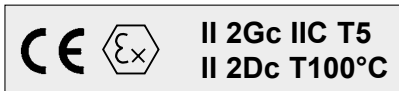


Standard executions		
Version	Symbol	Type
Single acting magnetic with female thread		CIS
Double acting magnetic with female thread		CI
Double acting magnetic anti-rotating		CIN



For the magnetic reed switches type ASV see from page 1.110.1
 For mounting accessories see from page 1.97.1
 For rod mountings see from page 1.85.1



On request, they can be supplied according to 94/9/EC - ATEX

Series of compact cylinders conforming to ISO 21287 standards. The new barrel with grooves allow the mounting of the magnetic reed switches directly in the tube without brackets; the reed switch will not protrude out the barrel profile. This series is equipped with elastic dampers on the piston. Only magnetic version available. One or more magnetic reed switches can be mounted.

Options	Suffix
Single acting, rear spring (page 1.16.5)	T
Male thread on piston-rod (page 1.16.5)	M
Through-rod (page 1.16.5)	P
Rod in stainless steel AISI 304 (only for Ø 32 - 40 - 50 - 63 - 80 - 100 - 125)	K
Seals FKM max 150°C (V1 = with FKM rod wiper)	V
Tandem with coupled rods (page 1.16.6)	TA1
Tandem with independent rods (page 1.16.6)	TA2
Tandem back to back (page 1.16.6)	TA3
Tandem front to front (page 1.16.6)	TA4
Extended rod (indicate the requested WH dimension in mm. E.g.: WH-50)	WH-...
Special on request	/S

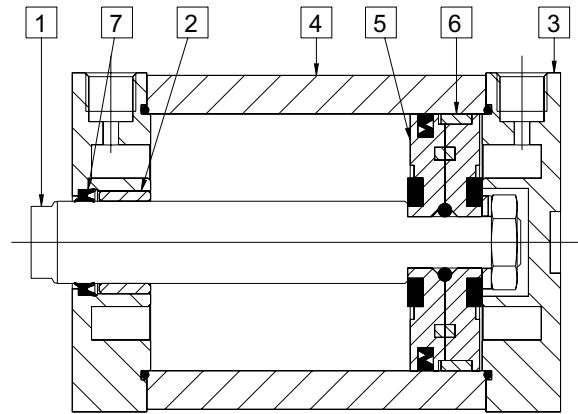
When possible options can be combined. The suffix of the options are to be added to the model number of the standard product, as shown in the following table. How to order: 63/100CIMP

63	/	100	CI	M	P
Bore	/	Stroke	Type	Option	Option

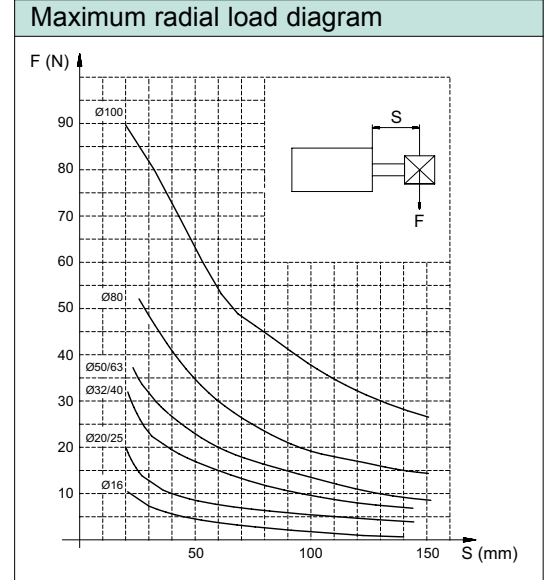
Seal kits	
n. 1	Rod seal
n. 2	Tube O-ring
n. 1	Piston lip-seal

How to order: 32 / SG / CIP

32	/	SG	/	CI	P
Bore	/	Seal kit	/	Type	Option



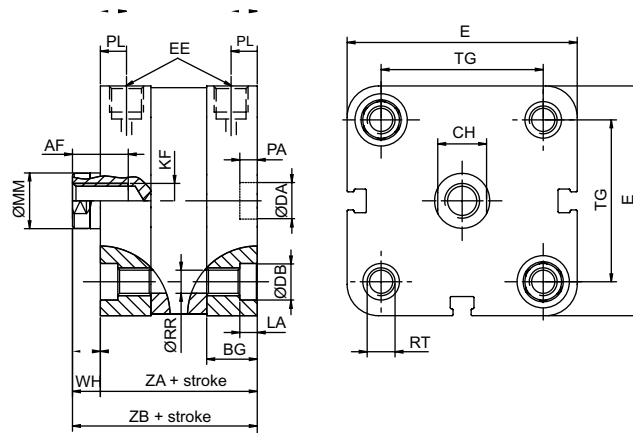
Materials (standard types)	
1 Rod	Stainless steel AISI 304 (Ø 16 - 25) Chrome-plated steel C45 (Ø 32 - 125)
2 Bushing	Stainless steel, sintered bronze, PTFE
3 Heads	Anodised aluminium
4 Tube	Anodised aluminium
5 Piston	PTFE (Ø 16) Aluminium (Ø 25 - 125)
6 Guide ring	PTFE
7 Rod seals	Polyurethane
Other seals	Nitrilic rubber NBR



Technical data	
Fluid	Compressed filtered air with or without lubrication. Lubrication, if started, must be continued.
Pressure	Single acting 2 ÷ 10 bar - Double acting 1 ÷ 10 bar
Temperature	-20 °C ÷ +80 °C

