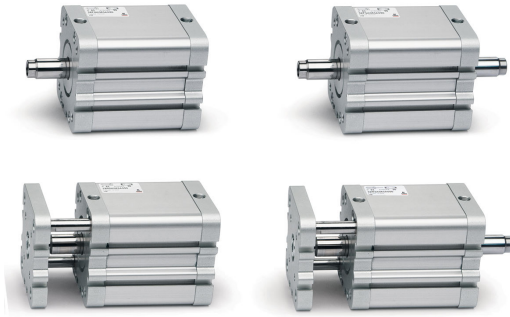


COMPACT CYLINDERS ISO 21287

SERIES 32

Single and double-acting, non-rotating, auto-cushioned
 ø 12, 16, 20, 25, 32, 40, 50, 63, 80, 100, 125 mm



- In compliance with ISO 21287
- Compact design
- Wide range of models available in different diameters
- Auto-cushioned version available

Series 32 cylinders, thanks to their compactness, are suitable for installation in confined spaces.

Being in compliance with the ISO 21287 Standard, the cylinders Series 32 can be used in conjunction with mountings/accessories suitable with ISO 15552 standard.

GENERAL DATA

Construction	Compact profile
Operation	Single and double acting, magnetic
Design	ISO 21287
Materials	Anodized AL body and end-blocks - rolled stainless steel AISI 303 rod Anodized AL piston - rod seal, end-block OR and piston seal in PU High temperatures: rod seal, OR end-block and piston in FKM (140°)
Mounting	With threaded holes on the end blocks Flange - feet - trunnion
Stroke min and max (*)	Ø12-16 = 5-200 mm Ø20-25 = 5-300 mm Ø32-40-50-63 = 5-400 mm Ø80-100-125 = 5-500 mm
Operating temperature	0°C ÷ 80°C (with dry air -20°C)
Operating pressure	1 ÷ 10 bar (double-acting) 2 ÷ 10 bar (single-acting)
Fluid	Clean air without lubrication. If lubricated air is used it is recommended to use oil ISOVG32. Once applied the lubrication should never be interrupted.
Operation speed	10 ÷ 700mm/sec. (without load)

(*) the minimum stroke for the use of the sensors is 10 mm.

COMPACT CYLINDERS ISO 21287
SERIES 32 - STANDARD STROKES
Standard strokes

✕ = Non-rotating ● = Double-acting, male/female rod thread;
 ■ = Single-acting, front/rear spring, male/female rod thread.

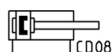
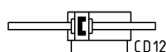
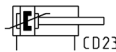
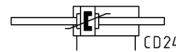
∅	5	10	15	20	25	50	100	200	300	400	500
12	● ■	● ■	● ■	● ■	● ■	●	●	●			
16	● ■	● ■	● ■	● ■	● ■	●	●	●			
20	✕ ● ■	✕ ● ■	✕ ● ■	✕ ● ■	✕ ● ■	✕ ●	✕ ●	✕ ●	✕ ●		
25	✕ ● ■	✕ ● ■	✕ ● ■	✕ ● ■	✕ ● ■	✕ ●	✕ ●	✕ ●	✕ ●		
32	✕ ● ■	✕ ● ■	✕ ● ■	✕ ● ■	✕ ● ■	✕ ●	✕ ●	✕ ●	✕ ●	✕ ●	
40	✕ ● ■	✕ ● ■	✕ ● ■	✕ ● ■	✕ ● ■	✕ ●	✕ ●	✕ ●	✕ ●	✕ ●	
50	✕ ● ■	✕ ● ■	✕ ● ■	✕ ● ■	✕ ● ■	✕ ●	✕ ●	✕ ●	✕ ●	✕ ●	
63	✕ ● ■	✕ ● ■	✕ ● ■	✕ ● ■	✕ ● ■	✕ ●	✕ ●	✕ ●	✕ ●	✕ ●	
80	✕ ● ■	✕ ● ■	✕ ● ■	✕ ● ■	✕ ● ■	✕ ●	✕ ●	✕ ●	✕ ●	✕ ●	●
100	✕ ● ■	✕ ● ■	✕ ● ■	✕ ● ■	✕ ● ■	✕ ●	✕ ●	✕ ●	✕ ●	✕ ●	●
125	● ■	● ■	● ■	● ■	● ■	●	●	●	●	●	●

CODING EXAMPLE

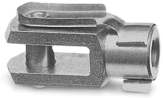
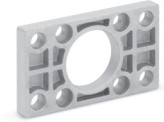
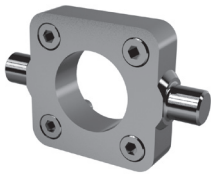
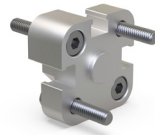
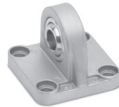
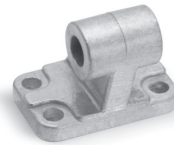
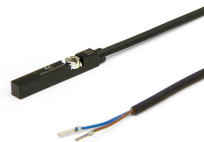
32	M	2	A	032	A	050
32	SERIES					
M	VERSION M = male rod thread, mounted with rod nut Mod. U F = female rod thread R = antirotation with flange (from ∅20 to ∅100; no single-acting) CM = auto-cushioned with male rod thread, mounted with rod nut Mod. U (from ∅32 to ∅100) CF = auto-cushioned with female rod thread (from ∅32 to ∅100)					
2	OPERATION 1 = single-acting, front spring (Only for version M and F) 2 = double-acting 3 = double-acting, through-rod 4 = single-acting, rear spring (Only for version M and F)			PNEUMATIC SYMBOLS CS06 CD08 (Only for version M, F and R) - CD23 (Only for version CM and CF) CD12 (Only for version M, F and R) - CD24 (Only for version CM and CF) CS08		
A	MATERIALS A = anodized aluminium body, end blocks and piston, PU seals (rod, end-blocks OR and piston)					
032	BORES 012 = 12 mm 016 = 16 mm 020 = 20 mm 025 = 25 mm 032 = 32 mm 040 = 40 mm			050 = 50 mm 063 = 63 mm 080 = 80 mm 100 = 100 mm 125 = 125 mm		
A	CONSTRUCTION A = standard					
050	STROKE (see the table)					
	VARIANTS = standard V = FKM rod seal W = high temperatures (up to 140°C) non-magnetic (only for version M and F) (___) = stem longer than ___ mm					

Pneumatic symbols

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

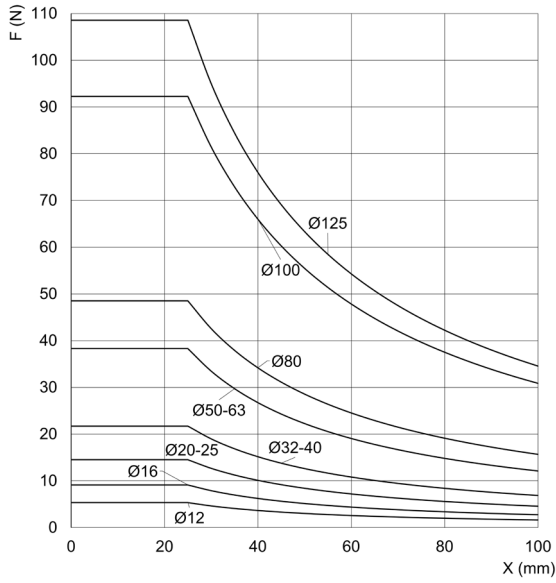
CD08

CD12

CD23

CD24

CS06

CS08


Rod fork end Mod. G**Piston rod socket joint Mod. GY****Self aligning rod Mod. GK****Coupling piece Mod. GKF****Front flange Mod. D-E****Front/rear spot faced trunnion Mod. FN****Foot mount Mod. B-41****Opposed cylinder coupler Mod. DC-32****Front female trunnion Mod. H and C-H****Rear female trunnion Mod. C and C-H****Rear trunnion male Mod. L****Rear trunnion ball-joint Mod. R****90° male trunnion Mod. ZC****Swivel Combination Mod. C+L+S****Rear trunnion bracket Mod. I****Clevis pin Mod. S****Centring sleeve Mod. TR****Centring pin Mod. TS****Proximity switches Mod. CST****Proximity switches Mod. CSH****Piston rod lock nut Mod. U****Proximity switches Mod. CSG**

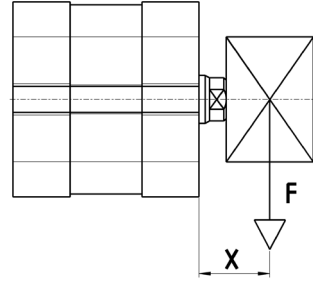
All accessories are supplied separately.

Applicable loads

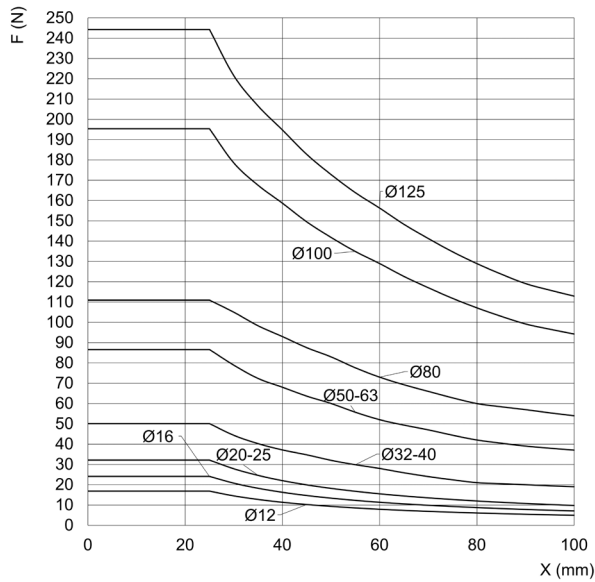


Version M, F
Operating 1, 2, 4 (see coding example)

