



Superior Clamping and Gripping



## Product Information

Miniature rotary unit ERD

# ERD

Miniature rotary unit

## Fast. Compact. Flexible.

### Torque motor ERD

Powerful torque motor with absolute encoder and electric and pneumatic rotary feed-through

#### Field of application

For all applications with exceptional requirements in terms of achievable repeatability, rotary speed, acceleration and tool life.

#### Advantages – Your benefits

**With absolute position measurement system** Less programming effort and time saving when commissioning and in operation

**High dynamics for shorter cycle times** therefore a high productivity is achieved

**Integrated air and electric feed-through** for safe energy supply of grippers

**Almost no wear parts** For long service life and reliability of the system

**No mechanical play between the drive components** for flexible response behavior and high positioning accuracy

**Optionally certified safety devices according to SIL2/PLd** with the HIPERFACE® and DRIVE-CliQ interfaces for applications with high standards in the area of machine safety



Sizes  
Quantity: 3



Weight  
1.2 .. 1.8 kg



Torque  
0.4 .. 1.2 Nm



Repeat accuracy  
0.01°



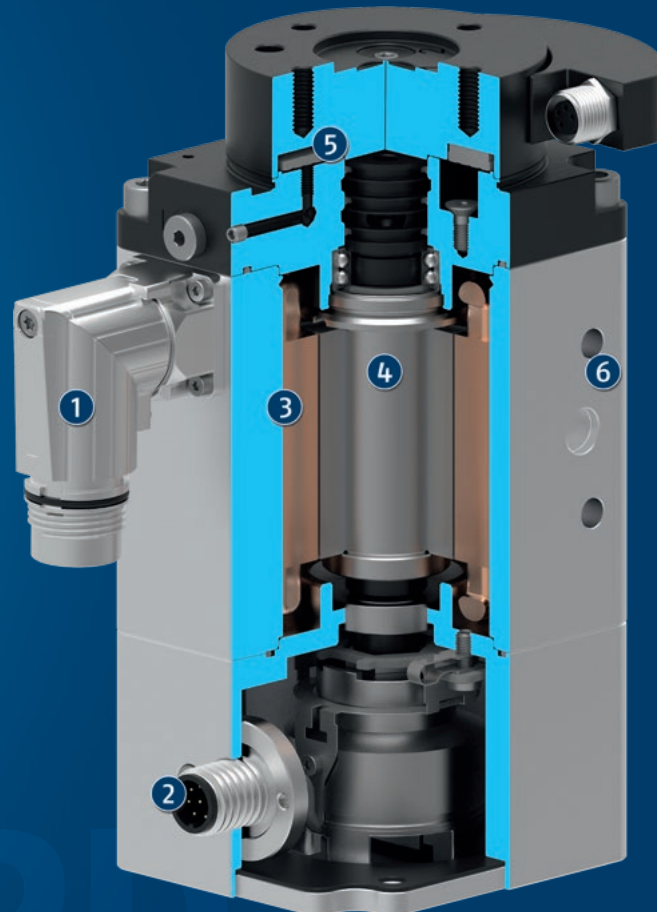
Angle of rotation  
>360°

## Functional description

The unit is driven by a 3-phase brushless synchronous motor with permanent excitation.

As it is a direct drive, it no longer needs mechanical transmission elements such as gears, eliminating the

resulting inaccuracies.



- ① **Motor plug**  
Standard M17 connector for comfortable connection of motor phases and temperature sensor
- ② **Absolute encoder plug**  
Easy connection of encoder cable by default M12 connectors
- ③ **Fixed primary part**  
Stator with 3-phase ferromagnetic core coil
- ④ **Secondary component**  
Iron girder with integrated permanent magnets as rotor
- ⑤ **Energy feed-through**  
Integrated 2-fold air feed-through and optional 2-fold electric feed-through
- ⑥ **Housing**  
is weight-optimized due to the use of high-strength aluminum alloy

## General notes about the series

**Housing material:** Aluminum alloy, coated

**Drive:** Torque motor, 3-phase

**Stroke measuring system:** Motor feedback system for absolute measurement, multiturn version (up to 4,096 RPM), with HIPERFACE and DRIVE-CLiQ interfaces

**Drive controller:** Bosch Rexroth IndraDrive Cs control unit is supported as standard; matching parameters supplied on DVD, other manufacturers available on request.

**Scope of delivery:** Enclosed accessory pack containing centering sleeve, assembly and operating manual, commissioning DVD for SCHUNK motors

**Warranty:** 24 months

**Service life characteristics:** on request

**Swiveling times:** The swiveling times are purely the times when the module moves from rest position to rest position. Delays caused by the PLC or the drive controller are not included and to be taken into consideration when determining cycle times. Load-dependent rest periods may have to be included in the cycle time.

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

**Repeat accuracy:** The repeat accuracy is defined as the spread of the target position after 100 consecutive positioning cycles.

**Ambient conditions:** The modules are primarily designed for the use in clean to slightly contaminated environments. 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.

**Safety notes:** Caution: Magnetic field! This particularly applies for persons with implanted medical devices, such as pacemakers, hearing aids, etc.

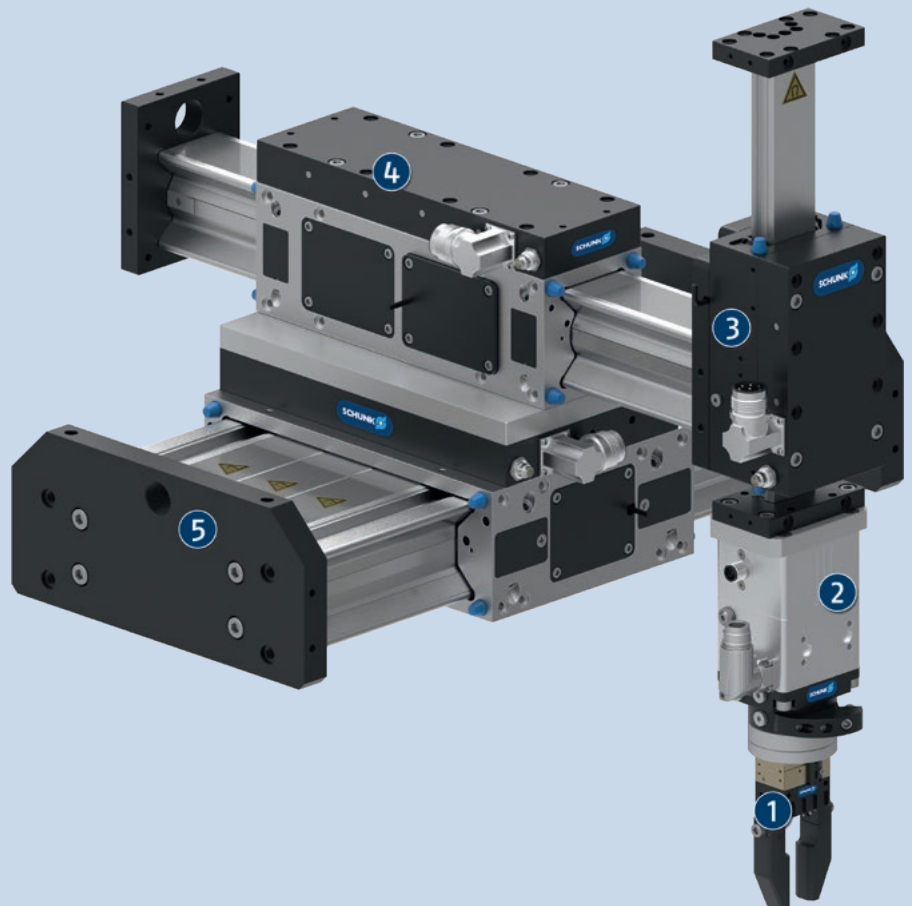
**Nominal currents:** The rated currents can be permanently actuated. With regard to all the currents which are ranging above the nominal current up to the maximum current, the notes of the individual product documentation has to be respected.

**Cleanroom class ISO 14644-1:2015:** 2

## Application example

Linear gripper rotary unit for dynamic movement of small components.

- 1 2-finger parallel gripper MPG-plus
- 2 Miniature rotary module ERD
- 3 Stroke module LDK
- 4 Universal linear module LDN
- 5 Universal linear module LDT



## SCHUNK offers more ...

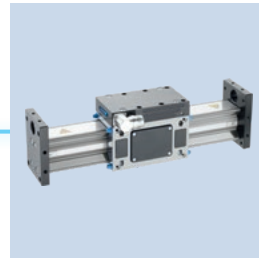
The following components make the product even more productive – the suitable addition for the highest functionality, flexibility, reliability, and controlled production.



Gripper for small components



Gripper for small components



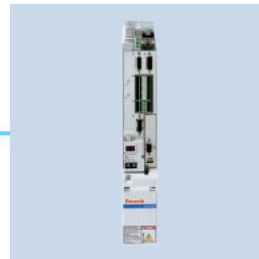
Linear module



Pick & Place Unit



Power and encoder cables



Controller



Room gantry

① For more information on these products can be found on the following product pages or at [schunk.com](http://schunk.com).

