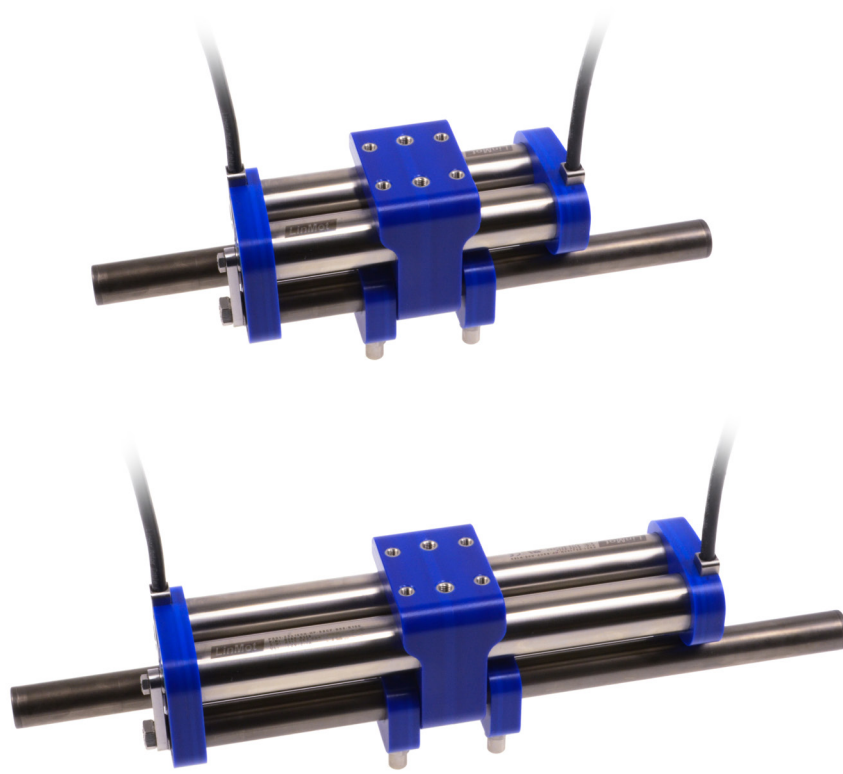


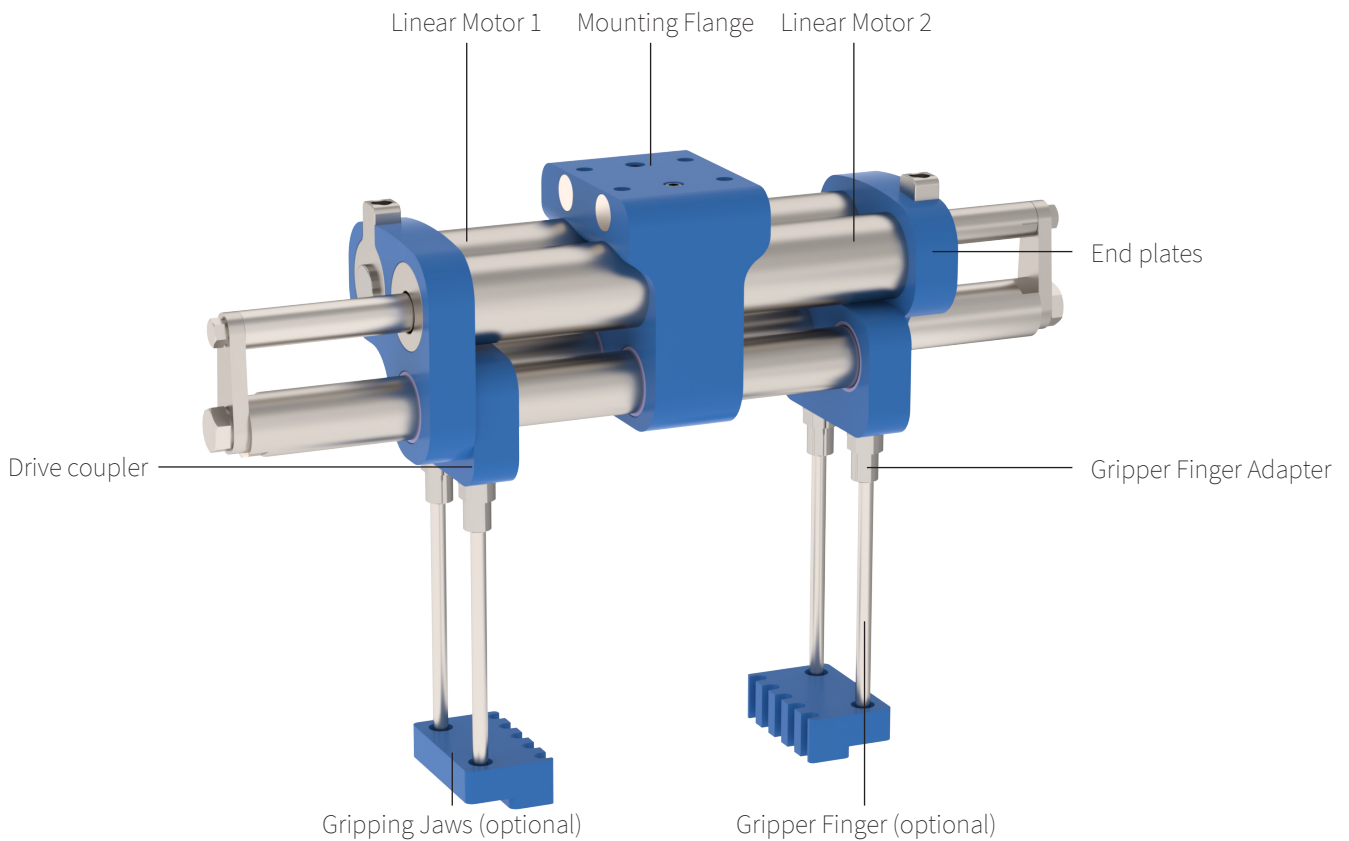
# GRIPPER MODULES GM01



- ✓ Consistent opening and closing times with high dynamics
- ✓ Used in industries with high requirements, such as the pharmaceutical, food and automation industry
- ✓ Form-fit and force-fit gripping as well as high clamping reliability for even and uneven products
- ✓ High process reliability by monitoring data such as press force, distance, temperature and capacity utilisation
- ✓ Controllable over all common Ethernet and fieldbuses
- ✓ "Washdown safe" stainless steel EN 1.4404/316L and light weight materials (FDA)
- ✓ Easy integration and customisation to individual product and packaging formats
- ✓ Can be extended with customised gripping elements

## GRIPPER MODULES GM01

Description .....	3
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## Grippers GM01

