

# Series CGA angular grippers

Magnetic

Sizes:  $\varnothing$  10, 16, 20, 25, 32 mm

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MOVEMENT

- » 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).

Series CGA angular grippers are available in 5 different sizes. The gripper opens and closes 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

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

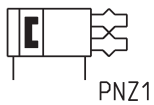
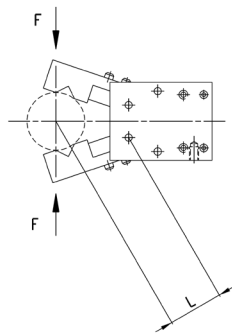
**CODING EXAMPLE**

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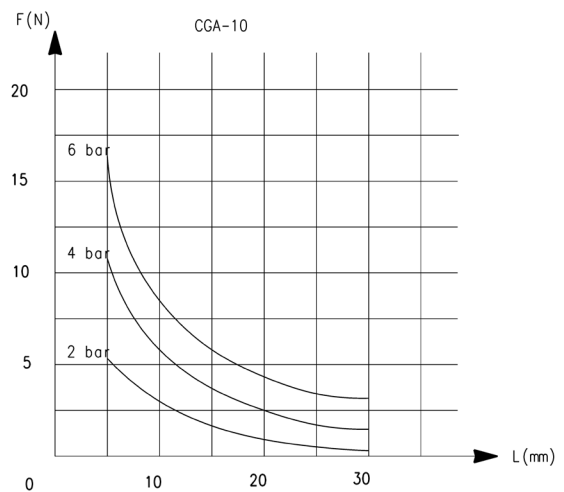
<b>CGA</b>	SERIES	PNEUMATIC SYMBOL
<b>20</b>	SIZES 10 = ø 10 mm 16 = ø 16 mm 20 = ø 20 mm 25 = ø 25 mm 32 = ø 32 mm	PNZ1