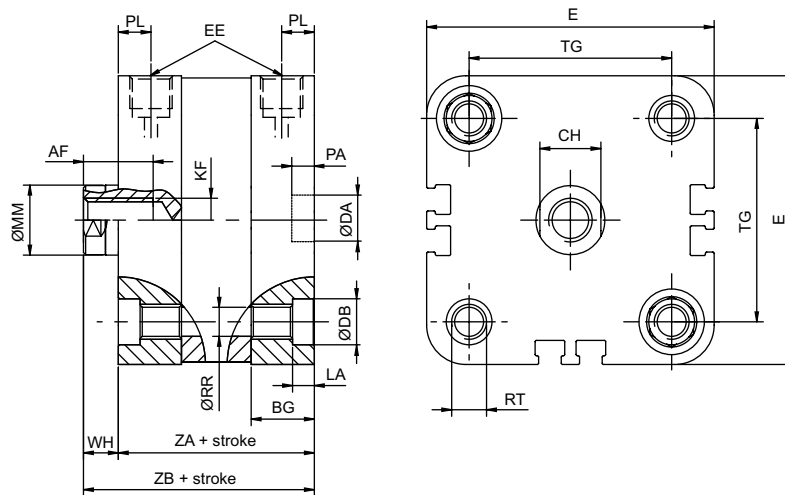
Bore (mm)	Standard strokes CIS	Standard strokes CI	Standard strokes CIN
16	5, 10, 15, 20, 25 (5÷25)	5, 10, 15, 20, 25, 30, 40, 50 (5÷300)	5, 10, 15, 20, 25, 30, 40, 50 (5÷200)
20	5, 10, 15, 20, 25 (5÷25)	5, 10, 15, 20, 25, 30, 40, 50, 60 (5÷300)	5, 10, 15, 20, 25, 30, 40, 50, 60 (5÷200)
25	5, 10, 15, 20, 25 (5÷25)	5, 10, 15, 20, 25, 30, 40, 50, 60 (5÷300)	5, 10, 15, 20, 25, 30, 40, 50, 60 (5÷200)
32	5, 10, 15, 20, 25 (5÷25)	5, 10, 15, 20, 25, 30, 40, 50, 60, 80 (5÷400)	5, 10, 15, 20, 25, 30, 40, 50, 60, 80 (5÷300)
40	5, 10, 15, 20, 25 (5÷25)	5, 10, 15, 20, 25, 30, 40, 50, 60, 80 (5÷400)	5, 10, 15, 20, 25, 30, 40, 50, 60, 80 (5÷300)
50	5, 10, 15, 20, 25 (5÷25)	5, 10, 15, 20, 25, 30, 40, 50, 60, 80 (5÷400)	5, 10, 15, 20, 25, 30, 40, 50, 60, 80 (5÷300)
63	5, 10, 15, 20, 25 (5÷25)	5, 10, 15, 20, 25, 30, 40, 50, 60, 80 (5÷400)	5, 10, 15, 20, 25, 30, 40, 50, 60, 80 (5÷300)
80	15, 20, 25 (15÷25)	15, 20, 25, 30, 40, 50, 60, 80 (15÷500)	15, 20, 25, 30, 40, 50, 60, 80 (15÷400)
100	15, 20, 25 (15÷25)	15, 20, 25, 30, 40, 50, 60, 80, 100 (15÷500)	15, 20, 25, 30, 40, 50, 60, 80, 100 (15÷400)
125	15, 20, 25 (15÷25)	15, 20, 25, 30, 40, 50, 60, 80, 100 (15÷500)	15, 20, 25, 30, 40, 50, 60, 80, 100 (15÷400)

