TIGZONE® TORCHES

TIGZONE SERIES

Vo-X

air- and watercooled TIG-Torches

TIGZONE eVo-X - Built for Professionals. **Designed for Performance.**

Precision, durability, and simplicity. That's what defines the new TIGZONE eVo-X series.

Developed from the ground up for real-world industrial demands, the eVo-X isn't just an evolution of the proven Endurance Series, it's a revolution in usability and efficiency.

With fully cross-compatible consumables across all four torch models, an advanced, ruggedized collet system, and the introduction of flexible torch necks, the eVo-X sets a new benchmark for performance and reliability in TIG welding.

No complex spare part management. No more deformed collets. No compromises.

- Small profile torch designed for demanding applications and high amperage output
- Available for all standard welding machines
- EVO X triangle design with different switch options
- Super-Flex® cables and Super-Snake® leather remains flexible and ease to handle with a significant cable lifetime
- CE EN 60 974-7





Torch	DC	AC	W Ø	Page
(model)	(in A)	(in A)	(in mm)	
eVo13	130	100	1.0 - 4.0	8
eVo21	210	160	1.0 - 4.0	





Torch	DC	AC	WØ	Page
(model)	(in A)	(in A)	(in mm)	
eVo31	310	240	1.0 - 4.0	12
eVo41	410	310	1.0 - 4.0	14

All DC and AC amperages according to DIN EN 60974-7. <u>Underlined torches</u> come with flex neck.

Content	Page
eVo-X Series	2
Ordering Numbers	3
Connection Interfaces	4
Torch Models	8
Handle & Switches	16
eVo-FLO	17
Electrodes	18



What sets the eVo-X apart?

Unified consumable system

All consumables – gas cups, nozzles, collet bodies, and caps – are fully interchangeable across all four eVo-X torch models.

Only the X-collets are size-specific, carefully tailored to the corresponding torch size to ensure maximum mechanical strength and precision. This smart system greatly simplifies spare part management, reduces inventory complexity, and increases operational flexibility.

Innovative X-collet technology with extended clamping range: The eVo-X series uses only two rugged collet sizes across all models.

New X-collets - Enhanced durability and service life

The new collets withstand greater mechanical and thermal stresses.



Superior performance and control

Improved heat management and gas shielding provide exceptionally stable arcs and outstanding weld results that are comparable to gas lens systems, but without the added complexity.



Flexible torch necks

For the first time, the eVo-X series offers flexible neck torch versions, allowing for precise positioning even in tight and awkward spaces.

Proven ergonomic handle and hose technology

We continue to rely on our trusted ergonomic handle from the Endurance Series combined with ultra-flexible, highly durable natural rubber Superflex hoses. This ensures fatigue-free operation and maximum reliability.



Secure, non-twisting connection:

X-collets are tensioned into the torch head via a reverse-threaded locking system instead of being pressed into the collet body by the cap.



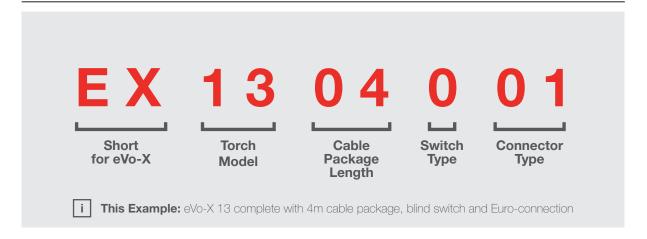
Positive antirotation locking: A machined flat in the thread prevents collet twisting or misalignment.



Extended clamping range: Even the smaller torches can now safely and reliably clamp tungsten electrodes from 1.0 mm up to 4.0 mm offering maximum flexibility for a wide range of welding tasks.

TIGZONE eVo-X – complete torches

Structure of the SKU for a complete torch package



Torch Options - EXXX xx x xx



Cable Package Lenght Options - EX xx XX x xx









Switch Options - EX xx xx X xx



Connector Options Quick List - EX xx xx x XX

Universal				
EU 1	SK35	13mm	х	01
EU 2	SK25	9mm	х	02
UK	BSP	3/8"	х	03
US 1	Air 1	3/8"x14 RH	х	04
US 2	Air 2	7/8"x14 RH	х	05
US 3	Water	7/8"x14 LH	х	06

Manufac	touch Cr	a a ifi a
Manuiac	lurer 5t	ecilic:

Böhler	7pol	10
Castolin	7pol	11
CEA	6pol	12
Cebora	10pol	13
ESAB	2pol	14
ESAB	8pol	15
ESAB	х	16
ESS	5pol	17
ESS	5pol	18
EWM	5pol	19
EWM	8pol	20
France	2pol	21
Fronius	9pol	22
Fronius	9pol	23
Fronius	8pol	24
Jasic	9pol	25
Jasic	12pol	26
Kemppi	4pol	27
Kemppi	7pol	28
Lincoln	5pol	29
Lorch	5pol	30
L-TEC	5pol	31
Migatronic	7pol	32
Miller NW5	14pol	33
Miller 5/8	14pol	34
Rehm	7pol	35
Rehm	12pol	36
Rehm	19pol	37
Weco	5pol	38

Connector Types & Cooling Versions

Air or water version of the connector is automatically determined by the torch type.

More thorough information regarding connectors on the following pages.

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Disclaimer

All references to genuine manufacturer's equipment numbers, and/or trade names or trademarks are for identification and convenience only. The trademarks and trade names are the property of their respective owners.



Interfaces

EWS connection interfaces are designed for maximum reliability and performance under demanding industrial conditions. Precision-fit components and rugged materials ensure leak-proof sealing, efficient current transmission, and stable fluid flow even under thermal stress and mechanical strain.



SK35 - 13mm



Power Connections

Design

Flexible, braided copper conductors housed in robust, low-resistance interfaces. The connectors are designed for high current loads, pulse resistance, and frequent movement. Contact zones are optimized for minimal heat generation and durable mechanical locking.

Benefits

- High current-carrying capacity with low losses
- Reliable under frequent retooling and movement
- Safe connection even under peak loads
- Long service life, also in combination with cooling systems



SK25 - 9mm







3/8" x 14 RH



7/8" x 14 RH



7/8" x 14 LH



Fronius Central



ZA ESAB



ZA-LTEC



ZA-Kemppi



Water Connections

Design

The water-cooled systems are equipped with the proven SUPERFLEXTM cable, featuring a high-strength braided outer layer and an inner insulation made from natural rubber. Offering excellent flexibility and mechanical durability, even under tight bending radii or drag chain conditions. Couplings are engineered for long-term drip resistance and remain stable under thermal and chemical stress. The system design also allows the return line to be used as a current conductor without causing thermal bottlenecks under high loads.

Benefits 8 4 1

- High current-carrying capacity with low losses
- Reliable under frequent retooling and movement
- Safe connection even under peak loads
- Long service life, also in combination with cooling systems
- For optimal conductivity and material compatibility, the pH value of the coolant should be maintained between 7.0 and 8.5. We recommend using the antifreeze coolant (BA15-EVO) from Rhino Protection.



NW5





Sealing Caps

All water ports come equipped with high-quality sealing caps for safe delivery and handling.







Gas Connections

Design

Precision-engineered connectors with high-tolerance brass components and specialized multi-point crimping. Sealing surfaces are designed for permanent tightness without the need for sealing tape or secondary processing. High mechanical stability supports use under fluctuating temperatures.

Benefits

- Durable, maintenance-free sealing
- Reduced microleakage and wear
- Time-saving installation without post-adjustments
- Stable performance in long-term industrial use



Cooling Style ⇒ & △

Cooling connectors will be selected and assembled based on the cooling system of the ordered torch. Air cooled torches do not need extra connectors like water torches.









5/8" x 18 RH







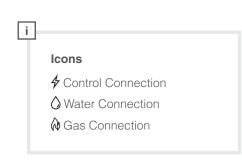






General Connectors

EWS offers standardized control line interfaces designed for reliable signal transmission and easy integration into common automation systems. All connectors meet industrial safety standards and ensure secure, interference-free operation in demanding environments.















Manufacturer-Specific Interfaces

For selected OEM systems, EWS provides preconfigured control connectors tailored to proprietary interface standards. These solutions enable direct integration without adapter wiring and ensure full compatibility with the respective machine control architecture.



TIGZONE - Connector Options



Rehm - 19pol

SK35 - 13mm

NW5 🔷

NW2.7

Weco - 5pol

SK35 - 13mm

NW5 🔷

M10x1

respective owners.





