

The image features a variety of Vessel Air Nipper pneumatic pliers and a GT-NY10 air cylinder. The pliers are shown in several orientations, highlighting their different jaw shapes and sizes. They are primarily made of polished metal, with some featuring blue and silver anodized sections. The air cylinder is a compact, blue and silver unit. The background is dark, making the metallic tools stand out.

AIR NIPPER

<http://www.vessel.co.jp/english/airnipper/>

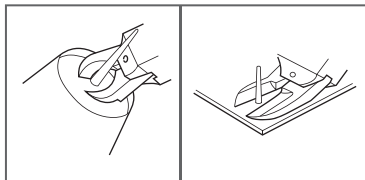
VESSEL®



Solution

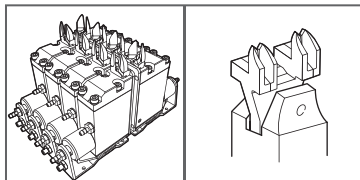
Cut, grab, crimp and punch.

Cutting direct gate molded components



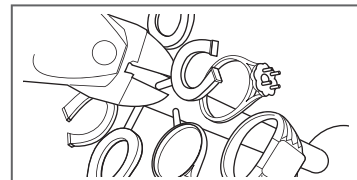
Cuts large diameter sprues such as garment cases, helmets, pipe joint parts, trash cans, planters. Superb durability in long term use.

Gate cut for multiple impression molded components



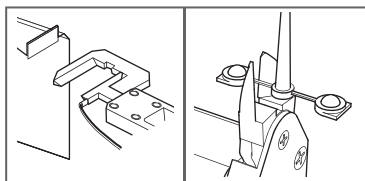
Compact, lightweight body and with a large selection of blade items, easy mounting on chuck board and standby jig. Achieves efficient cuts matching cycle time.

Taking products from a jewelry tree



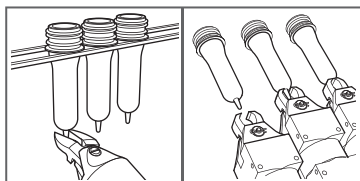
Cutting of precious metals for rings, necklaces etc. Superb durability and increased efficiency with powerful nipper blades.

Gate cutting for lenses, LGP, and transparent products



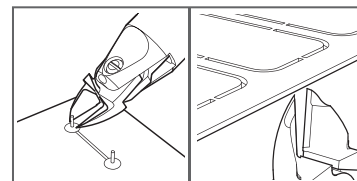
Various heated nippers prevent cracks and whitening, the decisive factor is the heating temperature of the blades and cutting speed. Supports demands for improved flexibility and high precision cutting.

Pre-form cutting for food and drug cases



Improved efficiency in pre-forming, nippers attached to flat finish pre-form molding machine. Cut precision is linked to product quality.

Cutting electronic components and around boards



Optimal handy nippers for cutting lead lines after soldering to significantly reduce wrist strain. Substrate is attached to the desktop robot...

Selection method for air nipper

Check materials

What is the "cutting target (workpiece)"?

- Metal wire ——— Steel wire
- Copper wire
- Piano wire (not heat processed/HV320 or below), precious metals etc.
- Molded plastic ——— Soft plastic (polyvinyl chloride, polyethylene)
- Hard plastic (acrylic, polycarbonate, ABS, etc.)
- Other applications ——— Check materials, applications and work.
- (Bending, caulking, punching, robotic hand, and scissors.)

Check dimensions

How big is the "size of the cut portion"?

- Metal ——— Angle (mm × mm) [select model by cross-section area]
- Round (Φ mm)
- Plastic ——— Angle (mm × mm) [select model by cross-section area]
- Other applications ——— Check materials, applications and work.

Usage

What is the "state/environment of the work"?

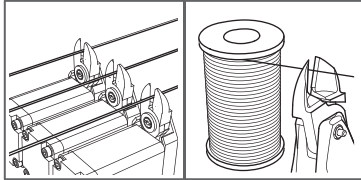
- Used mounted on automated machinery and robots.
- Used for manual work.
- Used mounted on a jig. And so forth

Select model

Choose a model suitable for the purpose.

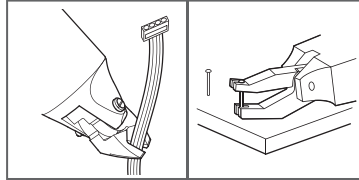
Choose based on "usage and cut dimensions" for the main unit, and "material and dimensions/shape" for the blades. Refer to "product specifications" for the main unit/blade characteristics/usage, respectively. Also when selecting the machine, refer to "capability selection chart". The shape/material of the workpiece may not be compatible with standard products.

Wire cutting with coil winding machine



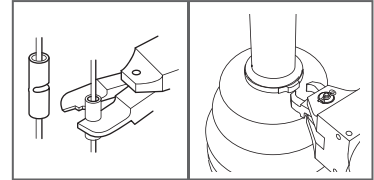
Attach to the nipper unit of automatic coil winding machine for power transformers, fan motors and ignition. Cutting thick diameter wires that cannot be torn off.

Hand tools for dismantling in recycling plants



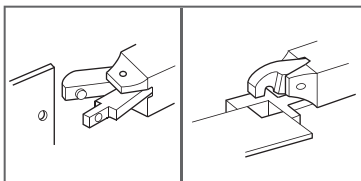
Cuts a variety of wires, copper tubing and steel bands in recycling plants such as PCs and OA equipment, pachinko machines, TVs, and refrigerators, washing machines, etc. Nippers for the purpose of pulling out the pachinko machine pins.

Crimping task for solderless terminals



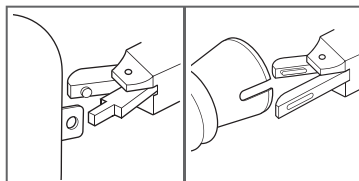
For crimping terminals with various wiring harnesses such as for switchboards, electrical products and lighting equipment. Less strain on fingers and wrists. Increased work efficiency for stop rings for auto parts.

Die cutter for aluminum products and plastic components



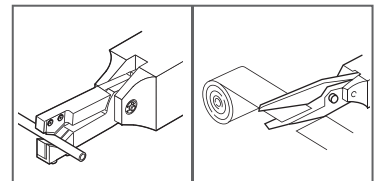
By support for separate blades, allows punching and form cutting of aluminum sash and thin plates.

Punching of blow molded products, punching slotted holes



Punching blow molded products, punching slotted holes, for containers that cannot be punched and automobile ducts, etc.

Other applications



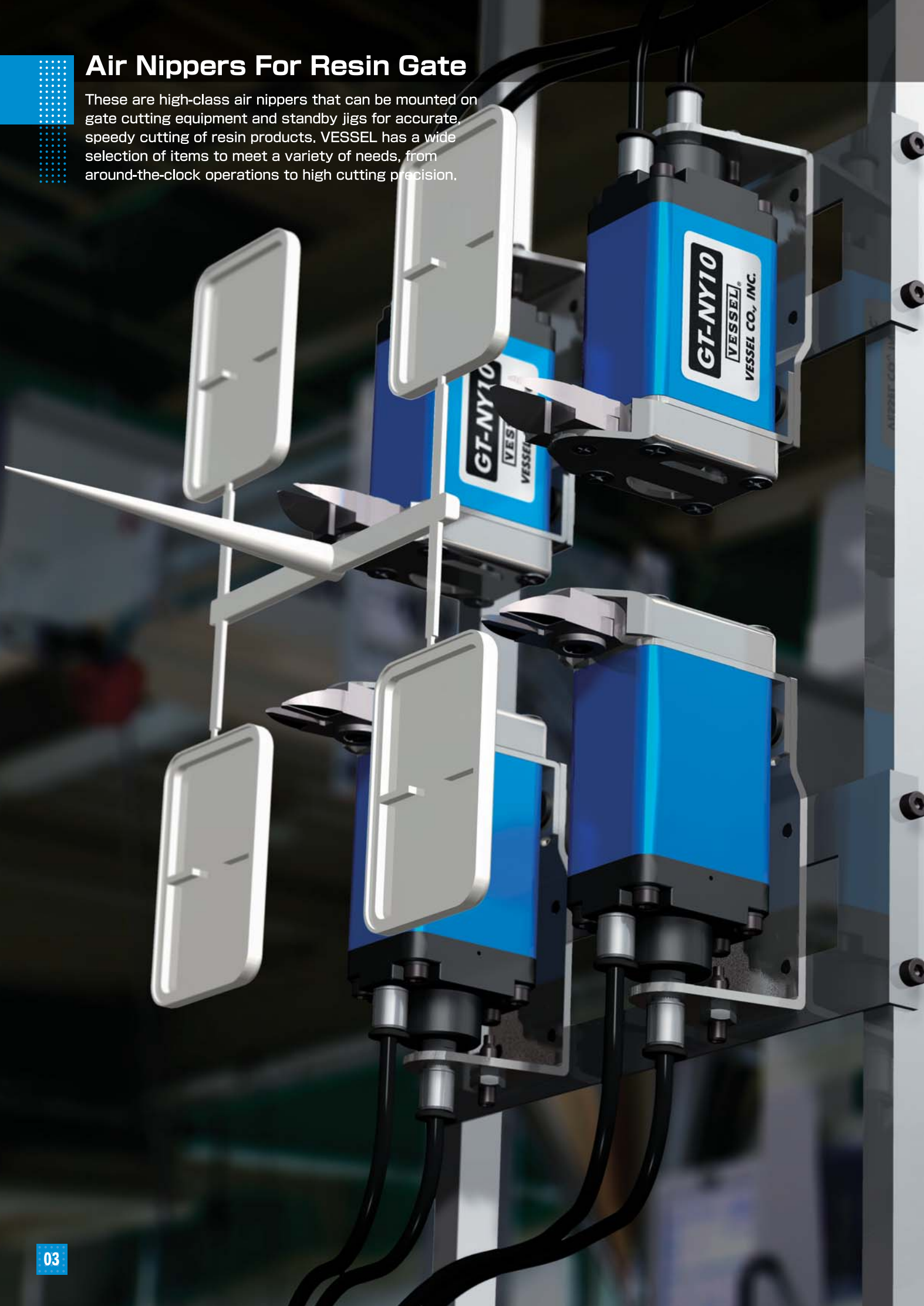
Micro-edge air scissors that can cut various hard-to-cut fibers, carbon, aramid fibers, and soft plastic sheets. Nippers for cutting belt loops of jeans, peeling recycled golf balls, cutting edges with textile machinery, etc.

Capability selection chart

Types	Cutting material							Application model	Air pressure (MPa)
	Copper wire	Steel wire (Non-heat treated)	Stainless steel (Non-heat treated)	Piano Wire (HV320 or below)	Soft Plastic	Hard Plastic	Solderless terminals		
N · NS · NR	1.0mm	0.5mm		0.2mm	1.0mm			NS2,N3,NS3,NR3	0.4~0.5
	1.0	0.5		0.3	2.0	1.0mm		N5,NS5,NR5	0.4~0.5
	1.0	0.5		0.5	3.0	2.0		N7,NS7,NR7	0.4~0.5
	1.6	1.0	1.0mm	0.5	4.0	2.6		N10,NS10L,NR10L	0.4~0.5
	1.8	1.2	1.6	1.0	7.0	5.0		N12	0.4~0.5
	2.6	2.0	2.0	1.2	10.0	6.5		N20,NS20,NR20	0.5~0.6
	3.3	2.8	3.5	1.6	12.0		1.25/2.0	N30,NS30,NR30	0.5~0.6
	5.5	4.5						N50,NR50	0.5~0.6
With pressure booster	2.6	1.6	1.3	1.0	5.0	4.0	12.5/2.0	P-10L	
	3.0	2.2	2.8	1.2	8.0	6.0	2.0/5.5	P-20	
	4.8	4.0	2.8	1.2	13.0	7.0	~0.8	P-30	
	6.5	5.5	4.0	2.0				P-50	
NY					2.0	1.3		NY03	0.4~0.5
	1.6	1.0			3.0	2.0		NF05,NY05	0.4~0.5
	1.7	1.1			3.5	2.3		NF10,NY10	0.4~0.5
	1.8	1.2			4.0	2.6		NF15,NY15	0.4~0.5
					5.0	3.4		NY25	0.5~0.6
NT					1.5	1		NT03	0.4~0.5
					2.5	1.5		NT05	0.4~0.5
					3.5	2.5		NT10	0.4~0.5
					5.0	3.4		NT20	0.4~0.5
	AS, HS, BJ type		BBB	HS	AP, PF, AJ type		ACD type		

Air Nippers For Resin Gate

These are high-class air nippers that can be mounted on gate cutting equipment and standby jigs for accurate, speedy cutting of resin products. VESSEL has a wide selection of items to meet a variety of needs, from around-the-clock operations to high cutting precision.



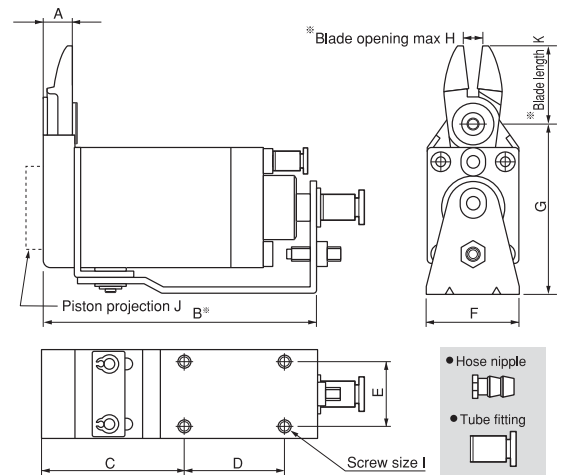
Slide-off air nipper horizontal-type

GT-NY05/10/15/25 Slide-Off Air Nippers Horizontal-Type

NY



The horizontal slide enables space to be used effectively. The low profile of the main unit allows work to be removed without obstructing the operations of the chuck plate.



