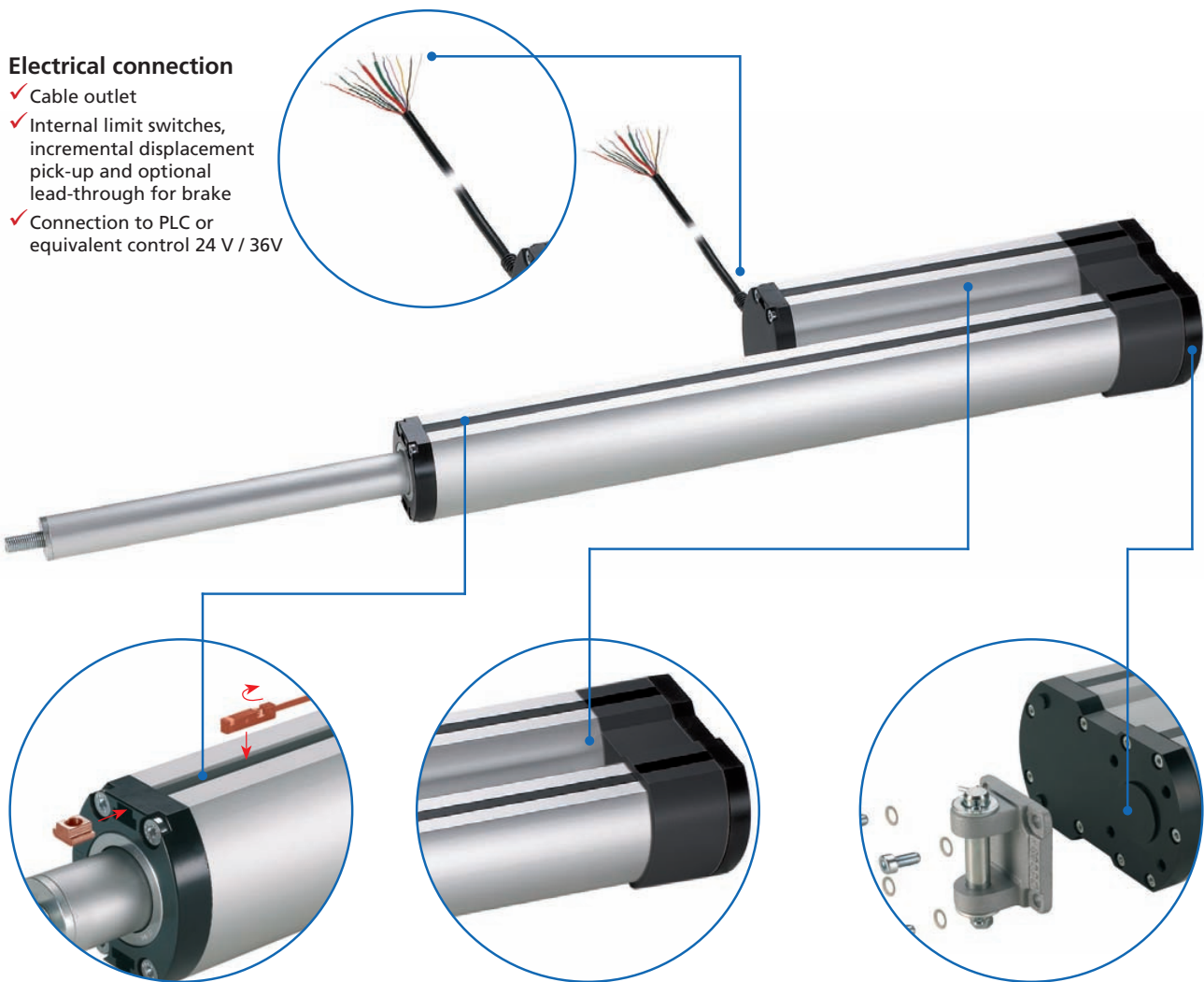


LZ 80 Heavy-duty cylinder

The industrial design complete system with push/pull forces up to 10,000 N.



