



- Cost-effective dynamics thanks to maximum cycle times
- Ideal for vertical operation
- Small moving loads
- Compact with angled gear unit

Cantilever axes DGEA

Features

FESTO

Key features at a glance

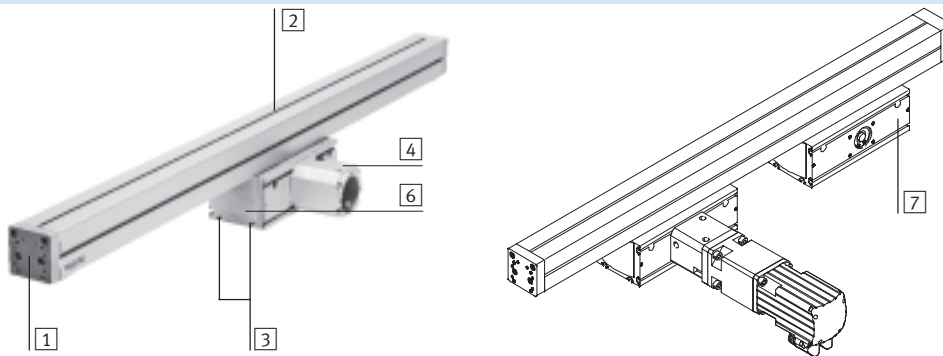
- Super flat Ω drive head enabling high mechanical torques.
- Improved dynamics compared to toothed belt axis DGE-ZR in cantilever operation, as the motor, gear unit and drive head are securely mounted and thus the moving load (profile barrel) is considerably reduced.
- Tried and tested motor-controller packages can be utilised.
- Mounting options adapted to the new multi-axis modular system.



Size		18	25	40
Max. working stroke	[mm]	800	900	1000
Max. working load	[kg]	7	18	27
Max. speed	[m/s]	3	3	3
Max. feed force	[N]	230	400	1000

Variants

Basic design



1 Mounting interface for working load: thread, centring holes and hole pattern are identical to the end caps on the DGE axes. Both caps can be machined as desired or removed and replaced by others.

2 Profile barrel: 3 sides with slots for external mounting – clearance for tubing and electrical cable throughfeed

3 Mounting interface for cantilever application (matched to DGE-...-KF slide)

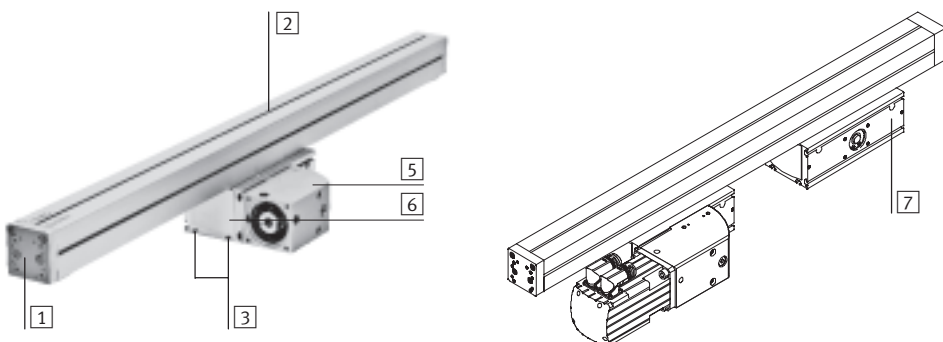
4 Coupling housing

5 Coupling housing with integrated angled gear unit

6 Drive head

7 Optional:
Additional drive head without drive shaft for increasing mechanical torque resistance

With angled gear unit



Cantilever axes DGEA

Features

FESTO

Electrical positioning systems
Electromechanical drives

2.1

System selection for electromechanical drives

Stepper motor controller
SEC-ST
→ 5 / 2.2-23



Servo motor controller
SEC-AC
→ 5 / 2.2-38



Axis controller
SPC-200
→ 5 / 1.3-2



Stepper motor
MTR-ST
→ 5 / 2.2-12



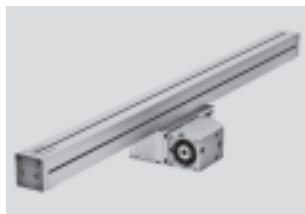
Servo motor
MTR-AC
→ 5 / 2.2-26



Coupling
KSE-...
→ 5 / 2.3-3



Motor flange
MTR-FL-...
→ 5 / 2.3-8



Cantilever axis
DGEA-...-ZR-...



Toothed belt axis
with recirculating ball bearing guide
DGE-...-ZR-KF-...



Toothed belt axis
with roller guide
DGE-...-ZR-RF-...



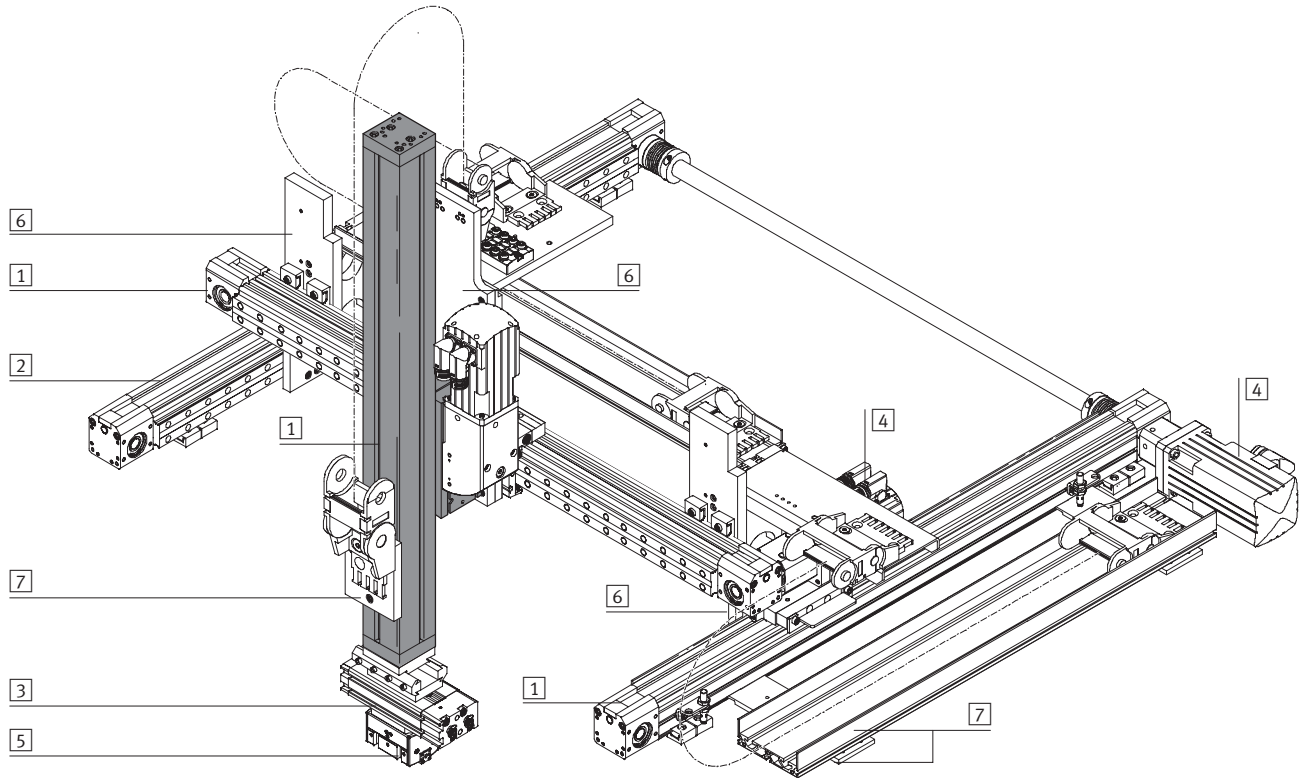
Spindle axis
with recirculating ball bearing guide
DGE-...-SP-...

Cantilever axes DGEA

System example

FESTO

System product for handling and assembly technology



System elements and accessories		
	Brief description	→ Page
1	Axes	Wide range of combination options within handling and assembly technology Volume 5
2	Passive guide axis	To increase force and torque capacity in multi-axis applications Volume 5
3	Drive units	Wide range of combination options within handling and assembly technology Volume 1
4	Motors	Servo and stepper motors, with or without gearing Volume 5
5	Grippers	Wide range of variation options within handling and assembly technology Volume 1
6	Adapters	For drive/drive and drive/gripper combinations Volume 5
7	Installation components	For achieving a clear-cut, safe layout for electrical cables and tubing Volume 5

