



Superior Clamping and Gripping



Product data sheet

Compact linear module ELP

ELP

Compact linear module

Easy. Fast. Reliable.

Compact linear module ELP

Electric linear module with direct drive and integrated controller, scope-free guided using pre-loaded roller guideü

Field of application

For use in clean environments, such as assembly and testing systems. Optimum standard solution for high-precision applications.



Advantages – Your benefits

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

10 independent extension and retraction speeds for high flexibility in cycle times

Linear direct drive for almost wear-free use and a long service life

Robust bearing guidance for high load capacities and end-position accuracy in all installation positions

Maintenance-free for high machine uptime and low operating costs

Compact dimensions for less interfering contours

Standardized mounting bores for numerous combinations with other components from the modular system



Sizes
Quantity: 3



Weight
1.8 .. 8.3 kg



Max. driving force
17 .. 104 N



Max. stroke
30 .. 200 mm

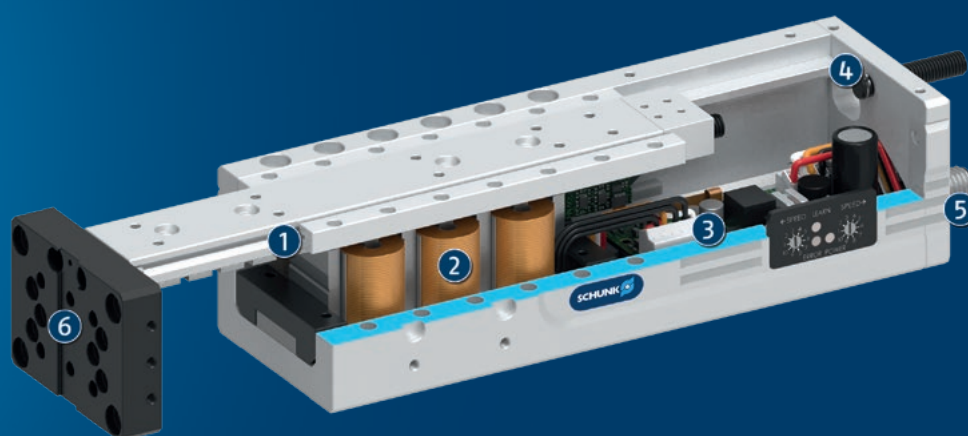


Repeat accuracy
±0.01 mm

Functional description

The electric drive consists of a primary part (motor coil) and a secondary part (permanent magnets). The phase and the amplitude of the applied electrical current are regulated in the controller. Depending on the application,

this sets the profile fitted with magnets in motion or moves the slides of the axis.



- | | |
|--|---|
| <p>① Roller guide
for maximum positioning accuracy and moment loads</p> <p>② Drive
Linear direct drive</p> <p>③ Control electronics
Adaptive control technology with integrated control and power electronics</p> | <p>④ End position adjustability
Mechanical adjustment of end positions via stop screws</p> <p>⑤ Connection plug
Standard connectors for quick connection to sensor and power distributors</p> <p>⑥ Mounting pattern
Completely integrated in the module system</p> |
|--|---|

General notes about the series

Housing material: Aluminum alloy, coated

Guidance: Backlash-free, pre-loaded roller guides

Drive: Linear direct drive

Scope of delivery: Accessory kit with centering sleeves, safety information (product-specific instructions are available online)

Warranty: 24 months

Service life characteristics: on request

Stroke: is the maximum nominal stroke of the unit. It can be reduced on both sides by end stops.

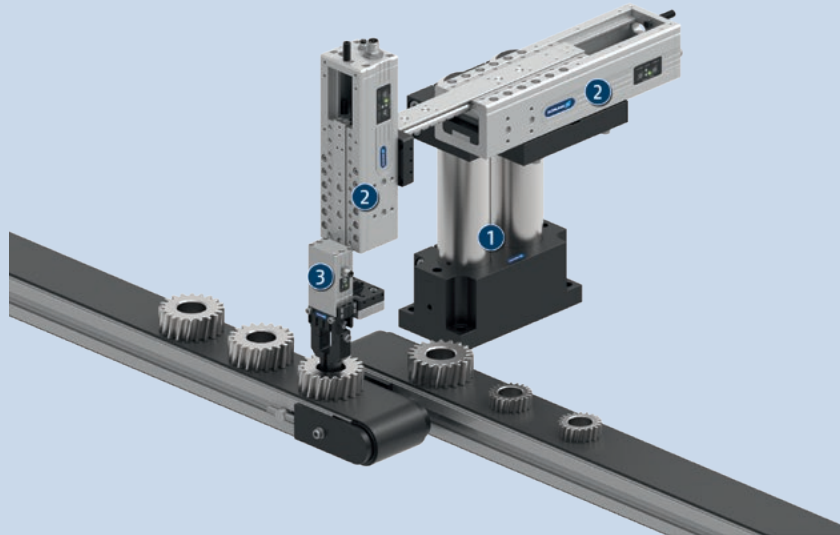
Repeat accuracy: is defined as a distribution of the end positions for 100 consecutive cycles.

Travel times: are pure movement times of the slide. PLC reaction times are not included and have to be considered when the cycle times are determined.

Payload: is the weight of the total weight which is attached to the cantilever arm. Please consider that service life will shorten if the maximum payload is exceeded. SCHUNK cannot assume any warranty for this.

Layout or control calculation: Verifying the sizing of the selected unit is necessary, since otherwise overloading can result. Please contact us for assistance.

Ambient conditions: The modules are mainly designed for the use in clean ambient conditions. Please note that the life time of the modules can shorten if they are used in harsh ambient conditions, and that SCHUNK cannot assume liability in such cases. Please contact us for assistance.



Application example

Pick & place unit driven by linear motor for dynamic movements.

- ① Pillar assembly system
- ② Electric linear module ELP

- ③ Electric 2-finger parallel gripper EGP

SCHUNK offers more ...

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



Gripper for small components



Rotary gripper module



Rotation unit



Pick & Place Unit



Inductive proximity switch



Magnetic switches



Holding brake



Pillar assembly system



Connection cables

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

Options and special information

Manually adjustable speed: The extension and retraction speeds can be adjusted independently using two integrated rotary switches.

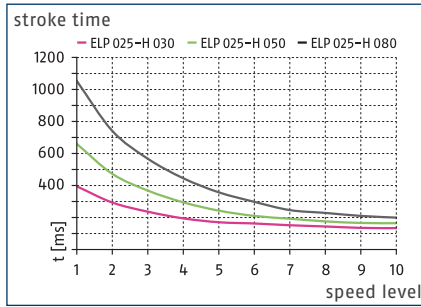
Load compensation: Optionally, a load compensation device can be attached parallel to the motor. A MagSpring® is used for this purpose. The magnetic spring compensates for the weight forces generated during vertical movements of the linear module. In certain applications, this can prevent the lowering of the slide when the linear module is switched off.

Electric piston rod brakes: On option, the axis can be fitted with an electrical holding brake. This prevents an unintentional sinking of vertically installed axes in the event of a power failure. The holding brake is also suitable for applications in the field of machine safety. Please feel free to contact us.

NEW: Version with food –compliant lubrication (H1G): as a solution for an easy entry into medical technology, lab automation, pharmaceutical and food industry. The requirements of EN 1672-2:2020 are not fully met.

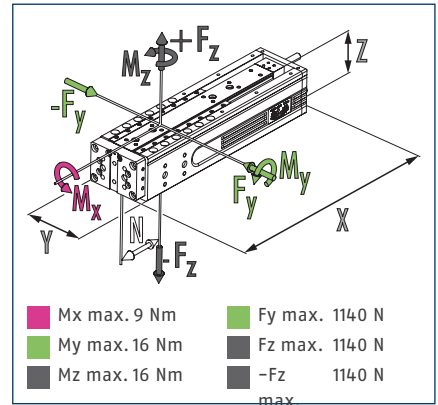


Travel time, horizontal



① The diagram shows the average stroke time in horizontal installation position, with maximum stroke, and constant maximum payload. We will gladly support you in designing further applications.

Dimensions and maximum loads

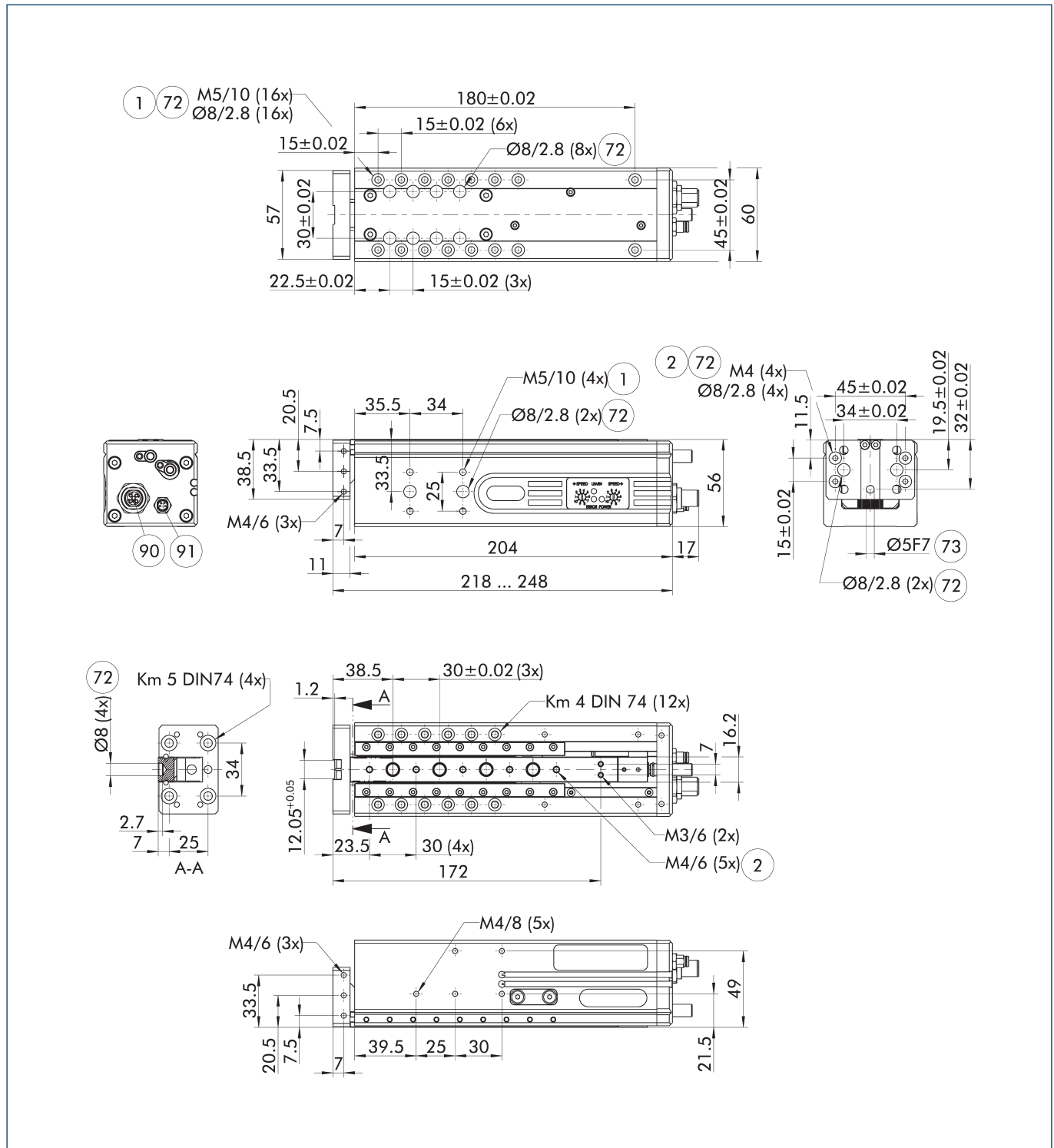


① The indicated forces and moments are maximum values for individual loading. If several forces and/or moments are applied at the same time, the maximum permitted individual values will be lower.

Technical data

Description		ELP 025-H030	ELP 025-H050	ELP 025-H080
ID		0315700	0315708	0315716
General operating data				
Drive concept		Linear direct drive	Linear direct drive	Linear direct drive
Max. stroke	[mm]	30	50	80
Nominal force	[N]	17	17	17
Max. payload (horizontal)	[kg]	1	1	1
Max. payload (vertical)	[kg]	0.75	0.75	0.75
Repeat accuracy	[mm]	±0.01	±0.01	±0.01
Dead weight including slide	[kg]	1.8	1.8	2
Weight of slide	[kg]	0.3	0.3	0.34
Min./max. ambient temperature	[°C]	5/55	5/55	5/55
IP protection class		20	20	20
Cleanroom class ISO 14644-1:2015		5	5	5
Noise emission	[dB(A)]	52	52	52
Clearance N (for moment load)	[mm]	89	109	139
Dimensions X x Y x Z	[mm]	218 x 60 x 56	218 x 60 x 56	246 x 60 x 56
Electrical operating data				
Nominal voltage	[V]	24	24	24
Nominal current	[A]	0.64	0.64	0.64
Max. current	[A]	2	2	2
Controller electronics		integrated	integrated	integrated
Communication interface		Digital inputs	Digital inputs	Digital inputs
Number of digital I/O		2/-	2/-	2/-
Rated current logic	[A]	0.04	0.04	0.04
Options and their characteristics				
H1 grease version		1487900	1487901	1487966

Main view ELP 025-H030



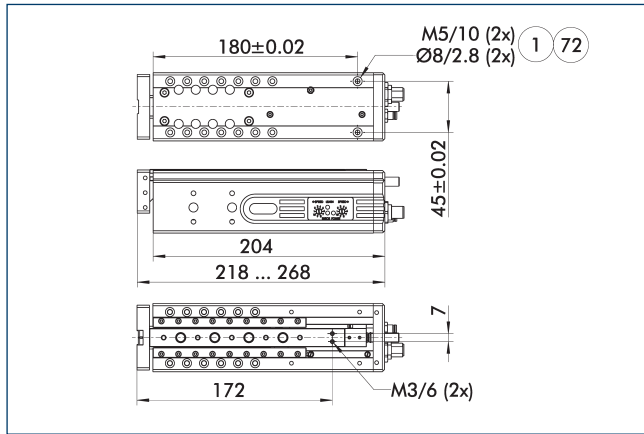
The drawing shows the basic version of the linear module with retracted slide and without dimensional consideration of the options described below.

