

2 position electrical rotary actuator

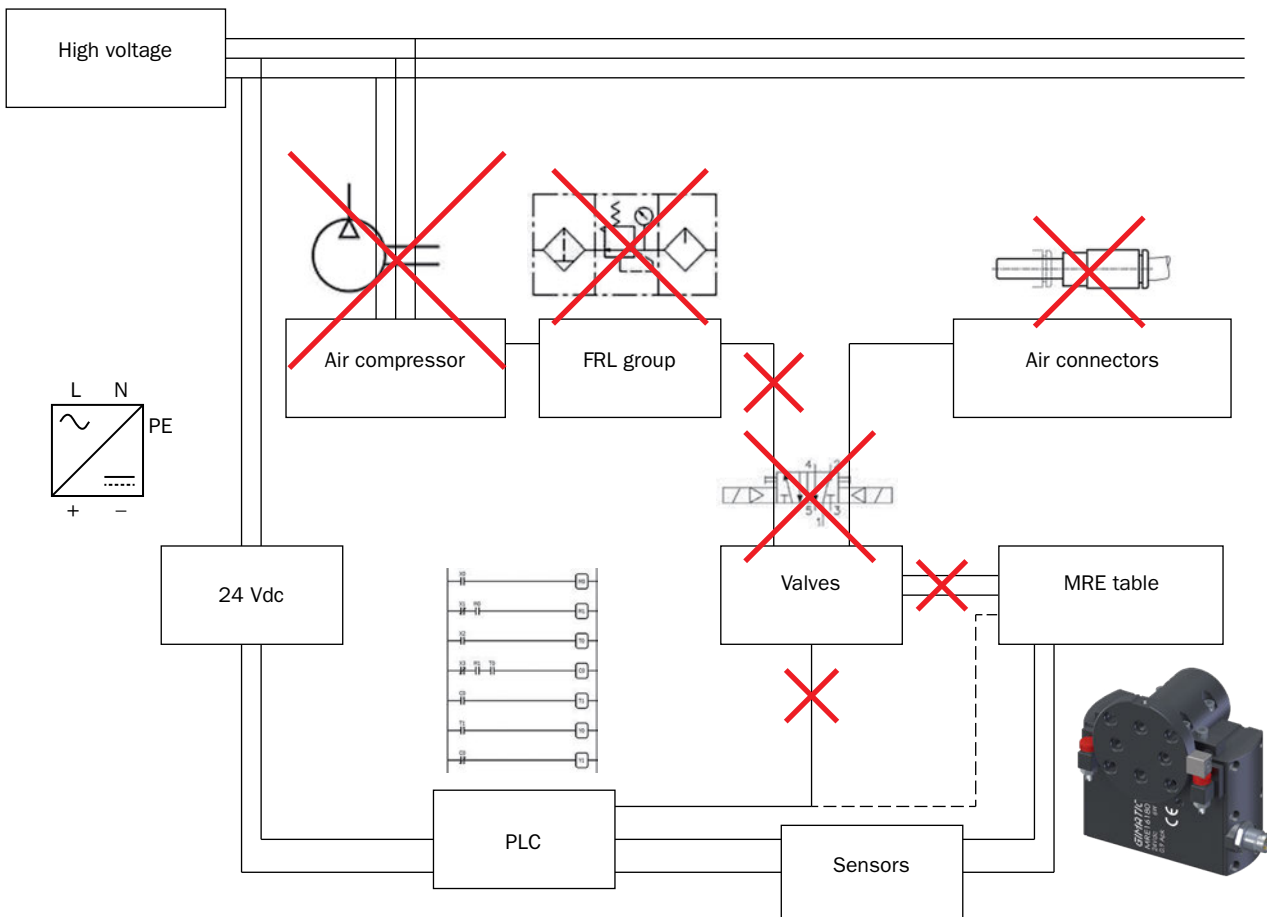
- Suitable for 90° or 180° rotation angle mechanically set.
- Plug & play user friendly gripper.
- No electricity consumption when actuator is in position.
- No programming required.
- Guarantee of position kept in the event of power blackout.
- Long life Brushless motor (Brushless DC).
- Motor drive integrated in the actuator.
- 24 Vdc Low Voltage Power Supply.
- M8x1, 3 poles standard connection.
- Controllable by PLC as a pneumatic valve.
- Ball bearings.
- Fiber-carbon gear reduction.
- 10 million cycle maintenance-free.
- Weight-dimensions-force best trade off.
- Compatible with MPPM electric grippers.
- Optional inductive sensors.

