



Superior Clamping and Gripping

Product Information

Plug & Work Portfolio Universal Robots

Plug & Work Portfolio Universal Robots

Modular. Flexible. Easy.

Plug & Work Portfolio Universal Robots

The Plug & Work portfolio consists of electrically and pneumatically actuated grippers, quick-change modules and force/ moment sensors that are specifically adapted to robot arms from Universal Robots.

Field of application

The components can be used in clean and slightly dirty environments.

Advantages – Your benefits

Comprehensive portfolio consisting of various components and grippers for different applications for fast and easy entry into automation

Plug & Work with the interfaces suitable for all robots from Universal Robots

Software modules for robot control are included in the scope of delivery for fast and easy commissioning

Pre-assembled gripping unit with robot interface therefore no mounting kits or external valves required

Certified SCHUNK Co-act grippers For quick and easy entry into th world of collaborative applications

Electric grippers with a long adjustable stroke and force range for flexible workpiece handling

Pneumatic grippers For a high power density and simple integration



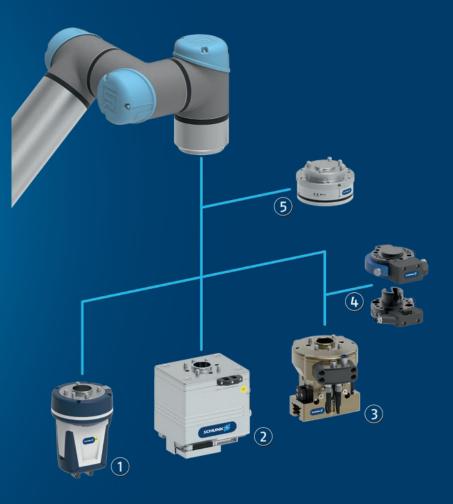






Functional description

All the Plug & Work components are prepared for mechanical and electrical direct connection to Universal Robots sizes 3, 5, 10, and 16. Depending on requirements, various grippers and end-of-arm components can be selected. The pneumatic gripping units are additionally equipped with micro valves meaning no external valves are required.



- ① **Co-act Gripper** for implementing collaborative applications
- ② Electric gripper for flexible handling of workpieces
- ③ **Pneumatic grippers** For conventional, robust handling of workpieces
- Change systems
 for manual exchange of different grippers and actuators
- (5) Force/torque sensor for measuring and processing of forces and torques on the robot arm

General notes about the series

Scope of delivery: Components for direct connection to robots from Universal Robots, assembly and operating manual with declaration of incorporation, USB stick with URcap

Gripping force: is the arithmetic sum of the individual force applied to each jaw at distance P (see illustration).

Finger length: The maximum permissible finger length applies until the nominal operating pressure is achieved. With higher pressures, the finger length must be reduced proportionally to the nominal operating pressure.

Repeat accuracy: is defined as a distribution of the end Position for 100 consecutive strokes.

Actuation: Control via digital I/O

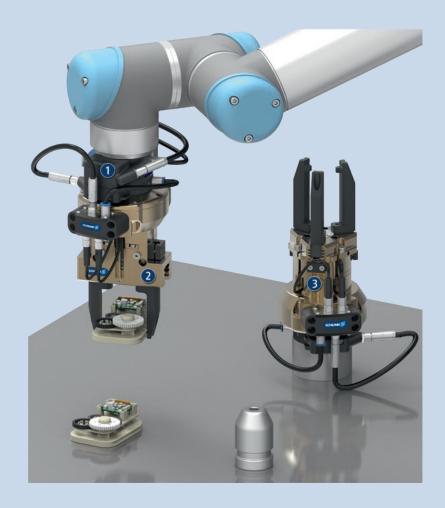
Workpiece weight: is calculated for force-fit gripping with a coefficient of static friction of 0.1 and a safety factor of 2 against workpiece slippage at acceleration due to gravity g. For form-fit or capture gripping, there are significantly higher permissible workpiece weights.

Closing and opening times: are purely the times that the base jaws or fingers are in motion. Valve switching times, hose fill times, or PLC reaction times are not included, and are to be considered when cycle times are calculated.

Application example

Pneumatic gripping units for Universal Robots for flexible handling of various workpieces. By combining change system and gripping unit, the gripper can be exchanged to suit the workpiece.

- Manual change system SHS
- 2 2-finger parallel gripper PGN-plus-P
- **3** -finger centric gripper PZN-plus



Plug & Work Portfolio Universal Robots

SCHUNK offers more ...

The following components make the product even more productive – the suitable addition for the highest functionality, flexibility, reliability, and controlled production.







Jaw quick-change system





Finger blank with jaw quick-change system



Attachment fingers

① For more information on these products can be found on the following product pages or at schunk.com.

Options and special information

Further technical data and accessories: The products from the Plug & Work portfolio represent a selection of SCHUNK standard products that are adapted for direct use with the respective robots. Further technical data and usable accessories for the individual Plug & Work components are therefore included in the product information for the respective SCHUNK standard components.

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Plug & Work Portfolio Universal Robots



Technical data

Description		Co-act EGP-C 25-N-N-URID	Co-act EGP-C 25-N-N-UREK	Co–act EGP–C 40–N–N–URID	Co-act EGP-C 40-N-N-UREK	Co-act EGP-C 50-N-N-UREK	Co-act EGP-C 64-N-N-URID
ID		1326452	1327881	1326455	1327883	1327884	1436401
Function		Gripping	Gripping	Gripping	Gripping	Gripping	Gripping
Robot compatibility		UR 3/5/10/16	UR 3/5/10/16	UR 3/5/10/16	UR 3/5/10/16	UR 3/5/10/16	UR 3/5/10/16 (nur e-Series)
Standard components		Co-act EGP-C 25-N-N-URID	Co-act EGP-C 25-N-N-UREK	Co-act EGP-C 40-N-N-URID	Co-act EGP-C 40-N-N-UREK	Co-act EGP-C 50-N-N-UREK	Co-act EGP-C 64-N-N-URID
LED strip light			integrated		integrated	integrated	
Stroke per jaw	[mm]	3	3	6	6	8	10
Max. gripping force	[N]	40	40	140	140	215	230
Weight	[kg]	0.36	0.63	0.59	0.86	1.22	1.11
Recommended workpiece weight	[kg]	0.2	0.2	0.7	0.7	1.05	1.15
Cable length	[mm]	90	4000	90	4000	4000	90

① You can find more technical values in the catalog chapter for the respective standard component.

