

MIG/MAG welding torch system

“ABIROB® 350 GC” air-cooled



“Sturdy, durable & economic ...”

ABIROB® 350 GC – in the typical design of an air-cooled CO₂ welding torch – is mainly used for automated welding in the Asian market.

The changeable torch stands for high capacity and long duty cycles. Its intelligent interface guarantees fast and reproducible maintenance and thus avoids downtimes.

The welding torch system is available for all standard wire feeder connections (ABICOR BINZEL®, MOTOMAN®, PANASONIC®, OTC®).

Advantages that speak for themselves:

- Compatible with Asian CO₂ torches
- Changeable torch neck with intelligent pin fixing reduces line downtimes and costs
- Optimum temperature behaviour guarantees long service life for wear parts
- High-grade cable assemblies guarantee a long service life
- Sturdy torch design provides high crash stability

Degree of automation:

Low

Medium

High

Typical areas of application:

- Automobile construction
- Suppliers (Tier 1, Tier 2)
- Bicycle industry
- Container construction

Material:

- Construction steels (coated / non-coated)
- Chrome-nickel steels
- Duplex steels
- Nickel basic materials

Robot interface:

- Conventional robot
(Cable assembly on the outside):
 - Robot mount CAT2
 - Fixed bracket RTM
- Hollow wrist robot
(Cable assembly on the inside):
 - Robot mount iCAT
 - Bracket iSTM (for robots with integrated collision software)
- Hollow wrist robot
(Cable assembly on the outside):
 - Robot mount CAT2
 - Fixed bracket RTM

