

DM-W SERIES WATERPROOF LVDT DISPLACEMENT TRANSDUCER



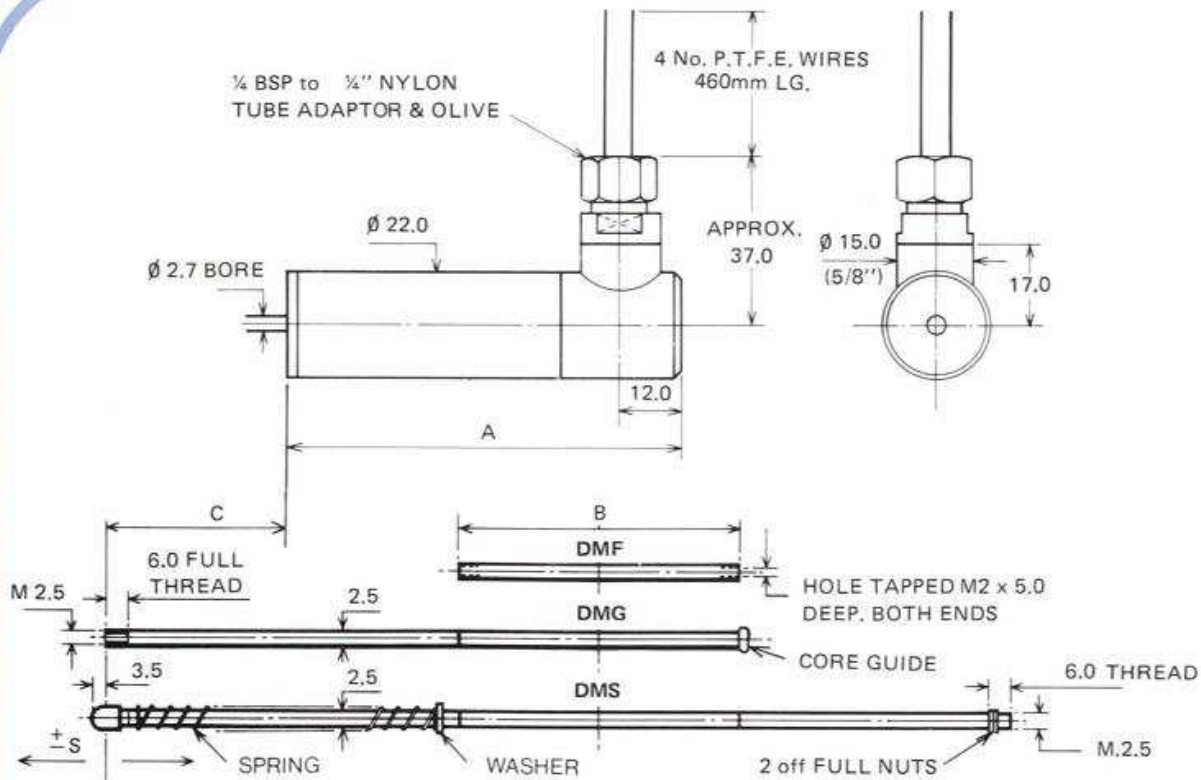
- FULLY SEALED
- FULLY SUBMERSIBLE
- DC OPERATION
- SPRUNG, GUIDED OR FREE CORES
- HIGH ACCURACY

The DM-W series waterproof linear variable differential transformers are designed for applications requiring total submersion or for use in situations where high humidity or condensation may be expected.

The DM-W series of DC input DC output LVDTs consist of a fully sealed body housing the impregnated coils and internally potted electronics such that these units are suitable for the majority of submersible applications.

For submersion in liquids up to approximately 20m depth (or equivalent pressure of 30 PSI or 2 atmospheres), a suitable sealing compound should be used within the compression fitting. For higher pressures (or greater depths) the use of Araldite AY18 and Hz 18 hardener is recommended and the manufacturer's instructions on cleaning surfaces and mixing should be followed.

The series is available with the lightweight core supplied as a basic unattached item (DMF-W) or with the core attached to an extension rod and fitted with core guides (DMG-W) or with the core and extension rod captive and spring loaded (DMS-W).



SPECIFICATION

| | | | DM - 5W | DM - 12.5W | DM - 25W | DM - 50W |
|--------------------|-------------------|---------------|---|------------|----------|----------|
| Stroke | S | ± mm | 5 | 12.5 | 25 | 50 |
| | A | mm | 81 | 110 | 117 | 244 |
| | B | mm | 20 | 30.15 | 76.2 | 94 |
| | C | mm | 34.5 | 50.5 | 67 | 87.25 |
| Core weight | | gms | 0.8 | 1.2 | 3.1 | 3.8 |
| Core + extension | | gms | 3.0 | 4.2 | 6.8 | 9.5 |
| 12V Excitation | DMF-W | Free core | IS214 | IS215 | IS216 | IS217 |
| | DMG-W | Guided core | IS222 | IS223 | IS224 | IS225 |
| | DMS-W | Sprung loaded | IS230 | IS231 | IS232 | IS233 |
| | Sensitivity ± 15% | | | ± 2.5V | ± 3.0V | ± 3.5V |
| 24V Excitation | DMF-W | Free core | IS218 | IS219 | IS220 | IS221 |
| | DMG-W | Guided core | IS226 | IS227 | IS228 | IS229 |
| | DMS-W | Sprung loaded | IS234 | IS235 | IS236 | IS237 |
| | Sensitivity ± 15% | | | ± 5V | ± 5.8V | ± 7V |
| Output Impedance | | ohms | 9 K 4 | | | |
| Output Load | | ohms | 50 K | | | |
| Thermal zero shift | | FRO/°C | Better than 0.005% | | | |
| Thermal span shift | | FRO/°C | Better than 0.10% | | | |
| Output Ripple | | FRO | Less than 0.20% | | | |
| Frequency Response | | Hz | DC to 75 | | | |
| Input Current | | mA | 30 ± 15% | | | |
| Temp. range | | °C | 0 to 80°C | | | |
| Linearity | | | Better than ± 0.5% standard to ± 0.25% by selection | | | |

Ordering Information

Order units by specifying Type No. and IS No.

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