- ① Connection linear unit
- ② Attachment connection
- ⑦③ Fit for centering pins
- ⑨⑩ M12 T-coded (power supply)
- ⑦② Fit for centering sleeves
- ⑨① M8, 4-pole (control)

ELP 25

Compact linear module

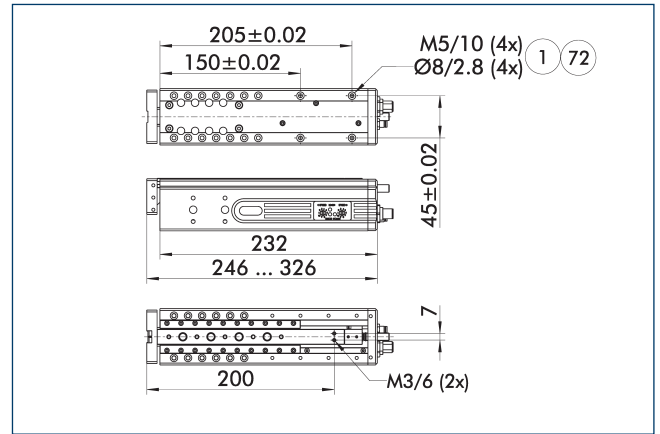
Stroke variant ELP 025-H050



- ① Connection linear unit
- ⑦② Fit for centering sleeves

The drawing shows changes in dimensions of the version with a different stroke compared to the version shown in the main view.

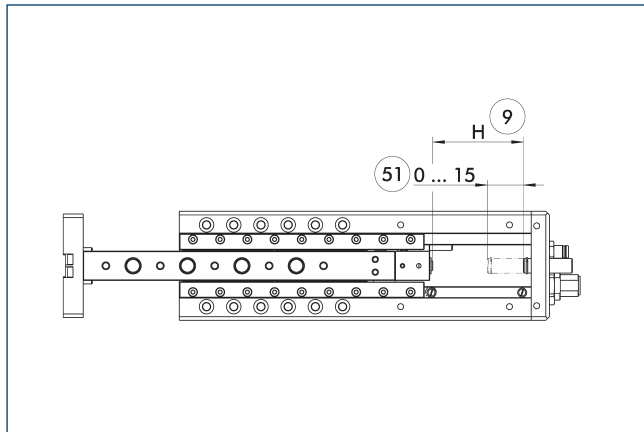
Stroke variant ELP 025-H080



- ① Connection linear unit
- ⑦② Fit for centering sleeves

The drawing shows changes in dimensions of the version with a different stroke compared to the version shown in the main view.

"Retracted" fine adjustment

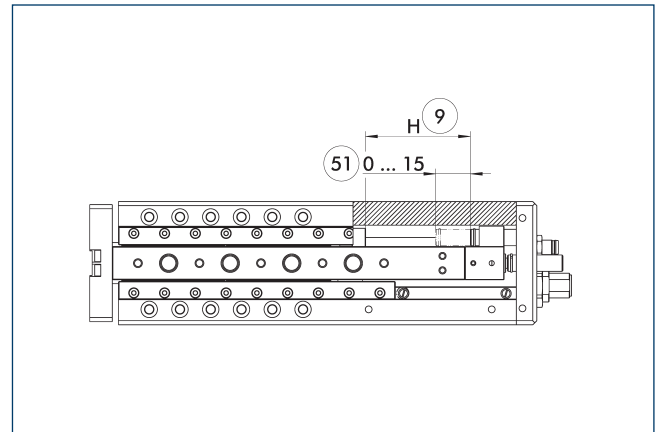


- ⑨ Nominal stroke
- ⑤① Stroke adjustment range

This illustration shows the possible fine adjustment of the retracted position.

ⓘ Please note that a minimum stroke of 5 mm has to be observed.

"Extended" fine adjustment

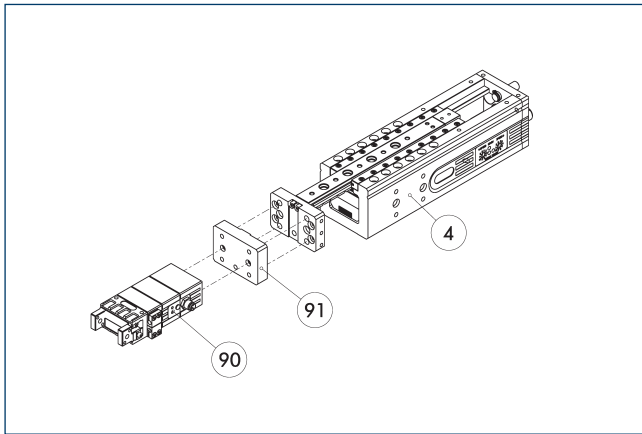


- ⑨ Nominal stroke
- ⑤① Stroke adjustment range

This illustration shows the possible fine adjustment of the extended position.

ⓘ Please note that a minimum stroke of 5 mm has to be observed.

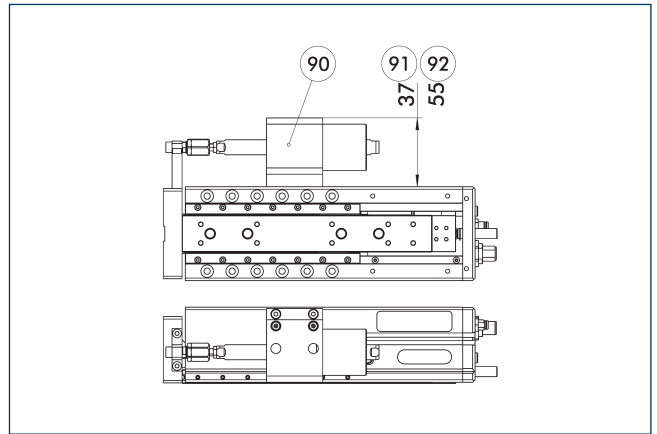
Modular Assembly Automation



- ④ Linear unit
- ⑨① ASG adapter plate
- ⑨① Grippers

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".

Attachment kit for load compensation



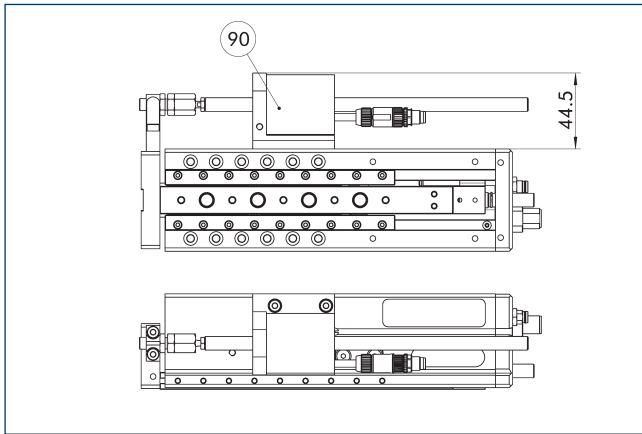
- ⑨① MagSpring®
- ⑨② MS01-37
- ⑨① MS01-20

With its constant force over the complete stroke, the MagSpring® is the perfect load compensation. It ideally supports the linear motor in vertical applications.

Description	ID
Attachment kit for magnetic spring	
AS-ELP-MS01-20	0315900

① The matching MagSpring® has to be ordered separately. Please contact us.

Electric piston rod brakes



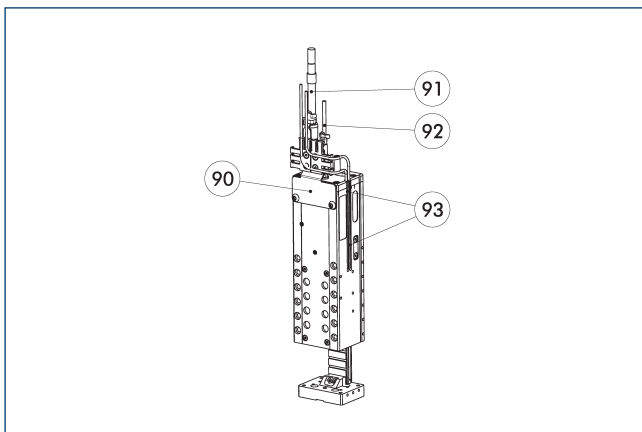
90 ROBA® linear stop

The ROBA® linear stop is an electric holding brake that prevents gravity loaded axes from unintentionally dropping or falling. The holding brake is also suitable for applications in the field of machine safety. Please feel free to contact us.

Description	ID
Mounting kit for ROBA® linear stop	
AS-ELP025-HB-10	1339891
ROBA® linear stop	
ROBA®-linearstop-10	1339906
Voltage supply/signals connection cable - drag chain and torsion resistant, M8 socket, straight	
KA GLN0804-10-00200-A	1310371
KA GLN0804-10-00500-A	1310375
KA GLN0804-10-01000-A	1310379
Fast switching module	
ROBA®-brake-checker	1339913

ⓘ When using an electric piston rod brake, per linear unit a ROBA® linear stop, a mounting kit for a ROBA® linear stop and a rapid switching module for activation are required.

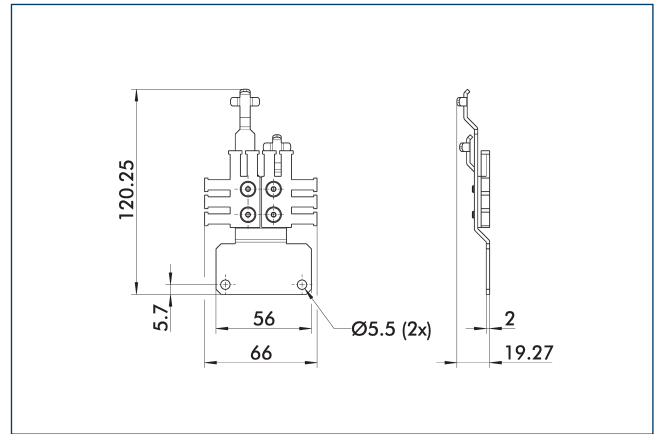
Attachment of strain relief



- 90 Strain relief
- 91 M12 T-coded (power supply)
- 92 M8, 4-pole (control)
- 93 Sensor MMS 22..

Description	ID
Strain relief	
ZE-ELP 025	0315905

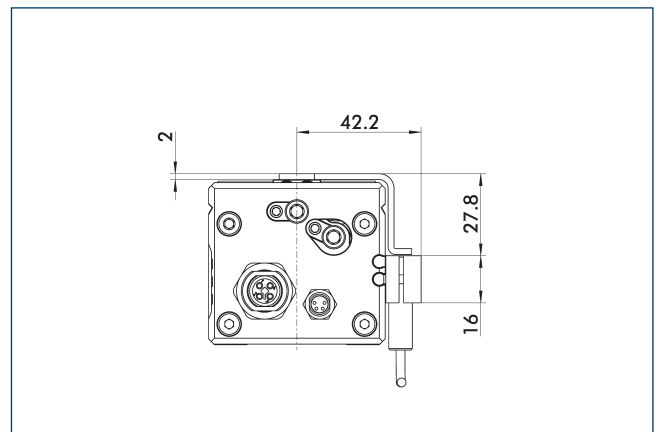
Strain relief



The strain relief protects the electric lines from mechanical load. In addition to lines for power supply and logic, sensor cables can also be fastened.

Description	ID
Strain relief	
ZE-ELP 025	0315905

Attachment kit for proximity switch IN 80

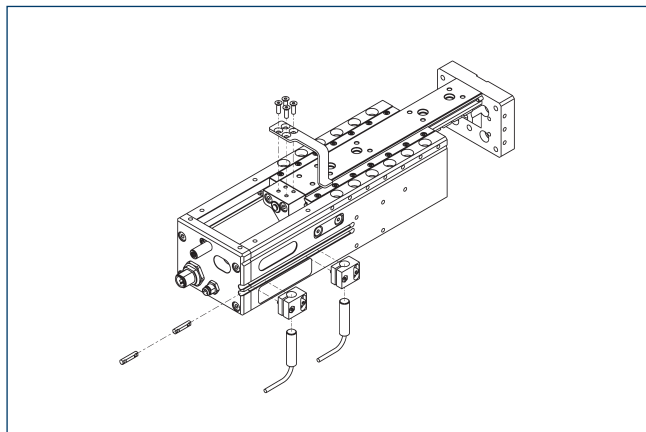


End position monitoring can be mounted with an attachment kit.

