Ratchet Hand Tools (YHT, YNT, 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	Length: Width: Weight:	Others29 YNT & YN Others70 YN series.	305mm (12.0") 95mm (11.6") series75mm (3.0") 9mm (2.8") 600g (1.3lbs) 90g (1.1lbs)	Heavy Duty Tools Length: YHT-8S310mm (12.2") Others300mm (11.8") Width: 75mm (3.0") Weight: 900g (2.0 lbs)						
		Nominal Size	Model No.	4	Size	Model No.					
ҮНТ	Non- insulated	0.5	YHT-2622		8	YHT-8S					
	terminals/ splices	1.25 2 3.5 5.5	YHT-2210 (IIS) (Note:2)	~ · ·	J	1111-03					
		0.5	YNT-2622								
YNT	Insulated terminals/ splices (Note:1)	1.25	YNT-2216		5.5	YNT-1210S					
		2	YNT-1614								
YN	Bullet (PC type)	0.5 1.25 2	YN-2014		_	-	_				
YDT	Non-insulated terminals with	1.25	YDT-2216		5.5	YDT-1210S					
101	copper sleeve (Note:1)	2	YDT-1614		3.3	101-12105					

Note: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. (Certificate No. JQ 0608020)

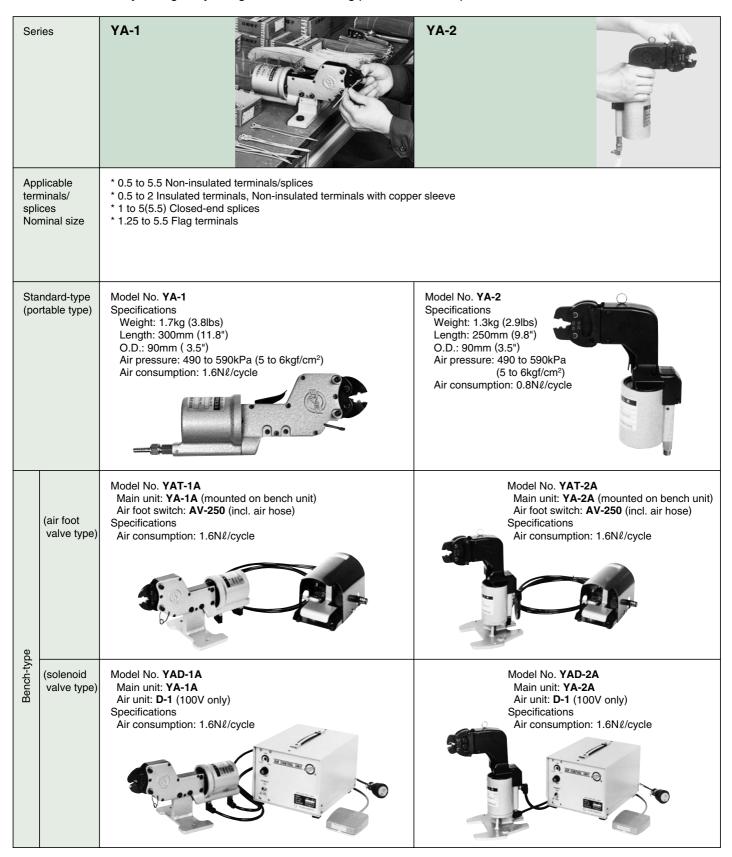
Tool Series	Type of Applicable Terminals	Length: Width: Weight:	Others70: 500g (1.1lk	75mm (3.0") Omm (2.8")	Heavy Duty Tools Length: YHT-8S310mm (12.2") Others300mm (11.8") Width: 75mm (3.0") Weight: 900g (2.0 lbs)					
		Nominal Size	Model No.		Nominal Size	Model No.				
		1.25	YG-2216			YG-8S				
YG	Flag type terminals	2	YG-1614		- 8	10-05	YG-8S			
		5.5	YG-1210		14	YG-14S				
		0.5 YS-262	YS-2622							
YS	Closed-end splices	1.25	YS-2216		- 8					
13		2	YS-1614		0	YS-8S				
		5.5	YS-1210							

Pneumatic Tools (YA series)

These pneumatic 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 dis setting pins and the tool provided.



