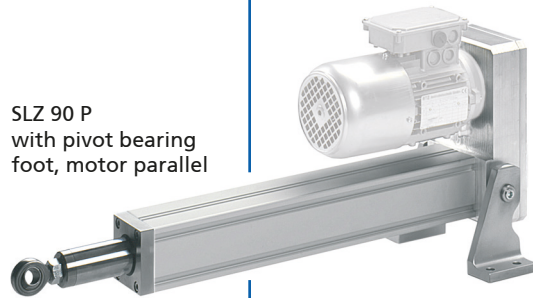


Heavy duty cylinder – SLZ 90

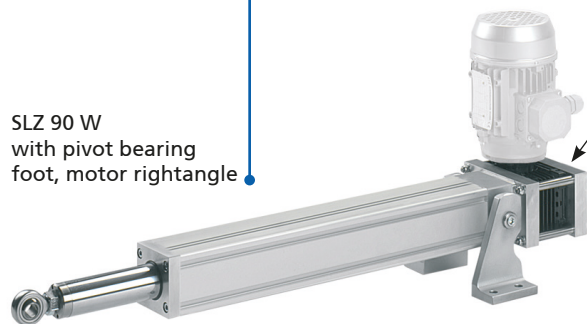
The powerful linear cylinder for precise positioning tasks up to 25,000 N



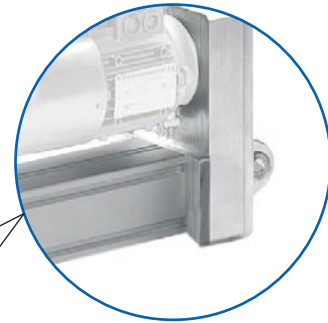
SLZ 90 S
with pivot bearing
foot, motor inline



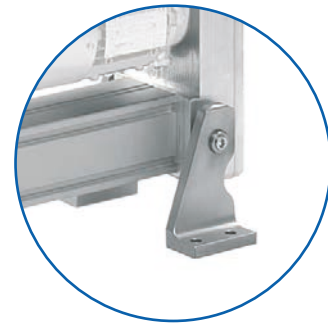
SLZ 90 P
with pivot bearing
foot, motor parallel



SLZ 90 W
with pivot bearing
foot, motor rightangle



SLZ 90 version
with fixing boss



SLZ 90 version
with pivot bearing foot



Drive options for SLZ 90

- ✓ 3-phase motor
- ✓ Servo motor

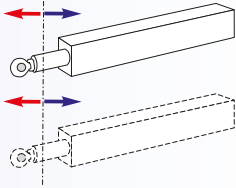
Features:

- Choice of drives (3-phase motor/servo motor)
- Flexible use of space due to different motor configurations
- Forces up to 25,000 N
- Speeds up to 933 mm/s
- 100% duty cycle
- Coverable slot geometry on both sides supports a range of fixing options for attachments
- Push rod with rotation locking
- Travel up to 2000 mm
- Maintenance-free for entire lifetime of unit
- IP 54
- Internal magnets for external magnetic switches

Options:

- Optional IP 65 can be supplied
- Servo motors and controls available on request
- Special stroke lengths available on request
- Motor brake

SLZ 90 Electric cylinder – Table of contents

Properties/Technical data		■ General information/operating conditions... 546
Versions (Dimensions, order numbers)		■ SLZ 90 electric cylinder with pivot bearing foot and fixing boss: SLZ 90 S 548 - 549 SLZ 90 P 550 - 552 SLZ 90 W 554 - 556
Accessories	Fixing	■ Slot stone -R- 557
	Position determination	■ Magnetic switch 557

SLZ 90 – Technical data

General information/operating conditions

Type	SLZ 90 with ball screw for precise positioning/control		
	SLZ 90 S	SLZ 90 P	SLZ 90 W
Compressive force/tensile force	25,000 N	25,000 N	25,000 N
Self-locking (via motor brake)	25,000 N	25,000 N	25,000 N
Max. speed	933 mm/s	933 mm/s	126 mm/s
Design	Linear cylinder with ball screw 25 x 5, 25 x 10, 25 x 25, 32 x 5, 32 x 10, 32 x 40		
Guide	Double bearing provided by slide bushes		
Installation position	Any position, without shear forces		
Lead accuracy	T 7 ($\leq 0,052$ mm / 300 mm)		
Ambient temperature	-20°C to +70°C		
Repeatability	± 0.05 mm		
Duty cycle (at max. load)	100%		
Voltage	230/400 V AC		
Current consumption (max. starting current)	depending on motor selection		
Power input	depending on motor selection, up to 1.5 KW		
Protection class	IP 54 (optional IP 65)		
Mechanical positioning accuracy	$\pm 0,142$ mm		

*The pitch accuracy and the axial play of the lead nut combine to produce the mechanical positioning accuracy.

The data refers to a three-phase motor 230/400 V AC, 50 Hz;
different performance data available on request.

