

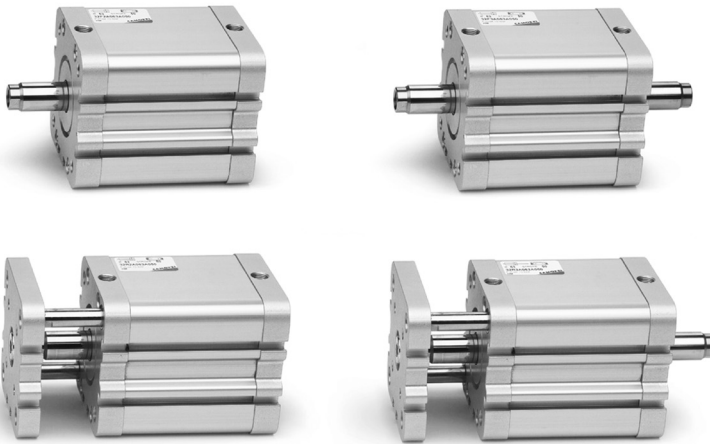
Series 32 compact magnetic cylinders

Single and double-acting, non-rotating
 \varnothing 20, 25, 32, 40, 50, 63, 80, 100 mm



1

MOVEMENT



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

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 have the advantage that they can be used in conjunction with mountings/accessories suitable for other standard cylinders DIN/ISO 6431 / VDMA 24562 (Series 60/61).

GENERAL DATA

Construction	compact profile
Operation	single and double acting, magnetic
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 (1)	Series 32F, 32M, 32R \varnothing 20-25 = 5-300 mm Series 32F, 32M, 32R \varnothing 32-40-50-63 = 5-400 mm Series 32F, 32M, 32R \varnothing 80-100 = 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 + 1000mm/sec. (without load)

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

STANDARD STROKES FOR CYLINDERS SERIES 32

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

STANDARD STROKES

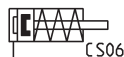
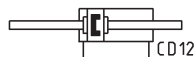
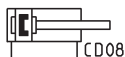
Ø	5	10	15	20	25	30	40	50	60	80
20	✕●■	✕●■	✕●■	✕●■	✕●■	✕●	✕●	✕●		
25	✕●■	✕●■	✕●■	✕●■	✕●■	✕●	✕●	✕●		
32	✕●■	✕●■	✕●■	✕●■	✕●■	✕●	✕●	✕●	✕●	✕●
40	✕●■	✕●■	✕●■	✕●■	✕●■	✕●	✕●	✕●	✕●	✕●
50		✕●■	✕●■	✕●■	✕●■	✕●	✕●	✕●	✕●	✕●
63		✕●■	✕●■	✕●■	✕●■	✕●	✕●	✕●	✕●	✕●
80		✕●■	✕●■	✕●■	✕●■	✕●	✕●	✕●	✕●	✕●
100		✕●■	✕●■	✕●■	✕●■	✕●	✕●	✕●	✕●	✕●

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 (not for single-acting version)						
2	OPERATION 1 = single-acting, front spring 2 = double-acting 3 = double-acting, through-rod 4 = single-acting, rear spring				PNEUMATIC SYMBOLS CS06 CD08 CD12 CS08		
A	MATERIALS A = anodized aluminium body, end blocks and piston, PU seals (rod, end-blocks OR and piston)						
032	BORES 020 = 20 mm - 025 = 25 mm - 032 = 32 mm - 040 = 40 mm 050 = 50 mm - 063 = 63 mm - 080 = 80 mm - 100 = 100 mm						
A	CONSTRUCTION A = standard						
050	STROKE (see the table) = standard S = special V = FKM rod seal W = high temperatures (double-acting, non-magnetic with FKM seals for high temperatures up to 140°C)						