up to
350 A



"ABIROB® 350 GC" air-cooled System overview and technical data

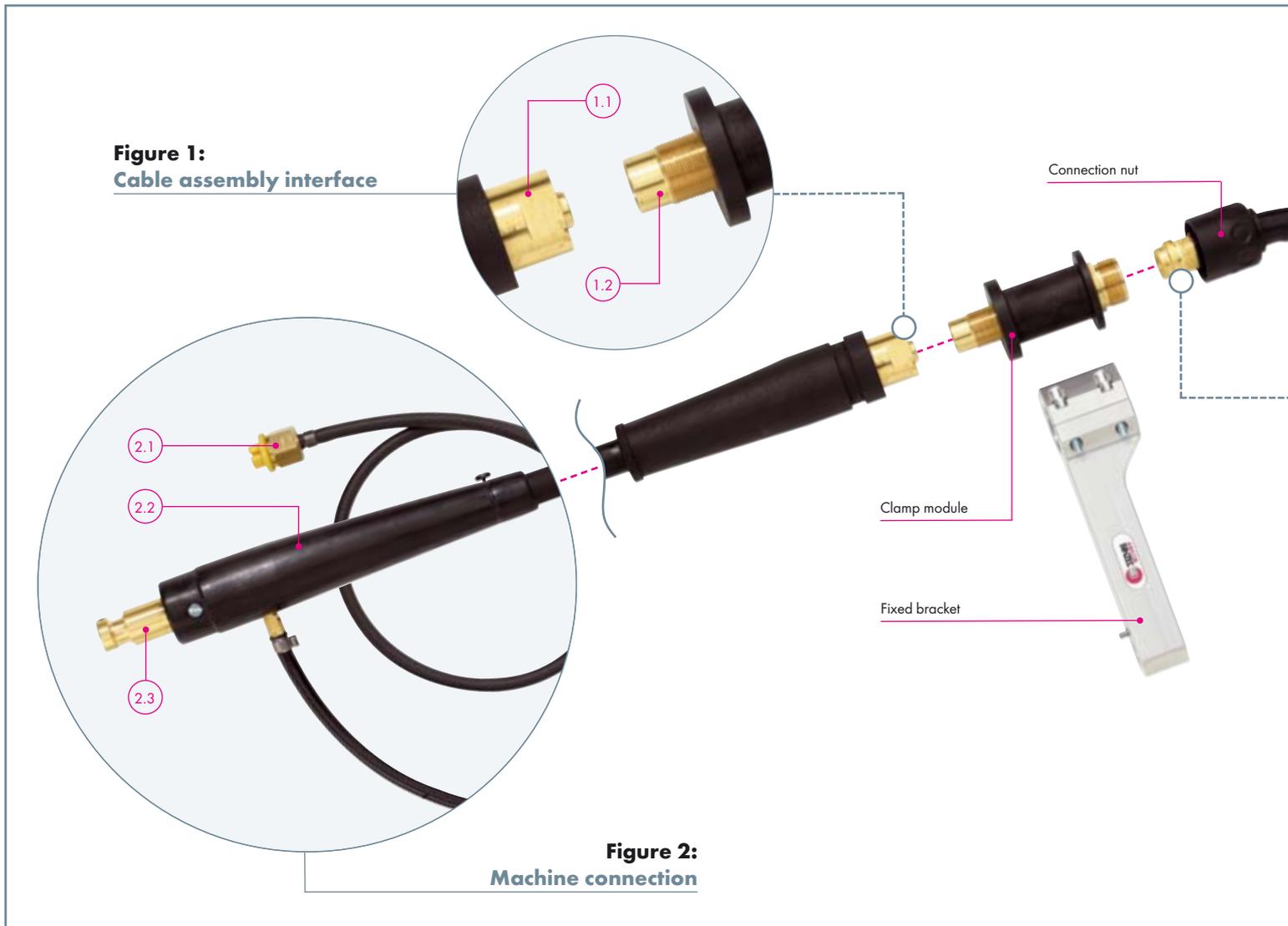


Figure 1:
Cable assembly interface

- 1.1 Straightforward attachment of the cable assembly through connection nut
- 1.2 Clamp module – the holder does not need to be opened for reproducible changing of cable assembly and torch neck

Figure 2:
Machine connection

- 2.1 Airblast hose with blanking plug (optional)
- 2.2 Flexible bend-protection casing for protection in every position
- 2.3 Power connection available for all standard wire feeds

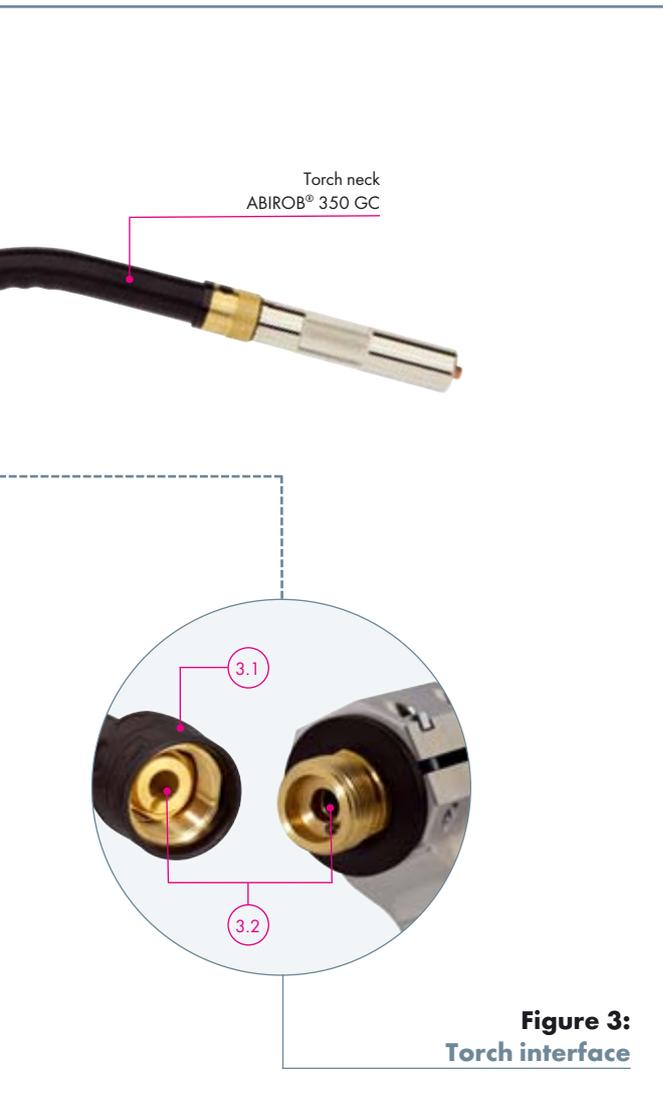


Figure 3:
Torch interface

Figure 3:
Torch interface

- 3.1 High-grip connection nut – for a fast and tight connection
- 3.2 Lock pin and groove – for reproducible torch neck changing



