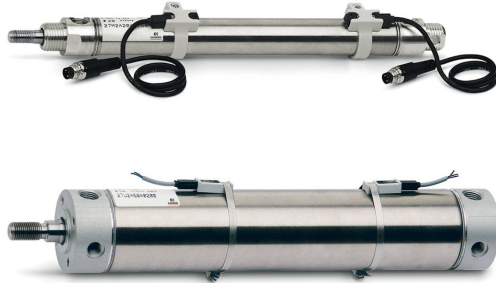


ROUNDLINE CYLINDERS

SERIES 27

Double-acting, magnetic
 ø 20, 25, 32, 40, 50, 63 mm



- Reduced dimensions
- Different mounting options
- Perfect alignment, perfect linearity

Series 27 has been designed to reduce the cylinders sizes as much as possible. These cylinders have been constructed with clean lines using stainless steel for both the tube and the rod and Aluminium for the end-blocks.

The choice of material and other design features have allowed to create a range of versatile and reliable cylinders. The precise method of securing the tube to the end block ensures that all the parts are perfectly aligned. Mechanical cushioning has been fitted on these cylinders in order to reduce noise produced by the piston impact on the end-blocks. Cylinders Series 27 are suitable for assembling with magnetic sensors. Various mounting bracket accessories enable the cylinders to be fitted to suit the requirements of a particular application.

General Data

Type of construction	Flanged
Operation	Double acting
Materials	Rod: Ø20 - 25 stainless steel AISI 303 - Ø32 ÷ 63 stainless steel AISI 420B tube: INOX AISI 304 piston and rod seals = PU
Mounting	Feet - trunnion - steel bar - pins
Strokes (min-max)	All diameters 10 - 1000 mm
Bores	Ø 20, 25, 32, 40, 50, 63 mm
Operating temperature	0°C ÷ 80°C (with dry air - 20°C)
Operating pressure	1 ÷ 10 bar
Speed	10 ÷ 1000 mm/sec (no load)
Fluid	Filtered air, without lubrication. If lubricated air is used, it is recommended to use oil ISOVG32. Once applied the lubrication should never be interrupted.

ROUNDLINE CYLINDERS
SERIES 27 - STROKES
Standard strokes

Mod. 27M and 27T (∅ 20 ÷ 40) and Mod. 27U (∅ 20 ÷ 63)

PNEUMATIC ACTUATION

∅	10	25	40	50	80	100	125	160	200	250	300	320	400	500
20	■	■	■	■	■	■	■	■	■	■	■	■	■	■
25	■	■	■	■	■	■	■	■	■	■	■	■	■	■
32	■	■	■	■	■	■	■	■	■	■	■	■	■	■
40	■	■	■	■	■	■	■	■	■	■	■	■	■	■
50	■	■	■	■	■	■	■	■	■	■	■	■	■	■
63	■	■	■	■	■	■	■	■	■	■	■	■	■	■

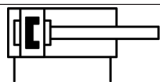
1
Coding Examples

27	M	2	A	20	A	0050
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27	SERIES	
M	VERSION M = rear endblock with trunnion and upper round port for ∅ 20-25-32-40 T = rear endblock with rear round port for ∅ 20-25-32-40 U = rear endblock with upper round port for ∅ 20-25-32-40-50-63	
2	OPERATION 2 = double-acting	PNEUMATIC SYMBOL CD08
A	MATERIALS A = rolled stainless steel rod - stainless steel tube	
20	BORE 20 = 20 mm - 25 = 25 mm - 32 = 32 mm - 40 = 40 mm - 50 = 50 mm - 63 = 63 mm	
A	TYPE OF DESIGN A = standard	
0050	STROKE (see the table)	
	SEAL OPTIONS = Standard V = Rod Seal FKM	
	ROD LENGTH = Standard (_ _ _) = Rod extended with _ _ _ mm	
	CERTIFICATIONS = Standard EX = ATEX	

Pneumatic symbols

The pneumatic symbols which have been indicated in the CODING EXAMPLE are shown below.



