JOUCOMATIC

COMPACT CYLINDERS

Ø 20 to 100 mm - single and double acting
ISO 21287
with single and through rod

NAR
NAS

Series **449**
Type
PEC-DM
PEC-DM-T2

B

GENERAL

Detection	**Equipped for magnetic position detectors**
Fluid	Air or neutral gas, filtered, lubricated or not
Operating pressure	2 to 10 bar max.
Ambient temperature	-20°C to +70°C
Max. speed rate	0,5 m/s
Standards	**ISO 21287** The diameters and distances between the centres of the mounting holes ensures that any fittings can be attached that comply with Ø20-25: **ISO 21287** Ø32-100: **ISO 15552-AFNOR NF ISO 15552-DIN ISO 15552**

Minimum pressure to compress the spring (NAR and NAS) : Ø20-50 = 1 bar
Ø63-100 = 0,65 bar

The return of the piston rod must be without load (single acting version)

CONSTRUCTION

Barrel (non magnetic)	Anodized aluminium alloy
Rod	Ø 20: stainless steel, Ø 25-100: chrome plated steel
Rod end	Tapped or threaded
Piston	POM (polyacetal) or light alloy
Piston seal	PUR (polyurethane)
Front and rear ends	Anodized aluminium alloy
Bearing	Self lubricating

SPECIFICATIONS

DEFINING THE CYLINDER CATALOGUE NUMBER

To order, please specify:

■ CYLINDER - The cylinder type (profiled, without cushioning, rod returned or out at rest, equipped for magnetic position detector)
- The cylindre diameter and its stroke

■ DETECTORS : The magnetic position detectors must be ordered separately :
- "T" model (see page P291), reed switch or magneto-resistive type
- ATEX (see page X019-318 of ATEX catalogue)

CATALOGUE NUMBER + **REFERENCE**

449 5 .. 0 . .... + **PEC .. .. DM ..**

Ø (mm) — **type (N . . .. .)** — **stroke** (mm) — **through rod version (T2)**

barrel	cushioning	detection	cylinder type: version	cylinder type: rod end	type	
Vérin simple effet						
profiled barrel	without	equipped	rod returned (NAR)	tapped	**TA**	**NAR.T**
				threaded	**60**	**NAR.F**
			rod out (NAS)	tapped	**TE**	**NAS.T**
				threaded	**62**	**NAS.F**
Vérin double effet						
profiled barrel	without	equipped	single rod	tapped	**T2**	**NA.T**
				threaded	**02**	**NA.F**
			Through rod	tapped	**TC**	**NA.T T2**
				threaded	**0C**	**NA.F T2**

rod returned cylinder	rod out cylinder	cylinder Ø	
return force (daN)		**Ø** (mm)	**type**
1,9	1,9	20	**2**
3,5	3,5	25	**9**
5,7	5,7	32	**3**
9,4	9,4	40	**4**
11,4	11,4	50	**5**
13,9	13,9	63	**6**
18,4	18,4	80	**8**
14,8	14,8	100	**1**

Ordering example:
- profiled cylinder with rod out (NAR), tapped rod equipped for detectors = **TA**
- cylinder Ø 80 mm = **8**
- stroke 25 mm = **0025**

Ordering catalogue number : **449 5 TA 0 8 0025**
Ordering reference : **PEC 80 NAR.T 0025 DM**

single acting cylinder

Ø (mm)	standard stroke (mm) (1) (recommended standard strokes) 5	10	15	20	25
20	●	●	●		
25	●	●	●	●	
32	●	●	●	●	●
40	●	●	●	●	●
50	●	●	●	●	●
63	●	●	●	●	●
80	●	●	●	●	●
100	●	●	●	●	●

double acting cylinder

Ø (mm)	standard stroke (mm) (2) (recommended standard strokes) 5	10	15	20	25	50	80	100	125	160	200	250	320	400	max. stroke (mm)
20	●	●	●	●	●	●									60
25	●	●	●	●	●	●	●								90
32	●	●	●	●	●	●	●	●	●	●	●	●			400
40	●	●	●	●	●	●	●	●	●	●	●	●	●	●	400
50	●	●	●	●	●	●	●	●	●	●	●	●	●	●	400
63	●	●	●	●	●	●	●	●	●	●	●	●	●	●	400
80	●	●	●	●	●	●	●	●	●	●	●	●	●	●	400
100	●	●	●	●	●	●	●	●	●	●	●	●	●	●	400

(1) Indicate stroke (in mm) preferably selecting one of the standard strokes above. Others strokes on request (min. 5, max. 25)
(2) Indicate stroke (in mm) preferably selecting one of the standard strokes above. Do not exceed maximum possible stroke

MOUNTINGS: see page P8
ACCESSORIES : Protective groove cover and detector cable holder: see page P291

OPTIONS

- Others strokes on request
- Version non equipped for magnetic position detectors (consult us)
- Piston rod in 303 stainless steel, catalogue number: **995202**
- Overlength piston rod in hard chrome steel, cat. n°: **995003** - in 303 stainless steel, cat. n°: **995204**
- Front through rod in hard chrome steel, cat. n°: **995015** - in 303 stainless steel, cat. n° : **995216**
  rear through rod in hard chrome steel, cat. n°: **995017** - in 303 stainless steel, cat. n° : **995218**
- PEC compact cylinders are available in versions for use in potentially **explosive** dust or gas **atmospheres** according to Directive 94/9/EC - Classification : ⟨Ex⟩ II**2**GD **c** - Ta 40°C T85°C (T6) - Ta 70°C T100°C (T5) (ZONE 1-21) - cat n°.: **612106**

