

Plastic connector with metal coupling system

Description

"UTG" Metalok Bantam plastic industrial circular connectors with metal coupling are a range of multiway connectors to provide the complete answer to the need for lightweight, robust circular connectors. They are available in 8 shell sizes, 11 insert arrangements **all intermateable, interchangeable and intermountable** with the TRIM TRIO "UTO" and "UTP" industrial connector families.



Features and benefits

- Available in 8 shell sizes and 11 insert arrangements incl. 3 VDE versions.
- Available in plug and receptacle versions for both male and female contacts.
- Connectors and accessories are moulded from highly durable glass-filled thermoplastic.
- Flammability rating: UL94-V0.
- Metal bayonet ring:
 - Metal wave spring loaded.
 - Locks with audible positive "click"
 - Assures 500 matings and unmatings
 - UL recognized file Nr.: E238675

Performance characteristics

Operating temperature:	-55°C to +125°C
Insulation resistance:	5000 MΩ min.
Test potential:	2000 VAC
Durability:	500 matings and unmatings.
Vibration resistance:	Per MIL-STD202 method 204
Thermal shock:	Per MIL-STD202 method 207
Degree of protection per DIN 40050: IP65 in mated condition. "H" version used with waterprotected backshells.	

Construction

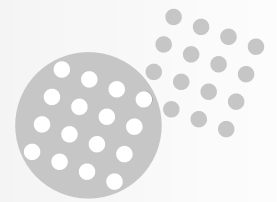
Connector body	Glass filled thermoplast UL94-V0
	Colour: black
Coupling ring:	Nickel plated brass
Tri-lock pins:	Stainless steel
Coupling spring:	Spring steel

Contact accommodation

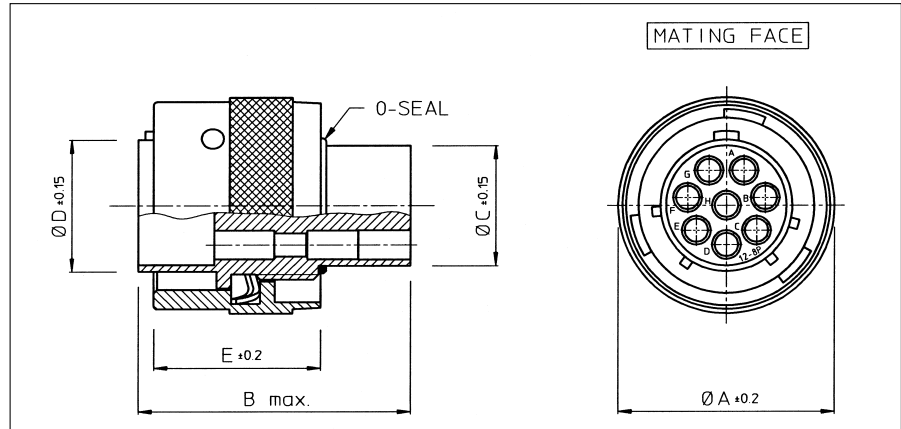
- "UTG" connectors accept TRIM TRIO size 16 removable snap-lock contacts (see contact section)
- Contacts to be ordered separately.

How to order

Connector family :		UTG	0	14	12	P	N	H	--
		UTG	6	14	12	S			--
Body variation:	0 : Wall mounting receptacle 6 : Cable plug 1 : Free hanging receptacle								
Shell size:									
Insert arrangement:									
Type of contacts:	P : Pin contacts S : Socket contacts								
Plating	N : Nickelplated bayonet ring								
Application	No letter : Standard version H : Water protected version (only receptacle)								
Design variation	No letter : Moulded-in contact marking (standard version) Others : Specials versions								



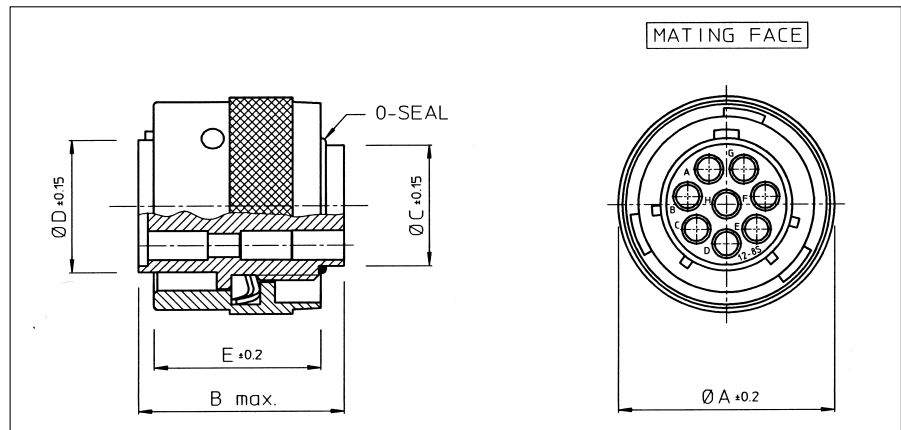
Cable plug for pin contacts (UTG6- - - -PN)



Part number	Shell size	Ø A ±0.2	B max.	Ø C ±0.15	Ø D ±0.15	E ±0.2
UTG6104PN / UTG6103PNVDE	10	21.6	31.8	10.9	12.2	19.1
UTG6128PN	12	24.8		13.8	15.1	
UTG61412PN	14	28.0		17.0	18.3	
UTG61619PN	16	31.2		19.9	21.5	
UTG61823PN / UTG6187PNVDEU	18	34.3	31.8 / 33.0	22.4	24.0	
UTG62028PN / UTG62020PN	20	37.5	31.8 / 35.3	25.6	27.2	
UTG62235PN	22	40.7	31.8	26.5	30.4	
UTG62448PN	24	43.9		31.7	33.5	

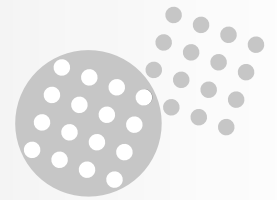
Part numbers are suitable for both standard and IP65 water protection versions.

