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veam

# VBN Connectors



**ITT**

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## PROVEN QUALITY, RELIABILITY AND EXPERTISE.

ITT's Interconnect Solutions' Veam brand is a leading global manufacturer of connector products serving international customers in multiple end markets.

In an increasingly global economy, getting

from Point A to Point B on time and on budget is more important than ever. VEAM connectors protect the world's products and people in transit so they can get to where they're going with maximum efficiency.



Engineered with your toughest challenges in mind.

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Dimensions shown in mm  
Specifications and dimensions subject to change



- The VBN connector series is based on MIL-DTL-5015G and VG95234 specification. They are interchangeable with all corresponding CIR/VG types and feature identical panel mounting dimensions
- VBN connectors are qualified to NF F 61 030 French specification and approved by SNCF and RATP.
- The contact system enables easy insertion and removal. The inserts are composed of a halogen free hard plastic material that results in a very low fire hazard.
- Stainless steel bayonet pins riding along the three Bayonet ramps (machined into the receptacle shell) achieve the connector coupling. Coupling integrity is guaranteed by:
  - Three stainless steel pins at the critical wear points of the receptacle shell bayonet ramps
  - An audible click when fully mated.
  - Alignment of three yellow colored dots when fully mated.
- VBN connectors are available in 14 sizes arrangements from shell size 16S to shell size 40 with arrangements having from 4 up to 70 contacts.
- Crimp contacts are available in sizes 16, 12 and 8 AWG.
- The stainless steel pins installed on the critical wear points of the ramps, the dynamic coupling gasket at the base of the plugshell, the flat and the wave washer between the coupling nut and the plugshell, are the key features that allow to prevent the unmating of the connection in case of vibration and guarantees the high reliability of the bayonet mating system.
- Environmental sealing of mated connectors to IP67 is achieved by compression of the coupling gasket, while integrity at the rear is achieved by the use of an individual wire seal grommet with membranes (being penetrated only when a wire is present) and use of appropriate accessories.
- Comprehensive range of screened / unscreened, sealed / unsealed backshells & accessories

Dimensions shown in mm  
 Specifications and dimensions subject to change

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## MATERIAL CONSTRUCTION

**Shells:** Aluminum alloy

**Available Platings:** T108: Black Zn/Co - 200 H Salt Spray - Conductive  
T240: Blue Zn/Ni - 500 H Salt Spray - Conductive  
T39: Black epoxyurethanic coating - 500 H Salt Spray - Non Conductive

**Insulator:** Low fire hazard thermoplastic.

**Interfacial Seal & Grommet:** Low fire hazard silicone rubber

**Contacts:** Copper alloy with gold or silver (on request, not according NFF standard) plating.

## ENVIRONMENTAL PERFORMANCE

**Operating Temperature:** -40°C to +100°C per NF F 61-030

**Corrosion Resistance:** T108: Black Zn/Co - 200 H Salt Spray - Conductive  
T240: Blue Zn/Ni - 500 H Salt Spray - Conductive  
T39: Black epoxyurethanic coating - 500 H Salt Spray - Non Conductive

**Water Protection:** IP67 in mated condition when used with proper backshell and accessories

**Fluid Resistance:** Gas, oil, mineral oil, acid bath per NF F 61-030

**Fire and smoke:** Rated I3F2 acc. to NF F 16-101 & 16-102 (exigence 2)  
Rated HL3 – R22/R23 acc. To EN 45545-2 UL94v0 compliant.

## MECHANICAL PERFORMANCE

**Durability:** 500 mating cycles minimum

**Bayonet Coupling Torque:** Per VG95234

**Shock:** 30g - 18 ms.

**Vibration:** 2g / 10-100Hz or 5g / 25-250Hz (NF F 60-002 / NF C 93-400).

**Min. Retention force:** 70N for contacts #16

**of the contact in:** 90N for contacts #12

**the insulator:** 110N for contacts #8

## ELECTRICAL PERFORMANCE

**Insulation Resistance:** 5000 MOhm

**Rated voltage:** 380Vac / 500Vdc per NF F 61-030

**Withstanding Voltage:** 3250 VAC rms per NF F 61-030

**Creepage/Clearance distance:** 12mm / 8mm min. (In mated conditions, interfacial seal in compression)

**Contact Rating:** See table

Layout	Shell Size	Contacts Size	No of Contacts	Rated Current (*) A		Contact Resistance mΩ max.
				Single cont.	Grouped cont.	
16S-1	16S	16S	7	15	12	2.5
18-19	18	16	10	15	12	2.5
20-15	20	12	7	23	20	1.3
20-4	20	12	4	23	22	1.3
20-7	20	16	8	15	14	2.5
22-14	22	16	19	15	11,5	2.5
22-23	22	12	8	23	20	1.3
24-10	24	8	7	46	33	0.9
28-21	28	16	37	15	12	2.5
32A-13	32	12	13	23	18	1.3
36-10	36	16	48	15	7,5	2.5
36A-22	36	12	22	23	19	1.3
40A-35	40	12	35	23	15,5	1.3
40A-60	40	16	60	15	9	2.5

(\*) Acc. To NF F 61-030. Max heating in C° allowed: 50°C

- Single contact: loaded into insulator. - Grouped contacts: fully populated insulator, all contacts loaded.

## VBN COMPONENTS DESCRIPTION

### PANEL MOUNTED CONNECTOR

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**Flange** - holds the insert and incorporates an alignment key to position the insert. The Flange accommodates either the socket or pin insert to reverse gender. Bayonet Coupling ramps provide cam action for coupling and uncoupling with the plug connectors. Stainless steel pins, at the top of the ramps, ensure positive locking and long service life.

**Insert (pin or socket)** - Removable, orientable, retains the contacts and can be used in either Flange or plugshells.

**Contacts (pin or socket)** - Suitable to be crimped with the wire conductors.

**Circlip Retaining Ring** - Retains the insert into the shell.



### PLUG CONNECTOR

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**Coupling nut** - Provides cam force when mating and un-mating mechanical system for coupling and uncoupling of the connectors.

**Plugshell** - Holds the insert and incorporates an alignment key to position the insert. The plugshell accommodates either the socket or pin insert to reverse gender.

**Insert (pin or socket)** - Removable, orientable, retains the contacts and can be used in either Flange or plugshells.

**Circlip Retaining Ring** - Retains the insert into the shell.

**Contacts (pin or socket)** - Suitable to be crimped with the wire conductors



Dimensions shown in mm  
Specifications and dimensions subject to change

VBN	3	( )	20	15	P	N	TXX	( )
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### Connector Series

- VBN VEAM Bayonet Coupling N Series
- VBNG\* Plug

### Connector Type

- 2 Front Mounting Receptacle
- 3 Rear Mounting Receptacle
- 38 90° Rear Mount Receptacle
- 6 Straight Plug Connector
- 8 90° Plug Connector

### Connector Class

- A, R Straight or Right Angle, no Strain relief
- AF, F, CF, CFZ Straight or Right Angle with Strain relief
- APG, RPG Straight for use with PG fitting
- SS Backshells for shielded cable

### Shell Size

- 16S, 18, 20, 22, 24, 28, 32, 36, 40

### Insert Arrangement

Refer to pages 9 and 10

### Contact Gender

- P Male Contacts (Pin)
- S Female Contacts (Sockets)

### Insert Orientation

- N Normal
- W, X, Y, Z Degree for alternate positions - refer to page 10
- No Letter Insulation Not Installed

### Shell Plating

- TXX See available platings page 5

### Modification Code

Consult Factory

\*To be used only with Connector Type "6" and Connector Class "SS"



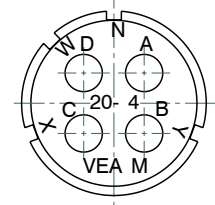
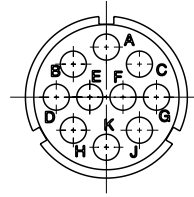
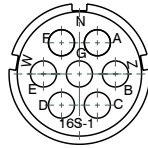
# VBN VERSION OVERVIEW

