

MKF-TFS-05

Mate force sensor



DESCRIPTION

MKF-TFS-05 force sensor, panel mounted embedded, the main shell material is aviation aluminum alloy, built-in high dynamic stress sensing device, its resistance value changes output under the influence of external force. Designed according to national military standards, strong experimentality, and relatively positive linearity over the full temperature range. Suitable for weapon fire control systems, armored vehicles, aircraft, command and control, tracking control, remote control, visual display, high-end medical equipment, etc.

SPECIFICATION

Main component materials	Aluminum alloy, stainless steel, high beryllium copper
Welding type	Soldering
Weight	22±2 grams
Frame	Sleeve type
Operation force	0~15N, allowable limit operation force: 120N
Panel opening size	Ø20, Ø17
Maximum input voltage	+10VDC
Zero position error	5±0.150VDC (under 25℃ environment)
Full scale output (F.S.)	(3.86±0.25~6.14±0.25)VDC (under 25℃ environment)
Temperature sensitivity coefficient	±0.4%F.S./℃
Temperature sensitivity coefficient	Per degree Celsius ±0.06%F.S./℃
Zero hysteresis	Within 2 seconds after the external force is completely released, the maximum value is ±0.020VDC, and the sum of the voltage drift of the temperature sensitivity coefficient does not exceed plus or minus 0.050VDC
Resolution	Continuous output, no dead zone
Linearity	>±2% (full scale)
Coupling	<8%
Operating temperature range	-40℃ to +80℃
Storage temperature range	-55℃ to +85℃
Insulation resistance	>100MΩ (under 50V)
Dielectric withstand voltage	50V, <1.0mA
Impact	+30g 11ms half-sine
Vibration	Peak value 10g, 55 to 2000HZ
MTBF	100,000 hours

TECHNICAL DRAWINGS

