

## FEATURES

- Good resistance to corrosive elements (barrel and stainless steel rod)

## GENERAL

<b>Detection</b>	Equipped or not for magnetic position detectors
<b>Fluid</b>	Air or neutral gas, filtered, lubricated or not
<b>Operating pressure</b>	2 to 10 bar
<b>Ambient temperature</b>	0°C to +70°C (Ø8-10) / -10°C to +70°C (Ø12 to 25)
<b>Standards</b>	ISO 6432 - 8140 - 8139 CETOP RP 52 P - RP 102 P - RP 103 P AFNOR NF E 49-030




**Minimum pressure to compress the spring: 2 bar**  
**The return of the piston rod must be without load**



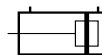
## CONSTRUCTION

	Cylinder non-equipped for detectors	Cylinder equipped for detectors
<b>Barrel</b>	Stainless steel	Non-magnetic stainless steel
<b>Rod</b>	Stainless steel	Stainless steel
<b>Front and rear covers</b>	Anodized light alloy	Anodized light alloy
<b>Piston</b>	POM (polyacetal) and light alloy	POM (polyacetal) and light alloy equipped with permanent magnet
<b>Piston seals</b>	PUR (polyurethane)	PUR (polyurethane)
<b>Neck nut</b>	Galvanized steel	Galvanized steel
<b>Rod nut</b>	Galvanized steel	Galvanized steel
<b>Dismounting</b>	Cannot be dismantled	Cannot be dismantled
<b>Cushioning</b>	Without cushioning	Without cushioning

## SPECIFICATIONS

Ø (mm)	stroke (mm)	rod returned at rest (SER) 		rod out at rest (SES) 		connection Ø
		catalogue number	reference	catalogue number	reference	
<b>Cylinder non-equipped for detectors</b>						
8	25	43500254	C 8 AS 25 - SER	-	-	M5
	50	43500255	C 8 AS 50 - SER	-	-	
10	25	43500256	C 10 AS 25 - SER	-	-	M5
	50	43500257	C 10 AS 50 - SER	-	-	
12	25	43500083	C 12 AS 25 - SER	43500218	C 12 AS 25 - SES	M5
	50	43500084	C 12 AS 50 - SER	43500219	C 12 AS 50 - SES	
16	25	43500085	C 16 AS 25 - SER	43500220	C 16 AS 25 - SES	M5
	50	43500086	C 16 AS 50 - SER	43500221	C 16 AS 50 - SES	
20	25	43500087	C 20 AS 25 - SER	43500222	C 20 AS 25 - SES	G 1/8
	50	43500088	C 20 AS 50 - SER	43500223	C 20 AS 50 - SES	
25	25	43500089	C 25 AS 25 - SER	43500224	C 25 AS 25 - SES	G 1/8
	50	43500090	C 25 AS 50 - SER	43500225	C 25 AS 50 - SES	
<b>Cylinder equipped for detectors *</b>						
8	25	43500258	C 8 AS 25 - SER/DM	-	-	M5
	50	43500259	C 8 AS 50 - SER/DM	-	-	
10	25	43500260	C 10 AS 25 - SER/DM	-	-	M5
	50	43500261	C 10 AS 50 - SER/DM	-	-	
12	25	43500262	C 12 AS 25 - SER/DM	-	-	M5
	50	43500263	C 12 AS 50 - SER/DM	-	-	
16	25	43500264	C 16 AS 25 - SER/DM	-	-	M5
	50	43500265	C 16 AS 50 - SER/DM	-	-	
20	25	43500266	C 20 AS 25 - SER/DM	-	-	G 1/8
	50	43500267	C 20 AS 50 - SER/DM	-	-	
25	25	43500268	C 25 AS 25 - SER/DM	-	-	G 1/8
	50	43500269	C 25 AS 50 - SER/DM	-	-	

## MOUNTINGS (see page 44)

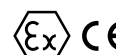


## FEATURES

- Good resistance to corrosive elements (barrel and stainless steel rod)

