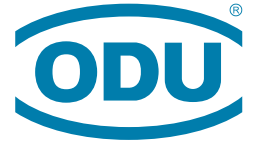


A PERFECT ALLIANCE.



ODU MEDI-SNAP®

Miniature connectors with
Push-Pull locking

METAL HOUSING



ODU MEDI-SNAP®

ODU MINI-SNAP® F

ODU MINI-SNAP® L / K / B

ODU MINI-SNAP® PC

ODU MINI-MED®

ODU AMC®

ODU MEDI-SNAP®

FEATURES

- Easy installation and maintenance
- Space-saving design
- High chemical resistance
- Fully sterilizable
- Quick mating with Push-Pull locking
- Easy-to-release Break-Away function

APPLICATIONS

- Medical
- Industrial
- Digital test and measurement



TABLE OF CONTENTS

Clickable page numbers

ODU MEDI-SNAP® WITH METAL HOUSING

Summary	4
Styles	6
Codings	10
Contact inserts and PCB layouts	11
Cable collet system	16
Accessories	17



All shown connectors are according to IEC 61984:2008 (VDE 0627:2009-11); connectors without breaking capacity (COC).

ODU MEDI-SNAP® is UL-approved under File E110586.

Issue: 2021-03

Printed on certified recycled paper.



For assembly instructions, please refer to our website:
www.odu-usa.com/odu-engineering-platform/catalogs-and-technical-data/assembly-instructions/

SUMMARY ODU MEDI-SNAP® METAL HOUSING

The ODU MEDI-SNAP® with metal housing in size 1 is coded by pin and groove. These circular connectors can have a variety of configurations: numerous styles of connectors, receptacles and in-line receptacles as well as various termination types, contact inserts and color codings.

- Compatible with plastic finish
- Robust housing finish
- Coding over pin and groove
- 7 color codings
- 3 mechanical codings
- 2–14 contacts
- 3 termination types
- Contacts for solder, crimp and PCB termination
- A selection of numerous connectors as well as receptacles and in-line receptacles
- IP50 and IP64 available in mated condition
- Up to 5,000 mating cycles

NOTE
The ODU MEDI-SNAP® Break-Away connector A5 in size 1 is not generally mateable on metal receptacles.

STRAIGHT PLUG – PUSH-PULL

2,000 mating cycles

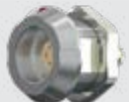
P. 90

IP50		S	1
		S	2
IP64		S	4

RECEPTACLE – PUSH-PULL

5,000 mating cycles

P. 91

IP50		G	1
		G	5
IP64 / IP68 ¹		G	A
IP50		G	K

IN-LINE RECEPTACLE

5,000 mating cycles

P. 93

IP50		K	5
		K	6

For assembly instructions, please refer to our website:
www.odu-usa.com/odu-engineering-platform/catalogs-and-technical-data/assembly-instructions/

¹ IP68 in reference to the tightness of the end device in unmated condition

STRAIGHT PLUG

Push-Pull styles



S

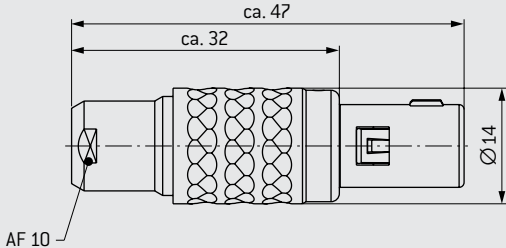
1

0

STYLE: 1

With standard back nut

IP50



S

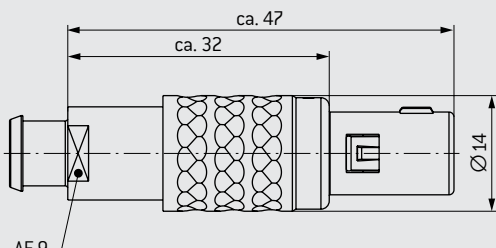
2

S

STYLE: 2

With back nut¹ for cable bend relief²

IP50



S

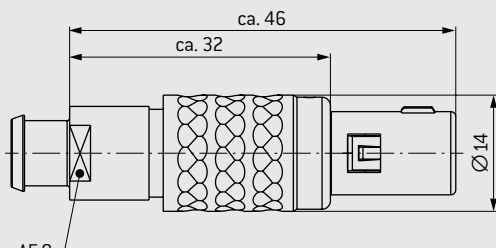
4

S

STYLE: 4

With back nut¹ for cable bend relief²

IP64



TECHNICAL DATA

- Contact configuration from page 11
- Color coding for S1 possible
- IP64 in combination with receptacle style 4 [in mated condition]

