

Actuators

Cartridge Cylinders

Ø 6-16 mm



CA - CAF Series

Pg. 15.3

Mini Cylinders ISO 6432

Ø 8-25 mm



Mini Series

Pg. 15.5

Mini Stainless Steel ISO 6432

Ø 16-25 mm



Mini Stainless Steel Series

Pg. 15.14

Limited Space

Ø 32-63 mm



A95 Series

Pg. 15.17

Compact Cylinders

Ø 12-100 mm



Q Series

Pg. 15.24

ISO 15552 Cylinders

Ø 32-125 mm



L Series

Pg. 15.37

ISO 6431 Cylinders

Ø 160-320 mm



E Series

Pg. 15.44

ISO 15552 Cylinders

Ø 32-125 mm



X Series

Pg. 15.46

Stainless Steel ISO 15552

Ø 32-125 mm



V Series

Pg. 15.51

Twin Rod Cylinders

Ø 32-100 mm



NHA Series

Pg. 15.54

Compact Cylinders

Ø 20-100 mm



W Series

Pg. 15.58

Cylinder Accessories

ISO 6431 - ISO 15552 - ISO 21287



Pg. 15.66

Guided Units

ISO 15552 - Ø 12-25 mm
ISO 6431 VDMA - Ø 32-100 mm



Pg. 15.76

Rodless Cylinders

Ø 16-63 mm



R Series

Pg. 15.85

Rotary Actuators

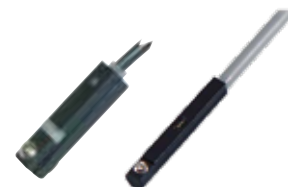
Ø 32-100 mm



XR Series

Pg. 15.96

Magnetic Position Sensing Switches



Sensor

Pg. 15.99

PNEUMATIC ACTUATORS



Actuators



Light weight



Low friction



Clean design



Adjustable cushion



Long lasting quality



Multiple versions for every application



Aluminium piston



SERIE T

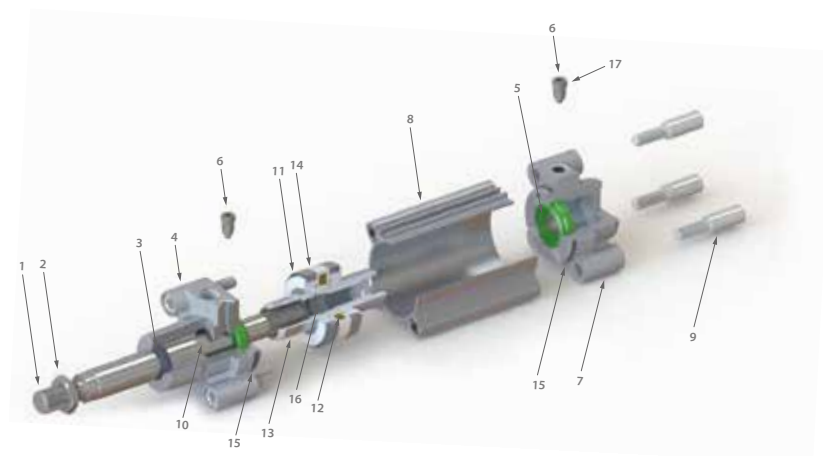
Ø 32÷125

Serie T Aluminum profile with tie rods.





TECHNICAL CHARACTERISTICS



Component Parts and Materials

- 1 Chrome-plated Steel C40 piston rod
- 2 Zinc-plated steel nut
- 3 PU rod seal
- 4 Aluminium front head
- 5 NBR cushion seal
- 6 Zinc-plated steel cushion screw
- 7 Aluminium rear head
- 8 Anodized Aluminium cylinder profile.
- 9 Zinc-plated screw
- 10 KU bushing
- 11 NBR piston seals
- 12 Plastroferrite magnet
- 13 Aluminium piston
- 14 Guide
- 15 NBR O-Ring (front head)
- 16 NBR O-Ring (piston)
- 17 NBR O-Ring (cushion screw)



Reference Standard

1907/2006
REACH ✓

2011/65/CE
ROHS ✓

PED
2014/68/UE

SILICON
FREE

ATEX
2014/34/UE


Recommended Sensors

DT



Pressures

- 1 bar (0.1 MPa) / 14.5 psi
10 bar (0.7 MPa) / 145 psi

Starting pressure: 0,3 bar (0.03 MPa)



Temperatures

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



Media

Filtered and lubricated compressed air
as well as non lubricated air.



