

LINEAR MOTORS P10-54X180U



- ✓ 230VAC and 3 x 400VAC technology
- ✓ Peak forces up to 502 N
- ✓ LinMot encoder or 3rd party drive encoder
SinCos, A/B incremental, BiSS / PT1000, PTC
- ✓ Extremely high dynamic
- ✓ Rotating push-pull TWIN connector for power and encoder cables
- ✓ Can also be controlled by standard third-party servo drives

LINEAR MOTORS P10-54X180U

/ TECHNICAL DATA / 425

/ MOTOR SPECIFICATIONS / 439

 P10-54x180U/10-BL-TU..... 439

 P10-54x180U/70-BL-TU..... 440

 P10-54x180U/160-BL-TU 441

 P10-54x180U/280-BL-TU 442

 P10-54x180U/370-BL-TU 443

 P10-54x180U/460-BL-TU 444

 P10-54x180U/580-BL-TU 445

 P10-54x180U/670-BL-TU 446

 P10-54x180U/880-BL-TU 447

 P10-54x180U/1060-BL-TU 448

 P10-54x180U/1270-BL-TU 449

 P10-54x180U/1480-BL-TU 450

 P10-54x180U/1660-BL-TU 451

/ ACCESSORIES / 452



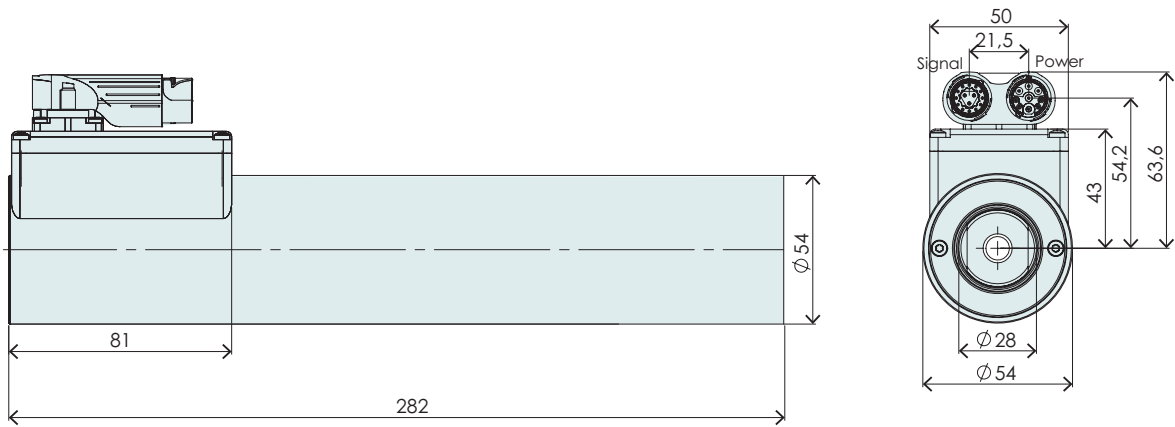
MOTOR FAMILY P10-54x180U

Technical Data				
Stroke				
Max. Stroke (ES)	mm (in)		10 - 1660	(0.39 - 65.4)
Force				
Max. Force ¹ @ 1x230VAC	N (lbf)		502	(113)
Max. Force ¹ @ 3x400VAC	N (lbf)		502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})		33	(7.42)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s (in/s)		5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		9.5	(379.9)
Position Detection				
Position Resolution	mm (in)		0.007	(0.0003)
Repeatability	mm (in)		±0.05	(±0.002)
Position Resolution with ES	mm (in)		0.001	(0.00004)
Repeatability with ES	mm (in)		±0.01	(±0.0004)
Linearity with ES	mm (in)		±0.01	(±0.0004)
Electrical Data				
Max. Current ¹ @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current ¹ @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Back EMF Constant	V _{pk} / (m/s) (V _{pk} / (in/s))		38.1	(0.968)
Terminal Resistance 25 °C / 120 °C	Ohm		5.7 / 7.8	
Terminal Inductivity	mH		4.6	
Magnetic Period	mm (in)		60	(2.35)
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Stator Diameter	mm (in)		54	(2.1)
Stator Length	mm (in)		282	(11)
Stator Mass	g (lb)		2220	(4.88)
Slider Diameter	mm (in)		28	(1.1)
Slider Length	mm (in)		350 - 2000	(14 - 79)
Slider Mass	g (lb)		1460 - 9140	(3.21 - 20.11)
IP Code			IP 65	
Certification				
UL	File-No.		E354430	

1) Real time calculation of motor winding temperature is required (including monitoring).

If temperature monitoring is only based on temperature sensor signal (missing thermal model calculation), 70 % of the peak value has to be taken instead.

STATOR



Item	Description	Item-No.	Comment
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723	For use with LinMot Drives
PS10-54x180U-BL-TU-D04	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, Pt1000 dual	0150-4409	For use with 3rd Party Drives
PS10-54x180U-BL-TU-D05	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC dual	0150-4592	For use with 3rd Party Drives
PS10-54x180U-BL-TU-D24	Stator 3x400VAC, A/B Encoder 1µm, Pt1000 dual	0150-2749	For use with 3rd Party Drives
PS10-54x180U-BL-TU-D24S	Stator 3x400VAC, A/B Encoder 5µm, Pt1000 dual	0150-4049	For use with 3rd Party Drives
PS10-54x180U-BL-TU-D25	Stator 3x400VAC, A/B Encoder 1µm, PTC dual	0150-2753	For use with 3rd Party Drives
PS10-54x180U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5µm, PTC dual	0150-2783	For use with 3rd Party Drives
PS10-54x180U-BL-TU-D26	Stator 3x400VAC, A/B Encoder, PTC single ended	0150-2956	For use with 3rd Party Drives
PS10-54x180U-BL-TU-D34	Stator 3x400VAC, BiSS-C Encoder, Pt1000 dual	0150-5771	For use with 3rd Party Drives

AVAILABLE INTERFACES FOR 3RD PARTY DRIVES

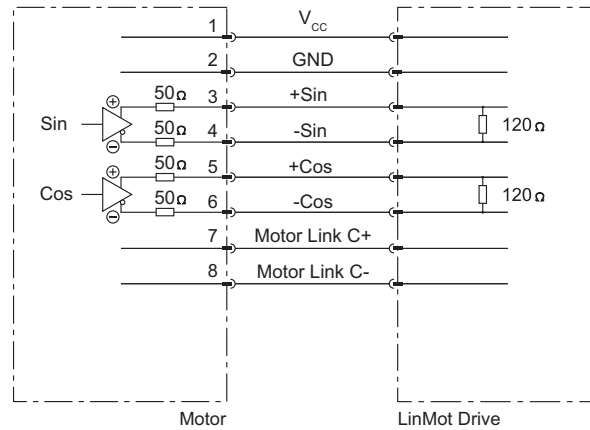
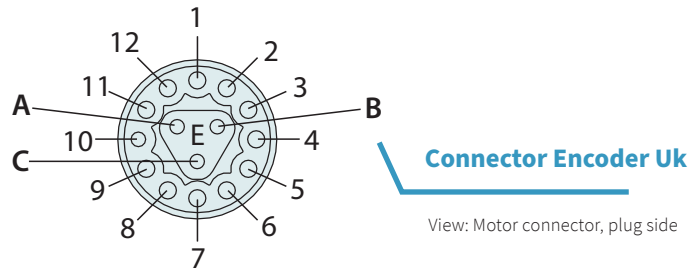
TEMPERATURE FEEDBACK		POSITION FEEDBACK			
		SinCos, 1Vpp	A/B 1µm	A/B 5µm	BiSS-C
		D0x	D2x	D2xS	D3x
MotLink C					
Pt1000, dual*	Dx4	D04	D24	D24S	D34
PTC, dual*	Dx5	D05	D25	D25S	
PTC single ended	Dx6		D26		

* Feedback available on encoder and power connectors.

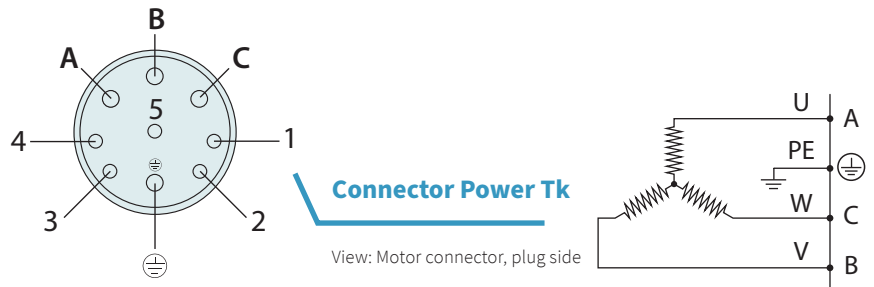
CONNECTOR PS10-54x180U-BL-TU (INTERFACE FOR LINMOT DRIVES)

Motor Connector Wiring		Connector Encoder Uk	Wire Color Motor Cable
+Vcc	Supply	1	red
GND	Supply	2	black
Sin+	Encoder	3	yellow
Sin-	Encoder	4	orange
Cos+	Encoder	5	green
Cos-	Encoder	6	blue
Mot. Link C+	Communication	7	pink
Mot. Link C-	Communication	8	grey
n. c.	n. c.	9	n. c.
n. c.	n. c.	10	n. c.
n. c.	n. c.	11	n. c.
n. c.	n. c.	12	n. c.
n. c.	n. c.	A	n. c.
n. c.	n. c.	B	n. c.
n. c.	n. c.	C	n. c.

* The supply voltage Vcc depends on the LinMot Drive type and is within 6...9V.



Motor Connector Wiring	Connector Power Tk	Wire Color Motor Cable
Phase U	A	red
PE	PE	yellow-green
Phase V	B	blue
Phase W	C	black (previously: green)
n. c.	1	n. c.
n. c.	2	n. c.
n. c.	3	n. c.
n. c.	4	n. c.
n. c.	5	n. c.

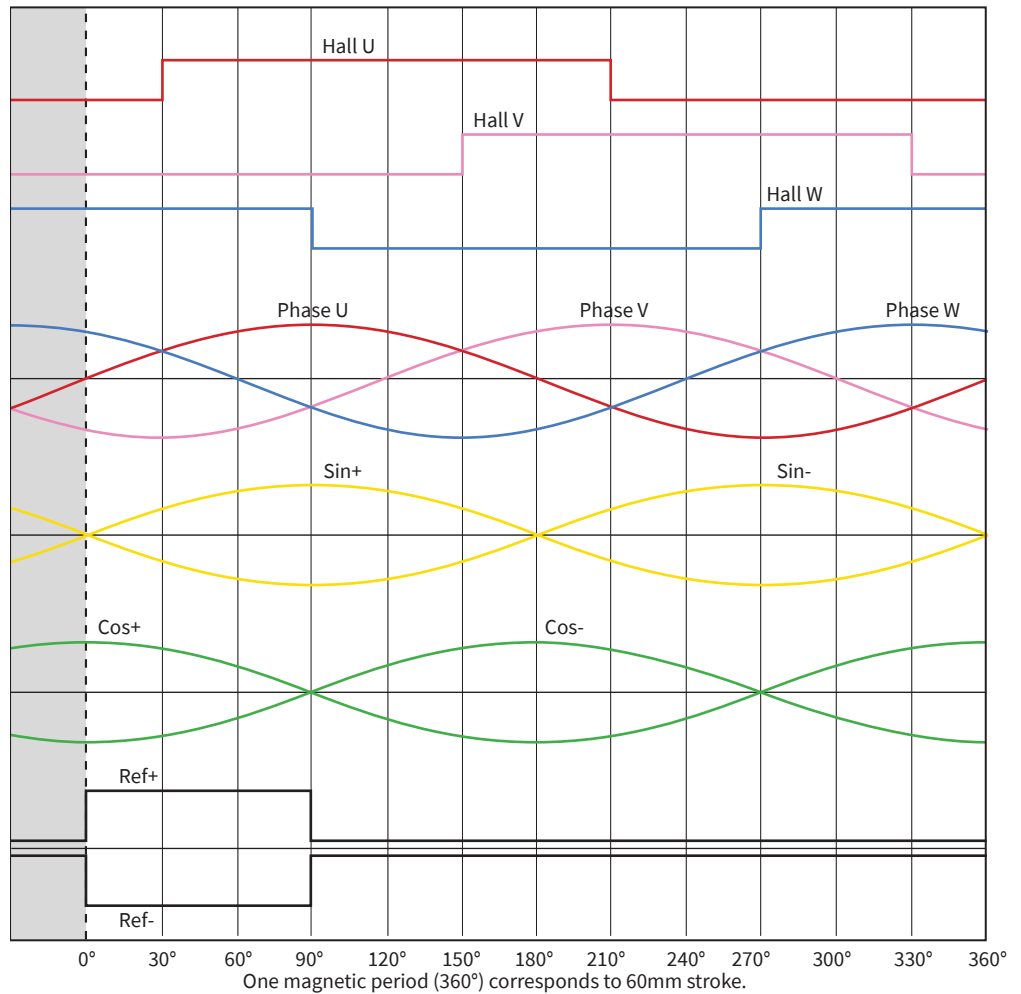


SIN/COS-POSITIONS-FEEDBACK (D0X-INTERFACE FOR 3RD PARTY DRIVES)

The linear motors of the P10-54 series have a contactless, integrated position feedback, which means that an external encoder is not required. The integrated position sensor technology of the motors with D0x interface provides a differential standard 1Vpp sin/cos signal with a 60mm period. The phase position of the sensor signals and the phase currents (with constant force in positive direction) is shown on the right side of the diagram. (The Sin encoder signal is in phase with the current characteristic of phase U).



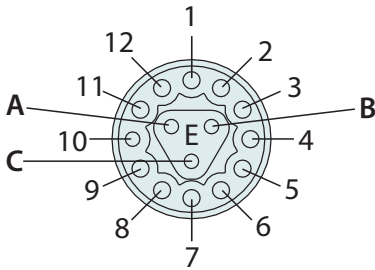
The arrows show the direction of movement of the slider. The stator remains in its position.



