activation contacts			6,000
Number of NC contacts • for the position surveillance of the locking element Number of NC contacts • for the position surveillance of the activation element Number of NO contacts • for the position surveillance of the locking element Number of NO contacts • for the position surveillance of the locking element Number of NO contacts • for the position surveillance of the activation element Number of NO contacts • for the position surveillance of the activation element Design of the switching function Resistance against vibration Resistance against shock Ambient temperature • during operating • during storage *C	Repeat accuracy	mm	0.05
* for the position surveillance of the locking element Number of NC contacts * for the position surveillance of the activation element * for the position surveillance of the locking element * for the position surveillance of the locking element * for the position surveillance of the locking element * for the position surveillance of the activation element * for the position surveillance of the activation element * for the position surveillance of the activation element * for the position surveillance of the activation element * for the position surveillance of the activation element * for the position surveillance of the activation element * for the position surveillance of the activation element * for the switching function * gostine opening	Design of the contact element		slow-action contacts
Number of NC contacts	Number of NC contacts		
Number of NO contacts • for the position surveillance of the locking element Number of NO contacts • for the position surveillance of the locking element Number of NO contacts • for the position surveillance of the activation element Pesign of the switching function Resistance against vibration Resistance against vibration Resistance against shock Ambient temperature • during operating • during storage Number of NO contacts • during operating • C • 25 +60 • during storage Number of NO contacts • during operating • C • A0 +80 Naterial • of the enclosure Material / of the enclosure / of the switch head Design of the operating mechanism Actuating speed mm/s / m/s Ninimum actuating force N O A 1.5 Minimum actuating force N O A 1.5 Minimum actuating force N O A 1.5 Minimum position Cable gland version Design of the electrical connection screw-type terminals	for the position surveillance of the locking element		2
Number of NO contacts • for the position surveillance of the locking element Number of NO contacts • for the position surveillance of the activation element Design of the switching function Resistance against vibration Resistance against shock Ambient temperature • during operating • during storage Width of the sensor Material • of the enclosure Material / of the enclosure / of the switch head Design of the operating mechanism Actuating speed mm/s / m/s Actuating speed mm/s / m/s Naturating force Naturating position Naturating position Protection class IP mounting position Design of the electrical connection Minimum actuating force Design of the electrical connection Naturating speed Material Actuating speed Minimum actuating force Naturating position Actuating speed Actuating speed Minimum actuating force Naturating speed Naturatin	Number of NC contacts		
Number of NO contacts • for the position surveillance of the activation element • for the position surveillance of the activation element Design of the switching function Resistance against vibration Resistance against shock Ambient temperature • during operating • during storage C -25 +60 • during storage Width of the sensor mm 54 Material • of the enclosure Material / of the enclosure / of the switch head Design of the operating mechanism Actuating speed mm/s / m/s Actuating speed mm/s / m/s Minimum actuating force N 30 Protection class IP mounting position Cable gland version Design of the electrical connection 1 1 1 1 1 1 1 1 1 1 1 1 1	for the position surveillance of the activation element		2
Number of NO contacts • for the position surveillance of the activation element Design of the switching function Resistance against vibration Resistance against shock Ambient temperature • during operating • during storage Width of the sensor Material • of the enclosure Material / of the enclosure / of the switch head Design of the operating mechanism Actuating speed Minimum actuating force N 30 Protection class IP mounting position Design of the electrical connection I 1 1 1 1 1 1 1 1 1 1 1 1	Number of NO contacts		
• for the position surveillance of the activation element Design of the switching function Resistance against vibration Resistance against shock Ambient temperature • during operating • during storage Width of the sensor Material • of the enclosure Material / of the enclosure / of the switch head Design of the operating mechanism Actuating speed mm/s / m/s Minimum actuating force N Oal 1.5 Minimum position Cable gland version Design of the electrical connection 1 Design of the electrical connection	for the position surveillance of the locking element		1
Design of the switching function positive opening Resistance against vibration 0.35 mm / 5g Resistance against shock 30g / 11 ms Ambient temperature during operating during storage 40 - 40 +80 Width of the sensor mm Material metal of the enclosure metal Material / of the operating mechanism 5 directions of approach Actuating speed mm/s / m/s 0.4 1.5 Minimum actuating force N 30 Protection class IP IP66/IP67 mounting position any Cable gland version 3 x (M20 x 1.5) Design of the electrical connection screw-type terminals	Number of NO contacts		