Type: **CI - CIS**
Bore: 16 - 20 - 25

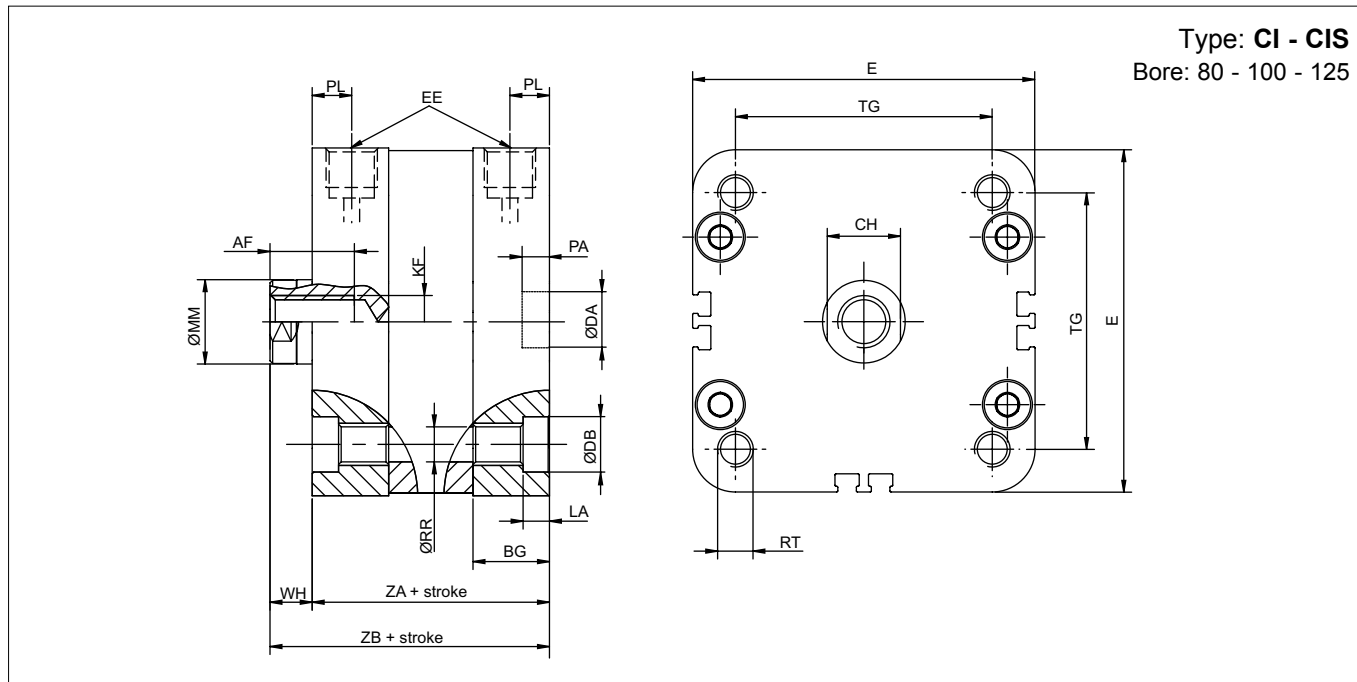


Ø (mm)	Ø MM f7	AF	WH	ZA	ZB	KF	EE	BG	RR	TG	E	RT	LA	Ø DB	PL	CH	Ø DA H9	PA +0.1
16	8	10	4,5	35	39.5	M4	M5	12,7	3,1	18	29	M4	3,5	6	8	7	9	2,1
20	10	10	6	37	43	M6	M5	15	4,1	22	36	M5	4,1	7,5	6	8	9	2,1
25	10	10	6	39	45	M6	M5	15	4,1	26	40	M5	4,1	7,5	5	8	9	2,1

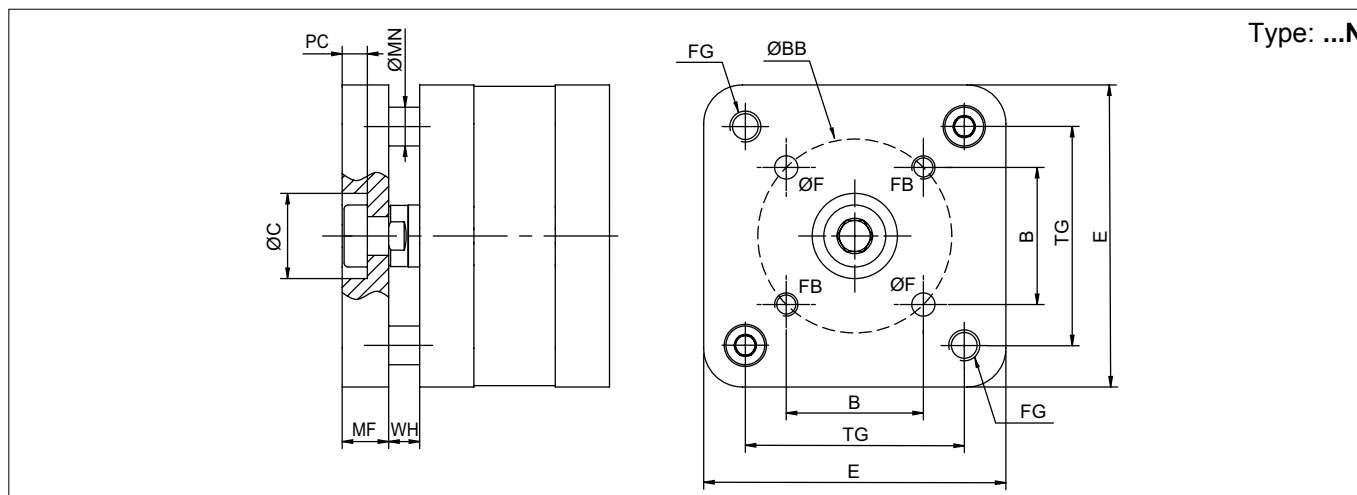
Type: **CI - CIS**
Bore: 32 - 40 - 50 - 63



