

PNEUMATIC CYLINDERS

**COMPACT CYLINDERS
CYLINDERS UNITOP - SERIES CU**



Compact short stroke cylinders series CU.
According to U.N.I.T.O.P. - RUP/7 Standards.

Bores from 16 to 100 mm.,
with magnetic piston, single and double
acting, with rubber end of stroke cushions.

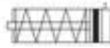
THE RANGE

**SINGLE ACTING
front spring**

**SINGLE ACTING
rear spring**

DOUBLE ACTING

**DOUBLE ACTING
double ended rod**



CUS...-FA



CUS...-FP



CUD...-F



CUDP...-F

**SINGLE ACTING
double ended rod**

**SINGLE ACTING
non-rotating - 2 slide
bar**

**DOUBLE ACTING
non-rotating - double
ended rod**



CUSP...-F



CUD...-A



CUDP...-A

BORE AND STROKES

BORE	SINGLE ACTING			DOUBLE ACTING					
	Standard strokes	Possible strokes		Standard strokes	Possible strokes		Standard strokes	Possible strokes	
	mm.	mm.		mm.	mm.		mm.	mm.	
16	5,10,15, 20,25	1:25	16	5,10,15, 20,25	1:25	16	5,10,15, 20,25	1:25	16
20			20			25			20

25			32	20,25,30,40,50				
32			40					
40			50	5,10,15,20,25,30,40,50,60,80		32		32
50			63		1:300	40		40
63	10,15,20,25		80			50	10,15,20,25	50
80				10,15,20,25		63		63
100					1:400	80		80

*theoretic values

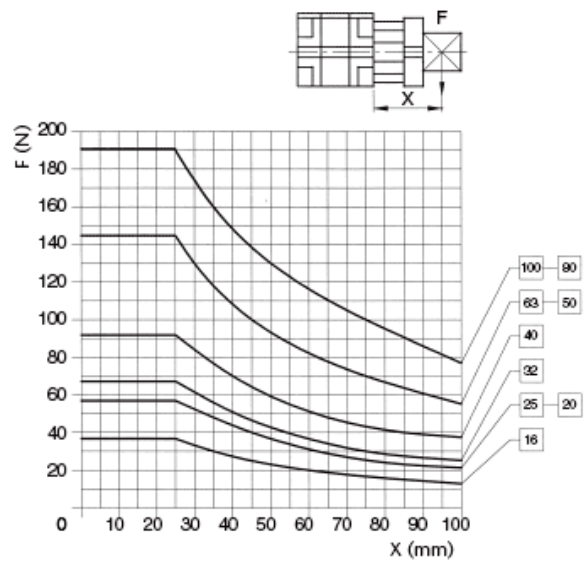
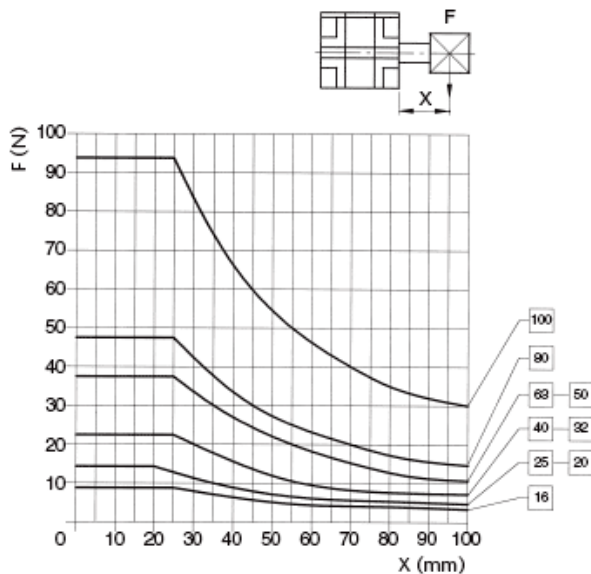
TECHNICAL FEATURES

<p>Squeeze casted end caps in black anodized light alloy, slide bush for piston rod in self-lubricating sintered bronze,</p> 	<p>The body, aesthetic and functional component, manufactured in light alloy, honed and anodized inside and outside (class 20 micron)</p> 
<p>Piston rod in rolled stainless steel. Piston in light alloy with a permanent magnet fixed on it.</p> 	<p>Seals in polyurethane for high resistance to wear. After first lubrication, they can be used with only filtered air.</p> 
<p>Fasteners for fixing or oscillating installation of cylinders.</p> 	