Electrical connection

- ✓ Cable outlet
- ✓ Internal limit switches, incremental displacement pick-up and optional lead-through for brake
- ✓ Connection to PLC or equivalent control 24 V / 36V

Adjustable external magnetic switch

- ✓ Covered in slot geometry
- ✓ Stroke can be adjusted
- ✓ Accessories can be retrofitted
- ✓ Pre-fitted with internal magnets for external magnetic switch

Features:

- Integrated DC drive
- Integrated limit switches
- Flexible use of space thanks to parallel motor positioning
- Coverable slot geometry on both sides, supports a range of fixing options
- Push rod with rotation locking

High-performance DC motor

- ✓ Integrated motor brake on "ball screw" version

- Maintenance-free for entire lifetime of unit
- IP 54
- Self-locking
- Choice of ACME screw or recirculating-ball spindle

Cylinder fixing

- ✓ Simple connection of trunnion flange, trunnion or clevis

Options:

- Optional IP 66 can be supplied
- Special stroke lengths available on request
- ACME screw version optionally available with motor brake

LZ 80 Electric cylinder - Table of contents

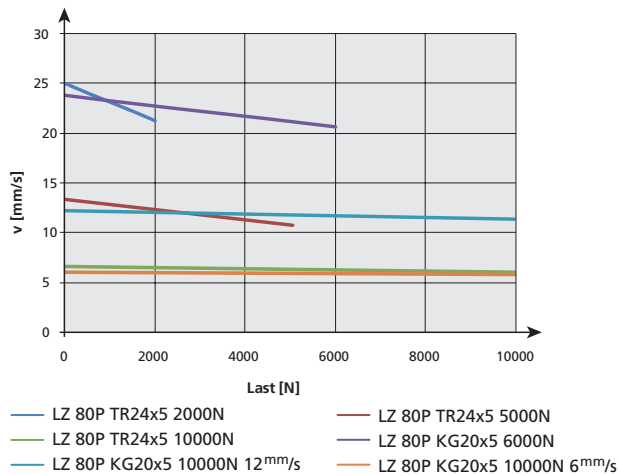
Properties/Technical data	<ul style="list-style-type: none"> ■ General information/operating conditions... 314 				
Versions (Dimensions, order numbers)	LZ 80 electric cylinder with ACME screw and ball screw drive: <ul style="list-style-type: none"> ■ Dimensions/Order table..... 315 				
Accessories	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Fixing</td> <td style="width: 50%;"> <ul style="list-style-type: none"> ■ Slot stones 316 ■ Clevis 316 ■ Bearing block for Clevis 316 ■ Swivel head 316 ■ Fork attachment for Swivel head..... 317 ■ Swivel 317 ■ Bearing block for Swivel 317 ■ Trunnion mounting set 318 ■ Support blocks for trunnion mounting 318 </td> </tr> <tr> <td>Position determination</td> <td> <ul style="list-style-type: none"> ■ Magnetic switch 319 ■ Controls 319 </td> </tr> </table>	Fixing	<ul style="list-style-type: none"> ■ Slot stones 316 ■ Clevis 316 ■ Bearing block for Clevis 316 ■ Swivel head 316 ■ Fork attachment for Swivel head..... 317 ■ Swivel 317 ■ Bearing block for Swivel 317 ■ Trunnion mounting set 318 ■ Support blocks for trunnion mounting 318 	Position determination	<ul style="list-style-type: none"> ■ Magnetic switch 319 ■ Controls 319
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Position determination	<ul style="list-style-type: none"> ■ Magnetic switch 319 ■ Controls 319 				

LZ 80 – Technical data

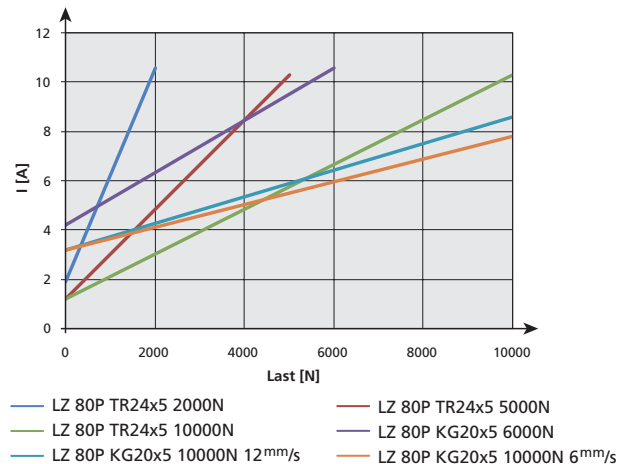
General information/operating conditions