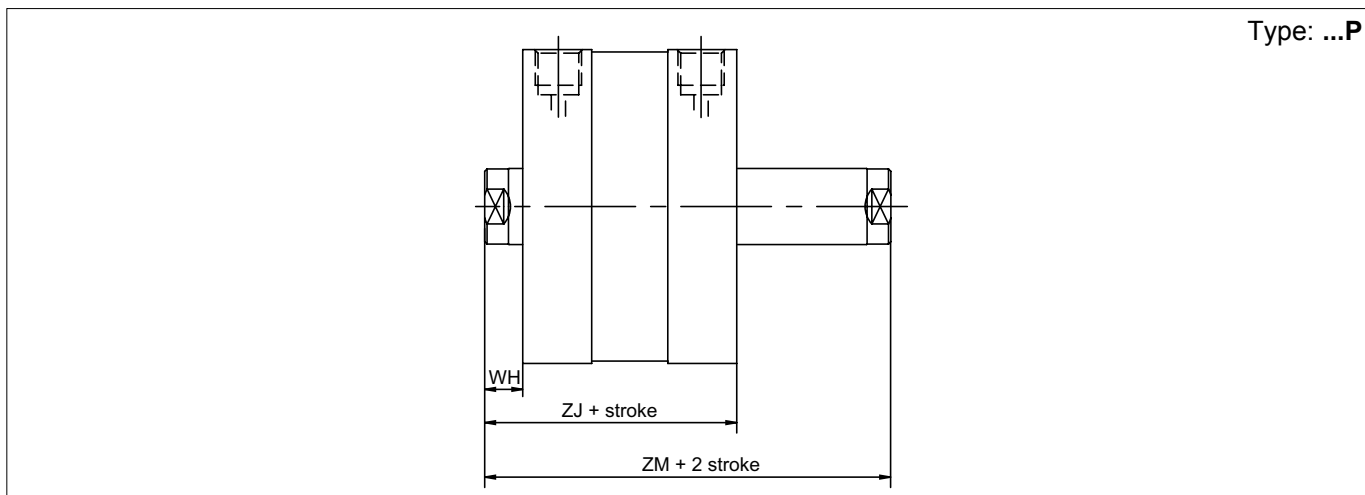
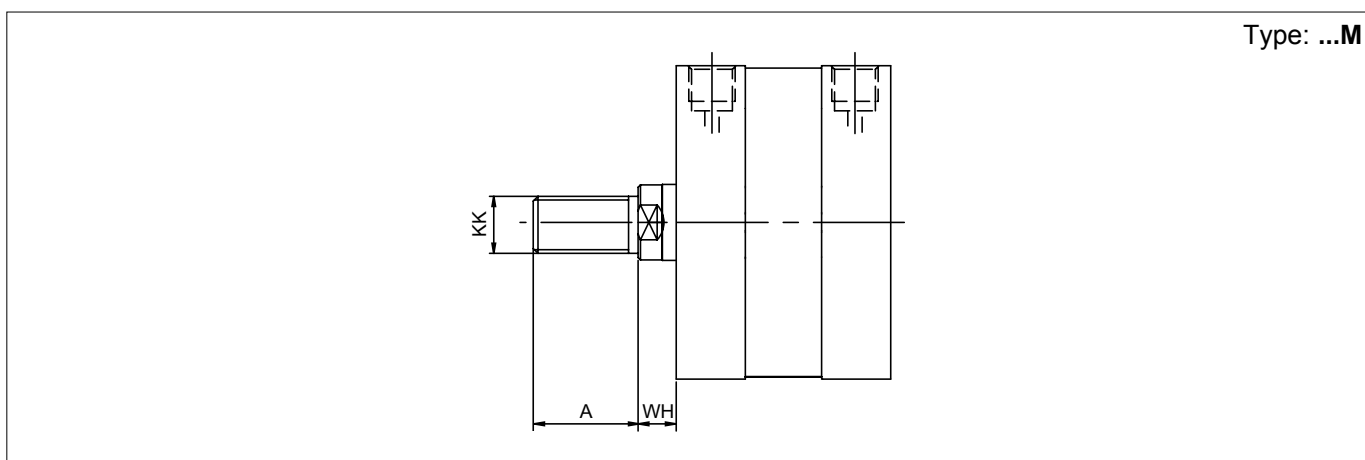
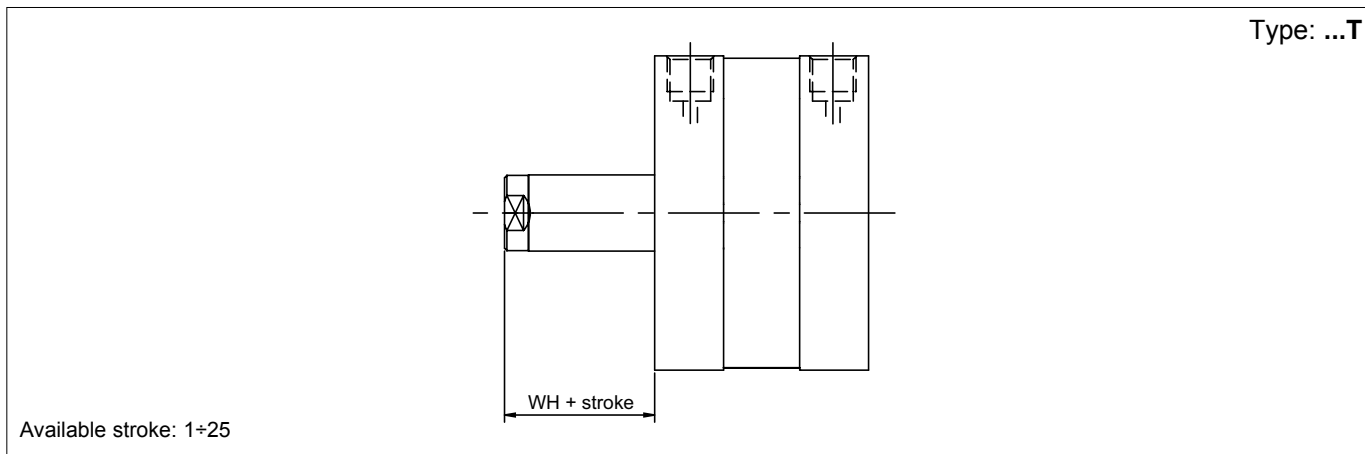
Ø (mm)	Ø MM f7	AF	WH	ZA	ZB	KF	EE	BG	RR	TG	E	RT	LA	Ø DB	PL	CH	Ø DA H9	PA +0.1
32	12	-	7	44	51	-	1/8"	16	-	32,5	47,5	M6	5,1	8,5	7	10	9	2,1
40	12	12	7	45	52	M8	1/8"	16	5,1	38	55	M6	5,1	8,5	7,5	10	9	2,1
50	16	16	8	45	53	M10	1/8"	16	6,4	46,5	66	M8	6,1	10,5	7,5	14	12	2,6
63	16	16	8	49	57	M10	1/8"	16	6,4	56,5	78	M8	6,1	10,5	7	14	12	2,6



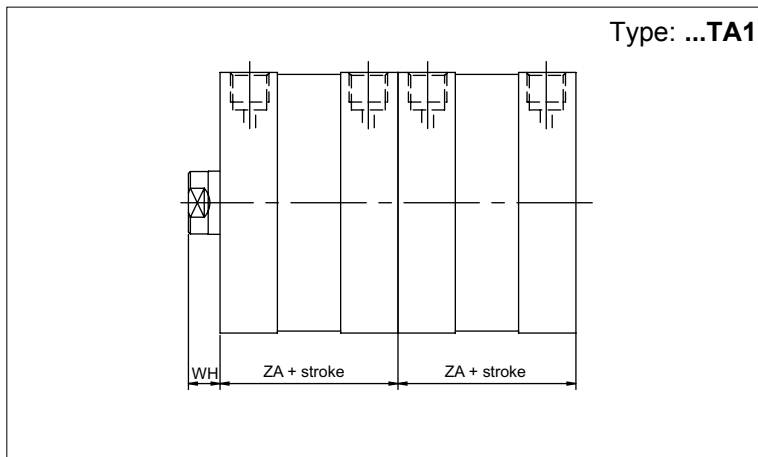
Ø (mm)	Ø MM f7	AF	WH	ZA	ZB	KF	EE	BG	RR	TG	E	RT	LA	Ø DB	PL	CH	Ø DA H9	PA +0.1
80	20	20	10	54	64	M12	1/8"	17	8,4	72	96	M10	8,5	13	8	17	12	2,6
100	20	20	10	67	77	M12	1/8"	17	8,4	89	116	M10	8,5	13	8,5	17	12	2,6
125	25	24	11	81	92	M16	1/4"	20	10,2	110	135	M12	10,5	17	10	21	12	2,6



