

Series 1500 Ecompact-S

Based on the **ECOMPACT** series with piston rods and centring diameters according to ISO 15552 standard

Construction characteristics

Body	anodized aluminium
Piston rod bushings	spheroid bronze on steel band with P.T.F.E. coat
Seals	standard: NBR Oil resistant rubber, PUR Piston rod seals (PUR or FPM on request)
Springs	stainless steel
Pistons	Ø32 and Ø40 acetal resin (aluminium on request) Ø50 and Ø63 aluminium (with FPM seals, aluminium for all of standard diameters)
Piston rod	C43 chromed steel (on request stainless steel)
End caps	aluminium alloy casting painted with brass centring bearing
Fixing screws	zinc plated steel

Operational characteristics

Fluid	filtered and preferably lubricated air or not (if lubricated the lubrication must be continuous)
Max. pressure	10 bar
Working temperature	-5°C ... +70°C with standard seals (magnetic or non magnetic piston) -30°C ... +80°C with PUR seals (magnetic or non magnetic piston) -5°C ... +80°C with FPM seals (magnetic piston) -5°C - +150°C with FPM seals (non magnetic piston)

Use and maintenance

Please follow the suggestions below to ensure a long life for these cylinders:

- use clean and lubricated air.
- correct alignment during assembly with regard to the applied load so as to avoid radial components or bending the rod.
- avoid high speeds together with long strokes and heavy loads: this would produce kinetic energy which the cylinder cannot absorb, especially if used as a limit stop (in this case use mechanical stop device).
- evaluate the environmental characteristics of cylinder used (high temperature, hard atmosphere, dust, humidity etc.).

Please note: air must be dried for applications with lower temperature.

Use hydraulic oils H class (ISO VG32) for correct continued lubrication.

Stroke tolerance, minimum and maximum spring loads and cushioning length

Bore (mm)	Stroke tolerance (mm)	Minimum springs load (N)	Maximum springs load (N)	Cushioning length (mm)
Ø32	+ 2 / 0 mm	19,6	25,5	6,5
Ø40		25,5	42,2	8
Ø50		44,1	96,3	7,5
Ø63	+ 2,5 / 0 mm	44,1	96,3	7,5



Standard strokes

DOUBLE ACTING BASIC version and THROUGH ROD CYLINDER version

Cylinders with longer strokes than those in the chart are also available.

The end user is responsible for the load applied on the product and for its correct use.

For special applications, please get in touch with our sales rep.

		Stroke																				Maximum suggested strokes									
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	100	125	150	160	200	250	300	320	350	400	450	500		
Bore		WITHOUT CUSHIONING DEVICE																				Maximum suggested strokes									
Ø32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
Ø40	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
Ø50	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
Ø63	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
Bore		WITH CUSHIONING DEVICE																				Maximum suggested strokes									
Ø32				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
Ø40					●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
Ø50					●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
Ø63					●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			

DOUBLE ACTING THROUGH ROD CYLINDER BORED version

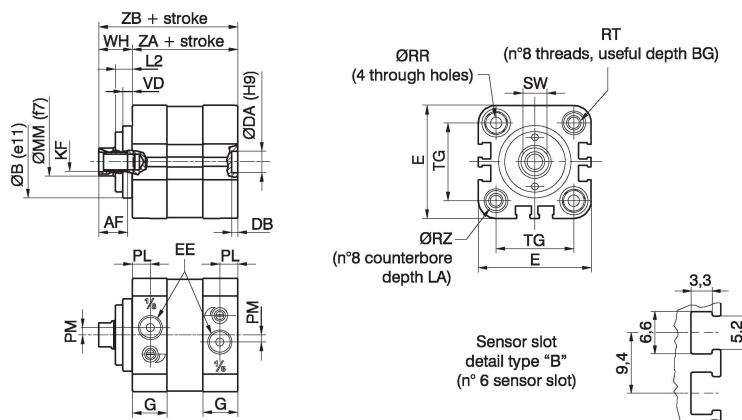
Cylinders with longer strokes than those in the chart are also available.

The end user is responsible for the load applied on the product and for its correct use.

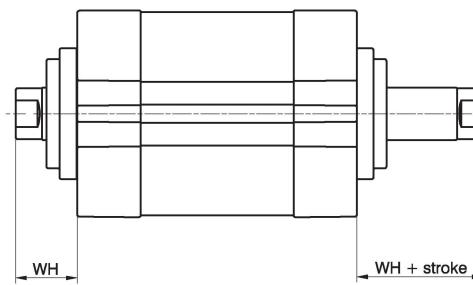
For special applications, please get in touch with our sales rep.

