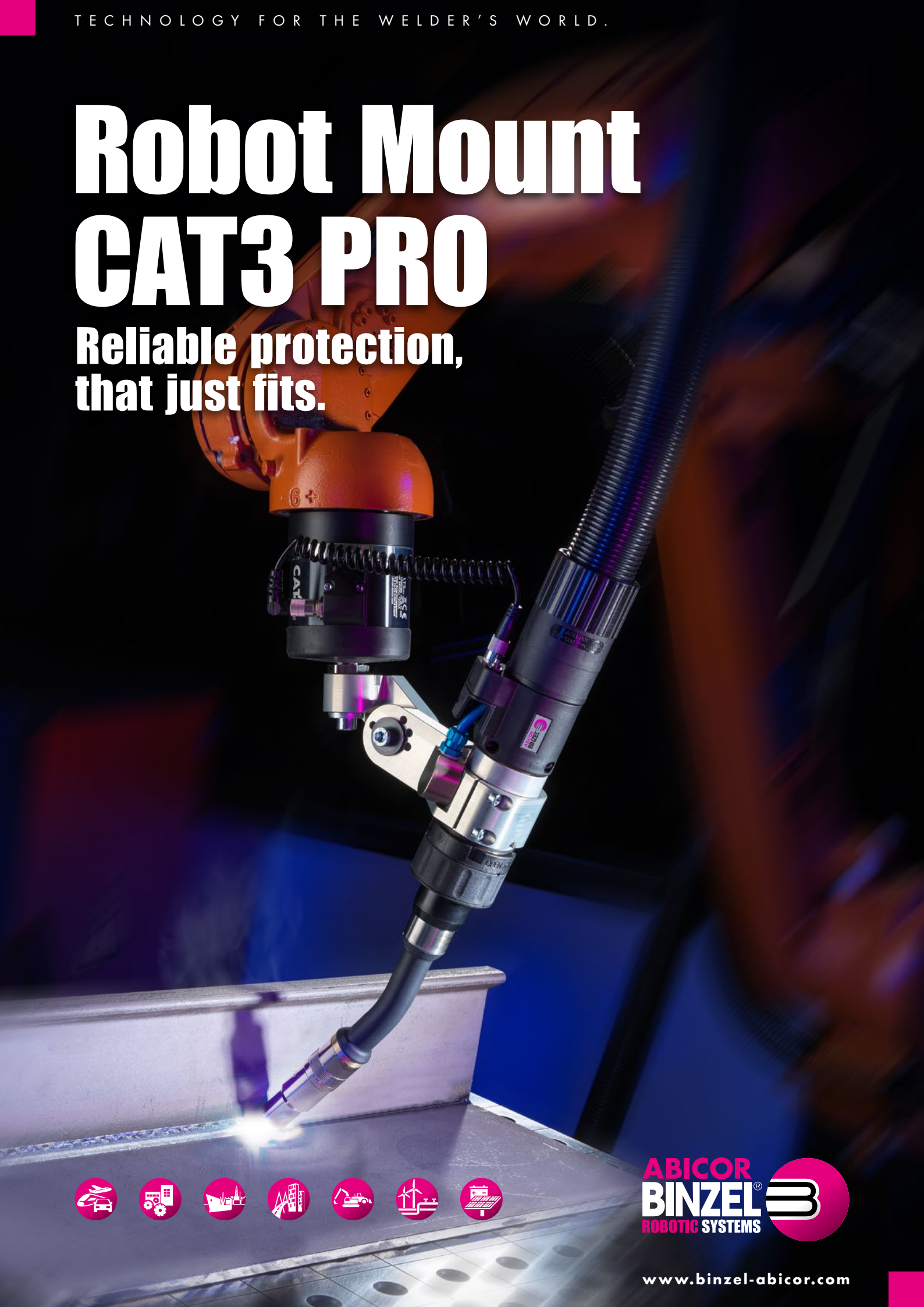


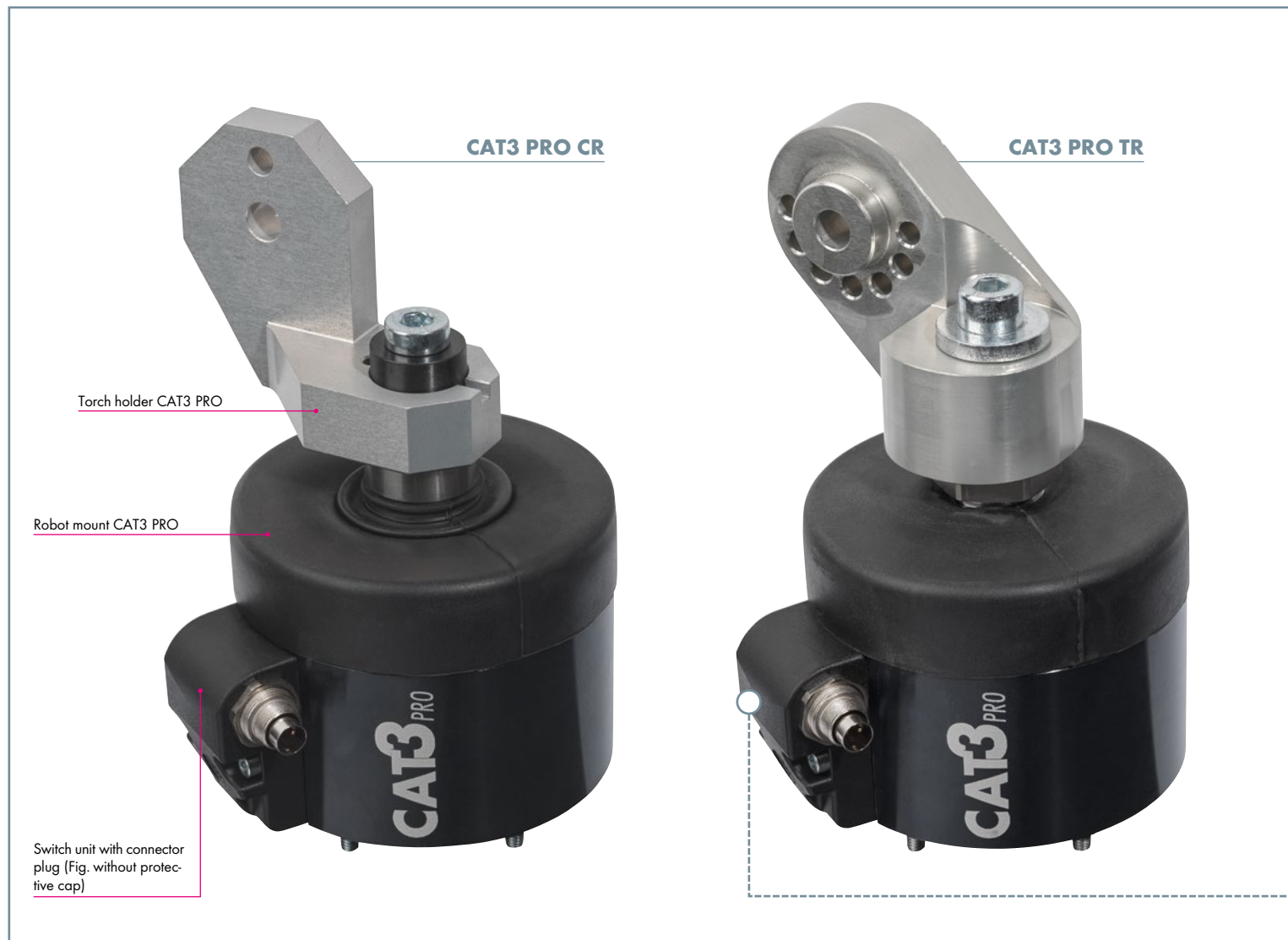
Robot Mount CAT3 PRO

Reliable protection,
that just fits.



In Detail

System Overview & Technical Data



CAT3 PRO

Reliable and universal protection for welding equipment & robot

The new generation of CAT2 and CAT3 torch mounts – the CAT3 PRO. With its two flange types CR (cylindrical release flange) and TR (tapered release flange), this new development is 100% compatible with CAT3 as well as CAT2. It provides with even more stability and robustness compared to its predecessor types.