Functions

Single acting magnetic or non-magnetic.
Double acting single or double end rod,
magnetic or non-magnetic, cushioned or
non-cushioned and tandem.



Bores

from 32 to 125 mm



Standard Strokes

from 25 to 1000 mm
Strokes on demand: up to 2700 mm

FORCES, SPRING LOADS AND AIR CONSUMPTION

See Pg. 15.34-15.35

Serie	Execution	Ø mm	Stroke	Version	Choices
L H		0 3 2	0 0 2 5		
● LH Double acting - cushioned - magnetic	= Male rod	032	0025	= Standard	= Standard NBR
▲ LB Single acting - magnetic	B Piston Rod Lock	040	0040	T Tie rods	PU Polyurethane
● LL Double acting - cushioned - magnetic with double rod end	T Tandem	050	0050		F -40° Versione
		063	0060		VS Only Rod Seals in FKM
		080	0075		IS Stainless steel rod
		100	0080		V All FKM seals
		125	0100		W Water and chemical Version
			0125		R Metal Scraper (NBR)
			0150		IVR Corrosion resistant and chemical agents compatible.
			0160		
			0200		
			0250		
			0300		
			0320		
			0350		
			0400		
			0450		
			0500		
			0600		
			0700		
			0800		
			0900		
			1000		

Intermediate or higher strokes are available upon request Maximum stroke 2700 mm.

Ø mm	Strokes mm																						
	25	40	50	60	75	80	100	125	150	160	200	250	300	320	350	400	450	500	600	700	800	900	1000
32	▲●	▲●	▲●	▲●	▲●	▲●	▲●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
40	▲●	▲●	▲●	▲●	▲●	▲●	▲●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
50	▲●	▲●	▲●	▲●	▲●	▲●	▲●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
63	▲●	▲●	▲●	▲●	▲●	▲●	▲●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
80	▲●	▲●	▲●	▲●	▲●	▲●	▲●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
100	▲●	▲●	▲●	▲●	▲●	▲●	▲●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
125	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

MOST POPULAR VERSIONS

L H 0 3 2 0 0 2 5

STANDARD AUTOMATION


-10 / +80 °C
NBR SEALS - LOW FRICTION

L H 0 3 2 0 0 2 5 P U

LONG LIFE


-20 / +80 °C
PU SEALS


L H 0 3 2 0 0 2 5 V

HIGH TEMPERATURE AND CHEMICAL COMPATIBLE


-10 / +150 °C
FKM SEALS


L H 0 3 2 0 0 2 5 I S

STAINLESS STEEL ROD


-10 / +80 °C
NBR SEALS - LOW FRICTION
ROD: AISI 303


L H 0 3 2 0 0 2 5 F

LOW TEMPERATURES


-40 / +80 °C
PU SEALS


L H 0 3 2 0 0 2 5 F R

LOW TEMPERATURES WITH METAL SCRAPER


-40 / +80 °C
PU SEALS
METAL SCRAPER


L H 0 3 2 0 0 2 5 W

WATER AND CHEMICAL WASHING RESISTANT


-10 / +60 °C
PU SEALS - WATERPROOF
ROD: AISI 303
SPECIAL PAINTING

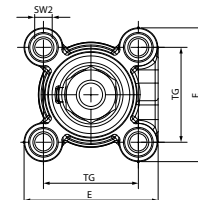
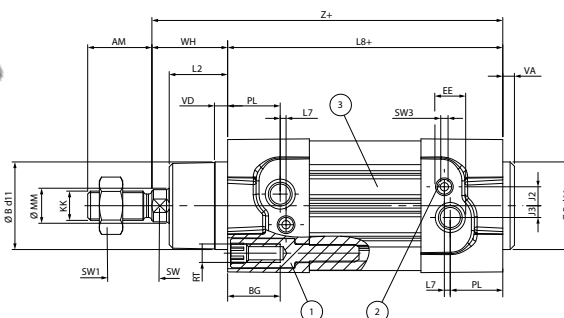
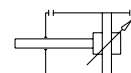