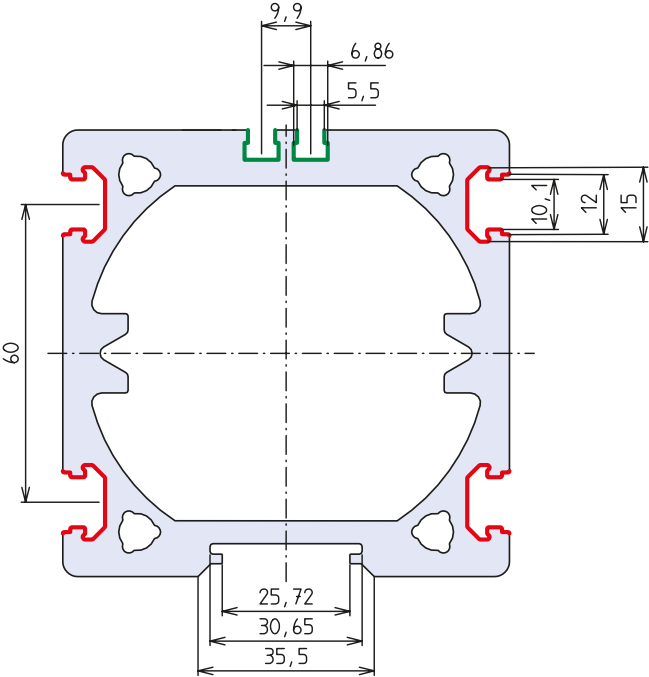
Connecting slots - guide profile



Slot for magnetic switch, see page 557



Slot for accessory attachment
(30 BLOCAN® slot geometry)



SLZ 90 S – Versions

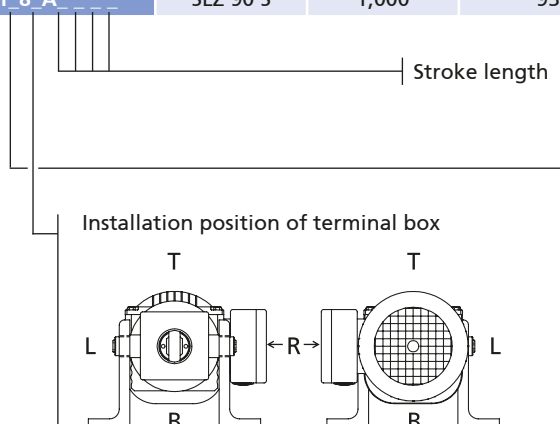
Order instruction:

- Longer stroke lengths on request
- Other performance data and motors available on request



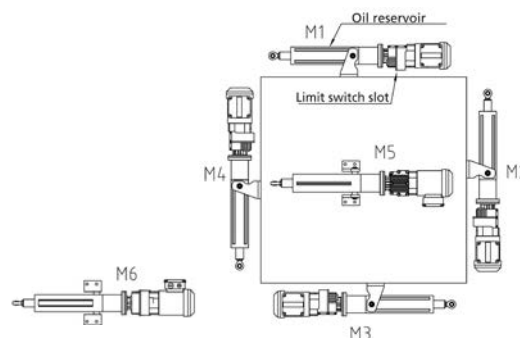
SLZ 90 S versions with ball screw

Code No.	Type	Max. force F [N]	Max. speed [mm/s]	Max. stroke [mm]	Output [kW]	Motor selection with motor brake
Ball screw 32 x 5						
TQ21A1S21_6_A_---	SLZ 90 S	8,000	116	1,000	1.5	DRN90L4/BE2/FT
TQ21A1S24_6_A_---	SLZ 90 S	18,000	26	1,300	0.75	RF17DRN80M4/BE1
Ball screw 32 x 10						
TQ21A1S21_7_A_---	SLZ 90 S	3,500	233	1,000	1.5	DRN90L4/BE2/FT
TQ21A1S25_7_A_---	SLZ 90 S	25,000	17	1,100	0.55	RF17DRS71M4/BE1
Ball screw 32 x 40						
TQ21A1S21_8_A_---	SLZ 90 S	1,000	933	900	1.5	DRN90L4/BE2/FT



