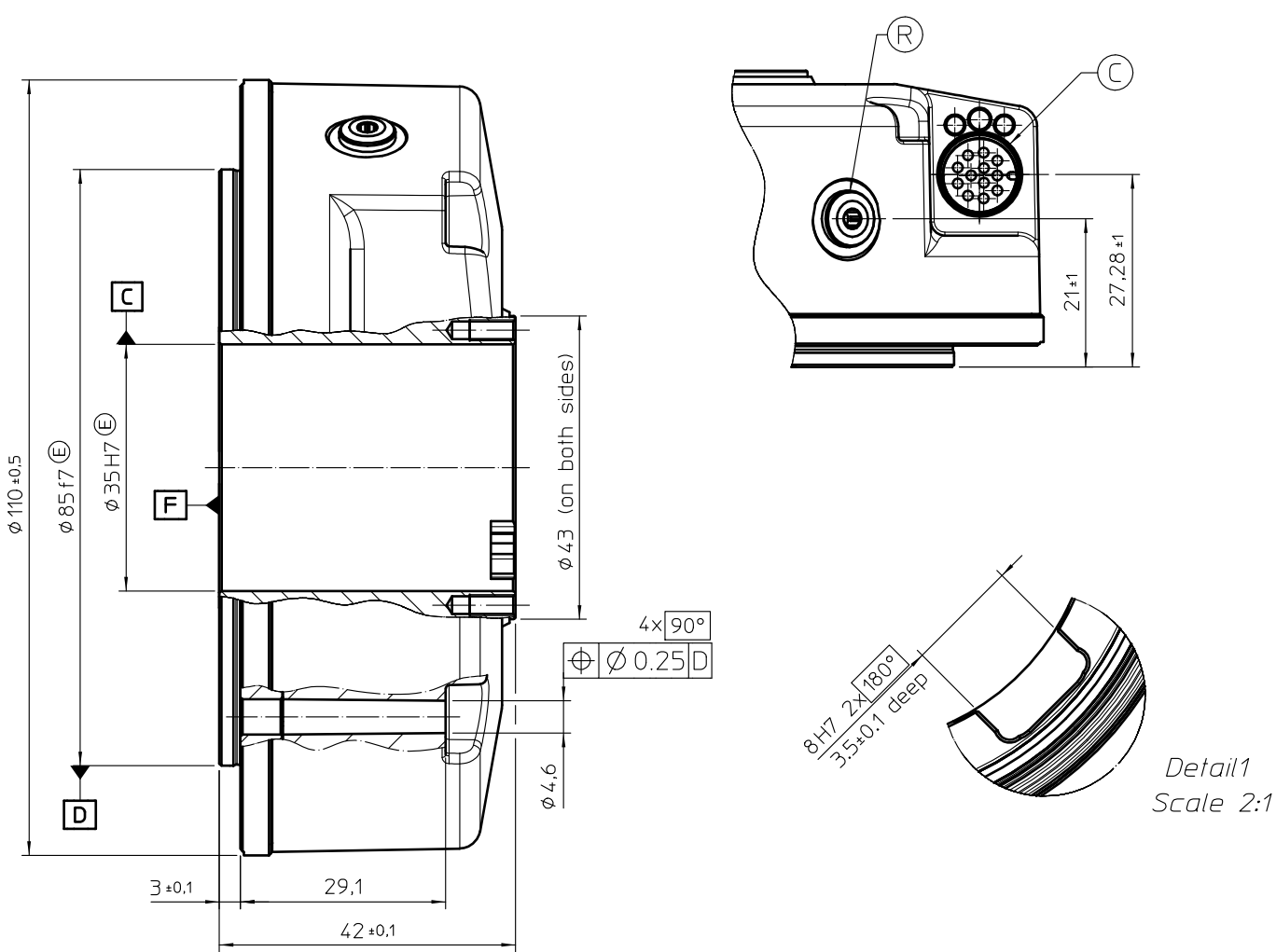
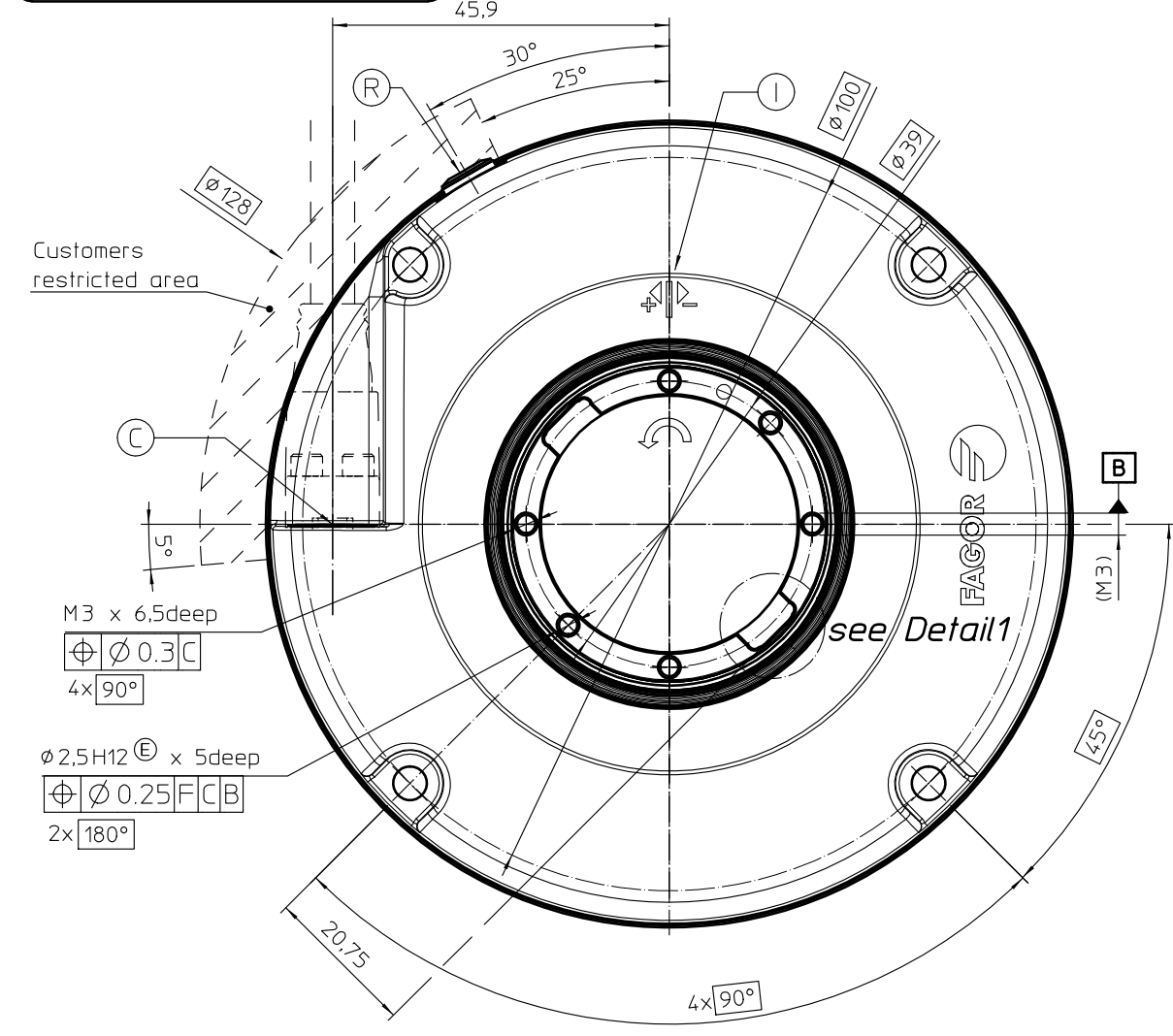