Capacity ϕ (mm)				Model No.	Size (mm)											Air Consumption (cm ³ /str.)	Weight (g)	Slide Direction/ Distance (mm)	Spec. & Size of theHose Port
Soft Plastic	Hard Plastic	Copper	Steel		A	B	C	D	E	F	G	H	I	J	K				
3.0	2.0	1.6	1.0	GT-NY05	8.6	75.9	40.9	25	15	23	47.6	4	M4	3	22	48	155	Pull 0~3	W/hose nipple
3.0	2.0	1.6	1.0	GT-NY05R												48	155	Push 0~3	Hose I.D. ϕ 2.5mm
3.0	2.0	1.6	1.0	GT-NY05-4												48	155	Pull 0~3	W/tube fitting
3.0	2.0	1.6	1.0	GT-NY05R-4												48	155	Push 0~3	Hose I.D. ϕ 2.5XO.D. ϕ 4mm
3.5	2.3			GT-NY10	8.8	82.1	42.1	30	20	28	51.6	6	M4	5	24	68	210	Pull 0~3	W/hose nipple
3.5	2.3			GT-NY10R												68	210	Push 0~3	Hose I.D. ϕ 2.5mm
3.5	2.3			GT-NY10-4												68	210	Pull 0~3	W/tube fitting
3.5	2.3			GT-NY10R-4												68	210	Push 0~3	Hose I.D. ϕ 2.5XO.D. ϕ 4mm
4.0	2.6			GT-NY15	10.2	93	48	35	25	33	58	8	M4	5	27	136	319	Pull 0~3	W/hose nipple
4.0	2.6			GT-NY15R												136	319	Push 0~3	Hose I.D. ϕ 2.5mm
4.0	2.6			GT-NY15-4												136	319	Pull 0~3	W/tube fitting
4.0	2.6			GT-NY15R-4												136	319	Push 0~3	Hose I.D. ϕ 2.5XO.D. ϕ 4mm
5.0	3.4			GT-NY25	12.5	108.5	54.5	40	30	42	69	9	M5	2	31	184	580	Pull 0~5	W/hose nipple
5.0	3.4			GT-NY25R												184	580	Push 0~5	Hose I.D. ϕ 4mm
5.0	3.4			GT-NY25-6												184	580	Pull 0~5	W/tube fitting
5.0	3.4			GT-NY25R-6												184	580	Push 0~5	Hose I.D. ϕ 4XO.D. ϕ 6mm

※Blade length (K) and opening max. (H) is the dimension adjusted for standard blade (AJ type). ※Air Pressure...0.4~0.5 MPa (NY25 type: 0.5~0.6)

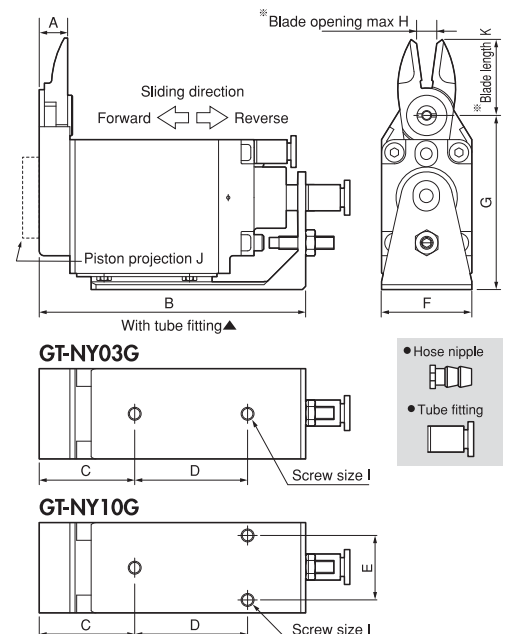
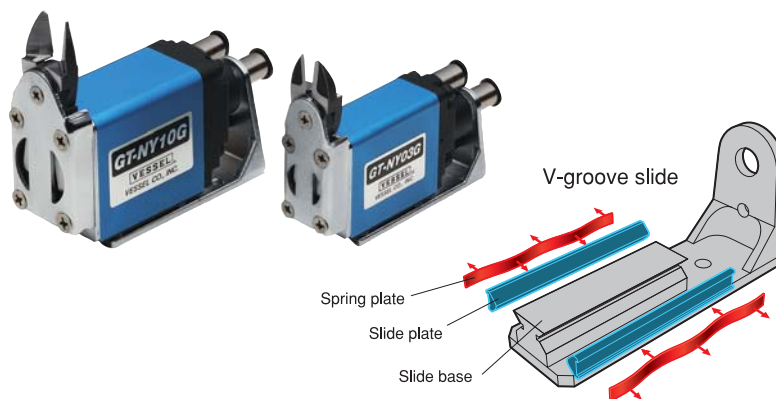
※B refers to the distance from the cut position for PUSH style models, and the distance from the start position for PULL style models.

*Capacity(ϕ) is for reference purpose only. It varies depending on blade types.

GT-NY03G/10G Slide-Off Air Nippers Horizontal-Type

Patented

NY-G



VESSEL's patented, V-groove slide base ensures constant, stable positioning. The unit is not subject to inclined loads, and has achieved high precision gate cutting performance.

Capacity ϕ (mm)		Model No.	Size (mm)											Air Consumption (cm ³ /str.)	Weight (g)	Slide Direction/ Distance (mm)	Spec. & Size of the Hose Port	
Soft Plastic	Hard Plastic		A	B	C	D	E	F	G	H	I	J	K					
2.0	1.3	GT-NY03G	8.6	74.5	29.5	30	-	19	46.5	3	M4	0	21	37	160	Pull 0~3	W/hose nipple	Hose I.D. ϕ 2.5mm
2.0	1.3	GT-NY03GR												37	160	Push 0~3		
2.0	1.3	GT-NY03G-4												37	160	Pull 0~3		
2.0	1.3	GT-NY03GR-4												37	160	Push 0~3		
3.5	2.3	GT-NY10G	8.8	82.6	29.6	35	20	28	54	6	M4	5	24	68	275	Pull 0~3	W/hose nipple	Hose I.D. ϕ 2.5mm
3.5	2.3	GT-NY10GR												68	275	Push 0~3		
3.5	2.3	GT-NY10G-4												68	275	Pull 0~3		
3.5	2.3	GT-NY10GR-4												68	275	Push 0~3		

※Blade length (K) and opening max. (H) is the dimension adjusted for standard blade (AJ type). ※Air Pressure...0.4~0.5 MPa

*Capacity(ϕ) is for reference purpose only. It varies depending on blade types.

Blade is optional. Note that forward and backward-facing blades are available.

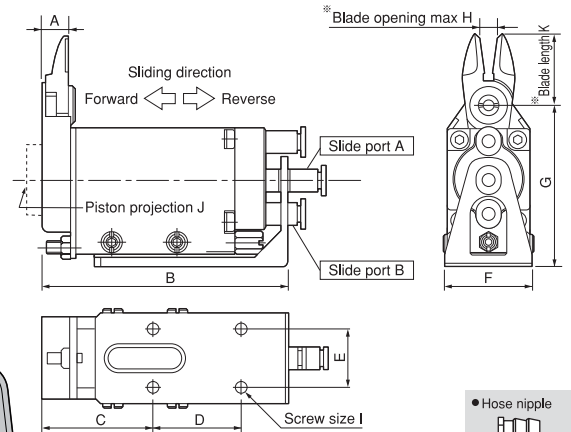
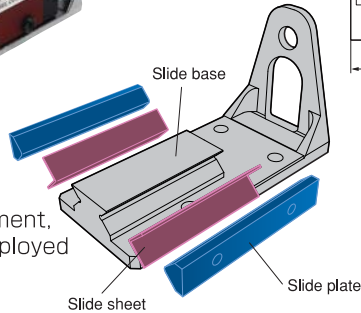
Slide-off air nipper horizontal-type

GT-NY10S/25S Double Action Sliding Air Nippers

NY-S

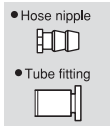


The springless slide construction of the main unit ensures smooth movement, and a V-groove slide base has been employed for high precision positioning.



WARNING

Injecting air into slide port A slides the nippers in reverse.
Injecting air into slide port B slides the nippers forward.

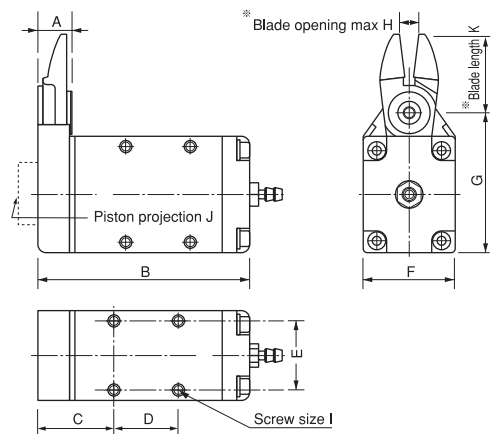


Capacity ϕ (mm)		Model No.	Size (mm)											Air Consumption (cm ³ /str.)	Weight (g)	Slide Direction/ Distance (mm)	Spec. & Size of the Hose Port	
Soft Plastic	Hard Plastic		A	B	C	D	E	F	G	H	I	J	K					
3.5	2.3	GT-NY10S	8.8	84.5	38	30	20	32	55	6	4-M4	5	24	68	300	0~3.5	W/tube fitting	Hose I.D. ϕ 2.5×O.D. ϕ 4mm
5.0	3.4	GT-NY25S	12.5	106.5	47	40	30	47	72	9	4-M5	2	31	184	695	0~5.0	W/tube fitting	Hose I.D. ϕ 4×O.D. ϕ 6mm

※ Blade length (K) and opening max. (H) is the dimension adjusted for standard blade (AJ type). ※ Air Pressure...NY10S : 0.4~0.5 MPa / NY25S : 0.5~0.6 MPa
※ Capacity(ϕ) is for reference purpose only. It varies depending on blade types.

GT-NF05/10/15 Type-F Air Nippers

NF



These compact, lightweight nippers have been designed for easy mounting inside equipment and to enable secure mounting under high-density mounting conditions.

Capacity ϕ (mm)				Model No.	Size (mm)												Air Consumption (cm ³ /str.)	Weight (g)	Spec. & Size of the Hose Port
Soft Plastic	Hard Plastic	Copper	Steel		A	B	C	D	E	F	G	H	I	J	K				
3.0	2.0	1.6	1.0	GT-NF05	8.6	59.9	21.9	17	18	23	39.5	4	M3	3	22	43	101		
3.5	2.3	1.7	1.1	GT-NF10	8.8	65.1	23.1	20	22	28	43.5	6	M3.5	5	24	63	143		
4.0	2.6	1.8	1.2	GT-NF15	10.2	73	25	25	26	33	48.5	8	M4	5	27	128	219		

※ Blade opening max. (K) is the dimension adjusted for standard blade (AJ type). Mounting screw for NF10 (M3.5) is regarded as spare part. ※ Air Pressure...0.4~0.5 MPa
※ Capacity(ϕ) is for reference purpose only. It varies depending on blade types.

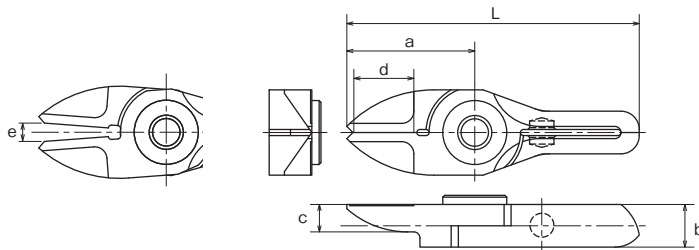
Slide-off air nipper horizontal-type blades

AJ/RAJ AJB

Straight blades for plastic

AJ/ This is a vertical set of blades with an unbeveled cutting edge. You can apply it at a right angle to the gate. **RAJ/** This is a reverse bevel of AJ type. **AJB/** This has a brazed carbide tip, suitable for cutting hard plastic or plastic containing glass fiber.

Plastic



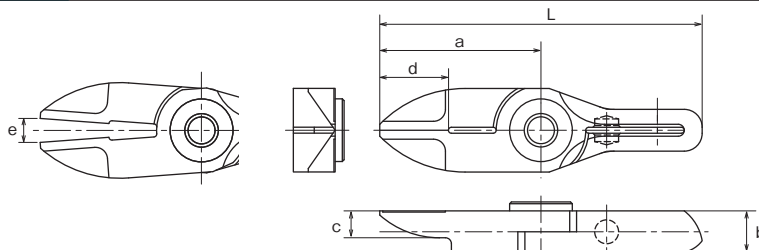
Model No.	a	b	c	d	e	L	Weight (g)	Material	Application model
NY03AJ	21	7	4.5	10.5	3	48	17	Special alloy steel	GT-NY03G(-4)
NY03RAJ	21	7	4.5	10.5	3	48	17	Special alloy steel	GT-NY03GR(-4)
NY05AJ	22	7	5	10.5	4	53	22	Special alloy steel	GT-NY05(-4) / NF05
NY05RAJ	22	7	5	10.5	4	53	22	Special alloy steel	GT-NY05R(-4) / NF05
NY05AJB	22	7	5	10.5	4	53	22	Sintered Alloy	GT-NY05(-4) / NF05
NY10AJ	24	7.2	5	12	6	57	28	Special alloy steel	GT-NY10(-4) / NY10G(-4) / NF10 / NY10S
NY10RAJ	24	7.2	5	12	6	57	28	Special alloy steel	GT-NY10R(-4) / NY10GR(-4) / NF10 / NY10S
NY10AJB	24	7.2	5	12	6	57	28	Sintered Alloy	GT-NY10(-4) / NY10G(-4) / NF10 / NY10S
NY15AJ	27	8.2	5.5	13	8	65	41	Special alloy steel	GT-NY15(-4) / NF15
NY15RAJ	27	8.2	5.5	13	8	65	41	Special alloy steel	GT-NY15R(-4) / NF15
NY15AJB	27	8.2	5.5	13	8	65	41	Sintered Alloy	GT-NY15(-4) / NF15
NY25AJ	31	10	6	16	9	77	65	Special alloy steel	GT-NY25(-6) / NY25S
NY25RAJ	31	10	6	16	9	77	65	Special alloy steel	GT-NY25R(-6) / NY25S
NY25AJB	31	10	6	16	9	77	65	Sintered Alloy	GT-NY25(-6) / NY25S

AJL

Straight long blades for plastic

AJL/ This is a long type set of straight blades. This is useful when there is distance between the nippers and the gate cut portion of the workpiece.

Plastic



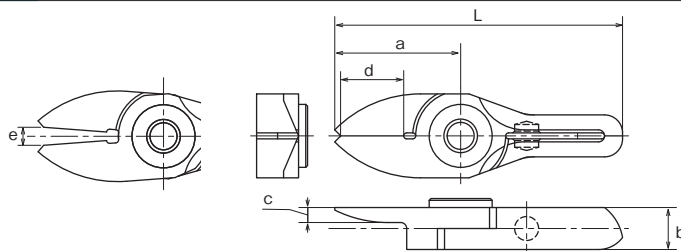
Model No.	a	b	c	d	e	L	Weight (g)	Material	Application model
NY03AJL	27	7	4.5	10.5	4	54	21	Special alloy steel	GT-NY03G(-4)
NY05AJL	31	7	5	10.5	5.5	62	29	Special alloy steel	GT-NY05(-4) / NF05
NY10AJL	33	7.2	5	12	8	66	37	Special alloy steel	GT-NY10(-4) / NY10G(-4) / NF10 / NY10S
NY15AJL	38	8.2	5.5	13	11	76	50	Special alloy steel	GT-NY15(-4) / NF15
NY25AJL	46	10	6	16	13	92	88	Special alloy steel	GT-NY25(-6) / NY25S

AJT

Thin, straight blades for plastic

AJT/ This is a set of straight blades with a thin cutting edge. It can cleanly trim cross sections without remnants.

Plastic



Model No.	a	b	c	d	e	L	Weight (g)	Material	Application model
NY03AJT	21	7	2.5	10.5	3	48	17	Special alloy steel	GT-NY03G(-4)
NY05AJT	22	7	3	10.5	4	53	21	Special alloy steel	GT-NY05(-4) / NF05
NY10AJT	24	7.2	3	12	6	57	26	Special alloy steel	GT-NY10(-4) / NY10G(-4) / NF10 / NY10S
NY15AJT	27	8.2	3.5	13	8	65	38	Special alloy steel	GT-NY15(-4) / NF15

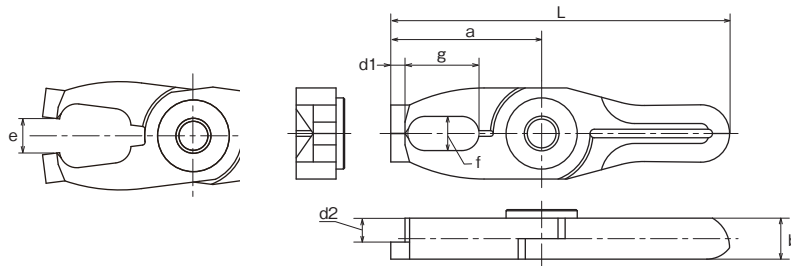
Slide-off air nipper horizontal-type blades

AD

Lift blades for plastic

Plastic

AD/ This is used for batch processing of the three-dimensional gate such as ride gate.



