

Crimping tools/machines



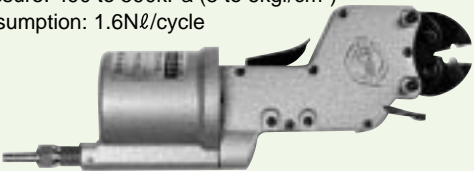



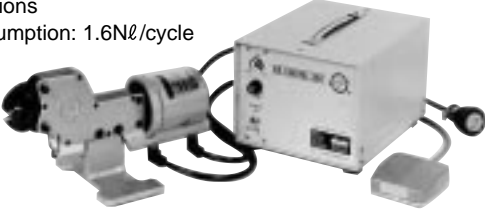

ABCD YA TOOLS

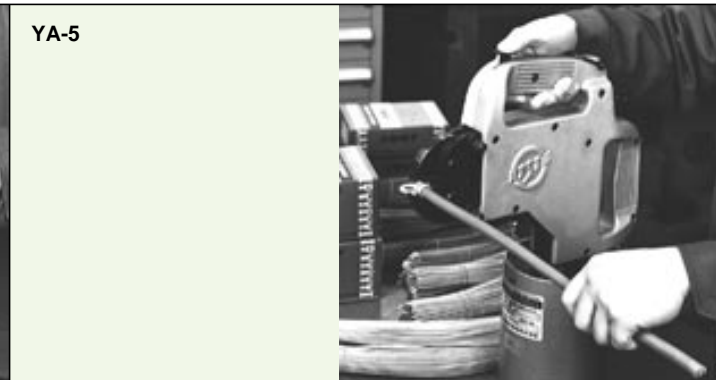
Pneumatic hand tools

These pneumatic hand tools operate on compressed air ranging from 75 to 85 PSI (5.0 to 6.0 kg/cm²){500 to 600kPa} for quick and accurate crimping, and are very efficient for continuous crimping.

The dies are classified according to the type and size of the solderless terminal. Refer to the table of appropriate tools at the back of this catalog for information on each of the dies. **Dies should be ordered separately.**

The die can be easily changed by using the two die setting pins and the tool provided.

Series	YA-1		YA-2	
Applicable terminals/splices Nominal size	<ul style="list-style-type: none"> * 0.5 to 5.5 Non-insulated terminals/splices * 0.5 to 2 Insulated terminals, Non-insulated terminals with copper sleeve * 1 to 5(5.5) Closed-end splices * 1.25 to 5.5 Flag terminals 			
Standard-type (portable type)	<p>Model No. YA-1 Specifications Weight: 1.7kg (3.8lbs) Length: 300mm (11.8") O.D.: 90mm (3.5") Air pressure: 490 to 590kPa (5 to 6kgf/cm²) Air consumption: 1.6Nℓ/cycle</p> 	<p>Model No. YA-2 Specifications Weight: 1.3kg (2.9lbs) Length: 250mm (9.8") O.D.: 90mm (3.5") Air pressure: 490 to 590kPa (5 to 6kgf/cm²) Air consumption: 0.8Nℓ/cycle</p> 		
Bench-type	<p>(air foot valve type)</p> <p>Model No. YAT-1A Main unit: YA-1A (mounted on bench unit) Air foot switch: AV-250 (incl. air hose) Specifications Air consumption: 1.6Nℓ/cycle</p> 	<p>Model No. YAT-2A Main unit: YA-2A (mounted on bench unit) Air foot switch: AV-250 (incl. air hose) Specifications Air consumption: 1.6Nℓ/cycle</p> 		
	<p>(solenoid valve type)</p> <p>Model No. YAD-1A Main unit: YA-1A Air unit: D-1 (100V only) Specifications Air consumption: 1.6Nℓ/cycle</p> 	<p>Model No. YAD-2A Main unit: YA-2A Air unit: D-1 (100V only) Specifications Air consumption: 1.6Nℓ/cycle</p> 		



