

ISO 9002  
CERTIFIED

# TOOLS FOR THE PLASTICS INDUSTRY

JDV



VESSEL®

JDV Products Inc. is the exclusive representative of industrial quality Vessel brand tools in North America, including Canada and Mexico. We remain committed to provide our customers with the highest professional and reliable service.

JDV Products Inc.

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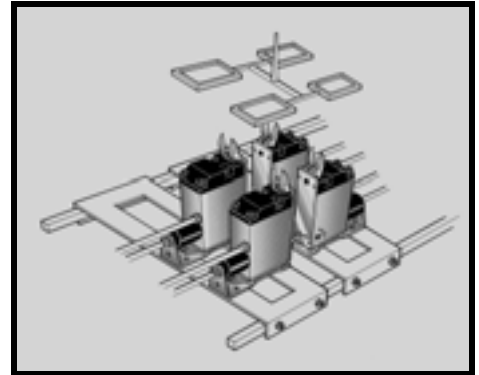
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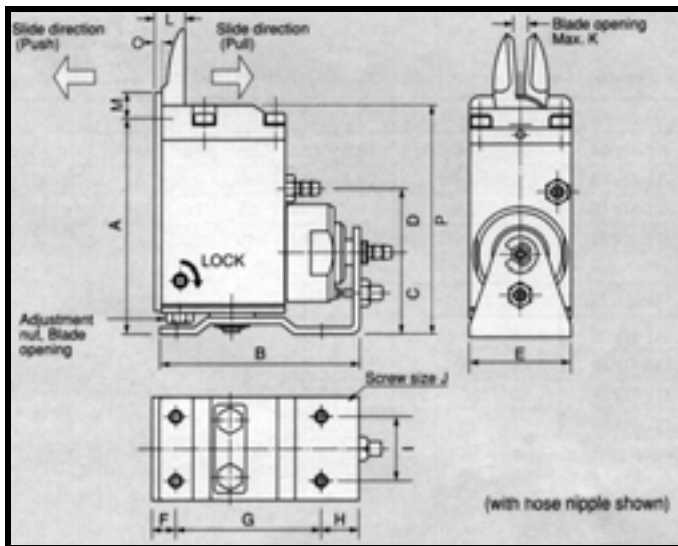
The vertically oriented NT series boasts a small footprint for those applications with space restrictions. Unique to this model is the built-in blade opening adjuster and lock.

- ◆ Adjustable blade opening.
- ◆ Adjustable slide stroke, 0-3mm.
- ◆ Pull and Push (“R”) slide stroke models available.
- ◆ Compact sizes (including the GT-NT03-4, among the smallest in the industry).
- ◆ Protective and distinctive blue anodized finish.



Blades sold separately, see page 16

Part Number	Weight (g)	Air Cons. Cm <sup>3</sup> /stroke	Sup. Air Pres. MPA	psi	Slide Stroke (mm)	Fitting Specs.	Cutting Cap mm	
GT-NT03-4	178	27	.4-.5	58-73	Pull	0-3	Push quick connect, 4mm OD hose	1.5
GT-NT03R-4	178	27	.4-.5	58-73	Push	0-3	Push quick connect, 4mm OD hose	1.5
GT-NT05-4	325	47	.4-.5	58-73	Pull	0-3	Push quick connect, 4mm OD hose	2.5
GT-NT05R-4	325	47	.4-.5	58-73	Push	0-3	Push quick connect, 4mm OD hose	2.5
GT-NT10-6	515	82	.4-.5	58-73	Pull	0-3	Push quick connect, 6mm OD hose	3.5
GT-NT10R-6	515	82	.4-.5	58-73	Push	0-3	Push quick connect, 6mm OD hose	3.5
GT-NT20-6	930	237	.5-.6	73-87	Pull	0-8	Push quick connect, 6mm OD hose	5.0
GT-NT20R-6	930	237	.5-.6	73-87	Push	0-8	Push quick connect, 6mm OD hose	5.0



Model No.	A	B	C	D	E	F	G
GT-NT03-4	63.1	62	23.1	15	19	7	43
GT-NT05-4	66.1	64	25.1	20	32	7	45
GT-NT10-6	83.1	73	29.1	21	38	8	53
GT-NT20-6	96.1	103	33.1	21.9	44	10	80

Model No.	H	I	J	K	L	M	O	P
GT-NT03-4	12	14	M3	3	4.9	8	2	68.1
GT-NT05-4	12	20	M4	6	4.9	9	2	71.1
GT-NT10-6	12	24	M4	7	4.9	9	2	88.1
GT-NT20-6	13	28	M5	9	6	12.5	2	102.1

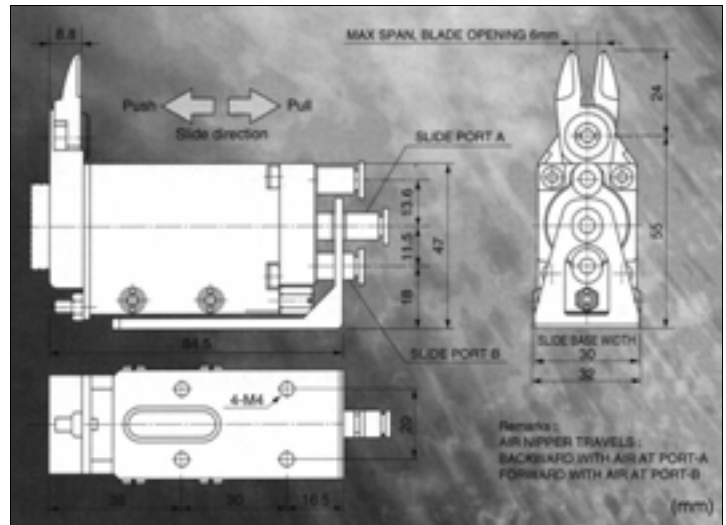
All dimensions are in (mm). Dimension “K” is based on standard “AJ” style blade. Cutting capacities are based on ideal conditions using ABS resin material. Weight does not include blade or accessories.

The GT-NY10S “Ninja” redefines the industry standard for sliding nippers with its unique tracking design.

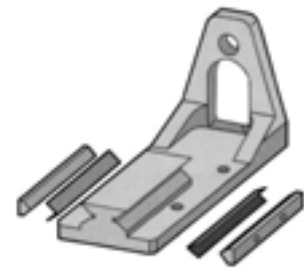
- ◆ Provides a low profile and light weight design.
- ◆ Slide stroke can be adjusted from 0-3mm
- ◆ One touch quick connection fitting standard
- ◆ Adjustable blade opening by special order



Blades sold separately.  
See page 16



The patented design of the “Ninja” utilizes a linear, opposing “V”, slide track with adjustable gibbs, providing the ultimate in accuracy, speed and consistency.



Cutting capacities are based on ideal conditions using ABS resin material.

Part No.	Weight (g) Without blade	Air Cons. Cm <sup>3</sup> /stroke	Supply Air Pressure (psi)	Applied Force N	Applied Force lbf	Slide Range (mm)	Hose Inner Dia. (mm)	Cutting Cap. (ABS Resin)
GT-NY10S	300	68	58-73	500	112	0-3.5	Ø2	Ø3.5mm

**GT-NB SERIES SLIDING NIPPERS**

The NB series provides a sliding base for the GT-NS20 nipper. These units provide the most cutting force of any sliding nipper offered by Vessel. The LW-10 series uses a precision linear rail system, and both forward and reverse 10 mm slide strokes are available.

**GT-NB10LW  
-10TM**

**GT-NB20LW  
-10TM**

**GT-NB30LW  
-10TM**

**GT-NB20**



Blades sold separately,  
See page 15

Model No.	
PUSH	PULL
GT-NB10LW-10SM	GT-NB10LW-10TM
GT-NB20LW-10SM	GT-NB20LW-10TM
GT-NB30LW-10SM	GT-NB30LW-10TM

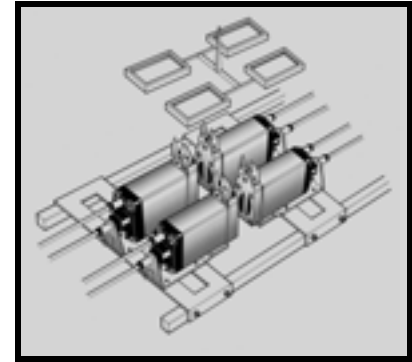
Model No.	Stroke
GT-NB20/5PULL	5 mm Pull
GT-NB20/10PULL	10 mm Pull

## GT-NY SERIES NIPPERS

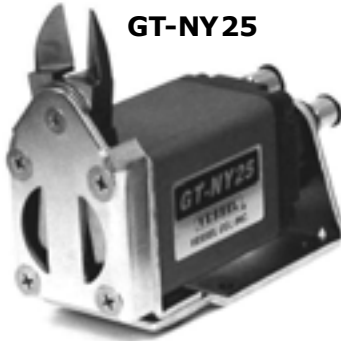
## SLIDING NIPPERS

The GT-NY series is a compact sliding nipper which is ideal for mounting on EOAT or automated machinery.

- ◆ Provides a low profile and light weight design.
- ◆ Two different slide styles available (Pull or Push).
- (See page 16 for corresponding blades)
- ◆ Slide stroke can be adjusted from 0-3mm.
- ◆ One touch quick connection fitting standard.
- ◆ Adjustable blade opening by special order.



GT-NY10-4 (PULL)



GT-NY25



GT-NY15



GT-NY10



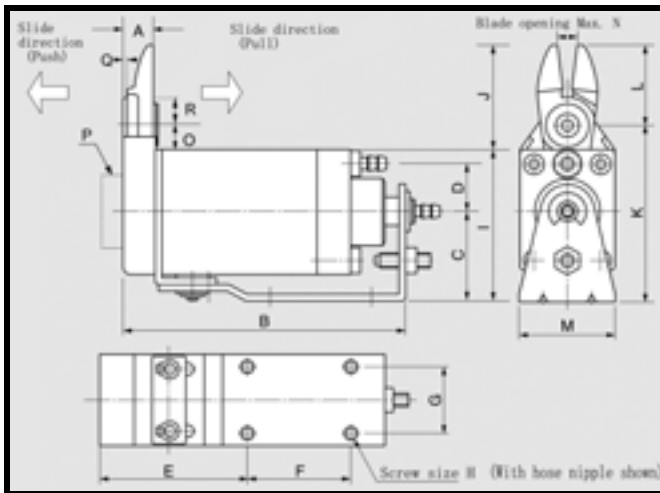
GT-NY05

GT-NY10R-4 (PUSH)



Blades sold separately, See page 16

Part Number	Weight (g)	Air Cons. Cm <sup>3</sup> /stroke	Sup. Air Pres. MPA	psi	Slide Stroke (mm)	Fitting Specs.	Cutting Cap mm
GT-NY05-4	155	48	.4-.5	58-73	Pull 0-3	Push quick connect, 4mm OD hose	3.0
GT-NY05R-4	155	48	.4-.5	58-73	Push 0-3	Push quick connect, 4mm OD hose	3.0
GT-NY10-4	210	68	.4-.5	58-73	Pull 0-3	Push quick connect, 4mm OD hose	3.5
GT-NY10R-4	210	68	.4-.5	58-73	Push 0-3	Push quick connect, 4mm OD hose	3.5
GT-NY15-4	319	136	.4-.5	58-73	Pull 0-3	Push quick connect, 6mm OD hose	4.0
GT-NY15R-4	319	136	.4-.5	58-73	Push 0-3	Push quick connect, 6mm OD hose	4.0
GT-NY25-6	580	184	.5-.6	73-87	Pull 0-5	Push quick connect, 6mm OD hose	5.0
GT-NY25R-6	580	184	.5-.6	73-87	Push 0-5	Push quick connect, 6mm OD hose	5.0



### Dimension Chart

Model No.	A	B	C	D	E	F	G	H	I
GT-NY05-4/(R-4)	8.6	75.9	21.6	13.3	40.9	25	15	M4	39.1
GT-NY10-4/(R-4)	8.8	82.1	26.1	13.8	42.1	30	20	M4	44
GT-NY15-4/(R-4)	10.2	93	30	16	48	35	25	M4	50.5
GT-NY25-6/(R-6)	12.5	108.5	35	18.5	54.5	40	30	M5	58.5

Model No.	J	K	L	M	N	O	P	Q	R
GT-NY05-4/(R-4)	30.5	47.6	22	23	4	8.5	3	1.6	8
GT-NY10-4/(R-4)	31.6	51.6	24	28	6	7.6	5	1.6	8
GT-NY15-4/(R-4)	34.5	58	27	33	8	7.5	5	2	9
GT-NY25-6/(R-6)	41.5	69	31	42	9	10.5	2	2.5	10

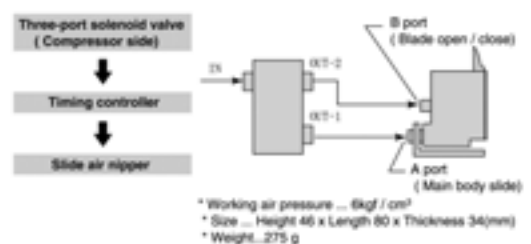
All dimensions are in (mm). Dimensions "L" and "N" are based on standard "AJ" style blade. Cutting capacities are based on ideal conditions using ABS resin material. Weight does not include blade or accessories. Blades sold separately, see page 12 for options.

## TC-02 TIMING CONTROLLER

The TC-02 Timing Controller is used to control one or several sliding nippers. When air is supplied to the controller it provides air flow to the nipper's slide cylinder. After an adjustable time delay it provides air flow to the nipper cut cylinder. Time delay is adjustable between 0.5 - 1.5 seconds.



TC-02



The NF series Nippers are similar to the NY series, but without the sliding motion. These Nippers are lightweight, compact and have mounting holes on three surfaces. Their low profile design makes them a good choice for end of arm tooling.

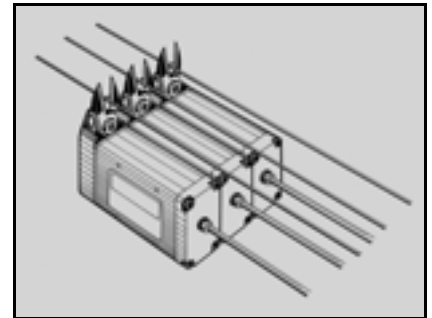
**GT-NF05**



**GT-NF10**



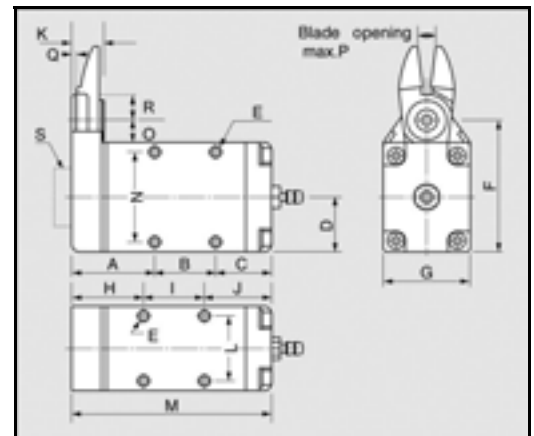
**GT-NF15**



Blades sold separately,  
See page 16

Part No.	Weight (g)	Air cons. Cm <sup>3</sup> /stke	Supply Press.		Cutting cap. Ø mm		
			MPA	psi	ABS	Copper	Steel
GT-NF05	101	43	.4-.5	58-73	3.0	1.6	1.0
GT-NF10	143	63	.4-.5	58-73	3.5	1.7	1.1
GT-NF15	219	128	.4-.5	58-73	4.0	1.8	1.2

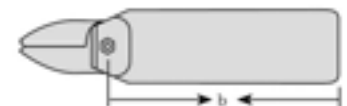
Part No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
GT-NF05	25.9	17	17	15.5	M3	39.5	23	21.9	17	21	8.6	18	59.9	26	8.5	4	3	8	8
GT-NF10	27.1	20	18	18	M3.5	43.5	28	23.1	20	22	8.8	22	65.1	30	7.6	6	5	8	8
GT-NF15	29	25	19	20.5	M4	48.5	33	25	25	23	10.2	26	73	34	7.5	8	5	9	9



All dimensions are in (mm). Dimension "P" is based on standard "AJ" style blade. Cutting capacities are based on ideal conditions. Weight does not include blade or accessories.

**DOUBLE ACTION NIPPERS & SCISSORS PATENTED**

Double Acting Nippers are ideal for mounting in automated equipment with high production rates. The double action eliminates the blade return spring. These nippers require minimum blade maintenance which make them suitable for longer production runs.



Blades sold separately, See page 17

**Double Action Air Nipper**

**NW Nipper Series**



**GT-NWR30**



**GT-NWS30**

Part Number	(B) mm	Body Dia. mm	Weight (g)	Air Con. Cm <sup>3</sup> /stroke	Supply Air Pressure		Applied Force		Cutting Cap. Ø (mm)		
					MPA	psi	N	lbf	Copper	Steel	Plastic
GT-NWS1	95	23X20	116	45	.4-.5	58-73	294	66	1.0	0.5	2.0
GT-NWS10	146	36	356	116	.4-.5	58-73	588	132	1.8	1.2	4.0
GT-NWS20	165	45	610	230	.5-.6	73-87	1372	309	2.6	2.0	6.5
GT-NWR30	216	56	1,150	584	.5-.6	73-85	2744	617	3.3	2.8	6.5
GT-NWS30	216	56	1,150	584	.5-.6	73-85	2744	617	3.3	2.8	6.5

**HW Scissor Series (Scissor Blades Included)**

**Double Action Air Scissors**

Part Number	(B) mm	Body Dia. mm	Weight (g)	Air Cons. Cm <sup>3</sup> /stroke	Supply Air Pressure		Applied Force		Cut Cap. Ø (mm)		
					MPA	psi	N	lbf	Copper	Steel	Plastic
GT-HWR1	95	20	84	45	.4-.5	58-73	294	66	1.0	0.5	
GT-HWS1	95	23X20	84	45	.4-.5	58-73	294	66	1.0	0.5	
GT-HWS10	146	36	356	116	.4-.5	58-73	588	132	1.8	1.2	
GT-HWS20	165	45	610	230	.5-.6	73-87	1372	309	2.6	2.0	



**GT-HWR1**



**GT-HWS1**

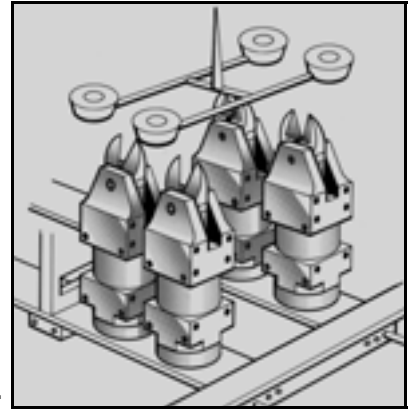
Cutting capacities are based on ideal conditions.

# GT-NS SERIES NIPPERS

# STATIONARY NIPPERS

The square body of the NS Series Air Nipper simplifies mounting and installation.

- ◆ Pre-tapped mounting holes on five sides.
- ◆ Two air inlet ports for versatility.
- ◆ Rotating endcap can change the orientation of the air inlet port.
- ◆ A range of nine sizes to choose from.



**GT-NS50**



**GT-NS30**



**GT-NS20 GT-NS12**



**GT-NS10L**



**GT-NS5**

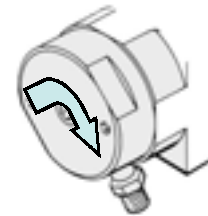


**GT-NS3**

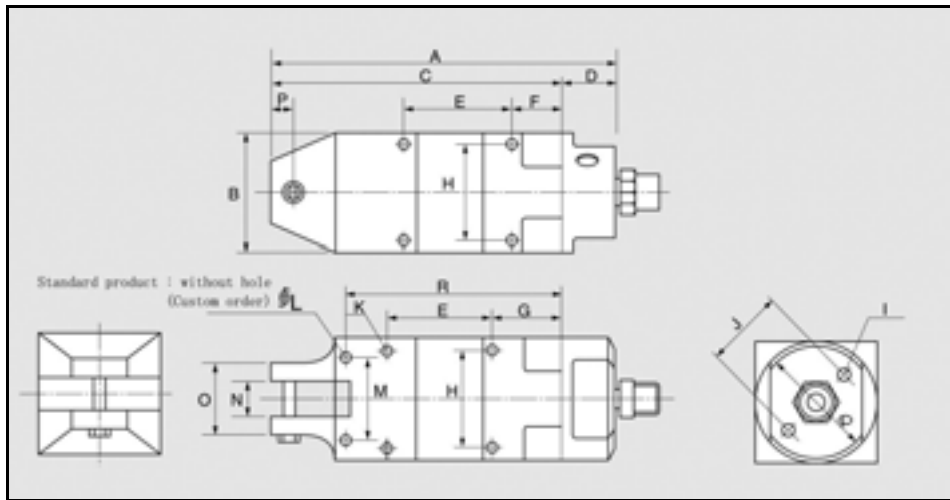


Part Number	Weight (g)	Air Cons. Cm <sup>3</sup> /stroke	Supply Air Pressure		Applied Force		Cutting Capacity Ø (mm)							
			MPa	psi	N	lbf	Copper	Steel	Piano Wire	Plastics	Hard Plastic	Bare Term.		
GT-NS2	85	35	0.4-0.5	58-73	264	59	1.0	0.5						
GT-NS3	95	45	0.4-0.5	58-73	294	66	1.0	0.5	0.2	2.0				
GT-NS5	135	64	0.4-0.5	58-73	392	88	1.0	0.5	0.2	2.0				
GT-NS7	215	116	0.4-0.5	58-73	490	110	1.6	1.0	0.5	3.0	2.0			
GT-NS10L	230	116	0.4-0.6	58-87	588	132	1.8	1.2	0.5	4.0	2.6			
GT-NS12	270	116	0.5-0.6	73-87	735	165	2.3	1.7	0.6	4.5	4.0			
GT-NS20	370	230	0.5-0.6	73-87	1372	309	2.6	2.0	1.0	7.0	5.0			
GT-NS30	685	584	0.5-0.6	73-87	2744	617	3.3	2.8	1.2	10.0	6.5	CE1.25/2.0		
GT-NS50	1675	1,170	0.5-0.6	73-87	4704	1,058	5.5	4.5	1.6	12.0	6.5	CE5.0/2.0		

Blades sold separately, See page 15



The endcap can be rotated to change the position of the air port

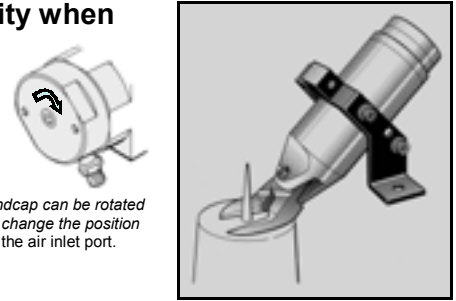


Model No.	A	B	C	D	E	F	G	H	I	J	K	ØL	M	N	O	P	R
GT-NS2	109	20	88	21	40	19	24	16	-	-	M3 x 4	-	-	7	20	6	-
GT-NS3	110	23	89	21	40	19	24	19	M3 x 8.0 Deep	17	M3 x 3.5 Deep	3.3	14	7	23	7	71
GT-NS5	94	30	74	20	30	14	19	24	M4 x 10 Deep	20	M3 x 5.0 Deep	4.3	20	7	23	7	55
GT-NS7	113	36	93	20	30	18	23	28	M4 x 10 Deep	24	M4 x 5.5 Deep	4.3	28	9	23	7	65
GT-NS10L	113	36	93	20	30	18	23	28	M4 x 10 Deep	24	M4 x 5.5 Deep	4.3	28	12	26	7	65
GT-NS12	131	36	111	20	47	18	23	28	M4 x 7.0 Deep	24	M4 x 8.0 Deep	N/A	N/A	12	26	8	N/A
GT-NS20	129	45	109	20	40	19	24	36	M4 x 12 Deep	30	M4 x 7.0 Deep	5.3	30	12	26	9	81
GT-NS30	170	56	150	20	60	20	30	46	M5 x 12 Deep	40	M5 x 10 Deep	5.3	40	17	36	15	110
GT-NS50	222	75	200	22	75	13	23	62	M6 x 12 Deep	50	M8 x 16 Deep	N/A	N/A	25.2	43	15	N/A

All dimensions are in (mm). Cutting capacities are based on ideal conditions. Weight does not include blade or accessories.

Round Body Mountable Air Nippers offer versatility and adjustability when fixtured with mounting clamps and brackets.

- ◆ Rotating endcap can change the orientation of the air inlet port.
- ◆ Mounting holes provided for vertical mounting.



Endcap can be rotated to change the position of the air inlet port.

See the "End of Arm Tooling" section in this catalog for mounting options.



**GT-NR50**



**GT-NR30**



**GT-NR20**



**GT-NR12**



**GT-NR10L**



**GT-NR7**



**GT-NR5**



**GT-NR3**



Blades sold separately, See page 15

Part Number	Overall Length mm	Body Dia. mm	Weight (g)	Air cons. Cm <sup>3</sup> /stroke	Supply Air Pressure		Applied Force		Cutting Capacity Ø (mm)					
					MPA	psi	N	lbf	Copper	Steel	Piano Wire	Plastics	Hard Plastic	Bare Term.
GT-NR3	110	23	70	45	.4-.5	58-73	294	66	1.0	0.5	0.2	2.0		
GT-NR5	94	30	110	64	.4-.5	58-73	392	88	1.0	0.5	0.2	2.0		
GT-NR7	113	34	150	116	.4-.5	58-73	490	110	1.6	1.0	0.5	3.0	2.0	
GT-NR10L	113	36	215	116	.4-.6	58-87	588	132	1.8	1.2		4.0	2.6	
GT-NR12	131	36	190	116	.5-.6	73-87	735	165	2.3	1.7	0.6	4.5	4.0	
GT-NR20	129	45	280	230	.5-.6	73-87	1372	309	2.6	2.0	1.0	7.0	5.0	
GT-NR30	165	56	505	584	.5-.6	73-87	2744	617	3.3	2.8	1.2	10.0	6.5	CE1.25/2.0
GT-NR50	222	75	1,190	1,170	.5-.6	73-87	4704	1,058	5.5	4.5	1.6	12.0	6.5	CE2.0/5.5

Cutting capacities are based on ideal conditions. Weight does not include blade or accessories.

**INTENSIFIERS (Pressure Booster)**

Intensifiers are used as a supplement for low supply air pressure.

They can be used with the 10L, 20, 30 and 50 sizes of Vessel Air Nippers.

- ◆ Ideal for facilities with low air pressure.
- ◆ Use to increase the applied force of a standard nipper.
- ◆ For use on N (hand-held), NR (round) and NS (square) models.

**GT-NSP30**

Disassembled for illustration



**GT-NRP20**



**GT-NP30**



**GT-NP50**



Part No. Booster only	Part No. With NR nipper	Part No. With NS nipper	Part No. With N nipper	OAL of Booster (mm)	Body Dia. (mm)	Weight (g)	Air con Cm <sup>3</sup> /Stroke	Applied Force		Cutting Capacity Ø (mm)				
								N	lbf	Copper	Steal	Piano Wire	Plastic	Hard Plastic
P10L	GT-NRP10L	GT-NSP10L	GT-NP10L	71	36	115	223	980	221	2.6	1.6		5.0	4.0
P-20	GT-NRP20	GT-NSP20	GT-NP20	87	45	215	508	2,254	507	3.0	2.2	1.2	8.0	6.0
P-30	GT-NRP30	GT-NSP30	GT-NP30	92	56	330	956	4,410	992	4.8	4.0	1.2	13.0	7.0
P-50	GT-NRP50	GT-NSP50	GT-NP50	133	75	840	2,670	7,742	1,742	6.5	5.5	2.0		

Cutting capacities are based on ideal conditions. Weight and length are for intensifier only, add values to nipper and blade.



## GT-N SERIES NIPPERS

Hand Held Air Nippers with Safety Lever reduce fatigue and repetitive motion problems.

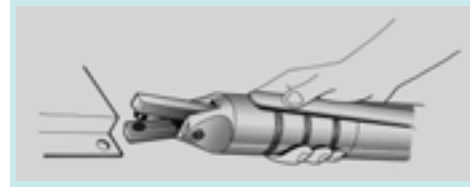
- ◆ Knurled housing for a secure and comfortable grip
- ◆ Eight sizes to choose from for comfort and convenience
- ◆ Hundreds of blades to choose from for cutting, crimping and custom applications.



## STATIONARY NIPPERS

### 850401 Cover

- ◆ Nipper cover for GT-N20
- ◆ Improves ergonomics
- ◆ Comfortable rubber grip



Air hose available on page 27

Blades sold Separately. See page 15

GT-N50



GT-N30



GT-N20



GT-N12



GT-N10



GT-N7



GT-N5



GT-N3



Part Number	Overall Length (mm)	Body Dia. (mm)	Weight (g)	Air Cons. Cm <sup>3</sup> /Stroke	Supply Air Pressure		Applied Force		Cutting Capacity Ø (mm)					
					MPA	psi	N	lbf	Copper	Steel	Piano Wire	Plastic	Hard Plastic	Bare Term.
GT-N3	112	23	95	45	0.4-0.5	58-73	294	66	1.0	0.5	0.2	2.0		
GT-N5	103	30	135	64	0.4-0.5	58-73	392	88	1.0	0.5	0.2	2.0		
GT-N7	123	34	180	116	0.4-0.5	58-73	490	110	1.6	1.0	0.5	3.0	2.0	
GT-N10	132	34	185	116	0.4-0.6	58-87	588	132	1.8	1.2	0.5	4.0	2.6	
GT-N12	142	36	210	116	0.5-0.6	73-87	735	165	2.3	1.7	0.6	4.5	4.0	
GT-N20	156	45	375	230	0.5-0.6	73-87	1372	309	2.6	2.0	1.0	7.0	5.0	
GT-N30	193	56	625	584	0.5-0.6	73-87	2744	617	3.3	2.8	1.2	10.0	6.5	1.25/2.0 MM <sup>2</sup>
GT-N50	237	75	1220	1,170	0.5-0.6	73-87	4704	1,058	5.5	4.5	1.6	12.0	6.5	C. TERM. 8.0mm <sup>2</sup>

Cutting capacities are based on ideal conditions. Weight does not include blades or accessories. 1/8 or 1/4 NPT male fitting provided.

## GT-NH SERIES HEATED NIPPER

## SPECIAL NIPPERS



The NH series is a heated degating set, complete with nipper, special blade, digital temperature controller and speed control valve. These units are ideal for cutting and degating acrylics and other brittle plastics which tend to crack when cut with conventional degating tools.

- ◆ Fully heat insulated nipper with ergonomic rubber grip and Safety Lever
- ◆ Maximum Temp: 392 °f
- ◆ Hand Held model includes Safety Lever and Cut-Off Valve
- ◆ Also available in 220V

Part No.	Body Style	Dim. "A" (mm)	Dim. "B" (mm)	Wt. (lbs)	Supp. Air Pressure (psi)	Applied Force (lbf)	Cutting Speed (sec)	Cutting Cap. acrylic
GT-NH20S	Hand held	208	56	1.9	72-87	309	4-5	Ø6, □ 5

Weight does not include accessories. Hose coupling 1/4" NPT. Set includes blade.



**Create your own Heated Nipper Set.**

It is now easy to create a custom heated nipper and blade set for your application. Simply combine a Heated Nipper Part No.& a Heated Blade DWG Ref. All heated Nipper Sets include Nipper, blade, and heat control.

Example: GT-NHR30S/AB

(GT-NHR20S round heated nipper with a NH20AB heated blade)

**GT-NHR30S/AB**



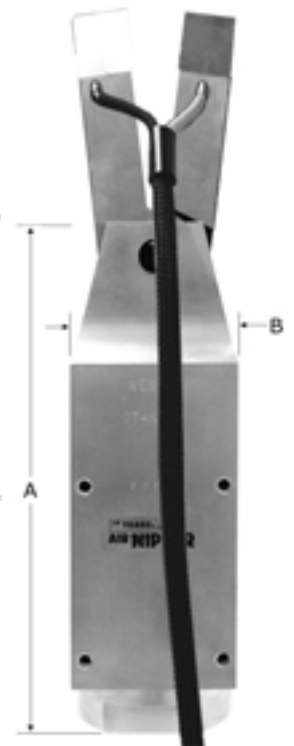
**GT-NH20 NIPPERS**

Part No.	Body Style	Dim. "A" (mm)	Dim. "B" (mm)	Wt. (g)
GT-NH20S	Hand Held	255	55	425
GT-NHR20S	Round Mountable	193	45	280
GT-NHS20S	Square Mountable	193	45	370
GT-NHB20S	Sliding (Push/Pull)	-	-	755

**GT-NH20 BLADES**

Part No.	Dim. A (mm)	Dim. B (mm)	DWG Ref
NH20AA	12	25	AB
NH20AJL	16	20	AJL
NH20AML	13	36	AM
NH20AMR	13	36	AM

**GT-NHS50S/AB**



**GT-NH30 NIPPERS**

Part No.	Body Style	Dim. "A" (mm)	Dim. "B" (mm)	Wt. (g)
GT-NH30S	Hand Held	193	56	625
GT-NHR30S	Round Mountable	165	56	505
GT-NHS30S	Square Mountable	170	56	685
GT-NHB30S	Sliding (Push/Pull)	-	-	1435

**GT-NH30 BLADES**

Part No.	Dim. A (mm)	Dim. B (mm)	DWG Ref
NH30AB	9	25	AB
NH30AJL	19	25	AJL
NH30AML	13	35	AM
NH30AMR	13	35	AM

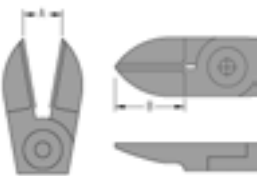
**GT-NH50 NIPPERS**

Part No.	Body Style	Dim. "A" (mm)	Dim. "B" (mm)	Wt. (g)
GT-NH50S	Hand Held	237	75	1220
GT-NHR50S	Round Mountable	222	75	1190
GT-NHS50S	Square Mountable	222	75	1675

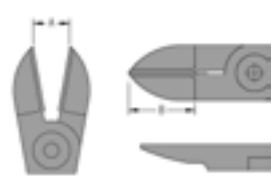
**GT-NH50 BLADES**

Part No.	Dim. A (mm)	Dim. B (mm)	DWG Ref
NH50AB	21	90	AB
NH50AJL	26	110	AJL
NH50AL	20	84	AL

**AB**



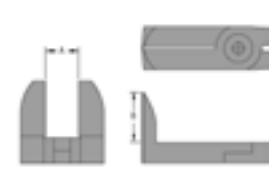
**AJL**



**AK**

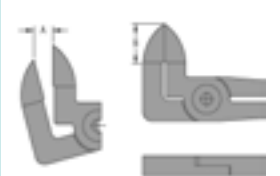


**AL**



**AM**

AML=Left / AMR=Right



**HEATED NIPPERS**

JDV Products Sprue Cutters are the ideal tool for cutting sprues up to one inch in diameter.



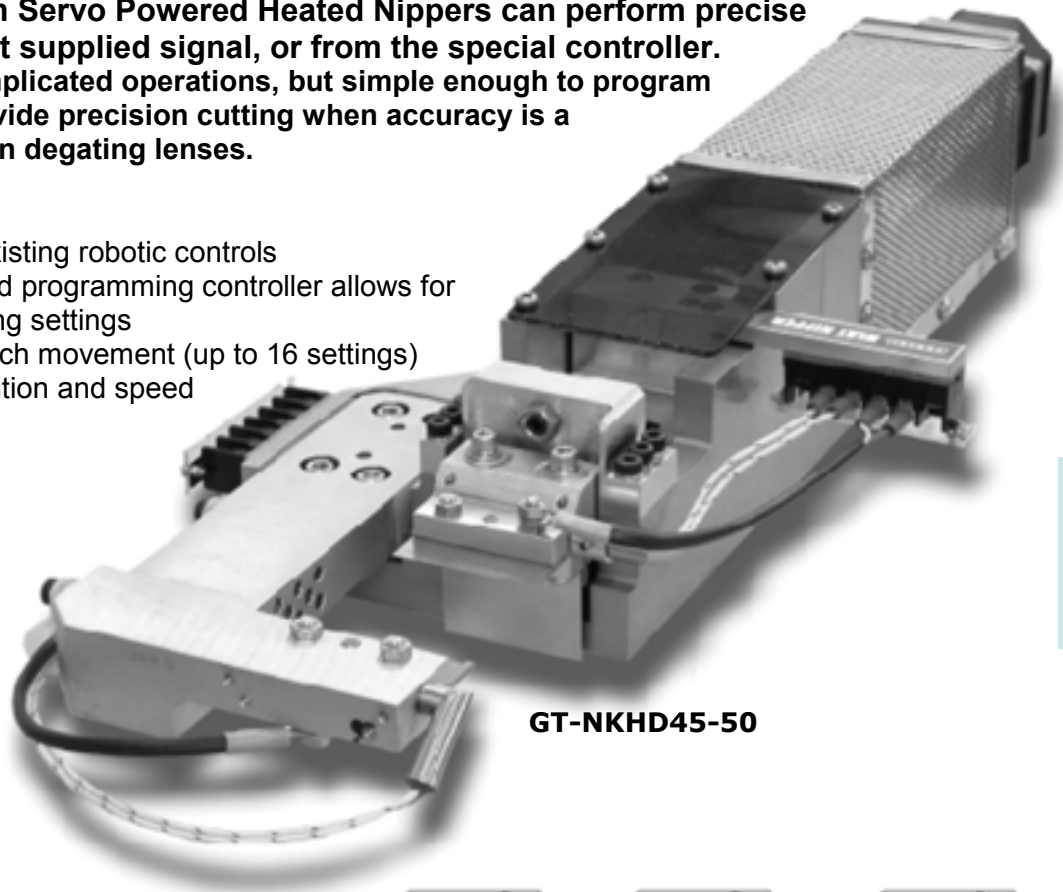
**GT-NSPH50S**  
Shown with HC-20 heat controller

The GT-NKHD Precision Servo Powered Heated Nippers can perform precise movements with a robot supplied signal, or from the special controller. Capable of providing complicated operations, but simple enough to program yourself. These units provide precision cutting when accuracy is a necessity, especially when degating lenses.

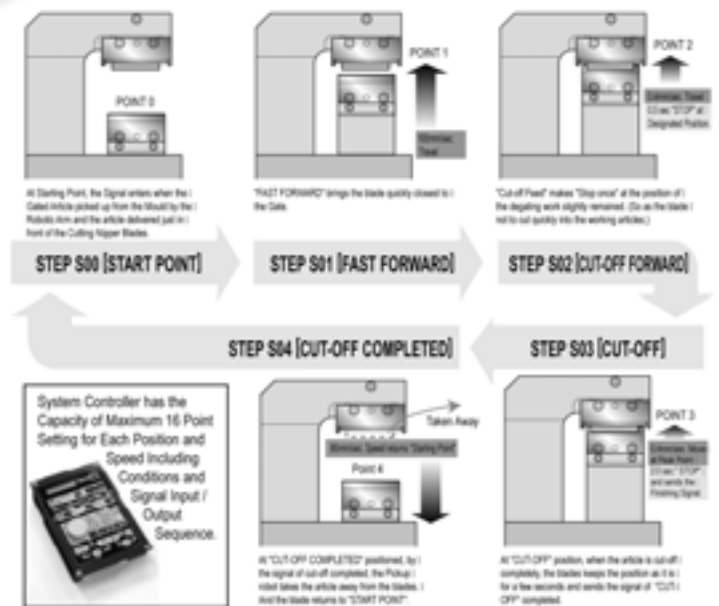
- ◆ High thrust power
- ◆ Easily integrated into existing robotic controls
- ◆ Easy to use, full featured programming controller allows for quick setup and changing settings
- ◆ Accurate settings for each movement (up to 16 settings)
- ◆ Precise settings for position and speed



**GT-NKHD20-10**



**GT-NKHD45-50**



**HEAT CONTROLLERS**

**Heat Control Features:**

- ◆ Auto-tune controller with digital display
- ◆ Temperature range ambient - 400°f
- ◆ 50 watt cartridge heater
- ◆ 115VAC input voltage
- ◆ Machine mountable
- ◆ Teflon® jacketed leads
- ◆ Up to 2 outputs with the HC-20
- ◆ Up to 6 outputs with the HC-30

**HC-20**



**HC-30**



**GT-NKH series is a line of nippers for cutting fan gates.** Each unit is custom built to the requirements of your application. Options include different bore sizes, blade sizes and a heat package. The heat package provides a better cutting finish, the ability to cut larger gates, cuts brittle materials without cracking, and provides a longer blade life.