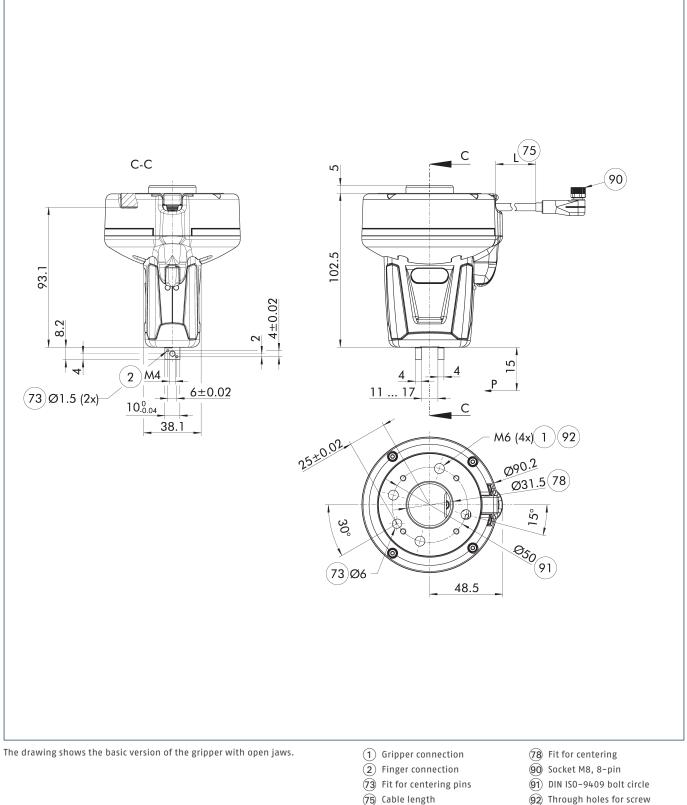
For the Co-act EGP-C-URID combined with force/moment sensor, cable extension ID 1339964 is required.

Description		Co-act EGP-C 64-N-N-UREK	
ID		1327885	
Function		Gripping	
Robot compatibility		UR 3/5/10/16	
Standard components		Co-act EGP-C 64-N-N-UREK	
LED strip light		integrated	
Stroke per jaw	[mm]	10	
Max. gripping force	[N]	230	
Weight	[kg]	1.38	
Recommended workpiece weight	[kg]	1.15	
Cable length	[mm]	4000	

① You can find more technical values in the catalog chapter for the respective standard component. For the Co-act EGP-C-URID combined with force/moment sensor, cable extension ID 1339964 is required.

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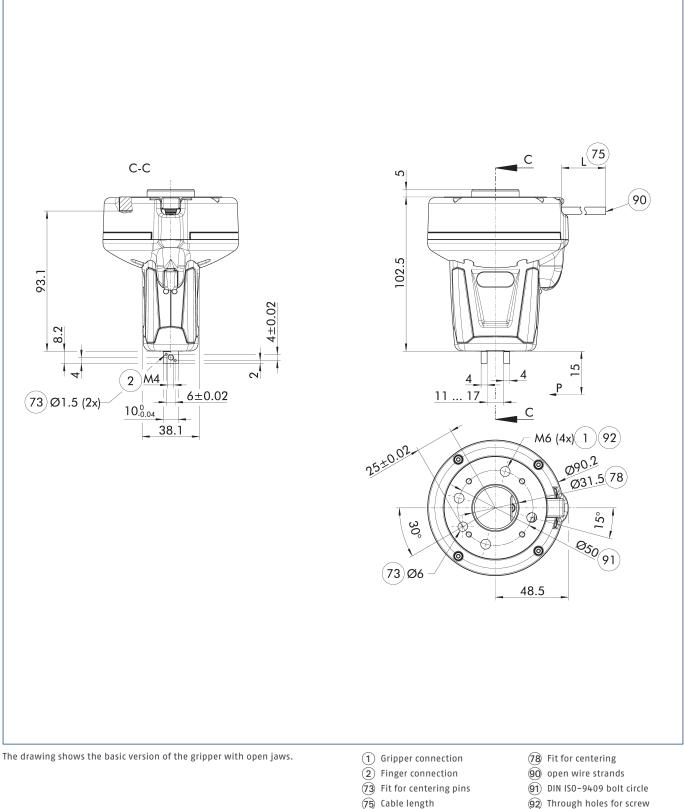
Main view Co-act EGP-C 25-N-N-URID