Cantilever axes DGEA

Type codes

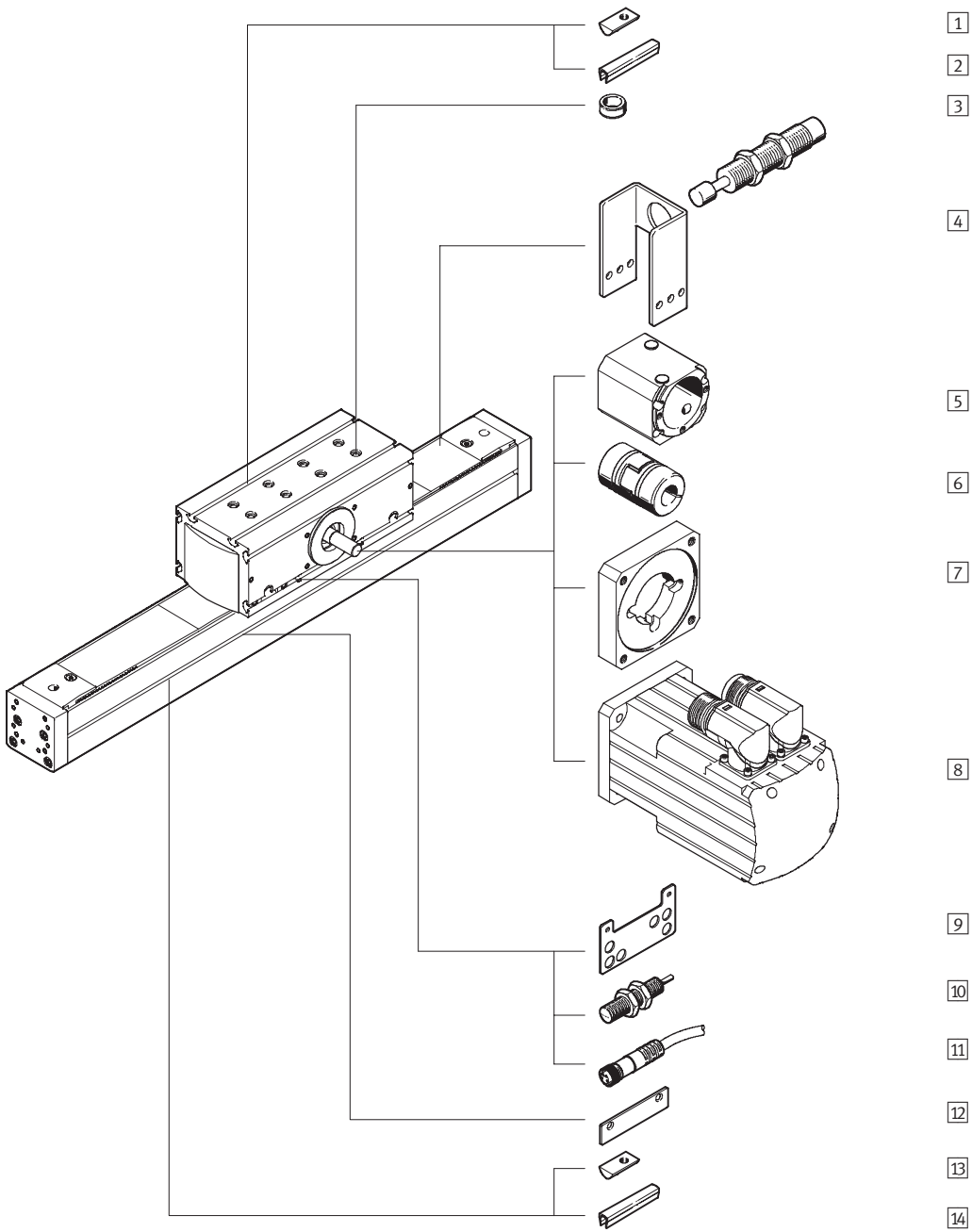
FESTO

		DGEA	-	25	-	500	-	ZR	-	WH	-	KV	-	ZWK	-	STD	-		-	
Type																				
DGEA	Cantilever axis																			
Size																				
Stroke [mm]																				
Drive function																				
ZR	Toothed belt																			
Drive head																				
WH	Drive shaft at rear																			
WV	Drive shaft at front																			
WB	Drive shaft at both ends																			
GVL	 Integrated angled gear unit/motor at front left																			
GVR	 Integrated angled gear unit/motor at front right																			
GHL	 Integrated angled gear unit/motor at rear left																			
GHR	 Integrated angled gear unit/motor at rear right																			
Coupling housing																				
KV	Drive head, at front																			
KH	Drive head, at rear																			
LV	Drive head at front, for high performance																			
LH	Drive head at rear, for high performance																			
Additional drive head																				
ZWK	Without drive shaft																			
Type of motor																				
STD	Stepper motor																			
STG	Stepper motor with gear unit																			
SED	 Servo motor																			
SEDP	 Servo motor for high performance																			
SEG	Servo motor with gear unit																			
SEI	Servo motor with integrated gear unit																			
Motor brake																				
BR	Brake																			
Accessories supplied separately																				
...S	Slot cover for profile slot																			
...B	Slot cover for drive head																			
...Y	Slot nut for profile slot																			
...X	Slot nut for drive head																			
...C	Shock absorber with retainer																			
...Z	Centring sleeve																			
L	Mounting kit for proximity sensor																			
...O	Proximity sensor with cable (normally open contact)																			
...P	Proximity sensor with cable (normally closed contact)																			
...W	Proximity sensor with plug (normally open contact)																			
...R	Proximity sensor with plug (normally closed contact)																			
...V	Plug socket with cable, 2.5 m																			

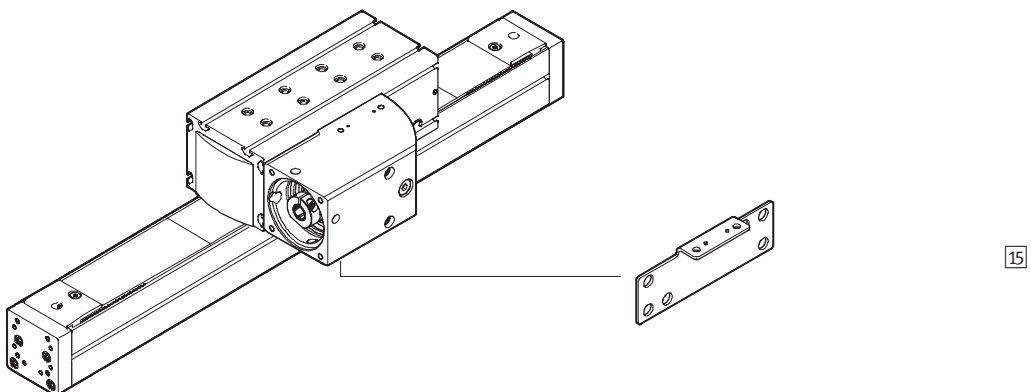
Cantilever axes DGEA

Peripherals overview

FESTO



With angled gear unit



Cantilever axes DGEA

Peripherals overview

FESTO

Variants and accessories					
Type	Brief description	Basic design	Angled gear unit	→ Page	
1 Slot nut for drive head X	For mounting the axis	■	■	5 / 2.1-115	
2 Slot cover for drive head B	For protecting against ingress of dirt	■	■	5 / 2.1-115	
3 Centring sleeve Z	To centre the axis	■	■	5 / 2.1-115	
4 Shock absorber with retainer C	Prevents damage to the axis in the event of a power failure (in vertical operation), if the axis is driven into the end position by the load	■	■	5 / 2.1-114	
5 Coupling housing KG	Adapter for mounting the motor on the axis	■	integrated	5 / 2.1-110	
6 Coupling KSE	Connecting element between axis and motor	■	integrated	5 / 2.1-110	
7 Motor flange MTR-FL	Connecting element between coupling housing and motor	■	integrated	5 / 2.1-110	
8 Motor MTR	Motors specially matched to the axis, with or without gearing	■	■	5 / 2.1-110	
9 Mounting plate L	Adapter for mounting the SIEN proximity sensor on the axis (basic design)	■	–	5 / 2.1-112	
10 Proximity sensor O/P/W/R	For providing a proximity signal or safety check	■	■	5 / 2.1-115	
11 Plug socket with cable V	Via proximity sensor	■	■	5 / 2.1-115	
12 Switching lug L	For sensing the slide position	■	■	5 / 2.1-112	
13 Slot nut for profile slot Y	For mounting attachments	■	■	5 / 2.1-115	
14 Slot cover for profile slot S	For protecting against ingress of dirt	■	■	5 / 2.1-115	
15 Mounting plate L	Adapter for mounting the SIEN proximity sensor on the axis with angled gear unit	–	■	5 / 2.1-113	

Cantilever axes DGEA

Data sheet

FESTO

- Ø - Size
18, 25, 40
- I - Stroke length
100 ... 1000 mm



General technical data				
Size	18	25	40	
Constructional design	Cantilever axis with toothed belt drive			
Guide	Recirculating ball bearing guide			
Mounting position	Any			
Max. working stroke ¹⁾	[mm]	1 ... 800	1 ... 900	1 ... 1000
Max. working (effective) load, horizontal ²⁾	[kg]	6	15	40
Max. working load, vertical	[kg]	10	20	50
Max. feed force F_x	[N]	230	400	1000
Max. speed	[m/s]	3		
Max. acceleration	[m/s ²]	50		
Repetition accuracy	[mm]	< ±0.05		
Basic design				
Max. driving torque	[Nm]	3	5.2	19
Max. no-load driving torque ³⁾	[Nm]	0.4	0.4	1
Maximum drive speed	[rpm]	2222	2222	1500
With angled gear unit				
Max. driving torque	[Nm]	1.4	2.2	7.3
Max. no-load driving torque ³⁾	[Nm]	0.3	0.6	1.3
Maximum drive speed	[rpm]	6666	6666	4500
Gearing type	Crown gear unit			
Gearing	Straight			
Gear ratio	3			