## Options and special information

**Pneumatic rotary feed-through:** The rotary module ERD comes with two pneumatic feed-throughs by Default. The pneumatic hoses can be connected radially to the rotary table on the output side. Alternatively, hose-free direct connections are also available in the center of the rotary table.

**Electrical rotary feed-through:** For versions with electrical feed-through, a feed-through with up to four electrical signals is possible in addition to the integrated pneumatic feed-through. Connected on the drive side using an M8 connector (4-pin). The rotary table has a radially aligned M8 socket (4-pin) on the output side.

**Connection of power and sensor cables:** The rotary module is connected to the drive controller via separate power and encoder cables. The rotary module includes an M17 plug connector for connecting the power cable and an M12 plug connector for connecting the sensor cable. See the accessory section of the catalog chapter for matching connecting cables. Customized lengths or cable extensions are available on request.

**Certified encoder system:** The encoder systems with the HIPERFACE® (optional) and DRIVE-CLiQ interfaces are certified according to SIL2/PLd. This means that even demanding applications with high requirements in the area of machine safety can be implemented. Please contact us for further information.

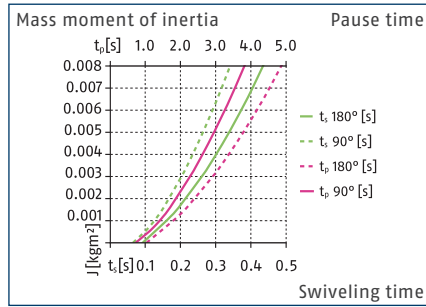
**NEW: Version with food –compliant lubrication (H1G):** as a solution for an easy entry into medical technology, lab automation, pharmaceutical and food industry. The requirements of EN 1672-2:2020 are not fully met.

# ERD 04

Miniature rotary unit

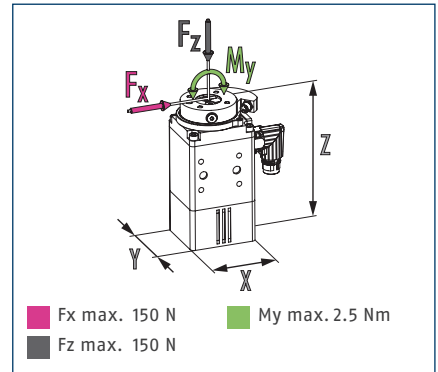


## Swivel time diagram



Swivel and pause times apply for motions without restricted speeds at max. current. Reducing the max. current increases swivel periods and reduces rest periods. Higher mass moments of inertia are possible. Diagrams only apply for sufficiently rigid designs. Please contact us for assistance with the design of your application.

## Dimensions and maximum loads



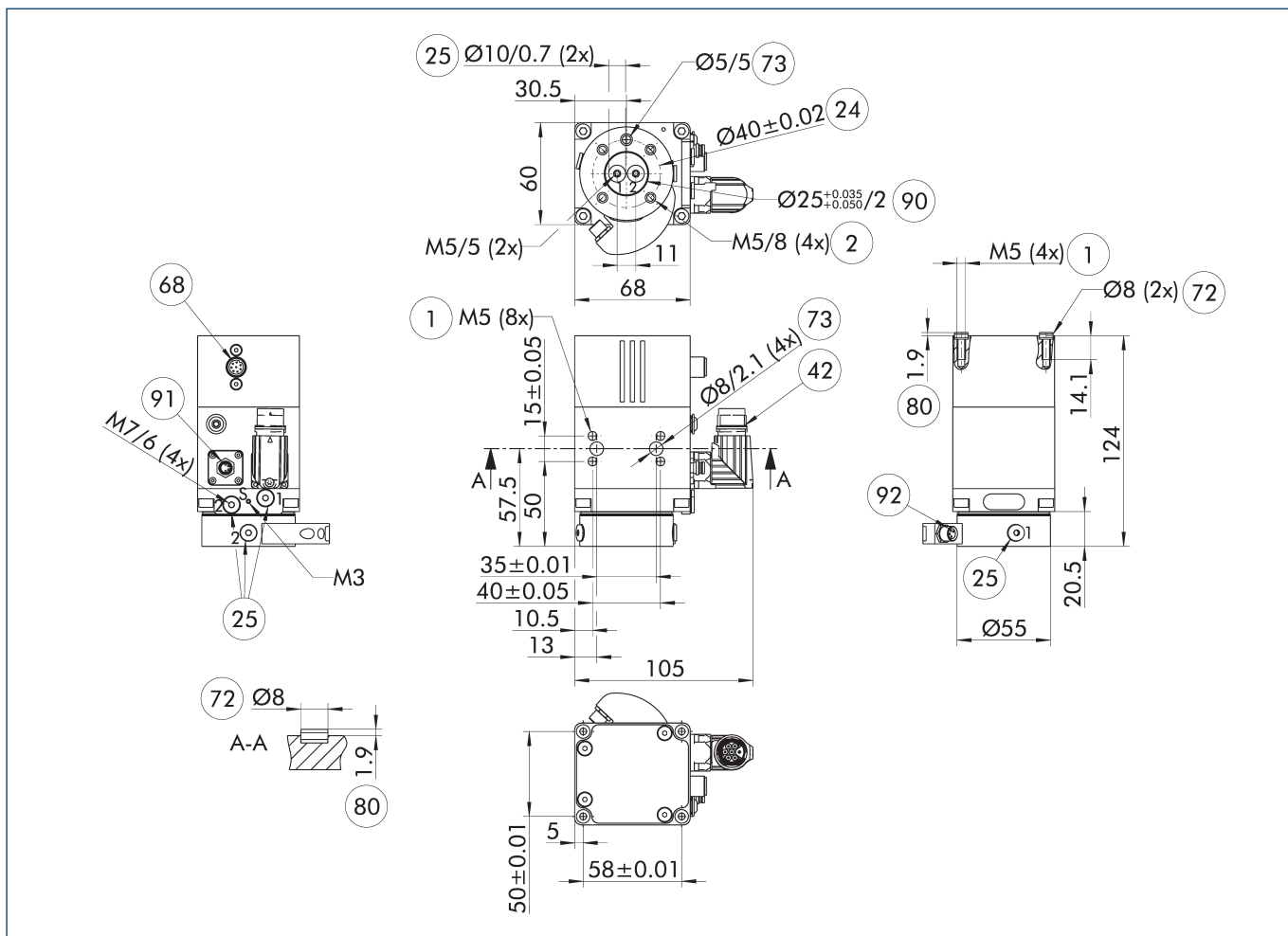
Moments and forces may occur simultaneously.

## Technical data

Description		ERD 04-40-D-H-N	ERD 04-40-D-D-2	ERD 04-40-D-H-2	ERD 04-40-N-H-N	ERD 04-40-N-D-2	ERD 04-40-N-H-2
ID		0331220	0331222	1484513	0331224	0331226	1484515
<b>General operating data</b>							
Angle of rotation	[°]	>360	>360	>360	>360	>360	>360
Rated/maximum torque	[Nm]	0.4/1.2	0.4/1.2	0.4/1.2	0.4/1.2	0.4/1.2	0.4/1.2
Max. RPM	[1/min]	600	600	600	600	600	600
Max. permissible mass moment of inertia	[kgm <sup>2</sup> ]	0.008	0.008	0.008	0.008	0.008	0.008
Repeat accuracy	[°]	0.01	0.01	0.01	0.01	0.01	0.01
Weight	[kg]	1.2	1.2	1.2	1.2	1.2	1.2
Min./max. ambient temperature	[°C]	10/40	10/40	10/40	10/40	10/40	10/40
IP protection class		40	40	40	40	40	40
Dimensions X x Y x Z	[mm]	68 x 60 x 124	68 x 60 x 139	68 x 60 x 124	68 x 60 x 124	68 x 60 x 139	68 x 60 x 124
<b>Electrical operating data</b>							
Intermediate circuit voltage	[V]	530	530	530	530	530	530
Rated/maximum current	[A]	0.43/1.29	0.43/1.29	0.43/1.29	0.43/1.29	0.43/1.29	0.43/1.29
Encoder system		Encoder (absolute)	Encoder (absolute)	Encoder (absolute)	Encoder (absolute)	Encoder (absolute)	Encoder (absolute)
Output signal		HIPERFACE®	DRIVE-CLiQ	HIPERFACE®	HIPERFACE®	DRIVE-CLiQ	HIPERFACE®
SIL certification		not certified	2	2	not certified	2	2
<b>Rotary feed-through operating data</b>							
Number of pneumatic feed-throughs		2	2	2	2	2	2
Max. operating pressure	[bar]	6	6	6	6	6	6
Number of electrical feed-throughs		4	4	4			
Max. voltage (DC)	[V]	60	60	60			
Max. current	[A]	1	1	1			
<b>Options and their characteristics</b>							
H1 grease version			1488528	1488541		1488545	1488615

The peak torques serve as short-term drive reserves when accelerating and delaying.

