## HSM14F - $360^{\circ}$ single turn sensor

With a thickness of just $6,2 \mathrm{~mm}$ this sensor is designed to fit in the smallest spaces. A life expectancy of approx. 100.000 .000 operations also stands out. The sensor is typically Sakae, well designed and well produced.

## TECHNICAL SPECIFICATION

| Output type | Single, dual, dual independent |
| :---: | :---: |
| Mechanical rotating angle | $360^{\circ}$ (endless) |
| Starting torque | Below $5 \mathrm{mN} \cdot \mathrm{m}$ ( $50 \mathrm{gf} \cdot \mathrm{cm}$ ) |
| Current consumption | Single output : Max. 16 mA Dual output : Max. 32 mA |
| Independent linearity tolerance | Within $\pm 1$ \%FS |
| Electrical rotating angle | $360^{\circ}$ (programmable) |
| Applied voltage | $5 \mathrm{VDC} \pm 0,5 \mathrm{VDC}$ |
| Effective output | $10 \pm 3 \% \sim 90 \pm 3 \%$ Vin |
| Dielectric strength | 1 minute at 500 VAC |
| Insulation resistance | Over 1,000 M 2 at 500 VDC |
| Operating temperature range | $-40^{\circ} \mathrm{C} \sim+105^{\circ} \mathrm{C}$ |
| Index of protection | IP65, IP67 for the incorporated PCB part only |
| EMS tolerance | $100 \mathrm{~V} / \mathrm{m} 80 \mathrm{MHz} \sim 6 \mathrm{GHz}$ (According to \|SO11452-1~-3) |
| ESD tolerance | $\pm 8$ kV Contact discharge / $\pm 15 \mathrm{kV}$ Air discharge (It applies to IEC 61000-4-2) |
| Mechanical life expectancy | Approx. 100,000,000 shaft revolutions |
| Mass | Approx. 11g |
| B10d | 137.800.000 |
| MTTF | 1037,6 years |



Use caution:
Organic solvents such as acetone oil or alcohol solutions such as ethanol droplet could leave chemical burn scars on. plastic surfaces. Any environments where chemical proofs (Organic solvent resistance, alcohol resistance, etc.) are required, extra caution should be exercised.

Please note: This illustration shows only one example of a variety of existing variants.
Customer specific variants are possible on request.


Terminal diagrams
Output Charactaristics



