

PRECISE & STURDY CUSHIONING
 . Precise cushioning by means of captive micrometer screws
 . Large cushioning length

EASY MOUNTING
 Wide choice of standard mountings and rod ends

STURDY DESIGN
 Rod in hard chrome steel

PRECISE ROD GUIDANCE
 With high-performance self-lubricating bearing and non-abrasive scraper seal

MAGNETIC POSITION DETECTOR
 Reed-switch type or magneto-resistive type (MR)
 Installation into the T-slot grooves

T-SLOT GROOVES
 Grooves in 3 sides

ESTHETIC DESIGN
 Cylinders with profiled barrel in hard anodised aluminium

STANDARD SWIVEL TRUNNION MOUNT
 As a fastening option, this trunnion slides on the barrel for on-site positioning.

EASY MAINTENANCE
 . Series 453 cylinders do not require lubrication
 . All the functions in the same side:
 - air ports
 - cushioning adjustment
 - detection

OPTIONS

STANDARD MOUNTINGS

Guiding units
 UCG
 HCG
 HBG

Rod locking devices

Rod bellows

Alignment compensator
 AP6
 AP2

Position detectors
 reed switch or magneto-resistive type

AB7
 MP2
 AB6
 AB5
 MP4
 MP6
 AB6
 MS1
 MF1
 MF2
 MS3

Centre trunnion
 AT4
 MT4
 AT4

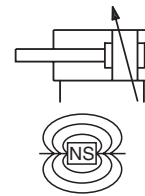
MS1
 MF1
 MF2
 MS3

SPECIAL ASSEMBLIES

CONFIGURABLE INTO PLUG & PLAY UNITS
 5/2 and 5/3 valves with mounting pad to ISO or Namur Mountings, detectors, pneumatic function fittings
 Custom solutions assembled and tested on delivery



All leaflets are available on: www.asco.com



GENERAL

Detection	Equipped for magnetic position detectors
Fluid	Air or inert gas, filtered, lubricated or not
Operating pressure	10 bar, max. [1 bar = 100 kPa]
Ambient temperature	-20°C to +70°C (for higher temperature, see HTP option)
Optimal max. speed	≤ 1 m/s (for optimal service life)
Max. speed rate	2 m/s (for higher and lower speed rate, see LFS option)
Standards	ISO 15552

CONSTRUCTION

Barrel	Hard anodized aluminium alloy	
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 chrome plated steel	
Rod nut	Galvanised steel	
Piston	Ø 32 to 80 mm	POM (polyacetal)
	Ø 100 mm	light alloy
	fitted with an annular permanent magnet	
Piston seals	PUR (polyurethane)	



HOW TO ORDER

15-DIGIT PRODUCT CODE

G 453 A - S K - - - A00

Thread connection
G = ISO 16030

Product series
453

Revision letter
A = Initial release

Diameter (mm)

- 3 = 32
- 4 = 40
- 5 = 50
- 6 = 63
- 8 = 80
- 1 = 100

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
 - T = Eye rod end
- Extended piston rod, contact us

Options

- A00 = Without
- MT4 = Non fixed centre trunnion (MT4 axis perpendicular to the ports)⁽¹⁾
- MS4 = Non fixed centre trunnion (MT4 axis parallel to the ports)⁽¹⁾
- UCG = Plain bearing "U" guiding unit
- HCG = Plain bearing "H" guiding unit
- HBG = Ball bearing "H" guiding unit

HTP = High temperature (up to 120°C)⁽²⁾

FPM = FPM seals

FFP = FPM front end seals

NPC = Anticorrosion treatment on covers & high-quality rod seals

SCN = Stainless steel cover nuts

LFS = Low friction piston seals - Ø 32 to 80 mm⁽³⁾

NCS = Without pneumatic cushioning

⁽¹⁾ For fixed supplied centre trunnion, consult our Dynamic Product Modeling Tool on www.asco.com and indicate XV dimension.

⁽²⁾ Magnetic detectors cannot be fitted to this version.