*Blades are included*

**GT-NKH40-63**



**GT-NKH20R-40**



**GT-NKH20-25**



**DG2-100**

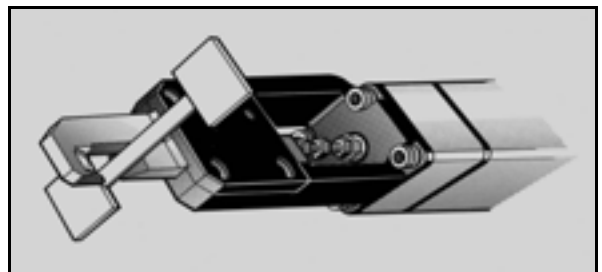


**GT-NK10 THRUST CUT NIPPER**

**SPECIAL NIPPERS**

The **GT-NK10 Thrust Cut** is ideal for cutting **small fan gates**. This small, lightweight, and compact unit fits into limited spaces and between tight gate/runner configurations. Blade opening can be adjusted between 0-12mm. Pre-tapped mounting holes are provided for easy installation.

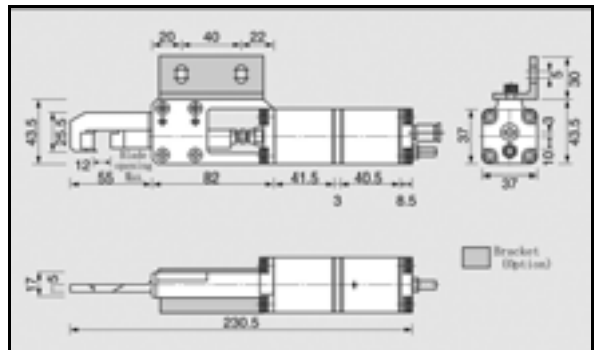
- ◆ Unit includes blades and 6mm fitting.



*Blades sold separately,  
See page 17*



**GT-NK10**



Part Number	Weight (g)	Air Cons. Cm <sup>3</sup> /Stroke	Working Air Pressure	Cutting CapØ (mm) ABS	Hose size mm	Stroke mm
GT-NK10	800	110	0.4-0.5 MPA 57-71 psi	5	ID-4,OD-6	12 max

*Cutting capacities are based on ideal conditions.*

JDV's Thrust Cut nippers, available with optional heat package, are designed to withstand the demands of high volume production. The TC-63 nippers are capable of cutting fan gates as wide as 3 inches, while the TC-40 can cut fan gates as wide as 1-1/2".

**TCH-40R Heated Nipper  
(Right Hand)**



**TC-63L  
(Left Hand)**



**Standard Features:**

- ◆ High speed steel blades (TC-63)
- ◆ Alloy steel blades (TC-40)
- ◆ Double acting cylinders  
Tandem 63mm (TC-63) provides twice the cutting force  
Single 40mm on the TC-40
- ◆ Teflon® coated blades

**Optional Features:**

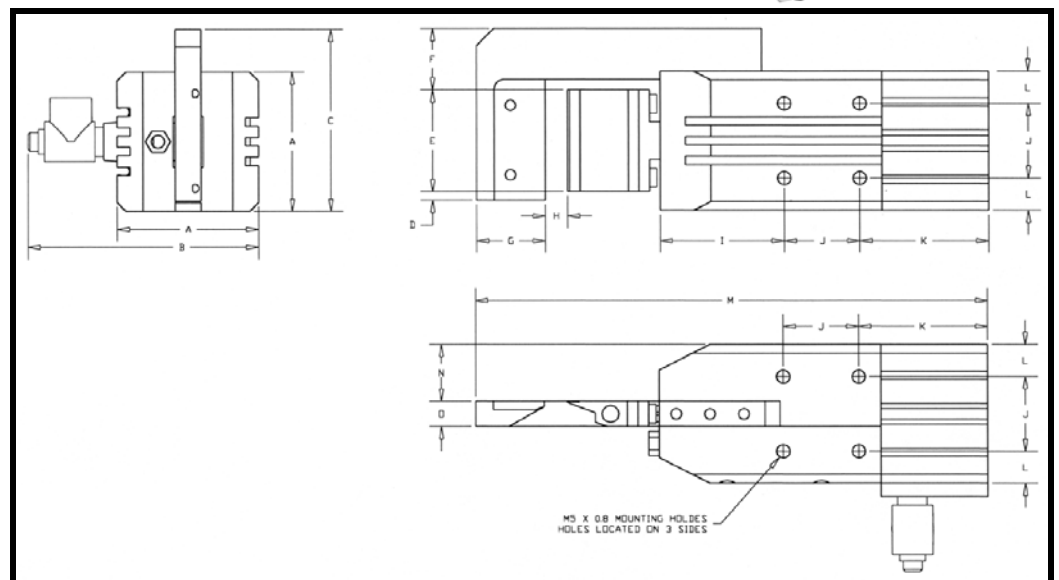
- ◆ High speed steel blades for the TC-40
- ◆ Tandem 40mm double acting cylinder for the TC-40
- ◆ Heated blades for both TC-40 and TC-63

Part No.	Description	Weight (g)
TC-40R	Right hand unit no heat	1315
TC-40L	Left hand unit no heat	1315
TC-63R	Right hand unit no heat	4218
TC-63L	Left hand unit no heat	4218
TCH-40R	Right hand with heat pkg.	1669 *
TCH-40L	Left hand with 0 heat pkg.	1669 *
TCH-63R	Right hand with HC-20 heat pkg.	4572 *
TCH-63L	Left hand with HC-20 heat pkg.	4572 *

\* Weight includes HC-20 Heat Controller (included with TCH series)



Optional Linear Slide available  
See Page 24.



Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
TC-40	52.0	86.0	67.9	3.2	38.1	22.8	25.7	9.0	46.3	28.0	47.7	12.0	190.9	21.2	9.5
TC-63	77.0	115.0	102.0	0	76.2	25.4	32.8	19.0	82.0	34.0	130.7	21.5	332.4	32.2	12.7



**GT-HR120K**



Hand Held unit with Safety Lever and Shut-Off valve. Sold standard with H120SK shearing blades (as shown).

**H120K Blade Options:**

H120SKE - Micro Groove Serrations for cutting thin steel plate, rubber and cardboard

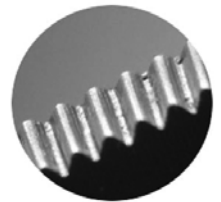
Available in both hand-held and round models

Part No.	Overall Length (mm)	Dia. (mm)	Weight (g)	Air Cons. Cm <sup>3</sup> /stroke	Cutting Capacity (mm)	Blade Opening (mm)	Cutting Surface (mm)
GT-H120K	211	36	340	116	0.4 Fabric	15	38
GT-HR120K	200	36	310	116	0.4 Fabric	15	38

**GT-H SERIES KEVLAR SCISSORS**



The H Series Scissor Nippers are specifically designed to cut Kevlar, Kevlar fabrics, Zylon, synthetic yarns, fiber optic tapes, gum tapes and other tough fibrous materials. Blades are made from superior quality High Speed Steel for maximum durability and wear resistance. Cutting edges are serrated with micro grooves for the cleanest and most accurate cut.



**Micro Serrations**

Additional and replacement Blades on page 17



**GT-H12K**

**Light-Duty** Hand Held unit with Safety Latch Activation Lever and Shut-Off valve. Sold standard with H12ME30K shearing blades (shown above) Also available in round model (GT-HR12K)



**GT-H30**

Hand Held unit with Safety Lever and Shut-Off valve. Sold standard with H30ME shearing blades (shown above). Also available in round model (GT-HR30)



**GT-HS30**

Square, mountable body come with 18 pre-tapped M5 holes for quick and secure mounting. Sold standard with H30ME shearing blades (shown above).

Part No.	Overall Length (mm)	Dia. (mm)	Weight (g)	Air Cons. Cm <sup>3</sup> /stroke	Cutting Capacity (mm)	Blade Opening	Cutting Surface
GT-H12K	186 mm	36	290	116	0.3 Kevlar	17 mm	28 mm
GT-HS30	260 mm	56	970	584	1 Kevlar	26 mm	52 mm
GT-H30	280 mm	56	1030	584	1 Kevlar	34 mm	67 mm



**CB-123 AIR CONTROL BOX**

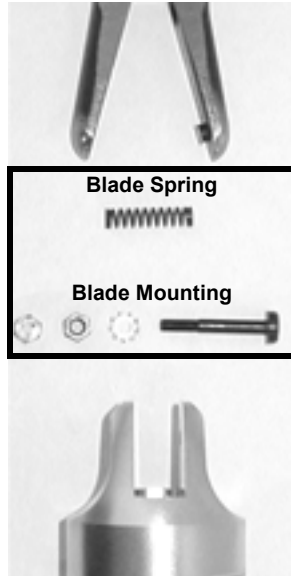
- ◆ Air cycling control box to actuate nippers without safety lever
- ◆ 3 ports of regulated air supply
- ◆ Minimum of 1 cycle per 1 hour 20 minutes  
Maximum of 1 cycle per 0.3 second (180 cycles per minute) (adjustable anywhere in between)
- ◆ 110V model # CB-123 , 220V model # CB-223

## STATIONARY NIPPER SPARE PARTS

### Mounting Pin Assemblies

#### N & NR Nippers

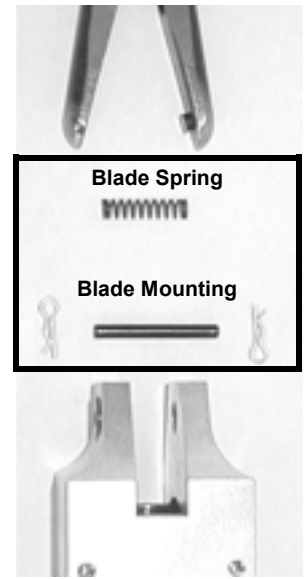
Part Number	Nipper Serviced
BA-HR3	GT-NR3
BA-HR5	GT-NR5
BA-HR7	GT-NR7
BA-HR10L	GT-NR10L
BA-HR12	GT-NR12
BA-HR20	GT-NR20
BA-HR30	GT-NR30
BA-HR50	GT-NR50



### Mounting Pin Assemblies

#### NS Nippers

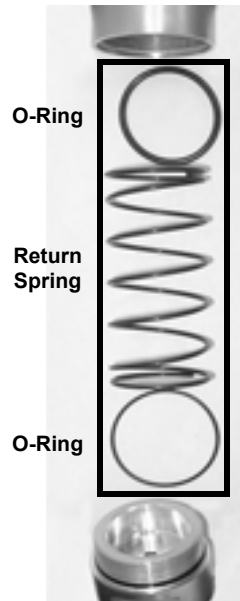
Part Number	Nipper Serviced
BA-S2	GT-NS2
BA-S3	GT-NS3
BA-S5	GT-NS5
BA-S7	GT-NS7
BA-S10	GT-NS10L
BA-S12	GT-NS12
BA-S20	GT-NS20
BA-S30	GT-NS30
BA-S50	GT-NS50



### Return Assemblies

#### N & NR Nippers

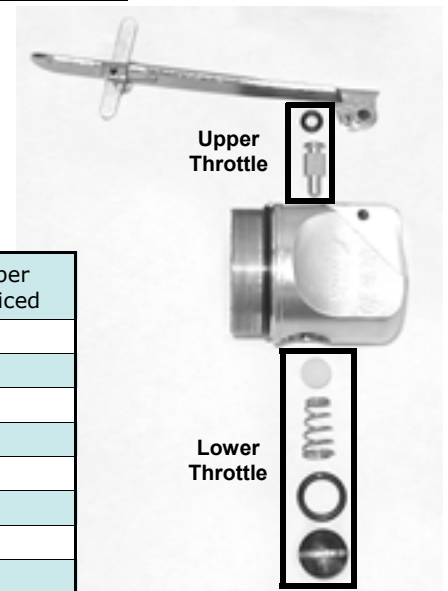
Part Number	Nipper Serviced	
RA-HRS3	GT-N3	GT-NR3
RA-HRS5	GT-N5	GT-NR5
RA-HRS7	GT-N7	GT-NR7
RA-HRS10	GT-N10	GT-NR10L
RA-HRS12	GT-N12	GT-NR12
RA-HRS20	GT-N20	GT-NR20
RA-HRS30	GT-N30	GT-NR30
RA-HRS50	GT-N50	GT-NR50



### Throttle Assemblies

#### N Nippers

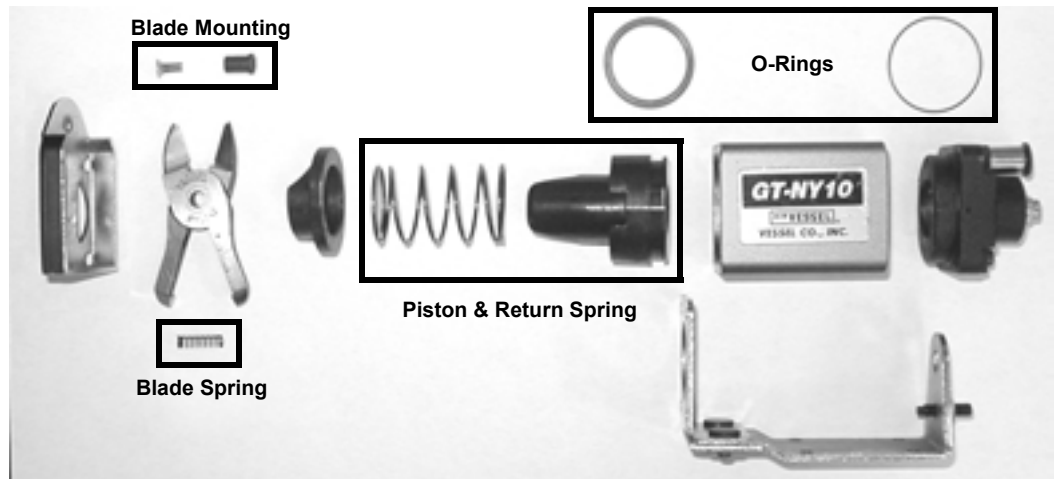
Part Number	Nipper Serviced
TA-H3	GT-N3
TA-H5	GT-N5
TA-H7	GT-N7
TA-H10	GT-N10
TA-H12	GT-N12
TA-H20	GT-N20
TA-H30	GT-N30
TA-H50	GT-N50



## SLIDING NIPPER SPARE PARTS

### GT-NY Rebuild Kit

Part Number	Nipper Serviced
RK-NY05	GT-NY05
RK-NY10	GT-NY10
RK-NY15	GT-NY15
RK-NY25	GT-NY25



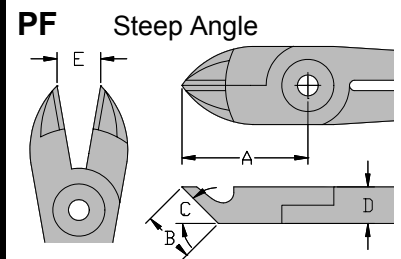
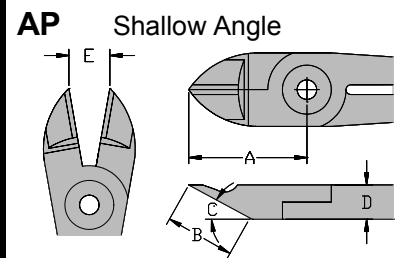
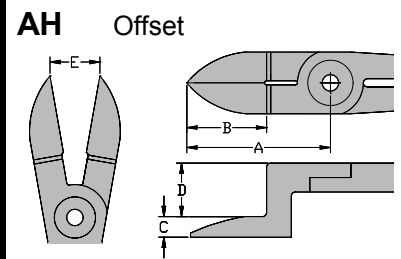
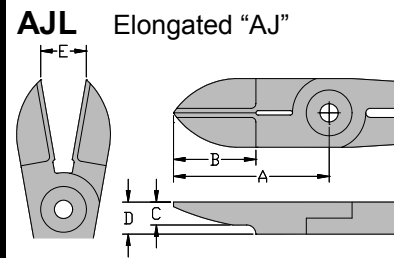
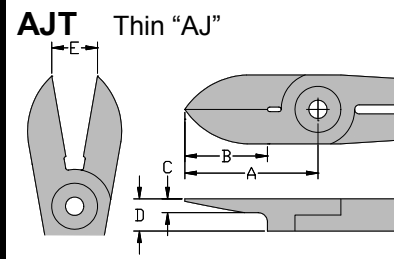
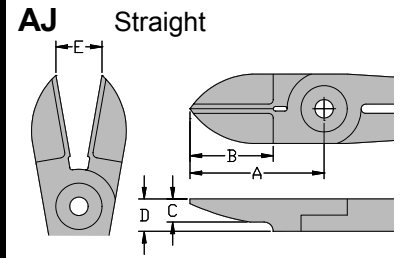
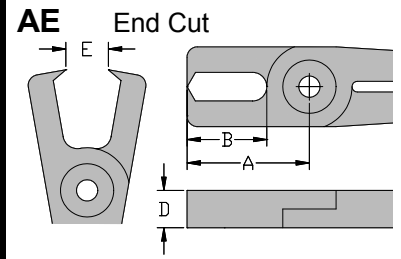
# STANDARD BLADES

# BLADES

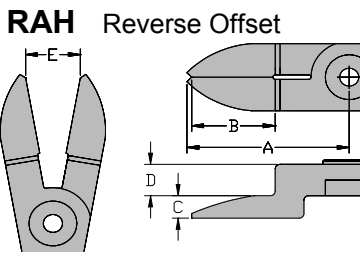
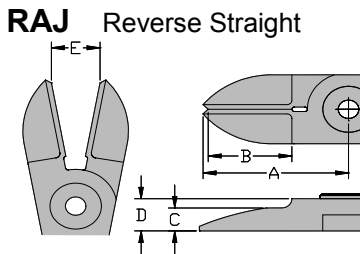
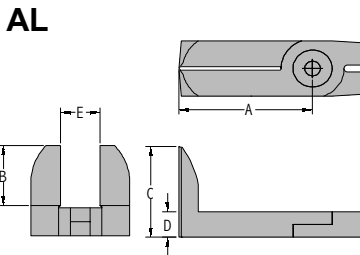
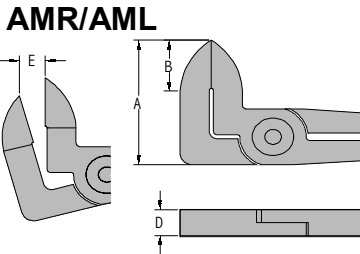
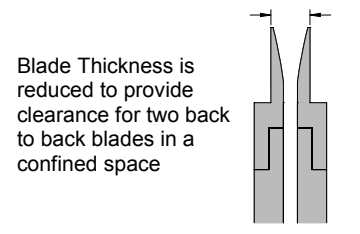
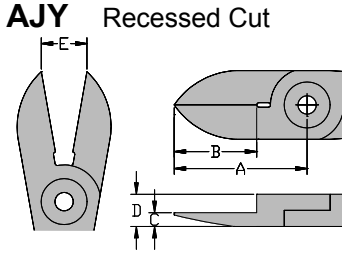
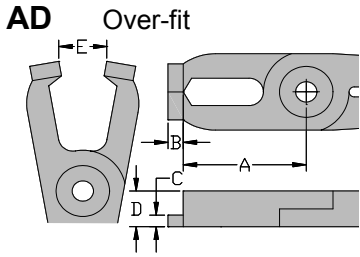
JDV is proud to have the most diverse line of standard Air Nipper blades in the industry. The following is a list of our most common Air Nipper blades. Simply find the appropriate chart based on the size and style of nipper which you've selected. Reference to the corresponding drawing to select the blade style. If none of these options suit your application, then review the following pages for alternative, special, or custom designs.



Nipper Model	Standard Part #	Additional Versions Available Part #		DWG Ref	Dimensions (mm)					Cutting capacity (mm)		Weight (g)
	Alloy	Carbide	High Speed Steel		A	B	C	D	E	Plastic	Hard Plastic	
GT-N3 NR3 NS3 NS2	N3AE			AE	20	7	-	7	3.5	2.0		35
	N3AJ			AJ	24	12	4	7	5.5	2.0		
	N3AJT			AJT	24	12	2.3	7	5.5	2.0		
	N3AJY			AJY	24	12	2.5	7	5.5	2.0		
	N3AP	N3APB		AP	24	11	15°	7	4	2.0		35
GT-N5 NR5 NS5	N5AE	N5AEB315		AE	20	7	-	7	3.5	2.0		40
	N5AP	N5ABB380		AP	24	13	15°	7	4	2.0		40
	N5AS	N5BBB385		AS	24	13	25°	7	4			40
GT-N7 NR7 NS7	N7AE	N7AEB	N7AEH150	AE	26	9	-	9	4	3.0	2.0	85
	N7AP		N7HS	AP	27	14	30°	9	4	3.0	2.0	80
	N7PF			PF	27	10	40°	9	4	3.0	2.0	80
GT-N10	N10AP			AP	27	14	30°	9	5	4.0	2.6	85
GT-NR10L NS10L	N10LAB2			AJ	61	36	7	12	10	4.0	2.6	
	N10LAP			AP	35	16	15°	12	5	4.0	2.6	120
	N10LPF			PF	35	13	45°	12	5	4.0	2.6	120
GT-N12 NR12 NS12	N12AA27			AP	45	25	23°	12	7.5			
	N12AP			AP	35	21	30°	12	5			135
	N12PF			PF	35	14	40°	12	6.5	4.5	4.0	
GT-N20 NR20 NS20	N20AA239	N20AAB825	N20AAH693	AP	-	37	40°	12	14			
	N20AA27			AP	45	25	23°	12	12	7.0	5.0	
	N20AB39	N20AJB1118		AJ	61	36	7	12	14	7.0	5.0	
	N20AE	N20AEB113	N20AEH727	AE	28	15	-	12	8	7.0	5.0	135
	N20AEL			AE	48	31	-	12	13	5.0	3.0	
	N20AH			AH	60	23	4	24	16	6.0	4.0	240
	N20AJ	N20AJB875	N20AJH1099	AJ	35	18	8	12	11	7.0	5.0	125
	N20AJL	N20AJLB1004	N20AJLH	AJL	65	20	4	12	16	6.0	4.0	230
	N20AJT			AJT	35	18	3	12	11	6.0	4.0	
	N20AJY			AJY	40	19	5	12	10	6.0	4.0	
	N20AL			AL	45	19	32	12	12			
	N20AML			AM	68	36	-	17	13			
	N20AMR			AM	68	36	-	17	13			
N20AP	N20APB629	N20APH740	AP	35	18	15°	12	9.5	7.0	5.0	125	
N20PF	N20PFB544	N20ABH1220	PF	35	14	40°	12	9.5	7.0	5.0	130	
GT-N30 NR30 NS30	N30AA114	N30AAB513		AP	76	50	30°	17	20			
	N30AA165			AP	76	50	40°	17	20			
	N30AE			AE	45	28	-	17	12	10	6.5	395
	N30AE767			AE	60	43	-	17	16	8.5	4.5	
	N30AH			AH	80	32	8	57	22			
	N30AJ	N30AJB712		AJ	52	28	8	17	11	10	6.5	370
	N30AJL	N30AJB779	N30AJH1015	AJL	75	25	8	17	19	8.0	5.0	470
	N30AL	N30ALB		AL	50	35	54	17	14			
	N30AP	N30ABB241		AP	66	38	15°	17	16	10	6.5	380
	N30AML			AM	68	35	-	17	13			
N30AMR			AM	68	35	-	17	13				
N30PF	N30PFB293	N30ABH845	PF	58	25	30°	17	15	10	6.5	390	
GT-N50 NR50 NS50	N50AB			AJ	90	29	30°	25	21			
	N50ABH41	(High Speed Steel)		AJ	120	35	30°	25	35			
	N50AJL			AJL	110	35	15	25	26			
	N50AL			AL	84	35	64	25	20			







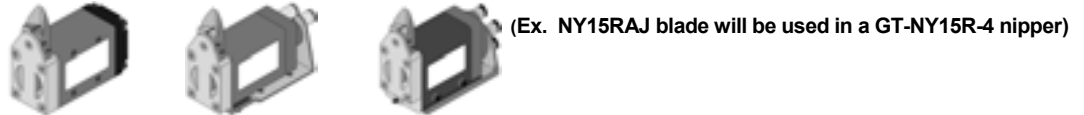
**NT SERIES BLADES**



Nipper Model	Standard Part #		Additional Versions Available Part #		DWG Ref	Dimensions (mm)					Cutting capacity (mm)		Weight (g)
	Alloy	Carbide	High Speed Steel	A		B	C	D	E	Plastic	Hard Plastic		
GT-NT03	NT03AJ	NT03AJB		AJ	24	11	4	7	3	1.5	1.0	20	
	NT03AJT			AJT	24	11	2.3	7	3	1.5	1.0	19	
	NT03AJY			AJY	24	11	2.5	7	3	1.5	1.0	19	
GT-NT05	NT05AD			AD	29	2.5	2.5	7	6	2.5	1.2	37	
	NT05AE			AE	29	18	-	7	6	2.0	1.3	36	
	NT05AJ	NT05AJB	NT05AJH	AJ	29	15	5	7	6	2.5	1.2	30	
	NT05AJL			AJL	36	15	5	7	7	2.0	1.3	39	
	NT05AJT			AJT	29	15	3	7	6	2.5	1.2	29	
	NT05AJY			AJY	24	11	2.5	7	3	2.5	1.2	29	
GT-NT10	NT10AD			AD	35	4	4	9	7	3.5	2.3	65	
	NT10AE			AE	35	22	-	9	7	3.5	2.3	75	
	NT10AJ	NT10AJB	NT10AJH	AJ	35	17	6	9	7	3.5	2.3	62	
	NT10AJL			AJL	47	17	6	9	9	3.0	2.0	62	
	NT10AJT			AJT	35	17	4	9	7	3.5	2.3	65	
	NT10AJY			AJY	29	15	3	7	6	3.5	2.3	82	
GT-NT20	NT20AD			AD	40	6	5	12	9	2.0	2.0	141	
	NT20AE			AE	40	25	-	12	9				
	NT20AJ	NT20AJB	NT20AJH	AJ	40	20	6	12	9	5.0	3.4	120	
	NT20AJL			AJL	57	20	6	12	12	4.5	3.2	156	

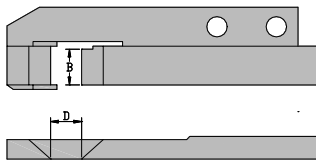
**NF & NY SERIES BLADES**

NY blades can only be used in the Vessel NY series, NF series and the patented GT-NY10S "Ninja" nippers. These blades are not reversible and therefore only those part numbers with the "R" are traditionally used in "push" type sliding nippers.



Nipper Model	Standard Part #		Additional Versions Available Part #		DWG Ref	Dimensions (mm)					Cutting capacity (mm)		Weight (g)
	Alloy	Carbide	High Speed Steel	A		B	C	D	E	Plastic	Hard Plastic		
GT-NY05 GT-NF05	NY05AH			AH	31	11	5	14	5.5	3.0	2.0	37	
	NY05RAH			RAH	30	11	5	7	5	3.0	2.0	31	
	NY05AJ	NY05AJB		AJ	22	11	5	7	4	3.0	2.0	22	
	NY05RAJ			RAJ	22	11	5	7	4	3.0	2.0	22	
	NY05AJL			AJL	31	11	5	7	5.5	2.8	1.6	29	
	NY05AJT			AJT	22	11	5	7	4	3.0	2.0	21	
GT-NY10 GT-NY10S GT-NF10	NY10AH			AH	33	12	5	15	8	3.5	2.3	43	
	NY10RAH			RAH	32	12	5	7.2	7	3.5	2.3	36	
	NY10AJ	NY10AJB		AJ	24	15	5	7.2	6	3.5	2.3	28	
	NY10RAJ			RAJ	24	12	5	7.2	6	3.5	2.3	28	
	NY10AJL			AJL	33	12	5	7.2	8	3.2	2.1	37	
	NY10AJT			AJT	24	12	3	7.2	6	3.5	2.3	26	
GT-NY15 GT-NF15	NY15AH			AH	38	13	5.5	16	11	4.0	2.6	63	
	NY15RAH			RAH	35	13	5.5	7.7	11	4.0	2.6	52	
	NY15AJ	NY15AJB		AJ	27	13	5.5	8.2	8	4.0	2.6	41	
	NY15RAJ			RAJ	27	13	5.5	8.2	8	4.0	2.6	41	
	NY15AJL			AJL	38	13	5.5	8.2	11	3.7	2.3	50	
	NY15AJT			AJT	27	13	5.5	8.2	8	4.0	2.6	38	
GT-NY25	NY25AH			AH	46	16	6	18	13	5.0	3.4	110	
	NY25RAH			RAH	42	16	6	10	12	5.0	3.4	89	
	NY25AJ	NY25AJB		AJ	31	16	6	10	9	5.0	3.4	65	
	NY25RAJ			RAJ	31	16	6	10	9	5.0	3.4	65	
	NY25AJL			AJL	46	16	6	10	13	4.7	3.0	88	

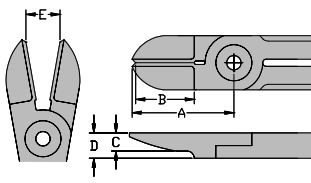
**NK Thrust cut**



**NK SERIES BLADES**

Nipper Model	Blade Part No.	DWG Ref.	Material To cut	Dimensions (mm)				
				a	b	c	d	e
GT-NK10	NK10AJ	NK	Plastic	-	10	-	12	-
	NK15AJ	NK	Plastic	-	15	-	12	-

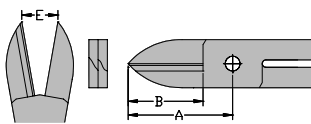
**NW Double Action**



**NW SERIES BLADES**

GT-NWS1	NW1BJ	NW	Wire / Plastic	20	10.5	-	-	3.5
GT-NWR10	NW10AJ	NW	Plastic	30	14	-	7	5
GT-NWS10	NW10BJ	NW	Wire / Plastic	30	14	-	7	5
GT-NWR20	NW20AJ	NW	Plastic	40	21.5	-	12	8
	NW20BA	NW	Plastic	35	21.5	40°	12	8
GT-NWS20	NW20BJ	NW	Wire / Plastic	40	21.5	-	12	8
GT-NWR30	NW30AJ	NW	Plastic	55	29.5	-	17	11
GT-NWS30	NW30BJ	NW	Wire / Plastic	55	29.5	-	17	11

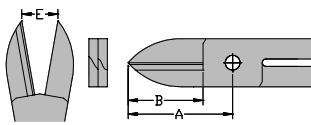
**HW Scissor**



**HW SERIES BLADES**

GT-HWR1	HW1J	HW	Wire / Plastic	25	17	-	-	3
GT-HWS1								
GT-HWS10	HW10J	HW	Wire / Plastic	40	28	-	-	5
GT-HWS20	HW20J	HW	Wire / Plastic	48	35	-	-	8.5

**ME Scissor**



**H SERIES BLADES**

GT-H30	H30ME	ME	1mm Kevlar®	105	50	-	-	26
GT-HR30	H30MEL	ME	1mm Kevlar®	125	57	-	-	34
GT-HS30								
GT-H12K	H12ME30K	ME	.3mm Kevlar®	45	28	-	-	17
GT-H120K	H120SK	ME	.3mm Natural Fiber	115	38	-	-	15
GT-HR120K								

**CUSTOM BLADES**

Other popular Special Blade styles....



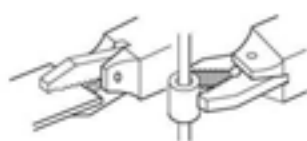
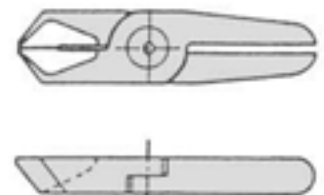
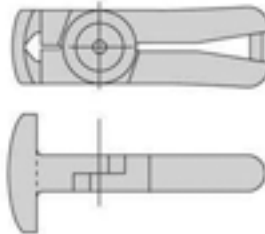
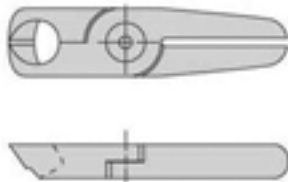
N20AE1121



N20DI292-1



N20AE19  
N30AE53



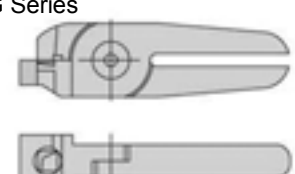
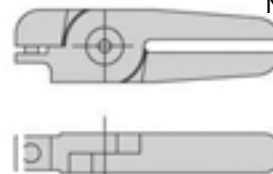
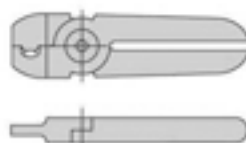
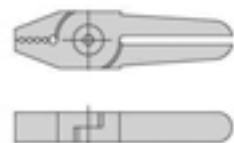
N20DI Series



N30CC Series

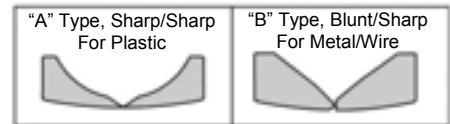


N30DG Series



**HOW TO SELECT/DESIGN AN AIR NIPPER BLADE:**

There are several elements to consider which will ultimately effect the performance and longevity of an Air Nipper blade. The following is a guideline to assist in finding a proper blade.



**Nipper Body**—Determine what type of Air Nipper your application requires (nipper styles covered on pages 2-10).

**Cutting Edge Type**—Typically, type “A” for cutting plastic, type “B” for cutting metal and wire. (See above diagram)

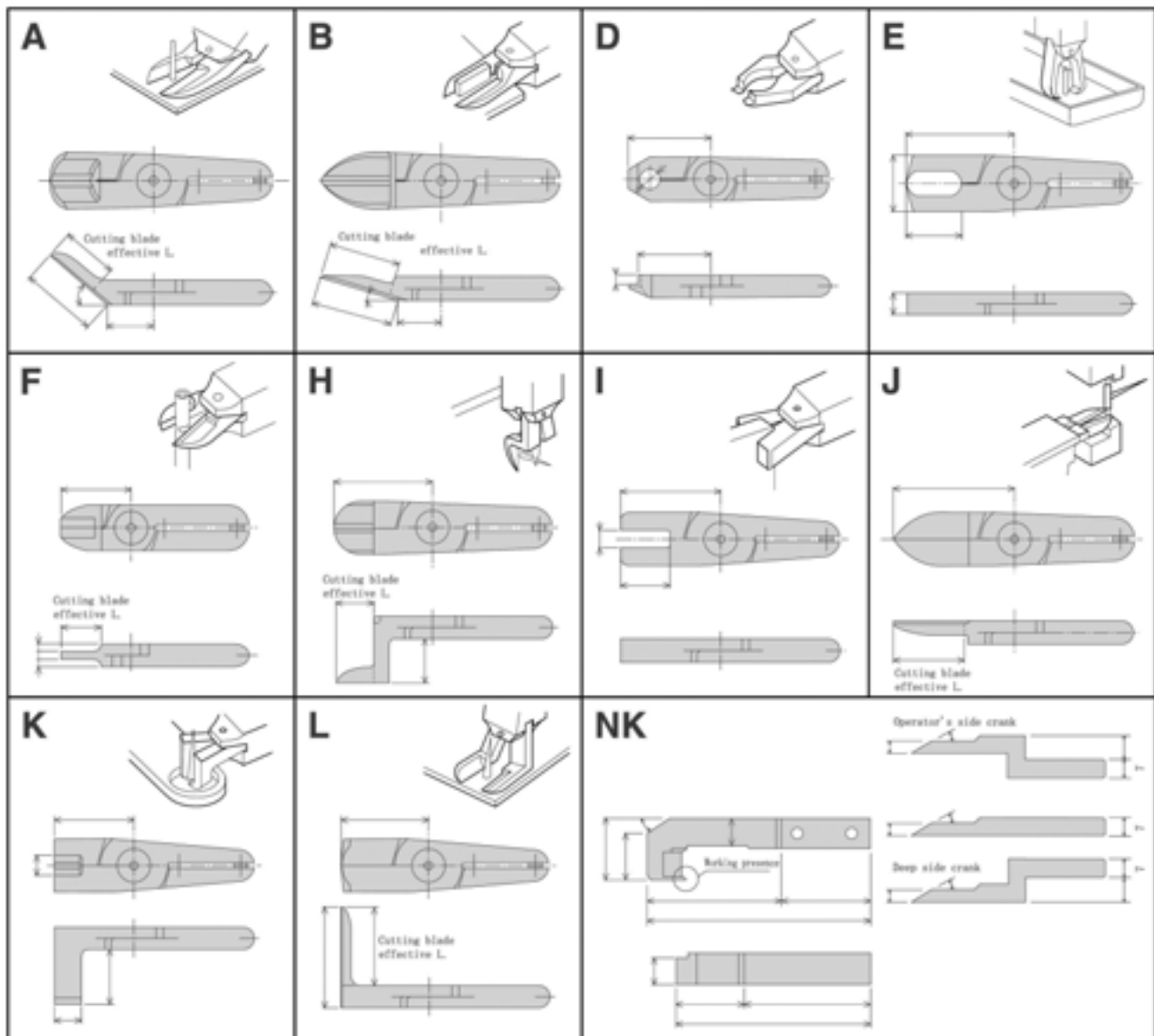
**Blade Design**—Choose from the designs represented on this and the other pages in the “Blades” section of this catalog (pages 11-14). Consider the type of operation (whether manual, fixtured or robot mounted), angle of nipper approach, the immediate landscape of the application / part (where the actual cut is to be performed) and any features or obstructions which may be in the way (this may even include the Air Nipper itself).

**Application Material**—Most applications will only require a standard Alloy Steel Blade. However, for certain Applications, High Speed Steel or Carbide blades may be required. Common examples include applications with chrome plating, glass (or other abrasive) fill, post-mold hardened plastic or metal inserts.

- High Speed Steel (HSS) - Used for its durability qualities. Generally used for hard / dense, chrome plated and cold (temperature less than 150°F) glass filled plastics.
- Carbide - Used for its hardness and anti-abrasion qualities. A more delicate material, carbide should be used in plastic applications where the material is still warm (temperature above 150°F) and for certain metal applications.