Technical data (EN 60 974-7):

ABIROB® 350 GC

Type of cooling:	air-cooled
Rating:	350 A CO ₂ 300 A Mixed gases M21 (EN ISO 14175)
Duty cycle:	100 %
Wire-Ø:	0.8- 1.2 mm
Torch geometries:	30°/35°

Note on the technical data:

Rating data were determined under normal conditions at low to medium reflected heat, free air circulation and at 28 °C ambient temperature. When used under more difficult conditions, the rating data must be reduced by 10 - 20 %. The rating data are reduced by up to 35 % for pulse arc welding.

"ABIROB® 350 GC" air-cooled Torch necks & wear parts

ABIROB® 350 GC



Torch neck

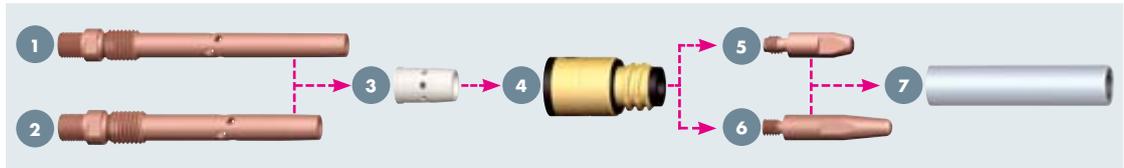
Features	30°	Part-No.	35°
Standard	-		980.0004
Short	980.0027		-
Long	980.0028		-

Wear parts and fittings are not included in the scope of delivery! Please order these separately and according to the application!

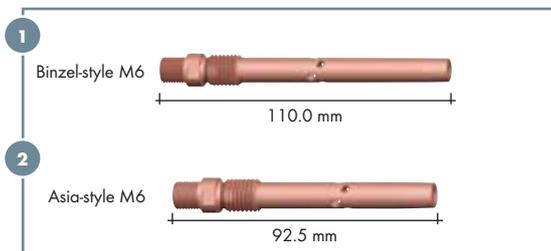
Neck liner

for	for torch geometry	Wire-Ø	Part-No.
Steel	35° Standard	Ø 0.8-1.2	980.0033.5
Steel	30° short	Ø 0.8-1.2	980.0035.5
Steel	30° long	Ø 0.8-1.2	980.0036.5

Wear parts for ABIROB® 350 GC

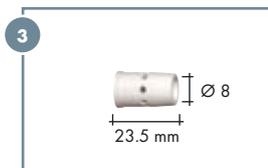


- 1 Binzel-style contact tip holder
- 2 Asia-style contact tip holder (5 pcs.)



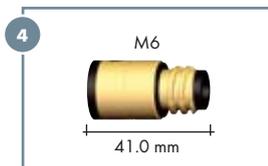
Type	Part-No.
Binzel-style M6 copper	142.0152
Asia-style M6 copper	142.0143.5

- 3 Gas diffuser (10 pcs.)



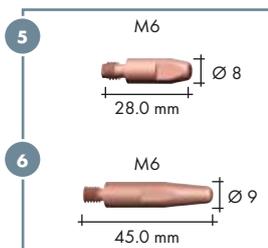
Type	Part-No.
Standard	980.0019

- 4 Gas nozzle holder (10 pcs.)



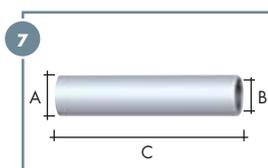
Type	Part-No.
Standard	980.0142.10

- 5 Binzel-style M6 contact tip
- 6 Asia-style M6 contact tip (10 pcs.)