## GENERAL

<b>Detection</b>	Equipped or not for magnetic position detectors
<b>Fluid</b>	Air or neutral gas, filtered, lubricated or not
<b>Operating pressure</b>	10 bar max.
<b>Ambient temperature</b>	0°C to +70°C (Ø8-10) / -10°C to +70°C (Ø12 to 25)
<b>Standards</b>	<b>ISO 6432 - 8140 - 8139</b> <b>CETOP RP 52 P - RP 102 P - RP 103 P</b> <b>AFNOR NF E 49-030</b>



## CONSTRUCTION

### Cylinder non-equipped for detectors

<b>Barrel</b>	Stainless steel
<b>Rod</b>	Stainless steel
<b>Front and rear covers</b>	Anodized light alloy
<b>Piston</b>	POM (polyacetal) and light alloy
<b>Piston seals</b>	PUR (polyurethane)
<b>Neck nut</b>	Galvanized steel
<b>Rod nut</b>	Galvanized steel
<b>Dismounting</b>	Cannot be dismounted
<b>Cushioning</b>	Without cushioning

### Cylinder equipped for detectors

<b>Barrel</b>	Non-magnetic stainless steel
<b>Rod</b>	Stainless steel
<b>Front and rear covers</b>	Anodized light alloy
<b>Piston</b>	POM (polyacetal) and light alloy equipped with permanent magnet
<b>Piston seals</b>	PUR (polyurethane)
<b>Neck nut</b>	Galvanized steel
<b>Rod nut</b>	Galvanized steel
<b>Dismounting</b>	Cannot be dismounted
<b>Cushioning</b>	Without cushioning

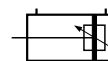
## SPECIFICATIONS

Ø (mm)	stroke (mm)	Cylinder non-equipped for detectors		Cylinder equipped for detectors  *		connection Ø
		catalogue number	reference	catalogue number	reference	
8	25	43500271	C 8 AS 25	43500291	C 8 AS 25-DM	M5
	50	43500272	C 8 AS 50	43500292	C 8 AS 50-DM	
	80	43500273	C 8 AS 80	43500293	C 8 AS 80-DM	
	100	43500274	C 8 AS 100	43500294	C 8 AS 100-DM	
10	25	43500277	C 10 AS 25	43500296	C 10 AS 25-DM	M5
	50	43500278	C 10 AS 50	43500297	C 10 AS 50-DM	
	80	43500279	C 10 AS 80	43500298	C 10 AS 80-DM	
	100	43500280	C 10 AS 100	43500299	C 10 AS 100-DM	
12	25	43500066	C 12 AS 25	43500301	C 12 AS 25-DM	M5
	50	43500067	C 12 AS 50	43500302	C 12 AS 50-DM	
	80	43500283	C 12 AS 80	43500303	C 12 AS 80-DM	
	100	43500069	C 12 AS 100	43500304	C 12 AS 100-DM	
16	25	43500070	C 16 AS 25	43500305	C 16 AS 25-DM	M5
	50	43500071	C 16 AS 50	43500306	C 16 AS 50-DM	
	80	43500285	C 16 AS 80	43500307	C 16 AS 80-DM	
	100	43500073	C 16 AS 100	43500308	C 16 AS 100-DM	
20	25	43500074	C 20 AS 25	43500309	C 20 AS 25-DM	G 1/8
	50	43500075	C 20 AS 50	43500310	C 20 AS 50-DM	
	80	43500287	C 20 AS 80	43500311	C 20 AS 80-DM	
	100	43500077	C 20 AS 100	43500312	C 20 AS 100-DM	
25	25	43500078	C 25 AS 25	43500313	C 25 AS 25-DM	G 1/8
	50	43500079	C 25 AS 50	43500314	C 25 AS 50-DM	
	80	43500289	C 25 AS 80	43500315	C 25 AS 80-DM	
	100	43500081	C 25 AS 100	43500316	C 25 AS 100-DM	
	160	43500290	C 25 AS 160	43500317	C 25 AS 160-DM	

## MOUNTINGS (see page 44)

## OPTIONS

- Other strokes on request
- Double crossbar for Ø 16-20-25 mm (max. stroke 300 mm)
- Barrel in stainless steel for Ø 16-20-25 mm : specify the codes of cylinders equipped for magnetic detectors.
- Anti-corrosive version, stainless steel type CIX