The electric gripper is used for precise clamping and moving of products in demanding environments. Due to the high flexibility of the settings, dry, moist, solid or soft products can be gently clamped and transported without leaving noticeable marks. With its hygienic design and high IP69 protection rating, the gripper can be easily cleaned and is designed for use in the food industry. Thanks to the detection of the gripper position

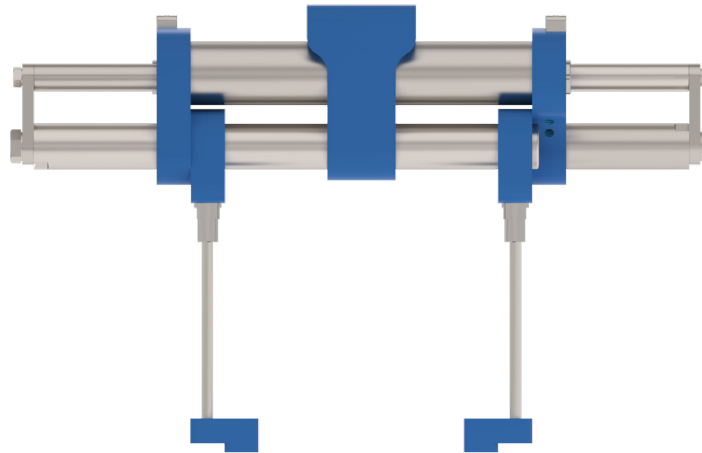
and the control of the clamping force, even uneven products can be gripped reliably. Due to the large number of monitoring options, faulty gripping or even defective parts can be detected "on the fly" and sorted out accordingly. The intelligent GM01 gripper includes a wide range of monitoring options, which are indispensable for applications with a high degree of automation.

