eddicy A Schaltbau Brand

VG/NF

Connectors for communication systems
VG96934 Version J (NF10)
VG95351 / NF07

Connectors for communication systems: VG96934 version J (NF10), VG95351 / NF07

VG/NF connectors combine over 20 years of proven reliability with next-generation innovation to provide compact, high-performance connectivity for challenging communication systems. The miniature bayonet connectors – designed and manufactured in Germany - offer robust shielding, shock and vibration resistance and up to 5,000 mating cycles for long-term reliability in the harshest environments. With precise, gold-plated pogo pin contacts, IP68 seals and a pressure contact system with a permanently high contact reliability, VG/NF connectors ensure uninterrupted, safe operation and high resistance to damage or contamination. Thanks to innovative surface technology and new materials, the 10-pin series (NF10) is fully RoHS-compliant and also meets the strict technical requirements of VG96934 version J. The 7-pin series (NF07) based on VG95351 is also available. Both series have identical dimensions and are suitable for very low currents from 6 microamperes to a maximum of 2.5 amperes and rated voltages up to 50 volts.

Applications

- Voice and data communication systems for mobile and stationary use
- Mobile and stationary hand-held and headsets
- Helmets for emergency services
- Observation systems
- Metal detection devices
- Camera systems

A broad portfolio of 7- and 10-pin connectors is available for applications that are bound to VG95351, VG96934 and other VG standards. For applications beyond the VG standard, a wide range of customized solutions of plugs and sockets available.

Features

Electrical benefits

- **Reliable, long-lasting contact connection (5,000 mating cycles)**
  Spring-loaded, gold-plated Pogo pins with self-cleaning contact surfaces ensure consistently low contact resistance and high reliability – even under massive vibration or shock. Ideal for sensitive low-voltage or low-current applications, eliminating the risk of bent pins or dirty contacts and ensuring uninterrupted signal integrity.
- **Maximum interference protection for safe and stable operation** Advanced EMC shielding – especially with the 10-pin version featuring a 360-degree lamella cage – protects critical signals against electromagnetic, radio-frequency, and pulsed noise, ensuring your equipment works reliably in harsh environments and mission-critical systems.
- **Scoop-proof: No short circuits when plugging in**
  The fail-safe design ensures that no contact damage or short circuits occur when plugging in.
- **Flexible terminal options for easy integration**
  Supports a wide range of wire types (up to AWG20) and PCB mounting needs (3.5 mm or 8 mm pins), enabling seamless integration into space-constrained or custom applications.

Mechanical benefits

- **Exceptional durability and discreet appearance**
  The rugged, non-reflective black finish resists corrosion and wear, ideal for harsh outdoor conditions and tactical environments where stealth and longevity matter..
- **Waterproof performance – even when unplugged**
  Rated IP68, the connectors remain sealed under water and under pressure – even when not mated – thanks to robust elastomers and O-rings, ensuring uninterrupted performance in wet or submerged conditions.
- **Fast, secure connection with intuitive handling**
  Bayonet coupling with up to five color-coded keying options enables quick, error-free mating – even in low-visibility or high-pressure scenarios, enhancing operational efficiency.
- **Environmentally responsible and compliant with defense standards**
  RoHS conform materials ensure environmental safety and legal conformity – without the use of hazardous substances – while meeting stringent military requirements (VG 96934 Version J).
- **Versatile installation options for robust, customized solutions**
  Heat-shrink boots provide enhanced strain relief and mechanical protection, preventing cable breakage and maximizing connection reliability in rugged use cases.

Cable-connecting plug with rubber sleeve, 10 pole
to VG96934 version J for connection and interconnection cables, available with 5-coding layers and solder terminals up to AWG20

Cable-connecting socket, long housing, 10 pole
to VG96934 version J for connection and interconnection cables, available with 5-coding layers and solder terminals up to AWG20

Cable-connecting socket with step protection, 10 pole
to VG96934 version J for connection and interconnection cables, available with 5-coding layers and solder terminals up to AWG20

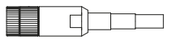
Flange socket, 10 pole
to VG96934 version J for housing installation, available with 5-coding layers and solder and PCB connection

Jam-nut socket, 10 pole
to VG96934 version J for housing installation, available with 5-coding layers and solder and PCB connection

VG96934 version J (NF10), VG95351/ NF07 – series overview 10- and 7-pole variants

For new, future-proof projects, we recommend our 10-pin, RoHS-compliant VG96934 Version J connectors, which meet the strict technical requirements of VG standard. They also have more effective shielding attenuation and, in addition to solder connections for stranded wires, offer two further options with PCB connection and 5 coding layers. These options are not available for the 7-pin connector in accordance with VG95351/NF07. The new VG96934 version J-compliant NF10 version is also fully compatible with the cadmium-containing predecessor versions and is therefore also suitable as a replacement in existing systems.

Plug

Figure	Description	Series	Number of contacts	Coding layers / color	Terminals*	Version J	Page
	Cable-connecting plug with rubber sleeve	VG96934 (NF10) VG95351 / NF07	10 7	5x / / / / 1x	L0 L0	• ---	8 18
	Cable-connecting plug, long housing	VG96934 (NF10) VG95351 / NF07	10 7	5x / / / / 1x	L0 L0	• ---	8 18
	Screw-in plug	VG96934 (NF10)	10	5x / / / /	L0	•	8
	Cable-connecting plug	VG95351 / NF07	7	1x	L0	---	18
	Flange plug	VG96934 (NF10) VG95351 / NF07	10 7	5x / / / / ---	L0 ---	• ---	9 ---

Socket

Figure	Description	Series	Number of contacts	Coding layers / color	Terminals*	Version J	Page
	Cable-connecting socket, long housing	VG96934 (NF10) VG95351 / NF07	10 7	5x / / / / 1x	L0 L0	• ---	9 18
	Cable-connecting socket with step protection	VG96934 (NF10) ---	10 ---	5x / / / / ---	L0 ---	• ---	9 ---
	Jam-nut socket	VG96934 (NF10) VG95351 / NF07	10 7	5x / / / / 1x	L0 / L1 / L2 L0	• ---	10 19
	Flange socket	VG96934 (NF10) VG95351 / NF07	10 7	5x / / / / 1x	L0 / L1 / L2 L0	• ---	11 20

Accessories

Figure	Description	Series	Usage	Version J	Page
	Protection-cap plug	VG96934 (NF10) VG95351 / NF07	All plugs All plugs	• •	12 21
	Protection-cap socket	VG96934 (NF10) VG95351 / NF07	All sockets All sockets	--- ---	12 21
	Dummy-socket plug	VG96934 (NF10) VG95351 / NF07	All cable-connecting plugs All cable-connecting plugs	• •	12 21
	Flange-gasket	VG96934 (NF10) VG95351 / NF07	Flange plug/socket Flange socket	--- ---	11 20
	Sealing ring	VG96934 (NF10) VG95351 / NF07	Flange plug/socket Flange socket	--- ---	11 20
	Heat shrink boot, straight	VG96934 (NF10) VG95351 / NF07	Cable-connecting plug/socket** Cable-connecting plug/socket**	--- ---	10 19
	Heat shrink boot, 90° angled	VG96934 (NF10) VG95351 / NF07	Cable-connecting plug/socket** Cable-connecting plug/socket**	--- ---	10 19
	Assembly tool	VG96934 (NF10) VG95351 / NF07	Jam-nut socket Jam-nut socket	--- ---	10 19

* For details see page 12 or page 20
** Except cable-connecting plug with rubber sleeve

