

**ACCURATE ROD GUIDING**

High-performance self lubricating bearing and non-abrasive scraper seal.

**ACCURATE CUSHIONING LENGTH**

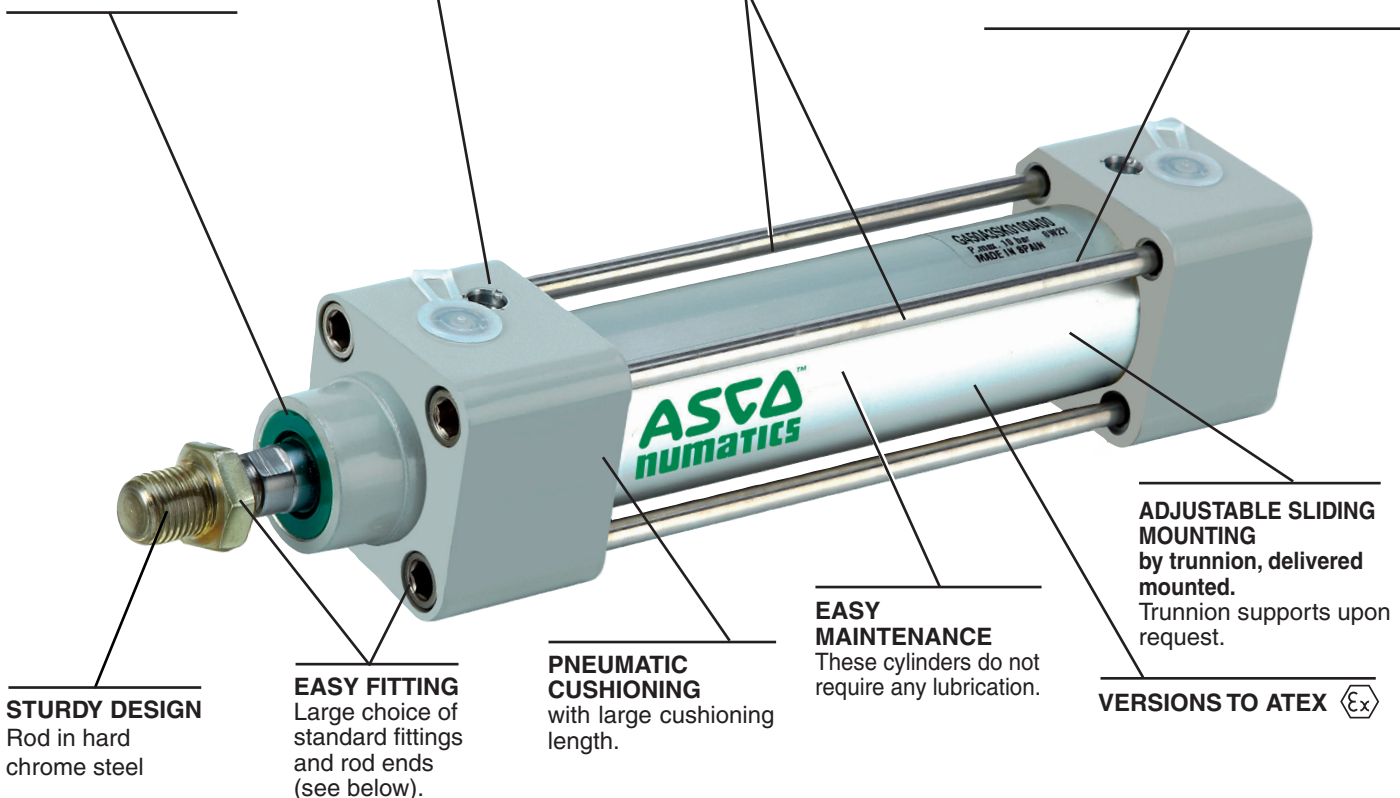
by means of micrometer screws (captive screws).

