WIRE WIZARD®
WELDING PRODUCTS
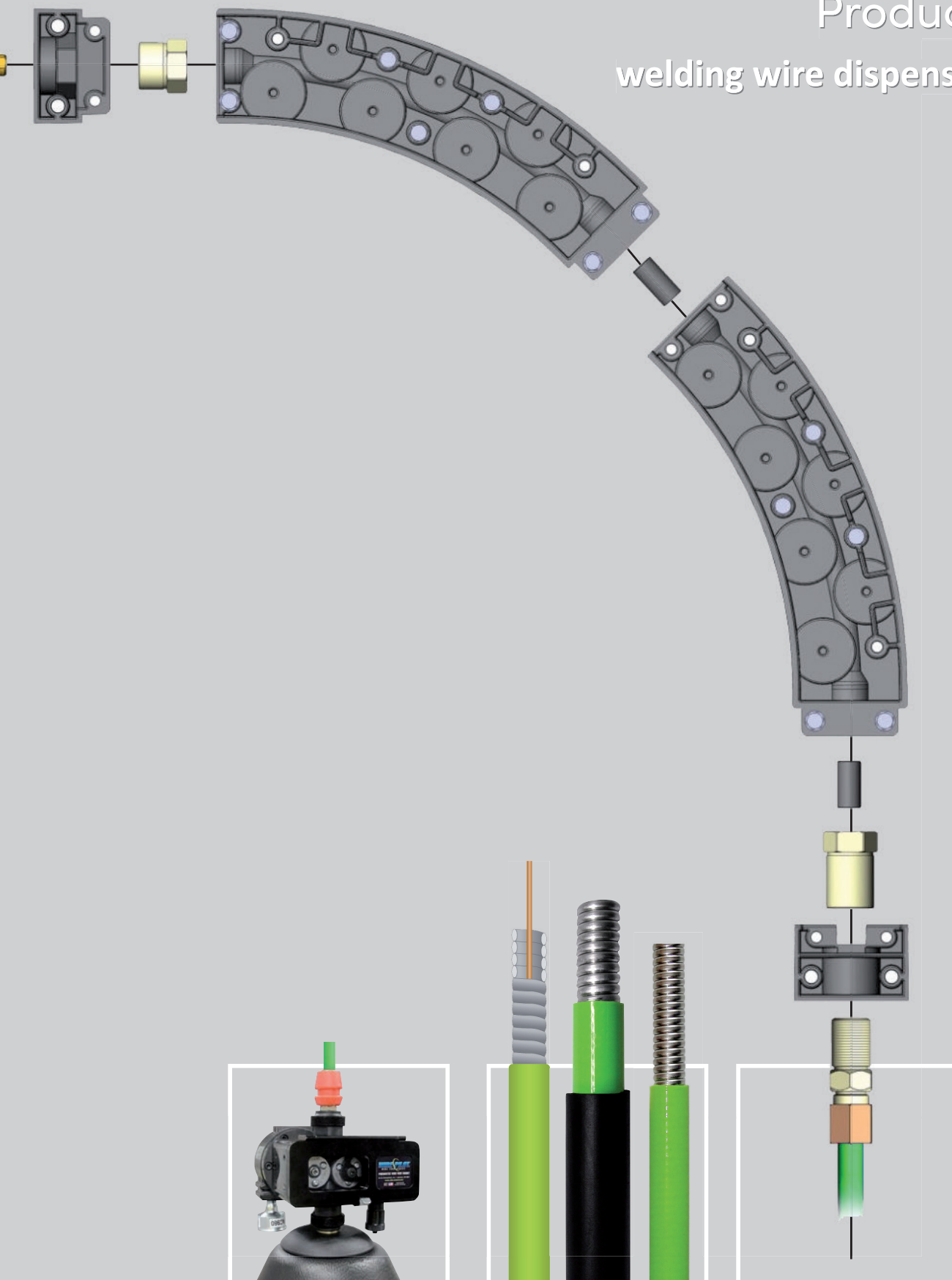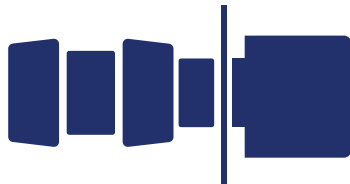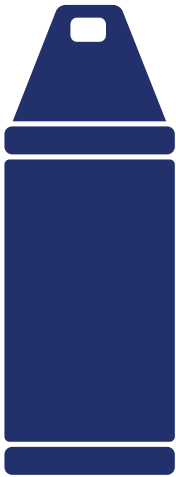
The art of wire feeding

Productcatalog
welding wire dispensing systems

About Wire Wizard

"Give us your worst performing welding cell and we'll make it your best performing welding cell."

Dear Welding Associate,

You're about to enter the world of the Wire Wizard. This Wizard will hand you a solution for each wire feed problem you are faced with or will be in future. Wire Wizard is the world leading brand in wire dispensing products. Started in 1985 by Elco Enterprices, Inc. in USA and brought over to Europe in 1999. Through anticipation of customer needs and ongoing dialogue with end users Wire Wizard created a distinct product line of High quality products.

What is Wire Wizard?
Wire Wizard is a range of products to dispense welding wire from any kind of spool or drum to any kind of wire feeder. This means that whatever kind of drums you're using; Wire Wizard has a cone especially for your type of drum. And also that whatever brand of robot or manual welding machine you use; Wire Wizard has a connector specially for your type of wire feeder. In combination with the high quality conduit you are able to connect everything to anything.

The first goal of Wire Wizard is to improve the productivity of your welding cell. Our motto:
"Give us your worst performing welding cell and we'll make it your best performing welding cell."

Five steps to your solution
Wire Wizard keeps things simple. Each situation is connected with a universal type of connector and also the conduit is easy to choose. This makes it very easy to compose your own set of equipment specially for your situation. In five steps this catalogue takes you to a perfect set of equipment.

On our website www.wire-wizard.eu you can find our Wire Wizard Tool. With this tool we take you through five steps in order To compose your own perfect set of equipment. In step five you can easily add these items to a quotation request.

"The Wire Wizard Tool"

About Wire Wizard

New Wire Guide Modules

The most spectacular innovation in years are the new Wire Guide Modules. A totally new concept of feeding wire.

Philosophy: What causes the most friction in wire transport? Exactly, "the bends and curves in your conduit". Eliminate these curves, you'll eliminate the friction.

Within this new way of thinking the straight ends of your wire feed are made with the familiar conduits and the bends are made with these Wire Guide Modules. Each module has a curve of 45 degrees and can be built together with other modules in order to make a 90, 135 or 180 degrees curves. In this way large distances can be bridged without assist.

The possibilities

The Wire Wizard program offers a total solution for all your wire feeding problems with high quality products. With a simple combination of products it is possible to equip every robot or welding machine with a drum placed at a variable distance. Extra advantage is that every connection is made with quick disconnections. This makes it very easy to replace or clean the conduit. To change from one type of wire to another can be done very fast.

Watch the video about Wire Wizard

Step 1 – Cones

Unbreakable polyethylene cones for all available drums made with two flexible window-flaps

Round drum cone

Round drum cone for Economical or Environmental fiber drums.
The lip securely anchors the cone to the drum.

Size in cm	Part No.
51 cm	WW10201F
58 cm	WW10231F
67 cm	WW10260F

Octagon drum cone

Octagon drum cone for octagonal packs.
The lip securely anchors the cone to the pack.

Size in cm	Part No.
52 cm	WWOC205
60 cm	WWOC235 H

Size in cm	Part No.
60 cm	WWOC235 L

Low profile hood

Square drum cone

Square drum cone for square packs.
The lip securely anchors the cone to the pack.

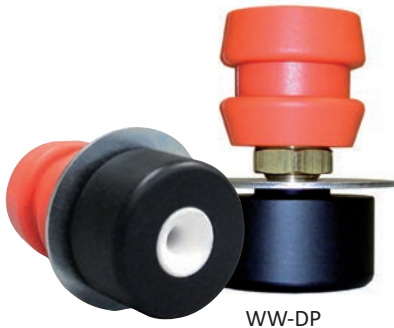| Size in cm	Part No.
54 cm	WWSC-21
61 cm	WWSC-24
72 cm	WWSC-28

Round drum cone

Round drum cone for standard fiber drums.
Mounted with the metal ring supplied with the drum.

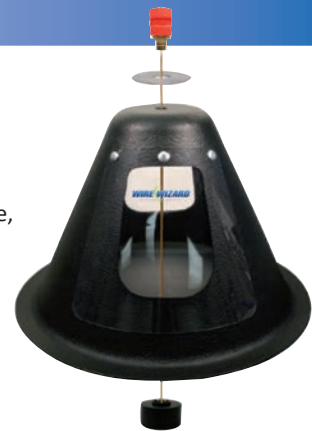| Size in cm	Part No.
51 cm	WW10200C
52 cm	WW10204C

Step 2 – Cone connectors

Direct Pull Kit

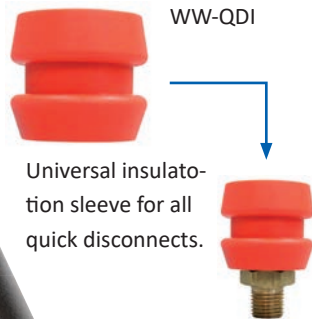The WWDP is the most universal cone-connector and is the right choice for 99% of all applications.

The kit contains a female connector with insulation-sleeve, a washer and a ceramic insert in a delrin socket.

WW-DP

## Cone Connector Insulator

Insulator for the drum connection

WW-DI

WW-QDI

Universal insulation sleeve for all quick disconnects.

Orbital Arm kit

The orbital arm is developed to solve problems which can occure during the unwinding of drums. Small diameter wires and heavy tangling wire can cause nuts inside the drum. With the orbital arm these problems can be solved easily.
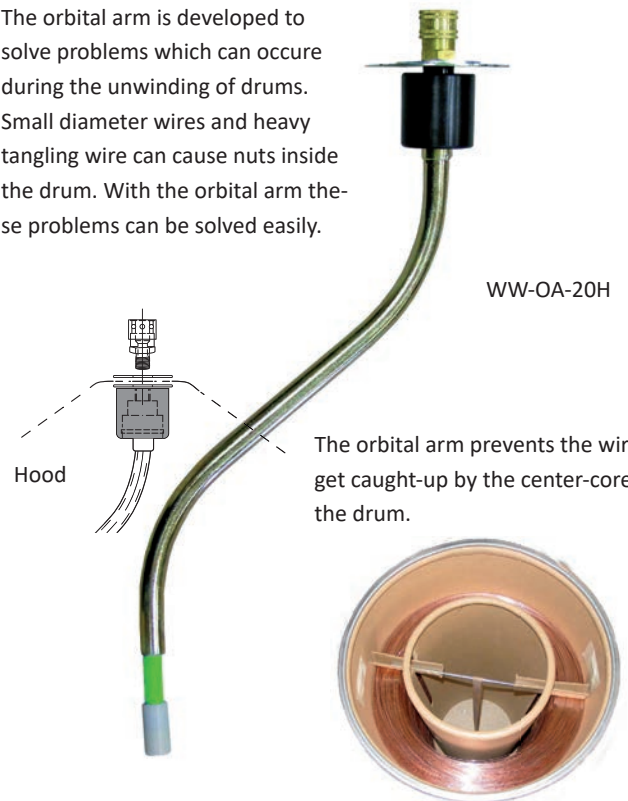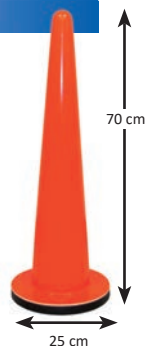
WW-OA-20H

Hood

The orbital arm prevents the wire to get caught-up by the center-core of the drum.

Re-usable drum core

The re-usable drum core is special designed for coreless drums. This tool prevents the wire from flipping over inside the drum. Herewith the downtime caused by tangled wire is history.

WW-IC-11

70 cm

25 cm

Wire detection

Wire sensor block M12 (male thread in, female out)

WWSBM12

Wire end sensor 24V (including 10 Mtr Cable)

WWA5-E34-NC (Normally close)
WWA5-E34-NO (Normally open)
The wire-end-detection-sensor can be used at Mild steel, stainless steel and aluminum.
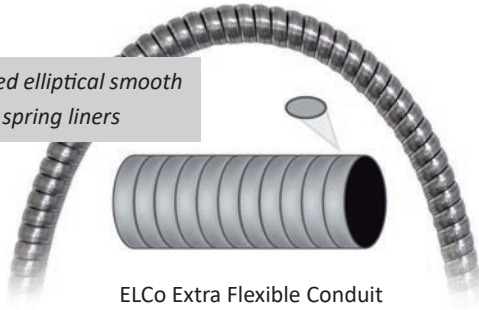
Mounting at drum-cone by using WWDP

5

Step 3 – Conduits for Mild Steel

Extra Flexible Conduit

Patented elliptical smooth coated spring liners

ELCo Extra Flexible Conduit

The Wire Wizard extra flexible conduit made with hard metal spring of elliptical wire for:

- Less contact with welding wire surface
- Minimum friction
- Smooth round edges in bends
- Easy to feed in new wire

The double insulation jacket makes the right proportion in stiff and flexible.

	Part No.	Dimensions in mm inside x outside	Connector	Use for wire	Order quantity	Bulk length
	FC-X	6,0 x 12,7 mm	A-10CX	0,6 -1,6 mm	Per mtr	30,5 mtr
The FC-X liner is the standard for MIG/MAG welding						
	FC-XH	7,5 x 15,5 mm	A-10R	1,6 - 2,4 mm	Per mtr	30,5 mtr
	FC-XH-LW	10,0 x 19,0 mm	A-9+A6	2,4 - 4,8 mm	Per mtr	30,5 mtr

Get connected in 3 steps
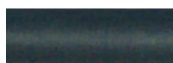
1   Cut your conduit at the right length with a cutter or angle grinder. **Attention: Do not strip it**

2   Push the connector onto the liner. Make sure the clamping ring is in place.

3   Tighten the connector with two wrenches.

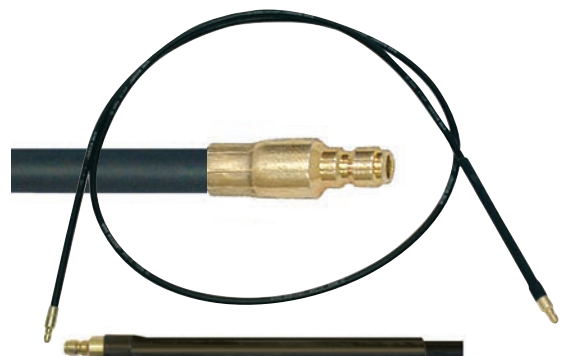## Extra Flexible Conduit in fixed lengths with swaged connectors

All conduits in our range are also available in fixed lengths with swaged connectors.
For the FC-X we have made some standards.

