

ACCURATE ROD GUIDING

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

ACCURATE CUSHIONING LENGTH

by means of micrometer screws (captive screws).

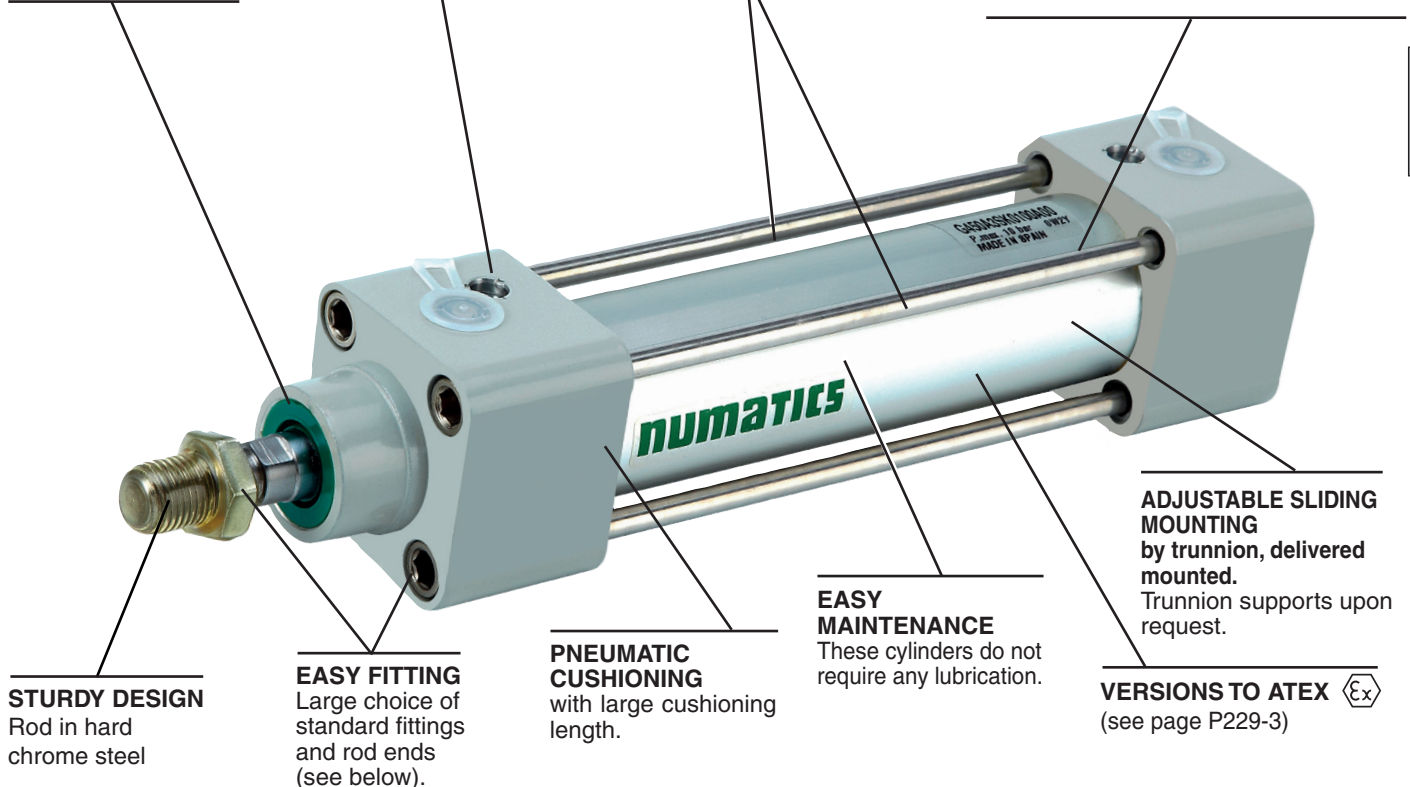
LIGHT AND ESTHETIC DESIGN

Tie-rod construction with hard anodized aluminium tube.

POSITION DETECTOR

Cylinder equipped with a piston with a permanent magnet, for position sensors, type:

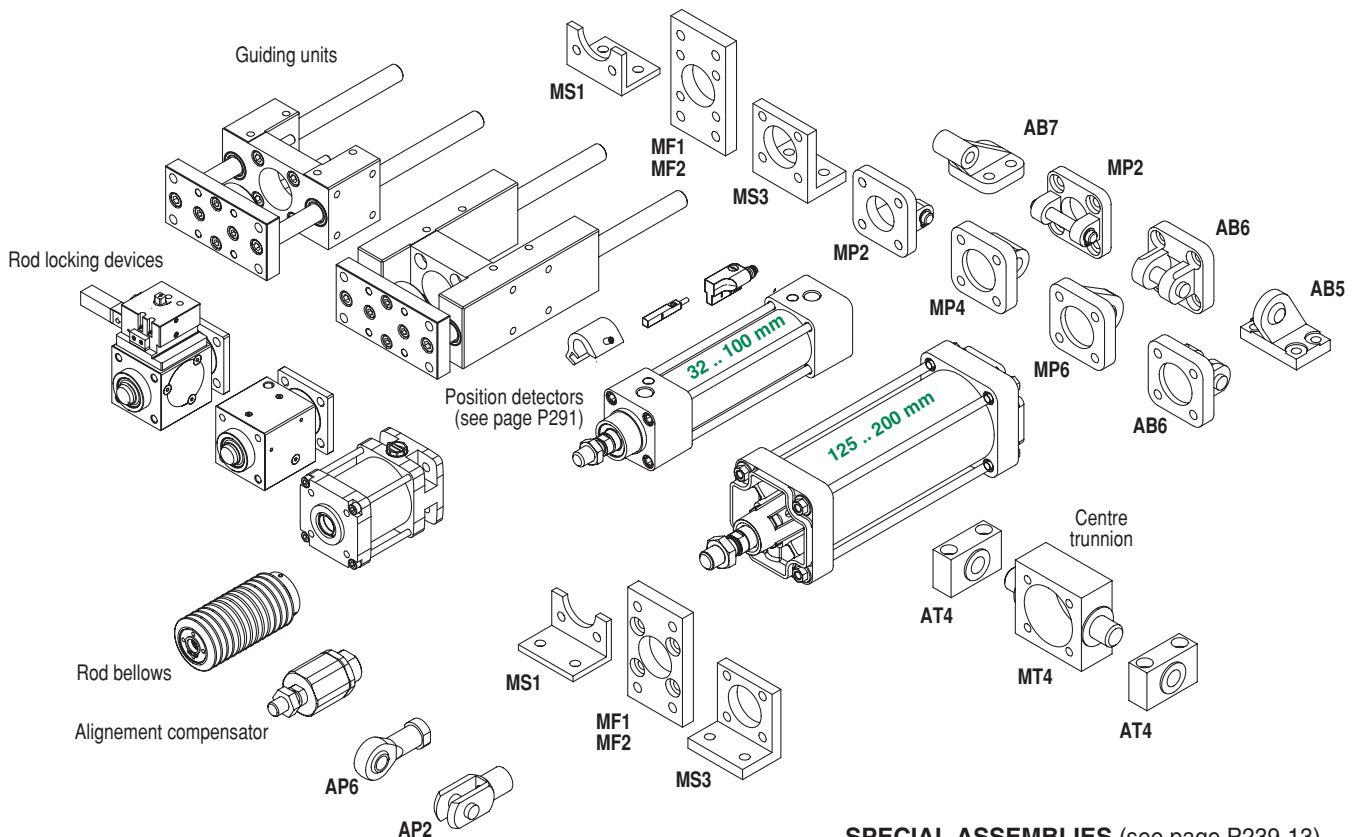
- REED switch
- magneto resistive (MR)



B

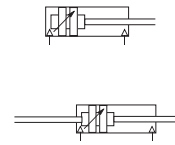
OPTIONS (see page P229-7)

STANDARD MOUNTINGS (see page P235)



SPECIAL ASSEMBLIES (see page P239-13)

01425GB-2015/R01
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GENERAL

Detection

Fluid

Operating pressure

Ambient temperature

Optimal max. speed

Max. speed rate

Standards

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

CONSTRUCTION

Barrel	Hard anodized aluminium alloy
Tie rods	Stainless steel (Ø32-100), steel (Ø 125-200)
Front and rear ends	Aluminium alloy
Bearing	Self-lubricating metal
Cushioning seals	PUR (polyurethane)
Cushioning	Pneumatic, adjustable from both sides with captive screw
Rod	Hard chromed steel
Rod nut	Galvanised steel
Piston	Ø 32 to 80 mm POM (polyacetal) Ø 100 to 200 mm light alloy fitted with an annular permanent magnet
Piston seals	PUR (polyurethane)



2D/3D CAD models - *In 3D*

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) ⁽¹⁾

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

⁽¹⁾ 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 (see P229-24)
4 = Static rod-locking device and manual operator (see P229-24)
5 = Dynamic rod-locking device - Ø 40 to 100 mm (see P229-29)
6 = Oversized piston rod - Ø 63 to 100 mm (see P229-33)
8 = Rod bellow (see P229-35)

POSITION DETECTORS

Magnetic position detectors must be ordered separately: "T" model (see page P291), reed switch or magneto-resistive type

MOUNTINGS

Mountings must be ordered separately: see page P235

Options

- A00** = Without
- FMT** = Fixed centre trunnion (axis perpendicular to the ports)⁽²⁾
- FST** = Fixed centre trunnion (axis parallel to the ports)⁽²⁾
- UCG** = Plain bearing "U" guiding unit (see P229-20)
- HCG** = Plain bearing "H" guiding unit (see P229-20)
- HBG** = Ball bearing "H" guiding unit (see P229-20)
- AT1** = ATEX zones 1/21
- AT2** = ATEX zones 2/22
- HTP** = High temperature (up to 120°C)⁽³⁾
- 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⁽⁴⁾(see P229-15)
- NCS** = Without pneumatic cushioning
- TAN** = Tandem, double force, linked rods (see P229-16)
- EPX** = Epoxy tube

⁽²⁾ For fixed supplied centre trunnion, consult our Dynamic Product Modeling Tool on www.asconumatics.eu and indicate XV dimension.