Sin / Cos		P10-54x...-D0x
Output signal period	mm	60
Signal amplitude ¹	V _{pp}	1
Termination ¹	Ohm	120
Supply voltage	Vdc	3...13 (w or w/o sense)
Power consumption	mW	< 1000
		(I < 150mA @ 5VDC, I < 80mA @ 12 VDC) ²

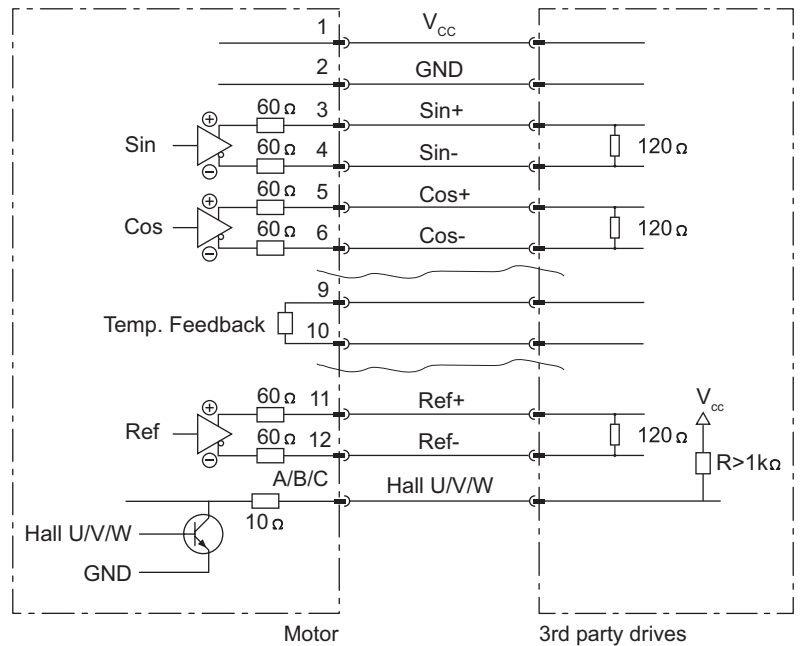
1) Applicable for Sin+/Sin-, Cos+/Cos- and Ref+/Ref- signals. Hall U/V/W are open collector signals.
 2) Power efficiency of the motor electronics varies with supply voltage.

CONNECTOR PS10-54x180U-BL-TU-D04/05 (SIN/COS-INTERFACE FOR 3RD PARTY DRIVES)

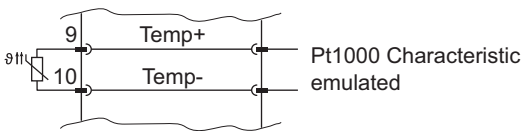


Connector Encoder Uk

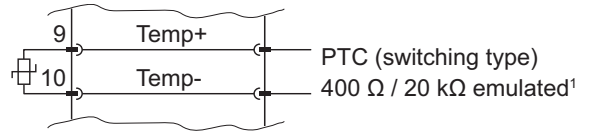
View: Motor connector, plug side



PS10-54x180U-BL-TU-D04



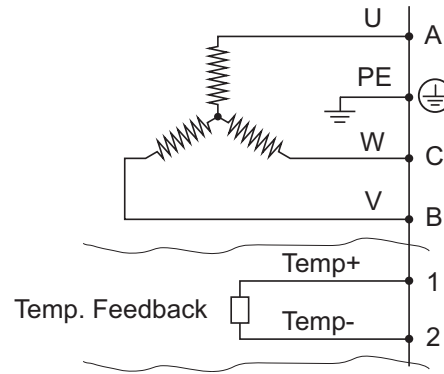
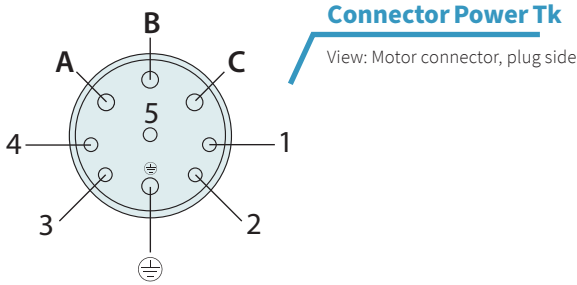
PS10-54x180U-BL-TU-D05



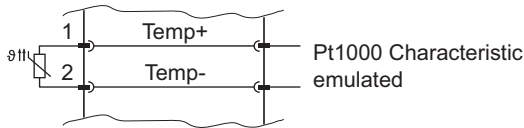
1) $\leq 400 \Omega$ = no error, $\geq 20 \text{ k}\Omega$ = error

Sin/Cos-Interface: Encoder Connector Wiring				
PS10-54x180U-BL-TU-D04	PS10-54x180U-BL-TU-D05	Function	Connector Encoder Uk	Wire Color Motor Cable KSS05-02/13
	+Vcc	Supply	1	white
	GND	Supply	2	brown
	Sin+	Encoder	3	grey
	Sin-	Encoder	4	pink
	Cos+	Encoder	5	blue
	Cos-	Encoder	6	red
	Do not connect	-	7	-
	Do not connect	-	8	-
Temp+ (Pt1000 Char.)	Temp+ (PTC 400/20k Char.)	Temperature ²	9	yellow-brown
Temp- (Pt1000 Char.)	Temp- (PTC 400/20k Char.)	Temperature ²	10	white-yellow
	Ref+	Encoder	11	black
	Ref-	Encoder	12	violet
	Hall U	Encoder	A	grey-red
	Hall V	Encoder	B	red-blue
	Hall W	Encoder	C	white-green

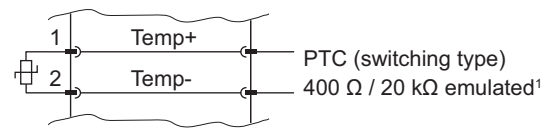
2) The temperature evaluation circuit must have the same galvanic reference potential as the encoder circuit (supply). It should therefore be connected to the supply GND. For correct evaluation, the connection potentials of the emulated temperature sensor must be in the range of the supply potentials. Valid temperature values can only be measured 50ms after the encoder supply is applied. In the currentless state, a resistance of 200kOhm is measured between pin 9 and 10 is measured. The maximum voltage between pin 9 and 10 must not exceed 16VDC. The maximum current is 15mA.



PS10-54X180U-BL-TU-D04



PS10-54X180U-BL-TU-D05



1) ≤ 400 Ω = no error, ≥ 20 kΩ = error

Sin/Cos-Interface: Power Connector Wiring			
PS10-54x180U-BL-TU-D04	PS10-54x180U-BL-TU-D05	Connector Power Tk	Wire Color Motor Cable KPS07-04/02
Phase U		A	red
PE		PE	yellow-green
Phase V		B	blue
Phase W		C	black (before: green)
Pt1000+ ¹⁾	PTC+ ¹⁾	1	cyan
Pt1000- ¹⁾	PTC- ¹⁾	2	grey
n. c.	n. c.	3	n. c.
n. c.	n. c.	4	n. c.
n. c.	n. c.	5	n. c.

1) The temperature evaluation circuit must have the same galvanic reference potential as the encoder circuit (supply). It should therefore be connected to the supply GND. For correct evaluation, the connection potentials of the emulated temperature sensor must be in the range of the supply potentials. Valid temperature values can only be measured 50ms after the encoder supply is applied. In currentless state a resistance of 200kOhm is measured between pin 1 and 2. The maximum voltage between pin 1 and 2 must not exceed 16VDC. The maximum current is 15mA.

TEMPERATURE FEEDBACK DX4 / DX5

Overheating protection is provided by three internal thermistors embedded in the motor windings. These thermistors are monitored by the motor electronics. A single thermistor is tracked based on the maximum of the temperature readings. This is done to accurately monitor the temperature along the entire length of the stator and to react as quickly as possible to dynamic changes in a single motor phase. When the motor winding temperature reaches its absolute maximum value, the drive amplifier/servo controller must shut down the motor to protect the motor from overheating dam-

age. To support the temperature evaluation given by the drive amplifier/servocontroller, the various temperature interfaces -Dx4 or -Dx5 are available. Depending on the interface used and the signals used, there are suitable motor cables (see overview table, section Accessories/Motor cables).

Dx4 (Pt1000 dual)

An emulated **Pt1000 thermistor** is available on both the **signal and the power connector** for evaluating the max. motor temperature.

Dx5 (PTC dual)

An emulated **PTC thermistor** is available on both **the signal and the power connector**, which changes to the high-impedance state when the max. motor temperature is exceeded.

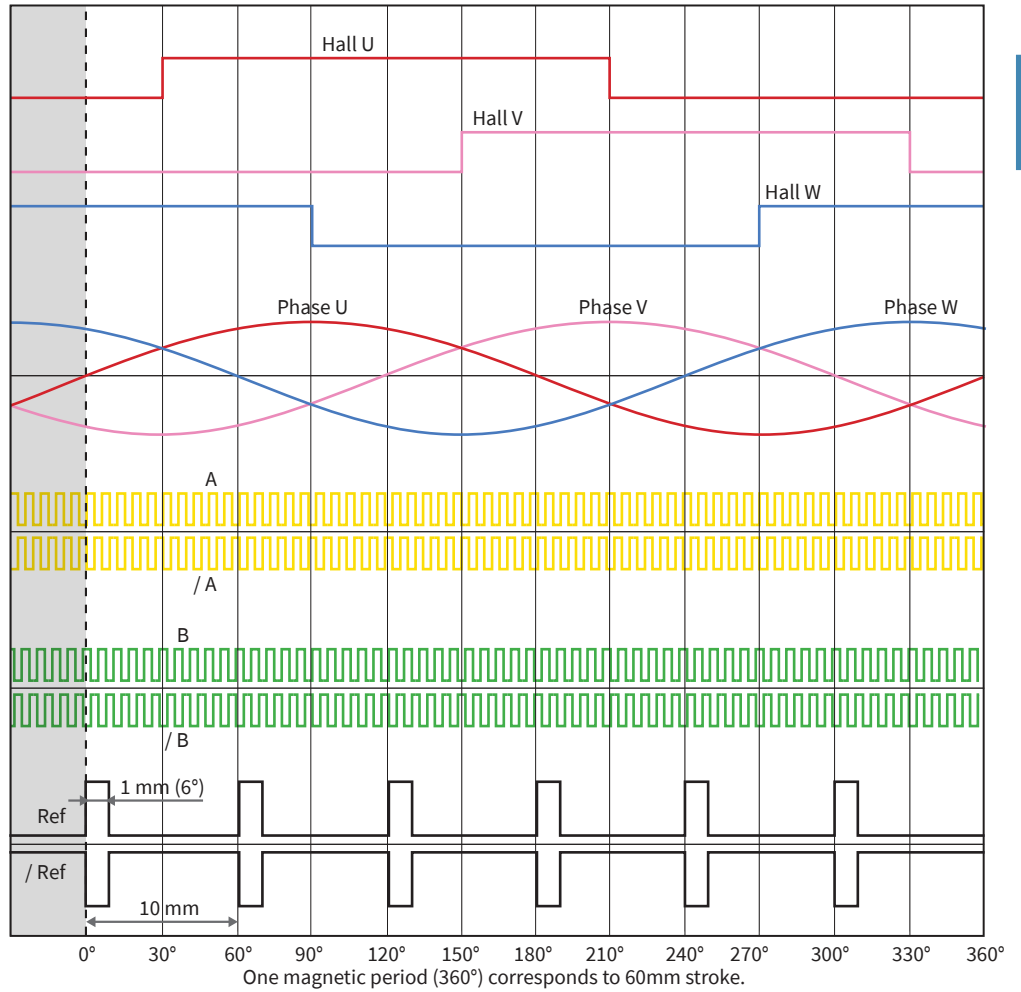
A/B INCREMENTAL POSITION FEEDBACK (D2X- INTERFACE FOR 3RD PARTY DRIVES)

The linear motors of the P10-54 series have a contactless, integrated position feedback, which means that an external encoder is not required.

The position output of the motors with D2x interface is an industry-standard A/B incremental signal with supplementary reference signal (RS422). Hall switch signals are available for commutation. The relationship between the phase current and the position sensor output is shown on the right.



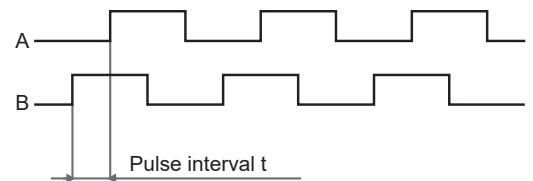
The arrows show the direction of movement of the slider. The stator remains in its position.



Example:
 Min. pulse interval $t = 500 \text{ ns}$
 For downstream evaluation, at least the following counter frequency is required:
 $f_{\text{counter}} = 1 / \text{pulse interval}$
 $= 1 / 500 \text{ ns} = 2 \text{ MHz}$

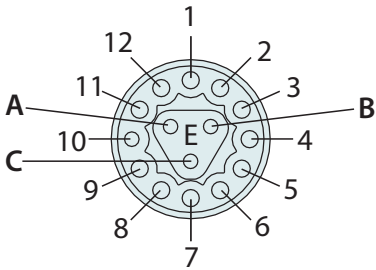


The logical state of signals A and B is not defined in relation to the reference signal Ref. The signal shape may differ from the illustration.