TIGZONE eVo13 – aircooled TIG-Torch

The Torch

Small profile torch designed for demanding applications and high amperage output

The End-Connector

Available for all standard welding machines

The Handle

Endurance triangle design with different switch options

The Cable

Super-Flex® cables and Super-Snake® leather remains flexible and ease to handle with a significant cable lifetime

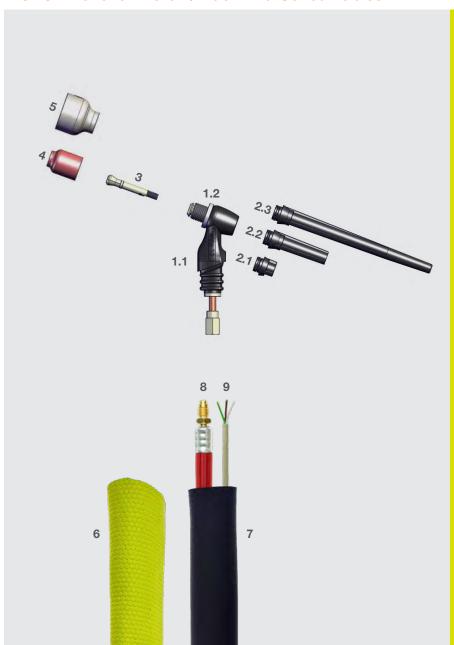
Cross-Compatibility

Cross-compatible consumables across eVo-X torches

DIN Norm

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TIGZONE eVo13 - Torch / Back End Consumables



	Torch Front (Frouin		
1	Torch	ысар		
.1	Body incl. insulator (1.2)	EVO13		
.2	Insulator	EVHS		
2	Backcap			
.1	short	EVBCS		
.2	medium	EVBCM		
.3	long	EVBCL		
3	X-Collet 43,5mm			
	1.0mm	EVC040		
	1.6mm	EVC116		
	2.4mm	EVC332		
	3.2mm	EVC418		
	4.0mm	EVC532		
4	Cup			
	variants in table below			
5	eVo-FLO			
Ü	variants on page 17			
	Cable Gro	UD		
6	Cable cover			
	leather	TZ-1027Y		
7	Cable cover	RS-22		
8	Power Cable			
	4m	57Y01R-SF-*		
	8m	57Y03R-SF-*		
9	Control			
Ĭ	4m	AE130-12CC-*		
	8m	AE130-25CC-*		
r	Dlogge appoint made	hino		
l l	* Please specify mac connections e.g. 1/			
L	COMPECTIONS e.g. 17	7, 3/0 €IU.		
Г.	_			
[i Handles & Switch	nes		
1	More Handles & Switc	hes infor-		
	mation our on our handle page.			









TIGZONE eVo21 – aircooled TIG-Torch

The Torch

Small profile torch designed for demanding applications and high amperage output

The End-Connector

Available for all standard welding machines

The Handle

Endurance triangle design with different switch options

The Cable

Super-Flex® cables and Super-Snake® leather remains flexible and ease to handle with a significant cable lifetime

Cross-Compatibility

Cross-compatible consumables across eVo-X torches

DIN Norm

TIGZONE eVo21 - Torch / Back End Consumables



	Torch Front (Group	
1	Torch		
.1	Body incl. insulator (1.2)	EVO21	
.2	Insulator	EVHS	
2	Backcap		
.1	short	EVBCS	
.2	medium	EVBCM	
.3	long	EVBCL	
3	X-Collet 50mm		
	1.0mm	EVC040L	
	1.6mm	EVC116L	
	2.4mm	EVC332L	
	3.2mm	EVC418L	
	4.0mm	EVC532L	
4	Cup		
	variants in table below		
5	eVo-FLO		
	variants on page 17		
	Cable Gro	מוומ	
6	Cable cover	Д	
Ů	leather	TZ-1027Y	
7	Cable cover		
'	25×1.5mm	RS-25	
8	Power Cable		
Ü	4m	46V28R-SF-*	
	8m	46V30R-SF-*	
9	Control		
9	4m	AE210-12CC-*	
	8m	AE210-25CC-*	
Г	* Please specify mad	hine	
L			
	connections e.g. 1	/ 4, 3/8 etc.	
	i Handles & Switch	hes	
1			
N	More Handles & Switc	hes infor-	
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mation out out natione page.			







