

A new series to handle it all.

GRIPPER SERIES NGP/NGA/NGT

PARALLEL, 30° AND 180° PNEUMATIC GRIPPERS
GRIPPER PNEUMATICI PARALLELI, 30° E 180°



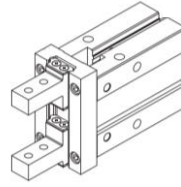
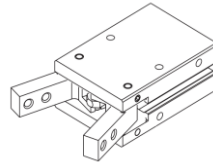
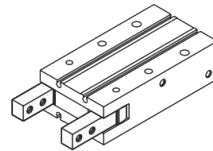
Ball bearing precision guiding
system for parallel grippers

*Guida parallela di precisione
con cuscinetti a sfera*



Available double & single acting
Disponibili double & single acting



NGP**Ø06-25****PARALLEL PNEUMATIC GRIPPER**
GRIPPER PNEUMATICO PARALLELO**Page 3 / Pagina 3****NGA****Ø12-32****30° ANGULAR GRIPPER**
GRIPPER ANGOLARE 30°**Page 12 / Pagina 12****NGT****Ø10-25****180° ANGULAR GRIPPER**
GRIPPER ANGOLARE 180°**Page 15 / Pagina 15****MAGNETIC SWITCHES / SENSORI MAGNETICI****Page 18 / Pagina 18**

DESCRIPTION / DESCRIZIONE

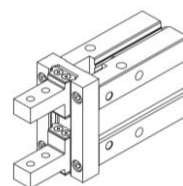
Parallel pneumatic grippers with aluminium body, stainless steel piston rod and fingers, carbon steel rivets, stainless steel ball bushing linear guiding system, NBR seals. Available bore 6, 10, 16, 20, 25mm.

Gripper pneumatici paralleli con corpo in alluminio, stelo e componenti di presa in acciaio inox, rivetti in acciaio al carbonio, sistema di guida lineare con cuscinetti a sfera, guarnizioni in NBR. Disponibili alesaggi 6, 10, 16, 20 e 25mm.



TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

NGP 06 NGP 10 NGP 16 NGP 20 NGP 25					
Acting type	Double acting / Single acting				
Tube I.D. (mm)	6	10	16	20	25
Opening / Closing stroke (mm)	4	4	6	10	14
Port size	M3×0.5		M5×0.8		
Medium	Air				
Operating pressure range (MPa)	Double acting	1.5-7	2-7	1-7 Bar	
	Single acting	—	3.5-7	2.5-7 Bar	
Ambient temperature	-10~+60℃ (No freezing)				
Repeatability	± 0.01 mm				
Max. operating frequency (c.p.m)	180				
Lubricator	Not required				
Weight (g)	27	55	124	250	461
Weight single acting (g)		70	145	270	490



ORDERING CODE / CODICE DI ORDINAZIONE

NGP 16 - NO

Bore size:

06 = Ø06mm
10 = Ø10mm
16 = Ø16mm
20 = Ø20mm
25 = Ø25mm

Blank = Double Acting

NO = Single Acting (Normally Open)

NC = Single Acting (Normally Closed)

NGP 06 is available only double acting

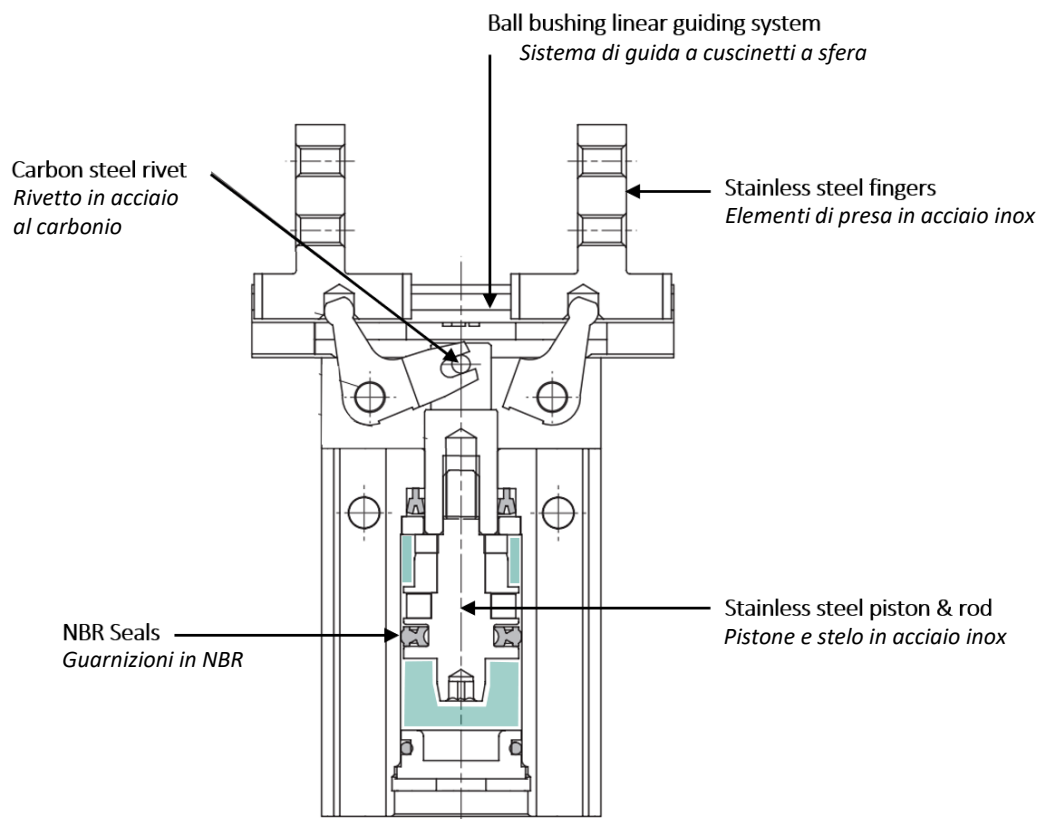
NGP 06 è disponibile solo a doppio effetto