- * 1.25 to 14 Non-insulated terminals/splices
- * 1.25 to 5.5 Insulated terminals, Non-insulated terminals with copper sleeve
- * 1 to 8 Closed-end splices
- * 1.25 to 14 Flag terminals

- * 8 to 60 Non-insulated terminals/splices
- * 8 to 60 Flag terminals

Model No. YA-4
Specifications
 Weight: 3.0kg (6.6lbs)
 Length: 185mm (7.3")
 Width: 88mm (3.5")
 Height: 275mm (10.8")
 Air pressure: 490 to 590kPa (5 to 6kgf/cm²)
 Air consumption: 2.4Nℓ/cycle

Model No. YA-5
Specifications
 Weight: 9.7kg (21.4lbs)
 Length: 300mm (11.8")
 Width: 125mm (4.9")
 Height: 450mm (17.7")
 Air pressure: 490 to 590kPa (5 to 6kgf/cm²)
 Air consumption: 7.8Nℓ/cycle

Model No. YAT-4A
 Main unit: **YA-4A**
 Air foot switch: **AV-250** (incl. air hose)
Specifications
 Air consumption: 4.8Nℓ/cycle


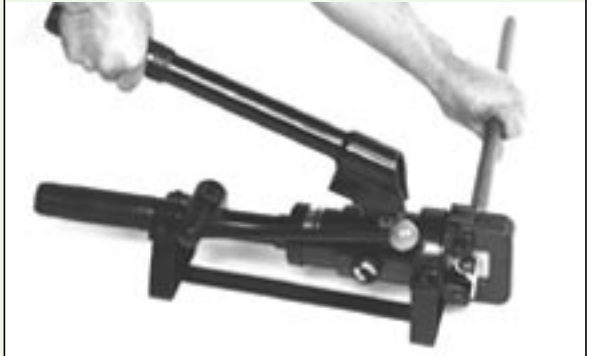

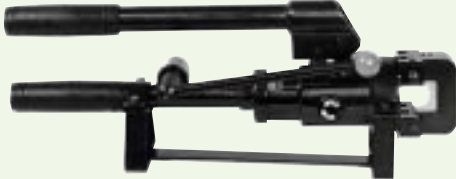





Model No. YAD-4A
 Main unit: **YA-4A**
 Air unit: **D-1** (100V only)
Specifications
 Air consumption: 4.8Nℓ/cycle

EP RATCHET HAND TOOLS (YHT, YHT, YDT, YG, YS)

Ratchet hand tools are widely used to crimp small terminals. The proper crimping pressure is ensured by a ratchet which automatically controls the crimping force. Five different types –YHT, YNT, YDT, YG and YS – are available and can be selected according to the type of terminal to be crimped.

Tool Series	Type of Applicable Terminals	Light Duty Tools Length: 295mm (11.6") Width: YNTseries...75mm (3.0") Others...70mm (2.8") Weight: 500g (1.1lbs)		Heavy Duty Tools Length: YHT-8S...310mm (12.2") Others...300mm (11.8") Width: 75mm (3.0") Weight: 900g (2.0 lbs)	
		Terminal Nominal Size	Tool Model No.	Terminal Nominal Size	Tool Model No.
YHT	Non-insulated terminals/splices	0.5	YHT-2622	8	YHT-8S
		1.25	YHT-2210 (*)2		14
		2			
		3.5			
5.5					
YNT	Insulated terminals/splices (*1)	0.5	YNT-2622	5.5	YNT-1210S
		1.25	YNT-2216		
		2	YNT-1614		
YDT	Non-insulated terminals with copper sleeve (*1)	1.25	YDT-2216	5.5	YDT-1210S
		2	YDT-1614		
YG	Flag type terminals	1.25	YG-2216	8	YG-8S
		2	YG-1614		
		3.5	YG-1412	14	YG-14S
		5.5	YG-1210		
YS	Closed-end splices	0.5	YS-2622	8	YS-8S
		1.25	YS-2216		
		2	YS-1614		
		5.5	YS-1210		