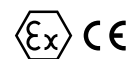
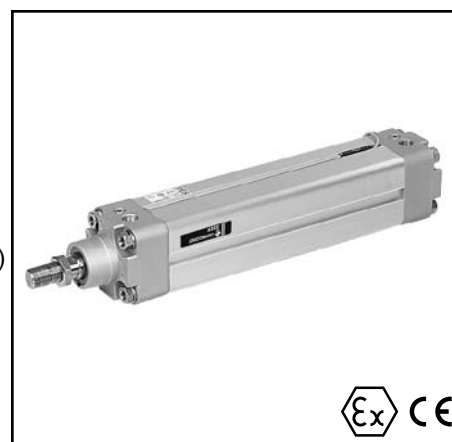


### GENERAL

<b>Detection</b>	Equipped for magnetic position detectors
<b>Fluid</b>	Air or neutral gas, filtered, lubricated or not
<b>Operating pressure</b>	10 bar max.
<b>Ambient temperature</b>	-20°C to +70°C (for higher temperatures, contact us)
<b>Optimal max. speed</b>	≤ 1 m/s (for optimal service life)
<b>Max. speed rate</b>	2 m/s
<b>Standards</b>	ISO 15552-AFNOR NF ISO 15552-DIN ISO 15552 (replace ISO 6431-AFNOR NFE 49003-VDMA 24562)

### CONSTRUCTION

<b>Barrel</b>	Hard anodized aluminium alloy
<b>Front and rear ends</b>	Aluminium alloy
<b>Barrel/end connection</b>	With stainless steel tie-rods
<b>Bearing</b>	self-lubricating metal
<b>Cushioning seals</b>	PUR (polyurethane)
<b>Cushioning</b>	Pneumatic, adjustable from both sides with captive screw
<b>Rod</b>	Hard chrome plated steel
<b>Rod nut</b>	Galvanized steel
<b>Piston</b>	Ø 32 to 80 mm: POM (polyacetal) Ø 100-125 mm: light alloy, fitted with an annular permanent magnet
<b>Piston seals</b>	PUR (polyurethane)



### SPECIFICATIONS

#### DEFINING THE CYLINDER CATALOGUE NUMBER

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 or without cushioning, equipped or not 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:

- Model for T-slot groove, Reed switch or magneto-resistive type (contact us for details)
- COMPACT model, Reed switch or magneto-resistive type (contact us for details)

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cylinder type			type
barrel	cushioning	position detection	
Profiled barrel	Cushioned	Equipped	<b>00</b>
		Non-Equipped	<b>01</b> <sup>(1)</sup>
	Non-cushioned	Equipped	<b>02</b>
		Non-Equipped	<b>03</b> <sup>(1)</sup>

groove position		type
Position of the T-slot grooves on the profiled PES cylinder	12 o'clock	
	3 o'clock	<b>3</b>
	6 o'clock	<b>6</b>
	9 o'clock	<b>9</b>
Position of the dovetail grooves on the profiled PES cylinder	12 o'clock	<b>9</b>
	3 o'clock	<b>0</b>
	6 o'clock	<b>3</b>
	9 o'clock	<b>6</b>

Ø (mm)	standard stroke (mm) <sup>(2)</sup>											max. strokes (mm)					
	(recommended standard strokes) <sup>(3)</sup>																
	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

cylinder Ø type	Ø (mm)
<b>3</b>	32
<b>4</b>	40
<b>5</b>	50
<b>6</b>	63
<b>8</b>	80
<b>1</b>	100

- (1) Available versions (contact us)  
(2) Other strokes on request.  
(3) Minimum stroke to mount 2 detectors on Ø 32 mm: 40 mm

#### Ordering example:

- profiled cylinder with pneumatic cushioning equipped for detectors = **00**
- T-slot grooves at 3 o'clock position = **3**
- Cylinder Ø 80 mm = **8**
- Stroke 100 mm = **0100**