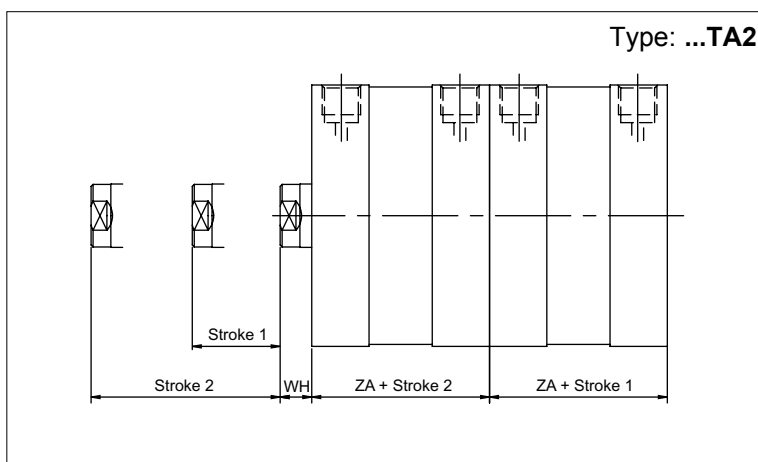
Ø (mm)	WH	MF +0,1	E	TG	B	FG	ØBB ±0,1	ØF +0,1	FB	ØC H9	PC	MN f7
16	4,5	6	29	18	9.9	M4	14	3	M3	7,5	4,5	6
20	6	8	36	22	12	M5	17	4	M4	10,5	4,5	6
25	6	8	40	26	15.6	M5	22	5	M5	14	4,5	6
32	7	10	47,5	32,5	19.8	M6	28	5	M5	17	5,5	8
40	7	10	55	38	23,3	M6	33	5	M5	17	5,5	8
50	8	12	66	46,5	29.7	M8	42	6	M6	22	6,5	10
63	8	12	78	56,5	35,4	M8	50	6	M6	22	6,5	10
80	10	14	96	72	46	M10	65	8	M8	24	7,5	10
100	10	14	116	89	56.6	M10	80	10	M10	24	7,5	12
125	-	-	-	-	-	-	-	-	-	-	-	-



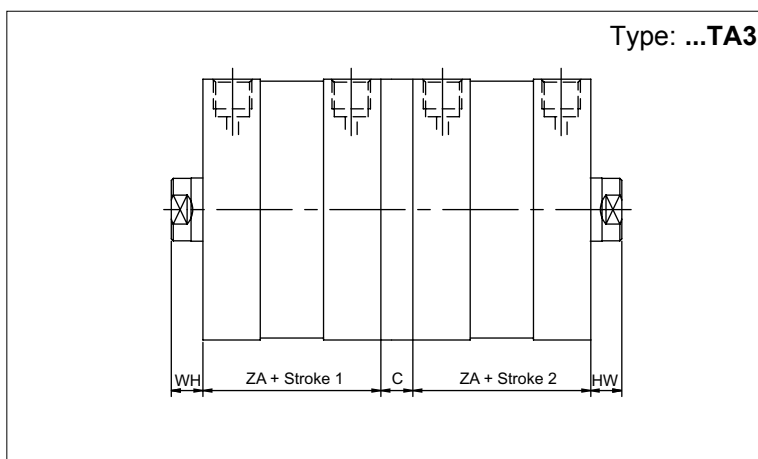
Ø (mm)	A	KK	WH	ZJ	ZM
16	12	M6	4,5	-	-
20	16	M8x1,25	6	43	49
25	16	M8x1,25	6	45	51
32	19	M10x1,25	7	51	58
40	19	M10x1,25	7	52	59
50	22	M12x1,25	8	53	61
63	22	M12x1,25	8	57	65
80	28	M16x1,5	10	64	74
100	28	M16x1,5	10	77	87
125	40	M20x1,5	11	92	103



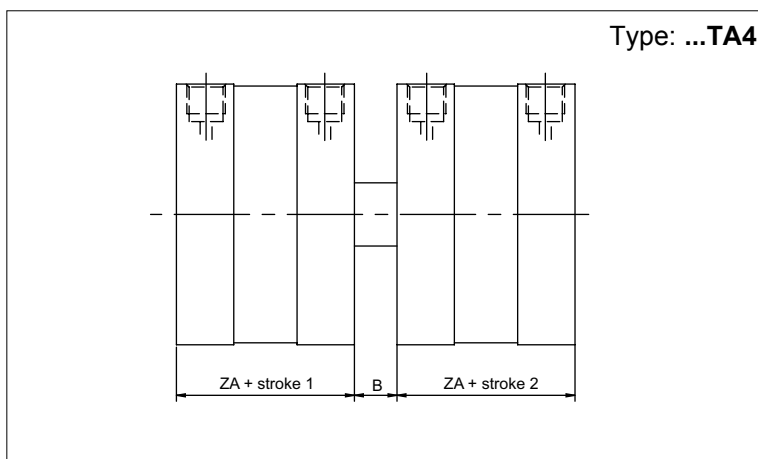
∅ (mm)	ZA	WH
25	39	6
40	45	7
63	49	8



∅ (mm)	ZA	WH
25	39	6
40	45	7
63	49	8



∅ (mm)	ZA	WH	C
20	37	6	13
25	39	6	13
32	44	7	15
40	45	7	15
50	45	8	15
63	49	8	15
80	54	10	17
100	67	10	19,5
125	81	11	19,5