Notes: *1 By adjusting the eccentric cam, these tools can be used both for straight type and flared type insulated terminals.
*2 YHT-2210 conforms to JIS C9711. (File No.677018)

<p>Model No.</p>	<p>YPT-60-21</p> <p>The YPT-60-21 hydraulic hand tool is easily portable and is used extensively to crimp small lots of non-insulated terminals with a nominal size of 8 to 60 (AWG#8 to #1/0). The precision ratchet ensures a complete connection every time. Female and male dies must be attached to the main body to crimp terminals. Five different female dies and three different male dies can be used, depending on the size of the terminal.</p> <p>This product conforms to JIS C9711. (File No.375001)</p> 	<p>YPT-150-1</p> <p>The YPT-150-1 is used for non-insulated terminals and sleeves with a nominal size of 8 to 150 (AWG#8 to MCM300). Crimping is performed by placing the tool on the floor and manually operating the handle at the top. The terminal is grasped securely by operation of the quick lever, thus allowing the work to be done efficiently.</p> 
<p>Applicable terminals/splices Nominal size</p>	<p>* 8 to 60 Non-insulated terminals/splices</p>	<p>* 8 to 150 Non-insulated terminals/splices</p>
<p>Specifications</p>	<p>Weight: 3.3kg (7.3lbs) Demensions: 420L x 80T x 120Wmm (16.5"L x 3.1"T x 4.7"W) Max. pressure output: 58.8KN(6 ton)</p> 	<p>Weight: 7.4kg (16.3lbs) Demensions: 518L x 190T x 160Wmm (20.4"L x 7.5"T x 6.3"W) Max. pressure output: 186KN(19 ton)</p> 
<p>Applicable dies</p> <p>* Unless the order specifies otherwise, the YPT-60-21 and the YPT-150-1 come with these dies. Please specify if only the tool is being ordered.</p> <p>* When ordering dies only, please specify the individual model numbers of the dies. (See "Selection Table of Proper Tooling".)</p>	<p style="text-align: center;">Female dies</p>  <p style="text-align: center;">Male dies</p> 	<p style="text-align: center;">Female dies</p>   <p style="text-align: center;">Male dies</p> 

I YF-1 **J K L M N O** CRIMPING HEADS

By connecting a crimping head via a high-pressure hose, foot-operated hydraulic tools are capable of crimping non-insulated terminals and splices with a nominal size of 8 or larger. Because they are foot-operated, they are easier to work than hand-operated hydraulic units, and the 2-stage valve system (high-pressure and low-pressure) provides a high level of efficiency.

[Ordering example]

When you'd like to crimp non-insulated terminals of nominal size 60 by using the YF-1, place an order for:

1. YF-1
2. High Pressure Hose
(2m unless otherwise specified)
- 2' Male Couplers (1 pair)
3. YET-60-1
4. (No need. Dies comes with YET-60-1)
5. Tripod
Mounting fixture 150
Mounting fixture 60

3. CRIMPING HEAD



4. DIES



(for YET-300)

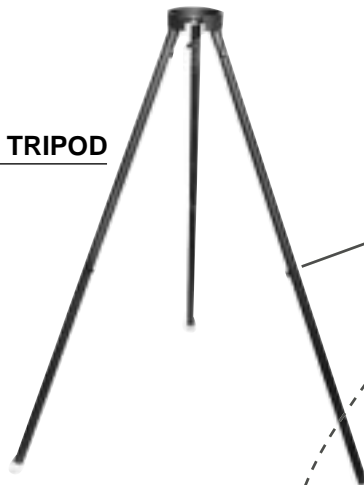
Female coupler

6. MOUNTING FIXTURE



Connect

5. TRIPOD



2. HIGH PRESSURE HOSE

Male coupler
(Order separately)

