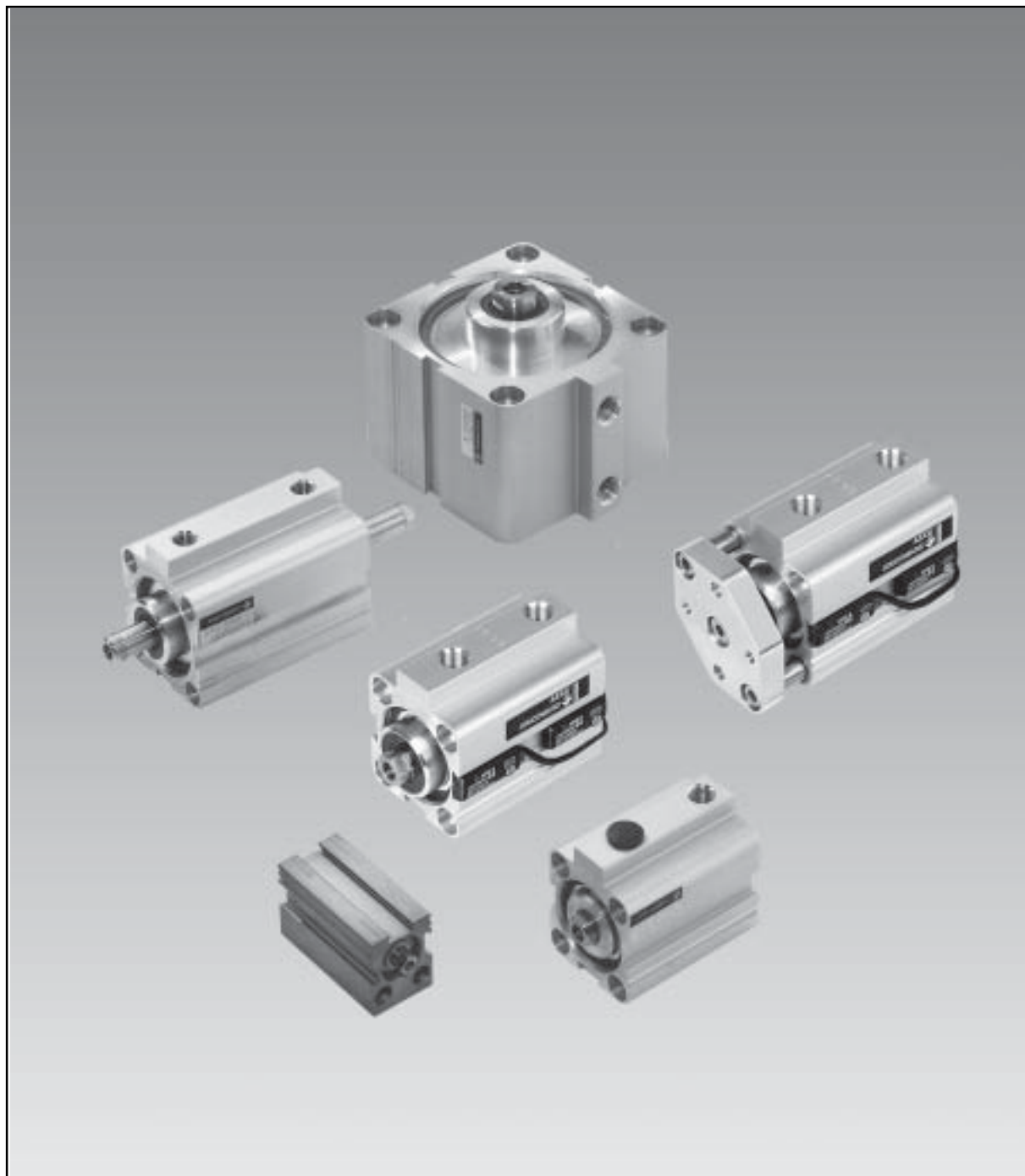



# SHORT STROKE CYLINDERS, Ø 8 to 100 mm SINGLE AND DOUBLE ACTING

SERIES 441 - TYPE : K



P215-GB-R7a

**ASCO**<sup>®</sup>  
**JOUCOMATIC** 

# SHORT STROKE AIR CYLINDERS

## APPLICATIONS

Their compact construction and rapid response times make the short stroke air cylinders suitable for clamping, stopping, ejection, indexing and locking of parts in all industrial applications.

Short stroke air cylinders are manufactured in single acting and double acting versions, double crossbar, rotation proof in a wide range of diameters (8 to 100 mm).

They are available in versions designed to receive magnetic position detectors. The barrel of the air cylinder is grooved to enable the mini-detectors to be adapted, providing effective, space-saving solutions for all clamping situations.

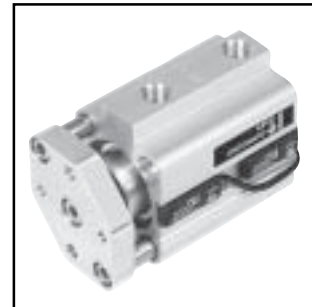
## AVAILABLE RANGE



Standard cylinder  
single and double acting  
(page P215-3/6)



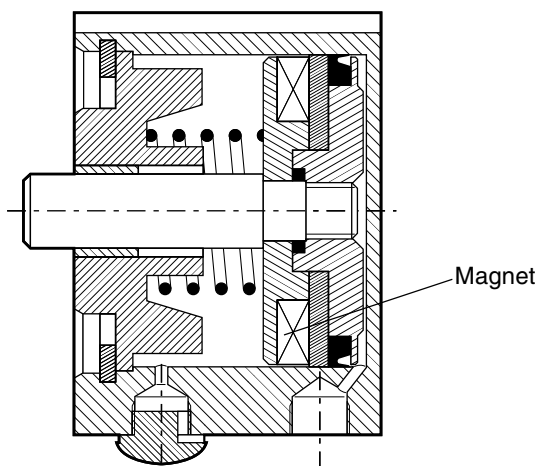
Cylinder with  
double crossbar  
(page P215-7)



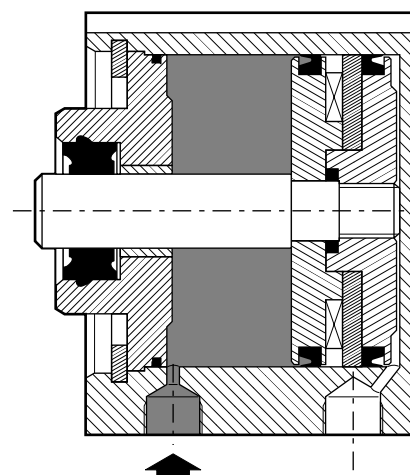
Double acting cylinder with  
rotation-proof device on the  
rod (page P215-11/12)

## OPERATIONAL DIAGRAM

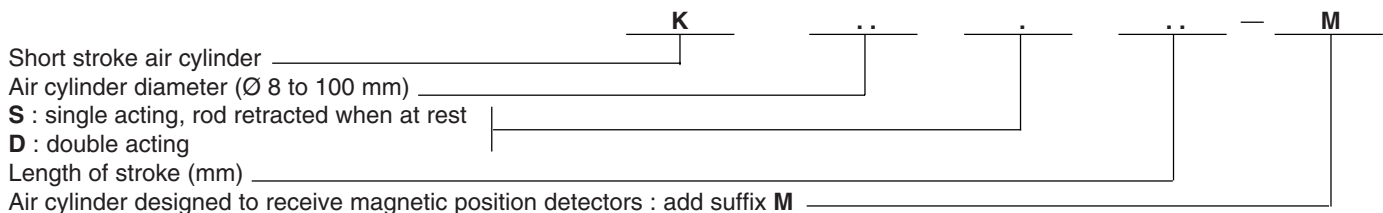
SINGLE ACTING AIR CYLINDER  
(Rod retracted when at rest)



DOUBLE ACTING AIR CYLINDER



## DEFINING THE PART NUMBER OF A SHORT STROKE AIR CYLINDER



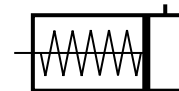
## ORDERING

When ordering, please specify : **441.....\*** **K.....-**

Air cylinder code \_\_\_\_\_

Air cylinder part number \_\_\_\_\_

\* Magnetic position detectors should be ordered separately.