RECEPTACLE & PLUG	SEALING	STRAIGHT VERSIONS	RECEPTACLE & PLUG	SEALING	90° VERSIONS
		 <p>CLASS AV / RV Short backshell ext. thread</p>			 <p>CLASS A / R Standard backshell ext. thread</p>
 <p>VBN 2 Front Panel</p>		 <p>CLASS A / R Standard backshell ext. thread</p>	 <p>VBN 2 Front Panel</p>		 <p>CLASS APG / RPG Standard backshell int. PG thread</p>
 <p>VBN3 Rear panel mounting</p>	 <p>With Grommet</p>	 <p>CLASS APG / RPG Standard backshell int. PG thread</p>	 <p>VBN3 Rear panel mounting</p>	 <p>With Grommet</p>	 <p>CLASS AF / F Standard backshell with "A" cable clamp</p>
 <p>Plug - VBN6</p>	 <p>Without Grommet</p>	 <p>CLASS AF / F Standard backshell with "A" cable clamp</p>	 <p>Plug - VBN6</p>	 <p>Without Grommet</p>	 <p>CLASS CF / CFZ Standard backshell with "C" cable clamp</p>
 <p>Plug - VBN6-GG</p>		 <p>CLASS CF / CFZ Standard backshell with "C" cable clamp</p>	 <p>Plug - VBN6-GG</p>		 <p>CLASS SS / RSS Backshell with shielding system</p>
		 <p>CLASS SS / RSS Backshell with shielding system</p>			 <p>CLASS SS / RSS Backshell with shielding system</p>

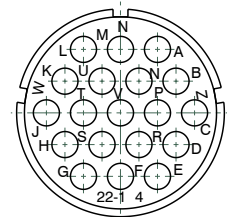
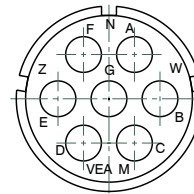
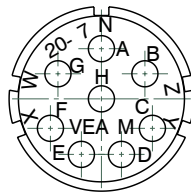
Dimensions shown in mm  
Specifications and dimensions subject to change

## CONTACT LAYOUTS

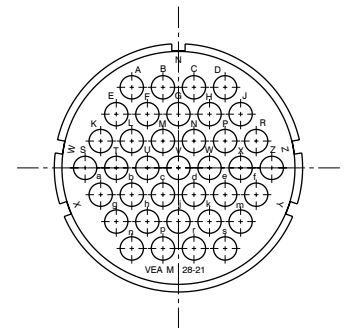
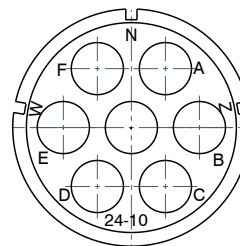
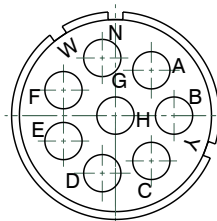
Front View of the Male Insert



Layout	16S-1	18-19	20-4
# of contacts	7	10	4
Contact Size	16	16	12



Layout	20-7	20-15	22-14
# of contacts	8	7	19
Contact Size	16	12	16

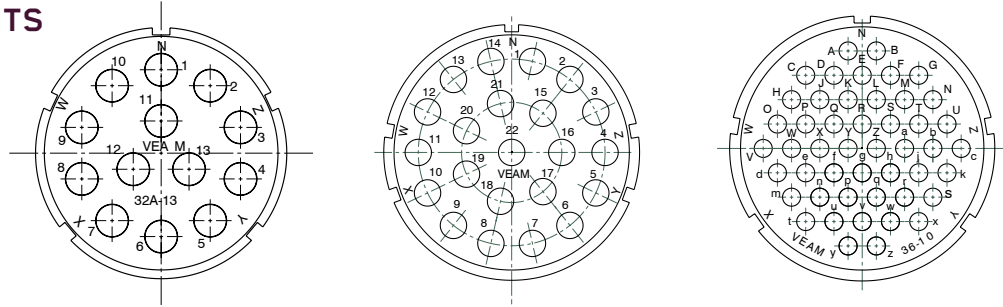


Layout	22-23	24-10	28-21
# of contacts	8	7	37
Contact Size	12	8	16

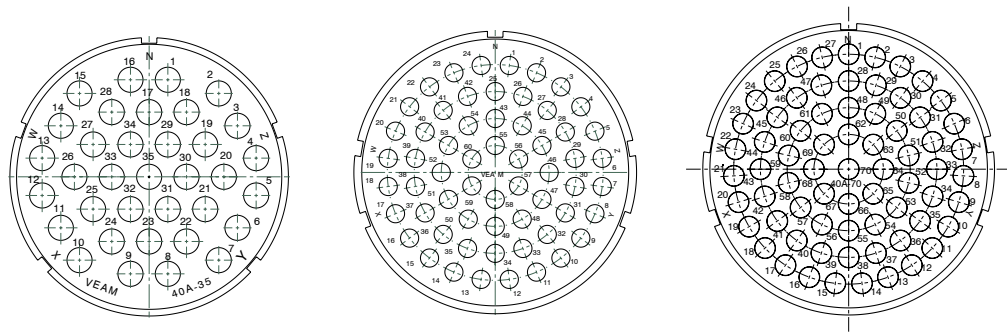
# VBN INSERT ARRANGEMENTS

## CONTACT ARRANGEMENTS

Front View of the Male Insert



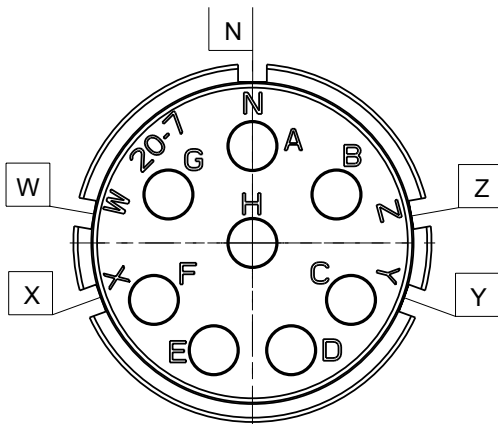
Layout	32A-13	36A-22	36-10
# of contacts	13	22	48
Contact Size	12	12	16



Layout	40A-35	40A-60	40A-70
# of contacts	35	60	70
Contact Size	12	16	16

## KEYING SYSTEM

Front view of male insert - Insert rotation

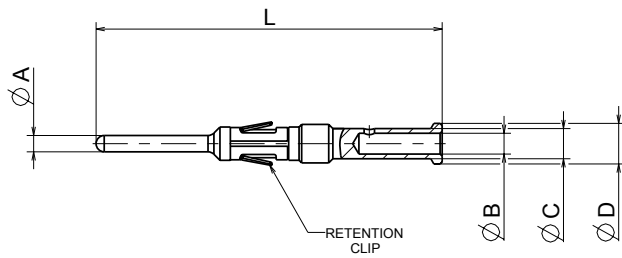


Insert Layout	Degrees for alternate positions				
	N	W	X	Y	Z
16S-1	0	80			280
18-19	0		120	240	
20-4	0	45	110	250	
20-7	0	80	110	250	280
20-15	0	80			280
22-14	0	80			280
22-23	0	35		250	
24-10	0	80			280
28-21	0	80	110	250	280
32A-13	0	65	130	230	295
36-10	0	80	125	235	280
36A-22	0	80	110	250	280
40A-35	0	70	130	230	290
40A-60	0	80	110	250	280
40A-70	0	80	110	250	280

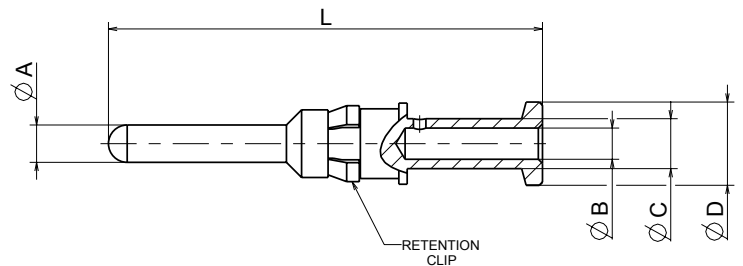
Dimensions shown in mm  
Specifications and dimensions subject to change

**PIN CONTACTS**

Male contact to be used on connector with male insulator.



