

OMRON

Product Discontinuation Notices

Displacement Sensors

August 1, 2011 No. 2011244E

Discontinuation Notice of Contact Displacement. D5SN series.

Product Discontinuation

Recommended Replacement



D5SN-S04-L

ZX-TDS04T-L

Discontinuation date : The end of March, 2012

Caution on recommended replacement

- The change is needed in the amplifier unit as the sensor is changed.
- The Preamplifier is inserted between the sensor head and the connector of the substitute.
- The temperature property is changed as follows.
- Sensor: From (0.01%F.S.) to (Sensor Head: 0.03% F.S./°C, Preamplifier: 0.01% F.S./°C) Amplifier Unit (The amplifier unit is not product discontinuation.): From (0.01%F.S./°C) to (0.01%F.S./°C)
- Current consumption (with Sensor connected) is changed as follows. From (80mA) to (140mA)
- The Load current of judgment outputs is changed as follows. From (26.4 VDC 100 mA max.) to (30 VDC, 30 mA max.)
- The ambient temperature is changed as follows. From (Operating: -10 to +60°C, Storage: -15 to +70°C) to (Operating: 0°C to 50°C, Storage: -15°C to 60°C)

Difference from discontinued product

Model	Body Color	Dimen sions	Wire connection	Mounting Dimensions		Operation ratings	Operation methods
ZX	*				*	*	

- ** : Fully compatible
- * : The change is a little/Almost compatible
- -- : Not compatible
- : No corresponding specification

Product Discontinuation and recommended replacement

Product discontinuation	Recommended replacement	
Sensor DESN S04	Sensor ZX-TDS04T-L	
Sensor D5SN-S04-L	(Amplifier Unit ZX-TDA11)	

Body color

Product discontinuation	Recommendable replacement
D5SN-S04-L	ZX-TDS04T-L
Argent	Argent

Dimensions



Dimensions



Wire Connection



Mounting dimensions

Product discontinuation D5SN-S04-L	Recommendable replacement ZX-TDS04T-L (ZX-TDA11)		
Amplifier Unit D5SN-A01 (The amplifier unit is not product discontinuation.) The following mounting hole or DIN rail installation	Sensor ZX-TDS04T-L Preamplifier Mounting Bracket (Supplied with Each Sensor) Mounting Hole Cutout Dimensions		
Mounting Holes	Amplifier Unit ZX-TDA11 DIN rail installation		

Characteristics

Sensor

ltem	Product discontinuation D5SN-S04-L	Recommended replacement ZX-TDS04T-L	
Measurement range	4	mm	
Maximum actuator travel distance	Approx. 5 mm		
Resolution	0.4µm	0.1 µm	
Linearity	0.5% FS max.	0.3% F.S.	
Operating force	Approx. 0.25 N		
Degree of protection	IEC60529, IP54		
Mechanical durability	10,000,000 operations min.		
Ambient temperature	Operating: -10 to +60°C, Storage: -15 to +70°C (with no icing or condensation)	Operating: 0°C to 50°C, Storage: -15°C to 60°C (with no icing or condensation)	
Ambient humidity Operating and storage: 25% to 95% (with no icing or condensation)		Operating and storage: 35% to 85% (with no icing or condensation)	
Temperature influence	0.01% FS/°C	Sensor Head: 0.03% F.S./°C Preamplifier: 0.01% F.S./°C	
Materials	Sensor Head: Stainless steel	Sensor Head: Stainless steel Preamplifier: Polycarbonate	

Characteristics

Amplifier Unit

lte	em	Product discontinuation D5SN-A01 (The amplifier unit is not product discontinuation.)	Recommended replacement ZX-TDA11	
Supply voltage		12 to 24VDC (10.8 to 26.4VDC)	12 to 24 VDC ±10%, Ripple (p-p): 10% max.	
Current con	sumption	80mA max (with Sensor connected)	140 mA max. (with Sensor connected)	
Analog	Current	4 to 20mA (load impedance: 300Ω max.)		
output Voltage		-5 to 5V (load impedance: $10k\Omega$ min.)	±4 V (±5 V, 1 to 5 V (See note 1.)), Output impedance: 100 Ω	
Judgment outputs		NPN open collector 26.4 VDC 100 mA max. Residual voltage: 1.5 V max.	NPN open-collector , 30 VDC, 30 mA max. Residual voltage: 1.2 V max.	
Zero reset i in-put, reset judgment of input	t input,	None	ON: Short-circuited with 0-V terminal or 1.5 V or less OFF: Open (leakage current: 0.1 mA max.)	
Function		Offset adjust, Span adjust	- Measurement value display- Present value/set value/output value display - Display reverse- ECO mode - Number of display digit changes- Sample hold- Peak hold- Bottom hold, peak-to-peak hold- Self-peak hold - Self-bottom hold- Zero reset- Initial reset- Direct threshold value setting- Position teaching - Hysteresis width setting- Timing inputs- Reset input- Judgment output hold input - (A-B) calculations (See note 4.)- (A+B) calculations (See note 4.) - Sensor disconnection detection- Zero reset memory- Function lock- Non-measurement setting- Clamp value setting- Scale inversion- Zero reset indicator- Span adjustment- Warming-up display- Pressing force alarm	
Indicators		Alarm (red)/enable (green) indicator Position indicator (green)	Judgment indicators: High (orange), pass (green), low (yellow), 7-segment main digital display (red), 7-segment sub-digital display (yellow), power ON (green), zero reset (green), enable (green)	
Ambient temperature		Operating: -10 to +55°C, Storage: -25 to +65°C (with no icing or condensation)	Operating and storage: 0 to 50°C (with no icing or condensation)	
Ambient humidity		Operating and storage: 25% to 85% (with no condensation)	Operating and storage: 35% to 85% (with no condensation)	
Materials		Sensors ; Case: ABS resin, Amplifier Units ; Case: ABS resin,	Case: Stainless steel (SUS303) Sensing surface: PBT resin, polyurethane, glass epoxy resin	

Note1. Setting is possible via the monitor focus function.

Operation ratings



Operation methods

Product discontinuation D5SN-S04-L	Recommendable replacement ZX-TDS04T-L (ZX-TDA11)
Amplifier Unit D5SN-A01 (The amplifier unit is not product discontinuation.)	Amplifier Unit ZX-TDA11
OFFSET adjustment and span adjustment by adjuster	Each setting with slide switch and push-button.