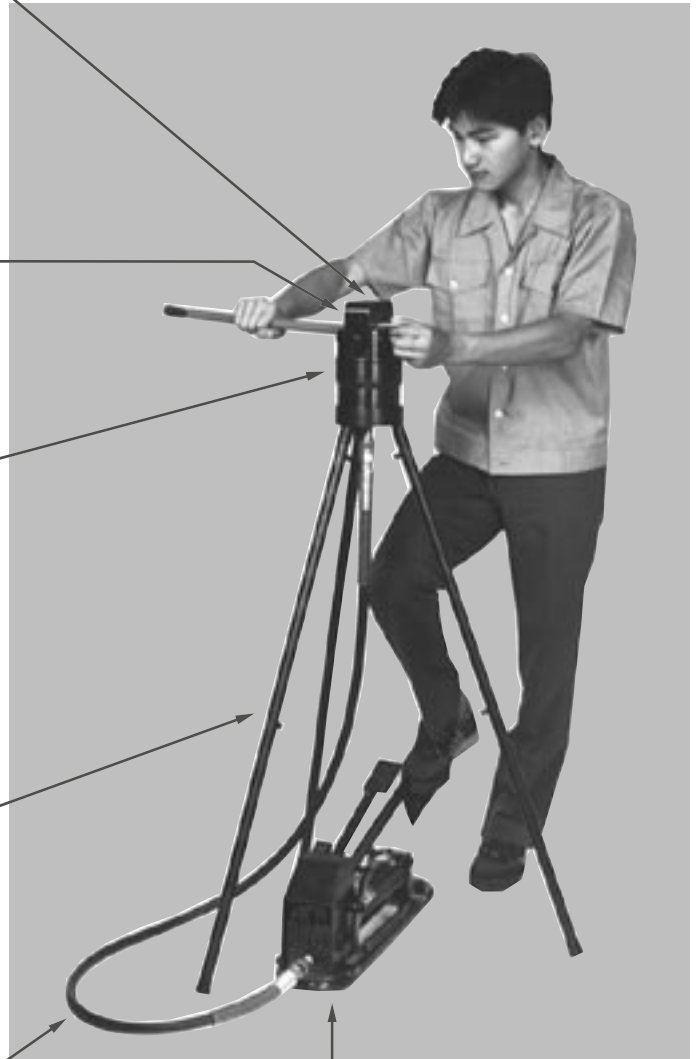
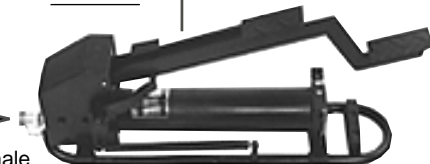


Male coupler
(Order separately)

Connect

1. YF-1

Female coupler



1. YF-1

Specifications

Dimensions	620L x 176W x 350Hmm (24.4"L x 6.9"W x 13.8"H)
Weight	17kg (37.5lbs)
Max. pressure output	68.6MPa 9,950PSI (700kg/cm ²)

2. HIGH PRESSURE HOSE

Specifications

- * Comes without couplers (must order separately 2')
- * Triple steel wire-reinforced rubber hose
- * Hose diameter: I.D.6mm(.24"), O.D. 20.5mm(.81")
- * Hose fitting thread diameter: 3/8
- * Minimum breaking pressure: 196MPa {28,400 PSI (2,000kg/cm²)}
- * Minimum bending radius: R120mm(R4.7")
- * Length: 2m(6' 7") standard, max. 15m(49' 2")

3. CRIMPING HEAD

Specifications

Model No.	Dimensions mm (in.)		Weight lbs(kg)	Maximum output KN(ton)	Maximum allowable pressure	Dies
	Height	Outer diameter				
YNE-38	213 (8.4)	72(2.8)	2.2 (4.9)	79 (8)	68.6MPa {240PSI (700kg/cm ²)}	Order separately
YET-60-1	191 (7.5)	72(2.8)	2.6 (5.7)	79 (8)		1set(8 pcs) included
YET-150-1	221 (8.7)	90(3.5)	5.3(11.7)	196(20)		1set(14 pcs) included
YEG-150	245 (9.6)	90(3.5)	5.3(11.7)	196(20)		Order separately
YET-300-1	284(11.2)	125(4.9)	13.0(28.7)	353(36)		1set(13 pcs) included
(YET-300N)	287(11.3)	125(4.9)	14.0(30.9)	353(36)		

- Note:1) YET-60-1, YET-150-1, YET-300-1 and YET-300N come with a full set of their dies.
For the heads YNE-38 and YEG-150, order their dies separately.
- 2) The YET-300N crimping head allows reversible mounting of dies i.e. the position of the female and male dies can be switched to facilitate the work to be done.
- 3) The die for YET-300-1 and the die for YET-300N are not interchangeable.

