

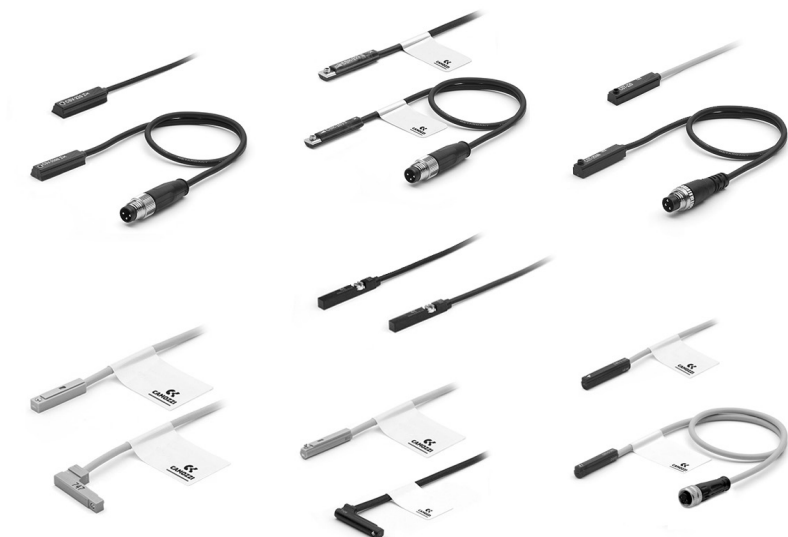
Magnetic proximity switches

Series CST-CSV-CSH, CSB-CSC-CSD, CSG

New models

Reed

Magneto-resistive - Hall effect (Series CST, CSV, CSH only)



The magnetic proximity switches define the position of the piston in cylinders or grippers. When the internal contact is actuated by a magnetic field, the sensors complete an electrical circuit and provide an output signal to actuate directly a solenoid valve or a PLC. A yellow or red LED diode shows when the internal magnetic contact is closed.

The switches are available in two different versions - Reed with mechanical switching and with electronic switching - and they are subdivided into Hall effect and Magneto-resistive. The electronic versions are suggested for heavy duty with frequent operations and strong vibrations.

- » Series CST, CSV, CSH, CSG switches: integrated in the actuator profile, with or without M8 connector and new ATEX version
- » Series CSB switches: for grippers CGA, CGP
- » Series CSC switches: for grippers CGLN
- » Series CSD switches: for grippers CGSN, CGPT, CGPS, RRGB, CGCN, CGZT
- » Series CSG switches: top mounting, ATEX and UL versions

SERIES CST, CSV, CSH GENERAL DATA

SERIES CST-CSV-CSH-CSB-CSC-CSD-CSG SENSORS

Operation	Reed contact Magnetoresistive Hall effect
Type of output	Static or electronic PNP
Type of contact in Reed switches	Normally Open (NO) Normally Closed (NC)
Voltage	see the characteristics of each model
Max current	see the characteristics of each model
Max load	8 W DC and 10 VA AC (Reed)
Protection class	IP67
Materials	plastic body encapsulating epoxy resin; cable in PVC, connector in PVR, connector body in PU
Mounting	directly into the groove or by means of adapters
Signalling	by means of a yellow diode Led
Protections	see the characteristics of each model
Switching time	<1,8 ms (Reed); <1 ms (Magnetoresistive - Hall effect)
Operating temperature	-10°C + 80°C
Electrical duration	10.000.000 cycles (Reed); 1.000.000.000 cycles (Magnetoresistive - Hall effect)
Electrical connections	with a 2-wire cable, section 2x0.14, 2m (standard), high flexibility; with a 3-wire cable, section 3x0.14, 2m (standard), high flexibility; with a M8 connector and cable of 0.3 m

SERIES CST, CSV, CSH CODING EXAMPLE

CS	T	-	2	2	0	N	-	5	EX
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CS	SERIES
T	TYPE OF SLOT: T = T-slot V = V-slot H = H-slot
2	OPERATION: 2 = Reed NO 3 = Magnetoresistive 4 = Reed NC 5 = Hall effect
2	CONNECTIONS: 2 = 2 wires (Reed only) 3 = 3 wires 5 = 2 wires with M8 connector (Reed only) 6 = 3 wires with M8 connector
0	POWER SUPPLY VOLTAGE: 0 = 10 ÷ 110 V DC; 10 ÷ 230 V AC (PNP) 1 = 30 ÷ 110 V DC; 30 ÷ 230 V AC (PNP) 2 = 3 wires cst (PNP) 3 = 10 ÷ 30 V AC/DC (PNP) 4 = 10 ÷ 27 V DC (PNP)
N	NOTE (CST/CSV-250N only): N = according to norm
5	LENGTH OF THE CABLE: = 2m (CST and CSV only) 2 = 2m (CSH only) 5 = 5m
EX	

SERIES CSB, CSC, CSD GENERAL DATA

Funcionamiento	Contacto Reed (CSB, CSC solo) Magnetoresistivo (CSD solo)
Tipo de salida	-
Tipo de contacto en sensors Reed	Normalmente abierto (NO)
Tensión	Ver las características de cada modelo
Corriente máx.	Ver las características de cada modelo
Carga máx.	8 W DC y 10 VA AC
Grado de protección	IP66
Materiales	Cuerpo de plástico encapsulado en resina epoxi
Montaje	Directamente en las ranuras
Señalización	Por medio de un Led rojo
Protecciones	Ver las características de cada modelo
Tiempo de conmutación	<1 ms
Temperatura de funcionamiento	-10°C ÷ 60°C
Vida eléctrica	-
Conexiones eléctricas	con cable de 2 hilos, sección 2x0.14, 2m (estándar), alta flexibilidad (CSB, CSC solo); con cable de 3 hilos, sección 3x0.14, 2m (estándar), alta flexibilidad (CSD solo); Con conector M8 y cables de 0.3 m (CSD solo)

SERIES CSB, CSC, CSD CODING EXAMPLE

CS	B	-	D	-	2	2	0	-	
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CS	SERIES
B	TYPE OF SLOT: B = B-slot C = C-slot D = D-slot
D	CABLE OUTPUT: D = straight H = 90°
2	OPERATION: 2 = Reed NC (CSB, CSC only) 3 = Magnetoresistive (CSD only)
2	CONNECTIONS: 2 = 2 wires (CSB, CSC only) 3 = 3 wires (CSD only) 6 = 3 wires with M8 connector (CSD only)
0	POWER SUPPLY VOLTAGE: 0 = 10 ÷ 110 V DC/AC (CSB, CSC only) 4 = 10 ÷ 27 V DC PNP (CSD only)
	LENGTH OF THE CABLE: = 2m (standard) 5 = 5m

SERIES CSG GENERAL DATA

SERIES CST-CSV-CSH-CSB-CSC-CSD-CSG SENSORS

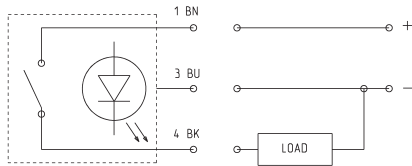
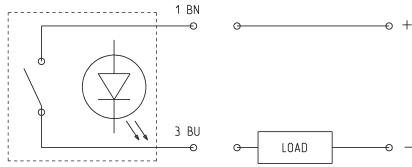
Operation	Reed contact Magnetoresistive
Type of output	Static or electronic PNP and NPN
Type of contact in Reed switches	Normally Open (NO)
Voltage	see the characteristics of each model
Max current	see the characteristics of each model
Max load	see the code tables
Protection class	IP67
Materials	plastic body encapsulating epoxy resin; cable in PU
Mounting	directly into the groove or by means of adapters directly into the groove
Signalling	by means of a LED (colours are indicated in the code tables)
Protections	never exceed the maximum voltages and currents
Switching time	<5 ms (Reed); <1 ms (Magnetoresistive)
Operating temperature	-10°C ÷ 70°C (-10°C ÷ 60°C only for Reed version, 2 wires UL)
Electrical connections	with a 2-wire cable, external section 2,8 x 2 wires PU; with a 3-wire cable, external section 2,8 x 3 wires PU

SERIES CSG CODING EXAMPLE

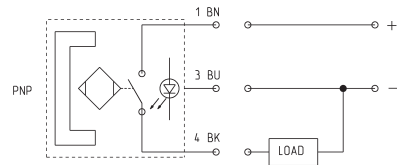
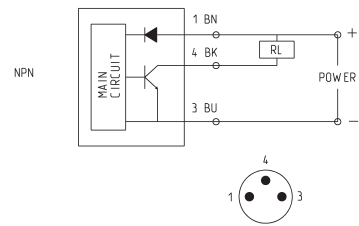
CS	G	-	2	2	3	-	2	-	UL
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CS	SERIES
G	TYPE OF SLOT: G = T-slot
2	OPERATION: 2 = Reed Normally Open 3 = Magnetoresistive PNP 5 = Magnetoresistive NPN 6 = Magnetoresistive PNP Normally Closed 7 = Magnetoresistive NPN Normally Closed
2	CONNECTIONS: 2 = 2 wires 3 = 3 wires
3	POWER SUPPLY VOLTAGE: 3 = 5/10 ÷ 30 V AC/DC (PNP) 4 = 10 ÷ 28 V DC (PNP)
2	LENGTH OF THE CABLE: 2 = 2m 5 = 5m 10 = 10 m
UL	CERTIFICATION: = No certification EX = ATEX certification UL = UL certification

SWITCHES ELECTRICAL CONNECTIONS



Reed switches
 BN = brown
 BU = blue
 BK = black

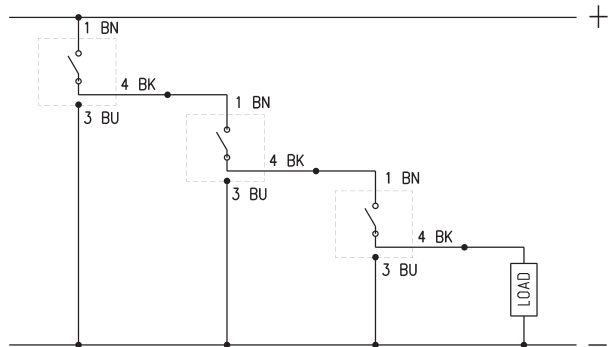


Magnetoresistive and Hall effect switches
 BN = brown
 BU = blue
 BK = black

Connecting schemes in series

The 3-wire version of the Reed sensors has been designed to allow the connection of several sensors in series, as there is no voltage drop between the supply and the load. See connecting scheme. The voltage drop is 2.8V for the 2-wire Reed sensors and 1.0V for 3-wire Magnetoresistive and Hall effect sensors.

