Superior Clamping and Gripping

Product data sheet

Universal gripper EGU 50

Robust. Flexible. Intelligent.

Flexible universal gripper EGU

Versatile 2-finger universal gripper for maximum workpiece variety with maximum process robustness

Field of application

Flexible loading and unloading of machine tools, assembly and joining tasks with additional process forces, and universal workpiece handling. The sealed design makes the gripper particularly suitable for use in harsh environments with contamination from chips or coolant.

Advantages – Your benefits

Versatile and productive due to the large and freely programmable jaw stroke with continuous gripping force adjustment for flexible workpiece handling

Robust and reliable with sealed design and proven guidance particularly suitable for the harsh ambient conditions of machine loading

Maximum process reliability by avoiding workpiece loss due to integrated gripping force maintenance with loss detection

Always referenced both with an emergency stop and a power failure due to integrated absolute encoder

100% gripping force without start-up distance with almost constant gripping force over the entire finger length due to integrated spur gear

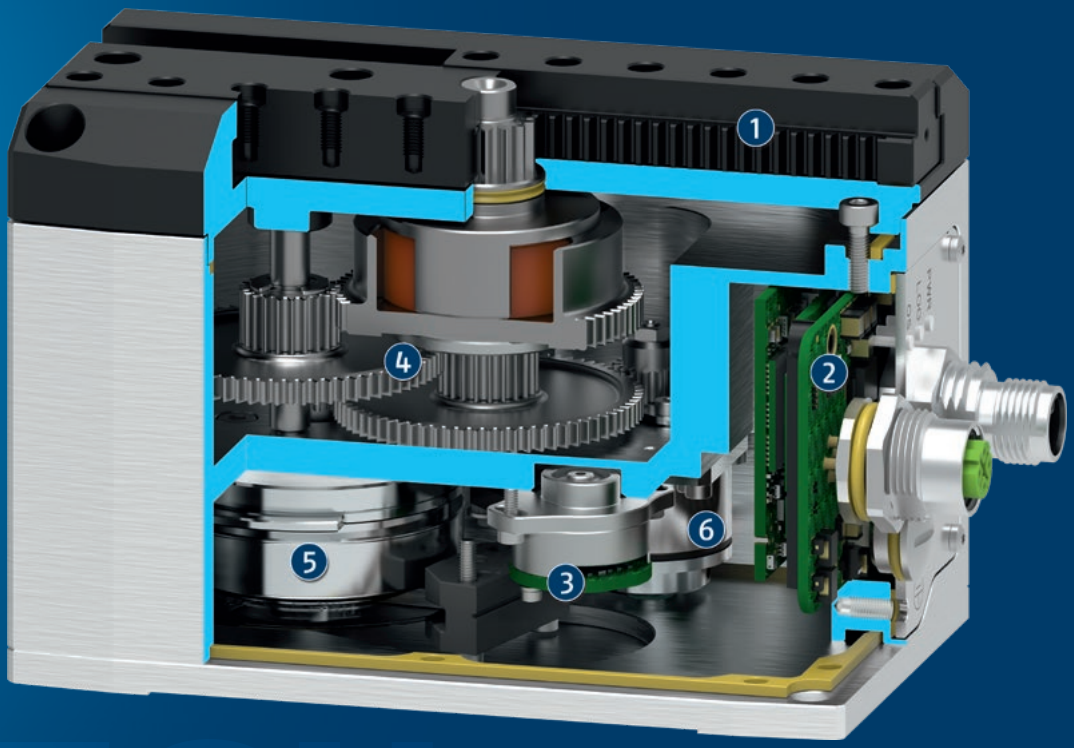
Minimal integration effort compatible with the leading manufacturers on the market due to a wide range of communication interfaces, as well as PLC function blocks and robot plug-ins

Sizes	Weight	Gripping force	Stroke per jaw
Quantity: 4	1.44 .. 7.8 kg	300 .. 4000 N	41 .. 80 mm

Functional description

The user has access to the highest level of functionality due to the components embedded in the gripper. This allows the gripper fingers to be pre-positioned at high speed or for dipping into a workpiece holder. The gripping force can be continuously adjusted to the workpiece handling requirement. Workpiece recognition enables full process transparency for the user. In an emergency stop situation, workpiece loss can be avoided due to the integrated gripping force maintenance.

The BasicGrip and StrongGrip gripping modes are available. With BasicGrip continuous operation of the motor and thus permanent re-gripping of the workpiece is possible. The gripping speed is automatically optimized for gripping force adjustment. With StrongGrip, the maximum gripping force is generated and then stored by the gripping force maintenance. Permanent regripping is possible within an adjustable time frame.



① **Sturdy and resistant T-slot guidance**
for large finger lengths, external forces and moments. Optionally available as dust-tight version.

② **Fully integrated and sealed control and power electronics**
with status LEDs and M12 plug connectors for connecting the voltage supply and communication.

③ **High-resolution, output-side absolute encoder**
for precise positioning of the gripper jaws with permanent absolute position feedback.

④ **Sealed drive train with spur gear and pinion/rack principle**
for a nearly constant acting gripping force over the entire finger length, without a minimum approach distance.

⑤ **Brushless flat motor**
for limited space and high torques due to external rotor.

⑥ **Electromagnetic brake**
with additional mechanism for maintaining gripping force and position during standstill or power failure.

Detailed functional description

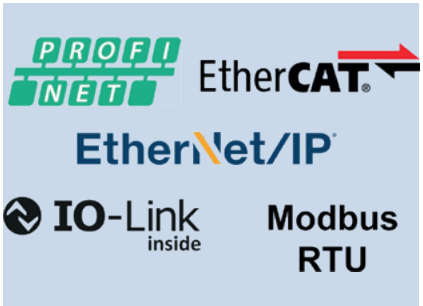
Increased protection class with dust-tight version SD

The dust-tight version increases the degree of protection against dust and liquids entering the guidance and base jaw. In combination with the sealed electronics (IP67), the dust-tight version is thus suitable for use in particularly harsh ambient conditions, such as for loading a grinding machine. The achieved protection of the guidance corresponds to the IP64 protection class and is thus absolutely dust-tight and protected against splashing water from all directions. You can find additional information on the product in the operating manual.

Mounting option for additional attachment

Additional threads and fittings are located in the guidance housing for mounting an application-specific design in order to implement additional functions. For example, a spring-loaded pressure element can be mounted to center the workpiece.

Connectivity

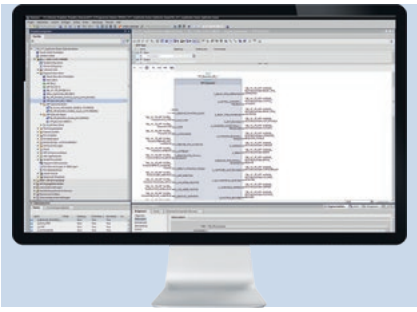


A wide range of available communication interfaces simplifies handling with a wide variety of control and robot manufacturers and ensures time savings during integration. Industrial Ethernet (PROFINET, EtherCAT, EtherNet/IP) enables direct integration without additional gateways into the control environment of leading PLC manufacturers on the market. With the Modbus RTU serial interface, the gripper can be connected to the tool flange of leading robot manufacturers without external cable routing. IO-Link is independent and offers flexibility in connecting to other networks.

Software Service – Robot integration

For seamless interaction between gripper and robot, software modules for integration into the robot control system of leading manufacturers are available. This means that the gripper's range of functions can be used directly without any additional programming effort and programming of the application can be started immediately. Robot compatibility (partially only available on request): Universal Robots e-Series via Modbus RTU, FANUC CRX via Modbus RTU, ABB OmniCore C30 via EtherNet/IP, YASKAWA YRC1000micro via EtherNet/IP.Software, other compatibility notes and documentation can be downloaded at www.schunk.com/egu-software.

Software Service – PLC integration



For seamless interaction between gripper and PLC control, function modules for the programming interface of leading manufacturers is available. This means that the gripper's range of functions can be used directly without any additional programming effort and programming of the application can be started immediately. PLC compatibility (partially only available on request): Siemens TIA Portal (PROFINET and IO-Link), Beckhoff TwinCAT (EtherCAT and IO-Link), Allen Bradley Studio 5000 Logix Designer (EtherNet/IP and IO-Link)Software and other compatibility notes can be downloaded at schunk.com/egu-software.

Commissioning app in the SCHUNK control center

The mechatronic grippers app simplifies commissioning, operation, diagnostics and service thanks to an extensive catalog of functions Users can control the gripper directly and perform application validation without the need for a PLC. The functions include network configuration, firmware updates, parameter adjustments and backups as well as comprehensive diagnostic options. The app is compatible with Windows and can be downloaded at schunk.com/downloads-software.