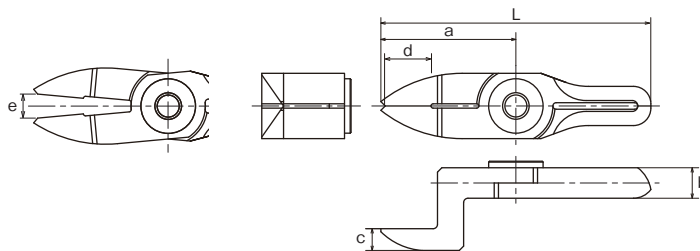
Model No.	Size (mm)		f×g	d1 (mm)	d2 (mm)	e (mm)	L (mm)	Weight (g)	Material	Application model
	a	b								
NY10AD	26.5	7.2	6×13	4.2	2.5	6	59.5	31	Special alloy steel	GT-NY10(-4) / NY10G(-4) / NF10 / NY10S
NY15AD	30	8.2	7×14	4.7	3	8	68	45	Special alloy steel	GT-NY15(-4) / NF15
NY25AD	35	10	8×17	6	4	9	81	75	Special alloy steel	GT-NY25(-6) / NY25S

**AH/
RAH**

Crank blades for plastic

Plastic

AH/ This is a set of blades with a clamped cutting edge for plastic. It is effective when there are obstructions or the gate is narrow. **RAH/** This is a reverse bevel of AH type used when installing the main units face-to-face.



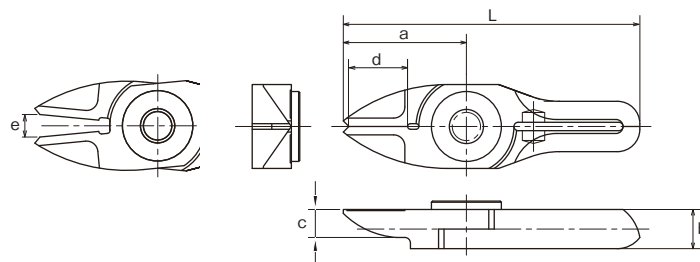
Model No.	Size (mm)			d	e	L	Weight (g)	Material	Application model
	a	b	c						
NY05AH	31	19	5	10.5	5.5	62	37	Special alloy steel	GT-NY05(-4) / NF05
NY05RAH	30	12	5	10.5	5	61	31	Special alloy steel	GT-NY05R(-4) / NF05
NY10AH	33	20	5	12	8	66	43	Special alloy steel	GT-NY10(-4) / NY10G(-4) / NF10 / NY10S
NY15AH	38	21.5	5.5	13	11	76	63	Special alloy steel	GT-NY15(-4) / NF15
NY15RAH	35	13.2	5.5	13	9	73	52	Special alloy steel	GT-NY15R(-4) / NF15
NY25AH	46	24	6	17	13	92	110	Special alloy steel	GT-NY25(-6) / NY25S
NY25RAH	42	16	6	16	12	88	89	Special alloy steel	GT-NY25R(-6) / NY25S

**BJ/
RBJ**

Straight thin blades for metal

Metal

BJ/ This is a set of vertical blades with an unbeveled cutting edge for metal. **RBJ/** This is a reverse bevel of BJ type.

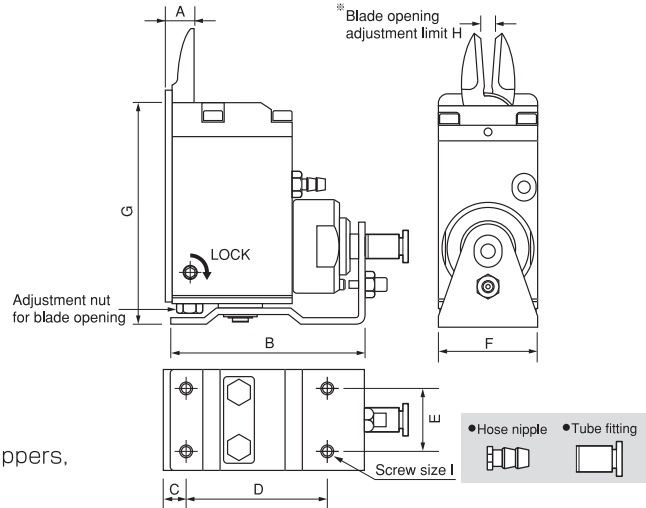


Model No.	Size (mm)			d	e	L	Weight (g)	Material	Application model
	a	b	c						
NY05BJ	22	7	5	10.5	4	53	22	Special alloy steel	GT-NY05(-4) / NF05
NY05RBJ	22	7	5	10.5	4	53	22	Special alloy steel	GT-NY05R(-4) / NF05

Slide-off air nipper vertical-type

GT-NT03/05/10/20 Slide-Off Air Nippers Vertical-type

NT



Blade gape is adjustable, and fine adjustments are easy to make after mounting the nippers, ensuring clean, unblemished cut surfaces.

Capacity ϕ (mm) Soft Plastic Hard Plastic	Model No.	Size (mm)									Air Consumption (cm ³ /str.)	Weight (g)	Slide Direction/ Distance (mm)	Spec. & Size of the Hose Port
1.5 1.0	GT-NT03	9	62	7	43	14	19	68.1	1.5~3	M3	0.4~0.5	178	Pull 0~3	W/hose nipple Hose I.D. ϕ 2.5mm
1.5 1.0	GT-NT03R										0.4~0.5	178	Push 0~3	
1.5 1.0	GT-NT03-4										0.4~0.5	178	Pull 0~3	W/tube fitting Hose I.D. ϕ 2.5XO.D. ϕ 4mm
1.5 1.0	GT-NT03R-4										0.4~0.5	178	Push 0~3	
2.5 1.5	GT-NT05	9	64	7	45	20	32	71.1	3~6	M4	0.4~0.5	325	Pull 0~3	W/hose nipple Hose I.D. ϕ 2.5mm
2.5 1.5	GT-NT05R										0.4~0.5	325	Push 0~3	
2.5 1.5	GT-NT05-4										0.4~0.5	325	Pull 0~3	W/tube fitting Hose I.D. ϕ 2.5XO.D. ϕ 4mm
2.5 1.5	GT-NT05R-4										0.4~0.5	325	Push 0~3	
3.5 2.3	GT-NT10	11	73	8	53	24	38	88.1	4~7	M4	0.4~0.5	515	Pull 0~3	W/hose nipple Hose I.D. ϕ 2.5mm
3.5 2.3	GT-NT10R										0.4~0.5	515	Push 0~3	
3.5 2.3	GT-NT10-6										0.4~0.5	515	Pull 0~3	W/tube fitting Hose I.D. ϕ 4XO.D. ϕ 6mm
3.5 2.3	GT-NT10R-6										0.4~0.5	515	Push 0~3	
5.0 3.4	GT-NT20	14	103	10	80	28	44	102.1	4.5~9	M5	0.5~0.6	930	Pull 0~8	W/hose nipple Hose I.D. ϕ 4mm
5.0 3.4	GT-NT20R										0.5~0.6	930	Push 0~8	
5.0 3.4	GT-NT20-6										0.5~0.6	930	Pull 0~8	W/tube fitting Hose I.D. ϕ 4XO.D. ϕ 6mm
5.0 3.4	GT-NT20R-6										0.5~0.6	930	Push 0~8	

※Blade opening adjustment limit (H) is the dimension adjusted for standard blade (AJ type). ※Air Pressure...0.4~0.5 MPa

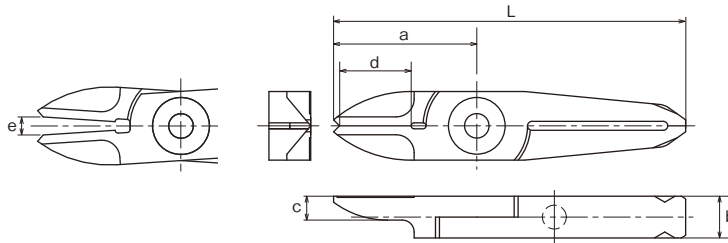
※Capacity(ϕ) is for reference purpose only. It varies depending on blade types.

Slide-off air nipper vertical-type blades

AJ/AJH
AJB

Straight blades for plastic

AJ/ This is a set of blades with an unbeveled cutting edge. You can apply it at a right angle to the gate. **AJH/** This has a brazed high-speed steel tip suitable for cutting hard plastic. **AJB/** This has a brazed carbide tip used for cutting hard plastic or plastic containing glass fiber. Improved durability.



Model No.	a	b	c	d	e	L	Weight (g)	Material	Application model
NT03AJ	24	7	4	11	3	59	20	Special alloy steel	GT-NT03 type
NT05AJ	29	7	5	15	6	65	30	Special alloy steel	
NT05AJH	29	7	5	15	6	65	30	High Speed Steel	GT-NT05 type
NT05AJB	29	7	5	15	6	65	30	Sintered Alloy	
NE5AJ	24	7	3.5	12	6	60	35	Special alloy steel	GT-NT10 type
NT10AJ	35	9	6	17	7	82	62	Special alloy steel	
NT10AJH	35	9	6	17	7	82	65	High Speed Steel	
NT10AJB	35	9	6	17	7	82	76	Sintered Alloy	
NE10AJ	27	9	4.5	12	7	74	70	Special alloy steel	GT-NT20 type
NT20AJ	40	12	6	20	9	97	120	Special alloy steel	
NT20AJH	40	12	6	20	9	97	120	High Speed Steel	
NT20AJB	40	12	6	20	9	97	120	Sintered Alloy	

Blade is optional.

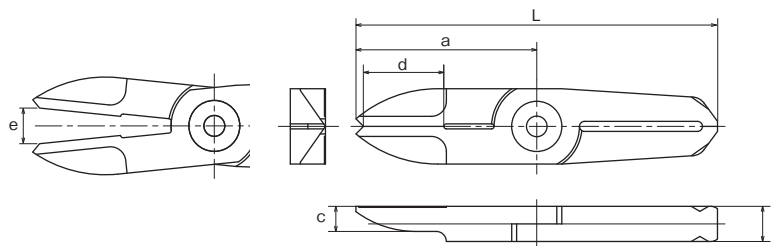
Slide-off air nipper-vertical-type blades

AJL

Straight long blades for plastic

Plastic

AJL/ This is a long type set of straight blades. This is useful when there is distance between the nippers and the gate cut portion of the workpiece.



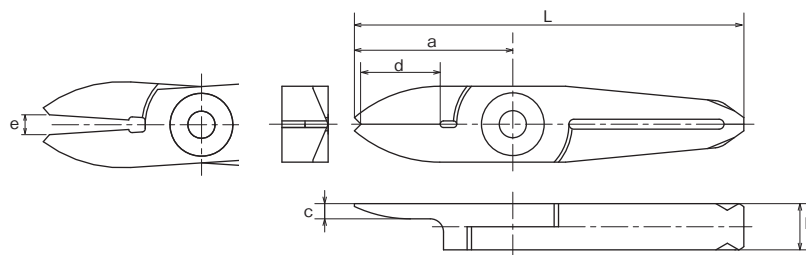
Model No.	a	b	c	d	e	L	Weight (g)	Material	Application model
NT05AJL	36	7	5	15	7	72	39	Special alloy steel	GT-NT05 type
NT10AJL	47	9	6	17	9	94	62	Special alloy steel	GT-NT10 type
NT20AJL	57	12	6	20	12	114	156	Special alloy steel	GT-NT20 type

AJT

Thin, straight blades for plastic

Plastic

AJT/ This is a set of straight blades with a thin cutting edge. It can cleanly finish cross sections without remnants.



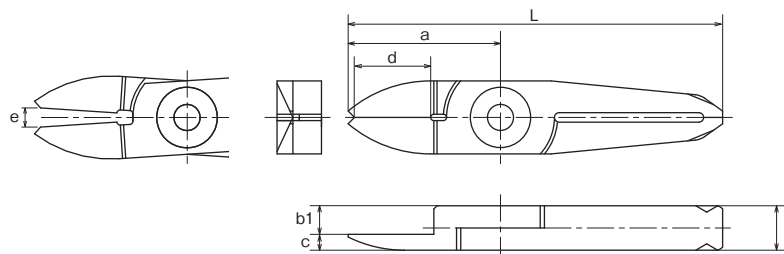
Model No.	a	b	c	d	e	L	Weight (g)	Material	Application model
NT03AJT	24	7	2.3	11	3	59	19	Special alloy steel	GT-NT03 type
NT05AJT	29	7	3	15	6	65	29	Special alloy steel	GT-NT05 type
NT10AJT	35	9	4	17	7	82	65	Special alloy steel	GT-NT10 type

AJY

Thin, straight blades for plastic

Plastic

AJY/ This is effective when the width between the opposing gates is too short and the thickness of the blades will not go in.



Model No.	a	b	b1	c	d	e	L	Weight (g)	Material	Application model
NT03AJY	24	7	4.5	2.5	11	3	59	19	Special alloy steel	GT-NT03 type
NT05AJY	29	7	4.5	5	15	6	65	29	Special alloy steel	GT-NT05 type
NT10AJY	35	9	5.0	4	17	7	72	82	Special alloy steel	GT-NT10 type

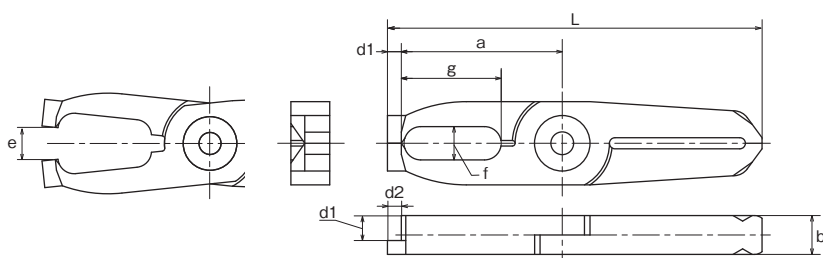
Slide-off air nipper vertical-type blades

AD

Lift blades for plastic

AD/ This is used for batch processing of the three-dimensional gate such as ride gate.

Plastic



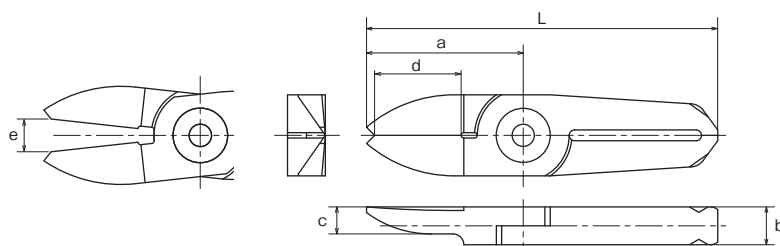
Model No.	a	Size (mm) b	f×g	d1 (mm)	d2 (mm)	e (mm)	L (mm)	Weight (g)	Material	Application model
NT05AD	31.5	7	6×18	3.5	2.5	6	67.5	37	Special alloy steel	GT-NT05 type
NT10AD	39	9	8×21.5	5	4	7	86	65	Special alloy steel	GT-NT10 type
NT20AD	46	12	9×24.5	7	6	9	103	141	Special alloy steel	GT-NT20 type

AJV

V shaped straight blades for plastic

AJV/ This is suitable for gate processing when the cross section is curved or the cut end must not be left.