**SPECIFICATIONS**

FLUID : Air or neutral gas, filtered, lubricated or not  
 PRESSURE : 2 to 10 bar  
 TEMPERATURE : -10°C, +60°C  
 CYLINDER BORE : 8 to 100 mm  
 STROKE : 4 - 5 - 10 - 25 mm

**CONSTRUCTION**

Body : light alloy  
 Piston rod : stainless steel (Ø8 to 25 mm)  
 Piston rod : hard chrome steel (Ø 32 to 100 mm)  
 Piston rod : tapped  
 Internal parts : acetal (POM) brass or light alloy  
 Sealing : polyurethane (PUR)  
 Self lubricating bearing  
 Front, rear or side mounted: - with screws (not supplied)  
 - or flange (see mounting section)



2

**CHOICE OF EQUIPMENT**

**SINGLE ACTING CYLINDER (rod returned at rest)**

Ø bore (mm)	Force developed at 6 bar (daN)	Spring return force (daN)	Strokes (mm)	CYLINDER EQUIPPED FOR DETECTORS		DETECTOR TYPES TO BE USED		Weight (Kg)	Ø Ports
				CODES	REFERENCES	ILS reed switch type	magnetoresistant electronic type		
8	2,5	0,3	4	441 00 001	K 8 S 4-M	—	•	0,025	M 5
			10	441 00 154	K 8 S 10-M	•	•	0,030	
10	3,9	0,5	4	441 00 002	K 10 S 4-M	—	•	0,030	M 5
			10	441 00 155	K 10 S 10-M	•	•	0,035	
12	5,6	0,7	4	441 00 003	K 12 S 4-M	—	•	0,035	M 5
			10	441 00 004	K 12 S 10-M	•	•	0,045	
16	10	1,2	4	441 00 005	K 16 S 4-M	—	•	0,080	M5
			10	441 00 006	K 16 S 10-M	•	•	0,090	
			25	441 00 156	K 16 S 25-M	•	•	0,120	
20	16	1,4	4	441 00 007	K 20 S 4-M	—	•	0,105	G 1/8
			10	441 00 008	K 20 S 10-M	•	•	0,120	
			25	441 00 157	K 20 S 25-M	•	•	0,165	
25	25	2,2	5	441 00 009	K 25 S 5-M	—	•	0,175	G 1/8
			10	441 00 010	K 25 S 10-M	•	•	0,200	
			25	441 00 158	K 25 S 25-M	•	•	0,275	
32	40	3,6	5	441 00 011	K 32 S 5-M	—	•	0,240	G 1/8
			10	441 00 012	K 32 S 10-M	•	•	0,260	
			25	441 00 013	K 32 S 25-M	•	•	0,320	
40	63	4,8	10	441 00 014	K 40 S 10-M	•	•	0,350	G 1/8
			25	441 00 015	K 40 S 25-M	•	•	0,430	
50	100	6,3	10	441 00 016	K 50 S 10-M	•	•	0,495	G 1/8
			25	441 00 017	K 50 S 25-M	•	•	0,600	
63	160	8,5	10	441 00 018	K 63 S 10-M	•	•	0,715	G 1/8
			25	441 00 019	K 63 S 25-M	•	•	0,860	
80	251	11,5	25	441 00 020	K 80 S 25-M	•	•	1,450	G 1/4
100	400	12	25	441 00 243	K 100 S 25-M	•	•	2,600	G 1/4

**Magnetic detectors should be ordered separately**

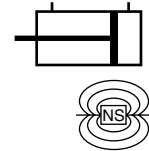
In order to prolong the product's service life, it is recommended to use external stoppers.  
 Tolerance on stroke length ± 1 mm

• Detector to be used

**OPTION**

- Other strokes on request
- Version non equipped for use with detector (consult us)

For installations using short stroke 32 to 100 mm bore, it is recommended to select the PEC type models compatible with ISO 6431 (see page P227)



**SPECIFICATIONS**

FLUID : Air or neutral gas, filtered, lubricated or not  
 PRESSURE : 10 bar max.  
 TEMPERATURE : -10°C, +60°C  
 CYLINDER BORE : 8 to 100 mm  
 STROKE : See table below

**CONSTRUCTION**

Body : light alloy  
 Piston rod : stainless steel (Ø 8 to 25 mm)  
 Piston rod : hard chrome steel (Ø 32 to 100 mm)  
 Piston rod : tapped  
 Internal parts : acetal (POM) brass or light alloy  
 Sealing : polyurethane (PUR)  
 Self lubricating bearing  
 Front, rear or side mounted: - with screws (not supplied)  
 - or flange (see mounting section)



**CHOICE OF EQUIPMENT**

Ø bore (mm)	Force developed at 6 bar (daN)	Spring return force 6 bar (daN)	Strokes (mm)	CYLINDER EQUIPPED FOR DETECTORS		DETECTOR TYPES TO BE USED		Weight (Kg)	Ø Ports
				CODES	REFERENCES	ILS reed switch type	magnetoresistant electronic type		
8	2,7	2	5	441 00 159	K 8 D 5-M	—	•	0,025	M5
			10	441 00 021	K 8 D 10-M	•	•	0,030	
			15	441 00 160	K 8 D 15-M	•	•	0,035	
			20	441 00 161	K 8 D 20-M	•	•	0,040	
			25	441 00 162	K 8 D 25-M	•	•	0,045	
10	4,2	3,4	5	441 00 163	K 10 D 5-M	—	•	0,030	M5
			10	441 00 022	K 10 D 10-M	•	•	0,035	
			15	441 00 164	K 10 D 15-M	•	•	0,040	
			20	441 00 165	K 10 D 20-M	•	•	0,045	
			25	441 00 166	K 10 D 25-M	•	•	0,050	
12	6	5,4	5	441 00 167	K 12 D 5-M	—	•	0,035	M5
			10	441 00 023	K 12 D 10-M	•	•	0,045	
			15	441 00 168	K 12 D 15-M	•	•	0,055	
			20	441 00 169	K 12 D 20-M	•	•	0,065	
			25	441 00 170	K 12 D 25-M	•	•	0,075	
			30	441 00 171	K 12 D 30-M	•	•	0,085	
16	10	8,1	5	441 00 172	K 16 D 5-M	—	•	0,080	M5
			10	441 00 024	K 16 D 10-M	•	•	0,090	
			15	441 00 173	K 16 D 15-M	•	•	0,100	
			20	441 00 174	K 16 D 20-M	•	•	0,110	
			25	441 00 175	K 16 D 25-M	•	•	0,120	
			30	441 00 176	K 16 D 30-M	•	•	0,130	
			40	441 00 177	K 16 D 40-M	•	•	0,150	
20	16	13,5	5	441 00 178	K 20 D 5-M	—	•	0,105	G 1/8
			10	441 00 025	K 20 D 10-M	•	•	0,120	
			15	441 00 179	K 20 D 15-M	•	•	0,135	
			20	441 00 180	K 20 D 20-M	•	•	0,150	
			25	441 00 026	K 20 D 25-M	•	•	0,165	
			30	441 00 181	K 20 D 30-M	•	•	0,180	
			40	441 00 182	K 20 D 40-M	•	•	0,210	
25	27	22	5	441 00 184	K 25 D 5-M	—	•	0,175	G 1/8
			10	441 00 027	K 25 D 10-M	•	•	0,200	
			15	441 00 185	K 25 D 15-M	•	•	0,225	
			20	441 00 186	K 25 D 20-M	•	•	0,250	
			25	441 00 028	K 25 D 25-M	•	•	0,275	
			30	441 00 187	K 25 D 30-M	•	•	0,300	
			40	441 00 188	K 25 D 40-M	•	•	0,350	
50	441 00 189	K 25 D 50-M	•	•	0,400				

