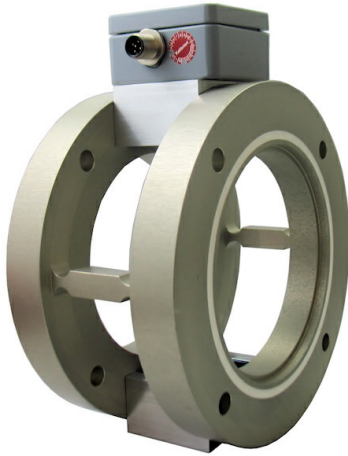


# C-FACE FLANGE TORQUE TRANSDUCER

## Model LSC

### STANDARD CONFIGURATION



**MODEL LSC-10** (Shown)

The LSC is used in test benches for measuring the reaction torque (Wired and non-rotating).

The torque transducer consists of two flanges, which are connected with each other via 4 measuring spokes. The two flanges have the same bolt circle of 5.8 in (149 mm). The pilots are designed as an external and internal collar with Ø 4.5 in (Ø 114.3 mm).

Due to the large diameter of the torque transducer LSC and the arrangement of the measuring spokes in the axial direction, this torque transducer can also absorb bending moments up to 1770 lbf-in (200 Nm), which are caused by the dead weight of the drive motor.

The connection is made via a terminal box with M12 connectors.

Optionally, an integral measuring amplifier can be provided instead of the terminal box so that the transducer has a voltage output of +/-10V.

### WIRING DIAGRAM

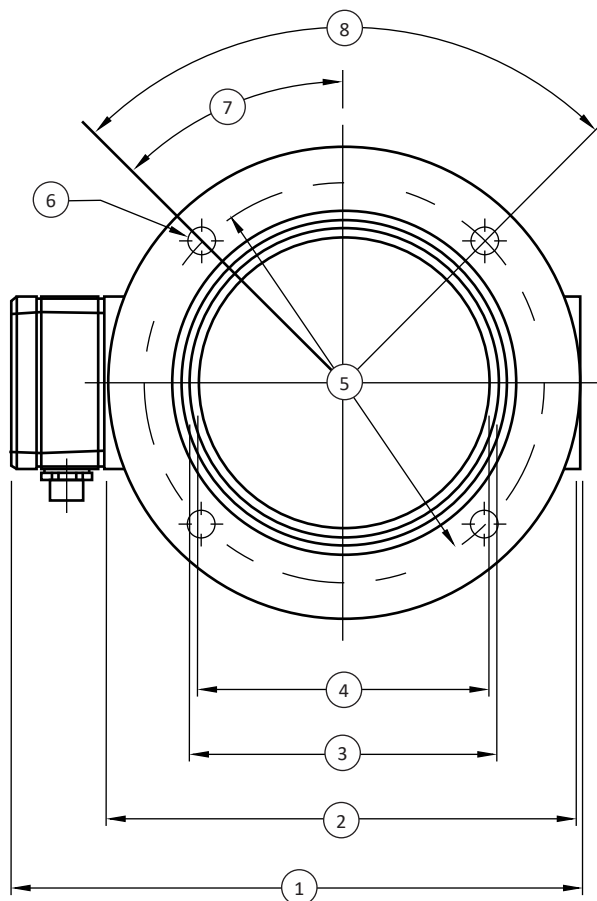
Pin	Description	Color	Symbol
Pin 1	Positive bridge supply	Brown	+Us
Pin 2	Negative bridge supply	White	-Us
Pin 3	Positive bridge output	Blue	+Ud
Pin 4	Negative bridge output	Black	-Ud

### SPECIFICATIONS

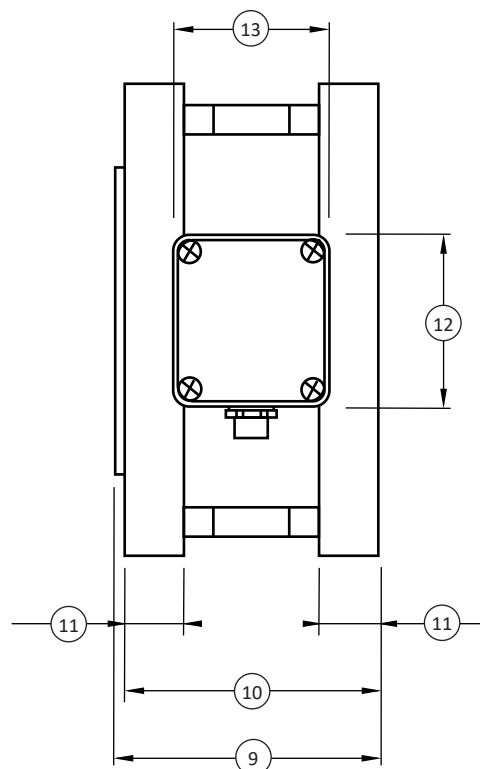
ACCURACY - (MAX ERROR)					
Accuracy class		0.1%			
Relative linearity error		0.1 %FS			
Relative zero signal hysteresis		0.1 %FS			
Temperature effect on zero signal		0.01 %FS/K			
Temperature effect on characteristic value		0.01 %RD/K			
Relative creep		0.05 %FS			
TEMPERATURE					
Rated temperature range	°F	14 to 158			
	°C	-10 to 70			
Operating temperature range	°F	14 to 185			
	°C	-10 to 85			
Storage temperature range	°F	14 to 185			
	°C	-10 to 85			
Environmental protection		IP65			
ELECTRICAL					
Input resistance		700 Ohm			
Tolerance input resistance		10 Ohm			
Output resistance		700 Ohm			
Tolerance output resistance		10 Ohm			
Insulation resistance		5 GOhm			
Rated range of excitation voltage		2.5 - 5 VDC			
Operating range of excitation voltage		1 - 10 VDC			
Zero signal		0.05 mV/V			
Rated output		1 mV/V			
MECHANICAL					
Type		Bending spring			
Rated torque	lbf-in	88.5	177	442.5	885
	Nm	10	20	50	100
Bending moment limit	lbf-in	1770.1			
	Nm	200			
Maximum operating torque		150 %FS			
Breaking torque		400 %FS			
Rated torsion angle		0.7 °/FS			
Axial force limit	lbf	112			
	N	500			
Lateral force limit	lbf	112			
	N	500			
Torque introduction		Bolt circle			
Material		Aluminum alloy			

MODEL							
LSC-10		LSC-20		LSC-50		LSC-100	
CAPACITY							
U.S. (lbf-in)	Metric (Nm)	U.S. (lbf-in)	Metric (Nm)	U.S. (lbf-in)	Metric (Nm)	U.S. (lbf-in)	Metric (Nm)
88.5	10	177	20	442.5	50	885	100

SIDE VIEW



TOP VIEW



## DIMENSIONS

SEE DRAWING	MODEL	
	LSC-10, 20, 50, 100	
	CAPACITY	
	U.S. (lbf-in)	Metric (Nm)
	88.5, 177, 442.5, 885	10, 20, 50, 100
	in	mm
(1)	8.3	212
(2)	Ø 6.9	Ø 175
(3)	Ø 4.5	Ø 114.3
(4)	Ø 4.3	Ø 108
(5)	Ø 5.9	Ø 149
(6)	4x Ø 0.4	4x Ø 10
(7)	45°	
(8)	4x 90°	
(9)	3.9	98
(10)	3.7	95
(11)	0.9	22
(12)	2.5	64
(13)	2.3	58



Lanrin Measurement Instrument

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