

# DM-W SERIES WATERPROOF LVDT DISPLACEMENT TRANSDUCER



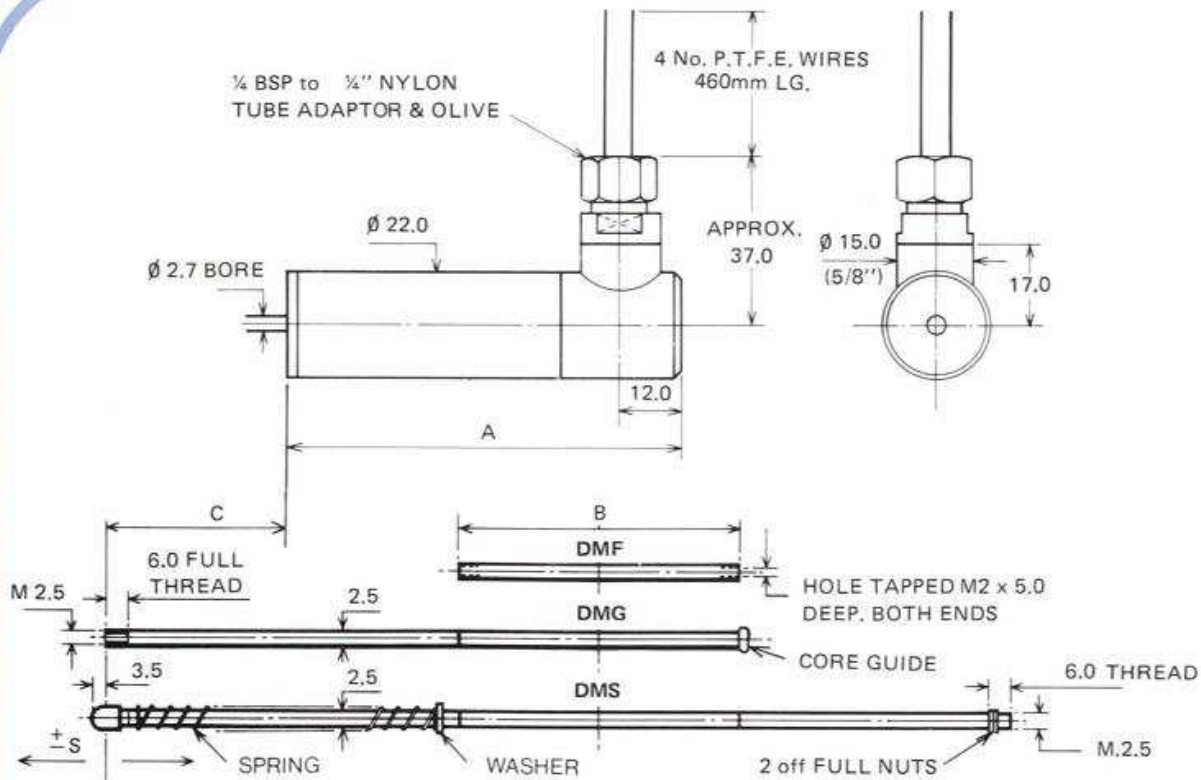
- FULLY SEALED
- FULLY SUBMERSIBLE
- DC OPERATION
- SPRUNG, GUIDED OR FREE CORES
- HIGH ACCURACY

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	± 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	± 10V
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.

# SENSONICS LIMITED



**Sensonics Ltd**  
 Northbridge Road  
 Berkhamsted  
 Herts, HP4 1EF  
 United Kingdom  
 Tel: +44 (0)1442 876833  
 Fax: +44 (0)1442 876477  
[www.sensonics.co.uk](http://www.sensonics.co.uk)