Cable plug for socket contacts (UTG6- - - -SN)

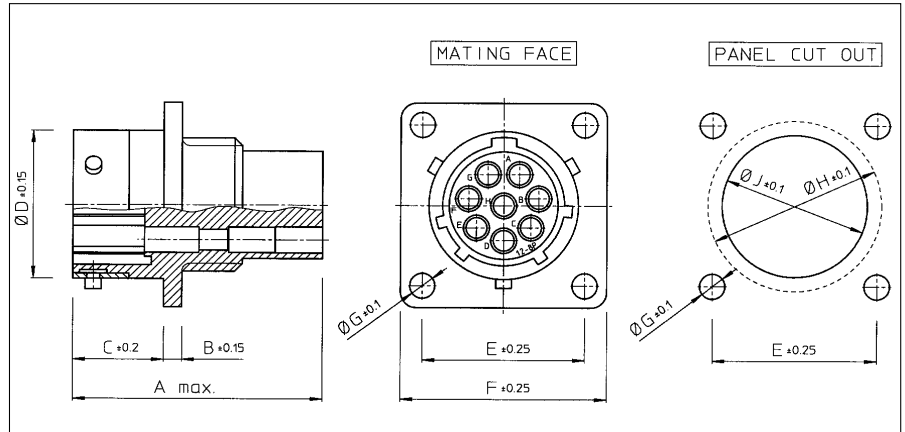


Part number	Shell size	Ø A ±0.2	B max.	Ø C ±0.15	Ø D ±0.15	E ±0.2
UTG6104SN / UTG6103SNVDE	10	21.6	23.9 / 26.75	10.9	12.2	19.1
UTG6128SN	12	24.8	23.9	13.8	15.1	
UTG61412SN	14	28.0		17.0	18.3	
UTG61619SN	16	31.2		19.9	21.5	
UTG61823SN / UTG6187SNVDEU	18	34.3	23.9 / 29.0	22.4	24.0	
UTG62028SN / UTG62020SN	20	37.5	24.9	25.6	27.2	
UTG62235SN	22	40.7		28.5	30.4	
UTG62448SN	24	43.9	26.2	31.7	33.5	

Part numbers are suitable for both standard and IP65 water protection versions.



Wall mounting receptacle for pin contacts (UTG0- - - -P)

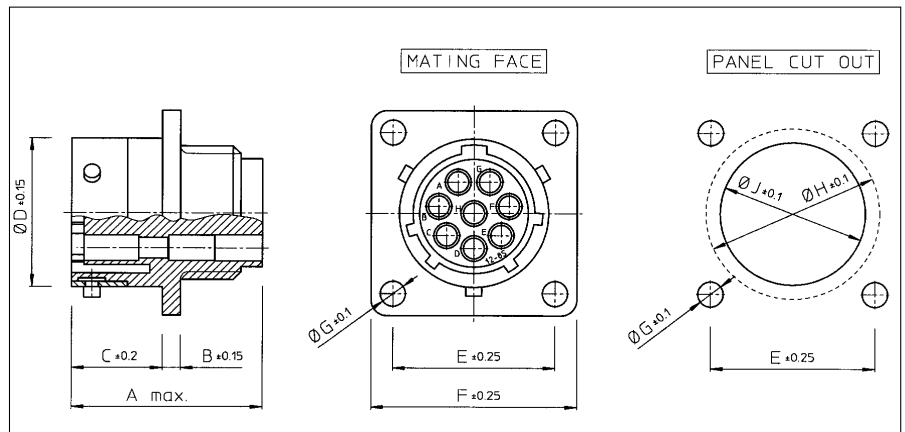


Part number	Shell size	A max.	B ±0.15	C ±0.2	Ø D ±0.15	E ±0.25	F ±0.25	Ø G ±0.1	Ø H ±0.1	Ø J ±0.1
UTG0104P / UTG0103PVDE	10	31.7	2.3	11.3	15.0	18.3	23.8	3.2	17.3	15.1
UTG0128P	12				19.0	20.6	26.2		21.8	18.2
UTG01412P	14				22.2	23.0	28.6		25.0	21.4
UTG01619P	16				25.3	24.6	31.0		28.1	24.6
UTG01823P / UTG0187PVDEU	18	31.7/34.0	2.5	11.3/17.9	28.5	27.0	33.3	3.9	31.3	27.8
UTG02028P / UTG02020P	20	33.3/34.3		14.5	31.7	29.4	36.5		34.5	30.9
UTG02235P	22	33.3	3.5	15.3	34.9	31.8	39.7	3.9	37.7	34.1
UTG02448P	24				38.0	34.9	42.9		40.9	37.3

For IP65 waterprotected version add "H" behind "P" e.g. UTG01412PH

A square flange sealing has to be ordered separately to guarantee a sealing with the equipment. Refer to "Circular accessories" section (UTFD--).

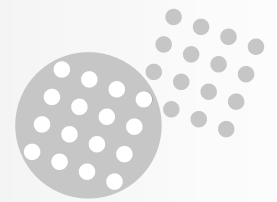
Wall mounting receptacle for socket contacts (UTG0- - - -S)



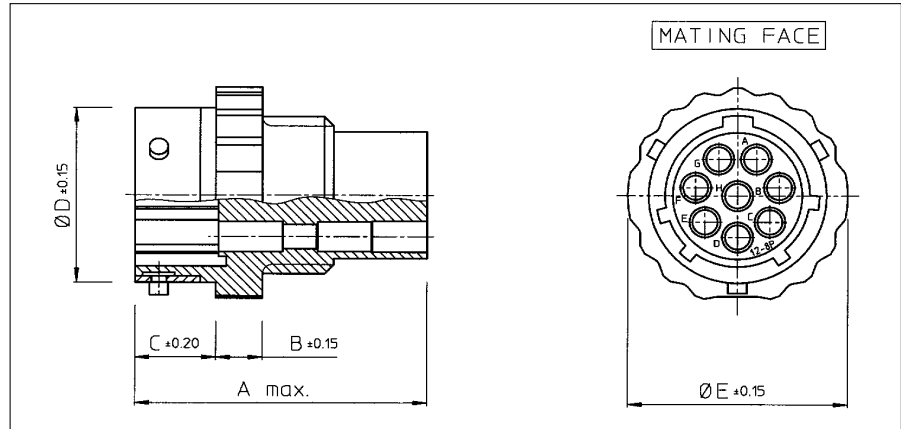
Part number	Shell size	A max.	B ±0.15	C ±0.2	Ø D ±0.15	E ±0.25	F ±0.25	Ø G ±0.1	Ø H ±0.1	Ø J ±0.1
UTG0104S / UTG0103SVDE	10	24.3/27.6	2.3	11.3	15.0	18.3	23.8	3.2	17.3	15.1
UTG0128S	12	24.3			19.0	20.6	26.2		21.8	18.2
UTG01412S	14				22.2	23.0	28.6		25.0	21.4
UTG01619S	16				25.3	24.6	31.0		28.1	24.6
UTG01823S / UTG0187SVDEU	18	24.3/30.4	2.5	11.3/17.9	28.5	27.0	33.3	3.9	31.3	27.8
UTG02028S / UTG02020S	20	27.0	3.5	14.5	31.7	29.4	36.5		34.5	30.9
UTG02235S	22	28.0		34.9	31.8	39.7	37.7		34.1	
UTG02448S	24	30.4		15.3	38.0	34.9	42.9	3.9	40.9	37.3

For IP65 waterprotected version add "H" behind "S" e.g. UTG01412SH

A square flange sealing has to be ordered separately to guarantee a sealing with the equipment. Refer to "Circular accessories" section (UTFD--).



