

## Series HE

Mini cylinders ISO 6432, single acting

### Technical details

<b>Operating pressure</b>	1 ... 10 bar								
<b>Temperature range</b>	-30°C ... +80°C								
<b>Medium</b>	Filtered, oil-free and dried compressed air according to ISO 8573-1:2010, Class 7:2:4, instrument air, free of aggressive additives. Alternatively the pressure dew point must be at least 10°C below lowest occurring ambient temperature.								
<b>Materials</b>	<table border="0"> <tr> <td>Cylinder tube:</td> <td>stainless steel</td> </tr> <tr> <td>End caps:</td> <td>Al (anodized)</td> </tr> <tr> <td>Piston rod:</td> <td>stainless steel</td> </tr> <tr> <td>Seals:</td> <td>PU, NBR</td> </tr> </table>	Cylinder tube:	stainless steel	End caps:	Al (anodized)	Piston rod:	stainless steel	Seals:	PU, NBR
Cylinder tube:	stainless steel								
End caps:	Al (anodized)								
Piston rod:	stainless steel								
Seals:	PU, NBR								



Single acting pneumatic cylinder with built-in cushioning rings.

### Versions



HE, HES, HEZ  
single acting, normally retracted

### Order code

Series		Options	
HE	standard	without	standard version, normally retracted
HES*	lateral air connection, rear		
HEZ*	central air connection, rear		
		Stroke (mm)	
		xxx	10, 25, 50
		Piston Ø	
		08	8 mm
		10	10 mm
		12	12 mm
		16	16 mm
		20	20 mm
		25	25 mm

HE\*--\*\*\*--\*\*\*--\*\*\*

\* only for Ø 16, 20 and 25 mm

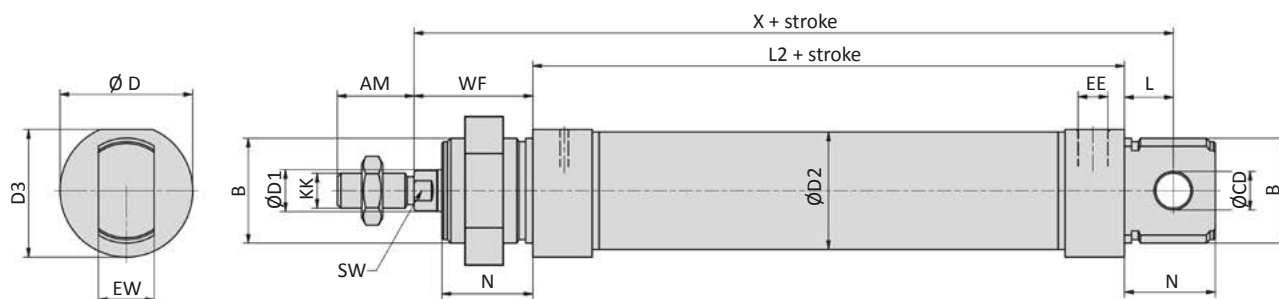
## Series HE

### Mini cylinders ISO 6432, single acting

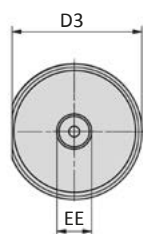
#### Technical data

Model-no.:		HE-08-...	HE-10-...	HE-12-...	HEx-16-...	HEx-20-...	HEx-25-...
Piston $\varnothing$ (mm)		8	10	12	16	20	25
Force at 6 bar and 10 mm stroke (N)	Extension	19.0 ... 19.7	36.0 ... 36.7	51.7 ... 52.0	87.5 ... 90.0	142.8 ... 145.0	243.7 ... 245.0
	Retraction	4.5 ... 5.2	4.5 ... 5.2	5.7 ... 6.0	15.0 ... 17.5	21.3 ... 23.5	18.2 ... 19.5
Force at 6 bar and 25 mm stroke (N)	Extension	19.0 ... 20.3	36.0 ... 37.3	51.7 ... 52.6	87.5 ... 93.5	142.8 ... 148.3	243.7 ... 247.0
	Retraction	3.9 ... 5.2	3.9 ... 5.2	5.1 ... 6.0	11.5 ... 17.5	18.0 ... 23.5	16.2 ... 19.5
Force at 6 bar and 50 mm stroke (N)	Extension	19.0 ... 21.7	36.0 ... 38.7	51.7 ... 53.6	87.5 ... 99.7	142.8 ... 153.8	243.7 ... 250.3
	Retraction	2.5 ... 5.2	2.5 ... 5.2	4.1 ... 6.0	5.3 ... 17.5	12.5 ... 23.5	12.9 ... 19.5
Connection		M5	M5	M5	M5	G1/8	G1/8
Piston rod thread		M4	M4	M6	M6	M8	M10 x 1.25

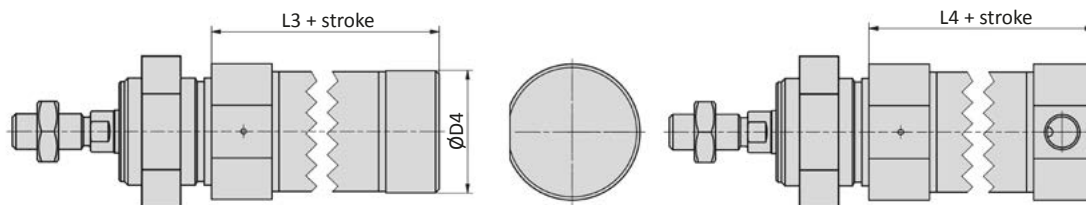
#### Dimensions series HE



#### Series HEZ



#### Series HES



Piston $\varnothing$	AM	B	$\varnothing$ CD	$\varnothing$ D	$\varnothing$ D1	$\varnothing$ D2	D3	$\varnothing$ D4	EE
8	12	M12 x 1.25	4	16	4	9.27	15	-	M5
10	12	M12 x 1.25	4	16	4	11.27	15	-	M5
12	16	M16 x 1.5	6	19	6	13.27	18	-	M5
16	16	M16 x 1.5	6	19	6	17.27	18	17.2	M5
20	20	M22 x 1.5	8	27	8	21.27	25.5	22.2	G1/8
25	22	M22 x 1.5	8	30	10	26.5	28.5	27	G1/8

Piston $\varnothing$	EW	KK	L	L2	L3	L4	N	SW	WF	X
8	8	M4	6	46	-	-	12	-	16	64
10	8	M4	6	46	-	-	12	-	16	64
12	12	M6	9	48	-	-	18	5	22	75
16	12	M6	9	53	52	52.5	18	5	22	82
20	16	M8	12	67	65	67	20	7	24	95
25	16	M10 x 1.25	12	68	66	68	22	9	28	104