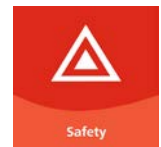


Kuhnke FIO Safety

Control Technology

Kuhnke FIO Safety SDI4/SDO2 Safety I/O terminal

Kuhnke FIO Safety SDI4/SDO2 is a safety I/O terminal featuring four safe digital input channels and two safe digital output channels. This module from Kuhnke FIO range can easily be integrated in any EtherCAT® network. Four inputs pick up sensor readings via floating 24 V DC contacts while two outputs send up to 2 A of current per channel to 24 V DC actuators. In case the EtherCAT terminal detects a fault, it changes to a safe state (fail safe). The module meets the requirements of IEC 61508 SIL3 and DIN EN ISO 13849 PL_e.



Supported safety functions

- 4 x emergency stop, or
- 4 x contact sensor, or
- 2 x light grid, or
- 1 x two-handed operation
- and 2 autonomous output functions

Technical data	Kuhnke FIO Safety IO SDI4/SDO2
Safety protocol	FSoE
Safety standard	IEC 61508 SIL3 and DIN EN ISO 13849-1 PL _e
Number of inputs	4 safe inputs (configurable properties)
Number of outputs	2 safe outputs (I _{max} = 2.0 A)
Clock pulse outputs (OSSD)	4
Response time	< 1 ms (read input, write to E-bus)
Error response time	≤ watchdog time (configurable)
Extended diagnostic information	via CoE
E-bus power consumption	275 mA
Power supply voltage	24 V DC (-15% / +20%)
Electrical interference	EN 61000-6-2/ EN 61000-6-4
Resistance to vibration	EN 60068-2-6
Resistance to shock	EN 60068-2-27
Fieldbus port	EtherCAT® 100 Mbps LVDS: E-bus
Installation / mounting pos.	35 mm DIN rail / horizontal
Signal indication	LEDs allocated to the point of termination, status LEDs (EtherCAT, Safety, Power)
Shield	Provided directly by the module
Terminals	18-pin spring-assisted connector with mechanical ejector
Ambient conditions	0 °C ...+55 °C, IP 20
Housing (W x H x D)	Plastic shroud over aluminium frame, 25 x 120 x 90 mm
Certifications	CE, cULus, TÜV Rheinland

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