⁽³⁾ Special characteristics for this option:

- . piston material: light alloy
- . max. speed rate: 3 m/s

[Configurator - CAD Files](#)

Recommended standard strokes (mm)⁽⁵⁾

Ø	connect.	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

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

POSITION DETECTORS

Magnetic position detectors must be ordered separately: "T" model, [reed switch](#) or [magneto-resistive](#) type

MOUNTINGS

Mountings must be ordered separately

DIMENSIONS (mm), WEIGHT (kg)

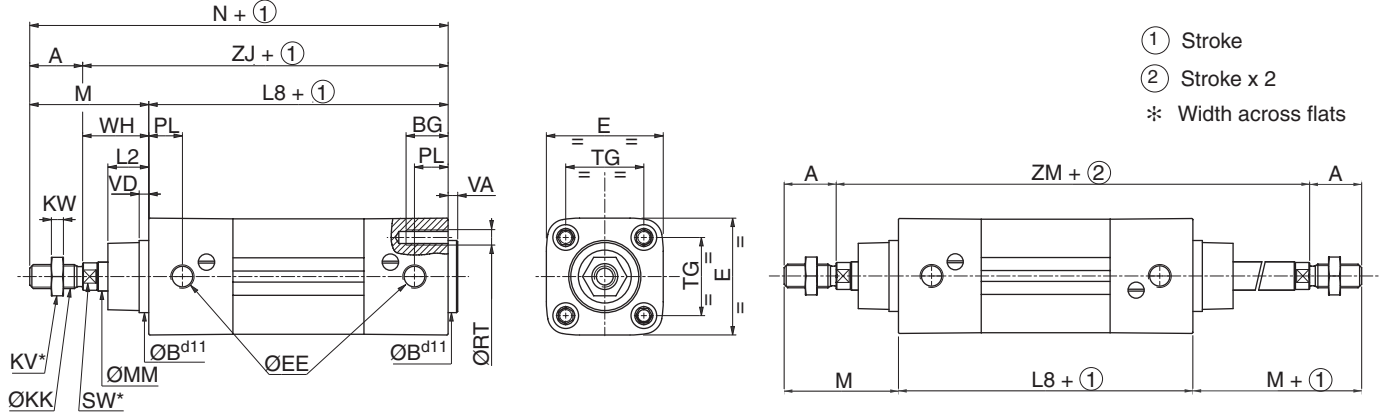
[Configurator - CAD Files](#)



SINGLE-ROD TYPE CYLINDER
Bare cylinder
ISO 15552



THROUGH-ROD TYPE CYLINDER
Bare cylinder
ISO 15552



Ø (mm)	A	ØBd11	BG	E	ØEE (3)	ØKK	KV	KW	L2	L8	M	ØMM	N	PL	ØRT	SW	TG	VA	VD min.	WH	ZJ	ZM	weight	
																							(4)	(5)
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	0,49	0,0029
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	0,78	0,0037
50	32	40	16	66	G14	M16x1,5	24	8	24	106	69	20	175	18,5	M8	17	46,5 ±0,5	4	4	37	143	180	1,00	0,0053
63	32	45	16	78	G3/8	M16x1,5	24	8	24	121	69	20	190	19	M8	17	56,5 ±0,5	4	4	37	158	195	1,35	0,0057
80	40	45	17	96	G3/8	M20x1,5	30	10	33	128	86	25	214	16,5	M10	22	72 ±0,5	4	4	46	174	220	2,36	0,0086
100	40	55	17	115	G1/2	M20x1,5	30	10	35,5	138	91	25	229	19,5	M10	22	89 ±0,5	4	4	51	189	240	3,46	0,0099

(3) Thread connections G have standard thread according to ISO 16030.
 (4) Cylinder weight at 0 mm stroke.
 (5) Weight to be added per additional mm length.

SPARE PARTS KITS CODE		
Ø (mm)	1 + 2 + 3 + 4 ⁽¹⁾	rod + piston unit
32		97802736 ⁽²⁾
40		97802737 ⁽²⁾
50		97802738 ⁽²⁾
63		97802739 ⁽²⁾
80		97802740 ⁽²⁾
100		97802741 ⁽²⁾

⁽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).