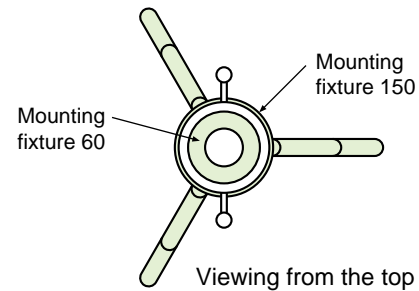
4. DIES

The dies are made of a special alloy, chrome plated, and then finished under a stringent quality control system. Both female and male dies are available to suit the type and size of terminal to be processed.

4. DIES

O-marked parts are required to mount a crimping head on the tripod.

Crimping head model No.	Tripod	Mounting	
		fixture 150	fixture 60
YET-300-1 YET-300N	O	X	X
YET-150-1 YEG-150	O	O	X
YET-60-1 YNE-38	O	O	O



P AP-F6

Semi-automatic crimping machine

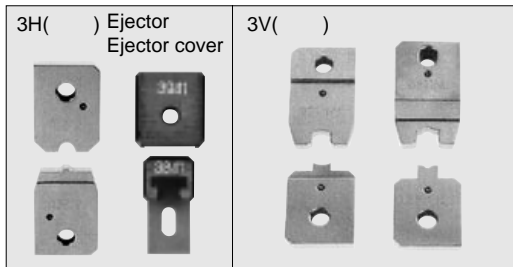
This machine is loaded with tape-on solderless terminals which are wound on a reel. Crimping is performed automatically by operation of a foot switch or touch sensor. Each crimping operation requires only one second, so more than 2,000 terminals can be crimped per hour during continuous operation. Operation of the machine requires almost no training, and the machine can be easily moved.

Dies should be ordered separately.

Specifications

Model No.	AP-F6
Dimensions	270W x 415L x 385Hmm (10.6"W x 16.3"L x 15.2"H)
Weight	50kg (110lbs)
Power supply	100/115/220/240V AC, Single phase, 50/60Hz
Air pressure	490 to 690kpa {75 to 90 PSI(5 to 7kg/cm ²)}
Pressure output	14.7KN {3,311lbs(1,500kg)}
Applicable terminals	Tape-on solderless terminals (insulated and non-insulated) with a nominal size of 0.5 to 5.5.

Dies









*Touch-sensor-system cannot be applied to some of the terminals/splices.

AP-F6 Crimping Dies











Terminals			Dies					
Type	Model No. Prefix (Suffix*)	Nominal Size	Set No.	Conductor		Insulation		
				Upper	Lower	Upper	Lower	
Non-insulated terminals	—	0.5	3H-2622	3102	3101	—	—	*
		1.25	3H-2216	3112	3111	—	—	*
		2	3H-1614	3112	3121	—	—	*
		5.5	3H-1210N	3132N	3131N	—	—	*
Non-insulated splices	C	1.25	3C-2216	3112	3111	(Spacers) 3042 3041		*
		2	3C-1614	3122	3121	3042	3041	*
		5.5	3C-1210	3132	3131	—	—	*
Insulated terminals Insulated quick disconnect	(F)V, (F)N, (F)ND, (F)VD, FVL	0.5	3V-2622N	3201N	3202N	3301N	3302N	
	(F)V, (F)N, FVX, FVL, (F)VDDF, FVDDM, (F)VDGM, CVDGF, (F)LVDDF, FLVZDF, FVZDF	1.25	3V-2216N	3211N	3212N	3311N	3312N	
		2	3V-1614N	3221N	3222N	3321N	3322N	
	(F)VD, (F)ND	1.25	3V-2216D	3211D	3212D	3311D	3312D	
		2	3V-1614D	3221D	3222D	3321D	3322D	
	(F)V, (F)N, FVX, FVL, (F)VD, (F)ND, (F)VDDF, FVDDM, LVDDF	5.5	3V-1210N	3231N	3232N	3331N	3332N	
Closed-end splices	-SD*	1	3S-2218D	3411C	3412C	(Spacers) 3011SD 3012SD		
		2	3S-1614D	3421C	3422C	3021SD	3022SD	
		5.5	3S-1210D	3431C	3432C	3031SD	3032SD	

