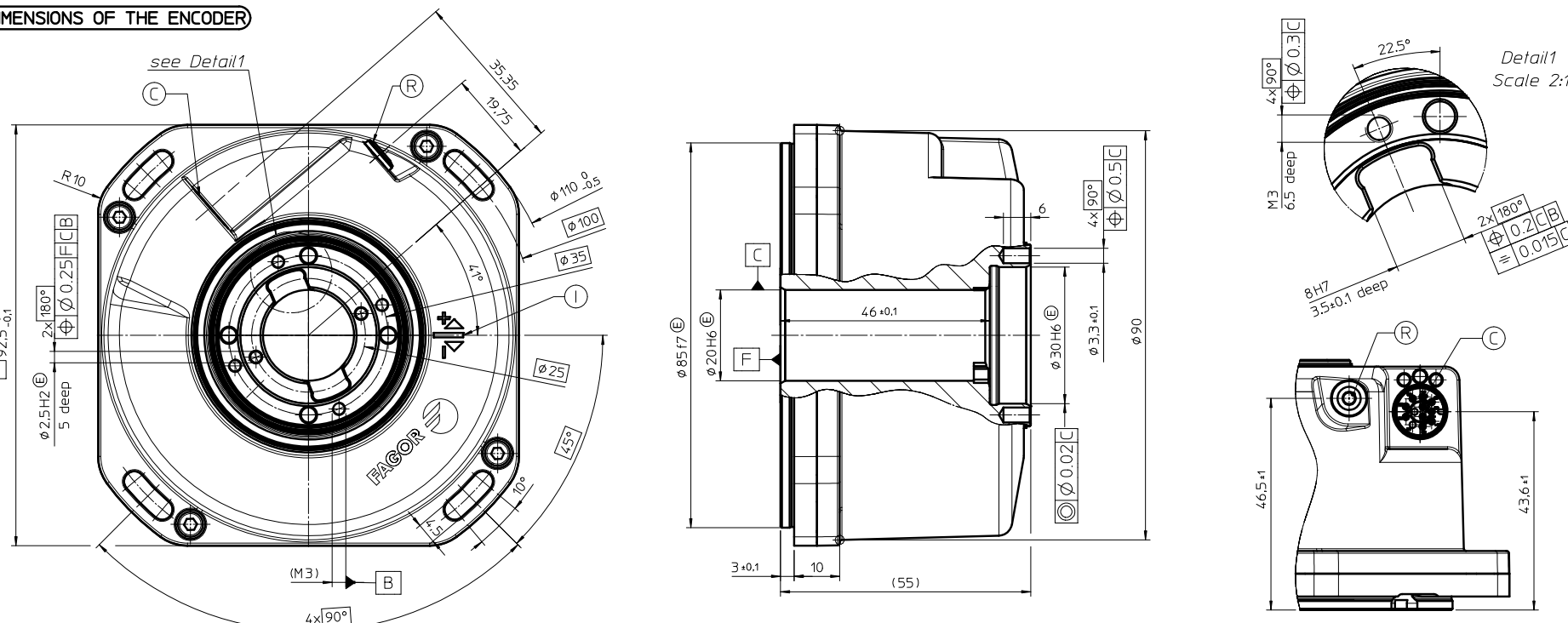
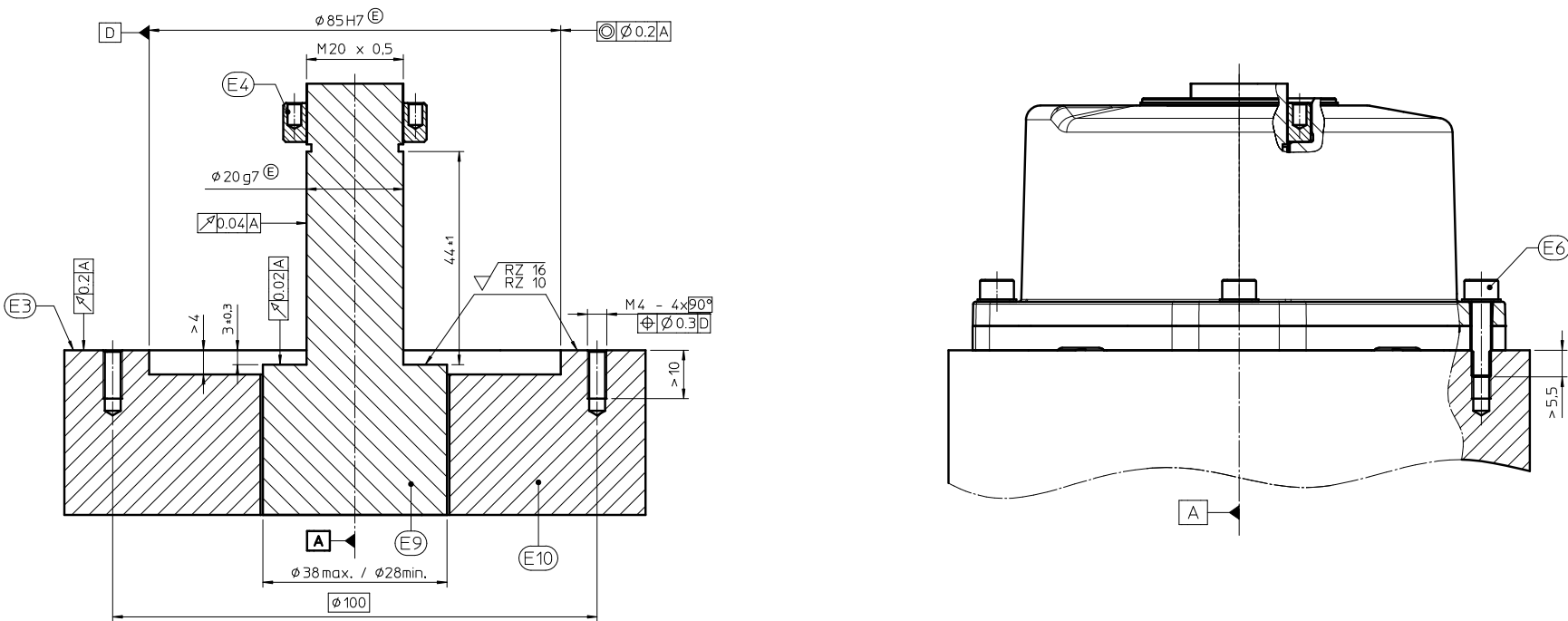