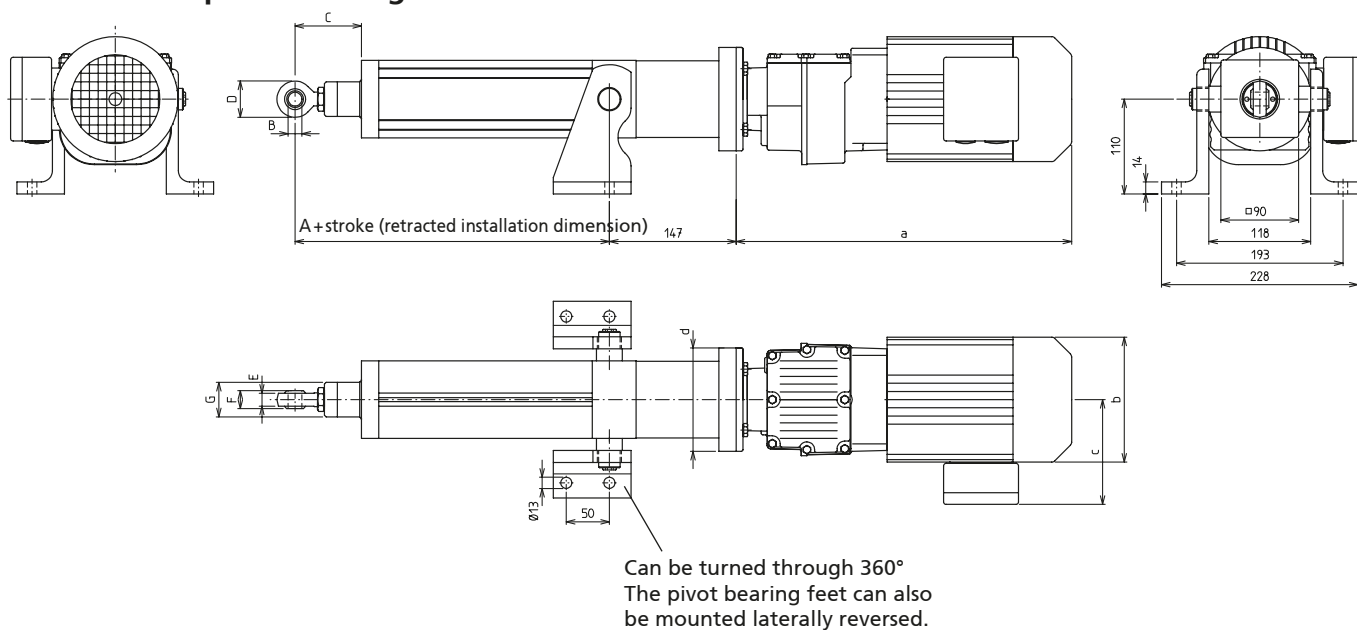
All diagrams show the terminal box in the R position

- 1 = M1
- 2 = M2
- 3 = M3
- 4 = M4
- 5 = M5
- 6 = M6





Version with pivot bearing feet



[mm]

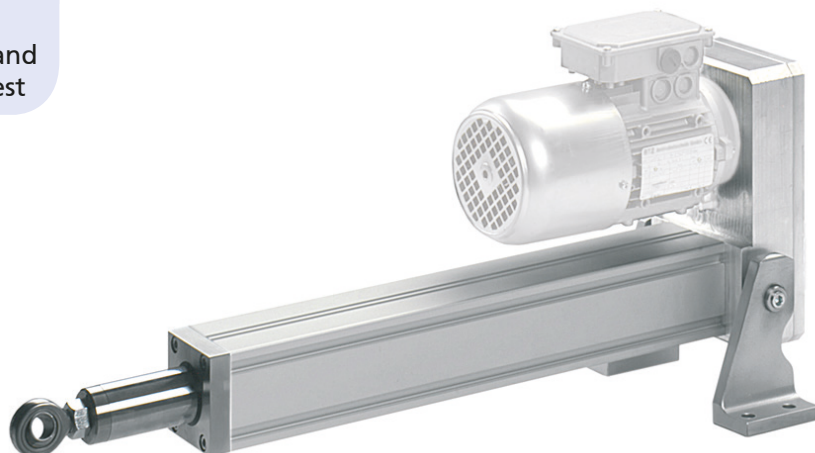
3-phase motors	a	b	c	d	Weight [kg]
RF17DRS71M4/BE1	428	Ø139	129	Ø120	15
RF17DRN80M4/BE1	491	Ø156	139		20
DRN90L4/BE2/FT	407	Ø179	150	Ø140	37

Type	A	B	C	D	E	F	G	Weight [kg]	
								Basic length (dimension A)	Additional weight/100 mm
KG 32x5, 32x10, 32x40	294	Ø20	86	50	18	25	Ø50	12.8	1.9