Size {1}

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
		1	M			C	-	P										

¹ Back nuts for cable bend reliefs have to be ordered in the same color as the connector housing. The color coding is based on the cable bend relief.
² Cable bend reliefs have to be ordered separately [see page 20].

RECEPTACLE



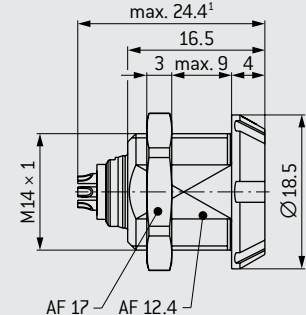
G

1

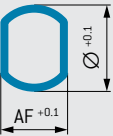
STYLE: 1

For front panel installation

IP50



PANEL CUT-OUT



AF : 12.5 mm
Ø : 14.1 mm

TECHNICAL DATA

- Contact inserts and PCB layouts [see page 11]
- Anti-rotation feature
- IP50 in reference to the tightness of the end device

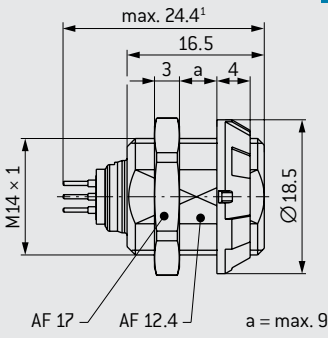
G

5

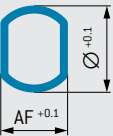
STYLE: 5

Receptacle with continuous thread, can be installed from front or rear; extension in front of panel is adjustable

IP50



PANEL CUT-OUT



AF : 12.5 mm
Ø : 14.1 mm

TECHNICAL DATA

- Contact inserts and PCB layouts [see page 11]
- IP50 in reference to the tightness of the end device
- Anti-rotation feature
- With color coding