## Mode of use with SM01 linear modules

Due to the easy coupling and the standardisation of the materials, the G01 parallel gripper complements another element of the stainless steel line from LinMot. In combination with the SM01 guide, a complete pick and place application can be realised in stainless steel EN 1.4404/316L. A combination that is extremely resistant to chemicals and has an enormous service life even under difficult conditions. Further information on the SM01 modules can be found at <https://linmot.com/products/linear-guides-linear-modules/linear-modules-stainless-steel-sm01/>



## PERFORMANCE DATA GM01-23X80F-XP-90-SSCP



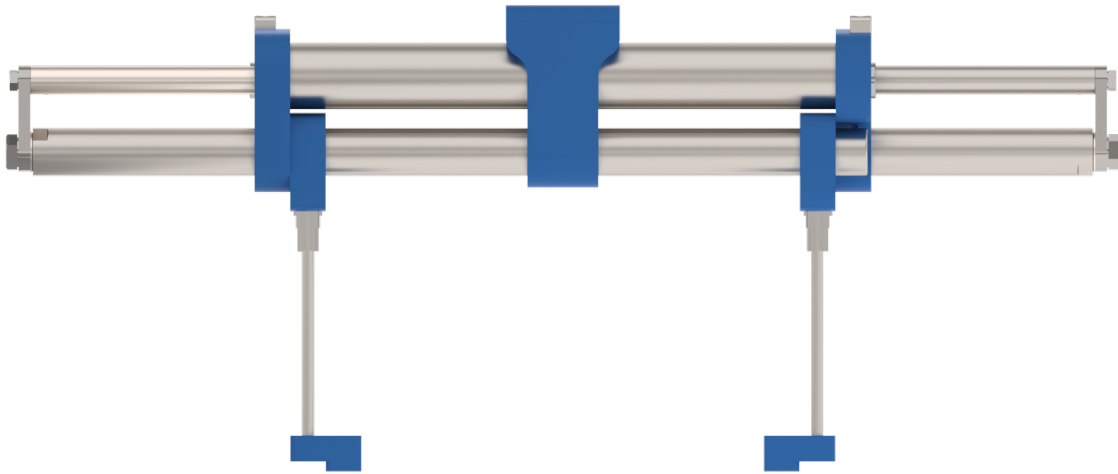
Performance Data Gripper Module GM01-23x80F-XP-90-SSCP

Performance Data Gripper Module GM01-23x80F-XP-90-SSCP				
<b>Stroke</b>				
Max. Opening/Closing Stroke Range	mm	(in)	≤ 90	(≤ 3.54)
<b>Force</b>				
Max. Clamping Force @ 48VDC*	N	(lbf)	67.1	(15.08)
Max. Clamping Force @ 72VDC*	N	(lbf)	67.1	(15.08)
Max. Continuous Clamping Force*	N	(lbf)	12	(2.69)
<b>Velocity</b>				
Max. Gripper Speed (Close/Open)	m/s	(in/s)	3.5	(137.79)
<b>Position Detection</b>				
Position Resolution	mm	(in)	0.002	(0.00008)
Repeatability	mm	(in)	±0.05	(±0.002)
<b>Electrical Data</b>				
Max. Current per Gripper Arm @ 48VDC		$A_{pk}$	7.4	
Max. Current per Gripper Arm @ 72VDC		$A_{pk}$	7.4	
Constant Force		$N/A_{pk}$	8.95	
<b>Mechanical Data</b>				
Gripper Width	mm	(in)	71	(2.80)
Gripper Length	mm	(in)	309	(12.17)
Gripper Height	mm	(in)	104	(4.09)
Gripper Mass	g	(lb)	2695	(5.94)
Moving Mass (Slider / Guiding Rod / Drive Coupler / Connecting Element)	g	(lb)	520	(1.15)
Cable Length	mm	(in)	1500	(59.06)
Coupling of Clamping Jaws			M5	
Material (Motor Support / Clamping jaws / Mounting Flange)			POM	
Material (Stator / Slider / Guide)			1.4404	316L
Material (Cable Sheath)			PUR	
IP Protection Class**			IP 69	

\*The clamping force can be set via the motor current or the motor force constant.

\*\*Protection Class Motor Connector IP67S.

