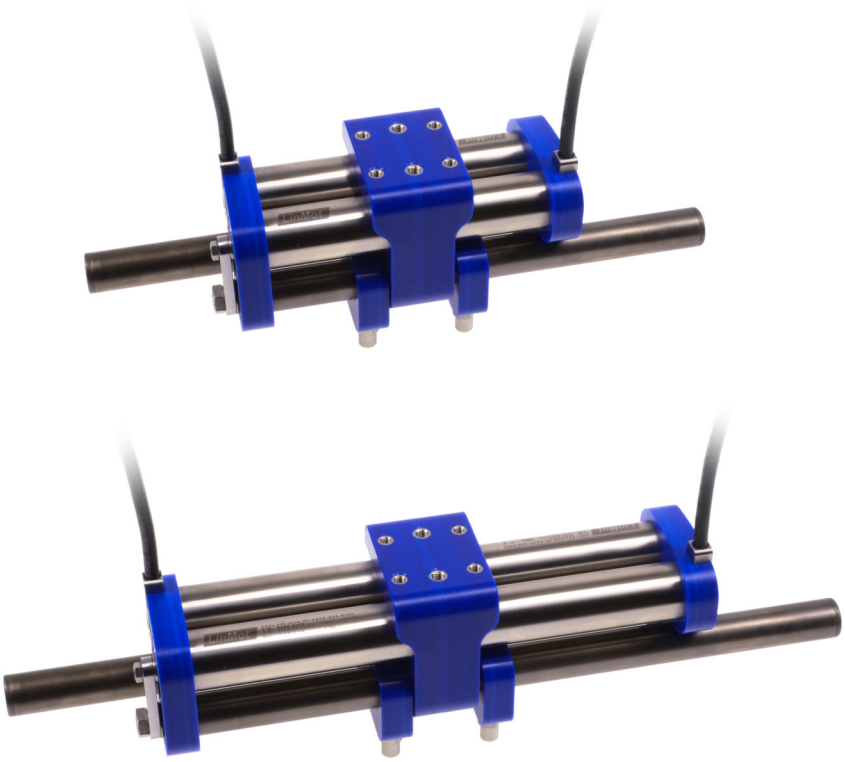
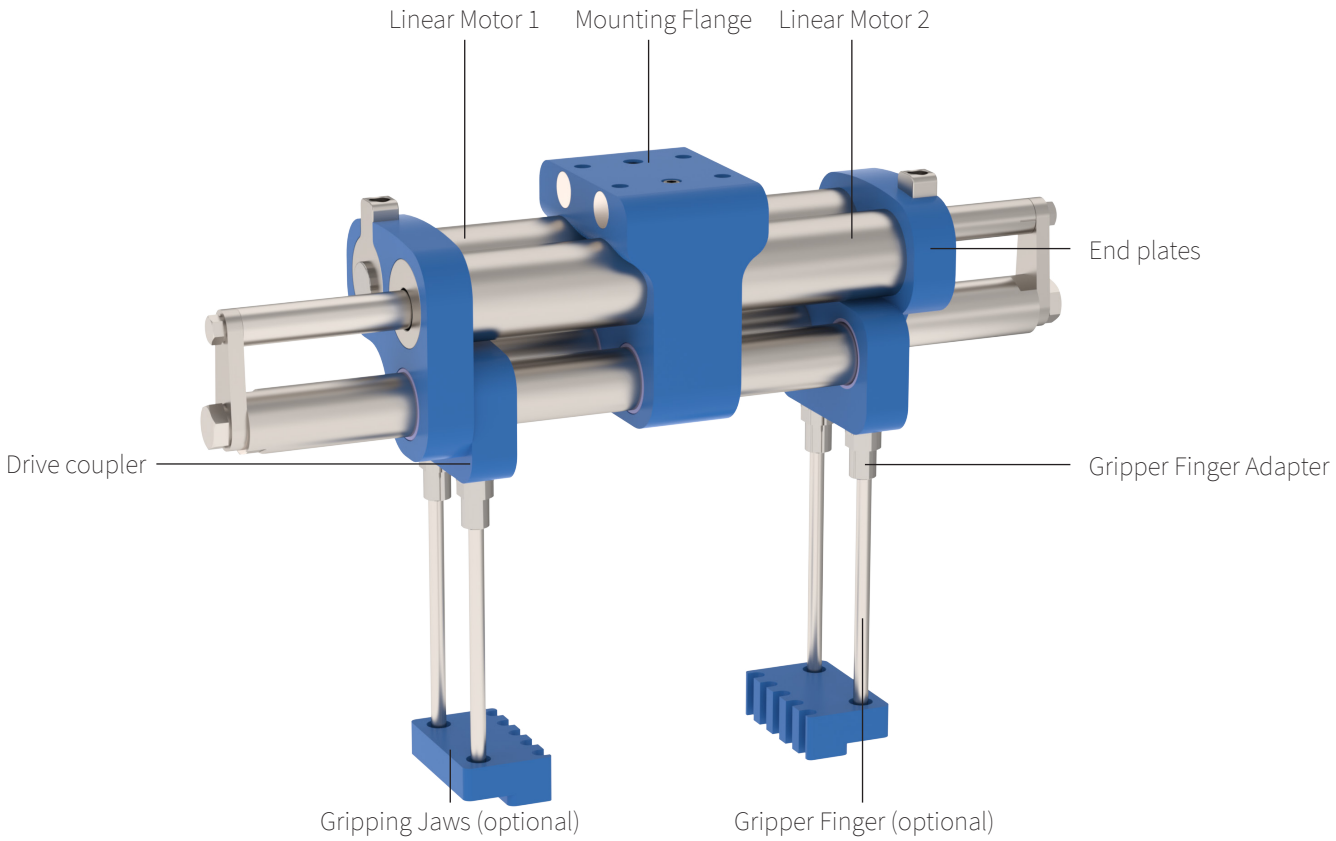
GRIPPER MODULES GM01



