Superior Clamping and Gripping

Product Information

Gripper for small components EGP

High Performance Density. Fast. Compact.

EGP gripper for small components

Electric 2-finger parallel gripper with smooth-running base jaws guided on roller bearings

Field of application

Gripping and moving of small to medium-sized workpieces with flexible force and high speed in clean environments, such as assembly, testing, laboratory and pharmaceutical industry

Advantages – Your benefits

Highest compact performance for the use of smaller grippers sizes

Control via digital I/O for easy commissioning and rapid integration into existing systems

Two to four stage adjustable gripping force for simple adaption to sensitive workpieces

Backlash-free, pre-loaded cross roller guide for precise gripping with nearly constant force for all permissible finger lengths

Very high maximum cycles per minute for highest productivity

Compact dimensions for minimal interfering contours in the application

Proven a thousand times MPG-plus basis for equal gripping forces and strokes with identically high efficiency

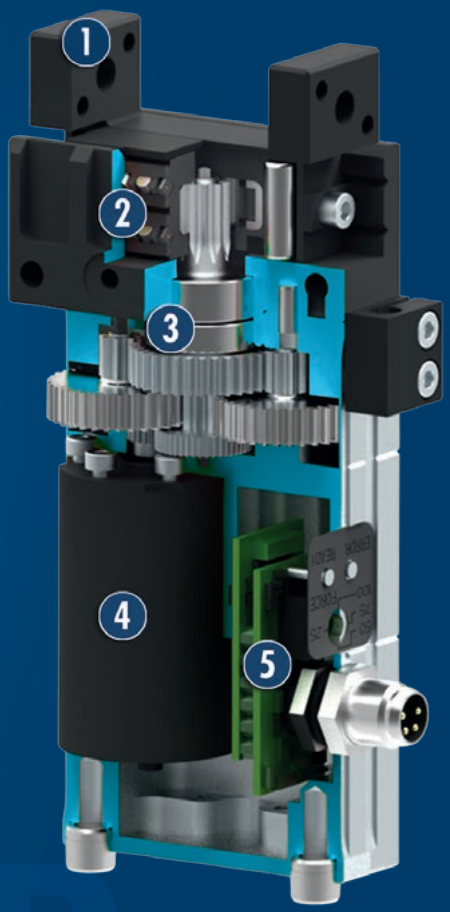
Brushless DC servomotor for almost wear-free use and a long service life

Sizes	Weight	Gripping force	Stroke per jaw	Workpiece weight
Quantity: 4	0.11 .. 0.8 kg	12 .. 300 N	3 .. 10 mm	0.07 .. 1.25 kg

Functional description

The brushless servomotor drives the base jaw via the gear mechanism.

The jaw stroke is synchronized by means of rack and pinion kinematics.



① **Base jaw**
for the connection of workpiece-specific gripper fingers

② **Cross roller guidance**
precise gripping due to backlash-free base jaw guidance

③ **Gear**
Rack and pinion principle for centric gripping

④ **Drive**
Brushless DC servomotor

⑤ **Control electronics**
integrated control and power electronics for decentralized control of the servomotor

CAD data, operating manuals and other current product documents can be found online.

EGP

Gripper for small components

General notes about the series

Operating principle: Rack and pinion principle

Housing material: Aluminum alloy, DNC coating

Base jaw material: Steel

Actuation: servo-electric, via brushless DC servomotor

Warranty: 24 months

Scope of Delivery: Enclosed pack with centering sleeves, mount for proximity switch, assembly and operating manual with Declaration of Incorporation.

Gripping force: is the arithmetic total of the gripping force applied to each gripper jaw at distance P (see illustration).

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

Repeat accuracy: is defined as the spread of the end position during 100 consecutive strokes.

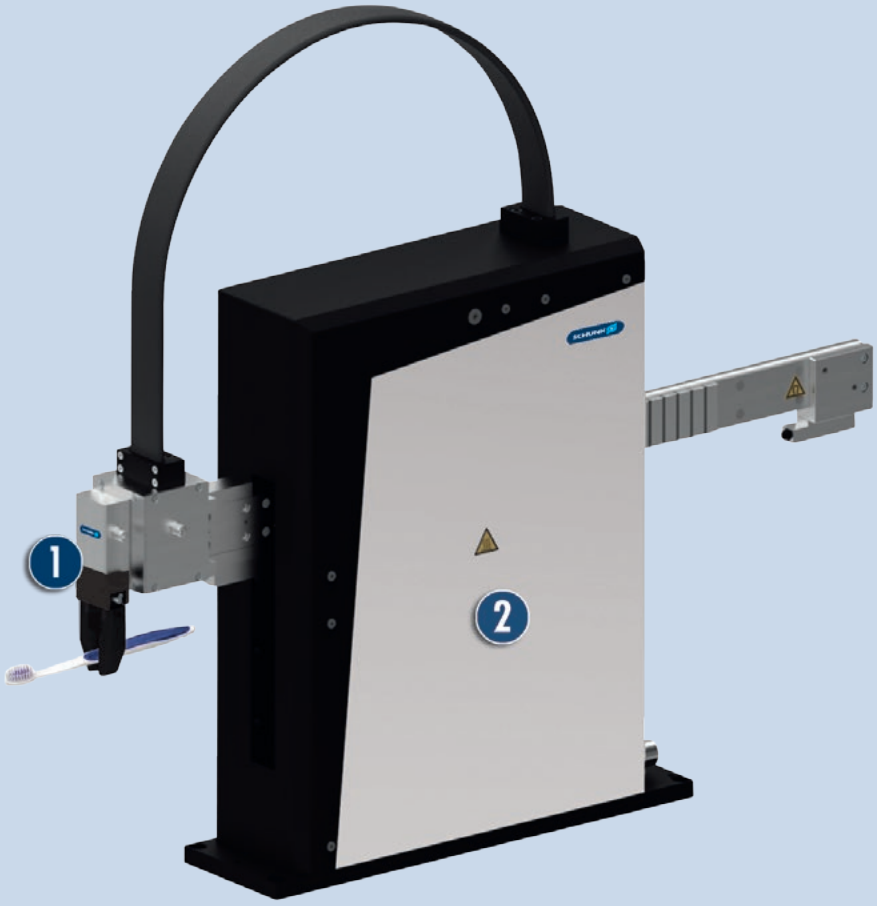
Workpiece weight: is calculated for force-fit gripping with a coefficient of static friction of 0.1 and a safety factor of 2 against workpiece slippage at acceleration due to gravity g. For form-fit or capture gripping, there are significantly higher permissible workpiece weights.

Closing and opening times: are purely the times that the base jaws or fingers are in motion. PLC reaction times are not a part of this and are to be considered when cycle times are calculated.

Application example

Electrically driven, dual-axis pick-and-place machine for small components

1. EGP electric 2-finger parallel gripper
2. PPU-E pick & place unit

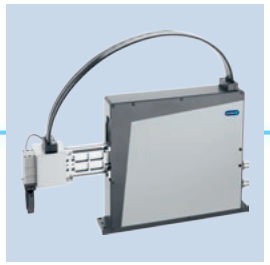


SCHUNK offers more ...

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

Linear modules

Rotary modules



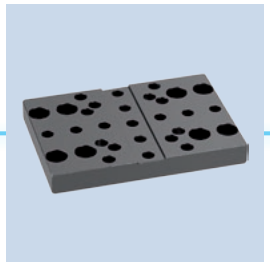
Pick & Place modules

Pillar assembly system

Flexible position sensor

Inductive proximity switches

Finger blanks



Adapter plates

Optical distance sensor

Connection cables

ⓘ Additional information regarding the products can be found on the following product pages or at www.schunk.com. Please contact us for further information: SCHUNK technical hotline +49-7133-103-2696

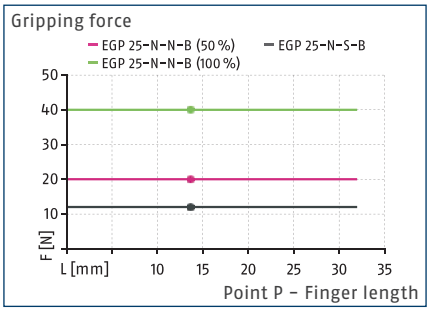
Options and special information

Manually adjustable gripping force: With an integrated rotary switch, the gripping force can be adjusted in two stages for the EGP 25 – 100% and 50%, and in four stages for EGP 40, 50 and 64 – 100%, 75%, 50%, and 25%.
Optional status monitoring via external sensor system: The status of the gripper can be monitored by external senors.
Optional adapter plates: Space-saving frontal mounting of the gripper is enabled by optional adapter plates.
KA connection cable: Connection cables with an angled or a straight female connector can be ordered in various lengths to connect the gripper with the power supply and higher-level control system.
Speed Version S: for faster closing and opening times

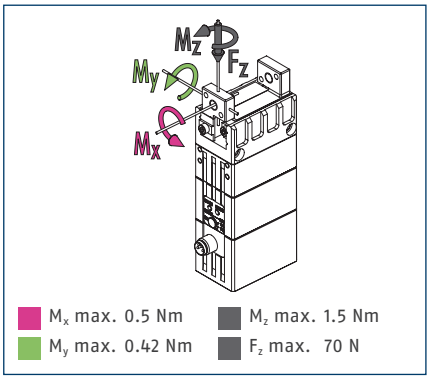
EGP 25

Gripper for small components

Gripping force



Finger load

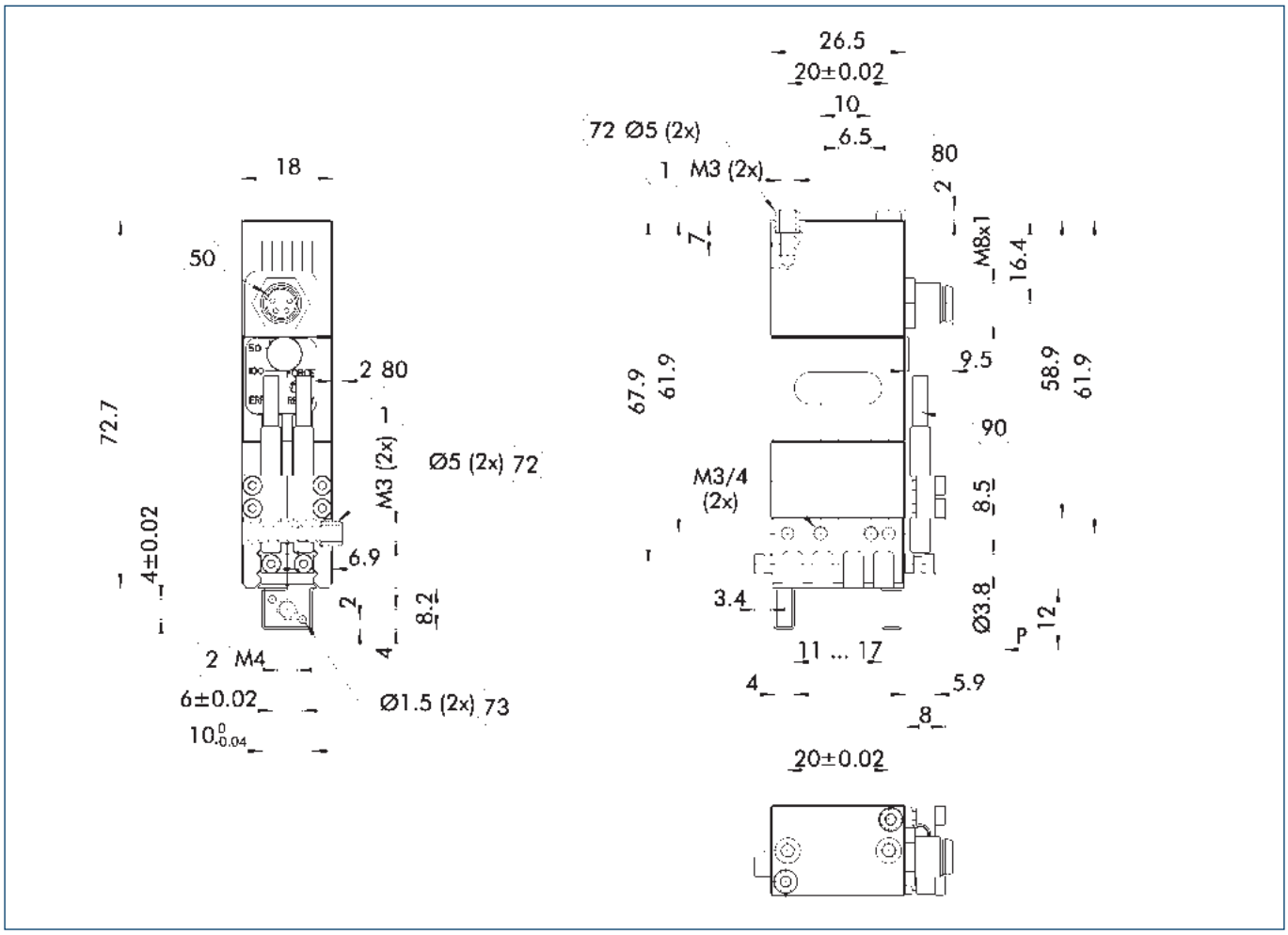


ⓘ The specified torques and forces are static values, apply for each base jaw, and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself.

