

new

UTOW

Dynamic IP68 / IP69K
High salt spray resistance
RoHS compliant
MIL-C-26482 S1 intermateable



High density Metal circular connector

Description

"UTOW" industrial circular connectors are a range of multi way connectors available in 8 shell sizes and 8 high density insert arrangements.

"UTOW" is equipped with identical shells from military connectors complying to MIL-C-26482 series I specifications. Strong and rugged built to resist every environmental and mechanical requirement for indoor and outdoor applications. Amongst several characteristics, "UTOW" offers possibilities on: Shielding, high levels on sealing and salt spray.

Features and benefits (see p2)

- Suitable for EMC requirements.
- Available in 8 shell sizes and 8 insert arrangements.
- Available in plug and receptacle version for both male and female contacts.
- Different insert orientations possible
- Plastic inserts with flammability rating: UL94-V0.
- **2 levels of water protection:** Dynamic IP67 and IP68 both versions are IP69K
- **2 levels of salt spray:** 48h and 96h
Higher salt spray resistance (200/500h) upon request
- Higher salt spray (200/500h) upon request.
- UL recognition in process.
- Metal bayonet ring:
 - Metal wave spring loaded
 - Locks with audible positive "click"
 - Assures 500 matings and unmatings
- RoHS compliant



Performance characteristics

Operating temperature:	-40°C to +105°C
Insulation resistance:	5000 MΩ min.
Test potential:	1500 VAC
Durability:	500 matings and unmatings.
Vibration resistance:	Per MIL-STD202 method 204
Thermal shock:	Per MIL-STD202 method 207
Corrosion:	Salt spray per MIL-STD 202 method 101 48h (standard version) 96h (black anodised coupling ring)
Higher salt spray resistance (200/500h) upon request	
Shielding effectiveness: 65 dB at 10 Mhz	
Degree of water protection per DIN 40050: Dynamic IP67 / IP68 / IP69K in mated condition and in combination with sealed back shell	

Construction

Shells and accessories:	Zinc alloy
Coupling ring:	Aluminium alloy
Coupling spring:	Spring stainless steel
Insert:	Glass-filled thermoplast UL94-V0
Finish:	Nickel plated
RoHS compliant	

Contact accommodation

- "UTOW" connectors accept TRIM TRIO size 20 crimp-type removable snap-lock contacts (see contacts section)
- Contacts to be ordered separately

How to order

Connector family:	UTOW	0	16	26	P	-	H or H6	--	-
	UTOW	6	16	26	S	-	H	--	-
Body variation :	0 : Wall mounting receptacle 6 : Cable plug 7 : Jam nut receptacle for rear panel mounting								
Shell size :									
Insert arrangement :									
Type of contacts :	P : Pin contacts S : Socket contacts								
Insert polarisation :	No letter : Standard version W, X, Y, Z : Different orientations								
Application :	H : Standard version, water protection IP 67 & IP 69K H6 : Water protected IP 68 & IP 69K (only needed for wall mounting & jam nut receptacles)								
Design variation :	No letter : Standard version Others : Special versions								
Plating :	No letter : standard is nickel plating (48h salt spray) 01: Black anodised, jam nut (96h salt spray) 02: Black anodised coupling ring (96h salt spray)								

