



CAT Compact

Shock sensor with
compact size



CAT Compact

System overview and technical data

Figure 1:
System overview

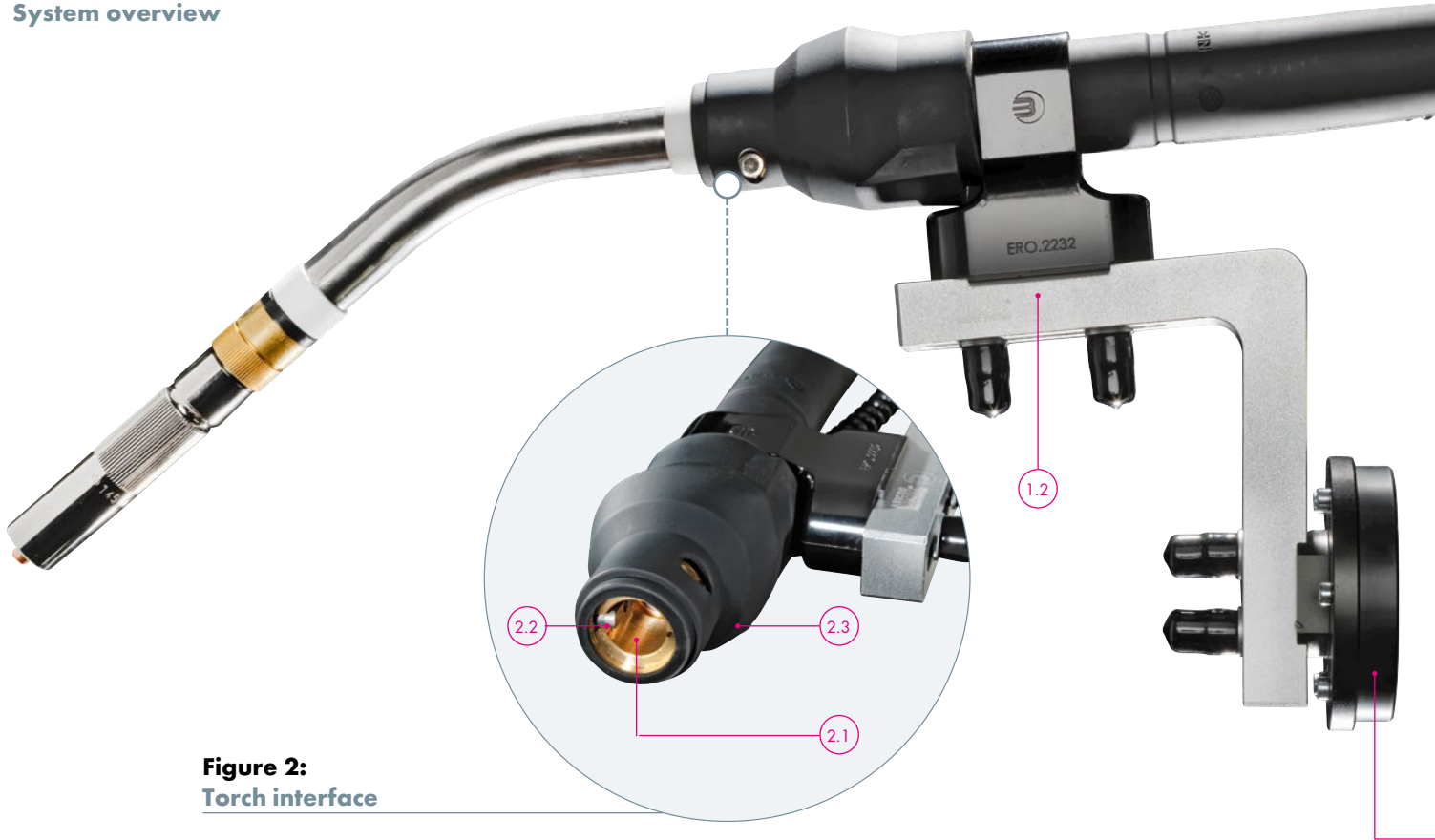


Figure 2:
Torch interface

Reduced to the max: Compact, precise, simple, fast installation and value for- money

The robot mount CAT Compact with fast installation cable assembly for air-cooled welding applications was designed for use on over arm robots up to 500 A. The overall system includes a welding torch, collision sensor and cable assembly with a heavy-duty and torsion-resistant coaxial cable for long service life.

The torch neck versions ABIROB® G 350, G 360 and G 500, which are equipped with the G-interface, are available to complement the CAT Compact system. Their outstanding features include stability and repeat accuracy – for good and reproducible welding results.

