

Туре		CSL-18	CSL-20/CSL-20F/CSL-20L	CSL-35/CSL-35K CSL-35F/CSL-35G/CSL-35L	CSH-35/CSH-35K/CSH-35V CSH-35F/CSH-35L/CSH-35G	CSH-45/CSH-45V CSH-45F/CSH-45L	CSH-50/CSH-50F/CSH-50L
Rated Current	A	180	200	350	350	450	500
Duty Cycle	%(CO ₂)	40	40	35	60	60 (CSH-45F 40)	60 (CSH-50F 35)
Duty Cycle	%(MAG)	20	20	20	35	35 (CSH-45F 20)	35 (CSH-50F 20)
Applicable Wire Size	mm	(0.6, 0.8) 0.9	(0.8, 0.9, 1.0) 1.2	(0.8, 0.9, 1.0) 1.2	(0.9, 1.0, 1.4) 1.2	(1.4, 1.6) 1.2	(1.2, 1.4) 1.6
Cooling Method		Air-Cooled	Air-Cooled	Air-Cooled	Air-Cooled	Air-Cooled	Air-Cooled
Cable Length	m	3	3 / 4	3/4/4.5/5/6	3/4/4.5/5/6	3/4/4.5/5/6	3/4/4.5/5/6
Total Weight (with 3m cable)	kg	1.9	1.9	2.3	2.4	3.0	3.6

Installable on feeders of various manufacturers







N direct installation

Other Types

- Sensarc type: Kobe Steel installation type
- Innerless type: The liner is connected directly to the tip
- D tip type: Tip part is Daihen black torch type
- Auto welder installation: Installs onto Daihen auto welder

CP/CSA/a

Special Torch



Туре		CP-35	CSA-252	CSH-50W		
Rated Current	Α	350	250(MIG)450(CO ₂)	500		
Duty Cycle	%	50	70(MIG)70(CO ₂)	60(MAG)100(CO ₂)		
Applicable Wire Size	mm	0.9 – 1.2	(1.0)1.2	1.2, 1.4, 1.6		
Cooling Method		Air-Cooled	Air-Cooled	Water-Cooled		
Cable Length	m	3, 4	3	3, 4, 5		
Total Weight (with 3m cable) kg		2.3	3.2	3		

REPLACEMENT PARTS

Various Selections for Customers' Needs



ADAPTER

Fit to Various Manufacturers' Wire Feeder



TA/CS/FX/FXS SERIES

Various Models for Specific Work Pieces



Туре	TA-9, FX-9	TA-20	
Rated Current	Α	125	250
Applicable Tungsten Size	mm	0.5 – 2.4	0.5 - 3.2
Cooling Method		Air-Cooled	Water-Cooled
Weight (without P/C)	q	105	99



CS-310

Туре		CS-310
Rated Current	Α	310
Applicable Tungsten Size	mm	0.5 - 3.2
Cooling Method		Air-Cooled
Weight (without P/C)	g	100



TA-24

80

0.5 - 1.0

Air-Cooled

66

TA-24,24W

TA-24W

180

0.5 - 2.4

Water-Cooled

80

TA-17P

TA-18

TA-18

350

16 - 40

Water-Cooled

236

Туре		TA-9P	TA-20P	
Rated Current	Α	125	250	
Applicable Tungsten Size	mm	0.5 – 2.4	0.5 – 3.2	
Cooling Method		Air-Cooled	Water-Cooled	
Weight (without P/C)	g	105	105	

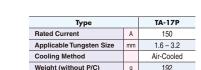


Туре		CS-410
Rated Current	Α	410
Applicable Tungsten Size	mm	0.5 – 4.0
Cooling Method		Water-Cooled
Weight (without P/C)	g	160

FX-25

TA-17,FX-17

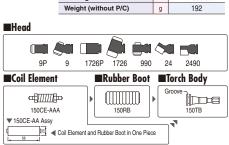
Туре		TA-17, FX-17
Rated Current	Α	150
Applicable Tungsten Size	mm	1.6 - 3.2
Cooling Method		Air-Cooled
Weight (without P/C)	g	192





