

# Robot mount iCAT

## Safety & flexibility in perfect symbiosis!

**iCAT** – the robot mount for the latest generation of welding robots with a central guided cable assembly through the 6th axis offers a high level of safety & flexibility for air- and liquid-cooled torches.

In case of a collision of the welding torch with the work piece, the **iCAT** is mechanically deflected by up to 10°. The **iCAT** has a buffer function in order to avoid damage at the welding torch, periphery as well as the robot. An additional safety aspect is the integrated crash protection of the **iCAT** which stops the robot immediately in case of a "crash".

### The secret:

- Extremely torsion resistant cable assembly rotatable in the 6<sup>th</sup> axis over 480° (+/- 240°).
- Safety & optimal system performance due to high repeatability.
- High productivity & long life time through rugged, simple design.
- High flexibility and optimal work piece accessibility.
- Reduction of maintenance costs due to an easy assembly and handling.
- Highest reliability is offered through the comprehensive protection against dust and spatters.
- **Additional feature:** optional airblast and anti spatter injection through the cable assembly.

ABIROB® A



ABIROB® W



ABIROB® GC



Technology for the Welder's World.



**ABIROB® A**

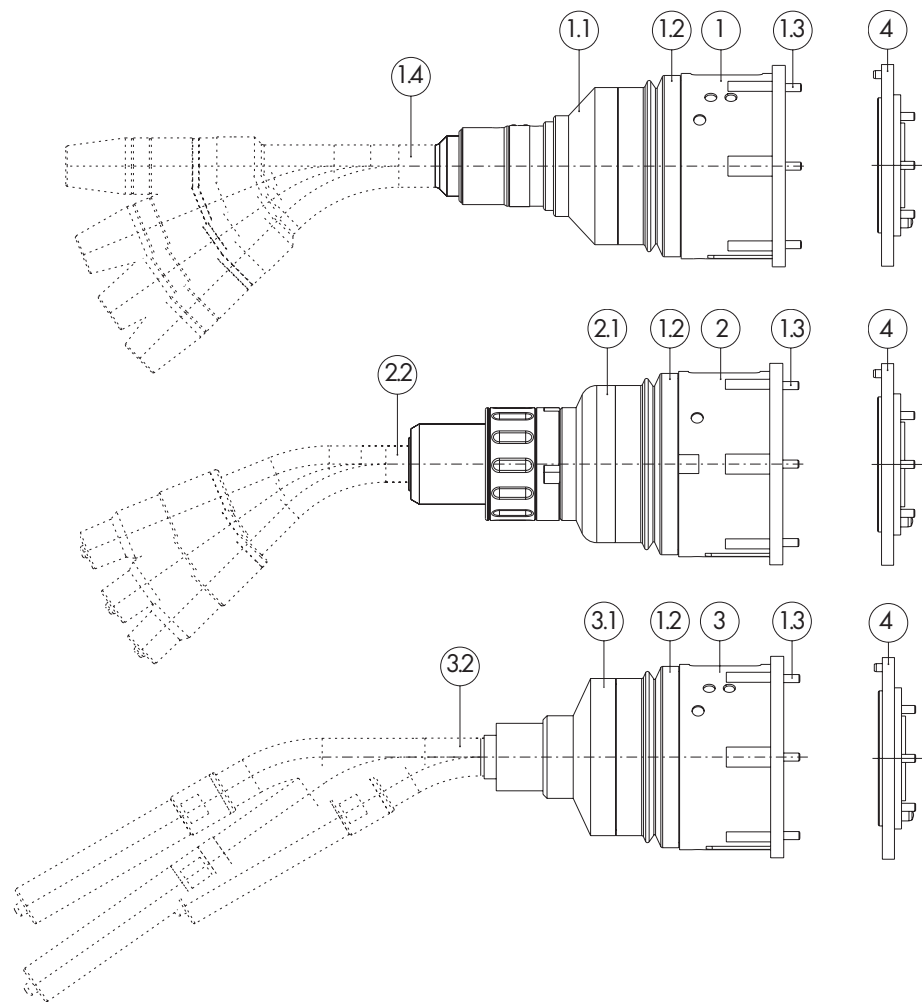
The proven air cooled system. High stability and repeatability.