PERFORMANCES DIAGRAMS

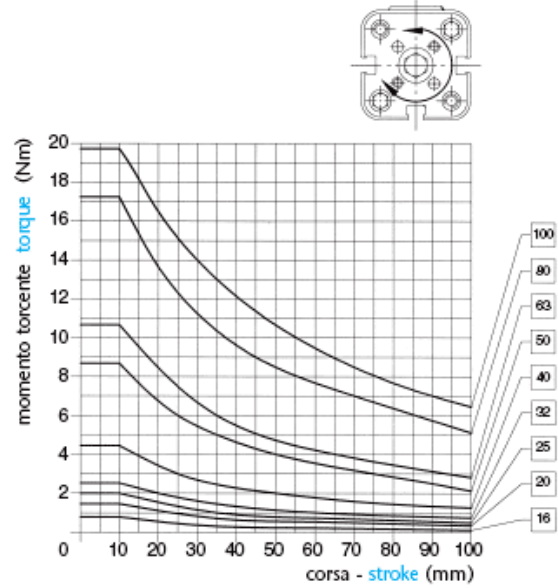
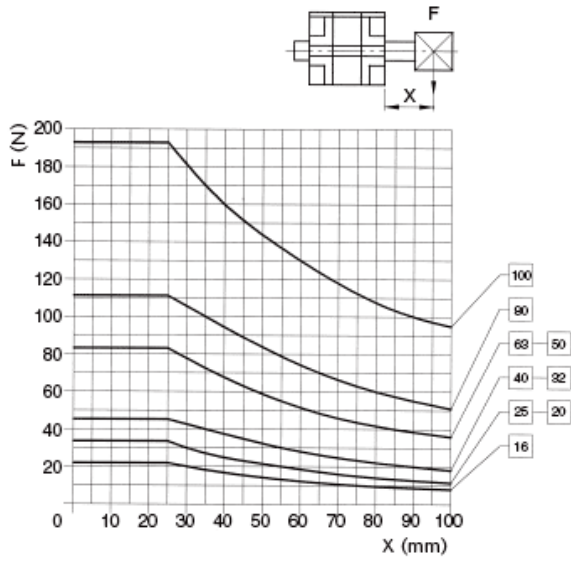
double acting CUD

non-rotating rod (loading diagram) CUD...A

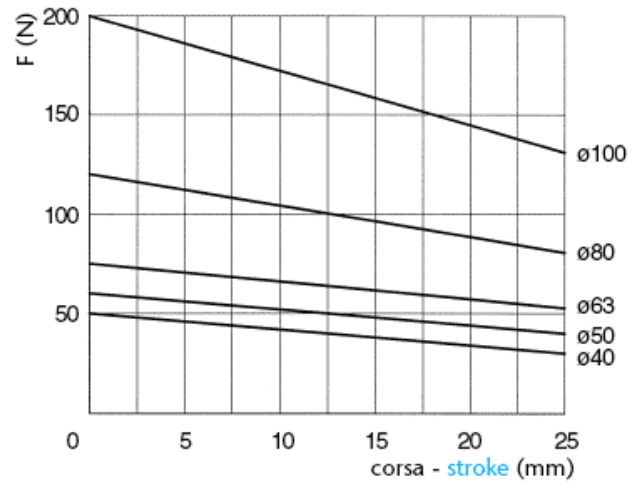
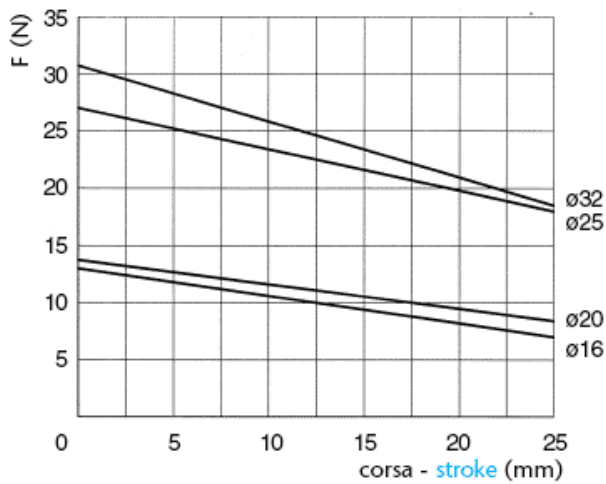


