

Proximity Switches

Series CSN

7

Reed switch



- » Integrated clamp for direct mounting onto tie-rods, Series 60 ISO w/32mm - 100mm bore
- » Integrated DIN 43650-B connection w/ LED

It is designed so that it can be fixed directly on the tie-rod by means of two screws which assure the position longitudinal to the cylinder axle; and with a third screw for the anti-rotation positioning. The three terminals are indicated by the numbers 1, 2 and 3 and enable the following connections to be made (see the scheme).

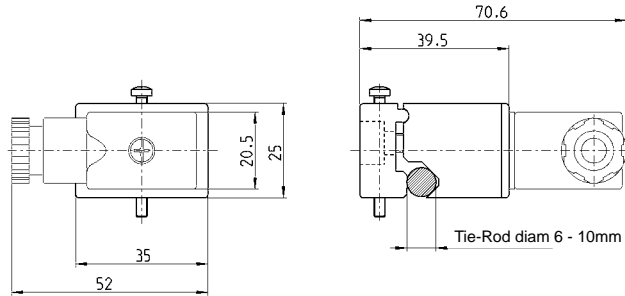
The electrical proximity switch mod. CSN 2032-0 consists of a Reed switch complete with an electronic protection circuit and a red LED indicator all encapsulated in an insulated sealed casing.

GENERAL DATA

Mod.	CSN 2032- 0
Voltage	from 12 to 220V AC and DC
Protection	IP54 / IP65 with connector DIN 43650
Material	glass-reinforced PA
Mounting	bracket for tie rod \varnothing 6 – \varnothing 10
Signalling	integrated red LED
Electrical connection	DIN 43650 connector, Mod. 122-800
Max. current	1.5 A
Max. load	20 W DC - 30 VA AC
Actuating time	\leq 2 ms
Actuating tolerance	\pm 1mm
Operating temperature	-13°F - 167°F (- 25°C – + 75°C)
Type of contact	NO (normally open)

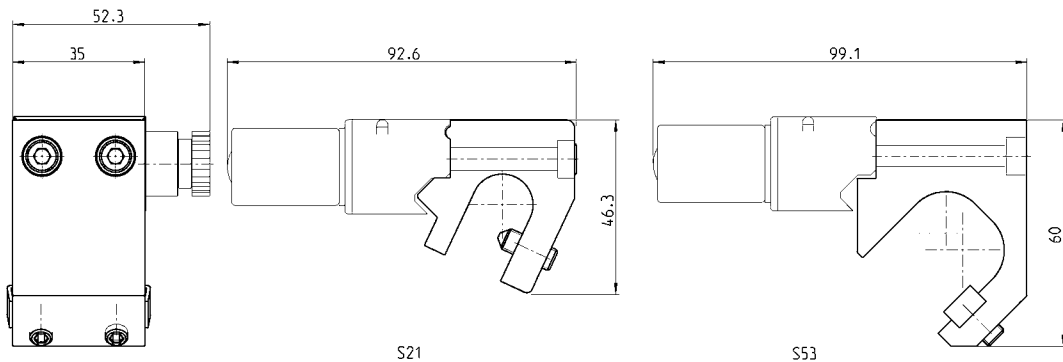
Switches Series CSN

For cylinders Series 40 from \varnothing 160 – 250 (mounting band to be ordered separately).
 For cylinders Series 41 from \varnothing 160 - 200 (mounting band to be ordered separately).
 For cylinders Series 60 from diam 32mm - 100mm bore, direct mounting on tie rods



Mod.
CSN 2032-0

Mounting bracket for sensor



Mod.

S21 for cylinders Series 40 \varnothing 160 - 200 - 250 mm

S53 for cylinders Series 41 \varnothing 160 - 200 mm

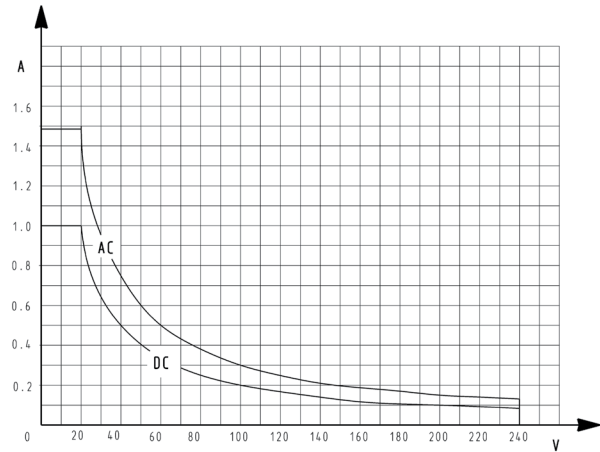
Maximum contact load

The maximum load (W) which the contacts are able to tolerate is that indicated in the section "General data", i.e.