Size {1}

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
		1	M			C	-	P							-	0	0	

¹ Depending on the insert

RECEPTACLE



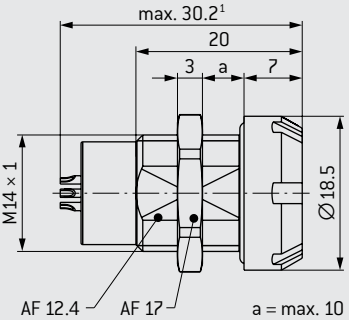
G

A

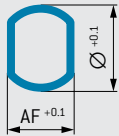
STYLE: A

For front panel installation

IP64/68



PANEL CUT-OUT



AF : 12.5 mm
Ø : 14.1 mm

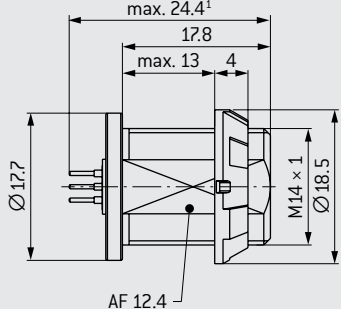
G

K

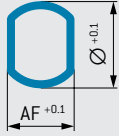
STYLE: K

For rear panel installation

IP50



PANEL CUT-OUT



AF : 12.5 mm
Ø : 14.1 mm

Size {1}

12345678910111213141516171819

		1	M		C	-	P											
--	--	---	---	--	---	---	---	--	--	--	--	--	--	--	--	--	--	--

¹ Depending on the insert

IN-LINE RECEPTACLE



K

5

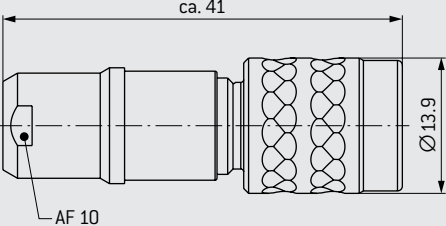
0

STYLE: 5

With standard back nut

ON REQUEST

IP50



K

6

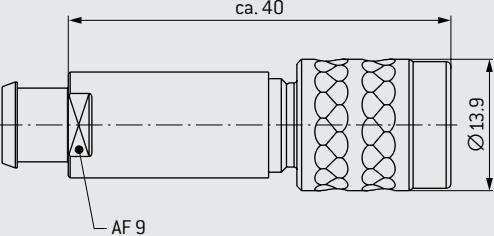
S

STYLE: 6

With back nut for cable bend relief¹

ON REQUEST

IP50



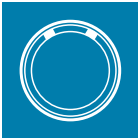
Size {1}

12345678910111213141516171819

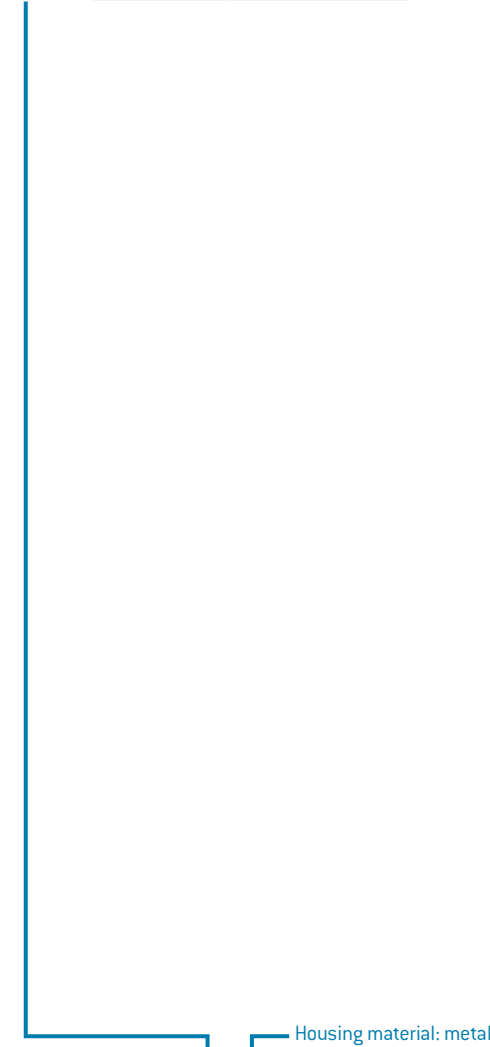
		1	M		C	-	P											
--	--	---	---	--	---	---	---	--	--	--	--	--	--	--	--	--	--	--

¹ Cable bend reliefs have to be ordered separately (see page 20).