General notes about the series

Housing material: Aluminum alloy, anodized

Base jaw material: Steel, corrosion-protected

Warranty: 24 months or 5 million cycles BasicGrip / 3 million cycles StrongGrip (one cycle consists of a complete gripping process: "Open gripper" and "Close gripper")

Scope of delivery: Gripper including assembly instructions and accessory kit with centering sleeves for gripper and finger mounting. Additional digital services are available at schunk.com/downloads-software.

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

Repeat accuracy (gripping): defined as the spread of the actual position during 100 consecutive closing or opening movements on a rigid workpiece or a fixed workpiece stop under constant conditions.

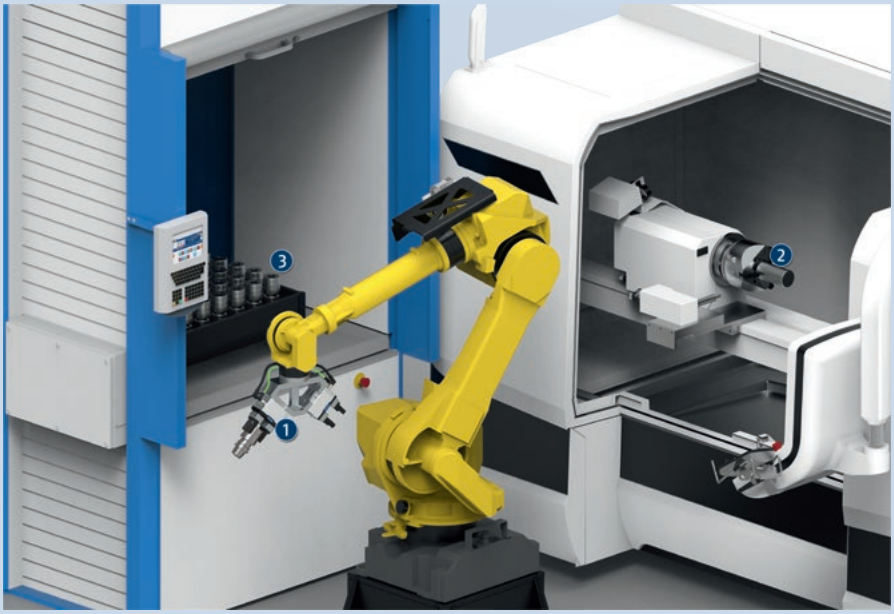
Repeat accuracy (positioning, unidirectional): defined as the spread of the actual position per base jaw during 100 consecutive movements to a target position from the same direction under constant conditions.

Repeat accuracy (positioning, bi-directional): defined as the distribution of the actual position per base jaw during 100 consecutive movements to a target position from both directions under constant conditions.

Finger length: is measured from the reference surface as the distance P in direction to the main axis.

Closing and opening times (positioning): Closing and opening times are only the movement times of the fingers at max. speed, as well as max. acceleration with observance of the max. permissible mass per finger and refer to the traverse path per jaw and 30 mm stroke.

Max. speed (positioning) and max. acceleration: is the arithmetic sum of the velocity and acceleration acting on each jaw.



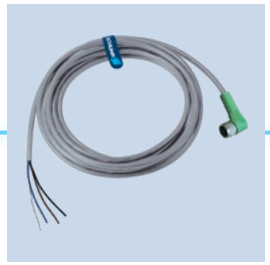
Application example

Flexible, cycle-time optimized loading and unloading of a machine tool. By using two grippers on the robot, the machine tool can be automatically loaded in a way that is optimized for the cycle time, and productivity can be increased. Finished part and pre-machined part can be transported in one loading cycle. The automated high-bay warehouse contains pallets with various sizes of semi-finished and finished parts. Due to the large and freely programmable jaw stroke of the gripper, different diameters can be gripped without having to change the gripper.

1. Universal gripper EGU for unfinished and finished part handling
2. Machine tool with power lathe chuck ROTA
3. Automated high bay warehouse

SCHUNK offers more ...

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



Power cable

Communication cables

Intermediate jaw

Robot adaptation kits

Customizable gripper fingers

Finger blank

Jaw quick-change system

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

Options and special information

Gripping modes: The BasicGrip and StrongGrip gripping modes are available. With BasicGrip continuous operation of the motor and thus permanent re-gripping of the workpiece is possible. The gripping speed is automatically optimized for gripping force adjustment. With StrongGrip, the maximum gripping force is generated and then stored by the gripping force maintenance. Permanent regripping is possible within an adjustable time frame. In addition, defined pause times and maximum ambient temperatures must be taken into account in StrongGrip mode. Further details can be found in the operating manual.
Gripping force maintenance: In the event of an emergency stop or a voltage drop, more than 80% of the originally applied gripping force can be reliably maintained due to a combination of an electric holding brake and the initial tension of the elastic element. If the gripping force and position maintenance is activated preventatively, 100% of the originally applied gripping force can be maintained. Overrun of the gripper fingers when removing the workpiece is a few millimeters and depends on the gripping force generated. Variants without gripping force maintenance are also available as an option.
Seal: The gripper has increased protection against the ingress of dust or liquids by default. The IP protection of the electronics is only given if the plug connectors have been mounted properly. The gearbox of the gripper is additionally protected by a seal on the main shaft.
Interface of the base jaws: When using the intermediate jaw, the interface of the base jaws corresponds to that of the universal gripper PGN-plus-P. This means that the extensive range of finger accessories for the PGN-plus-P can also be used for this gripper, taking into account the interfering contours, and the application limits that apply.

Ordering example

EGU 50 – PN – M – B

Description

EGU

Size

50
60
70
80

Communication interface

PN = PROFINET
EI = EtherNet/IP
EC = EtherCAT
IL = IO-Link
MB = Modbus RTU

Gripping force maintenance

M = with gripping force maintenance
N = without gripping force maintenance

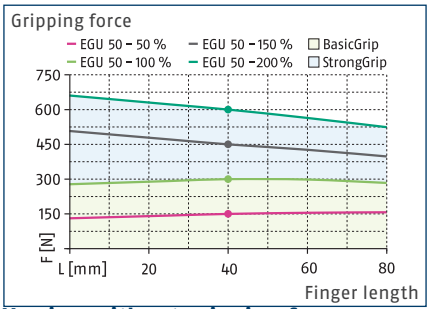
Version

B = Basic version
SD = Dustproof version

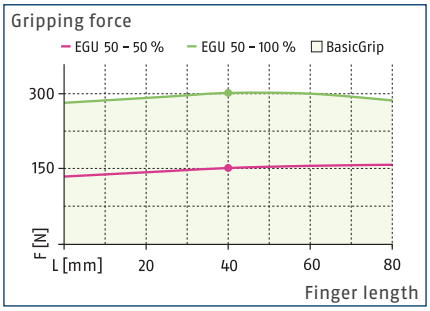
EGU 50

Universal gripper

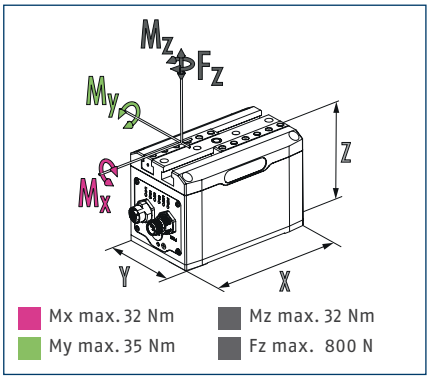
Version with gripping force maintenance device



Version without gripping force maintenance



Dimensions and maximum loads



ⓘ The indicated moments and forces are statical values, apply for each base jaw and may appear simultaneously. Loads may additionally occur to the moment produced by the gripping force itself.

