

Series **Page**

SF Series

1-2

IP rating: IP67
Coupling: push-pull
No. of contact: 2-9



ST Series

3-4

IP rating: IP67
Coupling: threaded
No. of contact: 2-9



SP Series

5-11

IP rating: IP68
Coupling: threaded
No. of contact: SP13:2-9
SP17:2-9
SP21:2-12



RJ45F Series

12

IP rating: IP67
Coupling: bayonet
For Ethernet RJ45F connector



WA Series

13-14

IP rating: IP67
Coupling: threaded
No. of contact: 3+PE, 6+PE



Series **Page**

WP Series

15-16

IP rating: IP44, IP55
Coupling: bayonet
No. of contact: 2-12



WS Series

17-24

IP rating: for indoor only
Coupling: threaded
No. of contact: 2-61



WF Series

25-31

IP rating: IP44, IP55, IP65, IP67
Coupling: threaded
No. of contact: 2-61



WY Series

33-39

IP rating: IP44, IP55, IP65, IP66, IP67
Coupling: bayonet
No. of contact: 2-61



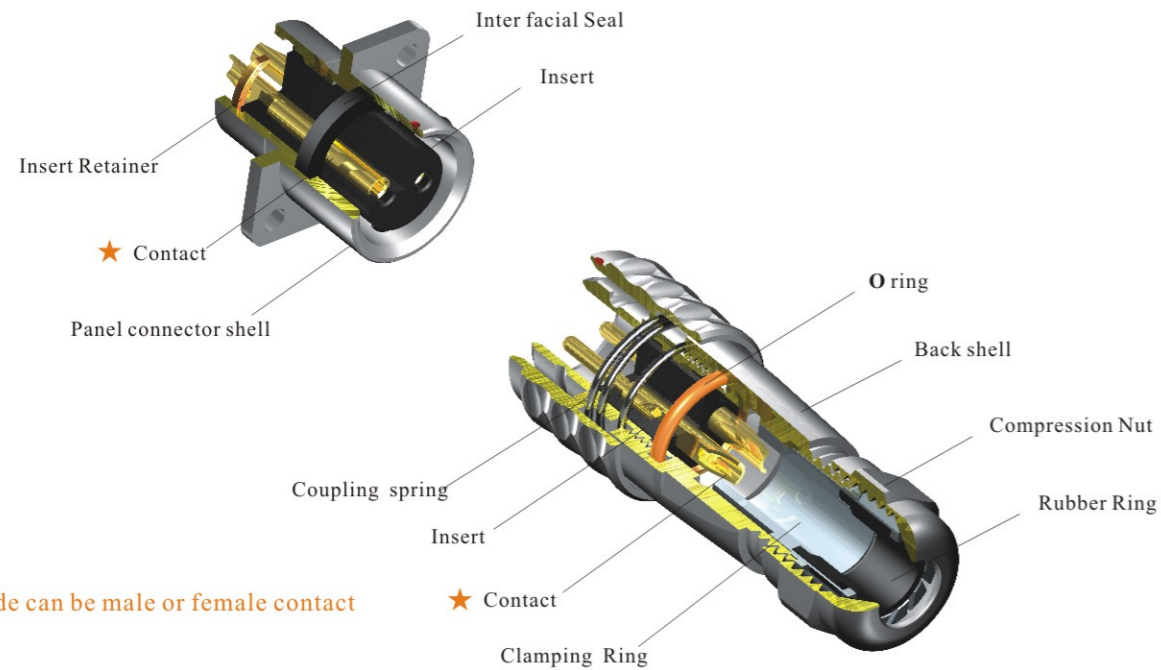
WS, WF, WY

43-44

Contact arrangement and spec



● SF12 IP67 Push-pull coupling



★ Each side can be male or female contact

★ Contact

Material and spec

Coupling	PUSH-PULL
Shell material	Brass with chrome plating
Insert material	PPS max temperature 260 °C
Contact material	Brass with gold plating
Termination	Solder
Cable outer diameter range	I : 4-6.5mm II : 5-8mm
IP rating	IP67
Mating cycle	> 500
Temperature range	-25~+85°C
Insulation resistance MΩ	2000

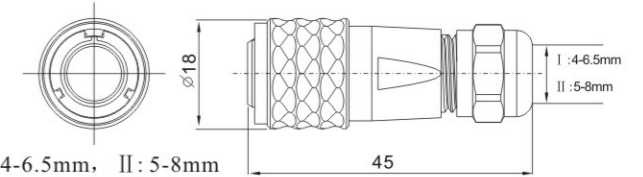
SF12 Series IP67



SF1210 / P — SF1210 / S

Cable connector

Mate with SF1211, SF1212, SF1213



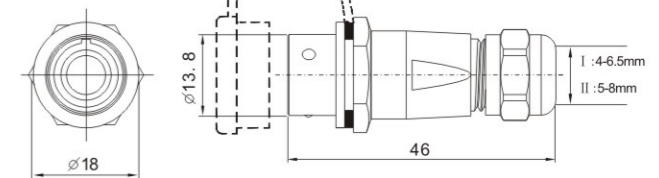
Cable outer diameter: I : 4-6.5mm, II : 5-8mm
Number of contact: 2. 3. 4. 5. 6. 7. 9



SF1211 / P — SF1211 / S

In-line cable connector

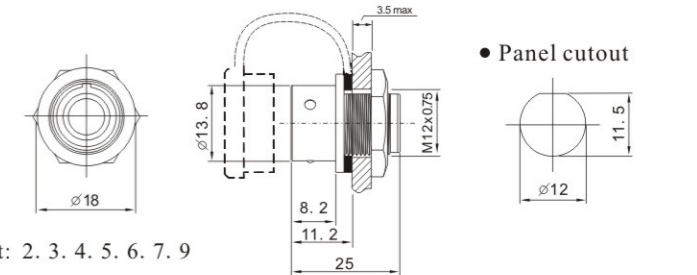
Mate with SF1210



SF1212 / P — SF1212 / S

Front mount

Mate with SF1210



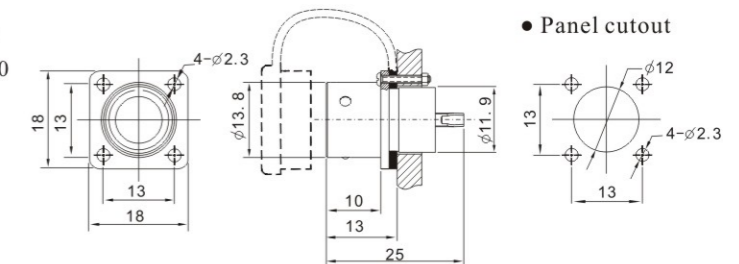
Number of contact: 2. 3. 4. 5. 6. 7. 9



SF1213 / P — SF1213 / S

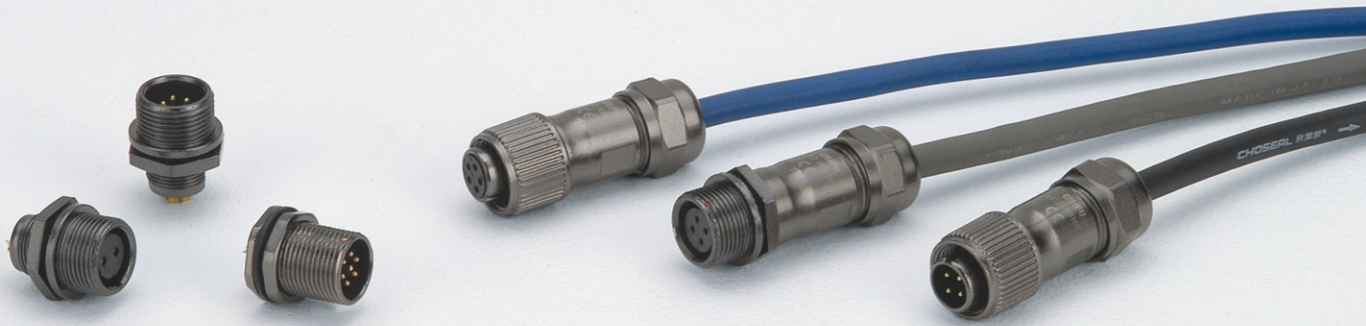
Square flange

Mate with SF1210

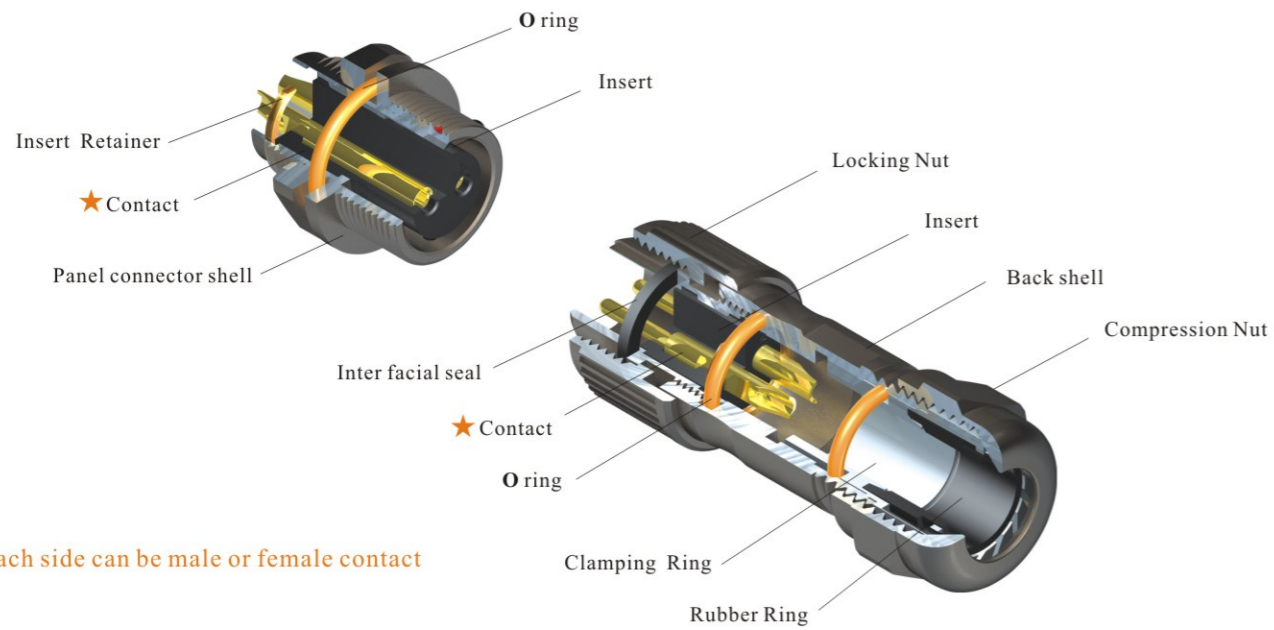


Contact arrangement and spec

Number of contact	2	3	4	5	6	7	9
Male contact face view							
Rated current (A)	13A	13A	5A	5A	5A	5A	3A
Contact diameter	∅ 1.6X2	∅ 1.6X3	∅ 1X4	∅ 1X5	∅ 1X6	∅ 1X7	∅ 0.7X9
Rated voltage (AC.V)	250V	250V	200V	180V	125V	125V	125V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1000V	1000V	1000V	1000V
Contact resistance mΩ	2	2	5	5	5	5	10
Wire size mm ² /AWG	≤2/14	≤2/14	≤0.785/18	≤0.785/18	≤0.785/18	≤0.785/18	≤0.785/18



● ST12 IP67 Threaded coupling



★ Each side can be male or female contact

Material and spec

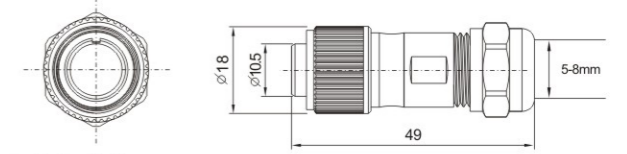
Coupling	Threaded coupling
Shell material	Zinc alloy with black nickel plating
Insert material	PPS max temperature 260 °C
Contact material	Brass with gold plating
Termination	Solder
Cable outer diameter range	5-8mm
IP rating	IP67
Mating cycle	>500
Temperature range	-25C~+85C
Insulation resistance MΩ	2000