Note * : Parts for ejector (Part nos. 3841+3941) are optional.

SELECTION TABLE OF PROPER TOOLING

Terminals/Splices				E Ratchet hand tools	F Heavy duty ratchet hand tools	Pneumatic hand tools			Pneumatic hand tools
Type	Applicable Wire [Stranded]		Nominal size			A Standard-type YA-1 Bench-type YAT-1A YAD-1A 	B Standard-type YA-2 Bench-type YAT-2A YAD-2A 	C Standard-type YA-4 Bench-type YAT-4A YAD-4A 	D YA-5 
	AWG # ACM #	mm ²				Dies	Dies	Dies	Dies
Non-insulated	26 to 22	0.2 to 0.5	0.5	YHT-2622	—	AD-100	AD-500	—	—
	22 to 16	0.25 to 1.65	1.25	⊕ YHT-2210	—	AD-101	AD-501	AD-900	—
	16 to 14	1.04 to 2.63	2	⊕ YHT-2210	—	AD-101	AD-501	AD-900	—
	—	3.5	3.5	⊕ YHT-2210	—	—	—	—	—
	12 to 10	2.63 to 6.64	5.5	⊕ YHT-2210	—	AD-101	AD-501	AD-900	—
	8	6.64 to 10.52	8	—	YHT-8S	—	—	AD-901	AD-951
	6	10.52 to 16.78	14	—	YHT-14S	—	—	AD-902	AD-952
	4	16.78 to 26.66	22	—	—	—	—	—	AD-953
	2	26.66 to 42.42	38	—	—	—	—	—	AD-954
	1/0	42.42 to 60.57	60	—	—	—	—	—	AD-955
	2/0	60.57 to 76.28	70	—	—	—	—	—	—
	3/0	76.28 to 96.30	80	—	—	—	—	—	—
	4/0	96.30 to 117.2	100	—	—	—	—	—	—
Insulated	26 to 22	0.2 to 0.5	0.5	N, V, VD FN, FV, FVD	YNT-2622	—	AD-200	AD-600	—
	22 to 16	0.25 to 1.65	1.25	N, V, VD FN, FV, FVD, FVL, FVX	YNT-2216	—	AD-201	AD-601	(AD-911)
	16 to 14	1.04 to 2.63	2	N, V, VD FN, FV, FVD, FVL, FVX	YNT-1614	—	AD-202	AD-602	(AD-911F)
	—	—	—	—	—	—	AD-202F	AD-602	(AD-912)
	12 to 10	2.63 to 6.64	5.5	N, V, VD FN, FV, FVD, FVL, FVX	—	YNT-1210S	—	—	(AD-912F)
	8	6.64 to 10.52	8	FVD	—	—	—	—	AD-913