F = Transversal load
X = Dependant on stroke

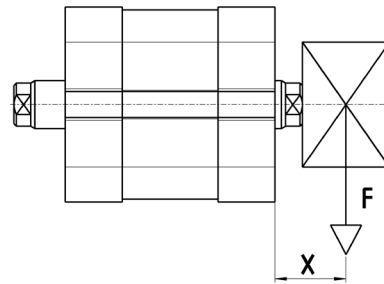


Applicable loads

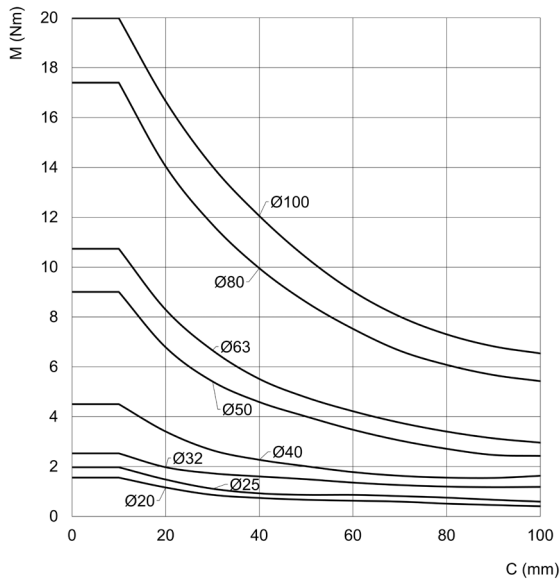


Version M, F
Operating 3 (see coding example)

F = Transversal load
X = Dependant on stroke

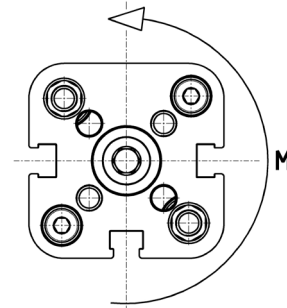


Applicable loads

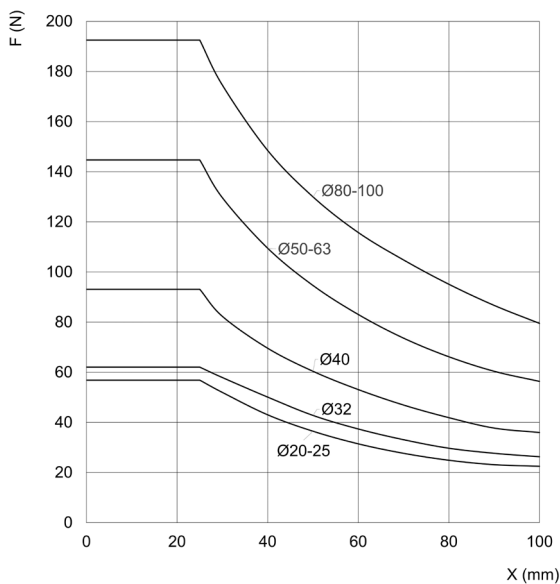


Version R
 Operating 2 (See coding example)

M = Torque moment
 C = Dependant on stroke

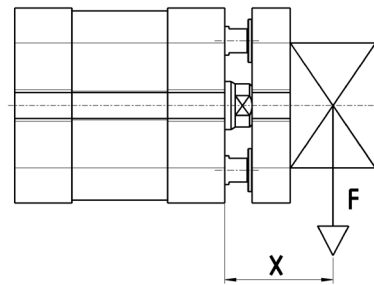


Applicable loads

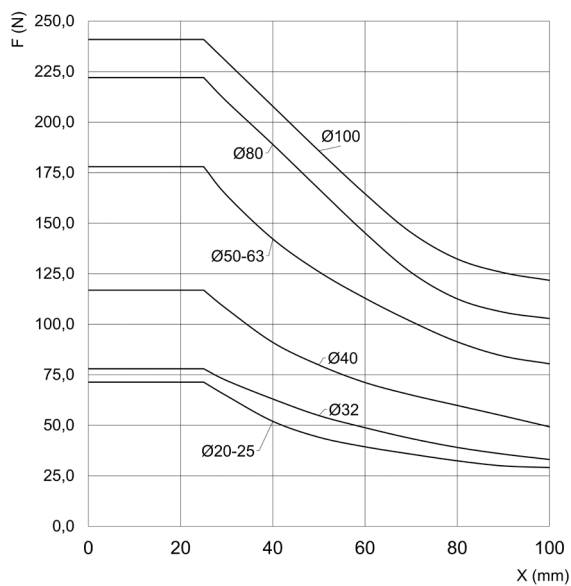


Version R
 Operating 2 (see coding example)

F = Transversal load
 X = Dependant on stroke

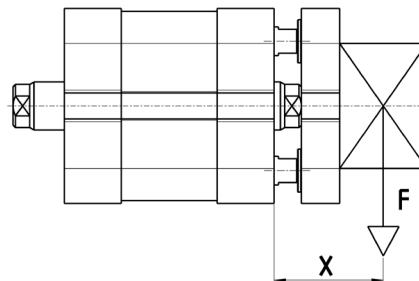


Applicable loads

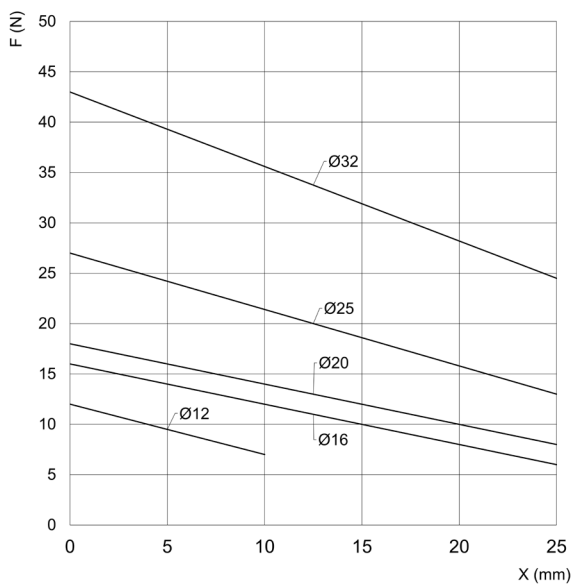


Version R
 Operating 3 (see coding example)

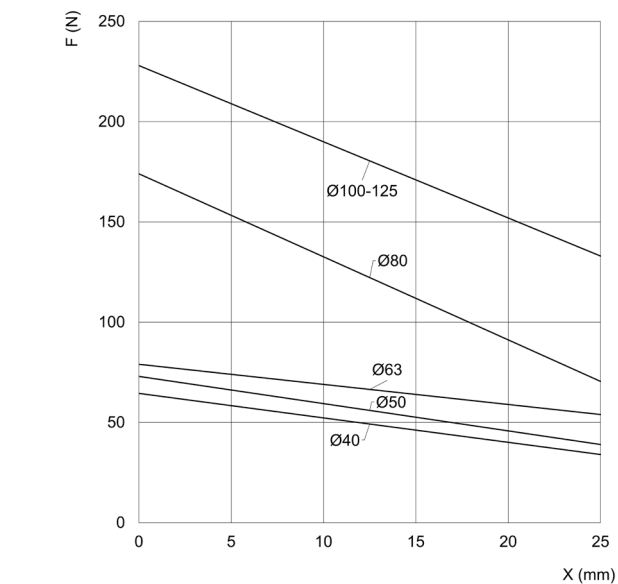
F = Transversal load
 X = Dependant on stroke



Spring force single-acting cylinders



F = Force of spring
 X = Stroke function



F = Force of spring
 X = Stroke function

SERIES 32 AUTO-CUSHIONED: APPLICABLE MASS ACCORDING TO THE CYLINDER'S SPEED

CHOICE OF THE AUTO-CUSHIONED CYLINDER

- 1) Choose the size according to the force needed in the application
- 2) Check on the graph* if the working conditions - mass and speed - intersect at a point below the curve that corresponds to the size chosen

m = mass applied to the cylinder (kg)

v = speed of the cylinder (mm/s)

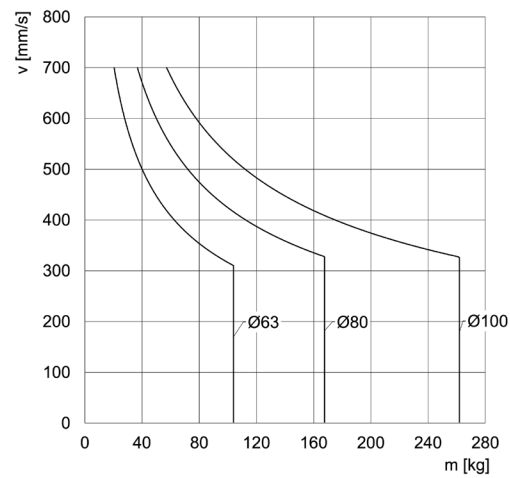
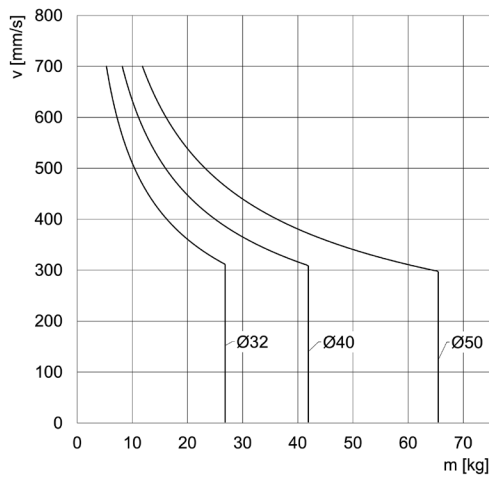
Example:

Diameter = 50 mm;

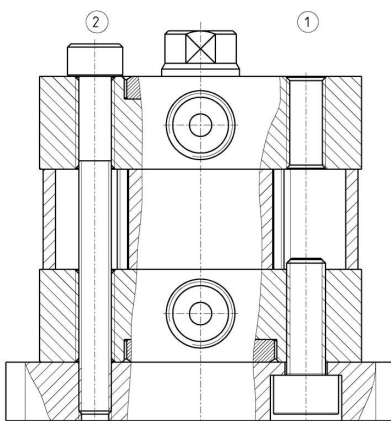
Speed = 340 mm/s;

Max applicable mass = 50kg;

*Graphs obtained at a pressure of 5 bar.



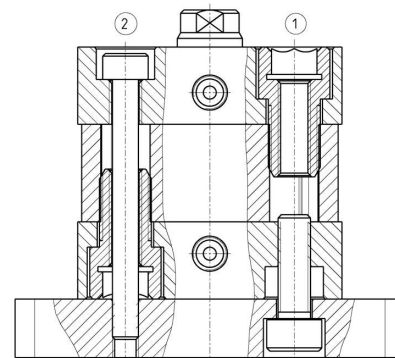
Mounting example



Mounting example for mounting cylinders Ø 32; 40; 50; 63; 80; 100; 125.

