

Ordering code

CS1 - U B

Series No. Switch logic

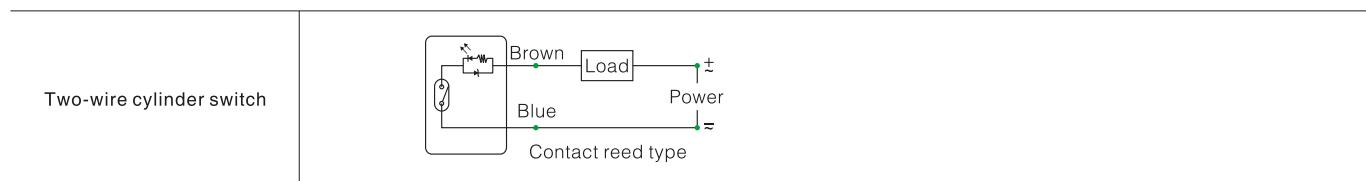
	H	-
	Characteristic	
Blank	Normally open	
A	300mA	
B	Normally close	
F	Non-contact PET electric current output	
H	High sensibility	
L	Low sensibility	
X	No signal LED (Strong current)	
R	Contact NPN output	
P	Non-contact NPN output	
Rd	Three wire dual purpose reed type(NPN/PNP)	
HT	High temperature	

02

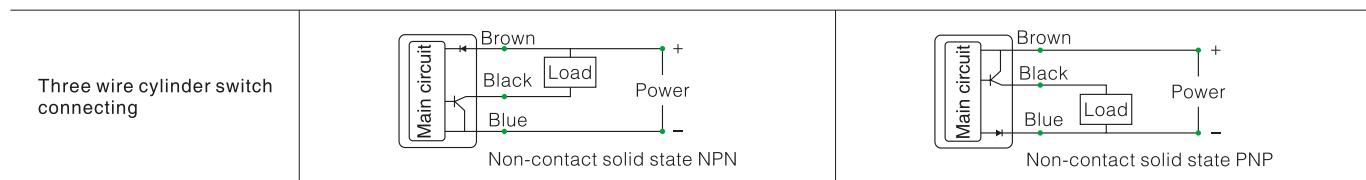
	Lead wire length
Blank	Wire length 1M (Starndard length)
02	Wire length 2M (Starndard length)
05	Wire length 5M (Starndard length)
QD8	M8 Quick connector (Starndard length 0.15M)

Refer to the cylinder switch precautions, when using magnetic induction switch, it should not exceed the specifications limit.

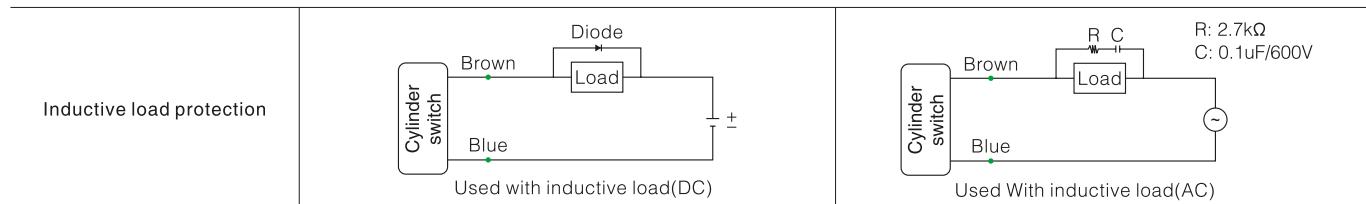
- In the usage of two-wire magnet switch, it must be connected with the load, otherwise it will cause the damage to the switch.
- When using DC power supply, the brown wire should be connected to the positive potential(+), and the blue wire should be connected to the negative potential(-). Otherwise, the indicator light of the switch will not light, but the sensor switch can work normally. And the switch will not be damaged, as long as the two lines are reversed, the indicator light will work normally.



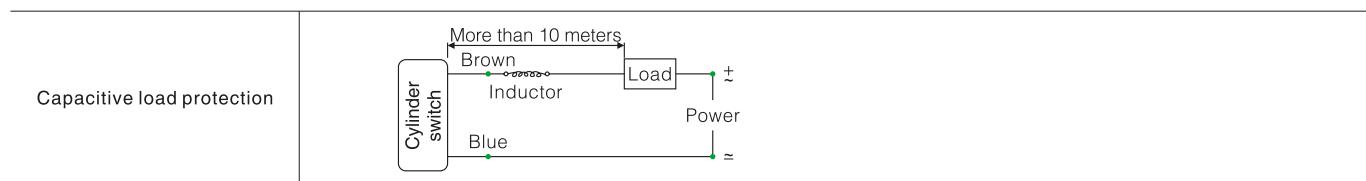
- When using a three-wire non-contact switch, be sure to use a DC power supply and pay attention to the wire connecting.
- The brown wire should be connected to a high potential(+), the blue wire is connected to a low potential(-), and the black wire is connected to the load.
- The black wire must be connected to the load before the switch was used. If the black wire is connected to the power supply, it will cause damage to the switch.



- When it's an inductive load (such as a Relay or a Solenoid Valve), Please add a protection component to the load to extend the life of the switch.
- If a DC inductive load is connected, please add a diode to the load (as shown below), and the reverse breakdown voltage of the diode is greater than the power voltage.
- If you connect an AC inductive load, please connect an R-C circuit to the load.

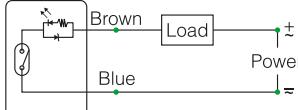
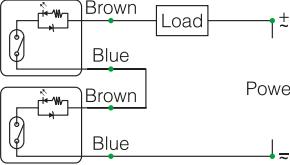
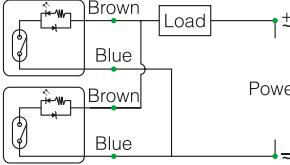


- When the load is a capacitive load, or when the length of the wire more than 10 meters, try to connect an inductor (470uH-4000uH) close to the switch, in order to extending the service life of the inductive switch.

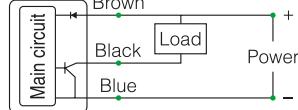
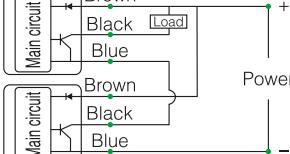
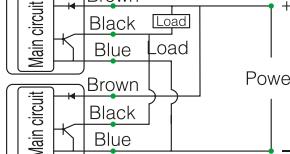


- When using the magnetic sensor switch, please try to avoid the strong magnetic field or the environment surrounding magnetic conductive metal to avoid interference.

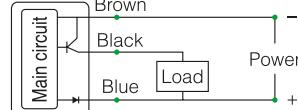
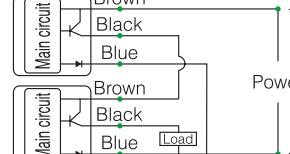
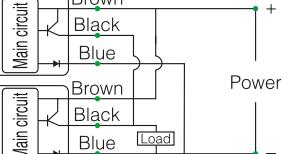
Two wire reed switch connection

The standard connection	Two wire and connection	Two wire or connection
 <ul style="list-style-type: none"> When using the 2-wire reed switch, be sure the load is connected in series, otherwise the switch will be damaged. When connect to the DC power, be sure the brown wire be connected to a high potential(+), and blue wire were connected on low potential (-)Otherwise, the indicator of the switch will not light up. 	 <ul style="list-style-type: none"> When connecting the inductive switch in series, please note that the internal voltage drop when the inductive switch number increased, and the max internal voltage drop of adding each switch is up to 2.5 volts. When too many inductive switches are connected in series, if the total internal voltage drop is too large, the load may not work. The number of switches that can be connected in series depends on the voltage of power supply. 	 <ul style="list-style-type: none"> When the inductive switch is connected in parallel, if the inductive switch operates at the same time, the current flowing through the inductive switch becomes smaller due to the shunt. When too many inductive switches are connected in parallel, if the current through the load is too small, the indicator will be slightly light or not light. The number of switches that can be connected in parallel depends on the current of the load.

Three wire non contact NPN switch connection

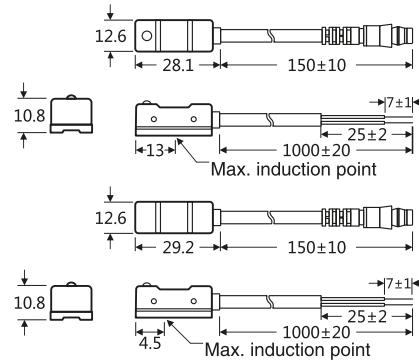
The standard connection	Two wire and connection	Two wire or connection
 <ul style="list-style-type: none"> When using a three-wire inductive switch, be sure to use a DC power supply. Pay attention to the black wiring, the incorrect connection may lead to the switch be burned out. The brown wire should be connected to the positive potential(+), the blue wire is connected to the negative potential, and the black wire is connected in series with the load, then connect to the positive potential. 	 <ul style="list-style-type: none"> When connecting the inductive switch in series, please attention that the internal voltage drop with the inductive switch increasing, and the max internal voltage drop of each switch is up to 1.5 volts. When too many inductive switches are connected in series, if the total internal voltage drop is too large, the load may not work. The number of switches that can be connected in series depends on the voltage of power supply. 	 <ul style="list-style-type: none"> When the sensor is connected in parallel, it will not influence the operation of the switch and the load output, but the current of the switch will be weaken. When too many inductive switches are connected in parallel, and if the current of the load is too small, the load may be failure and malfunction. The number of switches that can be connected in parallel depends on the current of the load.