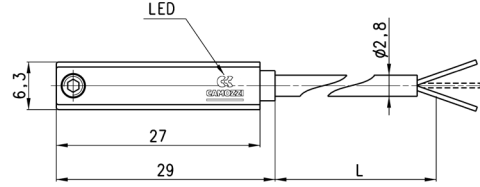
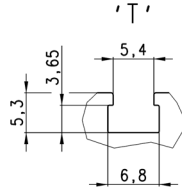
1 BN = Brown
 3 BU = Blue
 4 BK = Black
 L = load



Magnetic proximity switches with 2- or 3-wire cable for T-slot



Note for 2-wire switches Mod. CST-220, CST-220-5:
in case of polarity reversing the sensor will still be operating, but the LED diode won't turn on.



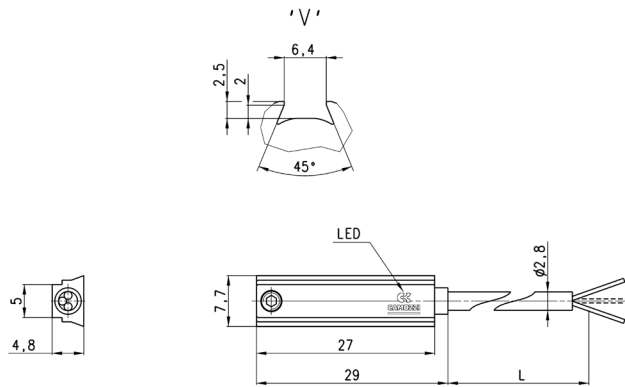
SERIES CST-CSV-CSH-CSB-CSC-CSD-CSG SENSORS

Mod.	Operation	Connections	Voltage	Output	Max. current	Max Load	Protection	L = length cable
CST-220	Reed	2 wires	10 ÷ 110 V AC/DC-230 V AC	-	250 mA	10 VA / 8W	None	2 m
CST-220-5	Reed	2 wires	10 ÷ 110 V AC/DC-230 V AC	-	250 mA	10 VA / 8 W	None	5 m
CST-220-12	Reed	2 wires	10 ÷ 110 V AC/DC-230 V AC	-	250 mA	10 VA / 8W	None	12 m
CST-220EX	Reed	2 wires	10 ÷ 110 V AC/DC-230 V AC	-	250 mA	10 VA / 8W	None	2 m
CST-220-5EX	Reed	2 wires	10 ÷ 110 V AC/DC-230 V AC	-	250 mA	10 VA / 8W	None	5 m
CST-220-12EX	Reed	2 wires	10 ÷ 110 V AC/DC-230 V AC	-	250 mA	10 VA / 8W	None	12 m
CST-232	Reed	3 wires	5 ÷ 30 V AC/DC	PNP	250 mA	10 VA / 8 W	Against polarity reversing	2 m
CST-232-5	Reed	3 wires	5 ÷ 30 V AC/DC	PNP	250 mA	10 VA / 8 W	Against polarity reversing	5 m
CST-232EX	Reed	3 wires	5 ÷ 30 V AC/DC	PNP	250 mA	10 VA / 8W	Against polarity reversing	2 m
CST-232-5EX	Reed	3 wires	5 ÷ 30 V AC/DC	PNP	250 mA	10 VA / 8W	Against polarity reversing and overvoltage	5 m
CST-332	Magneto-resistive	3 wires	10 ÷ 27 V DC	PNP	100 mA	6 W	Against polarity reversing and overvoltage	2 m
CST-332-5	Magneto-resistive	3 wires	10 ÷ 27 V DC	PNP	100 mA	6 W	Against polarity reversing and overvoltage	5 m
CST-332EX	Magneto-resistive	3 wires	10 ÷ 27 V DC	PNP	100 mA	6 W	Against polarity reversing and overvoltage	2 m
CST-332-5EX	Magneto-resistive	3 wires	10 ÷ 27 V DC	PNP	100 mA	6 W	Against polarity reversing and overvoltage	5 m
CST-432	Reed	3 wires	5 ÷ 30 V AC/DC	PNP-NC	250 mA	10 VA / 8 W	Against polarity reversing	2 m
CST-432-5	Reed	3 wires	5 ÷ 30 V AC/DC	PNP-NC	250 mA	10 VA / 8 W	Against polarity reversing	5 m
CST-432EX	Reed	3 wires	5 ÷ 30 V AC/DC	PNP-NC	250 mA	10 VA / 8 W	Against polarity reversing	2 m
CST-432-5EX	Reed	3 wires	5 ÷ 30 V AC/DC	PNP-NC	250 mA	10 VA / 8 W	Against polarity reversing	5 m
CST-532	Hall effect	3 wires	10 ÷ 27 V DC	PNP	100 mA	6 W	Against polarity reversing and overvoltage	2 m
CST-532-5	Hall effect	3 wires	10 ÷ 27 V DC	PNP	100 mA	6 W	Against polarity reversing and overvoltage	5 m
CST-532EX	Hall effect	3 wires	10 ÷ 27 V DC	PNP	100 mA	6 W	Against polarity reversing and overvoltage	2 m
CST-532-5EX	Hall effect	3 wires	10 ÷ 27 V DC	PNP	100 mA	6 W	Against polarity reversing and overvoltage	5 m

Magnetic proximity switches with 2- or 3-wire cable for V-slot



Note for 2-wire switch Mod. CSV-220:
In case of polarity reversing the sensor will still be operating, but the LED diode won't turn on.

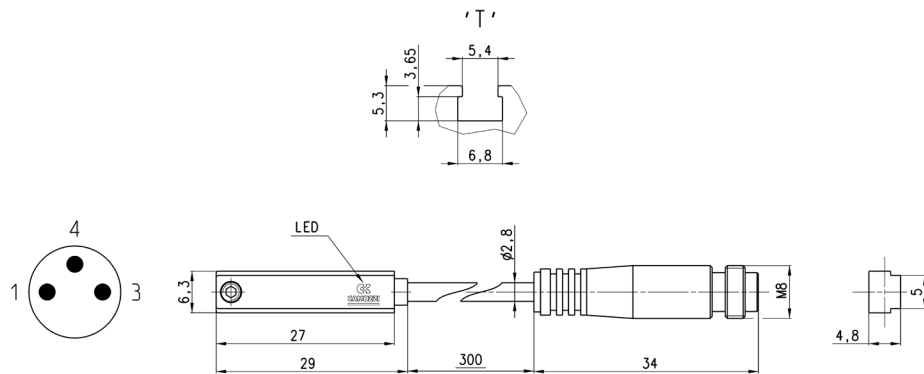


Mod.	Operation	Connections	Voltage	Output	Max. current	Max Load	Protection	L = length cable
CSV-220	Reed	2 wires	10 ÷ 110 V AC/DC-230 V AC	-	250 mA	10 VA / 8 W	None	2 m
CSV-232	Reed	3 wires	5 ÷ 30 V AC/DC	PNP	250 mA	10 VA / 8 W	Against polarity reversing	2 m
CSV-332	Magneto-resistive	3 wires	10 ÷ 27 V DC	PNP	100 mA	6 W	Against polarity reversing and overvoltage	2 m

Magnetic proximity switches with M8 3-pin connector for T-slot



Note for 2-wire switch Mod. CST-250N:
in case of polarity reversing the sensor will still be operating, but the LED diode won't turn on.

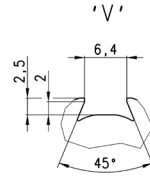


Cable length: 0.3 m

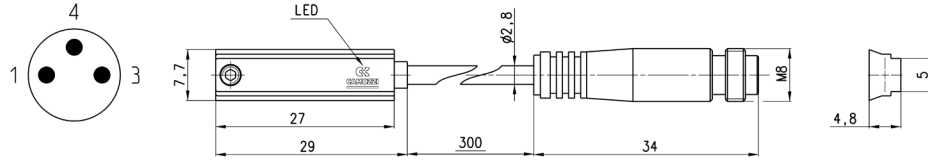
Mod.	Operation	Connection	Voltage	Output	Max. current	Max load	Protection
CST-250N	Reed	2 wires M8 male 3 pin	10 ÷ 110 V AC/DC	-	250 mA	10 VA / 8 W	None
CST-250NEX	Reed	2 wires M8 male 3 pin	10 ÷ 110 V AC/DC	-	250 mA	10 VA / 8 W	None
CST-262	Reed	3 wires M8 male 3 pin	5 ÷ 30 V AC/DC	PNP	250 mA	10 VA / 8 W	Against polarity reversing
CST-262EX	Reed	3 wires M8 male 3 pin	5 ÷ 30 V AC/DC	PNP	250 mA	10 VA / 8 W	Against polarity reversing
CST-362	Magneto-resistive	3 wires M8 male 3 pin	10 ÷ 27 V DC	PNP	100 mA	6 W	Against polarity reversing and overvoltage
CST-362EX	Magneto-resistive	3 wires M8 male 3 pin	10 ÷ 27 V DC	PNP	100 mA	6 W	Against polarity reversing and overvoltage
CST-562	Hall effect	3 wires M8 male 3 pin	10 ÷ 27 V DC	PNP	100 mA	6 W	Against polarity reversing and overvoltage
CST-562EX	Hall effect	3 wires M8 male 3 pin	10 ÷ 27 V DC	PNP	100 mA	6 W	Against polarity reversing and overvoltage

Magnetic proximity switches with M8 3-pin connector for V-slot

Note for 2-wire switch Mod. CSV-250N:
in case of polarity reversing the sensor will still be operating, but the LED diode won't turn on.