Sei	ries	YA-4	YA-5		
terr spli	olicable minals/ ices minal size	* 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		
	indard-type irtable type)	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		
ed	(air foot valve type)	Model No. YAT-4A Main unit: YA-4A Air foot switch: AV-250 (incl. air hose) Specifications Air consumption: 4.8Nl/cycle			
Bench-type	(solenoid valve type)	Model No. YAD-4A Main unit: YA-4A Air unit: D-1 (100V only) Specifications Air consumption: 4.8Nl/cycle			

Hydraulic Tools (BCT, YPT)

Applicable terminals/ splices Nominal size	Battery operated type
0.5 to 14 terminals/splices	Tool Model No.: BCT-0514 Dimensions: 255mm (10.0") L x 241mm (9.5") H x 64mm (2.5") W Weight: Approx. 1.8kg (3.9 lbs.) Max. pressure output: 15kN (1.5 tonf) Standard accessories Battery pack: BP-6VR/1pc. Battery charger: CH-15MC/1 set (Input voltage 100V AC) Carrying case: 1 pc. <410mm (16.1") x 310mm (12.2") x 90mm (3.6")> Optional: Dies Shoulder belt
8 to 60 terminals/splices	Tool Model No.: BCT-860N Dimensions: 305mm (12.0") L x 315mm (12.4") H x 65mm (2.6") W Weight: Approx. 3.1kg (6.8 lbs.) Max. pressure output: 69kN (7tonf) Remarks: Conforms to JIS C9711 (Certificate No. JQ 0307101) Standard accessories Battery pack: BP-70MH/1pc. Battery charger: CH-3MH/1 set (Input voltage 100V AC) Dies: 1 set for the terminals of nominal size 8 to 60 Carrying case: 1 pc. <500mm (19.7") x 370mm (14.6") x 120mm (4.7")> Note: Battery pack and Battery charger are exchangeable with those for BCT-8150. Optional: Shoulder belt
8 to 150 terminals/splices	Tool Model No.: BCT-8150 Dimensions: 392mm (15.4") L x 275mm (10.8") H x 90mm (3.5") W Weight: Approx. 8.1kg (17.9 lbs.) Max. pressure output: 186kN (19 tonf) Remarks: Conforms to JIS C9711 (1) (Certificate No. JQ 0307101) Standard accessories Battery pack: BP-70MH/1pc. Battery charger: CH-3MH/1 set (Input voltage 100V AC) Dies: 1 set for the terminals of nominal size 8 to 150 Carrying case: 1 pc. <555mm (21.9") x 385mm (15.2") x 165mm (6.5")> Note: Battery pack and Battery charger are exchangeable with those for BCT-860N. Optional: Shoulder belt

Applicable terminals/ splices Nominal size	Hand operated type
0.5 to 14 terminals/splices	
8 to 60 terminals/splices	Tool Model No.: YPT-60N Dimensions: 435mm (17.0") L x 75mm (3.0") H x 130mm (5.1") W Weight: Approx. 3.0kg (6.6 lbs.) Max. pressure output: 69kN (7tonf) Dies: 1 set for the terminals of nominal size 8 to 60 Remarks: Conforms to JIS C9711 (1) (Certificate No. JQ 0307101)
8 to 150 terminals/splices	Tool Model No.: YPT-150-1 Dimensions: 518mm (20.4") L x 190mm (7.5") H x 160mm (6.3") W Weight: Approx. 7.4kg (16.3 lbs.) Max. pressure output: 186kN (19tonf) Dies: 1 set for the terminals of nominal size 8 to 150

Foot Operated Hydraulic Unit YF-1 / Electrically Operated Hydraulic Unit E-4 & Crimping Head

3. CRIMPING HEAD (P.97)

3-1. DIES (P.97)

YF-1 Foot Operated Hydraulic Unit

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 (700kgf/cm²)

[Ordering example]

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

- 1. **YF-1**
- 1-1. High Pressure Hose

(2m unless otherwise specified) & Male Couplers (1 pair)

1-2. Tripod

Mounting fixture 150 Mounting fixture 60

- 3. Crimping head: YET-60-1
- 3-1. Dies:

No need. Dies comes with YET-60-1.