Three wire non contact PNP switch connection

The standard connection	Two wire and connection	Two wire or connection
 <ul style="list-style-type: none"> When using a three-wire inductive switch, be sure to use a DC power supply. Pay attention to the black wiring, the incorrect connection may lead to the switch be burned out. The brown wire should be connected to the positive potential(+), the blue wire is connected to the negative potential, and the black wire be connected in series with the load, then connect to the positive potential. 	 <ul style="list-style-type: none"> When connecting the inductive switch in series, please attention that the internal voltage drop of each inductive switch increasing, and the max internal voltage drop of each switch is up to 1.5 volts. When too many inductive switches are connected in series, if the total internal voltage drop is too large, the load may not work. The number of switches that can be connected in series depends on the voltage of power supply. 	 <ul style="list-style-type: none"> When the sensor is connected in parallel, it will not influence the operation of the switch and the load output, but the leakage current of the switch will increase. When too many inductive switches are connected in parallel, and if the current of the load is too small, the load may be failure and malfunction. The number of switches that can be connected in parallel depends on the current of the load.

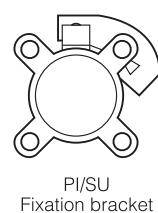
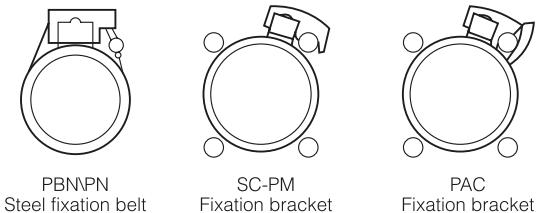


CS1-U
CS1-U-QD
CS1-UN
CS1-UN-QD
CS1-UP
CS1-UP-QD

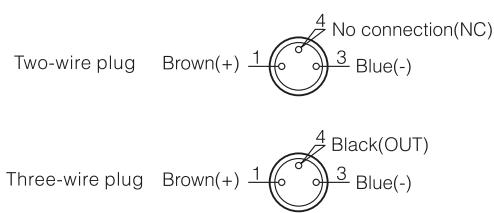


Characteristic	type		CS1-U	CS1-UB	CS1-UN	CS1-UP		
Swtich logic	SPST NO		SPST NC	Electrical Non-contact; NO				
Sensor type	Contact-reed style		Non-contact solid NPN type		Non-contact solid PNP type			
Opreating voltage	5~240V DC/AC		5~120V DC/AC	5~30V DC				
Switching current	100mA max			200mA max				
Contact rating	10W max			6W max				
Internal current consumption	NO			20mA max@24V (Switch active)				
Voltage drop	2.5V max@100mA			0.5V max@200mA				
Leakage current	NO			0.01mA max				
Indicator	Red LED	Green LED		Red LED	Green LED			
Cable	3.8Φ, 2C, Brown-oil resistance (PVC)			3.8Φ, 3C, Black-oil resistance (PVC)				
Sensitivity (Note 1)	60 Gauss							
Max.switch frequency	200Hz			1000Hz				
Temperature range	-10~70°C							
Shock (Note 2)	30G			50G				
Vibration (Note 3)	9G							
Protection classification	IEC 529 IP67(NEMA6)							
Protection circuit	Without		With protection circuit					
Circuit diagram								

Suitable for round tube cylinder



QD connector diagram



Note:

1. Standard magnet for measurement: Φ 15.5xΦ 8x5T (orthorhombic rubber magnet).
2. Sine wave/X, Y, Z 3 axial/3 loops (each direction) /11ms.
3. The complex amplitude is 1.5mm/10Hz~55Hz~10Hz (reciprocating for 1 minute) /X, Y, Z 3 axial/hour (each cycle).

Cylinder Switch
CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S,
CS1-M,
CS1-G
CS1-G,
CS1-M,
CS1-J,
CS1-D
CS1-H
CS1-L
CS1-E
CS1-Z
M8
Fixation clamp
Fixation belt

Cylinder Switch

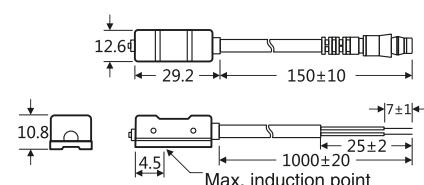
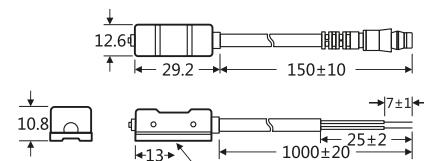
CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S,
CS1-M,
CS1-G
CS1-G,
CS1-M,
CS1-J,
CS1-D
CS1-H
CS1-L
CS1-E
CS1-Z

M8
Fixation clamp

Fixation belt

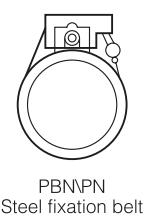


CS1-F
CS1-F-QD
CS1-FN
CS1-FN-QD
CS1-FP
CS1-FP-QD

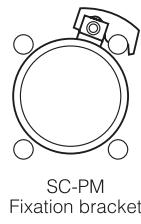


Characteristic	type		CS1-F	CS1-FB	CS1-FN	CS1-FP
Switch logic	SPST NO		SPST NC	Electrical Non-contact; NO		
Sensor type	Contact-reed style		Non-contact solid state NPN		Non-contact solid state PNP	
Opreating voltage	5~240V DC/AC		5~120V DC/AC	5~30V DC		
Switching current	100mA max		200mA max			
Contact rating	10W max		6W max			
Internal current consumption	Non		20mA max@24V (Switch active)			
Voltage drop	2.5V max@100mA		0.5V max@200mA			
Leakage current	Non		0.01mA max			
Indicator	Red LED	Green LED	Red LED	Green LED		
Cable	3.8Φ, 2C, Brown-oil resistance (PVC)		3.8Φ, 3C, Black-oil resistance (PVC)			
Sensitivity (Note 1)	60 Gauss					
Max.switch frequency	200Hz		1000Hz			
Temperature range	-10~70°C					
Shock (Note 2)	30G		50G			
Vibration (Note 3)	9G					
Protection classification	IEC 529 IP67(NEMA6)					
Protection circuit	Without		With protection circuit			
Circuit diagram						

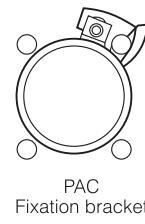
Suitable for round tube cylinder



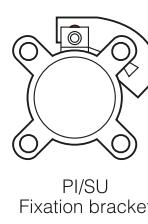
PBNNPN
Steel fixation belt



SC-PM
Fixation bracket

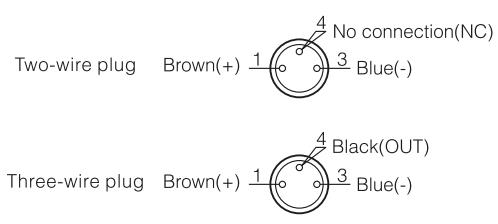


PAC
Fixation bracket



PI/SU
Fixation bracket

QD connector diagram



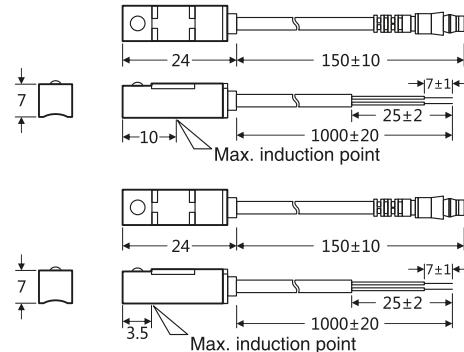
Note:

1. Standard magnet for measurement: Φ 15.5×Φ 8×5T (orthorhombic rubber magnet).
2. Sine wave/X, Y, Z 3 axial/3 loops (each direction) /11ms.
3. The complex amplitude is 1.5mm/10Hz~55Hz~10Hz (reciprocating for 1 minute) /X, Y, Z 3 axial/hour (each cycle).



CS1-S
CS1-S-QD

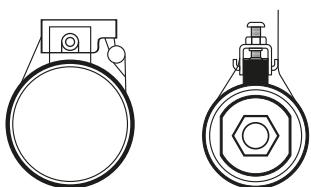
CS1-SN
CS1-SN-QD
CS1-SP
CS1-SP-QD



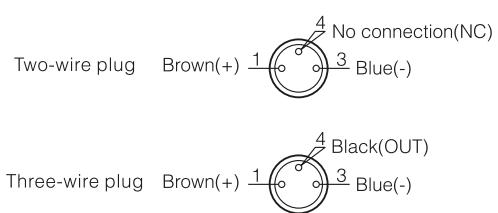
Cylinder Switch
CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S,
CS1-M,
CS1-G
CS1-G,
CS1-M,
CS1-J,
CS1-D
CS1-H
CS1-L
CS1-E
CS1-Z
M8
Fixation clamp
Fixation belt

Characteristic \ type	CS1-S	CS1-SB	CS1-SN	CS1-SP		
Switch logic	SPST NO	SPST NC	Electrical Non-contact; NO			
Sensor type	Contact-reed style		Non-contact solid state NPN	Non-contact solid state PNP		
Opreating voltage	5~240V DC/AC	5~120V DC/AC	5~30V DC			
Switching current	100mA max		200mA max			
Contact rating	10W max		6W max			
Internal current consumption	Non		20mA max@24V (Switch active)			
Voltage drop	2.5V max@100mA		0.5V max@200mA			
Leakage current	Non		0.01mA max			
Indicator	Red LED	Green LED	Red LED	Green LED		
Cable	3.2Φ, 2C, Brown-oil resistance (PVC)		3.2Φ, 3C, Black-oil resistance (PVC)			
Sensitivity (Note 1)	60 Gauss					
Max.switch frequency	200Hz		1000Hz			
Temperature range	-10~70°C					
Shock (Note 2)	30G		50G			
Vibration (Note 3)	9G					
Protection classification	IEC 529 IP67(NEMA6)					
Protection circuit	Without		With protection circuit			
Circuit diagram						

CS1-S Series cylinder switch need the PAB/BK steel belt to fix.
Suitable for AIRTAC, Mindman, CHANTO cylinders



QD connector diagram



Note:

1. Standard magnet for measurement: Φ15.5×Φ8×5T (orthorhombic rubber magnet).
2. Sine wave/X, Y, Z 3 axial/3 loops (each direction) /11ms.
3. The complex amplitude is 1.5mm/10Hz~55Hz~10Hz (reciprocating for 1 minute) /X, Y, Z 3 axial/hour (each cycle).

