

Panasonic
CONNECT

**Welding Machines,
Torches & Genuine Parts**
TIG, Stick & Cutting



Product Guide

[TIG Welding Machines]

		Model	Process					Weld Navigation	Input			Output Current (A)			Duty Cycle (%)	Pulse Frequency (Hz)	Arc Spot Time (s)	Base Metal Thickness (mm)	Page
			AC TIG	DC TIG	Pulse	AC Stick	DC Stick		Phase	Voltage (VAC)	Frequency (Hz)	AC TIG	DC TIG	DC Stick					
Full Digital (Inverter)	300BZ3		○	○		○		3	380 or 415	50/60	—	300	250	40	0.8 to 500	0.1 to 5.0	Stainless steel: 0.3 to 6.0	4	
	200BL3YNA		○	○		○		1	200 to 240	50/60	—	200	150	20	0.5 to 500	0.1 to 5.0	Stainless steel: 0.3 to 4.5	4	
	300BP4YUA	○	○	○		○	○	3	380 to 415	50/60	300	300	250	40	0.1 to 500	0.1 to 5.0	Stainless steel: 0.3 to 6.0 Aluminum: 0.8 to 6.0	5	
Inverter	315TX3		○	○		○		3	380 or 415	50/60	—	315	315	60	0.5 to 500	—	Stainless steel: 0.5 to 6.0	—	
	400TX3		○	○		○		3	380 or 415	50/60	—	400	400	60	0.5 to 500	—	Stainless steel: 0.5 to 8.0	—	
	200BL1HDK		○			○		1	220	50/60	—	200	160	20	—	—	Stainless steel: 0.5 to 4.5	—	
	300WX4	○	○	○		○		3	380 or 415	50/60	300	300	250	40	0.5 to 500	—	Stainless steel: 0.5 to 6.0 Aluminum: 0.8 to 6.0	5	
	500WX4Y0E	○	○	○		○		3	380	50/60	500	500	400	60	0.5 to 500	—	Stainless steel: 0.8 to 8.0 Aluminum: 1.5 to 8.0	5	
	300WY4	○	○	○		○		3	380 or 415	50/60	300	300	250	40	0.5 to 500	—	Stainless steel: 0.5 to 6.0 Aluminum: 0.8 to 6.0	—	
	200BR1YAA	○	○	○				1	200	50/60	200	200	—	25	0 to 500	—	Stainless steel: 0.5 to 4.5 Aluminum: 0.8 to 4.5	6	
Thyristor	300TSP		○	○		○		3	380 or 415	50/60	—	300	300	40	0.5 to 15	0.5 to 5.0	Stainless steel: 0.5 to 6.0	6	
	500TSP		○	○		○		3	380 or 415	50/60	—	500	500	60	0.5 to 15	0.5 to 5.0	Stainless steel: 0.8 to 8.0	6	
	150TM(Mini)		○			○		1	220 or 380	50/60	—	150	150	20	—	—	Stainless steel: 0.5 to 4.5	—	
	300WP5	○	○	○	○	○		1	220 or 380 or 415	50/60	315	315	315	40	0.5 to 10	0.5 to 5.0	Stainless steel: 0.8 to 6.0 Aluminum: 1.5 to 6.0	—	

[Full Digital (Inverter)]: Digital display, control and communication for easier operation, increased energy savings, reduced size and weight and superior welding performance compared to non-digital or thyristor welding machines.

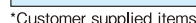
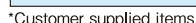
[Inverter]: Inverter model achieves improved welding performance compared to thyristor models while providing increased energy savings in a smaller and lighter design.

[Thyristor]: Standard welding models.

[AC/DC Stick Welding Machines, Plasma Cutting Machines]

Model	Process					Input			Output Current (A)	Duty Cycle (%)	Page
	AC Stick	DC Stick	Arc Gouging	DC Simple TIG	Cutting	Phase	Voltage (VAC)	Frequency (Hz)			
400AT3		○		○		3	380 or 415	50/60	400	60	7
630AT3		○	○	○		3	380 or 415	50/60	630	60	7
400SS3		○				3	380 or 415	50	400	60	8
630SS3		○	○			3	380 or 415	50	630	60	8
405FL4	○					1	220 or 380 or 415	50	400	60	—
505FL4	○					1	220 or 380 or 415	50	500	60	—
305AA3	○					1	380	50	300	60	8
060PS2					○	3	380 or 415	50/60	63	60	—
100PS2					○	3	380 or 415	50/60	100	60	—

TIG

2

Specifications

TIG

1. Welding Power Sources

Model	Rated Input Voltage Phase Rated Frequency	Rated Input (kVA) (kW)	Output Current Adjustable Range (A)						Rated Duty Cycle (%)	Arc Spot Time (s)	AC Frequency (Hz)	MIX Frequency (Hz)	Pulse Frequency (Hz)	Dimensions (W×D×H) (mm)	Weight (kg)
			AC TIG			MIX TIG	DC TIG	DC Stick							
			Standard	Hard	Soft										
YC-300BZ3	380 V or 415 V 3-phase 50/60 Hz	10.5 9.5	—	—	—	—	4 to 300	4 to 250	40	0.1 to 5	—	—	0.8 to 500	380×510×410	35
YC-200BL3YNA	200 to 240 V 1-phase 50/60 Hz	7.8 5.1	—	—	—	—	5 to 200	5 to 150	20	0.1 to 5	—	—	0.5 to 500	95×420×295	9
YC-300BP4YUA	380 to 415 V 3-phase 50/60 Hz	11.6 9.7	10 to 300	20 to 300	10 to 200	10 to 300	4 to 300	4 to 250	40	0.1 to 5	30 to 400	0.1 to 20	0.1 to 500	375×523×634	64
YC-315TX3	380 V or 415 V 3-phase 50/60 Hz	8.8 8.3	—	—	—	—	4 to 315	4 to 315	60	—	—	—	0.5 to 500	327×555×602	42
YC-400TX3	380 V or 415 V 3-phase 50/60 Hz	14.5 12.4	—	—	—	—	4 to 400	4 to 400	60	—	—	—	0.5 to 500	327×555×602	43
YC-200BL1HDK	220 V 1-phase 50/60 Hz	7.5 4.5	—	—	—	—	5 to 200	5 to 160	20	—	—	—	—	150×345×252	10
YC-300WX4	380 V or 415 V 3-phase 50/60 Hz	12.0 10.5	10 to 300	20 to 300	10 to 200	10 to 300	4 to 300	4 to 250	40	—	—	0.5 to 10	0.5 to 500	380×530×730	74
YC-500WX4Y0E	380 V 3-phase 50/60 Hz	24.0 19.5	20 to 500	40 to 500	20 to 330	20 to 500	5 to 500	50 to 400	60	—	—	0.5 to 10	0.5 to 500	440×585×945	118
YC-300WY4	380 V or 415 V 3-phase 50/60 Hz	10.5 9.0	10 to 300	20 to 300	10 to 200	10 to 300	4 to 300	4 to 250	40	—	—	0.5 to 10	0.5 to 500	380×530×730	74
YC-200BR1YAA	200 V 1-phase 50/60 Hz	7.3 5.4	10 to 200	—	—	—	4 to 200	—	25	—	—	—	0 to 500	212×448×333	15
YC-300TSP	380 V or 415 V 3-phase 50/60 Hz	16.1 13.5	—	—	—	—	5 to 300	5 to 300	40	0.5 to 5	—	—	0.5 to 15	470×560×845	136
YC-500TSP	380 V or 415 V 3-phase 50/60 Hz	33.2 30.7	—	—	—	—	5 to 500	5 to 500	60	0.5 to 5	—	—	0.5 to 15	500×650×1 020	225
YC-150TM(Mini)	220 V or 380 V 1-phase 50/60 Hz	11.4 6.3	—	—	—	—	8 to 150	8 to 150	20	—	—	—	—	300×460×520	62
YC-300WP5	220 V or 380 V or 415 V 1-phase 50/60 Hz	26.0 17.0	20 to 315	—	—	—	5 to 315	5 to 315	40	0.5 to 5	—	—	0.5 to 10	465×617×846	193

2. Remote Controllers

Eliminate the need to return to the power source to adjust welding current or voltage.

■YC-301URTRK1

- For use with WX4
- 5 m 6 core cable



■YC-30BPR1

- For use with BZ3 and BP4
- 5 m 12 core cable
- Pulse current adjustment



■YC-30BPR4

- For use with BP4
- Recall of welding parameters
- 5 m 12 core cable
- Pulse current adjustment



5. Argon Gas Regulator

●YX-251A

Provides accurate regulation of shielding gas for quality welding.



