

# Round cylinders

# series P

## DESCRIPTION

Round profile cylinders series "P" and their accessories, are produced from Ø 32 to Ø 63, with techno-polymer piston supplied as standard, available in basic version, through rod or with rear axial feed, magnetic or non-magnetic, with adjustable cushions. They can comply with ATEX directive, 2 GD category, upon request.



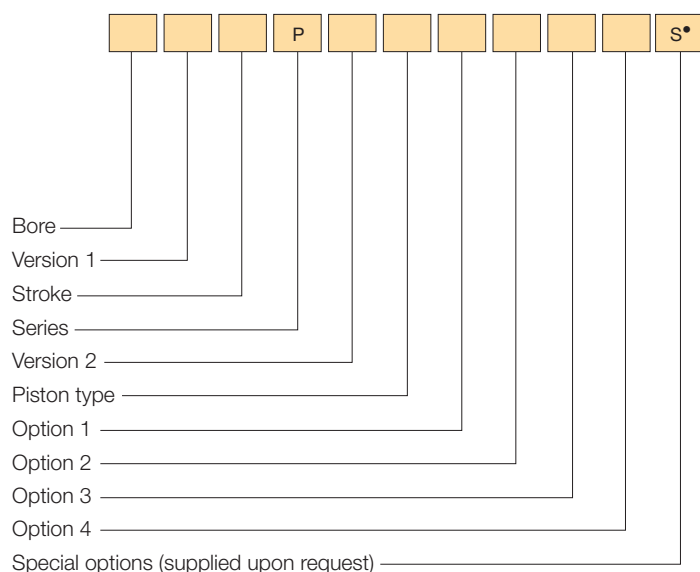
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## TECHNICAL DATA

Operating pressure	1 ÷ 10 bar
Working temperature	0 ÷ +80 °C (-20 °C with dry air) 0 ÷ +150 °C with seals for high temperature (-10 °C with dry air)
Fluid	Compressed air, filtered, continuous lubricated, unlubricated or dry lubricated
Versions	Double acting, single acting front spring, single acting rear spring, through rod, flat rear cap (rear axial feed); reduced flat rear cap
Bore	Ø 32, 40, 50, 63
Port size	Ø 32 = G 1/8 Ø 40 - 50 = G 1/4 Ø 63 = G 3/8
Standard strokes (mm)	10, 25, 50, 75, 80, 100, 125, 150, 160, 175, 200, 250, 300, 320, 350, 400, 450, 500
Decelerators lenght	Ø 32 40 50 63 mm 29 35 40 40
Max strokes (mm)	Ø 32 ÷ 63 = 1000
Max strokes single act. (mm)	Ø 32 ÷ 63 = 50
Spring theoretical tractive force	See technical data on page 0.13

## MATERIALS

End caps	Anodized aluminium alloy
Cylinder barrel	Extruded tube, AISI 304 stainless steel
Barrel-end cover fixing type	Irreversible calking with dual-seal system, mechanical and pneumatic
Piston rod	C45 chromium-plated steel AISI 303 rolled stainless steel
Rod nut and ring nut	Steel Stainless steel
Decelerator ogives	Anodized aluminium alloy
Piston rod bearing	Self lubricating sintered bronze
Piston	Techno-polymer (supplied with and without magnet) Aluminium alloy (supplied with and without magnet) for high temperature, for applications that don't provide the real use of the cushioning and strokes other 1000 mm
Piston seals	Polyurethane - FKM (Viton®)
Springs	Spring steel



• See chapter 1, page 1.1.

<b>VERSION 1</b>	
/ Basic cylinder	R Through rod
H Flat rear cap (rear axial feed)	C Reduced flat rear cap
<b>VERSION 2</b>	
D Double acting	Y Single acting rear spring*
S Single acting front spring	
<b>PISTON TYPE</b>	
C Non-magnetic	E Magnetic**
<b>OPTION 1</b>	
X Cushioned ("H" and "C" versions excluded)	
<b>OPTION 2</b>	
1 Stainless steel piston rod and rod nut	3 Stainless steel piston rod and rod nut, and seals for high temperature***
2 Seals for high temperature***	
<b>OPTION 3</b>	
5 Aluminium alloy piston	
<b>OPTION 4</b>	
/EX Consistent with the ATEX directive  II 2GD c T5 T100°C -20°C<Ta<80°C	

\* Different dimensions from the versions "D" and "S"; contact the commercial office  
 \*\* Available even with "FKM" (Viton®) seals but just for applications where is needed a chemical compatibility; not available for high temperatures.  
 \*\*\* Supplied only with non-magnetic piston type.

