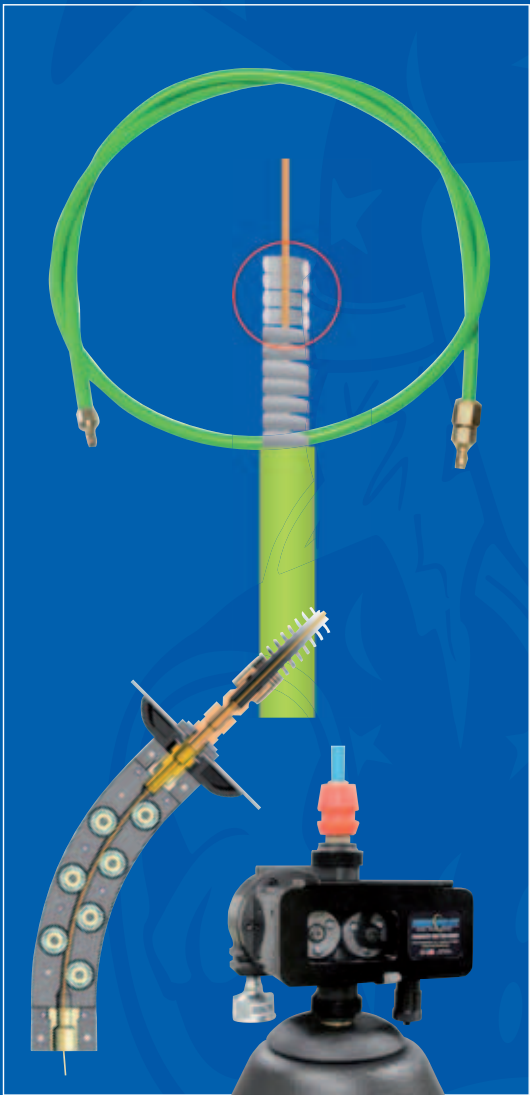


the art of wire feeding



Productcatalog 2016
welding wire dispensing systems
www.wire-wizard.eu

Introduction

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 Enterprises, 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.



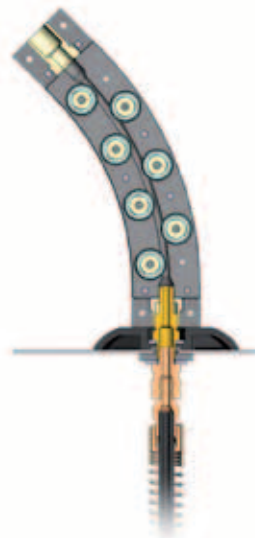
New Wire Guide Modules

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.

6 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 6 steps this catalogue takes you to a perfect set of equipment.

New products in this catalog



New PFA-Unit with oil-free motor

A new model of the pneumatic feed assist is added to the program With oil-free motor and precise alignment of the drive-rolls.

See page 16



Spatter Shield the new way of Anti-spatter

New way of spatter fighting starting from the source.

Read more at page 28



Extreme flexible conduit

Extreme flexible conduit made for robotic use in that situations where maximum flexibility is required. Available with Wire Wizard and Asian style connectors.

See page 12

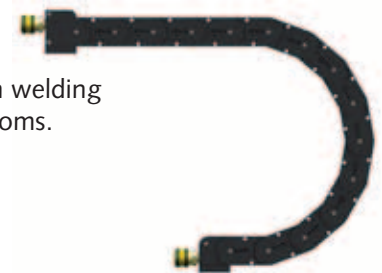


Flex-module

Made in the same concept as the guide modules is the new Flex-module.

This innovation provides easy wire feeding for each welding application with automated tracks, gantries and booms.

Will be available soon.
See page 21



Torch-products

The elliptical wire technology used at the conduits is now continued and used to make the best torch-liner in the market.

See page 30

Torch consumables made within a new way of thinking
Check page 31



Step 1 - Cone's

Unbreakable polyethylene cone's 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 Number
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 Number
52 cm	WWOC205
60 cm	WWOC235 H

Size in cm	Part Number
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 Number
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 Number
51 cm	WW10200C
52 cm	WW10204C-STANDARD IN EUROPE
66 cm	WW10260C



Step 2 - Cone connectors

Direct pull kit



WW-DP

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.



Cone Connector insulator

Insulator for the drum connection

WW-DI



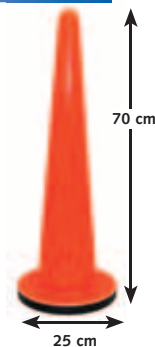
WW-QDI

Universal insulation sleeve for all quick disconnects.

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



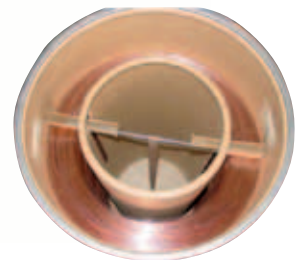
Orbital Arm kit

The orbital arm is developed to solve problems which can occur 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.



HOOD

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



WW-OA-20H

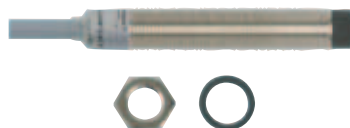
Wire detection

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)

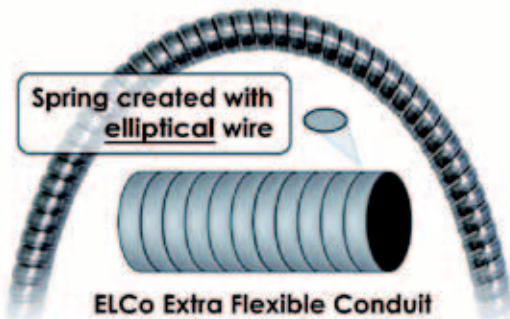
The wire-end-detection-sensor can be used at Mild steel, stainless steel and aluminum.

Mounting at drum-cone by using WWDP



Step 3 - Conduits for Mild Steel

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

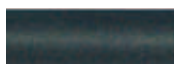


The double insulation jacket makes the right proportion in stiff and flexible.

	Part Number	Dimensions in mm inside x outside	Connector	Use for wire	Order quantity	Bulk length
	FC-X-SW	2,3 x 9,00 mm	A-10CS	0,6 mm	Per mtr	30,5 mtr
	FC-X	6,0 x 12,70 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 15,50 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	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
The ring will be pressed and clamped onto the conduit

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*	Article Number
1,5 m	FCX015
3,0 m	FCX030
5,0 m	FCX050
8,0 m	FCX080
10,0 m	FCX100

2 Swaged connectors

1 x side with polymer strain relief



Conduits Stainless Steel & Aluminum

Polymer conduit is going green in 2016! NEW COLOR- SAME QUALITY



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

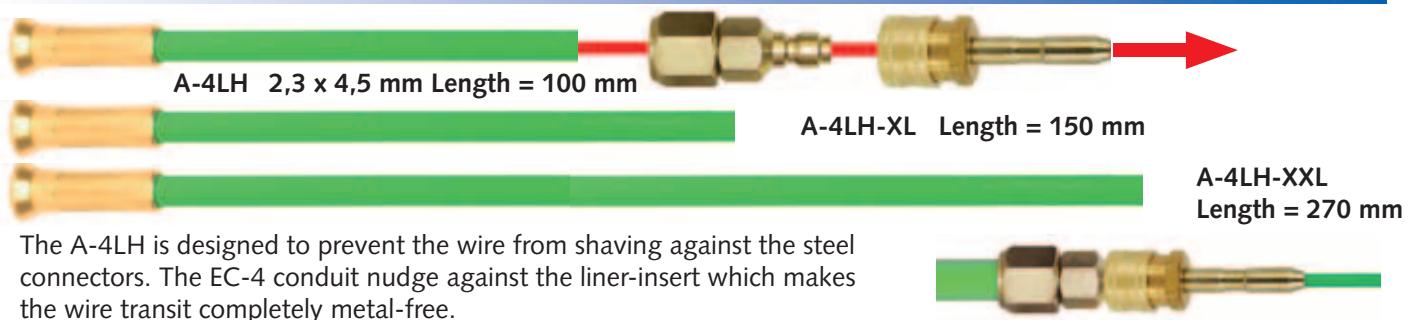


Non-Crosslinked Conduit B



	Part Number	Dimensions in mm inside x outside	Connector	Use for wire	Order quantity	Bulk length
	EC-3	4,5 x 8,6 mm	A-10CS	0,6 mm	Per mtr	152 mtr
	EC-4	7,6 x 11,70 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 15,20 mm	A-10R	1,6 - 2,4 mm	Per mtr	152 mtr
	EC-6	14,0 x 19,00 mm	A-9+A6	2,4 - 4,8 mm	Per mtr	152 mtr

Polymer liner insert for metal-free connector transit

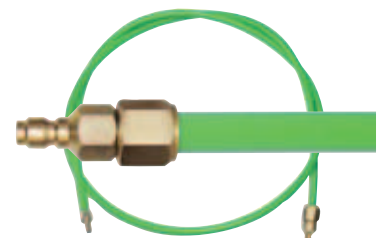


Blue Polymer conduit in fixed lengths with thread connectors

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

















Length*	Article Number	Length*	Article Number
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		

*Other lengths can be made at request



Step 4 - Conduit connectors












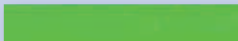


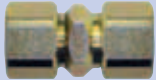
Connectors for extra flexible conduit

Conduit	Compression	Press-on	In-Line	Union
 FC-X-SW	 A-10CS	Attention!! You need an hydraulic press to mount these	With 1/2" thread use to connect the wire guide modules	
 FC-X	 A-10CX	 A-11X	 A-10-XM	
 FC-XH	 A-10R	 A-11XH	 A-10RM	 A-10RU
 FC-XH-LW	 A9 + A6	 A-11XH-LW	 A-9	 A-9U

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



Connectors for polymer conduit

Conduit	Compression	Self-threading	In-Line	Union
 EC-3	 A-10CS		With 1/2" thread use to connect the wire guide modules	
 EC-4	 A-10CH	 A-16F4	 A-10HM	
 EC-5	 A-10R	 A-16F5	 A-10RM	 A-10RU
 EC-6	 A9 + A6		 A-9	 A-9U

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



Replacement ferrules for compression connectors

Re-use the connector by only replacing the ferrule



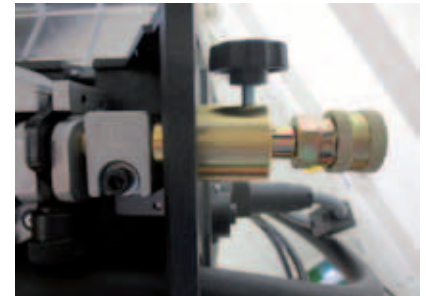
Conduit	Ferrule
FC-X-SW & EC-3	A-10SFE
EC-4	A-10CFE
FC-X	A-10XFE
FC-XH & EC-5	A-10RFE
FC-XH-LW & EC-6	A-9-FE

Step 5 - Feeder connectors 1



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



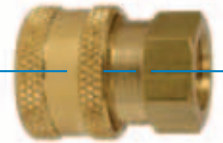
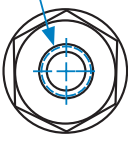
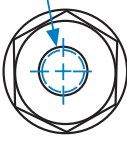
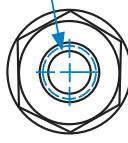
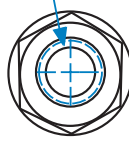
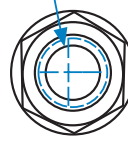
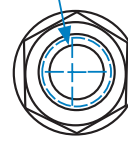
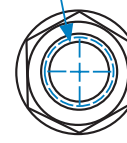
To help you choose the right adapter we made a selection of the most used ones

<p>A-1LN-23B 12 x 37mm</p>  <p>Fits: Lincoln Esab Cloos EWM Kempfi Lorch etc</p>	<p>A-1FRO 13 x 47mm</p>  <p>Fits: Fronius SKS</p>	<p>A-3QDF-4 9/16"-18UNF Thread</p>  <p>Fits: Panasonic OTC Yaskawa</p>	<p>A-4 plus A-14</p>  <p>For: insulated plate mounting and universal use</p>
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Quick disconnects (FEMALE)

