



PREFFAG

Components for moving coil movements of series KSI 400

Application:

The range of application covers panel and switchboard meters as well as special instruments for ships, track vehicles, off-road vehicles, aviation and other critical fields.

The electrical conditions and most of the mounting dimensions make this system exchangeable with the proven types of the series KSI 200.

Technical characteristics:

- Pointer deflection 240° resp. 250°
- Simple adaptation for zero left, center or right as well as for suppressed zero
- One single movement type suitable for case sizes DIN 48 x 48 to DIN 144 x 144 or round body with inner diameter 46 mm (2") to approx. diam. 220 mm (10")
- Sensitivity with good torque up to 100 μ A, even lower with corresponding layout

Installation:

- Mounting by 2 solid brass case columns
- Scale assembly to columns on the outer pole piece or off center to the movement support with self-cutting screws (scale to be supported)

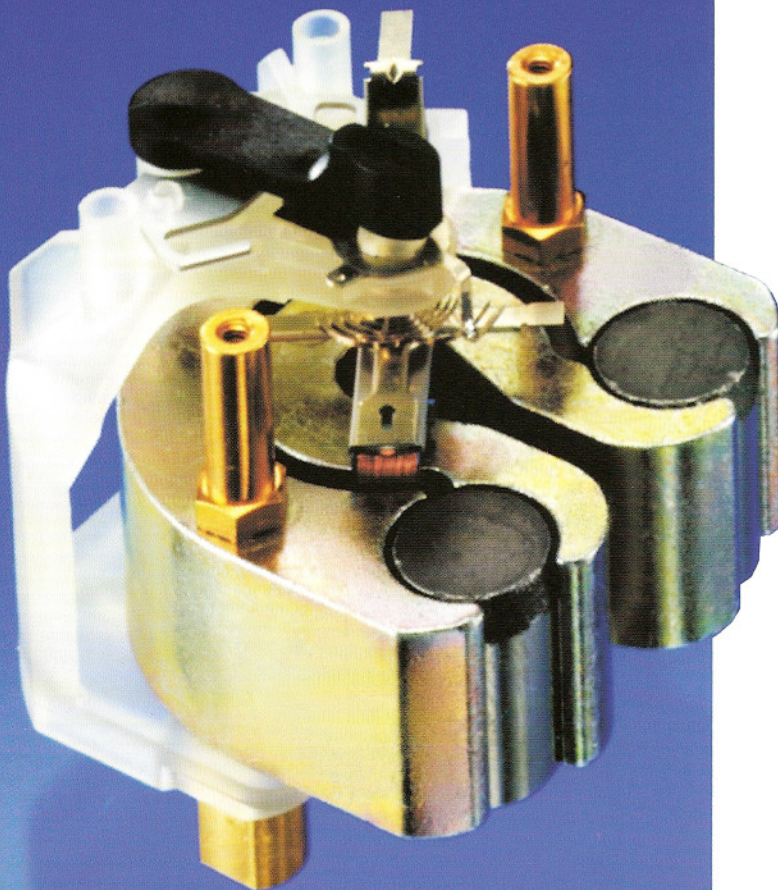
Design principles:

