



- ✓ 隨插即用
- ✓ 高安全係數
- ✓ 穩固、低噪音水準
- ✓ 符合 IEC 60601-1 醫療認證

CPMA

For ophthalmic equipment

Benefits

- Universal power supply
- Plug and play
- Soft start and stop control
- Multiple outlet socket accessories
- Cable through pillar

Standards

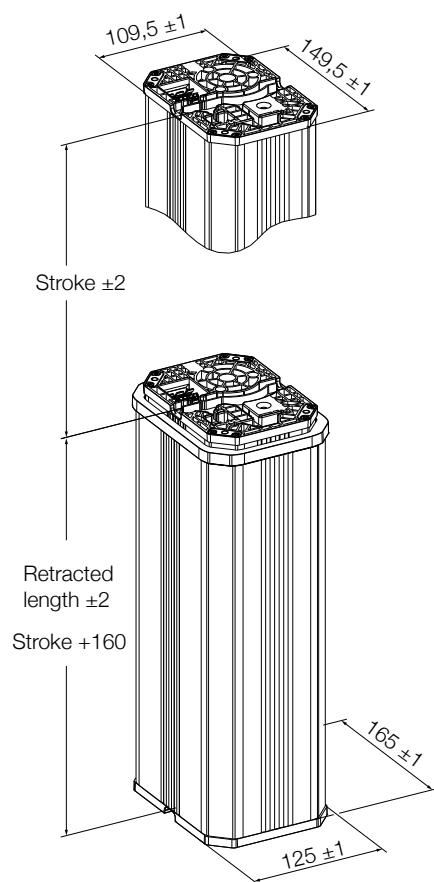
- IEC 60601-1:2005
(3rd edition) compliant

Technical data

	Unit	CPMA1-1	CPMA1-2	CPMA2-2
Rated push load (with self locking)	N	1 000	2 000	2 000
Rated pull load	N	0	0	0
Bending moment (dynamic)	Nm	up to 115 ¹⁾	up to 250 ¹⁾	up to 250 ¹⁾
Speed (full load to no load)	mm/s	14 to 15	11 to 15	11 to 15
Telescopic pillar version	# of section	2-section	2-section	2-section
Stroke	mm	230 to 400	230 to 400	200 to 400
Retracted length	mm	S+160	S+160	S+160
Static Load (Max) in push way	N	8 000	8 000	8 000
Static bending moment (Max)	Nm	500	500	500
Voltage (rated)	V	100–240 AC 50/60 Hz	100–240 AC 50/60 Hz	24 DC
Input current (rated)	A	1,5	1,6	5
Duty cycle: intermittent operation	on/off	1 min./9 min.	1 min./9 min.	1 min./9 min.
Ambient temperature	°C	+10 to +40	+10 to +40	+10 to +40
Type of protection	IP	30	30	30
Protection class	–	I	I	–
Type of control	–	electrical	electrical	electrical
Noise level (Max)	dB(A)	45	45	45
Weight	kg	8 to 11	9 to 12	8 to 11
Standby power (Max)	W	2,1	1,9	–

¹⁾ For details, see offset load diagrams (→ page 184)

Dimensional drawing



More flexibility with Series CPMA design options

Built-in with outer tube on top
More hygienic and easy-to-clean design



Motor
orientation B



Motor
orientation A

Built-in with outer tube on bottom
More aesthetic design

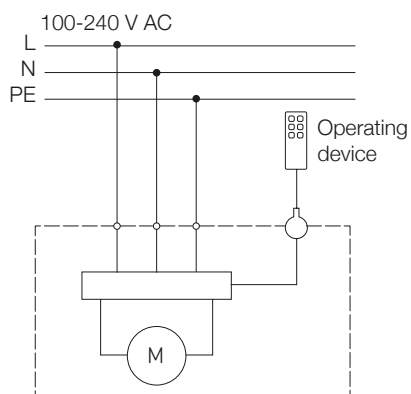
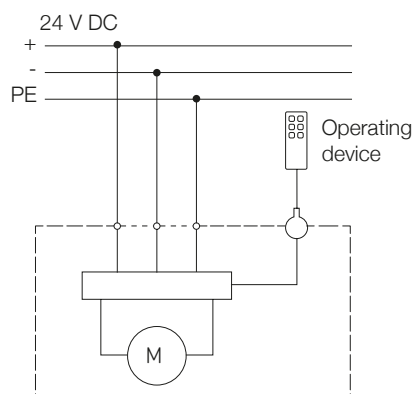


Motor
orientation A



Motor
orientation B

Connecting diagrams

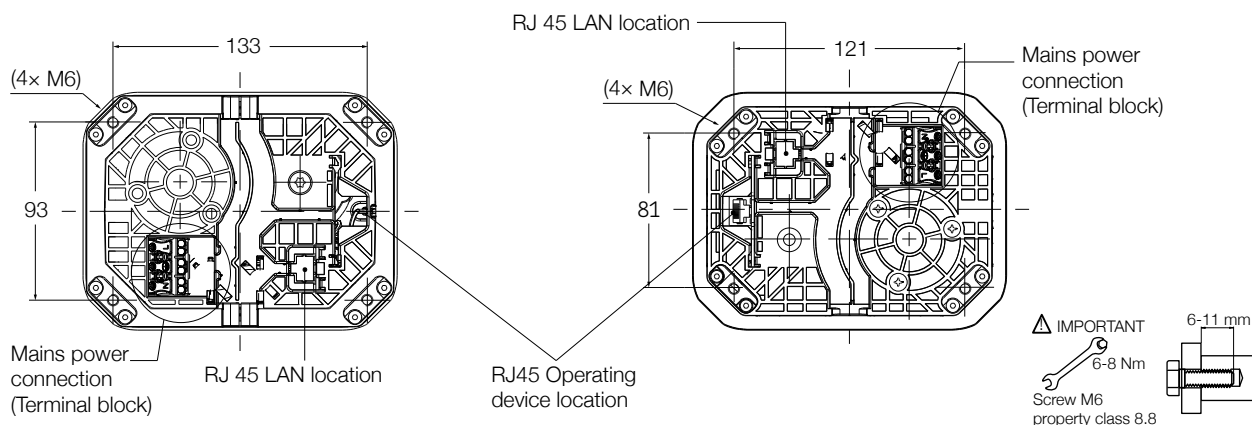


Suitable products

	External power supply 24 V DC																		
	EHA4	STL	STK		ZDV-348220-002	ZDV-348221-002		ZKA-140449-2500	ZKA-140450-2500	ZKA-140451-2500	ZKA-140452-2500	ZKA-140458-2500	ZKA-140460-2500	ZKA-140453-2500	ZKA-140454-2500	ZKA-140455-2500	ZKA-140456-2500	ZKA-140459-2500	ZKA-140461-2500
CPMA1-1		•	•	•	•	•		•	•	•	•	•	•						
CPMA1-2		•	•	•	•	•		•	•	•	•	•	•						
CPMA2-2	•	•	•	•															
 Hand switch	 Foot switch		 Desk switch		 Socket box		 Mains cable					 Detachable mains cord							

Hand switch
 Foot switch
 Desk switch
 Socket box
 Mains cable
 Detachable mains cord

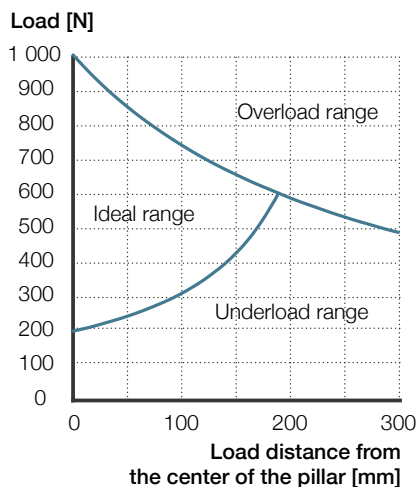
Connections and fastening



Pillar must be attached on plane and rigid surface by 4 screws M6 with a depth of 6 to 11 mm in the pillar. The total length of the screw must be adjusted to the height of the fixture.

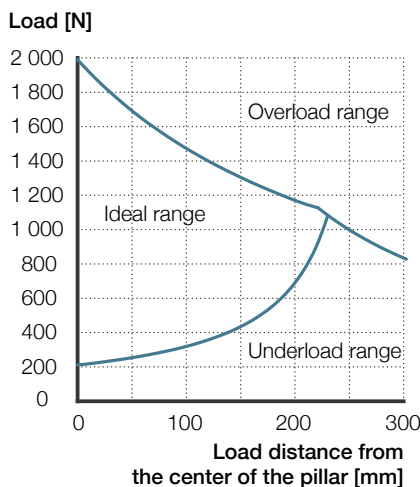
Offset load diagrams

CPMA1-1



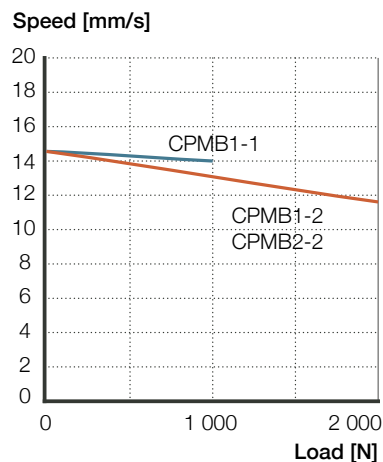
Offset load at full extension in the best axis

CPMA1-2 and CPMA2-2



Offset load at full extension in the best axis

Performance diagram



— CPMA1-1
 — CPMA1-2, CPMA2-2

Inlet socket box – ZDV



Benefits

- Multifunction plug and play accessory
- Detachable mains power cord
- Replaceable fuses
- LAN Connector
- Easy to use
- Cord strain relief

Standards

- IEC 60601-1:2005 (3rd edition) compliant

Outlet socket box – ZDV



Benefits

- Multifunction plug and play accessory
- 3 IEC outlet sockets
- Replaceable fuses
- Integrated mounting plate
- LAN Connector
- Easy to use

Standards

- IEC 60601-1:2005 (3rd edition) compliant

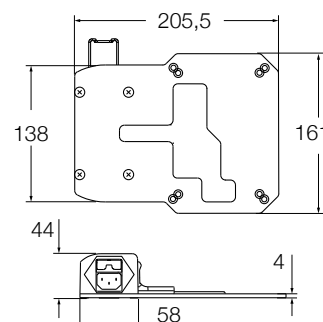
Suitable operating devices

	Pillars	Hand switches	Foot switches	Desk switches	Mains cables	Detachable mains cords
	CPMA1-1 CPMA1-2 CPMA2-2	EHA41-13N10N-000	STL01-GW1000-X190	STK01-SW3000-X100 STK01-UW3000-X100	ZKA-140449-2500 ZKA-140450-2500 ZKA-140451-2500 ZKA-140452-2500 ZKA-140458-2500 ZKA-140460-2500	ZKA-140453-2500 ZKA-140454-2500 ZKA-140455-2500 ZKA-140456-2500 ZKA-140459-2500 ZKA-140461-2500
ZDV-348220-002	• •	•	•	• •		• • • • •

Technical data

- IEC inlet mains power socket with retainer
- 1 RJ45 for operating device
- 1 RJ45 for LAN
- 2 replaceable fuses 8 A
- Plate with holes as the plates of the pillar CPMA
- Can be fastened on inner and outer tube

Dimensional drawing



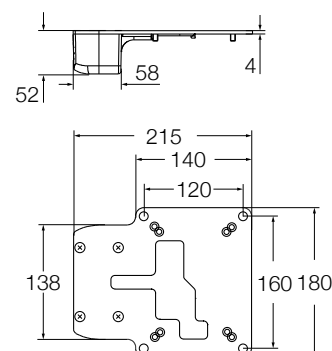
Suitable operating devices

	Pillars	Hand switches	Foot switches	Desk switches	Mains cables	Detachable mains cords
	CPMA1-1 CPMA1-2 CPMA2-2	EHA41-13N10N-000	STL01-GW1000-X190	STK01-SW3000-X100 STK01-UW3000-X100	ZKA-140449-2500 ZKA-140450-2500 ZKA-140451-2500 ZKA-140452-2500 ZKA-140458-2500 ZKA-140460-2500	ZKA-140453-2500 ZKA-140454-2500 ZKA-140455-2500 ZKA-140456-2500 ZKA-140459-2500 ZKA-140461-2500
ZDV-348220-002	• •	•	•	• •		

Technical data

- 3 IEC mains power outlet sockets
- 1 RJ45 for operating device
- 1 RJ45 for LAN
- 2 replaceable fuses 8 A
- Integrated mounting plate with 4 holes 9 mm diameter
- 4 screws to fasten on pillar CPMA
- Can be fastened on inner and outer tube

Dimensional drawing



Mounting plate – ZPL



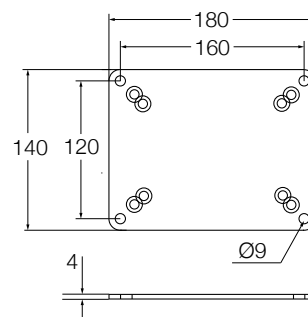
Benefits

- Easy to use

Suitable operating devices

	Pillars		
	CPMA1-1	CPMA1-2	CPMA2-2
ZPL	•	•	•

Dimensional drawing



Technical data

- Can be fastened on inner and outer tube
- Mounting plate with 4 holes 9 mm diameter

Mains cable and detachable mains cord – ZKA

Mains cable



Detachable mains cord



Mains cable

	Pillars			Socket boxes	
	CPMA1-1	CPMA1-2	CPMA2-2	ZDV-348220-002	ZDV-348221-002
ZKA-140449-2500	•	•			
ZKA-140450-2500	•	•			
ZKA-140451-2500	•	•			
ZKA-140452-2500	•	•			
ZKA-140458-2500	•	•			
ZKA-140460-2500	•	•			

Detachable mains cord

	Pillars			Socket boxes	
	CPMA1-1	CPMA1-2	CPMA2-2	ZDV-348220-002	ZDV-348221-002
ZKA-140453-2500	•	•			
ZKA-140454-2500	•	•			
ZKA-140455-2500	•	•			
ZKA-140456-2500	•	•			
ZKA-140459-2500	•	•			
ZKA-140461-2500	•	•			

Benefits

- Easy to use
- Identification by a product label

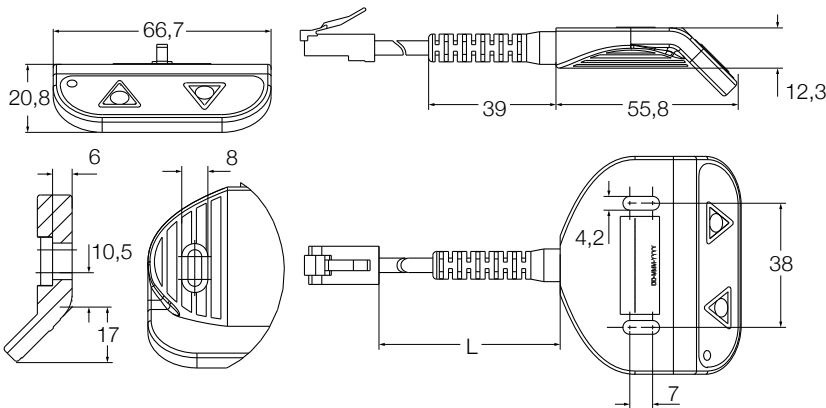
Standards

- IEC 60601-1:2005 (3rd edition) compliant

Desk switch – STK



Dimensional drawing



Benefits

- Easy and precise
- Stylish design
- Tactile buttons with finger guide
- 2 colors LED for power and feedback status