CODINGS



	Angle	Receptacle front view
0	0°	
A	40°	
C	60°	



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
		1	M		C	-	P							-				

CONTACT INSERTS



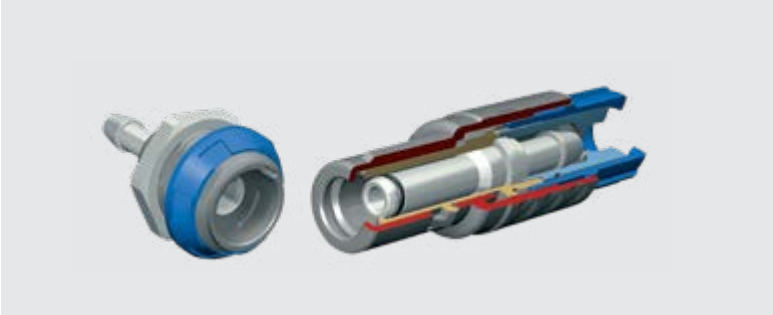
Number of contacts	Contact type		Part number key insert			Contact style ¹	Contact diameter mm	Single contact nominal current ² A	Nominal current insert A	Clearance and creepage distance contact to contact mm	Test voltage ² SAE kV DC	Test voltage ^{5,8} IEC kV RMS	Operating voltage ^{7,8} IEC V RMS	Termination diameter mm	Termination cross-section		View on termination area	
	Termination	Socket Pin													AWG	mm ²	Pin piece	Socket piece
0	2	Solder	L	M	P N 0 P H 0	0	1.3	15	15	1	1.6	0.67	38	1.4	18	1		
		Print straight ⁴	Q		P O 0			12	12	1.3	1.9	0.67	48	1.1	20	0.5		
		Angled ⁴												0.7	-	-		
0	3 ⁵	Solder	L	M	P N 9 P H 9	0	1.3	15	15	0.9	1.6	0.67	37	1.4	18	1		
		Print straight ⁴	Q		P O 9			12	12	1.2	1.9	0.67	48	1.1	20	0.5		
		Angled ⁴												0.7	-	-		
0	4	Solder	L	M	J H 0 J G 0	0	0.9	10	10	0.9	1.6	0.67	37	1.1	20	0.5		
		Crimp ³	N	P	J H 0 J G 0			7.5	7.5	1.2	1.9	0.67	48	0.85	22	0.38		
		Print straight ⁴	Q		J O 0			10	10	0.9	1.6	0.67	37	-	20-24	0.5-0.25		
		Angled ⁴												-	-	-		
		Print straight ⁴	Q		J O 0			7.5	7.5	1.2	1.9	0.67	48	0.7	22-26	0.38-0.15		
		Angled ⁴												0.6	-	-		
0	5	Solder	L	M	J H 0 J G 0	0	0.9	10	7.5	0.5	1.35	0.67	25	1.1	20	0.5		
		Crimp ³	N	P	J H 0 J G 0			7.5	5.6	0.8	1.6	0.67	35	0.85	22	0.38		
		Print straight ⁴	Q		J O 0			10	7.5	0.5	1.35	0.67	25	-	20-24	0.5-0.25		
		Angled ⁴												-	-	-		
		Print straight ⁴	Q		J O 0			7.5	5.6	0.8	1.6	0.67	35	0.7	22-26	0.38-0.15		
		Angled ⁴												0.6	-	-		
0	6	Solder	L	M	F G 0 F D 0	0	0.7	7.5	5.6	0.65	1.35	0.67	33	0.85	22	0.38		
		Crimp ³	N	P	F G 0 F D 0			6	4.5	0.85	1.6	0.67	36	0.65	26	0.15		
		Print straight ⁴	Q		F O 0			7.5	5.6	0.65	1.35	0.67	33	-	22-26	0.38-0.15		
		Angled ⁴												0.5	-	-		
		Print straight ⁴	Q		F O 0			6	4.5	0.85	1.6	0.67	36	0.6	-	-		
		Angled ⁴												-	-	-		
0	7	Solder	L	M	F G 0 F D 0	0	0.7	7.5	4.9	0.65	1.35	0.67	33	0.85	22	0.38		
		Crimp ³	N	P	F G 0 F D 0			6	3.9	0.85	1.6	0.67	36	0.65	26	0.15		
		Print straight ⁴	Q		F O 0			7.5	4.9	0.65	1.35	0.67	33	-	22-26	0.38-0.15		
		Angled ⁴												0.5	-	-		
		Print straight ⁴	Q		F O 0			6	3.9	0.85	1.6	0.67	36	0.6	-	-		
		Angled ⁴												-	-	-		
0	8	Solder	L	M	F G 0 F D 0	0	0.7	7.5	4.9	0.4	1.2	0.67	10	0.85	22	0.38		
		Crimp ³	N	P	F G 0 F D 0			6	3.9	0.6	1.6	0.67	32	0.65	26	0.15		
		Print straight ⁴	Q		F O 0			7.5	4.9	0.4	1.2	0.67	10	-	22-26	0.38-0.15		
		Angled ⁴												0.5	-	-		
		Print straight ⁴	Q		F O 0			6	3.9	0.6	1.6	0.67	32	0.6	-	-		
		Angled ⁴												-	-	-		
0	9	Solder	L	M	C D 0 C C 0	0	0.5	6	3.9	0.45	1.2	0.67	16	0.65	26	0.15		
		Print straight ⁴	Q		C O 0			4	2.6	0.65	1.35	0.67	33	0.45	28	0.08		
		Angled ⁴												0.5	-	-		
		Solder	L	M	C D 0 C C 0			6	3.3	0.3	0.75	0.67	7.5	0.65	26	0.15		
		Print straight ⁴	Q		C O 0			4	2.2	0.5	1.35	0.67	25	0.45	28	0.08		
		Angled ⁴												0.5	-	-		
1	10	Solder	L	M	C D 9 C C 9	0	0.5	6	3.3	0.4			10	0.65	26	0.15		
		Print straight ⁴	Q		C O 9			4	2.2	0.5			25	0.45	28	0.08		
		Angled ⁴												0.5	-	-		
		Solder	L	M	C D 9 C C 9			6	3.3	0.4			10	0.65	26	0.15		
		Print straight ⁴	Q		C O 9			4	2.2	0.5			25	0.45	28	0.08		
		Angled ⁴												0.5	-	-		
1	2 ⁵	Solder	L	M	C D 0 C C 0	0	0.5	6	3	0.3	0.75	0.67	7.5	0.65	26	0.15		
		Print straight ⁴	Q		C O 0			4	2	0.5			25	0.45	28	0.08		
		Angled ⁴												0.5	-	-		
		Solder	L	M	C D 0 C C 0			6	3	0.3	0.75	0.67	7.5	0.65	26	0.15		
		Print straight ⁴	Q		C O 0			4	2	0.5			25	0.45	28	0.08		
		Angled ⁴												0.5	-	-		

