

DR SERIES LVDT DISPLACEMENT TRANSDUCER



- DC INPUT - DC OUTPUT
- ROBUST CONSTRUCTION
- WEATHERPROOF AND SUBMERSIBLE VERSIONS
- SPRING LOADED OR GUIDED CORES
- STAINLESS STEEL BODY
- CONNECTOR, CABLE OR CONDUIT OUTLET

The DR series of LVDTs are designed for heavy industrial environments where a quick and easy to install displacement transducer is required.

The DR LVDT consists of a stainless steel body enclosing the transducer windings and signal conditioning.

The voltage input and output is via a connector, cable or conduit depending on the application and environment.

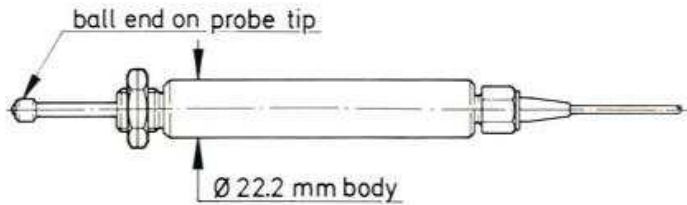
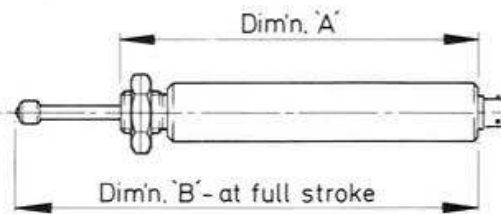
If moisture is a problem then a connector or cable version only gives limited protection whilst the conduit version enables the transducer to be fully submersed.

The SR series transducer can be supplied in a spring loaded format with either end exit or side exit or supplied with rod end (universal) bearings.

If temperatures are likely to exceed 90°C or zero and gain controls are required then a Sensonics AC input AC output transducer should be used.

VERSION 1 (DRXXX/1)

Spring loaded, captive core and extension rod. Ball end on extension rod. End exit with 4 pin connector. Weatherproof. (IP55).

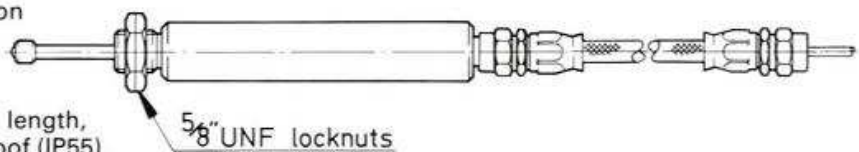


VERSION 2 (DRXXX/2)

Spring loaded, captive core and extension. Ball end on extension rod. End exit via 4 core PTFE cable 2m in length. Other lengths optional. Weatherproof. (IP55).

VERSION 3 (DRXXX/3)

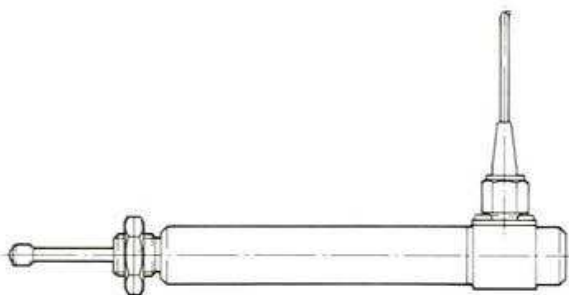
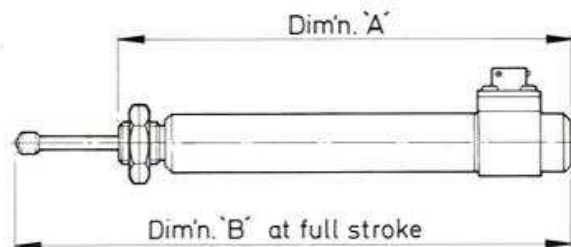
Spring loaded. Captive core and extension rod. Ball end on extension rod. End exit via 4 core PTFE cable in stainless steel braided flexible conduit, ending in 1/4BSP re-usable coupling, 2m in length, other lengths optional. Weatherproof (IP55).



