

FEATURES

- PES cylinder equipped with seals (piston rod seal + all internal seals) of FPM for use in aggressive environments, subject to compatibility with standard construction materials (see below).
- On request, this type of cylinder can be equipped with stainless steel piston rods, tie rods and threaded fasteners and corrosion-resistant ends.

CYLINDER WITH PROFILED BARREL

GENERAL

| | |
|----------------------------|------------------------------------------------------|
| Detection | Equipped for magnetic position detectors |
| Fluid | Air or neutral gas, filtered, lubricated or not |
| Operating pressure | 10 bar max. |
| Ambient temperature | 0°C to +70°C |
| Cushioning | Pneumatic, adjustable at both ends by captive screws |
| Standards | ISO 15552-AFNOR NF ISO 15552-DIN ISO 15552 |

CONSTRUCTION

| | |
|------------------------------|-------------------------------|
| Barrel | Hard anodized aluminium alloy |
| Front and rear ends | Aluminium alloy |
| Barrel/end connection | With stainless steel tie-rods |
| Bearing | Metal self lubricating |
| Rod | Hard chrome plated steel |
| Threaded fasteners | Zinc-plated steel |



SPECIFICATIONS

DEFINING THE CYLINDER Ø 32 to 100 mm WITH PROFILED BARREL

Standard version: profiled barrel with adjustable pneumatic cushioning, equipped for magnetic position detectors (T-slot grooves in 12 o'clock position). Other versions available (see tables below).
To order, please specify:

- **CYLINDER**
 - The cylinder type: profiled, with cushioning, equipped for magnetic position detectors.
 - The position of the T-slot groove or dovetail groove on the cylinder.
 - The cylinder diameter and its stroke
- **DETECTORS:** The magnetic position detectors must be ordered separately:
 - "T" model (see page P291), reed switch or magneto-resistive type

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| barrel | cylinder type | | | type |
|-----------------|---------------|-----------|-------------|-----------|
| | cushioning | detection | through rod | |
| profiled barrel | with | prévu | without | 36 |
| | with | prévu | with | 3A |

| Ø (mm) | standard stroke (mm) (1) | | | | | | | | | | | max. stroke (mm) | | | | | |
|--------|-------------------------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|------------------|-----|-----|-----|------|------|
| | (recommended standard stroke) | | | | | | | | | | | | | | | | |
| | 25 | 50 | 80 | 100 | 125 | 160 | 200 | 250 | 320 | 400 | 500 | 630 | 700 | 800 | 900 | 1000 | |
| 32 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | 1000 |
| 40 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | 1500 |
| 50-63 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | 1800 |
| 80 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | 2000 |
| 100 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | 2000 |

(1) Others strokes (consult us)

| groove position | | type |
|---------------------------------------------------------------|------------|----------|
| position of the T-slot grooves on the profiled PES cylinder | 12 o'clock | 0 |
| | 3 o'clock | 3 |
| | 6 o'clock | 6 |
| | 9 o'clock | 9 |
| position of the dovetail grooves on the profiled PES cylinder | 12 o'clock | 9 |
| | 3 o'clock | 0 |
| | 6 o'clock | 3 |
| | 9 o'clock | 6 |

| cylinder Ø | |
|------------|--------|
| type | Ø (mm) |
| 3 | 32 |
| 4 | 40 |
| 5 | 50 |
| 6 | 63 |
| 8 | 80 |
| 1 | 100 |

Ordering example:

- profiled cylinder with pneumatic cushioning equipped for detectors = **36**
- T-slot grooves at 3 o'clock position = **3**
- Cylinder Ø 80 mm = **8**
- Stroke 100 mm = **0100**

Ordering catalogue number : **453536380100**

CYLINDER Ø 125 mm, PROFILED BARREL: catalogue number, single rod version = **45052023**
through rod version = **45052030**

OPTIONS

- Other strokes on request
- Piston rod in 316L stainless steel, catalogue number: **995002** - in 303 stainless steel, catalogue number: **995202**
- Overlength piston rod in hard chrome steel, cat. n°: **995003** - in 316L stainless steel, cat. n°: **995004** - in 303 stainless steel, cat. n°: **995204**

