

Angular grippers with opening angle of 30° Series CGAN

Double acting, magnetic, self centering Sizes: 10, 16, 20, 25, 32

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utomatio



» Compact and light design

- » Flexible mounting
- » Fixing on 3 sides
- » High closing and opening speed
- Position detection thanks to the use of Series CSD magnetic proximity switches

Fixing points on three different sides of the gripper body and its easy mounting by means of an optional adaptor, guarantee highly flexible installation, even in industrial sectors that demand high levels of production efficiency such as the assembly, packaging and Food & Beverage sectors.

Series CGAN angular grippers are available in 5 different sizes. Thanks to an opening angle of between -10° and 30°, the Series CGAN angular grippers guarantee a fast and efficient grip even in reduced workspaces.

Its compact design and the materials used, make this gripper particularly suitable for all those applications requiring high precision and position repeatability such as Transferring, Pick & Place or Pick & Hold.

GENERAL DATA

Type of construction	Self centering angular gripper
Operation	Double-acting
Sizes	10; 16; 20; 25; 32
Force transmission	Lever system
Opening torque at 6 bar	14 - 280 (Ncm)
Closing torque at 6 bar	10 - 230 (Ncm)
Opening/closing angle	2x15°
Air connections	M3 - M5
Operating pressure	2 ÷ 8 bar
Operating temperature	5°C ÷ 60°C
Store temperature	-10°C ÷ 80°C
Maximum use frequency	3 Hz
Repeatability	0.05°
Medium	Filtered air in class 7.4.4 according to ISO 8573-1. In case lubricated air is used, we recommend ISOVG32 oil and to never interrupt lubrication.
Compatibility	ROHS Directive
Certifications	ATEX (II 2GD c IIC 120°C(T4)-20°C≤Ta≤80)
Materials	PTFE, Silicone and Copper free
Compatible magnetic proximity switches	Series CSD

CODING EXAMPLE

CGAN	-	20	-	EX
CGAN	SERIES		PNEUMATIC SYMBOL PNZ1	
20	SIZES: 10 16 20 25 32			
EX	Add EX to order the certified ATEX versio	n		

PNEUMATIC SYMBOLS

The pneumatic symbol indicated in the CODING EXAMPLE is shown below.



ANGULAR GRIPPERS > SERIES CGAN ANGULAR GRIPPERS

Grippers Series CGAN - construction

Automation

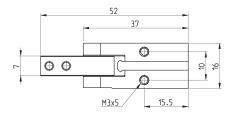
LIST OF COMPONENTS		
PARTS	MATERIALS	
1 - Body	Aluminium alloy	
2 - Jaw	Stainless steel	
3 - Piston	Stainless steel	
4 - Seal	NBR	
5 - Magnet	Plastoferrite	
6 - Rear end cap	Acetal POM	
7 - 0-ring	NBR - HNBR	
8 - Cushioning	PU Polyurethane	
9 - Seeger	Stainless steel	
10 - Pin	Steel	

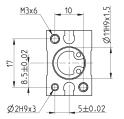


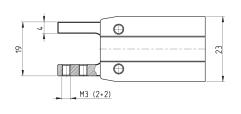
Series CGAN gripper, size 10 - dimensions

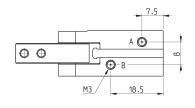


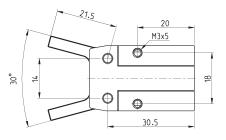
DRAWING LEGEND: A = Opening of air connection B = Closing of air connection









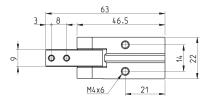


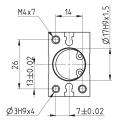
Mod.	Total closing gripping force at 6 bar (N)	Closing gripping force [·] per jaw at 6 bar (N)	Total opening gripping force at 6 bar (N)	Opening gripping force per jaw at 6 bar (N)			Working temperature (°C)	Repeatability (°)	Max use frequency (Hz)	Weight (Kg)
CGAN-10	10,5	5,25	14	7	15°	2 ÷ 8	5 ÷ 60	0.05	3	0.045

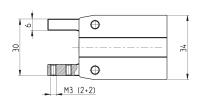
Series CGAN gripper, size 16 - dimensions

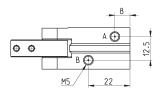


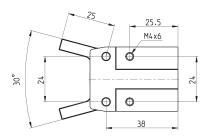
DRAWING LEGEND: A = Opening of air connection B = Closing of air connection