Specifications

Series		VG96934, version J (NF10)	VG95351 / NF07
Version J: RoHS compliant and fulfills increased requirements of VG96934		•	---
Number of contacts		10	7
Contact arrangement	Plug: Front view Socket: Rear view		
Contact identification	Plug: Front view Socket: Rear view		
Rated voltage		50 V	50 V
Coding layers max. / lock type		5 / Bayonet quick release	1 / Bayonet quick release
Rated current	min. / max.	6 µA / 2.5 A *1	6 µA / 2.5 A *1
Contact resistance		approx. 5 mΩ *2	approx. 5 mΩ *2
Shock		Half-sine 150 m/s²; 11 ms	Half-sine 150 m/s²; 11 ms
Vibration		5 Hz ... 500 Hz; 2 g RMS	5 Hz ... 500 Hz; 2 g RMS
Insulation resistance		≥ 5,000 MΩ	≥ 5,000 MΩ
Test voltage		500 V_{eff}, 50 Hz	500 V_{eff}, 50 Hz
Shield effect		> 70 dB	approx. 60 dB
Sealing	unmated, mated	IP68 *3	IP68 *3
Temperature range		–55° C ... +100° C; max. 10 sec. up to +150° C	–55° C ... +100° C; max. 10 sec. up to +150° C
Mechanical life		> 5,000 mating cycles	> 5,000 mating cycles
Housing	Plug material Color / Surface	Al-alloy Black / cadmium-free, chrome VI free	Stainless steel Black / cadmium-free, chrome VI free
	Socket material Color / Surface	Stainless steel, Al-alloy end housing Black / cadmium-free, chrome VI free	Stainless steel, Al-alloy end housing Black / cadmium-free, chrome VI free
	Sealing elements	FKM extreme rubber, silicone rubber	FKM extreme rubber, silicone rubber
	Contact inserts	Thermoplastic	Thermoplastic
	RoHS / REACH	• / •	• / •
Contacts	Plug / terminal	Rigid contacts / solder cups AWG20 / 0.5 mm²	Rigid contacts / solder cups AWG20 / 0.5 mm²
	Socket / terminal	Pogo-Pins / solder cups AWG20 / 0.5 mm², PCB	Pogo-Pins / solder cups AWG20 / 0.5 mm², PCB
	Design	Self-cleaning spring-loaded contacts	Self-cleaning spring-loaded contacts
	Material	Brass alloy	Brass alloy
	Surface	Special gold-plating	Special gold-plating

Coding

1	0°	95°	140°	white	0°	90°	120°	red
2	30°	85°	115°	blue	90°	---	---	
3	α1	100°	105°	violett	α2	---	---	
4		110°	120°	yellow	α1	---	---	
5	α2	80°	145°	dark red		---	---	

*1 For any two contacts
*2 Required are ≤ 20 mΩ according to VG96 934 / VG95351
*3 0.4 bar, 48 hours

Sockets for housing installation

Flange-gasket
NF Z1, page 11

Sealing ring
NF Z2, page 11

Flange socket
VG96934B10..., page 11

Jam-nut socket
VG96934C10..., page 10

Protection-cap socket
VG96934Z4, page 12

Sockets for cable connections

Heat shrink boot, straight
203W112-25/225-0, page 10

Heat shrink boot, 90° angled
224K012-25-0, page 10

Cable-connecting socket, long housing
VG96934P10..., page 9

Cable-connecting socket with step protection
VG96934K10..., page 9

Protection-cap socket
VG96934Z4, page 12

Sockets for cable connections

Heat shrink boot, straight
203W112-25/225-0, page 10

Heat shrink boot, 90° angled
224K012-25-0, page 10

Cable-connecting socket, long housing
VG96934P10..., page 9

Cable-connecting socket with step protection
VG96934K10..., page 9

Protection-cap socket
VG96934Z4, page 12

Plugs for cable connections

Protection-cap plug
VG96934, page 12

Dummy-socket plug for wall mounting
VG96934Z6, page 12

Cable-connecting plug with rubber sleeve
VG96934L10..., page 8

Cable-connecting plug, long housing
VG96934J10..., page 8

Heat shrink boot, straight
203W112-25/225-0, page 10

Heat shrink boot, 90° angled
224K012-25-0, page 10

Plugs for cable connections

Protection-cap plug
VG96934Z3, page 12

Dummy-socket plug for wall mounting
VG96934Z6, page 12

Cable-connecting plug with rubber sleeve
VG96934L10..., page 8

Cable-connecting plug, long housing
VG96934J10..., page 8

Heat shrink boot, straight
203W112-25/225-0, page 10

Heat shrink boot, 90° angled
224K012-25-0, page 10

Plugs for housing installation

Protection-cap plug
VG96934Z3, page 12

Flange plug
VG96934F10..., page 9

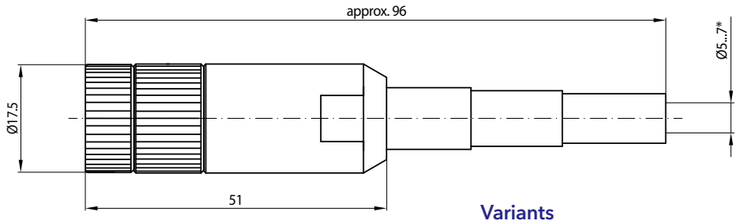
Screw-in plug
VG96934E10..., page 8

Flange-gasket
NF Z1, page 11

Sealing ring
NF Z2, page 11

Cable-connecting plug with rubber sleeve VG96934L10... version J – Plugs for cable connections, 10 pole

Dimension diagram



* Cable diameter max.

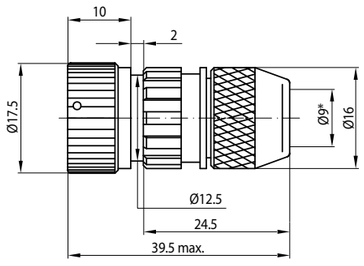
Variants

Ordering code	Item no.	Coding	Terminal	Version J
VG96934L10NL0J	1-1439-357842	N / white	L0 / Solder cup	•
VG96934L10WL0J	1-1439-359182	W / blue	L0 / Solder cup	•
VG96934L10XL0J	1-1439-359183	X / violett	L0 / Solder cup	•
VG96934L10YL0J	1-1439-359184	Y / yellow	L0 / Solder cup	•
VG96934L10ZL0J	1-1439-359187	Z / dark red	L0 / Solder cup	•

For detailed information on coding, see " Specifications" on page 5;
for detailed information on connections, see page 12

Cable-connecting plug, long housing VG96934J10... version J – Plugs for cable connections, 10 pole

Dimension diagram



* Cable diameter max.

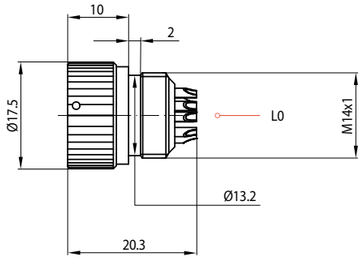
Variants

Ordering code	Item no.	Coding	Terminal	Version J
VG96934J10NL0J	1-1439-358502	N / white	L0 / Solder cup	•
VG96934J10WL0J	1-1439-357844	W / blue	L0 / Solder cup	•
VG96934J10XL0J	1-1439-359143	X / violett	L0 / Solder cup	•
VG96934J10YL0J	1-1439-359492	Y / yellow	L0 / Solder cup	•
VG96934J10ZL0J	1-1439-359491	Z / dark red	L0 / Solder cup	•

For detailed information on coding, see " Specifications" on page 5;
for detailed information on connections, see page 12

Screw-in plug VG96934E10... version J – Plugs for housing installation, 10 pole

Dimension diagram



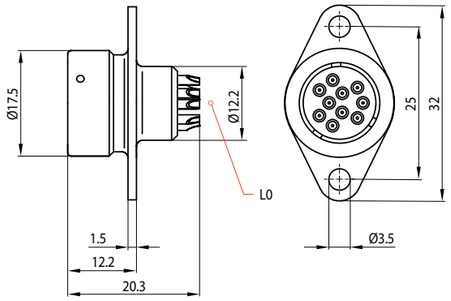
Variants

Ordering code	Item no.	Coding	Terminal	Version J
VG96934E10NL0J	1-1439-357839	N / white	L0 / Solder cup	•
VG96934E10WL0J	1-1439-359043	W / blue	L0 / Solder cup	•
VG96934E10XL0J	1-1439-357837	X / violett	L0 / Solder cup	•
VG96934E10YL0J	1-1439-357843	Y / yellow	L0 / Solder cup	•
VG96934E10ZL0J	1-1439-359044	Z / dark red	L0 / Solder cup	•