## ORDER EXAMPLES

Basic cylinder Ø 32, 50 mm stroke, double acting, non magnetic piston type: **32/50 PDC**

Basic cylinder Ø 40, 50 mm stroke, double acting, magnetic piston type, cushioned: **40/50 PDE**

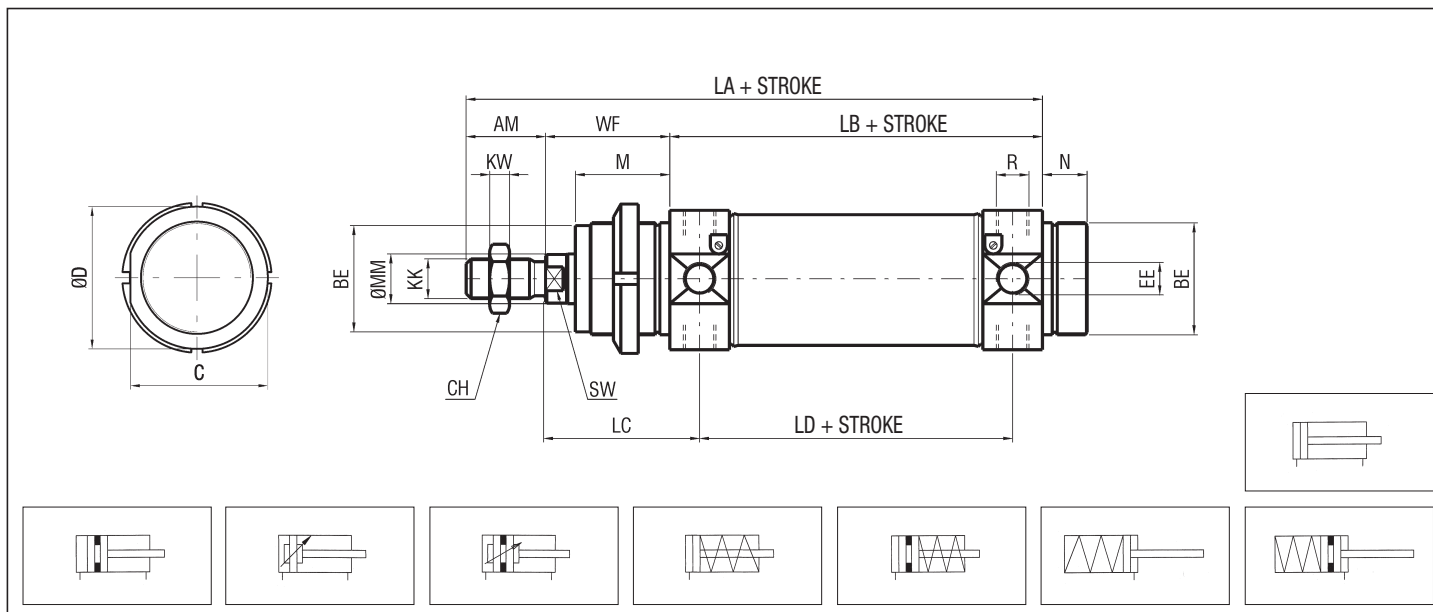
Cylinder Ø 50, through rod, 100 mm stroke, double acting, magnetic piston type, cushioned: **50R100 PDCX**

Basic cylinder Ø 50, 40 mm stroke, single acting rear spring, non-magnetic piston type, seals for high temperature, ATEX: **50/40 PYC2/EX**