Magnetic switch / Sensori finecorsa



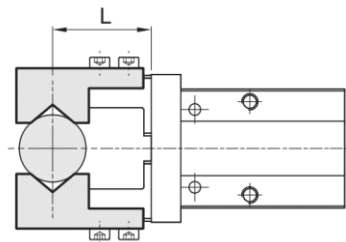
VRDE (Page 18)

VRDE (Pagina 18)

MATERIALS / MATERIALI

GRIPPING FORCE / FORZA DI SERRAGGIO

		NGP 06	NGP 10	NGP 16	NGP 20	NGP 25
Double acting	External	3.3	11	34	42	65
	Internal	6.1	17	45	66	104
Single acting / Normally open	External	—	7.1	27	33	45
Single acting / Normally closed	Internal	—	13	38	57	83

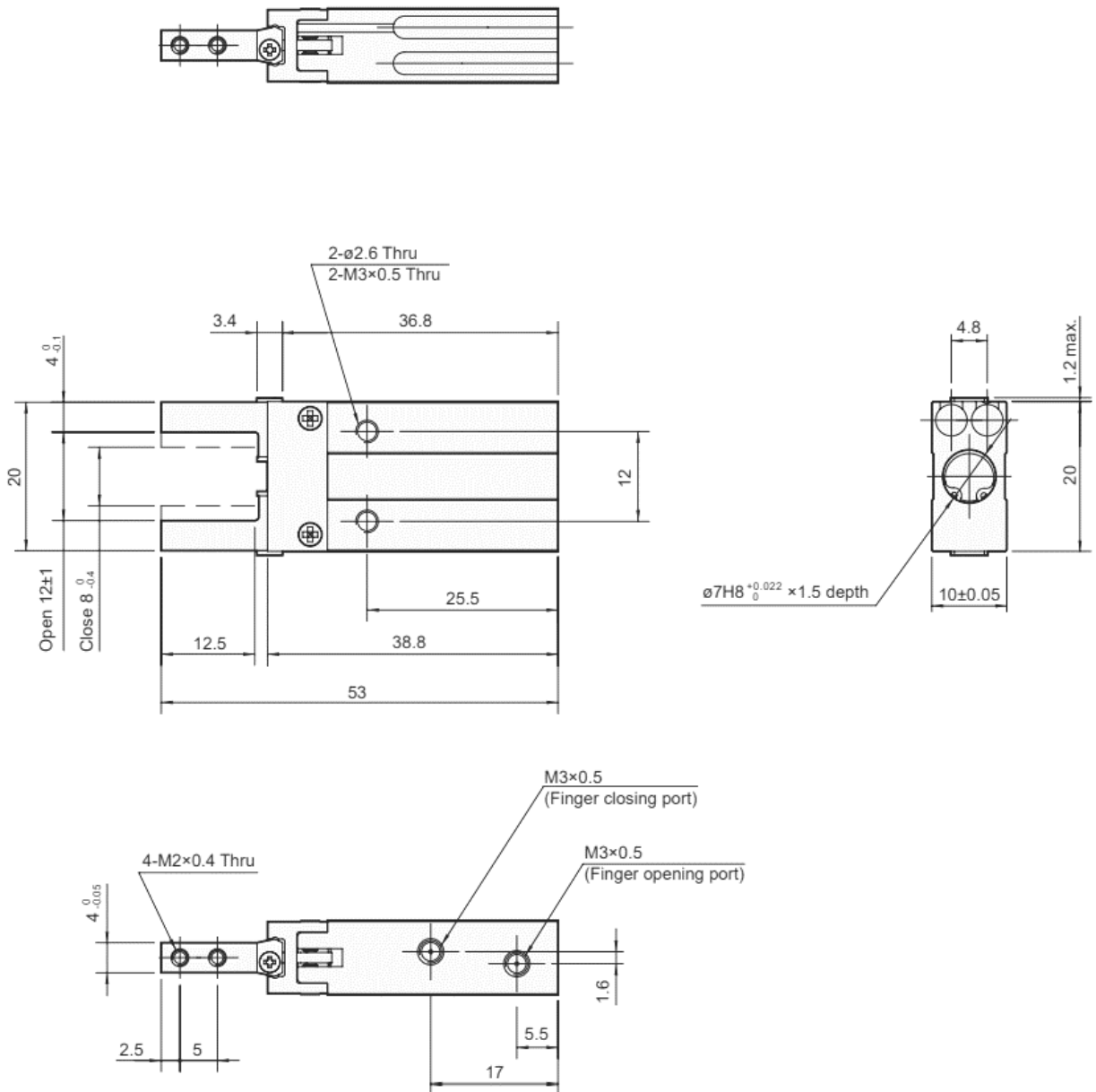
Pressure: 5 bar
 Gripping length (L): 20mm
 Force: N (kgf)



Complete force charts are available at page 9 and 10.
 I grafici dei valori di forza sono disponibili a pagina 9 e 10.