Type	Wire-Ø	Part-No.	
		M6 Binzel-style	M6 Asia-style
CuCrZr	Ø 0.8	140.0054	-
	Ø 0.9	-	140.1355
	Ø 1.0	140.0245	140.1356
	Ø 1.2	140.0383	140.1357

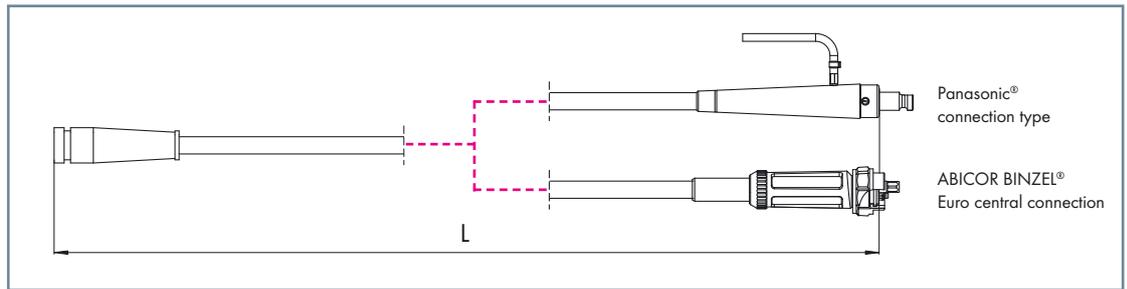
- 7 Gas nozzle (10 pcs.)



Type	Ø A	Ø B	Length C	Part-No.
Conical	Ø 20.0	Ø 12.0	89.5 mm	145.0558
Conical	Ø 20.0	Ø 13.0	89.5 mm	145.0573
Bottle form	Ø 20.0	Ø 14.0	89.5 mm	145.0559
Cylindrical	Ø 20.0	Ø 15.0	89.5 mm	145.0557
Cylindrical	Ø 20.0	Ø 19.0	89.5 mm	145.0579

"ABIROB® 350 GC" air-cooled Cable assemblies & accessories

Cable assemblies and connection types



Cable assemblies cpl.

with connection type	Length	Part-No.
ABICOR BINZEL® Euro central connection	1.10 m	980.0030
PANASONIC®	1.10 m	980.0029
PANASONIC®	1.25 m	980.0089

The control cable is not pre-wired at the machine end. Power source specific types on request.
The red steel liner 0.8 - 1.2 mm is included in the scope of delivery. Please order other versions separately.

Clamp module

Type	Part-No.
Clamp module 350 GC	980.0006

Liners

Type	for connection type	Wire-Ø	to L=1.3 m
Liner steel red ¹	ABICOR BINZEL® Euro central connection	Ø 0.8 - 1.2	124.0145
Liner steel red ¹	PANASONIC®	Ø 1.4 - 1.6	124.0147

¹ Red steel liner (insulated) for the use of non-alloyed and low-alloyed steels. The totally insulated wire feed prevents damage caused by "micro-arcing" on the wire. This allows optimal current transfer inside the contact tube, improving the welding process. The insulated steel liner must always be used for power sources with optimal welding wire sensors. Liners for aluminium and special wires on request.

Accessories



Alignment jig

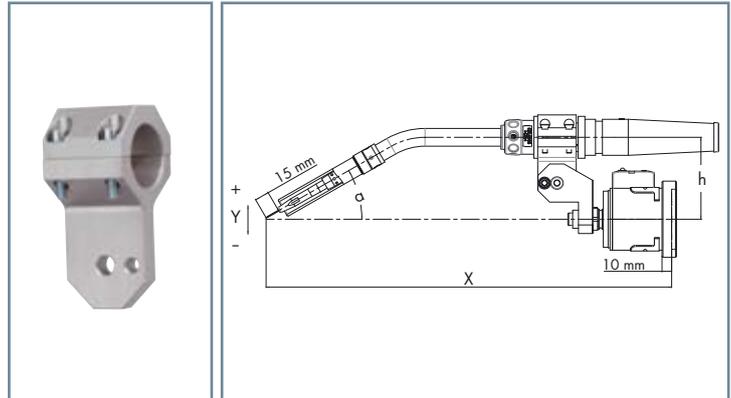
for torch type	Torch geometry	Part-No.
ABIROB® 350 GC	35°	837.0551
Standard		

“ABIROB® 350 GC” air-cooled Holder and TCP geometries

Torch holder for ABIROB® 350 GC

in connection with CAT2 cpl.