Description	ID
Attachment kit for proximity switch	
AS-ELP 025-IN80	0315902

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

IN 80 inductive proximity switches

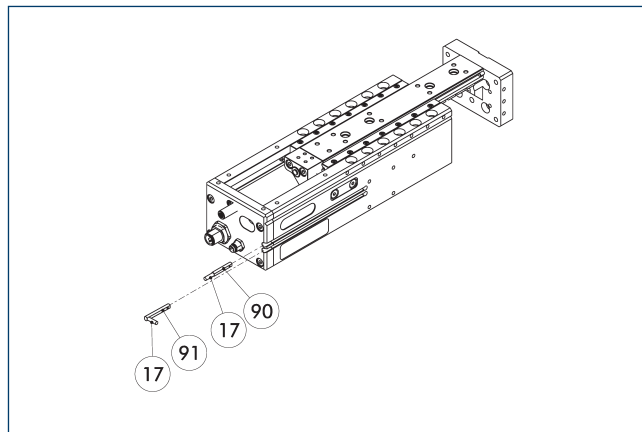


End position monitoring can be mounted with an attachment kit.

Description	ID	Often combined
Attachment kit for proximity switch		
AS-ELP 025-IN80	0315902	
Inductive proximity switch		
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	●
INK 80-S	0301550	
Inductive proximity switch with lateral cable outlet		
IN 80-S-M12-SA	0301587	
IN 80-S-M8-SA	0301483	●
INK 80-S-SA	0301566	

① Two sensors (closer/S) are required for each unit and extension cables are available as an option. This attachment kit needs to be ordered optionally as an accessory. For sensor cables, note the minimum permissible bending radii. These are generally 35 mm.

Electronic magnetic switch MMS



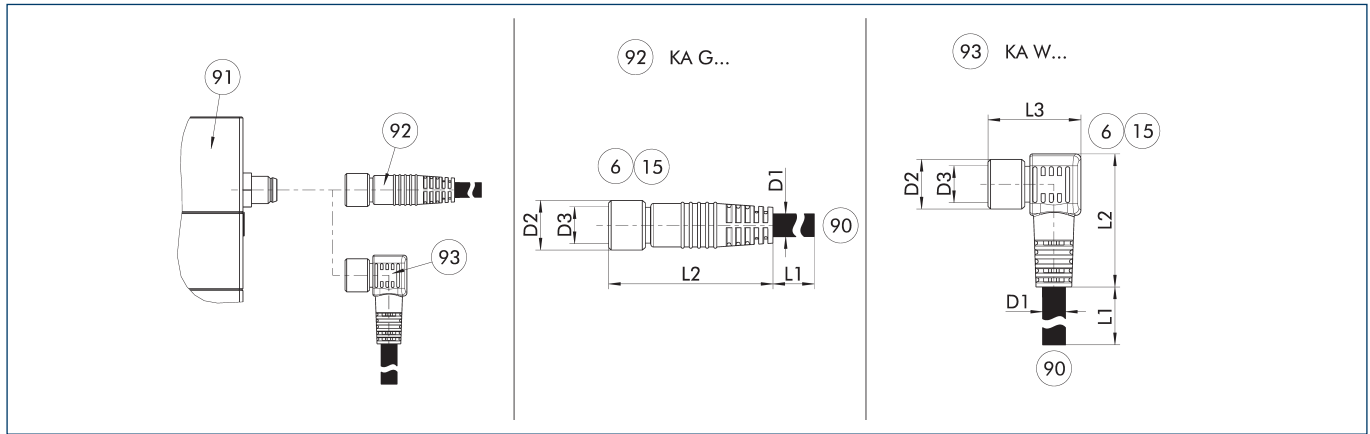
- ①⑦ Cable outlet
- ①⑨ Sensor MMS 22...-SA
- ①⑩ Sensor MMS 22..

End position monitoring for mounting in the C-slot.

Description	ID	Often combined
Electronic magnetic switch		
MMS 22-S-M8-PNP	0301032	
MMSK 22-S-PNP	0301034	
Electronic magnetic switches with lateral cable outlet		
MMS 22-S-M8-PNP-SA	0301042	
MMSK 22-S-PNP-SA	0301044	
Connection cables		
KA BG08-L 3P-0300-PNP	0301622	●
KA BG08-L 3P-0500-PNP	0301623	
KA BW08-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-PNP	0301502	
Clip for connector/socket		
CLI-M8	0301463	
Cable extension		
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	●
Sensor distributor		
V2-M8	0301775	●
V4-M8	0301746	
V8-M8	0301751	

① Two sensors are required per unit for monitoring two positions. On option, extension cables and sensor distributors are available. Additional product variants of the sensor, and further information and technical data can be found in the catalog chapter sensor system.

Voltage supply/signals connection cable



KA G... Connection cable with straight socket
 KA W... Connection cable with angular socket

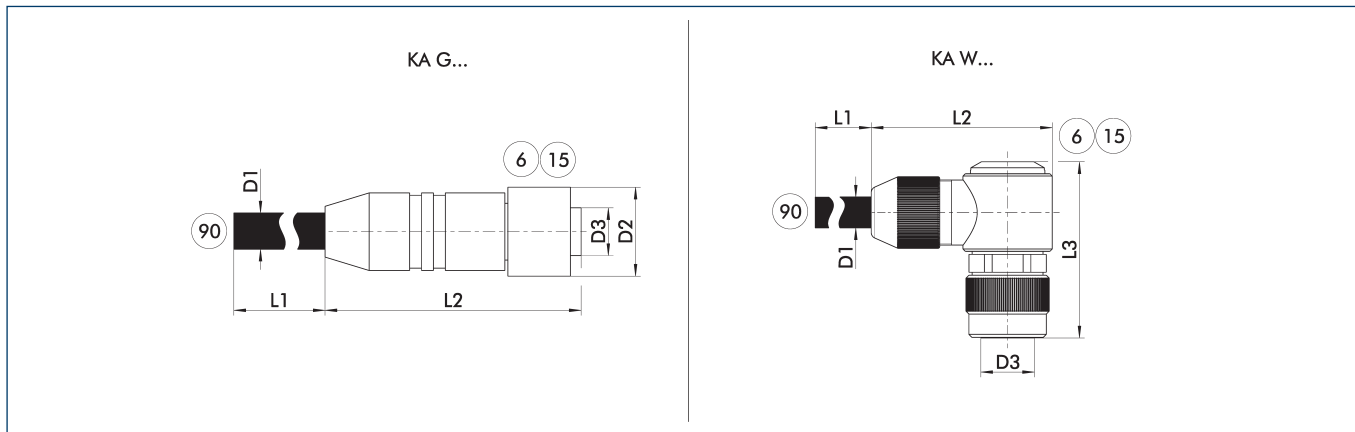
- ⑥ Connection module side
- ⑬ Socket
- ⑨① SAC connection cable with open wire strands
- ⑨① Connection plug component
- ⑨② Cable with straight female connector
- ⑨③ Cable with angled female connector

The connection cable is ideal for connecting the corresponding components to the controller or the power supply unit. The connection cable has a 4-pin M8 socket on one side and an open wire strand 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 [m]	D1 [mm]	L2 [mm]	D2 [mm]	L3 [mm]	D3	Often combined
Voltage supply/signals connection cable - drag chain and torsion resistant, M8 socket, straight								
KA GLN0804-10-00200-A	1310371	2	4.8	33.7	10		M8	
KA GLN0804-10-00500-A	1310375	5	4.8	33.7	10		M8	●
KA GLN0804-10-01000-A	1310379	10	4.8	33.7	10		M8	
KA GLN0804-10-02000-A	1442994	20	4.5	32	10		M8	
Voltage supply/signals connection cable - drag chain and torsion resistant, M8 socket, angled								
KA WLN0804-10-00200-A	1310372	2	4.8	27.9	10	18.9	M8	
KA WLN0804-10-00500-A	1310376	5	4.8	27.9	10	18.9	M8	
KA WLN0804-10-01000-A	1310381	10	4.8	27.9	10	18.9	M8	
KA WLN0804-10-02000-A	1442996	20	4.5	25	10	20	M8	

① 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.

Voltage supply connection cable



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

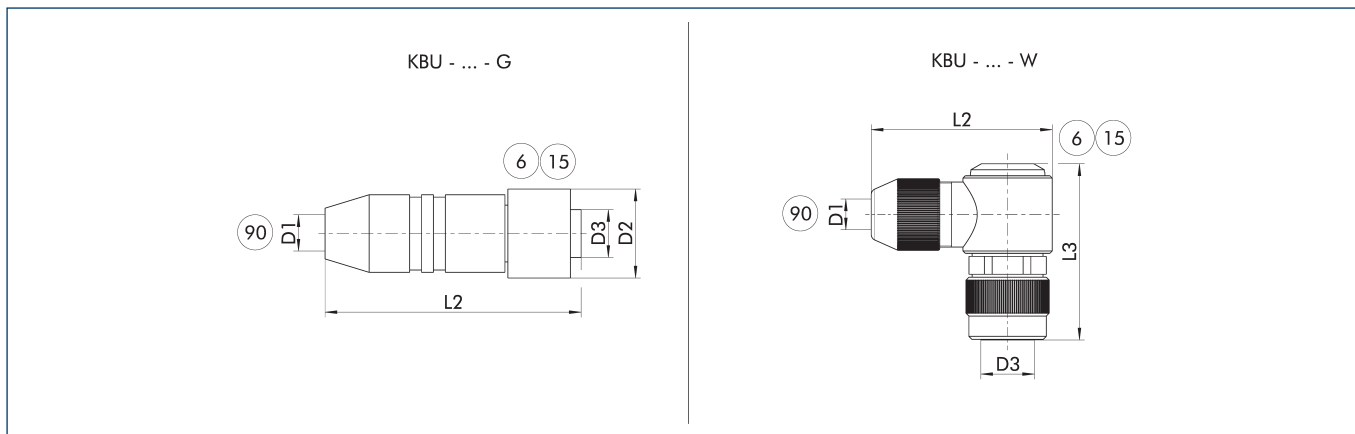
6 Connection module side
 15 Socket
 90 Cable end with open wire strands

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

Description	ID	L1 [m]	D1 [mm]	L2 [mm]	D2 [mm]	L3 [mm]	D3
Voltage supply connection cable - cable track compatible							
KA GLN12T0150-LK-00500-A	0310262	5	9.6	51	15		M12 T-coded
KA GLN12T0150-LK-01000-A	0310264	10	9.6	51	15		M12 T-coded
KA WLN12T0150-LK-00500-A	0310263	5	9.6	47.5		35	M12 T-coded
KA WLN12T0150-LK-01000-A	0310265	10	9.6	47.5		35	M12 T-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.

Plug-in connector power supply/signals



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

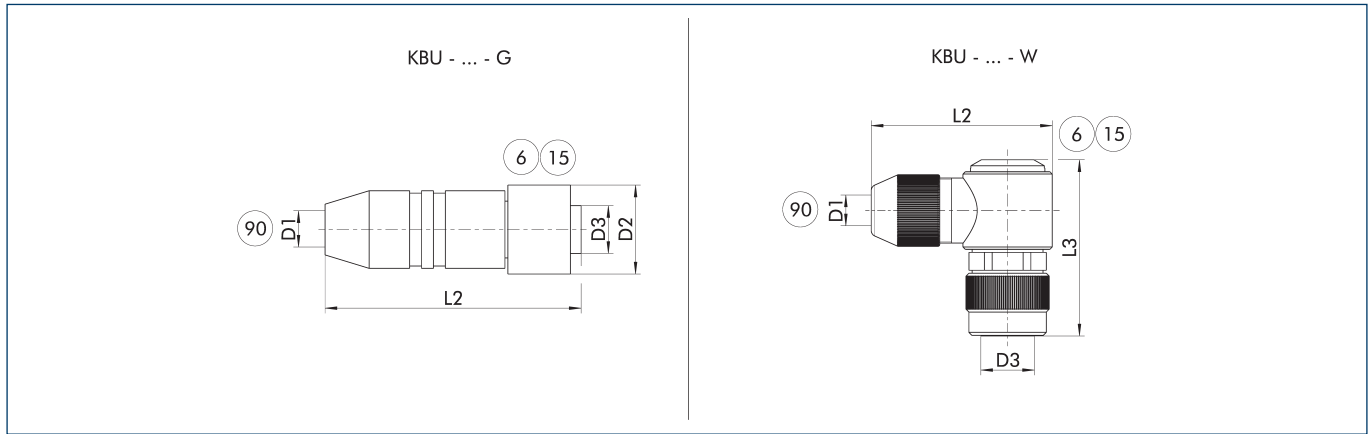
6 Connection module side
 15 Socket
 90 D1 - max. diameter connection cable

The plug connectors are used to connect the SCHUNK products to the voltage supply. A customer cable can be used for this. The individual wire strands can be soldered to the solder pins of the connector.

Description	ID	D1 (max.) [mm]	L2 [mm]	D2 [mm]	L3 [mm]	D3
Cable connector						
KBU-M8-G 4P	1506418	5	37	12		M8
KBU-M8-W 4P	1506422	5	25		28	M8

ⓘ For the connection cable, a cross-section for each individual wire strand of 0.25 mm² is recommended. Please refer to the product documentation for information about max. cable length and min. wire cross section.

Power supply plug-in connector



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

⑥ Connection module side ⑨⑩ D1 - max. diameter connection cable
 ⑮ Socket

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.) [mm]	L2 [mm]	D2 [mm]	L3 [mm]	D3
Power supply plug-in connector						
KBU-M12T-G 4P	0310260	10	58	20.2		M12 T-coded
KBU-M12T-W 4P	1001514	10	43	20.2	39	M12 T-coded

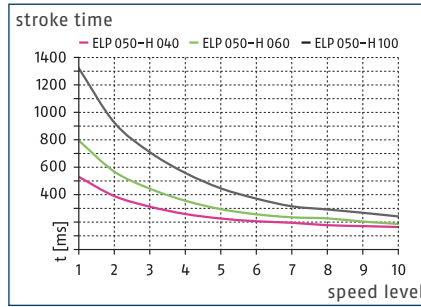
① For the connection cable, a cross-section for each individual wire strand of 1.5 mm² is recommended. Please refer to the product documentation for information about max. cable length and min. wire cross section.