TA-26,FX-26 TA-26, FX-26 Туре Rated Current 200 Applicable Tungsten Size 16-40 **Cooling Method** Air-Cooled





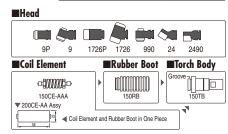


Туре

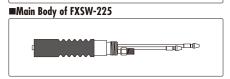
Applicable Tungsten Size

Rated Current

Cooling Method







1726P 1726

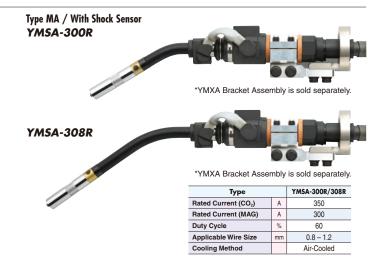


ROBOTIC TORCHES FOR MOTOMAN

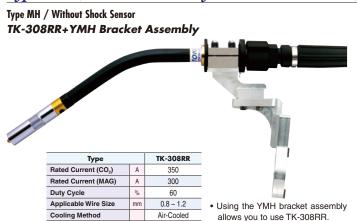
for Motoman MA1440

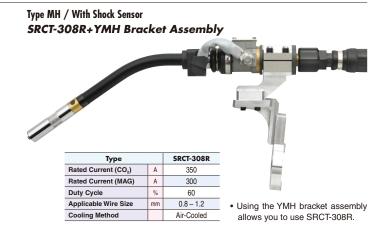
Type MA (with an internally mounted torch cable)





Type MH (with an externally mounted torch cable)





MOTOMAN-EA SERIES



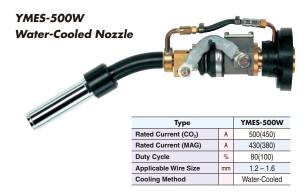




ROBOTIC TORCHES FOR MOTOMA











- · Specially designed for aluminum welding. Regulates Gas flow by Special Noz-
- zle and Tip Body.

Cooling Method Water-Cooled Water-Cooled Nozzle ##mm and Wire 1.2mm with MIG tip (available for other options, ask sales)

Туре

AIR-COOLED ROBOTIC TORCHES

TOKINARC

TK-508RR

500

430

60

1.2 - 1.6

Air-Cooled

0.8 - 5

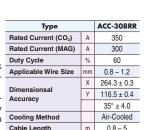
ACC/TK SERIES

High Accuracy Robotic Torch

TK-308RS

High Advanced Robotic Torches







Туре		TK-308RR/S
Rated Current (CO ₂)	Α	350
Rated Current (MAG)	Α	300
Duty Cycle	%	60
Applicable Wire Size	mm	0.8 – 1.2
Cooling Method		Air-Cooled
Cable Length	m	0.8 – 5





0.8 - 5

Cable Length · Accomplished a quick replacement of torch body by separating from clamp and to keep a reliable repeatability.

Built-in Shock Sensor Type of TK-308RR

 Without loosing a control point, the torch (TK-308RR) is replaceable.



WX/ β SERIES

The ultimate in water-cooled robotic torches

WX7025



Water-Cooled

1 - 5

Туре		WX7025/R
Rated Current (CO ₂)	Α	700
Rated Current (MAG)	Α	600
Duty Cyclet (CO ₂)	%	80
Duty Cycle(MAG)	%	70
Applicable Wire Size	mm	1.4 - 1.6
Cooling Method		Water-Cooled
Cable Length	m	1 – 5

WX5005/R





Cooling Method

• Water-Cooled 500A Standard Type

WX4015/R



• Developed by WX-400. Can be separated from cable assembly.

lype		WX4015/R
Rated Current (CO ₂)	Α	400
Duty Cycle	%	100
Applicable Wire Size	mm	1.2 – 1.4
Cooling Method		Water-Cooled
Cable Length	m	1 – 5

WX4515/R



• 100% duty cycle at 450A Can be separated into two assemblies: torch body and cable.

WX4025/R



- (1) Develped by WX-400.
- (2) Can be separated into three assemblies: Torch Body, Clamp and Cable.

WX4525/R





• 100% duty cycle at 450A Can be separated into three assemblies: torch body, clamp and cable.