**CUSTOM BLADE CONFIGURATIONS**

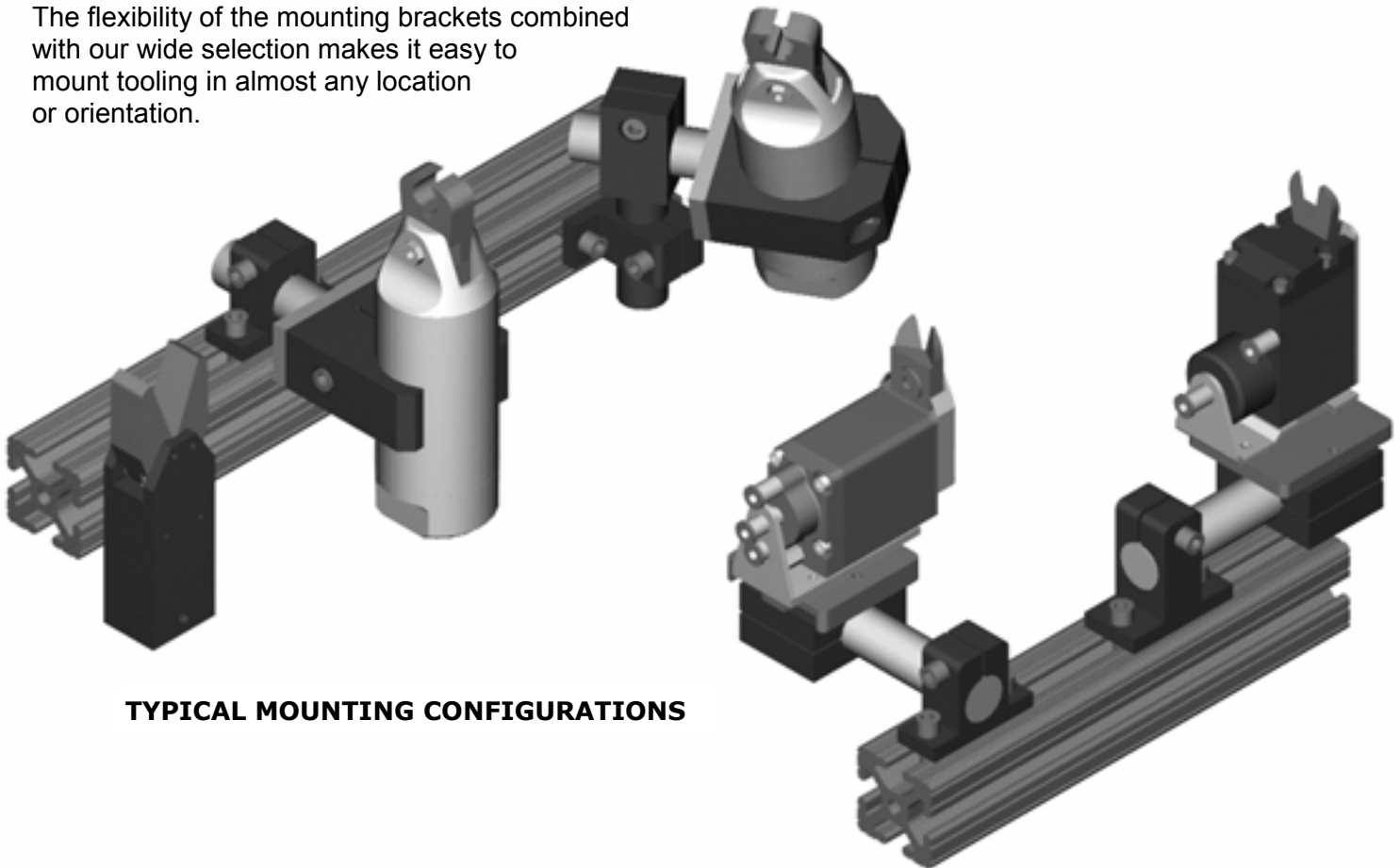
Custom blades in various shapes and sizes can be made to your specific requirements. If you have a unique application, simply fill in some general dimensions on the drawings shown below or on any other page in this section.



**JDV offers a complete line of universal mounting brackets.**

These brackets can be used to mount nippers, grippers, cylinders, suction cups, or numerous other tooling components.

The flexibility of the mounting brackets combined with our wide selection makes it easy to mount tooling in almost any location or orientation.



**TYPICAL MOUNTING CONFIGURATIONS**



**MP SERIES MOUNTING PLATES**

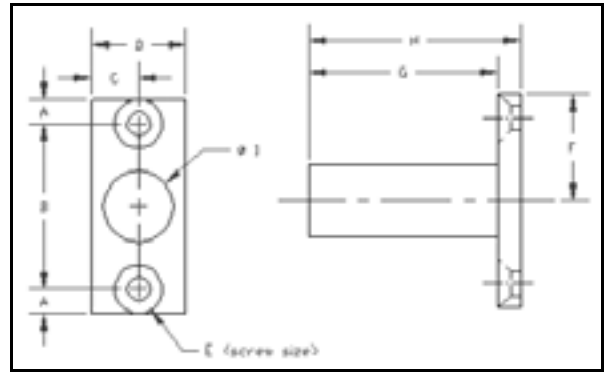


Part Number	Description
MP-NS3-5	Mounting Plate GT-NS3 & GT-NS5 Nippers
MP-NS7-20	Mounting Plate GT-NS7 thru GT-NS20 Nippers
MP-NS30	Mounting Plate GT-NS30 Nippers
MP-NT03	Mounting Plate GT-NT03 Nippers
MP-NT05	Mounting Plate GT-NT05 Nippers
MP-NY	Mounting Plate All GT-NY Series Nippers
MP-GR50	Mounting Plate Gripper

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 U. S. A.

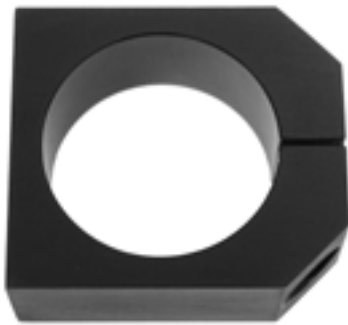


**CPS  
 CLAMP POST**

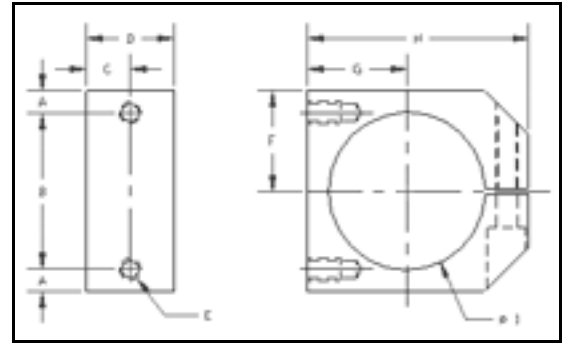


MODEL	A	B	C	D	E	F	G	H	I
CPS-2	.188	1.375	.375	.750	M5	.875	2.000	2.250	.750
CPS-4	.188	1.375	.375	.750	M5	.875	4.000	4.250	.750
CPM-2	.250	1.750		.500	M6	1.125	2.000	2.250	.750
CPM-4	.250	1.750	.500	.500	M6	1.125	4.000	4.250	.750

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 U. S. A.

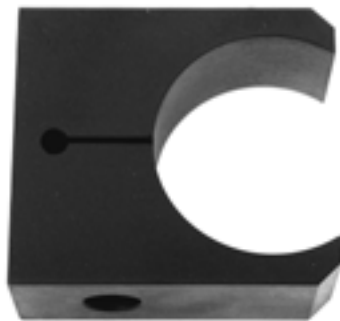


**MC  
 MOUNTING CLAMP**

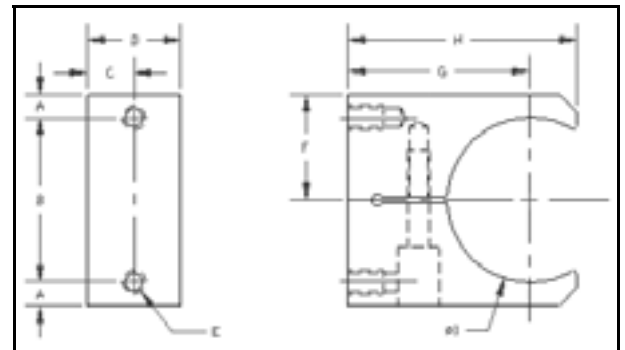


MODEL	A	B	C	D	E	F	G	H	I
MC-NR3	.188	1.375	.375	.750	M5	.875	.875	2.000	23mm
MC-NR5	.188	1.375	.375	.750	M5	.875	.875	2.000	30mm
MC-NR7	.188	1.375	.375	.750	M5	.875	.875	2.000	34mm
MC-NR10/12	.188	1.375	.375	.750	M5	.875	.875	2.000	36mm
MC-NR20	.250	1.750	.500	1.00	M6	1.125	1.125	2.500	45mm
MC-NR30	.500	1.750	.500	1.00	M6	1.375	1.375	3.000	56mm
MC-NR50									

MADE IN  
  
 U. S. A.



**PMC  
 PARTIAL MOUNTING CLAMP**

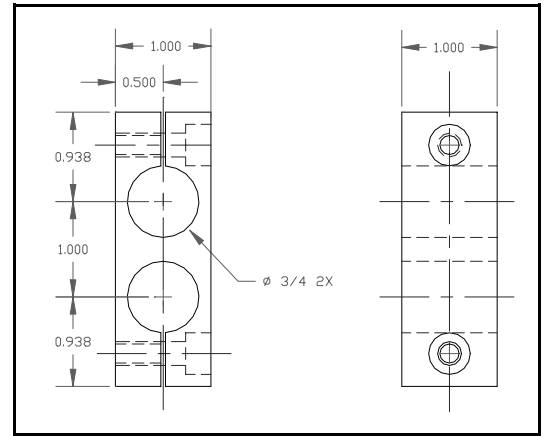


MODEL	A	B	C	D	E	F	G	H	I
PMC-NR3	.188	1.375	.375	.750	M5	.875	1.488	1.738	23mm
PMC-NR5	.188	1.375	.375	.750	M5	.875	1.738	2.113	30mm
PMC-NR7	.188	1.375	.375	.750	M5	.875	1.738	2.113	34mm
PMC-NR10/12	.188	1.375	.375	.750	M5	.875	1.738	2.113	36mm
PMC-NR20	.250	1.750	.500	1.00	M6	1.125	1.938	2.438	45mm
PMC-NR30	.500	1.750	.500	1.00	M6	1.375	2.125	2.750	56mm

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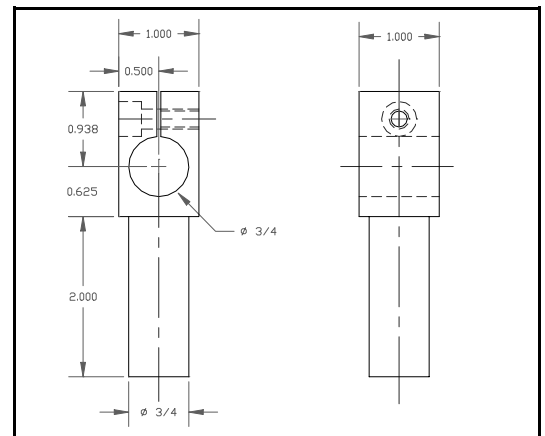
**SB-3/4  
 STRAIGHT BLOCK**



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 U. S. A.



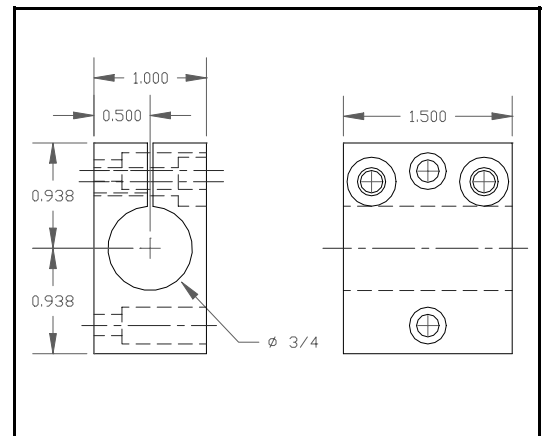
**UMP-3/4  
 UNIVERSAL MOUNTING POST**



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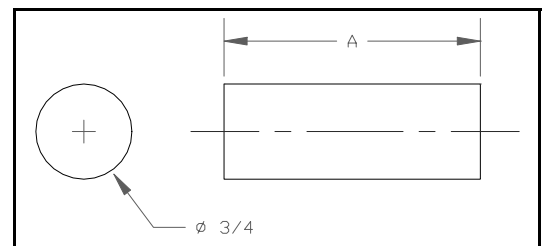
**UMB-3/4  
 UNIVERSAL MOUNTING BLOCK**



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**MS-3/4  
 MOUNTING SHAFT**

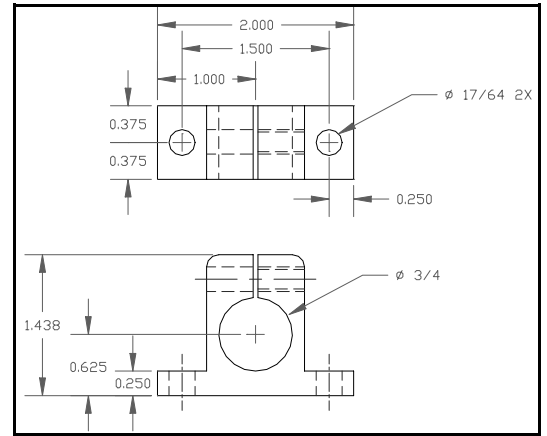


Part Number	A
MS-3/4-2	2"
MS-3/4-4	4"
MS-3/4-6	6"

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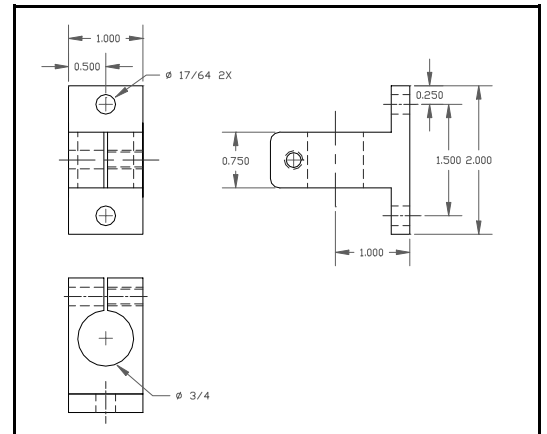
**MB-3/4  
 MOUNTING BLOCK**



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 U. S. A.



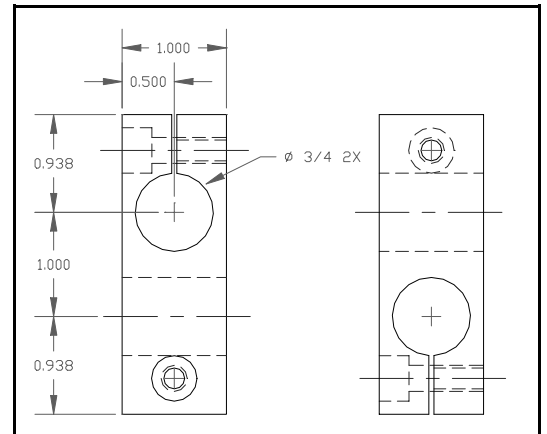
**RMB-3/4  
 RIGHT ANGLE MOUNTING  
 BLOCK**



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 U. S. A.



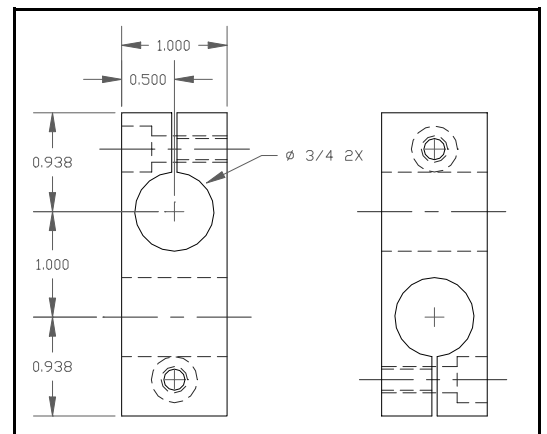
**LAB-3/4  
 LEFT ANGLE BLOCK**



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 U. S. A.

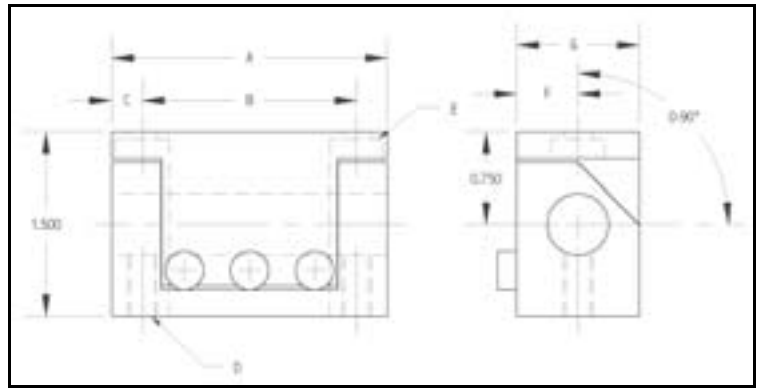


**RAB-3/4  
 RIGHT ANGLE BLOCK**



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U. S. A.

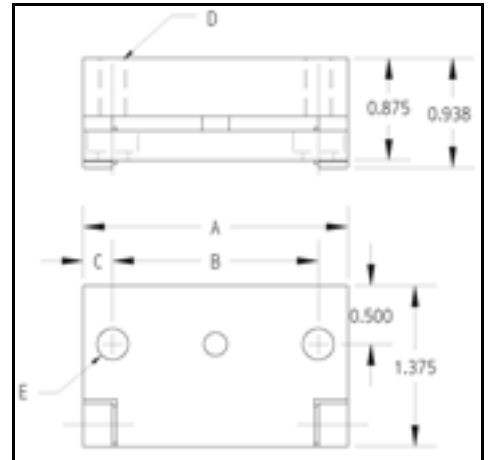
**SM  
SWIVEL MOUNT**



Part Number	A	B	C	D	E (screw provided)
SM-S	1.750	1.375	0.188	M5	M5
SM-M	2.250	1.750	.250	M6	M6

MADE IN  
U. S. A.

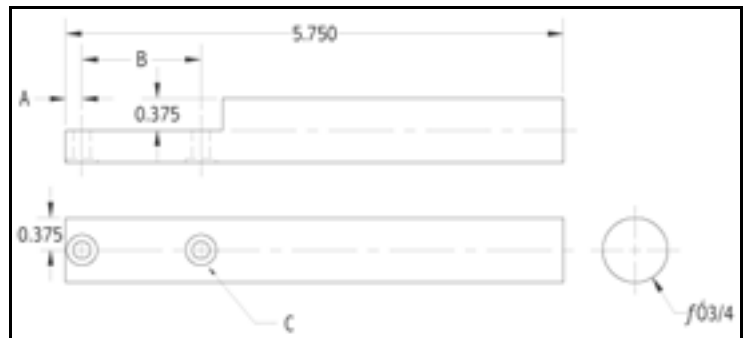
**SLB  
SPRING LOADED BRACKET**



Part Number	A	B	C	D	E (screw provided)
SLB-S	1.750	1.375	0.188	M5	M5
SLB-M	2.250	1.750	.250	M6	M6

MADE IN  
U. S. A.

**ACP  
ANGLE CLAMP POST**



Part Number	A	B	E (screw provided)
ACP-S	0.188	1.375	M5
ACP-M	0.250	1.750	M6



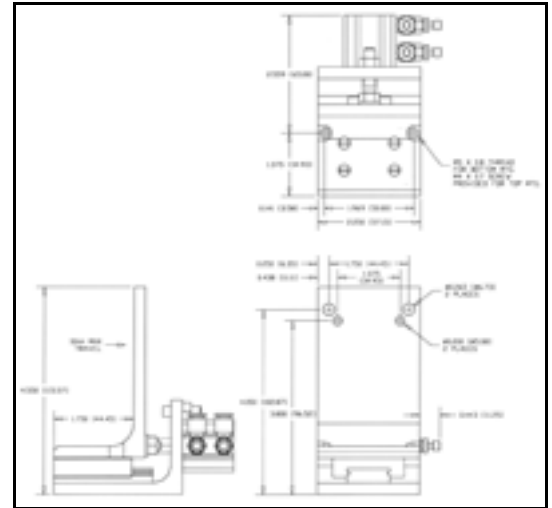
The **LS-10 Linear Slide Bracket** can add the versatility of a sliding nipper to the **GT-NR Series round nippers**. Using an optional MC mounting clamp to attach a round nipper, the nipper can be rotated to match virtually any angle on the part to be degated



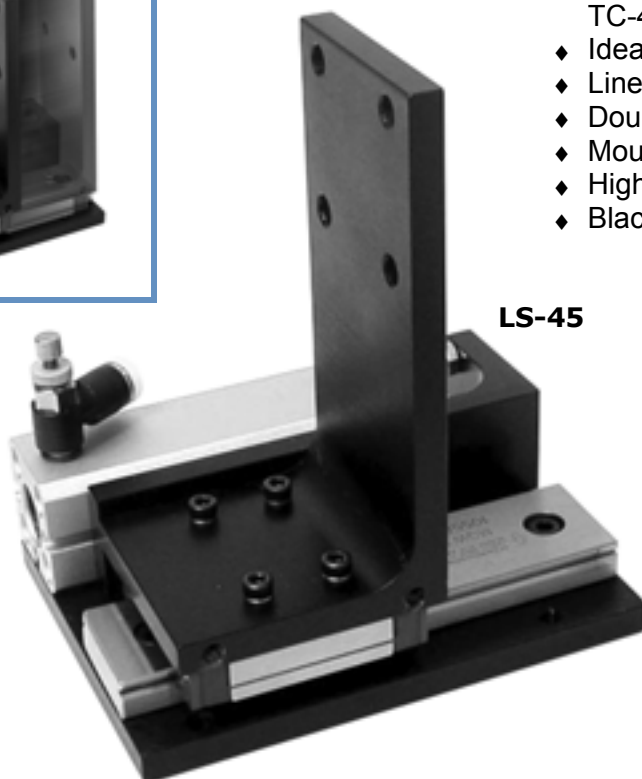
**LS-10**  
SHOWN WITH OPTIONAL  
NIPPER MOUNTING CLAMP

**Nipper mounting clamps on page 22**

- ◆ Linear bearing design
- ◆ Mounting plate for GT-NS nippers
- ◆ High quality components
- ◆ Gold anodized finish

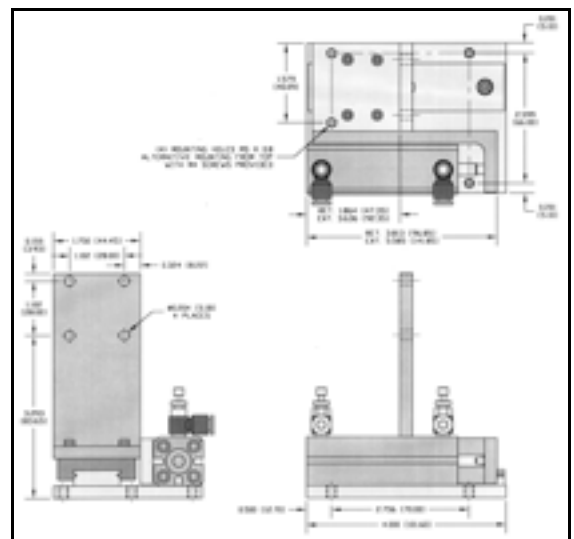


The **LS-45 Linear Slide Bracket** is ideal for **JDV's TC-40 Series Thrust Cut Nippers**. The 45mm slide stroke helps to move the nipper toward the part to be cut, then moves away from the cutting area in order for the part to be easily removed.



**LS-45**

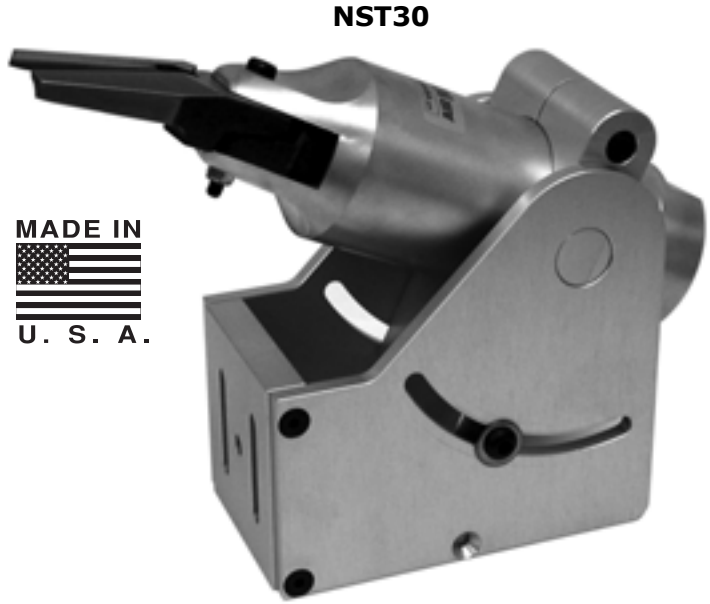
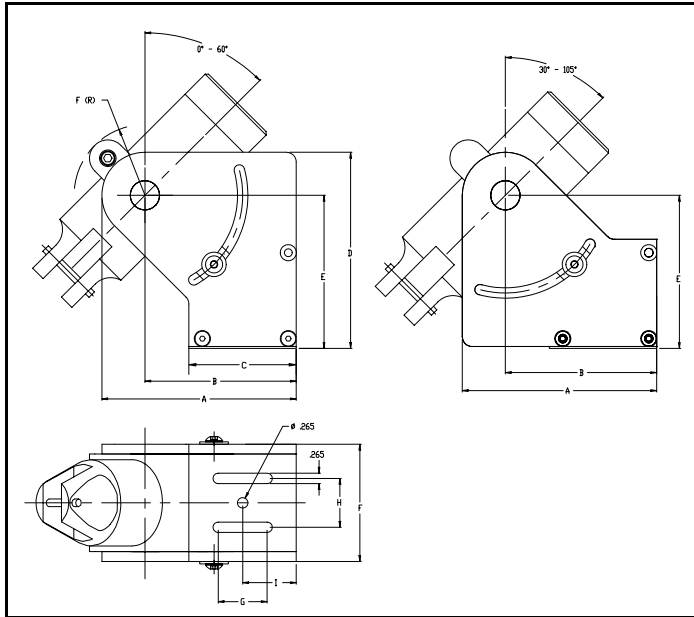
- ◆ "Mirror Image" mounting for right and left hand TC-40 Nippers
- ◆ Ideal for fully automated operations
- ◆ Linear bearing "V" block design
- ◆ Double action sliding
- ◆ Mounting plate
- ◆ High quality components
- ◆ Black anodized finish



The NST series Air Nipper Stands offer 105 Degrees of positioning flexibility. These units are ideal for quick and convenient fixturing for those difficult angle applications. The NST was also designed to be used for benchtop and in-line process applications. Two sizes are available to accommodate the GT-NR20 and GT-NR30 nippers.

**Features:**

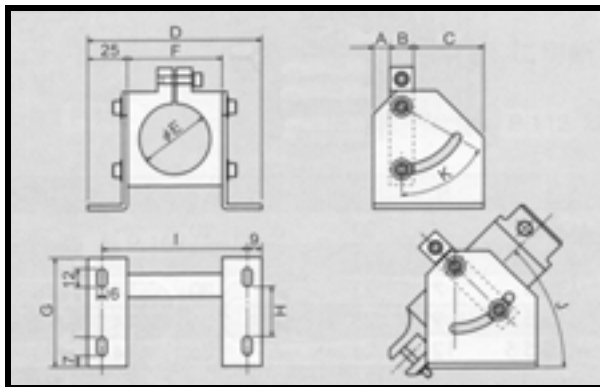
- ◆ 105 Degrees of angling flexibility
- ◆ Rigid and lightweight construction
- ◆ Anodized aluminum plates
- ◆ Two mounting positions



*Nipper and blade not included*

Model No.	A	B	C	D	E	F	G	H	I	Weight (g)
NST20	101.6	79.2	55.9	102.6	80.2	60.5	25.4	25.4	28.5	487.6
NST30	126.2	98.3	69.6	127.5	99.6	76.2	31.8	31.8	34.8	870.3

All dimensions in millimeters. Weight does not include nipper



**VESSEL**<sup>®</sup>  
SUPERIOR QUALITY

**NR20ST**



Model No.	A	B	C	D	E	F	G	H	I	J	K	Weight (g)
NR10ST	10.5	15	44.5	102	36	52	70	32	84	45°	60°	335
NR20ST	10.5	15	44.5	110	45	60	70	32	92	45°	60°	385
NR30ST	10.5	15	44.5	130	56	80	70	32	112	45°	60°	535
NR50ST	8	20	57	150	75	100	85	47	132	30°	60°	

All dimensions in millimeters. Weight does not include nipper

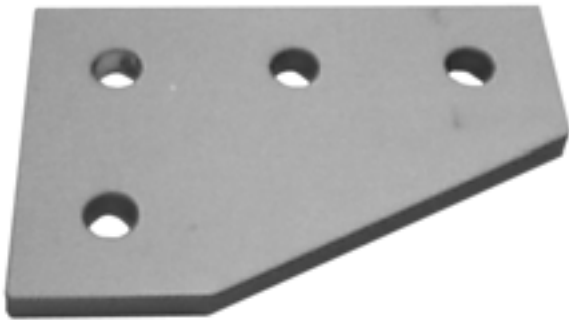
*Nipper and blade not included*

**"T" SLOT EXTRUSION**



Part No.	Description
TSE1	1" Square
TSE15	1-1/2" Square

**JOINING PLATE 4 HOLE**



Part No.	Description
JP1X4	For TSE1
J515X4	For TSE15

**END CAP ASSEMBLY**



Part No.	Description
EC1	For TSE1
EC15	For TSE15

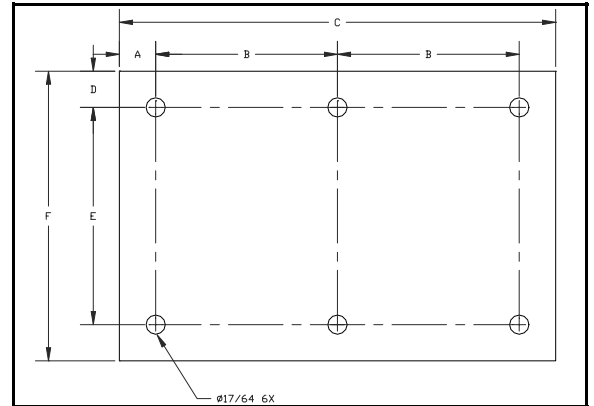
**STN-1/4-20  
STANDARD "T" NUT**



**ETN-1/4-20  
ECONOMY "T" NUT**



**EOAT  
MOUNTING  
PLATE**



Part No.	Description
EMP-4X6	EOAT Mounting plate 4" x 6"
EMP-8X12	EOAT Mounting plate 8" x 12"

*Dimensions in inches*

Part No.	A	B	C	D	E	F
EMP-4X6	0.5	2.5	6.0	0.5	3.0	4.0
EMP-8X12	0.5	5.5	12	0.5	7.0	8.0

**INSIDE CORNER 2 HOLE**



Part No.	Description
IC1X2	For TSE1
IC15X2	For TSE15

**ELBOW FITTING**



Part No.	Hose OD	Thread
ELB4-8	4mm (5/32")	R1/8 (metric)
ELB4-4	4mm (5/32")	R1/4 (metric)
ELB6-8	6mm	R1/8 (metric)
ELB6-4	6mm	R1/4 (metric)
ELB1/4-8M	1/4"	R1/8 (metric)
ELB1/4-4M	1/4"	R1/4 (metric)
ELB1/4-8	1/4"	1/8" NPT

**STRAIGHT FITTING**



Part No.	Hose OD	Thread
SF4-8	4mm (5/32")	R1/8 (metric)
SF4-4	4mm (5/32")	R1/4 (metric)
SF6-8	6mm	R1/8 (metric)
SF6-4	6mm	R1/4 (metric)
SF1/4-8M	1/4"	R1/8 (metric)
SF1/4-4M	1/4"	R1/4 (metric)
SF1/4-8	1/4"	1/8" NPT

**TEE FITTING**



Part Number	Hose OD
T4	4mm (5/32")
T6	6mm
T1/4	1/4"

**HOSE Kink Resistant Polyurethane (sold per ft.)**



Part No.	Hose OD	Hose ID
H4	4mm (5/32)	2.4mm
H6	6mm	4mm
H1/4	1/4"	.160"

**COILED HOSE (Polyurethane)**



Part No.	Hose OD	Hose ID	Coil ID	Extended length	Retracted length	Working pressure @75°F
CH1/4	1/4"	1/8"	3/4"	8 ft	6.5"	126 psi

**NYLON HOSE**



Part No.	Description
A-10738	6' Nylon braided hose
A-12549	8' Nylon braided hose

Flexible nylon braided hose  
Also available in custom lengths (1' increments).

**AIR COMPONENTS**

**FILTER REGULATOR or REGULATOR Increase tool life and add safety.** Both come equipped with a gauge. Most pneumatic tool manufacturers recommend using a filter regulator. The filter/regulator removes particles and captures moisture. The regulator is used when the air is clean and dry.

**FILREG**

**REG**



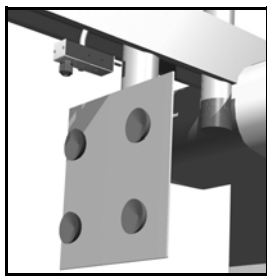
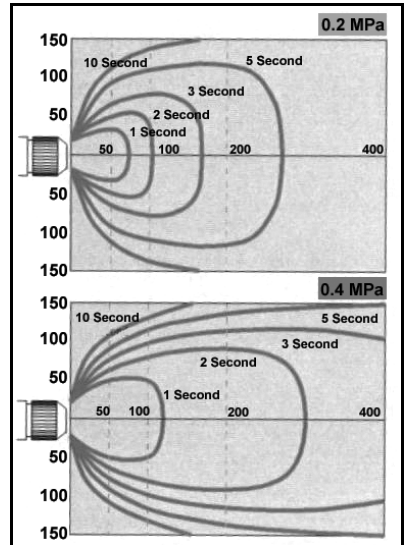
**RMB REGULATOR MOUNTING BRACKET**

Will fit both regulator and filter regulator shown.

Part No.	Port size (NPT)	Reg. Press. range	Max. oper. pressure	filtration
FILREG	1/8"	7-120 PSI	150 PSI	5µm
REG	1/8"	7-120 PSI	150 PSI	None

The SDJ-02 eliminates static and static related problems at the source. Controlled and timed by robot output, parts and mold can now be statically neutralized with each cycle of the production process. The SDJ-02 super lightweight and compact design permits easy mounting to End of Arm Tooling.

- ◆ Rapid, balanced and repeatable static neutralization.
- ◆ Super lightweight: 160g.
- ◆ Compact enough for most EOAT mountings
- ◆ Mounting holes on 4 sides for flexibility.
- ◆ Corona discharge method used for ion distribution.
- ◆ UL & CE approved.



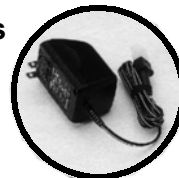
Voltage Rating	24VDC +/- 10%
Ion Generation Method	Corona Discharge
Load Current	50mA Maximum
Applied Voltage	AC+/- 3,000 V
Operating Pressure	87 psi maximum
Air Input	5/32"
Weight	160g

**STATIC ERASER SDJ-03**

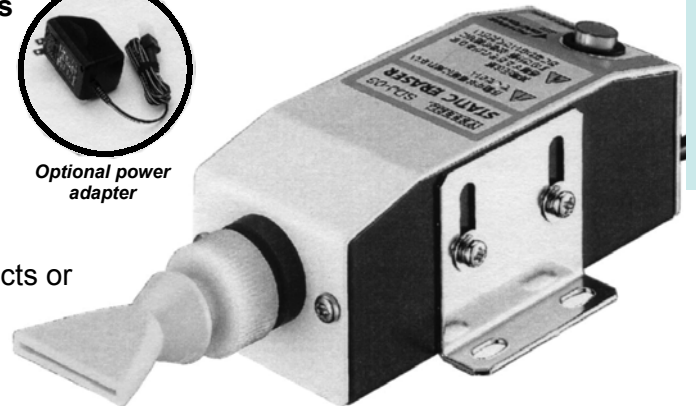
The SDJ-03 eliminates static in hoppers, storage bins and various assembly line applications.

The SDJ-03 super lightweight and compact design permits easy mounting without sacrificing space.

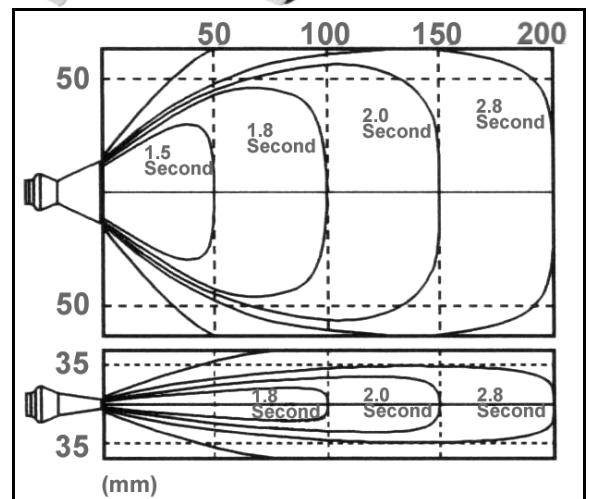
- ◆ Electrostatic discharge can be used for resin pellets, printed circuit boards, optical lenses, vibratory feeders and surfaces prior to painting.
- ◆ Eliminates dust contaminants collecting on products or surfaces
- ◆ Flared nozzle can be angled on a 360° axis
- ◆ Super lightweight: 230g(0.5lb)
- ◆ Compact: 55mm x 145mm x 39mm
- ◆ Corona discharge method used for ion generation
- ◆ SDJ-03-PS with 120VAC adapter



Optional power adapter

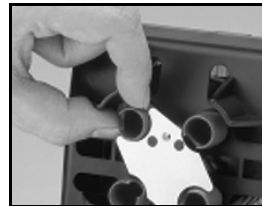
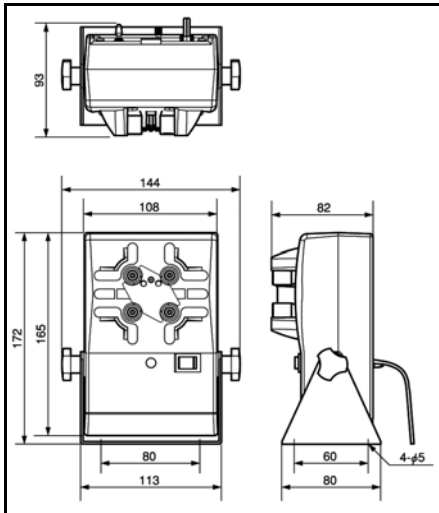


Voltage Rating	24VDC +/- 10%
Ion Generation Method	Corona Discharge
Load Current	50mA Maximum
Applied Voltage	AC+/- 3,000 V
Operating Pressure	87 psi maximum
Air Input	5/32"
Weight	230g (without power adapter)
Optional AC Adapter	Input 120VAC 50/60Hz 8.5A Output 24VDC 2000mA



The SDJ-05 eliminates static on working tables, conveyors, stockers, or parts feeders. The compact design of the SDJ-05 features a built-in AC powered fan, eliminating the need for an external air supply and simplifying installation.

- ◆ Discharge needles are easily cleaned from front panel
- ◆ Ion balance is adjusted by turning protection cap
- ◆ Efficiently balanced Ionizing, with or without fan
- ◆ Adjustable fan speed: High, Off, Low
- ◆ Excessive electro discharge protection circuit
- ◆ Micro adjustment of ion balancing available



Weight	920g
Ion Generation Method	DC Corona Discharge
Output Voltage	6.5kVDC
Input Voltage	100VAC 50/60Hz
Current Consumption	0.11A (50Hz) / 0.13A (60Hz)
Environmental	Operating Temperature 0-50 C
Conformity	Humidity Application 35-65%

**TOOLING COMPONENTS**

We offer a complete line of tooling components, please call for information or to request a EOAT catalog.