- 20 W for direct current (DC)
- 30 VA for alternating current (AC)

The effective load allowed depends on the operating voltage (minimum 12 V, maximum 220 V) as shown in the following graph.

Note: this graph was obtained from practical tests performed using a load consisting of our Series A and 6 solenoid valves, at an operating speed of one stroke per second. For higher operating speeds, you are advised to contact our technical department.



TECHNICAL DATA

CONNECTION

- For inductive loads = solenoid valves, electrical magnets, relay.

To connectors = terminals 1 - 2

- For capacitive loads = circuit with remaining tension (see PLC controls)

To connectors = 1 - 3

Note: For connections with wires of approximately 10m, the connection shall be made as for a capacitive load.

MAXIMUM LOADS

For maximum loads see relative diagram, those loads are valid only for inductive loads. For capacitive loads, using clamp 3 (or black wire) load must not exceed 80 mA and load must be given by PLC or, for electrical circuits, by microrelay or micro solenoid valves with 2W maximum consumption.

Note: When operating with direct current, clamp 1 must always be connected to the positive outlet (+). In cases where commands are given from the PLC and logic NPN, clamp 1 must be connected to the inlet. In cases where commands are given from the PLC and logic PNP, clamps 2 or 3 must be connected to the inlet.

LEGEND:

C1 = capacitive load

C2 = inductive load

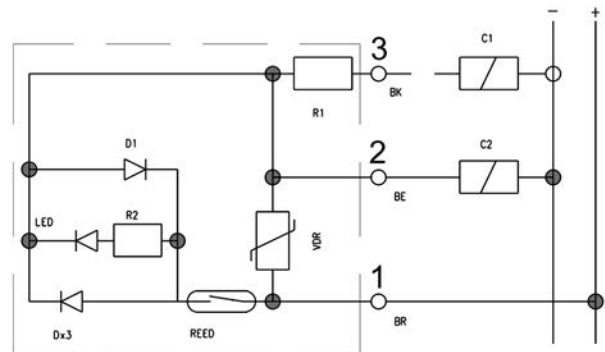



TABLE SHOWING THE COMPATIBILITY OF MAGNETIC PROXIMITY SWITCHES BY CYLINDER SERIES

Series	Ø	CST - CSH	CSV	CSN
24 - 25	16	S-CST-02		
	20	S-CST-03		
	25	S-CST-04		
27	20	S-CST-03		
	25	S-CST-04		
	32	S-CST-18		
	40	S-CST-19		
	50	S-CST-20		
	63	S-CST-21		
31	12	Direct mounting		
	16	Direct mounting		
	20	Direct mounting		
	25	Direct mounting		
	32	Direct mounting		
	40	Direct mounting		
	50	Direct mounting		
	63	Direct mounting		
	80	Direct mounting		
	100	Direct mounting		
32	20	Direct mounting		
	25	Direct mounting		
	32	Direct mounting		
	40	Direct mounting		
	50	Direct mounting		
	63	Direct mounting		
	80	Direct mounting		
40	160	S-CST-28		S21
	200	S-CST-28		S21
	250			Direct mounting
	320			Direct mounting
41	160			S53
	200			S53
42	32	S-CST-18		
	40	S-CST-19		
	50	S-CST-20		
	63	S-CST-21		
50	16		Direct mounting	
	25		Direct mounting	
	32	S-CST-01		
	40	S-CST-01		
	50	S-CST-01		
	63	S-CST-01		
	80	S-CST-01		
52	25	Direct mounting		
	32	Direct mounting		
	40	Direct mounting		
	50	Direct mounting		
	63	Direct mounting		
60	32	S-CST-25		
	40	S-CST-25		
	50	S-CST-25		
	63	S-CST-25		
	80	S-CST-26		
	100	S-CST-26		
	125	S-CST-27		
60 + 45N	32	S-CST-45N1		
	40	S-CST-45N1		
	50	S-CST-45N1		
	63	S-CST-45N1		
	80	S-CST-45N2		
	100	S-CST-45N2		