Technical data

Description		EGP 25-N-N-B	EGP 25-N-S-B
ID		0310900	0310902
General operating data			
Stroke per jaw	[mm]	3	3
min. / max. gripping force	[N]	20/40	12/12
recommended workpiece weight	[kg]	0.2	0.07
max. admissible finger length	[mm]	32	32
max. admissible weight per finger	[kg]	0.02	0.02
Repeat accuracy	[mm]	0.02	0.02
closing/opening time	[s]	0.09/0.09	0.03/0.03
Weight	[kg]	0.11	0.12
min./max. ambient temperature	[°C]	5/55	5/55
Protection class IP		30	30
Noise emission	[dB(A)]	< 70	< 70
Electrical operating data			
Nominal voltage	[V DC]	24	24
Nominal current	[A]	0.14	0.14
max. current	[A]	1	1
Controller electronics		integrated	integrated
Communication interface		Digital Inputs	Digital Inputs
Number of digital inputs/outputs		2/-	2/-

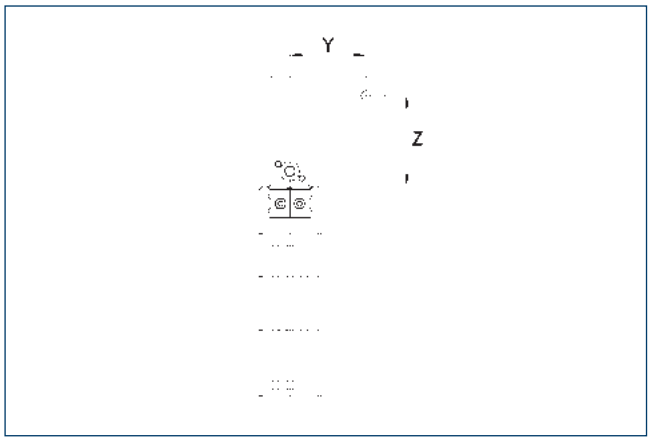
Main view

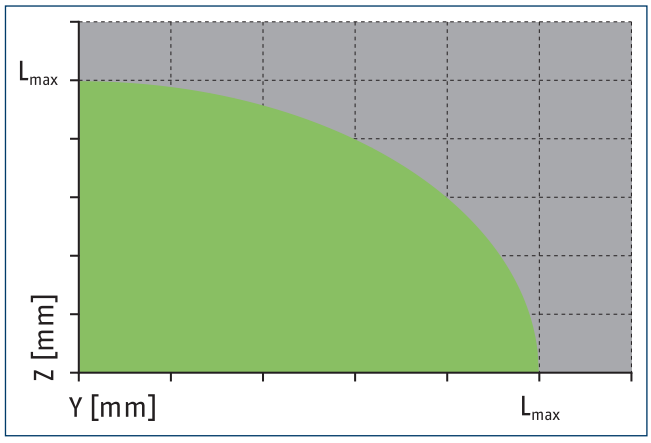


The drawing shows the basic version of the gripper with open jaws, without dimensional consideration of the options described below.

1. Gripper connection
2. Finger connection
50. Electrical connection
72. Fit for centering sleeves
73. Fit for centering pins
80. Depth of the centering sleeve hole in the counter part
90. Sensor IN ...

Maximum permitted finger projection





Permitted range

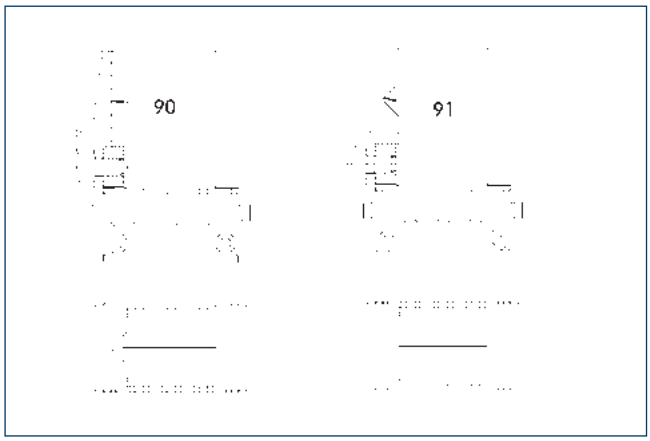
Inadmissible range

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

EGP 25

Gripper for small components

Jaw design

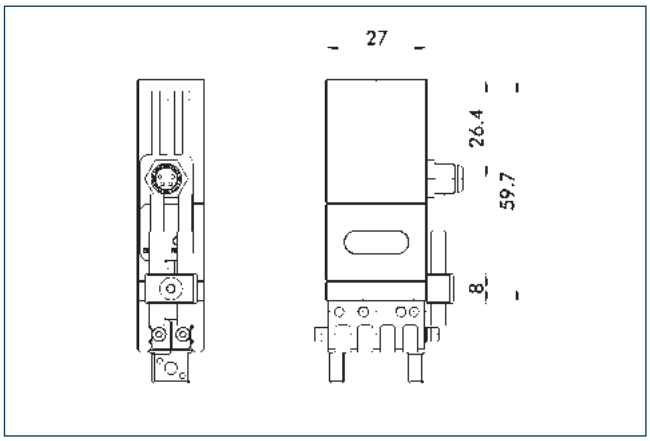


(90) Vertically positioned prism

(91) Horizontally positioned prism

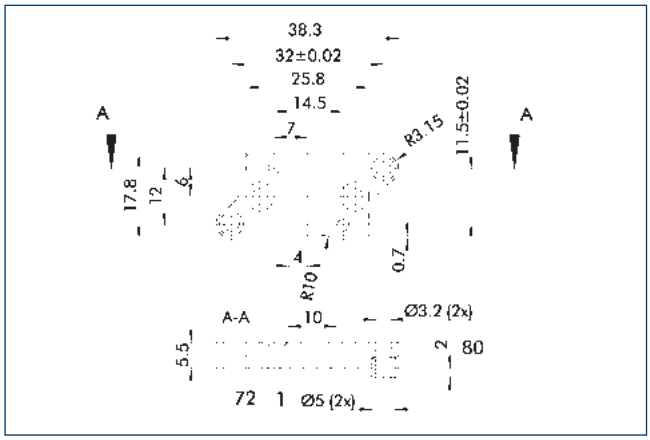
A workpiece, which is gripped using three points of contact, can be reliably gripped with high repeatability. A system with more than three points of contact is overdetermined. The drawing shows two alternative gripper finger designs for coaxial and radial gripping of a cylindrical part.

Speed version S



The speed version S offers reduced closing and opening times by using a different internal gear ratio. The drawing shows the changes in dimension of the speed version in comparison to the basic version illustrated in the main view.

Adapter plate



(1) Gripper connection

(72) Fit for centering sleeves

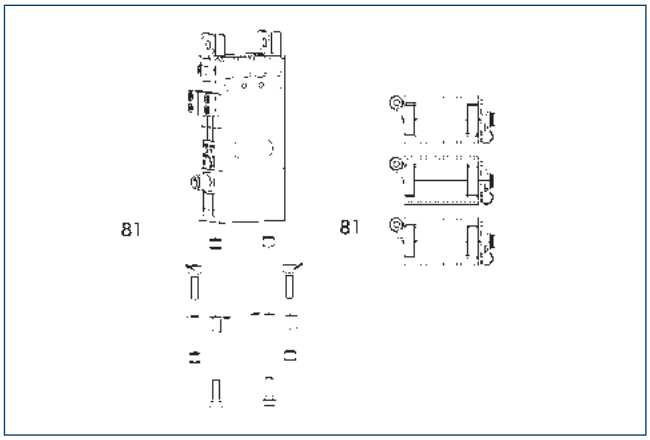
(80) Depth of the centering sleeve hole in the counter part

The adapter plate includes an O-ring* for a direct air connection, additional centering sleeves, and screws for mounting the gripper.
*Optional only with pneumatic actuators

Description	ID	
Adapter plate		
APL-MPG-plus 25	0305507	

ⓘ The adapter plate is a separately ordered, optional accessory.

Adapter plate



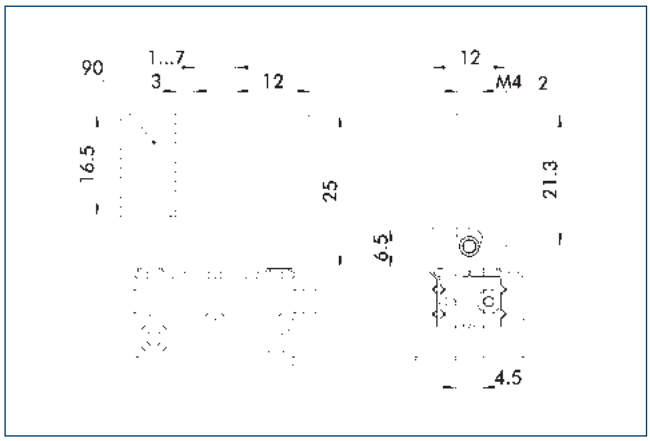
(81) Not included in the scope of delivery

The adapter plate includes an O-ring* for a direct air connection, additional centering sleeves, and screws for mounting the gripper.
*Optional only with pneumatic actuators

Description	ID	
Adapter plate		
APL-MPG-plus 25	0305507	

ⓘ The adapter plate is a separately ordered, optional accessory.

Finger blanks with BSWS ABR-BSWS-MPG-plus 25

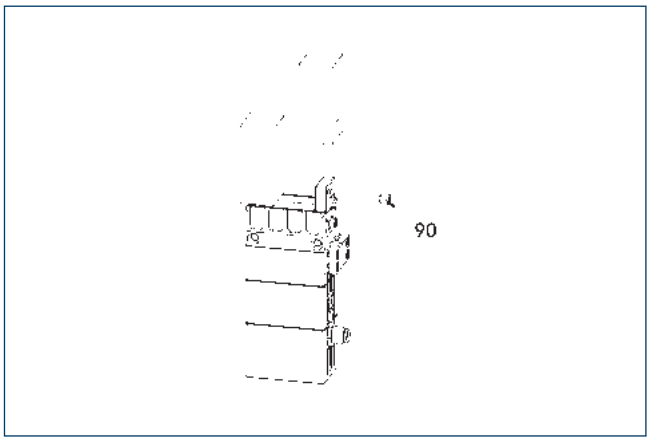


(2) Finger connection
(90) Machining volume

Finger blanks for customized subsequent machining with integrated jaw quick-change system for precise and fast finger changes.

Description	ID	Material	Scope of Delivery
Finger blanks			
ABR-MPG-plus 25	0340211	Aluminum	2
ABR-BSWS-MPG-plus 25	0302894	Aluminum	2

Finger blanks with BSWS

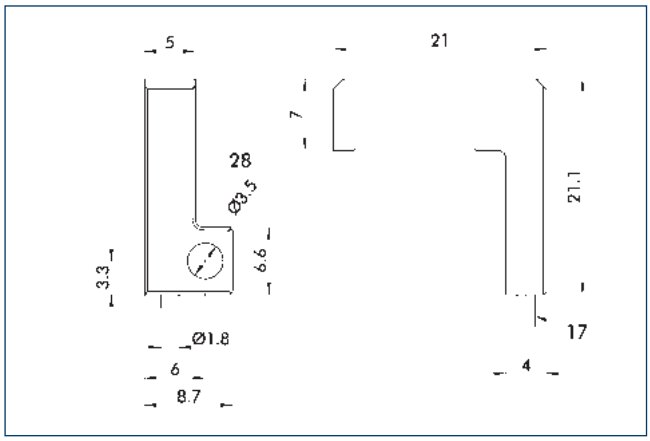


(90) Included in the scope of delivery

The finger blanks with jaw quick-change system allow fast and manual gripper finger changes. The mechanical interface to the gripper is already integrated. Only the specific workpiece geometry needs to be machined into the finger blank.

Description	ID	Material	Scope of Delivery
Finger blanks			
ABR-MPG-plus 25	0340211	Aluminum	2
ABR-BSWS-MPG-plus 25	0302894	Aluminum	2

Object distance sensor OAS-MPG-plus 25

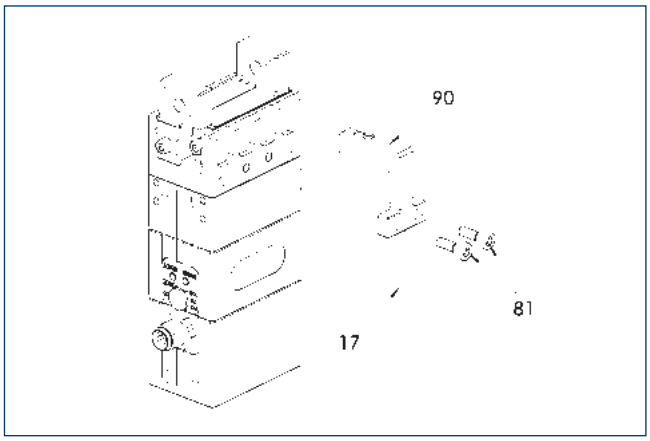


(17) Cable outlet
(28) Through-hole

Object distance sensor for detecting a workpiece and for measuring its distance to the gripper.