4. Extension Cables for Welding Torches (Build-to-Order)

Torch	Cable Length (m)	Cooling Method	Connector	Power Source
YT-20TS2TAG	4	Air-cooled	Dinse	300BP4/300BZ3
YT-20TS2TAH	8	Air-cooled	Dinse	300BP4/300BZ3
YT-30TS2TAG	4	Air-cooled	Dinse	300BP4/300BZ3
YT-30TS2TAH	8	Air-cooled	Dinse	300BP4/300BZ3
YT-30TS2	4	Air-cooled	Ring	
YT-30TS2C1	8	Air-cooled	Ring	
YT-30TSW2TAG	4	Water-cooled	Dinse	300BP4/300BZ3
YT-30TSW2THA	8	Water-cooled	Dinse	300BP4/300BZ3
YT-30TSW2	4	Water-cooled	Ring	
YT-30TSW2C1	8	Water-cooled	Ring	
YT-50TSW2	4	Water-cooled	Ring	
YT-50TSW2C1	8	Water-cooled	Ring	

For Air-Cooled Torches

Model	Section Area(mm²)	Length(m)
TWU20131	38	5
TWU20132		10
TWU20133		15

For Water-Cooled Torches

TWU30132	38	5
TWU30133		10
TWU30134		15

For 500 A Water-Cooled Torches

TWU50137	60	5
TWU50138		10
TWU50139		15

Note: A terminal block adapter (CWC00180) and a control cable assembly (TWX00018) are required to connect a extension cable to 300BP4 or 300BZ3.

Full Digital 300BZ3

Full Digital DC TIG Welding Machine

DC TIG DC Stick

Full Digital Control Changes Welding.
User-friendly control panel and jog dial allow easy parameter settings.



300BZ3

High Welding Performance

Precise control only possible with Full Digital control.
Straight and consistent bead edges valued highly.

- Welding current adjustable in 1 A increments allows high-quality welding.
- Appropriate welding parameters can be recalled from the database.



Stainless steel (0.5 mm)
Lap welding (fusion welding)
Base and pulse current: 5 A, 50 A
Weld speed: 30 cm/min.

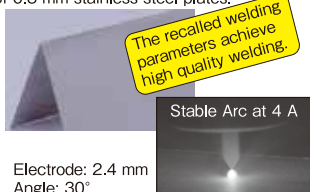
Revolutionary arc starting.

- Almost 100 % success rate of instantaneous arc starting even at 4 A. Minimizes burn-through in butt welding of 0.3 mm stainless steel plates. (Hot current setting: Low)

- Concentrated and stable arc.

- The ability to weld a wide range of thicknesses using a thick 2.4 mm electrode.

- Optional gas lens nozzle for better bead appearance.



Electrode: 2.4 mm
Angle: 30°
Electrode to work distance: 0.5 mm

Compact, lightweight and versatile.

- Only 19.5 kg despite the rated output of 300 A at 40% duty cycle. Half the weight and volume of the previous model.

- Three welding processes:
 - DC TIG (including DC pulse TIG)
 - DC arc spot
 - DC stick

Easy setting.

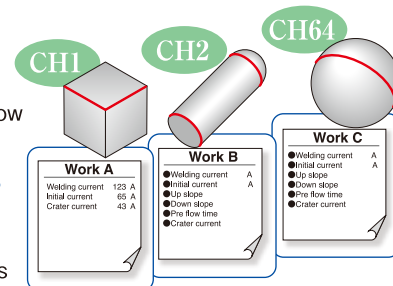
- User-friendly control panel and jog dial allow easy setting.

Welding parameter memory.

- Allows storage and recall of up to 64 sets of welding parameters.

Easy connection with other equipment.

- Easy connection with G2/G3 controller for Panasonic robot TA series.



Full Digital 200BL3

Full Digital DC TIG Welding Machine

Portable Type
Weight*
9 kg

DC TIG DC Stick

Full Digital and Portable.
Perfectly Suited for Mobile Welding.



200BL3

*Weight is for machine only.

Easy to Use for Mobile Welding

- Only 9 kg despite all metal strong case.
- Input voltage from 200 to 240 V (170 to 264 V) for stable welding.
- Additional DC Stick welding control with arc drive function (arc force control) and voltage reduction device.

Welding Processes and Functions for Stable Welding Quality

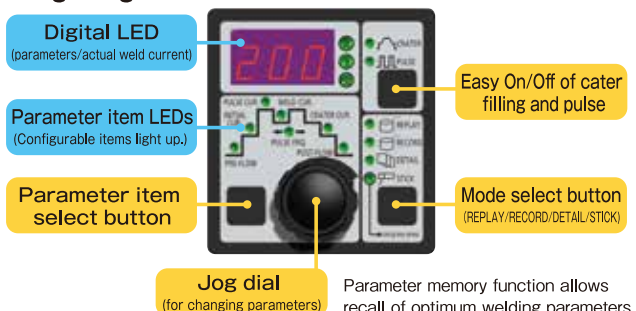
Full Digital control allows easy setting, storage and recall of welding parameters.

- DC pulse welding.
- Arc spot welding.
- Memory to store/recall up to 9 sets of welding parameters.

Easy Setting

Full Digital control allows precise and easy parameter setting.

Large Jog Dial and Three Buttons on Control Panel



Full Digital 300BP4

Full Digital AC/DC TIG Welding Machine

Makes Aluminum Welding Easy and High-Quality.

30 to 400 Hz AC output changes aluminum welding.



300BP4

AC TIG DC TIG DC Stick



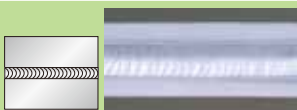
High Welding Performance

AC output adjustable from 30 to 400 Hz.

- Allows you to weld like an expert.
- Makes difficult fillet welding and filler wire feeding easy.
- Improves arc concentration to prevent burn through or make tuck welding easy.

120 Hz

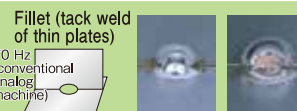
Multi-pass, butt



Material: Aluminum (A5052)
Plate thickness: 8.0 mm
Current: 180 A to 200 A
Speed: 10 cm to 20 cm/min.

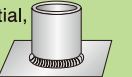
400 Hz

Fillet (tack weld of thin plates)
70 Hz (conventional analog machine)
Easily weldable. Burn-through often occurs.



Material: Aluminum (A5052)
Plate thickness: 1.0 mm
Current: 110 A
Welding time: 0.5 sec.

Circumferential, fillet



Material: Aluminum (A5052)
Plate thickness: 3.0 mm
Base current: 140 A
Peak current: 260 A
Speed: 38 cm/min.

Expert mode for welding experts.

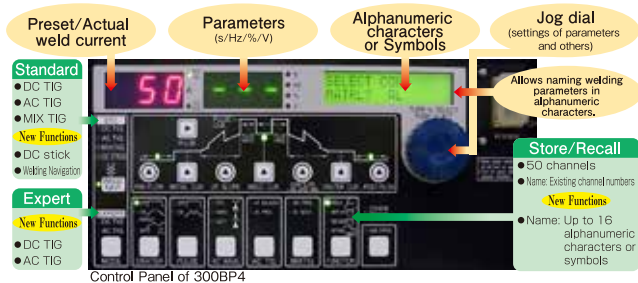
Drooping characteristic changes the weld current according to the torch height.

Easy Operation

Welding Navigation determines the optimal welding parameters.

Rich and customizable database

- More than 100 sets of welding parameters are contained.
- You can change and store the parameters to fit your needs.



Control Panel of 300BP4

WX4

Twin Inverter Control AC/DC TIG Welding Machines

High-Performance Models for Producing High-Quality Welds on a Variety of Materials.



300WX4



500WX4Y0E

AC TIG DC TIG DC Stick

Various Welding Modes for High Quality Welding

Twin inverter control and adjustable AC output for welding a wide variety of aluminum workpieces.

- High AC output frequency produces a concentrated arc.

Ideal for welding hard aluminum (No.6000 and 7000 of JIS) and aluminum bronze.



(Aluminum No.7000 series)

- Low AC output frequency makes it possible to weld a wide range of workpieces such as thin plates, thick plates and aluminum alloys.

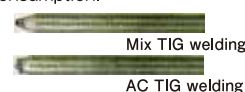


(Aluminum bronze)

Various welding modes for various workpieces.

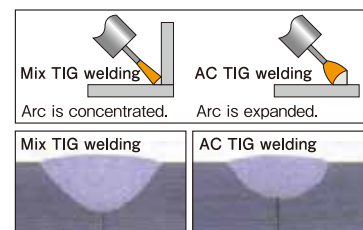
- Mix TIG welding

- A concentrated arc is ideal for lap welding of thin aluminum plates.
- Combination of AC and DC TIG allows deep penetration and significantly reduces electrode consumption.