For detailed information on coding, see " Specifications" on page 5;
for detailed information on connections, see page 12
Sealing ring for housing mounting Ø12x1.7 mm, item no. 1-5616-352414, order separately

Flange socket VG96934F10... version J – Plugs for housing installation, 10 pole

Dimension diagram



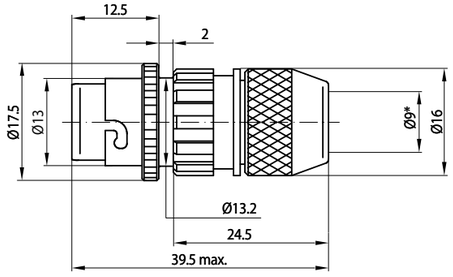
Variants

Ordering code	Item no.	Coding	Terminal	Version J
VG96934F10NL0J	1-1439-357841	N / white	L0 / Solder cup	•
VG96934F10WL0J	1-1439-357847	W / blue	L0 / Solder cup	•
VG96934F10XL0J	1-1439-357849	X / violett	L0 / Solder cup	•
VG96934F10YL0J	1-1439-357851	Y / yellow	L0 / Solder cup	•
VG96934F10ZL0J	1-1439-357854	Z / dark red	L0 / Solder cup	•

For detailed information on coding, see " Specifications" on page 5;
for detailed information on connections, see page 12

Cable-connecting plug, long housing VG96934P10... version J – Sockets for cable connections, 10 pole

Dimension diagram



* Cable diameter max.

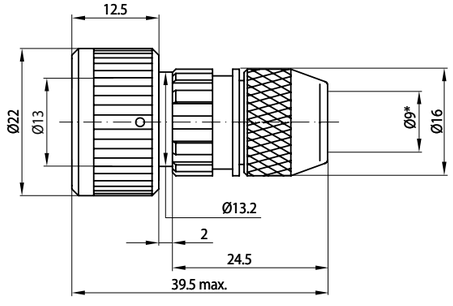
Variants

Ordering code	Item no.	Coding	Terminal	Version J
VG96934P10NL0J	1-1439-357845	N / white	L0 / Solder cup	•
VG96934P10WL0J	1-1439-357852	W / blue	L0 / Solder cup	•
VG96934P10XL0J	1-1439-359074	X / violett	L0 / Solder cup	•
VG96934P10YL0J	1-1439-359046	Y / yellow	L0 / Solder cup	•
VG96934P10ZL0J	1-1439-359047	Z / dark red	L0 / Solder cup	•

For detailed information on coding, see " Specifications" on page 5;
for detailed information on connections, see page 12

Cable-connecting socket with step protection VG96934K10... version J – Sockets for cable connections, 10 pole

Dimension diagram



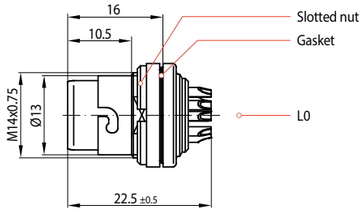
Variants

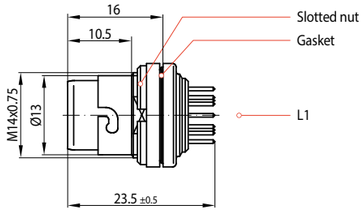
Ordering code	Item no.	Coding	Terminal	Version J
VG96934K10NL0J	1-1439-359228	N / white	L0 / Solder cup	•
VG96934K10WL0J	1-1439-359232	W / blue	L0 / Solder cup	•
VG96934K10XL0J	1-1439-359231	X / violett	L0 / Solder cup	•
VG96934K10YL0J	1-1439-359230	Y / yellow	L0 / Solder cup	•
VG96934K10ZL0J	1-1439-359229	Z / dark red	L0 / Solder cup	•

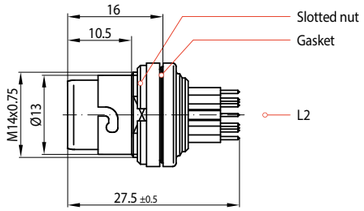
For detailed information on coding, see " Specifications" on page 5;
for detailed information on connections, see page 12

Jam-nut socket VG96934C10... version J – Socket for housing installation, 10 pole

Dimension diagram





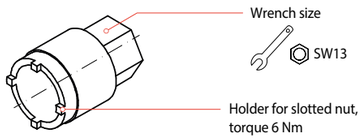


Variants

Ordering code	Item no.	Coding	Terminal	Version J
VG96934C10NL0J	1-1439-357846	N / white	L0 / Solder cup	•
VG96934C10WL0J	1-1439-357853	W / blue	L0 / Solder cup	•
VG96934C10XL0J	1-1439-357855	X / violett	L0 / Solder cup	•
VG96934C10YL0J	1-1439-357857	Y / yellow	L0 / Solder cup	•
VG96934C10ZL0J	1-1439-359048	Z / dark red	L0 / Solder cup	•
VG96934C10NL1J	1-1439-357850	N / white	L1 / PCB Ø0.53/3.5 mm	•
VG96934C10WL1J	1-1439-359049	W / blue	L1 / PCB Ø0.53/3.5 mm	•
VG96934C10XL1J	1-1439-359150	X / violett	L1 / PCB Ø0.53/3.5 mm	•
VG96934C10YL1J	1-1439-359149	Y / yellow	L1 / PCB Ø0.53/3.5 mm	•
VG96934C10ZL1J	1-1439-359148	Z / dark red	L1 / PCB Ø0.53/3.5 mm	•
VG96934C10NL2J	1-1439-359495	N / white	L2 / PCB Ø0.53/8.0 mm	•
VG96934C10WL2J	1-1439-359154	W / blue	L2 / PCB Ø0.53/8.0 mm	•
VG96934C10XL2J	1-1439-359153	X / violett	L2 / PCB Ø0.53/8.0 mm	•
VG96934C10YL2J	1-1439-359152	Y / yellow	L2 / PCB Ø0.53/8.0 mm	•
VG96934C10ZL2J	1-1439-359151	Z / dark red	L2 / PCB Ø0.53/8.0 mm	•

ⓘ Slotted nut: Recommended tightening torque 6 Nm, but must be adapted to the specific installation conditions depending on the material and wall thickness.
For detailed information on coding, see " Specifications" on page 5
for detailed information on connections, see page 12

Assembly tool

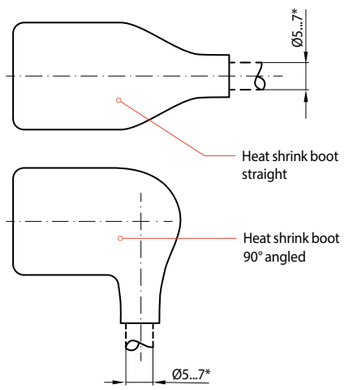


Variants

Ordering code	Item no.	Description
ATH-S-NF/VG	1-1437-357330	Assembly tool for jam-nut socket

Heat shrink boot straight / 90° angled

Dimension diagram

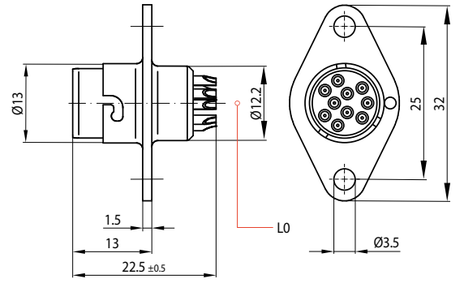


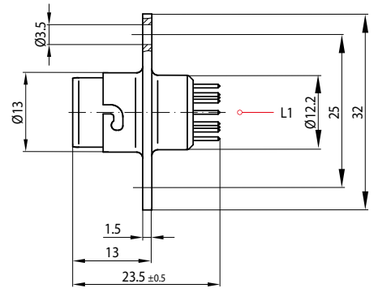
Variants

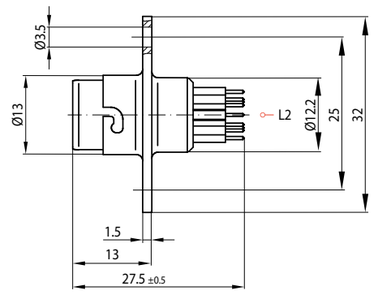
Ordering code	Item no.	Description
203W112-25/225-0	1-1043-360053	Heat shrink boot straight for: • Cable-connecting plug, long housing • Cable-connecting socket, long housing • Cable-connecting socket with step protection
224K012-25-0	1-1043-360054	Heat shrink boot 90° angled for: • Cable-connecting plug, long housing • Cable-connecting socket, long housing • Cable-connecting socket with step protection