(92) Through holes for screw connections

Plug & Work Portfolio Universal Robots

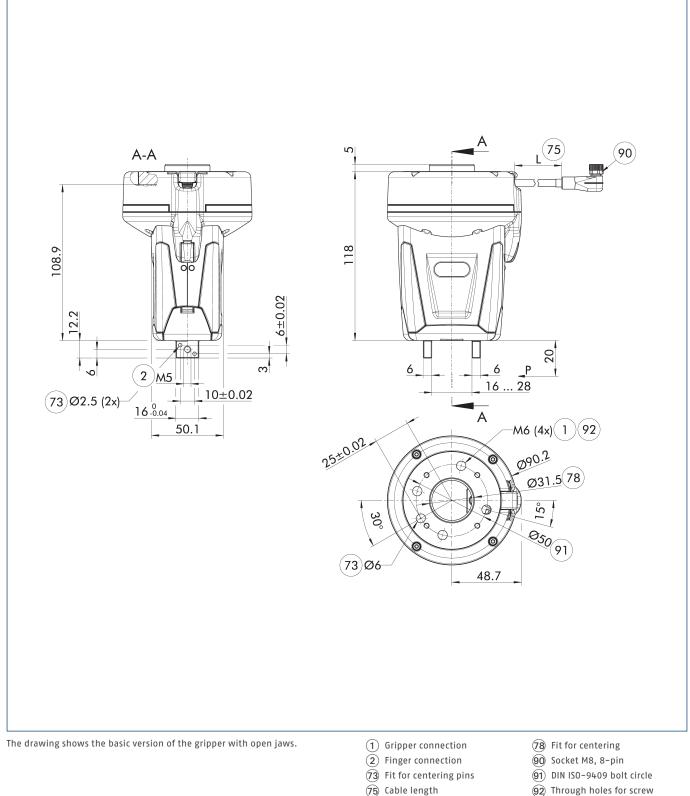
Main view Co-act EGP-C 25-N-N-UREK



(92) Through hole connections

Plug & Work Portfolio Universal Robots

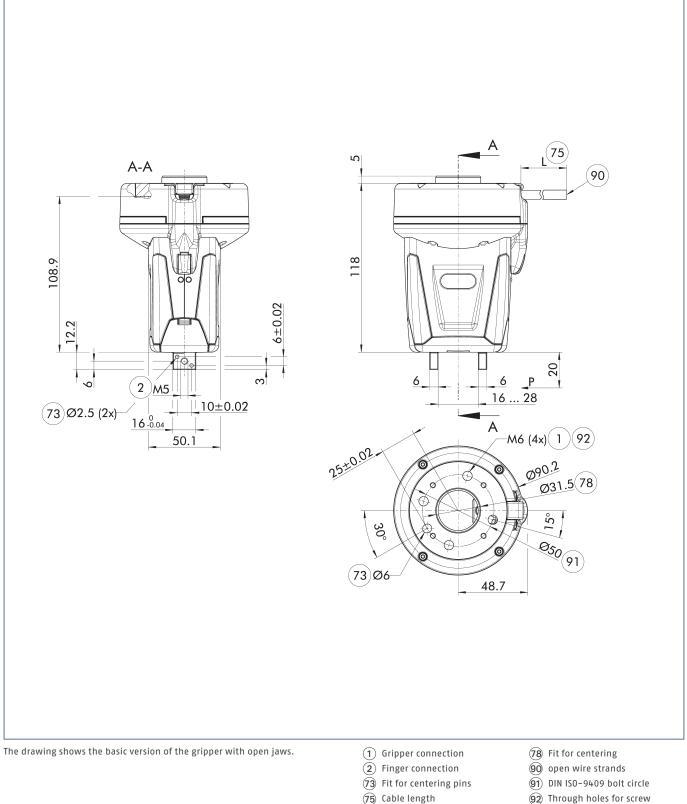
Main view Co-act EGP-C 40-N-N-URID



(92) Through holes for screw connections

Plug & Work Portfolio Universal Robots

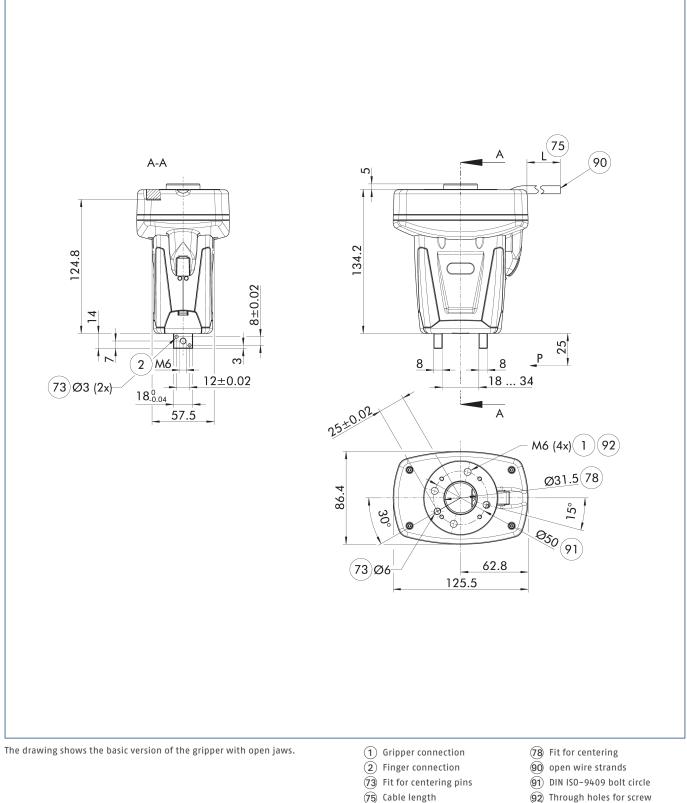
Main view Co-act EGP-C 40-N-N-UREK



⁽⁹²⁾ Through holes for screw connections

Plug & Work Portfolio Universal Robots

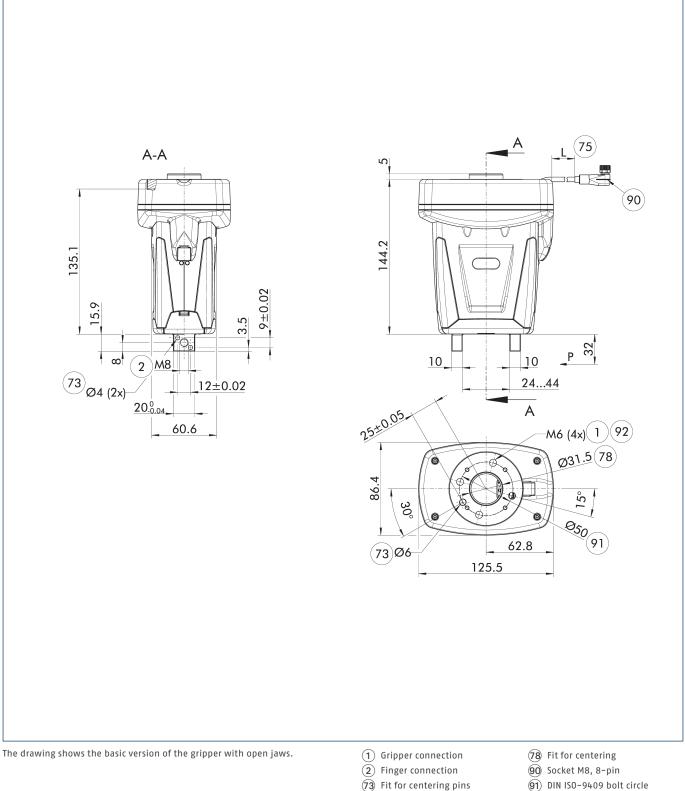
Main view Co-act EGP-C 50-N-N-UREK



⁽⁹²⁾ Through holes for screw connections

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Main view Co-act EGP-C 64-N-N-URID

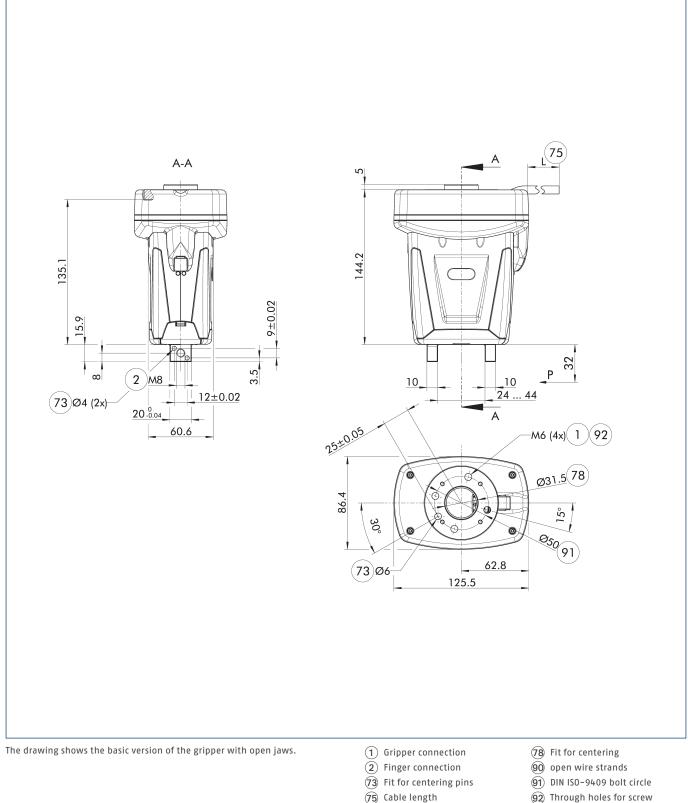


(75) Cable length

- (91) DIN ISO-9409 bolt circle
- (92) Through holes for screw connections

Plug & Work Portfolio Universal Robots

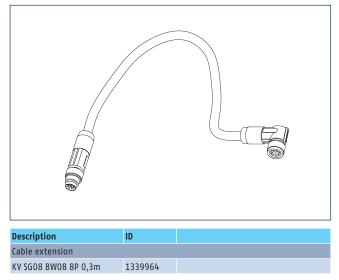
Main view Co-act EGP-C 64-N-N-UREK



connections

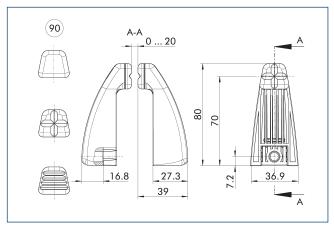
Plug & Work Portfolio Universal Robots

Cable extension



Tor the Co-act EGP-C-URID combined with force/moment sensor, cable extension ID 1339964 is required. For the EGP 40 combined with force/ moment-sensor, adapter plate ID 1355667 and cable extension ID 1339964 are required.