- 1 = Rear mounting
- 2 = Through mounting

N.B. For through mounting with screws through the cylinder it is recommended to use screws made from non-magnetic material. Cylinder Ø 125 has rear mounting (1) only.



Mounting example for mounting cylinders Ø 12 - 16 - 20 - 25.

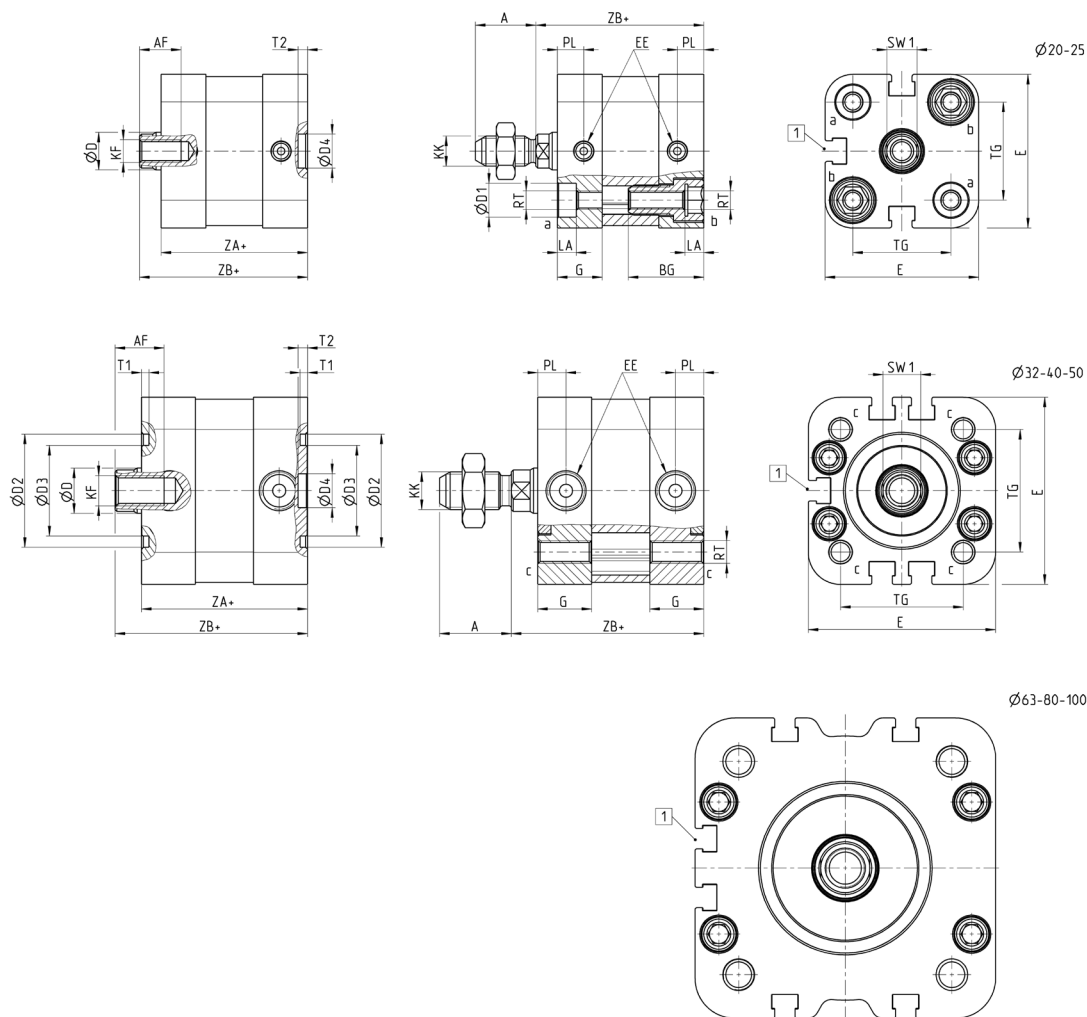
- 1 = Rear mounting
- 2 = Through mounting

N.B. For through mounting with screws through the cylinder it is recommended to use screws made from non-magnetic material.

Compact magnetic cylinders Mod. 32F and 32M

PNEUMATIC ACTUATION

1



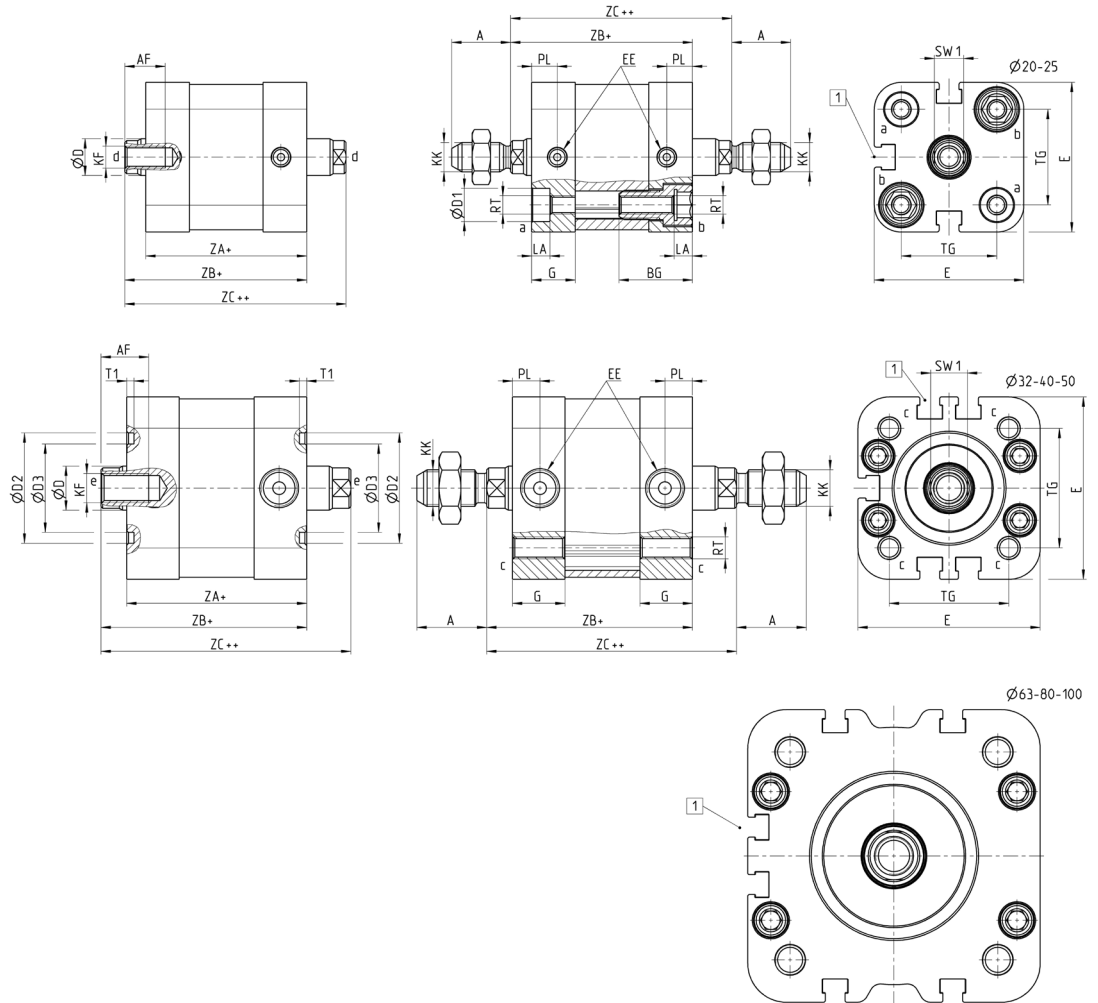
+ = add the stroke
1 = groove for sensor

Ø	A	AF	BG	G	gD	gD1	gD2	gD3	gD4	E	EE	KF	KK	LA	PL	RT	SW1	T1	T2	TG	ZA +	ZB +
12	10	8	18	10,5	6	6	-	-	9	27,5	M5	M3	M5	3,5	6	M4	5	-	2,1	16	35	39,2
16	12	10	18,5	10,5	8	6	-	-	9	29	M5	M4	M6	3,5	6	M4	7	-	2,1	18	35	39,7
20	16	11	20	10,9	10	9	-	-	9	35,8	M5	M6	M8	5	6,5	M5	8	-	2,5	22	36,8	42,5
25	16	11	20	11,9	10	9	-	-	9	40,7	M5	M6	M8	5	7	M5	8	-	2,5	26	38,8	44,5
32	19	13	-	14,3	12	-	30	24	9	49,6	G1/8	M8	M10x1,25	-	7,6	M6	10	2	2,5	32,5	44	51
40	19	13	-	14,3	12	-	35	29	9	57	G1/8	M8	M10x1,25	-	7,6	M6	10	2	2,5	38	45	52
50	22	16	-	14,3	16	-	40	34	12	69,6	G1/8	M10	M12x1,25	-	7,6	M8	13	2	3	46,5	45	53
63	22	16	-	14	16	-	45	39	12	79,6	G1/8	M10	M12x1,25	-	7,6	M8	13	2	3	56,5	49	57
80	28	20	-	14,8	20	-	45	39	12	95,6	G1/8	M12	M16x1,5	-	7,7	M10	17	2	3	72	54	63,5
100	28	20	-	17,8	25	-	55	49	12	115,6	G1/8	M12	M16x1,5	-	8	M10	22	2	3	89	66,8	76,5
125	40	25	20	20	25	-	60	50	12	134,6	G1/4	M16	M20x1,5	-	10,5	M12	22	4	2,5	110	81	92