Cylinder Switch

CS1-U

CS1-F

CS1-S

CS1-J

CS1-C

CS1-S_i

CS1-M

CS1-G

CS1-G_i

CS1-M_i

CS1-J_i

CS1-D

CS1-H

CS1-L

CS1-E

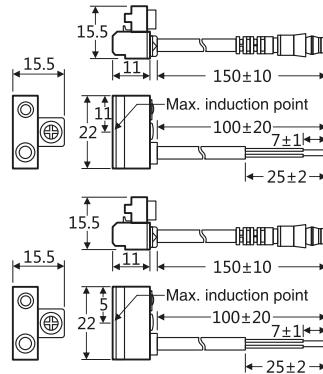
CS1-Z

M8



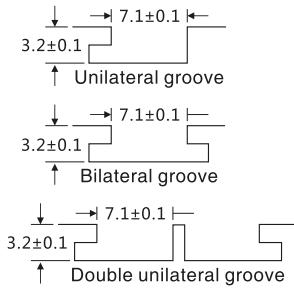
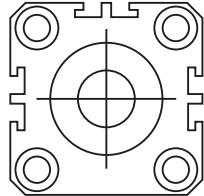
CS1-J
CS1-J-QD

CS1-JN
CS1-JN-QD
CS1-JP
CS1-JP-QD

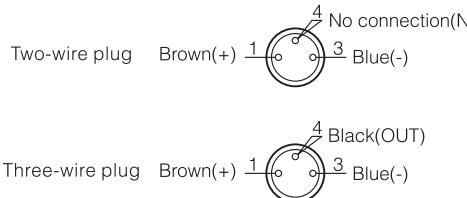


Characteristic	type	CS1-J	CS1-JB	CS1-JN	CS1-JP		
Fixation clamp		SPST NO	SPST NC	Electrical Non-contact; NO			
Fixation belt		Contact-reed style		Non-contact solid state NPN	Non-contact solid state PNP		
Opreating voltage		5~240V DC/AC	5~120V DC/AC		5~30V DC		
Switching current		100mA max		200mA max			
Contact rating		10W max		6W max			
Internal current consumption		Non		20mA max@24V (Switch active)			
Voltage drop		2.5V max@100mA		0.5V max@200mA			
Leakage current		Non		0.01mA max			
Indicator		Red LED		Red LED	Green LED		
Cable		3.2Φ, 2C, Brown-oil resistance (PVC)		3.2Φ, 3C, Black-oil resistance (PVC)			
Sensitivity (Note 1)		40 Gauss					
Max.switch frequency		200Hz		1000Hz			
Temperature range		-10~70°C					
Shock (Note 2)		30G		50G			
Vibration (Note 3)		9G					
Protection classification		IEC 529 IP67(NEMA6)					
Protection circuit		Without		With protection circuit			
Circuit diagram							

Suitable for AIRTAC, Mindman, CHANTO, Chelic cylinders

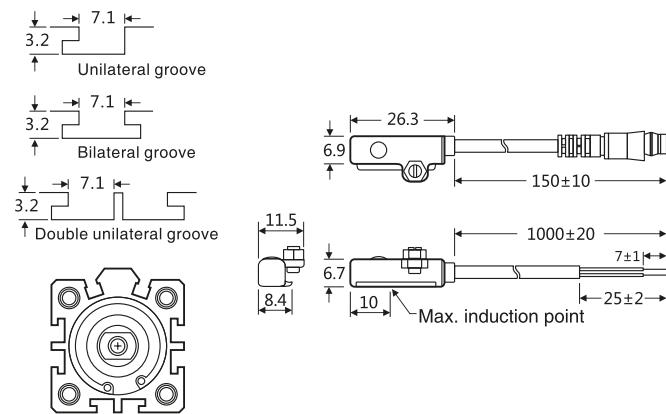


QD connector diagram



Note:

- Standard magnet for measurement: Φ 15.5×Φ 8×5T (orthorhombic rubber magnet).
- Sine wave/X, Y, Z 3 axial/3 loops (each direction) /11ms.
- The complex amplitude is 1.5mm/10Hz~55Hz~10Hz (reciprocating for 1 minute) /X, Y, Z 3 axial/hour (each cycle).



Cylinder Switch
CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S,
CS1-M
CS1-G
CS1-G,
CS1-M,
CS1-J,
CS1-D
CS1-H
CS1-L
CS1-E
CS1-Z
M8
Fixation clamp
Fixation belt

Characteristic	type	CS1-C	CS1-CN	CS1-CP	
Switch logic		SPST NO	Electrical Non-contact; NO		
Sensor type		Contact-reed style	Non-contact solid state NPN		Non-contact solid state PNP
Opreating voltage		5~240V DC/AC	5~30V DC		
Switching current		100mA max	200mA max		
Contact rating		10W max	6W max		
Internal current consumption		Non	20mA max@24V (Switch active)		
Voltage drop		2.5V max@100mA	0.5V max@200mA		
Leakage current		Non	0.01mA max		
Indicator		Red LED	Red LED	Green LED	
Cable		3.2Φ, 2C, Brown-oil resistance (PVC)	3.2Φ, 3C, Black-oil resistance (PVC)		
Sensitivity (Note 1)			40 Gauss		
Max.switch frequency		200Hz	1000Hz		
Temperature range			-10~70°C		
Shock (Note 2)		30G	50G		
Vibration (Note 3)			9G		
Protection classification		IEC 529 IP67(NEMA6)			
Protection circuit		Without	With protection circuit		
Circuit diagram					
Suitable for AIRTAC, Mindman, CHANTO, Chelic cylinders					

Note:

1. Standard magnet for measurement: Φ 15.5×Φ 8×5T (orthorhombic rubber magnet).
2. Sine wave/X, Y, Z 3 axial/3 loops (each direction) /11ms.
3. The complex amplitude is 1.5mm/10Hz~55Hz~10Hz (reciprocating for 1 minute) /X, Y, Z 3 axial/hour (each cycle).

Cylinder Switch

CS1-U

CS1-F

CS1-S

CS1-J

CS1-C

CS1-S₁

CS1-M

CS1-G

CS1-G₁

CS1-M₁

CS1-J₁

CS1-D

CS1-H

CS1-L

CS1-E

CS1-Z

M8

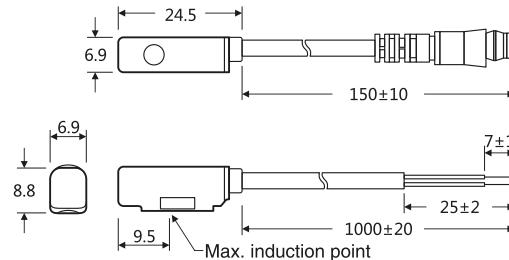
Fixation
clamp

Fixation
belt



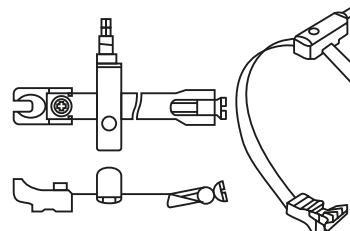
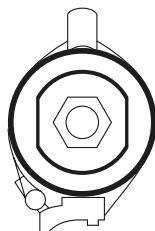
CS1-S₁,
CS1-S₁-QD

CS1-S,N
CS1-S,N-QD
CS1-S,P
CS1-S,P-QD

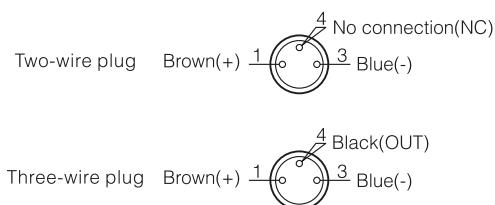


Characteristic	type	CS1-S ₁	CS1-S,N	CS1-S,P
Switch logic		SPST NO	Electrical Non-contact; NO	
Sensor type		Contact-reed style	Non-contact solid state NPN	
Opreating voltage		5~240V DC/AC	5~30V DC	
Switching current		100mA max	200mA max	
Contact rating		10W max	6W max	
Internal current consumption		Non	20mA max@24V (Switch active)	
Voltage drop		2.5V max@100mA	0.5V max@200mA	
Leakage current		Non	0.01mA max	
Indicator		Red LED	Red LED	Green LED
Cable		3.2Φ, 2C, Brown-oil resistance (PVC)	3.2Φ, 3C, Black-oil resistance (PVC)	
Sensitivity (Note 1)			60 Gauss	
Max.switch frequency		200Hz	1000Hz	
Temperature range			-10~70°C	
Shock (Note 2)		30G	50G	
Vibration (Note 3)			9G	
Protection classification			IEC 529 IP67(NEMA6)	
Protection circuit		Without	With protection circuit	
Circuit diagram				

Steel belt to fix. Suitable for Tie rod cylinder, CS1-Series cylinder switch need the PAB/BK belt to be fixed around cylinder.