PNEUMATIC SYMBOLS

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



ACCESSORIES FOR CYLINDERS SERIES 32



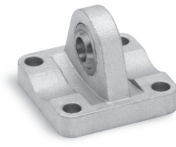
Piston rod socket joint
Mod. GY



Piston rod lock nut
Mod. U



Clevis pin Mod. S



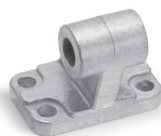
Rear trunnion ball-joint
Mod. R



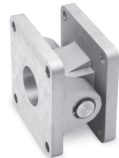
Coupling piece
Mod. GKF



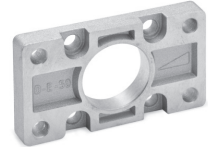
Swivel ball joint Mod. GA



90° male trunnion
Mod. ZC



Swivel combination
Mod. C+L+S



Front and rear flange
Mod. D-E



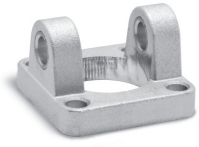
Self aligning rod
Mod. GK



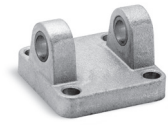
90° swivel combination
for trunnion Mod. I



Foot mount Mod. B



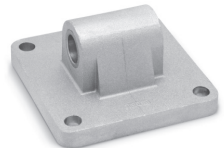
Front female trunnion
Mod. H and C-H



Rear female trunnion
Mod. C and C-H



Rod fork end Mod. G



Rear trunnion male Mod.
L

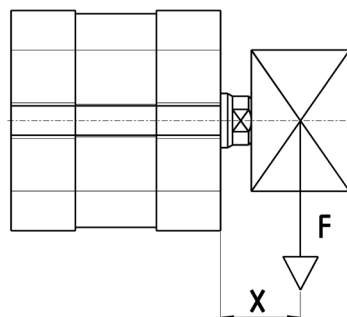
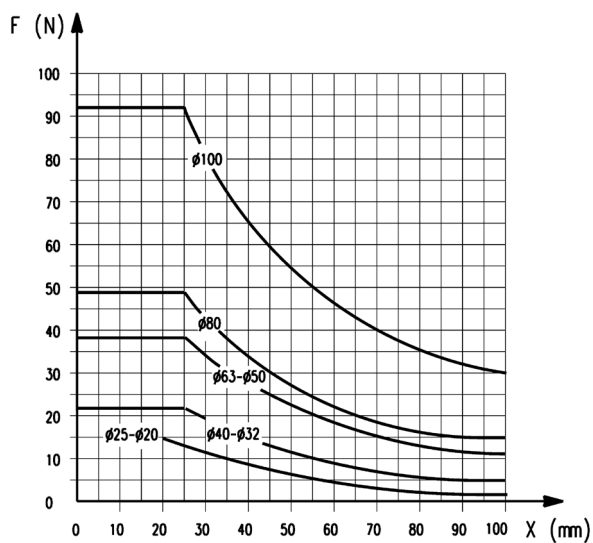


All accessories are supplied separately.

APPLICABLE LOADS

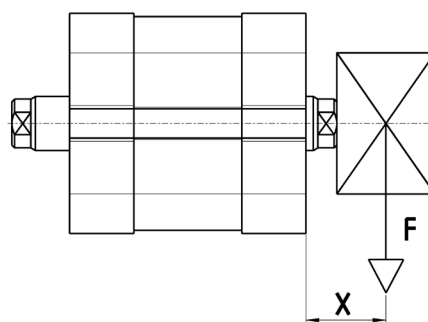
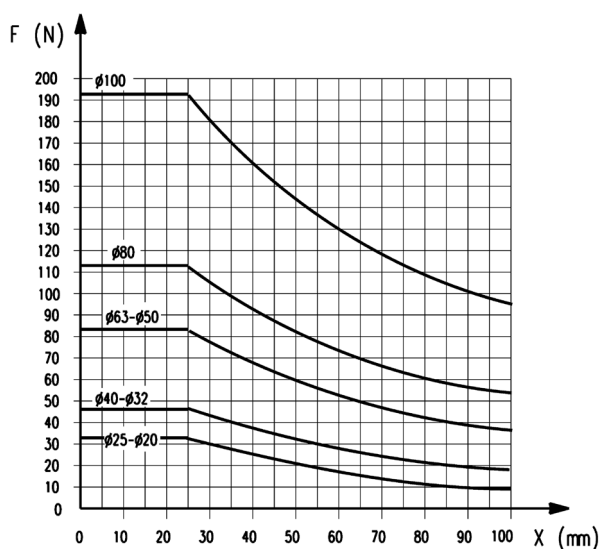
1