ELP 50

Compact linear module

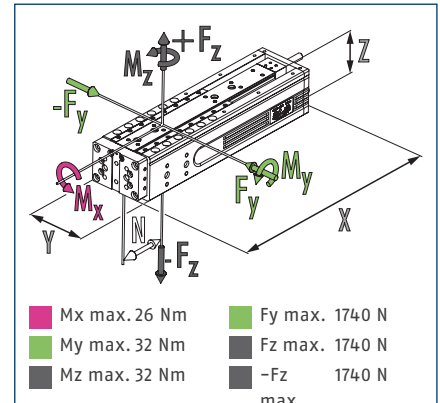


Travel time, horizontal



① The diagram shows the average stroke time in horizontal installation position, with maximum stroke, and constant maximum payload. We will gladly support you in designing further applications.

Dimensions and maximum loads

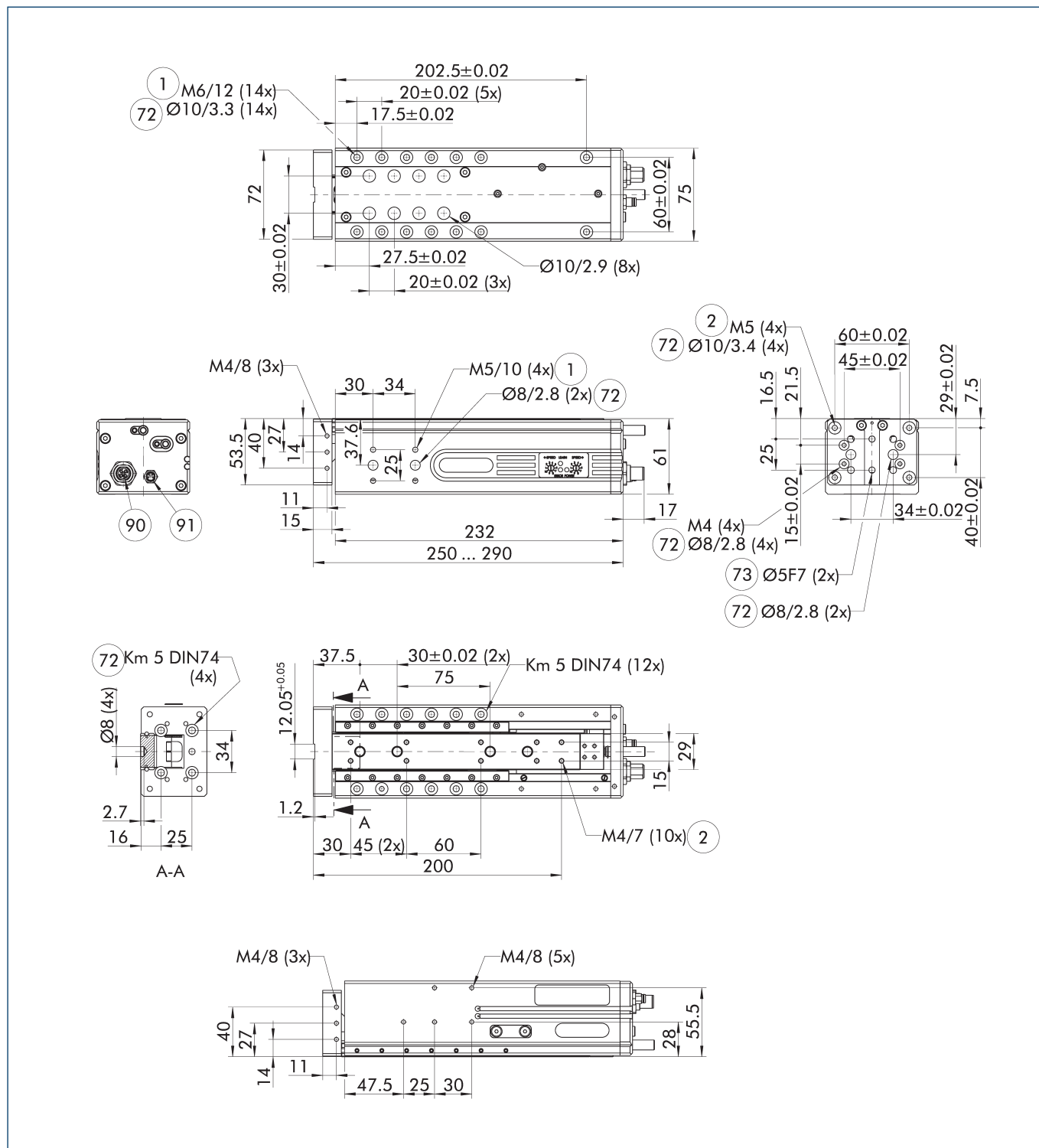


① The indicated forces and moments are maximum values for individual loading. If several forces and/or moments are applied at the same time, the maximum permitted individual values will be lower.

Technical data

Description		ELP 050-H040	ELP 050-H060	ELP 050-H100
ID		0315724	0315732	0315740
General operating data				
Drive concept		Linear direct drive	Linear direct drive	Linear direct drive
Max. stroke	[mm]	40	60	100
Nominal force	[N]	45	45	45
Max. payload (horizontal)	[kg]	3	3	3
Max. payload (vertical)	[kg]	2	2	2
Repeat accuracy	[mm]	±0.01	±0.01	±0.01
Dead weight including slide	[kg]	3	3	3.4
Weight of slide	[kg]	0.7	0.7	0.82
Min./max. ambient temperature	[°C]	5/55	5/55	5/55
IP protection class		20	20	20
Cleanroom class ISO 14644-1:2015		5	5	5
Noise emission	[dB(A)]	58	58	58
Clearance N (for moment load)	[mm]	106	126	166
Dimensions X x Y x Z	[mm]	250 x 75 x 61	250 x 75 x 61	298 x 75 x 61
Electrical operating data				
Nominal voltage	[V]	24	24	24
Nominal current	[A]	1	1	1
Max. current	[A]	2.1	2.1	2.1
Controller electronics		integrated	integrated	integrated
Communication interface		Digital inputs	Digital inputs	Digital inputs
Number of digital I/O		2/-	2/-	2/-
Rated current logic	[A]	0.04	0.04	0.04
Options and their characteristics				
H1 grease version		1487967	1487969	1487971

Main view ELP 050-H040



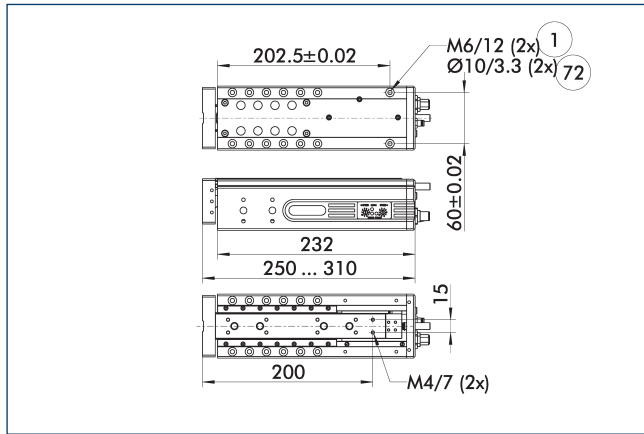
The drawing shows the basic version of the linear module with retracted slide and without dimensional consideration of the options described below.

- ① Connection linear unit
- ② Attachment connection
- ⑦ Fit for centering sleeves
- ⑦③ Fit for centering pins
- ⑨⑩ M12 T-coded (power supply)
- ⑨① M8, 4-pole (control)

ELP 50

Compact linear module

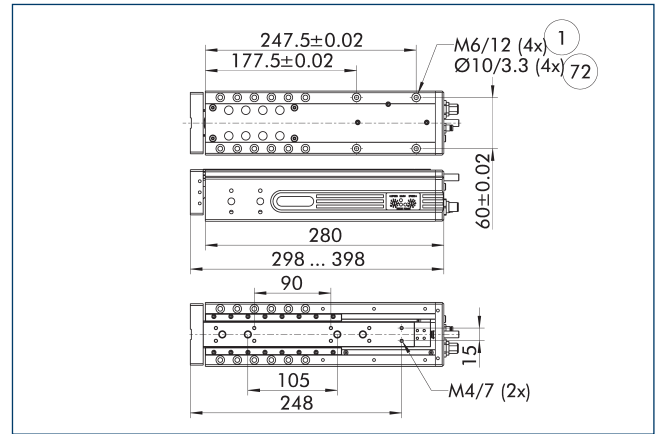
Stroke variant ELP 050-H060



- ① Connection linear unit
- ⑦② Fit for centering sleeves

The drawing shows changes in dimensions of the version with a different stroke compared to the version shown in the main view.

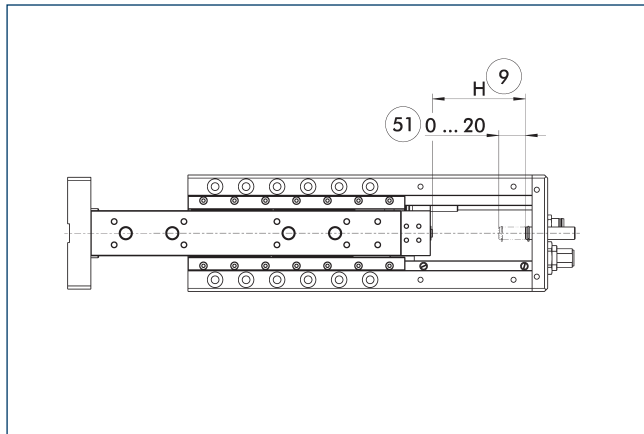
Stroke variant ELP 050-H100



- ① Connection linear unit
- ⑦② Fit for centering sleeves

The drawing shows changes in dimensions of the version with a different stroke compared to the version shown in the main view.

"Retracted" fine adjustment

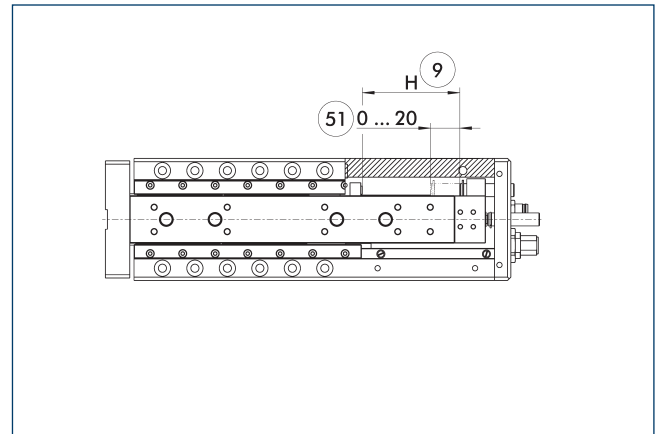


- ⑨ Nominal stroke
- ⑤① Stroke adjustment range

This illustration shows the possible fine adjustment of the retracted position.

ⓘ Please note that a minimum stroke of 5 mm has to be observed.

"Extended" fine adjustment

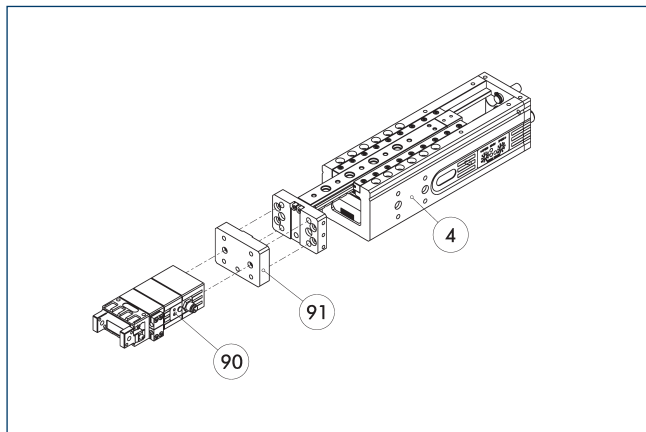


- ⑨ Nominal stroke
- ⑤① Stroke adjustment range

This illustration shows the possible fine adjustment of the extended position.

ⓘ Please note that a minimum stroke of 5 mm has to be observed.

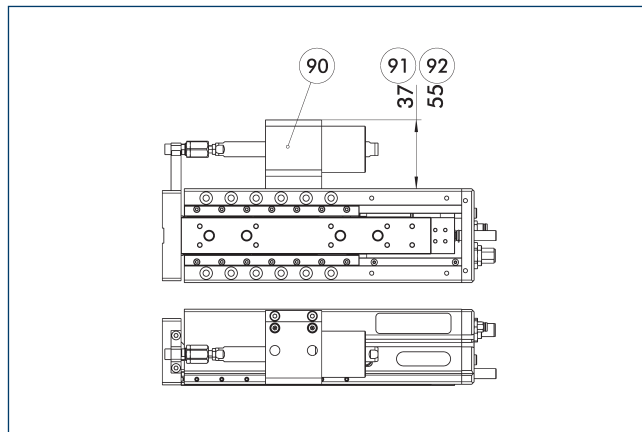
Modular Assembly Automation



- ④ Linear unit
- ⑨① ASG adapter plate
- ⑨① Grippers

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".

