



Position switch, 3SE51 Metal enclosure 40 mm according to EN 50041 1 NO/1 NC quick action contacts with M12 connector, 5-pole, fixed PIN assignment: PIN1=21, PIN2=22 PIN3=13, Pin4=14, PIN5=PE with roller plunger, 30 N Actuating/restoring force



Product brand name	SIRIUS
Product designation	Mechanical position switches
Product type designation	3SE5
Manufacturer's article number	3SE5114-0CA00-1AL0 3SE5000-0AD02 3SE5000-0CA00
<ul style="list-style-type: none"> • of the supplied basic switch • of the supplied actuator head for position switches • of the supplied switching contacts 	
Suitability for use safety switch	Yes

General technical data

Product function	Yes
<ul style="list-style-type: none"> • positive opening 	
Insulation voltage	125 V
<ul style="list-style-type: none"> • rated value 	
Degree of pollution	class 3
Surge voltage resistance rated value	1.5 kV
Protection class IP	IP66/IP67
Shock resistance	30 g / 11 ms
<ul style="list-style-type: none"> • acc. to IEC 60068-2-27 	



Vibration resistance • acc. to IEC 60068-2-6	0.35 mm/5g
Mechanical service life (switching cycles) • typical	15 000 000
Electrical endurance (switching cycles) with contactor 3RH11, 3RT1016, 3RT1017, 3RT1024, 3RT1025, 3RT1026 typical	10 000 000
Electrical operating cycles in one hour with contactor 3RH11, 3RT1016, 3RT1017, 3RT1024, 3RT1025, 3RT1026	6 000
Thermal current	4 A
Material of the enclosure of the switch head	metal
Reference code acc. to DIN EN 81346-2	B
Reference code acc. to DIN EN 61346-2	B
Continuous current of the C characteristic MCB	1 A; for a short-circuit current smaller than 400 A
Continuous current of the quick DIAZED fuse link	4 A; for a short-circuit current smaller than 400 A
Continuous current of the DIAZED fuse link gG	4 A
Active principle	mechanical
Repeat accuracy	0.05 mm
Minimum actuating force in activation direction	30 N
Length of the sensor	130.5 mm
Width of the sensor	40 mm
Design of the switching contact	mechanical
Operating frequency rated value	50 ... 60 Hz
Number of NC contacts for auxiliary contacts	1
Number of NO contacts for auxiliary contacts	1
Operating current at AC-15 • at 24 V rated value • at 125 V rated value	4 A 4 A
Operating current at DC-13 • at 24 V rated value • at 125 V rated value	3 A 0.55 A
Design of the interface for safety-related communication	without

Enclosure

Design of the housing	block, narrow
Material of the enclosure	metal
Coating of the enclosure	cathodic immersion coating
Design of the housing acc. to standard	Yes

Drive Head

Design of the operating mechanism	Roller plunger, high-grade steel roller
Standard-compliant actuator head	EN 50041, design C
Shape of the switch head	roller



Design of the switching function	positive opening
Circuit principle	snap-action contacts
Number of switching contacts safety-related	1

Connections/ Terminals

Type of electrical connection	M12 plug, fixed
Cable entry type	M12 plug
Design of plug-in connection	M12 plug, 5-pole: Pin 1 = terminal 21, Pin 2 = 22, Pin 3 = 13, Pin 4 = 14, Pin 5 = PU

Communication/ Protocol

Design of the interface	without
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Ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> during operation during storage 	<p>-25 ... +85 °C</p> <p>-40 ... +90 °C</p>
Explosion protection category for dust	none

Installation/ mounting/ dimensions

Mounting position	any
Mounting type	screw fixing

Certificates/ approvals

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity
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CCC



CSA



UL



Type Examination
Certificate



EG-Konf.