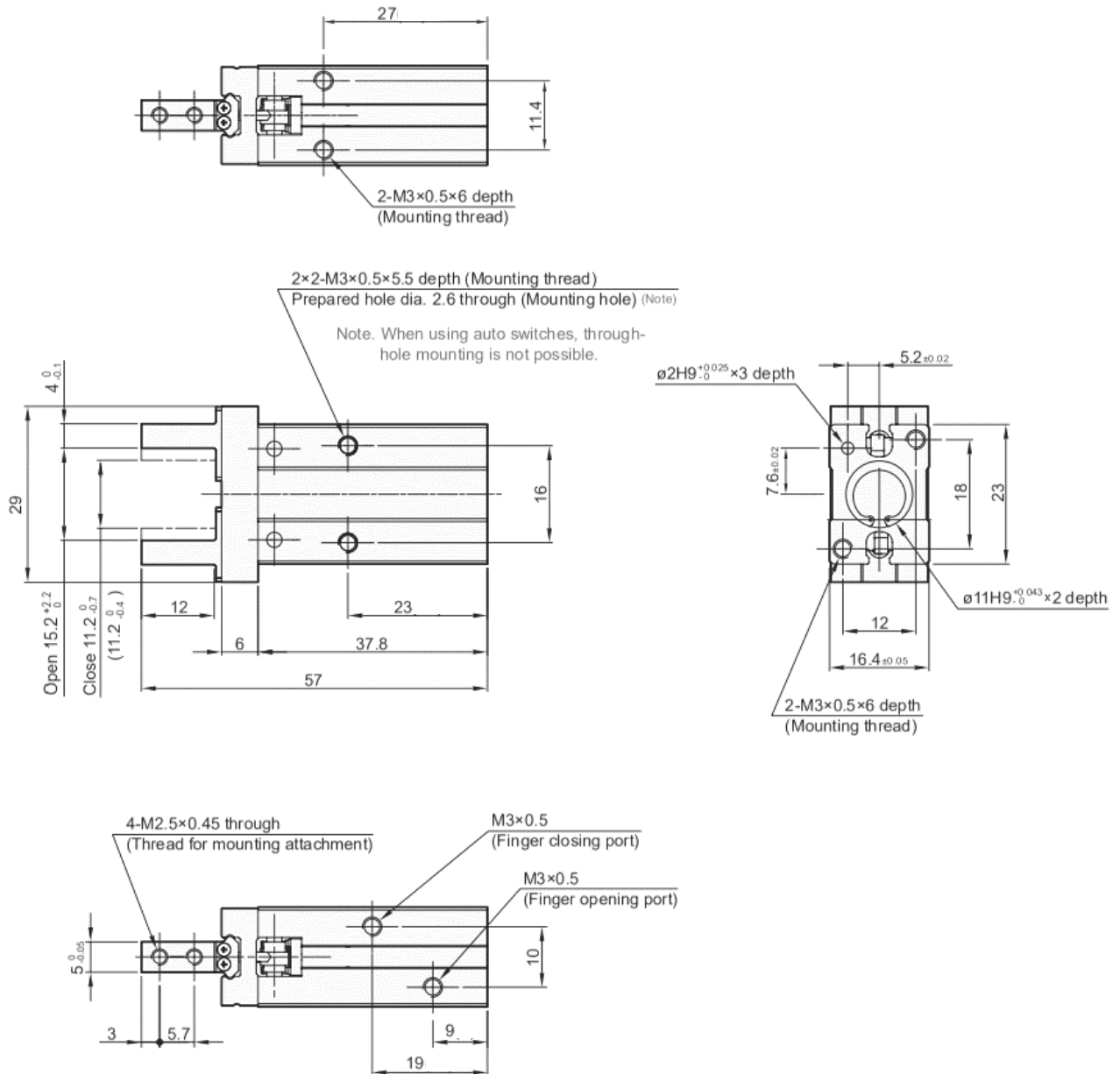
NGP 06

DIMENSIONS / DIMENSIONI



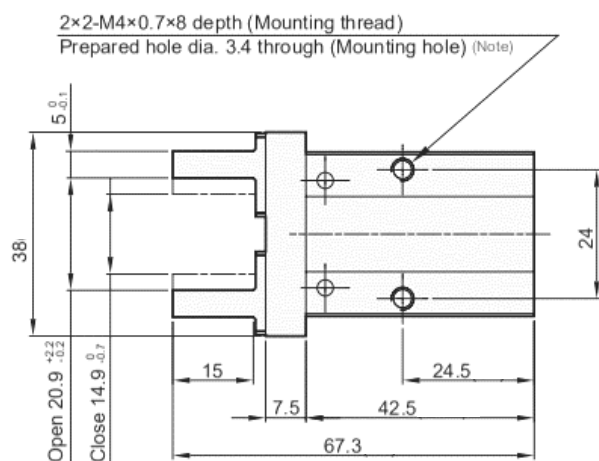
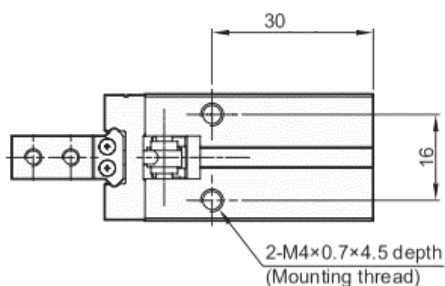
NGP 10

DIMENSIONS / DIMENSIONI

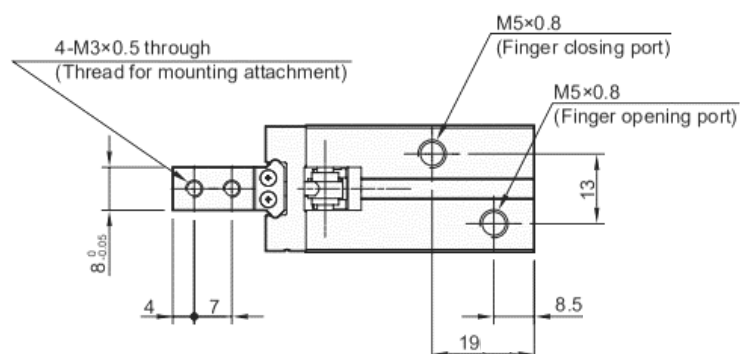
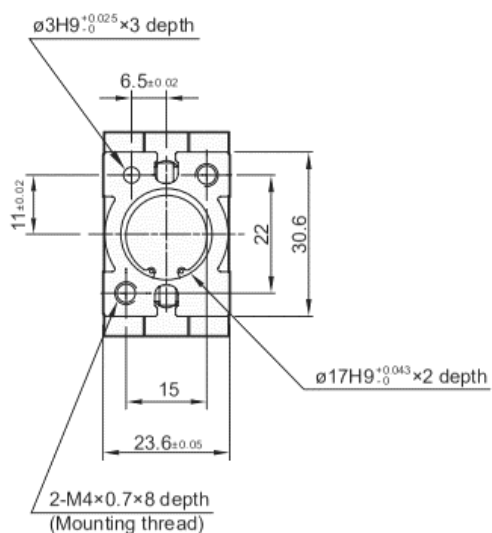


