

NWA SERIES

STANAG 4695 & GOSSRA*

* GENERIC OPEN SOLDIER SYSTEM REFERENCE ARCHITECTURE
compatible with Nett Warrior

BREAK AWAY CONNECTORS



BERNIER

NWA
SERIES
BREAK AWAY
CONNECTORS

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

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

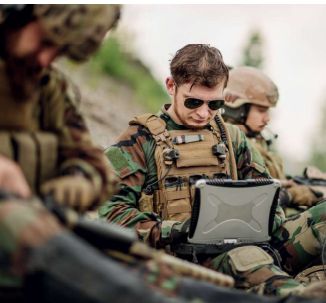
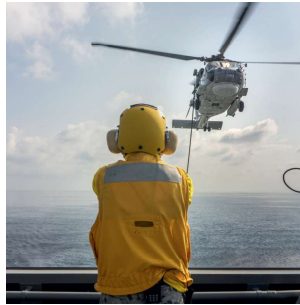
* **GENERIC OPEN SOLDIER SYSTEM REFERENCE ARCHITECTURE**

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 transmission
- 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 Architecture)

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.

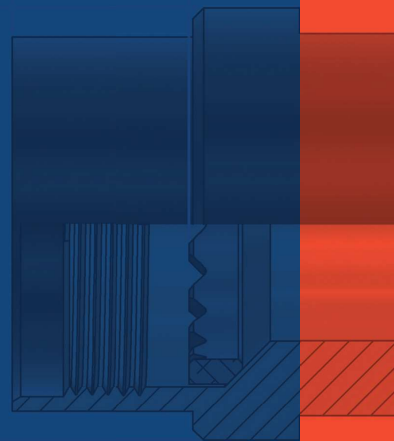
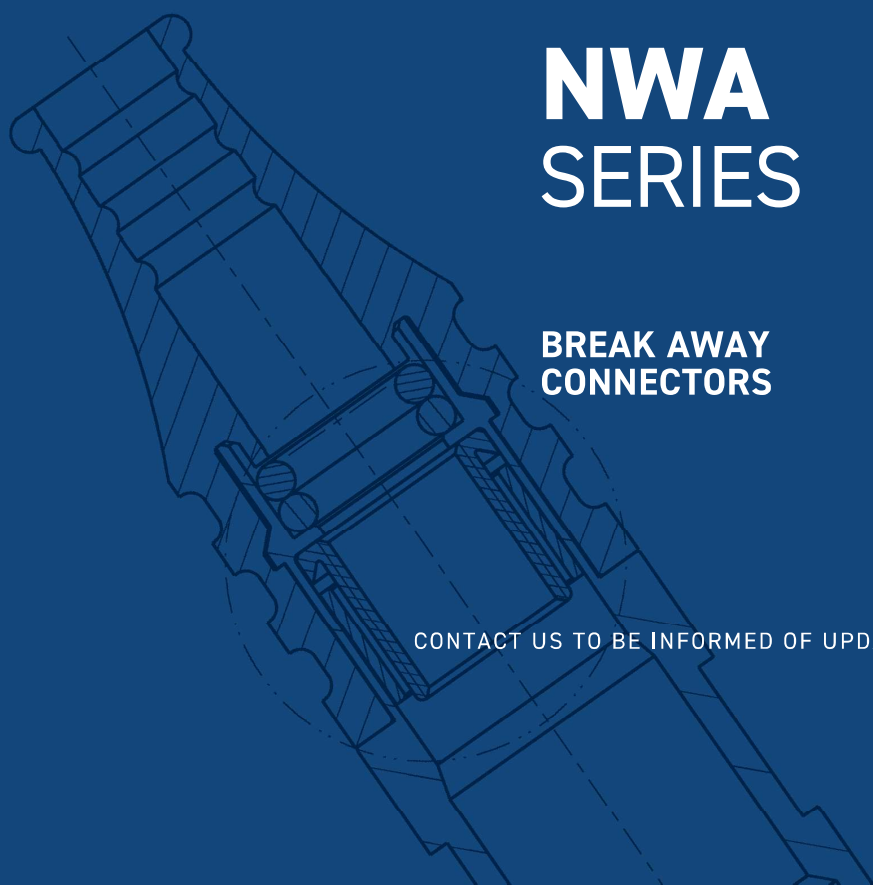
- 8 Technical data NWA
- 11 Plug NWA
- 12 Synoptic NWA
- 13 Extension NWA
- 14 Receptacle NWA
- 15 Overmolding options



NWA SERIES

**BREAK AWAY
CONNECTORS**

CONTACT US TO BE INFORMED OF UPDATES



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 | EMI RFI PROTECTION | MULTI-CONTACTS | WATERTIGHT



BERNIER

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
O-ring	Fluorosilicon



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 présent)	No connection or V+ battery voltage	Blank/NC/Batt+(*2)

