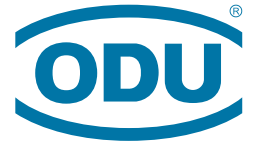


A PERFECT ALLIANCE.



ODU-MAC[®] **Blue-Line**

A new performance class.

Up to 2,500 V, 12 bar, 10 Gbit/s, > 10,000 mating cycles and 4.0 GHz.

MANUAL MATING
AUTOMATIC DOCKING

SHORT OVERVIEW



ODU-MAC[®] BLUE-LINE

ODU-MAC[®] SILVER-LINE

ODU-MAC[®] WHITE-LINE

THE PRINCIPLE OF MODULAR DESIGN

Look here to see exactly what our modular design looks like. For more detailed information, please visit our website or consult our ODU-MAC Blue-Line catalogue.

2 Possible applications:
manual mating or automatic docking

53 Cable hood versions

3 Locking types: spindle, lever and
transverse locking

18 Modules to choose from: signal, power, high
current, coax, pneumatic, data transmission,
fibre optic and PCB termination

3 Different spindle geometries

Removable
contacts with
clip principle

12 Variations of bulkhead mounted and
surface mounted housing and cable-to-cable-
hoods in different sizes



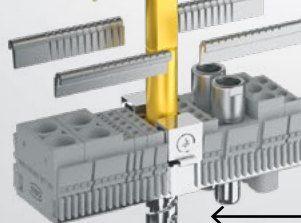
10,000

Mating cycles and more

← Housing



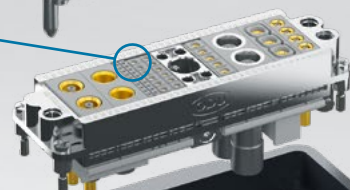
← Contacts for
solder, crimp and
print terminations



← Spindle locking



← Pin frame



← Socket frame



← Housing

OUTSTANDING – FOR EVERY NEED:

Take a closer look at the following pages to discover for yourself the variety of transmission methods we offer, such as USB[®] 2.0¹, FireWire[®]¹, CAT 6_A¹ and Ethernet¹.

¹ These ODU specific connectors can transmit common data transmission protocols such as USB[®] 2.0, FireWire[®], CAT 6_A and Ethernet, but they are not USB[®]-, FireWire[®]-, CAT 6_A- and Ethernet-standard connectors.

THE MOST CUSTOMIZED CONNECTORS – THANKS TO THEIR MODULAR DESIGN



ODU-MAC® BLUE-LINE – A NEW PERFORMANCE CLASS.

The economical connector system is a modular all-around talent that can be configured for the smallest installation space – available in both a plastic and a metal housing. A multitude of data transmission modules enable a broad area of application as a service and interface connector, such as in mechanical engineering, in measurement and testing, as well as in medical technology.

The simple, exceptionally user-friendly assembly and dismantling of the crimp-clip contacts, even if they have already been assembled, distinguish the ODU-MAC Blue-Line as well; a faulty clipping-in of the module is prevented via one mechanical and two optical coding functions. The cost-effective and proven ODU contact technology – turned and slotted contacts – with at least 10,000 mating cycles, as well as the simple processing of the contacts and modules, underscores the economic aspect of the system.

⊕ CONVINCING – THE ODU-MAC® BLUE-LINE

- High-quality, manual connector solution with a variety of housing variants
- Various locking options (spindle and lever)
- Highest packing density
- Easy handling: the simplest clip assembly and removal of the module without tools
- Simplest removal of the crimp-clip contact (when already assembled)
- Separate PCB termination module for an effective contact
- > 10,000 mating cycles
- Numerous data transmission modules

FOR MORE DETAILED INFORMATION,
PLEASE VISIT OUR CATALOGUE.

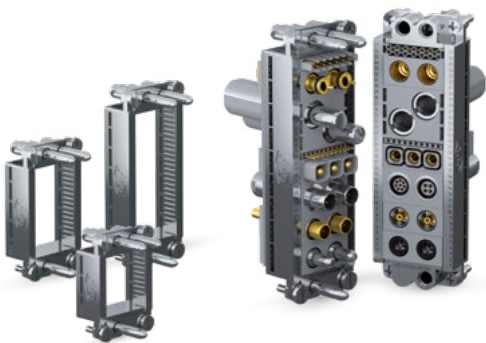


SIMPLY SCAN THE QR CODE
TO DOWNLOAD THE ENTIRE
BROCHURE.