**ABIROB® W**

For particularly demanding applications. Liquid-cooled up to 400 A.

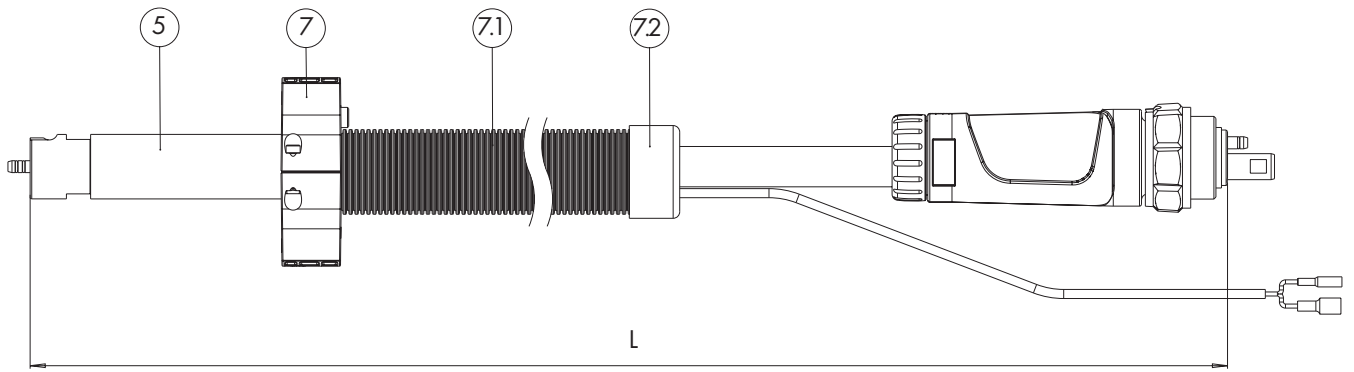
**ABIROB® 350 GC**

Economical and reliable in the typical Asian CO<sub>2</sub> torch design.