**LIGHT AND ESTHETIC DESIGN**

Tie-rod construction with hard anodized aluminium tube.

**POSITION DETECTOR**

Cylinder equipped with a piston with a permanent magnet, for position sensors, type:  
 • REED switch  
 • magneto resistive (MR)



**STURDY DESIGN**

Rod in hard chrome steel

**EASY FITTING**

Large choice of standard fittings and rod ends (see below).

**PNEUMATIC CUSHIONING**

with large cushioning length.

**EASY MAINTENANCE**

These cylinders do not require any lubrication.

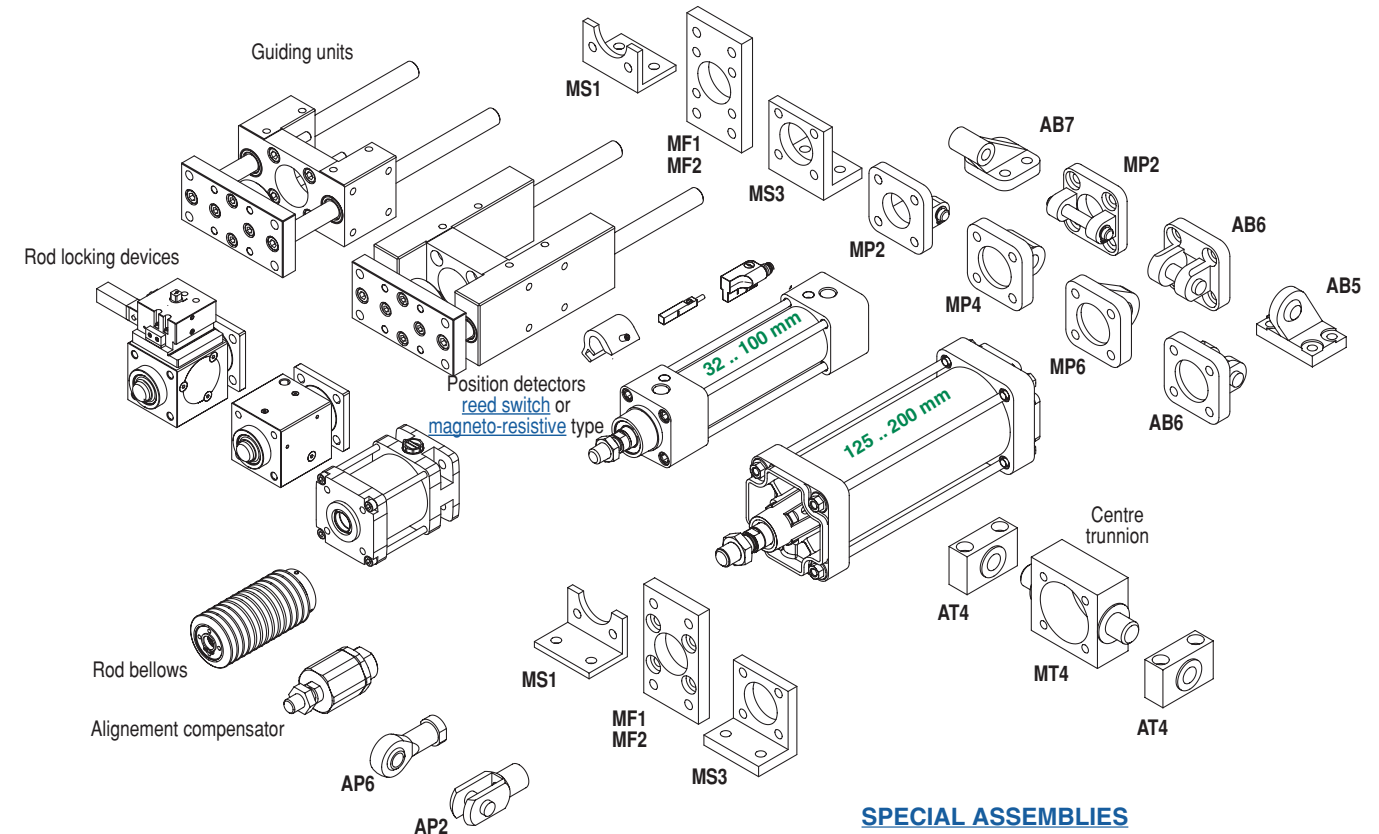
**ADJUSTABLE SLIDING MOUNTING**

by trunnion, delivered mounted. Trunnion supports upon request.