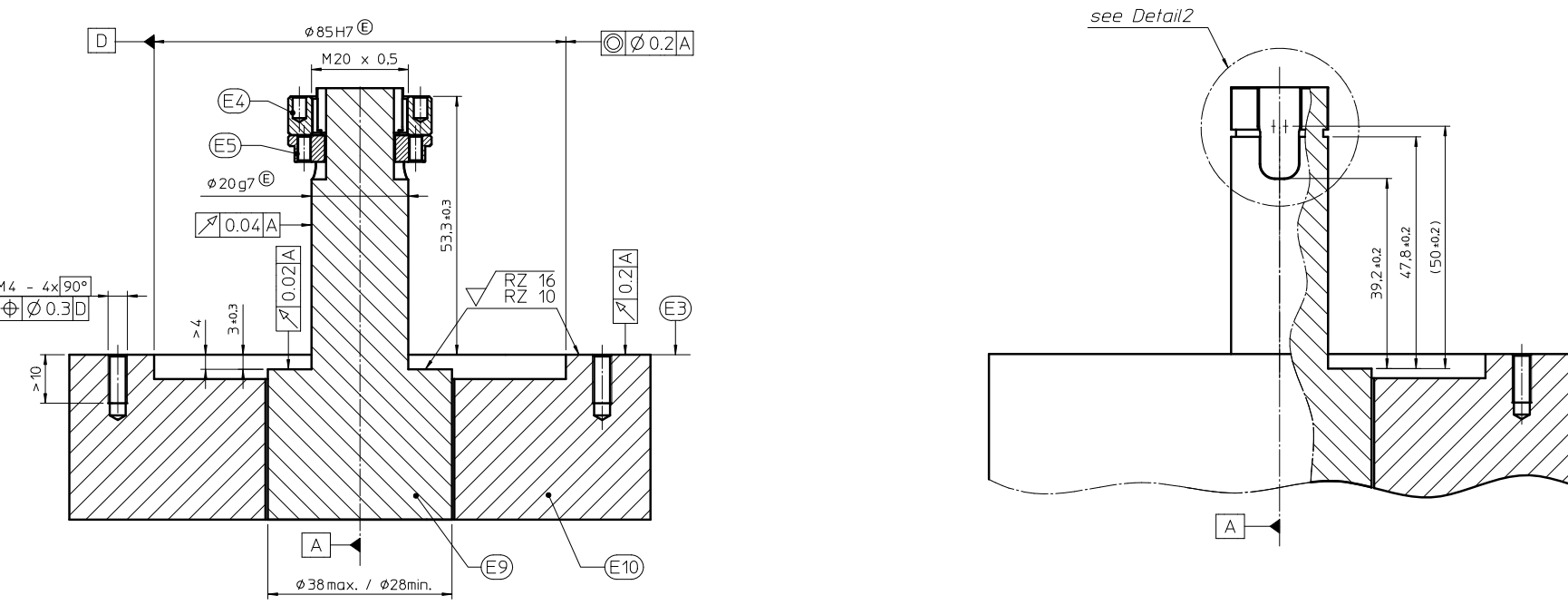
DIMENSIONS OF THE ENCODER



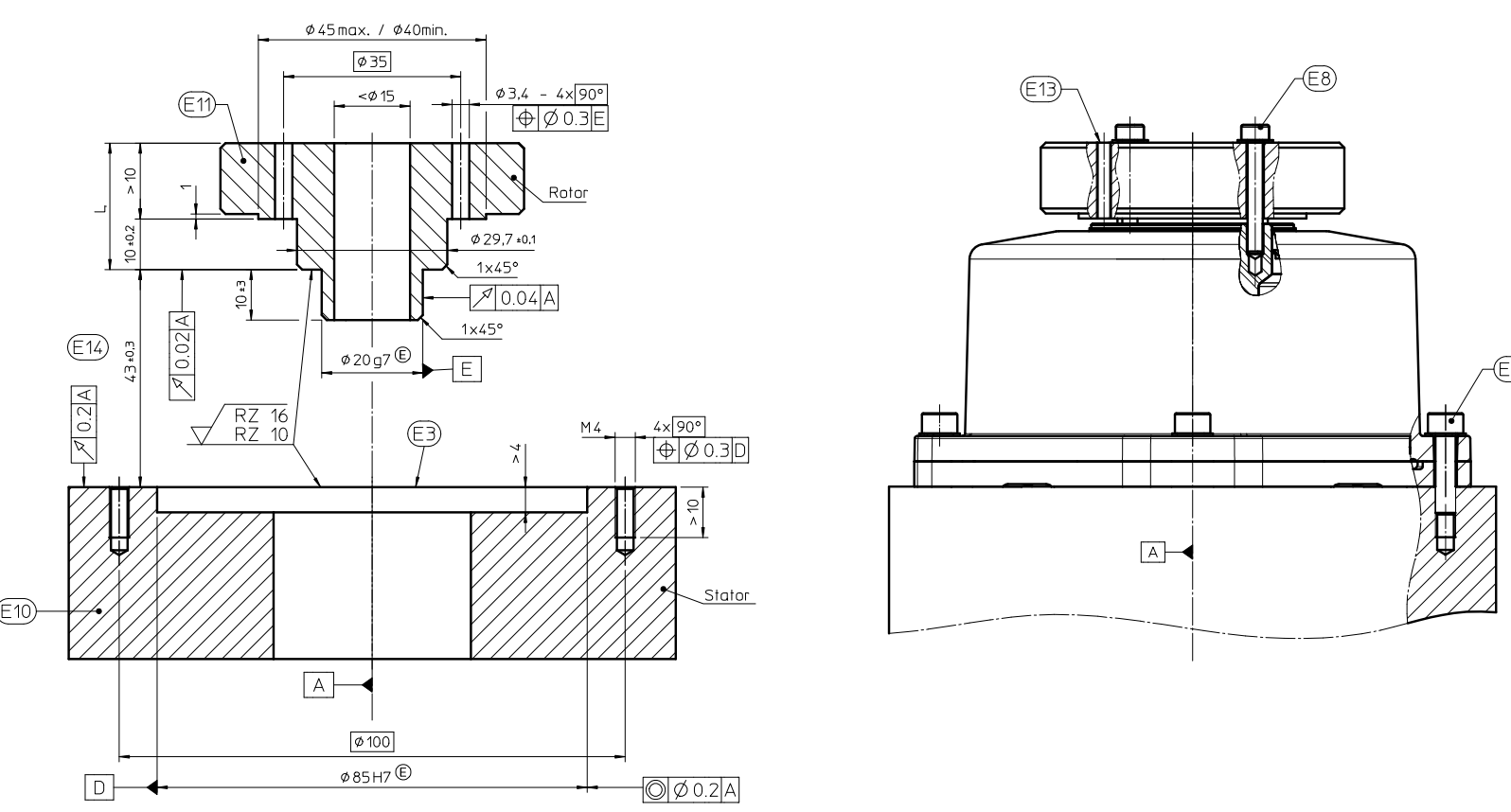
MOUNTING OPTION: SHAFT COUPLING (M) (N1)
WITHOUT MECHANICAL FAULT EXCLUSION



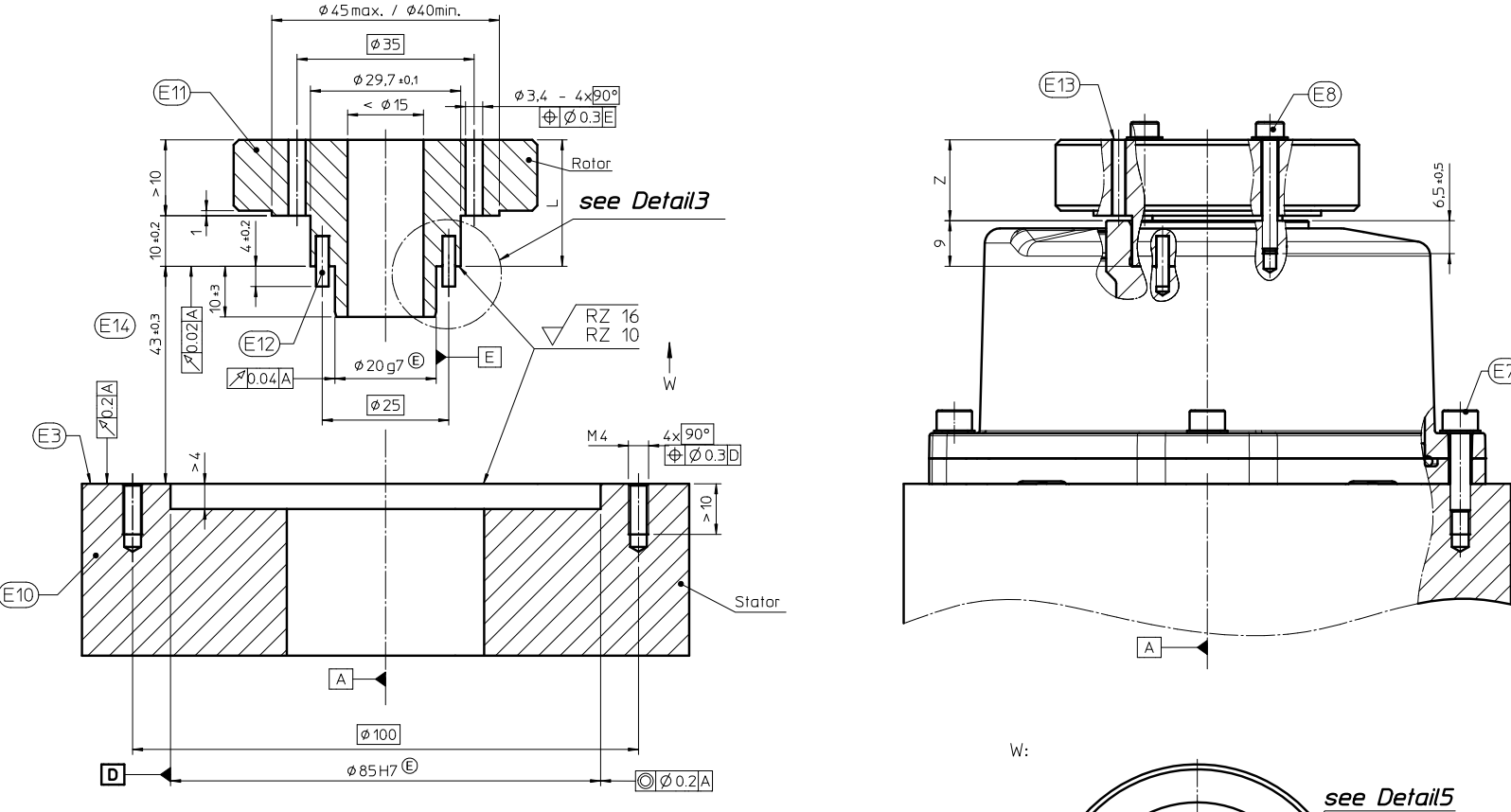
WITH MECHANICAL FAULT EXCLUSION



ALTERNATIVE MOUNTING OPTION: FRONT END SHAFT COUPLING (M) (N1)
WITHOUT MECHANICAL FAULT EXCLUSION

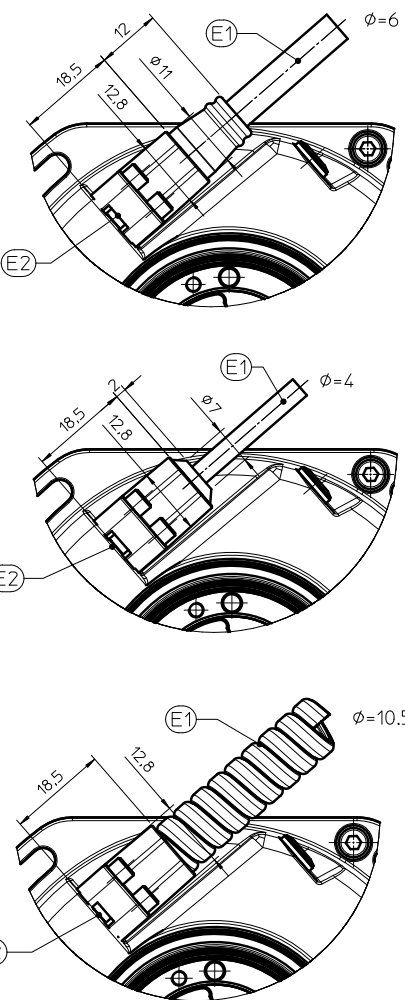


WITH MECHANICAL FAULT EXCLUSION

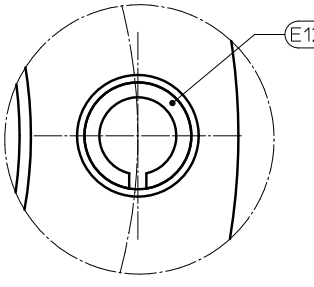


DIFFERENT TYPES OF CONNECTOR CABLES

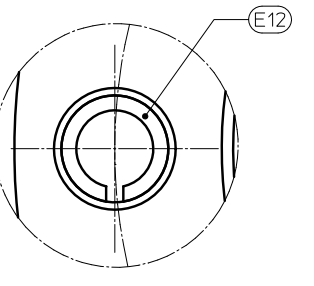
- (E1) - Three different types of cable:
 - Cable 6mm.
 - Cable 4mm.
 - Cable 10.5mm (with protection).
- Bend radius for flexible configuration for:
 - Cable 6mm: R>60mm.
