

# Cylinders Series 61

## Aluminium profile

1

Single, double-acting, magnetic, cushioned  
 ø 32, 40, 50, 63, 80, 100, 125 (ISO 15552)



- » ISO 15552 (corresponding to the previous DIN/ISO 6431/VDMA 24562 standards)
- » Rolled stainless steel rod
- » Clean design
- » Adjustable pneumatic cushioning

Cylinders Series 61 have been designed to comply with the dimensions laid down in the ISO 15552 standards. A permanent magnet, mounted on the piston in these cylinders, enables information to be received regarding the piston position by means of proximity switches mounted in grooves along the cylinder profile. These grooves can be covered with a slot cover profile.

This cylinder series is equipped with adjustable end-stroke cushioning. Moreover, these cylinders are equipped with a mechanical cushioning in order to reduce the impact of the piston as it reaches the end of the stroke.

### GENERAL DATA

Type of construction	with tie-rods (inside the profile)
Operation	double-acting, single-acting, tandem
Materials	end-blocks = AL, seals = NBR, rod = PU, other parts: see coding
Type of mounting	with tie-rods, front flange, rear flange, feet front and rear trunnion, swivel combination
Stroke min - max	10 + 2500mm
Operating temperature	0°C + 80°C (with dry air -20°C)
Special designs	see coding example
Operating pressure	1 + 10 bar
Speed	10 + 1000 mm/sec (NO LOAD)
Fluid	filtered air, without lubrication. If lubricated air is used, it is recommended to use oil ISOVG32. Once applied the lubrication should never be interrupted.

**STANDARD STROKES FOR CYLINDERS SERIES 61**

■ = Single-acting  
✱ = Double-acting

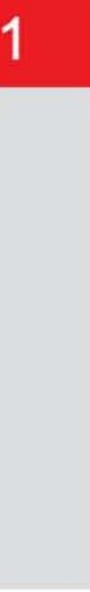
Ø	25	50	75	80	100	125	150	160	200	250	300	320	400	500
32	■ ✱	■ ✱	■ ✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱
40	■ ✱	■ ✱	■ ✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱
50	■ ✱	■ ✱	■ ✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱
63	■ ✱	■ ✱	■ ✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱
80	■ ✱	■ ✱	■ ✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱
100		■ ✱	■ ✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱
125		✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱

**CODING EXAMPLE**

61	M	2	P	050	A	0200
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<b>61</b>	SERIES
<b>M</b>	VERSION M= standard, magnetic
<b>2</b>	OPERATION 1 = single-acting (front spring) (ø 32 + ø 100) 2 = double-acting 3 = double-acting (no cushion) 4 = double-acting (rear cushion) 5 = double-acting (front cushion) 6 = double-acting, through-rod 7 = single-acting, through-rod
<b>P</b>	MATERIALS P = rolled stainless steel rod AISI 420B - anodized AL profile tube - NBR seals - nuts and tie-rods zinc-plated steel - rod seals PU R = rolled stainless steel rod AISI 420B - anodized AL profile tube - NBR seals - nuts stainless steel AISI 303 - tie-rods stainless steel AISI 420B - rod seals PU
<b>050</b>	BORE 032 = 32 mm 040 = 40 mm 050 = 50 mm 063 = 63 mm 080 = 80 mm 100 = 100 mm 125 = 125 mm
<b>A</b>	CONSTRUCTION A = standard lock nut for rod RL = cylinder with rod lock
<b>0200</b>	STROKE (see table)  = standard V = rod seal FKM N = tandem R = rod seal NBR W = all seals FKM + 130 C°

**CYLINDERS ACCESSORIES SERIES 61**



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



Centre trunnion Mod. F



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, except for piston rod lock nut Mod. U