Compact magnetic cylinders Mod. 32F3 and 32M3

PNEUMATIC ACTUATION

1



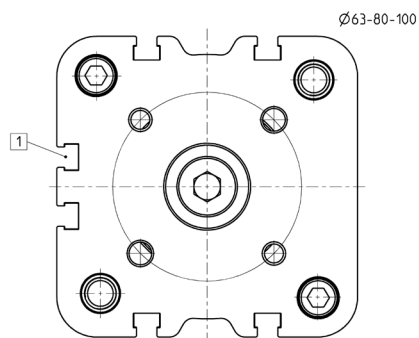
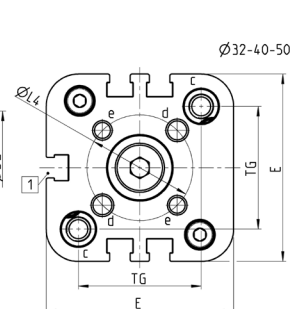
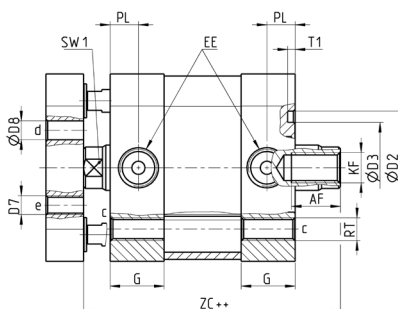
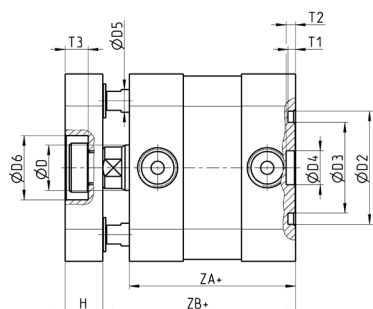
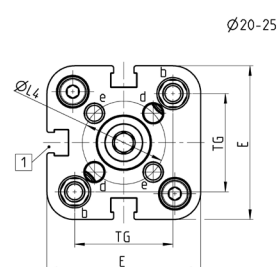
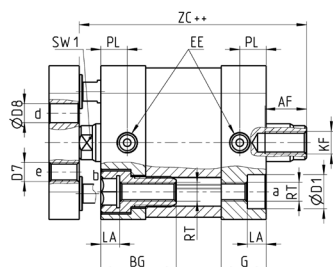
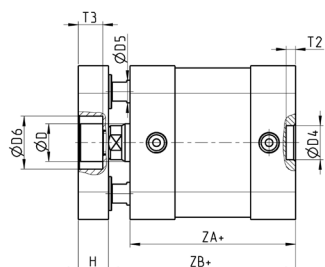
+ = add the stroke once
 ++ = add the stroke twice
 1 = groove for sensor

Ø	A	AF	BG	G	øD	øD1	øD2	øD3	E	EE	KF	KK	LA	PL	RT	SW1	T1	TG	ZA+	ZB+	ZC++
12	10	8	18	10,5	6	6	-	-	27,5	M5	M3	M5	3,5	6	M4	5	-	16	35	39,2	43,4
16	12	10	18,5	10,5	8	6	-	-	29	M5	M4	M6	3,5	6	M4	7	-	18	35	39,7	44,4
20	16	11	20	10,9	10	9	-	-	35,8	M5	M6	M8	5	6,5	M5	8	-	22	36,8	42,5	48,2
25	16	11	20	11,9	10	9	-	-	40,7	M5	M6	M8	5	7	M5	8	-	26	38,8	44,5	50,2
32	19	13	-	14,3	12	-	30	24	49,6	G1/8	M8	M10x1,25	-	7,6	M6	10	2	32,5	44	51	58
40	19	13	-	14,3	12	-	35	29	57	G1/8	M8	M10x1,25	-	7,6	M6	10	2	38	45	52	59
50	22	16	-	14,3	16	-	40	34	69,6	G1/8	M10	M12x1,25	-	7,6	M8	13	2	46,5	45	53	61
63	22	16	-	14	16	-	45	39	79,6	G1/8	M10	M12x1,25	-	7,6	M8	13	2	56,5	49	57	65
80	28	20	-	14,8	20	-	45	39	95,6	G1/8	M12	M16x1,5	-	7,7	M10	17	2	72	54	63,5	73
100	28	20	-	17,8	25	-	55	49	115,6	G1/8	M12	M16x1,5	-	8	M10	22	2	89	66,8	76,5	86,2
125	40	25	20	20	25	-	60	50	134,6	G1/4	M16	M20x1,5	-	10,5	M12	22	4	110	81	92	103

Compact magnetic cylinders Mod. 32R

PNEUMATIC ACTUATION

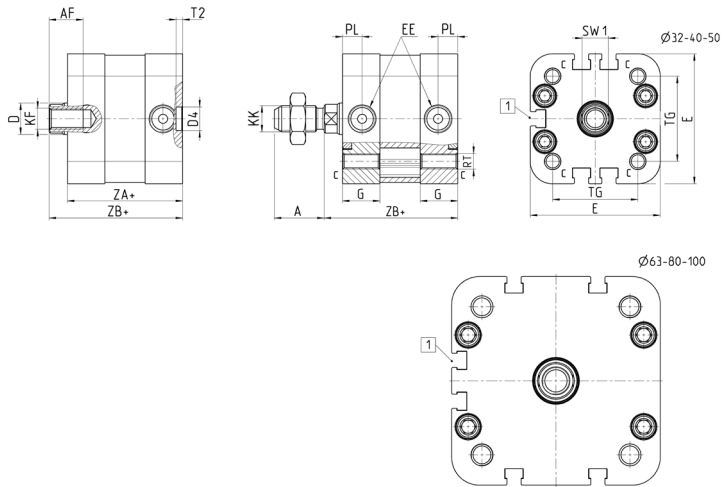
1



+ = add the stroke once
 ++ = add the stroke twice
 1 = groove for sensor

Ø	AF	BG	G	ø _D	ø _{D1}	ø _{D2}	ø _{D3}	ø _{D4}	ø _{D5}	ø _{D6}	D7	ø _{D8}	E	EE	H	KF	LA	ø _{L4}	PL	RT	SW1	T1	T2	T3	TG	ZA+	ZB+	ZC++
20	11	20	10,9	10	9	-	-	9	6	-	M4	4	35,8	M5	8	M6	5	17	6.5	M5	8	-	2.5	-	22	36.8	42.5	48.2
25	11	20	11,9	10	9	-	-	9	6	14	M5	5	40,7	M5	8	M6	5	22	7	M5	8	-	2.5	6.5	26	38.8	44.5	50.2
32	13	-	14,3	12	-	30	24	9	6	17	M5	5	49,6	G1/8	10	M8	-	28	7.6	M6	10	2	2.5	6	32.5	44	51	58
40	13	-	14,3	12	-	35	29	9	6	17	M5	5	57	G1/8	10	M8	-	33	7.6	M6	10	2	2.5	6	38	45	52	59
50	16	-	14,3	16	-	40	34	12	10	22	M6	6	69,6	G1/8	12	M10	-	42	7.6	M8	13	2	3	7	46.5	45	53	61
63	16	-	14	16	-	45	39	12	10	22	M6	6	79,6	G1/8	12	M10	-	50	7.6	M8	13	2	3	7	56.5	49	57	65
80	20	-	14,8	20	-	45	39	12	12	24	M8	8	95,6	G1/8	14	M12	-	65	7.7	M10	17	2	3	10.5	72	54	63.5	73
100	20	-	18	25	-	55	49	12	12	24	M10	10	115,6	G1/8	14	M12	-	80	8	M10	22	2	3	10.5	89	67	76.7	86.2

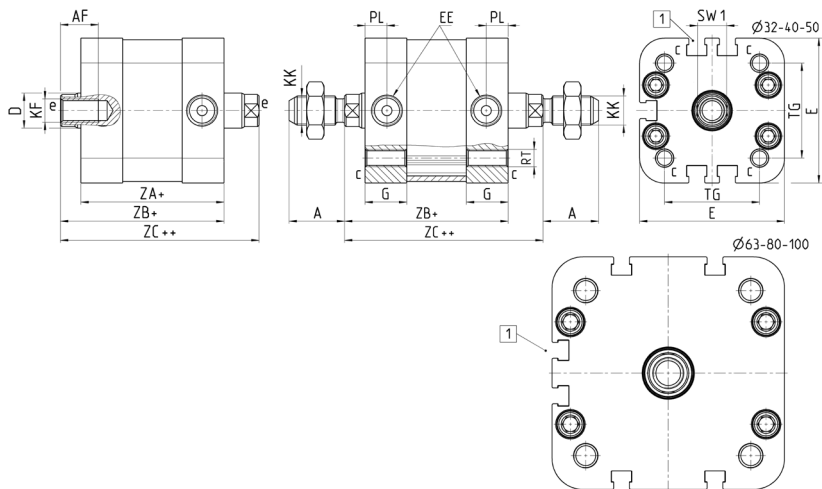
Compact magnetic cylinders Mod. 32CF and 32CM



+ = add the stroke once
1 = groove for sensor

∅	A	AF	G	\varnothing_D	\varnothing_{D4}	E	EE	KF	KK	PL	RT	SW1	T2	TG	ZA +	ZB +
32	19	13	14,3	12	9	49,6	G1/8	M8	M10x1,25	7,6	M6	10	2,5	32,5	44	51
40	19	13	14,3	12	12	57	G1/8	M8	M10x1,25	7,6	M6	10	2,5	38	45	52
50	22	16	14,3	16	12	69,6	G1/8	M10	M12x1,25	7,6	M8	13	3	46,5	45	53
63	22	16	14	16	12	79,6	G1/8	M10	M12x1,25	7,6	M8	13	3	56,5	49	57
80	28	20	14,8	20	12	95,6	G1/8	M12	M16x1,5	7,7	M10	17	3	72	54	63,5
100	28	20	17,8	25	12	115,6	G1/8	M12	M16x1,5	8	M10	22	3	89	66,8	76,5

Compact magnetic cylinders Mod. 32CF3 and 32CM3



+ = add the stroke once
++ = add the stroke twice
1 = groove for sensor

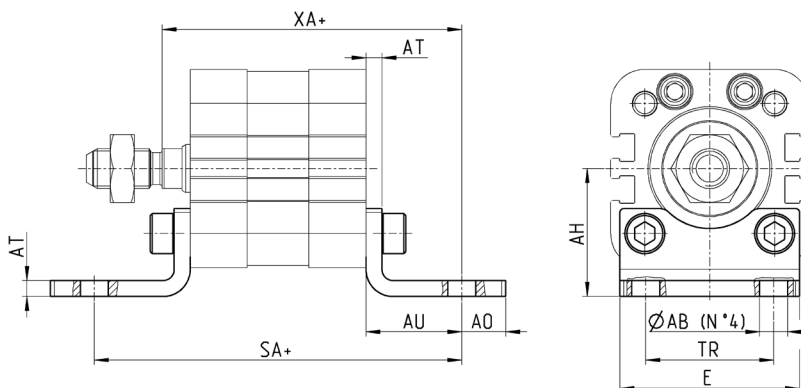
∅	A	AF	G	\varnothing_D	\varnothing_{D2}	\varnothing_{D3}	E	EE	KF	KK	PL	RT	SW1	T1	TG	ZA +	ZB +	ZC++
32	19	13	14,3	12	30	24	49,6	G1/8	M8	M10x1,25	7,6	M6	10	2	32,5	44	51	58
40	19	13	14,3	12	35	29	57	G1/8	M8	M10x1,25	7,6	M6	10	2	38	45	52	59
50	22	16	14,3	16	40	34	69,6	G1/8	M10	M12x1,25	7,6	M8	13	2	46,5	45	53	61
63	22	16	14	16	45	39	79,6	G1/8	M10	M12x1,25	7,6	M8	13	2	56,5	49	57	65
80	28	20	14,8	20	45	39	95,6	G1/8	M12	M16x1,5	7,7	M10	17	2	72	54	63,5	73
100	28	20	17,8	25	55	49	115,6	G1/8	M12	M16x1,5	8	M10	17	2	89	66,8	76,5	86,2

