

CRG Serie Collaborative universal gripper



Teamworker

The CRG series has been specially developed for the collaboration of humans and robots. It is a very flexible tool that already meets the DGUV recommendations for collaborative robotic systems as well as the ISO/TS 15066 requirements. This is thanks to the rounded edges and inherent safe gripping force that greatly simplifies the risk assessment of your collaborative robot application.

Sensorless gripping force control

With the sensorless gripping force control, the CRG grippers handle even brittle, fragile or flexible parts effortlessly and ensure a consistently reproducible gripping result. The gripping width and gripping force can be set flexibly for each grip via IO-Link and thus optimally adapt to the gripping part.

Gripping force retention – PERMAGRIP

The innovative gripping force retention PERMAGRIP developed by Weiss Robotics preserves the gripping force on the workpiece, even if the power supply to the gripper is interrupted unexpectedly. Thanks to the integrated absolute sensors the production can continue even without referencing when the power supply is restored.

Gripping part detection

The CRG gripping modules have a built-in gripper control with gripper part recognition and handle monitoring. This guarantees safe handling even in difficult situations. Thanks to the precise servo-electric drive, the gripper fingers can be flexibly pre-positioned, which makes it possible to grip different workpieces without retooling. The usual external proximity switches are not required, which minimizes the interference contour of the grippers and significantly increases process reliability.

Strong quality for the highest demands

With the gripping modules of the CRG series you rely on the highest quality and cutting-edge technology. The maintenance-free and low-friction rolling bearing guides with FDA-compliant lifetime lubrication make the grippers very sturdy and enable precise and sensitive gripping over the entire stroke. Due to the unique double bearing of the base jaws, the gripping force is almost independent of the finger length. The likewise maintenance-free brushless DC servo motor ensures high dynamics and efficiency and thus ensures a long service life.

TECHNICAL DATA

Product type	CRG 30-050	CRG 200-085
Actuation	servo-electric	
Kinematics	parallel	
Gripping force	adjustable 15 - 30 N	adjustable 75 - 200 N
Max. workpiece weight (form fit / force fit)	2,7 kg/ 0,15 kg	4,3 kg/ 1 kg
Full stroke	50 mm	85 mm
Weight	460 g	1,2 kg
Finger speed	180 mm/s	140 mm/s
ESD-compliant	yes	
Power supply	24 VDC/ 300 mA	24 VDC/ 850 mA
Communication	IO-Link V1.1, COM2 (38,4 kbit/s)	
Permitted finger length	70 mm	100 mm
Permitted weight per finger	0,13 kg	0,3 kg
Protection class	IP 20	
Operating temperature	5 - 50 °C	
Parameterization	8 grips	
Dimensions (L x W x H)	80 x 44 x 55 mm	105 x 60 x 70 mm