ACCESSORIES FOR MAGNETIC CYLINDERS SERIES 27
**Coupling piece Mod.
GKF**

**Self aligning rod Mod.
GK**

**Threaded trunnion pin
Mod. T**

**Piston rod socket joint
Mod. GY**

**Swivel ball joint Mod.
GA**

Foot mount Mod. B

Foot mount Mod. B

Nose nut Mod. V

**Rear trunnion bracket
Mod. I**

**Piston rod lock nut
Mod. U**

**Rear trunnion bracket
Mod. I**

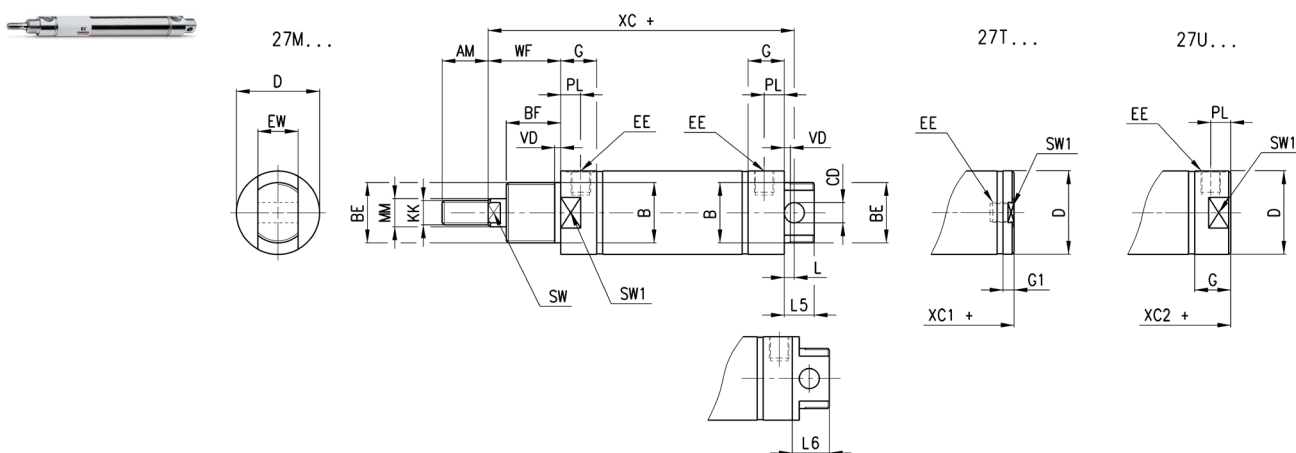
Rod fork end Mod. G


All accessories are supplied separately.

ROUNDLINE CYLINDERS
SERIES 27 - DIMENSIONS
Cylinders (Ø 20, 25, 32, 40mm)