COMPACT CYLINDERS ISO 21287
SERIES 32 - ACCESSORIES
Foot mount Mod. B

PNEUMATIC ACTUATION

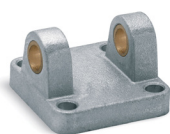
1

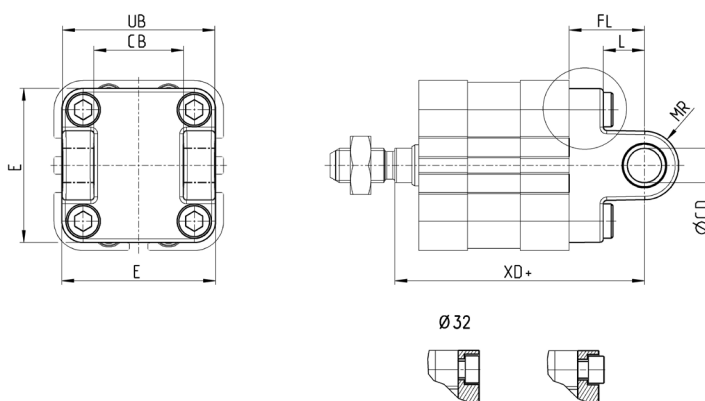
 Material:
 zinc plated steel

 Supplied with:
 2x feet mount
 4x screws


+ = add the stroke

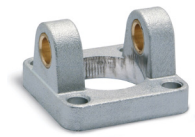
Mod.	Ø	ø _{AB}	AH	AO	AU	AT	E	TR	SA +	XA+
B-32-12	12	5,5	21	5	13	3	26	16	61	52,2
B-31-12-16	16	5,5	22	7	13	3	28	18	61	52,7
B-32-20	20	6,5	27	9	16	4	35	22	68,8	58,5
B-31-25	25	6,5	29	9	16	4	39	26	70,8	60,5
B-41-32	32	7	32	11	24	4	45	32	92	75
B-41-40	40	10	36	15	28	4	53,5	36	101	80
B-41-50	50	10	45	15	32	4	62,5	45	109	85
B-41-63	63	10	50	15	32	5	73	50	113	89
B-41-80	80	12	63	20	41	6	92	63	136	104,5
B-41-100	100	14,5	71	25	41	6	108,5	71	148,8	117,5
B-32-125	125	16,5	90	25	45	7	132	90	171	137

Rear female trunnion Mod. C

 Material:
 aluminium

 Supplied with:
 1x female trunnion
 4x screws


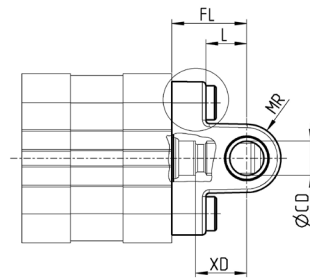
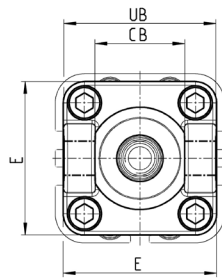
Mod.	Ø	ø _{CD}	E	CB	UB	L	FL	MR	XD+
C-41-32	32	10	47	26	46,5	12,5	22	10	73
C-41-40	40	12	52	28	52	16	25	12	77
C-41-50	50	12	64	32	60	16	27	12	80
C-H-41-63	63	16	74	40	70	21	32	16	89
C-H-41-80	80	16	94	50	90	22	36	16	99,5
C-H-41-100	100	20	114	60	110	27	41	20	117,5
C-H-32-125	125	25	140	70	130	30	50	25	142

Front female trunnion Mod. H



Material:
aluminium

Supplied with:
1x female trunnion
4x screws

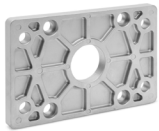


Ø 32



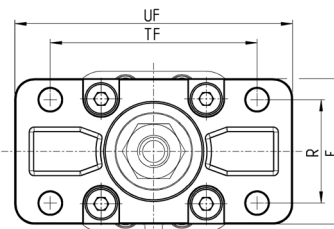
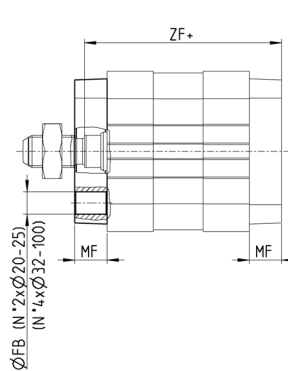
Mod.	Ø	ØCD	E	CB	UB	L	FL	MR	XD+
H-41-32	32	10	47	26	46,5	12,5	22	10	15
H-41-40	40	12	52	28	52	16	25	12	18
H-41-50	50	12	64	32	60	21	27	12	19
H-60-63	63	16	74	40	70	21	32	16	24
C-H-41-80	80	16	94	50	90	22	36	16	26,5
C-H-41-100	100	20	114	60	110	27	41	20	31,3
C-H-32-125	125	25	140	70	130	30	50	25	41

Front flange Mod. D-E



Material:
zinc-plated steel for Ø
16 - Ø 25;
aluminium for Ø 32 ÷ Ø 125;

Supplied with:
1x flange
4x screws

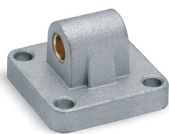


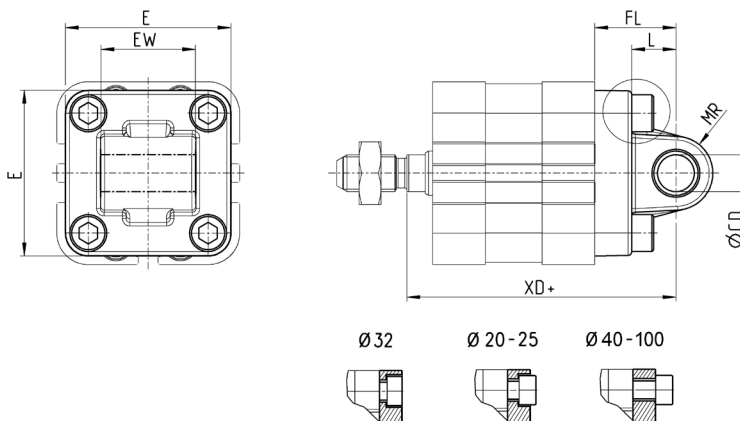
+ = add the stroke

Mod.	Ø	ØFB	E	MF	R	TF	UF	ZF+
D-E-31-12-16	16	5,5	29	10	-	43	55	49,7
D-E-32-20	20	6,6	36	10	-	55	70	52,5
D-E-32-25	25	6,6	40	10	-	60	76	54,5
D-E-41-32	32	7	45	10	32	64	80	61
D-E-41-40	40	9	52	10	36	72	90	62
D-E-41-50	50	9	65	12	45	90	110	65
D-E-41-63	63	9	75	12	50	100	120	69
D-E-41-80	80	12	95	16	63	126	150	79,5
D-E-41-100	100	14	115	16	75	150	170	92,5
D-E-41-125	125	16	140	20	90	180	220	112

COMPACT CYLINDERS ISO 21287
SERIES 32 - ACCESSORIES
Rear male trunnion Mod. L

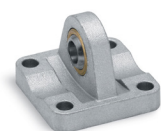
PNEUMATIC ACTUATION

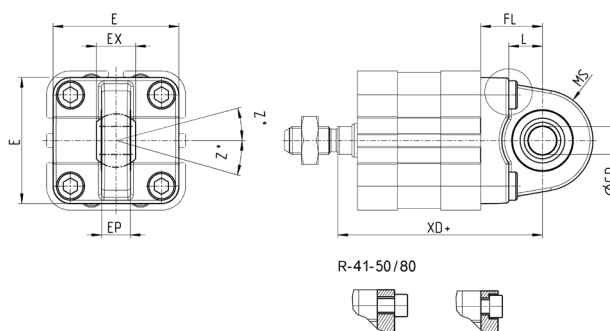
1

 Material:
 aluminium

 Supplied with:
 4x screws
 1x male trunnion
 1x centering pin


+ = add the stroke

Mod.	Ø	Ø _{CD}	E	EW	L	FL	MR	XD +
L-31-12-16	16	6	30	12	10	16	6	55,7
L-32-20	20	8	34	16	14	20	8	62,5
L-32-25	25	8	38	16	14	20	8	64,5
L-41-32	32	10	47	26	12,5	22	10	73
L-41-40	40	12	52	28	16	25	12	77
L-41-50	50	16	64	32	16	27	12	80
L-41-63	63	16	74	40	21	32	15,5	89
L-41-80	80	20	94	50	22	36	16	99,5
L-41-100	100	20	114	60	27	41	20	117,5
L-32-125	125	25	140	70	30	50	25	142

Trunnion ball-joint Mod. R

 Material:
 aluminium

 Supplied with:
 1x trunnion ball joint
 4x screws


+ = add the stroke

Mod.	Ø	Ø _{CD}	E	EX	EP	L	FL	MS	XD+	Z°
R-41-32	32	10	45	14	10,5	12	22	16	73	4
R-41-40	40	12	52	16	12	15	25	19	77	4
R-41-50*	50	12	62,5	16	12	15	27	21	80	4
R-50	50	16	65	21	15	16	27	21,5	80	4
R-41-63	63	16	75	21	15	20	32	24	89	4
R-41-80*	80	16	92	21	15	24	36	28	99,5	4
R-80	80	20	95	25	18	22	36	28,5	99,5	4
R-41-100	100	20	115	25	18	27	41	30	117,5	4
R-41-125	125	30	140	37	25	30	50	40	142	4

