

- Measuring strokes up to 300 mm
- Infinite resolution
- Life expectancy > 50 million cycles
- Compact, robust design for engineering and instrumentation applications
- Various mechanical and electrical connections on option

Construction

Square shaped case in anodised aluminium - Shaft in stainless steel - Shaft entry with floating Teflon washer Shaft free to rotate about itself and to move conically to accept misalignment - Conductive plastic resistant element with precious wipers on Teflon slider - Electrical connection through solder pins or leads.

Measuring Strokes and Technical Data

| | | | | | | | | |
|------------------|--------------------------|------|------|-------|-------|-------|-----|-------|
| Measuring stroke | mm | 25.4 | 50.8 | 101.6 | 152.4 | 203.2 | 254 | 304.8 |
| Resistance | K Ω $\pm 10\%$ | 1 | 1 | 1 | 5 | 5 | 5 | 5 |

- Operating speed: 1000 mm/sec max.
- Mechanical travel: Stroke + 1,6 mm approx.
- Linearity classes: 1 - 0,5 - 0,25 - 0,1 - 0,05 %
- Rating (W): 1 W per 25,4 mm stroke
- Recommended load on wiper: $\leq 1\text{ M}\Omega$
- Max. current through wiper: 1 mA*
- Dielectric strength: 500 V 50 Hz 1 min

- Operating force: 2,5 N approx.
- Operating temperature range: -40° C to +105° C
- Storage temperature range: -55° C to + 125° C
- Resistance to shock: 30 g/11 msec
- Resistance to vibration: 50 to 2000 Hz/5 g
- Applicable Mil-Specs: Mil-E-5272 and Mil-R-12934
- Protection grade: IP 50

***Note:** Precision potentiometers should only be used as voltage dividers - not as variable resistances!

Variants and mounting accessories

Side plate "S"

With 4 mounting holes 4.35 dia

Guide sleeve "F"

On shaft entry to eliminate conical movement

Gauge type "T"

With spring return, guide sleeve and spherical head, for strokes up to 101.6 mm only.

Ball joint "KV"

On shaft end (tip angle of ball is 13°)

Ball joint "KH"

On rear end of case (tip angle of ball is 13°)

Thread "G"

