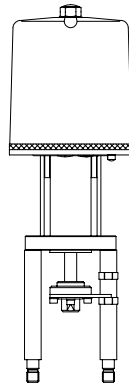


## Electric thrust actuator FR 2.1 / FR 2.2 with safety reset



FR 2.1 / FR 2.2  
Electric thrust actuator

with safety reset  
on electrical power failure



Page 2



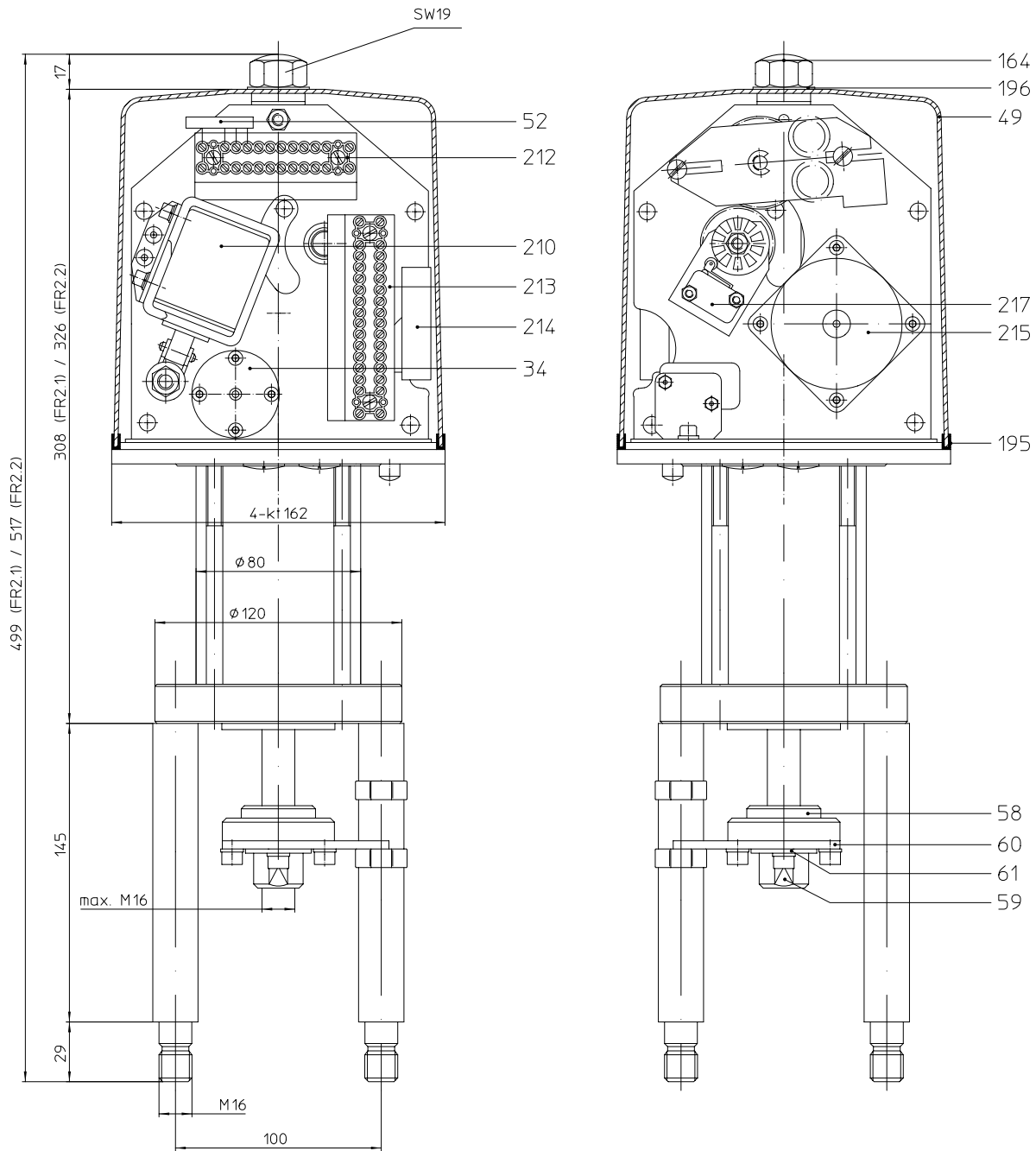
FR 2.1 / FR 2.2

### Features FR 2.1 / FR 2.2:

- Safety reset on electrical power failure
- TÜV-approval / DIN 32730
- 2 travel switches
- Operative ambient temperatures 0°C up to +50°C
- Enclosure IP 54
- Additional devices available,  
e.g. potentiometer
- Travel indicator