 <p>A-4 Brass copper 1/4" NPT</p>	 <p>A-14 Derlin plastic 1/4" NPS</p>	 <p>A-14KIT 2x A-4 + A-14</p>	 <p>A-14BK A-14KIT + A-14B</p>	 <p>A-4ST Steel 1/4" NPT</p>	 <p>A-4S Ring + Nut 1/4" BSP-M (GAS)</p>	 <p>A-5 Brass-copper 1/2" NPT-M</p>
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Quick disconnect with inside thread to mount directly at the inlet guide of the feeder

 <p>A-3</p>	<p>1/4" NPT-F</p>  <p>A-3</p>	<p>3/8"-24UNF THREAD</p>  <p>A-3QDF-1</p>	<p>7/16"-20 UNF THREAD</p>  <p>A-3QDF-2 OTC</p>	<p>1/2"-20 UNF THREAD</p>  <p>A-3QDF-3 Motoman</p>	<p>9/16"-18 UNF THREAD</p>  <p>A-3QDF-4 Panasonic</p>	<p>M14 x 1.5 THREAD</p>  <p>A-3QDF-5</p>	<p>3/8" NPT-F THREAD</p>  <p>A-3QDF-6</p>
---	---	---	---	--	---	--	---

WWTT-DP

WWTT-DP
for plate mounting
with ceramic insert



Bayonet (Male) connectors

 <p>A-16MST 1/4" NPT-M for use in Derlin thread</p>	 <p>A-15 1/4" BSP (GAS) A-15-1 7/16"-20 A-15-2 9/16"-20</p>	 <p>A-16F3 1/8" NPT-F A-16F4 1/4" NPT-F</p>	 <p>A-16F5 3/8" NPT-F A-16F6 1/2" NPT-F</p>
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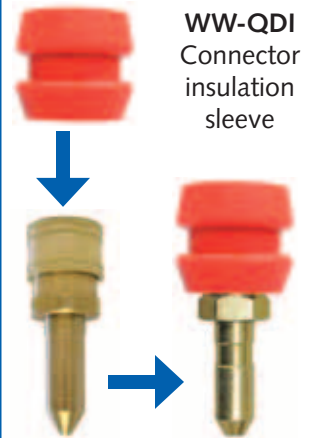
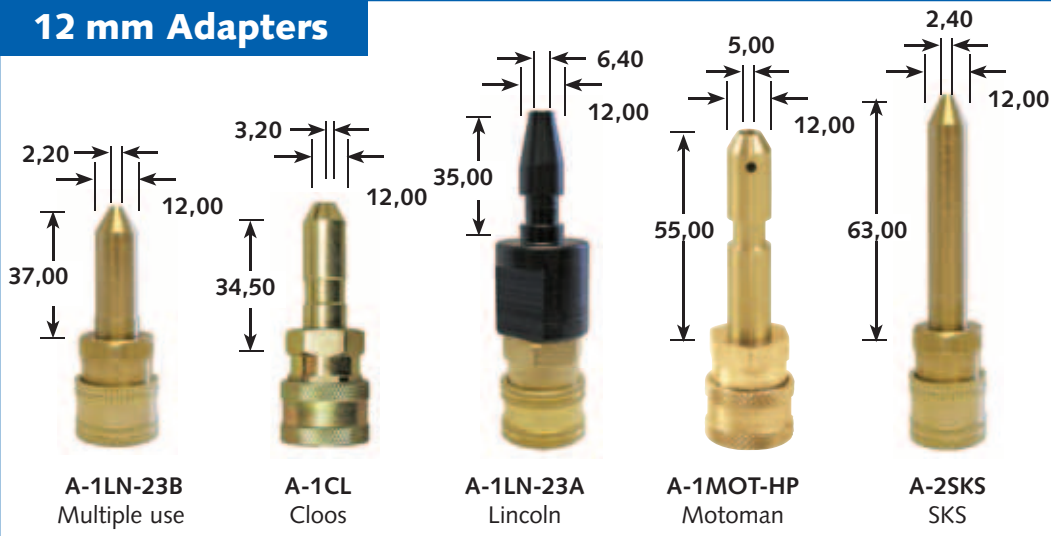
Thread adapters

 <p>A-17G 1/4" F → 3/8" M A-18G 1/4" F → 1/2" M A-18G1 3/8" F → 1/2" M</p>
--

Step 5 - Feeder connectors 2

Inlet guides with quick disconnect special for one brand

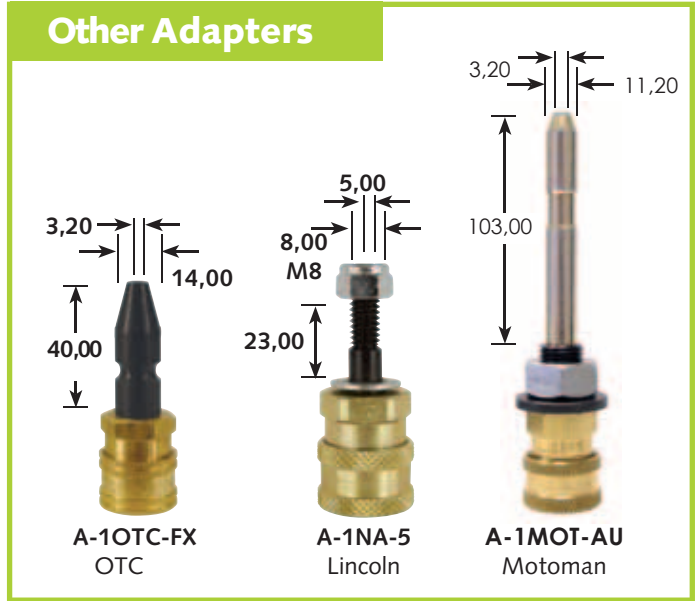
12 mm Adapters



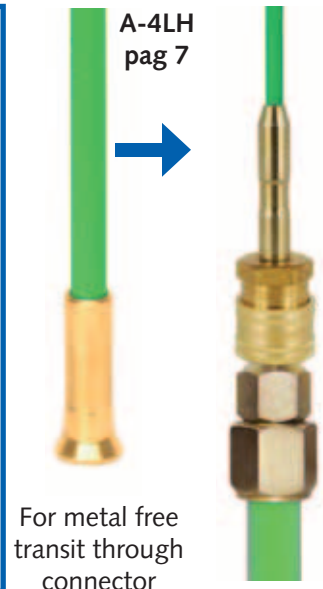
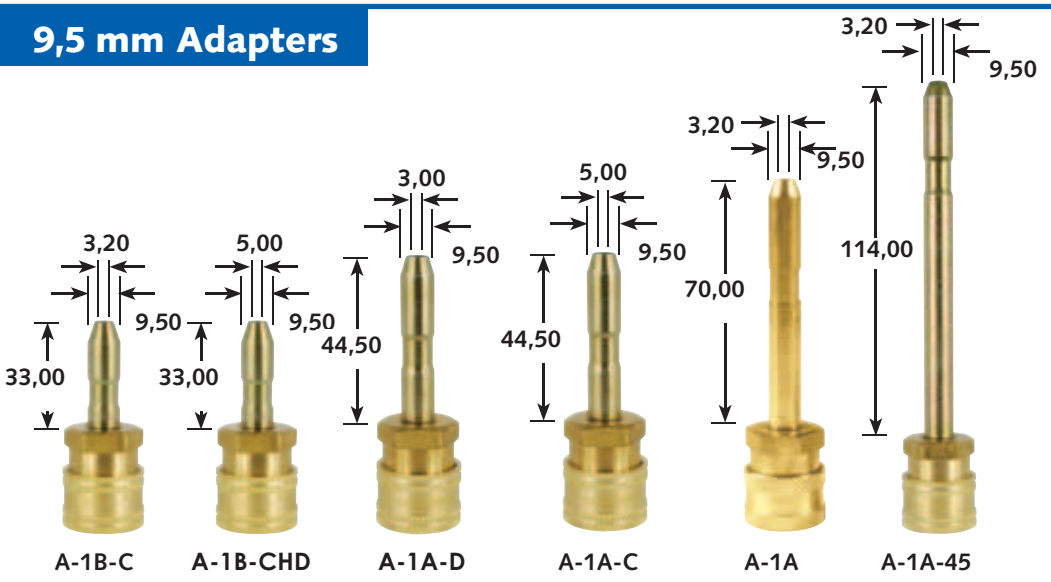
13 mm Adapters



Other Adapters



9,5 mm Adapters

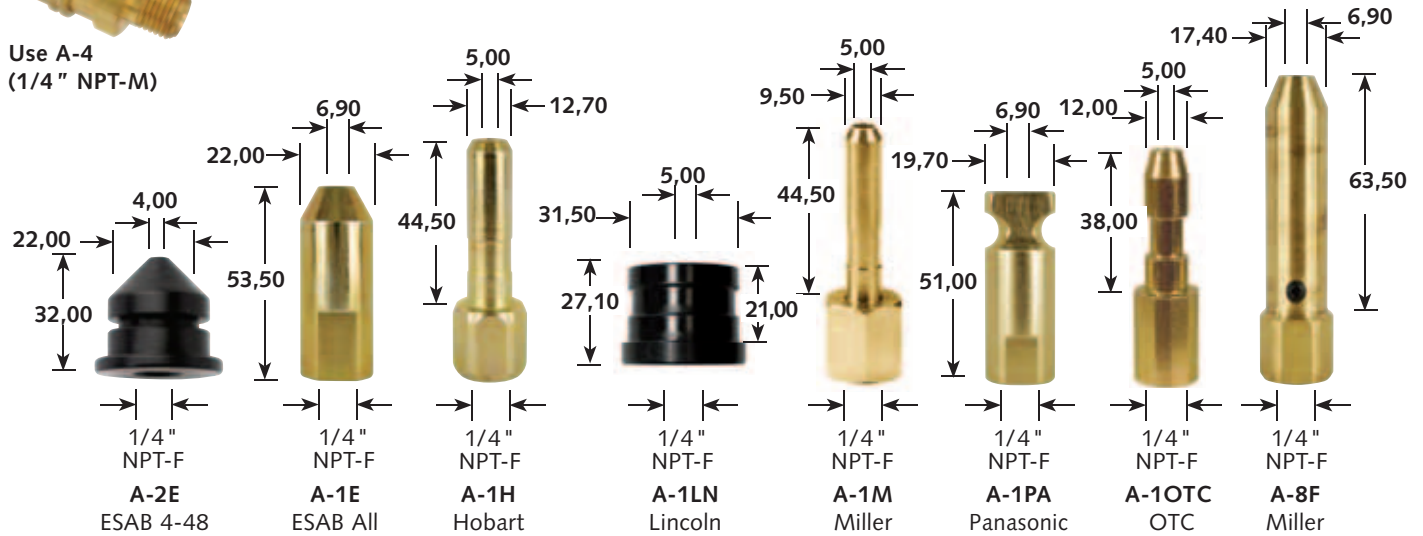


Step 5 - Feeder connectors 3



Inlet adapters with female thread

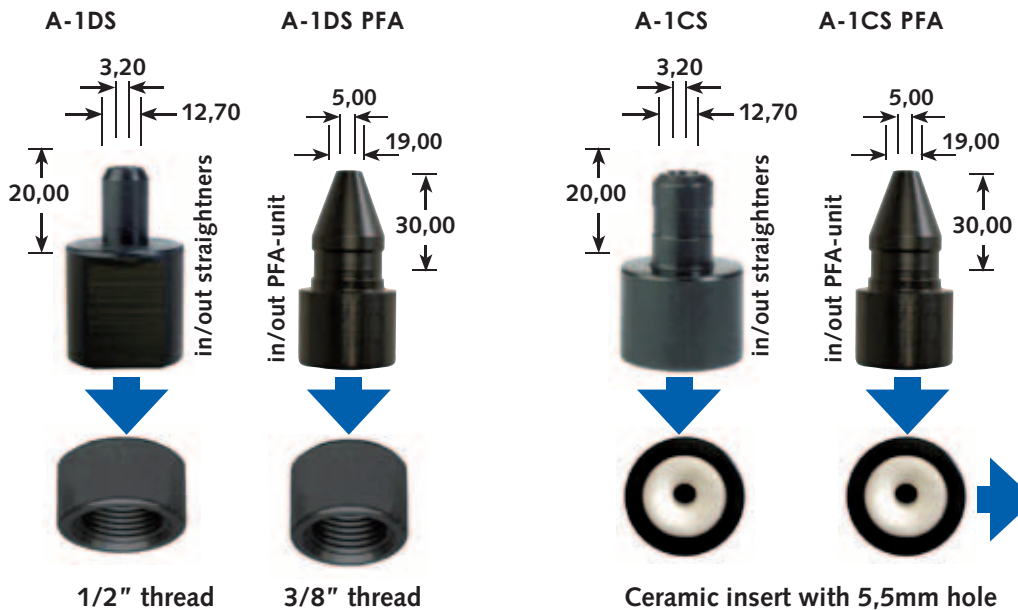
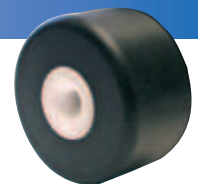
Use A-4
(1/4" NPT-M)



Derlin-plastic connectors for insulated feed through

Thread connectors

Ceramic connector



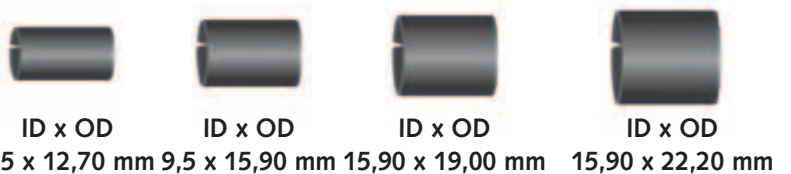
Universal inlet guide with quick disconnect



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.

