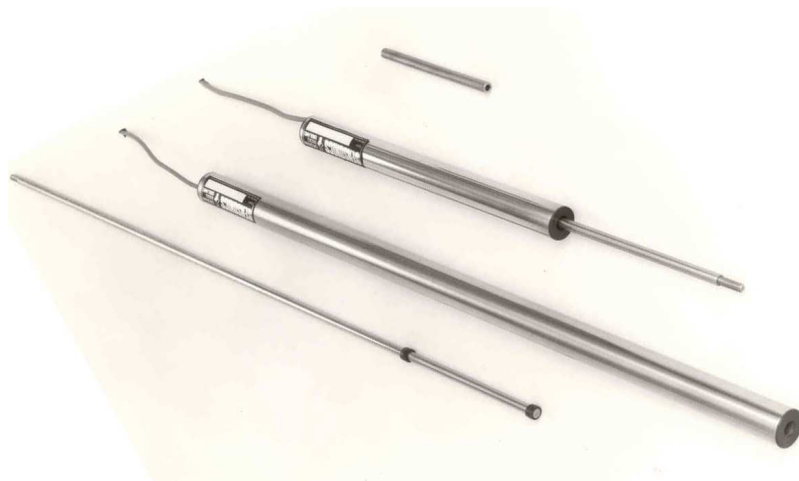


## DE Series DC-DC LVDT

(Displacement Transducer)



The Sensonics DE series of DC input DC output transducers offer a simple, inexpensive solution to many applications involving linear displacement measurement or monitoring.

These include displacement monitoring and control functions in industrial processes, position feedback elements in extensometers in materials testing systems.

This DE Series extends from  $\pm 25\text{mm}$  to  $\pm 300\text{mm}$  and is the standard Sensonics DC-DC economy range offering those parameters most commonly required, eg. Reasonable core to core clearance, substantial extension rods etc.

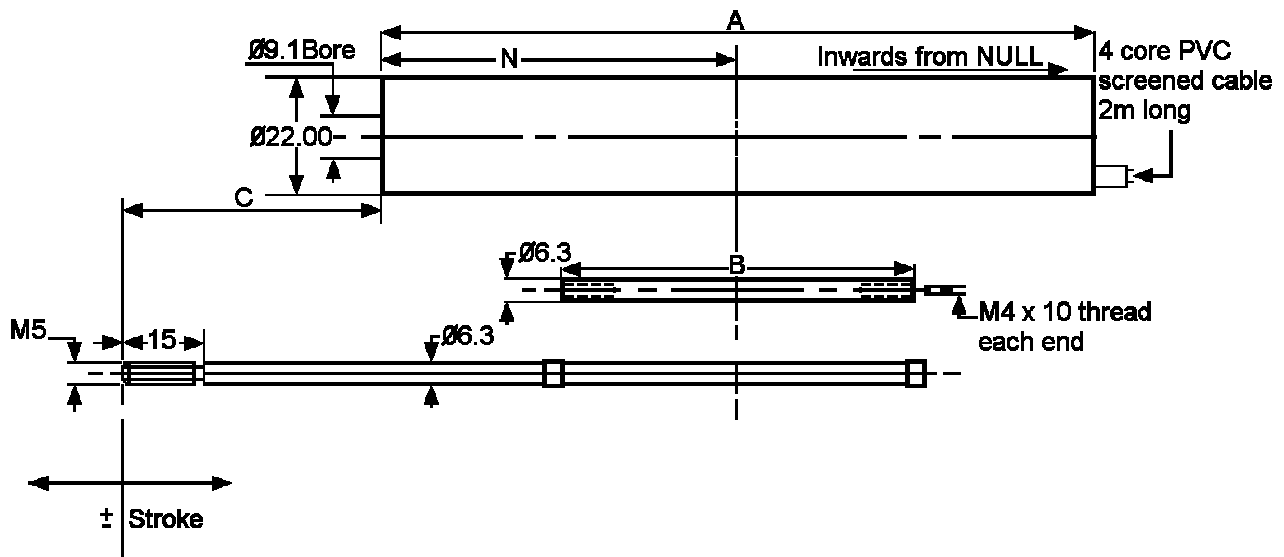
Other DC-DC Series available are:

DF Series  $\pm 15\text{mm}$  to  $\pm 50\text{mm}$

DM Series  $\pm 2.5\text{mm}$  to  $\pm 50\text{mm}$

Free cores (Type DEF) or guided cores with extensions (Type DEG) are available to provide versatile units for applications involving additional packaging for the more vigorous environments.

Units will operate from unstabilised input supplies of 10V to 24V (DE.300 10V to 15V). Units are of sealed construction suitable for operation in normal industrial environments.



## Specification

Input Voltage.....	10-24V DC unstabilised, (10-16V 300 Core).
Output.....	±2V DC
Output ripple.....	Less than 0.2% FSD Pk Pk.
Thermal zero shift.....	Better than 0.02% FRO/°C
Thermal Span Shift.....	Better than 0.05% FRO/°C
Linearity.....	± 0.5% standard ± 0.3 by selection

Free Core	25	50	75	100	125	150	200	300
<b>Guided Core</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>200</b>	<b>300</b>
<b>Stroke ± mm</b>	25	50	75	100	125	150	200	300
<b>A mm</b>	220	229	371	502	502	502	695	924
<b>B mm (DEF)</b>	64	76	79	152	119	102	142	189
<b>C mm (DEG)</b>	72	108	143	160	176	190	265	355
<b>N mm</b>	82	124	149	215	215	215	313	428
<b>Core weight (g)</b>	15	18	19	37	29	17	34	49
<b>Extension Weight (g)</b>	32	50	68	75	85	95	129	170
<b>Sensitivity (mV/mm)</b>	80	54	48	25	16	16	10	12
<b>Output impedance (ohms)</b>	3k4							
<b>Output Load (ohms)</b>	50k							
<b>Frequency Response</b>	400 Hz				250Hz			
<b>Response time constant</b>	0.3 m sec				0.5 m sec			

DS1184-1



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