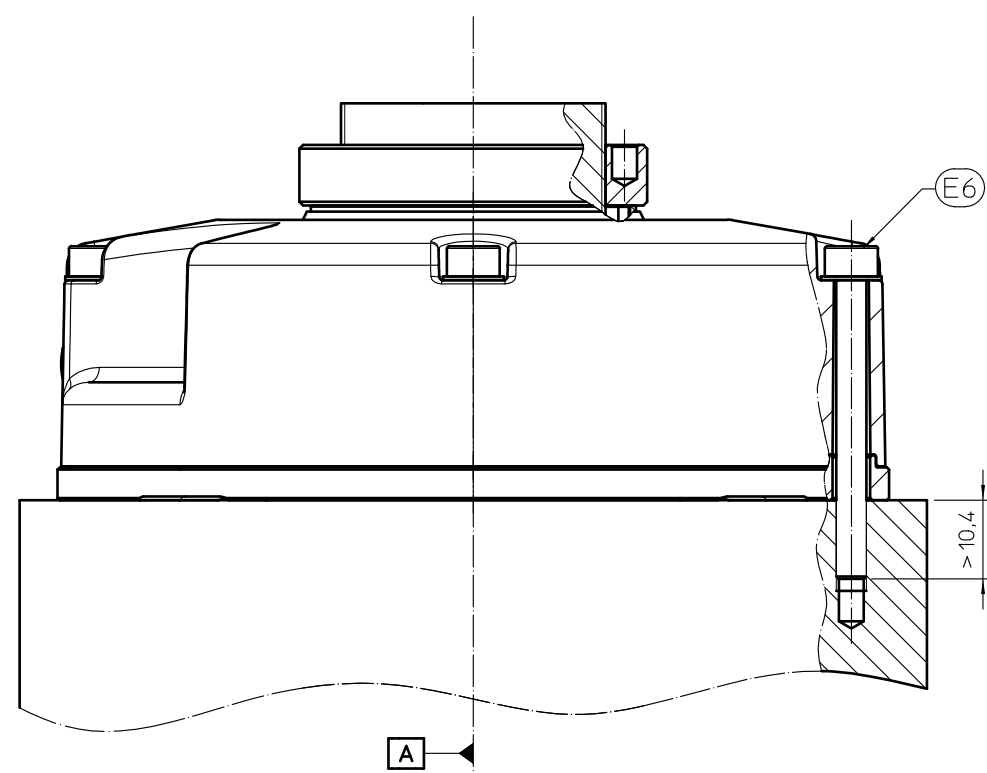
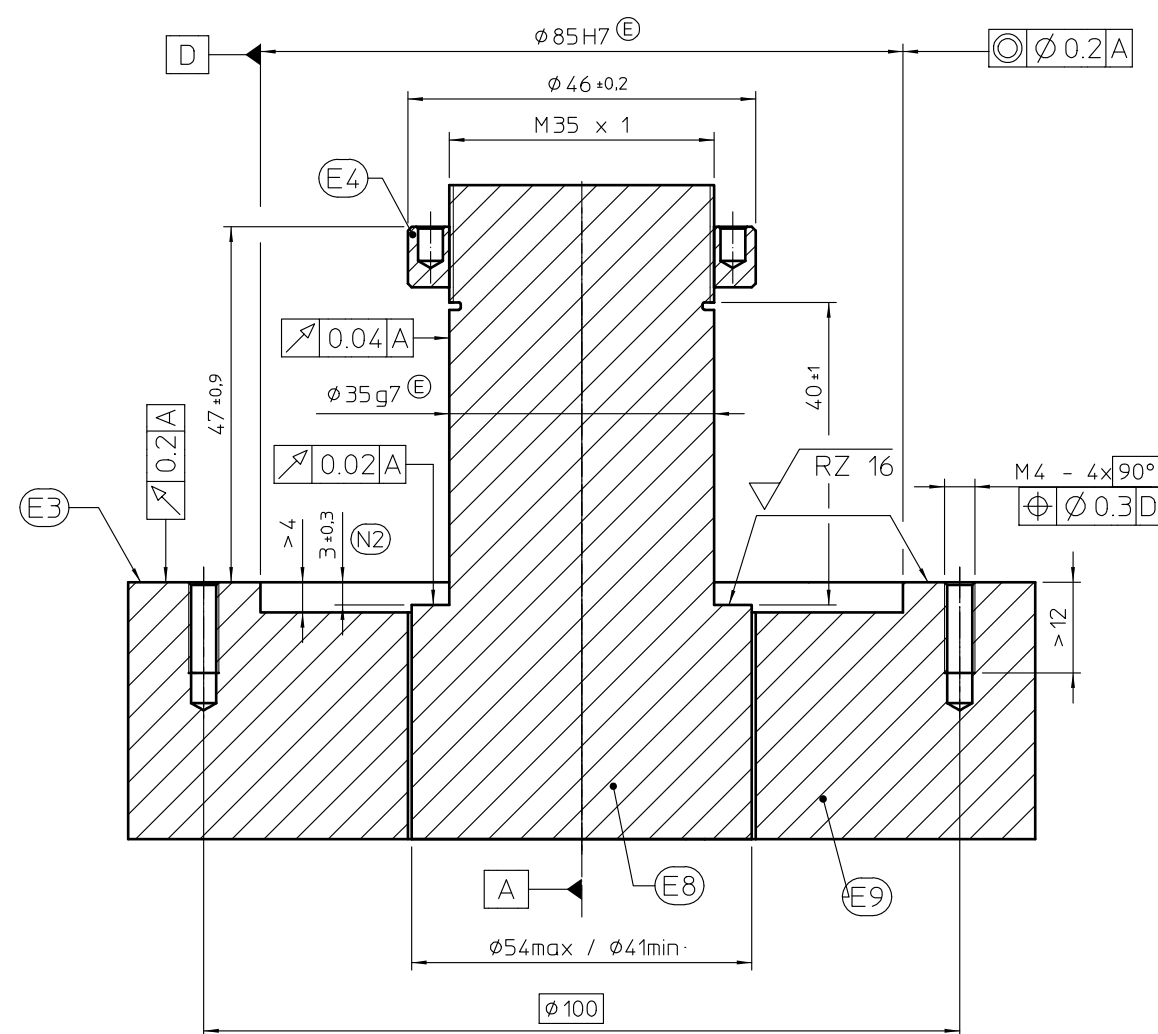


