NWA SERIES

STANAG 4695 & GOSSRA*

* GENERIC OPEN SOLDIER SYSTEM REFERENCE ARCHITECTURE compatible with Nett Warrior

BREAK AWAY CONNECTORS



NWA SERIES

BREAK AWAY CONNECTORS

BERNIER has developped the NWA range specifically for systems operating in extreme environments.

This new range offers versatile connectors that are are fully compliant with the standard of NETT WARRIOR, STANAG 4695 & GOSSRA* standards. * GENERIC OPEN SOLDIER SYSTEM REFERENCE ARCHITECTURE

NWA connectors are available with 06 or 07 contact configurations, providing flexibility for a variety of applications.

The Nett Warrior program, initiated by the U.S. Army, equips dismounted soldiers with real-time battlefield awareness and seamless communication with military tactical networks. This ensures that critical data and commands are transmitted securely and instantly in the field. Compliant with NATO Standardisation Agreements (STANAG), the NWA connectors are designed to support higher data rates and power levels, meeting the stringent requirements for interoperability across all NATO members. This allows soldiers to operate efficiently in dynamic, high-stress environments, enhancing both situational awareness and mission success. *GOSSRA: Generic Open Soldier System Reference Architecture.

Applications











Radio systems

Dismounted soldier

Connected jacket

Battery

Data transfmission

Intercoms

Optronics

Rugged computers

Encrypted data

Cameras

Binoculars

Tactical systems











BERNIER NWA Connectors: Designed for Soldier Equipment, Fully Compliant with Military Standards



The NWA connector is fully compatible with the following standards

NATO STANAG4695

Nett Warrior

GOSSRA (General Open Structure Artchitecture)

The NWA aluminum connector offers robustness and lightness for users such as dismounted soldiers.

Made from aluminum, the NWA connector combines robustness and lightness, offering an ideal solution for dismounted soldiers and other users in extreme environments.

NWA: A reliable connectivity solution for demanding, harsh environments

This connector is perfectly suited for peripheral units such as tactical radio systems, ruggedized equipment for USB 2.0 data transmission in C4ISR applications, portable batteries, and power transmission.

NWA connectors provide high performance with a durability rating of up to 2000 mating/ unmating cycles, ensuring long-term reliability.

NWA miniature connectors:

- Ergonomic
- Lightweight
- Robust
- IP68 (1m/1h) connected & disconnected (depth/duration)

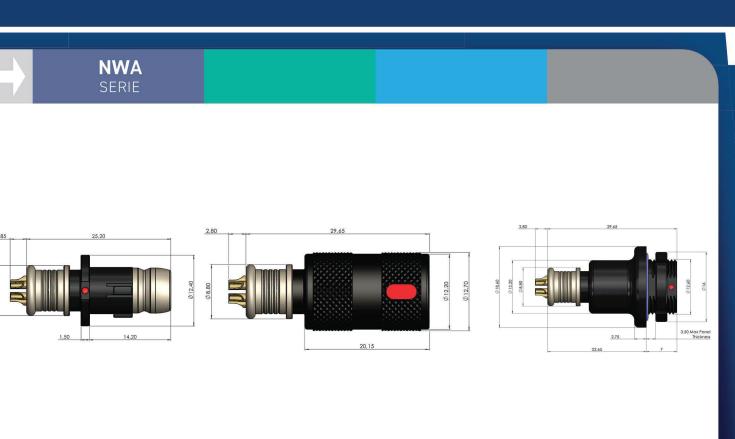
CUSTOMIZED PROJECTS

The NWA range is designed to be scalable and adaptable to the specific needs of our customers. Our design office is available to create custom solutions based on your specifications. Additional reinforcements can be applied to ensure the connector withstands more severe climatic, ergonomic, or electromagnetic constraints. www.bernier.tm.fr

LIGHTWEIGHT ROBUSTNESS

BREAK AWAY





P6 NWA SERIE INDEX

- 8 Technical data NWA
- 11 Plug NWA
- 12 Synoptic NWA
- 13 Extension NWA
- 14 Receptacle NWA
- 15 Overmolding options

