Mini slides SLTE, electric

FESTO

- Precise and rigid guide
- Freely programmable with respect to position, speed and acceleration
- High flexibility
- Motor controller SFC-DC:

reddot design award winner 2006

Mini slides SLTE, electric

Key features

Field of application

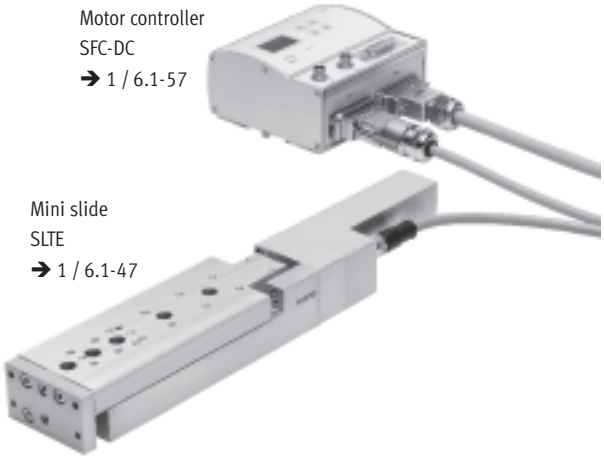
The electric mini slide SLTE is ideal for use in automation applications where controlled end-position cushioning (gentle stopping), constant travel speed and positioning capability are important factors.

The SLTE has the same interfaces on the yoke, slide and underneath the housing as the pneumatic SLT. It is also fully compatible with the modular handling and assembly system and SLT adapter kits.

Special features

- Precise and rigid guide
- Freely positionable
- Fast positioning times
- Through-holes from above and below
- Integrable sensors
- Gentle starting and stopping
- Working loads up to 4 kg
- Constant travel speeds of 2 ... 200 mm/s

Everything from a single source



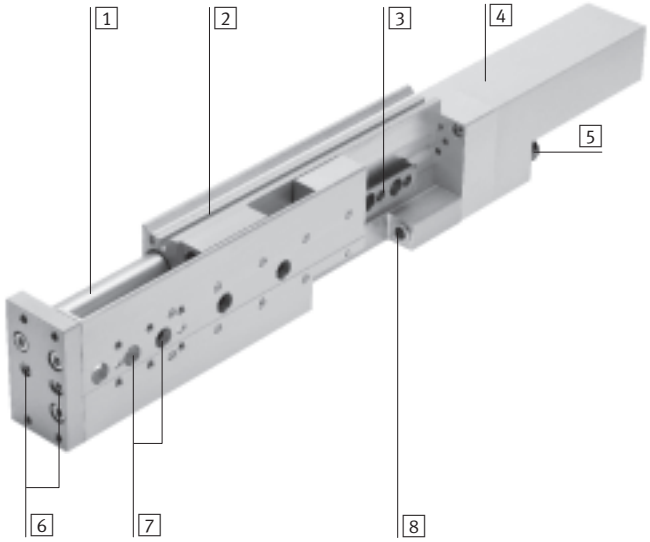
The mini slide SLTE and motor controller SFC form one unit.

- Thanks to the protection class IP54, the SFC can be mounted close to the SLTE, either:
  - on central supports
  - on a H-rail
- Only one cable required between SLTE and SFC
- Motor controller SFC available with or without control panel
- Simple control via I/O or Profibus connection

Parameterisation possible via:

- Control panel:
  - suitable for simple positioning cycles
- Configuration package FCT (Festo configuration tool):
  - parameterisation via RS 232 interface
  - Windows-based PC user interface (Festo configuration tool)

The technology in detail

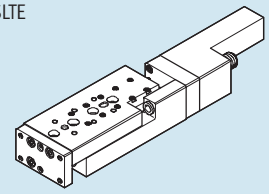
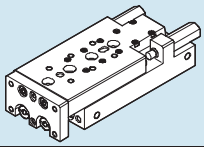
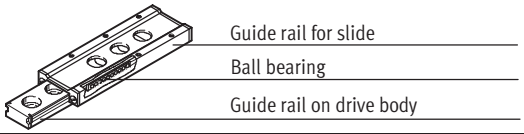
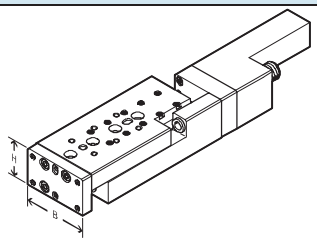
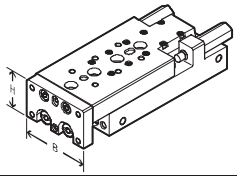
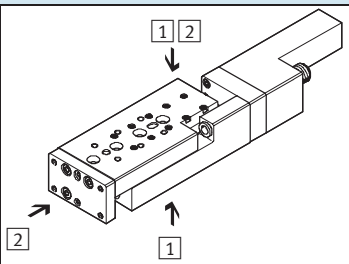
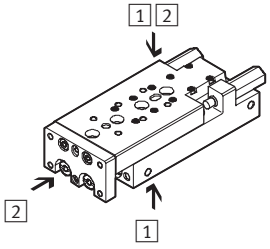


1 Drive rod
2 Slot for reference switch
3 Ball bearing guide
4 Drive assembly consisting of DC motor with displacement encoder
5 Electrical connection
6 Threaded holes and through-holes with centring hole for attaching the working load
7 Threaded holes and through-holes with centring hole for attaching the SLTE
8 Fixed stop with integrated rubber buffer

Mini slides SLTE, electric

Key features

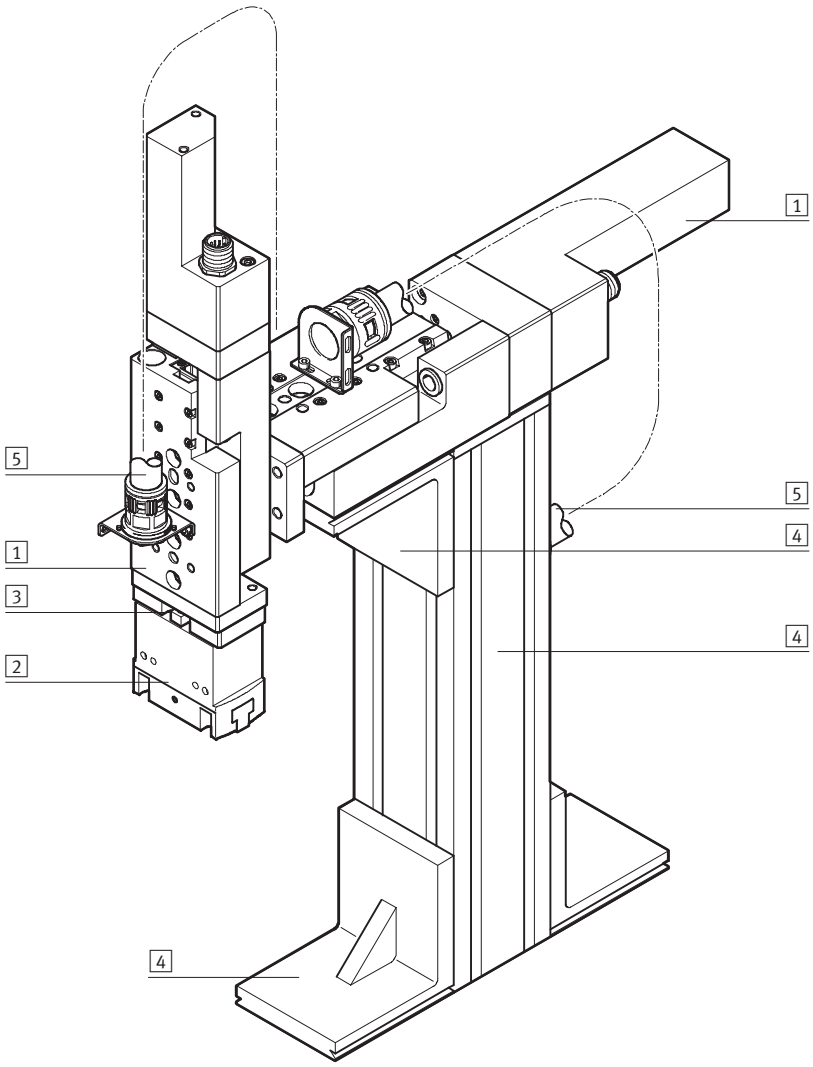
Comparison between electric mini slide SLTE and pneumatic mini slide SLT