The torch neck types of the G-series are available in various TCP versions and can fall back on the tried-and-trusted wearing part concept of the ABIROB® A and ABIROB® GC-series.

Arguments that speak for themselves:

- Excellent purchasing price, combined with a fast and simple installation and long service life
- Compact design size for better access in tight and complex jigs or components
- Good reset-precision combined with large deflection for good reproducible welding results and the optimum protection of robot and welding torch
- Extensive range of welding torches
- Two cable assembly types available for standard applications with rubber cable support and for heavy dynamic welding application with spring support
- Technically sophisticated, robust design
- Excellent protection against contamination
- Worldwide Product support available

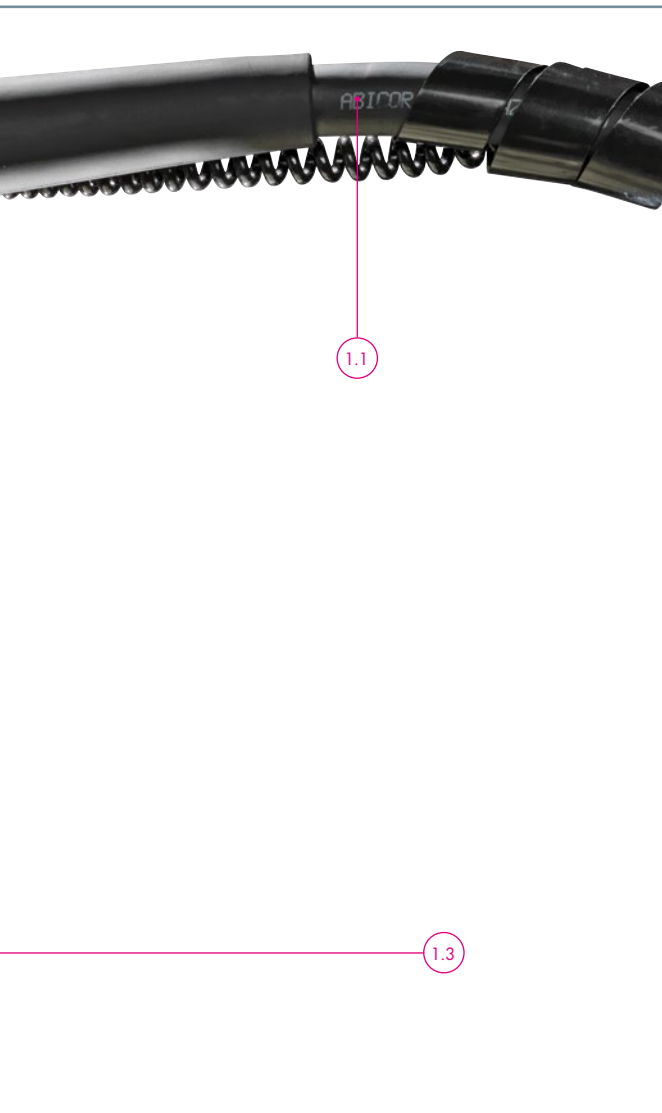


Figure 1:
System overview

- 1.1 Changeable cable assembly to the CAT Compact, for an simple-and fast installation
- 1.2 Bracket
- 1.3 Robot flange

Figure 2:
Torch interface

- 2.1 Changeable torch interface
- 2.2 Key-way for precise positioning of the welding torch
- 2.3 HNBR rubber protection against welding spatter and soiling

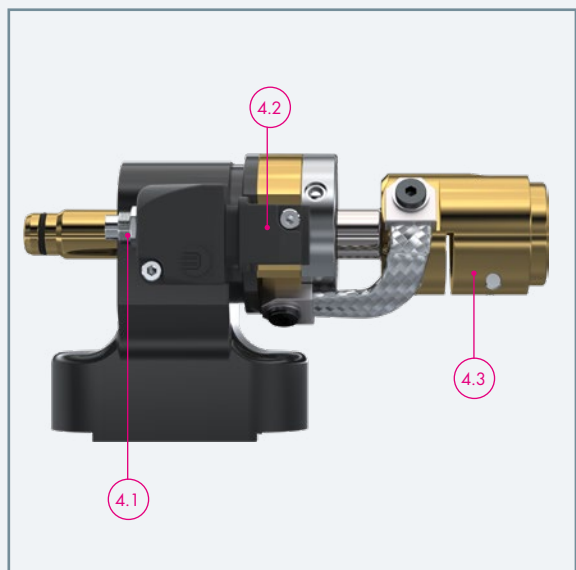
Figure 3:
Shock Sensor

Modular shock sensor, simple and fast installation
Quick connection for signal cable