QD connector diagram



Note:

1. Standard magnet for measurement: Φ15.5×Φ8×5T (orthorhombic rubber magnet).

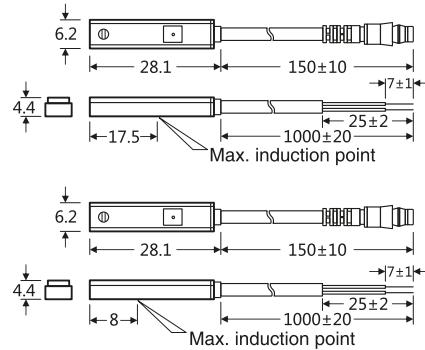
2. Sine wave/X, Y, Z 3 axial/3 loops (each direction) /11ms.

3. The complex amplitude is 1.5mm/10Hz~55Hz~10Hz (reciprocating for 1 minute) /X, Y, Z 3 axial/hour (each cycle).



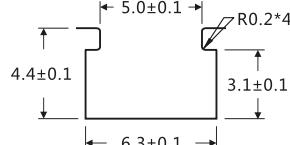
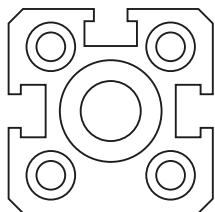
CS1-M
CS1-M-QD

CS1-MN
CS1-MN-QD
CS1-MP
CS1-MP-QD

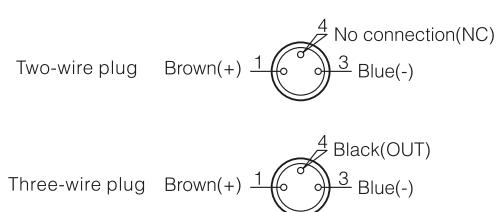


Characteristic	type	CS1-M(DNC)	CS1-MN	CS1-MP	
Switch logic		SPST NO	Electrical Non-contact; NO		
Sensor type		Contact-reed style	Non-contact solid state NPN		Non-contact solid state PNP
Operating voltage		5~240V DC/AC	5~30V DC		
Switching current		100mA max	200mA max		
Contact rating		10W max	6W max		
Internal current consumption		Non	20mA max@24V (Switch active)		
Voltage drop		2.5V max@100mA	0.5V max@200mA		
Leakage current		Non	0.01mA max		
Indicator		Red LED	Red LED	Green LED	
Cable		3.2Φ, 2C, Brown-oil resistance (PVC)	3.2Φ, 2C, Black-oil resistance (PVC)		
Sensitivity (Note 1)			40 Gauss		
Max.switch frequency		200Hz	1000Hz		
Temperature range			-10~70°C		
Shock (Note 2)		30G	50G		
Vibration (Note 3)			9G		
Protection classification		IEC 529 IP67(NEMA6)			
Protection circuit		Without	With protection circuit		
Circuit diagram					

Suitable for FESTO standard cylinder



QD connector diagram



Note:

1. Standard magnet for measurement: Φ 15.5×Φ 8×5T (orthorhombic rubber magnet).
2. Sine wave/X, Y, Z 3 axial/3 loops (each direction) /11ms.
3. The complex amplitude is 1.5mm/10Hz~55Hz~10Hz (reciprocating for 1 minute) /X, Y, Z 3 axial/hour (each cycle).

Cylinder Switch
CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S,
CS1-M
CS1-G
CS1-G,
CS1-M,
CS1-J,
CS1-D
CS1-H
CS1-L
CS1-E
CS1-Z
M8
Fixation clamp
Fixation belt

Cylinder Switch

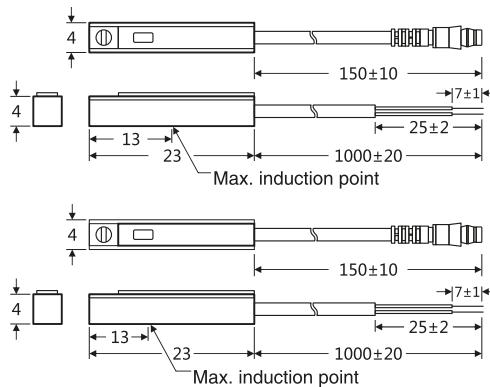
CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S,
CS1-M,
CS1-G,
CS1-G,
CS1-M,
CS1-J,
CS1-D
CS1-H
CS1-L
CS1-E
CS1-Z

M8
Fixation clamp
Fixation belt



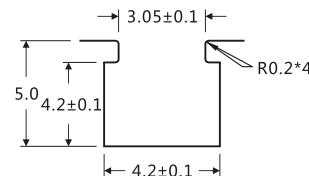
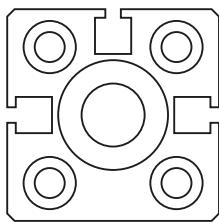
CS1-G
CS1-G-QD

CS1-GN
CS1-GN-QD
CS1-GP
CS1-GP-QD

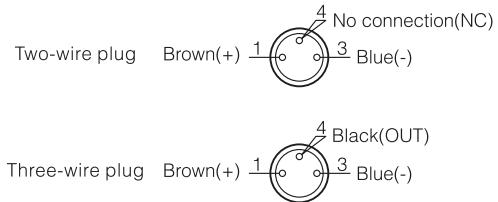


Characteristic	type	CS1-G	CS1-GN	CS1-GP		
Switch logic		SPST NO	Electrical Non-contact; NO			
Sensor type		Contact-reed style	Non-contact solid state NPN			
Opreating voltage		5~240V DC/AC	5~30V DC			
Switching current		100mA max	200mA max			
Contact rating		10W max	6W max			
Internal current consumption		Non	20mA max@24V (Switch active)			
Voltage drop		2.5V max@100mA	0.5V max@200mA			
Leakage current		Non	0.01mA max			
Indicator		Red LED	Red LED	Green LED		
Cable		3.2Φ, 2C, Brown-oil resistance (PVC)	3.2Φ, 3C, Black-oil resistance (PVC)			
Sensitivity (Note 1)		60 Gauss				
Max.switch frequency		1000Hz	1000Hz			
Temperature range		-10~70°C				
Shock (Note 2)		30G	50G			
Vibration (Note 3)		9G				
Protection classification		IEC 529 IP67(NEMA6)				
Protection circuit		Without	With protection circuit			
Circuit diagram						

Suitable for groove size 4*4

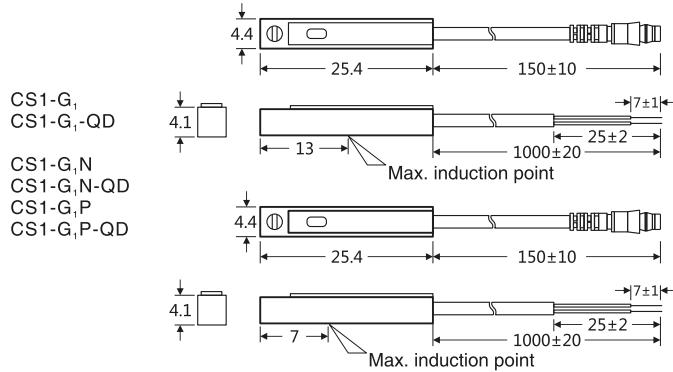


QD connector diagram



Note:

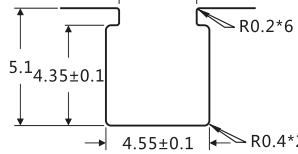
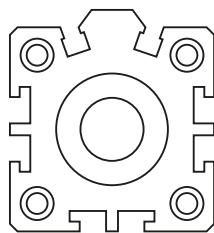
- Standard magnet for measurement: Φ 15.5×Φ 8×5T (orthorhombic rubber magnet).
- Sine wave/X, Y, Z 3 axial/3 loops (each direction) /11ms.
- The complex amplitude is 1.5mm/10Hz~55Hz~10Hz (reciprocating for 1 minute) /X, Y, Z 3 axial/hour (each cycle).