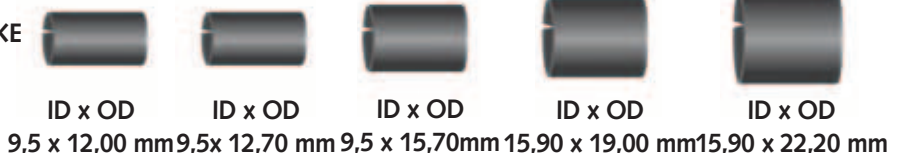
A-7 = BUSHINGS ONLY



A-1AKE

SPECIAL ESAB

A-7E = BUSHINGS ONLY

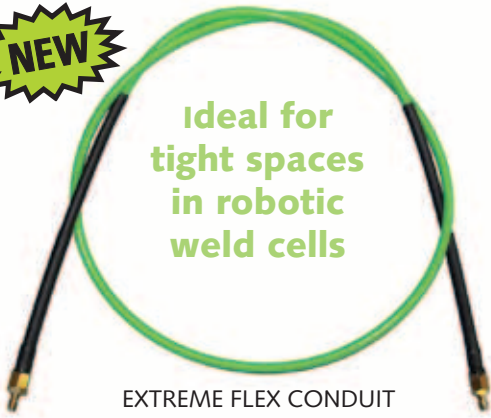


Step 5 - Extreme Flexible Conduit

Extreme flex conduit



Ideal for tight spaces in robotic weld cells



EXTREME FLEX CONDUIT
Shown as cut length with connectors and strain reliefs



POLYMER STRAIN RELIEF
Included on all pre-cut lengths

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

Flexible outer jacket



FC-E CONDUIT (EXPLODED VIEW)

Patent pending low friction elliptical liner

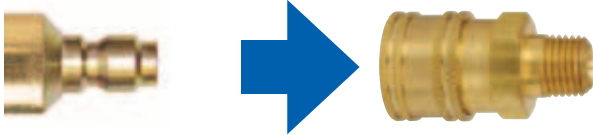
Available lengths and connectors

FCE WITH WIRE WIZARD CONNECTOR

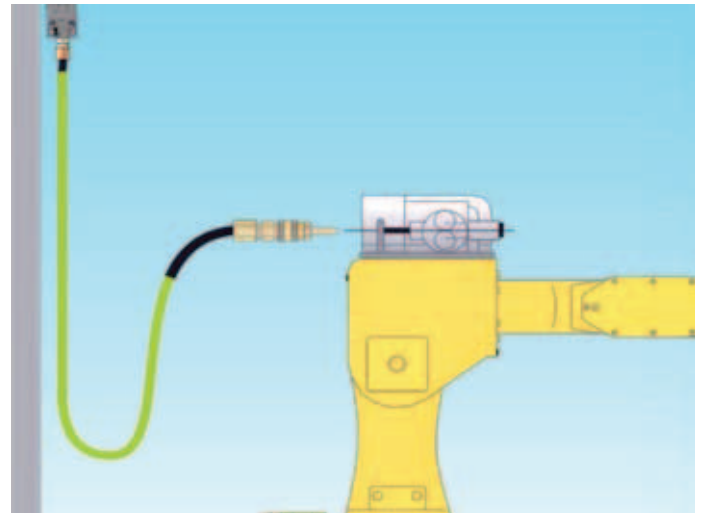
3,0 m	FCE030W
5,0 m	FCE050W
7,5 m	FCE075W
10,0 m	FCE100W

2x at conduit

At feeder / drum



Wizard male bayonet fits wizard female QD

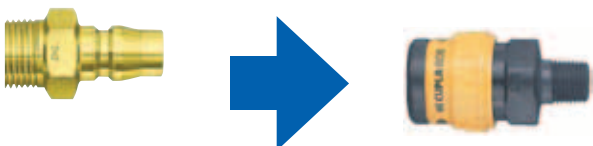


FCE WITH PANASONIC CONNECTOR

3,0 m	FCE030P
5,0 m	FCE050P
7,5 m	FCE075P
10,0 m	FCE100P

2x at conduit

At feeder / drum



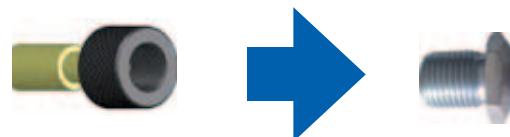
Panasonic fits Nitto HI Cupla Ace connector

FCE WITH THREAD CONNECTOR

3,0 m	FCE030A
5,0 m	FCE050A
7,5 m	FCE075A
10,0 m	FCE100A

2x at conduit

At feeder / drum



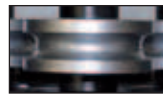
9/16"-18UNF thread fits Asian style feeders

Wire straighteners

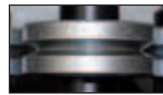
Small Wire straightener

MODELS WS-1000 & WS-1000A
For Wire Sizes 0,8 - 1,6mm

Dimensions: W x H x D
95 x 78 x 42 mm
Weight: 0,45 Kg



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



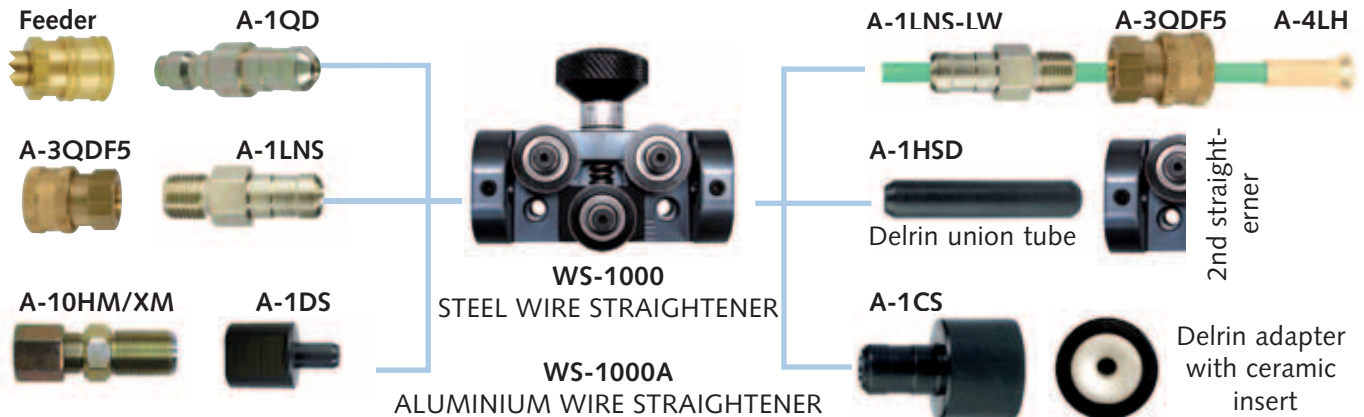
WS-1000-A Drive Rolls
V-Groove Drive Rolls for Aluminum Wire

INSULATED MOUNTING KITS

Available for all



WSS-100-IK Small
WSM-100-IK Medium
WSL-100-IK Large



Medium Wire straightener

MODEL WS-1000H
For Wire Sizes 2,0 - 3,2 mm

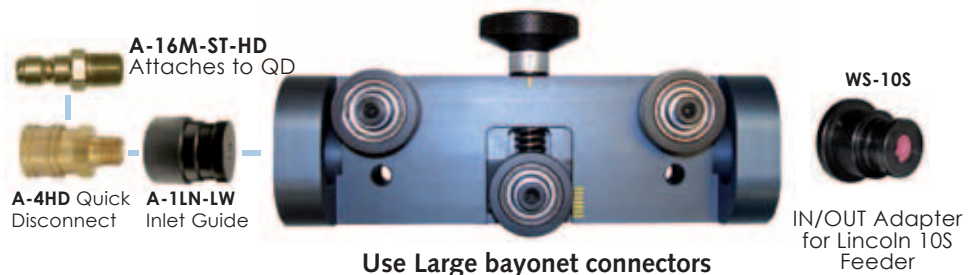
Dimensions: W x H x D
145 x 85 x 48 mm
Weight: 0,8 Kg



Large Wire straightener

MODEL WS-1000L
For Wire Sizes 4,0 - 6,0 mm

Dimensions: W x H x D
220 x 104 x 58 mm
Weight: 1,8 Kg



Facts and fables about straighteners

These straighteners has 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.

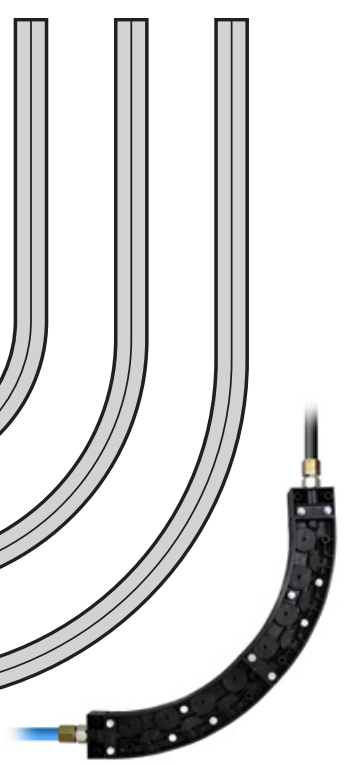




EC-3, 4, 5 or 6
POLYMER CONDUIT
PAGE 6, 7

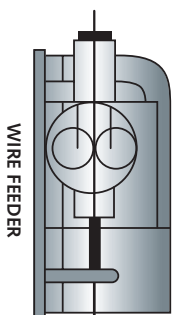
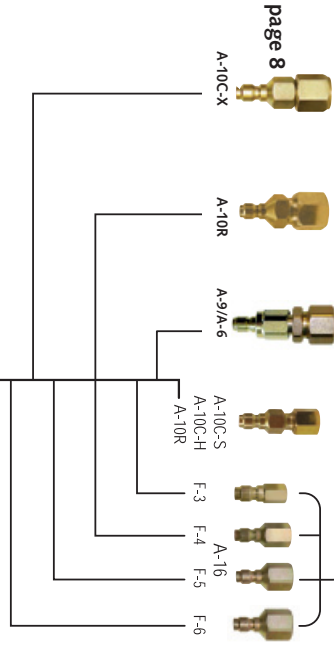