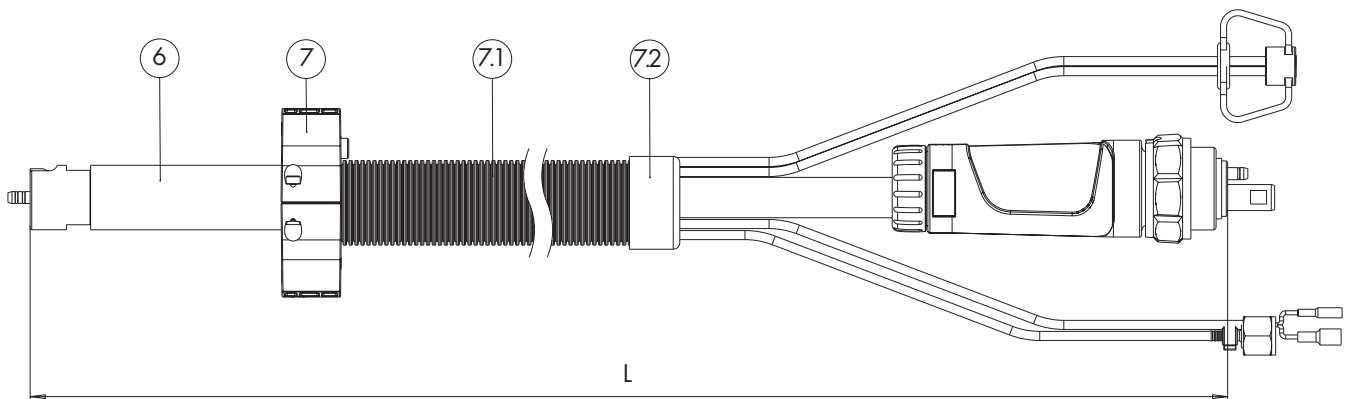


Component	Pos.	Description	Order-no.	
<b>Robot mount</b> <b>iCAT</b>	1	iCAT ABIROB® A cpl.	780.3101	
	1.1	Isolation sleeve	780.3010	
	1.2	Rubber boot	780.3009	
	1.3	Screw M4x10	009.0268	
	2	iCAT ABIROB® W cpl.	780.3130	
	2.1	Isolation sleeve	780.3133	
	3	iCAT ABIROB® GC cpl.	780.3110	
<b>Intermediate flange</b>	3.1	Isolation sleeve	780.3113	
	4	Robot flange for Motoman® EA1400N oder 1900N (other on request)	780.0575	
	<b>Torch neck*</b> <b>ABIROB® A 360</b> <b>ABIROB® A 500</b>	1.4	ABIROB® A 360 0°	980.1023
			ABIROB® A 360 22°	980.1024
			ABIROB® A 360 35°	980.1025
			ABIROB® A 360 45°	980.1026
			ABIROB® A 500 0°	980.1012
		ABIROB® A 500 22°	980.1013	
		ABIROB® A 500 35°	980.1014	
		ABIROB® A 500 45°	980.1015	
<b>Torch neck*</b> <b>ABIROB® W</b>	2.2	ABIROB® W 22°	782.0003	
		ABIROB® W 35°	782.0004	
		ABIROB® W 45°	782.0005	
<b>Torch neck*</b> <b>ABIROB® 350 GC</b>	3.2	ABIROB® 350 GC 35°	980.0004	
		ABIROB® 350 GC 30° short	980.0027	
		ABIROB® 350 GC 30° long	980.0028	

### Cable assembly air-cooled for iCAT



### Cable assembly liquid-cooled for iCAT



Wire feeder*	Robot	ABIROB® A and GC (pos. 5)	ABIROB® W (pos. 6)	length (L)	Liner standard**	Liner alternative
Kemppi® with euro central connector	Motoman® EA1400	980.2006	980.2054	1.05 m	H	F/G/I/M/N
	Motoman® EA1900	980.2007	980.2055	1.34 m	H	F/G/I/M/N
Fronius®	Motoman® EA1400	980.2016	980.2058	1.03 m	J	○
	Motoman® EA1900	980.2017	980.2059	1.32 m	J	○
Panasonic®	Motoman® EA1400	980.2004	980.2052	0.94 m	B	A/C/D/E/K/L
	Motoman® EA1900	980.2005	980.2053	1.23 m	B	A/C/D/E/K/L
SKS®	Motoman® EA1400	980.2014	980.2056	0.99 m	A	B/C/D/E/K/L
	Motoman® EA1900	980.2015	980.2057	1.28 m	A	B/C/D/E/K/L
Miller®	Motoman® EA1400	980.2019	980.2060	1.04 m	A	B/C/D/E/K/L
	Motoman® EA1900	980.2020	980.2061	1.35 m	A	B/C/D/E/K/L

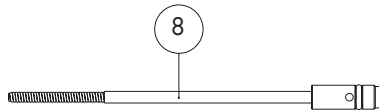
Component	Pos.	Description	Order-no.
<b>Accessories</b>	7	Wrist protection cpl.	400.1153
	7.1	Outer hose (length indication necessary)	109.0074
	7.2	Outer hose end piece	500.0453
	w/o fig.	Protection cover (for iCAT)	191.0117
	w/o fig.	Insertion help tool (for an easy mounting of the cable assembly)	980.2030
	w/o fig.	TCP check tool	780.3020

\* Further assemblies e.g. with airblast function or for other wire feeder manufacturers on request.

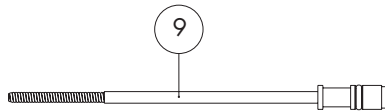
\*\* Contained in the original equipment.

## Liner for air- and liquid-cooled cable assemblies for steel welding

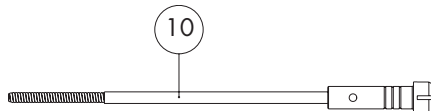
PA nipple screwed on  
(for Panasonic®, Miller®, SKS®)



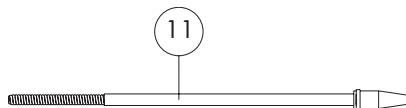
Brass collet crimped  
(for Panasonic®, Miller®, SKS®)



PA collet screwed on  
(for Kemppi® with euro central connector)



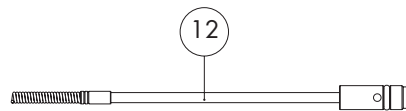
Liner  
(Fronius®)