TIGZONE eVo31 – watercooled TIG-Torch

The Torch

Small profile torch designed for demanding applications and high amperage output

The End-Connector

Available for all standard welding machines

The Handle

Endurance triangle design with different switch options

The Cable

Super-Flex® cables and Super-Snake® leather remains flexible and ease to handle with a significant cable lifetime

Cross-Compatibility

Cross-compatible consumables across eVo-X torches

DIN Norm

TIGZONE eVo31 - Torch / Back End Consumables



Size		4 Cup (25.40 mm)	4 Super Cup (Sil.Nitride)	4 Cup L (35 mm)	4 Cup XL (72 mm)
#3	Ø 4.75 mm	-	-	-	-
#4	Ø 6.35 mm	53N58	53N58SC	53N58L	53N58XL
#5	Ø 7.93 mm	53N59	53N59SC	53N59L	53N59XL
#6	Ø 9.52 mm	53N60	53N60SC	53N60L	53N60XL
#7	Ø 11.11 mm	53N61	53N61SC	53N61L	53N61XL
#8	Ø 12.70 mm	53N61S	53N61SSC	53N61SL	-
#10	Ø 15.87 mm	53N61S-10	-	-	-

	Torch Front	Group
1	Torch	· Group
.1	Body incl. insulator (1.2)	EVO31
.2	Insulator	EVHS
2	Backcap	
.1	short	EVBCS
.2	medium	EVBCM
.3	long	EVBCL
3	X-Collet 43,5mm	
3	1.0mm	EVC040
	1.6mm	EVC116
	2.4mm	EVC332
	3.2mm	EVC418
	4.0mm	EVC532
4	Cup variants in table below	
_		
5	eVo-FLO	
	variants on page 17	
	Cable G	rour
6	Cable cover	loup [
	leather	TZ-1027Y
7	Cable cover	
	25×1.5mm	RS-25
8	Power Cable	
	4m	AQ310-12PC-*
	8m	AQ310-25PC-*
9	Water Hose	
	4m	AQ310-12W-*
	8m	AQ310-25W-*

* Please specify machine connections e.g. 1/4, 3/8 etc.

AQ310-12G-*

AQ310-25G-*

AQ310-12CC-*

AQ310-25CC-*

i Handles & Switches

10 Gas Hose

4m 8m

11 Control

4m 8m

More **Handles & Switches** information our on our handle page.





TIGZONE eVo41 – watercooled TIG-Torch

The Torch

Small profile torch designed for demanding applications and high amperage output

The End-Connector

Available for all standard welding machines

The Handle

Endurance triangle design with different switch options

The Cable

Super-Flex® cables and Super-Snake® leather remains flexible and ease to handle with a significant cable lifetime

Cross-Compatibility

Cross-compatible consumables across eVo-X torches

DIN Norm

TIGZONE eVo41 - Torch / Back End Consumables



Size		4 Cup (25.40 mm)	4 Super Cup (Sil.Nitride)	4 Cup L (35 mm)	4 Cup XL (72 mm)
#3	Ø 4.75 mm	-	-	-	-
#4	Ø 6.35 mm	53N58	53N58SC	53N58L	53N58XL
#5	Ø 7.93 mm	53N59	53N59SC	53N59L	53N59XL
#6	Ø 9.52 mm	53N60	53N60SC	53N60L	53N60XL
#7	Ø 11.11 mm	53N61	53N61SC	53N61L	53N61XL
#8	Ø 12.70 mm	53N61S	53N61SSC	53N61SL	-
#10	Ø 15.87 mm	53N61S-10	-	-	-

	Torch Fron	nt Group
1	Torch	
.1	Body incl. insulator (1.2)	EVO41
.2	Insulator	EVHS
2	Backcap	
.1	short	EVBCS
.2	medium	EVBCM
.3	long	EVBCL
3	X-Collet 50mm	
	1.0mm	EVC040L
	1.6mm	EVC116L
	2.4mm	EVC332L
	3.2mm	EVC418L
	4.0mm	EVC532L
4	Cup	
	variants in table below	
5	eVo-FLO	
	variants on page 17	
	Cable (Group
6	Cable cover	
	leather	TZ-1027Y
7	Cable cover	
	25×1.5mm	RS-25
8	Power Cable	
	4m	AQ410-12G-*
	8m	AQ410-25G-*
9	Water Hose	
	4m	AQ410-12W-*
	8m	AQ410-25W-*
10	Gas Hose	
	4m	AQ410-12PC-*
	8m	AQ410-25PC-*
11	Control	
	4	A0440 4000 +

Please specify machine connections e.g. 1/4, 3/8 etc.

AQ410-12CC-*

AQ410-25CC-*

i Handles & Switches

4m 8m

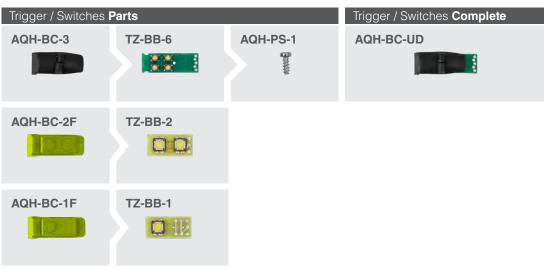
More **Handles & Switches** information our on our handle page.