DIMENSIONS OF THE ENCODER

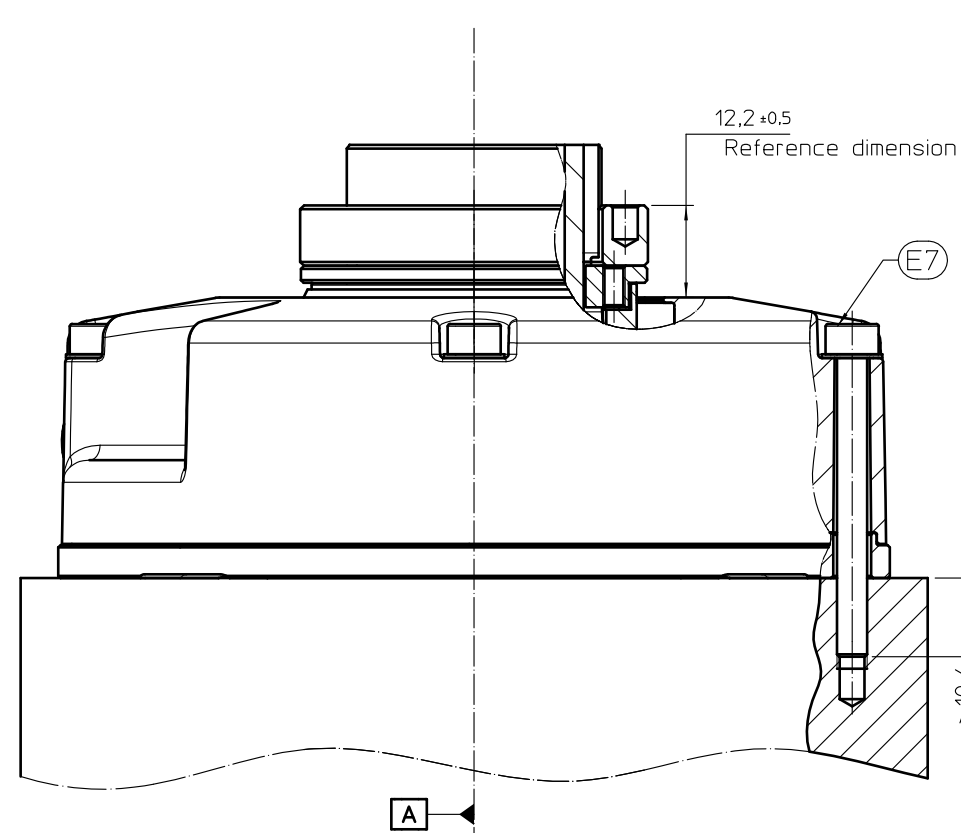
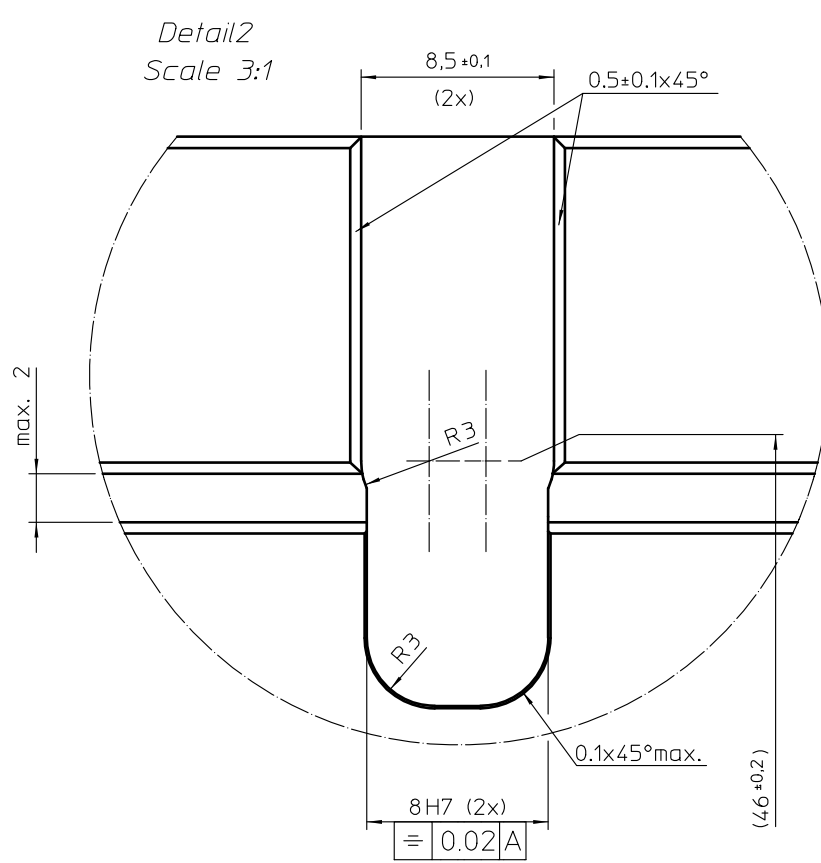