Flange socket VG96934B10... version J – Socket for housing installation, 10 pole

Dimension diagram







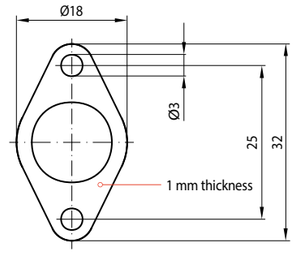
Variants

Ordering code	Item no.	Coding	Terminal	Version J
VG96934B10NL0J	1-1439-357848	N / white	L0 / Solder cup	•
VG96934B10WL0J	1-1439-359147	W / blue	L0 / Solder cup	•
VG96934B10XL0J	1-1439-359146	X / violett	L0 / Solder cup	•
VG96934B10YL0J	1-1439-359144	Y / yellow	L0 / Solder cup	•
VG96934B10ZL0J	1-1439-359145	Z / dark red	L0 / Solder cup	•
VG96934B10NL1J	1-1439-359045	N / white	L1 / PCB Ø0.53/3.5 mm	•
VG96934B10WL1J	1-1439-359177	W / blue	L1 / PCB Ø0.53/3.5 mm	•
VG96934B10XL1J	1-1439-359178	X / violett	L1 / PCB Ø0.53/3.5 mm	•
VG96934B10YL1J	1-1439-359179	Y / yellow	L1 / PCB Ø0.53/3.5 mm	•
VG96934B10ZL1J	1-1439-359181	Z / dark red	L1 / PCB Ø0.53/3.5 mm	•
VG96934B10NL2J	1-1439-359227	N / white	L2 / PCB Ø0.53/8.0 mm	•
VG96934B10WL2J	1-1439-359226	W / blue	L2 / PCB Ø0.53/8.0 mm	•
VG96934B10XL2J	1-1439-359225	X / violett	L2 / PCB Ø0.53/8.0 mm	•
VG96934B10YL2J	1-1439-359224	Y / yellow	L2 / PCB Ø0.53/8.0 mm	•
VG96934B10ZL2J	1-1439-359223	Z / dark red	L2 / PCB Ø0.53/8.0 mm	•

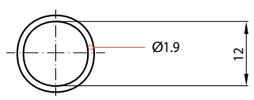
ⓘ For detailed information on coding, see " Specifications" on page 5
for detailed information on connections, see page 12

Flange-gasket NF Z1, sealing ring NF Z2 for Flange plugs/-sockets

NF Z1, dimension diagram



NF Z2, dimension diagram

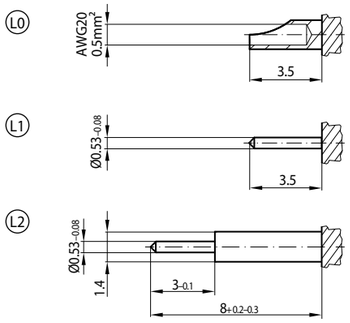


Variants

Ordering code	Item no.	Description
NF Z1	1-2435-204008	Flange-gasket NF Z1 for: • Flange plug VG96934F10... • Flange socket VG96934B10...
NF Z2	1-5616-352458	Sealing ring NF Z2 for: • Flange plug VG96934F10... • Flange socket VG96934B10...

Terminals VG96934 version J, 10 pole

Dimension diagram

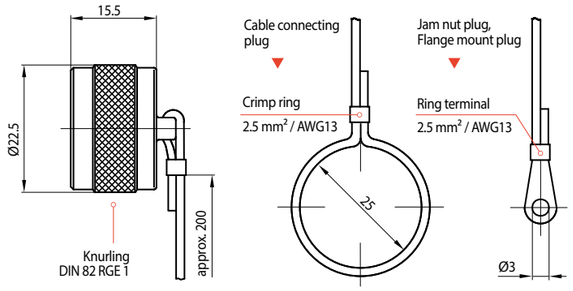


Variants

Contact type	Description	Plug	Socket
L0	Soldering cup for stranded wires up to AWG20/0.5 mm²	• Cable-connecting plug with rubber sleeve • Cable-connecting plug, long housing • Flange plug • Screw-in plug	• Cable-connecting plug, long housing • Cable-connecting socket with step protection • Jam-nut socket • Flange socket
L1	Solder pin for PCB Ø 0.53 mm, Length 3.5 mm	---	• Jam-nut socket • Flange socket
L2	Solder pin for PCB Ø 0.53 mm, Length 8 mm	---	• Jam-nut socket • Flange socket

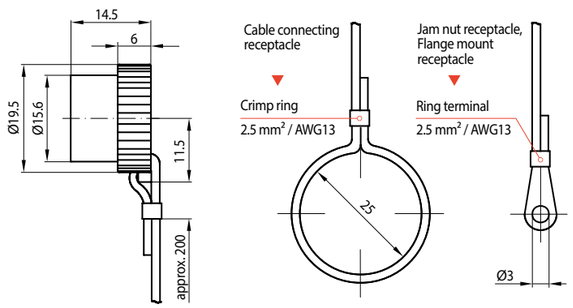
Protection-caps and dummy-socket

Protection-cap plug Z3, dimension diagram



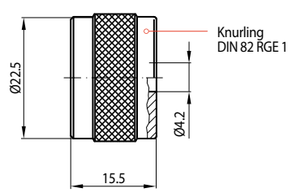
Ordering code	Item no.	Protection-cap plug Z3 for	Version J
VG96934Z3J	1-1439-357856	• Cable-connecting plug with rubber sleeve • Cable-connecting plug, long housing • Screw-in plug • Flange plug	•

Protection-cap socket Z4 (elastomer), dimension diagram



Ordering code	Item no.	Protection-cap socket Z4 for	Version J
VG96934Z4	1-1437-376374	• Cable-connecting plug, long housing • Cable-connecting socket with step protection • Jam-nut socket • Flange socket	---

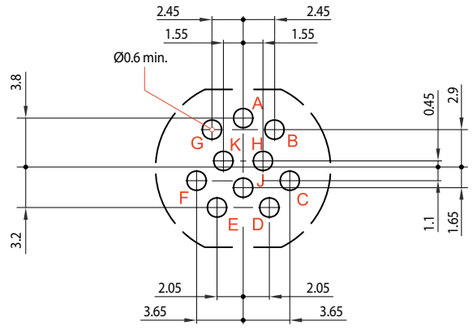
Dummy-socket for plug Z6, dimension diagram



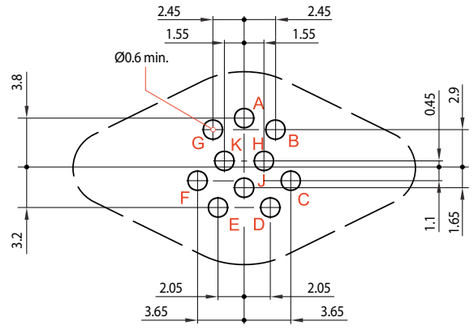
Ordering code	Item no.	Dummy-socket Z6 for	Version J
VG96934Z6J	1-1439-357836	Cable plug holder; Wall mounting	•

Mounting holes VG96934 version J, 10 pole

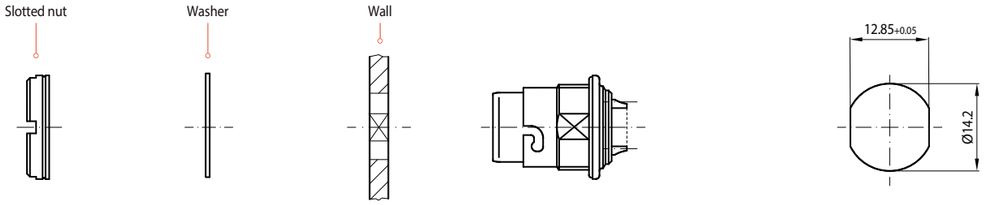
PCB connection, jam-nut sockets for housing installation