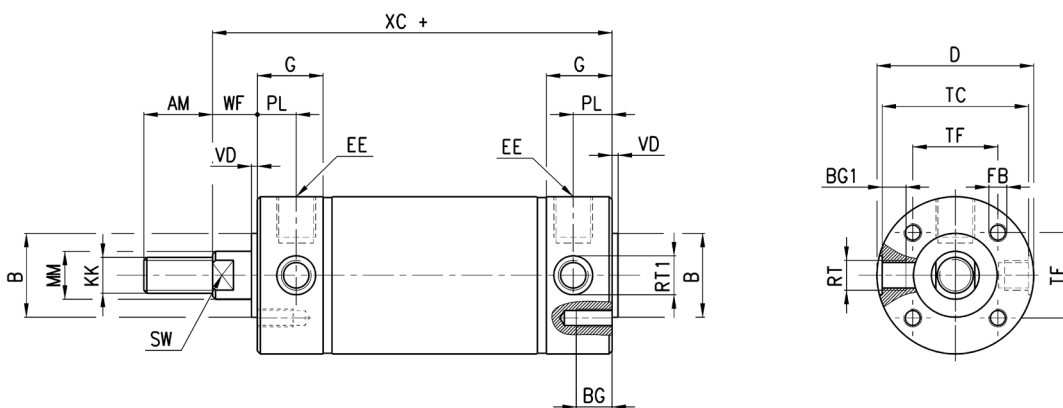
PNEUMATIC ACTUATION

1



+ = add the stroke

Ø	AM	_ø B	BF	BE	CD ^(hp)	_ø D	EE	EW	G	G1	KK	L	L6	_ø MM ^(hp)	L5	PL	SW	VD	WF	XC+	XC1+	XC2+	SW1
20	14	16	12	M16x1,5	6	21,5	G1\8	12	15,5	8	M8x1,25	7	-	8	13	9	7	3	17	77	62,5	70,8	19
25	16	18	12	M18x1,5	8	26,5	G1\8	14	15,5	8	M10x1,25	9	-	10	17	9	9	3	16,5	78,5	62	69,5	24
32	22	22	15	M22x1,5	8	33,5	G1\8	16	17,5	5,5	M10x1,25	7	20	12	15	9	10	3	23	93	74	86	30
40	23	30	15	M30x1,5	10	41,5	G1\8	20	18	5,5	M12x1,25	5	24	16	15	10	13	3	24	96	78,5	91	38

Cylinders (Ø 50, 63)


+ = add the stroke

Ø	AM	_ø B	BG	BG1	_ø D	EE	FB	G	KK	_ø MM ^(hp)	PL	RT	_ø RT1	SW	TC	TF	VD	WF	XC+
50	23	28	12	8	52,5	G1\4	M6	22	M12x1,25	16	13	M10x1	12	13	49	28,5	2	13	97
63	30	35	12	9,5	65,5	G1\4	M8	22	M16x1,5	20	13	M12x1,5	14	17	62	35,5	2	13	99

Foot mount Mod. B

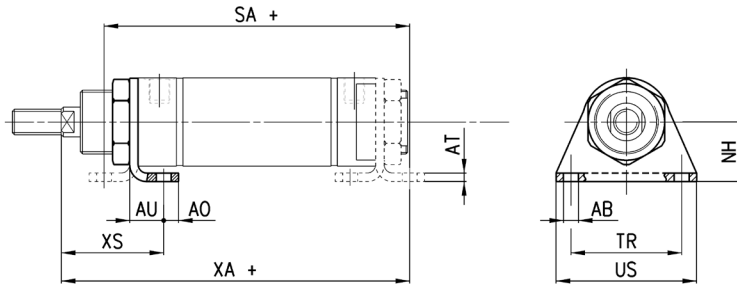


Material:

zinc-plated steel

Supplied with:

- 1x foot
- 1x front end cap nut mod. V



+ = add the stroke

Mod.	∅	AB	AO	AT	AU	NH	SA +	TR	US	XA +	XS
B-27-20	20	5,5	6	3	13	20	79	32	42	83	27
B-27-25	25	6,6	8	3	12,5	22	78	38	49	82	26
B-27-32	32	6,6	8	4	16	25	95	40	54	102	35
B-27-40	40	7	7	4	16	28	99	52	66	107	36

Foot mount Mod. B

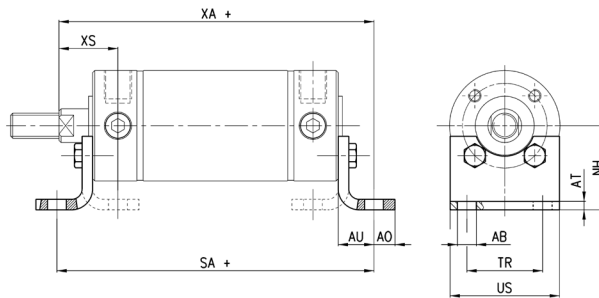


Material:

zinc-plated steel

Supplied with:

- 2x feet
- 4x screws



+ = add the stroke

Mod.	∅	AB	AO	AT	AU	NH	SA +	TR	US	XA	XS
B-27-50	50	9	10	4	17	40	118	36	52	114	26
B-27-63	63	9	10	5	19	47	124	45	61	118	27

Threaded trunnion pin Mod. T

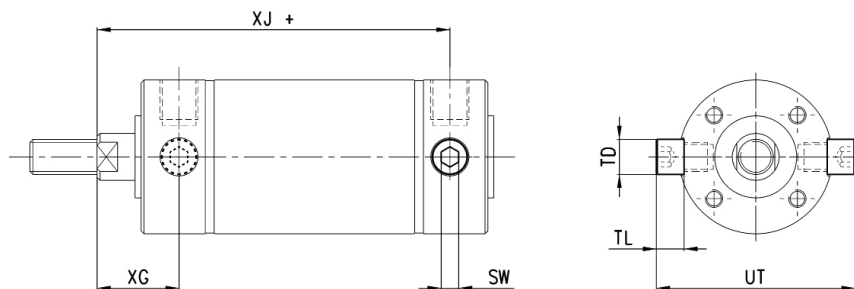


Material:

stainless steel

Supplied with:

- 2x pins



+ = add the stroke

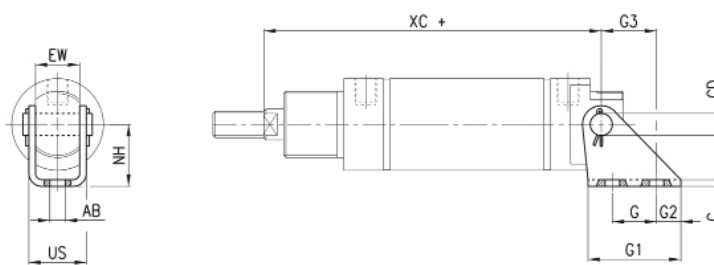
Mod.	∅	SW	TD ^{hp}	TL	UT	XG	XJ+
T-27-50	50	6	12	9,5	68	26	84
T-27-63	63	6	14	11	84	26	86

ROUNDLINE CYLINDERS
SERIES 27 - ACCESSORIES

PNEUMATIC ACTUATION

1
Rear trunnion bracket Mod. I (Ø 20, 25, 32, 40)

Material:
 zinc-plated steel

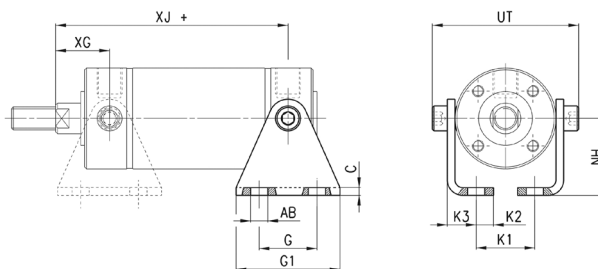
 Supplied with:
 1x female hinge
 1x pin
 2x Seeger


+ = add the stroke

Mod.	Ø	G	G1	G2	G3*	C	XC+	AB	US	NH	CD	EW
I-27-20	20	15	30	8	18,5	1,5	77	5,5	15	20	6	12
I-27-25	25	15	33	9	20	2	78,5	6,6	18	22	8	14
I-27-32	32	15	35	10	20	2	93	6,6	20,5	25	8	16
I-27-40	40	20	42	11	25	3	96	7	26	28	10	20

Rear trunnion bracket Mod. I (Ø 50 - 63)

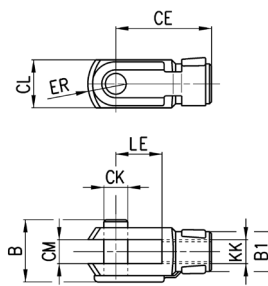
Material:
 zinc-plated steel

 Supplied with:
 2x pins
 2x feet


+ = add the stroke

Mod.	Ø	G	G1	C	XJ+	XG	AB	K1	K1	K2	K3	NH	UT
I-27-50	50	30	54	4	84	26	9	9	9	9	15	40	68
I-27-63	63	40	64	5	86	26	9	9	9	9	17,5	47	84

Rod fork end Mod. G

ISO 8140
Material:
 zinc-plated steel


+ = add the stroke

Mod.	Ø	CK	LE	CM	CL	ER	CE	KK	B	B1
G-20	20	8	16	8	16	10	32	M8x1,25	22	14
G-25-32	25-32	10	20	10	20	12	40	M10x1,25	26	18
G-40	40-50	12	24	12	24	14	48	M12x1,25	32	20
G-50-63	63	16	32	16	32	19	64	M16x1,5	40	26