MOVEMENT



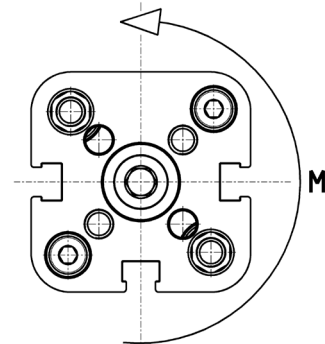
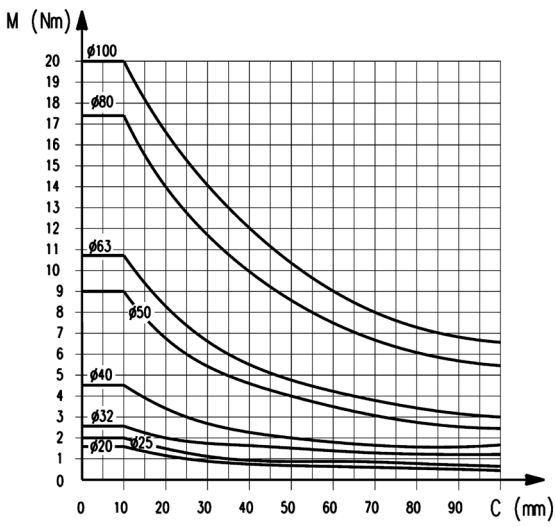
Standard.
Transversal load (F) dependant on stroke (X)

APPLICABLE LOADS



Through-rod.
Transversal load (F) dependant on stroke (X)

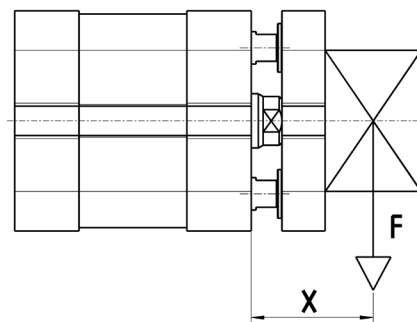
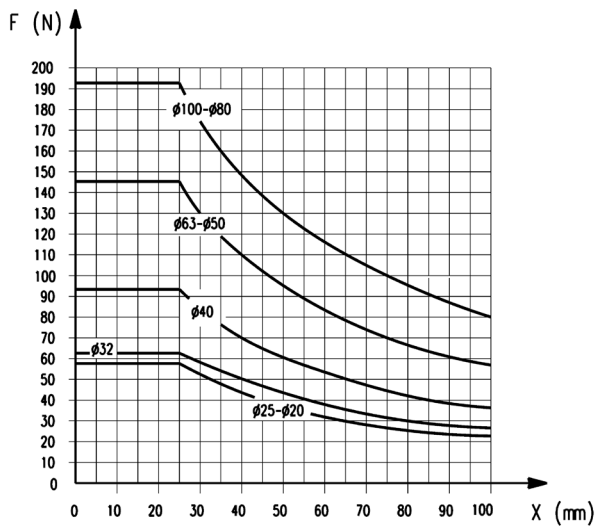
APPLICABLE LOADS



It is possible to use longer strokes as indicated in the general data (excluding radial loads and torque moments). When imposing radial loads on the cylinder it is important to respect the maximum stroke of the centre of gravity. In the presence of torque moments, respect the maximum stroke as shown in the diagrams.