ST12 Series IP67



Cable connector

Mate with ST1211, ST1212, ST1213



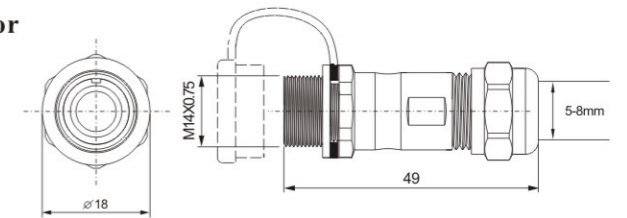
ST1210 / P_ ST1210 / S_

Number of contact: 2. 3. 4. 5. 6. 7. 9



In-line cable connector

Mate with ST1210

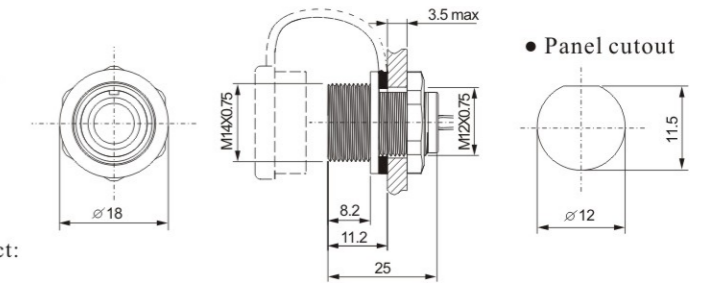


ST1211 / P_ ST1211 / S_



Front mount

Mate with ST1210



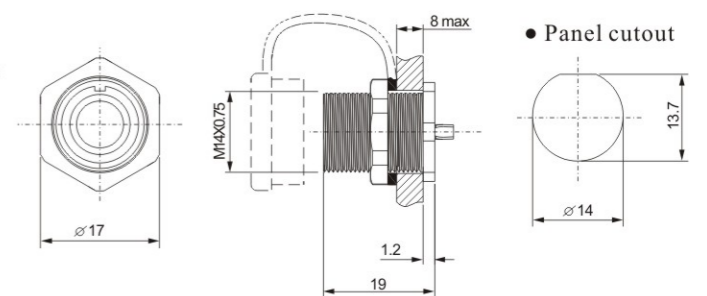
ST1212 / P_ ST1212 / S_

Number of contact: 2. 3. 4. 5. 6. 7. 9



Rear mount

Mate with ST1210



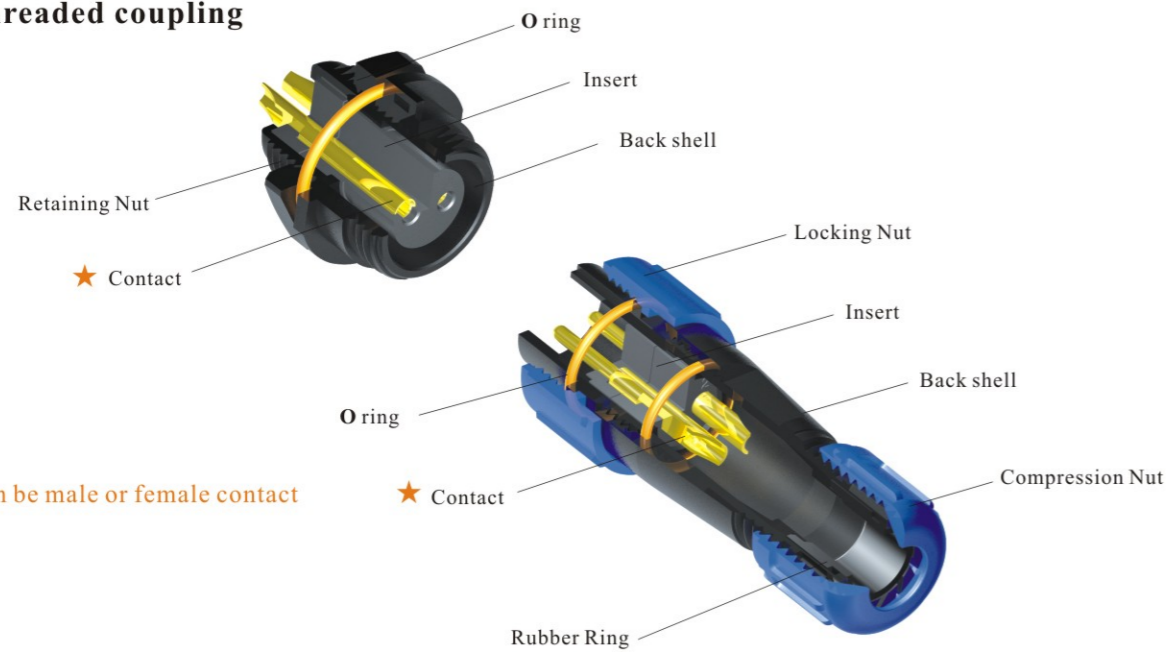
ST1213 / P_ ST1213 / S_

Contact arrangement and spec

Number of contact	2	3	4	5	6	7	9
Male contact face view							
Rated current (A)	13A	13A	5A	5A	5A	5A	3A
Contact diameter	∅ 1.6X2	∅ 1.6X3	∅ 1X4	∅ 1X5	∅ 1X6	∅ 1X7	∅ 0.7X9
Rated voltage (AC.V)	250V	250V	200V	180V	125V	125V	125V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1000V	1000V	1000V	1000V
Contact resistance mΩ	2	2	5	5	5	5	10
Wire size mm ² /AWG	≤2/14	≤2/14	≤0.785/18	≤0.785/18	≤0.785/18	≤0.785/18	≤0.785/18



● IP68 Threaded coupling



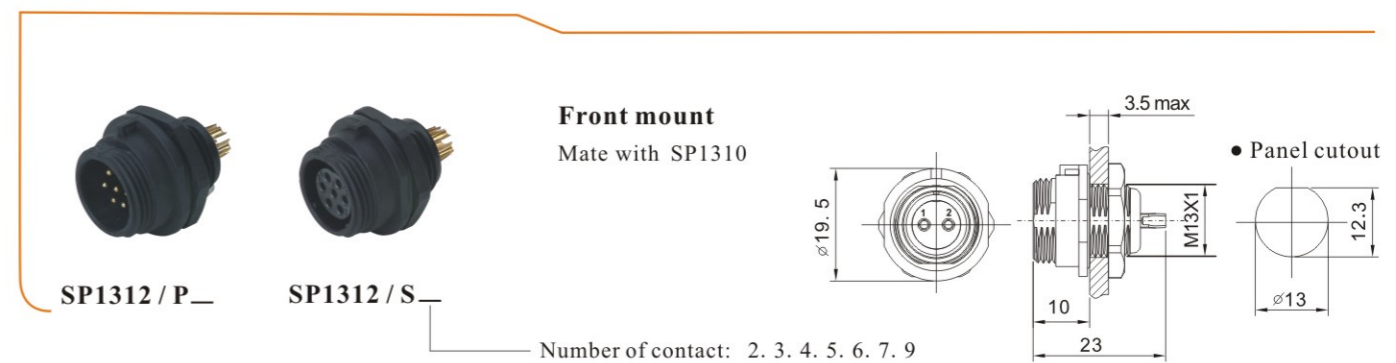
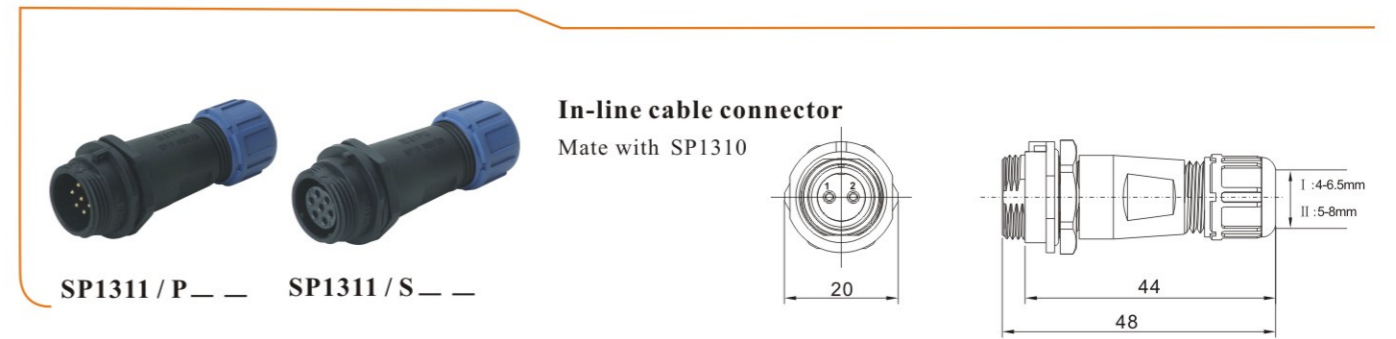
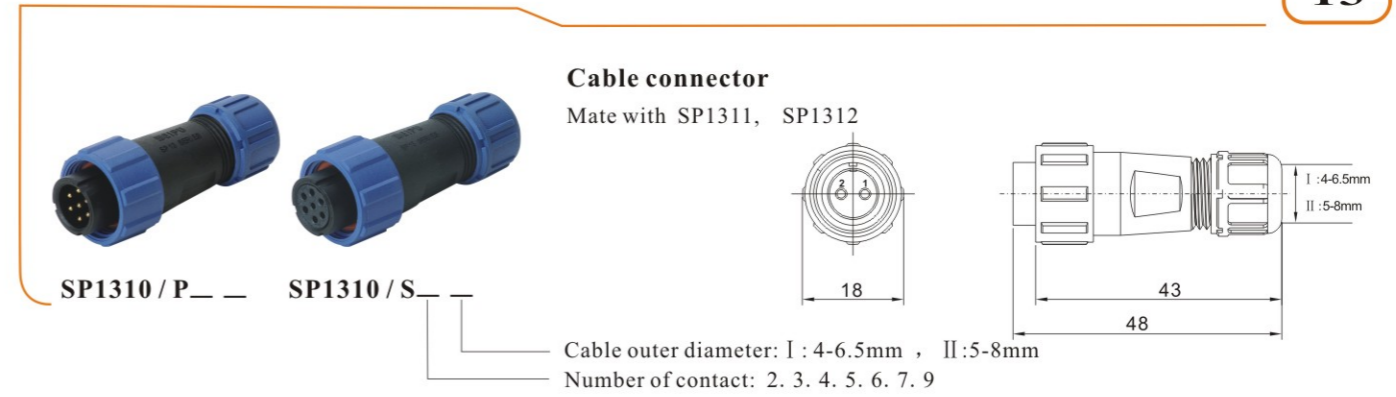
★ Each side can be male or female contact

★ Contact

Material and spec

Product model	Connector	Overmolded Cable Assemblies
Coupling	Threaded coupling	Threaded coupling
Shell material	Nylon66, fire resistance: V-0	PC, PVC, fire resistance: V-0; Anodizing Aluminium Proess
Insert material	PPS max temperature 260 °C	PPS max temperature 260 °C
Contact material	Brass with gold plating	Brass with gold plating
Termination	SP13: solder, SP17: solder, SP21: solder / screw	
Cable outer diameter range	SP13 I: 4-6.5mm SP13 II: 5-8mm SP17: 6-10mm SP21 I: 4.5-7mm SP21 II: 7-12mm	
IP rating	IP68	IP68
Mating cycle	>500	>500
Temperature range	-25°C~+85°C	-20°C~+85°C
Insulation resistance MΩ	2000	2000

SP13 Series IP68



Contact arrangement and spec

Number of contact	2	3	4	5	6	7	9
Male contact face view							
Rated current (A)	13A	13A	5A	5A	5A	5A	3A
Contact diameter	∅ 1.6X2	∅ 1.6X3	∅ 1X4	∅ 1X5	∅ 1X6	∅ 1X7	∅ 0.7X9
Rated voltage (AC.V)	250V	250V	200V	180V	125V	125V	125V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1000V	1000V	1000V	1000V
Contact resistance mΩ	2	2	5	5	5	5	10
Wire size mm ² /AWG	≤2/14	≤2/14	≤0.785/18	≤0.785/18	≤0.785/18	≤0.785/18	≤0.785/18

SP17 Series IP68

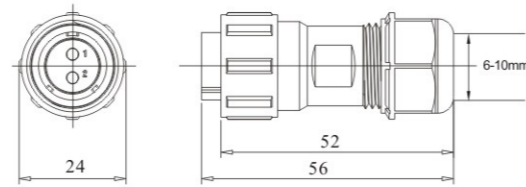
SP
17



Cable connector
Mate with SP1711, SP1712

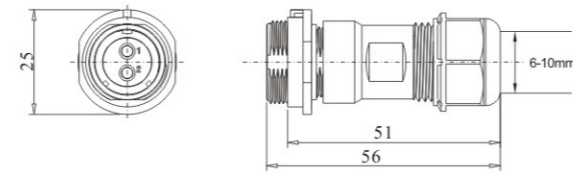
SP1710 / P_ SP1710 / S_

Number of contact: 2. 3. 4. 5. 7. 9



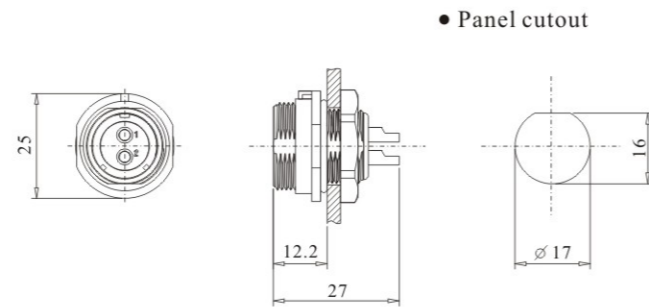
In-line cable connector
Mate with SP1710

SP1711 / P_ SP1711 / S_



Front mount
Mate with SP1710

SP1712 / P_ SP1712 / S_



• Panel cutout

Contact arrangement and spec

Number of contact	2	3	4	5	7	9
Male contact face view						
Rated current (A)	10A	10A	5A	5A	5A	5A
Contact diameter	∅ 1.5X2	∅ 1.5X3	∅ 1X4	∅ 1X5	∅ 1X7	∅ 1X9
Rated voltage (AC.V)	500V	500V	500V	500V	400V	400V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1500V	1200V	1200V
Contact resistance mΩ	2.5	2.5	5	5	5	5
Wire size mm ² /AWG	≤ 2/14	≤ 2/14	≤ 0.785/18	≤ 0.785/18	≤ 0.785/18	≤ 0.785/18