**Shape type 1**



**Shape type 2**

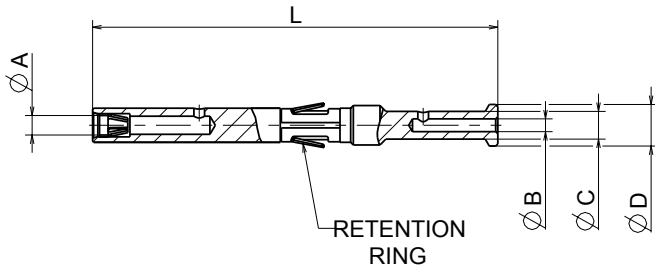
Male Part number	Size	Wire Size		L	ØA	ØB	ØC	ØD	Cable O.D. max. (2 - 3)	Type
		mm2	AWG							
51513-16S-12T12	16S	0.5-0.75	20	28.1	1.58	1.2	2.6	3.9	3.8	1
51513-16S-20T12	16S	1.0-2.0	16	28.1	1.58	2.0	2.9	3.9	3.8	1
51513-16S-26T12	16S	2.5-3.0	12	28.1	1.58	2.5	3.8	3.8	3.8	1
51513-16-12T12	16	0.5-0.75	20	33.2	1.58	1.2	2.6	3.9	3.8	1
51513-16-20T12	16	1.0-2.0	16	33.2	1.58	2.0	2.9	3.9	3.8	1
51513-16-26T12	16	2.5-3.0	12	33.2	1.58	2.5	3.8	3.8	3.8	1
51513-12T12	12	2.5-3.0	12	38.5	2.38	2.5	3.8	5.5	5.4	1
51513-12-12T12	12	0.5-0.75	20	38.5	2.38	1.2	2.6	5.5	5.4	1
51513-12-20T12	12	1.0-2.0	16	38.5	2.38	2.0	3.8	5.5	5.4	1
51513-12-30T12	12	4.0	12	38.5	2.38	3.0	4.8	5.5	5.4	1
51513-12-38T12	12	6.0	10	38.5	2.38	3.6	4.8	5.5	5.4	1
51513-8T12	8	AWG 8	8	41.7	3.60	4.6	6.8	8.0	7.8	2
51513-8-20T12	8	1.0 - 2.0		41.7	3.60	2.0	3.8	8.0	7.8	2
51513-8-26T12	8	3.0		41.7	3.60	2.5	3.8	8.0	7.8	2
51513-8-30T12	8	4.0		41.7	3.60	3.0	4.8	8.0	7.8	2
51513-8-38T12	8	6.0		41.7	3.60	3.6	4.8	8.0	7.8	2
51513-8-50T12	8	10		41.7	3.60	5.0	7	8.0	7.8	2

NOTES: 1. Finish: Silver plating on size 12 and 8 also available (please consult factory).  
 2. The dimensions indicated are the maximum OD cable permitted, due to the rear insert holes.  
 3. When grommets are used refer to page XX for cable dimensions.

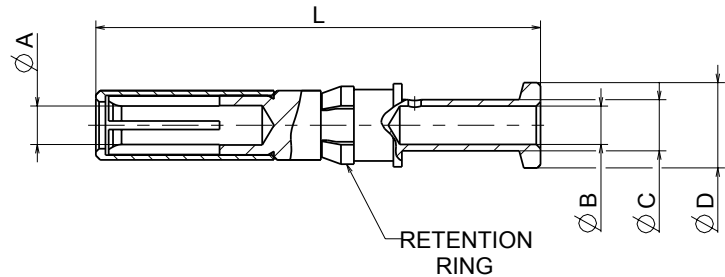
# VBN CONTACTS

## SOCKET CONTACTS

Female contact to be used on connector with female insulator.



Shape type 1



Shape type 2

Female Part number	Size	Wire Size mm <sup>2</sup>	AWG	L	ØA	ØB	ØC	ØD	Cable O.D. max. (2 - 3)	Type
51511-16S-12T12	16S	0.5-0.75	20	28.1	1.58	1.2	2.6	3.9	3.8	1
51511-16S-20T12	16S	1.0-2.0	16	28.1	1.58	2.0	2.9	3.9	3.8	1
51511-16S-26T12	16S	2.5-3.0	12	28.1	1.58	2.5	3.8	3.8	3.8	1
51511-16-12T12	16	0.5-0.75	20	33.2	1.58	1.2	2.6	3.9	3.8	1
51511-16-20T12	16	1.0-2.0	16	33.2	1.58	2.0	2.9	3.9	3.8	1
51511-16-26T12	16	2.5-3.0	12	33.2	1.58	2.5	3.8	3.8	3.8	1
51511-12T12	12	2.5-3.0	12	38.5	2.38	2.5	3.8	5.5	5.4	1
51511-12-12T12	12	0.5-0.75	20	38.5	2.38	1.2	2.6	5.5	5.4	1
51511-12-20T12	12	1.0-2.0	16	38.5	2.38	2.0	3.8	5.5	5.4	1
51511-12-30T12	12	4.0	12	38.5	2.38	3.0	4.8	5.5	5.4	1
51511-12-38T12	12	6.0	10	38.5	2.38	3.6	4.8	5.5	5.4	1
51511-8T12	8	AWG 8	8	41.7	3.60	4.6	6.8	8.0	7.8	2
51511-8-20T12	8	1.0 - 2.0		41.7	3.60	2.0	3.8	8.0	7.8	2
51511-8-26T12	8	3.0		41.7	3.60	2.5	3.8	8.0	7.8	2
51511-8-30T12	8	4.0		41.7	3.60	3.0	4.8	8.0	7.8	2
51511-8-38T12	8	6.0		41.7	3.60	3.6	4.8	8.0	7.8	2
51511-8-50T12	8	10		41.7	3.60	5.0	7	8.0	7.8	2

NOTES: 1. Finish: Silver plating on size 12 and 8 also available (please consult factory).  
 2. The dimensions indicated are the maximum OD cable permitted, due to the rear insert holes.  
 3. When grommets are used refer to page XX for cable dimensions.

Dimensions shown in mm  
 Specifications and dimensions subject to change

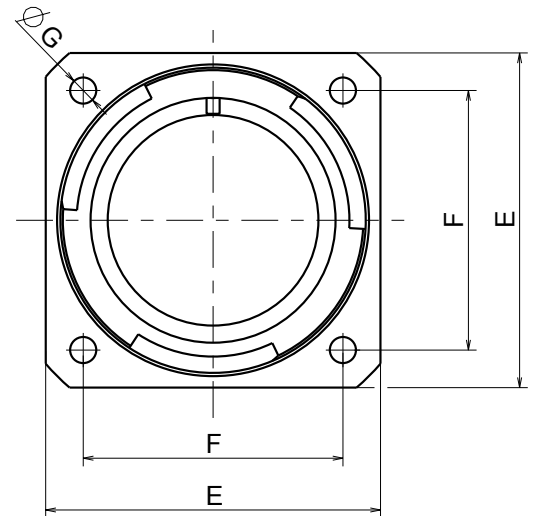
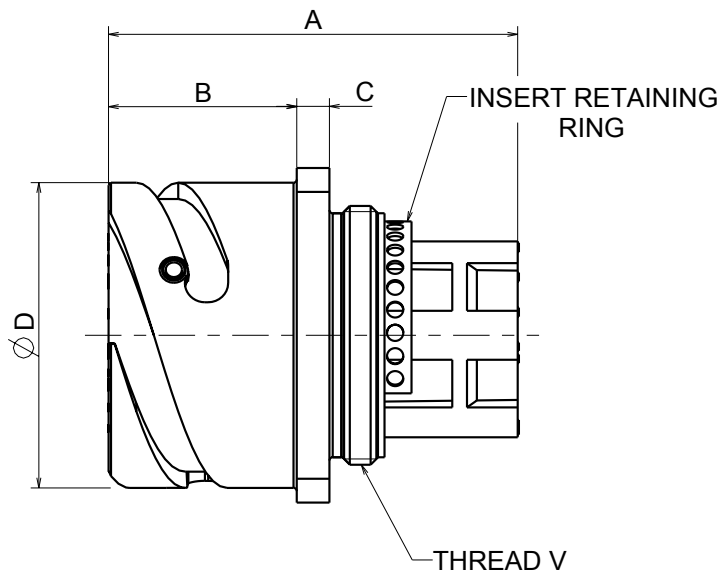
# VBN RECEPTACLE



## VBN2--

Front panel mounting receptacle with through fixing holes and a threaded rear end.