Main view



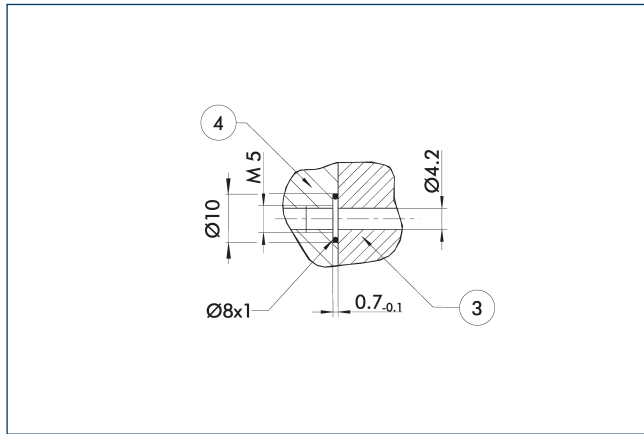
The drawing shows the rotary module with pneumatic and electrical rotary feed-throughs in IP protection class 40 and HIPERFACE measurement system interface.

- S Air purge connection (0.5 ... 1 bar)
- ① Connection swivel unit
- ② Attachment connection
- ④ Bolt circle
- ⑤ Fluid feed-through
- ④ Motor plug
- ⑥ Shaft encoder connection
- ⑦ Fit for centering sleeves
- ⑦ Fit for centering pins
- ⑧ Depth of the centering sleeve hole in the counter part
- ⑨ Fit for centering
- ⑩ Input for 4 pole sensor feed-through
- ⑪ Output for a 4-pin sensor feed-through

# ERD 04

Miniature rotary unit

## Hose-free direct connection M5

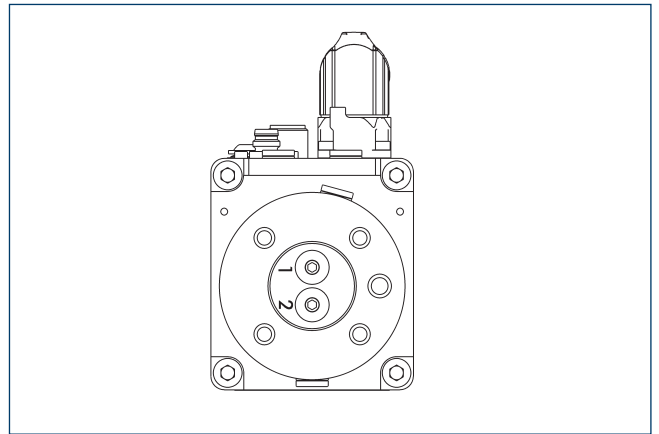


③ Adapter

④ Rotary unit

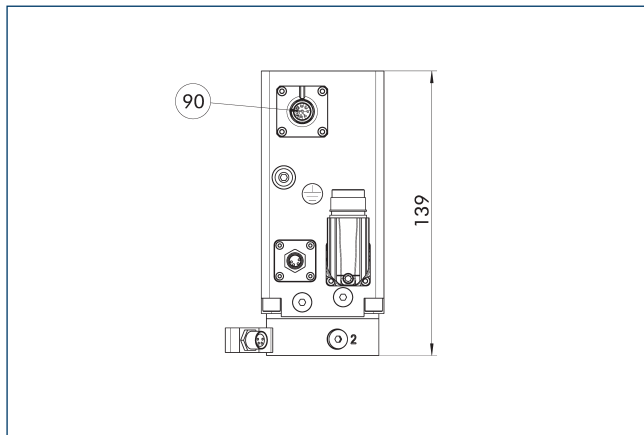
The direct connection is used for supplying compressed air without hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.

## Without an electrical rotary feed-through



In this option, no sensor signals can be transmitted.

## DRIVE-CLiQ interface

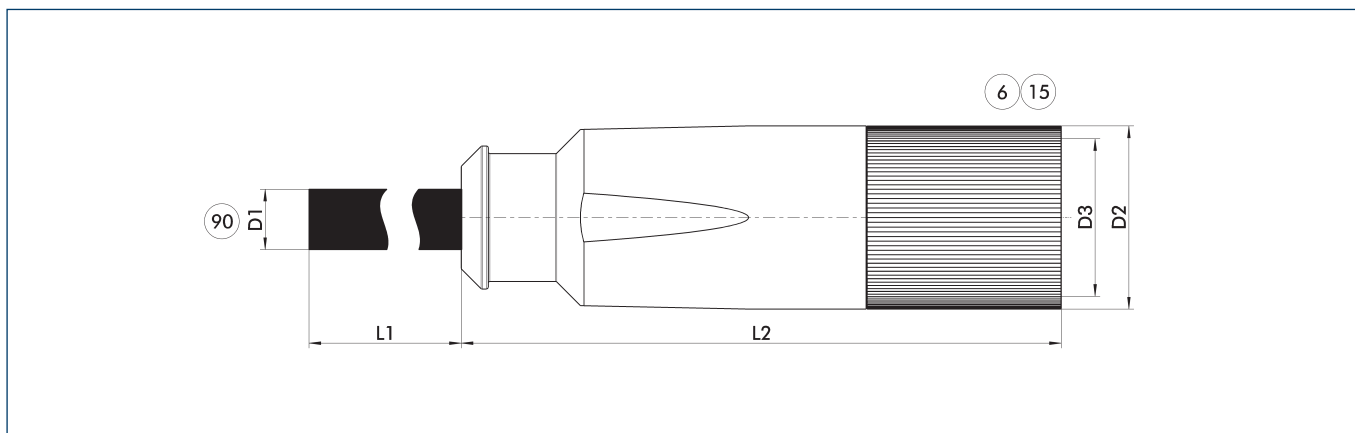


⑨⑩ Shaft encoder connection for DRIVE-CLiQ

The view shows the height of the ERD with the absolute measuring system and DRIVE-CLiQ interface.



Power cable



Connection cables such as power cables and encoder cables are specifically designed for connecting SCHUNK products with drive control units. We will gladly help you to select the right connection cables.

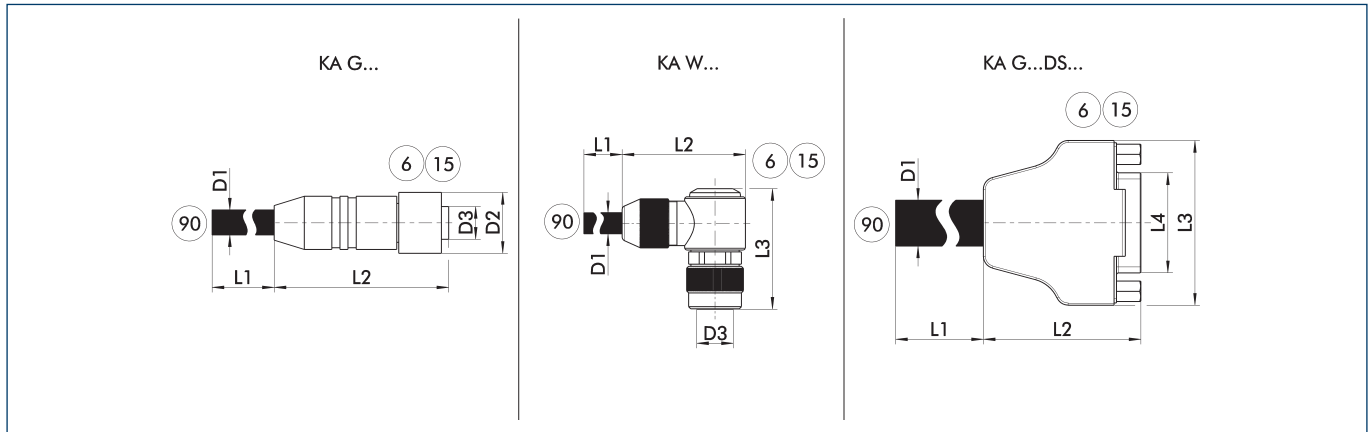
⑥ Connection module side  
⑮ Socket

⑨⑩ Prefabricated to connect to the higher-level components

Description	ID	L1 [m]	D1 [mm]	L2 [mm]	D2 [mm]	D3
Power cable for BOSCH Rexroth IndraDrive Cs - cable track-compatible						
KA GLT1706-LK-00500-1	0349104	5	8.5	71	21.2	M17
KA GLT1706-LK-01000-1	0349105	10	8.5	71	21.2	M17
KA GLT1706-LK-01500-1	0349106	15	8.5	71	21.2	M17
KA GLT1706-LK-02000-1	0349107	20	8.5	71	21.2	M17
Power cable for Siemens SINAMICS with DRIVE-CLiQ - cable track compatible						
ERD - DQ 05m	1395330	5	8.5	71	21.2	M17
ERD - DQ 10m	1395343	10	8.5	71	21.2	M17
ERD - DQ 15m	1389001	15	8.5	71	21.2	M17
ERD - DQ 20m	1395345	20	8.5	71	21.2	M17

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.