non-rotating double ended rod **CUDP...A**

non-rotating rod (torque diagram) **CUD...A**



RETURN FORCE OF SPRINGS



DIMENSIONS

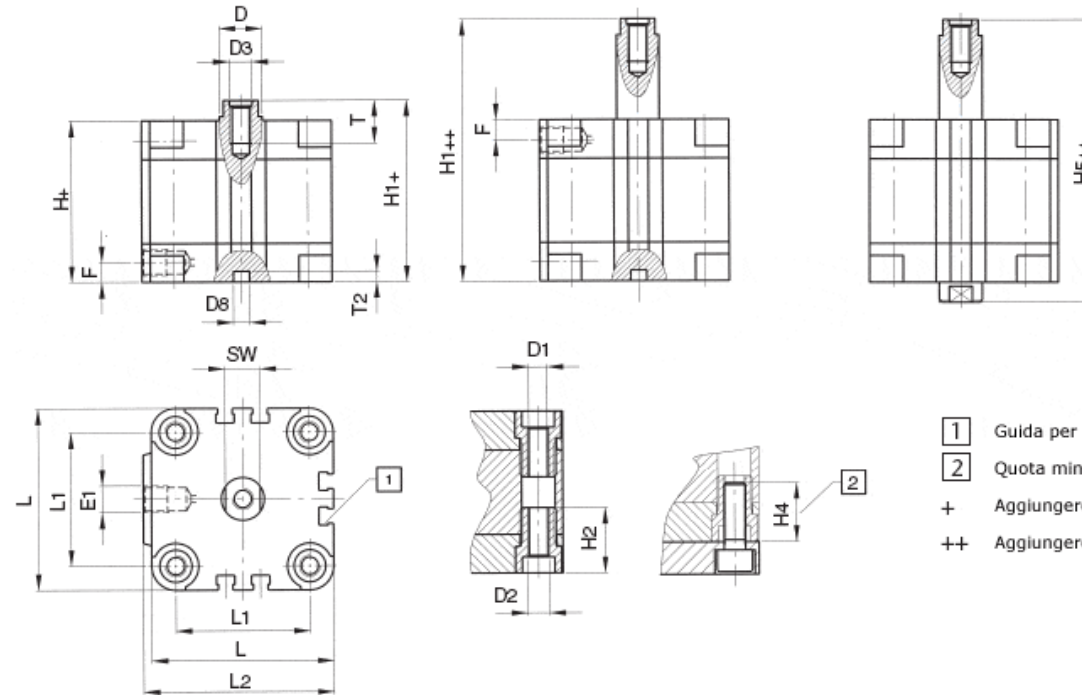
WITH FEMALE PISTON ROD



CUS...-FA
CUD...-F

CUS...-FP

CUSP...-F
CUDP...-F



- 1 Guida per fine corsa magnetico
- 2 Quota minima di avvitatura
- + Aggiungere la corsa
- ++ Aggiungere 2 volte la corsa

- DOUBLE ACTING
- SINGLE and DOUBLE acting DOUBLE ENDED ROD
- SINGLE acting FRONT and REAR spring

CUD ... -F
CUSP ... -F / CUDP ... -F
CUS ... -FA / CUS ... -FP

BORE SIZE	D mm.	D1 mm.	D2	D3	D6 mm.	D7	D8	E1	F	H	H1	H2	H4	H5	K1	L	L1	L2	SW	T	T1	T2
16	8	3.3	M4	M4	3.2	-	6	M5	8	38	42.5	18.5	16	47	M8	29	18	30	7	10	20	4
20	10	4.2	M5	M5	3.8	-	6	M5	8	38	42.5	18.5	18	47	M10x1,25	36	22	37.5	8	10	22	4
25	10	4.2	M5	M5	3.8	-	6	M5	8	39.5	45	18.5	18	50.5	M10x1,25	0	26	41.5	8	10	22	4
32	12	5.2	M6	M6	4.5	-	6	G1/8	8	44.5	50.5	21.5	20	56.5	M10x1,25	50	32	52	10	12	22	4
40	12	5.2	M6	M6	4.5	-	6	G1/8	8	45.5	52	21.5	20	58.5	M10x1,25	60	42	62.5	10	12	22	4
50	16	6.8	M8	M8	6	-	6	G1/8	8	45.5	53	22	20	60.5	M12x1,25	68	50	71	13	16	24	4
63	16	8.5	M10	M8	6	-	8	G1/8	8	50	57.5	24.5	25	65	M12x1,25	87	65	91	13	16	24	4