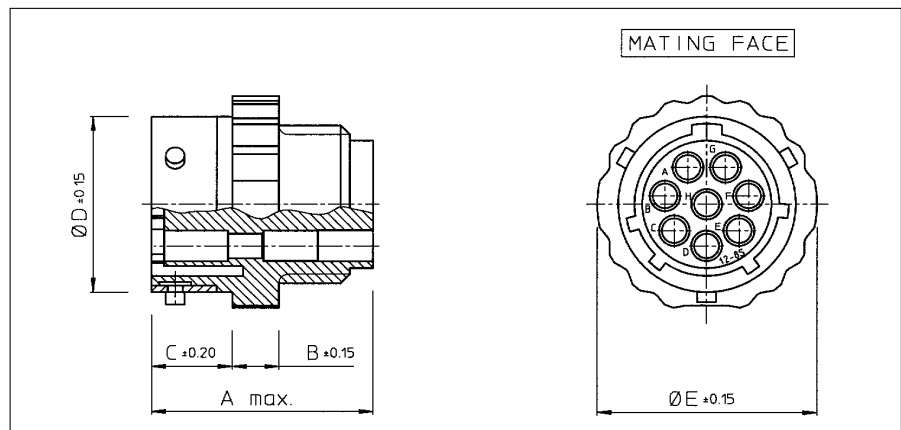
Free hanging receptacle for pin contacts (UTG1- - - -P)



Part number	Shell size	A max.	B ±0.15	C ±0.2	Ø D ±0.15	Ø E ±0.15
UTG1104P / UTG1103PVDE	10	31.7	5.0	8.65	15.0	19.5
UTG1128P	12				19.0	23.5
UTG11412P	14				22.2	27.0
UTG11619P	16				25.3	30.0
UTG11823P / UTG1187PVDEU	18	31.7/34.0	5.0	8.65/15.35	28.5	33.0
UTG12028P / UTG12020P	20	33.3/34.3		12.05	31.7	36.5
UTG12235P	22	33.3		13.85	34.9	39.5
UTG12448P	24				38.0	42.5

For IP65 waterprotected version add "H" behind "P" e.g. UTG11412PH

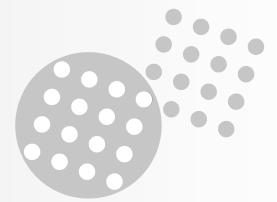
Free hanging receptacle for socket contacts (UTG1- - - -S)



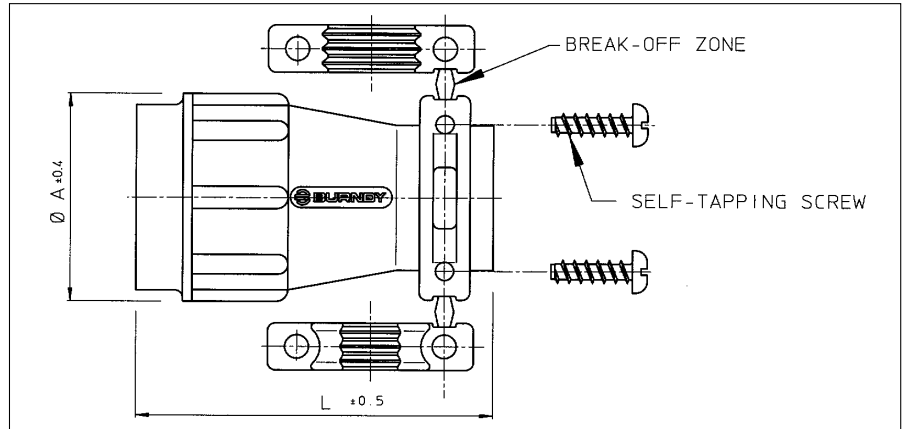
Part number	Shell size	A max.	B ± 0.15	C ± 0.2	$\varnothing D \pm 0.15$	$\varnothing E \pm 0.15$
UTG1104S / UTG1103SVDE	10	24.3/27.6	5.0	8.65	15.0	19.5
UTG1128S	12	24.3			19.0	23.5
UTG11412S	14				22.2	27.0
UTG11619S	16				25.3	30.0
UTG11823S / UTG1187SVDEU	18	24.3/30.4		8.65/15.35	28.5	33.0
UTG12028S / UTG12020S	20	25.9		12.05	31.7	36.5
UTG12235S	22				34.9	39.5
UTG12448S	24				13.85	38.0

For IP65 waterprotected version add "H" behind "S" e.g. UTG11412SH

Circular accessories



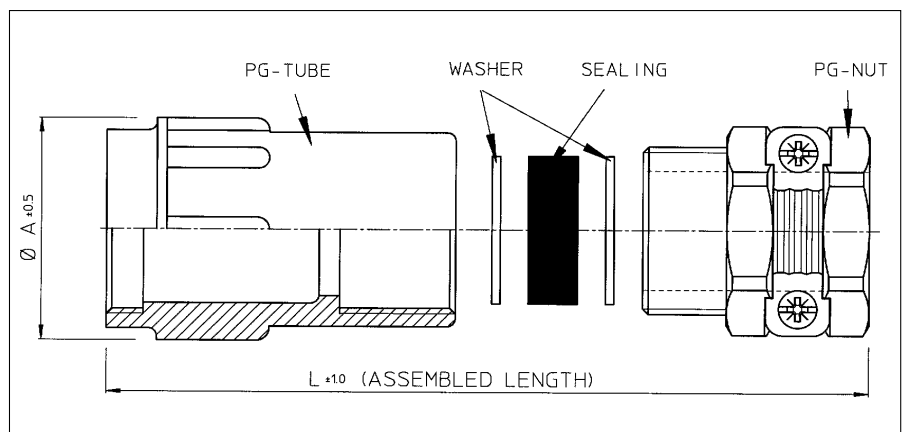
Plastic cable clamp with strain relief (UTG--AC)