SP21 Series IP68

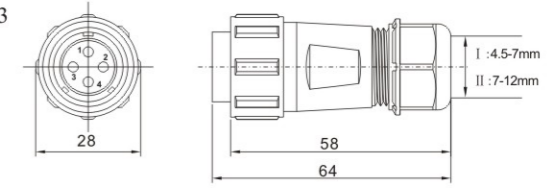
SP
21



Cable connector
Mate with SP2111, SP2112, SP2113

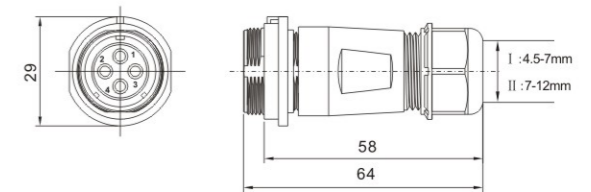
SP2110 / P_ SP2110 / S_

Cable outer diameter
I : 4.5-7mm, II : 7-12mm
Number of contact: 2. 3. 4. 5. 5B. 5C. 7. 9. 12



In-line cable connector
Mate with SP2110

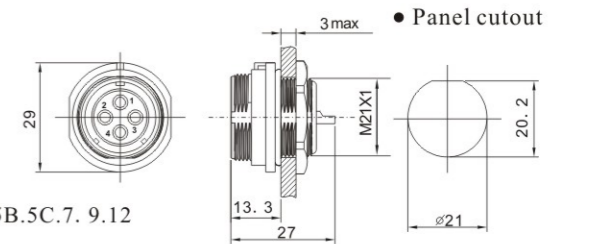
SP2111 / P_ SP2111 / S_



Front mount
Mate with SP2110

SP2112 / P_ SP2112 / S_

Number of contact: 2. 3. 4. 5. 5B. 5C. 7. 9. 12

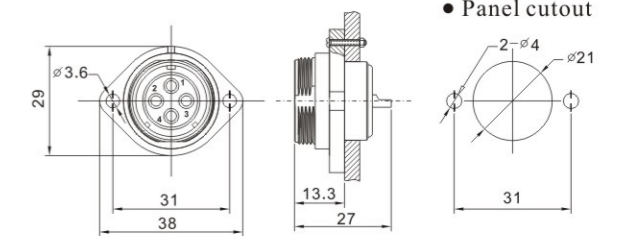


• Panel cutout



2-hole flange
Mate with SP2110

SP2113 / P_ SP2113 / S_



• Panel cutout

Contact arrangement and spec

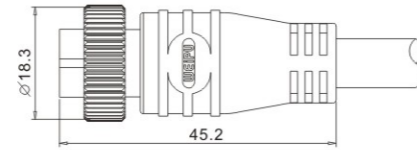
Number of contact	2	3	4	5	5B	5C	7	9	12
Male contact face view									
Rated current (A)	30A	30A	30A	30A	5A, 30A	15A	15A	5A	5A
Contact diameter	∅ 3X2	∅ 3X3	∅ 3X4	∅ 3X5	∅ 1X3 ∅ 3X2	∅ 2X5	∅ 2X7	∅ 1X9	∅ 1X12
Termination	solder / screw	solder / screw	solder / screw	solder / screw	solder / screw	solder	solder	solder	solder
Rated voltage (AC.V)	500V	500V	500V	500V	500V	500V	500V	500V	400V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1500V	1500V	1500V	1500V	1500V	1200V
Contact resistance mΩ	1	1	1	1	5, 1	2.5	2.5	5	5
Wire size mm ² /AWG	≤ 4.17/11	≤ 4.17/11	≤ 4.17/11	≤ 4.17/11	≤ 0.785/18 ≤ 4.17/11	≤ 2/14	≤ 2/14	≤ 0.785/18	≤ 0.785/18

Overmolded Cable Assemblies: SP13 Series IP68

SP
13



Single ended plug assembly
Mate with SP1311,SP1312,SP1315

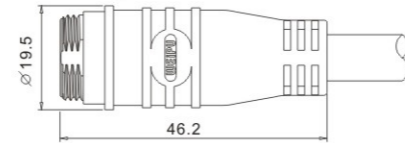


SP1314 / P_ SP1314 / S_

Number of contact: 2. 3. 4. 5. 6. 7. 9



Single ended in-line receptacle assembly
Mate with SP1310,SP1314



SP1315 / P_ SP1315 / S_

Double ended extension assembly
-plug & receptacle



SP1314 / _ + SP1315 / _

Double ended plug assembly
-plug & plug



SP1314 / _ + SP1314 / _

Double ended in-line receptacle assembly
-receptacle & receptacle



SP1315 / _ + SP1315 / _

Number of contact: 2. 3. 4. 5. 6. 7. 9
P:male contact S:female contact

The plugs and receptacles are available with male contact or female contact

Contact arrangement and spec

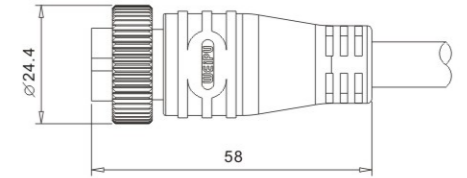
Number of contact	2	3	4	5	6	7	9		
Male contact face view									
Rated current (A)	8A	8A	4A	4A	4A	4A	1.6A		
Contact diameter	∅ 1.6X2	∅1.6X3	∅ 1X4	∅1X5	∅ 1X6	∅ 1X7	∅ 0.7X9		
Rated voltage (AC.V)	250V	250V	200V	180V	125V	125V	125V		
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1000V	1000V	1000V	1000V		
Contact resistance mΩ	2	2	5	5	5	5	10		
Wire size mm ² /AWG	≤ 1/17	≤ 1/17	≤ 0.5/20	≤ 0.5/20	≤ 0.5/20	≤ 0.5/20	≤ 0.2/24		
Cable Color	1- black	2- white	3- red	4- yellow	5- green	6- brown	7- blue	8- orange	9- purple

Overmolded Cable Assemblies: SP17 Series IP68

SP
17



Single ended plug assembly
Mate with SP1711,SP1712,SP1715

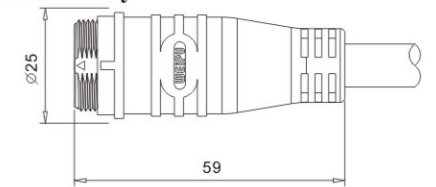


SP1714 / P_ SP1714 / S_

Number of contact: 2. 3. 4. 5. 7. 9



Single ended in-line receptacle assembly
Mate with SP1710,SP1714



SP1715 / P_ SP1715 / S_

Double ended extension assembly
-plug & receptacle



SP1714 / _ + SP1715 / _

Double ended plug assembly
-plug & plug



SP1714 / _ + SP1714 / _

Double ended in-line receptacle assembly
-receptacle & receptacle



SP1715 / _ + SP1715 / _

Number of contact: 2. 3. 4. 5. 7. 9
P:male contact S:female contact

The plugs and receptacles are available with male contact or female contact

Contact arrangement and spec

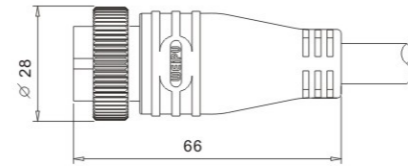
Number of contact	2	3	4	5	7	9			
Male contact face view									
Rated current (A)	12A	12A	4A	4A	4A	4A			
Contact diameter	∅ 1.5X2	∅ 1.5X3	∅ 1X4	∅ 1X5	∅ 1X7	∅ 1X9			
Rated voltage (AC.V)	500V	500V	500V	500V	400V	400V			
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1500V	1200V	1200V			
Contact resistance mΩ	2.5	2.5	5	5	5	5			
Wire size mm ² /AWG	≤ 1.5/15	≤ 1.5/15	≤ 0.5/20	≤ 0.5/20	≤ 0.5/20	≤ 0.5/20			
Cable Color	1- black	2- white	3- red	4- yellow	5- green	6- brown	7- blue	8- orange	9- purple

Overmolded Cable Assemblies: SP21 Series IP68

SP
21



Single ended plug assembly
Mate with SP2111,SP2112,
SP2113,SP2115

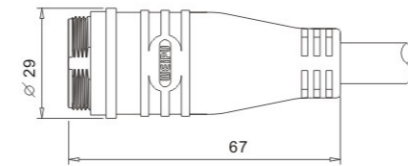


SP2114 / P— SP2114 / S—

Number of contact: 2. 3. 4. 5. 5B.5C.7. 9.12



Single ended in-line receptacle assembly
Mate with SP2110,SP2114



SP2115 / P— SP2115 / S—

Double ended extension assembly
-plug & receptacle



SP2114 / — + SP2115 / — —

Double ended plug assembly
-plug & plug



SP2114 / — + SP2114 / — —

Double ended in-line receptacle assembly
-receptacle & receptacle



SP2115 / — + SP2115 / — —

Number of contact: 2. 3. 4. 5. 5B.5C.7. 9.12
P: male contact S: female contact

The plugs and receptacles are available
with male contact or female contact

Contact arrangement and spec

Number of contact	2	3	4	5	5B	5C	7	9	12
Male contact face view									
Rated current (A)	20A	20A	20A	20A	4A. 20A	12A	12A	4A	4A
Contact diameter	∅ 3X2	∅ 3X3	∅ 3X4	∅ 3X5	∅ 1X3 ∅ 3X2	∅ 2X5	∅ 2X7	∅ 1X9	∅ 1X12
Rated voltage (AC.V)	500V	500V	500V	500V	500V	500V	500V	500V	400V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1500V	1500V	1500V	1500V	1500V	1200V
Contact resistance mΩ	1	1	1	1	5.1	2.5	2.5	5	5
Wire size mm ² /AWG	≤2.5	≤2.5	≤2.5	≤2.5	≤0.5 ≤2.5	≤1.5	≤1.5	≤0.5	≤0.5
Cable Color	1- black 2- white 3- red 4- yellow 5- green 6- brown 7- blue 8- orange 9- purple 10- grey 11- pink 12- light green								



RJ
45F

- **RJ45F Series IP67**
Bayonet Coupling, Shell material : PC, fire resistance: V-0

Part number	Drawing and description	Panel cutout
RJ45F6	Plug , Cable outer diameter 5.5-7mm 	
RJ45F71	Socket 	



● **WA22 Series IP67**
Material and spec

spec		
Number of contact	3+PE	6+PE
Termination	Screw	Solder
Wire size	Max2. 5mm ² /AWG14	Max0. 75mm ² /AWG18
Rated voltage (V)	400V	250V
Rated current(A)	16A	10A
Shell material	Nylon66 , fire resistance : V-0	
Contact material	Brass with gold plating	
Cable outlet diameter	6 , 8 , 10mm	
IP rating	IP67	

● **WA 22**

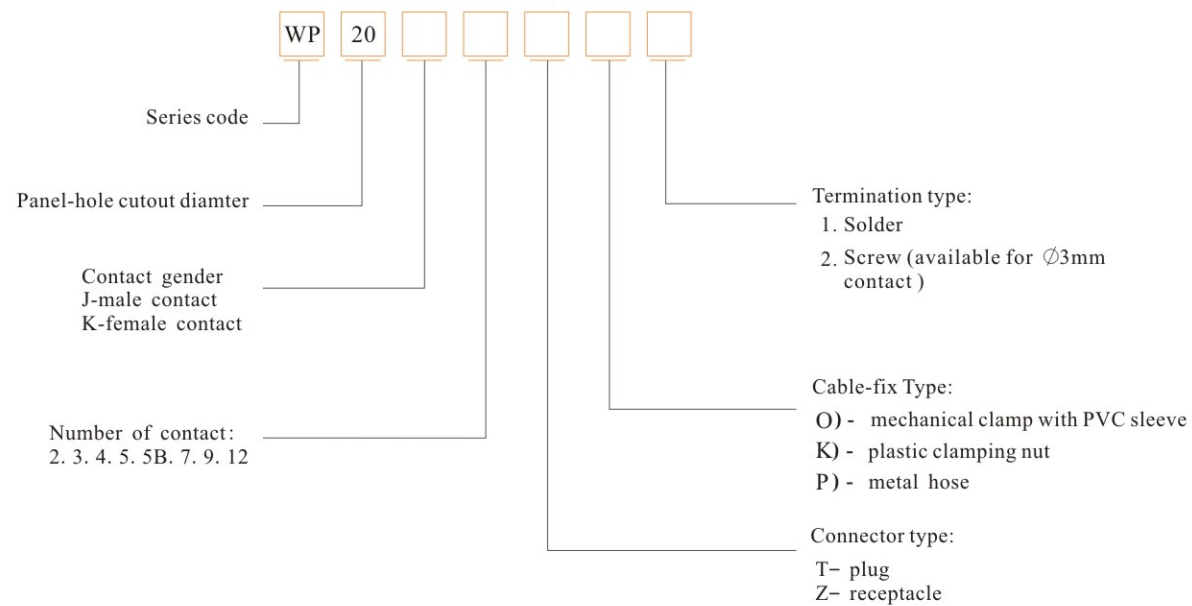
Part number	Description	Drawing
 WA22J4TE2	WA 22 male cable connector 3+PE , screw termination	 60 62φ PG11 I: φ6 II: φ8 III: φ10
 WA22J7TE1	WA 22 male cable connector 6+PE, solder termination	