Magnetic detectors should be ordered separately

Tolerance on stroke length ± 1 mm

• Detector to be used

**OPTION :** • Other strokes on request  
 • Version non equipped for use with detector (consult us)

## DOUBLE ACTING CYLINDER

Ø bore (mm)	Force developed at 6 bar (daN)	Spring return force at 6 bar (daN)	Stroke (mm)	CYLINDER EQUIPPED FOR DETECTORS		DETECTOR TYPES TO BE USED		Weight (Kg)	Ø Ports
				CODES	REFERENCES	ILS reed switch type	magneto-resistant electronic type		
32	44	37	5	441 00 190	K 32 D 5 - M	—	•	0,240	G 1/8
			10	441 00 029	K 32 D 10 - M	•	•	0,260	
			15	441 00 191	K 32 D 15 - M	•	•	0,280	
			20	441 00 192	K 32 D 20 - M	•	•	0,300	
			25	441 00 030	K 32 D 25 - M	•	•	0,320	
			30	441 00 193	K 32 D 30 - M	•	•	0,340	
			40	441 00 194	K 32 D 40 - M	•	•	0,380	
			50	441 00 195	K 32 D 50 - M	•	•	0,420	
			60	441 00 196	K 32 D 60 - M	•	•	0,460	
80	441 00 197	K 32 D 80 - M	•	•	0,540				
40	68	62	5	441 00 198	K 40 D 5 - M	—	•	0,330	G 1/8
			10	441 00 031	K 40 D 10 - M	•	•	0,360	
			15	441 00 199	K 40 D 15 - M	•	•	0,390	
			20	441 00 200	K 40 D 20 - M	•	•	0,420	
			25	441 00 032	K 40 D 25 - M	•	•	0,450	
			30	441 00 201	K 40 D 30 - M	•	•	0,480	
			40	441 00 202	K 40 D 40 - M	•	•	0,540	
			50	441 00 203	K 40 D 50 - M	•	•	0,600	
			60	441 00 204	K 40 D 60 - M	•	•	0,660	
			80	441 00 205	K 40 D 80 - M	•	•	0,780	
100	441 00 259	K 40 D100 - M	•	•	0,900				
50	106	95	10	441 00 033	K 50 D 10 - M	—	•	0,515	G 1/8
			15	441 00 206	K 50 D 15 - M	•	•	0,550	
			20	441 00 207	K 50 D 20 - M	•	•	0,585	
			25	441 00 034	K 50 D 25 - M	•	•	0,620	
			30	441 00 208	K 50 D 30 - M	•	•	0,655	
			40	441 00 209	K 50 D 40 - M	•	•	0,725	
			50	441 00 210	K 50 D 50 - M	•	•	0,795	
			60	441 00 211	K 50 D 60 - M	•	•	0,865	
			80	441 00 212	K 50 D 80 - M	•	•	1,005	
100	441 00 260	K 50 D 100 - M	•	•	1,145				
63	169	158	10	441 00 035	K 63 D 10 - M	•	•	0,750	G 1/8
			15	441 00 213	K 63 D 15 - M	•	•	0,795	
			20	441 00 214	K 63 D 20 - M	•	•	0,840	
			25	441 00 036	K 63 D 25 - M	•	•	0,885	
			30	441 00 215	K 63 D 30 - M	•	•	0,930	
			40	441 00 216	K 63 D 40 - M	•	•	1,020	
			50	441 00 217	K 63 D 50 - M	•	•	1,110	
			60	441 00 218	K 63 D 60 - M	•	•	1,200	
			80	441 00 219	K 63 D 80 - M	•	•	1,380	
100	441 00 261	K 63 D 100 - M	•	•	1,560				
80	272	255	10	441 00 220	K 80 D 10 - M	•	•	1,275	G 1/4
			15	441 00 221	K 80 D 15 - M	•	•	1,350	
			20	441 00 222	K 80 D 20 - M	•	•	1,425	
			25	441 00 037	K 80 D 25 - M	•	•	1,500	
			30	441 00 223	K 80 D 30 - M	•	•	1,575	
			40	441 00 224	K 80 D 40 - M	•	•	1,725	
			50	441 00 225	K 80 D 50 - M	•	•	1,875	
			60	441 00 226	K 80 D 60 - M	•	•	2,025	
			80	441 00 227	K 80 D 80 - M	•	•	2,325	
100	441 00 262	K 80 D100 - M	•	•	2,625				
100	400	398	10	441 00 244	K 100D 10 - M	•	•	2,250	G 1/4
			15	441 00 245	K 100D 15 - M	•	•	2,370	
			20	441 00 246	K 100D 20 - M	•	•	2,500	
			25	441 00 247	K 100D 25 - M	•	•	2,600	
			30	441 00 248	K 100D 30 - M	•	•	2,720	
			40	441 00 249	K 100D 40 - M	•	•	2,950	
			50	441 00 250	K 100D 50 - M	•	•	3,200	
			60	441 00 251	K 100D 60 - M	•	•	3,420	
			80	441 00 252	K 100D 80 - M	•	•	3,900	
100	441 00 253	K 100D100 - M	•	•	4,350				

Magnetic detectors should be ordered separately

In order to prolong the product's service life, it is recommended to use external stoppers  
Tolerance on stroke length  $\pm 1$  mm

OPTION : • Other strokes on request

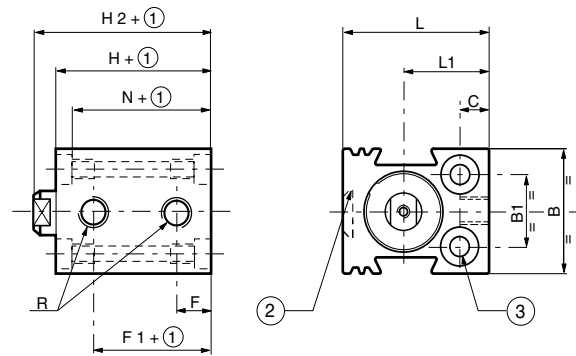
- Version non equipped for use with detector (consult us)

• Detector to be used

For installations using short stroke 32 to 100 mm bore, it is recommended to select the PEC type models compatible with ISO 6431 (see page P227)

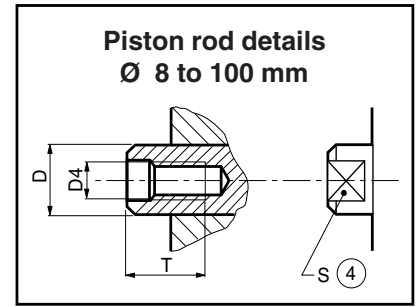
## DIMENSIONS

### Ø 8 to 25 mm - SINGLE ACTING and DOUBLE ACTING

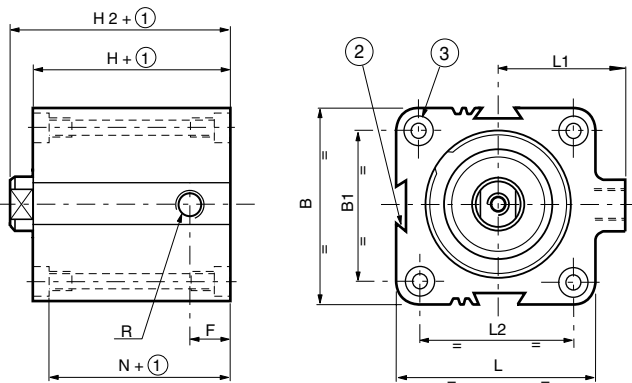


- ② 3rd track on Ø16 to 100
- ③ Mounting holes and counterbores (see detailed view below and following pages)
- ④ Dimensions across flats

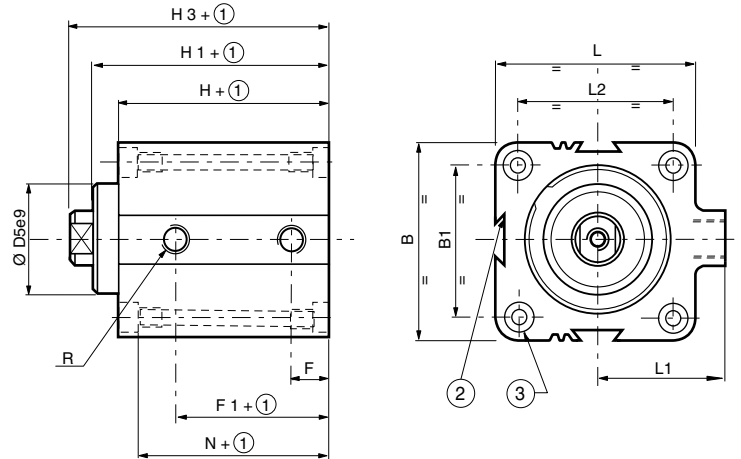
NOTE : In the single-acting version, the connection takes place on the port located in F.