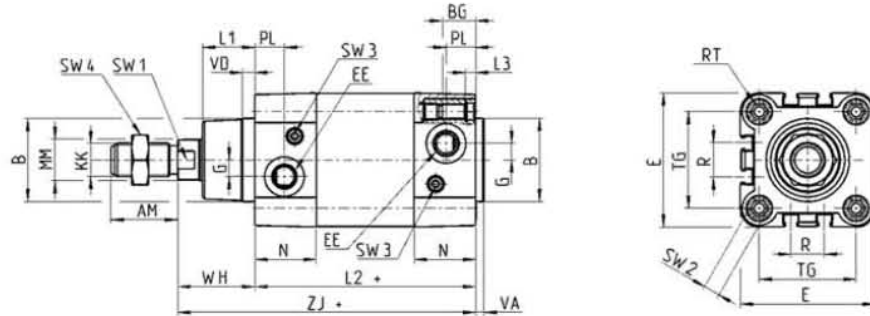
MOVEMENT > Cylinders Series 61

CATALOGUE > Release 8.2

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**Cylinders Series 61**

N.B. : the single-acting cylinders' sizes L1 and L2 are increased by 25 mm.



+ = add the stroke

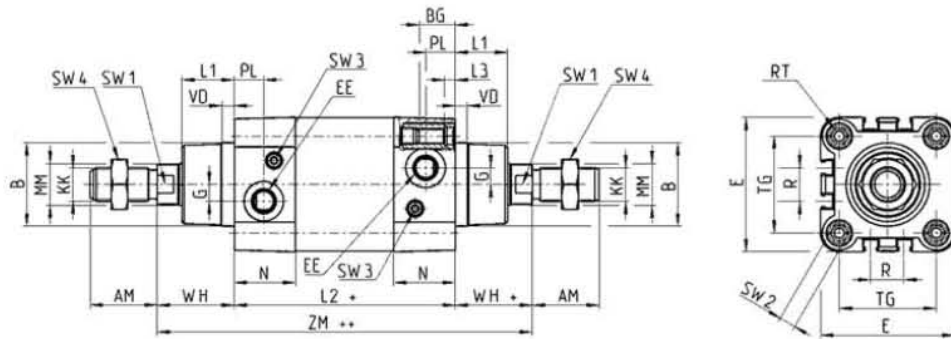
**DIMENSIONS**

Ø	AM	B	BG	E	EE	G	KK	L1	L2+	L3	MM	N	PL	R	RT	SW1	SW2	SW3	SW4	TG	VA	VD	WH	ZJ+	front and rear cushion stroke
32	22	30	16	46	G1/8	5	M10x1,25	18	94	5	12	26	14	13	M6	10	6	2	17	32,5	4	5	26	120	17 / 12
40	24	35	16	55	G1/4	5	M12x1,25	21	105	5	16	29	15	13,5	M6	13	6	2	19	38	4	5	30	135	20 / 17
50	32	40	16	64,5	G1/4	8	M16x1,5	25	106	5	20	29,5	15	16	M8	17	8	3	24	46,5	4	6	37	143	15 / 14
63	32	45	16	75	G3/8	8	M16x1,5	26	121	5	20	36,5	21	28	M8	17	8	3	24	56,5	4	6	37	158	17 / 16
80	40	45	19	93	G3/8	8	M20x1,5	30	128	0	25	36	21	30	M10	22	10	5	30	72	4	7	46	174	20 / 20
100	40	55	19,5	110	G1/2	8	M20x1,5	35	138	0	25	38,5	23	40	M10	22	10	5	30	89	4	7	51	189	21 / 19
125	54	60	23	135	G1/2	10,5	M27x2	42	160	0	32	43	23,5	50	M12	27	12	4	41	110	6	8	65	225	26 / 25

MOVEMENT

**Cylinders Series 61 - through-rod**

Note: the single-acting cylinders sizes L1 and L2 are increased by 25 mm.