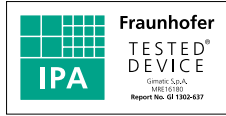


MRE16180

MRE25180

MRE32180





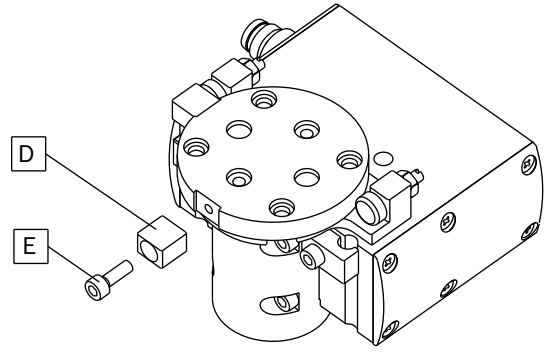
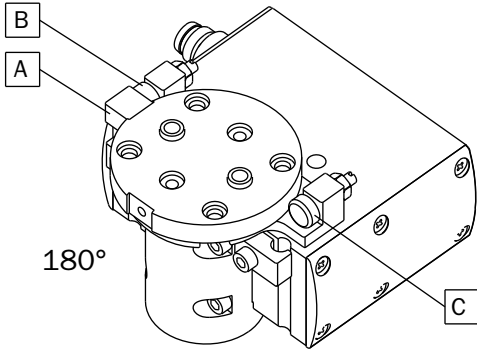
	MRE16180		MRE25180		MRE32180	
Swivelling torque	45 Ncm		80 Ncm		138 Ncm	
Swivelling angle	90°	180°	90°	180°	90°	180°
Frequency at an ambient temperature of 30°C	0.61 Hz	0.60 Hz	1.46 Hz	0.91 Hz	0.83 Hz	0.62 Hz
Swivelling time without load	0.12 s	0.35 s	0.22 s	0.44 s	0.15 s	0.35 s
Working actuator time	0.35 s	0.57 s	0.33 s	0.55 s	0.36 s	0.57 s
Duty cycle at an ambient temperature of 30°C	46%	66%	99%	100%	39%	79%
Power supply	24 Vdc ±10%		24 Vdc ±10%		24 Vdc ±10%	
Peak current	0.9 Apk		1.2 Apk		3.8 Apk	
Nominal current	0.3 Arms		0.4 Arms		0.8 Arms	
Brushless motor power	6 W		11 W		23 W	
Connection	M8 - 3 poles					
Open/closed input signal	PNP open collector					
Repetition accuracy	0.04°		0.04°		0.04°	
Operating temperature	5 ÷ 60°C		5 ÷ 60°C		5 ÷ 60°C	
Environmental Degree	IP54		IP54		IP54	
Noise level	< 70 dB		< 70 dB		< 70 dB	
Mass (motor included)	195 g		400 g		738 g	
Maximum inertial load	6 kgcm ²		15 kgcm ²		20 kgcm ²	
ISO14644-1 Clean Room Certification	CLASS 6		-		-	
Reference standards	EN 61000-6-2 + EC + IS1; EN 61000-6-3 + A1					
Technology and options	Page 594 - 595					

Rotation angle

MRE electrical rotary actuators are able to swivel to 90° or 180°.