L H 0 3 2 0 0 2 5 I V R

CORROSION RESISTANT AND CHEMICAL AGENTS COMPATIBLE


-10 / +150 °C
FKM SEALS
ROD: AISI 303
SPECIAL PAINTING
METAL SCRAPER


LH

DOUBLE ACTING - CUSHIONED - MAGNETIC

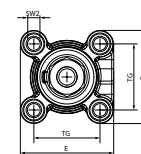
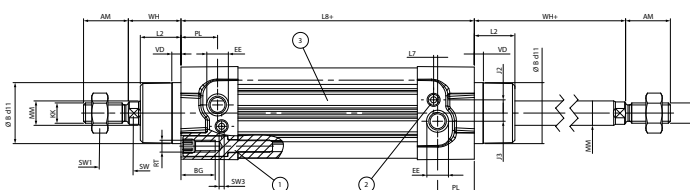
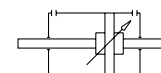


+ = Add Stroke

Ø	ØB d11	VD	VA	L2	WH	Ømm	SW	KK	AM	SW1	ZJ	L8	BG	RT	SW2	E	TG	EE	PL	J3	J2	L7	SW3
32	30	10	4	20	26	12	10	M10X1.25	22	17	120	94	18	M6	6	46	32.5	G1/8	18	4	6.5	2	2.5
40	35	10.5	4	22	30	16	13	M12X1.25	24	19	135	105	18	M6	6	54	38	G1/4	17.5	3.5	8	5.8	2.5
50	40	11.5	4	28	37	20	17	M16X1.5	32	22	143	106	20	M8	8	64	46.5	G1/4	20.5	7	10	2	4
63	45	15	4	29	37	20	17	M16X1.5	32	22	158	121	20	M8	8	74	56.5	G3/8	22	11	8.5	4	4
80	45	15.7	4	35	46	25	22	M20X1.5	40	30	174	128	19	M10	6	94	72	G3/8	22	11	8.5	4	4
100	55	19.2	4	38	51.5	25	22	M20X1.5	40	30	189.5	138	19	M10	6	111	89	G1/2	26	9	12.5	5	4
125	60	20	6	50	65	32	27	M27X2	54	41	225	160	21	M12	8	135	110	G1/2	30	9	12.5	2.5	4

LL

DOUBLE ACTING - CUSHIONED - MAGNETIC WITH DOUBLE ROD END



+ = Add Stroke

Ø	ØB d11	VD	VA	L2	WH	Ømm	SW	KK	AM	SW1	ZJ	L8	BG	RT	SW2	E	TG	EE	PL	J3	J2	L7	SW3
32	30	10	4	20	26	12	10	M10X1.25	22	17	120	94	18	M6	6	46	32.5	G1/8	18	4	6.5	2	2.5
40	35	10.5	4	22	30	16	13	M12X1.25	24	19	135	105	18	M6	6	54	38	G1/4	17.5	3.5	8	5.8	2.5
50	40	11.5	4	28	37	20	17	M16X1.5	32	22	143	106	20	M8	8	64	46.5	G1/4	20.5	7	10	2	4
63	45	15	4	29	37	20	17	M16X1.5	32	22	158	121	20	M8	8	74	56.5	G3/8	22	11	8.5	4	4
80	45	15.7	4	35	46	25	22	M20X1.5	40	30	174	128	19	M10	6	94	72	G3/8	22	11	8.5	4	4
100	55	19.2	4	38	51.5	25	22	M20X1.5	40	30	189.5	138	19	M10	6	111	89	G1/2	26	9	12.5	5	4
125	60	20	6	50	65	32	27	M27X2	54	41	225	160	21	M12	8	135	110	G1/2	30	9	12.5	2.5	4

KEY

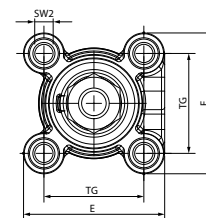
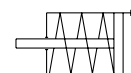
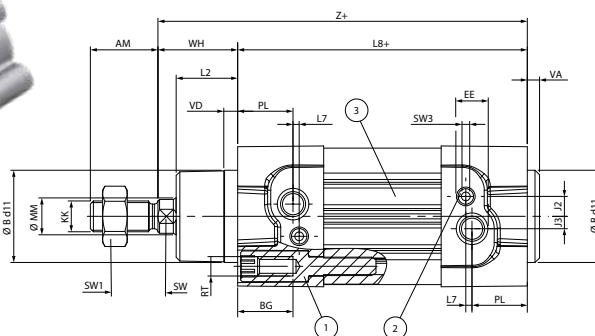
① = Socket head screw with female thread for mounting attachments.

② = Adjustment screw for adjustable end-position cushioning.

③ = Slot for proximity sensor.