**Suction Cups:**

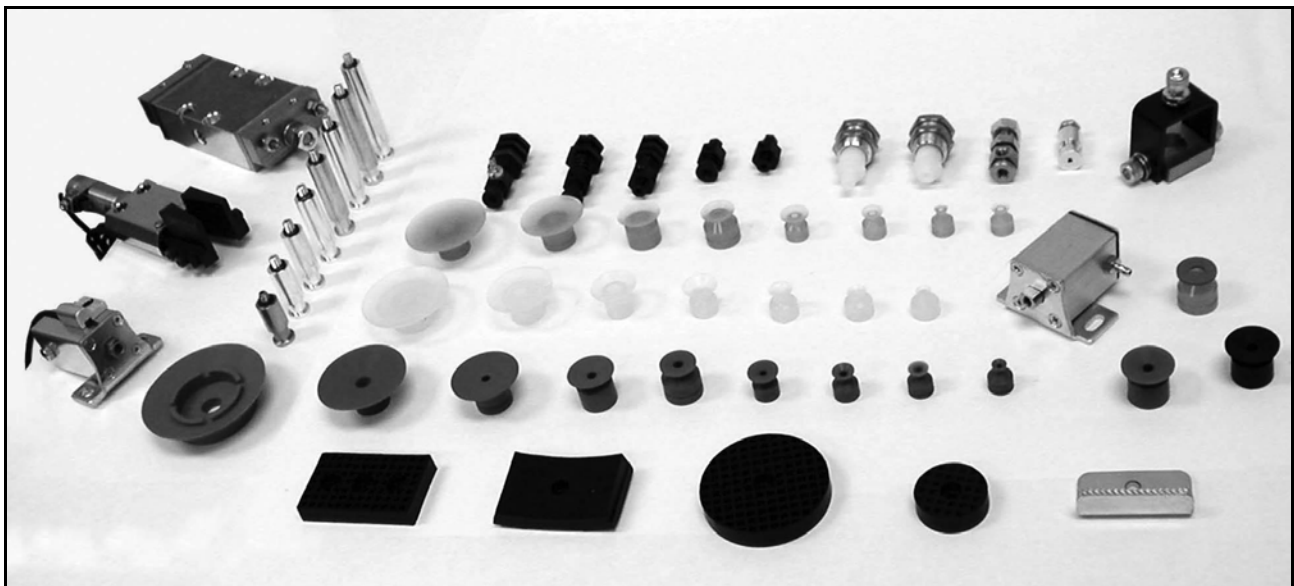
- Anti-Static
- Bellows
- Silicon Sponge
- Flat Surface
- Short Head

**Suction Cup Holders**

- Adjusters
- Angle Brackets
- Mini Cylinders
- Grip Plates
- Manifolds

**Check Valves**

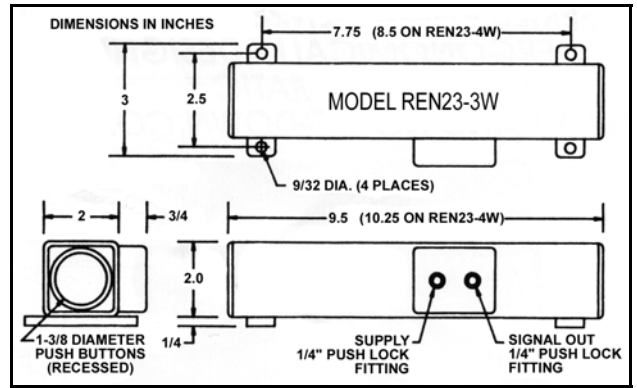
- Stopper Cylinder
- Chuck Cylinders
- Air Grippers
- Universal Mountings
- Custom EOAT



**The REN23 is a two hand anti-tie down control.**

They can be used to control presses, degating fixtures, nippers, and cylinders.

- ◆ Provides a maintained output signal when both buttons are pressed within 0.3 seconds and held.
- ◆ Compact design with recessed push buttons
- ◆ Light actuation pressure (5 oz)
- ◆ 1/4" push lock fittings, 5/32" (4mm) optional
- ◆ Rounded edges, no sharp corners or edges
- ◆ Quick and simple installation



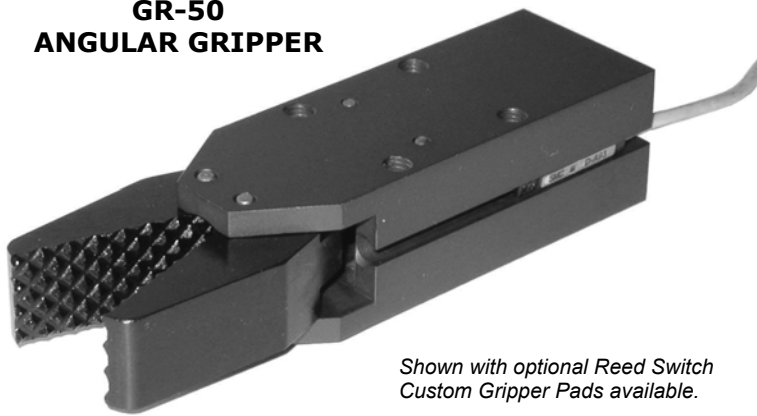
**REN23-3W**  
**(3 way valve)**



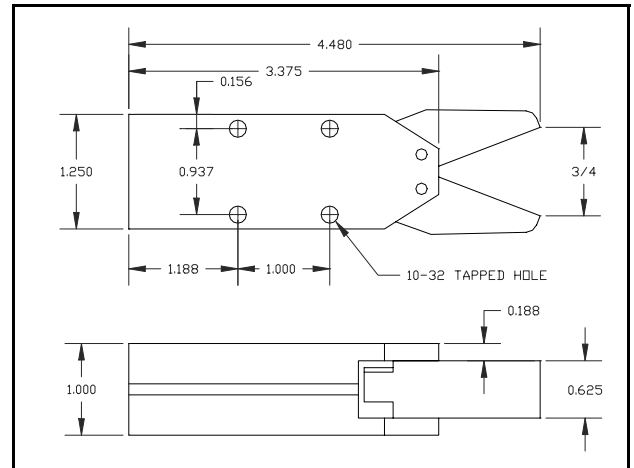
**REN23-4W**  
**(4 way valve)**

**GR-50 ANGULAR GRIPPER**

**GR-50**  
**ANGULAR GRIPPER**



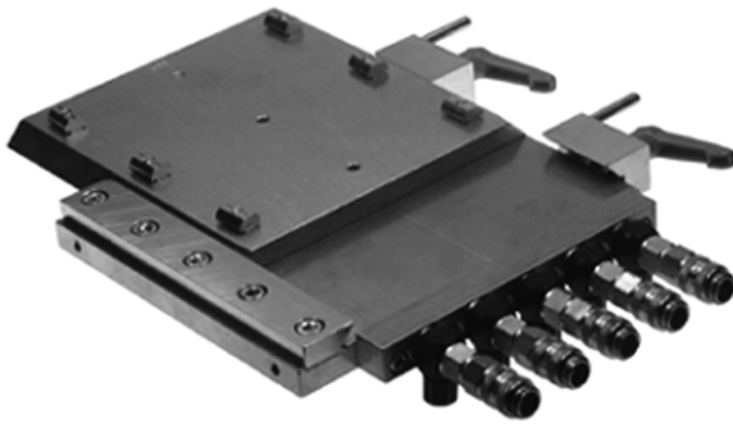
*Shown with optional Reed Switch  
Custom Gripper Pads available.*



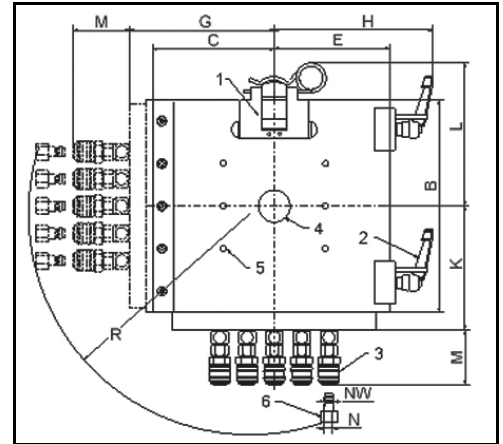
**SPECIFICATIONS:**

- ◆ One piece aluminum housing machined from solid block.
- ◆ Hardened tool steel jaws will provide excellent durability.
- ◆ Bronze piston with long lasting seal.
- ◆ Single acting cylinder allows for easy connection.
- ◆ Gripper is serviceable not disposable.
- ◆ Optional sensor allows for "Missing Part" sensing.
- ◆ Weight: 9.6 ounces.





**SWM Quick Change System**

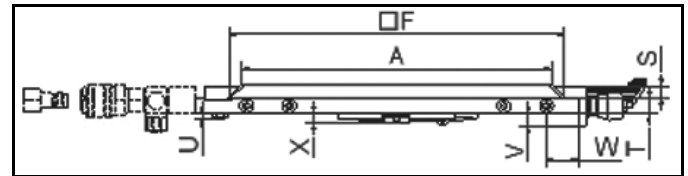


**Advantages:**

- ◆ On each robot system mounting plate
- ◆ Easy exchange of the gripper plate from robot to robot
- ◆ Extremely short gripper change times
- ◆ Minimizes machine down time
- ◆ Dismantling of the gripper framework is not necessary
- ◆ Adjustment of the gripping system is maintained
- ◆ Integrated pneumatics
- ◆ Quick release couplings

Drawing Details:

- 1.) Security latch system (only with size 3)
- 2.) Wedge lock (with SWM GR-01)
- 3.) Air connections
- 4.) Drilling for A-Axis (upon request)
- 5.) Drilling in accordance with robot (upon request)
- 6.) STN plug-in nipple / NW plug-in nipple size



Includes: 2 pieces of gripper-plates (GPM) and 1 set plug in nipple (STN)

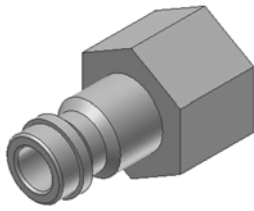
Part Number	A	B	C	D	E	F	G	H	K	L	M	N	NW	R	S	T	U	V	W	X
SWM-GR-01	24	40	28	-	34	40	-	34	26	20	-	-	-	35	7	10	-	-	3	-
SWM-GR.0	44	60	38	-	34	60	46	43	38	30	27	M 5	2.5	80	8	10	3	3	3	-
SWM-GR.1	84	100	60	-	49	100	60	63	60	50	40	M 5	2.5	110	8	12	2	1.5	3	-
SWM-GR.2	140	160	101	-	79	160	117	130	96	100	73	G 1/8"	5	200	10	12	6	1	-	-
SWM-GR.3	230	250	150	-	136	250	170	180	145	165	65	G 1/4"	7	265	10	12	6	9	9	6

Part Number	STN Connection	Wedge Lock	Security Latch	Weight (g)
SWM-GR-01	-	NO	NO	130
SWM-GR.0	STN M5	NO	NO	325
SWM-GR.1	STN M5	YES	NO	590
SWM-GR.2	STN G 1/8"	YES	NO	2004
SWM-GR.3	STN G 1/4"	YES	YES	4570

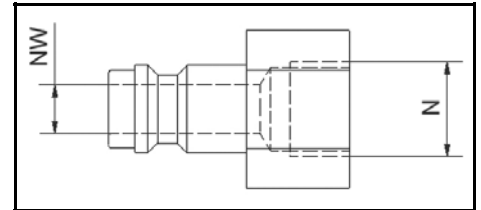
Part #	A	B	C	D	E	F	G	H	K	L	M	N	NW	R	S	T	U	V	W	X
SWM-GR-01 Heavy Duty Steel	230	250	150	-	136	250	170	180	145	165	65	G 1/4"	7	265	10	12	6	9	9	6

Part Number	STN Connection	Wedge Lock	Security Latch	Weight (g)
SWM-GR.3 Heavy Duty Steel	STN G 1/4"	YES	YES	-

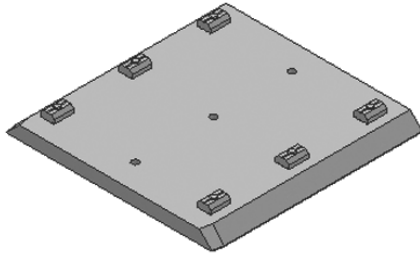




**STN Plug-In Nipple for SWM Quick Change System**

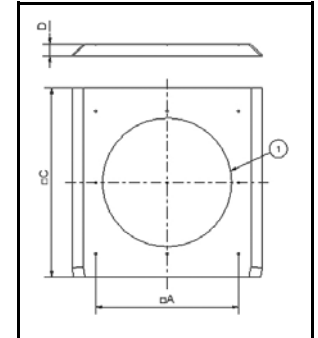


Part #	A	NW	for SWM	Min. Qty	Weight (g)
STN M5	M 5	-	GR. 0 + 1	10 pieces	3
STN 1/8	G 1/8"	2.5	GR. 2	10 pieces	14
STN 1/4	G 1/4"	7	GR. 3	10 pieces	25

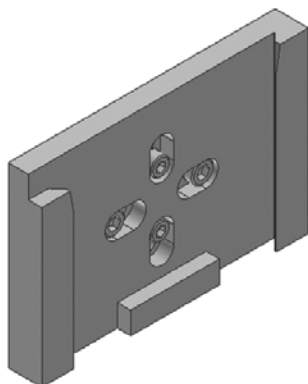


**GPM Gripper Plate**

**Option:** drilling for weight reduction  
**Table:** X = holes and channel nuts

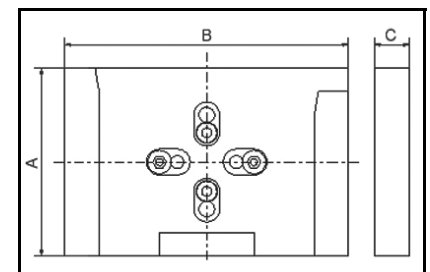


Part #	A	C	D	for Light System	for X System	for Jumbo System	Weight (g)
GPM GR. 01	-	40	8				30
GPM GR. 0	35	60	8				70
GPM GR. 0 L	35	60	8	X			77
GPM GR. 1	70	100	8				205
GPM GR. 1 L	70	100	8	L 18/10			208
GPM GR. 1 L/X	70	100	8	L 18/18	X		235
GPM GR. 2	120	160	10				668
GPM GR. 2 X	120	160	10		X		710
GPM GR. 2 J	120	160	10			X	745
GPM GR. 3	200	250	10				1665
GPM GR. 3 X	200	250	10		X		1702
GPM GR. 3 J	200	250	10			X	1846
GPM GR. 3 Steel (made from steel)	200	250	10				1846

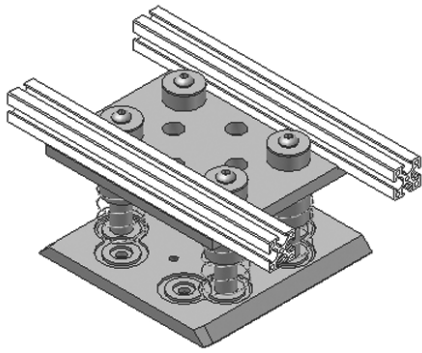


**GHV Gripper Holding Fixture**

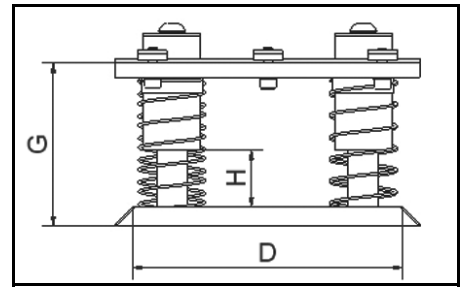
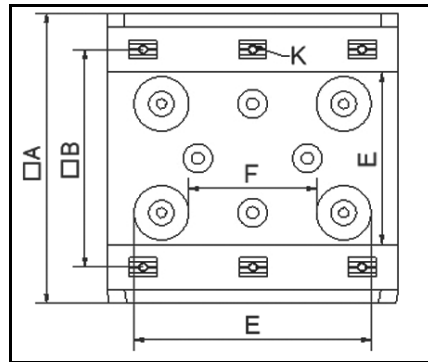
**Remarks:**  
 Neatly store your EOAT  
 Protect your investment  
 Wall mount option or build your own storage Rack  
 with X or J profiles  
 Channel nuts for X and J are included



Part #	A	B	C	Compatible	Weight (g)
GHV GR. 0.1	60	60	12	SWM GR. 0.1	117
GHV GR. 0	60	81	18	SWM GR. 0	175
GHV GR. 1	80	121	18	SWM GR. 1	302
GHV GR. 2	100	181	18	SWM GR. 2	610
GHV GR. 3	160	271	18	SWM GR. 3	1095



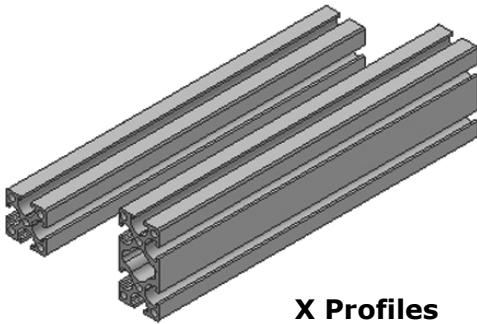
**GPG**  
**Gripper Plate Spring Loaded**



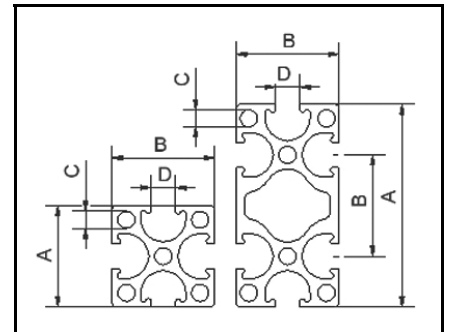
Remarks:  
L = number of guide bars  
For X and L system only  
Custom design available upon request

Part #	A	B	C	D	E	F	G	H	K	L	for Light System	for X System	Weight (g)
GPG GR. 1	100	70	-	95	35	-	51	20	5.5	2	X	X	580
GPG GR. 2	160	120	65	145	95	25	88	30	5.5	4		X	2237
GPG GR. 3	250	200	145	225	175	105	88	30	5.5	4		X	3863

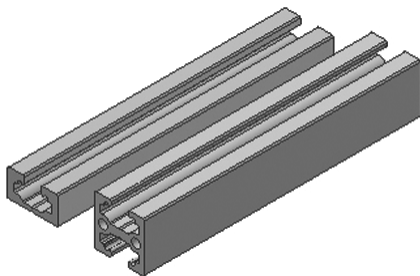
**PROFILE AND ACCESSORIES**



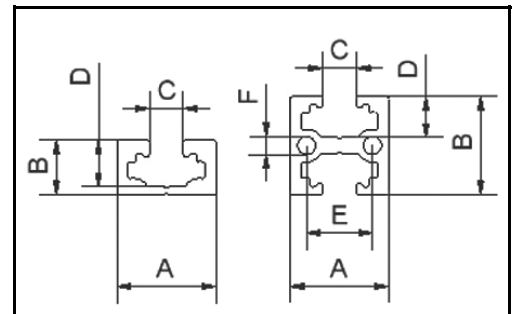
**X Profiles**



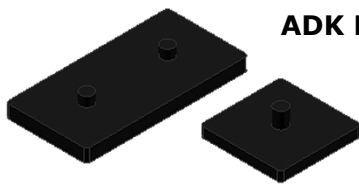
Part #	A	B	C	D	Length (mm)	Compatible	Weight (g)
X-25/25/1000	25	25	4.2	6	1000	Alu leg. F38	640
X-25/25/2000	25	25	4.2	6	2000	Alu leg. F38	1280
X-50/25/1000	25	25	4.2	6	1000	Alu leg. F38	1040
X-50/25/2000	25	25	4.2	6	2000	Alu leg. F38	2080



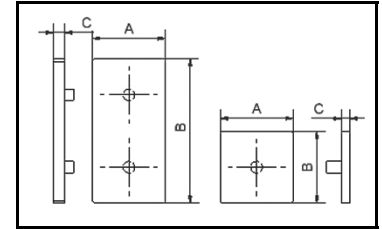
**L18 Light Profiles**



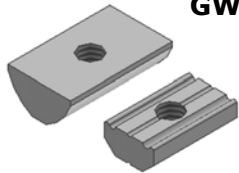
Part #	A	B	C	D	E	F	Length (mm)
L 18/10 2000	18	10	6.1	7.5	12	3.3	2000
L 18/18 2000	18	18	6.1	7.5	12	3.3	2000



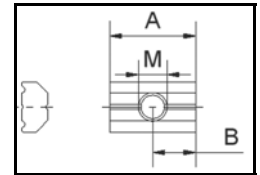
**ADK Profile End Cap**



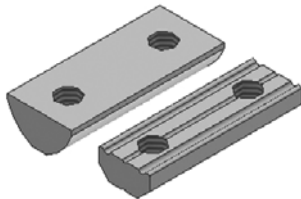
Part #	Profile	A	B	C	Weight (g)
ADK 25/25X	X-25/25	25	25	3	2
ADK 50/25X	X-50/25	25	50	3	4



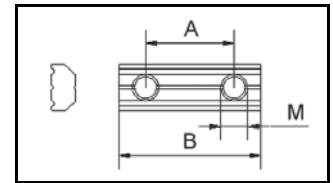
**GWP Channel Nut**



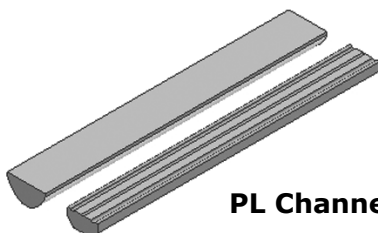
Part #	for	M = Thread	Material	Weight (g)
GWP 4/LX	C - Profile	M 4	Steel St37	3
GWP 5X	X - Profile	M 5	Steel St37	5
GWP 5J	X - Profile	M 5	Steel St37	10



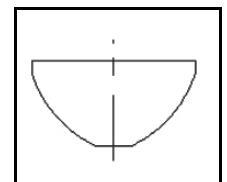
**GWP Channel Nut (2 Threads)**



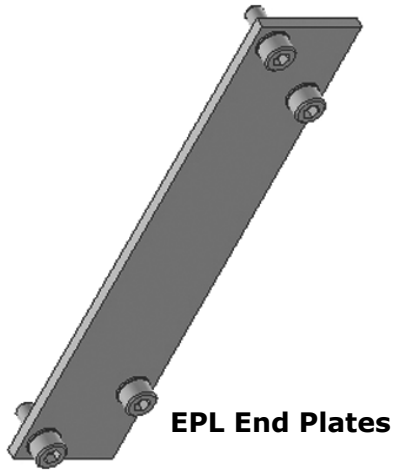
Part #	for	A	M = Thread	Material	Weight (g)
GWP 4-8 L/X	X-Profile	8	M 4	Steel St37	5
GWP 4-17 L/X	X-Profile	17	M 4	Steel St37	8
GWP GWP 4-25 L/X	L-Profile & X-Profile	25	M 4	Steel St37	12
GWP 4-31 L/X	X-Profile	31	M 4	Steel St37	15
GWP 5-10 X	X-Profile	10	M 5	Steel St37	6
GWP 5-16 X	X-Profile	16	M 5	Steel St37	8
GWP 5-22 X	X-Profile	22	M 5	Steel St37	11
GWP 5-28 X	X-Profile	28	M 5	Steel St37	14
GWP 5-35 X	L-Profile & X-Profile	35	M 5	Steel St37	16
GWP 5-38 X	X-Profile	38	M 5	Steel St37	18
GWP 5-41 X	X-Profile	41	M 5	Steel St37	18
GWP 5-42 X	X-Profile	42	M 5	Steel St37	19
GWP 5-58 X	X-Profile	58	M 5	Steel St37	26
GWP 5-63 X	J-Profile	63	M 5	Steel St37	30



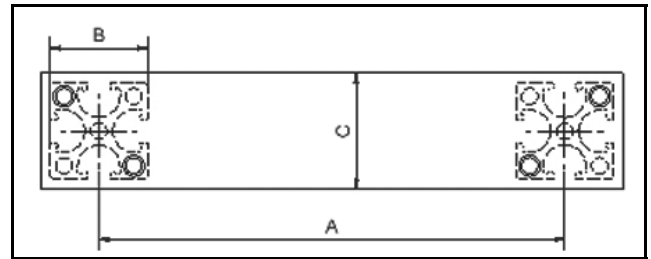
**PL Channel Nut Profiles**



Part #	for	A	Length (mm)	Material	Weight (g)
PL-L/X	X-Profile	6	2000	Steel St37	830

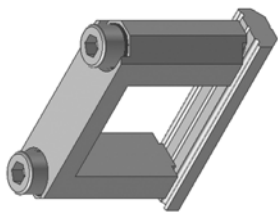


**EPL End Plates**

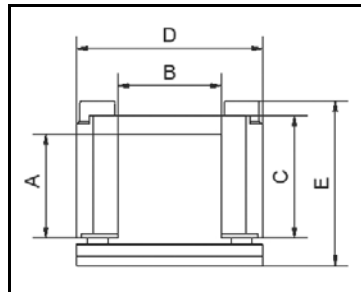


Part #	A	B	For Profile	Weight (g)
EPL 2-25X	120	25	X-25/25	27
EPL 2-50X	120	25	X-50/25	57
EPL 3-25X	200	25	X-25/25	57
EPL 3-50X	200	25	X-50/25	88

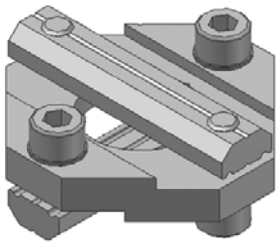
**PROFILE CONNECTORS**



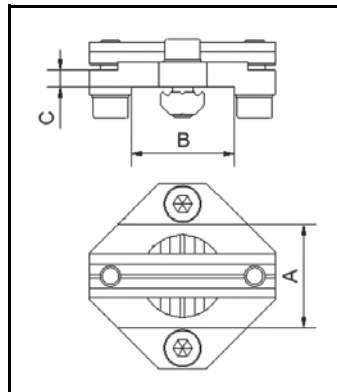
**KBV Square Joint Connector**



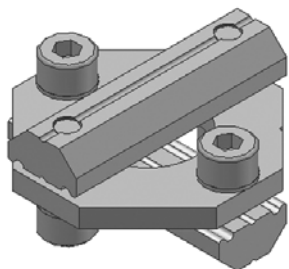
Part #	A	B	C	D	Weight (g)
KBV 10-18L	10	18	13	33	29
KBV 18-18L	18	18	21	33	34
KBV 25-25X	25	25	30	50	74
KBV 25-50X	25	50	30	70	82
KBV 50-25X	50	25	56	50	115



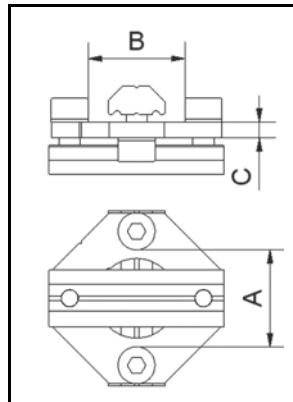
**KPL Cross Joint Connector**



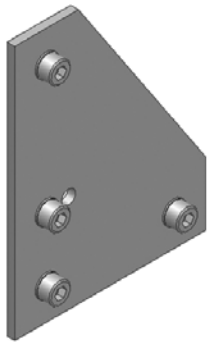
Part #	A	B	Weight (g)
KPL 18-18L	18	18	45
KPL 25-25X	25	25	70
KPL 25-50X	25	50	100
KPL 50-50X	50	50	196



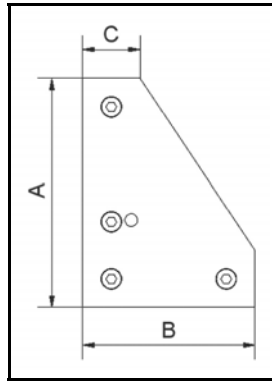
**KPL Flat Cross Joint Connector**



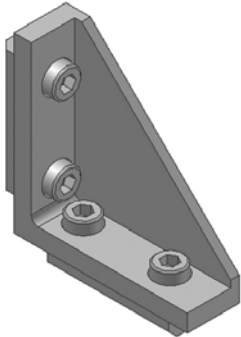
Part #	A	B
KPL 18-18FL	18	18
KPL 25-25FX	25	25



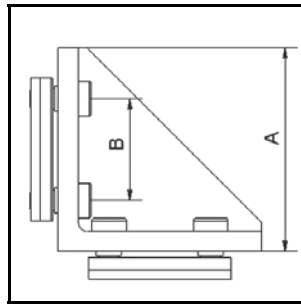
**EVB Corner Joint Plate**



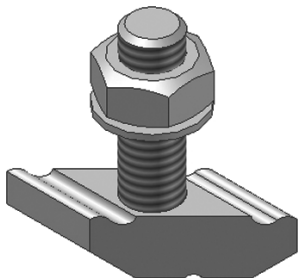
Part #	A	B	C	Weight (g)
EVB 25X	100	75	25	77
EVB 50X	100	100	50	114



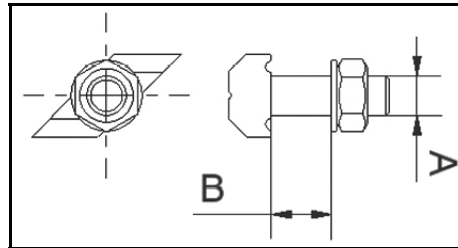
**WIV Corner Connector**



Part #	A	B	Weight (g)
WIV 25X	25	-	24
WIV 50X	50	25	52



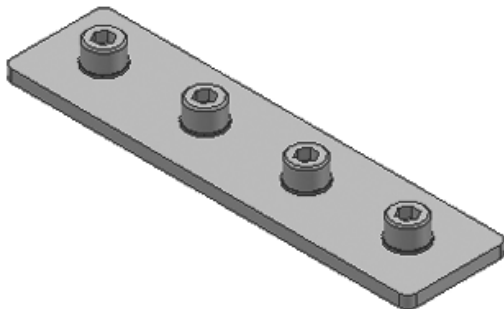
**HKS Removable Channel Bolt**



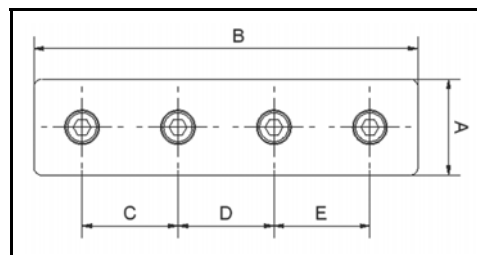
Part #	A	B= Thickness	Weight (g)
HKS 5-15X	M 5	Up to 10mm	19
HKS 5-62X	M 5	10 - 57mm	35

**SUPPORT JOINT CONNECTORS**

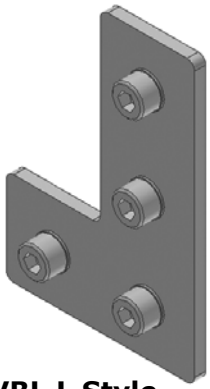
All Support Joint Connectors are designed for the X and J system. The primary use for these connectors are in >ATS< Safety Fence Kits or for the construction of fixtures or stands. They can also be used in conjunction with the joint connectors KPL, KPV, or WIV to make End of Arm Tool frames more rigid. They should never be used without or instead of these joint connectors in End of Arm Tool applications.



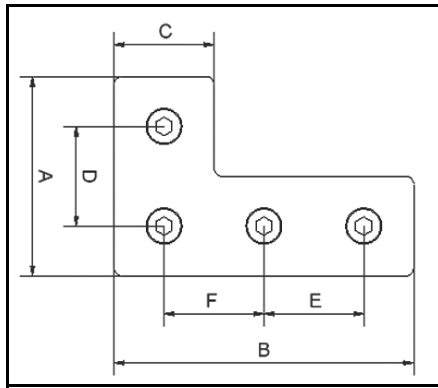
**VBG Straight**



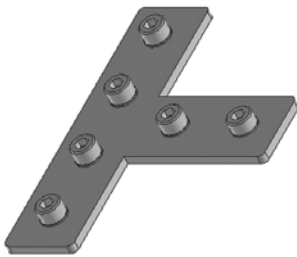
Part #	A	B	C	D	E
VBG 25/50X	25	50	25	-	-
VBG 25/75X	25	75	25	25	-
VBG 25/100X	25	100	25	25	25



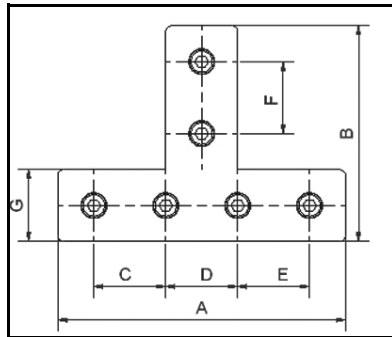
**VBL L Style**



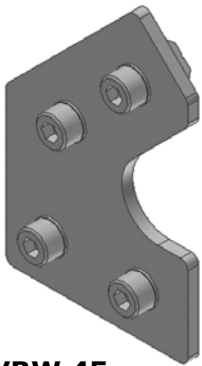
Part #	A	B	C	D	E	F
VBL 50/50X	50	50	25	25	25	-
VBL 50/75X	50	75	25	25	25	25



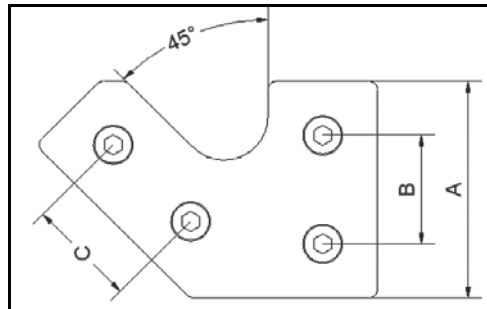
**VBT T Style**



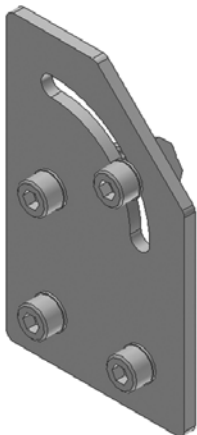
Part #	A	B	C	D	E	F	G
VBT 50/75X	50	75	-	25	-	25	25
VBT 100/75X	100	75	25	25	25	25	25



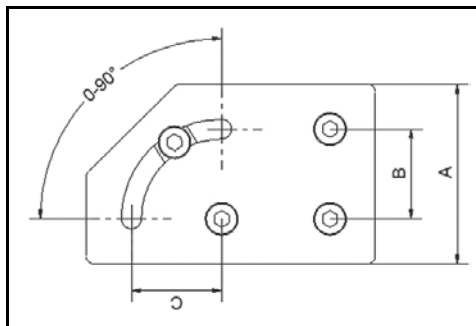
**VBW 45**



Part #	A	B	C
VBW 45X	50	25	25

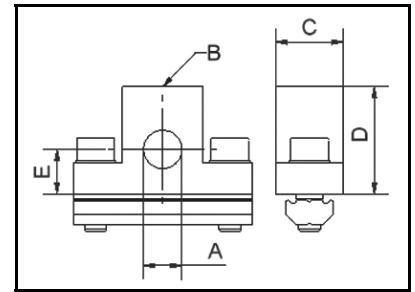
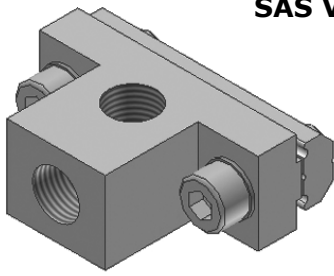


**VBW 0-90 Adjustable**



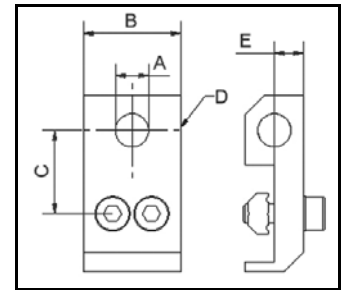
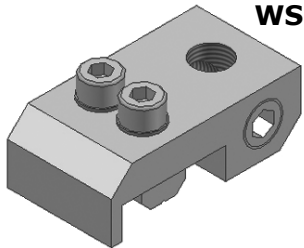
Part #	A	B	C
VBW 0-90X	50	25	25

**SAS Vacuum Cup Connector  
(Lateral)**



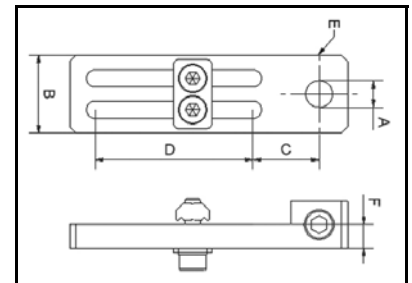
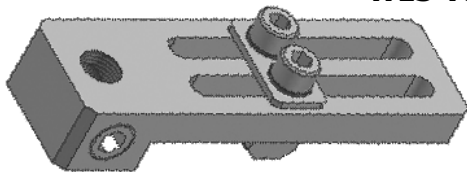
Part #	A	B	C	D	E	Weight (g)
SAS 1/8X	G 1/8"	G 1/8"	15	27	12	43
SAS 1/4X	-	G 1/8"	12	27	12	42

**WSS Vacuum Cup Connector  
(Angled)**



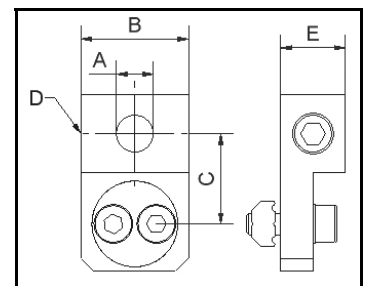
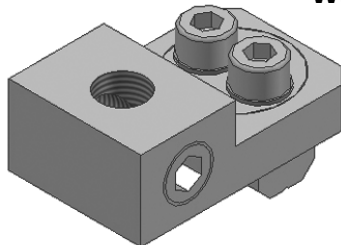
Part #	A	B	C	D	Weight (g)
WSS M 5L	M 5	16	16	M 5	17
WSS 1/8B	G 1/8"	25	22	G 1/8"	45
WSS 1/4X	G 1/4"	25	22	G 1/4"	43

**WLS Vacuum Cup Connector  
(Long Angle)**

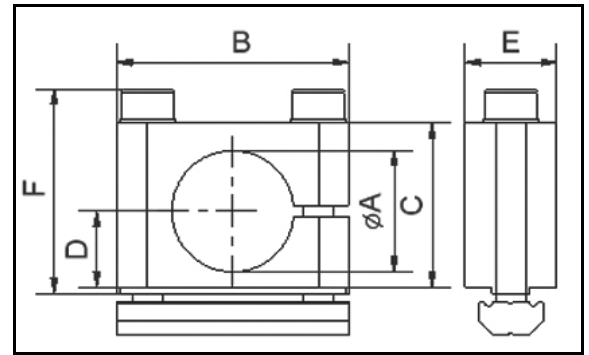
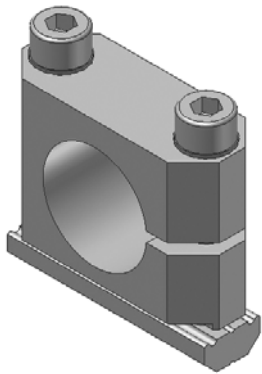


Part #	A	B	C	D	E	Weight (g)
WLS M 5L/X	M 5	16	16	45	M 5	23
WLS 1/8X	G 1/8"	25	22	57	G 1/8"	57
WLS 1/4X	G 1/4"	25	22	57	G 1/8"	57

**WSD Vacuum Cup Connector  
(Adjustable 360 Angle)**

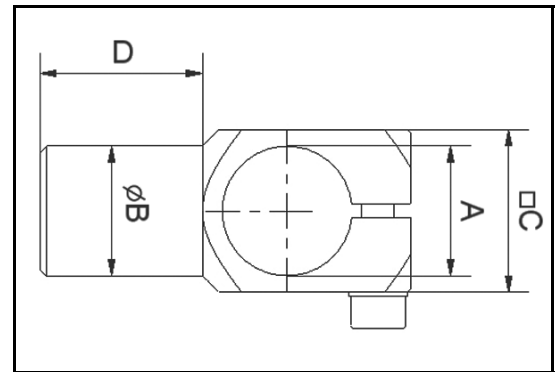
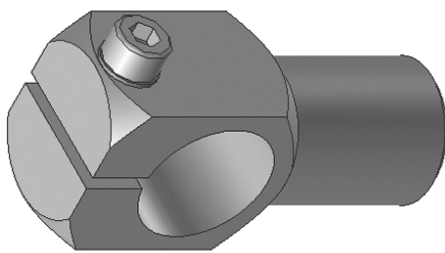


Part #	A	B	C	D	Weight (g)
WSD M 5L/X	M 5	16	16	M 5	19
WSD 1/8X	G 1/8"	25	22	G 1/8"	39
WSD 1/4X	G 1/4"	25	22	G 1/8"	38



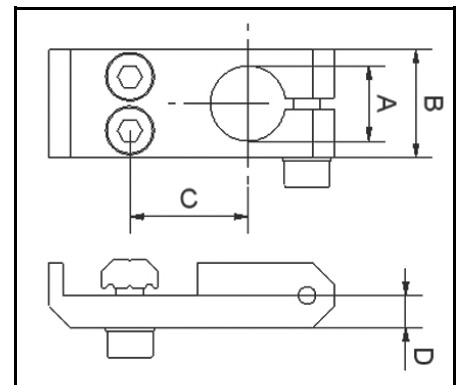
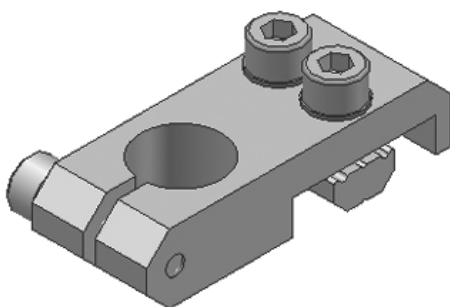
**KVB Cross Clamp**

