



General

Our new clean profile cylinder is an updated version of the existing 1319-20-21 series, built in accordance with ISO15552 - VDMA24562 standards.

The name of this range gives an indication to it's most important characteristic. The square profile barrel with rounded edges, and "T" slots for sensors on three sides, is completely flat over it's entire length, such that the end covers have the same profile as the barrel.

To compliment this design, we also have a profiled rubber strip that, when cut to the correct length, covers the sensor slot, resulting in a completely closed, smooth finish cylinder.

We thereby have a clean square line design, eliminating the collection of dust, dirt, and grime; ideal where hygiene and ease of cleaning are important.

At first glance, you may overlook the innovative material from which the end covers are moulded. This highly resistant thermoplastic material is the real innovation of this cylinder.

The piston is made from two halves in acetal resin, which are designed to provide superior rod guidance with integral cushion bushes. The magnet is positioned between the semi-pistons, to comprise the complete piston assembly.

The nose and cushioning seals are produced in polyurethan permitting use either with or without lubrication.

The "T" slots on the cylinder sides can accommodate both the classic Pneumax 1500 series, and the miniature 1580 series sensors.

Cylinders can be mounted using the threaded holes in the end covers, or alternatively using the 1320 series of mounting brackets.

This range is the product of extensive research and material tests. All components, from end caps to seals are scrutinised to grant optimum performance.

The result is a range of cylinders with a really clean profile and an aesthetically pleasing, unique shape; ideally suited to applications requiring smoothness, precision and long life.

Construction characteristics

End plates	higt resistant thermoplastic material
Rod	AISI 303 chromed stainless steel or C43 chromed steel
Barrel	aluminium alloy anodised
Rod bushings	self-lubricating sintered bronze
Half-piston	polyacetal resin
Rod, piston and cushioning seals	polyurethan
Other seals	in rubber NBR
Cushion adjustment assy	in nickel plated steel

Technical characteristics

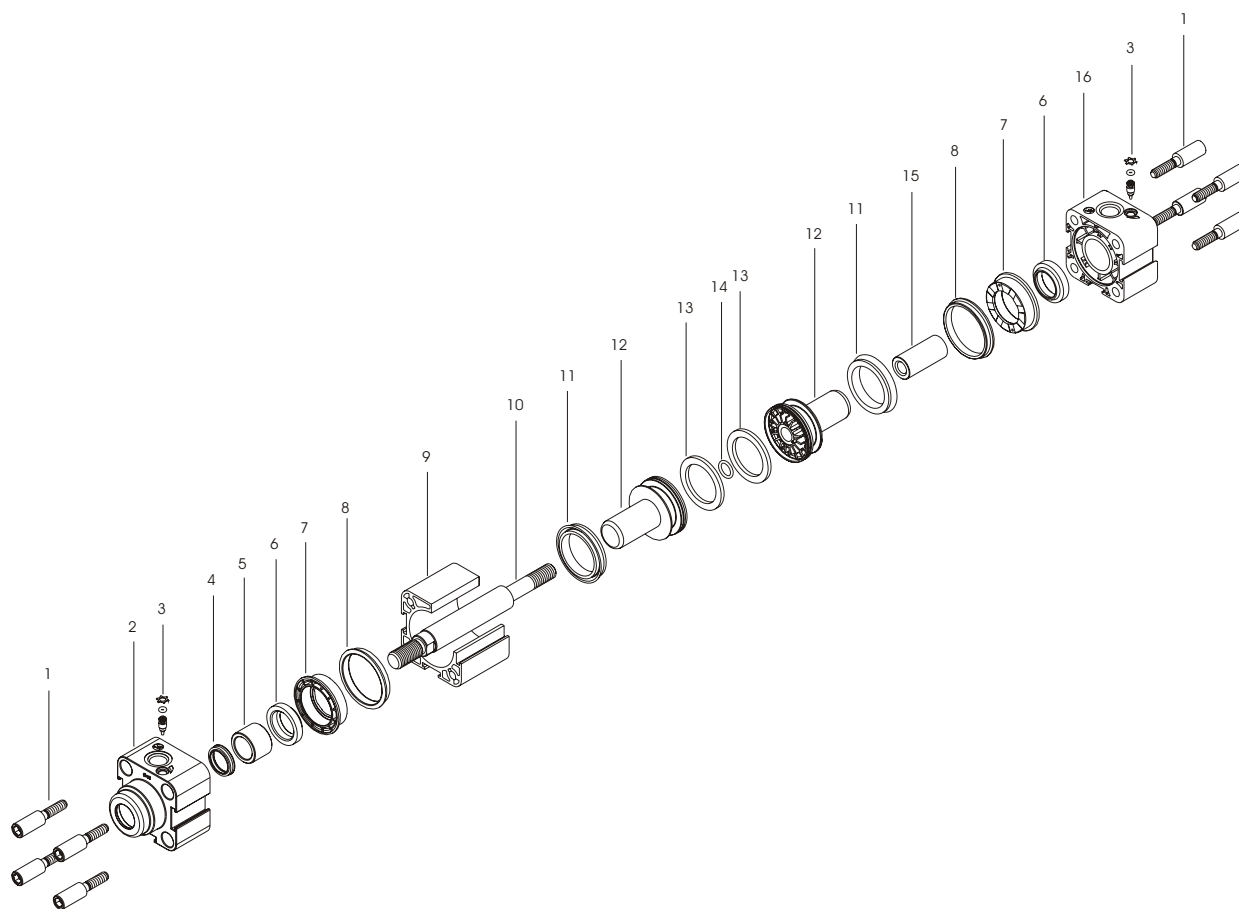
Fluid	filtered and lubricated air or non (when required lubrication must be continuative)
Max pressure	10 bar
Operating temperature	-5°C ÷ +70°C
Bore	Ø 32 - 40 - 50 - 63 - 80 - 100
Cushioning lengths	mm 27 - 31 - 31 - 37 - 40 - 44

