Tensioned Pinion

Mounting option

TR-ECE-TI-GB-0421 v01
01/19/2026

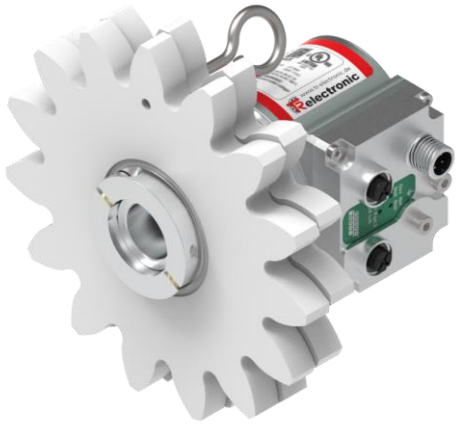


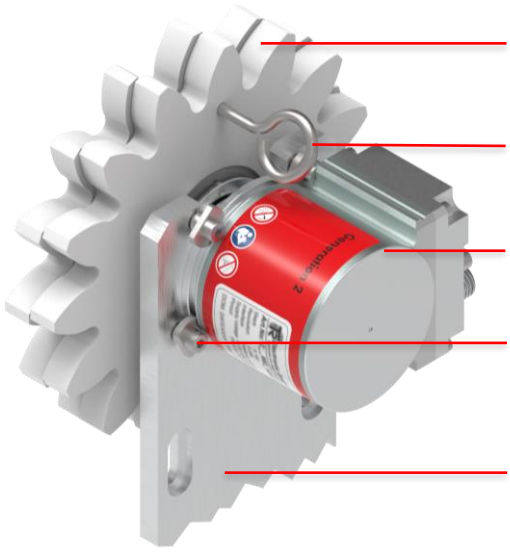
Illustration exemplary

Advantages

- Optimal measuring angle accuracy, as there is no backlash.
- Reduction in mechanical stress, as there are no overdetermined bearing forces.
- Compensation for runout deviations
- Wide range of interfaces available for the C__582 encoder

The pinion is delivered fully assembled on the customer-specific measuring system.

Components



Subject to change

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Technical Data

Description	Pinion m05-z20	Pinion m06-z19	Pinion m08-z15	Pinion m08-z17	Pinion m10-z15	Pinion m14-z11
Drawing no.	A4-0002-057	A4-0002-058	A4-0002-045	A4-0002-047	A4-0002-046	A4-0002-048
Illustration (exemplary)						
Type of interlocking	straight outside					
Reference profile	DIN 867					
Tolerance according to	DIN 3967 cd27					
Module [m]	5	6	8	8	10	14
Number of teeth [z]	20	19	15	17	15	11
Pitch circle ∅ [d0]	100	114	120	136	150	154
Head circle ∅ [dk]	110	126	141.6	155.9	179.3	195.1
Foot circle ∅ [df]	87.5	99	104	120.8	135	134.4
Pressure angle [a]	20°	20°	20°	20°	20°	20°
Profile shift factor [x]	0	0	0.4	0.3	0.5	0.5

Customized gear teeth

Customer-specific gear teeth are also available. The following data is required for this:

- Module
- Number of teeth
- Profile offset
- Angle of engagement
- Pitch circle diameter
- Head circle diameter
- Foot circle diameter

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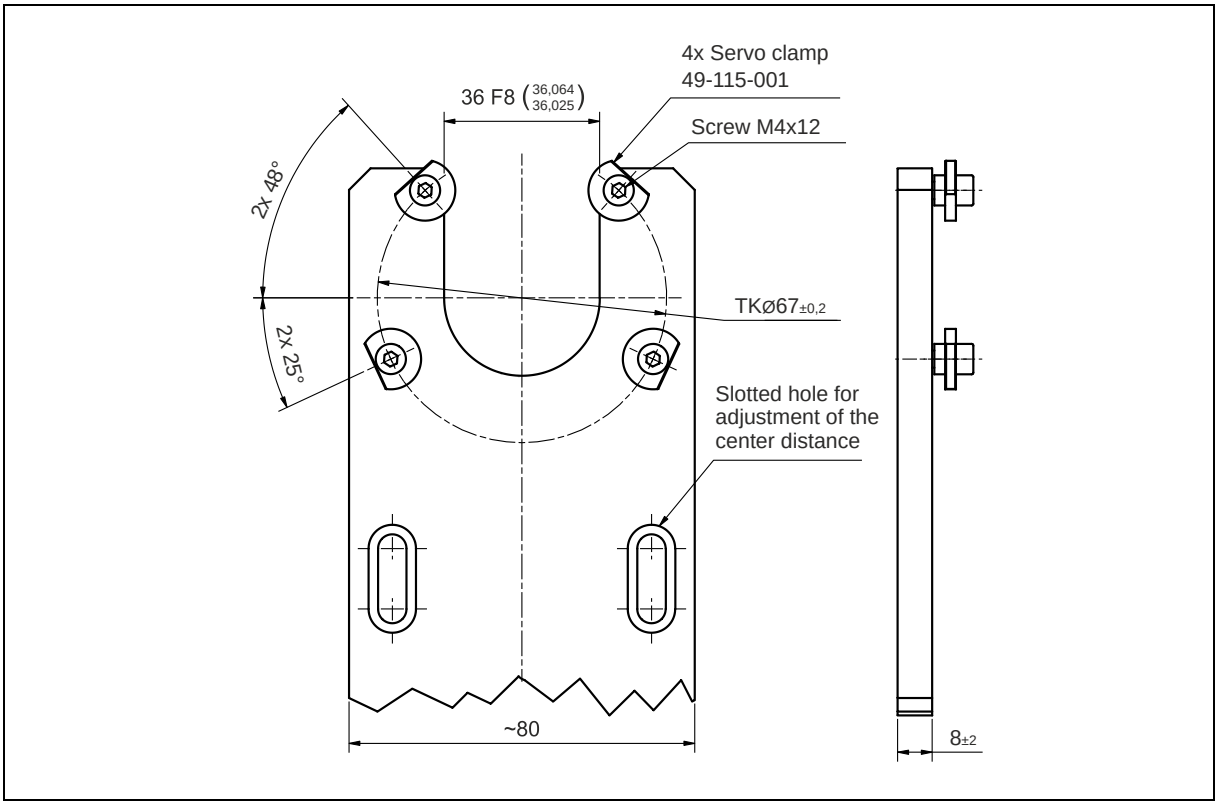
The installation instructions for the measuring system must be observed.
Download installation instructions: www.tr-electronic.de/f/TR-ECE-BA-DGB-0175

- Secure the measuring system to the mounting plate using 4x servo clamps.
- Secure the mounting plate with the measuring system to the installation site using 2x fastening screws through the long holes. Do not tighten the screws completely yet so that the mounting plate can still be moved.
- Push the mounting plate with the measuring system until it stops (measuring system pinion <--> customer pinion) and tighten the fastening screws in the long holes of the mounting plate. The installation position should be chosen so that the fastening screws are approximately in the center of the long holes.
- Remove the locking pin. This allows the tensioned pinion to compensate for any concentricity deviation of the customer pinion and eliminate backlash.

Example of mounting plate



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