Attachment kit for load compensation



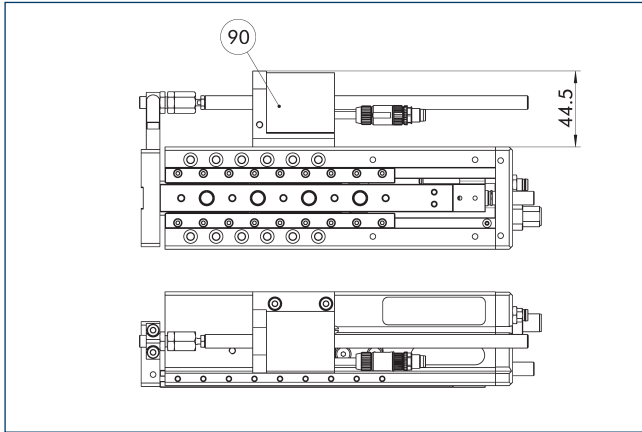
- ⑨① MagSpring®
- ⑨② MS01-37
- ⑨① MS01-20

With its constant force over the complete stroke, the MagSpring® is the perfect load compensation. It ideally supports the linear motor in vertical applications.

Description	ID	
Attachment kit for magnetic spring		
AS-ELP-MS01-20	0315900	
AS-ELP-MS01-37	0315901	

① The matching MagSpring® has to be ordered separately. Please contact us.

Electric piston rod brakes



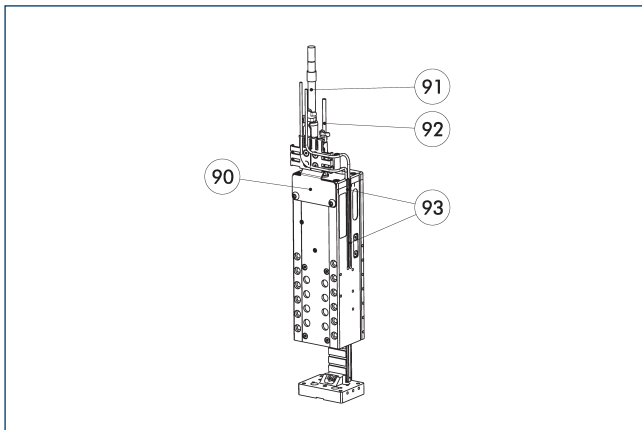
90 ROBA® linear stop

The ROBA® linear stop is an electric holding brake that prevents gravity loaded axes from unintentionally dropping or falling. The holding brake is also suitable for applications in the field of machine safety. Please feel free to contact us.

Description	ID
Mounting kit for ROBA® linear stop	
AS-ELP050-HB-10	1343775
ROBA® linear stop	
ROBA®-linearstop-10	1339906
Voltage supply/signals connection cable - drag chain and torsion resistant, M8 socket, straight	
KA GLN0804-10-00200-A	1310371
KA GLN0804-10-00500-A	1310375
KA GLN0804-10-01000-A	1310379
Fast switching module	
ROBA®-brake-checker	1339913

ⓘ When using an electric piston rod brake, per linear unit a ROBA® linear stop, a mounting kit for a ROBA® linear stop and a rapid switching module for activation are required.

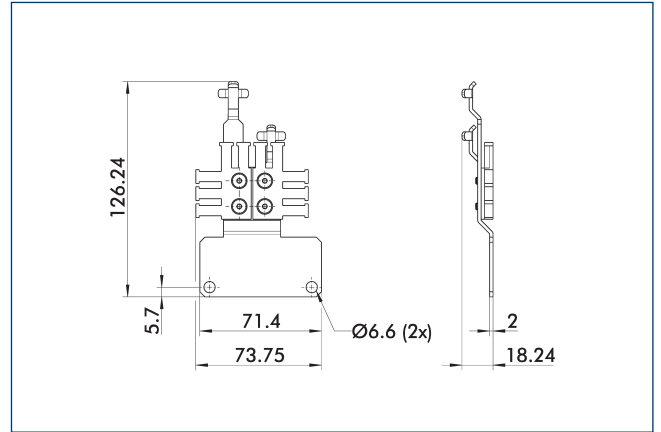
Attachment of strain relief



- 90 Strain relief
- 91 M12 T-coded (power supply)
- 92 M8, 4-pole (control)
- 93 Sensor MMS 22..

Description	ID
Strain relief	
ZE-ELP 050	0315906

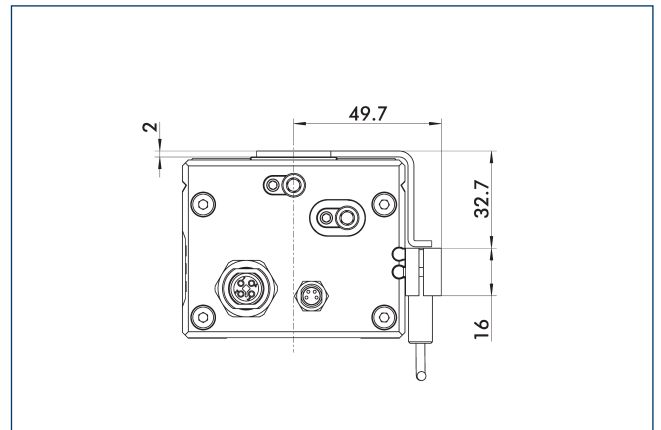
Strain relief



The strain relief protects the electric lines from mechanical load. In addition to lines for power supply and logic, sensor cables can also be fastened.

Description	ID
Strain relief	
ZE-ELP 050	0315906

Attachment kit for proximity switch IN 80

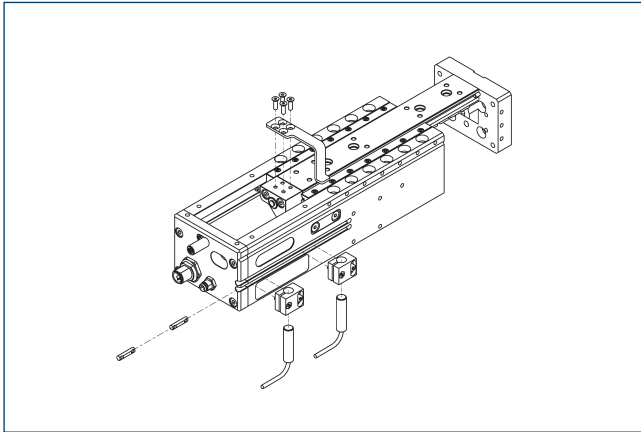


End position monitoring can be mounted with an attachment kit.

Description	ID
Attachment kit for proximity switch	
AS-ELP 050-IN80	0315903

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

IN 80 inductive proximity switches

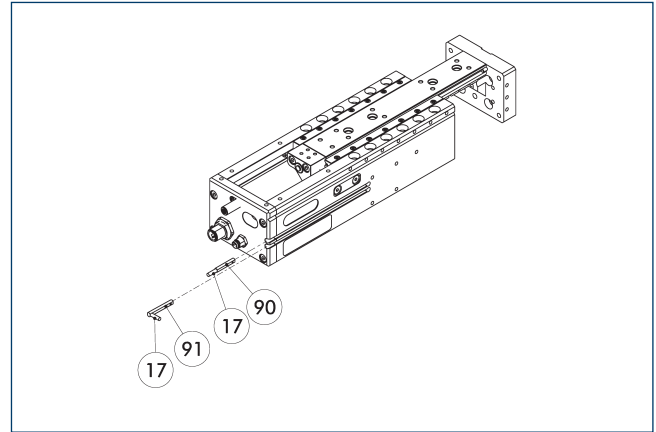


End position monitoring can be mounted with an attachment kit.

Description	ID	Often combined
Attachment kit for proximity switch		
AS-ELP 050-IN80	0315903	
Inductive proximity switch		
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	●
INK 80-S	0301550	
Inductive proximity switch with lateral cable outlet		
IN 80-S-M12-SA	0301587	
IN 80-S-M8-SA	0301483	●
INK 80-S-SA	0301566	

① Two sensors (closer/S) are required for each unit and extension cables are available as an option. This attachment kit needs to be ordered optionally as an accessory. For sensor cables, note the minimum permissible bending radii. These are generally 35 mm.

Electronic magnetic switch MMS



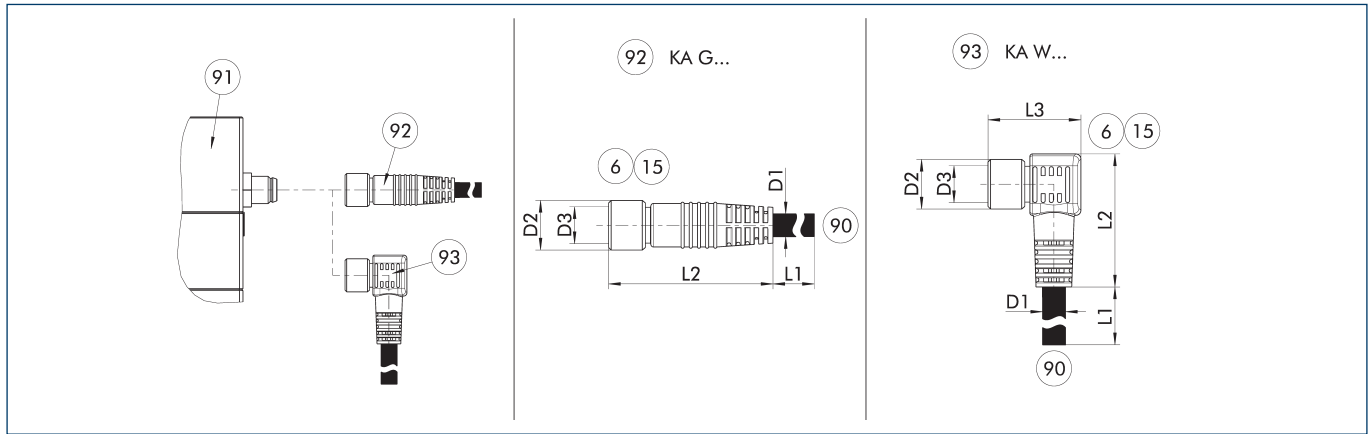
- ①⑦ Cable outlet
 ①⑨ Sensor MMS 22...-SA

End position monitoring for mounting in the C-slot.

Description	ID	Often combined
Electronic magnetic switch		
MMS 22-S-M8-PNP	0301032	
MMSK 22-S-PNP	0301034	
Electronic magnetic switches with lateral cable outlet		
MMS 22-S-M8-PNP-SA	0301042	
MMSK 22-S-PNP-SA	0301044	
Connection cables		
KA BG08-L 3P-0300-PNP	0301622	●
KA BG08-L 3P-0500-PNP	0301623	
KA BW08-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-PNP	0301502	
Clip for connector/socket		
CLI-M8	0301463	
Cable extension		
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	●
Sensor distributor		
V2-M8	0301775	●
V4-M8	0301746	
V8-M8	0301751	

① Two sensors are required per unit for monitoring two positions. On option, extension cables and sensor distributors are available. Additional product variants of the sensor, and further information and technical data can be found in the catalog chapter sensor system.

Voltage supply/signals connection cable



KA G... Connection cable with straight socket
 KA W... Connection cable with angular socket

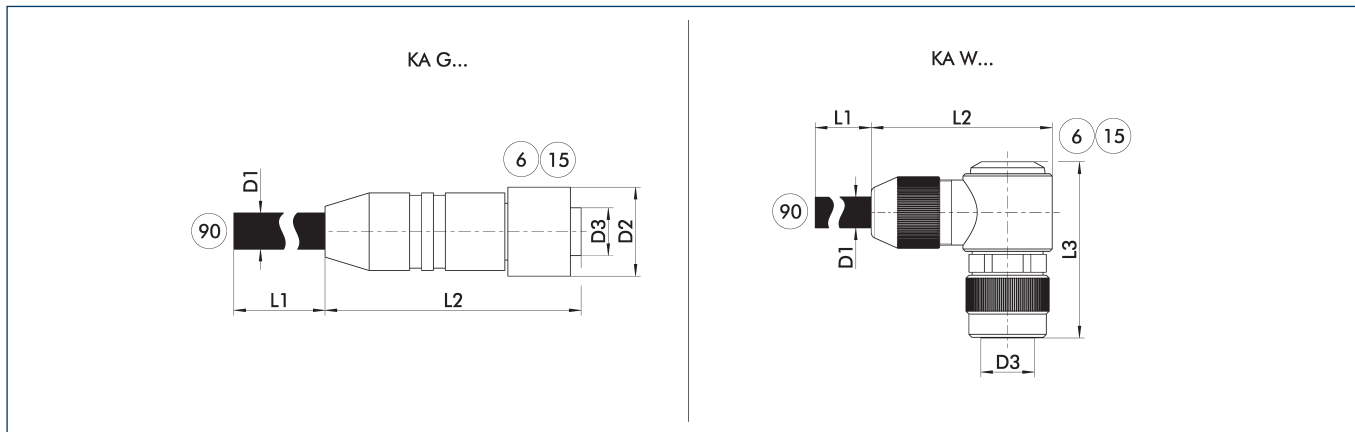
- ⑥ Connection module side
- ⑬ Socket
- ⑨⑩ SAC connection cable with open wire strands
- ⑨① Connection plug component
- ⑨② Cable with straight female connector
- ⑨③ Cable with angled female connector

The connection cable is ideal for connecting the corresponding components to the controller or the power supply unit. The connection cable has a 4-pin M8 socket on one side and an open wire strand 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 [m]	D1 [mm]	L2 [mm]	D2 [mm]	L3 [mm]	D3	Often combined
Voltage supply/signals connection cable - drag chain and torsion resistant, M8 socket, straight								
KA GLN0804-10-00200-A	1310371	2	4.8	33.7	10		M8	
KA GLN0804-10-00500-A	1310375	5	4.8	33.7	10		M8	●
KA GLN0804-10-01000-A	1310379	10	4.8	33.7	10		M8	
KA GLN0804-10-02000-A	1442994	20	4.5	32	10		M8	
Voltage supply/signals connection cable - drag chain and torsion resistant, M8 socket, angled								
KA WLN0804-10-00200-A	1310372	2	4.8	27.9	10	18.9	M8	
KA WLN0804-10-00500-A	1310376	5	4.8	27.9	10	18.9	M8	
KA WLN0804-10-01000-A	1310381	10	4.8	27.9	10	18.9	M8	
KA WLN0804-10-02000-A	1442996	20	4.5	25	10	20	M8	

① 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.