Part number	Shell size	Cable range $\varnothing$	$\varnothing A \pm 0.4$	$L \pm 0.5$
UTG10AC	10	3.0 - 8.7	21.0	40.0
UTG12AC	12	3.0 - 12.8	24.0	40.0
UTG14AC	14	4.0 - 13.8	27.0	46.0
UTG16AC	16	5.0 - 17.0	30.2	46.0
UTG18AC	18	5.0 - 19.0	33.3	50.0
UTG20AC	20	5.0 - 21.0	36.5	55.0
UTG22AC	22	5.0 - 23.0	39.7	60.0
UTG24AC	24	8.0 - 27.0	42.9	65.0

For threading specifications see last page of this section "Circular accessories"

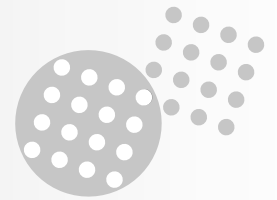
Plastic cable clamp with strain relief nut for waterprotected (IP65) applications (UTG--PG)



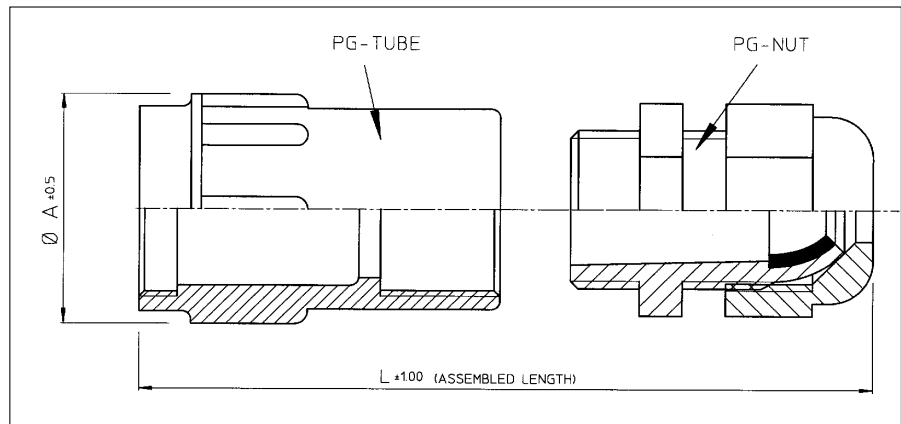
Part number	Shell size	Sealing* outer dia x inner dia's	$L \pm 1$	$A \pm 0.5$
UTG10PG	10	13.5 x 5 x 8	54	21.0
UTG12PG	12	16 x 7 x 10.5 x 13 x 16	57	24.0
UTG14PG	14	18.5 x 7 x 10.5 x 13 x 16	62	27.0
UTG16PG	16	20.5 x 8 x 10.5 x 13 x 16	68	30.2
UTG18PG	18	20.5 x 8 x 10.5 x 13 x 16	71	33.3
UTG20PG	20	26 x 11 x 15 x 18 x 22	82	36.5
UTG22PG	22	26 x 11 x 15 x 18 x 22	88	39.7
UTG24PG	24	35 x 19 x 23 x 27 x 31	103	42.9

*In order to accommodate different cable dia's, the sealing exists of different layers which can be pulled out easily. Cable clamp has a PG style cable gland. For threading specifications see last page of this section "Circular accessories"

Circular accessories



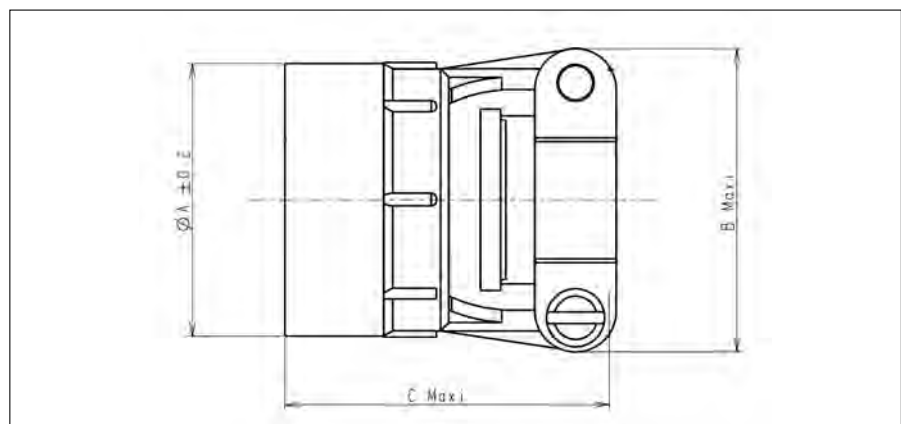
Plastic cable clamp with strain relief nut for waterprotected (IP65) applications (UTG--ST)



Part number	Shell size	Cable range	Dia. A ± 0.5	L ± 1
UTG10ST	10	2 - 6	21.0	64
UTG12ST	12	3 - 7	24.0	64
UTG14ST	14	6 - 9	27.0	69
UTG16ST	16	7 - 12	30.2	72
UTG18ST	18		33.3	76
UTG20ST	20	9 - 16	36.5	80
UTG22ST	22		39.7	86
UTG24ST	24	13 - 20	42.9	91

Cable clamp has a PG style cable gland. For threading specifications see last page of this section "Circular"

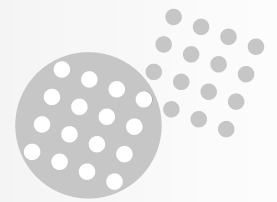
Metal cable clamp with strain relief (UT0--AC)



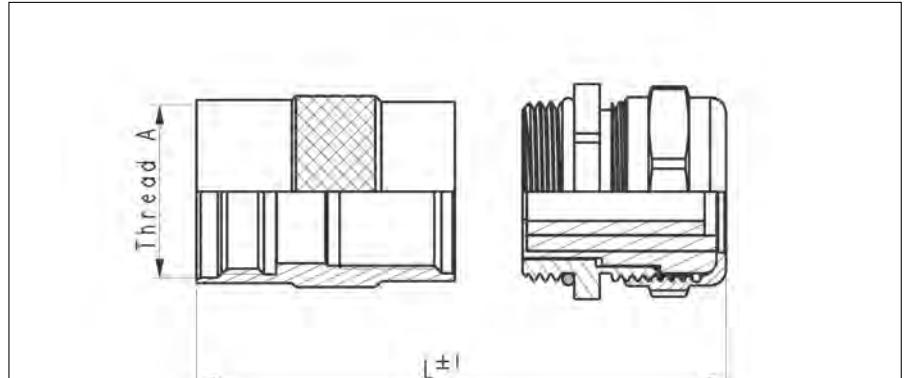
Part number	Shell size	Max cable dia. Excl. sealing	$\varnothing A \pm 0.2$	B maxi	C maxi
UT010AC	10	5.0	16.3	21.6	31.0
UT012AC	12	8.2	19.4	25.0	31.5
UT014AC	14	10.0	22.5	27.4	34.0
UT016AC	16	13.0	25.8	29.4	34.0
UT018AC	18	16.0	29.2	35.2	31.4
UT020AC	20	16.0	32.5	35.2	32.0
UT022AC	22	19.3	35.7	41.1	31.0
UT024AC	24	20.6	38.8	42.4	31.0