∅ (mm)	ZA	WH
20	37	9
25	39	11
32	44	12
40	45	13
50	45	15
63	49	15
80	54	16
100	67	20

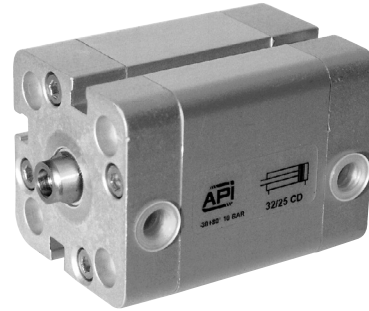
Standard executions		
Version	Symbol	Type
Magnetic		CS

	II 2Gc IIC T5 II 2Dc T100°C
--	----------------------------------------------

On request, they can be supplied according to 94/9/EC - **ATEX**

Options	Suffix
Rear spring	T
Seals FKM max 150 °C	V
Piston rod with male thread	M
Special versions on request	/ S

The options can be combined (when this is possible)



Series of compact cylinders conforming to European UNITOP standards.

The new barrel has grooves allowing the mounting of the magnetic reed switch directly onto the barrel itself without further brackets; this allows the magnetic sensor not to protrude beyond the profile of the barrel.

Elastic cushioning are mounted on the piston.

Only in the version with magnetic piston.

One or more magnetic sensors can be applied.

For the magnetic reed switches type ASV see from page 1.110.1

For mounting accessories see from page 1.100.1.

For rod accessories see from page 1.85.1

How to order: 32 / 50 CST

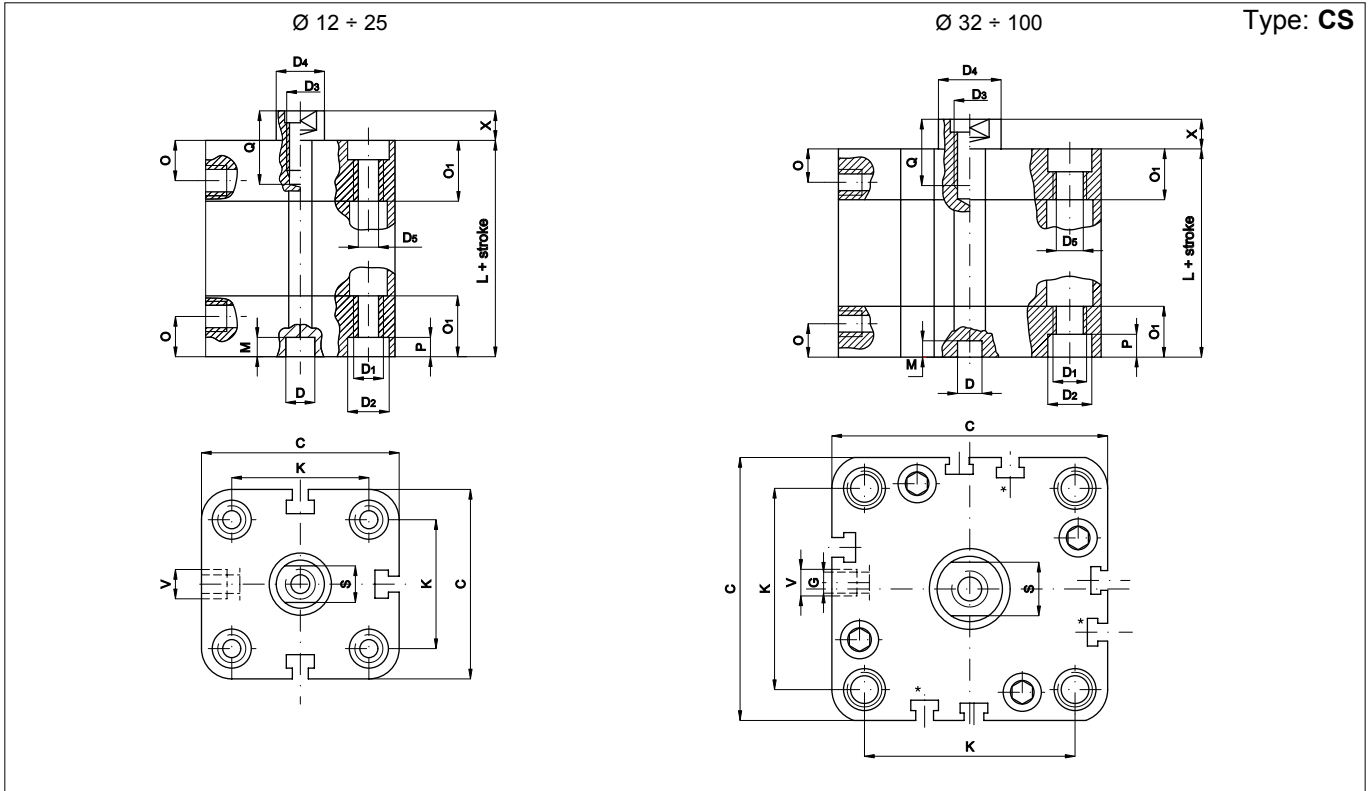
32	/	50	CS	T
Bore	/	Stroke	Type	Option

On request this series of cylinders can also be supplied with the mounting hole dimensions conforming to ISO 6431 standards, from bore 32 to 100 mm: type CSI.

For accessories see from page 1.97.1.