	Electric: SLTE	Pneumatic: SLT
		
Advantages		
	■ Gentle starting and stopping ■ Constant and precise speed (2 … 200 mm/s) ■ Flexible positioning without mechanical devices ■ Programmable drive profile	■ High feed force ■ High speed ■ Fast positioning time ■ Compact length
Guide		
■ Preloaded, backlash-free, precise and rigid ball bearing cage guide ■ High torque and load absorption		
Dimensions		
■ Identical width and height dimensions Type Width (W) x Height (H) SLT(E)-10 50 x 30 mm SLT(E)-16 66 x 40 mm	 	
Interfaces		
■ Identical mounting and attachment options [1] Mounting surfaces: Direct mounting using threaded holes and through-holes [2] Attachment surfaces: Direct mounting of loads and devices (e.g. SLT: semi-rotary drives and grippers) by means of threaded holes in slide and yoke plate	 	
Technical data		
Piston ∅ [mm]	10, 16	6 … 25
Stroke [mm]	50 … 150	10 … 200
Max. speed [m/s]	0.2	0.8
Repetition accuracy at end positions [mm]	±0.1	±0.02
Intermediate positions	Any	None

Mini slides SLTE, electric

Key features

System product for handling and assembly technology



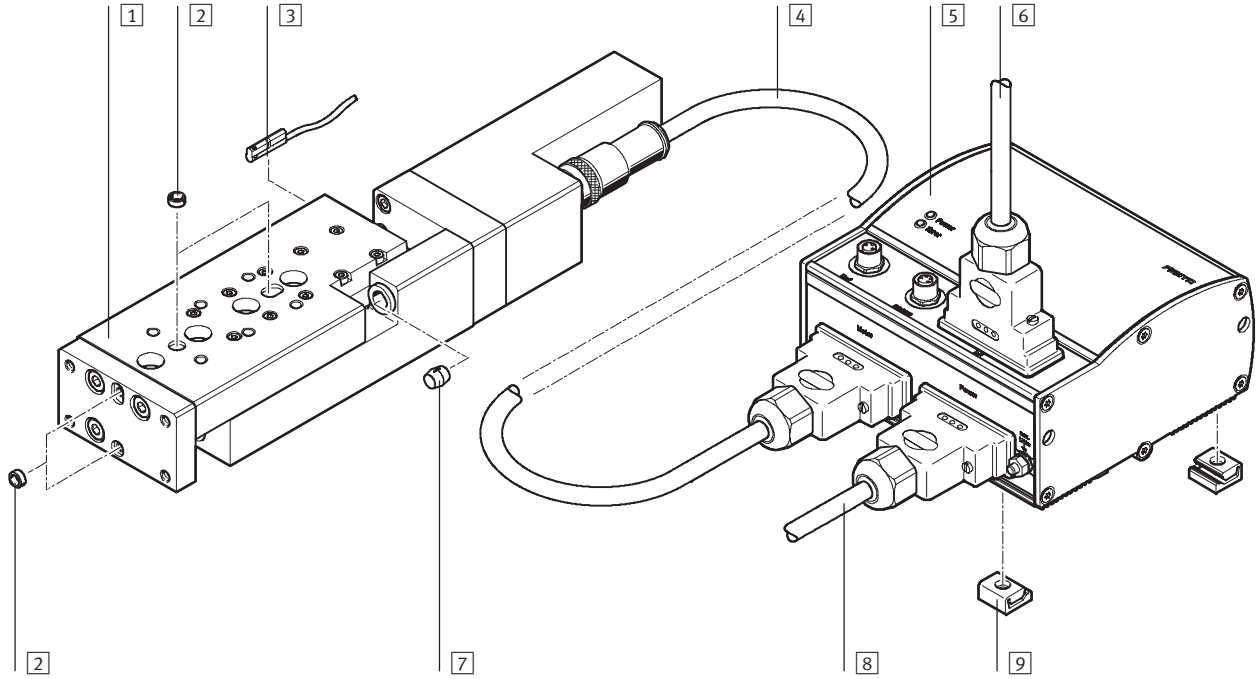
System elements and accessories

		Brief description	➔ Page
1	Axes	Wide range of combinations options within handling and assembly technology	Volume 5
2	Gripper	Wide range of variation options within handling and assembly technology	Volume 1
3	Adapter	For drive/drive and drive/gripper combinations	Volume 5
4	Basic components	Profiles and profile combinations as well as profile/drive combinations	Volume 5
5	Installation components	For achieving a clear-cut, safe layout for electrical cables and tubing	Volume 5
–	Drives	Wide range of combinations options within handling and assembly technology	Volume 1

Mini slides SLTE, electric

Peripherals overview

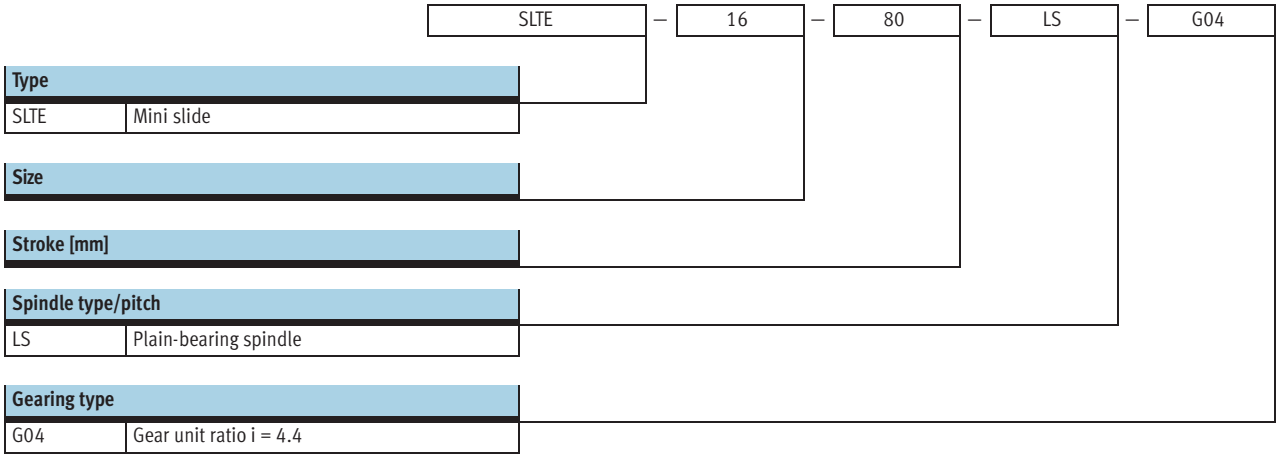
Size 10/16



Accessories			
		Brief description	**→ Page**
1	Mini slide SLTE	Electromechanical linear axis with plain-bearing spindle	1 / 6.1-47
2	Centring pin/sleeve ZBS/ZBH	– For centring loads and attachments – Centring sleeves included in scope of delivery	1 / 6.1-55
3	Proximity sensor SME/SMT-10	For referencing mini slide or for sensing slide position	1 / 6.1-55
4	Motor cable KMTR	Connecting cable between motor and motor controller	1 / 6.1-61
5	Motor controller SFC	For parameterising and positioning mini slide	1 / 6.1-57
6	Control cable KES	Cable for I/O connection to any controller	1 / 6.1-61
7	Buffer	Buffer included in scope of delivery	–
8	Supply cable KPWR	Power supply cable; load and logic power supplies are isolated	1 / 6.1-61
9	Central support MUP	– For mounting motor controller – Motor controller can also be mounted on H-rail	1 / 6.1-61