Part number	Description	Drawing
 WA22K4Z2	WA 22 female panel connector 3+PE, screw termination	 3.6 38 29 31 φ21.5 13.5 18.5
 WA22K7Z1	WA 22 female panel connector 6+PE , solder termination	 3.6 38 29 31 φ21.8 9 3.5 18.2
 WA22K4ZE2	WA 22 female cable connector 3+PE, screw termination	 60 62φ PG11 I: φ6 II: φ8 III: φ10
 WA22K7ZE1	WA 22 female cable connector 6+PE, solder termination	
 WA22J4Z2	WA 22 male panel connector 3+PE, screw termination	 3.6 38 29 31 φ21.5 14 18.0
 WA22J7Z1	WA 22 male panel connector 6+PE,solder termination	 3.6 38 29 31 φ21.8 8.3 3.5 18.2
 WA22G1	Cap	 26 φ29
 WA22G2	Cap	 31 φ29 φ24



● **WP20 Series**

Part number system



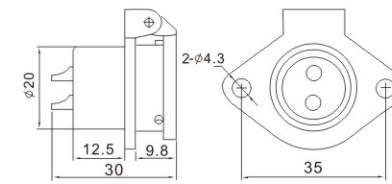
The plugs and receptacles are available with male contact or female contact

Material and spec

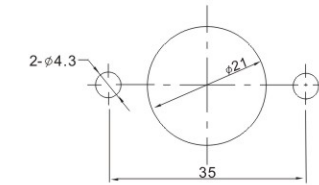
Coupling	Bayonet
Shell	Nylon PA66/zinc alloy
Insert material	PPS max temperature 260 °C
Contact material	Brass
Contact plating	Gold over nickel
Termination	2-5 contacts solder, 7-12 contacts solder / screw
Mating cycle	>500
Temperature range	-25°C ~ +85°C



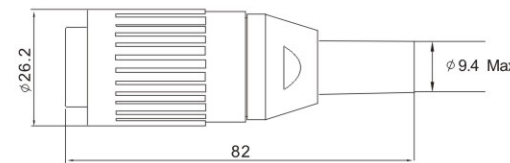
● **Receptacle: Z IP44**



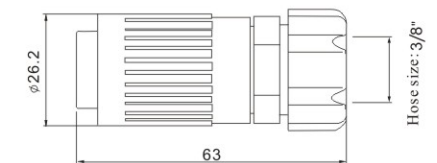
● **Panel cutout**



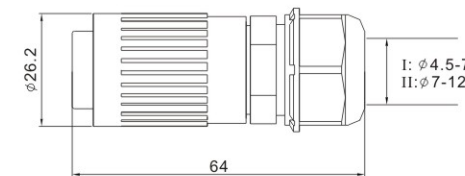
● **Mechanical clamp with PVC sleeve : TO**



● **Metal hose: TP**



● **Plastic clamping nut : TK IP55**



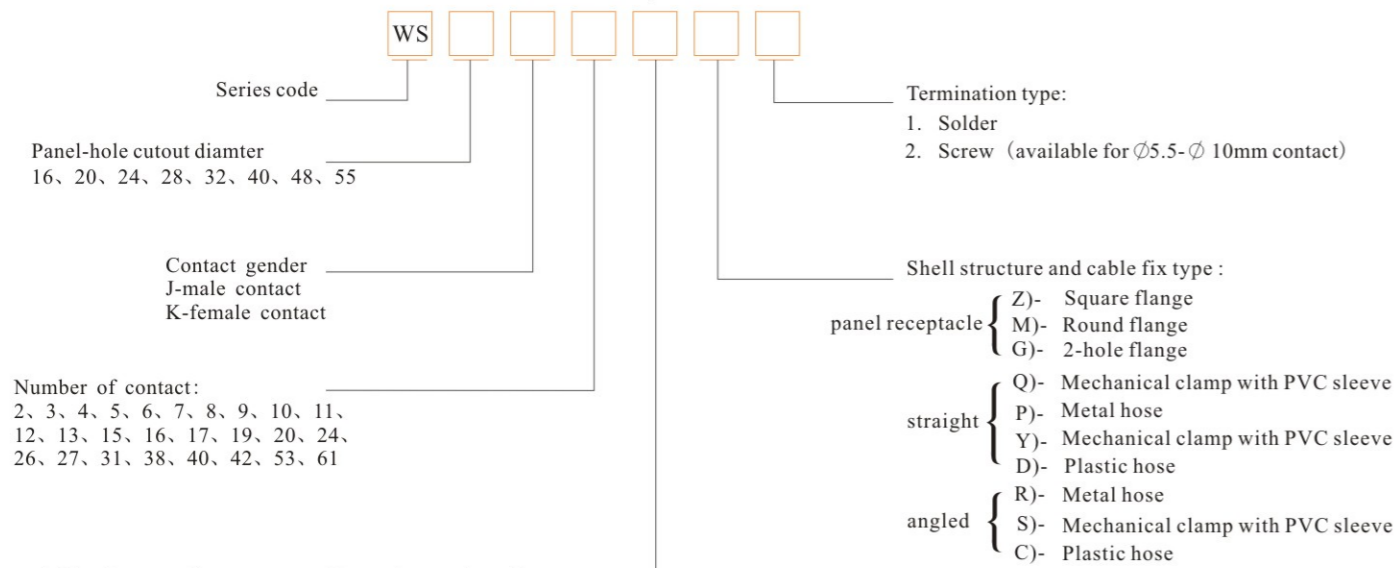
Contact arrangement and spec

Number of contact	2	3	4	5	5B	7	9	12
Male contact face view								
Rated current(A)	30A	30A	30A	30A	5A, 30A	15A	5A	5A
Contact diameter	Ø 3X2	Ø 3X3	Ø 3X4	Ø 3X5	Ø 1X3 Ø 3X2	Ø 2X7	Ø 1X9	Ø 1X12
Rated voltage (AC.V)	500V	500V	500V	500V	500V	500V	500V	400V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1500V	1500V	1500V	1500V	1200V
Contact resistance mΩ	1	1	1	1	5, 1	2.5	5	5
Insulation resistance mΩ	2000	2000	2000	2000	2000	2000	2000	2000
Termination	solder / screw	solder / screw	solder / screw	solder / screw	solder / screw	solder	solder	solder
Wire size ^{mm²} /AWG	≤ 4.17/11	≤ 4.17/11	≤ 4.17/11	≤ 4.17/11	≤ 0.785/18 ≤ 4.17/11	≤ 2/14	≤ 0.785/18	≤ 0.785/18



● **WS Series**

Part number system



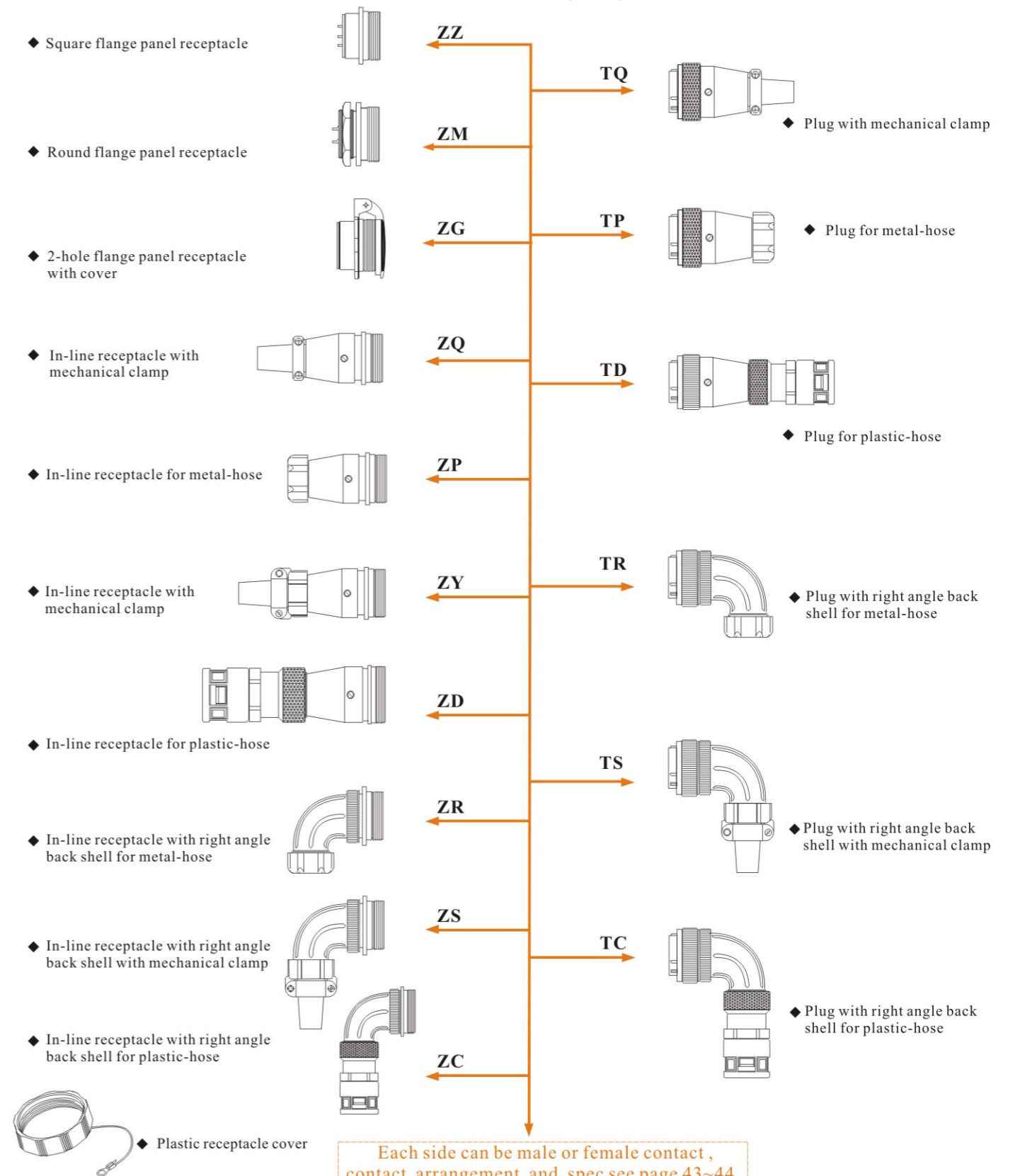
● **Remark:** Rated current decreases according to the number of contacts
Rated current decrease rate form

Number of contact	1-3	4-10	11-20	21-30	31-40	41-50	above 51
Decrease rate %	0	10	20	30	40	50	60

Material and spec

Coupling	threaded coupling
Shell material	Zinc alloy with chrome plating
Insert material	PPS max temperature 260 °C
Contact material	Brass with gold plating
Termination	$\phi 1-\phi 3.5$ mm Solder, $\phi 5.5-\phi 10$ mm screw
Mating cycle	>500
Temperature range	-25°C ~ +85°C
IP Rating	for indoor only

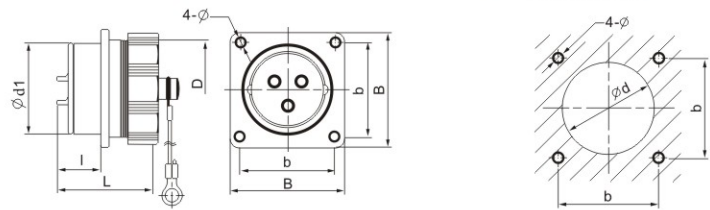
● **WS Series Mating diagram**





● Square flange panel receptacle : ZZ

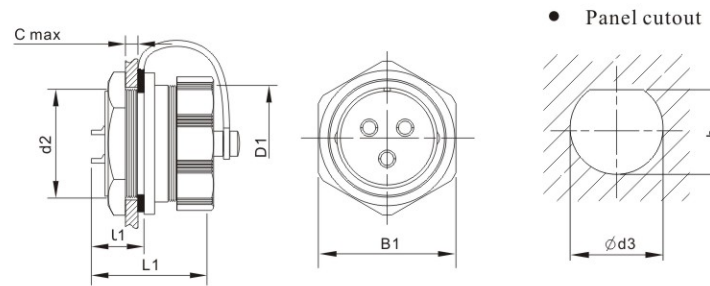
● Panel cutout



★ Contact arrangement and spec see page 43~44

Dimension (mm)	WS16	WS20	WS24	WS28	WS32	WS40	WS48	WS55
∅d1	16	20	24	28	32	40	48	55
D	M18X1	M22X1	M26X1	M30X1	M35X1.5	M44X1.5	M52X1.5	M59X1.5
I	10	10	10	10	13.8	13.8	13.8	13.8
L	26	28	28	28	37.5	37.5	37.5	37.5
b	20	22	26	30	32	40	48	52
B	26	29	32	36	42	50	58	64
∅d	16.5	20.5	24.5	28.5	32.5	40.5	48.5	55.5
∅	3.5	3.5	3.5	3.5	3.5	4.5	4.5	4.5