For threading specifications see last page of this section "Circular accessories"

Circular accessories



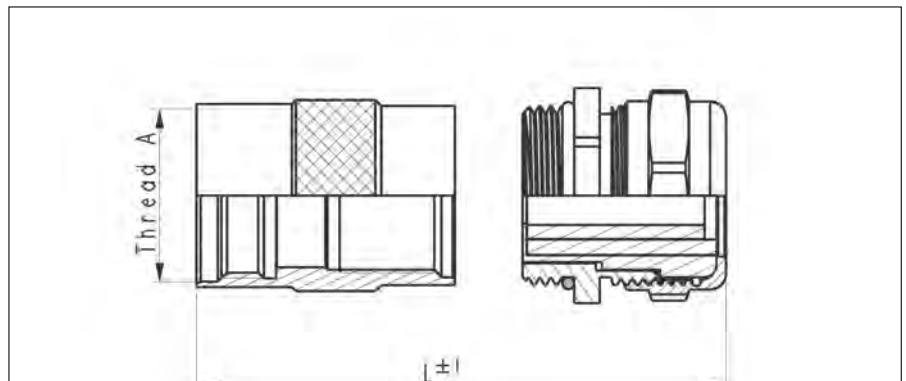
Short cable clamp with strain relief nut for waterprotected applications (IP68). (UT0--JCS)
Long cable clamp with strain relief nut for waterprotected applications (IP68). (UT0--JC)



Part number		Shell size	Clamping range (Ø en mm) min / max	L ± 1		Thread A
Short version	Long version			Short version	Long version	
UT010JCS	UT010JC	10	03 / 06	48.5	60.5	9/16 – 24 UNEF Class 2A
UT012JCS	UT012JC	12	06 / 10	49.5	61.5	11/16 – 24 UNEF Class 2A
UT014JCS	UT014JC	14	06 / 10	53.5	67.5	13/16 – 20 UNEF Class 2A
UT016JCS	UT016JC	16	9.5 / 14	62.5	73.5	15/16 – 20 UNEF Class 2A
UT018JCS	UT018JC	18	9.5 / 14	65.5	76.0	1" 1/16 – 18 UNEF Class 2A
UT020JCS	UT020JC	20	11.5 / 18	70.5	84.0	1" 3/16 – 18 UNEF Class 2A
UT022JCS	UT022JC	22	11.5 / 18	76.5	88.0	1" 5/16 – 18 UNEF Class 2A
UT024JCS	UT024JC	24	11.5 / 18	82.0	92.0	1" 7/16 – 18 UNEF Class 2A

Cable clamp has a Metric style cable gland. For threading specifications see last page of this section "Circular accessories"

Short cable clamp with large strain relief nut for waterprotected applications (IP68). (UT0--JCSL)
Long cable clamp with large strain relief nut for waterprotected applications (IP68). (UT0--JCL)

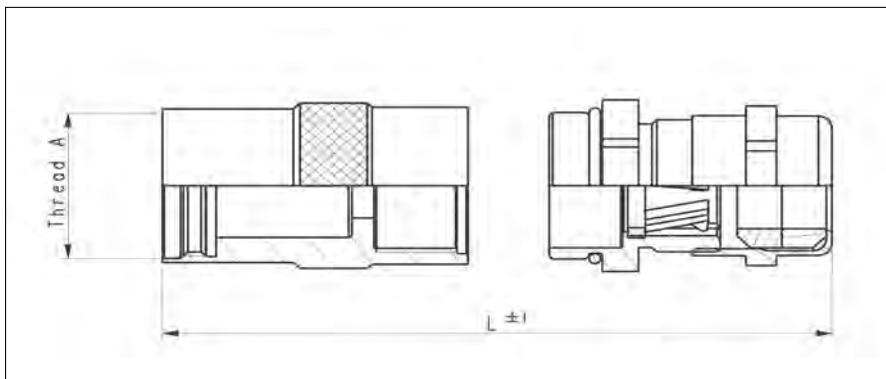


Part number		Shell size	Clamping range (Ø en mm) min / max	L ± 1		Thread A
Short version	Long version			Short version	Long version	
UT010JCSL	UT010JCL	10	05 / 08	49.5	61.5	9/16 – 24 UNEF Class 2A
UT012JCSL	UT012JCL	12	08 / 12	49.5	62.5	11/16 – 24 UNEF Class 2A
UT014JCSL	UT014JCL	14	08 / 12	54.5	68.5	13/16 – 20 UNEF Class 2A
UT016JCSL	UT016JCL	16	11.5 / 18	68.5	79.5	15/16 – 20 UNEF Class 2A
UT018JCSL	UT018JCL	18	11.5 / 18	71.5	82.0	1" 1/16 – 18 UNEF Class 2A
UT020JCSL	UT020JCL	20	15 / 24	77.5	91.0	1" 3/16 – 18 UNEF Class 2A
UT022JCSL	UT022JCL	22	15 / 24	83.5	95.0	1" 5/16 – 18 UNEF Class 2A
UT024JCSL	UT024JCL	24	15 / 24	89.0	99.0	1" 7/16 – 18 UNEF Class 2A

Cable clamp has a Metric style cable gland. For threading specifications see last page of this section "Circular accessories"



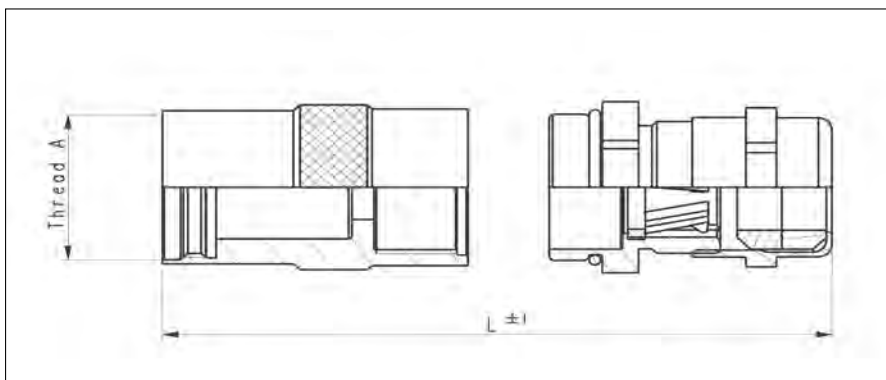
Short shielded cable clamp with strain relief nut for waterprotected applications (IP68). (UT0S----JCS)
Long shielded cable clamp with strain relief nut for waterprotected applications (IP68). (UT0S----JC)