Top jaw AUB Co-act EGP



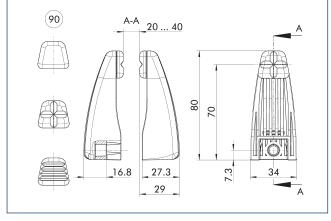
(90) Finger inserts

The top jaws are specifically designed for the Co-act EGP gripper. Depending on the size, they are available with varying clamping ranges. Depending on the application and workpiece, one of the supplied finger inserts can be used. The finger inserts are manufactured from rigid or elastic material.

Description	ID	Material
Finger blank		
AUB Co-act EGP 64/20	1401294	PA/TPU

The scope of delivery includes two top jaws including fastening material. Observe the notes in the Assembly and Operating Manual of the Co-act EGP gripper.

Top jaw AUB Co-act EGP



(90) Finger inserts

The top jaws are specifically designed for the Co-act EGP gripper. Depending on the size, they are available with varying clamping ranges. Depending on the application and workpiece, one of the supplied finger inserts can be used. The finger inserts are manufactured from rigid or elastic material.

Description	ID	Material
Finger blank		
AUB Co-act EGP 64/40	1401297	PA/TPU

The scope of delivery includes two top jaws including fastening material. Observe the notes in the Assembly and Operating Manual of the Co-act EGP gripper.



Plug & Work Portfolio Universal Robots



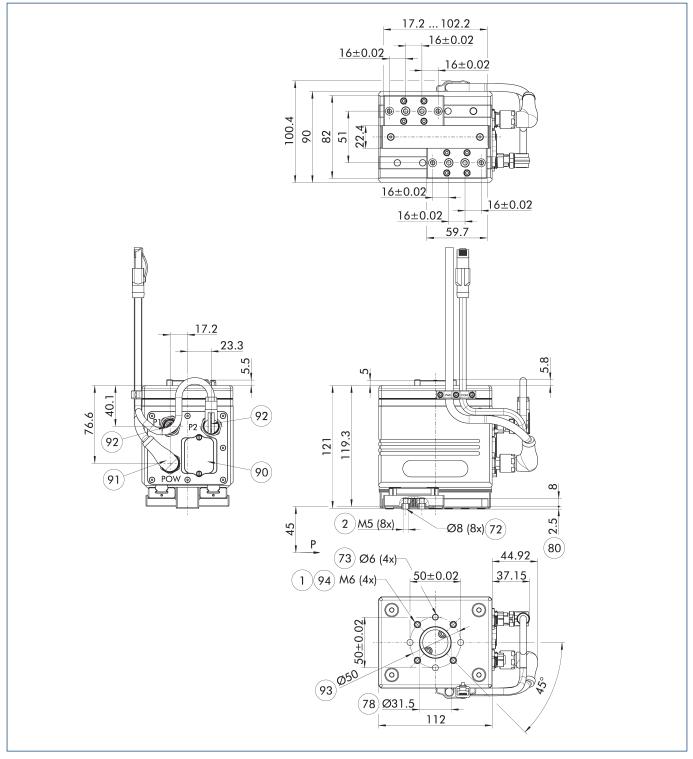
Technical data

Description		EOA-UR3510-EGL 90	EOA-UR3510-EGL 90-AUB	EOA-UR3510-EGP 40
ID		1392477	1403607	1320370
Function		Gripping	Gripping	Gripping
Robot compatibility		UR 3/5/10/16	UR 3/5/10/16	UR 3/5/10/16
Standard components		EGL 90	EGL 90	EGP 40
Stroke per jaw	[mm]	42.5	42.5	6
Max. gripping force	[N]	600	600	140
Weight	[kg]	2.13	2.63	0.7
Recommended workpiece weight	[kg]	3	3	0.7

① You can find more technical values in the catalog chapter for the respective standard component.

The adapter plate ID 1355667 is required for combining the EGP 40 with a force/torque sensor, change system, or UR 16. Cable extension ID 1339964 is required when the EGP 40 is combined with the force/torque sensor.

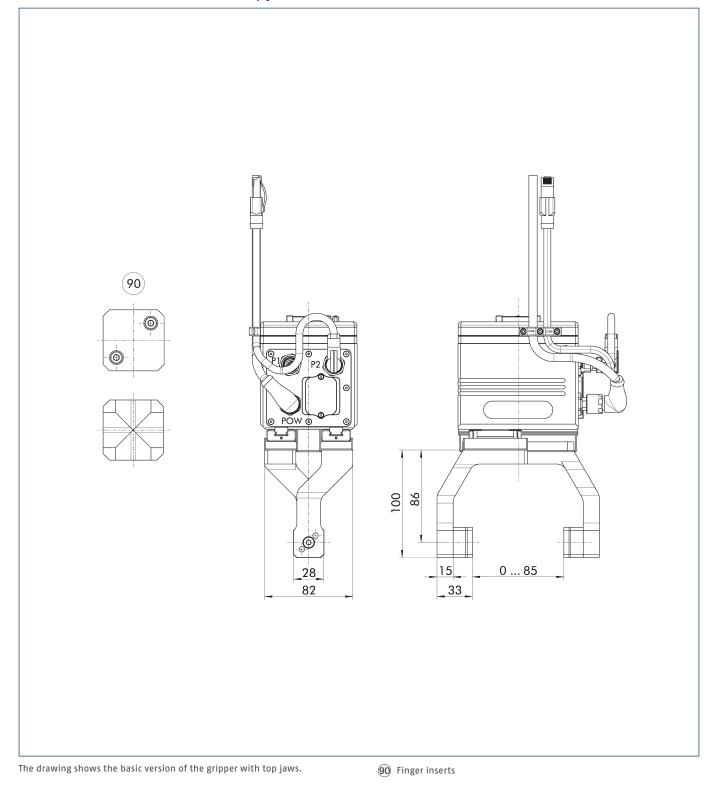
Main view EOA-UR3510-EGL 90



- (1) Gripper connection
- 2 Finger connection
- (72) Fit for centering sleeves
- (73) Fit for centering pins
- (78) Fit for centering
- 80 Depth of the centering sleeve hole in the counter part
- (90) Service window
- (91) M12 connector, T-coded (voltage supply)
- 92 M12 PROFINET socket
- (93) DIN ISO-9409 bolt circle
- (94) Through holes for screw connections