- 1) Total stroke = working stroke + 2x stroke reserve
2) At 500 mm stroke and with a centred working load in the middle of the guide. Further values → 5 / 2.1-100
3) Measured at a speed of 0.2m/s

Operating and environmental conditions			
Size	18	25	40
Ambient temperature	[°C] -10 ... +60		
Protection class	IP20		

Cantilever axes DGEA

Data sheet

FESTO

Weights [kg]							
Size	18	25	40				
Number of drive heads	1	2	1	2	1	2	
Basic design							
Overall weight	at 0 mm stroke ¹⁾	2.8	4.7	4.9	8.5	14.3	23.2
	Additional weight Per 100 mm stroke ¹⁾	0.35	0.35	0.47	0.47	1	1
Moving load	at 0 mm stroke	1.5	2	2.4	3.3	6.2	8.6
With angled gear unit							
Overall weight	at 0 mm stroke ¹⁾	3.6	5	6.6	9.3	19.5	26
	Additional weight Per 100 mm stroke ¹⁾	0.35	0.35	0.47	0.47	1	1
Moving load	at 0 mm stroke ¹⁾	1.5	2	2.4	3.3	6.2	8.6

1) Without motor, coupling, coupling housing and accessories

Mass moment of inertia							
Size	18	25	40				
Number of drive heads	1	2	1	2	1	2	
J_0	[kg cm ²]	2.87	4.08	4.45	6.40	28	41.5
J_H	per metre stroke [kg cm ² /m]	0.6	0.8	3.65			
J_L	per kg working load [kg cm ² /kg]	1.66	1.66	3.65			
J_G	angled gear unit [kg cm ² /m]	0.14	0.26	2.02			
i	gear ratio	3	3	3			

The mass moment of inertia J_A of the entire axis is calculated as follows:

Basic design

$$J_A = J_0 + J_H \times \text{working stroke [m]} + J_L \times m_{\text{working load [kg]}}$$

With angled gear unit

$$J_A = J_G + \frac{J_0 + J_H \times \text{working stroke [m]} + J_L \times m_{\text{working load [kg]}}}{i^2}$$

Toothed belt			
Size	18	25	40
Expansion ¹⁾	[%]	0.037	0.053
Pitch	[mm]	3	5
Effective radius; effective diameter	[mm]	25.78	38.2
Feed constant	[mm/rev.]	81	120
Feed constant with integrated angled gear unit	[mm/rev.]	27	40

1) At max. feed force

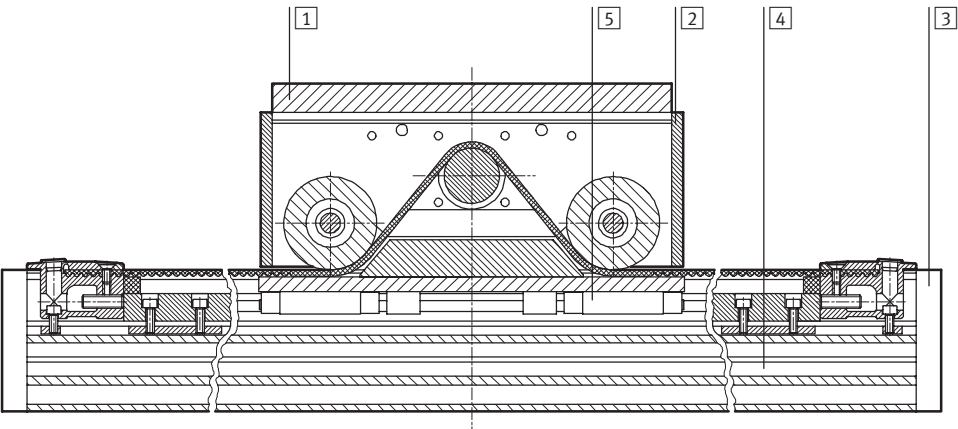
Cantilever axes DGEA

Data sheet

FESTO

Materials

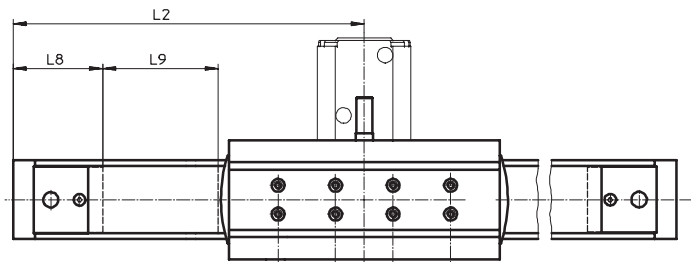
Sectional view



Axis		
1	Drive head interface	Galvanised steel
2	Drive head - Housing	Anodised aluminium
3	End cap	Anodised aluminium
4	Profile	Anodised aluminium
5	Guide rail	Rolled steel, corrotect coated
-	Gearing housing	Anodised aluminium
-	Pinion	Steel
-	Crown gear	Steel

Stroke reserve

- L2 Drive head in the end position of the working stroke
- L8 Distance between mechanical stop and external dimension of the axis
- L9 The stroke reserve is a safety distance available on both sides of the axis in addition to the stroke



Example:
Type DGEA-25-500-ZR

Working stroke = 500 mm
Stroke reserve = (2x 81 mm)
= 162 mm
Total stroke = 500 mm + 126 mm
= 662 mm

Size	18	25	40
L9 per end position [mm]	81	81	120

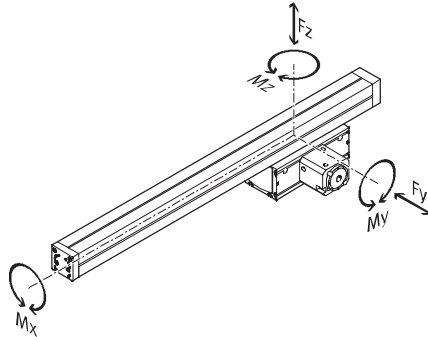
Cantilever axes DGEA

Data sheet

FESTO

Characteristic load values of the guide

The indicated forces and torques refer to the centre of the guide rail.
They must not be exceeded in the dynamic range. Special attention must be paid to the cushioning phase.



If the cantilever axis is simultaneously subjected to several of the forces and torques listed below, the following equation must be satisfied in addition to the indicated maximum loads.

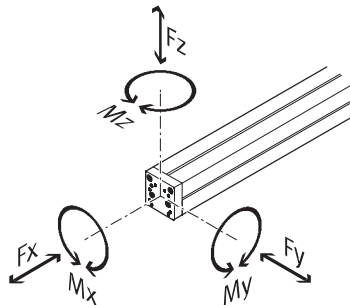
$$\left| \frac{F_y}{F_{y_{\max.}}} \right| + \left| \frac{F_z}{F_{z_{\max.}}} \right| + \left| \frac{M_x}{M_{x_{\max.}}} \right| + \left| \frac{M_y}{M_{y_{\max.}}} \right| + \left| \frac{M_z}{M_{z_{\max.}}} \right| \leq 1$$

Permissible forces and torques

Size	18	25	40
F _{y_{max.}} [N]	2000	3080	7300
F _{z_{max.}} [N]	2000	3080	7300
M _{x_{max.}} [Nm]	19	28	133
M _{y_{max.}} [Nm]	94	230	665
M _{z_{max.}} [Nm]	65	160	460

Characteristic load values of the interface for mounting the effective load

The forces and torques specified refer to the interface for mounting the effective load.
They must not be exceeded in the dynamic range. Special attention must be paid to the cushioning phase.



If the cantilever axis is simultaneously subjected to several of the forces and torques listed below, the following equation must be satisfied in addition to the indicated maximum loads.

$$\left| \frac{F_x}{F_{x_{\max.}}} \right| + \left| \frac{F_y}{F_{y_{\max.}}} \right| + \left| \frac{F_z}{F_{z_{\max.}}} \right| + \left| \frac{M_x}{M_{x_{\max.}}} \right| + \left| \frac{M_y}{M_{y_{\max.}}} \right| + \left| \frac{M_z}{M_{z_{\max.}}} \right| \leq 1$$

Permissible forces and torques

Size	18	25	40
F _{x_{max.}} [N]	6000	6000	8400
F _{y_{max.}} [N]	2240	2240	3200
F _{z_{max.}} [N]	2240	2240	3200
M _{x_{max.}} [Nm]	30	50	118
M _{y_{max.}} [Nm]	125	230	407
M _{z_{max.}} [Nm]	185	273	580



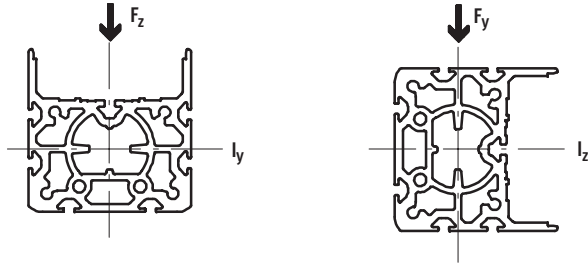
PtTool
design tool
www.festo.com/en/engineering

Cantilever axes DGEA

Data sheet

FESTO

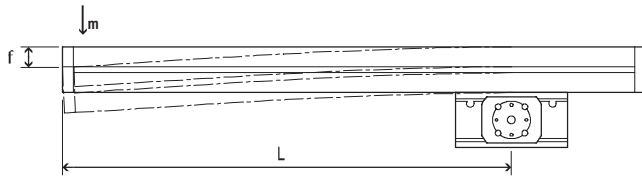
2nd moment of area¹⁾



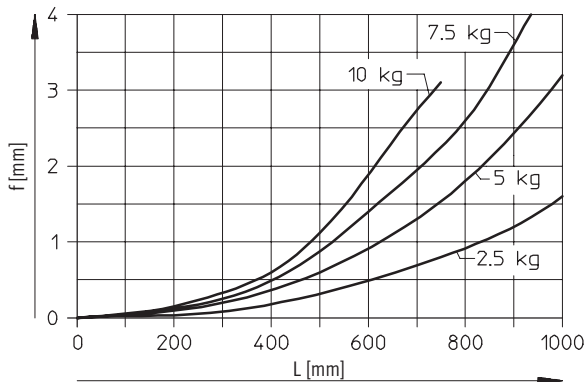
Size		18	25	40
ly	[mm ⁴]	173x10 ³	432x10 ³	1759x10 ³
lz	[mm ⁴]	135x10 ³	438x10 ³	1894x10 ³

1) After machining or replacing the end cap, the values become invalid.