Attention: We recommend using dry air if the working temperature is lower than 0°C.

Stroke tolerance (ISO 6431)

Standard strokes (for all bores)	Bore	Stroke	Tolerance
from 0 to 150, every 25 mm	32 - 40 - 50	up to 500	+2 0
		over 500 up to 1000	+3.2 0
from 150 to 500, every 50 mm	63 - 80 - 100	up to 500	+2.5 0
		over 500 up to 1000	+4 0
from 500 to 1000, every 100 mm			

Drawing



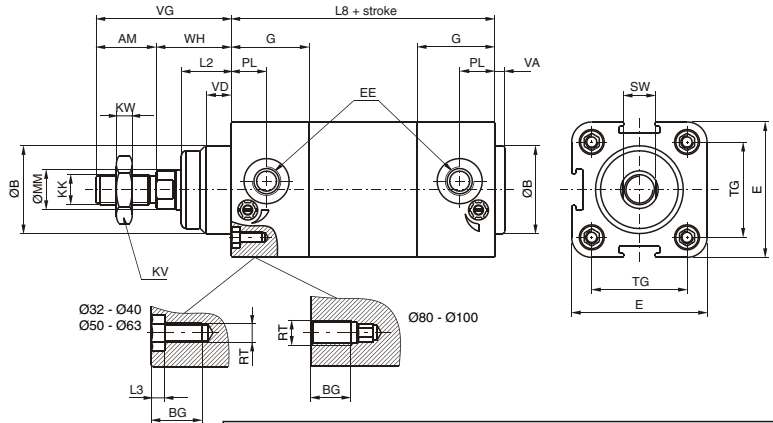
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Pos.	Description	N. Pieces
1	Tie rod nut	8
2	Front end cover	1
3	Cushion adjustment pin	2
4	Rod seal	1
5	Rod-guide bushing	1
6	Cushion seal	2
7	Cushion seal cup	2
8	Cover seal	2
9	Barrel	1
10	Rod	1
11	Piston seal	2
12	Half piston	2
13	Magnet	*
14	Seal	1
15	Piston rod nut	1
16	Rear end cover	1

* N. 1 for $\varnothing 32$, n. 2 for other bores



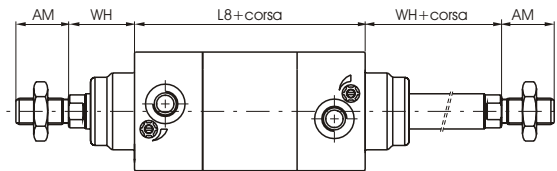
Basic version "01"



This is the configuration representing the basic cylinder according to ISO-VDMA standards. It can be directly anchored on machine parts using the 4 threads on the end cover screws. For other applications see the following pages where different types of attachments are shown.