Cable length: 0.3 m

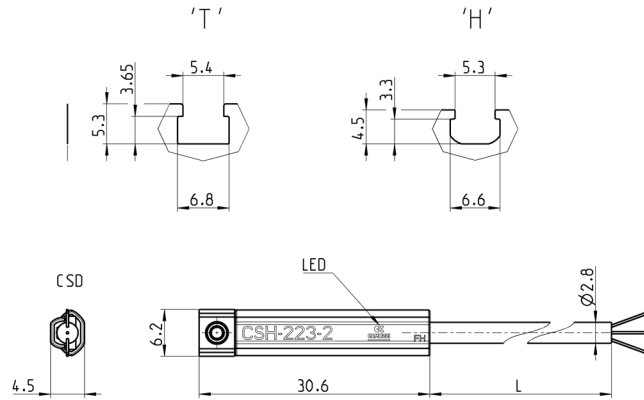


Mod.	Operation	Connection	Voltage	Output	Max. current	Max load	Protection
CSV-250N	Reed	2 wires M8 male 3 pin	10 ÷ 110 V AC/DC	-	250 mA	10 VA / 8 W	None
CSV-262	Reed	3 wires M8 male 3 pin	5 ÷ 30 V AC/DC	PNP	250 mA	10 VA / 8 W	Against polarity reversing
CSV-362	Magnetoresistive	3 wires M8 male 3 pin	10 ÷ 27 V DC	PNP	100 mA	6 W	Against polarity reversing and overvoltage

Magnetic proximity switches with 2- or 3-wire cable for H-slot



Note for 2-wire switches Mod. CSH-223-2, CSH-223-5, CSH-221-2, CSH-221-5:
in case of polarity reversing the sensor will still be operating, but the LED diode won't turn on.

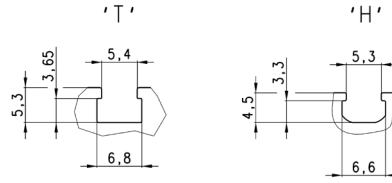


Suitable also for T-slots

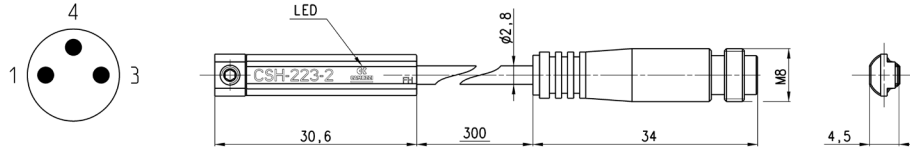
Mod.	Operation	Connection	Voltage	Output	Max current	Max load	Protection	L = cable length
CSH-223-2	Reed	2 wires	10 ÷ 30 V AC/DC	-	250 mA	10 VA / 8 W	Against polarity reversing	2 m
CSH-223-5	Reed	2 wires	10 ÷ 30 V AC/DC	-	250 mA	10 VA / 8 W	Against polarity reversing	5 m
CSH-223-10	Reed	2 wires	10 ÷ 30 V AC/DC	-	250 mA	10 VA / 8 W	Against polarity reversing and overvoltage	10 m
CSH-223-2EX	Reed	2 wires	10 ÷ 30 V AC/DC	-	250 mA	10 VA / 8 W	Against polarity reversing and overvoltage	2 m
CSH-223-5EX	Reed	2 wires	10 ÷ 30 V AC/DC	-	250 mA	10 VA / 8 W	Against polarity reversing	5 m
CSH-223-10EX	Reed	2 wires	10 ÷ 30 V AC/DC	-	250 mA	10 VA / 8 W	Against polarity reversing	10 m
CSH-221-2	Reed	2 wires	30 ÷ 230 V AC - 30 ÷ 110 V DC	-	250 mA	10 VA / 8 W	Against polarity reversing	2 m
CSH-221-5	Reed	2 wires	30 ÷ 230 V AC - 30 ÷ 110 V DC	-	250 mA	10 VA / 8 W	Against polarity reversing	5 m
CSH-221-2EX	Reed	2 wires	30 ÷ 230 V AC - 30 ÷ 110 V DC	-	250 mA	10 VA / 8 W	Against polarity reversing	2 m
CSH-221-5EX	Reed	2 wires	30 ÷ 230 V AC - 30 ÷ 110 V DC	-	250 mA	10 VA / 8 W	Against polarity reversing	5 m
CSH-233-2	Reed	3 wires	10 ÷ 30 V AC/DC	PNP	250 mA	10 VA / 8 W	Against polarity reversing	2 m
CSH-233-5	Reed	3 wires	10 ÷ 30 V AC/DC	PNP	250 mA	10 VA / 8 W	Against polarity reversing	5 m
CSH-233-2EX	Reed	3 wires	10 ÷ 30 V AC/DC	PNP	250 mA	10 VA / 8 W	Against polarity reversing	2 m
CSH-233-5EX	Reed	3 wires	10 ÷ 30 V AC/DC	PNP	250 mA	10 VA / 8 W	Against polarity reversing	5 m
CSH-334-2	Magneto-resistive	3 wires	10 ÷ 27 V DC	PNP	250 mA	6 W	Against polarity reversing and overvoltage	2 m
CSH-334-5	Magneto-resistive	3 wires	10 ÷ 27 V DC	PNP	250 mA	6 W	Against polarity reversing and overvoltage	5 m
CSH-334-2EX	Magneto-resistive	3 wires	10 ÷ 27 V DC	PNP	250 mA	6 W	Against polarity reversing and overvoltage	2 m
CSH-334-5EX	Magneto-resistive	3 wires	10 ÷ 27 V DC	PNP	250 mA	6 W	Against polarity reversing and overvoltage	5 m
CSH-433-2	Reed NC	3 wires	10 ÷ 30 V AC/DC	PNP	250 mA	10 VA / 8 W	Against polarity reversing and overvoltage	2 m
CSH-433-5	Reed	3 wires	10 ÷ 30 V AC/DC	PNP-NC	250 mA	10 VA / 8 W	Against polarity reversing	5 m
CSH-433-2EX	Reed	3 wires	10 ÷ 30 V AC/DC	PNP-NC	250 mA	10 VA / 8 W	Against polarity reversing	2 m
CSH-433-5EX	Reed	3 wires	10 ÷ 30 V AC/DC	PNP-NC	250 mA	10 VA / 8 W	Against polarity reversing	5 m

Magnetic proximity switches with M8 3-pin connector for H-slot

Note for 2-wire switch Mod. CSH-253:
in case of polarity reversing the sensor will still be operating, but LED diode won't turn on.



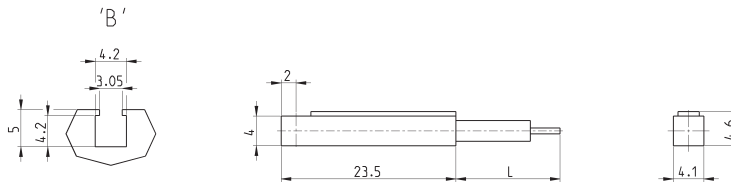
Suitable also for T-slots
Cable length: 0.3 m



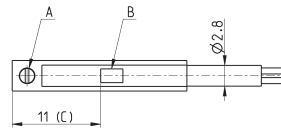
Mod.	Operation	Connection	Voltage	Output	Max current	Max load	Protection
CSH-253	Reed NO	2 wires M8 male 3 pin	10 ÷ 30 V AC/DC	-	250 mA	10 VA / 8 W	Against polarity reversing
CSH-253EX	Reed NO	2 wires M8 male 3 pin	10 ÷ 30 V AC/DC	-	250 mA	10 VA / 8 W	Against polarity reversing
CSH-263	Reed NO	3 wires M8 male 3 pin	10 ÷ 30 V AC/DC	PNP	250 mA	10 VA / 8 W	Against polarity reversing
CSH-263EX	Reed NO	3 wires M8 male 3 pin	10 ÷ 30 V AC/DC	PNP	250 mA	10 VA / 8 W	Against polarity reversing
CSH-364	Magneto-resistive	3 wires M8 male 3 pin	10 ÷ 27 V DC	PNP	250 mA	6 W	Against polarity reversing and overvoltage
CSH-364EX	Magneto-resistive	3 wires M8 male 3 pin	10 ÷ 27 V DC	PNP	250 mA	6 W	Against polarity reversing and overvoltage
CSH-463	Reed NC	3 wires M8 male 3 pin	10 ÷ 30 V AC/DC	PNP	250 mA	10 VA / 8 W	Against polarity reversing
CSH-463EX	Reed NC	3 wires M8 male 3 pin	10 ÷ 30 V AC/DC	PNP	250 mA	10 VA / 8 W	Against polarity reversing

Magnetic proximity switch with 2-wire cable for B-slot

In case of polarity reversing the sensor will still be operating, but the LED diode won't turn on.



A = fixing screw
B = Led indicator
C = ideal position detection

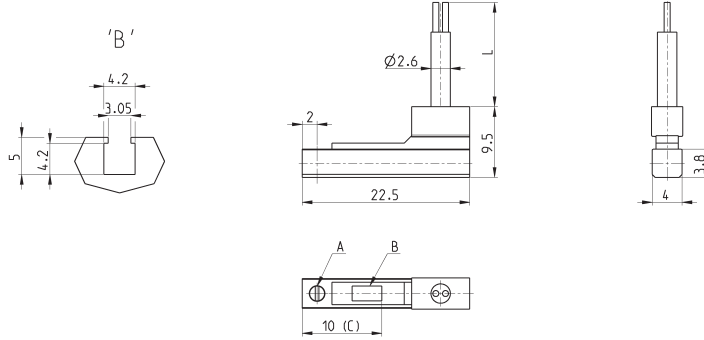


Mod.	Operation	Connections	Voltage	Output	Max. current	Max Load	Protection	L = length cable
CSB-D-220	Reed	2 wires	10÷110 V AC/DC	PNP	50 mA	8 W / 10 VA	Against polarity reversing and overvoltage	2 m

Magnetic proximity switch with 2-wire 90° cable for B-slot



In case of polarity reversing the sensor will still be operating, but the LED diode won't turn on.