# Electric thrust actuator FR 2.1 / 2.2



Pos.	Description
34	Centrifugal brake cpl.
49	Hood
52	Rectifier plate
58	Coupling flange
59	Threaded bush
60	Anti-twist plate
61	Locking plate
164	Cap nut

Pos.	Description
195	Hood sealing
196	Gasket
210	Direct current - lifting, magnetic clutch
212	Terminal 12-pole
213	Terminal 16-pole
214	Capacitor
215	Motor
217	Microswitch

**Data sheet for thrust actuator with safety reset**

Type:	FR 2.1	FR 2.2
Closing force	0,9 kN (at 35 mm travel)	2,2 kN (at 35 mm travel)
Travel	max. 35 mm	
Positioning speed	0,29 mm/sec	
On power cut-out:		
Closure time	8,5 sec. (for travel 35mm)	
Closure force	0,9 kN (at travel 35 mm)	2,2 kN (at travel 35 mm)
Direction of closure	Extended stem on electrical power failure (on request - retracted stem on electrical power failure)	
Manual adjustment	Electrical (bottom operated)	
Operative ambient temperature	0°C up to +50°C	
Installation position	any	
Enclosure (according to DIN 40050)	IP 54	
Mounting A	Mounting pillars	
Mounting B	Flange according to ISO 5211-F05	
Mains	24V 50/60Hz 1~; 230V 50/60 Hz 1~; Special voltages on request	
Electrical connection	to internal terminal via max. 4 cable screw connections Pg 11	
Operating mode (according to VDE)	S1 - 100% ED, S4 - 30% ED - 600 c/h	
Weight	8,7 kg	
Required clearance for removal of hood	100 mm	
Travel limitation	2 travel switches, 10 A, max. 250V WS	