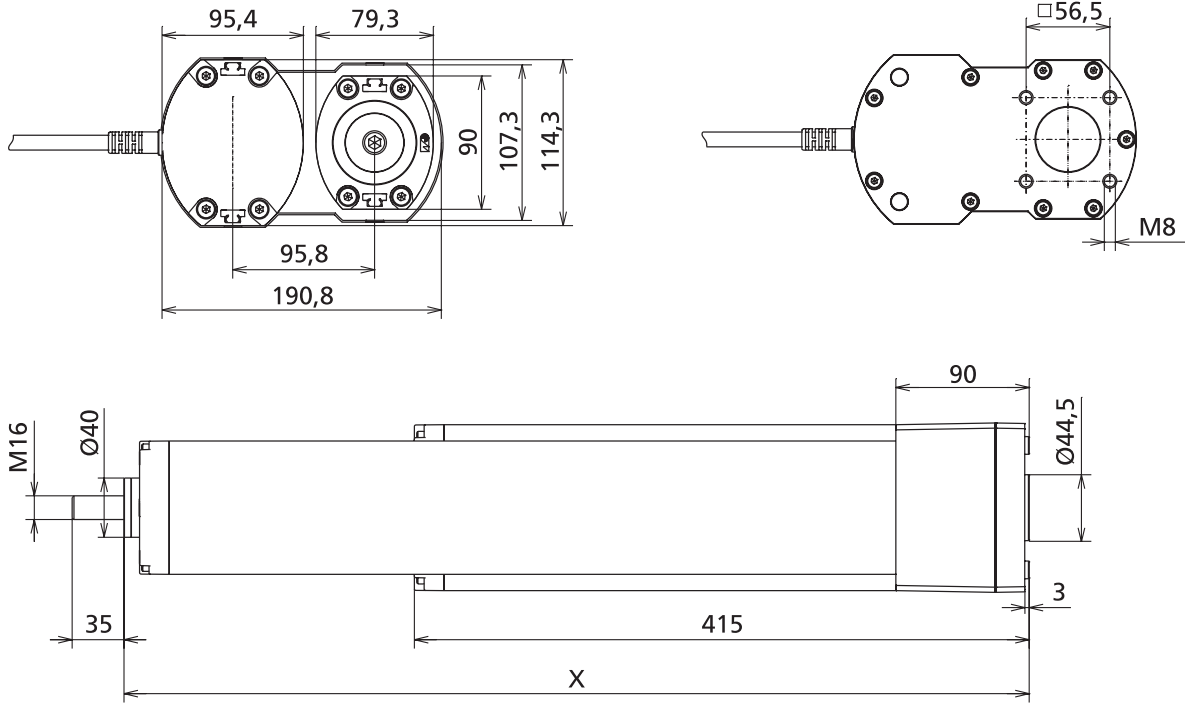
	ACME screw	Ball screw
Design	Linear cylinder with integrated DC motor	
Guide	Double bearing with POM bushes	
Installation position	Any position, without shear forces	
Ambient temperature	+5°C to +40°C	
Repeatability	0.5 mm	
Speed	Max. 25 mm/s	
Duty cycle (at max. load)	10% (1 min. operating time; 9 mins rest time/depending on sizing, up to 100% duty cycle possible)	
Voltage	24 V	
Current consumption	12 A	
Power input	450 W	
Protection class	IP 54 (optional IP 66)	
Compressive force/tensile force	10,000 N	
Self-locking	10,000 N	10,000 N (motor brake)

Speed/Force diagram



Current consumption/Force diagram





Versions LZ 80

Code No.	Type	Max. force F [N]	Max. speed [mm/s]
ACME screw 24 x 5			
QLP00AAAB_ _ _ _	LZ 80	2,000	25
QLP00ABAB_ _ _ _	LZ 80	5,000	13
QLP00ACAB_ _ _ _	LZ 80	10,000	6.5
Ball screw drive 20 x 5			
QLP11ADAB_ _ _ _	LZ 80	6,000	24
QLP11AEAB_ _ _ _	LZ 80	10,000	12
QLP11AFAB_ _ _ _	LZ 80	10,000	6

Stroke lengths available in increments of 7.5 mm
 e.g. stroke [mm] = 0 3 9 7 . 5

Stroke [mm]	Installation dimension X [mm]	Weight [kg]
7.5 to 397.5	Stroke + 311.0	12.5-16.0
405.0 to 600.0	Stroke + 348.5	16.0-18.0
607.5 to 795.0	Stroke + 386.0	18.0-20.0
802.5 to 1005.0	Stroke + 431.0	20.0-22.0

