Robust LVDT Probe

- Robust industrial version
- Full (symmetric) LVDT configuration
- Ø25 mm diameter

Technical data

		DTC 20	DTC 40	DTC 50	DTC 100
Nominal stroke	mm	±10	±20	±25	±50
Dimension B	mm	195	255	265	435
Dimension A	mm	30	40	45	70
Measuring force at zero (approx.)	N	7,0	8,3	8,3	9,4
Spring constant (approx.)	N/mm	0,33	0,15	0,13	0,08
Sensor weight (approx.)	g	500	630	650	950
Core weight (approx.)	g	55	76	80	80
Rated output @ 5 kHz **)	mV/V	80	80	80	80
Body diameter D		25 mm			
Core diameter d		3 mm			
Carrier frequency *)		5 kHz optional 10 kHz			
Recommended amplifier		e.g. MBI 46.31 / 46.32			
Excitation voltage (eff.)		Recommended 1 ... 5 Vac			
dynamic measurements		< 5 Hz			
Linearity *)		< ±0,4% F.S.O.; optional: ±0,2%			
Temperature coefficient of zero		< ±0,1% / 10K			
Temperature coefficient of span		< ±0,15% / 10K			
Operating temperature		-50°C ... +120°C			
Protection class (DIN 40050)		IP 54			

*) Specify options on order **) indicative figures only, determined phase-independent

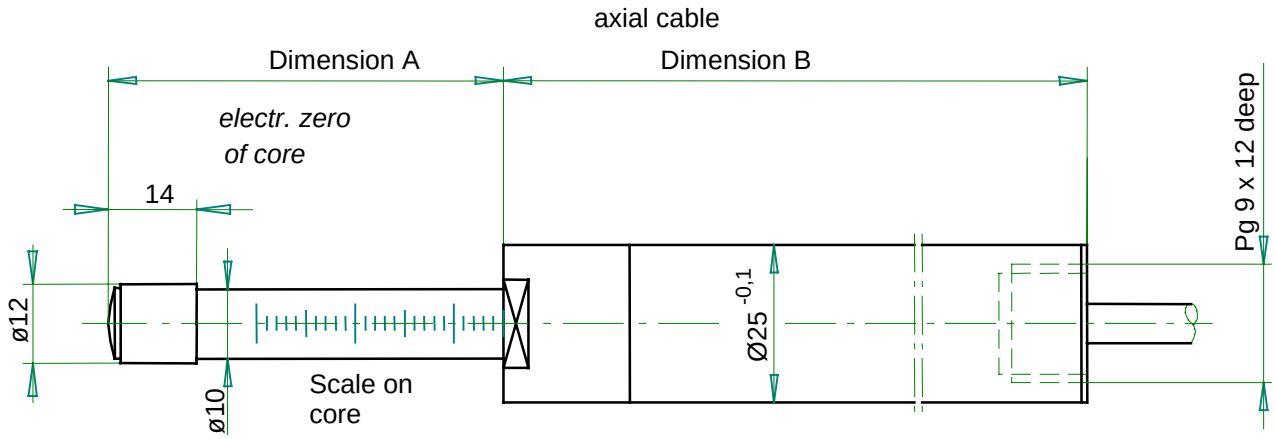
Model list

Order code e

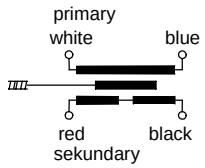
DTC	*nnn*	*NN*		*n,n%*		*/Option1 /Option2*
Series	Stroke	Connection		Linearity (FSO)		Options
	See specification	Axial cable	Radial cable	0,4%	0,2%	Carrier frequency
			Q			/10 kHz
DTC	20 ... 100	X	O	X	O	O

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

Mechanical drawings



Connection

	Cable
	PTFE-cable 5 m long:
	
Excitation +	White
Excitation –	Blue
Measuring signal –	Red
Measuring signal +	Black

Notes

The movement (forces) has to be strictly axially on the cantilever. Radial forces / movement can lead to a premature wear or even to blocking of the sensor bar.