Technical data EGU with gripping force maintenance

Description		EGU 50-PN-M-B	EGU 50-EI-M-B	EGU 50-EC-M-B	EGU 50-IL-M-B	EGU 50-MB-M-B
ID		1491537	1491540	1491546	1491532	1491535
General operating data						
Stroke per jaw	[mm]	51	51	51	51	51
Min./max. gripping force	[N]	150/600	150/600	150/600	150/600	150/600
Min./max. gripping force maintenance	[%]	90/100	90/100	90/100	90/100	90/100
Max. permissible finger length	[mm]	80	80	80	80	80
Max. permissible weight per finger	[kg]	0.4	0.4	0.4	0.4	0.4
Repeat accuracy (gripping)	[mm]	0.02	0.02	0.02	0.02	0.02
Repeat accuracy (positioning, unidirectional)	[mm]	0.05	0.05	0.05	0.05	0.05
Repeat accuracy (positioning, bi-directional)	[mm]	0.15	0.15	0.15	0.15	0.15
Closing/opening time (positioning, 30 mm stroke)	[s]	0.8/0.8	0.8/0.8	0.8/0.8	0.8/0.8	0.8/0.8
Max. speed (positioning)	[mm/s]	110	110	110	110	110
Max. acceleration	[mm/s²]	800	800	800	800	800
Weight	[kg]	1.49	1.49	1.49	1.49	1.49
Min./max. ambient temperature	[°C]	5/55	5/55	5/55	5/55	5/55
IP protection class, electronics		67	67	67	67	67
IP protection class guide/base jaws		40	40	40	40	40
Cleanroom class ISO 14644-1:2015		5	5	5	5	5
Electrical operating data						
Nominal voltage	[V]	24	24	24	24	24
Communication interface		PROFINET	EtherNet/IP	EtherCAT	IO-Link	Modbus RTU
BasicGrip nominal/max. current consumption	[A]	0.3/1.44	0.3/1.44	0.3/1.44	0.3/1.44	0.3/1.44
StrongGrip nominal/max. current consumption	[A]	0.72/1.08	0.72/1.08	0.72/1.08	0.72/1.08	0.72/1.08
Logic nominal/max. current consumption	[A]	0.16/0.2	0.16/0.2	0.16/0.2	0.16/0.2	0.16/0.2
Options and their characteristics						
Dustproof version		1504558	1504580	1504582	1504554	1504556
IP protection class guide/base jaws		64	64	64	64	64
Stroke per jaw	[mm]	41	41	41	41	41
Min./max. gripping force	[N]	210/600	210/600	210/600	210/600	210/600
Weight	[kg]	1.52	1.52	1.52	1.52	1.52
Cleanroom class ISO 14644-1:2015		4	4	4	4	4

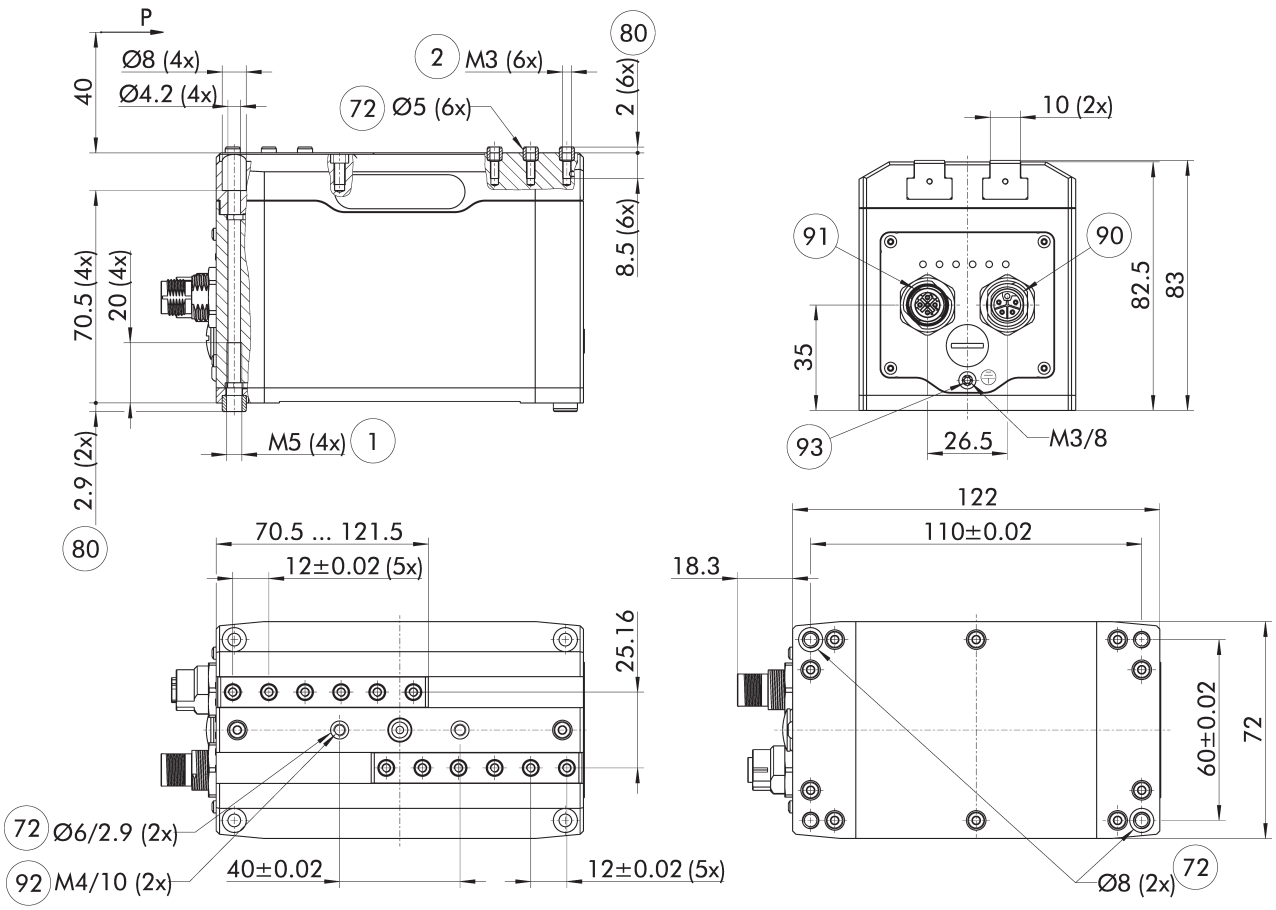
Technical data EGU without gripping force maintenance

Description		EGU 50-PN-N-B	EGU 50-EI-N-B	EGU 50-EC-N-B	EGU 50-IL-N-B	EGU 50-MB-N-B
ID		1491538	1491541	1491547	1491533	1491536
General operating data						
Stroke per jaw	[mm]	51	51	51	51	51
Min./max. gripping force	[N]	150/300	150/300	150/300	150/300	150/300
Max. permissible finger length	[mm]	80	80	80	80	80
Max. permissible weight per finger	[kg]	0.4	0.4	0.4	0.4	0.4
Repeat accuracy (gripping)	[mm]	0.02	0.02	0.02	0.02	0.02
Repeat accuracy (positioning, unidirectional)	[mm]	0.05	0.05	0.05	0.05	0.05
Repeat accuracy (positioning, bi-directional)	[mm]	0.15	0.15	0.15	0.15	0.15
Closing/opening time (positioning, 30 mm stroke)	[s]	0.8/0.8	0.8/0.8	0.8/0.8	0.8/0.8	0.8/0.8
Max. speed (positioning)	[mm/s]	110	110	110	110	110
Max. acceleration	[mm/s²]	800	800	800	800	800
Weight	[kg]	1.44	1.44	1.44	1.44	1.44
Min./max. ambient temperature	[°C]	5/55	5/55	5/55	5/55	5/55
IP protection class, electronics		67	67	67	67	67
IP protection class guide/base jaws		40	40	40	40	40
Cleanroom class ISO 14644-1:2015		5	5	5	5	5
Electrical operating data						
Nominal voltage	[V]	24	24	24	24	24
Communication interface		PROFINET	EtherNet/IP	EtherCAT	IO-Link	Modbus RTU
BasicGrip nominal/max. current consumption	[A]	0.24/1.23	0.24/1.23	0.24/1.23	0.24/1.23	0.24/1.23
Logic nominal/max. current consumption	[A]	0.16/0.2	0.16/0.2	0.16/0.2	0.16/0.2	0.16/0.2
Options and their characteristics						
Dustproof version		1504559	1504581	1504583	1504555	1504557
IP protection class guide/base jaws		64	64	64	64	64
Stroke per jaw	[mm]	41	41	41	41	41
Min./max. gripping force	[N]	210/300	210/300	210/300	210/300	210/300
Weight	[kg]	1.47	1.47	1.47	1.47	1.47
Cleanroom class ISO 14644-1:2015		4	4	4	4	4