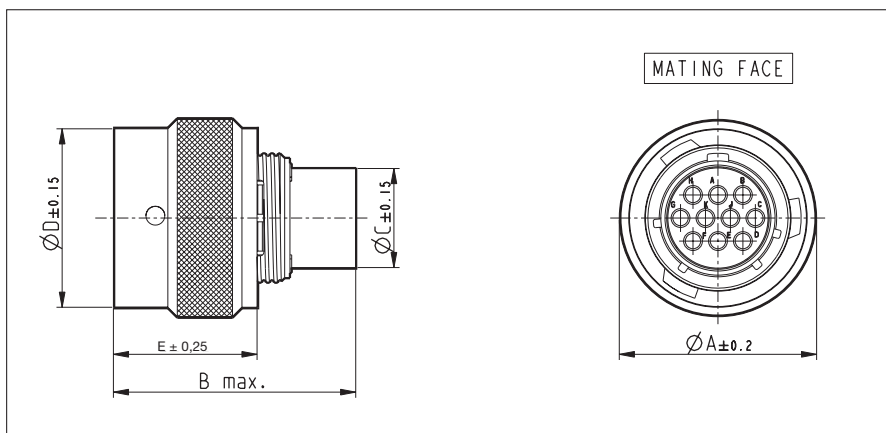
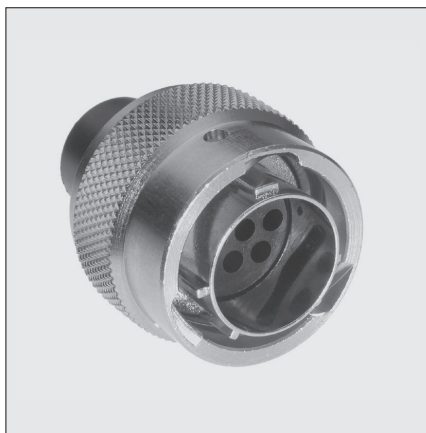
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Cable plug for pin contacts (UTOW6----PH)

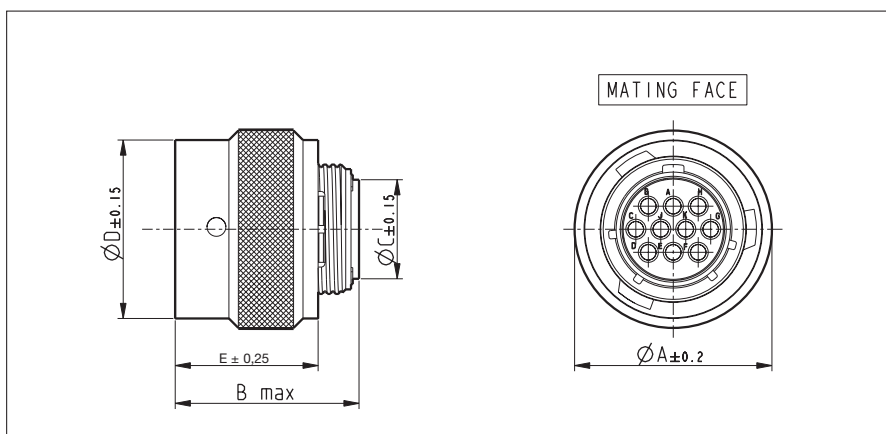
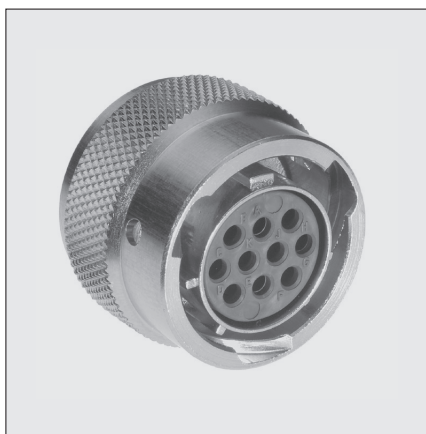


Part number	Shell size	$\varnothing A \pm 0.2$	B max.	$\varnothing C \pm 0.15$	$\varnothing D \pm 0.15$	$E \pm 0.25$
UTOW6106PH	10	21.6	31.8	10.2	12.3	19.1
UTOW61210PH	12	24.8		13.4	15.1	
UTOW61419PH	14	28.0		16.7	18.3	
UTOW61626PH	16	31.2		19.7	21.5	
UTOW61832PH	18	34.3		21.7	24.0	
UTOW62041PH	20	37.5		24.9	27.2	
UTOW62255PH	22	40.7		28.1	30.4	
UTOW62461PH	24	43.9		31.2	33.5	

Part numbers are suitable for both IP67 and IP68 water protection

For 96h salt spray version add "02" behind "H" e.g. UTOW61419PH02 (only bayonet ring will be black anodised)

Cable plug for socket contacts (UTOW6----SH)