A / B		P10-54x...-D2x	P10-54x...-D2xS
Position Resolution	μm	1	5
Output Type		RS422	
Min. Edge Distance t	ns	100	500
Min. required counter frequency	MHz	10	2
Supply Voltage	Vdc	5 -12	
Max. Supply Current	mA	300	300

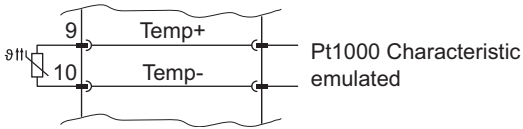
CONNECTOR PS10-54x180U-BL-TU-D24 / D24S / 25 / 25S / 26 (A/B-INTERFACE FOR 3RD PARTY DRIVES)



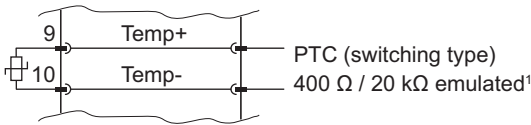
Connector Encoder Uk

View: Motor connector, plug side

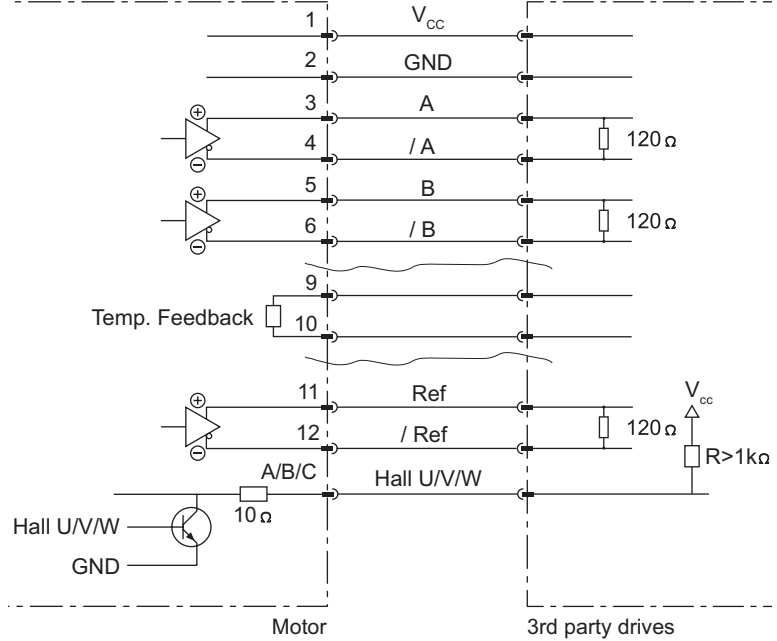
**PS10-54x180U-BL-TU-D24
PS10-54x180U-BL-TU-D24S**



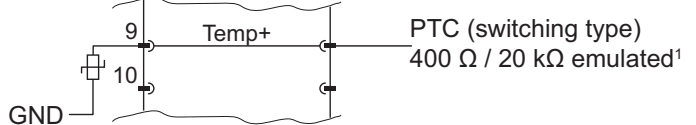
**PS10-54x180U-BL-TU-D25
PS10-54x180U-BL-TU-D25S**



1) $\leq 400 \Omega$ = no error, $\geq 20 \text{ k}\Omega$ = error



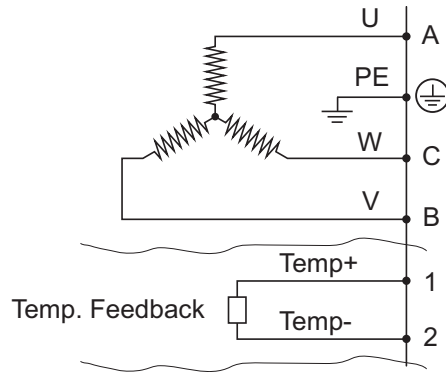
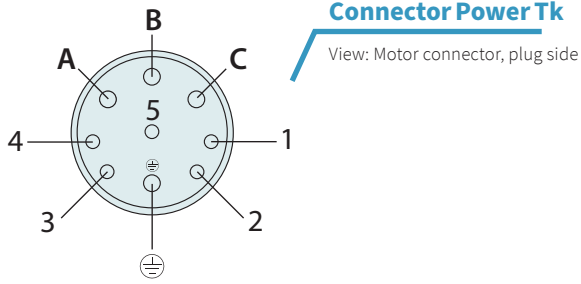
PS10-54x180U-BL-TU-D26



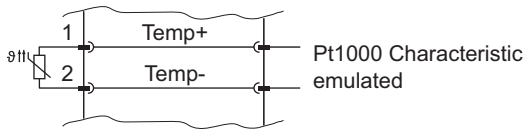
1) $\leq 400 \Omega$ = no error, $\geq 20 \text{ k}\Omega$ = error

A/B-Interface: Encoder Connector Wiring			Function	Connector Encoder Uk	Wire Color Motor Cable KSS05-02/13
PS10-54x180U-BL-TU-D24 PS10-54x180U-BL-TU-D24S	PS10-54x180U-BL-TU-D25 PS10-54x180U-BL-TU-D25S	PS10-54x180U-BL-TU-D26	+Vcc	1	white
			GND	2	brown
			A	3	grey
			/A	4	pink
			B	5	blue
			/B	6	red
			Do not connect	7	-
			Do not connect	8	-
Temp+ (Pt1000 Char.)	Temp+ (PTC 400/20k Char.)	Temp+ (PTC 400/20k Char.)	Temperature ²	9	yellow-brown
Temp- (Pt1000 Char.)	Temp- (PTC 400/20k Char.)	Do not connect	Temperature ²	10	white-yellow
			Ref	11	black
			/Ref	12	violett
			Hall U	A	grey-red
			Hall V	B	red-blue
			Hall W	C	white-green

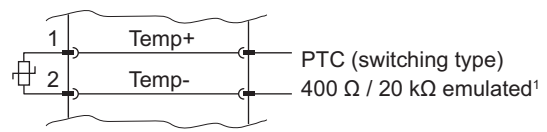
2) The temperature evaluation circuit must have the same galvanic reference potential as the encoder circuit (supply). It should therefore be connected to the supply GND. For correct evaluation, the connection potentials of the emulated temperature sensor must be in the range of the supply potentials. Valid temperature values can only be measured 50ms after the encoder supply is applied. In the currentless state, a resistance of 200kOhm is measured between pin 9 and 10 is measured. The maximum voltage between pin 9 and 10 must not exceed 16VDC. The maximum current is 15mA.



PS10-54x180U-BL-TU-D24
PS10-54x180U-BL-TU-D24S



PS10-54x180U-BL-TU-D25
PS10-54x180U-BL-TU-D25S



1) ≤ 400 Ω = no error, ≥ 20 kΩ = error

A/B-Interface: Power Connector Wiring				
PS10-54x180U-BL-TU-D24 PS10-54x180U-BL-TU-D24S	PS10-54x180U-BL-TU-D25 PS10-54x180U-BL-TU-D25S	PS10-54x180U-BL-TU-D26	Connector Power Tk	Wire Color Motor Cable KPS07-04/02
		Phase U	A	red
		PE	PE	yellow-green
		Phase V	B	blue
		Phase W	C	black (before: green)
Pt1000+ ¹⁾	PTC+ ¹⁾	Do not connect	1	cyan
Pt1000- ¹⁾	PTC- ¹⁾	Do not connect	2	grey
n. c.	n. c.	n. c.	3	n. c.
n. c.	n. c.	n. c.	4	n. c.
n. c.	n. c.	n. c.	5	n. c.

1) The temperature evaluation circuit must have the same galvanic reference potential as the encoder circuit (supply). It should therefore be connected to the supply GND. For correct evaluation, the connection potentials of the emulated temperature sensor must be in the range of the supply potentials. Valid temperature values can only be measured 50ms after the encoder supply is applied. In currentless state a resistance of 200kOhm is measured between pin 1 and 2. The maximum voltage between pin 1 and 2 must not exceed 16VDC. The maximum current is 15mA.

TEMPERATURE FEEDBACK DX4 / DX5 / DX6

Overheating protection is provided by three internal thermistors embedded in the motor windings. These thermistors are monitored by the motor electronics. A single thermistor is replicated based on the maximum of the temperature readings. This is done to accurately monitor the temperature along the entire length of the stator and to react as quickly as possible to dynamic changes in a single motor phase. When the motor winding temperature reaches its absolute maximum value, the drive amplifier/servo controller must shut down the motor to protect the motor from overheating damage. To support the temperature evaluation given by the drive amplifier/servocontroller, different temperature interfaces -DX4, -DX5

or -DX6 are available. Depending on the interface used and the signals used, there are suitable motor cables (see overview table section Accessories/Motor cables).

Dx4 (Pt1000 dual)

An emulated **Pt1000 thermistor** is available on both the **signal and the power connector** for evaluating the max. motor temperature.

Dx5 (PTC dual)

An emulated **PTC thermistor** is available on both the **signal and the power connector**, which changes to the high-impedance state when the max. motor temperature is exceeded.

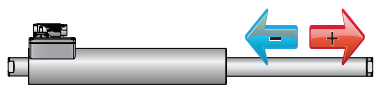
Dx6 (PTC)

An emulated PTC thermistor is available on the **signal connector**, which changes to the high-impedance state when the max. motor temperature is exceeded. The emulated **PTC** is internally **connected to GND on one side**, which is why only one additional signal line is connected to the servocontroller in addition to the power supply for evaluation.

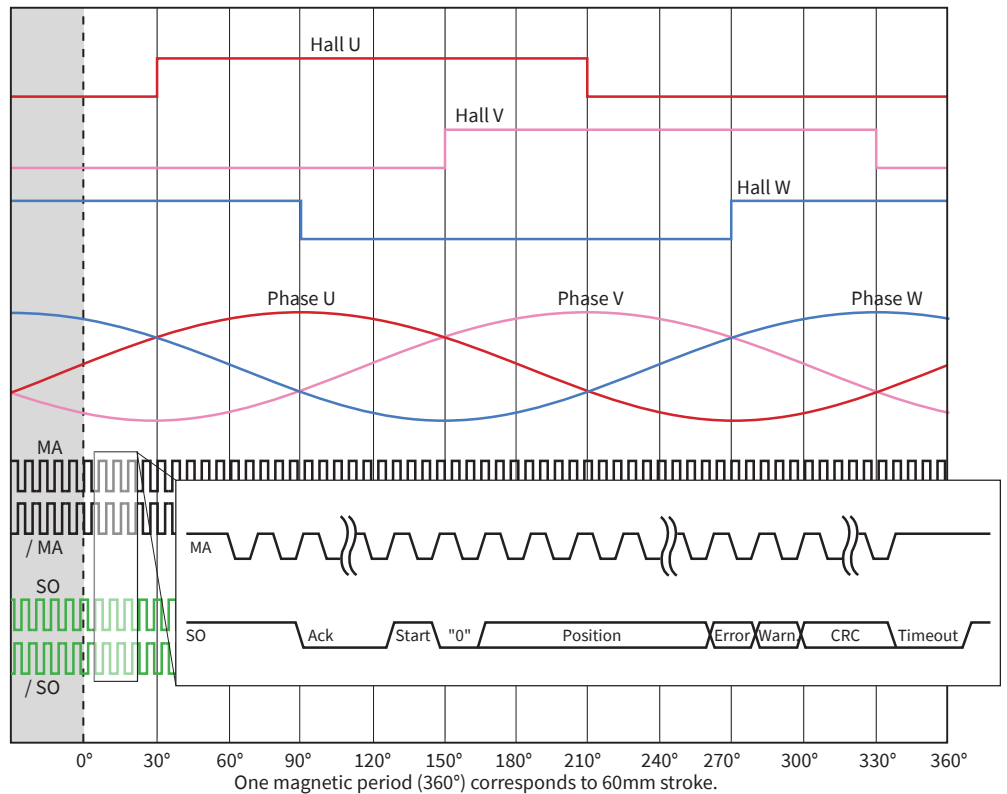
BISS-C POSITION FEEDBACK (D3x- INTERFACE FOR 3RD PARTY DRIVES)

The linear motors of the P10-54 series have contactless, integrated position feedback, which means that there is no need for an external encoder.

The position feedback of the motors with D3x interface is based on RS422 and the industry-standard BiSS-C protocol. Either the transmitted position or the hall switch signals can be used for commutation. The relationship between the phase current and the encoder signals is shown on the right.



The arrows show the direction of movement of the slider. The stator remains in its position.



BiSS-C ¹		P10-54x...-D3x			
Singleturn Position Resolution	µm	~0.1526 (60 000 / 2 ¹⁸)			
Output Type		RS422			
Max. Frequency	MHz	3.3			
Min. Edge Distance t	ns	100			
Supply Voltage	Vdc	5 -12			
Max. Supply Current	mA	300			
Data Type		SCDS (Single Cycle Data Sensor)			
Data (Bits)		Position		nER	nWA
		Multiturn	Singleturn	1	1
		16	18		
Data Format and Alignment		Binary coded, MSB first, right aligned			
CRC polynomial		0x43 (X ⁶ + X ¹ + X ⁰) – CRC bit length 6 bits, CRC is inverted			
CRC Starting Value		0x00			
BiSS Timeout (tm)	µs	~20			
Switch-on Delay	ms	100			

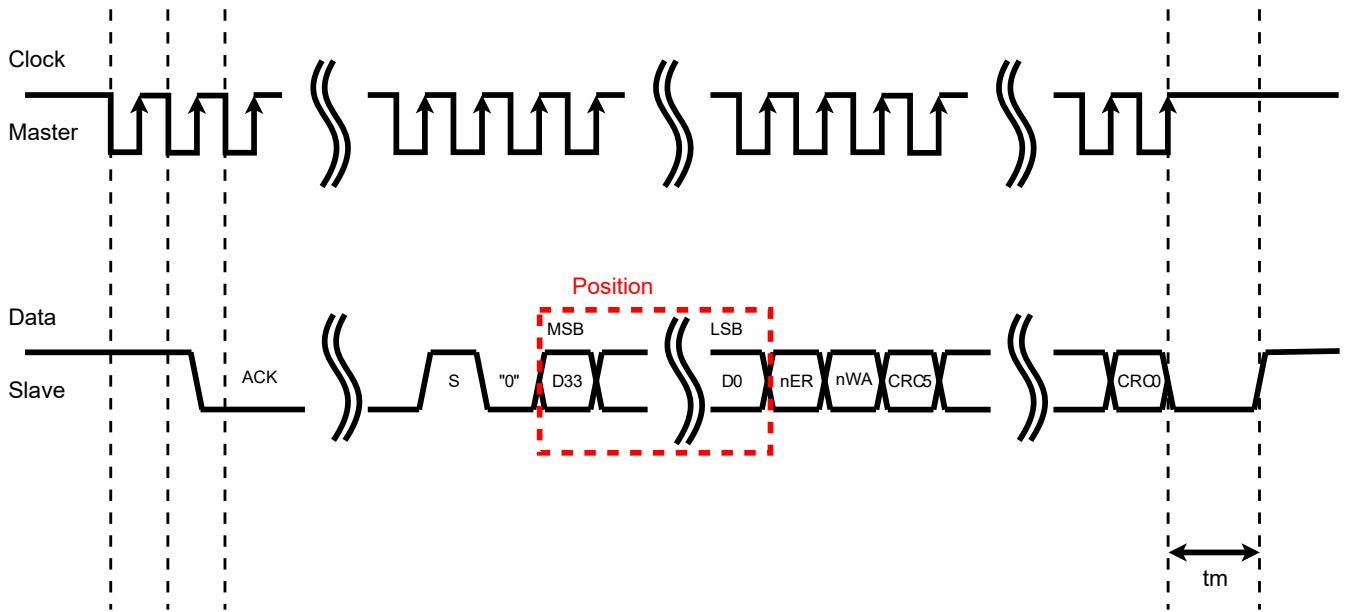
1) Compatible with bidirectional interfaces supporting EDS register access and unidirectional interfaces

Commutation Angle

$$\text{Comm. Angle} = \frac{\text{Modulo (Pos. 60 mm)}}{\text{Magnetic Period}} \cdot 360^\circ$$

$$\text{Comm. Angle} = \frac{\text{Singleturn-Value}}{2^{18}} \cdot 360^\circ$$

BISS-C-FRAME DESCRIPTION



Multiturn Position 16 Bit: D33-D18

Binary coded, MSB first
 Resolution per bit = width of a pole pair
 P10-70: 40mm
 P10-54: 60mm
 After switching on the encoder, the multiturn position starts with an offset of 2.04m. The multiturn position is thus initialised to the following values:
 P10-54: 34
 P10-70: 51

Singleturn Position 18 Bit: D17-D0

Binary coded, MSB first
 Resolution per bit = width of a pole pair / 2^{18}
 P10-70: $40'000 \mu\text{m} / 262'144 = 0.152587890625 \mu\text{m}$
 P10-54: $60'000 \mu\text{m} / 262'144 = 0.2288818359375 \mu\text{m}$
 The singleturn position maps the current position angle of the slider within a pole pair (magnetic period) of the motor. The singleturn position can therefore be used for commutation of the phase currents.
 Position 0 = 0°

Position $2^{16} = 90^\circ$
 Position $2^{17} = 180^\circ$
 Position $2^{18} = 360^\circ$
 The position or commutation angle is calculated as follows:
 Commutation angle = single turn position / $2^{18} * 360^\circ$

Errorbit: nER

0: error; 1: no error (active low).
 Indicates an encoder error. If this bit indicates an error, the position must be treated as invalid.