WX4515 Water-Cooled Nozzle



WX451R Water-Cooled Nozzle with Wire Clamp



• Water-Cooled Nozzle features effects of minimizing spatter build-up and increasing the durability of contact tip.

β-600W

For heavy duty



•	Cooling effect produced by the unique de-
	sign of water channels achieves 100% duty
	cycle at 600A.

Туре	β-600W	
Rated Current (CO ₂)	Α	600
Duty Cycle	%	100
Applicable Wire Size	mm	1.2 – 1.6
Cooling Method		Water-Cooled
Cable Length	m	1 – 5



- Usable for high speed multilayer welding
- Excellent cooling performance by utilizing large Water-Cooled Nozzle
- · Reliable cooling via independent cooling system that separately cools the torch body and nozzle
- · Wire Clamp unit included as standard equipment



- TK-308RR Water-Cooled Type
- Can be replaced without altering the TK-308RR teaching point.

TK-308RR



*Nozzle use requires a water circulator (separate unit) *Clamp the water hose with a suitable hose band or clamp so that the water hose and the torch cable are laid in parallel



Thermo-chiller equipped coolant circulation system

- Equipped with high-lift pump. Approximate discharge pressure of 0.4MPa.
- Temperature setting range between 5°C and 40°C (±0.1°C temperature stability)
- Operating conditions can be monitored by way of the digital indication on the control
- Particle filter is provided at the return outlet of the circulating fluid, thus preventing problems caused by dirty circulating fluid
- · Equipped with heating function to prevent freezing
- Compact design allows installation in tight space



Туре	WR-200TC
Supply voltage	AC200V(single phase)
Frequency	50/60Hz
Power consumption	1.1/1.4KVA
Discharge pressure	0.4Mpa
Discharge flow rate (* 1)	2.1-2.2L/min
Cooling capacity	1700/1900W
Tank capacity	Approx. 5L
Unit Weight (* 2)	51kg
Exterior dimensions (WxDxH)	377×500(+280)×615
Flow rate (body only)	4.1~4.2L/min
Flow rate (torch head + hose 10m)	2.1~2.2L/min
(+4) 14(1)	

*1) With water-cooled torch connected: 60Hz (*2) Cooling water mass not included

Coolant circulation system WR-100 (046500)

- Compact body and superior cooling performance realizing 35kcal/min of heat value
- Pump portion is completely insulated
- · Water tank is separate and independent, facilitating water replacement
- Excels in serviceability, reducing cleaning work load



Туре	WR-100	
Supply voltage	50/60Hz	Single phase AC200V
Power consumption	W	200/240
Discharge pressure	MPa	0.3
Discharge flow rate (* 1)	L/min	2.1 – 2.2
Heat discharge	Kca/min	35
Tank capacity	L	10
Unit Weight (* 2)	ka	22