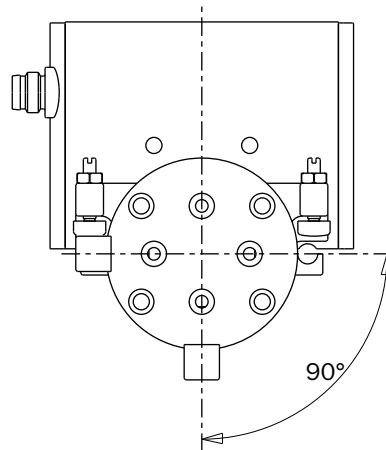
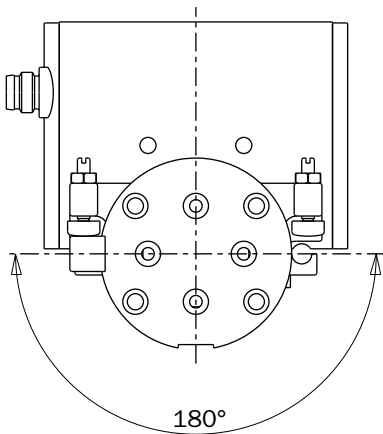
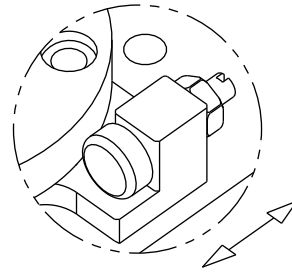
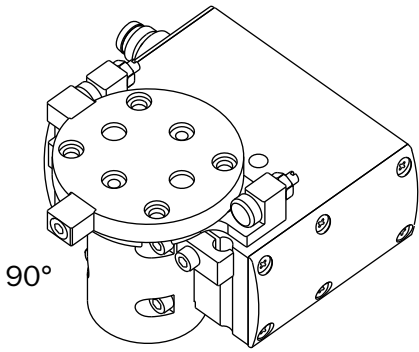
The fixed block (A) gives the 0° position against the mechanical stopper (B) and the 180° position against the mechanical stopper (C), while the moving block (D) gives 90° position against the mechanical stopper (C).

Extreme positions can be adjusted by +/- 4° on each side, by acting on the mechanical stoppers.