Warnbit: nWA

0: warning; 1: no warning (active low).
 Displays encoder warnings. The position is still valid if only a warning is displayed.

CRC 6 Bit: CRC5-0

Polynomial : 0x43
 Initial value : 0x00
 The CRC is calculated via position, error and warning bits.
 It is transmitted with MSB first and inverted. The start bit and the "0" bit are omitted from the CRC calculation.

ted from the CRC calculation.

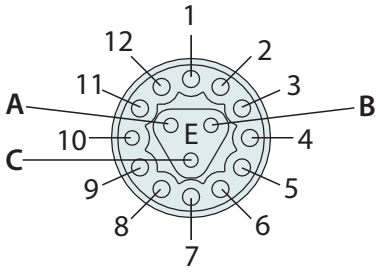
Register and Memory Definitions

A description of how a BiSS-C master can access registers can be found at www.biss-interface.com.

BiSSC - XML

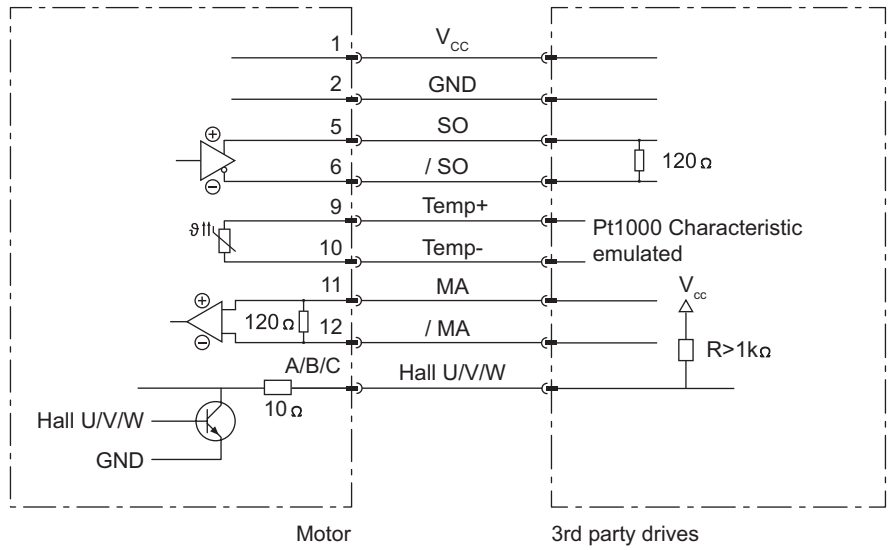
The encoder is compatible with the "Standard Encoder Profile (BP3)".
 The function of the XML file is to automatically assign device properties in the master using the BiSS identifier.
 The XML file can be used by masters to facilitate the configuration of slave devices. It can be downloaded from www.linmot.com.

CONNECTOR PS10-54x180U-BL-TU-D34 (BISS-C-INTERFACE FOR 3RD PARTY DRIVES)



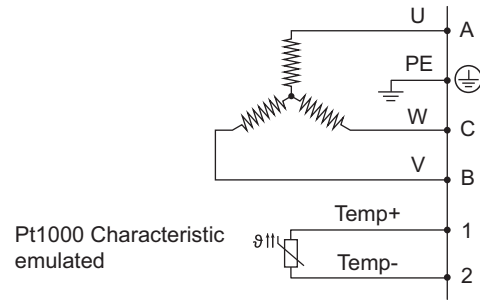
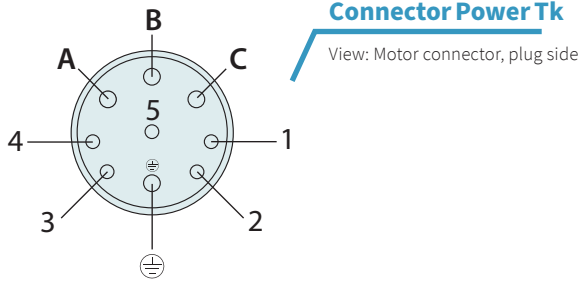
Connector Encoder Uk

View: Motor connector, plug side



BiSS-C-Interface: Encoder Connector Wiring			
PS10-54x180U-BL-TU-D34	Function	Connector Encoder Uk	Wire Color Motor Cable KSS05-02/13
+Vcc	Supply	1	white
GND	Supply	2	brown
Do not connect	-	3	-
Do not connect	-	4	-
SO (Slave out)	Encoder RS422	5	blue
/SO (Slave out)	Encoder RS422	6	red
Do not connect	-	7	-
Do not connect	-	8	-
Temp+ (Pt1000 Char.)	Temperature ¹⁾	9	yellow-brown
Temp- (Pt1000 Char.)	Temperature ¹⁾	10	white-yellow
MA (Master clock)	Encoder RS422	11	black
/MA (Master clock)	Encoder RS422	12	violett
Hall U	Encoder	A	grey-red
Hall V	Encoder	B	red-blue
Hall W	Encoder	C	white-green

1) The temperature evaluation circuit must have the same galvanic reference potential as the encoder circuit (supply). It should therefore be connected to the supply GND. For correct evaluation, the connection potentials of the emulated temperature sensor must be in the range of the supply potentials. Valid temperature values can only be measured 50ms after the encoder supply is applied. In the currentless state, a resistance of 200kOhm is measured between pin 9 and 10 is measured. The maximum voltage between pin 9 and 10 must not exceed 16VDC. The maximum current is 15mA.



BiSS-C-Interface: Power Connector Wiring		
PS10-54x180U-BL-TU-D34	Connector Power Tk	Wire Color Motor Cable KPS07-04/02
Phase U	A	red
PE	PE	yellow-green
Phase V	B	blue
Phase W	C	black (before: green)
Pt1000+ ¹⁾	1	cyan
Pt1000- ¹⁾	2	grey
n. c.	3	n. c.
n. c.	4	n. c.
n. c.	5	n. c.

1) The temperature evaluation circuit must have the same galvanic reference potential as the encoder circuit (supply). It should therefore be connected to the supply GND. For correct evaluation, the connection potentials of the emulated temperature sensor must be in the range of the supply potentials. Valid temperature values can only be measured 50ms after the encoder supply is applied. In currentless state a resistance of 200kOhm is measured between pin 1 and 2. The maximum voltage between pin 1 and 2 must not exceed 16VDC. The maximum current is 15mA.

TEMPERATUR FEEDBACK DX4

Overheating protection is provided by three internal thermistors embedded in the motor windings. These thermistors are monitored by the motor electronics. A single thermistor is tracked based on the maximum of the temperature readings. This is done to accurately monitor the temperature along the entire length of the stator and to react as quickly as possible to dynamic changes in a single motor phase. When the motor winding temperature reaches its ab-

solute maximum value, the drive amplifier/servo controller must shut down the motor to protect the motor from overheating damage. To support the temperature evaluation given by the drive amplifier/servocontroller, different temperature interfaces -DX4, -DX5 or -DX6 are available. Depending on the interface used and the signals used, there are suitable motor cables (see overview table, section Accessories/Motor cables).

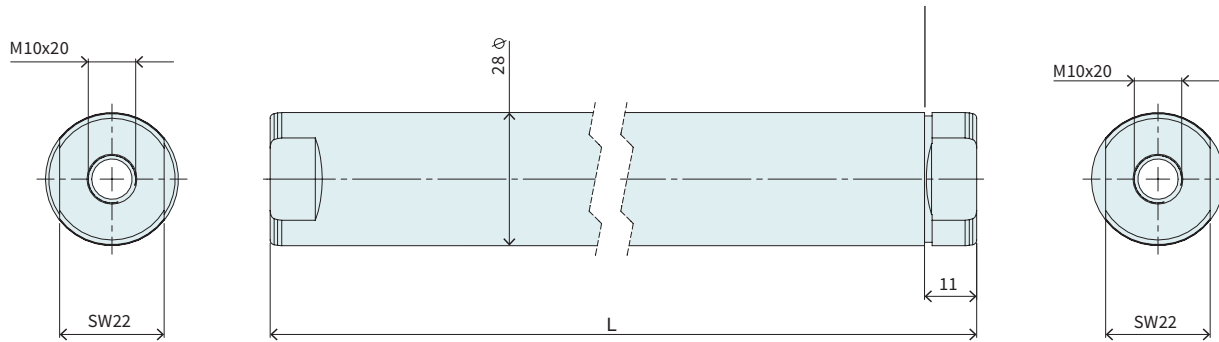
Dx4 (Pt1000 dual)

An emulated **Pt1000 thermistor** is available on both the **signal and the power connector** for evaluating the max. motor temperature.

SLIDER

Slider Standard

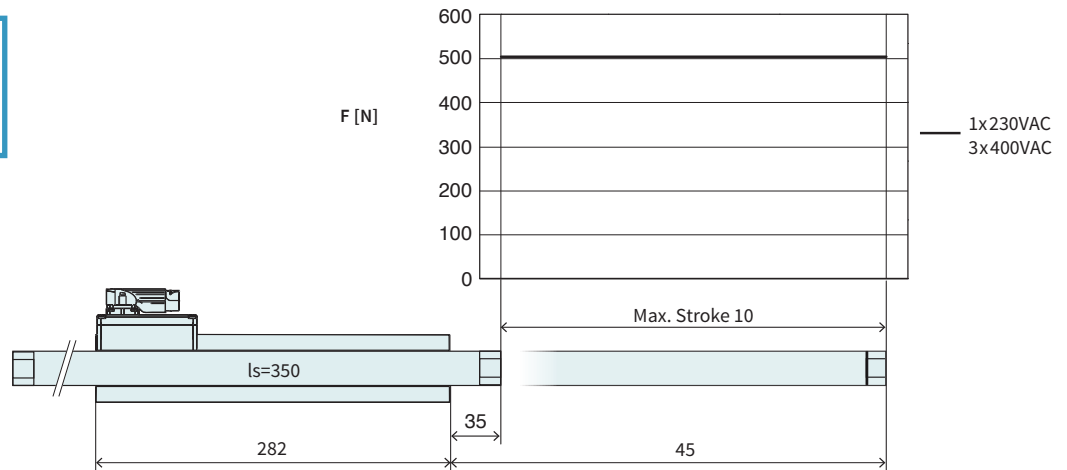
Number of grooves determines the slider type (see chapter 2 / slider) and marks the front end.



Slider Standard			
Item	Description	Max. Stroke [mm]	Item-No.
PL01-28x350/270	Slider 'standard'	10	0150-1380
PL01-28x410/330	Slider 'standard'	70	0150-1381
PL01-28x500/420	Slider 'standard'	160	0150-1382
PL01-28x620/540	Slider 'standard'	280	0150-1383
PL01-28x710/630	Slider 'standard'	370	0150-1384
PL01-28x800/720	Slider 'standard'	460	0150-1385
PL01-28x920/840	Slider 'standard'	580	0150-1386
PL01-28x1010/930	Slider 'standard'	670	0150-1387
PL01-28x1220/1140	Slider 'standard'	880	0150-1388
PL01-28x1400/1320	Slider 'standard'	1060	0150-1389
PL01-28x1610/1530	Slider 'standard'	1270	0150-1390
PL01-28x1820/1740	Slider 'standard'	1480	0150-1395
PL01-28x2000/1920	Slider 'standard'	1660	0150-1396

P10-54x180U/10-BL-TU

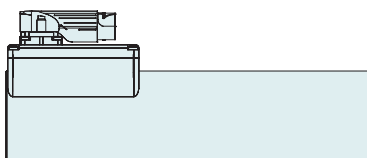
Max. Stroke: 10 mm
Peak Force: 502 N



Dimensions in mm

Technical Data P10-54x180U/10				
Stroke				
Max. Stroke	mm	(in)	10	(0.39)
Force				
Max. Force ¹ @ 1x230VAC	N	(lbf)	502	(113)
Max. Force ¹ @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 7.6	
Electrical Data				
Max. Current ¹ @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current ¹ @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	350	(14)
Slider Mass	g	(lb)	1460	(3.21)

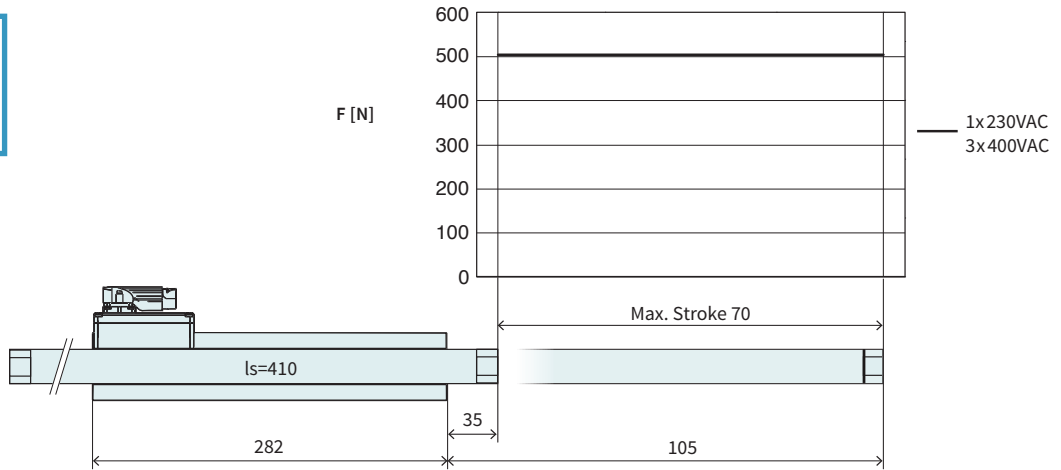
1) Real time calculation of motor winding temperature is required (including monitoring).
 If temperature monitoring is only based on temperature sensor signal (missing thermal model calculation), 70 % of the peak value has to be taken instead.



