

Product: <u>VAD M12 1A-VAD 1A-1-3-226</u> ☑



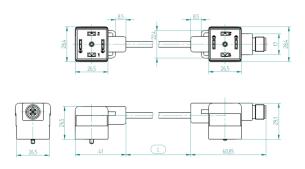
Dual Valve, Form A | M12- Male 0° | #Contacts: 3 | 2xForm A - Female 90° | #Contacts: 2+2 PE | Varistor (MOV) & yellow LED | 24 V | Cable: Black (PUR);

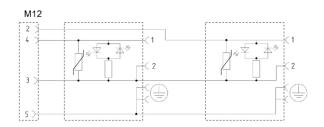
0.50 mm²; IEC | cURus

Product Description

Form A, Dual Valve Adaptor| M12- Male Straight | #Contacts: 3, A-coded | 2 x Form A - Female Angled Cordset | #Contacts: 2+2 PE | Varistor (MOV) & yellow LED | 24 V / 4 A | Cable: Black PUR Jacket; 3x0.50 mm² (20 AWG); IEC

Technical Drawing





Technical Specifications

Face View Side 1

Pin 2	Pin 3	Pin 4	Pin 5
brown	blue	brown	green-yellow

Face View Side 2

Pin 1	Pin 2	PE1	PE2
brown	blue	green-yellow	green-yellow

Product Description

Product Family:	Valve Connectors
Brand:	Lumberg Automation
Shielding:	Unshielded
Rated Voltage:	24 V
Rated Impulse Voltage:	4.0 kV (PCBA 2.0 kV)
Operating Voltage:	24 V AC/DC
Rated Current*:	4 A

Technical Data Side 1

Product Sub Family:	Dual Valve Adapter
Type of Contact / Gender:	Pin Contact / Male, M12 Socket Contact / Female, Valve
Connector Design:	M12 Male 5 Pole 0°
Attachment Type:	Fixed Screw, M12 Exit Central Screw Valve
Number of Pins:	3, M12 Exit 2+2 PE, Valve

Insulation Resistance: > 10 Mating Cycles: ≤ 10 Conductor Cross Section: 0.50	5 mOhm, M12 Exit Ohm 10^9 Ohm 100 50 mm² 40 °C - + 80 °C
Mating Cycles: ≤ 10 Conductor Cross Section: 0.50	100 .50 mm ²
Conductor Cross Section: 0.50	50 mm ²
Ambient Tenenerature	
Ambient Temperature	40 °C - + 80 °C
(Operation)*:	
Temperature Range (Gasket): -25	25°C to +80°C
Protection Degree / IP Rating**:	² 65, IP67
Design Standard: DIN	IN EN 175301-803-A, ISO 4400
Pollution Degree: 3 ac	acc. to DIN EN 60664-1 (VDE 0110-1)
Clearance / Creepage DIN Distance:	IN EN 60664-1 (2008/01); VDE 0110-1
Overvoltage Category: III a	acc. to DIN EN 60664-1 (VDE 0110-1)
Contact Base Material: Cop	opper Alloy (CuSn), M12 Brass (CuZn), Valve
Contact Plating: Gol	iold over Copper (Cu/Au), M12 Copper over Tin (Cu/Sn), Valve
Contact Bearer Material: The	hermoplastic Polyurethane (TPU), M12 Glass-filled Polyamides (PA GF), Valve
Contact Bearer Color: Black	lack, M12 Black, Valve
Flammability Class (Contact Bearer):	L 94 HB, M12 UL 94 V-0, Valve
Molded Body Material: The	hermoplastic Polyurethane (TPU)
Molded Body Color: Gre	rey Translucent
Flammability Class (Molded Body):	L 94 HB
Housing Material: Bras	rass (CuZn), M12 Exit
Housing Plating: Nick	ickel (Ni), M12 Exit
Housing Color: Met	letallic, M12 Translucent, Valve
Attachment Material: Bras	rass (CuZn), M12 Steel, Philips combi slot, Valve
Gasket Material: Mol	lolded Integrated Gasket
Protection Circuitry: Sup	uppression diode (TVS)
Protective Circuit: Sup	uppression diode (TVS)
Fastening Torque (Attachment):	112x1: (50-60) Ncm, hand-tight