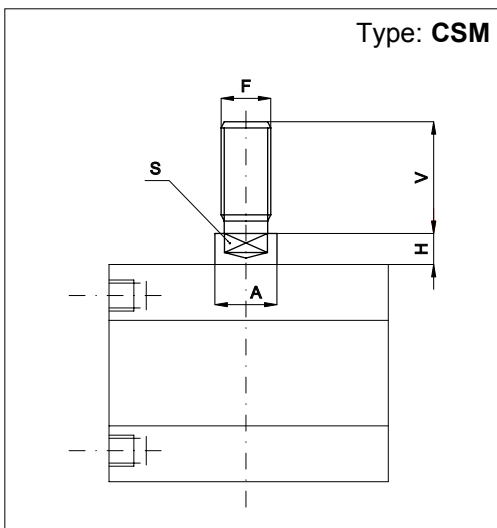
Technical data	
Fluid	Compressed filtered air with or without lubrication. Lubrication, if started, must be continued.
Pressure	2 ÷ 10 bar
Temperature range	-30 °C ÷ + 80°C
Materials	Heads: Anodised aluminium Tube: Anodised aluminium Rod: Stainless steel AISI 303 Seals: Polyurethane - Aluminium piston

Bore (mm)	Standard strokes (mm)	Max stroke (mm)	Thrust force at 6 bar (N)	Max traction force of the spring (N)	Number of grooves for the sensors
12	5, 10, 15, 20 25, 30, 40, 50	50	59	6	3
16			110	6	
20			177	7	
25			270	12	
32			448	16	
40			700	23	
50	10, 15, 20, 25, 30, 40, 50	50	1125	30	7
63			1800	35	
80			2900	60	
100			4510	100	



Ø mm.	C	D Ø	D1 Ø	D2 Ø	D3 Ø	D4 Ø	D5 Ø	G	V	O	O1	K	S	P	M	Q	X	L*
12	29	6	M4	6	M3	6	3,3	0	M5	8	12,25	18	5	3,5	4	6	4,5	38
16	29	6	M4	6	M4	8	3,3	0	M5	8	12,25	18	6	3,5	4	8	4,5	38
20	36	6	M5	7,5	M5	10	4,2	0	M5	8	12,25	22	8	4,5	4	10	4,5	38
25	40	6	M5	7,5	M5	10	4,2	0	M5	8	12,75	26	8	4,5	4	10	5,5	39,5
32	50	6	M6	9	M6	12	5,2	4	1/8"	8	14,5	32	10	5,5	4	12	6	44,5
40	58	6	M6	9	M6	12	5,2	3	1/8"	8	14,75	42	10	5,5	4	12	6,5	45,5
50	67	6	M8	10,5	M8	16	6,7	0	1/8"	8	14,75	50	13	6,5	4	12	7,5	45,5
63	80	8	M10	13,5	M8	16	8,5	0	1/8"	8	14,25	62	13	8,5	4	14	7,5	50
80	100	8	M10	13,5	M10	20	8,5	0	1/8"	8,5	16	82	17	8,5	4	15	8	56
100	124	8	M10	13,5	M12	25	8,5	0	1/4"	10,5	19,25	103	22	8,5	4	20	10	66,5

*From 30 mm stroke add to above dimensions: 10 mm for Ø 12-16-20, 20 mm for Ø 25-32-40-50-63, 30 mm for Ø 80-100.



Ø mm	A	V	F	S	H
12	6	16	M6	5	4,5
16	8	20	M8	6	4,5
20	10	22	M10x1,25	8	4,5
25	10	22	M10x1,25	8	5,5
32	12	22	M10x1,25	10	6
40	12	22	M10x1,25	10	6,5
50	16	24	M12x1,25	13	7,5
63	16	24	M12x1,25	13	7,5
80	20	32	M16x1,5	17	8
100	25	40	M20x1,5	22	10

Seal kit.

Here are the quantities and the description of the components comprised in each kit.

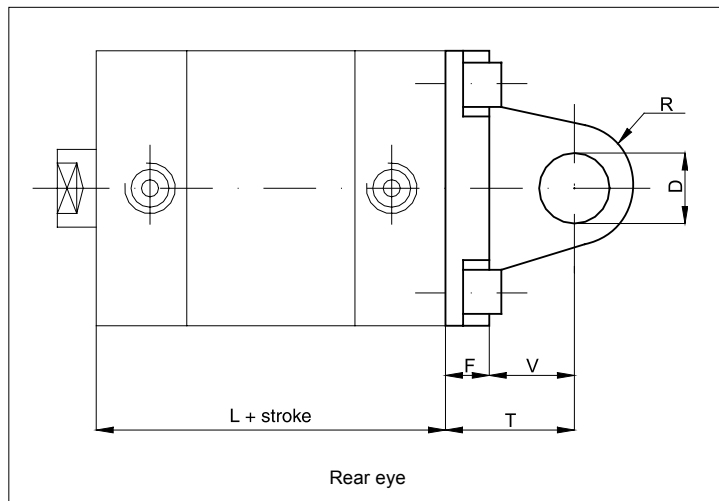
Description	N°	CS
Rod seal	1	•
Tube o-ring	2	•
Lip seal	2	•

The magnetic ring to be ordered separately.