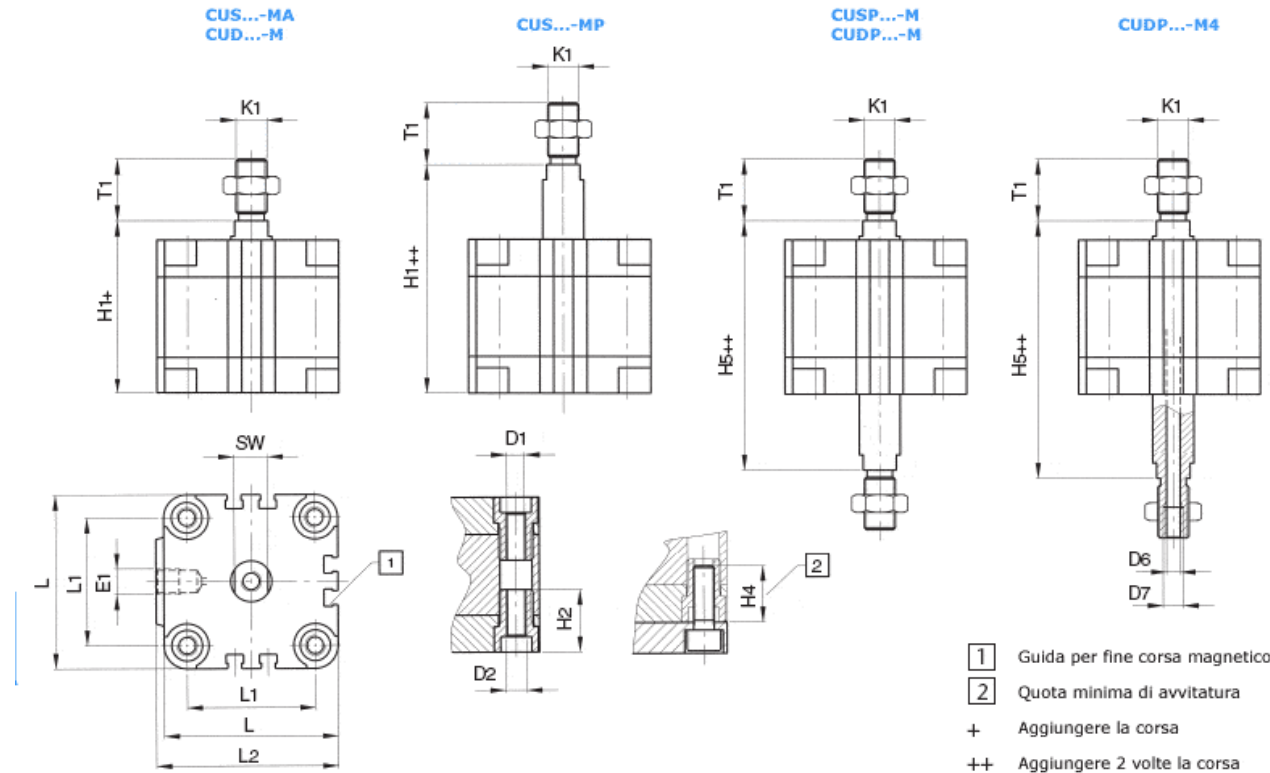
80	20	8.5	M10	M10	8	G1/8	8	G1/8	8.5	56	64	27.5	25	72	M16x1,5	107	82	111	17	20	32	4
100	25	8.5	M10	M12	11.7	G1/4	8	G1/4	10.5	66.5	76.5	32.5	25	86.5	M20x1,5	128	103	133	22	24	40	4

WITH MALE PISTON ROD



- DOUBLE ACTING
- SINGLE and DOUBLE acting DOUBLE ENDED ROD
- SINGLE and DOUBLE acting DOUBLE ENDED HOLLOW ROD
- SINGLE acting FRONT and REAR spring