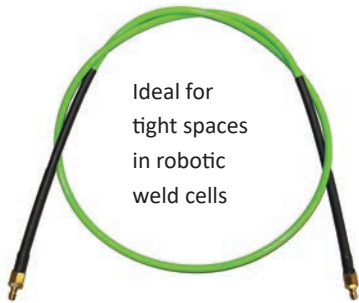| Length*	Part No.
1,5 m	FCX015
3,0 m	FCX030
5,0 m	FCX050
8,0 m	FCX080
10,0 m	FCX100

Two Swaged connectors

One side with polymer strain relief

Other lengths can be made at request

Step 3 – Extreme Flexible Conduit

Extreme Flex Conduit

Ideal for
tight spaces
in robotic
weld cells

This new extreme flexible conduit is made for those robotic applications in which the robot has to operate in a very tight welding cell.

When using a regular stiff conduit for such applications, the conduit can easily hook up with other parts. Or in case of a fast moving robot the conduit can hit against the walls of the cell causing damage to the feeder connectors

This extreme flexible conduit bends easy into the small spaces around the robot

Extreme Flex Conduit
Shown as cut lenght with connectors and strain reliefs

Flexible outer
jacket

Patented low friction
elliptical liner

Polymer strain relief
Included on all pre-cut lenghts

FC-E Conduit

Available lengths and connectors

FC-E Conduit per meter

FC-E
Diameter: 6,0 x 11,7 mm
Order quantity: per meter
Bulk length: 30,5 meter

Standard connector
A-10CH
Strain relief connector
A-10CH-SR
A-11E-2-3 Reïnforcement tube

FC-E Conduit in fixed lengths with three different connections					
Wire Wizard		**Panasonic/Nitto**		**Asian Style UNF Thread**	
3,0 m	FCE030W	3,0 m	FCE030P	3,0 m	FCE030A
5,0 m	FCE050W	5, 0m	FCE050P	5,0 m	FCE050A
7,5 m	FCE075W	7,5 m	FCE075P	7,5 m	FCE075A
10,0 m	FCE0100W	10,0 m	FCE0100P	10,0 m	FCE0100A
2x at conduit At feeder / drum		2x at conduit At feeder / drum		2x at conduit At feeder / drum	
Wizard male bayonet fits wizard female QD		Panasonic fits Niito HI Cupla Ace connector		9/16"-18UNF thread fits Asian style feeders	

Step 3 – Conduits Stainless Steel & Aluminum

Polymer Conduit   The new standard is green
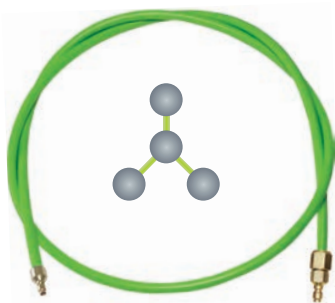
The Wire Wizard polymer conduit is made of a cross-linked polymer which unites all the best in one.

- Low friction coefficient
- Extended wear
- High durability
- Light in weight

Tested for maximum durability by continuously flexing it back and forward. The EC-4 lasts over 200.000 times. That's the amount of the leading competition times 70!
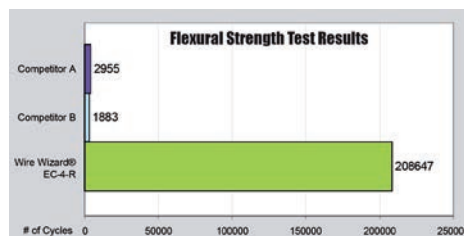
EC-4 Crosslinked Conduit

Non-Crosslinked Conduit A

Non-Crosslinked Conduit B

Flexural Strength Test Results

	# of Cycles
Competitor A	2955
Competitor B	1883
Wire Wizard® EC-4-R	208647

	Part No.	Dimensions in mm	Connector	Use for wire	Order quantity	Bulk length
	EC-4	7,6 x 11,7 mm	A-10CH	0,6 -1,6 mm	Per mtr	152 mtr
The EC-4 liner is the standard for MIG/MAG welding						
	EC-5	10,0 x 15,2 mm	A-10R	1,6 - 4,8 mm	Per mtr	152 mtr

Polymer liner insert for metal-free connector transit

A-4LH   2,3 x 4,5 mm Length = 100 mm

A-4LH-XL   Length = 150 mm
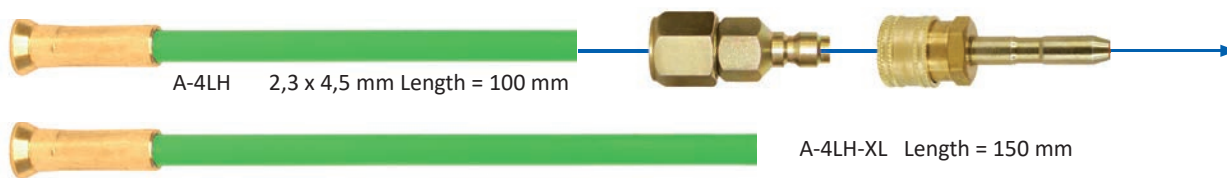
The A-4LH is designed to prevent the wire from shaving against the steel connectors. The EC-4 conduit nudge against the liner-insert which makes the wire transit completely metal-free.
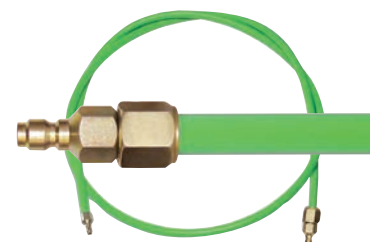
Polymer Conduit in fixed lengths with thread connectors

All conduits in our range are also available in fixed lengths with thread-connectors For the EC-4 we have some standards.

Length*	Part No.	Length*	Part No.
1,5 m	EC4-015	8,0 m	EC4-080
3,0 m	EC4-030	10,0 m	EC4-100
5,0 m	EC4-050	12,0 m	EC4-120

*Other lenghts can be made at request

Step 4 – Conduit Connectors

Connectors for Extra Flexible Conduit

Conduit	Compression	Press-on	In-Line	Union
FC-X	A-10CX	A-11X	A-10-XM	
FC-XH	A-10R	A-11XH	A-10RM	A-10RU
FC-XH-LW	A9 + A6 (HD see page 22)	A-11XH-LW	A-9	A-9U

For connectors with a strain relief add -SR to the articel number

Connectors for Extreme Flexible Conduit

Conduit	Compression	In-Line	Compression with Strain relief
FC-E	A-10CH	A-10HM	A-10CH-SR

A-11E-2-3 reïnforcement tube

Connectors for Polymer Conduit

Conduit	Compression	Self threading	In-Line	Union
EC-4	A-10CH	A-16F4	A-10HM	
EC-5	A-10R	A-16F5	A-10RM	A-10RU

For connectors with a strain relief add -SR to the articel number

Replacement ferrules for compression connectors

Re-use the connector by only replacing the ferrule

A-9-FE   A-10RFE   A-10XFE   A-10CFE

Conduit	Part No.
EC-4 & FC-E	A-10CFE
FC-X	A-10XFE
FC-XH & EC-5	A-10RFE
FC-XH-LW & EC-6	A-9-FE

Step 5 – Feeder connectors

Choose the right connector to connect your wire feeder

To connect the conduit to your wire feeder Wire Wizard offers a wide range of feeder-adapters. One for each feeder available in welding industry. All feeder-adapters are made with a female quick disconnect which fits the male bayonet at the conduit, this makes:
- Quick exchange of conduit possible
- A rotation point at the feeder to relief torsion in the conduit

A-1LN-23B 12 x 35mm

Fits:
- Lincoln
- Esab
- Cloos
- EWM
- Kemppi
- Lorch

etc

A-1FRO 13 x 47mm

Fits:
- Fronius
- SKS

A-3QDF-4
9/16"-18UNF Thread

Fits:
- Panasonic
- OTC
- Yaskawa

A-4 plus A-14

For:
- insulated plate mounting and universal use

A-5FRO

For:
- Fronius
- TPSI
- Feeders

Quick Disconnects (female)

A-14KIT
2x A-4ST
+ A-14L

A-14BK
1x A14LKIT + A-14B

Low profile bulkhead the two A-4ST connectors-touch in the middle for better feed through of the wire

A-4=Brass
A-4ST=Steel
1/4" NPT

A-14
Derlin plastic
1/4" NPS

A-14L
A=14 in low profile

A-14B
Bracket only

A-4S
Ring + Nut
1/4"BSP-M (GAS)

A-5
Brass-copper
1/2" NPS-M

Quick Disconnect with inside thread to mount directly at the inlet guide of the feeder

1/4" NPT-F

3/8" – 24UNF THREAD

7/16"-20 UNF THREAD

1/2"-20 UNF THREAD

9/16"-18 UNF THREAD

M14 x 1.5 THREAD

3/8" NPT-F THREAD

A-3   A-3   A-3QDF-1   A-3QDF-2 OTC   A-3QDF-3 Motoman   A-3QDF-4 Panasonic   A-3QDF-5   A-3QDF-6

WWTT-DP   Bayonet (male) connectors   Thread adapters

WWTT-DP
for plate mounting
with ceramic insert

A-16MST
1/4" NPT-M
for use in
Derlin thread

A-15
1/4" BSP (GAS)
A-15-1
7/16"–20
A-15-2
9/16"–20

A-16F5
3/8" NPT-F

A-16F6
1/2" NPT-F

A-16F3
1/8" NPT-F

A-16F4
1/4" NPT-F

A-17G
1/4"F ➔ 3/8" M
A-18G
1/4"F ➔ 1/2" M
A-18G1
3/8"F ➔ 1/2" M

Step 5 – Feeder connectors

Inlet guides with quick disconnect special for one brand

12 mm Adapters

A-1LN-23B Multiple use — 2,20 / 12,00 / 35,00

A-1CL Cloos — 3,20 / 12,00 / 35,00

A-1LN-23A Lincoln — 6,40 / 12,00 / 35,00

A-1MOT-HP Motoman — 5,00 / 12,00 / 55,00

A-2SKS SKS — 2,40 / 12,00 / 63,00

WW-QDI Connector insulation sleeve

Fronius adapters

A-1FRO Fronius Feeder — 2,20 / 13,00 / 47,00

A-2FRO Fronius Feeder — 2,00 / 13,00 / 70,00

A-5FRO Fronius TPSI — M20 x 2,5

Other adapters

A-1OTC-FX OTC — 3,20 / 14,00 / 40,00

A-2PA-QD Panasonic — 2,5 / 15,00 / 32,00

A-1NA-5 Lincoln — 5,00 / 8,00 M8 / 23,00

A-1MOT-AU Motoman — 3,20 / 11,20 / 103,00

9,5 mm adapters

A-1B-C — 3,20 / 9,50 / 33,00

A-1B-CHD — 5,00 / 9,50 / 33,00

A-1A-C — 5,00 / 9,50 / 44,50

A-1A — 3,20 / 9,50 / 70,00

A-1A-45 — 3,20 / 9,50 / 114,00

A-4LH page 8

For metal free transit through connector

Step 5 – Feeder connectors

Inlet adapters with female thread

Use A-4
(1/4″ NPT-M)

22,00 / 4,00 / 32,00	22,00 / 6,90 / 53,50	5,00 / 12,70 / 44,50	31,50 / 5,00 / 27,10 / 21,00	9,50 / 5,00 / 44,50	19,70 / 6,90 / 51,00	12,00 / 5,00 / 38,00
1/4" NPT-F	1/4" NPT-F	1/4" NPT-F	1/4" NPT-F	1/4" NPT-F	1/4" NPT-F	1/4" NPT-F
A-2E ESAB 4-48	A-1E ESAB All	A-1H Hobart	A-1LN Lincoln	A-1M Miller	A-1PA Panasonic	A-1OTC OTC
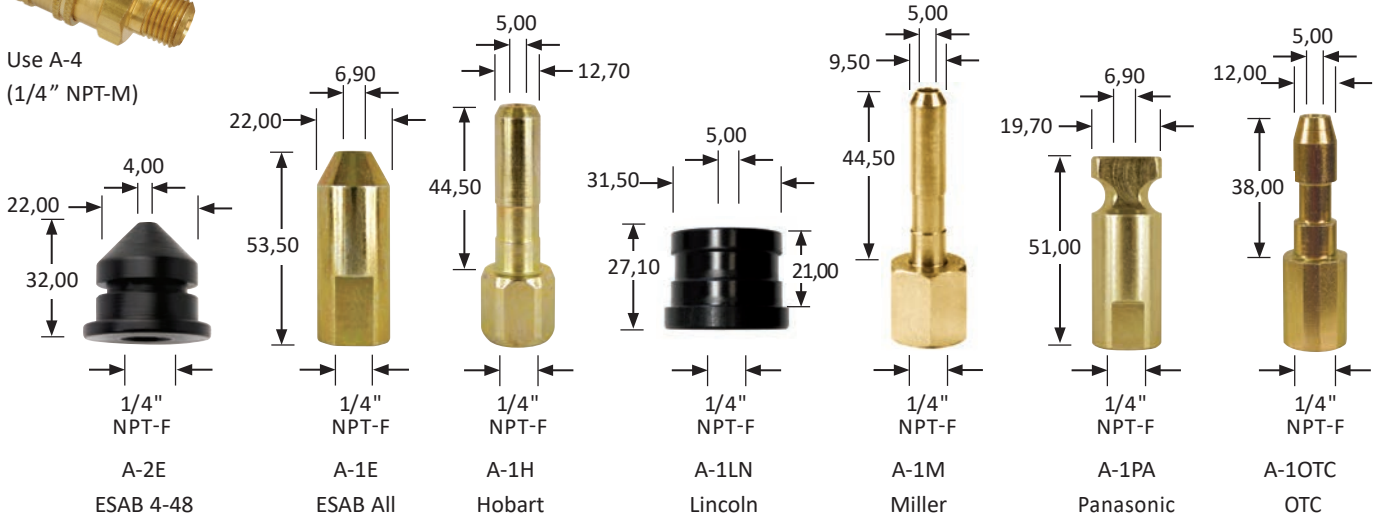
Derlin-plastic connectors for insulated feed through

Thread connectors

A-1DS

3,20 — 12,70
20,00

in/out straightners

1/2" thread

A-1DS PFA

5,00 — 19,00
30,00

in/out PFA-unit

3/8" thread

A-1DS PANA

3,00 — 15,00
28,00

inlet for Panasonic Wire Feeder

1/2" thread
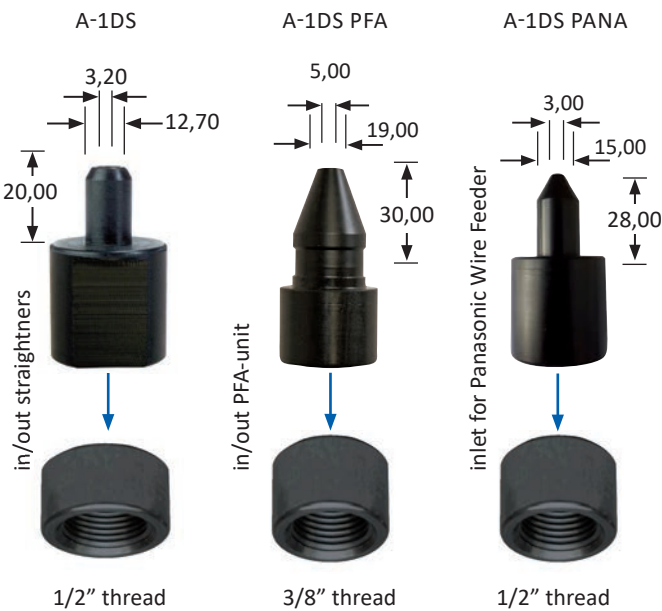
Ceramic connector

A-1CS

3,20 — 12,70
20,00

in/out straightners

5,00 — 19,00
30,00

in/out PFA-unit

Ceramic insert with 5,5mm hole
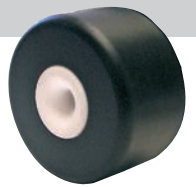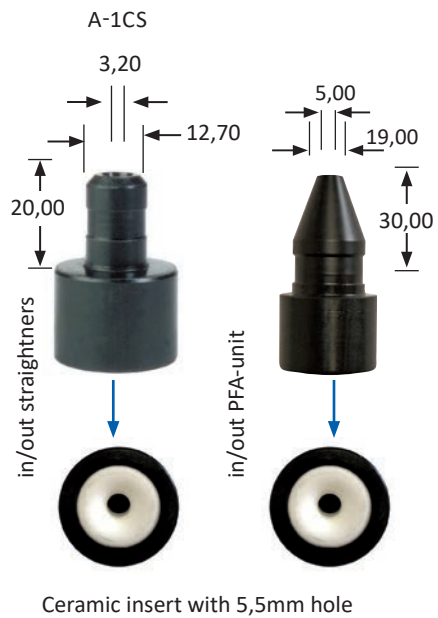
Universal inlet guide with quick disconnect

A-1AK

The A-1AK universal inlet kit is an inlet adapter with four phenolic bushings to make a solid and stable fitting in several sizes of holes.