### Ø 32 to 100 mm - SINGLE ACTING



### Ø 32 to 100 mm - DOUBLE ACTING

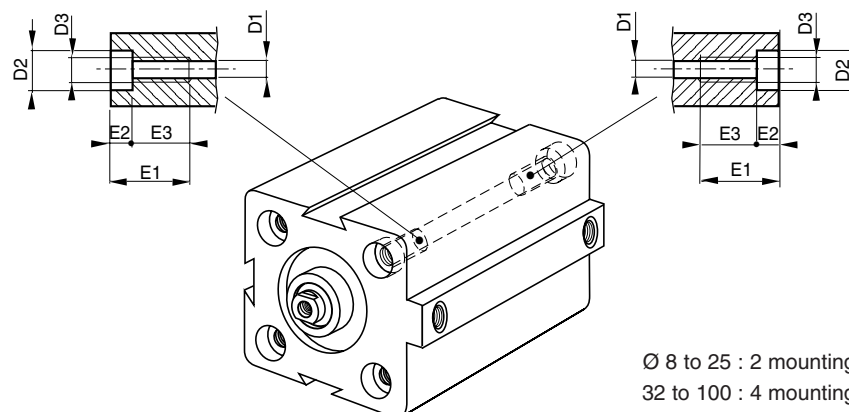


Ø bore (mm)	B	B <sub>1</sub>	C	Ø D	Ø D <sub>1</sub>	Ø D <sub>2</sub>	Ø D <sub>3</sub>	Ø D <sub>4</sub>	Ø D <sub>5</sub>	E <sub>1</sub>	E <sub>2</sub>	E <sub>3</sub>	F	F <sub>1</sub> +	H+	H <sub>1</sub> +	H <sub>2</sub> +	H <sub>3</sub> +	L	L <sub>1</sub>	L <sub>2</sub>	N+	ØR	S	T
8	20	11	4,5	4	3,4	6	M4	M2,5	-	12	3,4	8,6	5	14	23	-	24	-	24	15	-	19,6	M5	-	3,5
10	21	12	6	4	3,4	6	M4	M2,5	-	12	3,4	8,6	5	15	24	-	25	-	25,5	16,5	-	20,6	M5	-	3,5
12	23	13	6,5	4	3,4	6	M4	M2,5	-	12	3,4	8,6	5	16	24	-	25	-	27,5	18,5	-	20,6	M5	-	3,5
16	28	18	8	7,8	4,5	8	M5	M4	-	15	4,6	10,4	6	18	32	-	36,5	-	34	20	-	27,4	M5	6	8
20	32	20	9	9,8	5,5	10	M6	M5	-	18	5,7	12,3	8	20	32	-	36,5	-	40	24	-	26,3	G1/8	8	11
25	38	26	9	9,8	5,5	10	M6	M5	-	18	5,7	12,3	9,5	24,5	38,5	-	44	-	44	25	-	33,8	G1/8	8	11
32	45	32	-	11,8	5,5	10	M6	M6	26	18	5,7	12,3	9,5	22	39,5	44,5	45	50,5	48	32	36	33,8	G1/8	10	13
40	55	42	-	11,8	5,5	10	M6	M6	28	18	5,7	12,3	11	25,5	39,5	45,5	46	52	55	37,5	42	33,8	G1/8	10	13
50	65	50	-	15,8	6,6	11	M8	M8	34	20	6,8	13,2	11	25,5	39,5	45,5	47	53	65	42,5	50	32,7	G1/8	13	12
63	80	62	-	15,8	9	15	M10	M8	38,5	25	9	16	11	27,3	42	50	48,5	57,5	80	47,5	62	33	G1/8	13	14
80	100	82	-	19,8	9	15	M10	M10	44	25	9	16	12,5	29,3	46	56	54	64	100	60	82	37	G1/4	17	16
100	124	103	-	24,6	11	18	M12	M12	56	30	11	19	12,5	36	56	66,5	66	76,5	124	72	103	45	G1/4	22	20

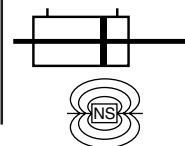
(1) : + stroke. The stroke length must be added to dimensions F<sub>1</sub>, H, H<sub>1</sub>, H<sub>2</sub>, H<sub>3</sub> and N.

For non-standard strokes, add the value of the immediately higher standard stroke.

### MOUNTING HOLES



Ø 8 to 25 : 2 mounting holes  
32 to 100 : 4 mounting holes



**SPECIFICATIONS AND CONSTRUCTION:**  
identical to the standard double acting version

**CHOICE OF EQUIPMENT**

Ø Bore (mm)	DOUBLE CROSSBAR CYLINDER		Max. stroke capability (mm)	Ø Port
	CODES (1)	REFERENCES		
8	441 50 049	K 8 D (1) T 2 - M	30	M5
10	441 50 050	K 10 D (1) T 2 - M	30	M5
12	441 50 051	K 12 D (1) T 2 - M	40	M5
16	441 50 052	K 16 D (1) T 2 - M	40	M5
20	441 50 053	K 20 D (1) T 2 - M	60	G 1/8
25	441 50 054	K 25 D (1) T 2 - M	60	G 1/8
32	441 50 055	K 32 D (1) T 2 - M	100	G 1/8
40	441 50 056	K 40 D (1) T 2 - M	120	G 1/8
50	441 50 057	K 50 D (1) T 2 - M	130	G 1/8
63	441 50 058	K 63 D (1) T 2 - M	130	G 1/8
80	441 50 059	K 80 D (1) T 2 - M	130	G 1/4
100	441 50 060	K 100 D (1) T 2 - M	130	G 1/4



2

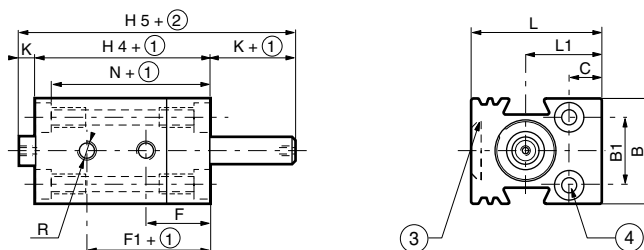
(1) Please specify stroke length (in mm)

The magnetic detectors must be ordered separately

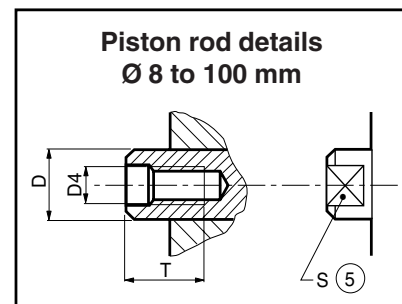
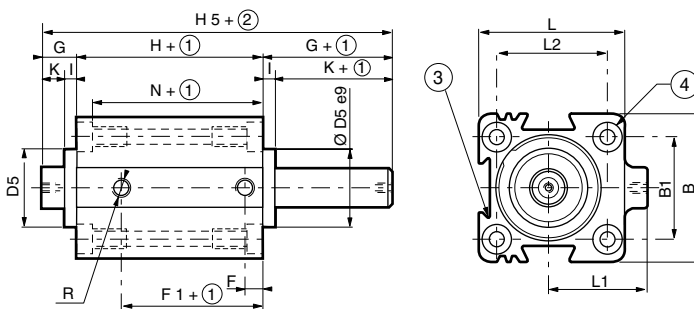
In order to prolong the product's service life, it is recommended to use external stoppers for both directions

**DIMENSIONS**

Ø 8 to 25 mm



Ø 32 to 100 mm



- ③ 3rd track on Ø16 to 100
- ④ Mounting holes and counterbores (see detailed view on page 6 and following pages)
- ⑤ Dimensions across flats

