

MICROOPTO MOS 12-28VDC/5VTTL

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

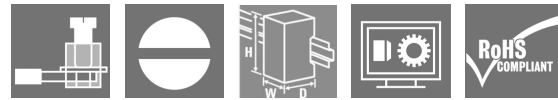
D-32758 Detmold

Germany

Fon: +49 5231 14-0

Fax: +49 5231 14-292083

www.weidmueller.com



To adjust sensitive TTL signals to the typical voltage level of 24 V DC used in industrial automation applications, the MICROOPTO TTL modules are used. For the protection of the electronics, the sensitive TTL signals require electrical isolation from the 24 V world. To control the opto circuit via the 5 V TTL signal, an additional auxiliary voltage is fed in.

General ordering data

Type	MOS 12-28VDC/5VTTL
Order No.	8937930000
Version	MICROOPTO, solid-state relays, 1 NO contact (TTL), Rated control voltage: 12 V DC...28 V DC , Rated switching voltage: 5 V TTL, Continuous current: 50 mA, Screw connection
GTIN (EAN)	4032248716166
Qty.	1 pc(s).

Creation date August 16, 2020 4:42:43 PM CEST

Catalogue status 24.07.2020 / We reserve the right to make technical changes.

**MICROOPTO
MOS 12-28VDC/5VTTL**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Technical data**Dimensions and weights**

Width	6.1 mm	Width (inches)	0.24 inch
Height	88.1 mm	Height (inches)	3.468 inch
Depth	97.8 mm	Depth (inches)	3.85 inch
Net weight	34 g		

Temperatures

Humidity	5 - 93% rel. humidity, Tu = 40°C, no condensation	Operating temperature, max.	60 °C
Operating temperature, min.	-25 °C	Storage temperature, max.	60 °C
Storage temperature, min.	-40 °C	Operating temperature	-25 °C...60 °C
Storage temperature	-40 °C...60 °C		

Probability of failure

MTTF	2,047 Years
------	-------------

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
------------	----------------

Control side

Rated control voltage	12 V DC...28 V DC	Power rating	150 mW
Cut-in / dropout voltage	10.7 V / 10.6 V DC	Status indicator	Green LED
Protective circuit	Varistor, Reverse polarity protection		

Load side

Rated switching voltage	5 V TTL	Continuous current	50 mA
Load category	LC A	Switch-on delay	typ. < 1 µs
Switch-off delay	typical. < 4 µs	Voltage drop at max. load	90 mV
Leakage current	< 1 µA	Short-circuit-proof	No
Protective circuit, load side	Varistor	max. switching frequency (DC control voltage)	100 kHz
Nominal auxiliary voltage	5 V DC ± 10 % / max. 50 mA		

Contact data

Contact type	1 NO contact (TTL)
--------------	--------------------

General data

Rail	TS 35	Colour	black
UL 94 flammability rating	V-0		

**MICROOPTO
MOS 12-28VDC/5VTTL**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Technical data**Insulation coordination**

Rated voltage	300 V	Pollution severity	2
Surge voltage category	III	Clearance and creepage distances for control side - load side	> 3 mm
Dielectric strength for control side - load side	3 kV _{eff} / 1 Min.	Dielectric strength to mounting rail	4 kV _{eff} / 1 Min.
Impulse withstand voltage	4 kV (1.2/50 µs)	Protection degree	IP20

Further details of approvals / standards

Standards	DIN EN 50178, GL 2003-VI-Abs. 9, IEC 62314, UL508	Certificate No. (DNVGL)	TAE000033E
Certificate No. (GERMLLOYD)	54853-08	Certificate no. (cULus)	E141197

Connection data

Wire connection method	Screw connection	Stripping length, rated connection	7 mm
Tightening torque, min.	0.4 Nm	Tightening torque, max.	0.6 Nm
Clamping range, rated connection	2.5 mm ²	Clamping range, min.	0.5 mm ²
Clamping range, max.	4 mm ²	Wire cross-section, solid, min.	0.5 mm ²
Wire cross-section, solid, max.	4 mm ²	Wire connection cross-section, finely stranded, min.	0.5 mm ²
Wire connection cross section, finely stranded, max.	2.5 mm ²	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.5 mm ²
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	1.5 mm ²	Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.5 mm ²
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	1.5 mm ²	Blade size	0.6 x 3.5 mm

Classifications

ETIM 6.0	EC001504	ETIM 7.0	EC001504
eClass 9.0	27-37-16-04	eClass 9.1	27-37-16-04
eClass 10.0	27-37-16-04	UNSPSC	30-21-18-01

Product information

Product information The cable lengths must not exceed 30 m.

Approvals

Approvals



ROHS Conform

Data sheet**MICROOPTO
MOS 12-28VDC/5VTTL**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Technical data**Downloads**

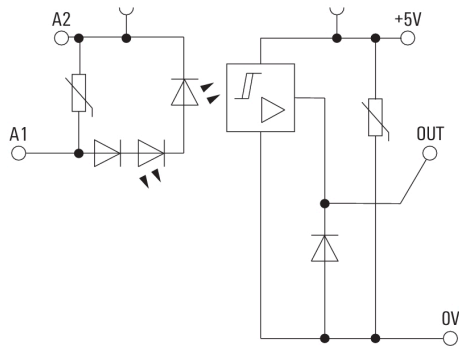
Approval/Certificate/Document of Conformity	EU Konformitätserklärung / EU Declaration of Conformity
Brochure/Catalogue	CAT 4.2 ELECTR 18/19 EN
Engineering Data	EPLAN, WSCAD
Engineering Data	STEP
User Documentation	Beipackzettel / Package Insert – multilingual

**MICROOPTO
MOS 12-28VDC/5VTTL**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Drawings

Wiring diagram



Dimensional drawing