SLZ 90 P – Versions

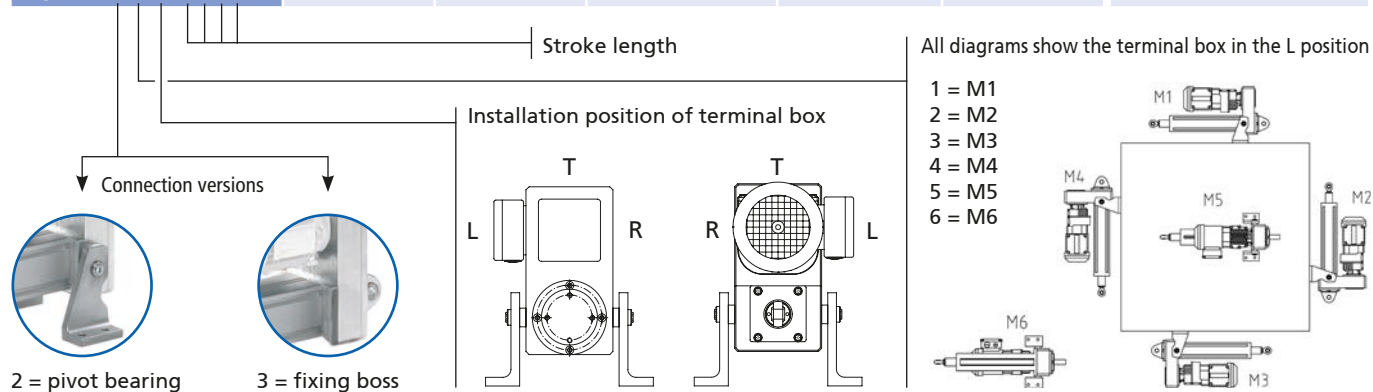
Order instructions:

- Longer stroke lengths on request
- Other performance data and motors available on request



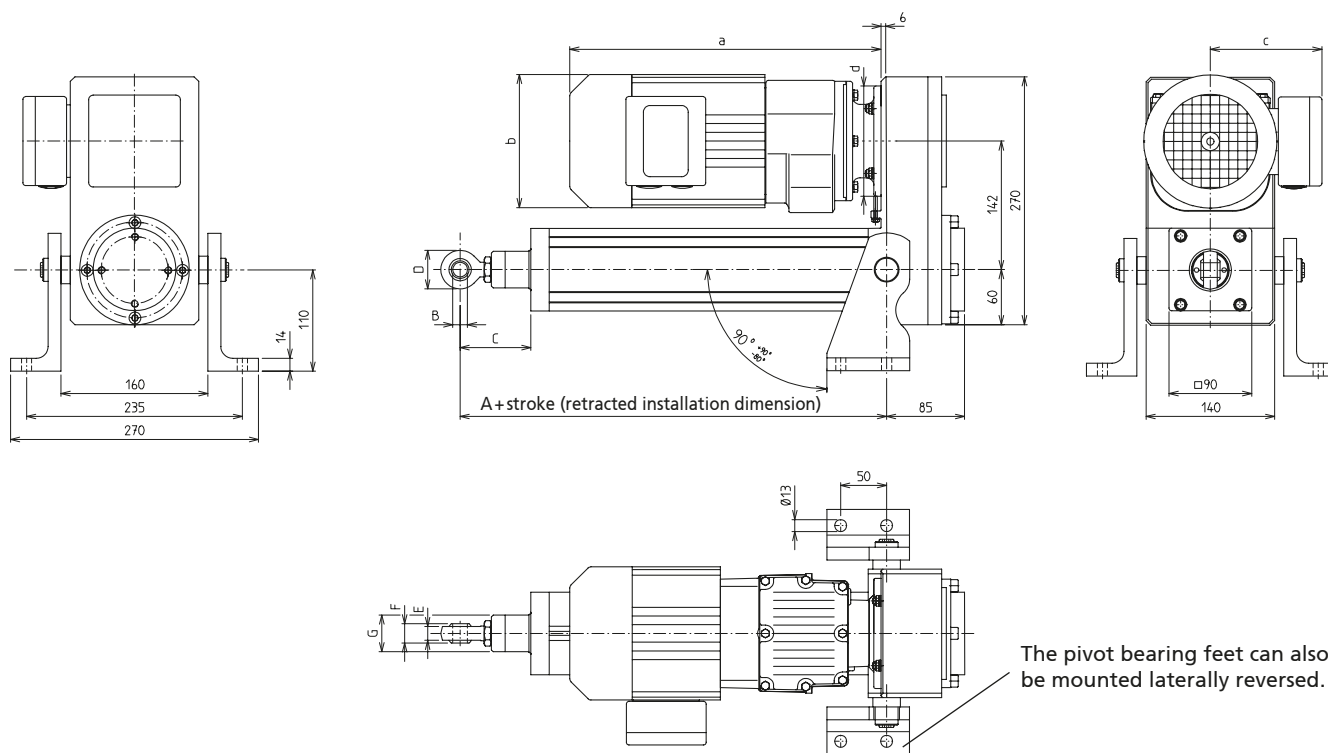
SLZ 90 P versions with ball screw drive

Code No.	Type	Max. force F [N]	Max. speed [mm/s]	Max. stroke [mm]	Output [kW]	Motor selection with motor brake
Ball screw 32 x 5						
TQ21A1P_1_6_A_ _ _ _	SLZ 90 P	8,000	116	800	1.5	DRN90L4/BE2/FT
TQ21A1P_4_6_A_ _ _ _	SLZ 90 P	18,000	26	1,300	0.75	RF17DRN80M4/BE1
Ball screw 32 x 10						
TQ21A1P_1_7_A_ _ _ _	SLZ 90 P	3,500	233	1,000	1.5	DRN90L4/BE2/FT
TQ21A1P_5_7_A_ _ _ _	SLZ 90 P	25,000	17	1,100	0.55	RF17DRS71M4/BE1
Ball screw 32 x 40						
TQ21A1P_1_8_A_ _ _ _	SLZ 90 P	1,000	933	900	1.5	DRN90L4/BE2/FT