● Round flange panel receptacle: ZM

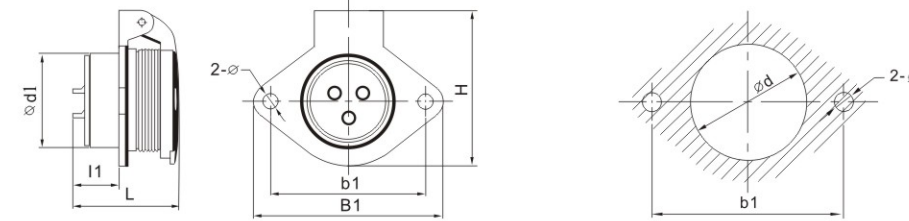


Dimension (mm)	WS16	WS20	WS24	WS28
d2	M16X1	M20X1	M24X1	M28X1
D1	M18X1	M22X1	M26X1	M30X1
C	5	5	5	5
L1	10	10	10	10
L1	26	28	28	28
B1	21	25	29	33
∅d3	16	20	24	28
h	15.4	19.4	23.2	26.9



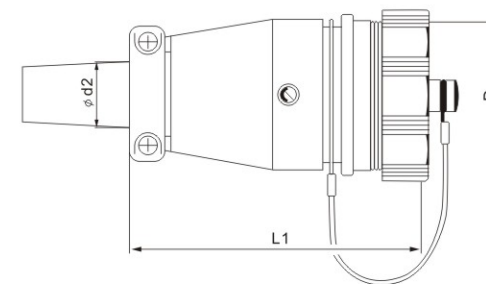
● 2-hole flange panel receptacle with cover : ZG

● Panel cutout



Dimension (mm)	WS16	WS20	WS24	WS28	WS32	WS40	WS48	WS55
∅d	16.5	20.5	24.5	28.5	32.5	40.5	48.5	55.5
∅d1	16	20	24	28	32	40	48	55
I1	10	10	10	10	13.8	13.8	13.8	13.8
L	30	32.3	32.3	32.3	42.2	42.2	42.2	43.2
b1	30	35	40	45	55	65	80	85
B1	38	44	50	55	67	77	92	98
H	32.5	33.5	40.5	45.5	52.5	63.5	74.5	80
∅	3.5	4.5	4.5	4.5	5.5	5.5	5.5	6.5

● In-line receptacle with mechanical clamp: ZQ

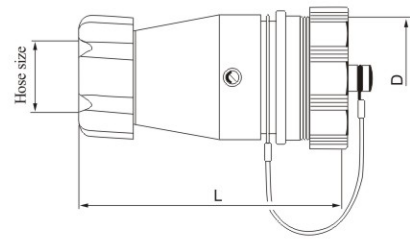


★ Sleeve dimension see page 42
★ Optional cap size see page 42

Dimension (mm)	WS16	WS20	WS24	WS28	WS32	WS40	WS48	WS55
D	M18X1	M22X1	M26X1	M30X1	M35X1.5	M44X1.5	M52X1.5	M59X1.5
L1	47.5	52	53	55	69	92	98	100
d2 Max	10	11.6	12.4	15.7	19.5	24	24	30



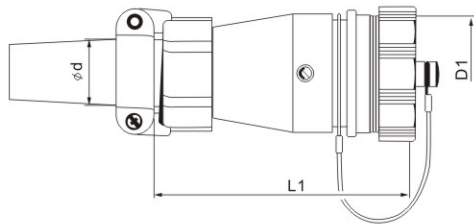
● In-line receptacle for metal-hose: ZP



Dimension (mm)	WS16	WS20	WS24	WS28	WS32	WS40	WS48	WS55
D	M18X1	M22X1	M26X1	M30X1	M35X1.5	M44X1.5	M52X1.5	M59X1.5
L	53.5	58	59	61	75	99	103	106
Hose size	1/4"	3/8"	3/8"	1/2"	3/4"	1"	I: 1" II: 1 1/4"	1 1/4"

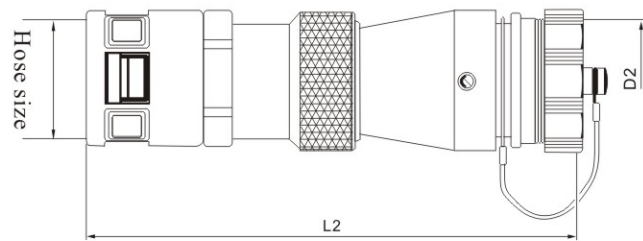
Optional cap size see page 42

● In-line receptacle with mechanical clamp: ZY



Dimension (mm)	WS16	WS20	WS24	WS28	WS32	WS40	WS48	WS55
D1	M18X1	M22X1	M26X1	M30X1	M35X1.5	M44X1.5	M52X1.5	M59X1.5
L1	52.3	59.2	67	70	89.2	94.8	101.8	124.7
∅dMax	10	13	13	17	19	23	I: 23 II: 31	31

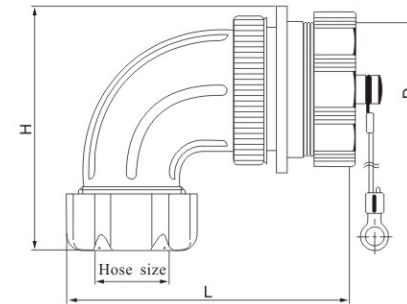
● In-line receptacle for plastic-hose: ZD



Dimension (mm)	WS16	WS20	WS24	WS28	WS32	WS40	WS48	WS55
D2	M18X1	M22X1	M26X1	M30X1	M35X1.5	M44X1.5	M52X1.5	M59X1.5
L2	80	90	97	104	126.7	134	141	160
Adapter size	PG7	PG11	PG11	PG16	PG21	PG29	I: PG29 II: PG36	PG36
Hose size	1/4"	3/8"	3/8"	1/2"	3/4"	1"	I: 1" II: 1 1/4"	1 1/4"

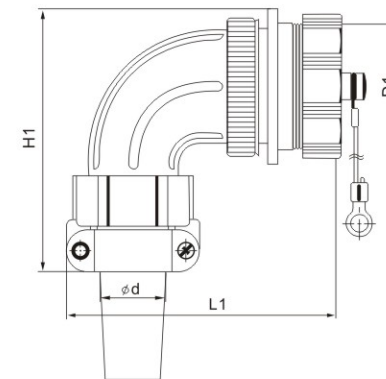


● In-line receptacle with right angle back shell for metal-hose: ZR



Dimension (mm)		WS20	WS24	WS28	WS32	WS40	WS48	WS55
D		M22X1	M26X1	M30X1	M35X1.5	M44X1.5	M52X1.5	M59X1.5
L		60	60	63	81	88	96	107
H		48	51	52	58	70	82	90
Hose size		3/8"	3/8"	1/2"	3/4"	1"	1"	1 1/4"

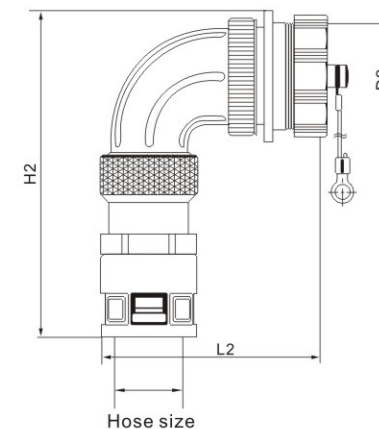
● In-line receptacle with right angle back shell and mechanical clamp: ZS



Dimension (mm)		WS20	WS24	WS28	WS32	WS40	WS48	WS55
D1		M22X1	M26X1	M30X1	M35X1.5	M44X1.5	M52X1.5	M59X1.5
L1		60.6	60.4	64.7	82	89.2	96	114.2
H1		54.4	56.8	64	72	83.3	94.5	112.3
∅d Max		13	13	17	19	23	23	31

Sleeve dimension see page 42

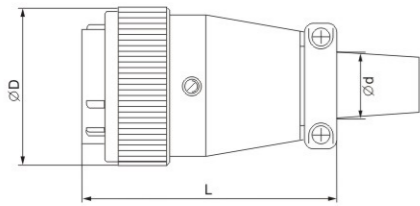
● In-line receptacle with right angle back shell for plastic-hose: ZC



Dimension (mm)		WS20	WS24	WS28	WS32	WS40	WS48	WS55
D2		M22X1	M26X1	M30X1	M35X1.5	M44X1.5	M52X1.5	M59X1.5
L2		60	60	65	82	90	95	110
H2		88	88	98	110	120	135	140
Adapter size		PG11	PG11	PG16	PG21	PG29	PG29	PG36
Hose size		3/8"	3/8"	1/2"	3/4"	1"	1"	1 1/4"



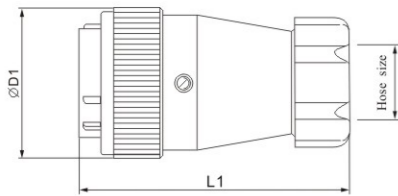
● Plug with mechanical clamp : TQ



Dimension/mm	WS16	WS20	WS24	WS28	WS32	WS40	WS48	WS55
∅D	21	25.6	30	33.8	38.2	46.2	55.8	63
L	42	49	52	55	68	75	84	94
∅d Max	10	11.6	12.4	15.7	19.5	24	24	30

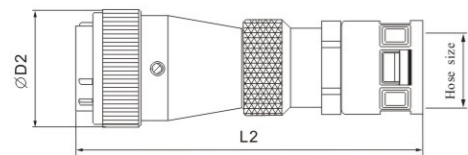
Sleeve dimension see page 42

● Plug for metal-hose: TP



Dimension/mm	WS16	WS20	WS24	WS28	WS32	WS40	WS48	WS55
∅D1	21	25.6	30	33.8	38.2	46.2	55.8	63
L1	48	55	58	61	74	82	90	100
Hose size	1/4"	3/8"	3/8"	1/2"	3/4"	1"	I: 1" II: 1 1/4"	1 1/4"

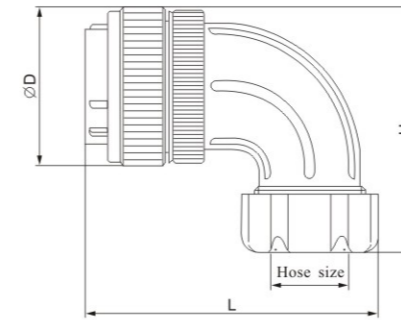
● Plug for plastic-hose: TD



Dimension/mm	WS16	WS20	WS24	WS28	WS32	WS40	WS48	WS55
∅D2	21	25.6	30	33.8	38.2	46.2	55.8	63
L2	63	75	60	63	120	132	138	150
Adapter size	PG7	PG11	PG11	PG16	PG21	PG29	I: PG29 II: PG36	PG36
Hose size	1/4"	3/8"	3/8"	1/2"	3/4"	1"	I: 1" II: 1 1/4"	1 1/4"

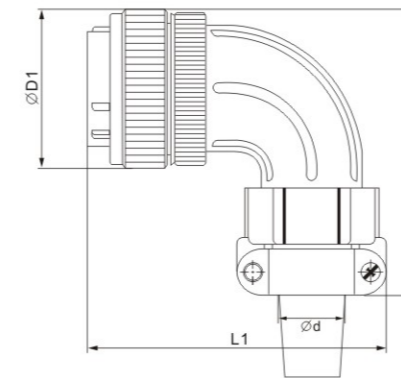


● Plug with right angle back shell for metal-hose: TR



Dimension/mm		WS20	WS24	WS28	WS32	WS40	WS48	WS55
∅D	—	25.6	30	33.8	38.2	46.2	55.8	63
H	—	48	51	52	58	70	82	90
L	—	60	60	63	81	88	96	107
Hose size	—	3/8"	3/8"	1/2"	3/4"	1"	1"	1 1/4"

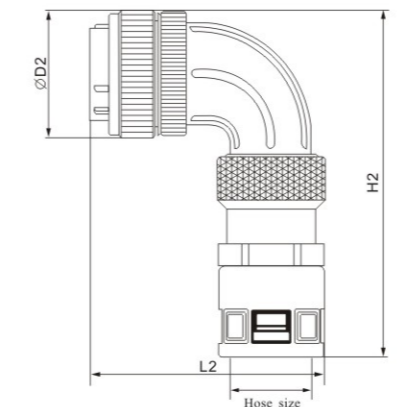
● Plug with right angle back shell with mechanical clamp: TS



Dimension/mm		WS20	WS24	WS28	WS32	WS40	WS48	WS55
∅D1	—	25.6	30	33.8	38.2	46.2	55.8	63
H1	—	53	57	61	66	78	91	100
L1	—	60	61	64	80	88	96	107
∅d Max	—	13	13	17	19	23	23	31

