VG & MIL CONNECTORS
SPACE & AEROSPACE CONNECTORS
ATEX & IECEX CONNECTORS
SUBSEA CONNECTORS
FIBER OPTIC CONNECTORS
ACCESSORIES
CABLE HARNESSES
CUSTOMIZED PRODUCTS
SERVICE

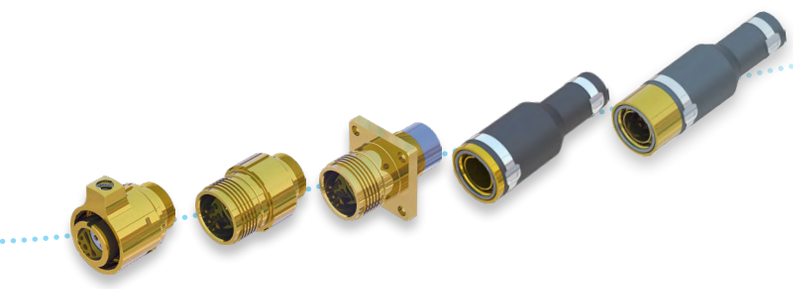
SERIES 8811

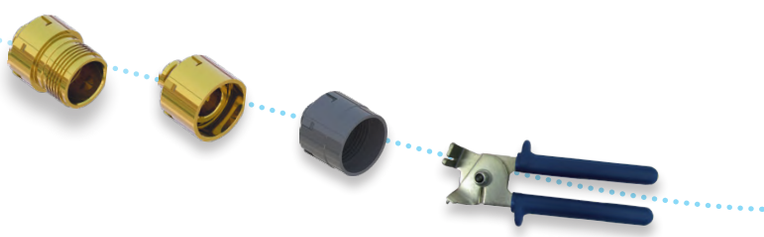
CONNECTORS FOR HARSH AND HAZARDOUS ENVIRONMENTS

FOR EXPLOSIVE AREAS AND UNDERWATER APPLICATIONS UP TO 1000 M

JOWO Systemtechnik GmbH

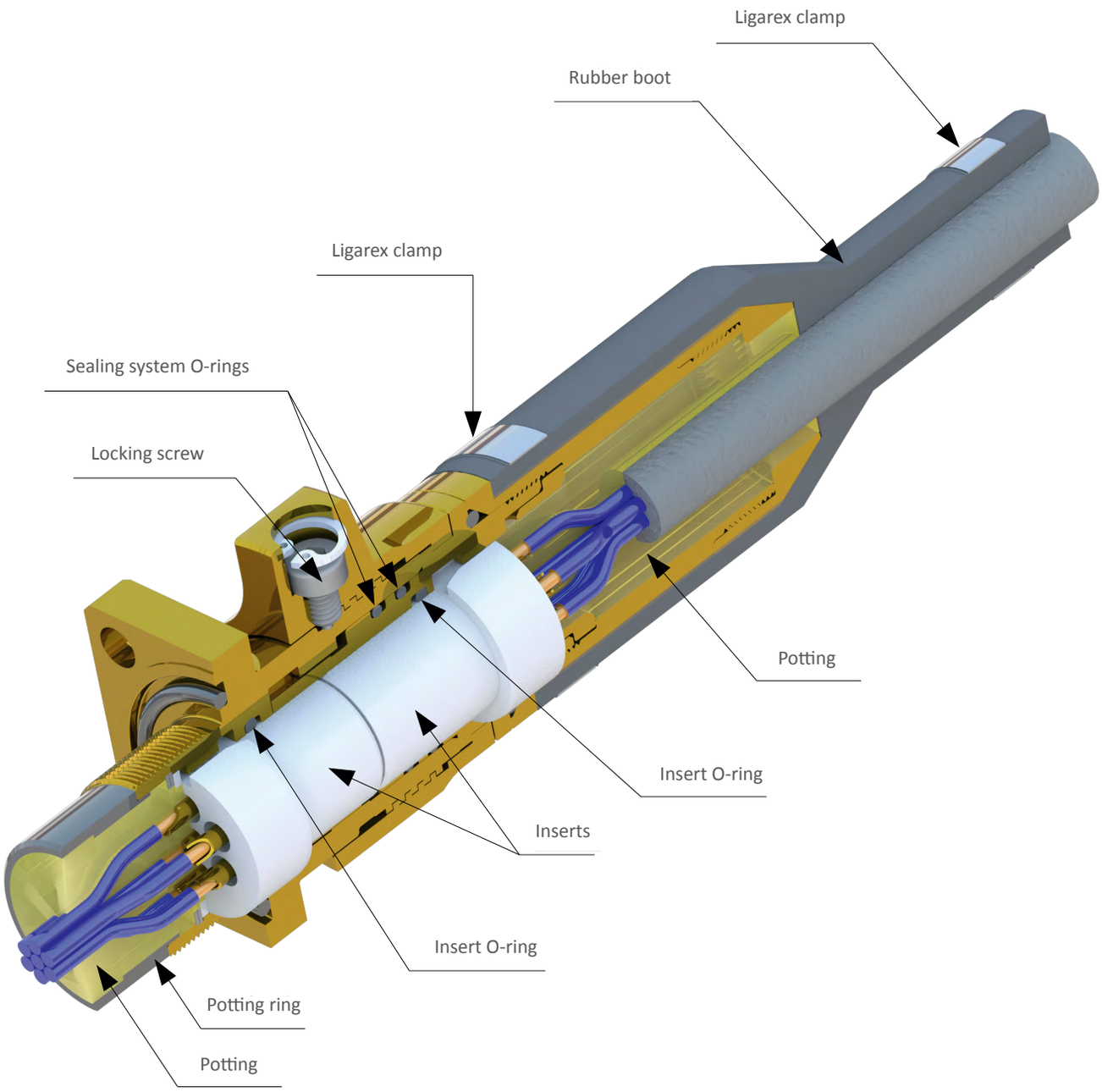
CONTENT

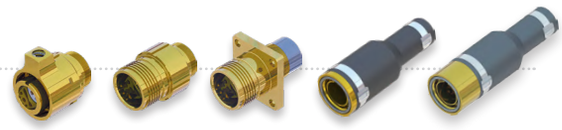




FUNCTIONAL DESCRIPTION

Structure of a JOWO Series 8811 connector
(Receptacle Q with plug G and backshell C)





Explosion proof connector offering a high robustness and resistance to marine corrosion.

> scoop proof insert
> screw locking system
> solder contacts
> watertight up to 10 MPa
(≈ 1000 m water depth)

SPECIFICATIONS

MATERIALS

Shells:
Nickel aluminum bronze CW307G
Stainless steel 316L

Insulator:
PTFE

Contact body:
Copper alloy

Contact plating:
Gold over nickel plated

O-rings:
NBR

Rubber boot:
NBR

ENVIRONMENTAL

Operating temperature:
Ambient -30°C to +70°C
Subsea -4°C to +40°C

Ingress protection: IP 6X
Mated: 10 MPa (100 bar)
Unmated: 3 MPa (30 bar)