Mix TIG welding

AC TIG welding



Mix TIG welding

AC TIG welding

Mix TIG welding

AC TIG welding



Thin aluminum plate

Thick aluminum plate



Aluminum



Aluminum gap

- AC standard TIG welding

- Allows you to weld a wide variety of materials from thin to thick plates.

- AC soft TIG welding

- Produces a soft arc with low noise.

- AC hard TIG welding

- Produces a concentrated arc.
- Great for gap welding of thin plates.

200BR1

Inverter Control AC/DC TIG Welding Machine

For Aluminum and Stainless Steel Welding.
Portable Type Focusing on Ease
of Use and Light Weight.



AC TIG DC TIG

Portable Type
Weight*
15 kg

200BR1

*Weight is for machine only.

Easy to Use for Mobile Welding

- Compact and portable, weighing only 15 kg.
- User-friendly control panel.
- 200 A @ 25% duty cycle, despite the compact size.



Various Welding Modes

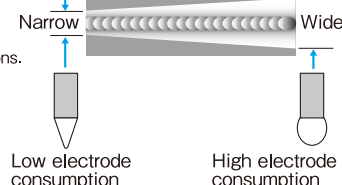
Allow you to weld a variety of metals such as aluminum, stainless steel, copper, titanium, brass.

● AC TIG welding

Switchable penetration and adjustable cleaning width.



Note: The penetration can be different depending on the welding conditions.



● AC pulse TIG welding

● DC TIG welding

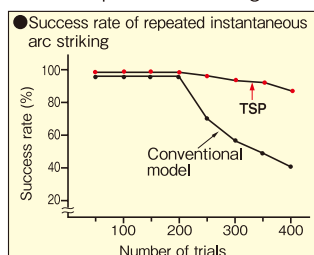
● DC pulse TIG welding

Good Welding Performance

DC TIG welding and DC pulse TIG welding

● High arc starting success rate even at a low current

IC thyristor current control allows high success rate of instantaneous arc striking at every current level and in repeated arc striking.



● Gentle and stable arc

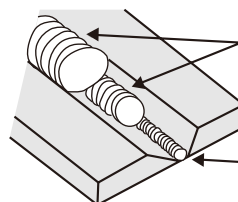
Stable output current with less ripple produces gentle and stable, providing excellent bead appearance even in high speed welding.

Example of high speed welding(300TSP)
Joint: Butt joint
Work: 0.3 mm stainless steel



DC Stick welding

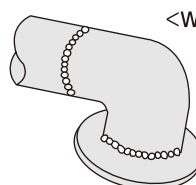
- Achieves high quality welding of various metals such as mild steel, stainless steel, high tensile steel and Cr-Mo steel



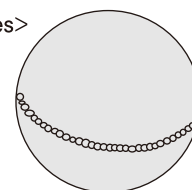
The second or higher layer:
Efficient welding by stick welding

The first layer:
Uniform penetration bead by TIG welding

<Work examples>



Machinery & equipment



Pressure vessel

TSP

Thyristor Control DC TIG Welding Machine

Economical Model for DC TIG and
DC Stick welding.



DC TIG

DC Stick

300TSP

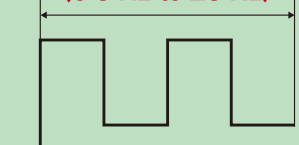
500TSP

What Is DC Pulse Welding?

A peak current and a base current are alternately supplied during welding.

Types of Pulse

Low pulse (0.5 Hz to 25 Hz)



Base current: 20 A
Peak current: 100 A
Pulse width: 50 %
Pulse frequency: 1.5 Hz

Middle pulse (25 Hz to 500 Hz)

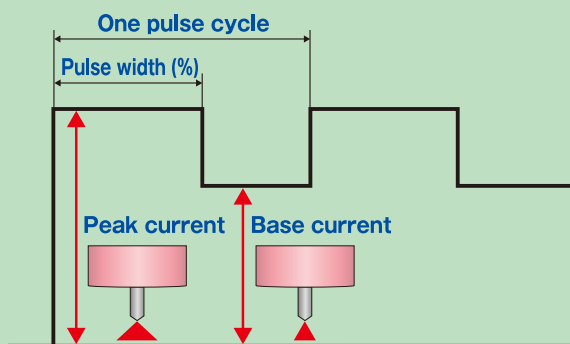


Base current: 20 A
Peak current: 100 A
Pulse width: 50 %
Pulse frequency: 500 Hz

Term Definitions

Pulse frequency is the number of times per second the power source pulses between peak and base currents.

Pulse width is the percentage of time that the peak current flows during a pulse cycle. (When the pulse width is 50%, the peak current time and base current time are the same.)



Peak current ("pulse current" on setting screen)
Base current ("welding current" on setting screen)

⇒ Set the peak current at more than twice the base current.

AT3

Inverter Control Stick Welding Machines

Highly-Reliable and Multi-Functional Models for Tough Environments.



400AT3



400AT3



630AT3

DC Stick

DC Simple TIG

DC Arc Gouging
(630AT3)

Multifunctional models that meet your welding needs.

- AT3 series are capable of both stick and simple TIG welding.
- The special model for using cellulose welding rod is also available.

Additional features of 630AT3:

- Characteristics-adjustable arc gouging function.
- Full-bridge phase-shifted resonant soft switching technology.
- Energy conservation: the cooling fan and main circuit are turned off a few minutes after welding.

The multi operator welding system can be used in the industries such as ship-building and petrochemical.



Specifications

Model		YD-400AT3	YD-630AT3
Control	—	IGBT inverter	
Rated Input Voltage	VAC	380 or 415	
Number of Phase	—	3	
Rated Input Frequency	Hz	50/60	
Rated Input Power	kVA/kW	17.6/16.7	32.2/30.8
Rated Output Current	A	400	630
Rated Output Voltage	VDC	36	44
Rated Duty Cycle	%	60	
Max. No-Load Voltage	VDC	71	75
Output Current Range	A	20 to 410	50 to 630
Protection Class	—	IP23	
Insulation Class	—	H (B for transformer)	
Cooling Method	—	Forced air-cooled	
Dimensions (W×D×H)	mm	327×560×602	327×619×706
Weight	kg	50	70

SS3

Thyristor Control DC Stick Welding Machines

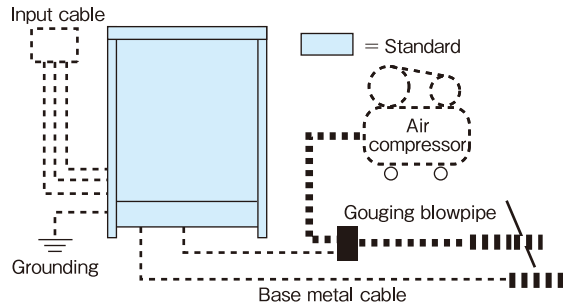
**Economical and Versatile.
Popular Models for
High-Quality Welding.**



DC
Stick

DC
Arc
Gouging
(630SS3)

■ Connection Diagram (for Arc Gouging Function of 630 A Model)



Arc force control to prevent the welding rod from sticking.

Achieve stable welding even if the cable is extended to 100 m.

Class H insulation and IP21S rated protection to withstand tough environments.

■ Specifications

Model		YD-400SS3	YD-630SS3
Control	—	Thyristor	
Rated Input Voltage	VAC	380 or 415	
Number of Phase	—	3	
Rated Input Frequency	Hz	50	
Rated Input Power	kVA/kW	26.3/19.5	44.3/34
Rated Output Current	A	400	630
Rated Output Voltage	VDC	36	44
Rated Duty Cycle	%	60	
Max. No-Load Voltage	VDC	64	77
Output Current Range	DC Stick	A	60 to 400
	Gouging	A	100 to 630
Protection Class	—	IP21S	
Insulation Class	—	H	
Cooling Method	—	Forced air-cooled	
Dimensions (W×D×H)	mm	436×675×762	496×690×920
Weight	kg	155	225

305AA3

AC Stick Welding Machines

**Excellent Weld Quality with
Good Bead Appearance.**



AC
Stick

Compact and lightweight stick welding machines ideal for outdoor use.

Designed safety in mind.

- Protection covers for input and output terminals.
- Bottom design to prevent foreign material from entering the case.
- Case design to prevent finger injuries.

Select 305AA3 for higher duty cycle.