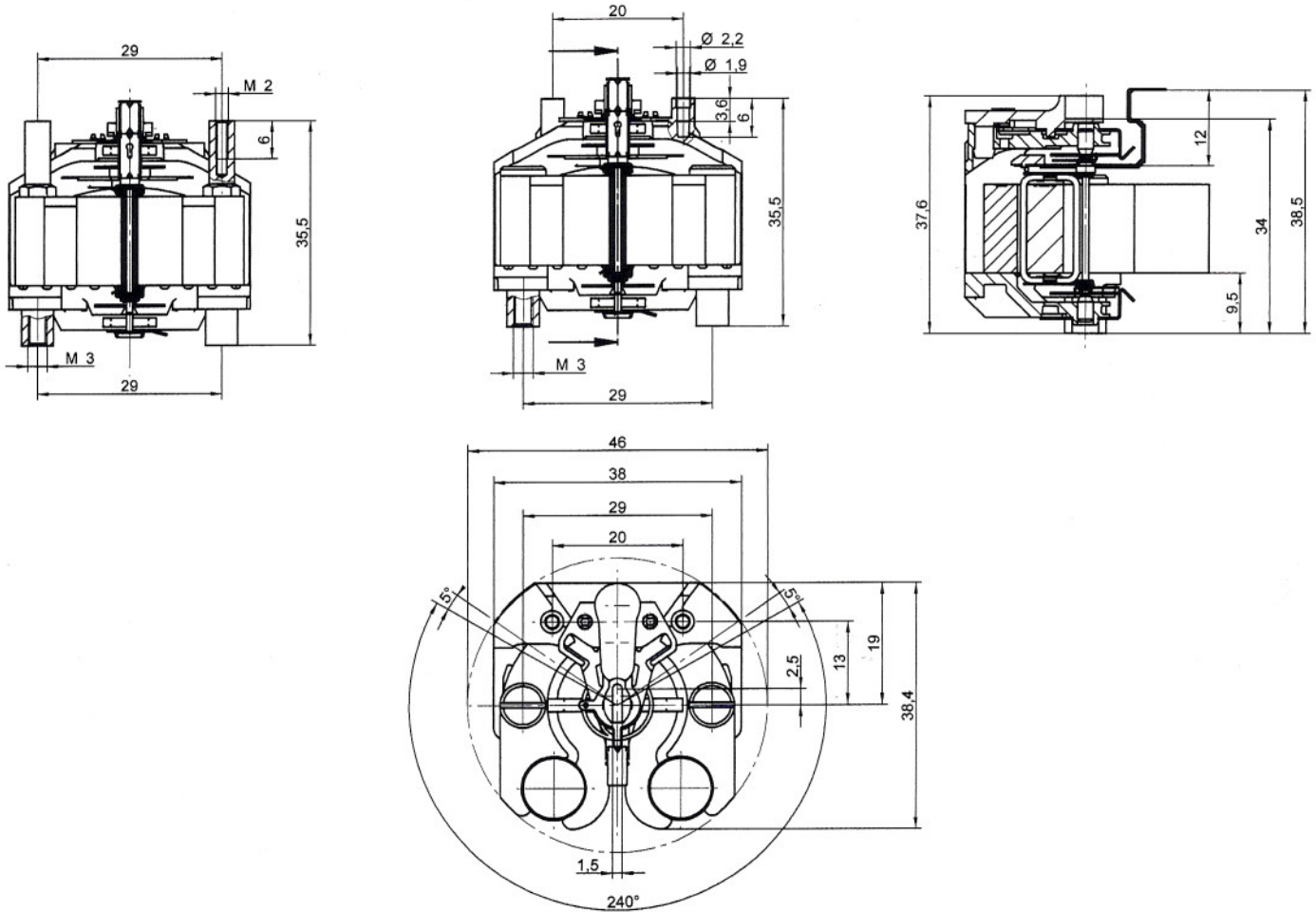
- Principle of external magnets with 2 round ALNICO magnets
- Good temperature stability - 65°C to + 100°C
- Substantially increased mechanical stability, also under vibration and shock, compared to KSI 200 serie.
- Coil frame with different conductivities for adaptation of damping
- Self-centering coil former support system with throughspindle, assembled vibration-proof
- Spring-loaded jewel bearings assembled play-free, vibration-proof

Assembly:

- Short assembly times on our assembly equipment with little dependence on operator
- A large portion of the assembly equipment for types KSI 200 types can be used.

Make use of our decades of experience when designing your mechanisms.





Technical Data Assembly kit series KSI 400

Movement type	Dimensions \varnothing h [mm]		Deflection angle electric. mechan. ¹⁾		Induction in air gap	Linearity error max.	Sensitivity at 240° deflection	
							min. value ²⁾	recomm. value ³⁾
KSI 420	46	37,6	240°	250°	180 mT	± 1%	100µA	250µA
KSI 422	46	37,6	240°	250°	180 mT	± 1%	100µA	250µA

- 1) pointer deflection angle with cross arm width of 3,5 mm at interference section with pointer stop or support.
- 2) values with max. number of turns, Cu- \varnothing 0,02 mm and min. torque 400 μ Ncm/90°.
- 3) values with max. number of turns, Cu- \varnothing 0,025 mm and recommended torque 650 μ Ncm/90°.

Assembly:

The components of the KSI 400 series are delivered as a complete set. We offer hereto our assembly equipment.

Movements:

If required, we can also supply assembled movements with or without pointer and balancing.

Technical documentation

Comprehensive technical documentation exists for the above systems. If you require this documentation, we would be pleased to send it to you.

We would also be pleased to support you in the design of your components. Take advantage from our extensive experience !

Prefag Carl Rivoir GmbH & Co.KG

PO Box 11
D-75045 Walzbachtal
Prefagstraße 4
D-75045 Walzbachtal
Telefon 0 72 03/87-0
Telefax 0 72 03/871 70
eMail info@prefag.de
http://www.prefag.de