Mechanical:
Durability:
500 mating/unmating cycles

Shocks:
100 g during 11 ms

Vibrations:
5 to 13 Hz ± 4 mm
13 to 300 Hz = 3 g

EXPLOSIVE ATMOSPHERES

Certificates:
IECEx EPS 15.0015X
EPS 15 ATEX 1 980 X

Approvals:
Ex d IIC T6/T5 Gb
Ex t IIIC T80°C/T100°C IP6X Db
Ex d I Mb

Zones:
Dust: Zone 21/22
Gas: Zone 1/2

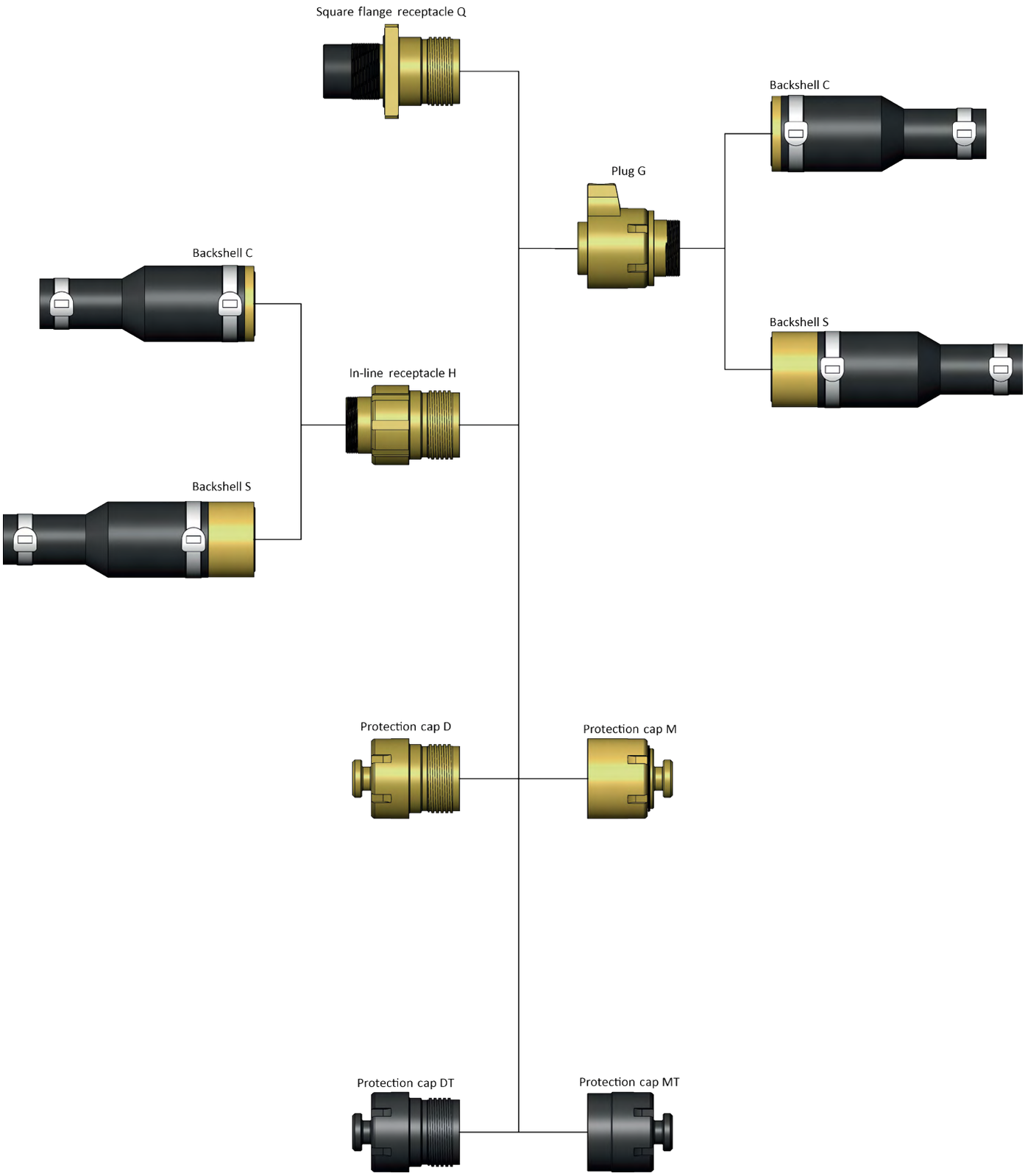
Equipment protection levels:
Mb
Gb
Db

CONTACTS

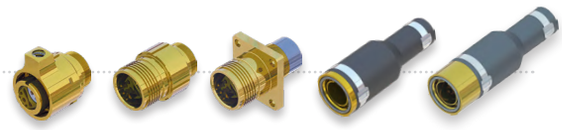
			Max. conductor section			
Contact size	Current rating per contact [A]	Solder cup min. Ø [mm]	Class 1* [mm²]	Class 2* [mm²]	Class 5/6* [mm²]	AWG
20	7,5	1,1	0,75	0,5	0,5	20
16	13	1,4	1,00	1,00	0,75	16
14	15	1,9	2,50	1,50	1,50	14
12	23	2,6	4,00	2,50	2,50	12

* According to IEC 60228

RANGE PRESENTATION



PART NUMBERING SYSTEM