■ Specifications

Model		YK-305AA
Rated Input Voltage	VAC	380
Number of Phase	—	1
Rated Input Frequency	Hz	50
Rated Input Power	kVA/kW	24.5/13
Rated Output Current	A	300
Rated Output Voltage	VAC	32
Rated Duty Cycle	%	60
Max. No-Load Voltage	VDC	80
Output Current Range	A	60 to 300
Protection Class	—	IP21S
Insulation Class	—	H
Cooling Method	—	Forced air-cooled
Dimensions (W×D×H)	mm	288×585×527
Weight	kg	77

3. RED TIG TORCH 2

TIG Welding Torches

All New. RED

Higher Welding Performance, Operability and Safety.



No.	Model	Rated Current (A)		Duty Cycle (%)	Cable Length (m)	Electrode Diameter (mm) Sizes in () Optional	Nozzle Inner Diameter (mm) Sizes in () Optional	Water Flow (L/min)	Water Pressure (MPa)	Water Cooling Unit Capacity (kW)	Weight (kg)	Cooling Method
		DC	AC									
1	YT-08TS2	80	55	35	4	(0.5), (1.0), 1.6	8	—	—	—	0.9	Air-cooled
2	YT-12TS2	120	85	35	4	(0.5), (1.0), 1.6, (2.0)	6.4, (8), (10), (11), (12.7), (16)	—	—	—	0.9	Air-cooled
3	YT-15TS2	150	105	35	4	(0.5), (1.0), 1.6, (2.0), (2.4)	(6.5), 8, (9.5), (11), (12.7), (16), (19)	—	—	—	1.2	Air-cooled
4	YT-15TS2C1	150	105	35	8	(0.5), (1.0), 1.6, (2.0), (2.4)	(6.5), 8, (9.5), (11), (12.7), (16), (19)	—	—	—	2.0	Air-cooled
5	YT-15TS2TAD	150	105	35	8	(0.5), (1.0), 1.6, (2.0), (2.4)	(6.5), 8, (9.5), (11), (12.7), (16), (19)	—	—	—	2.0	Air-cooled
6	YT-20TS2	200	140	35	4	(0.5), (1.0), (1.6), (2.0), 2.4, (3.2)	(6.5), (8), 9.5, (11), (12.7), (16), (19)	—	—	—	1.8	Air-cooled
7	YT-20TS2C1	200	140	35	8	(0.5), (1.0), (1.6), (2.0), 2.4, (3.2)	(6.5), (8), 9.5, (11), (12.7), (16), (19)	—	—	—	3.0	Air-cooled
8	YT-20TS2TAD	200	140	35	8	(0.5), (1.0), (1.6), (2.0), 2.4, (3.2)	(6.5), (8), 9.5, (11), (12.7), (16), (19)	—	—	—	3.0	Air-cooled
9	YT-20TS2TAG	200	140	35	4	(0.5), (1.0), (1.6), (2.0), 2.4, (3.2)	(6.5), (8), 9.5, (11), (12.7), (16), (19)	—	—	—	1.9	Air-cooled
10	YT-20TS2TAH	200	140	35	8	(0.5), (1.0), (1.6), (2.0), 2.4, (3.2)	(6.5), (8), 9.5, (11), (12.7), (16), (19)	—	—	—	3.1	Air-cooled
11	YT-20TSW2	200	140	100	4	(0.5), (1.0), (1.6), (2.0), 2.4, (3.2)	(6.4), (8), 10, (11), (12.7), (16)	0.7 or more	0.1 to 0.35	0.75 or more	1.4	Water-cooled
12	YT-30TS2	300	210	20	4	(0.5), (1.0), (1.6), (2.0), (2.4), 3.2, (4.0)	(6.5), (8), (9.5), 11, (12.7), (16), (19)	—	—	—	2.2	Air-cooled
13	YT-30TS2C1	300	210	20	8	(0.5), (1.0), (1.6), (2.0), (2.4), 3.2, (4.0)	(6.5), (8), (9.5), 11, (12.7), (16), (19)	—	—	—	3.7	Air-cooled
14	YT-30TS2TAG	300	210	20	4	(0.5), (1.0), (1.6), (2.0), (2.4), 3.2, (4.0)	(6.5), (8), (9.5), 11, (12.7), (16), (19)	—	—	—	2.3	Air-cooled
15	YT-30TS2TAH	300	210	20	8	(0.5), (1.0), (1.6), (2.0), (2.4), 3.2, (4.0)	(6.5), (8), (9.5), 11, (12.7), (16), (19)	—	—	—	3.8	Air-cooled
16	YT-30TSW2	300	210	100	4	(0.5), (1.0), (1.6), (2.0), (2.4), 3.2, (4.0)	(6.5), (8), (9.5), 11, (12.7), (16), (19)	0.7 or more	0.1 to 0.35	0.8 or more	1.8	Water-cooled
17	YT-30TSW2C1	300	210	100	8	(0.5), (1.0), (1.6), (2.0), (2.4), 3.2, (4.0)	(6.5), (8), (9.5), 11, (12.7), (16), (19)	0.7 or more	0.1 to 0.35	1.6 or more	3.0	Water-cooled
18	YT-30TSW2TAG	300	210	100	4	(0.5), (1.0), (1.6), (2.0), (2.4), 3.2, (4.0)	(6.5), (8), (9.5), 11, (12.7), (16), (19)	0.7 or more	0.1 to 0.35	0.8 or more	1.9	Water-cooled
19	YT-30TSW2TAH	300	210	100	8	(0.5), (1.0), (1.6), (2.0), (2.4), 3.2, (4.0)	(6.5), (8), (9.5), 11, (12.7), (16), (19)	0.7 or more	0.1 to 0.35	1.6 or more	3.1	Water-cooled
20	YT-50TSW2	500	350	100	4	(1.0), (1.6), (2.0), (2.4), (3.2), 4.0, (4.8), (6.4)	(9.5), (12.7), 16, (19)	1.0 or more	0.15 to 0.35	1.9 or more	2.6	Water-cooled
21	YT-50TSW2C1	500	350	100	8	(1.0), (1.6), (2.0), (2.4), (3.2), 4.0, (4.8), (6.4)	(9.5), (12.7), 16, (19)	1.5 or more	0.2 to 0.35	3.3 or more	4.4	Water-cooled

Note: Torch switch included. *Flexible type and pencil type also available. **Optional collet and collet body required to use optional electrode.

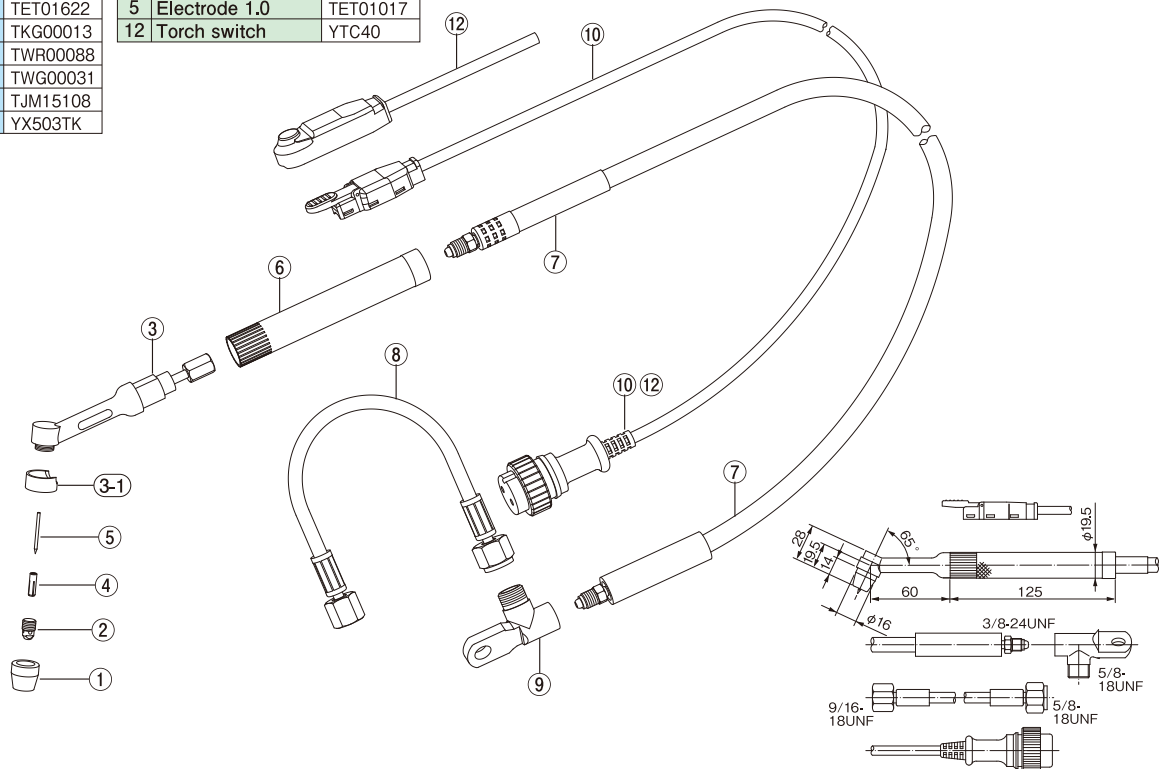
●YT-08TS2

■Standard Parts List

No.	Description	Part Number
1	Nozzle No.5K (φ8.0)	TGN00813
2	Collet body 1.6	TEB08103
3	Torch body assembly	TKH00100
3-1	Insulator	TFQ08101
4	Collet 1.6	TEC01611
5	Electrode 1.6	TET01622
6	Handle	TKG00013
7	Cooling cable (4 m)	TWR00088
8	Gas hose	TWG00031
9	Cable fitting	TJM15108
10	Torch switch	YX503TK