Part #	A	B	C	D	for Light System	for X System	Weight (g)
KVB 10L/X	10	25	16	8	X	X	25
KVB 14X	14	34	19	10		X	38
KVB 20X	20	40	26	12		X	50
KVB 30X	30	50	38	18		X	93



**SKS Insert Clamp**

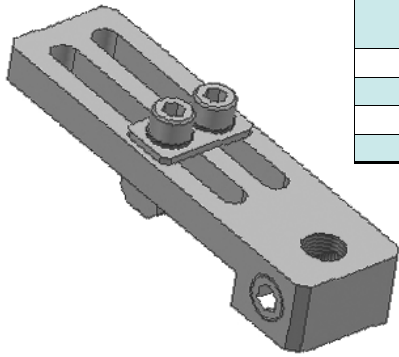
Part #	A	B	C	D	for X System	Weight (g)
SKS 20	20	20	25x25	30	X	49
SKS 20-30	30	20	40x30	30	X	70



**WST Angle Clamp**

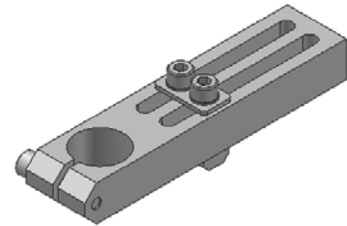
Part #	A	B	C	for Light System	for X System	Weight (g)
WST 10L	10	16	16	X		19
WST 10X	10	16	21		X	25
WST 14X	14	20	21		X	42
WST 20X	20	25	25		X	51
WST 30X	20	40	30		X	116





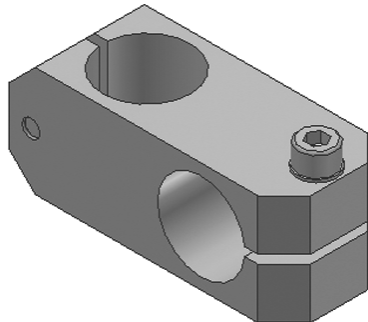
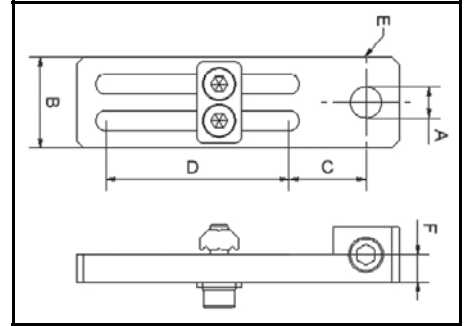
Part #	A	B	C	D	for Light System	for X System	Weight (g)
WSL 10L/X	10	16	16	45	X	X	27
WSL 14X	14	20	21	57		X	50
WSL 20X	20	25	25	64		X	67
WSL 30X	30	40	30	64		X	161

**WLS Long Angle Clamp**

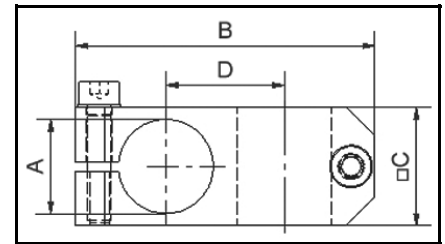


**WLS Long Angle Clamp Strong Version**

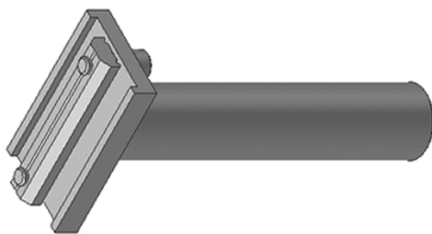
Part #	A	B	C	D	for Light System	for X System	Weight (g)
WSL 20VX	20	25	25	64		x	96



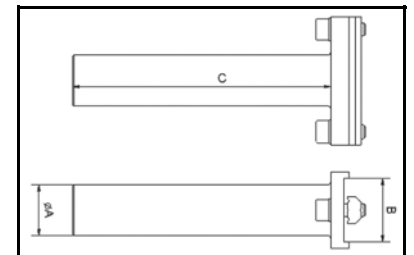
**KKS Cross Clamp**



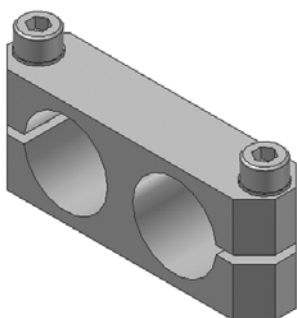
Part #	A	B	C	D	Weight (g)
KKS 10L	10	38	16	14	21
KKS 14X	14	52	20	20	41
KKS 20X	20	64	25	26	68



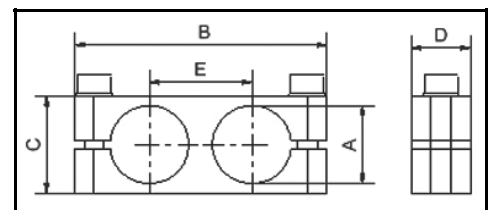
**DKS 90 Mounting Bar**



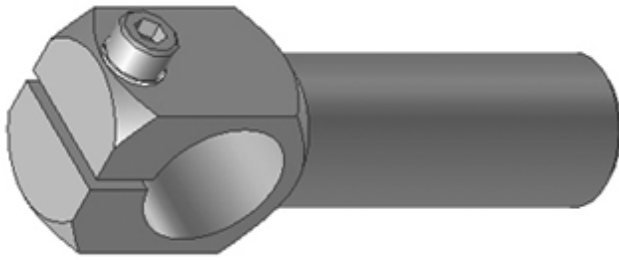
Part #	A	B	C	Weight (g)
DKS 10L	-	18	60	27
DKS 14X	14	25	80	53
DKS 20X	20	25	100	79



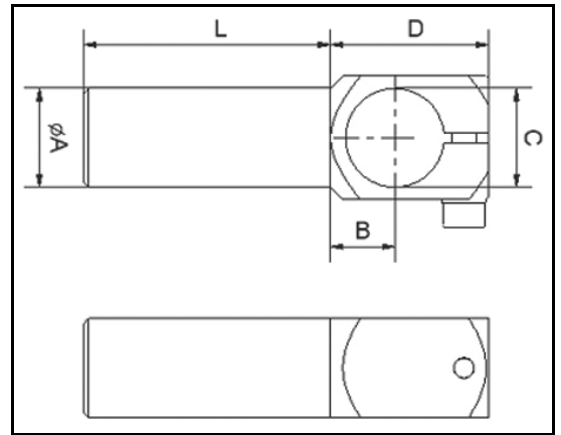
**PKS Parallel Clamp**



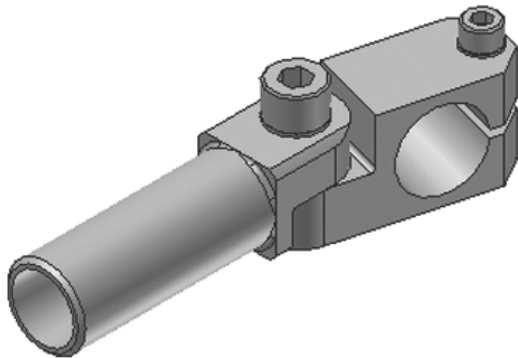
Part #	A	B	C	D	E	Weight (g)
PKS 10	-	38	15	10	14	14
PKS 14	14	52	20	15	20	28
PKS 20	20	64	25	15	26	45



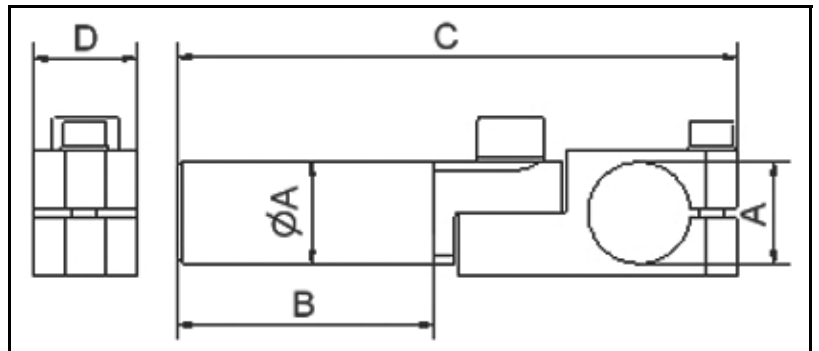
**WKA Angle Arm**



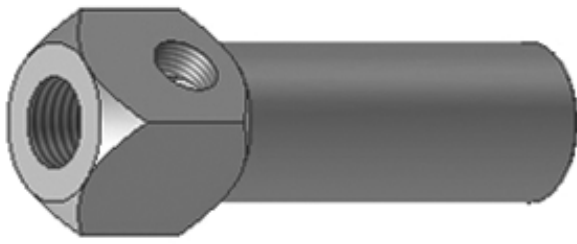
Part #	A	B	C	D	for Light System	for X System	Weight (g)
WKA 10-30	10	7	10	20	X	X	12
WKA 10-60	10	7	10	20	X	X	16
WKA 10-90	10	7	10	20	X	X	20
WKA 14-40	14	9	14	25		X	30
WKA 14-80	14	9	14	25		X	38
WKA 14-120	14	9	14	25		X	46
WKA 20-50	20	12	20	33		X	59
WKA 20-100	20	12	20	33		X	69
WKA 20-150	20	12	20	33		X	88
WKA 30-80	30	18	30	48		X	
WKA 30-120	30	18	30	48		X	
WKA 30-200	30	18	30	48		X	



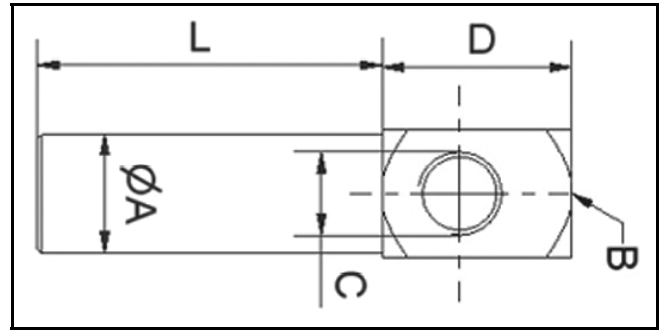
**GLA Elbow Gripper Arm**



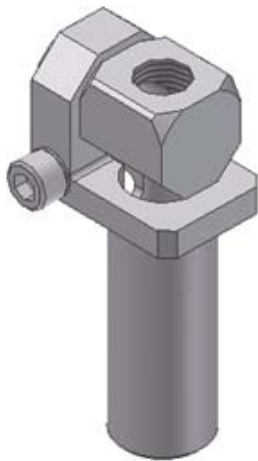
Part #	A	B	C	D	for Light System	for X System	for Jumbo System
GLA 10-30	-	30	67	14	X	X	
GLA 10-60	10	60	97	14	X	X	
GLA 10-90	10	90	127	14	X	X	
GLA 14-40	14	40	90	18		X	
GLA 14-80	14	80	130	18		X	
GLA 14-120	14	120	170	18		X	
GLA 20-50	20	20	110	20		X	X
GLA 20-100	20	100	160	20		X	X
GLA 20-150	20	150	210	20		X	X



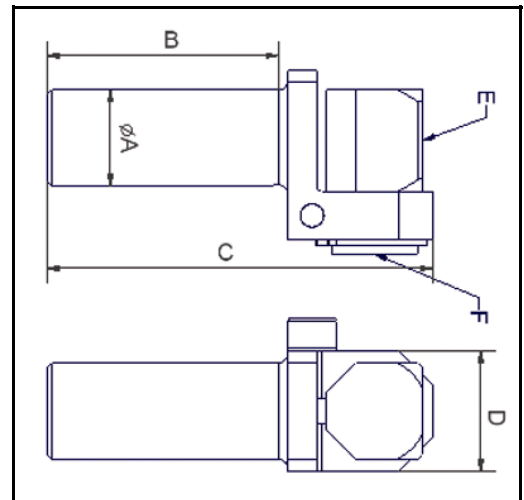
**GSE Gripper Arm for Suction Cups**



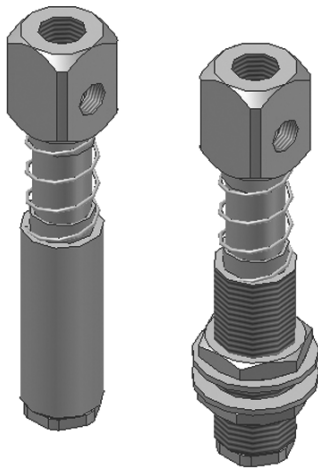
Part #	A	B	C	D	L	for Light System	for X System	Weight (g)
GSE 10-30	10	M 5	M 5	10	30	X	X	9
GSE 10-60	10	M 5	M 5	10	60	X	X	14
GSE 10-90	10	M 5	M 5	10	90	X	X	18
GSE 10-1/8-30	10	G 1/8"	M 5	10	30	X	X	9
GSE 10-1/8-60	10	G 1/8"	M 5	10	60	X	X	13
GSE 10-1/8-90	10	G 1/8"	M 5	10	90	X	X	18
GSE 14-40	14	G 1/8"	G 1/8"	22	40		X	19
GSE 14-80	14	G 1/8"	G 1/8"	22	80		X	27
GSE 14-120	14	G 1/8"	G 1/8"	22	120		X	35
GSE 20-50	20	G 1/4"	G 1/8"	30	50		X	38
GSE 20-100	20	G 1/4"	G 1/8"	30	100		X	52
GSE 20-150	20	G 1/4"	G 1/8"	30	150		X	68



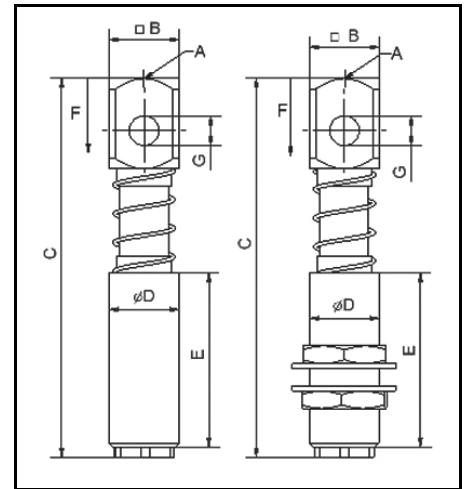
**GGE Swivel Gripper Arm**



Part #	A	B	C	D	for Light System	for X System
GGE 10-30	-	30	50	15	X	X
GGE 10-60	10	60	80	15	X	X
GGE 10-90	10	90	110	15	X	X
GGE 14-40	14	40	68	20		X
GGE 14-80	14	80	108	20		X
GGE 14-120	14	120	148	20		X
GGE 20-50	20	50	82	25		X
GGE 20-100	20	100	132	25		X
GGE 20-150	20	150	182	25		X

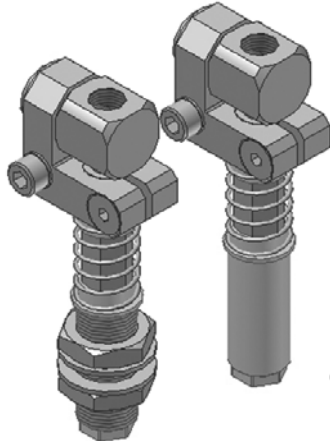


**GAF Spring Loaded Gripper Arm**

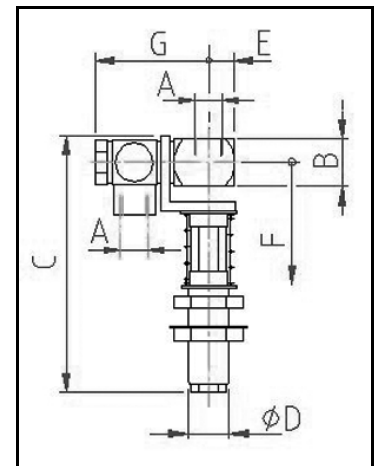


Part #	A	B	C	D	F	G	for Light System	for X System	for Jumbo System	Weight (g)
GAF 10-C-10	M 5	10	60	10	10	M 5	X	X		31
GAF 10-M-10	M 5	10	60	M 10x1	10	M 5				36
GAF 14-C-15		16	72	14	15	G 1/8		X		48
GAF 14-M-15		16	72	M 14x1	15	G 1/8				60
GAF 20-C-20		20	109	20	20	G 1/8		X	X	142
GAF 20-M-20		20	109	M 20x1.2	20	G 1/8				162

Choice of threaded or non-threaded arms (Measurement D)

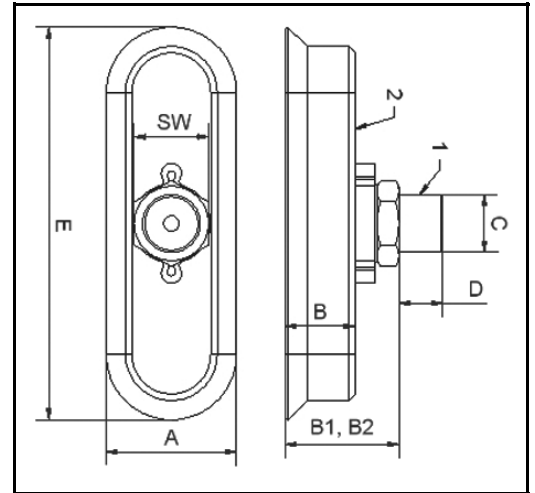
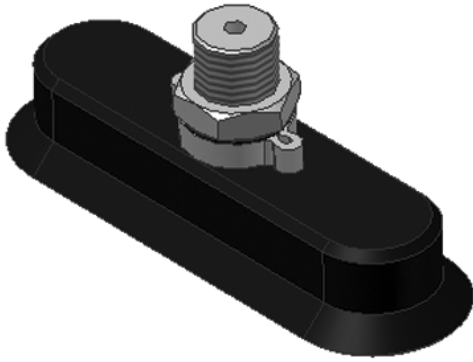


**GGS Spring Loaded Gripper Arm**



Part #	A	B	C	D	E	F	G	for Light System	for X System	for Jumbo System	Weight (g)
GGS 10-C-10	M 5	16	60	10	5	10	23	X	X		36
GGS 10-M-10	M 5	10	60	M 10x1	5	10	23				41
GGS 14-C-15	G 1/8	16	86	14	8	15	38		X		87
GGS 14-M-15	G 1/8	16	86	M 14x1	8	15	38				97
GGS 14-C-40	G 1/8	16	111	14	8	40	38		X		97
GGS 14-M-15	G 1/8	16	111	M 14x1	8	40	38				108
GGS 20-C-20	G 1/4	20	120	20	10	20	47		X	X	201
GGS 20-M-20	G 1/4	20	120	M 20x1.5	10	20	47				218
GGS 20-C-50	G 1/4	20	150	20	10	50	47		X	X	219
GGS 20-M-50	G 1/4	20	150	M 20x1.5	10	50	47				245

Choice of threaded or non-threaded arms (Measurement D)



**VS0 Oval with Adapter**

Made for use in restricted work envelope areas

**Holding Force:** Theoretical value at 0.6 bar vacuum on a dry smooth and flat surface.

**Working Force:** Double the Holding Force

Part #	A	E	B	B1	B2	Holding Force	Weight	Without Adapter
VS0-2x4 N	2	4	6	5	4.5	0.4N	0.2g	VNO-2x4N
VS0-3.5x7N	3.5	7	6	5	4.5	1N	0.2g	VNO-3.5x7N
VS0-5x15N	5	15	11	16	15.5	3N	1.6g	VNO-5x15N
VS0-6x18N	6	18	11	16	15.5	4.5N	1.6g	VNO-6x18N
VS0-8x24N	8	24	13	18	17	8N	5g	VNO-8x24M
VS0-10x30N	10	30	12	16	15	12N	6g	VNO-10x30N
VS0-15x45N	15	45	20	26	25	28N	15g	VNO-15x45N
VS0-20x60N	20	60	20	26	25	50N	18g	VNO-20x60N
VS0-25x75N	25	75	21	26	25	78N	26g	VNO-25x75N
VS0-30x90N	30	90	21	27	26	112.5N	35g	VNO-30x90N

**VS0 Adapter**

Part #	C	D	SW1	Adapter Style
VSA5	M 3	3	5	PUSH FIT
VSA15	M 5	5	8	PUSH FIT
VSA20	G 1/8"	8	14	CRIMPED
VSA130	G 1/4"	10	17	CRIMPED

**VS1 Adapters**

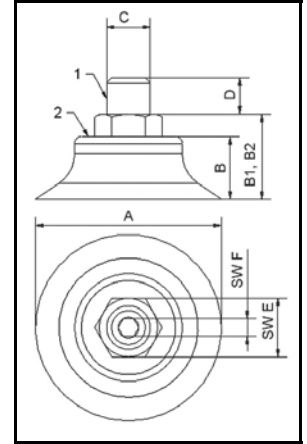
Part #	C	D	SWE	SWF	Adapter Style
VSA 10	M 5	5	7	2	PUSH FIT
VSA 30	G 1/8"	5	7	2	PUSH FIT
VSA 50	G 1/8"	5	13	3	PUSH FIT
VSA 60	G 1/8"	8	13	4	PUSH FIT
VSA 80	G 1/8"	8	13	5	PUSH FIT
VSA 110	G 1/4"	10	17	5	TAPPED

The VS1 style provides the strongest suction. Recommended for use on even surfaces. Unique mounting method with open end wrench from the top or with allen wrench from the bottom.



**Remark:**  
 1 - Adapter  
 2 - Suction cup  
 3 - Allen wrench  
 B1 - Relaxed  
 B2 - Compressed

**Chart:**  
 N: Nitrile  
 S: Silicone  
 P: Polyurethane  
 V: Viton



**VS1 Bellow with Adapter**

Part #	A	B	B1	B2	Material	Holding Force	Weight	Without Adapter
VS1-2-N5	2	4	9	8.5	N	0.12N	2g	VN 1-2-N
VS1-2-S5	2	4	9	8.5	S	0.12N	2g	VN 1-2-S
VS1-2-P5	2	4	9	8.5	P	0.12N	2g	VN 1-2-P
VS1-3.5-N5	3.5	4	9	8.5	N	0.4N	2g	VN 1-3.5-N
VS1-3.5-S5	3.5	4	9	8.5	S	0.4N	2g	VN 1-3.5-S
VS1-3.5-P5	3.5	4	9	8.5	P	0.4N	2g	VN 1-3.5-P
VS1-5-N5	5	6.5	11	10	N	0.75N	2.7g	VN 1-5-N
VS1-5-S5	5	6.5	11	10	S	0.75N	2.7g	VN 1-5-S
VS1-5-P5	5	6.5	11	10	P	0.75N	2.7g	VN 1-5-P
VS1-8-N5	8	7	11	10	N	2.5N	2.7g	VN 1-8-N
VS1-8-S5	8	7	11	10	S	2.5N	2.7g	VN 1-8-S
VS1-8-P5	8	7	11	10	P	2.5N	2.7g	VN 1-8-P
VS1-8-V5	8	7	11	10	V	2.5N	2.7g	VN 1-8-V
VS1-10-N5	10	7.5	12.5	11	N	4N	3g	VN 1-10-N
VS1-10-S5	10	7.5	12.5	11	S	4N	3g	VN 1-10-S
VS1-10-P5	10	7.5	12.5	11	P	4N	3g	VN 1-10-P
VS1-10-V5	10	7.5	12.5	11	V	4N	3g	VN 1-10-V
VS1-15-N5	15	8	13	11	N	9N	3g	VN 1-15-N
VS1-15-S5	15	8	13	11	S	9N	3g	VN 1-15-S
VS1-15-P5	15	8	13	11	P	9N	3g	VN 1-15-P
VS1-20-N8	20	10	14	12	N	15.5N	12g	VN 1-20-N
VS1-20-S8	20	10	14	12	S	15.5N	12g	VN 1-20-S
VS1-20-P8	20	10	14	12	P	15.5N	12g	VN 1-20-P
VS1-20-V8	20	10	14	12	V	15.5N	12g	VN 1-20-V
VS1-25-N8	25	14	18	16	N	26.5N	13g	VN 1-25-N
VS1-25-S8	25	14	18	16	S	26.5N	13g	VN 1-25-S
VS1-25-P8	25	14	18	16	P	26.5N	13g	VN 1-25-P
VS1-25-V8	25	14	18	16	V	26.5N	13g	VN 1-25-V
VS1-30-N8	30	12	17	14	N	34N	13g	VN 1-30-N
VS1-30-S8	30	12	17	14	S	34N	13g	VN 1-30-S
VS1-30-P8	30	12	17	14	P	34N	13g	VN 1-30-P
VS1-30-V8	30	12	17	14	V	34N	13g	VN 1-30-V
VS1-40-N8	40	14	18	15	N	57.5N	18g	VN 1-40-N
VS1-40-S8	40	14	18	15	S	57.5N	18g	VN 1-40-S

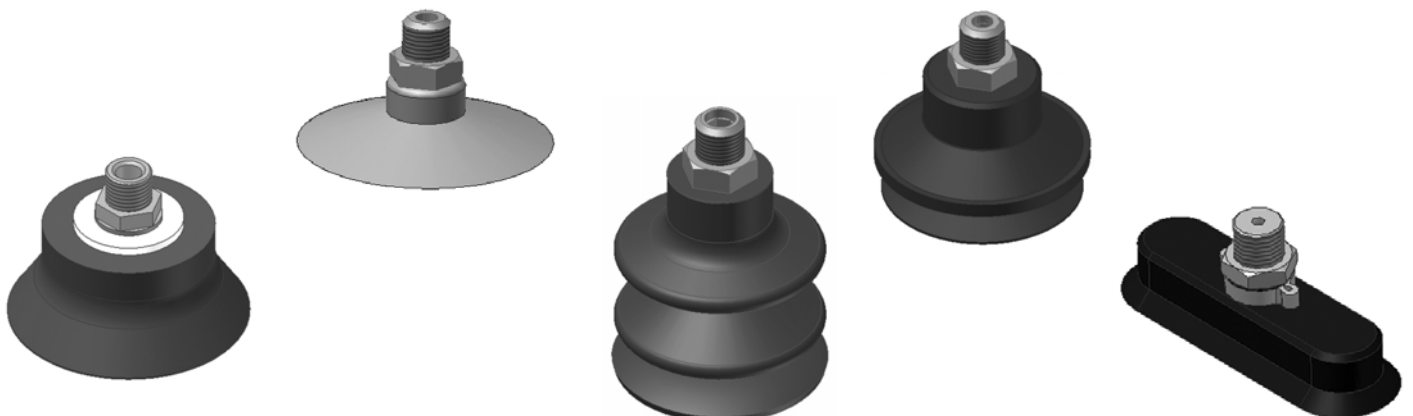
**VS1 Bellow with Adapter (continued)**

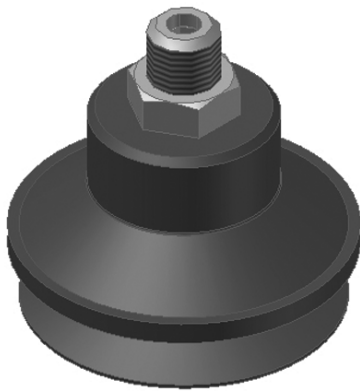
Part #	A	B	B1	B2	Material	Holding Force	Weight	Without Adapter
VS1-40-P8	40	14	18	15	P	57.5N	18g	VN 1-40-P
VS1-40-V8	40	14	18	15	V	57.5N	18g	VN 1-40-V
VS1-50-N8	50	15	20	16	N	91N	22g	VN 1-50-N
VS1-50-S8	50	15	20	16	S	91N	22g	VN 1-50-S
VS1-50-P8	50	15	20	16	P	91N	22g	VN 1-50-P
VS1-50-V8	50	15	20	16	V	91N	22g	VN 1-50-V
VS1-60-N4	60	18	24	18	N	125N	50g	VN 1-60-N
VS1-60-S4	60	18	24	18	S	125N	50g	VN 1-60-S
VS1-60-P4	60	18	24	18	P	125N	50g	VN 1-60-P
VS1-80-N4	80	20	25	19	N	260N	79g	VN 1-80-N
VS1-80-S4	80	20	25	19	S	260N	79g	VN 1-80-S
VS1-80-P4	80	20	25	19	P	260N	79g	VN 1-80-V
VS1-95-N4	95	19	26	20	N	350N	113g	VN 1-95-N
VS1-95-S4	95	19	26	20	S	350N	113g	VN 1-95-S
VS1-95-P4	95	19	26	20	P	350N	113g	VN 1-95-P

**VACUUM CUPS**

- ◆ Most sizes come in all materials
- ◆ For every cup you have a wide selection of materials to meet your application needs
- ◆ Every cup is available with or without adapters
- ◆ Adapters are reusable
- ◆ Elephant skin Vacuum Cups™ New Polyurethane vacuum cups made of Aclathan®

MATERIAL	COLOR	HARDNESS	WORKING TEMPERATURE	TEAR RESISTANCE	AGING PROPERTIES	OIL/GREASE RESISTANCE
ACLATHAN	BROWN	78 +/- 5	-20 C to 100 C -4 F to 212 F	VERY HIGH	HIGH	HIGH
POLYURETHANE	BLUE	55 +/- 5	-20 C to 75 C -4 F to 167 F	HIGH	HIGH	HIGH
NITRILE	BLACK	55 +/- 5	-25 C to 120 C -13 F to 248 F	MEDIUM	MEDIUM	MEDIUM
SILICONE	CLEAR	55 +/- 5	-30 C to 200 C -22 F to 392 F	LOW	HIGH	HIGH
VITON	BLACK	55 +/- 5	-30 C to 220 C -22 F to 428 F	MEDIUM	HIGH	HIGH
NATURAL RUBBER	RED-BROWN	VERY SOFT	to 100 C to 212 F	LOW	HIGH	LOW

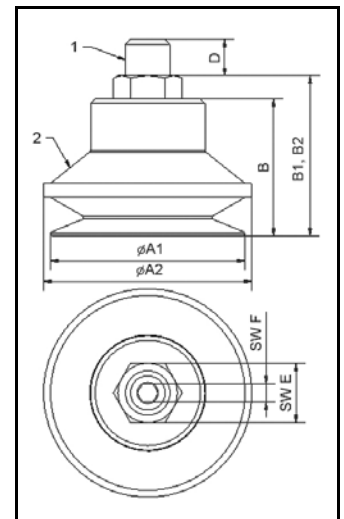




VS2 Bellows with Adapter

**Remark:**

- 1 - Adapter
- 2 - Suction cup
- 3 - Allen wrench
- B1 - Relaxed
- B2- Compressed



**Holding Force:** Theoretical value at 0.6 bar vacuum on a dry smooth and flat surface.

**Working Force:** Double the Holding Force

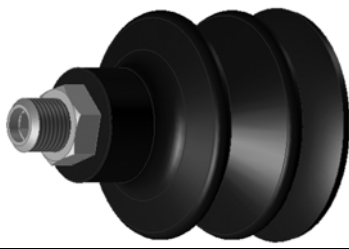
Part #	A	A2	B	B1	B2	Material	Work Diameter	Holding Force	Weight	Without Adapter
VS2-10-N5	11.5	12.5	13.5	18	14	N	5.2	0.13 N	3.2g	VN 2-10-N
VS2-10-S5	11.5	12.5	13.5	18	14	S	5.2	0.13 N	3.2g	VN 2-10-S
VS2-10-P5	11.5	12.5	13.5	18	14	P	5.2	0.13 N	3.2g	VN 2-10-P
VS2-15-N5	16	17	15	21	14	N	7.5	0.35 N	3.3g	VN 2-15-N
VS2-15-S5	16	17	15	21	14	S	7.5	0.35 N	3.3g	VN 2-15-S
VS2-15-P5	16	17	15	21	14	P	7.5	0.35 N	3.3g	VN 2-15-P
VS2-20-N8	22	24	21	25	19	N	11	0.55 N	13g	VN 2-20-N
VS2-20-S8	22	24	21	25	19	S	11	0.55 N	13g	VN 2-20-S
VS2-20-P8	22	24	21	25	19	P	11	0.55 N	13g	VN 2-20-P
VS2-30-N8	33	36	30	35	25	N	17	1.35 N	20g	VN 2-30-N
VS2-30-S8	33	36	30	35	25	S	17	1.35 N	20g	VN 2-30-S
VS2-30-P8	33	36	30	35	25	P	17	1.35 N	20g	VN 2-30-P
VS2-40-N8	43	46	30	35	25	N	22.5	2.35 N	25g	VN 2-40-N
VS2-40-S8	43	46	30	35	25	S	22.5	2.35 N	25g	VN 2-40-S
VS2-40-P8	43	46	30	35	25	P	22.5	2.35 N	25g	VN 2-40-P
VS2-50-N8	54	60	36	41	29	N	32	4.8 N	35g	VN 2-50-N
VS2-50-S8	54	60	36	41	29	S	32	4.8 N	35g	VN 2-50-S
VS2-50-P8	54	60	36	41	29	P	32	4.8 N	35g	VN 2-50-P
VS2-75-N4	78	84	40	46	24	N	55	14.2N	115g	VN 2-75-N
VS2-75-S4	78	84	40	46	24	S	55	14.2 N	115g	VN 2-75-S
VS2-75-P4	78	84	40	46	24	P	55	14.2 N	115g	VN 2-75-P

**VS2 Adapters**

Adapters for VS2 and VS2 PL (Polyurethane Longlife)

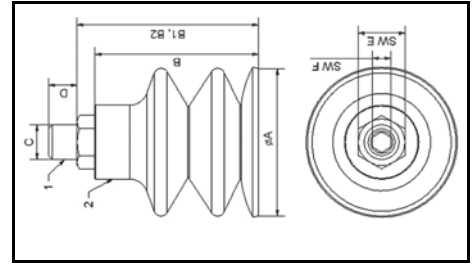
Part #	C	D	SWE	SWF	Adapter Style
VSA 30	M 5	5	7	2	PUSH FIT
VSA 60	G 1/8"	8	13	4	PUSH FIT
VSA 80	G 1/8"	8	13	4	PUSH FIT
VSA 110	G 1/4"	10	17	5	SCREWED





**VS3 Bellows with Adapter**

**Remark:**  
 1 - Adapter  
 2 - Suction cup  
 3 – Allen wrench  
 B1 - Relaxed  
 B2- Compressed



Part #	A	B	B1	B2	Material	Work Diameter	Holding Force	Weight	Without Adapter
VS 3-5-N-5	5	9.5	14	12.5	N	2	0.02 N	2.7g	VN 3-5-N
VS 3-5-S-5	5	9.5	14	12.5	S	2	0.02 N	2.7g	VN 3-5-S
VS 3-5-P-5	5	9.5	14	12.5	P	2	0.02 N	2.7g	VN 3-5-P
VS 3-8-N-5	8	10	15	12.5	N	2.9	0.04 N	2.7g	VN 3-8-N
VS 3-8-S-5	8	10	15	12.5	S	2.9	0.04 N	2.7g	VN 3-8-S
VS 3-8-P-5	8	10	15	12.5	P	2.9	0.04 N	2.7g	VN 3-8-P
VS 3-10-N-5	10	14	19	17	N	4.5	0.1 N	3g	VN 3-10-N
VS 3-10-S-5	10	14	19	17	S	4.5	0.1 N	3g	VN 3-10-S
VS 3-10-P-5	10	14	19	17	P	4.5	0.1 N	3g	VN 3-10-P
VS 3-10-N-8	10	14	19	17	N	4.5	0.1 N	11g	VN 3-10-N
VS 3-10-S-8	10	14	19	17	S	4.5	0.1 N	11g	VN 3-10-S
VS 3-10-P-8	10	14	19	17	P	4.5	0.1 N	11g	VN 3-10-P
VS 3-15-N-5	15	23	28	20	N	5.2	0.13 N	5g	VN 3-15-N
VS 3-15-S-5	15	23	28	20	S	5.2	0.13 N	5g	VN 3-15-S
VS 3-15-P-5	15	23	28	20	P	5.2	0.13 N	5g	VN 3-15-P
VS 3-15-N-8	15	23	28	20	N	5.2	0.13 N	12g	VN 3-15-N
VS 3-15-S-8	15	23	28	20	S	5.2	0.13 N	12g	VN 3-15-S
VS 3-15-P-8	15	23	28	20	P	5.2	0.13 N	12g	VN 3-15-P
VS 3-18-N-5	18	23	27	19	N	8	0.3 N	5g	VN 3-18-N
VS 3-18-S-5	18	23	27	19	S	8	0.3 N	5g	VN 3-18-S
VS 3-18-P-5	18	23	27	19	P	8	0.3 N	5g	VN 3-18-P
VS 3-18-N-8	18	23	27	19	N	8	0.3 N	12g	VN 3-18-N
VS 3-18-S-8	18	23	27	19	S	8	0.3 N	12g	VN 3-18-S
VS 3-18-P-8	18	23	27	19	P	8	0.3 N	12g	VN 3-18-P
VS 3-20-N-5	20	23	27	19	N	9.6	0.4 N	6g	VN 3-20-N
VS 3-20-S-5	20	23	27	19	S	9.6	0.4 N	6g	VN 3-20-S
VS 3-20-P-5	20	23	27	19	P	9.6	0.4 N	6g	VN 3-20-P
VS 3-20-N-8	20	23	27	19	N	9.6	0.4 N	13g	VN 3-20-N
VS 3-20-S-8	20	23	27	19	S	9.6	0.4 N	13g	VN 3-20-S
VS 3-20-P-8	20	23	27	19	P	9.6	0.4 N	13g	VN 3-20-P
VS 3-30-N-8	30	37	42	29	N	17	1.4 N	23g	VN 3-30-N
VS 3-30-S-8	30	37	42	29	S	17	1.4 N	23g	VN 3-30-S
VS 3-30-P-8	30	37	42	29	P	17	1.4 N	23g	VN 3-30-P
VS 3-40-N-8	40	46	51	33	N	16	1.2 N	34g	VN 3-40-N
VS 3-40-S-8	40	46	51	33	S	16	1.2 N	34g	VN 3-40-S
VS 3-40-P-8	40	46	51	33	P	16	1.2 N	34g	VN 3-40-P
VS 3-60-N-8	60	55	60	37	N	29	4 N	69g	VN 3-60-N
VS 3-60-S-8	60	55	60	37	S	29	4 N	69g	VN 3-60-S
VS 3-60-P-8	60	55	60	37	P	29	4 N	69g	VN 3-60-P
VS 3-90-N-4	90	87	88	54	N	32	4.8 N	205g	VN 3-90-N
VS 3-90-S-4	90	87	88	54	S	32	4.8 N	205g	VN 3-90-S

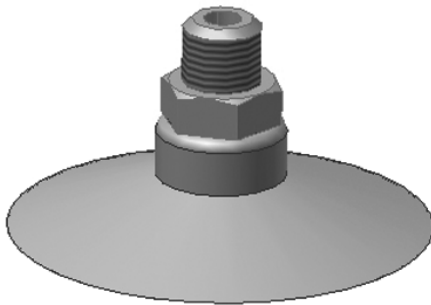
**VS3 Adapter**

Part #	C	D	SWE	SWF	Adapter Style
VSA 30	M 5	5	7	2	PUSH FIT
VSA 40	M 5	5	7	2	PUSH FIT
VSA 70	G 1/8"	8	13	3	PUSH FIT
VSA 90	G 1/8"	8	13	5	PUSH FIT
VSA 110	G 1/4"	10	17	6	PUSH FIT

**VAS Si/M Adapter**

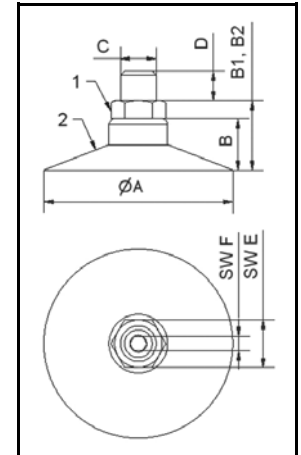
Part #	C	D	SWE	SWF	Adapter Style
AVS 8	M 5	5	10	-	PUSH FIT
AVS 30	G 1/8"	7	13	5	PUSH FIT