Voltage supply connection cable



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

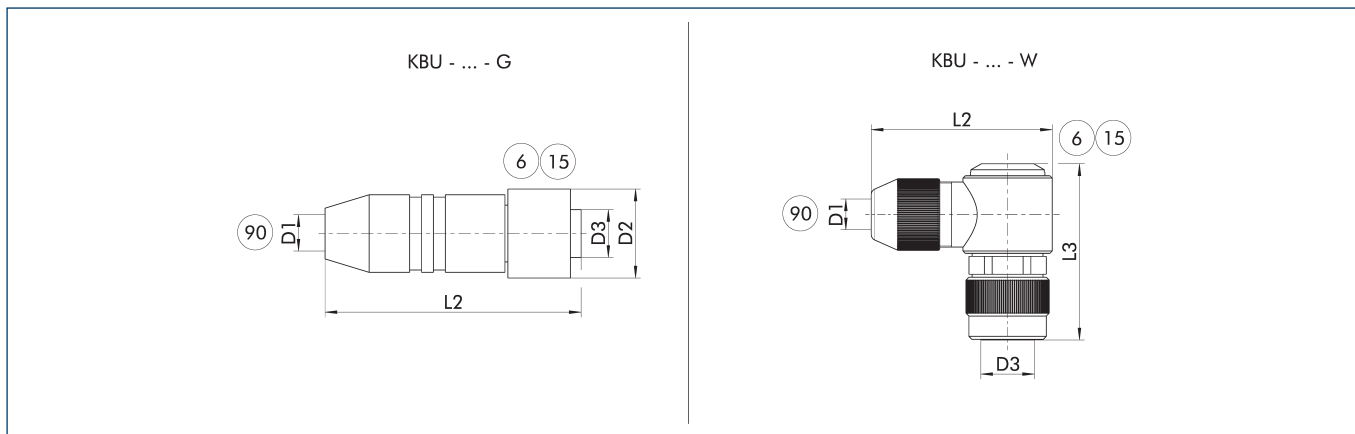
6 Connection module side
 15 Socket
 90 Cable end with open wire strands

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

Description	ID	L1 [m]	D1 [mm]	L2 [mm]	D2 [mm]	L3 [mm]	D3
Voltage supply connection cable - cable track compatible							
KA GLN12T0150-LK-00500-A	0310262	5	9.6	51	15		M12 T-coded
KA GLN12T0150-LK-01000-A	0310264	10	9.6	51	15		M12 T-coded
KA WLN12T0150-LK-00500-A	0310263	5	9.6	47.5		35	M12 T-coded
KA WLN12T0150-LK-01000-A	0310265	10	9.6	47.5		35	M12 T-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.

Plug-in connector power supply/signals



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

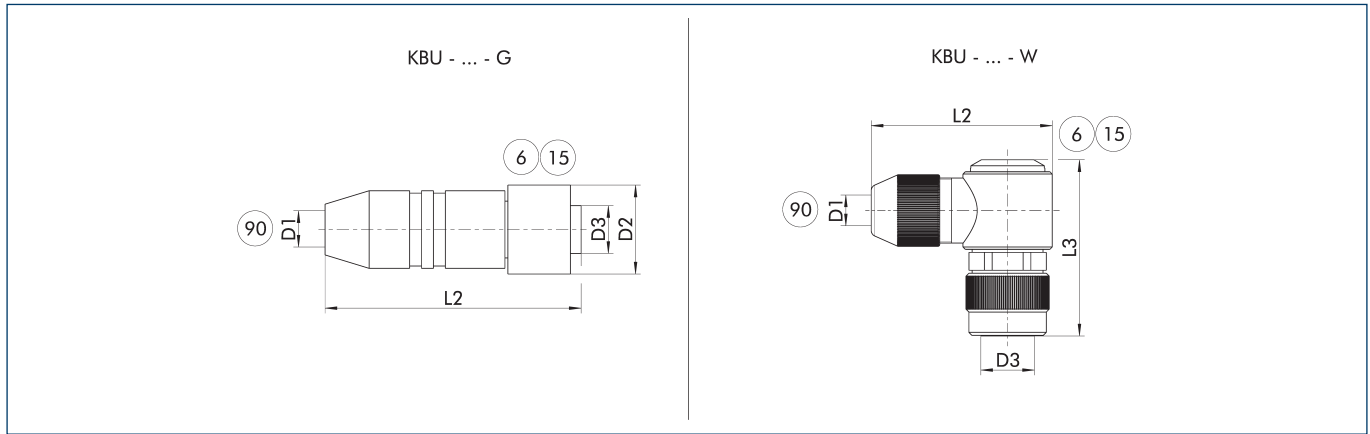
6 Connection module side
 15 Socket
 90 D1 - max. diameter connection cable

The plug connectors are used to connect the SCHUNK products to the voltage supply. A customer cable can be used for this. The individual wire strands can be soldered to the solder pins of the connector.

Description	ID	D1 (max.) [mm]	L2 [mm]	D2 [mm]	L3 [mm]	D3
Cable connector						
KBU-M8-G 4P	1506418	5	37	12		M8
KBU-M8-W 4P	1506422	5	25		28	M8

ⓘ For the connection cable, a cross-section for each individual wire strand of 0.25 mm² is recommended. Please refer to the product documentation for information about max. cable length and min. wire cross section.

Power supply plug-in connector



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

⑥ Connection module side ⑨⑩ D1 - max. diameter connection cable
 ⑮ Socket

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.) [mm]	L2 [mm]	D2 [mm]	L3 [mm]	D3
Power supply plug-in connector						
KBU-M12T-G 4P	0310260	10	58	20.2		M12 T-coded
KBU-M12T-W 4P	1001514	10	43	20.2	39	M12 T-coded

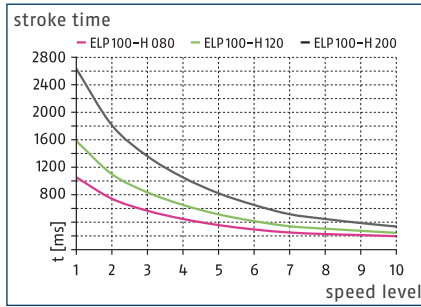
① For the connection cable, a cross-section for each individual wire strand of 1.5 mm² is recommended. Please refer to the product documentation for information about max. cable length and min. wire cross section.

ELP 100

Compact linear module

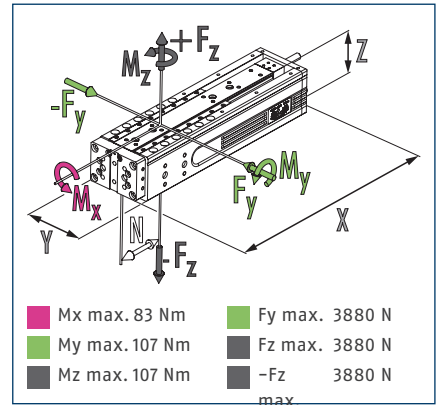


Travel time, horizontal



① The diagram shows the average stroke time in horizontal installation position, with maximum stroke, and constant maximum payload. We will gladly support you in designing further applications.

Dimensions and maximum loads

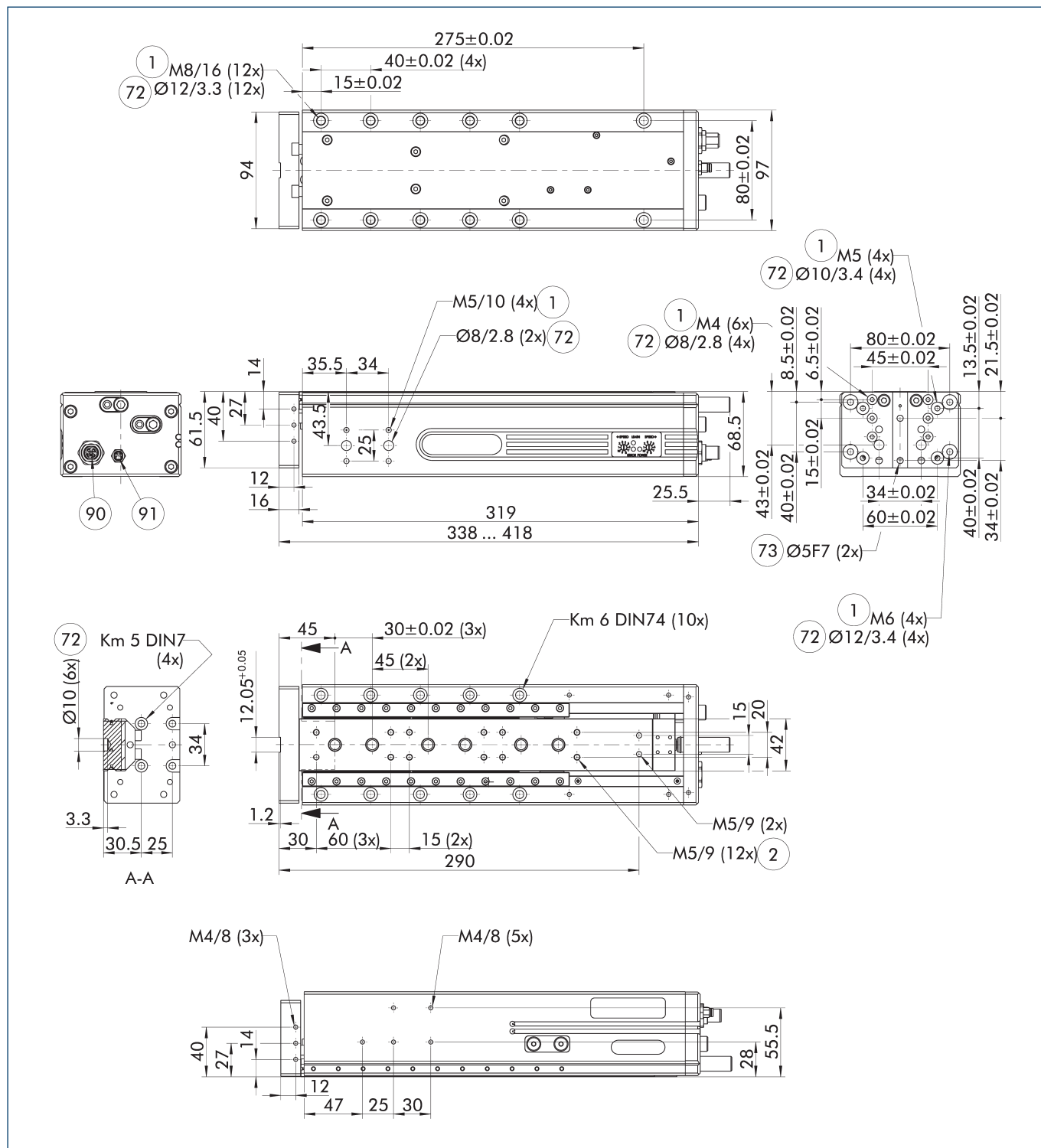


① The indicated forces and moments are maximum values for individual loading. If several forces and/or moments are applied at the same time, the maximum permitted individual values will be lower.

Technical data

Description		ELP 100-H080	ELP 100-H120	ELP 100-H200
ID		0315748	0315756	0315764
General operating data				
Drive concept		Linear direct drive	Linear direct drive	Linear direct drive
Max. stroke	[mm]	80	120	200
Nominal force	[N]	104	104	104
Max. payload (horizontal)	[kg]	6	6	6
Max. payload (vertical)	[kg]	4	4	4
Repeat accuracy	[mm]	±0.01	±0.01	±0.01
Dead weight including slide	[kg]	6.6	7.2	8.3
Weight of slide	[kg]	1.78	1.98	2.4
Min./max. ambient temperature	[°C]	5/55	5/55	5/55
IP protection class		20	20	20
Cleanroom class ISO 14644-1:2015		5	5	5
Noise emission	[dB(A)]	68	68	68
Clearance N (for moment load)	[mm]	179	219	299
Dimensions X x Y x Z	[mm]	338 x 97 x 68.5	376 x 97 x 68.5	454 x 97 x 68.5
Electrical operating data				
Nominal voltage	[V]	24	24	24
Nominal current	[A]	1.6	1.6	1.6
Max. current	[A]	5.9	5.9	5.9
Controller electronics		integrated	integrated	integrated
Communication interface		Digital inputs	Digital inputs	Digital inputs
Number of digital I/O		2/-	2/-	2/-
Rated current logic	[A]	0.06	0.06	0.06
Options and their characteristics				
H1 grease version		1487974	1487975	1487978

Main view ELP 100-H080



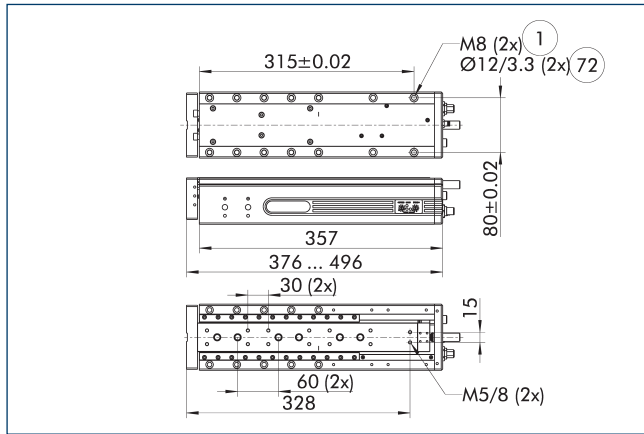
The drawing shows the basic version of the linear module with retracted slide and without dimensional consideration of the options described below.

