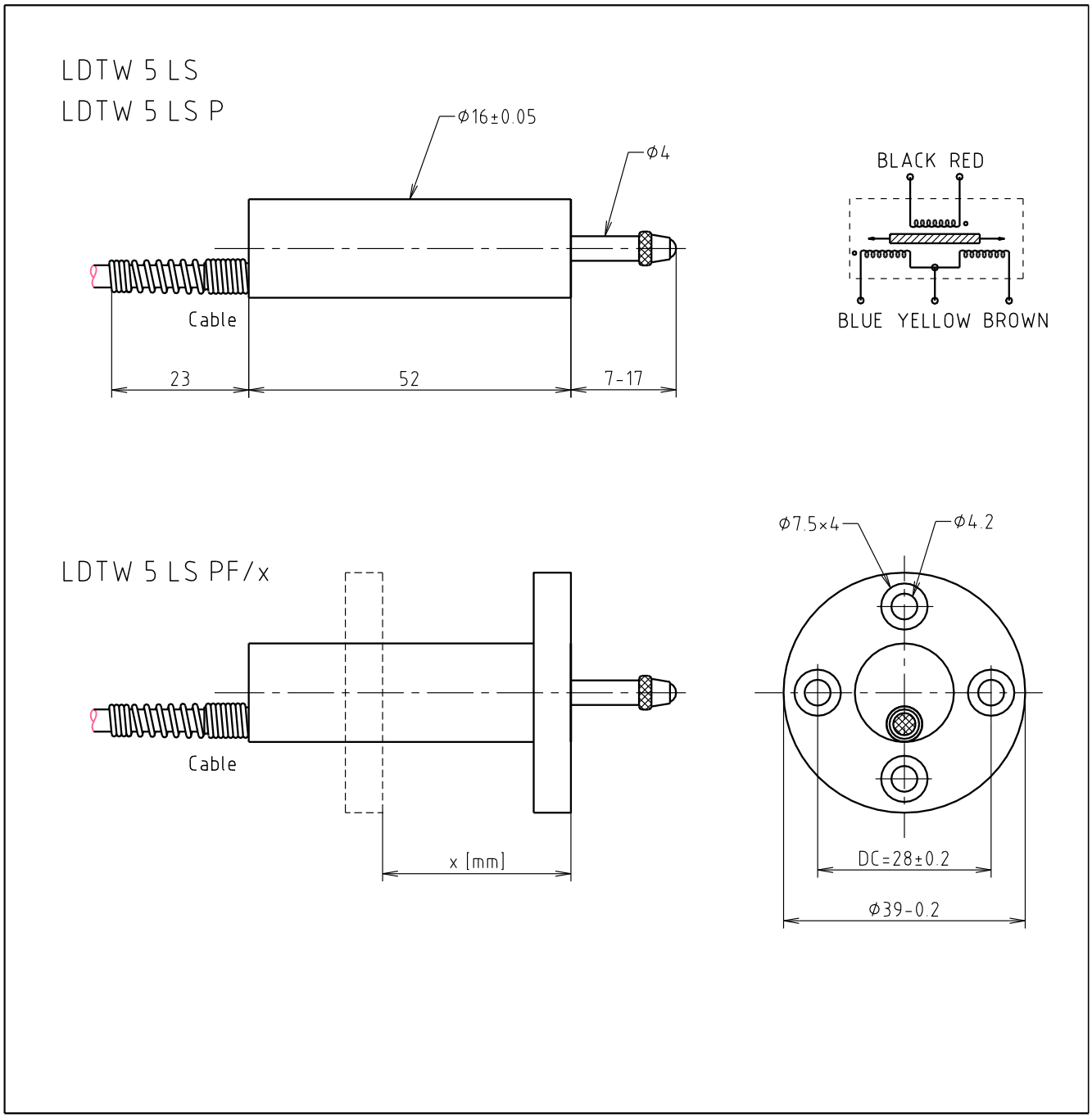
SPRING-ACTIVATED LINEAR VARIABLE DIFFERENTIAL TRANSFORMER
LDTW 5 LS



DESCRIPTION

The transducer is a linear variable differential transformer (LVDT) with a single primary winding, two secondary windings and a movable core. The primary winding is normally energized from a 5 kHz supply at 5 V_{RMS}, although other supply voltages and frequencies can be used. The two secondary windings are connected in series opposition so that the resultant output voltage is proportional to the core displacement from electrical center. The phase of the transducer output signal reverses as the core moves through the central position.The coilform is surrounded by a compound tube which outside is made of stainless steel and inside of soft iron for electrostatic and electromagnetic shielding. The core is made of hydrogen annealed mumetal and mounted on a non-magnetic stainless core rod (AISI 316). The core rod again is guided with a PTFE tube, which has an excellent wear resistance. A version to work in a high pressure environment is also available. For easy placement a flange obtion can be supplied. The LDTW 5 LS can work with most carrier wave measuring amplifiers as the HFJ ICAB 5k.

H F Jensen A/S
Emdrupvej 70, DK-2400 Kbh NV
www.hfjensen.dk

Tel: +45 39 53 60 40
Fax: +45 39 53 60 48
info@hfjensen.dk

H F JENSEN
SENSOR TECHNOLOGY

SPECIFICATIONS

Linear range	±5 mm
Linearity	< 0,5 %
Input voltage	500 mV_{RMS} to 5 V_{RMS}
Carrier frequency	nom. 5 kHz
Sensitivity (5 kHz)	67 mV/V/mm
Carrier phase shift (5 kHz)	< 2 °
Input impedance (5 kHz)	1100 Ohm
Output impedance (5 kHz)	400 Ohm
Temperature range	-40 °C to +150 °C
Temperature coefficient of sensitivity	< 0,01 %/°C
Residual voltage	< 5 mV/V
Cable	FEP, diameter ø3.6 mm, with 5 wires, 0.1 mm²
Cable length	2 m
Spring force	app. 200 p
Working pressure test - "P" and "PF" versions	1: 6 bar helium leaktest 2: 40 bar air pressure test for 5 min.

ORDERING INFORMATION

LDTW 5 LS P F/x

- F/x — Relative flange postion.
- F — Flange option.
- P — Tested for work in high pressure environment.

H F Jensen A/S
Emdrupvej 70, DK-2400 Kbh NV
www.hfjensen.dk

Tel: +45 39 53 60 40
Fax: +45 39 53 60 48
info@hfjensen.dk