S-DIAS Transsonar Module
TS 041/TS 051

with 4 (TS 041) or 5 (TS 051) Transsonar encoders

The S-DIAS TS 041 or TS 051 transsonar module can be used to analyze ultrasound distance recordings. The advantage lies in the contact and wear-free collection of measurement values with ultrasound.

Electrical Requirements

		TS 041	
	Voltage supply from S-DIAS bus	+24 V	
	Current consumption on the S-DIAS bus (+24 V power supply)	typically 85 mA at 18 V 65 mA at 24 V 55 mA at 30 V	maximum 90 mA at 18 V 70 mA at 24 V 60 mA at 30 V
		TS 051	
	Voltage supply from S-DIAS bus	+24 V	
	Current consumption on the S-DIAS bus (+24 V power supply)	typically 90 mA at 18 V 70 mA at 24 V 60 mA at 30 V	maximum 95 mA at 18 V 75 mA at 24 V 65 mA at 30 V

Article Number and Miscellaneous

	Article number	20-053-041 20-053-051
	Dimensions	12.5 x 104.2 x 72 mm (W x H x D)
	Standard	UL 508 (E247993)
	Approvals	UL, cUL, CE

Transsonar Specifications

	Number of channels	5 (TS 051) 4 (TS 041)
	Number of position encoders/channel	maximum 4
	Transonic encoder	ultrasonic encoder with start/stop function and RS422 interface (MTS EPS, Balluff BTL5, Balluff BTL6, Balluff BTL7)
	Position encoder speed	manufacturer-dependent (vus*: ca. 2845 m/s for Balluff encoder). This value must be set for each position encoder!!
	Automatic sensor parameter recognition	for sensors with integrated protocols (= "expanded P-interface" with Balluff BTL 6 AT types with DPI/IP (BTL6-P111-......) MTS EP start/stop sensor EPSxxxMDxxxR3)
	Measurement value (corresponds to the runtime)	0-1048575 (0-3.50 ms)
	Resolution	20 bits (corresponds to 9.48 µm at vus* = 2845 m/s)
	Gate time	3.33 ns
	Counter frequency	500 MHz
	Distance measuring (Example)	minimum: depends on the type of position sensor / maximum: runtime x vus (3.50 ms x 2845 m/s = 9.96 m)
	Status LEDs	5