 - Cable 4mm: R>40mm.
 - Cable 10.5mm: R>60mm.
- Bend radius for rigid configuration for:
 - Cable 6mm: R>24mm.
 - Cable 4mm: R>16mm.
 - Cable 10.5mm: R>35mm.
- (E2) - Cable support.



Detail5
Scale 8:1



Detail4
Scale 8:1



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.

ABBREVIATIONS

- (A) = Bearing of mating shaft.
- (M) = Assembly sizing set by customer.
- (R) = Compressed air intake.
- (C) = Connector.
- (I) = 0° position index ±5°.
- Pa = Tightening torque
- (E7) = Hexagon socket head cap screws M4: Pa=2.9±0.15Nm
Screw: ISO4762-M4x20
Screw property class: 8.8
Washer: ISO7092-4-200HV
Materially bonding anti-rotation lock necessary.
- (E8) = Hexagon socket head cap screws M3: Pa=1.25±0.1Nm
Screw: ISO4762-M3x16-4.5
Screw property class: 8.8
Washer: ISO7092-3-200HV
Materially bonding anti-rotation lock necessary.
- (E12) = 2x spring type straight pin for mechanical fault exclusion necessary ISO8752-2.5x10.
Mounting sequence:
 1. Mount spring-type straight pins in correct angular position (see detail 4 and 5) in part E11.
 2. Mount part E11 using E8 screws.
 3. Pay attention to reference dimension Z: L-9-Z=±0.15
- (E13) = Using spring-type straight pins removing threads (M3) necessary, otherwise optional.
- (E14) = Tolerance specification includes mounting tolerances and thermal expansion. No dynamic movement permitted.
- (N) = Mounting surfaces and threads must be clean and free of grease.

Material	(E9) (E11) - Mating shaft	(E10) - Mating stator
Tensile strength	$R_m > 600 \text{ N/mm}^2$	$> 250 \text{ N/mm}^2$
Shear strength	$R_s > 390 \text{ N/mm}^2$	$> 290 \text{ N/mm}^2$
Interface pressure	$P_a > 660 \text{ N/mm}^2$	$> 275 \text{ N/mm}^2$
Modulus of elasticity	$E > 110000 \text{ N/mm}^2$	$> 215000 \text{ N/mm}^2$
Coefficient of expansion (at 20°C)	$10 \times 10^{-6} \text{ K}^{-1} < \alpha_{max} \leq 17 \times 10^{-6} \text{ K}^{-1}$	
Mounting temperature	All information regarding screw connection is based on a mounting temperature of 15°C to 35°C	

Summary				Propo.	App.	Date	Scale: 1:1
Rev.	Designation	Quant.	Material	Finish			
Drawing N°	PT-2-028-3	Date	01/2023	Fagor Automation			
Replaces		Design by	AINARA	S. Coop.			
		Check by	ZUNZU	20500 Mondragón			

