

Construction characteristics

End plates	UNI 5079 aluminium alloy casting painted black by cataphoresis
Rod	C43 chromed steel Ra = 0.2
Barrel	UNI 9006/1 aluminium alloy square section, hardened 30 micron oxidate
Cushion bushings	2011 UNI 9002/5 hardened alloy aluminium
Piston	polyacetal resin, self-lubricated and anti-wear, with plastoferrite rings in magnetic version
Piston seals	NBR oil-resistant rubber, PUR Piston rod and cushion seals
Cushioning adjustment screw	brass

Technical characteristics

Fluid	filtered and lubricated air
Pressure	10 bar
Operating temperature	-5°C - +70°C

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.

Our Technical Department will be glad to help.

Bore	Usable surface (square profile) cm ²	Max couple on the rod (max torque) Nm	Grade precision (rest rod, without load) anti-rotation	Cushion length mm.
32	8.31	0.5	12'	22
40	12.41	0.8	12'	27
50	18.41	1.1	12'	27
63	29.67	1.5	12'	32

Standard strokes (for all diameters)

from 0 to 150, every 25 mm
Other stroke for these following bores:
<p> Ø 32 80 mm Ø 40 80 - 160 mm Ø 50 80 - 160 - 200 - 250 mm Ø 63 80 - 160 - 200 - 300 - 320 mm </p>

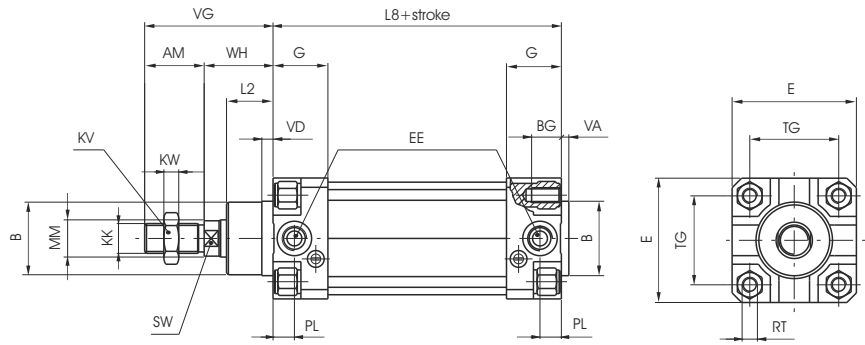
Stroke Tolerance (ISO 15552)

Bore	Stroke	Tolerance
32 - 40 - 50 - 63	up to 500	$\begin{matrix} +2 \\ 0 \end{matrix}$

Basic version

Ordering code

- 1348.Ø.stroke.01**
magnetic chromed rod
- 1349.Ø.stroke.01**
magnetic stainless steel rod
- 1350.Ø.stroke.01**
non-magnetic chromed rod



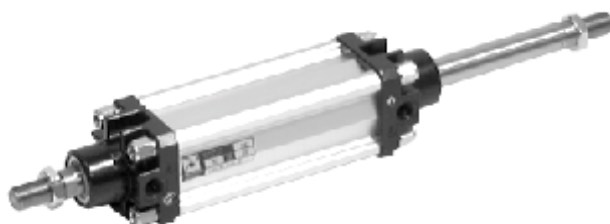
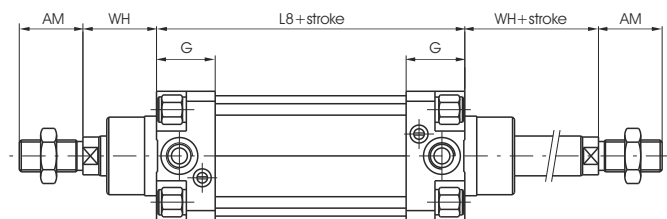
Bore	32	40	50	63
AM	22	24	32	32
B (d 11)	30	35	40	45
BG	12	12	16	16
E	46	52	65	75
EE	G 1/8"	G 1/4"	G 1/4"	G 3/8"
G	25	29	29.5	36
KK	M10x1.25	M12x1.25	M16x1.5	M16x1.5
KV	17	19	24	24
KW	6	7	8	8
L 2	16	20	25	25
L 8	94	105	106	121
MM	12	16	20	20
PL	9	11.5	13	14
RT	M6	M6	M8	M8
SW	10	13	17	17
TG	32.5	38	46.5	56.5
VA	4	4	4	4
VD	5	6	6	6
VG	48	54	69	69
WH	26	30	37	37
Weight	stroke 0	505	705	1320
gr.	every 10 mm	24	33	53

This is the configuration that represents the basic cylinder according to ISO-VDMA standards. It can be directly anchored on machine parts using the four threads on the end cover. For other applications see the following pages where different types of attachments shown.