Part number		Shell size	Clamping range (Ø en mm) min / max	L ± 1		Thread A
Short version	Long version			Short version	Long version	
UT0S10JCS	UT0S10JC	10	04 / 6.5	58.5	70.5	9/16 – 24 UNEF Class 2A
UT0S12JCS	UT0S12JC	12	07 / 10.5	61.5	74.5	11/16 – 24 UNEF Class 2A
UT0S14JCS	UT0S14JC	14	07 / 10.5	66.5	80.5	13/16 – 20 UNEF Class 2A
UT0S16JCS	UT0S16JC	16	10 / 14.5	72.5	83.5	15/16 – 20 UNEF Class 2A
UT0S18JCS	UT0S18JC	18	10 / 14.5	75.5	86.0	1" 1/16 – 18 UNEF Class 2A
UT0S20JCS	UT0S20JC	20	13.5 / 18	84.5	97.5	1" 3/16 – 18 UNEF Class 2A
UT0S22JCS	UT0S22JC	22	13.5 / 18	90.0	101.5	1" 5/16 – 18 UNEF Class 2A
UT0S24JCS	UT0S24JC	24	13.5 / 18	95.5	105.5	1" 7/16 – 18 UNEF Class 2A

Cable clamp has a Metric style cable gland. For threading specifications see last page of this section "Circular accessories"

Short shielded cable clamp with large strain relief nut for waterprotected applications (IP68). (UT0S----JCSL)
Long shielded cable clamp with large strain relief nut for waterprotected applications (IP68). (UT0S----JCL)



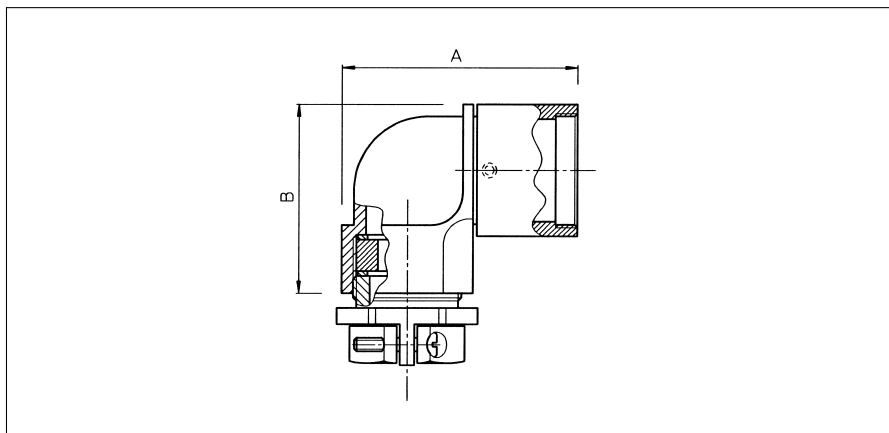
Part number		Shell size	Clamping range (Ø en mm) min / max	L ± 1		Thread A
Short version	Long version			Short version	Long version	
UT0S10JCSL	UT0S10JCL	10	05 / 8.5	59.5	71.5	9/16 – 24 UNEF Class 2A
UT0S12JCSL	UT0S12JCL	12	08 / 12.5	61.5	74.5	11/16 – 24 UNEF Class 2A
UT0S14JCSL	UT0S14JCL	14	08 / 12.5	66.5	80.5	13/16 – 20 UNEF Class 2A
UT0S16JCSL	UT0S16JCL	16	13.5 / 18	82.5	93.5	15/16 – 20 UNEF Class 2A
UT0S18JCSL	UT0S18JCL	18	13.5 / 18	85.5	96.0	1" 1/16 – 18 UNEF Class 2A
UT0S20JCSL	UT0S20JCL	20	17 / 24	93.0	106.5	1" 3/16 – 18 UNEF Class 2A
UT0S22JCSL	UT0S22JCL	22	17 / 24	99.0	110.5	1" 5/16 – 18 UNEF Class 2A
UT0S24JCSL	UT0S24JCL	24	17 / 24	104.5	114.5	1" 7/16 – 18 UNEF Class 2A

Cable clamp has a Metric style cable gland. For threading specifications see last page of this section "Circular accessories"

Circular accessories



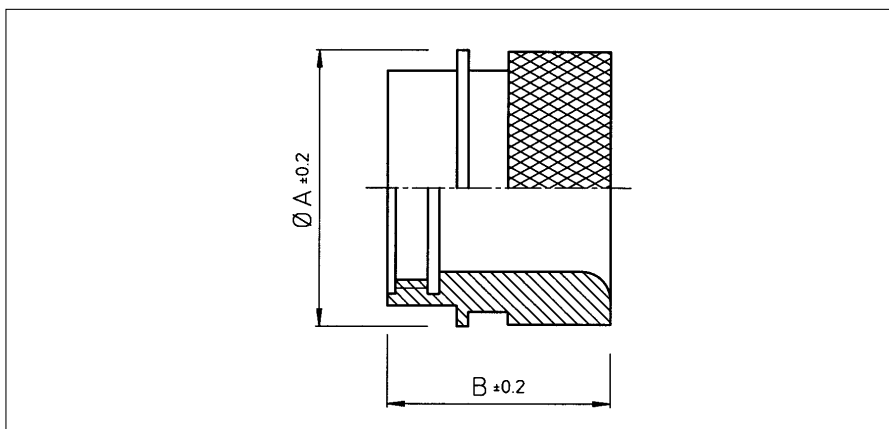
Metal right angle cable clamp with strain relief nut (UTG--LPGN / UTO--LPGN)