The socket is installed in the (in-line) receptacle; the pin is installed in the plug. **Reversed gender variants on request.**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
		1	M		C	-	P							-				

² SAE AS 13441:2004 method 3001.1
⁵ Not compatible to competition
⁶ IEC 60664-1:2007 (VDE 0110-1:2008-01):
Overvoltage category III
⁷ IEC 60664-1:2007 (VDE 0110-1:2008-01):
Pollution degree 2
⁸ Surge voltage

MEDIA FEED THROUGH



Media feed through	Feed through		Contact type		Part number key insert			Contact inner diameter	Working pressure max.	Termination diameter	Tube diameter max.
			Socket	Pin				mm	bar	mm	mm
F	1	Not shut off	B	S	1	1	0	2.5	2	4	6
	A	Shut off	B	S	On request ¹			1.9	2	4	6

Media feed through

12345678910111213141516171819

Size (1)

1 M C - 0

¹ Not compatible to competition

PCB LAYOUTS

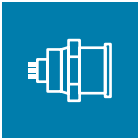


For PCB contacts (Size 1)

	Straight	90° right-angled
2 contacts		
3 contacts		
4 contacts		
5 contacts		
6 contacts		
7 contacts		
8 contacts		
9 contacts		
10 contacts		
12 contacts		
14 contacts		

All specifications are only valid for socket inserts, pin inserts on request. Further PCB layouts upon request

RIGHT-ANGLED PCB CONTACTS IN THE RECEPTACLE



A



Technical Data

- PCB layouts, see page [13](#)

Contact diameter	Termination diameter
mm	mm
0.5	0.5
0.7	0.6
0.9	0.6
1.3	0.8

Size {1}

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

1

M

C

-

P

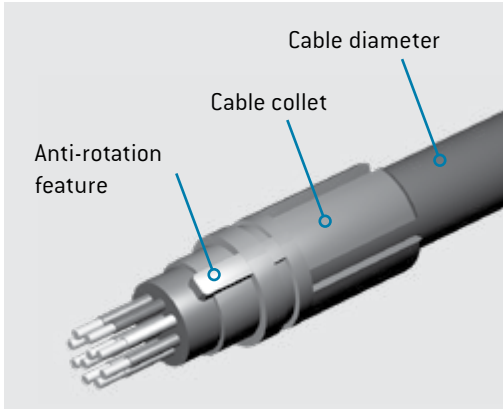
-

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FOR YOUR NOTES

CABLE COLLET SYSTEM

For plugs and in-line receptacles



		Cable diameter mm	Material	Part number
3	9	> 2.7 – 3.9	PSU	KM1.020.121.934.007
5	2	> 4.0 – 5.2		KM1.020.122.934.007
6	5	> 5.3 – 6.5		KM1.020.123.934.007
3	9	> 2.7 – 3.9	PEI	KM1.020.121.933.008
5	2	> 4.0 – 5.2		KM1.020.122.933.008
6	5	> 5.3 – 6.5		KM1.020.123.933.008

APPLICATION: for all plugs and in-line receptacles

USE: cable collet for strain relief

Size {1}																		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
		1	M			C	–	P							–		0	

COLOR CODINGS



Color coding of the front nut only for receptacles G5 and GK
Color coding of the back nut only for straight plug S1 and in-line receptacle K5

The color coding here is based on the cable bend relief in combination with back nut made of brass.