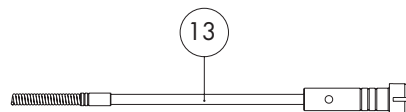
Component	No.	Pos.	Description	Order-no.	
<b>Screwed on PA nipple</b>	A	8	Liner 1.9 x 5.5 x 2200 mm; 1.0 - 1.2 mm wire	124.0163	
	B	8	Liner 2.0 x 4.5 x 2200 mm; 1.0 - 1.2 mm wire; gas pressure < 2.0 bar	124.0164	
<b>Crimped brass nipple</b>	C	9	Liner 2.0 x 4.5 x 2200 mm; 1.0 - 1.2 mm wire; gas pressure < 2.0 bar	124.0165	
	D	9	Liner 1.9 x 5.5 x 1300 mm; 1.0 - 1.2 mm wire	124.D070	
	E	9	Liner 1.9 x 5.5 x 3400 mm; 1.0 - 1.2 mm wire	124.D075	
	F	10	Liner 2.0 x 4.5 x 2000 mm; 1.0 - 1.2 mm wire; gas pressure < 2.0 bar	124.0170	
	<b>Screwed on PA collet</b>	G	10	Liner 1.9 x 5.5 x 3600 mm; 1.0 - 1.2 mm wire	124.0146
		H	10	Liner 1.9 x 5.5 x 2000 mm; 1.0 - 1.2 mm wire	124.0145
I		10	Liner 2.2 x 6.0 x 2000 mm; 1.0 - 1.6 mm wire	124.0147	
<b>Liner</b>	J	11	Liner 1.9 x 5.5 x 2200 mm; 1.0 - 1.2 mm wire	124.0174	

## Liner for air- and liquid-cooled cable assemblies for aluminium welding

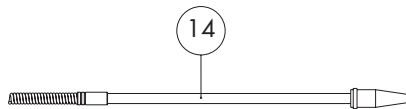
PA nipple screwed on  
(for Panasonic®, Miller®, SKS®)



Brass collet crimped  
(for Kemppi® with euro central connector)



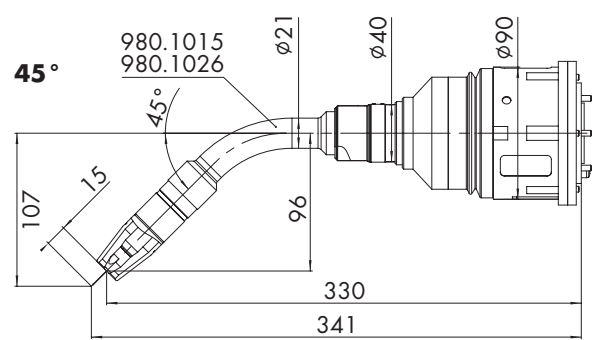
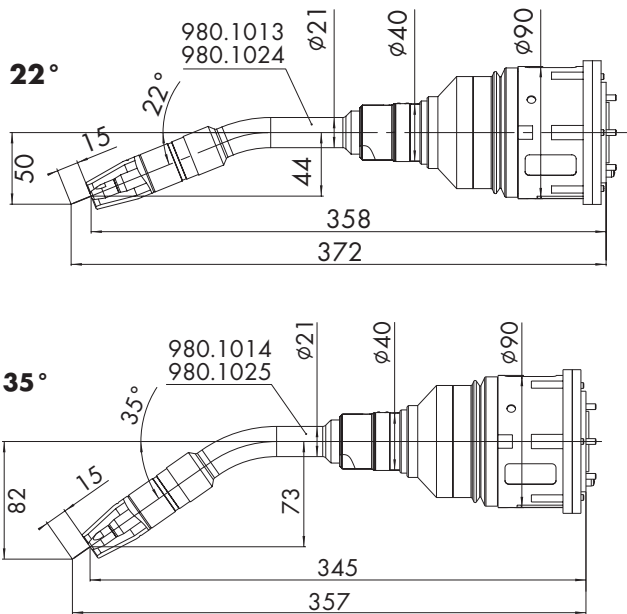
Liner  
(Fronius®)