PCB connection, flange socket for housing installation

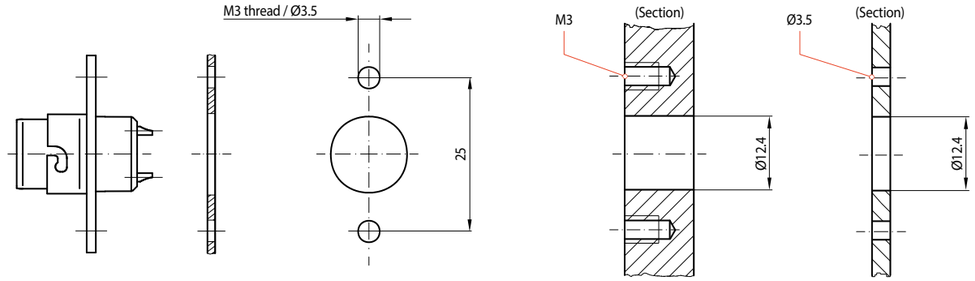


Jam-nut sockets

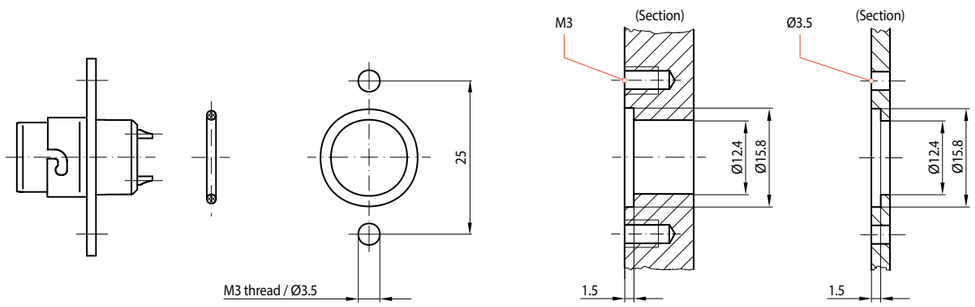


ⓘ Fastening with mounting tool ATH-S-NF/VG (item no. 1-1437-357330)
Slotted nut: Recommended tightening torque 6 Nm, but must be adapted to the specific installation conditions depending on the material and wall thickness.

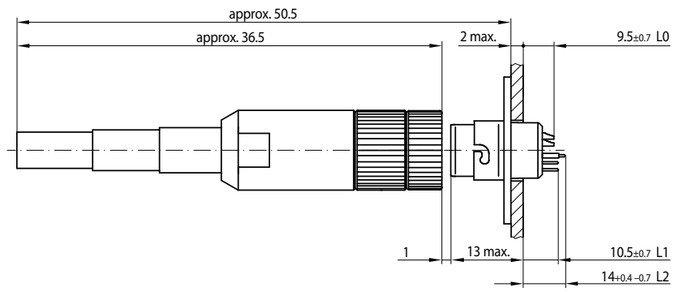
Flange sockets with gasket NF Z1



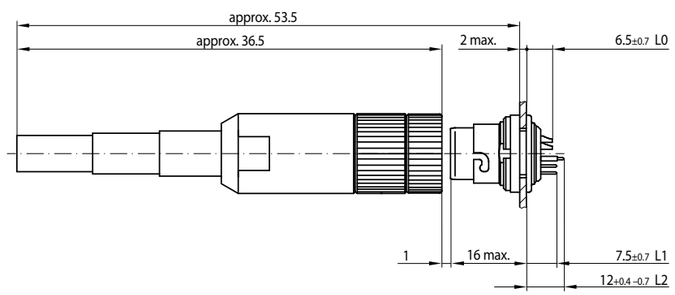
Flange sockets with sealing ring NF Z2



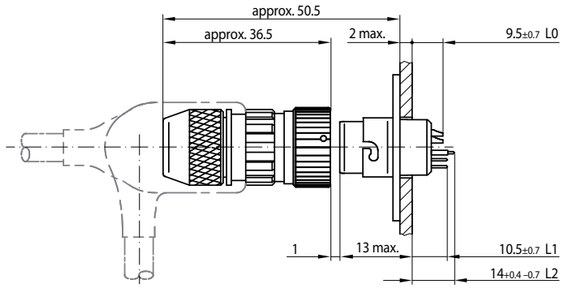
Cable-connecting plug with rubber sleeve → Flange socket



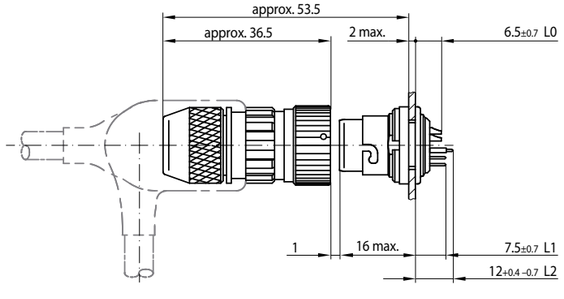
Cable-connecting plug with rubber sleeve → Jam-nut socket



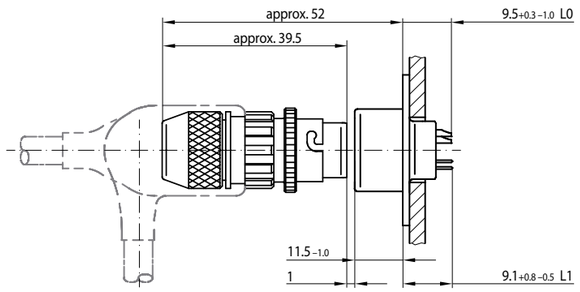
Cable-connecting plug, long housing → Flange socket



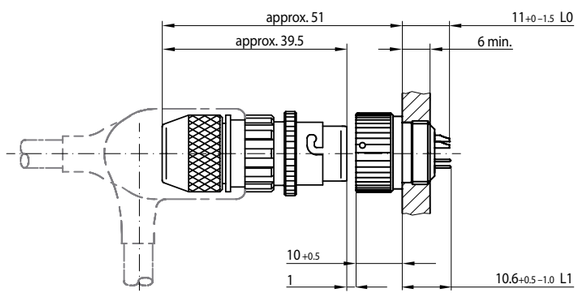
Cable-connecting plug, long housing → Jam-nut socket



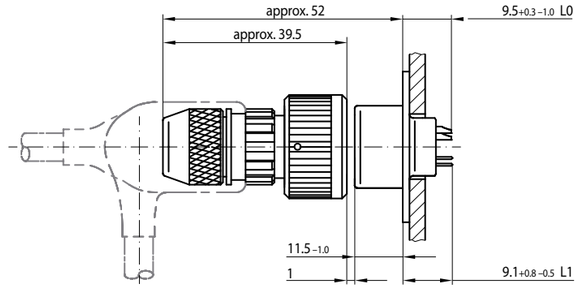
Cable-connecting socket, long housing → Flange plug



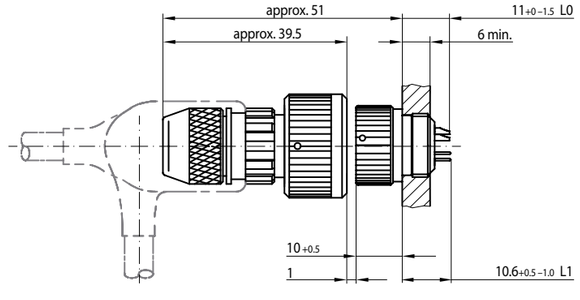
Cable-connecting socket, long housing → Screw-in plug



Cable-connecting socket with step protection → Flange plug



Cable-connecting socket with step protection → Screw-in plug



Sockets for housing installation

Flange-gasket
NF Z1, page 20

Sealing ring
NF Z2, page 20

Flange socket
VG95351B7 / NF07 B1L1, page 20

Jam-nut socket
VG95351C7, page 19

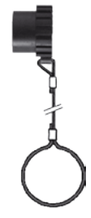
Protection-cap socket
VG96934Z4, page 21