- 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 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



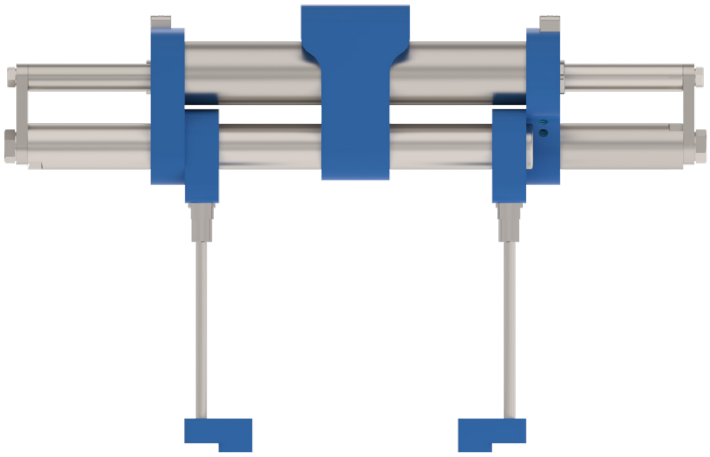
Grippers GM01

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. 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/

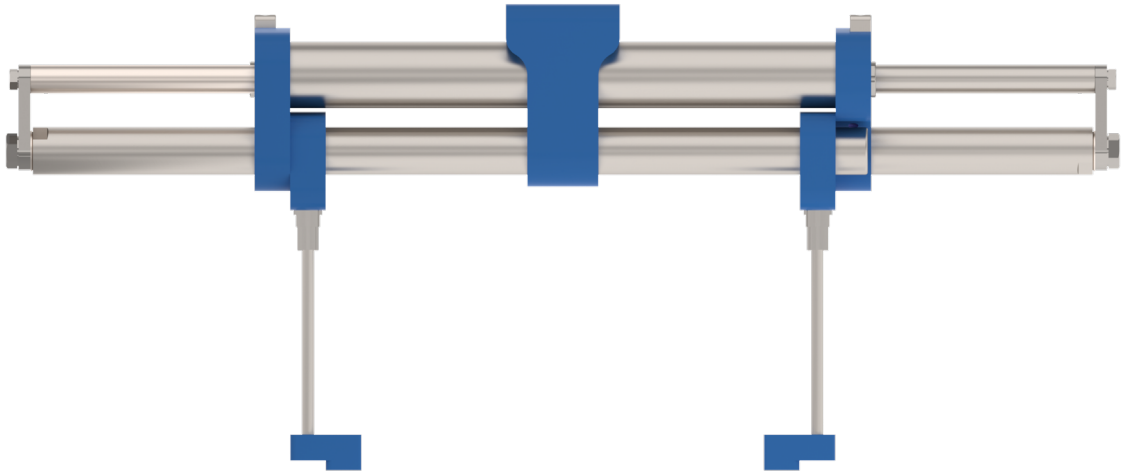
PERFORMANCE DATA GM01-23X80F-HP-90-SSCP



Performance Data Gripper Module GM01-23x80F-HP-90-SSCP				
Stroke				
Max. Opening/Closing Stroke Range	mm	(in)	≤ 90	(≤ 3.54)
Force				
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)
Velocity				
Max. Gripper Speed (Close/Open)	m/s	(in/s)	3.5	(137.79)
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_{pk}		7.4	
Max. Current per Gripper Arm @ 72VDC	A_{pk}		7.4	
Constant Force	N/A_{pk}		8.95	
Mechanical Data				
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.