Cable Data

Cable Number:	226
Conductor Size:	0.5 mm ²
Number of Wires:	3
Minimal Bending Radius (Fixed Inst):	>5 x D
Minimal Bending Radius (Flexible Inst):	> 10 x D
Cycles (Bending):	> 5 M
Cycles (Torsion):	$>$ 5 M @ \pm 360 °/1 m
Conductor material:	Cu
Cable Jacket Material:	Polyurethane (PUR)
Cable Jacket Color:	Black
Cable Diameter D:	Ø 4.6 mm [0.181]"
Wire Insulation Material:	Polypropylene (PP)
Insulated Wire Diameter:	Ø 1.50 mm [0.06"]
Ambient Temperature (Fixed Installation):	- 50 °C to + 105 °C (UL: + 80 °C)
Ambient Temperature (Flex Installation):	- 25 °C to + 105 °C (UL: + 80 °C)
Ambient Temperature (Drag Chain Inst):	- 25 °C to + 60 °C
UL Cable Type:	AWM: 20549
Flammability Class (Cable Jacket):	DIN EN 50265-2-2, VDE 0482-265-2-2, IEC 60332-2-2, CSA FT2

Flexibility: Excellent | Abrasion Resistance: Excellent | Oil & Chemical Resistance: Excellent | UV Resistance: Good to excellent | Low Temp Performance: Excellent (flexible to -40°C) | Flame Retardance: Varies | Halogen-Free: Yes | Mechanical Durability: High (resists impact, tear, and flex) | Environmental Suitability: Outdoor, oily, wet, or rough environments

Technical Data Side 2

Product Sub Family, Side 2:	Dual Valve
Type of Contact / Gender, Side 2:	Socket Contact / Female
Connector Design, Side 2:	Dual Form A Female 90° 2+2PE Pole
Attachment Type, Side 2:	Central Screw
Number of Pins, Side 2:	2+2 PE
Coding, Side 2:	A
Contact Resistance, Side 2:	≤ 10 mOhm
Insulation Resistance, Side 2:	> 10^9 Ohm
Mating Cycles, Side 2:	≤ 50
Ambient Temperature (Operation), Side 2*:	- 40 °C - + 80 °C
Protection Degree / IP Rating, Side 2**:	IP65, IP67
Design Standard, Side 2:	DIN EN 175301-803-A, ISO 4400
Pollution Degree, Side 2:	3 acc. to DIN EN 60664-1 (VDE 0110-1)
Clearance / Creepage Distance, Side 2:	DIN EN 60664-1 (2008/01); VDE 0110-1
Overvoltage Category, Side 2:	III acc. to DIN EN 60664-1 (VDE 0110-1)
Contact Base Material, Side 2:	Brass (CuZn)
Contact Plating, Side 2:	Copper over Tin (Cu/Sn)
Contact Bearer Material, Side 2:	Glass-filled Polyamides (PA GF)
Contact Bearer Color, Side 2:	Black
Flammability Class (Contact Bearer), Side 2:	UL 94 V-0
Molded Body Material, Side 2:	Thermoplastic Polyurethane (TPU)
Molded Body Color, Side 2:	Grey Translucent
Flammability Class (Molded Body), Side 2:	UL 94 HB
Housing Color, Side 2:	Translucent
Attachment Material, Side 2:	Steel, Philips combi slot
Protection Circuitry, Side 2:	Suppression diode (TVS)
Function Indicator, Side 2:	Yellow LED
Protective Circuit, Side 2:	Suppression diode (TVS)
Fastening Torque (Attachment), Side 2:	(50-60) Ncm
Note, Side 2:	1. Do not connect or disconnect under load.

Approvals

VDE: Yes

Safety & Environmental Compliance

RoHS Compliant: Yes

Resistances

Halogenfree:	Yes
Oil Resistance:	Good chemical and oil resistance

Notes

Protection Degree / IP Rating Note:	IP Rating tested according to IEC standard using combination of a Hirschmann or Lumberg Automation connector mounted and locked
Note Derating:	Notice derating
Update and Revision:	Revision Number: 0.49 Revision Date: 07-31-2025

Variants

Item #	Item Description	Cable Length
12180	VAD M12 1A-VAD 1A-1-3-226/0,4 M	0.4 m
5805	VAD M12 1A-VAD 1A-1-3-226/0,2M	0.2 m

© 2025 Belden, Inc

All Rights Reserved

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.