Plastic



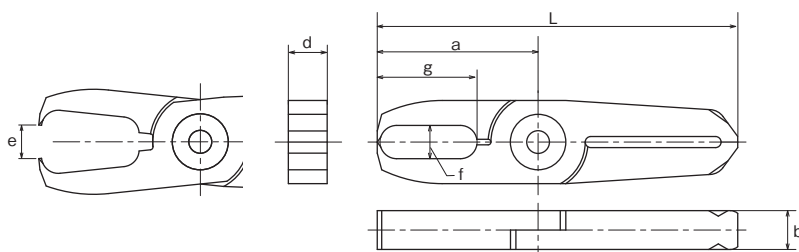
Model No.	a	b	Size (mm) c	d	e	L	Weight (g)	Material	Application model
NT05AJV	29	7	5	15	6	65	29	Special alloy steel	GT-NT05 type
NT10AJV	35	9	6	17	7	82	63	Special alloy steel	GT-NT10 type

AE

Nipping blades for plastic

AE/ Used for processing plastic gates such as ride gates and discard gates.

Plastic

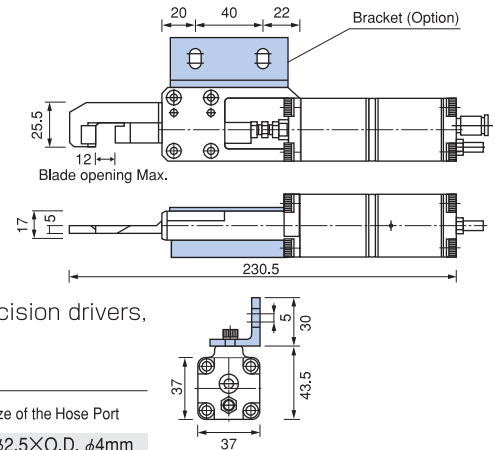


Model No.	a	b	Size (mm) f×g	d	e	L	Weight (g)	Material	Application model
NT05AE	29	7	6×18	7	6	65	36	Special alloy steel	GT-NT05 type
NT10AE	35	9	8×21.5	9	7	82	75	Special alloy steel	GT-NT10 type

Thrust-Cut Air Nipper

GT-NK10 Thrust-Cut Air Nipper

NK


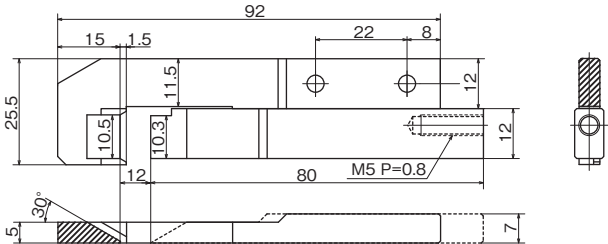



These nippers are equipped with a foot switch and are linked to high precision drivers, enabling the cutting of film-shaped gates from the thin end, preventing wrinkles around the cut.

Capacity ϕ (mm) ABS Plastic	Model No.	Air Consumption (cm ³ /str.)	Air Pressure (MPa)	Weight (g)	Applied Pressure (N)	Spec. & Size of the Hose Port
5	GT-NK10	110	0.4~0.5	800	735	Hose I.D. ϕ 2.5XO.D. ϕ 4mm

•Hose Coupling: I.D. ϕ 4 X O.D. ϕ 6 mm •Piston stroke...Max.12 mm

Thrust-Cut Air Nipper blades

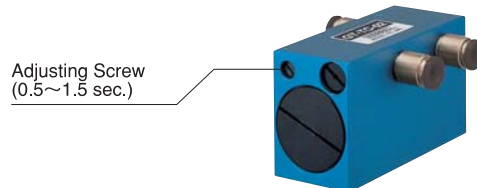
NK10AJ	Thrust-Cut Air Nipper blades					Plastic
	This is a dedicated set of blades for GT-NK10. Suitable for processing of film gates attached to robot hands.					
<div></div>						
						

Model No.	Size (mm)	Shape	O.A.L. (mm)	Weight (g)	Material	Application model
NK10AJ	As above	For metal cutting (Knife type)	95	96	Special alloy steel	GT-NK10

Related items

GT-TC-02 Timing Controller

TC

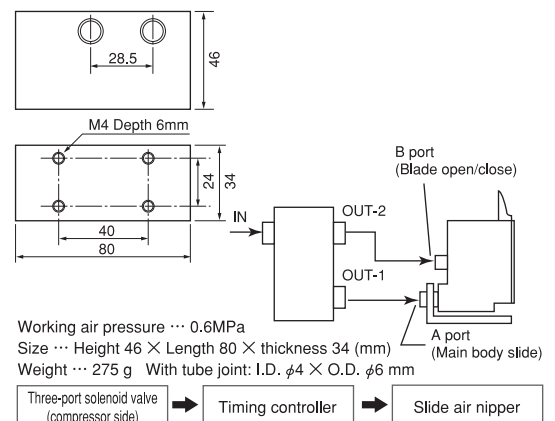


Connected between the compressor and the air nippers, the timing controller enables adjustments to the slide and cutting timing. (Approximately 0.5 seconds to 1.5 seconds)

Connectable nippers (Reference)

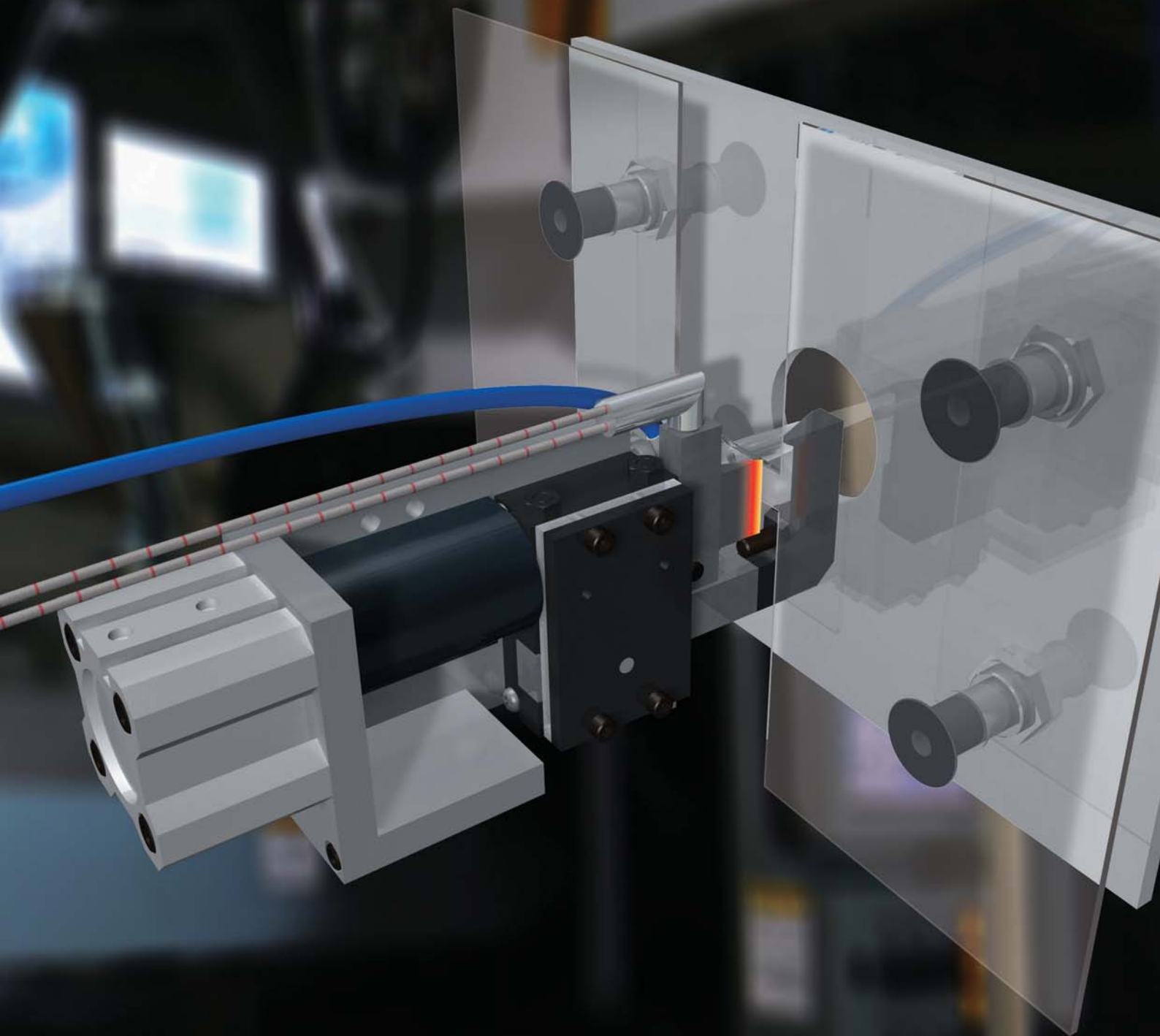
No. GT-	NY05	NY10	NY15	NY25	NT03	NT05	NT10	NT20	NB20	NB30	NB20LW	NB30LW
Connectable unit	4	3	1	1	6	4	2	1	2	1	2	1

(pcs)



Heat Air Nippers

These air nippers are connected to a heater to suppress cracks and whitening of clear materials such as acrylic.
The gate is slowly melted as it's cut, resulting in a clean, unblemished cut surface.

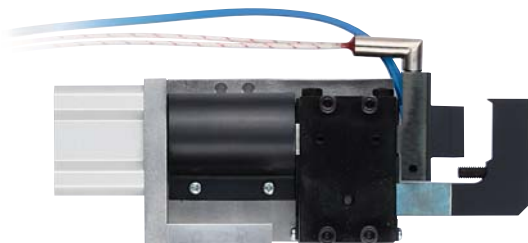


Heat Air Nippers

GT-NKH20A/20AR Heat Air Nippers (Air Hydro Type)

NKH

Air-hydro cylinders produce high power from air and oil. These units are ideal for high precision cuts required for products such as optical resin lenses.



- Requires separately sold Hydro Controller.
- Custom-made blade lengths and cylinder capacities available.

Model No.	Cutting Capacity φ (mm) Acril	Blade Edge Temp. (MAX °C)	Cutting Cycle (sec/cut)	Air Consumption (cm³/str.)	Piston Stroke (mm)	Weight (g)
GT-NKH20A-25/20AR-25	Thickness 1.5 Width 10	180	4~5	60	10	720

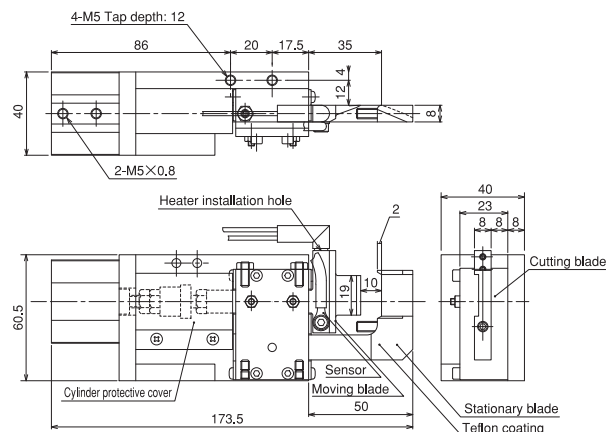
• Included heater: HTL-28.5-6.25-300L 80W/100V Cord length 300mm Recommended temp. 140°C
 • Included temperature sensor: SNO300L Thermal couple type K (Nickel-Chromium/Nickel-Aluminum)
 Recommended temp. 140°C Cord length 1,000mm
 • Air Pressure: 0.6MPa • Working air hose inner diameter: 4mm
 ※200V/240V heaters are also available to order.

Blades Specifications

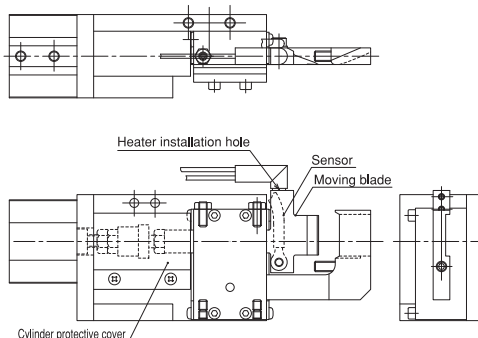
Material	Blade Shape	Blade Opening (mm)	Cutting blade effective (mm)	Weight (g)
Special Alloy Steel	Knife type (resin)	10	19	125

- Option Parts**
- Hydro-converter (Recommended: KOGANEI AHC 32×50)
Working fluid: Petroleum hydraulic fluid or turbine oil with antifoaming agent additive (VG22~100)
 - Temperature controller (DTC-001)

GT-NKH20A-25 (Forward-facing blades)



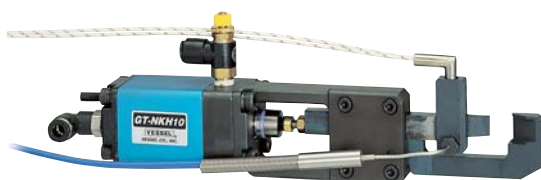
GT-NKH20AR-25 (Backward-facing blades)



GT-NKH10 Heat Air Nippers

NKH

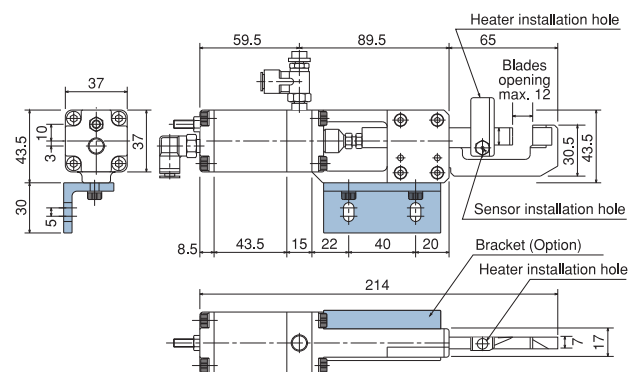
Speed control of cut speed and heater temperature allows for variable cutting surface solutions for extremely high precision cutting demands.



Model No.	Cutting Capacity φ (mm) Acril	Blade Edge Temp. (MAX °C)	Cutting Cycle (sec/cut)	Air Consumption (cm³/str.)	Piston Stroke (mm)	Weight (g)
GT-NKH10	Thickness 1.5 Width 7	200	4~5	73	12	715

• Included heater: 80W/120V Cord length: 300mm
 • Included temperature sensor: Thermal couple type K (Nickel-Chromium/Nickel-Aluminum)
 Cord length: 1,000mm
 • Air Pressure: 0.4~0.5MPa

- Option Parts**
- Temperature controller (DTC-001)



Blades Specifications

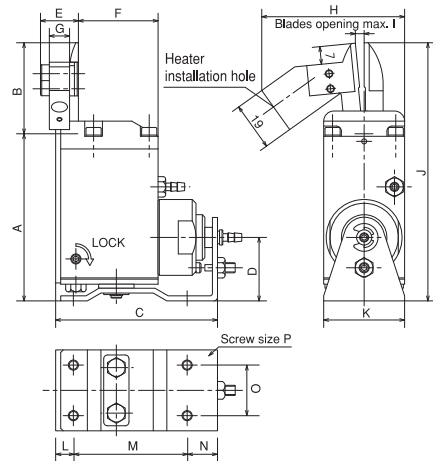
Model No.	Material	Blade Shape	Blade Opening (mm)	Cutting blade effective (mm)	Weight (g)
NKH10AJ/NKH10RAJ	Special Alloy Steel	Knife type (resin)	12	10	137

Heat Air Nippers

GT-NTH05/10 Heat Air Nippers (Vertical sliding type)

NTH

One blade is fixed in position, facilitating easy gate alignment. In addition, a slide function presses the product into position.