Code C (brass chromate) always for straight plug S2 and receptacles G1 and GA



	Color	Similar RAL systems		Material
		Design	Classic	
2	Red	030 40 40	3002	Plastic (PSU)
3	White	000 90 00	9003	
4	Yellow	095 90 59	1016	
5	Green	170 60 50	6032	
6	Blue	250 40 40	5019	
7	Gray	000 55 00	7045	
8	Black	000 25 00	9004	Plastic (PSU/PEI)
C	Chrome matt	–	–	Brass

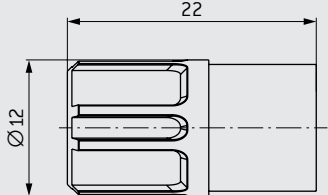
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
		1	M			C	–	P							–			

DEFINITION OF THE BACK NUTS

Applicable to all straight plugs as well as in-line receptacles

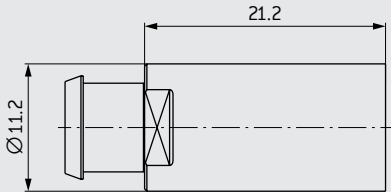


STANDARD BACK NUT



Part number	Material	Color	Similar RAL systems	
			Design	Classic
KM1.020.111.934.002	PSU	Red	030 40 40	3002
KM1.020.111.934.003		White	000 90 00	9003
KM1.020.111.934.004		Yellow	095 90 59	1016
KM1.020.111.934.005		Green	170 60 50	6032
KM1.020.111.934.006		Blue	250 40 40	5019
KM1.020.111.934.007		Gray	000 55 00	7045
KM1.020.111.933.008	PEI	Black	000 25 00	9004
KM1.020.111.315.000	Brass	Chrome matt	—	—

STANDARD BACK NUT FOR CABLE BEND RELIEF¹



Part number	Material	Color	Similar RAL systems	
			Design	Classic
KM1.020.113.934.007	PSU ²	Gray	000 55 00	7045
KM1.020.113.933.008	PEI	Black	000 25 00	9004
KM1.020.113.315.000	Brass	Chrome matt	—	—

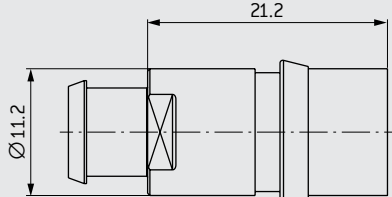
¹ Silicone cable bend reliefs have to be ordered separately (see page 20). ² Additional colors on request

DEFINITION OF THE BACK NUTS

Applicable to all straight plugs as well as in-line receptacles

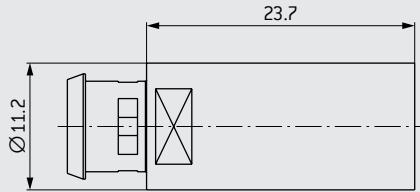


STANDARD BACK NUT FOR CABLE BEND RELIEF FOR PLUG IP64¹



Part number	Material	Color	Similar RAL systems	
			Design	Classic
KM1.026.113.934.107	PSU ²	Gray	000 55 00	7045
KM1.026.113.933.108	PEI	Black	000 25 00	9004
KM1.026.113.315.000	Brass	Chrome matt	—	—