EGU 50

Universal gripper

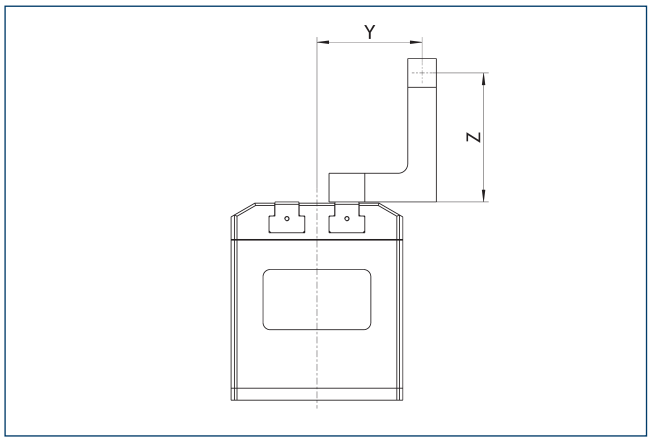
Main view

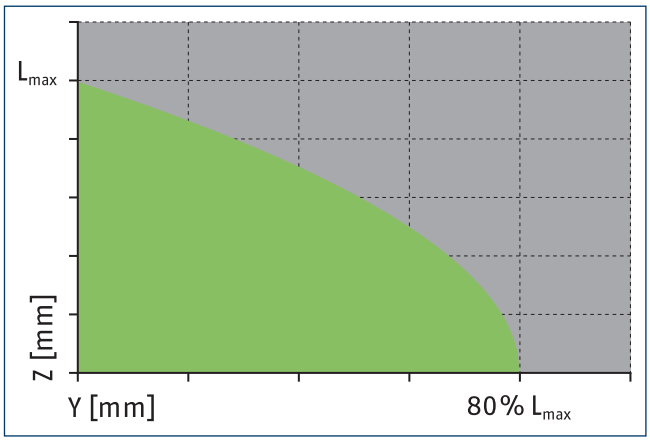


The drawing shows the gripper in PROFINET, EtherNet/IP or EtherCAT version, with and without gripper force maintenance with opened jaws.

1. Gripper connection
2. Finger connection
72. Fit for centering sleeves
80. Depth of the centering sleeve hole in the counter part
90. Voltage supply (M12, connector, 4 pin, L-coded)
91. Communication (M12, socket, 4 pin, D-coded)
92. Screw connection with fittings for additional attachment (these centering sleeves are not included in the scope of delivery)
93. Functional ground connection

Maximum permitted finger projection

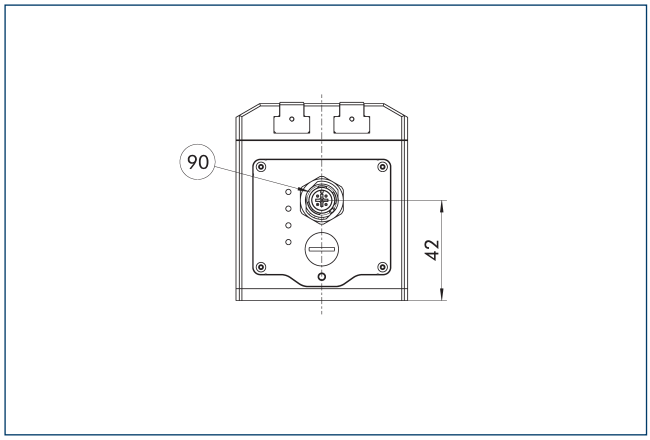




Permitted range Inadmissible range

L^{max} is equivalent to the maximum permitted finger length, see the technical data table.

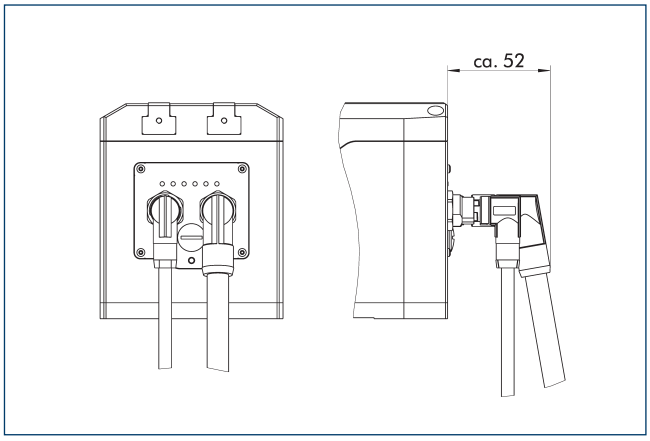
IO-Link and Modbus RTU version



(90) Voltage supply and communication (M12, connector, A-coded, IL: 5 pin, MB: 4 pin)

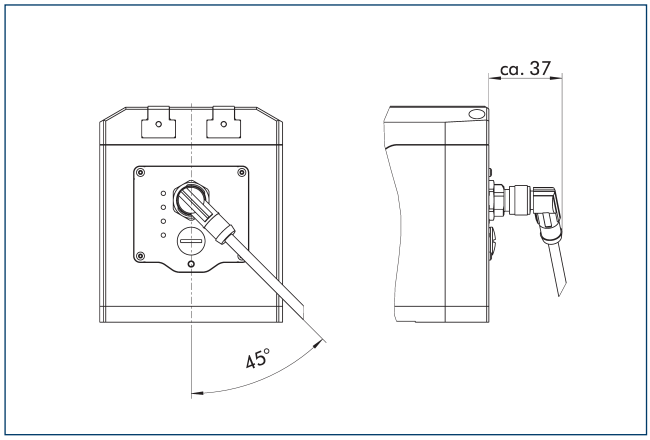
The drawing shows the changes in dimension of the IO-Link and Modbus RTU versions compared to the basic version found in the main view.

Angled plug connectors for PROFINET, EtherNet/IP and EtherCAT version



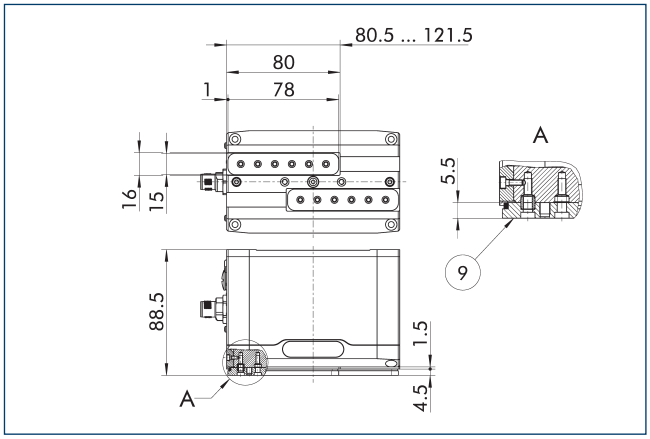
The drawing shows the direction of the cable outlet when using angled connectors. The distance from the plug connector to the gripper housing may vary depending on the cable manufacturer used.

Angled plug connectors for IO-Link and Modbus RTU version



The drawing shows the direction of the cable outlet when using angled connectors. The distance from the plug connector to the gripper housing may vary depending on the cable manufacturer used.

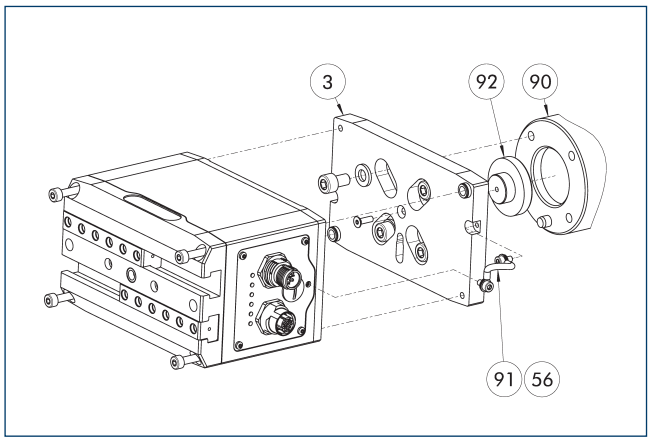
Dustproof version



(9) For mounting screw connection diagram, see basic version

The "dustproof" option increases the degree of protection against penetrating substances. The assembly diagram shifts by the height of the intermediate jaw. The finger length is still measured from the upper edge of the gripper housing.

Robot adaptation packages single gripper

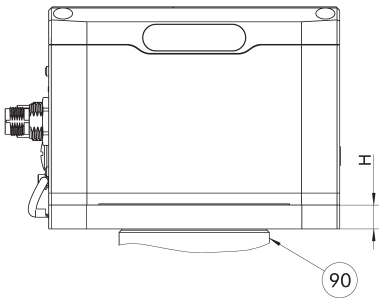


(3) Adapter
(56) Included in the scope of delivery
(90) Robot flange
(91) Cable functional ground
(92) Centering disc

Robot adaptation packages for single grippers contain all components required to mechanically adapt the gripper to the desired robot flange. Depending on the flange pattern, suitable screws, centering pins and the centering collar are included.