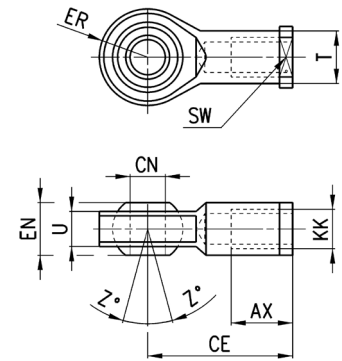
Swivel ball joint Mod. GA



ISO 8139

Material:
zinc-plated steel

Mod.	∅	\varnothing_{CN}	U	EN	ER	AX	CE	KK	\varnothing_T	Z	SW
GA-20	20	8	9	12	12	16	36	M8x1,25	12,5	6,5	14
GA-32	25-32	10	10,5	14	14	20	43	M10x1,25	15	6,5	17
GA-40	40-50	12	12	16	16	22	50	M12x1,25	17,5	6,5	19
GA-50-63	63	16	15	21	21	28	64	M16x1,5	22	7,5	22



PNEUMATIC ACTUATION

1

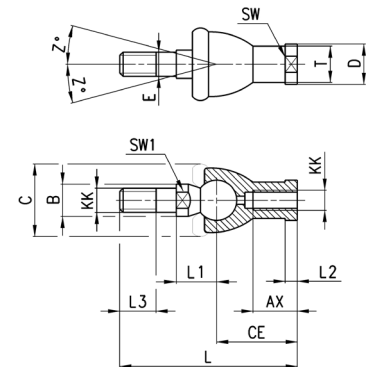
Piston rod socket joint Mod. GY



ISO 8139

Material:
zama and zinc-plated steel

Mod.	∅	KK	L	CE	L2	AX	E	B	C	T	D	L1	L3	SW1	SW	Z
GY-20	20	M8x1,25	65	32	5	16	8	12	24	12,5	16	16	12	10	14	15
GY-32	25-32	M10x1,25	74	35	6,5	18	10	14	28	15	19	19,5	15	11	17	15
GY-40	40-50	M12x1,25	84	40	6,5	20	12	19	32	17,5	22	21	17	17	19	15
GY-50-63	63	M16x1,5	112	50	8	27	16	22	40	22	27	27,5	23	19	22	11



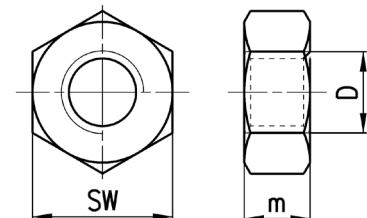
Piston rod lock nut Mod. U



UNI EN ISO 4035

Material:
zinc-plated steel

Mod.	∅	D	m	SW
U-20	20	M8x1,25	5	13
U-25-32	20-32	M10x1,25	6	17
U-40	40-50	M12x1,25	7	19
U-50-63	63	M16x1,5	8	24

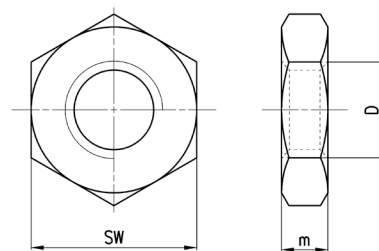


ROUNDLINE CYLINDERS
SERIES 27 - ACCESSORIES

PNEUMATIC ACTUATION

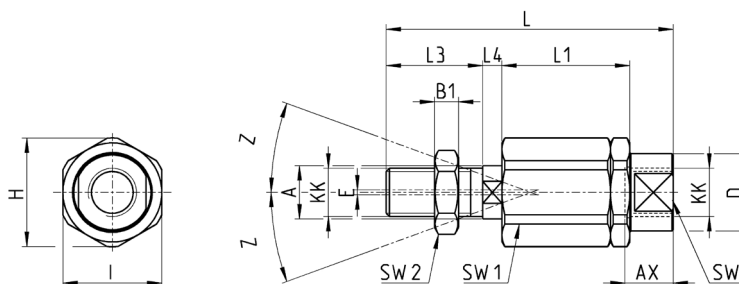
1
Nose nut Mod.V

ISO 4035
 V-8-10 / V-20-25 / V 42-32 not according standard.