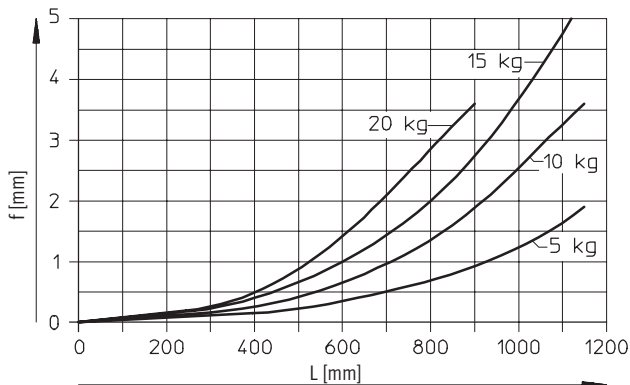
Deflection f of the profile as a function of the distance L and the effective load m



DGEA-18



DGEA-25



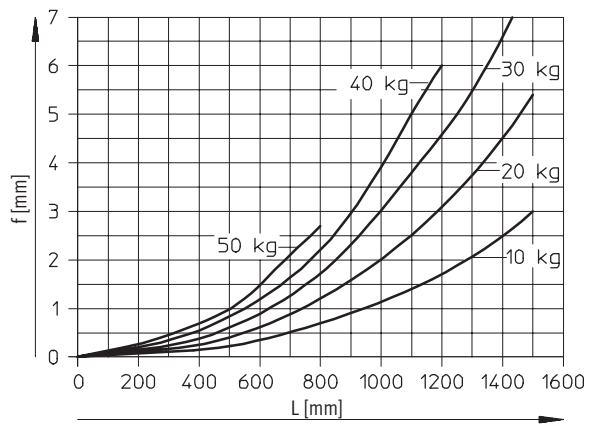
Cantilever axes DGEA

Data sheet

FESTO

Deflection f of the profile as a function of the distance L and the effective load m

DGEA-40



Cantilever axes DGEA

Data sheet

FESTO

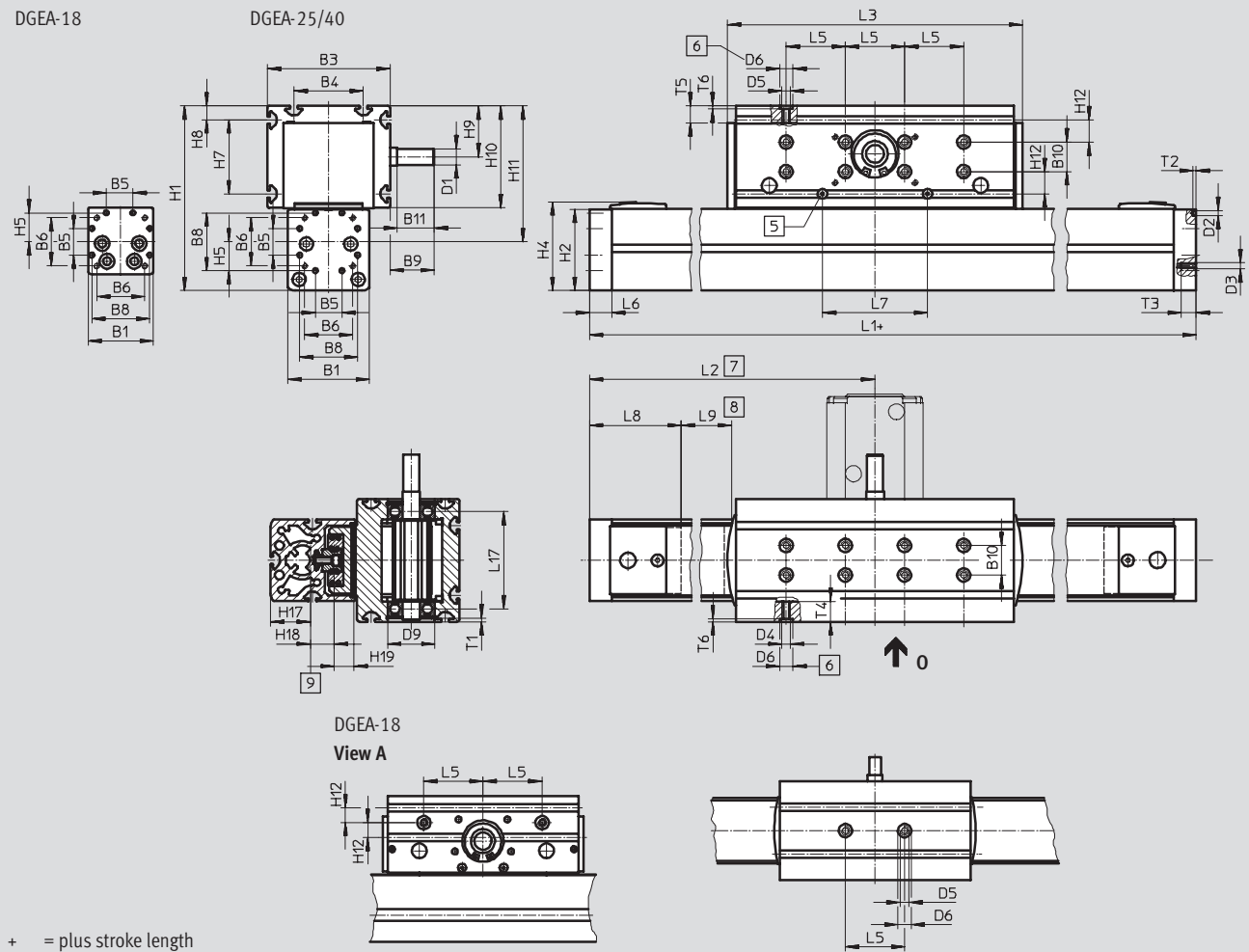
Dimensions

Download CAD data → www.festo.com/en/engineering

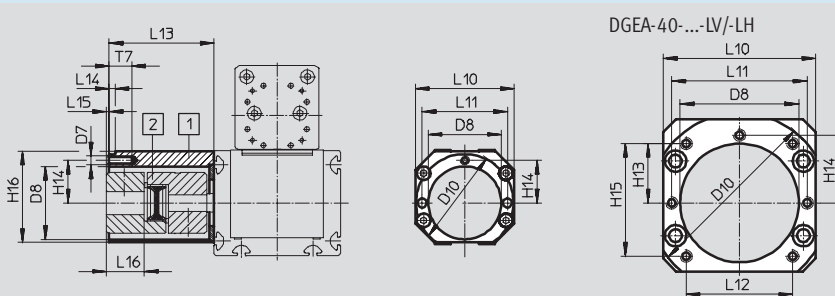
Basic design

DGEA-18

DGEA-25/40



Coupling housing



- 1 Coupling housing
- 2 Coupling
- 5 Lubrication nipple

- 6 Hole for centring sleeve ZBH-9
- 7 Slide in end position of the working stroke

- 8 Stroke reserve (Available safety distance from mechanical end position at both ends)

- 9 Centre of gravity of the moving intrinsic load

Cantilever axes DGEA

Data sheet

FESTO

Size	Variant	B1	B3	B4	B5 ±0.1	B6	B8	B9	B10	B11	D1 Ø h6	D2 Ø	D3
18	KV/KH	44	67	32	18	32.5	39.1	16	–	12	8	3.3	M4
25	KV/KH	55	83	47	18	32.5	39.1	29.8	20	25	11	3.3	M4
40	KV/KH	80	111.8	72	28	49	53	30.1	40	25	15	4	M5
	LV/LH												

Size	Variant	D4	D5	D6 Ø H7	D7	D8 Ø	D9 Ø H7	D10 Ø g7	H1	H2	H4	H5	H7
18	KV/KH	M6	M6	9	M4	32	28	44	99	45	50.8	19.55	20
25	KV/KH	M6	M6	9	M6	48	32	64	128	57.7	63.1	19.55	50
40	KV/KH	M6	M6	9	M6	48	40	64	197	85	91.3	26.5	72
	LV/LH				M8	78		118					