**PERFORMANCE DATA GM01-23X160H-XP-170-SSCP**



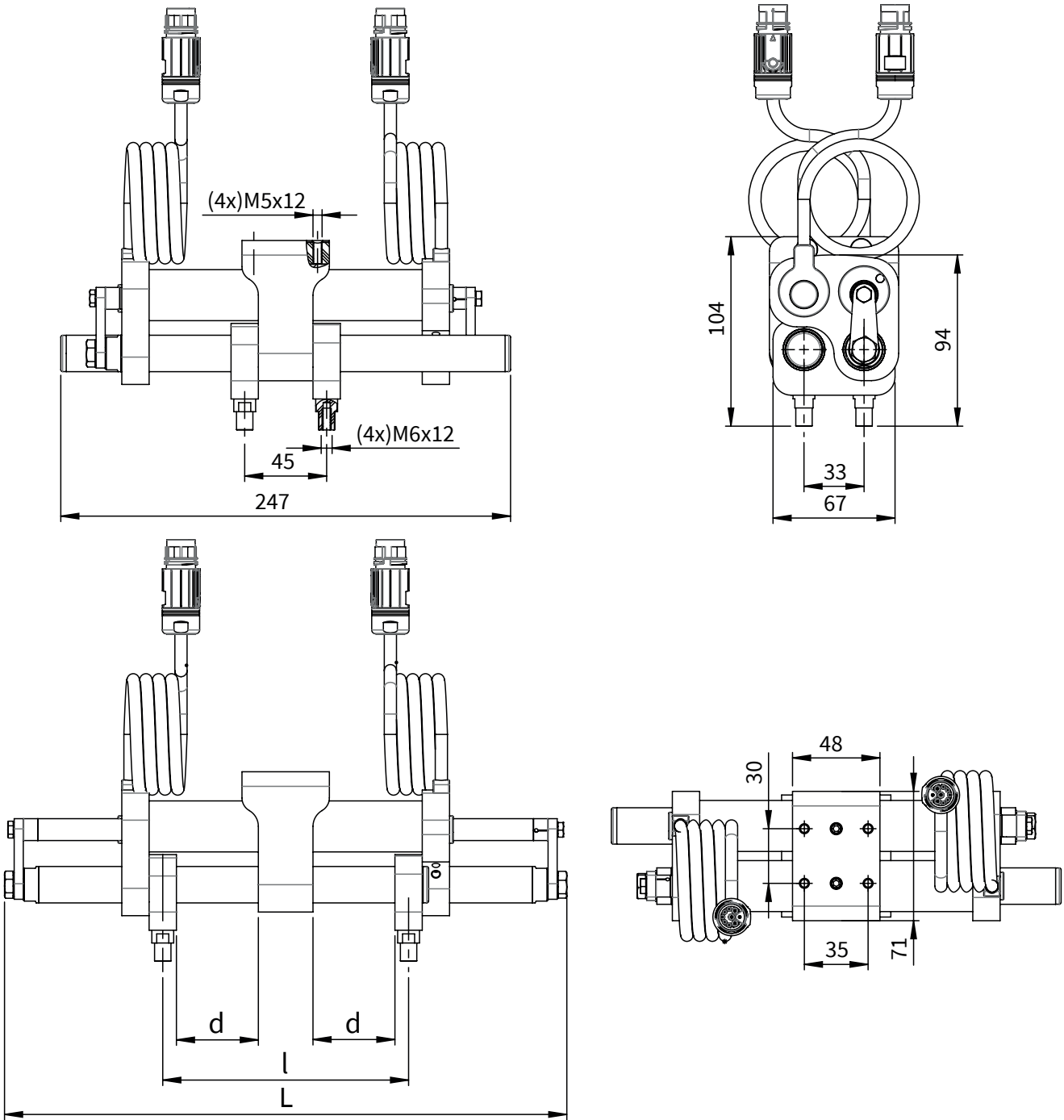
Performance Data Gripper Module GM01-23x160H-XP-170-SSCP

Stroke				
Max. Opening/Closing Stroke Range	mm	(in)	≤ 170	(≤ 6.38)
Force				
Max. Clamping Force @ 48VDC*	N	(lbf)	116	(26.08)
Max. Clamping Force @ 72VDC*	N	(lbf)	138	(31.01)
Max. Continuous Clamping Force*	N	(lbf)	23.5	(5.28)
Velocity				
Max. Gripper Speed (Close/Open)	m/s	(in/s)	3.1	(122.05)
Position Detection				
Position Resolution	mm	(in)	0.002	(0.00008)
Repeatability	mm	(in)	±0.05	(±0.002)
Electrical Data				
Max. Current per Gripper Arm @ 48VDC		A <sub>pk</sub>	10	
Max. Current per Gripper Arm @ 72VDC		A <sub>pk</sub>	10	
Constant Force		N/A <sub>pk</sub>	12.6	
Mechanical Data				
Gripper Width	mm	(in)	71	(2.80)
Gripper Length	mm	(in)	470	(18.05)
Gripper Height	mm	(in)	104	(4.09)
Gripper Mass	g	(lb)	3425	(7.55)
Moving Mass (Slider / Guiding Rod / Drive Coupler / Connecting Element)	g	(lb)	680	(1.50)
Cable Length	mm	(in)	1500	(59.06)
Coupling of Clamping Jaws			M5	
Material (Motor Support / Clamping jaws / mounting flange)			POM	
Material (Stator / Slider / Guide)			1.4404	316L
Material (Cable Sheath)			PUR	
IP Protection Class**			IP 69	

\*The clamping force can be set via the motor current or the motor force constant.