 Material:
 zinc-plated steel


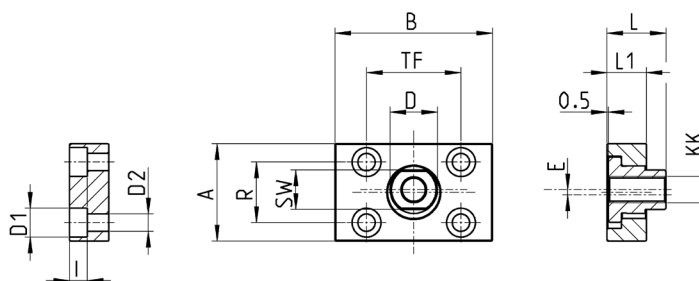
Mod.	Ø	D	M	SW
V-12-16	20	M16x1,5	8	24
V-27-25	25	M18x1,5	5	24
V-20-25	32	M22x1,5	10	32
V-42-32	40	M30x1,5	8	-

Self aligning rod Mod. GK

 Material:
 zinc-plated steel


Mod.	Ø	KK	L	L1	L3	L4	Ø A	Ø D	H	I	SW	SW1	SW2	B1	AX	Z	E
GK-20	20	M8x1,25	57	26	21	5	8	12,5	19	17	11	7	13	4	16	4	2
GK-25-32	25-32	M10x1,25	71,5	35	20	7,5	14	22	32	30	19	12	17	5	22	4	2
GK-40	40	M12x1,25	75,5	35	24	7,5	14	22	32	30	19	12	19	6	22	4	2
GK-50-63	50-63	M16x1,5	104	53	32	10	22	32	45	41	27	20	24	8	30	3	2

Coupling piece Mod. GKF

 Material:
 zinc-plated steel


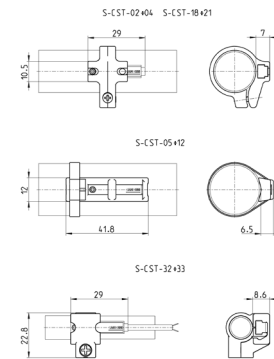
Mod.	Ø	KK	A	B	R	TF	L	L1	I	ØD	ØD2	SW	E
GKF-20	20	M8x1,25	30	35	20	25	22,5	10	-	14	5,5	13	1,5
GKF-25-32	25-32	M10x1,25	37	60	23	36	22,5	15	6,8	18	11	6,6	2
GKF-40	40	M12x1,25	56	60	38	42	22,5	15	9	20	15	9	2,5
GKF-50-63	50-63	M16x1,5	80	80	58	58	26,5	15	10,5	25	18	11	2,5

Adapters for Series CST-CSH-CSG sensors

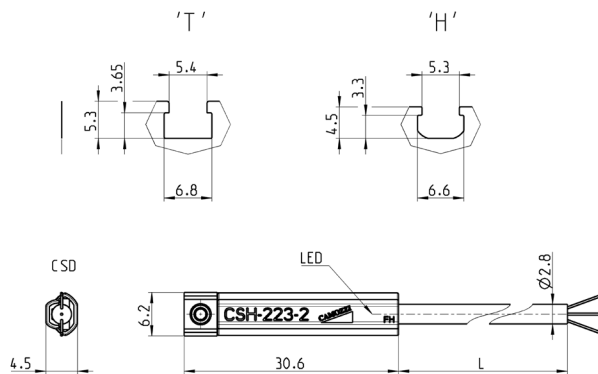


Materials:
 technopolymer
 (S-CST-02÷04)

Mod.	Cylinders Series	Ø
S-CST-03	23, 24, 25, 27	20
S-CST-04	23, 24, 25, 27	25
S-CST-18	27, 42	32
S-CST-19	27, 42	40
S-CST-20	27, 42	50
S-CST-21	27, 42	63