FC-XH-LW
LARGE-WIRE, EXTRA FLEXIBLE

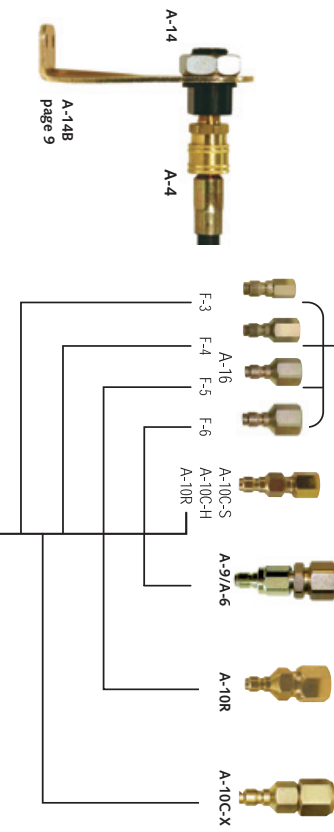


FC-X
STANDARD, EXTRA FLEXIBLE

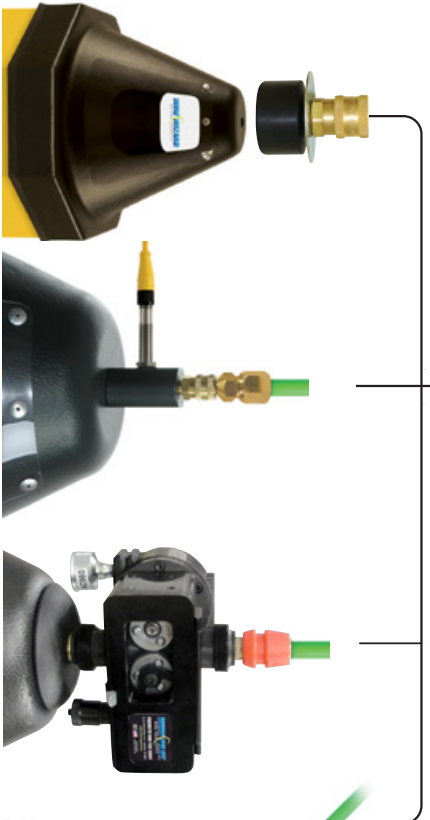
FC-XH
HEAVY-DUTY, EXTRA FLEXIBLE



WIRE FEEDER



page 8



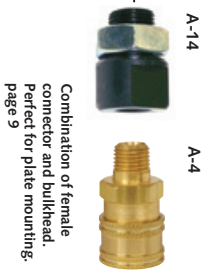
Direct pull
page 5

Direct pull with
wire detection
page 5

Pneumatic Feed Assist
for long conduit runs
page 16-17

Wire Guide
Modules
page 18-19

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

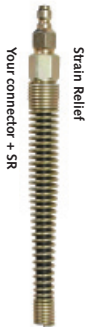


Combination of female
connector and bulkhead.
Perfect for plate mounting.
page 9



Universal inlet kit
Set of 1 inlet adapter
and 4 adapter bushings
page 11.

Inlet adapter for specific
brand. Choose one at page 10.



Strain Relief
Your connector + SR

page 8



Pneumatic Feed Assist - PFA



Application



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. If 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.



Features

- Works independent, NO SIGNAL NEEDED, shop air only
- Feeds wire up to 30 Mtr.
- Works with all wires and all welding machines
- Reduces, drag, wear and arc failures
- Increases conduit life, feeder life and production

Wire Feed Assist 2

PFA Classic model oiled motor



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



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	

New PFA-RB with oil-free motor



- Advantages:**
- Oil-free motor
 - Exact roller alignment
 - Closed gear box
 - Easy reversible



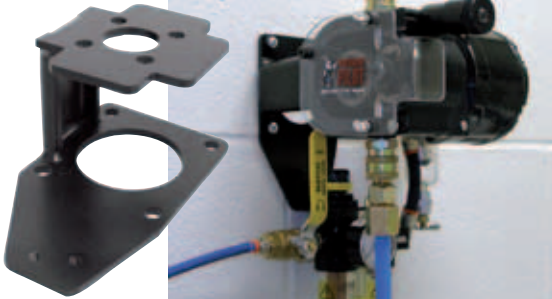
All items included in standard set

Product	Part no	Product	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 diameters at request		Other diameters at request	

Feed Assist Accessories

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



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.



Item no. PFA-SK

Double Solenoid kit for classic PFA with OILED-MOTOR

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

Solenoid needs to be powered by the robot controller



Item no. PFA-SK2

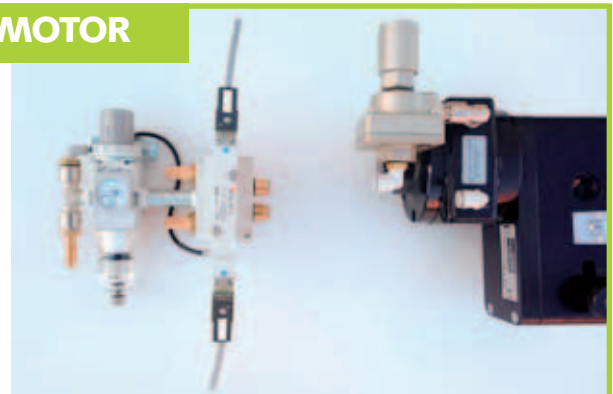
Double Solenoid kit for PFA-RB with OIL-FRE-MOTOR

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

Kit is supplied with:

- Filter/Regulator
- 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

Solenoid needs to be powered by the robot controller



Item no. 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

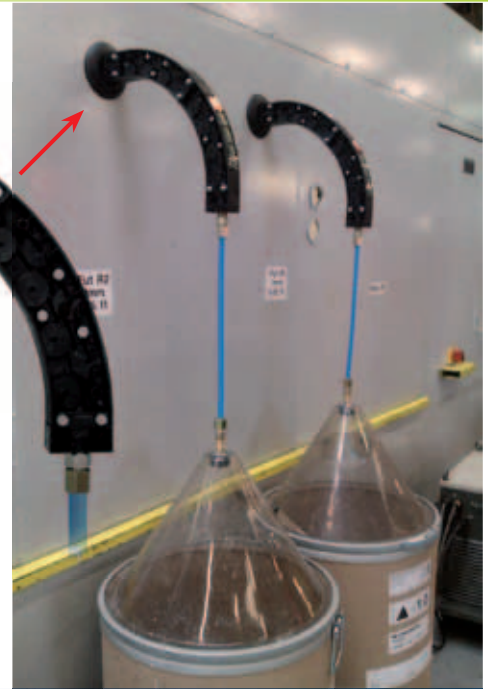
Heavy duty rollers with bearings

Wire from source

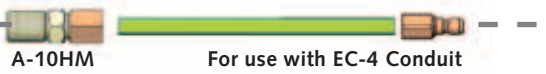
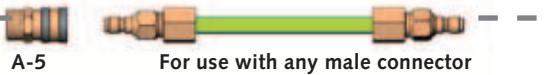
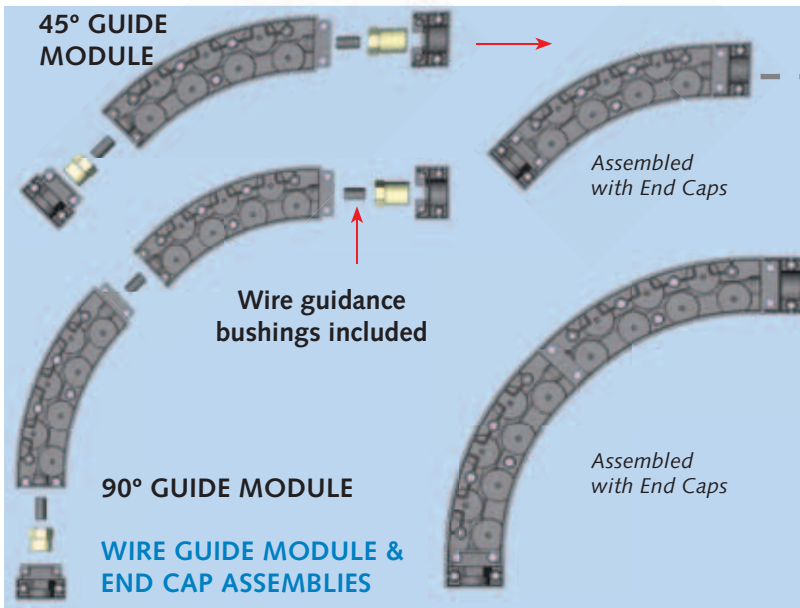
Conduit connection going to feeder

2x 45° degree wire guide modules combined to a 90° angle

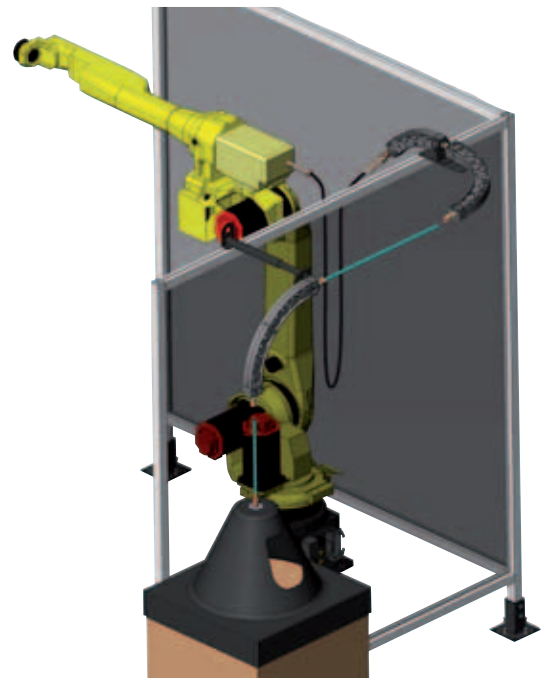
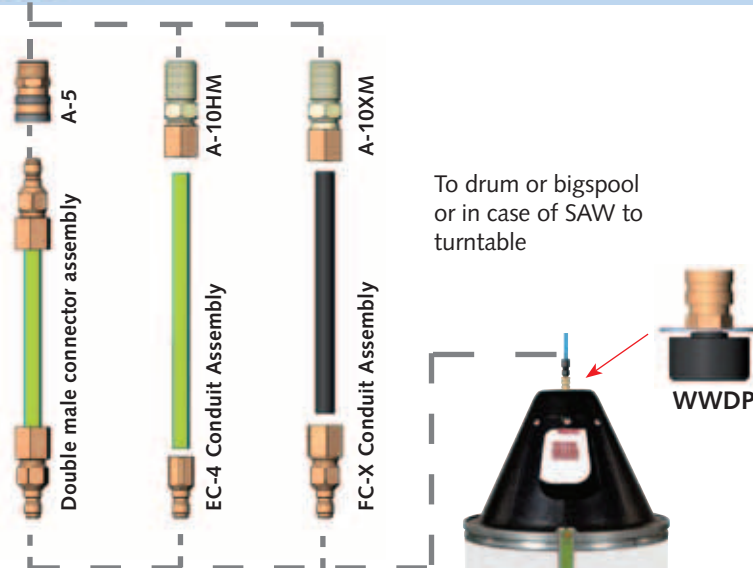
- Create any bend you like by connecting the modules.
- For all kinds of wire from 0,6 to 2,4 mm
- Much cheaper than other roller products
- 3 YEARS GUARANTEE (excludes damage caused by contaminants)



Installation example



To wire feeder, choose the right adapter at page 10



Wire Guide Modules

45° WIRE GUIDE MODULES

WGM-1

Standard module for wire up to 2,4mm

For larger wires look at page 24



90° MINI GUIDE MODULE

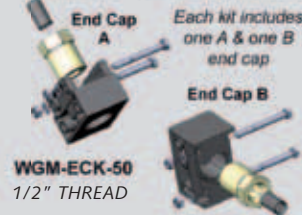
6" (152mm)