1-1. HIGH PRESSURE HOSE

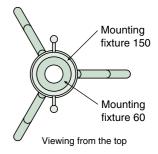
Specifications

- * Comes without couplers.
- * 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(2,000kg/cm²)
- * Minimum bending radius: R120mm(R4.7")
- * Length: 2m(6' 7") standard, max. 15m(49' 2")

1-2. TRIPOD

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

Crimping head model No.	Tripod	Mounting fixture 150	Mounting fixture 60	
YET-300-1 YET-300N	0	х	Х	
YET-150-1 YEG-150	0	0	Х	
YET-60-1 YNE-38	0	0	0	



E-4 Electrically Operated Hydraulic Unit

2. E-4

Specifications

	Dimen	sions m	m (in.)		Power				
Motor kW	Maximum pressure MPa	Discharge ℓ/min.	Ovarall length	Width	Height	Weight kg (lbs)	supply (Note 2)	Accessories	
200V 3 phase 1.5	68.6 (700kgf/cm²)	200V 3 phase 2.2	370 (14.6)	340 (13.4)	970 (38.2)	75 (166) approx.	200V 3 phase	[length : 5.4m (17.8")]	
								Foot switch [2-stage type]	

Note:1) Crimping heads should be orderd separately.

2) Conforms to JIS C9711. (19) (Certificate No. JQ0508153)

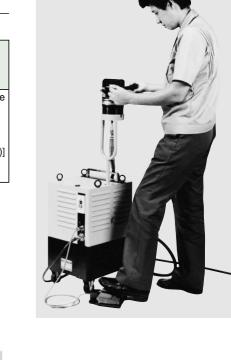
[Ordering example]

When you'd like to crimp non-insulated terminals of nominal size 60, for example, by using the E-4, place an order for:

Crimping head: YET-60-1 3.

3-1. Dies:

No need. Dies comes with YET-60-1.



Crimping Head & Dies

3. CRIMPING HEAD













3-1. 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.

Specifications

YNE-38

Model No.	Dimension	ns mm (in.)	Weight	Maximum output	Maximum allowable	Applicable terminals/splices	Dies
Woder No.	Height	Outer diameter			pressure	Nominal size	Dies
YNE-38	213 (8.4)	72 (2.8)	2.2 (4.9)	79 (8)		8 to 38 (Insulated terminals with copper sleeve)	Order separately.
YET-60-1	191 (7.5)	72 (2.8)	2.6 (5.7)	79 (8)		8 to 60 (Non-insulated terminals/splices)	1set included
YET-150-1	221 (8.7)	90 (3.5)	5.3 (11.7)	196 (20)	68.6MPa	8 to 150 (Non-insulated terminals/splices)	1set included
YEG-150	245 (9.6)	90 (3.5)	5.3 (11.7)	196 (20)	(700kgf/cm ²)	8 to 100 (Flag terminals)	Order separately.
YET-300-1	284 (11.2)	125 (4.9)	13.0 (28.7)	353 (36)		60 to 325 (Non-insulated terminals/splices)	1set included
YET-300N	287 (11.3)	125 (4.9)	14.0 (30.9)	353 (36)		except 250	Order separately.

Note:1) YET-60-1, YET-150-1 and YET-300-1 come with a full set of their dies. For the heads YNE-38, YEG-150 and YET-300N, 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) YET-60-1, YET-150-1 and YET-300-1 conform to JIS C9711. (9) (Certificate No. JQ0508153)