Standards

- IEC 60601-1:2005 (3rd edition) compliant

Suitable operating devices

	Pillars			Socket boxes	
	CPMA1-1	CPMA1-2	CPMA2-2	ZDV-348220-002	ZDV-348221-002
STK01-SW3000-X100	•	•	•	•	•
STK01-UW3000-X100	•	•	•	•	•

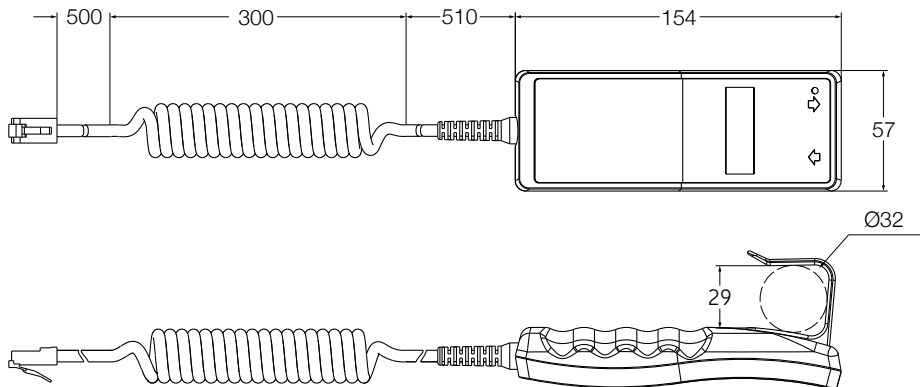
Designation	L [mm]
STK01-SW3000-X100	500
STK01-UW3000-X100	1 000

See ➞ page 188 and 189 for technical data and ordering key

Hand switch – EHA



Dimensional drawing



Benefits

- Robust ergonomic design
- Tactile buttons
- Easy mountable fastening hook
- 2 colors LED for power and feedback status

Standards

- IEC 60601-1:2005 (3rd edition) compliant

Suitable operating devices

	Pillars			Socket boxes	
	CPMA1-1	CPMA1-2	CPMA2-2	ZDV-348220-002	ZDV-348221-002
EHA	•	•	•	•	•

See ➞ page 188 and 189 for technical data and ordering key

Foot switch –
STL



Benefits

- Easy to use
- Ergonomic design

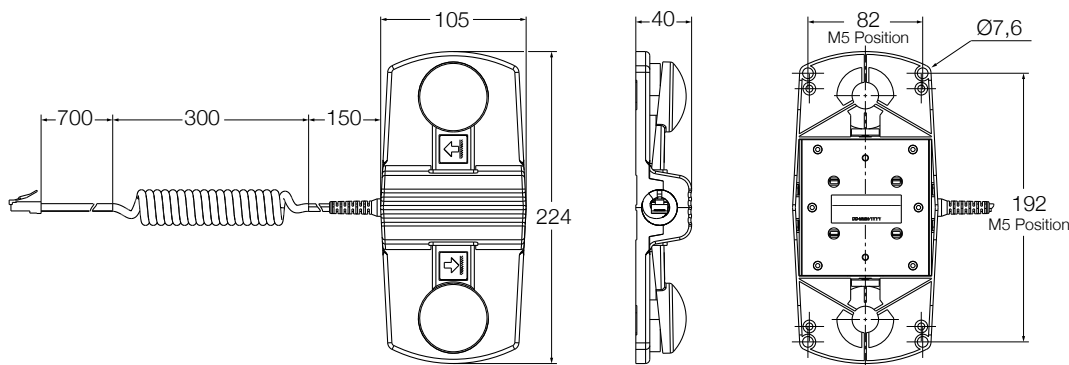
Standards

- IEC 60601-1:2005 (3rd edition) compliant

Suitable operating devices

	Pillars			Socket boxes	
	CPMA1-1	CPMA1-2	CPMA2-2	ZDV-348220-002	ZDV-348221-002
STL01	•	•	•	•	•

Dimensional drawing



Switches technical data

	Unit	EHA4	STL	STK
Max. operating channels	n°	1	1	1
Operating power	V DC/mA	5/20	5/20	5/20
Type of protection	IP	67	x2	–
Color	–	Grey	Grey and anthracite	Grey
Indicator	–	LED 2 colors for power and feedback status	–	LED 2 colors for power and feedback status
Plug	–	RJ45	RJ45	RJ45
Hook	–	with hook	–	–
Symbols	–	with arrows up/down	with arrows up/down	with arrows up/down

Accessories

Description	Plug	Country	Part number	Order Number
Mains cable straight 2,5 m	Schuko	Germany, France, ...	ZKA-140449-2500	130015
	Typ-L	Italy	ZKA-140450-2500	130016
	British standard	UK	ZKA-140451-2500	130017
	NEMA	USA, Japan, ...	ZKA-140452-2500	130018
	SEV	CH	ZKA-140458-2500	130256
	AS 3112	PRC, Australia, ...	ZKA-140460-2500	130391
Detachable mains cord straight 2,5 m (to plug in socket box Inlet)	Schuko	Germany, France, ...	ZKA-140453-2500	130019
	Typ-L	Italy	ZKA-140454-2500	130020
	British standard	UK	ZKA-140455-2500	130021
	NEMA	USA, Japan, ...	ZKA-140456-2500	130022
	SEV	CH	ZKA-140459-2500	130257
	AS 3112	PRC, Australia, ...	ZKA-140461-2500	130392
Desk switch with LED, cable 0,5 m			STK01-SW3000-X100	130025
Desk switch with LED, cable 1,0 m			STK01-UW3000-X100	130026
Handset with LED, cable coiled 1,3 m			EHA41-13N00N-000	131033
Foot switch, cable coiled 1,3 m			STL01-GW1000-X100	131873
Mounting plate			ZPL-348382	130024
Socket box inlet: IEC, RJ45 LAN, RJ45 op. device			ZDV-348220-002	130030
Socket box outlet: 3xIEC, RJ45 LAN, RJ45 op. device			ZDV-348221-002	130032

Ordering key

C P M A - 2 - 0 0 0

Type

Voltage

- 1 100–240 V AC 50/60 Hz
- 2 24 V DC

Load

- Push
- 1 1 000 N Only for AC version
- 2 2 000 N

Tube set

- 2 2-section

Stroke length

- 200 200 mm Only for DC version
- 230 230 mm
- 250 250 mm
- 300 300 mm
- 400 400 mm
- Other per 10 mm from 200 mm or 230 mm for AC version up to 400 mm

Motor orientation¹⁾

- A Motor in inner tube
- B Motor in outer tube

Operating device orientation

- A Operating device socket as the motor
- B Operating device socket at both sides

LAN cable through

- 0 No
- 1 LAN cable through Not compatible with op. device socket at both sides

¹⁾ Pillar can be placed with outer tube on the top or bottom (→ page 183)

■ Options shown in red are only available on request. Contact Ewellix for more information on minimum quantities and additional cost.

CPMB

For infant care

Benefits

- Universal power supply
- Plug and play
- Soft start and stop control
- Low noise level
- Cable through pillar
- Grounding continuity

Standards

- IEC 60601-1:2005
(3rd edition) compliant

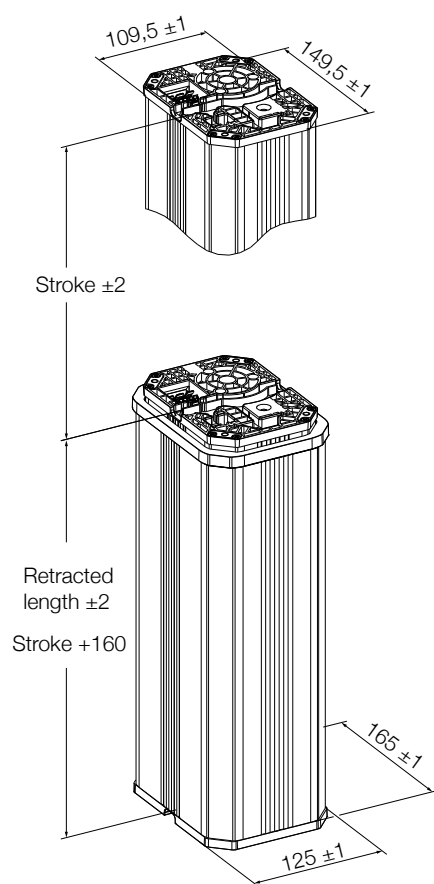


Technical data

	Unit	CPMB1-1	CPMB1-2	CPMB2-2
Rated push load (with self locking)	N	1 000	2 000	2 000
Rated pull load	N	0	0	0
Bending moment (dynamic)	Nm	up to 115 ¹⁾	up to 250*	up to 250 ¹⁾
Speed (full load to no load)	mm/s	14 to 15	11 to 15	11 to 15
Telescopic pillar version	# of section	2-section	2-section	2-section
Stroke	mm	230 to 400	230 to 400	200 to 400
Retracted length	mm	S+160	S+160	S+160
Static Load (Max) in push way	N	8 000	8 000	8 000
Static bending moment (Max)	Nm	500	500	500
Voltage (rated)	V	100–240 AC 50/60 Hz	100–240 AC 50/60 Hz	24 DC
Input current (rated)	A	1,5	1,6	5
Duty cycle: intermittent operation	on/off	1 min./9 min.	1 min./9 min.	1 min./9 min.
Ambient temperature	°C	+10 to +40	+10 to +40	+10 to +40
Type of protection	IP	30	30	30
Protection class	–	I	I	–
Type of control	–	electrical	electrical	electrical
Noise level (Max)	dB(A)	45	45	45
Weight	kg	8 to 11	9 to 12	8 to 11

¹⁾ For details, see offset load diagrams (→ page 192)

Dimensional drawing



More flexibility with Series CPMB design options

Built-in with outer tube on top
More hygienic and easy-to-clean design



Motor
orientation B



Motor
orientation A

Built-in with outer tube on bottom
More aesthetic design

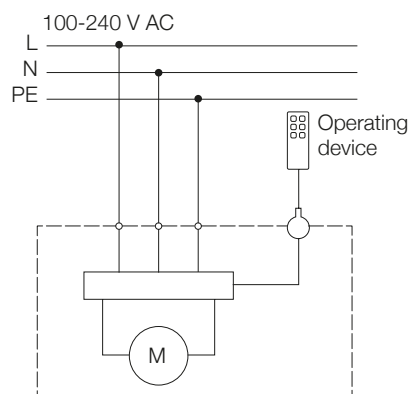
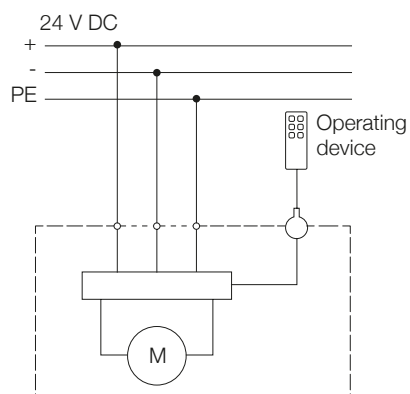


Motor
orientation A



Motor
orientation B

Connecting diagrams

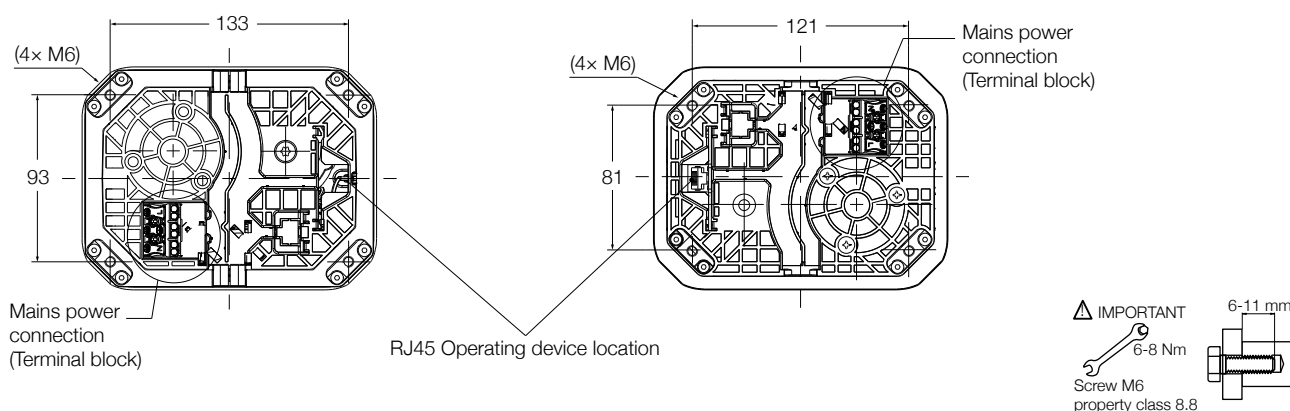


Suitable operating devices

	External power supply 24 V DC			
		EHA4	STL	STK
CPMB1-1		•	•	•
CPMB1-2		•	•	•
CPMB2-2	•	•	•	•

 Hand switch
  Foot switch
  Desk switch

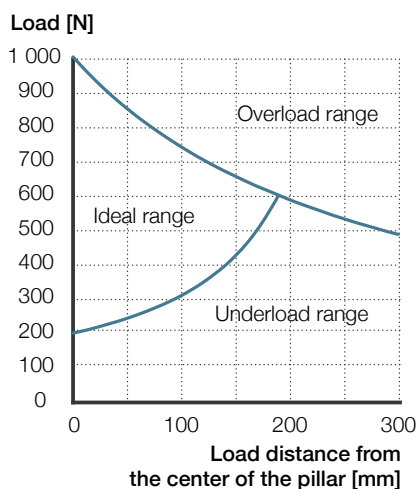
Connections and fastening



Pillar must be attached on plane and rigid surface by 4 screws M6 with a depth of 6 to 11 mm in the pillar.
The total length of the screw must be adjusted to the height of the fixture.