Ø	B	B <sub>1</sub>	C	Ø D	Ø D <sub>1</sub>	Ø D <sub>2</sub>	Ø D <sub>4</sub>	Ø D <sub>5</sub>	E <sub>1</sub>	E <sub>2</sub>	E <sub>3</sub>	F	F <sub>1</sub> +	G +	H +	H <sub>4</sub> +	H <sub>5</sub> +	I	K +	L	L <sub>1</sub>	L <sub>2</sub>	N +	R	S	T
<b>8</b>	20	11	4,5	4	3,4	6	M2,5	-	12	3,4	8,6	9	21,5	-	-	30,5	32,5	-	1	24	15	-	27,1	M5	-	3,5
<b>10</b>	21	12	6	4	3,4	6	M2,5	-	12	3,4	8,6	9	22,5	-	-	31,5	33,5	-	1	25,5	16,5	-	28,1	M5	-	3,5
<b>12</b>	23	13	6,5	4	3,4	6	M2,5	-	12	3,4	8,6	9	20	-	-	28	30	-	1	27,5	18,5	-	24,6	M5	-	3,5
<b>16</b>	28	18	8	7,8	4,5	8	M4	-	15	4,6	10,4	14	31	-	-	45	54	-	4,5	34	20	-	40,4	M5	6	8
<b>20</b>	32	20	9	9,8	5,5	10	M5	-	18	5,7	12,3	12	26	-	-	38	47	-	4,5	40	24	-	32,3	G1/8	8	11
<b>25</b>	38	26	9	9,8	5,5	10	M5	-	18	5,7	12,3	14	34	-	-	48	59	-	5,5	44	25	-	42,3	G1/8	8	11
<b>32</b>	45	32	-	11,8	5,5	10	M6	26	18	5,7	12,3	17,5	30	11	47,5	-	69,5	5	6	48	32	36	41,8	G1/8	10	13
<b>40</b>	55	42	-	11,8	5,5	10	M6	28	18	5,7	12,3	14	32	12,5	46	-	71	6	6,5	55	37,5	42	40,3	G1/8	10	13
<b>50</b>	65	50	-	15,8	6,6	11	M8	34	20	6,8	13,2	14	32,5	13,5	46,5	-	73,5	6	7,5	65	42,5	50	39,7	G1/8	13	12
<b>63</b>	80	62	-	15,8	9	15	M8	38,5	25	9	16	15	33	16	48	-	80	8	8	80	47,5	62	39	G1/8	13	14
<b>80</b>	100	82	-	19,8	9	15	M10	44	25	9	16	16,7	34,3	18	51	-	87	10	8	100	60	82	42	G1/4	17	16
<b>100</b>	124	103	-	24,8	11	18	M12	56	30	11	19	20	44	20,5	64	-	105	10,5	10	124	72	103	53	G1/4	22	20

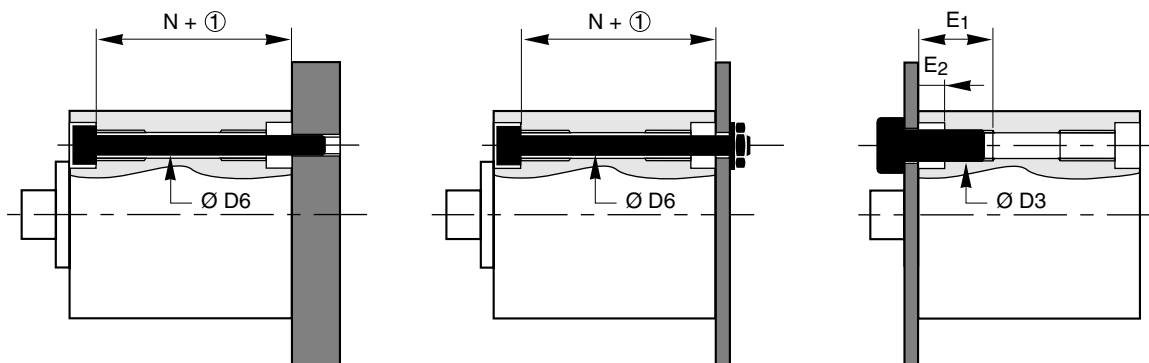
(1) : +stroke. Dimensions F<sub>1</sub>, H, H<sub>4</sub>, K, G and N the stroke length must be added  
For non-standard strokes, add the value of the immediately higher standard stroke.

(2) : + twice stroke.

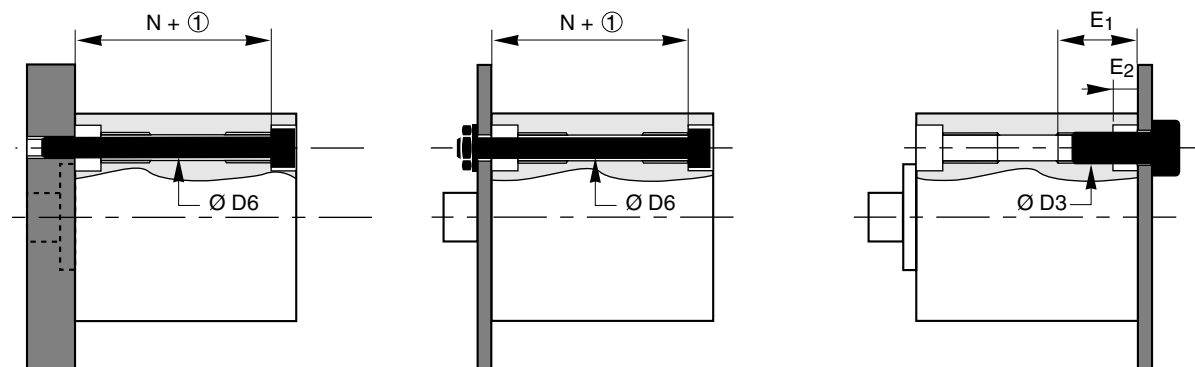
# MOUNTING OPTIONS

The tapped and sunten mounting holes provide great flexibility for mounting. The tappings simplify securing the cylinders, particularly when the stroke is long

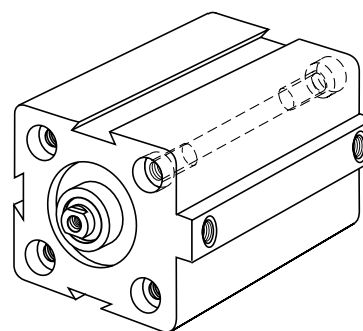
## • Front mounting



## • Rear mounting



Ø bore (mm)	Ø D3	Ø D6	E1	E2	N +
8	M4	M3	12	3,4	19,6
10	M4	M3	12	3,4	20,6
12	M4	M3	12	3,4	20,6
16	M5	M4	15	4,6	27,4
20	M6	M5	18	5,7	26,3
25	M6	M5	18	5,7	32,8
32	M6	M5	18	5,7	33,8
40	M6	M5	18	5,7	33,8
50	M8	M6	20	6,8	32,7
63	M10	M8	25	9	33
80	M10	M8	25	9	37
100	M12	M10	30	11	45

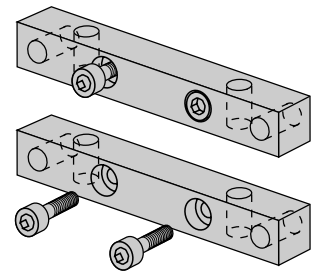


Ø 8 to 25 : 2 mounting holes per face  
Ø 32 to 100 : 4 mounting holes per face

(1) The length of stroke must be added to dimension N.  
For non-standard strokes, add the next higher standard one.

# MOUNTING WITH FLANGES

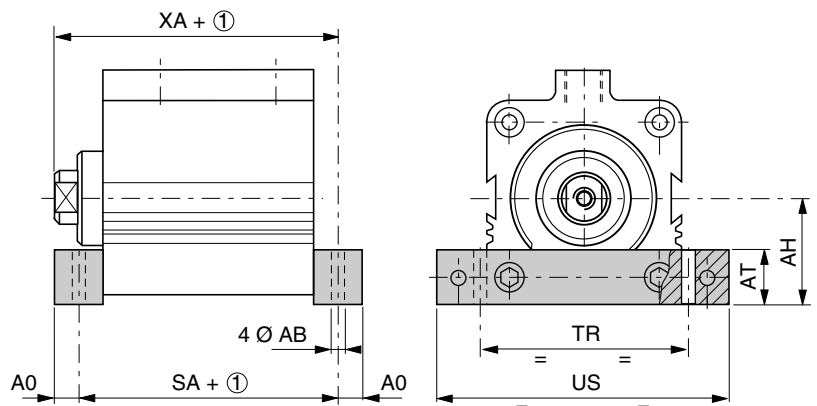
A set of two flanges enables front, rear or side mounting of cylinders with bores of 32 to 100mm, for single-acting, or double-acting, single rod or double crossbar type.  
(The set comprises two flanges and four screws for securing them to the cylinder).