Part number	Shell size	$\varnothing A \pm 0.2$	B max.	$\varnothing C \pm 0.15$	$\varnothing D \pm 0.15$	$E \pm 0.25$
UTOW6106SH	10	21.6	24.2	10.2	12.3	19.1
UTOW61210SH	12	24.8		13.4	15.1	
UTOW61419SH	14	28.0		16.7	18.3	
UTOW61626SH	16	31.2		19.7	21.5	
UTOW61832SH	18	34.3	24.9	21.7	24.0	
UTOW62041SH	20	37.5		24.9	27.2	
UTOW62255SH	22	40.7	26.2	28.1	30.4	
UTOW62461SH	24	43.9		31.2	33.5	

Part numbers are suitable for both IP67 and IP68 water protection

For 96h salt spray version add "02" behind "H" e.g. UTOW61419SH02 (only bayonet ring will be black anodised)

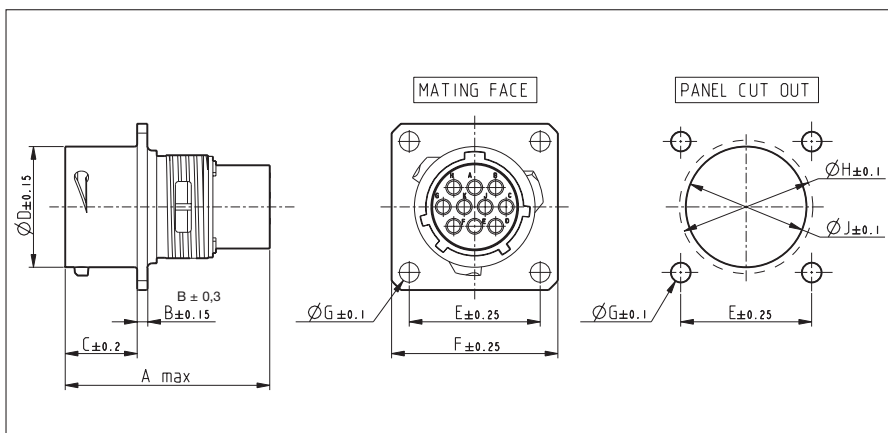
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Wall mounting receptacle for pin contacts (UTOW0---PH/PH6)