**VERSIONS TO ATEX**

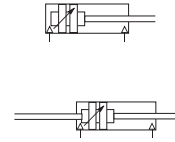
**OPTIONS**

**STANDARD MOUNTINGS**



**SPECIAL ASSEMBLIES**

01425GB-2016/R01  
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## GENERAL

### Detection

### Fluid

### Operating pressure

### Ambient temperature

### Optimal max. speed

### Max. speed rate

### Standards

## CONSTRUCTION

<b>Barrel</b>	Hard anodized aluminium alloy	
<b>Tie rods</b>	Stainless steel (Ø32-100), steel (Ø 125-200)	
<b>Front and rear ends</b>	Aluminium alloy	
<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 chromed steel	
<b>Rod nut</b>	Galvanised steel	
<b>Piston</b>	Ø 32 to 80 mm	POM (polyacetal)
	Ø 100 to 200 mm	light alloy
	fitted with an annular permanent magnet	
<b>Piston seals</b>	PUR (polyurethane)	

### Equipped for magnetic position detectors

Air or inert gas, filtered, lubricated or not

10 bar, max. [1 bar = 100 kPa]

-20°C to +70°C (for higher temperature, see HTP option)

≤ 1 m/s (for optimal service life)

2 m/s (for higher and lower speed rate, see LFS option)

ISO 15552



## HOW TO ORDER

### 15-DIGIT PRODUCT CODE

**G 450 A - S K - - - - A00**

### Thread connection

G = ISO 16030

### Product series

450

### Revision letter

A = Initial release

### Diameter (mm) <sup>(1)</sup>

3 = 32      1 = 100  
 4 = 40      P = 125  
 5 = 50      Q = 160  
 6 = 63      R = 200  
 8 = 80

<sup>(1)</sup> 250 mm/ 320 mm, contact us

### Rod options 1

S = Chromed single rod  
 2 = Through rod  
 3 = AISI 303 stainless steel rod  
 4 = AISI 303 stainless steel through rod  
 6 = AISI 316 stainless steel rod  
 7 = AISI 316 stainless steel through rod  
 All cylinders delivered with rod nut, in stainless steel for options 3, 4, 6 and 7.

### Rod options 2

K = No option  
 3 = Static rod-locking device  
 4 = Static rod-locking device and manual operator  
 5 = Dynamic rod-locking device - Ø 40 to 100 mm  
 6 = Oversized piston rod - Ø 63 to 100 mm  
 8 = Rod bellow

## POSITION DETECTORS

Magnetic position detectors must be ordered separately

## MOUNTINGS

Mountings must be ordered separately

### Options

A00 = Without  
 FMT = Fixed centre trunnion (axis perpendicular to the ports)<sup>(2)</sup>  
 FST = Fixed centre trunnion (axis parallel to the ports)<sup>(2)</sup>  
 UCG = Plain bearing "U" guiding unit  
 HCG = Plain bearing "H" guiding unit  
 HBG = Ball bearing "H" guiding unit  
 AT1 = ATEX zones 1/21  
 AT2 = ATEX zones 2/22  
 HTP = High temperature (up to 120°C)<sup>(3)</sup>  
 FPM = FPM seals  
 FFP = FPM front end seals  
 NPC = Anticorrosion treatment on covers & high-quality rod seals  
 MMT = Ø125 mm, with non groved profiled tube  
 MM4 = Ø125 mm, with non groved profiled tube and non fixed MT4, axis perpendicular to the port  
 MM5 = Ø125 mm, with non groved profiled tube and non fixed MT4, axis parallel to the port  
 STN = Stainless steel cover nuts + tie rods  
 LFS = Low friction piston seals - Ø 32 to 80 mm<sup>(4)</sup>  
 NCS = Without pneumatic cushioning  
 TAN = Tandem, double force, linked rods  
 EPX = Epoxy tube