STANDARD BACK NUT FOR OVERMOLDING ON REQUEST

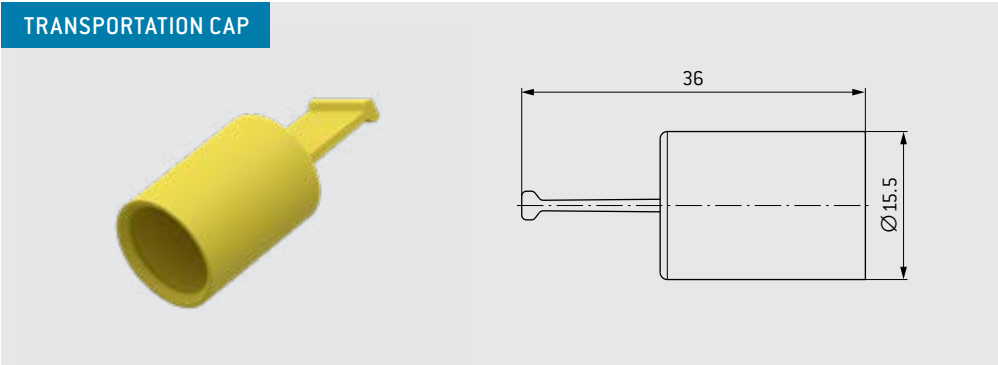


Part number	Material	Color	Similar RAL systems	
			Design	Classic
KM1.020.114.934.007	PSU ²	Gray	000 55 00	7045
KM1.020.114.934.008		Black	000 25 00	9004
KM1.020.114.933.008	PEI	Black	000 25 00	9004

¹ Silicone cable bend reliefs have to be ordered separately (see page 20). ² Additional colors on request

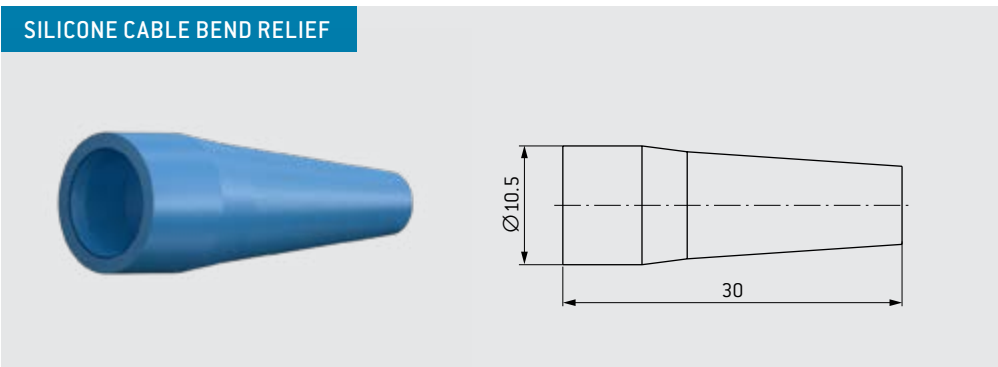
TRANSPORTATION CAP

Applicable to all straight plugs



Part number	Material	Color	Similar RAL systems	
			Design	Classic
922.000.002.000.075	TPE	Yellow	095 90 59	1016

SILICONE CABLE BEND RELIEF



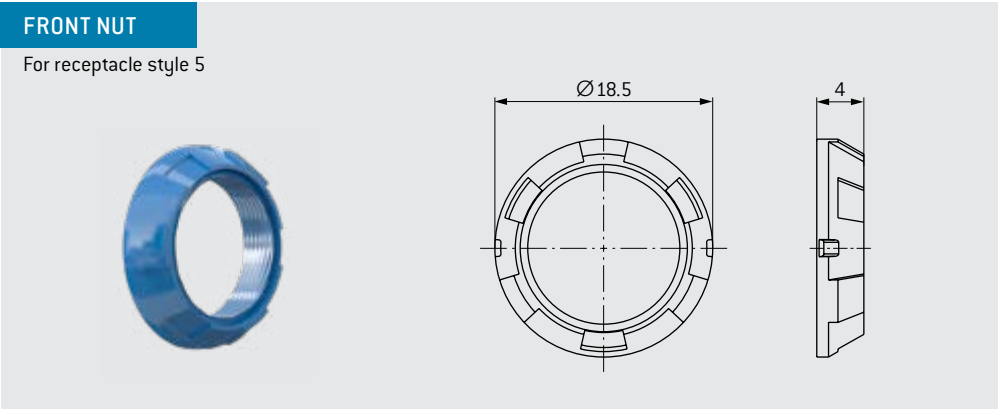
Part number	Cable jacket (Ø outside)		Color code	Color	RAL-Nr. ¹ (similar) Classic
	min.	max.			
701.023.____.965.025	2.5	3	202	Red	3020
701.023.____.965.030	3	3.5	203	White	9010
701.023.____.965.035	3.5	4	204	Yellow	1016
701.023.____.965.040	4	5	205	Green	6032
701.023.____.965.050	5	6	206	Blue	5002
701.023.____.965.060	6	6.5	207	Gray	7005
			208	Black	9005