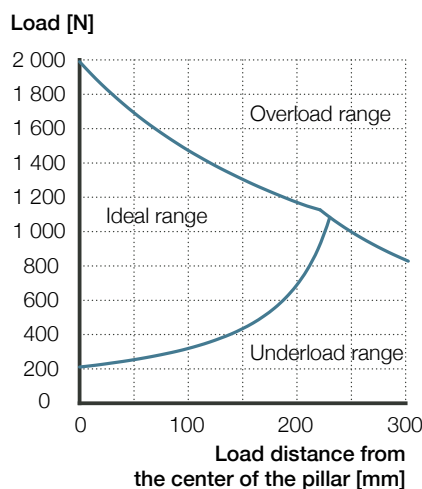
Offset load diagrams

CPMA1-1



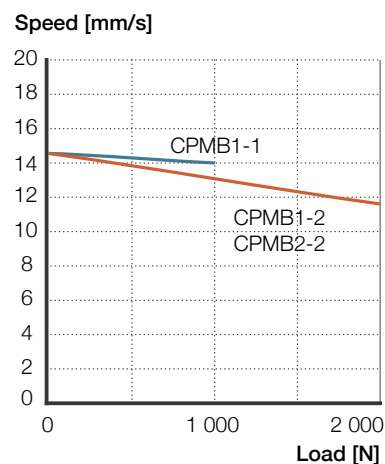
Offset load at full extension in the best axis

CPMA1-2 and CPMA2-2



Offset load at full extension in the best axis

Performance diagram



— CPMA1-1
— CPMA1-2, CPMA2-2

Inlet socket box – ZDV



Benefits

- Multifunction plug and play accessory
- Detachable mains power cord
- Replaceable fuses
- LAN Connector
- Easy to use
- Cord strain relief

Standards

- IEC 60601-1:2005 (3rd edition) compliant

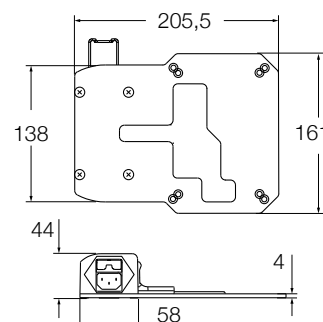
Suitable operating devices

	Pillars			Hand switches	Foot switches	Desk switches		Mains cables					Detachable mains cords						
	CPMB1-1	CPMB1-2	CPMB2-2	EHA41-13N10N-000	STL01-GW1000-X190	STK01-SW3000-X100	STK01-UW3000-X100	ZKA-140449-2500	ZKA-140450-2500	ZKA-140451-2500	ZKA-140452-2500	ZKA-140458-2500	ZKA-140460-2500	ZKA-140453-2500	ZKA-140454-2500	ZKA-140455-2500	ZKA-140456-2500	ZKA-140459-2500	ZKA-140461-2500
ZDV-348220-002	●	●		●	●	●	●							●	●	●	●	●	●

Technical data

- IEC inlet mains power socket with retainer
- 1 RJ45 for operating device
- 1 RJ45 for LAN
- 2 replaceable fuses 8 A
- Plate with holes as the plates of the pillar CPMA
- Can be fastened on inner and outer tube

Dimensional drawing



Outlet socket box – ZDV



Benefits

- Multifunction plug and play accessory
- 3 IEC outlet sockets
- Replaceable fuses
- Integrated mounting plate
- LAN Connector
- Easy to use

Standards

- IEC 60601-1:2005 (3rd edition) compliant

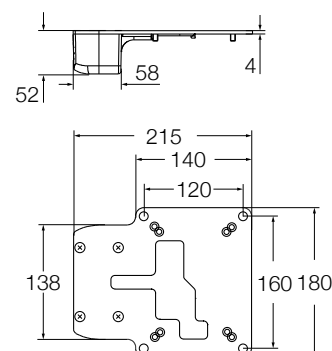
Suitable operating devices

	Pillars		Hand switches	Foot switches	Desk switches	Mains cables					Detachable mains cords								
	CPMB1-1	CPMB1-2	CPMB2-2	EHA41-13N10N-000	STL01-GW1000-X190	STK01-SW3000-X100	STK01-UW3000-X100	ZKA-140449-2500	ZKA-140450-2500	ZKA-140451-2500	ZKA-140452-2500	ZKA-140458-2500	ZKA-140460-2500	ZKA-140453-2500	ZKA-140454-2500	ZKA-140455-2500	ZKA-140456-2500	ZKA-140459-2500	ZKA-140461-2500
ZDV-348221-002	●	●		●	●	●	●												

Technical data

- 3 IEC mains power outlet sockets
- 1 RJ45 for operating device
- 1 RJ45 for LAN
- 2 replaceable fuses 8 A
- Integrated mounting plate with 4 holes 9 mm diameter
- 4 screws to fasten on pillar CPMA
- Can be fastened on inner and outer tube

Dimensional drawing



Mounting plate – ZPL



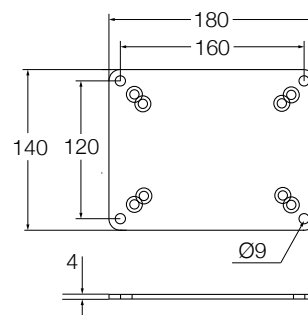
Benefits

- Easy to use

Suitable operating devices

	Pillars		
	CPMA1-1	CPMA1-2	CPMA2-2
ZPL	•	•	•

Dimensional drawing



Technical data

- Can be fastened on inner and outer tube
- Mounting plate with 4 holes 9 mm diameter

Mains cable and detachable mains cord – ZKA

Mains cable



Detachable mains cord



Mains cable

	Pillars			Socket boxes	
	CPMB1-1	CPMB1-2	CPMB2-2	ZDV-348220-002	ZDV-348221-002
ZKA-140449-2500	•	•			
ZKA-140450-2500	•	•			
ZKA-140451-2500	•	•			
ZKA-140452-2500	•	•			
ZKA-140458-2500	•	•			
ZKA-140460-2500	•	•			

Detachable mains cord

	Pillars			Socket boxes	
	CPMB1-1	CPMB1-2	CPMB2-2	ZDV-348220-002	ZDV-348221-002
ZKA-140453-2500	•	•			
ZKA-140454-2500	•	•			
ZKA-140455-2500	•	•			
ZKA-140456-2500	•	•			
ZKA-140459-2500	•	•			
ZKA-140461-2500	•	•			

Benefits

- Easy to use
- Identification by a product label

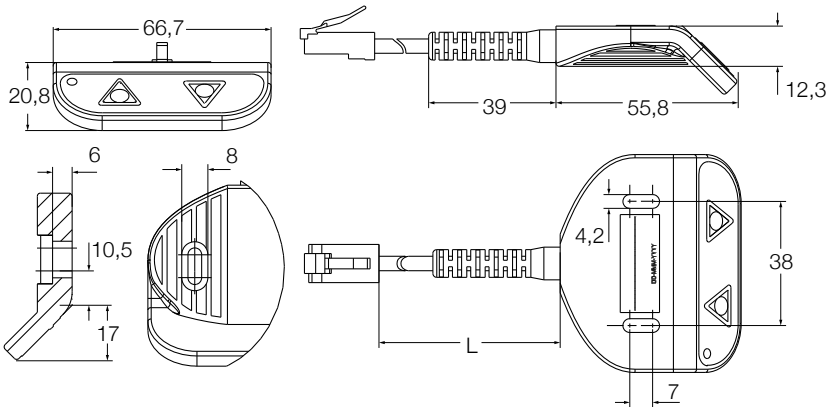
Standards

- IEC 60601-1:2005 (3rd edition) compliant

Desk switch – STK



Dimensional drawing



Benefits

- Easy and precise
- Stylish design
- Tactile buttons with finger guide
- 2 colors LED for power and feedback status

Standards

- IEC 60601-1:2005 (3rd edition) compliant

Suitable operating devices

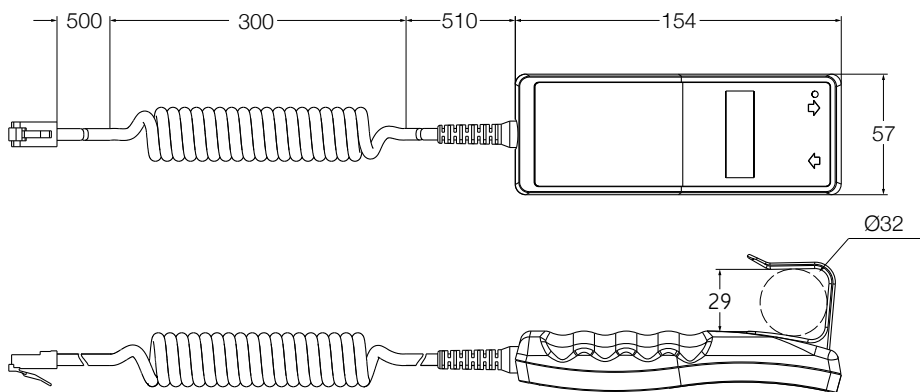
	Pillars			Socket boxes		
	CPMA1-1	CPMA1-2	CPMA2-2	ZDV-348220-002	ZDV-348221-002	
Designation						L [mm]
STK01-SW3000-X100	•	•	•	•	•	500
STK01-UW3000-X100	•	•	•	•	•	1 000

See **page 196** and **197** for technical data and ordering key

Hand switch – EHA



Dimensional drawing



Benefits

- Robust ergonomic design
- Tactile buttons
- Easy mountable fastening hook
- 2 colors LED for power and feedback status

Standards

- IEC 60601-1:2005 (3rd edition) compliant

Suitable operating devices

	Pillars			Socket boxes		
	CPMB1-1	CPMB1-2	CPMB2-2	ZDV-348220-002	ZDV-348221-002	
EHA	•	•	•	•	•	

See **page 196** and **197** for technical data and ordering key

Foot switch –
STL



Benefits

- Easy to use
- Ergonomic design

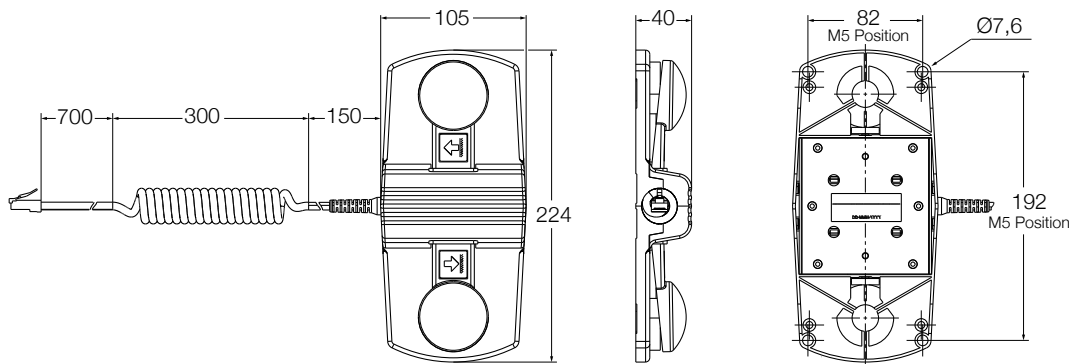
Standards

- IEC 60601-1:2005 (3rd edition) compliant

Suitable operating devices

	Pillars			Socket boxes	
	CPMB1-1	CPMB1-2	CPMB2-2	ZDV-348220-002	ZDV-348221-002
STL01	•	•	•	•	•

Dimensional drawing



Switches technical data

	Unit	EHA4	STL	STK
Max. operating channels	n°	1	1	1
Operating power	V DC/mA	5/20	5/20	5/20
Type of protection	IP	67	x2	–
Color	–	Grey	Grey and anthracite	Grey
Indicator	–	LED 2 colors for power and feedback status	–	LED 2 colors for power and feedback status
Plug	–	RJ45	RJ45	RJ45
Hook	–	with hook	–	–
Symbols	–	with arrows up/down	with arrows up/down	with arrows up/down

Accessories

Description	Plug	Country	Part number	Order Number
Mains cable straight 2,5 m	Schuko	Germany, France, ...	ZKA-140449-2500	130015
	Typ-L	Italy	ZKA-140450-2500	130016
	British standard	UK	ZKA-140451-2500	130017
	NEMA	USA, Japan, ...	ZKA-140452-2500	130018
	SEV	CH	ZKA-140458-2500	130256
	AS 3112	PRC, Australia, ...	ZKA-140460-2500	130391
Detachable mains cord straight 2,5 m (to plug in socket box Inlet)	Schuko	Germany, France, ...	ZKA-140453-2500	130019
	Typ-L	Italy	ZKA-140454-2500	130020
	British standard	UK	ZKA-140455-2500	130021
	NEMA	USA, Japan, ...	ZKA-140456-2500	130022
	SEV	CH	ZKA-140459-2500	130257
	AS 3112	PRC, Australia, ...	ZKA-140461-2500	130392
Desk switch with LED, cable 0,5 m			STK01-SW3000-X100	130025
Desk switch with LED, cable 1,0 m			STK01-UW3000-X100	130026
Handset with LED, cable coiled 1,3 m			EHA41-13N00N-000	131033
Foot switch, cable coiled 1,3 m			STL01-GW1000-X100	131873
Mounting plate			ZPL-348382	130024
Socket box inlet: IEC, RJ45 LAN, RJ45 op. device			ZDV-348220-002	130030
Socket box outlet: 3xIEC, RJ45 LAN, RJ45 op. device			ZDV-348221-002	130032

Ordering key

C P M B - 2 - 0 - 0 0 0

Type

Voltage

- 1 100–240 V AC 50/60 Hz
- 2 24 V DC

Load

- Push
- 1 1 000 N Only for AC version
- 2 2 000 N

Tube set

- 2 2-section

Stroke length

- 200 200 mm Only for DC version
- 230 230 mm
- 250 250 mm
- 300 300 mm
- 400 400 mm
- Other per 10 mm from 200 mm or a mm for AC version up to 400 mm

Motor orientation¹⁾

- A Motor in inner tube
- B Motor in outer tube

Operating device orientation

- A Operating device socket as the motor
- B Operating device socket at both sides

¹⁾ Pillar can be placed with outer tube on the top or bottom (→ page 191)

■ Options shown in red are only available on request. Contact Ewellix for more information on minimum quantities and additional cost.

CPMT

For medical procedure equipment

Benefits

- Low retracted height
- High stroke
- High load capacity
- High safety and reliability
- Design flexibility

Standards

- IEC 60601-1:2005
- ANSI/AAMI ES60601-1:2005
- IEC 60601-1-2:2007

Technical data

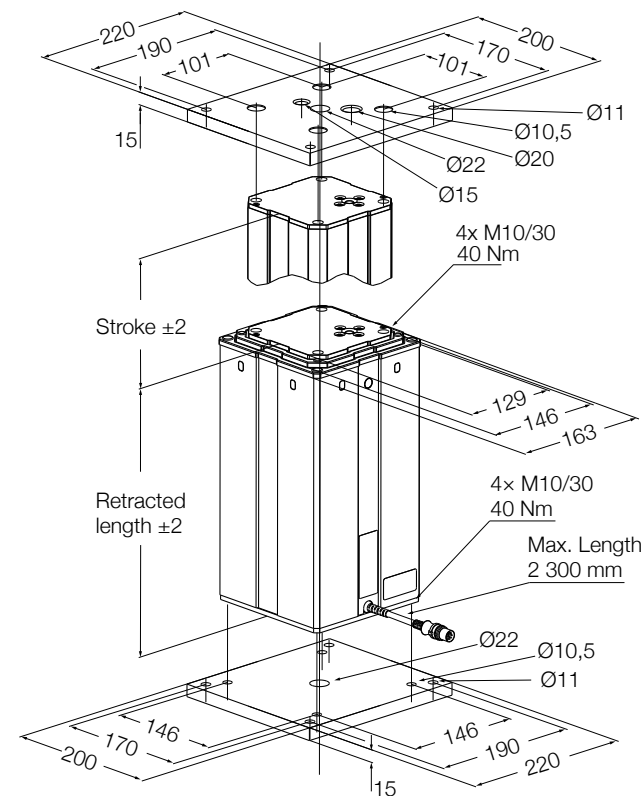
	Unit	CPMT1-1S	CPMT1-1M	CPMT1-2S	CPMT1-2M
Rated push load	N	5 000	5 000	6 000	6 000
Rated pull load	N	4 000	4 000	4 000	4 000
Static load (push) ¹⁾	N	15 000	15 000	15 000	15 000
Safety factor on rated load ²⁾		4	4	4	4
Dynamic bending moment	Nm	up to 450 ³⁾	up to 1 200 ³⁾	up to 550 ³⁾	up to 1 400 ³⁾
Static bending moment (max.)	Nm	1 000	3 000	1 000	3 000
Retracted length	mm	stroke/2 + 120 mm	stroke/2 + 240 mm	stroke/2 + 120 mm	stroke/2 + 240 mm
Stroke (S)	mm	400 to 600	300 to 600	400 to 600	300 to 600
Speed	mm/s	14 to 34	14 to 34	12 to 26	12 to 26
Voltage	V DC	24 to 30	24 to 30	24 to 30	24 to 30
Current (push, max.)	A	12	12	10	10
Current (pull, max.)	A	10	10	7	7
Duty cycle	on/off	1 min./9 min.	1 min./9 min.	1 min./9 min.	1 min./9 min.
Ambient temperature	°C	+10 to +40	+10 to +40	+10 to +40	+10 to +40
IP protection		20	20	20	20
Weight	kg	16,5 to 20	19 to 23,5	16,5 to 20	19 to 23,5