Figure 4:
CAT Compact

- 4.1 Signal/emergency stop
- 4.2 Switch housing
- 4.3 Interface/torch interface G-series



CAT Compact

Technical data



Technical data (EN 60 974-7):

ABIROB® G 350

Rating:	350 A CO ₂ 300 A M21
Duty cycle:	100%
Wire:	0.8 - 1.4 mm
Neck geometries:	30° / 35° / 45°

ABIROB® G 360

Rating:	360 A CO ₂ 290 A M21
Duty cycle:	100%
Wire:	0.8 - 1.6 mm
Neck geometries:	22° / 35° / 45°

ABIROB® G 500

Rating:	500 A CO ₂ 400 A M21
Duty cycle:	100%
Wire:	0.8 - 1.6 mm
Neck geometries:	22° / 35° / 45°

Technical data:

CAT Compact

Dimensions:	148 x 69 x 88 mm
Weight:	approx. 0.85 kg approx. 1.3 kg (incl. bracket and flange)
Electrical data:	switching capacity 24 VDC / 100 mA
Switching point:	- deflection in X, Y direction approx. 2.5° - deflection in Z axis approx. 0.8 mm
Release accuracy: (L= 300 mm)	all directions $\leq \pm 0.3$ mm
Max. release distance: (L= 300 mm)	X-, Y-direction approx. 9.5° Z-direction approx. 3 mm
Protection class:	IPX 21
Ambient Temperature:	during operation -10°C to +55°C storage and transportation -10°C to +55°C
Relative humidity:	during operation up to 70% at 20°C storage and transportation up to 70% at 20°C

CAT Compact

Order information and technical details

Torch neck

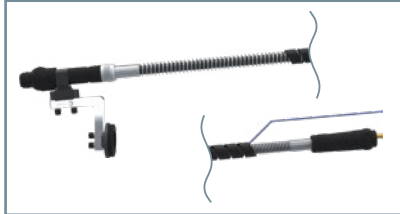
Torch type	22°	30°	35°	45°
	Part-No.	Part-No.	Part-No.	Part-No.
ABIROB®G 350	-	980.0190.1	980.0185.1	980.0203.1
ABIROB®G 360	980.0215.1	-	980.0222.1	980.0216.1
ABIROB®G 500	980.0208.1	-	980.0223.1	980.0209.1

CAT Compact



Description	Part-No.
Robot mount CAT Compact shock sensor for all torch types including protective cover	780.2137.1

Cable assemblies



CAT Compact cable assemblies including shock sensor

Description	Length	Part-No.
Spring cable support, Panasonic®connector	1.1 m	980.0274.1
Spring cable support, Euro connector	1.1 m	980.0275.1
Rubber cable support, Panasonic®connector	1.1 m	980.0272.1
Rubber cable support, Euro connector	1.1 m	980.0273.1

Liners



Description	Part-No.
Liner 2.1x5.5x2000 for Euro connector	124.0145.1
Liner 2.1x5.5x3600 for Panasonic®connector	124.0190.1

Adaptor Flanges



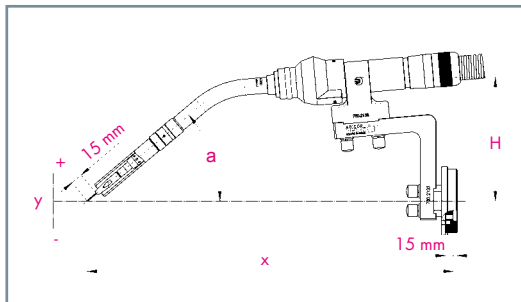
Type of robot	Part-No.
ABB 1410/1600; OTC NV 6/NV 6L; Kuka KR5 ARC	780.0604.1
PANASONIC TM1400	780.1604.1
KAWASAKI RA06L	780.0698.1
MOTOMAN MA 1440/MA 2010	780.0682.1
FANUC 100iC/M-10iA/M-20iA	780.0682.1

Holder



Description	Part-No.
L Bracket for CAT Compact, adjustable	780.2135.1
L Bracket for CAT Compact, not adjustable	780.2133.1

TCP geometries



Torch Type	TCP data				Part-No.
Description	x(mm)	Y(mm)	H(mm)	α	
G 350 30°	419.5	36.8	157	35°	980.0190.1
G 350 35°	461.3	0	157	40°	980.0185.1
G 350 45°	434.4	-26.9	157	50°	980.0203.1
G 360 22°	442.8	77.1	157	27°	980.0215.1
G 360 45°	406.7	23.4	157	50°	980.0216.1
G 500 22°	442.8	77.1	157	27°	980.0208.1
G 500 45°	406.7	23.4	157	50°	980.0209.1



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