Model No.	Cutting Capacity φ (mm) Acrl	Blade Edge Temp. (MAX °C)	Cutting Cycle (sec/cut)	Air Consumption (cm³/str.)	Slide Distance (mm)	Weight (g)	Dimensions (mm)															
							A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
GT-NTH05	2.5	200	4~5	47	0~3	325	66.1	36	64	25.1	15	31.5	8	56.5	3.5	102.1	32	7	45	12	20	M4
GT-NTH10	3.5	200	4~5	82	0~3	515	83	47	73	29	16.2	37.5	8	63	4.5	130	38	8	53	12	24	M4

•Included heater: 80W/120V Cord length: 300mm
•Included temperature sensor : Thermal couple type K (Nickel-Chromium/Nickel-Aluminum) Cord length: 1,000mm
•Air Pressure: 0.4~0.5MPa

Blades Specifications

Model No.	Material	Blade Shape	Blade Opening (mm)	Cutting blade effective (mm)	Weight (g)
NTH05AJ	Special Alloy Steel	Nipper type (resin)	3.5	15	40
NTH10AJ	Special Alloy Steel	Nipper type (resin)	4.5	17	88

HTH type blade weight does not include heater and sensor.

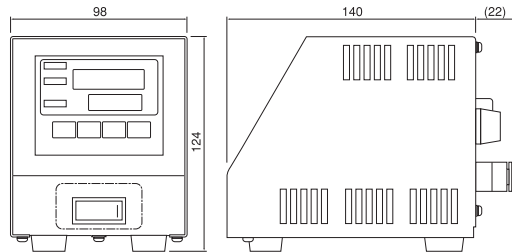
Option Parts •Temperature controller (DTC-001)

Temperature Controller

DTC-001 Benchtop Temperature Controller

DTC

The heating element can be connected directly to the main unit, a useful feature that saves labor during wiring installation. Compact construction enables the unit to be easily carried, allowing for changing the work site at any time.



Please inform us of the product number of the heat nipper when placing an order.

Model No.	Temperature range Thermocouple K (°C)	Power supply (V)	Power consumption (with 100 VAC input)	Ambient temperature and humidity (°C)	Protection fuse	Weight (g)
DTC-001	0~200	AC100~240	Approx. 3W (Approx. 5VA) (With no load)	0~40 RH35~85% (No condensing)	One 15A fuse is incorporated.	900

※Please ensure the input voltage in prior to operation as it is directly connected to the heater.

Option Parts • Power supply cable : Model No. DTC-001-□-□

- ☐ : Cable for connection to the terminal block is necessary to be included.
☐ : (N/ A) Cable not necessary.
- ☐ A : 2m power cable w/ Japanese type plug (A-type)
☐ C : 2m power cable w/ European type plug (C-type)
☐ : (N/ A) Cable not necessary.

Servo Heat Nippers

GT-NKHD20A/45 Servo Heat Nippers (With Motor Cylinder)

NKHD

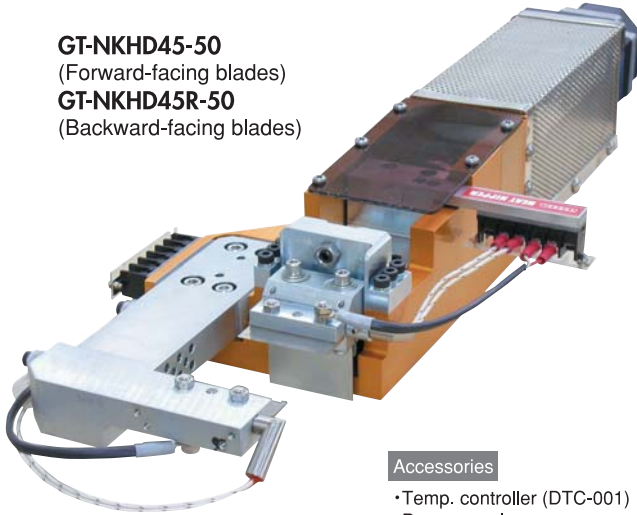
Blade travel distance and speed can be easily programmed. Servo motor control enables delicate blade feeds and quiet gate cutting work.

GT-NKHD45-50

(Forward-facing blades)

GT-NKHD45R-50

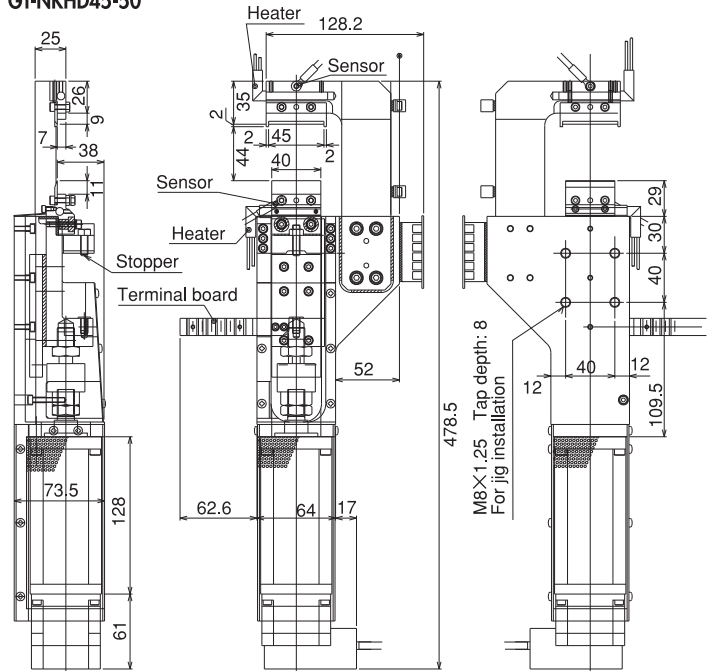
(Backward-facing blades)



Accessories

- Temp. controller (DTC-001)
- Power supply
- Heater code
- Parallel cable
- ADP cable
- Controller (CTC-33)
- Power cord
- Sensor cord

GT-NKHD45-50



Small type for lens cutting

GT-NKHD20A-10

(Forward-facing blades)

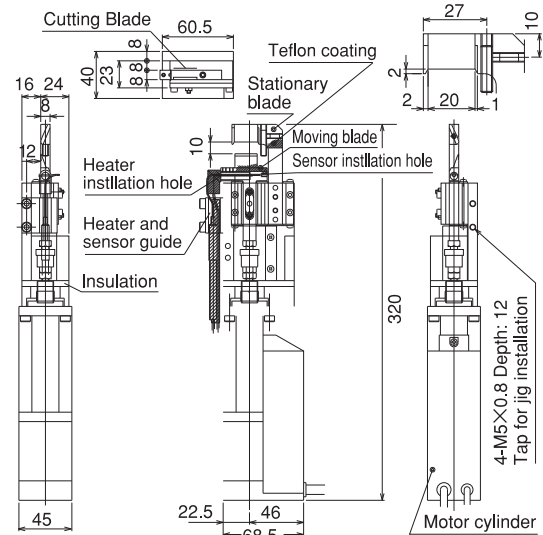
GT-NKHD20AR-10

(Backward-facing blades)

Accessories

- Temp. controller (DTC-001)
- Power supply
- Heater code
- Parallel cable
- ADP cable
- Controller (CTC-33)
- Power cord
- Sensor cord

GT-NKHD20A-10



Model No.	Cutting Capacity φ (mm) Acrl	Blade Edge Temp. (MAX °C)	Cutting Cycle (sec/cut)	Blade Opening (mm)	Position Accuracy	Max. Thrust (N)	Max. Speed (mm/s)	Positioning Points (pts)	Power Supply Voltage	Current Consumption Power Control circuit	Weight (kg)
GT-NKHD45(R)-50	width24×thickness1.2	180	10	43	±0.1mm or less	500	100	16	DC24V±10%	3.0A 0.2A	5
GT-NKHD20A(R)-10	width10×thickness1.5	180	10	10	±0.1mm or less	100	400	16	DC24V±10%	2.0A	1.6

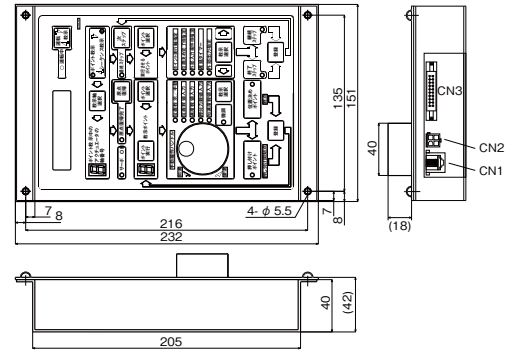
Option Parts • Temp. controller (DTC-001) • Power supply • Heater code • Parallel cable • ADP cable • Controller (CTC-33) • Power cord • Sensor cord

Special Controller (optionally available)

Controller CTC-33



Model No.	CTC-33
Sequence	41 steps
Power	Supplied by amplifier
P I O connector	Hirose HIF3BA (20PIN)
S I O connector	RS485
A D P connector	AMP 172167-1
Size (mm)	235x150x40
Weight (kg)	0.9



Features

Freely Settable Blade Travel Distance and Speed

Heating nippers that optimally uses the prime control features of the servomotor.

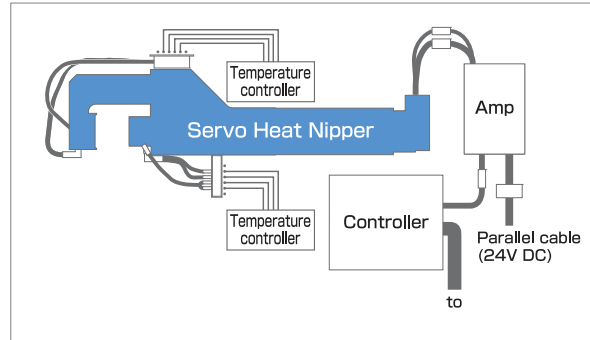
Reduces Fusing, Cracking and Bad Cuts

Fine pitch feeding is possible, therefore cutting can be performed at low temperature and low speed.

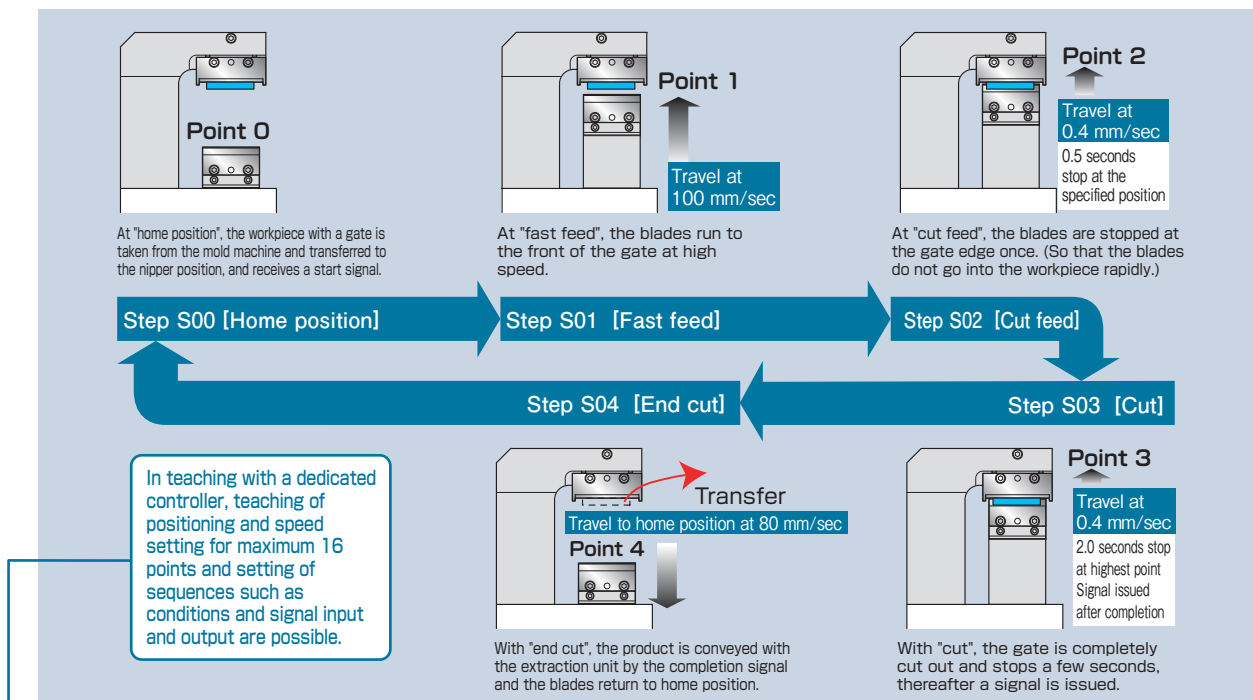
Stable Cutting

The blades are fed by servomotor control, therefore cutting quality is stable.

System Connections



Practical example of gate-cut



Practical example of input data

Teaching content		Home position	Fast feed	Cut feed	Cut	End cut
Point data	Point No.	0	1	2	3	4
	Positioning (*)	Home position	Leaving 7 mm	Leaving 0.5 mm	Maximum	value
	Speed setting	-	100 mm/sec	0.4 mm/sec	0.4 mm/sec	80 mm/sec
	Pushing force setting	-	-	-	-	-
	Acceleration setting	-	-	-	-	-
Sequencer data	Step No.	S00	S01	S02	S03	S04
	Waiting for positioning to complete	-	-	-	-	-
	Waiting for external input conditions	-	-	-	-	-
	Delay timer	-	-	0.5sec	2.0sec	-
	Specified external output	-	-	-	ON	-

(*) Input of positioning is actually done with a numerical value.

Air Nippers For Cutting and Crimping

A tough body for hard jobs.

With a frame diameter range of 23mm to 75mm, this product line was developed by piston size.

These models are ideal for a broad spectrum of cutting and crimping work.

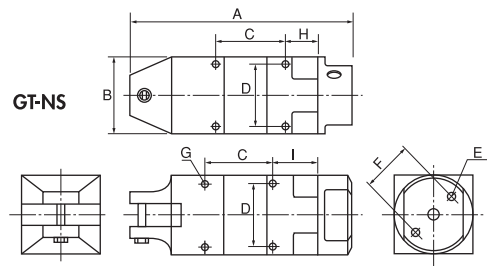


Air Nippers

GT-NS2/3/5/7/10L/20/30 Square Air Nippers

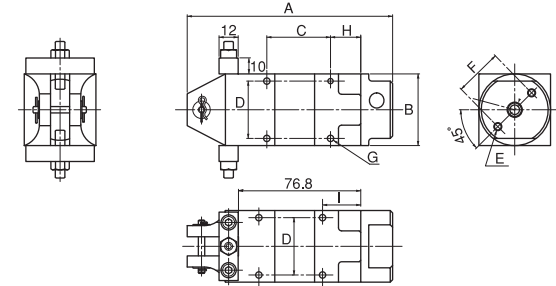
NS

VESSEL provides a generous selection of blades for all wire cutting needs, including resin product gate cuts and automatic welding equipment.



Customization

GT-NS20H-1 (Blade opening adjustable)



- The main body end is 180° rotatable.
- Two suction (intake) ports are provided, and so the suction position can be optionally changed depending on the mounting place.