**SPECIAL VACUUM CUPS**



**Remark:**

- 1 - Adapter
- 2 - Suction cup
- 3 - Allen wrench
- B1 - Relaxed
- B2 - Compressed

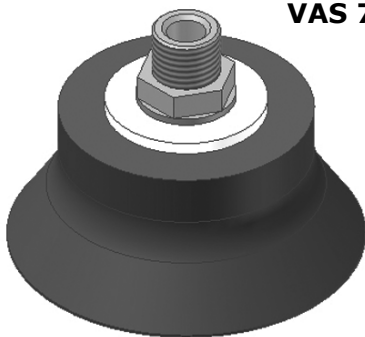


**VAS Si/M Microlip**

Does not leave marks on surface

Part #	A	B	B1	B2	Adapter Style	Material	Weight	Without Adapter
VAS 8 Si/M	8	11.5	15.5	15	PUSH FIT	SILICONE	16g	VSN 8 Si/M
VAS 12 Si/M	12	12	12	15.5	PUSH FIT	SILICONE	16g	VSN 12 Si/M
VAS 15 Si/M	15	16	16	25	PUSH FIT	SILICONE	17g	VSN 15 Si/M
VAS 20 Si/M	20	16	16	24	PUSH FIT	SILICONE	17g	VSN 20 Si/M
VAS 30 Si/M	30	16	16	24	PUSH FIT	SILICONE	17g	VSN 30 Si/M
VAS 40 Si/M	40	16	16	24	PUSH FIT	SILICONE	19g	VSN 40 Si/M
VAS 60 Si/M	60	15	15	17	TAPPED	SILICONE	36g	VSN 60 Si/M

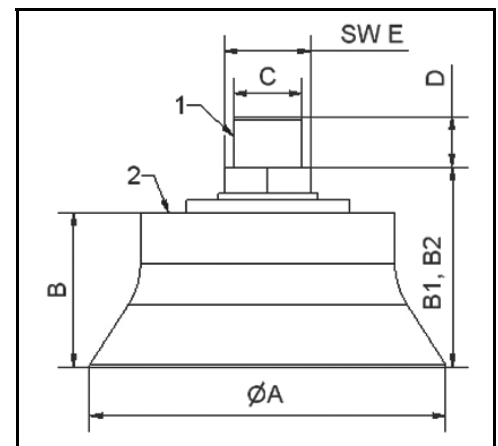
**VAS 70 SBR Tri-Lip**



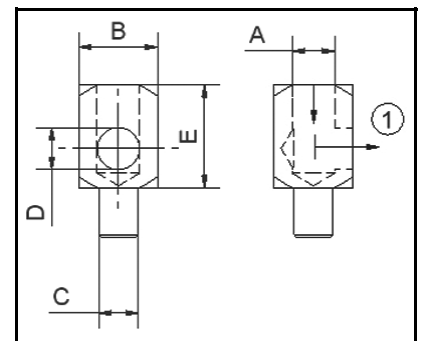
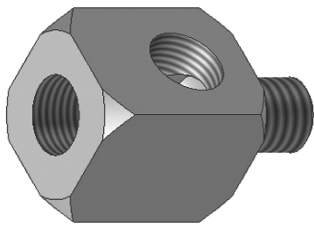
Special vacuum cup for rough or grainy surfaces

**Material:** Natural Rubber, heat resistant up to 212 F (100 C)

**Remark:** Specially designed for the wood industry



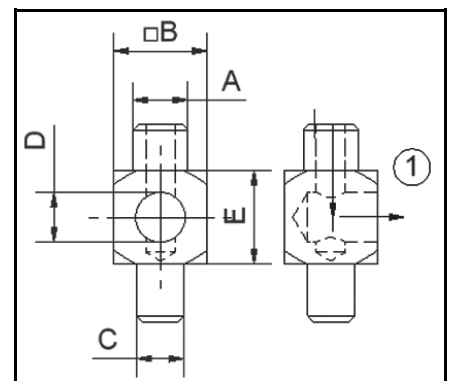
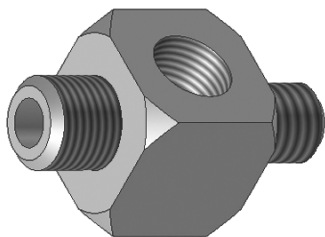
Part #	A	B	B1	B2	Adapter Style	Adapter	C	D	SWE	Weight	Without Adapter
VAS 70 SBR	70	31	40	36	PUSH FIT	AVS 70	G 1/4"	10	17	84g	VSN 70 SBR



**AVI Female Adapter**

Part #	A	B	C	D	E	Weight
AVI 5 I-8-3	M 5	8	M 3	M 5	12	4g
AVI 1/8 I-16-8	G 1/8"	16	M 8	G 1/8"	21	39g
AVI 1/4 I-16-8	G 1/4"	16	M 8	G 1/8"	26	35g

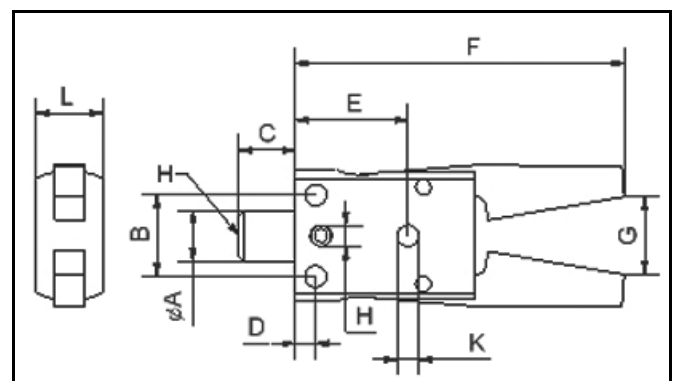
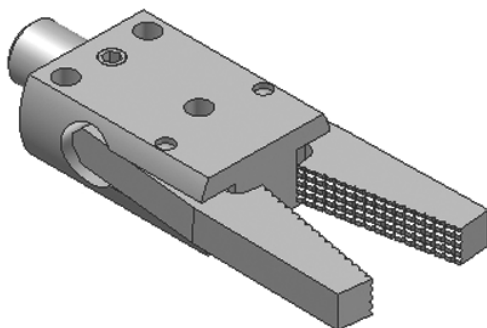
Measurement C is for connecting vacuum cup to KHZ



**AVA Male Adapter**

Part #	A	B	C	D	E	Weight
AVA 1/8A-16-6	G 1/8"	16	M 6	G 1/8"	16	29g
AVA 1/8A-16-8	G 1/8"	16	M 8	G 1/8"	16	29g
AVA 1/4A-16-6	G 1/4"	16	M 6	G 1/8"	16	32g
AVA 1/4A-16-8	G 1/4"	16	M 8	G 1/8"	16	32g

**GRIPPER JAWS**

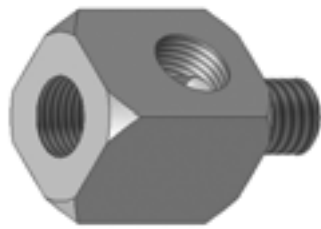


**GRZ 10-10 Gripper with Jaws**

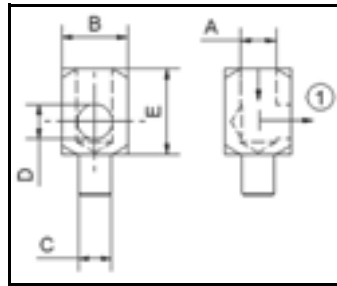
Designed for Light Systems and X Systems

Part #	A	B	C	D	E	F	G	H	K	L	Closing Pressure	Light System	X System	Weight
GRZ 10-10	10	16	12	4	22	64	15	M 5	4.5	13	10N	X	X	55

## ADAPTER



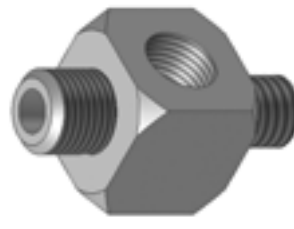
**AVI Female Adapter**



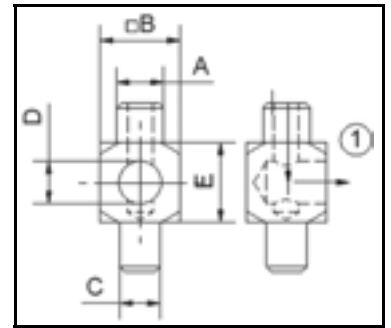
Part #	A	B	C	D	E	Weight
AVI 5 I-8-3	M 5	8	M 3	M 5	12	4g
AVI 1/8 I-16-8	G 1/8"	16	M 8	G 1/8"	21	39g
AVI 1/4 I-16-8	G 1/4"	16	M 8	G 1/8"	26	35g

Measurement C is for connecting vacuum cup to KHZ

## EOAT COMPONENTS



**AVA Male Adapter**



Part #	A	B	C	D	E	Weight
AVA 1/8A-16-6	G 1/8"	16	M 6	G 1/8"	16	29g
AVA 1/8A-16-8	G 1/8"	16	M 8	G 1/8"	16	29g
AVA 1/4A-16-6	G 1/4"	16	M 6	G 1/8"	16	32g
AVA 1/4A-16-8	G 1/4"	16	M 8	G 1/8"	16	32g

## GRIPPER JAW ACCESSORIES



**SF-200 Special File**

Creates a toothed pattern surface  
Recommended for custom jaws

Part #	Length	Grade
PVD 00010	200 mm	0

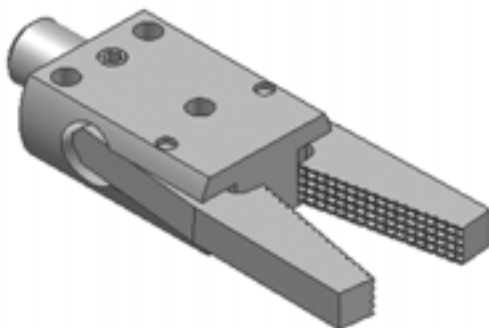
## KG Glue and Polyurethane Kit



This adhesive is specially formulated to be used in conjunction with supplied polyurethane pad. Pad can be cut to suit for custom lining jaws and gripper fingers to prevent handling marks on parts.

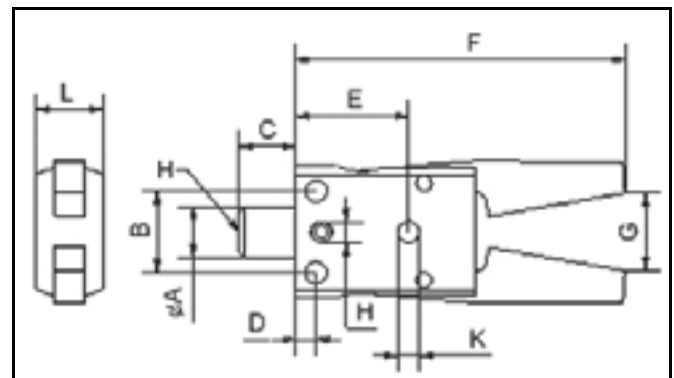
Part #	Thickness	Size (mm)
KG 250-4	4	250x250
KG 250-5	5	250x250

## GRIPPER JAWS

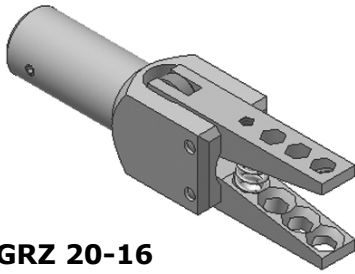


**GRZ 10-10 Gripper with Jaws**

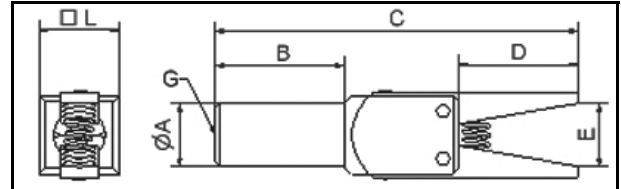
Designed for Light Systems and X Systems



Part #	A	B	C	D	E	F	G	H	K	L	Closing Pressure	Light System	X System	Weight
GRZ 10-10	10	16	12	4	22	64	15	M 5	4.5	13	10N	X	X	55

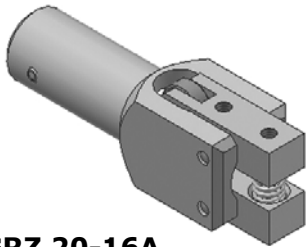


Gripper with jaws  
Designed for X Systems and Jumbo Systems

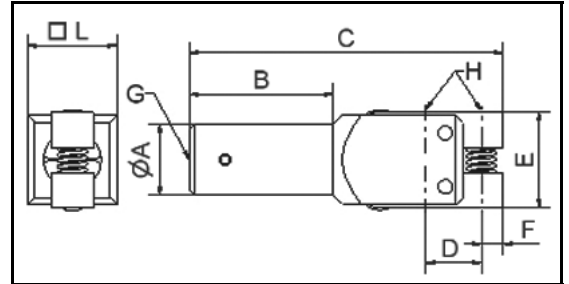


**GRZ 20-16**

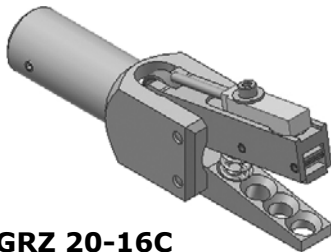
Part #	A	B	C	D	E	G	L	Closing Pressure	Weight
GRZ20-16	20	40	113	36	18	G 1/8"	25	50N	130g



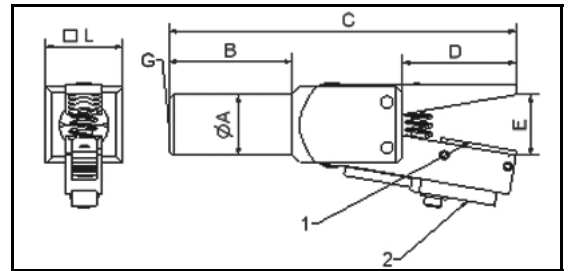
**GRZ 20-16A**  
Gripper for custom made jaws  
Designed for Light Systems and X Systems



Part #	A	B	C	D	E	F	G	H	L	Closing Pressure	Weight
GRZ20-16A	20	40	86	16	27	6	G 1/8"	M 5	25	-	116g

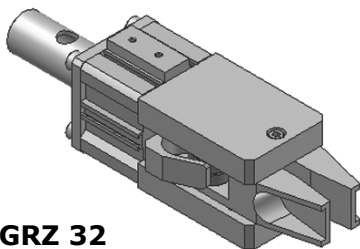


Grooved serrations on switch side  
Mechanically triggered switch  
Available in PNP or NPN styles

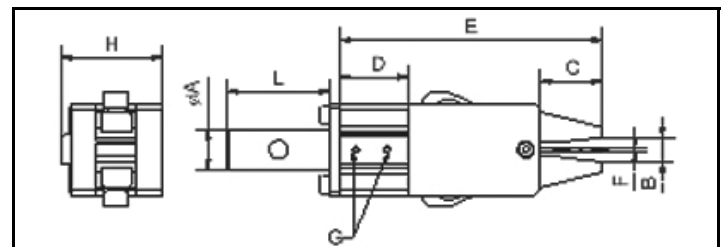


**GRZ 20-16C**  
Gripper with sensor  
Designed for X and Jumbo Systems

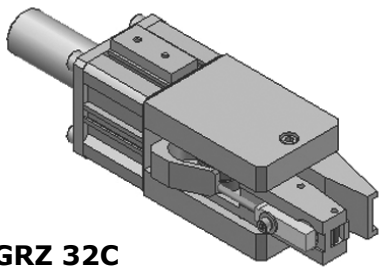
Part #	A	B	C	D	E	G	H	L	Closing Pressure	Weight
GRZ20-16C	20	40	113	36	18	G 1/8"	M 5	25	50N	190g



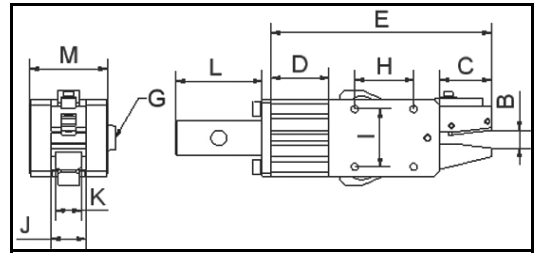
**GRZ 32**  
Gripper with jaws  
Designed for X System and Jumbo System



Part #	A	B	C	D	E	F	G	K	L	Closing Pressure	Weight
GRZ32	20	12	30	33	127	2	G 1/8"	50	44	-	645g

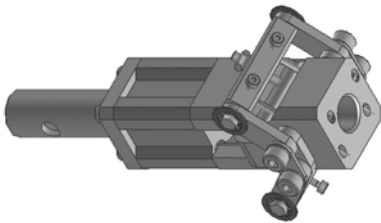


Gripper with sensor  
Available in PNP or NPN styles



**GRZ 32C**

Part #	A	B	C	D	E	G	H	I	J	K	L	M	Closing Pressure	Weight
GRZ32C	20	13	30	45	140	G 1/8"	34	34	20	15	M 5	44	-	723g



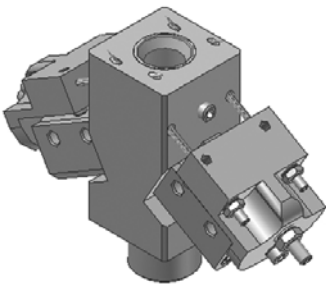
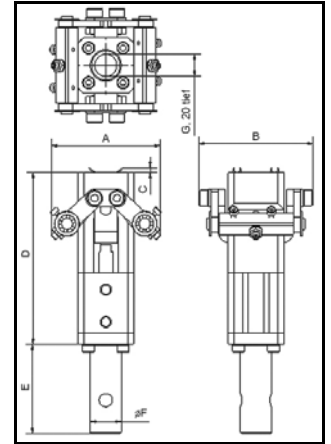
**Remark:**  
C - Length of needles  
O.D of needles- 2mm

**NGR 12 needle Gripper**

Designed for picking up textile, cloth, carpet, etc.

Part #	A	B	C	D	E	F	G	H	Air Connection
NGR12	45 (55)	52	4	72	40	12	10	20	M 5

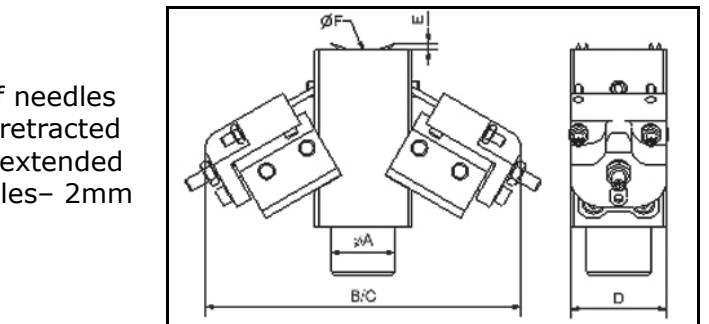
Orientation of needles slightly stretches the material for better handling



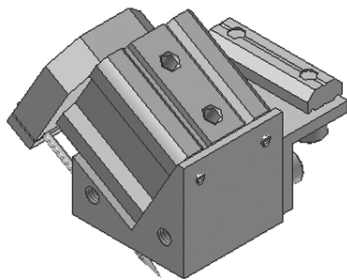
**Remark:**  
E - Length of needles  
B - Needles retracted  
C - Needles extended  
O.D. of needles- 2mm

**NGR 12D Needle Gripper**

Designed for picking up textile, cloth, carpet, etc.



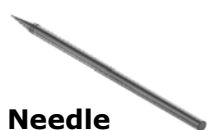
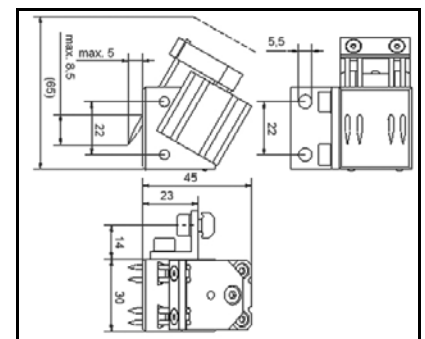
Part #	A	B	C	D	E	Air Connection
NGR12D	20	98	116	30	2.5	M 5



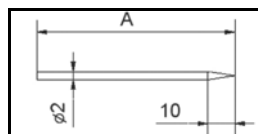
Designed for picking up textile, cloth, carpet, etc.  
Sold in pairs (mounting bracket included)

**GNZ Needle Gripper**

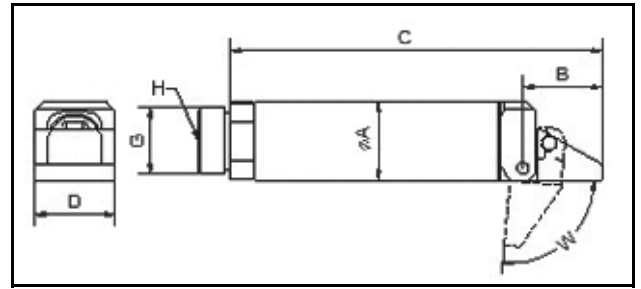
Part #	Air Connection
GNZ16-10X	M 5



**Needle**



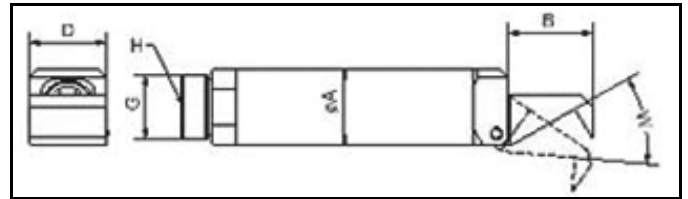
Part #	A	for	QTY.
NEEDLE 37	37	NGR 12	10 pcs.
NEEDLE 50	50	NGR 12D and GNZ 16-10X	10 pcs.



**GFR 95° Gripper Finger**

Recommended if parts stick in the mold  
Designed for X Systems and Jumbo Systems

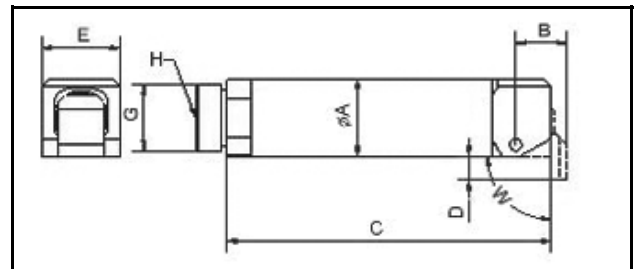
Part #	A	B	C	G	W	H	Closing Pressure	Weight
GRF20-95V	20	20	95	M 17x1	95	G 1/8"	42 N	60g
GRF30-95V	30	29	137	M 27x1	95	G 1/8"	120 N	195g



**GRF 35° Gripper Finger**

Recommended if parts stick in the mold  
Designed for X Systems and Jumbo Systems

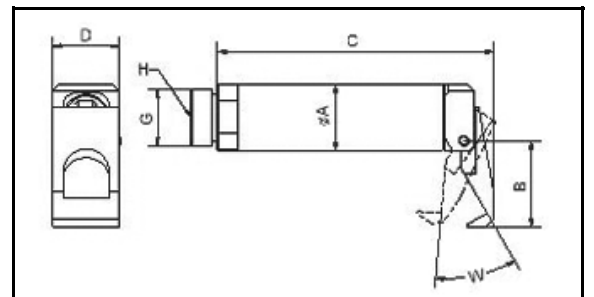
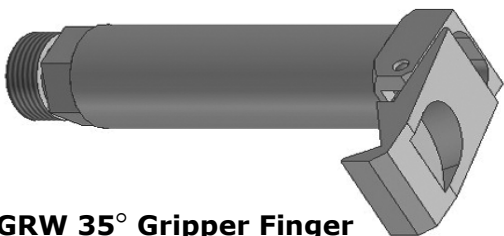
Part #	A	B	C	G	W	H	Closing Pressure	Weight
GRF20-35V	20	23	105	M 17x1	35	G 1/8"	55 N	60g
GRF30-35V	30	34	142	M 27x1	35	G 1/8"	190 N	200g



**GRF 90° Gripper Finger**

Recommended if parts stick in the mold  
Designed for X Systems and Jumbo Systems

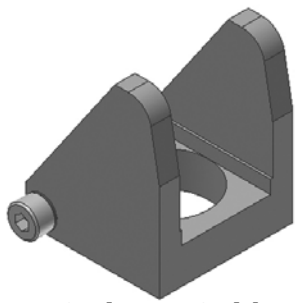
Part #	A	B	C	D	G	W	H	Closing Pressure	Weight
GRF20-90V	20	9	83	6	M 17x1	90	G 1/8"	95 N	60g
GRF30-90V	30	16	124	11	M 27x1	90	G 1/8"	220 N	190g



**GRW 35° Gripper Finger**

Recommended if parts stick in the mold  
Designed for X Systems and Jumbo Systems

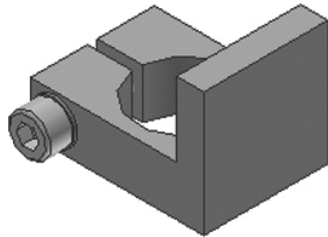
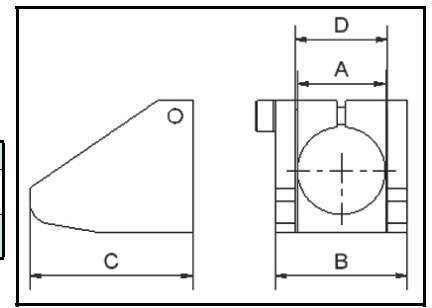
Part #	A	B	C	G	W	H	Closing Pressure	Weight
GRW20-35V	20	20	85	M 17x1	35	G 1/8"	50 N	60g
GRW30-35V	30	34	123	M 27x1	35	G 1/8"	160 N	195g



**ZTS Finger Guide**

Part #	A	B	C	D	Material	Weight
ZTS20	20	30	37	22	POLYAMIDE	16g
ZTS30	30	42	65	32	POLYAMIDE	58g

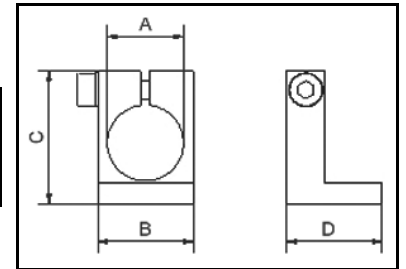
Guide for Gripper Finger GRF95  
Placed over GRF95 to protect parts during retrieval



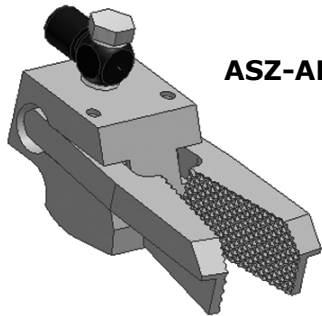
**ANS Gripper Stop**

Part #	A	B	C	D	Material	Weight
ANS20	20	25	35	25	POLYAMIDE	14g
ANS30	30	35	45	25	POLYAMIDE	21g

Used with Gripper Finger GRF90  
For gripping the lip of part between finger and stop

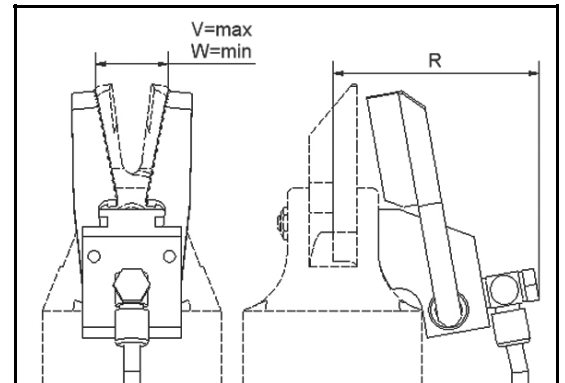


**SPRUE CUTTER ACCESSORIES**



**ASZ-AH Sprue Gripper**

Part #	R	V	W	for ASZ	Weight
ASZ-AH20	53	11	1	ASZ 20 A or H	130g
ASZ-AH30	45	16	1	ASZ 30 A or H	140g
ASZ-AH50	45	18	1	ASZ 50 A or H	150g



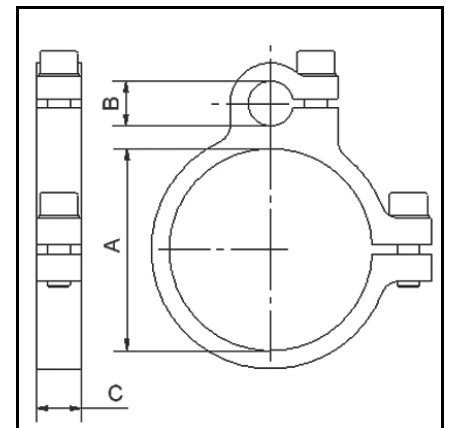
Actuated from same port as ASZ Sprue Cutters



**ASZ-KA Clamp**

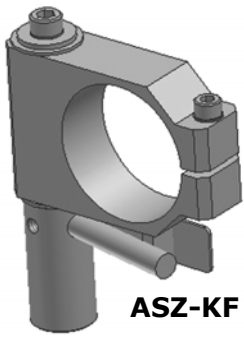
**Remark:**  
10 - Sprue Gripper  
20 - Gripper arm  
30 - Sprue cutter

Part #	A	B	C	Weight
ASZ-KA 20	-	10	12	31g
ASZ-KA 30	56	10	12	46g
ASZ-KA 50	75	10	12	53g



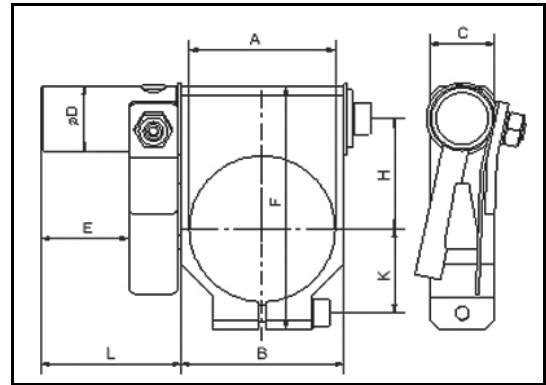
Combination clamp for Sprue Gripper and Sprue Cutter



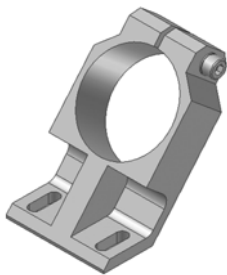


**ASZ-KF Clamp**

Spring loaded clamp for GT-NR Sprue Cutters  
Achieve max. proximity to the surface by allowing blade to contact part

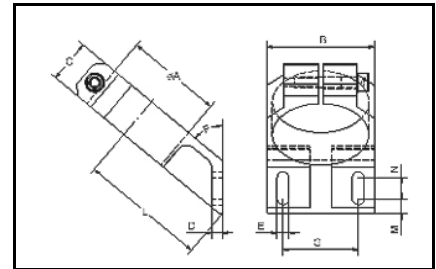


Part #	A	B	C	D	E	F	H	K	L	Weight
ASZ-KF 20	45	50	20	20	25	81	37	34	43	265g
ASZ-KF 30	55	70	20	20	33	90	40	40	54	360g
ASZ-KF 50	75	90	25	20	33	110	48	50	54	515g

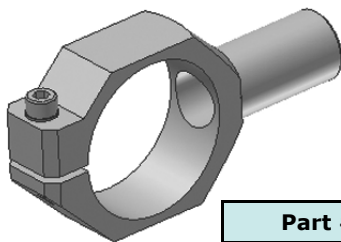


**ASZ-HS Clamp**

Clamp for GT-NR Sprue Cutter  
Can be mounted directly to profile  
Cutting edge remains parallel to profile  
(using standard blades)



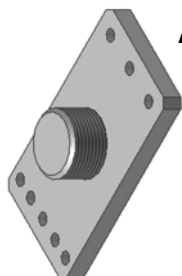
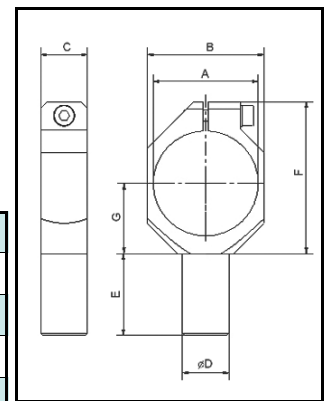
Part #	A	C	D	E	F	G	M	N	L	R	Weight
ASZ-HS 20	45	50	10	7	50	38	15	10	99	120	270g
ASZ-HS 30	55	60	12	7	60	48	13	10	92	150	340g
ASZ-HS 50	75	85	12	7	60	72	13	15	112	160	470g



**ASZ-KS Clamp**

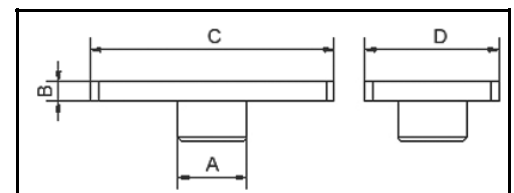
Arm style clamp for GT-NR Sprue Cutters

Part #	A	B	C	D	E	F	G	Weight
ASZ-KS 10	36	40	20	20	45	51	22	54g
ASZ-KS 20	45	50	20	20	45	65	30	80g
ASZ-KS 30	55	60	65	20	45	75	35	85g
ASZ-KS 50	75	85	85	20	55	95	45	160g

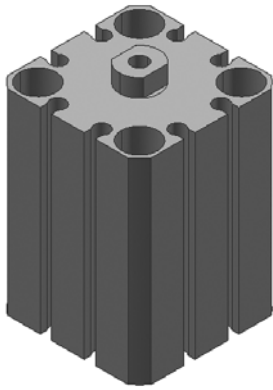


**ASZ-HP Holding Plate**

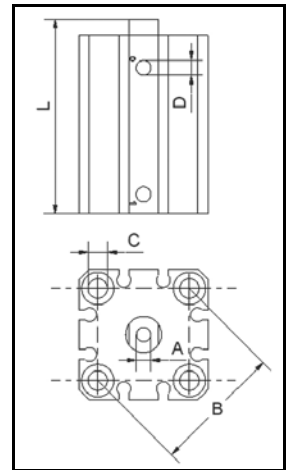
Holding plate for GT-NT Sprue Cutters  
Install extension rod VLR to threaded portion  
and use WKA or GLA arms



Part #	A	B	C	D	for Sprue Cutter	Weight
ASZ-HP	M 17	5	60	33	GT-NT3 & 5	31g
ASZ-HP	M 27	5	100	50	GT-NT10 & 20	85g

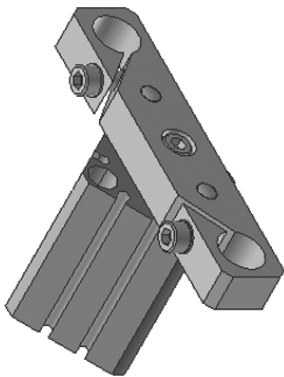


Cylinder is retracted when idle  
Shipped with screws and protection disks

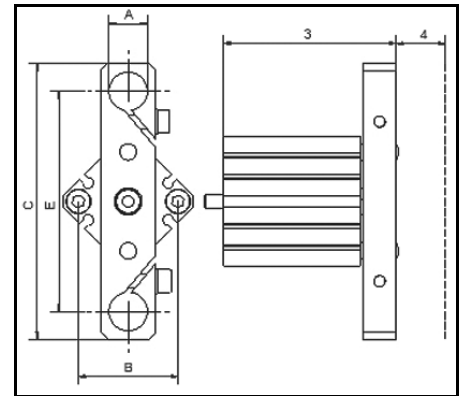


**KHZ Short Stroke Cylinder**

Part #	Piston	A	B	C	D	M	Stroke	Operation	Control with	Weight
KHZ 12-5-E	12	M 3	22	3.5	M 5	20.5	5	SINGLE		33g
KHZ 12-10-E	12	M 3	22	3.5	M 5	20.5	10	SINGLE		41g
KHZ 20-5-E	20	M 5	36	5.5	M 5	24	5	SINGLE		88g
KHZ 20-10-E	20	M 5	36	5.5	M 5	24	10	SINGLE		97g
KHZ 32-5-E	32	M 8	48	5.5	1/8"	30	5	SINGLE		147g
KHZ 32-10-E	32	M 8	48	5.5	1/8"	30	10	SINGLE		175g

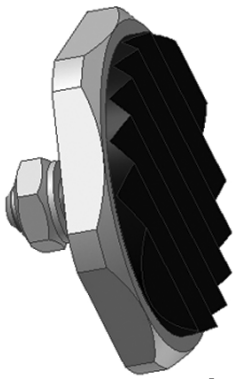


Special Cylinder with mounting bracket  
Can be mounted directly to profile  
For use with suction cup arms:  
GSE, GGE, GAF, and GGS



**SZD Special Cylinder**

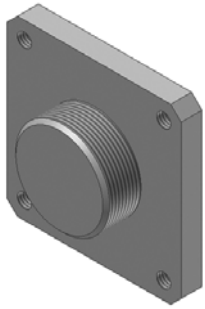
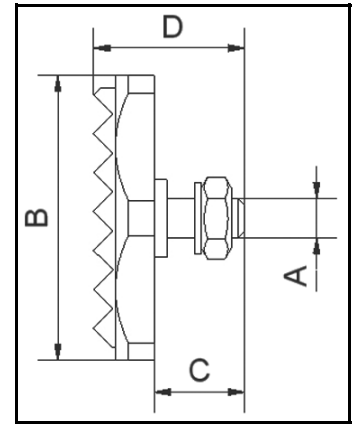
Part #	Piston	A	B	C	E	M	Stroke	Operation	Control with	Weight
SZD 12-10-A	12	10	22	70	55	36.5	10	DOUBLE	RRK-93	83g
SZD 12-20-A	12	10	22	70	55	36.5	20	DOUBLE	RRK-93	98g
SZD 20-10-A	20	14	36	100	80	44	10	DOUBLE	RRK-93	210g
SZD 20-20-A	20	14	36	100	80	44	20	DOUBLE	RRK-93	239g
SZD 20-30-A	20	14	36	100	80	44	30	DOUBLE	RRK-93	270g
SZD 20-40-A	20	14	36	100	80	44	40	DOUBLE	RRK-93	307g
SZD 20-50-A	20	14	36	100	80	44	50	DOUBLE	RRK-93	334g
SZD 32-10-A	32	20	48	145	120	49	10	DOUBLE	RRK-93	382g
SZD 32-20-A	32	20	48	145	120	49	20	DOUBLE	RRK-93	341g
SZD 32-30-A	32	20	48	145	120	49	30	DOUBLE	RRK-93	406g
SZD 32-40-A	32	20	48	145	120	49	40	DOUBLE	RRK-93	527g
SZD 32-50-A	32	20	48	145	120	49	50	DOUBLE	RRK-93	567g



**DPL Pressure Plate**

Pressure Plate for KHZ Short Stroke Cylinder  
Rubber pad

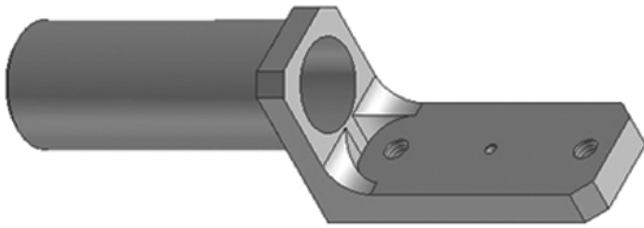
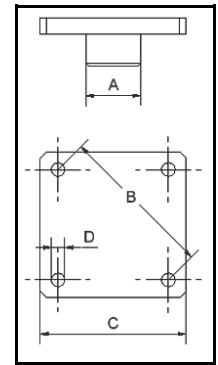
Part #	A	B	C	G	Weight
DPL 12-3	M 3	D 12	9		2g
DPL 25-3	M 3	6 kt 22	7	X	7g
DPL 25-4	M 4	6 kt 22	13	X	12g
DPL 25-5	M 5	6 kt 22	13	X	12g