Size	Variant	H8	H9	H10	H11	H12	H13	H14 ±0.1	H15	H16	H17	H18	H19
18	KV/KH	8	30.5	52	77	10	–	19	–	45	19.6	10	14.3
25	KV/KH	9.5	32.5	69	95	15	–	28	–	60	27.1	16	13.3
40	KV/KH	15.5	55.5	110	153	16	–	28	–	60	42.8	21.5	18
	LV/LH						39	44.5	74	100			

Size	Variant	L1	L2	L3	L5	L6	L7	L8	L9	L10	L11	L12	L13
18	KV/KH	419.5	210	138	40	13	28	58	81	45	38	–	40
25	KV/KH	487.5	244	202	40	15	71	60	81	65	56	–	65
40	KV/KH	662	331	256	40	15	94	81	120	65	56	–	65
	LV/LH									100	89	70	96

Size	Variant	L14	L15	L16	L17	T1	T2	T3	T4 min.	T5 min.	T6	T7
18	KV/KH	3.2	–3.6	14.6	53	1.6	2	9	11	11	2.1	10
25	KV/KH	4	2.2	22.8	65.6	2.3	2	10	11	11	2.1	13
40	KV/KH	4	2.2	22.8	90	2.8	3	10	11	11	2.1	13
	LV/LH	5	–0.9	35.9								18

Cantilever axes DGEA

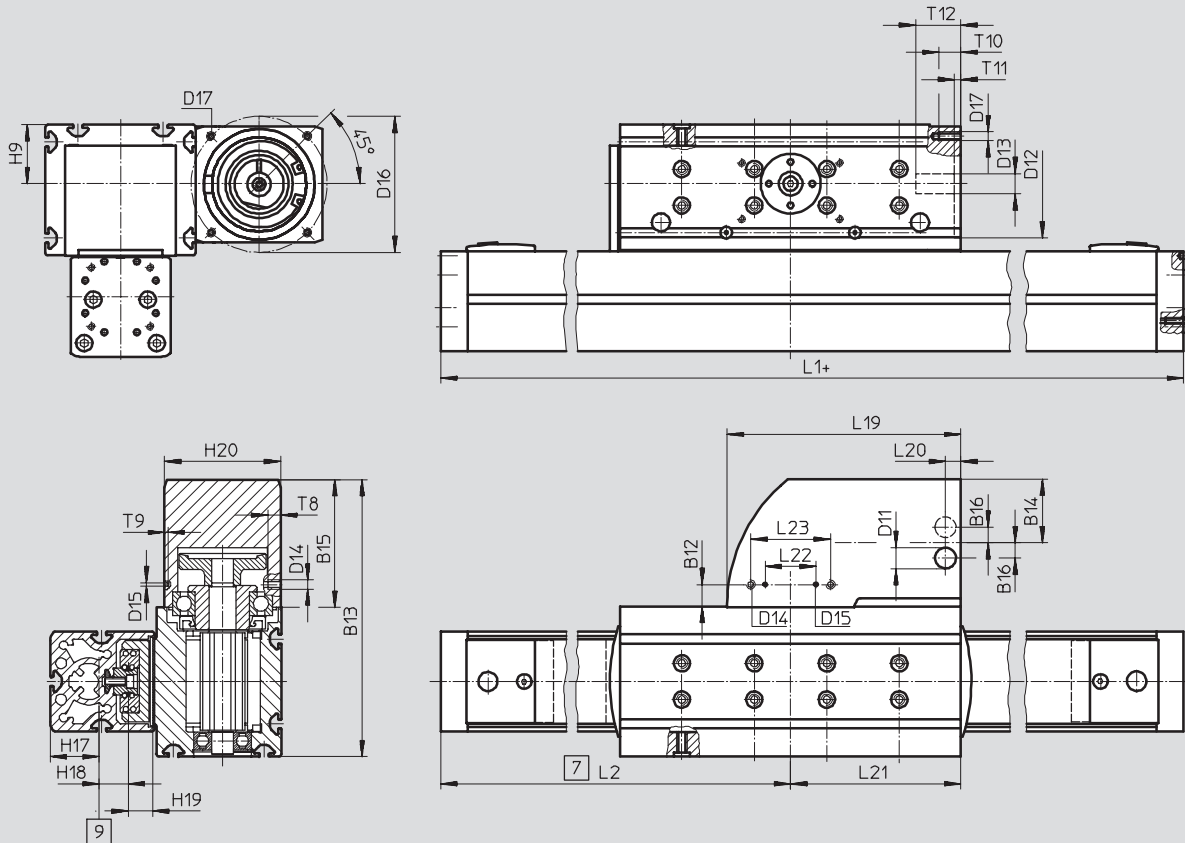
Data sheet

FESTO

Dimensions

Download CAD data → www.festo.com/en/engineering

With angled gear unit



+ = plus stroke length

[7] Slide in end position of the nominal stroke

[9] Centre of gravity of the moving intrinsic load

Size	B12	B13	B14	B15	B16	D11 Ø	D12 Ø +0.05/+0.08	D13 Ø	D14	D15 Ø ±0.05
18	11	122	27.5	55	9	11.5	40	9	M4	2
25	12	153	35	70	9	11.5	60	11	M5	2
40	16	211.8	50	100	17	11.9	95	19	M5	3

Size	D16 Ø	D17	H9	H17	H18	H19	H20	L1	L2	L19
18	63	M5	30.5	19.6	10	14.3	55	419.5	210	97
25	75	M5	32.5	27.1	16	13.3	64	487.5	244	129
40	115	M8	55.5	42.8	21.5	18	100	662	331	173

Size	L20	L21	L22 ±0.1	L23 ±0.1	T8	T9	T10	T11	T12
18	8.5	64.5	18	34	5	2	12	3.5	24
25	8.5	94	28	44	7	2	12	3.5	25
40	11.5	120	44	68	5	2	12	3.5	40

Cantilever axes DGEA

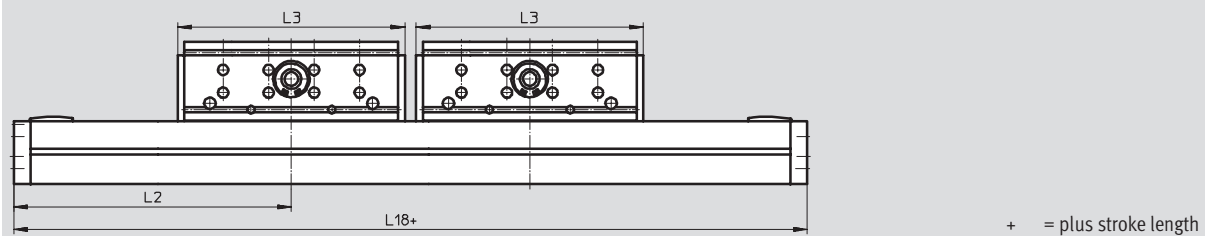
Data sheet

FESTO

Dimensions

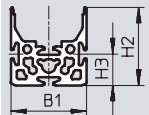
Download CAD data → www.festo.com/en/engineering

with additional drive head

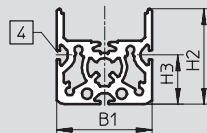


Profile barrel

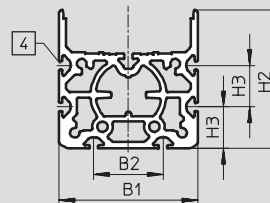
Size 18



Size 25



Size 40



4 Mounting slot for slot nut NST

Size	B1	B2	H2	H3	L2	L3	L18
18	44	–	45	18	210	138	569.5
25	55	–	57.7	28.7	244	202	697.5
40	80	40	85	24	331	256	926