Description	ID	
Object distance sensor		
OAS-MPG-plus 25	0308891	

Object distance sensor



(17) Cable outlet
(81) Not included in the scope of delivery
(90) OAS

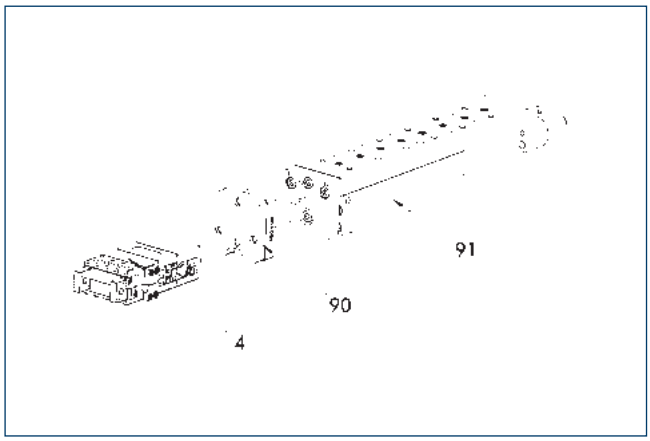
Optical distance and presence sensor for direct mounting to to the gripper. One OAS sensor can be attached per gripper.

Description	ID	
Object distance sensor		
OAS-MPG-plus 25	0308891	
Evaluation electronics		
OAS-V09-D	0308865	
OAS-V10-A	0308867	
OAS-V10-D	0308866	

EGP 25

Gripper for small components

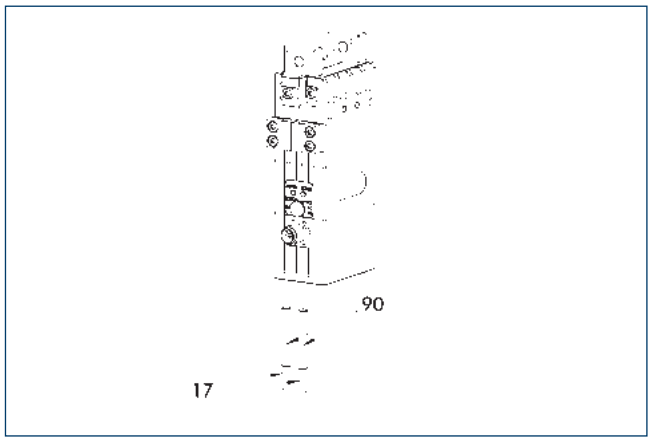
Modular Assembly Automation



(4) Grippers
(90) ASG adapter plate
(91) CLM/KLM/LM/ELM/HLM linear modules

Grippers and linear modules can be combined with standard adapter plates from the modular assembly system. For more information see our main catalog „Modular Assembly Automation“.

IN 40 inductive proximity switches



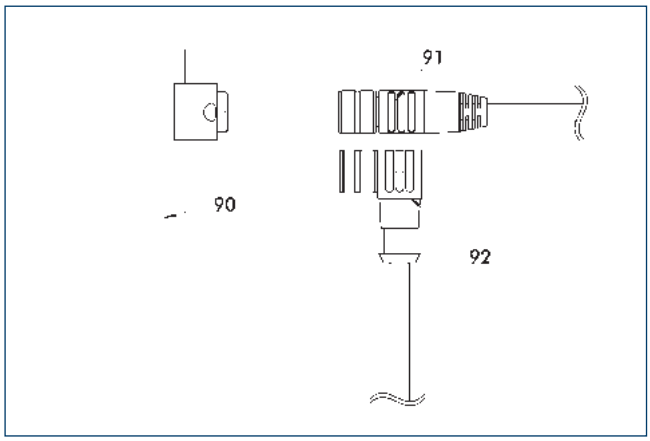
(17) Cable outlet
(90) Inductive proximity switches

Directly mounted end position monitoring.

Description	ID	Often combined
Inductive proximity switches		
IN 40-S-M12	0301574	
IN 40-S-M8	0301474	●
INK 40-S	0301555	
Cable extension		
KV BG12-SG12 3P-0030-PNP	0301999	
KV BG12-SG12 3P-0060-PNP	0301998	
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	●
KV BW12-SG12 3P-0030-PNP	0301595	
KV BW12-SG12 3P-0100-PNP	0301596	
KV BW12-SG12 3P-0200-PNP	0301597	
clip for plug/socket		
CLI-M12	0301464	
CLI-M8	0301463	
Connection cables		
KA BG08-L 3P-0300-PNP	0301622	●
KA BG08-L 3P-0500-PNP	0301623	
KA BG12-L 3P-0500-PNP	30016369	
KA BW08-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-PNP	0301502	
KA BW12-L 3P-0300-PNP	0301503	
KA BW12-L 3P-0500-PNP	0301507	
Sensor distributor		
V2-M8	0301775	●
V2-M12	0301776	●
V4-M12	0301747	
V4-M8	0301746	
V8-M12	0301752	
V8-M8	0301751	

ⓘ Two sensors (closer/S) are required for each unit and extension cables are available as an option. For sensor cables, note the minimum permissible bending radii. These are generally 35 mm.

Connection cables



(90) Electrical connection component
(91) Cable with straight connector
(92) Cable with angled connector

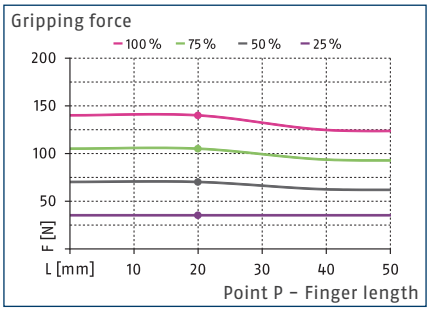
Description	ID	L1	Often combined
		[m]	
Connection cables			
KA BG08-L 4P-0500	0307767	5	●
KA BG08-L 4P-1000	0307768	10	
KA BW08-L 4P-0500	0307765	5	
KA BW08-L 4P-1000	0307766	10	

ⓘ BG stands for a connection cable with a straight female connector and BW for an angled female connector. SG stands for a connection cable with a straight male connector and SW for an angled male connector.

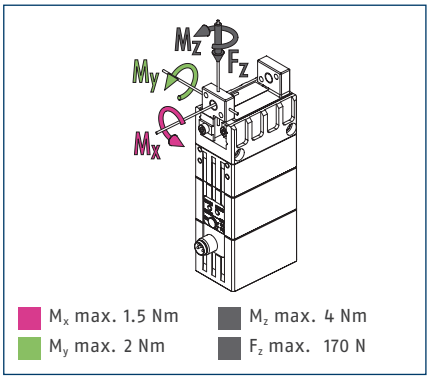
EGP 40

Gripper for small components

Gripping force



Finger load

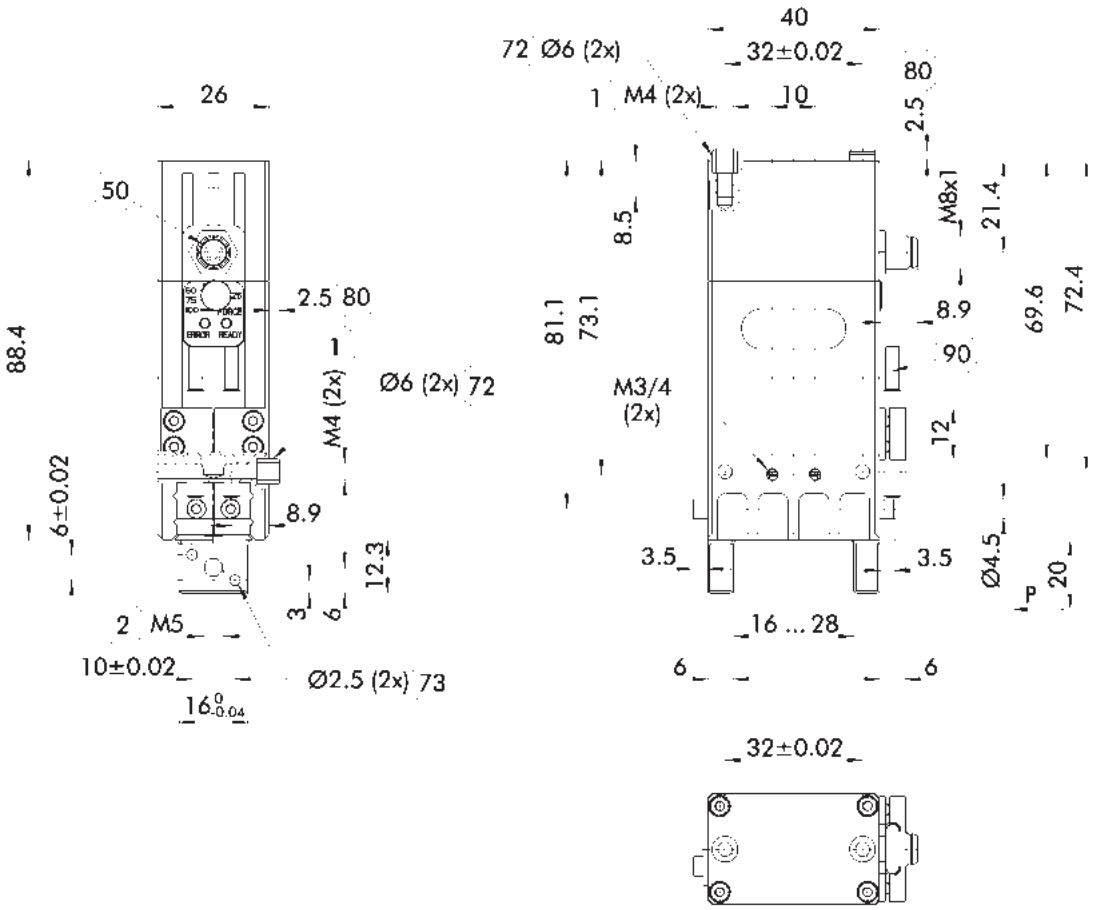


ⓘ The specified torques and forces are static values, apply for each base jaw, and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself.

Technical data

Description		EGP 40-N-N-B
ID		0310940
General operating data		
Stroke per jaw	[mm]	6
min. / max. gripping force	[N]	35/140
recommended workpiece weight	[kg][g]	0.7
max. admissible finger length	[mm]	50
max. admissible weight per finger	[kg]	0.08
Repeat accuracy	[mm]	0.02
closing/opening time	[s]	0.2/0.2
Weight	[kg]	0.32
min./max. ambient temperature	[°C]	5/55
Protection class IP		30
Noise emission	[dB(A)]	< 70
Electrical operating data		
Nominal voltage	[V DC]	24
Nominal current	[A]	0.2
max. current	[A]	2
Controller electronics		integrated
Communication interface		Digital Inputs
Number of digital inputs/outputs		2/-

Main view



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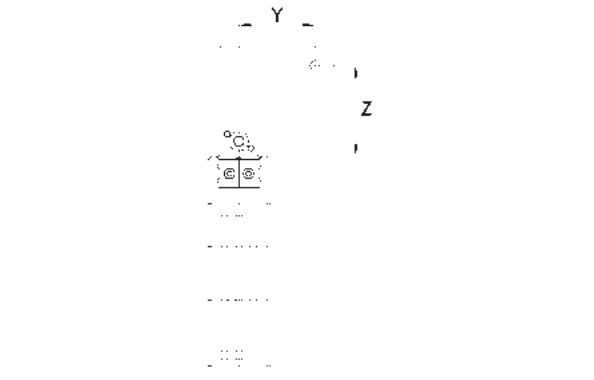
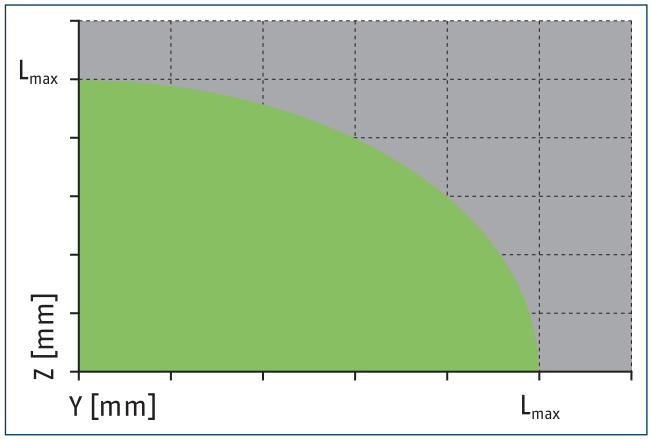
1. Gripper connection
2. Finger connection
50. Electrical connection
72. Fit for centering sleeves
73. Fit for centering pins
80. Depth of the centering sleeve hole in the counter part
90. Sensor IN ...