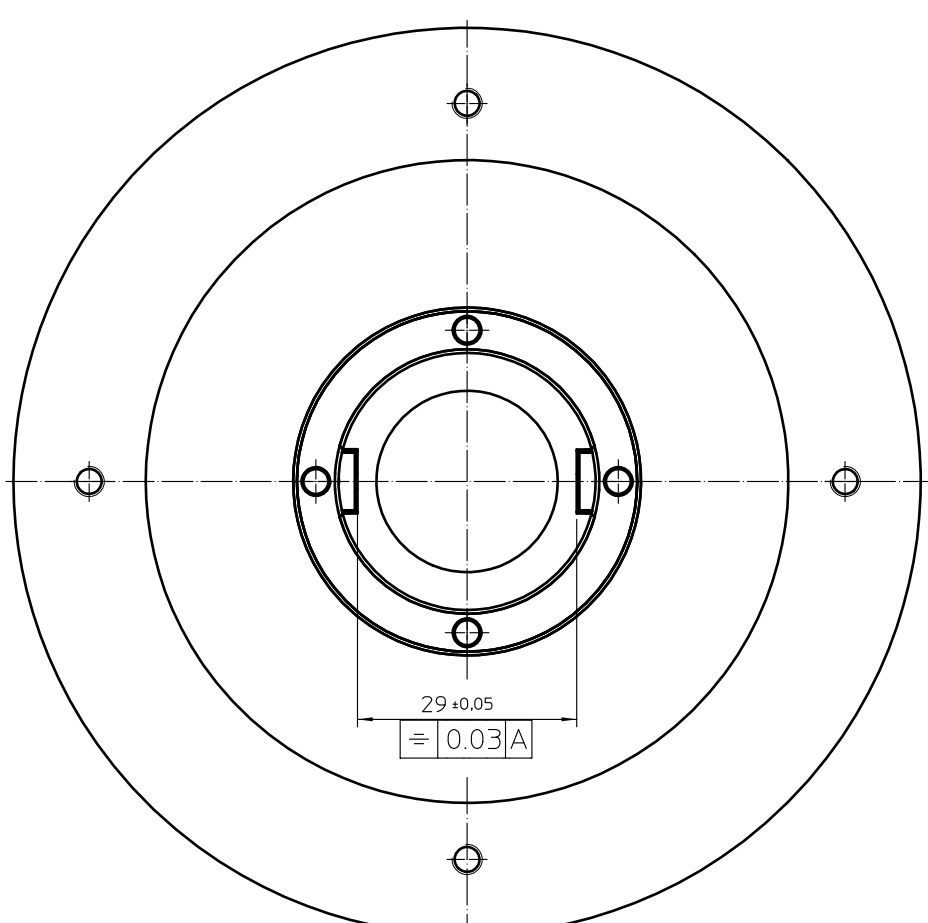
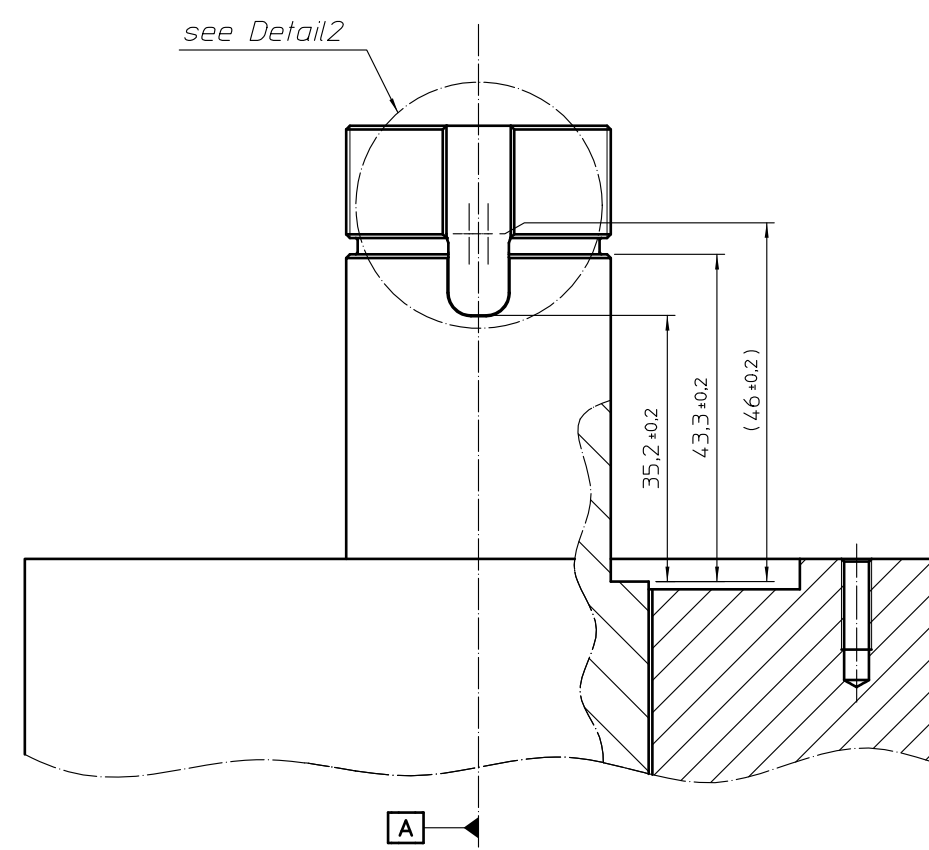
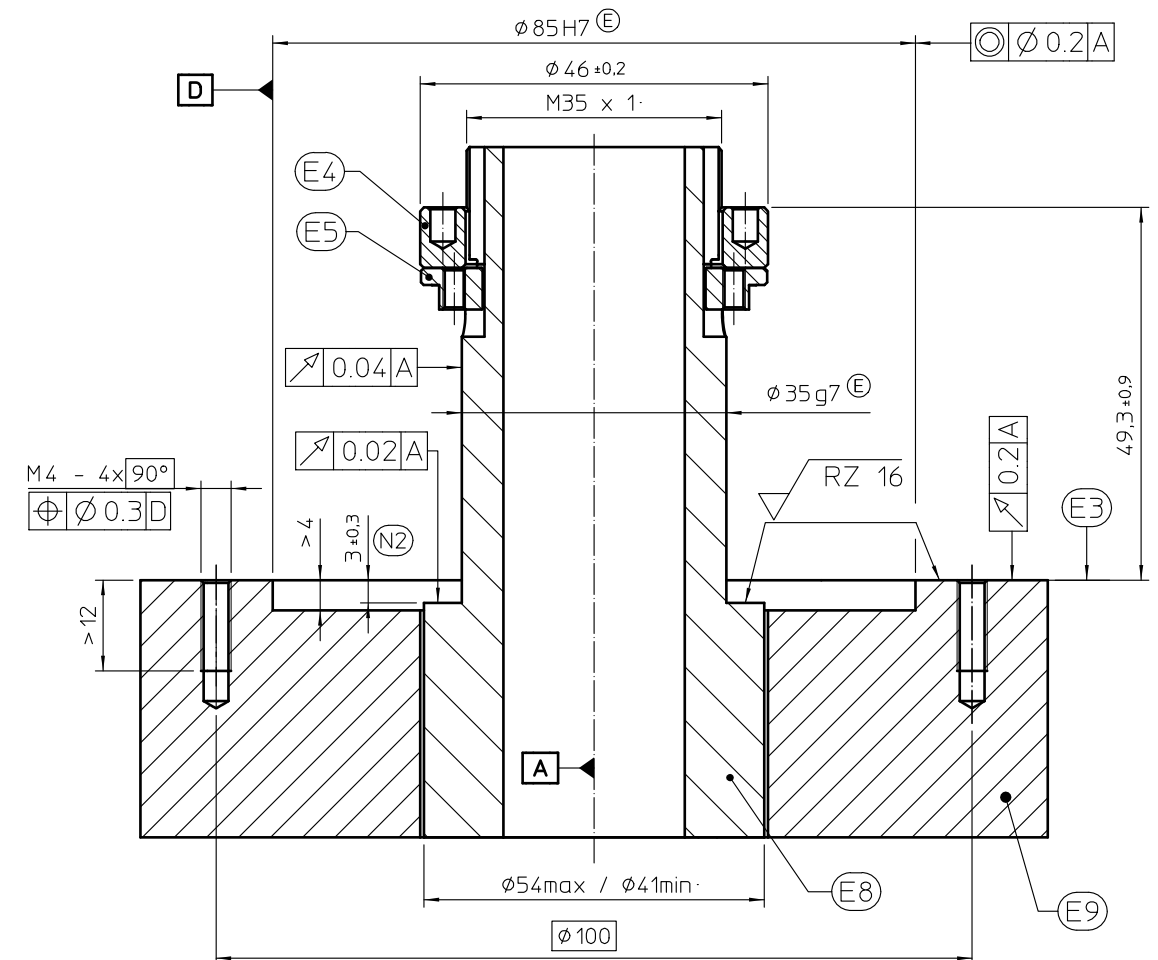