1 2

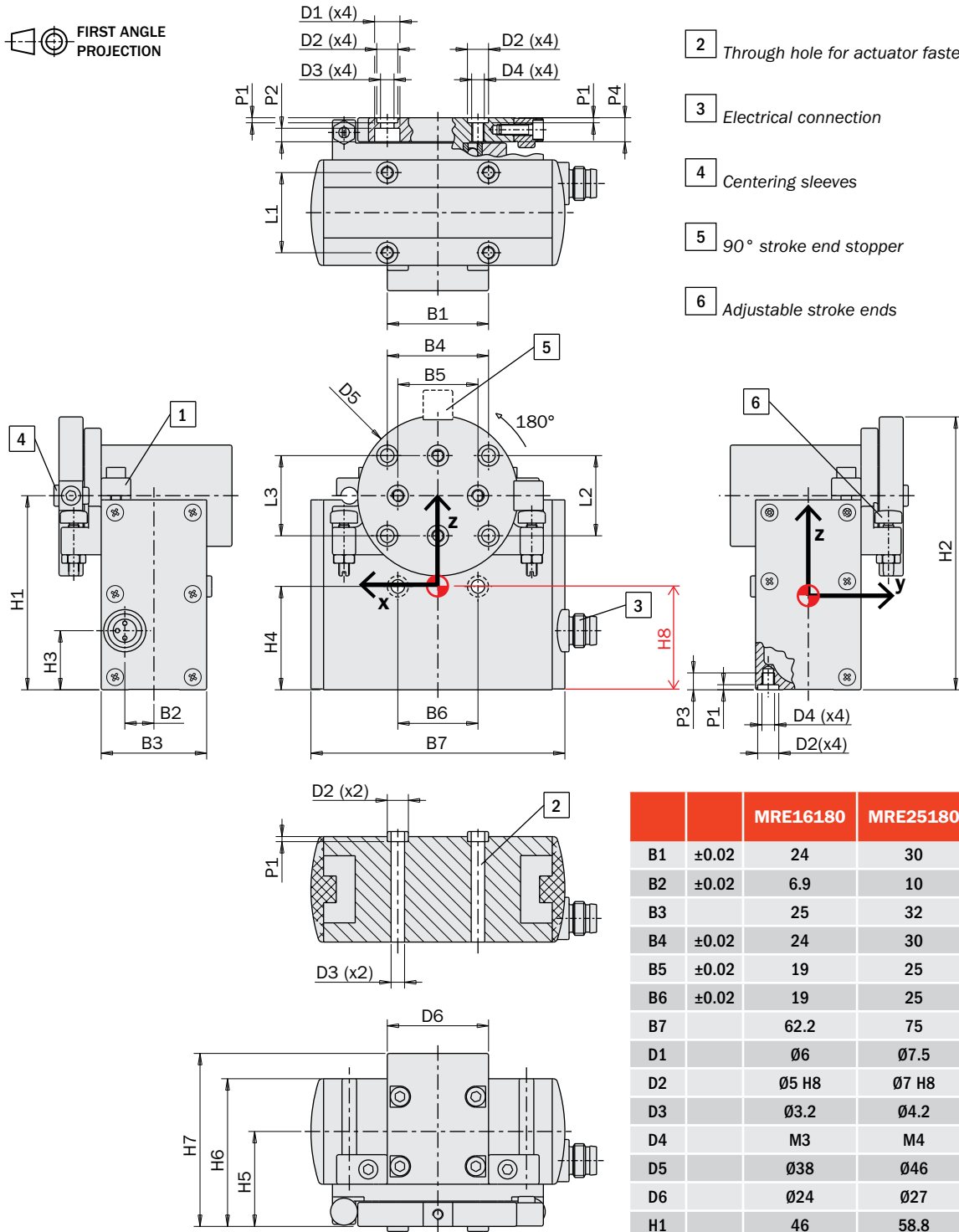
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The moment of inertia of the load must be lower than 6/15/20 kgcm². Excessive kinetic energy can damage the table and compromise its operation.

Dimensions (mm)

FIRST ANGLE PROJECTION



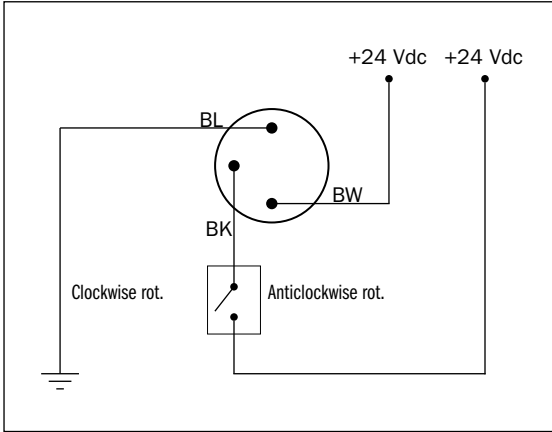
- 1 Inductive sensor bracket
- 2 Through hole for actuator fastening
- 3 Electrical connection
- 4 Centering sleeves
- 5 90° stroke end stopper
- 6 Adjustable stroke ends

		MRE16180	MRE25180	MRE32180
B1	±0.02	24	30	36
B2	±0.02	6.9	10	11
B3		25	32	35
B4	±0.02	24	30	36
B5	±0.02	19	25	30
B6	±0.02	19	25	30
B7		62.2	75	89
D1		Ø6	Ø7.5	Ø9
D2		Ø5 H8	Ø7 H8	Ø7 H8
D3		Ø3.2	Ø4.2	Ø5.2
D4		M3	M4	M5
D5		Ø38	Ø46	Ø55
D6		Ø24	Ø27	Ø31
H1		46	58.8	67.5
H2		65	81.8	95
H3		14	17	19
H4	±0.02	24.5	32	38
H5		22.5	28.5	33
H6		35	43.5	50.5
H7		41	52	60
H8		31.5	41	48
L1	±0.02	19	24	26
L2	±0.02	19	24	26
L3	±0.02	19	25	30
P1		1.2	1.5	1.5
P2	+0.1	3.2	4.1	5
P3		4	6	8
P4		5.7	7.2	8.7