In the event of a collision, the CAT3 PRO ensures a reliable shutdown of the welding robot and thus prevents costly damage to the robot and equipment. Since a production process has to be restarted as quickly as possible, special requirements are set on the torch holder. The CAT3 PRO fulfills these demands better than any of its predecessors, because it is not only particularly robust, but also enables precise reset accuracy to the tool center point (TCP). Expensive production downtimes are thus reduced to an absolute minimum.

It is very easy to replace the CAT2, CAT2-HL and CAT3 robot mounts with the CAT3 PRO CR or CAT3 PRO TR. Reprogramming of the welding robot is not necessary.

The range of ABICOR BINZEL accessories for holders and flanges always offers the right production solution for your application.

Arguments that speak for themselves:

- Practical, robust design results in better performance
- Easy installation on the welding robot
- Reliable switching function
- 100% compatible with CAT2, CAT2-HL and CAT3
- Easy replacement and repair
- Precise reset accuracy (TCP) minimizes system downtime
- Spring forces XL, L, M and (S) for optimum adaptation to the tool weight
- Excellent protection against contamination



Figure 1:
CAT3 PRO
Switch housing with
connection for signal cable

Figure 1:
Cross-section CAT3 PRO

- 1.1 The switch is integrated directly into the housing.
- 1.2 Same bracket mounting for CAT3 PRO TR as for CAT3 and CAT2-HL for reliable and robust mounting even with higher mounting weights. For CAT3 PRO CR the same bracket mounting is used as for CAT2.

Figure 2:
Deflection of the robot mount CAT3 PRO

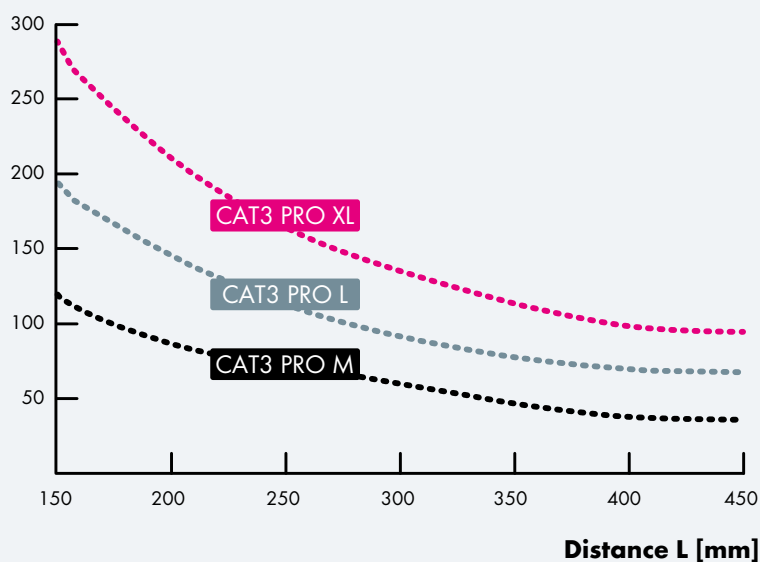
Collision in direction of the X- or Y-axis
Collision in direction of the Z-axis

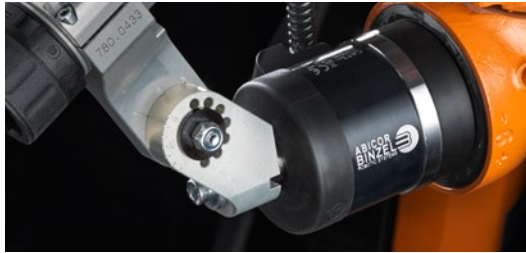


Figure 3:
Release force of the robot mount CAT3 PRO CR and CAT3 PRO TR

The following figure shows the static release force of the different spring types as a function of the distance to the flange surface (figure 4):

Release force [N]





