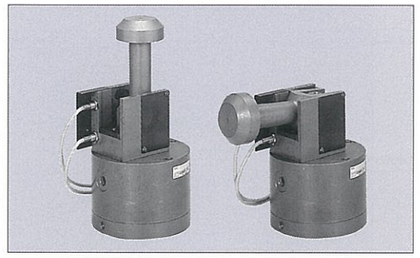
MODEL

GN CLAMP



MODEL CODE

GN [063] 0 – [35] – [5] – [V]

① Design No. ② ③ ④

NON STOCKING ITEM

① Capacity (See specifications)

② Mold thickness (h dimension)*1
- 25 : h dimension 25 mm
- 50 : h dimension 50 mm

③ Switch load voltage (current)
- 1 : AC100V
- 2 : AC200V
- 5 : DC 24V (5 - 40 mA)

④ Options
- N : Piping port with NPT*1
- V : For high temperature (70 - 120℃)

*1When "N" is selected from options, each dimension is described in "inch"in the specifications and other documents. However the die thickness is shown by mm value as a symbol.

e.g. GN0630-40-2
- Clamp capacity 61.7 kN
- Clamp height 40 mm
- AC200V

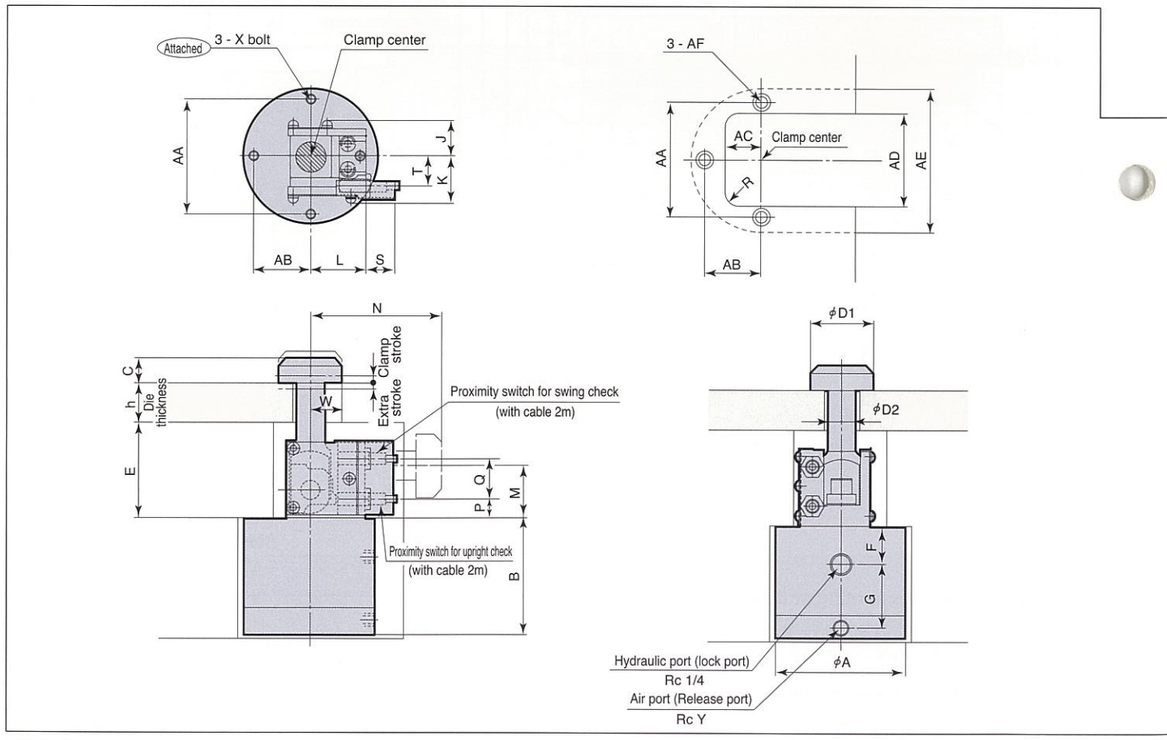
NOTE All types shall be produced after an order received.If you place an order, ask delivery time in advance.

