

Miniature
signalling
connectors

RWN

model

RWN1

RWN series connectors are designed for connecting and disconnecting electrical circuits in radio and electrical engineering or in devices working with DC and AC at a maximum frequency of 3 MHz.

Both connector parts, receptacle and plug, are designed to be mounted onto a cable. RWN connectors consist of a receptacle with sockets and a plug with pins. Connection is achieved by plugging a plug into a receptacle.

The connector housing is made from an anodised aluminium alloy. The contacts are made from a copper alloy – silver plated; they are fitted in a thermosetting insulator. The contacts have terminals for soldering wires.

A connected RWN connector can be further protected with a rubber cover. The cover (separate detail No. K15-226-04) is put tightly onto the connector, ensuring the tightness of the connected connector and protecting it from accidental disconnection.



*TENEO connectors
are used
in **flight helmets**.*





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DESCRIPTION OF THE CONNECTOR DESIGN

RWN connectors consist of a receptacle with sockets and a plug with pins. Connection is achieved by plugging a plug into a receptacle. The connector housing is made from an anodised aluminium alloy. The contacts are made from a copper alloy – silver plated; they are fitted in a thermosetting insulator. Contacts [G – sockets are fitted in the receptacle insulator] and contact pins [S – pressed into plug insulator]. The contacts have terminals for soldering wires. Receptacles [except for panel mount receptacles] and plugs have a bushing and a protective cable sheath. A connected RWN connector can be further protected with a rubber cover. The cover [separate detail No. K15-226-04] is put tightly onto the connector to provide tightness of the connected connector and protect it from accidental disconnection.

TYPES AND CONFIGURATIONS OF RWN RECEPTACLES AND PLUGS

- RWN1 - 5 - 2G - P1 - receptacle [with circumferential grooves]
- RWN1 - 5 - 2G - P2 - receptacle [no grooves]
- RWN1 - 5 - 2G - P3 - receptacle [short]
- RWN1 - 5 - 2SZ - P1 - plug [with grooves]
- RWN1 - 5 - 2SZ - P2 - plug [no grooves]

MAIN TECHNICAL DATA

- Rated voltage – 220 V DC and AC with maximum frequency of 3 MHz
- Number of contacts and their diameter – 5 × Ø 1.5 mm
- Max. current load of one contact pair – 5 A
- Short-period load – 7.5 A / one contact pair for duration of 3 minutes.
- Insulation resistance:
 - at least 1 000 MΩ – under normal climatic conditions
 - at least 50 MΩ – at high and low temperatures of ±60°C
 - at least 20 MΩ – at high humidity of 98%, temperature of 40°C and pressure of 100 kPa
- Dielectric strength:
 - 1 500 V / 50 Hz for 1 minute under normal climatic conditions
 - 300 V / 50 Hz for 1 minute at a low pressure
- Contact pair resistance – 2 mΩ max.

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OPERATING CONDITIONS

The connectors can reliably operate under the following conditions:

- Ambient air temperature -60°C to +60°C
- Humidity up to 95% at 40°C
- Vibration frequency from 10 to 300 Hz at an acceleration of up to 10 g
- Individual impacts 12 g with 50 ms impulses
- Repeated impacts up to 10 g with 20-50 ms impulses
- Repeated impacts up to 12 g with 30 ms impulses
- Constant centripetal acceleration up to 50 g
- At a pressure of 0.7-101.3 kPa
- Maximum input signal frequency 3 MHz

MORE INFORMATION

connectors meet the requirements of the WT/A-15/033-88 standard

The warranty period is 12 years for the permitted number of connections – no more than 500 disconnections of plug and receptacle (without electrical load).

HOW TO ORDER

The receptacle and plug, which form a complete connector, are ordered separately, e.g.: Receptacle RWN1-5-2G-P1 + Plug RWN1-5-P1-2SZ

PLEASE NOTE

The K15-226-04 protective cover is an additional equipment item and therefore needs to be ordered separately.

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Panel Mount Receptacle



Straight Cable Mount Receptacle



Straight Cable Mount Plug

BASIC DATA

Connector diameter	15 mm
Number of contacts	5

CONFIGURATION

Material (housing)	Aluminium [anodised]
Configuration	Panel Mount Receptacle Straight Cable Mount Receptacle Straight Cable Mount Plug
Mating	Insertion
Connection to wire	Soldering

ELECTRICAL PROPERTIES

Operating voltage U_n / at frequency		max. 220 V \sim / max. 3 Hz	
Contact diameter	Contact rated current I_n	Contact marking	Diameter of connectable wire
\varnothing 1.5 mm	5 A	\oplus	1.33 mm ²
Maximum contact current			
Short periods up to 3 minutes		7.5 A	
Contact resistance of a contact pair		\leq 2 m Ω	
Housing contact resistance		\leq 5 m Ω	
Insulation resistance under normal climatic conditions		\geq 1 G Ω	
Insulation resistance [40°C, 98% rel. humidity, 100 kPa]		\geq 20 M Ω	

MECHANICAL PROPERTIES	
Number of connections / disconnections	500
Impact strength	
Individual impacts	12 g max.
Repeated impacts (impulse duration 20–50 ms)	10 g max.
Stability during sinusoidal vibrations / at frequency	10 g / 10–300 Hz max.
Continuous centrifugal acceleration	50 g max.

OPERATING ENVIRONMENT	
Temperature	-60°C to +60°C
Relative humidity (40°C)	95% max.