Cantilever axes DGEA

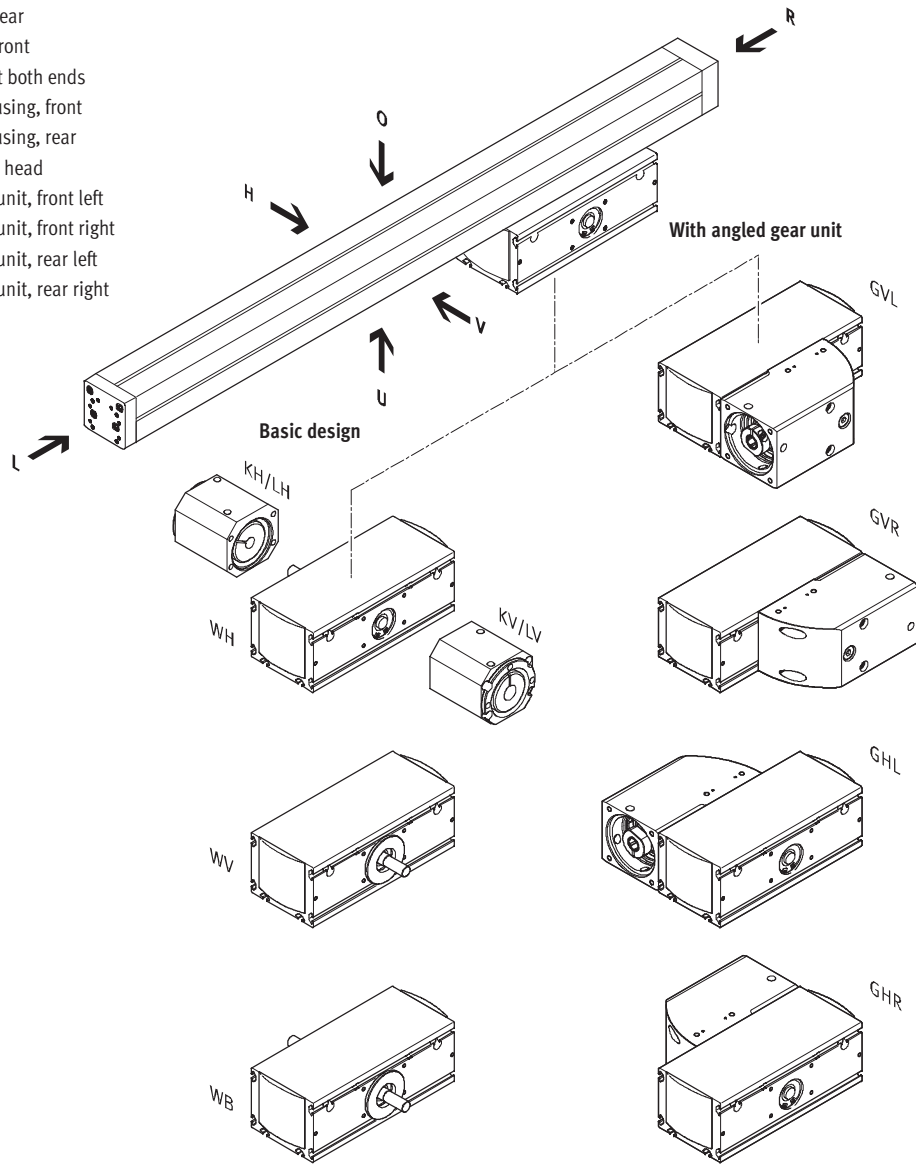
Ordering data – Modules

FESTO

Order code

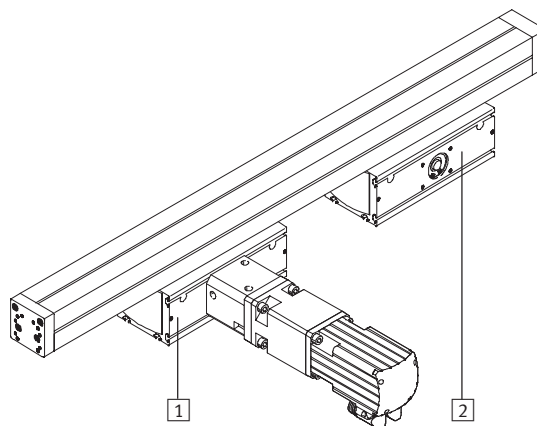
Mandatory data/options

WH	Drive shaft, rear
WV	Drive shaft, front
WB	Drive shaft at both ends
KV/LV	Coupling housing, front
KH/LH	Coupling housing, rear
ZWK	Second drive head
GVL	Angled gear unit, front left
GVR	Angled gear unit, front right
GHL	Angled gear unit, rear left
GHR	Angled gear unit, rear right



O = top
U = underneath
R = right
L = left
V = front
H = rear

- 1 Drive head
- 2 Optionally:
Additional drive head
(to increase the mechanical
torque resistance)

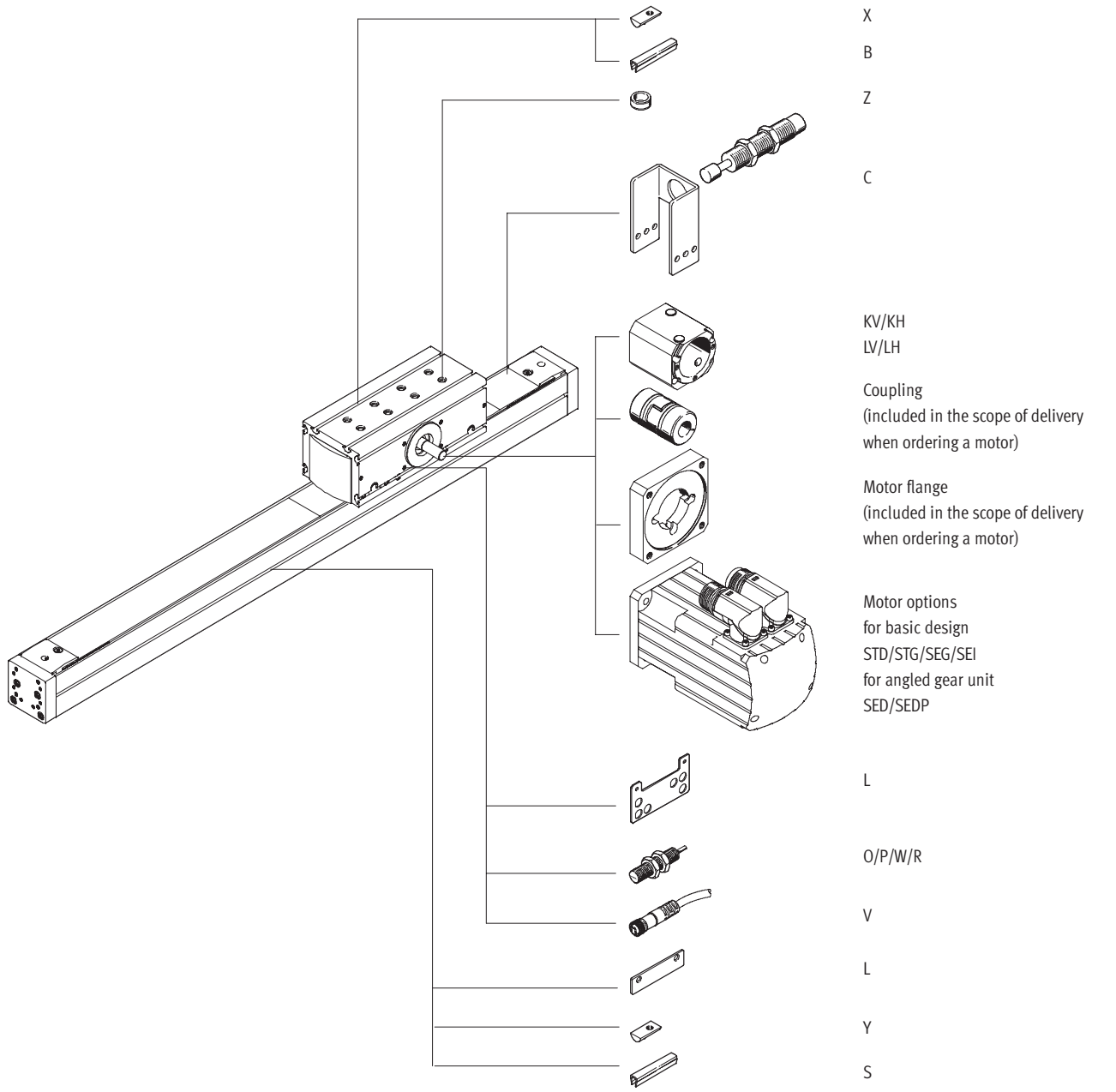


Cantilever axes DGEA

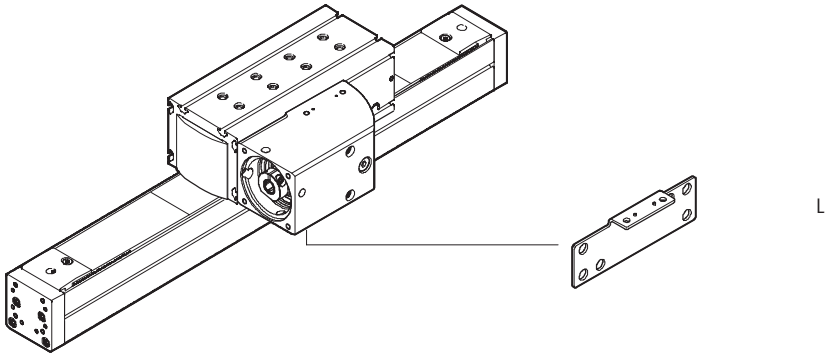
Ordering data – Modules

FESTO

Order code
Options



With angled gear unit



Cantilever axes DGEA

Ordering data – Modules

FESTO

Mandatory data						Options				
Module No.	Construction	Size	Stroke	Drive function	Drive head	Coupling housing	Additional drive head	Type of motor	Brake	
195 611	DGEA	18	1 ... 1000	ZR	WH	KV	ZWK	STD	BR	
195 612		25			WV	KH		STG		
195 613		40			WB	LV		SED		
					GVL	LH		SEDP		
					GVR			SEG		
					GHL			SEI		
					GHR					
Ordering example										
195 612	DGEA	- 25	- 850	- ZR	- WV	- KV	-	- STD	- BR	-

Ordering table										
Size		18		25		40		Condi- tions	Code	Enter code
M	Module No.		195 611		195 612		195 613			
	Construction		Cantilever axis with toothed belt drive						DGEA	DGEA
	Size		18		25		40		-...	
	Stroke [mm]		1 ... 800		1 ... 900		1 ... 1000		-...	
	Drive function		Electromechanical drive with toothed belt drive						-ZR	-ZR
	Drive head		Drive shaft at rear						-WH	
			Drive shaft at front						-WV	
			Drive shaft at both ends						-WB	
			Integrated angled gear unit for arrangement of motor at front left						-GVL	
			Integrated angled gear unit for arrangement of motor at front right						-GVR	
Integrated angled gear unit for arrangement of motor at rear left						-GHL				
Integrated angled gear unit for arrangement of motor at rear right						-GHR				
O	Coupling housing	Standard	For drive head at front				1	-KV		
			For drive head at rear				2	-KH		
		Large version (for high performance)	-		-	For drive head at front		1	-LV	
			-		-	For drive head at rear		2	-LH	
	Additional drive head		Without drive shaft						-ZWK	
	Type of motor	Stepper motor on one drive head	Stepper motor				-	3	-STD	
			-		-	with gearing		3	-STG	
		Servo motor on one drive head	Servo motor		-		-	4	-SED	
			-		-		for high performance	4	-SEDP	
			with gearing		-		-	3	-SEG	
-			-		with integrated gearing	5	-SEI			
↓	Brake ¹⁾		Motor brake					6	-BR	

1) Always order brake for vertical applications for safety reasons.