SPECIFICATIONS

Model			GN0250	GN0400	GN0630	GN1000
Clamping Force		(kN)	24.5	39.2	61.7	98
Working Pressure		(MPa)	24.5 (for rated clamp force)			
Max Working Pressure		(MPa)	27.0			
Max Rated Pressure		(MPa)	36.8			
Swing Angle			90°			
Full Stroke		(mm)	6	7.5	10	12
Clamp Stroke		(mm)	4	5	7	9
Extra Stroke		(mm)	2	2.5	3	
Cylinder Capacity	Lock	(cm^3)	18.6	36	73.9	157.9
	Release	(cm^3)	27.4	53.5	115.5	241.8
Swing Air Pressure		(MPa)	0.39 - 0.49			
Switch Voltage			AC100V / AC200V / DC24V			
Working Temperature			0 - 70℃ (V type is available for 70 - 120℃)			
Frequency of Use			20 times/day (please contact us for more frequent use.)			
Working Fluid			ISO - VG - 32 or equivalent			

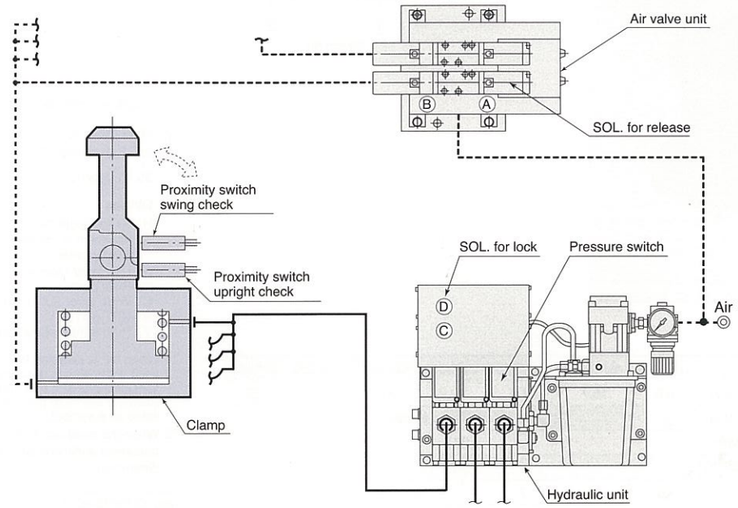
*Pressure lower than 0.39 MPa may cause malfunction.

OUTLINE DIMENSIONS



Clamp rod of the GN clamp swings to avoid interfering with the die when loading or unloading the lower die.

TYPICAL LAYOUT



Action

Release → Lock

SOL. for release (A) ON (B) OFF (Exhaust) → Swing and discharge air by spring → Upright check switch (ON)

SOL. for lock (C) ON (D) OFF (Pump activates) → Lock → Pressure switch (ON) → Lock completed

Lock is completed when both upright check switch and pressure switch are ON.

Lock → Release

SOL. for lock (C) OFF (D) ON Hydraulic released → Pressure switch (OFF)

SOL.for release (A) OFF (B) ON Air supplied → Swing by air → Swing check switch (ON) → Swing completed

Release and swing are completed when swing check switch is ON and pressure switch is OFF.

OUTLINE DIMENSIONS

Model	GN0250	GN0400	GN0630	GN1000
A	83	102	122	142
B	71.5	77	90.5	111
C	16	20	25	35
D1	40	50	60	75
D2	18	22	28	34
E	60	75	90	115
F	24	25	26.5	30
G	40	44.5	54	70
J	22.5	26	32.5	40
K	28.5	32	38.5	49
L	35	42	49	60
M	33.5	41	53	67
N	h+58.5	h+74	h+89	h+118
P	16.5	20	24	31
Q	21	26	34	39
S	18	22	24	17
T	18	21	26.5	35
h	min.25 - max.50			
W	20	25	30	37.5
AA	72	86	106	126
AB	36	43	53	63
AC	23	27	35	40
AD	58	67	84	104
AE	90	110	130	150
AF	7 Drill hole Spot facing φ11 Depth7	9 Drill hole Spot facing φ14Depth 9		
R	10	12.5	15	17.5
X	M6	M8		
Y	Rc 1/8			Rc 1/4
Provided bolts	M6×60 (3pcs)	M8×75 (3pcs)	M8×90 (3pcs)	M8×115 (3pcs)

*1. Specify clamping height (h) when ordering.
*2. For specifications other than above, consult us.

Note) *1. Although the GN Clamp is a hydraulic single action clamp, the unit circuit of the clamp is the U circuit because the clamp is controlled by double solenoids. When using the GN Clamp combining with other single action clamps, the clamp circuit should be the G circuit. When using the GN Clamp combining with the MRA rollers, the circuit should be the H circuit. Contact us for further information.

〈 Precautions for mounting and operation 〉

1. Allowance of die clamping thickness is h ±0.5mm.
2. Clamp surface must be parallel with clamp mounting surface.
3. Hydraulic pressure for lock should be 24.5 MPa, and pneumatic pressure for release should be 0.39～0.49MPa.
4. Take care to prevent dust, sand, chips, slugs, etc. from entering clamp mechanism.
5. This clamp is not applicable to the upper die (swing rod downward).