Description	ID	Height	DIN ISO-9409 bolt circle	Manufac-turer	Model
		[mm]	[mm]		
Adapter					
AKO EGU50/ GP12	1524670	11		YASKAWA	GP12
AKO EGU50/ GP7,8	1524659	10.5		YASKAWA	GP7, GP8
AKO EGU50/ ISO31.5	1524650	10.5	31.5	ABB	SWIFTI CRB1100, IRB1100, IRB1200
AKO EGU50/ ISO40	1524653	10.5	40	ABB	IRB1300
AKO EGU50/ ISO50	1524658	10.5	50	Universal Robots	UR5e, UR10e, UR16e
AKO EGU50/ ISO50	1524658	10.5	50	FANUC	CRX-5iA, CRX-10iA, CRX-20iA, CRX-25iA
AKO EGU50/ ISO50	1524658	10.5	50	ABB	GoFa CRB15000
AKO EGU50/ ISO50	1524658	10.5	50	YASKAWA	HC10DTP, HC20DTP

Robot adaptation packages single gripper

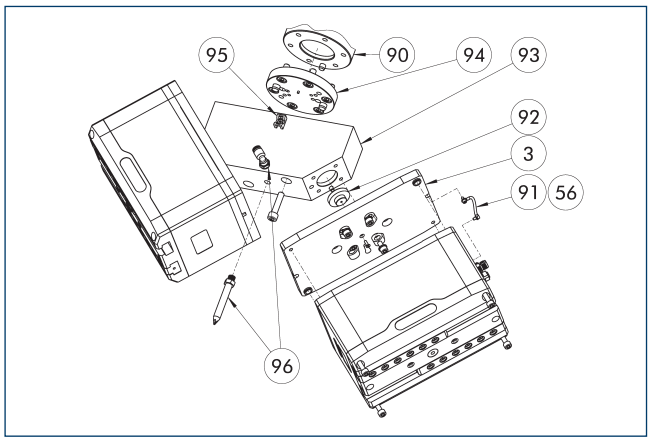


(90) Robot flange

The single-piece design enables a flat construction of the entire system. The adapter is manufactured from blank aluminum. The listed robot manufacturers with their associated models constitute useful recommendations taking the total mass into account. SCHUNK nevertheless recommends that the payload of the robot will be considered in detail.

Description	ID	Height	DIN ISO-9409 bolt circle	Manufac-turer	Model
		[mm]	[mm]		
Adapter					
AKO EGU50/ GP12	1524670	11		YASKAWA	GP12
AKO EGU50/ GP7,8	1524659	10.5		YASKAWA	GP7, GP8
AKO EGU50/ ISO31.5	1524650	10.5	31.5	ABB	SWIFTI CRB1100, IRB1100, IRB1200
AKO EGU50/ ISO40	1524653	10.5	40	ABB	IRB1300
AKO EGU50/ ISO50	1524658	10.5	50	Universal Robots	UR5e, UR10e, UR16e
AKO EGU50/ ISO50	1524658	10.5	50	FANUC	CRX-5iA, CRX-10iA, CRX-20iA, CRX-25iA
AKO EGU50/ ISO50	1524658	10.5	50	ABB	GoFa CRB15000
AKO EGU50/ ISO50	1524658	10.5	50	YASKAWA	HC10DTP, HC20DTP

Robot adaptation packages double gripper

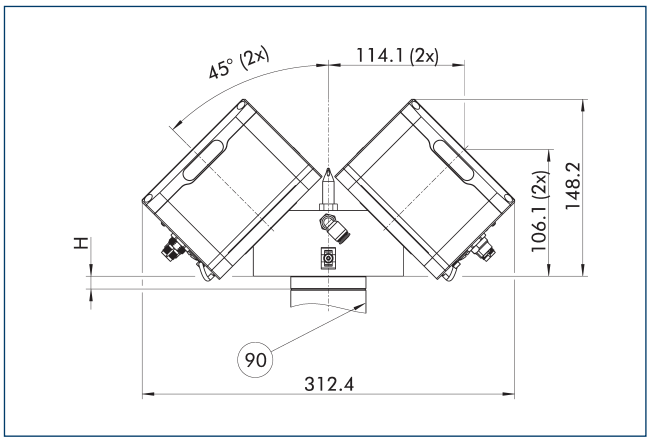


(3) Adapter
(56) Included in the scope of delivery
(90) Robot flange
(91) Cable functional ground
(92) Centering collar gripper
(93) angle adapter
(94) Adapter robot
(95) Cable holder (included in the scope of delivery of the cable package)
(96) Attachment set blow-off nozzle

Robot adaptation packages for double grippers contain all components required to mechanically adapt two grippers to the desired robot flange. Depending on the flange pattern, suitable screws, centering pins and centering material are included in the delivery. A short or long blow-off nozzle can be added as an option.

Description	ID	Height	DIN ISO-9409 bolt circle	Manufacturer	Model
		[mm]	[mm]		
Adapter					
AKO 2xEGU50/ GP12	1524754	15.8		YASKAWA	GP12
AKO 2xEGU50/ ISO50	1524743	10.8	50	Universal Robots	UR10e, UR16e
AKO 2xEGU50/ ISO50	1524743	10.8	50	FANUC	CRX-10iA, CRX-20iA, CRX-25iA
AKO 2xEGU50/ ISO50	1524743	10.8	50	YASKAWA	HC10DTP, HC20DTP
AKO 2xEGU50/ ISO63	1524747	14.8	63		
AKO 2xEGU50/ ISO80	1524752	14.8	80	Universal Robots	UR20
Attachment set blow-off nozzle (short)	1524788				

Robot adaptation packages double gripper



(90) Robot flange

The adapter is manufactured from blank aluminum. The listed robot manufacturers with their associated models constitute useful recommendations taking the total mass into account. SCHUNK nevertheless recommends that the payload of the robot will be considered in detail.

Description	ID	Height	DIN ISO-9409 bolt circle	Manufacturer	Model
		[mm]	[mm]		
Adapter					
AKO 2xEGU50/ GP12	1524754	15.8		YASKAWA	GP12
AKO 2xEGU50/ ISO50	1524743	10.8	50	Universal Robots	UR10e, UR16e
AKO 2xEGU50/ ISO50	1524743	10.8	50	FANUC	CRX-10iA, CRX-20iA, CRX-25iA
AKO 2xEGU50/ ISO50	1524743	10.8	50	YASKAWA	HC10DTP, HC20DTP
AKO 2xEGU50/ ISO63	1524747	14.8	63		
AKO 2xEGU50/ ISO80	1524752	14.8	80	Universal Robots	UR20

Robot-specific connection cables

Connection cables and connection cable kits for electrical connection to specific robot models and controllers. Depending on the manufacturer, a direct connection to the tool flange is possible or external cabling is required. In combination with mechanical adapters and software modules, this allows commissioning on the robot to be carried out in just a few steps. Cables for external cable routing are designed to withstand torsion.

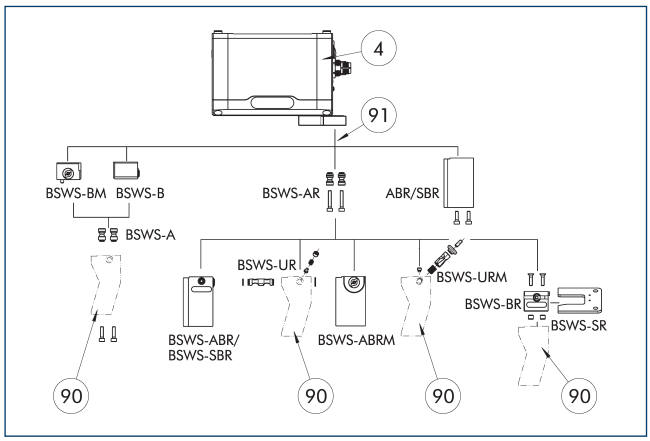
Description	ID	Manufacturer	Series	Model	Controller	Connection	Cable length	Interface
							[m]	
Double gripper								
EGU/EGK CNK-DG-FANUC-CRX	1532241	FANUC	CRX	CRX-5iA, CRX-10iA, CRX-20iA, CRX-25iA	R-30iB Plus Mini	Tool, internal feed-through		Modbus RTU
EGU/EGK CNK-DG-UR-eSeries	1532238	Universal Robots	e-Series	UR3e, UR5e, UR10e, UR16e	CB5	Tool, internal feed-through		Modbus RTU
EGU CNK-DG-ABB-OmniCoreC30	1529608	ABB	IRB, CRB		OmniCore C30	Controller, external cable routing	5	EtherNet/IP
EGU CNK-DG-YASKAWA-YRC1000micro	1529621	YASKAWA	GP, HC		YRC1000MICRO	Controller, external cable routing	5	EtherNet/IP
Single gripper								
EGU/EGK CNK-SG-FANUC-CRX	1532240	FANUC	CRX	CRX-5iA, CRX-10iA, CRX-20iA, CRX-25iA	R-30iB Plus Mini	Tool, internal feed-through		Modbus RTU
EGU/EGK CNK-SG-UR-eSeries	1532237	Universal Robots	e-Series	UR3e, UR5e, UR10e, UR16e	CB5	Tool, internal feed-through		Modbus RTU
EGU CNK-SG-ABB-OmniCoreC30	1529600	ABB	IRB, CRB		OmniCore C30	Controller, external cable routing	5	EtherNet/IP
EGU CNK-SG-YASKAWA-YRC1000micro	1529619	YASKAWA	GP, HC		YRC1000MICRO	Controller, external cable routing	5	EtherNet/IP

ⓘ The performance data of the robot must be taken into account. SCHUNK also recommends the use of a suitable strain relief.