A-7 = Bushings only

ID x OD 9,5 x 12,70 mm	ID x OD 9,5 x 15,90 mm	ID x OD 15,90 x 19,00 mm	ID x OD 15,90 x 22,20 mm

Wire straighteners

Small Wire Straightener

WS-1000 and WS-1000A
For wire sizes 0,8 - 1,6mm
Dimensions: 95 x 78 x 42 mm (W x H x D)
Weight: 0,45 Kg

WS-1000 Drive Rolls
U-Groove Drive Rolls for
Steel Wire

WS-1000-A Drive Rolls
V-Groove Drive Rolls for
Aluminum Wire

Insulated
Mounting kits
Avaliable for all

WSS-100-IK
Small
aMedium
WSL-100-IK
Large

A-3QDF5   A-1LNS

A-4LH   A-3QDF5   A-1LNS-LW

A-10HM/XM   A-1DS

A-1QD   Feeder

A-1HSD

Delrin union tube

A-1CS

2nd straighterner

WS-1000
Steel wire straightener

WS-1000A
Aluminium wire straightener

Delrin adapter
with ceramic insert
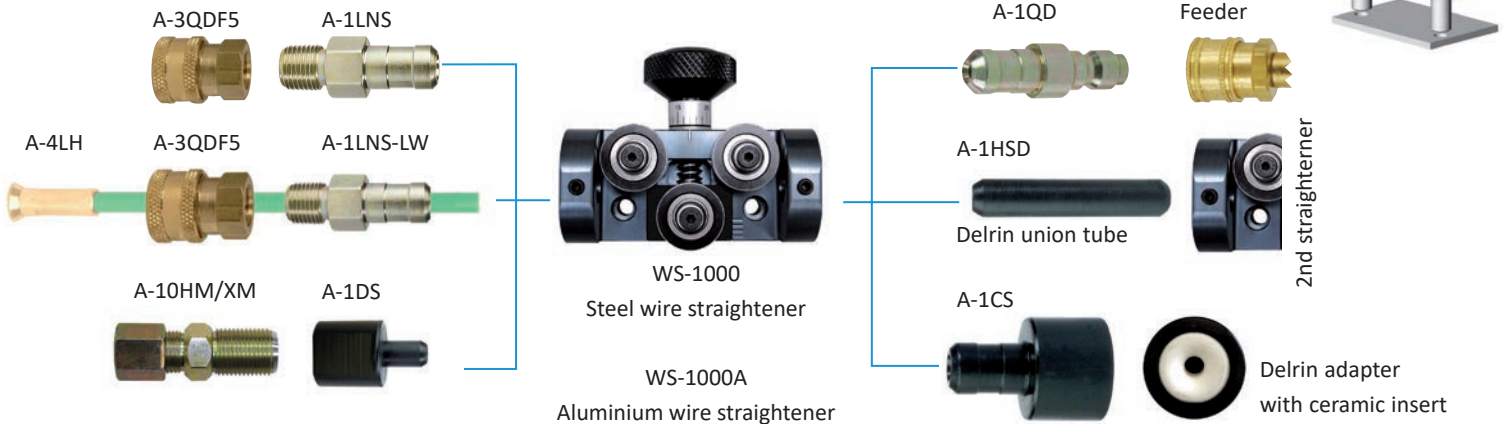
Medium Wire Straightener

WS-1000H
For wire sizes 2,0 - 3,2 mm
Dimensions: 145 x 85 x 48 mm (W x H x D)
Weight: 0,8 Kg

A1-LNCS
Straightener inlet with ceramic insert

A-16M-ST
Attaches to QD

A-4ST Quick   A-1LN
Disconnect   Inlet Guide

A-1LNU

Union
connector
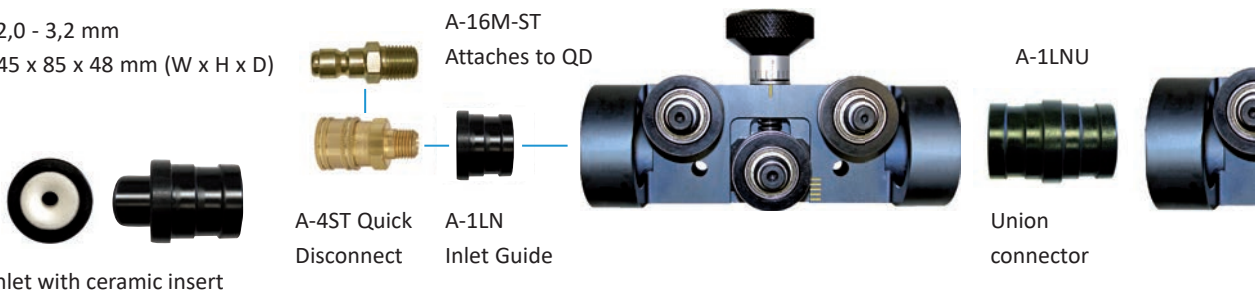
Large Wire Straightener

A-16M-ST-HD
Attaches to QD

WS-1000L
For wire sizes 4,0 - 6,0 mm
Dimensions: 220 x 140 x 58 mm
(W x H x D)
Weight: 1,8 Kg

A-4HD   A-1LN-LW
Quick   Inlet
Disconnect   Guide

Use Large bayonet connectors

Connectors with
ceramic insert

WS-LW
3/8" BSP-Fem.

WS-10S
Lincoln fit
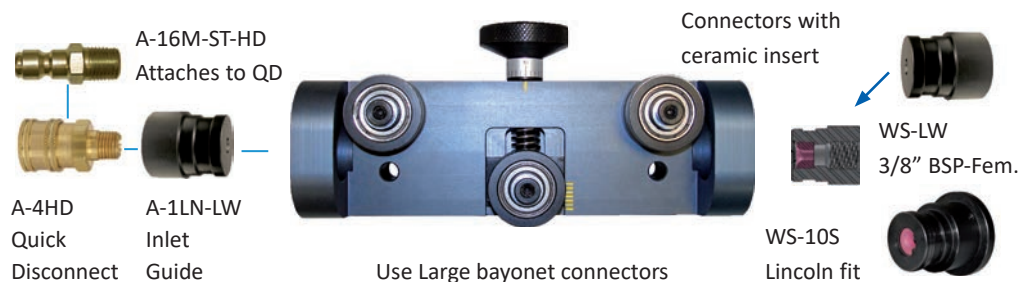
Facts and fables about Straighteners

These straighteners have an aluminium body, insulated rollers and are made with a location calibration and a scale at the tension knob for fine adjustment. The units at this page are called wire straighteners, but are in fact wire benders. A unit with three rollers can only bend the wire. When used at a wire coming from a spool you can in fact straighten the wire by bending it in the opposite direction. In case of wire coming from a drum the function of these units is to bend the wire in such way that the wire will not wobble when it comes out of the torch but curve out in one direction. Mainly when using aluminium from drums this can be a big problem. When it comes to the position of the unit at the welding installation, we strongly recommend to mount it at the entrance of the wire feeder.

All these options can be used in combination with a cone of your choice

Direct pull
page 5

Direct pull with wire detection
page 5

Pneumatic Feed Assist for long conduit runs
page 15-17

Wire Guide Modules
page 18 - 20

Page 9

A-10C-X

A-10R

A-9/A-6

A-10C-S

A-10C-H
A-10R

F-3
F-4 A-16
F-5
F-6

Conduit connectors

Wire Feeder
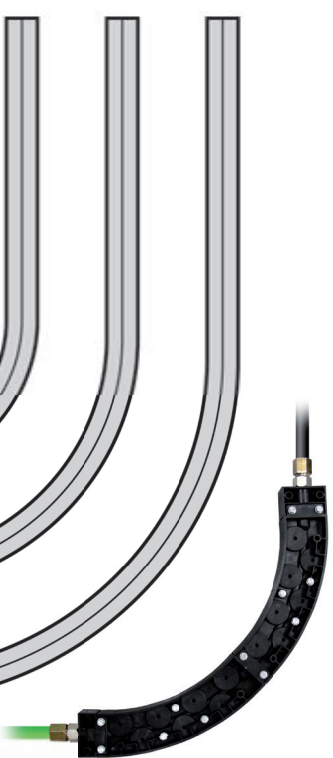
page 6 - 8

FC-X
Standard, extra flexible

FC-XH
Heavy-duty, extra flexible

FC-XH-LW
Large-wire, extra flexible

EC-3, 4, 5 or 6
Polymer conduit

A-1FRO

A-1AK

A-14

A-14

Inlet adapter for specific brand. Choose one at page 11

Universal inlet kit
Set of 1 inlet adapter and 4 adapter bushings, page 12.
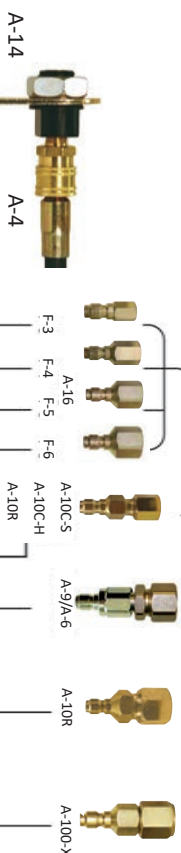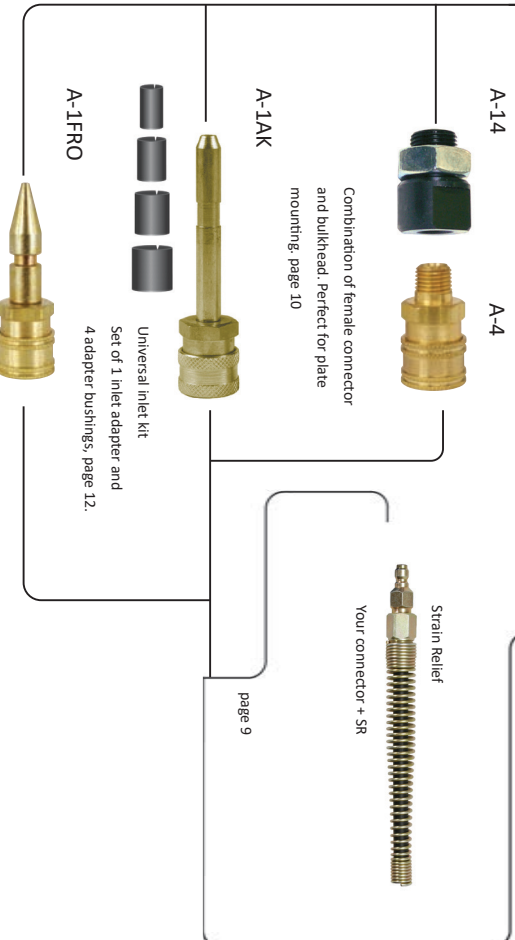
Combination of female connector and bulkhead. Perfect for plate mounting, page 10

A-14B
page 10

A-4

A-4

Conduit connectors

F-3
F-4 A-16
F-5
F-6

A-10C-S
A-10C-H

A-9/A-6

A-10R

A-10R

A-100-X

Page 9

Strain Relief

Your connector + SR

page 9

14

Pneumatic Feed Assist – PFA

Why?

Why using a wire feed assist? The PFA is used at those installations in which a long cable run cannot be avoid.
10 Meter, 20 or 30 Meter? The PFA makes it possible.

How?

The air-powered motor pushes the wire to the outer corner of the conduit. The pushing-force is adjusted in a way that the motor keeps the wire at a mechanical tension. When the welding starts the wire is pulled into the inner-corner which will undo the resistance and makes the air-motor run freely. This process makes the wire float between the inner and outer corners inside the conduit.