(MOUNTING OPTION: SHAFT COUPLING) (M) (N1)

WITHOUT MECHANICAL FAULT EXCLUSION

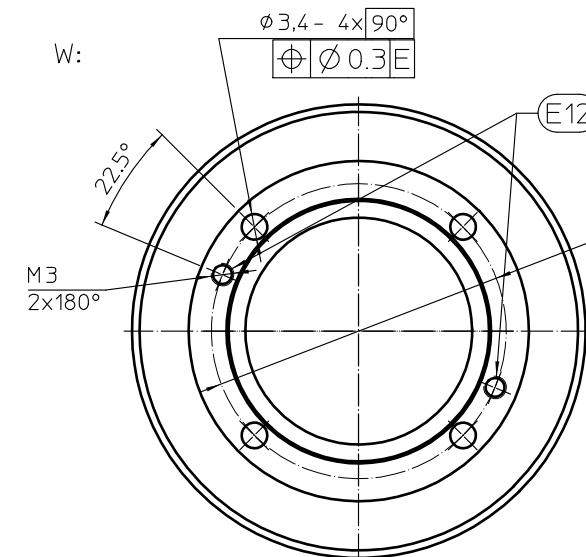
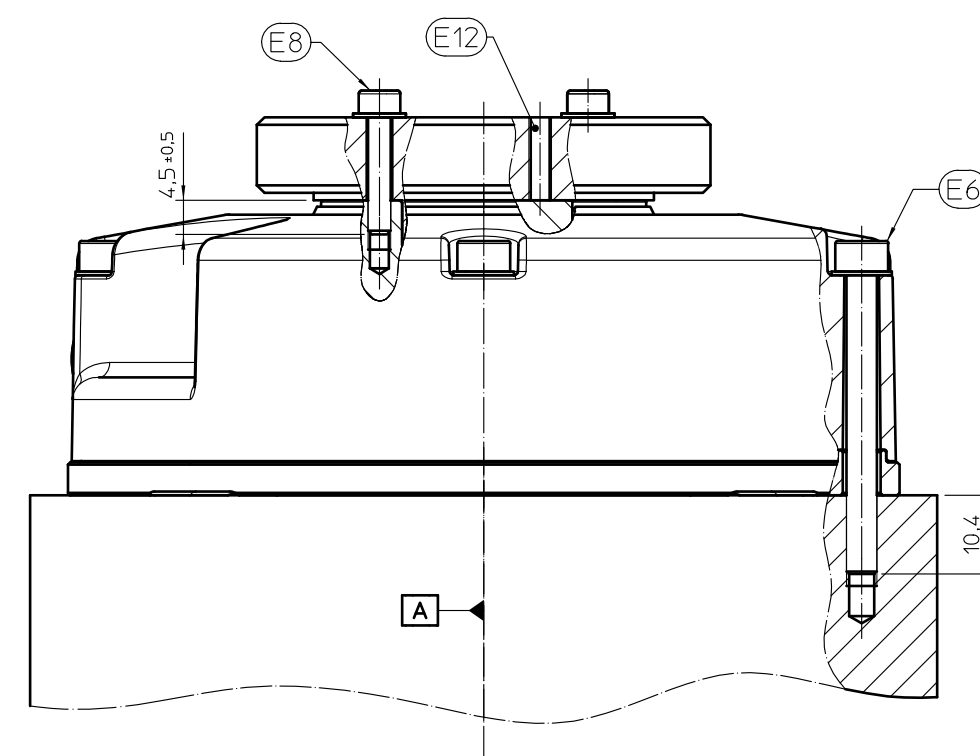
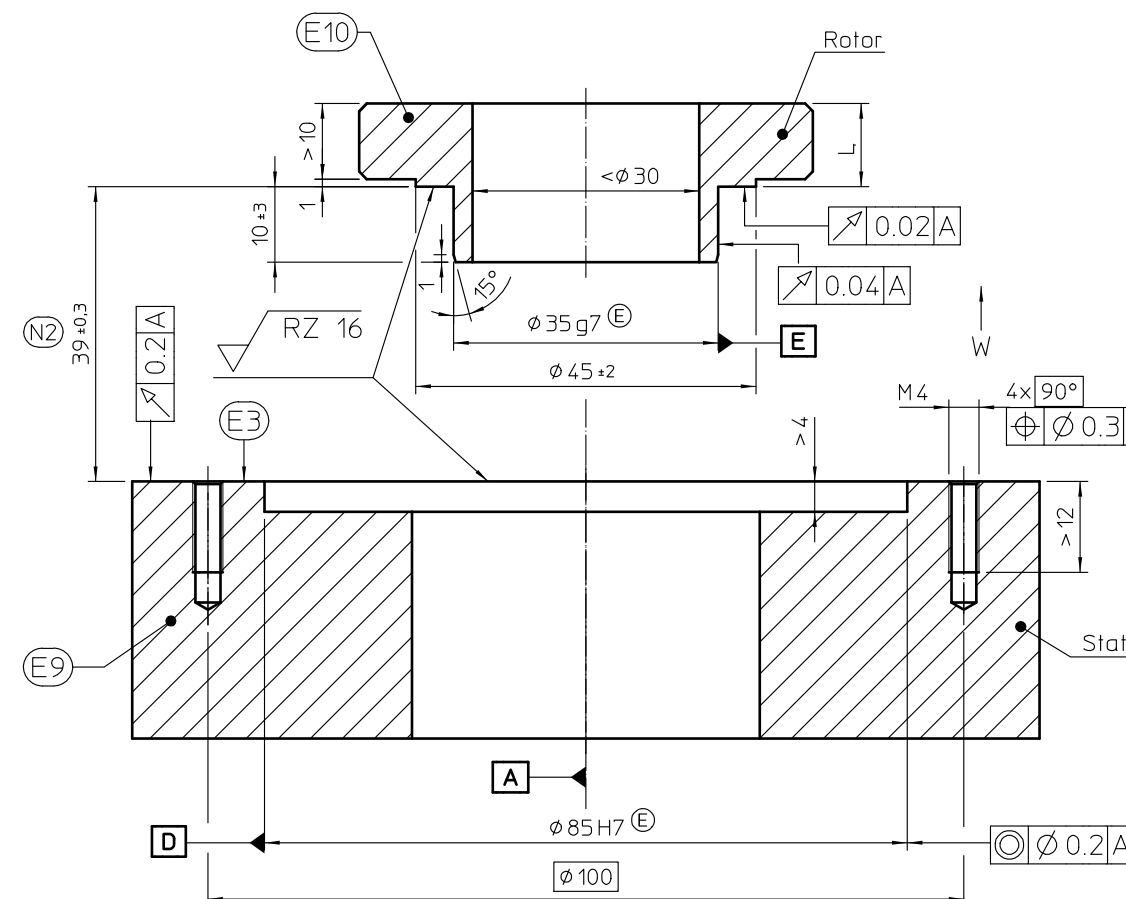


