



position switch, 3SE51 metal enclosure 40 mm according to EN 50041 1 NO/1 NC quick action contacts with M12 plug, 5-pole, fixed pin assignment: Pin1=21, Pin2=22 Pin3=13, Pin4=14, Pin5=PE with roller plunger, 30 N actuating/restoring force only available as complete unit

product brand name	SIRIUS
product designation	Mechanical position switches
product type designation	3SE5
manufacturer's article number	
<ul style="list-style-type: none"> • of the supplied basic switch • of the supplied actuator head for position switches • of the supplied switching contacts 	3SE5114-0CA00-1AL0 3SE5000-0AD02 3SE5000-0CA00
suitability for use safety switch	Yes
General technical data	
product function positive opening	Yes
insulation voltage rated value	125 V
degree of pollution	class 3
surge voltage resistance rated value	1.5 kV
protection class IP	IP66/IP67
shock resistance	
<ul style="list-style-type: none"> • according to IEC 60068-2-27 	30g / 11 ms
vibration resistance according to IEC 60068-2-6	0.35 mm/5g
mechanical service life (operating cycles) typical	3 000 000
thermal current	4 A
material of the enclosure of the switch head	metal
reference code according to IEC 81346-2	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
Substance Prohibittance (Date)	07/01/2006
SVHC substance name	Lead - 7439-92-1 Imidazolidine-2-thione (2-imidazoline-2-thiol) - 96-45-7
Net Weight	0.368 kg
minimum actuating force in directions of actuation	30 N
length of the sensor	130.5 mm
width of the sensor	40 mm
Ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage 	-25 ... +85 °C -40 ... +90 °C
explosion protection category for dust	none
Main circuit	

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
operational current at AC-15	
• at 24 V rated value	4 A
• at 125 V rated value	4 A
operational current at DC-13	
• at 24 V rated value	3 A
• at 125 V rated value	0.55 A
Enclosure	
design of the housing	block, narrow
material of the enclosure	metal
coating of the enclosure	cathodic dip coating
design of the housing according to standard	Yes
Drive Head	
design of the actuating element	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
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
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw fixing
Connections/ Terminals	
type of electrical connection	M12 plug, fixed
design of the interface for safety-related communication	without
Communication/ Protocol	
design of the interface	without
Safety related data	
product function suitable for safety function	Yes
service life maximum	20 a
test wear-related service life necessary	Yes
proportion of dangerous failures	
• with low demand rate according to SN 31920	20 %
• with high demand rate according to SN 31920	20 %
B10 value with high demand rate according to SN 31920	1 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
ISO 13849	
device type according to ISO 13849-1	3
Approvals Certificates	
General Product Approval	Test Certificates



[Type Test Certificates/Test Report](#)

other

Environment



[Confirmation](#)



[Environmental Confirmations](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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

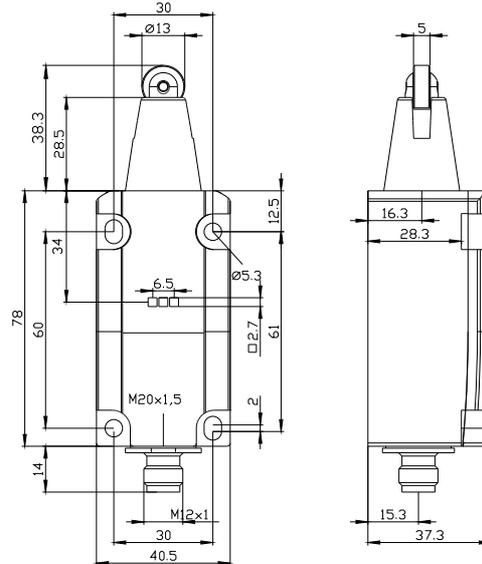
<https://support.automation.siemens.com/WW/CAxorder/default.aspx?lang=en&mlfb=3SE5114-0CD02-1AL0>

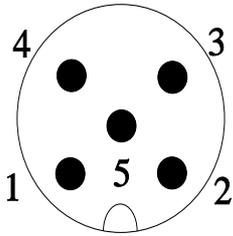
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<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, ...)

https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=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	→	⊕