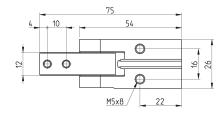


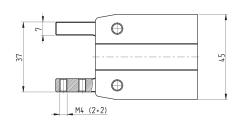
Mod.	Total closing gripping force at 6 bar (N)	Closing gripping force per jaw at 6 bar (N)	Total opening gripping force at 6 bar (N)	Opening gripping force per jaw at 6 bar (N)			Working temperature (°C)	Repeatability (°)	Max use frequency (Hz)	Weight (Kg)
CGAN-16	50	25	62	31	15°	2 ÷ 8	5 ÷ 60	0.05	3	0.112

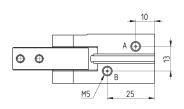
Series CGAN gripper, size 20 - dimensions

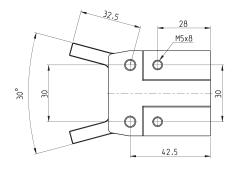


DRAWING LEGEND: A = Opening of air connection B = Closing of air connection









Mod.	Total closing gripping force at 6 bar (N)	Closing gripping force per jaw at 6 bar (N)	Total opening gripping force at 6 bar (N)	Opening gripping force per jaw at 6 bar (N)			Working temperature (°C)	Repeatability	Max use frequency (Hz)	Weight
	TOICE at 6 Dai (N)	per Jaw at 6 bar (N)	TOICE at 6 Dai (N)	per Jaw at 6 bar (N)	Jaw (*)	pressure (bar)	temperature (°C)	0	inequency (Hz)	(Kg)
CGAN-20	97	48,5	120	60	15°	2 ÷ 8	5 ÷ 60	0,05	3	0,213

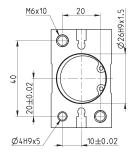
Ø21H9x1.5 \bigcirc 17.5±0.02 35 Ť. Φ Ó Ø4H9x5 8±0.02 _

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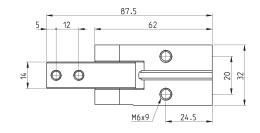
<u>M5x9</u>

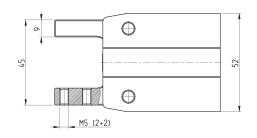
Series CGAN gripper, size 25 - dimensions

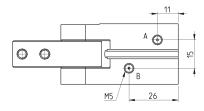


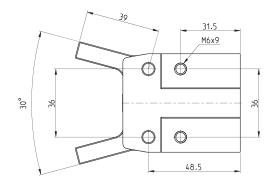






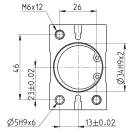


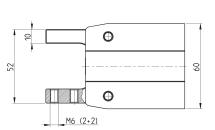




Mod.	Total closing gripping force at 6 bar (N)	Closing gripping force per jaw at 6 bar (N)	Total opening gripping force at 6 bar (N)	Opening gripping force per jaw at 6 bar (N)	Stroke per jaw (°)		Working temperature (°C)	Repeatability (°)	Max use frequency (Hz)	Weight (Kg)
CGAN-25	185	92,5	232	116	15°	2 ÷ 8	5 ÷ 60	0,05	3	0,355







DRAWING LEGEND: A = Opening of air connection B = Closing of air connection

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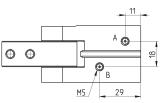
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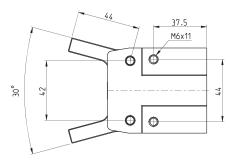
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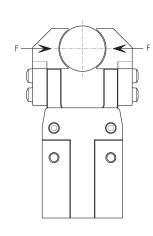


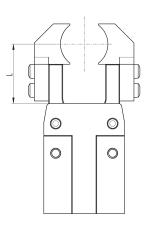


Mod.				Opening gripping force			Working	Repeatability		Weight
	force at 6 bar (N)	per jaw at 6 bar (N)	force at 6 bar (N)	per jaw at 6 bar (N)	jaw (°)	pressure (bar)	temperature (°C)	(°)	frequency (Hz)	(Kg)
CGAN-32	235	117,5	292	146	15°	2 ÷ 8	5 ÷ 60	0,05	3	0,585