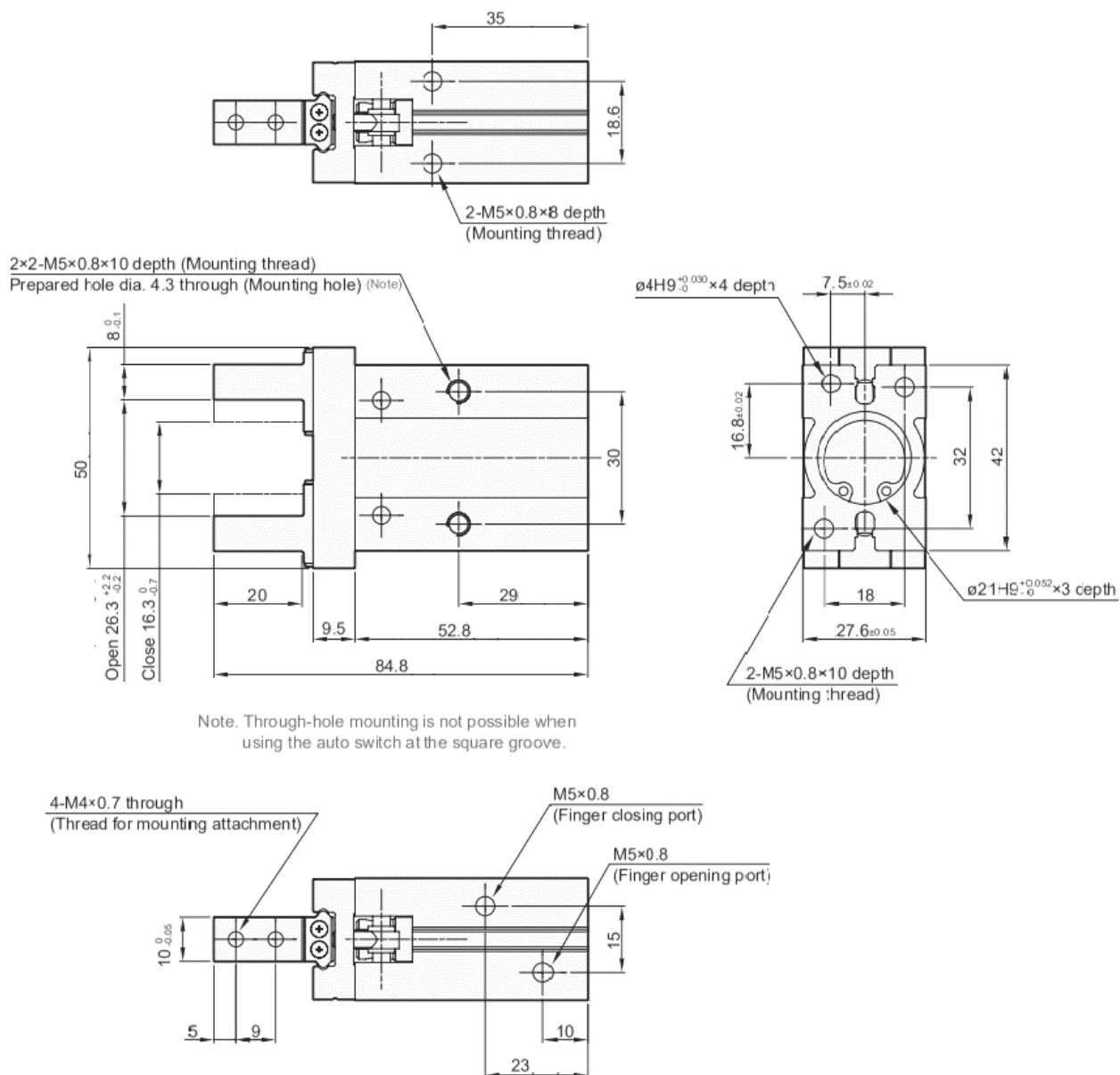
NGP 16

DIMENSIONS / DIMENSIONI



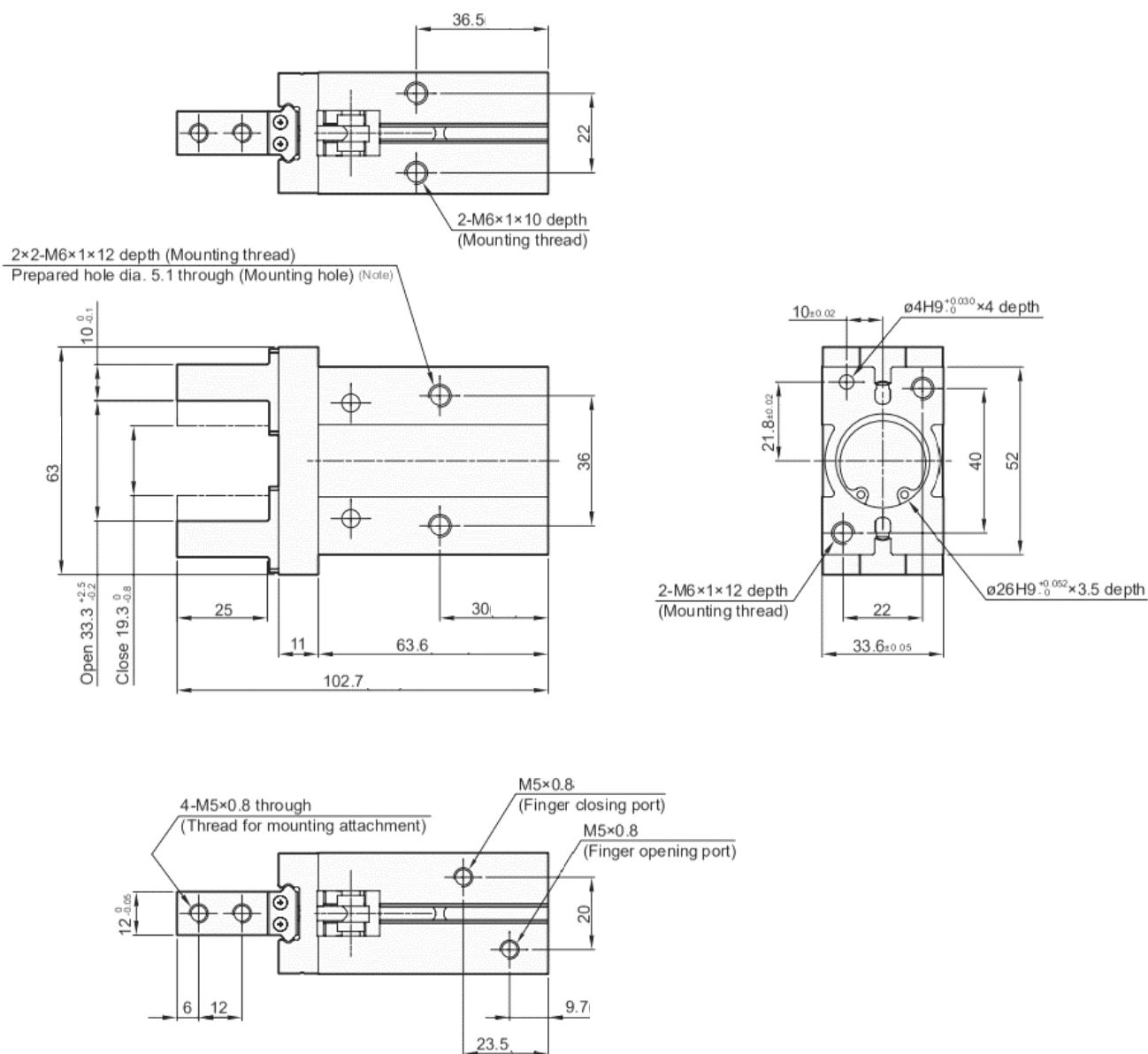
Note. Through-hole mounting is not possible when using the auto switch at the square groove.



