



Superior Clamping and Gripping



The new SCHUNK End-of-Arm Modular System

The most comprehensive gripping modular system for all Universal Robots on the market.

SCHUNK End-of-Arm Modular System for Universal Robots

Modular System Overview

The new SCHUNK End-of-Arm Modular System

The most comprehensive gripping modular system for all Universal Robots on the market.

The new SCHUNK End-of-Arm modular systems, exclusively for Universal Robots, facilitates the individual and fast automation of handling and assembly tasks. The modular system provides a combination of a force/torque sensor, change system, and a wide range of grippers.

Up to **36** product combination possibilities

Modular system components for changing and measuring procedures.

- ① 6-axis force/torque sensor FT-AXIA 80 completely with adapter plate
- ② Manual change system SHS 50 Quick-change head (SHK) and quick-change adapter (SHA) with suitable feed-through module

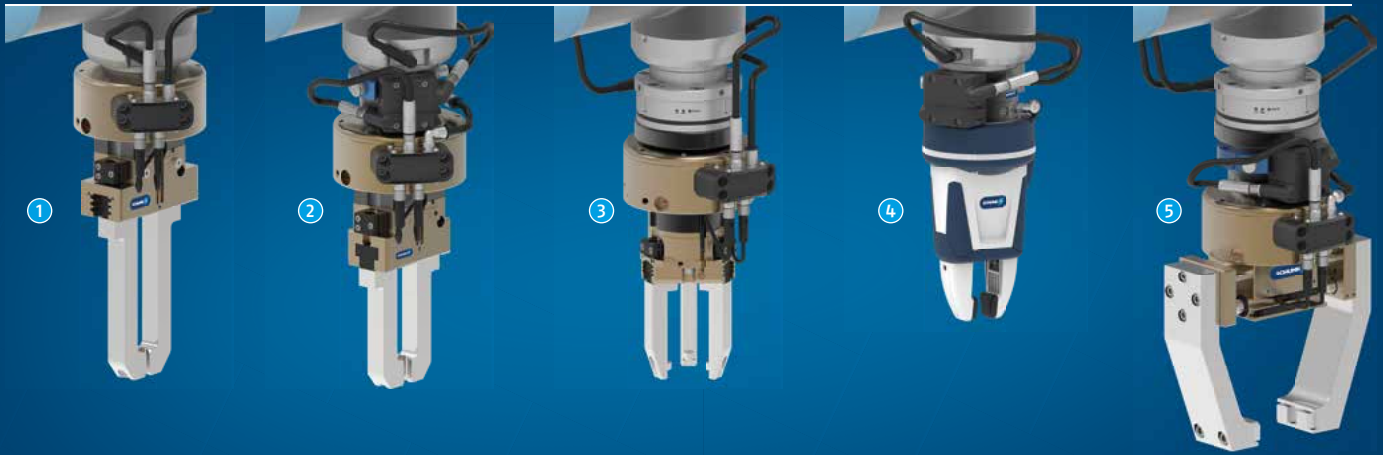
Mechatronic gripping systems with direct connection and integrated sensor system and connection cable.

- ③ Gripper for small components EGP 40
- ④ Collaborating gripper for small components Co-act EGP-C 40

Pneumatic gripping systems with direct connection and integrated micro valves, sensor system with connection cable

- ⑤ Gripper for small components KGG 100-80
- ⑥ Long-stroke gripper PSH 22-1
- ⑦ Universal gripper PGN-plus-P 80
- ⑧ Universal gripper PGN-plus-P 100
- ⑨ Centric gripper PZN-plus 64
- ⑩ Universal gripper JGP 80
- ⑪ Universal gripper JGP 100





Combination Examples:

- ① **Universal gripper PGN-plus-P**
Direct assembly
- ② **Universal gripper JGP**
+ manual change system SHS
- ③ **Centric gripper PZN-plus**
+ 6 axis force/torque sensor FT-AXIA
- ④ **Collaborating gripper for small components**
Co-act EGP-C
+ manual change system SHS
- ⑤ **Long-stroke gripper PSH**
+ quick-change system SHS
+ 6-axis force/torque sensor FT-AXIA

+ Variety

Complete SCHUNK modular system for the individual automation with electric and pneumatic SCHUNK grippers, change system and force/torque sensor, precisely fitting and exclusively for Universal Robots.

+ Simple Automation

In the field of handling and assembly, the End-of-Arm modular system combined with Universal Robots is reducing the implementation time of an application many times over.

+ Plug & Work

The compatible interfaces of the SCHUNK gripping systems from the modular system allow for assembly and commissioning to be done directly via the robot control system.

SCHUNK End-of-Arm Modular System for Universal Robots

Selection Table

Universal Robots	SCHUNK Grippers			Co-act EGP-C 40			KGG 100-80			PSH 22-1			JGP 80		
	EGP 40			UR 3			UR 5			UR 10					
 UR 3 UR 5 UR 10															
Combination possibilities*	UR 3	UR 5	UR 10	UR 3	UR 5	UR 10	UR 3	UR 5	UR 10	UR 3	UR 5	UR 10	UR 3	UR 5	UR 10
Gripper	•	•	•	•	•	•	•	•	•		•	•	•	•	•
Gripper + change system/FT sensor	•	•	•	•	•	•		•	•		•	•		•	•
Gripper + change system + FT sensor		•	•		•	•		•	•			•		•	•
Workpiece weight															
0 – 1 kg		•			•			•			•			•	
1.1 – 1.5 kg											•			•	
1.6 – 2 kg											•			•	
2.1 – 2.5 kg														•	
2.6 – 3.0 kg															
3.1 – 3.5 kg															
3.6 – 4.0 kg															
4.1 – 4.5 kg															
Technical data															
ID	1320370***			1326455**			1327748			1327747			1348129		
Weight [kg]	0.7			0.6			1.2			1.7			1.33		
Max. gripping force [N]	140			140			175			320			415		
Recommended workpiece weight [kg]	0.7			0.7			0.9			1.6			2.1		
Stroke per jaw [mm]	6			6			40			28			8		

You can find more technical data in the catalog chapter for the respective gripper.