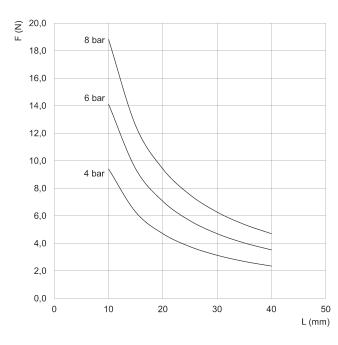
GRIPPING POINT



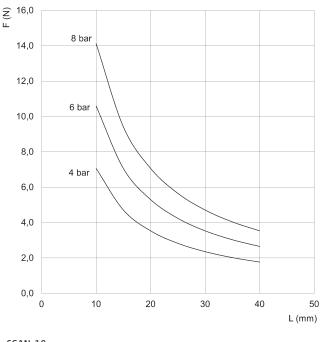




L = Arm F = Gripping force



TIGHTENING FORCE PER SINGLE JAW



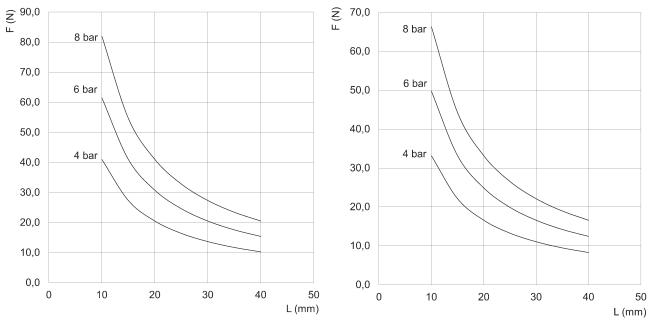
CGAN-10

Opening gripping force L = Arm F = Gripping force CGAN-10

Closing gripping force L = Arm F = Gripping force



TIGHTENING FORCE PER SINGLE JAW

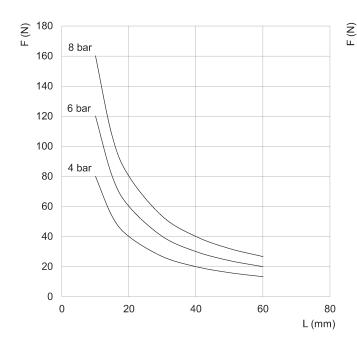


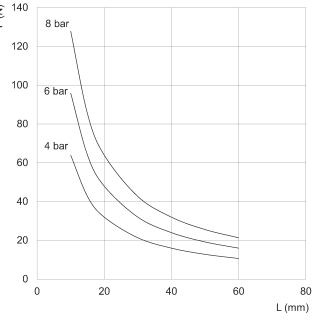
CGAN-16

Opening gripping force L = Arm F = Gripping force

CGAN-16

Closing gripping force L = Arm F = Gripping force



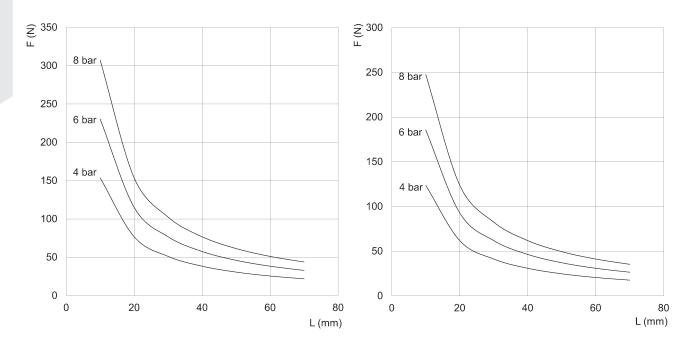


CGAN-20

Opening gripping force L = Arm F = Gripping force CGAN-20

Closing gripping force L = Arm F = Gripping force

TIGHTENING FORCE PER SINGLE JAW

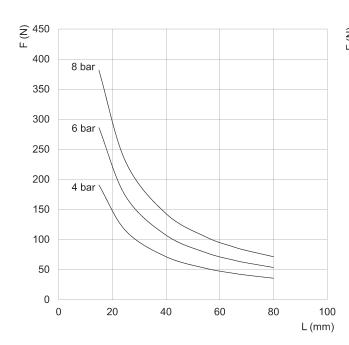


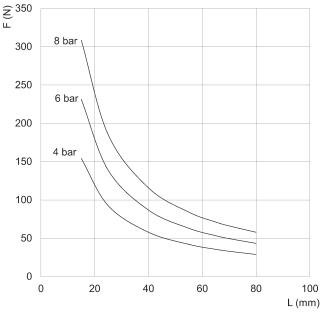
CGAN-25

Opening gripping force L = Arm F = Gripping force

CGAN-25

Closing gripping force L = Arm F = Gripping force





CGAN-32

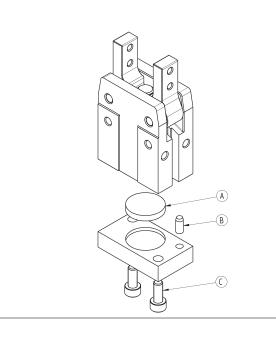
Opening gripping force L = Arm F = Gripping force