Supplied without accessories



SIZE	A	B +0.4-0	C ±0.2	ØD +0-0.15	E ±0.3	F ±0.1	ØG	Thread V
16S	40	18.2	3.2	27.4	32.5	24.6	3.2	7/8"-20 UNEF
18	50	23.05	4	30.8	35	27	3.2	1"-20 UNEF
20	50	23.05	4	34.2	38	29.4	3.2	1 1/8"-18 UNEF
22	50	23.05	4	37.4	41	31.8	3.2	1 1/4"-18 UNEF
24	50	23.05	4	40.9	44.5	34.9	3.7	1 3/8"-18 UNEF
28	50	24.05	4	46.7	50.8	39.7	3.7	1 5/8"-18 UNEF
32	50	24.05	4	53.4	57	44.5	4.3	1 7/8"-16 UN
36	50	24.05	4	59.6	63.5	49.2	4.3	2 1/16"-16 UN
40	50	24.05	4	65.5	69.9	55.5	4.3	2 5/16"-16 UN

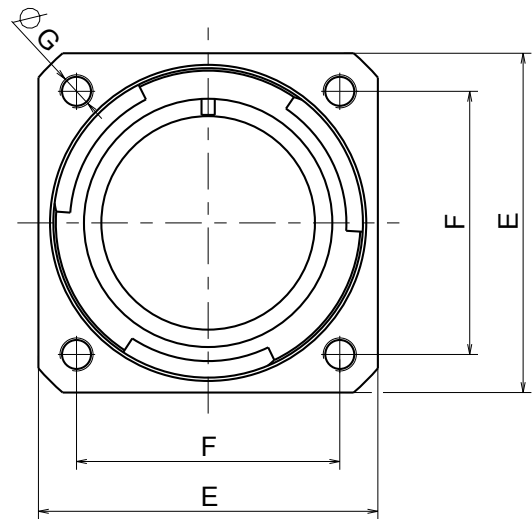
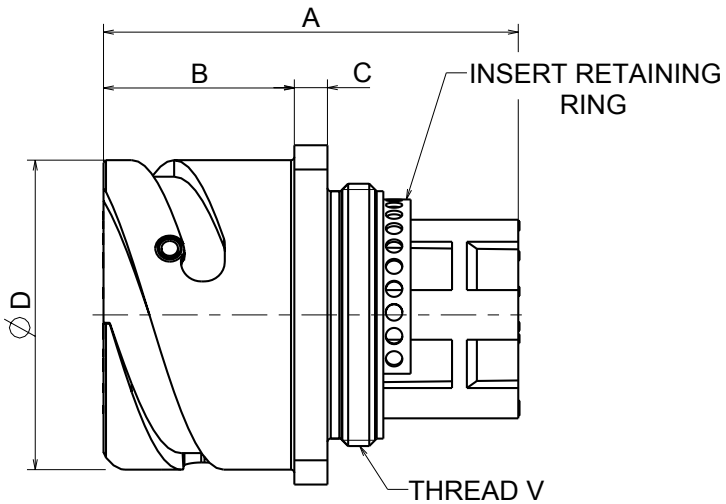
Dimensions shown in mm  
Specifications and dimensions subject to change

# VBN RECEPTACLE

## VBN3--

Rear panel mounting receptacle with threaded fixing holes and a threaded rear end.

Supplied without accessories



SIZE	A	B +0.4-0	C ±0.2	ØD +0-0.15	E ±0.3	F ±0.1	ØG	Thread V
16S	40	+0.4-0	3.2	27.4	32.5	24.6	M4	7/8"-20 UNEF
18	50	23.05	4	30.8	35	27	M4	1"-20 UNEF
20	50	23.05	4	34.2	38	29.4	M4	1 1/8"-18 UNEF
22	50	23.05	4	37.4	41	31.8	M4	1 1/4"-18 UNEF
24	50	23.05	4	40.9	44.5	34.9	M4	1 3/8"-18 UNEF
28	50	24.05	4	46.7	50.8	39.7	M5	1 5/8"-18 UNEF
32	50	24.05	4	53.4	57	44.5	M5	1 7/8"-16 UN
36	50	24.05	4	59.6	63.5	49.2	M5	2 1/16"-16 UN
40	50	24.05	4	65.5	69.9	55.5	M5	2 5/16"-16 UN

Dimensions shown in mm  
Specifications and dimensions subject to change

# VBN RECEPTACLE

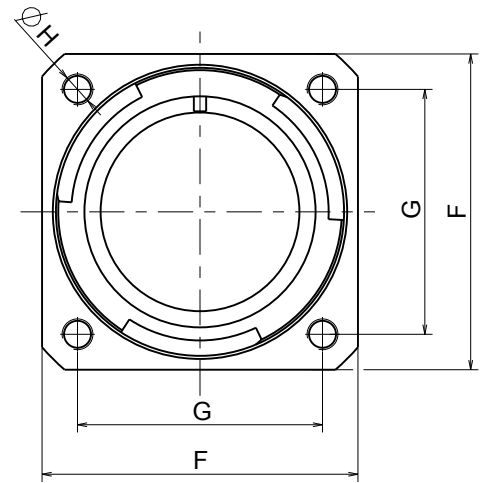
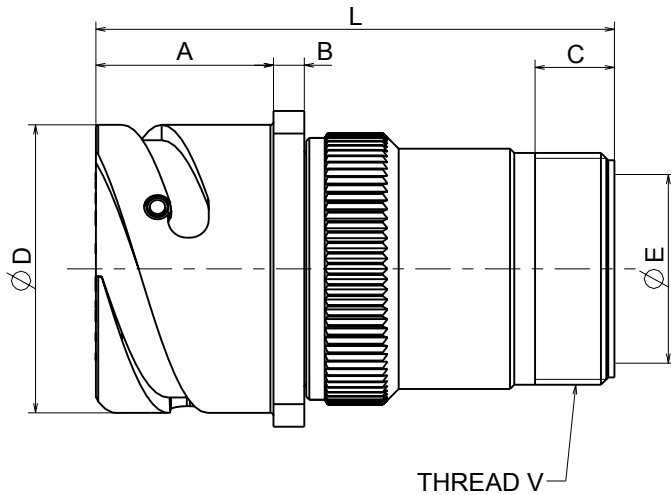


## VBN3AV-- VBN3RV--

Rear panel mounting receptacle with threaded fixing holes.

Foresees a short straight backshell with UNEF external thread.

Supplied with (RV) or without (AV) grommet.



SIZE	L	A +0.4-0	B ±0.2	C Min.	ØD +0-0.15	ØE Max.	F ±0.3	G ±0.1	ØH	Thread V
16S	55	18.2	3.2	10	27.4	16.2	32.5	24.6	M4	7/8"-20 UNEF
18	65	23.05	4	10	30.8	19	35	27	M4	1"-20 UNEF
20	70	23.05	4	10	34.2	22	38	29.4	M4	1 3/16"-18 UNEF
22	70	23.05	4	10	37.4	24.5	41	31.8	M4	1 3/16"-18 UNEF
24	70	23.05	4	10	40.9	27.8	44.5	34.9	M4	1 7/16"-18 UNEF
28	75	24.05	4	10	46.7	31.2	50.8	39.7	M5	1 7/16"-18 UNEF
32	75	24.05	4	12	53.4	37.8	57	44.5	M5	1 3/4"-18 UNS
36	80	24.05	4	12	59.6	45	63.5	49.2	M5	2"-18 UNS
40	80	24.05	4	12	65.5	51.2	69.9	55.5	M5	2 1/4"-16 UN