YOUR CUSTOMIZED CONNECTION

The ODU-MAC Blue-Line is a convenient, hybrid manual-connector solution comprising a stable frame, various modules and a housing. Its modular design enables it to combine many individual connectors in one ODU-MAC Blue-Line. The proven ODU spindle locking in the new standard plastic housing provides the ODU-MAC Blue-Line with a truly unique selling point on the market.

CONFIGURE YOUR ODU-MAC BLUE-LINE
ONLINE. SIMPLY GO TO WWW.ODU-MAC.COM.



MANUAL MATING

Configuration can be customized according to your wishes, offering many options which leave nothing to be desired.

+ 3 TYPES OF LOCKING

First, you select your lock type by choosing between spindle and lever locking.

+ DIFFERENT CONNECTOR HOUSINGS

According to the lock you choose, you then select the plastic or metal housing best suited to your requirements: cable hood, cable hood XXL or cable hood wide.

+ RECEPTACLE SELECTION

Depending on your requirements for the receptacle and connector housing, you then choose between bulkhead mounted housing, surface mounted housing or cable-to-cable hood.

AUTOMATIC DOCKING

Depending on your requirements, there are 4 different frame lengths to choose from for automatic docking.

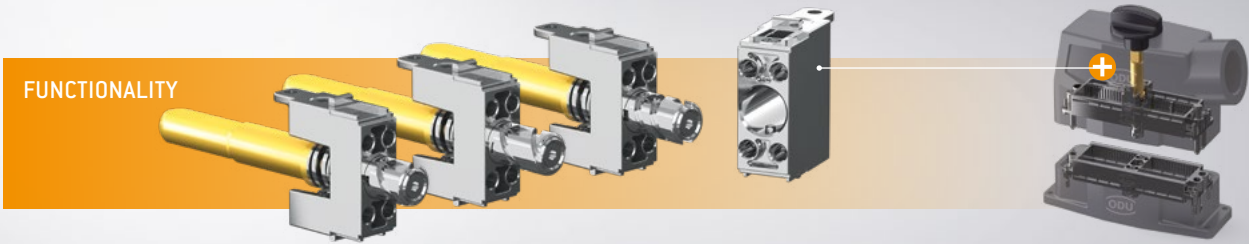
+ 4 DOCKING FRAMES

Size	Units
1	12
2	18
3	26
4	37

Tolerance compensation radial: ± 0.6 mm
Tolerance compensation axial: min. 0.1 mm

SPINDLE LOCKING

Quick-action locking system with 10,000 locking cycles. If required, the simple front replacement set (spindle exchange set) enables a simple adjustment of the spindle geometry. Module for installation in ODU-MAC Blue-Line frames for housings.



SIGNAL

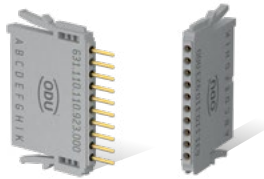


2

Units

+ 20 contacts / Contact Ø: 0.7 mm

- Operating voltage¹ 250 V
- Rated impulse voltage¹ 2,000 V
- Max. continuous current² 11 A at 0.38 mm²
- Mating cycles min. 10,000



1

Unit

+ 10 contacts / Contact Ø: 0.7 mm

- Operating voltage¹ 320 V
- Rated impulse voltage¹ 2,500 V
- Max. continuous current² 11 A at 0.38 mm²
- Mating cycles min. 10,000



2

Units

+ 6 contacts / Contact Ø: 1.3 mm

- Operating voltage¹ 400 V
- Rated impulse voltage¹ 2,500 V
- Max. continuous current² 19.5 A at 1 mm²
- Mating cycles min. 10,000



3

Units

+ 5 contacts / Contact Ø: 2 mm

- Operating voltage¹ 630 V
- Rated impulse voltage¹ 2,500 V
- Max. continuous current² 33 A at 2.5 mm²
- Mating cycles min. 10,000

CONFIGURE YOUR ODU-MAC BLUE-LINE
ONLINE. SIMPLY GO TO WWW.ODU-MAC.COM.