LB

SINGLE ACTING - MAGNETIC



+ = Add Stroke

Ø	ØB d11	VD	VA	L2	WH	Ømm	SW	KK	AM	SW1	ZJ	L8	BG	RT	SW2	E	TG	EE	PL	J3
32	30	10	4	20	26	12	10	M10X1.25	22	17	145	119	18	M6	6	46	32.5	G1/8	18	4
40	35	10.5	4	22	30	16	13	M12X1.25	24	19	160	130	18	M6	6	54	38	G1/4	17.5	3.5
50	40	11.5	4	28	37	20	17	M16X1.5	32	22	168	131	20	M8	8	64	46.5	G1/4	20.5	7
63	45	15	4	29	37	20	17	M16X1.5	32	22	183	146	20	M8	8	74	56.5	G3/8	22	8
80	45	15.7	4	35	46	25	22	M20X1.5	40	30	199	153	19	M10	6	94	72	G3/8	22	11
100	55	19.2	4	38	51.5	25	22	M20X1.5	40	30	214.5	163	19	M10	6	111	89	G1/2	26	9

KEY

① = Socket head screw with female thread for mounting attachments.

② = Adjustment screw for adjustable end-position cushioning.

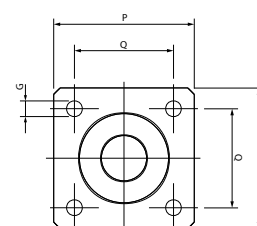
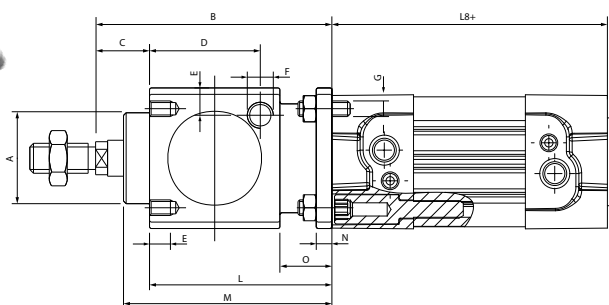
③ = Slot for proximity sensor.

SERIES L - WITH PISTON ROD LOCK ISO 15552 / 6431

LHB

DOUBLE ACTING - CUSHIONED - MAGNETIC WITH PISTON ROD LOCK

LLB: AVAILABLE DOUBLE ROD END



Ø	A	B	C	D	E	F	G	H	L	M	N	O	P	Q	L8
32	30	86	26	33.25	9	1/8"G	M6	8	60	67.5	6	20	47	32.5	94
40	34.5	100	30	42.5	9	1/8"G	M6	8	70	80	6	20	54	38	105
50	40	127	37	58	12.5	1/8"G	M8	12	90	100	8	24	65	46.5	106
63	45	127	37	59	17.5	1/8"G	M8	12	90	100	8	24	75	56.5	121
80	45	156	46	69	17.5	1/4"G	M10	16	110	120	12	32	95	72	128
100	55	161	51	69	20	1/4"G	M10	16	110	120	12	32	114	89	138
125	60	205	65	84.5	19	1/4"G	M12	20	140	156	20	45	138	110	160



Pressures

Without Pressures:
LOCKED

Cylinder Supply Pressure

0 ÷ 7 bar (0 ÷ 0.7 Mpa)

7 ÷ 10 bar (0.7 ÷ 1 Mpa)

Minimum release pressure

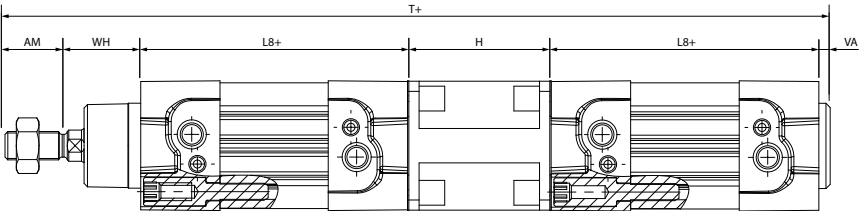
2.5 bar (0.25 Mpa)

3 bar (0.3 Mpa)

SERIES L - TANDEM ISO 15552/ 6431

LHT

TANDEM DOUBLE ACTING - MAGNETIC



Ø	VA	WH	AM	LB	H	T
32	4	26	22	94	55	295
40	4	30	24	105	55	323
50	4	37	32	106	68	353
63	4	37	32	121	68	383
80	4	46	40	128	92	438
100	4	51.5	40	138	92	463.5
125	6	65	54	160	120	565

For further information please contact our technical department.