■Optional Parts List

No.	Description	Part Number
2	Collet body 0.5	TEB08101
2	Collet body 1.0	TEB08102
4	Collet 0.5	TEC00505
4	Collet 1.0	TEC01010
5	Electrode 0.5	TET00502
5	Electrode 1.0	TET01017
12	Torch switch	YTC40



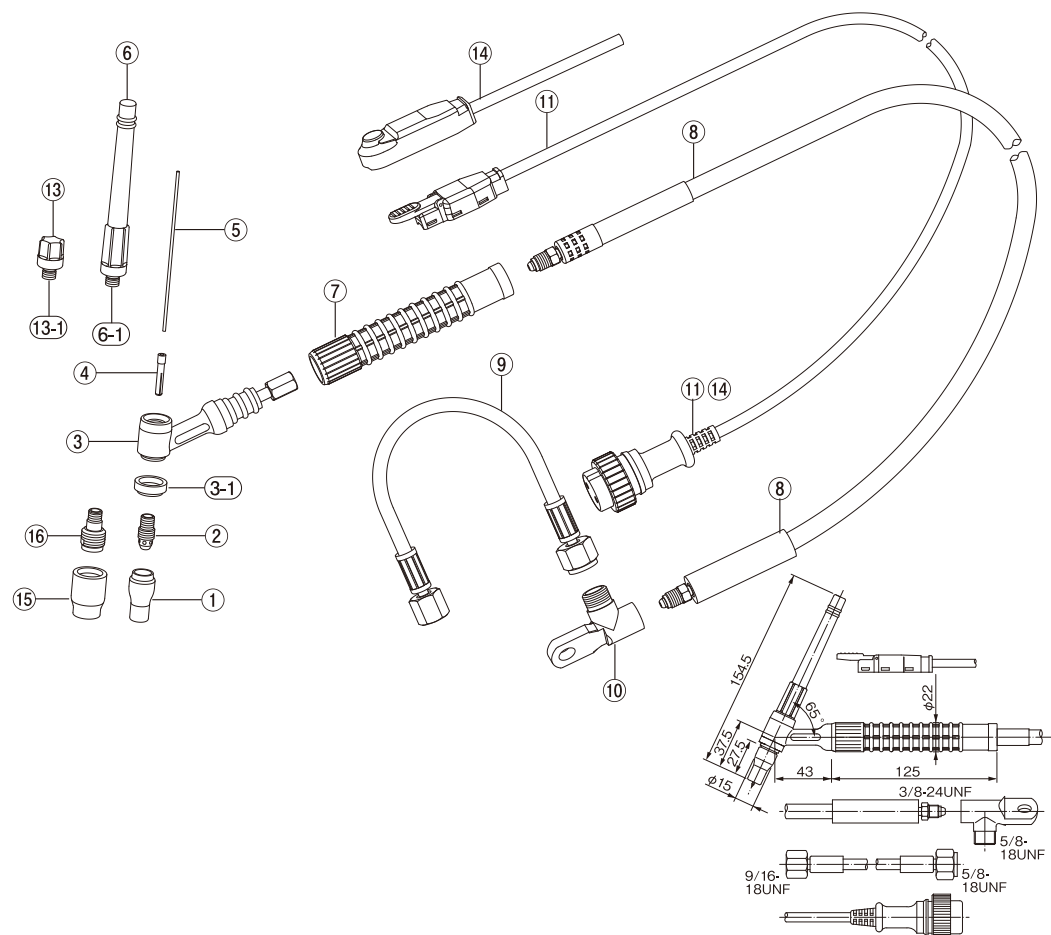
●YT-12TS2

■Standard Parts List

No.	Description	Part Number
1	Nozzle No.4A (φ6.4)	TGN00618
2	Collet body 1.6	TEB20125
3	Torch body	TKH00101
3-1	Insulator	TFQ00008
4	Collet 1.6	TEC01618
5	Ceri-Tun 1.6	YN16C2S
6	Cap M	TKK12103
6-1	O-ring	WP3V
7	Handle	TKG00010
8	Cooling cable	TWR00088
9	Gas cable	TWG00031
10	Cable fitting	TJM15108
11	Torch switch	YX503TK

■Optional Parts List

No.	Description	Part Number
1	Nozzle No.5A (φ8.0)	TGN00819
1	Nozzle No.6A (φ10.0)	TGN00911
1	Nozzle No.7A (φ11.0)	TGN01110
1	Nozzle No.8A (φ12.7)	TGN01222
1	Nozzle No.10A (φ16.0)	TGN01677
2	Collet body 0.5	TEB20123
2	Collet body 1.0	TEB20124
2	Collet body 2.0	TEB20126
4	Collet 0.5	TEC00512
4	Collet 1.0	TEC01017
4	Collet 2.0	TEC02012
13	Cap S	TKK12105
13-1	O-ring	WP3V
14	Torch switch	YTC40
15	Thin type short GL nozzle No.5GA (φ8.0)	TGN00130
15	Thin type short GL nozzle No.6GA (φ9.5)	TGN00131
15	Thin type short GL nozzle No.7GA (φ11.0)	TGN00132
16	Thin type short GL collet body 1.6	TEB00097



●YT-15TS2 ●YT-15TS2C1 ●YT-15TS2TAD

(200BL3)

Standard Parts List

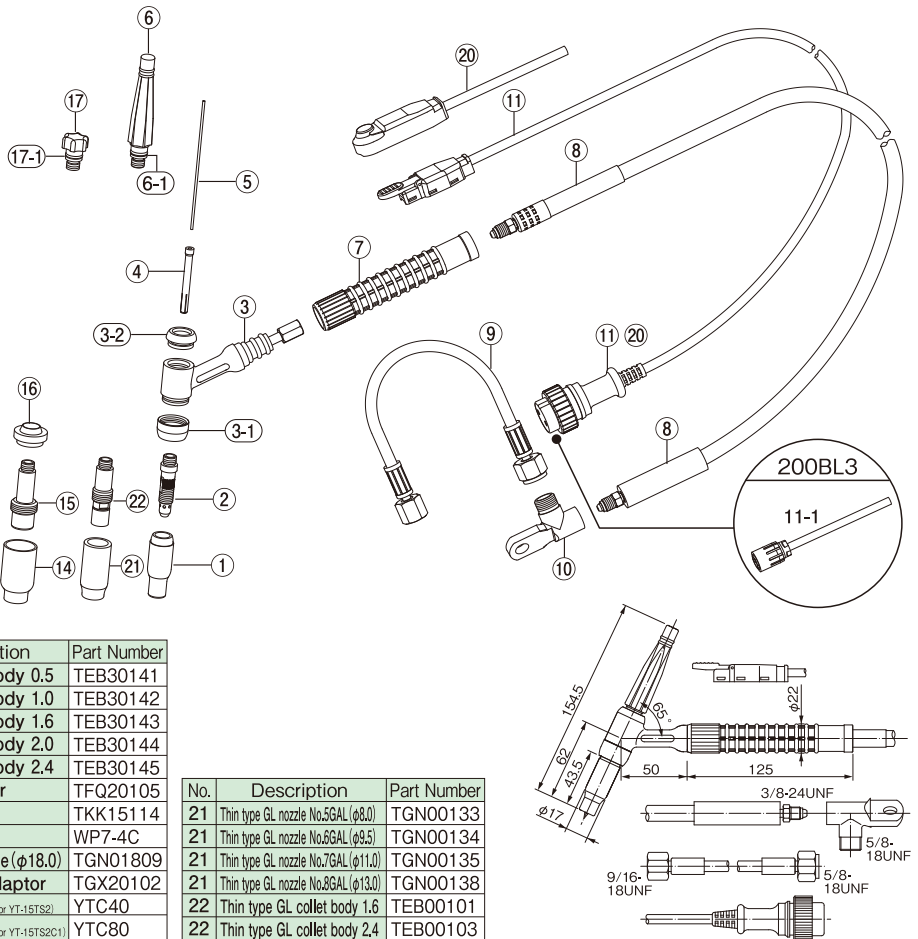
No.	Description	Type	YT-15TS2	YT-15TS2C1
1	Nozzle No.5 (φ8.0)		TGN00815	
2	Collet body 1.6		TEB00091	
3	Torch body		TKH00093	
3-1	Insulator		TFQ00007	
3-2	Upper packing		TFQ20106	
4	Collet 1.6		TEC01615	
5	Ceri-Tun 1.6		YN16C2S	
6	Cap M		TKK00018	
6-1	O-ring		WP7-4C	
7	Handle		TKG00010	
8	Cooling cable		TWR00090	TWR00091
9	Gas cable		TWG00031	
10	Cable fitting		TJM15108	
11	Torch switch		YX503TK	YX503TKC1
11-1	Torch switch		TWU00057 (for YT-15TS2TAD)	