NGP 20
DIMENSIONS / DIMENSIONI


NGP 25

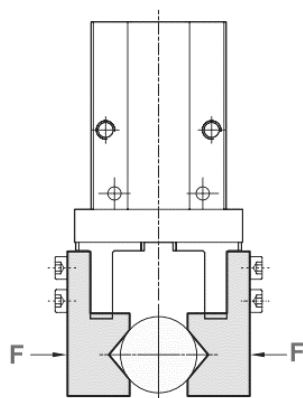
DIMENSIONS / DIMENSIONI



FORCE OF DOUBLE ACTING GRIPPERS
FORZA GRIPPER DOPPIO EFFETTO

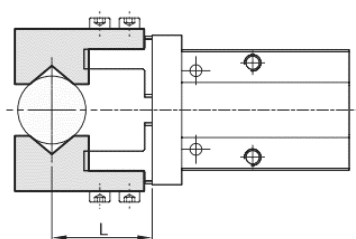
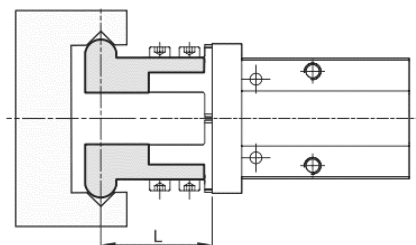
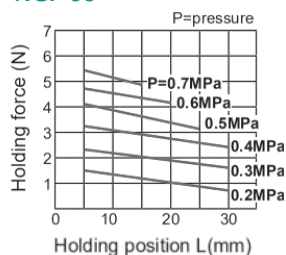
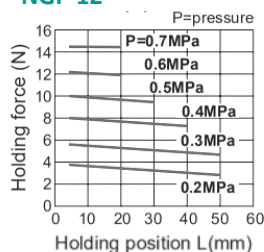
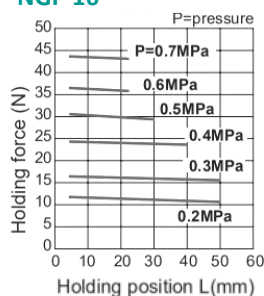
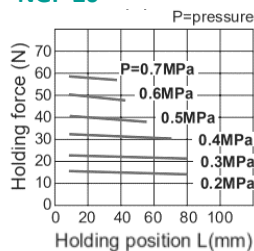
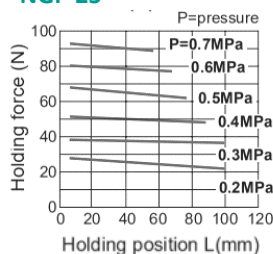
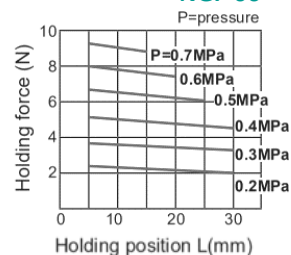
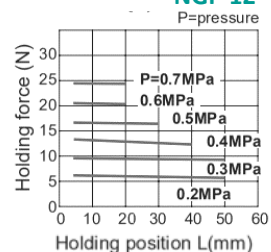
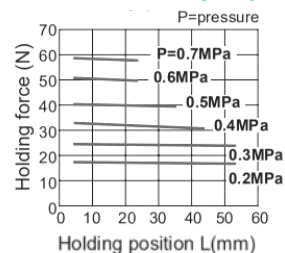
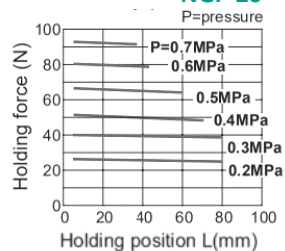
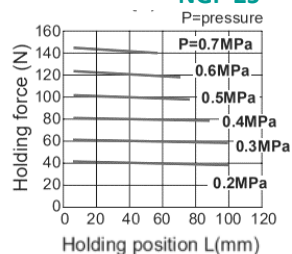
Indication of effective force.

The effective gripping force shown in the graphs to the right is expressed as F, which is the thrust of one finger, when both fingers and attachments are in full contact with the workpiece as shown in the figure below.



$$1\text{N}=0.102\text{ kgf}$$

$$1\text{MPa}=10.2\text{ kgf/cm}^2$$


External grip

Internal grip
External grip
NGP 06

NGP 12

NGP 16

NGP 20

NGP 25

Internal grip
NGP 06

NGP 12

NGP 16

NGP 20

NGP 25


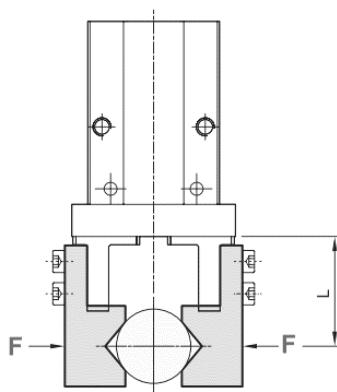
FORCE OF SINGLE ACTING GRIPPERS
 FORZA GRIPPER SINGOLO EFFETTO

Indication of effective force.