1 KV, LV Only with drive head WV, WB.

2 KH, LH Only with drive head WH, WB.

3 STD, STG, SEG

Only with coupling housing KV, KH and drive head WV, WH, WB.

4 SED, SEDP Only with drive head GVL, GVR, GHL, GHR.

5 SEI Only with coupling housing LV, LH and drive head WV, WH, WB.

6 BR Only permissible with motor type.

Transfer order code

DGEA - - - ZR - - - - - - -

Cantilever axes DGEA

Ordering data – Modules

FESTO

Options							
Accessories	Slot cover	Slot nut	Shock absorber with retainer	Centring sleeve	Retaining plate for proximity sensor	Inductive proximity sensor	Plug socket with cable
ZUB	...S ...B	...Y ...X	...C	...Z	L	...O ...P ...W ...R	...V
ZUB	- 2B		2C	10Z	L	2P2W	2V

Ordering table							
Size		18	25	40	Condi- tions	Code	Enter code
↓ Accessories		Supplied separately				ZUB-	ZUB-
Options	Slot cover for profile slot	1 ... 10				...S	
	Slot cover for drive head	1 ... 10				...B	
	Slot nut for profile slot	1 ... 10				...Y	
	Slot nut for drive head	1 ... 10				...X	
	Shock absorber with retainer	1 ... 2				...C	
	Centring sleeve	10, 20, 30, 40, 50, 60, 70, 80, 90				...Z	
	Retaining plate for inductive proximity switch, incl. 2 switching lugs	1				L	
	Inductive proximity sensor NO contact, cable	1 ... 5				...O	
	Inductive proximity sensor NC contact, cable	1 ... 5				...P	
	Inductive proximity sensor NO contact, plug	1 ... 5				...W	
	Inductive proximity sensor NC contact, plug	1 ... 5				...R	
	Plug socket with cable	1 ... 10				...V	



Note

The motor controller and cable set must be ordered separately.

Ordering data:

Cantilever axes DGEA offer the same mounting options (on the end cap of the profile and drive head) as the electromechanical axes DGE-...-ZR-KF/-SP-KF.

Stepper motor → 5 / 2.2-12

Servo motor → 5 / 2.2-26

Note however that there is no 1:1 conformity with regard to size.

Example:
Profile dimension DGEA-18 corresponds to DGE-25.

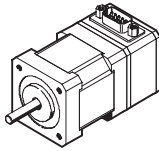
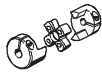
Transfer order code

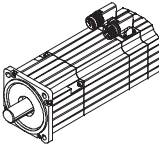
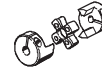
ZUB -

Cantilever axes DGEA

Accessories

FESTO

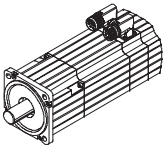
Permissible combinations with stepper motor						
Order code	Motor		Motor flange		Coupling	
						
	Part No.	Type	Part No.	Type	Part No.	Type
For DGEA-18, basic design						
	without gear unit/without brake					
STD	530 065	MTR-ST-87-48S-AA	530 082	MTR-FL44-ST87	123 042	KSE-30-35-D08-D11
	without gear unit/with brake					
STD + BR	530 066	MTR-ST-87-48S-AB	530 082	MTR-FL44-ST87	123 042	KSE-30-35-D08-D11
	with gear unit/without brake					
	without gear unit/with brake					
STD + BR	530 066	MTR-ST-87-48S-AB	530 082	MTR-FL44-ST87	123 042	KSE-30-35-D08-D11
	with gear unit/with brake					
STD + BR	530 066	MTR-ST-87-48S-AB	530 082	MTR-FL44-ST87	123 042	KSE-30-35-D08-D11
For DGEA-25, basic design						
	without gear unit/without brake					
STD	530 065	MTR-ST-87-48S-AA	533 140	MTR-FL64-ST87	530 090	KSE-40-66-D11-D11
	without gear unit/with brake					
STD + BR	530 066	MTR-ST-87-48S-AB	533 140	MTR-FL64-ST87	530 090	KSE-40-66-D11-D11
	with gear unit/without brake					
STG	530 067	MTR-ST-87-48S-GA	533 139	MTR-FL64-PL80	123 845	KSE-40-66-D15-D20
	with gear unit/with brake					
STG + BR	530 068	MTR-ST-87-48S-GB	533 139	MTR-FL64-PL80	123 845	KSE-40-66-D15-D20
For DGEA-40, basic design						
	with gear unit/without brake					
STG	530 067	MTR-ST-87-48S-GA	533 139	MTR-FL64-PL80	123 845	KSE-40-66-D15-D20
	with gear unit/with brake					
STG + BR	530 068	MTR-ST-87-48S-GB	533 139	MTR-FL64-PL80	123 845	KSE-40-66-D15-D20

Permissible combinations with servo motor						
Order code	Motor		Motor flange		Coupling	
						
	Part No.	Type	Part No.	Type	Part No.	Type
For DGEA-18, basic design						
	with gear unit/without brake					
SEG	526 725	MTR-AC-55-3S-GA	529 944	MTR-FL44-PL60	123 042	KSE-30-35-D08-D11
	with gear unit/with brake					
SEG + BR	526 726	MTR-AC-55-3S-GB	529 944	MTR-FL44-PL60	123 042	KSE-30-35-D08-D11
For DGEA-25, basic design						
	with gear unit/without brake					
SEG	526 729	MTR-AC-70-3S-GA	529 945	MTR-FL64-AC70	525 864	KSE-40-66-D11-D12
	with gear unit/with brake					
SEG + BR	526 730	MTR-AC-70-3S-GB	529 945	MTR-FL64-AC70	524 864	KSE-40-66-D11-D12
For DGEA-40, basic design						
	with gear unit/without brake					
SEI	526 737	MTR-AC-100-5S-GA	529 949	MTR-FL118-AC100	530 940	KSE-65-90-D15-D24
	with gear unit/with brake					
SEI + BR	526 738	MTR-AC-100-5S-GB	529 949	MTR-FL118-AC100	530 940	KSE-65-90-D15-D24

Cantilever axes DGEA

Accessories

FESTO

Permissible combinations with servo motor		
Order code	Motor	
		
	Part No.	Type
For DGEA-18, with angled gear unit		
	without gear unit/without brake	
SED	526 723	MTR-AC-55-3S-AA
	without gear unit/with brake	
SED + BR	526 724	MTR-AC-55-3S-AB
For DGEA-25, with angled gear unit		
	without gear unit/without brake	
SED	526 727	MTR-AC-70-3S-AA
	without gear unit/with brake	
SED + BR	526 728	MTR-AC-70-3S-AB
For DGEA-40, with angled gear unit		
	without gear unit/without brake	
SEDP	526 735	MTR-AC-100-5S-AA
	without gear unit/with brake	
SEDP + BR	526 736	MTR-AC-100-5S-AB

-  - Note

The basic design of the gear units facilitates a reduction of 4 : 1 and that of the angled gear unit a reduction ratio of 3: 1.