Capacity ϕ (mm)				Model No.	Size (mm)									Air Consumption (cm ³ /str.)	Air Pressure (MPa)	Weight (g)	Hose coupling
Soft Plastic	Hard Plastic	Copper	Steel		A	B	C	D	E	F	G	H	I				
		1.0	0.5	GT-NS2	109	20	40	16	—	—	M3 Depth4	19	24	35	0.4~0.5	85	Rc1/8
2.0		1.0	0.5	GT-NS3	110	23	40	19	M3 Depth8	17	M3 Depth3.5	19	24	45	0.4~0.5	95	
2.0		1.0	0.5	GT-NS5	94	30	30	24	M4 Depth10	20	M3 Depth5	14	19	64	0.4~0.5	135	
3.0	2.0	1.6	1.0	GT-NS7	113	36	30	28	M4 Depth10	24	M4 Depth5.5	18	23	116	0.4~0.5	215	
4.0	2.6	1.8	1.2	GT-NS10L	113	36	30	28	M4 Depth10	24	M4 Depth5.5	18	23	116	0.4~0.6	215	
7.0	5.0	2.6	2.0	GT-NS20	129	45	40	36	M5 Depth12	30	M4 Depth7	19	24	230	0.5~0.6	370	
10.0	6.5	3.3	2.8	GT-NS30	170	56	60	46	M6 Depth12	40	M5 Depth10	20	30	584	0.5~0.6	685	
7.0	5.0	2.6	2.0	GT-NS20H-1	129	45	40	36	M5 Depth12	30	M4 Depth7	19	24	230	0.5~0.6	455	

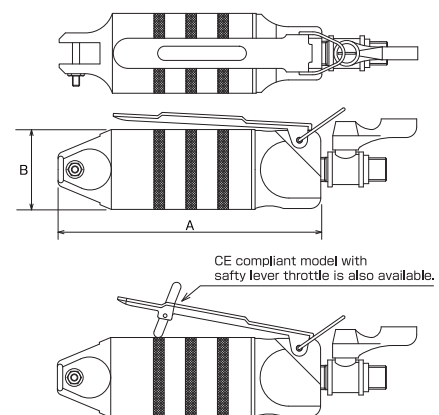
•Air hose inner dia. : 5mm •Overall length/Weight: Accessories not included.

※Before mounting of exclusive/automatic machines, check the following product dimensions.
(Frame O.D., screw dia. (screw to screw) dimensions, etc.)
※Model GT-NS50 is a special order item. Please contact VESSEL for details.
※Capacity(ϕ) is for reference purpose only. It varies depending on blade types.

GT-N3/5/7/10/12/20/30/50 Hand Held Air Nippers

N

VESSEL's special order blades provide solutions for a virtually unlimited range of needs, leading to safer, and more efficient work with less fatigue.



- N20, N30 and N50 have the air cock.

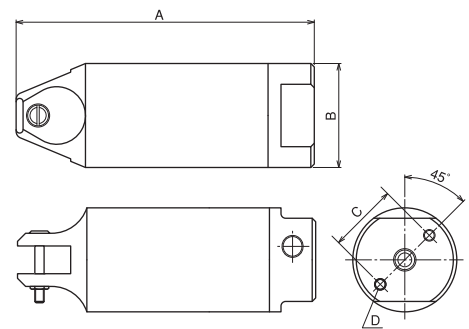
Capacity ϕ (mm)				Model No.	Size (mm)		Air Consumption (cm ³ /str.)	Air Pressure (MPa)	Weight (g)	Body	Hose coupling
Soft Plastic	Hard Plastic	Copper	Steel		A	B					
2.0		1.0	0.5	GT-N3	112	23	45	0.4~0.5	95	Rc1/8	R1/4
2.0		1.0	0.5	GT-N5	103	30	64	0.4~0.5	135	Rc1/8	
3.0	2.0	1.6	1.0	GT-N7	123	34	116	0.4~0.5	180	Rc1/4	
4.0	2.6	1.8	1.2	GT-N10	132	34	116	0.4~0.5	185	Rc1/4	
4.5	4.0	2.3	1.7	GT-N12	142	36	116	0.5~0.6	210	Rc1/4	
7.0	5.0	2.6	2.0	GT-N20	156	45	230	0.5~0.6	375	Rc1/4	
10.0	6.5	3.3	2.8	GT-N30	193	56	584	0.5~0.6	625	Rc1/4	
		5.5	4.5	GT-N50	237	75	1,170	0.5~0.6	1,220	Rc1/4	

•Hose coupling: R 1/4 •Air hose inner dia. : 5mm •Overall length: Accessories, Hunger not included. •Weight: Accessories not included. ※Capacity(ϕ) is for reference purpose only. It varies depending on blade types.

Air Nippers

GT-NR3/5/7/10L/20/30/50 Air Nipper Round-Type without Lever

NR



- The main body end is 180° rotatable.
- Two suction (intake) ports are provided, the suction position can be optionally changed depending on the mounting plate.

Soft Plastic	Hard Plastic	Copper	Steel	Model No.	A	B	Size (mm) C	D	Air Consumption (cm ³ /str.)	Air Pressure (MPa)	Weight (g)	Hose coupling
2.0		1.0	0.5	GT-NR3	110	23	17	M3 Depth8	45	0.4~0.5	70	Rc1/8
2.0		1.0	0.5	GT-NR5	94	30	20	M4 Depth10	64	0.4~0.5	110	
3.0	2.0	1.6	1.0	GT-NR7	113	34	22	M4 Depth10	116	0.4~0.5	150	
4.0	2.6	1.8	1.2	GT-NR10L	113	36	24	M4 Depth10	116	0.4~0.6	215	
7.0	5.0	2.6	2.0	GT-NR20	129	45	30	M5 Depth12	230	0.5~0.6	280	
10.0	6.5	3.3	2.8	GT-NR30	165	56	40	M6 Depth12	584	0.5~0.6	505	
12.0	6.5	5.5	4.5	GT-NR50	222	75	50	M8 Depth12	1,170	0.5~0.6	1,190	

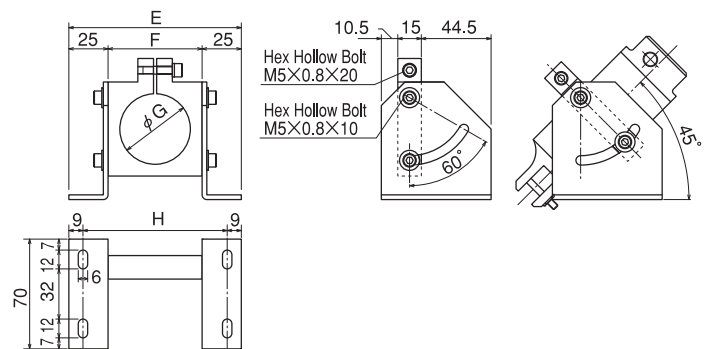
• Air hose inner dia. : 5mm • Overall length/Weight: Accessories not included.

※ Before mounting of exclusive/automatic machines, check the following product dimensions.
(Frame O.D., screw dia. (screw to screw) dimensions, etc.)

※ Capacity(φ) is for reference purpose only. It varies depending on blade types.

Stand

Stands for installing air nippers.
The angle is easily adjustable.



Model No.	E	Size (mm) F	G	H	Weight (g)
NR10LST	102	52	36	84	335
NR20ST	110	60	45	92	385
NR30ST	130	80	56	112	535
NR50ST Option	150	100	75	132	835

P-10L/20/30/50 Powerful Intensifiers (With Extra pressure Booster)

This unit is to be used in case the originally required pressure is not obtainable
by the limit of space and air pressure.



Capacity φ (mm)	Application model	Model No.	Size (mm) A	B	Air Consumption (cm ³ /str.)	Air Pressure	Weight (g)
Soft Plastic	NS10L, NR10L, N12	P-10L	71	36	223	Up to 0.4MPa	115
Hard Plastic	N20, NS20, NR20	P-20	87	45	508	Up to 0.5MPa	215
Copper	N30, NS30, NR30	P-30	92	56	956	Up to 0.5MPa	330
Steel	N50, NR50	P-50	133	75	2,670	Up to 0.5MPa	840

• Above figures of overall length and the weight are defined for the extra booster specs only. And these figures in the installation. ※ Capacity(φ) is for reference purpose only. It varies depending on blade types.

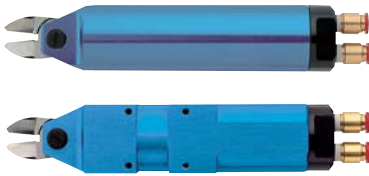
Air Nippers

GT-NWR1/10/20/30 GT-NWS1/10/20 Double Action Air Nippers

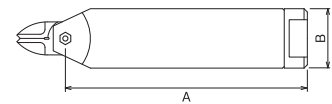
Patented

NWR·NWS

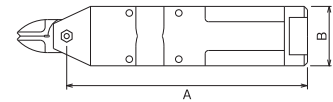
Blade opening and closing is air piston driven.
Having no spring mechanism in the main unit facilitates maintenance operations.



GT-NWR



GT-NWS



Model No.	Capacity ϕ (mm)			Air Consumption (cm ³ /str.)	Applied Pressure (N)	Air Pressure (MPa)	Size (mm)		Weight (g)
	Copper	Steel	ABS Plastic				A	B	
Double Action Air Scissors (Round Type without Lever)									
GT-NWR10	1.8	1.2	4.0	116	588	0.4~0.5	146	ϕ 36	280
GT-NWR20	2.6	2.0	6.5	230	1,372	0.5~0.6	165	ϕ 45	523
GT-NWR30	3.3	2.8	9.5	584	2,744	0.5~0.6	216	ϕ 56	980
Double Action Air Scissors (Square Type)									
GT-NWS1	1.0	0.5	2.0	45	294	0.4~0.5	95	23×20	116
GT-NWS10	1.8	1.2	4.0	116	588	0.4~0.5	146	36×36	356
GT-NWS20	2.6	2.0	6.5	230	1,372	0.5~0.6	165	45×45	610

※Capacity(ϕ) is for reference purpose only. It varies depending on blade types.

GT-NB20/30/20LW/30LW Slide-Off Air Nipper Bracket-Type

NB

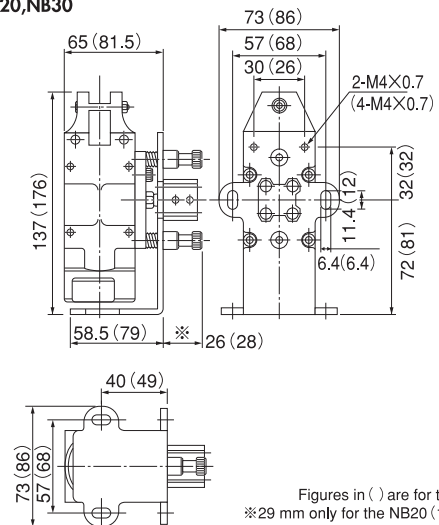
VESSEL has achieved smooth, continuous slide movement even for large diameter gate cuts, which produce a large shock at each cut.



GT-NB20LW-10TM
Accurate slide function
with slide stroke

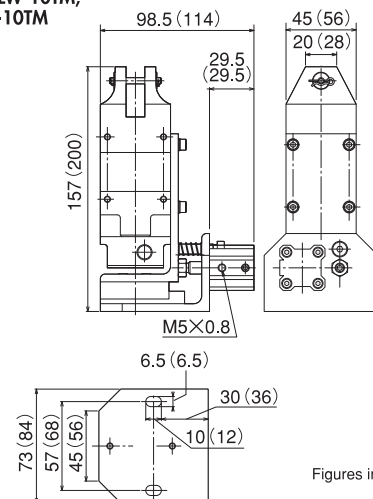
GT-NB20

GT-NB20,NB30



Figures in () are for the NB30.
※29 mm only for the NB20 (10-HIKU)

GT-NB20LW-10TM,
NB30LW-10TM



Figures in () are for the
NB30LW-10TM.

Unit : mm

Model No.	Size (mm)		Slide Direction/ Distance (mm)	Weight (g)
	A	B		
GT-NB20 (5-OSHI)	59	22	Push 0~5	755
GT-NB20 (5-HIKU)	61.5	27	Pull 0~5	755
GT-NB20 (10-OSHI)	59	27	Push 0~10	755
GT-NB20 (10-HIKU)	66.5	29	Pull 0~10	755
GT-NB30 (10-HIKU)	77.5	28.5	Pull 0~10	1,435
GT-NB20LW-10TM	65	28.5	Pull 0~10	785
GT-NB30LW-10TM		28.5	Pull 0~10	1,315
GT-NB20LW-10SM		29.5	Push 0~10	785
GT-NB30LW-10SM		29.5	Push 0~10	1,315

Blade is optional.

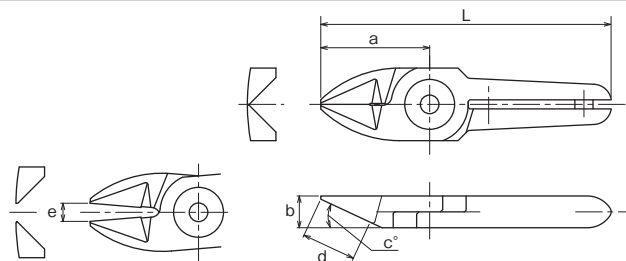
Air nipper standard blades for metal

AS/HS

Standard

AS/ Standard type. This is a general set of blades used for cutting copper wire and steel wire. **HS/** Improved durability with brazed high-speed steel.

Metal



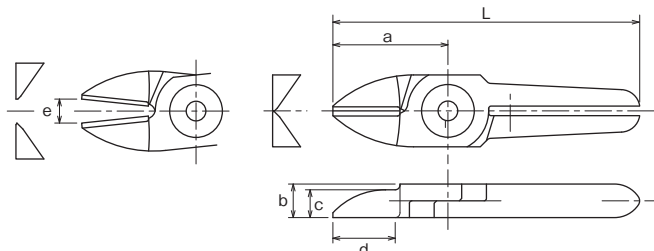
Model No.	a	b	c(°)	d	e	L	Weight (g)	Material	Application model
N3AS	24	7	25	12	4	64	35	Special alloy steel	GT-N3 / NS3 / NR3
N3HS	24	7	25	12	4	64	35	High Speed Steel	GT-N3 / NS3 / NR3
N5AS	24	7	25	12	4	64	40	Special alloy steel	GT-N5 / NS5 / NR5
N5HS	24	7	25	12	4	64	40	High Speed Steel	GT-N5 / NS5 / NR5
N7AS	27	9	30	13.5	4	81	80	Special alloy steel	GT-N7 / NS7 / NR7
N7HS	27	9	30	13.5	4	81	80	High Speed Steel	GT-N7 / NS7 / NR7
N10AS	27	9	30	13.5	5	91	85	Special alloy steel	GT-N10
N10HS	27	9	30	13.5	5	91	85	High Speed Steel	GT-N10
N10LAS	35	12	30	20	5	89	120	Special alloy steel	GT-NS10L / NR10L
N12AS	35	12	30	20	5	105	135	Special alloy steel	GT-N12
N12HS	35	12	30	20	5	105	135	High Speed Steel	GT-N12
N20AS	35	12	30	20	9	95	140	Special alloy steel	GT-NS20 / NR20 / N20
N30AS	43	17	30	25	9	127	370	Special alloy steel	GT-NS30 / NR30 / N30

BJ

Straight blades for metals

BJ/ This is a set of vertical blades with an unbeveled cutting edge for metal.

