

Sensor DLH

Innovative and proven LVDTs up to 40% shorter



- Useful stroke up to 85% body length
- High resolution and linearity
- Full (symmetric) LVDT configuration
- Ø12 mm for standard applications

Technical data

		DLH 50	DLH 100	DLH 200	DLH 300	DLH 400	DLH 500
Nominal stroke	mm	±25	±50	±100	±150	±200	±250
Mechanical stroke	mm	55	105	210	320	420	520
Dimension B	mm	100	160	260	370	480	600
Dimension A others optional *)	mm	55	80	135	190	240	290
Body diameter D	mm	12 h9					
Core diameter d	mm	3,6 (incl. PTFE coating)					
Sensor weight (approx.)	g	50	70	120	170	210	260
Core weight (approx.)	g	7	10	15	20	26	32
Nominal output @ 5 kHz **)	mV/V	133	135	125	134	150	130
Carrier frequency	5 kHz						
Recommended amplifier	MBI 46.31						
Excitation voltage (eff.)	up to 5 VAC						
Linearity *)	< ±0,5% F.S.O. optional: ±0,25%; 0,1% (not DLH 50)						
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 (not with 0,1% linearity)						
Protection	IP 64						

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

Notes

1) Core PTFE coating is provided for mechanical purposes (improved sliding) without influence on sensor electrical characteristics

Model list

Order code

DLH	Nnn	NN						n,n%			/Option1 /Option2		
Series	Stroke	Connection						Linearity (FSO)			Options		
	See spec.	Leads	Axial cable ^{1) 2)}	Radial cable ^{1) 2)}	Axial conn. ^{2) 3)}	Radial conn. ³⁾	Radial connector (reinforced) ³⁾	0,5%	0,25%	0,1%	High operating temperature ¹⁾	Customised dimension A	80 mV/V nominal output ^{4) 5) 6)}
		()	K	Q	LX	R	RS				/120°C	/Axx	/80mV/V
DLH	50 ... 500	AWG 30	X	X	X	X	--	X	X	X	--	O	O
DLH	50 ... 500	AWG 30	X	X	X	--	X	X	X	X	O	O	O

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

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

2) Core channel non-continuous

3) Mating connector supplied

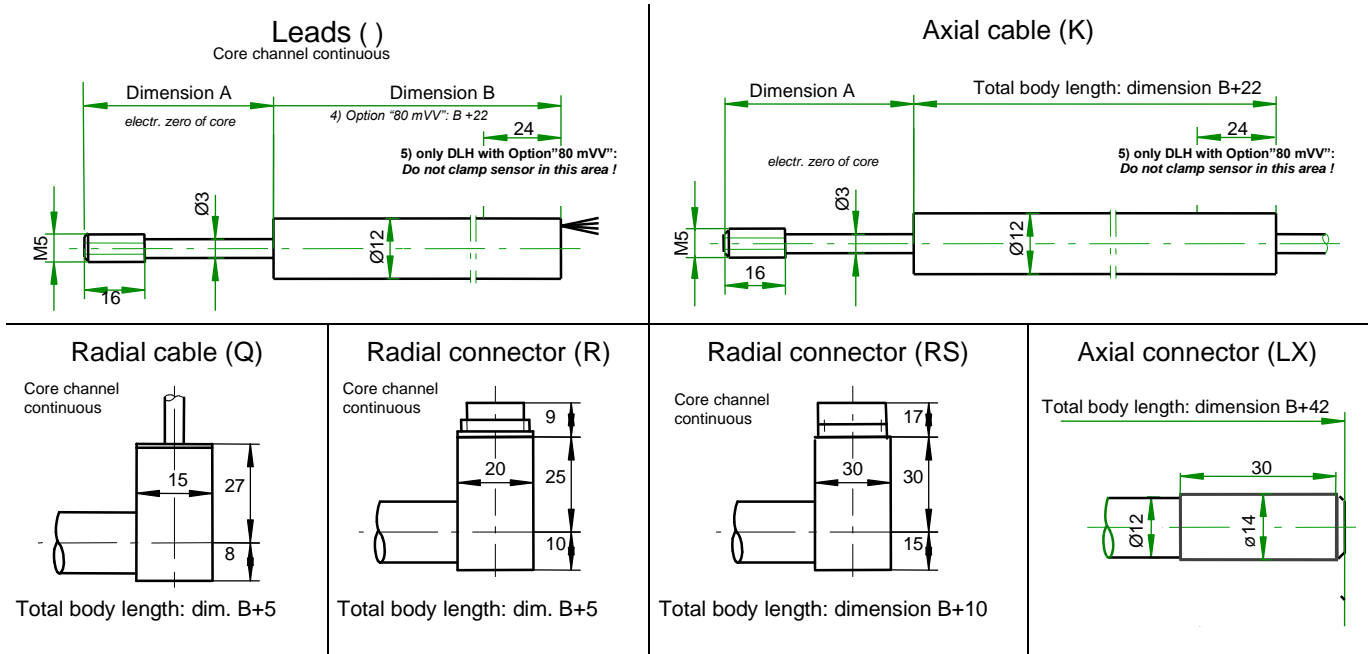
4) with leads-only version: B+22

5) clamping of sensor maybe not possible (see mechanical drawings)

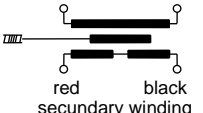
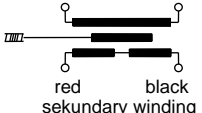



6) not available with linearity 0,1%; without core coating

Sensor DLH

Mechanical drawings



Connection

	Leads	K / Q	R	RS	LX
Type of connection	PTFE leads 250 mm long	PE-cable 2,5 m long Option: PTFE cable	Amphenol C 091 connector (Mating plug supplied)	Amphenol 3101 A connector (Mating plug supplied)	LEMO ERA.1S.303.CLL (Mating plug supplied)
Pin configuration	primary winding white blue  red black secondary winding	primary winding white blue  red black sekundary winding			
Excitation +	White	White	2	B	3
Excitation -	Blue	Blue	3	C	2
Measuring signal +	Red	Red	1	A	1
Measuring signal -	Black	Black	4	D	4
Mating plug	-	-	Amphenol C 091	Amphenol 3106 A	LEMO FFA.1S.303CLA 57