**ADZ Adapter Plate**

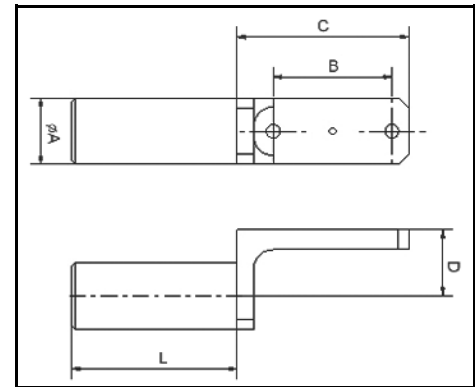
For Short Stroke Cylinder KHZ and SZD

Part #	A	B	C	D	for Cylinder	Weight
ADZ 14-12	M 12x1	22	25	M 3	PISTON 12	10g
ADZ 20-20	M 17x1	36	35	M 5	PISTON 20	21g
ADZ 20-32	M 17x1	48	45	M 5	PISTON 32	32g
ADZ 30-32	M 27x1	48	45	M 5	PISTON 32	41g

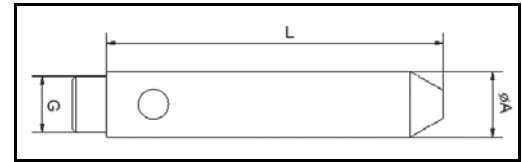


**GAZ Gripper Arm**

For Short Stroke Cylinder KHZ and SZD



Part #	A	B	C	D	L	Use With	for Light System	for X System	for Jumbo System	Weight
GAZ 12-10-30	10	22	36	13	30	KHZ/SZD12	X	X		12g
GAZ 12-10-60	10	22	36	13	60	KHZ/SZD12	X	X		16g
GAZ 12-10-90	10	22	36	13	90	KHZ/SZD12	X	X		22g
GAZ 12-14-40	14	22	36	13	40	KHZ/SZD12		X		15g
GAZ 12-14-80	14	22	36	13	80	KHZ/SZD12		X		24g
GAZ 12-14-120	14	22	36	13	120	KHZ/SZD12		X		32g
GAZ 20-20-50	20	36	52	20	50	KHZ/SZD20		X	X	35g
GAZ 20-20-100	20	36	52	20	100	KHZ/SZD20		X	X	58g
GAZ 20-20-150	20	36	52	20	150	KHZ/SZD20		X	X	79g
GAZ 20-20-50	20	48	66	20	50	KHZ/SZD20		X	X	46g
GAZ 20-20-100	20	48	66	20	100	KHZ/SZD20		X	X	64g
GAZ 20-20-150	20	48	66	20	150	KHZ/SZD20		X	X	73g

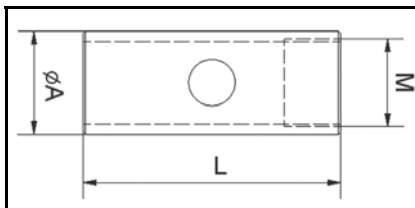


**ZTB Centering Pin**  
Made from Polyamid

Part #	A	G	Length	Weight
ZTB20	20	M 17x1	110	35g
ZTB30	30	M 27x1	100	82g

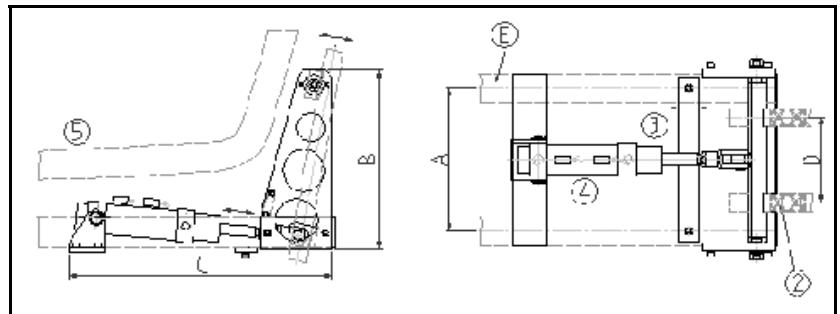


**VLR Extension Tube**



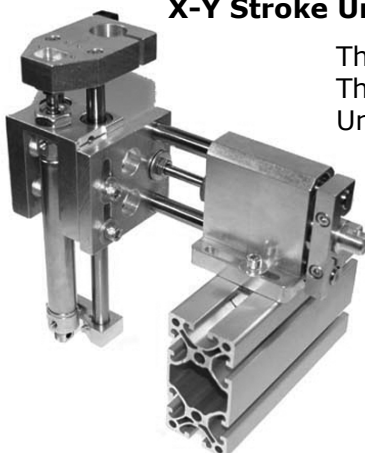
Part #	A	G	Material	Length	Weight
VLR14-40	14	M 12x1	Alu F38	40	6g
VLR14-80	14	M 12x1	Alu F38	80	14g
VLR14-120	14	M 12x1	Alu F38	120	23g
VLR20-50	20	M 17x1	Steel St37	15	40g
VLR20-100	20	M 17x1	Steel St37	100	84g
VLR20-150	20	M 17x1	Steel St37	150	130g
VLR30-80	30	M 27x1	Steel St37	80	106g
VLR30-120	30	M 27x1	Steel St37	120	164g
VLR30-200	30	M 27x1	Steel St37	200	271g

**BSS Bumper Spread**  
Spreads for Bumper Gripper  
BSS exits from 2 units (left and right)



Part #	A	B	C	D	E	Cylinder	Stroke	for X System	for Jumbo System	Weight
BSS-25	200	250	365	120	X50/25	40	40	X		7.2g
BSS-40	200	250	365	120	J40/40	40	40		X	7.2g

**X-Y Stroke Unit**



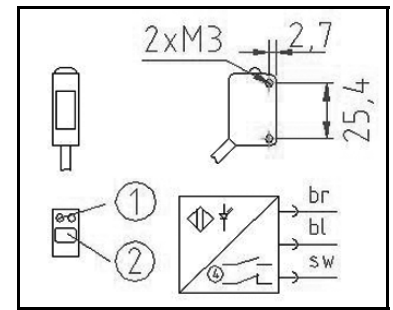
This stroke unit can be mounted on a X-Profile as well as a Jumbo Profile. The 20mm clamp accommodates the 20mm EOAT elements. Unit consists of 2 double-action cylinders featuring ball bushings.

Part #	A Stroke	B Stroke	Signification	for X System	for Jumbo System
XYH 50/50 X	50	50	20	X	
XYH 100/100 X	100	100	20	X	
XYH 50/50 J	50	50	20		X
XYH 100/100 J	100	100	20		X



**LES-5 Sensor**

Retro reflective part sensor  
Adjustable sensitivity



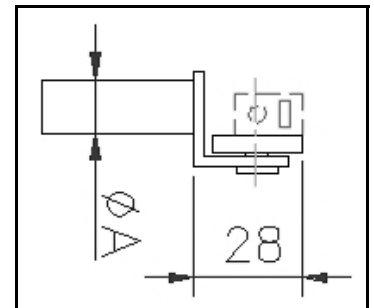
Part #	Type	Voltage	Output	Distance	Signal Output	Accessories	Weight
LES-5	LIGHT SWITCH	10-36 VDC	200mA	20-600 mm	PNP or NPN	GGE 14 Series	44g



**GGE-14F Gripper Arm**

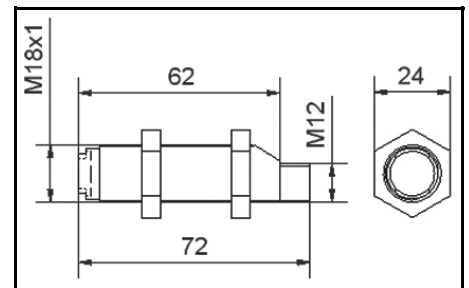
Use with LES-5 Retro Reflective Sensor  
Designed for X Systems

Part #	A	Length	Weight
GGE 14-40-F	14	40	32g
GGE 14-80-F	14	40	40g
GGE 14-120-F	14	40	48g



**LRS-18 Sensor**

Retro reflective part sensor  
Designed for X Systems and Jumbo Systems

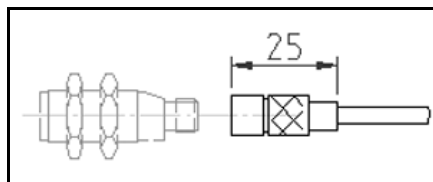


Part #	Type	Voltage	Output	Distance	Signal Output	Switch Property	Accessories	Weight
LRS 18	LIGHT SWITCH	10-36 VDC	200mA	20-600 mm	PNP or NPN	LIGHT or DARK	GGE 14 Series	22g



**KG-18 Jack**

Use with LRS 18 Retro Reflective part sensor

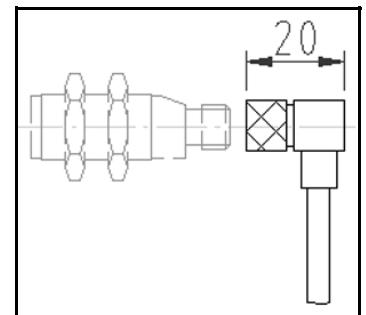


Part #	Cable Length	Weight
KG 18	5 m	135g

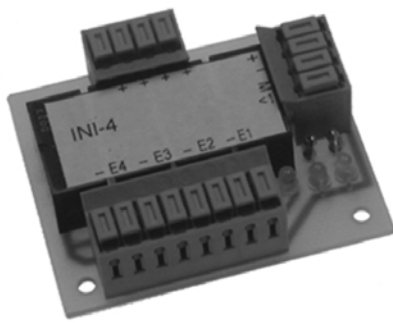


**KW-18 Right Angle Jack**

Use with LRS 18 Retro Reflective part sensor

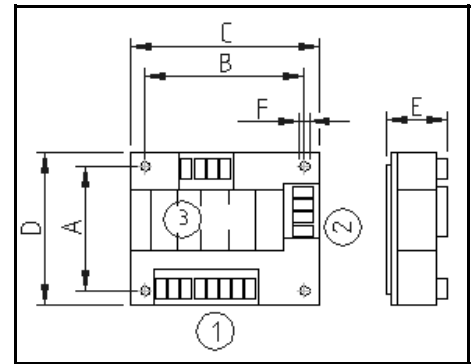


Part #	Cable Length	Weight
Kw 18	5 m	130g

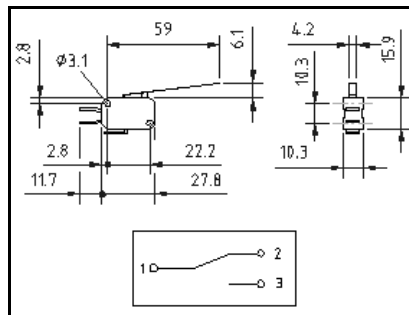


**RPL Relay Board**

For series connection of sensors and switches  
 RPL# = Number of circuits that can be wired  
 Easy connection with supplied schematic



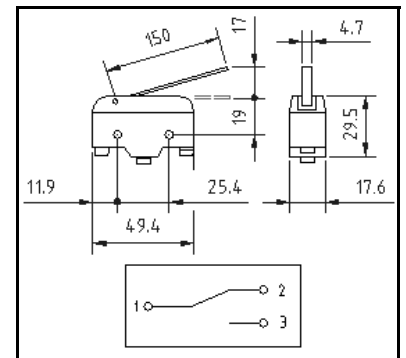
Part #	A	B	C	D	E	F	G	1	Weight
RPL 2	38.5	27	35	47	18.5	3	2	2	22g
RPL 4	37.8	47.8	57	47	18.5	3	4	4	40g
RPL 6	37.8	69.5	78.5	47	18.5	3	6	6	56g
RPL 8	37.8	89.8	99	47	18.5	3	8	8	76g



**SEO-5 Switch**

Mechanical switch without cable

Part #	Voltage	Output	Weight
SEO-5	24 VDC	1A	8g



**SEO-10 Switch**

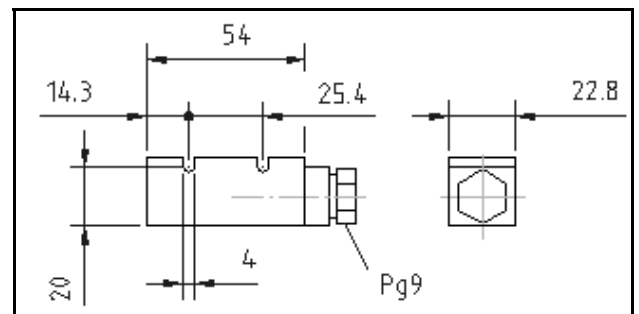
Mechanical switch without cable

Part #	Voltage	Output	Weight
SEO-10	24 VDC	1A	37g



**GEO-10**

Cover for SEO-5  
 Ships with 2 screws



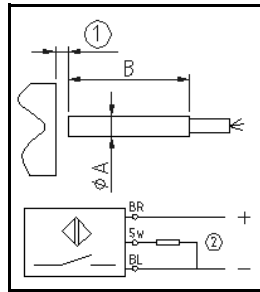
Part #	Weight
GEO-10	17g

## ELECTRICS AND SENSORS

## EOAT COMPONENTS



**IRK-4 Switch**

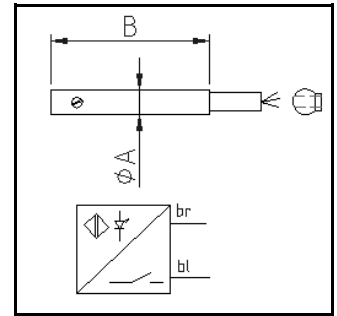


Proximity switch for PGR

Part #	A	B	1	Voltage	Switch Function	Cable Length	Weight
IRK-4	4	25	0.8	24 VDC	N.O.	3m	30g



**RRK-93 Reed Contact**

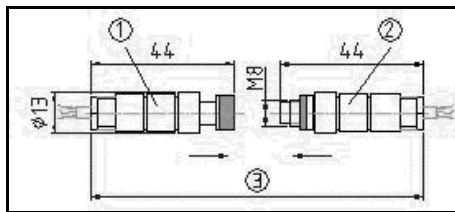


Reed Contact for KHZ or SZD

Part #	Voltage	Output	Signal	Cable Length	Weight
RRK-93	24 VDC	200 mA	PNP	3m	30g



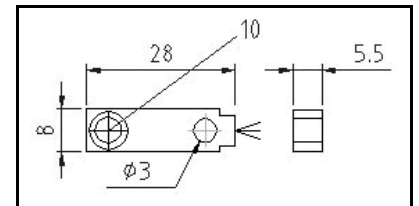
**VRS-8 Plug Connection**



Part #	Type	Voltage	Strom	Cable	# of Pins	Weight
VRS 8	PLUG	24 V	1 A	0.14-1.0mm	3	12g



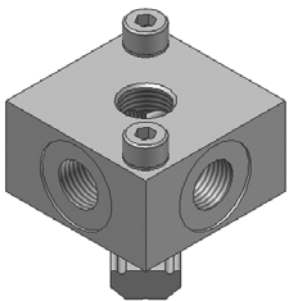
**IEK-8 Sensor**



Replacement for GRZ 10-10C and GRZ 20-16C

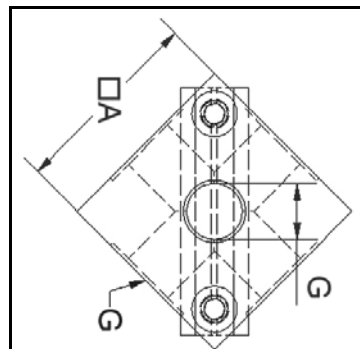
Part #	Signal	Special	Voltage	Output
IEK 8-NPN	NPN	With Cable	10-30 VDC	150 mA
IEK 8-PNP	PNP	With Cable	11-30 VDC	151 mA
IEK 8-PNP	PNP	Plug	12-30 VDC	152 mA

## PNEUMATICS



**LVT Manifold**

Manifold block with single port



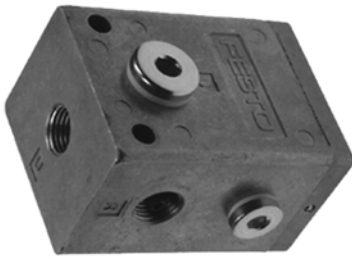
Part #	A	G	Weight
LVT M5 L/X	14	5xM 5	8g
LVT 1/8 X	30	5xG 1/8"	52g
LVT 1/4 X	40	5xG 1/4"	100g



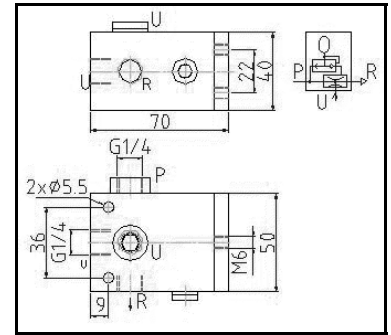
**STV Smart Flow Valve**

This can prevent vacuum cups from losing vacuum when all cups do not make contact.

Part #	B
STV 1/8	G 1/8"
STV 1/4	G 1/4"



Vacuum producer with blow off



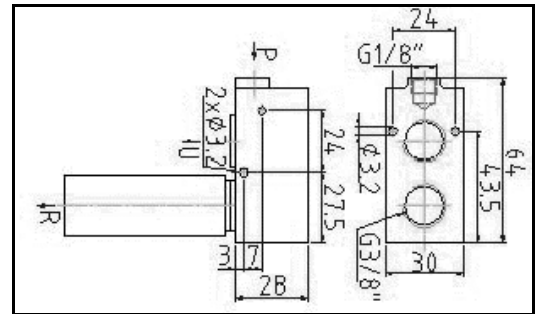
**VAE-10**

Part #	Type	Pressure Area	Under Pressure	Vacuum	Special	Material	Weight
VAE-10	Suction Head	1.5-10 bar	-0.85 (bei 6 bar)	Ca. 5 l/min	Air Impulse	ALUMINUM	263g

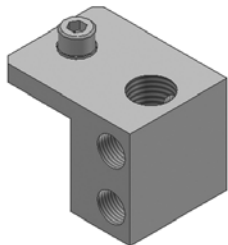


**VAE-20**

Vacuum producer

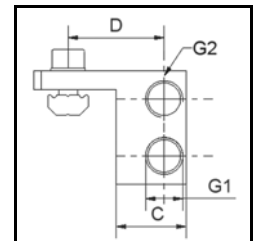


Part #	Type	Pressure Area	Under Pressure	Vacuum	Material	Weight
VAE-20	Suction Pump	4-6 bar	-0.85 (at 6 bar)	ca. 1.0-1.4 l/sec	PLASTIC	60g

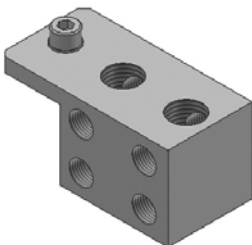


**VTB-1 Manifold**

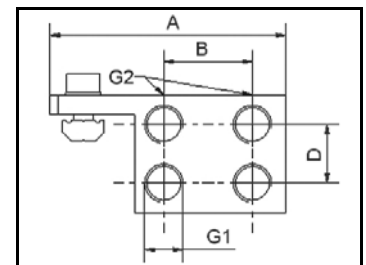
Manifold block with single circuit



Part #	G1	G2	C	D	K	Weight
VTB 1/4X	G 1/8"	G 1/4"	18	22	1	48g
VTB 1/4J	G 1/8"	G 1/4"	22	30	1	67g



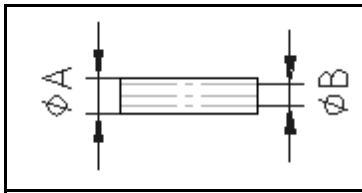
Manifold block with double circuit



**VTB-2 Manifold Block**

Part #	A	B	G1	G2	D	K	Weight
VTB 2-1-1/4X	60	20	G 1/8"	G 1/4"	15	1	88g
VTB 2-2-1/4X	60	20	G 1/8"	G 1/4"	15	2	86g
VTB 2-1-1/4J	60	20	G 1/8"	G 1/4"	15	1	97g
VTB 2-2-1/4J	60	20	G 1/8"	G 1/4"	15	2	96g

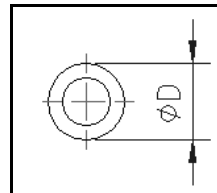




**PSS Compressed Air Hose**

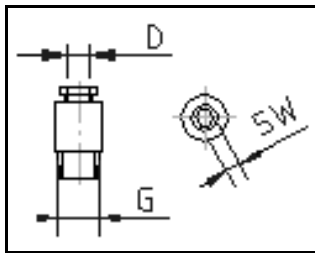
Minimum order = 10m (32.8')

Part #	A	B	Tube
PSS 00045	4	3	4/3
PSS 01020	6	4	6/4
PSS 01025	8	6	8/6



**PVD Seal Ring**

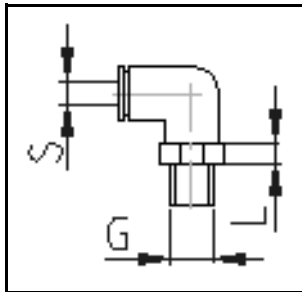
Part #	D	Min QTY
PVD 00125	M5	100 pcs
PVD 00105	G 1/8"	100 pcs
PVD 00110	G 1/4"	100 pcs



**STA Quick Connector**

Straight quick connector for manifold block  
Self-sealing threads

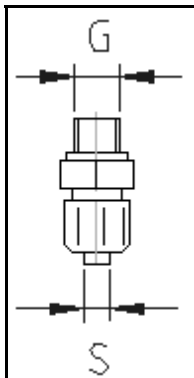
Part #	D = Hose	G	SW	Min QTY	Weight
STA 4	4/3	G 1/8"	3	10 pcs	6g
STA 6	6/4	G 1/8"	4	10 pcs	5g
STA 8	8/6	G 1/8"	5	10 pcs	13g



**QSL Quick Connector**

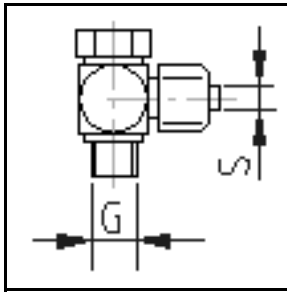
L quick connector for manifold block  
Self-sealing threads

Part #	G	L	S	Min QTY	Weight
QSL-1/8-4	G 1/8"	4	4	10 pcs	10g
QSL-1/8-6	G 1/8"	4.5	6	10 pcs	13g
QSL-1/8-8	G 1/8"	4.8	8	10 pcs	17g
QSL-1/4-6	G 1/4"	4.8	6	10 pcs	21g
QSL-1/4-8	G 1/4"	4.8	8	10 pcs	23g
QSL-1/8-4	G 1/8"	16	4	10 pcs	13g
QSL-1/8-6	G 1/8"	16	6	10 pcs	13g
QSL-1/8-8	G 1/8"	20	8	10 pcs	36g
QSL-1/4-6	G 1/4"	18	6	10 pcs	38g
QSL-1/4-8	G 1/4"	20	8	10 pcs	41g



**PVG Male Barb Fitting**

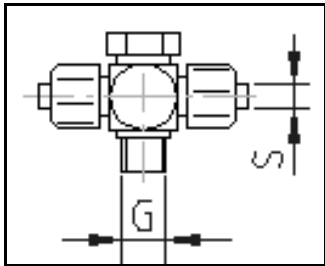
Part #	G	S = Hose	Min QTY	Weight
PVG 02120	M 5	4/3	10 pcs	4g
PVG 02130	M 5	6/4	10 pcs	4g
PVG 02005	G 1/8"	4/3	10 pcs	4g
PVG 02015	G 1/8"	6/4	10 pcs	4g
PVG 02020	G 1/8"	8/6	10 pcs	5g
PVG 02035	G 1/4"	6/4	10 pcs	6g
PVG 02040	G 1/4"	8/6	10 pcs	7g



**PVW Single Swivel Barb Fitting**

**Includes:**  
 Hollow bolt  
 2x seal rings  
 Compression nut

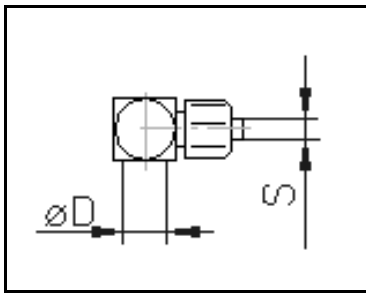
Part #	G	S = Hose	Min QTY	Weight
PVW 02220	M 5	4/3	10 pcs	7g
PVW 02230	M 5	6/4	10 pcs	8g
PVW 02235	G 1/8"	4/3	10 pcs	13g
PVW 02245	G 1/8"	6/4	10 pcs	13g
PVW 02250	G 1/8"	8/6	10 pcs	14g
PVW 02265	G 1/4"	6/4	10 pcs	19g
PVW 02270	G 1/4"	8/6	10 pcs	19g



**PVW Double Swivel Barb Fitting**

**Includes:**  
 Hollow bolt  
 2x seal rings  
 Compression nut

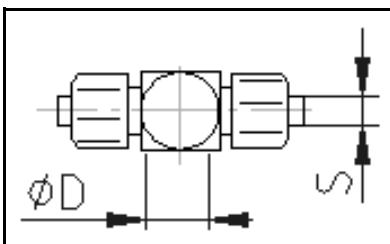
Part #	G	S = Hose	Min QTY	Weight
PVW 02620	M 5	4/3	10 pcs	10g
PVW 02630	M 5	6/4	10 pcs	11g
PVW 02635	G 1/8"	4/3	10 pcs	15g
PVW 02645	G 1/8"	6/4	10 pcs	15g
PVW 02650	G 1/8"	8/6	10 pcs	17g
PVW 02660	G 1/4"	6/4	10 pcs	20g
PVW 02665	G 1/4"	8/6	10 pcs	22g



**PVW Single Swivel Barb Fitting**

**Includes:**  
 Fitting  
 Compression nut

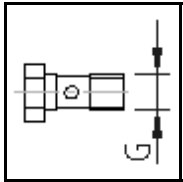
Part #	G	S = Hose	f. Throttle	Min QTY	Weight
PVW 02100	M 5	4/3		10 pcs	5g
PVW 02110	M 5	6/4		10 pcs	6g
PVW 02115	M 5	4/3	X	10 pcs	5g
PVW 02125	M 5	6/4	X	10 pcs	6g
PVW 02005	G 1/8"	4/3		10 pcs	7g
PVW 02015	G 1/8"	6/4		10 pcs	8g
PVW 02020	G 1/8"	8/6		10 pcs	8g
PVW 02035	G 1/4"	6/4		10 pcs	10g
PVW 02040	G 1/4"	8/6		10 pcs	10g



**PVW Double Swivel Barb Fitting**

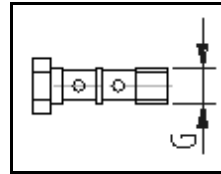
**Includes:**  
 Fitting  
 Compression nut

Part #	G	S = Hose	f. Throttle	Min QTY	Weight
PVW 02500	M 5	4/3		10 pcs	7g
PVW 02510	M 5	6/4		10 pcs	8g
PVW 02515	M 5	4/3	X	10 pcs	7g
PVW 02525	M 5	6/4	X	10 pcs	8g
PVW 02405	G 1/8"	4/3		10 pcs	9g
PVW 02415	G 1/8"	6/4		10 pcs	9g
PVW 02420	G 1/8"	8/6		10 pcs	11g
PVW 02430	G 1/4"	6/4		10 pcs	12g
PVW 02435	G 1/4"	8/6		10 pcs	13g



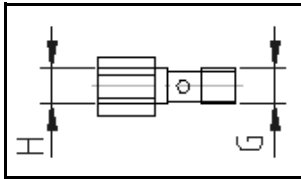
**PVH Hollow Bolt Single Port**

Part #	G	Min QTY	Weight
PVH 00005	M 5	10 pcs	2g
PVH 00015	G 1/8"	10 pcs	4g
PVH 00020	G 1/4"	10 pcs	7g



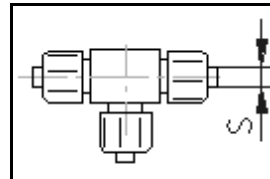
**PVH Hollow Bolt Double Port**

Part #	G	Min QTY	Weight
PVH 00070	M 5	10 pcs	3g
PVH 00050	G 1/8"	10 pcs	18g
PVH 00055	G 1/4"	10 pcs	28g



**PVH Hollow Bolt with Internal Thread**

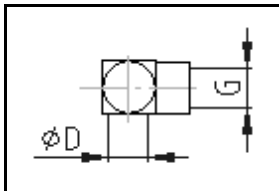
Part #	H	G	Min QTY	Weight
PVH 00100	M 5	M 5	10 pcs	2g
PVH 00105	G 1/8"	G 1/8"	10 pcs	15g
PVH 00110	G 1/4"	G 1/4"	10 pcs	25g



**PVV 3-Way Barb Fitting**

Made from Thermoplastic

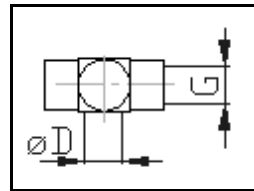
Part #	S	Min QTY	Weight
PVV 00005	6/4	10 pcs	9g
PVV 00010	8/6	10 pcs	11g



**PVW Swivel Fitting**

Single Female Thread

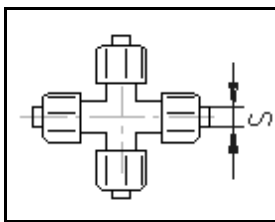
Part #	H	G	f Throttle	Min QTY	Weight
PVW 02715	M 5	M 5		10 pcs	5g
PVW 02720	M 5	M 5	X	10 pcs	5g
PVW 02725	G 1/8"	G 1/8"		10 pcs	6g
PVW 02730	G 1/4"	G 1/4"		10 pcs	16g



**PVW Swivel Fitting**

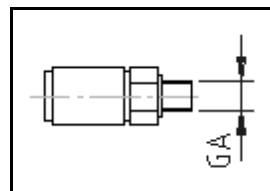
Double Female Thread

Part #	H	G	f Throttle	Min QTY	Weight
PVW 02770	M 5	M 5		10 pcs	2g
PVW 02775	M 5	M 5	X	10 pcs	2g
PVW 02780	G 1/8"	G 1/8"		10 pcs	10g
PVW 02785	G 1/4"	G 1/4"		10 pcs	19g



**PVV 4-Way Hose Connector**

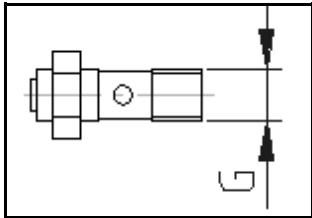
Part #	S	Min QTY	Weight
PVV 00050	6/4	10 pcs	11g
PVV 00055	8/6	10 pcs	14g



**PVK Quick Release Coupling**

For use with SWM

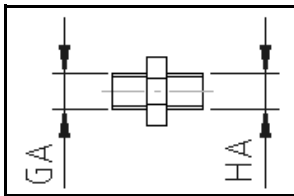
Part #	S	Min QTY	Weight
PVK 00005	M 5	10 pcs	7g
PVK 00015	G 1/8"	10 pcs	26g
PVK 00030	G 1/4"	10 pcs	72g



**PVD Hollow Bolt - Exhaust**

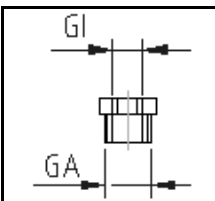
Hollow Bolt with Throttle Check Exhaust

Part #	G	Weight
PVD 00010	M 5	3g
PVD 00015	G 1/8"	17g
PVD 00020	G 1/4"	31g



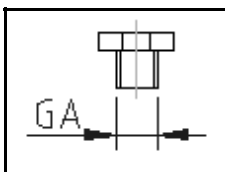
**PVN Double Union with Hex**

Part #	GA	HA	Min QTY	Weight
PVN 00305	M 5	M 5	10 pcs	2g
PVN 00310	G 1/8"	G 1/8"	10 pcs	9g
PVN 00350	G 1/8"	M 5	10 pcs	7g
PVN 00315	G 1/4"	G 1/4"	10 pcs	18g
PVN 00355	G 1/4"	G 1/8"	10 pcs	18g



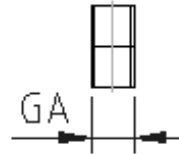
**PVN Reducing Union Short**

Part #	GA	GA	Min QTY	Weight
PVN 00204	M 3	M 5	10 pcs	1g
PVN 00205	M 5	G 1/8"	10 pcs	6g
PVN 00210	M 5	G 1/4"	10 pcs	15g
PVN 00215	G 1/8"	G 1/4"	10 pcs	9g



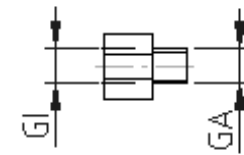
**PVS Hex Plug**

Part #	GA	Min QTY	Weight
PVS 00005	M 5	10 pcs	1g
PVS 00201	G 1/8"	10 pcs	5g
PVS 00210	G 1/4"	10 pcs	14g



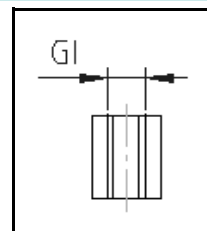
**PVN Double Union**

Part #	GA	Min QTY	Weight
PVN 00405	G 1/8"	10 pcs	2g
PVN 00410	G 1/4"	10 pcs	6g



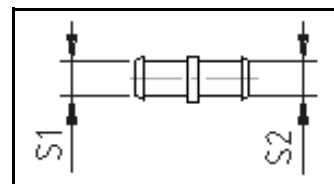
**PVN Reducing Union Long**

Part #	GA	GA	Min QTY	Weight
PVN 00105	G 1/8"	G 1/8"	10 pcs	15g
PVN 00110	G 1/8"	G 1/4"	10 pcs	22g
PVN 00115	G 1/4"	G 1/4"	10 pcs	25g



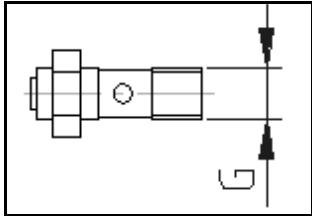
**PVN Thread Coupling**

Part #	GA	Min QTY	Weight
PVN 00005	M 5	10 pcs	2g
PVN 00010	G 1/8"	10 pcs	14g
PVN 00015	G 1/4"	10 pcs	26g



**PVT Straight Connector**

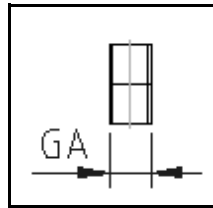
Part #	S1	S2	Min QTY	Weight
PVT 00115	4/3	4/3	10 pcs	0.7g
PVT 00120	4/3	6/4	10 pcs	1.3g
PVT 00116	6/4	6/4	10 pcs	1.4g
PVT 00121	6/4	8/6	10 pcs	3g



**PVD Hollow Bolt - Exhaust**

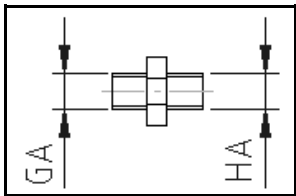
Hollow Bolt with Throttle Check Exhaust

Part #	G	Weight
PVD 00010	M 5	3g
PVD 00015	G 1/8"	17g
PVD 00020	G 1/4"	31g



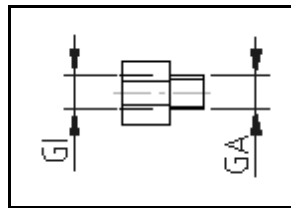
**PVN Double Union**

Part #	GA	Min QTY	Weight
PVN 00405	G 1/8"	10 pcs	2g
PVN 00410	G 1/4"	10 pcs	6g



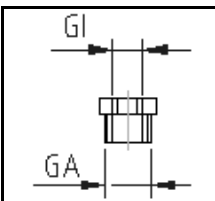
**PVN Double Union with Hex**

Part #	GA	HA	Min QTY	Weight
PVN 00305	M 5	M 5	10 pcs	2g
PVN 00310	G 1/8"	G 1/8"	10 pcs	9g
PVN 00350	G 1/8"	M 5	10 pcs	7g
PVN 00315	G 1/4"	G 1/4"	10 pcs	18g
PVN 00355	G 1/4"	G 1/8"	10 pcs	18g



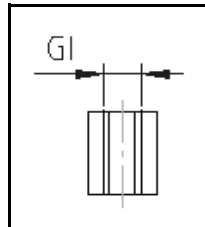
**PVN Reducing Union Long**

Part #	GA	GA	Min QTY	Weight
PVN 00105	G 1/8"	G 1/8"	10 pcs	15g
PVN 00110	G 1/8"	G 1/4"	10 pcs	22g
PVN 00115	G 1/4"	G 1/4"	10 pcs	25g



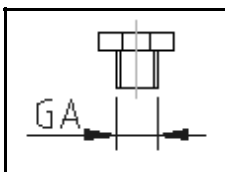
**PVN Reducing Union Short**

Part #	GA	GA	Min QTY	Weight
PVN 00204	M 3	M 5	10 pcs	1g
PVN 00205	M 5	G 1/8"	10 pcs	6g
PVN 00210	M 5	G 1/4"	10 pcs	15g
PVN 00215	G 1/8"	G 1/4"	10 pcs	9g



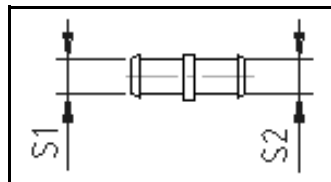
**PVN Thread Coupling**

Part #	GA	Min QTY	Weight
PVN 00005	M 5	10 pcs	2g
PVN 00010	G 1/8"	10 pcs	14g
PVN 00015	G 1/4"	10 pcs	26g



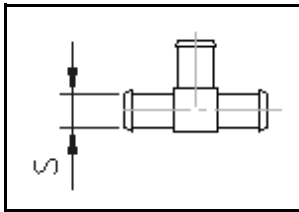
**PVS Hex Plug**

Part #	GA	Min QTY	Weight
PVS 00005	M 5	10 pcs	1g
PVS 00201	G 1/8"	10 pcs	5g
PVS 00210	G 1/4"	10 pcs	14g



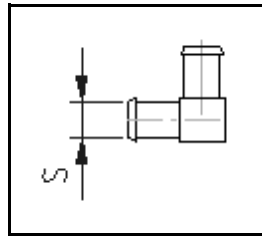
**PVT Straight Connector**

Part #	S1	S2	Min QTY	Weight
PVT 00115	4/3	4/3	10 pcs	0.7g
PVT 00120	4/3	6/4	10 pcs	1.3g
PVT 00116	6/4	6/4	10 pcs	1.4g
PVT 00121	6/4	8/6	10 pcs	3g



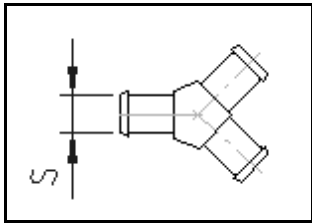
**PVT 3-Way Connector**

Part #	S	Min QTY	Weight
PVT 00030	4/3	10 pcs	1.7g
PVT 00035	6/4	10 pcs	3.4g



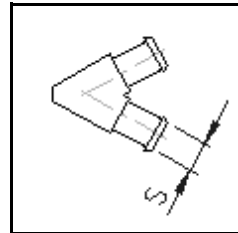
**PVT 90 Hose Connector**

Part #	S	Min QTY	Weight
PVT 00010	4/3	10 pcs	1g
PVT 00015	6/4	10 pcs	2g



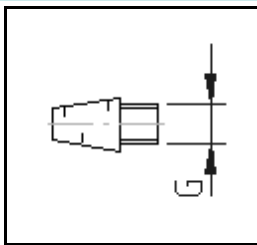
**PVT Y-Hose Connector**

Part #	S	Min QTY	Weight
PVT 00070	4/3	10 pcs	1.8g
PVT 00075	6/4	10 pcs	3.4g



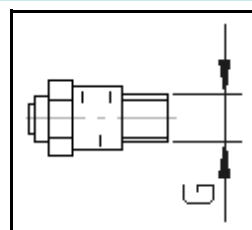
**PVT V-Hose Connector**

Part #	S	Min QTY	Weight
PVT 00050	4/3	10 pcs	1.2g
PVT 00055	6/4	10 pcs	2.1g



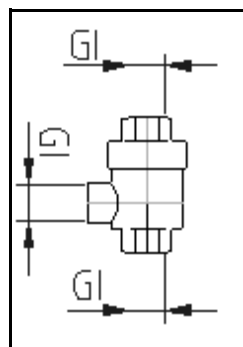
**PVL Silencer**

Part #	GA	Min QTY	Weight
PVL 00005	M 5	10 pcs	3g
PVL 00010	G 1/8"	10 pcs	7g
PVL 00015	G 1/4"	10 pcs	14g



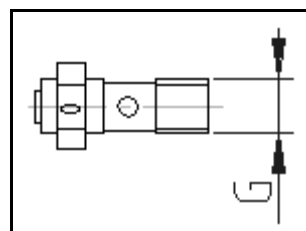
**PVD Exhaust Throttle Silencer**

Part #	G	Weight
PVD 00210	G 1/8"	18g
PVD 00215	G 1/4"	161g31g



**PYN Quick Exhaust Valve**

Part #	G	Weight
PYN 00010	G 1/8"	91g
PYN 00015	G 1/4"	161g



**PVD Hollow Bolt - Intake**

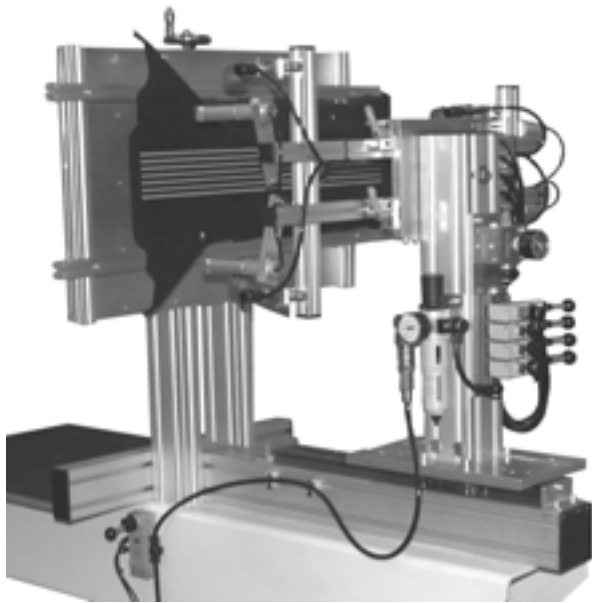
Hollow Bolt with Throttle Check Intake

Part #	G	Weight
PVD 00060	M 5	3g
PVD 00065	G 1/8"	17g
PVD 00070	G 1/4"	31g

The EOAT Assembly Units provide a foundation for building custom EOAT for even the most complicated parts. Easy to use, and includes functional pneumatic valves for testing your EOAT.

