

| Mechanical Data | | |
|--|----------------------|-----|
| Dimensions | see drawing | |
| Mounting | with 3 clamps Z 1-31 | |
| Mechanical travel | 360, continuous | ° |
| Permitted shaft loading (axial and radial) static or dynamic force | 45 | N |
| Torque | ≤ 0.15 | Ncm |
| Maximum operational speed | 10,000 | RPM |
| Weight | 80 | g |

| Electrical Data | | |
|---|--------------------------|-------|
| Actual electrical travel | 355 ±2 | ° |
| Available resistance values | 1; 2; 5 | kΩ |
| Resistance tolerance | ±20 | % |
| Repeatability | 0.002 (Δ0.007°) | % |
| Effective temperature coefficient of the output-to-applied voltage ratio | 5 (typical) | ppm/K |
| Independent linearity | ±0.05 (0.025 on request) | % |
| Max. permissible applied voltage | 42 | V |
| Recommended operating wiper current | ≤ 1 | μA |
| Max. wiper current in case of malfunction | 10 | mA |
| Insulation resistance (500 VDC, 1 bar, 2 s) | ≥ 10 | MΩ |
| Dielectric strength (50 Hz, 2 s, 1 bar, 500 VAC) | ≤ 100 | μA |

| Environmental Data | | |
|---------------------------|--|---------------|
| Temperature range | -40...+100 | °C |
| Vibration | 5...2000 A _{max} = 0.75 a _{max} = 20 | Hz mm g |
| Shock | 50 11 | g ms |
| Life | > 100 x 10 ⁶ | rev. |
| Protection class | IP 40 (DIN 400 50 / IEC 529) | |

| Order designations | | |
|---------------------------|----------|---------|
| Type | Art. no. | R in kΩ |
| P6501 A102 | 008201 | 1 |
| P6501 A202 | 008202 | 2 |
| P6501 A502 | 008203 | 5 |

| Additional models available | | |
|------------------------------------|--------|--|
| P6501 S0049 | 008024 | 60° ±2°, indep. Lin. ±0.2%; R = 1kΩ ±50% |
| P6501 G252 | 008221 | 90° ±2°, indep. Lin. ±0.3%; R = 2.5kΩ ±20% |
| P6501 R252 | 009012 | 180° ±2°, indep. Lin. ±0.15%; R = 2.5kΩ ±20% |

Type designations for non-standard models will be specified upon receipt of order.

Included in delivery

3 mounting clamps Z 1-31

Recommended accessories

Fork coupling Z 104 G 6,
Fork coupling Z 105 G 6
(backlash-free),
MAP process-control indicators
and display. MUP or MUK signal
conditioner for standardized
output signals.

Important

All values given for this series –
including linearity, lifetime, micro-
linearity, resistance to external
disturbances and temperature
coefficient in voltage dividing
mode – are quoted for the device
operating with the wiper voltage
driving an operational amplifier
working as a voltage follower
where virtually no load is applied
to the wiper (I_e ≤ 1 μA).