EGU 50

Universal gripper

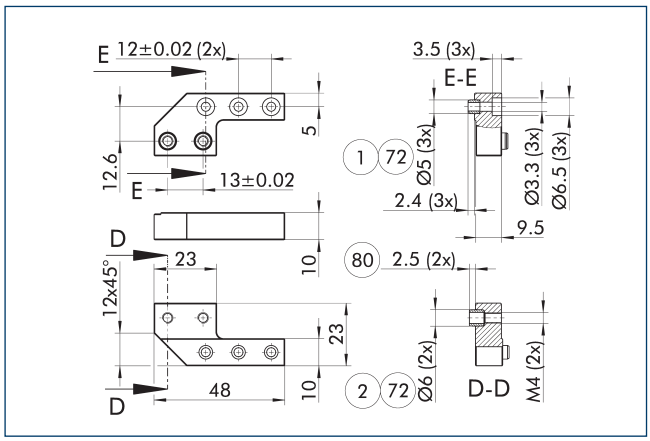
BSWS jaw quick-change jaw systems



4 Grippers
91 Intermediate jaw
90 Customized gripper fingers

There are various jaw quick-change systems available for the gripper. For detailed information, please refer to the corresponding product.

Intermediate jaw ZBA-EGU 50



(1) Gripper connection
(2) Finger connection
(72) Fit for centering sleeves
(80) Depth of the centering sleeve hole in the counter part

The intermediate jaws offset the side offset of the base jaws in the Y direction and enable an aligned connection. During use, the interface of the base jaws corresponds to that of the universal gripper PGN-plus-P. This means that the extensive range of finger accessories for the PGN-plus-P can also be used for this gripper, taking into account the interfering contours, and the application limits that apply.

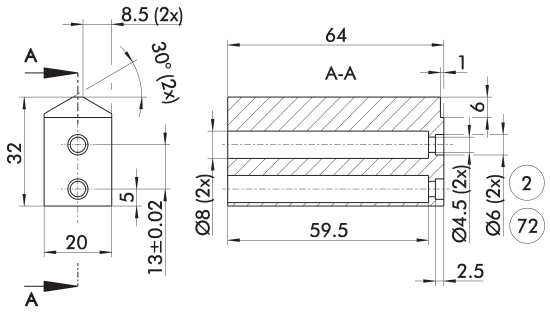
Description	ID	Material	Scope of delivery
Intermediate jaw			
ZBA EGU 50	1504612	Steel, corrosion-protected	2
Jaw quick-change system adapter pin			
BSWS-AR 64	0300092		2
BSWS-AR 64	0300092		2
Quick-change jaw system base			
BSWS-B 64	0303023		1
BSWS-BM 64	1313900		1

Fields of application

Series	Size	Variant	Suitability
EGU	50	BasicGrip 50%	■■■■
EGU	50	BasicGrip 100%	■■■■
EGU	50	StrongGrip 150%	■■■■
EGU	50	StrongGrip > 150%	■■■■
Legend			
■■■■	Can be combined without restrictions		
■■□□	Use with restrictions (see loading limits)		
□□□□	cannot be combined		

The load limits for describing the application limits can be found in the catalog chapter of the corresponding accessories.

Finger blanks ABR/SBR-PGZN-plus 64



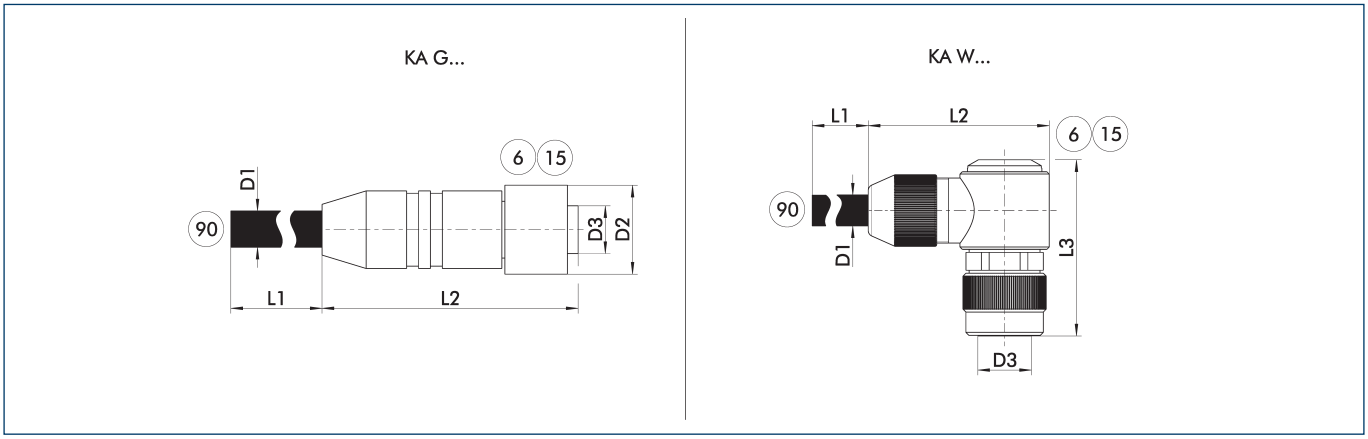
(2) Finger connection
(72) Fit for centering sleeves

The drawing shows the finger blank which can be reworked by the customer.

Description	ID	Material	Scope of delivery
Finger blank			
ABR-PGZN-plus 64	0300010	Aluminum (3.4365)	1
SBR-PGZN-plus 64	0300020	Steel (1.7131)	1

ⓘ In the PGL-plus-P gripper series, the use of finger blanks results in a limitation of the closing stroke. Please check this in detail in advance using the CAD data and adjust the reworking of the fingers accordingly.

Voltage supply connection cable



KA G... Connection cable with straight plug connector
KA W... Connection cable with angled plug connector

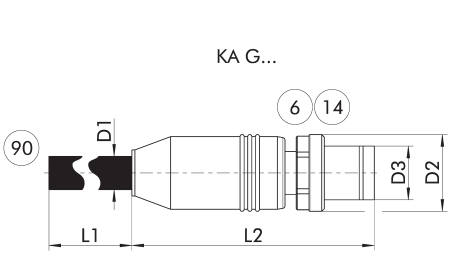
(6) Connection module side
(15) Socket
(90) Cable end with open wire strands

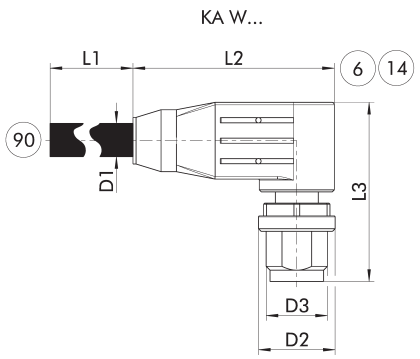
The connection cables are used to connect the SCHUNK product to the voltage supply.

Description	ID	L1	D1	L2	D2	L3	D3
		[m]	[mm]	[mm]	[mm]	[mm]	
Voltage supply connection cable – drag chain and torsion resistant M12 socket, straight							
KA GLN12L04-LK-00500-A	1502019	5	7.2	53.5	18		M12 L-coded
KA GLN12L04-LK-01000-A	1502023	10	7.2	53.5	18		M12 L-coded
Voltage supply connection cable – drag chain and torsion resistant M12 socket, angled							
KA WLN12L04-LK-00500-A	1502028	5	7.2	49	18	40	M12 L-coded
KA WLN12L04-LK-01000-A	1502032	10	7.2	49	18	40	M12 L-coded

ⓘ Please observe the min. bending radius for cable track-compatible cables or the max. torsion angle for torsion-compatible cables. These are generally 10 times the cable diameter or +/- 180°/m. Please refer to the product documentation for information about max. cable length and min. wire cross section.