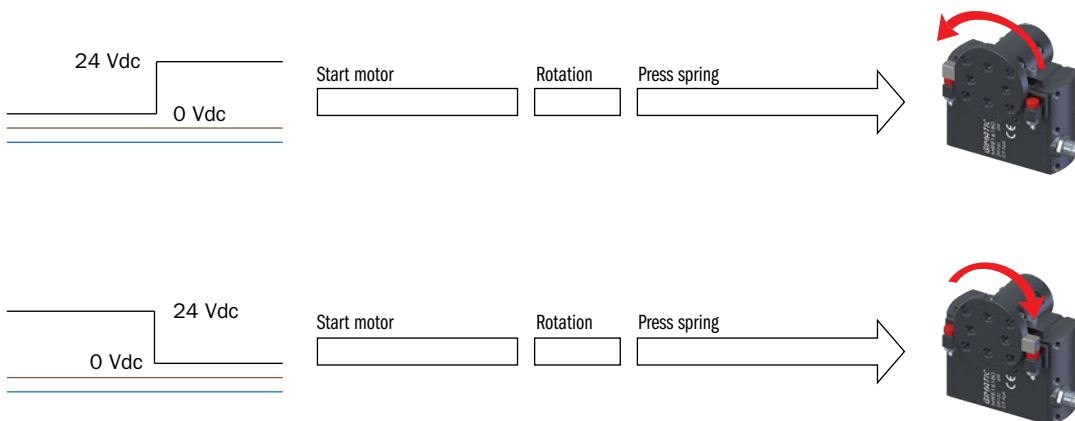
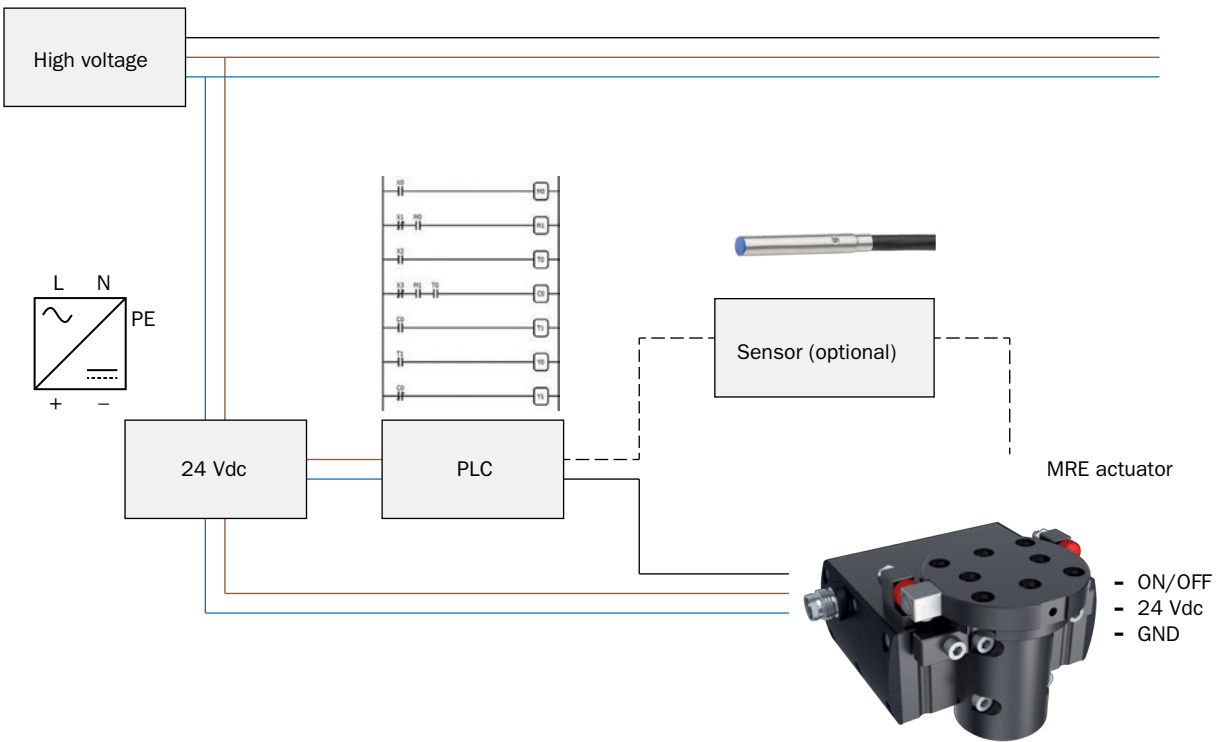
Electrical connection