		Stroke																				Maximum suggested strokes									
		5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	25	30	35	40	45	50	55	60	65	70	75	80		
Bore		WITHOUT CUSHIONING DEVICE										WITH CUSHIONING DEVICE										Maximum suggested strokes									
Ø32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
Ø40	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
Ø50	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
Ø63	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			

Basic version



Through rod cylinder version



Ordering codes

15 _ Ø.stroke. _ _ _

- 0= NBR seals and C43 chromed plated rod
- 1= NBR seals and stainless steel rod
- 4= PUR seals and C43 chromed plated rod
- 5= PUR seals and stainless steel rod
- 6= FPM seals and C43 chromed plated rod
- 7= FPM seals and stainless steel rod
- 4= Non-cushioned version
(mechanical cushioning only)
- 5= Versions with adjustable end
of stroke cushioning system

1= Double acting, magnetic piston
4= Double acting, non magnetic piston

- 10= Basic, female threaded rod
- 11= Basic, male threaded rod
- 12= Through rod, female threaded rods
- 13= Through rod, male threaded rods
- 14= Through rod, bored female threaded rods
- 15= Through rod, bored male threaded rods

* it is possible to order the Ø32 and Ø40 cylinders with an aluminium piston by replacing the '1' with '2' in the ordering code
Example: 1540.32.10.10.1 (acetyl resin piston)
1540.32.10.20.1 (aluminium piston version)

Seals compounds scheme

NBR: Oil resistant nitrile rubber seals

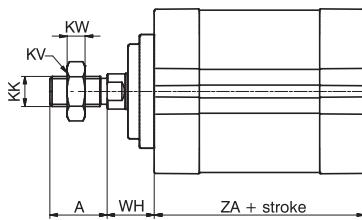
PUR: Polyurethane seals

FPM: Fluoropolymer rubber seals

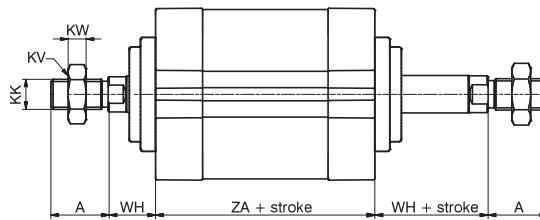
Table of dimensions

Bore	Ø32	Ø40	Ø50	Ø63	
AF (min)	12	16	20	20	
ØB (e11)	30	35	40	45	
BG	16	16	16	16	
ØDA (H9)	9	9	12	12	
DB (+0,1/0)	2,5	2,5	2,6	2,6	
E (max)	47,5	55	66	78	
EE	G1/8"	G1/8"	G1/8"	G1/8"	
G	14,5	15	15	15	
KF	M8	M10	M12	M12	
LA (0/-0,1)	5	5	5	5	
L2	7	7	10	10	
ØMM (f7)	12	16	20	20	
PL (+0,1/0)	7,5	8	8	8	
PM	3	/	/	/	
ØRR (min)	5,1	5,1	6,6	6,6	
RT	M6	M6	M8	M8	
ØRZ (min)	8,5	8,5	10,5	10,5	
SW (0/-0,1)	10	13	17	17	
TG (±0,2)	32,5	38	46,5	56,5	
VD	4	4	5	5	
WH (±1)	14	14	18	18	
ZA (±0,5)	44	45	45	49	
ZB (+1/0)	58	59	63	67	
Weight (g)	stroke every 5 mm	240 13	330 17	530 24	700 27

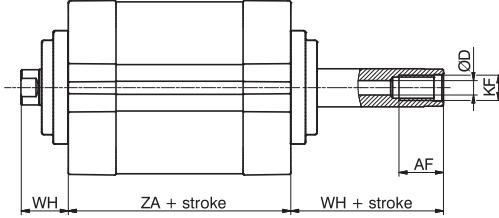
Basic version male piston rod



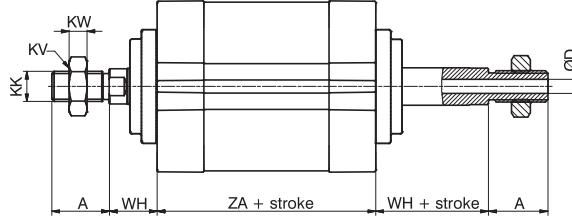
Through rod cylinder version male rod



Through rod cylinder version bored female piston rod



Through rod cylinder version bored male piston rod



Bore	A (0/-0,5)	AF (min)	DØ	KF	KK	KV	KW	WH (±1)	ZA (±0,5)
Ø32	22	14	4,5	M8	M10x1,25	17	6	14	44
Ø40	24	18	4,5	M10	M12x1,25	19	7	14	45
Ø50	32	24	6	M12	M16x1,5	24	8	18	45
Ø63	32	24	6	M12	M16x1,5	24	8	18	49