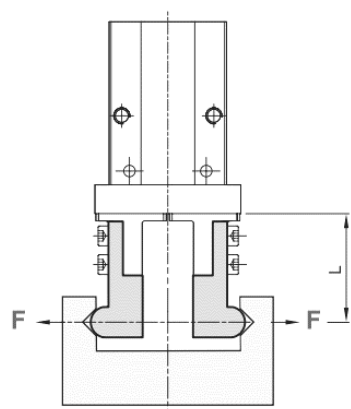
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1N=0.102 kgf

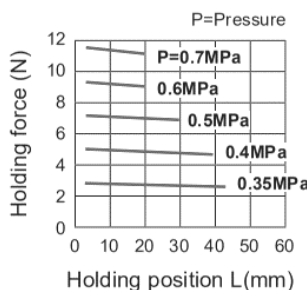
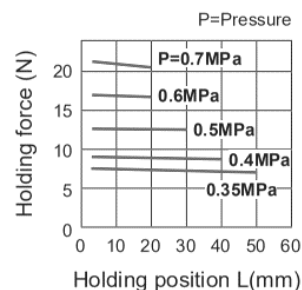
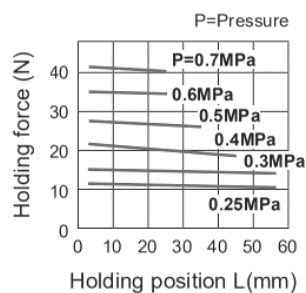
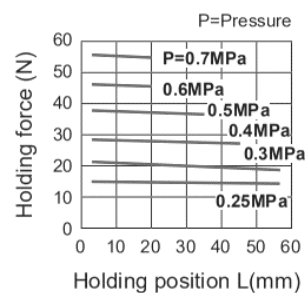
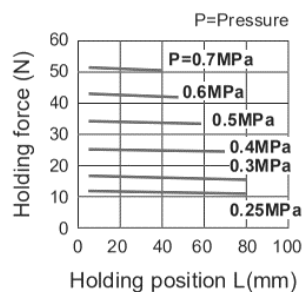
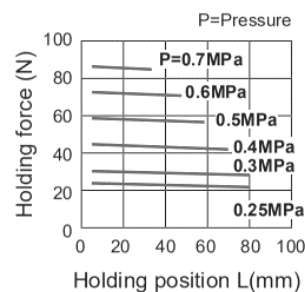
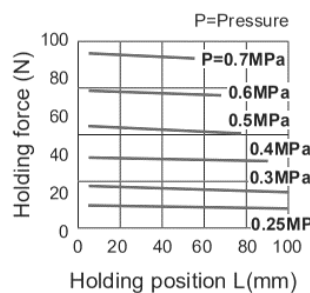
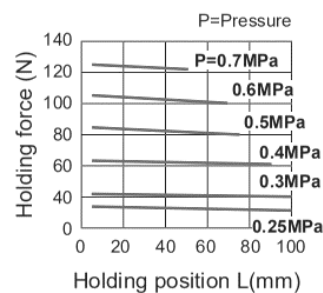
1MPa=10.2 kgf/cm²



External grip
(Single acting / Normally open)



Internal grip
(Single acting / Normally closed)

Normally open (internal)
NGP 10 - NO

Normally close (external)
NGP 10 - NC

NGP 16 - NO

NGP 16 - NC

NGP 20 - NO

NGP 20 - NC

NGP 25 - NO

NGP 25 - NC


DESCRIPTION / DESCRIZIONE

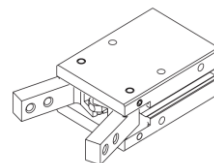
30° pneumatic angular grippers with aluminium body, stainless steel piston rod, carbon steel fingers, NBR seals. Available bores: 12, 16, 20, 25, 32mm.

Gripper pneumatici angolari 30° con corpo in alluminio, stelo in acciaio inox, componenti di presa in acciaio al carbonio, guarnizioni in NBR. Disponibili alesaggi 12, 16, 20, 25, 32mm.



TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

		NGA 12	NGA 16	NGA 20	NGA 25	NGA 32
Acting type		Double acting / Single acting (N.O.)				
Tube I.D. (mm)		12	16	20	25	32
Port size		M3×0.5	M5×0.8			
Medium		Air				
Operating pressure range	Double acting	1.5-7 Bar				
	Single acting	2-6	2-7 Bar			
Ambient temperature		-5~+60°C (No freezing)				
Max. operating frequency (c.p.m)		180				
Lubrication	Cylinder	Not required				
	Lever	Grease (Joint parts)				
Max. arm length (L)		30	40	60	70	85
Clamp / Release angle		-10~+30°				
Weight (g)		53	103	193	327	525



ORDERING CODE / CODICE DI ORDINAZIONE

NGA 16 - NO

Bore size:

12 = Ø12mm

16 = Ø16mm

20 = Ø20mm

25 = Ø25mm

32 = Ø32mm

Blank = Double Acting

NO = Single Acting (Normally Open)