SHELLS

	8811 -	G	A -	2 -	1920	P

SHELL TYPE

G	Plug
H	In-line receptacle
Q	Square flange receptacle

MATERIAL

A	Nickel aluminium bronze CW307G
E	Stainless steel 316L

SHELL SIZE

1,2,3

CONTACT ARRANGEMENT

see page 7

CONTACT TYPE

P	pin contacts
S	socket contacts

BACKSHELLS

	8811 -	C	A -	2-	115-130

TYPE

C	Molding backshell
S	Band molding backshell

MATERIAL

A	Nickel aluminium bronze CW307G
E	Stainless steel 316L

SHELL SIZE

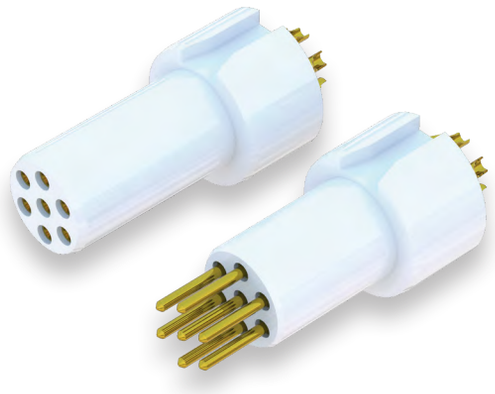
1,2,3

CABLE SIZE

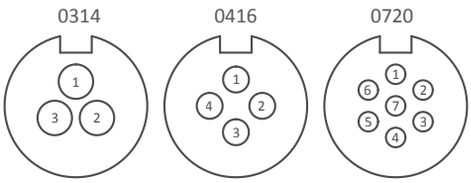
see page 11 and 12

CONTACT ARRANGEMENTS

(FEMALE INSULATOR REAR VIEW)

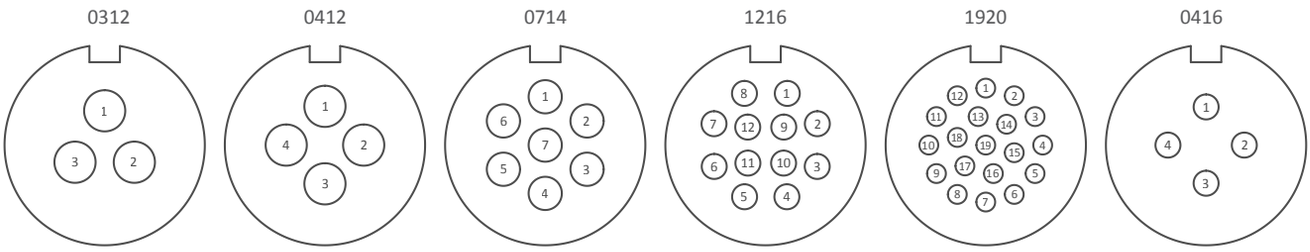


Shell size 1



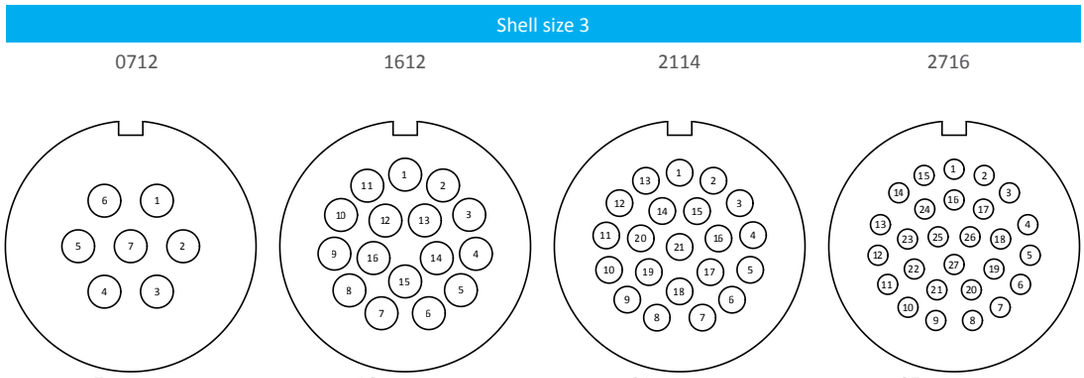
3 contacts size 14 | 4 contacts size 16 | 7 contacts size 20