(*1) With water-cooled torch connected: 60Hz

(*2) Cooling water mass not included



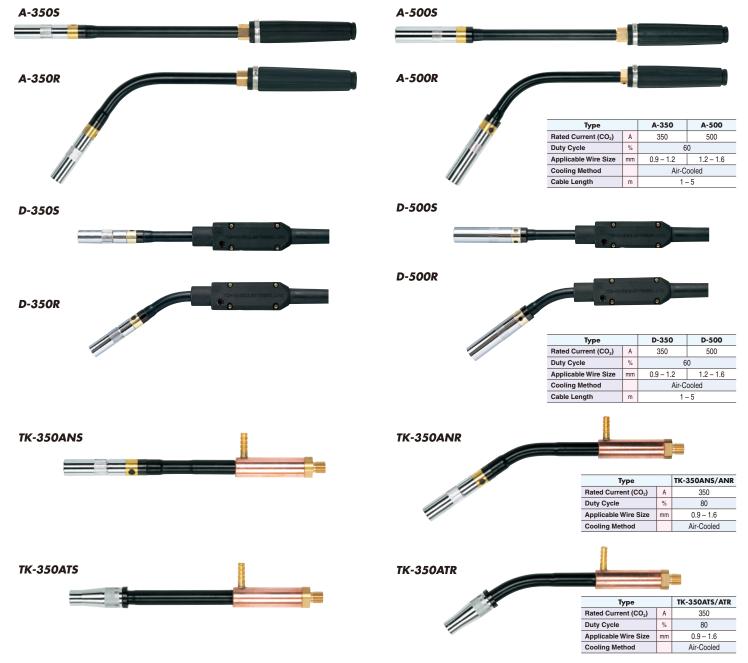






AUTOMATIC TORCHES

TOKINARC®



ROBOTIC TIG SERIES



TA-301HW



- 300A/Water-Cooled/100% duty cycle
- Built-in pneumatic cylinder makes replacing the tungsten electrode easy.
- Reliable gas shielding by gas lens



TA-301CDW



Туре		301HW	301CDW
Rated Current	Α	300	300
Duty Cycle	%	100	100
Applicable Tungesten Size	mm	2.4, 3.2	2.4, 3.2
Cable Length	m	6, 8	6, 8
Cooling Method		Water-Cooled	Water-Cooled
Cylinder		ı	Double-Acting Type

^{*}Standard model: Gaslens Nozzle No.6 and Electrode 3.2mm



- 500A/Water-Cooled/100% duty cycle
- Built-in pneumatic cylinder makes replacing the tungsten electrode easy.
- Reliable gas shielding by gas lens



Туре		500HW	500CDW
Rated Current	Α	500	500
Duty Cycle	%	100	100
Applicable Tungesten Size	mm	3.2, 4.0	3.2, 4.0
Cable Length	m	6, 8	6, 8
Cooling Method		Water-Cooled	Water-Cooled
Cylinder		_	Double-Acting Type

*Standard model: Gaslens Nozzle No.10 and Electrode 4.0mm



Standard model: 45° feeding angle and Wire: 1.2mm

- Choice of Angle (35° or 45°)
- Not includes Flexible conduct Tube
- Not includes Filler Unit

Cooling Method

Cable Length

• Filler Unit for TA-301 can be used for TA-200 Series (Ask sales for other options)

Filler Unit for TA-500



Standard model : 45° feeding angle and Wire : 1.2mm

- Choice of Angle (35° or 45°)
- Not includes Flexible conduct Tube
- Not includes Filler Unit (Ask sales for other options)

AUTOMATIC TIG SERIES

Air-Cooled

4.8



Water-Cooled

3.8. 7.6

Water-Cooled

3.8. 7.6





NOZZLE CLEANING STATION

New Model Nozzle Cleaning Station with Selectable Installation Equipment



Split and select type offers a selection of installable equipment Combination examples

- 1) Nozzle cleaner (basic type)
- 2) Nozzle cleaner + wire cutter
- 3) Nozzle cleaner + anti-spatter solution sprayer
- 4) Nozzle cleaner + wire cutter + anti-spatter solution sprayer

Nozzle Cleaner

- Electric motor, which provides power, supports power supplies of major countries
- It is turned ON/OFF by pressing the welding nozzle against the equipment switch. Thus, it can be used without requiring a solenoid valve.
- The cleaning head uses Tokin's proprietary reinforced spring.

Wire Cutter

- Cuts wires when the welding nozzle is pressed against the switch.
- · Without requiring a solenoid valve, it can be used by simply connecting an air

* Anti-Sputter Solution Sprayer

In contrast to the conventional sprayer in which dust and spatter accumulated, requiring cleaning and maintenance, the new model is simply constructed and practically maintenance-free.

Nozzle Coat anti-sputter solution

• Dried quickly by the post-welding heat of the nozzle, it forms anti-spatter film to minimize the adhesion of spatter onto the nozzle. Three types are available with different volumes.

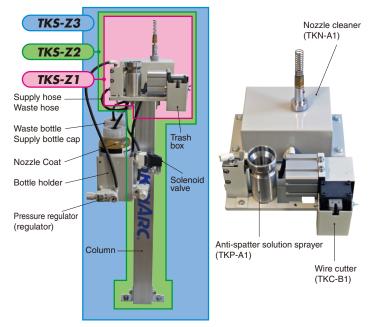
Nozzle Coat 2L Nozzle Coat Spray 220ml Nozzle Coat 18L can

Realizing Efficient Robotic Welding

- * A single bench equipped with a wire cutter, nozzle cleaner, and anti-sputter fluid sprayer realizes space savings and efficient nozzle cleaning.
- ❖ Simple to install because it is driven by compressed air.
- Simple design offers superior serviceability.