<sup>(2)</sup> For fixed supplied centre trunnion, consult our Dynamic Product Modeling Tool on [www.asco.com](http://www.asco.com) and indicate XV dimension.

<sup>(3)</sup> Magnetic detectors cannot be fitted to this version.

<sup>(4)</sup> Special characteristics for this option:  
 . piston material: light alloy  
 . max. speed rate: 3 m/s

### Recommended standard strokes (mm) <sup>(5)</sup>

Ø connect. mm	Ø (G)	25	50	80	100	125	160	200	250	320	400	500	630	700	800	900	1000	1500	max. stroke
32	G1/8	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	2000
40	G1/4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	2000
50	G1/4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	2000
63	G3/8	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	2000
80	G3/8	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	2000
100	G1/2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	2000
125	G1/2	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	2000
160	G3/4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	2000
200	G3/4	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	2000

Strokes range available up to "max. stroke" column on the right.  
 Please note strokes marked in grey exceed the maximum recommended.

<sup>(5)</sup> Other strokes on request. / Min. stroke: 5 mm

[Configurator - CAD Files](#)

**DIMENSIONS (mm), WEIGHT (kg)**

[Configurator - CAD Files](#)



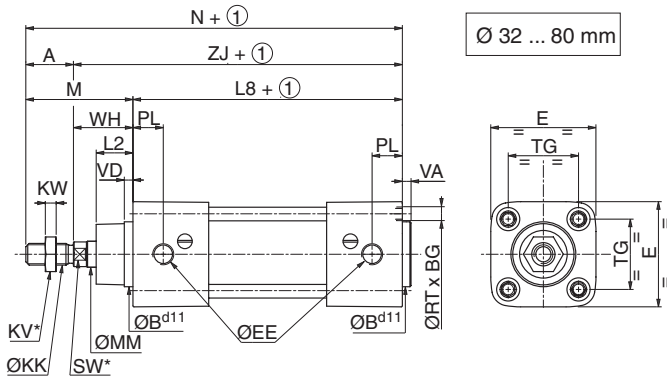
**SINGLE-ROD TYPE CYLINDER**

Tie-rod cylinder  
ISO 1552

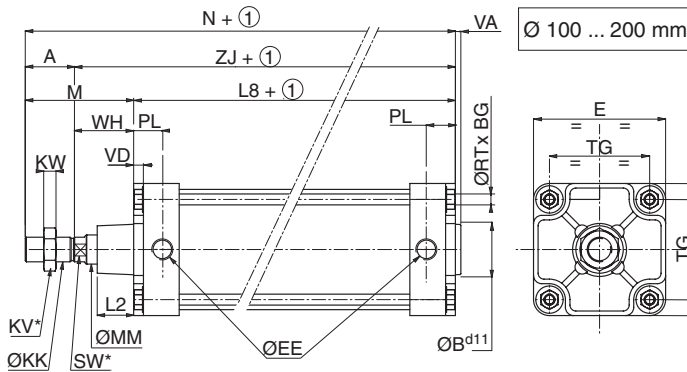
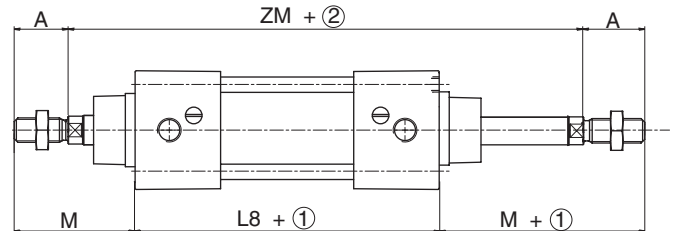