Shell size 2



3 contacts size 12 | 4 contacts size 12 | 7 contacts size 14 | 12 contacts size 16 | 19 contacts size 20 | 4 contacts size 16

Shell size 3

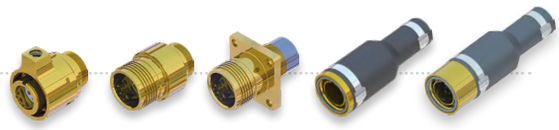


7 contacts size 12 | 16 contacts size 12 | 21 contacts size 14 | 27 contacts size 16

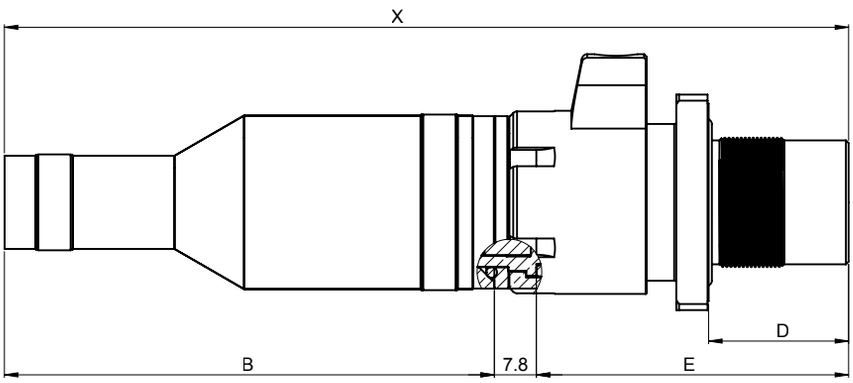
ELECTRICAL CHARACTERISTICS

Shell size	Contact layout	Max. current [A]				Working voltage [Vrms]
		T6 / T80°C			T5 / T100°C	
		Ta=40°C	Ta=50°C	Ta=60°C	Ta=70°C	
1	0314	14	10	10	10	700
	0416	9,0	6,40	6,40	6,40	800
	0720	4,2	3,0	3,0	3,0	600
2	0312	17,2	12,2	12,2	12,2	800
	0412	16	11,4	11,4	11,4	800
	0714	8,7	6,2	6,2	6,2	700
	1216	6,1	4,3	4,3	4,3	800
	1920	3,0	2,1	2,1	2,1	600
	0416	9,0	6,4	6,4	6,4	800
3	0712	15	13	9	9	800
	1612	10	7,1	7,1	7,1	600
	2114	6,0	4,0	4,0	4,0	700
	2716	4,5	3,2	3,2	3,2	800

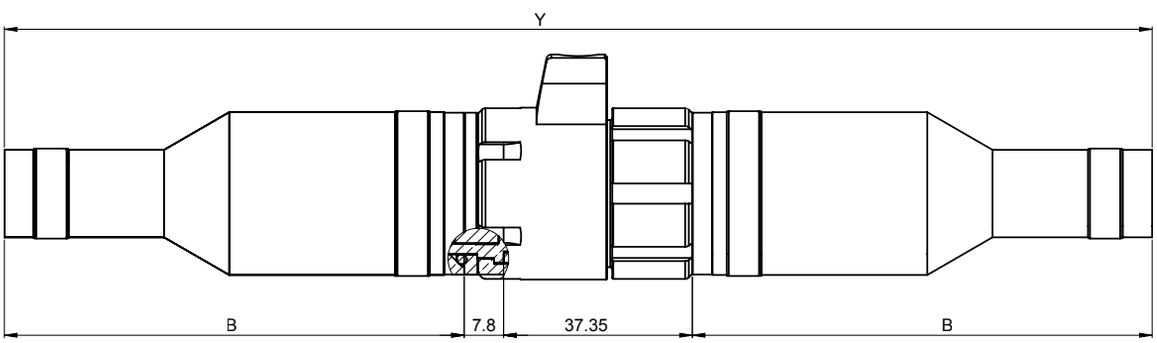
SHELL DIMENSIONS



Plug G + backshell C with receptacle Q



Plug G with backshell C + receptacle Q

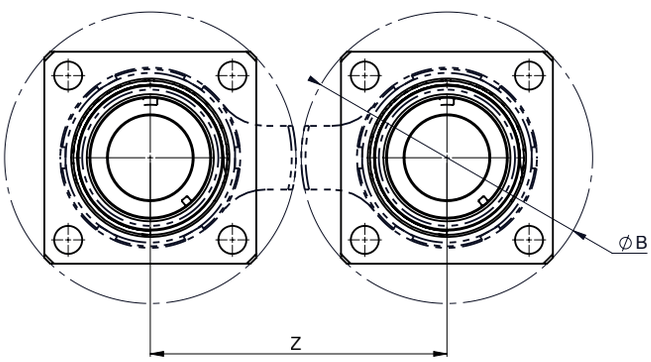


Plug G with backshell C + receptacle H with backshell C

B = Length of backshell (For details see page 10)
E = Length of receptacle Q (For details see page 11)