The rotary actuator is equipped with a 3-pole M8 connector for the 24Vdc power supply and the swiveling signal.

No further electronics is necessary to drive the actuator.



Optional M8x1 standard female connector.
Gimatic code: CFGM800325P / CFGM890325P.



Fitting the rotary actuator

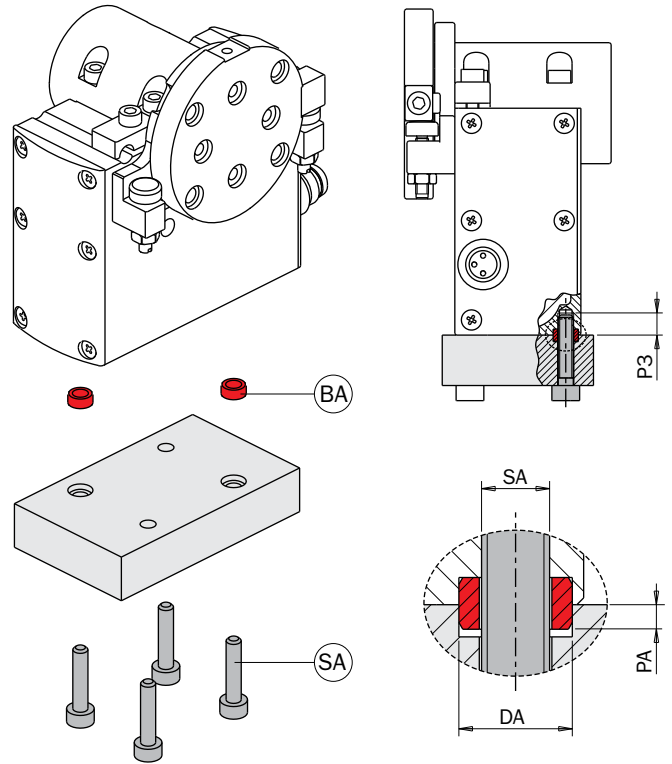
The rotary actuator can be fitted in a fixed position or to moving parts.

When on a moving part, you must pay attention to the inertial force to which the gripper and its load are subjected.

- To fasten the actuator by its base, use four through-screws (SA) through the mounting plate and screw it to the unit.
- To fasten the actuator by its side, use two screws (SB) in the through-holes (D3).

In every case, use the two centering sleeves (BA) supplied in the package. Follow the dimensions (DA and PA) given in the table for their seats in the mounting plate.

	MRE16180	MRE25180	MRE32180
B4	25	32	35
D3	Ø3.2	Ø4.2	Ø5.2
DA	Ø5 h7	Ø7 h7	Ø7 h7
P3	4	6	8
PA	1.2	1.5	1.5
SA	M3	M4	M5
SB	M3	M4	M5



2 centering rings (BA) for the disc and 2 centering sleeves (BA) for the body are supplied in the package.