## Encoder cable



KA G... encoder cable with straight plug  
 KA W... encoder cable with angled plug  
 KA G...DS... Sub D encoder cable

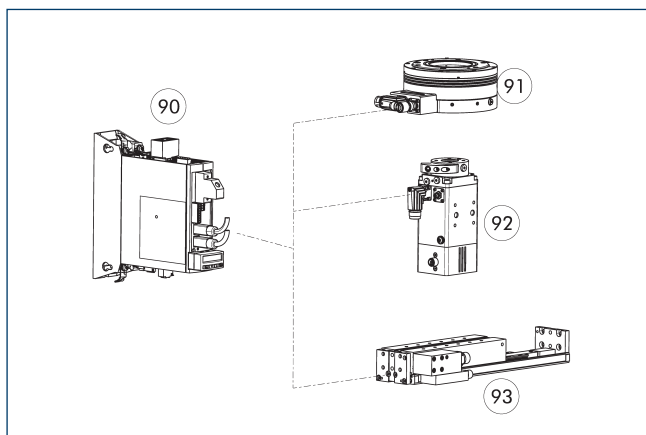
⑥ Connection module side      ⑨⑩ Prefabricated for connection to the drive controller  
 ⑮ Socket

Connection cables such as power cables and encoder cables are specifically designed for connecting SCHUNK products with drive control units. We will gladly help you to select the right connection cables.

Description	ID	L1	D1	L2	D2	L3	D3
		[m]	[mm]	[mm]	[mm]	[mm]	
<b>Encoder cable for BOSCH IndraDrive A/B/Cs and HIPERFACE® encoder interface – drag chain compatible</b>							
KA WWN1208-GK-00500-K	0349544	5	6	37.5	14.9	30.8	M12
KA WWN1208-GK-01000-K	0349545	10	6	37.5	14.9	30.8	M12
KA WWN1208-GK-01500-K	0349546	15	6	37.5	14.9	30.8	M12
KA WWN1208-GK-02000-K	0349547	20	6	37.5	14.9	30.8	M12
<b>Sensor cable for Siemens SINAMICS and encoder interface DRIVE-CLiQ – cable track compatible</b>							
ERD/ERT - DQ 05m	1395066	5	6	37.5	14.9	30.8	M12
ERD/ERT - DQ 10m	1395071	10	6	37.5	14.9	30.8	M12
ERD/ERT - DQ 15m	1388995	15	6	37.5	14.9	30.8	M12
ERD/ERT - DQ 20m	1395076	20	6	37.5	14.9	30.8	M12

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

**Bosch Rexroth IndraDrive Cs controller**



- ⑨⑩ Controller
- ⑨① Rotary module ERS/ERT, electric
- ⑨② ERD Rotary unit
- ⑨③ Compact linear module ELB

The controller can be used to operate the rotary modules ERS, ERT and ERD as well as for SCHUNK linear motor axes. It is available with the PROFIBUS or Multi-Ethernet (Sercos III, PROFINET, EtherCAT, EtherNet/IP) communication interfaces.

Description	Nominal current [A]	Maximum current [A]	Note
<b>Controller</b>			
HCS01.1E-W0008	2.7	8	

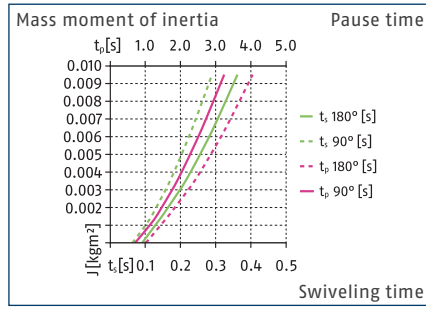
① We will be happy to help you select the right controller. Please contact us for assistance.

# ERD 08

Miniature rotary unit

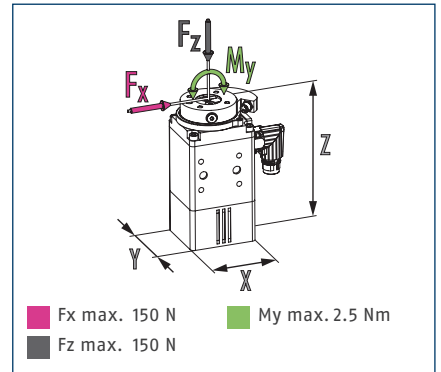


## Swivel time diagram



- ⓘ Swivel and pause times apply for motions without restricted speeds at max. current. Reducing the max. current increases swivel periods and reduces rest periods. Higher mass moments of inertia are possible. Diagrams only apply for sufficiently rigid designs. Please contact us for assistance with the design of your application.

## Dimensions and maximum loads



- ⓘ Moments and forces may occur simultaneously.

**Technical data**

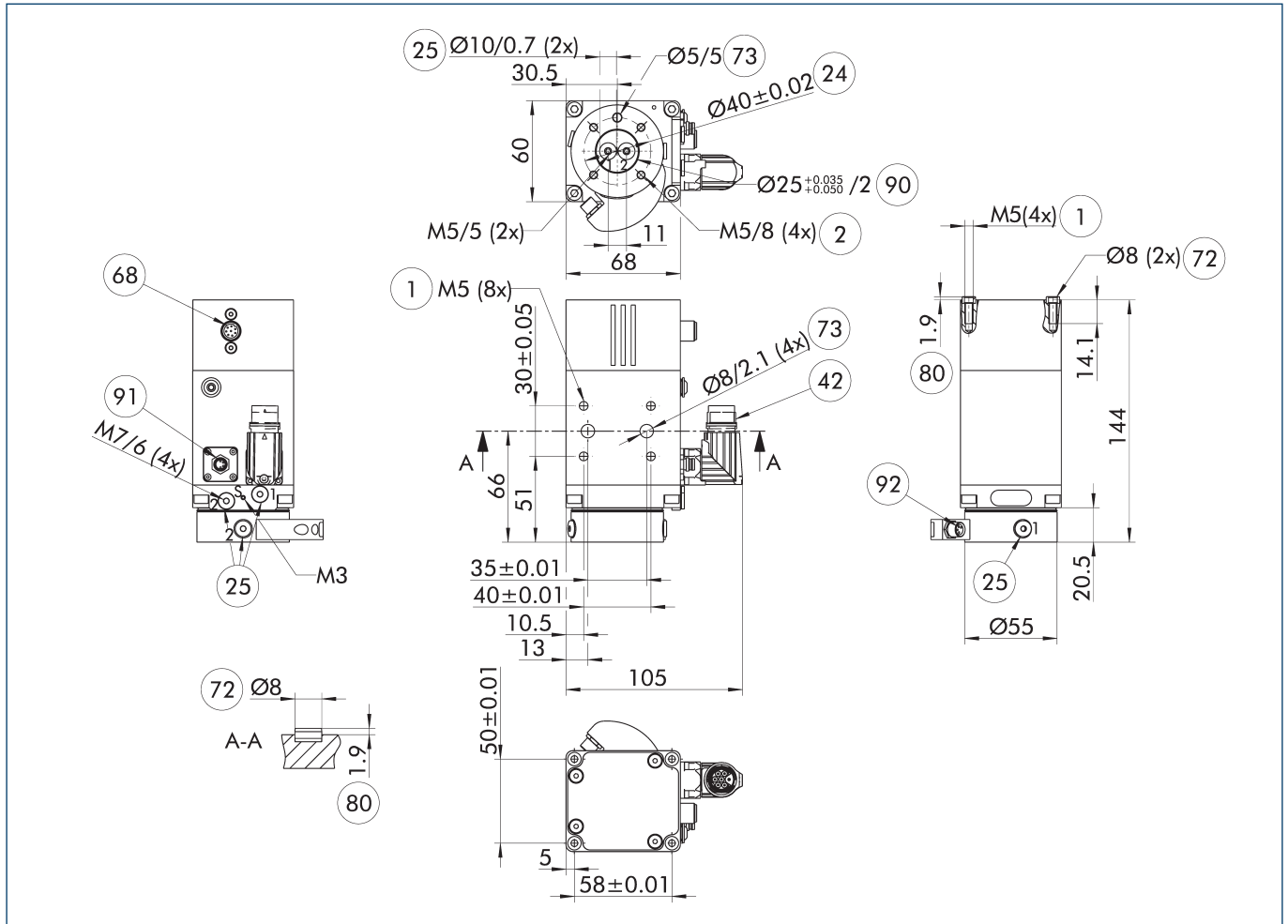
Description		ERD 08-40-D-H-N	ERD 08-40-D-D-2	ERD 08-40-D-H-2	ERD 08-40-N-H-N	ERD 08-40-N-D-2	ERD 08-40-N-H-2
ID		0331230	0331232	1484518	0331234	0331236	1484540
<b>General operating data</b>							
Angle of rotation	[°]	>360	>360	>360	>360	>360	>360
Rated/maximum torque	[Nm]	0.8/2.4	0.8/2.4	0.8/2.4	0.8/2.4	0.8/2.4	0.8/2.4
Max. RPM	[1/min]	600	600	600	600	600	600
Max. permissible mass moment of inertia	[kgm <sup>2</sup> ]	0.009	0.009	0.009	0.009	0.009	0.009
Repeat accuracy	[°]	0.01	0.01	0.01	0.01	0.01	0.01
Weight	[kg]	1.5	1.5	1.5	1.5	1.5	1.5
Min./max. ambient temperature	[°C]	10/40	10/40	10/40	10/40	10/40	10/40
IP protection class		40	40	40	40	40	40
Dimensions X x Y x Z	[mm]	68 x 60 x 144	68 x 60 x 159	68 x 60 x 144	68 x 60 x 144	68 x 60 x 159	68 x 60 x 144
<b>Electrical operating data</b>							
Intermediate circuit voltage	[V]	530	530	530	530	530	530
Rated/maximum current	[A]	1.3/3.8	1.3/3.8	1.3/3.8	1.3/3.8	1.3/3.8	1.3/3.8
Encoder system		Encoder (absolute)	Encoder (absolute)	Encoder (absolute)	Encoder (absolute)	Encoder (absolute)	Encoder (absolute)
Output signal		HIPERFACE®	DRIVE-CLiQ	HIPERFACE®	HIPERFACE®	DRIVE-CLiQ	HIPERFACE®
SIL certification		not certified	2	2	not certified	2	2
<b>Rotary feed-through operating data</b>							
Number of pneumatic feed-throughs		2	2	2	2	2	2
Max. operating pressure	[bar]	6	6	6	6	6	6
Number of electrical feed-throughs		4	4	4			
Max. voltage (DC)	[V]	60	60	60			
Max. current	[A]	1	1	1			
<b>Options and their characteristics</b>							
H1 grease version			1488619	1488627		1488631	1488638
Version with protection class IP 54		0331238	0331240	1484547	0331242	0331244	1484551
IP protection class		54	54	54	54	54	54
Weight	[kg]	1.55	1.5	1.55	1.55	1.5	1.55
Nominal torque	[Nm]	0.8	0.8	0.8	0.8	0.8	0.8
Protection class IP 54/H1 grease version			1488650	1488653		1488654	1488657
Weight	[kg]		1.5	1.55		1.5	1.55
IP protection class			54	54		54	54