TRANSDUCER TYPE-(VERSIONS 1,2 & 3)	DR25	DR50	DR100	DR150
TOTAL DISPLACEMENT RANGE (mm)	25	50	100	150
DIMENSION 'A' (mm)	183	255	341	412
DIMENSION 'B' (mm)	251	356	511	659
OVERTRAVEL AT EACH END AT LEAST 5% OF TOTAL RANGE				

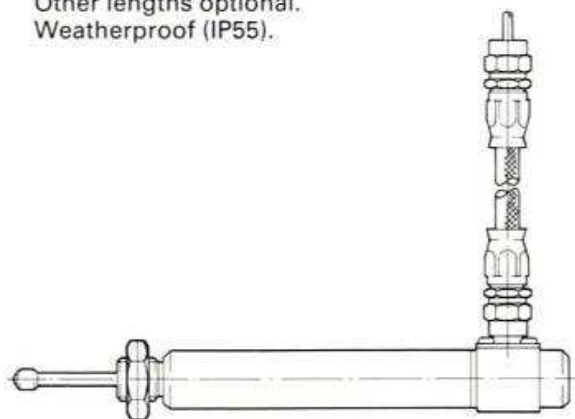
VERSION 4 (DRXXX/4)

Spring loaded, captive core and extension rod. Ball end on extension rod. Side exit with 4 pin connector. Weatherproof (IP55)



VERSION 5 (DRXXX/5)

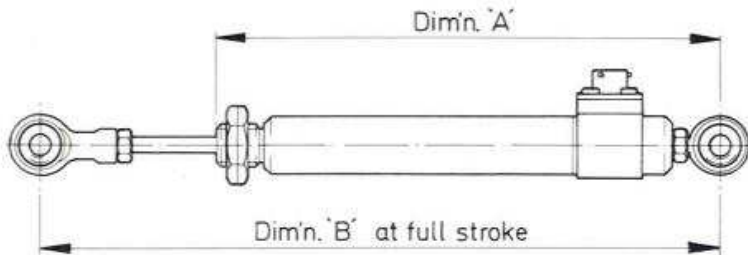
Spring loaded, captive core and extension rod. Ball end on extension rod. Side exit via 4 core PTFE cable 2m in length. Other lengths optional. Weatherproof (IP55).



VERSION 6 (DRXXX/6)

Spring loaded, captive core and extension rod. Ball end on extension rod. Side exit via 4 core PTFE cable in stainless steel flexible conduit, ending in 1/4 BSP re-usable coupling. 2m in length. Other lengths optional. Weatherproof or submersible versions available.

TRANSDUCER TYPE- (VERSIONS 4,5 & 6)	DR 25	DR 50	DR 100	DR 150
TOTAL DISPLACEMENT RANGE (mm)	25	50	100	150
DIMENSION 'A' (mm)	215	294	372	444
DIMENSION 'B' (mm)	283	388	542	690
OVERTRAVEL AT EACH END AT LEAST 5 % OF TOTAL RANGE				