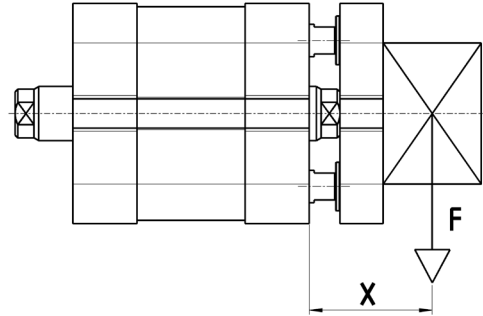
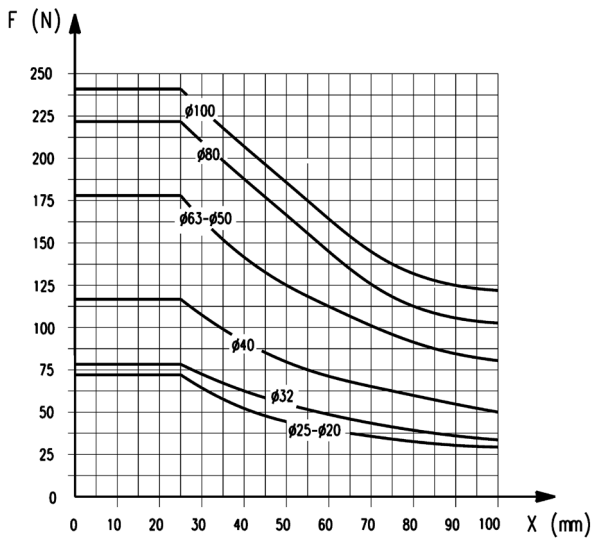
Torque moment (M) dependant on stroke (C).

APPLICABLE LOADS



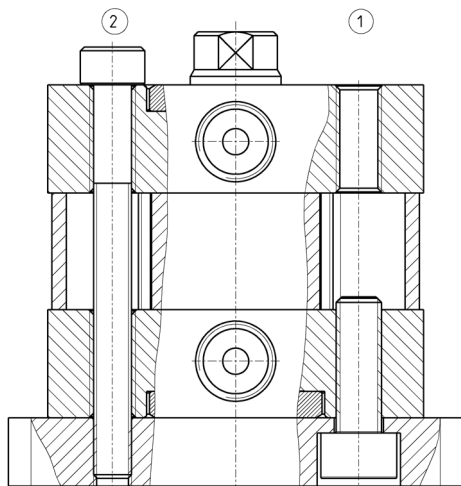
Anti-rotation.
Transversal load (F) dependant on stroke (X).

APPLICABLE LOADS



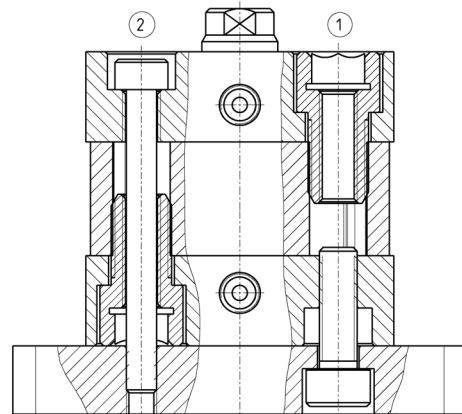
Anti-rotation through-rod.
Transversal load (F) dependant on stroke (X).