Max Friction

No Friction
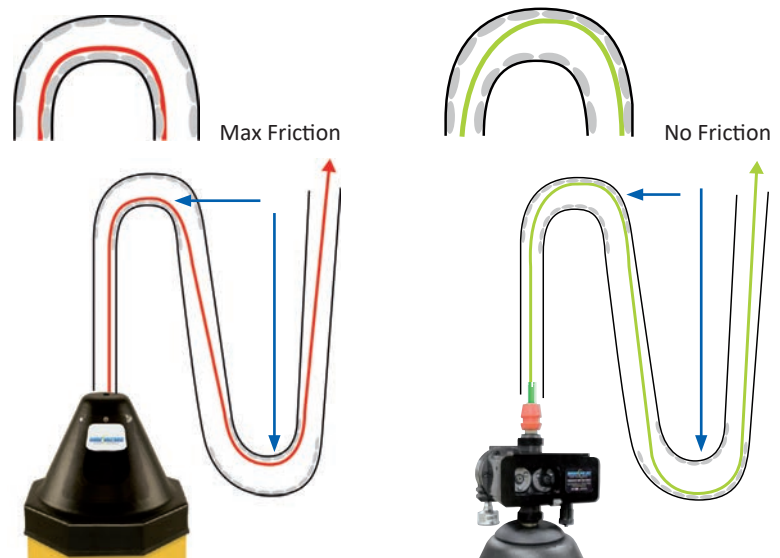
Features

- Works independent, no signal needed, shop air only
- Feeds wire up to 30 meter
- Works with all wires and all welding machines
- Reduces drag, wear and arc failures
- Increases conduit life, feeder life and production

Wire Feed Assist

PFA Classic

Advantages:
- Quick roll exchange
- Small housing
- Suited for SAW

A-1BC

PFA-FRL

Feedrollers

PFA-DA

PFA-OIL

1 mtr hose

All items included in standard set

Product	Part No.	Product	Part No.
PFA unit for 1,0 mm wire (installation set included)	PFA10	U-groove Feed roll 1,0mm for PFA (per piece)	WW072000
PFA unit for 1,2 mm wire (installation set included)	PFA12	U-groove Feed roll 1,2mm for PFA (per piece)	WW053701
PFA unit for 1,4 mm wire (installation set included)	PFA14	U-groove Feed roll 1,4mm for PFA (per piece)	WW053702
PFA unit for 1,6 mm wire (installation set included)	PFA16	U-groove Feed roll 1,6mm for PFA (per piece)	WW053706
Other diameters at request		Other diameters at request	

PFA-RB

Advantages:
- Exact roller alignment
- Closed gear box
- Easy reversible

PFAWT-OA
outlet apapter

PFA-FR

Filter-Regulator

Feedrollers

PFAWT-DA
drum
adapter

1 mtr hose

All items included in standard set

Discription	Part No.	Discription	Part No.
PFA unit for 1,0 mm wire (installation set included)	PFA10RB	U-groove Feed roll 1,0mm for PFA (per piece)	PFADR10
PFA unit for 1,2 mm wire (installation set included)	PFA12RB	U-groove Feed roll 1,2mm for PFA (per piece)	PFADR12
PFA unit for 1,4 mm wire (installation set included)	PFA14RB	U-groove Feed roll 1,4mm for PFA (per piece)	PFADR14
PFA unit for 1,6 mm wire (installation set included)	PFA16RB	U-groove Feed roll 1,6mm for PFA (per piece)	PFADR16
Other diacleters at request		Other diameters at request	

Wall mount bracket

PFA-WM
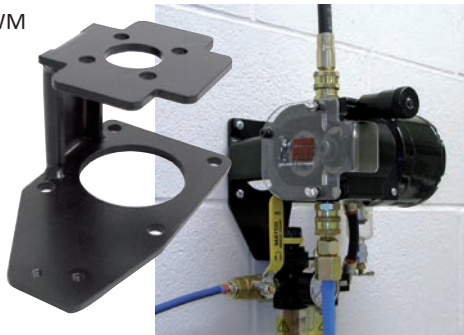
Advantages:
- PFA no longer mounted at drum cone
- Easy drum replacement
- No longer dependent on drum shape

PFA can be mounted to the wall/cell above the drum. Fits both PFA-models is supplied with bolts.

A-1BC

A-1CS PFA

Order one extra inlet adapter. Either with quick disconnect or ceramic insert.

Single solenoid kit

Solenoid valve kit used to reduce air consumption by the PFA during down time.

This 24 volt valve kit is supplied with 10 mtr cable and the needed 3/8 thread connectors and is mounted at FRL entrance. The signal the solenoid uses can be connected parallel to the gas valve, or in case of SAW welding, parallel with the flux valve, in both cases the PFA will always be powered during welding.

PFA-SK

Double solenoid kit for classic PFA

Double action solenoid valve kit used at classic PFA to feed and retract the wire if needed

Kit is supplied with:
- Filter/Regulator
- Liquidator (oil-unit)
- 24Volt Solenoid valve
- 2x 10 meter electrical cable
- 2x 2 meter pneumatic hose 8mm
- Pneumatic quick connectors 8mm with 1/4 thread
- Low threshold quick exhaust for motor outlet
- Exhaust filter

PFA-SK2

Double solenoid kit for PFA-RB

Double action solenoid valve kit used at PFA-RB to feed and retract the wire if needed

Kit is supplied with:
- Filter/Regulator
- 24 volt solenoid valve
- 2x 10 meter electrical cable
- 2x 2 meter pneumatic hose 8mm
- Pneumatic quick connectors 8mm with 1/4 thread
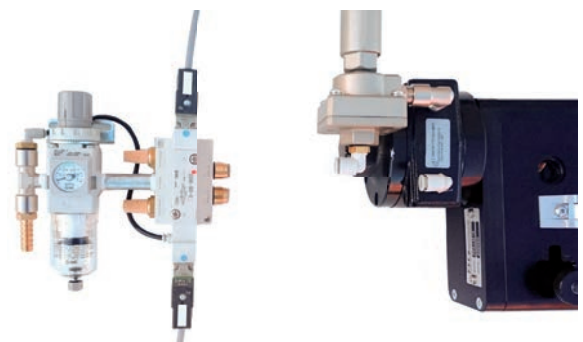- Low threshold quick exhaust for motor outlet
- Exhaust filter

PFA-FRSK

Wire Guide Modules

The new way of thinking in feeding wire, what causes the friction in your wire supply?... the bends! Eliminate the bends, you will eliminate the friction. Feed over 30 meters without assist

Lightweight durable polymer body

Heavy duty rollers with bearings

Wire from source

Conduit connection going to feeder

2x 45º degree wire guide modules combined to a 90º angle
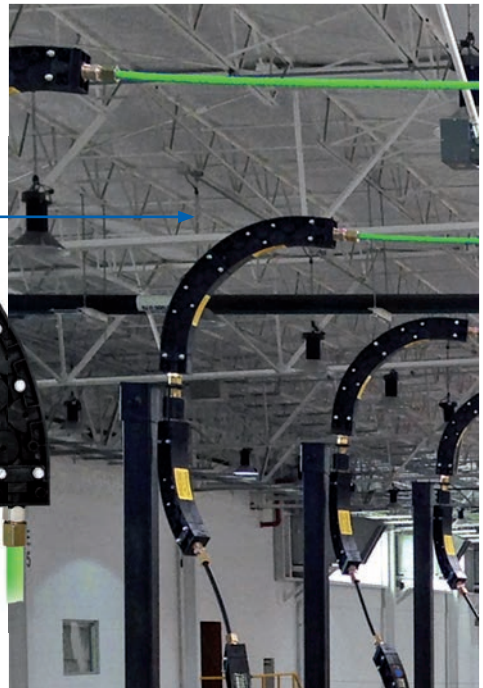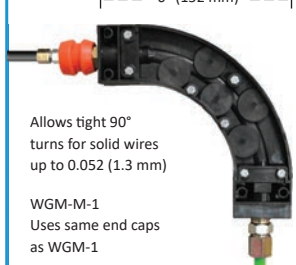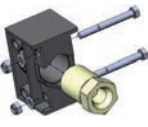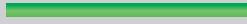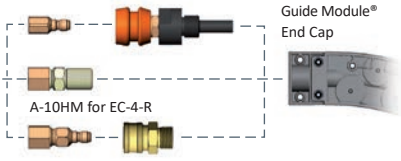
- Create any bend you like by connecting the modules.
- For all kinds of wire from 0,6 to 2,4 mm
- Much cheaper than other roller products
- 3 years Guarantee (excludes damage caused by contaminants)
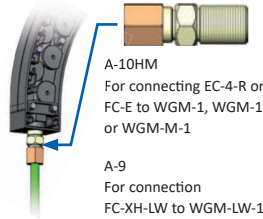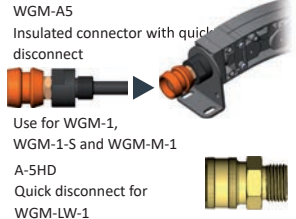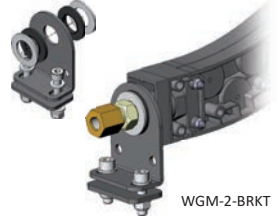
Installation example for Wire Guide Module & end cap assemblies

45º Guide Module

Wire guidance bushings included

Assembled with End Caps

90º Guide Module

Assembled with End Caps

A-5   For use with any male connector

A-10HM   For use with EC-4 conduit

A-10XM   For use with FC-X conduit

To wire feeder, choose the right adapter at page 10

Double male connector assembly

A-10HM

EC-4 conduit Assembly

A-10XM

FC-X conduit Assembly

To drum or bigspool or in case of SAW to turntable

WWDP
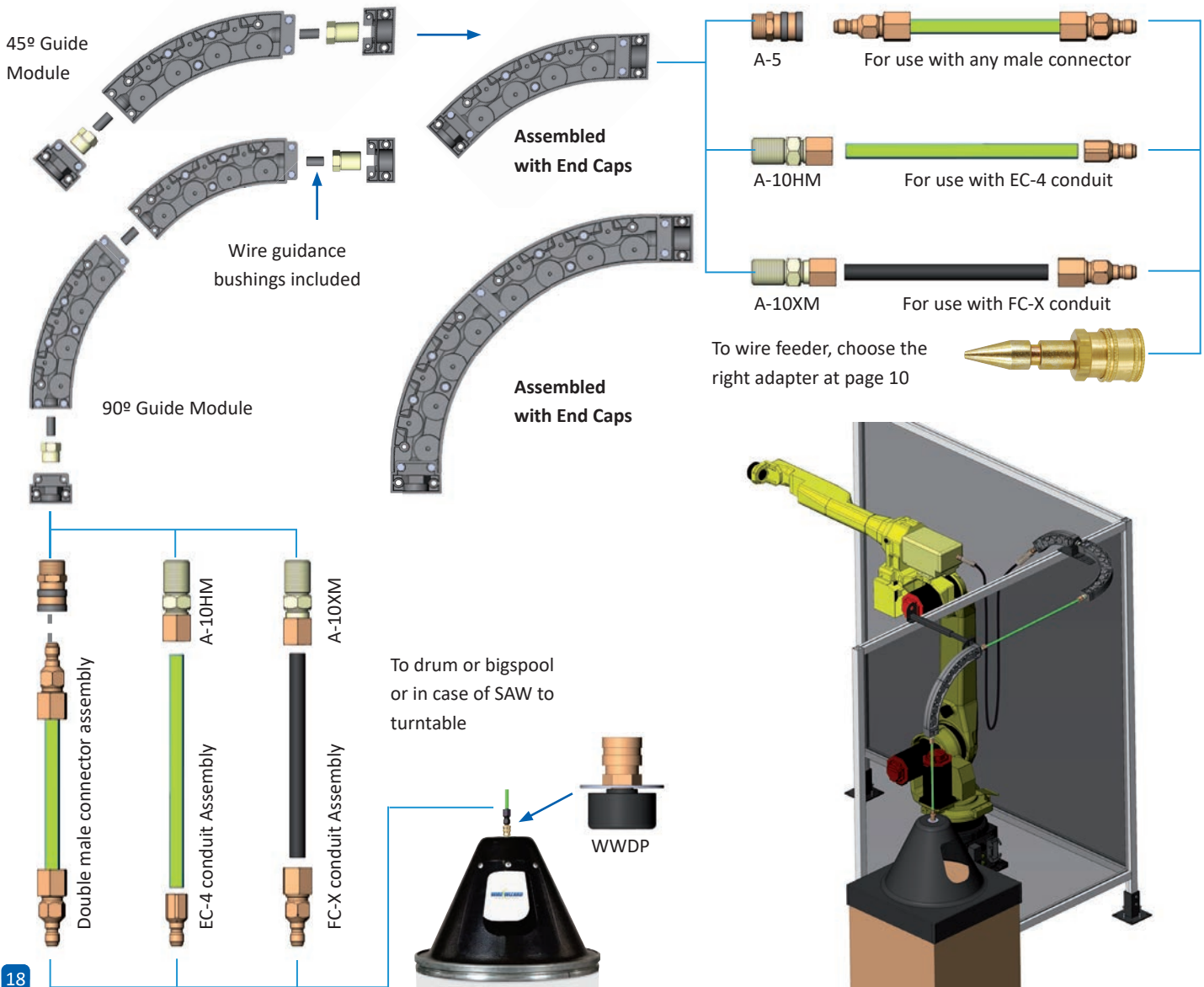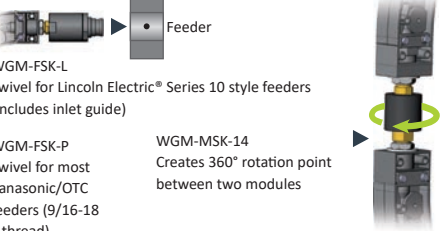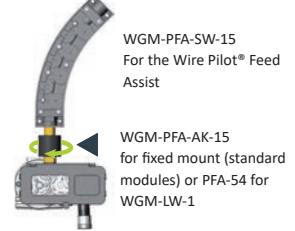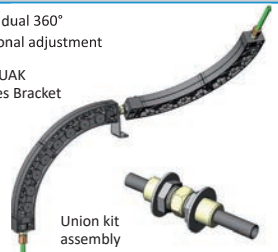
45° Wire Guide Modules	90° Mini Guide Module®	End Cap Connectors	Face Mount Bracket Kit
WGM-1 For solid wire up to 5/64" (2 mm) WGM-1-S For cored and stainless wire up to 5/64" (2 mm) WGM-LW-1 For large wire 3/32" – 5/32" (2.4 mm – 4 mm)	|— — — 6" (152 mm) — — —| Allows tight 90° turns for solid wires up to 0.052 (1.3 mm) WGM-M-1 Uses same end caps as WGM-1	Each kit includes one A and one B end cap End Cap A WGM-ECK-50 Use for WGM-1, WGM-1-S and WGM-M-1 WGM-LW-ECK-50 for WGM-LW-1 End Cap B	Allows 360° directional adjustment WGM-A-10BK Add WGM-A5 or order WGM-2-BRKT for insulated connections

Conduits & Fittings	Wire Wizard® Polymer Conduit	Conduits & Fittings	Wire Wizard® Extra Flexible Conduit
EC-4-R (7.6 MM I.D.) FITTINGS: A-16F-4 OR A-10C-H EC-5 (10.2 mm I.D.) Fittings: A-16F-5 or A-10R	A-16F-# Screw-on Fitting WGM-A5 All modules except WGM-LW-1 Guide Module® End Cap A-10HM for EC-4-R A-10## Compression Quick Disconnect A-5HD for WGM-LW-1 only	FC-X (6.1 mm I.D.) Fitting: A-10C-X FC-XH (7.4 mm I.D.) Fitting: A-10R FC-XH-LW (10 mm I.D.) Fitting: A-9	A-10## Compression WGM-A5 All modules except WGM-LW-1 Guide Module® End Cap Swaged Fitting (pre-cut only) A-9 A-6HD Quick Disconnect A-5HD for WGM-LW-1 only WGM-LW-1 only

Conduit connection options		Weld-on or Bolt-on mounting bracket	Insulated face mount bracket
Threaded connectors	**Detachable qd connectors**		Allows 360° directional adjustment
A-10HM For connecting EC-4-R or FC-E to WGM-1, WGM-1-S or WGM-M-1 A-9 For connection FC-XH-LW to WGM-LW-1	WGM-A5 Insulated connector with quick disconnect Use for WGM-1, WGM-1-S and WGM-M-1 A-5HD Quick disconnect for WGM-LW-1	WGM-044	WGM-2-BRKT

Cell Wall Mounting Kit	Cell Wall Mounting Kit	Adjustable Wall Mount Bracket	Male disconnect fittings
Single sided WGM-WK-1-1	Double sided WGM-WK-2-1	WGM-WK-1-3 Adjustable for up to 3" (76 mm) thick walls	WGM-049 Male fitting for WGM-1, WGM-1-S and WGM-M-1 WGM-LW-049 Fitting for WGM-LW-1

