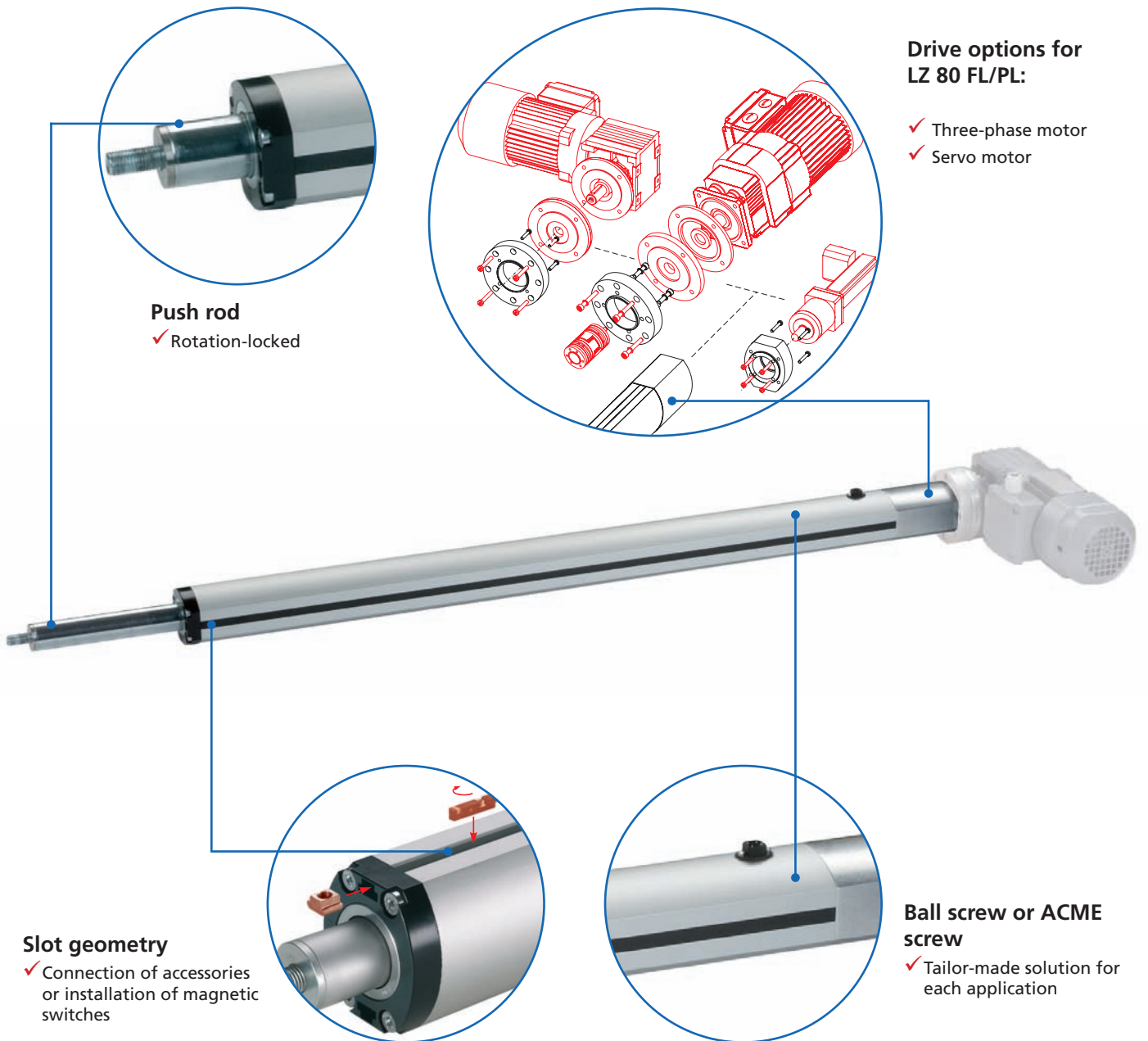


Heavy duty cylinder - LZ 80 FL/PL

The new generation of industrial linear cylinders



Drive options for LZ 80 FL/PL:

- ✓ Three-phase motor
- ✓ Servo motor

Push rod
✓ Rotation-locked

Slot geometry
✓ Connection of accessories or installation of magnetic switches

Ball screw or ACME screw
✓ Tailor-made solution for each application

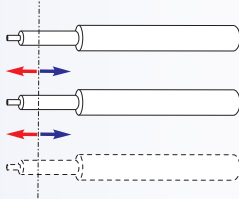
Features:

- Selectable drive (3-phase motor/servo motor)
- Flexible use of space due to different motor assembly options
- Coverable slot geometry on both sides supports a range of fixing options
- Push rod rotation locked
- Maintenance-free for up to 400 operating hours (with ball screws)
- Service life of up to 1 million double strokes (500 mm travel)
- Protection class IP 54
- Integrated magnets for external magnetic switches

Options:

- Optional IP 65 can be supplied
- Special stroke lengths available on request
- External magnetic switches
- Angular 3-phase motor with fixing boss available on request

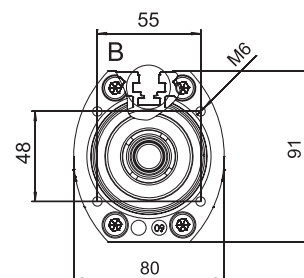
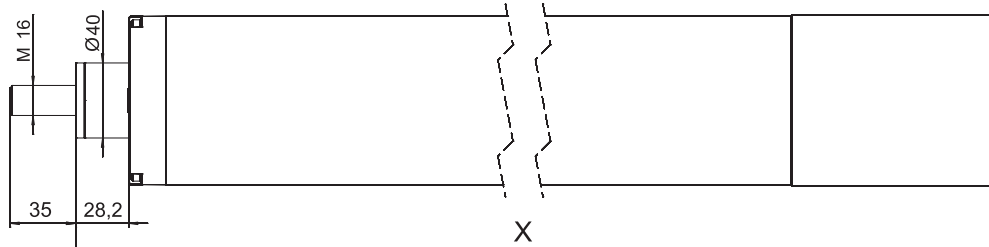
LZ 80 FL/PL Electric cylinder - Table of contents

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LZ 80 FL/PL – Versions

Order information:

- Longer stroke lengths on request
- The drive train (motor, motor adaptor kit and coupling) is not included and must be ordered separately



LZ 80 versions

Code No.	Type	Max. force F [N]	Max. speed [mm/s]	Max. travel	Duty cycle [%]	Double strokes per hour with 500 mm travel	Output [kW]	Motor selection (not included)	Speed output shaft [rpm]
Ball screw 20 x 5									
TQ11A1A1B12AA	LZ 80 PL	3,000	27	1,005	100	85	0.25	WF20DR63M2	324
		3,800			50	42	0.25	WF20DR63M2	
		4,600			25	21	0.25	WF20DR63M2	
		3,700	13		100	44	0.25	WF20DR63M2	161
		4,800			50	22	0.25	WF20DR63M2	
		6,000			25	11	0.25	WF20DR63M2	
		4,700	7		100	24	0.18	WF20DR63M4	80
		6,000			50	12	0.18	WF20DR63M4	
		8,000			25	6	0.18	WF20DR63M4	
		10,000			10	2.5	0.18	WF20DR63M4	
Ball screw 20 x 50									
TQ12A1A1B13AA	LZ 80 FL	1,300	284	1,005	100	480	0.75	WF30DRS80S2	341
		1,600			50	240	0.75	WF30DRS80S2	
		2,000			25	120	1.1	WF30DRS80M2	
		1,600	143		100	162	0.55	WF30DRS71M2	172
		2,000			50	81	0.55	WF30DRS71M2	
		2,400			25	80	0.55	WF30DRS71M4	
		2,100	70		100	200	0.37	WF30DR71S4	84
		2,600			50	100	0.37	WF30DR71S4	
		3,000			25	50	0.37	WF30DR71S4	

Stroke lengths available in increments of 7.5 mm

e.g. stroke [mm] = 0 3 9 7 . 5

[mm]

Stroke	Install. dimension X
7.5 to 397.5	Stroke + 348.5
405.0 to 600.0	Stroke + 386
607.5 to 795.0	Stroke + 423.5
802.5 to 1005.0	Stroke + 468.5

Note:

Performance data are based on an SEW 3-phase motor; a range of motor combinations from other manufacturers are available on request.

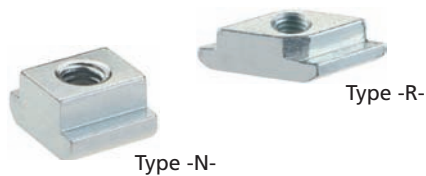
General information/operating conditions

Type	LZ 80 FL/PL with ball screw for high-precision positioning tasks	
	LZ 80 FL	LZ 80 PL
Compressive force/tensile force	3,000 N	10,000 N
Self-locking (via motor brake)	8,000 N	12,000 N
Max. speed	284 mm/s	27 mm/s
Design	Linear cylinder with ball screw 20 x 50	Linear cylinder with ball screw 20 x 5
Guide	Double bearing provided by slide bushes	
Installation position	Any position, without shear forces	
Ambient temperature	+5°C to +40 °C	
Repeatability	± 0.05 (depending on position transducer used)	
Duty cycle (at max. load)	100% (based on electric cylinder)	
Lifetime (500 mm stroke)	1 million double strokes	
Voltage	230/400 V AC	
Current consumption (max. starting current)	depending on motor selection	
Power input	depending on motor selection, up to 0.37 KW	
Protection class	IP 54 (optional IP 65)	

The data refers to three-phase motors 230/400 V AC, 50 Hz.