Mini slides SLTE, electric

Type codes



Mini slides SLTE, electric

Technical data

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Size
10 and 16

Stroke length
50 ... 150 mm

General technical data				
Size			10	16
Constructional design			Electromechanical linear axis with plain-bearing spindle	
Guide			With ball bearings	
Type of mounting			Via through-holes	
			Via female thread	
			Via female thread and centring sleeve	
Stroke		[mm]	50, 80	50, 80, 100, 150
Stroke reserve per end position	with rubber buffer at both ends	[mm]	0.5	0.6
	with rubber buffer at one end	[mm]	1.2	1.25
Assembly position			Any	
Spindle pitch		[mm]	5	7.5
Min. travel speed		[mm/s]	2	
Max. acceleration		[m/s^2]	2.5	
Repetition accuracy		[mm]	±0.1	
Reversing backlash		[mm]	< 0.1	

Electrical data for motor			
Size		10	16
System resolution of encoder		512 (pulses per rotation)	1,000 (pulses per rotation)
Nominal operating voltage	[V DC]	24	
Output	[W]	4.5	18

Operating and environmental conditions			
Size		10	16
Ambient temperature	[°C]	0 ... +40	
Protection class		IP40	
Fast transients		To EN61000-4-4	
Max. noise level[1)]	[dB A]	< 50	< 55
CE symbol (declaration of conformity)		In accordance with EU EMC directive	

1) At maximum permissible speed

Weight [g]						
Size	10		16			
Stroke	50	80	50	80	100	150
Product weight	574	737	1,185	1,465	1,714	2,196
Moving load	163	235	296	415	519	729

Mini slides SLTE, electric

Technical data

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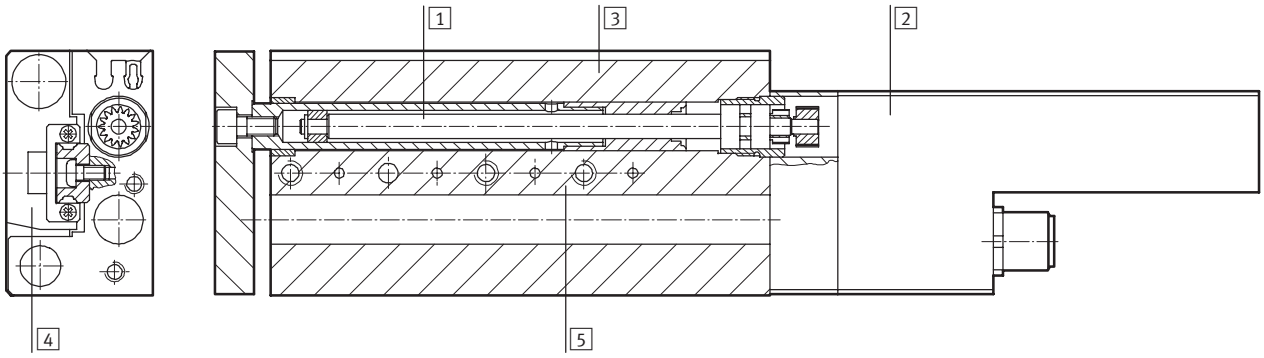
Materials

Sectional view

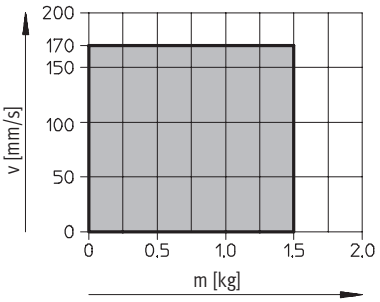


Mini slide		
1	Spindle	High-alloy steel
2	Motor housing	Wrought aluminium alloy, anodised
3	Housing	Wrought aluminium alloy, anodised
4	Slide	Wrought aluminium alloy, anodised
5	Guide	Tempered steel
–	Seals	Thermoplastic rubber, nitrile rubber

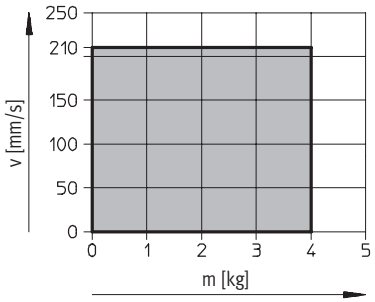
Travel speed v as a function of applied load m

Horizontal mounting position

SLTE-10

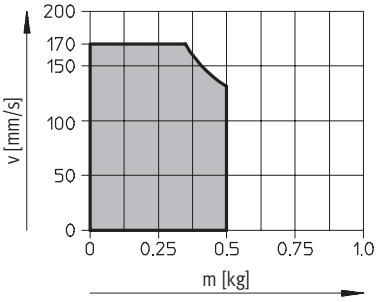


SLTE-16

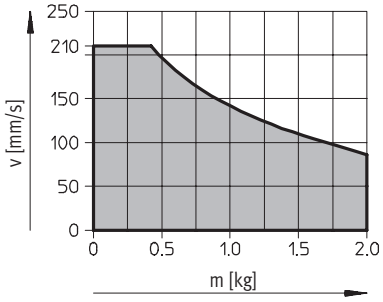


Vertical mounting position

SLTE-10



SLTE-16



Permissible operating range

Mini slides SLTE, electric

Technical data

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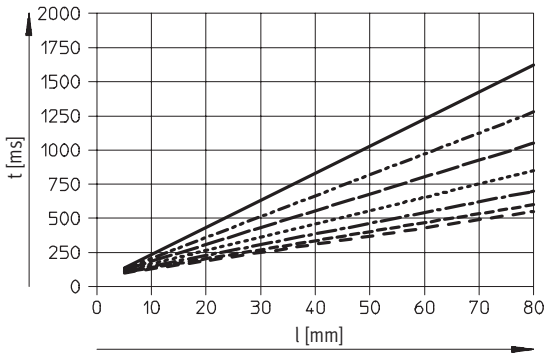
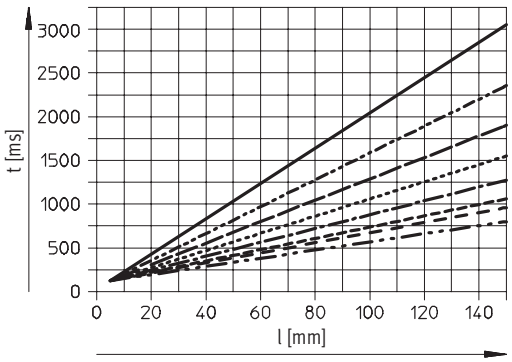
Positioning time t as a function of stroke l

SLTE-10



v = 50 mm/s
v = 65 mm/s
v = 80 mm/s
v = 100 mm/s
v = 125 mm/s
v = 150 mm/s
v = 170 mm/s