Version with pivot bearing feet

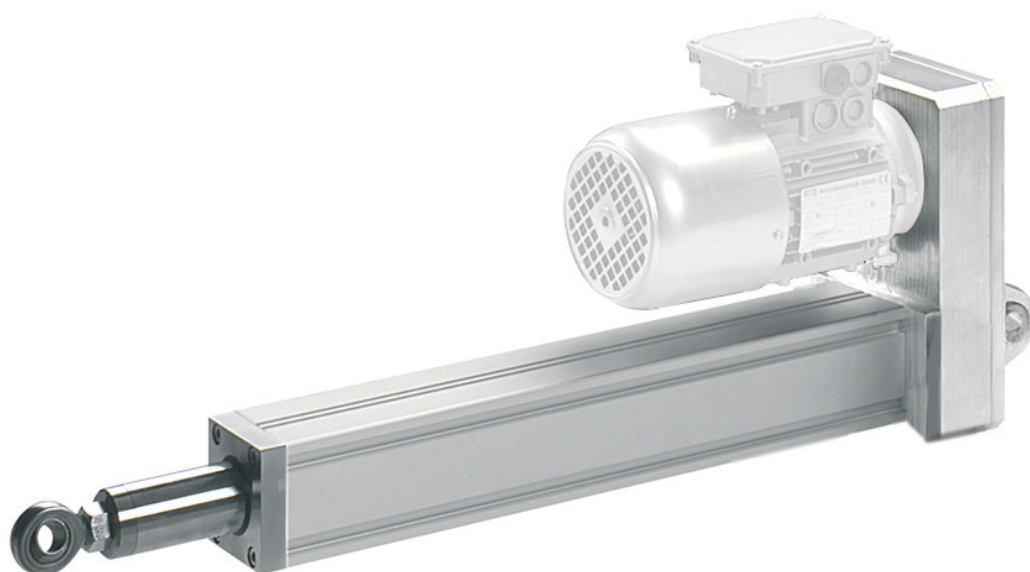


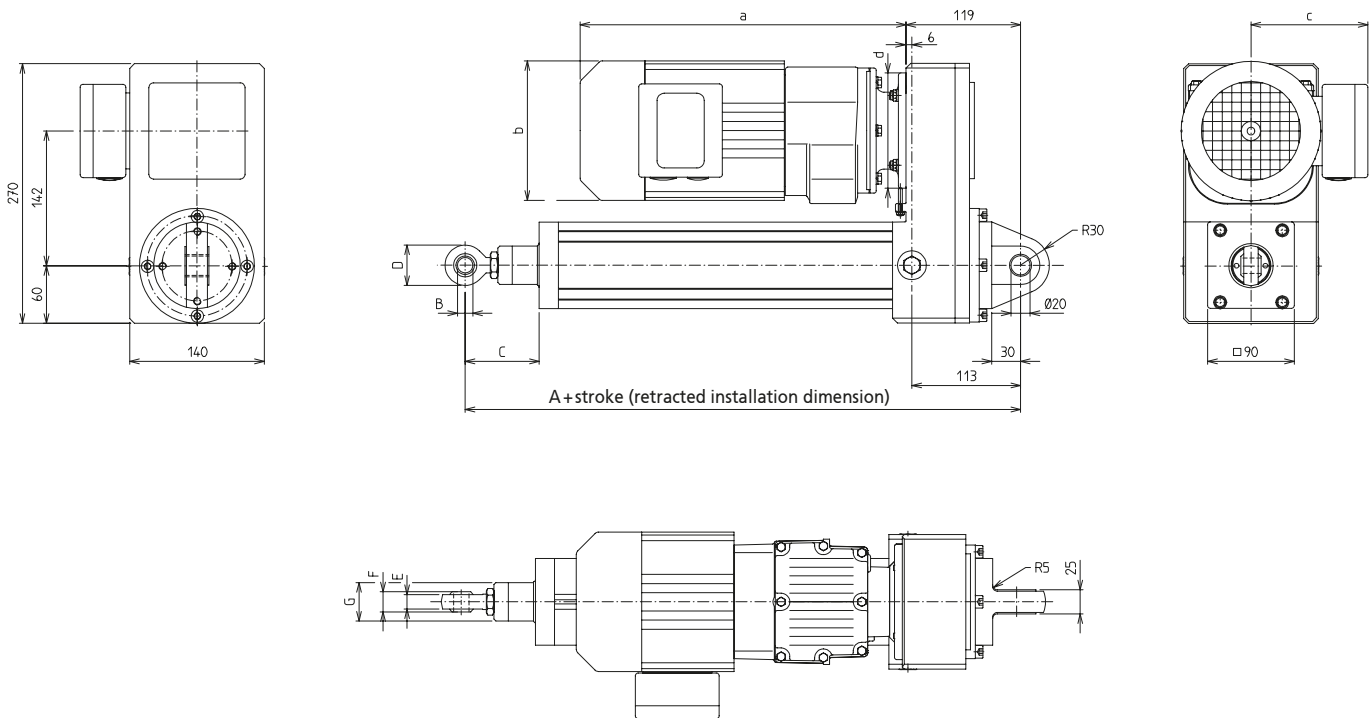
[mm]

