

# Angular grippers Series CGA

Magnetic  
Sizes 10, 16, 20, 25, 32



- » Compact design
- » Flexible mounting
- » Optional mounting adaptors

For an easier installation the gripper can also be equipped with an optional installation adaptor mod. C-CGP (female) or L-CGP (male).

The angular grippers Series CGA, available in 5 different sizes, open and close at angles between  $-10^\circ$  and  $+30^\circ$ . The proximity switches can be inserted in the U-shaped grooves on the body.  
Grippers Series CGA have mounting holes on three sides which provide flexibility in installation.

## GENERAL DATA

Model	CGA-10; CGA-16; CGA-20; CGA-25; CGA-32				
Bore sizes	$\varnothing 10$ ; $\varnothing 16$ ; $\varnothing 20$ ; $\varnothing 25$ ; $\varnothing 32$				
Type of operation	double-acting				
Operating pressure	1.5 ÷ 7 bar				
Operating temperature	0 ÷ $80^\circ\text{C}$				
Max. operating frequency	180 cycles/min				
Lubrication	lever section - lubrication required on sliding section				
Grip moment - closed M (Ncm)	1,6xP	8xP	17xP	34xP	61xP
Grip moment - open M ( Ncm )	2,6xP	11xP	23xP	43xP	81xP
Effective gripping force F (N)	F = M/L x0,85		L = distance of gripping point (cm)		
Length of la. gripping point L (cm)	3,0	4,0	6,0	7,0	8,5
Weight (g)	$\varnothing 10 = 40$	$\varnothing 16 = 100$	$\varnothing 20 = 200$	$\varnothing 25 = 330$	$\varnothing 32 = 540$
Lever open / closed angles	$-10^\circ+$	$+30^\circ$			
Port sizes	M5	(CGA-10 M3)			
Magnet	magnet for proximity sensors in piston				
Fluid	filtered air, without lubrication. If lubricated air is used, it is recommended to use oil ISOVG32. Once applied the lubrication should never be interrupted.				

**CODING EXAMPLE**

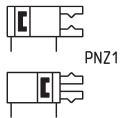
**CGA** - **20**

<b>CGA</b>	SERIES	PNEUMATIC SYMBOL
<b>20</b>	SIZES 10 = ø 10 mm 16 = ø 16 mm 20 = ø 20 mm 25 = ø 25 mm 32 = ø 32 mm	PNZ1

**PNEUMATIC SYMBOLS**

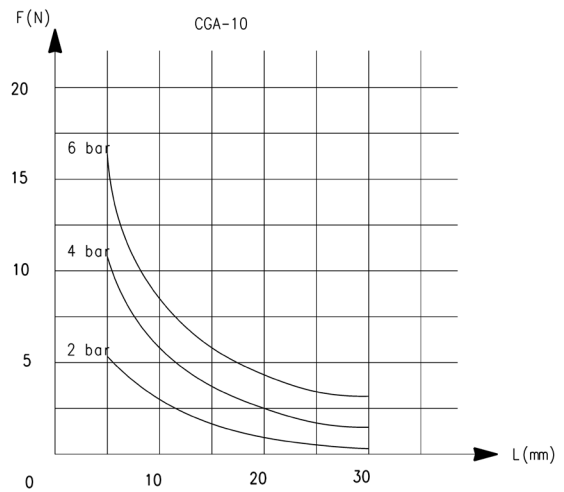
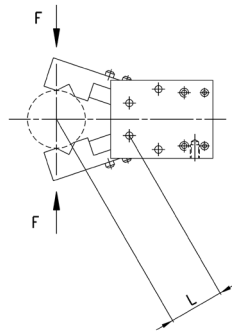
**PNEUMATIC SYMBOLS**

The pneumatic symbols which have been indicated in the CODING EXAMPLE are shown below.



**CLOSING GRIPPING FORCE - CHARACTERISTICS**

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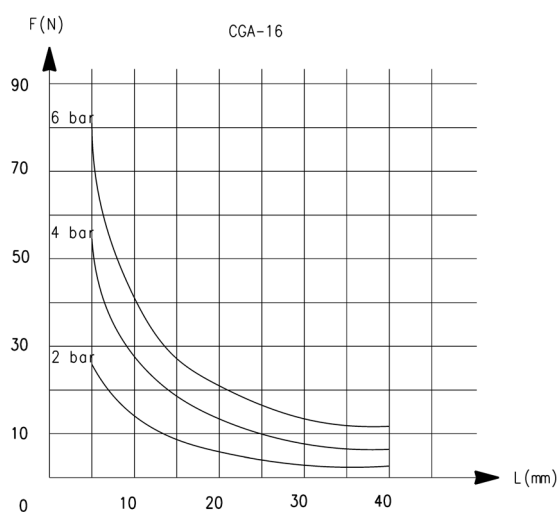
L = Length of gripping point  
F = Gripping force

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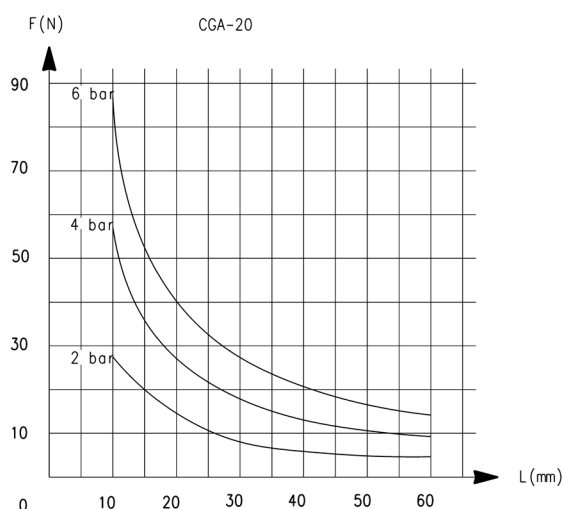
## CLOSING GRIPPING FORCE - CHARACTERISTICS