Shell size	X	Y
1	85,8	93,15
2	93,8	110,15
3	115,3	136,15

Recommend distance between receptacles



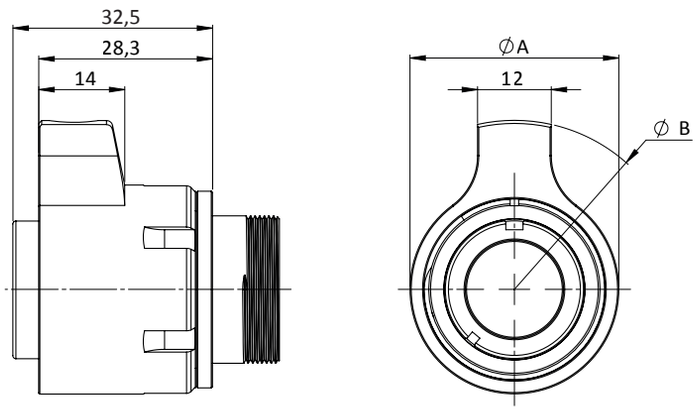
ØB = Size of the coupling nut (for details see page 9)

Shell size	Z
1	49
2	57
3	69

UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE IN MM

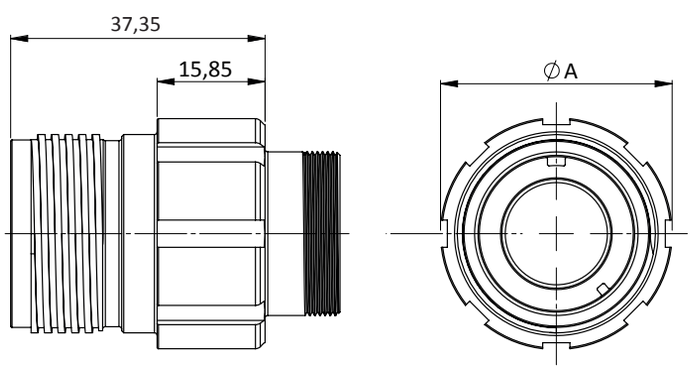
SHELL DIMENSIONS

Plug G



Shell size	ØA [mm]	ØB [mm]
1	24	47
2	34	55
3	46	67

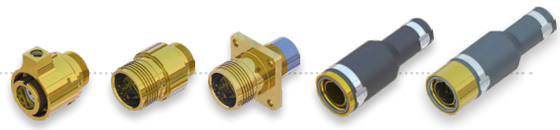
In-line receptacle H



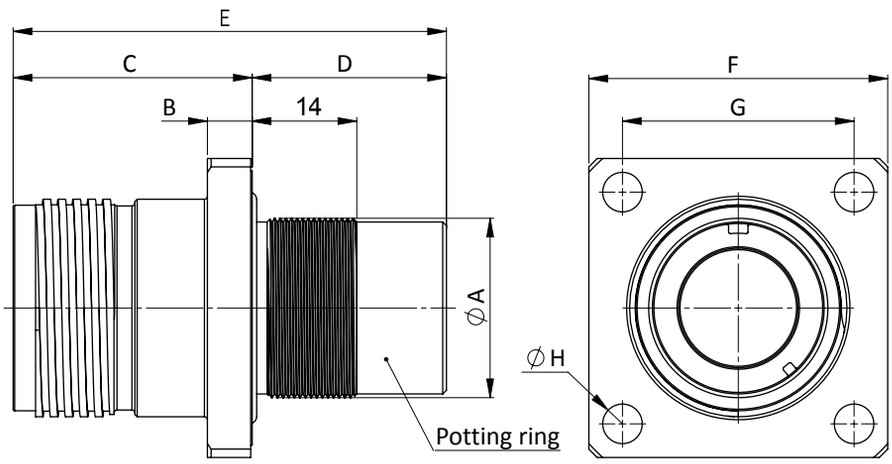
Shell size	ØA [mm]
1	24
2	34
3	46

UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE IN MM

SHELL DIMENSIONS

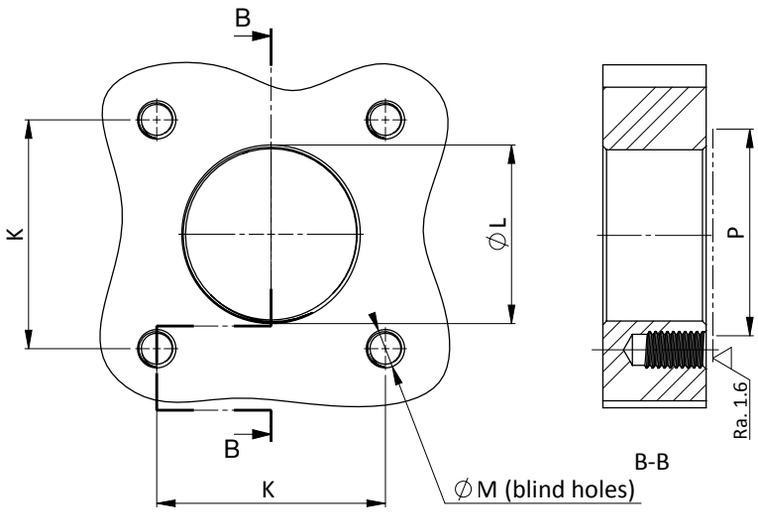


Square flange receptacle Q

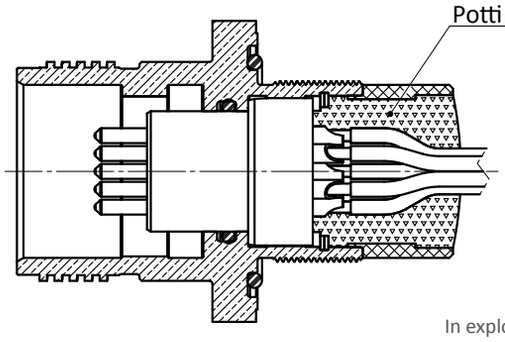


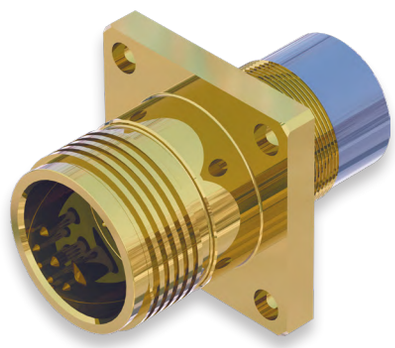
Shell size	ØA -6g	B ±0.15	C	D	E	F ±0.3	G ±0.1	ØH +0.1