Technical data:
Robot Mount CAT3 PRO

Dimensions:	Ø 77 mm, height 106 mm
Weight:	960 g (without holder and flange)
Release force:	(see figure 3) Deflection CAT3 PRO CR / CAT3 PRO TR
Switch point:	<ul style="list-style-type: none"> - Deflection in X- and Y-direction: 1.2° - 1.5° - Deflection in Z-direction: 1.3 - 1.6 mm
Max. deflection:	<ul style="list-style-type: none"> - Deflection in X- and Y-axis: approx. 7° - Deflection in Z-axis: 5 mm
Resetting accuracy:	(see figure 4) X-, Y- and Z-direction: ± 0.04 mm (at 400 mm distance to the robot flange)
IP Protection class:	IP 21
Load capacity safety cut-out:	max. 30 V DC / 100 mA
Ambient temperature:	<ul style="list-style-type: none"> - in operation: -10 °C up to +55 °C - during storage and transportation: -10 °C up to +55 °C
Relative humidity:	<ul style="list-style-type: none"> - in operation: up to 70 % at 20 °C - during storage and transportation: up to 70 % at 20 °C

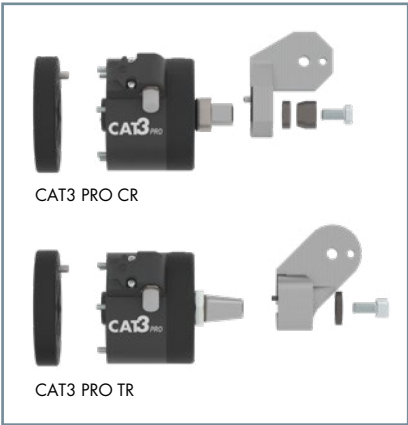
Figure 4:
Maximum deflection in X- and Y-axis



Robot Mount CAT3 PRO

Robot Mount & Accessories

Robot Mounts



CAT3 PRO CR

Description	Part-No.
Robot Mount CAT3 PRO CR M without holder	780.2178.1
Robot Mount CAT3 PRO CR L without holder	780.2177.1
Robot Mount CAT3 PRO CR L with holder	780.2180.1
Robot Mount CAT3 PRO CR XL without holder	780.2176.1
Robot Mount CAT3 PRO CR XL with holder	780.2179.1

CAT3 PRO TR

Description	Part-No.
Robot Mount CAT3 PRO TR M without holder	780.2175.1
Robot Mount CAT3 PRO TR L without holder	780.2174.1
Robot Mount CAT3 PRO TR XL without holder	780.2173.1

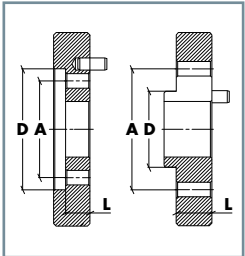
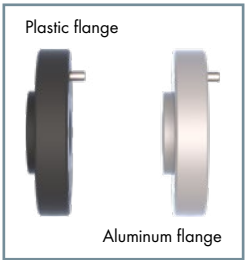
A connection cable is included in the scope of the order.
Please order the flanges and holders separately according to the robot type and welding task.

Flanges

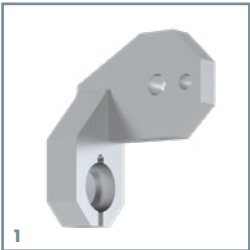
Description		Part-No.	
		Aluminum	Plastic
Intermediate flange	ISO 9409-1-A31.5/D40/L15	780.0532.1	780.0632.1
Intermediate flange	ISO 9409-1-A40/D50/L10	780.0504.1	780.0604.1
Intermediate flange	ISO 9409-1-A40/D50/L15	780.0591.1	780.0691.1
Intermediate flange	ISO 9409-1-A50/D31.5/L15	780.0508.1	780.0608.1
Intermediate flange	ISO 9409-1-A50/D63/L10	780.0503.1	780.0603.1
Intermediate flange	ISO 9409-1-A50/D63/L15	780.0594.1	780.0694.1
Intermediate flange	ISO 9409-1-A63/D40/L15	780.0514.1	780.0614.1
Intermediate flange	ISO 9409-1-A100/D63/L15	780.0549.1	780.0649.1
Intermediate flange	ISO 9409-1-A125/D80/L15	780.0530.1	780.0630.1
Intermediate flange	ISO 9409-1-A160/D100/L15	780.0547.1	780.0647.1

Intermediate flanges are available for all standard welding robots. Please always specify the robot type.