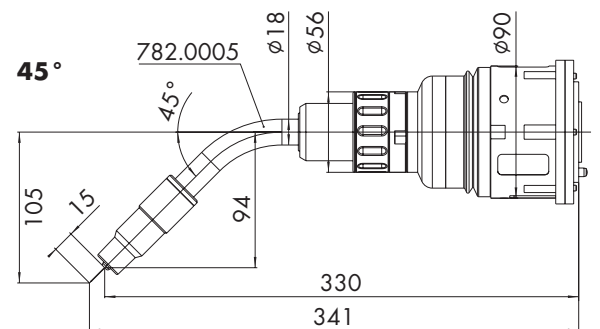
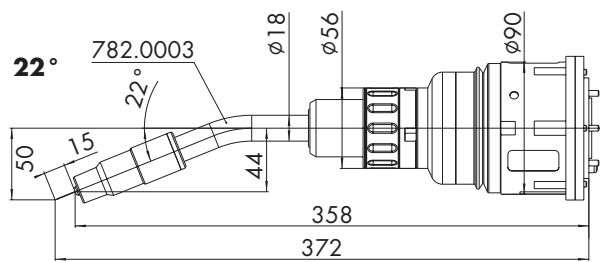
Component	No.	Pos.	Description	Order-no.
<b>Screwed on PA nipple</b>	K	12	Combiliner 1.0 - 1.2 mm wire; total length 2.4 m	128.M006
	L	12	Combiliner 1.0 - 1.6 mm wire; total length 2.4 m	128.M010
<b>Screwed on PA collet</b>	M	13	Combiliner 1.0 - 1.2 mm wire; total length 2.4 m	128.M008
	N	13	Combiliner 1.0 - 1.6 mm wire; total length 2.4 m	128.M012
<b>Liner</b>	O	14	Combiliner 1.0 - 1.6 mm wire; total length 2.4 m	128.M014

**Note:** All trademarks mentioned are property of the respective companies.

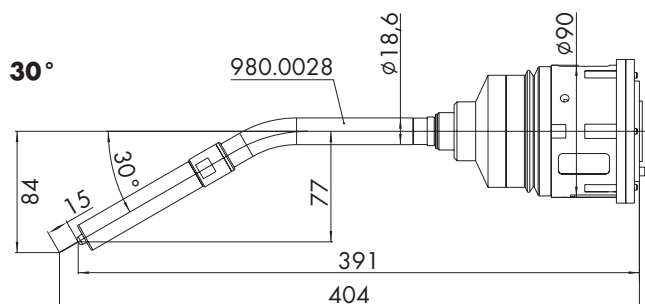
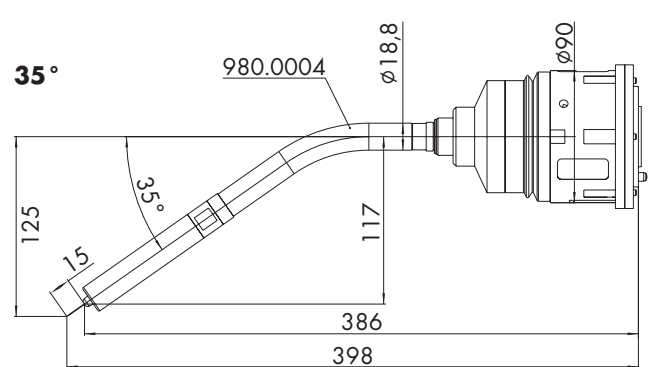
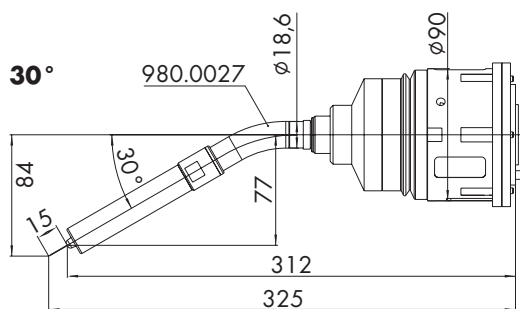
**Dimensional sketch ABIROB® A (incl. robot flange)**