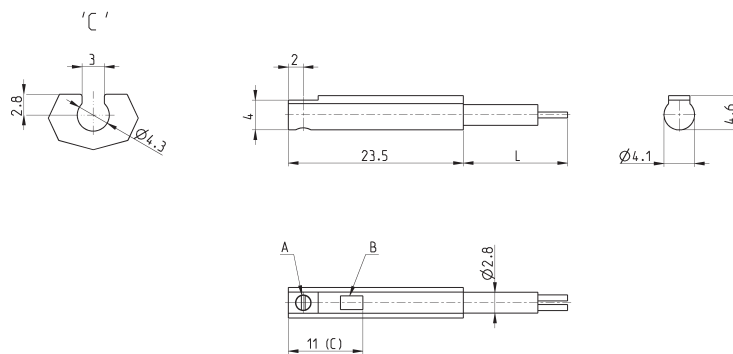
- A = fixing screw
- B = Led indicator
- C = ideal position detection

Mod.	Operation	Connections	Voltage	Output	Max. current	Max Load	Protection	L = length cable
CSB-H-220	Reed	2 wires	10÷110 V AC/DC	PNP	50 mA	8 W / 10 VA	Against polarity reversing and overvoltage	2 m

Magnetic proximity switch with 2-wire cable for C-slot



In case of polarity reversing the sensor will still be operating, but the LED diode won't turn on.



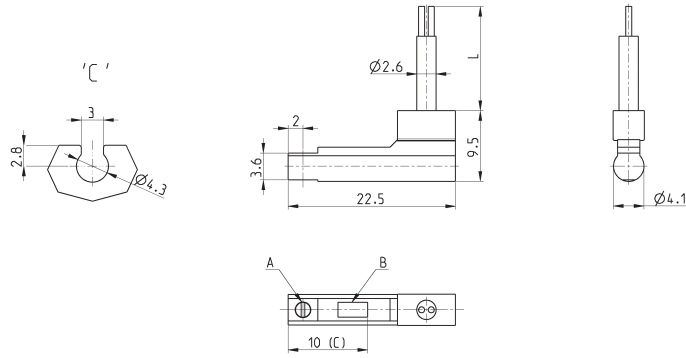
- A = fixing screw
- B = Led indicator
- C = ideal position detection

Mod.	Operation	Connections	Voltage	Output	Max. current	Max Load	Protection	L = length cable
CSC-D-220	Reed	2 wires	10÷110 V AC/DC	PNP	50 mA	8 W / 10 VA	Against polarity reversing and overvoltage	2 m

Magnetic proximity switch with 2-wire 90° cable for C-slot



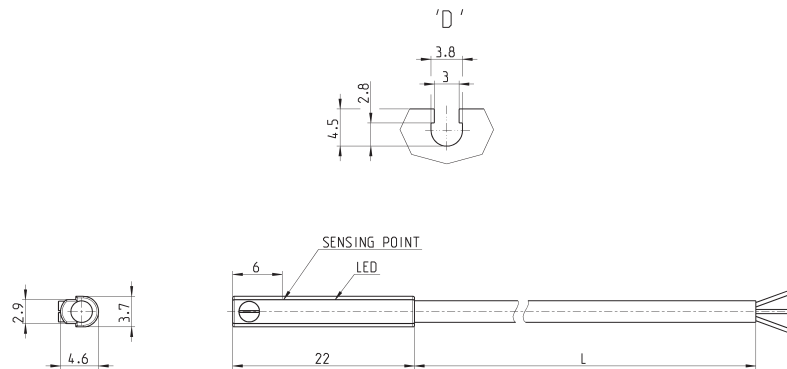
In case of polarity reversing the sensor will still be operating, but the LED diode won't turn on.



A = fixing screw
B = Led indicator
C = ideal position detection

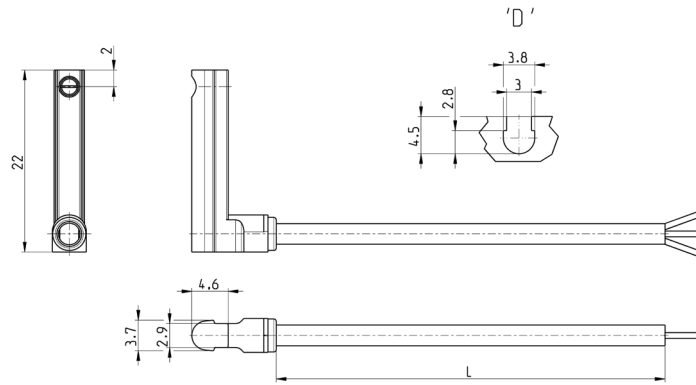
Mod.	Operation	Connections	Voltage	Output	Max. current	Max Load	Protection	L = length cable
CSC-H-220	Reed	2 wires	10÷110 V AC/DC	PNP	50 mA	8 W / 10 VA	Against polarity reversing and overvoltage	2 m

Magnetic proximity switches, 3-wire cable, D-slot



Mod.	Operation	Connections	Voltage	Output	Max. current	Max Load	Protection	L = length cable
CSD-D-334	Magneto-resistive	3 wires	10 ÷ 27 V DC	PNP	200 mA	6W	Against polarity reversing and overvoltage	2 m
CSD-D-334-5	Magneto-resistive	3 wires	10 ÷ 27 V DC	PNP	200 mA	6W	Against polarity reversing and overvoltage	5 m
CSD-D-374	Magneto-resistive	3 wires	10 ÷ 27 V DC	NPN	200 mA	6W	Against polarity reversing and overvoltage	2 m
CSD-D-374-5	Magneto-resistive	3 wires	10 ÷ 27 V DC	NPN	200 mA	6W	Against polarity reversing and overvoltage	5 m

Magnetic proximity switches, 3-wire cable, D-slot with 90° cable

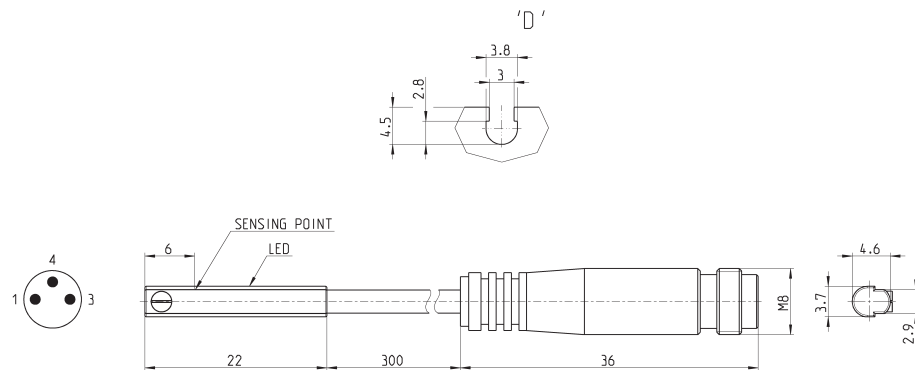


Mod.	Operation	Connections	Voltage	Output	Max. current	Max Load	Protection	L = length cable
CSD-H-334	Magneto-resistive	3 wires	10 ÷ 27 V DC	PNP	200 mA	6 W	Against polarity reversing and overvoltage	2 m
CSD-H-334-5	Magneto-resistive	3 wires	10 ÷ 27 V DC	PNP	200 mA	6 W	Against polarity reversing and overvoltage	5 m
CSD-H-374	Magneto-resistive	3 wires	10 ÷ 27 V DC	NPN	200 mA	6 W	Against polarity reversing and overvoltage	2 m
CSD-H-374-5	Magneto-resistive	3 wires	10 ÷ 27 V DC	NPN	200 mA	6 W	Against polarity reversing and overvoltage	5 m

Magnetic proximity switches, male M8 3-pin conn., D-slot, straight



Cable length: 0.3 m

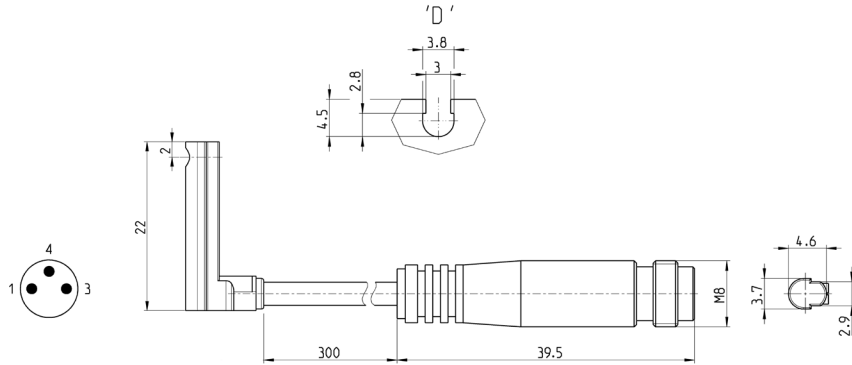


Mod.	Operation	Connection	Voltage	Output	Max current	Max load	Protection
CSD-D-364	Magneto-resistive	3 wires with M8 connector	10 ÷ 27 V DC	PNP	200 mA	6 W	Against polarity reversing and overvoltage
CSD-D-384	Magneto-resistive	3 wires with M8 connector	10 ÷ 27 V DC	NPN	200 mA	6 W	Against polarity reversing and overvoltage

Magnetic proximity switches, male M8 3-pin conn., D-slot, 90°



Cable length: 0.3 m



Mod.	Operation	Connection	Voltage	Output	Max current	Max load	Protection
CSD-H-364	Magneto-resistive	3 wires with M8 connector	10 ÷ 27 V DC	PNP	200 mA	6 W	Against polarity reversing and overvoltage
CSD-H-384	Magneto-resistive	3 wires with M8 connector	10 ÷ 27 V DC	NPN	200 mA	6 W	Against polarity reversing and overvoltage