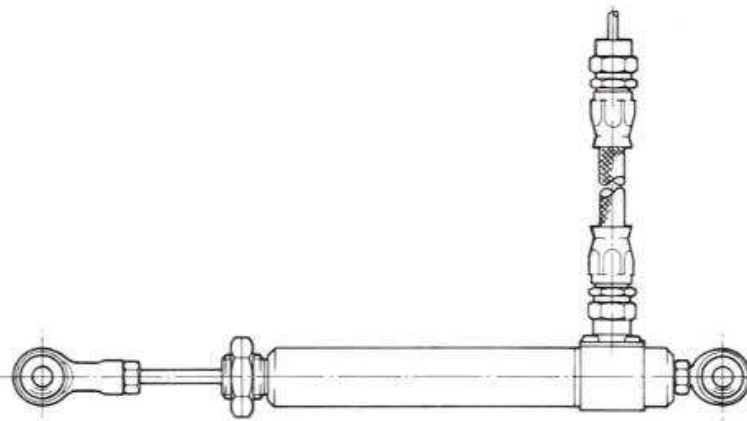
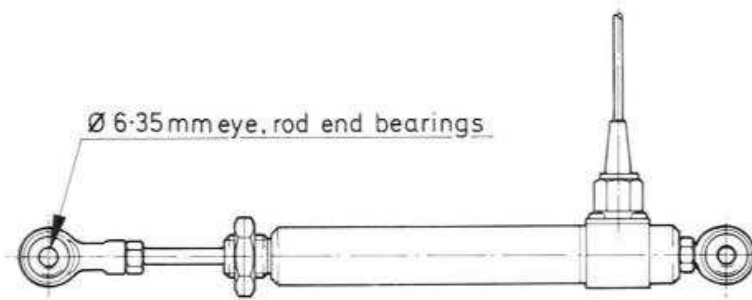


VERSION 7 (DRXXX/7)

Captive core and extension rod.
Rod end bearings on body and extension rod. Side exit with 4 pin connector.
Weatherproof (IP55).

VERSION 8 (DRXXX/8)

Captive core and extension rod.
Rod end bearings on body and extension rod. Side exit via 4 core PTFE cable, 2m in length, other lengths optional. Weatherproof. (IP55).



VERSION 9 (DRXXX/9)

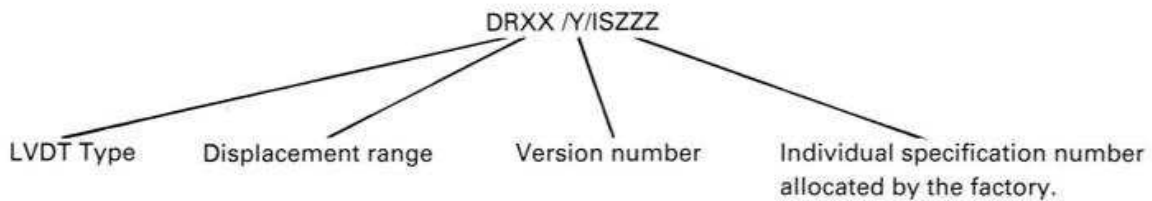
Captive core and extension rod.
Rod end bearings on body and extension rod. Side exit via 4 core PTFE cable in stainless steel braided flexible conduit, ending in 1/4 BSP re-usable coupling, 2m in length, other lengths optional. Weatherproof or submersible versions available.

TRANSDUCER TYPE- (VERSIONS 7,8 & 9)	DR 25	DR 50	DR 100	DR 150
TOTAL DISPLACEMENT RANGE (mm)	25	50	100	150
DIMENSION 'A' (mm)	234	313	391	463
DIMENSION 'B' (mm)	302	407	561	709
OVERTRAVEL AT EACH END AT LEAST 5 % OF TOTAL RANGE				

SPECIFICATION

Input	10 - 24v dc. stabilised
Operating temperature range	-20°C to +90°C
Survival temperature range	-55°C to +95°C
Null voltage	0 V DC
Ripple	Less than 25 mV rms
Linearity	± 0.5% full range (0.3% by selection)
Stability	0.125% full scale
Temperature	
Coefficient of/ Scale factor	0.08%/°C
Shock survival	200 g for 20 milliseconds
Vibration tolerance	10 g up to 2 kHz
Housing material	Non magnetic stainless steel (EN58)
Frequency response	200 Hz
Output load	50K ohms
Output voltage	As below ± 20%

ORDERING INFORMATION



TRANSDUCER TYPE:-	DR25	DR50	DR100	DR150
TOTAL DISPLACEMENT RANGE (mm)	25	50	100	150
FULL RANGE OUTPUT (VOLTS)	2.8	3.1	3.0	2.9
WEIGHT EXC. CABLE (GRMS)	370	440	620	720

We reserve the right to alter the specification without notification.

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