① The peak torques serve as short-term drive reserves when accelerating and delaying.

# ERD 08

Miniature rotary unit

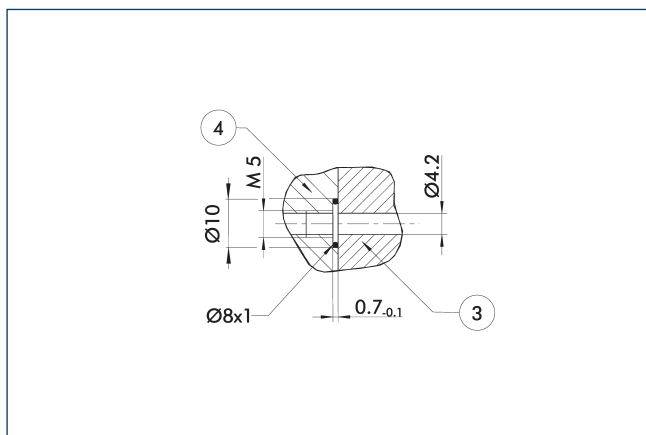
## Main view



The drawing shows the rotary module with pneumatic and electrical rotary feed-throughs in IP protection class 40 and HIPERFACE measurement system interface.

- |    |                                      |    |  |
|----|--------------------------------------|----|--|
| 5  | Air purge connection (0.5 ... 1 bar) | 72 | Fit for centering sleeves                              |
| 1  | Connection swivel unit               | 73 | Fit for centering pins                                 |
| 2  | Attachment connection                | 80 | Depth of the centering sleeve hole in the counter part |
| 24 | Bolt circle                          | 90 | Fit for centering                                      |
| 25 | Fluid feed-through                   | 91 | Input for 4 pole sensor feed-through                   |
| 42 | Motor plug                           | 92 | Output for a 4-pin sensor feed-through                 |
| 68 | Shaft encoder connection             |    |  |

**Hose-free direct connection M5**

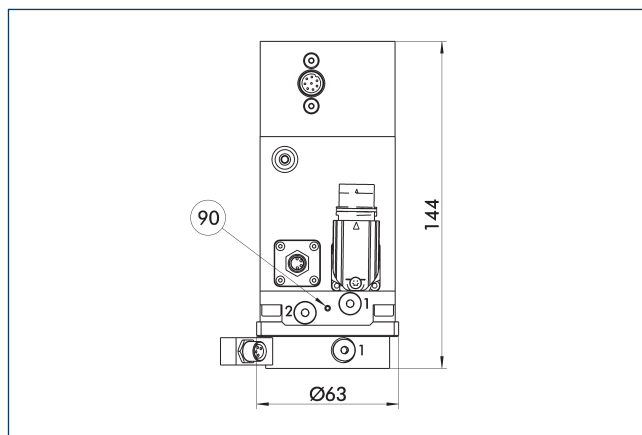


③ Adapter

④ Rotary unit

The direct connection is used for supplying compressed air without hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.

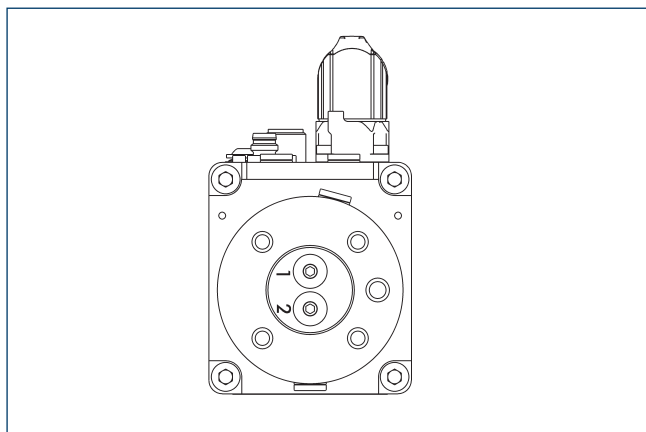
**Protection class IP54**



⑨ M3/6 air purge connection

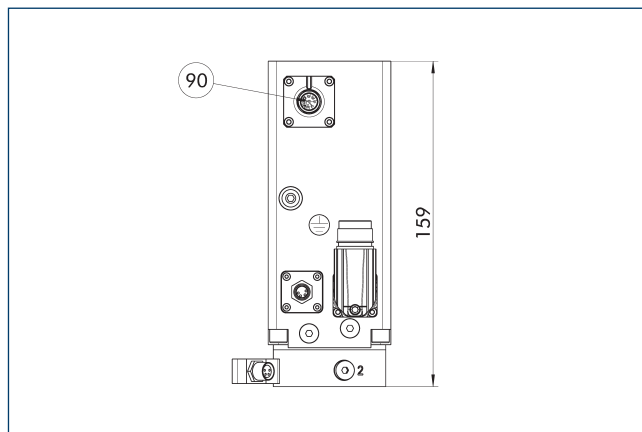
The protection class specified is implemented via an additional set of seals in the module and air purge.

**Without an electrical rotary feed-through**



In this option, no sensor signals can be transmitted.

**DRIVE-CLiQ interface**



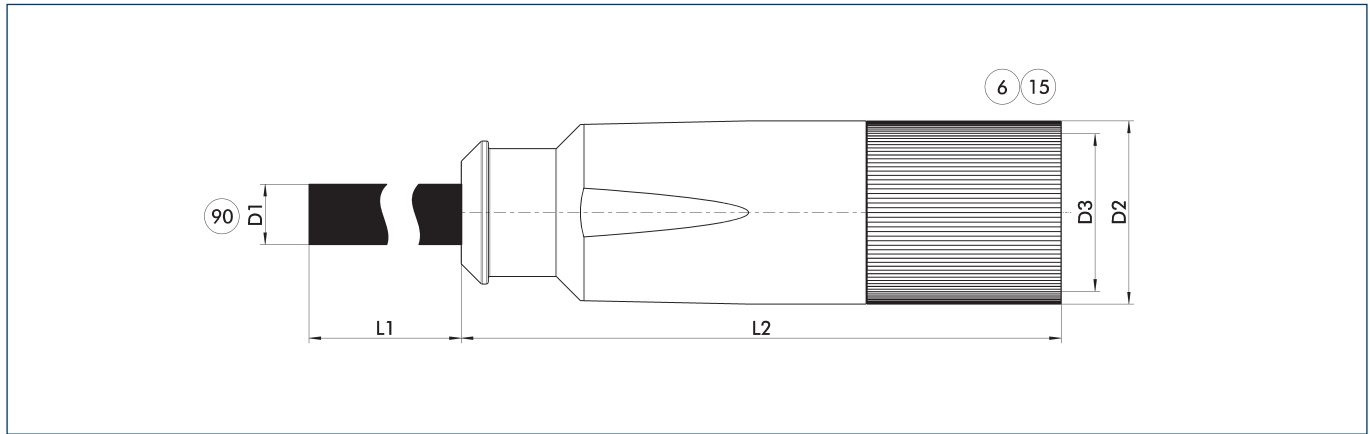
⑨ Shaft encoder connection for DRIVE-CLiQ

The view shows the height of the ERD with the absolute measuring system and DRIVE-CLiQ interface.

