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Slip Ring Module PremiumLine

Type 9873

for RoaDyn® P106

The RoaDyn slip ring module PremiumLine transmits measured signals from wheel torque transducer RoaDyn P106 to the control unit, which is located inside the vehicle. The slip ring PremiumLine is specific designed for analog measurements with torque wheel sensors.

- analog signal output
- maximum of 12 output signals; including 1 torque signal of torque sensor, 1 print circuit board temperature signal of torque sensors, 4 temperatures, 3 resolver signals and 3 customized signals
- resolver for speed and angle measurement

Description

All signals are transmitted via a 7 m long, 20 pin connecting cable from the rotating torque measuring wheels to the control unit Type 9867A… or to the control box Type 5683 inside the vehicle. In addition to the traction-torque signal several auxiliary quantities such as up to four temperature and three customized channels can be transmitted by the slip ring module. For control purposes one additional signal, the print circuit board temperature of the torque sensor electronics, can be transmitted synchronously. All above mentioned signals are of analog output. Inside of the slip ring module a resolver is integrated in order to determine speed and angle of rotation. The signals A and B define the position and the direction of rotation. The signal Z defines the zero position of the resolver.

Applications

The slip ring module in combination with the wheel torque transducer is used particularly in vehicle engineering or automotive research with emphasis in dynamic stability and traction control, anti-lock brake systems, investigations of fading effects, brake jitter, power measurements. Determination of friction values, coast down and safety tests such as U.S. procedure FMVSS 135.

Technical Data

Slip Ring Module, Type 9873

Operating temperature range		°C	–25 ... 80
Max. speed (≈250km/h)	n	min^{-1}	2 200
Shock resistance		g	50
Mass of transmission module	m	kg	0,85
Dimension			
diameter	d	mm	112
length	l	mm	82,5
Degree of protection			IP65 EN60529

Electrical Data

Power supply		VDC	9,5 ... 18
Max. current (Ext. +5 V, Pin 21, DB25)		mA	100
Max. current per ring		A	2
Output signal (FS)	Ch1 ... Ch3	V	±5
	M_y	V	±3,5
	T1 ... T4	V	0 ... 3,5
	Tc	V	0 ... 3,5
Encoder signals	A, B, Z	V	0 ... 5
pulses of revolution	A, B		1 024
pulses of revolution	Z		1
Interfaces			
to RoaDyn P106			D-Sub 25 pin, fem.
to connecting cable			Fischer 19 pin, fem.
Conform to the Directives			89/336/EWG
EMC Emmission			EN 61000-6-4: 2001 (EN 55011 Class A)
EMC Immunity			EN 61000-6-2: 2001

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Mounting

Mounted slip ring transmission module PremiumLine Type 9873 with RoaDyn P106, connecting cable Type 1763B7 and fixing arm Type 9881.

Fig. 1: Wheel torque transducer RoaDyn® P106 with slip ring module PremiumLine Type 9873

Included Accessories	Type/Art. No.
• none	

Optional Accessories	Type/Art. No.
• Connecting cable	1763B7
• Fixing arm	9881

Ordering Code	
• Slip ring module PremiumLine for RoaDyn P106	**Type 9873**

Dimensions

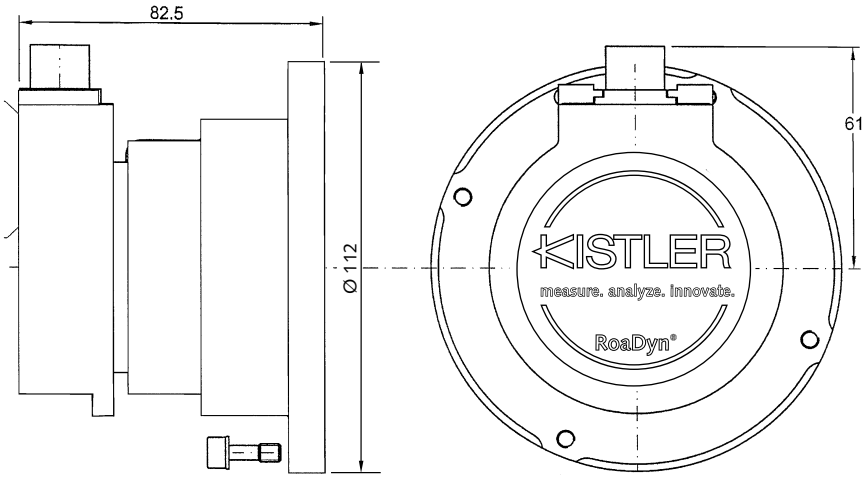

Fig. 2: Slip ring module PremiumLine Type 9873

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