+ = add the stroke  
++ = add the stroke two times

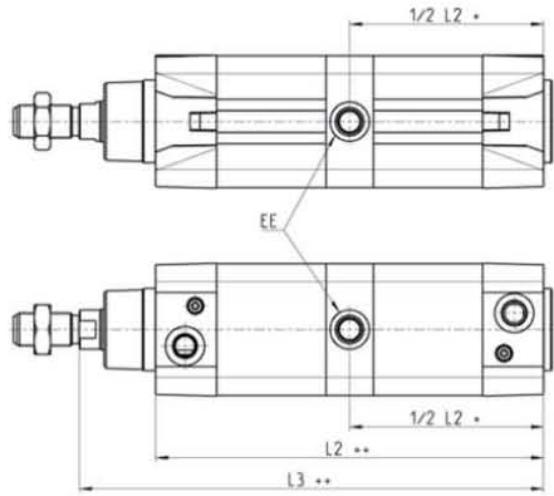
**DIMENSIONS**

Ø	AM	B	BG	E	EE	G	KK	L1	L2+	L3	MM	N	PL	R	RT	SW1	SW2	SW3	SW4	TG	VD	WH	ZM++	front and rear cushion stroke
32	22	30	16	46	G1/8	5	M10x1,25	18	94	5	12	26	14	13	M6	10	6	2	17	32,5	5	26	146	17 / 12
40	24	35	16	55	G1/4	5	M12x1,25	21	105	5	16	29	15	13,5	M6	13	6	2	19	38	5	30	165	20 / 17
50	32	40	16	64,5	G1/4	8	M16x1,5	25	106	5	20	29,5	15	16	M8	17	8	3	24	46,5	6	37	180	15 / 14
63	32	45	16	75	G3/8	8	M16x1,5	26	121	5	20	36,5	21	28	M8	17	8	3	24	56,5	6	37	195	17 / 16
80	40	45	19	93	G3/8	8	M20x1,5	30	128	0	25	36	21	30	M10	22	10	5	30	72	7	46	220	20 / 20
100	40	55	19,5	110	G1/2	8	M20x1,5	35	138	0	25	38,5	23	40	M10	22	10	5	30	89	7	51	240	21 / 19
125	54	60	23	135	G1/2	10,5	M27x2	42	160	0	32	43	23,5	50	M12	27	12	4	41	110	8	65	290	26 / 25

Cylinders Series 61 - tandem version



+ = add the stroke  
++ = add the stroke two times

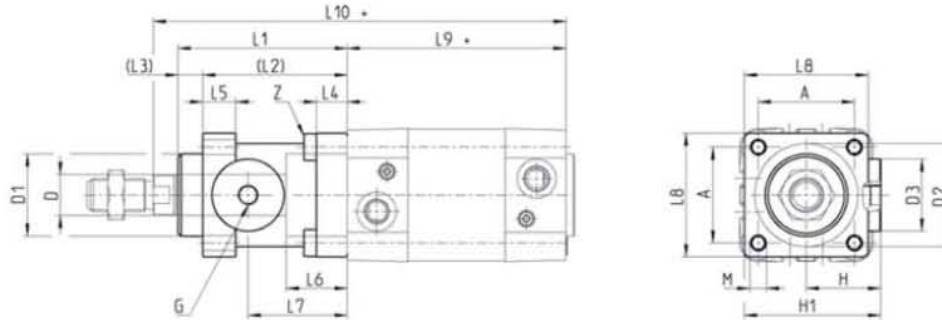


DIMENSIONS			
Ø	EE	L2+	L3+
32	G1/8	172,5	197,5
40	G1/4	191,5	221,5
50	G1/4	188	225
63	G3/8	204	230
80	G3/8	225,5	271,5
100	G1/2	231	282
125	G1/2	264	329

Cylinders Series 61 with rod lock



+ = add the stroke



DIMENSIONS																				
Ø	D	D1	D2	D3	A	G	H	H1	L1	L2	L3	L4	L5	L6	L7	L8	L9+	L10+	M	Z
32	12	30,5	35	25	32,5	M5	25,5	46,5	58	48	10	8	13	20,5	34	45	94	160	M6	M6x20
40	16	35	40	28	38	G1/8	30	53	65	55	10	8	13	22,5	38	50	105	178	M6	M6x20
50	20	40	50	35	46,5	G1/8	36	64	82	70	12	15	16	29,5	48	60	106	200	M8	M6x20
63	20	45	60	38	56,5	G1/8	40	75	82	70	12	15	16	29,5	49,5	70	121	215	M8	M8x30
80	25	45	80	48	72	G1/8	50	95	110	90	20	18	20	35	61	90	128	254	M10	M10x35
100	25	55	100	58	89	G1/8	58	110,5	115	100	15	18	20	39	69	105	138	269	M10	M10x35
125	32	60	130	65	110	G1/8	80	150	167	122	45	22	30	51	86,5	140	160	350	M12	M12x40