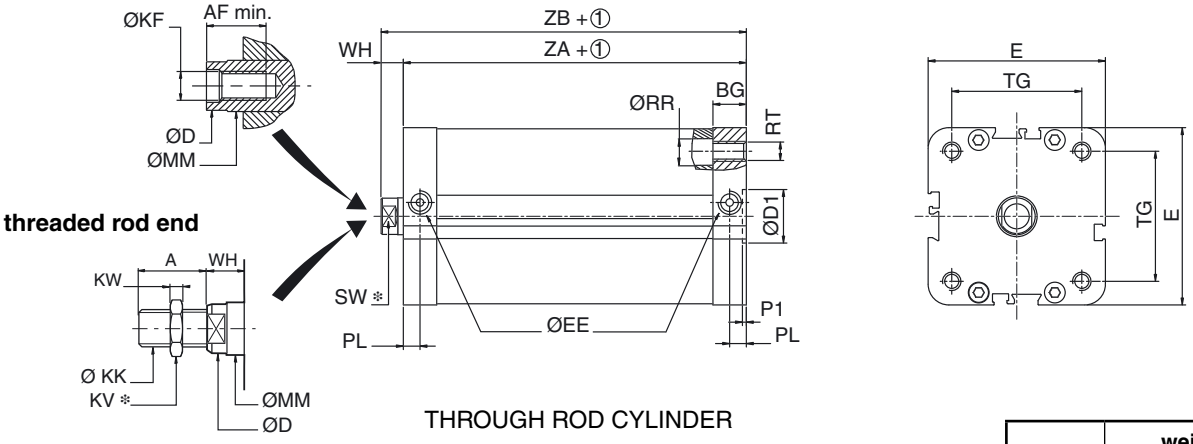
DIMENSIONS (mm), WEIGHTS (kg)

BARE CYLINDER

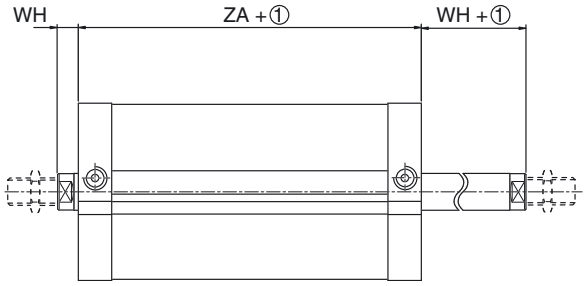
tapped rod end

threaded rod end

SINGLE ROD CYLINDER



THROUGH ROD CYLINDER



Ø	weight	
	(2)	(3)
20	0,125	0,0026
25	0,150	0,0030
32	0,220	0,0027
40	0,310	0,0032
50	0,450	0,0044
63	0,650	0,0050
80	1,110	0,0072
100	2,270	0,0110

① + stroke

❊ dimensions on flats

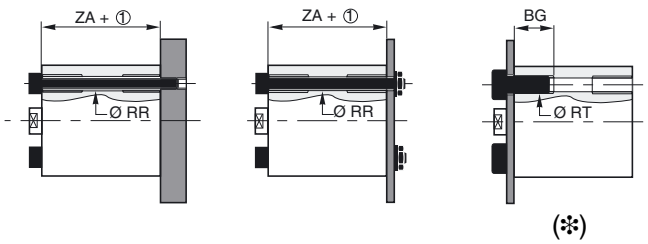
Ø	A	AF	BG	ØD	ØD1	E	EE	ØKF	ØKK	ØKV	KW	ØMM	P1	PL	ØRR	ØRT	SW	TG	WH	ZA	ZB
20	16	10	15	9,8	12	36	M5	M6	M8x1,25	13	4	10	2,5	10	4,5	M5	8	22	6	37	43
25	16	10	15	9,8	12	40	M5	M6	M8x1,25	13	4	10	2,5	10	4,5	M5	8	26	6	39	45
32	19	12	16	11,8	14	47	G1/8	M8	M10x1,25	16	5	12	2,5	7,5	6	M6	10	32,5	7	44	51
40	19	12	16	11,8	14	55	G1/8	M8	M10x1,25	16	5	12	2,5	7,5	8	M6	10	38	7	45	52
50	22	16	16	15,8	18	65	G1/8	M10	M12x1,25	18	6	16	2,5	7,5	10	M8	13	46,5	8	45	53
63	22	16	16	15,8	18	77	G1/8	M10	M12x1,25	18	6	16	2,5	7,5	10	M8	13	56,5	8	49	57
80	28	20	17	19,8	23	95	G1/8	M12	M16x1,50	24	8	20	3	8,5	14	M10	16	72	10	54	64
100	28	20	20	24,8	28	115	G1/8	M12	M16x1,50	24	8	25	3	10	15	M10	21	89	10	67	77

(2) Cylinder weight with 0 mm stroke.
(3) Weight to be added per additional mm length.

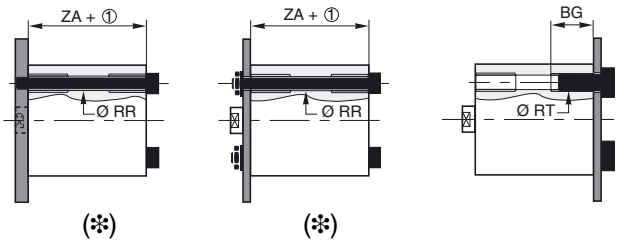
DIRECT MOUNTING OPTIONS (for short-stroke cylinders)

The threaded mounting holes and the four unthreaded through holes (ØRR) ensure compatibility with a wide choice of screws and other fasteners recommended for short-stroke cylinders.

• Front mounting



• Rear mounting



(❊) Type of mounting not realizable on anti-rotation version