TKS-Z series (0462Z*) * Includes Types No.1 through No.3

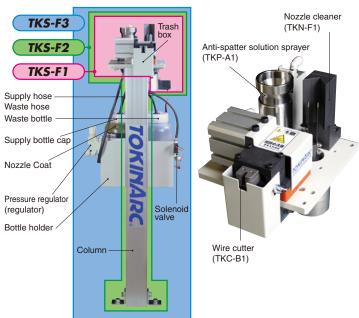
Signals from the robot turn the solenoid valve ON/OFF, allowing the pneumatic force to turn the spring and remove the sputter. It contains a nozzle cleaner (TKN-A1), a compact wire cutter (TKC-B1), and an anti-sputter fluid sprayer (TKP-A1). This is a standard type nozzle cleaning station that adapts to a wide range of conditions.



- · Nozzle cleaning station can handle a wide range of conditions!
- · Air-driven Nozzle Cleaner (TKN-A1) is installed and available in a wide range of conditions
- Minimum space required is 260mm x 265mm.
- *Come with 1 bottle of Nozzle Coat a station.
- *Please use always the dedicated nozzle coat only.

TKS-F series (0462F*) * Includes Types No.1 through No.3

The reamer type nozzle cleaner (TKN-F1) may be used to forcefully remove sputter from the inner surface of a nozzle. Because it is combined with a compact wire cutter (TKC-B1), it can be installed in the smallest space in the series. Select this product for high current or high operation rate applications.



· Cutting blade is designed by principle of leverage and made of highly durable material, allowing 40,000 cuts or more on one side. (Both sides of cutting blade are usable.)

*Number of cuts varies according to usage of location. Thus, the data on number of cuts was obtained from actual testing under certain conditions and does not imply guarantee.

*Solenoid valve is available as an option.



ANTI-SPATTER SOLUTION SPRAYER



- Sprays a fine mist of anti-spatter solution to apply a thin uniform coating to the interior surface of the nozzle. This nozzle coating dries right after welding due to nozzle heat to form an anti-spatter coating.
- Anti-spatter solution can be sprayed in optimum quantities to prevent wasted fluid
- Supports nozzles with external dimensions in range from 16mm through 26mm.
- *The dedicated anti-spatter solution "Nozzle Coat" is required when using the above device. (Unit comes with 1 bottle)
 *Regulator and bottle holder are available as an option.

WIRE CUTTER



- · Cutting blade is designed by principle of leverage and made of highly durable material, allowing 40,000 cuts or more on one side. (Both sides of cutting blade are usable.)
- *Number of cuts varies according to usage of location. Thus, the data on number of cuts was obtained from actual testing under certain conditions and does not imply guarantee. *Solenoid valve is available as an option.

NOZZLE CLEANER



- Easy installation provided by a simple structure of air piping drive force.
- Various cleaning heads are available for different nozzle sizes.



• Cleans away spatter with 2 different types of cleaners. Scraper" for removing spatter stuck to the nozzle tip and "Nozzle Inner Wall Cleaner" for removing spatter on the inner nozzle walls without damaging the nozzles with relatively few adhesion of spatter and when using carbon nozzles.



- · Reamer's forward and reverse rotation removes spatter inside of the nozzle
- Driven by compressed-air and mounting is simple.

SHIELDING GAS CHECKER

5 V BATTERY POWER SUPPLY TYPE Gas flow monitor Connecting Cable Rubber Cover Power Supply

- Shows shield gas flow rate on digital display
- Small-size, lightweight, and free mounting direction Shielding Gas Checker
- Two kinds of power sources, Battery and AC100V, are available.

Usable gas types	Power Type	Item code
Argon (Ar)	Battery	046401-0001
	AC 100 V	046401
Carbon dioxide (CO2)	Battery	046402-0001
	AC 100 V	046402

^{*}Specify the applicable gas type when ordering

ANTI-SPATTER SOLUTION

NOZZLE COAT



· When Nozzle Coat is sprayed by the sprayer, the post-welding heat of the nozzle dries it quickly and forms anti-sputter film on the nozzle surface. This film allows the sputter to be removed with a weak force from the nozzle.