Semi-automatic Crimping Machine AP-F6

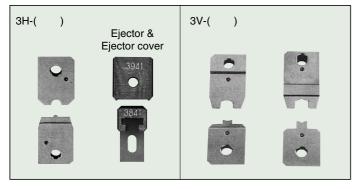
This machine is loaded with tape-on solderless terminals which are wound on a reel. Crimping is performed automatically by operation of a foot switch or touch sensor. Each crimping operation requires only one second, so more than 2,000 terminals can be crimped per hour during continuous operation. Operation 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	264W x 415L x 385Hmm (10.4"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 (5 to 7kgf/cm²)			
Pressure output	14.7kN (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		
T	Madal Na Darfin (Outfloor)	Nominal	Set No.	Cond	luctor	Insulation	
Туре	Model No. Prefix (Suffix*)	Size	Set No.	Upper	Lower	Upper	Lower
		0.5	3H-2622	3102	3101	_	_
Non-insulated terminals		1.25	3H-2216	3112	3111	_	_
Non-insulated terminals	_	2	3H-1614	3122	3121	_	_
		5.5	3H-1210N	3132N	3131N	_	_
	(F)V, (F)N, (F)ND, (F)VD	0.5	3V-2622N	3201N	3202N	3301N	3302N
	(F)V, (F)N, FVX, (F)VDDF,	1.25	3V-2216N	3211N	3212N	3311N	3312N
Insulated terminals	FVDDM, (F)VDGM, CVDGF, (F)LVDDF, FLVZDF, FVZDF	2	3V-1614N	3221N	3222N	3321N	3322N
Insulated quick disconnect		1.25	3V-2216D	3211D	3212D	3311D	3312D
	(F)VD, (F)ND	2	3V-1614D	3221D	3222D	3321D	3322D
	(F)V, (F)N, FVX, (F)VD, (F)ND, (F)VDDF, FVDDM, LVDDF	5.5	3V-1210N	3231N	3232N	3331N	3332N
		1	3S-2218D	3411C	3412C	(Spa 3011SD	cers) 3012SD
Closed-end splices	CE,-SD*	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