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x180U-BL-TU-D04	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, Pt1000 dual	0150-4409
PS10-54x180U-BL-TU-D05	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC dual	0150-4592
PS10-54x180U-BL-TU-D24	Stator 3x400VAC, A/B Encoder 1µm, Pt1000 dual	0150-2749
PS10-54x180U-BL-TU-D24S	Stator 3x400VAC, A/B Encoder 5µm, Pt1000 dual	0150-4049
PS10-54x180U-BL-TU-D25	Stator 3x400VAC, A/B Encoder 1µm, PTC dual	0150-2753
PS10-54x180U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5µm, PTC dual	0150-2783
PS10-54x180U-BL-TU-D26	Stator 3x400VAC, A/B Encoder, PTC single ended	0150-2956
PS10-54x180U-BL-TU-D34	Stator 3x400VAC, BiSS-C Encoder, Pt1000 dual	0150-5771
PL01-28x350/270	Slider 'standard'	0150-1380

P10-54x180U/70-BL-TU

Max. Stroke: 70 mm
Peak Force: 502 N

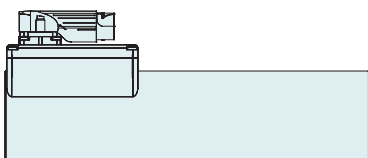


Dimensions in mm

Technical Data P10-54x180U/70

Stroke			
Max. Stroke	mm (in)	70 (2.75)	
Force			
Max. Force ¹ @ 1x230VAC	N (lbf)	502 (113)	
Max. Force ¹ @ 3x400VAC	N (lbf)	502 (113)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	84 / 110 / 160 (19 / 26 / 36)	
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	33 (7.42)	
Force Constant 2	N/A _{rms} (lbf/A _{rms})	46.7 (10.5)	
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	5.4 (219.9)	
Max. Velocity @ 3x400VAC	m/s (in/s)	9.5 (9.5)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 1.15	
Electrical Data			
Max. Current ¹ @ 1x230VAC	A _{pk} / A _{rms}	15.1 / 10.6	
Max. Current ¹ @ 3x400VAC	A _{pk} / A _{rms}	15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.8 / 2.4 / 3.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1200 / 650 / 320	
Mechanical Data			
Slider Length	mm (in)	410 (16)	
Slider Mass	g (lb)	1740 (3.83)	

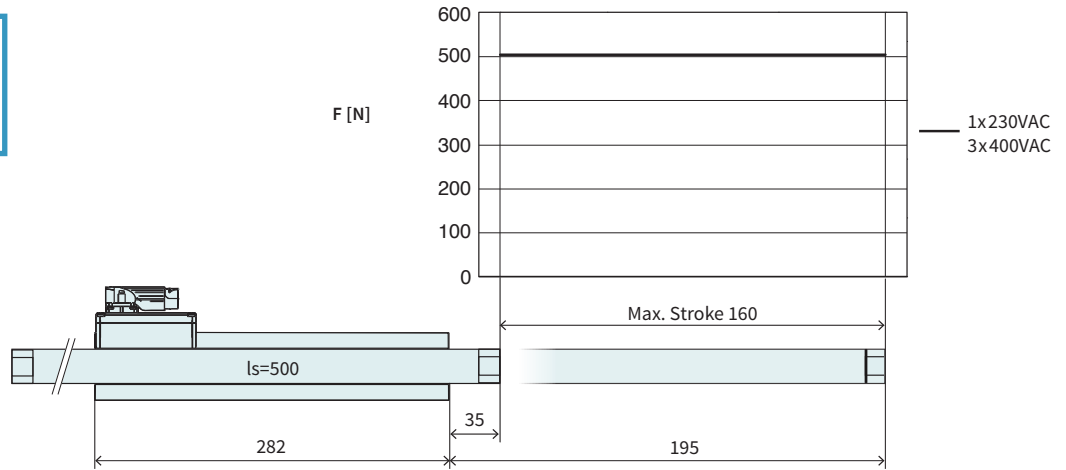
¹ Real time calculation of motor winding temperature is required (including monitoring).
 If temperature monitoring is only based on temperature sensor signal (missing thermal model calculation), 70 % of the peak value has to be taken instead.



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x180U-BL-TU-D04	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, Pt1000 dual	0150-4409
PS10-54x180U-BL-TU-D05	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC dual	0150-4592
PS10-54x180U-BL-TU-D24	Stator 3x400VAC, A/B Encoder 1µm, Pt1000 dual	0150-2749
PS10-54x180U-BL-TU-D24S	Stator 3x400VAC, A/B Encoder 5µm, Pt1000 dual	0150-4049
PS10-54x180U-BL-TU-D25	Stator 3x400VAC, A/B Encoder 1µm, PTC dual	0150-2753
PS10-54x180U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5µm, PTC dual	0150-2783
PS10-54x180U-BL-TU-D26	Stator 3x400VAC, A/B Encoder, PTC single ended	0150-2956
PS10-54x180U-BL-TU-D34	Stator 3x400VAC, BiSS-C Encoder, Pt1000 dual	0150-5771
PL01-28x410/330	Slider 'standard'	0150-1381

P10-54x180U/160-BL-TU

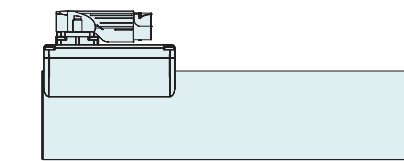
Max. Stroke: 160 mm
Peak Force: 502 N



Dimensions in mm

Technical Data P10-54x180U/160				
Stroke				
Max. Stroke	mm	(in)	160	(6.29)
Force				
Max. Force ¹ @ 1x230VAC	N	(lbf)	502	(113)
Max. Force ¹ @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		±0.55	
Electrical Data				
Max. Current ¹ @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current ¹ @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	500	(20)
Slider Mass	g	(lb)	2160	(4.75)

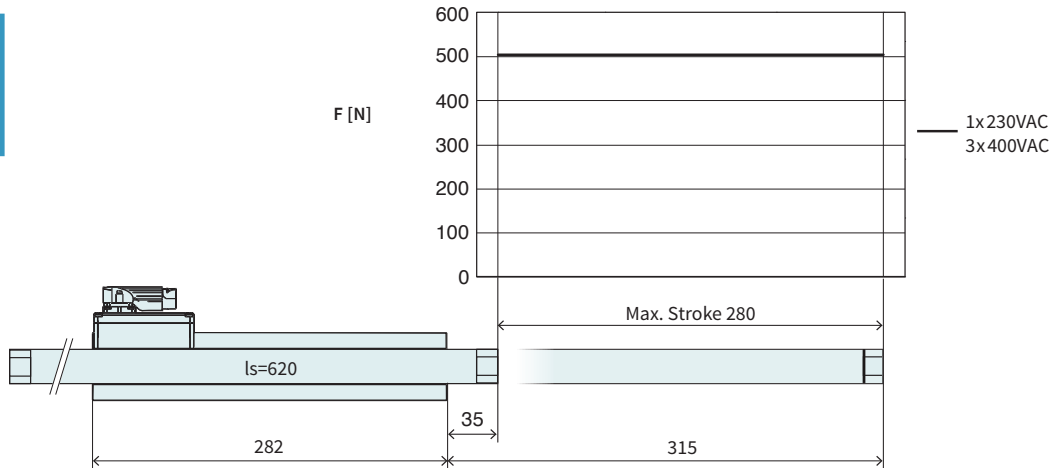
1) Real time calculation of motor winding temperature is required (including monitoring).
 If temperature monitoring is only based on temperature sensor signal (missing thermal model calculation), 70 % of the peak value has to be taken instead.



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x180U-BL-TU-D04	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, Pt1000 dual	0150-4409
PS10-54x180U-BL-TU-D05	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC dual	0150-4592
PS10-54x180U-BL-TU-D24	Stator 3x400VAC, A/B Encoder 1µm, Pt1000 dual	0150-2749
PS10-54x180U-BL-TU-D24S	Stator 3x400VAC, A/B Encoder 5µm, Pt1000 dual	0150-4049
PS10-54x180U-BL-TU-D25	Stator 3x400VAC, A/B Encoder 1µm, PTC dual	0150-2753
PS10-54x180U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5µm, PTC dual	0150-2783
PS10-54x180U-BL-TU-D26	Stator 3x400VAC, A/B Encoder, PTC single ended	0150-2956
PS10-54x180U-BL-TU-D34	Stator 3x400VAC, BiSS-C Encoder, Pt1000 dual	0150-5771
PL01-28x500/420	Slider 'standard'	0150-1382

P10-54x180U/280-BL-TU

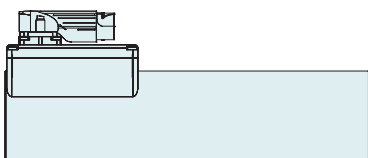
Max. Stroke: 280 mm
Peak Force: 502 N



Dimensions in mm

Technical Data P10-54x180U/280			
Stroke			
Max. Stroke	mm (in)	280	(10.99)
Force			
Max. Force ¹ @ 1x230VAC	N (lbf)	502	(113)
Max. Force ¹ @ 3x400VAC	N (lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	46.7	(10.5)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	9.5	(9.5)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	± 0.35	
Electrical Data			
Max. Current ¹ @ 1x230VAC	A _{pk} / A _{rms}	15.1 / 10.6	
Max. Current ¹ @ 3x400VAC	A _{pk} / A _{rms}	15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.8 / 2.4 / 3.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1200 / 650 / 320	
Mechanical Data			
Slider Length	mm (in)	620	(24)
Slider Mass	g (lb)	2720	(5.98)

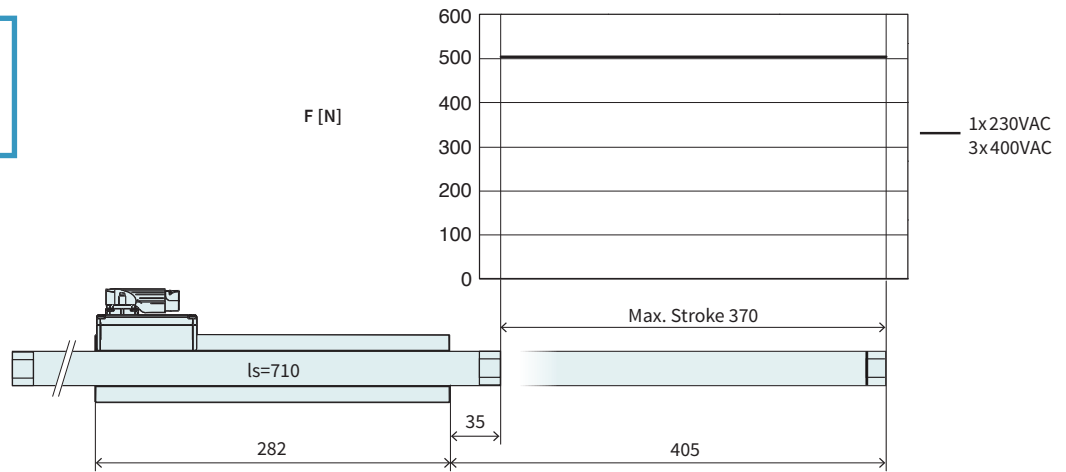
1) Real time calculation of motor winding temperature is required (including monitoring).
 If temperature monitoring is only based on temperature sensor signal (missing thermal model calculation), 70 % of the peak value has to be taken instead.



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x180U-BL-TU-D04	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, Pt1000 dual	0150-4409
PS10-54x180U-BL-TU-D05	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC dual	0150-4592
PS10-54x180U-BL-TU-D24	Stator 3x400VAC, A/B Encoder 1µm, Pt1000 dual	0150-2749
PS10-54x180U-BL-TU-D24S	Stator 3x400VAC, A/B Encoder 5µm, Pt1000 dual	0150-4049
PS10-54x180U-BL-TU-D25	Stator 3x400VAC, A/B Encoder 1µm, PTC dual	0150-2753
PS10-54x180U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5µm, PTC dual	0150-2783
PS10-54x180U-BL-TU-D26	Stator 3x400VAC, A/B Encoder, PTC single ended	0150-2956
PS10-54x180U-BL-TU-D34	Stator 3x400VAC, BiSS-C Encoder, Pt1000 dual	0150-5771
PL01-28x620/540	Slider 'standard'	0150-1383

P10-54x180U/370-BL-TU

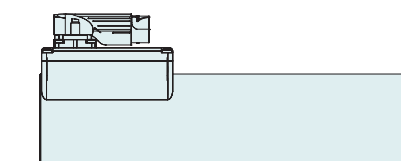
Max. Stroke: 370 mm
Peak Force: 502 N



Dimensions in mm

Technical Data P10-54x180U/370				
Stroke				
Max. Stroke	mm	(in)	370	(14.59)
Force				
Max. Force ¹ @ 1x230VAC	N	(lbf)	502	(113)
Max. Force ¹ @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.3	
Electrical Data				
Max. Current ¹ @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current ¹ @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	710	(28)
Slider Mass	g	(lb)	3140	(6.91)

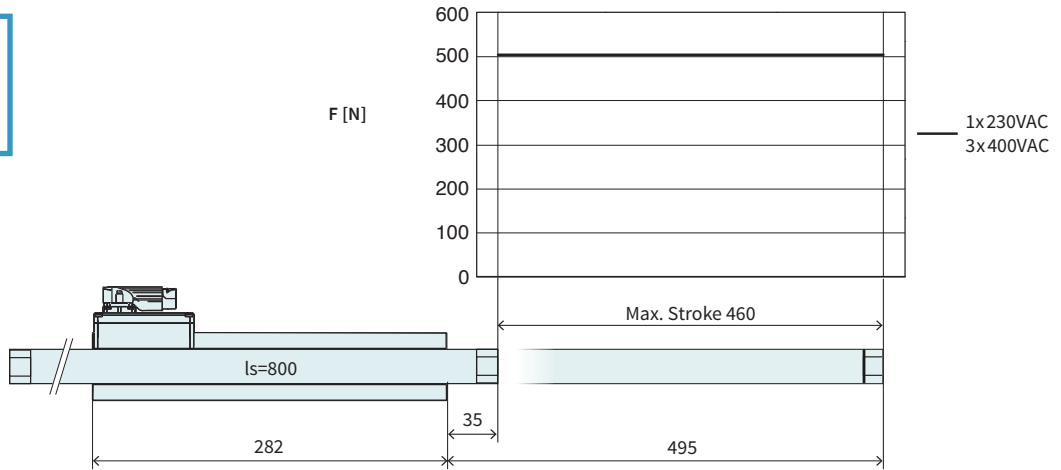
1) Real time calculation of motor winding temperature is required (including monitoring).
 If temperature monitoring is only based on temperature sensor signal (missing thermal model calculation), 70 % of the peak value has to be taken instead.