CUD ... -M
CUSP ... -M / CUDP ... -M
CUSP ... -M4 / CUDP ... -M4
CUS ... -MA / CUS ... -MP



- 1 Guida per fine corsa magnetico
- 2 Quota minima di avvitatura
- + Aggiungere la corsa
- ++ Aggiungere 2 volte la corsa

Bore	D	D1	D2	D3	D6	D7	D8 H9	E1	F	H	H1	H2	H4	H5	K1	L	L1	L2	SW	T	T1	T2
	Ø mm.	Ø mm.			Ø mm.		Ø mm.		mm.	mm.	mm.	mm.	mm.	mm.		mm.	mm.	mm.	mm.	mm.	mm.	mm.
16	8	3.3	M4	M4	3.2	-	6	M5	8	38	42.5	18.5	16	47	M8	29	18	30	7	10	20	4
20	10	4.2	M5	M5	3.8	-	6	M5	8	38	42.5	18.5	18	47	M10x1,25	36	22	37.5	8	10	22	4
25	10	4.2	M5	M5	3.8	-	6	M5	8	39.5	45	18.5	18	50.5	M10x1,25	40	26	41.5	8	10	22	4
32	12	5.2	M6	M6	4.5	-	6	G1/8	8	44.5	50.5	23	20	56.5	M10x1,25	50	32	52	10	12	22	4



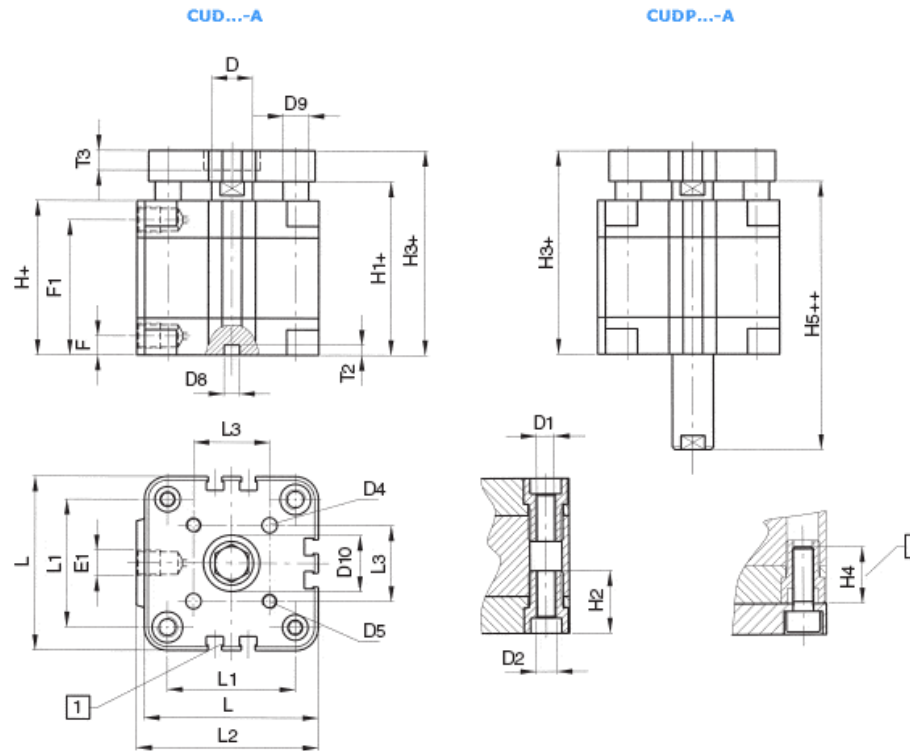
40	12	5.2	M6	M6	4.5	-	6	G1/8	8	45.5	52	23	20	58.5	M10x1,25	60	42	62.5	10	12	22	4
50	16	6.8	M8	M8	6	-	6	G1/8	8	45.5	53	24.5	20	60.5	M12x1,25	68	50	71	13	16	24	4
63	16	8.5	M10	M8	6	-	8	G1/8	8	50	57.5	27	25	65	M12x1,25	87	62	91	13	16	24	4
80	20	8.5	M10	M10	8	G1/8	8	G1/8	8.5	56	64	27	25	72	M16x1,5	107	82	111	17	20	32	4
100	25	8.5	M10	M12	11.7	G1/4	8	G1/4	10.5	66.5	76.5	32.5	25	86.5	M20x1,5	128	103	133	22	24	40	4