**PNEUMATIC SYMBOLS**

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

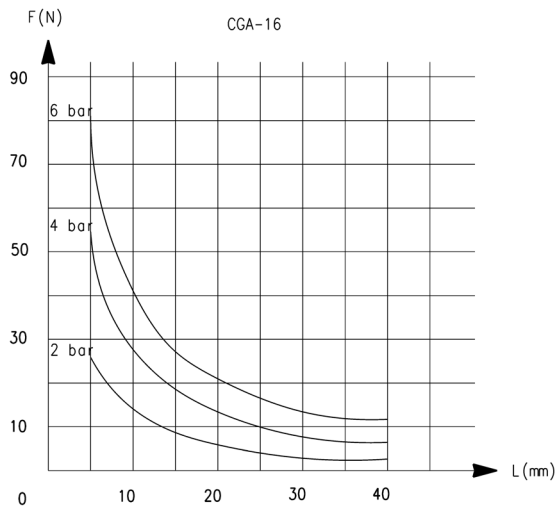

**CLOSING GRIPPING FORCE - CHARACTERISTICS**


L = Length of gripping point  
F = Gripping force

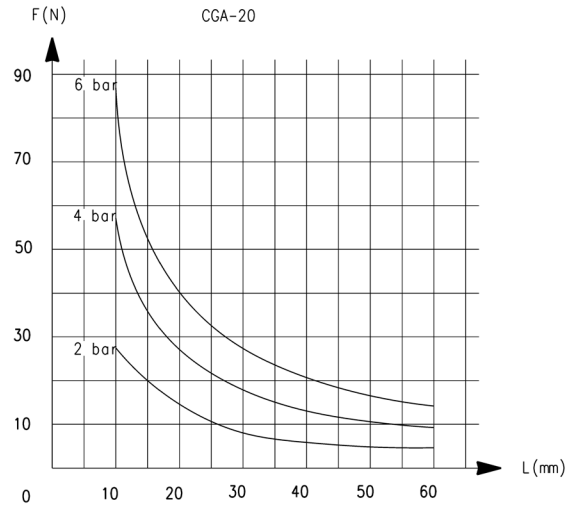


L = Length of gripping point  
F = Gripping force

CLOSING GRIPPING FORCE - CHARACTERISTICS

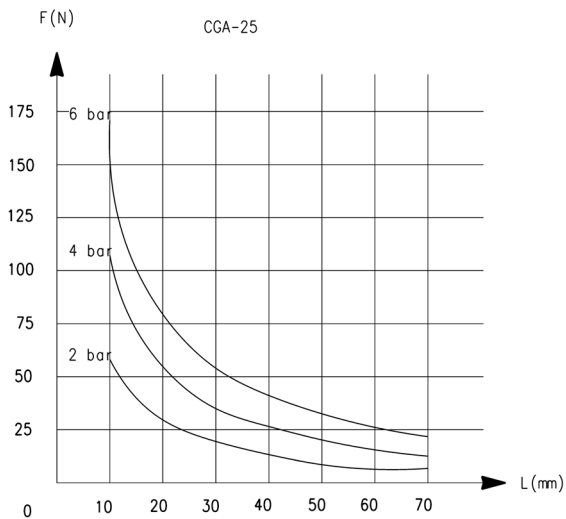


L = Length of gripping point  
F = Gripping force

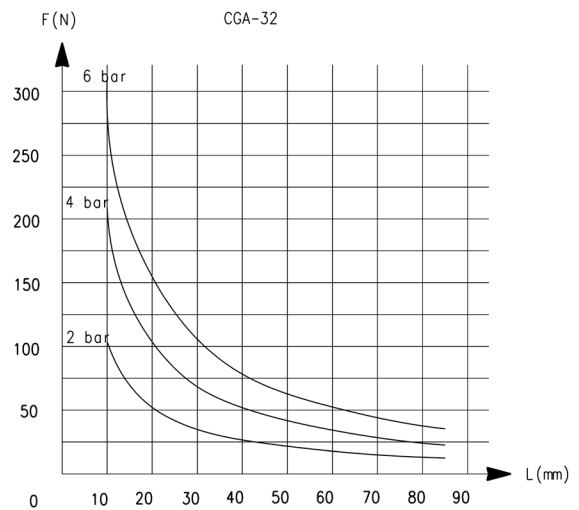


L = Length of gripping point  
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CLOSING GRIPPING FORCE - CHARACTERISTICS

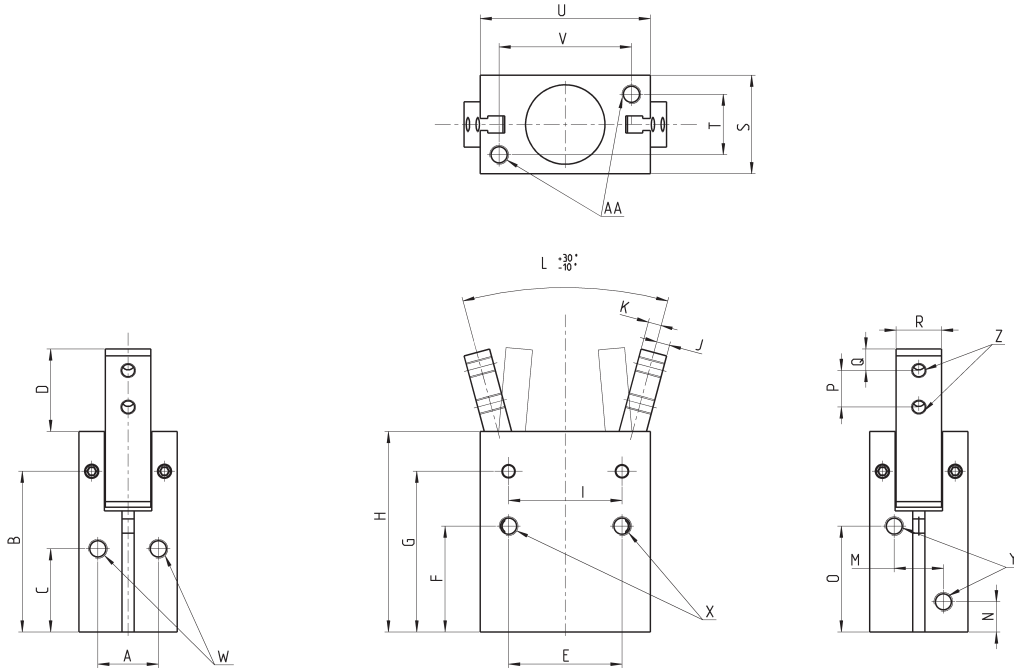


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## Angular grippers Series CGA