- ① Connection linear unit
- ② Attachment connection
- ⑦ Fit for centering sleeves
- ⑦③ Fit for centering pins
- ⑨⑩ M12 T-coded (power supply)
- ⑨① M8, 4-pole (control)

ELP 100

Compact linear module

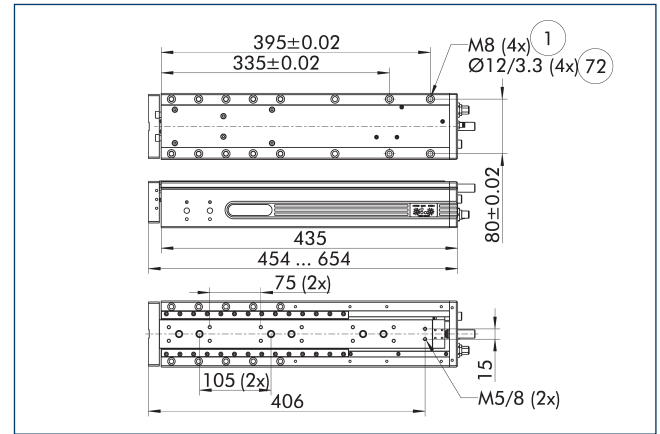
Stroke variant ELP 100-H120



- ① Connection linear unit
- ⑦② Fit for centering sleeves

The drawing shows changes in dimensions of the version with a different stroke compared to the version shown in the main view.

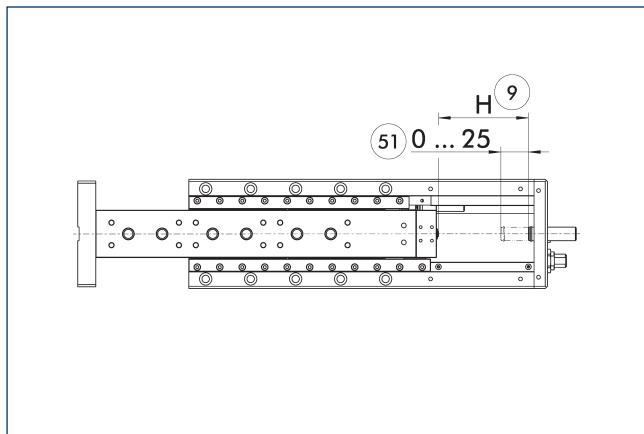
Stroke variant ELP 100-H200



- ① Connection linear unit
- ⑦② Fit for centering sleeves

The drawing shows changes in dimensions of the version with a different stroke compared to the version shown in the main view.

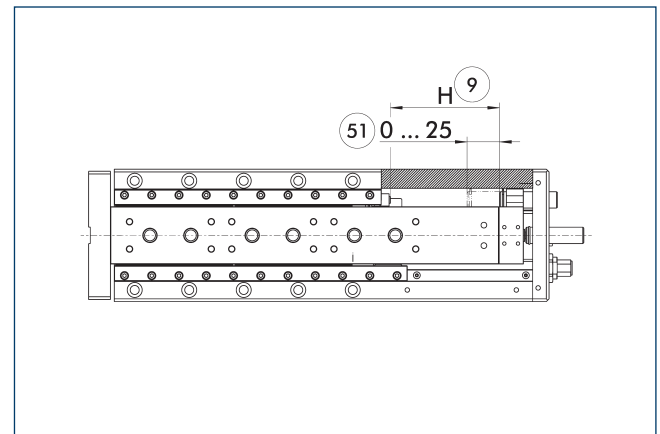
"Retracted" fine adjustment



- ⑨ Nominal stroke
- ⑤① Stroke adjustment range

This illustration shows the possible fine adjustment of the retracted position.

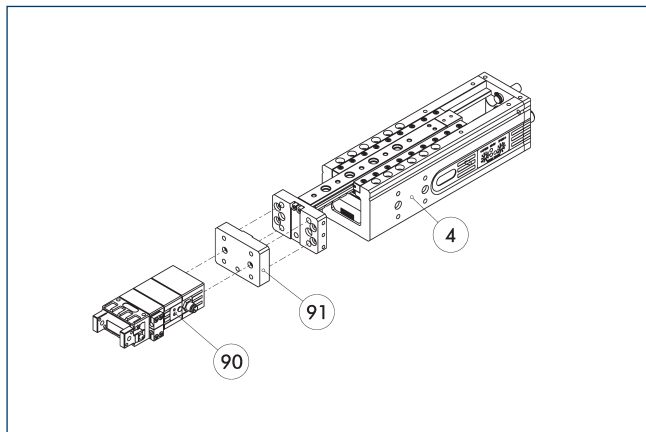
"Extended" fine adjustment



- ⑨ Nominal stroke
- ⑤① Stroke adjustment range

This illustration shows the possible fine adjustment of the extended position.

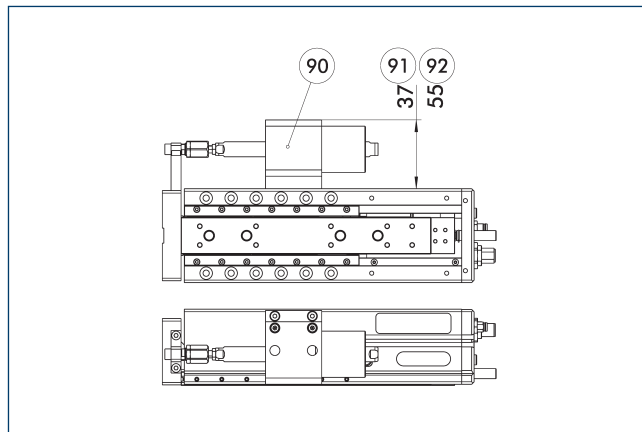
Modular Assembly Automation



- ④ Linear unit
- ⑨① ASG adapter plate
- ⑨① Grippers

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".

Attachment kit for load compensation



- ⑨① MagSpring®
- ⑨② MS01-37
- ⑨① MS01-20

With its constant force over the complete stroke, the MagSpring® is the perfect load compensation. It ideally supports the linear motor in vertical applications.

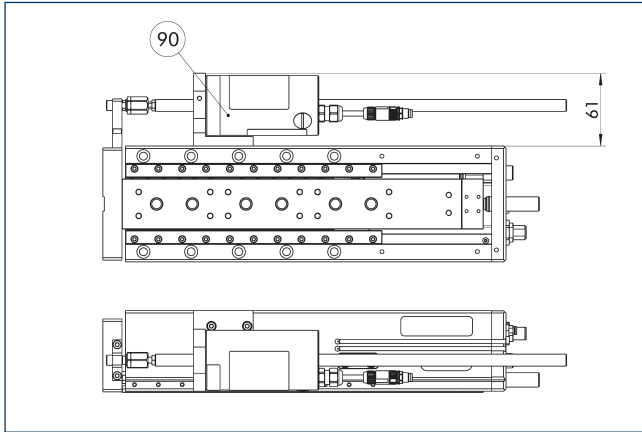
Description	ID
Attachment kit for magnetic spring	
AS-ELP-MS01-37	0315901

① The matching MagSpring® has to be ordered separately. Please contact us.

ELP 100

Compact linear module

Electric piston rod brakes



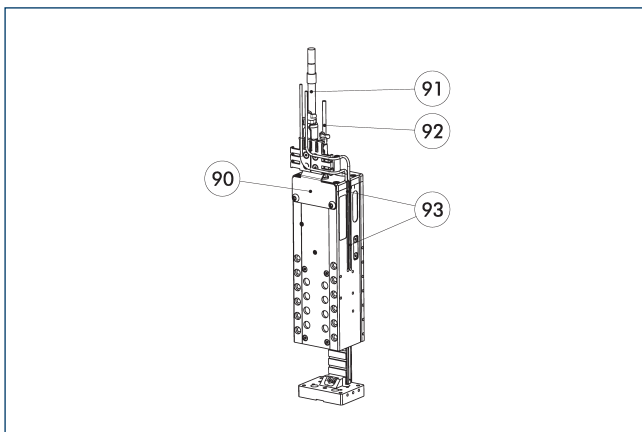
90 ROBA® linear stop

The ROBA® linear stop is an electric holding brake that prevents gravity loaded axes from unintentionally dropping or falling. The holding brake is also suitable for applications in the field of machine safety. Please feel free to contact us.

Description	ID	
Mounting kit for ROBA® linear stop		
AS-ELP100-HB-20	1339902	
ROBA® linear stop		
ROBA®-linearstop-20	1339909	
Voltage supply/signals connection cable - drag chain and torsion resistant, M8 socket, straight		
KA GLN0804-10-00200-A	1310371	
KA GLN0804-10-00500-A	1310375	
KA GLN0804-10-01000-A	1310379	
Fast switching module		
ROBA®-brake-checker	1339913	

ⓘ When using an electric piston rod brake, per linear unit a ROBA® linear stop, a mounting kit for a ROBA® linear stop and a rapid switching module for activation are required.

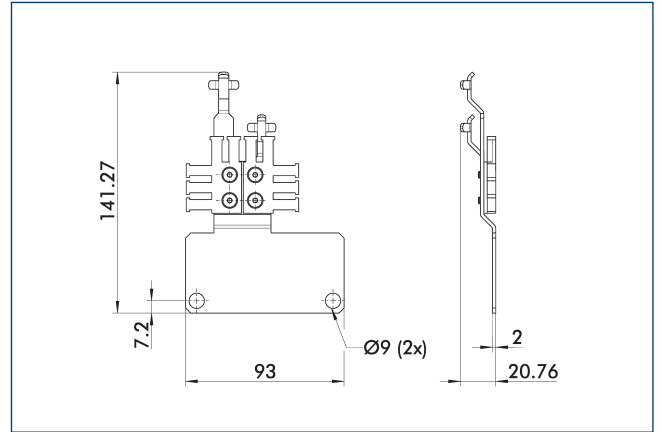
Attachment of strain relief



- 90 Strain relief
- 91 M12 T-coded (power supply)
- 92 M8, 4-pole (control)
- 93 Sensor MMS 22..

Description	ID	
Strain relief		
ZE-ELP 100	0315907	

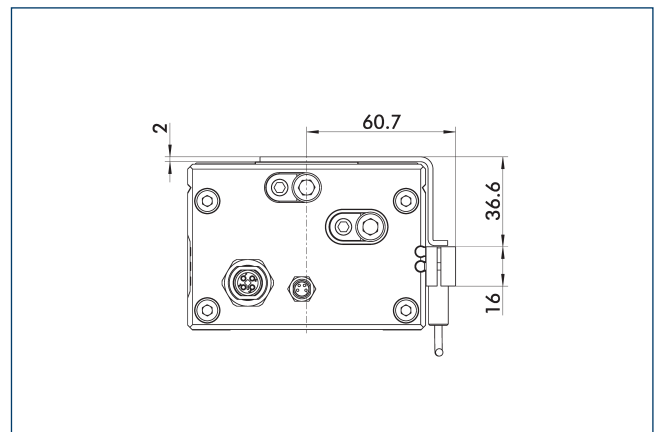
Strain relief



The strain relief protects the electric lines from mechanical load. In addition to lines for power supply and logic, sensor cables can also be fastened.

Description	ID	
Strain relief		
ZE-ELP 100	0315907	

Attachment kit for proximity switch IN 80

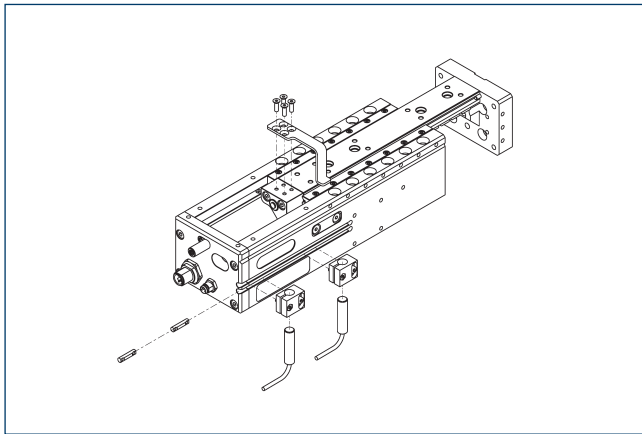


End position monitoring can be mounted with an attachment kit.