Sleeve dimension see page 42

● Plug with right angle back shell for plastic-hose: TC

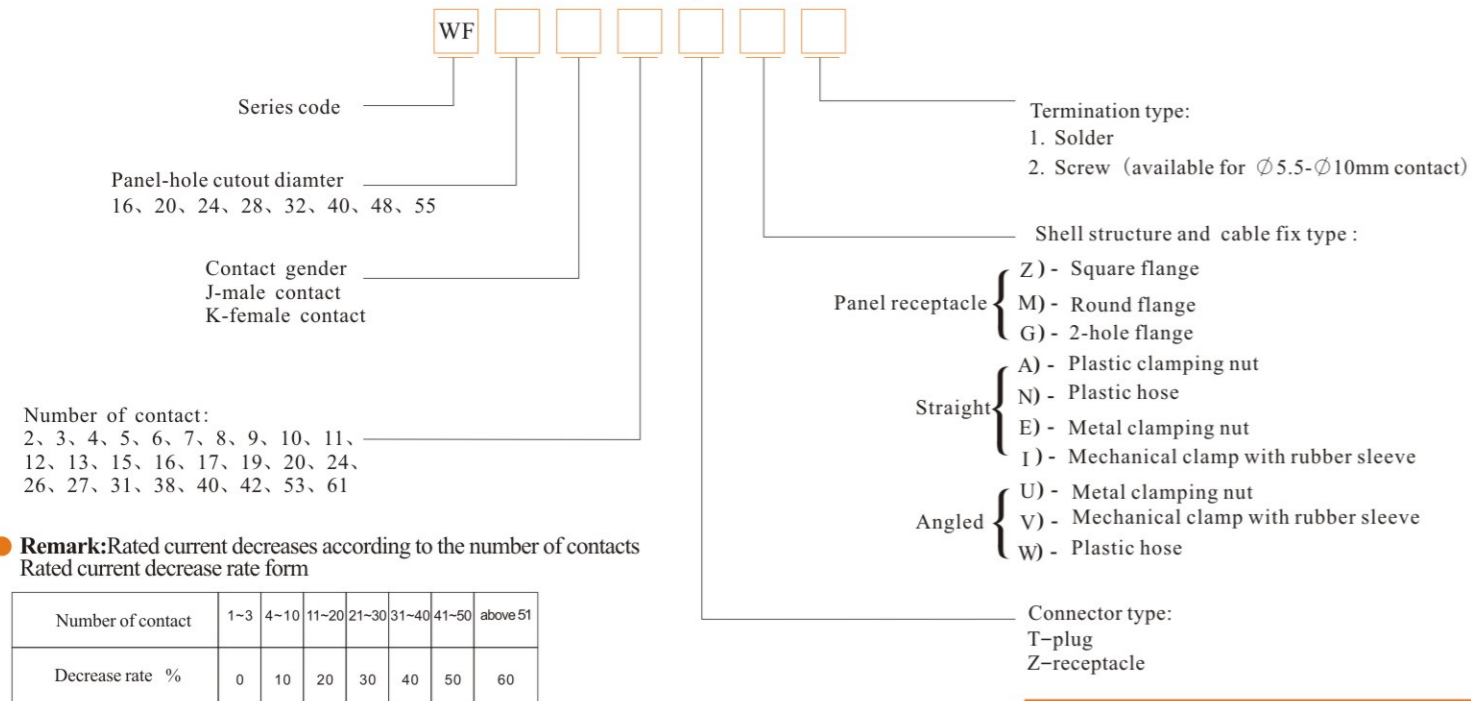


Dimension/mm		WS20	WS24	WS28	WS32	WS40	WS48	WS55
∅D2	—	25.6	30	33.8	38.2	46.2	55.8	63
H2	—	60	62	65	82	88	96	107
L2	—	70	88	95	105	130	130	146
Adapter size	—	PG11	PG11	PG16	PG21	PG29	PG29	PG36
Hose size	—	3/8"	3/8"	1/2"	3/4"	1"	1"	1 1/4"



WF Series

Part number system

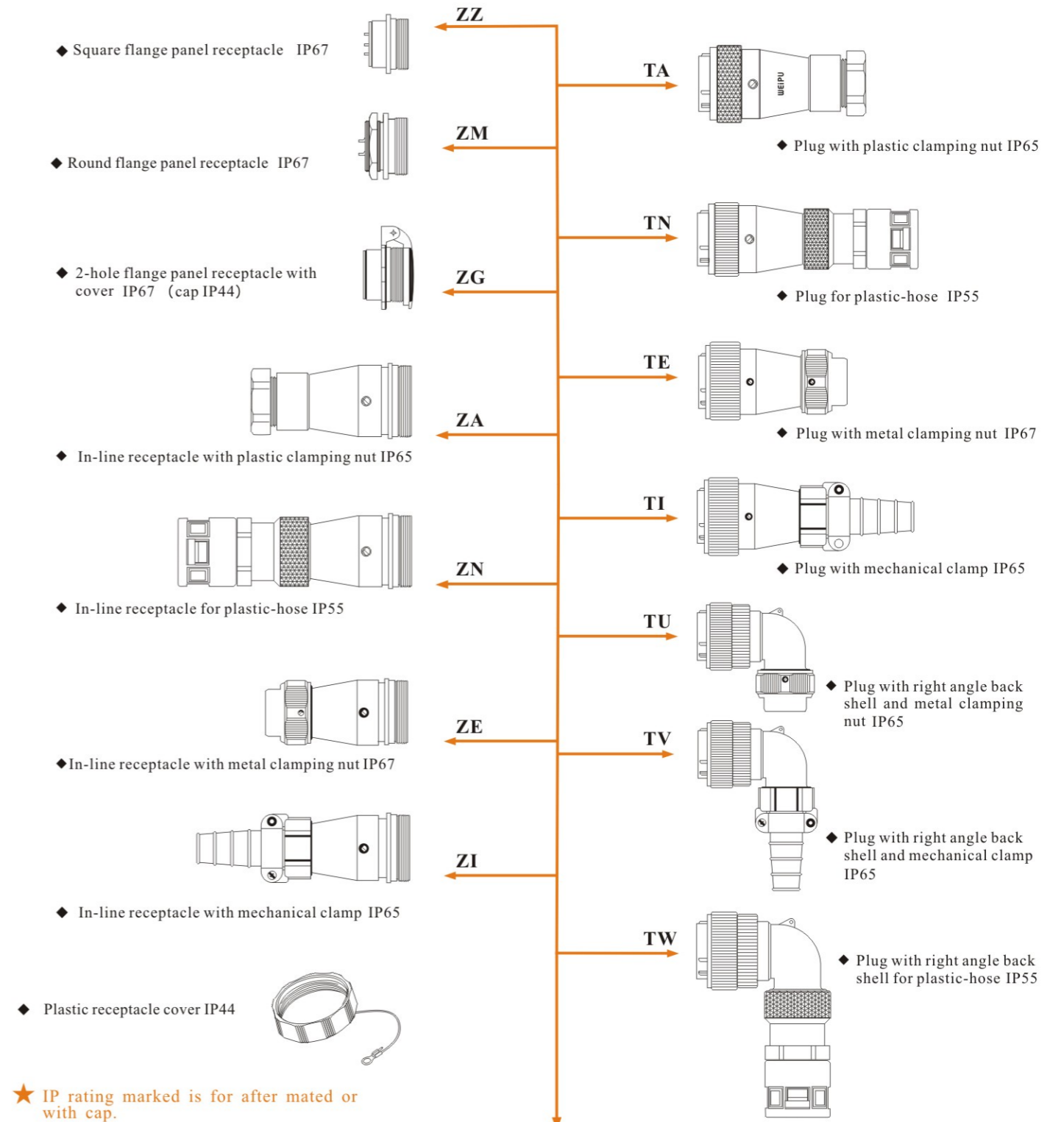


Material and spec

Coupling	Threaded coupling
Shell	Zinc alloy with chrome plating
Insert material	PPS max temperature 260 °C
Contact material	Brass with gold plating
Termination	$\phi 1$ - $\phi 3.5$ mm Solder, $\phi 5.5$ - $\phi 10$ mm screw
Mating cycle	>500
Temperature range	-25°C~+85°C

The plugs and receptacles are available with male contact or female contact

WF Series Mating diagram

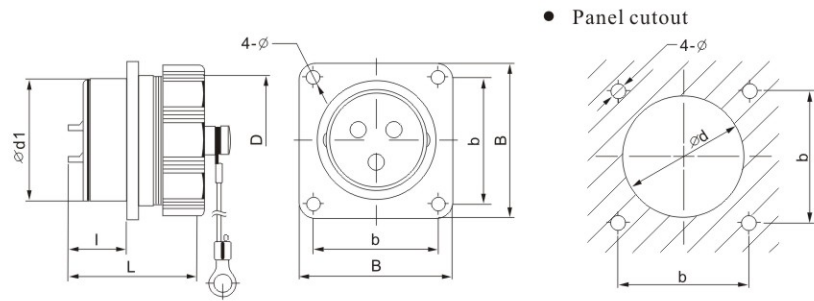


★ IP rating marked is for after mated or with cap.

Each side can be male or female contact, contact arrangement and spec see page 43~44.



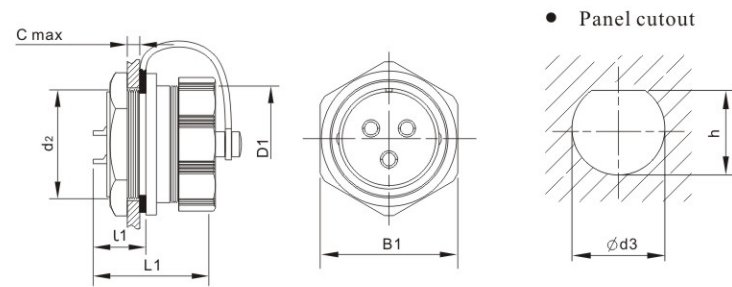
● Square flange panel receptacle : ZZ IP67



★ Contact arrangement and spec see page 43~44

Dimension (mm)	WF16	WF20	WF24	WF28	WF32	WF40	WF48	WF55
∅d1	16	20	24	28	32	40	48	55
D	M18X1	M22X1	M26X1	M30X1	M35X1.5	M44X1.5	M52X1.5	M59X1.5
l	10	10	10	10	13.8	13.8	13.8	13.8
L	26	28	28	28	37.5	37.5	37.5	37.5
b	20	22	26	30	32	40	48	52
B	26	29	32	36	42	50	58	64
∅d	16.5	20.5	24.5	28.5	32.5	40.5	48.5	55.5
∅	3.5	3.5	3.5	3.5	3.5	4.5	4.5	4.5

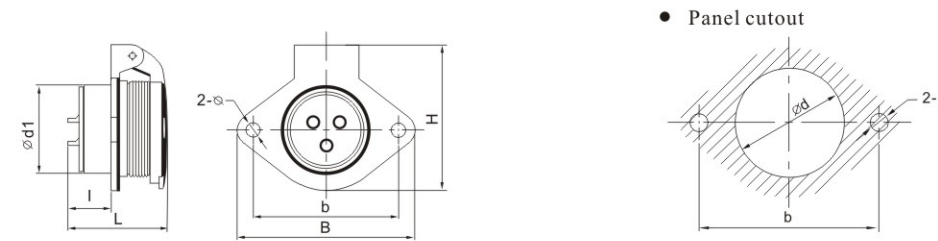
● Round flange panel receptacle: ZM IP67



Dimension (mm)	WF16	WF20	WF24	WF28
d2	M16X1	M20X1	M24X1	M28X1
D1	M18X1	M22X1	M26X1	M30X1
C	5	5	5	5
L1	10	10	10	10
L1	26	28	28	28
B1	21	25	29	33
∅d3	16	20	24	28
h	15.4	19.4	23.2	26.9

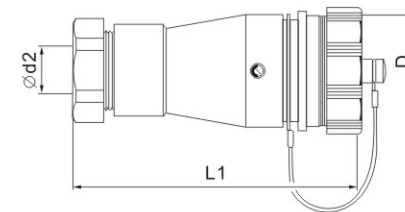


● 2-hole flange panel receptacle with cover : ZG IP67(cap IP44)



Dimension (mm)	WF16	WF20	WF24	WF28	WF32	WF40	WF48	WF55
∅d1	16	20	24	28	32	40	48	55
∅d	16.5	20.5	24.5	28.5	32.5	40.5	48.5	55.5
l	10	10	10	10	13.8	13.8	13.8	13.8
L	30	32.3	32.3	32.3	42.2	42.2	42.2	43.2
b	30	35	40	45	55	65	80	85
B	38	44	50	55	67	77	92	98
H	32.5	33.5	40.5	45.5	52.5	63.5	74.5	80
∅	3.5	4.5	4.5	4.5	5.5	5.5	5.5	6.5

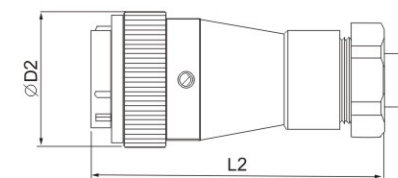
● In-line receptacle with plastic clamping nut: ZA IP65



Dimension (mm)	WF16	WF20	WF24	WF28	WF32	WF40	WF48	WF55
D	M18X1	M22X1	M26X1	M30X1	M35X1.5	M44X1.5	M52X1.5	M59X1.5
L1	59	68	69	76	92	109	116	110
∅d2	4.5-7	5-12	5-12	6.5-15.5	8.5-19.5	11.5-24.5	11.5-24.5	15-31

Optional cap size see page 42

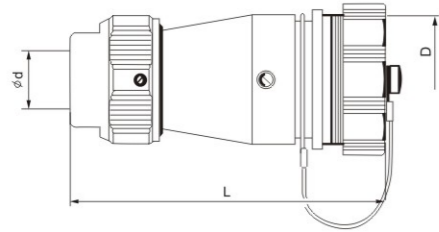
● Plug with plastic clamping nut: TA IP65