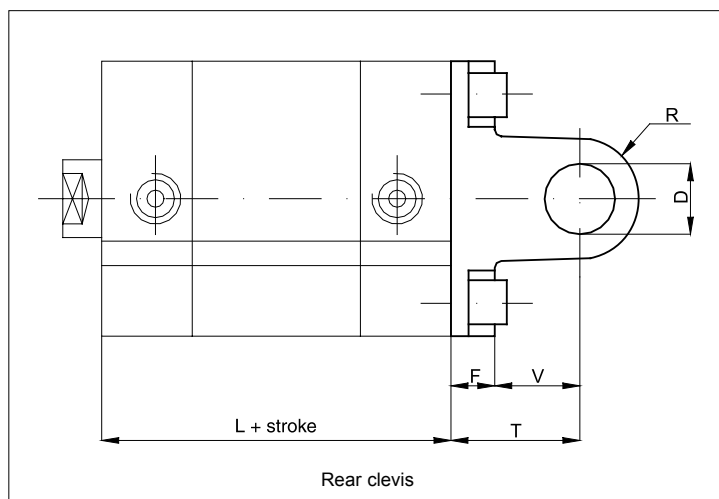
How to order: 32 / SG / CSV

32	/	SG	/	CS	V
Bore	/	Seal kit	/	Type	Option

The seal kit for the cylinders in non-standard executions is to be composed according to the option.

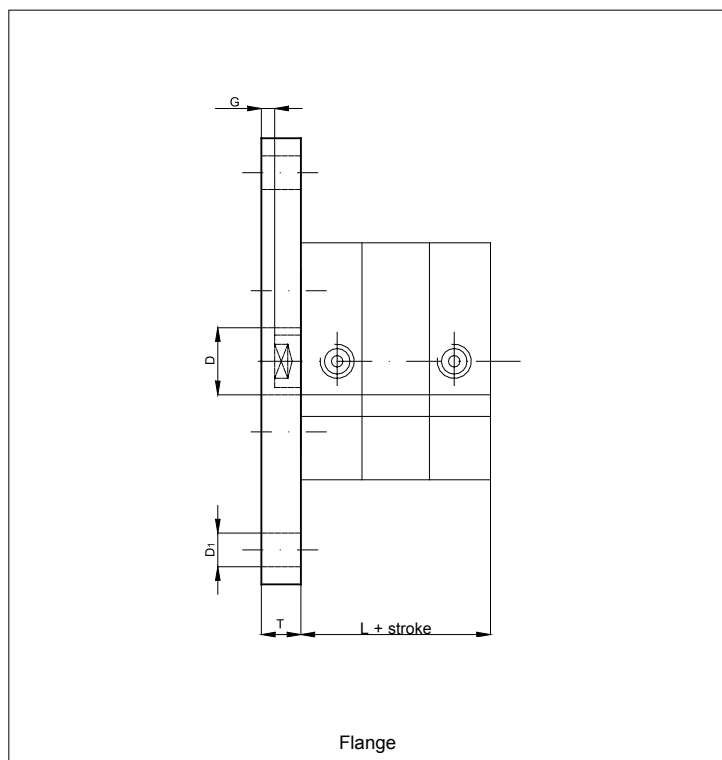


Ø mm	F	V	T	D	R	L
12	6	10	16	6	6	38
16	6	10	16	6	6	38
20	6	14	20	8	8	38
25	6	14	20	8	8	39,5

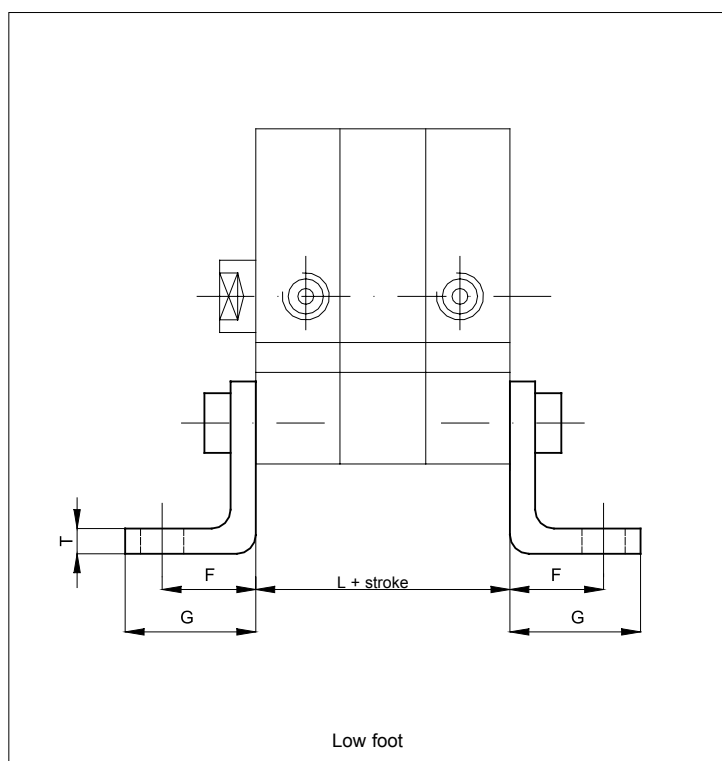


Ø mm	F	V	T	D	R	L
32	9	13	22	10	10	44,5
40	9	16	25	12	12,5	45,5
50	11	16	27	12	12,5	45,5
63	11	21	32	16	15	50
80	13	23	36	16	15	56
100	15	26	41	20	20	66,5

For dimensions and codes of the accessories see page 1.100.1.



Ø mm	G	T	D ₁	D	L
12	5,5	10	5,5	10	38
16	5,5	10	5,5	10	38
20	5,5	10	6,5	12	38
25	4,5	10	6,5	12	39,5
32	4	10	7	14	44,5
40	3,5	10	9	14	45,5
50	4,5	12	9	18	45,5
63	7,5	15	9	18	50
80	7	15	12	23	56
100	5	15	14	28	66,5



Ø mm	F	G	T	L
12	13	17,5	3	38
16	13	17,5	3	38
20	16	22	4	38
25	16	22	4	39,5
32	18	26	5	44,5
40	20	28	5	45,5
50	24	32	6	45,5
63	27	39	6	50
80	30	42	8	56
100	33	45	8	66,5

For dimensions and codes of the accessories see page 1.100.1.