SLTE-16

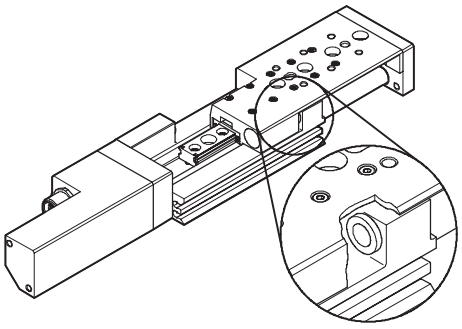


v = 50 mm/s
v = 65 mm/s
v = 80 mm/s
v = 100 mm/s
v = 125 mm/s
v = 150 mm/s
v = 170 mm/s
v = 210 mm/s

Homing

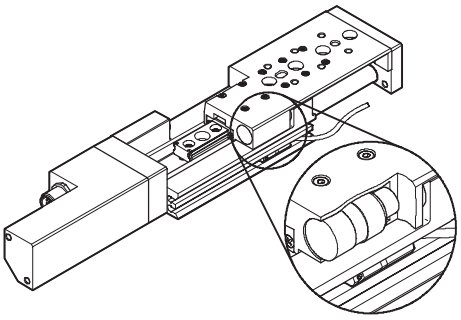
to fixed stop

- Positive fixed stop
  - To front stop bush (extended)
- Negative fixed stop
  - To rear stop bush (retracted)



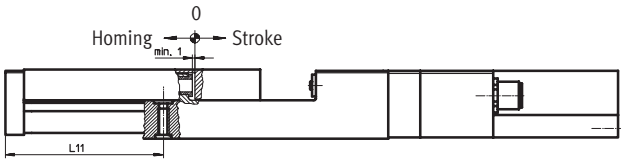
to proximity sensor

- Position freely selectable

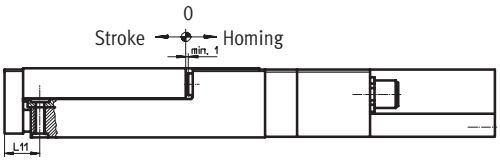


The following applies for homing to a fixed stop:

Positive fixed stop



Negative fixed stop



Size	Stroke	L11	
		Positive fixed stop	Negative fixed stop
10	50	$67.4^{+1.1}$	$15.6_{-1.1}$
	80	$97.0^{+1.1}$	$15.2_{-1.1}$
16	50	$74.9^{+1.1}$	$23.1_{-1.1}$
	80	$104.1^{+1.1}$	$22.3_{-1.1}$
	100	$124.6^{+1.1}$	$22.8_{-1.1}$
	150	$173.3^{+1.1}$	$21.5_{-1.1}$

Mini slides SLTE, electric

Technical data

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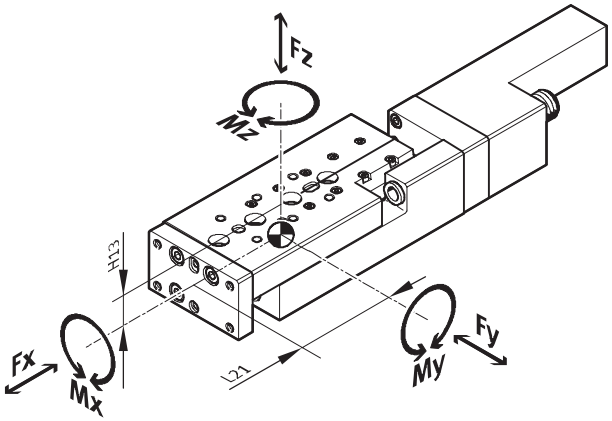
Dynamic characteristic load values

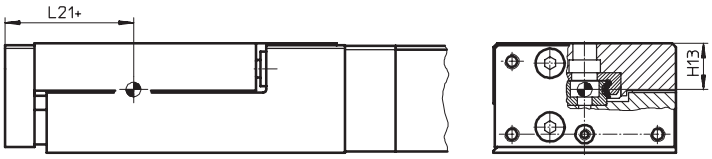
Torques are indicated with reference to the centre of the guide.
They must not be exceeded in the dynamic range. Special attention must be paid to the cushioning phase.



If the drive is subjected to more than two of the indicated forces and torques simultaneously, the following equation must be satisfied in addition to the indicated maximum loads:

$$\frac{|Fy|}{Fy_{max.}} + \frac{|Fz|}{Fz_{max.}} + \frac{|Mx|}{Mx_{max.}} + \frac{|My|}{My_{max.}} + \frac{|Mz|}{Mz_{max.}} \leq 1$$

Position of the guide centre



\+ plus stroke length

Permissible forces and torques						Geometric characteristics	
Size	Stroke	Fy_{max} [N]	Fz_{max} [N]	Mx_{max}, My_{max} [Nm]	Mz_{max} [Nm]	H13 [mm]	L21 [mm]
10							
	50	390	390	3.1	1.4	13	33.5
	80	410	410	4.3	1.5		41
16							
	50	510	510	4.6	2.8	16	35
	80	520	520	6.0	2.8		41.5
	100	600	600	9.1	3.2		51.5
	150	660	960	12.6	3.5		66.5

Mini slides SLTE, electric

Technical data

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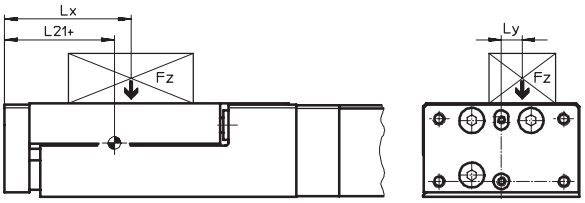
Calculation example

Given:



Mini slide	= SLTE-10
Stroke length	= 80 mm
Lever arm L_x	= 50 mm
Lever arm L_y	= 30 mm
Weight F_z	= 0.8 kg
Acceleration a	= 0 m/s^2

To be found:

F_y, F_z, Mx, My, Mz
and
verification of function with combined load

Solution:

L21 = 41 mm from table

F_y = 0 N

F_z = m x g
= 0.8 kg x 9.81 m/s^2 = 7.848 N

M_x = m x g x L_y
= 0.8 kg x 9.81 m/s^2 x 30 mm = 0.236 Nm

M_y = m x g x [(L21+stroke)-L_x]
= 0.8 kg x 9.81 m/s^2 [(41 mm + 80 mm) – 50 mm] = 0.557 Nm

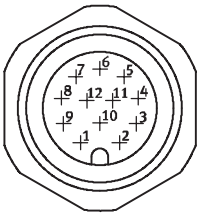
M_z = 0 Nm

Combined load:

$$\frac{|Fy|}{Fy_{max.}} + \frac{|Fz|}{Fz_{max.}} + \frac{|Mx|}{Mx_{max.}} + \frac{|My|}{My_{max.}} + \frac{|Mz|}{Mz_{max.}}$$

$$= 0 + \frac{7,848N}{410N} + \frac{0,2366Nm}{4,3Nm} + \frac{0,557Nm}{1,5Nm} + 0 = 0,445 \leq 1$$

Pin allocation of connection plug



Plug M12		
Pin	Connection	Function
1	Motor +	Motor conductor
2	Motor –	Motor conductor
3	A	Encoder signal RS 485
4	A/	Encoder signal RS 485
5	B	Encoder signal RS 485
6	B/	Encoder signal RS 485
7	I	Encoder signal RS 485
8	I/	Encoder signal RS 485
9	+5 V DC	Signal supply
10	0 V	Signal ground
11	–	–
12	–	–