Metal



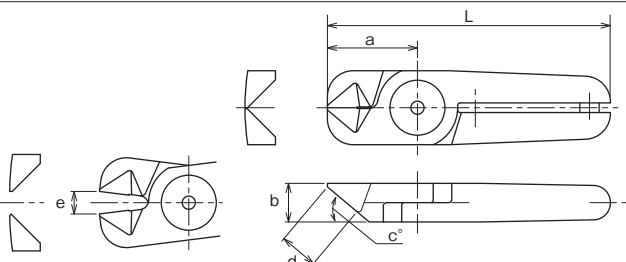
Model No.	a	b	c	d	e	L	Weight (g)	Material	Application model
NW1BJ	20	5	3	10.5	3.5	50	16	Special alloy steel	GT-NWR1 / NWS1
N3BJ	24	7	5.8	13	5	64	35	Special alloy steel	GT-N3 / NS3 / NR3 / NS2
N5BJ	24	7	5.8	13	4	64	40	Special alloy steel	GT-N5 / NS5 / NR5
N7BJ	27	9	7.5	13	5	81	75	Special alloy steel	GT-N7 / NS7 / NR7
NW10BJ	30	9	6	14	5	85	76	Special alloy steel	GT-NWR10 / NWS10
NW20BJ	40	12	6	21.5	8	100	142	Special alloy steel	GT-NWR20 / NWS20
NW30BJ	55	17	8	29.5	11	140	368	Special alloy steel	GT-NWR30

AG

Powerful cutting blades

AG/ This is a set of blades with increased strength with a shorter cutting edge than the standard type. Increases the pressure because it cuts at the base of the blades.




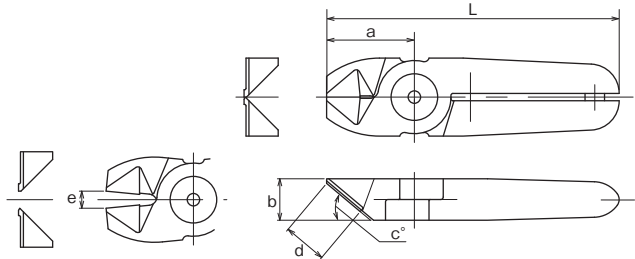
Metal




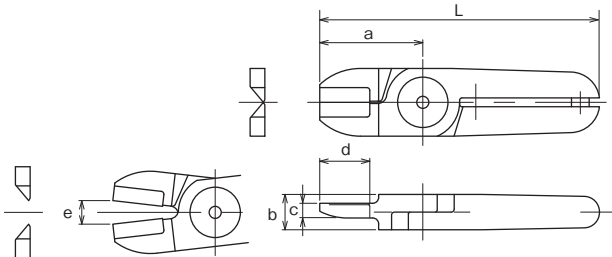


Model No.	a	b	c(°)	d	e	L	Weight (g)	Material	Application model
N20AG	28	12	40	12	7	88	135	Special alloy steel	GT-NS20 / NR20 / N20
N20HS	26	12	40	10	7	86	135	High Speed Steel	GT-NS20 / NR20 / N20

Air nipper standard blades for metal

 Sintered Alloy Hardest, most durable material. For cutting hard steel wire, glassfiber-reinforced resin, etc.

BBB	Powerful cutting blades with carbide tips						Metal		
	BBB/ With carbide tips suitable for cutting hard wire such as high steel wire and piano wire.								
							N30BBB	N50BBB	
									
Model No.	a	b	c(°)	d	e	L	Weight (g)	Material	Application model
N30BBB	36	17	40	18	7	120	365	Sintered Alloy	GT-NS30 / NR30 / N30
N50BBB	46	25	35	19	9	166	955	Sintered Alloy	GT-NR50 / N50

BFB/AS	Clipper blades with carbide tips						Metal		
	BFB/ The shape is clipper type. With carbide tips, suitable for cutting metal wire and thin pipe. AS/ Standard clipper type blades.							 N50AS	
									
Model No.	Size (mm)						Weight (g)	Material	Application model
N20BFB	35	12	5	17	8	95	150	Sintered Alloy	GT-NS20 / NR20 / N20
N50AS	60	25	10	30	11	180	950	Special alloy steel	GT-NR50 / N50

ACD	Crimp edge for solderless terminals					Metal		
	ACD/ This is a set of blades for crimping solderless terminals. (Bare terminal 1.25 sq/2.0 sq)							
Model No.	a	b	Size (mm)			Weight (g)	Material	Application model
N30ACD	40	17	c	e	L	335	Special alloy steel	GT-NS30 / NR30 / N30

NM Blades

NM Blades

Patented



NM blades shut down the Spring breakage. Applicable to your VESSEL current air nipper. Spring replacement is no longer required as the neodymium magnet works semi-permanently.



Capacity ϕ (mm)		Application model	Model No.	Size (mm)					Weight (g)
Soft Plastic	Hard Plastic			a	b	c (°)	d	e	
7.0	5.0	GT-N20	NM20AJ	35	12		18.0	11.0	116
7.0	5.0	GT-N520	NM20AP	35	12	15	16.0	11.0	124
7.0	5.0	GT-NR20	NM20AE	28	12		12.0	8.0	129
10.0	6.5	GT-N30	NM30AJ	52	17		28.0	11.0	360
10.0	6.5	GT-N530	NM30AP	66	17	15	38.0	16.0	380
10.0	6.5	GT-NR30	NM30AE	45	17		17.0	12.0	358

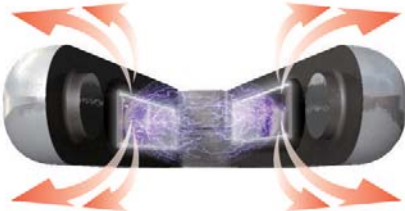
※ Customization also available upon request.

Utmost Care

Handling care due to its powerful magnet.

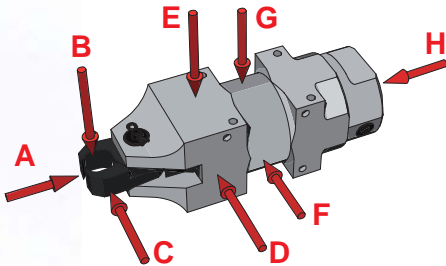


Magnetic repulsive force



Result of magnetic force measurement.

If a magnetic sensor is installed nearby for operation check, please confirm the magnetic force level in the following diagram.



Model No.	A	B	C	D	E	F	G	H
NM20AE	85	10	10	5	32	5	2	0
NM30AE	34	8	8	6	42	15	30	3

Measurement unit: Gauss / Measuring device: Gaussmeter GM-1200 manufactured by DENSHIJIKI INDUSTRY Co., Ltd., Japan

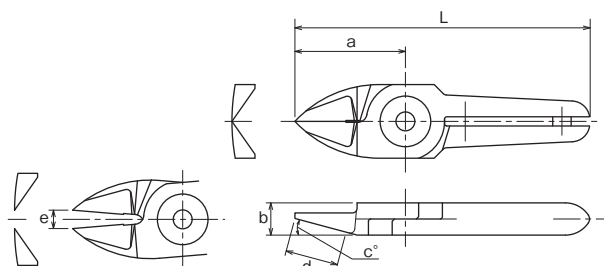
Air nipper standard blades for plastic

AP

For plastic

AP/ This is a standard set of blades used to cut plastic. A broad, gentle curve is provided in the cross section for gate processing where the cut end must not be left. (The cutting edge is curved.)

Plastic



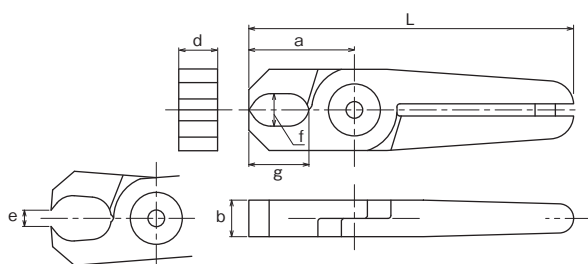
Model No.	a	b	Size (mm)		d	e	L	Weight (g)	Material	Application model
N3AP	24	7	15	c(°)	11.5	4	64	35	Special alloy steel	GT-N3 / NS3 / NR3
N5AP	24	7	15		11.5	4	64	40	Special alloy steel	GT-N5 / NS5 / NR5
N7AP	27	9	30		11.5	4	81	80	Special alloy steel	GT-N7 / NS7 / NR7
N10AP	27	9	30		11.5	5	91	85	Special alloy steel	GT-N10
N10LAP	35	12	15		16	5	89	120	Special alloy steel	GT-NS10L / NR10L
N12AP	35	12	15		16	5	105	135	Special alloy steel	GT-N12
N20AP	35	12	15		16	11	95	125	Special alloy steel	GT-NS20 / NR20 / N20
N30AP	66	17	15		38	16	150	380	Special alloy steel	GT-NS30 / NR30 / N30

AE

Nipping blades for plastic

AE/ Used for processing plastic gates such as ride gates and discard gates.

Plastic



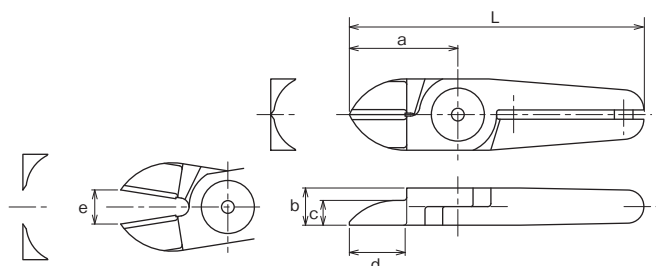
Model No.	a	b	Size (mm)		d	e	L	Weight (g)	Material	Application model
N3AE	20	7	6x11	f x g	11.5	3.5	60	35	Special alloy steel	GT-N3 / NS3 / NR3
N5AE	20	7	6x 6.6		7	3.5	60	40	Special alloy steel	GT-N5 / NS5 / NR5
N7AE	26	9	8x14.8		9	4	80	85	Special alloy steel	GT-N7 / NS7 / NR7
N20AE	28	12	10x15.5		12	8	88	135	Special alloy steel	GT-NS20 / NR20 / N20
N30AE	45	17	13x28		17	12	129	395	Special alloy steel	GT-NS30 / NR30 / N30

AJ

Thin, straight blades for plastic

AJ/ This is a set of vertical blades with an unbeveled cutting edge for plastic. You can apply it at a right angle to the gate.

Plastic



Model No.	a	b	Size (mm)		d	e	L	Weight (g)	Material	Application model
NW10AJ	30	b	c		14	5		76	Special alloy steel	GT-NWR10 / NWS10
N20AJ	35	12	8		18	11	95	125	Special alloy steel	GT-NS20 / NR20 / N20
N20AJB	35	12	8		18	11	95	125	Sintered Alloy	GT-NS20 / NR20 / N20
NW20AJ	40				21.5	8		142	Special alloy steel	GT-NWR20 / NWS20
N30AJ	52	17	8		28	11	136	370	Special alloy steel	GT-NS30 / NR30 / N30
NW30AJ	55				29.5	11		368	Special alloy steel	GT-NWR30

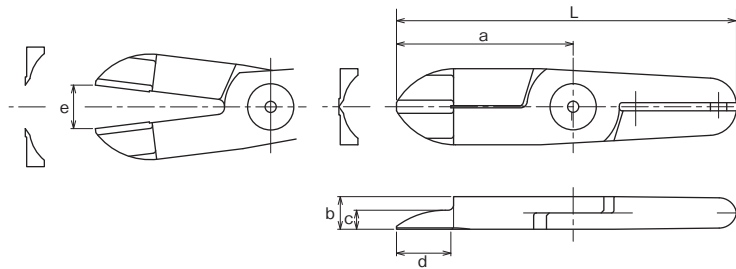
Air nipper standard/quasi-standard blades for plastic

AJL/ Quasi- standard products

Straight long blades for plastic

AJL/ This is a long type set of straight blades. This is suitable when there is distance between the nippers and the gate cut portion of the workpiece. N30AJL163 is useful for wide gate processing.

Plastic



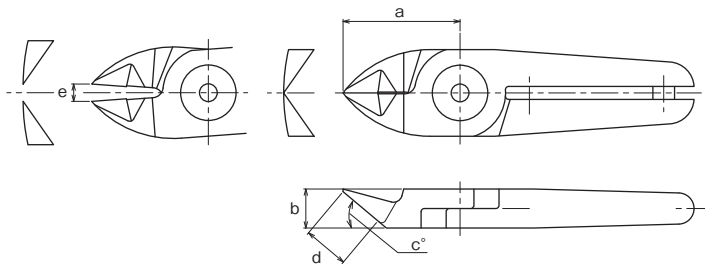
Model No.	Size (mm)						Weight (g)	Material	Application model
N10LAJ141	a	b	c	d	e	L	165	Special alloy steel	GT-NS10L / NR10L
N20AJL	61	12	7	34	10	115	230	Special alloy steel	GT-NS20 / NR20 / N20
N20AB39	65	12	7	20	16	125	185	Special alloy steel	GT-NS20 / NR20 / N20
N30AJ163	61	12	7	36	14	121	355	Special alloy steel	GT-NS30 / NR30 / N30
N30AJL	65	17	7	41	17.5	149	470	Special alloy steel	GT-NS30 / NR30 / N30

PF

Flat blades for plastic

PF/ This is a set of blades for cutting the cut end flat for plastic. A large R is provided in the cross section for gate processing where the cut end must not be left.

Plastic



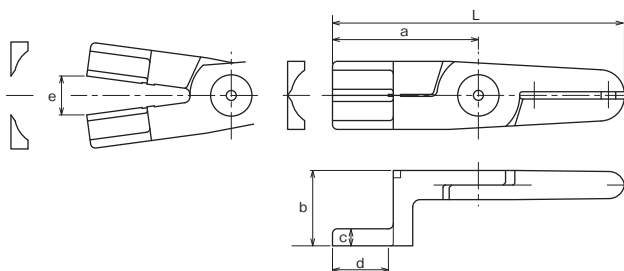
Model No.	Size (mm)						Weight (g)	Material	Application model
N7PF	a	b	c(°)	d	e	L	80	Special alloy steel	GT-N7 / NS7 / NR7
N10LPF	27	9	40	10.5	4	81	120	Special alloy steel	GT-NS10L / NR10L
N20PF	35	12	40	13.5	5	89	130	Special alloy steel	GT-NS20 / NR20 / N20
N30PF	35	12	40	13.5	11	95	390	Special alloy steel	GT-NS30 / NR30 / N30

AH

Crank blades for plastic

AH/ This is a set of blades with a crank cutting edge for plastic. It is effective when there are obstructions or the gate is narrow.

Plastic



Model No.	Size (mm)						Weight (g)	Material	Application model
N20AH	a	b	c	d	e	L	240	Special alloy steel	GT-NS20 / NR20 / N20

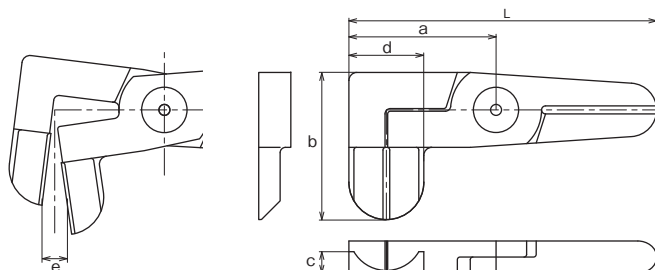
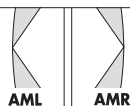
Air nipper standard/quasi-standard blades for plastic

**AMR/
AML**

Laterally facing blades for plastics

AMR/AML This is a set of blades for plastic where the ML cutting edge is bent 90 degrees. It is useful when restricted to confined spaces hard for the nipper to get into.