Maximum permitted finger projection





Permitted range

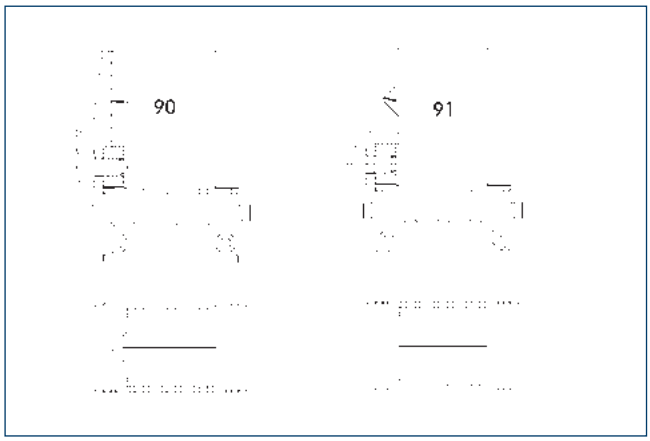
Inadmissible range

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

EGP 40

Gripper for small components

Jaw design

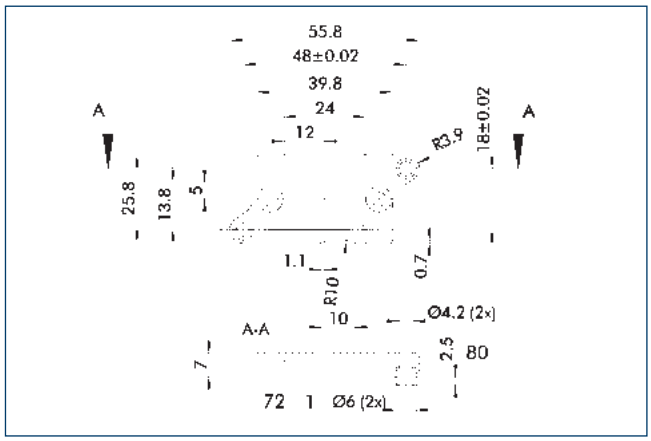


(90) Vertically positioned prism

(91) Horizontally positioned prism

A workpiece, which is gripped using three points of contact, can be reliably gripped with high repeatability. A system with more than three points of contact is overdetermined. The drawing shows two alternative gripper finger designs for coaxial and radial gripping of a cylindrical part.

Adapter plate



(1) Gripper connection

(72) Fit for centering sleeves

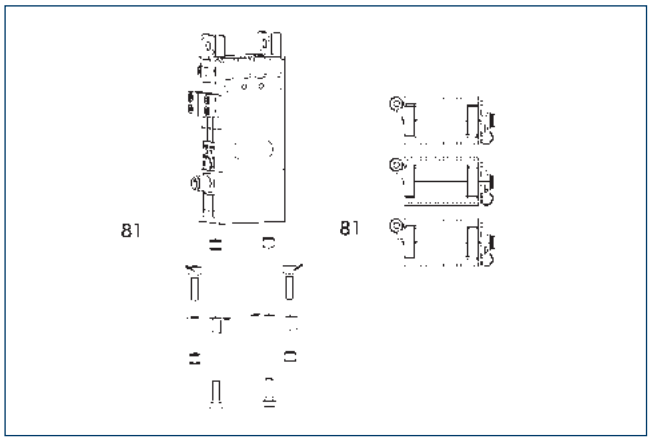
(80) Depth of the centering sleeve hole in the counter part

The adapter plate includes an O-ring* for a direct air connection, additional centering sleeves, and screws for mounting the gripper.
*Optional only with pneumatic actuators

Description	ID	
Adapter plate		
APL-MPG-plus 40	0305527	

ⓘ The adapter plate is a separately ordered, optional accessory.

Adapter plate



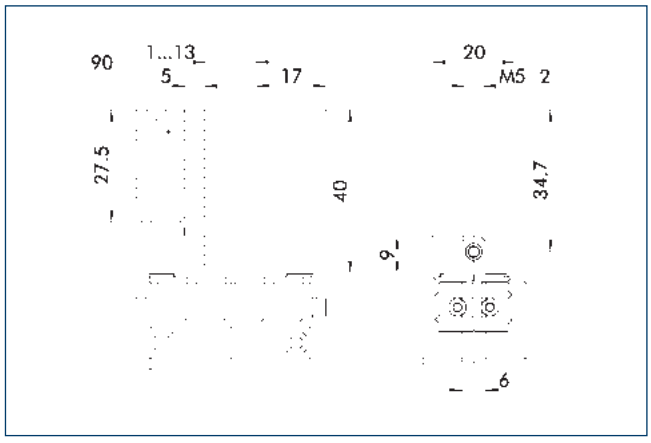
(81) Not included in the scope of delivery

The adapter plate includes an O-ring* for a direct air connection, additional centering sleeves, and screws for mounting the gripper.
*Optional only with pneumatic actuators

Description	ID	
Adapter plate		
APL-MPG-plus 40	0305527	

ⓘ The adapter plate is a separately ordered, optional accessory.

Finger blanks with BSWS ABR-BSWS-MPG-plus 40



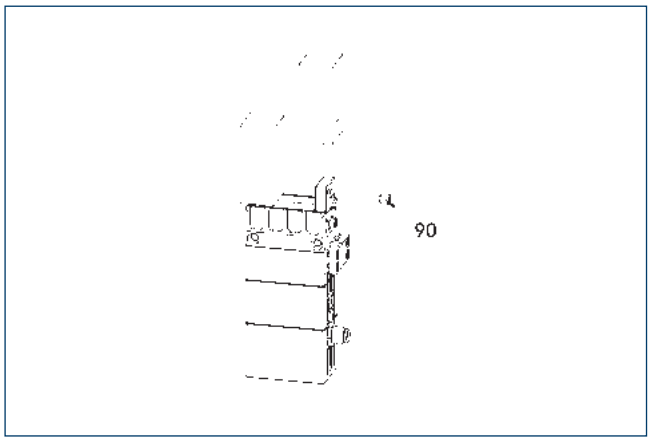
(2) Finger connection

(90) Machining volume

Finger blanks for customized subsequent machining with integrated jaw quick-change system for precise and fast finger changes.

Description	ID	Material	Scope of Delivery
Finger blanks			
ABR-MPG-plus 40	0340213	Aluminum	2
ABR-BSWS-MPG-plus 40	0302896	Aluminum	2

Finger blanks with BSWS

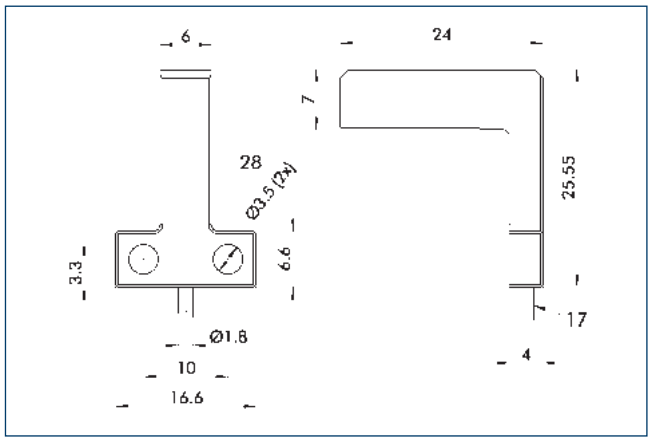


(90) Included in the scope of delivery

The finger blanks with jaw quick-change system allow fast and manual gripper finger changes. The mechanical interface to the gripper is already integrated. Only the specific workpiece geometry needs to be machined into the finger blank.

Description	ID	Material	Scope of Delivery
Finger blanks			
ABR-MPG-plus 40	0340213	Aluminum	2
ABR-BSWS-MPG-plus 40	0302896	Aluminum	2

Object distance sensor OAS-MPG-plus 40

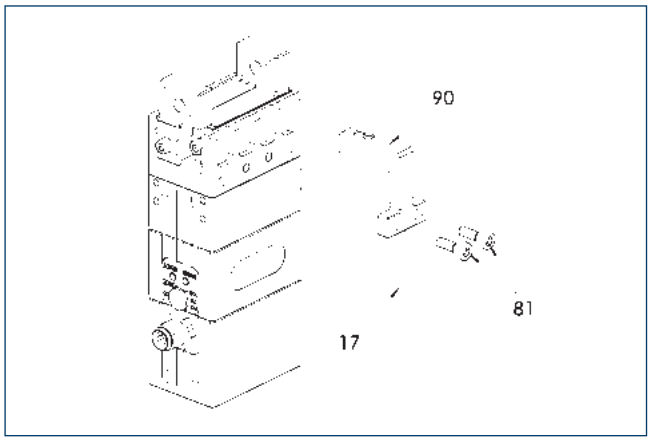


(17) Cable outlet
(28) Through-hole

Object distance sensor for detecting a workpiece and for measuring its distance to the gripper.

Description	ID	
Object distance sensor		
OAS-MPG-plus 40	0308893	

Object distance sensor

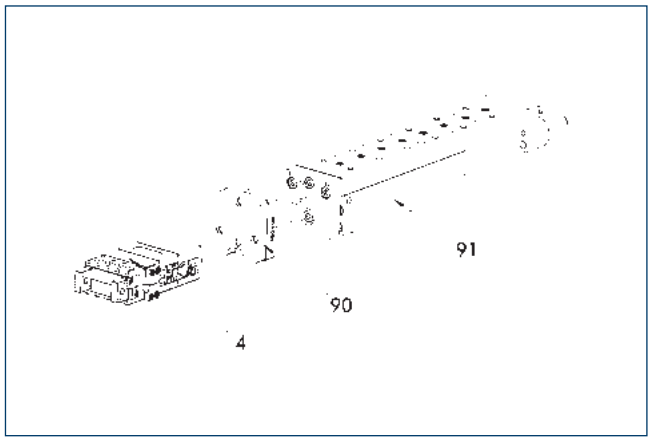


(17) Cable outlet
(81) Not included in the scope of delivery
(90) OAS

Optical distance and presence sensor for direct mounting to to the gripper. One OAS sensor can be attached per gripper.

Description	ID	
Object distance sensor		
OAS-MPG-plus 40	0308893	
Evaluation electronics		
OAS-V09-D	0308865	
OAS-V10-A	0308867	
OAS-V10-D	0308866	

Modular Assembly Automation



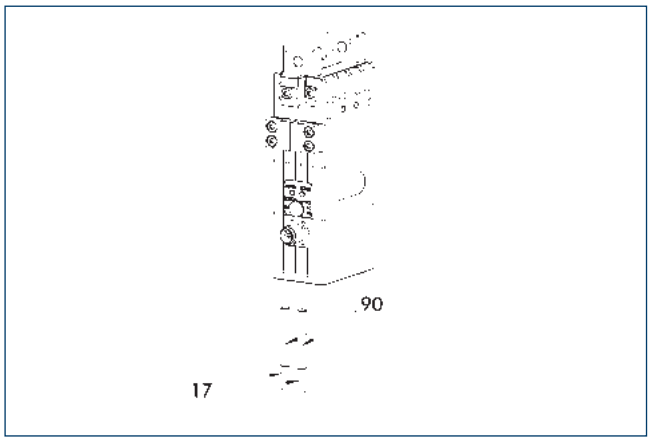
(4) Grippers
(90) ASG adapter plate
(91) CLM/KLM/LM/ELM/HLM linear modules

Grippers and linear modules can be combined with standard adapter plates from the modular assembly system. For more information see our main catalog „Modular Assembly Automation“.

EGP 40

Gripper for small components

IN 40 inductive proximity switches



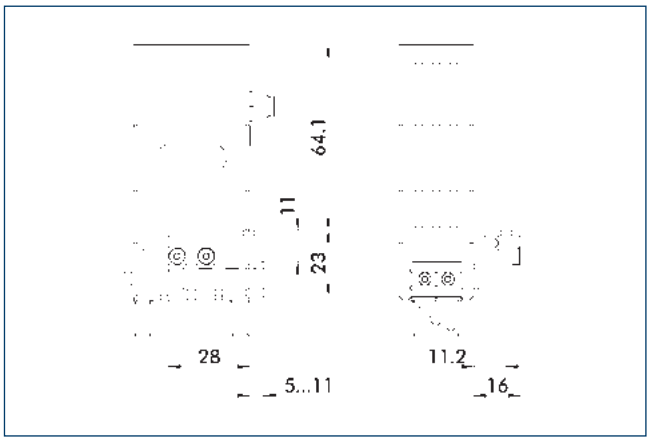
(17) Cable outlet (90) Inductive proximity switches

Directly mounted end position monitoring.