POWER



4

Units

+ 3 contacts / Contact Ø: 3.5 mm

- Operating voltage¹ 2,500 V
- Rated impulse voltage¹ 10,000 V
- Max. continuous current² 58 A at 6 mm²
- Mating cycles min. 10,000



5

Units

+ 2 contacts / Contact Ø: 5 mm

- Operating voltage¹ 400 V
- Rated impulse voltage¹ 4,000 V
- Max. continuous current² 108 A at 16 mm²
- Mating cycles min. 10,000



9

Units

+ 2 contacts / Contact Ø: 8 mm

- Operating voltage¹ 400 V
- Rated impulse voltage¹ 3,000 V
- Max. continuous current² 150 A at 25 mm²
- Mating cycles min. 10,000

COAX



3

Units

+ 4 contacts / 50 Ω

- Frequency range 2.8 GHz
- Mating cycles min. 10,000



5

Units

+ 2 contacts / 50 Ω

- Frequency range 4 GHz
- Mating cycles min. 10,000



5

Units

+ 2 contacts / 75 Ω

- Frequency range 2.2 GHz
- Mating cycles min. 10,000



SIMPLY SCAN THE QR CODE
TO DOWNLOAD THE ENTIRE
BROCHURE.

¹ Acc. to IEC 60664-1:2007 (VDE 0110-1:2008) for degree of pollution 2. ² Definition max. continuous current see catalogue ODU-MAC Blue-Line page 147.

PNEUMATIC MODEL



5
Units

+ 2 contacts

- 12 bar
- Tube-Ø inner-Ø max. 4 mm
outer-Ø Push-in max. 6 mm
- Mating cycles min. 10,000

SHIELDED IMPLEMENTATION / HIGH-SPEED CONNECTOR

[Suitable for all common bus systems]



6
Units

USB® 2.0¹, FireWire®¹, Ethernet¹

+ 2 contacts

- Mating cycles min. 10,000
- Selected inserts are suitable and certified for data rates of up to 1 Gbit/s

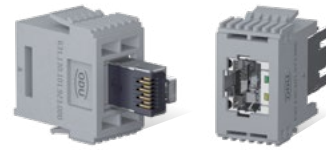


6
Units

USB® 2.0¹, FireWire®¹, Ethernet¹

+ 1 contact

- Mating cycles min. 10,000
- Selected inserts are suitable and certified for data rates of up to 1 Gbit/s



7
Units

Ethernet¹, CAT 6_A¹

+ 1 contact / RJ45

- Mating cycles min. 5,000
- Selected inserts are suitable and certified for data rates of up to 10 Gbit/s

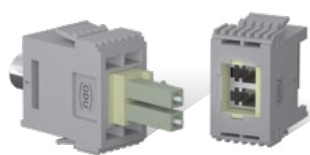
FIBRE OPTIC (UPON REQUEST)



7
Units

+ 2 contacts / SC-insert

- Mating cycles min. 10,000
- Single mode (SM)
- Multi mode (MM)



7
Units

+ 2 contacts / LC-insert

- Mating cycles min. 10,000
- Single mode (SM)
- Multi mode (MM)

BLANK



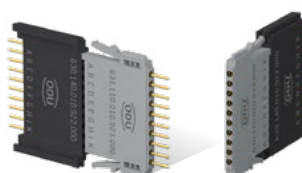
1
Unit

3
Units

5
Units

+ Blank modules

PCB TERMINATION MODULES



1
Unit

+ 10 contacts / Contact Ø: 0.7 mm

- Operating voltage² 250 V
- Rated impulse voltage² 2,500
- Max. continuous current³ 7 A
- Mating cycles min. 10,000



2
Units

+ 6 contacts / Contact Ø: 1.3 mm

- Operating voltage² 400 V
- Rated impulse voltage² 2,500 V
- Max. continuous current³ 13 A
- Mating cycles min. 10,000



3
Units

+ 5 contacts / Contact Ø: 2 mm

- Operating voltage² 630 V
- Rated impulse voltage² 2,500 V
- Max. continuous current³ 25 A
- Mating cycles min. 10,000

¹ These ODU specific connectors can transmit common data transmission protocols such as USB® 2.0, FireWire®, CAT 6_A and Ethernet, but they are not USB®, FireWire®, CAT 6_A and Ethernet-standard connectors. ² Acc. to IEC 60664-1:2007 [VDE 0110-1:2008] for degree of pollution 2. ³ Definition max. continuous current see catalogue ODU-MAC Blue-Line page 147.