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

MOUNTINGS: see page P229-18

DIMENSIONS : see page P229-16

CYLINDER WITH TIE-RODS

GENERAL

Detection
Fluid
Operating pressure
Ambient temperature
Cushioning
Standards

Equipped for magnetic position detectors
Air or neutral gas, filtered, lubricated or not
10 bar max.
0°C to +70°C
Pneumatic, adjustable at both ends by captive screws
ISO 15552-AFNOR NF ISO 15552-DIN ISO 15552

CONSTRUCTION

Barrel
Tie rods
Piston rod
Rod nut
Front and rear ends
Threaded fasteners

Hard-anodized aluminium
Stainless steel (Ø32 to 100 mm)
Painted steel (Ø125 to 200 mm)
Hard chrome plated steel
Zinc-plated steel
Aluminium alloy
Zinc-plated steel



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SPECIFICATIONS

DEFINING THE CYLINDER WITH TIE-RODS CATALOGUE NUMBER

To order, please specify:

- Cylinder description: **PES FPM seals** type, tie rods barrel, aluminium or steel barrel, single or through rod, cushioned or not cushioned, equipped for magnetic position detectors.
- Cylinder catalogue number and stroke indication (in mm):

| Ø (mm) | PES Ø 32 to 200 mm tie-rod cylinders equipped for magnetic detectors (2) | |
|-----------|-----------------------------------------------------------------------------|--------------------------------------|
| | with single rod aluminium barrel | with through rod aluminium barrel |
| 32 (3) | 45051081... (1) | 45051090... (1) |
| 40 | 45051082... (1) | 45051091... (1) |
| 50 | 45051083... (1) | 45051092... (1) |
| 63 | 45051084... (1) | 45051093... (1) |
| 80 | 45051085... (1) | 45051094... (1) |
| 100 | 45051086... (1) | 45051095... (1) |
| 125 | 45051087... (1) | 45051096... (1) |
| 160 | 45051088... (1) | 45051097... (1) |
| 200 | 45051089... (1) | 45051098... (1) |

- (1) Indicate the stroke (in mm), preferably choosing standard values (see standard equipment page P232)
- (2) **The magnetic position detectors are ordered separately:**
 - "T" model (see page P291), reed switch or magneto-resistive type
- (3) In the case of use of a BIM magnetic detector on PES series 450 Ø 32, it is necessary to add the option catalogue number = **995125**

MOUNTINGS: Fastener catalogue numbers and quantities (see page P229-18)

DIMENSIONS: same as standard cylinders (see page P229-6)

OPTIONS

- Other strokes on request
- Piston rod in 316L stainless steel, catalogue number: **995002** - in 303 stainless steel, catalogue number: **995202**
- Overlength piston rod in hard chrome steel, cat. n°: **995003** - in 316L stainless steel, cat. n°: **995004** - in 303 stainless steel, cat. n°: **995204**

DOUBLE ACTING CYLINDERS - TYPE PES Ø 32 to 200 mm WITH ROD SEAL ONLY OF FPM FEATURES

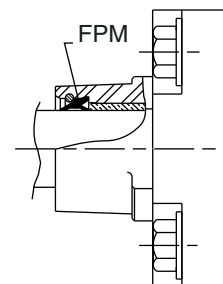
- *Only the piston rod seal of FPM, affords better corrosion resistance than the standard PUR one, to protect the interior of the seal in the event of use in damp and slightly aggressive environments. On request, this type of cylinder can be equipped with stainless steel piston rods, tie rods and threaded fasteners and corrosion-resistant ends*

SPECIFICATIONS

To order, please specify:

- Cylinder description: Type **PES with FPM seals**, tie rod or profiled barrel, aluminium or steel barrel, single or through rod, cushioned or not cushioned, equipped or not for magnetic position detectors.
- Catalogue number of standard cylinder and stroke indication (in mm) :
- FPM rod seal option catalogue number:

| Ø (mm) | catalogue number | |
|-----------|------------------|------------------|
| | with single rod | with through rod |
| 32 | 510550 | 510556 |
| 40 | 510551 | 510557 |
| 50-63 | 510552 | 510558 |
| 80-100 | 510553 | 510559 |
| 125 | 510554 | 510560 |
| 160-200 | 510555 | 510561 |



MOUNTINGS: Fastener catalogue numbers and quantities (see page P229-18)

OPTIONS: see above

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