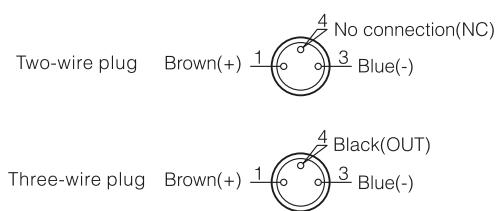
Cylinder Switch
CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S,
CS1-M
CS1-G
CS1-G₁
CS1-M ₁
CS1-J ₁
CS1-D
CS1-H
CS1-L
CS1-E
CS1-Z
M8
Fixation clamp
Fixation belt

Characteristic \ type	CS1-G ₁	CS1-G ₁ N	CS1-G ₁ P		
Switch logic	SPST NO	Electrical Non-contact; NO			
Sensor type	Contact-reed style	Non-contact solid state NPN	Non-contact solid state PNP		
Operating voltage	5~240V DC/AC	5~30V DC			
Switching current	100mA max	200mA max			
Contact rating	10W max	6W max			
Internal current consumption	Non	20mA max@24V (Switch active)			
Voltage drop	2.5V max@100mA	0.5V max@200mA			
Leakage current	Non	0.01mA max			
Indicator	Red LED	Red LED	Green LED		
Cable	3.2Φ, 2C, Brown-oil resistance (PVC)	3.2Φ, 3C, Black-oil resistance (PVC)			
Sensitivity (Note 1)	60 Gauss				
Max.switch frequency	200Hz	1000Hz			
Temperature range	-10~70°C				
Shock (Note 2)	30G	50G			
Vibration (Note 3)	9G				
Protection classification	IEC 529 IP67(NEMA6)				
Protection circuit	Without	With protection circuit			
Circuit diagram					

Suitable for AIRTAC cylinder groove size 4*4



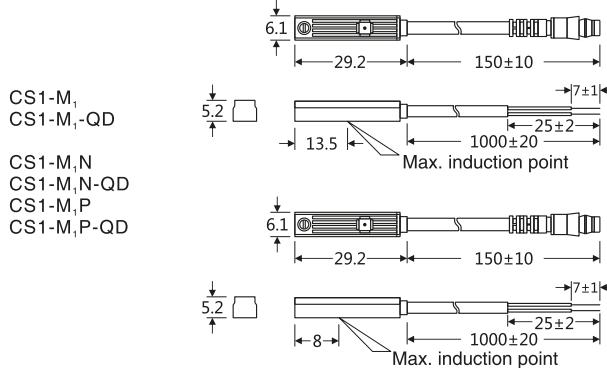
QD connector diagram



Note:

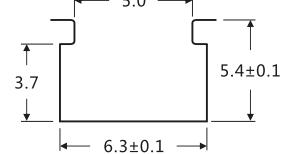
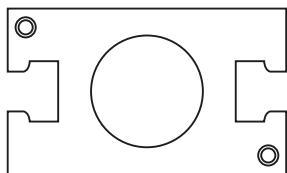
1. Standard magnet for measurement: Φ15.5×Φ8×5T (orthorhombic rubber magnet).
2. Sine wave/X, Y, Z 3 axial/3 loops (each direction) /11ms.
3. The complex amplitude is 1.5mm/10Hz~55Hz~10Hz (reciprocating for 1 minute) /X, Y, Z 3 axial/hour (each cycle).

Cylinder Switch
CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S _i
CS1-M
CS1-G
CS1-G _i
CS1-M_i
CS1-J _i
CS1-D
CS1-H
CS1-L
CS1-E
CS1-Z

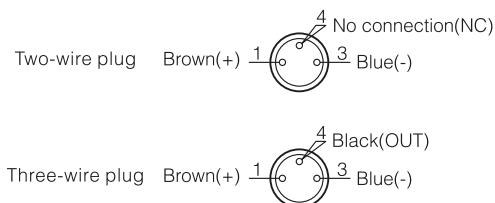


Characteristic	type	CS1-M _i	CS1-M,N	CS1-M,P
Fixation clamp	M8			
Fixation belt	Switch logic		Electrical Non-contact; NO	
	Sensor type		Non-contact solid state NPN	
	Opreating voltage		5~240V DC/AC	
	Switching current		5~30V DC	
	Contact rating		100mA max	
	Internal current consumption		200mA max	
	Voltage drop		10W max	
	Leakage current		6W max	
	Indicator		Red LED	
	Cable		Green LED	
	Sensitivity (Note 1)		3.2Φ, 2C, Brown-oil resistance (PVC)	
	Voltage drop		0.5V max@200mA	
	Leakage current		Non	
	Indicator		0.01mA max	
	Cable		Red LED	
	Sensitivity (Note 1)		3.2Φ, 3C, Black-oil resistance (PVC)	
	Voltage drop		2.5V max@100mA	
	Leakage current		0.5V max@200mA	
	Indicator		Non	
	Cable		0.01mA max	
	Sensitivity (Note 1)		200Hz	
	Max.switch frequency		40 Gauss	
	Temperature range		1000Hz	
	Shock (Note 2)		-10~70°C	
	Vibration (Note 3)		30G	
	Protection classification		50G	
	Protection circuit		9G	
	Circuit diagram		IEC 529 IP67(NEMA6)	
	Without		With protection circuit	

Suitable for SMC standard cylinder



QD connector diagram



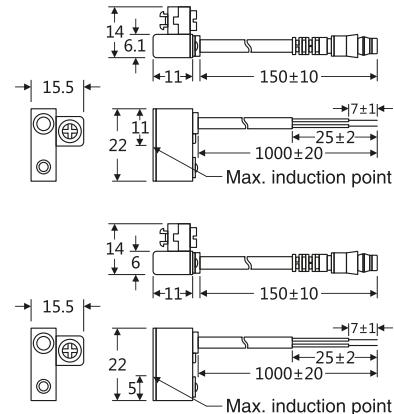
Note:

- Standard magnet for measurement: Φ 15.5×Φ 8×5T (orthorhombic rubber magnet).
- Sine wave/X, Y, Z 3 axial/3 loops (each direction) /11ms.
- The complex amplitude is 1.5mm/10Hz~55Hz~10Hz (reciprocating for 1 minute) /X, Y, Z 3 axial/hour (each cycle).



CS1-J,
CS1-J,-QD

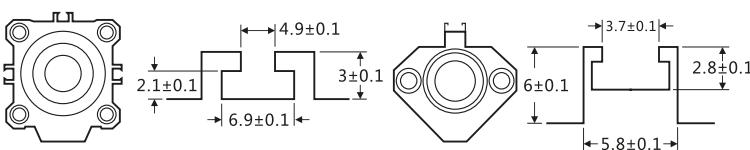
CS1-J,N
CS1-J,N-QD
CS1-J,P
CS1-J,P-QD



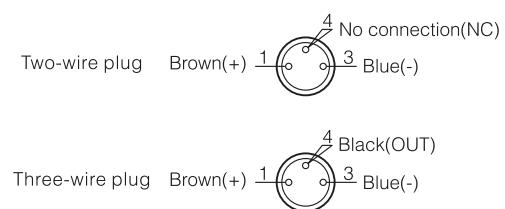
Cylinder Switch
CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S,
CS1-M
CS1-G
CS1-G,
CS1-M,
CS1-J,
CS1-D
CS1-H
CS1-L
CS1-E
CS1-Z
M8
Fixation clamp
Fixation belt

Characteristic	type	CS1-J,(SMC)	CS1-J,N	CS1-J,P
Switch logic		SPST NO	Electrical Non-contact; NO	
Sensor type		Contact-reed style	Non-contact solid state NPN	Non-contact solid state PNP
Opreating voltage		5~240V DC/AC		5~30V DC
Switching current		100mA max		200mA max
Contact rating		10W max		6W max
Internal current consumption		Non	20mA max@24V (Switch active)	
Voltage drop		2.5V max@100mA	0.5V max@200mA	
Leakage current		Non	0.01mA max	
Indicator		Red LED	Red LED	Green LED
Cable		3.2Φ, 2C, Brown-oil resistance (PVC)	3.2Φ, 3C, Black-oil resistance (PVC)	
Sensitivity (Note 1)			40 Gauss	
Max.switch frequency		200Hz		1000Hz
Temperature range			-10~70°C	
Shock (Note 2)		30G		50G
Vibration (Note 3)			9G	
Protection classification			IEC 529 IP67(NEMA6)	
Protection circuit		Without	With protection circuit	
Circuit diagram				

Suitable for NORGREN standard cylinder



QD connector diagram



Note:

1. Standard magnet for measurement: Φ 15.5×Φ 8×5T (orthorhombic rubber magnet).
2. Sine wave/X, Y, Z 3 axial/3 loops (each direction) /11ms.
3. The complex amplitude is 1.5mm/10Hz~55Hz~10Hz (reciprocating for 1 minute) /X, Y, Z 3 axial/hour (each cycle).

Cylinder Switch

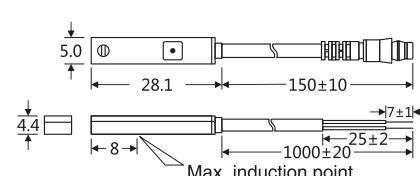
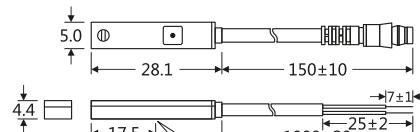
CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S,
CS1-M,
CS1-G
CS1-G,
CS1-M,
CS1-J,
CS1-D
CS1-H
CS1-L
CS1-E
CS1-Z

M8
Fixation clamp
Fixation belt



CS1-D
CS1-D-QD

CS1-DN
CS1-DN-QD
CS1-DP
CS1-DP-QD

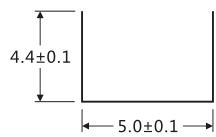
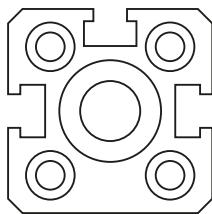


Max. induction point

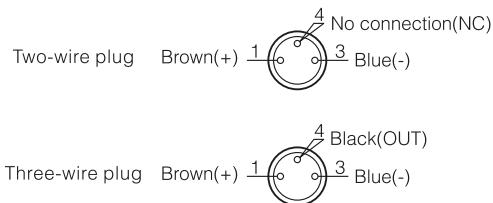
Max. induction point

Characteristic	type	CS1-D(DNC)	CS1-DN	CS1-DP
Switch logic		SPST NO	Electrical Non-contact; NO	
Sensor type		Contact-reed style	Non-contact solid state NPN	
Opreating voltage		5~240V DC/AC	5~30V DC	
Switching current		100mA max	200mA max	
Contact rating		10W max	6W max	
Internal current consumption		Non	20mA max@24V (Switch active)	
Voltage drop		2.5V max@100mA	0.5V max@200mA	
Leakage current		Non	0.01mA max	
Indicator		Red LED	Red LED	Green LED
Cable		3.2Φ, 2C, Brown-oil resistance (PVC)	3.2Φ, 2C, Black-oil resistance (PVC)	
Sensitivity (Note 1)			40 Gauss	
Max.switch frequency		200Hz	1000Hz	
Temperature range			-10~70°C	
Shock (Note 2)		30G	50G	
Vibration (Note 3)			9G	
Protection classification			IEC 529 IP67(NEMA6)	
Protection circuit		Without	With protection circuit	
Circuit diagram				