Drum Hood Mounting Kit	Hood Swivel Kit	Module / Feeder Swivel Kits	Feed Assist Swivel Kit
WGM-DK	Allows 360° rotation on top of drum cover. WGM-HSK	Feeder WGM-FSK-L Swivel for Lincoln Electric® Series 10 style feeders (includes inlet guide) WGM-FSK-P Swivel for most Panasonic/OTC feeders (9/16-18 F thread) WGM-MSK-14 Creates 360° rotation point between two modules	WGM-PFA-SW-15 For the Wire Pilot® Feed Assist WGM-PFA-AK-15 for fixed mount (standard modules) or PFA-54 for WGM-LW-1

L-Bracket Mounting Kit	360° Union Adapter Kit	45° Hanging Bracket Kit	90° Hanging Bracket Kit
WGM-LBM-BRKT	Allows dual 360° directional adjustment WGM-UAK Includes Bracket Union kit assembly	WGM-1-BRKT	WGM-1-90-BRKT WGM-LW-BRKT for WGM-LW-1

Wire Guide Modules

Installation example

Outside weldcell

WGM-1
WGM-ECK-50 (2nd Half)
WGM-ECK-50 (2nd Half)
WGM-WK-2-1
WGM-1
WGM-ECK-50 (1st Half)
A-5
Included
WGM-1
WGM-ECK-50 (1st Half)
A-10HM
EC-4

Inside weldcell

Installation example

WGM-1

WGM-1
WGM-1
WGM-ECK-50 (2nd Half)
WGM-ECK-50 1st Half
WGM-DK
A-10HM / A-10XM
EC-4 or FC-X
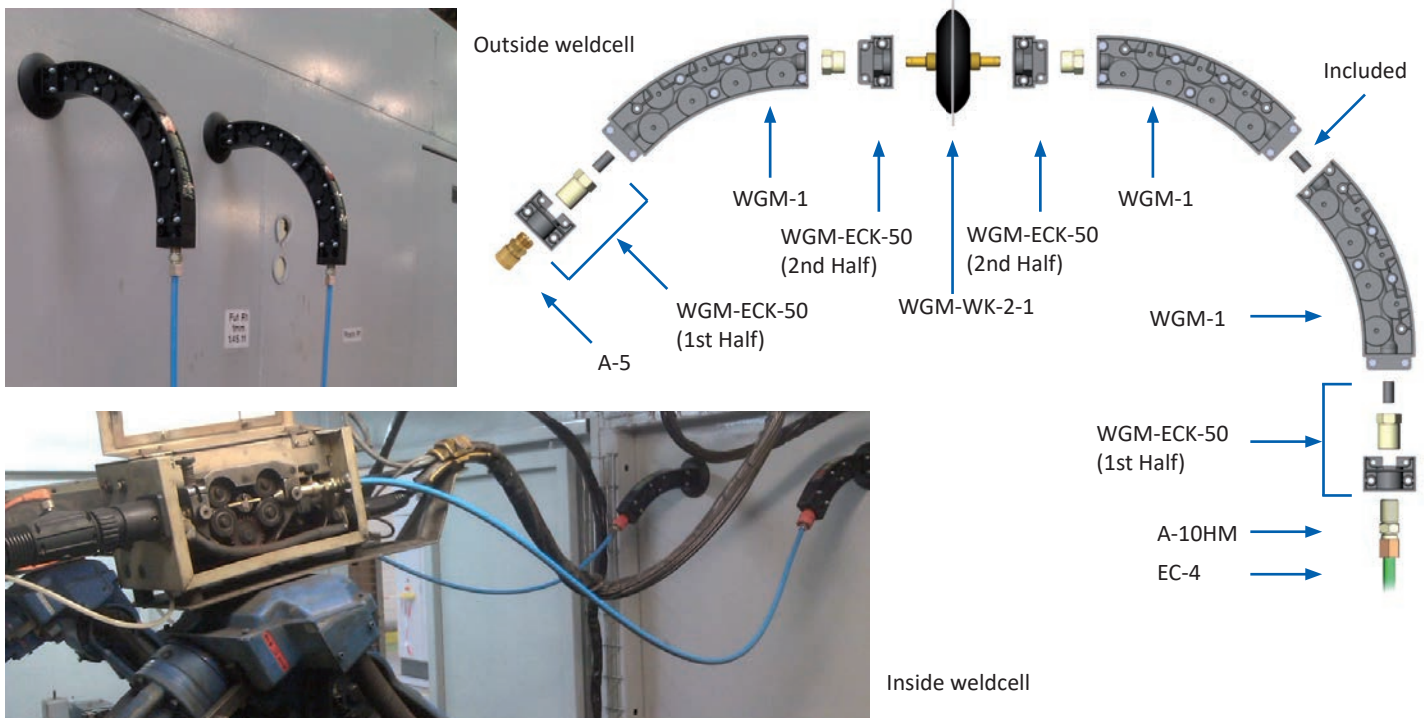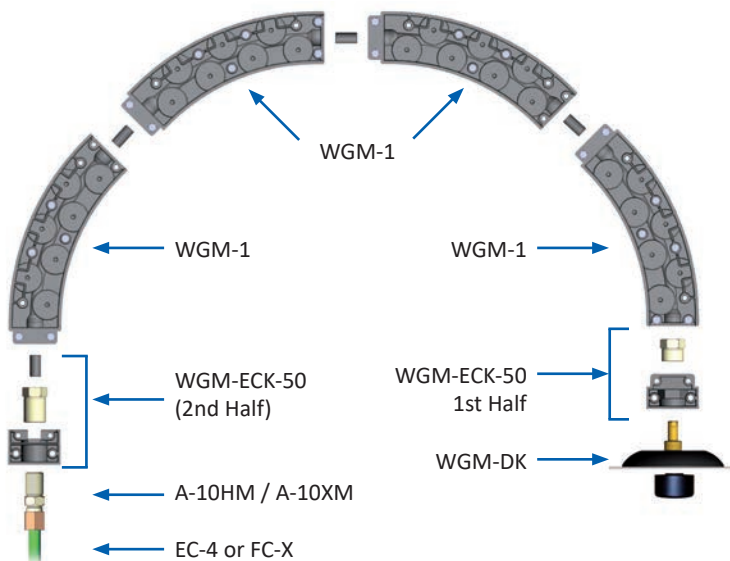
Application:
Automotive production plant
Drums at first floor above robotic installation

Data before modification		Data after modification	
Distance		Distance	
drum to feeder :	6,6 Meter	drum to feeder:	6,6 Meter
Set-up:	Cheap plastic liner only	Set-up:	FC-X Liner + 180 module
Pull test:	Variating 3,5 - 7,0 Kg	Pull test:	constant 0,35 Kg
Feeder power:	0,7 Ampere	Feeder power:	0,15 Ampere
Maintenance:	Changing liner once in two weeks	Maintenance:	Free of maintenance for over three years

WIZARDGEAR
CABLE MANAGEMENT

Flex module cable chain

Featuring the same innovative concept as the other Wire Wizard Guide Modules, the FLEX Module is designed especially for welding applications with automated tracks, gantries and booms. The FLEX Module is built up from segments with ball-bearing rollers guiding the wire. These rollers eliminate friction and drag on the wire, providing a smooth, consistent wire feed. For wires 0,8mm – 1,6mm

Available from stock

Description	Part No.
Wire Guide FLEX Module per Meter	WGM-F-B
Wire Guide FLEX Module End Cap Kit	WGM-F2-ECK
1,5 Meter FLEX Module complete kit incl. end caps	WGM-F-015
3,0 Meter FLEX Module complete kit incl. end caps	WGM-F-030
4,5 Meter FLEX Module complete kit incl. end caps	WGM-F-045
6,0 Meter FLEX Module complete kit incl. end caps	WGM-F-060

Compact Module 90

160 mm

205mm

185 mm

A-4
A-16MST
A-2FRO
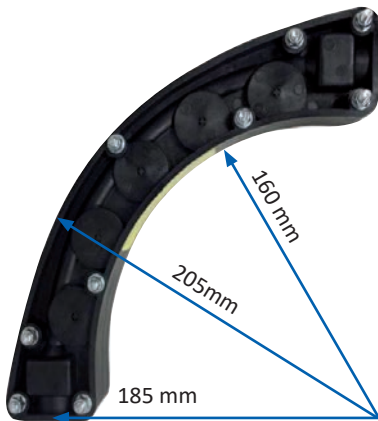
WGM-C1
IN: 1/4" female thread
OUT: 1/4" female thread

Choose one of the connectors with a 1/4" thread to connect these compact modules.
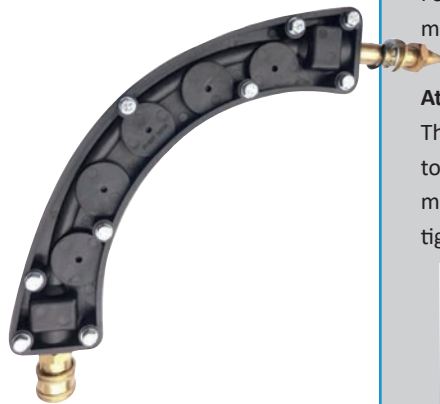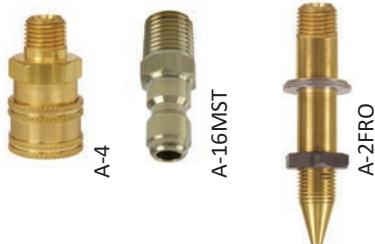
The compact 90 module is only available in 90 degree angle and made as complete unit including end caps and connectors.

For cost- and spacesaving rollers are only made at the inner curve of the module.

Attention:
These compact modules cannot be built together with the regular modules and are mainly used at wire feeder entrance in case of tights robotic weld cells.

Submerged Arc Welding

SAW Conduits

Spiral Conduits

	Article	Dimensions	Connector	Wire	Order	Coil
	FC-XH	7,5 x 15,50 mm	A-10R	1,6 - 2,4 mm	Per mtr	30,5 mtr
	FC-XH-LW	10,0 x 19,00 mm	A-9+A6 or A9 + A6 HD	2,4 - 4,8 mm	Per mtr	30,5 mtr
Polymer Conduits						
	EC-5	10,0 x 15,20 mm	A-10R	1,6 - 4,8 mm	Per mtr	152 mtr

HD Connector with large bayonet

6,5mm
11,8mm

A-6

9,8mm
14,9mm

A-6HD

Regular Bayonet

Heavy duty Bayonet
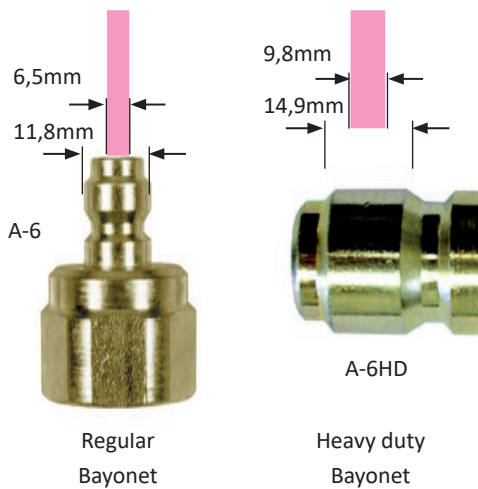
Specially for the large wire diameters used in Submerged Arc Welding Wire Wizard developed a range of connectors with a large Bayonet. These HD connectors provide a larger feedthrough than the regular connectors and avoid the connector passage becomes a bottleneck in your system.

By using these heavy duty connectors wire shaving inside the connector can be avoid.
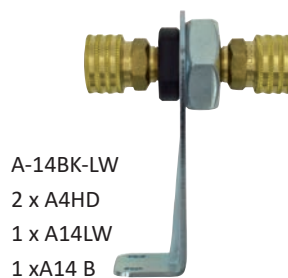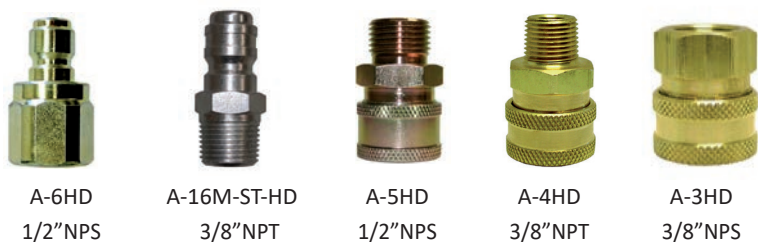
A-14BK-LW
2 x A4HD
1 x A14LW
1 xA14 B

HD Combinations
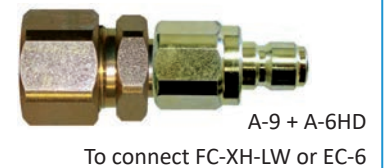
A-9 + A-6HD
To connect FC-XH-LW or EC-6

A-4HD + A-1DSPFA
To use as outlet at PFA-unit

WWTT-DP-LW

A-6HD
1/2"NPS

A-16M-ST-HD
3/8"NPT

A-5HD
1/2"NPS

A-4HD
3/8"NPT

A-3HD
3/8"NPS

Mechanical turn tables

WWTT-500
WWTT-500 W + Wheels

Removable guide arm
for easy drum change

Bracket for mounting
PFA-unit at Turn Table

Part # WWTT-PBS

Lenght x Width = 76x66cm
Weight: 64,5 kg
Max. Load : 500 Kg
Max Dia 66 cm

WWTT-1000:
Length x Width: 100x100 cm
Weight : 192 Kg
Max. Load : 1.000 Kg
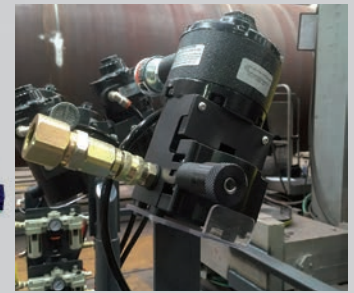
With single PFA for 2,0 to 2,8 mm

PFA-union connector A1DS-PFA-U
With double PFA for 3,2 to 5,0 mm

PFA-Unit for SAW

Feedrollers
U-Groove   V-Knurled

A-4HD+   or   A-1BC-HD   PFA-FRL
A1-DSPFA
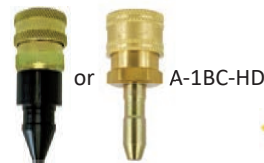
A1-CSPFA   OR   PFA-DA-HD   PFA-oil

Turn table Drum cone   All items included   1 mt hose
                              in standard set

PFA + Installation set	Part No.	PFA feed rollers U-Groove	Part No.	PFA feed rollers V-knurled	Part No.
PFA unit for 2,0 mm wire	PFA20	U-Groove Feed roll 2,0mm p.p.	WW053704	V-Knurled feed roll 2,0mm p.p.	WW132960
PFA unit for 2,4 mm wire	PFA24	U-Groove Feed roll 2,4mm p.p.	WW053703	V-Knurled feed roll 2,4mm p.p.	WW132961
PFA unit for 3,2 mm wire	PFA32	U-Groove Feed roll 3,2mm p.p.	WW053707	V-Knurled feed roll 3,2mm p.p.	WW132963
PFA unit for 4,0 mm wire	PFA40	U-Groove Feed roll 4,0mm p.p.	WW05M532	V-Knurled feed roll 4,0mm p.p.	WW193700
PFA unit for 5,0 mm wire	PFA50			V-Knurled feed roll 5,0mm p.p.	WW193701

