

Receptacle with break-away locking for rear panel mounting

Size: 0, IP68 / IP6K9K, Keying: A, Number of contacts: 12, PCB, Contact type: Sockets, USB® 3.2 Gen 1x1 (5 Gbit/s)



Basic information

Part number	GKOWAM-P12UM00-000L
Category	Connector
Type of connector	Receptacle
Assembly situation	Rear panel mounting

Contact insert description

Special features	Data transmission
Transmission type	USB® 3.2 Gen 1x1 (5 Gbit/s)
Number of contacts	12
Contact type	Sockets
Contact diameter	0.3 mm; 0.7 mm
Termination type	PCB
Termination diameter	0.3 mm; 0.8 mm

Reverse gender on request

Technical information

Nominal current single contact	1 A; 5 A	IEC 60512-5-2:2002 (DIN EN 60512-5-2:2003)
Test voltage	0.75 kV DC	EIA-364-20F:2019-02

All shown connectors are rated to a safety extra low voltage (SELV) of less than 50 V AC / 75 V DC, according to IEC 61140:2016 (VDE 0140-1:2016) Protection against electric shock - Common aspects for installation and equipment. In case other standards rule a specific use of the connector, the application specific safety criteria shall be considered first. In this context, lower voltage ratings may be valid. Warning: Danger to life for operating voltages above 50 V AC / 120 V DC!

Mechanical and environmental data

Locking principle	Break-Away
Keying	A
Mating cycles	5.000
IP class	IP68 / IP6K9K
Max. operating temperature	125 °C
Min. operating temperature	-51 °C
Tightening torque	1 Nm
Weight	6.22 g

*IP protection class refers to mated condition

Material and surface treatments

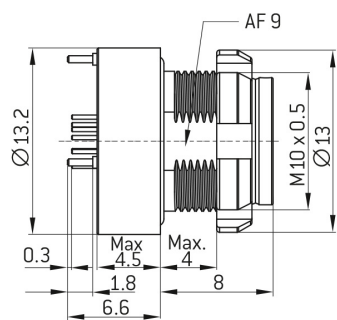
Material	Cu-alloy with ruthenium finish
Insulator material	PEEK
Contact material	Cu-alloy with gold finish

Unless explicitly confirmed otherwise the contact arrangement of an ODU data transmission connector differs from a standard data transmission connector due to the robust ODU specific design. However, the ODU design meets the electrical specifications of the respective standard data transmission protocol.

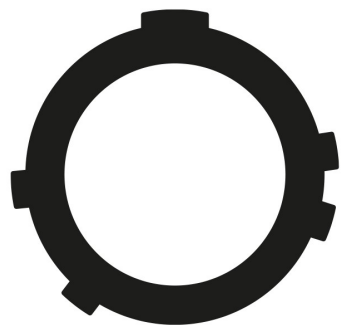
ODU reserves the right to make changes based on the current state of knowledge without prior notice without being obliged to provide replacement deliveries or refinements of older designs.

All shown connectors are defined without breaking capacity (COC) according to IEC 61984:2008 (VDE 0627:2009).

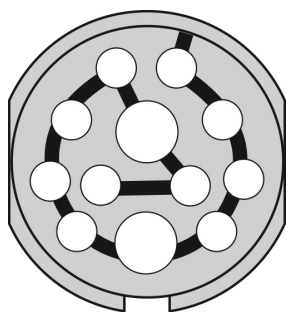
DIMENSIONS:



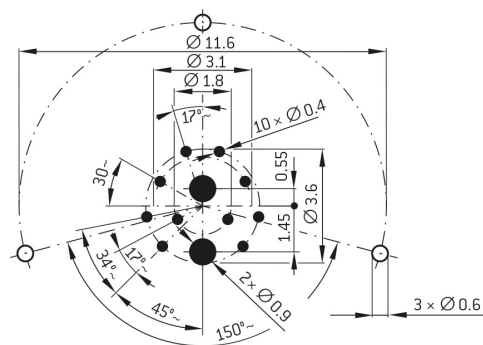
CODING:A



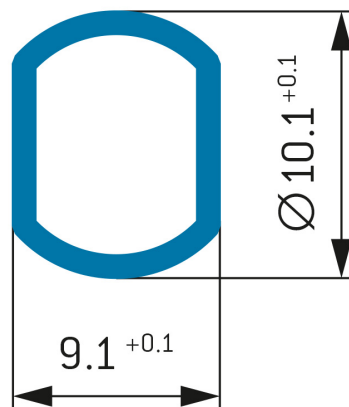
POSITIONS: 12 positions



PCB-LAYOUT:



PANEL CUT OUT:



PCB Layout with socket contacts: Top view (from component side). Unless otherwise numbered, numbering starts at the contact marked by the bracket and follows the spiral clockwise.

Pin layout: View on termination area. Unless otherwise numbered, numbering starts at the contact marked by the bracket and follows the spiral clockwise.

Further technical information and downloads

Connection diagram	Pos. DDU [®] (Crossover)	Signal	Color	Note	Signal	Pos. USB [®] (Male)
	10	VBUS	Red	–	VBUS	1
	9	D-	White	Twisted pair unshielded	D-	2
	1	D+	Green		D+	3
	5	GND	Black	–	GND	4
	3	SSRX-	Blue	Twisted pair shielded	SSRX-	5
	4	SSRX+	Yellow		SSRX+	6
	2, 11	Shield TX	Drain Wire	Twisted pair shielded	Shield RX	7
	8, 12	Shield RX	Drain Wire		Shield TX	
	7	SSTX-	Orange		SSTX-	8
	6	SSTX+	Violet		SSTX+	9
	Housing	Outer shield				Housing

[3D-File \(STP-File\)](#)
[Technical specifications](#)