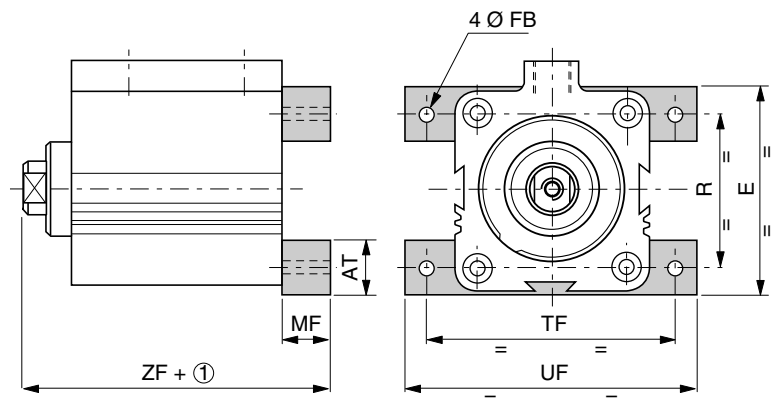
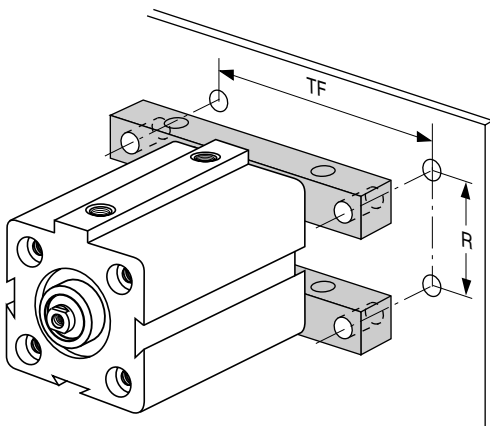
2

Ø bore (mm)	CODES set of two flanges
32	439 00 268
40	439 00 269
50	439 00 270
63	439 00 271
80	439 00 272
100	439 00 273

## • Side mounting



## • Front or rear mounting



Ø bore (mm)	Ø AB	AH	AO	AT	E	Ø FB	MF	R	TF	TR	UF US	SA +		XA +		ZF +		Weight (Kg)
												(2)	(3)	(2)	(3)	(2)	(3)	
32	5,5	25	5	14	50	5,5	10	36	63	50,5	72,5	49,5	57,5	55,5	63,5	60,5	68,5	0,065
40	5,5	28	5	14	56	5,5	10	42	73	60,5	82,5	49,5	56	57	63,5	62	68,5	0,080
50	6,6	33	6	16	66	6,6	12	50	88	72,5	99	51,5	58,5	59	66	65	72	0,135
63	9	41	7,5	20	82	9	15	62	111	91	125	57	63	65	71	72,5	78,5	0,250
80	9	51	7,5	20	102	9	15	82	116	53	131	61	66	71,5	76,5	79	84	0,260
100	10,5	62,5	8,5	22	125	10,5	17	103	142,5	64,5	160	73	81	85	93	93,5	101,5	0,400

(1) Add stroke length to dimensions SA, XA and ZF.

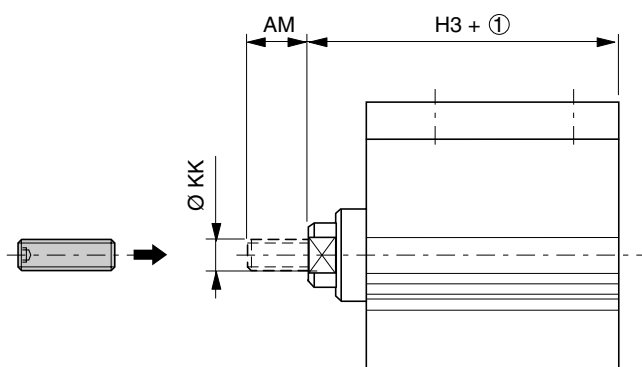
(2) Dimensions for single rod cylinder

(3) Dimensions for double crossbar cylinder

- Dimensions of bare cylinder, see specific overall dimensions pages.
- 32 mm bore cylinders are installed with the supply ports on top face.  
The bodies of 40 to 100mm bore cylinders can be rotated by 90° increments.
- For side-mounted 80 and 100mm bore cylinders, distance between TR centres is **less** than the distance between the centres of the mounting holes.

# THREADED END PIECE

Threaded rod endfitting for the tapped rod end of standard 16 to 100 mm bore cylinders.

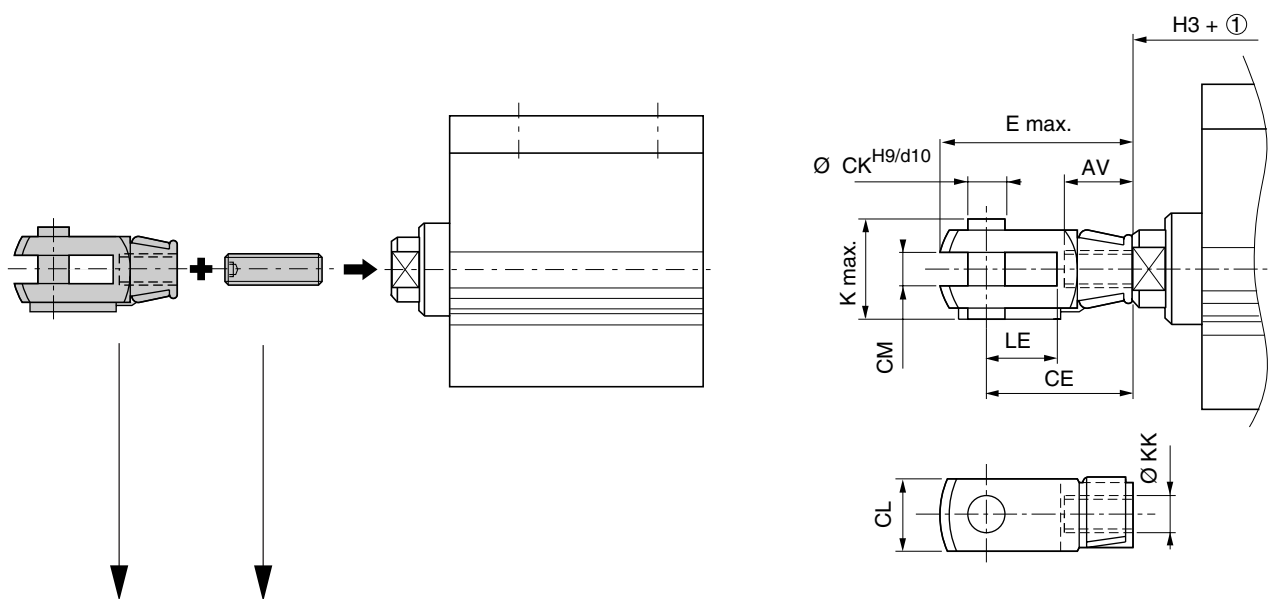


Ø bore (mm)	CODE threaded end piece	AM	H3+	Ø KK
16	439 00 259	8	36,5	M4
20	439 00 260	12	36,5	M6
25		12	44	M6
32	439 00 262	12	50,5	M6
40		12	52	M6
50	439 00 264	15	53	M8
63		15	57,5	M8
80	439 00 266	19	64	M10
100	439 00 267	20	76,5	M12

(1) Add the stroke to this value.

In your order, indicate the code of the end piece, which is supplied separately.

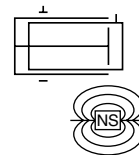
# FEMALE ROD CLEVIS



Ø bore (mm)	CODE female end piece +	CODE threaded end piece	AV	CE	Ø CK	CL	CM	E	K	Ø KK	LE	H3+	Clevis weight (Kg)
16	43900193	43900259	8	16	4	8	4 <sup>+0,4</sup> / <sub>+0,1</sub>	22,5	11	M4	8	36,5	0,010
20	43900159	439 00 260	12	24	6	12	6 <sup>+0,4</sup> / <sub>+0,1</sub>	33,5	16,5	M6	12	36,5	0,020
25												44	
32		50,5											
40		439 00 262										52	
50	43900161	439 00 264	16	32	8	16	8 <sup>+0,5</sup> / <sub>+0,15</sub>	45	22	M8	16	53	0,050
63												57,5	
80	43900163	439 00 266	20	40	10	20	10 <sup>+0,5</sup> / <sub>+0,15</sub>	56	26	M10	20	64	0,100
100	43900164	439 00 267	22	48	12	24	12 <sup>+0,5</sup> / <sub>+0,15</sub>	67	32	M12	24	76,5	0,150

Please indicate the threaded and clevis end piece code in your order. These two items are supplied installed on the cylinder.