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x180U-BL-TU-D04	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, Pt1000 dual	0150-4409
PS10-54x180U-BL-TU-D05	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC dual	0150-4592
PS10-54x180U-BL-TU-D24	Stator 3x400VAC, A/B Encoder 1µm, Pt1000 dual	0150-2749
PS10-54x180U-BL-TU-D24S	Stator 3x400VAC, A/B Encoder 5µm, Pt1000 dual	0150-4049
PS10-54x180U-BL-TU-D25	Stator 3x400VAC, A/B Encoder 1µm, PTC dual	0150-2753
PS10-54x180U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5µm, PTC dual	0150-2783
PS10-54x180U-BL-TU-D26	Stator 3x400VAC, A/B Encoder, PTC single ended	0150-2956
PS10-54x180U-BL-TU-D34	Stator 3x400VAC, BiSS-C Encoder, Pt1000 dual	0150-5771
PL01-28x710/630	Slider 'standard'	0150-1384

P10-54x180U/460-BL-TU

Max. Stroke: 460 mm
Peak Force: 502 N

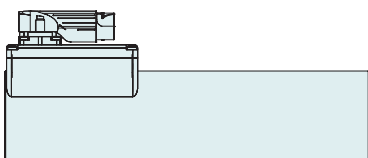


Dimensions in mm

Technical Data P10-54x180U/460

Stroke			
Max. Stroke	mm (in)		460 (18.1)
Force			
Max. Force ¹ @ 1x230VAC	N (lbf)		502 (113)
Max. Force ¹ @ 3x400VAC	N (lbf)		502 (113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)		84 / 110 / 160 (19 / 26 / 36)
Max. Border Force relative	%		100
Force Constant 1	N/A _{pk} (lbf/A _{pk})		33 (7.42)
Force Constant 2	N/A _{rms} (lbf/A _{rms})		46.7 (10.5)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)		5.4 (219.9)
Max. Velocity @ 3x400VAC	m/s (in/s)		9.5 (9.5)
Position Detection			
Repeatability	mm (in)		±0.05 (±0.002)
Linearity	%		± 0.25
Electrical Data			
Max. Current ¹ @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6
Max. Current ¹ @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5
Thermal Data			
Max. Winding Temperature (Sensor)	°C		90
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320
Mechanical Data			
Slider Length	mm (in)		800 (31)
Slider Mass	g (lb)		3560 (7.83)

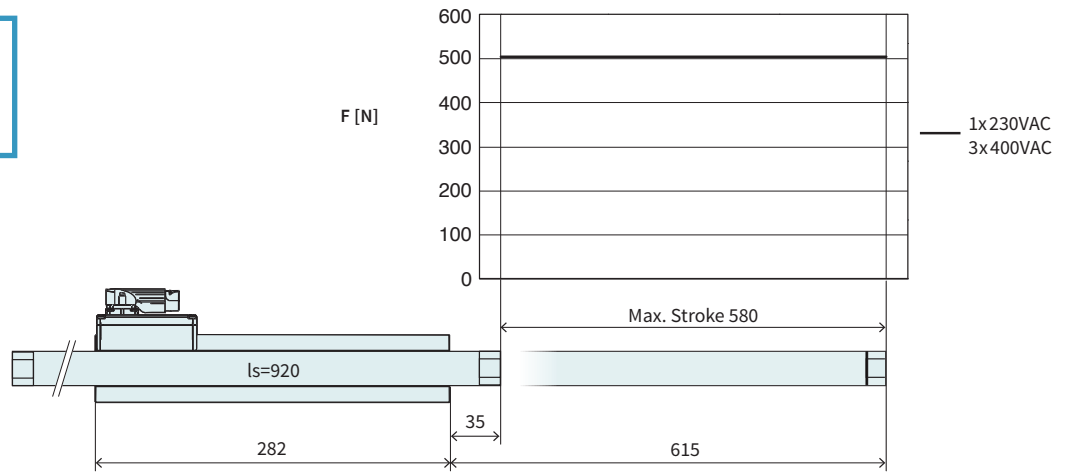
¹) Real time calculation of motor winding temperature is required (including monitoring).
 If temperature monitoring is only based on temperature sensor signal (missing thermal model calculation), 70 % of the peak value has to be taken instead.



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x180U-BL-TU-D04	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, Pt1000 dual	0150-4409
PS10-54x180U-BL-TU-D05	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC dual	0150-4592
PS10-54x180U-BL-TU-D24	Stator 3x400VAC, A/B Encoder 1µm, Pt1000 dual	0150-2749
PS10-54x180U-BL-TU-D24S	Stator 3x400VAC, A/B Encoder 5µm, Pt1000 dual	0150-4049
PS10-54x180U-BL-TU-D25	Stator 3x400VAC, A/B Encoder 1µm, PTC dual	0150-2753
PS10-54x180U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5µm, PTC dual	0150-2783
PS10-54x180U-BL-TU-D26	Stator 3x400VAC, A/B Encoder, PTC single ended	0150-2956
PS10-54x180U-BL-TU-D34	Stator 3x400VAC, BiSS-C Encoder, Pt1000 dual	0150-5771
PL01-28x800/720	Slider 'standard'	0150-1385

P10-54x180U/580-BL-TU

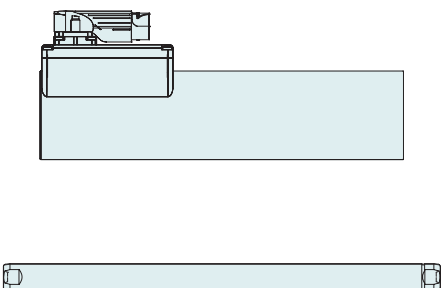
Max. Stroke: 580 mm
Peak Force: 502 N



Dimensions in mm

Technical Data P10-54x180U/580				
Stroke				
Max. Stroke	mm	(in)	580	(22.8)
Force				
Max. Force ¹ @ 1x230VAC	N	(lbf)	502	(113)
Max. Force ¹ @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.25	
Electrical Data				
Max. Current ¹ @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current ¹ @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	920	(36)
Slider Mass	g	(lb)	4120	(9.06)

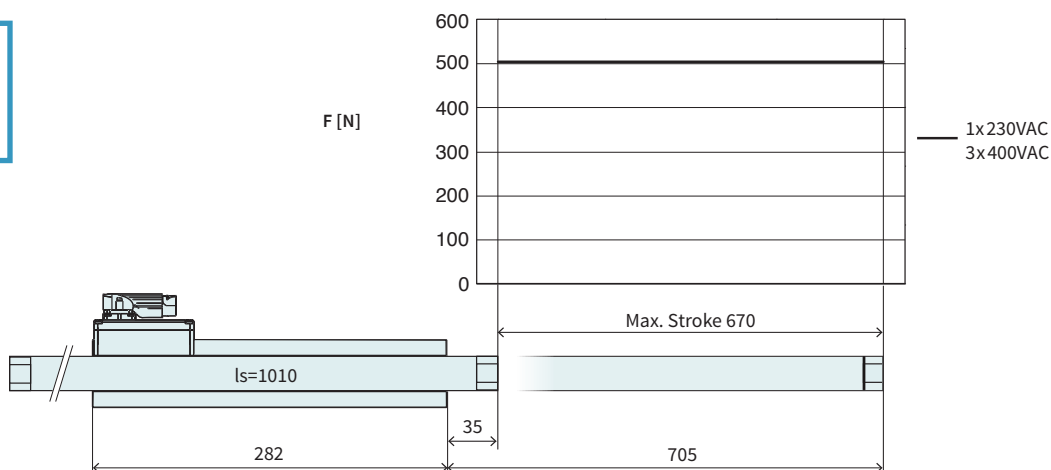
1) Real time calculation of motor winding temperature is required (including monitoring).
 If temperature monitoring is only based on temperature sensor signal (missing thermal model calculation), 70 % of the peak value has to be taken instead.



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x180U-BL-TU-D04	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, Pt1000 dual	0150-4409
PS10-54x180U-BL-TU-D05	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC dual	0150-4592
PS10-54x180U-BL-TU-D24	Stator 3x400VAC, A/B Encoder 1µm, Pt1000 dual	0150-2749
PS10-54x180U-BL-TU-D24S	Stator 3x400VAC, A/B Encoder 5µm, Pt1000 dual	0150-4049
PS10-54x180U-BL-TU-D25	Stator 3x400VAC, A/B Encoder 1µm, PTC dual	0150-2753
PS10-54x180U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5µm, PTC dual	0150-2783
PS10-54x180U-BL-TU-D26	Stator 3x400VAC, A/B Encoder, PTC single ended	0150-2956
PS10-54x180U-BL-TU-D34	Stator 3x400VAC, BiSS-C Encoder, Pt1000 dual	0150-5771
PL01-28x920/840	Slider 'standard'	0150-1386

P10-54x180U/670-BL-TU

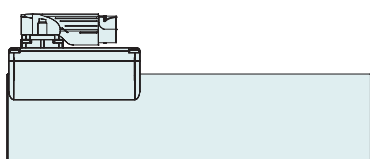
Max. Stroke: 670 mm
Peak Force: 502 N



Dimensions in mm

Technical Data P10-54x180U/670			
Stroke			
Max. Stroke	mm (in)	670	(26.39)
Force			
Max. Force ¹ @ 1x230VAC	N (lbf)	502	(113)
Max. Force ¹ @ 3x400VAC	N (lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms} (lbf/A _{rms})	46.7	(10.5)
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s (in/s)	9.5	(9.5)
Position Detection			
Repeatability	mm (in)	±0.05	(±0.002)
Linearity	%	±0.2	
Electrical Data			
Max. Current ¹ @ 1x230VAC	A _{pk} / A _{rms}	15.1 / 10.6	
Max. Current ¹ @ 3x400VAC	A _{pk} / A _{rms}	15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.8 / 2.4 / 3.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1200 / 650 / 320	
Mechanical Data			
Slider Length	mm (in)	1010	(40)
Slider Mass	g (lb)	4540	(10)

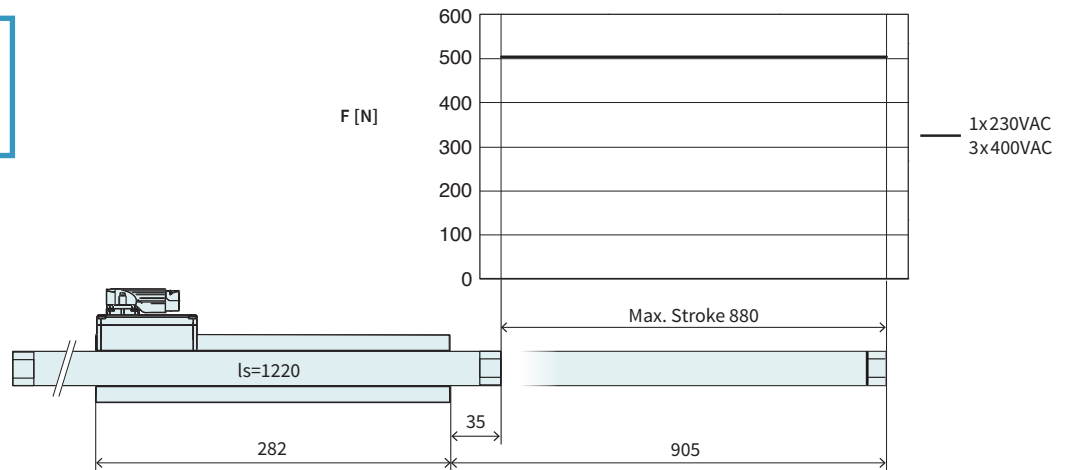
¹) Real time calculation of motor winding temperature is required (including monitoring).
 If temperature monitoring is only based on temperature sensor signal (missing thermal model calculation), 70 % of the peak value has to be taken instead.



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x180U-BL-TU-D04	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, Pt1000 dual	0150-4409
PS10-54x180U-BL-TU-D05	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC dual	0150-4592
PS10-54x180U-BL-TU-D24	Stator 3x400VAC, A/B Encoder 1µm, Pt1000 dual	0150-2749
PS10-54x180U-BL-TU-D24S	Stator 3x400VAC, A/B Encoder 5µm, Pt1000 dual	0150-4049
PS10-54x180U-BL-TU-D25	Stator 3x400VAC, A/B Encoder 1µm, PTC dual	0150-2753
PS10-54x180U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5µm, PTC dual	0150-2783
PS10-54x180U-BL-TU-D26	Stator 3x400VAC, A/B Encoder, PTC single ended	0150-2956
PS10-54x180U-BL-TU-D34	Stator 3x400VAC, BiSS-C Encoder, Pt1000 dual	0150-5771
PL01-28x1010/930	Slider 'standard'	0150-1387

P10-54x180U/880-BL-TU

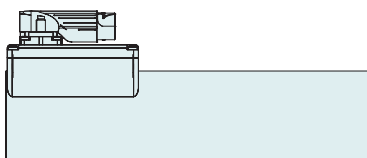
Max. Stroke: 880 mm
Peak Force: 502 N



Dimensions in mm

Technical Data P10-54x180U/880				
Stroke				
Max. Stroke	mm	(in)	880	(34.6)
Force				
Max. Force ¹ @ 1x230VAC	N	(lbf)	502	(113)
Max. Force ¹ @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.2	
Electrical Data				
Max. Current ¹ @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current ¹ @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	1220	(48)
Slider Mass	g	(lb)	5510	(12.12)

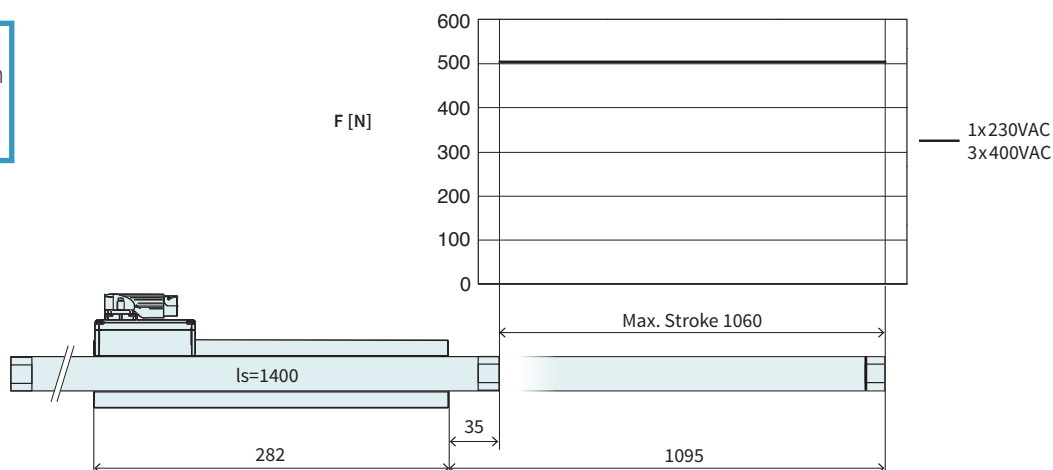
1) Real time calculation of motor winding temperature is required (including monitoring).
 If temperature monitoring is only based on temperature sensor signal (missing thermal model calculation), 70 % of the peak value has to be taken instead.