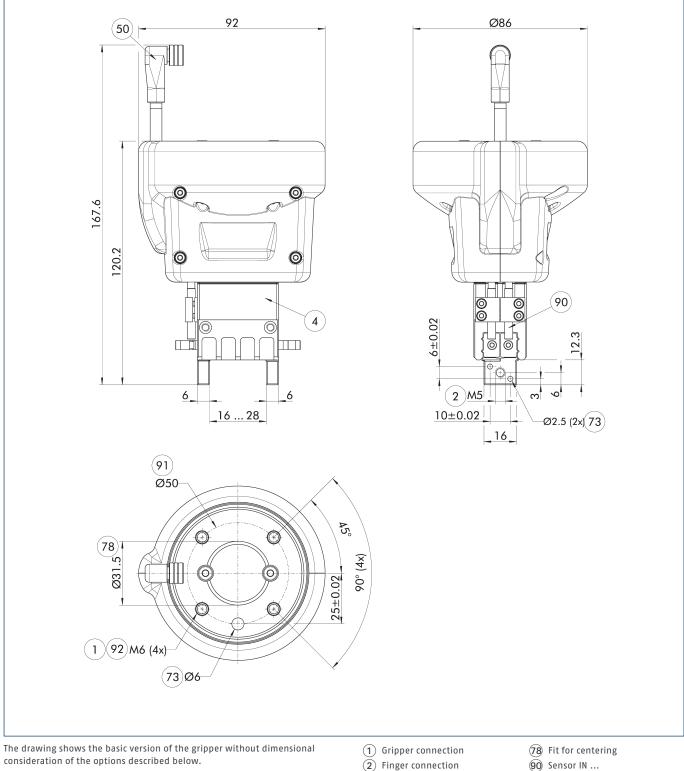
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Main view EOA-UR3510-EGL 90-AUB with top jaws



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Main view EOA-UR3510-EGP 40



(4) Grippers

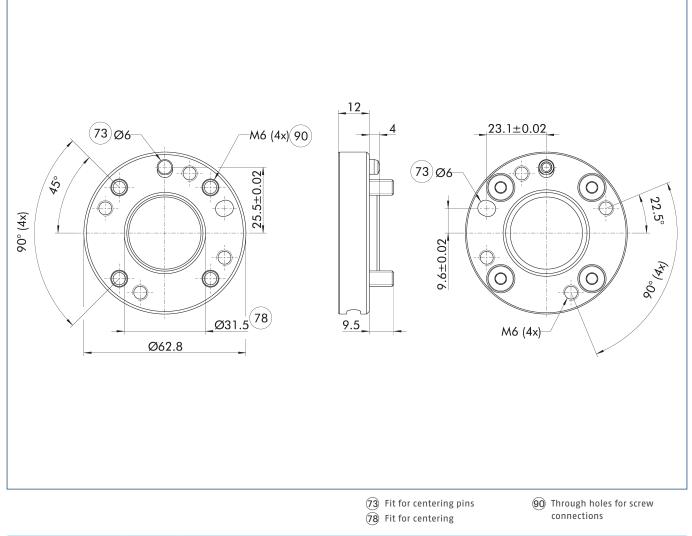
(50) Electrical connection

(73) Fit for centering pins

- (90) Sensor IN ...
 - (91) DIN ISO-9409 bolt circle
 - (92) Through holes for screw
 - connections

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Adapter plate IS050-IS050

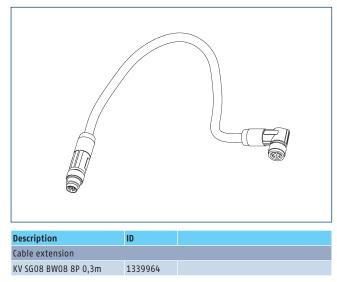


Description	ID	
Adapter plate		
EOA-UR3510-AKO-EGP 40	1355667	

The adapter plate ID 1355667 is required for combining the EGP 40 with a force/torque sensor, change system, or UR 16. Cable extension ID 1339964 is required when the EGP 40 is combined with the force/torque sensor.

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Cable extension



 For the Co-act EGP-C-URID combined with force/moment sensor, cable extension ID 1339964 is required. For the EGP 40 combined with force/ moment-sensor, adapter plate ID 1355667 and cable extension ID 1339964 are required.

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Technical data

Description		EOA-UR3510-KGG 100-80	EOA-UR3510-PSH 22-1	EOA-UR3510-JGP 80-1	EOA-UR3510-JGP 100-1	EOA-UR3510-PGN- plus-P 80-1	EOA-UR3510-PGN- plus-P 100-1
ID		1327748	1327747	1348129	1348128	1327751	1327750
Function		Gripping	Gripping	Gripping	Gripping	Gripping	Gripping
Robot compatibility		UR 3/5/10/16	UR 3/5/10/16	UR 3/5/10/16	UR 3/5/10/16	UR 3/5/10/16	UR 3/5/10/16
Standard components		KGG 100-80	PSH 22-1	JGP 80-1	JGP 100-1	PGN-plus-P 80-1	PGN-plus-P 100-1
Stroke per jaw	[mm]	40	28	8	10	8	10
Max. gripping force	[N]	175	320	415	660	550	870
Weight	[kg]	1.2	1.7	1.33	1.72	1.38	1.8
Recommended workpiece weight	[kg]	0.9	1.6	2.1	3.3	2.75	4.35

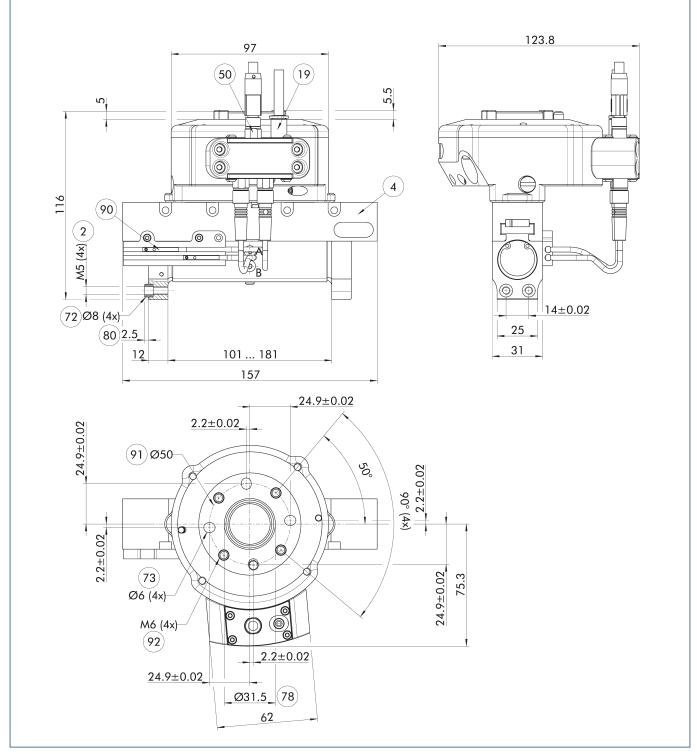
① You can find more technical values in the catalog chapter for the respective standard component.