¹⁾ Compliant with static load according to IEC 60601-2-46:2010

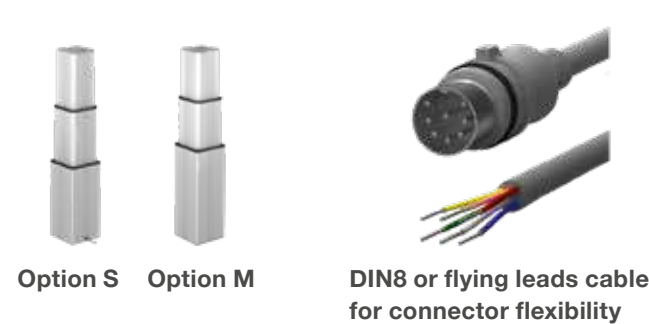
²⁾ Static tensile safety factor to prevent mechanical hazard according to IEC 60601-1:2005

³⁾ For details, see offset load diagrams (→ **page 199**)

Dimensional drawing



Configuration options



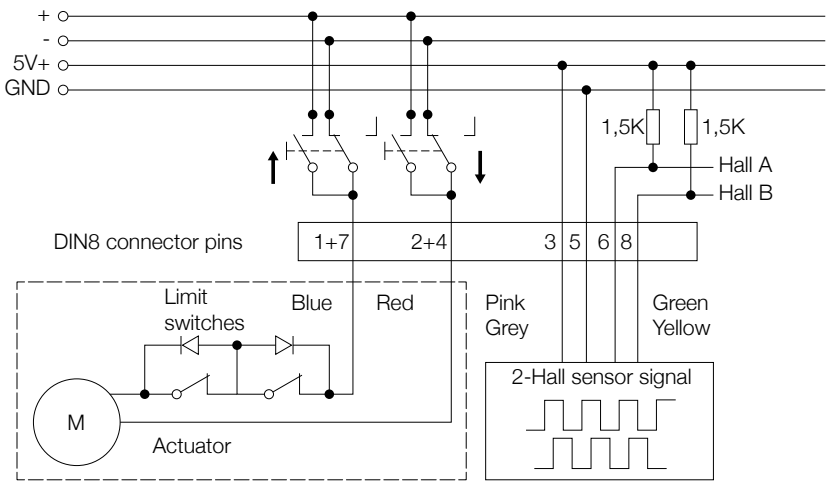
Suitable control units and accessories

	Control units		
	SCU	VCU	BCU ¹⁾
CPMT	•	•	•
Operating switches			
EHA 3 	•	•	•
STJ 	•	•	•
STE 	•	•	•
 Hand switch		 Foot switch	 Desk switch

¹⁾ Reduced load capacity:
CPMT1-1 up to 3 000 N
CPMT1-2 up to 4 000 N

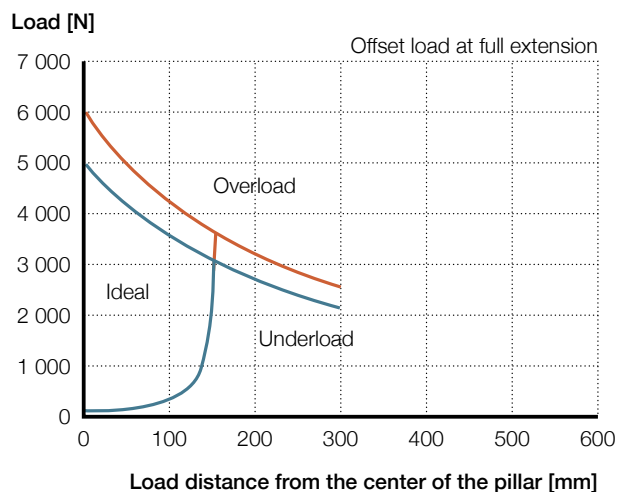
Connecting diagrams

24–30 V DC

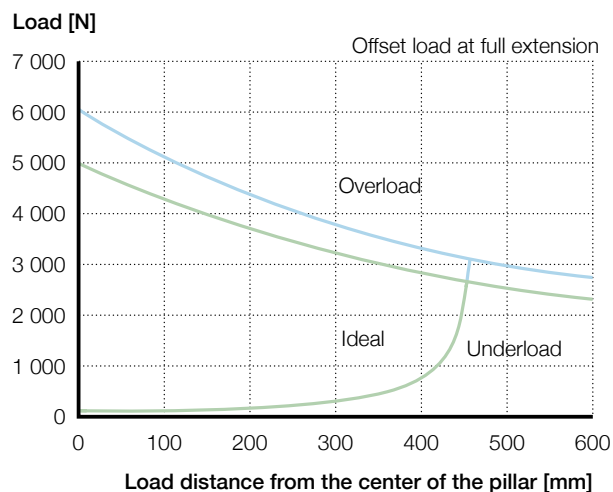


Offset load diagrams

CPMT1-1S, -2S



CPMT1-1M, -2M



CPMT1-1S

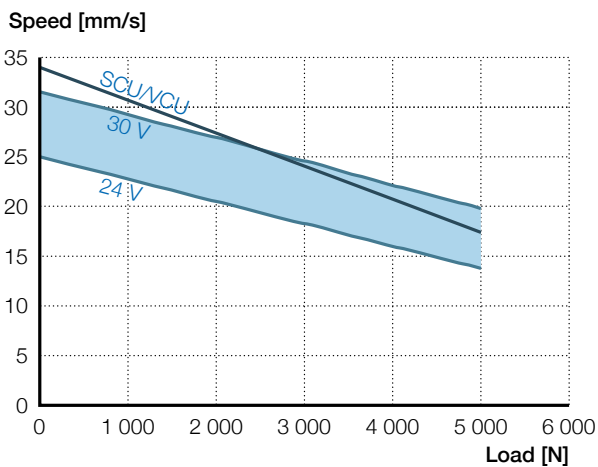
CPMT1-2S

CPMT1-2M

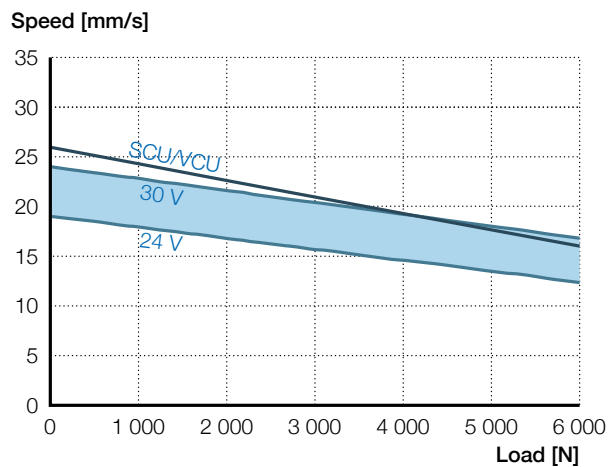
CPMT1-1M

Speed-load diagrams

CPMT1-1

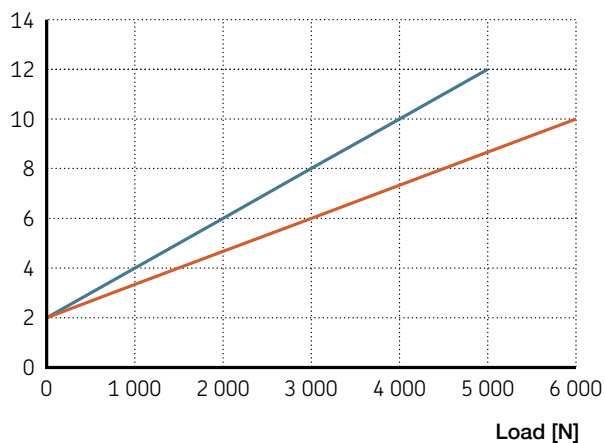


CPMT1-2



For medical procedure equipment

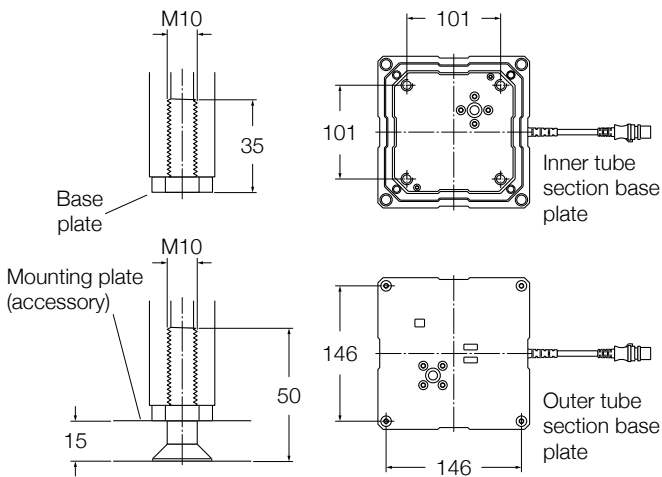
Current [A]



CPMT1-1

CPMT1-2

Mounting details



The pillar must be mounted on a plane and rigid surface by 4 screws M10 (accessory) with a screw in depth of 25 to 35 mm in the pillar.

Additional attachment options

Optional threads on outer tube section can be configured for additional attachment options. Please contact Ewellix for more details.

- Choice in size and position
- High strength to support attached actuators



Accessories

Description	Part number
Control Unit SCU (3 or 6 ports)	SCUXX-003XXX-000
Control Unit VCU (3 or 5 ports)	VCUXX-003XX0-000
Control Unit BCU (3 ports)	BCUX3-XX3100-0000
Foot switch STJ (1-3 channels)	STJ0X-XXXXXX-XX00
Hand switch EHA3 (1-5 channels)	EHA3X-23MXXN-000
Top mounting plate	ZPL-290268
Bottom mounting plate	ZPL-290265
Screw (4/plate) for mounting plate	ZBE-510707

Ordering key

C

P

M

T

1

-

0

-

0

0

0

Type

Voltage

124–30 V DC

Load

Push (N)

Pull (N)

1

5 000

4 000

2

6 000

4 000

Retracted length

S

Stroke/2 + 120 mm

M

Stroke/2 + 240 mm

Stroke length (mm)

300

300 mm

Only for retracted length M

350

350 mm

Only for retracted length M

400

400 mm

450

450 mm

500

500 mm

550

550 mm

600

600 mm

Other

per 10 mm from 300 mm (or 400 mm for retracted length S) to 600 mm

Electrical options

F2-Hall encoder, end limit switches

Cable options

1

1 m DIN8 cable

2

2,3 m DIN8 cable

3

2,3 m flying leads cable

Options shown in red are only available on request. Contact Ewellix for more information on minimum quantities and additional cost.



TFG

Telemag

Benefits

- Push or pull load
- Compact design
- Fast movement
- Powerful
- Plug and play

Standards

- EN/IEC 60601-1
- UL 60601-1

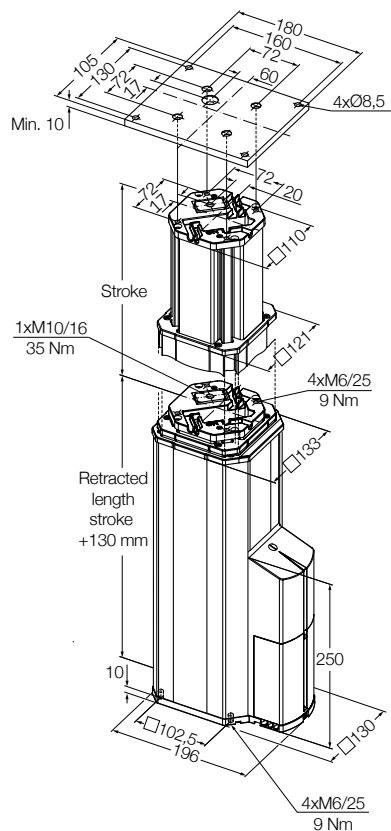


Technical data

	Unit	TFG 50	TFG 90
Rated push load	N	2 500	2 500
Rated pull load	N	2 500	2 500
Bending load	Nm	up to 500 ¹⁾	up to 500 ¹⁾
Speed (full load to no load)	mm/s	15 to 19	15 to 19
Telescopic pillar version	# of section	3-section	3-section
Stroke	mm	200 to 700	200 to 700
Retracted length	mm	S+130	S+130
Voltage	V AC	120	230
Power	W	160	160
Current	A	1.8	1
Duty cycle: intermittent operation	min.	1 min./9 min.	1 min./9 min.
Duty cycle: short-time operation	min.	3	3
Ambient temperature	°C	+10 to +40	+10 to +40
Type of protection	IP	30	30
Protection class	-	I	I
Type of control	-	electrical	electrical
Weight	kg	8 to 19	8 to 19

¹⁾ For details, please see bending load diagrams (→ page 205)

Dimensional drawing



Note: mounting plates are not included.
To be ordered separately.

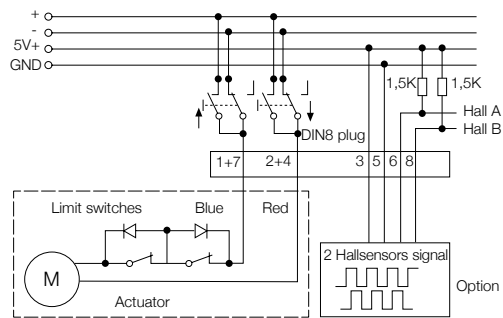
Legend:

S = stroke

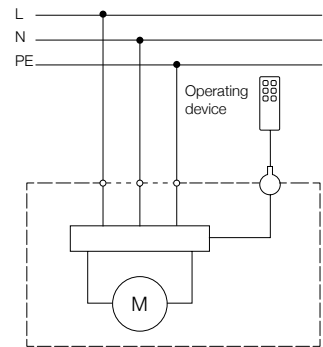
L = retracted length

Connecting diagrams

24 V DC (TFG10 only)



120/230 V AC



Suitable control units and accessories

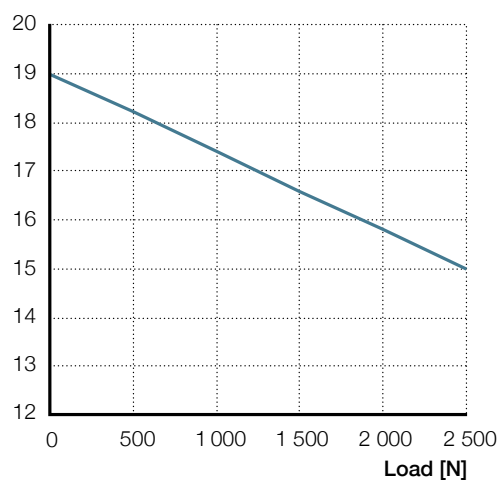
		Control units				
		SCU	VCU	BCU	COMPACT	SEM
TFG1		•	•	•	•	•
Operating switches						
EHA 3		•	•	•		
EHE						•
STJ		•	•	•		
STE		•	•	•		
HSM					•	
HSF					•	

Hand switch Foot switch Desk switch

Performance diagrams

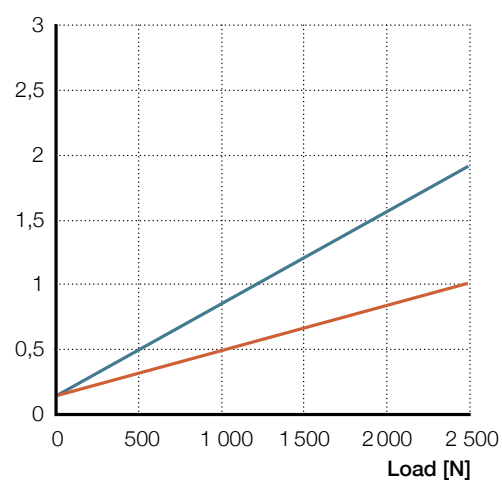
Speed-load diagram

Speed [mm/s]



Current-load diagram

Current consumption [A]