					Ratchet	Ratchet	Battery		Pneumatic tools			
	Terminal	s/Splices			hand tools (Light duty)	hand tools (Heavy duty)	operated hydraulic tool BCT-0514	Standard-type YA-1 Bench-type	Standard-type YA-2 Bench-type	YA-4 Bench-type	YA-5	AP-F6
Type -	Applicat [Strar		N	ominal size	N	N ₃		YAT-1A A YAD-1A	YAT-2A YAD-2A	YAT-4A YAD-4A	1	
	ACM #	111111			11	h /	Dies	Dies	Dies	Dies	Dies	Dies
_	26 to 22	0.2 to 0.5		0.5	YHT-2622		_	AD-100	AD-500	_	_	3H-2622
-	22 to 16 16 to 14	0.25 to 1.65		1.25			BYHT-2210	AD-101	AD-501	AD-900	_	3H-2216 3H-1614
	10 10 14	1.04 to 2.63 3.5		3.5	_	_		_	_	_	_	3H-1014 —
	12 to 10	2.63 to 6.64		5.5	∙®YHT-2210		BYHT-2210	AD-101	AD-501	AD-900	_	3H-1210N
	8	6.64 to 10.52		8		YHT-8S	BYHT-8			AD-901	AD-951	
	6	10.52 to16.78		14	_	_	BYHT-14	_		AD-902	AD-952	
Non-	4	16.78 to 26.66		22							AD-953	_
insulated	2	26.66 to 42.42		38	_	_	_	_	_	_	AD-954	
-	1/0 2/0	42.42 to 60.57 60.57 to 76.28		60 70							AD-955	
	3/0	76.28 to 96.30		80								
	4/0	96.3 to117.2		100								
	250/300	117.2 to 152.05		150	_	_	_	-	_	-	_	_
	350	152.05 to 192.6		180								
-	400	192.6 to 242.27		200								
	600/650	242.27 to 325		325 N, V, VD				AD-200				
	26 to 22	0.2 to 0.5	0.5	FN,FV,FVD	YNT-2622	_	_	AD-200F	AD-600	_	_	3V-2622N
	22 to 16	0.25 to 1.65	1.25	N, V, VD	YNT-2216	_	_	AD-201	AD-601	(AD-911)	_	3V-2216N
Insulated				FN, FV, FVD, FVX				AD-201F AD-202		(AD-911F) (AD-912)		
-	16 to 14	1.04 to 2.63	2	FN, FV, FVD,FVX	YNT-1614	_	_	AD-202F	AD-602	(AD-912F) AD-913	_	3V-1614N
	12 to 10	2.63 to 6.64	5.5	FN, FV, FVD,FVX	_	_	BYNT-1210	_	_	AD-913F	_	3V-1210N
Fully-nylon	20 to 18	0.5 to 0.75	0.5	PCM PCF	YN-2014	_	_	(AD-210)	_	_	_	_
-insulated with copper	18 to 16	0.75 to 1.25	1.25	PCM PCF	YN-2014 YNT-2216	_	_	AD-201F	AD-601	AD-911F	_	
sleeve	14	2.0	2	PCM PCF	YN-2014 YNT-1614	_	_	AD-202F	AD-602	AD-912F	_	_
	26 to 22	0.2 to 0.5	0.5	D FD	(YDT-2622)	_	_	(AD-400) (AD-400F)	(AD-700)	_	_	_
Non- insulated	22 to 16	0.25 to 1.65	1.25	D FD	(YDT-2216)	_	_	(AD401) (AD-401F)	(AD-701)	(AD-921) (AD-921F)	_	_
with copper sleeve	16 to 14	1.04 to 2.63	2	D FD	(YDT-1614)	_	_	(AD-402) (AD-402F)	(AD-702)	(AD-922) (AD-922F)	_	
	12 to 10	2.63 to 6.64	5.5	D FD	_	(YDT-1210S)	_	_	_	(AD-923) (AD-923F)	_	_
	26 to 22	0.2 to 0.6	_	0.5-SD	YS-2622	_	_	(AD-300)			_	
	22 to 16 22 to 16	0.5 to 1.75 1.0 to 1.75	_	CE1 1-SD	YS-2216	_	_	AD-301	AD-801	(AD-931)	_	3S-2218D
-	16 to 14	1.0 to 3.0	_	CE2								3S-1614D
Classif	16 to 14	1.5 to 3.0	_	2-SDW	YS-1614	_	_	AD-302	AD-802	(AD-932)	_	-
Closed-end	16 to 14	1.0 to 2.5	_	2-SD	YS-1614	_	_	AD-302	AD-802	(AD-932)	_	3S-1614D
	12 to 10	2.5 to 6.0	_	CE5	YS-1210	_	_	AD-303	AD-803	(AD-933)	_	3S-1210D
	12 to 10	2.0 to 5.5	_	5.5-SD	13 1210			, 15 000	, 15 000	(, 15 000)		- 55 12100
	8 8	4.0 to 9.0	_	CE8 8-SD	_	YS-8S	_	-	_	(AD-934)	_	-
	22 to 16	4.0 to 9.0 0.25 to 1.65	_	8-SD 1.25	(YG-2216)			(AG-10)	(AD-504G)	(AD-941)		
	16 to 14	1.04 to 2.63		2	(YG-1614)	_	_	(AG-10) (AG-20)	(AD-504G) (AD-501G)	(AD-941) (AD-942)	_	_
	12 to 10	2.63 to 6.64		5.5	(YG-1210)			(AG-55)	(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)	
Flag	4	16.78 to 26.66		22	_	_	_	_	_	_	(AD-953G)	_
	2	26.66 to 42.42		38				-			(AD-954G)	
	1/0	10 10 to 60 E7		60	l							
	1/0	42.42 to 60.57		70	_	_	_	_	_	_	(AD-955G)	_
	1/0 2/0 3/0	42.42 to 60.57 60.57 to 76.28 76.28 to 96.3		70 80		_		_	_	_	(AD-955G)	

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

3) The dies 3H-****(for the machine AP-F6, to crimp non-insulated terminals) require the ejector and ejector cover.