TEMPERATURE RANGE
Silicone: –50 °C up to +200 °C
short-term up to +230 °C
Autoclavable

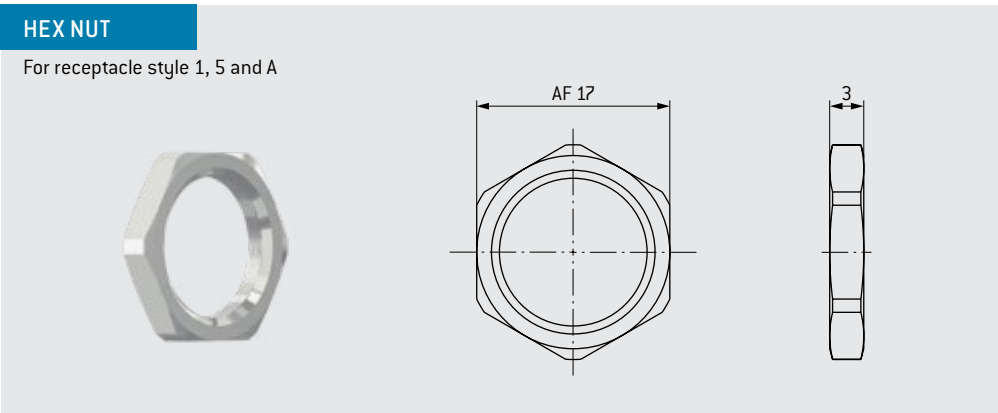
The silicone cable bend reliefs must always be ordered separately.

¹ Because of differing basic materials, the colors may differ slightly from RAL numbers.

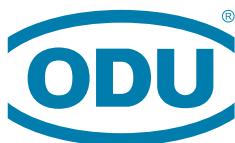
NUTS



Part number	Material	Color	Similar RAL system Design
KM1.311.002.934.002	PSU	Red	030 40 40
KM1.311.002.934.003		White	000 90 00
KM1.311.002.934.004		Yellow	095 90 59
KM1.311.002.934.005		Green	170 60 50
KM1.311.002.934.006		Blue	250 40 40
KM1.311.002.934.007		Gray	000 55 00
KM1.311.002.933.008	PEI	Black	000 25 00
KM1.311.003.315.000	Brass	Cr matt	

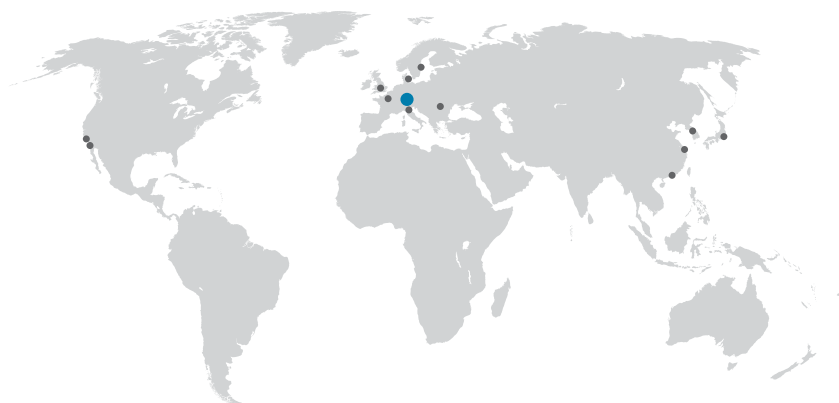


Part number	Material
021.310.115.304.000	Nickel-plated brass



A PERFECT ALLIANCE.

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