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### P BASIC CYLINDER

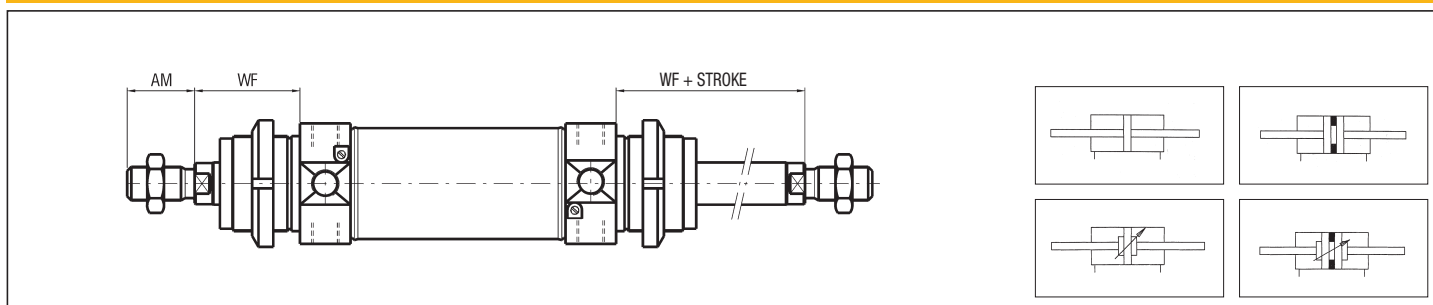


P.S.: End cap ring nut and rod nut supplied as standard

### DIMENSIONS AND WEIGHTS BASIC CYLINDER

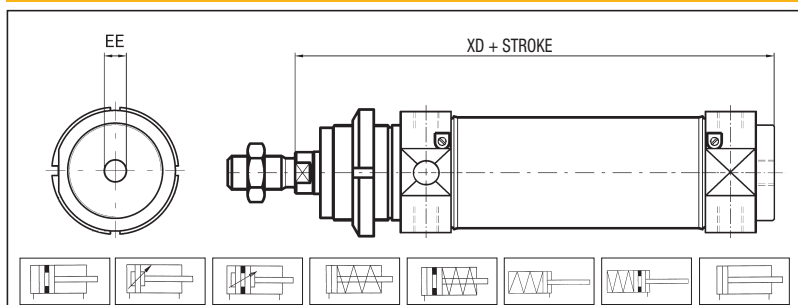
Ø	AM	BE	C	CH	D	EE	KK	KW	LA	LB	LC	LD	M	MM	N	R	SW	WF	XC	XD	WEIGHT (g)	INCR. (g) x 10 mm
32	20	M30x1,5	36,5	17	38	G1/8	M10x1,25	6	154	96	47	78	30	12	14	M8x1	10	38	134	140	386	16
40	24	M38x1,5	44	19	46	G1/4	M12x1,25	7	182	113	57	89	35	16	16	M10x1	12	45	158	163	690	26
50	32	M45x1,5	55	24	57	G1/4	M16x1,5	8	202	120	62	96	38	20	18	M12x1,5	16	50	170	176	1265	34
63	32	M45x1,5	67,5	24	70	G3/8	M16x1,5	8	206	124	63	98	38	20	18	M14x1,5	16	50	174	180	1750	50

### THROUGH ROD



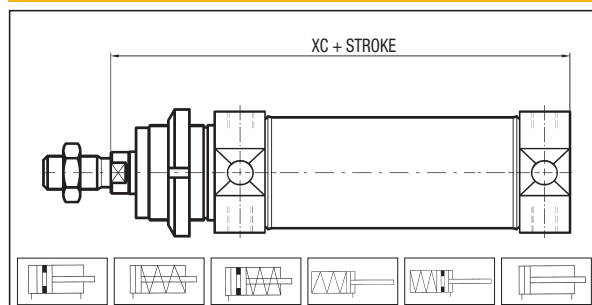
P.S.: End cap ring nut and rod nut supplied as standard