HANDLE SERIES

TIGZONE Endurance

The very small and short TIGZONE Endurance handle is equipped with an up/down function to regulate the power up and down. And more: Due to its triangular shape, the handle can be used by both right-handed and left-handed users without turning. The switch module of the TIGZONE Endurance is also available as a single or double switch version.







TIGZONE SERIES

eVo - FLO

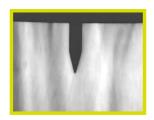
Cover Nozzle

TIG ZONE® designed and developed the new eVo-FLO Cover Nozzle ready for all demanding welding applications.

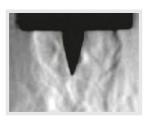
With an orifice of 27mm the eVo-FLO Cover nozzle provides a large inert atmosphere for the welding of reactive metals such as titanium, molybdenum,nickel - based and aluminium based alloys as well as non - reactive metals like stainless steel. An additional benefit is the ability for greater electrode stick - out (up to 50 mm) for better visibility of the puddle. As a result the eVo Flo system helps you weld and reach the most difficult welding positions.

- Available for 1,6mm 2,4mm 3,2mm tungsten
- Weight advantage against standard jumbo Lens
- Interchangeable Lens screens





eVo-FLO in action tested by Linde AG



turbulent flow from common cups

Ø Tungsten Diameter	eVo-FLO complete	eVo-FLO Screen	eVo-FLO Spring Ring
1/16 (1,6mm)	GSC116	GS116	
3/32 (2,4mm)	GSC332	GS332	EFSR
1/8 (3,2mm)	GSC418	GS418	

Specifications	
Size	#18
inner Ø (mm)	27,3
Recommended Material	Stainless, Titanium, Inconel
Ampere (A)	180DC
Flow Rate (I/min)	14-21





TIGZONE SERIES

TUNGSTEN

ELECTRODES

The range of tungsten electrodes is very extensive. When it comes to choosing the right tungsten for your own welding task, you will find yourself confronted with the colour coding of the tungsten electrodes. The individual electrode types are marked with different colours. The colours stand for the respective material mix, i.e. which components other than tungsten are added to the electrodes. Depending on the welding process or material, one variant is more suitable than another.



Personalised Packaging
We also offer private label packaging.

LENGTH 150 mm 175 mm W TYPE O WL10 DIAMETI WL15 **0.5** mm WL20 1.0 mm () WP 1.6 mm WT20 2.0 mm WZ8 2.4 mm WC20 3.2 mm WR02 4.0 mm 4.8 mm WR03 (Gen3

Choose your Tungsten Electrode

Application	WL10 Black	WL15 Gold	WL20 Blue	WP Green	WT20 Red	WZ8 White	WC20 Grey	WR02 Turquoise	WR03 Violet	Gen3 Pearl Copper
Direct Current Minus Pole	++	++	+++	-	+++	-	+	+++	+++	+++
Alternating Current	++	+	+	++	-	+++	+	+++	+++	+++
Arc Stability	+	+	++	-	+++	++	++	++	++	+++
Ignitability	++	++	+++	-	+++	++	+	+++	++++	++++
Lifetime	+	++	+++	+	+++	++	+	++++	++++	+++++
High Alloy Steels	++	+++	+++	-	++++	-	+++	++++	++++	++++
Aluminium	++	+	+	++	-	++++	+	+++	+++	+++

11

That's how you create the SKU





Grinding Angle

The sharper the electrode, the lower the ampere rating!

The electrode can only withstand the full ampere load at a ground angle of 60°. If electrodes are permanently overloaded, they lose their properties.

	Grinding Angle (°)							
	15°	30 °	45°	60 °	75°			
Ø (mm)	Ampere (A)							
1,0	5 – 20	10 – 30	20 - 80	-	-			
1,6	10 – 50	20 – 75	30 – 100	50 – 140	-			
2,4	10 – 50	20 - 90	30 – 140	50 – 180	80 – 230			
3,2	30 – 80	40 – 140	50 – 220	70 – 300	80 – 320			
4,0	50 – 100	50 – 150	60 – 250	70 – 350	90 – 450			

Manufacturing

Tungsten electrodes are manufactured in a wide variety of designs with the addition of rare earth oxides, using the forging process.







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