1	M18x0.75	5	30	24	54	32	24	4,2
2	M24x0.75	6	32	26	58	40	31	5,3
3	M36x1	7	34	29	62	52	42	6,3

PANEL CUT OUT



Shell size	K ±0.1	ØL +0.3	ØM	P ± 1
1	24	18	M4	33
2	31	24	M5	36
3	42	36	M6	48





In explosive atmospheres the cable entry must be potted.

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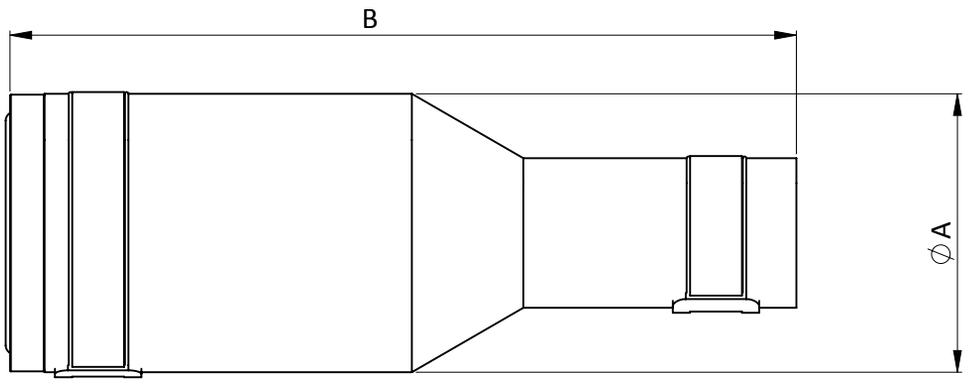
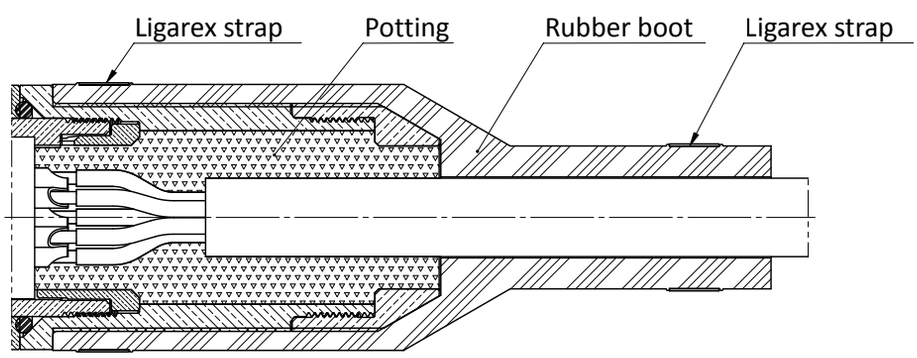
SHELL DIMENSIONS

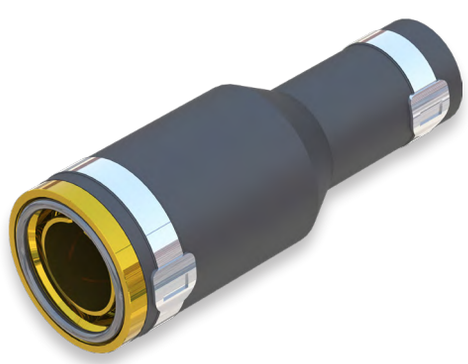
Molding backshell C



Shell size	ØA	B
1	24,0	77
2	32,5	97
3	45,5	116



Shell size	Order code	Outside cable-Ø
1	075-085	7,5 – 8,5
	085-095	8,5 – 9,5
	095-105	9,5 – 10,5
	105-115	10,5 – 11,5
2	100-115	10,0 – 11,5
	115-130	11,5 – 13,0
	140-155	14,0 – 15,5
	145-160	14,5 – 16,0
3	200-230	20,0 – 23,0
	240-260	24,0 – 26,0
	270-290	27,0 – 29,0