Dimensions shown in mm  
Specifications and dimensions subject to change



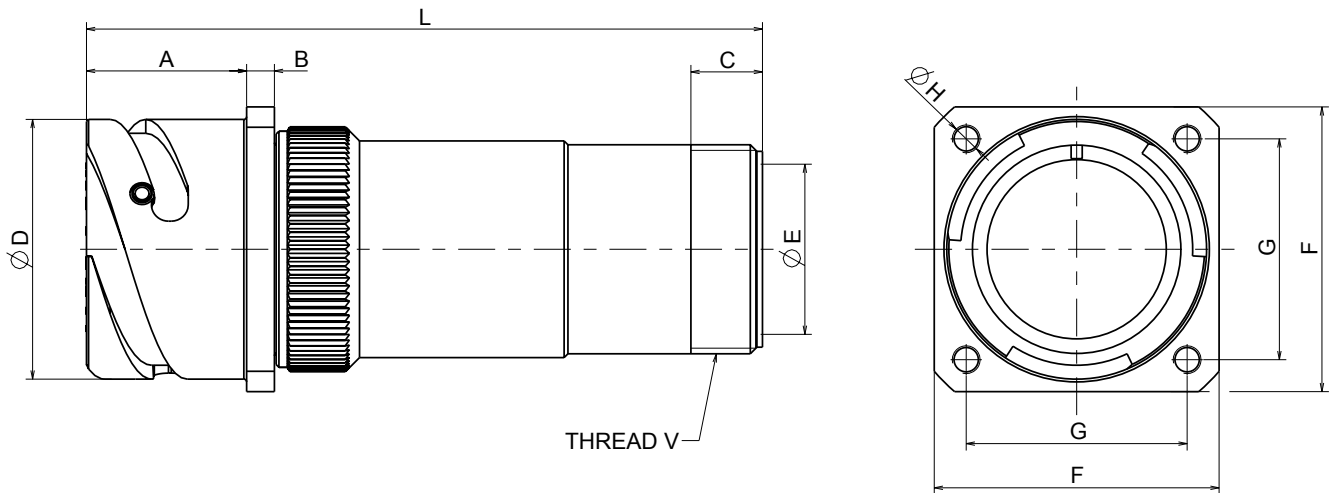
# VBN RECEPTACLE

## VBN3A-- VBN3R--

Rear panel mounting receptacle with threaded fixing holes.

Foresees a standard straight backshell with UNEF external thread.

Supplied with (R) or without (A) grommet.



SIZE	L	A +0.4-0	B ±0.2	C Min.	ØD +0-0.15	ØE Max.	F ±0.3	G ±0.1	ØH	Thread V
16S	80	18.2	3.2	10	27.4	16.2	32.5	24.6	M4	7/8"-20 UNEF
18	100	23.05	4	10	30.8	19	35	27	M4	1"-20 UNEF
20	100	23.05	4	10	34.2	22	38	29.4	M4	1 3/16"-18 UNEF
22	100	23.05	4	10	37.4	24.5	41	31.8	M4	1 3/16"-18 UNEF
24	105	23.05	4	10	40.9	27.8	44.5	34.9	M4	1 7/16"-18 UNEF
28	105	24.05	4	10	46.7	31.2	50.8	39.7	M5	1 7/16"-18 UNEF
32	115	24.05	4	12	53.4	37.8	57	44.5	M5	1 3/4"-18 UNS
36	125	24.05	4	12	59.6	45	63.5	49.2	M5	2 "-18 UNS
40	125	24.05	4	12	65.5	51.2	69.9	55.5	M5	2 1/4"-16 UN

Dimensions shown in mm  
Specifications and dimensions subject to change

# VBN RECEPTACLE

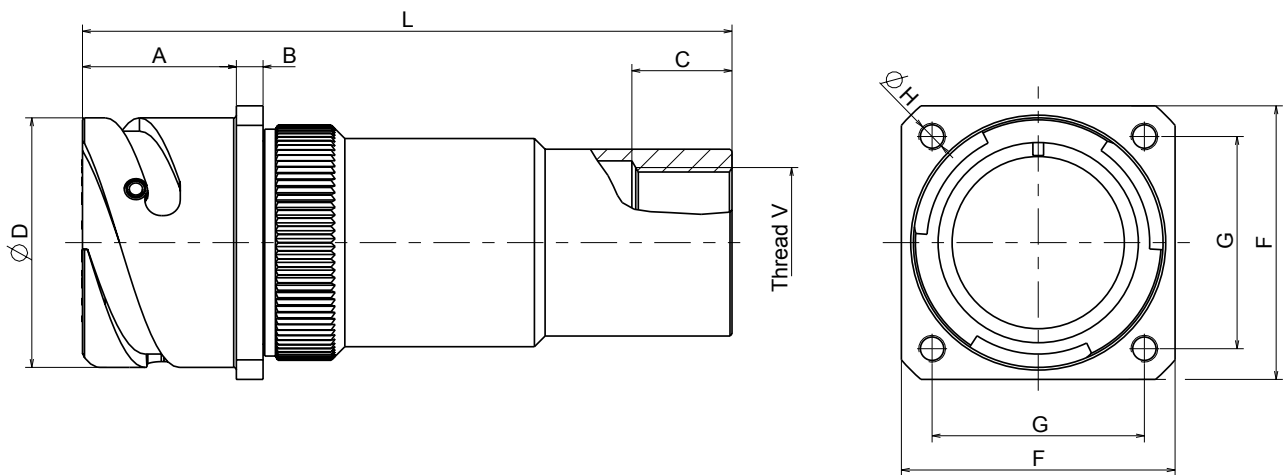


## VBN3AM-- VBN3RM--

Rear panel mounting receptacle with threaded fixing holes.

Foresees a standard straight backshell with metric internal thread.

Supplied with (RM) or without (AM) grommet.



SIZE	L	A +0.4-0	B ±0.2	ØD +0-0.15	F ±0.3	G ±0.1	ØH	Thread V	
								C Min	Metric
16S	80	18.2	3.2	27.4	32.5	24.6	M4	12	M12x1.5
								15	M16x1.5
								15	M20x1.5
18	100	23.05	4	30.8	35	27	M4	15	M16x1.5
								18	M20x1.5
								18	M25x1.5
20	100	23.05	4	34.2	38	29.4	M4	15	M16x1.5
								15	M20x1.5
								15	M25x1.5
22	100	23.05	4	37.4	41	31.8	M4	15	M20x1.5
								15	M25x1.5
								18	M32x1.5
24	105	23.05	4	40.9	44.5	34.9	M4	15	M25x1.5
								15	M32x1.5
								18	M20x1.5
28	105	24.05	4	46.7	50.8	39.7	M5	15	M25x1.5
								15	M32x1.5
								20	M40x1.5
32	115	24.05	4	53.4	57	44.5	M5	20	M25x1.5
								20	M32x1.5
								20	M40x1.5
36	125	24.05	4	59.6	63.5	49.2	M5	20	M32x1.5
								20	M40x1.5
								20	M50x1.5
40	125	24.05	4	65.5	69.9	55.5	M5	20	M25x1.5
								20	M32x1.5
								20	M40x1.5
									M50x1.5
									M63x1.5

For additional thread size please consult the factory.

Dimensions shown in mm  
Specifications and dimensions subject to change

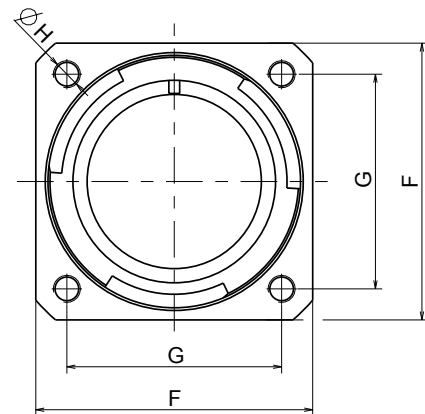
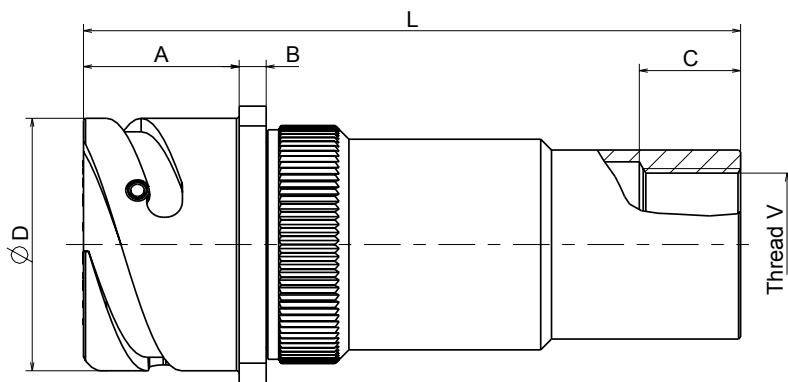
# VBN RECEPTACLE

## VBN3APG-- VBN3RPG--

Rear panel mounting receptacle with threaded fixing holes.

Foresees a standard straight backshell with PG internal thread.

