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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**

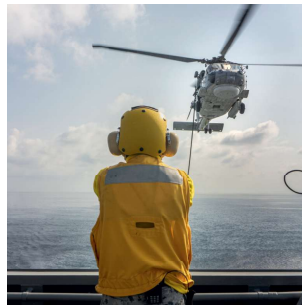
NWA connectors are available with 06 or 07 contact configurations, providing flexibility for a variety of applications.

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.

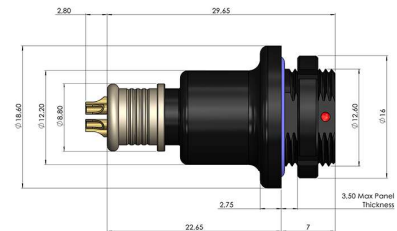
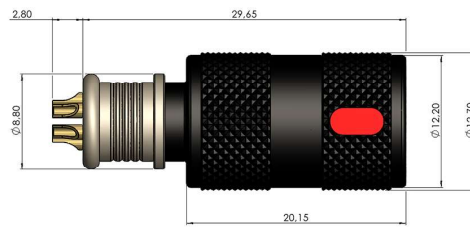
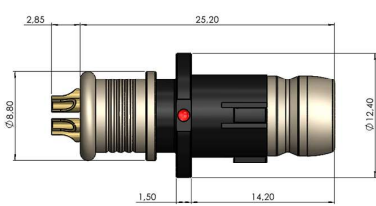
NWA miniature connectors:

- 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.

LIGHTWEIGHT ROBUSTNESS BREAK AWAY



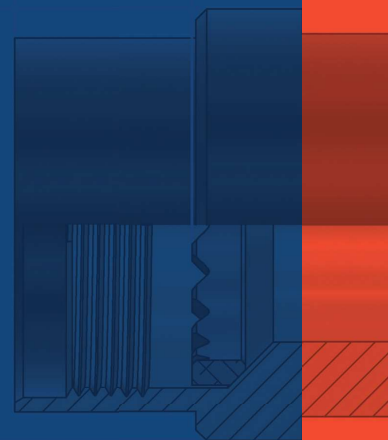
- 8 Technical data NWA
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- 15 Overmolding options



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

NWA SERIES

BREAK AWAY
CONNECTORS

06 to 07 CONTACTS



ERGONOMICS | ALUMINUM | EMI RFI PROTECTION | MULTI-CONTACTS | WATERTIGHT



BERNIER

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

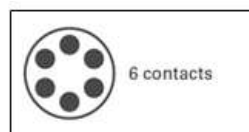
TYPE OF CONNECTOR	Weight (Max)
Plug	3,35 g
Extension	5,53 g
Receptacle	6,60 g

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



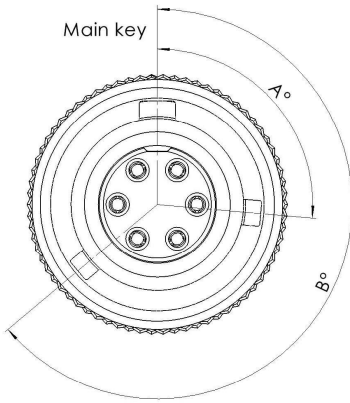
KEYWAYS / NWA



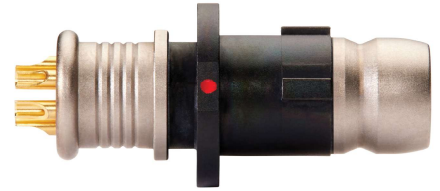
Receptacle



Front view



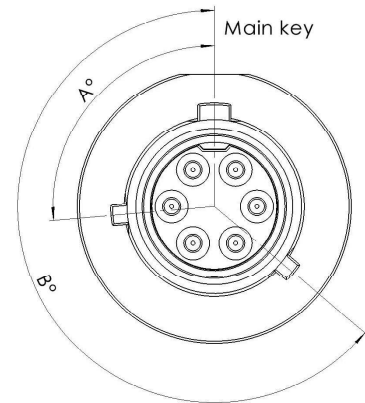
for Receptacle or Extension



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



NWA

PART NUMBERS:

NWA

B

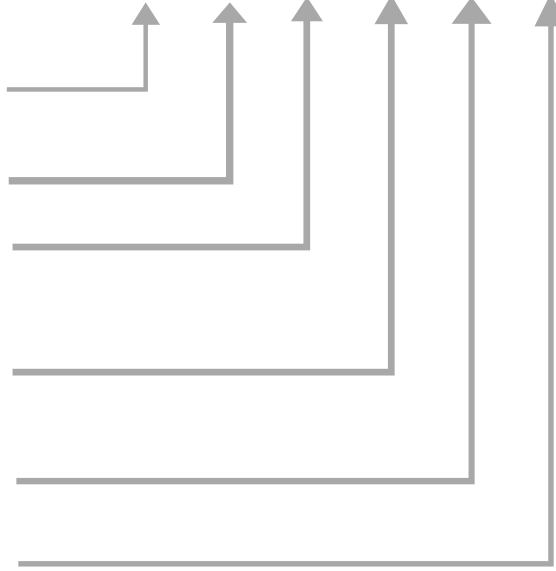
F

66

PFS

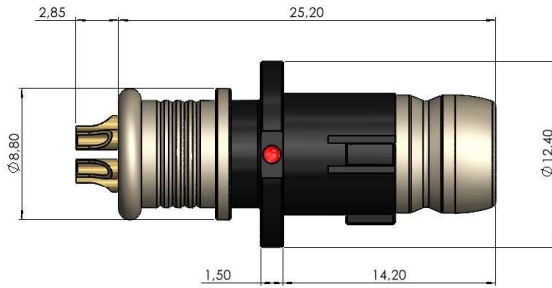
C

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

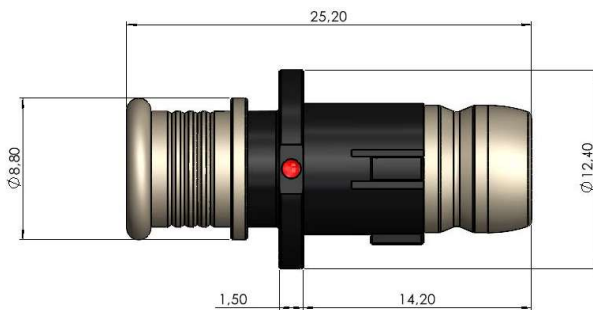


PLUG WITH SOLDER CUP CONTACTS

Popular configuration : NWA B F 66 PFS C



PLUG WITH CRIMP CONTACTS



SYNOPTIC / NWA

■ ELEMENTS

PLUG



EXTENSION



RECEPTACLE



EXTENSION (TYPE L) / NWA

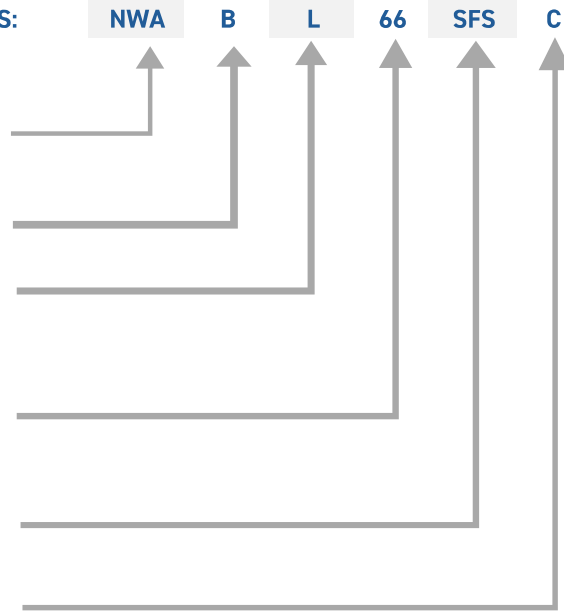
NWA



PART NUMBERS:

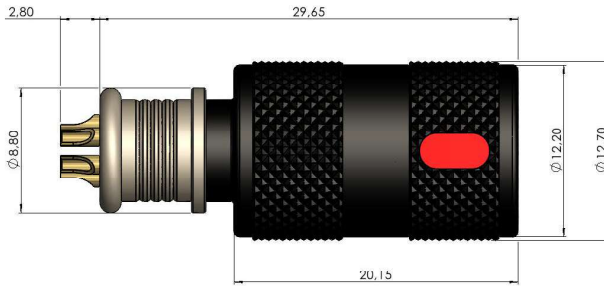
NWA B L 66 SFS C

DESCRIPTION	Code
Serie	NWA
Aspect	
Black (by default)	B
Type of connector	
Extension	L
Number 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