Magnetic proximity switches, ATEX "II 3 GD" certified, T-slot, straight

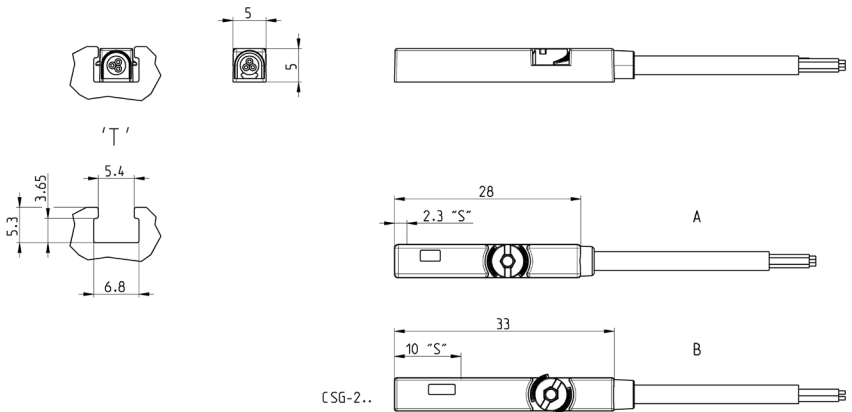
New

Note for 2-wire switches Mod. CSG-223-2-EX, CSG-223-5-EX, CSG-324-2-EX, CSG-324-5-EX: in case of polarity reversing the sensor will still be operating, but the LED diode won't turn on.



Top mounting with the new fixing system

A = Magneto-resistive version
B = Reed version



Mod.	Operation	Connection	Voltage	Output	Max current	Max load	Protection
CSG-223-2-EX	Reed NO	2 wires	5 ÷ 30 V AC/DC	-	100 mA	3 W	IP67
CSG-223-5-EX	Reed NO	2 wires	5 ÷ 30 V AC/DC	-	100 mA	3 W	IP67
CSG-233-2-EX	Reed NO	3 wires	10 ÷ 30 V AC/DC	-	500 mA	10 W	IP67
CSG-233-5-EX	Reed NO	3 wires	10 ÷ 30 V AC/DC	-	500 mA	10 W	IP67
CSG-324-2-EX	Magneto-resistive NO	2 wires	10 ÷ 28 V DC	-	50 mA	1,5 W	IP67
CSG-324-5-EX	Magneto-resistive NO	2 wires	10 ÷ 28 V DC	-	50 mA	1,5 W	IP67
CSG-334-2-EX	Magneto-resistive NO	3 wires	10 ÷ 28 V DC	PNP	200 mA	5,5 W	IP67
CSG-334-5-EX	Magneto-resistive NO	3 wires	10 ÷ 28 V DC	PNP	200 mA	5,5 W	IP67
CSG-534-2-EX	Magneto-resistive NO	3 wires	10 ÷ 28 V DC	NPN	200 mA	5,5 W	IP67
CSG-534-5-EX	Magneto-resistive NO	3 wires	10 ÷ 28 V DC	NPN	200 mA	5,5 W	IP67
CSG-734-2-EX	Magneto-resistive NC	3 wires	10 ÷ 28 V DC	NPN	200 mA	5,5 W	IP67
CSG-734-5-EX	Magneto-resistive NC	3 wires	10 ÷ 28 V DC	NPN	200 mA	5,5 W	IP67
CSG-634-2-EX	Magneto-resistive NC	3 wires	10 ÷ 28 V DC	PNP	200 mA	5,5 W	IP67
CSG-634-5-EX	Magneto-resistive NC	3 wires	10 ÷ 28 V DC	PNP	200 mA	5,5 W	IP67

Magnetic proximity switches, UL certified, T-slot, straight

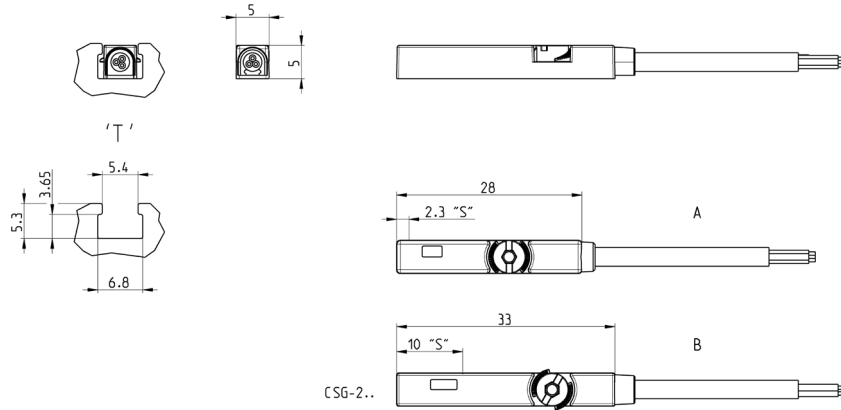
New

Note for 2-wire switches Mod. CSG-223-2-UL, CSG-223-5-UL, CSG-324-2-UL, CSG-324-5-UL:
in case of polarity reversing the sensor will still be operating, but the LED diode won't turn on.



Top mounting with the new fixing system

A = Magneto-resistive version
B = Reed version



Mod.	Operation	Connection	Voltage	Output	Max current	Max load	Protection
CSG-223-2-UL	Reed	2 wires	5 ÷ 30 V AC/DC	-	60 mA	1,8 W	IP67
CSG-223-5-UL	Reed	2 wires	5 ÷ 30 V AC/DC	-	60 mA	1,8 W	IP67
CSG-223-10-UL	Reed	2 wires	5 ÷ 30 V AC/DC	-	60 mA	1,8 W	IP67
CSG-233-2-UL	Reed	3 wires	10 ÷ 30 V AC/DC	-	100 mA	3 W	IP67
CSG-233-5-UL	Reed	3 wires	10 ÷ 30 V AC/DC	-	100 mA	3 W	IP67
CSG-233-10-UL	Reed	3 wires	10 ÷ 30 V AC/DC	-	100 mA	3 W	IP67
CSG-324-2-UL	Magneto-resistive	2 wires	10 ÷ 28 V DC	-	40 mA	1,2 W	IP67
CSG-324-5-UL	Magneto-resistive	2 wires	10 ÷ 28 V DC	-	40 mA	1,2 W	IP67
CSG-334-2-UL	Magneto-resistive	3 wires	10 ÷ 28 V DC	PNP	100 mA	3 W	IP67
CSG-334-5-UL	Magneto-resistive	3 wires	10 ÷ 28 V DC	PNP	100 mA	3 W	IP67
CSG-534-2-UL	Magneto-resistive	3 wires	10 ÷ 28 V DC	NPN	100 mA	3 W	IP67
CSG-534-5-UL	Magneto-resistive	3 wires	10 ÷ 28 V DC	NPN	100 mA	3 W	IP67

Magnetic proximity switches T-slot, straight

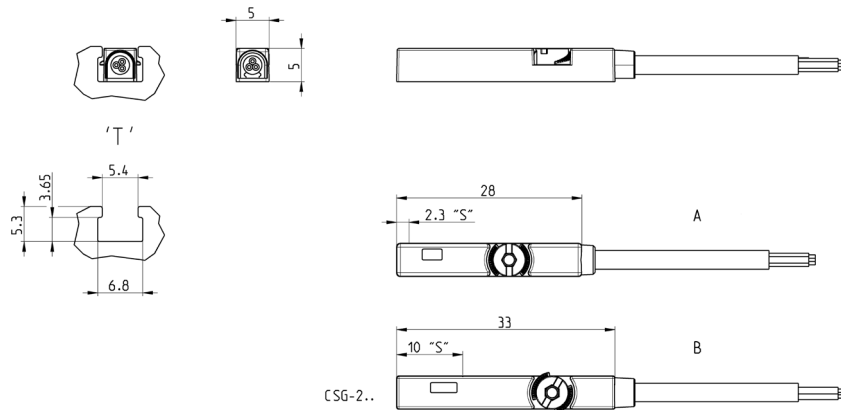
New

Note: the 2-wire switches in case of polarity reversing the sensor will still be operating, but the LED diode won't turn on.



Top mounting with the new fixing system

A = Magneto-resistive Version
B = Reed version

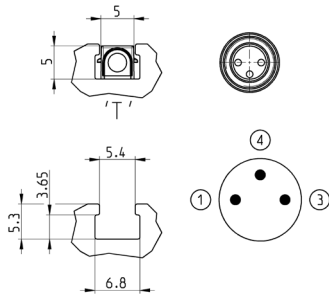


Mod.	Operation	Connections	Voltage	Output	Max. current	Max Load	Protection	L = length cable
CSG-220-2	Reed	2 wires	5 ÷ 240 V AC/DC	-	100 mA	10 W	IP67	2 mt
CSG-220-5	Reed	2 wires	5 ÷ 240 V AC/DC	-	100 mA	10 W	IP67	5 mt
CSG-324-2	Magneto-resistive	2 wires	10 ÷ 28 V DC	-	50 mA	1,5 W	IP67	2 mt
CSG-324-5	Magneto-resistive	2 wires	10 ÷ 28 V DC	-	50 mA	1,5 W	IP67	5 mt
CSG-334-2	Magneto-resistive	3 wires	10 ÷ 28 V DC	PNP	200 mA	5,5 W	IP67	2 mt
CSG-334-5	Magneto-resistive	3 wires	10 ÷ 28 V DC	PNP	200 mA	5,5 W	IP67	5 mt
CSG-534-2	Magneto-resistive	3 wires	10 ÷ 28 V DC	NPN	200 mA	5,5 W	IP67	2 mt
CSG-534-5	Magneto-resistive	3 wires	10 ÷ 28 V DC	NPN	200 mA	5,5 W	IP67	5 mt
CSG-233-2	Reed	3 wires	10 ÷ 30 V AC/DC	-	500 mA	10 W	IP67	2 mt
CSG-233-5	Reed	3 wires	10 ÷ 30 V AC/DC	-	500 mA	10 W	IP67	5 mt

Magnetic proximity switches T-slot, straight M8

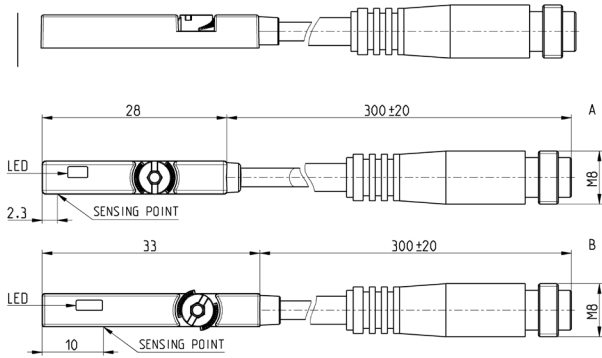
New

Note: the 2-wire switches in case of polarity reversing the sensor will still be operating, but the LED diode won't turn on.