MOUNTING EXAMPLE



Mounting example for mounting cylinders ϕ 32; 40; 50; 63; 80; 100.
1 = Rear mounting
2 = Through mounting

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



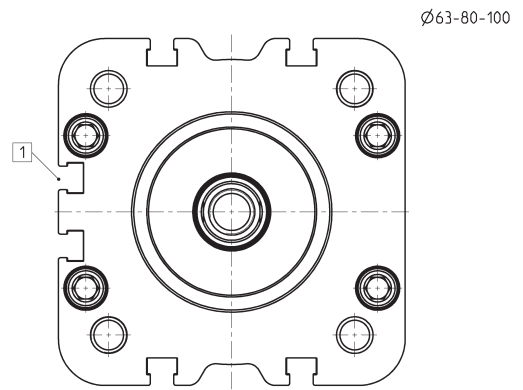
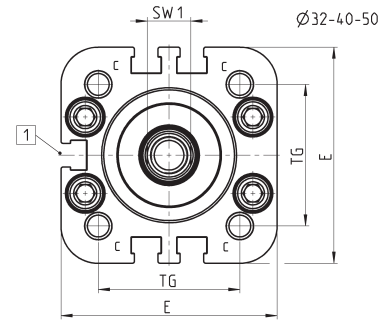
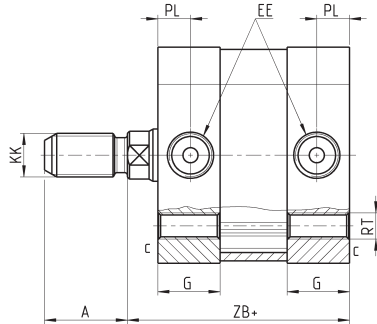
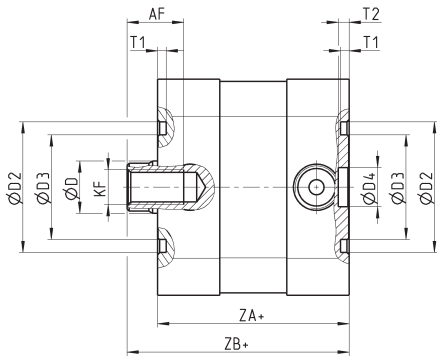
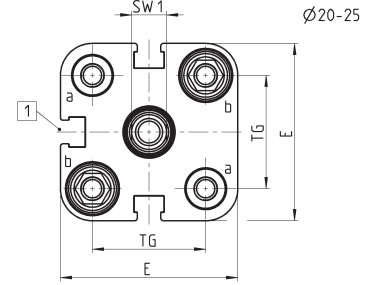
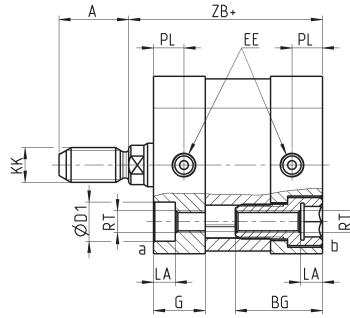
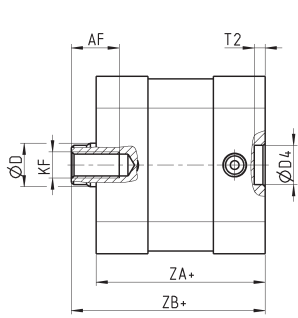
Mounting example for mounting cylinders ϕ 20 + 25.
1 = Rear mounting
2 = Through mounting