Optional Parts List

No.	Description	Part Number
1	Nozzle No.4 (φ6.5)	TGN00614
1	Nozzle No.6 (φ9.5)	TGN00907
1	Nozzle No.7 (φ11.0)	TGN01104
1	Nozzle No.8 (φ12.7)	TGN01220
1	Nozzle No.10 (φ16.0)	TGN01674
1	Nozzle No.12 (φ19.0)	TGN01934
2	Collet body 0.5	TEB00089
2	Collet body 1.0	TEB00090
2	Collet body 2.0	TEB00092
2	Collet body 2.4	TEB00093
4	Collet 0.5	TEC00509
4	Collet 1.0	TEC01014
4	Collet 2.0	TEC02010
4	Collet 2.4	TEC02415
13	Long nozzle No.5L (φ8.0)	TGN00816
13	Long nozzle No.7L (φ11.0)	TGN01106
14	GL nozzle No.4G (φ6.5)	TGN00616
14	GL nozzle No.5G (φ8.0)	TGN00818
14	GL nozzle No.6G (φ10.0)	TGN00908
14	GL nozzle No.7G (φ11.0)	TGN01108
14	GL nozzle No.8G (φ13.0)	TGN01218

No.	Description	Part Number
15	GL collet body 0.5	TEB30141
15	GL collet body 1.0	TEB30142
15	GL collet body 1.6	TEB30143
15	GL collet body 2.0	TEB30144
15	GL collet body 2.4	TEB30145
16	GL insulator	TFQ20105
17	Cap S	TKK15114
17-1	O-ring	WP7-4C
18	Arc spot nozzle (φ18.0)	TGN01809
19	Arc spot adaptor	TGX20102
20	Torch switch (for YT-15TS2)	YTC40
20	Torch switch (for YT-15TS2C1)	YTC80

No.	Description	Part Number
21	Thin type GL nozzle No.5GAL (φ8.0)	TGN00133
21	Thin type GL nozzle No.6GAL (φ9.5)	TGN00134
21	Thin type GL nozzle No.7GAL (φ11.0)	TGN00135
21	Thin type GL nozzle No.8GAL (φ13.0)	TGN00138
22	Thin type GL collet body 1.6	TEB00101
22	Thin type GL collet body 2.4	TEB00103



●YT-20TS2 ●YT-20TS2C1 ●YT-20TS2TAG ●YT-20TS2TAH ●YT-20TS2TAD

(BZ3/300BP4)

(BZ3/300BP4)

(200BR1)

Standard Parts List

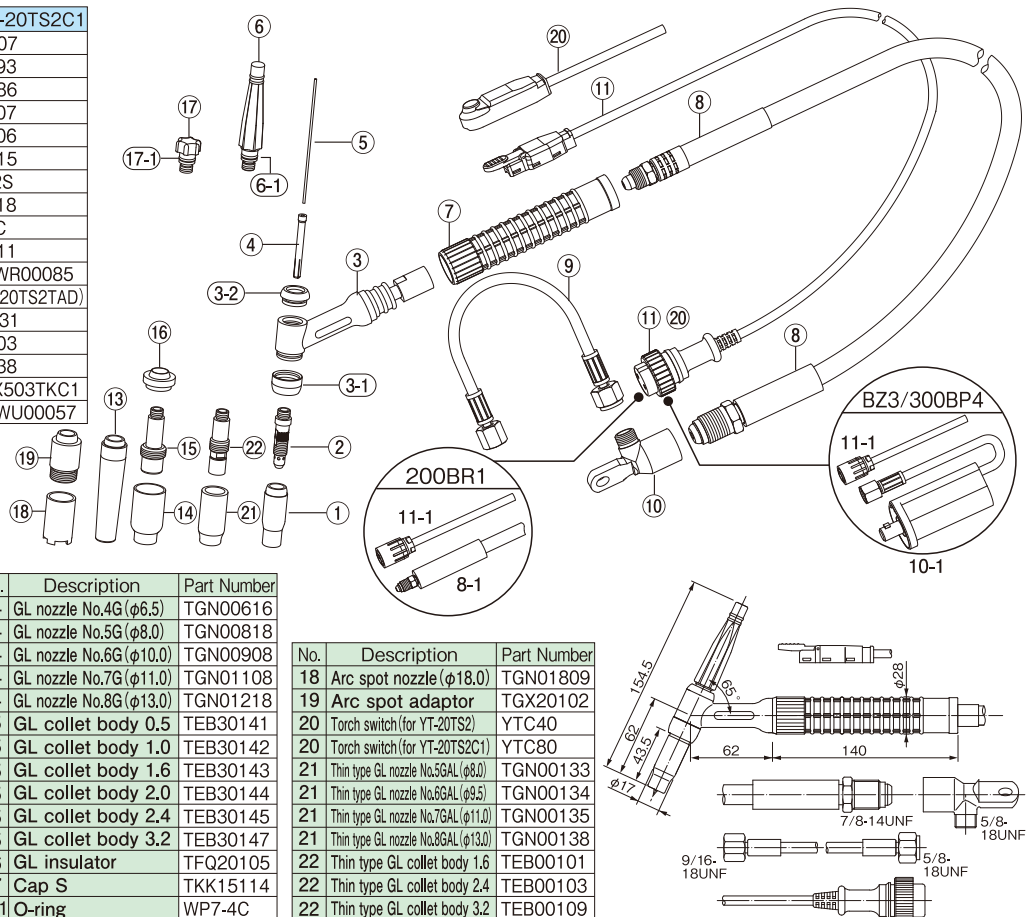
No.	Description	Type	YT-20TS2	YT-20TS2C1
1	Nozzle No.6 (φ9.5)		TGN00907	
2	Collet body 2.4		TEB00093	
3	Torch body		TKH00086	
3-1	Insulator		TFQ00007	
3-2	Upper packing		TFQ20106	
4	Collet 2.4		TEC02415	
5	Ceri-Tun 2.4		YN24C2S	
6	Cap M		TKK00018	
6-1	O-ring		WP7-4C	
7	Handle		TKG00011	
8	Cooling cable		TWR00084	TWR00085
8-1	Cooling cable		TWR00093 (for YT-20TS2TAD)	
9	Gas hose		TWG00031	
10	Cable fitting		TJM20103	
10-1	Cable fitting		TJM00038	
11	Torch switch		YX503TK	YX503TKC1
11-1	Torch switch		TWU00102	TWU00057

Optional Parts List

No.	Description	Part Number
1	Nozzle No.4 (φ6.5)	TGN00614
1	Nozzle No.5 (φ8.0)	TGN00815
1	Nozzle No.7 (φ11.0)	TGN01104
1	Nozzle No.8 (φ12.7)	TGN01220
1	Nozzle No.10 (φ16.0)	TGN01674
1	Nozzle No.12 (φ19.0)	TGN01934
2	Collet body 0.5	TEB00089
2	Collet body 1.0	TEB00090
2	Collet body 1.6	TEB00091
2	Collet body 2.0	TEB00092
2	Collet body 3.2	TEB00095
4	Collet 0.5	TEC00509
4	Collet 1.0	TEC01014
4	Collet 1.6	TEC01615
4	Collet 2.0	TEC02010
4	Collet 3.2	TEC03209
13	Long nozzle No.5L (φ8.0)	TGN00816
13	Long nozzle No.7L (φ11.0)	TGN01106