Description		EOA-UR3510-PZN-plus 64-1
ID		1327749
Function		Gripping
Robot compatibility		UR 3/5/10/16
Standard components		PZN-plus 64-1
Stroke per jaw	[mm]	6
Max. gripping force	[N]	580
Weight	[kg]	1.22
Recommended workpiece weight	[kg]	2.9

① You can find more technical values in the catalog chapter for the respective standard component.

Plug & Work Portfolio Universal Robots

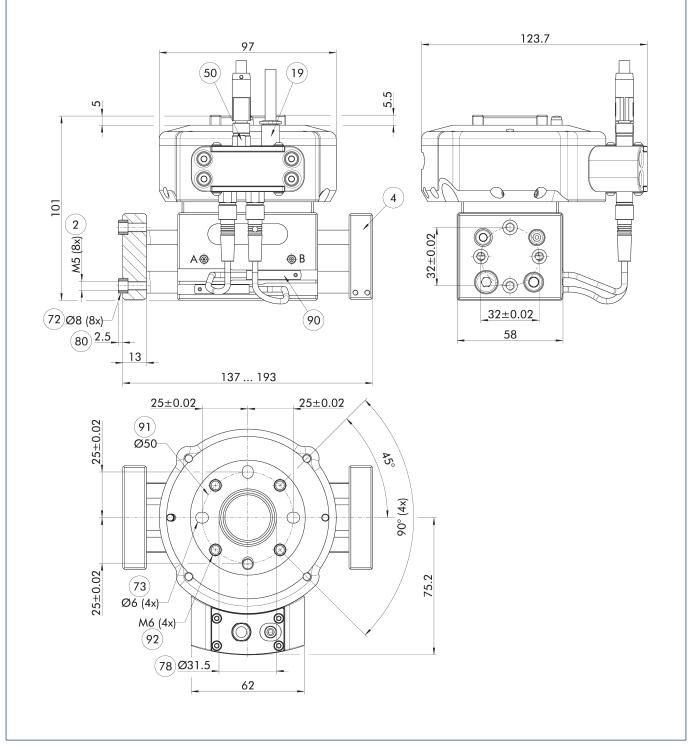
Main view EOA-UR3510-KGG 100-80



- (2) Finger connection
- (4) Grippers
- (19) Air connection
- (50) Electrical connection
- $(\overline{72})$ Fit for centering sleeves
- $(\widetilde{73})$ Fit for centering pins
- (78) Fit for centering
- 80 Depth of the centering sleeve hole in the counter part
- (90) Sensor MMS 22..
- (91) DIN ISO-9409 bolt circle
- (92) Through holes for screw connections

Plug & Work Portfolio Universal Robots

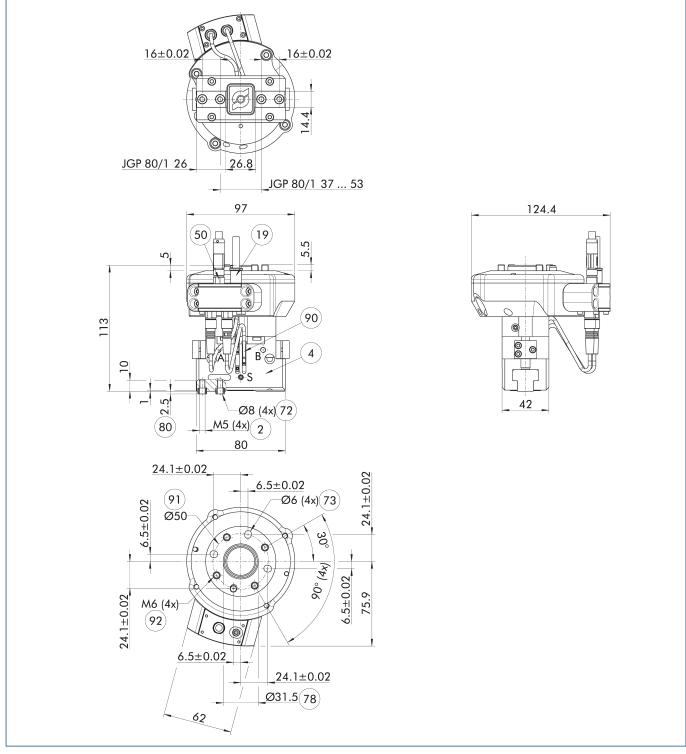
Main view EOA-UR3510-PSH 22-1



- (2) Finger connection
- (4) Grippers
- (19) Air connection
- (50) Electrical connection
- (72) Fit for centering sleeves
- $(\overline{73})$ Fit for centering pins
- (78) Fit for centering
- 80 Depth of the centering sleeve hole in the counter part
- (90) Sensor MMS 22..
- (91) DIN ISO-9409 bolt circle
- (92) Through holes for screw connections

Plug & Work Portfolio Universal Robots

Main view EOA-UR3510-JGP 80-1

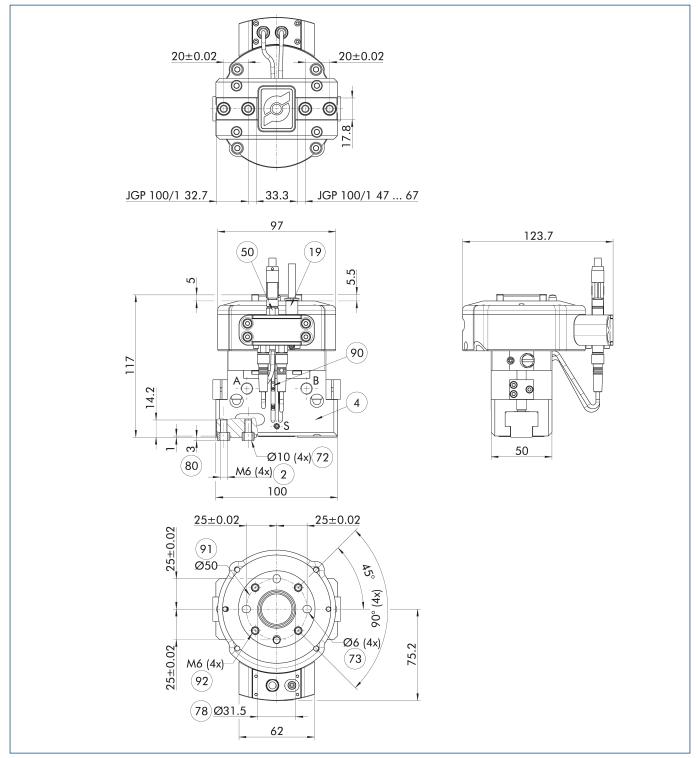


The drawing shows the basic version of the gripper without dimensional consideration of the options described below.