Dimension (mm)	WF16	WF20	WF24	WF28	WF32	WF40	WF48	WF55
∅D2	21	25.6	30	33.8	38.2	46.2	55.8	63
L2	54	65	68	73	90	101	102	107
∅d3	4.5-7	5-12	5-12	6.5-15.5	8.5-19.5	11.5-24.5	11.5-24.5	15-31



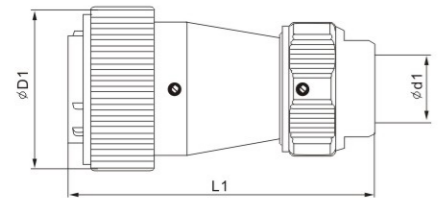
- In-line receptacle with metal clamping nut: ZE IP67



Dimension (mm)	WF16	WF20	WF24	WF28	WF32	WF40	WF48	WF55
D	M18X1	M22X1	M26X1	M30X1	M35X1.5	M44X1.5	M52X1.5	M59X1.5
L	53.6	61	67.6	68.2	90.4	103.6	108	131.6
ød	5-6.5	8-10.5	8-10.5	10.5-12.5	15.5-17	18-20	I:18-20 II:24.5-26	24.5-26

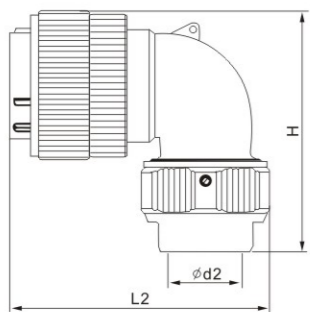
Optional cap size see page 42

- Plug with metal clamping nut: TE IP67



Dimension (mm)	WF16	WF20	WF24	WF28	WF32	WF40	WF48	WF55
øD1	21	25.6	30	33.8	38.2	46.2	55.8	63
L1	52.6	61.3	67.3	67.4	88	102.9	107.7	131.6
ød1	5-6.5	8-10.5	8-10.5	10.5-12.5	15.5-17	18-20	I:18-20 II:24.5-26	24.5-26

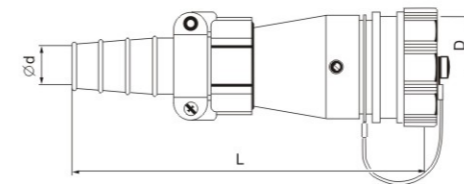
- Plug with right angle back shell and metal clamping nut: TU IP65



Dimension (mm)	WF16	WF20	WF24	WF28	WF32	WF40	WF48	WF55
H	43.2	50.3	54	56.7	74.6	80	98	105.2
L2	47.5	55	58.3	72	82.5	91.5	98.5	109.2
ød2	5-6.5	8-10.5	8-10.5	10.5-12.5	15.5-17	18-20	18-20	24.5-26

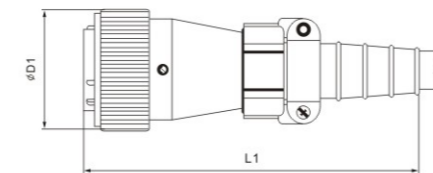


- In-line receptacle with mechanical clamp : ZI IP65



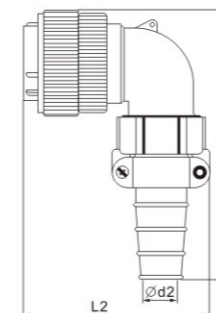
Dimension (mm)	WF16	WF20	WF24	WF28	WF32	WF40	WF48	WF55
D	M18X1	M22X1	M26X1	M30X1	M35X1.5	M44X1.5	M52X1.5	M59X1.5
L	73	85.7	92	101	118.6	130.2	137	210.5
ød	7-8	8-10.5	8-10.5	10-14	13-15.6	15-18.8	I:15-18.8 II:24-28	21-28

- Plug with mechanical clamp: TI IP65



Dimension (mm)	WF16	WF20	WF24	WF28	WF32	WF40	WF48	WF55
øD1	21	25.6	30	33.8	38.2	46.2	55.8	63
L1	72.3	86.9	92.5	100.6	118.3	130.4	137.2	161.1
ød1	7-8	8-10.5	8-10.5	10-14	13-15.6	15-18.8	I:15-18.8 II:24-28	21-28

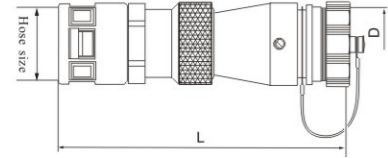
- Plug with right angle back shell and mechanical clamp: TV IP65



Dimension (mm)	WF16	WF20	WF24	WF28	WF32	WF40	WF48	WF55
H	60	80	80	93	107	118	127	140
L2	45.5	53	56.3	70	80.5	89.5	98	107.2
ød2	7-8	8-10.5	8-10.5	10-14	13-15.6	15-18.8	15-18.8	21-28



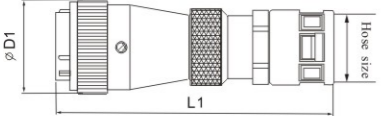
● In-line receptacle for plastic-hose: ZN IP55



Dimension (mm)	WF16	WF20	WF24	WF28	WF32	WF40	WF48	WF55
D	M18X1	M22X1	M26X1	M30X1	M35X1.5	M44X1.5	M52X1.5	M59X1.5
L	80	90	97	104	126.7	134	141	160
Adapter size	PG7	PG11	PG11	PG16	PG21	PG29	I: PG29 II: PG36	PG36
Hose size	1/4"	3/8"	3/8"	1/2"	3/4"	1"	I: 1" II: 1 1/4"	1 1/4"

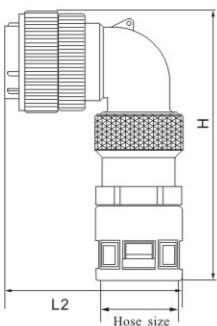
Optional cap size see page 42

● Plug for plastic-hose: TN IP55

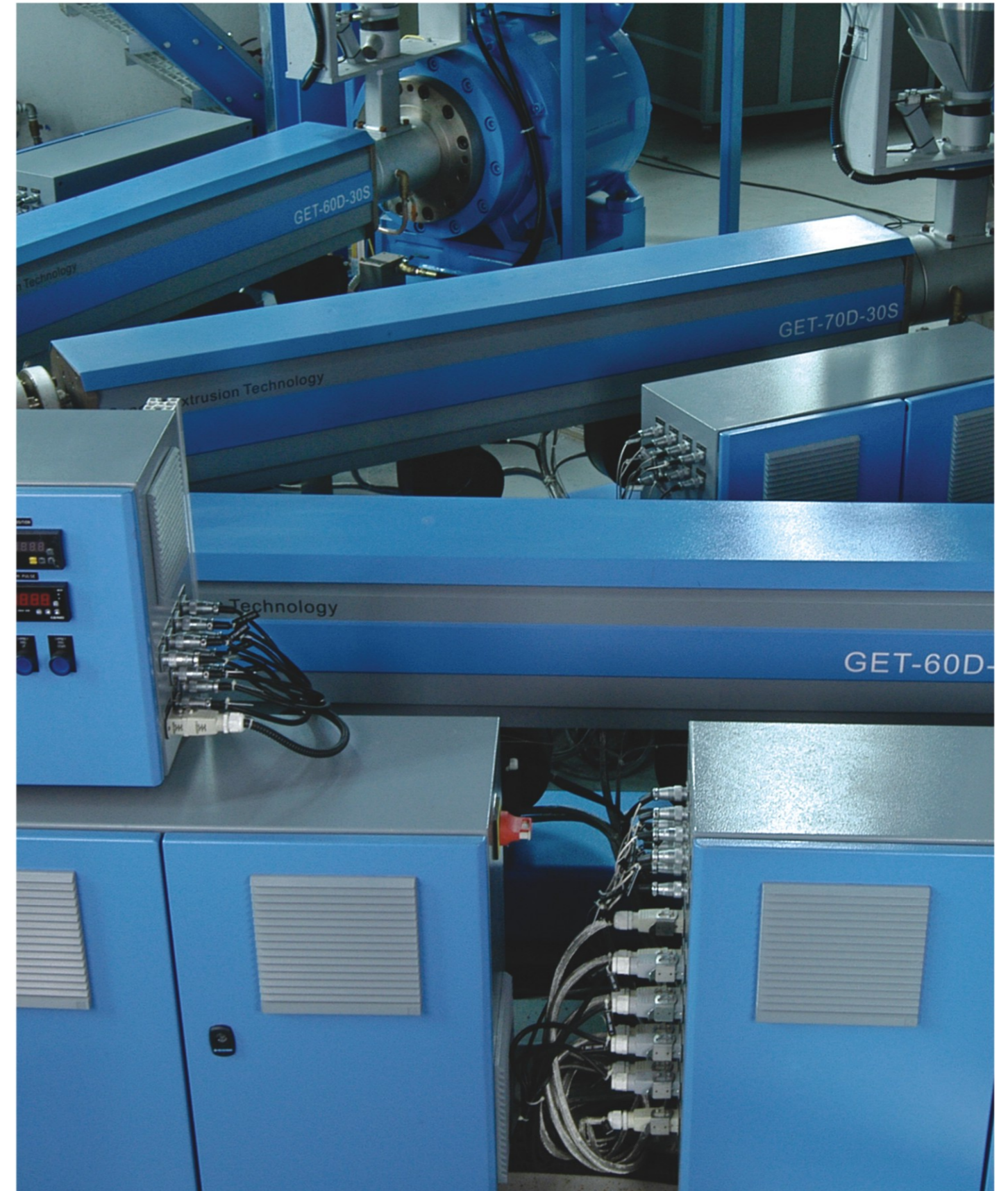


Dimension (mm)	WF16	WF20	WF24	WF28	WF32	WF40	WF48	WF55
$\varnothing D1$	21	25.6	30	33.8	38.2	46.2	55.8	63
L1	63	75	60	63	120	132	138	150
Adapter size	PG7	PG11	PG11	PG16	PG21	PG29	I: PG29 II: PG36	PG36
Hose size	1/4"	3/8"	3/8"	1/2"	3/4"	1"	I: 1" II: 1 1/4"	1 1/4"

● Plug with right angle back shell for plastic-hose: TW IP55



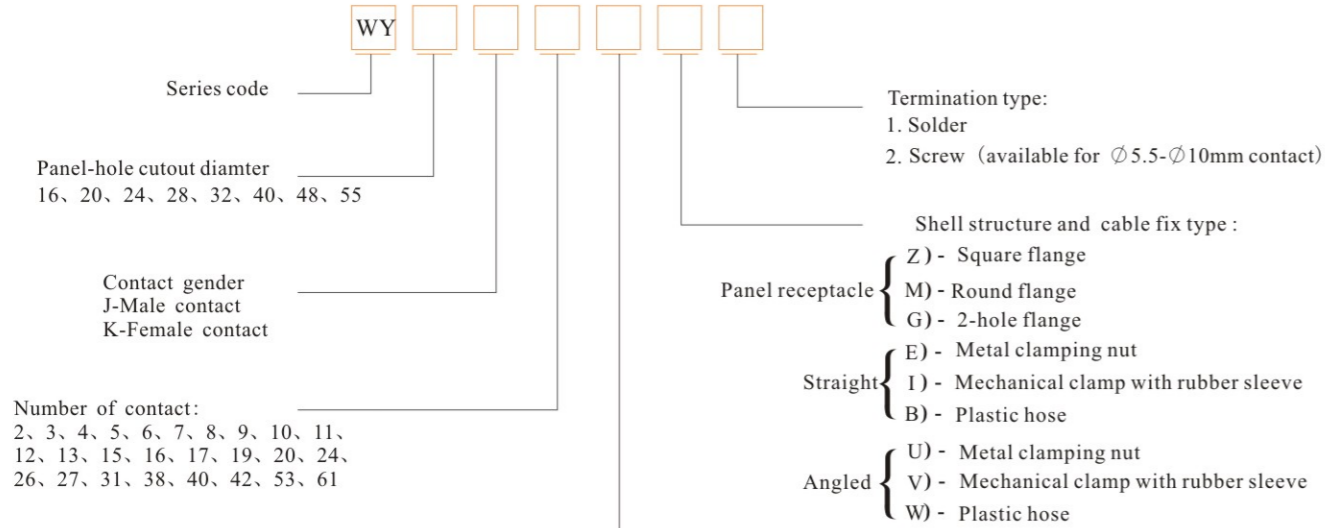
Dimension (mm)	WF16	WF20	WF24	WF28	WF32	WF40	WF48	WF55
H	58	78	78	91	105	120	125	132
L2	46.5	54	57.3	71	81.5	90.5	98	108
Adapter size	PG7	PG11	PG11	PG16	PG21	PG29	PG29	PG36
Hose size	1/4"	3/8"	3/8"	1/2"	3/4"	1"	1"	1 1/4"





● WY Series IP44-IP67

Part number system



● Remark: Rated current decreases according to the number of contacts
Rated current decrease rate form