### FLAT END CAP (REAR AXIAL FEED)



P.S.: End cap ring nut and rod nut supplied as standard

### REDUCED FLAT REAR CAP



P.S.: End cap ring nut and rod nut supplied as standard

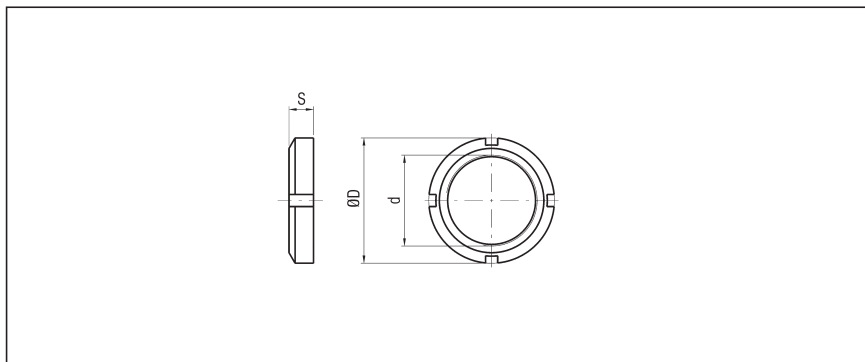
Accessories  
Fixings

series **P**

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RING NUT - STEEL - PG Ø

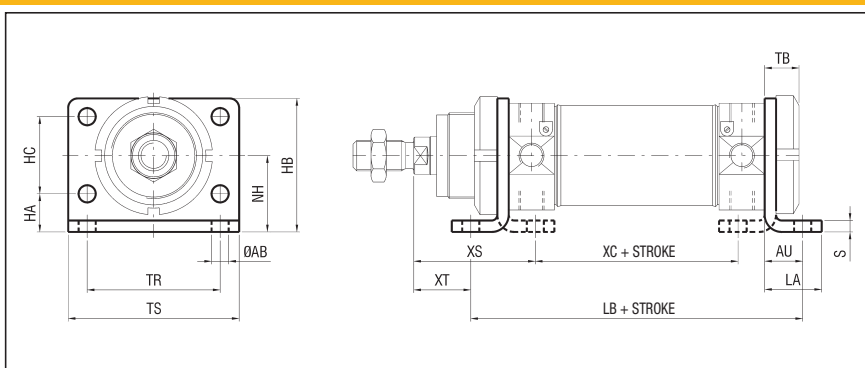
Ø	d	D	S	WEIGHT (g)
32	M30x1,5	42	8	43
40	M38x1,5	50	10	80
50-63	M45x1,5	65	10	122



FLANGE/FOOT - STEEL - PFP Ø

Ø	AB	AU	HA	HB	HC	LA	LB	LC
32	7	14	14	49	28	21	124	76
40	9	20	18	58	30	30	153	83
50	9	20	20	70	40	30	160	92
63	9	20	20	80	50	30	164	92

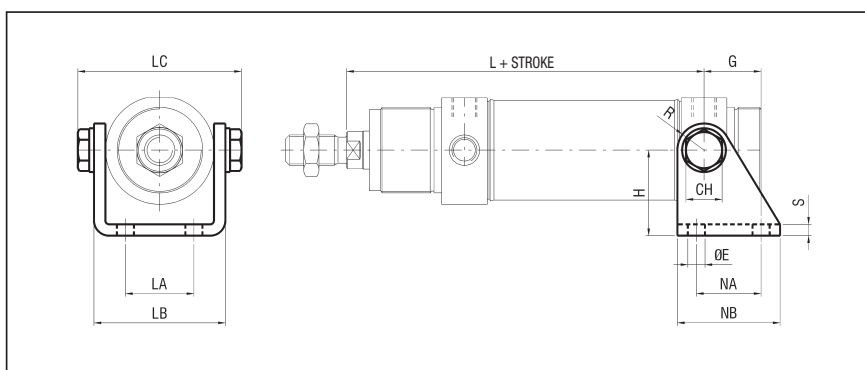
Ø	NH	S	TB	TR	TS	XS	XT	WEIGHT (g)
32	28	4	11	52	66	48	24	98
40	33	5	13	60	80	60	25	183
50	40	6	14	70	90	64	30	276
63	45	6	14	76	96	64	30	395



REAR HINGE - STEEL - PSC Ø

Ø	CH	E	G	H	L	LA	LB
32	13	7	20	35	125	20	46,1
40	17	9	27	40	146	28	56,1
50	19	9	30	45	158	36	69,1
63	19	9	34	50	161	42	82,1

Ø	LC	NA	NB	R	S	WEIGHT (g)
32	58	24	40	12	4	150
40	70	30	50	13	5	259
50	86	34	54	14	6	403
63	100	35	65	16	6	520



PIVOT (PAIR) - STEEL - PT Ø

Ø	D	H	LA	LB	CH	WEIGHT (g)
32	10	51	47	125	5	10
40	12	61	57	146	6	20
50	14	75	62	158	6	40
63	16	92	63	161	8	65