Suitable for FESTO standard cylinder



QD connector diagram



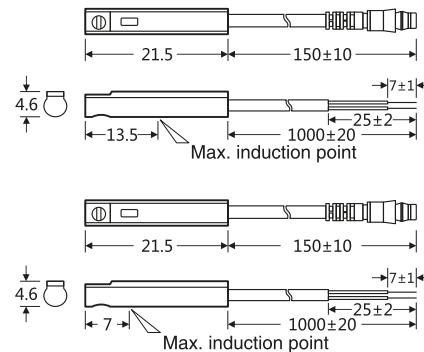
Note:

1. Standard magnet for measurement: Φ 15.5×Φ 8×5T (orthorhombic rubber magnet).
2. Sine wave/X, Y, Z 3 axial/3 loops (each direction) /11ms.
3. The complex amplitude is 1.5mm/10Hz~55Hz~10Hz (reciprocating for 1 minute) /X, Y, Z 3 axial/hour (each cycle).



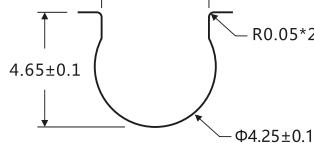
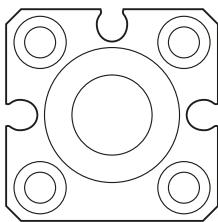
CS1-H
CS1-H-QD

CS1-HN
CS1-HN-QD
CS1-HP
CS1-HP-QD

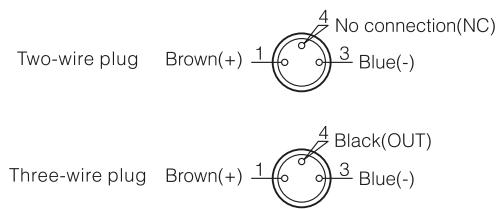


Characteristic	type	CS1-H	CS1-HN	CS1-HP
Switch logic		SPST NO		Electrical Non-contact; NO
Sensor type		Contact-reed style	Non-contact solid state NPN	Non-contact solid state PNP
Opreating voltage		5~120V DC/AC	5~240V DC/AC	5~30V DC
Switching current		100mA max		200mA max
Contact rating		10W max		6W max
Internal current consumption		Non		20mA max@24V (Switch active)
Voltage drop		2.5V max@100mA		0.5V max@200mA
Leakage current		Non		0.01mA max
Indicator		Red LED	Red LED	Green LED
Cable		3.2Φ, 2C, Brown-oil resistance (PVC)		3.2Φ, 3C, Black-oil resistance (PVC)
Sensitivity (Note 1)			60 Gauss	
Max.switch frequency		1000Hz		1000Hz
Temperature range			-10~70°C	
Shock (Note 2)		30G		50G
Vibration (Note 3)			9G	
Protection classification			IEC 529 IP67(NEMA6)	
Protection circuit		Without		With protection circuit
Circuit diagram				

Suitable for SMC, CHELIC, CHANTO standard cylinder



QD connector diagram



Note:

1. Standard magnet for measurement: Φ15.5×Φ8×5T (orthorhombic rubber magnet).
2. Sine wave/X, Y, Z 3 axial/3 loops (each direction) /11ms.
3. The complex amplitude is 1.5mm/10Hz~55Hz~10Hz (reciprocating for 1 minute) /X, Y, Z 3 axial/hour (each cycle).

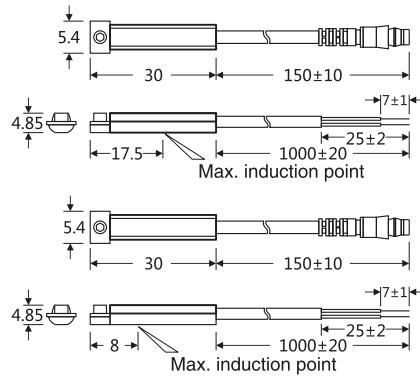
Cylinder Switch
CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S,
CS1-M
CS1-G
CS1-G,
CS1-M,
CS1-J,
CS1-D
CS1-H
CS1-L
CS1-E
CS1-Z
M8
Fixation clamp
Fixation belt

Cylinder Switch

CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S,
CS1-M
CS1-G
CS1-G,
CS1-M,
CS1-J,
CS1-D
CS1-H
CS1-L
CS1-E
CS1-Z
M8

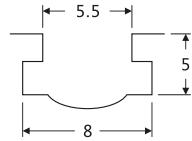
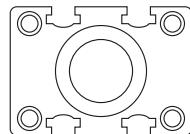


CS1-L
CS1-L-QD
CS1-LN
CS1-LN-QD
CS1-LP
CS1-LP-QD

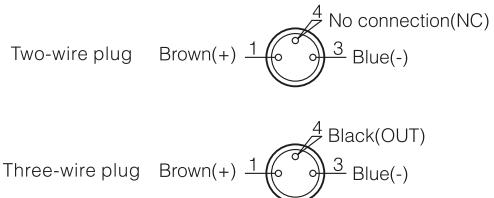


Characteristic	type	CS1-L	CS1-LN	CS1-LP
Switch logic		SPST NO	Electrical Non-contact; NO	
Sensor type		Contact-reed style	Non-contact solid state NPN	
Opreating voltage		5~240V DC/AC	5~30V DC	
Switching current		100mA max	200mA max	
Contact rating		10W max	6W max	
Internal current consumption		Non	20mA max@24V (Switch active)	
Voltage drop		2.5V max@100mA	0.5V max@200mA	
Leakage current		Non	0.01mA max	
Indicator		Red LED	Red LED	Green LED
Cable		3.2Φ, 2C, Brown-oil resistance (PVC)	3.2Φ, 3C, Black-oil resistance (PVC)	
Sensitivity (Note 1)			40 Gauss	
Max.switch frequency		200Hz	1000Hz	
Temperature range			-10~70°C	
Shock (Note 2)		30G	50G	
Vibration (Note 3)			9G	
Protection classification		IEC 529 IP67(NEMA6)		
Protection circuit		Without	With protection circuit	
Circuit diagram				

Suitable for CHANTO standard cylinder



QD connector diagram

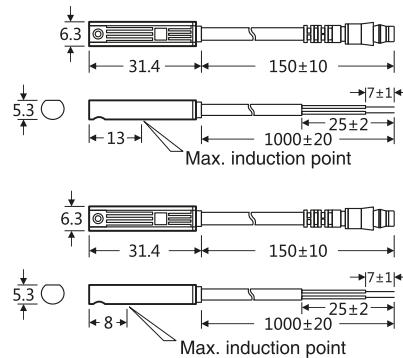


Note:

- Standard magnet for measurement: Φ 15.5×Φ 8×5T (orthorhombic rubber magnet).
- Sine wave/X, Y, Z 3 axial/3 loops (each direction) /11ms.
- The complex amplitude is 1.5mm/10Hz~55Hz~10Hz (reciprocating for 1 minute) /X, Y, Z 3 axial/hour (each cycle).



CS1-E
CS1-E-QD
CS1-EN
CS1-EN-QD
CS1-EP
CS1-EP-QD



Cylinder Switch
CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S,
CS1-M
CS1-G
CS1-G,
CS1-M,
CS1-J,
CS1-D
CS1-H
CS1-L
CS1-E
CS1-Z
M8
Fixation clamp
Fixation belt

Characteristic	type	CS1-E	CS1-EN	CS1-EP			
Switch logic		SPST NO	Electrical Non-contact; NO				
Sensor type		Contact-reed style	Non-contact solid state NPN		Non-contact solid state PNP		
Opreating voltage		5~240V DC/AC	5~30V DC				
Switching current		100mA max	200mA max				
Contact rating		10W max	6W max				
Internal current consumption		Non	20mA max@24V (Switch active)				
Voltage drop		2.5V max@100mA	0.5V max@200mA				
Leakage current		Non	0.01mA max				
Indicator		Red LED	Red LED	Green LED			
Cable		3.2Φ, 2C, Brown-oil resistance (PVC)	3.2Φ, 2C, Black-oil resistance (PVC)				
Sensitivity (Note 1)		40 Gauss					
Max.switch frequency		200Hz	1000Hz				
Temperature range		-10~70°C					
Shock (Note 2)		30G	50G				
Vibration (Note 3)		9G					
Protection classification		IEC 529 IP67(NEMA6)					
Protection circuit		Without	With protection circuit				
Circuit diagram							

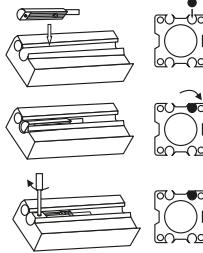
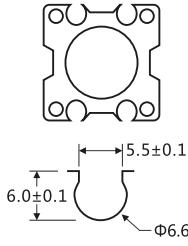
Suitable for NORGREN standard cylinder

Installation mode

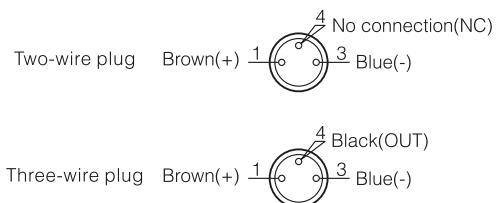
Place the magnetic sensor switch sideways over the groove and down into the groove.