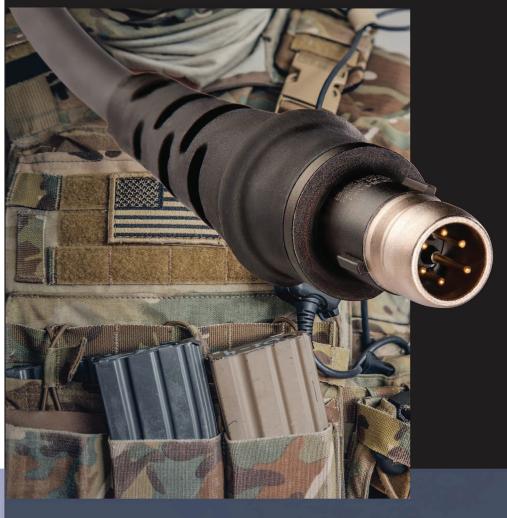


NWA SERIES

BREAK AWAY CONNECTORS



The **NWA** "Nett Warrior" series provides a reliable interconnection solution for communication, navigation, data transmission, and USB power supply, specifically designed for modern military applications.



NWA SERIES

BREAK AWAY CONNECTORS

06 to 07 CONTACTS



ERGONOMICS | ALUMINUM | EMIRFI PROTECTION | MULTI-CONTACTS | WATERTIGHT



TECHNICAL DATA / NWA

■ MECHANICAL AND CLIMATIC CHARACTERISTICS

NWA	
Locking system	Break away
Traction force	55N±15N
Operating temperature	-18°C to 75°C
Endurance (connection / disconnection)	Up to 2 000 cycles
Watertightness	IP68 (1m/1h) connected & disconnected (depth/duration)
Salt spray corrosion resistance	Aluminium: 96 hours*

*on test 500h

Break away plugs are compatible with the same receptacle.

■ ELECTRICAL CHARACTERISTICS

Number of contacts	6 contacts or 7 contacts
Gauge AWG	AWG 22-26
Type of contacts	Solder cup - Crimp terminals
Operating voltage	< 50 VAC
Current rating per contact	5A
Voltage drop	< 85 mV for an applied load of 3A at 16VDC
Isolation	> 100 MΩ under 500VDC
EMI RFI protection	50V/m over a range of 2-10000MHz

■ MATERIALS AND SURFACE TREATMENTS





Connector body	Aluminium
Surface treatment	Black Zinc Nickel
Insulator	Thermosetting
Contacts	Copper alloy and gold plating with nickel undercoating
Ground ring	stainless steel
0-ring	Flurosilicon



ELEMENT WEIGHTS / NWA

CONNECTORS

TYPE OF CONNECTOR	Weight (Max)	
Plug	3,35 g	
Extension	5,53 g	
Receptacle	6,60 g	

CONTACT PRESENTATION / NWA

STANAG 4695 connector contact assignment

Contacts	Description	Terminations
1	V+ Battery voltage	Battery +
2	V - Battery voltage	Battery -
3	Charge +	Charge +
4	SMBus data	Data
5	SMBus clock	Clock
6	SMBus ID (10K Thermistor to Ground	S8 ID
7 (if	No connection or V+	
présent)	battery voltage	Blank/NC/Batt+(*2)

CONTACTS CONFIGURATION







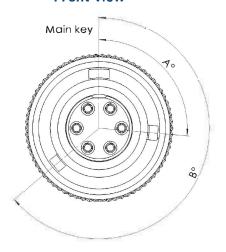
KEYWAYS / NWA



Receptacle



Front view



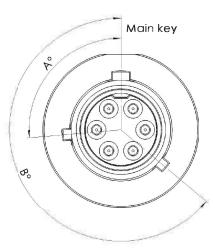
for Receptacle or Extension



Plug



Front view



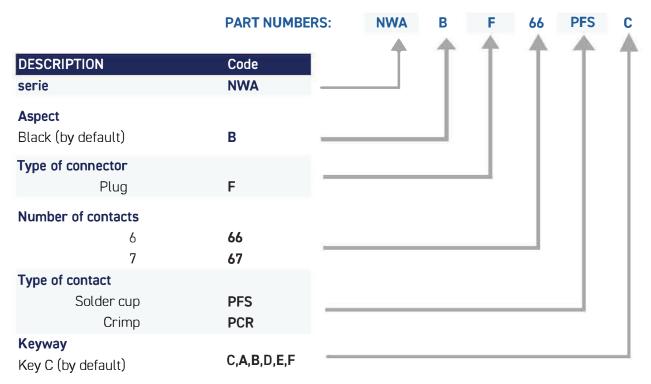
KEYWAY NWA

Nett Warrior standards *C codage by default

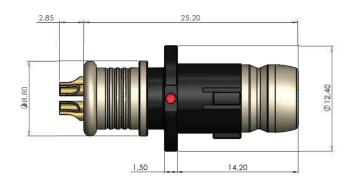
A°	B°	KEYWAY
95	230	C*
150	210	А
75	210	В
140	275	D
75	275	E
95	210	F