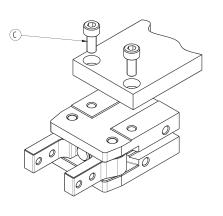
CGAN-32

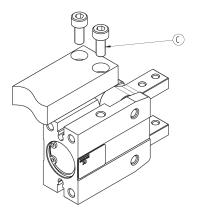
Closing gripping force L = Arm F = Gripping force

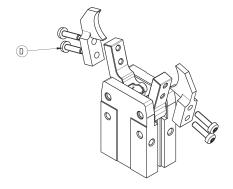
Automation







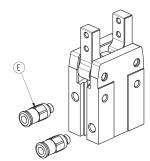




Mod.	А	В	C	D
CGAN-10	Ø11	Ø2	M3	M3
CGAN-16	Ø17	Ø3	M4	М3
CGAN-20	Ø21	Ø4	М5	M4
CGAN-25	Ø26	Ø4	M6	M5
CGAN-32	Ø34	Ø5	M6	M6

Products designed for industrial applications. General terms and conditions for sale are available on www.camozzi.com.

Air supply ports

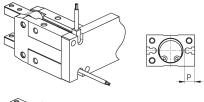


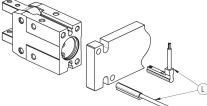
E	
М3	
M5	
M5	
M5	
M5	
	M3 M5 M5 M5 M5

Example of mounting: proximity switches

L = proximity switch mod. CSD-D-334/CSD-H-334 or mod. CSD-D-364/CSD-H-364

In order to position the proximity switch correctly, a channel must be created in the base.



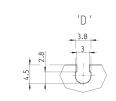


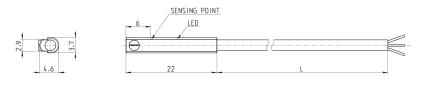
Mod.	Р	
CGAN-10	5	
CGAN-16	7	
CGAN-20	10	
CGAN-25	10.5	
CGAN-32	10.5	



Series CSD magnetic proximity switches, 3-wire cable, D-slot







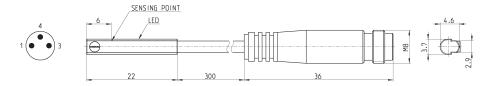
Mod.	Operation	Connections	Voltage	Output	Max. current	Max Load	Protection	L = length cable
CSD-D-334	Magnetoresistive	3 wires	es 10 ÷ 27 V DC PNP 200 mA 6W Against polarity reversing and overvoltage		2 m			

Series CSD magnetic proximity switches, M8 3-pin male conn., D-slot, straight

Length of cable 0.3 metres



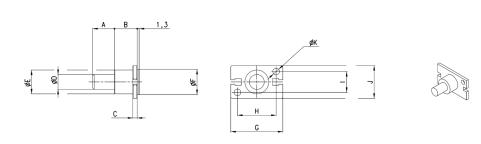




Mod.	Operation Connection		Voltage Output		Max. current	Maxload	Protection		
CSD-D-364	Magnetoresistive	3 wires with M8 connector	10 ÷ 27 V DC	PNP	200 mA	6W	Against polarity reversing and overvoltage		

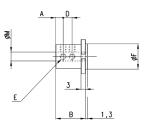
Mounting brackets Mod. L-CGP

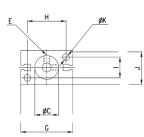




Mod.	А	В	С	D	E	F	G	Н	I	J	К
L-CGP-16	15	15	3	10	16	17	35	26	14	22	4,5
L-CGP-20	15	15	3	10	18	21	46	35	16	26	5,5
L-CGP-25	25	17	5	14	26	26	53	40	20	32	6,6
L-CGP-32	25	20	6	16	30	34	61	46	26	40	6,6

Mounting brackets Mod. C-CGP







Mod.	А	В	С	D	E	F	G	н	I	J	К	М
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