Supplied with (RPG) or without (APG) grommet.



SIZE	L	A +0.4-0	B ±0.2	ØD +0-0.15	F ±0.3	G ±0.1	ØH	Thread V	
								C Min	C Min
16S	80	18.2	3.2	27.4	32.5	24.6	M4	13	PG9
18	100	23.05	4	30.8	35	27	M4	15	PG16
									PG21
20	100	23.05	4	34.2	38	29.4	M4	15	PG16
									PG29
22	100	23.05	4	37.4	41	31.8	M4	15	PG16
									PG29
24	105	23.05	4	40.9	44.5	34.9	M4	15	PG21
									PG29
								20	PG36
28	105	24.05	4	46.7	50.8	39.7	M5	15	PG21
									PG29
32	115	24.05	4	53.4	57	44.5	M5	20	PG29
									PG36
36	125	24.05	4	59.6	63.5	49.2	M5	20	PG36
									PG42
40	125	24.05	4	65.5	69.9	55.5	M5	20	PG36
									PG42

For additional thread size please consult the factory.

Dimensions shown in mm  
Specifications and dimensions subject to change

# VBN RECEPTACLE

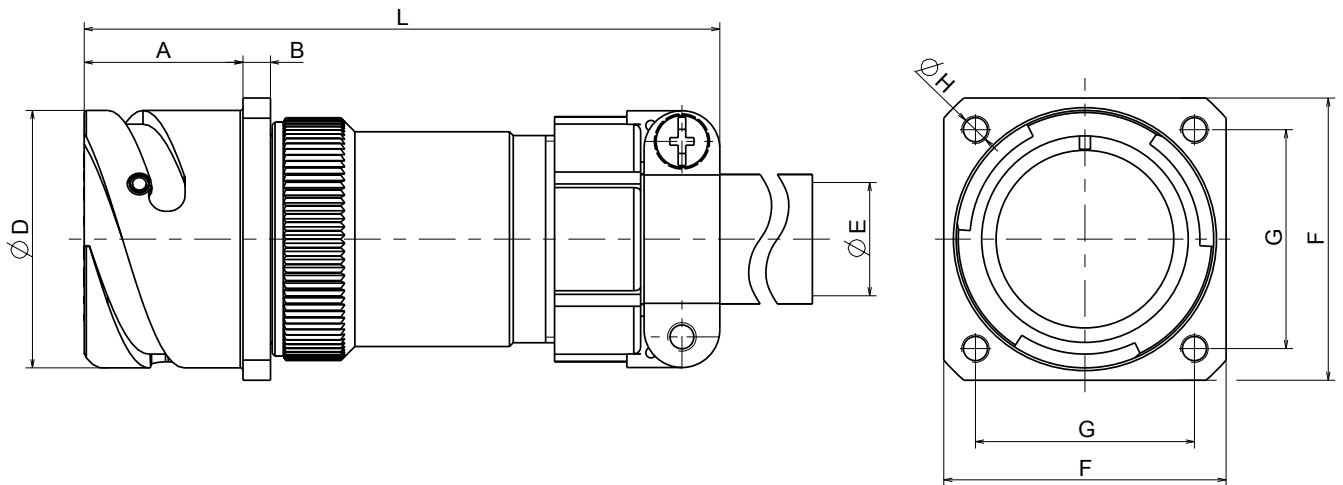


## VBN3AF-- VBN3F--

Rear panel mounting receptacle with threaded fixing holes.

Foresees a standard straight backshell and a cable clamp with bushing for single wires.

Supplied with (F) or without (AF) grommet.



SIZE	L	A +0.4-0	B ±0.2	ØD +0-0.15	ØE (*) Max.	F ±0.3	G ±0.1	ØH
16S	105	18.2	3.2	27.4	11	32.5	24.6	M4
18	125	23.05	4	30.8	14.2	35	27	M4
20	125	23.05	4	34.2	15.8	38	29.4	M4
22	125	23.05	4	37.4	15.8	41	31.8	M4
24	130	23.05	4	40.9	19	44.5	34.9	M4
28	130	24.05	4	46.7	19	50.8	39.7	M5
32	145	24.05	4	53.4	23.8	57	44.5	M5
36	155	24.05	4	59.6	31.7	63.5	49.2	M5
40	167	24.05	4	65.5	34.9	69.9	55.5	M5

(\*): Maximum cable (or wires bundle dimension) outer diameter

Dimensions shown in mm  
Specifications and dimensions subject to change

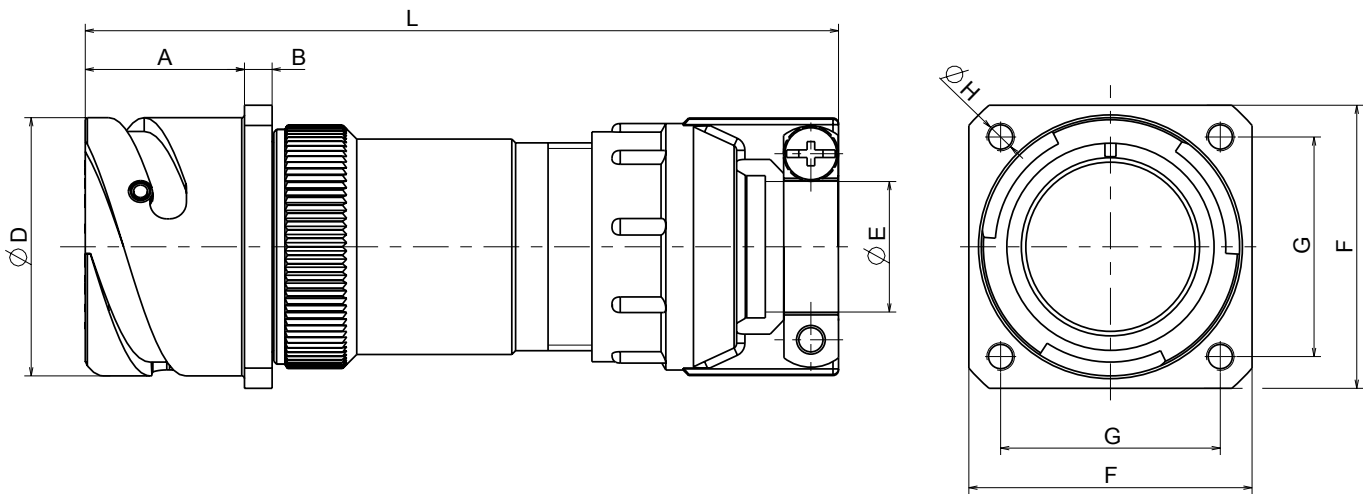
# VBN RECEPTACLE

## VBN3CF-- VBN3CFZ--

Rear panel mounting receptacle with threaded fixing holes.

Foresees a standard straight backshell and a cable clamp for jacketed cable.

Supplied with (CFZ) or without (CF) grommet.



SIZE	L	A +0.4-0	B ±0.2	ØD +0-0.15	ØE (*)		F ±0.3	G ±0.1	ØH
					Min	Max			
16S	110	18.2	3.2	27.4	8	13.5	32.5	24.6	M4
18	135	23.05	4	30.8	9.6	15.8	35	27	M4
20	135	23.05	4	34.2	11.3	19	38	29.4	M4
22	135	23.05	4	37.4	11.3	19	41	31.8	M4
24	140	23.05	4	40.9	15.5	23.8	44.5	34.9	M4
28	140	24.05	4	46.7	15.5	23.8	50.8	39.7	M5
32	160	24.05	4	53.4	23.4	31.7	57	44.5	M5
36	175	24.05	4	59.6	23.4	35	63.5	49.2	M5
40	175	24.05	4	65.5	29.9	41.2	69.9	55.5	M5

(\*): cable outer diameter range.