Plastic



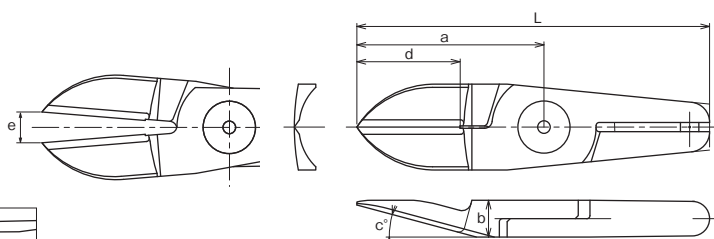
Model No.	a	b	Size (mm)				Weight (g)	Material	Application model
N20AML1498	55	55	c	d	e	L	270	Special alloy steel	GT-NS20 / NR20 / N20
N20AMR1499	55	55	8	26	9.5	115	270	Special alloy steel	GT-NS20 / NR20 / N20

Quasi-standard products

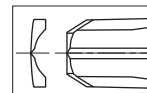
R blades for plastic

A large R is provided in the cross section for gate processing where the cut end must not be left. An angled blades can be selected in accordance with the installation angle of the main unit.

Plastic



N30AA114



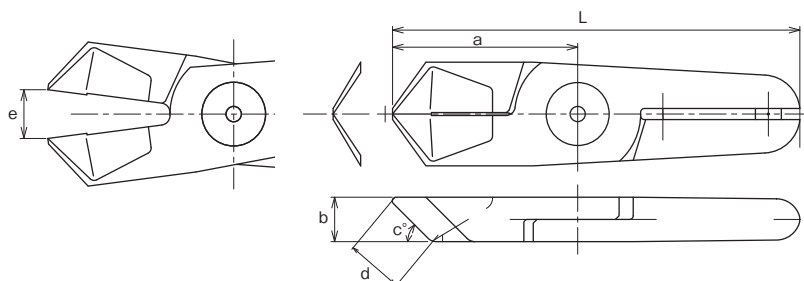
Model No.	a	b	Size (mm)				Weight (g)	Material	Application model
N10LAB152	61	12	c(°)	d	e	L	165	Special alloy steel	GT-NS10L / NR10L
N20AA27	45	12	23	25	12	105	145	Special alloy steel	GT-NS20 / NR20 / N20
N20AA239	52.3	12	40	27	14	112.3	195	Special alloy steel	GT-NS20 / NR20 / N20
N20AB360	61	12	15	35	16	121	185	Special alloy steel	GT-NS20 / NR20 / N20
N30AA114	76.3	17	30	50	20	160.3	385	Special alloy steel	GT-N30 / NS30 / NR30

Quasi-standard products

Angled nipping blades for plastic

AE/ Used for processing plastic gates such as ride gates, discard gates. The cutting edge is angled so that the main unit can set up diagonally.

Plastic



Model No.	a	b	Size (mm)				Weight (g)	Material	Application model
N20AE19	50	12	c(°)	d	e	L	200	Special alloy steel	GT-NS20 / NR20 / N20
N30AE53	65	17	65	18.5	16	149	440	Special alloy steel	GT-NS30 / NR30 / N30

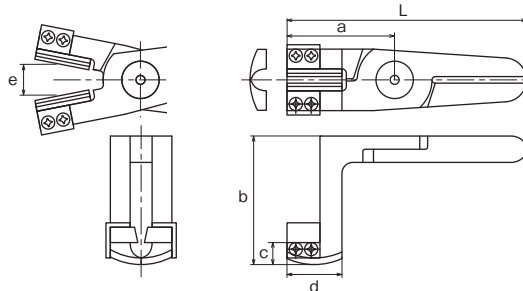
Air nipper quasi-standard blades for plastic

Quasi-standard products

Comes with sprue chuck function①

Mainly in gate processing for direct gates, the sprue is caught with urethane rubber. A large R is provided in the cross section for gate processing where the cut end must not be left.

Plastic



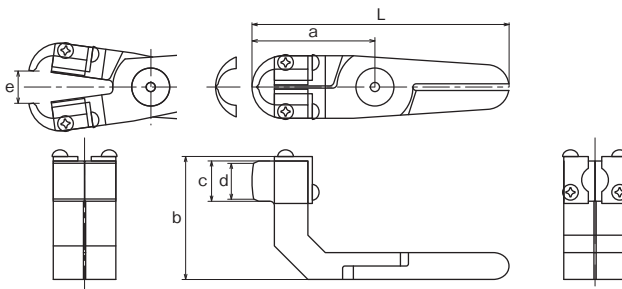
Model No.	Size (mm)						Weight (g)	Material	Application model
N20AH533	a	b	c	d	e	L	280	Special alloy steel	GT-N20 / NS20 / NR20

Quasi-standard products

Comes with sprue chuck function②

Mainly in gate processing for direct gates, the sprue is caught with urethane rubber. A large R is provided in the cross section for gate processing where the cut end must not be left.

Plastic



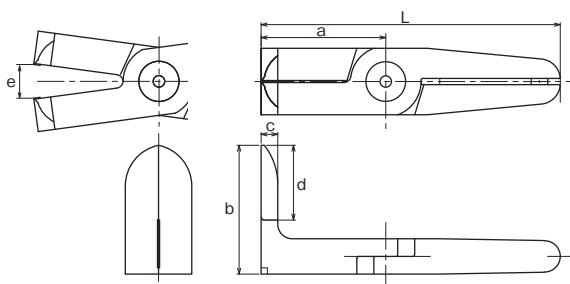
Model No.	Size (mm)						Weight (g)	Material	Application model
N20AH152	a	b	c	d	e	L	330	Special alloy steel	GT-N20 / NS20 / NR20

Quasi-standard products

L blades for sprue cut

This is an angled long type straight set of blades with a 90-degree angle. Ideal for direct gate cut.

Plastic



Model No.	Size (mm)						Weight (g)	Material	Application model
N30AL525	a	b	c	d	e	L	520	Special alloy steel	GT-N30 / NS30 / NR30

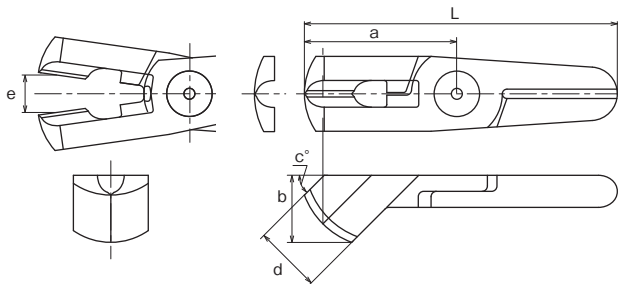
Air nipper quasi-standard blades for plastic

Quasi-standard products

Nipping blades for sprue cut

This is the perfect spherical set of cutting blades for sprue cut. The blades can be inserted precisely in narrow areas that have ribs around them and the finish is very clean.

Plastic



Model No.	a	b	Size (mm)			e	L	Weight (g)	Material	Application model
N20AK249	57	25	c(°)	d		14	117	240	Special alloy steel	GT-N20 / NS20 / NR20

Related items

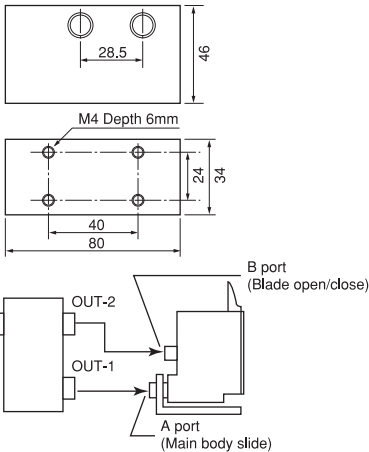
GT-TC-02 Timing Controller

TC

Adjusting Screw
(0.5~1.5 sec.)



Connected between the compressor and the air nippers, the timing controller enables adjustments to the slide and cutting timing. (Approximately 0.5 seconds to 1.5 seconds)

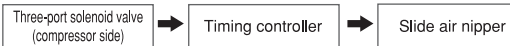


Connectable nippers (Reference)

No. GT-	NY05	NY10	NY15	NY25	NT03	NT05	NT10	NT20	NB20	NB30	NB20LW	NB30LW
Connectable unit	4	3	1	1	6	4	2	1	2	1	2	1

(pcs)

Working air pressure ... 0.6MPa
Size ... Height 46 × Length 80 × thickness 34 (mm)
Weight ... 275 g With tube joint: I.D. φ4 × O.D. φ6 mm



Air Nipper Troubleshooting

Inspection items when a malfunction occurs during use

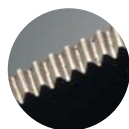
Symptoms	Causes	Treatment
1. Blades or slide not working properly.	Air is not being supplied	Supply air
	The hose is twisted	Extend the hose
	Low air pressure	Air pressure adjustment
	Corrosion, wear, or contamination of sliding part of the blades	Lubrication/disassembly adjustment
	Sliding parts burned by heat (heat nipper)	Component replacement
	Broken blade spring	Component replacement
	Broken return spring	Component replacement
	Broken blades	Replace blades
	Wear of the cutting unit/rivet	Replace blades
2. Air leakage	Valve malfunction/wear, damage (O-rings, ball valves, etc.)	Component replacement
	Packing is broken	Component replacement

Air Scissors

GT-H12K/H30/H120K/HS30 Air Scissors

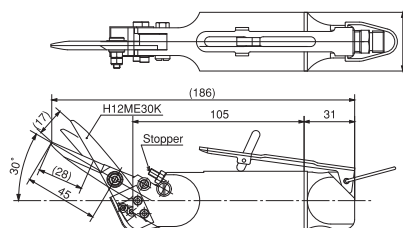
H

Two types of blades, standard and micro-edge, are available for use in accordance with the demands of each specific job.



Enlarged view of blade edge

GT-H12K+H12ME30K



GT-H12K Small lightweight type with single stationary blade



GT-H120K Single stationary blade specification

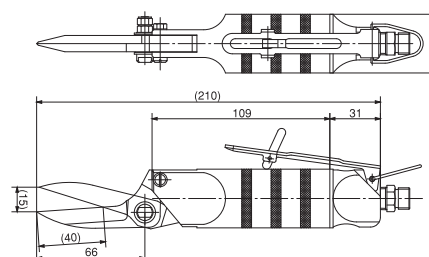


GT-H30 Double movable blades

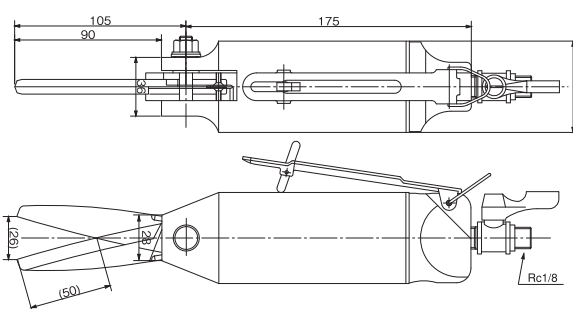


GT-HS30 Double movable blades

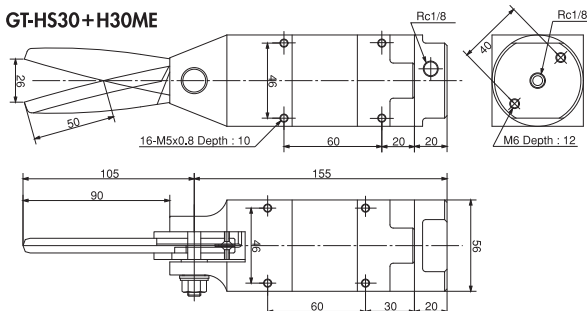
GT-H120K+H120SK



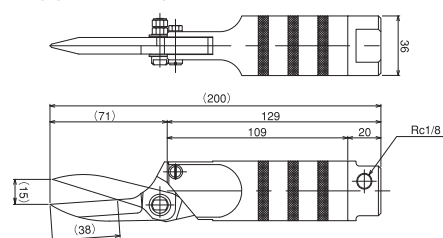
GT-H30+H30ME



GT-HS30+H30ME



GT-HR120K (Special Order)+H120SK



Model No.	Capacity (max) (mm)	Air Consumption (cm ³ /str.)	Applied Pressure (MPa)	Overall Length (with Blade) (mm)	Weight (with Blade) (g)
GT-H30	Kevlar t=1	584	0.3	280	1,030
GT-H12K	Kevlar t=0.3	116	0.2	186.2	290
GT-H120K	Band steel 15×0.5t	116	0.5~0.6	211	340
GT-HS30	Kevlar t=1	584	0.3	260	970
GT-HR120K (Special Order)	Band steel 15×0.5t	116	0.5~0.6	211	310

•Hose coupling: R 1/4 (Body Rc 1/8) •Air hose inner dia. : 5mm
•Overall length/Weight: Accessories not included.
•Total length and weight of the GT-HS30 and HS30 are given with the H30ME blade mounted.

Blades specifications

Model No.	Applicable Nippers	Blade Shape	Blade Aperture (mm)	Effective Blade Length (mm)	Weight (g)
H30ME	H30	Scissors type	26	50	280
H30MEL	HS30		34	67	285
H12ME30K	H12K	Scissors type	17	28	56
H120SK	H120K		15	38	115

Blade is optional.

GT-HWR1/10 GT-HWS1/10 Double Action Air Scissors

Patented

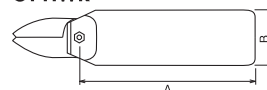
Blades are optional.

HWR·HWS

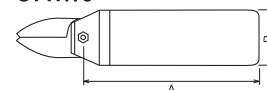
Blade opening and closing is air piston driven.
Having no spring mechanism in the main unit facilitates maintenance operations.



GT-HWR



GT-HWS



Model No.	Capacity ϕ (mm)	Air Consumption (cm ³ /str.)	Applied Pressure (N)	Air Pressure (MPa)	A (mm)	B (mm)	Weight (g)
GT-HWR1	1.0	0.5	45	294	0.4~0.5	95	20
GT-HWR10	1.8	1.2	116	588	0.4~0.5	146	36
Double Action Air Scissors (Square Type)							
GT-HWS1	1.0	0.5	45	294	0.4~0.5	95	23×20
GT-HWS10	1.8	1.2	116	588	0.4~0.5	146	36

Applicable Blade Specifications

Model No.	Blade Opening (mm)	Cutting blade effective length (mm)	A (mm)	Weight (g)
For GT-HWR1/HWS1				
HW1J	3.0	17	25	16
For GT-HWS10				
HW10J	5.0	28	40	76



Custom-made blades

Vessel customizes blades for a wide variety of uses.
Custom-made blades are available at low cost, speedy delivery and guaranteed flexible adaptation to a wide range of work.
See the below examples. Orders are accepted from 1 up.

No. **NY10 A E H 15**

Mounting body symbol

Outside view

Material
Special material only to be entered
H → High-speed steel
B → Carbide

Blade edge

A: For plastic (Both blades) B: Standard (One blades) C: Crimping D: Other ?

Type of blades

A Angled	B Angled	C Crimping	D Mounted gate	E Disposable gate treatment	F Power cutting
G Punching	H Crankshaft	I Pilers type	J(JL) Long blade for plastic Straight Long blade Product is vertically long, and if nipper does not reach gate with ordinary blades, long	K L-shaped (disposable gate treatment)	L L-shaped
M/XL/XR Side opening blades	TN Tube cutting	VO Nail pulling	DI Bending	VHA Scissors	
Cutting of stranded wire	Film gate	Direct gate ...Sprue is gate as it is.	AHE Pin gate treatment ...Treatment of small gate to be automatically cut at de-gating.	AHW Double blades	NH Double heating blades

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