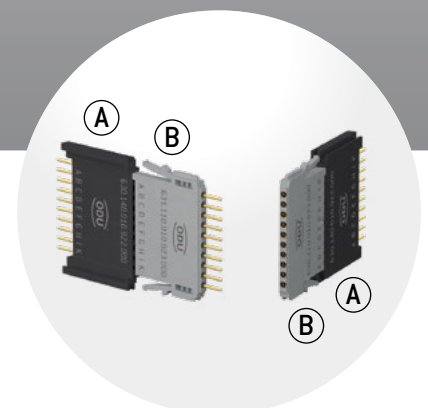
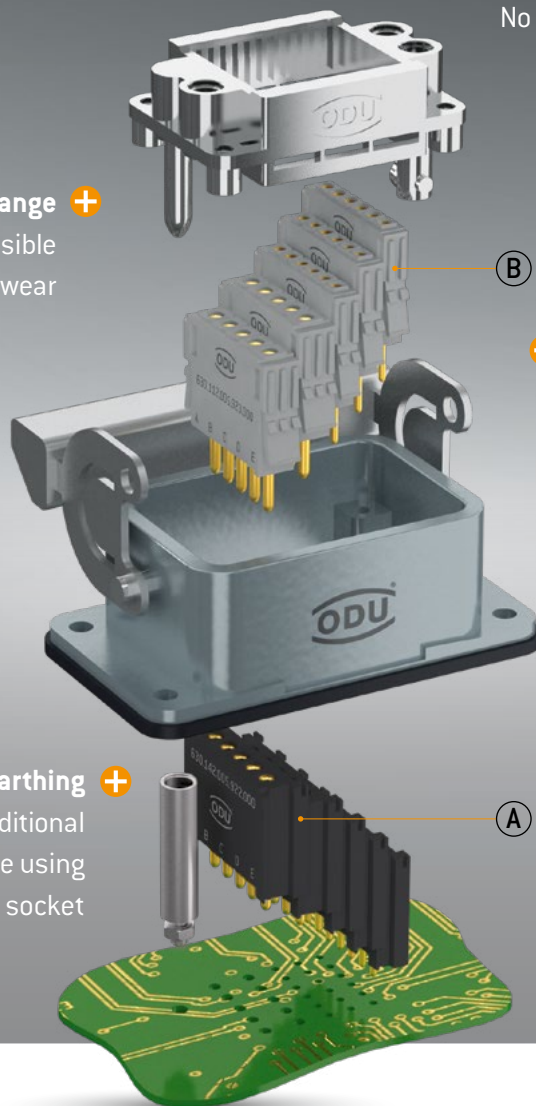
THE PCB TERMINATION MODULES LONG SERVICE LIFE – ECONOMICAL – EASY HANDLING

+ Economical solution
No cables due to the PCB termination

+ Convenient exchange
Quick-change system possible
for parts subject to wear

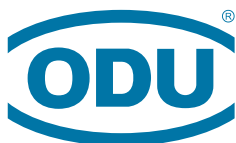
+ Long service life
PCB termination modules
are manufactured from
temperature-resistant PA
(soldering temperature 260 °C,
30 seconds)

+ Additional earthing
Upon request, additional
earthing is possible using
earthing pin and socket



THE ADVANTAGES OF THE PCB TERMINATION ASSEMBLY

The PCB termination modules (A) are firmly mounted to the board and are connected via an interface to the module (B) that is plugged into the frame. If a module needs to be replaced, then only the module (B) installed in the frame must be replaced. Module (A) that is mounted on the PCB is not affected by this. An effective installation or quick-change function, as the case may be, is thereby achieved.



A PERFECT ALLIANCE.

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China ODU (Shanghai) Connectors Manufacturing Co.Ltd

Mexico ODU Mexico Manufacturing S.R.L. de C.V.

Romania ODU Romania Manufacturing S.R.L.

USA ODU-USA, Inc.

ODU North American Logistics



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ODU-MAC® BLUE-LINE

ODU-MAC BLUE-LINE SHORT OVERVIEW / 01 / 0618 / E