Top mounting with the new fixing system

A = Magneto-resistive version
B = Reed version

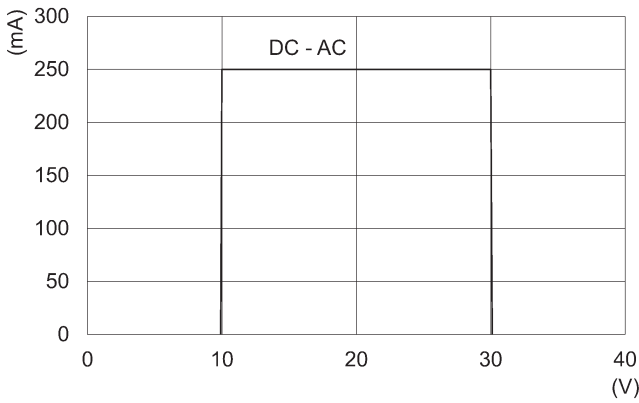


SERIES CST-CSV-CSH-CSB-CSC-CSD-CSG SENSORS

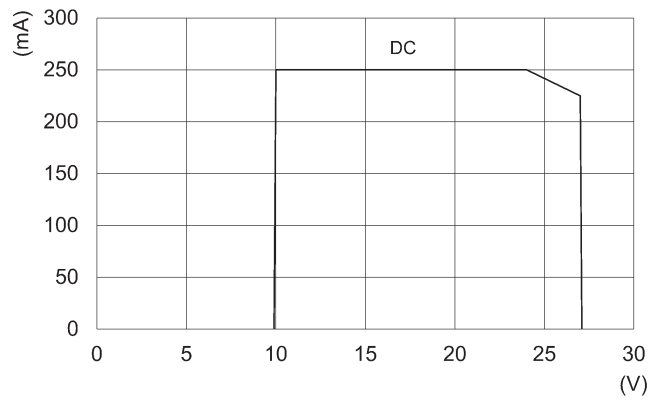
Mod.	Operation	Connection	Voltage	Output	Max current	Max load	Protection
CSG-253	Reed	2 wires with connector M8	5 ÷ 240 V AC/DC	-	100 mA	10 W	IP67
CSG-354	Magneto-resistive	2 wires with connector M8	10 ÷ 28 V DC	-	50 mA	1,5 W	IP67
CSG-364	Magneto-resistive	3 wires with connector M8	10 ÷ 28 V DC	PNP	200 mA	5,5 W	IP67
CSG-564	Magneto-resistive	3 wires with connector M8	10 ÷ 28 V DC	NPN	200 mA	5,5 W	IP67
CSG-263	Reed	3 wires with connector M8	10 ÷ 30 V AC/DC	-	500 mA	10 W	IP67

Load curves of sensors Mod. CSH, CST, CSV

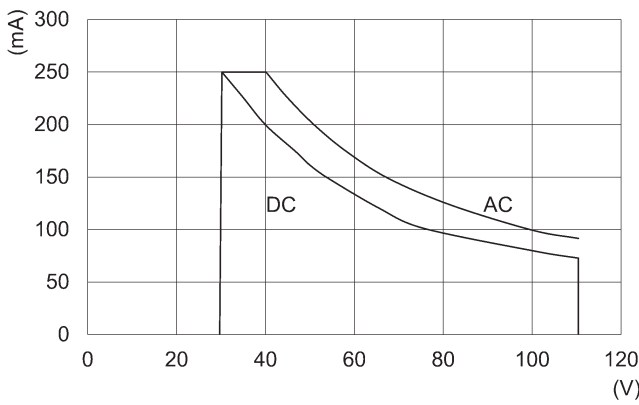
CSH-223, CSH-253, CSH-233, CSH-263, CSH-463



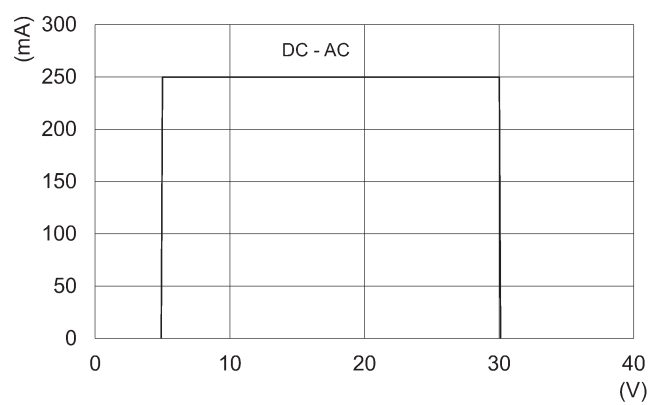
CSH-334, CSH-364



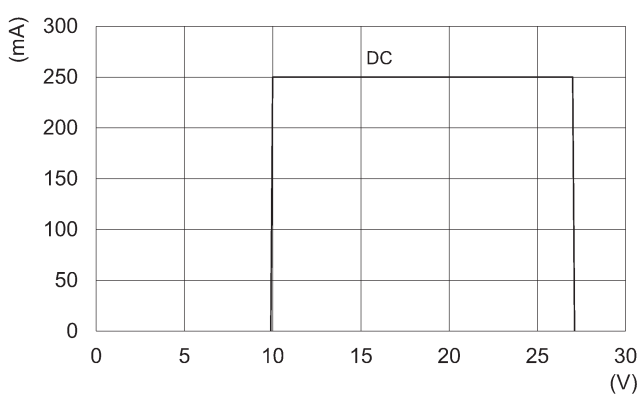
CST-250N, CSV-250N



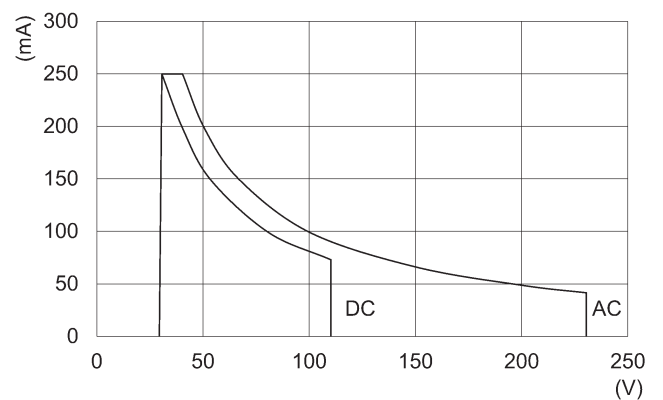
CST-232, CSV-232, CST-262, CSV-262



CST-332, CSV-332, CST-362, CSV-362, CST-532, CSV-562



CSH-221, CST-220, CSV-220

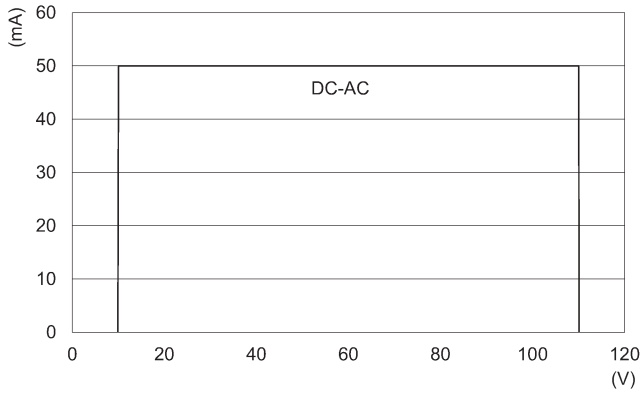


SERIES CST-CSV-CSH-CSB-CSC-CSD-CSG SENSORS

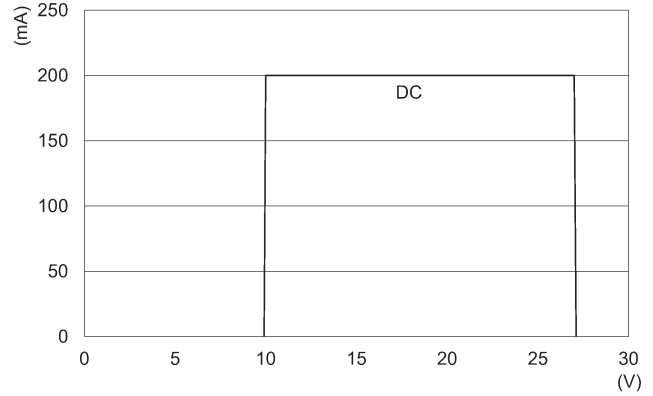
Load curves of sensors Mod. CSB, CSC, CSD, CSG

SERIES CST-CSV-CSH-CSB-CSC-CSD-CSG SENSORS

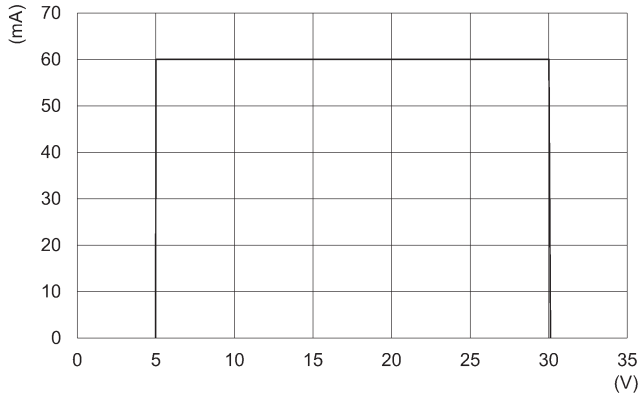
CSB-D-220, CSB-H-220, CSC-D-220, CSC-H-220