M5 at shaft end

Humidity sealing

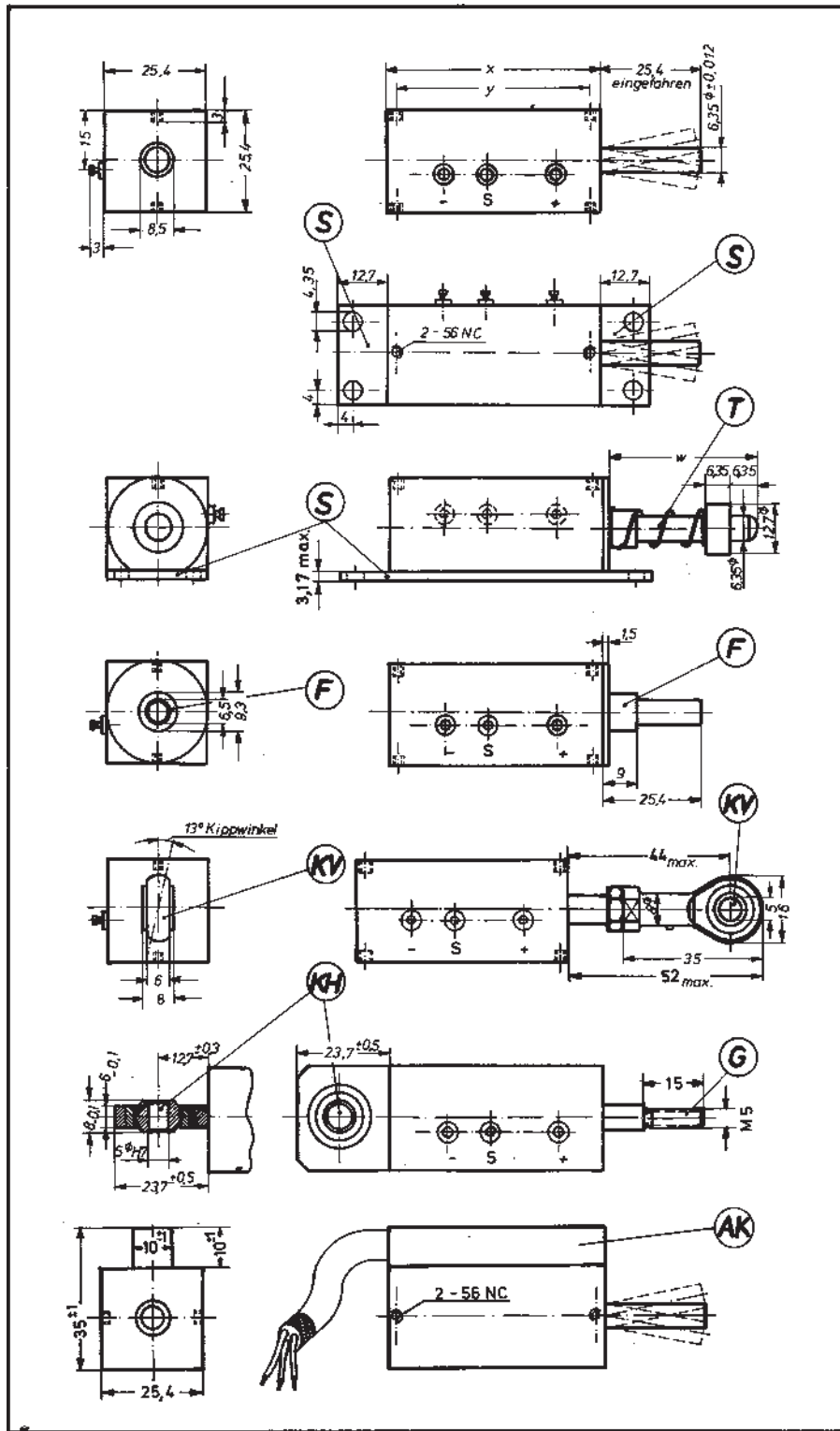
Additional humidity sealing to IP 65 can be provided upon request (additional order code "MIL-A"). Conical movement of shaft will be eliminated.

Encapsulated cable exit "AK"

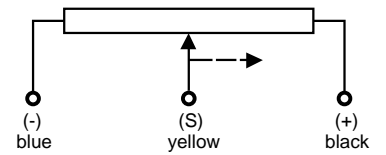
Cable type SIHFCSI-OB, 3 stranded wires of 2.25 mm² section and 0,564 mm dia (1.5 mm dia with insulation), outside diameter of cable including insulation is 1.5 mm.

For further details see overleaf.

Dimensions in mm



Electrical connections



Combinations of variants

| Code | S | T | F | KV | KH | G | AK |
|------|---|---|---|----|----|---|----|
| S | | X | X | X | - | X | X |
| T | X | | * | - | - | - | X |
| F | X | * | | X | X | X | X |
| KV | X | - | X | | X | * | X |
| KH | - | X | X | X | | X | X |
| G | X | - | - | * | X | | X |
| AK | X | X | X | X | X | X | |

Dimensions (mm) and masses (g) of standard versions

| Stroke | 25.4 | 50.8 | 101.6 | 152.4 | 203.2 | 254 | 304.8 | 406.4 | 508 |
|----------------|------|------|-------|-------|-------|-------|-------|-------|-------|
| W ± 0.5 | 59.5 | 85 | 160 | - | - | - | - | - | - |
| X | 54 | 79.4 | 130.2 | 181 | 231 | 282.6 | 333.4 | 435 | 536.6 |
| Y | 49.2 | 74.6 | 125.4 | - | - | - | - | - | - |
| Mass | 70 | 95 | 145 | 195 | 260 | 315 | 365 | 480 | 585 |

* F will always be combined with T and KV + KH.