\*\*Protection Class Motor Connector IP67S

**GRIPPER**



Dimensions mm

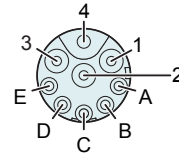
Gripper	d [mm (inch)]	l [mm (inch)]	L [mm (inch)]
<b>GM01-23x80F-XP-90-SSCP</b>	45 (1.77)	135 (5.31)	309 (12.17)
<b>GM01-23x160H-XP-170-SSCP</b>	85 (3.35)	215 (8.46)	470 (18.05)

Item	Description	Item-No.
<b>GM01-23x80F-XP-R150-90-SSCP</b>	Gripper Module SSCP, max. stroke 90mm, max. Force 67N	<a href="#">0150-5308</a>
<b>GM01-23x160H-XP-R150-170-SSCP</b>	Gripper Module SSCP, max. stroke 170mm, max. force 138N	<a href="#">0150-5595</a>

**CONNECTOR**

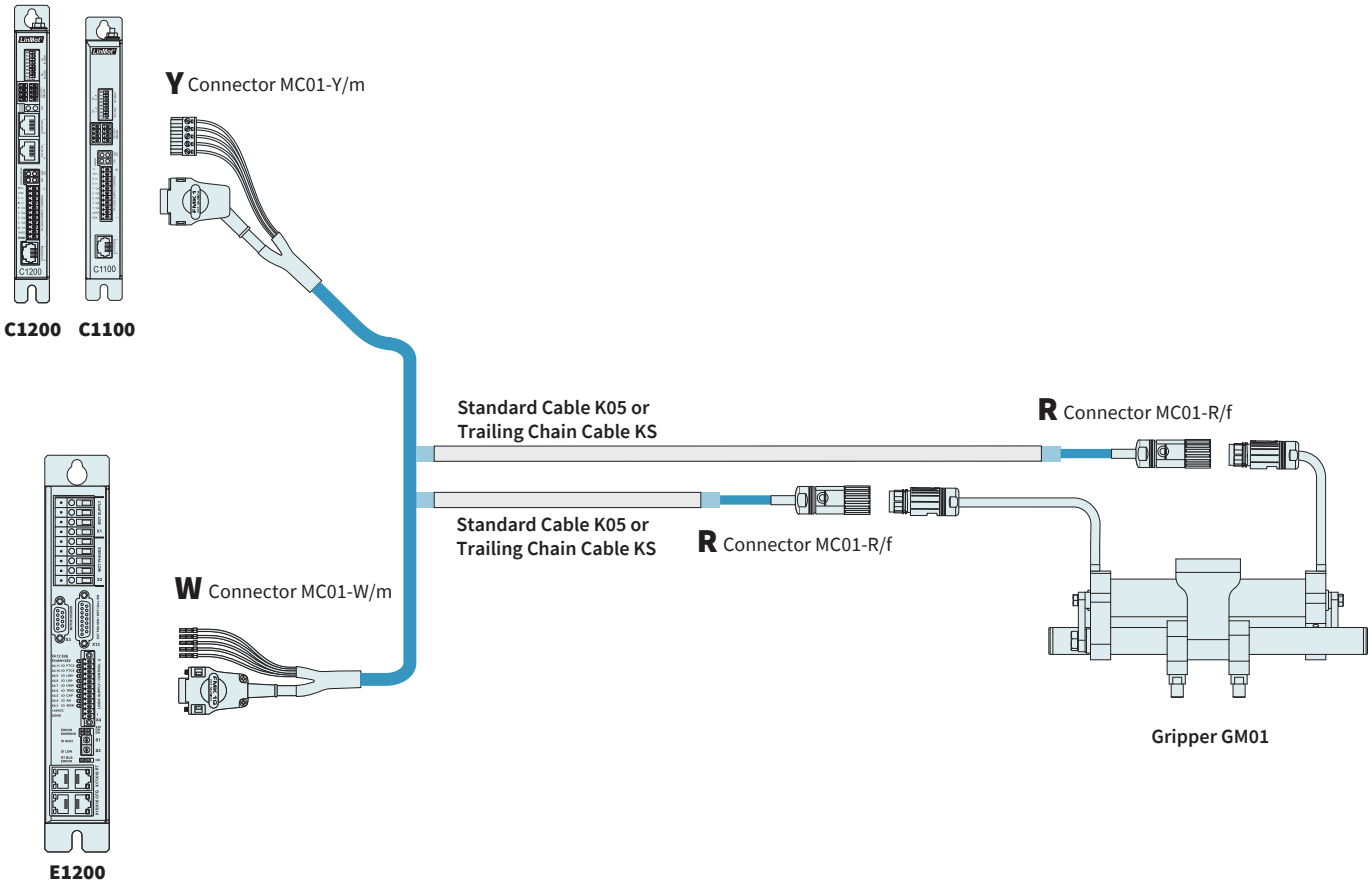
Motor Connector Wiring	R-Connector	Wire Color Motor Cable
Ph 1+	1	red
Ph 1-	2	pink
Ph 2+	3	blue
Ph 2-	4	grey
+5VDC	A	white
GND	B	inner Shield
Sinus	C	yellow
Cosinus	D	green
Temp.	E	black
Shield	Case	outer Shield