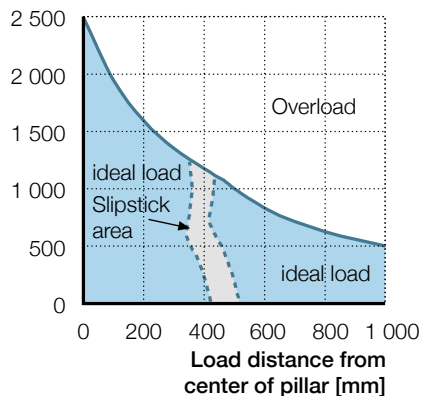
— TFG 50

— TFG 90

Bending load diagrams

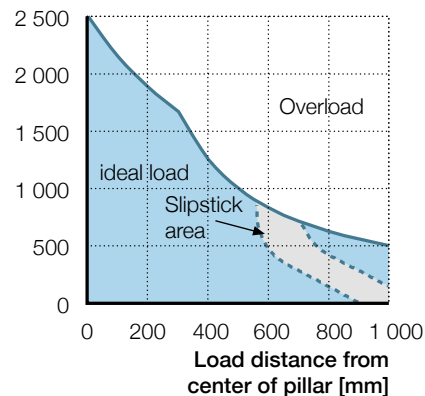
200 mm stroke

Load [N]



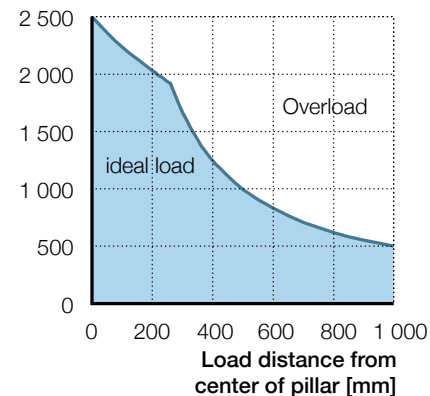
300 mm stroke

Load [N]



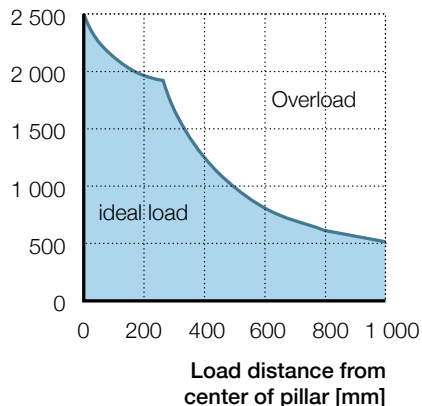
400 mm stroke

Load [N]



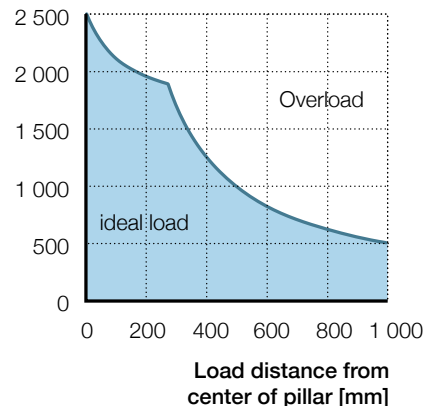
500 mm stroke

Load [N]



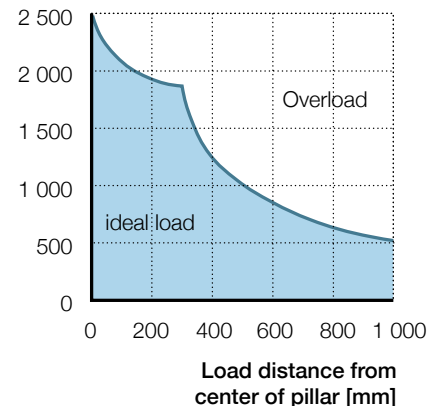
600 mm stroke

Load [N]



700 mm stroke

Load [N]



Accessories

	Designation	Order N°
Top mounting plate Bore 72 × 72 mm	ZPL-333360	0124808
Bottom mounting plate Bore 102,5 × 102,5 mm	ZPL-264363	0124814
Screw for top mounting plate M10 × 25 (1 screw required)	ZBE-510978	0125359
Screw for top mounting plate M6 × 30 (4 screws required)	ZBE-510709	0125560
Screw for bottom mounting plate M6 × 30 (4 screws required)	ZBE-510709	0125560
Mains cable SEV plug 3 000 mm, black, 3 × 0.75 mm²	ZKA-304345-3000	0128699
Mains cable Schuko plug 3 000 mm, black, 3 × 0.75 mm²	ZKA-304346-3000	0121729
Mains cable US plug 3 000 mm, black, 3 × 0.75 mm²	ZKA-304347-3000	0121762
Mains cable British Standard plug 3 000 mm, black, 3 × 0.75 mm²	ZKA-304355-3000	0121755

Ordering key

T

F

G

0

-

2

3

-

0

0

0

Type

Voltage

5

120 V AC (50/60 Hz)

9

230 V AC (50 Hz)

Stroke [S]

200

200 mm

250

250 mm

300

300 mm

350

350 mm

400

400 mm

500

500 mm

700

700 mm

Option

000

No option

E__

With 2-Hall encoder, 14 pulses per 9 mm travel

C

With mains cable feedthrough (3xAWG16)

H

With control cable feedthrough (10xAWG28)

THG

Telemag telescopic pillar

Benefits

- Compact design
- Robust

Standards

- EN/IEC 60601-1
- UL 60601-1



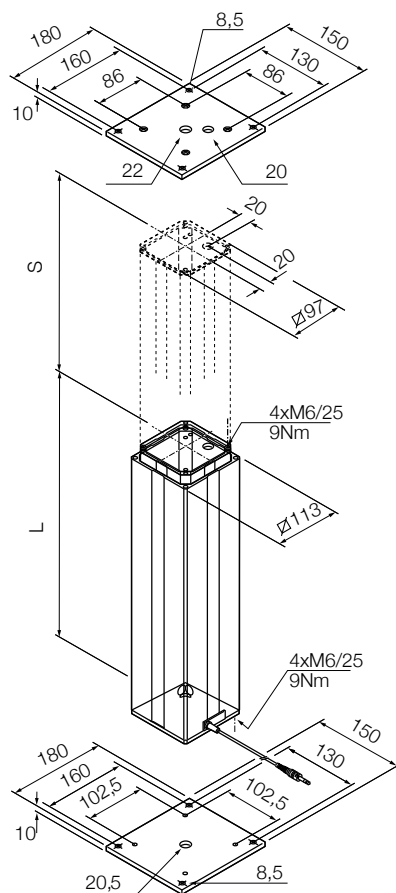
Technical data

	Unit	THG 10/11-BA	THG 10/11-CA	THG 10/11-BD	THG 10/11-CD
Rated push load	N	2 000	1 000	2 000	1 000
Rated pull load	N	0	0	0	0
Bending load	Nm	up to 250 ¹⁾	up to 120 ¹⁾	up to 1 000 ¹⁾	up to 450 ¹⁾
Speed (full load to no load)	mm/s	5 to 7	12 to 15	5 to 7	12 to 15
Telescopic pillar version	# of section	2-section	2-section	3-section	3-section
Stroke	mm	200 to 700	200 to 700	200 to 700	200 to 700
Retracted length	mm	S+270	S+270	S+180	S+180
Voltage	V DC	24	24	24	24
Power	W	120	120	120	120
Current	A	5	5	5	5
Duty cycle: intermittent operation	min.	1 min./9 min	1 min./9 min	1 min./9 min	1 min./9 min
Ambient temperature	°C	+10 to +40	+10 to +40	+10 to +40	+10 to +40
Type of protection	IP	30	30	30	30
Protection class	–	SELV	SELV	SELV	SELV
Type of control	–	electrical	electrical	electrical	electrical
Weight	kg	8 to 14	8 to 14	8 to 14	8 to 14

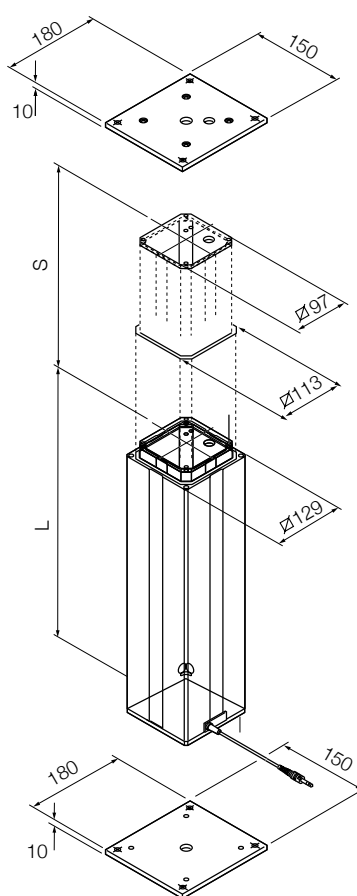
¹⁾ For details, please see bending load diagrams (→ page 209)

Dimensional drawing

2-section

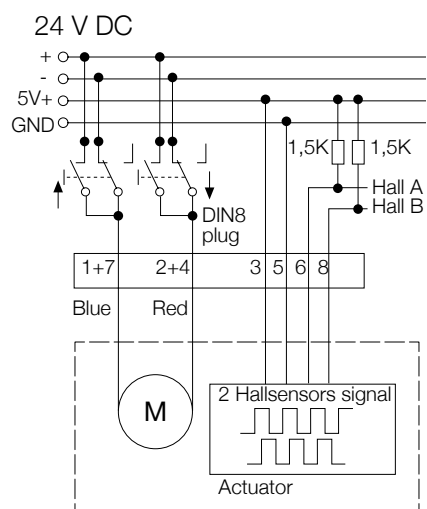


3-section



Note: mounting plates are not included.
To be ordered separately.

Connection diagram¹⁾



Suitable control units and accessories

		Control units			
		SCU	VCU	BCU	MCU
THG		•	•	•	•
Operating switches					
EHA 1					•
EHA 3		•	•	•	
STF					•
STJ		•	•	•	
STA					•
STE		•	•	•	

 Hand switch

 Foot switch

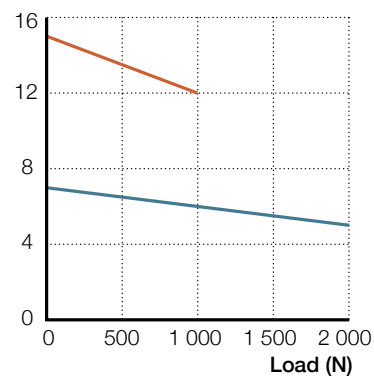
 Desk switch

¹⁾ Only valid with THG11. THG10 must be operated by a BCU, SCU or VCU control unit.

Performance diagrams

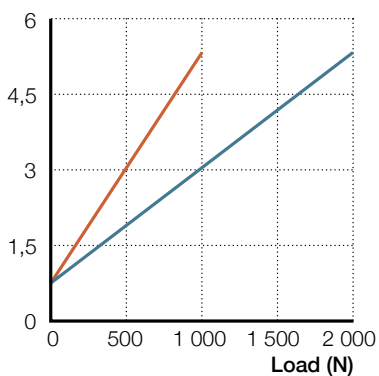
Speed-load diagram

Speed (mm/s)



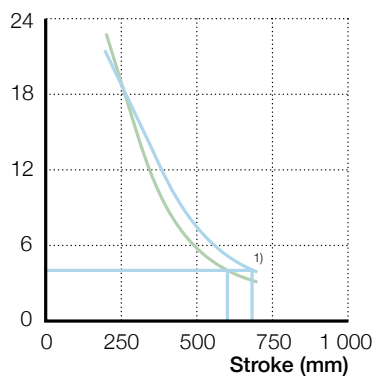
Current-load diagram

Current consumption (A)



Safety factor load conditions

Safety factor (screw buckling)



1) Safety factor = 4

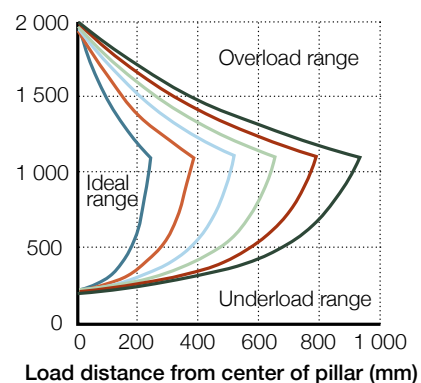
— THG...B. — THG...C.

— B/Tr 15x5 — C/Tr 12,5x5

Bending load diagrams

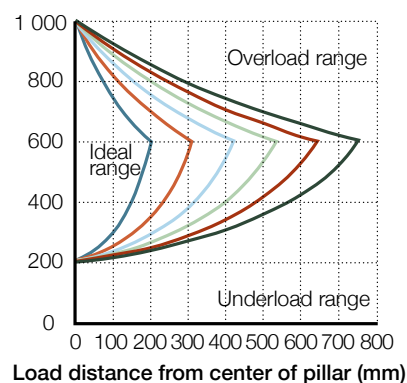
Bending load diagram THG...BD

Load [N]



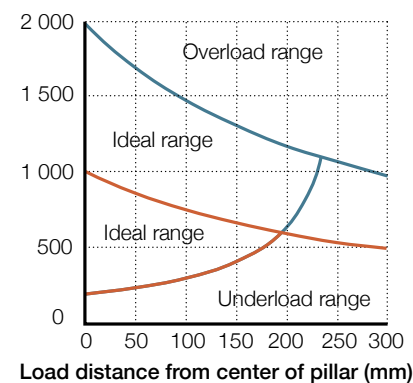
Bending load diagram THG...CD

Load [N]



Bending load diagram THG...BA/CA

Load [N]



Stroke: — 200 — 300 — 400 — 500 — 600 — 700

— THG...BA — THG...CA

Accessories

	Designation	Order number
Top mounting plate for 2× tube set	SPL-264265	0125688
Bottom mounting plate for 2× tube set	SMT-264363	0124814
Top mounting plate for 3× tube set	SPL-264265	0125688
Bottom mounting plate for 3× tube set	SPL-264237	0125623
Screw (4/plate) for mounting plate	ZBE-510707	0125622
Plug AC Telemag 3 pin	ZBE-510707	0125360

Ordering key

T

H

G

1

-

-

0

0

0

Type

Voltage

024 V DC

124 V DC with integrated current cut-off

Load

B2 000 N

C1 000 N

Tube set

A Tube set 2×

D Tube set 3×

Stroke (S)

2200 mm

3300 mm

4400 mm

5500 mm

6600 mm

7700 mm

Cable / connecting plug

1Straight, 1,0 m / jack plug

2Straight, 2,3 m / jack plug

AStraight, 1,0 m / DIN8 plug

3Straight, 2,3 m / DIN8 plug

4Straight, 2,3 m / DIN8 plug

BStraight, 2,3 m / DIN8 plug

Option

0No option 0

A1-Hall encoder, 8 pulses, cable with jack plug

BPotentiometer, 1 k, 2 Watt, 0,25 % linearity, 10 turns (tube set 3 × only)

CCable feedthrough, 5 × 0,75 mm2, top +160 mm, bottom +800 mm

DCable feedthrough, 1-Hall encoder, 8 pulses, cable with jack plug

ECable feedthrough, potentiometer (tube set 3 × only)

F2-Hall encoder, cable with DIN8 plug

GCable feedthrough, 2-Hall encoder, cable with DIN8 plug

Options shown in red are only available on request. Contact Ewellix for more information on minimum quantities and additional cost.