No.	Description	Part Number
14	GL nozzle No.4G (φ6.5)	TGN00616
14	GL nozzle No.5G (φ8.0)	TGN00818
14	GL nozzle No.6G (φ10.0)	TGN00908
14	GL nozzle No.7G (φ11.0)	TGN01108
14	GL nozzle No.8G (φ13.0)	TGN01218
15	GL collet body 0.5	TEB30141
15	GL collet body 1.0	TEB30142
15	GL collet body 1.6	TEB30143
15	GL collet body 2.0	TEB30144
15	GL collet body 2.4	TEB30145
15	GL collet body 3.2	TEB30147
16	GL insulator	TFQ20105
17	Cap S	TKK15114
17-1	O-ring	WP7-4C

No.	Description	Part Number
18	Arc spot nozzle (φ18.0)	TGN01809
19	Arc spot adaptor	TGX20102
20	Torch switch (for YT-20TS2)	YTC40
20	Torch switch (for YT-20TS2C1)	YTC80
21	Thin type GL nozzle No.5GAL (φ8.0)	TGN00133
21	Thin type GL nozzle No.6GAL (φ9.5)	TGN00134
21	Thin type GL nozzle No.7GAL (φ11.0)	TGN00135
21	Thin type GL nozzle No.8GAL (φ13.0)	TGN00138
22	Thin type GL collet body 1.6	TEB00101
22	Thin type GL collet body 2.4	TEB00103
22	Thin type GL collet body 3.2	TEB00109



●YT-30TS2

●YT-30TS2C1

●YT-30TS2TAG

●YT-30TS2TAH

(BZ3/300BP4)

(BZ3/300BP4)

Standard Parts List

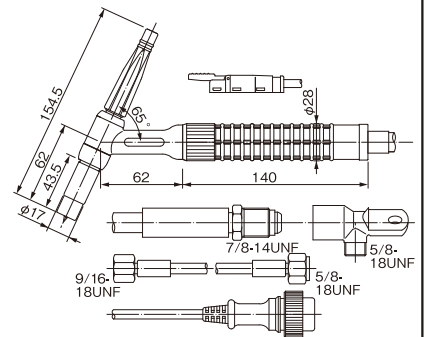
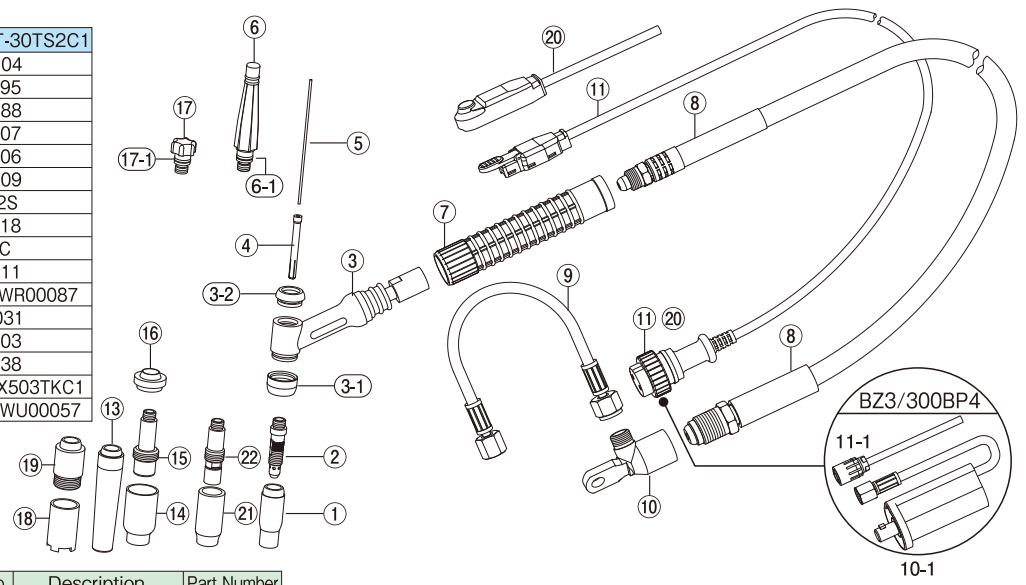
No.	Description	Type	YT-30TS2	YT-30TS2C1
1	Nozzle No.7 (φ11.0)		TGN01104	
2	Collet body 3.2		TEB00095	
3	Torch body		TKH00088	
3-1	Insulator		TFQ00007	
3-2	Upper packing		TFQ02106	
4	Collet 3.2		TEC03209	
5	Ceri-Tun 3.2		YN32C2S	
6	Cap M		TKK00018	
6-1	O-ring		WP7-4C	
7	Handle		TKG00011	
8	Cooling cable		TWR00086	TWR00087
9	Gas hose		TWG00031	
10	Cable fitting		TJM20103	
10-1	Cable fitting		TJM00038	
11	Torch switch		YX503TK	YX503TKC1
11-1	Torch switch		TWU00102	TWU00057

Optional Parts List

No.	Description	Part Number
1	Nozzle No.4 (φ6.5)	TGN00614
1	Nozzle No.5 (φ8.0)	TGN00815
1	Nozzle No.6 (φ9.5)	TGN00907
1	Nozzle No.8 (φ12.7)	TGN01220
1	Nozzle No.10 (φ16.0)	TGN01674
1	Nozzle No.12 (φ19.0)	TGN01934
2	Collet body 0.5	TEB00089
2	Collet body 1.0	TEB00090
2	Collet body 1.6	TEB00091
2	Collet body 2.0	TEB00092
2	Collet body 2.4	TEB00093
2	Collet body 4.0	TEB00096
4	Collet 0.5	TEC00509
4	Collet 1.0	TEC01014
4	Collet 1.6	TEC01615
4	Collet 2.0	TEC02010
4	Collet 2.4	TEC02415
4	Collet 4.0	TEC04005
13	Long nozzle No.5L (φ8.0)	TGN00816
13	Long nozzle No.7L (φ11.0)	TGN01106

No.	Description	Part Number
14	GL nozzle No.4G (φ6.5)	TGN00616
14	GL nozzle No.5G (φ8.0)	TGN00818
14	GL nozzle No.6G (φ10.0)	TGN00908
14	GL nozzle No.7G (φ11.0)	TGN01108
14	GL nozzle No.8G (φ13.0)	TGN01218
15	GL collet body 0.5	TEB30141
15	GL collet body 1.0	TEB30142
15	GL collet body 1.6	TEB30143
15	GL collet body 2.0	TEB30144
15	GL collet body 2.4	TEB30145
15	GL collet body 3.2	TEB30147
15	GL collet body 4.0	TEB30148
16	GL insulator	TFQ20105
17	Cap S	TKK15114
17-1	O-ring	WP7-4C

No.	Description	Part Number
18	Arc spot nozzle (φ18.0)	TGN01809
19	Arc spot adapter	TGX20102
20	Torch switch (for YT-30TS2)	YTC40
20	Torch switch (for YT-30TS2C1)	YTC80
21	Thin type GL nozzle No.5GL (φ8.0)	TGN00133
21	Thin type GL nozzle No.6GL (φ9.5)	TGN00134
21	Thin type GL nozzle No.7GL (φ11.0)	TGN00135
21	Thin type GL nozzle No.8GL (φ13.0)	TGN00138
22	Thin type GL collet body 1.6	TEB00101
22	Thin type GL collet body 2.4	TEB00103
22	Thin type GL collet body 3.2	TEB00109