TABLE SHOWING THE USE OF CAMOZZI MAGNETIC PROXIMITY SWITCHES

Series	Ø	CST - CSH
61	32	Direct mounting
	40	Direct mounting
	50	Direct mounting
	63	Direct mounting
	80	Direct mounting
	100	Direct mounting
	125	Direct mounting
62	32	Direct mounting (CSH only)
	40	Direct mounting (CSH only)
	50	Direct mounting (CSH only)
	63	Direct mounting (CSH only)
	80	Direct mounting (CSH only)
	100	Direct mounting (CSH only)
63...P	32	Direct mounting (CSH only)
	40	Direct mounting (CSH only)
	50	Direct mounting (CSH only)
	63	Direct mounting (CSH only)
	80	Direct mounting (CSH only)
	100	Direct mounting (CSH only)
	125	Direct mounting (CSH only)
63...T	32	S-CST-25
	40	S-CST-25
	50	S-CST-25
	63	S-CST-25
	80	S-CST-26
	100	S-CST-26
	125	S-CST-27
69	32	Direct mounting
	40	Direct mounting
	50	Direct mounting
	63	Direct mounting
	80	Direct mounting
	100	Direct mounting
	125	Direct mounting
6PF	50	Direct mounting
	63	Direct mounting
	80	Direct mounting
	100	Direct mounting
	125	Direct mounting
90	32	S-CST-06
	40	S-CST-07
	50	S-CST-08
	63	S-CST-09
	80	S-CST-10
	100	S-CST-11
	125	S-CST-12
94	16	S-CST-05
	20	S-CST-05
	25	S-CST-05
95	16	S-CST-05
	20	S-CST-05
	25	S-CST-06
97	32	S-CST-06
	40	S-CST-07
	50	S-CST-08
	63	S-CST-09

TABLE SHOWING THE USE OF CAMOZZI MAGNETIC PROXIMITY SWITCHES

Series	Ø	CST - CSH	CSV	CSC-D / CSC-H
QC	20	Direct mounting		
	25	Direct mounting		
	32	Direct mounting		
	40	Direct mounting		
	50	Direct mounting		
	63	Direct mounting		
QCBF	20	Direct mounting		
	25	Direct mounting		
	32	Direct mounting		
	40	Direct mounting		
QCTF	20	Direct mounting		
	25	Direct mounting		
	32	Direct mounting		
	40	Direct mounting		
QP - QPR	12		Direct mounting	
	16		Direct mounting	
	20	S-CST-01		
	25	S-CST-01		
	32	S-CST-01		
	40	S-CST-01		
	50	S-CST-01		
	63	S-CST-01		
	80	S-CST-01		
	100	S-CST-01		
QX	10			Direct mounting
	16			Direct mounting
	20			Direct mounting
	25			Direct mounting
	32			Direct mounting
	40			Direct mounting
ST	20	Direct mounting		
	32	Direct mounting		
	40	Direct mounting		
	50	Direct mounting		


Table 4: mounting of sensors on grippers, electromechanical axis and cylinders

* Further details about Series 5E electromechanical axis and Series 6E electromechanical cylinders can be found in the C_Electrics catalogue which is also available on the Camozzi website www.camozzi.com within the section Products & Solutions › C_Electrics.

Series	Ø	CST - CSH	CSB-D / CSB-H	CSC-D / CSC-H	CSD-D / CSD-H
Grippers					
CGA	10		Direct mounting		
	16		Direct mounting		
	20		Direct mounting		
	25		Direct mounting		
	32		Direct mounting		
CGC	50		Direct mounting (CSB-D-220 only)		
	64		Direct mounting (CSB-D-220 only)		
	80		Direct mounting (CSB-D-220 only)		
	100		Direct mounting (CSB-D-220 only)		
	125		Direct mounting (CSB-D-220 only)		
CGLN	10			Direct mounting	
	16			Direct mounting	
	20			Direct mounting	
	25			Direct mounting	
	32			Direct mounting	
CGP	10		Direct mounting		
	16		Direct mounting		
	20		Direct mounting		
	25		Direct mounting		
	32		Direct mounting		
CGPS	10				Direct mounting
	16				Direct mounting
	20				Direct mounting
	25				Direct mounting
	32				Direct mounting
CGPT	16				Direct mounting
	20				Direct mounting
	25				Direct mounting
	32				Direct mounting
	40				Direct mounting
CGSN	16			Direct mounting	Direct mounting
	20			Direct mounting	Direct mounting
	25			Direct mounting	Direct mounting
	32			Direct mounting	Direct mounting
RPGA	20				*Contact Factory
RPGB	8				Direct mounting
	12				Direct mounting
Electromechanical axis *					
5E	50	Direct mounting (CSH only)			
	65	Direct mounting (CSH only)			
	80	Direct mounting (CSH only)			
Electromechanical cylinders *					
6E	32	Direct mounting			
	40	Direct mounting			
	50	Direct mounting			
	63	Direct mounting			