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MOVEMENT

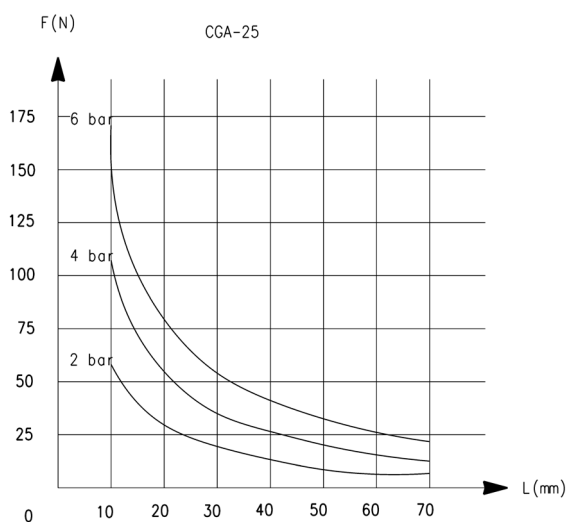


L = Length of gripping point  
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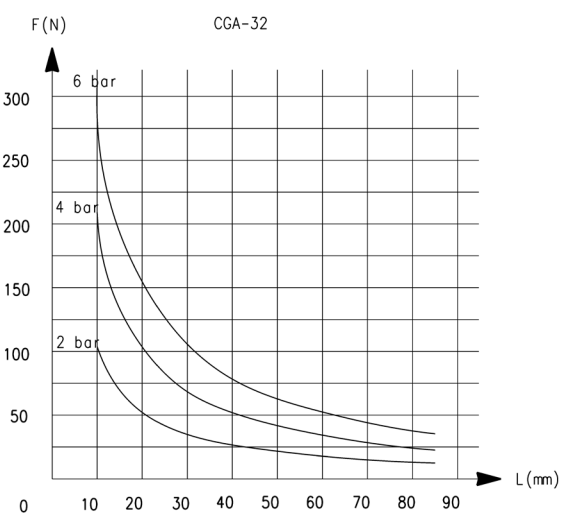


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## CLOSING GRIPPING FORCE - CHARACTERISTICS

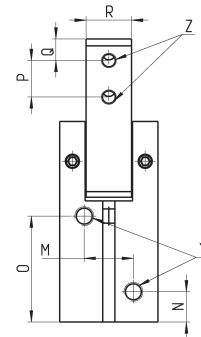
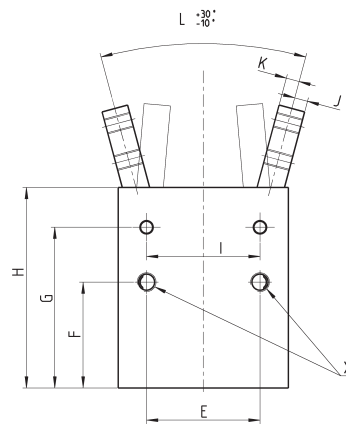
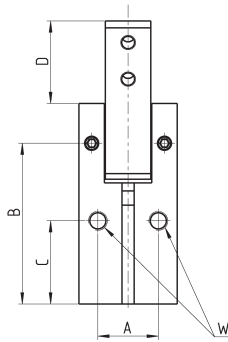
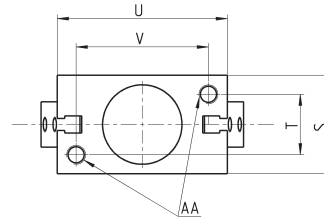


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Angular grippers Series CGA



Y = port connection  
 Z = claw mounting-holes  
 X,W,AA = Mounting holes

DIMENSIONS

Mod.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
<b>CGA-10</b>	10	30,5	15,5	15,7	18	20	30,5	36,5	14	2,5	1,5	0°	10	7,5	19	6	3	7	16	10	23	17
<b>CGA-16</b>	14	38	21	17,5	24	25,5	38	45,5	24	3	3	0°	12	7,5	25,5	8	3	9	22	14	34	26
<b>CGA-20</b>	16	42,5	22	22	30	28	42,5	53	30	3,5	3,5	0°	13	8	28	10	4	12	26	16	45	35
<b>CGA-25</b>	20	48,5	24,5	26	36	31,5	48,5	61	36	4,5	4,5	0°	18	9	31	12	5	14	32	20	52	40
<b>CGA-32</b>	26	54	30	30	44	37,5	45	68	42	5	5	0°	24	10	33,5	14	6	18	40	26	60	46

DIMENSIONS

Mod.	X thread	X depth	Y thread	Y depth	W thread	W depth	Z thread	Z depth	AA thread	AA depth
<b>CGA-10</b>	M3	7	M3	-	M3	-	M3	-	M3	5
<b>CGA-16</b>	M4	11	M5	-	M4	-	M3	-	M4	7
<b>CGA-20</b>	M5	13	M5	-	M5	-	M4	-	M5	8
<b>CGA-25</b>	M6	15	M5	-	M6	-	M5	-	M6	10
<b>CGA-32</b>	M6	20	M5	-	M6	-	M6	-	M6	10