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

Compact magnetic cylinders Mod. 32F and 32M



+ = add the stroke
1 = groove for sensor



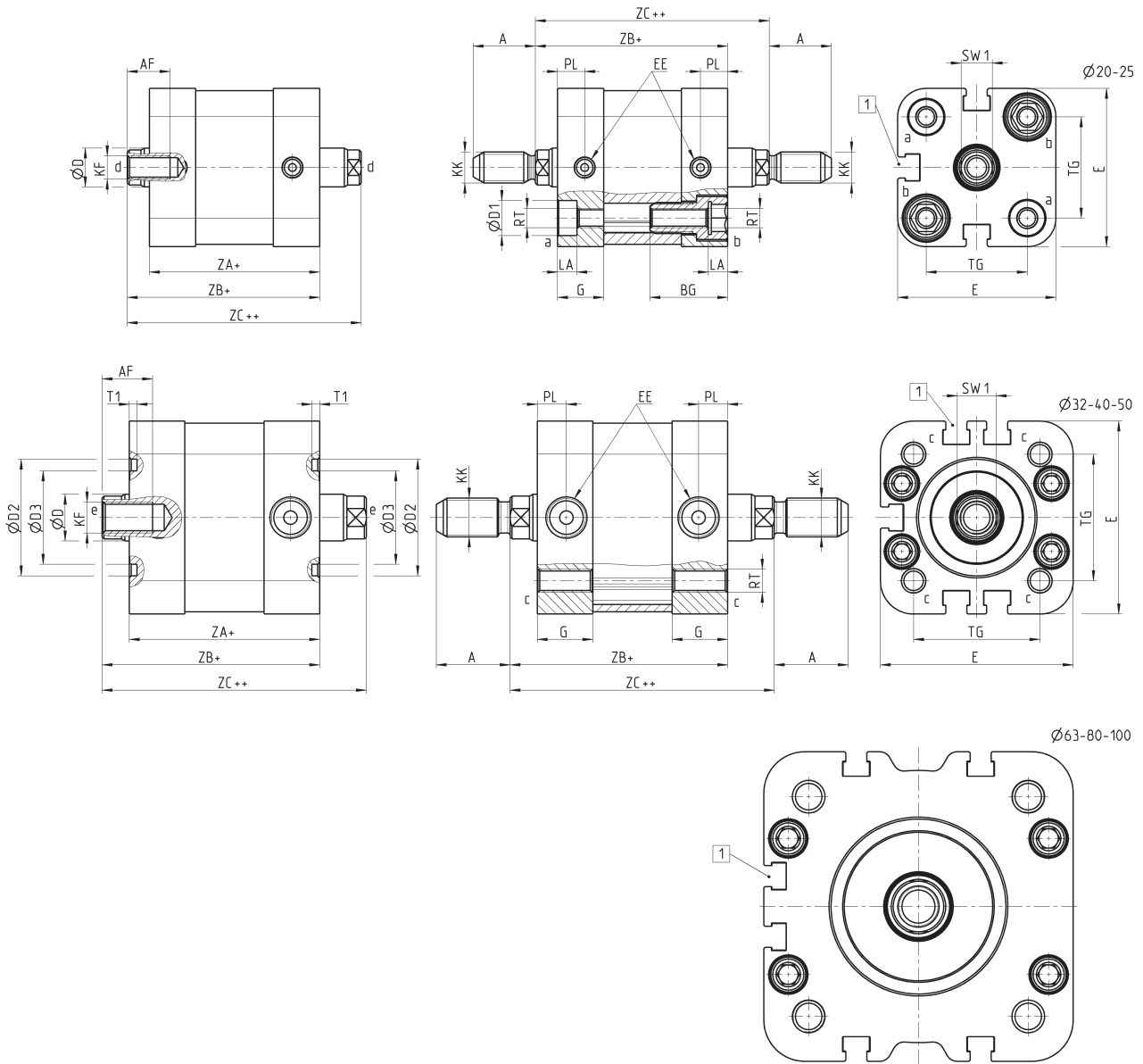
DIMENSIONS

Ø	A	AF	BG	G	ØD	D1	ØD2	ØD3	ØD4	E	EE	KF	KK	LA	PL	RT	SW1	T1	T2	TG	ZA	ZB
20	16	11	20	10,9	10	9	-	-	9	35,8	M5	M6	M8X1,25	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	M8X1,25	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

Compact magnetic cylinders Mod. 32F3 and 32M3



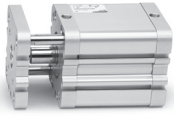
+ = add the stroke once
 ++ = add the stroke twice
 1 = groove for sensor