* Overview of the combination possibilities of gripping systems and robot sizes which result from the comparison of the weight of the gripping system to half of the robot payload. A technical design for the application including top jaws and workpieces is absolutely essential.

** The cable extension ID 1339964 is required for combination with force/torque sensor.

*** The adapter plate ID 1355667 and cable extension ID 1339964 are required for combinations with force/torque sensors. The adapter plate ID 1355667 is required for combination with the change system.







The new SCHUNK FT-AXIA Force/Torque Sensor

The first compact force/torque sensor with two calibrations.

The compact SCHUNK force/torque sensor FT-AXIA was designed primarily for use in lightweight and small robots. Due to the dual calibration, it covers two measurement ranges and is therefore very versatile.



- Compact design**
 due to completely integrated electronics and status display via LEDs
- Simple configuration**
 Two calibrations can be controlled in the sensor via web interface
- Robust and durable and long service life**
 Even at short-term overloading, the sensor is protected from damage
- Plug & Work**
 directly compatible for KUKA and Universal Robots via installations module

												Robot Accessories			
JGP 100			PGN-plus-P 80			PGN-plus-P 100			PZN-plus 64					FT-AXIA 80	SHS 50
															
UR 3	UR 5	UR 10	UR 3	UR 5	UR 10	UR 3	UR 5	UR 10	UR 3	UR 5	UR 10	Universal Robots	Direct assembly possible		
	•	•	•	•	•		•	•	•	•	•	UR 3	•	•	
	•	•		•	•			•		•	•	UR 5	•	•	
		•		•	•			•		•	•	UR 10	•	•	
												SCHUNK Grippers	Direct combination possible		
	•			•			•			•		EGP 40	• ***	• ***	
	•			•			•			•		Co-act EGP-C 40	• **	•	
	•			•			•			•		KG 100-80	•	•	
	•			•			•			•		PSH 22-1	•	•	
	•			•			•			•		JGP 80	•	•	
	•			•			•			•		JGP 100	•	•	
							•			•		PGN-plus	•	•	
							•			•		PZN-plus 64	•	•	
1348128	1327751		1327750			1327749			ID			1357169	SHK 1334788		
1.72	1.38		1.8			1.22			Weight [kg]			0.51	SHA 1334789		
660	550		870			580			Max. dynam. bending moment [Nm]				SHK 0.35		
3.3	2.75		4.35			2.9			Max. dynam. bending moment M _z [Nm]				SHA 0.14		
10	8		10			6			Range of measurement F _{xy} [N]			200 .. 500			
									Range of measurement F _z [N]			360 .. 900			
									Moment measurement range [Nm]			8 .. 20			

Manual Change System SCHUNK SHS

Manual tool change system with integrated air feed-through, locking monitoring and optional electric signal feed-through.

Ideally suited for use in the flexible production of products with a comprehensive range of variants in which reliable manual changes are required.

- **6 sizes**

for optimum size selection and a broad application range

- **Integrated pneumatic feed-through**

for reliable energy supply of the handling modules and tools

- **The locking clip opens at the front**

this allows the changer to be easily operated even in confined spaces

- **Optional locking and presence monitoring**

means more process reliability

- **Broad range of electric, pneumatic and fluid modules**

for various energy transmission options

- **ISO flange pattern**

for simple assembly on most types of robots without additional adapter plates



Co-act meets Cobots Gripper

Certified Grippers for collaborative Use

Robots and components that interact with a worker in a shared workplace must satisfy extremely high requirements when it comes to safety and the safety technology. With the SCHUNK Co-act EGP-C gripper, SCHUNK presents an inherently safe industrial gripper that has been certified and approved by the German Social Accident Insurance (DGUV) for collaborative operation. It allows for reliable collaboration between humans and all common assistance robots.



The Path to optimum Grippers for collaborative HRC Applications

The **SCHUNK Co-act team** is the first team on the market that is specialized in end effectors for collaborative operations. It cares particularly for your requests in the collaborative sector. The trained expert personnel with CMSE certificate has the latest state of knowledge in terms of findings and technologies, and knows all cobots used on the market.

To determine the optimum gripper for HRC applications, the properties of the task, workpiece, and gripper must also be taken into account. The **SCHUNK Co-act team** recommends a structured approach, considering all factors and parameters.



You can reach the **SCHUNK Co-act team** by:
Telephone: + 49-7133-103-3444 or
Email: co-act-team@de.schunk.com
We look forward to hearing from you!



Step 1
Description of task and feasibility test



Step 2
Selection of the robot or cobot



Step 3
Selecting the gripper in collaboration with the SCHUNK Co-act team



J. Lehmann

Jens Lehmann, German goalkeeper legend, SCHUNK brand ambassador since 2012 for safe, precise gripping and holding. schunk.com/lehmann

1356238-3M-06/2018 © 2018 SCHUNK GmbH & Co. KG