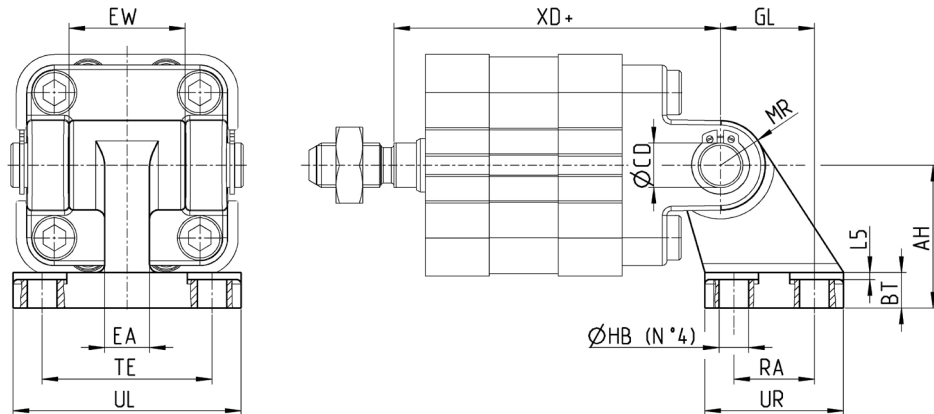
90° male trunnion Mod. ZC



CETOP RP 107P

Material:
aluminium

Supplied with:
1x male support



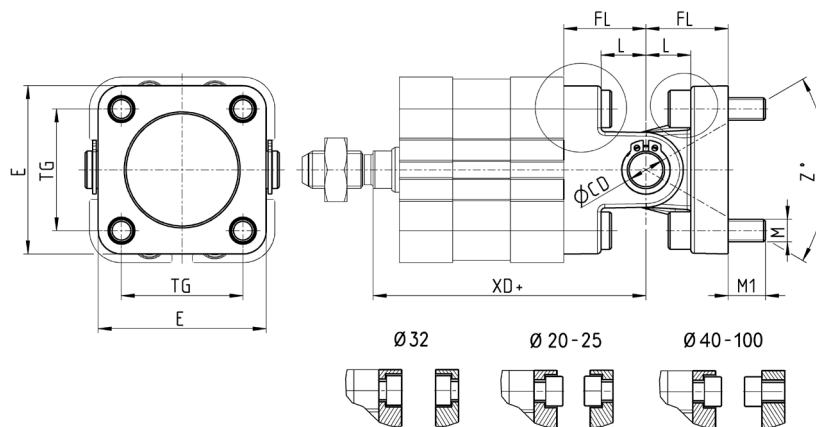
+ = add the stroke

Mod.	Ø	AH	BT	ØCD	EA	EW	GL	ØHB	L5	MR	RA	UL	UR	TE	XD+
ZC-32	32	32	8	10	10	26	21	6,6	1,6	10	18	51	31	38	73
ZC-40	40	36	10	12	15	28	24	6,6	1,6	11	22	54	35	41	77
ZC-50	50	45	12	12	16	32	33	9	1,6	13	30	65	45	50	80
ZC-63	63	50	14	16	16	40	37	9	1,6	15	35	67	50	52	89
ZC-80	80	63	14	16	20	50	47	11	2,5	15	40	86	60	66	99,5
ZC-100	100	71	17	20	20	60	55	11	2,5	19	50	96	70	76	117,5
ZC-125	125	90	20	25	30	70	70	14	3,2	22,5	60	124	90	94	142

Accessory combination Mod. C+L+S



Material:
aluminium



+ = add the stroke

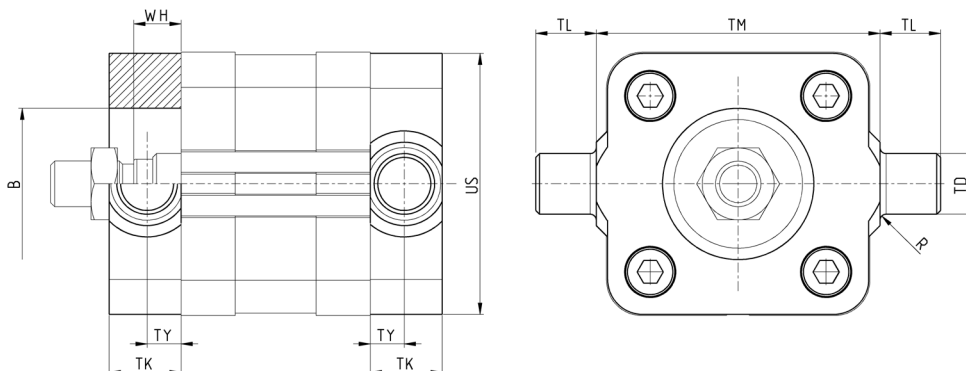
Mod.	Ø	ØCD	E	L	FL	M	M1	TG	XD +	Z° (max)
C+L+S	32	10	47	12,5	22	M6	10,5	32,5	73	30
C+L+S	40	12	52	16	25	M6	10,5	38	77	40
C+L+S	50	12	64	16	27	M8	11,5	46,5	80	25
C+L+S	63	16	74	21	32	M8	13,5	56,5	89	36
C+L+S	80	16	93	22	36	M10	15	72	99,5	34
C+L+S	100	20	114	27	41	M10	15	89	117,5	38
C+L+S	125	30	140	30	50	M12	15	110	142	30

COMPACT CYLINDERS ISO 21287
SERIES 32 - ACCESSORIES
Front spot faced trunnion Mod. FN

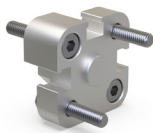
PNEUMATIC ACTUATION

1

 Material:
 zinc-plated steel

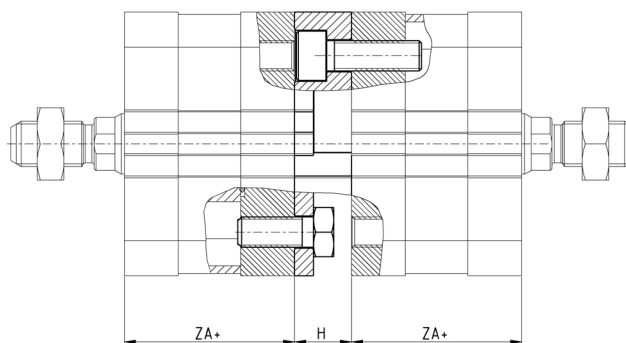
 Supplied with:
 1x spot faced trunnion
 4x screws


Mod.	∅	TK	TY	WH	∅B	US	TL	TM	∅TD	R
FN-32	32	14	6,5	7	30	46	12	50	12	1
FN-40	40	19	9	7	35	59	16	63	16	1,5
FN-50	50	19	9	8	40	69	16	75	16	1,6
FN-63	63	24	11,5	8	45	84	20	90	20	1,6
FN-80	80	24	11,5	9,5	45	102	20	110	20	1,6
FN-100	100	29	14	9,7	55	125	25	132	25	2
FN-125	125	30	15	11	60	150	25	160	25	2

Opposed cylinder coupler Mod. DC-32

 Material:
 Aluminium

 Supplied with:
 1x flange
 2x hex head screws
 2x cylindrical head screws
 2x centering rings*

*Only from ∅50 to ∅125



+ = add the stroke

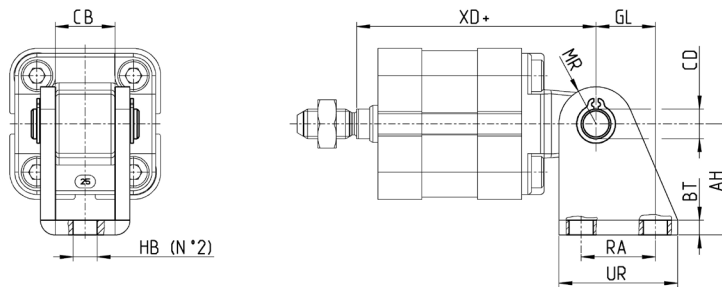
Mod.	∅	ZA+	H
DC-32-20	20	36,8	13
DC-32-25	25	38,8	13
DC-32-32	32	44	15
DC-32-40	40	45	15
DC-32-50	50	45	15
DC-32-63	63	49	15
DC-32-80	80	54	17
DC-32-100	100	66,8	19,5
DC-32-125	125	81	19,5

90° swivel combination for trunnion Mod. I



Material:
zinc-plated steel

Supplied with:
2x Seeger
1x female support
1x piston pin



+ = add the stroke

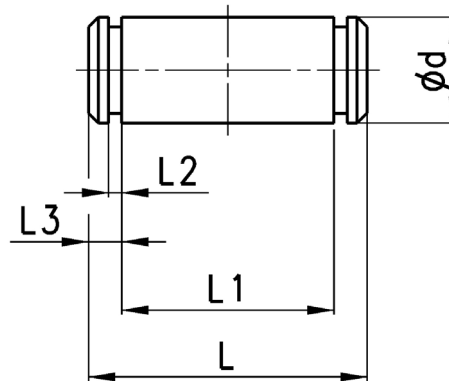
Mod.	∅	AH	BT	CD	CB	GL	HB	MR	RA	UR	XD+
I-12-16	16	27	3	6	12,1	13	5,5	7	15	25	55,7
I-20-25	20	30	4	8	16,1	16	6,5	10	20	32	62,5
I-20-25	25	30	4	8	16,1	16	6,5	10	20	32	64,5

Clevis pin Mod. S



Materials:
Stainless steel Clevis pin,
Steel Seeger

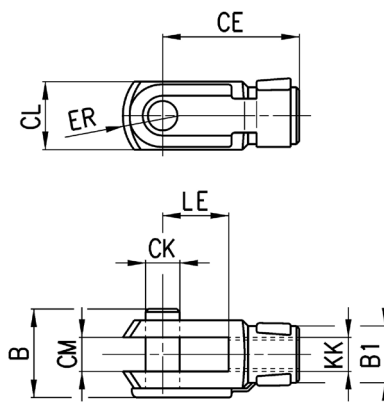
Supplied with:
1x clevis pin
2x seeger in steel