Allows tight 90° turns for solid wires up to 1,6mm

Part # WGM-M-1
Uses same end caps as WGM-1

END CAP CONNECTORS



WGM-ECK-50
1/2" THREAD

Each kit includes one A & one B end cap



FACE MOUNT BRACKET KIT

Allows 360° directional adjustment

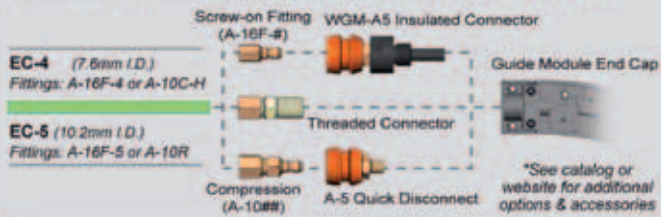


Part # WGM-A-10BK

Add WGM-A5 or order WGM-2-BRKT for insulated connections

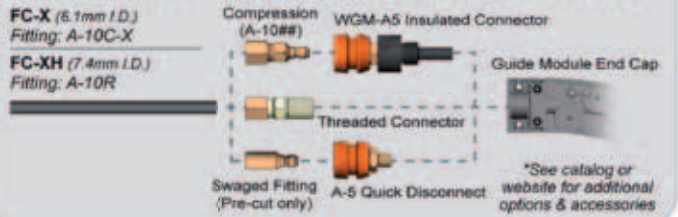
CONDUITS & FITTINGS

WIRE WIZARD® POLYMER CONDUIT



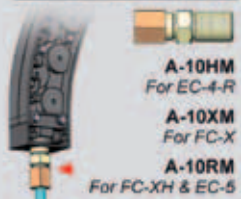
CONDUITS & FITTINGS

WIRE WIZARD® EXTRA FLEXIBLE CONDUIT

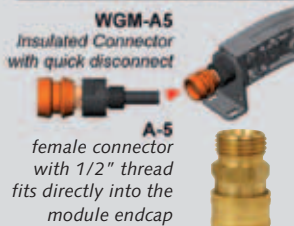


CONDUIT CONNECTORS

THREADED CONNECTORS



DETACHABLE QD CONNECTORS



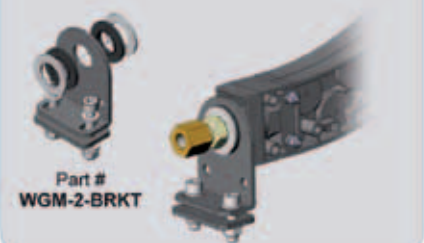
WELD-ON OR BOLT-ON MOUNTING BRACKET



Part # WGM-044

INSULATED FACE MOUNT BRACKET KIT

Allows 360° directional adjustment



Part # WGM-2-BRKT

CELL WALL MOUNTING KIT, SINGLE SIDED



Part # WGM-WK-1-1

CELL WALL MOUNTING KIT, DOUBLE SIDED



Part # WGM-WK-2-1

ADJUSTABLE WALL MOUNT BRACKET



Part # WGM-WK-1-3
Adjustable for up to 3" (76 mm) thick walls

FLOOR MOUNTING BRACKET



Part # WGM-FLM
Modules may be attached to one or both sides

DRUM HOOD MOUNTING KIT



Part # WGM-DK

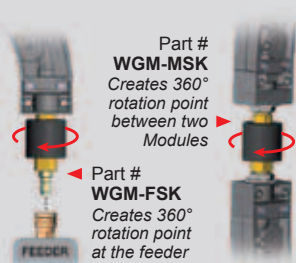
HOOD SWIVEL KIT

Allows 360° rotation on top of drum cover.



Part # WGM-HSK

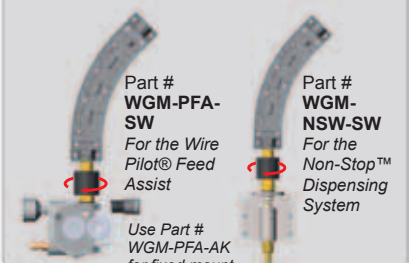
GUIDE MODULE SWIVEL KITS



Part # WGM-MSK
Creates 360° rotation point between two Modules

Part # WGM-FSK
Creates 360° rotation point at the feeder

ADD-ON SWIVEL KITS

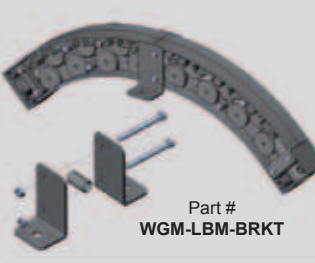


Part # WGM-PFA-SW
For the Wire Pilot® Feed Assist

Part # WGM-NSW-SW
For the Non-Stop™ Dispensing System

Use Part # WGM-PFA-AK for fixed mount

L-BRACKET MOUNTING KIT



Part # WGM-LBM-BRKT

360° UNION ADAPTER KIT

Allows dual 360° directional adjustment



Part # WGM-UAU
Includes Bracket

Part # WGM-UA
Adapter Kit Only

45° MODULE HANGING BRACKET KIT



Part # WGM-1-BRKT

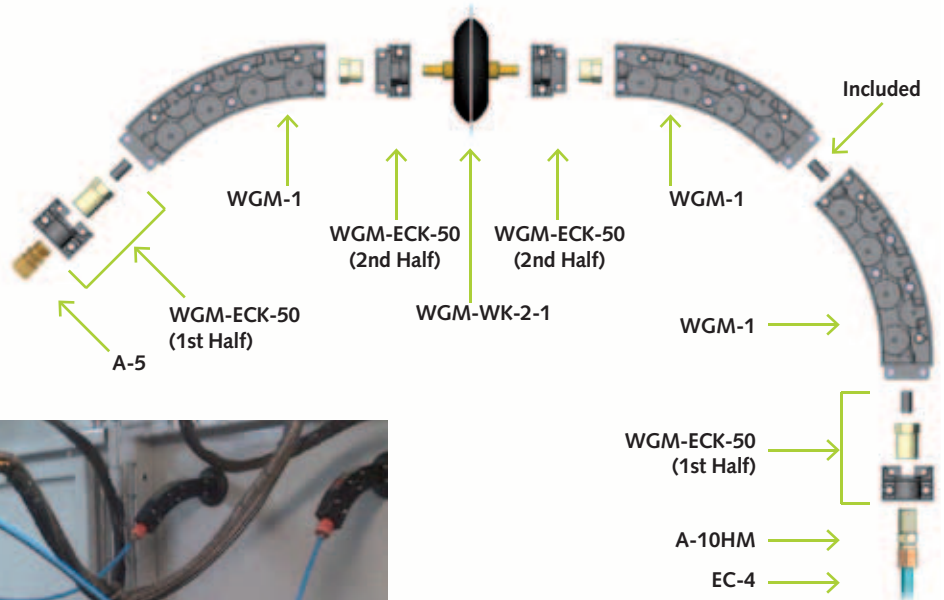
90° HANGING BRACKET KIT



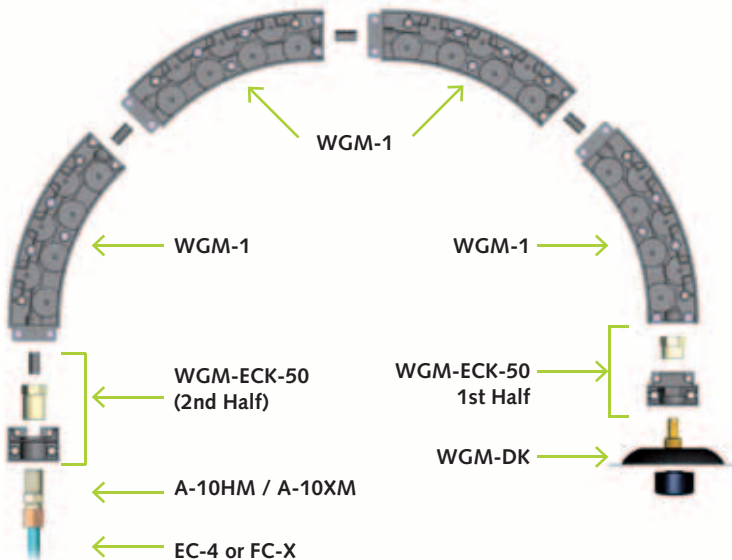
Part # WGM-1-90-BRKT
(WGM-LW-BRKT for WGM-LW-1)

Wire Guide Modules

Installation example



Installation example



Application:
Automotive production plant
Drums at first floor above robotic installation

Data before modification

Distance drum to feeder	: 6,6 Meter
Set-up	: Cheap plastic liner only
Pull test	: Variating 3,5 - 7,0 Kg
Feeder power	: 0,7 Ampere
Maintenance	: Changing liner once in two weeks

Data after modification

Distance drum to feeder	: 6,6 Meter
Set-up	: FC-X Liner + 180 module
Pull test	: constant 0,35 Kg
Feeder power	: 0,15 Ampere
Maintenance	: Free of maintenance for over three years

Wire Guide Modules

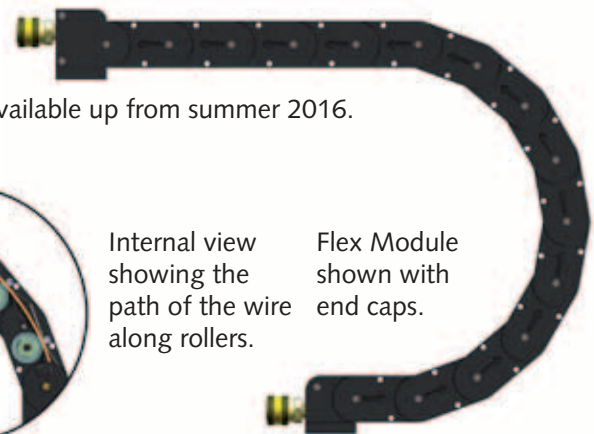


Flex module cable chain



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



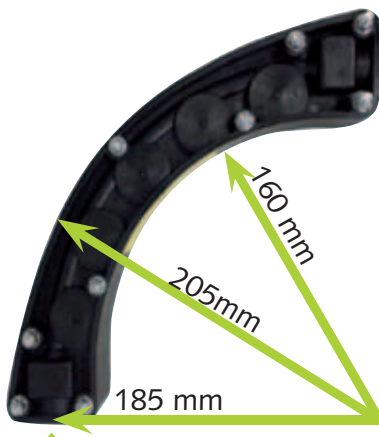
Expect to be available up from summer 2016.



Internal view showing the path of the wire along rollers.

Flex Module shown with end caps.

Compact Module 90



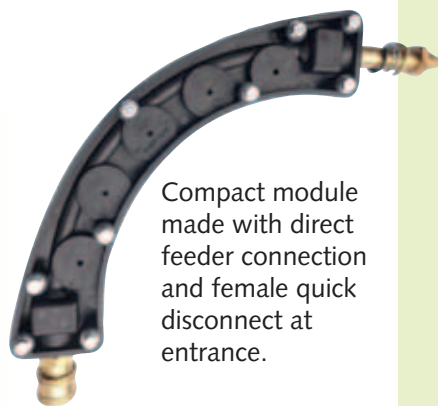
WGM-C1
IN: 1/4" female thread
OUT: 1/4" female thread

Choose one of the connectors with a 1/4" thread to connect these compact modules.

New in the program. **"Compact 90 module"**
The compact 90 module is only available in 90 degree angle and made as complete unit including end caps and connectors.

For cost- and space saving 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 tight robotic weld cells.



Submerged Arc Welding



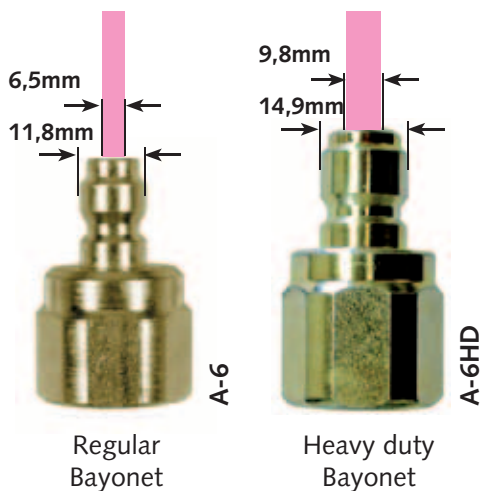
Spiral Conduits

	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	2,4 - 4,8 mm	Per mtr	30,5 mtr

Polymer Conduits

	EC-5	10,0 x 15,20 mm	A-10R	1,6 - 2,4 mm	Per mtr	152 mtr
	EC-6	14,0 x 19,00 mm	A-9+A6	2,4 - 4,8 mm	Per mtr	152mtr

HD Connector with large 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.