**Dimensional sketch ABIROB® W (incl. robot flange)**



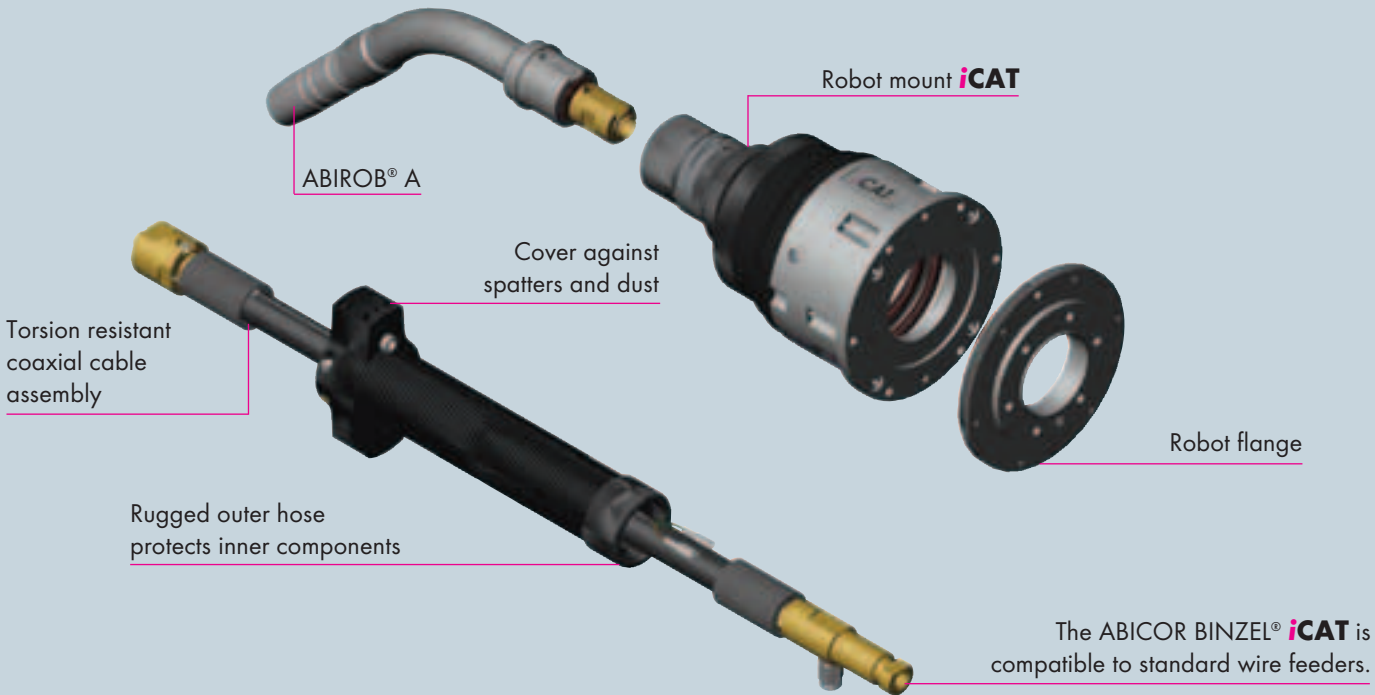
**Dimensional sketch ABIROB® GC (incl. robot flange)**



For detailed information about welding torches see ROBO-Catalogue or on request.

# Robot mount „iCAT“

Safety & flexibility in perfect symbiosis!



The ABICOR BINZEL® iCAT is compatible to standard wire feeders.



## Technical data:

Type	Cooling	Rating at 100% DC		Wire (mm)	Weight (incl. torch neck)
		Mixed gas M21	CO <sub>2</sub>		
iCAT ABIROB® A360	air-cooled	290 A	360 A	0.8 - 1.4	approx. 2000 g
iCAT ABIROB® A500	air-cooled	370 A	420 A	0.8 - 1.6	approx. 2100 g
iCAT ABIROB® W500	liquid-cooled	400 A	450 A	0.8 - 1.6	approx. 2600 g
iCAT ABIROB® 350GC	air-cooled	300 A	350 A	0.8 - 1.2	approx. 2100 g

**Excursion:** approx. 10°  
**Repeatability:** +/-0.1 mm

Technology for the Welder's World.



Alexander Binzel Schweisstechnik GmbH & Co. KG  
P.O. Box 10 01 53 · D-35331 Gießen  
Phone: ++49 (0) 64 08 / 59-0  
Fax: ++49 (0) 64 08 / 59-191  
Internet: www.binzel-abicor.com