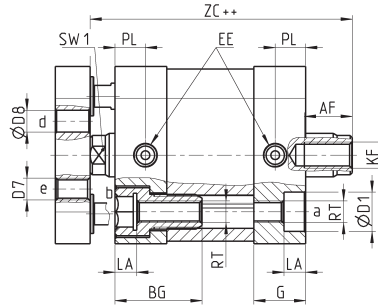
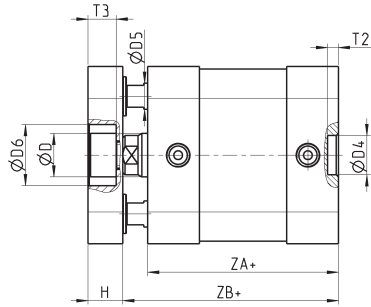
DIMENSIONS

Ø	A	AF	BG	G	ØD	ØD1	ØD2	ØD3	E	EE	KF	KK	LA	PL	RT	SW1	T1	TG	ZA	ZB	ZC
20	16	11	20	10,9	10	9	-	-	35,8	M5	M6	M8X1,25	5	6,5	M5	8	-	22	36,8	42,5	48,2
25	16	11	20	11,9	10	9	-	-	40,7	M5	M6	M8X1,25	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

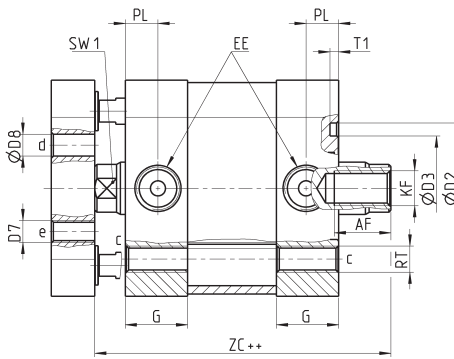
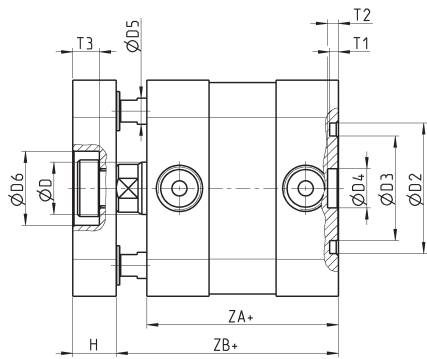
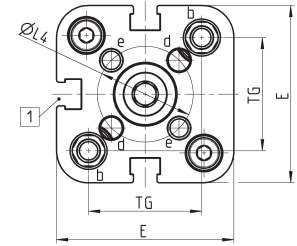
Compact magnetic cylinders Mod. 32R



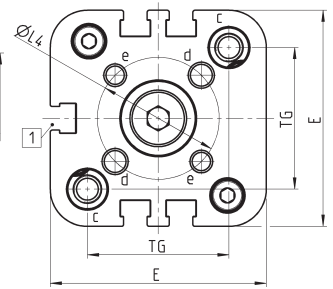
+ = add the stroke once
 ++ = add the stroke twice
 1 = groove for sensor



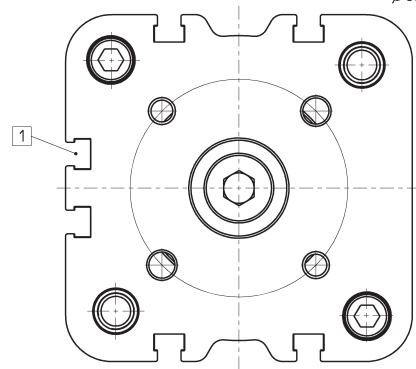
Ø20-25



Ø32-40-50



Ø63-80-100



DIMENSIONS

Ø	AF	BG	G	ØD	ØD1	ØD2	ØD3	ØD4	ØD5	ØD6	D7	ØD8	E	EE	H	KF	LA	ØL4	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