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

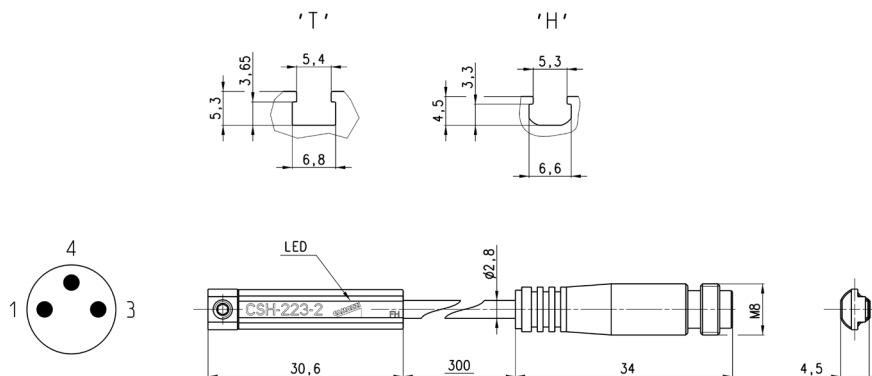


Mod.	Operation	Connection	Voltage	Output	Max. current	Max Load	Protection	L = cable length
CSH-223-2	Reed	2 wires	10 + 30 V AC/DC	-	250 mA	10 VA / 8 W	Against polarity reversing	2 m
CSH-223-5	Reed	2 wires	10 + 30 V AC/DC	-	250 mA	10 VA / 8 W	Against polarity reversing	5 m
CSH-223-10	Reed	2 wires	10 + 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	Magnetostrictive	3 wires	10 + 27 V DC	PNP	250 mA	6 W	Against polarity reversing and overvoltage	2 m
CSH-334-5	Magnetostrictive	3 wires	10 + 27 V DC	PNP	250 mA	6 W	Against polarity reversing and overvoltage	5 m
CSH-334-2EX	Magnetostrictive	3 wires	10 + 27 V DC	PNP	250 mA	6 W	Against polarity reversing and overvoltage	2 m
CSH-334-5EX	Magnetostrictive	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	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

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.

ROUNDLINE CYLINDERS
SERIES 27 - ACCESSORIES

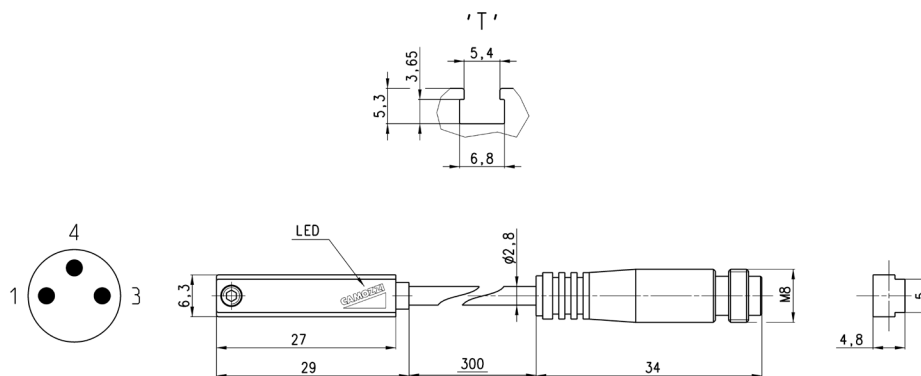
PNEUMATIC ACTUATION

1
Magnetic proximity switches with M8 3-pin connector for H-slot


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

 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.

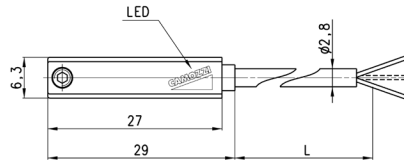
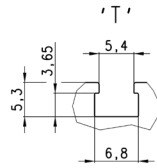
Magnetic proximity switches with M8 3-pin connector for T-slot


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

 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.

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



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 / 8 W	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 / 8 W	None	12 m
CST-220EX	Reed	2 wires	10 ÷ 110 V AC/DC-230 V AC	-	250 mA	10 VA / 8 W	None	2 m
CST-220-5EX	Reed	2 wires	10 ÷ 110 V AC/DC-230 V AC	-	250 mA	10 VA / 8 W	None	5 m
CST-220-12EX	Reed	2 wires	10 ÷ 110 V AC/DC-230 V AC	-	250 mA	10 VA / 8 W	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 / 8 W	Against polarity reversing	2 m
CST-232-5EX	Reed	3 wires	5 ÷ 30 V AC/DC	PNP	250 mA	10 VA / 8 W	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

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.