# ERD 08

Miniature rotary unit

## Power cable



Connection cables such as power cables and encoder cables are specifically designed for connecting SCHUNK products with drive control units. We will gladly help you to select the right connection cables.

⑥ Connection module side  
⑮ Socket

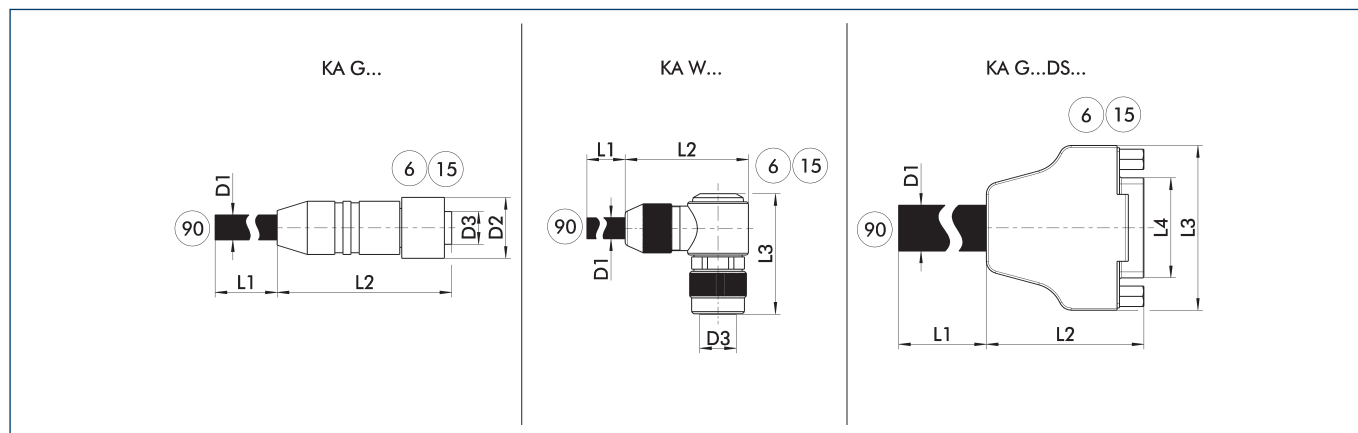
⑨⑩ Prefabricated to connect to the higher-level components

Description	ID	L1 [m]	D1 [mm]	L2 [mm]	D2 [mm]	D3
<b>Power cable for BOSCH Rexroth IndraDrive Cs - cable track-compatible</b>						
KA GLT1706-LK-00500-1	0349104	5	8.5	71	21.2	M17
KA GLT1706-LK-01000-1	0349105	10	8.5	71	21.2	M17
KA GLT1706-LK-01500-1	0349106	15	8.5	71	21.2	M17
KA GLT1706-LK-02000-1	0349107	20	8.5	71	21.2	M17
<b>Power cable for Siemens SINAMICS with DRIVE-CLiQ - cable track compatible</b>						
ERD - DQ 05m	1395330	5	8.5	71	21.2	M17
ERD - DQ 10m	1395343	10	8.5	71	21.2	M17
ERD - DQ 15m	1389001	15	8.5	71	21.2	M17
ERD - DQ 20m	1395345	20	8.5	71	21.2	M17

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.



Encoder cable



KA G... encoder cable with straight plug  
 KA W... encoder cable with angled plug  
 KA G...DS... Sub D encoder cable

⑥ Connection module side  
 ⑮ Socket  
 ⑨⑩ Prefabricated for connection to the drive controller

Connection cables such as power cables and encoder cables are specifically designed for connecting SCHUNK products with drive control units. We will gladly help you to select the right connection cables.

Description	ID	L1	D1	L2	D2	L3	D3
		[m]	[mm]	[mm]	[mm]	[mm]	
<b>Encoder cable for BOSCH IndraDrive A/B/Cs and HIPERFACE® encoder interface – drag chain compatible</b>							
KA WWN1208-GK-00500-K	0349544	5	6	37.5	14.9	30.8	M12
KA WWN1208-GK-01000-K	0349545	10	6	37.5	14.9	30.8	M12
KA WWN1208-GK-01500-K	0349546	15	6	37.5	14.9	30.8	M12
KA WWN1208-GK-02000-K	0349547	20	6	37.5	14.9	30.8	M12
<b>Sensor cable for Siemens SINAMICS and encoder interface DRIVE-CLiQ – cable track compatible</b>							
ERD/ERT - DQ 05m	1395066	5	6	37.5	14.9	30.8	M12
ERD/ERT - DQ 10m	1395071	10	6	37.5	14.9	30.8	M12
ERD/ERT - DQ 15m	1388995	15	6	37.5	14.9	30.8	M12
ERD/ERT - DQ 20m	1395076	20	6	37.5	14.9	30.8	M12

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



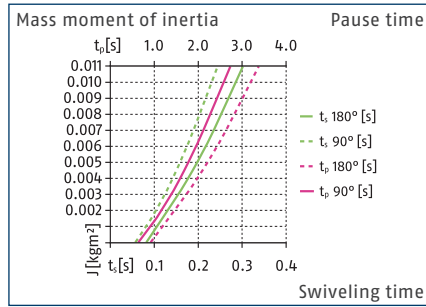


# ERD 12

Miniature rotary unit

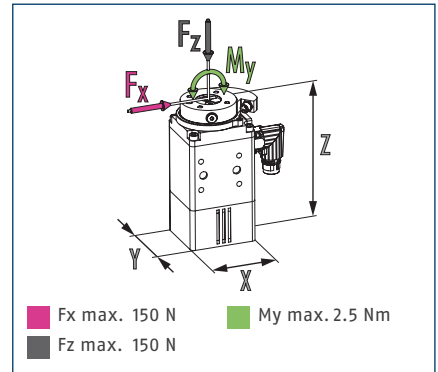


## Swivel time diagram



- Swivel and pause times apply for motions without restricted speeds at max. current. Reducing the max. current increases swivel periods and reduces rest periods. Higher mass moments of inertia are possible. Diagrams only apply for sufficiently rigid designs. Please contact us for assistance with the design of your application.

## Dimensions and maximum loads



- Moments and forces may occur simultaneously.