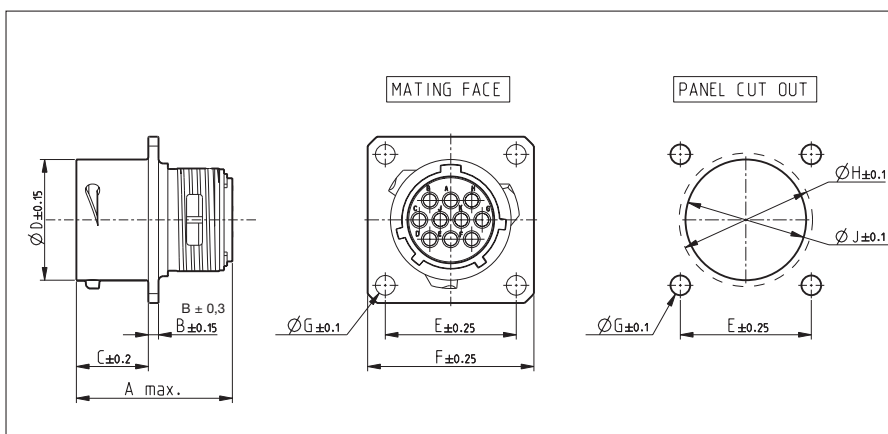


Part number		Shell size	A max.	B ± 0.3	C ± 0.2	$\varnothing D \pm 0.15$	E ± 0.25	F ± 0.25	$\varnothing G \pm 0.1$	$\varnothing H \pm 0.1$	$\varnothing J \pm 0.1$
IP67	IP68										
UTOW0106PH	UTOW0106PH6	10	31.7	1.6	11.3	15.0	18.3	23.8	3.2	17.3	15.1
UTOW01210PH	UTOW01210PH6	12				19.0	20.6	26.2		21.8	18.2
UTOW01419PH	UTOW01419PH6	14				22.2	23.0	28.6		25.0	21.4
UTOW01626PH	UTOW01626PH6	16				25.3	24.6	31.0		28.1	24.6
UTOW01832PH	UTOW01832PH6	18				28.5	26.9	33.3		31.3	27.8
UTOW02041PH	UTOW02041PH6	20	33.3	2.4	14.5	31.7	29.4	36.5	3.9	34.5	30.9
UTOW02255PH	UTOW02255PH6	22				34.9	31.8	39.7		37.7	34.1
UTOW02461PH	UTOW02461PH6	24				38.0	34.9	42.9		40.9	37.3

Part numbers are suitable for both 48hrs and 96h salt spray.

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

Wall mounting receptacle for socket contacts (UTOW0---SH/SH6)



Part number		Shell size	A max.	B ± 0.3	C ± 0.2	$\varnothing D \pm 0.15$	E ± 0.25	F ± 0.25	$\varnothing G \pm 0.1$	$\varnothing H \pm 0.1$	$\varnothing J \pm 0.1$
IP67	IP68										
UTOW0106SH	UTOW0106SH6	10	24.3	1.6	11.3	15.0	18.3	23.8	3.2	17.3	15.1
UTOW01210SH	UTOW01210SH6	12				19.0	20.6	26.2		21.8	18.2
UTOW01419SH	UTOW01419SH6	14				22.2	23.0	28.6		25.0	21.4
UTOW01626SH	UTOW01626SH6	16				25.3	24.6	31.0		28.1	24.6
UTOW01832SH	UTOW01832SH6	18				28.5	26.9	33.3		31.3	27.8
UTOW02041SH	UTOW02041SH6	20	25.9	2.4	14.5	31.7	29.4	36.5	3.9	34.5	30.9
UTOW02255SH	UTOW02255SH6	22				34.9	31.8	39.7		37.7	34.1
UTOW02461SH	UTOW02461SH6	24				38.0	34.9	42.9		40.9	37.3

Part numbers are suitable for both 48hrs and 96h salt spray.

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

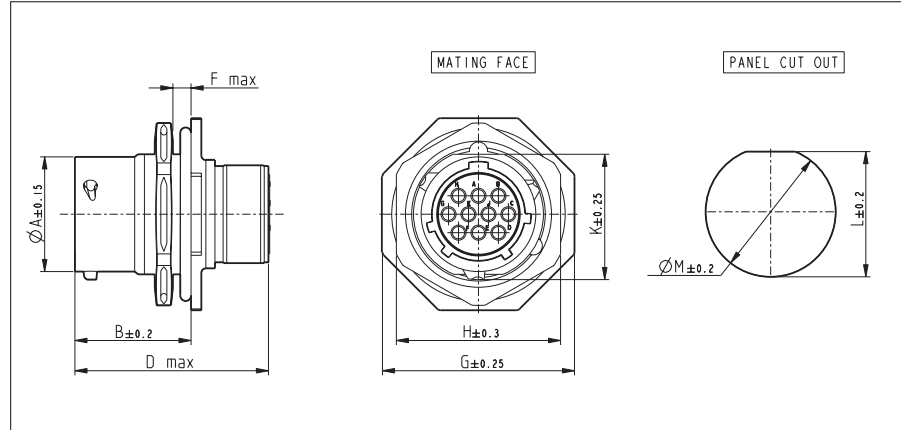
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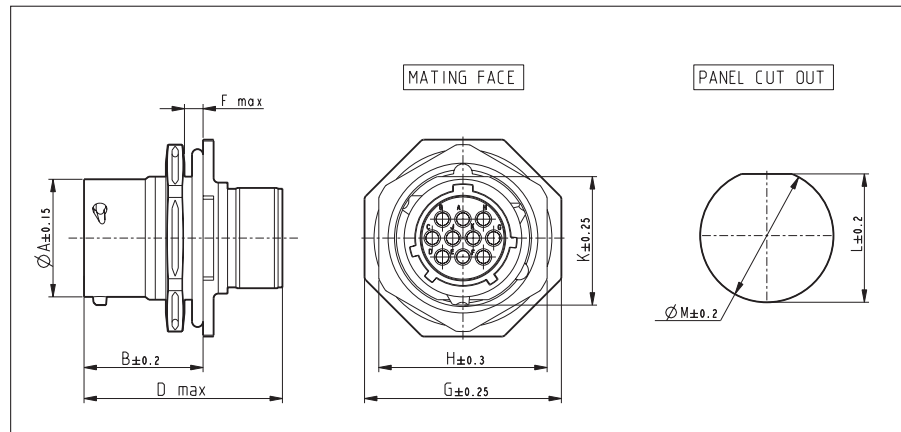
Jam nut receptacle for pin contacts (UTOW7---PH/PH6) - suitable for rear panel mounting