Technical drawings (3D models) are available upon request info@teneo.cz

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Product Code

RWN1 - 5 - 2 G - P1

Connector model

RWN1 = series identifier

Total number of contacts

Pinout identifier number

Housing variant

P1 = receptacle or plug housing with grooves
P2 = receptacle or plug housing without grooves
P3 = short receptacle housing
(for installation on a device)

Contact type

S = pin
G = socket

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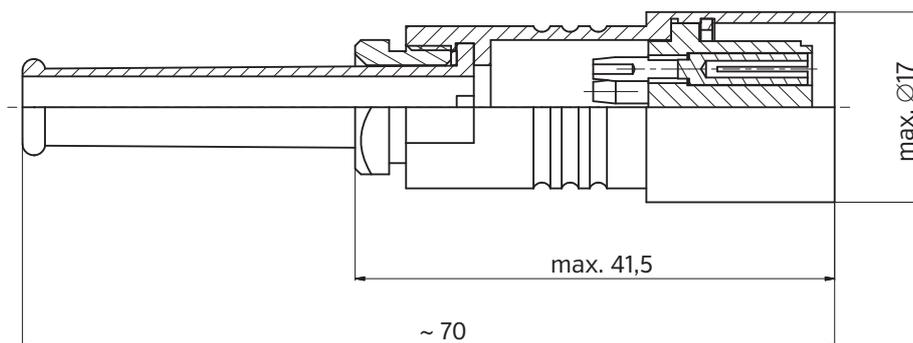
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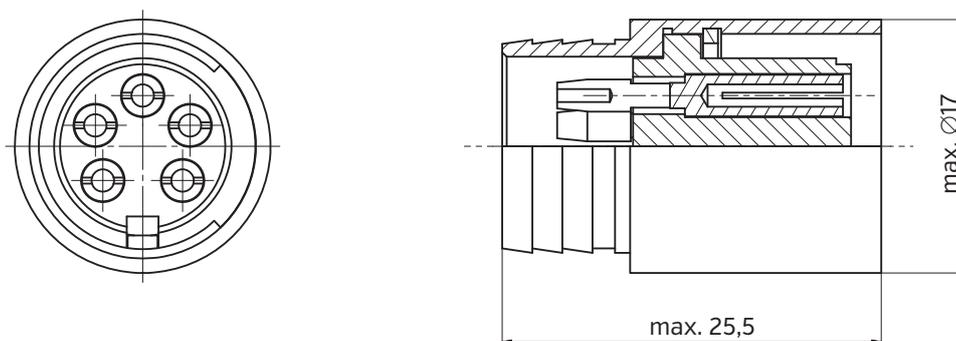
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STRAIGHT CABLE MOUNT SHIELDED FEMALE RECEPTACLE



Size	Code	Diagram	Contact			Connector		
			id.	n	∅ [mm]	I _n [A]	I _n [A]	U _n [V]
15	RWN1-5-2G-P1 (with grooves on housing)		⊕	5	1.5	5	25	220
	RWN1-5-2G-P2 (no grooves on housing)		⊕	5	1.5	5	25	220

PANEL MOUNT FEMALE RECEPTACLE



Size	Code	Diagram	Contact			Connector		
			id.	n	∅ [mm]	I _n [A]	I _n [A]	U _n [V]
15	RWN1-5-2G-P3 (short)		⊕	5	1.5	5	25	220

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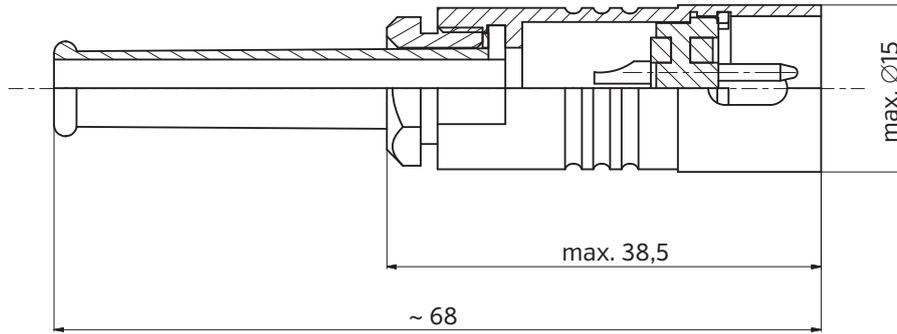
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STRAIGHT CABLE MOUNT SHIELDED MALE PLUG



Size	Code	Diagram	Contact				Connector	
			id.	n	∅ [mm]	I _n [A]	I _n [A]	U _n [V]
15	RWN1-5-2S-P1 (with grooves on housing)			5	1.5	5	25	220
	RWN1-5-2S-P2 (no grooves on housing)			5	1.5	5	25	220

Available mating combinations

Code	Counterpart
RWN1-5-2S-P2	RWN1-5-2G-P3 RWN1-5-2G-P2
RWN1-5-2S-P1	RWN1-5-2G-P3 RWN1-5-2G-P1
RWN1-5-2G-P3	RWN1-5-2S-P2 RWN1-5-2S-P1

Order example

Receptacle		RWN1	5	2G	P1
Plug		RWN1	5	2S	P1

The receptacle and plug must be ordered separately.

The K15-226-04 protective cover is an additional equipment item and therefore needs to be ordered separately.