HD Combinations



HD Connectors with large bayonet



Wire Guide Modules

Mechanical turn tables



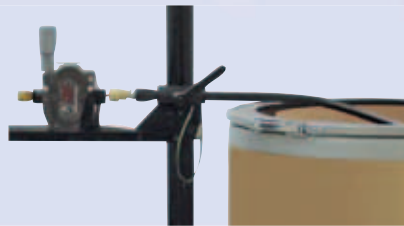
WWTT-500
WWTT-500 W + Wheels

Length x Width = 76x66cm
Weight: 64,5 kg
Max. Load : 500 Kg

Removable guide arm for easy drum change

Bracket for mounting PFA-unit at Turn Table

Part # WWTT-PBS



Length x Width:
100x100 cm
Weight: 95,00 Kg
Max. Load : 1.000 Kg

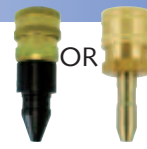
WWTT-1000: standard model
WWTT-1000-SP: including centre
WWTT-1000-SPS: including spider

PFA-Unit for SAW

Feedrollers



A-4HD+
A1-DSPFA



A-1BC-HD

PFA-FRL



A1-CSPFA



OR



PFA-DA-HD

Turn table Drum cone



PFA-oil



1 mt hose

All items included in standard set

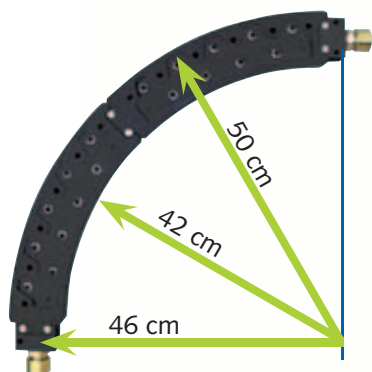
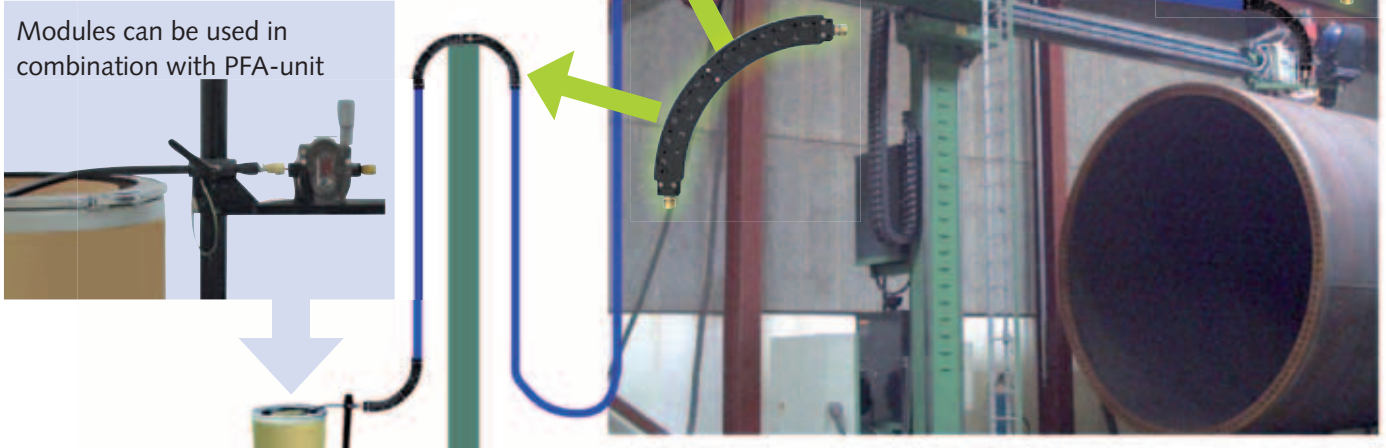
Product	Part no	Product	Part no
PFA unit for 2,0 mm wire (installation set included)	PFA20	U-groove Feed roll 2,0mm for PFA (per piece)	WW053704
PFA unit for 2,4 mm wire (installation set included)	PFA24	U-groove Feed roll 2,4mm for PFA (per piece)	WW053703
PFA unit for 3,2 mm wire (installation set included)	PFA32	U-groove Feed roll 3,2mm for PFA (per piece)	WW053707
PFA unit for 4,0 mm wire (installation set included)	PFA40	U-groove Feed roll 4,0mm for PFA (per piece)	WW05M532
PFA unit for 5,0 mm wire (installation set included)	PFA50	U-groove Feed roll 5,0mm for PFA (per piece)	WW05M316

Submerged Arc Welding

Wire Guide Modules for Large Wire

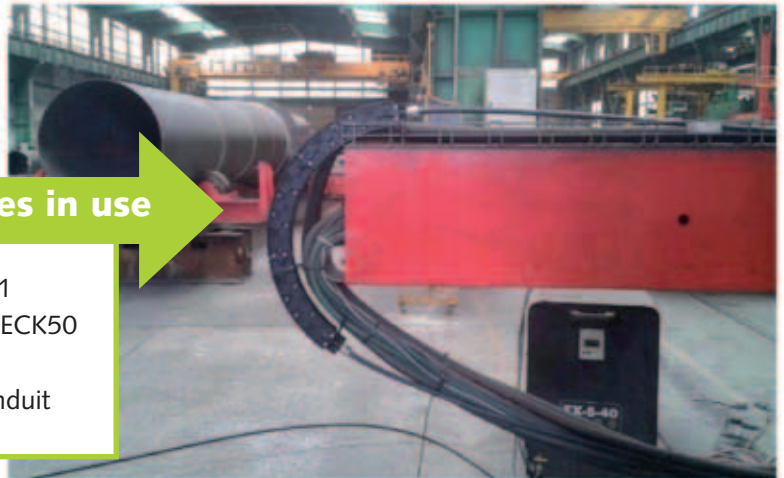
- Up to 5,0mm wire
- Steel ball-bearing rollers
- Eliminate friction in bends
- Eliminate slipping feed motor
- Easy connected with conduit

Modules can be used in combination with PFA-unit

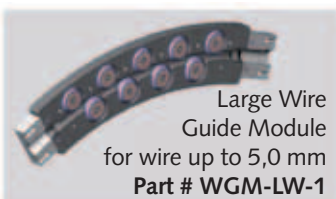


LW-Modules in use

- 3 x WGM-LW-1
- 1 X WGM-LW-ECK50
- 2 x A-9
- FC-XH-LW Conduit



Wire Guide Modules accessoires



Conduit connector for FC-XH-LW & EC-6
Part # A-9

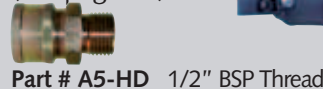


Part # WGM-4-BRKT

Bracket to mount XL-Modules to the Turn Table



Quick disconnect for Bayonet (see page 22)



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

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

Part # 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

Part # RW1030-C33

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

Part # RW1031-C33

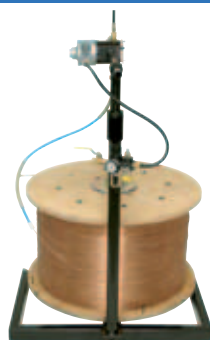


Adjustable stand for PFA



↑ into PFA

↓ onto guide arm



Wood reel accessories



RWC1111-30
POLYETHYLENE WOOD
REEL COVER

WRSC
STAGING CART

Non-Stop Wire Dispensing 1

A unique process joins the end wire from a used empty drum with the start wire of the next full drum. Both butt-welding and flash removal operations take only minutes and the two wire ends can be joined during welding.

- Eliminates downtime for wire changeover
- No operator action needed - robots can continue to weld while the next full drum is being installed
- Designed for use with optional Pneumatic Feed Assist or Wire Guide Modules
- Works with one- and two-station robotic cells (2 or 4 drums)
- Accepts any fiber drum or cardboard wire packaging design
- Easy-to-use resistance Butt-Welder & Wire Dresser available

Framework also available as wall-mount



Optional Barrel Empty Signal Flag



220 Volt hand-held Butt-welder

WW-BW



BW-WP

Wire Parters leaves flat wire ends for



BW-WD

220 Volt Mini grinder to clean the weld and assure easy passage through contact tip



WW-GB

Gage block. Made to test the butt-weld after cleaning whether it is good enough to run through the

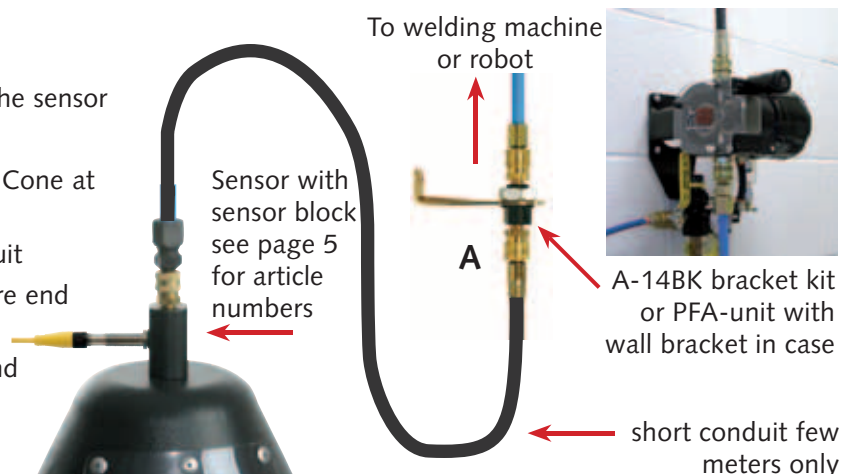
NSW-FF

Finish flag for endless wire system. Is springloaded and locked downwards when a new drum is installed. The swing pushes the flag out of its lock letting it pop up as a signal that one of the two

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

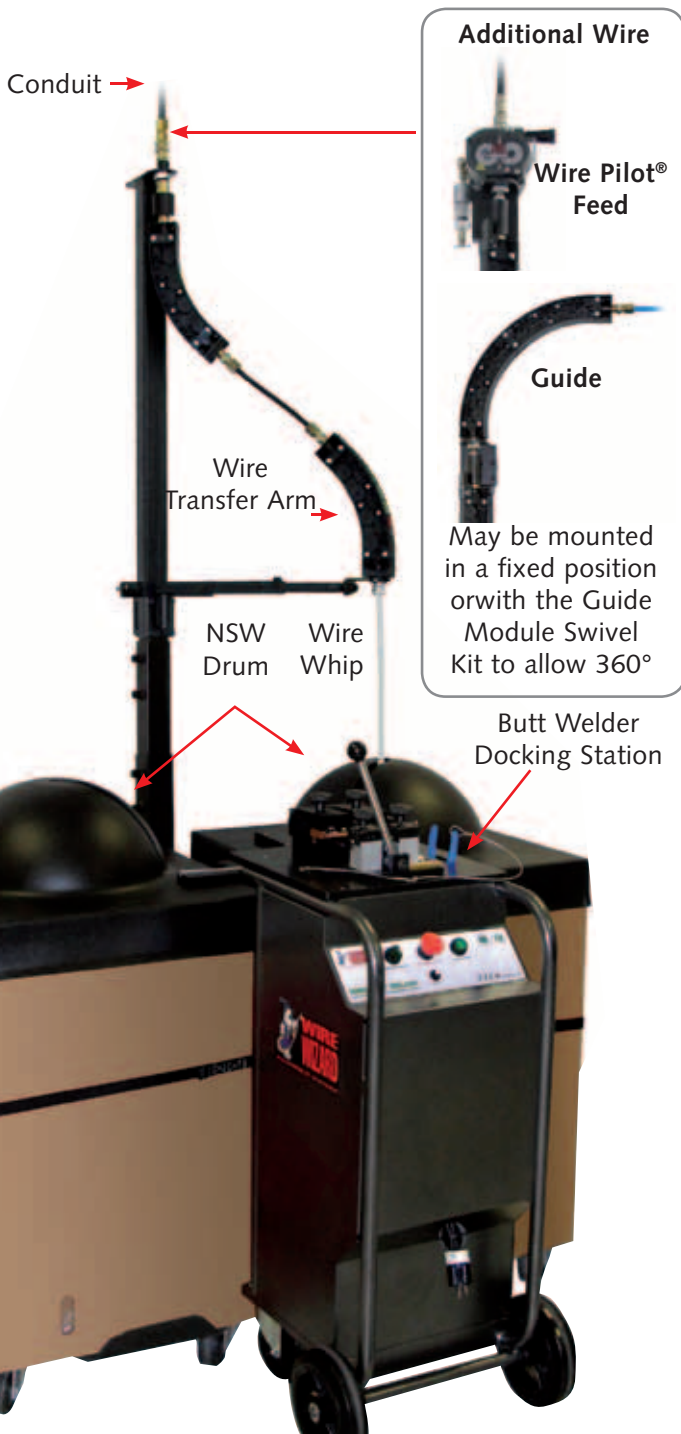


Non-Stop Wire Dispensing 2

- Eliminates production loss caused by empty drums
- Eliminates downtime for wire changeover