- (2) Finger connection
- (4) Grippers
- (19) Air connection
- (50) Electrical connection
- $(\overline{72})$ Fit for centering sleeves
- $(\overline{73})$ Fit for centering pins
- (78) Fit for centering
- 80 Depth of the centering sleeve hole in the counter part
- (90) Sensor MMS 22..
- (91) DIN ISO-9409 bolt circle
- (92) Through holes for screw connections

Plug & Work Portfolio Universal Robots

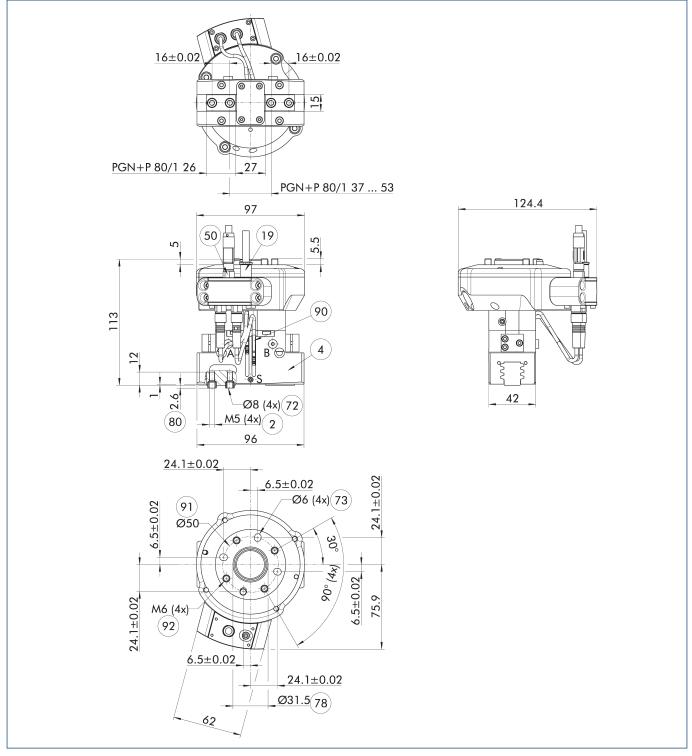
Main view EOA-UR3510-JGP 100-1



- (2) Finger connection
- (4) Grippers
- (19) Air connection
- (50) Electrical connection
- $(\widetilde{72})$ Fit for centering sleeves
- $(\overrightarrow{73})$ Fit for centering pins
- 78 Fit for centering
- 80 Depth of the centering sleeve hole in the counter part
- (90) Sensor MMS 22..
- (91) DIN ISO-9409 bolt circle
- (92) Through holes for screw connections

Plug & Work Portfolio Universal Robots

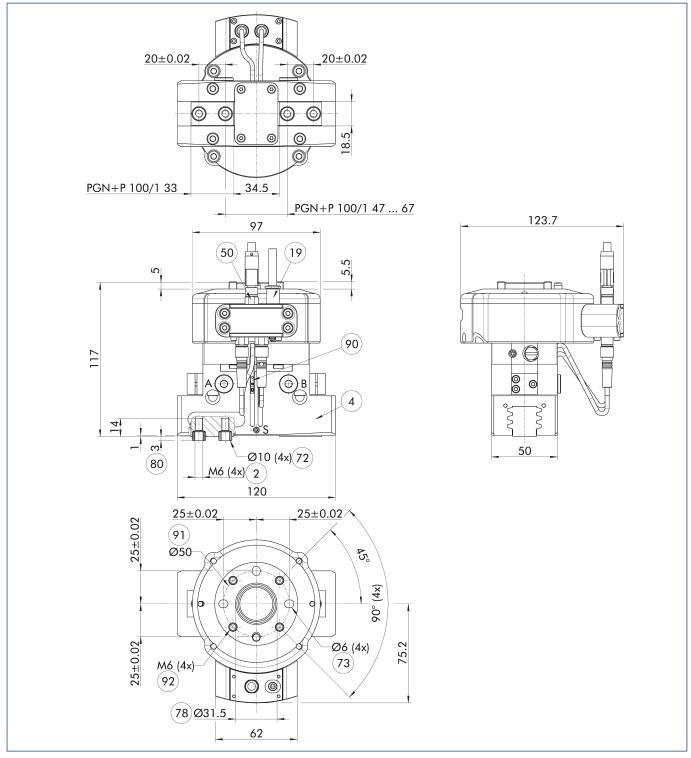
Main view EOA-UR3510-PGN-plus-P 80-1



- (2) Finger connection
- (4) Grippers
- (19) Air connection
- (50) Electrical connection
- (72) Fit for centering sleeves
- $(\overline{73})$ Fit for centering pins
- (78) Fit for centering
- 80 Depth of the centering sleeve hole in the counter part
- (90) Sensor MMS 22..
- (91) DIN ISO-9409 bolt circle
- (92) Through holes for screw connections

Plug & Work Portfolio Universal Robots

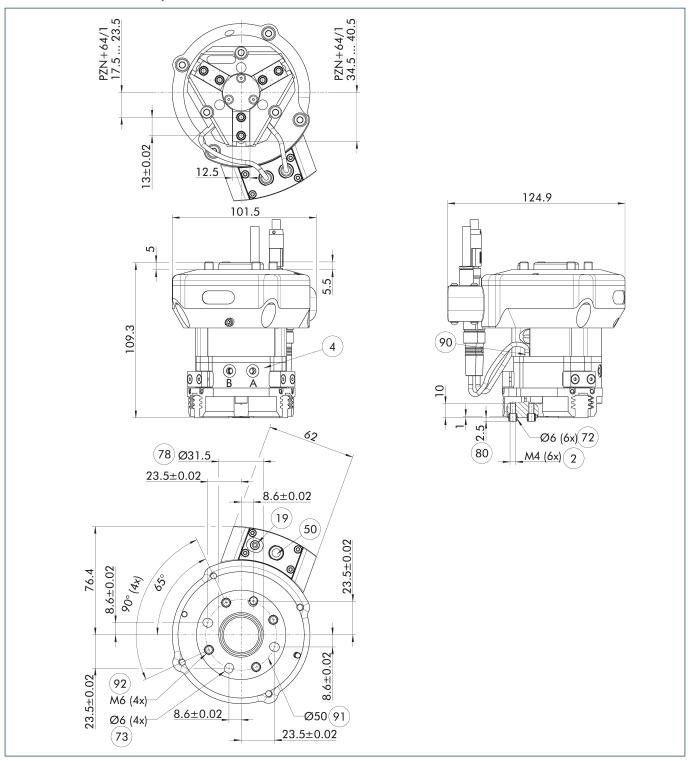
Main view EOA-UR3510-PGN-plus-P 100-1



- (2) Finger connection
- (4) Grippers
- (19) Air connection
- (50) Electrical connection
- $(\overline{72})$ Fit for centering sleeves
- $(\widetilde{73})$ Fit for centering pins
- (78) Fit for centering
- 80 Depth of the centering sleeve hole in the counter part
- (90) Sensor MMS 22..
- (91) DIN ISO-9409 bolt circle
- (92) Through holes for screw connections