Attention! For technical reasons, the MIG/MAG welding torches of the ABIROB® A series must be used with plastic intermediate flange.



Holders



Pos.	Description	Part-No.
1	Holder CAT3 PRO CR ¹	780.0202.1
not ill.	Segment holder CAT3 PRO CR ²	780.0147.1

All holders are TCP-compatible to CAT2.
Holders are suitable for CAT3 PRO CR.
For additional torch holders please refer to the ordering documents for the respective torch series.
¹ TCP-compatible to standard holders for CAT2 780.0202.1
² TCP-compatible to standard holders for CAT2 780.0147.1




Pos.	Description	Part-No.
2	Holder CAT3 PRO TR ¹	780.0323.1
not ill.	Segment holder CAT3 PRO TR ²	780.0305.1

All holders are TCP-compatible to CAT2-HL and CAT3.
Holders are suitable for CAT3 PRO TR.
For additional torch holders please refer to the ordering documents for the respective torch series.
¹ TCP-compatible to standard holders for CAT2 780.0323.1
² TCP-compatible to standard holders for CAT2 780.0305.1

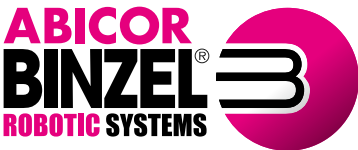
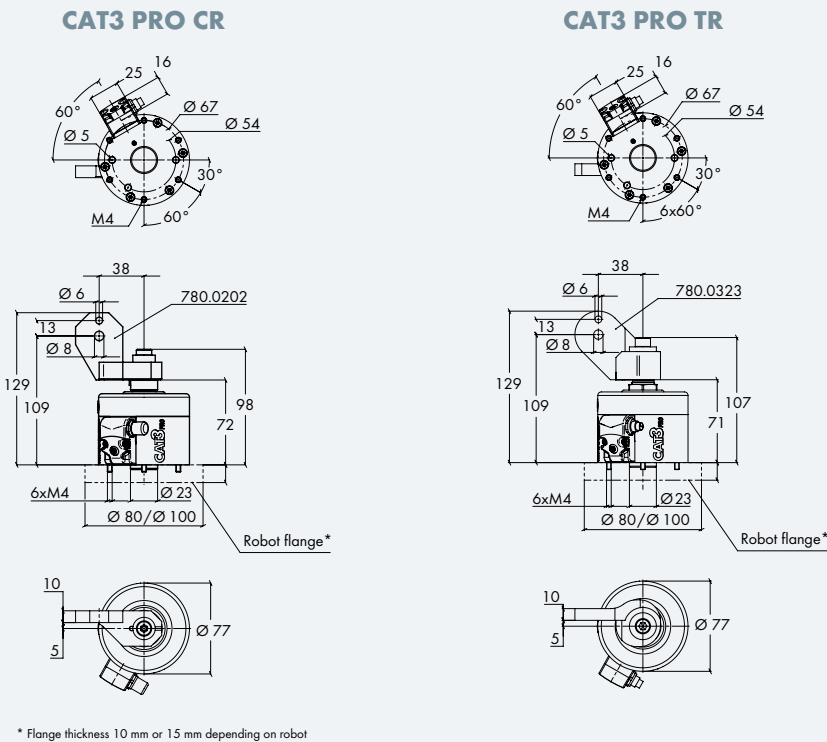
Robot Mount CAT3 PRO

Spare Parts & Product Dimensions

Spares

				
				
Pos.	Description	Part-No.		
1	Bellow CAT3 PRO	780.2059.1		
2	Switch set cpl. CAT3 PRO	780.2190.1		
3	Switch cpl. CAT3 PRO	780.2182.1		
4	Screw set CAT3 M4 x 55	780.2076.1		
5	Mounting Set CAT3 PRO CR	780.0036.1		
6	Mounting Set CAT3 PRO TR	780.2044.1		
7	Connector cable CAT (all versions)	780.0201.1		

Comparison of the geometries between the robot mounts CAT3 PRO CR and CAT3 PRO TR:



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