WITH MECHANICAL FAULT EXCLUSION

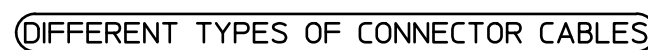
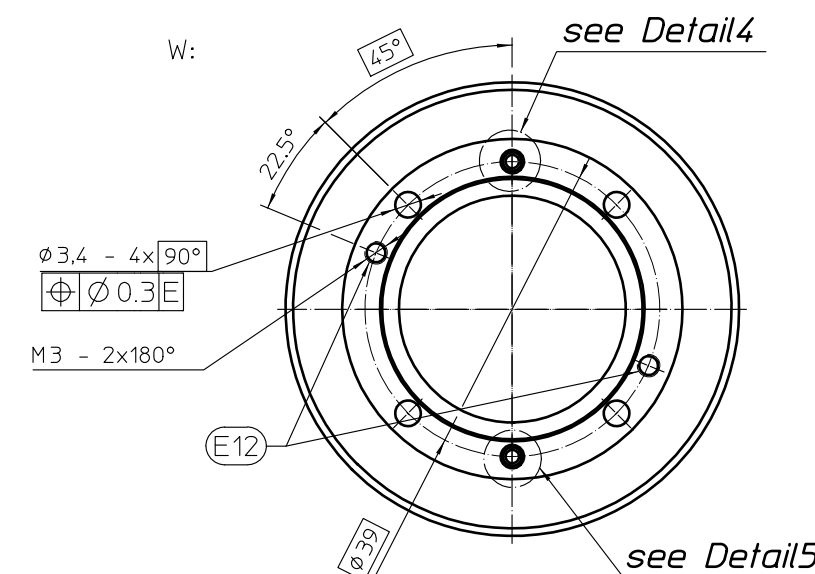