Push/pull version

Ordering code

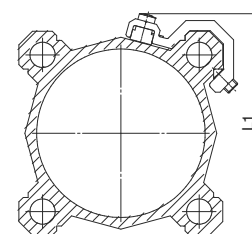
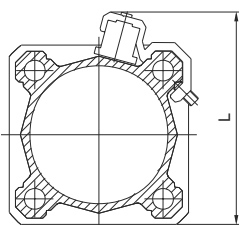
- 1348.Ø.stroke.02**
magnetic chromed rod
- 1349.Ø.stroke.02**
magnetic stainless steel rod
- 1350.Ø.stroke.02**
non-magnetic chromed rod



Sensor brackets

Sensor brackets codes 1500._, RS._, HS._			Sensor brackets codes 1580._, MRS._, MHS._		
Code	Bore	L	Code	Bore	L1
1320.A	Ø32	60	1320.AS	Ø32	48
	Ø40	65		Ø40	54
1320.B	Ø50	77	1320.BS	Ø50	66
	Ø63	87		Ø63	76
1320.C	Ø80	105	1320.CS	Ø80	96
	Ø100	125		Ø100	112
1320.D	Ø125	145	/	/	/
1320.E	Ø160	184	/	/	/
1320.F	Ø200	222	/	/	/

for cylinders: 1319 - 1320, 1325 - 1345, 1330 - 1332, 1348 - 1349

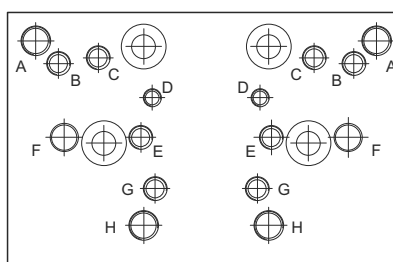


Sensor for microcylinders

For technical characteristics and ordering codes see Chapter 6 (magnetic sensors)

Distributor supports

This accessory permits to mount a valve or an electrovalve on a side of the cylinder. The plate can be fitted on the cylinder profiled barrel, and, on it, can be mounted either a threaded distributor or a base on which can be mounted an ISO distributor. Once installed the connections must be done with fittings and pipes. All of the threaded holes on the support plate are dedicated to different valves series as per attached drawing.



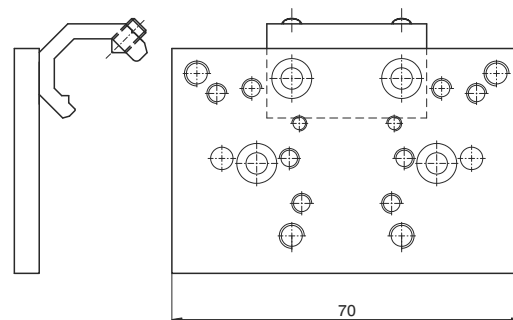
Fixing holes for valves series:

- A = 414/2
- B = 824
- C = 828, T488, 488, 484
- D = 2400
- E = 2600
- F = Bases for ISO distributors
- G = 858/2
- H = T424

For cylinders series 1319 - 1321 / 1325 - 1326 / 1345 - 1347 / 1330 - 1333 / 1348 - 1350

Ordering code

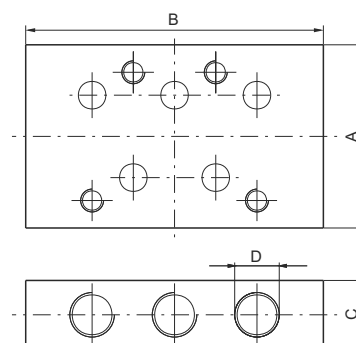
- 1320.15** (Ø32 - Ø40)
- 1320.16** (Ø50 - Ø63)
- 1320.17** (Ø80 - Ø100)
- 1320.18** (Ø125)
- 1320.19** (Ø160)
- 1320.20** (Ø200)



Bases for ISO distributors

Ordering code

- 1320.21** bases for ISO 1 electro distributor
- 1320.22** bases for ISO 2 electro distributor



Dimensions

		A	B	C	D
1320.21	bases for ISO 1 electro distributor	40	75	15	G 1/8"
1320.22	bases for ISO 2 electro distributor	50	95	20	G 1/4"