Sockets for cable connections

Heat shrink boot, straight
203W112-25/225-0, page 19

Heat shrink boot, 90° angled
224K012-25-0, page 19

Cable-connecting socket for heat shrink boot
VG95351D7, page 19



Protection-cap socket
VG96934Z4, page 21

Plugs for cable connections

Protection-cap plug
VG96934Z3J, page 21

Dummy-socket plug for wall mounting
VG96934Z6J, page 21

Cable-connecting plug with rubber sleeve
NF07 A1L0A5, page 18

Cable-connecting plug, long housing
NF07 J1L0, page 18

Cable-connecting plug for heat shrink boot
VG95351A7, page 18

Heat shrink boot, straight
203W112-25/225-0, Seite 19

Heat shrink boot, 90° angled
224K012-25-0, Seite 19

Plugs for cable connections

Protection-cap plug
VG96934Z3J, page 21

Cable-connecting plug with rubber sleeve
NF07 A1L0A5, page 18

Cable-connecting plug, long housing
NF07 J1L0, page 18

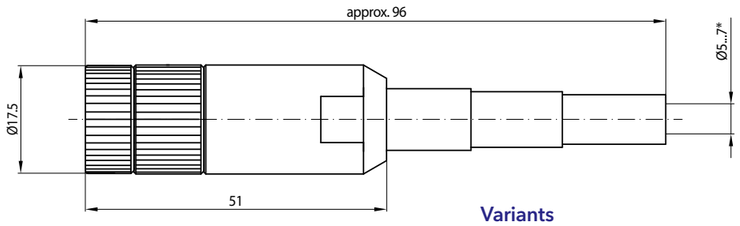
Cable-connecting plug for heat shrink boot
VG95351A7, page 18

Heat shrink boot, straight
203W112-25/225-0, page 19

Heat shrink boot, 90° angled
224K012-25-0, page 19

Cable-connecting plug with rubber sleeve NF07 A1L0A5 – Plug for cable connections, 7 pole

Dimension diagram



* Kabeldurchmesser max.

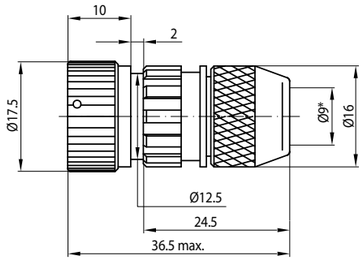
Variants

Ordering code	Item no.	Coding	Terminal
NF07 A1L0A5	1-1435-316463	1 / red	L0 / Solder cup

For detailed information on coding, see " Specifications" on page 5
For detailed information on connections, see page 20

Cable-connecting plug, long housing NF07 J1L0 – Plug for cable connections, 7 pole

Dimension diagram



* Kabeldurchmesser max.

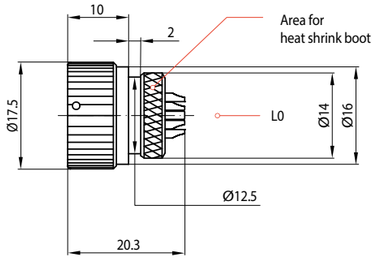
Variants

Ordering code	Item no.	Coding	Terminal
NF07 J1L0	1-1435-316463	1 / red	L0 / Solder cup

For detailed information on coding, see " Specifications" on page 5;
for detailed information on connections, see page 20

Cable-connecting plug VG95351A7 – Plug for cable connections with heat shrink boot, 7 pole

Dimension diagram



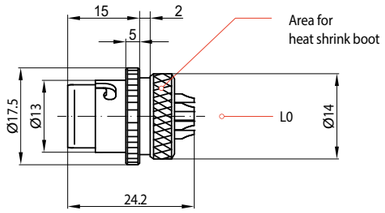
Variants

Ordering code	Item no.	Coding	Terminal
VG95351A7	1-1435-161912	red	L0 / Solder cup

For detailed information on coding, see " Specifications" on page 5
For detailed information on connections, see page 20
For detailed information on heat shrink boots see page 19

Cable-connecting socket VG95351D7 – Socket for cable connections with heat shrink boot, 7 pole

Dimension diagram



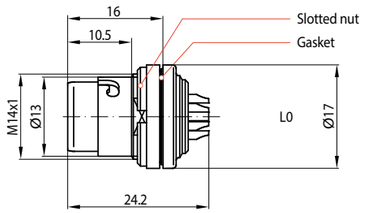
Variants

Ordering code	Item no.	Coding	Terminal
VG95351D7	1-1435-328104	red	L0 / Solder cup

For detailed information on coding, see " Specifications" on page 5
For detailed information on connections, see page 20
For detailed information on heat shrink boots see below

Jam-nut socket VG95351C7 – Socket for housing installation, 7 pole

Dimension diagram

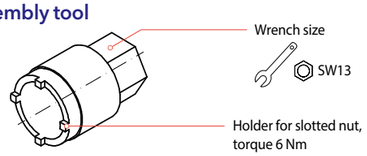


Variants

Ordering code	Item no.	Coding	Terminal
VG95351C7	1-1435-161923	red	L0 / Solder cup

Slotted nut: Recommended tightening torque 6 Nm, but must be adapted to the specific installation conditions depending on the material and wall thickness.
For detailed information on coding, see " Specifications" on page 5
For detailed information on connections, see page 20

Assembly tool

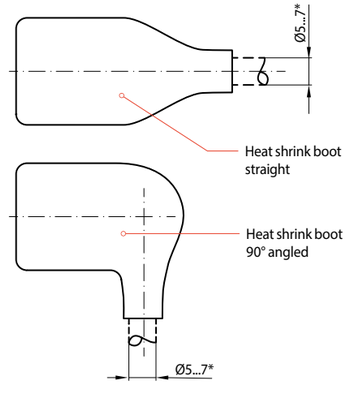


Variants

Ordering code	Item no.	Description
ATH-S-NF/VG	1-1437-357330	Assembly tool for jam-nut socket

Heat shrink boot straight / 90° angled

Dimension diagram

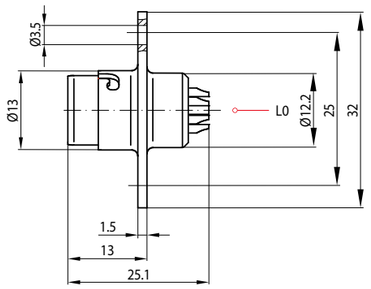


Variants

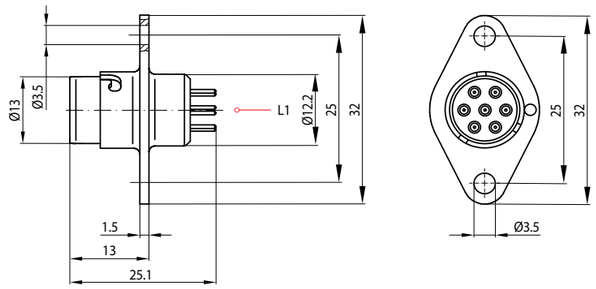
Ordering code	Item no.	Description
203W112-25/225-0	1-1043-360053	Heat shrink boot straight for: • Cable-connecting plug, long housing • Cable-connecting plug, • Jam-nut socket
224K012-25-0	1-1043-360054	Heat shrink boot 90° angled for: • Cable-connecting plug, long housing • Cable-connecting plug, • Jam-nut socket

Flange sockets VG95351B7, NF07 B1L1 – Sockets for housing installation, 7 pole

VG95351B7, dimension diagram



NF07 B1L1, dimension diagram



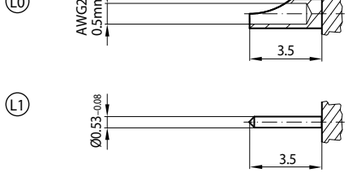
Variants

Ordering code	Item no.	Coding		Terminal
VG95351B7	1-1435-161934	red	●	L0 / Solder cup
NF07 B1L1	1-1435-534967	1 / red	●	L1 / PCB Ø0.53/3.5 mm

For detailed information on coding, see " Specifications" on page 5
For detailed information on connections, see page 20