Resistance against vibration Resistance against shock Ambient temperature - during operating - during storage Width of the sensor Material - of the enclosure Material / of the enclosure / of the switch head Design of the operating mechanism Actuating speed mm/s / m/s Material or the enclosure Minimum actuating force N 30 Protection class IP mounting position Cable gland version Design of the electrical connection 0.35 mm / 5g 30g / 11 ms 0.4 +80 0.4 +80 Metal metal metal metal metal petal metal 1.5 Minimum actuating force N 30 Protection class IP mounting position Cable gland version Design of the electrical connection screw-type terminals	for the position surveillance of the activation element		1
Resistance against shock Ambient temperature • during operating • during storage © C -25 +60 • during storage © C -40 +80 Width of the sensor mm 54 Material • of the enclosure metal Material / of the enclosure / of the switch head Design of the operating mechanism Actuating speed mm/s / m/s Minimum actuating force N 30 Protection class IP mounting position Cable gland version Design of the electrical connection 30g / 11 ms 30 +80 where \$\text{** of } \text{** of } ** o	Design of the switching function		positive opening
Ambient temperature • during operating • during storage © C -25 +60 • during storage © C -40 +80 Width of the sensor mm 54 Material • of the enclosure Material / of the enclosure / of the switch head Design of the operating mechanism Actuating speed mm/s / m/s Minimum actuating force N 30 Protection class IP mounting position Cable gland version Design of the electrical connection **C -25 +60 -40 +80 **mm 54 **metal metal **metal **metal **metal **metal **metal **metal **metal **metal **metal **protections of approach N 30 **IP66/IP67 **mounting position **C -40 +80 **metal **metal **protections of approach **mm/s / m/s **an **protection class IP **protection clas	Resistance against vibration		0.35 mm / 5g
 during operating during storage C -25 +60 C -40 +80 Width of the sensor mm 54 Material of the enclosure metal Material / of the enclosure / of the switch head metal Design of the operating mechanism 5 directions of approach Actuating speed mm/s / m/s 0.4 1.5 Minimum actuating force N 30 Protection class IP protection class IP prode/IP67 mounting position any Cable gland version 3 x (M20 x 1.5) Design of the electrical connection screw-type terminals 	Resistance against shock		30g / 11 ms
• during storage °C -40 +80 Width of the sensor mm 54 Material • of the enclosure metal • of the enclosure / of the switch head metal Design of the operating mechanism 5 directions of approach Actuating speed mm/s / m/s 0.4 1.5 Minimum actuating force N 30 Protection class IP IP66/IP67 mounting position any Cable gland version 3 x (M20 x 1.5) Design of the electrical connection screw-type terminals	Ambient temperature		
Width of the sensor Material of the enclosure Material / of the enclosure / of the switch head Design of the operating mechanism Actuating speed mm/s / m/s Minimum actuating force N 30 Protection class IP mounting position Cable gland version Design of the electrical connection mm/s / m/s 3 x (M20 x 1.5) screw-type terminals	during operating	°C	-25 +60
Material of the enclosure metal Material / of the enclosure / of the switch head Design of the operating mechanism Actuating speed Minimum actuating force N 30 Protection class IP Protection class IP IP66/IP67 mounting position Cable gland version Design of the electrical connection metal metal Metal Metal Metal Metal Metal N 30 Mm/s / m/s N 30 IP66/IP67 Any Sometion Sometal Metal	during storage	°C	-40 +80
 of the enclosure Material / of the enclosure / of the switch head Design of the operating mechanism Actuating speed Minimum actuating force N Protection class IP IP66/IP67 mounting position Cable gland version Design of the electrical connection metal 	Width of the sensor	mm	54
Material / of the enclosure / of the switch head metal Design of the operating mechanism 5 directions of approach Actuating speed mm/s / m/s 0.4 1.5 Minimum actuating force N 30 Protection class IP IP66/IP67 mounting position any Cable gland version 3 x (M20 x 1.5) Design of the electrical connection screw-type terminals	Material		
Design of the operating mechanism 5 directions of approach Actuating speed mm/s / m/s 0.4 1.5 Minimum actuating force N 30 Protection class IP IP66/IP67 mounting position any Cable gland version 3 x (M20 x 1.5) Design of the electrical connection screw-type terminals	of the enclosure		metal
Actuating speed mm/s / m/s 0.4 1.5 Minimum actuating force N 30 Protection class IP IP66/IP67 mounting position any Cable gland version 3 x (M20 x 1.5) Design of the electrical connection screw-type terminals	Material / of the enclosure / of the switch head		metal
Minimum actuating force N 30 Protection class IP IP66/IP67 mounting position Cable gland version Design of the electrical connection N 30 IP66/IP67 any 3 x (M20 x 1.5) screw-type terminals	Design of the operating mechanism		5 directions of approach
Protection class IP IP66/IP67 mounting position any Cable gland version 3 x (M20 x 1.5) Design of the electrical connection screw-type terminals	Actuating speed	mm/s / m/s	0.4 1.5
mounting position any Cable gland version 3 x (M20 x 1.5) Design of the electrical connection screw-type terminals	Minimum actuating force	N	30
Cable gland version 3 x (M20 x 1.5) Design of the electrical connection screw-type terminals	Protection class IP		IP66/IP67
Design of the electrical connection screw-type terminals	mounting position		any
	Cable gland version		3 x (M20 x 1.5)
Reference code	Design of the electrical connection		screw-type terminals
	Reference code		