(1) Add the stroke to this value

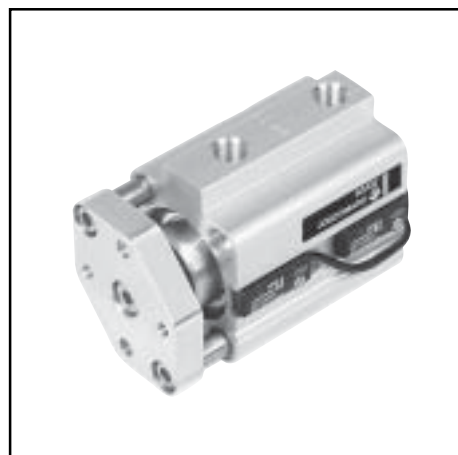


**SPECIFICATIONS**

FLUID : Air or neutral gas, filtered, lubricated or not  
 PRESSURE : 2 to 10 bar  
 PRESSURE : -10°C, +60°C  
 Ø CYLINDER BORE : 20 to 100 mm  
 STROKE : See table below

**CONSTRUCTION**

Body in light alloy  
 Piston rod in chrome plated steel  
 Load carrying plate in light alloy  
 Stainless steel guide rod  
 Self lubricating bearing  
 Internal parts in acetal (POM) brass or light alloy  
 Polyurethane (PUR) sealing  
 Front or rear mounting by 2 screws (not supplied)



2

**CHOICE OF EQUIPMENT**

Ø Bore (mm)	Stroke (mm)	CYLINDERS WITH ROTATION-PROOF DEVICE		Ø Port
		CODES	REFERENCES	
20	5	441 00 440	K 20 D 5L-M*	G1/8
	10	441 00 441	K 20 D 10L-M	
	15	441 00 442	K 20 D 15L-M	
	20	441 00 443	K 20 D 20L-M	
	25	441 00 444	K 20 D 25L-M	
	30	441 00 445	K 20 D 30L-M	
	40	441 00 446	K 20 D 40L-M	
25	5	441 00 448	K 25 D 5L-M*	G1/8
	10	441 00 449	K 25 D 10L-M	
	15	441 00 450	K 25 D 15L-M	
	20	441 00 451	K 25 D 20L-M	
	25	441 00 452	K 25 D 25L-M	
	30	441 00 453	K 25 D 30L-M	
	40	441 00 454	K 25 D 40L-M	
32	5	441 00 275	K 32 D 5L-M*	G1/8
	10	441 00 276	K 32 D 10L-M	
	15	441 00 277	K 32 D 15L-M	
	20	441 00 278	K 32 D 20L-M	
	25	441 00 279	K 32 D 25L-M	
	30	441 00 280	K 32 D 30L-M	
	40	441 00 281	K 32 D 40L-M	
	50	441 00 282	K 32 D 50L-M	
	60	441 00 283	K 32 D 60L-M	
80	441 00 284	K 32 D 80L-M		
40	5	441 00 285	K 40 D 5L-M*	G1/8
	10	441 00 286	K 40 D 10L-M	
	15	441 00 287	K 40 D 15L-M	
	20	441 00 288	K 40 D 20L-M	
	25	441 00 289	K 40 D 25L-M	
	30	441 00 290	K 40 D 30L-M	
	40	441 00 291	K 40 D 40L-M	
	50	441 00 292	K 40 D 50L-M	
	60	441 00 293	K 40 D 60L-M	
	80	441 00 294	K 40 D 80L-M	
100	441 00 295	K 40 D 100L-M		

Ø Bore (mm)	Stroke (mm)	CYLINDERS WITH ROTATION-PROOF DEVICE		Ø Port
		CODES	REFERENCES	
50	10	441 00 296	K 50 D 10L-M	G1/8
	15	441 00 297	K 50 D 15L-M	
	20	441 00 298	K 50 D 20L-M	
	25	441 00 299	K 50 D 25L-M	
	30	441 00 300	K 50 D 30L-M	
	40	441 00 301	K 50 D 40L-M	
	50	441 00 302	K 50 D 50L-M	
	60	441 00 303	K 50 D 60L-M	
	80	441 00 304	K 50 D 80L-M	
	100	441 00 305	K 50 D 100L-M	
63	10	441 00 306	K 63 D 10L-M	G1/8
	15	441 00 307	K 63 D 15L-M	
	20	441 00 308	K 63 D 20L-M	
	25	441 00 309	K 63 D 25L-M	
	30	441 00 310	K 63 D 30L-M	
	40	441 00 311	K 63 D 40L-M	
	50	441 00 312	K 63 D 50L-M	
	60	441 00 313	K 63 D 60L-M	
	80	441 00 314	K 63 D 80L-M	
	100	441 00 315	K 63 D 100L-M	
80	10	441 00 316	K 80 D 10L-M	G1/4
	15	441 00 317	K 80 D 15L-M	
	20	441 00 318	K 80 D 20L-M	
	25	441 00 319	K 80 D 25L-M	
	30	441 00 320	K 80 D 30L-M	
	40	441 00 321	K 80 D 40L-M	
	50	441 00 322	K 80 D 50L-M	
	60	441 00 323	K 80 D 60L-M	
	80	441 00 324	K 80 D 80L-M	
	100	441 00 325	K 80 D 100L-M	
100	10	441 00 326	K 100D 10L-M	G1/4
	15	441 00 327	K 100D 15L-M	
	20	441 00 328	K 100D 20L-M	
	25	441 00 329	K 100D 25L-M	
	30	441 00 330	K 100D 30L-M	
	40	441 00 331	K 100D 40L-M	
	50	441 00 332	K 100D 50L-M	
	60	441 00 333	K 100D 60L-M	
	80	441 00 334	K 100D 80L-M	
	100	441 00 335	K 100D 100L-M	

Magnetic detectors should be ordered separately.

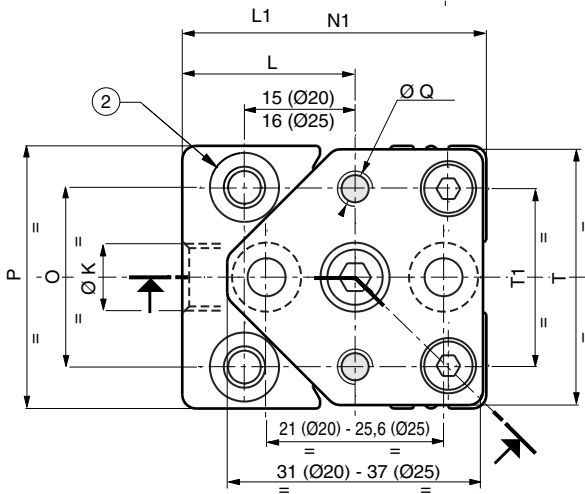
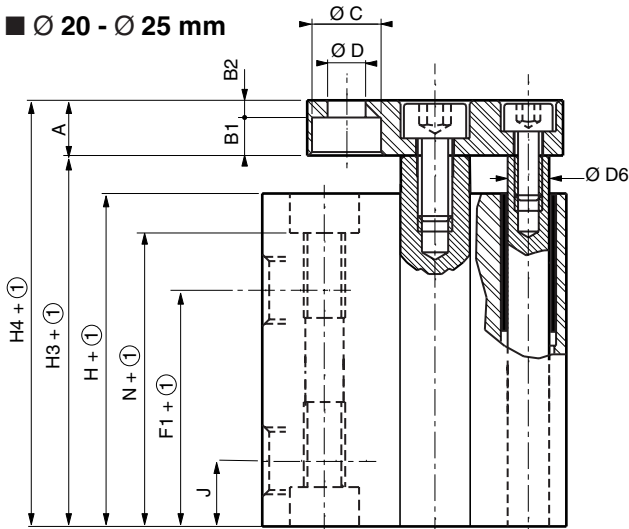
In order to prolong the product's service life, it is recommended to use external stoppers for both directions.

