

## Spring-loaded sensor Series DTL



### Short Body Spring-Loaded LVDT

- Ultra-short body due to special coil design
- Useable stroke up to 65% of body length
- Fully symmetrical LVDT configuration
- Ø12 mm diameter housing

### Technical data

		DTL 50	DTL 100	DTL 200
Nominal stroke	mm	±25	±50	±100
Mechanical stroke	mm	52	102	205
Dimension B	mm	150	210	310
Dimension A	mm	75	102	200
Body diameter D	mm	12 h9		
Core diameter d	mm	3		
Sensor weight (approx.)	g	130	160	200
Core weight (approx.)	g	10	15	25
Nominal output @ 5 kHz **)	mV/V	133	135	125
Carrier frequency		5 kHz		
Recommended amplifier		MBI 46.31 / 46.32		
Excitation voltage (eff.)		Recommended 1...5 Vac		
Linearity *)		< ±0,5% F.S.O. optional: ±0,25%		
Temperature coefficient of zero		< ±0,1% / 10K		
Temperature coefficient of span		< ±0,2% / 10K		
Operating temperature *)		-40°C ... +80°C, optional: up to 120°C		
Protection		IP 64		

\*) Specify options on order

\*\*) indicative figures only, determined phase-independent

### Model list

Order code

DTL	nnn	NN						n,n%		/Option1 /Option2		
Series	Stroke	Connection						Linearity (FSO)		Options		
	See specification	Lesds	Axial cable <sup>1)</sup>	Radial cable <sup>1)</sup>	Axial connector <sup>2)</sup>	Radial connector <sup>2)</sup>	Radial connector (reinforced) <sup>2)</sup>	0,5%	0,25%	High operating temperature <sup>1)</sup>	Teflon cable (instead of PE)	80 mV/V nominal output
		none	K	Q	LX	R	RS			/120°C	/TF	/80mVV
DTL	50 ... 200	AWG 30	X	X	X	X	--	X	X	--	O	O
DTL	50 ... 200	AWG 30	X	X	X	--	X	X	X	O	O	--

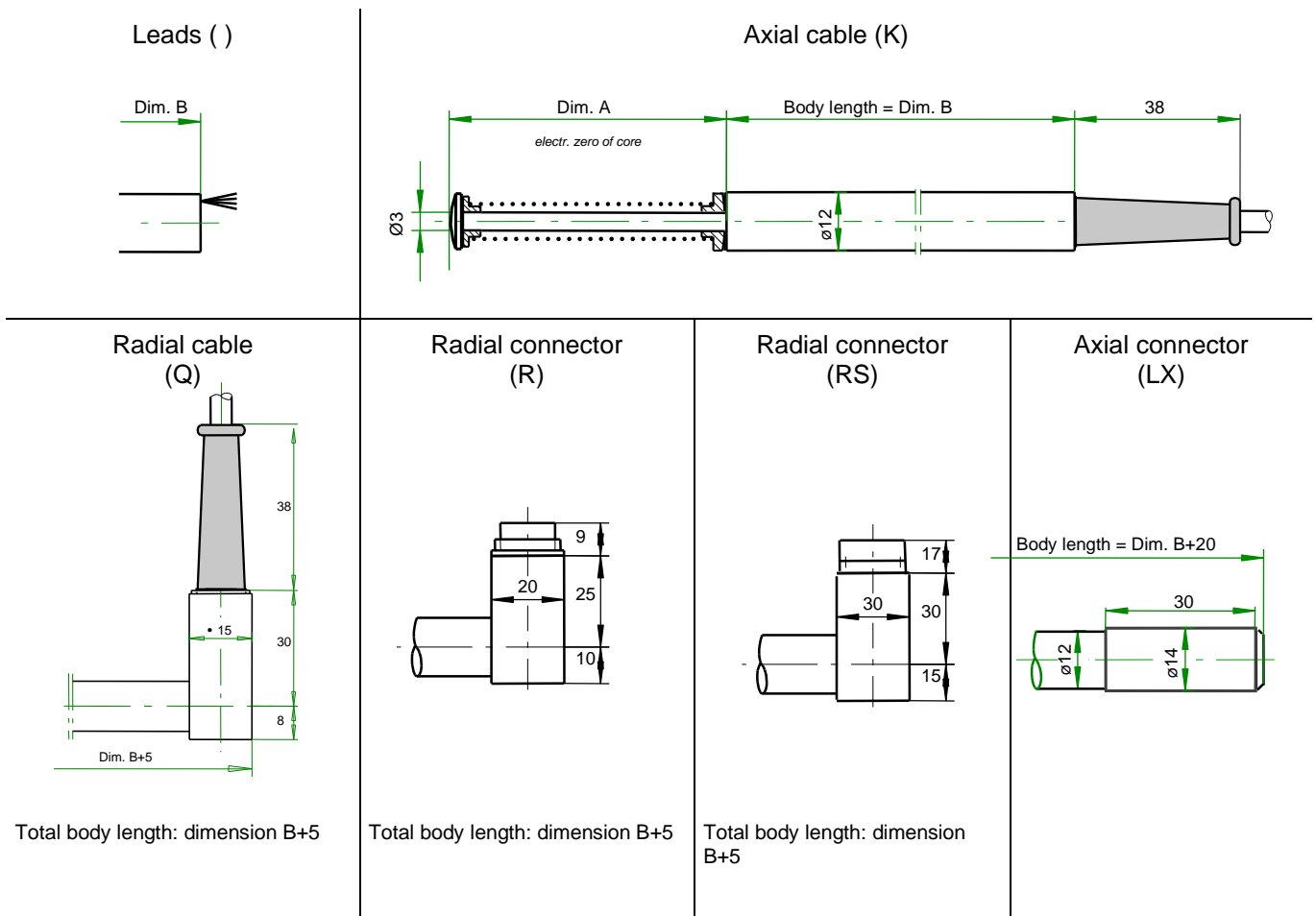
X = available standard model O = option -- = not available

1) Standard: PE-cable, for 120°C option: PTFE-cable

2) Mating connector supplied

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### Mechanical drawings



### Connection

	Leads	K/Q	R	RS	LX
	PTFE leads 250 mm long	PE-cable 2,5 m long Optional: PTFE-cable	Amphenol C 091 connector	Amphenol 3102 A connector	LEMO ERA.1S.304.CLL
<b>Excitation +</b>	White	White	2	B	2
<b>Excitation -</b>	Blue	Blue	3	C	3
<b>Measuring signal +</b>	Red	Red	1	A	1
<b>Measuring signal -</b>	Black	Black	4	D	4
<b>Mating connector supplied</b>	-	-	Amphenol C 091	Amphenol 3106 A	LEMO FFA.1S.304.CLA 57

### Notes

The movement has to be strictly axially on the cantilever. Radial forces / movement can lead to blocking of the sensor bar (especially the DTL 200).

DTL probes are not suitable for dynamic measurements (> 5 Hz).