Declaration of Conformity	Test Certificates	other
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[Miscellaneous](#)[Type Test Certificates/Test Report](#)[Confirmation](#)

Further information

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

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3SE5114-0CD02-1AL0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3SE5114-0CD02-1AL0>

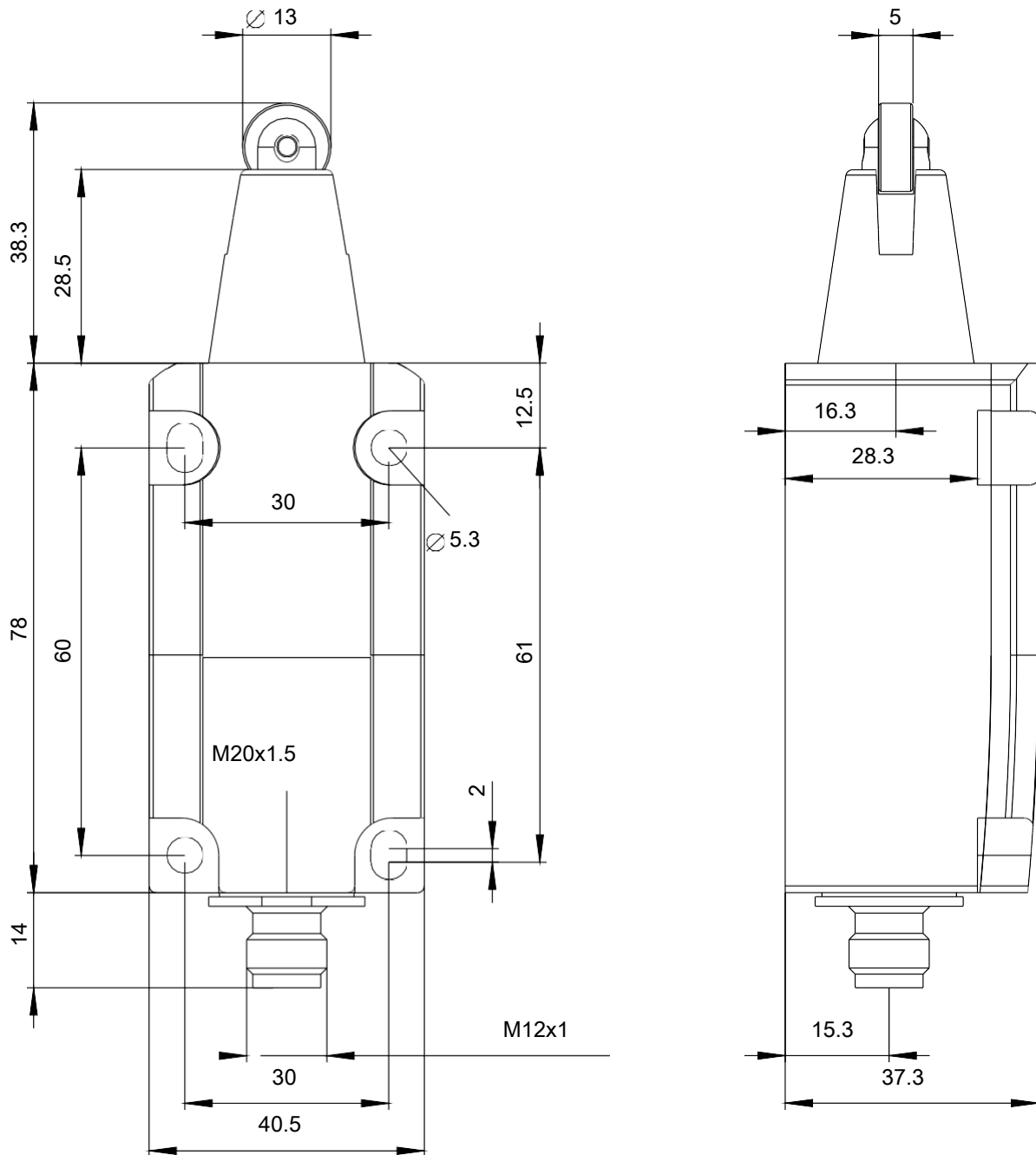


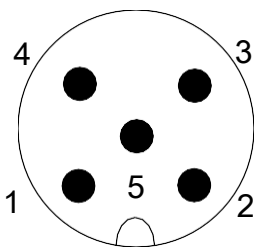
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3SE5114-0CD02-1AL0>

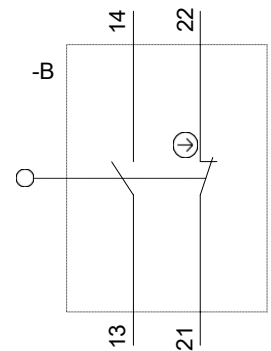
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3SE5114-0CD02-1AL0&lang=en





1	BN = Brown	→	21
2	WH = White	→	22
3	BU = Blue	→	13
4	BK = Black	→	14
5	GN/YE = Green/Yellow	>	PE





last modified:

05/15/2020