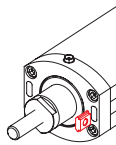
LZ 80 – Fixing/Position determination

Slot stone



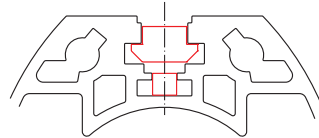
Type -N-

Type -R-



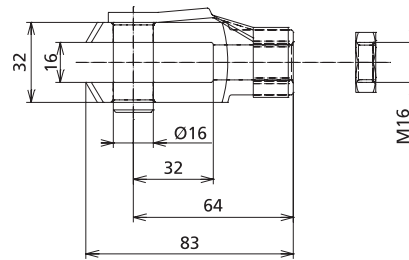
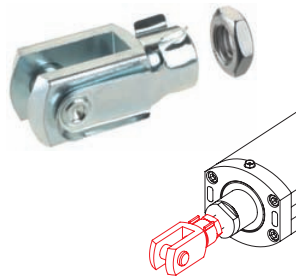
■ Slot stones facilitate the attachment of fittings to the cylinder.

■ To this end, the slot stones can be slid into the lateral slots (Type -N-) or swivelled into the slot from above (Type -R-).



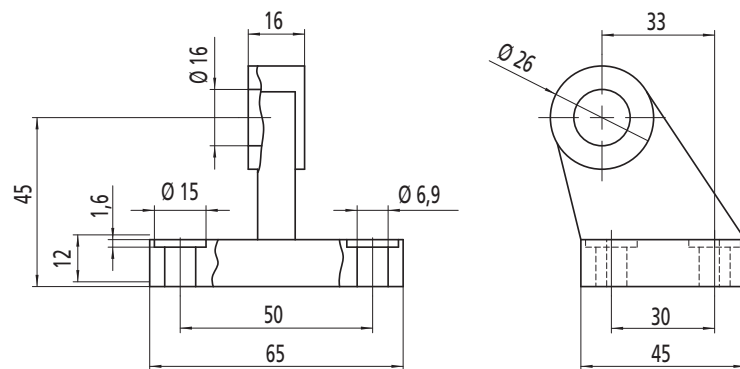
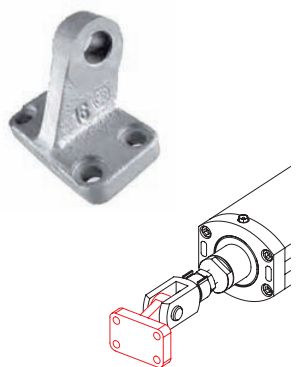
Code No.	Type	F [N]
4026203	Slot stone -N- M6	9,000
4026206	Slot stone -N- M8	9,000
4026221	Slot stone -R- M6	8,000
4026222	Slot stone -R- M8	8,000

Clevis



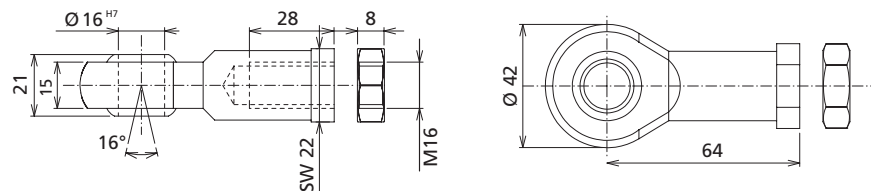
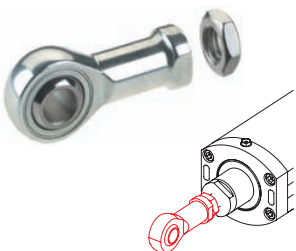
Code No.	Type
QZD050322	Clevis M16

Bearing block for Clevis



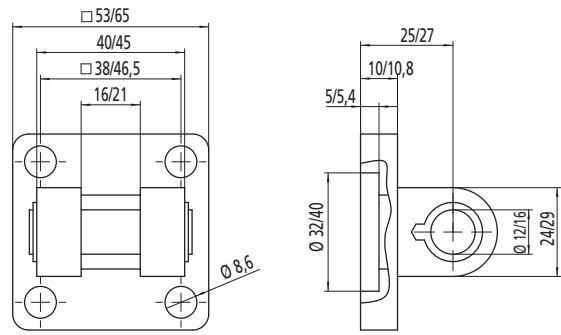
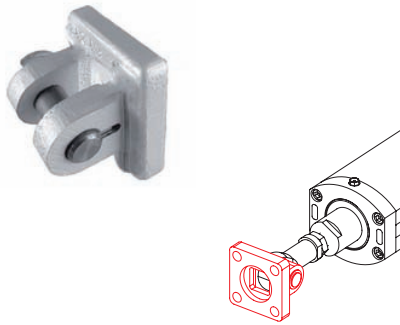
Code No.	Type
QZD050533	LZ 80 Bearing block Ø16