3-phase motors	a	b	c	d	Weight [kg]
RF17DRS71M4/BE1	428	Ø139	129	Ø120	15
RF17DRN80M4/BE1	491	Ø156	139		20
DRN90L4/BE2/FT	407	Ø179	150	Ø140	37

Type	A	B	C	D	E	F	G	Weight [kg]	
								Basic length (dimension A)	Additional weight/ 100 mm
KG 32x5, 32x10, 32x40	294	Ø20	86	50	18	25	Ø50	13.1	1.9

SLZ 90 P – Versions





[mm]					
3-phase motors	a	b	c	d	Weight [kg]
RF17DRN80M4/BE1	491	Ø156	139	Ø120	20
RF17DRS71M4/BE1	428	Ø139	129		15

Type	A	B	C	D	E	F	G	Weight [kg]	
								Basic length (dimension A)	Additional weight/ 100 mm
KG 32x5, 32x10, 32x40	410	Ø20	86	50	18	25	Ø50	12.0	1.9

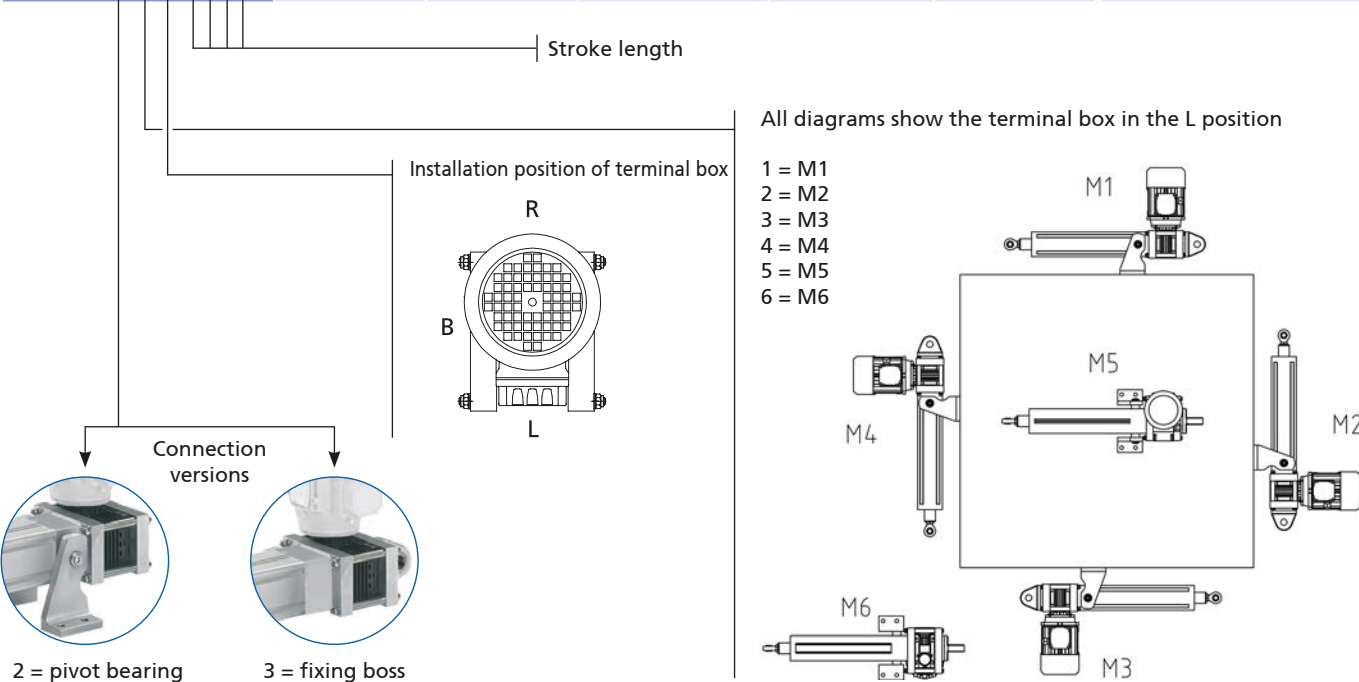
SLZ 90 W – Versions

- Order instructions:
- Longer stroke lengths on request
 - Other performance data and motors available on request