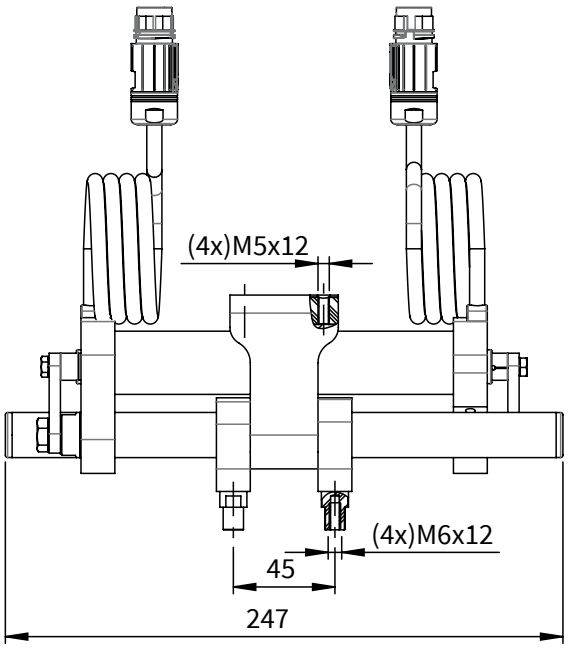
PERFORMANCE DATA GM01-23X160H-HP-170-SSCP

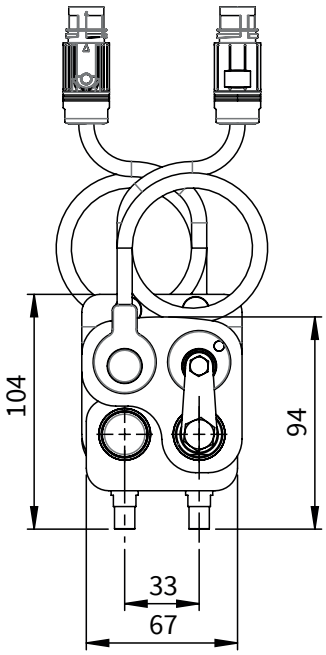


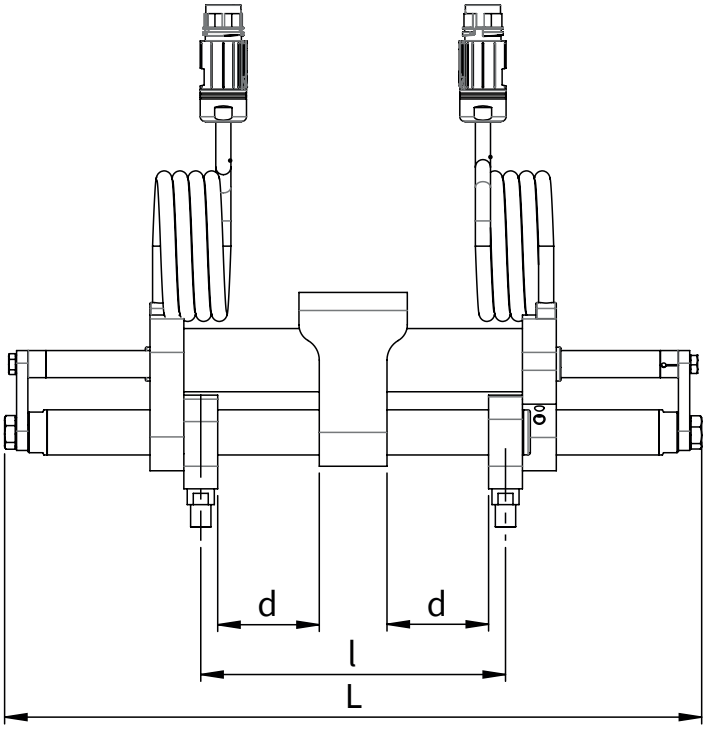
Performance Data Gripper Module GM01-23x160H-HP-170-SSCP				
Stroke				
Max. Opening/Closing Stroke Range	mm	(in)	≤ 170	(≤ 6.38)
Force				
Max. Clamping Force @ 48VDC*	N	(lbf)	116	(26.08)
Max. Clamping Force @ 72VDC*	N	(lbf)	138	(31.01)
Max. Continuous Clamping Force*	N	(lbf)	23.5	(5.28)
Velocity				
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_{pk}		10	
Max. Current per Gripper Arm @ 72VDC	A_{pk}		10	
Constant Force	N/A_{pk}		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	