Swivel head



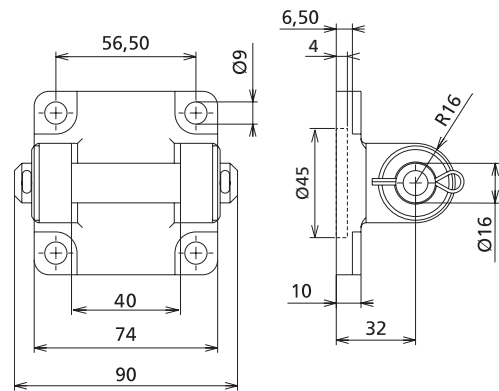
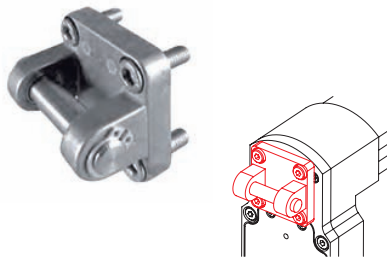
Code No.	Type
QZD050493	LZ 80 Swivel head M16

Fork attachment for Swivel head



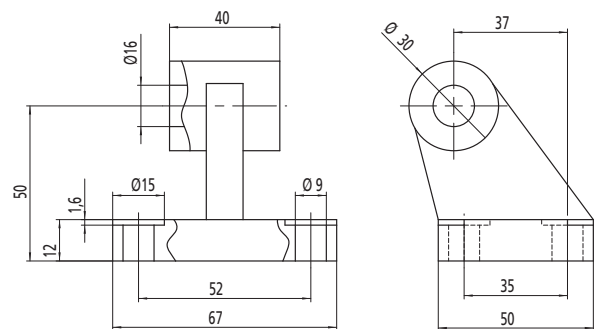
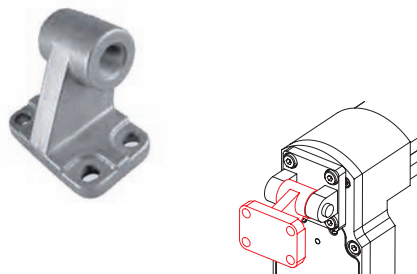
Code No.	Type
QZD050528	LZ 80 Fork attachment Ø 16

Swivel



Code No.	Type
QZD050323	LZ 80 Swivel Ø 16

Bearing block for Swivel



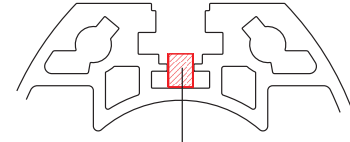
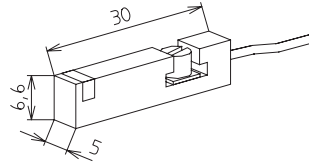
Code No.	Type
QZD050531	LZ 80 Swivel head wide Ø 16



Magnetic switch

- Signals from the magnetic switch can be collected and evaluated by a customer-provided control unit (such as a PLC).

- The switch can be retrofitted in the lateral slot (protected by a cover profile as standard)
- Magnets are integrated in the cylinder as standard.



Magnetic switch

Code No.	Type
QZD050193	Magnetic switch, NO contact, cable length 6 m
QZD050334	Magnetic switch, NC contact, cable length 5.3 m

Magnetic switch – Technical data

	NC contact	NO contact
Voltage	10-30 V DC	5-30 V DC
Current consumption	< 10 mA	< 10 mA
Output current	Max. 100 mA	Max. 50 mA
Output type	PNP	PNP
Function indication	LED	LED
Ambient temperature	-25°C to +85°C	-20°C to +70°C
Protection class	IP 67	IP 68

Control requirements

Power supply	24 V DC, at least 500 W
Current output	At least 20 A
Deceleration	Via generator brakes
Brake power	At least 500 W
Duty cycle	Up to 100%
Motor brake	24 V DC, at max. 1 A
Limit switch evaluation	Upper and lower limit switch (NC contacts)

Note:

Controls available on request.