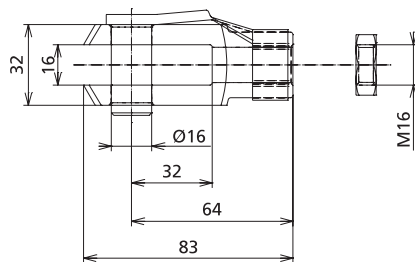
Slot stone

- Slot stones facilitate the attachment of fittings to the cylinder.
- They can subsequently be slid into the lateral slots (Type -N-) or swivelled into the slot from above (Type -R-).



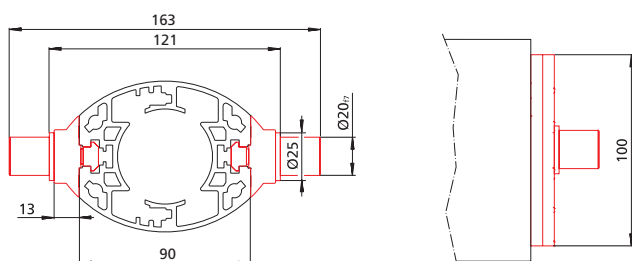
Code No.	Type	F [N]
4026207	Slot stone -N- M5	4,000
4026203	Slot stone -N- M6	9,000
4026206	Slot stone -N- M8	9,000
4026221	Slot stone -R- M6	8,000
4026222	Slot stone -R- M8	8,000

Clevis



Code No.	Type
QZD050322	Clevis

Trunnion



Code No.	Type
QZD050324	Trunnion

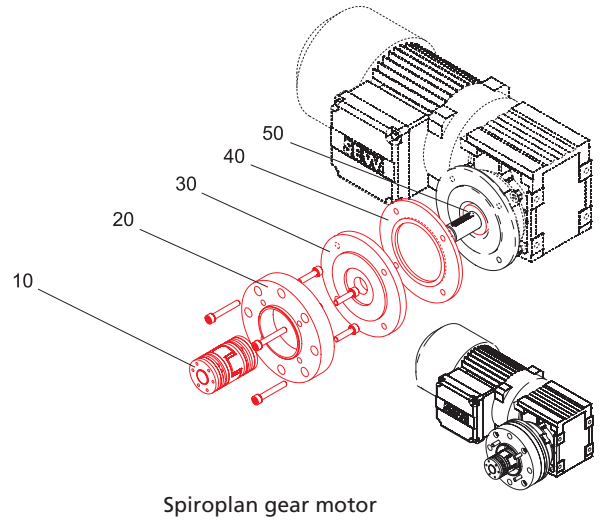
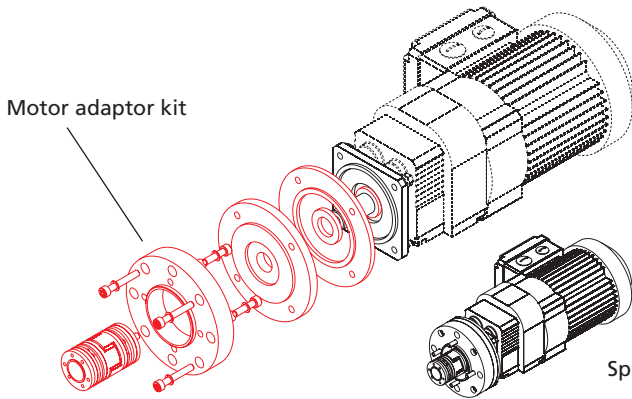
LZ 80 FL/PL – Drive/Position determination

Motor adaptor kit for 3-phase motor

Motor adaptor kit for SEW Spiroplan and spur gear motor (incl. rotary encoder)

No.	Description
10	Shaft coupling A: 15 mm, B: 20 mm
20	Motor adaptor kit
30	Rotary encoder