WITH NON-ROTATING PISTON ROD



- DOUBLE acting
- DOUBLE acting DOUBLE ENDED ROD

CUD ... -X
CUDP ... -X



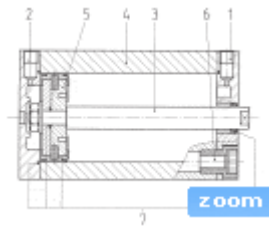
- 1 Guida per fine corsa magnetico
- 2 Quota minima di avvitatura
- + Aggiungere la corsa
- ++ Aggiungere 2 volte la corsa



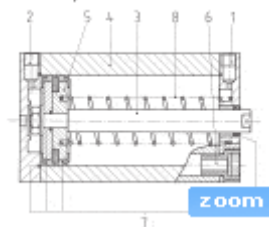
Bore	D	D1	D2	D3	D6	D7	D8 H9	E1	F	H	H1	H2	H4	H5	K1	L	L1	L2	SW	T	T1	T2
	∅ mm.	∅ mm.			∅ mm.		∅ mm.		mm.	mm.	mm.	mm.	mm.	mm.		mm.	mm.	mm.	mm.	mm.	mm.	mm.
16	8	3.3	M4	M4	3.2	-	6	M5	8	38	42.5	18.5	16	47	M8	29	18	30	7	10	20	4
20	10	4.2	M5	M5	3.8	-	6	M5	8	38	42.5	18.5	18	47	M10x1,25	36	22	37.5	8	10	22	4
25	10	4.2	M5	M5	3.8	-	6	M5	8	39.5	45	18.5	18	50.5	M10x1,25	40	26	41.5	8	10	22	4
32	12	5.2	M6	M6	4.5	-	6	G1/8	8	44.5	50.5	23	20	56.5	M10x1,25	50	32	52	10	12	22	4
40	12	5.2	M6	M6	4.5	-	6	G1/8	8	45.5	52	23	20	58.5	M10x1,25	60	42	62.5	10	12	22	4
50	16	6.8	M8	M8	6	-	6	G1/8	8	45.5	53	24.5	20	60.5	M12x1,25	68	50	71	13	16	24	4
63	16	8.5	M10	M8	6	-	8	G1/8	8	50	57.5	27	25	65	M12x1,25	87	62	91	13	16	24	4
80	20	8.5	M10	M10	8	G1/8	8	G1/8	8.5	56	64	27	25	72	M16x1,5	107	82	111	17	20	32	4
100	25	8.5	M10	M12	11.7	G1/4	8	G1/4	10.5	66.5	76.5	32.5	25	86.5	M20x1,5	128	103	133	22	24	40	4



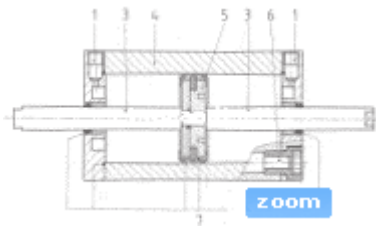
PNEUMATIC CYLINDERS: compact CYLINDERS UNITOP – spare parts



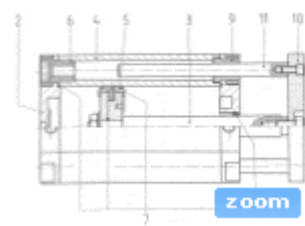
CUD...-F
CUD...-M



CUS...-FA
CUS...-FP
CUS...-MA
CUS...-MP



CUSP...-F
CUSP...-M
CUSP...-M4
CUDP...-F
CUDP...-M
CUDP...-M4



CUD...-A
CUDP...-A



ITEM	QUANTITY (each cylinder)	MODEL	DESCRIPTION
1	1	GTA	Front end cap group
2	1	GTP	Rear end cap group
3	1	ST	Piston rod
4	1	CM	Body
5	1	GPT	Piston group
6	8	VT	Screw
7	1	SGM	Seals kit
8	1	ML	Spring
9	1	GTR	Non-rotating front end cap
10	1	GSA	Non-rotating bracket group
11	2	SA	Slide bar
12	1	DS	Piston rod nut

