

Magnetic Shield Cases

Magnetic Shield Cases E989 Series



TACCF0093

Photomultiplier tubes are extremely sensitive to magnetic fields and exhibit output variations even from sources such as terrestrial magnetism. Hamamatsu E989 series magnetic shield cases are designed specifically to protect photomultiplier tubes from the influence of such magnetic fields. The E989 series uses permalloy, a material that has an extremely high permeability (approximately 10^5). The magnetic field intensity within the shield case can be attenuated from 1/1000 to 1/10000 of that outside the shield case (this ratio is called the shielding factor). The E989 series ensures a stable output for photomultiplier tubes operating in proximity to magnetic fields.

Features

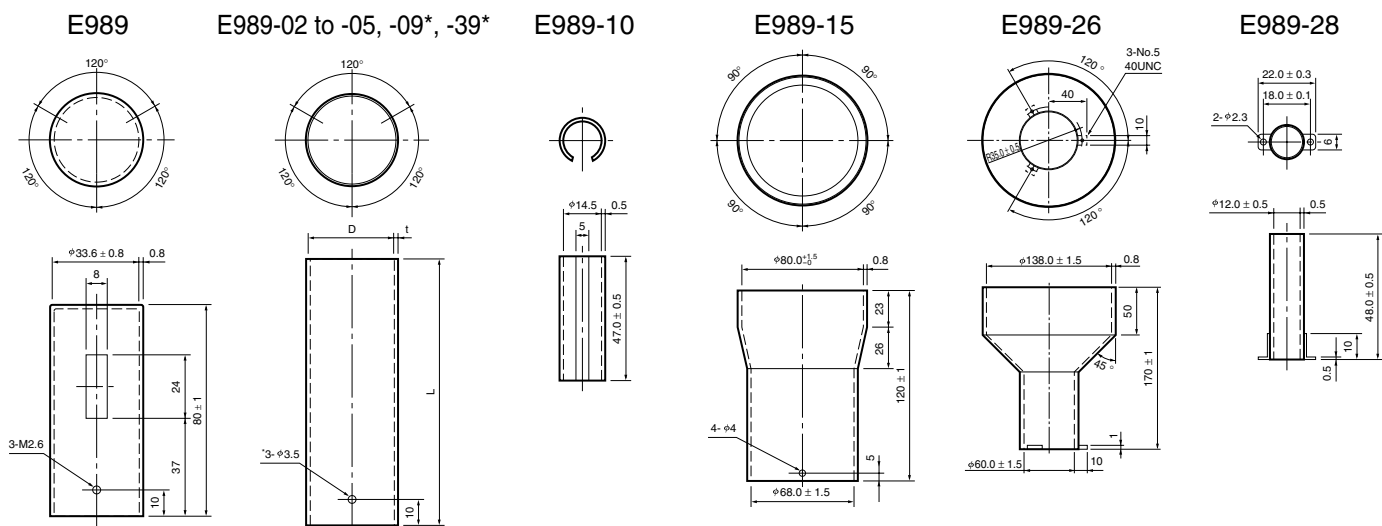
- Made of high-permeability permalloy (Ni: 78 %, Fe and others: 22 %)
- Various sizes available with inner diameters from 12 mm to 138 mm
- Lusterless black paint finish

Specifications

| | Photomultiplier Tube Diameter | Type No. | Internal Dia. D (φmm) | Thickness t (mm) | Length L (mm) | Weight (g) |
|---------|-------------------------------|----------|----------------------------------|------------------|---------------|------------|
| Side-on | φ 13 mm (1/2") | E989-10 | 14.5 | 0.5 | 47 ± 0.5 | 10 |
| | φ 28 mm (1-1/8") * | E989 | 33.6 ± 0.8 | 0.8 | 80 ± 1 | 66 |
| Head-on | φ 10 mm (3/8") | E989-28 | 12 ± 0.5 | 0.5 | 48 ± 0.5 | 9 |
| | φ 13 mm (1/2") | E989-09 | 16 ± 0.5 | 0.8 | 75 ± 0.5 | 28 |
| | φ 19 mm (3/4") | E989-02 | 23 ± 0.5 | 0.8 | 95 ± 1 | 50 |
| | φ 25 mm (1") | E989-39 | 29 ± 0.5 | 0.8 | 48 ± 0.5 | 32 |
| | φ 28 mm (1-1/8") | E989-03 | 32 ± 0.5 | 0.8 | 120 ± 1 | 90 |
| | φ 38 mm (1-1/2") | E989-04 | 44 ⁺¹ ₋₀ | 0.8 | 100 ± 1 | 102 |
| | φ 51 mm (2") | E989-05 | 60 ⁺¹ ₋₀ | 0.8 | 130 ± 1 | 180 |
| | φ 76 mm (3") | E989-15 | 80 ^{+1.5} ₋₀ | 0.8 | 120 ± 1 | 200 |
| | φ 127 mm (5") | E989-26 | 138 ± 1.5 | 0.8 | 170 ± 1 | 600 |

* Photomultiplier tubes with HA coating extending to the base portion cannot be used. Please consult our sales offices for details.

Dimensional Outlines (Unit: mm)



*No mounting hole is provided for E989-09 and E989-39.

TACCA0117EB

TACCA0118EA

TACCA0119EC

TACCA0120EC

TACCA0121EC

TACCA0122EC