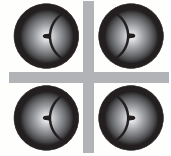
COMPONENTS & BASIC SETUP



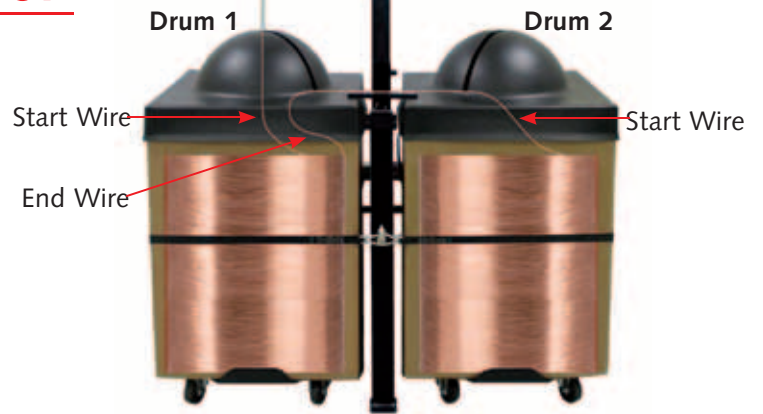
DRUM SETUP



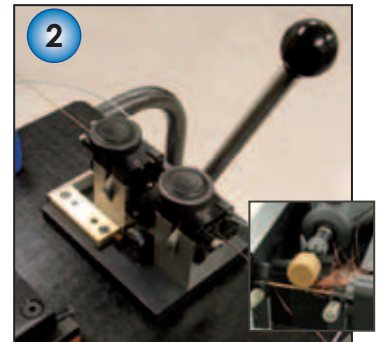
Single Torch Unit
(with round drums)



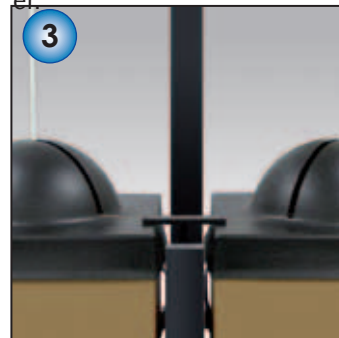
2-Torch Unit
(with round drums)



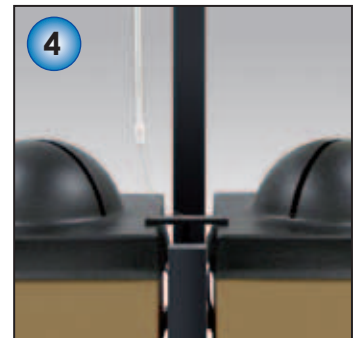
1 Join the end wire from drum 1 with the start wire from drum 2 using the Butt Welder.



2 Remove the flash in the wire joint using the Wire Sizer (or rotary tool with stone bit).



3 Position the wire on the pathway between the two drums.



4 When wire from drum 1 runs out, the transfer arm will switch over to drum 2. Simply replace empty drum and repeat steps 1-3.

Anti-Spatter Solutions

Spatter shield the new way of anti-spatter

WHAT IS SPATTER SHIELD?

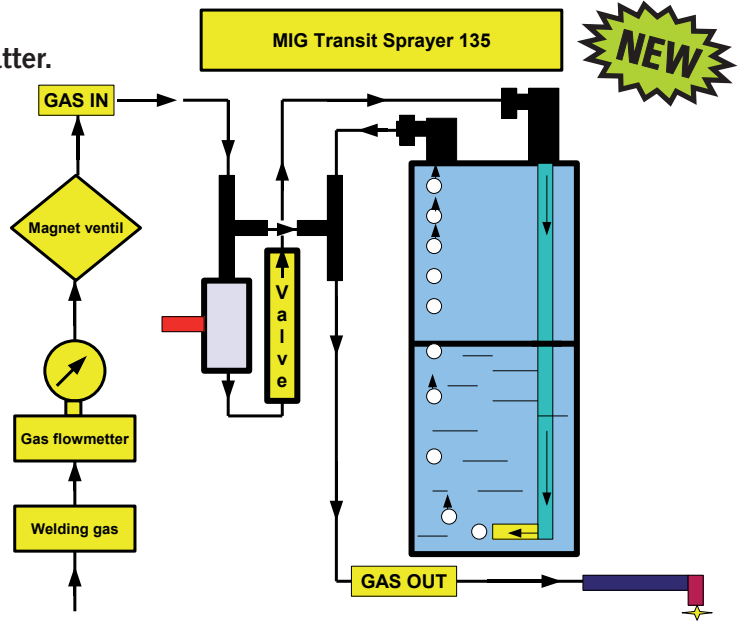
Spatter Shield is a revolutionary new way of anti-spatter.

- Up till now we protected the work piece against the spatter.
- From now on we protect the spatter against the work piece.

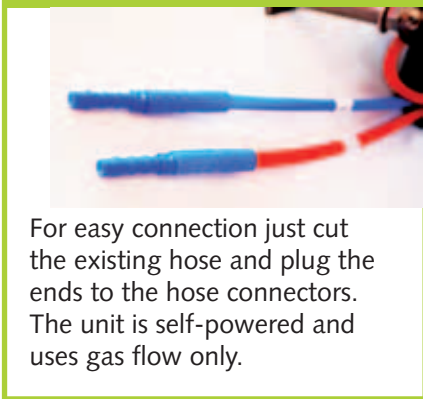
How does it work??

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 135ml bottle of fluid can be used to weld up to 450 Kg of welding wire. Works for mild steel and Stainless steel but not for Aluminium.



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.

Unit Part # WW-SSU



Regulator

With the regulator the amount of atomised mist can be adjusted



Fluid

The 135 MI refill bottle has the capacity to weld up to 450 Kg of welding wire

Part # WW-SSF



Mounting kit

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



Anti-Spatter Solutions



Spatter shield the new way of anti-spatter



- 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**

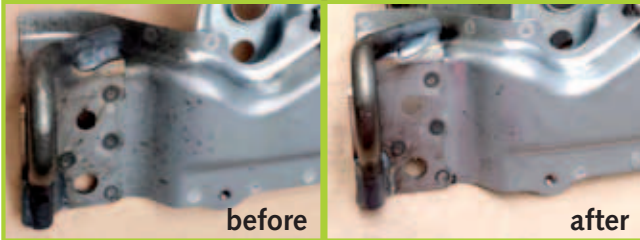
Soon Available:
Spatter Shield liquid
to use in your
cleaning station
Part # WW-SSL



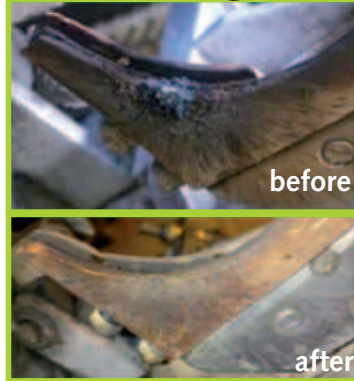
Part # WW-SSU
Unit w/o fluid

Part # WW-SSF
Spatter Shield Fluid

Work piece



Tooling



Consumables



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™

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 jerry cans and can be mixed with de-ionized water to a total of 200 liter of Blue Magic anti-spatter.

Blue Magic™ Concentrate
EAS1000-CC

ITEM	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

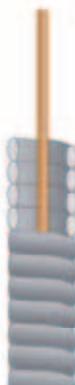


Torch liner made of elliptical wire

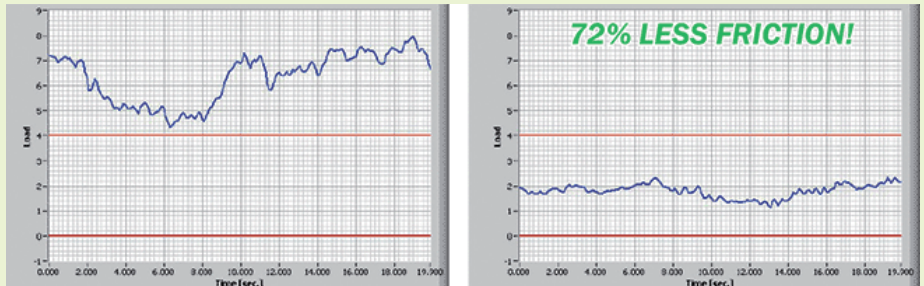


Wire Wizard expands its product range to cover all parts that touches the wire. Therefore the Elliptical wire technology used for the FC-X conduit is now also available for torch-liners. Besides the Elliptical shape the liner has a patented coating for an extreme smooth surface.

Problems in wire feeding at CMT installation? E-Power is the perfect solution for all wire feed problems.



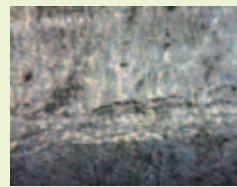
Comparison pull-test Competitor v.s. E-Power liner



Competitor round wire galvanneel coating E-power Elliptical wire E-Power coating



Wire : 1,2mm
Speed : 4,5 M/min
Length : 4,6 mtr
Min pull : 1,97 Kg
Max pull : 3,62 Kg
Average : 2,87 Kg



Wire : 1,2mm
Speed : 4,5 M/min
Length : 4,6 mtr
Min pull : 0,51 Kg
Max pull : 1,06 Kg
Average : 0,82 Kg

Part #	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 mtr (coil)	None
WTPB2547B	2,5 x 4,7mm	1,2 – 1,6mm	30 mtr (coil)	None
WTPB3047B	3,0 x 4,7mm	1,6 – 2,0mm	30 mtr (coil)	None

Torch liner made of heat resistant polymer

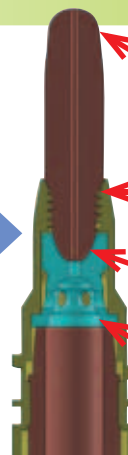
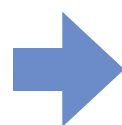
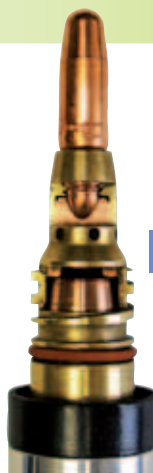
Within the range of the torch products Wire Wizard also supplies a heat resistant Carbon-polymer torch-liner for all non-ferritic wires.

Part #	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

The Carbon-polymer liner is more rigid and has better feeding properties as the competitor made of Teflon.



The Powerball system exchanges your actual diffuser and contact tip with a Powerball diffuser and contact tip. The new diffuser is made with a copper insert for a copper-to-copper current transit.



Round contact tip to prevent burn back

Buttress thread for more contact surface

Round tip seating for better current transit

Copper insert inside brass-copper diffuser

Torch products



The copper-to-copper power-transit results in the following benefits:

- Better conductivity
- Less heat build-up in torch parts
- Better cooling in gas diffuser
- Less spatter build up
- Energy saving



Five PowerBall tip styles available

Available for most air cooled torches and more to come. Gas cups also soon available. Ask for info about your torch.