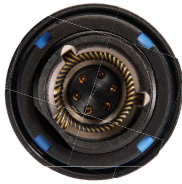
CONTACTS CONFIGURATION



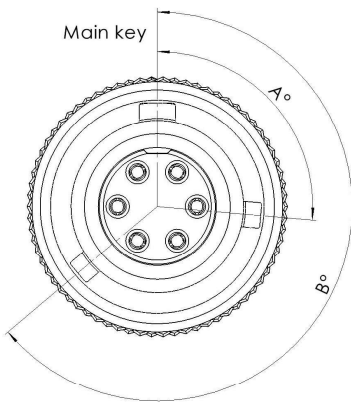
KEYWAYS / NWA



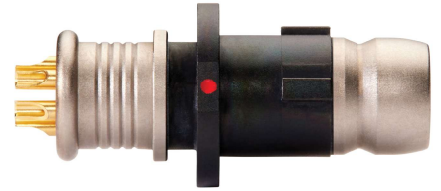
Receptacle



Front view



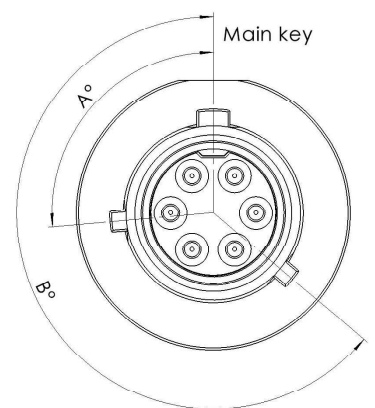
for Receptacle or Extension



Plug



Front view



KEYWAY NWA

Nett Warrior standards

*C codage by default

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

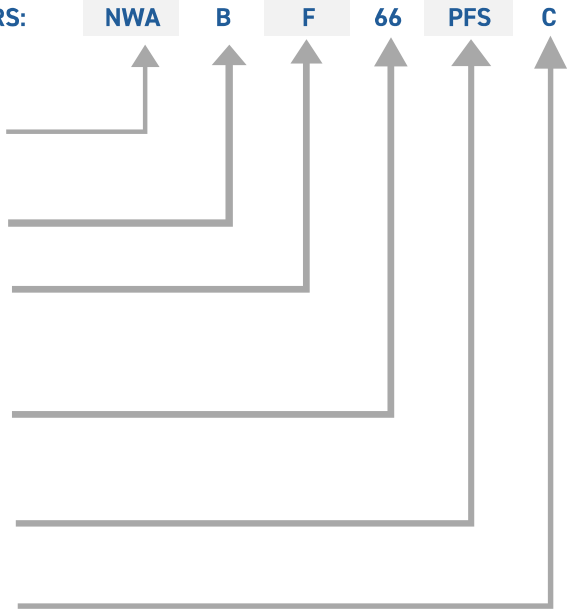
PLUGS (TYPE F) / NWA



PART NUMBERS:

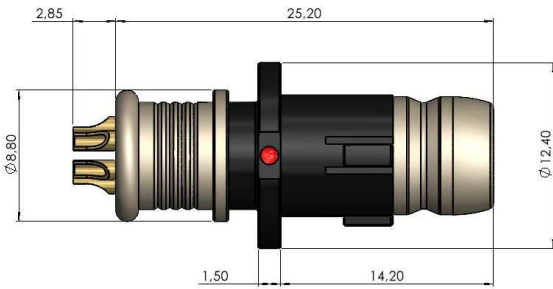
NWA **B** **F** **66** **PFS** **C**

DESCRIPTION	Code
serie	NWA
Aspect	
Black (by default)	B
Type of connector	
Plug	F
Number of contacts	
6	66
7	67
Type of contact	
Solder cup	PFS
Crimp	PCR
Keyway	
Key C (by default)	C,A,B,D,E,F

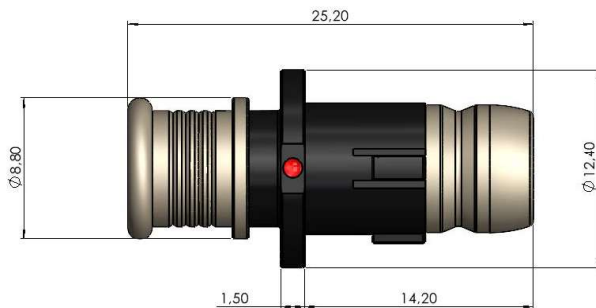


■ **PLUG WITH SOLDER CUP CONTACTS**

Popular configuration : **NWA B F 66 PFS C**



■ **PLUG WITH CRIMP CONTACTS**



SYNOPTIC / NWA

■ ELEMENTS

PLUG



EXTENSION



RECEPTACLE



RECEPTACLE (TYPE R) / NWA



PART NUMBERS:

NWA

B

R

66

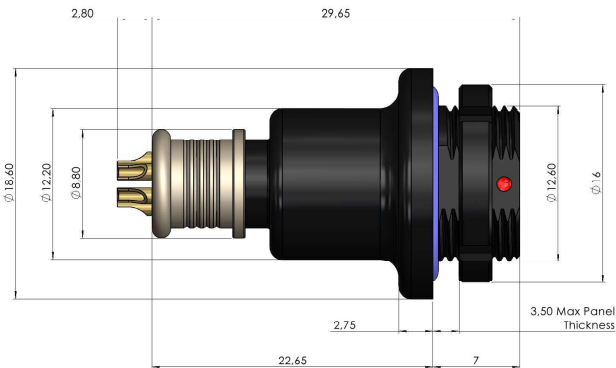
SFS

C

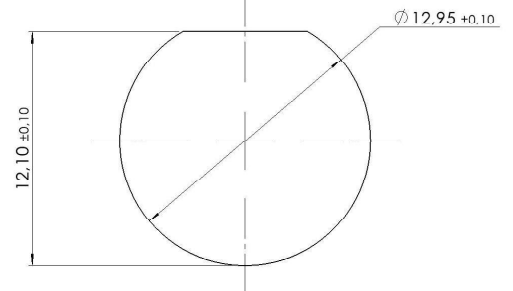
DESCRIPTION	Code
Serie	NWA
Aspect	
Black (by default)	B
Type of connecteur	
Receptacle	R
Nombre of contacts	
6	66
7	67
Type of contact	
Solder cup	SFS
Crimp	SCR
Keyway	
Key C (by default)	C,A,B,D,E,F

RECEPTACLE WITH SOLDER CUP CONTACTS

Popular configuration : NWABR66SFSC



DECOUPE PANNEAU

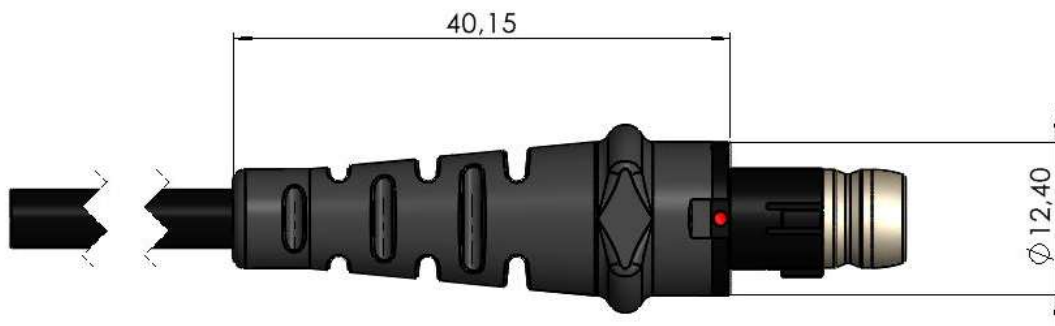


RECEPTACLE WITH CRIMP CONTACTS

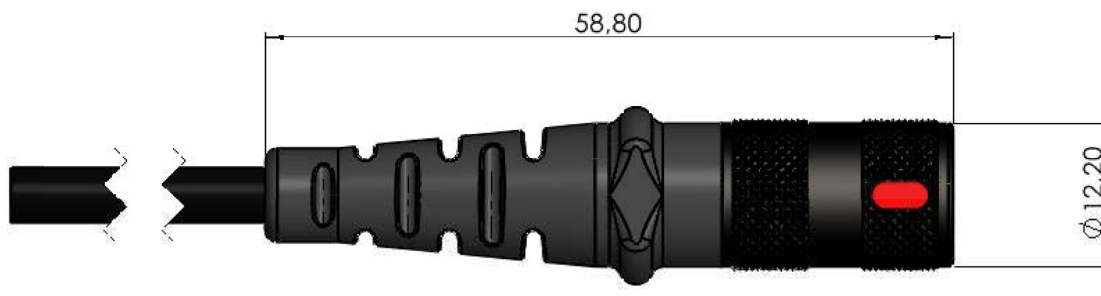


OVERMOLDING OPTION / NWA

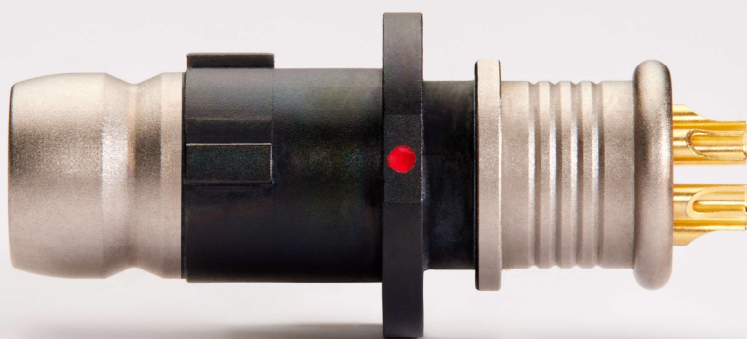
■ OVERMOLDING OF PLUGS



■ OVERMOLDING OF EXTENSION







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