Technical data for stepper motors
→ 5 / 2.2-12

Technical data for servo motors
→ 5 / 2.2-26

Cantilever axes DGEA

Accessories



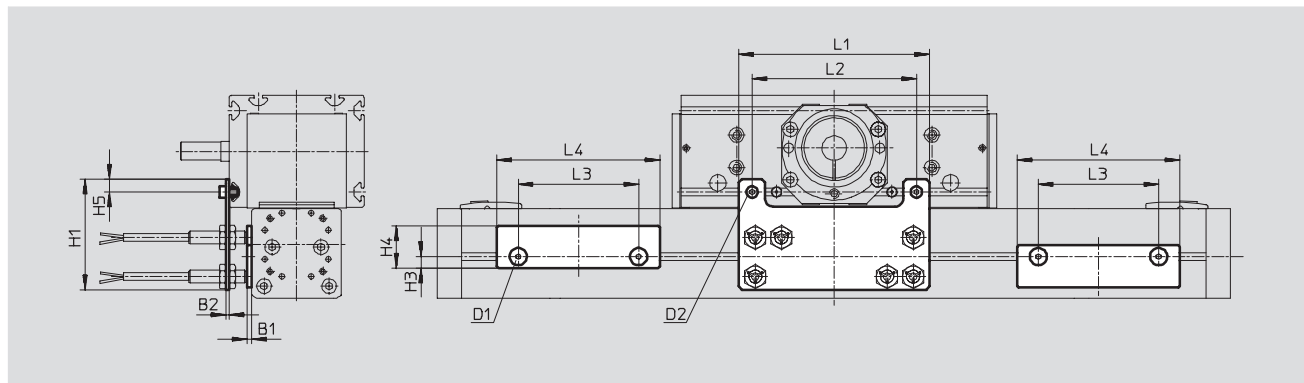
Mounting kit for proximity sensor
(DGEA in basic design)

DGEA-...-SIE-M8

(Order code: L)

Material:

Galvanised steel



Dimensions and ordering data							
For size	B1	B2	D1	D2	H1	H3	H4
18	3	2	M4	M4	77	5	21
25	3	2	M4	M5	68	7	26
40	3	7	M4	M5	92	7	26

For size	H5	L1	L2	L3	L4	Weights [g]	Part No.	Type
18	7.5	114	90	74	84	200	525 868	DGEA-18-SIE-M8
25	8	117	101	85	100	250	525 869	DGEA-25-SIE-M8
40	10	190	133	124.5	145	600	525 870	DGEA-40-SIE-M8

Cantilever axes DGEA

Accessories

FESTO

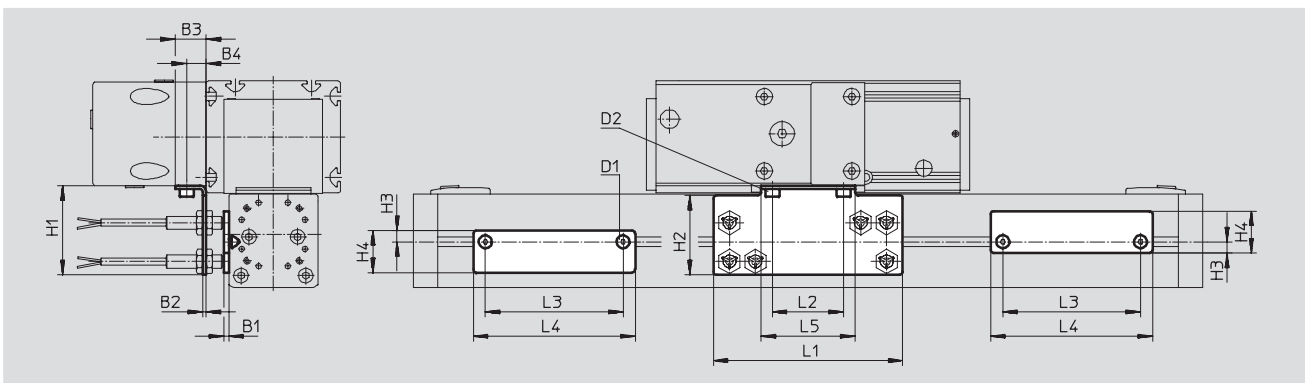
Mounting kit for proximity sensor
(DGEA with angled gear unit)

DGEA-...-G...-SIE-M8

(Order code: L)

Material:

Galvanised steel



Dimensions and ordering data									
For size	B1	B2	B3	B4	D1	D2	H1	H2	H3
18	3	2	17	11	M4	M4	40	34	5
25	3	2	19	12	M4	M5	55	49	7
40	3	4	23	16	M4	M5	64	52	7

For size	H4	L1	L2	L3	L4	L5	Weights [g]	Part No.	Type
18	21	114	34	74	84	46	170	539 935	DGEA-18-G...-SIE-M8
25	26	117	44	85	100	58	250	539 936	DGEA-25-G...-SIE-M8
40	26	153	68	124.5	145	82	520	539 937	DGEA-40-G...-SIE-M8

Cantilever axes DGEA

Accessories

FESTO

Shock absorber kit

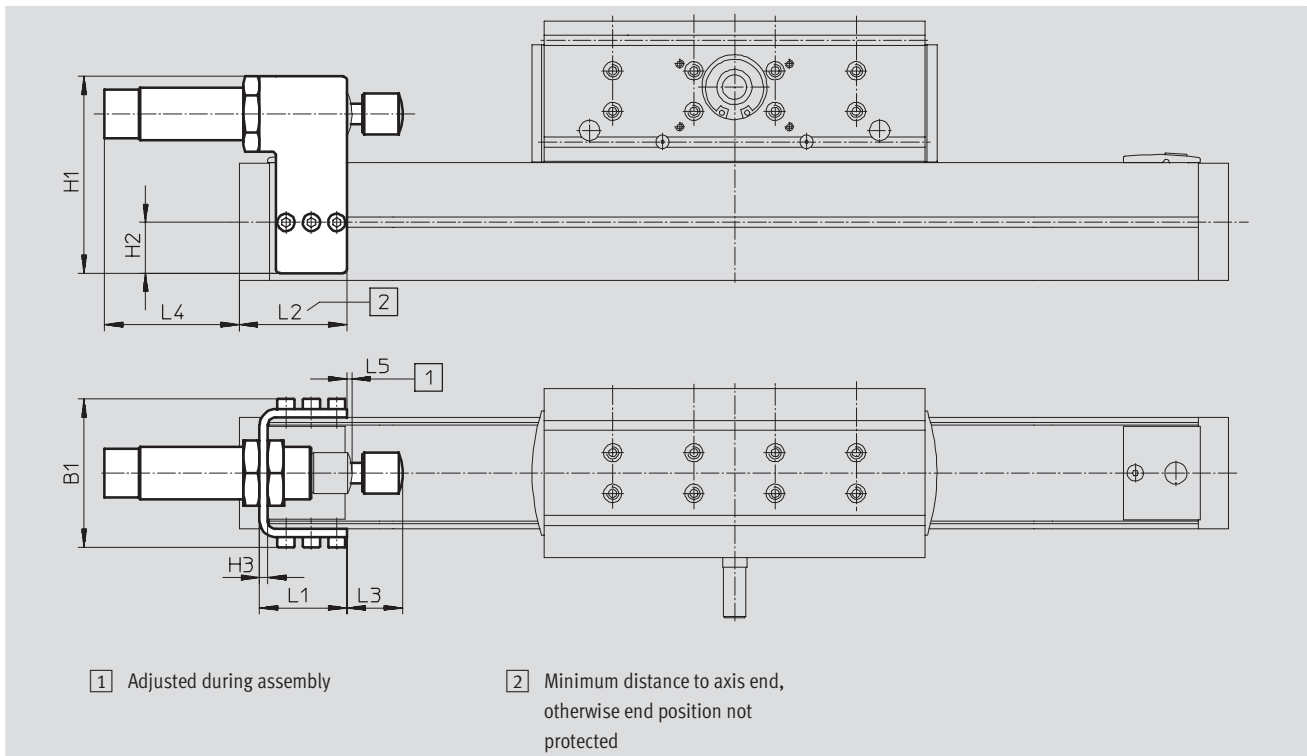
DGEA-...-YSR

(Order code: C)

Material:

Galvanised steel

Copper, PTFE and silicone-free



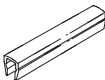
Dimensions and ordering data											
For size	B1	H1	H2	H3	L1	L2 +1	L3	L4	L5 +1	Weights [g]	Part No. Type
18	59	80	15	3	44	67	1)	1)	2	390	525 865 DGEA-18-YSR
25	73	97	25	4	43	60	1)	1)	2	630	525 866 DGEA-25-YSR
40	98	122	14	4	70.5	81	1)	1)	2	1200	525 867 DGEA-40-YSR

1) Dimension is related to the size of the shock absorber and the mounting position of the shock absorber kit

Cantilever axes DGEA

Accessories

FESTO

Ordering data				Technical data → Volume 1		
	For size	Remarks	Order code	Part No.	Type	PU ¹⁾
Slot nut NST						
	18	for profile slot	Y	526 091	NST-HMV-M4	1
	25, 40			150 914	NST-5-M5	1
	18, 25, 40	for drive head	X	150 914	NST-5-M5	1
Centring sleeve ZBH						
	18, 25, 40	for drive head	Z	150 927	ZBH-9	10
Slot cover ABP/ABP-S						
	18	for profile slot	S	151 680	ABP-5-S	2
	25, 40	every 0.5 m		151 681	ABP-5	2
	18, 25, 40	for drive head every 0.5 m	B	151 681	ABP-5	2

1) Packaging unit quantity

Ordering data – Inductive proximity sensors M8					Technical data ➔ Volume 4		
	Electrical connection		Switch output	LED	Cable length [m]	Part No.	Type
	Cables	M8 plug					
NO contact							
	3-core	–	PNP	■	2.5	150 386	SIEN-M8B-PS-K-L
	–	3-pin	PNP	■		150 387	SIEN-M8B-PS-S-L
NC contact							
	3-core	–	PNP	■	2.5	150 390	SIEN-M8B-PO-K-L
	–	3-pin	PNP	■		150 391	SIEN-M8B-PO-S-L

Ordering data – Plug sockets with cable						Technical data➔ Volume 1	
	Mounting	Switch output		Connection	Cable length [m]	Part No.	Type
		PNP	NPN				
Straight plug 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 plug socket							
	Union nut M8	■	■	3-pin	2.5	159 422	SIM-M8-3WD-2.5-PU
					5	159 423	SIM-M8-3WD-5-PU