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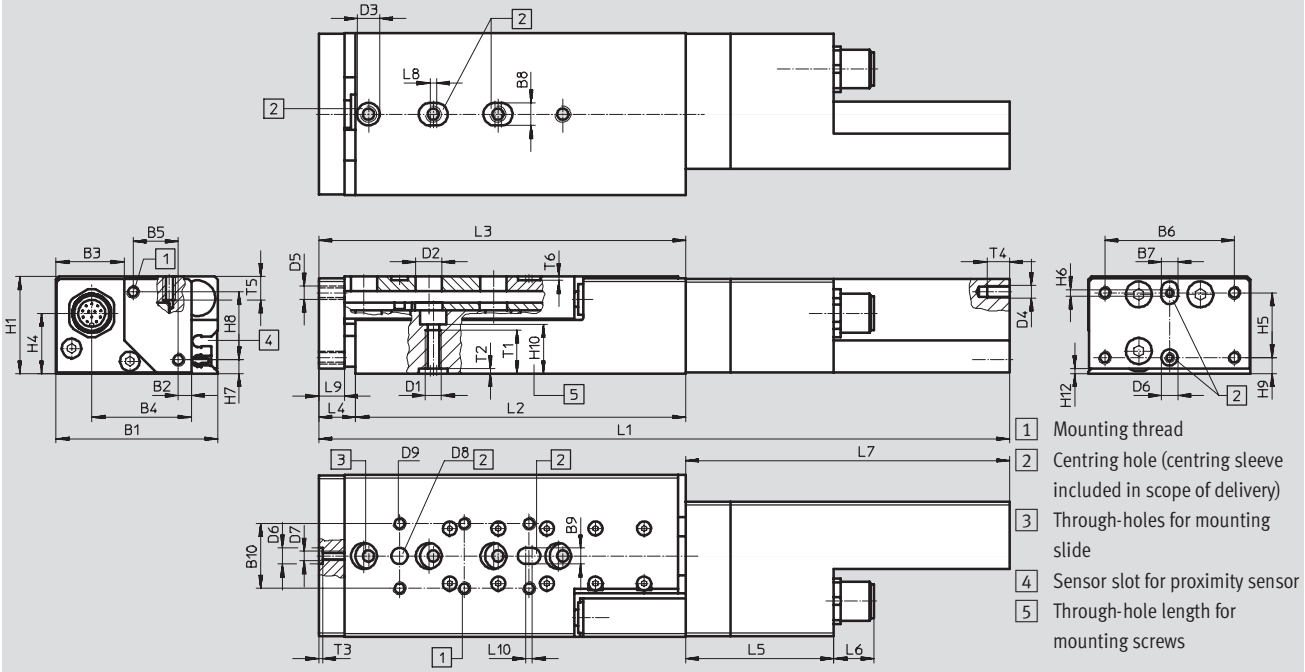
Technical data

Dimensions Download CAD data ➔ **www.festo.com/en/engineering**



1 Mounting thread
2 Centring hole (centring sleeve included in scope of delivery)
3 Through-holes for mounting slide
4 Sensor slot for proximity sensor
5 Through-hole length for mounting screws

Size	B1	B2 ±0.3	B3 ±0.3	B4	B5	B6	B7 H7	B8 H7	B9 H7	B10	D1	D2 ∅	D3 ∅ H7	D4
10	50	30.8	20.8	4	14	40	5	5	5	20	M5	8	7	M4
16	66	45.7	24.3	4.2	25	55	7	9	5	20	M6	10	9	M4

Size	D5	D6 ∅ H7	D7	D8 ∅ H7	D9	H1	H4	H5	H6	H7	H8	H9	H10	H12
10	M4	5	M3	5	M4	30	18.4	20	2	4	21	5	15	1.5
16	M5	7	M4	5	M5	40	25.8	20	2	4.5	30	13	20	1.5

Size	Stroke	L1 ±1.5		L2	L3 ±1		L4 ±1	
	[mm]	1)	2)		1)	2)	1)	2)
10	50	212	213	102	112	113	10	11.1
	80	262	263	152	162	163	9.6	10.7
16	50	262.5	263.5	100	112.5	113.5	12.5	13.5
	80	307.5	308.5	146	158	159	11.7	12.7
	100	349	350	187	199.5	200.5	12.2	13.2
	150	430.5	431.5	270	281	282	11	12

Size	L5 ±0.5	L6	L7	L8	L9	L10	T1	T2	T3	T4	T5	T6
10	45.8	12.5	100	2	8	2	12	1.5	1.2	7	8	1.2
16	56.3	12.5	149.7	2	10	1	16	2.1	1.5	7	7	1.2

1) End position at fixed stop
2) End position at rubber buffer

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Technical data

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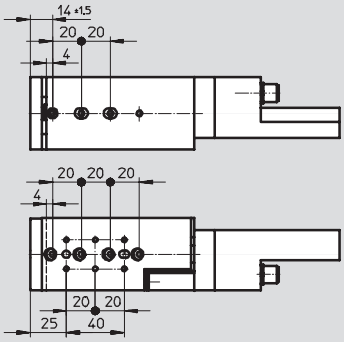
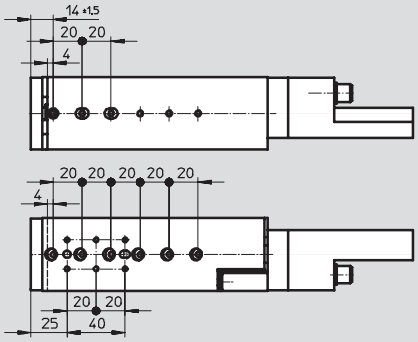
Hole pattern for mounting thread and centring holes

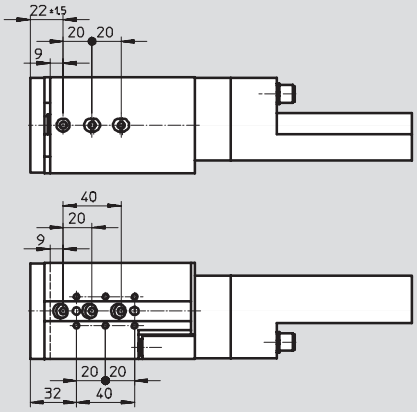
SLTE-10-50



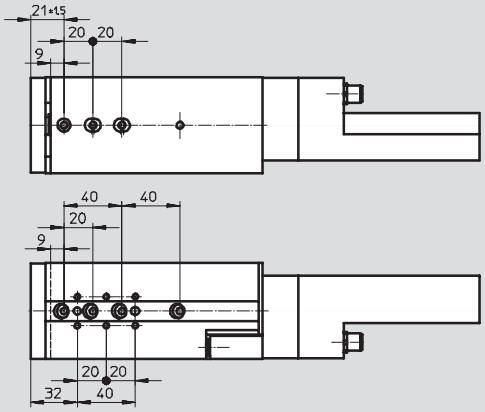
SLTE-10-80



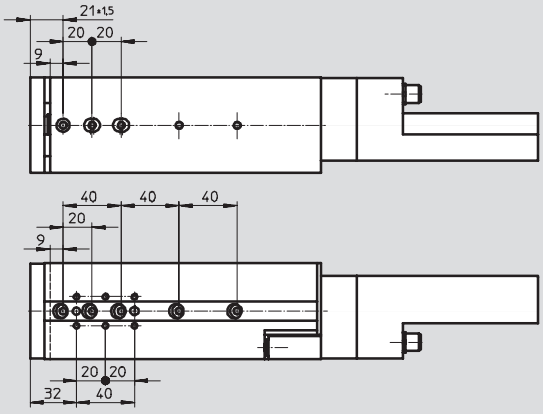
SLTE-16-50



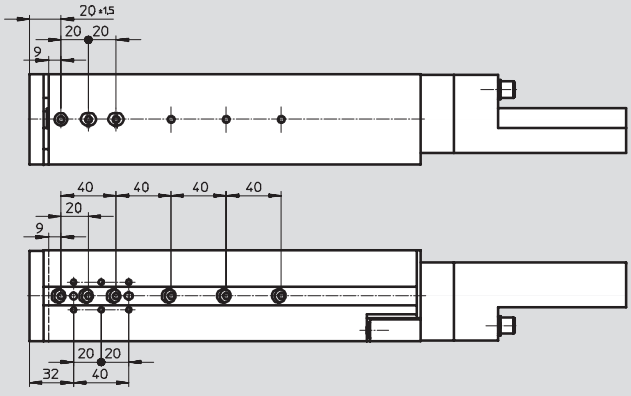
SLTE-16-80



SLTE-16-100



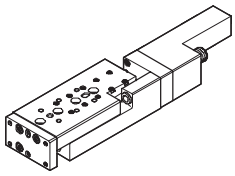
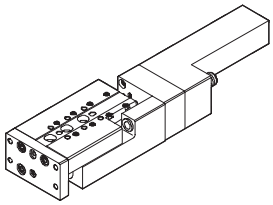
SLTE-16-150