	6	10.52 to 16.78	14	FVD	—	—	—	—	AD-913F
Non-insulated with copper sleeve	26 to 22	0.2 to 0.5	0.5	D FD	(YDT-2622)	—	(AD-400)	(AD-700)	—
	22 to 16	0.25 to 1.65	1.25	D FD	(YDT-2216)	—	(AD401)	(AD701)	(AD-921)
	16 to 14	1.04 to 2.63	2	D FD	(YDT-1614)	—	(AD-401F)	(AD-701)	(AD-921F)
	—	—	—	—	—	—	(AD-402)	(AD-702)	(AD-922)
	12 to 10	2.63 to 6.64	5.5	D FD	—	(YDT-1210S)	—	—	(AD-922F)
Closed-end	26 to 22	0.2 to 0.6	0.5-SD	YS-2622	—	AD-300	—	—	—
	22 to 16	0.5 to 1.75	CE1	YS-2216	—	AD-301	AD-801	(AD-931)	—
	22 to 16	1.0 to 1.75	1-SD	YS-2216	—	AD-301	AD-801	(AD-931)	—
	16 to 14	1.0 to 3.0	CE2	YS-1614	—	AD-302	AD-802	(AD-932)	—
	16 to 14	1.5 to 3.0	2-SDW	YS-1614	—	AD-302	AD-802	(AD-932)	—
	16 to 14	1.0 to 2.5	2-SD	YS-1614	—	AD-302	AD-802	(AD-932)	—
	12 to 10	2.5 to 6.0	CE5	YS-1210	—	AD-303	AD-803	(AD-933)	—
	12 to 10	2.0 to 5.5	5.5-SD	YS-1210	—	AD-303	AD-803	(AD-933)	—
	8	4.0 to 9.0	CE8	—	YS-8S	—	—	—	(AD-934)
	8	4.0 to 9.0	8-SD	—	YS-8S	—	—	—	(AD-934)
Flag	22 to 16	0.25 to 1.65	1.25	(YG-2216)	—	(AG-10)	(AD-504G)	(AD-941)	—
	16 to 14	1.04 to 2.63	2	(YG-1614)	—	(AG-20)	(AD-501G)	(AD-942)	—
	12 to 10	2.63 to 6.64	5.5	(YG-1210)	—	(AG-5.5)	(AD-502G)	(AD-944)	—
	8	6.64 to 10.52	8	—	YG-8S	—	—	(AD-945)	(AD-951G)
	6	10.52 to 16.78	14	—	YG-14S	—	—	(AD-946)	(AD-952G)
	4	16.78 to 26.66	22	—	—	—	—	—	(AD-953G)
	2	26.66 to 42.42	38	—	—	—	—	—	(AD-954G)
	1/0	42.42 to 60.57	60	—	—	—	—	—	(AD-955G)
	2/0	60.57 to 76.28	70	—	—	—	—	—	—
3/0	76.28 to 96.3	80	—	—	—	—	—	—	
4/0	96.3 to 117.2	100	—	—	—	—	—	—	

