

Actuators Series

Cartidge Cylinders
Ø 6-16 mm



CA - CAF Series

Pg. 20.3

Mini Cylinders ISO 6432
Ø 8-25 mm



Mini Series

Pg. 20.5

Mini Stainless Steel Cylinders
ISO 6432 Ø 16-25 mm



Mini Stainless Steel Series

Pg. 20.13

Limited Space
Ø 32-63 mm



A95 Series

Pg. 20.16

Compact Cylinders
Ø 12-100 mm



Q Series

Pg. 20.23

ISO 15552 Cylinders
Ø 32-125 mm



L Series

Pg. 20.36

ISO 6431 Cylinders
Ø 160-320 mm



E Series

Pg. 20.45

Stainless Steel ISO 15552 Cylinders
Ø 32-125 mm



V Series

Pg. 20.47

Twin Rod Cylinders
Ø 32-100 mm



NHA Series

Pg. 20.50

Compact Cylinders ISO 21287
Ø 20-100 mm



W Series

Pg. 20.54

Cylinder Accessories
ISO 6431 - ISO 15552 - ISO 21287



Accessories

Pg. 20.62

Magnetic Poition Sensing Switches



Sensor

Pg. 20.72

Rodless Actuators Series

Rodless Cylinders Standard Version



S1 Series

Pg. 20.78

Rodless Cylinder with Integrated
Guides in Tecnopolymer



S5 Series

Pg. 20.87

Click here to view the **Actuators Series** on our Website



PNEUMATIC ACTUATORS

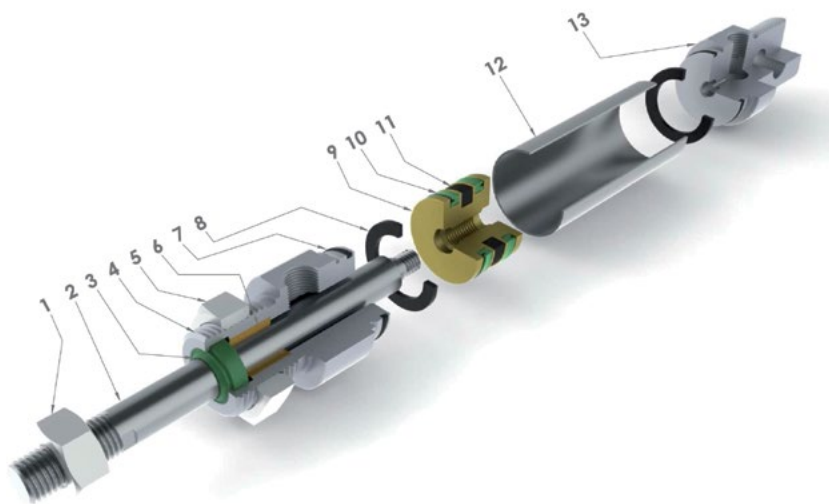


Actuators Series

STAINLESS STEEL MINI CYLINDERS - ISO 6432



TECHNICAL CHARACTERISTICS



Component Parts and Materials

- 1 304 Stainless steel rod jam nut
- 2 316 Stainless steel piston rod
- 3 Polyurethane rod seal
- 4 304 Stainless steel end cap
- 5 304 Stainless steel mounting nut
- 6 Sintered bronze rod bearing
- 7 NBR o-ring seals
- 8 Neoprene bumper
- 9 Brass piston
- 10 Polyurethane piston seal
- 11 Plastroferrite magnet
- 12 304 Stainless steel body
- 13 304 Stainless steel end cap



Reference Standard

1907/2006
REACH ✓

2011/65/CE
RoHS ✓

PED
2014/68/UE

SILICON
FREE

ATEX
2014/34/UE


Pressures

- 2 bar** (0.2 MPa) / 29 psi
10 bar (0.7 MPa) / 145 psi



Temperatures

- 0 °C** / 32 °F (-20 °C / -4 °F with dry air)
+ 80 °C / 176 °F



Media

Filtered and lubricated or
 non-lubricated compressed air.



Functions

Double-acting magnetic.
 Double-acting without magnet.



Bores

16 - 20 - 25 mm



Standard Strokes

from 10 to 320 mm

Series

Ø (mm)

Stroke (mm)

Special version

M F I
0 1 6
0 0 2 5
V S

• **MFI** Double acting - magnetic

016
020
025

0010
0025
0050
0080
0100
0125

0150
0160
0200
0250
0320

VS Rod Seals in FKM
V Seals in FKM

Intermediate or longer strokes are available upon request.