Dimensions shown in mm  
Specifications and dimensions subject to change

# VBN RECEPTACLE

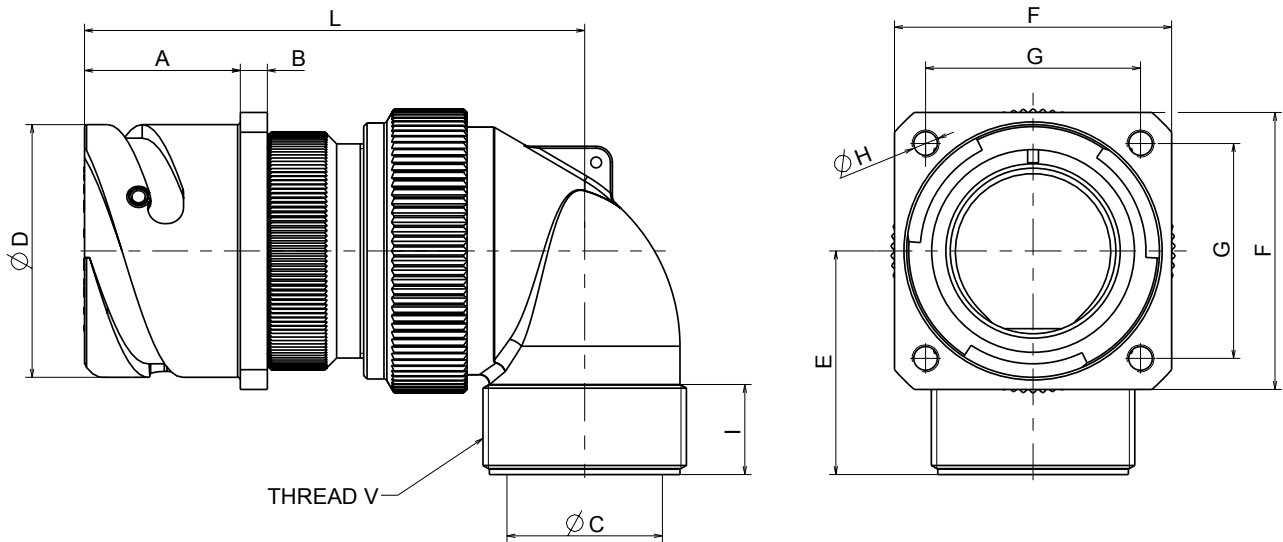


## VBN38A-- VBN38R--

Rear panel mounting receptacle with threaded fixing holes.

Foresees a 90° backshell with UNEF external thread.

Supplied with (R) or without (A) grommet.



SIZE	L	A +0.4-0	B ±0.2	ØC.	ØD +0-0.15	E	F ±0.3	G ±0.1	ØH	I Min.	Thread V
16S	63	18.2	3.2	14.7	27.4	30	32.5	24.6	M4	10	7/8"-20 UNEF
18	75	23.05	4	17.2	30.8	35	35	27	M4	10	1"-20 UNEF
20	80	23.05	4	20.35	34.2	35	38	29.4	M4	10	1 3/16"-18 UNEF
22	80	23.05	4	23	37.4	35	41	31.8	M4	10	1 3/16"-18 UNEF
24	80	23.05	4	25.8	40.9	40	44.5	34.9	M4	10	1 7/16"-18 UNEF
28	80	24.05	4	28.7	46.7	40	50.8	39.7	M5	10	1 7/16"-18 UNEF
32	85	24.05	4	36.5	53.4	45	57	44.5	M5	12	1 3/4"-18 UNS
36	90	24.05	4	42.6	59.6	50	63.5	49.2	M5	12	2"-18 UNS
40	95	24.05	4	48.6	65.5	55	69.9	55.5	M5	12	2 1/4"-16 UN

The connectors are supplied with an adapter between the flange and the elbow.

Dimensions shown in mm  
Specifications and dimensions subject to change

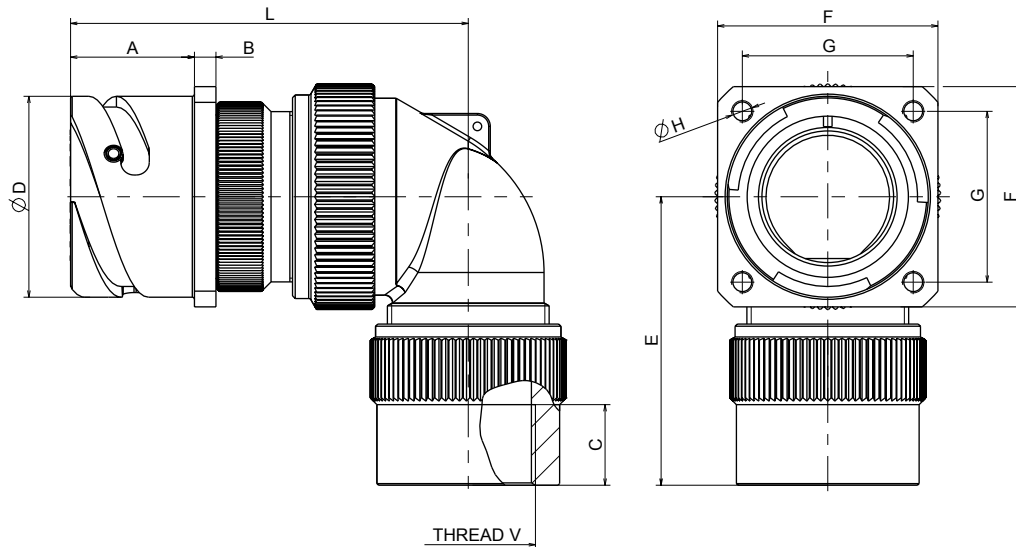
# VBN RECEPTACLE

## VBN38AM-- VBN38RM--

Rear panel mounting receptacle with threaded fixing holes.

Foresees a 90° backshell with an adapter with metric internal thread.

Supplied with (RM) or without (AM) grommet.



SIZE	L	A +0.4-0	B ±0.2	ØD +0-0.15	E	F ±0.3	G ±0.1	ØH	Thread V	
									C Min	Metric
16S	63	18.2	3.2	27.4	52	32.5	24.6	M4	12	M12x1.5
									15	M16x1.5 M20x1.5
18	75	23.05	4	30.8	57	35	27	M4	15	M16x1.5 M20x1.5 M25x1.5
									18	M20x1.5 M32x1.5
									20	M40x1.5
22	80	23.05	4	37.4	57	41	31.8	M4	15	M25x1.5 M32x1.5
									18	M32x1.5
									20	M40x1.5
24	80	23.05	4	40.9	65	44.5	34.9	M4	15	M25x1.5
									18	M32x1.5
									20	M40x1.5
28	80	24.05	4	46.7	65	50.8	39.7	M5	15	M25x1.5
									18	M32x1.5
									20	M40x1.5
32	85	24.05	4	53.4	70	57	44.5	M5	20	M25x1.5 M32x1.5 M40x1.5
									18	M32x1.5
									20	M40x1.5
36	90	24.05	4	59.6	78	63.5	49.2	M5	20	M32x1.5 M40x1.5 M50x1.5
									18	M40x1.5
									20	M50x1.5
40	95	24.05	4	65.5	80	69.9	55.5	M5	20	M40x1.5 M50x1.5 M63x1.5
									18	M50x1.5
									20	M63x1.5

The connectors are supplied with an adapter between the flange and the elbow.

Dimensions shown in mm  
Specifications and dimensions subject to change

# VBN RECEPTACLE

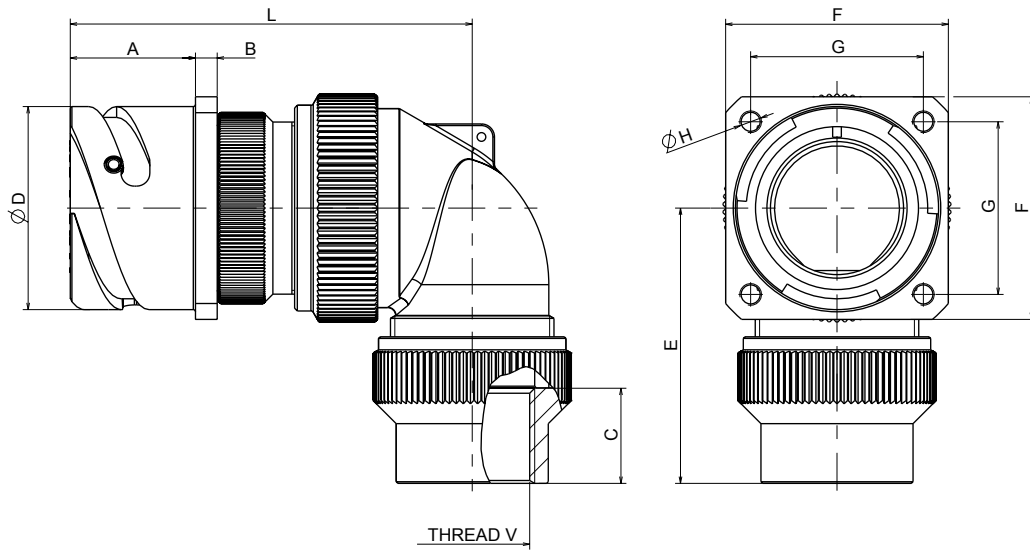


## VBN38APG-- VBN38RPG--

Rear panel mounting receptacle with threaded fixing holes.