TLC

Telemag telescopic pillar



Benefits

- Push or pull load
- High bending load
- Quiet
- Powerful
- Plug and play

Standards

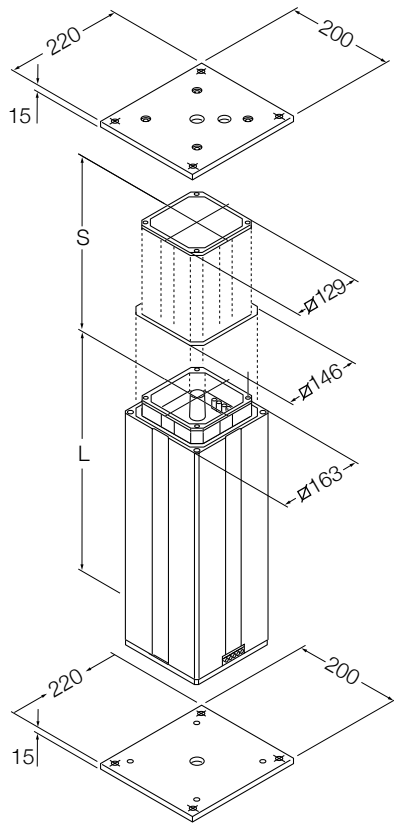
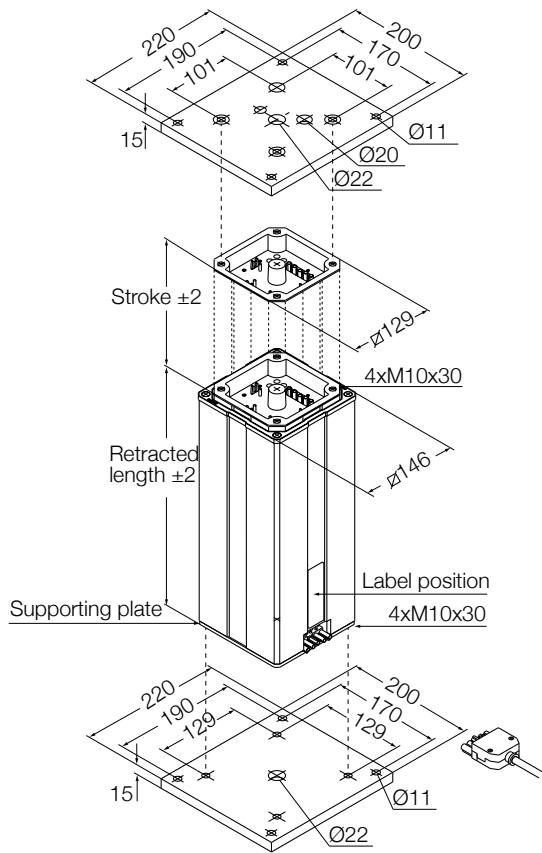
- EN/IEC 60601-1
- UL 60601-1

Technical data

		Unit	TLC 12ZWAS	TLC 12ZWAK	TLC 12ZWDS	TLC 12ZWDK
Rated push load		N	4 000	4 000	4 000	4 000
Rated pull load		N	4 000	4 000	4 000	4 000
Bending load		Nm	up to 630 ¹⁾	up to 630 ¹⁾	up to 2 100 ¹⁾	up to 2 100 ¹⁾
Speed (full load to no load)	120 V AC	mm/s	16 to 22	16 to 22	16 to 22	16 to 22
	230 V AC	mm/s	11 to 17	11 to 17	11 to 17	11 to 17
Telescopic pillar version		# of section	2-section	2-section	3-section	3-section
Stroke		mm	100 to 700	100 to 700	255 to 700	255 to 700
Retracted length (push version)		mm	S+175	S+175	S+60	S+60
Retracted length (pull version)		mm	S+185	S+185	S+70	S+70
Voltage		V AC	120 or 230	120 or 230	120 or 230	120 or 230
Power	120 V AC	W	1 200	1 200	1 200	1 200
	230 V AC	W	890	890	890	890
Current	120 V AC	A	10	10	10	10
	230 V AC	A	4,1	4,1	4,1	4,1
Duty cycle: intermittent operation	120 V AC	min.	0,8 min./37 min.	0,8 min./37 min.	0,8 min./37 min.	0,8 min./37 min.
	230 V AC	min.	1 min./37 min.	1 min./37 min.	1 min./37 min.	1 min./37 min.
Duty cycle: short-time operation	120 V AC	min.	1,2	1,2	1,2	1,2
	230 V AC	min.	2	2	2	2
Ambient temperature		°C	+10 to +40	+10 to +40	+10 to +40	+10 to +40
Type of protection		IP	20/30	20/30	20/30	20/30
Protection class		–	I	I	I	I
Type of control		–	electrical	pneumatic	electrical	pneumatic
Weight		kg	15,2-24,5	15,2-24,5	18,3-30,5	18,3-30,5

¹⁾ For details, please see bending load diagrams (→ page 213)

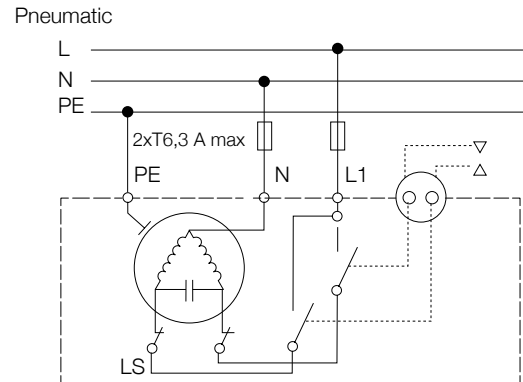
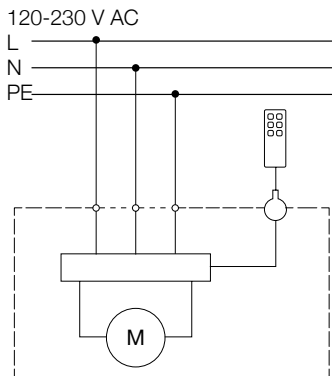
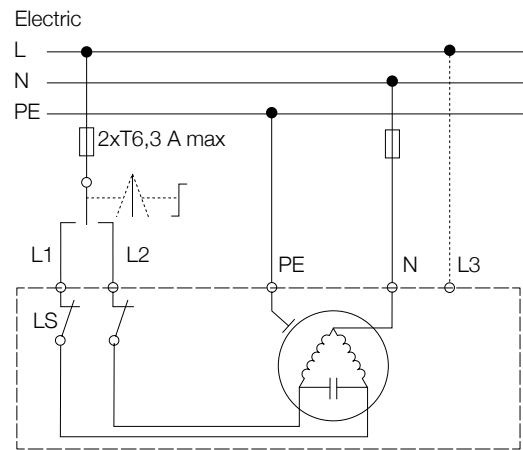
Dimensional drawing



Note: mounting plates are not included. To be ordered separately.

Legend:
S = stroke
L = retracted length

Connecting diagrams



Suitable control units and accessories

	PHC	PFP	PAM
TLC pneumatic*	•	•	•

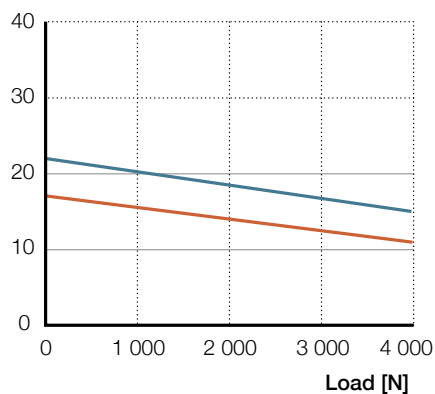
* Integrated control unit

- Hand switch
- Foot switch
- Desk switch

Performance diagram

Speed-load diagram

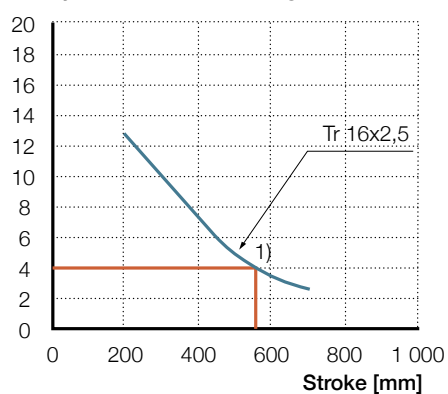
Speed [mm/s]



— 120 V AC version — 230 V AC version

Safety factor load conditions

Safety factor [screw buckling]

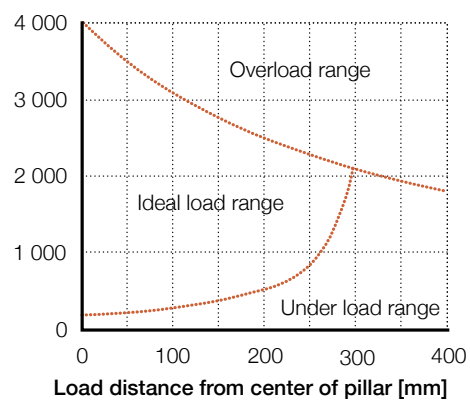


¹⁾ Safety factor = 4

Bending load diagrams

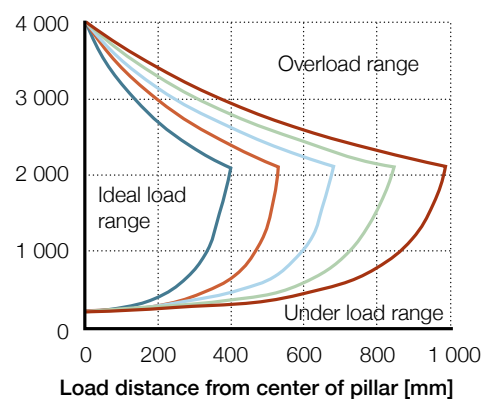
Bending load diagram 2-section

Load [N]



Bending load diagram 3-section

Load [N]



— 300 — 400 — 500 — 600 — 700

Accessories

	Designation	Order number
Top mounting plate for 2× tube set	ZPL-290268	0125624
Bottom mounting plate for 2× tube set	ZPL-290351	0125625
Top mounting plate for 3× tube set	ZPL-290268	0125624
Bottom mounting plate for 3× tube set	ZPL-290265	0125623
Screw (4/plate) for mounting plate	ZBE-510707	0125360
Plug AC Telemag 3 pin	ZEL-265518	0124866
Plug AC Telemag 5 pin	ZEL-265519	0124864

Ordering key

T	L	C	1	2	W				-	0

Type _____

Load _____

Z 4 000 N

Tube set _____

A Tube set 2×

D Tube set 3×

Control _____

S Electrical control

K Pneumatic control

N **Low-voltage control**

Voltage _____

- 230 V AC/50 Hz (no code)

2U 120 V AC/60 Hz

Construction _____

0 Push load

1 **Customer-specific**

3 Pull load

Stroke [S] _____

1 100 mm, only for tube set 2×, push

1 255 mm, only for tube set 3×, push

2 200 mm, only for tube set 2×

3 300 mm

4 400 mm

5 500 mm

6 600 mm

7 700 mm

TLG

Telemag telescopic pillar

Benefits

- High bending load
- Powerful

Standards

- EN/IEC 60601-1
- UL 60601-1

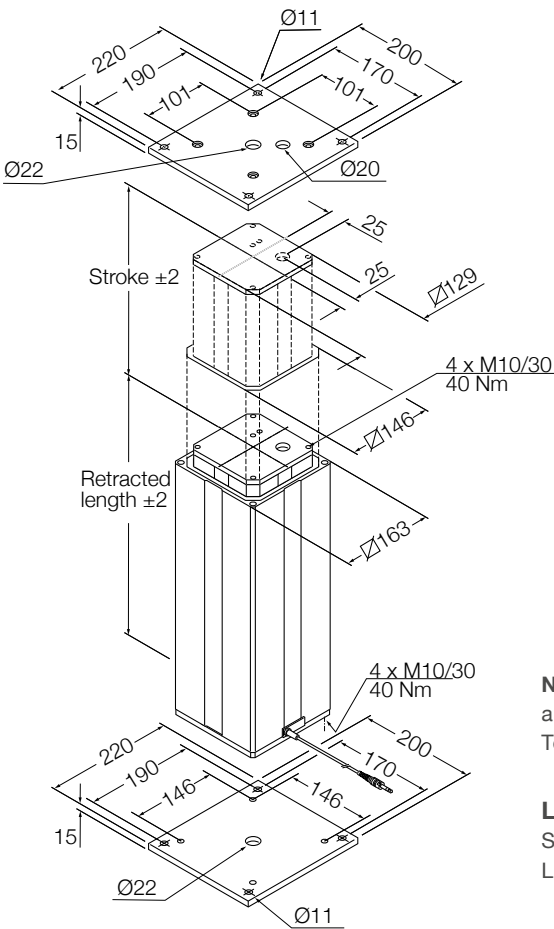
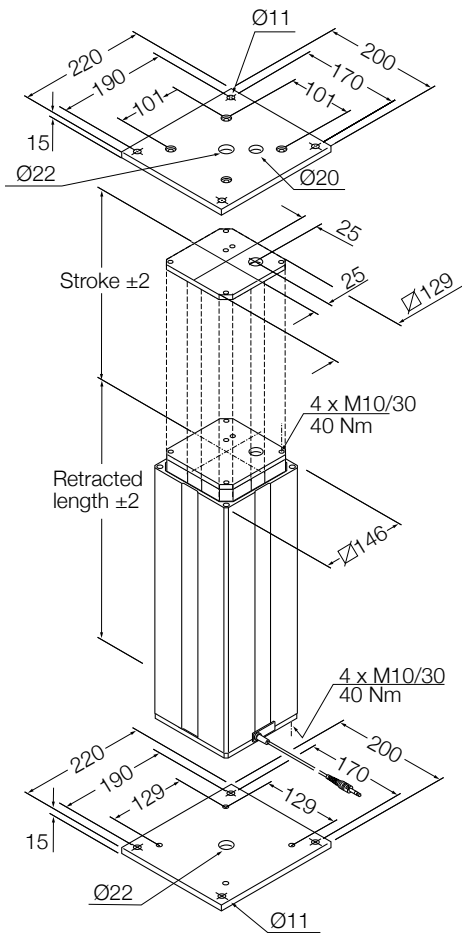


Technical data

	Unit	TLG 10/11-A	TLG 10-B	TLG 10/11-C
Rated push load	N	4 000	2 500	1 500
Rated pull load	N	0	0	0
Bending load	Nm	up to 2 800 ¹⁾	up to 1 750 ¹⁾	up to 950 ¹⁾
Speed (full load to no load)	mm/s	10 to 14	13 to 17	25 to 33
Telescopic pillar version	# of section	2 or 3-section	2 or 3-section	2 or 3-section
Stroke	mm	200 to 700	200 to 700	200 to 700
Retracted length	mm	S+180	S+180	S+180
Voltage	V DC	24	24	24
Power	W	156	156	156
Current	A	6	6	6
Duty cycle: intermittent operation	min.	1 min./9 min	1 min./9 min	1 min./9 min
Ambient temperature	°C	+10 to +40	+10 to +40	+10 to +40
Type of protection	IP	30	30	30
Protection class	–	SELV	SELV	SELV
Type of control	–	electrical	electrical	electrical
Weight	kg	15 to 30	15 to 30	15 to 30

¹⁾ For details, please see bending load diagrams (→ page 217)

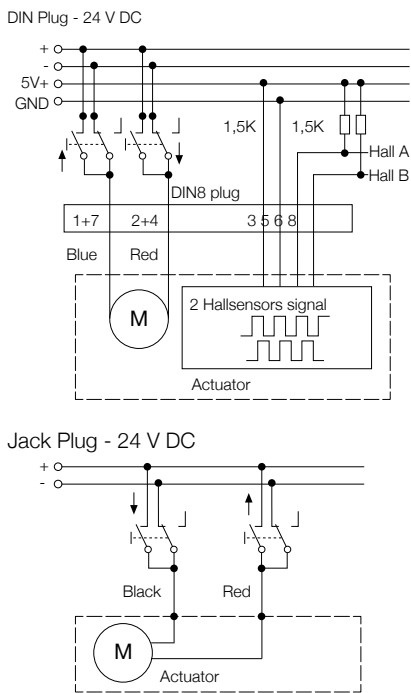
Dimensional drawing



Note: mounting plates are not included. To be ordered separately.