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x180U-BL-TU-D04	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, Pt1000 dual	0150-4409
PS10-54x180U-BL-TU-D05	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC dual	0150-4592
PS10-54x180U-BL-TU-D24	Stator 3x400VAC, A/B Encoder 1µm, Pt1000 dual	0150-2749
PS10-54x180U-BL-TU-D24S	Stator 3x400VAC, A/B Encoder 5µm, Pt1000 dual	0150-4049
PS10-54x180U-BL-TU-D25	Stator 3x400VAC, A/B Encoder 1µm, PTC dual	0150-2753
PS10-54x180U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5µm, PTC dual	0150-2783
PS10-54x180U-BL-TU-D26	Stator 3x400VAC, A/B Encoder, PTC single ended	0150-2956
PS10-54x180U-BL-TU-D34	Stator 3x400VAC, BiSS-C Encoder, Pt1000 dual	0150-5771
PL01-28x1220/1140	Slider 'standard'	0150-1388

P10-54x180U/1060-BL-TU

Max. Stroke: 1060 mm
Peak Force: 502 N

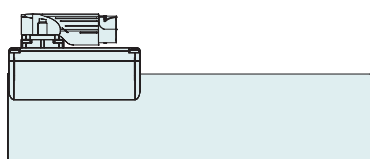


Dimensions in mm

Technical Data P10-54x180U/1060

Stroke			
Max. Stroke	mm (in)	1060 (41.7)	
Force			
Max. Force ¹ @ 1x230VAC	N (lbf)	502 (113)	
Max. Force ¹ @ 3x400VAC	N (lbf)	502 (113)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	84 / 110 / 160 (19 / 26 / 36)	
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	33 (7.42)	
Force Constant 2	N/A _{rms} (lbf/A _{rms})	46.7 (10.5)	
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	5.4 (219.9)	
Max. Velocity @ 3x400VAC	m/s (in/s)	9.5 (9.5)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	± 0.15	
Electrical Data			
Max. Current ¹ @ 1x230VAC	A _{pk} / A _{rms}	15.1 / 10.6	
Max. Current ¹ @ 3x400VAC	A _{pk} / A _{rms}	15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.8 / 2.4 / 3.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1200 / 650 / 320	
Mechanical Data			
Slider Length	mm (in)	1400 (55)	
Slider Mass	g (lb)	6350 (13.97)	

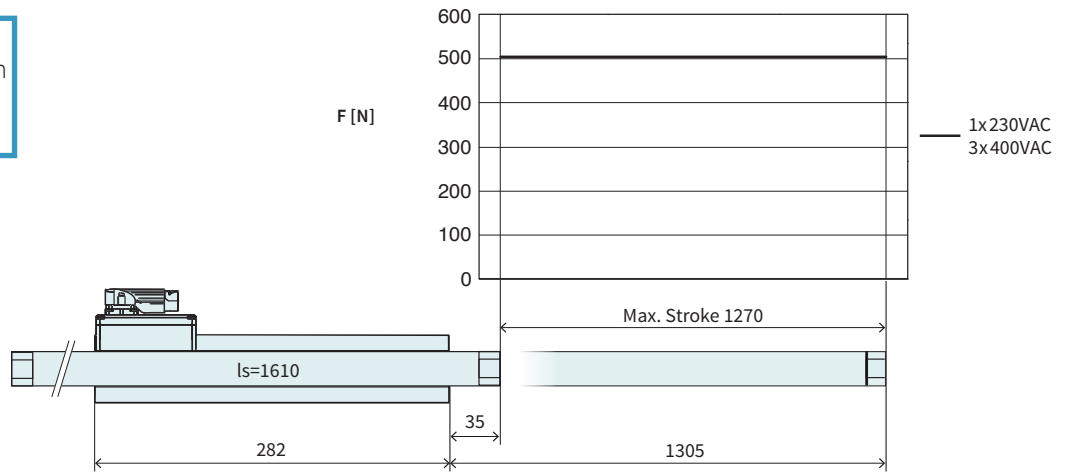
1) Real time calculation of motor winding temperature is required (including monitoring).
 If temperature monitoring is only based on temperature sensor signal (missing thermal model calculation), 70 % of the peak value has to be taken instead.



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x180U-BL-TU-D04	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, Pt1000 dual	0150-4409
PS10-54x180U-BL-TU-D05	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC dual	0150-4592
PS10-54x180U-BL-TU-D24	Stator 3x400VAC, A/B Encoder 1µm, Pt1000 dual	0150-2749
PS10-54x180U-BL-TU-D24S	Stator 3x400VAC, A/B Encoder 5µm, Pt1000 dual	0150-4049
PS10-54x180U-BL-TU-D25	Stator 3x400VAC, A/B Encoder 1µm, PTC dual	0150-2753
PS10-54x180U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5µm, PTC dual	0150-2783
PS10-54x180U-BL-TU-D26	Stator 3x400VAC, A/B Encoder, PTC single ended	0150-2956
PS10-54x180U-BL-TU-D34	Stator 3x400VAC, BiSS-C Encoder, Pt1000 dual	0150-5771
PL01-28x1400/1320	Slider 'standard'	0150-1389

P10-54x180U/1270-BL-TU

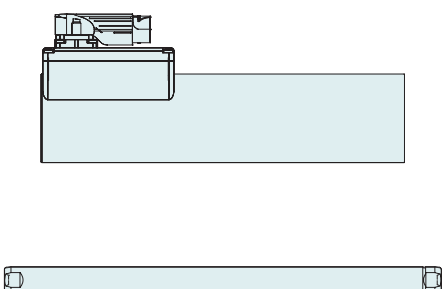
Max. Stroke: 1270 mm
Peak Force: 502 N



Dimensions in mm

Technical Data P10-54x180U/1270				
Stroke				
Max. Stroke	mm	(in)	1270	(49.99)
Force				
Max. Force ¹ @ 1x230VAC	N	(lbf)	502	(113)
Max. Force ¹ @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		± 0.15	
Electrical Data				
Max. Current ¹ @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current ¹ @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	1610	(63)
Slider Mass	g	(lb)	7330	(16.13)

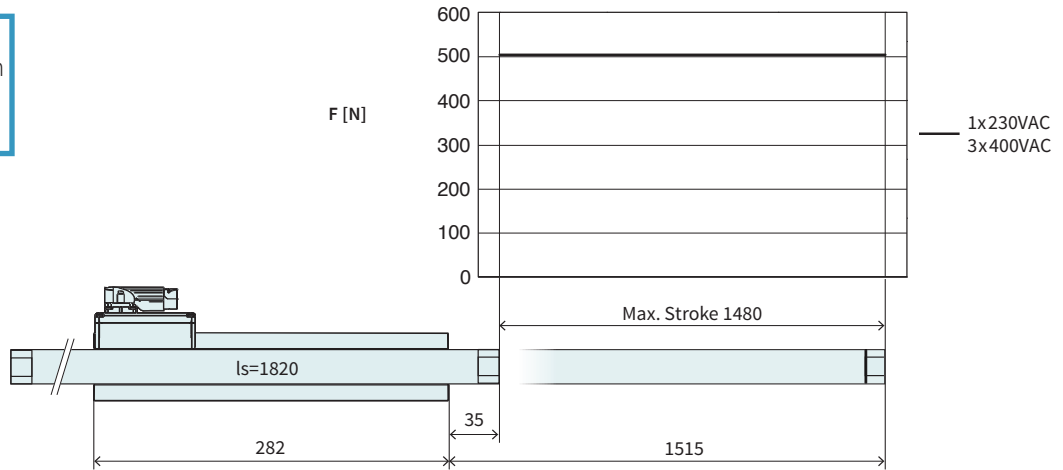
1) Real time calculation of motor winding temperature is required (including monitoring).
 If temperature monitoring is only based on temperature sensor signal (missing thermal model calculation), 70 % of the peak value has to be taken instead.



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x180U-BL-TU-D04	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, Pt1000 dual	0150-4409
PS10-54x180U-BL-TU-D05	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC dual	0150-4592
PS10-54x180U-BL-TU-D24	Stator 3x400VAC, A/B Encoder 1µm, Pt1000 dual	0150-2749
PS10-54x180U-BL-TU-D24S	Stator 3x400VAC, A/B Encoder 5µm, Pt1000 dual	0150-4049
PS10-54x180U-BL-TU-D25	Stator 3x400VAC, A/B Encoder 1µm, PTC dual	0150-2753
PS10-54x180U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5µm, PTC dual	0150-2783
PS10-54x180U-BL-TU-D26	Stator 3x400VAC, A/B Encoder, PTC single ended	0150-2956
PS10-54x180U-BL-TU-D34	Stator 3x400VAC, BiSS-C Encoder, Pt1000 dual	0150-5771
PL01-28x1610/1530	Slider 'standard'	0150-1390

P10-54x180U/1480-BL-TU

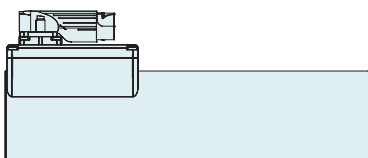
Max. Stroke: 1480 mm
Peak Force: 502 N



Dimensions in mm

Technical Data P10-54x180U/1480			
Stroke			
Max. Stroke	mm (in)	1480 (58.29)	
Force			
Max. Force ¹ @ 1x230VAC	N (lbf)	502 (113)	
Max. Force ¹ @ 3x400VAC	N (lbf)	502 (113)	
Max. Cont. Force [Passive cooling / Fan / Fluid]	N (lbf)	84 / 110 / 160 (19 / 26 / 36)	
Max. Border Force relative	%	100	
Force Constant 1	N/A _{pk} (lbf/A _{pk})	33 (7.42)	
Force Constant 2	N/A _{rms} (lbf/A _{rms})	46.7 (10.5)	
Velocity			
Max. Velocity @ 1x230VAC	m/s (in/s)	5.4 (219.9)	
Max. Velocity @ 3x400VAC	m/s (in/s)	9.5 (9.5)	
Position Detection			
Repeatability	mm (in)	±0.05 (±0.002)	
Linearity	%	±0.15	
Electrical Data			
Max. Current ¹ @ 1x230VAC	A _{pk} / A _{rms}	15.1 / 10.6	
Max. Current ¹ @ 3x400VAC	A _{pk} / A _{rms}	15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}	2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}	1.8 / 2.4 / 3.5	
Thermal Data			
Max. Winding Temperature (Sensor)	°C	90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W	1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s	1200 / 650 / 320	
Mechanical Data			
Slider Length	mm (in)	1820 (72)	
Slider Mass	g (lb)	8300 (18.26)	

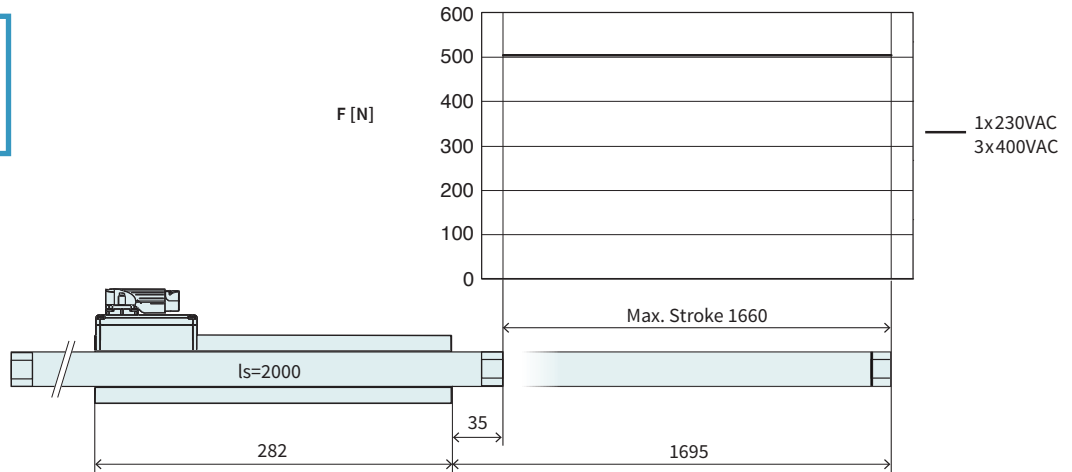
1) Real time calculation of motor winding temperature is required (including monitoring).
 If temperature monitoring is only based on temperature sensor signal (missing thermal model calculation), 70 % of the peak value has to be taken instead.