Description	ID	
Attachment kit for proximity switch		
AS-ELP 100-IN80	0315904	

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

IN 80 inductive proximity switches

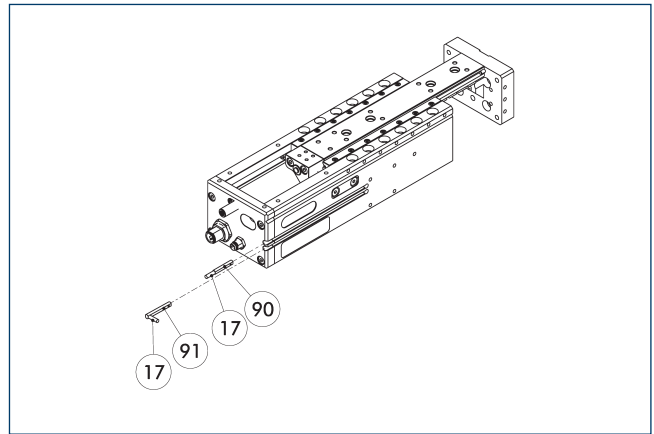


End position monitoring can be mounted with an attachment kit.

Description	ID	Often combined
Attachment kit for proximity switch		
AS-ELP 100-IN80	0315904	
Inductive proximity switch		
IN 80-S-M12	0301578	
IN 80-S-M8	0301478	●
INK 80-S	0301550	
Inductive proximity switch with lateral cable outlet		
IN 80-S-M12-SA	0301587	
IN 80-S-M8-SA	0301483	●
INK 80-S-SA	0301566	

① Two sensors (closer/S) are required for each unit and extension cables are available as an option. This attachment kit needs to be ordered optionally as an accessory. For sensor cables, note the minimum permissible bending radii. These are generally 35 mm.

Electronic magnetic switch MMS



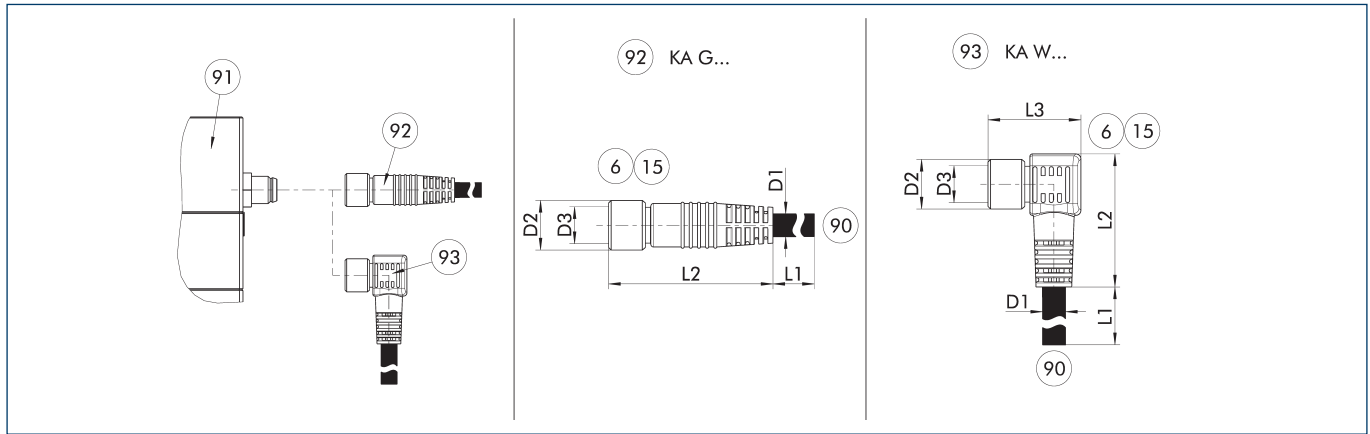
- ①⑦ Cable outlet
- ①⑨ Sensor MMS 22...
- ①⑩ Sensor MMS 22..
- ①⑨① Sensor MMS 22...-SA

End position monitoring for mounting in the C-slot.

Description	ID	Often combined
Electronic magnetic switch		
MMS 22-S-M8-PNP	0301032	
MMSK 22-S-PNP	0301034	
Electronic magnetic switches with lateral cable outlet		
MMS 22-S-M8-PNP-SA	0301042	
MMSK 22-S-PNP-SA	0301044	
Connection cables		
KA BG08-L 3P-0300-PNP	0301622	●
KA BG08-L 3P-0500-PNP	0301623	
KA BW08-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-PNP	0301502	
Clip for connector/socket		
CLI-M8	0301463	
Cable extension		
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	●
Sensor distributor		
V2-M8	0301775	●
V4-M8	0301746	
V8-M8	0301751	

① Two sensors are required per unit for monitoring two positions. On option, extension cables and sensor distributors are available. Additional product variants of the sensor, and further information and technical data can be found in the catalog chapter sensor system.

Voltage supply/signals connection cable



KA G... Connection cable with straight socket
 KA W... Connection cable with angular socket

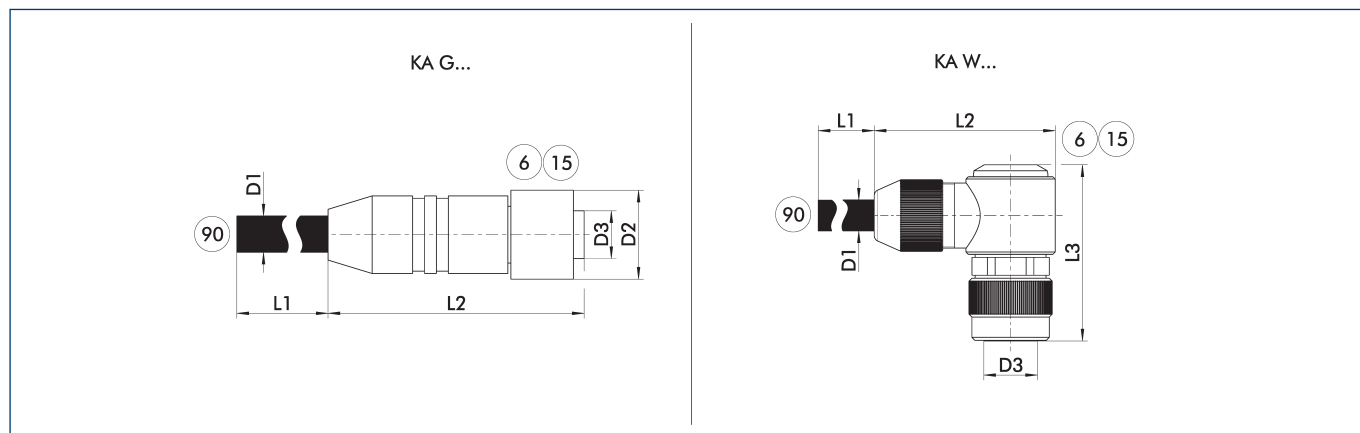
- ⑥ Connection module side
- ⑬ Socket
- ⑨⑩ SAC connection cable with open wire strands
- ⑨① Connection plug component
- ⑨② Cable with straight female connector
- ⑨③ Cable with angled female connector

The connection cable is ideal for connecting the corresponding components to the controller or the power supply unit. The connection cable has a 4-pin M8 socket on one side and an open wire strand 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 [m]	D1 [mm]	L2 [mm]	D2 [mm]	L3 [mm]	D3	Often combined
Voltage supply/signals connection cable - drag chain and torsion resistant, M8 socket, straight								
KA GLN0804-10-00200-A	1310371	2	4.8	33.7	10		M8	
KA GLN0804-10-00500-A	1310375	5	4.8	33.7	10		M8	●
KA GLN0804-10-01000-A	1310379	10	4.8	33.7	10		M8	
KA GLN0804-10-02000-A	1442994	20	4.5	32	10		M8	
Voltage supply/signals connection cable - drag chain and torsion resistant, M8 socket, angled								
KA WLN0804-10-00200-A	1310372	2	4.8	27.9	10	18.9	M8	
KA WLN0804-10-00500-A	1310376	5	4.8	27.9	10	18.9	M8	
KA WLN0804-10-01000-A	1310381	10	4.8	27.9	10	18.9	M8	
KA WLN0804-10-02000-A	1442996	20	4.5	25	10	20	M8	

① 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.

Voltage supply connection cable



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

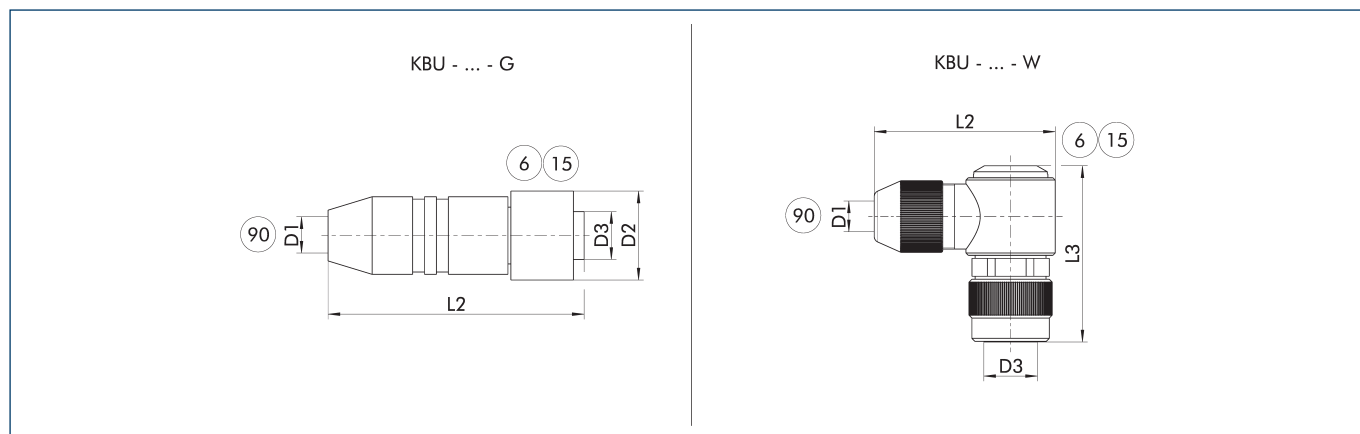
6 Connection module side
 15 Socket
 90 Cable end with open wire strands

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

Description	ID	L1 [m]	D1 [mm]	L2 [mm]	D2 [mm]	L3 [mm]	D3
Voltage supply connection cable - cable track compatible							
KA GLN12T0150-LK-00500-A	0310262	5	9.6	51	15		M12 T-coded
KA GLN12T0150-LK-01000-A	0310264	10	9.6	51	15		M12 T-coded
KA WLN12T0150-LK-00500-A	0310263	5	9.6	47.5		35	M12 T-coded
KA WLN12T0150-LK-01000-A	0310265	10	9.6	47.5		35	M12 T-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.

Plug-in connector power supply/signals



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 products to the voltage supply. A customer cable can be used for this. The individual wire strands can be soldered to the solder pins of the connector.

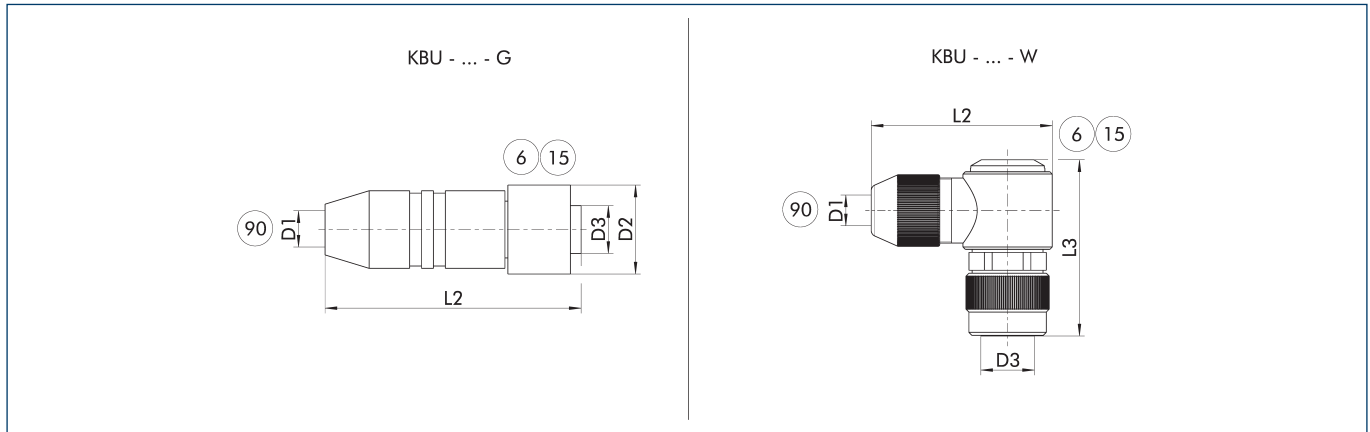
Description	ID	D1 (max.) [mm]	L2 [mm]	D2 [mm]	L3 [mm]	D3
Cable connector						
KBU-M8-G 4P	1506418	5	37	12		M8
KBU-M8-W 4P	1506422	5	25		28	M8

ⓘ For the connection cable, a cross-section for each individual wire strand of 0.25 mm² is recommended. Please refer to the product documentation for information about max. cable length and min. wire cross section.

ELP 100

Compact linear module

Power supply plug-in connector



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

⑥ Connection module side ⑨⑩ D1 - max. diameter connection cable
 ⑮ Socket

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.) [mm]	L2 [mm]	D2 [mm]	L3 [mm]	D3
Power supply plug-in connector						
KBU-M12T-G 4P	0310260	10	58	20.2		M12 T-coded
KBU-M12T-W 4P	1001514	10	43	20.2	39	M12 T-coded

① 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.



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