Note: 1) Model numbers inside parentheses require somewhat longer for delivery. 2) Products marked with ⊕ conform to standard JIS C9711.

Semi-automatic crimping machine P AP-F6 	Hydraulic hand tools		Foot operated hydraulic unit YF-1 						Terminals/ Splices	
	G YPT-60-21 	H YPT-150-1 	Crimping heads							
			J YNE-38 	K YET-60-1 	L YET-150-1 	M (YEG-150) 	N YET-300-1 	O (YET-300N) 	Nominal size	
Dies										
3H-2622	—	—	—	—	—	—	—	—	0.5	
3H-2216	—	—	—	—	—	—	—	—	1.25	
3H-1614	—	—	—	—	—	—	—	—	2	
—	—	—	—	—	—	—	—	—	3.5	
3H-1210N	Female die / Male die	Female die / Male die	—	Female die / Male die	Female die / Male die	—	—	—	5.5	
—	TD-121 TD-111	TD-221 TD-211	—	TD-121 TD-111	TD-221 TD-211	—	—	—	8	
—	TD-122 TD-111	TD-222 TD-211	—	TD-122 TD-111	TD-222 TD-211	—	—	—	14	
—	TD-123 D-112	TD-223 TD-212	—	TD-123 TD-112	TD-223 TD-212	—	—	—	22	
—	TD-124 TD-112	TD-224 TD-212	—	TD-124 TD-112	TD-224 TD-212	—	Female die / Male die	Female die / Male die	38	
—	TD-125 TD-113	TD-225 TD-213	—	TD-125 TD-113	TD-225 TD-213	—	TD-321 TD-311	TD-321N TD-311N	60	
—	—	TD-226 TD-213	—	—	TD-226 TD-213	—	TD-322 TD-311	TD-322N TD-311N	70	
—	—	TD-227 TD-214	—	—	TD-227 TD-214	—	TD-323 TD-312	TD-323N TD-312N	80	
—	—	TD-228 TD-214	—	—	TD-228 TD-214	—	TD-324 TD-312	TD-324N TD-312N	100	
—	—	TD-229 TD-215	—	—	TD-229 TD-215	—	TD-325 TD-313	TD-325N TD-313N	150	
—	—	—	—	—	—	—	TD-326 TD-313	TD-326N TD-313N	180	
—	—	—	—	—	—	—	TD-327 TD-314	TD-327N TD-314N	200	
—	—	—	—	—	—	—	TD-328 TD-315	TD-328N TD-315N	325	
3V-2622N	—	—	—	—	—	—	—	—	0.5	N, V, VD
3V-2622N	—	—	—	—	—	—	—	—		FN, FV, FVD
3V-2216N	—	—	—	—	—	—	—	—	1.25	N, V, VD
3V-2216N	—	—	—	—	—	—	—	—		FN, FV, FVD, FVL, FVX
3V-1614N	—	—	—	—	—	—	—	—	2	N, V, VD
3V-1614N	—	—	—	—	—	—	—	—		FN, FV, FVD, FVL, FVX
3V-1210N	—	—	—	—	—	—	—	—	5.5	N, V, VD
3V-1210N	—	—	Female die/Male die	—	—	—	—	—		FN, FV, FVD, FVL, FVX
—	—	—	DH-121 DH-111	—	—	—	—	—	8	FVD
—	—	—	DH-122 DH-112	—	—	—	—	—	14	FVD
—	—	—	DH-123 DH-113	—	—	—	—	—	22	FVD
—	—	—	DH-124 DH-114	—	—	—	—	—	38	FVD
—	—	—	—	—	—	—	—	—	0.5	D
—	—	—	—	—	—	—	—	—		FD
—	—	—	—	—	—	—	—	—	1.25	D
—	—	—	—	—	—	—	—	—		FD
—	—	—	—	—	—	—	—	—	2	D
—	—	—	—	—	—	—	—	—		FD
—	—	—	—	—	—	—	—	—	5.5	D
—	—	—	—	—	—	—	—	—		FD
—	—	—	—	—	—	—	—	—	0.5-SD	
—	—	—	—	—	—	—	—	—	CE1	
—	—	—	—	—	—	—	—	—	1-SD	
—	—	—	—	—	—	—	—	—	CE2	
—	—	—	—	—	—	—	—	—	2-SDW	
—	—	—	—	—	—	—	—	—	2-SD	
—	—	—	—	—	—	—	—	—	CE5	
—	—	—	—	—	—	—	—	—	5.5-SD	
—	—	—	—	—	—	—	—	—	CE8	
—	—	—	—	—	—	—	—	—	8-5D	
—	—	—	—	—	—	—	—	—	1.25	
—	—	—	—	—	—	—	—	—	2	
—	—	—	—	—	—	Female die / Male die	—	—	5.5	
—	—	—	—	—	—	(FD-321 FD-311)	—	—	8	
—	—	—	—	—	—	(FD-322 FD-311)	—	—	14	
—	—	—	—	—	—	(FD-323 FD-312)	—	—	22	
—	—	—	—	—	—	(FD-324 FD-312)	—	—	38	
—	—	—	—	—	—	(FD-325 FD-313)	—	—	60	
—	—	—	—	—	—	(FD-326 FD-313)	—	—	70	
—	—	—	—	—	—	(FD-327 FD-314)	—	—	80	
—	—	—	—	—	—	(FD-328 FD-314)	—	—	100	

3) The die for YET-300-1 and the die for YET-300N are not interchangeable.