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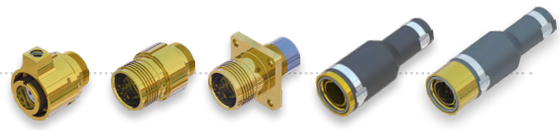
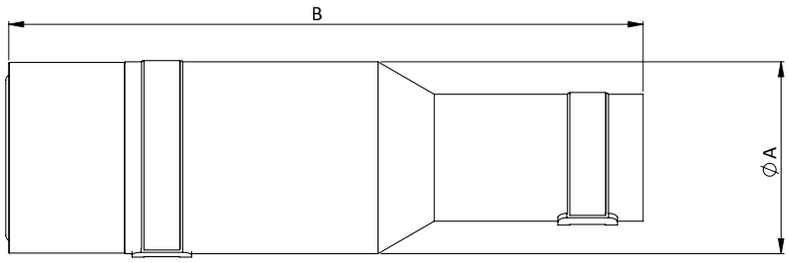
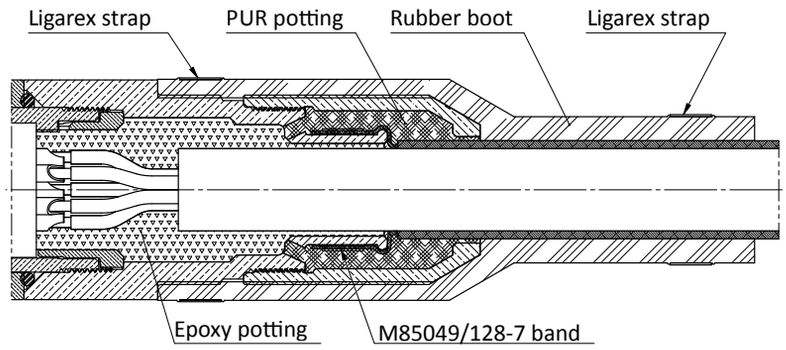
SHELL DIMENSIONS



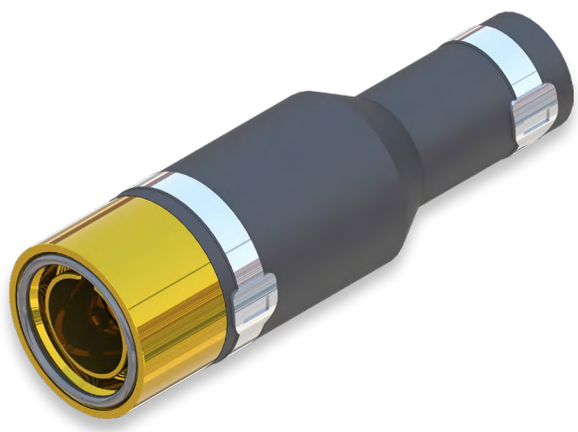
Band molding backshell S



Shell size	ØA	B
1	24,0	79
2	32,5	107
3	43,2	152



Shell size	Order code	Outside cable-Ø
1	075-085	7,5 – 8,5
	085-095	8,5 – 9,5
	095-105	9,5 – 10,5
2	100-115	10,0 – 11,5
	115-130	11,5 – 13,0
3	200-230	20,0 – 23,0



UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE IN MM

PROTECTION CAPS

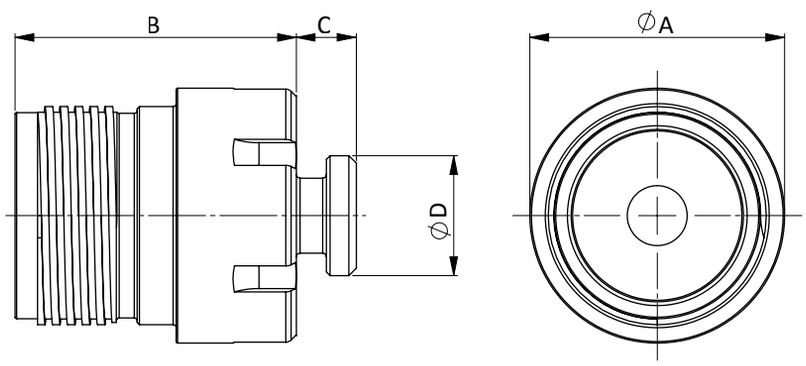
In explosive atmospheres plugs and receptacles are not permitted to be energized when fitted with these protection caps.