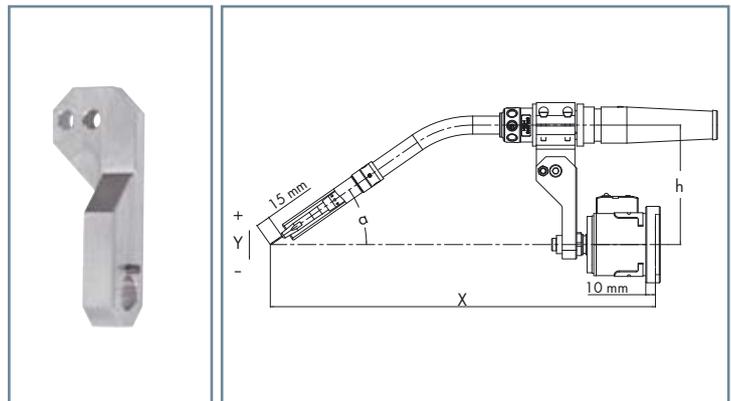
Torch type	Torch geometry	X	Y	h	α	Part-No.
ABIROB®	30°	453	86	86	0°	780.0145
350GC	35°	415	-39	86	35°	780.0145



CAT2 holder for ABIROB® 350 GC

in connection with CAT2 and holder 786.0145

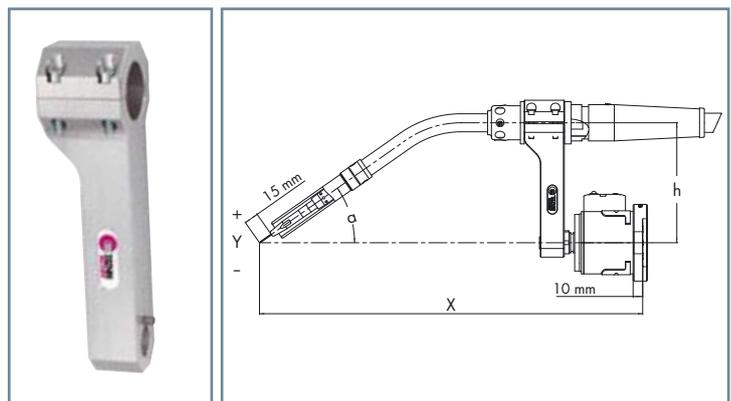
Torch type	Torch geometry	X	Y	h	α	Part-No.
ABIROB®	30°	437	125	125	0°	780.0310
350GC	35°	400	0	125	35°	780.0310



Fixed bracket for ABIROB® 350 GC

in connection with CAT2

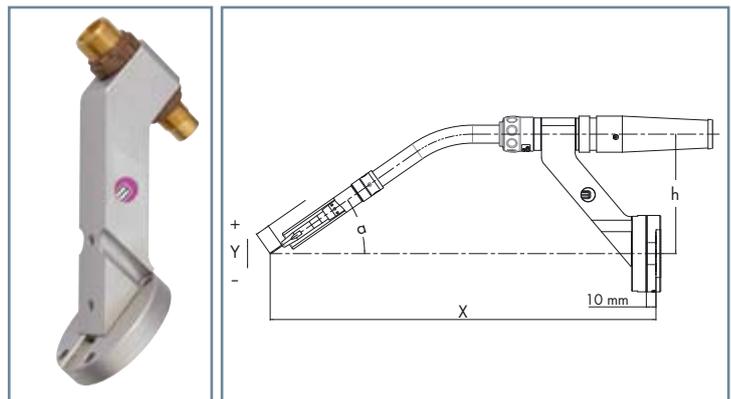
Torch type	Torch geometry	X	Y	h	α	Part-No.
ABIROB®	35°	400	0	125	35°	780.0309
350GC						



I-bracket for ABIROB® 350 GC

for robots with collision software

Torch type	Torch geometry	X	Y	h	α	Part-No.
ABIROB®	35°	400	0	125	35°	780.0183
350GC						



Further holders are available on request.

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