Plug & Work Portfolio Universal Robots

Main view EOA-UR3510-PZN-plus 64-1



- (2) Finger connection
- (4) Grippers
- (19) Air connection
- (50) Electrical connection
- (72) Fit for centering sleeves
- $\overline{\textbf{73}}$ Fit for centering pins
- (78) Fit for centering
- 80 Depth of the centering sleeve hole in the counter part
- (90) Sensor MMS 22..
- (91) DIN ISO-9409 bolt circle
- (92) Through holes for screw
- connections

Plug & Work Portfolio Universal Robots - Sensing

Plug & Work Portfolio Universal Robots



Technical data

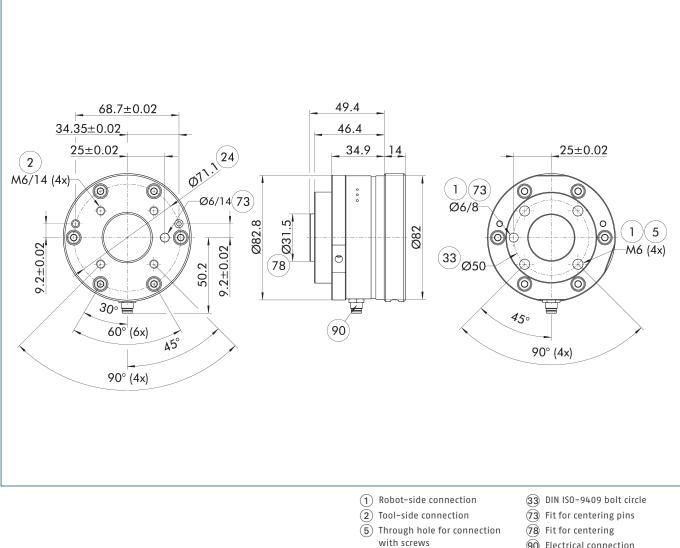
Description		EOA-UR3510-FTN-AXIA 80
ID		1357169
Function		Measuring
Robot compatibility		UR 3/5/10/16
Standard components		FT-AXIA 80
Weight	[kg]	0.51
Min. measuring range Fx, Fy	[N]	200
Max. range of measurement Fx, Fy	[N]	500
Min. measuring range Fz	[N]	360
Max. range of measurement Fz	[N]	900
Min. moment measuring range	[Nm]	8
Max. moment measuring range	[Nm]	20

Tou can find more technical values in the catalog chapter for the respective standard component.

Plug & Work Portfolio Universal Robots - Sensing

Plug & Work Portfolio Universal Robots

Main view EOA-UR3510-FTN-AXIA 80



- 24) Bolt circle
- 90 Electrical connection

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Plug & Work Portfolio Universal Robots - Changing

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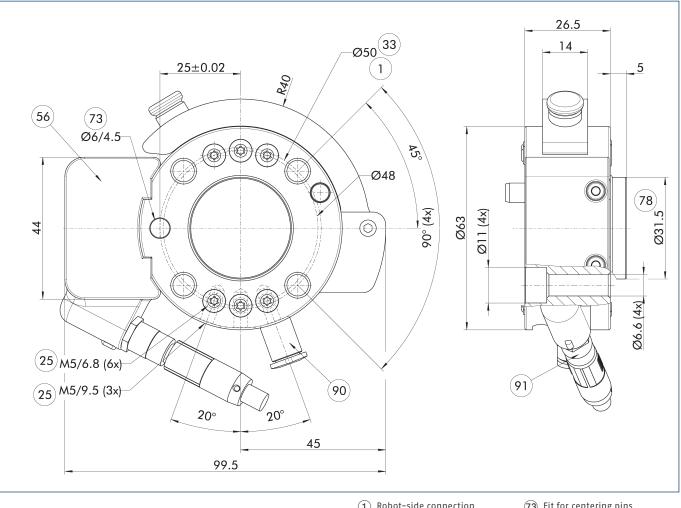
Technical data

Description		EOA-UR3510-SHK-050-E08-000	EOA-UR3510-SHA-050-EO8-000
ID		1334788	1334789
Function		Changing	Changing
Robot compatibility		UR 3/5/10/16	UR 3/5/10/16
Standard components		SHS 50	SHS 50
Weight	[kg]	0.35	0.14
Recommended workpiece weight	[kg]	11	11
Max. dynamic bending moment Mx/ My	[Nm]	75	75
Max. dynamic bending moment Mz	[Nm]	135	135

Tou can find more technical values in the catalog chapter for the respective standard component.

Plug & Work Portfolio Universal Robots - Changing

Plug & Work Portfolio Universal Robots



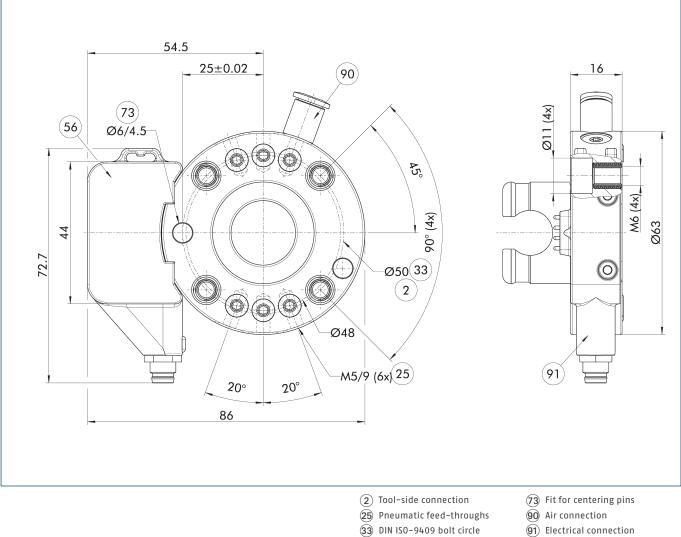
Main view EOA-UR3510-SHK-050

- $\bigcirc 1$ Robot-side connection
- (25) Pneumatic feed-throughs
- 3 DIN ISO-9409 bolt circle
- 56 Included in the scope of delivery
- (73) Fit for centering pins
- (78) Fit for centering
- (90) Air connection
- 91 Electrical connection

Plug & Work Portfolio Universal Robots - Changing

Plug & Work Portfolio Universal Robots

Main view EOA-UR3510-SHA-050



- 56 Included in the scope of
 - delivery





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