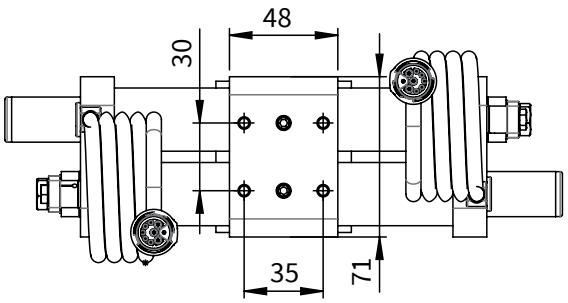
*The clamping force can be set via the motor current or the motor force constant.
**Protection Class Motor Connector IP67S

GRIPPER









Dimensions mm

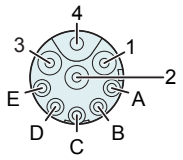
Gripper	d [mm (inch)]		l [mm (inch)]		L [mm (inch)]	
GM01-23x80F-HP-90-SSCP	45	(1.77)	135	(5.31)	309	(12.17)
GM01-23x160H-HP-170-SSCP	85	(3.35)	215	(8.46)	470	(18.05)

Item	Description	Item-No.
GM01-23x80F-HP-R150-90-SSCP	Gripper Module SSCP, max. stroke 90mm, max. Force 67N	0150-5308
GM01-23x160H-HP-R150-170-SSCP	Gripper Module SSCP, max. stroke 170mm, max. force 138N	0150-5595

CONNECTOR

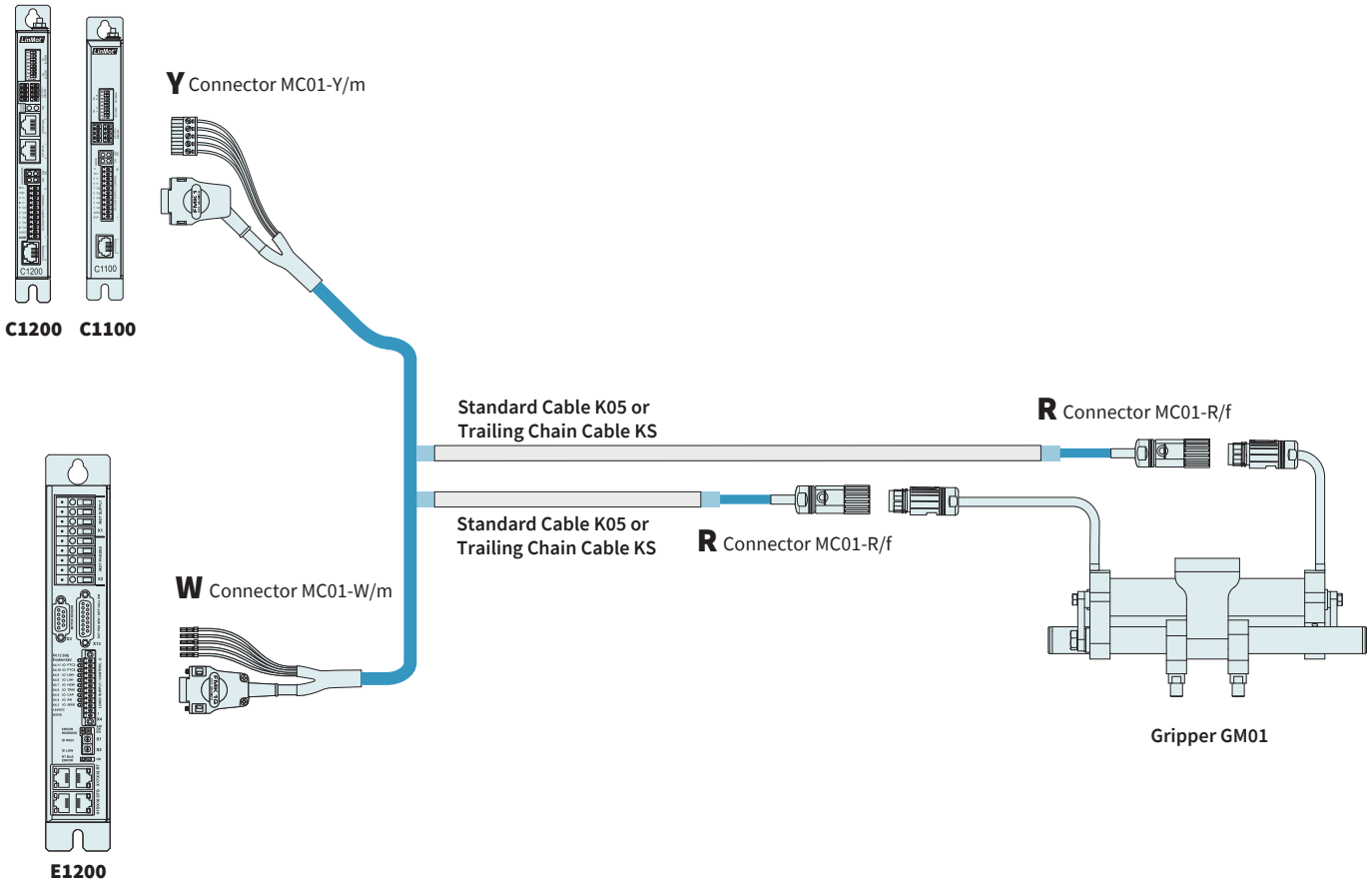
Motor Connector Wiring	R-Connector	Wire Color Motor Cable
Ph 1+	1	red
Ph 1-	2	pink
Ph 2+	3	blue
Ph 2-	4	grey
+5VDC	A	white
GND	B	inner Shield
Sinus	C	yellow
Cosinus	D	green
Temp.	E	black
Shield	Case	outer Shield