Description	ID	Often combined
Inductive proximity switches		
IN 40-S-M12	0301574	
IN 40-S-M8	0301474	●
INK 40-S	0301555	
Cable extension		
KV BG12-SG12 3P-0030-PNP	0301999	
KV BG12-SG12 3P-0060-PNP	0301998	
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	●
KV BW12-SG12 3P-0030-PNP	0301595	
KV BW12-SG12 3P-0100-PNP	0301596	
KV BW12-SG12 3P-0200-PNP	0301597	
clip for plug/socket		
CLI-M12	0301464	
CLI-M8	0301463	
Connection cables		
KA BG08-L 3P-0300-PNP	0301622	●
KA BG08-L 3P-0500-PNP	0301623	
KA BG12-L 3P-0500-PNP	30016369	
KA BW08-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-PNP	0301502	
KA BW12-L 3P-0300-PNP	0301503	
KA BW12-L 3P-0500-PNP	0301507	
Sensor distributor		
V2-M8	0301775	●
V2-M12	0301776	●
V4-M12	0301747	
V4-M8	0301746	
V8-M12	0301752	
V8-M8	0301751	

ⓘ Two sensors (closer/S) are required for each unit and extension cables are available as an option. For sensor cables, note the minimum permissible bending radii. These are generally 35 mm.

Attachment kit for FPS

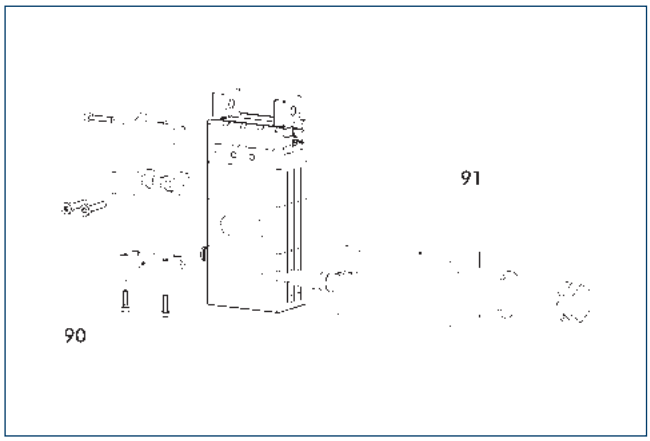


The following FPS position sensor can differentiate between five programmable areas or switching points for the stroke of a gripper, and can be used in connection with a PC as a measuring system.

Description	ID	
Attachment kit for FPS		
AS-FPS-MPG-plus 40	0301762	

ⓘ This attachment kit needs to be ordered optionally as an accessory.

Flexible position sensor



(90) FPS-S sensor

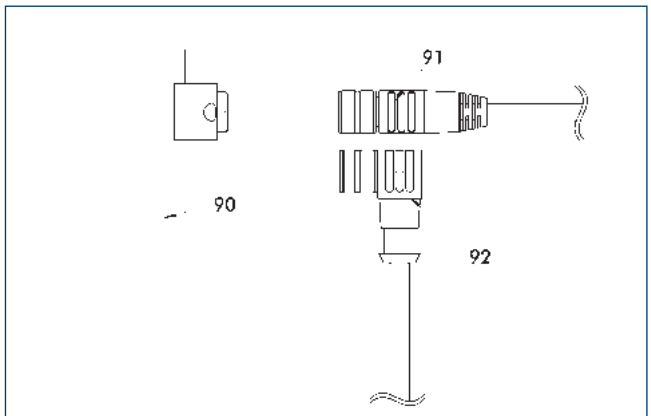
(91) FPS-F5 / -F5 T evaluation electronics

Flexible position monitoring of up to five positions.

Description	ID	Often combined
Attachment kit for FPS		
AS-FPS-MPG-plus 40	0301762	
Sensor		
FPS-S 13	0301705	
Evaluation electronics		
FPS-F5	0301805	●
FPS-F5 T	0301807	

ⓘ When using an FPS system, an FPS sensor (FPS-S) and an electronic processor (FPS-F5 / F5 T) are required for each gripper as well as an attachment kit (AS), if listed. Cable extensions (KV) are available as options in the “Accessories” catalog chapter.

Connection cables



(90) Electrical connection component

(91) Cable with straight connector

(92) Cable with angled connector

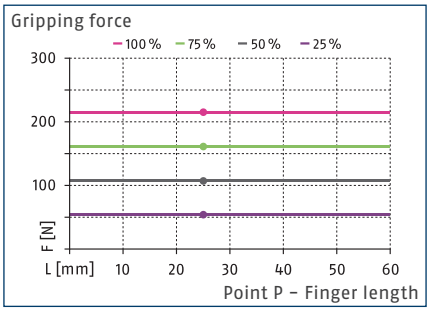
Description	ID	L1	Often combined
		[m]	
Connection cables			
KA BG08-L 4P-0500	0307767	5	●
KA BG08-L 4P-1000	0307768	10	
KA BW08-L 4P-0500	0307765	5	
KA BW08-L 4P-1000	0307766	10	

ⓘ BG stands for a connection cable with a straight female connector and BW for an angled female connector. SG stands for a connection cable with a straight male connector and SW for an angled male connector.

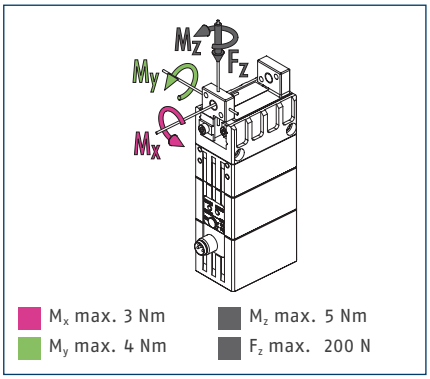
EGP 50

Gripper for small components

Gripping force



Finger load

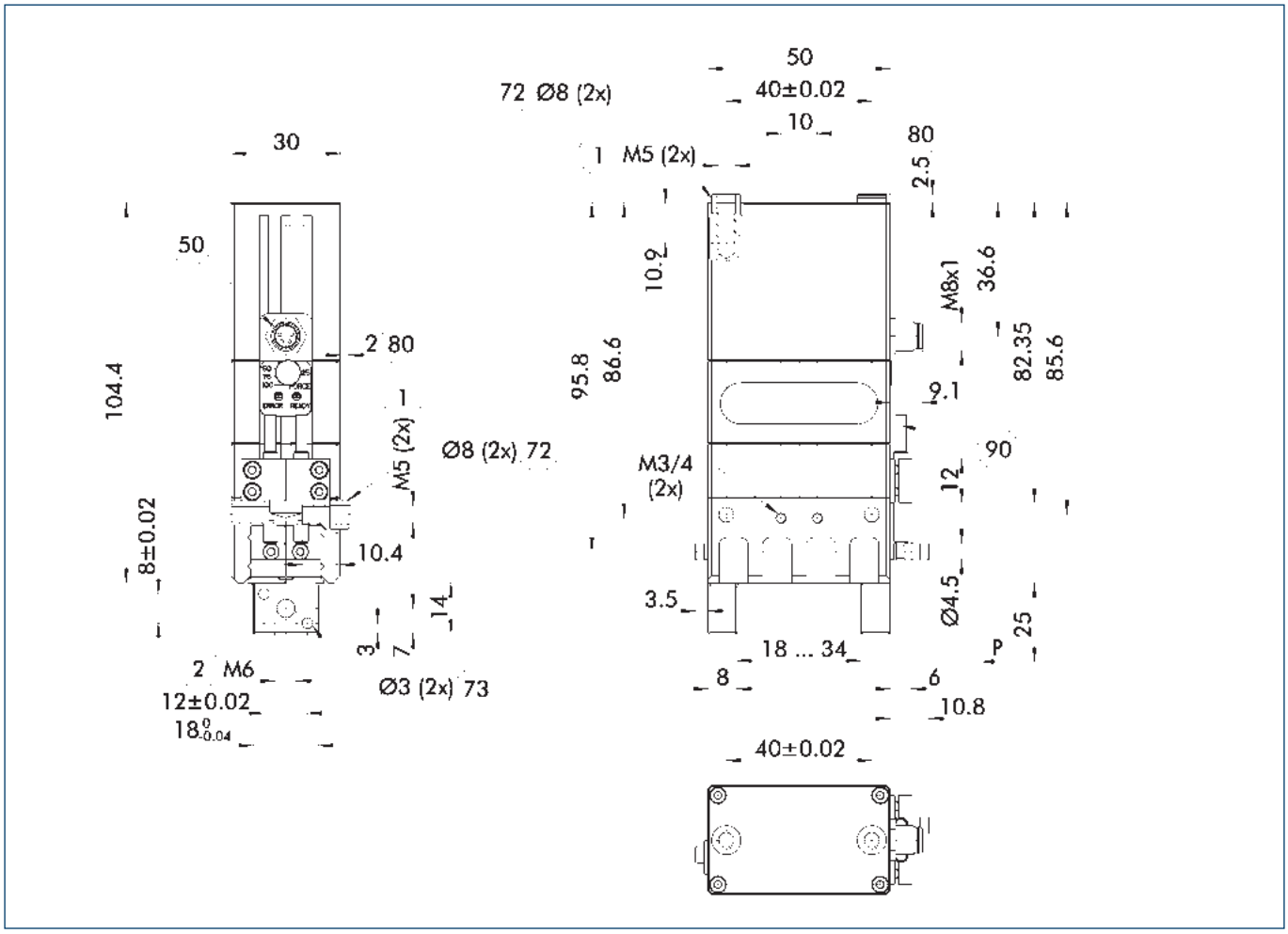


ⓘ The specified torques and forces are static values, apply for each base jaw, and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself.

Technical data

Description		EGP 50-N-N-B
ID		0310960
General operating data		
Stroke per jaw	[mm]	8
min. / max. gripping force	[N]	54/215
recommended workpiece weight	[kg]	1.05
max. admissible finger length	[mm]	64
max. admissible weight per finger	[kg]	0.14
Repeat accuracy	[mm]	0.02
closing/opening time	[s]	0.21/0.21
Weight	[kg]	0.51
min./max. ambient temperature	[°C]	5/55
Protection class IP		30
Noise emission	[dB(A)]	< 70
Electrical operating data		
Nominal voltage	[V DC]	24
Nominal current	[A]	0.3
max. current	[A]	2
Controller electronics		integrated
Communication interface		Digital Inputs
Number of digital inputs/outputs		2/-

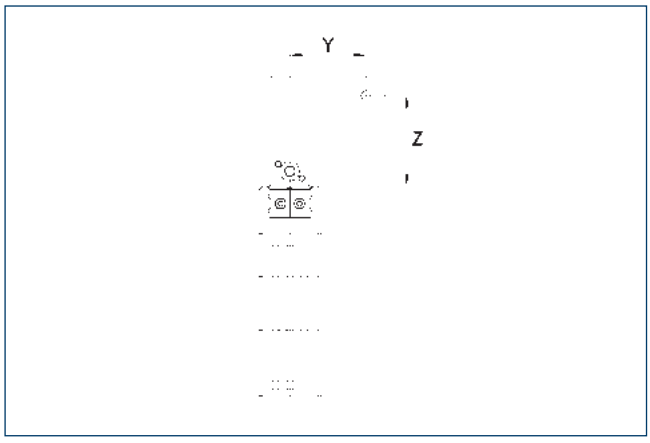
Main view

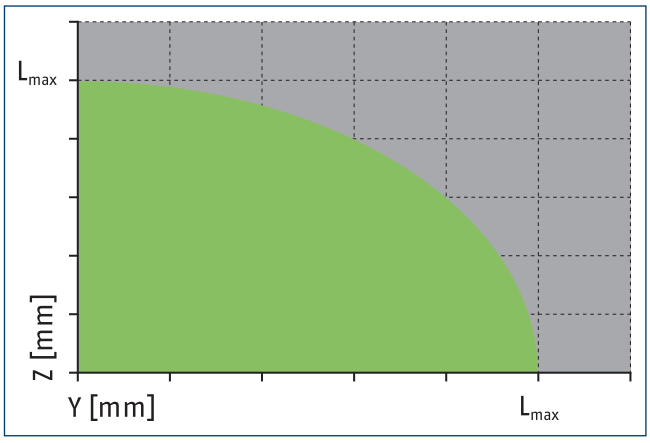


The drawing shows the basic version of the gripper with open jaws, without dimensional consideration of the options described below.

1. Gripper connection
2. Finger connection
50. Electrical connection
72. Fit for centering sleeves
73. Fit for centering pins
80. Depth of the centering sleeve hole in the counter part
90. Sensor IN ...