Terminals VG95351, NF07, 7 pole

Dimension diagram

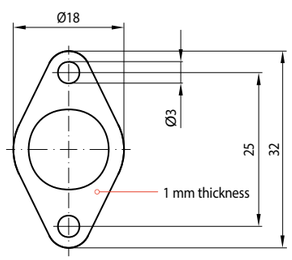


Variants

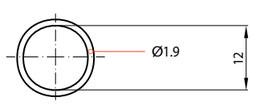
Contact type	Description	Plug	Socket
L0	Soldering cup for stranded wires up to AWG20/0.5 mm²	• Cable-connecting plug with rubber sleeve • Cable-connecting plug, long housing • Cable-connecting plug	• Cable-connecting socket • Jam-nut socket • Flange socket
L1	Solder pin for PCB Ø 0.53 mm, Length 3.5 mm	---	• Flange socket

Flange-gasket NF Z1, sealing ring NF Z2 for Flange plugs/-sockets

NF Z1, dimension diagram



NF Z2, dimension diagram

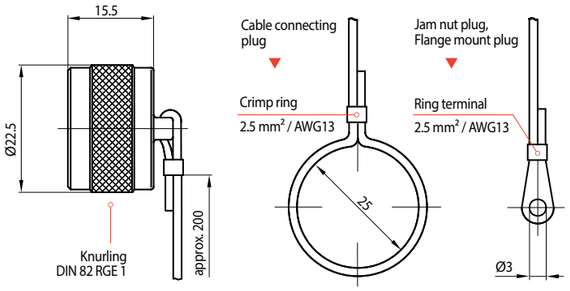


Variants

Ordering code	Item no.	Description
NF Z1	1-2435-204008	Flange-gasket NF Z1 for Flange socket VG95351B7 and NF07 B1L1
NF Z2	1-5616-352458	Sealing ring NF Z2 for Flange socket VG95351B7 and NF07 B1L1

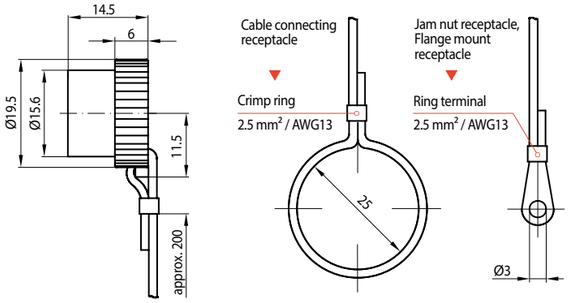
Protection-caps and dummy-socket

Protection-cap plug Z3, dimension diagram



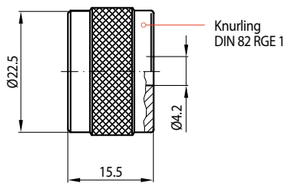
Ordering code	Item no.	Protection-cap plug Z3 for	Version J
VG96934Z3J	1-1439-357856	• Cable-connecting plug with rubber sleeve • Cable-connecting plug, long housing • Cable-connecting plug for heat shrink boot	•

Protection-cap socket Z4 (elastomer), dimension diagram



Ordering code	Item no.	Protection-cap socket Z4 for	Version J
VG96934Z4	1-1437-376374	• Cable-connecting socket for heat shrink boot • Jam-nut socket • Flange socket	---

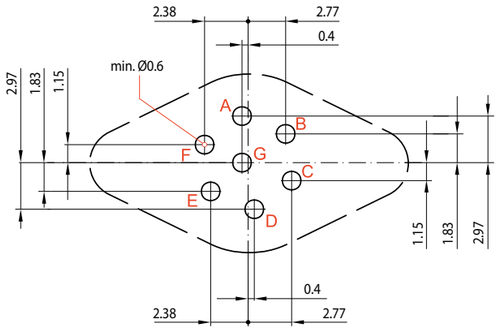
Dummy-socket for plug Z6, dimension diagram



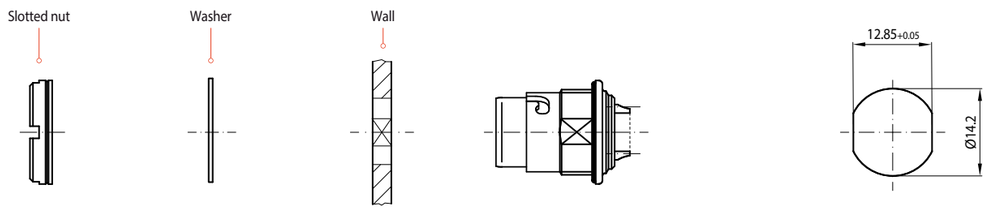
Ordering code	Item no.	Dummy-socket Z6 for	Version J
VG96934Z6J	1-1439-357836	Cable plug holder; Wall mounting	•

Mounting holes VG95351, NF07, 7 pole

PCB connection, flange socket for housing installation

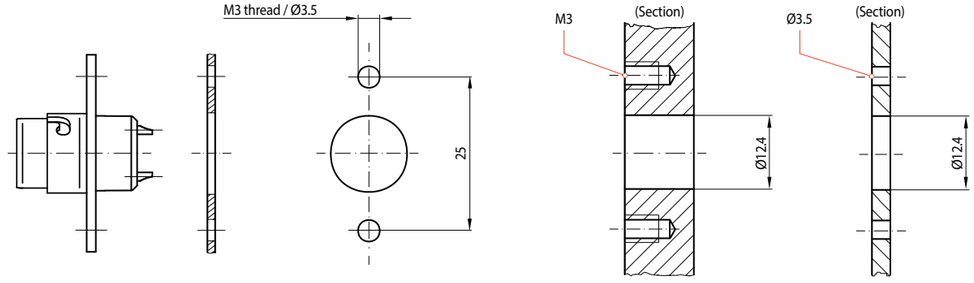


Jam-nut sockets

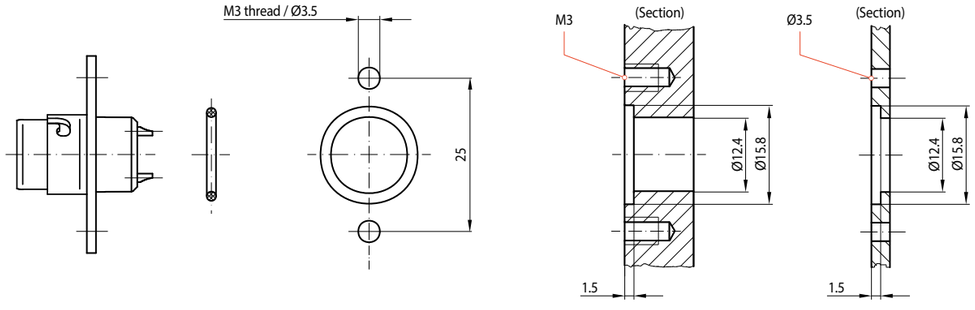


Fastening with mounting tool ATH-S-NF/VG (item no. 1-1437-357330)
Slotted nut: Recommended tightening torque 6 Nm, but must be adapted to the specific installation conditions depending on the material and wall thickness.