Part number For UTP / UTG	Part number For UTO / UTOW	Shell size	A max	B max	Cable range
UTG10LPGN	UT010LPGN	10	48.0	30.0	13.5 x 5 x 8
UTG12LPGN	UT012LPGN	12	50.0	33.5	16 x 7 x 10.5 x 13
UTG14LPGN	UT014LPGN	14	52.0	36.5	18.5 x 7 x 10.5 x 13 x 16
UTG16LPGN	UT016LPGN	16	55.0	39.5	20.5 x 8 x 10.5 x 13 x 16
UTG18LPGN	UT018LPGN	18	60.0	46.0	20.5 x 8 x 10.5 x 13 x 16
UTG20LPGN	UT020LPGN	20	58.0	47.0	26 x 11 x 15 x 18 x 22
UTG22LPGN	UT022LPGN	22	58.0	48.5	26 x 11 x 15 x 18 x 22
UTG24LPGN	UT024LPGN	24	67.0	54.5	35 x 19 x 23 x 27 x 31

Cable clamp has a PG style cable gland. For threading specifications see last page of this section "Circular accessories"

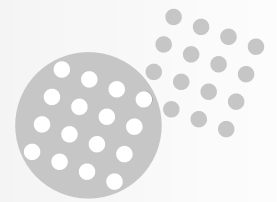
Metal shrink boot adaptor (UTG--AD) for UTP and UTG



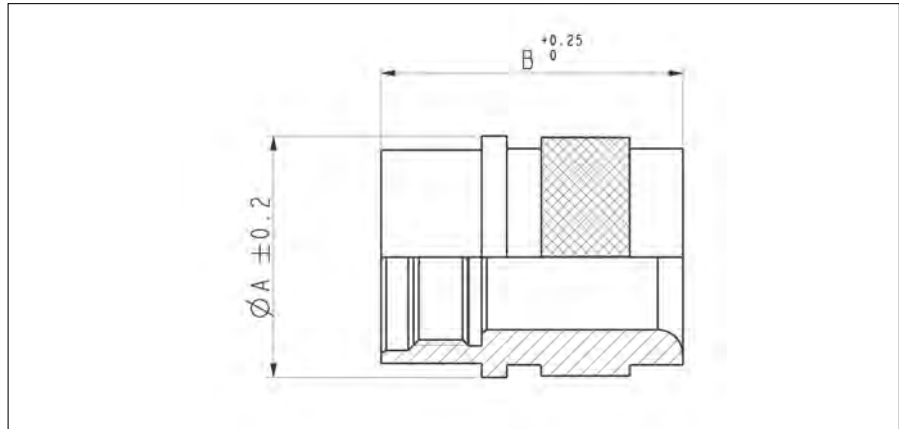
Part number	Shell size	Ø A ±0.2	B
UTG10AD	10	21.0	19.2
UTG12AD	12	24.0	
UTG14AD	14	27.0	
UTG16AD	16	30.0	21.5
UTG18AD	18	33.3	
UTG20AD	20	36.5	22.8
UTG22AD	22	39.7	
UTG24AD	24	42.9	21.9

Standard plating is anodised black. For tin plating add "T" at the end of the part number e.g. UTG12ADT
For threading specifications see last page of this section "Circular accessories"

Circular accessories



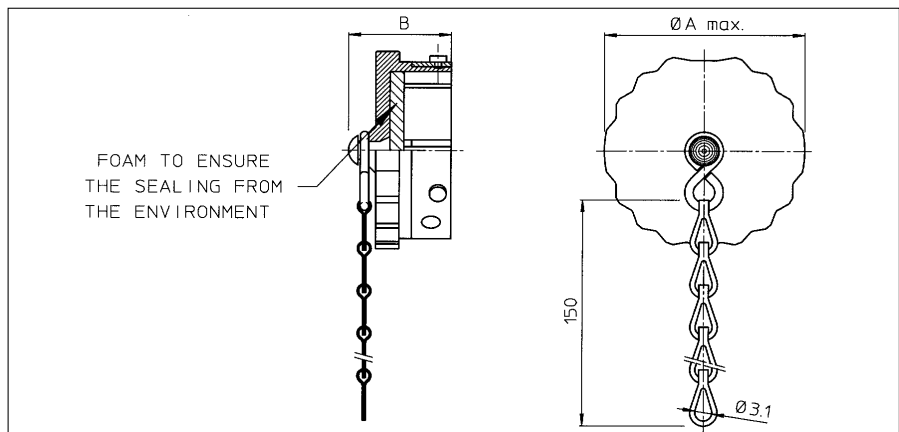
Metal shrink boot adaptor for UTO and UTOW



Part number	Shell size	Ø A ±0.2	B
UT010AD	10	21	24.7
UT012AD	12	24	
UT014AD	14	27	
UT016AD	16	30	27
UT018AD	18	33.3	
UT020AD	20	36.5	
UT022AD	22	39.7	
UT024AD	24	42.9	

For threading specifications see last page of this section "Circular accessories"

Environmental dustcap for plugs (UTG6--DCG)



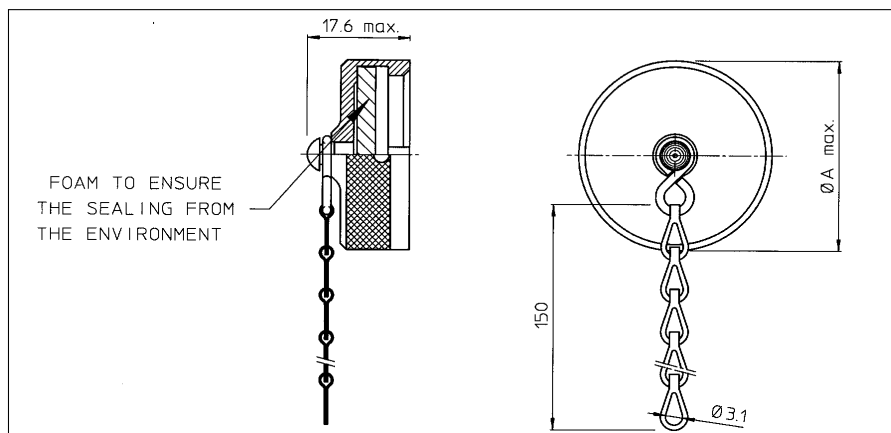
Part number	Shell size	A max.	B
UTG610DCG	10	20.0	20.8
UTG612DCG	12	24.0	
UTG614DCG	14	27.5	
UTG616DCG	16	30.5	
UTG618DCG	18	33.5	
UTG620DCG	20	36.5	22.5
UTG622DCG	22	40.0	
UTG624DCG	24	43.0	

For dustcap without chain skip "G" e.g. UTG612DC

Circular accessories



Metal environmental dustcap for receptacles (UT0--DCG)