 according to DIN 40719 extended according to IEC 204-2 / according to IEC 750

• according to DIN EN 61346-2

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Certificates/ approvals:

General Product Approval

Functional Safety / Safety of Machinery Declaration of Conformity

Test Certificates











Special Test Certificate

other

Confirmation

Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrial-controls/mall

Cax online generator

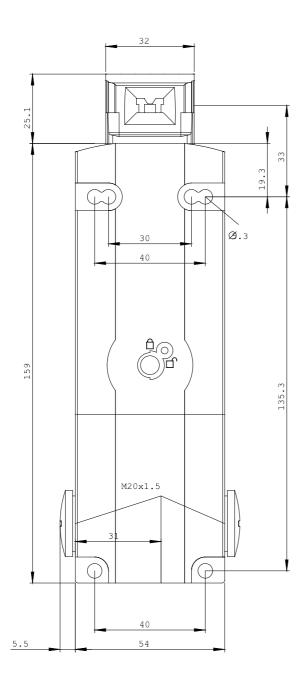
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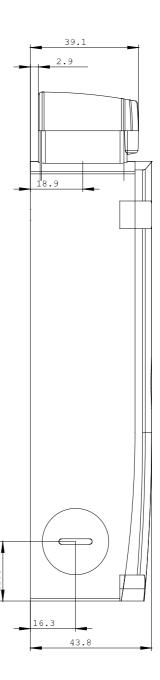
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

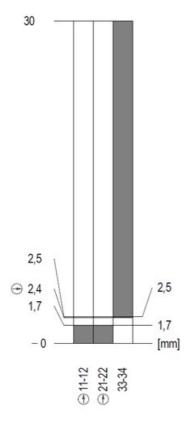
http://support.automation.siemens.com/WW/view/en/3SE5312-0SD11/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3SE5312-0SD11}}$







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