Flange sockets with gasket NF Z1

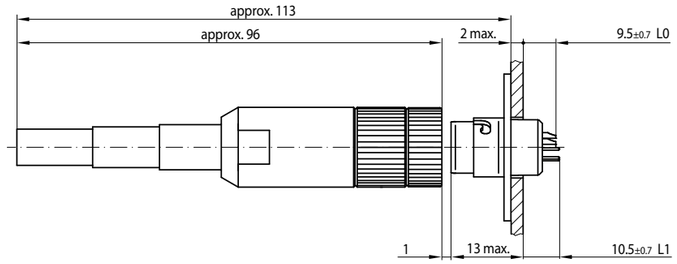


Flange sockets with sealing ring NF Z2

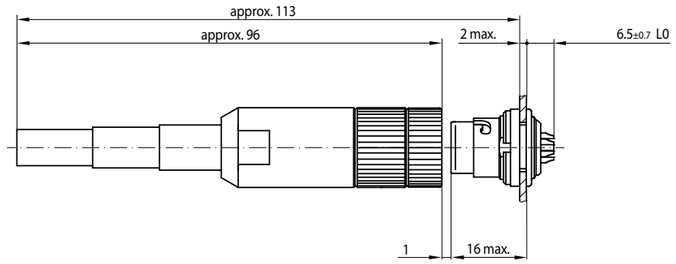


Assembly and installation dimensions, VG95351 (NF07), 7 pole

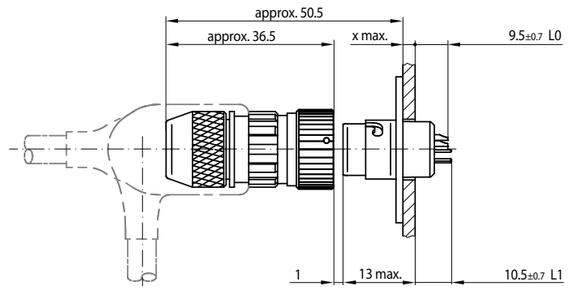
Cable-connecting plug with rubber sleeve ····· Flange socket



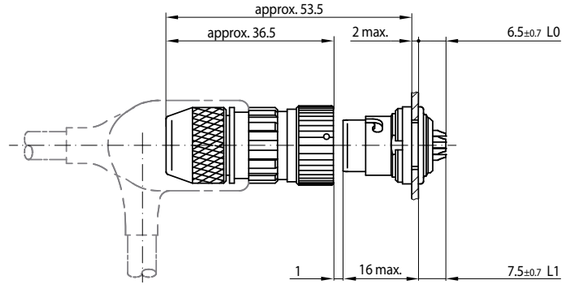
Cable-connecting plug with rubber sleeve ····· Jam-nut socket



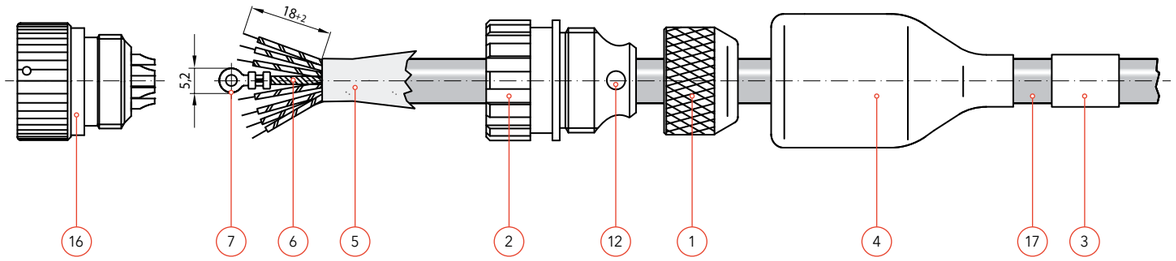
Cable-connecting plug, long housing ····· Flange socket

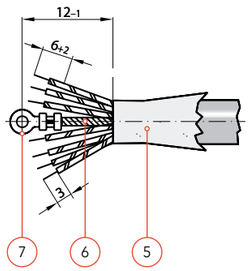


Cable-connecting plug, long housing ····· Jam-nut socket



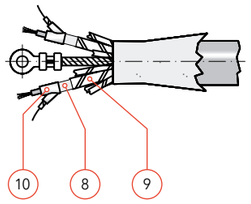
Assembly instructions for **cable-connecting plugs with long adapters**, **cable-connecting sockets with long adapters** or **cable-connecting sockets with step protection** for connecting cables in accordance with VG95218-11. The following assembly instructions refer to a cable-connecting plug with a long adapter, but apply analogously to all the above-mentioned cable plugs and sockets for cable connections.



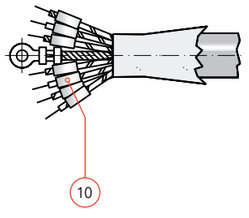


First loosen the **clamping nut (1)** and **plug end housing (2)** from the **plug (16)** and thread the **clamping nut (1)**, **heat shrink boot (4)** and, if required, **heat shrink tubing (3)** for attaching the protective cap onto the connecting cable. Strip the cable end of the **connection cable (17)** to the specified length and fold the **screen mesh (5)** backwards.

Open and cut off the foil shielding (if present). Thermally strip and tin the individual conductors by approx. 3 mm. Shorten the **strain relief cable (6)** so that the dimension 12-1 mm is achieved with the crimped, solderless **cable lug (7)**.



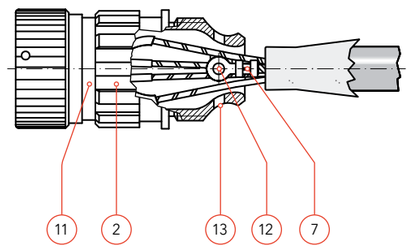
If available: Insulate the **screen mesh (8)** of the screened individual **strands (9)**, e.g. by taping them together with narrow **PTFE tape (10)** and connecting them to the corresponding contact with a single strand.



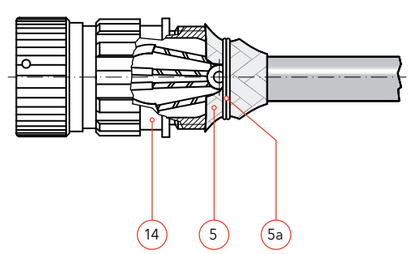
If the connector is overmolded with a positive fit, the connector end housing must be potted beforehand.

If the plug end housing is not potted: Heat-shrinkable **insulating sleeves (10)**, diameter 1.6 ... 2.4 mm, approx. 7 mm long, over the individual conductors or insulate with narrow PTFE tape.

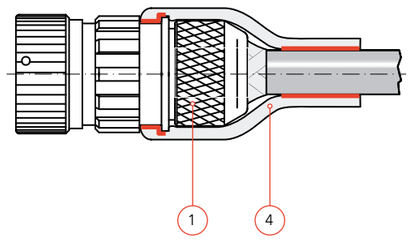
For easier handling, the plug can be clamped in a suitable device and the connecting cable fixed in an appropriate holder. Solder single strands with thread solder LSn60, diameter 1 mm, with acid-free flux core and a temperature-stabilized soldering iron with a tip diameter of approx. 2 mm to the contacts. Soldering tip temperature max. 310°C; soldering time max. 4 seconds. Slide the **insulating sleeves (10)** over the soldering cups and shrink on.



Coat the **thread (11)** on the plug with conductive adhesive (only the first turn of the thread) and screw on the plug **end housing (2)**. Tighten the plug end housing and plug hand-tight using pliers lined with plastic or rubber. Insert the cable into the plug **end housing (2)** until the strain relief **pin (12)** can be pushed through the **hole (13)** in the plug **end housing (2)** and the solderless **cable lug (7)**.



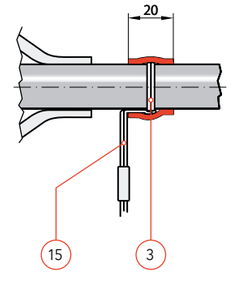
Fold the **screen mesh (5)** back onto the **conical rear part (14)** and cut it off in front of the thread. Additionally fix the **screen mesh (5)** in the bead using a **wire (5a)**.



Coat the thread with conductive adhesive (only the first turn of the thread); screw the **clamping nut (1)** onto the plug end housing and tighten hand-tight using pliers.

Intermediate test: Check contact assignment and continuity according to wiring diagram. Ensure insulation resistance and dielectric strength in accordance with VG96934-1, test no. 5.12 and 5.13.

If the connector is not overmolded with a positive fit: Apply a **heat shrink boot (4)** in accordance with VG95343-4.



In order to achieve the IP67 tightness specified in the data sheet, the **heat shrink boot (4)** must be bonded to the front part of the connector end housing and the connection cable, see red illustration. Schaltbau recommends the use of adhesives from the manufacturer of the respective heat-shrinkable molded part.

Final test: Insulation resistance and dielectric strength according to VG96934-1, test no. 5.12 and 5.13.

Attaching the protective cap to the connection cable: Place the **fastening cord (15)** of the protection cap in a loop around the cable. Then shrink on the **heat-shrink tubing (3)**.

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Catalog VG/NF – A2277/2507/0