Submerged Arc Welding

Wire Guide Modules for large wire

50 cm

42 cm

46 cm
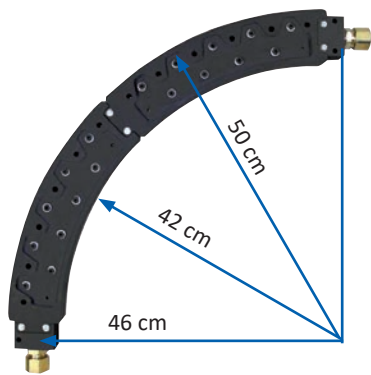
- Up to 5,0mm wire
- Steel ball-bearing rollers
- Eliminate friction in bends
- Eliminate slipping feed motor
- Easy connected with conduit

Modules can be
used in combination
with PFA-unit

LW-Modules in use
- 3 x WGM-LW-1
- 1 X WGM-LW-ECK50
- 2 x A-9
- FC-XH-LW Conduit
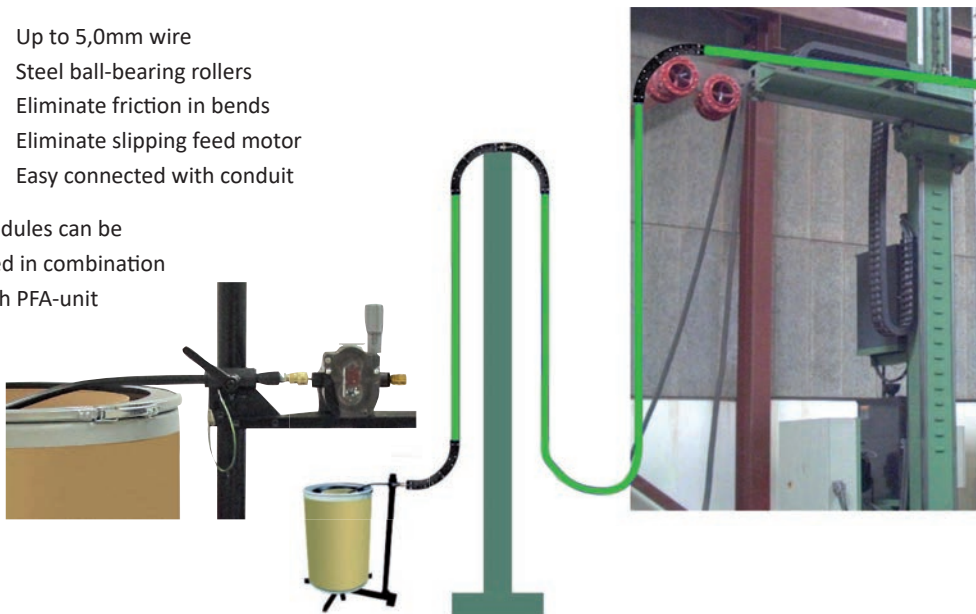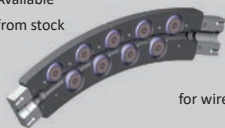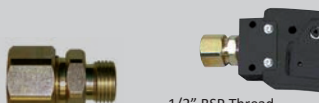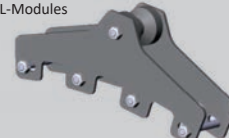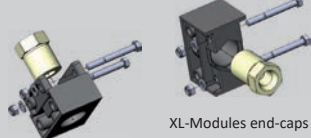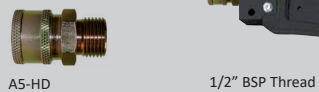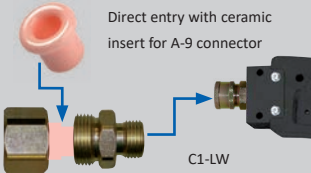
Flex module cable chain

Featuring the same innovative concept as the other Wire Wizard Guide Modules,
the FLEX Module is designed especially for welding applications with automated
tracks, gantries and booms. The FLEX Module is built up from segments with
ball-bearing rollers guiding the wire. These rollers eliminate friction and drag
on the wire, providing a smooth, consistent wire feed. For wires 0,8mm –
1,6mm

Wire Guide Modules accessoires

Available
from stock

Large Wire
Guide Module
for wire up to 5,0 mm
WGM-LW-1

Conduit connector
for FC-XH-LW & EC-6 Part no. A-9

1/2" BSP Thread

Hanger/support
bracketfor XL-Modules

Part no. WGM-4-BRKT
Bracket to mount XL-Modules to
the Turn Table

XL-Modules end-caps
WGM-LW-ECK-50

Quick disconnect for
Bayonet (see page 22)

A5-HD

1/2" BSP Thread

Direct entry with ceramic
insert for A-9 connector

C1-LW

Conduit clamp for
mounting
FC-XH-LW
or EC-6 to
the boom
EC6-CC

Non-Stop Wire Dispensing

New in the Wire Wizard range Butt Welder for
Submerged Arc Wire Weld up to 5 mm without problem

CE-Marking
240 Volt/50Hz
Weight: 14 Kg
Range: 2,4 - 5,0 mm

WW-BW-LW

Special cutter to cut wire
with straight edges

BWWP-LW

Avoid losing lots of time with feeding in a new wire. Due to the large wire diameters used in the submerged arc business feeding in a new wire can be a very time consuming job. All this time your production is down. With this small, hand-held butt welder the wire-ends can be welded together very easily. Once the welding is done the feeder motor will do the rest and welding restarts much quicker as before.

For Submerged Arc Wires is not an automatic drum change setup available.

Potentiometer

Adjustable

Auto
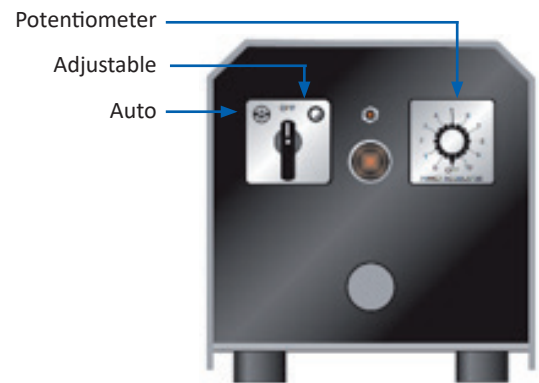
End-less wire by using wire detection sensor

How it works

- Step 1 Drum is empty and wire end passes the sensor

- Step 2 The sensor signals stops the welding

- Step 3 Disconnect conduit at "A" and place Cone at the new drum

- Step 4 Feed the new wire through the conduit

- Step 5 Weld the old wire end to the new wire end with the butt welder

- Step 6 Push the overlength into the drum and connect the conduit again at "A"

- Step 7 Start welding again

To welding machine or robot

Sensor with sensor block see page 5 for article numbers

A

A-14BK bracket kit or PFA-unit with wall bracket in case of large conduit length

short conduit few meters only
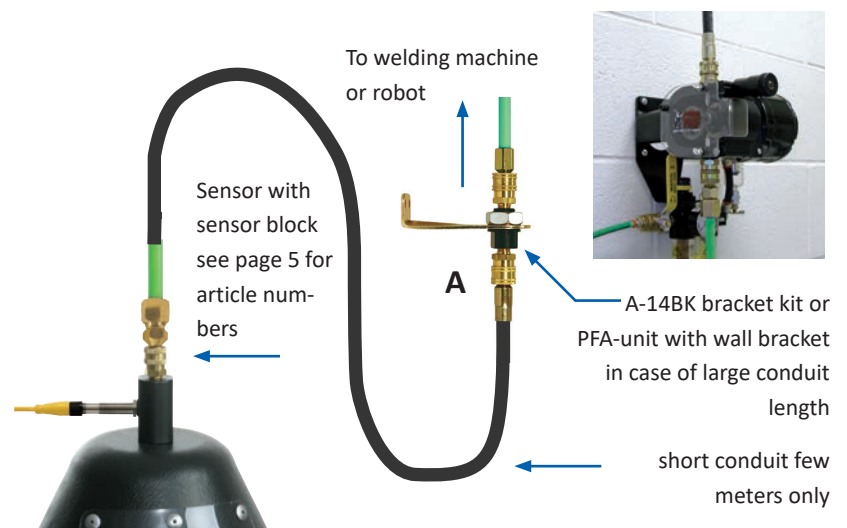
Non-Stop Wire Dispensing
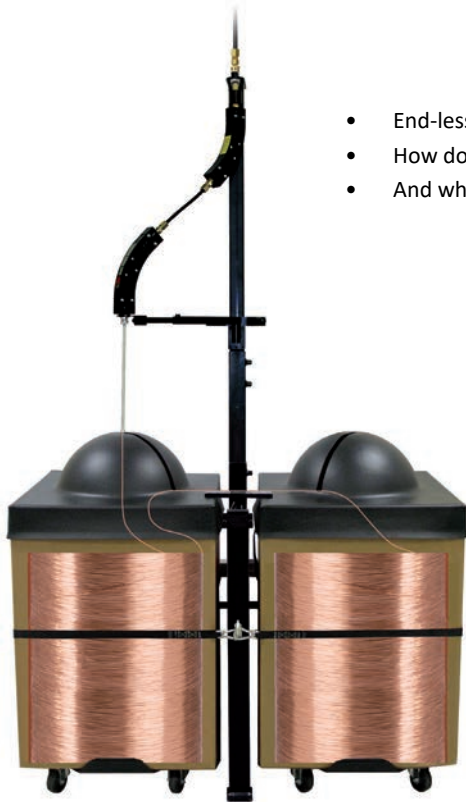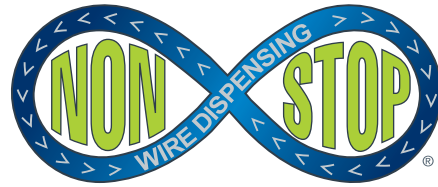
- End-less wire....
- How does it work?
- And what do we need for it?
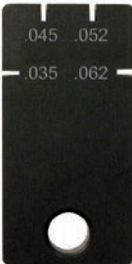
How?

Changing drums = downtime? Not in case of an endless wire system. The wire from the new, full drum is connected to the end of the drum in use. If that drum is empty, the wire flips over to the full drum and keeps running. This transfer from one drum to another is without interruption of the welding.

Why?

- No more downtime during change of drum and feeding in new wire
- No more half finished products and burn-backs caused by wire-end
- More production

What do we need?

Special drums	Frame to position drums	Special wire cutter
1 End-less drums with 'start' and 'end' both in the top of the drum and labeled	**2** Frame to position the drums underneath the swing	**3** X V To cut the wire off with straight ends to make a proper weld
Butt welder	**Wire dresser**	**Gage block**
4 Butt Welder to weld the two ends of the wire together	**5** Tool to clean the weld, can be a cutter or mini grinder	**6** .045 .052 .035 .062 Check if the weld is properly cleaned and fit the contact tip

Non-Stop Wire Dispensing

Wire Parters
BW-WP

Adjustable Swing made
with modules

Single torch unit
(with round drums)

2-Torch unit
(with round drums)
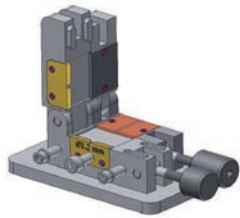
Wire Dresser
1,0mm BW-WD10
1,2mm BW-WD12
Pulls the welded wire through a set of
cutting blades of exact size to strip off
the weld-bur

Drum hoods specially for
endless wire
available in round,
octagon and square

Drum 1

Drum 2

Start Wire

Start wire

.045 .052

.035 .062

Gage-Block
WW-GB

With wire gage for
1,0/1,2/1,4/1,6mm

End Wire

Optional
drum dollies
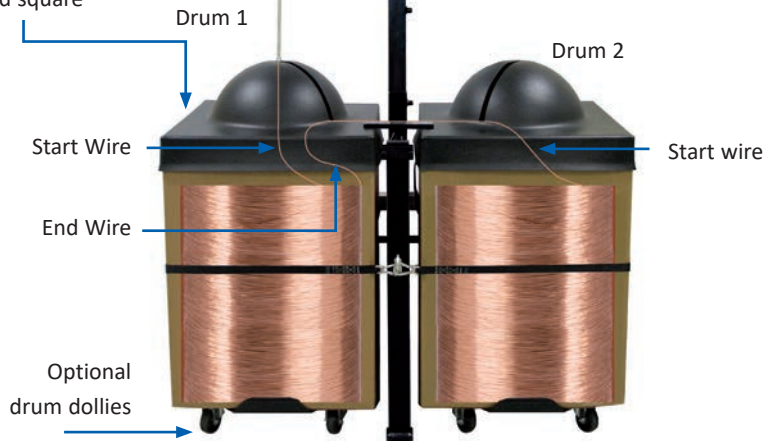
Butt Welder for solid and flux cored wire

Adjust mech. pressure

Adjust welding stroke

Wire clamps

Switch
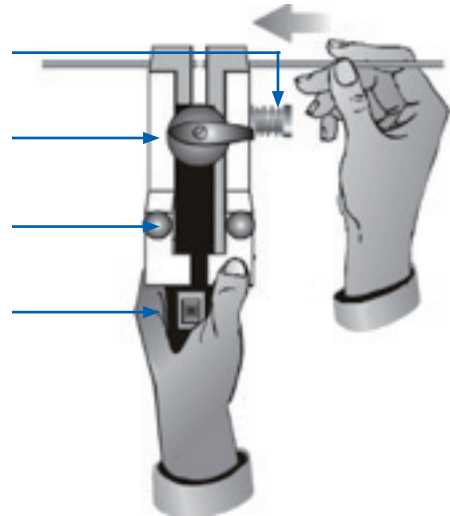
Potentiometer
Adjustable power
Auto (full power)

CE-Marking
240 Volt / 50 Hz
Weight: 13 Kg
Range 1,0 mm - 2,0mm

CE

WWBW

Anti-Spatter Solutions

Spatter Shield the new way of anti-spatter

What is Spatter Shield?

Spatter Shield is a revolutionary new way of anti-spatter.
- Up till now we protected the work piece against the spatter.
- From now on we protect the spatter against the work piece.

How does it work??

The Spatter Shield unit contains a special fluid which is atomised into the shielding gas. This mist creates a shielding layer around the spatter which makes that it won't stick to the work piece, tooling or jig. The same shielding layer is created at the torch parts which are herewith protected as well.

The unit is easily installed and one 70ml bottle of fluid can be used to weld up to 250 Kg of welding wire. Works for mild steel and Stainless steel but not for Aluminium.