Maximum permitted finger projection





Permitted range

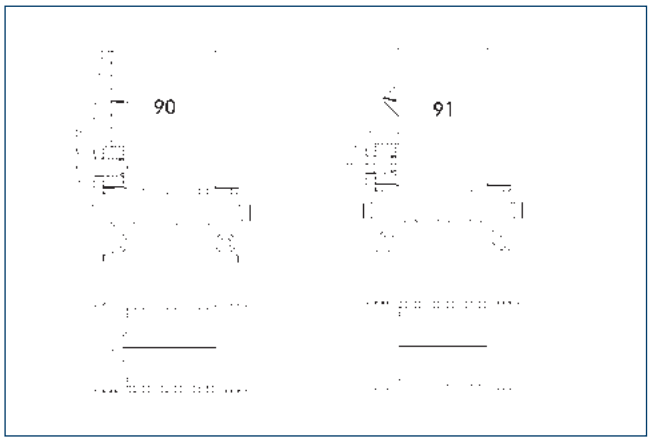
Inadmissible range

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

EGP 50

Gripper for small components

Jaw design

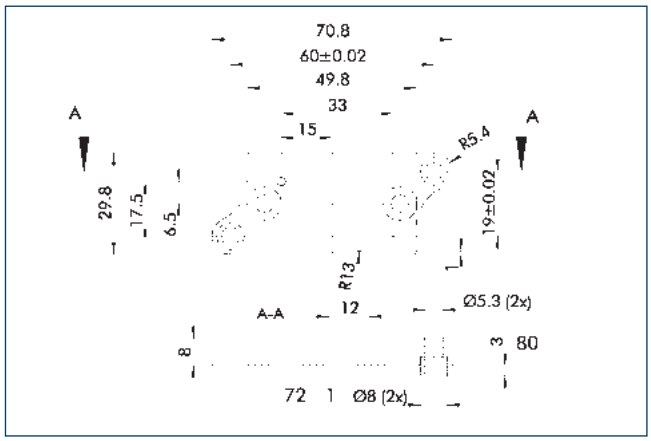


(90) Vertically positioned prism

(91) Horizontally positioned prism

A workpiece, which is gripped using three points of contact, can be reliably gripped with high repeatability. A system with more than three points of contact is overdetermined. The drawing shows two alternative gripper finger designs for coaxial and radial gripping of a cylindrical part.

Adapter plate



(1) Gripper connection

(72) Fit for centering sleeves

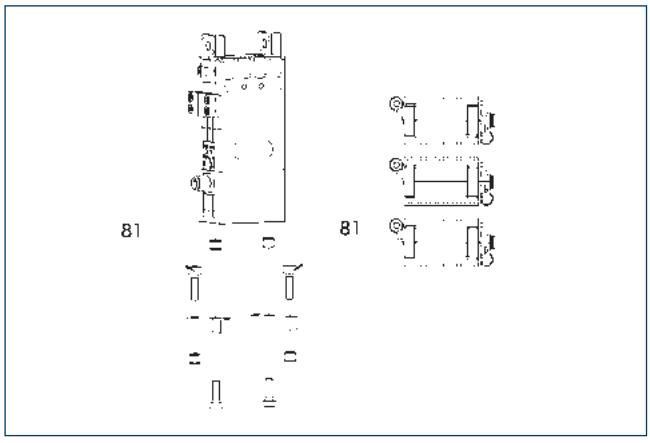
(80) Depth of the centering sleeve hole in the counter part

The adapter plate includes an O-ring* for a direct air connection, additional centering sleeves, and screws for mounting the gripper.
*Optional only with pneumatic actuators

Description	ID	
Adapter plate		
APL-MPG-plus 50	0305537	

ⓘ The adapter plate is a separately ordered, optional accessory.

Adapter plate



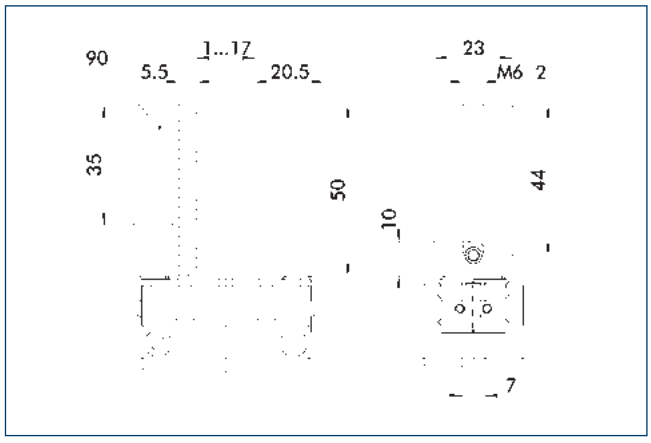
(81) Not included in the scope of delivery

The adapter plate includes an O-ring* for a direct air connection, additional centering sleeves, and screws for mounting the gripper.
*Optional only with pneumatic actuators

Description	ID	
Adapter plate		
APL-MPG-plus 50	0305537	

ⓘ The adapter plate is a separately ordered, optional accessory.

Finger blanks with BSWS ABR-BSWS-MPG-plus 50



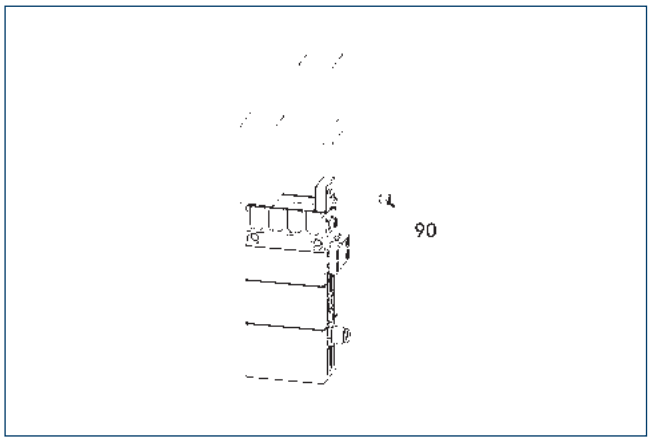
(2) Finger connection

(90) Machining volume

Finger blanks for customized subsequent machining with integrated jaw quick-change system for precise and fast finger changes.

Description	ID	Material	Scope of Delivery
Finger blanks			
ABR-MPG-plus 50	0340214	Aluminum	2
ABR-BSWS-MPG-plus 50	0302897	Aluminum	2

Finger blanks with BSWS

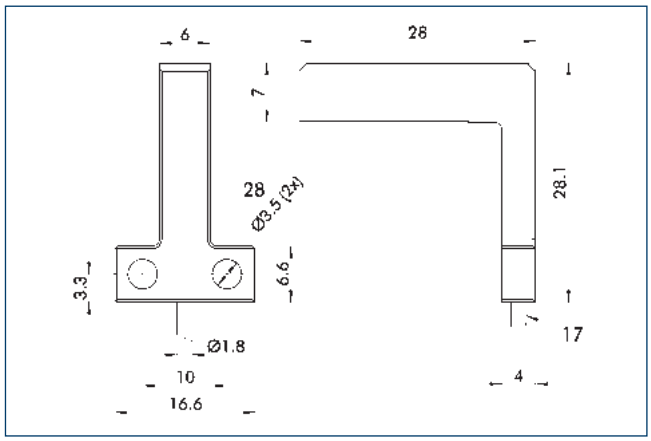


(90) Included in the scope of delivery

The finger blanks with jaw quick-change system allow fast and manual gripper finger changes. The mechanical interface to the gripper is already integrated. Only the specific workpiece geometry needs to be machined into the finger blank.

Description	ID	Material	Scope of Delivery
Finger blanks			
ABR-MPG-plus 50	0340214	Aluminum	2
ABR-BSWS-MPG-plus 50	0302897	Aluminum	2

Object distance sensor OAS-MPG-plus 50

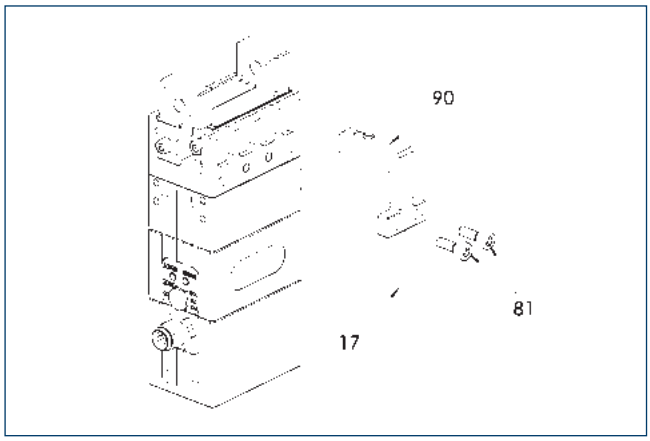


(17) Cable outlet
(28) Through-hole

Object distance sensor for detecting a workpiece and for measuring its distance to the gripper.

Description	ID	
Object distance sensor		
OAS-MPG-plus 50	0308894	

Object distance sensor

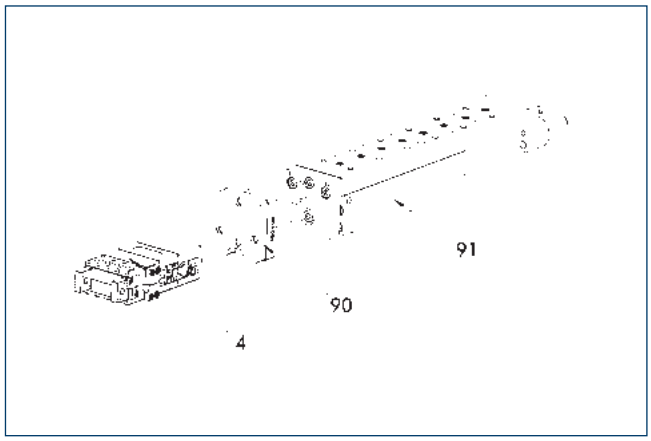


(17) Cable outlet
(81) Not included in the scope of delivery
(90) OAS

Optical distance and presence sensor for direct mounting to to the gripper. One OAS sensor can be attached per gripper.

Description	ID	
Object distance sensor		
OAS-MPG-plus 50	0308894	
Evaluation electronics		
OAS-V09-D	0308865	
OAS-V10-A	0308867	
OAS-V10-D	0308866	

Modular Assembly Automation



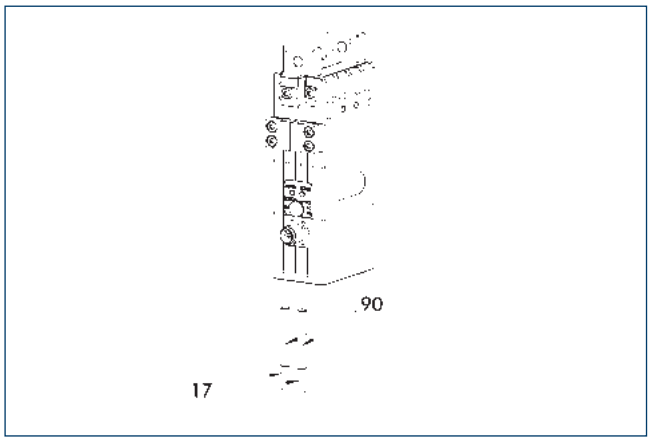
(4) Grippers
(90) ASG adapter plate
(91) CLM/KLM/LM/ELM/HLM linear modules

Grippers and linear modules can be combined with standard adapter plates from the modular assembly system. For more information see our main catalog „Modular Assembly Automation“.

EGP 50

Gripper for small components

IN 40 inductive proximity switches



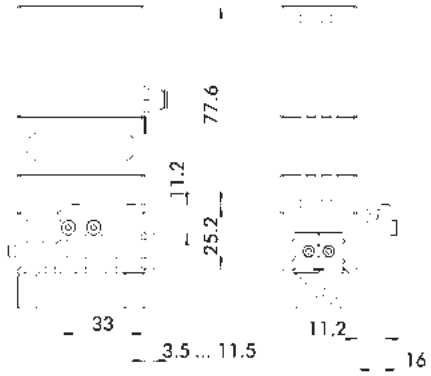
(17) Cable outlet (90) Inductive proximity switches

Directly mounted end position monitoring.

Description	ID	Often combined
Inductive proximity switches		
IN 40-S-M12	0301574	
IN 40-S-M8	0301474	●
INK 40-S	0301555	
Cable extension		
KV BG12-SG12 3P-0030-PNP	0301999	
KV BG12-SG12 3P-0060-PNP	0301998	
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	●
KV BW12-SG12 3P-0030-PNP	0301595	
KV BW12-SG12 3P-0100-PNP	0301596	
KV BW12-SG12 3P-0200-PNP	0301597	
clip for plug/socket		
CLI-M12	0301464	
CLI-M8	0301463	
Connection cables		
KA BG08-L 3P-0300-PNP	0301622	●
KA BG08-L 3P-0500-PNP	0301623	
KA BG12-L 3P-0500-PNP	30016369	
KA BW08-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-PNP	0301502	
KA BW12-L 3P-0300-PNP	0301503	
KA BW12-L 3P-0500-PNP	0301507	
Sensor distributor		
V2-M8	0301775	●
V2-M12	0301776	●
V4-M12	0301747	
V4-M8	0301746	
V8-M12	0301752	
V8-M8	0301751	

ⓘ Two sensors (closer/S) are required for each unit and extension cables are available as an option. For sensor cables, note the minimum permissible bending radii. These are generally 35 mm.