Mini slides SLTE, electric

Technical data

FESTO

Ordering data			
Size	Brief description	Part No.	Type
10			
	Mini slide	537 447	SLTE-10-50-LS-G04
		537 449	SLTE-10-80-LS-G04
16			
	Mini slide	537 459	SLTE-16-50-LS-G04
		537 461	SLTE-16-80-LS-G04
		537 463	SLTE-16-100-LS-G04
		537 465	SLTE-16-150-LS-G04

Mini slides SLTE, electric

Accessories

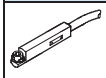
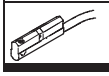
FESTO

Ordering data – Centring sleeves[1)] Technical data → 1 / 10.1-18

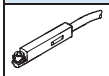
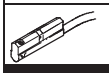
Size		10		16	
		Part No.	Type	Part No.	Type
	Housing	**186 717**	**ZBH-7**	**150 927**	**ZBH-9**
	Slide	**189 652**	**ZBH-5**	**189 652**	**ZBH-5**
	Yoke	**189 652**	**ZBH-5**	**186 717**	**ZBH-7**

1) Scope of delivery: 10 per pack

Ordering data – Proximity sensors for rounded slot, magneto-resistive Technical data → 1 / 10.2-52

	Assembly	Switch output	Electrical connection		Cable length [m]	Connection direction	Part No.	Type
			Cable	Plug M8				
N/O contact								
	Insertable from above	PNP	3-wire	–	2.5	In-line	**525 915**	**SMT-10F-PS-24V-K2,5L-OE**
			–	3-pin	0.3	In-line	**525 916**	**SMT-10F-PS-24V-K0,3L-M8D**
						Lateral	**526 675**	**SMT-10F-PS-24V-K0,3Q-M8D**
	Insertable from end	PNP	–	3-pin	0.3	In-line	**173 220**	**SMT-10-PS-SL-LED-24**
			3-wire	–	2.5		**173 218**	**SMT-10-PS-KL-LED-24**

Ordering data – Proximity sensors for rounded slot, magnetic reed Technical data → 1 / 10.2-55

	Assembly	Electrical connection		Cable length [m]	Connection direction	Part No.	Type
		Cable	Plug M8				
N/O contact							
	Insertable from above	–	3-pin	0.3	In-line	**525 914**	**SME-10F-DS-24V-K0,3L-M8D**
		3-wire	–	2.5	In-line	**525 913**	**SME-10F-DS-24V-K2,5L-OE**
		2-wire				**526 672**	**SME-10F-ZS-24V-K2,5L-OE**
	Insertable from end	–	3-pin	0.3	In-line	**173 212**	**SME-10-SL-LED-24**
		3-wire	–	2.5		**173 210**	**SME-10-KL-LED-24**

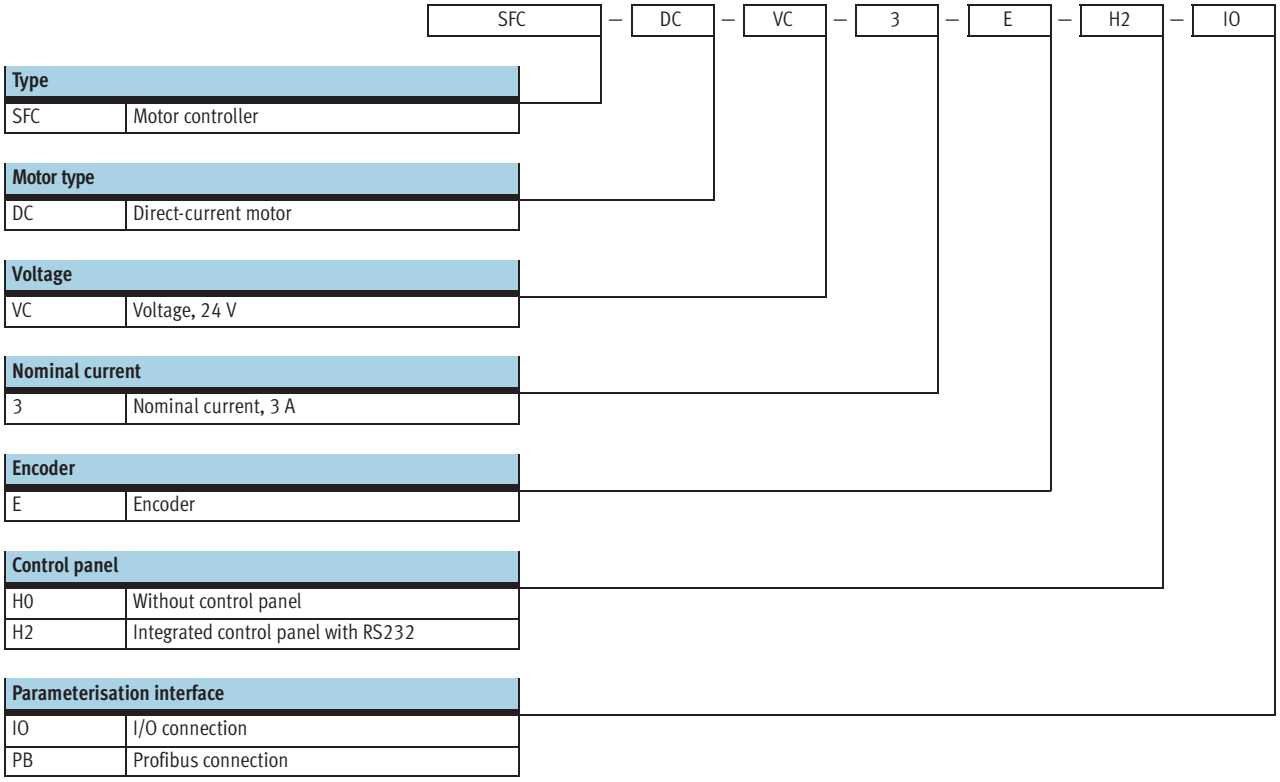
Ordering data – Plug sockets with cable Technical data → 1 / 10.2-109

	Assembly	Switch output		Connection	Cable length [m]	Part No.	Type
		PNP	NPN				
Straight socket							
	Union nut M8	■	■	3-pin	2.5	**159 420**	**SIM-M8-3GD-2,5-PU**
					5	**159 421**	**SIM-M8-3GD-5-PU**
Angled socket							
	Union nut M8	■	■	3-pin	2.5	**159 422**	**SIM-M8-3WD-2,5-PU**
					5	**159 423**	**SIM-M8-3WD-5-PU**