												#
	Termina	uls/Splices			YPT-60N	YPT-150-1	Foot operated hydraulic unit YF-1			Electrically operated hydraulic unit (19) E-4		
	Ann English Marin				BCT-860N	BCT-8150	YNE-38	YET-60-1	Crimpin	g heads (YEG-150)	VET 000 4	OVET COOL
Туре	Applicable Wire [Stranded]			ominal size			INE-38	(B)	(B)	(YEG-150)	YET-300-1	(YET-300N
	AWG # ACM #				Female die Male die	Female die Male die	Female die Male die	Female die Male die	Female die Male die	Female die Male die	Female die Male die	Female die
Non- insulated	8	6.64 to 10.52	8		TD-121 TD-111	TD-221 TD-211	_	TD-121 TD-111	TD-221 TD-211	_	_	_
	6	10.52 to16.78	14		TD-122 TD-111	TD-222 TD-211	_	TD-122 TD-111	TD-222 TD-211	_	_	_
	4	16.78 to 26.66	22		TD-123 TD-112	TD-223 TD-212	_	TD-123 TD-112	TD-223 TD-212	_	_	_
	2	26.66 to 42.42	38		TD-124 TD-112	TD-224 TD-212	_	TD-124 TD-112	TD-224 TD-212	_	_	_
	1/0	42.42 to 60.57	60		TD-125 TD-113	TD-225 TD-213	_	TD-125 TD-113	TD-225 TD-213	_	TD-321 TD-311	(TD-321N (TD-311N
	2/0	60.57 to 76.28	70		_	TD-226 TD-213	_	_	TD-226 TD-213	_	TD-322 TD-311	(TD-322N) (TD-311N)
	3/0	76.28 to 96.30	80		_	TD-227 TD-214	_	_	TD-227 TD-214	_	TD-323 TD-312	(TD-323N) (TD-312N)
	4/0	96.3 to117.2	100		_	TD-228 TD-214	_	_	TD-228 TD-214	_	TD-324 TD-312	(TD-324N (TD-312N
	250/300	117.2 to 152.05	150		_	TD-229 TD-215	_	_	TD-229 TD-215	_	TD-325 TD-313	(TD-325N) (TD-313N)
	350	152.05 to 192.6	180		_	_	_	_	_	_	TD-326 TD-313	(TD-326N (TD-313N
	400	192.6 to 242.27	200		_	_	_	_	_	_	TD-327 TD-314	(TD-327N (TD-314N
	_	250	250*		_	_	_	_	_	_	TD-329 TD-315	_
	600/650	242.27 to 325	325		_	_	_	_	_	_	TD-328 TD-315	(TD-328N (TD-315N
Insulated	8	6.64 to 10.52	8	FVD	_	_	(DH-121) (DH-111)	_	_	_	_	_
	6	10.52 to16.78	14	FVD	_	_	(DH-122) (DH-112)	_	_	_	_	_
	4	16.78 to 26.66	22	FVD	_	_	(DH-123) (DH-113)	_	_	_	_	_
	2	26.66 to 42.42	38	FVD	_	_	(DH-124) (DH-114)	_	_	_	_	_
Flag	22 to 16	0.25 to 1.65	1.25		-	_	_	_	_	_	_	_
	16 to 14	1.04 to 2.63	2		_	_	_	_	_	_	_	_
	12 to 10	2.63 to 6.64	5.5		_	_	_	_	_	_	_	_
	8	6.64 to 10.52	8		_	_	_	_	_	(FD-321) (FD-311)	_	_
	6	10.52 to 16.78	14		_	_	_	_	_	(FD-322) (FD-311)	_	_
	4	16.78 to 26.66	22		_	_	_	_	_	(FD-323) (FD-312)	_	_
	2	26.66 to 42.42	38		_	_	_	_	_	(FD-324) (FD-312)	_	_
	1/0	42.42 to 60.57	60		_	_	_	_	_	(FD-325) (FD-313)	_	_
	2/0	60.57 to 76.28	70		_	_	_	_	_	(FD-326) (FD-313)	_	_
	3/0	76.28 to 96.3	80		_	_	_	_	_	(FD-327) (FD-314)	_	_
	4/0	96.3 to 117.2	100						_	(FD-328) (FD-314)	_	_

Note: 4) The die for YET-300-1 and the die for YET-300N are not interchangeable. 5) * marked product is an option.