Technical data

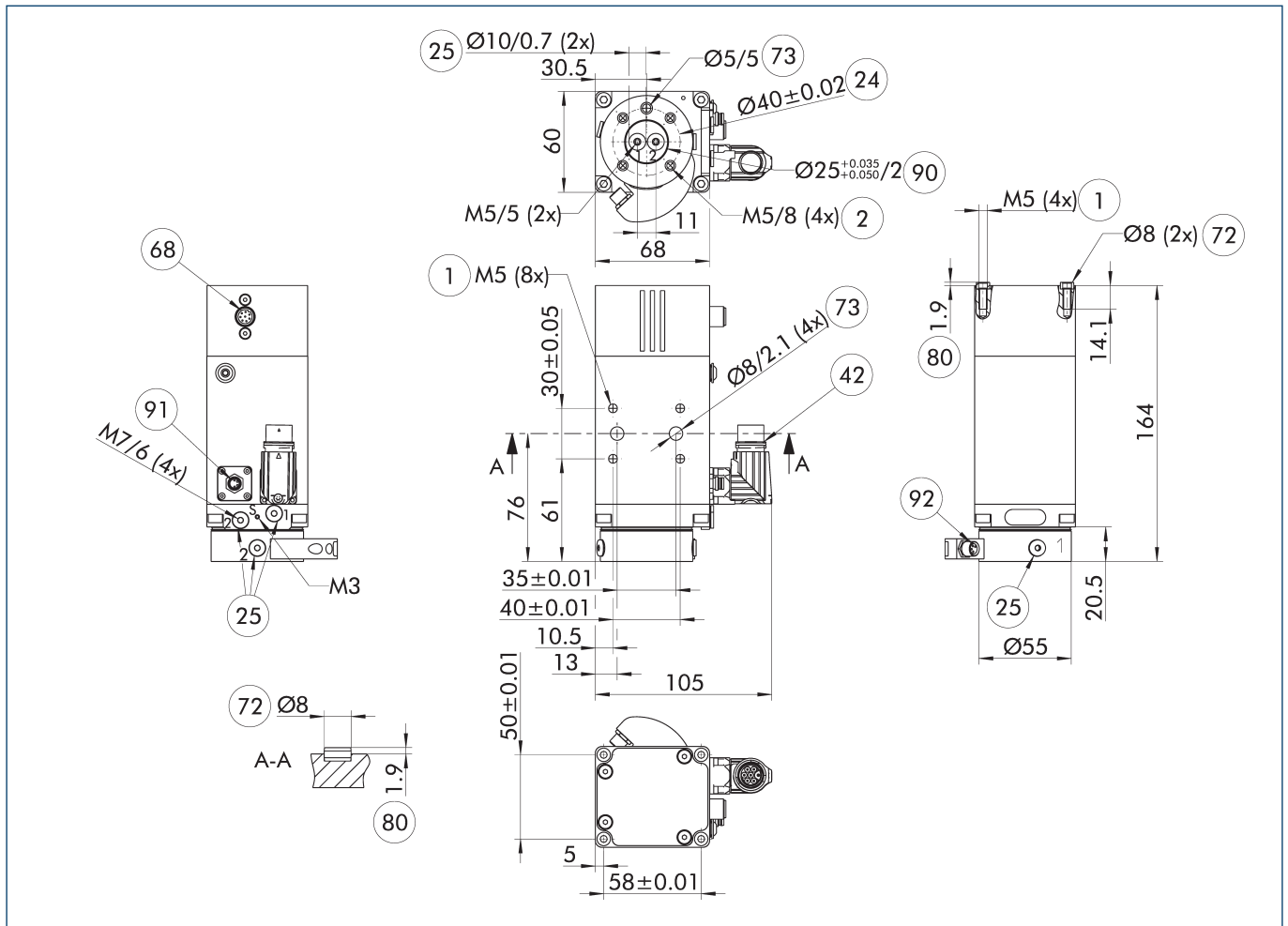
Description		ERD 12-40-D-H-N	ERD 12-40-D-D-2	ERD 12-40-D-H-2	ERD 12-40-N-H-N	ERD 12-40-N-D-2	ERD 12-40-N-H-2
ID		0331250	0331252	1484553	0331254	0331256	1484555
<b>General operating data</b>							
Angle of rotation	[°]	>360	>360	>360	>360	>360	>360
Rated/maximum torque	[Nm]	1.2/3.6	1.2/3.6	1.2/3.6	1.2/3.6	1.2/3.6	1.2/3.6
Max. RPM	[1/min]	600	600	600	600	600	600
Max. permissible mass moment of inertia	[kgm <sup>2</sup> ]	0.011	0.011	0.011	0.011	0.011	0.011
Repeat accuracy	[°]	0.01	0.01	0.01	0.01	0.01	0.01
Weight	[kg]	1.8	1.8	1.8	1.8	1.8	1.8
Min./max. ambient temperature	[°C]	10/40	10/40	10/40	10/40	10/40	10/40
IP protection class		40	40	40	40	40	40
Dimensions X x Y x Z	[mm]	68 x 60 x 164	68 x 60 x 179	68 x 60 x 164	68 x 60 x 164	68 x 60 x 179	68 x 60 x 164
<b>Electrical operating data</b>							
Intermediate circuit voltage	[V]	530	530	530	530	530	530
Rated/maximum current	[A]	1.6/5.1	1.6/5.1	1.6/5.1	1.6/5.1	1.6/5.1	1.6/5.1
Encoder system		Encoder (absolute)	Encoder (absolute)	Encoder (absolute)	Encoder (absolute)	Encoder (absolute)	Encoder (absolute)
Output signal		HIPERFACE®	DRIVE-CLiQ	HIPERFACE®	HIPERFACE®	DRIVE-CLiQ	HIPERFACE®
SIL certification		not certified	2	2	not certified	2	2
<b>Rotary feed-through operating data</b>							
Number of pneumatic feed-throughs		2	2	2	2	2	2
Max. operating pressure	[bar]	6	6	6	6	6	6
Number of electrical feed-throughs		4	4	4			
Max. voltage (DC)	[V]	60	60	60			
Max. current	[A]	1	1	1			
<b>Options and their characteristics</b>							
H1 grease version			1488662	1488663		1488665	1488680
Version with protection class IP 54		0331258	0331260	1484557	0331262	0331264	1484571
IP protection class		54	54	54	54	54	54
Weight	[kg]	1.8	1.8	1.8	1.8	1.8	1.8
Nominal torque	[Nm]	1.2	1.2	1.2	1.2	1.2	1.2
Protection class IP 54/H1 grease version			1488683	1488687		1488689	1488690
Weight	[kg]		1.8	1.8		1.8	1.8
IP protection class			54	54		54	54

① The peak torques serve as short-term drive reserves when accelerating and delaying.

# ERD 12

Miniature rotary unit

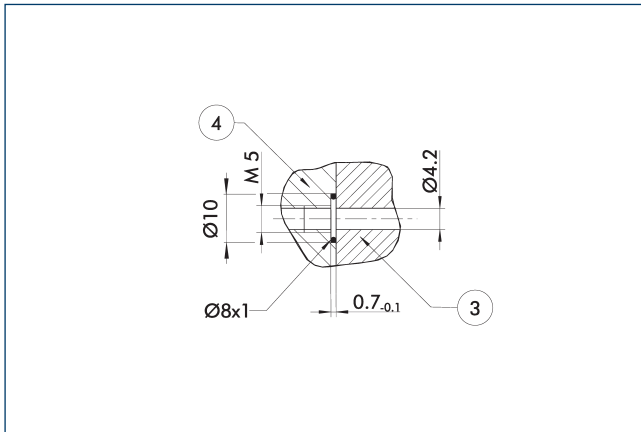
## Main view



The drawing shows the rotary module with pneumatic and electrical rotary feed-throughs in IP protection class 40 and HIPERFACE measurement system interface.

- |    |                                      |    |  |
|----|--------------------------------------|----|--|
| 5  | Air purge connection (0.5 ... 1 bar) | 72 | Fit for centering sleeves                              |
| 1  | Connection swivel unit               | 73 | Fit for centering pins                                 |
| 2  | Attachment connection                | 80 | Depth of the centering sleeve hole in the counter part |
| 24 | Bolt circle                          | 90 | Fit for centering                                      |
| 25 | Fluid feed-through                   | 91 | Input for 4 pole sensor feed-through                   |
| 42 | Motor plug                           | 92 | Output for a 4-pin sensor feed-through                 |
| 68 | Shaft encoder connection             |    |  |

## Hose-free direct connection M5

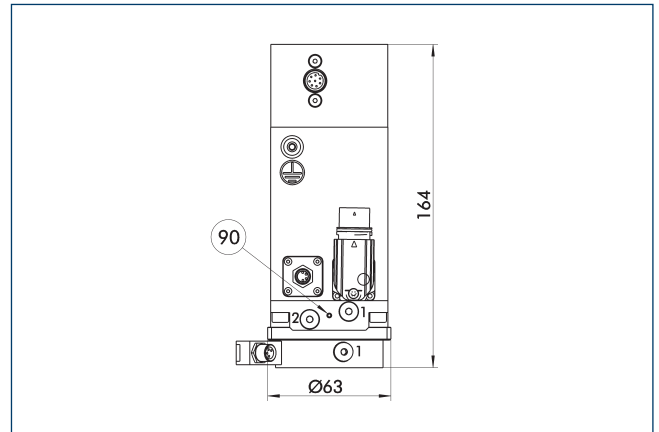


③ Adapter

④ Rotary unit

The direct connection is used for supplying compressed air without hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.

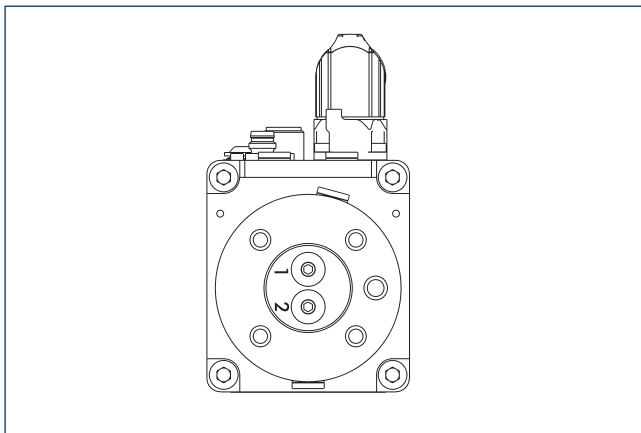
## Protection class IP54



⑨0 M3/6 air purge connection

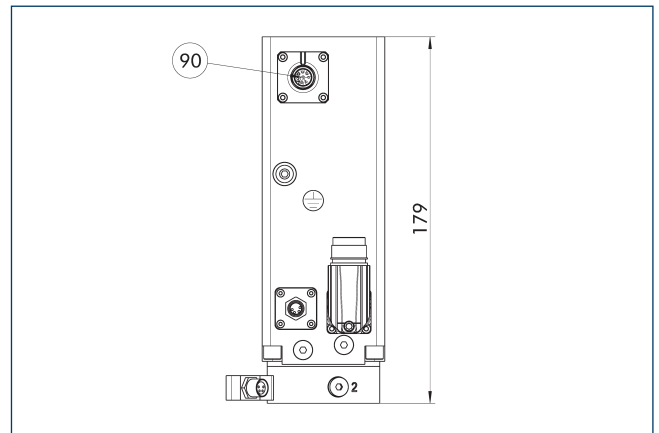
The protection class specified is implemented via an additional set of seals in the module and air purge.