Core Range

Motor controllers SFC-DC

Type codes



Type	
SFC	Motor controller

Motor type	
DC	Direct-current motor

Voltage	
VC	Voltage, 24 V

Nominal current	
3	Nominal current, 3 A

Encoder	
E	Encoder

Control panel	
H0	Without control panel
H2	Integrated control panel with RS232

Parameterisation interface	
IO	I/O connection
PB	Profibus connection

Motor controllers SFC-DC

Technical data

FESTO

General technical data					
Type		SFC-...-H0-IO	SFC-...-H2-IO	SFC-...-H0-PB	SFC-...-H2-PB
Operating mode		Cascade controller with – P current regulator		– PI speed controller – P position controller	
Position sensor		Encoder			
Encoder input		RS485/RS422, A/B signal with index pulse			
Display		–	Four-key interface with full-text display via graphic LCD display (128 x 64 pixels)	–	Four-key interface with full-text display via graphic LCD display (128 x 64 pixels)
Control elements		–	4 keys	–	4 keys
Process interfacing		I/O interface for 31 traversing records and homing		–	
Number of digital logic inputs		8		–	
Number of digital logic outputs		4		–	
Fieldbus coupling		–		Profibus DP	
Bus terminating resistor, external	[Ω]	–		120	
Communication profile		–		FHPP	
		–		Step7 functional modules	
Max. fieldbus baud rate	[Mbit/s]	–		12	
Type of mounting		H-rail, wall or surface bracket			
Product weight	[g]	600			

Electrical data		
General		
Rated output	[W]	75
Parameterisation interface		RS232; 9600 baud
Load supply		
Nominal voltage	[V DC]	24 ±10%
Nominal current	[A]	3
Peak current	[A]	5
Logic supply		
Nominal voltage	[V DC]	24 ±10%
Nominal current	[A]	0.1
Peak current	[A]	0.8
Max. current per output (digital logic outputs)	[A]	0.5

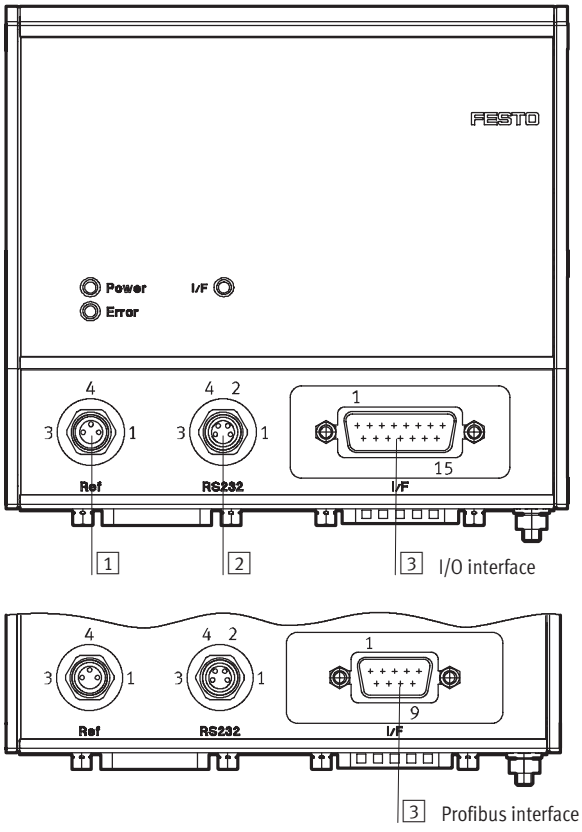
Motor controllers SFC-DC

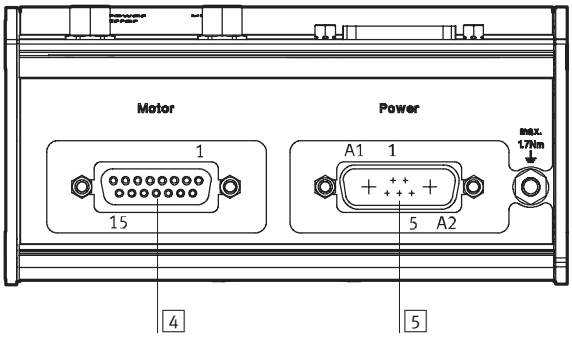
Technical data

FESTO

Operating and environmental conditions					
Type		SFC-...-H0-IO	SFC-...-H2-IO	SFC-...-H0-PB	SFC-...-H2-PB
Digital logic outputs		Electrically isolated		–	
Logic inputs		Electrically isolated		–	
Specification, logic input		IEC 61131		–	
Protection class		IP54			
Vibration and shock resistance		To FN 942017-4 and -5, severity level 1			
Protective function		– I^2t monitoring – Current monitoring – Voltage failure detection		– Drag fault monitoring – Software end-position detection	
CE symbol (declaration of conformity)		In accordance with EU EMC directive			
Ambient temperature	[°C]	0 ... +40			
Relative air humidity	[%]	0 ... 95 (non-condensing)			

Pin allocation





1 Reference switch, 3-pin M8 socket	
Pin	Function
1	24 V
4	Reference input
3	0 V
–	

2 RS 232 interface, 4-pin M8 socket	
Pin	Function
1	0 V
2	Transmitted Data (TxD)
3	Received Data (RxD)
4	–

Motor controllers SFC-DC

Technical data

FESTO

3 I/O interface, 15-pin Sub-D plug	
Pin	Function
1	24 V (supply for output)
2	Traversing record coding, bit 1
3	Traversing record coding, bit 2
4	Traversing record coding, bit 3
5	Traversing record coding, bit 4
6	Traversing record coding, bit 5
7	Stop bit
8	0 V
9	Enable bit
10	Start bit
11	MC
12	Ready
13	Acknowledge
14	Error
15	0 V

3 Profibus interface, 9-pin Sub-D plug	
Pin	Function
1	PE
2	–
3	RxD/TxD-P
4	CNTR-P
5	DGND
6	UP
7	–
8	RxD/TxD-N
9	–

4 Motor interface, 15-pin Sub-D plug	
Pin	Function
1	VCC logic
2	Encoder channel A
3	Encoder channel A/
4	Encoder channel B
5	Encoder channel B/
6	Encoder channel C
7	Encoder channel C/
8	Logic 0 V
9	0 V
10	0 V
11	0 V
12	Motor+
13	Motor–
14	0 V
15	0 V

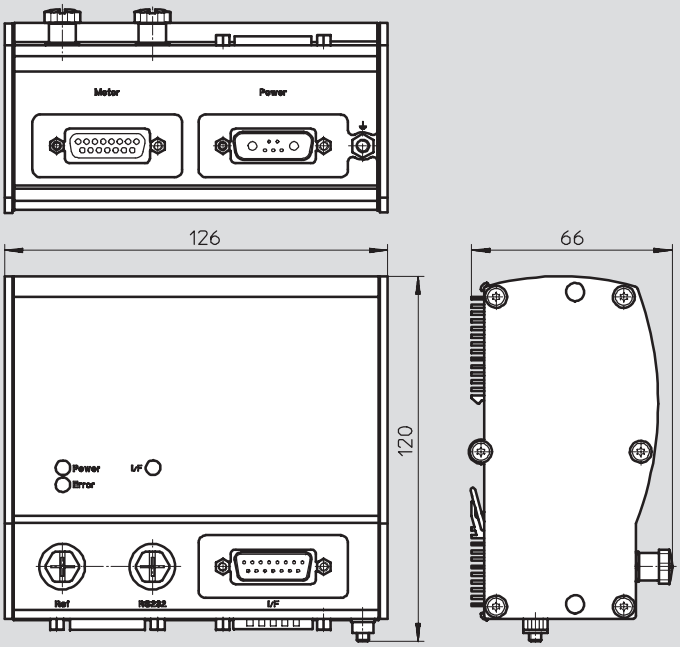
5 Power supply, 2-pin plug	
Pin	Function
A1	24 V (load)
A2	0 V (load)
1	24 V (logic)
2	0 V (logic)
3	–
4	PE
5	–