PLUGS (TYPE F) / NWA

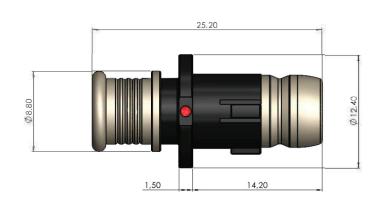




■ PLUG WITH SOLDER CUP CONTACTS Popular configuration : NWA B F 66 PFS C



■ PLUG WITH CRIMP CONTACTS





SYNOPTIC / NWA

■ ELEMENTS

PLUG



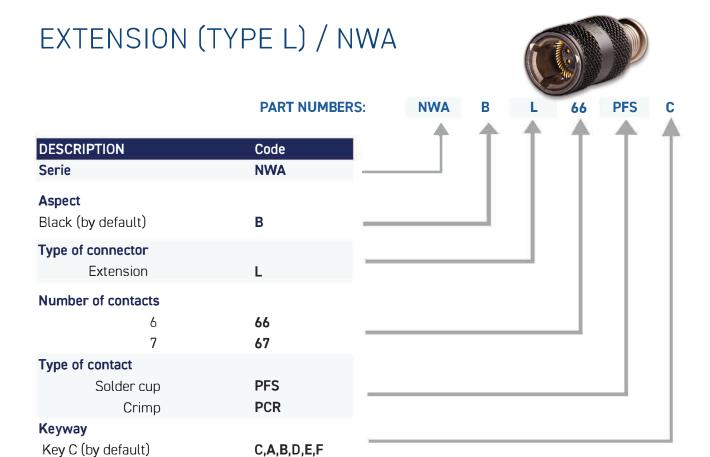




EXTENSION

RECEPTACLE





■ EXTENSION WITH SOLDER CUP CONTACTS

Popular configuration: NWABL66 PFSC



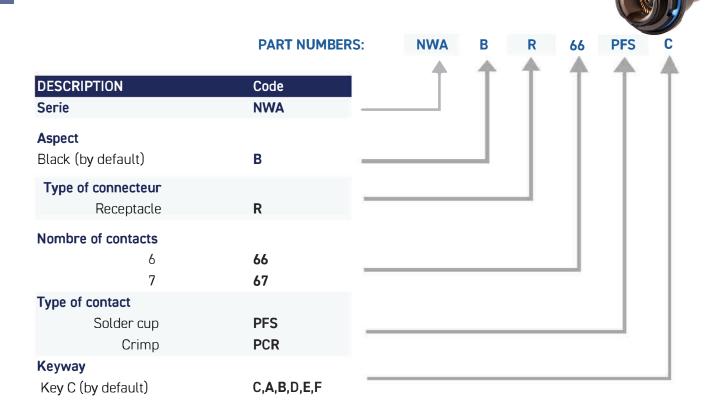


■ EXTENSION WITH CRIMP CONTACTS





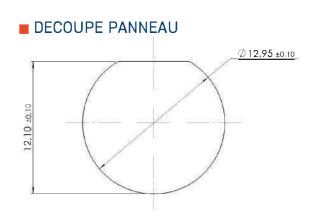
RECEPTACLE (TYPE R) / NWA



■ RECEPTACLE WITH SOLDER CUP CONTACTS







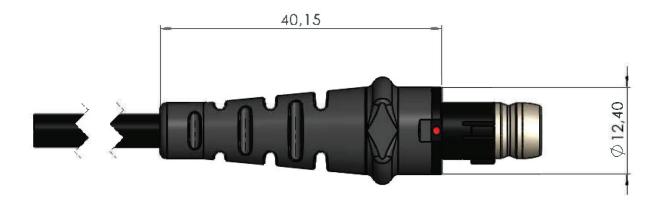
■ RECEPTACLE WITH CRIMP CONTACTS





OVERMOLDING OPTION / NWA

OVERMOLDING OF PLUGS





OVERMOLDING OF EXTENSION



NOTES















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