MIG Transit Sprayer 135

GAS IN — Magnet ventil — Gas flowmeter — Welding gas — Valve — GAS OUT
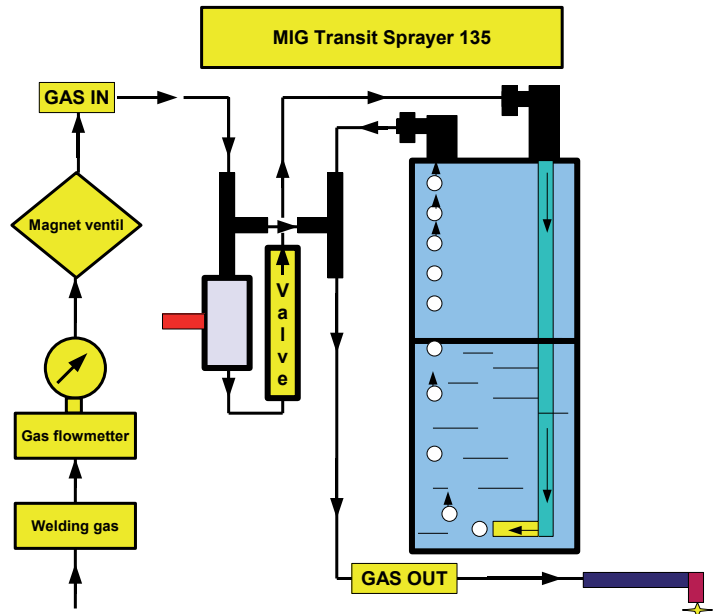
Connections

For easy connection just cut the existing hose and plug the ends to the hose connectors. The unit is self-powered and uses gas flow only.

WW-SSUW

Regulator

With the regulator the amount of atomised mist can be adjusted.

Fluid

The refill bottle has the capacity to weld up to 250 Kg of welding wire.

WW-SSFW

Mounting kit

For easy mounting to robot or welding machine. The swing keeps the unit in vertical position.

Anti-Spatter Solutions

WW-SSUW

WW-SSFW

- Less or no after treatment of workpiece
- Less cleaning cycles of torch needed
- Longer lifetime of torch consumables
- Longer lifetime of jig and tooling
- Clean weld cell by using less fluids
- More production

Tooling	Consumables
before	before
after	after
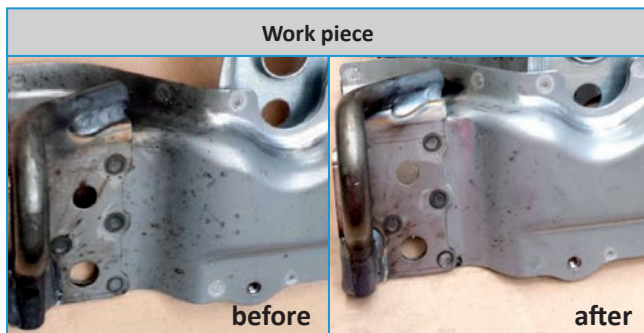
Work piece	
before	after

Traditional anti-spatter

For the traditional use of anti-spatter Wire Wizard offers the range of Blue Magic anti-spatter products. This cost effective, environmentally safe product provides a superb performance even in high temperature applications.

- Non-flammable no harmful chemicals
- Biodegradable low pH-level
- Contains no silicone
- Perfect paint over properties

Blue magic™ concentrate

To avoid high freight costs we can also supply the Blue Magic™ in a concentrate.

This concentrate is sold in 19 liter jerrycans and can be mixed with de-onized water to a total of 200 liter of Blue Magic anti-spatter.

Blue Magic™ Concentrate
EAS1000-CC

Blue Magic™

Discription	Part No.
1 Liter Bottle	EAS1000-C32
3,8 Liter Bottle	EAS1000-C1
19 Liter Jerrycan	EAS1000-C5
200 Liter Jerrycan	EAS1000-C

Torch products

High performance gascooled Manual Mig Torch

400 Amps 100%
Gascooled

Lead competitor

100ºC Max

Powerball
24% Cooler

75ºC Max

Ergonimic Design
Durable handle with comfort grip and trigger

Adjustable Trigger Pull
Allows fine tuning based on user preference or application
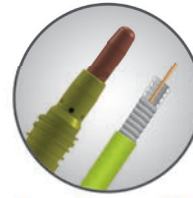
Proven Consumables
Powerball® long-life consumables reduce downtime & operating costs
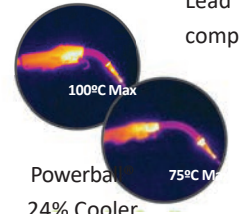
Superior Cooling
Better conductivity & effeciency results in a cooler gun

Part No.	Range	Cable length	Gascup	Connector
WPBT400M030	400 Amp 100% gascooled	3,0 meter	Thread-on	EURO (others at request)
WPBT400M045	400 Amp 100% gascooled	4,5 meter	Thread-on	EURO (others at request)
WPBT400M060	400 Amp 100% gascooled	6,0 meter	Thread-on	EURO (others at request)

High performance gascooled Automation Mig Torch

500 Amps 100%
Gascooled
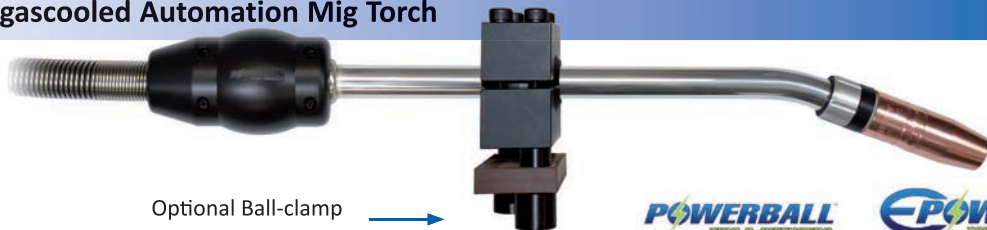
Optional Ball-clamp
WPTFAM

Part No.	Range	Cable length	Gascup	Connector
WPBT500A008	500 Amp 100% gascooled	0,75 meter	Thread-on	EURO (others at request)
WPBT500A015	500 Amp 100% gascooled	1,5 meter	Thread-on	EURO (others at request)
WPBT500A030	500 Amp 100% gascooled	3,0 meter	Thread-on	EURO (others at request)

Powerball® Contact Tips and Diffusers

PowerBall® Contact Tips and Diffusers feature a patent pending design with an all-copper current path for maximum conductivity and performance. The tip seats firmly in a copper insert within the diffuser with a smooth elliptical end. Traditional tip designs lose conductivity at this connection point since they are typically flat or tapered. A variety of High Performance Nozzles are available to complete the PowerBall® torch package. Boost your welding performance with PowerBall® Torches & Consumables!

PowerBall® Tip Styles Available
Tips available for all wire sizes up to 2,4 mm

38mm Tip
(PB-1)

38mm Heavy Duty/High Amp. Tip
(PB-3)

38mm Tip for Small Torch Nozzles
(PB-5)
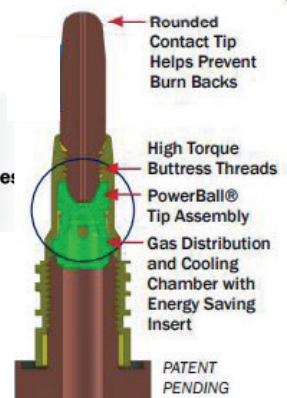
Rounded Contact Tip Helps Prevent Burn Backs

High Torque Buttress Threads

PowerBall® Tip Assembly

Gas Distribution and Cooling Chamber with Energy Saving Insert

PATENT PENDING

Results with Wire Wizard® wire dispensing equipment setup. Consumable life will vary based on welding application.

Torch liner made of elliptical wire

The Elliptical wire technology used for the FC-X conduit is also available for torch-liners. Besides the Elliptical shape the liner has a patented coating for an extreme smooth surface.

ELLIPTICAL WIRE TORCH LINER

Fewer contact points between liner & the wire

Wear pattern in the E-Power® liner after feeding an equal amount of weld wire. Extended service life due to less wear.

Contact Pressure

PRESSURE
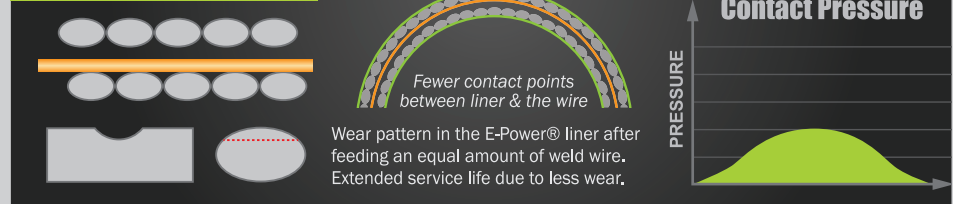
E-Power Elliptical wire with E-power coating
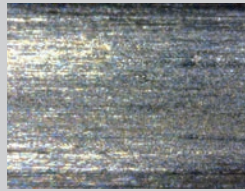
Wire:	1,2mm
Speed:	4,5 M/min
Lenght:	4,6 mtr
Min pull:	0,51 Kg
Max pull:	1,61 Kg
Average:	0,82 Kg

72% LESS FRICTION!

Traditional liner

ROUND WIRE TORCH LINER

More contact points between liner & the wire

Wear pattern in a round wire liner after feeding an equal amount of weld wire. The groove is approximately 60% deeper.

Contact Pressure

PRESSURE
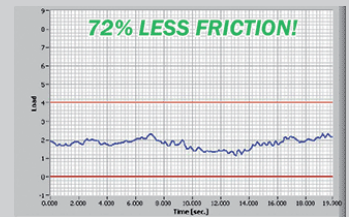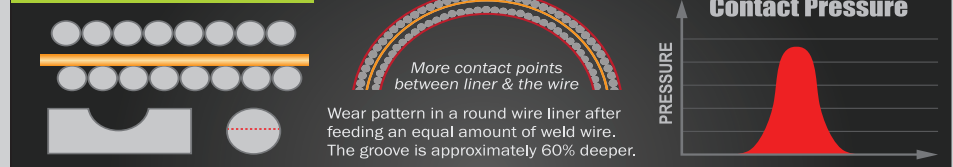
Traditional liner of round wire with galvaneel coating

Wire:	1,2mm
Speed:	4,5 M/min
Lenght:	4,6 mtr
Min pull:	1,97 Kg
Max pull:	3,62 Kg
Average:	2,87 Kg
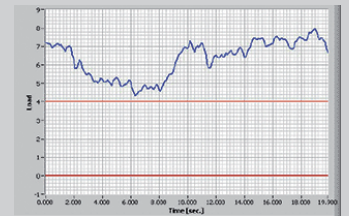
Problems in wire feeding at CMT installation? E-Power is the perfect solution for all wire feed problems.

Part No.	IDxOD	Wire	Length	Connection
WTPB354506	2,0 x 4,7mm	1,0 – 1,2mm	1,8 mtr	EURO
WTPB354510	2,0 x 4,7mm	1,0 – 1,2mm	3,0 mtr	EURO
WTPB354515	2,0 x 4,7mm	1,0 – 1,2mm	4,6 mtr	EURO
WTPB354525	2,0 x 4,7mm	1,0 – 1,2mm	7,5 mtr	EURO
WTPB2047B	2,0 x 4,7mm	1,0 – 1,2mm	30,5 mtr (coil)	None
WTPB2547B	2,5 x 4,7mm	1,2 – 1,6mm	30,5 mtr (coil)	None
WTPB3047B	3,0 x 4,7mm	1,6 – 2,0mm	30,5 mtr (coil)	None
WTPB3662B	3,6 x 6,2mm	2,0 – 3,2mm	30,5 mtr (coil)	None

Torch liner made of heat resistant polymer

Within the range of the torch products Wire Wizard also supplies a heat resistant Carbon-polymer torch liner for all non-ferritic wires. The Carbon-polymer liner is more rigid and has better feeding properties as the competitor made of Teflon.

Part No.	IDxOD	Wire	Length	Connection
WPHTL1547	1,5 x 4,7mm	0,6 – 1,0mm	30 mtr (coil)	None
WPHTL2347	2,3 x 4,7mm	1,2 – 1,6mm	30 mtr (coil)	None
WPHTL3247	3,2 x 4,7mm	1,8 – 2,4mm	30 mtr (coil)	None

Support Equipment

Universal stand for PFA and Module Mounting

Wire Wizard offers a solution for stand-alone drums. This stand makes it possible to mount the modules or PFA above the drum without support from the cell-wall.

Since there is no equipment mounted at the drum cone, drums are easy to change. Stand is supplied with one arm and can be extended with more arms or a spool holder.

EC-TCD

75 / 150cm
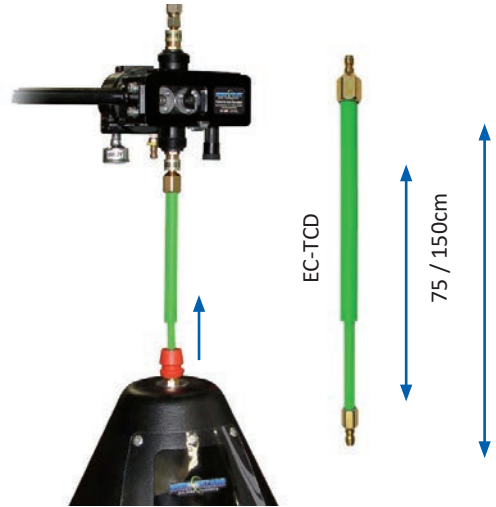
Make changing drums easy with this telescoping liner, simple disconnect from the drum hood and slide the conduit up. Make it yourself using EC-4 and EC-6 or buy the 1,5 Meter set.
EC-TCD

Part No.	Description
WW-US	Universal Stand + arm
WW-USA	Additional Arm
WW-USSH	Spool-holder + bracket

Spool-cover
WW-USC

Spool-holder only
WW-USH

Spool connector kit with ceramic insert
WWTT-DP

Retractable conduit balancers & hangers

conduit balancer

- Prevent your conduit for getting hooked up and get broken
- Avoid sharp bends in your conduit causing feeding failures

conduit hanger

CHH-22 = 56 cm Wide made of steel

CHH-10 = 25 cm Wide made of steel

1-2 Kg = RCH-2
2-4 Kg = RCH-4
6-8 Kg = RCH-8

CHH-8P = 20 cm Wide
Made of aluminium
+ Metal Shackle

CHH-5P = 14 cm Wide
Made of plastic
+ Metal Shackle

Larger sizes at request available for weights up to and over 100 Kg

CE–MARKED Handling Equipment

Drum lifter with safety hooks

- CE- certified
- Designed for ECO-Drums
- Usable with straps or handles
- Capacity: 500 Kg
- Weight 8 / 9 Kg

51-52 cm
FDL-21
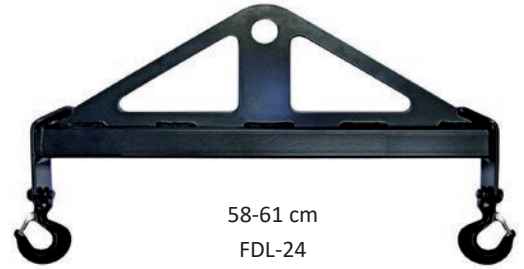
58-61 cm
FDL-24

Drum lifter with clamps

CE-certified

- Spring loaded clamp holds drum firmly in place
- For fiber or steel drums
- Accepts diameters from 47 cm to 66 cm

Weight   : 11,4 kg
Capacity   : 453 kg

NOTE: Drum rim must be within 25 mm of the top of the drum.
Content weight must not exceed the drum manufacturers' packing limit.
Drums must be closed with lids properly sealed.