Motor controllers SFC-DC

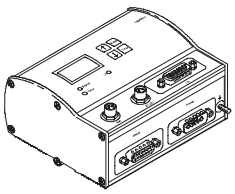
Technical data

Dimensions

Download CAD data ➔ **www.festo.com/en/engineering**

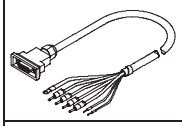
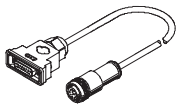
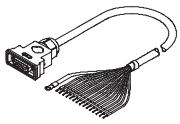
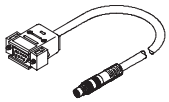
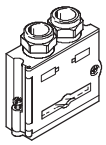
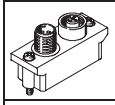
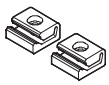


Ordering data

	Brief description	Part No.	Type
	Motor controller with I/O connection		
	Without control panel	**538 912**	**SFC-DC-VC-3-E-H0-IO**
	With control panel	**538 913**	**SFC-DC-VC-3-E-H2-IO**
	Motor controller with Profibus connection		
	Without control panel	**540 366**	**SFC-DC-VC-3-E-H0-PB**
	With control panel	**540 367**	**SFC-DC-VC-3-E-H2-PB**

Motor controllers SFC-DC

Accessories

Ordering data				
	Brief description	Cable length [m]	Part No.	Type
Cables				
	Supply cable, for connecting load and logic supply	2.5	**538 914**	**KPWR-MC-1-SUB-15HC-2,5**
		5	**538 915**	**KPWR-MC-1-SUB-15HC-5**
		10	**538 916**	**KPWR-MC-1-SUB-15HC-10**
	Motor cable, for connecting motor and controller	2.5	**538 917**	**KMTR-DC-SUB-15-M12-2,5**
		5	**538 918**	**KMTR-DC-SUB-15-M12-5**
		10	**539 316**	**KMTR-DC-SUB-15-M12-10**
	Control cable, for I/O connection to any controller	2.5	**538 919**	**KES-MC-1-SUB-15-2,5**
		5	**538 920**	**KES-MC-1-SUB-15-5**
		10	**538 921**	**KES-MC-1-SUB-15-10**
	Programming cable, for parameterisation and commissioning via RS232 interface using FCT software	2.5	**537 926**	**KDI-MC-M8-SUB-9-2,5**
Plugs				
	Profibus plug, with 9-pin Sub-D connection, position of DIL switch can be read externally		**532 216**	**FBS-SUB-9-GS-DP-B**
	Bus connection plug, adapter for Profibus interface. 9-pin Sub-D plug to 5-pin round plug/socket M12		**533 118**	**FBA-2-M12-5POL-RK**
Central support				
	For mounting controller		**160 909**	**MUP-8/12**

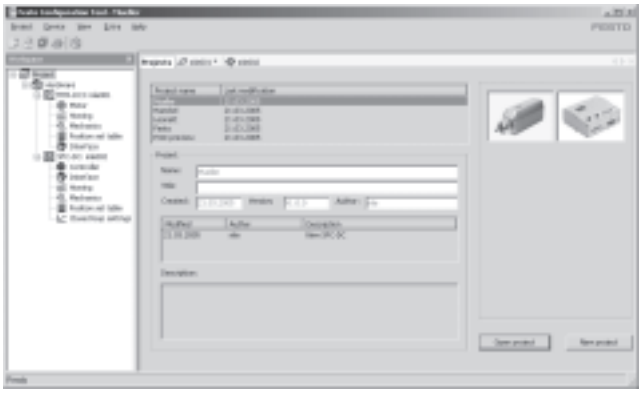
Ordering data – Documentation and software				
	Brief description	Language	Part No.	Type
	Description for I/O connection User documentation in paper form is not included in the scope of delivery.	DE	**540 417**	**P.BE-SFC-DC-IO-DE**
		EN	**540 418**	**P.BE-SFC-DC-IO-EN**
		ES	**540 419**	**P.BE-SFC-DC-IO-ES**
		FR	**540 420**	**P.BE-SFC-DC-IO-FR**
		IT	**540 421**	**P.BE-SFC-DC-IO-IT**
		SV	**540 422**	**P.BE-SFC-DC-IO-SV**
	Description for Profibus connection User documentation in paper form is not included in the scope of delivery.	DE	**540 411**	**P.BE-SFC-DC-PB-DE**
		EN	**540 412**	**P.BE-SFC-DC-PB-EN**
		ES	**540 413**	**P.BE-SFC-DC-PB-ES**
		FR	**540 414**	**P.BE-SFC-DC-PB-FR**
		IT	**540 415**	**P.BE-SFC-DC-PB-IT**
		SV	**540 416**	**P.BE-SFC-DC-PB-SV**
	Documentation package User documentation on CD-ROM, in the languages DE, EN, ES, FR, IT, SV, is included in the scope of delivery.		**542 003**	**P.BE-SFC-DC-UDOK**
	Configuration package The configuration package FCT (Festo configuration tool) on CD-ROM is included in the scope of delivery.		**539 622**	**P.SW-FCT**

Motor controllers SFC-DC

Technical data

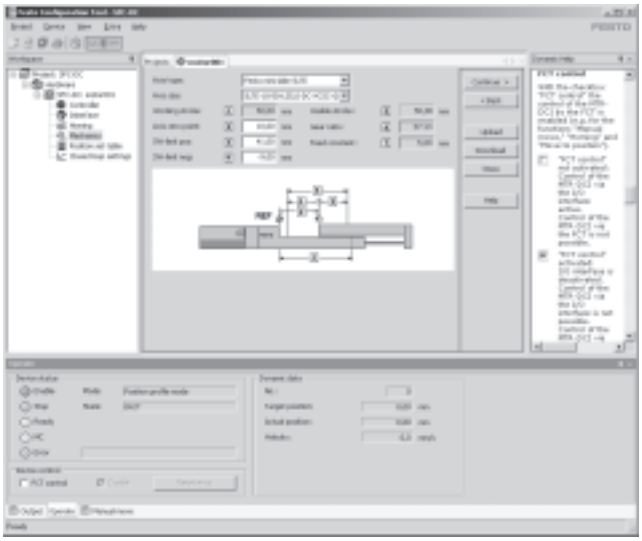
FCT software – Festo configuration tool

Software platform for electrical drives from Festo



- All the drives in a system can be managed and archived in a common project
- Project and data management for all supported device types
- Simple to use thanks to graphically supported parameter entry
- Universal mode of operation for all drives
- Working offline at your desk or online at the machine

Mechanical reference positions and limit positions



- Reference positions can be either edited or taught in
- Flexible adaptation to installation conditions
- Settings are displayed clearly

Traversing record table

- 31 traversing records ensure positioning flexibility
- Absolute or relative positioning values can be used
- The following parameters can be set flexibly for each application:
  - Position
  - Speed
  - Acceleration
  - Braking ramps
- Complete function test

Motor controllers SFC-DC

Technical data

FESTO

FHPP – Festo handling and positioning profile

Optimised data profile

Festo has developed an optimised data profile, the “Festo handling and positioning profile (FHPP)”, that is tailored to the target applications for handling and positioning tasks.

The FHPP data profile permits the activation of Festo motor controllers, using a fieldbus interface, via standardised control and status bytes.

The following are defined, among others:
- Operating modes
- I/O data structure
- Parameter objects
- Sequence control