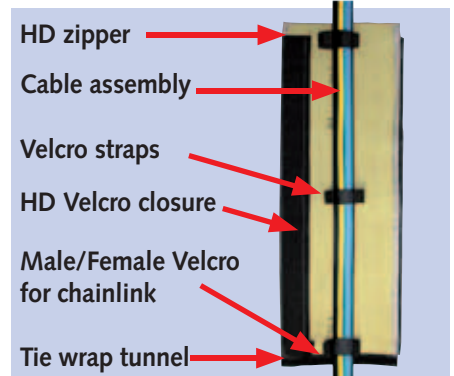


Conduits and cable protection



Wire Wizard supplies a range of cable sleeves made out of Kevlar with an Aluminized coating. These sleeves protect your costly cable assembly for wear and welding spatter. The sleeve is made with a heavy duty zipper and a Velcro enclosure to seal it tightly.

Part #	diam ø	Length
KCS-2-12-A	50 mm	30 cm
KCS-2-24-A	50 mm	60 cm
KCS-2-36-A	50 mm	90 cm
KCS-2-48-A	50 mm	120 cm
KCS-4-12-A	100 mm	30 cm
KCS-4-24-A	100 mm	60 cm
KCS-4-36-A	100 mm	90 cm
KCS-4-48-A	100 mm	120 cm



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	Article
Round	53 cm	DC-21R
Round	60 cm	DC-24R
Square	54 cm	DC-21S
Square	62 cm	DC-24S
Octagon	53 cm	DC-21O
Octagon	60 cm	DC-24O



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.



Part #	Description
WW-US	Universal Stand + arm
WW-USA	Additional Arm
WW-USSH	Spool-holder + bracket



The new WizardGear line of robot cable management products provides organization, support and protection for all lines and cables attached to robots. Keep cables free from damage that can cause unnecessary downtime and costly repairs. Using zip ties or other poor methods of attachment can even void the warranty on your control cables. Cable organizers are currently available for Fanuc® robots and more are in development for others.



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.



CE-MARKET 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
Part # FDL-21



58-61 cm
Part # FDL-24

Drum lifter, model FDL

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



FDL DRUM LIFTER



FDL DRUM LIFTER WITH FDL-FA

*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.

Heavy duty drum DOLLY ROUND



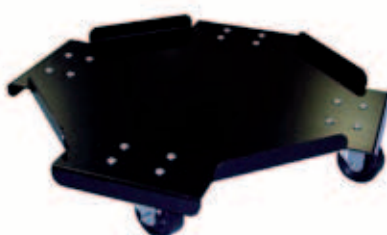
Part # FDD-21
Up to 53 cm

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



Part # FDD-26
Up to 66 cm

Heavy duty drum DOLLY REVERSABLE



Build up for small drums
Up to 54 cm



Build up for big drums
Up to 64 cm

Part # FDD-MD

- 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 Kg

Support equipment 1

Retractable conduit balancers & hangers

CONDUIT BALANCER
3 SIZES AVAILABLE



- Balancer provides easy method of hanging conduit & cables
- Conduit Hanger prevents excess droopage
- Prevents conduit and cables from hanging in areas where they could get damaged

CONDUIT HANGER
3 SIZES AVAILABLE



PART NO. DESCRIPTION

RCH-2	Conduit Balancer - 1-2 kg - 1.6 mtr
RCH-4	Conduit Balancer - 2-4 kg - 2.0 mtr
RCH-8	Conduit Balancer - 6-8 kg - 2.0 mtr
CHH-10	25 cm Conduit Hanger w/two Retaining Straps
CHH-16	40 cm Conduit Hanger w/four Retaining Straps
CHH-22	56 cm Conduit Hanger w/four Retaining Straps

Inert gas savers

- Reduces gas consumption
- Restricts gas surge upon arc starts, screen also prevents blockage
- Can be installed on the inlet or outlet side of the gas solenoid*

GAS SAVERS - INCLUDE SCREENS & JETS 2 or 3

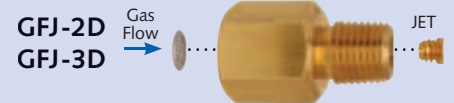
PART NO.	THREADS	JET LOCATION
GFJ- 2D or 3D	1/4" Male NPT x 1/4" Female NPT	Male End
GF- F2 or F3	1/4" Male BSP-GAS x 1/4"-19 Female BSP-GAS	Female End

GAS SAVER FLOW JETS

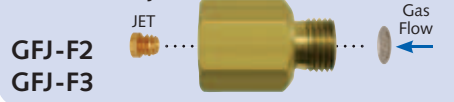
PART NO. JET	2,0 BAR	2,4 BAR	2,8 BAR	3,2 BAR	3,6 BAR	4,0 BAR
GFJ-2*	2	14,0 Ltr/Min	15,5 Ltr/Min	17,0 Ltr/Min	18,5 Ltr/Min	20,0 Ltr/Min
GFJ-3*	3	23,5 Ltr/Min	26,0 Ltr/Min	28,5 Ltr/Min	31,0 Ltr/Min	33,5 Ltr/Min

Jet 2 for Mig and Tig welding /Jet 3 for heavy Mig welding

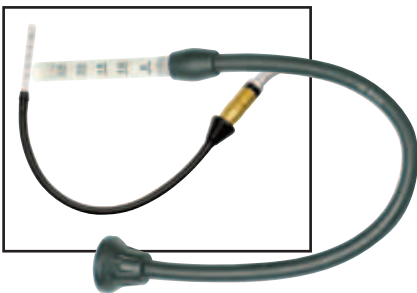
Gas Saver for Inlet Side of Solenoid



Gas Saver with BSPP Threads (Fronius® style)



Manual Gas Flow Gauge EL-GFM



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

PART # EL-GFM

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



PART # EL-RVMU

Digital Gas Flow sensor EL-GMP

- Measures the precise gas flow at gascup or in gas main
- Pre-calibrated at all common gas mixtures
- With totalizing option to measure gas-usages
- With RS-232 serial output
- Operates at 9 volt battery

PART # EL-GMP

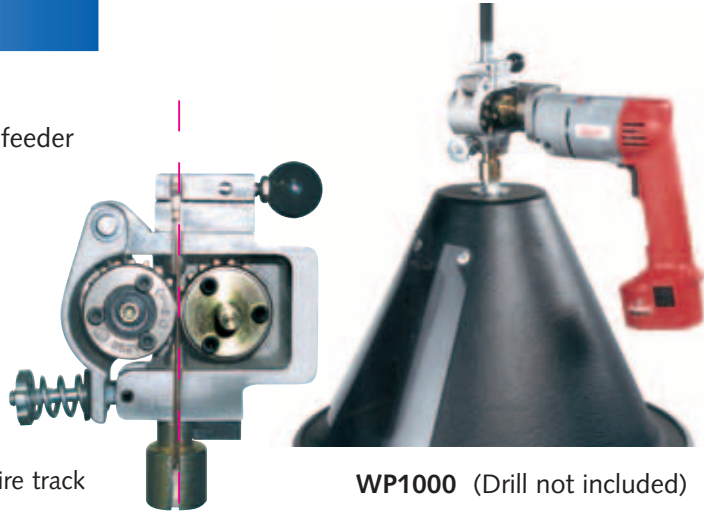


Support equipment 2

Wire pilot, Model WP1000

- Designed to feed weld wire from the source to the feeder
- Engage/disengage wire in seconds
- Accommodates 0,8 to 3,2 mm wire diameters
- Changeable drive rolls
- An 800RPM or less, 10 mm variable speed drill is recommended.

Specify wire diameters for all units when ordering



Open wire track

WP1000 (Drill not included)

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.

The HHSS can be placed between any male and female Wire Wizard quick disconnect. To place or remove the HHSS the wire don't need to be cut.

Additional Features

- Plugs into existing wire system and conduits
- 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
- Also available without connector base for hand held measurements at the torch.

Order article HHSS-12 for this option.



HHSS installed at the wire source

HHSS-12 obtaining measurement at the torch end

Wire draw gauge, Model WWPT

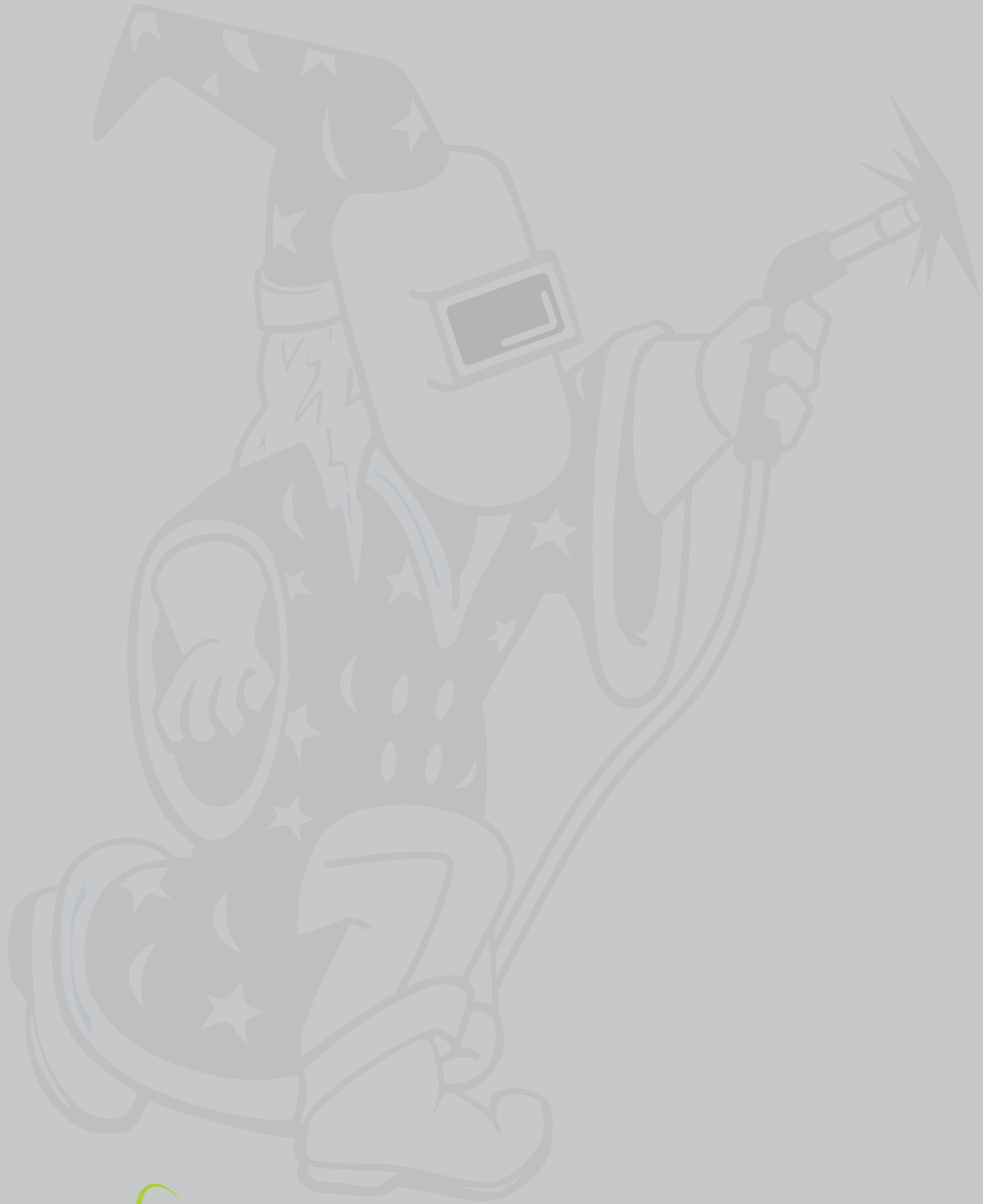
The electronic WWPT is designed to accurately measure the draw weight of all diameters of weld wire pulling through the conduit. This allows the operator to determine if the conduit needs to be changed by the amount of strain the wire is creating on the feed motor. Hand-held, battery powered (9-volt).

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



sales@wire-wizard.eu
www.wire-wizard.eu

Distributed locally by