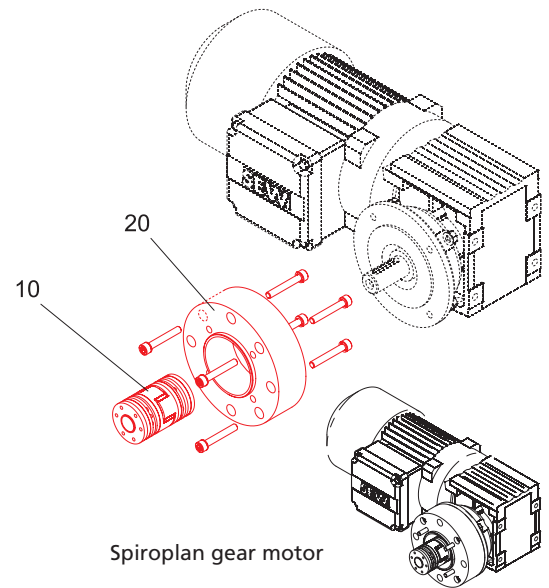
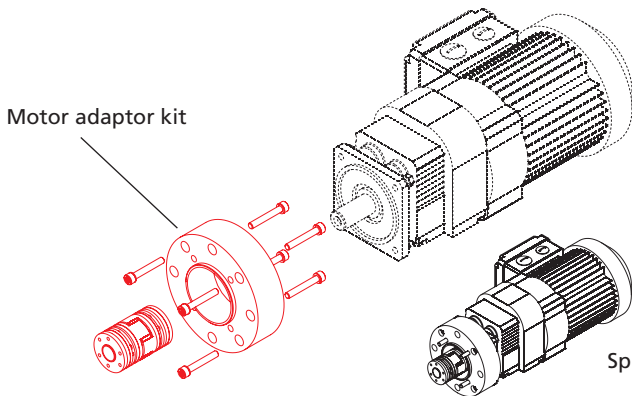
40	Flange ring for rotary encoder
50	Spacer ring 35/20 x 4.5



Code No.	Type
949986001	Motor adaptor kit for SEW gear motor, including rotary pulse encoder and coupling with double clamping ring hub

Motor adaptor kit for SEW Spiroplan and Spur gear motor (without rotary encoder)

No.	Description
10	Shaft coupling A: 15 mm, B: 20 mm
20	Motor adaptor kit

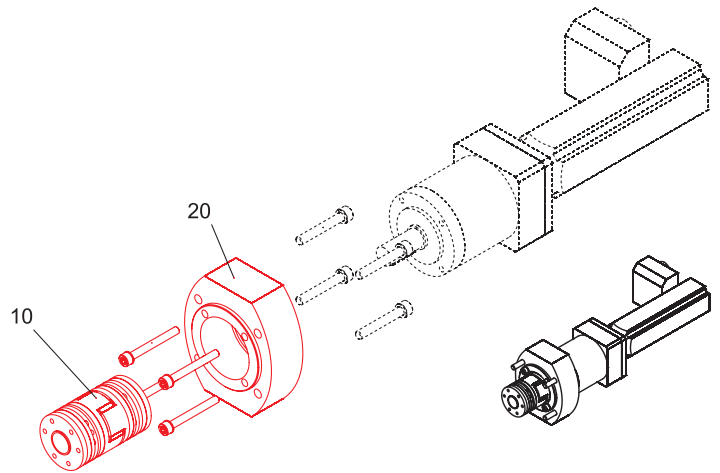


Code No.	Type
949987001	Motor adaptor kit for SEW gear motor, including coupling with double clamping ring hub

Motor adaptor kit for servo motor

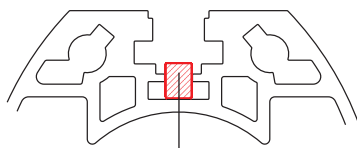
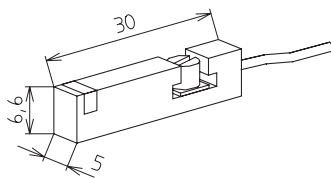
Motor adaptor kit for AC112 servo motor

No.	Description
10	Shaft coupling A: 14 mm, B: 15 mm
20	Motor adaptor kit



Code No.	Type
949988001	Motor adaptor kit for AC112 servo motor, including coupling with double clamping ring hub

Magnetic switch



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 already integrated within the cylinder as standard.



Code No.	Type
QZD050334	Magnetic switch, NC contact*, cable length 5.3 m

*Magnetic switch, NO contact, available on request

Magnetic switch – Technical data

	NC contact
Voltage	10-30 V DC
Current consumption	< 10 mA
Output current	Max. 100 mA
Output type	PNP
Function indication	LED
Ambient temperature	-25°C to +85°C
Protection class	IP 67