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x180U-BL-TU-D04	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, Pt1000 dual	0150-4409
PS10-54x180U-BL-TU-D05	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC dual	0150-4592
PS10-54x180U-BL-TU-D24	Stator 3x400VAC, A/B Encoder 1µm, Pt1000 dual	0150-2749
PS10-54x180U-BL-TU-D24S	Stator 3x400VAC, A/B Encoder 5µm, Pt1000 dual	0150-4049
PS10-54x180U-BL-TU-D25	Stator 3x400VAC, A/B Encoder 1µm, PTC dual	0150-2753
PS10-54x180U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5µm, PTC dual	0150-2783
PS10-54x180U-BL-TU-D26	Stator 3x400VAC, A/B Encoder, PTC single ended	0150-2956
PS10-54x180U-BL-TU-D34	Stator 3x400VAC, BiSS-C Encoder, Pt1000 dual	0150-5771
PL01-28x1820/1740	Slider 'standard'	0150-1395

P10-54x180U/1660-BL-TU

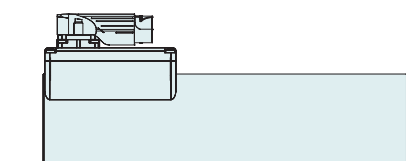
Max. Stroke: 1660 mm
Peak Force: 502 N



Dimensions in mm

Technical Data P10-54x180U/1660				
Stroke				
Max. Stroke	mm	(in)	1660	(65.4)
Force				
Max. Force ¹ @ 1x230VAC	N	(lbf)	502	(113)
Max. Force ¹ @ 3x400VAC	N	(lbf)	502	(113)
Max. Cont. Force [Passive cooling / Fan / Fluid]	N	(lbf)	84 / 110 / 160	(19 / 26 / 36)
Max. Border Force relative	%		100	
Force Constant 1	N/A _{pk}	(lbf/A _{pk})	33	(7.42)
Force Constant 2	N/A _{rms}	(lbf/A _{rms})	46.7	(10.5)
Velocity				
Max. Velocity @ 1x230VAC	m/s	(in/s)	5.4	(219.9)
Max. Velocity @ 3x400VAC	m/s	(in/s)	9.5	(9.5)
Position Detection				
Repeatability	mm	(in)	±0.05	(±0.002)
Linearity	%		±0.15	
Electrical Data				
Max. Current ¹ @ 1x230VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Current ¹ @ 3x400VAC	A _{pk} / A _{rms}		15.1 / 10.6	
Max. Cont. Current 1 [Passive cooling / Fan / Fluid]	A _{pk}		2.6 / 3.5 / 4.9	
Max. Cont. Current 2 [Passive cooling / Fan / Fluid]	A _{rms}		1.8 / 2.4 / 3.5	
Thermal Data				
Max. Winding Temperature (Sensor)	°C		90	
Thermal Resistance [Passive cooling / Fan / Fluid]	°K/W		1.6 / 0.86 / 0.43	
Thermal Time Constant [Passive cooling / Fan / Fluid]	s		1200 / 650 / 320	
Mechanical Data				
Slider Length	mm	(in)	2000	(79)
Slider Mass	g	(lb)	9140	(20.11)

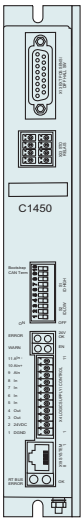
1) Real time calculation of motor winding temperature is required (including monitoring).
 If temperature monitoring is only based on temperature sensor signal (missing thermal model calculation), 70 % of the peak value has to be taken instead.



Item	Description	Item-No.
PS10-54x180U-BL-TU	Stator 3x400VAC, LinMot Encoder	0150-2723
PS10-54x180U-BL-TU-D04	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, Pt1000 dual	0150-4409
PS10-54x180U-BL-TU-D05	Stator 3x400VAC, Sin/Cos Encoder 1Vpp, PTC dual	0150-4592
PS10-54x180U-BL-TU-D24	Stator 3x400VAC, A/B Encoder 1µm, Pt1000 dual	0150-2749
PS10-54x180U-BL-TU-D24S	Stator 3x400VAC, A/B Encoder 5µm, Pt1000 dual	0150-4049
PS10-54x180U-BL-TU-D25	Stator 3x400VAC, A/B Encoder 1µm, PTC dual	0150-2753
PS10-54x180U-BL-TU-D25S	Stator 3x400VAC, A/B Encoder 5µm, PTC dual	0150-2783
PS10-54x180U-BL-TU-D26	Stator 3x400VAC, A/B Encoder, PTC single ended	0150-2956
PS10-54x180U-BL-TU-D34	Stator 3x400VAC, BiSS-C Encoder, Pt1000 dual	0150-5771
PL01-28x2000/1920	Slider 'standard'	0150-1396

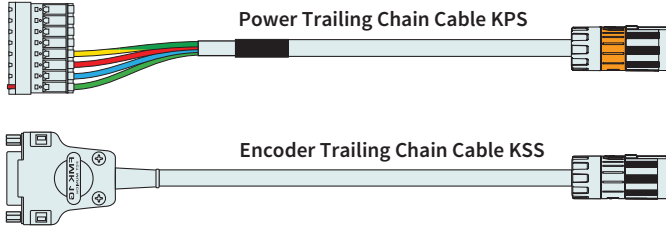
Motor Cable for LinMot Drives

4

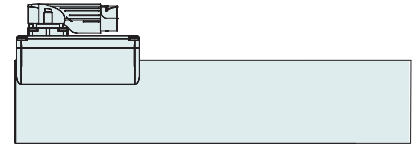


C1450

B Connector MC10-B/m



Tk Connector MC10-Tk/f



P10-54x180U

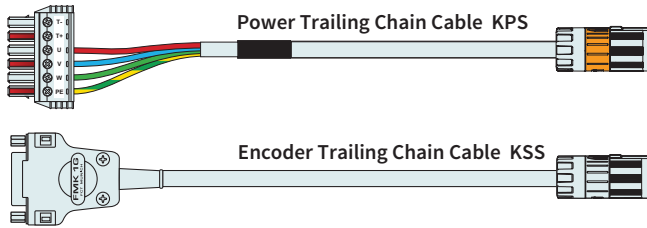
D15s Connector MC01-D15s-45°/f

Uk Connector MC10-Uk/f

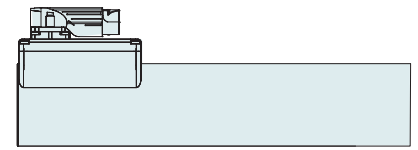


E1400

L Connector MC10-L/m



Tk Connector MC10-Tk/f



P10-54x180U

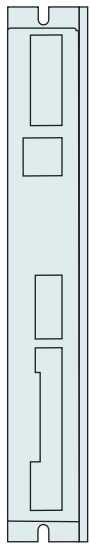
D15s Connector MC01-D15s-45°/f

Uk Connector MC10-Uk/f

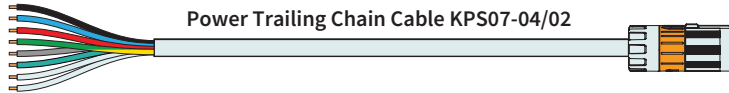
ORDERING INFORMATION

POWER CABLES		
Item	Description	Item-No.
KPS07-04/02-B/Tk-3	Power Trailing Chain Cable C1400/P10-54, 3 m	0150-3648
KPS07-04/02-B/Tk-5	Power Trailing Chain Cable C1400/P10-54, 5 m	0150-3657
KPS07-04/02-B/Tk-8	Power Trailing Chain Cable C1400/P10-54, 8 m	0150-3658
KPS07-04/02-B/Tk-12	Power Trailing Chain Cable C1400/P10-54, 12 m	0150-3659
KPS07-04/02-B/Tk-	Power Trailing Chain Cable B/Tk-, Custom length	0150-4770
KPS07-04/02-L/Tk-3	Power Trailing Chain Cable E1400/P10-54, 3 m	0150-2670
KPS07-04/02-L/Tk-5	Power Trailing Chain Cable E1400/P10-54, 5 m	0150-2671
KPS07-04/02-L/Tk-8	Power Trailing Chain Cable E1400/P10-54, 8 m	0150-2672
KPS07-04/02-L/Tk-12	Power Trailing Chain Cable E1400/P10-54, 12 m	0150-2673
KPS07-04/02-L/Tk-	Power Trailing Chain Cable L/Tk-, Custom length	0150-3706
ENCODER CABLES		
Item	Description	Item-No.
KSS05-02/08-D15s/Uk-3	Encoder Trailing Chain Cable D15s/Uk, 3 m	0150-2650
KSS05-02/08-D15s/Uk-5	Encoder Trailing Chain Cable D15s/Uk, 5 m	0150-2651
KSS05-02/08-D15s/Uk-8	Encoder Trailing Chain Cable D15s/Uk, 8 m	0150-2652
KSS05-02/08-D15s/Uk-12	Encoder Trailing Chain Cable D15s/Uk, 12 m	0150-2653
KSS05-02/08-D15s(f)-45°/Uk-	Encoder Trailing Chain Cable D15s(f)-45°/Uk-, Custom length	0150-2731
EXTENSION CABLES		
Item	Description	Item-No.
KPS07-04/02-Tk/Tk-	Power Trailing Chain Cable Tk/Tk-, Custom length	0150-2829
KSS05-02/08-Uk/Uk	Encoder Trailing Chain Cable Uk/Uk-, Custom length	0150-2830
CONNECTORS		
Item	Description	Item-No.
MC10-L/m	Connector Power E1400/X2	0150-3382
MC01-D15/f	Motor Connector D15 (f)	0150-3136
MC10-Tk/f	Connector Power PS10-54	0150-3482
MC10-Uk/f	Connector Encoder PS10-54	0150-3483

Motor Cables for 3rd Party Drives

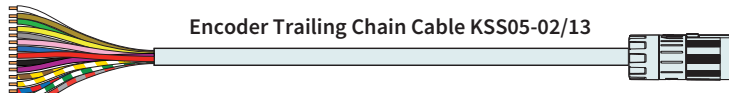


Open end



Power Trailing Chain Cable KPS07-04/02

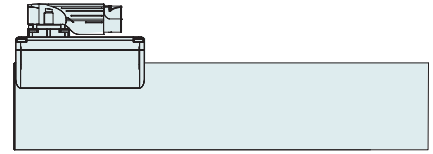
Tk Connector MC10-Tk/f



Encoder Trailing Chain Cable KSS05-02/13

Uk Connector MC10-Uk/f

Open end



P10-54x180U

3rd party Drive

ORDERING INFORMATION

POWER CABLES

Item	Description	Item-No.
KPS07-04/02-./Tk-10	Power Trailing Chain Cable .../Tk, 10m	0150-3626
KPS07-04/02-./Tk-	Power Trailing Chain Cable .../Tk, Custom length	0150-3622
KPS07-04/02	Power Trailing Chain Cable P10-54 (per m)	0150-2372

ENCODER CABLES

Item	Description	Item-No.
KSS05-02/13-./Uk-10	Encoder Trailing Chain Cable ./Uk, 10m	0150-3627
KSS05-02/13-./Uk-	Encoder Trailing Chain Cable ./Uk, Custom length	0150-3619
KSS05-02/13	Encoder Trailing Chain Cable P10-...-Dxx (per m)	0150-2259

EXTENSION CABLES

Item	Description	Item-No.
KPS07-04/02-Tk/Tk-	Power Trailing Chain Cable Tk/Tk-, Custom length	0150-2829
KSS05-02/08-Uk/Uk	Encoder Trailing Chain Cable Uk/Uk-, Custom length	0150-2830

CONNECTORS

Item	Description	Item-No.
MC10-Tk/f	Connector Power PS10-54	0150-3482
MC10-Uk/f	Connector Encoder PS10-54	0150-3483

MOTOR FLANGES



Item	Description	Item-No.
PF10-54x200	Flange for PS10-54x180	0150-2734

FIND MORE PRODUCT DETAILS IN THE CHAPTER „ACCESSORIES“.

FANS



Item	Description	Item-No.
HV01-37/48	Fan cooling for H01-37/48 & PF02-37/48	0150-5051

FIND MORE PRODUCT DETAILS IN THE CHAPTER „ACCESSORIES“.

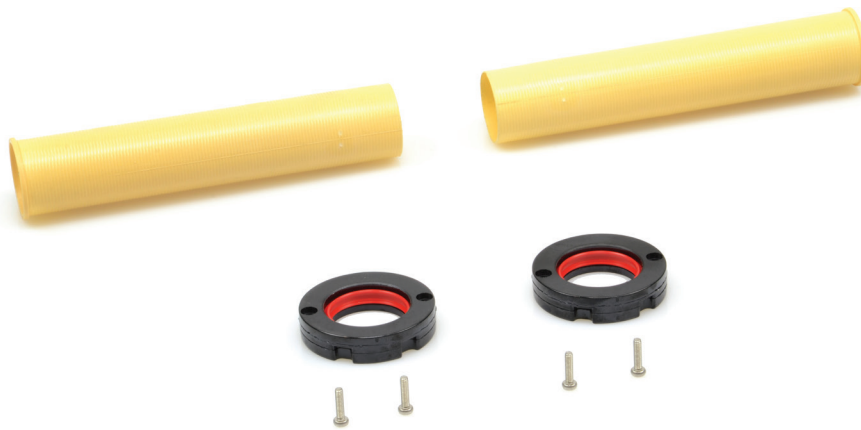
SLIDER MOUNTING



Item	Description	Item-No.
PLF01-28	Fixed Bearing Set for 27/28 mm sliders	0150-3087
PLF01-28-SS	Fixed Bearing Set for 27/28 mm sliders, stainless steel	0150-3297
PLL01-28	Floating Bearing for 28 mm sliders	0150-3094
PLM01-28-MK	Mounting Kit for 28 mm sliders	0150-3095

FIND MORE PRODUCT DETAILS IN THE CHAPTER „ACCESSORIES“.

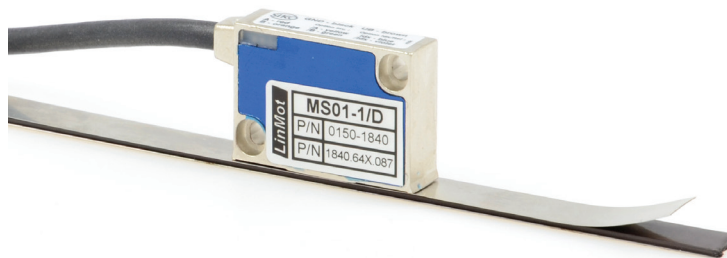
BEARING KIT



Item	Description	Item-No.
PB10-54x180-L	Bearing Kit for PS10-54x180	0150-3672

FIND MORE PRODUCT DETAILS IN THE CHAPTER „ACCESSORIES“.

EXTERNAL POSITION SENSORS



Item	Description	Item-No.
MS01-1/D	Linear Encoder 1µm, A/B (for incremental strip)	0150-1840
MB01-1000	Magnetic incremental strip for MS01-1/D, per cm	0150-1963
KS025-D15/D-Encoder	Encoder Cable (Length in m)	0150-3168

FIND MORE PRODUCT DETAILS IN THE CHAPTER „ACCESSORIES“.



Item	Description	Item-No.
MS01-1/D-SSI	Linear Encoder 1µm, A/B (for absolute strip)	0150-2095
MB01-1000-ABS	Magnetic absolute strip for MS01-1/D-SSI (per cm)	0150-2096
EC01-ABS/ENC-12-S	MS01-1/D-SSI Encoder connector straight	0150-3616
KSS01-12-D15/ABS-ENC	Special cable for MS01-1/D-SSI on C1100/C1200/C1400/E1200/E1400 Drives	0150-3652

FIND MORE PRODUCT DETAILS IN THE CHAPTER „ACCESSORIES“.