"47 – 66 cm"
FDL

FDL drum lifter with FDL-FA

Heavy duty drum dolly round

- Non-conductive wheels
- 7,5 cm Textile wheels
- HD Roller bearings
- Easy movable
- Deck height 12 cm
- Capacity: 500 Kg
- Weight 10,5 Kg

FDD-21
Up to 53 cm

Heavy duty drum dolly reversable

FDD-MD = 54/64 cm
FDD-MD-LD = 64/76 cm

- Deck usable in two ways
- Non-conductive wheels
- 7,5 cm Textile wheels
- HD Roller bearings
- Easy movable
- Deck height 11 cm
- Capacity: 500 Kg
- Weight 10,5 / 13,5 Kg

Small set-up
At FDD-MD = up to 54 cm
At FDD-MD-LD = up to 64 cm

Large set-up
At FDD-MD = up to 64 cm
At FDD-MD-LD = up to 76 cm

Gas equipment

Adjustable gas savers

GFJ-ADJ-A
5/8"-18 Male x
5/8"-18 Female

GFJ-ADJ-B
1/4"-18 Male NPT x
5/8"-18 Female

GFJ-ADJ-C
1/4"-18 Male NPT x
1/4"-18 Female

New Wire Wizard Adjustable Gas Savers cut gas usage and allow the ultimate fine tuning for inert gas! The gas saver works by restricting gas surge upon arc starts, and the included screen prevents blockage. After installing, manufacturers have seen an average of 35% in gas savings.

Some manufacturers have even saved up to 50% on inert gas!

- Reduces gas consumption by restricting gas surge upon arc starts, screen also prevents blockage
- Adjustable valve allows full control of gas flow, an added benefit for facilities utilizing long bulk gas delivery systems with pressure drops

Gas savers available for the inlet or outlet side of gas solenoid

Gas savings as a result of eliminating gas surge upon arc start

Gas Savings

Legend: Flowmeter — Gas Saver

Y-axis: CFH (0 to 80)
X-axis: TIME (SEC) (0 to 25)

Gas Flow Switch EL-RVMU

- Detects if gas flow is too high or too low
- Switches off in case of gas flow error
- Usable as normally open or closed
- Flow range 0,5-25 Ltr / min
- 1/8 Thread connection
- 24 VDC – max 55mA

EL-RVMU

Digital Gas Flow Sensors

Gas Flow Sensor
Measures/monitors volume of gas flow as CFH or LPM, gas surges and total gas used (can function as a totalizer). Pre-calibrated with most shielding gas mixtures. Standalone version available.

- Measures the actual gas flow (l/min)at the gascup
- Flexible hose for easy operator readings

EL-GFM

Wire feed sensor, model HHSS

This hand-held battery operated tachometer is capable to measure the exact wire speed in meters per minute or meters per hour. This makes it possible to use the HHSS to calibrate your wire feeder. The HHSS also has a function to totalize the amount of wire in meters or centimeters. This function can be very helpful in order to measure the amount of welding wire used during a certain period. For example to measure the amount of wire used to weld a product.

Additional Features
- Handles wire diameters from 0,8 up to 3,2 mm.
- Rugged aluminum construction with Delrin wire guide head.
- Displays wire speed with automatic floating decimal point.

HHSS-12 obtaining
measurement at the torch end

Wire Feed Sensor
WC-1WS-S

Wire draw gauge, model WWPT

The electronic WWPT is designed to accurately measure the draw weight of all diameters of weld wire pulling through the conduit. This allows the operator to determine if the conduit needs to be changed by the amount of strain the wire is creating on the feed motor. Hand-held, battery powered (9-volt).

Additional features
- Capable of averaging 10 pulls of wire, storing the largest draw
- Measures in English or metric at the touch of a button
- Easy to read 5-digit LCD display
- Ergonomic plastic housing

WWPT
Wire draw gauge

Support equipment

Non-flammable drum covers

Wire Wizard fire resistant drum covers provide a protection against cardboard drums catching fire. When drums stand near or inside the weld-cell the cardboard of the drum is a potential fire risk. Available for round, square and octagon drums.

Shape	Size	Part No.
Round/ Octagon	53 cm	DC-21R
Round/ Octagon	60 cm	DC-24R
Square	54 cm	DC-21S
Square	62 cm	DC-24S

TORCH WIZARD AP
ALL PNEUMATIC NOZZLE CLEANING STATION

The new Torch Wizard AP Nozzle Cleaning Station is a fully pneumatic operating unit giving you an easy to install and easy operating solution for gas cup cleaning. The nozzle inlet accepts all torch sizes, and adjustable nozzle guides ensure consistent reaming every time. An enclosed operating environment with catch tray and drain keeps the weld cell clean. The built-in caddy holds a 3,8 Ltr container for used anti-spatter. Two year warranty with exclusive use of Blue Magic anti-spatter.

Big spool dereeling arms

New dereeling arm with Guide Modules

- Runs up to 76 cm spools
- Made with magnetic adjustable brake
- Made with ball-bearing modules
- Suitable for all wires up to 1,6 mm
- Minimum friction inside dereeling arm
- Ceramic inlet guide at spool side
- Universal base plate

RW1039-C41
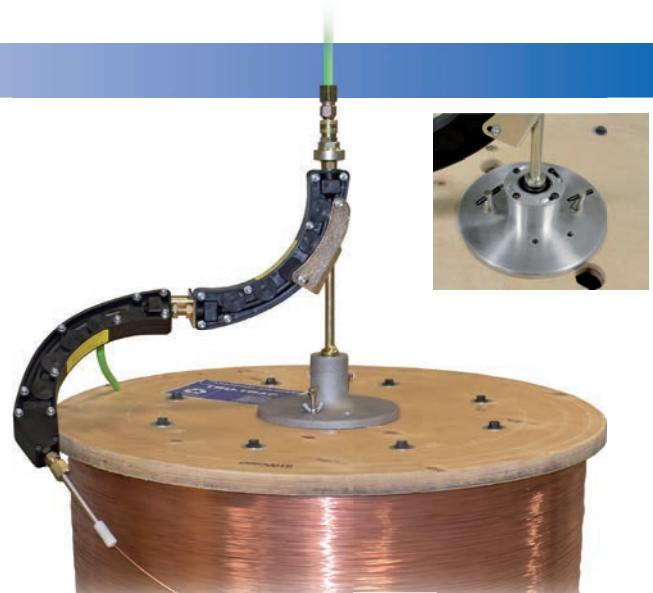
Traditional dereeling arms
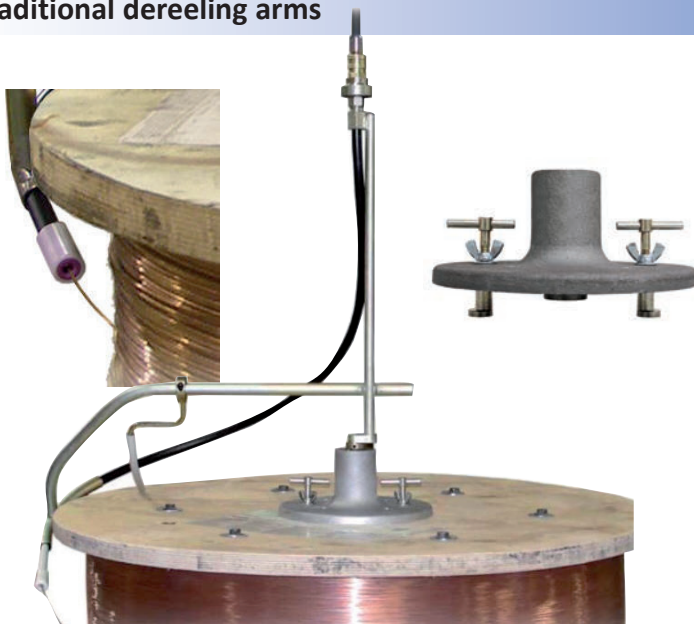
- Runs up to 76 cm spools
- Made with drag brake
- Suitable for all wires up to 1,6 mm
- Ceramic inlet guide at spool side
- Universal base plate

For non-ferro wires the dereeling arm is made with polymer liner EC-4

RW1030-C33

For mild steel wires the dereeling arm is made with steel liner FC-X

Adjustable stand for PFA

into
PFA

onto
guide
arm

PFA-AS-I
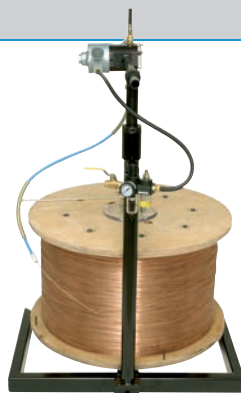
Wood reel accessories

RWC1111-30
polyethylene wood
reel cover

WRSC
staging cart

Cell monitoring and optimization

Optimize weld cell performance & oee

The new Weld Central® is a Process Optimization System that monitors and tracks key (time-stamped) process variables, including current, voltage, wire feed speed, arc stabilization period (ASP), gas flow and feed motor current. This information can be utilized for both process optimization and determining the weld cell OEE (Overall Equipment Effectiveness). Combined with the Wizard View® software, Weld Central® is the ultimate weld cell performance monitoring system!

Sensor Module Options

Gas Flow Sensor
Measures/monitors volume of gas flow as CFH or LPM, gas surges and total gas used (can function as a totalizer). Pre-calibrated with most shielding gas mixtures. Standalone version available.

Voltage/Amperage Sensor
Measures arc voltage and amperage from the power source.

Wire Feed Sensor
Measures wire activity, including feed speed and total wire usage. Functions in both forward and reverse, making it compatible with pulse-on-pulse mode.

Motor Current Sensor
Measures amperage draw on the feeder motor, which is used for detecting wire feeding issues.

Hardware features

- Monitor robotic or semi-automatic weld cells through a PC or mobile device using the Wizard View® software, where collected data can be viewed, charted and exported in a user friendly web browser interface
- Each controller can monitor up to four torches with inputs for up to four sets of sensors
- Equipment agnostic — utilizes sensors compatible with all brands of wire feeders and power sources
- Capacitive touchscreen interface displays arc status, wire speed, gas flow and wire/gas remaining
- More than just a data acquisition system — may be connected to a PLC to prevent costly weld quality issues
- Up to Eight Active Outputs that can activate an alarm or stop the welding process through the PLC if welds fall outside of user defined parameters
- Active Inputs for resetting the wire remaining (new wire package) and new gas canister (if applicable)
- Internal memory on controller can store up to 180 days of weld summary data (depending on duty cycle)
- Monitor a single torch or multiple weld cells through a network or mobile router with Wizard View® software
- Gas flow sensor is pre-calibrated for a variety of gas mixtures, including: Argon/CO2 (90/10, 85/15, 80/20, 98/2 or 75/20), Argon/Helium (75/25), Argon/O2 (97/3), He/Ar/CO2 (90/7.5/2.5) and 100% Argon, CO2, Helium or Nitrogen
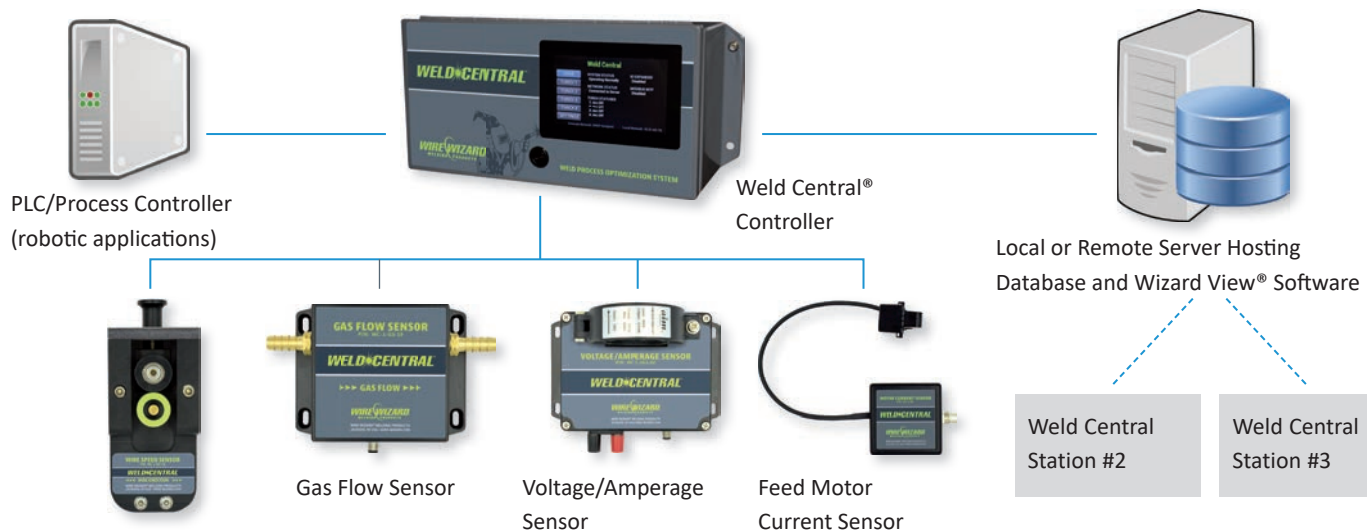
Cell monitoring and optimization

Weld central® Monitoring & Data Acquisition software
Wizard View® provides an easy to use interface for the Weld Central® System that graphs and logs data, alerts, wire and gas usage and other key welding performance information. The software collects data from any torch with the Weld Central® hardware installed. Simply browse to the desired torch to see a visual representation of the welding data along with the wire and gas usage information.

Software features

- Monitor, graph and export welding data to a CSV file
- Intuitive dashboard displays all welding data in an interactive chart and shows overview of the total number of welds, wire usage, gas usage, power usage and arc on time for a selected time frame
- Track and compare welding performance data to test and verify process improvements
- Data may be displayed for each weld assembly and by weld schedule
- Logs and displays user defined alerts so problems can quickly be detected and resolved
- Provides much of the data necessary to determine weld cell OEE (overall equipment effectiveness)

System architecture

PLC/Process Controller
(robotic applications)

Weld Central®
Controller

Local or Remote Server Hosting
Database and Wizard View® Software

Weld Central
Station #2

Weld Central
Station #3

Gas Flow Sensor

Voltage/Amperage
Sensor

Feed Motor
Current Sensor

Part No.	Description
WC-1-2-KIT-1	Weld Central™ Complete Kit — WC-1-2 Controller, all sensors and cables for one torch with Wizard View™ Software
WC-1-4-KIT-1	Weld Central™ Complete Kit — WC-1-4 Controller, all sensors and cables for one torch with Wizard View™ Software
WC-1-4-KIT-1	Weld Central™ Controller with Wizard View™ Software Package (required hardware/software) — up to 2 torches
WC-1-4	Weld Central™ Controller with Wizard View™ Software Package (required hardware/software) — up to 4 torches
WC-1-SK-1	Weld Central™ Sensor Kit (includes WC-1-VAS-DC, WC-1-MS, WC-1-GS-19, WC-1-WS-18)
WC-1-WS-18	Wire Feed Sensor
WC-1WS-S	Wire Feed Sensor Standalone
WC-1-VAS-DC	Voltage/Amperage Sensor for DC
WC-1-VAS-AC	Voltage/Amperage Sensor for AC
WC-1-GS-19	Gas Flow Sensor/Monitor
WC-1-GS-S	Gas Flow Sensor Standalone
WC-1-MS	Feed Motor Current Sensor

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