Legend:
S = stroke
L = retracted length

Connecting diagrams



Suitable control units and accessories

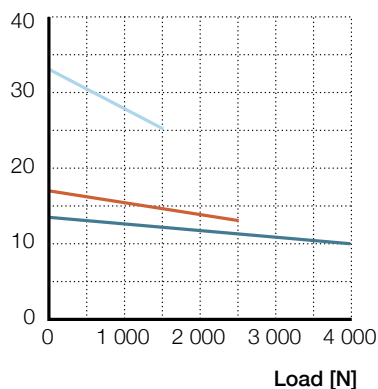
	Control units			
	SCU	VCU	BCU	MCU
TLG	•	•	•	•
Operating switches				
EHA 1 				•
EHA 3 	•	•	•	
STF 				•
STJ 	•	•	•	
STA 				•
STE 	•	•	•	
 Hand switch  Foot switch  Desk switch				

¹⁾ Only valid with TLG11. TLG10 must be operated by a BCU, MCU, SCU or VCU control unit.

Performance diagrams

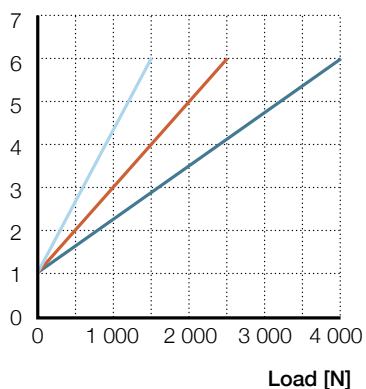
Speed-load diagram

Speed [mm/s]



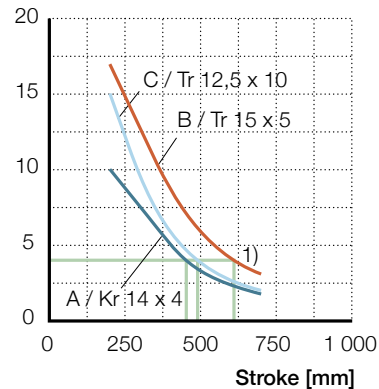
Current-load diagram

Current consumption [A]



Safety factor load conditions

Safety factor

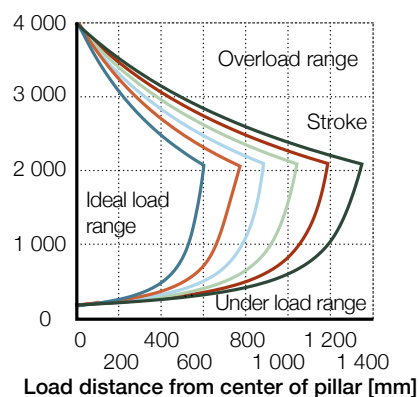


1) Safety factor =4

Bending load diagrams

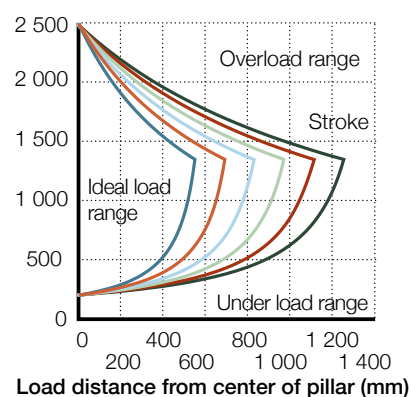
Bending load diagram TLG ...AD

Load [N]



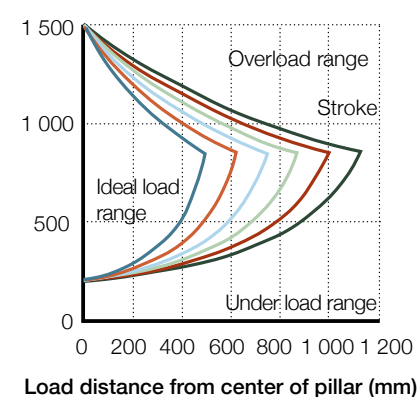
Bending load diagram TLG ...BD

Load [N]



Bending load diagram TLG ...CD

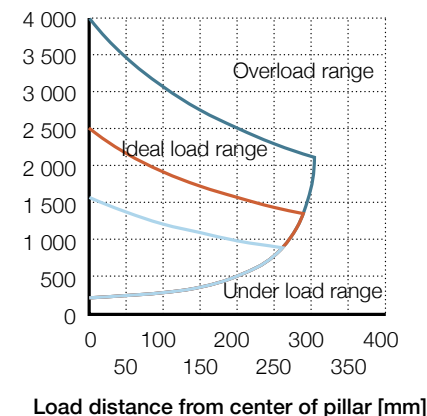
Load [N]



Stroke: 200 300 400 500 600 700

Bending load diagram TLG...AA/BA/CA

Load [N]



TLG1-AA
TLG1-BA
TLG1-CA

Accessories

	Designation	Order number
Top mounting plate for 2 × tube set	ZPL-290268	0125624
Bottom mounting plate for 2 × tube set	ZPL-290351	0125625
Top mounting plate for 3 × tube set	ZPL-290268	0125624
Bottom mounting plate for 3 v tube set	ZPL-290265	0125623
Screw (4/plate) for mounting plate	ZBE-510707	0125360

Ordering key

T L G 1 - - - - - 0 0 0

Type

Voltage

0 24 V DC

1 24 V DC with integrated current cut-off (only for 4 000 N and 1 500 N load version)

Load

A 4 000 N

B 2 500 N

C 1 500 N

Tube set

A Tube set 2×

D Tube set 3×

Stroke [S]

2 200 mm

3 300 mm

4 400 mm

5 500 mm

6 600 mm

7 700 mm

Cable / connecting plug

1 Straight, 1,0 m / jack plug

2 Straight, 2,3 m / jack plug

A Coiled, 0,6 m / jack plug

3 Straight, 1,0 m / DIN8 plug

4 Straight, 2,3 m / DIN8 plug

B Coiled, 0,6 m / DIN8 plug

Option

0 No option

A 1-Hall encoder, 8 pulses, cable with jack plug

B Potentiometer, 1 kΩ, 2 Watt, 0,25 % linearity, 10 turns

C Cable feedthrough, 5 × 0,75 mm², led out, top +160 mm, bottom +800 mm

D Cable feedthrough, 1-Hall encoder, 8 pulses, cable with jack plug

E Cable feedthrough, potentiometer

F 2-Hall encoder, cable with DIN8 plug

G Cable feedthrough, 2-Hall encoder, cable with DIN8 plug

TLT

Telemag telescopic pillar

Benefits

- Very small built-in dimension
- Powerful

Standards

- EN/IEC 60601-1
- UL 60601-1

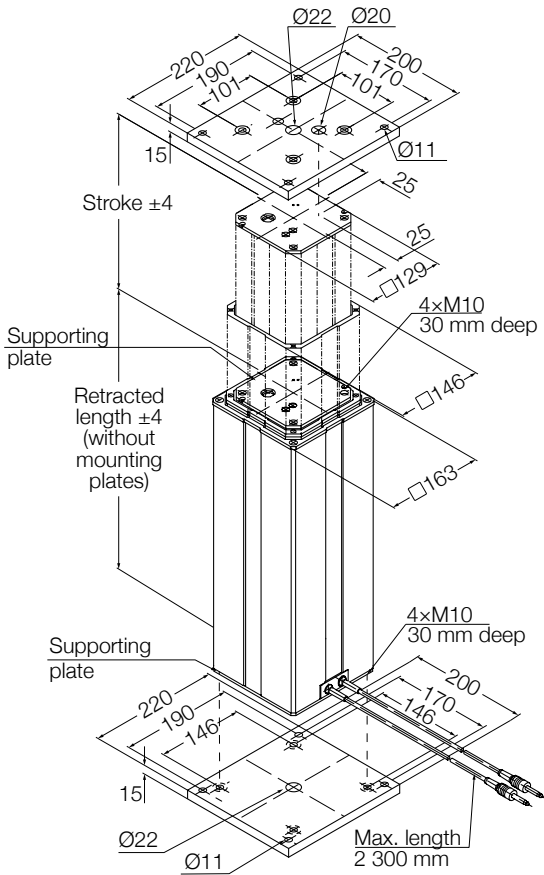


Technical data

	Unit	TLT10-A1	TLT10-A2	TLT10-B1	TLT10-C1	TLT10-C2
Rated push load	N	3 000	4 000	2 000	1 000	2 000
Rated pull load	N	0	0	0	0	0
Bending load	Nm	up to 400 ¹⁾	up to 1 000 ¹⁾	up to 250 ¹⁾	up to 110 ¹⁾	up to 480 ¹⁾
Speed (full load to no load)	mm/s	11 to 16	13 to 19	13 to 19	25 to 36	25 to 42
Telescopic pillar version	# of section	3-section	3-section	3-section	3-section	3-section
Stroke	mm	300 to 700	300 to 700	300 to 700	300 to 700	300 to 700
Retracted length	mm	0,5 × S+170	0,5 × S+240	0,5 × S+170	0,5 × S+170	0,5 × S+240
Voltage	V DC	24	24	24	24	24
Power	W	168	168	192	192	216
Current	A	2×3,5	2×3,5	2×4,5	2×4,5	2×4,5
Duty cycle: intermittent operation	min.	1 min./9 min	1 min./9 min	1 min./9 min	1 min./9 min	1 min./9 min
Ambient temperature	°C	+10 to +40	+10 to +40	+10 to +40	+10 to +40	+10 to +40
Type of protection	IP	40	40	40	40	40
Protection class	–	SELV	SELV	SELV	SELV	SELV
Type of control	–	electrical	electrical	electrical	electrical	electrical
Weight	kg	15 to 30	15 to 30	15 to 30	15 to 30	15 to 30

¹⁾ For details, please see bending load diagrams (→ page 221)

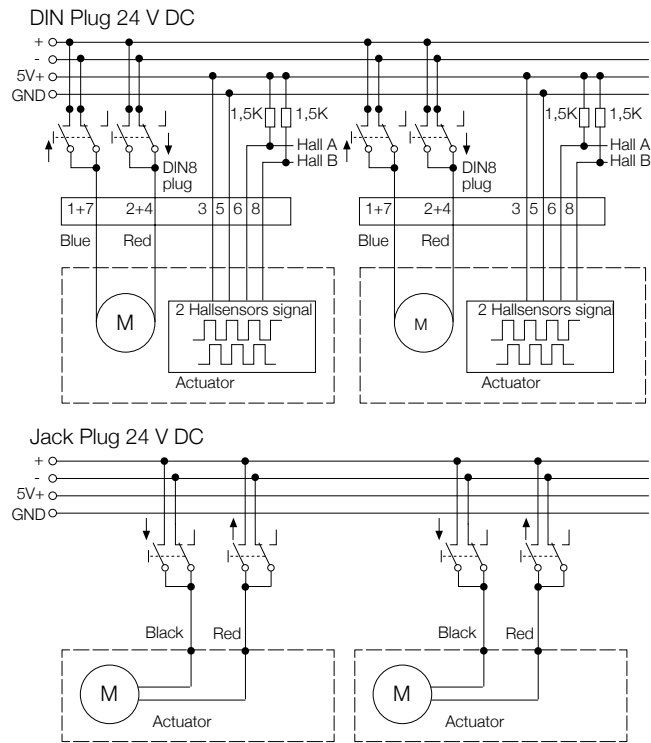
Dimensional drawing



Note: mounting plates are not included.
To be ordered separately.

Legend:
S = stroke
L = retracted length

Connecting diagrams



Suitable control units and accessories

	Control units			
	SCU	VCU	BCU	MCU
TLT	•	•	•	•
Operating switches				
EHA 1				•
EHA 3	•	•	•	
STF				•
STJ	•	•	•	
STA				•
STE	•	•	•	

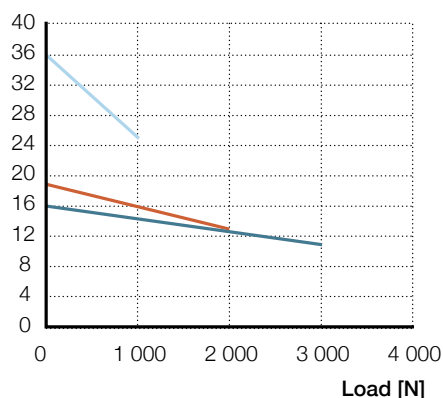
• Hand switch • Foot switch • Desk switch

¹⁾ Only valid with TLG11. TLG10 must be operated by a BCU, MCU, SCU or VCU control unit.

Performance diagrams

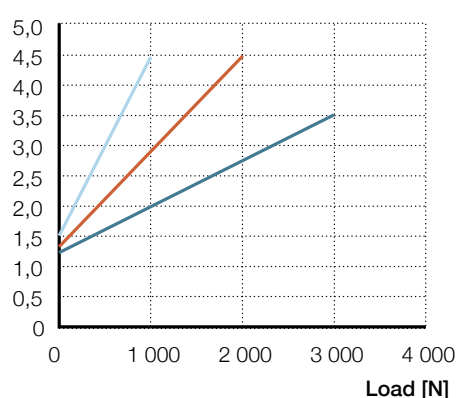
Speed-load diagram

Speed [mm/s]



Current-load diagram

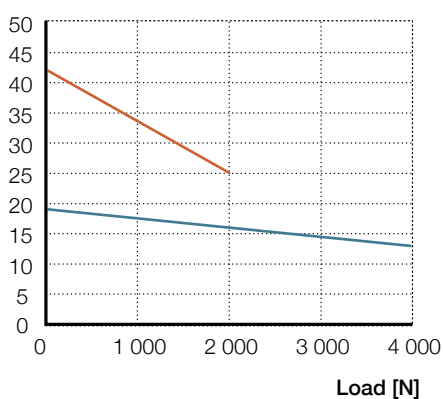
Current consumption [A]



— A1 — B1 — C1

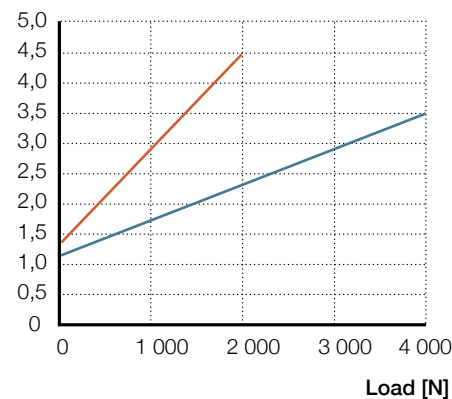
Speed-load diagram

Speed [mm/s]



Current-load diagram

Current consumption [A]

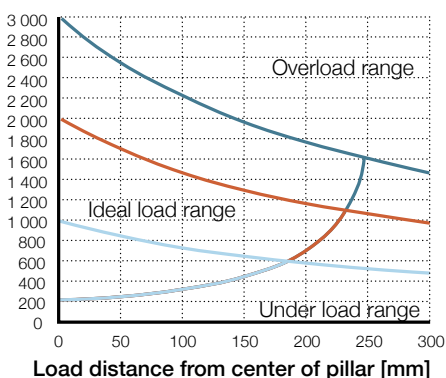


— A2 — C2

Bending load diagrams

Bending load diagram A1, B1, C1

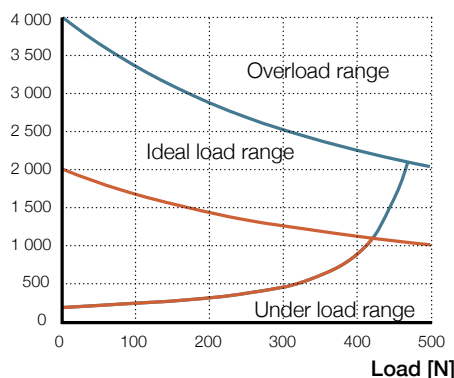
Load [N]



— TLT1 A-1 — TLT1 B-1 — TLT1 C-1

Bending load diagram A2, C2

Load [N]



— TLT1 A-2 — TLT1 C-2

Accessories

	Designation	Order number
Top mounting plate	ZPL-290268	0125624
Bottom mounting plate	ZPL-290265	0125623
Screw (4/plate) for mounting plate	ZBE-510707	0125360

Ordering key

T

L

T

1

-

-

0

0

0

Type

Voltage

024 V DC

124 V DC with integrated current cut-off (only for A2 and C2)

Load / Speed

A24 000 N

A13 000 N

B12 000 N / 19 to 13 mm/s

C22 000 N / 42 to 25 mm/s

C11 000 N

Stroke [S]

3300 mm

4400 mm

5500 mm

6600 mm¹⁾

7700 mm¹⁾

Cable / connecting plug

1Straight, 1,0 m / jack plug

2Straight, 2,3 m / jack plug

A Coiled, 0,6 m / jack plug

3Straight, 1,0 m / DIN8 plug

4Straight, 2,3 m / DIN8 plug

B Coiled, 0,6 m / DIN8 plug

Option

0No option

A1-Hall encoder, 8 pulses, cable with jack plug

C Cable feedthrough, 3x1,5 mm², top +160 mm, bottom +800 mm

D Cable feedthrough, 1-Hall encoder, 8 pulses, cable with jack plug

F2-Hall encoder, cable with DIN8 plug

¹⁾ Reduced safety factor
■ Options shown in red are only available on demand. Contact Ewellix for more information on minimum quantities and additional cost.