●YT-20TSW2

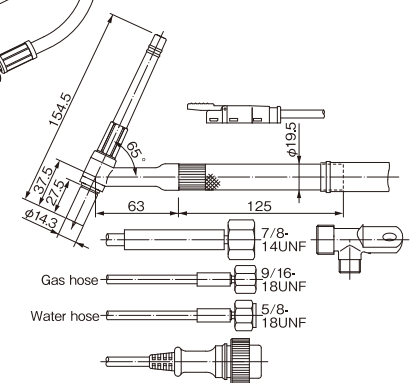
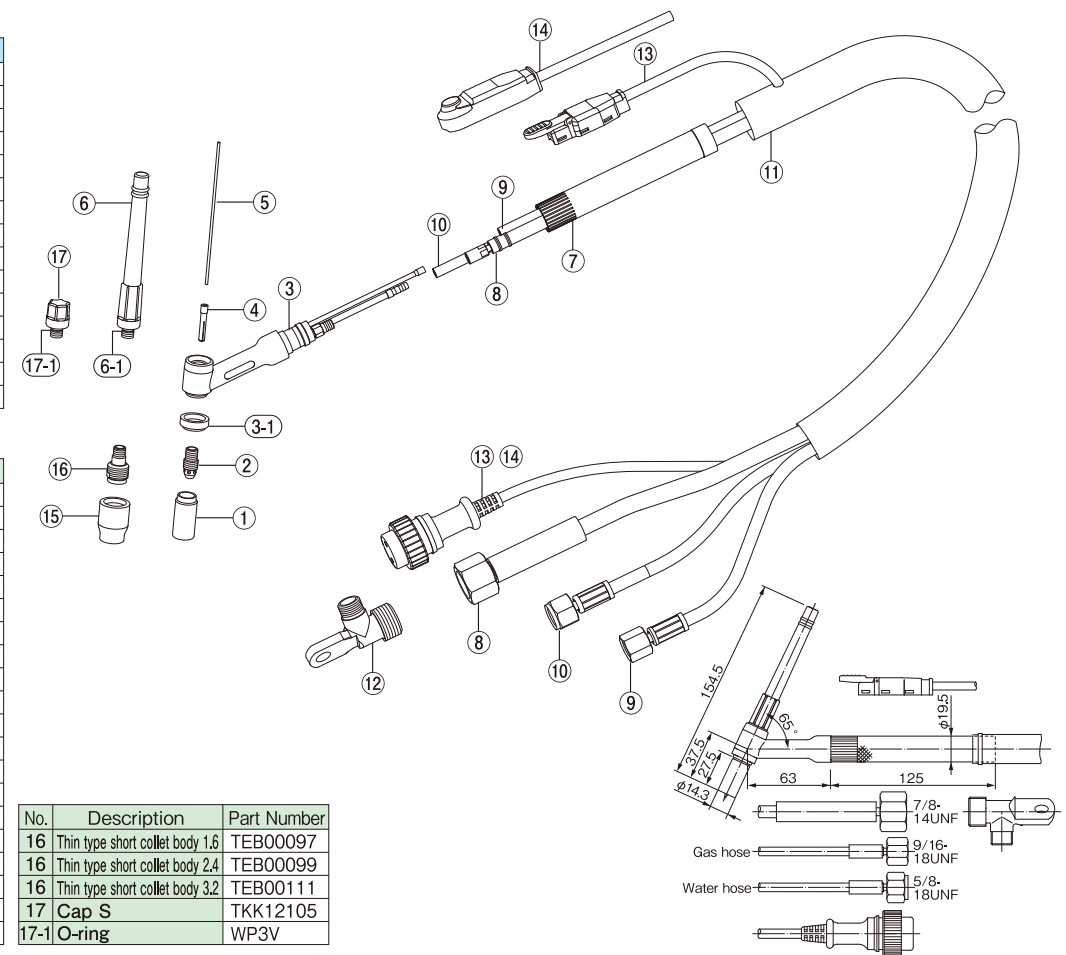
Standard Parts List

No.	Description	Part Number
1	Nozzle No.6A (φ10.0)	TGN00911
2	Collet body 2.4	TEB20127
3	Torch body	TKH00102
3-1	Insulator	TFQ00008
4	Collet 2.4	TEC02418
5	Ceri-Tun 2.4	YN24C2S
6	Cap M	TKK12103
6-1	O-ring	WP3V
7	Handle	TKG00013
8	Cooling cable	TWR00077
9	Gas hose	TWG30121
10	Water hose	TWW00025
11	Hose caver	TWK30116
12	Cable fitting	TJM15106
13	Torch switch	YX503TK

Optional Parts List

No.	Description	Part Number
1	Nozzle No.4A (φ6.4)	TGN00618
1	Nozzle No.5A (φ8.0)	TGN00819
1	Nozzle No.7A (φ11.0)	TGN01110
1	Nozzle No.8A (φ12.7)	TGN01222
1	Nozzle No.10A (φ16.0)	TGN01677
2	Collet body 0.5	TEB20123
2	Collet body 1.0	TEB20124
2	Collet body 1.6	TEB20125
2	Collet body 2.0	TEB20126
2	Collet body 3.2	TEB20128
4	Collet 0.5	TEC00512
4	Collet 1.0	TEC01017
4	Collet 1.6	TEC01618
4	Collet 2.0	TEC02012
4	Collet 3.2	TEC03212
11	Hose cover	TWK00034
14	Torch switch	YTC40
15	Thin type short GL nozzle No.5GA (φ8.0)	TGN00130
15	Thin type short GL nozzle No.6GA (φ9.5)	TGN00131
15	Thin type short GL nozzle No.7GA (φ11.0)	TGN00132

No.	Description	Part Number
16	Thin type short collet body 1.6	TEB00097
16	Thin type short collet body 2.4	TEB00099
16	Thin type short collet body 3.2	TEB00111
17	Cap S	TKK12105
17-1	O-ring	WP3V



Water Cooling Units

Unit Keeps Cooling Water Clean.

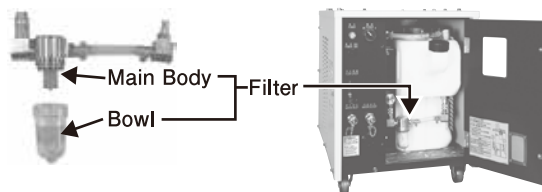


Features

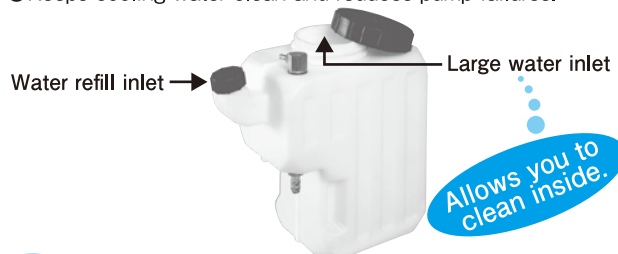
High Cooling Capacity

200 kJ/min

Easy Maintenance Without Tools



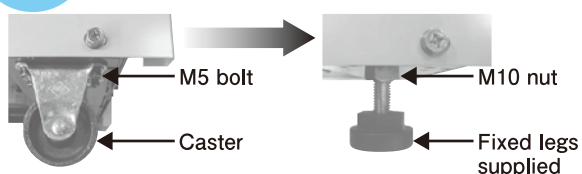
- Easy installation and removal of water tank and filter.
- Easy cleaning of water tank and filter.
- Keeps cooling water clean and reduces pump failures.



No Priming Necessary

Equipped with Flow Rate Switch

Fixed Legs Supplied



Use the fixed legs to place the unit on a welding machine.

Specifications

Unit		YX-09KGC1 (Standard Type)	YX-09KGB1 (Insulated Type)
Item			
Rated Input Voltage	VAC	380 (YGA) (±10 %) 415 (YJA) (±10 %)	200 (±10 %)
Number of Phases	—	1	
Rated Input Frequency	Hz	50/60	
Rated Input Power	W	230/330	
Coolant Capacity	L	9	
Cooling System	—	Forced Air Cooled Radiator	
Coolant Circulating System	—	Forced Circulation Pump	
Cooling Capacity	kJ/min	200	
Coolant Flow Rate*1	L/min	2.2/2.6	
Coolant Head*1	m	20/25	
Maximum Load	kg	60	
Dimensions (W×D×H)	mm	380×545*2×474	
Weight	kg	31	37

*1: Panasonic standard 300 A water-cooled TIG torch (4 m) connected.

*2: Tank refill inlet not included.

A fixing bracket is required to fix the unit on a Panasonic welding machine.

Correspondence Table for Welding Machines

Applicable Welding Machine	Water Cooling Unit	
	YX-09KGC1 (Standard Type)	YX-09KGB1 (Insulated Type)
TIG Welding Machines with High Frequency Arc Starting	Yes	Yes

Supplied Parts

- Fixed legs (with a nut) × 4
- Hose assembly × 1
- Cord assembly (for flow rate switch) × 1
- Glass tube fuse × 1

FA Technical Centers

Feel the excellent performance of Full Digital



**Welding
and
Robot
College**



We support development of highly skilled welding operators.

Workshops:

- Robot
- MAG/MIG
- TIG
- Special training

**Process
Development**

Consulting



Process verification prior to system installation.

Case Examples:

- New factory weld processing
- Improvement of existing processes
- Develop new welding solutions



Professional staff offer technical solutions.

Qualifications:

- Welding coordination personnels (including first class)
- JIS qualified welding operators
- Metal materials inspectors
- International welding license holders



We provide products that are friendly to the environment.

As an earth-friendly company, Panasonic Corporation discourages the use of hazardous substances in our products. The products of Panasonic Corporation comply with the European RoHS directive.



Safety precautions

• Before attempting to use any welding product always read the manual to ensure correct use.

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● Specifications are subject to change without notice.

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