Protection caps made of POM are only splash proof (IP 67). The metal versions are watertight up to 10 MPa (100 bar)

Part numbering system

		8811 -	M	T -	2 -	N
TYPE						
D	Protection cap for plugs					
M	Protection cap for receptacles					
MATERIAL						
W	Nickel aluminium bronze CW307G					
O	Stainless steel 316L					
T	POM					
SHELL SIZE						
1,2,3						
ROPE						
N	without rope					

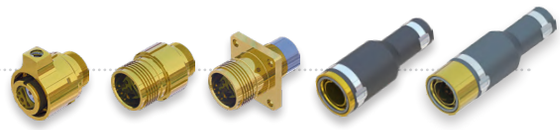
Protection cap D



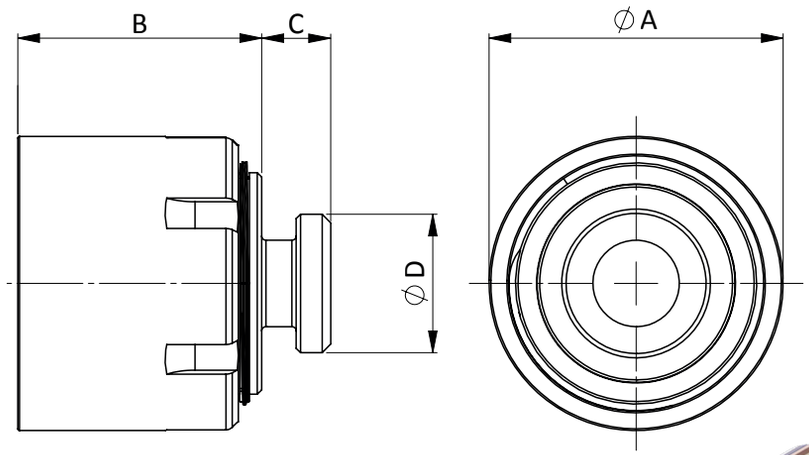
Shell size	ØA	B	C	ØD
1	24,0	37,5	6	13
2	34,0	37,5	8	16
3	46,0	37,5	10	19

UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE IN MM

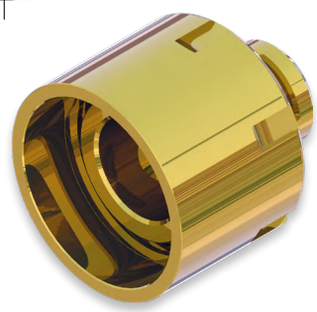
PROTECTION CAPS



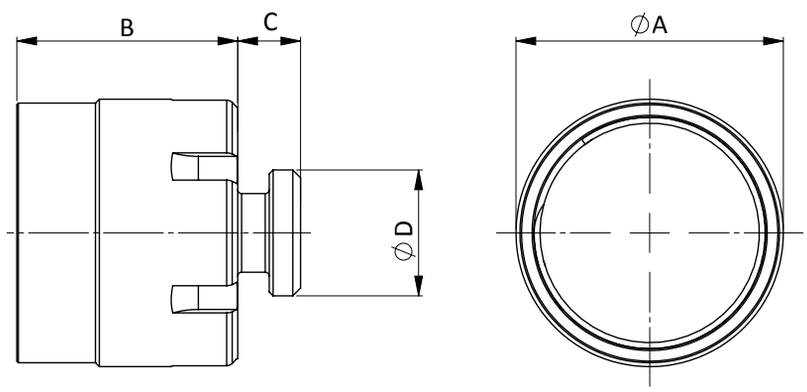
Protection cap M



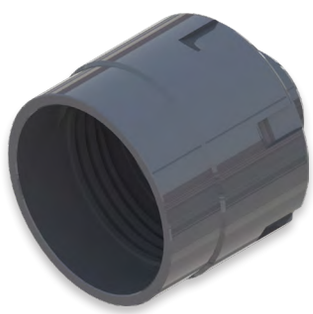
Shell size	ØA	B	C	ØD
1	24,0	28,5	6	13
2	34,0	28,5	8	16
3	46,0	28,5	10	19



Protection cap MT



Shell size	ØA	B	C	ØD
1	24,0	28	6	13
2	34,0	28	8	16
3	46,0	28	10	19



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TOOLS

Banding tool for backshell type C and S

JOWO P/N: 600600275

JOWO P/N: 600600284

Tool with torque limiter

Banding tool for backshell type S

JOWO P/N: 600600303

CONSUMABLE PRODUCTS

JOWO P/N	Description
8811-9000	JOWO potting set 50 gramm
8811-9001	JOWO potting set 150 gramm

The JOWO potting set contains the following materials:

JOWO P/N	Description
600900209	Araldite MY757 resin
600900210	HY956 hardener
600900211	Icosit KC 330 primer
	Syringe
	Needle for syringe

START CONTACT

+49 4221 916 495 -0

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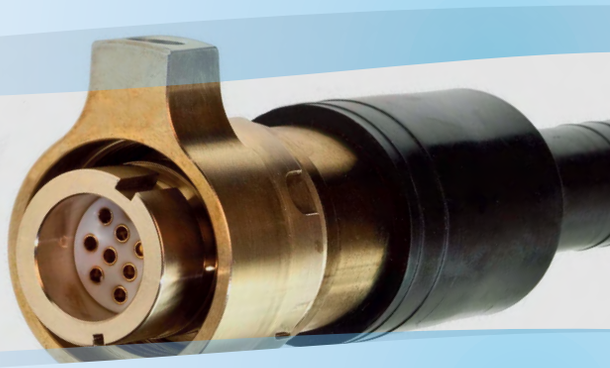

WWW.JOWOSY.DE

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EMAIL: INFO@JOWOSY.DE / WEB: WWW.JOWOSY.DE

JOWO
Systemtechnik GmbH

Stand 12 / 2017 / LAYOUT & DRUCK MEDIA-73.DE