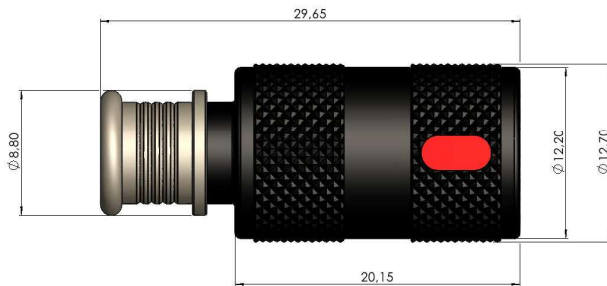


■ EXTENSION WITH SOLDER CUP CONTACTS

Popular configuration : **NWABL66SFSC**



■ EXTENSION WITH CRIMP CONTACTS



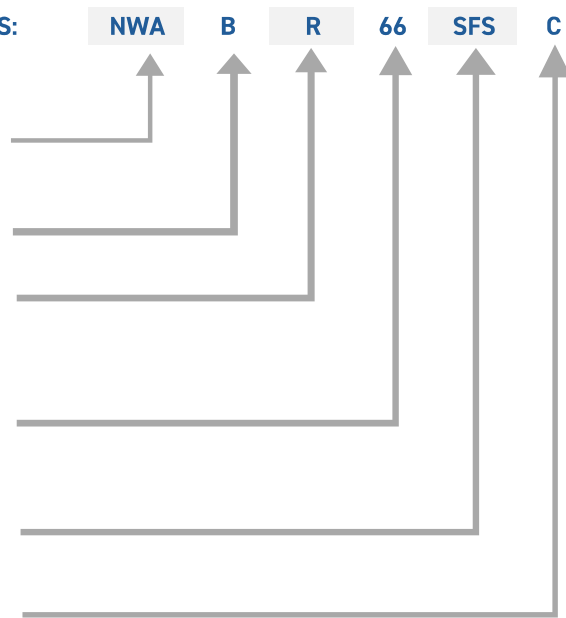
RECEPTACLE (TYPE R) / NWA



PART NUMBERS:

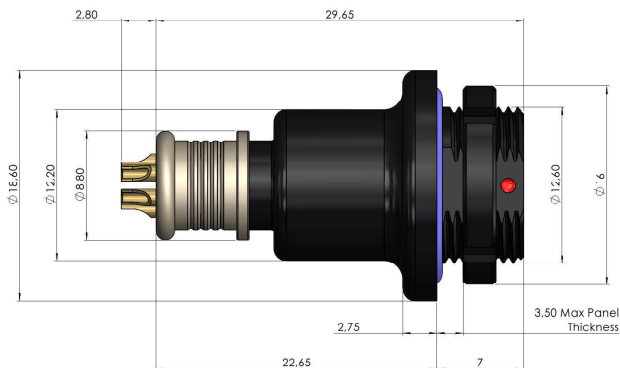
NWA B R 66 SFS C

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

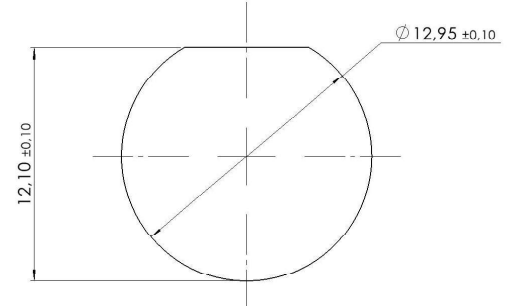


RECEPTACLE WITH SOLDER CUP CONTACTS

Popular configuration : **NWABR66SFS**



DECOUPE PANNEAU



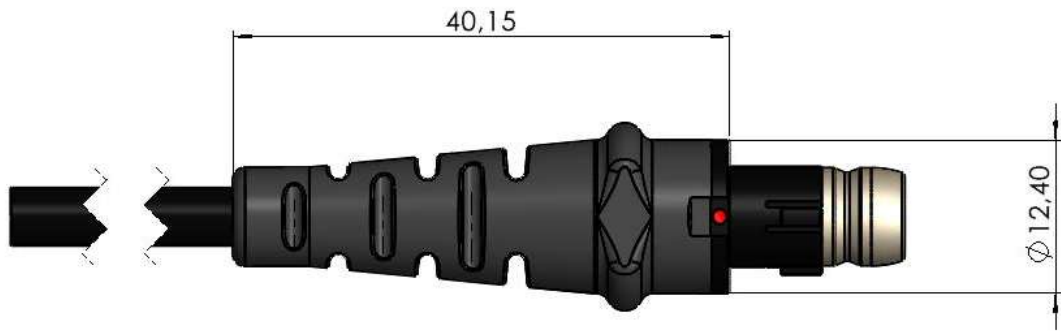
RECEPTACLE WITH CRIMP CONTACTS



OVERMOLDING OPTION / NWA

NWA

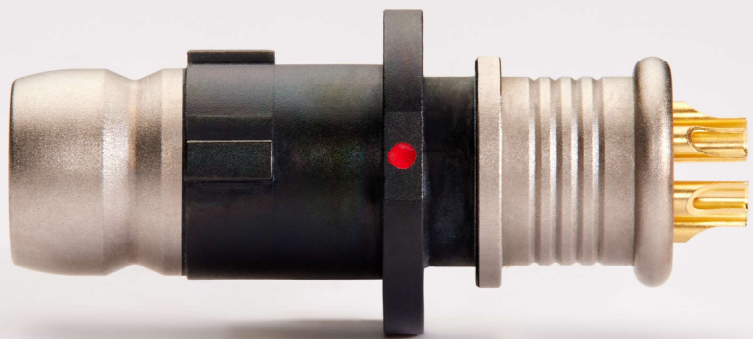
■ OVERMOLDING OF PLUGS



■ OVERMOLDING OF EXTENSION







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