Nozzle Coat 18L can Nozzle Coat 2L can 220ml Nozzle Coat spray

Anti-Sputter Agent CLEAN ARC (046100)



- This is an immersion type anti-sputter agent for semi-automatic use
- It suppresses spatter adhesion and improves the use life of nozzles and tips.



APC - AUTO PARTS CHANGER -

APC STOCKER TYPE

- Consumable parts unit on the tip body can be replaced by a single touch operation.
- No production down time for replacing and cleaning.

TUNGSTEN CHANGER



Not come with Legs.

• Enables robotic auto-change of tungsten electrodes in combination with Tokin cylinder TIG torch. (TA-200CDA/TA-301CDW/TA-500CDW)

Tungsten electrode types



Tungsten with 1.5% lantha num content (WL15)



Tungsten with 2% cerium content (WC20)



Pure tungsten (WF)

TUNGSTEN GRINDER

PIRANHA II

PIRANHA III



Product Name	Piranha II	Piranha III
Part No.	DGP-PG2	DGP-PG3
Grinding angle	10~60	15~60
Applicable Tungesten Size	1.0/1.6/2.4/3.2(mm)	1.0/1.6/2.4/3.2/4.0/4.8(mm)
External dimensions	W 102×L 255×H170(mm)	W 180×L 380×H260(mm)
Weight	5.5(kg)	21(kg)

- Grinding, cutting and facing the flat-tip features offer accurate tungsten
- Precision polishing finish (longitudinal axis direction polishing at roughness degree 0.5 μ m) offers better arc starts and arc stability, and welding quality is improved.

SERVO TORCH

NAMOTOM



• High-Speed and Stable wire feeding for small gauge wire and aluminum wire.

FILLER WIRE FEEDER





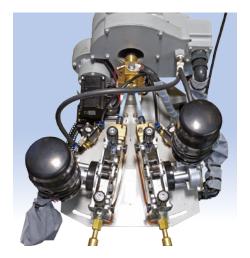
WIRE CHANGER UNIT

By loading two wire feeders onto the robot, high speed automatic switchover between two different kinds of wires, such as stainless and steel, and also shielding gases is

Using in combination with APC (Auto Parts Changer) allows to change to different size of wire and also expands the range of usable wire sizes.



Installation example: YASKAWA MOTOMAN EA1400N





Installation shows YASKAWA MOTOMAN HP6

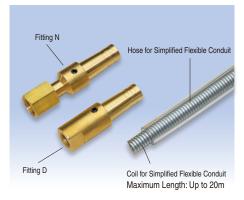
FLEXIBLE CONDUIT CABLES

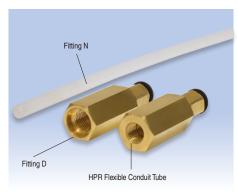
FLEXIBLE CONDUITS N/D

SIMPLIFIED FLEXIBLE CONDUIT

TEFLON FLEXIBLE CONDUIT







Maximum Length: Up to 100m

ROLLER USED FLEXIBLE CONDUIT CABLE

EASYGLIDE

Adopts special structure for Can be exchanged only reducing flaking off of the for the damaged parts and wire to prevent deposition cost-effective Rollers reduce the friction during feeding the wire. The length can be adjusted as needed by assembling

Length: Up to 30 meters

the cable. The Microglide allows smooth wire feed in troublesome sections where ordinary flexible conduits encounter large wire feed resistance.

- Superb wire feed; achieve at a 200 mm minimum usage diameter which is one-third that of ordinary flexible conduits!
- · Also usable at sharp bends such as when inserted in cableveyors

MICROGLIDE



• It is 8mm-smaller than Easyglide and can be used for narrow space.