Rotate magnetic switch and adjust the magnetic switch to the right position.

Turn the fixing screw clockwise with a flat-blade screwdriver to complete the installation.



QD connector diagram



Note:

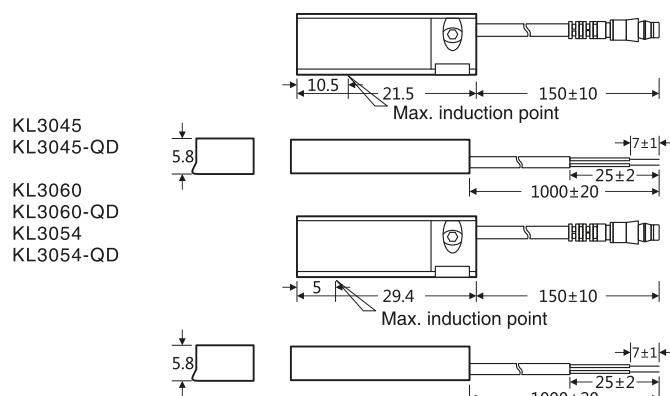
1. Standard magnet for measurement: Φ15.5×Φ8×5T (orthorhombic rubber magnet).
2. Sine wave/X, Y, Z 3 axial/3 loops (each direction) /11ms.
3. The complex amplitude is 1.5mm/10Hz~55Hz~10Hz (reciprocating for 1 minute) /X, Y, Z 3 axial/hour (each cycle).

Cylinder Switch

CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S,
CS1-M
CS1-G
CS1-G,
CS1-M,
CS1-J,
CS1-D
CS1-H
CS1-L
CS1-E

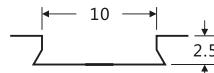
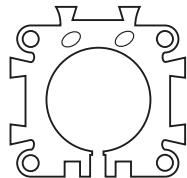
CS1-Z

M8
Fixation clamp
Fixation belt

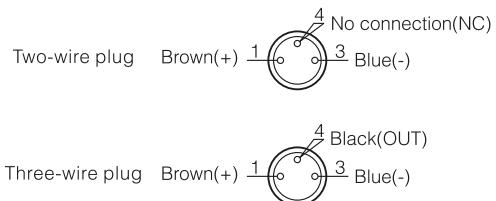


Characteristic	type	CS1-Z	CS1-ZN	CS1-ZP		
Switch logic		SPST NO	Electrical Non-contact; NO			
Sensor type		Contact-reed style	Non-contact solid state NPN		Non-contact solid state PNP	
Opreating voltage		5~240V DC/AC	5~30V DC			
Switching current		100mA max	200mA max			
Contact rating		10W max	6W max			
Internal current consumption		Non	20mA max@24V (Switch active)			
Voltage drop		2.5V max@100mA	0.5V max@200mA			
Leakage current		Non	0.01mA max			
Indicator		Red LED	Red LED	Green LED		
Cable		3.2Φ, 2C, Brown-oil resistance (PVC)	3.2Φ, 2C, Black-oil resistance (PVC)			
Sensitivity (Note 1)			40 Gauss			
Max.switch frequency		200Hz	1000Hz			
Temperature range			-10~70°C			
Shock (Note 2)		30G	50G			
Vibration (Note 3)			9G			
Protection classification		IEC 529 IP67(NEMA6)				
Protection circuit		Without	With protection circuit			
Circuit diagram						

ORIGA GROOVE



QD connector diagram



Note:

- Standard magnet for measurement: Φ 15.5×Φ 8×5T (orthorhombic rubber magnet).
- Sine wave/X, Y, Z 3 axial/3 loops (each direction) /11ms.
- The complex amplitude is 1.5mm/10Hz~55Hz~10Hz (reciprocating for 1 minute) /X, Y, Z 3 axial/hour (each cycle).

M83R-PVC

M83RL-PVC

M83R-R-PUR

M84R-PUR

M84RL-PVC

M83RL-PUR

M84RL-PUR



type	M83R-PVC (Horizontal Line) M83RL-PVC (Vertical Line)	M83R-PUC (Horizontal Line) M83RL-PUC (Vertical Line)	M83R-PUC (Horizontal Line) M83RL-PUC (Vertical Line)	M83R-PUR (Horizontal Line) M83RL-PUR (Vertical Line)		
Item PIN position						
PIN color	1: Brown 2: Blue 3: Black	1: Brown 2: White 3: Blue 4: Black	1: Brown 2: Blue 3: Black	1: Brown 2: White 3: Blue 4: Black		
Wire jacket	PVC					
Wire color	Brown					
Characters	Oil resistance, robotic grade		Oil and abrasion resistance, robotic grade			
Material of connector	PP					
Material of terminal	Gold-plated copper					
Material of nut	Silver-plated copper					
Maximum voltage and current	120VAC/DC 3Amp. max					
Wire specifications	3x24AWG/0.22mm, high flex Stranding, Self-Extinguishing PVC Insulation, 300V-					
Temperature range	20°C to +80°C					
Protection grade	IP67/NEMA 6					

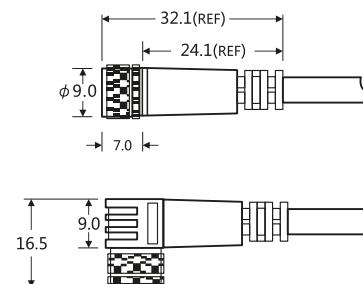
Specifications Explanation

M8	3	R	L	PVC	-	2M
Coupling type	3	3 PIN Needle	Connector style	NONE	Level 180°	Wire jacket
4	4 PIN Needle	L	Vertical 90°	PVC	2M	Wire length

2M | Wire length is 2M
5M | Wire length is 5M

Example: M83R-PUR-5M=3PIN Plug
M83RL-PVC-2M=4PIN Plug
Horizontal line PUR 5M.
Vertical line PVC 2M.

Dimension

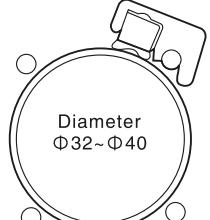
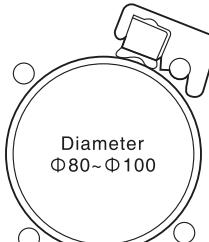


Cylinder Switch
CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S,
CS1-M
CS1-G
CS1-G,
CS1-M,
CS1-J,
CS1-D
CS1-H
CS1-L
CS1-E
CS1-Z

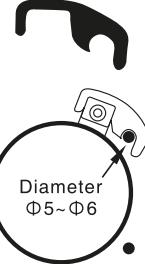
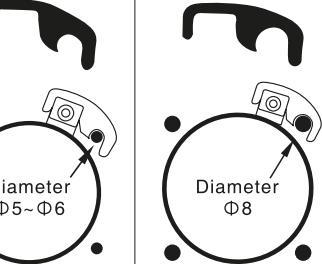
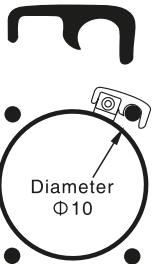
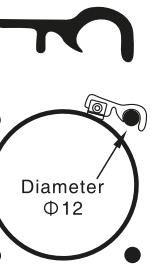
M8
Fixation clamp
Fixation belt

Cylinder Switch
CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S,
CS1-M
CS1-G
CS1-G,
CS1-M,
CS1-J,
CS1-D
CS1-H
CS1-L
CS1-E
CS1-Z
M8
Fixation clamp
Fixation belt

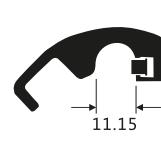
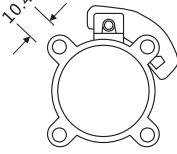
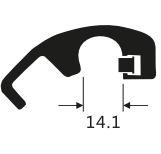
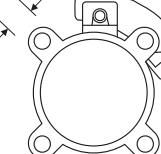
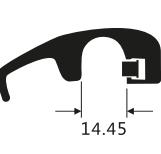
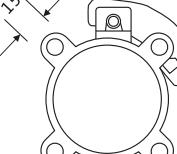
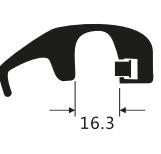
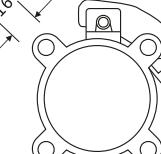
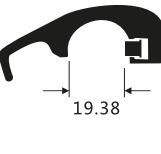
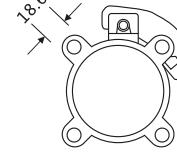
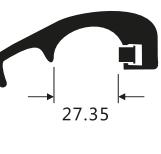
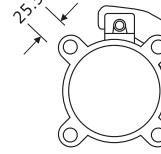
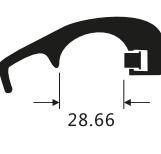
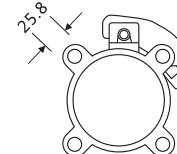
SC Fixation clamp Used for fixation of CS1-U, CS1-F series cylinder switch (Standard tie rod cylinder)

	SC-32/40	SC-50/63	SC-80/100
	  <p>Diameter $\Phi 32\sim\Phi 40$</p>	 <p>Diameter $\Phi 50\sim\Phi 63$</p>	 <p>Diameter $\Phi 80\sim\Phi 100$</p>