Foresees a 90° backshell with an adapter with PG internal thread.

Supplied with (RPG) or without (APG) grommet.



SIZE	L	A +0.4-0	B ±0.2	ØD +0-0.15	F ±0.3	E	G ±0.1	ØH	Thread V	
									C Min	PG
16S	63	18.2	3.2	27.4	32.5	48	24.6	M4	14	PG9
18	75	23.05	4	30.8	35	54	27	M4	14	PG16
										PG21
20	80	23.05	4	34.2	38	53	29.4	M4	15	PG16
									13	PG29
22	80	23.05	4	37.4	41	53	31.8	M4	15	PG16
									13	PG29
24	80	23.05	4	40.9	44.5	58	34.9	M4	13	PG21
						69			15	PG36
						58			13	PG21
28	80	24.05	4	46.7	50.8	58	39.7	M5	13	PG21
						69			15	PG36
32	85	24.05	4	53.4	57	60	44.5	M5	15	PG29
						71			15	PG36
36	90	24.05	4	59.6	63.5	68	49.2	M5	15	PG36
										PG42
40	95	24.05	4	65.5	69.9	74	55.5	M5	15	PG42
						76				PG48

The connectors are supplied with an adapter between the flange and the elbow. For additional thread size please consult the factory.

Dimensions shown in mm  
Specifications and dimensions subject to change



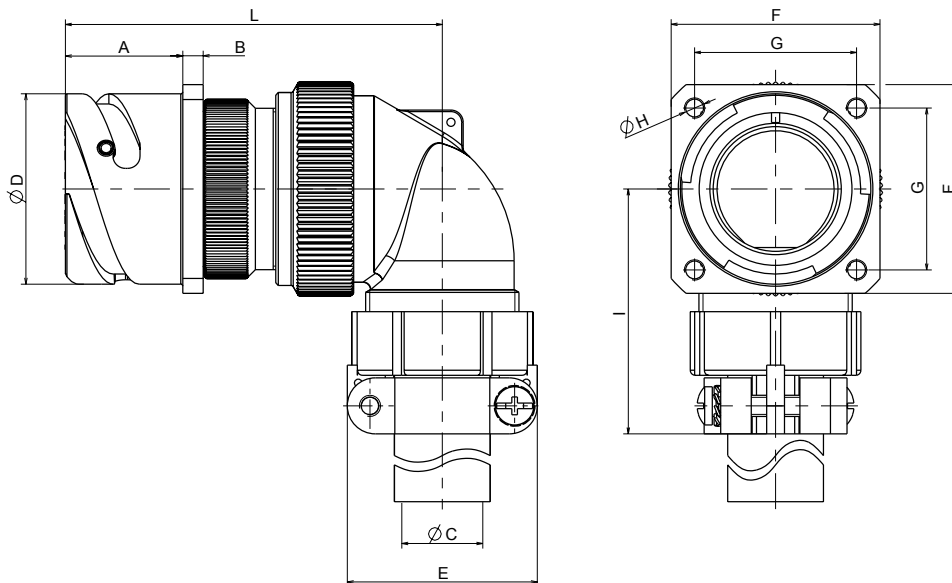
# VBN RECEPTACLE

## VBN38AF-- VBN38F--

Rear panel mounting receptacle with threaded fixing holes.

Foresees a 90° backshell and a cable clamp with bushing for single wires.

Supplied with (F) or without (AF) grommet.



SIZE	L	A +0.4-0	B ±0.2	ØC (*) Max.	ØE +0-0.15	E Max.	F ±0.3	G ±0.1	ØH	I
16S	63	18.2	3.2	11	27.4	30	32.5	24.6	M4	45
18	75	23.05	4	14.2	30.8	32.2	35	27	M4	53
20	80	23.05	4	15.8	34.2	37.5	38	29.4	M4	53
22	80	23.05	4	15.8	37.4	37.5	41	31.8	M4	53
24	80	23.05	4	19	40.9	43.3	44.5	34.9	M4	58
28	80	24.05	4	19	46.7	43.3	50.8	39.7	M5	58
32	85	24.05	4	23.8	53.4	51.7	57	44.5	M5	66
36	90	24.05	4	31.7	59.6	58	63.5	49.2	M5	69
40	95	24.05	4	34.9	65.5	68.5	69.9	55.5	M5	95

(\*): Maximum cable (or wires bundle dimension) outer diameter. The connectors are supplied with an adapter between the flange and the elbow.

Dimensions shown in mm  
Specifications and dimensions subject to change

# VBN RECEPTACLE

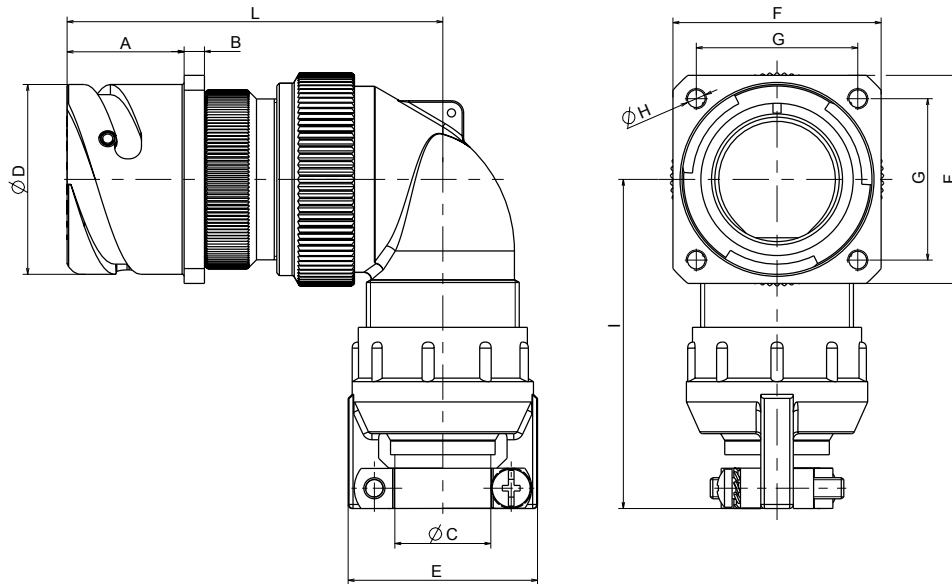


## VBN38CF-- VBN38CFZ--

Rear panel mounting receptacle with threaded fixing holes.

Foresees a 90° backshell and a cable clamp for jacketed cable.

Supplied with (CFZ) or without (CF) grommet.



SIZE	L	A +0.4-0	B ±0.2	ØC (*)		ØD +0-0.15	E Max.	F±0.3	G ±0.1	ØH	I
				Min	Max						
16S	63	18.2	3.2	8	13.5	27.4	28.1	32.5	24.6	M4	61
18	75	23.05	4	9.6	15.8	30.8	31	35	27	M4	68
20	80	23.05	4	11.3	19	34.2	37.3	38	29.4	M4	68
22	80	23.05	4	11.3	19	37.4	37.3	41	31.8	M4	68
24	80	23.05	4	15.5	23.8	40.9	42	44.5	34.9	M4	76
28	80	24.05	4	15.5	23.8	46.7	42	50.8	39.7	M5	76
32	85	24.05	4	23.4	31.7	53.4	54	57	44.5	M5	97
36	90	24.05	4	23.4	35	59.6	57.1	63.5	49.2	M5	98
40	95	24.05	4	29.9	41.2	65.5	63.5	69.9	55.5	M5	103

(\*): cable outer diameter range. The connectors are supplied with an adapter between the flange and the elbow.

Dimensions shown in mm  
Specifications and dimensions subject to change