Magnetic switch / Sensori finecorsa



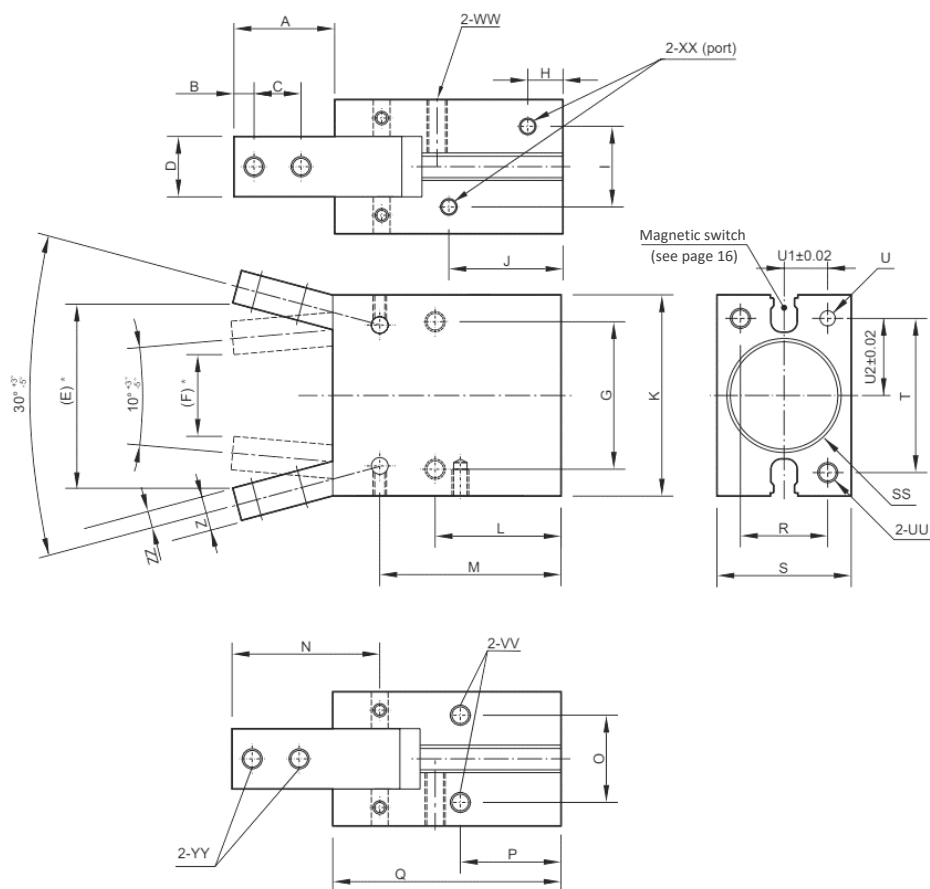
VRDE (Page 18)

VRDE (Pagina 18)

30° PNEUMATIC ANGULAR GRIPPER

GRIPPER PNEUMATICO ANGOLARE 30°

DIMENSIONS / DIMENSIONI



NGA	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	SS	T
12	15.4	3	6	7	26.3	9	20	7.5	10.2	23	28	20	32.9	21.5	10.2	16	39	10	16	ø14H9 ^{+0.043} ₀ ×1.5 depth	22
16	17.5	3	8	9	31.1	14	24	7.5	12	22	34	22.5	35	25	14	18	42.5	14	22	ø18H9 ^{+0.043} ₀ ×1.5 depth	26
20	22	4	10	12	40.1	18	30	8.0	13	25	45	25	39.5	32.5	16	19	50	16	26	ø22H9 ^{+0.052} ₀ ×1.5 depth	35
25	26	5	12	14	47.9	21	36	8.5	18	28	52	28.5	45.5	38.5	20	21.5	58	20	32	ø27H9 ^{+0.062} ₀ ×2 depth	40
32	30	6	14	18	55.1	24	44	10.5	24	34	60	37.5	54	44	26	30	68	26	40	ø34H9 ^{+0.062} ₀ ×2.5 depth	46

NGA	U	U1	U2	UU	VV	WW	XX	YY	Z	ZZ
12	ø2H9 ^{+0.025} ₀ ×3 depth	5	11	M3×0.5×5 depth	M3×0.5×5 depth	M3×0.5×8 depth	M3×0.5×5 depth	M3×0.5	5	2.5
16	ø3H9 ^{+0.025} ₀ ×3 depth	7	13	M4×0.7×7 depth	M4×0.7×7 depth	M4×0.7×11 depth	M5×0.8×5 depth	M3×0.5	6	3
20	ø4H9 ^{+0.03} ₀ ×4 depth	8	17.5	M5×0.8×8 depth	M5×0.8×8 depth	M5×0.8×12 depth	M5×0.8×5 depth	M4×0.7	7	3.5
25	ø4H9 ^{+0.03} ₀ ×4 depth	10	20	M6×1.0×10 depth	M6×1.0×8 depth	M6×1.0×16 depth	M5×0.8×5 depth	M5×0.8	9	4
32	ø5H9 ^{+0.03} ₀ ×5 depth	13	23	M6×1.0×10 depth	M6×1.0×8 depth	M6×1.0×20 depth	M5×0.8×5 depth	M6×1.0	10	5