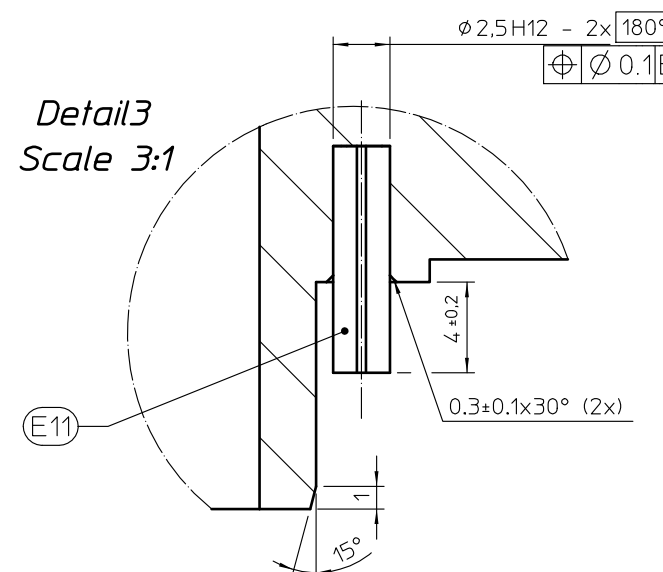
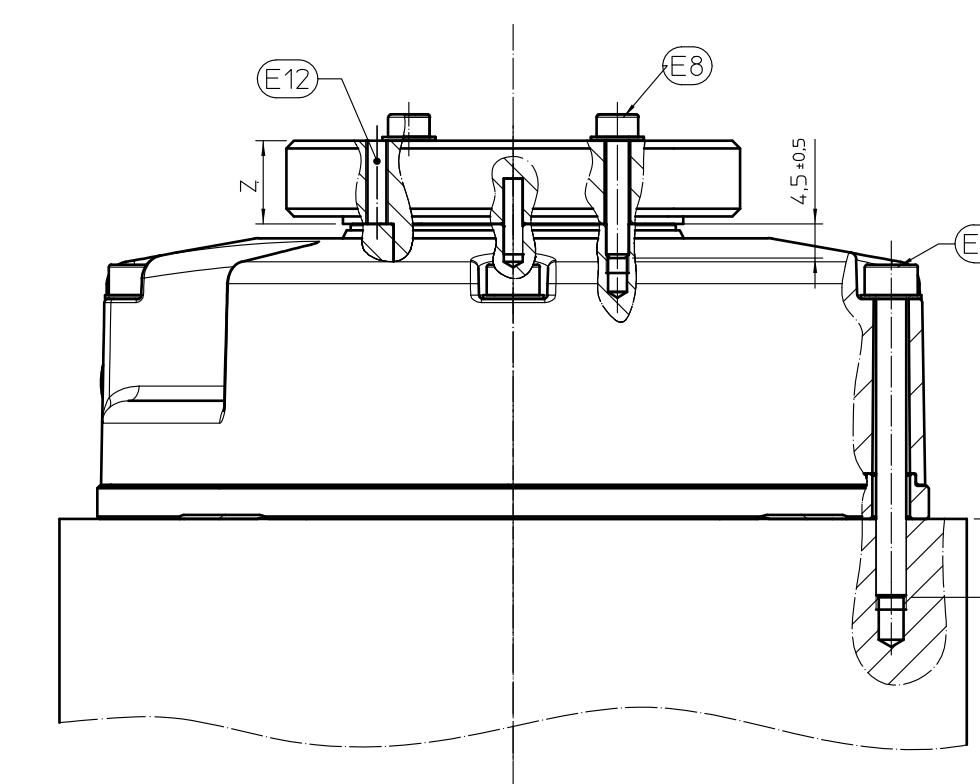
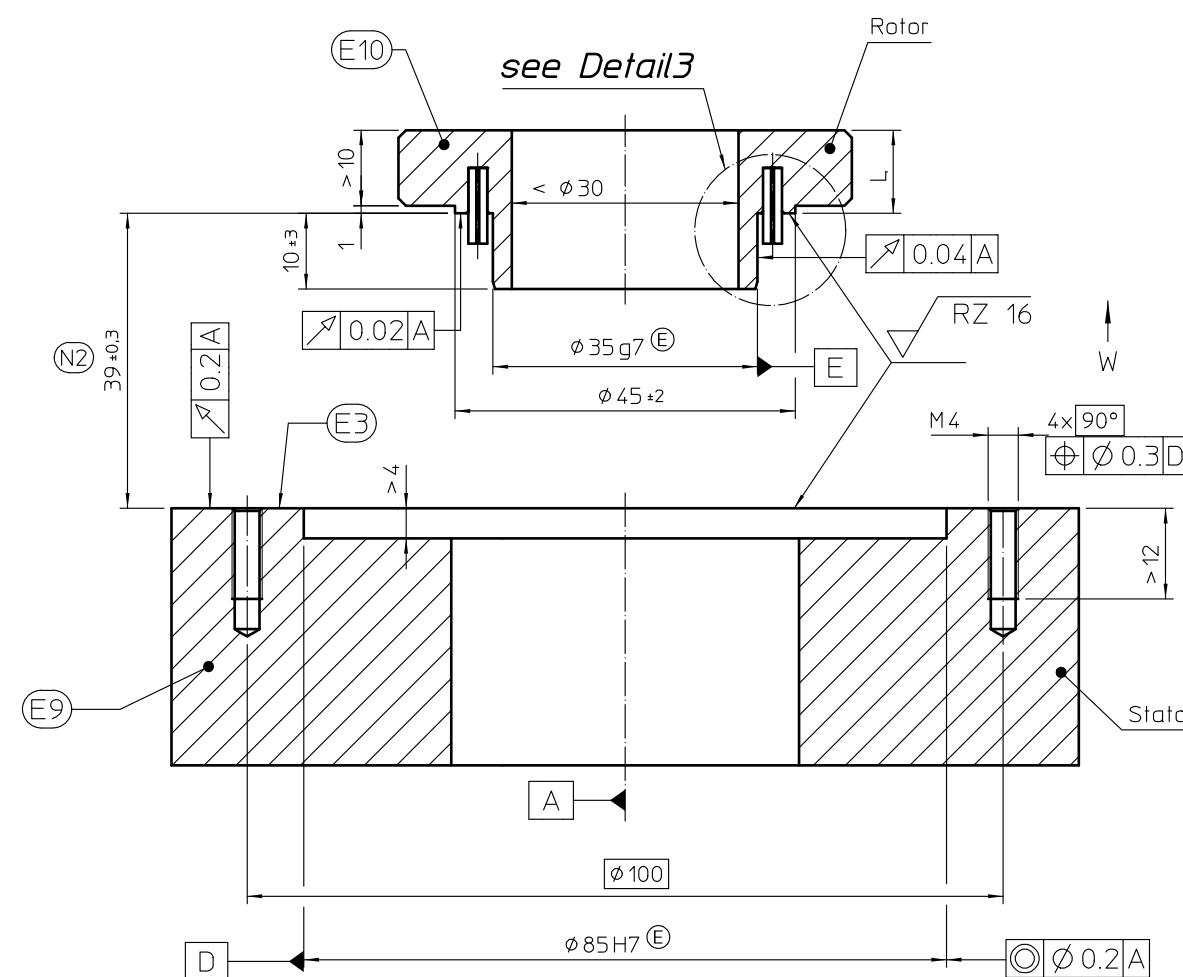