**R-Connector**



View: Motor connector, plug side  
 Mat. Motor Connector: Nickel-plated  
 Max. Torque: 0.6 Nm

**MOTOR CABLES**



STANDARD CABLE

Item	Description	Item-No.
<b>K05-W/R-2</b>	Motor Cable W/R, 2 m	<a href="#">0150-2119</a>
<b>K05-W/R-3</b>	Motor Cable W/R, 3 m	<a href="#">0150-2459</a>
<b>K05-W/R-3.5</b>	Motor Cable W/R, 3,5 m	<a href="#">0150-2481</a>
<b>K05-W/R-4</b>	Motor Cable W/R, 4 m	<a href="#">0150-2120</a>
<b>K05-W/R-6</b>	Motor Cable W/R, 6 m	<a href="#">0150-2121</a>
<b>K05-W/R-8</b>	Motor Cable W/R, 8 m	<a href="#">0150-2122</a>
<b>K05-W/R-10</b>	Motor Cable W/R, 10 m	<a href="#">0150-2132</a>
<b>K05-W/R-</b>	Special Cable W/R, Custom length	<a href="#">0150-3262</a>
<b>K05-Y/R-2</b>	Motor Cable Y/R, 2 m	<a href="#">0150-2421</a>
<b>K05-Y/R-3</b>	Motor Cable Y/R, 3 m	<a href="#">0150-4854</a>
<b>K05-Y/R-4</b>	Motor Cable Y/R, 4 m	<a href="#">0150-2422</a>
<b>K05-Y/R-6</b>	Motor Cable Y/R, 6 m	<a href="#">0150-2423</a>
<b>K05-Y/R-8</b>	Motor Cable Y/R, 8 m	<a href="#">0150-2424</a>
<b>K05-Y-Fe/R-</b>	Special Cable Y/R, Custom length	<a href="#">0150-3501</a>



**MOTOR CABLES**

TRAILING CHAIN CABLES		
Item	Description	Item-No.
<b>KS05-W/R-4</b>	Trailing Chain Cable W/R, 4 m	<a href="#">0150-2106</a>
<b>KS05-W/R-6</b>	Trailing Chain Cable W/R, 6 m	<a href="#">0150-2131</a>
<b>KS05-W/R-8</b>	Trailing Chain Cable W/R, 8 m	<a href="#">0150-2107</a>
<b>KS05-W/R-</b>	Trailing Chain Cable W/R, Custom length	<a href="#">0150-3256</a>
<b>KS05-Y/R-4</b>	Trailing Chain Cable Y/R, 4 m	<a href="#">0150-2433</a>
<b>KS05-Y/R-6</b>	Trailing Chain Cable Y/R, 6 m	<a href="#">0150-2434</a>
<b>KS05-Y/R-8</b>	Trailing Chain Cable Y/R, 8 m	<a href="#">0150-2435</a>
<b>KS05-Y/R-</b>	Trailing Chain Cable Y/R, Custom length	<a href="#">0150-3507</a>

**FURTHER ACCESSORIES**

Further accessories are available on request.

# ALL LINEAR MOTION FROM A SINGLE SOURCE

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