Connection cable communication PROFINET, EtherNet/IP and EtherCAT





KA G... Straight plug connector
KA W... Angular plug connector

(6) Connection module side
(14) Connector

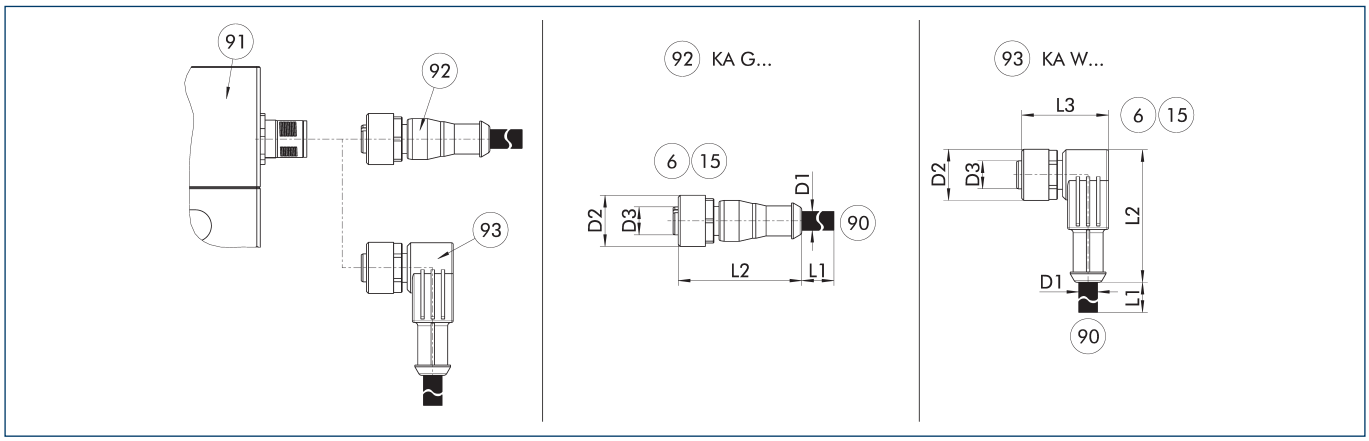
(90) Cable ends with second plug connector

The communication cables are suitably assembled for the mechatronic products from SCHUNK and can be used for the PROFINET, EtherNET/IP and EtherCAT communication interfaces. They always have an M12 plug connector on the module side (D-coded, connector). The plug connectors are designed straight (KA G...) or angled (KA W...) on the module side. On the second side, the cables either have a straight M12 plug connector (D-coded, connector) or an RJ45 plug connector.

Description	ID	L1	D1	L2	D2	L3	D3
		[m]	[mm]	[mm]	[mm]	[mm]	
EtherCAT connection cable star distributor M12 D-coded socket, straight; on M8 A-coded connector, straight							
KA GGN12D04-08A04-ET-00020-A	1521990	0.2	6.5	47.3	14.8		M12
Communication cable suitable for drag chain M12 connector, straight – to M12 connector, straight							
KA GGN12D04-12D04-ET-00500-A	1505114	5	6.5	47.3	14.8		M12
KA GGN12D04-12D04-ET-01000-A	1505119	10	6.5	47.3	14.8		M12
Communication cable suitable for drag chain M12 connector, straight – to RJ45 connector, straight							
KA GGN12D04-RJ45-ET-00200-A	1511256	2	6.5	47.3	14.8		M12
KA GGN12D04-RJ45-ET-00500-A	1354681	5	6.5	47.8	14.8		M12
KA GGN12D04-RJ45-ET-01000-A	1505143	10	6.5	47.3	14.8		M12
Communication cable suitable for drag chain M12 connector, angled – to M12 connector, straight							
KA WGN12D04-12D04-ET-00500-A	1354661	5	6.5	47.8	14.8		M12
KA WGN12D04-12D04-ET-01000-A	1505141	10	6.5	36.3	14.8	30	M12
Communication cable suitable for drag chain M12 connector, angled – to RJ45 connector, straight							
KA WGN12D04-RJ45-ET-00500-A	1354688	5	6.5	36.3	14.8	30	M12
KA WGN12D04-RJ45-ET-01000-A	1505142	10	6.5	36.3	14.8	30	M12
Communication cable suitable for torsion-resistant M12 connector, straight – to M12 connector, straight							
KAR GGN12D04-12D04-ET-00500-A	1505146	5	6.5	47.8	14.8		M12
KAR GGN12D04-12D04-ET-01000-A	1505147	10	6.5	47.3	14.8		M12
Communication cable suitable for torsion-resistant M12 connector, straight – to RJ45 connector, straight							
KAR GGN12D04-RJ45-ET-00500-A	1354677	5	6.5	47.8	14.8		M12
KAR GGN12D04-RJ45-ET-01000-A	1505160	10	6.5	47.3	14.8		M12
Communication cable suitable for torsion-resistant M12 connector, angled – to M12 connector, straight							
KAR WGN12D04-12D04-ET-00500-A	1354674	5	6.5	47.8	14.8		M12
KAR WGN12D04-12D04-ET-01000-A	1505148	10	6.5	36.3	14.8	30	M12
Communication cable suitable for torsion-resistant M12 connector, angled – to RJ45 connector, straight							
KAR WGN12D04-RJ45-ET-00500-A	1354692	5	6.5	36.3	14.8	30	M12
KAR WGN12D04-RJ45-ET-01000-A	1505149	10	6.5	36.3	14.8	30	M12

ⓘ Please observe the min. bending radius for cable track-compatible cables or the max. torsion angle for torsion-compatible cables. These are generally 10 times the cable diameter or +/- 180°/m.

Connection cable for voltage supply and communication IO-Link



KA G... Connection cable with straight socket

KA W... Connection cable with angular socket

6 Connection module side

15 Socket

90 SAC connection cable with open wire strands

91 Connection plug component

92 Cable with straight female connector

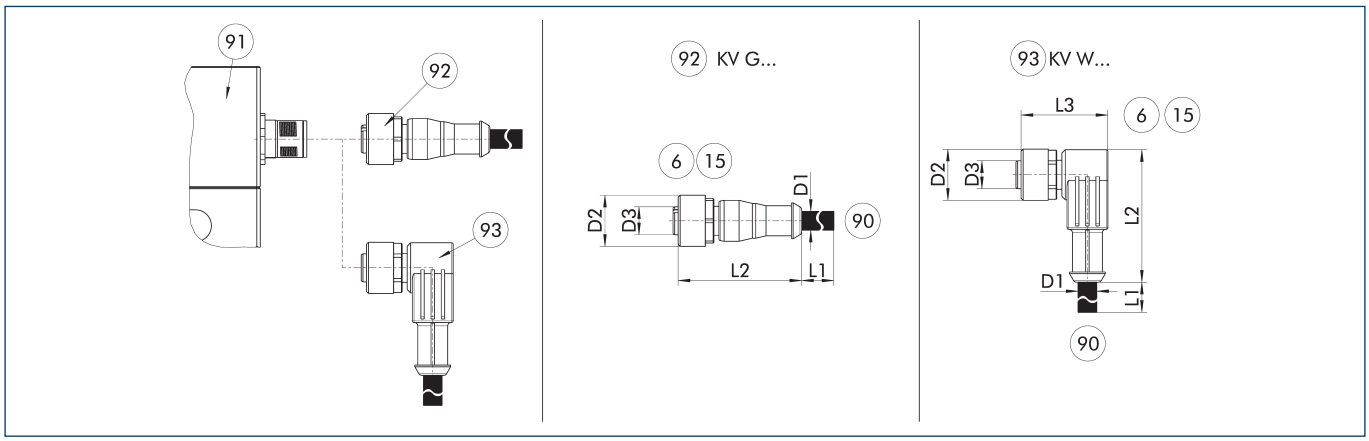
93 Cable with angled female connector

The connection cable is ideal for connecting the corresponding components to the control system. The connection cable has a 5-pin M12 socket on one side, and open wire strands on the other side for individual connections. The connection cables are suitable for use both in the cable track as well as in torsion applications.

Description	ID	L1	D1	L2	D2	L3	D3
		[m]	[mm]	[mm]	[mm]	[mm]	
IO-Link connection cable – drag chain and torsion-compatible							
KA GLN1205-IOL-00500-A	1387207	5	4.8	38	15		M12
KA GLN1205-IOL-01000-A	1387209	10	4.8	38	15		M12
KA WLN1205-IOL-00500-A	1387210	5	4.8	39	15	28	M12
KA WLN1205-IOL-01000-A	1387211	10	4.8	39	15	28	M12

ⓘ Please observe the min. bending radius for cable track-compatible cables or the max. torsion angle for torsion-compatible cables. These are generally 10 times the cable diameter or +/- 180°/m.