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.**
K05-W/R-2	Motor Cable W/R, 2 m	0150-2119
K05-W/R-3	Motor Cable W/R, 3 m	0150-2459
K05-W/R-3.5	Motor Cable W/R, 3,5 m	0150-2481
K05-W/R-4	Motor Cable W/R, 4 m	0150-2120
K05-W/R-6	Motor Cable W/R, 6 m	0150-2121
K05-W/R-8	Motor Cable W/R, 8 m	0150-2122
K05-W/R-10	Motor Cable W/R, 10 m	0150-2132
K05-W/R-	Special Cable W/R, Custom length	0150-3262
K05-Y/R-2	Motor Cable Y/R, 2 m	0150-2421
K05-Y/R-3	Motor Cable Y/R, 3 m	0150-4854
K05-Y/R-4	Motor Cable Y/R, 4 m	0150-2422
K05-Y/R-6	Motor Cable Y/R, 6 m	0150-2423
K05-Y/R-8	Motor Cable Y/R, 8 m	0150-2424
K05-Y-Fe/R-	Special Cable Y/R, Custom length	0150-3501

MOTOR CABLES

TRAILING CHAIN CABLES		
Item	**Description**	**Item-No.**
KS05-W/R-4	Trailing Chain Cable W/R, 4 m	0150-2106
KS05-W/R-6	Trailing Chain Cable W/R, 6 m	0150-2131
KS05-W/R-8	Trailing Chain Cable W/R, 8 m	0150-2107
KS05-W/R-	Trailing Chain Cable W/R, Custom length	0150-3256
KS05-Y/R-4	Trailing Chain Cable Y/R, 4 m	0150-2433
KS05-Y/R-6	Trailing Chain Cable Y/R, 6 m	0150-2434
KS05-Y/R-8	Trailing Chain Cable Y/R, 8 m	0150-2435
KS05-Y/R-	Trailing Chain Cable Y/R, Custom length	0150-3507

FURTHER ACCESSORIES

Further accessories are available on request.

ALL LINEAR MOTION
FROM A SINGLE SOURCE

Europe / Asia Headquarters

NTI AG - LinMot & MagSpring
Bodenaeckerstrasse 2
CH-8957 Spreitenbach
Switzerland

+41 (0)56 419 91 91
+41 (0)56 419 91 92

office@linmot.com
www.linmot.com

North / South America Headquarters

LinMot USA, Inc.
N1922 State Road 120, Unit 1
Lake Geneva, WI 53147
United States

262-743-2555

usasales@linmot.com
www.linmot.com