Mod.	∅	∅D	L	L1	L2	L3
S-32	32	10	52	46	1,1	3
S-40	40	12	59	53	1,1	3
S-50	50	12	67	61	1,1	3
S-63	63	16	77	71	1,1	3
S-80	80	16	97	91	1,1	3
S-100	100	20	121	111	1,3	5
S-125	125	25	140,5	132	1,3	4,25

Rod fork end Mod. G

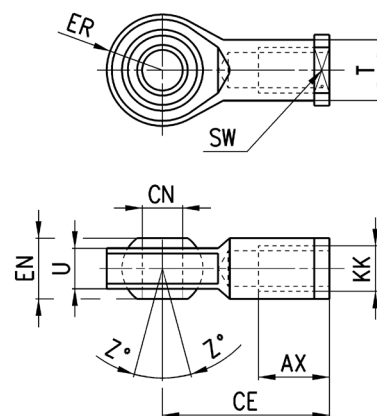

ISO 8140

 Material:
 zinc-plated steel


Mod.	∅	ϕ CK	LE	CM	CL	ER	CE	KK	B	ϕ B1
G-12-16	16	6	6	6	12	7	24	M6x1	16	10
G-20	20-25	8	8	8	16	10	32	M8x1,25	22	14
G-25-32	32-40	10	10	10	20	12	40	M10x1,25	26	18
G-40	50-63	12	12	12	24	14	48	M12x1,25	32	20
G-50-63	80-100	16	16	16	32	19	64	M16x1,5	40	26
G-80-100	125	20	20	20	40	25	80	M20x1,5	48	34

Swivel ball joint Mod. GA


ISO 8139

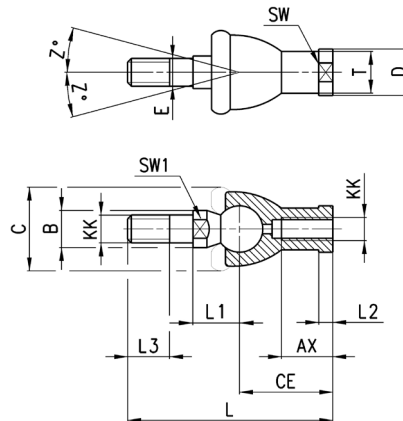
 Material:
 zinc-plated steel


Mod.	∅	ϕ CN	U	EN	ER	AX	CE	KK	ϕ T	Z	SW
GA-12-16	16	6	7	9	10	12	30	M6x1	10	6,5	11
GA-20	20-25	8	9	12	12	16	36	M8x1,25	12,5	6,5	14
GA-25-32	32-40	10	10,5	14	14	20	43	M10x1,25	15	6,5	17
GA-40	50-63	12	12	16	16	22	50	M12x1,25	17,5	6,5	19
GA-50-63	80-100	16	15	21	21	28	64	M16x1,5	22	7,5	22
GA-80-100	125	20	18	25	25	33	77	M20x1,5	27,5	7	30

Piston rod socket joint Mod. GY



ISO 8139
Material:
zama and zinc-plated steel

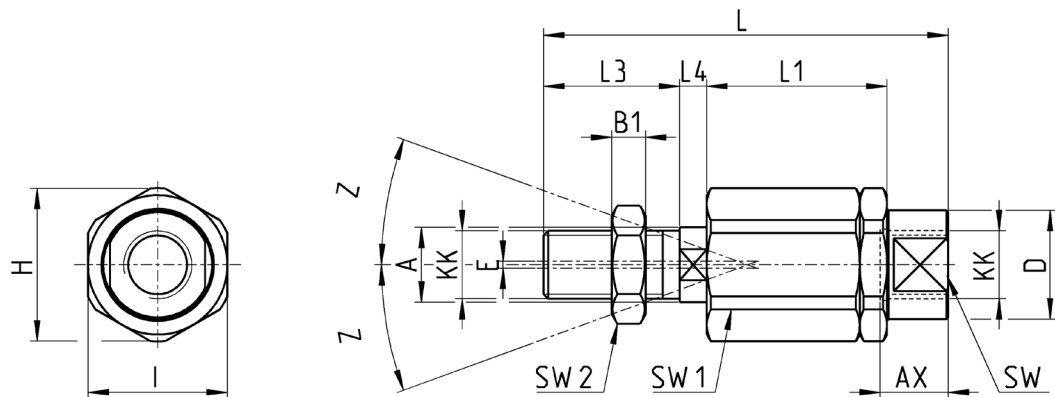


Mod.	∅	KK	L	CE	L2	AX	SW	SW1	L1	L3	T	D	E	B	C	Z
GY-12-16	16	M6x1	55	28	5	15	11	8	12,2	11	10	13	6	10	20	15
GY-20	20-25	M8x1,25	65	32	5	16	14	10	16	12	12,5	13	6	10	20	15
GY-32	32-40	M10x1,25	74	35	6,5	18	17	11	19,5	15	15	19	10	14	28	15
GY-40	50-63	M12x1,25	84	40	6,5	20	19	17	21	17	17,5	22	12	19	32	15
GY-50-63	80-100	M16x1,5	112	50	8	27	22	19	27,5	23	22	27	16	22	40	11
GY-80-100	125	M20x1,5	133	63	10	38	30	24	31,5	25	27,5	34	20	27	45	7,5

Self aligning rod Mod. GK



Material:
zinc-plated steel

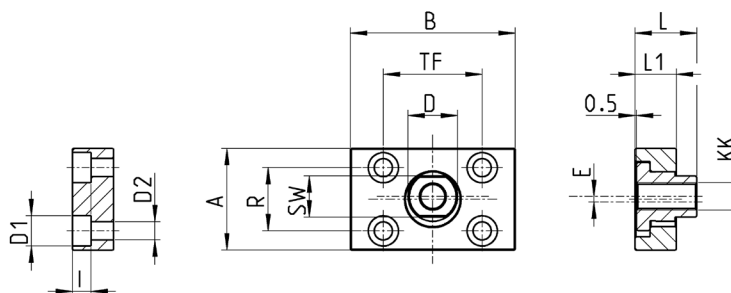


Mod.	∅	KK	L	L1	L3	L4	A	D	H	I	SW	SW1	SW2	B1	AX	Z	E
GK-12-16	16	M6x1	35	17,5	11	2,5	6	8,5	14,5	13	7	5	10	4	12,5	3	1
GK-20	20-25	M8x1,25	57	26	21	5	8	12,5	19	17	11	7	13	4	16	4	2
GK-25-32	32-40	M10x1,25	71,5	35	20	7,5	14	22	32	30	19	12	17	5	22	4	2
GK-40	50-63	M12x1,25	75,5	35	24	7,5	14	22	32	30	19	12	19	6	22	4	2
GK-50-63	80-100	M16x1,5	104	35	32	10	22	32	45	41	27	20	24	8	30	3	2
GK-80-100	125	M20x1,5	119	35	40	10	22	32	45	41	27	20	30	10	37	3	2

Coupling piece Mod. GKF

PNEUMATIC ACTUATION

1

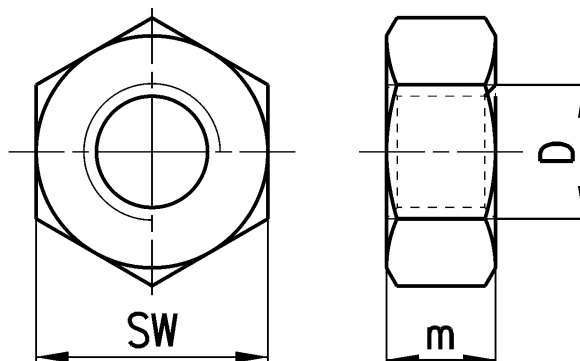
 Material:
 zinc-plated steel


Mod.	∅	KK	A	B	R	TF	L	L1	I	∅D	∅D1		SW	E
GKF-20	20-25	M8X1,25	30	35	20	25	22,5	10	-	14	5,5	-	13	1,5
GKF-25-32	32-40	M10X1,25	37	60	23	36	22,5	15	6,8	18	11	6,6	15	2
GKF-40	50-63	M12X1,25	56	60	38	42	22,5	15	9	20	15	9	15	2,5
GKF-50-63	80-100	M16X1,5	80	80	58	58	26,5	15	10,5	25	18	11	22	2,5
GKF-80-100	125	M20X1,5	90	90	65	65	32,5	20	13	30,5	20	14	27	2,5

Piston rod lock nut Mod. U



UNI EN ISO 4035

 Material:
 zinc-plated steel


Mod.	∅	D	M	SW
U-12-M5	12	M5x0,8	5	8
U-12-16	16	M6x1	4	10
U-20	20-25	M8x1,25	5	13
U-25-32	32-40	M10x1,25	6	17
U-40	50-63	M12x1,25	7	19
U-50-63	80-100	M16x1,5	8	24
U-80-100	125	M20x1,5	9	30

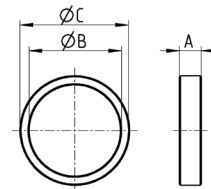
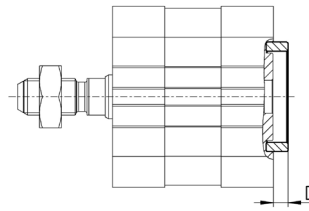
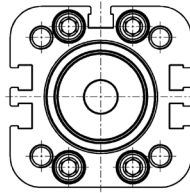
Centring sleeve Mod. TR



Supplied with:
1x anodized AL centring ring

Designed for the centring of both rear and front end caps with brackets Mod. B/D-E/C/C-H/H/L/R, as for the centring of the cylinder while mounting.

Not suitable for 32CM and 32CF versions.