Cable extension for voltage supply and communication IO-Link



KV G... Cable extension with straight socket
KV W... Cable extension with angled socket

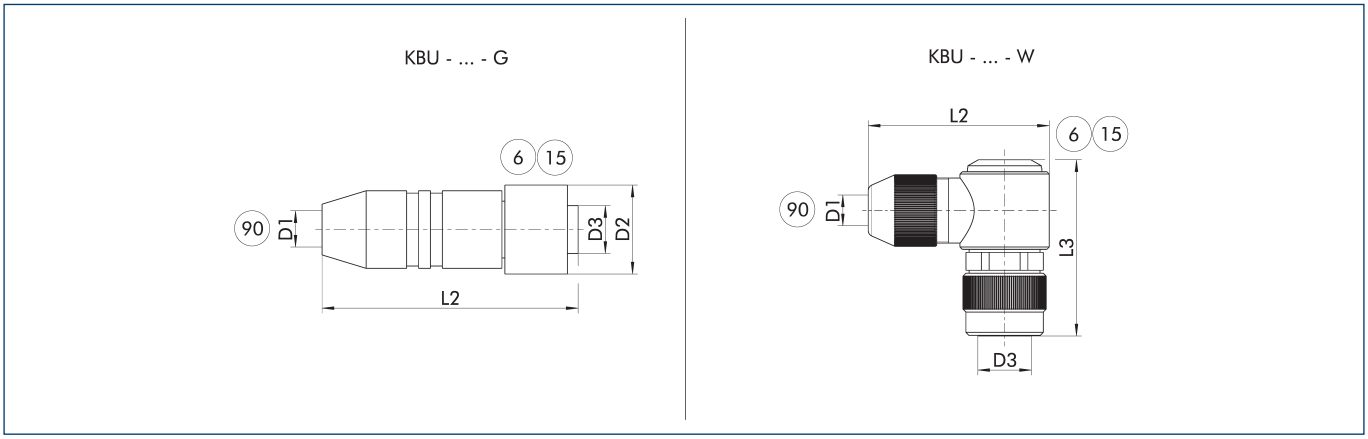
(6) Connection module side
(15) Socket
(90) Cable end with straight connector
(91) Connection plug component
(92) Cable with straight female connector
(93) Cable with angled female connector

The cable extensions are ideal for connecting the relevant components to the control system, or for use as extension cables. The cable extensions have a 5-pin M12 connector with a straight or angled design on the module side and a 5-pin M12 plug with a straight design on the other side. The cable extensions are suitable for use in the cable track and in torsion applications.

Description	ID	L1	D1	L2	D2	L3	D3
		[m]	[mm]	[mm]	[mm]	[mm]	
IO-Link cable extension – cable track and torsion-compatible							
KV GGN1205-IOL-00200-A	1387195	2	4.8	41	15		M12
KV GGN1205-IOL-00500-A	1387199	5	4.8	41	15		M12
KV WGN1205-IOL-00200-A	1387202	2	4.8	39	15	28	M12
KV WGN1205-IOL-00500-A	1387205	5	4.8	39	15	28	M12

ⓘ Please observe the min. bending radius for cable track-compatible cables or the max. torsion angle for torsion-compatible cables. These are generally 10 times the cable diameter or +/- 180°/m.

Power supply plug-in connector



KBU – ... – G Socket with straight outlet
KBU – ... – W Socket with angular outlet

(6) Connection module side
(15) Socket

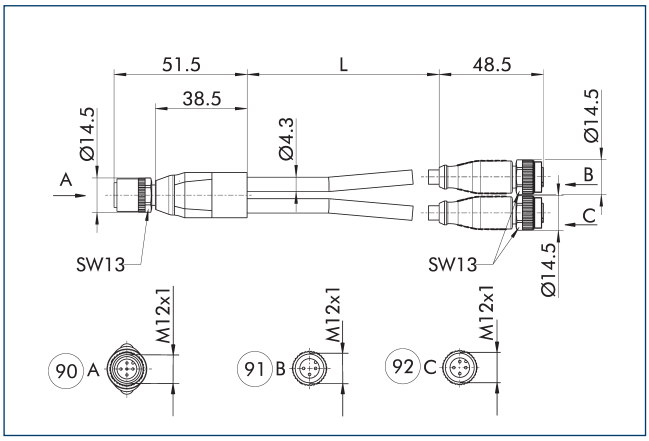
(90) D1 – max. diameter connection cable

The plug connectors are used to connect the SCHUNK product to the voltage supply. A customer cable can be used for this. The individual wire strands are clamped using screw connections in the plug connector.

Description	ID	D1 (max.)	L2	D2	L3	D3
		[mm]	[mm]	[mm]	[mm]	
Plug connector						
KBU-M12L-G	1502044	13	70	25		M12 L-coded
KBU-M12L-W 4P	1543957	13	49	25	99	M12 L-coded

ⓘ For the connection cable, a cross-section for each individual wire strand of 1.5 mm2 is recommended. Please refer to the product documentation for information about max. cable length and min. wire cross section.

Y-distributor for IO-Link for splitting logic and power supply

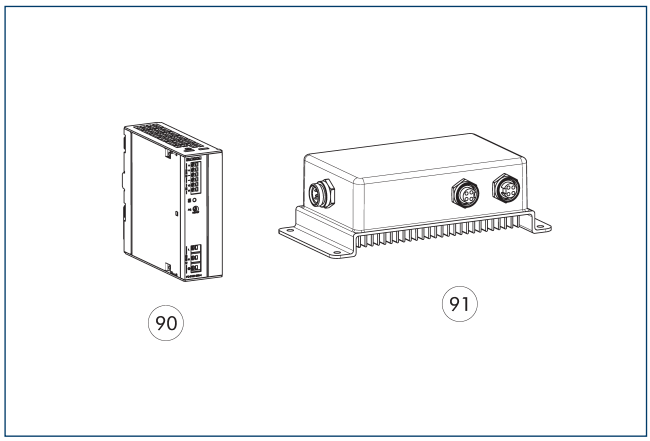


(90) Grippers
(91) Logic (IO-Link master)
(92) Power (24 V power supply)

The Y-distributor enables power to be supplied from a separate voltage source and is recommended when the current consumption of the product exceeds the current output of the IO-Link master. The logic supply and the IO-Link communication continue to run via the IO-Link master. IO-Link masters with port class A or port class B can be used.

Description	ID	Length
		[m]
Y-distributor, M12 socket, straight – on 2xM12 plugs, straight A-coded		
Y-Verteiler M12 5pol. auf 1x M12 3pol.	1523560	0.3

Switched-mode power supply



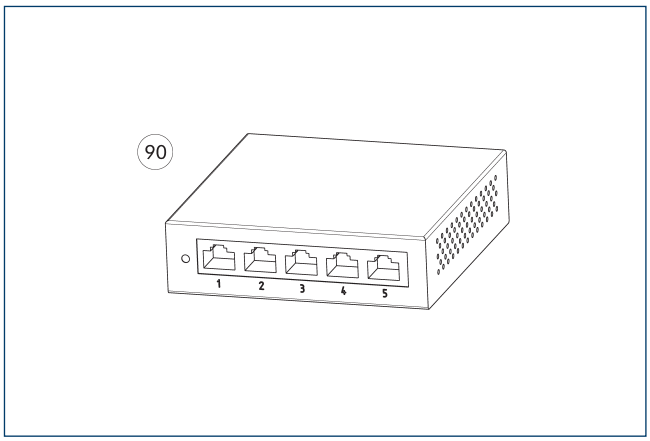
(90) 24 V power supply unit IP2 (91) 24 V power supply unit IP67

The power supply with an output voltage of 24 V and an input voltage range of 100 V – 240 V are matched to the power supply of our SCHUNK products. Whether for mounting in the control cabinet on DIN rail in protection class IP20 or directly in the field in protection class IP67: the power supply units deliver voltage where it is needed. We will be happy to assist you with further selection.

Description	ID	
24 V power supply unit IP2		
BLOCK PC-0124-050-0	31001408	
24 V power supply unit IP67		
TURCK PSU67-12-2480/M	1524336	

ⓘ For the power supply IP67, there are customizable plug connectors for connection to the power supply unit included in the scope of delivery.

Switch



(90) Ethernet 5-port switch

The switches enable easy expansion of a high-speed network using wired connections. With the switch, several SCHUNK products can be included in a network and thus controlled via a PLC, for example.

Description	ID	
Ethernet switch		
D-Link DGS-105 5-Port Ethernet Switch	1526496	

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