(ALTERNATIVE MOUNTING OPTION: FRONT END SHAFT COUPLING) (M) (N1)

WITHOUT MECHANICAL FAULT EXCLUSION



WITH MECHANICAL FAULT EXCLUSION



(E1) - Three different types of cables:

- Cable Ø6mm.
- Cable Ø4mm.
- Cable Ø10.5mm (with protection).

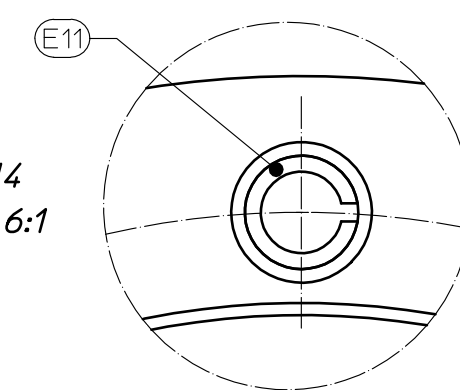
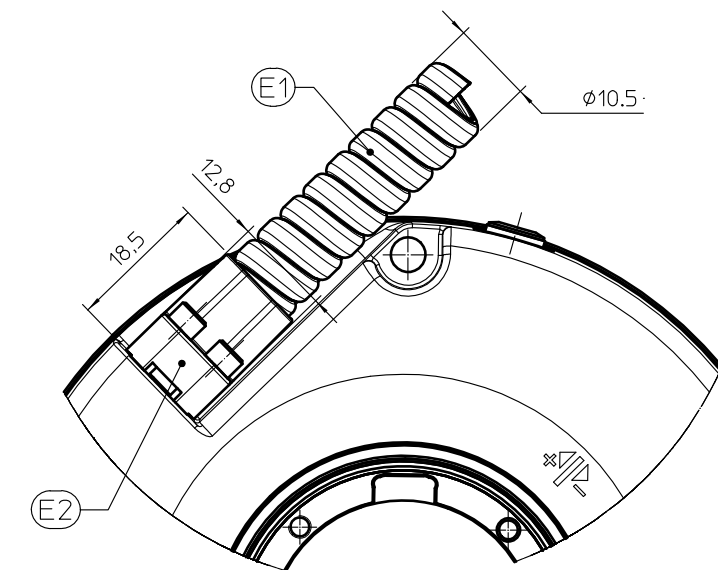
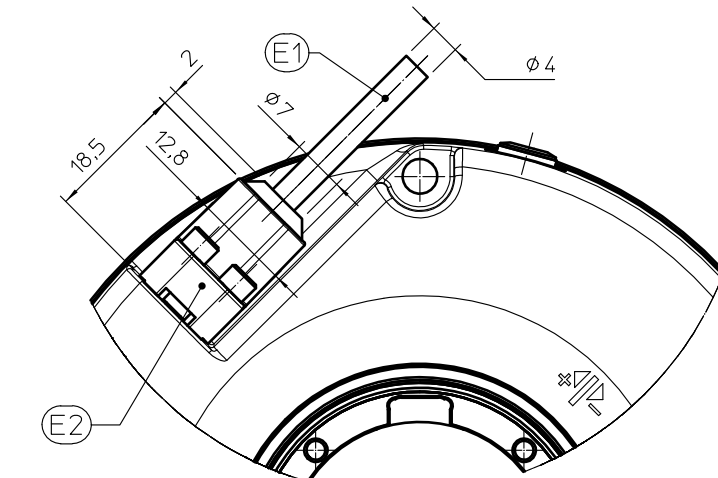
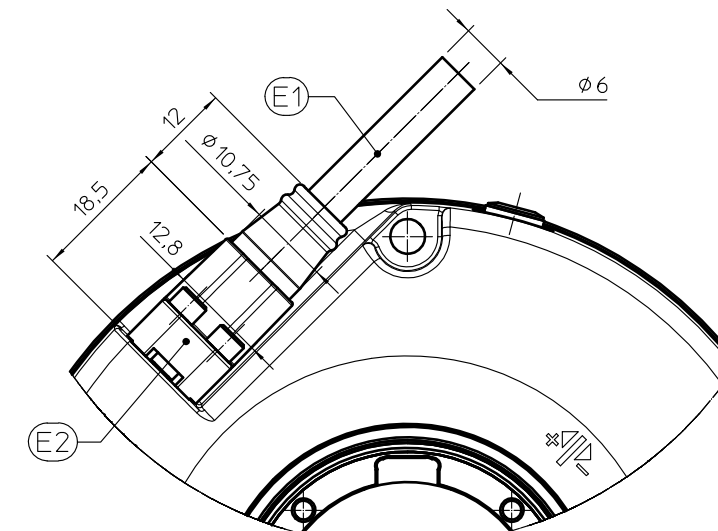
tend radius for flexible configuration for:

- Cable $\varnothing 6\text{mm}$: $R > 60\text{mm}$.
- Cable $\varnothing 4\text{mm}$: $R > 40\text{mm}$.
- Cable $\varnothing 10,5\text{mm}$: $R > 60\text{mm}$.

end radius for rigid configuration for:

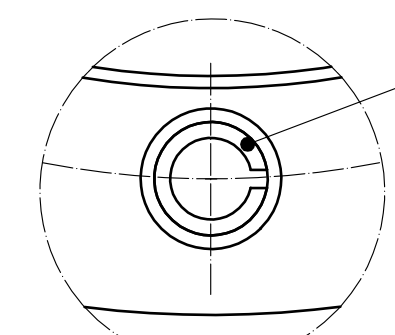
- Cable $\varnothing 6\text{mm}$: $R > 24\text{mm}$.
- Cable $\varnothing 4\text{mm}$: $R > 16\text{mm}$.
- Cable $\varnothing 10.5\text{mm}$: $R > 35\text{mm}$.

Ⓔ = Cable support.



Detail4
Scale 6:1

BOTH SPRING-TYPE STRAIGHT PINS:
Mounting direction as shown or both spring-type straight pins rotated by 180° (mount slot in tangential direction), spring-type straight pin must be inserted burr-free a potential chipping has to be removed.



Detail5
Scale 6:1

(ABBREVIATIONS)

- (A) = Bearing of mating shaft.
- (M) = Assembly sizing set by customer.
- (R) = Compressed air intake.
- (C) = Connector.
- (I) = 0° position index ±5°.
- ↺ = Direction of shaft rotating for output signals is described in interface description.
- (N0) = Mounting surfaces and threads must be clean and free of grease.
- (N2) = Tolerance specification includes mounting tolerances and thermal expansion. No dynamic movement permitted.
- Pa = Tightening torque.
- (E3) = Mounting surface.
- (E4) = ID: 82620153
Tightening torque of rig nut: 30Nm±3Nm
Materially bonding anti-rotation lock necessary
fix mating shaft when mounted.

- Ⓔ = ID: 82620758
Mechanical fault exclusion: washer using with ring nut (E4) necessary.
- Ⓔ6 = Hexagon socketed head cap screws M4; Pa-2.5x0.15Nm
Screw: DIN912-M4x0.1 (4x)
Screw property class: INOX A2
Whosher: DIN433-4-INOX A2
Materially bonding anti-rotation lock necessary.
- Ⓔ7 = Hexagon socketed head cap screws M4; Pa-2.9x0.15Nm
Screw: DIN912-M4x0.1 (8x)
Screw property class: 8.8
Whosher: DIN433-4-200HV
Materially bonding anti-rotation lock necessary.
- Ⓔ8 = Hexagon socketed head cap screws M3; Pa-1.25x0.1Nm
Screw: DIN912-M3x1.4 (5x)
Screw property class: 8.8
Whosher: DIN433-3-200HV
Materially bonding anti-rotation lock necessary.
- Ⓔ11 = 2x spring type straight pin for mechanical fault exclusion necessary DIN4818-2.5x10.
Mounting sequence:
 1. Mount spring-type straight pins in correct angular position (see detail 4 and 5) in part E8.
 2. Mount part E8 using E7 screws.
 3. Pay attention to reference dimension Z:
L-Z=0.15
- Ⓔ12 = Using spring-type straight pins removing threads (M3) necessary, otherwise optional.

	ⒺⒻ ⒺⒼ - Mating shaft	ⒺⒹ - Mating stator
Material	Ferrous materials (steel/cast iron)	
Tensile strength	$R_m > 600 \text{ N/mm}^2$	$> 250 \text{ N/mm}^2$
Shear strength	$T_B > 390 \text{ N/mm}^2$	$> 290 \text{ N/mm}^2$
Interface pressure	$p_d > 660 \text{ N/mm}^2$	$> 275 \text{ N/mm}^2$
Modulus of elasticity	$E = 110000 \text{ N/mm}^2 < E < 215000 \text{ N/mm}^2$	
Coefficient of expansion (at 20°C)	$10 \times 10^{-6} \text{ K}^{-1} < \alpha < 17 \times 10^{-6} \text{ K}^{-1}$	
Mounting temperature	All information regarding screw connections is based on a mounting temperature of 15°C to 35°C	

[illegible]