⁽³⁾ Magnetic detectors cannot be fitted to this version.

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

Recommended standard strokes (mm) ⁽⁵⁾

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.

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

DIMENSIONS (mm), WEIGHT (kg)



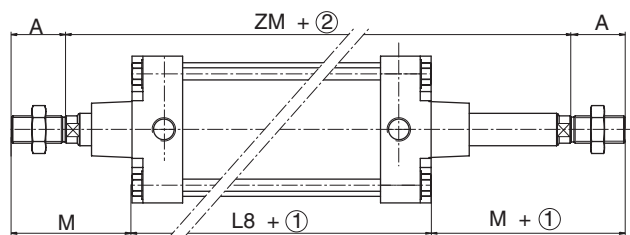
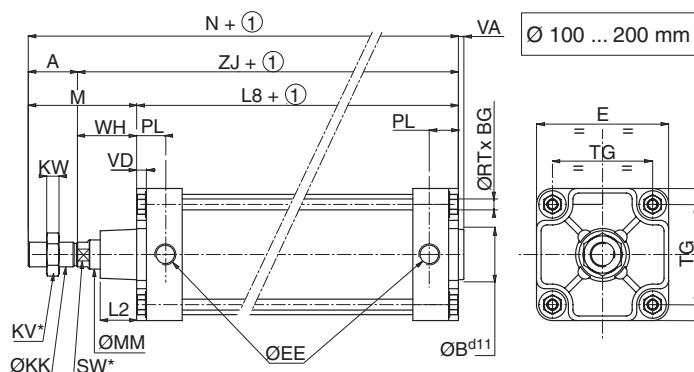
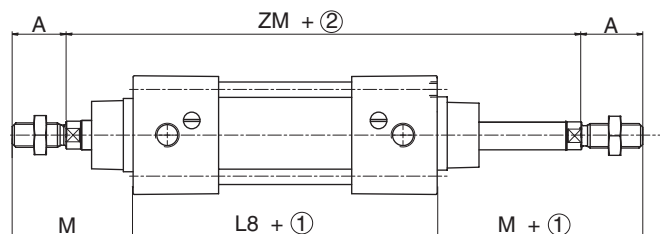
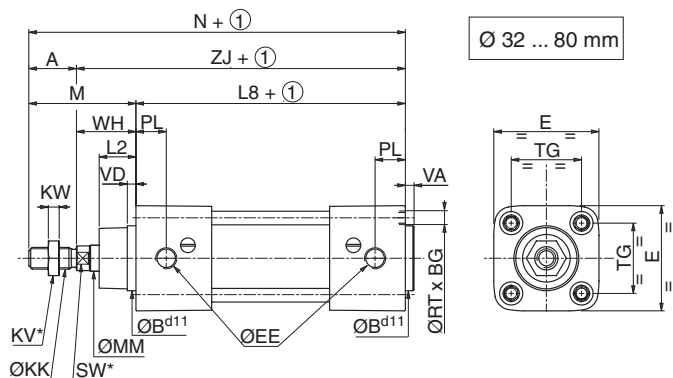
SINGLE-ROD TYPE CYLINDER

Tie-rod cylinder
ISO 1552



THROUGH-ROD TYPE CYLINDER

Tie-rod cylinder
ISO 1552

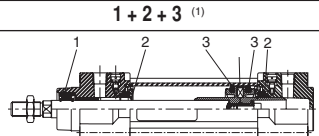


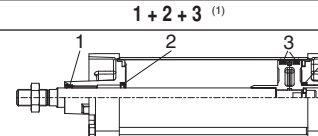
- ① Stroke
- ② Stroke x 2

Ø (mm)	A	ØB ^{d11}	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 ⁽¹⁾	rod + piston unit
32		97802736 ⁽²⁾
40		97802737 ⁽²⁾
50		97802738 ⁽²⁾
63		97802739 ⁽²⁾
80		97802740 ⁽²⁾
100		97802741 ⁽²⁾

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

⁽¹⁾ For best results, use grease supplied in each kit. Supplementary tube (11 cm³) available on request, catalogue number: 97802100

⁽²⁾ Specify stroke length (in mm).

