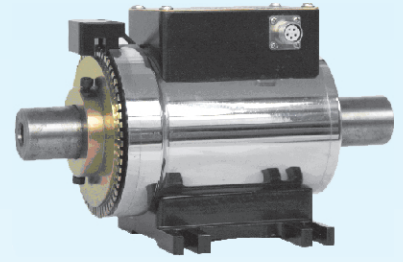


# Model 1811

## Heavy Duty Rotary Torque Transducers

1811 series heavy duty rotary torque transducers (RTT) are powered through an inductive transformer. Featuring a bearing only contacts structure, the maintenance of 1811 transducers is kept minimal. The non contact nature of the signal transfer, which is independent from the rotation movement, makes 1811 transducers capable of operating under high speed for a long time. These RTT are ideal products for long term durability applications such as rotational power transmission.

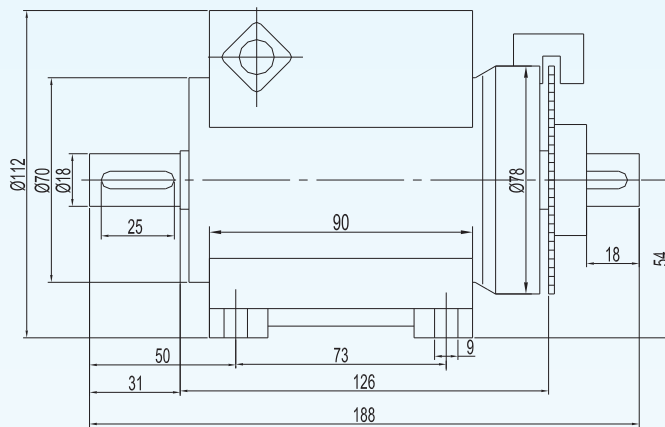
The measuring torque capacities of 1811 transducers span from 5 to 150000 Nm with an accuracy of 0.5 %fs (fs=full scale). The output (o/p) signal is frequency signal  $10 \pm 5$  kHz (square wave, 0-12 V). On request, these RTT can be coupled with a speed sensor and its tachometric wheel, measuring the rotational speed up to 60 pulse per round.



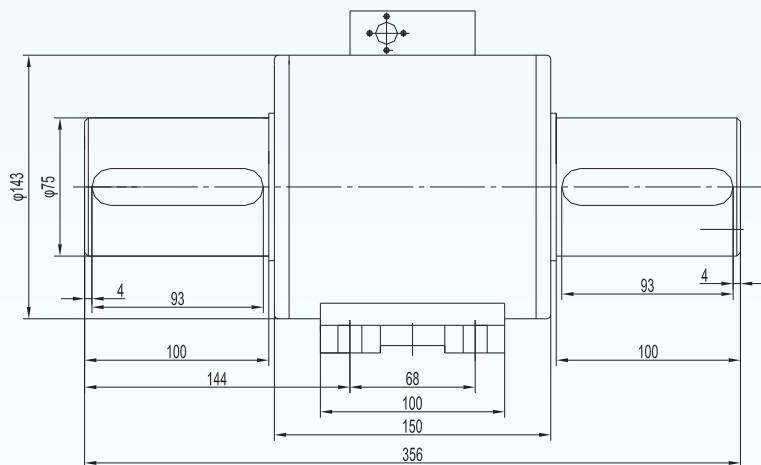
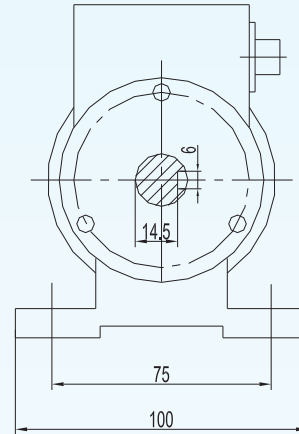
### Features:

- 5, ..., 150000 Nm capacity
- maximum rotation speed of 4500 rpm
- 0.5%fs measuring accuracy
- speed measurement available on request

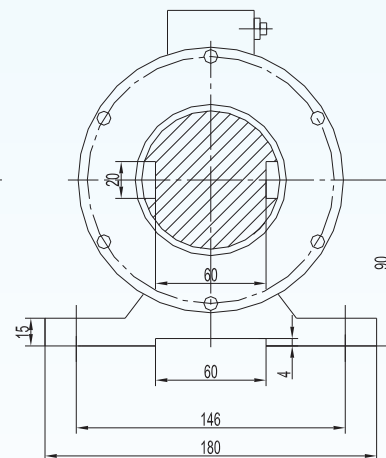
### Dimensions:



dimensions for capacity of 10Nm



dimensions for capacity of 2kNm and 3 kNm



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# Model 1811

## Heavy Duty Rotary Torque Transducers



### Technical Data:

parameters	units	specifications
capacity	Nm	5, ..., 150000
safe load limit	%fs	120
ultimate overload	%fs	150
output signal		frequency signal of square wave of 0-12V
frequency@zero load	kHz	10
frequency@clockwise fs	kHz	15
frequency@counter-clockwise fs	kHz	5
accuracy	%fs	± 0.5
maximum rotation speed	rpm	4500
speed measurement*	pulse/round	6~60
power supply	Vdc	± 15
load current	mA	< 10
response time	ms	0.1
storage temp. range	°C	-40 ~ +80
operating temp. range	°C	-30 ~ +80
compensated temp. range	°C	0 ~ 40
temp. coefficient of SPAN	%fs/°C	± 0.2
temp. coefficient of ZERO	%fs/°C	± 0.2
material		mild steel
environment protection		IP 66
mechanical interface		refer to the dimensions drawing
electrical interface		5-pin connector with detachable mating socket and 3 m PVC cable
unit weight	kg	0.8, ..., 120 (capacity dependent, to be confirmed in case of order)

The listed specifications are subject to change without prior notice.

\*: This function is available on request.

**Ordering Code:** model - capacity - other requests

example: 1811-100Nm-with speed measurement-detachable mating socket+3m Cable



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