Attachment kit for FPS

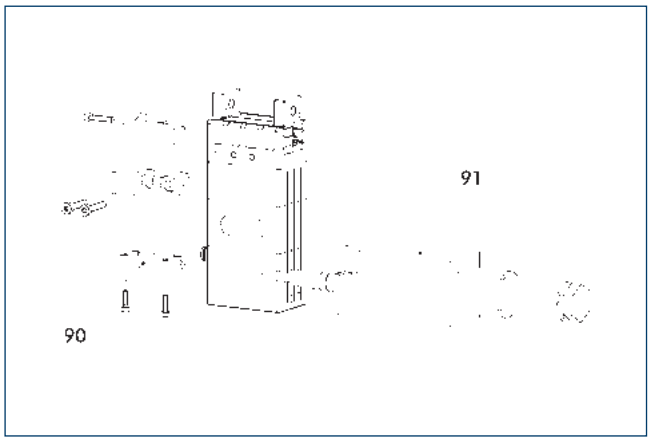


The following FPS position sensor can differentiate between five programmable areas or switching points for the stroke of a gripper, and can be used in connection with a PC as a measuring system.

Description	ID	
Attachment kit for FPS		
AS-FPS-MPG-plus 50	0301763	

ⓘ This attachment kit needs to be ordered optionally as an accessory.

Flexible position sensor



(90) FPS-S sensor

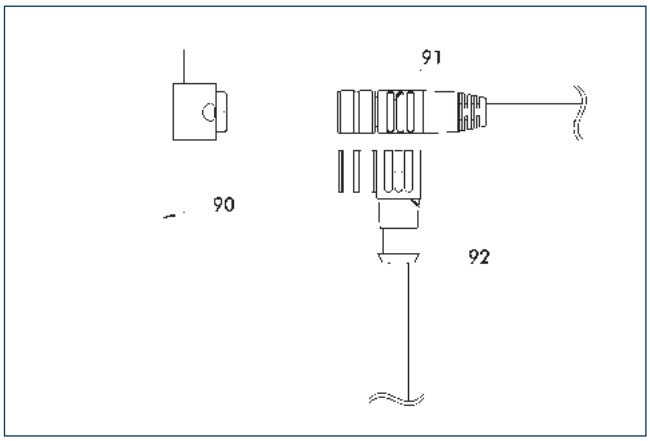
(91) FPS-F5 / -F5 T evaluation electronics

Flexible position monitoring of up to five positions.

Description	ID	Often combined
Attachment kit for FPS		
AS-FPS-MPG-plus 50	0301763	
Sensor		
FPS-S 13	0301705	
Evaluation electronics		
FPS-F5	0301805	●
FPS-F5 T	0301807	

ⓘ When using an FPS system, an FPS sensor (FPS-S) and an electronic processor (FPS-F5 / F5 T) are required for each gripper as well as an attachment kit (AS), if listed. Cable extensions (KV) are available as options in the “Accessories” catalog chapter.

Connection cables



(90) Electrical connection component

(91) Cable with straight connector

(92) Cable with angled connector

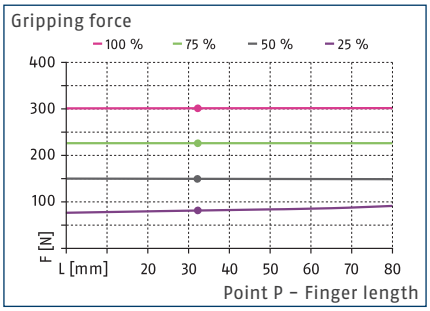
Description	ID	L1	Often combined
		[m]	
Connection cables			
KA BG08-L 4P-0500	0307767	5	●
KA BG08-L 4P-1000	0307768	10	
KA BW08-L 4P-0500	0307765	5	
KA BW08-L 4P-1000	0307766	10	

ⓘ BG stands for a connection cable with a straight female connector and BW for an angled female connector. SG stands for a connection cable with a straight male connector and SW for an angled male connector.

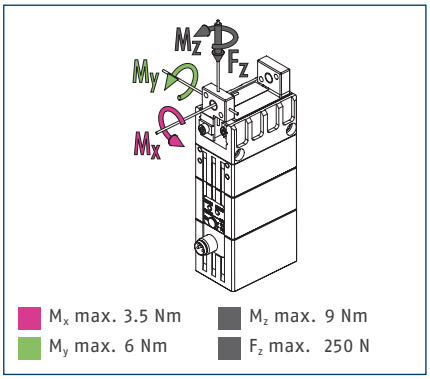
EGP 64

Gripper for small components

Gripping force



Finger load

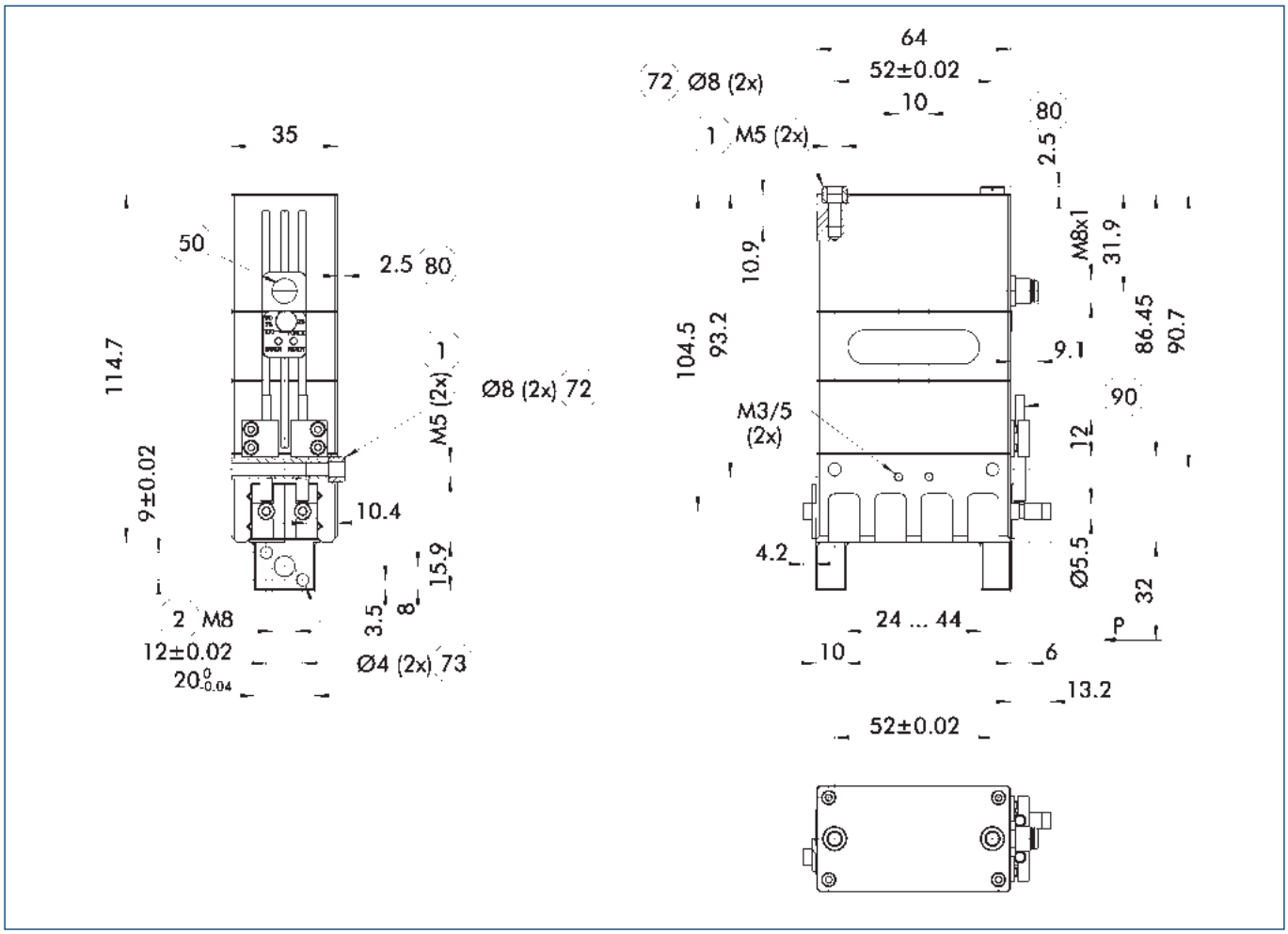


ⓘ The specified torques and forces are static values, apply for each base jaw, and may occur simultaneously. M_y may arise in addition to the moment generated by the gripping force itself.

Technical data

Description		EGP 64-N-N-B
ID		0310980
General operating data		
Stroke per jaw	[mm]	10
min. / max. gripping force	[N]	75/300
recommended workpiece weight	[kg]	1.25
max. admissible finger length	[mm]	80
max. admissible weight per finger	[kg]	0.24
Repeat accuracy	[mm]	0.02
closing/opening time	[s]	0.49/0.49
Weight	[kg]	0.8
min./max. ambient temperature	[°C]	5/55
Protection class IP		30
Noise emission	[dB(A)]	< 70
Electrical operating data		
Nominal voltage	[V DC]	24
Nominal current	[A]	0.15
max. current	[A]	2
Controller electronics		integrated
Communication interface		Digital Inputs
Number of digital inputs/outputs		2/-

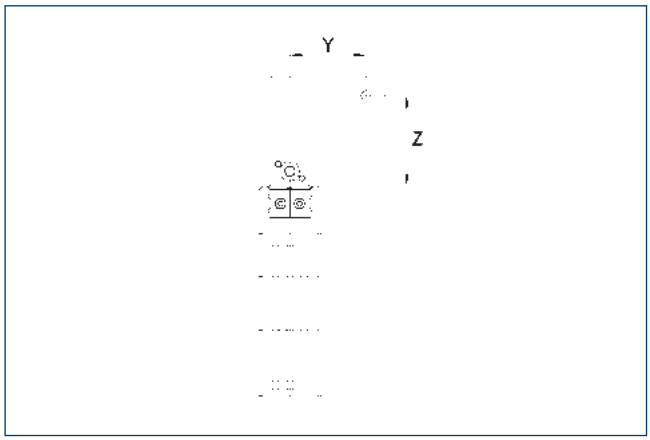
Main view

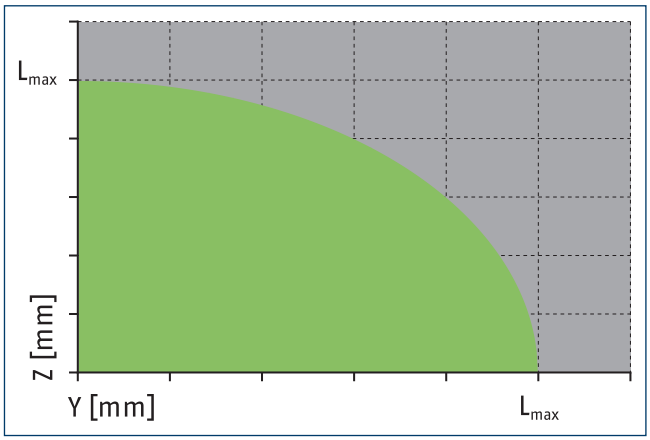


The drawing shows the basic version of the gripper with open jaws, without dimensional consideration of the options described below.

(1) Gripper connection
(2) Finger connection
(50) Electrical connection
(80) Depth of the centering sleeve hole in the counter part

Maximum permitted finger projection





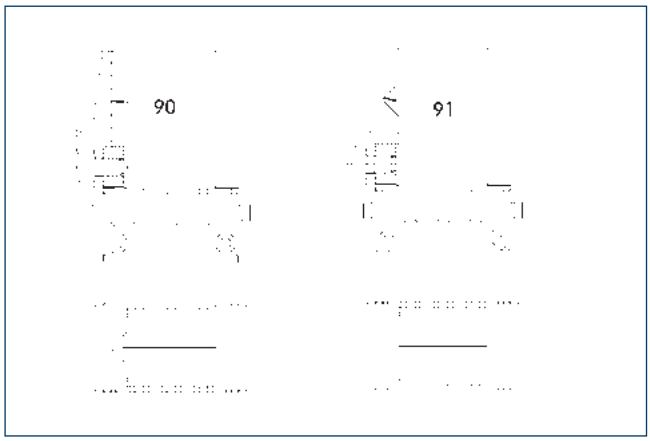
Permitted range
Inadmissible range

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

EGP 64

Gripper for small components

Jaw design

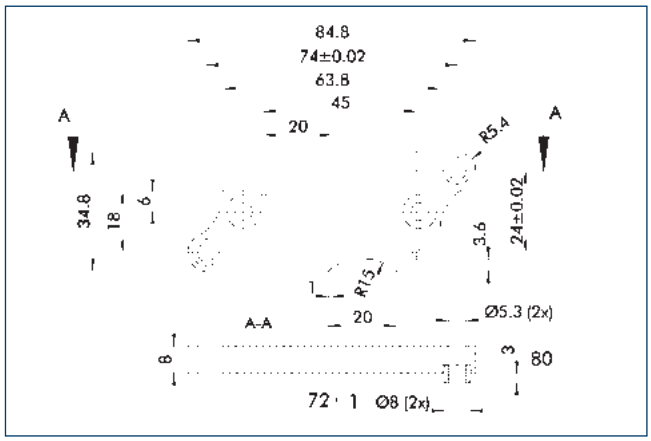


(90) Vertically positioned prism

(91) Horizontally positioned prism

A workpiece, which is gripped using three points of contact, can be reliably gripped with high repeatability. A system with more than three points of contact is overdetermined. The drawing shows two alternative gripper finger designs for coaxial and radial gripping of a cylindrical part.