Ordering catalogue number: **453 5 00 3 8 0100**












### MOUNTINGS (see page 44)







#### ATEX OPTION:

Type PES cylinders with profiled barrel are available in versions for use in potentially explosive dust or gas atmospheres according to Directive 94/9/EC

Classification : II3GD c - Ta 40°C T85°C (T6) - Ta 70°C T100°C (T5) (ZONE 2-22) - cat no.: **612014**  
 II2GD c - Ta 40°C T85°C (T6) - Ta 70°C T100°C (T5) (ZONE 1-21) - cat no.: **612017**

## MOUNTINGS

Cylinder (Ø mm)											
	Low foot MS1 (set of 2 items)	High foot MS1 (set of 2 items)	High foot MS3	High foot MS3	Spherical bearing rod end (ISO 8139 - RP 103 P) AP6	Female rod clevis (ISO 8140 - RP 102 P) AP2	Cap clevis for spherical eye or clevis bracket AB6 (forged steel)	Angular clevis bracket spherical eye AB5 (forged steel)	Cap eye with spherical bearing MP6 (forged steel)	Angular clevis bracket AB7 (light alloy)	Complete trunnion MP2
Catalogue number											
8	-	-	43900191	-	43900194	43900193	-	-	-	-	-
10	-	-	43900191	-	43900194	43900193	-	-	-	-	-
12	-	-	43900183	-	43900186	43900159	-	-	-	-	-
16	-	-	43900183	-	43900186	43900159	-	-	-	-	-
20	43400459	-	43900184	-	43900187	43900161	-	-	-	-	-
25	43400553	-	43900184	-	43400001	43400016	-	-	-	-	-
32	43400163	43900199	-	43400307	43400001	43400016	43400363	43400354	43400372	43400383	43400543
40	43400164	43900200	-	43400308	43400002	43400017	43400364	43400355	43400373	43400384	43400544
50	43400165	43900201	-	43400309	43400003	43400018	43400365	43400356	43400374	43400385	43400545
63	43400166	43900202	-	43400310	43400003	43400018	43400366	43400357	43400375	43400386	43400546
80	43400167	-	-	43400311	43400004	43400019	43400367	43400358	43400376	43400387	-
100	43400168	-	-	-	43400004	43400019	43400368	43400359	43400377	43400388	-
125	43400169	-	-	-	43400005	43400020	43400369	43400360	43400378	-	-
160	43400381	-	-	-	43400006	43400021	-	-	-	-	-
200	43400382	-	-	-	43400006	43400021	-	-	-	-	-

Cylinder (Ø mm)											
	Rear trunnion	Centre trunnion MT4 (cylinders with profiled barrel PES 453)		Cap, detachable clevis MP2			Cap, detachable eye MP4			MR3 Neck nut	
	cast iron supplied fully assembled	cast iron supplied loose	cast iron supplied fully assembled	light alloy	cast iron + steel without bush	cast iron + steel + bush	light alloy	cast iron + steel without bush	cast iron + steel + bush		
Catalogue number											
8	-	-	-	-	-	-	-	-	-	-	
10	-	-	-	-	-	-	-	-	-	-	
12	-	-	-	-	-	-	-	-	-	-	
16	43900181	-	-	-	-	-	-	-	-	43900150	
20	43900182	-	-	-	-	-	-	-	-	43900151	
25	43900182	-	-	-	-	-	-	-	-	43900151	
32	-	410564	410570	410548	43400130	43400257	43400185	43400125	43400266	43400171	43900203
40	-	410565	410571	410549	43400131	43400258	43400186	43400126	43400267	43400172	43900204
50	-	410566	410572	410550	43400132	43400259	43400187	43400127	43400268	43400173	43900205
63	-	410567	410573	410551	43400133	43400260	43400188	43400128	43400269	43400174	43900205
80	-	410568	410574	410552	43400134	43400261	43400189	43400129	43400270	43400175	-
100	-	410569	410575	410553	43400135	43400262	43400190	43400161	43400271	43400176	-
125	-	-	-	410554	-	43400263	43400191	-	43400272	43400177	-
160	-	-	-	410555	-	43400264	43400335	-	43400273	43400337	-
200	-	-	-	410556	-	43400265	43400336	-	43400274	43400338	-