Ø (mm)	Stroke (mm)									
	10	25	50	80	100	125	160	200	250	320
16	•	•	•	•	•	•	•	•	•	•
20	•	•	•	•	•	•	•	•	•	•
25	•	•	•	•	•	•	•	•	•	•

Extend and Retract Forces

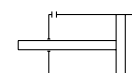
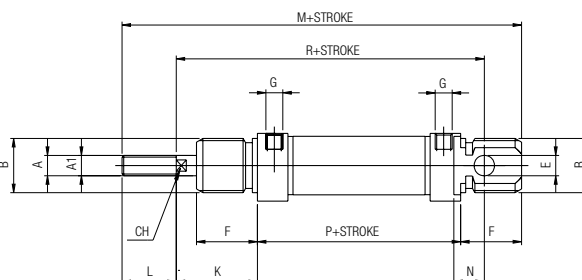
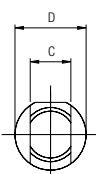
Cylinder Ø	Piston Rod Ø	Piston Area mm²	Operating pressure									
			bar									
			1	2	3	4	5	6	7	8	9	10
Output force N												
16	6	Extend = 200	18	36	54	72	90	108	126	144	162	180
		Retract = 173	16	32	48	64	80	96	112	128	144	160
20	8	Extend = 314	28	56	84	112	140	168	196	224	252	280
		Retract = 264	24	48	72	96	120	144	168	192	216	240
25	10	Extend = 490	44	88	132	176	220	264	308	352	396	440
		Retract = 412	36	72	108	144	180	216	252	288	324	360

Air Consumption

Cylinder Ø	Piston Rod Ø	Piston Area mm²	Operating pressure									
			bar									
			1	2	3	4	5	6	7	8	9	10
Air consumption for each 10 mm of stroke NI												
16	6	Extend = 200	0.004	0.006	0.008	0.010	0.012	0.014	0.016	0.018	0.020	0.022
		Retract = 173	0.003	0.005	0.007	0.009	0.010	0.012	0.014	0.016	0.017	0.019
20	8	Extend = 314	0.006	0.009	0.013	0.016	0.019	0.022	0.025	0.028	0.031	0.035
		Retract = 264	0.005	0.008	0.011	0.013	0.016	0.018	0.021	0.024	0.026	0.029
25	10	Extend = 490	0.010	0.015	0.020	0.025	0.029	0.034	0.039	0.044	0.049	0.054
		Retract = 412	0.008	0.012	0.016	0.021	0.025	0.029	0.033	0.037	0.041	0.045

MFI

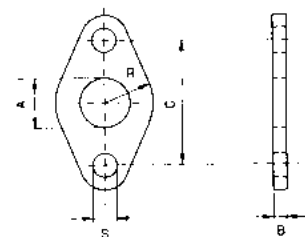
DOUBLE ACTING - MAGNETIC



Ø	A	A1	B	C	D	E	F	G	K	L	M	N	P	R	CH
16	M6	6	M16x1.5	12	19	6	18	M5	22	16	109	9	53	82	5
20	M8	8	M22x1.5	16	27	8	20	1/8G	24	20	131	12	67	95	7
25	M10x1.25	10	M22x1.5	16	30	8	22	1/8G	28	22	140	12	68	104	9

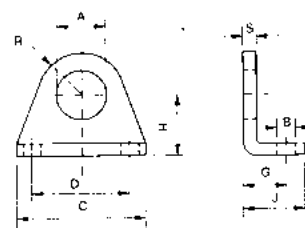
ISO 6432 Stainless Steel Mounting Accessories

MFLI

FLANGE

MATERIAL: Stainless Steel

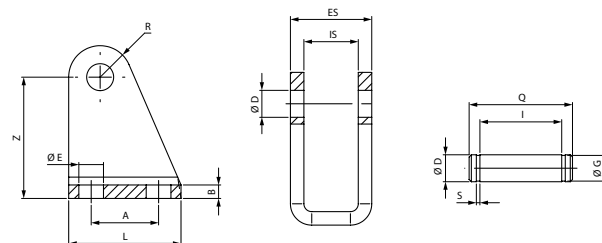
Code	Ø	A	B	C	R	S
MFLI 016	16	16	4	40	13	5.5
MFLI 020	20-25	22	5	50	19	6.6

MPDI

FOOT

MATERIAL: Stainless Steel

Code	Ø	A	B	C	D	G	H	J	R	S
MPDI 016	16	16	5.5	42	32	14	20	20	13.5	4
MPDI 020	20-25	22	6.6	54	43	17	25	25	18	5

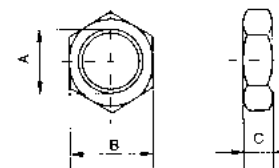
MCCI

CLEVIS BRACKET WITH PIN

MATERIAL: Stainless Steel

Code	Ø	A	B	R	L	Z	IS	ES	S	I	Q	ØE	ØD	ØG
MCCI 012	16	15	3	7	25	27	12	18	0.8	19	24	5.5	6	4
MCCI 020	20-25	20	4	10	32	30	16	24	0.9	25	30	6.5	8	7

DA

MOUNTING NUTS

ROD JAM NUT

MATERIAL: Stainless Steel

Code	A	B	C
ODA00 00 43 E3 00	M16x1.5	22	6
ODA00 00 43 F6 00	M22x1.5	27	8

Code	A	B	C
ODA00 00 43 B8 00	M6	10	5
ODA00 00 43 C3 00	M8x1.25	13	6.5
ODA00 00 43 C9 00	M10x1.25	17	8