Adapter plate



(1) Gripper connection

(72) Fit for centering sleeves

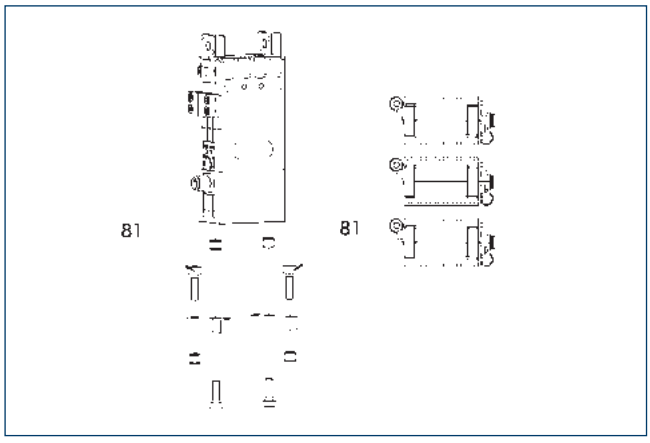
(80) Depth of the centering sleeve hole in the counter part

The adapter plate includes an O-ring* for a direct air connection, additional centering sleeves, and screws for mounting the gripper.
*Optional only with pneumatic actuators

Description	ID	
Adapter plate		
APL-MPG-plus 64	0305547	

ⓘ The adapter plate is a separately ordered, optional accessory.

Adapter plate



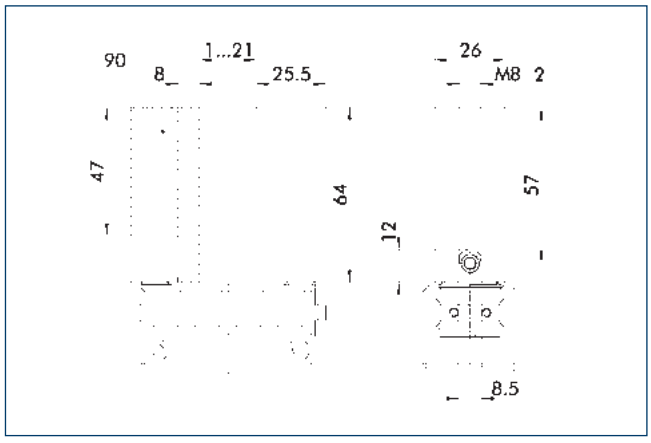
(81) Not included in the scope of delivery

The adapter plate includes an O-ring* for a direct air connection, additional centering sleeves, and screws for mounting the gripper.
*Optional only with pneumatic actuators

Description	ID	
Adapter plate		
APL-MPG-plus 64	0305547	

ⓘ The adapter plate is a separately ordered, optional accessory.

Finger blanks with BSWS ABR-BSWS-MPG-plus 64



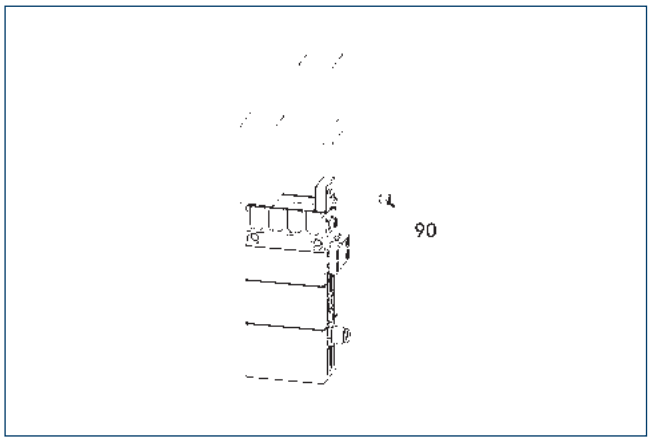
(2) Finger connection

(90) Machining volume

Finger blanks for customized subsequent machining with integrated jaw quick-change system for precise and fast finger changes.

Description	ID	Material	Scope of Delivery
Finger blanks			
ABR-MPG-plus 64	0340215	Aluminum	2
ABR-BSWS-MPG-plus 64	0302898	Aluminum	2

Finger blanks with BSWS

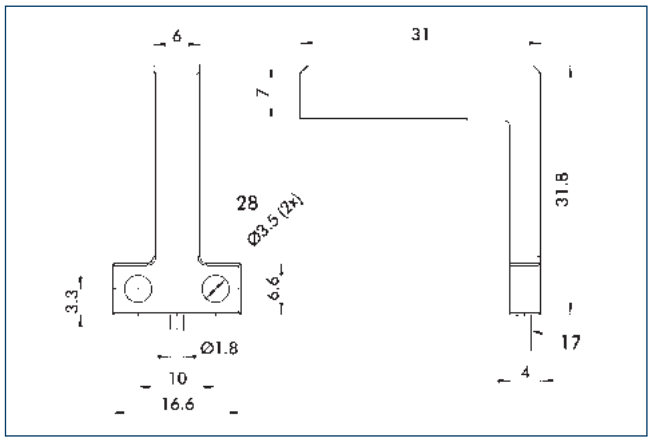


(90) Included in the scope of delivery

The finger blanks with jaw quick-change system allow fast and manual gripper finger changes. The mechanical interface to the gripper is already integrated. Only the specific workpiece geometry needs to be machined into the finger blank.

Description	ID	Material	Scope of Delivery
Finger blanks			
ABR-MPG-plus 64	0340215	Aluminum	2
ABR-BSWS-MPG-plus 64	0302898	Aluminum	2

Object distance sensor OAS-MPG-plus 64

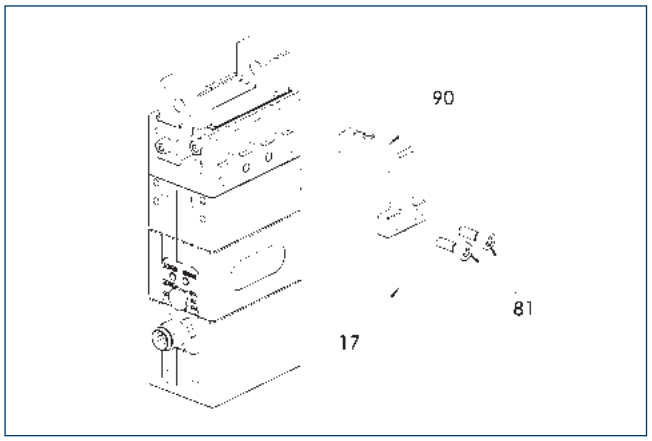


(17) Cable outlet
(28) Through-hole

Object distance sensor for detecting a workpiece and for measuring its distance to the gripper.

Description	ID	
Object distance sensor		
OAS-MPG-plus 64	0308895	

Object distance sensor

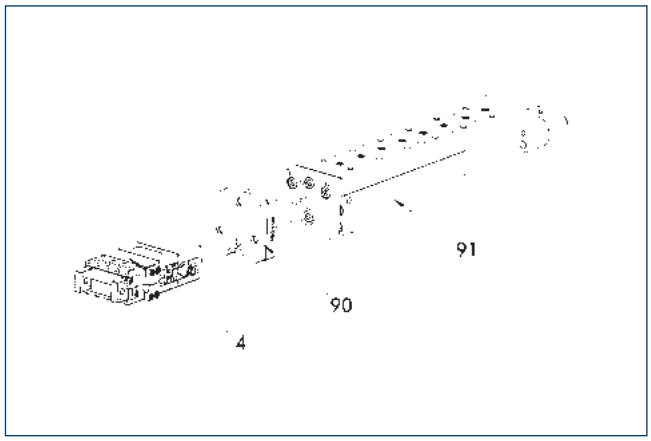


(17) Cable outlet
(81) Not included in the scope of delivery
(90) OAS

Optical distance and presence sensor for direct mounting to to the gripper. One OAS sensor can be attached per gripper.

Description	ID	
Object distance sensor		
OAS-MPG-plus 64	0308895	
Evaluation electronics		
OAS-V09-D	0308865	
OAS-V10-A	0308867	
OAS-V10-D	0308866	

Modular Assembly Automation



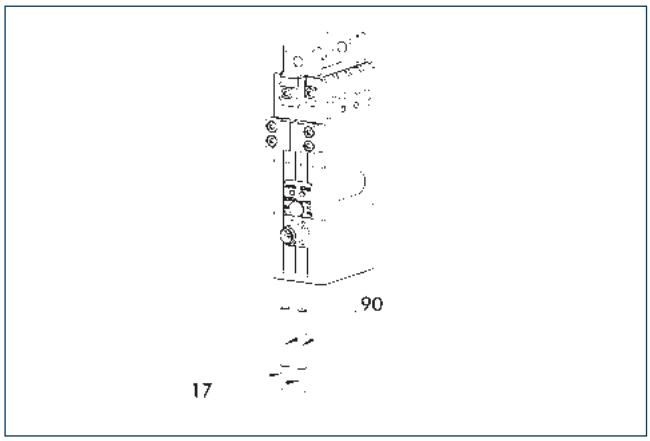
(4) Grippers
(90) ASG adapter plate
(91) CLM/KLM/LM/ELM/HLM linear modules

Grippers and linear modules can be combined with standard adapter plates from the modular assembly system. For more information see our main catalog „Modular Assembly Automation“.

EGP 64

Gripper for small components

IN 40 inductive proximity switches



(17) Cable outlet

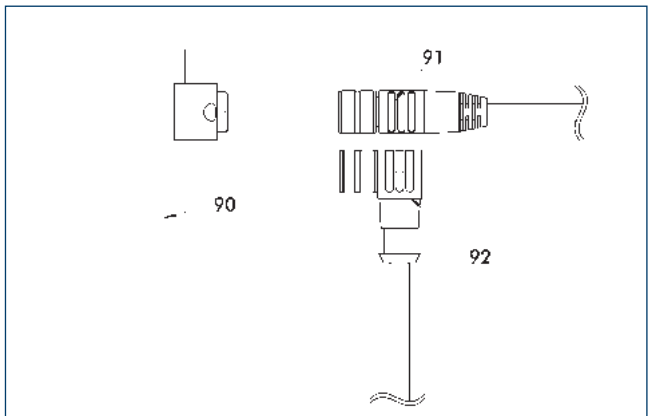
(90) Inductive proximity switches

Directly mounted end position monitoring.

Description	ID	Often combined
Inductive proximity switches		
IN 40-S-M12	0301574	
IN 40-S-M8	0301474	●
INK 40-S	0301555	
Cable extension		
KV BG12-SG12 3P-0030-PNP	0301999	
KV BG12-SG12 3P-0060-PNP	0301998	
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	●
KV BW12-SG12 3P-0030-PNP	0301595	
KV BW12-SG12 3P-0100-PNP	0301596	
KV BW12-SG12 3P-0200-PNP	0301597	
clip for plug/socket		
CLI-M12	0301464	
CLI-M8	0301463	
Connection cables		
KA BG08-L 3P-0300-PNP	0301622	●
KA BG08-L 3P-0500-PNP	0301623	
KA BG12-L 3P-0500-PNP	30016369	
KA BW08-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-PNP	0301502	
KA BW12-L 3P-0300-PNP	0301503	
KA BW12-L 3P-0500-PNP	0301507	
Sensor distributor		
V2-M8	0301775	●
V2-M12	0301776	●
V4-M12	0301747	
V4-M8	0301746	
V8-M12	0301752	
V8-M8	0301751	

ⓘ Two sensors (closer/S) are required for each unit and extension cables are available as an option. For sensor cables, note the minimum permissible bending radii. These are generally 35 mm.

Connection cables



(90) Electrical connection component

(91) Cable with straight connector

(92) Cable with angled connector

Description	ID	L1	Often combined
		[m]	
Connection cables			
KA BG08-L 4P-0500	0307767	5	●
KA BG08-L 4P-1000	0307768	10	
KA BW08-L 4P-0500	0307765	5	
KA BW08-L 4P-1000	0307766	10	

ⓘ BG stands for a connection cable with a straight female connector and BW for an angled female connector. SG stands for a connection cable with a straight male connector and SW for an angled male connector.

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