**Easy to follow steps to making custom EOAT:**

- ◆ Clamp the part to the fixed side of unit as if it were in the mold
- ◆ Insert EOAT frame into the quick change assembly on the moving side of unit
- ◆ Use the gripping components to build the EOAT around the part
- ◆ Use the pneumatic valves to check vacuum and gripping functions of EOAT



**EOAT Assembly Support Unit**



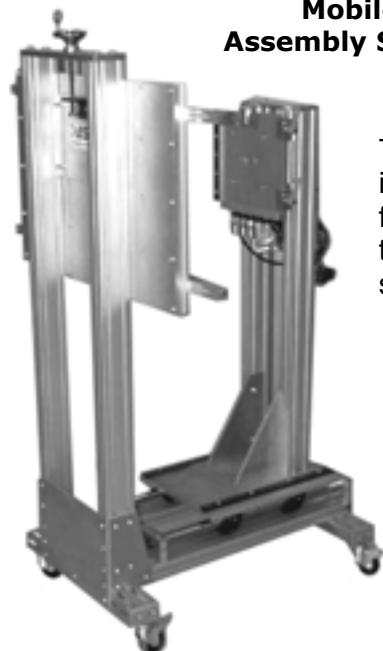
Pneumatic controls to test the functionality of the custom EOAT fixture.



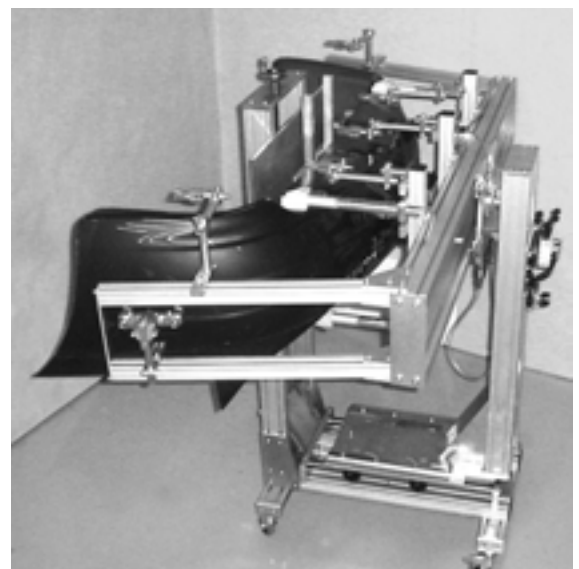
Provides unlimited flexibility to Produce an EOAT fixture that will fit the most complex shapes and angles.

Part #	Description
10821200	EOAT Assembly Support Unit

**Mobile EOAT Assembly Support Unit**



The **Mobile EOAT Assembly Unit** includes all of the features of the full sized unit, but is easily moved to the desired location with the smooth rolling wheels.



Part #	Description
10830000	Mobile EOAT Assembly Support Unit



**EOAT Startkit**

Each Startkit contains:

- ◆ Profiles
- ◆ Clamps
- ◆ Gripper Arms
- ◆ Suction Cups
- ◆ Sprue Cutters
- ◆ Pneumatic Fittings

**First Aid case for EOAT Building**

These first aid kits contain a selection of the most widely used End of Arm Tooling components. There are several standard sets, which are comprised of parts from our various gripper building systems. These kits will allow you to immediately build your own custom fixtures.

**Startkit Light—System/Base Kit**

1 x Quick Change System SWM Gr. O	1x Profile C-18 (2000mm length)	10 x Channel Nuts GWP 4M
2 x Angle Adapter WSS M5M	3 x Angle Clamp WST 10M	3 x Long Angle Clamp WSL 10M
4 x Gripper Arm GSE 10-30	4 x Elbow Gripper Arm GGE 10-30	2 x Elbow Gripper Arm GGE 10-90
2 x Suction Cup VS3-10-S-5	4 x Suction Cup VS3-15-S-5	1 x Elbow Arm GLA 10-60
2 x Elbow Arm WKA 10-60	2 x Gripper with Jaws GRZ 10-10	1 x Set Pneumatics

**Startkit Light—System/Advanced Kit**

1 x Quick Change System SWM Gr. O	2x Profile C-18 (2000mm length)	30 x Channel Nuts GWP 4M
6 x Angle Adapter WSS M5M	10 x Angle Clamp WST 10M	10 x Long Angle Clamp WSL 10M
4 x Gripper Arm GSE 10-30	4 x Gripper Arm GSE 10-90	4 x Elbow Gripper Arm GGE 10-30
4 x Elbow Gripper Arm GGE 10-90	6 x Suction Cup VS3-10-S-5	6 x Suction Cup VS3-15-S-5
2 x Elbow Arm GLA 10-30	2 x Elbow Arm GLA 10-90	2 x Elbow Arm WKA 10-30
2 x Elbow Arm WKA 10-90	2 x Gripper with Jaws GRZ 10-10	2 x Gripper Arm GAZ 12-10-90
2 x Pressure plate DPL 25-3	2 x Short Stroke Cylinder KHZ 12-5E	1 x Set Pneumatics

**Startkit X—System/Base Kit**

1 x Quick Change System SWM Gr. 1	2 x Profile X25/25 (2000mm Length)	20 x Channel Nut GWP 5X
2 x Angle Clamp WST 14X	1 x Angle Clamp WST 20X	2 x Long Angle Clamp WSL 14X
1 x Long Angle Clamp WSL 20X	2 x Adjustable Angle Connector WSD 1/8X	4 x Gripper Arm GSE 14-80
4 x Suction Cup VS3-30-P-8	1 x Elbow Arm WKA 20-100	1 x Elbow Arm GLA 20-50
1 x Gripper with Jaws GRZ 20-16A	1 x Manifold Black VTB 1/4X	4 x Quick Connector STA6 *
1 x Set Pneumatics		

\* (Unit = 10pcs)



**Startkit X—System/Medium Kit**

1 x Quick Change System SWM Gr. 2	2 x Profile X25/25 (2000mm Length)	20 x Channel Nut GWP 5X
6 x Angle Clamp WST 14X	2 x Angle Clamp WST 20X	4 x Long Angle Clamp WSL 14X
2 x Long Angle Clamp WSL 20X	2 x Universal Joint Connector UVF 25X	2 x Universal Joint Connector UVV 50X
6 x Angle Connector WSS 1/8X	2 x Angle Connector WSS 1/4X	2 x long Angle Connector WLS 1/8X
3 x Angle Arm WKA 20-50	2 x Angle Arm WKA 20-150	2 x Gripper Arm GSE 14-40
4 x Gripper Arm GSE 14-80	2x Gripper Arm GSE 14-120	4x Gripper Arm GGE 14-80
1x Gripper Arm GGE 14-120	4x Spring Loaded Gripper Arm GGS 14-C-15	4x Suction Cup VS1-20-P-8
4x Suction Cup VS1-30-P-8	4x Suction Cup VS1-50-P-8	4x Suction Cup VS3-30-P-8
4x Suction Cup VS1-18-P-8	4x Suction Cup VS1-20-S-8	2x Elbow Arm GLA 20-50
2x Cross Joint Connector KBV 25-25X	2x Spring Loaded Gripper Arm GAF-14-C-15	2x Gripper Finger GRF 20-95V
1x Gripper with Jaws GRZ 20-16	4x Manifold VTB 1/4X	4x Straight Quick Connector STA 4 (Unit = 10pcs)
8x Straight Quick Connector STA 6 *	4x Straight Quick Connector STA 8 *	1x Set Pneumatics

(Unit = 10pcs)

**Startkit X—System/Advanced Kit**

1x Gripper Quick Change System SWM Gr. 2	4x Profile X25/25 (2000mm length)	3x Profile X50/25 (2000mm length)
100x Channel Nut GWP 5X	4x Cross Joint Connector KBV 25-25X	4x Cross Joint Connector KBV 25-50X
4x Cross Joint Connector KBV 50-25X	10x Adjustable Angle Connector WSD 1/8X	10x Adjustable Angle Connector WSD 1/4X
25x Square joint Connector KV-X (Unit = 10pcs)	4x Cross Joint Connector WIV 50X	4x Cross Joint Connector KPL 25-50X
4x Angle Joint Connector WIV 25X	4x Angle Joint Connector WIV 50X	4x Universal Joint Connector UUV 25X
4x Universal Joint Connector UUV 50X	4x Universal Joint Connector UVF 25X	4x Universal Joint Connector UVF 50X
20x Angle Clamp WST 14X	20x Angle Clamp WST 20X	10x Long Angle Clamp WSL 14X
10x Long Angle Clamp WSL 20X	10x Angle Clamp WSS 1/8X	10x Angle Clamp WSS 1/4X
10x Vacuum Connector SAS 1/4X	5x Angle Arm WKA 20-50	5x Angle Arm WKA 20-100
5x Angle Arm WKA 20-150	5x Elbow Arm GLA 20-50	5x Elbow Arm GLA 20-100
5x Elbow Arm GLA 20-150	10x Gripper Arm GSE 14-40	10x Gripper Arm GSE 14-80
10x Gripper Arm GSE 14-120	6x Gripper Arm GGE 14-80	6x Gripper Arm GGE 14-120
6x Gripper Arm GGE 20-150	6x Spring Loaded Gripper Arm GGS 14-C-15	6x Spring Loaded Gripper Arm GGS 20-C-20
10x Suction Cup VS1-20-P-8	10x Suction Cup VS1-30-P-8	10x Suction Cup VS1-50-P-8
10x Suction Cup VS1-80-P-4	10x Suction Cup VS3-30-P-8	10x Suction Cup VS3-60-P-8
10x Suction Cup VS3-18-P-8	10x Suction Cup VS1-20-P-8	10x Suction Cup VS1-30-P-8
10x Suction Cup VS1-50-P-8	10x Suction Cup VS1-80-P-4	6x Cross Clamp KVB 20X
4x Corner Joint Plate EVB 25X	4x Corner Joint Plate EVB 50X	4x Gripper with Jaw GRZ 20-16
4x Gripper with Sensor GRZ 20-16C	2x Gripper Arm GAZ 20-20-150	2x Short Stroke Cylinder KHZ 20-20D
2x Elbow Arm GLA 20-50	2x Cross Joint Connector KBV 25-25X	6x Spring Loaded Gripper Arm GAF 14-M-15
6x Spring Loaded Gripper Arm GAF 20-M-20	2x Pressure Plate DPL 25-5	4x Gripper Finger GRF 20-95V
10x Manifold VTB 1/4X	8x Straight Quick Connection STA 4 (Unit = 10pcs)	16x Straight Quick Connection STA 6 (Unit = 10pcs)
16x Straight Quick Connection STA 8 (Unit = 10pcs)	1x Set pneumatics	



JDV offers a wide selection of degating fixtures. Choose from three standard models or have a fixture custom designed to suit your application. We can provide degating fixtures for manual or robotic loading and unloading. Short production runs or 24/7 operation can be accommodated.

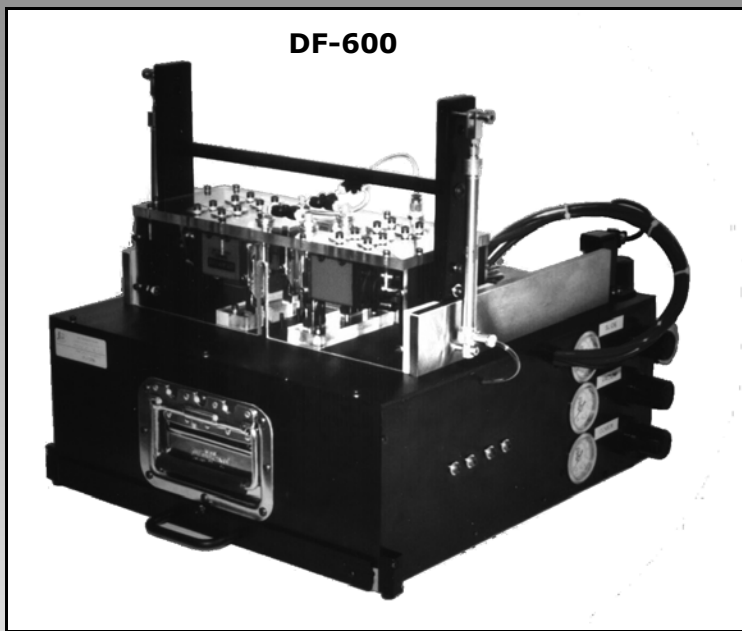

**Standard Features:**

- ◆ Fully pneumatic control requiring no other power source
- ◆ Enclosure - black anodized ¼" aluminum plate construction
- ◆ Manual loading and unloading of parts
- ◆ Fully guarded cutting area with interlock switch
- ◆ Vessel high quality Nippers and Blades in numerous styles and angles
- ◆ Input air filter and regulator
- ◆ Can be tooled for multiple products

**Optional Features:**

- ◆ Automated loading and unloading of parts with customer's picker
- ◆ Sorting tray for easy collection and containment of parts and/or vestige pieces
- ◆ Dual palm (anti-tie down) actuators for operator safety
- ◆ Slide Dispensing Chutes for sorting and dispensing parts
- ◆ Lifting handles in front and back
- ◆ Parts counter

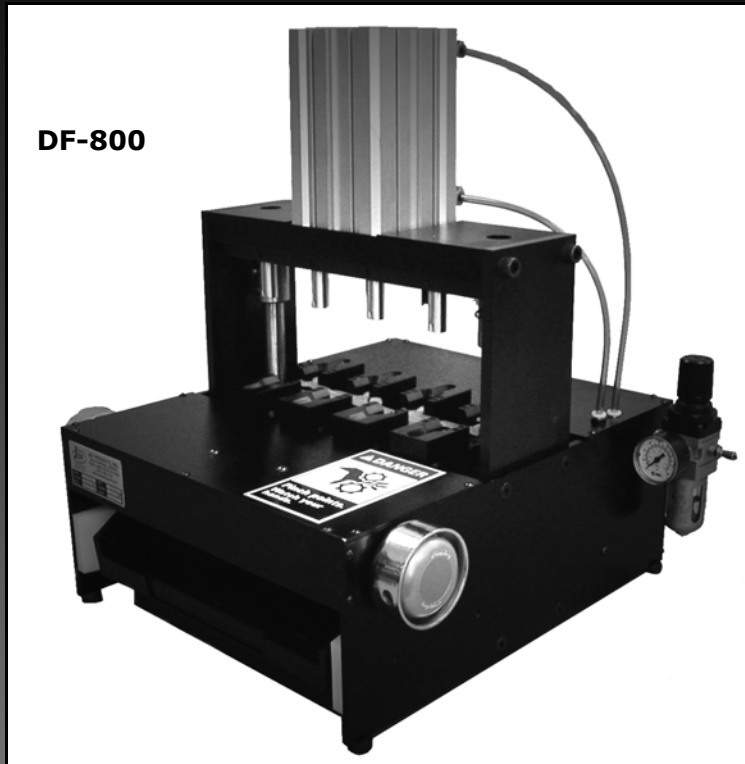
## DF600


**Standard Features:**

- ◆ PLC controlled with fourteen I/O expandable controller for interfacing with auxiliary equipment
- ◆ PLC controlled fixture permits easy set-up mode placing the Nippers in the cut position
- ◆ Provides sequencing of variable functions
- ◆ Enclosure - black anodized ¼" aluminum plate construction
- ◆ Manual loading and unloading of parts
- ◆ Fully guarded cutting area with interlock switch
- ◆ Vessel high quality Nippers and Blades in numerous styles and angles
- ◆ Input air filter and regulator
- ◆ Can be tooled for multiple products

**Optional Features:**

- ◆ Automated loading and unloading of parts with customer's picker
- ◆ Nipper retracting mechanism for parts loading and unloading
- ◆ Separate air pressure regulator for optional functions and operations
- ◆ Sorting tray for easy collection and containment of parts and/or vestige pieces
- ◆ Dual palm (anti-tie down) actuators for operator safety
- ◆ Slide Dispensing Chutes for sorting and dispensing parts
- ◆ Lifting handles in front and back
- ◆ Parts counter



DF-800

**Model DF800** Die Press Degating fixture offers cutting configurations where conventional nippers won't meet the application. Can cut multiple gate more cost effectively than conventional nippers

Provides an efficient, accurate, and safe method of degating custom products.

**Standard Features:**

- ◆ Fully pneumatic control requiring no other power source
- ◆ Enclosure black anodized 1/4" aluminum plate construction
- ◆ Precision die quality bushings and guide pins
- ◆ Parts manually loaded
- ◆ Sorting tray for easy collection and containment of parts
- ◆ Dual palm (anti-tie down) actuators for operator safety
- ◆ Cutting area custom designed for your application
- ◆ Requires no electrical input

**Optional Features:**

- ◆ Automated loading of parts with customer's sprue picker or robot
- ◆ Parts counter
- ◆ Up to 1000 lb of cutting force



DF-850

**Model DF850** Die Press type degating fixture can be integrated with a robot for a fully automated degating system. It can be fitted with heated blades for cutting brittle materials without cracking.

**Standard Features:**

- ◆ PLC controlled for cycle flexibility and easy integration with a robot
- ◆ Precision linear shuttle nests parts from robot and positions in cutting area
- ◆ Movable chute drops runner in waste bin.
- ◆ Enclosure black anodized 1/4" aluminum plate construction
- ◆ Precision die quality bushings and guide pins
- ◆ Automatic parts loading when integrated with robot
- ◆ Sorting tray for easy collection and containment of parts
- ◆ Fault detection with output signal to robot
- ◆ Cutting area custom designed for your application
- ◆ Fully automatic, requires no operator

**Optional Features:**

- ◆ Heated Blades
- ◆ Parts counter
- ◆ Up to 1000 lb of cutting force



**ZETZ-9**

**ZETZ-9 Handheld Thermocutter features electrically heated blade designed for cutting all thermoplastics effortlessly.** Achieves operating temperature instantly through in-handle transformer, which steps down voltage to a safe operational level. Input voltage 115 VAC @ 120 Watts.

Its slim compact handle makes it useful for cutting in areas with limited access. The spring-loaded on-off switch prevents operators from leaving it in the on position when not in use.

Blades for various operations are easily changed by loosening two thumb screws. For blade selection see page 26.

**EASILY CUTS:**

- |  |             |
|--|-------------|
| Rubber                                 | Polystyrene |
| PVC                                    | Polyamide   |
| Polyethylene                           | Cork        |
| Polypropylene                          | Styrofoam   |
| ABS (Acrydo-Nitrile Butadiene Styrene) |             |

**USE WITH:**

- |                    |                  |
|--------------------|------------------|
| Gypsum Wallboard   | Die-Cast Parts   |
| Plastic Pipe       | Molding Sprues   |
| Flooring and Tiles | Flashing         |
| Cable Conduit      | Foamed Plastics  |
| Webbing            | Corrugated Sheet |

- ◆ Adjustable Temperature
- ◆ Compact Construction
- ◆ Quick blade change
- ◆ Spring loaded on-off switch
- ◆ Lightweight 2.5 LBS
- ◆ Self contained transformer
- ◆ Blade temperatures up to 1050°F
- ◆ Ten-foot cord
- ◆ Comes with one T-3 blade
- ◆ Available in 240V

**THERMOCUTTERS ZETZ-24**

**ZETZ-24 is designed for continuous industrial operation at a central workstation or on-site.** The unit can be set for ON-OFF batch production or continuous use with the flip of a switch.



**ZETZ-24**

**500 WATTS – 115 VOLTS**

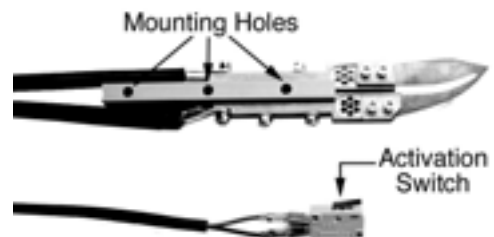
- ◆ Designed for heavy duty industrial use
- ◆ Infinitely adjustable controller transformer.
- ◆ Handle weight only 1.2lbs.
- ◆ Cables: Power to controller 6 feet · Controller to handle 9½ ft.
- ◆ Blade temperatures 220°F – 1400°F depending on blade used.
- ◆ Control Unit: Dimensions 7-1/2" x 8-1/2" x 11-7/8", Weight 30 LBS.
- ◆ Up to 2.6 Volts on blade makes for safe operation.
- ◆ Comes with one T-08/75mm blade (suitable for foam and soft thermoplastics).
- ◆ Available in 240V.

**ZETZ-25 (Fixture Handle)**

**ZETZ-25** is for robotic applications requiring the blade to be mounted as an EOAT. A special handle is provided with mounting holes.

For both the ZETZ-24 and ZETZ-25, the temperature of the blade is adjusted by the variable controller on the base of the unit which ensures the blade is evenly heated.

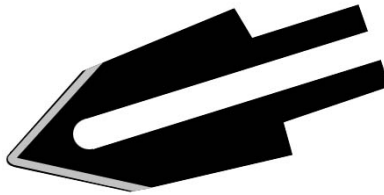
**Optional Robotic Handle**



**ZETZ-25 Robotic Handle**

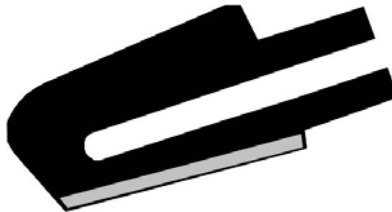
**Blades for the ZETZ Thermocutters.** ZETZ offers a wide selection of blades used on their Thermocutters. If the blade you need is not shown please call JDV or your distributor for additional blades.

Part No.	Thickness	Cutting Edge Length	ZETZ Model No.
T 04	0.6 mm	15 mm	ZETZ-9 ZETZ-24 ZETZ-25



**This blade has short obtuse angled cutting edges.** Both edges are sharpened.

Part No.	Thickness	Cutting Edge Length	ZETZ Model No.
T 05	0.6 mm	40 mm	ZETZ-9 ZETZ-24 ZETZ-25



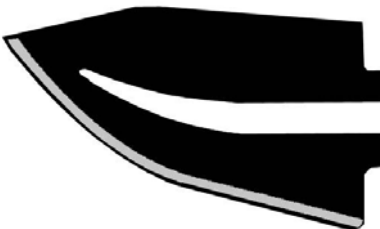
**Wide blade back and reinforced cutting flange provides stable cutting.** This high temperature blade is designed for heat sealing the cut edges

Part No.	Thickness	Cutting Edge Length	ZETZ Model No.
T 012/0.6	0.6 mm	35 mm	ZETZ-9
T 012/1.0	1.0 mm	35 mm	ZETZ-24 ZETZ-25



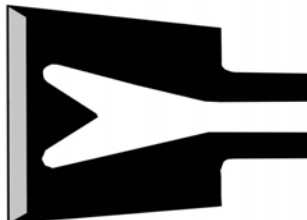
**Blade flanges are ground on both side for two directional cuts.** For cutting around templates. Also suitable for deburring

Part No.	Thickness	Cutting Edge Length	ZETZ Model No.
T 013/45	0.8 mm	45 mm	ZETZ-24 ZETZ-25
ALT/45	0.8 mm	45 mm	
T 013/70	1.0 mm	70 mm	ZETZ-24 ZETZ-25
T 3/115	1.0 mm	115 mm	
ALT/70	1.0 mm	70 mm	



**This wide high temperature blade has a curved cutting edge, which makes it suitable for long cuts under pressure.** ALT blades are the same as T013 blades with the exception of being offset at a 45° angle.

Part No.	Thickness	Cutting Edge Length	ZETZ Model No.
T 015/0.6	0.6 mm	15 mm	ZETZ-9 ZETZ-24 ZETZ-25
T 015/0.8	0.8 mm	30 mm	
T 015/1.0	1.0 mm	50 mm	



**Spade shaped to be held vertically.** Suitable for mounting installations

Part No.	Thickness	Cutting Edge Length	ZETZ Model No.
T 2/50	0.6 mm	50 mm	ZETZ-9 ZETZ-24 ZETZ-25
T 2/100	0.6 mm	100 mm	
T 2/150	0.6 mm	150 mm	
T 2/200	0.6 mm	200 mm	



**Allows cutting on two sides.** This blade is sharpened on both sides to prevent distortion. Ideal for cutting foam.

Part No.	Thickness	Cutting Edge Length	ZETZ Model No.
T 3/15	0.6 mm	15 mm	ZETZ-9 ZETZ-24 ZETZ-25
T 3/30	0.6 mm	30 mm	
T 3/50	0.6 mm	50 mm	
T 3/90	0.6 mm	90 mm	
T 3/125	0.6 mm	125 mm	



**Standard blade** used for many simple cutting applications

**Deburring Tools designed with the professional in mind.**

Ergonomic handles are made from top quality, solid aluminum with a red anodize finish and individually labeled for identification. Steel chucks and collets allow for interchangeability between large and small handles. Superior all-around quality makes this the finest deburring tool line.

**CCK Deburring Kit**

Set includes storage base with clear cover, six handles and 20 blades.  
 (2) CCH-1, (2) CCH-2, (1) CCS-3, (1) CCG-4 Handles and (5) CCB-404, (5) CCB-22, (5) CCB-406,  
 (1) of each or the following CCB-100, CCB-10, CCB-70, CCB-150, CCB-80 Blades.



**CCK Deburring Kit**

**Individual Handles**



**CCH-1-** Large (.98" x 4.52")  
 anodized aluminum handle with quick release steel blade holder for rotating deburring blades.



**CCG-4-** (.98" x 4.33")  
 Anodized aluminum handle with stainless steel Clamping sleeve for model CCB-404, 22, and 406 blades.



**CCS-3-** Scraper  
 knurled anodized aluminum handle (.39" x 3.11") with precision scraper blade (model CCB-50). Handle includes integrated hexagonal key for changing blade.



**CCH-2-** Small (.43" x 3.26")  
 anodized aluminum handle with quick release steel blade holder for rotating deburring blades.

**Replacement Blades**



**CCB-10** Deburring blade  
 Standard deburring blade



**CCB-100** Deburring blade  
 Std. deburring blade (stainless Steel)



**CCB-70** Deburring blade  
 For internal deburring applications



**CCB-150** Deburring blade  
 For internal deburring and chamfering



**CCB-80** Deburring blade  
 Precision deburring blade



**CCB-50** Scraping blade  
 Std. deburring blade fits handle CCS-3



**CCB-22** Utility Knife  
 Fits handle CCG-4



**CCB-404** Utility Knife  
 Fits handle CCG-4



**CCB-406** Utility Knife  
 Fits handle CCG-4

The VESSEL Air Micro Die Grinder features superior durability and grinding performance. Lightweight and compact, this is a grinder with a wide range of uses.

- ◆ Superior durability, with minimized heat buildup
- ◆ Low-noise with an attached exhaust hose
- ◆ Lightweight and compact, table performance can be maintained over long periods of time
- ◆ Performs light and smooth grinding with high RPMs



**GT-MG25-9CR**



**GT-MG25-12CR**



**GT-MG25S  
GT-MG25SB (reverse spin)**



**GT-MG35-12CR**



**GT-MG35SAR**



**GT-MG55S**



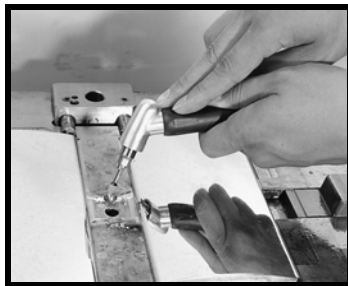
**GT-MG55SAR**



**GT-MG55SR**

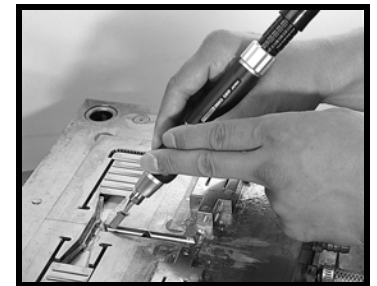


**GT-MG75S**



**Applications include:**

- ◆ Grinding
- ◆ Engraving
- ◆ Surface finishing
- ◆ Debarring of machined pieces
- ◆ Finishing of curved surfaces
- ◆ Inner surface grinding
- ◆ Beveling of gears



Part No.	RPM	Overall Length (mm)	Frame Diameter (mm)	Air Cons. M <sup>3</sup> /min.	Weight (g)	Body Form
GT-MG25-9CR	25,000	143	20.0	0.16	200	Angle 90°
GT-MG25-12CR	25,000	160	20.0	0.16	200	Angle 120°
GT-MG25S / SB	25,000	198	30.0	0.175	600	Straight
GT-MG35-12CR	35,000	151	20.0	0.16	160	Angle 120°
GT-MG35SAR	35,000	182	29.5	0.285	435	Straight
GT-MG55S	55,000	163	17.5	0.16	180	Straight
GT-MG55SAR	55,000	178	24.5	0.245	260	Straight
GT-MG55SR	55,000	180	20.0	0.16	220	Straight
GT-MG75S	75,000	170	18.5	0.16	190	Straight

**100 SERIES SCREWDRIVER KIT**



- ◆ 5 piece screwdriver set
- ◆ Round handle for more gripping power
- ◆ Chrome vanadium steel shaft
- ◆ Tang-Thru design:  
Shaft penetrates through handle  
1 piece combination shank and handle end cap  
Prevents damage to screwdriver when striking

Set includes: (-)5.5, (-)6, (+)0, (+)1, (+)2

**220 SERIES SCREWDRIVER SET**



- ◆ Unique, ergonomic design
- ◆ Color coded handles
- ◆ Hardened, chrome-plated, vanadium steel shaft
- ◆ Magnetized tips

Set includes: (-)5.5, (-)6, (+)0, (+)1, (+)2

**5400BP HEX-HEAD SCREWDRIVER SET**



- ◆ 7 common hex sizes
- ◆ Fully hardened, chrome vanadium steel shaft
- ◆ Ergonomic grip with hanging hole
- ◆ Tapered ball-point tip keeps the center from pivoting, allowing smooth tip rotation in a tilted position

Set includes: H1.5, H2, H2.5, H3, H4, H5, H6

**620 STUBBY SCREWDRIVER SET**



- ◆ Soft cushion grip
- ◆ High-torque handle
- ◆ Chrome vanadium steel
- ◆ Magnetic tip

Set includes: (-)6, (+)1, (+)2

**TD210 MULTI-TIP SCREWDRIVER SET**

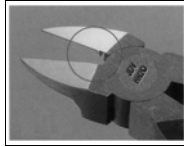


- ◆ Three tips in one convenient tool
- ◆ Contoured "Y" shape fits comfortably in your palm
- ◆ Magnetized tips
- ◆ Standard, philips, hex and torque tips

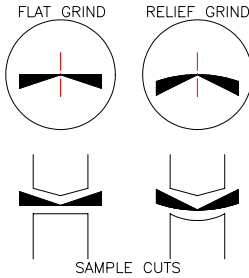
Set includes: (+)1/ (+)2/ (-)6      H2/ H2.5/ H3      H4/ H5/ H6  
T10/ T15/ T20      T25/ T30/ T40



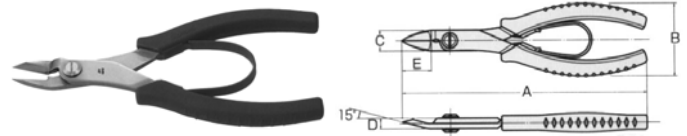
Hand Nippers from JDV are ideal for cutting gates when Pneumatic nippers are not practical. Available in a full line of shapes and sizes



Stopper mechanism prevents blade clapping prolonging blade life. (Except HN19)



**HN10**



**HN11  
HN12**



**HN13  
HN14**      **HIGH CARBON STEEL**



**HN15  
HN16**



**HN17  
HN18**



**HN19**



**HN20  
HN21**      **HIGH CARBON STEEL**



**HN22  
HN23**      **HIGH CARBON STEEL**



**HN24  
HN25**      **HIGH CARBON STEEL**



Part No.	A	B	C	D	E	Cut Cap..	Weight (g)	Spring type	Blade Grind
HN10	6.5	1.89	.55	.31	.75	Ø 0.20	95	Plastic resin	Flat
HN11	5.25	1.89	.55	.30	.75	Ø 0.20	70	Plastic resin	Flat
HN12	5.25	1.89	.55	.30	.75	Ø 0.20	70	Plastic resin	Relief
HN13	5.0	1.96	.47	.33	.55	Ø 0.12	76	Coil	Flat
HN14	5.0	1.96	.47	.33	.55	Ø 0.12	76	Coil	Relief
HN15	5.25	2.0	.55	.39	.91	Ø 0.20	105	Coil	Relief
HN16	6.0	2.09	.29	.43	.98	Ø 0.20	105	Coil	Relief
HN17	4.6	1.85	.41	.30	.87	Ø 0.06	55	Coil	Flat
HN18	4.5	1.85	.41	.30	.87	Ø 0.06	55	Coil	Relief
HN19	5.0	1.81	.55	.39	.71	Ø 0.12	45	Plastic resin	Flat
HN20	5.25	2.0	.59	.35	.67	Ø 0.20	95	Coil	Flat
HN21	5.25	2.0	.59	.35	.67	Ø 0.20	95	Coil	Relief
HN22	6.25	2.0	.75	.43	.87	Ø 0.20	150	Coil	Flat
HN23	6.25	2.0	.75	.43	.87	Ø 0.20	150	Coil	Relief
HN24	7.75	1.93	.87	.47	1.02	Ø 0.32	220	Coil	Flat
HN25	7.75	1.93	.87	.47	1.02	Ø 0.32	220	Coil	Relief

All dimensions are in (INCHES).

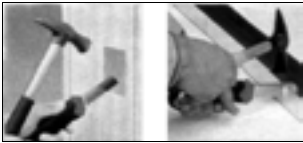
These knives are suited for industrial use. They are designed to take the abuse that would destroy other knives. Available in three styles; all knives come with ceramic sharpening stone and locking sheath.



**Hercules I Part No. 122791**  
High Alloy Steel Blade



**Hercules II Part No. 122792**  
Stainless Steel Blade  
Blade is removable and reversible



**Hercules III Part No. 122793**  
"Damascus" Blade  
Blade is easily re-sharpened

**NEON**

Glow-In-The-Dark handle



**Hercules V Part No. 122795**  
High Alloy Steel Blade  
Blade is easily re-sharpened  
Large grip handle

**IMPACT DRIVERS**

Loosen or tighten screws with stripped-out heads. Impact screwdrivers are the perfect solution for fastening and unfastening stubborn screws. To ensure the tightest fit, you only have to strike the Impact Driver to multiply the amount of tightening torque for most screw sizes. Impact screwdrivers are also great for loosening fasteners with stripped screw heads and stubborn rusted screws.

**Model 2300**



The 2300 model Impact Driver is the perfect set for most industrial, domestic or hobbyist applications. Set comes with six 5" long shank bits for normal use, and for applications in deep, narrow, or difficult to access spaces.

Tips Included: (+)1, (+)2, (+)3, (-)5, (-)6, (-)7 x 125mm

**Model 2400**



The 2400 model Impact Driver is a Heavy Duty tool for the more demanding or repetitive applications. This set comes with six, 5/16" thick shank bits, specially hardened for optimum durability.

Tips Included: (+)2, (+)3, (+)4, (-)10 x 36mm and (+)2, (+)3 x 80mm.

## NIPPER SELECTION

### HOW TO SELECT AN AIR NIPPER:

The optimum choice will rest heavily on the type of operation and characteristics of the application material.

**APPLICATION TYPE**—Nippers take many forms and styles to satisfy the requirements of the working environment.

#### Manual operation— Hand Held Nippers

- N series - for cutting plastics and metal/wire (Page 7)
- NH series- for cutting Acrylics and other brittle plastics (Page 8)
- H series - for cutting Kevlar, fabrics and other flat materials (Page 10)

#### Fixtured Operation—Mountable Nippers

- NF Series - low profile, compact box style for small to medium applications (Page 8)
- NR Series - round cylindrical style for a broad range of applications (Page 5)
- NS Series - square cylindrical style for a broad range of applications (Page 6)
- NW Series - similar to the NR/NS with double acting cylinder (Page 5)
- NH series - for cutting Acrylics and other brittle plastics (Page 8)
- NK/TC series - for cutting fan gates (Pages 9-10)

#### Fixtured/End of Arm Tooling—Sliding Nippers

- NY series - sliding nipper with low profile (Pages 3-4)
- NT series - sliding nipper with smaller footprint (Page 2)
- NB series - sliding nipper for larger cutting applications (Page 3)

**APPLICATION SIZE**—Each nipper style and size has a recommended cutting capacity which has been determined based on ideal conditions. Variables such as cutting material temperature, fill/content, dimensions and spacing requirements may effect the performance of a particular nipper.

#### Tips for maximum performance of your Vessel Air Nipper and your personal safety:

- ◆ **DISCONNECT ALL AIR LINES TO TOOLS BEFORE PERFORMING ANY SERVICING OR MAINTENANCE.**
- ◆ Maintain recommended air pressure to operate Air Nippers.
- ◆ Do not exceed the recommended cutting material size.
- ◆ Lube Air Nipper at least once per month with general purpose grease (do not oil).
- ◆ Use oil and water free filtered air.
- ◆ Minimize dry firings.
- ◆ Oil Air Nipper blades at least once per week.

## ROBOTIC OPTIONS

Vessel Air Nippers are easily integrated into most robots for completely automatic, efficient, and rapid degating. JDV can assist you in updating your degating programs and other post mold processing systems.

We offer lease programs on degating robots for short term projects.

### Sprue Pickers & Unloading Robots

### Multi-Axis Articulated Degating Robot Arm



X-Y Axis Degating Table



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