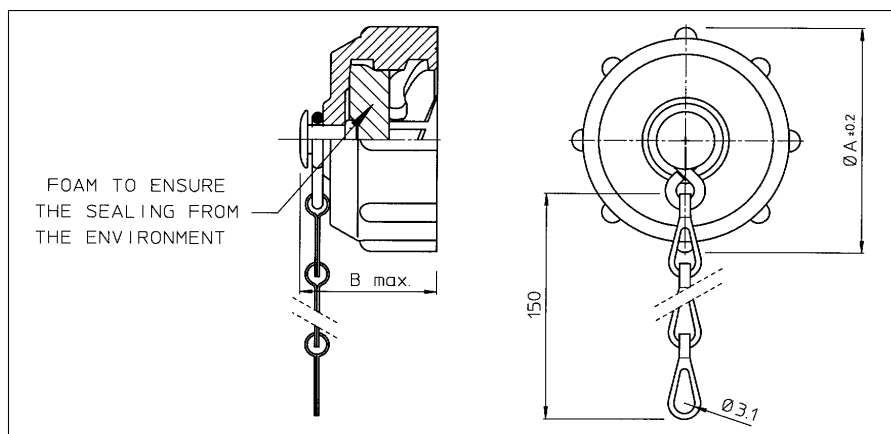


Part number	Shell size	A max.
UT010DCG	10	20.8
UT012DCG	12	24.9
UT014DCG	14	28.1
UT016DCG	16	31.3
UT018DCG	18	34.4
UT020DCG	20	37.6
UT022DCG	22	40.8
UT024DCG	24	43.9

For dustcap without chain skip "G" e.g. UTG12DC

For jam dustcap consult factory

Plastic environmental dustcap for receptacles (UTP--DCG)



Part number	Shell size	Ø A ±0.2	B max.
UTP10DCG	10	26.7	19.3
UTP12DCG	12	31.4	20.0
UTP14DCG	14	34.5	20.2
UTP16DCG	16	37.8	
UTP18DCG	18	40.8	
UTP20DCG	20	43.9	21.8
UTP22DCG	22	47.0	
UTP24DCG	24	50.1	

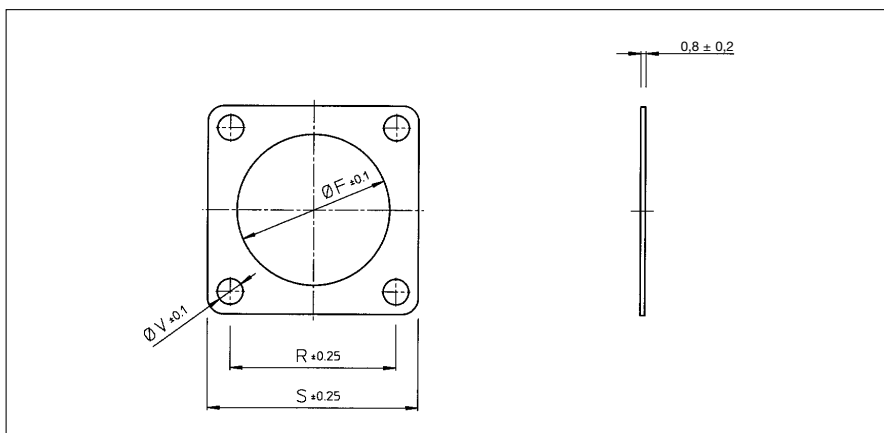
For dustcap without chain skip "G" e.g. UTP12DC

For jam dustcap consult factory

Circular accessories

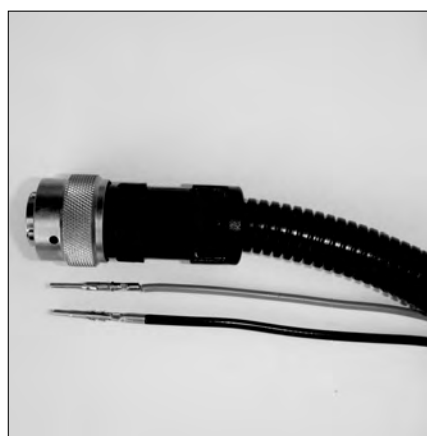


Sealing for wall mounting receptacle (UTFD1-B)



Part number	Shell size	Ø F ±0.1	R ±0.25	S ±0.25	Ø V
UTFD12B	10	15.9	18.3	23.8	3.3
UTFD13B	12	19.0	20.6	26.2	
UTFD14B	14	22.2	23.0	28.6	
UTFD15B	16	25.4	24.6	31.0	
UTFD16B	18	28.6	27.0	33.3	
UTFD17B	20	31.8	29.4	36.5	
UTFD18B	22	34.9	31.8	39.7	
UTFD19B	24	38.1	34.9	42.9	4.0

Adaptors for flexible cable protection systems (conduits)



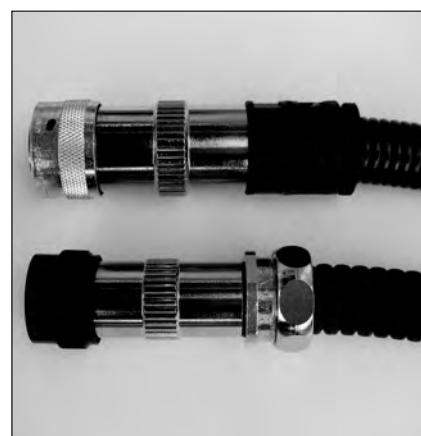
Adaptors for flexible cable protections systems that fit to the TRIM TRIO circular connectors are available from cable protection systems manufacturers (e.g. PMA).

2 solutions are offered:

- UNEF Adaptors that fit directly onto the connectors (left picture)
- METRIC Adaptors that fit onto the metal cable clamp tubes as indicated on pages 43 and 44 (right picture)

These types of adaptors offer extra protection to single wire applications (electrical, coax, Fibre optic ... etc.)

Note: the adaptors are not available from Souriau. They must be ordered directly from the manufacturers



Cable gland threadings used on cable clamps

Shell size	Thread size on connectors	PG threading	Metric threading
10	9/16 - 24 UNEF	PG9	M16 x 1.5
12	11/16 - 24 UNEF	PG11	M20 x 1.5
14	13/16 - 20 UNEF	PG13.5	M20 x 1.5
16	15/16 - 20 UNEF	PG16	M25 x 1.5
18	1-1/16 - 18 UNEF	PG16	M25 x 1.5
20	1-3/16 - 18 UNEF	PG21	M32 x 1.5
22	1-5/16 - 18 UNEF	PG21	M32 x 1.5
24	1-7/16 - 18 UNEF	PG29	M32 x 1.5