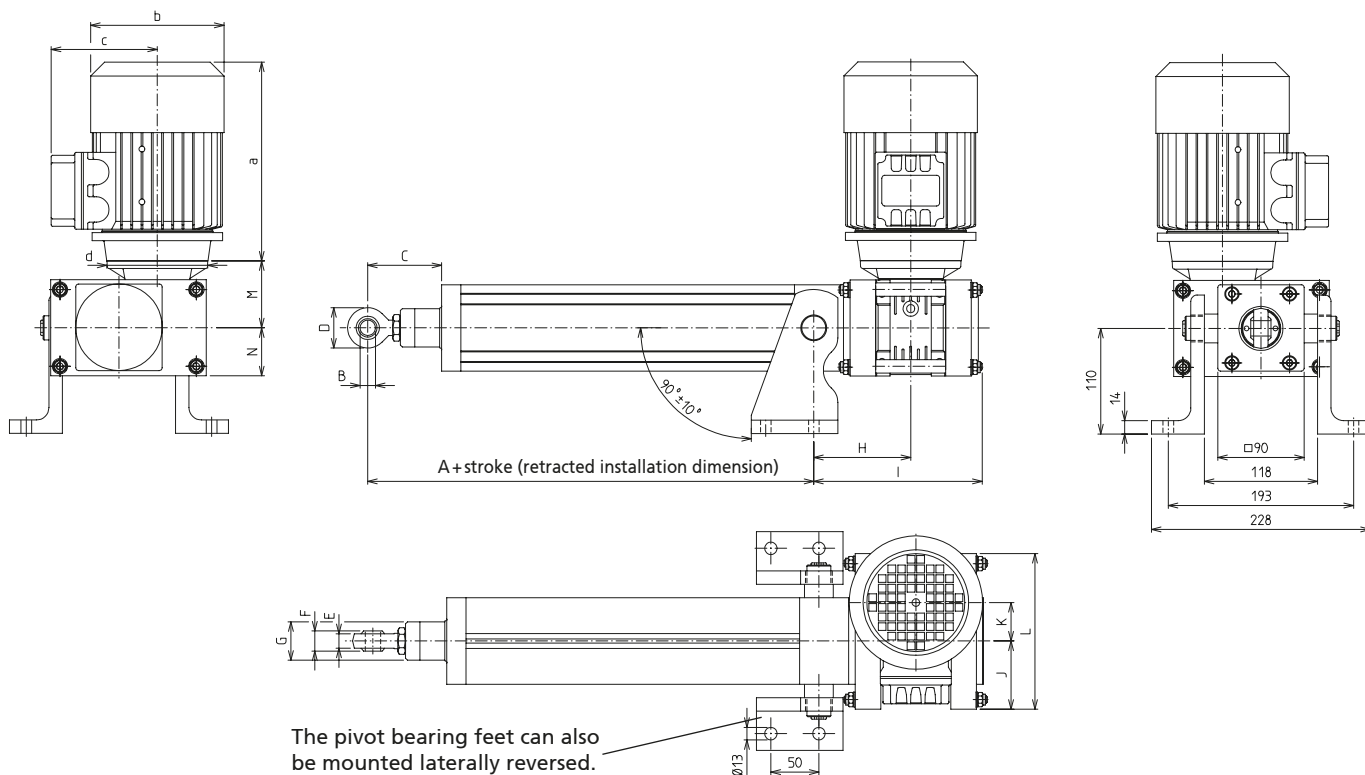
SLZ 90 W versions with ball screw drive

Code No.	Type	Max. force F [N]	Max. speed [mm/s]	Max. stroke [mm]	Output [kW]	Motor selection with motor brake
Ball screw 32 x 10						
TQ21A1W_2_7_A	SLZ 90 W	25,000	30	1,100	1.1	DRN90S4/BE2/FT
Ball screw 32 x 40						
TQ21A1W_2_8_A	SLZ 90 W	6,000	126	1,600	1.1	DRN90S4/BE2/FT