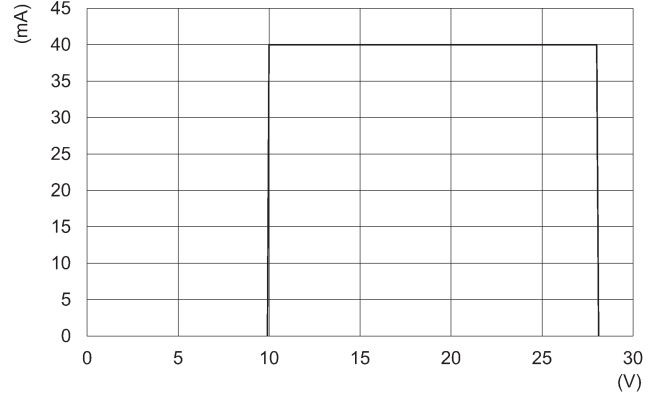
CSD-D-334, CSD-H-334, CSD-D-364, CSD-H-364



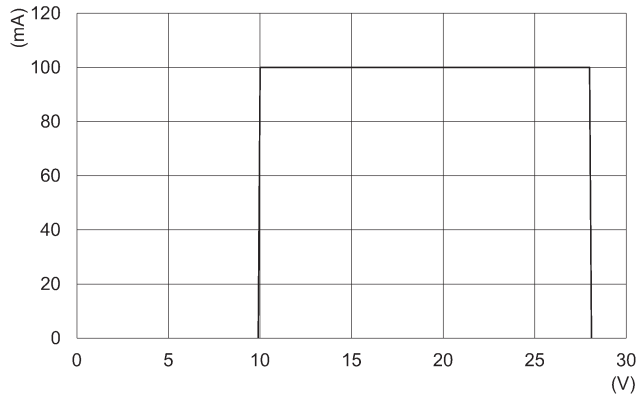
CSG-223-UL



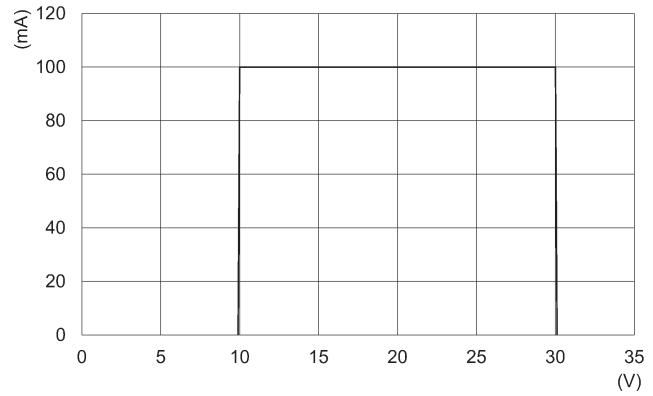
CSG-324-UL



CSG-334-UL, CSG-534-UL

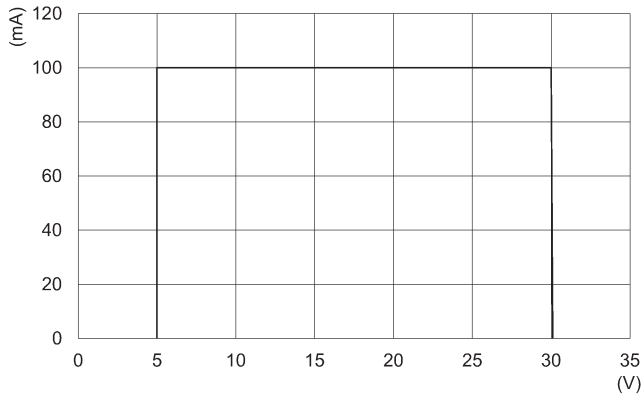


CSG-233-UL

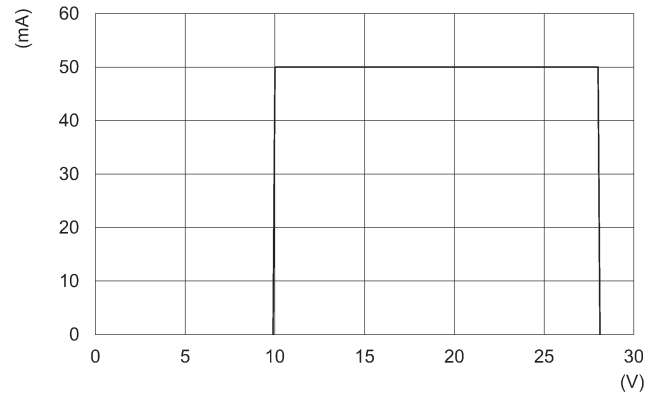


Load curves of sensors Mod. CSG

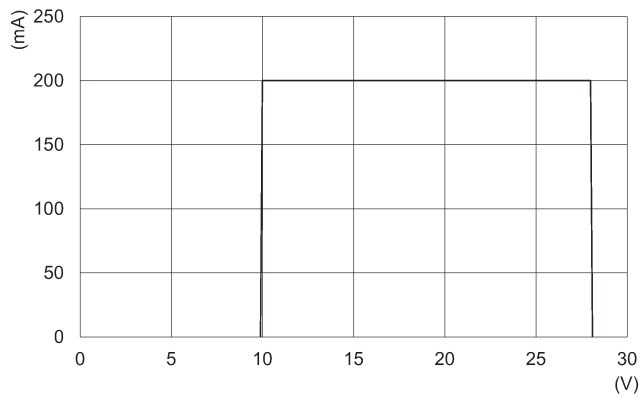
CSG-223-EX



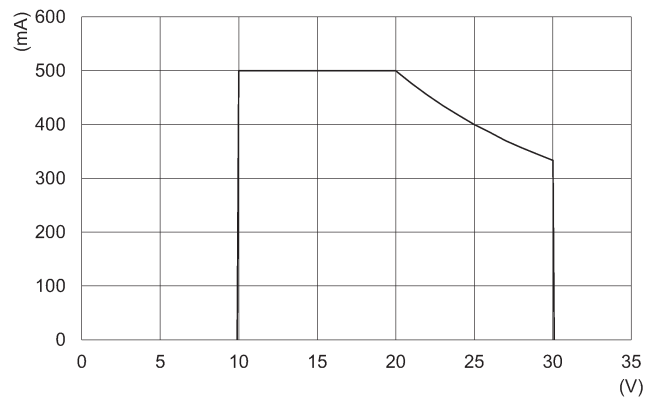
CSG-324-EX



CSG-334-EX, CSG-534-EX, CSG-634-EX, CSG-734-EX

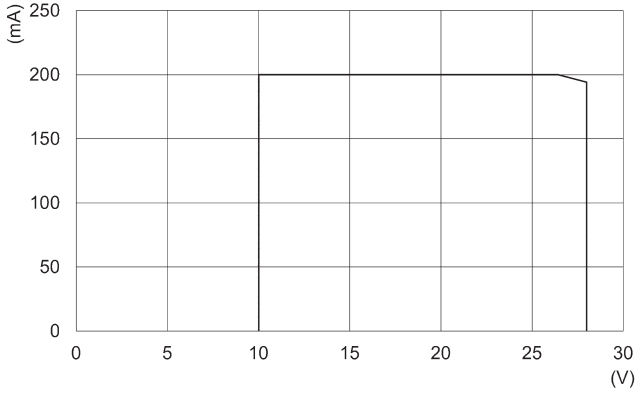


CSG-233-EX

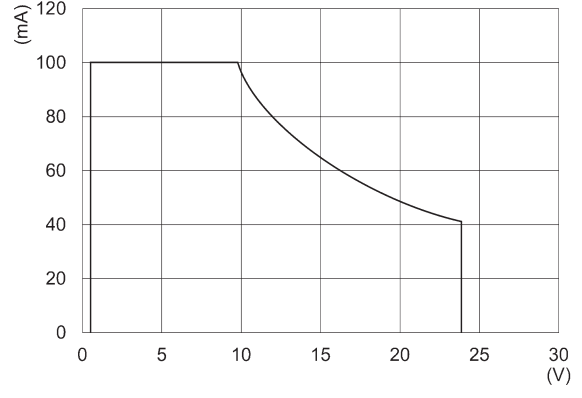


Load curves of sensors Mod. CSG not certified

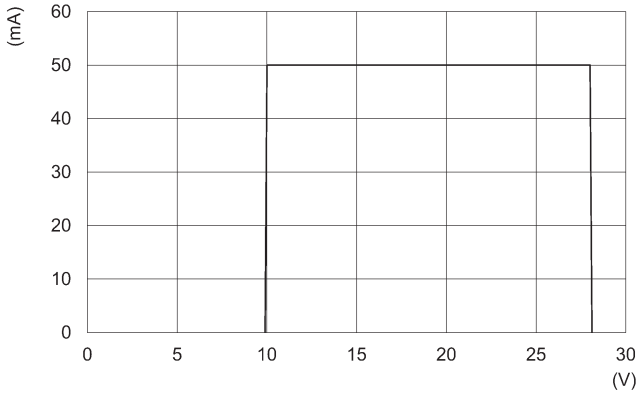
CSG-334, CSG-364, CSG-534, CSG-5674



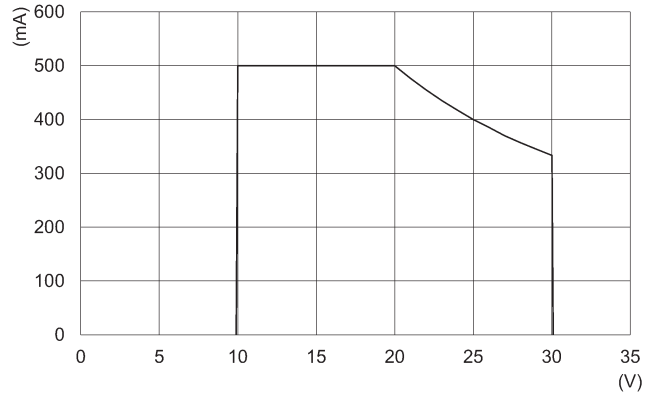
CSG-220, CSG-253



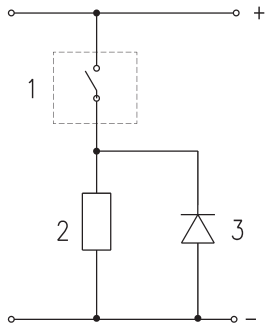
CSG-324, CSG-354



CSG-233, CSG-263



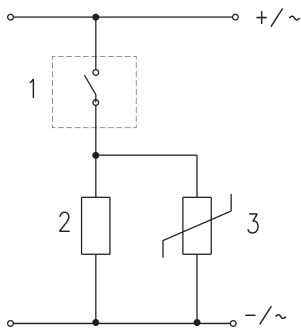
Electric circuit with protection against voltage spikes



DC applications: there is no protection on the Reed sensors on the inductive load, therefore it is advisable to use an electric circuit with protection against the voltage spikes. See picture above for a typical example.