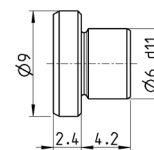
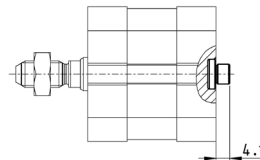
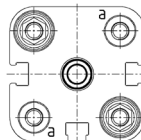
Mod.	Ø	A	B	C	D
TR-32-32	32	6	25	30	4
TR-32-40	40	6	30	35	4
TR-32-50	50	6	35	40	4
TR-32-63	63-80	7	40	45	5
TR-32-100	100	7	50	55	5

Centring pin Mod. TS



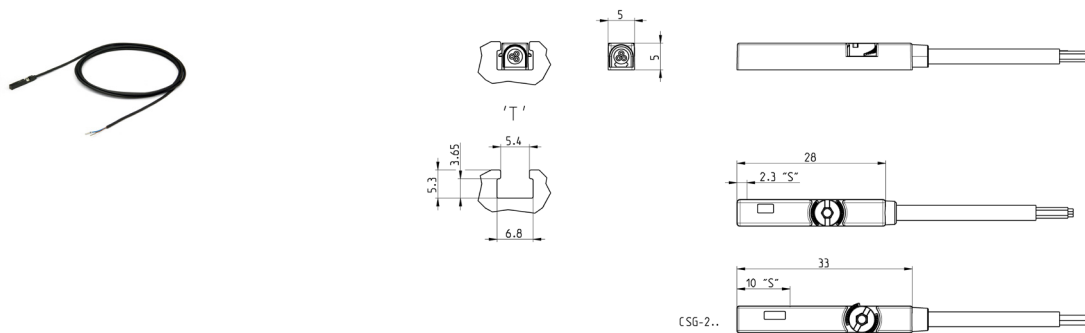
Material:
Anodized AL

Usable for size 12, 16, 20, 25, 32, 40



Mod.
TS-32-20

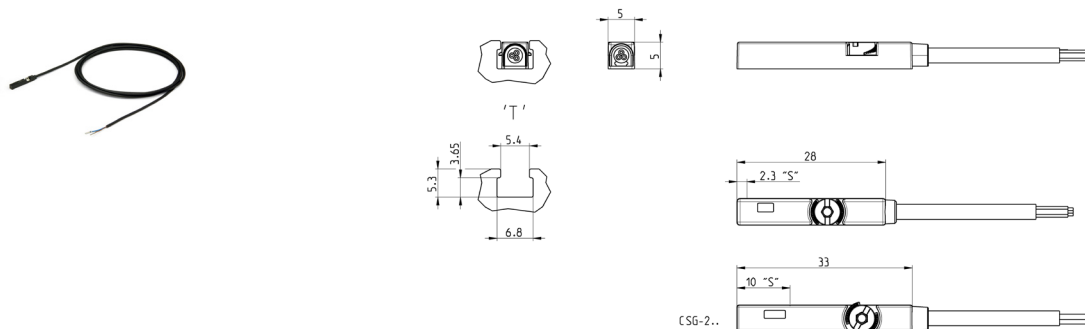
Magnetic proximity switches, ATEX "II 3 GD" certified, T-slot, straight



Mod.	Operation	Connection	Voltage	Output	Max. current	Max Load	Protection	L = cable length (m)	LED colour
CSG-223-2-EX	Reed NO	2 wires	5 ÷ 30 V AC/DC	-	100 mA	3 W	IP67	2	Red
CSG-223-5-EX	Reed NO	2 wires	5 ÷ 30 V AC/DC	-	100 mA	3 W	IP67	5	Red
CSG-233-2-EX	Reed NO	3 wires	10 ÷ 30 V AC/DC	-	500 mA	10 W	IP67	2	Yellow
CSG-233-5-EX	Reed NO	3 wires	10 ÷ 30 V AC/DC	-	500 mA	10 W	IP67	5	Yellow
CSG-324-2-EX	Magneto resistive NO	2 wires	10 ÷ 28 V DC	-	50 mA	1,5 W	IP67	2	Red
CSG-324-5-EX	Magneto resistive NO	2 wires	10 ÷ 28 V DC	-	50 mA	1,5 W	IP67	5	Red
CSG-334-2-EX	Magneto resistive NO	3 wires	10 ÷ 28 V DC	PNP	200 mA	5,5 W	IP67	2	Yellow
CSG-334-5-EX	Magneto resistive NO	3 wires	10 ÷ 28 V DC	PNP	200 mA	5,5 W	IP67	5	Yellow
CSG-534-2-EX	Magneto resistive NO	3 wires	10 ÷ 28 V DC	NPN	200 mA	5,5 W	IP67	2	Red
CSG-534-5-EX	Magneto resistive NO	3 wires	10 ÷ 28 V DC	NPN	200 mA	5,5 W	IP67	5	Red
CSG-734-2-EX	Magneto resistive NC	3 wires	10 ÷ 28 V DC	NPN	200 mA	5,5 W	IP67	2	Red
CSG-734-5-EX	Magneto resistive NC	3 wires	10 ÷ 28 V DC	NPN	200 mA	5,5 W	IP67	5	Red
CSG-634-2-EX	Magneto resistive NC	3 wires	10 ÷ 28 V DC	PNP	200 mA	5,5 W	IP67	2	Yellow
CSG-634-5-EX	Magneto resistive NC	3 wires	10 ÷ 28 V DC	PNP	200 mA	5,5 W	IP67	5	Yellow

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.

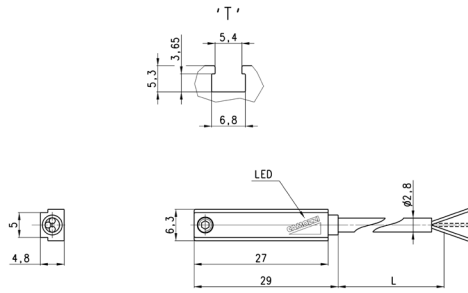
Magnetic proximity switches, UL certified, T-slot, straight



Mod.	Operation	Connection	Voltage	Output	Max. current	Max Load	Protection	L = cable length (m)	LED colour
CSG-223-2-UL	Reed	2 wires	5 ÷ 30 V AC/DC	-	60 mA	1,8 W	IP67	2	Red
CSG-223-5-UL	Reed	2 wires	5 ÷ 30 V AC/DC	-	60 mA	1,8 W	IP67	5	Red
CSG-223-10-UL	Reed	2 wires	5 ÷ 30 V AC/DC	-	60 mA	1,8 W	IP67	10	Red
CSG-233-2-UL	Reed	3 wires	10 ÷ 30 V AC/DC	-	100 mA	3 W	IP67	2	Yellow
CSG-233-5-UL	Reed	3 wires	10 ÷ 30 V AC/DC	-	100 mA	3 W	IP67	5	Yellow
CSG-233-10-UL	Reed	3 wires	10 ÷ 30 V AC/DC	-	100 mA	3 W	IP67	5	Yellow
CSG-324-2-UL	Magneto resistive	2 wires	10 ÷ 28 V DC	-	40 mA	1,2 W	IP67	2	Red
CSG-324-5-UL	Magneto resistive	2 wires	10 ÷ 28 V DC	-	40 mA	1,2 W	IP67	5	Red
CSG-334-2-UL	Magneto resistive	3 wires	10 ÷ 28 V DC	PNP	100 mA	3 W	IP67	2	Yellow
CSG-334-5-UL	Magneto resistive	3 wires	10 ÷ 28 V DC	PNP	100 mA	3 W	IP67	5	Yellow
CSG-534-2-UL	Magneto resistive	3 wires	10 ÷ 28 V DC	NPN	100 mA	3 W	IP67	2	Red
CSG-534-5-UL	Magneto resistive	3 wires	10 ÷ 28 V DC	NPN	100 mA	3 W	IP67	5	Red

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.

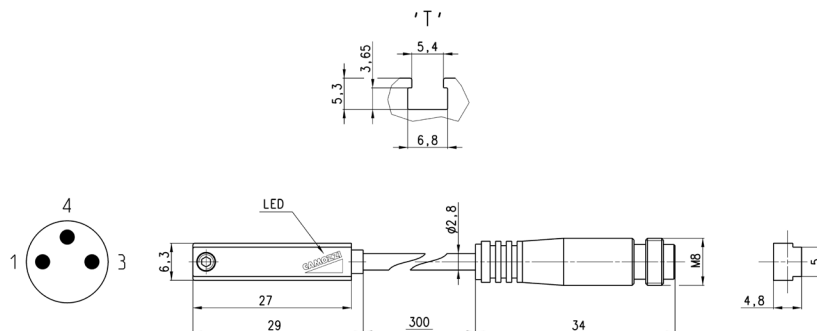
Magnetic proximity switches with 2 or 3 wire cable for T-slot



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.

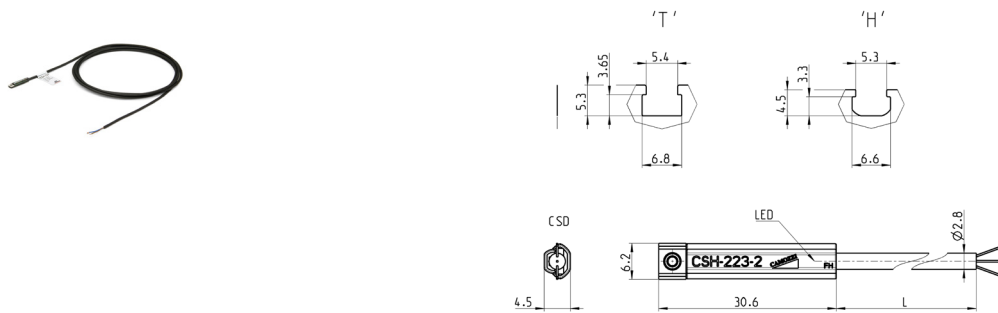
Magnetic proximity switches with M8 3-pin connector for T-slot



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

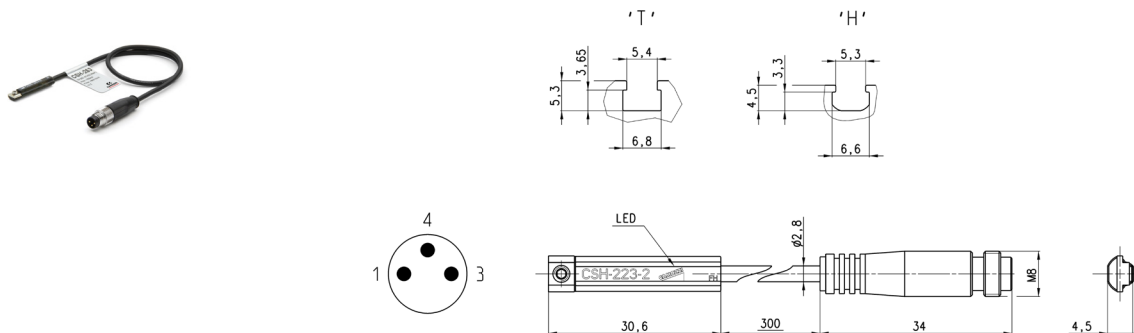
Magnetic proximity switches with 2 or 3 wire cable for H-slot



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	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

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.

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



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.