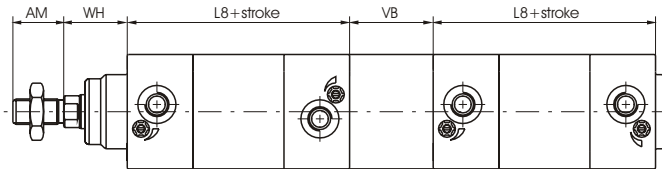
Ordering code
1380.Ø.stroke.01 Magnetic chromed rod
1381.Ø.stroke.01 Magnetic chromed stainless steel rod
1382.Ø.stroke.01 Non magnetic

Push/pull version "02"



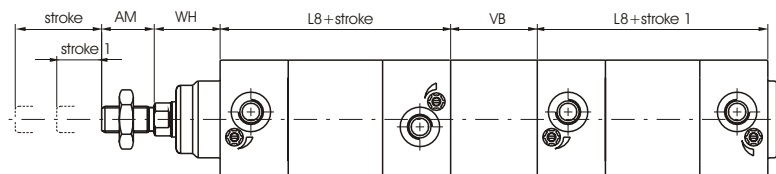
Ordering code
1380.Ø.stroke.02 Magnetic chromed rod
1381.Ø.stroke.02 Magnetic chromed stainless steel rod
1382.Ø.stroke.02 Non magnetic

Tandem push with common rod - "G"



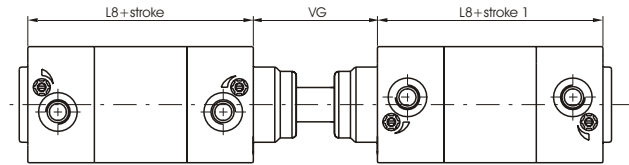
Ordering code
1380.Ø.stroke.G Magnetic chromed rod
1381.Ø.stroke.G Magnetic chromed stainless steel rod
1382.Ø.stroke.G Non magnetic

Tandem push with independent rods - "F"



Ordering code
1380.Ø.stroke.stroke1.F Magnetic chromed rod
1381.Ø.stroke.stroke1.F Magnetic chromed stainless steel rod
1382.Ø.stroke.stroke1.F Non magnetic

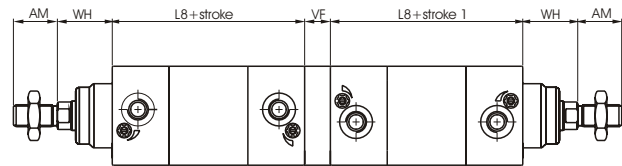
Opposed tandem with common rods - "D"



Ordering code

1380.Ø.stroke.stroke1.D Magnetic chromed rod
1381.Ø.stroke.stroke1.D Magnetic chromed stainless steel rod
1382.Ø.stroke.stroke1.D Non magnetic

Tandem with opposed rods - "E"



Ordering code

1380.Ø.stroke.stroke1.E Magnetic chromed rod
1381.Ø.stroke.stroke1.E Magnetic chromed stainless steel rod
1382.Ø.stroke.stroke1.E Non magnetic

Ribbon for slot hold sensor



Ordering code

1380.02F (code for 1m of product)

Table of dimensions

Bore	32	40	50	63	80	100	
AM	22	24	32	32	40	40	
B (d 11)	30	35	40	45	45	55	
BG	16	16	18	18	16	16	
E	46	54	65	77,5	95,5	115,5	
EE	G 1/8"	G 1/4"	G 1/4"	G 3/8"	G 3/8"	G 1/2"	
G	29	31	33	36	40	44	
KK	M10X1,25	M12X1,25	M16x1,5	M16x1,5	M20x1,5	M20x1,5	
KV	17	19	24	24	30	30	
KW	6	7	8	8	9	9	
L2	16	20	25	25	32	35	
L3	4	4	5	5	/	/	
L8	94	105	106	121	128	138	
MM	12	16	20	20	25	25	
PL	13	14	14	16	16	18	
RT	M6	M6	M8	M8	M10	M10	
SW	10	13	17	17	22	22	
TG	32,5	38	46,5	56,5	72	89	
VA	4	4	4	4	4	4	
VB	33	41	51	51	65	71	
VD	8	10	12	12	15	16	
VF	12	12	16	16	20	20	
VG	48	54	69	69	86	91	
WH	26	30	37	37	46	51	
Weight gr.	stroke 0	480	590	1020	1320	2100	3000
	every 10 mm	33	41	58	67	99	110