The Microglide is a next generation type flexible conduit that succeeds in lowering resistance to an absolute minimum during wire feed by using rollers along the wire feed path within

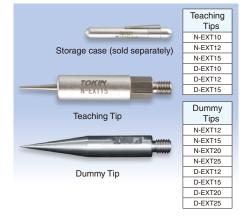
BUTT WELDER

100 V (046270) 200 V (046271)



- Simple flawless butt welding for anybody by pushing the button.
- In the range of 0.8 to 1.6mm wire diameter

TEACHING TIP / DUMMY TIP



- Teaching Tips
 Movable tips for test operation of a teaching robot.
- Dummy Tip
 Stainless steel tips used for torch calibration.

SAFTY GUARD

(046001)



- Used TAPYRUS fabric (made with non-woven fabric).
- · An Excellent filtration.
- Light-weight and gentle touch.

PACK-WIRE PULLING APPARATUS

(047801)

PACK-WIRE PULLING TOOL

(047800)

FLEXIBLE CABLE SUPPORT

(047805)



Plastic Dome Cover outer contour 510mm to 515mm

Wire Straightener WS-3 Unit Assy

For 250Kg Pack Wire

*Comes with Hardware Set



- · Attaches to spool shaft for semi-automatic welder
- Attachable to N Flexible Conduit Cable
- Installs above pack wire extractor to support the flexible conduit
- Install the flexible conduit with a clamping band or similar item.

WIRE STRAIGHTENER WIRE LENGTH MEASURING MACHINE

(047811)

Wire Length Measuring Machine (047850)
Wire Length Measuring Machine 9 VOLT BATTERY (047860)



for YASKAWA ELECTRIC CO. Wire Feeder

 Utilizes power of corrective roller to straighten bends in wire and suppress position deviations caused by wire to a minimum.

Figure:

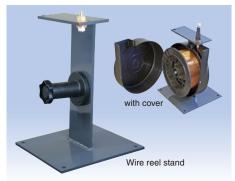
- *1. Installing on Plastic Dome Cover.
- *2. Installing on Wire Feeder



- Easy to see the wire consumption by digital counter up to 8 digits.
- Unit of measure is 1cm.

WIRE REEL STAND

REEL STAND with cover (TM4-116)



 This stand is for use when using spool wire instead of pack wire.

FUME EXTRACTOR WF SERIES

WF-180



· Eliminate the hazardous welding fume at welding point. Recommended to be used with a fume extractor torch.

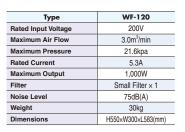
Туре	WF-180
Rated Input Voltage	200V (3 phase)
Maximum Air Flow	3.1m³/min
Maximum Pressure	23.5kpa
Rated Current	5.0A
Maximum Output	1,000W
Filter	1
Noise Level	75dB(A)
Weight	80kg
Dimensions	H1,000×W360×L660(mm)



· Equipped with the same brushless motor as WF-180. (It can be used approximately 8000 hours, instead of approximately 700 hours on WF-120.)

Туре	WF-130		
Rated Input Voltage	200V (3 phase)		
Maximum Air Flow	3.1m³/min		
Maximum Pressure	23.5kpa		
Rated Current	5.0A		
Maximum Output	1,000W		
Filter	1		
Noise Level	75dB(A)		
Weight	80kg		
Dimensions	H661×W300×L686(mm)		







• An original sputter trap shuts out burned sputter.

WF-300 200V (3 phase)
200\/ (2 phage)
200V (3 priase)
0.75kW
8m³/min
2.16kpa
1
75dB(A)
64kg
H1,060×W490×L600(mm)





F-308RR



Туре	CF-27J	CF-37J	CF-37J	CFL-20	CFL-35
Suction Nozzle	φ26	φ26	φ30	φ26	φ26

OPTICS

PLASMA / LASER PARTS







TOKINARC



Semi-Automatic Torches



Air-Cooled Robotic Torches



Water-Cooled Robotic Torches



TIG Welding Torches



Replacement Parts



Robotic Peripherals



Fume Extractor



Plasma Parts Laser Parts & Optics

Please contact us by FAX or E-mail for catalogues that interest you. You can also download them from our website.

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- •	For	more	information,	contact	us	at
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Part specifications, dimensions and design may be changed without prior notice for the purpose of part improvement. The product color shown here is a printed image and the actual color might vary somewhat.