Version with pivot bearing feet



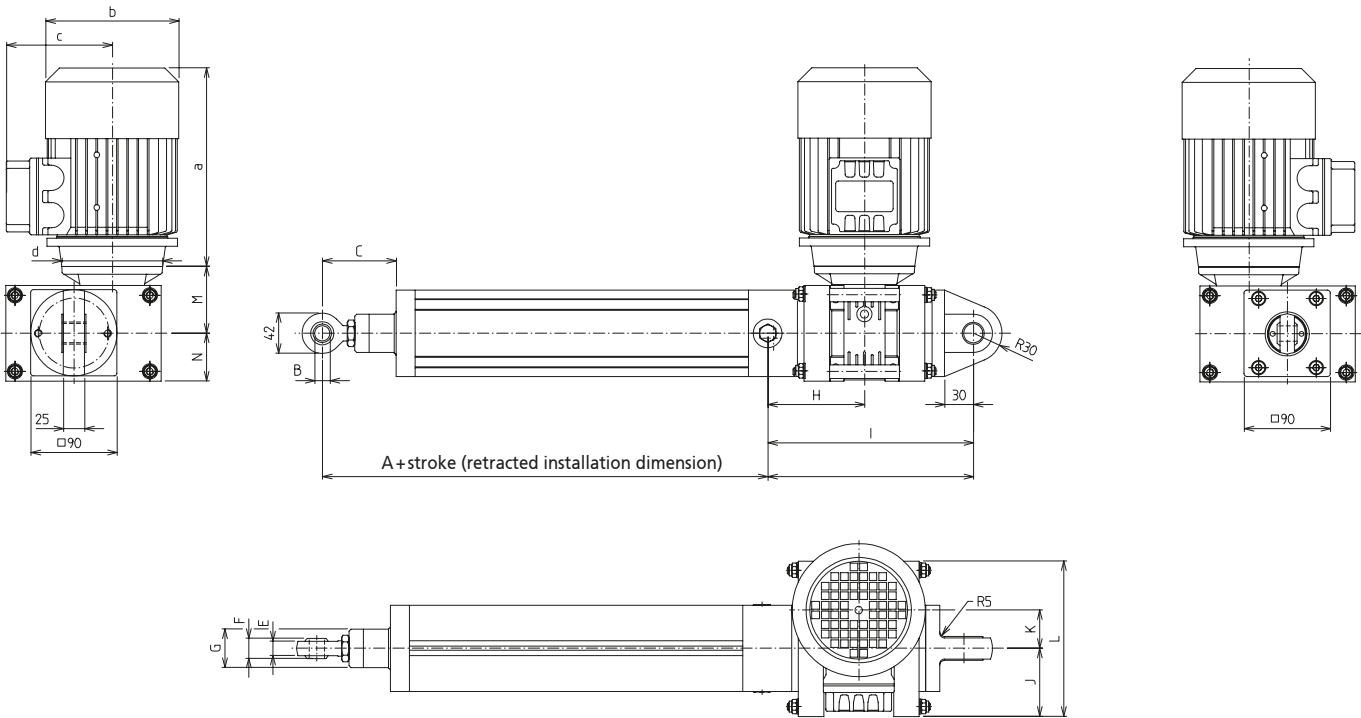
[mm]

3-phase motors	a	b	c	d	Weight [kg]
DRN90S4/BE2/FT	375	Ø179	150	Ø140	24

Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Weight [kg]	
															Basic length (dimension A)	Additional weight/ 100 mm
KG 32x10, 32x40	294	Ø20	86	50	18	25	Ø50	117.5	212	98	63	231.5	109	72	22.5	1.9

SLZ 90 W – Fixing/Position determination

Version with fixing boss



[mm]					
3-phase motors	a	b	c	d	Weight [kg]
DRN90S4/BE2/FT	375	Ø179	150	Ø140	24

Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Weight [kg]	
															Basic length (dimension A)	Additional weight/ 100 mm
KG 32x10, 32x40	294	Ø20	86	50	18	25	Ø50	117.5	212	98	63	231.5	109	72	22.5	1.9

Order instruction square nut:

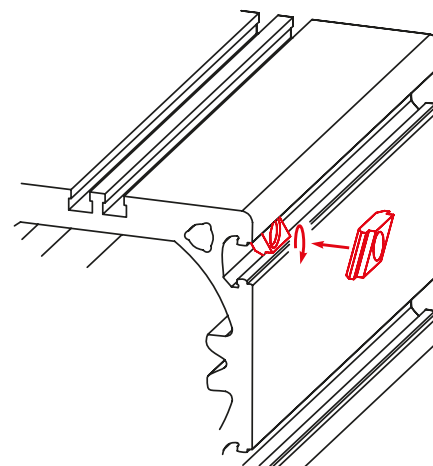
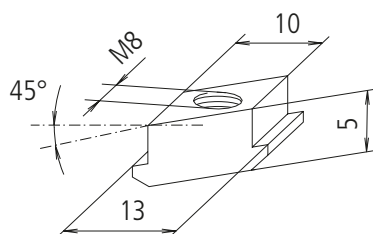
- Purchase only in lot sizes and a multiple of that, see product table below

Slot stone -R-



Type -R-

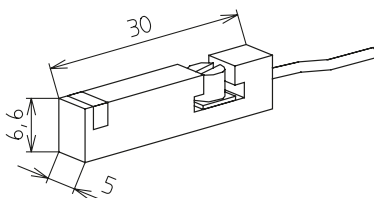
- Slot stones facilitate the fitting of attachments to the cylinder.
- To this end, they can be swivelled into the slot from above (Type -R-)



Code No.	Type	lot sizes	F [N]
4006223	Slot stone -R- M8	10, 20, 30... pcs	4,000

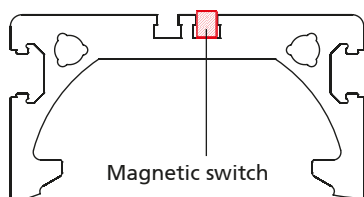
Magnetic switch

- 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)



Code No.	Type
QZD050599	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