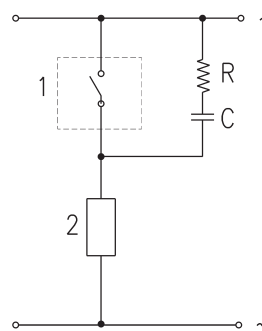
- Legend:
 1 = Sensor
 2 = Load
 3 = Protection diode

Electric circuit with protection against voltage spikes



DC and AC applications: there is no protection on the Reed sensors on the inductive load, therefore it is advisable to use an electric circuit with protection against the voltage spikes. See picture above for a typical example.

- Legend:
 1 = Sensor
 2 = Load
 3 = Protection varistor

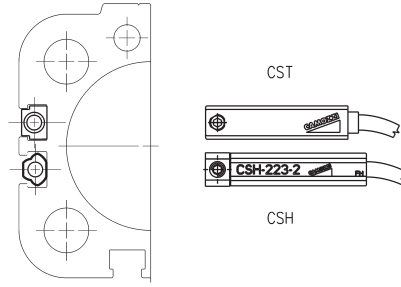


AC applications: there is no protection on the Reed sensors on the inductive load, therefore it is advisable to use an electric circuit with protection against the voltage spikes. See picture above for a typical example.

- Legend:
 1 = Sensor
 2 = Load
 C + R = Series of resistor and protection capacitor

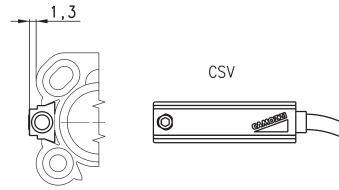
Mounting of Series CST - CSH - CSG sensors

CST/CSH/CSG sensors can be directly mounted on cylinders:
 Series 31, 31R, 32, 32R
 Series 52
 Series 61
 Series 63 (CSH and CSG only)
 Series 69
 Series 6PF
 Series QC, QCBF, QCTF



Mounting of Series CSV sensors

CSV sensors must be assembled directly into the groove of cylinders:
 Series 50 \varnothing 16÷25
 Series QP - QPR \varnothing 12÷16

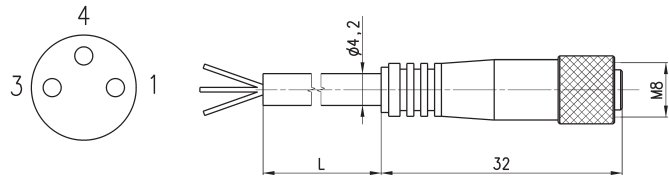


3-wire extension with M8 3-pin female connector



With PU sheathing, non shielded cable.
 Protection class: IP65

- 1 BN = Brown
- 4 BK = Black
- 3 BU = Blue

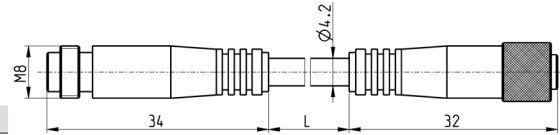
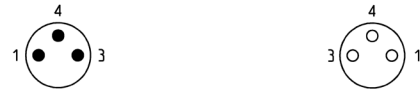


In case 2-wire sensors with M8 connector (Mod. CST-250N, CSV-250N, CSH-253) are used, please connect the brown wire to the supply (+) and the black wire to the load.

Mod.	L = cable length (m)
CS-2	2
CS-5	5
CS-10	10

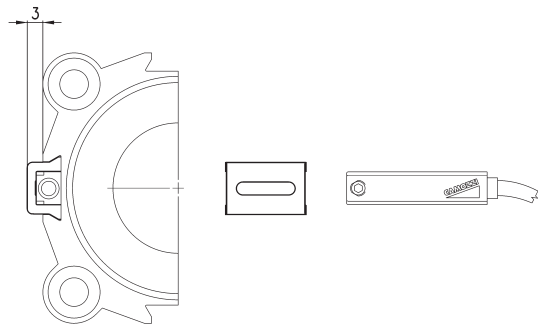
3-wire extension with M8 3-pin male / female connector

Non shielded



Mod.	cable length "L" (m)
CS-DW03HB-C250	2,5
CS-DW03HB-C500	5

Adapters Mod. S-CST-01 for Series CST-CSH-CSG sensors, V-slot



Mod.	Series QP-QPR cylinders	Series 50 cylinders
S-CST-01	∅ 20 ÷ 100	∅ 32 ÷ 80

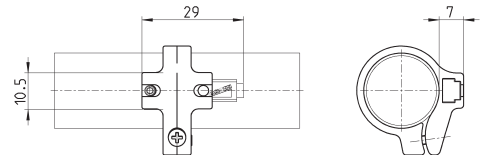
Adapters Mod. S-CST-02..21 for Series CST-CSH-CSG sensors

- Materials:
- stainless steel and technopolymer (S-CST-05÷12)*
 - technopolymer (S-CST-02÷04)
 - technopolymer (S-CST-18÷21)

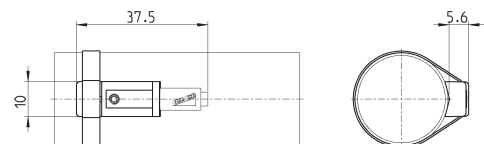
* Not suitable for use with Series CSG sensors



S-CST-02+04 S-CST-18+21



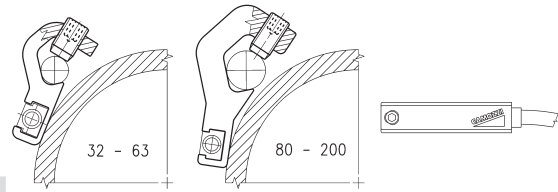
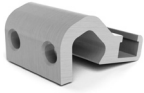
S-CST-05+12



Mod.	Cylinders Series	∅
S-CST-02	23,24, 25, 27	16
S-CST-03	23,24, 25, 27	20
S-CST-04	23,24, 25, 27	25
S-CST-05	94, 95	16-20-25 (94), 16-20 (95)
S-CST-06	90, 97, 95	32 (90-97), 25 (95)
S-CST-07	90, 97	40
S-CST-08	90, 97	50
S-CST-09	90, 97	63
S-CST-10	90	80
S-CST-11	90	100
S-CST-12	90	125
S-CST-18	27, 42	32
S-CST-19	27, 42	40
S-CST-20	27, 42	50
S-CST-21	27, 42	63
S-CST-16	63	32

Adapters Mod. S-CST-25...28 for Series CST-CSH-CSG sensors

Material: anodized aluminium

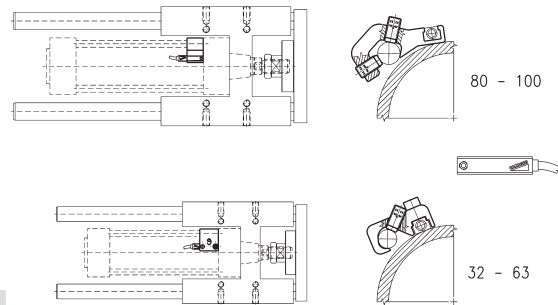


Mod.	Cylinders Series	∅
S-CST-25	90, 63MT	32 ÷ 63
S-CST-26	90, 63MT	80 ÷ 100
S-CST-27	90, 63MT	125
S-CST-28	40	160 - 200

Adapters for Series CST-CSH-CSG sensors



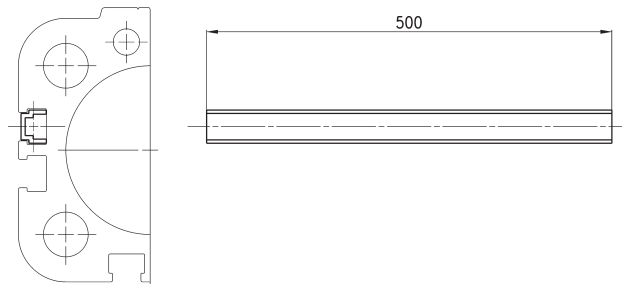
For Series 63MT cylinders mounted with guides 45NHT or 45NHB.
S-CST-45N1 is not suitable for use with Series CSG sensors.



Mod.	Cylinders Series	∅
S-CST-45N1	90, 63MT	32 ÷ 63
S-CST-45N2	90, 63MT	80 ÷ 100

Slot cover profile suitable for actuators with T- and H-slot

Supplied with 500 mm tube



Mod.	Series of cylinders
S-CST-500	31, 31 Tandem and Multi-position, QCT, QCB, QCBT, QCBF, 61, 63MP, 6E, 5E, 69, 32, 32 Tandem and Multi-position