TXG

Telesmart telescopic pillar



Benefits

- Powerful and fast lifting
- Aesthetic design

Standards

- EN/IEC 60601-1
- UL 60601-1

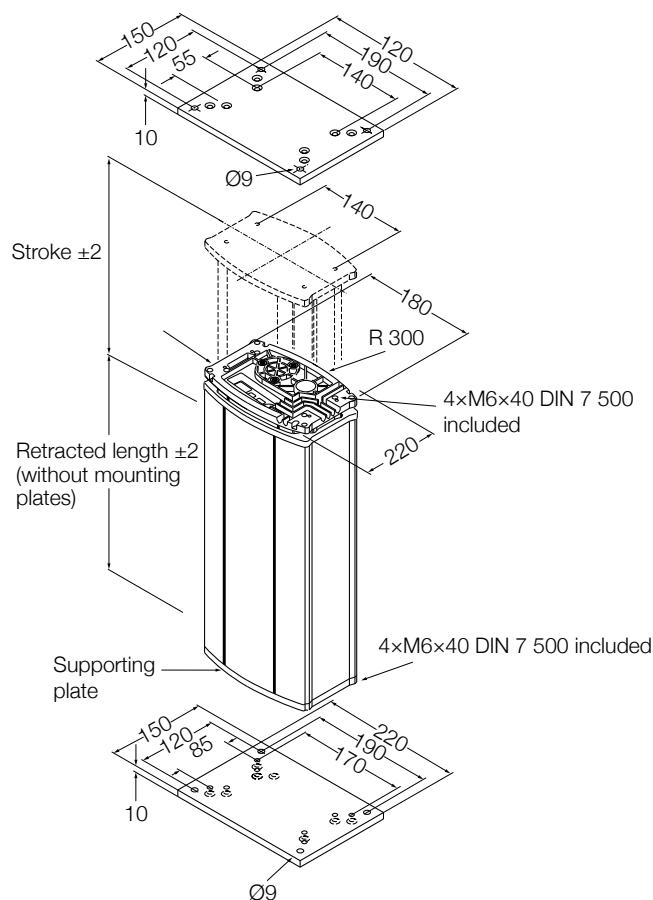
Technical data

	Unit	TXG1	TXG4/5	TXG8/9
Rated push load	N	1 500	1 500	1 500
Rated pull load	N	0	0	0
Bending load	Nm	up to 210 ¹⁾	up to 210 ¹⁾	up to 210 ¹⁾
Speed (full load to no load)	mm/s	17 to 23	17 to 23	17 to 23
Telescopic pillar version	# of section	2-section	2-section	2-section
Stroke	mm	200 to 600	200 to 600	200 to 600
Retracted length	mm	S+180	S+180	S+180
Voltage	–	24 V DC	120 V AC	230 V AC
Power	W	–	N/A	N/A
Current	A	5	1,8	0,9
Duty cycle: intermittent operation	min.	1 min./9 min.	1 min./9 min.	1 min./9 min.
Duty cycle: short-time operation	min.	–	N/A	N/A
Ambient temperature	°C	+10 to +40	+10 to +40	+10 to +40
Type of protection	IP	30	30	30
Protection class	–	SELV	II/(I)2	II/(I)2
Type of control	–	electrical	electrical	electrical
Weight	kg	8 to 13	9 to 14	9 to 14

¹⁾ For details, please see bending load diagrams (→ page 225)

²⁾ Mandatory for cable feedthrough option

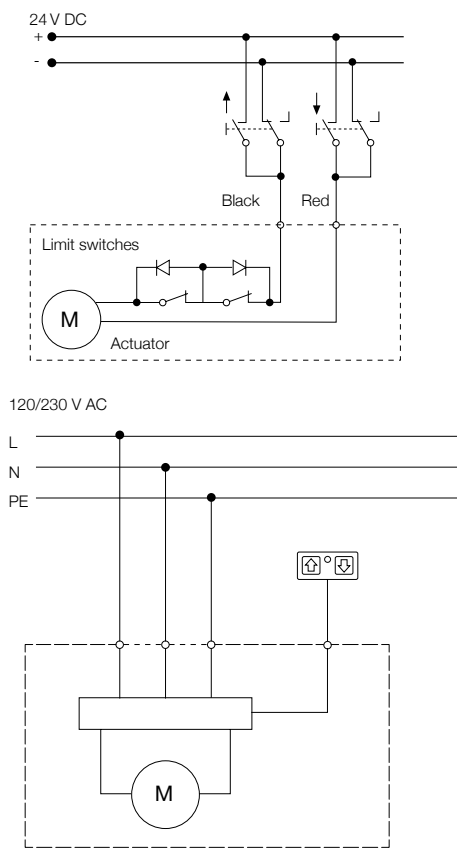
Dimensional drawing



Note: mounting plates are not included.
To be ordered separately.

Legend:
S = stroke
L = retracted length

Connecting diagrams



Suitable control units and accessories

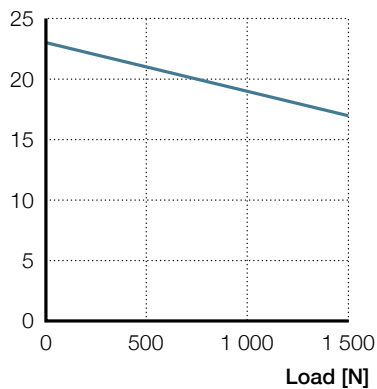
Control units		
TXG 10	COMPACT	
Operating switches		
EHA		
HSM		
HSF		

Hand switch Foot switch Desk switch

Performance diagram

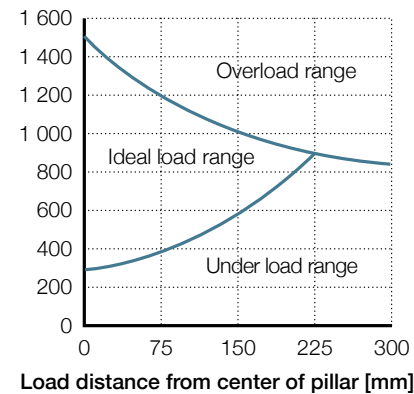
Speed-load diagram

Speed [mm/s]



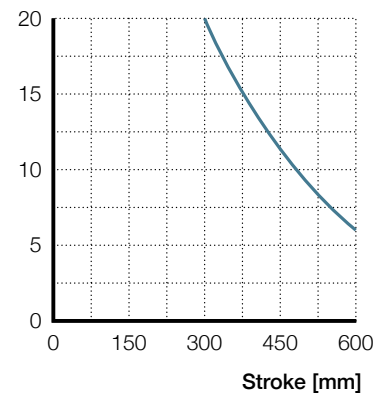
Bending load diagram

Load [N]



Safety factor load conditions

Safety factor (screw buckling)



Accessories

Mains cable	Plug	Country	Order number	Comment
Straight cable 3 m	Euro	General	0121730	2-pole
Straight cable 3 m	Schuko	General	0121729	3-pole
Straight cable 3 m	UL	USA	0126322	2-pole
Straight cable 3 m	SEV	Switzerland	0128699	3-pole
Straight cable 3 m	UL	USA	0121762	3-pole
Top or bottom mounting plate			0124874	

Mounting screws are included in the TXG.

Ordering key

T

X

G

0

-

0

0

-

0

0

Type

Voltage

1

24 V DC (slave actuator)

4

120 V AC, 50/60 Hz, class II

5

120 V AC, 50/60 Hz, class I (mandatory for cable feedthrough option)

8

230 V AC, 50 Hz, class II

9

230 V AC, 50 Hz, class I (mandatory for cable feedthrough option)

Color

5

Natural anodized coating

Option

000

None

EYX

Control connection feedthrough

EYF

Mains cable feedthrough

EYS

1-Hall encoder for Compact/slave use

2AA

Control connection feedthrough, mains cable feedthrough

EXG

Connection of TXG to BCU/VCU

KKK

Customer-specific

Stroke (S) / Retr. length (L=S+180 or L= S+160 mm)

L=S+180

L=S+160

200

4CY

200 mm

300

4DY

300 mm

400

4EY

400 mm

500

4FY

500 mm

600

4GY

600 mm

Options shown in red are only available on demand. Contact Ewellix for more information on minimum quantities and additional cost.

FRE

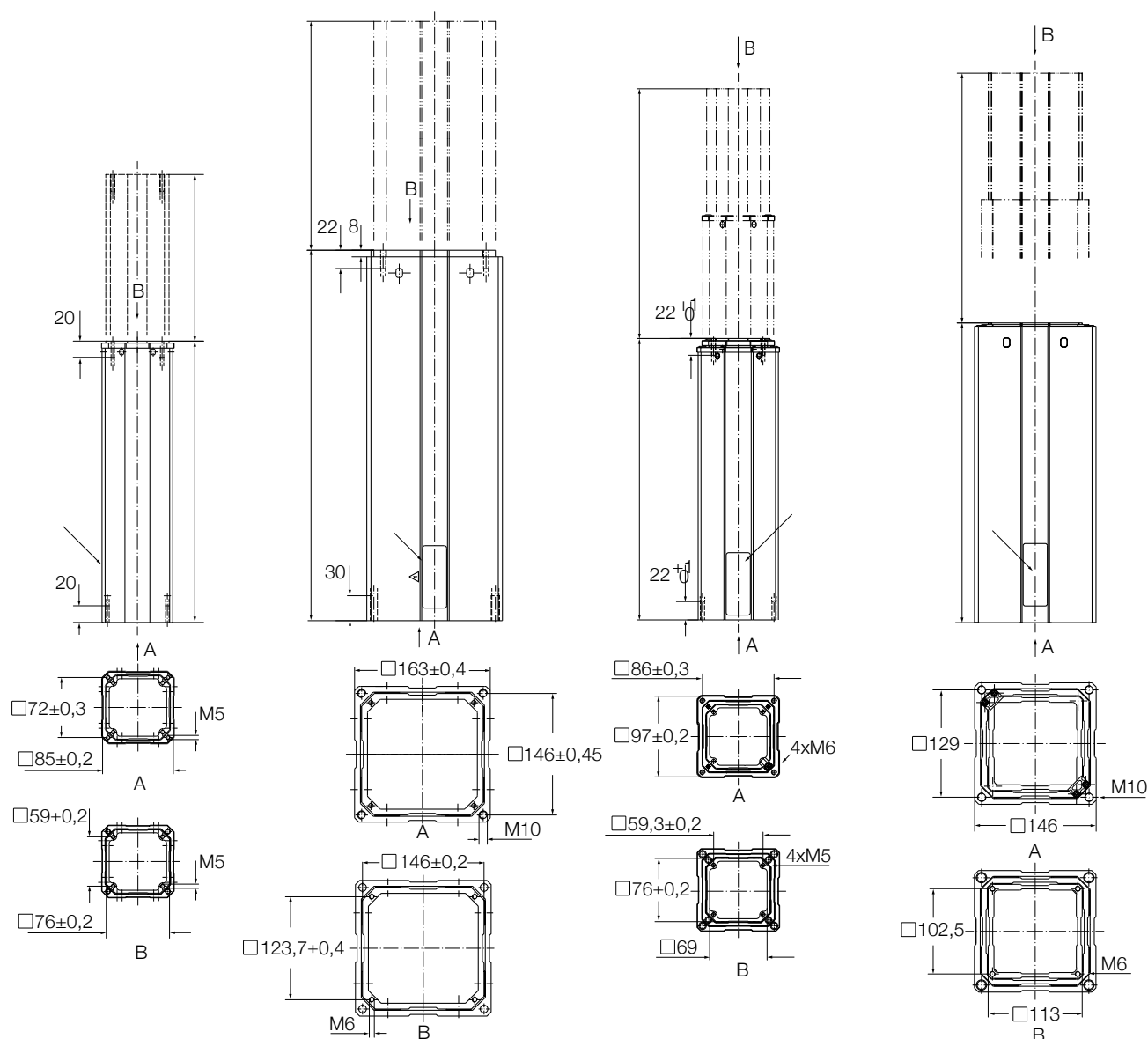
Telescopic pillar

Benefits

- Attractive design
- Stable
- Universal use



Dimensional drawing



Type	Sections		Profile dimensions in mm							Retracted length in mm
	2 sections	3 sections	76 x 76	85 x 85	97 x 97	113 x 113	129 x 129	146 x 146	163 x 163	
FRE-A085	•									Stroke + 138
FRE-A113	•									Stroke + 148
FRE-A146	•									Stroke + 168
FRE-D097		•								Stroke + 38
FRE-D129		•								Stroke + 53
FRE-D163		•								Stroke + 53
FRE-B097	•									N/A
FRE-B129	•									N/A
FRE-B163	•									N/A
FRE-E113		•								N/A
FRE-E146		•								N/A

■ Options shown in red are only available on demand. Please contact Ewellix.

Ordering key

F

R

E

-

-

-

0

0

0

Type

Combination

2 sections tube-set /Largest tube size

A085 85×85 mm

A113 113×113 mm

A146 146×146 mm

B097 97×97 mm

B129 129×129 mm

B163 163×163 mm

3 sections tube-set /Largest tube size

D097 97×97 mm

D129 129×129 mm

D163 163×163 mm

E113 113×113 mm

E146 146×146 mm

V_ 4 sections tube-set (on request)

F_ 5 sections tube-set (on request)

S_ 6 sections tube-set (on request)

Z_ 7 sections tube-set (on request)

Color

5 Natural anodized

6 Black anodized

Option

000 No option

MCM Cover

MCN Pull version

2EA Pull version, with cover

Stroke

20 200 mm

30 300 mm

40 400 mm

50 500 mm

60 600 mm

70 700 mm

--- Other stroke lengths

■ Options shown in red are only available on demand. Contact Ewellix for more information on minimum quantities and additional cost.