Temporary

High speed torque transducer 0126 DL

1. Introduction

The development of new combustion-motors and transmissions, the research of the propulsion cords through test rig simulation, demand a short build, compact and stiff torque transducer with high accuracy .
The series can be set in for speed upto 24000 rpm.

0126 DL

2. Advantages

The short, stiff construction and therewith resulting compact mechanical design of test rigs results high mechanical self frequencies, which means large ranges of measurement frequencies from 0 - 1000 Hz and allows therefore high dynamic measurements. Large above-and ranges of exchange load as well as very good accuracy of measurement predestine the measurement flane for dynamic performance test rigs. A high-definition speed measurement with 2 traces and zero signal are optional at disposal. The electric calibration signal produces 100 % rated torque of the strain gauge bridge, further more a static calibration can be carried out with weights and lever arm before and after the motor brake.
The torque signal is available as analog or frequency signal. A CE-labelling is obligatory with converter operation in regards to application with motor brake in 3-phase technique.

3. Design

The transducer consists of a rotor with flange connection for application of standard couplings.
Integrated in the stator part is the adjustment electronics with standardized outputs for the torque (0...± 10VDC or frequency output) . The speed signal is available as TTL-signal.
The stator can be mounted to the housing base.

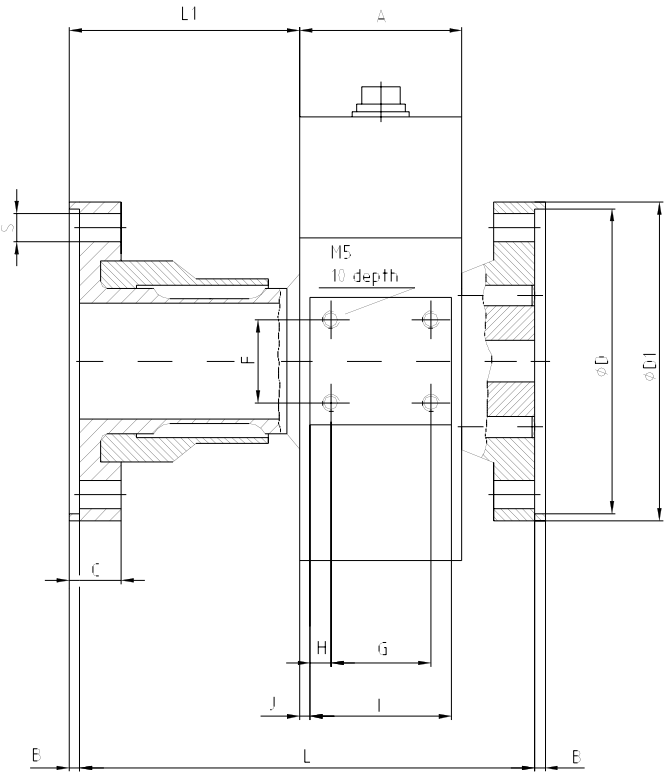
4. Electrical data

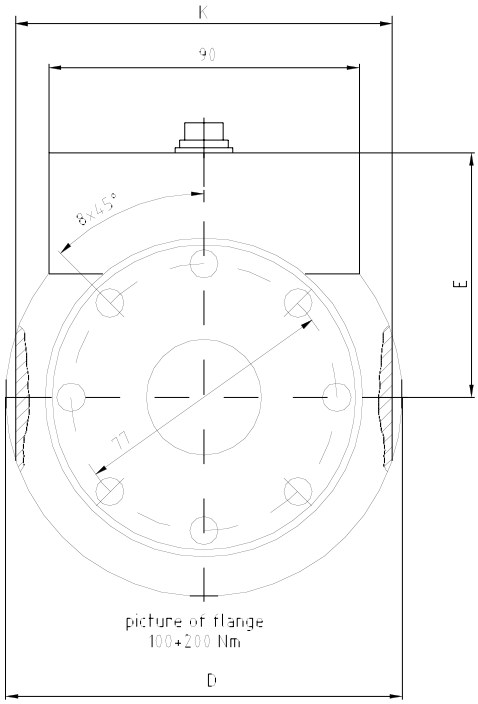
The data corresponds with the transducer according to data sheet 0126 DL

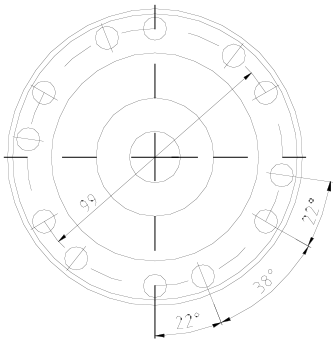
5. Application

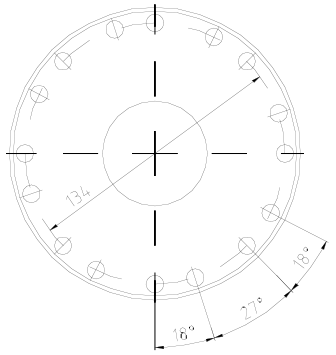
The torque transducers are used on different FORMEL 1-test stands for optimization or similar rigs.

6. Mechanical dimensions









	nominal torque range Nm				
	100 200		500	1000 1500	
L	132		160	210	
L1	67		80	105	
øD	88		110	146	
øD1	92		115	150	
A	47		53	53	
B	3		3	3	
C	16		16	16	
D	115		135	150	
E	71		86	95	
F	24		30	30	
G	29		29	29	
H	6		10	10	
I	41		49	49	
J	3		2	2	
K	109		126	142	
S	9		9	9	
J kgm²	0.0014		0.005	0.017	
C Nm/rad	34500	71000	167000	460000	530000