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MOVEMENT


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

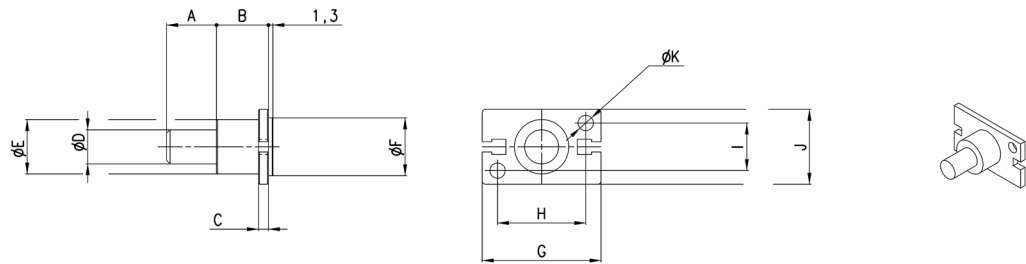
## DIMENSIONS

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

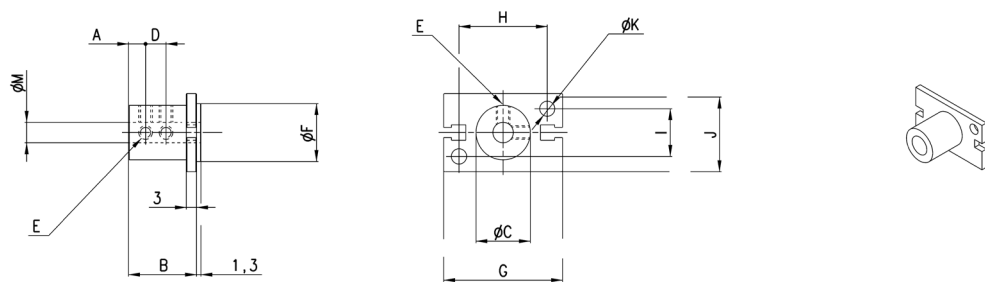
Mod.	X thread	X depth	Y thread	Y depth	W thread	W depth	Z thread	Z depth	AA thread	AA depth
<b>CGA-10</b>	M3	7	M3	-	M3	-	M3	-	M3	5
<b>CGA-16</b>	M4	11	M5	-	M4	-	M3	-	M4	7
<b>CGA-20</b>	M5	13	M5	-	M5	-	M4	-	M5	8
<b>CGA-25</b>	M6	15	M5	-	M6	-	M5	-	M6	10
<b>CGA-32</b>	M6	20	M5	-	M6	-	M6	-	M6	10

Mounting brackets Mod. L-CGP



Mod.	A	B	C	D	E	F	G	H	I	J	K
L-CGP-16	15	15	3	10	16	17	35	26	14	22	4,5
L-CGP-20	15	15	3	10	18	21	46	35	16	26	5,5
L-CGP-25	25	17	5	14	26	26	53	40	20	32	6,6
L-CGP-32	25	20	6	16	30	34	61	46	26	40	6,6

Mounting brackets Mod. C-CGP



Mod.	A	B	C	D	E	F	G	H	I	J	K	M
C-CGP-16	5	20,5	16	7	M4	17	35	26	14	23	4,5	6
C-CGP-20	7	25,5	20	9	M4	21	46	35	16	27	5,5	8
C-CGP-25	8	30,5	25	10	M4	26	53	40	20	33	6,6	10
C-CGP-32	10	40,5	32	15	M4	34	61	46	26	41	6,6	12