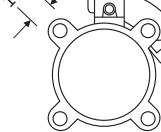
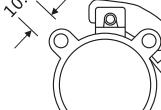
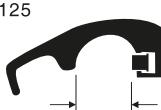
PM Fixation clamp Used for fixation of CS1-U, CS1-F series cylinder switch (Standard tie rod cylinder)

	PM-6	PM-8	PM-10	PM-12	PM-16
	  <p>Diameter $\Phi 5\sim\Phi 6$</p>	 <p>Diameter $\Phi 8$</p>	 <p>Diameter $\Phi 10$</p>	 <p>Diameter $\Phi 12$</p>	 <p>Diameter $\Phi 16$</p>

PM Fixation clamp For cylinder tube :  AIRTAC types PI-1(32/40) PI-2(50/63) PI-3(80) PI-4(100) PI-5(125) PI-6(160) PI-7(200)

	PI-1  <p>11.15</p>  <p>10.4</p> <p>Suitable for 32mm; 40mm bore size</p>	PI-2  <p>14.1</p>  <p>13.5</p> <p>Suitable for 50mm; 63mm bore size</p>
	PI-3  <p>14.45</p>  <p>15</p> <p>Suitable for 80mm bore size</p>	PI-4  <p>16.3</p>  <p>16</p> <p>Suitable for 100mm bore size</p>
	PI-5  <p>19.38</p>  <p>18.6</p> <p>Suitable for 125mm bore size</p>	PI-6  <p>27.35</p>  <p>25.5</p> <p>Suitable for 160mm bore size</p>
	PI-7  <p>28.66</p>  <p>25.8</p> <p>Suitable for 200mm bore size</p>	

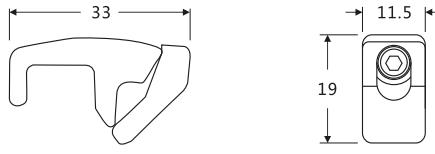
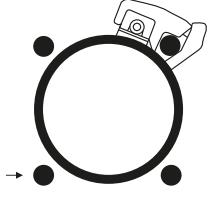
SU Fixation clamp For SU cylinder : Cylinder-shape

	SU-32  Suitable for 32mm bore size	SU-40  Suitable for 40mm bore size
	SU-50  Suitable for 50mm bore size	SU-63  Suitable for 63mm bore size
	SU-80  Suitable for 80mm bore size	SU-100  Suitable for 100mm bore size
	SU-125  Suitable for 125mm bore size	SU-160  Suitable for 160mm bore size
	SU-200  Suitable for 200mm bore size	

S Fixation clamp Used for fixation of CS1-M series

	S70  Suitable for 32mm; 40mm bore size tie rod cylinder	S80  Suitable for bore size under 100mm tie rod cylinder	S-100  Suitable for 80mm; 100mm bore size tie rod cylinder
	S115  Suitable for 50mm; 63mm bore size tie rod cylinder	S145  Suitable for 125mm bore size tie rod cylinder	S-165  Suitable for 160mm bore size tie rod cylinder

PAC Steel fixation clamp Used for fixation of CS1-U or CS1-F series (for standard tie rod cylinder)

	Suitable for from 32mm to 100mm bore size tie rod cylinder (tie rod OD from 5mm to 10mm)		
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Cylinder Switch
CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S,
CS1-M
CS1-G
CS1-G,
CS1-M,
CS1-J,
CS1-D
CS1-H
CS1-L
CS1-E
CS1-Z
M8
Fixation clamp
Fixation belt

Cylinder
Switch
CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S,
CS1-M
CS1-G
CS1-G,
CS1-M,
CS1-J,
CS1-D
CS1-H
CS1-L
CS1-E
CS1-Z
M8
Fixation clamp
Fixation belt

PAB Steel fixation belt Used for fixation of CS1-S series, and the bore size larger than 6mm

PAB-01 Suitable For $\Phi 6 \sim \Phi 63$

PAB-02 Suitable For $\Phi 6 \sim \Phi 125$

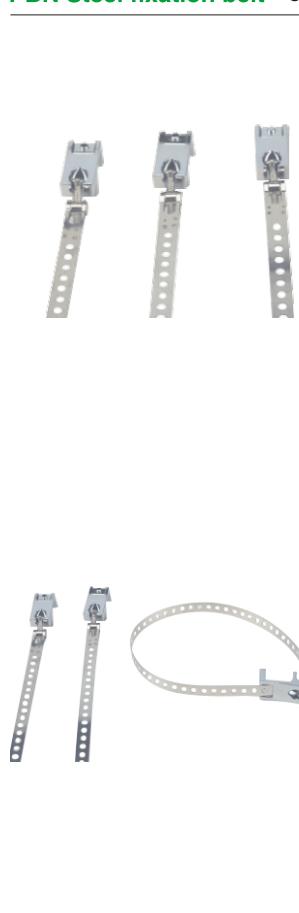
PAB-03 Suitable For Bore Size More Than $\Phi 125$

	Belt length L(mm)	Step 1	Step 2	Step 3	Step 4
	PAB-01 210 PAB-02 420 PAB-03 630	1. Loosen the screw that has just been brought up. 2. Leave the thread of 3 to 4 turns in the screw cap.	1. Put the screw head in the screw cap of the chuck. 2. Combine the sensor switch and cylinder as shown below and tighten the steel strip. 3. On the steel belt, mark the square hole of the other side where can be hung up.	1. Loosen the steel belt. 2. Cut the steel strip after the position where was marked as shown below.	1. Put one end of the cut steel strip into the collet. 2. Combine the sensor switch and cylinder as shown below, and tighten the screw to make the chuck jack up. 3. Lock the nut to secure the screw.
					⚠ Be careful ! Please attention: Do not tighten up the screw with excessive torque, which may cause damage to the switch or cylinder.

BK Steel fixation belt Used for fixation of CS1-S series, and the bore size larger than 6mm

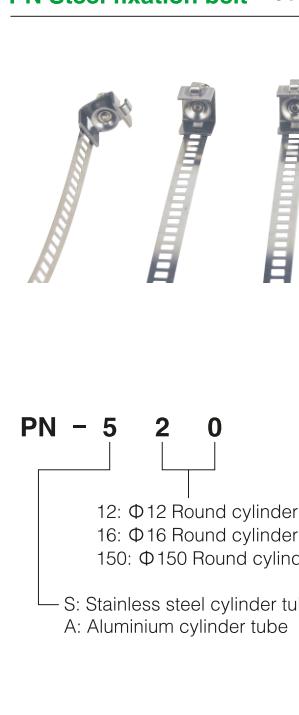
	PK	Step 1	Step 2	Step 3	Step 4
	BK-80 Suitable for $\Phi 6 \sim \Phi 32$ BK-81 Suitable for $\Phi 6 \sim \Phi 63$	1. Loosen the screws and nuts. 2. Ensure the screw does not extend out of the inner edge of the chuck.	1. Put one end of the steel strip on the chuck hook. 2. Combine the sensor switch and cylinder as shown below and tighten the steel strip. 3. On the steel belt, mark the square hole of the other side where can be hung up.	1. Loosen the steel strip. 2. Cut the steel strip at the position where behind the mark as shown below.	1. Put one end of the cut steel strip onto the chuck hook. 2. Combine the sensor switch and cylinder as shown below, and tighten the screw to make the chuck jack up. 3. Lock the nut to secure the screw.
					⚠ Be careful ! Please attention: Do not tighten up the screw with excessive torque, which may cause damage to the switch or cylinder.

PBN Steel fixation belt Used for fixation of CS1,CS1-F series the bore size bigger than 12mm.

	PBN	Step 1	Step 2	Step 3	Step 4
	<p>PAB-01 Suitable for $\Phi 12 \sim \Phi 63$ PAB-02 Suitable for $\Phi 12 \sim \Phi 125$</p>	<p>1. Loosen the screw that has just been brought up. 2. Keep the thread of 3 to 4 turns in the screw cap.</p>	<p>1. Put the screw head in the screw cap of the chuck. 2. Combine the sensor switch and cylinder as shown below and tighten the steel strip. 3. On the steel belt, mark the hole of the other side where can be hung.</p>	<p>1. Loosen the steel strip. 2. Cut the steel strip after the position where was marked as shown below.</p>	<p>1. Put one end of the cut steel strip into hole of the collect. 2. Put one end of the cut steel strip onto the chuck PIN. 3. Press the steel belt down with the thumb to bend the steel strip. 4. Combine the sensor switch and cylinder as shown below, and tighten the screw to make the chuck jack up. Lock the nut to secure the screw.</p>

Cylinder Switch
CS1-U
CS1-F
CS1-S
CS1-J
CS1-C
CS1-S,
CS1-M
CS1-G
CS1-G,
CS1-M,
CS1-J,
CS1-D
CS1-H
CS1-L
CS1-E
CS1-Z
M8
Fixation clamp
Fixation belt

PN Steel fixation belt Used for fixation of CS1-U,CS1-F series (Suitable for round tie rod cylinder)

	Step 1	Step 2	Step 3	Step 4
 PN - 5 2 0 <ul style="list-style-type: none"> 12: Ø12 Round cylinder 16: Ø16 Round cylinder 150: Ø150 Round cylinder <p>S: Stainless steel cylinder tube A: Aluminium cylinder tube</p>	<p>Please loosen the screw nut to the top</p>	<p>The steel belt is combined with the cylinder as below picture, and the steel strip is protruded from the notch of the fixed cover head.</p>	<p>Put the sensor into the gap between the fixed cover and the cylinder, and tighten the screw. The slider is pressed on the sensor to prevent sliding.</p>	<p>After the screw is locked, tighten the nut to complete the steel belt fixing.</p>