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Features



Aluminum alloy. Roverbal type and full bridge type Rated capacity : 4.903 N {0.5 kgf}~147.1 N {15 kgf}

Specification

| Specification name | Specification contents | | | | |
|-------------------------|---|--|--|--|--|
| Rated capacity | 4.903 N{0.5 kgf}~147.1 N{15 kgf} | | | | |
| Safe overload | 450 %R.C. | | | | |
| Ultimate overload | 600 %R.C. | | | | |
| Rated output | 0.5 mV/V±0.05 mV/V(FSU-0.5K: 0.5 mV/V±0.075 mV/V) | | | | |
| Non-linearity | 0.1 %R.O. | | | | |
| Hysteresis | 0.1 %R.O. | | | | |
| Repeatability | 0.1 %R.O. | | | | |
| Creep | 0.15 %R.O./1 min | | | | |
| Creep recovery | 0.15 %R.O./1 min | | | | |
| Excitation, recommended | 10 V or less | | | | |
| | | | | | |

FSU series

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| Excitation, maximum | 15 V | | | | |
|-----------------------------|--|--|--|--|--|
| Zero balance | ±0.4 mV/V | | | | |
| Input resistance | 340 Ω±50 Ω | | | | |
| Output resistance | 340 Ω±50 Ω | | | | |
| Insulation resistance | 1,000 $\text{M}\Omega$ or more (DC50 V) (between bridge and main body) | | | | |
| Temp. range, compensated | 0 ℃~60 ℃ | | | | |
| Temp. range, safe | −10 ℃~80 ℃ | | | | |
| Temp. effect on zero | ±1 %R.O./10 ℃ | | | | |
| Temp. effect on output | ±1 %LOAD/10 ℃ | | | | |
| Lead wire | AWG30, 150 mm directly attached, cable end is separated | | | | |
| Class of protection | IP00 or equivalent | | | | |
| Material of element | Alluminium alloy | | | | |
| Durability | 1,000,000 times with rated load applied. | | | | |
| Effect of eccentric load | • The center of loading plate and also the center of load cell should be the same position. • Error is within 0.8 %R.O. applied with 1/2 of rated capacity at the position of 50 mm of eccentricity. | | | | |

Table of P/N

| Parts No. | Rated capacity [N] | Rated capacity [kgf] | Weight(Approx.) [g] | Cable | Cable2 | Cable3 |
|--------------|--------------------------|----------------------------|----------------------|-------|--------------------------|------------------------|
| FSU- 0.5K | 4.903 | 0.5 | 30 | AWG30 | 150 mm directly attached | cable end is separated |
| FSU-1K | 9.807 | 1 | 30 | AWG30 | 150 mm directly attached | cable end is separated |
| FSU-2K | 19.61 | 2 | 30 | AWG30 | 150 mm directly attached | cable end is separated |
| FSU-5K | 49.03 | 5 | 30 | AWG30 | 150 mm directly attached | cable end is separated |
| FSU- 15K | 147.1 | 5 | 30 | AWG30 | 150 mm directly attached | cable end is separated |

Sensing Devices > Load cell > Force Sensor



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| Parts No. | 3D CAD files [STEP] | CAD files[DXF] |
|-----------|---------------------|----------------|
| FSU-0.5K | FSU-0.5K.STEP | fsu.dxf |
| FSU-1K | FSU-1K.STEP | fsu.dxf |
| FSU-2K | FSU-2K.STEP | fsu.dxf |
| FSU-5K | FSU-5K.STEP | fsu.dxf |
| FSU-15K | FSU-15K.STEP | fsu.dxf |