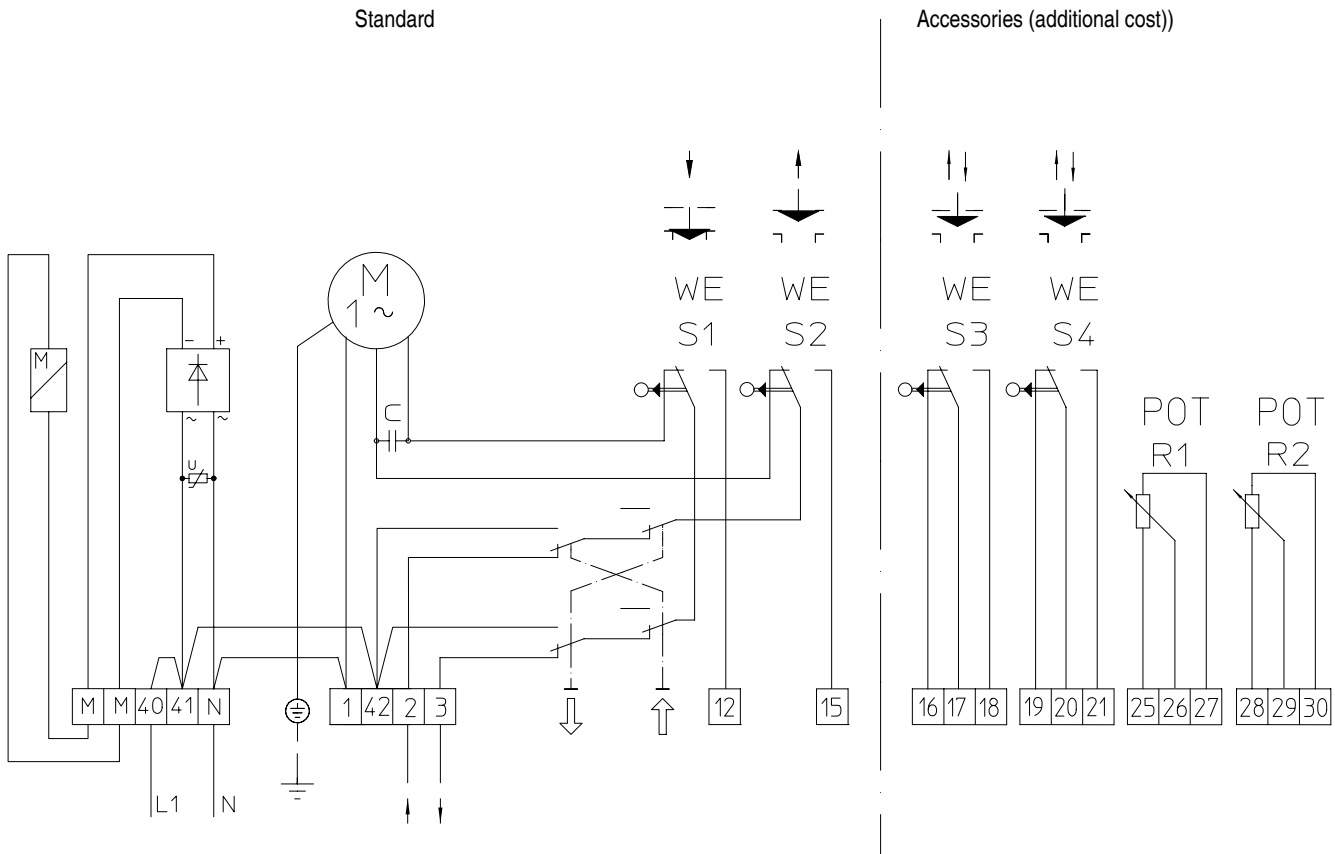
**Motor data**

Positioning speed	0,29 mm/sec			
	1-phase AC			
Voltage V	24	230	24	230
Rated current mA	260	31	316	33
Power consumption W	6,8		7,6	
Power output W	2,55		3,8	
Motor speed Rotation/min.	375		375	

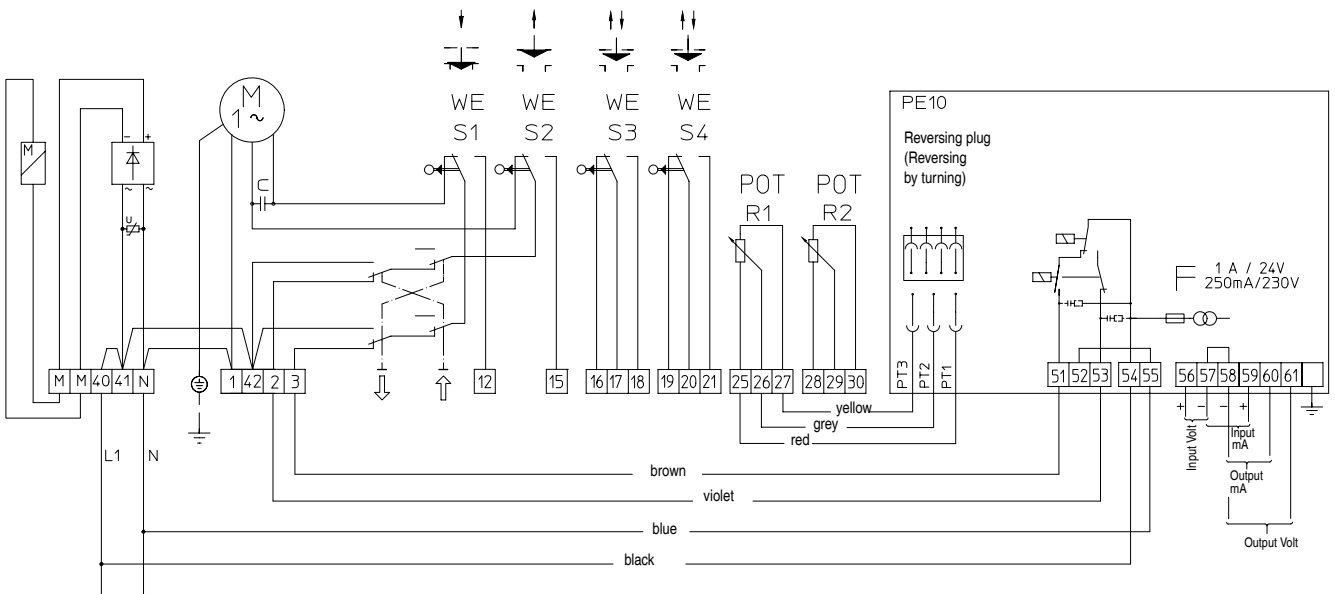
**Magnetic clutch data**

Voltage V	24	230	24	230
Magnet voltage V DC	21,3	204	21,3	204
Power consumption W	15		15	
Switch-on time (ED)	100%		100%	

<b>Additional accessories:</b>	(max. 2) additional switches, max. 250V WS for ohmic load, max. 10A for inductive load, max. 5A for filament lamps, max. 1A
	max. 2 potentiometers with 100 Ohm, 200 Ohm, 500 Ohm, 1 kOhm, 2 kOhm, 5 kOhm, 10 kOhm. - other values on request- max. 1,5 W, max. wiper current 30 mA
	1 positioning electronics „PE10“ (electronic position controller) for analogue input signals 0 (2) - 10 V or 0 (4) - 20 mA; Feedback in same direction



Wiring diagram FR 2.1 and FR 2.2



Wiring diagram FR 2.1 and FR 2.2 with electronic position controller (PE10)



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