## Without an electrical rotary feed-through



In this option, no sensor signals can be transmitted.

## DRIVE-CLiQ interface



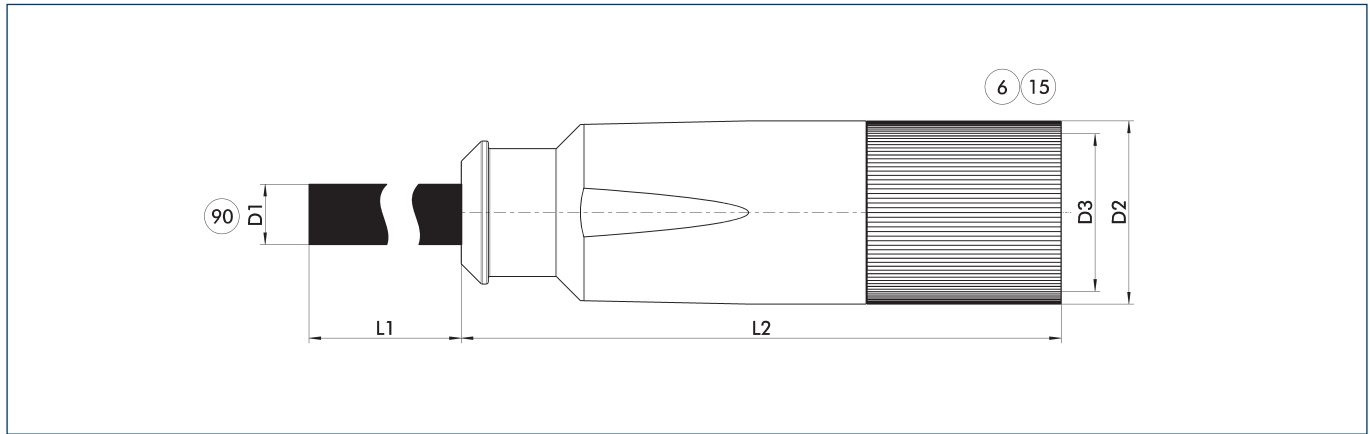
⑨0 Shaft encoder connection for DRIVE-CLiQ

The view shows the height of the ERD with the absolute measuring system and DRIVE-CLiQ interface.

# ERD 12

Miniature rotary unit

## Power cable



Connection cables such as power cables and encoder cables are specifically designed for connecting SCHUNK products with drive control units. We will gladly help you to select the right connection cables.

- ⑥ Connection module side
- ⑮ Socket

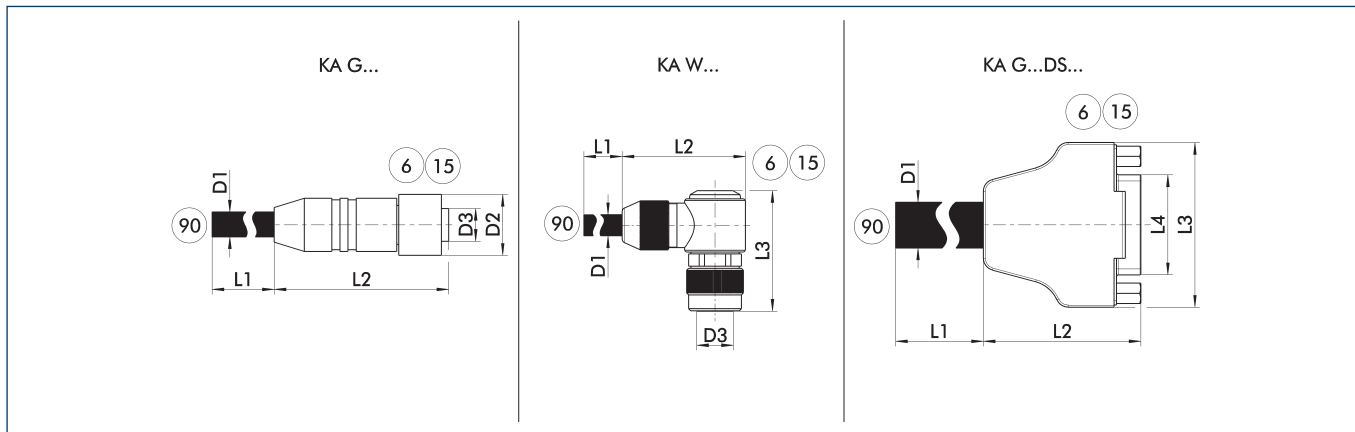
- ⑨⑩ Prefabricated to connect to the higher-level components

Description	ID	L1 [m]	D1 [mm]	L2 [mm]	D2 [mm]	D3
<b>Power cable for BOSCH Rexroth IndraDrive Cs - cable track-compatible</b>						
KA GLT1706-LK-00500-1	0349104	5	8.5	71	21.2	M17
KA GLT1706-LK-01000-1	0349105	10	8.5	71	21.2	M17
KA GLT1706-LK-01500-1	0349106	15	8.5	71	21.2	M17
KA GLT1706-LK-02000-1	0349107	20	8.5	71	21.2	M17
<b>Power cable for Siemens SINAMICS with DRIVE-CLiQ - cable track compatible</b>						
ERD - DQ 05m	1395330	5	8.5	71	21.2	M17
ERD - DQ 10m	1395343	10	8.5	71	21.2	M17
ERD - DQ 15m	1389001	15	8.5	71	21.2	M17
ERD - DQ 20m	1395345	20	8.5	71	21.2	M17

ⓘ 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.



Encoder cable



KA G... encoder cable with straight plug  
 KA W... encoder cable with angled plug  
 KA G...DS... Sub D encoder cable

⑥ Connection module side  
 ⑬ Socket  
 ⑨⑩ Prefabricated for connection to the drive controller

Connection cables such as power cables and encoder cables are specifically designed for connecting SCHUNK products with drive control units. We will gladly help you to select the right connection cables.

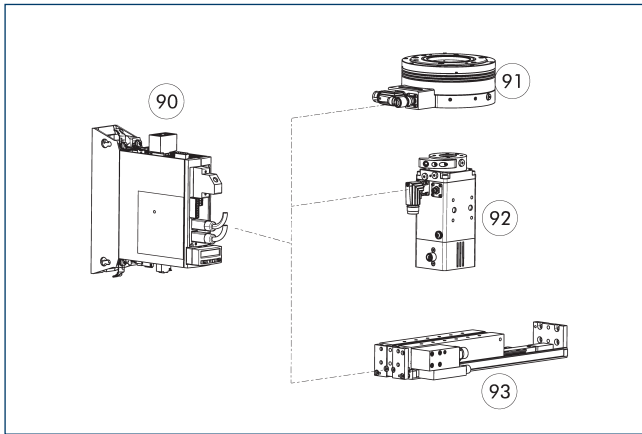
Description	ID	L1	D1	L2	D2	L3	D3
		[m]	[mm]	[mm]	[mm]	[mm]	
<b>Encoder cable for BOSCH IndraDrive A/B/Cs and HIPERFACE® encoder interface – drag chain compatible</b>							
KA WWN1208-GK-00500-K	0349544	5	6	37.5	14.9	30.8	M12
KA WWN1208-GK-01000-K	0349545	10	6	37.5	14.9	30.8	M12
KA WWN1208-GK-01500-K	0349546	15	6	37.5	14.9	30.8	M12
KA WWN1208-GK-02000-K	0349547	20	6	37.5	14.9	30.8	M12
<b>Sensor cable for Siemens SINAMICS and encoder interface DRIVE-CLiQ – cable track compatible</b>							
ERD/ERT - DQ 05m	1395066	5	6	37.5	14.9	30.8	M12
ERD/ERT - DQ 10m	1395071	10	6	37.5	14.9	30.8	M12
ERD/ERT - DQ 15m	1388995	15	6	37.5	14.9	30.8	M12
ERD/ERT - DQ 20m	1395076	20	6	37.5	14.9	30.8	M12

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

# ERD 12

Miniature rotary unit

## Bosch Rexroth IndraDrive Cs controller



- ⑨⑩ Controller
- ⑨① Rotary module ERS/ERT, electric
- ⑨② ERD Rotary unit
- ⑨③ Compact linear module ELB

The controller can be used to operate the rotary modules ERS, ERT and ERD as well as for SCHUNK linear motor axes. It is available with the PROFIBUS or Multi-Ethernet (Sercos III, PROFINET, EtherCAT, EtherNet/IP) communication interfaces.

Description	Nominal current [A]	Maximum current [A]	Note
Controller			
HCS01.1E-W0008	2.7	8	

① We will be happy to help you select the right controller. Please contact us for assistance.





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