\* reed switch type detector cannot be fitted on 5 mm strokes or less

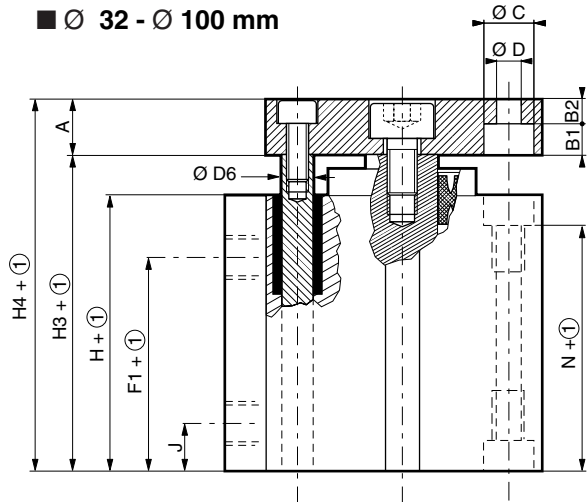
OPTION . Other strokes on request

## DIMENSIONS

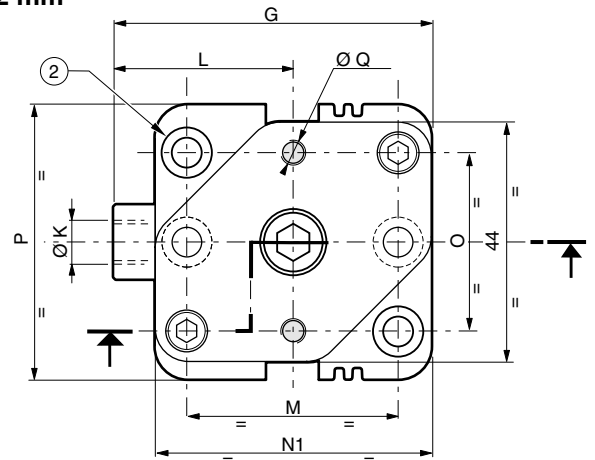
■  $\varnothing 20 - \varnothing 25 \text{ mm}$



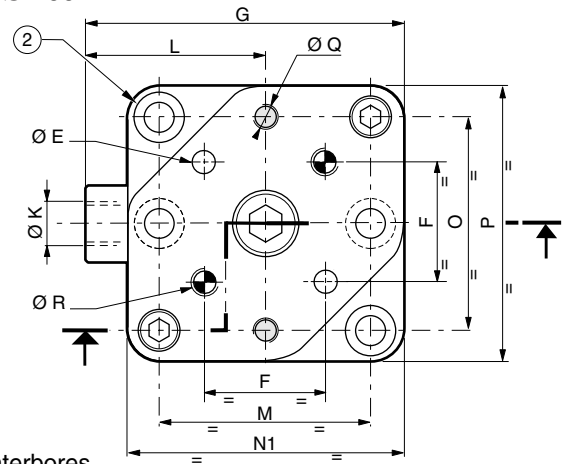
■  $\varnothing 32 - \varnothing 100 \text{ mm}$



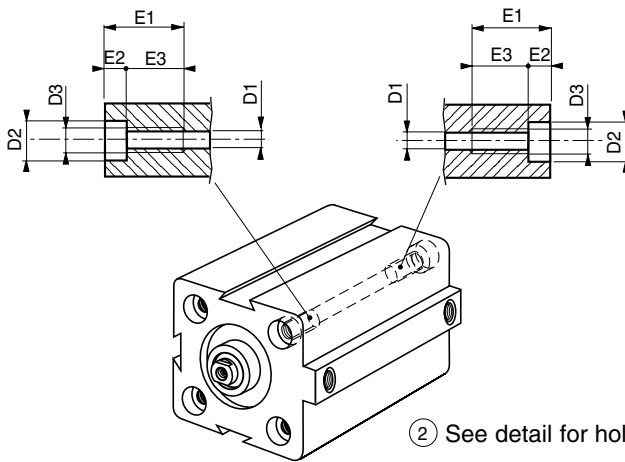
■  $\varnothing 32 \text{ mm}$



■  $\varnothing 40 - \varnothing 100 \text{ mm}$



## MOUNTING HOLES



(2) See detail for holes and counterbores

$\varnothing$ (mm)	A	B1	B2	$\varnothing$ C	$\varnothing$ D	$\varnothing$ D <sub>1</sub>	$\varnothing$ D <sub>2</sub>	$\varnothing$ D <sub>3</sub>	$\varnothing$ D <sub>6</sub>	$\varnothing$ E	E <sub>1</sub>	E <sub>2</sub>	E <sub>3</sub>	F	F <sub>1</sub> +	G	H +	H <sub>3</sub> +	H <sub>4</sub> +	J	$\varnothing$ K	L	M	N +	N <sub>1</sub>	O	P	$\varnothing$ Q	$\varnothing$ R
20	8	4,5	3,5	8	4,5	5,5	10	M6	5	-	18	5,7	12,3	-	20	-	32	36,5	44,5	8	G1/8	24	-	26,3	40	20	32	M3	-
25	8	5,5	2,5	10	5,5	5,5	10	M6	6	-	18	5,7	12,3	-	24,5	-	38,5	44	52	9,5	G1/8	25	-	32,8	44	26	38	M5	-
32	10	5,7	4,3	10	5,5	5,5	10	M6	8	-	18	5,7	12,3	-	22	56	39,5	50,5	60,5	9,5	G1/8	32	36	33,8	48	32	45	M5	-
40	10	5,7	4,3	10	5,5	5,5	10	M6	8	5,1	18	5,7	12,3	23,3	25,5	65	39,5	52	62	11	G1/8	37,5	42	33,8	55	42	55	M5	M5
50	12	5,7	6,3	10	5,5	6,6	11	M8	8	6,1	20	6,8	13,2	29,7	25,5	75	39,5	53	65	11	G1/8	42,5	50	32,7	65	50	65	M5	M6
63	12	6,8	5,2	11	6,6	9	15	M10	10	6,1	25	9	16	35,4	27,3	87,5	42	57,5	69,5	11	G1/8	47,5	62	33	80	62	80	M6	M6
80	14	6,8	7,2	11	6,6	9	15	M10	10	8,1	25	9	16	46	29,3	110	46	64	78	12,5	G1/4	60	82	37	100	82	100	M6	M8
100	16	9	7	15	9	11	18	M12	10	10,1	30	11	19	56,6	36	134	56	76,5	92,5	12,5	G1/4	72	103	45	124	103	124	M8	M10

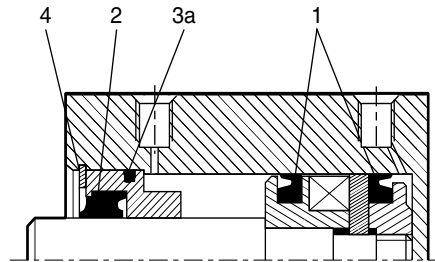
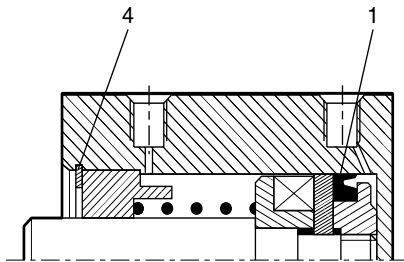
(1) The stroke length must be added to dimensions F<sub>1</sub>, H, H<sub>3</sub>, H<sub>4</sub> and N.  
For non-standard strokes, add the value of the immediately higher standard stroke.

Spare parts kits  
**SHORT STROKE CYLINDERS Ø 8 to 100mm - type K**

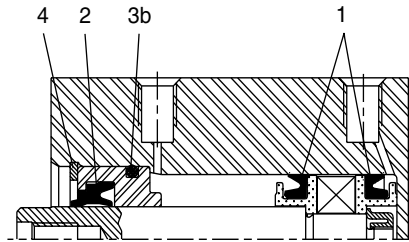
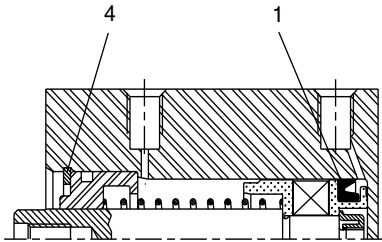
**SINGLE ACTING**

**DOUBLE ACTING**

Ø 8 ... 20 mm



Ø 25 ... 100 mm



The kits contain wearing parts. They are suitable for both single and double acting cylinders.

Ø bore (mm)	CODE spare parts kits
8	978 01 348
10	978 01 349
12	978 01 350
16	978 01 351
20	978 01 352
25	978 01 353
32	978 01 354
40	978 01 355
50	978 01 356
63	978 01 357
80	978 01 358
100	978 01 591
1 Tube of grease, 11 cm <sup>3</sup>	978 02 100

ASCO/JOUCOMATIC reserves the right to alter the availability and specifications without notice.