**THROUGH-ROD TYPE CYLINDER**

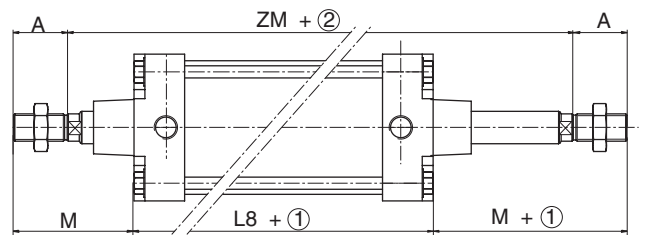
Tie-rod cylinder  
ISO 1552



Ø 32 ... 80 mm



Ø 100 ... 200 mm



- ① Stroke
- ② Stroke x 2

Ø (mm)	A	ØB <sup>d11</sup>	BG	E	ØEE	ØKK	KV	KW	L2	L8	M	ØMM	N	PL	ØRT	SW (5)	TG	VA	VD min.	WH	ZJ	ZM	weight	
																							(3)	(4)
32	22	30	16	48	G1/8	M10x1,25	16	5	17	94	48	12	142	14	M6	10	32,5 ± 0,5	4	4	26	120	146	0,590	0,235
40	24	35	16	54	G1/4	M12x1,25	18	6	19	105	54	16	159	16	M6	13	38 ± 0,5	4	4	30	135	165	0,840	0,335
50	32	40	16	66	G1/4	M16x1,5	24	8	24	106	69	20	175	18,5	M8	17	46,5 ± 0,6	4	4	37	143	180	1,200	0,510
63	32	45	16	78	G3/8	M16x1,5	24	8	24	121	69	20	190	17	M8	17	56,5 ± 0,7	4	4	37	158	195	1,500	0,540
80	40	45	17	96	G3/8	M20x1,5	30	10	33	128	86	25	214	16,5	M10	22	72 ± 0,7	4	4	46	174	220	2,860	0,840
100	40	55	17	115	G1/2	M20x1,5	30	10	35,5	138	91	25	229	21	M10	22	89 ± 0,7	4	4	51	189	240	3,675	1,185
125	54	60	24	145	G1/2	M27x2	41	13,5	40	160	119	32	279	32	M12	27	110 ± 1,1	6	6	65	225	290	6,955	1,360
160	72	65	29,5	180	G3/4	M36x2	55	18	58	180	152	40	332	35,5	M16	36	140 ± 1,1	6	6	80	260	340	12,835	2,100
200	72	75	29,5	220	G3/4	M36x2	55	18	58	180	167	40	347	35	M16	36	175 ± 1,1	6	6	95	275	370	17,575	2,500

- (3) Cylinder weight at 0 mm stroke.
- (4) Weight to be added per additional 100 mm length.

SPARE PARTS KITS CODE		
Ø (mm)	1 + 2 + 3 <sup>(1)</sup>	rod + piston unit
32		97802736 .... <sup>(2)</sup>
40		97802737 .... <sup>(2)</sup>
50		97802738 .... <sup>(2)</sup>
63		97802739 .... <sup>(2)</sup>
80		97802740 .... <sup>(2)</sup>
100		97802741 .... <sup>(2)</sup>

SPARE PARTS KITS CODE		
Ø (mm)	1 + 2 + 3 <sup>(1)</sup>	rod + piston unit
125		97802742 .... <sup>(2)</sup>
160		97802743 .... <sup>(2)</sup>
200		97802744 .... <sup>(2)</sup>
250	<b>contact us</b>	<b>contact us</b>

- <sup>(1)</sup> For best results, use grease supplied in each kit. Supplementary tube (11 cm<sup>3</sup>) available on request, catalogue number: 97802100
- <sup>(2)</sup> Specify stroke length (in mm).