Part number		Shell size	Ø A ± 0.15	B ± 0.2	D Max.	F Max.	G ± 0.25	H ± 0.3	K ± 0.2	L ± 0.2	Ø M ± 0.2
IP67	IP68										
UTOW7106PH	UTOW7106PH6	10	14.9	18.0	31.7	3.2	27.0	22.2	16.6	17.0	17.7
UTOW71210PH	UTOW71210PH6	12	19.0				31.8	27.0	20.8	21.2	22.5
UTOW71419PH	UTOW71419PH6	14	22.2				34.9	30.2	23.9	24.3	25.7
UTOW71626PH	UTOW71626PH6	16	25.3				38.1	33.3	27.1	27.5	28.7
UTOW71832PH	UTOW71832PH6	18	28.5				41.3	36.5	30.3	30.6	32.0
UTOW72041PH	UTOW72041PH6	20	31.7	22.7	33.3	6.4	46.1	39.7	33.4	33.8	35.2
UTOW72255PH	UTOW72255PH6	22	34.9				49.2	42.9	36.6	37.0	38.4
UTOW72461PH	UTOW72461PH6	24	38.0				52.4	46.0	39.8	40.1	41.5

For 96h salt spray version add "01" at the end of the part number e.g. UTOW71419PH601 (only jam nut will be black anodised)

Jam nut receptacle for socket contacts (UTOW7---SH/SH6) - suitable for rear panel mounting



Part number		Shell size	Ø A ± 0.15	B ± 0.2	D Max.	F Max.	G ± 0.25	H ± 0.3	K ± 0.2	L ± 0.2	Ø M ± 0.2
IP67	IP68										
UTOW7106SH	UTOW7106SH6	10	14.9	18.0	24.3	3.2	27.0	22.2	16.6	17.0	17.7
UTOW71210SH	UTOW71210SH6	12	19.0				31.8	27.0	20.8	21.2	22.5
UTOW71419SH	UTOW71419SH6	14	22.2				34.9	30.2	23.9	24.3	25.7
UTOW71626SH	UTOW71626SH6	16	25.3				38.1	33.3	27.1	27.5	28.7
UTOW71832SH	UTOW71832SH6	18	28.5				41.3	36.5	30.3	30.6	32.0
UTOW72041SH	UTOW72041SH6	20	31.7	22.7	25.9	6.4	46.1	39.7	33.4	33.8	35.2
UTOW72255SH	UTOW72255SH6	22	34.9				49.2	42.9	36.6	37.0	38.4
UTOW72461SH	UTOW72461SH6	24	38.0				52.4	46.0	39.8	40.1	41.5

For 96h salt spray version add "01" at the end of the part number e.g. UTOW71419PH601 (only jam nut will be black anodised)

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Insert rotation positions

The table shows possible insert rotation positions.

5 positions N,W,X,Y and Z differ in the degree of rotation for the various connectors sizes.

The table indicates the exact degree of rotation.

Shell size	Contact number	Insert rotation positions			
		W	X	Y	Z
10	6	90	-	-	-
12	10	60	155	270	295
14	19	30	165	315	-
16	26	60	-	275	338
18	32	85	138	222	265
20	41	45	126	225	-
22	55	30	142	226	314
24	61	90	180	270	324