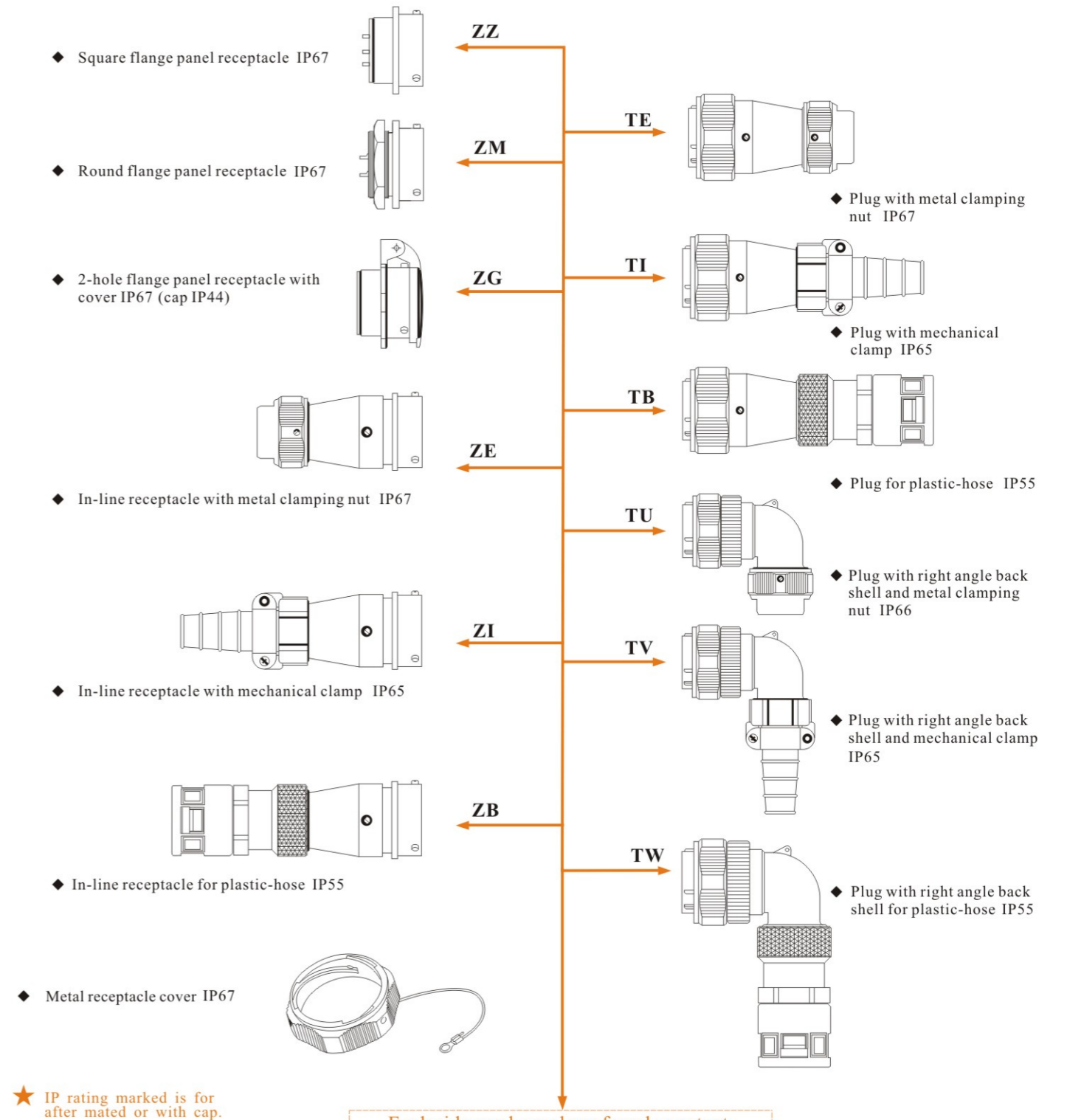
Number of contact	1-3	4-10	11-20	21-30	31-40	41-50	above 51
Decrease rate %	0	10	20	30	40	50	60

The plugs and receptacles are available with male contact or female contact

Material and spec

Coupling	Bayonet
Shell	Zinc alloy with chrome plating
Insert material	PPS Temperature 260°C
Contact material	Brass with gold plating
Termination	Ø1-Ø3.5mm Solder, Ø5.5-Ø10mm screw
Mating cycle	>500
Temperature range	-25°C~+85°C

● WY Series Mating diagram

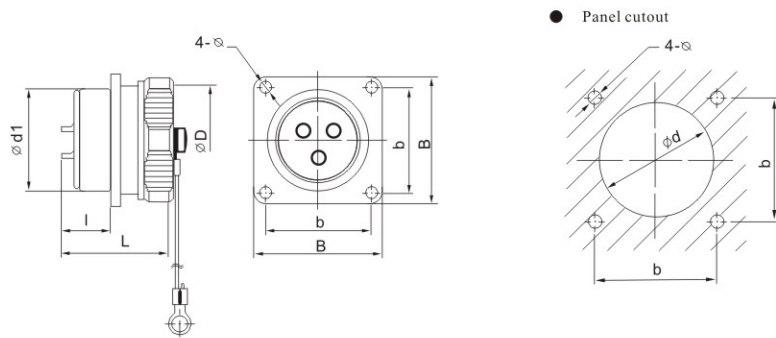


★ IP rating marked is for after mated or with cap.

Each side can be male or female contact, contact arrangement and spec see page 43~44



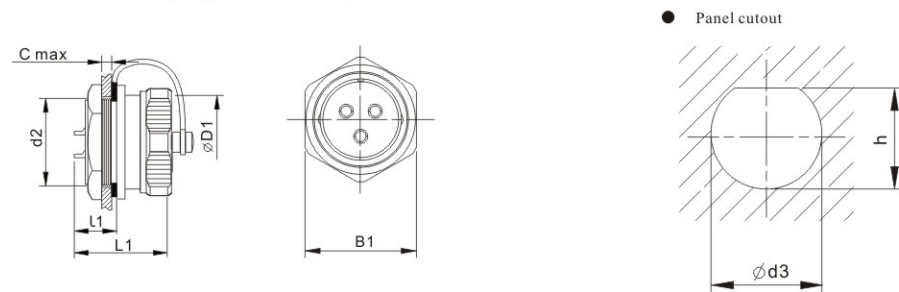
● Square flange panel receptacle : ZZ IP67



★ Contact arrangement and spec see page 43~44

Dimension(mm)	WY16	WY20	WY24	WY28	WY32	WY40	WY48	WY55
∅d1	16	20	24	28	32	40	48	55
∅D	18	22	26	30	35	44	52	59
l	10	10	10	10	13.8	13.8	13.8	13.8
L	26	28	28	28	37.5	37.5	37.5	37.5
b	20	22	26	30	32	40	48	52
B	26	29	32	36	42	50	58	64
∅d	16.5	20.5	24.5	28.5	32.5	40.5	48.5	55.5
∅	3.5	3.5	3.5	3.5	3.5	4.5	4.5	4.5

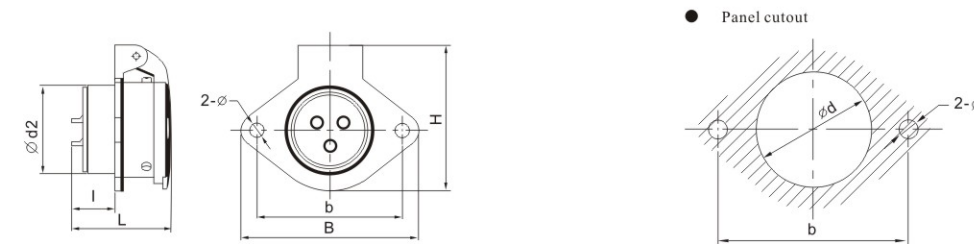
● Round flange panel receptacle : ZM IP67



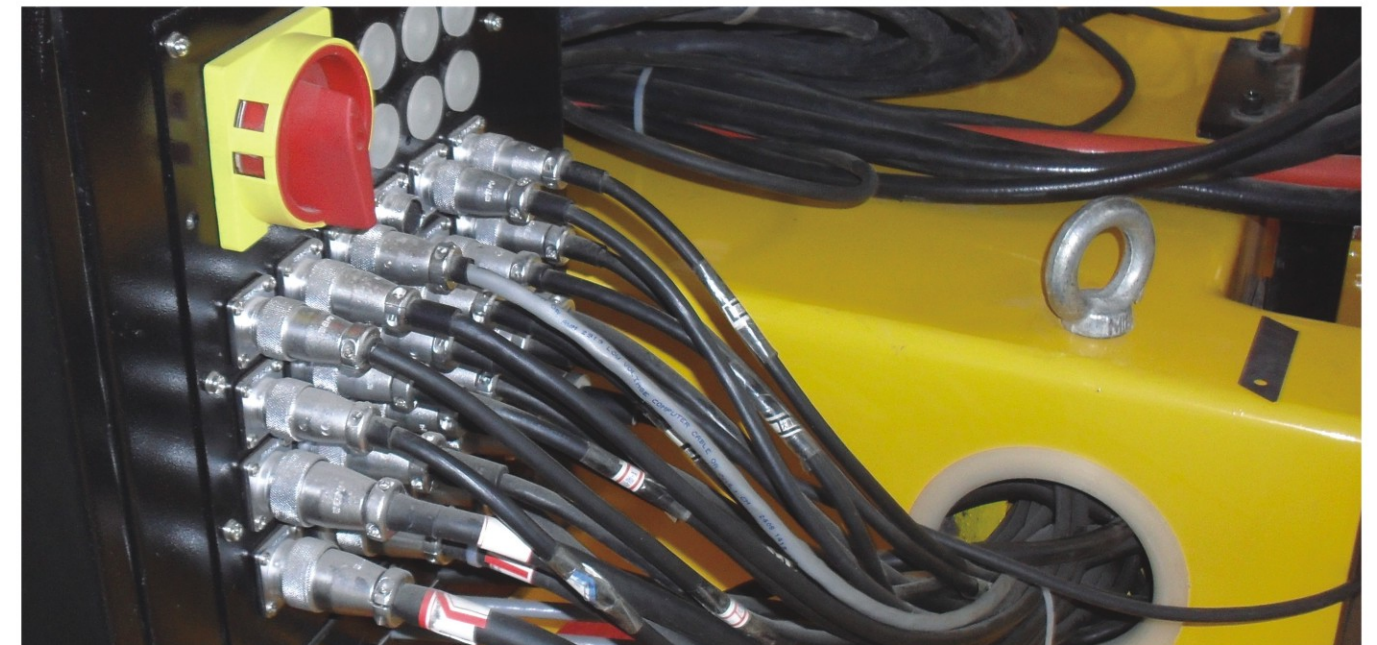
Dimension(mm)	WY16	WY20	WY24	WY28
d2	M16X1	M20X1	M24X1	M28X1
∅D1	18	22	26	30
C	5	5	5	5
L1	10	10	10	10
L1	26	28	28	28
B1	21	25	29	33
∅d3	16.5	20.5	24.5	28.5
h	15.4	19.4	23.2	26.9



● 2-hole flange panel receptacle with cover : ZG IP67(cap IP44)

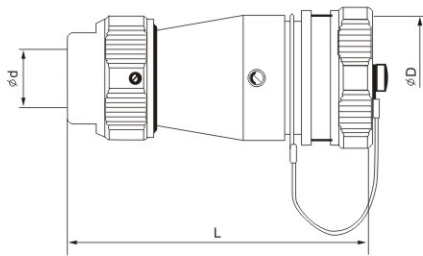


Dimension(mm)	WY16	WY20	WY24	WY28	WY32	WY40	WY48	WY55
∅d2	16	20	24	28	32	40	48	55
∅d	16.5	20.5	24.5	28.5	32.5	40.5	48.5	55.5
l	10	10	10	10	13.8	13.8	13.8	13.8
L	30	32.3	32.3	32.3	42.2	42.2	42.2	43.2
b	30	35	40	45	55	65	80	85
B	38	44	50	55	67	77	92	98
H	32.5	33.5	40.5	45.5	52.5	63.5	74.5	80
∅	3.5	4.5	4.5	4.5	5.5	5.5	5.5	6.5





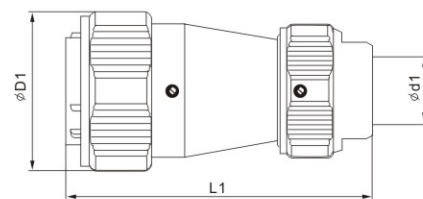
- In-line receptacle with metal clamping nut : ZE IP67



Dimension(mm)	WY16	WY20	WY24	WY28	WY32	WY40	WY48	WY55
∅D	18	22	26	30	35	44	52	59
L	53.6	61	67.6	68.2	90.4	103.6	108	131.6
∅d	5-6.5	8-10.5	8-10.5	10.5-12.5	15.5-17	18-20	I:18-20 II:24.5-26	24.5-26

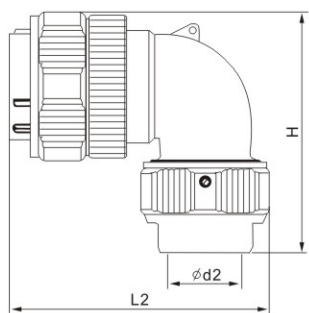
Optional cap size see page 42

- Plug with metal clamping nut : TE IP67



Dimension(mm)	WY16	WY20	WY24	WY28	WY32	WY40	WY48	WY55
∅D1	25	30	34	38.5	44.5	54	62	68.5
L1	52.6	61.3	67.3	67.4	88	102.9	107.7	131.1
∅d1	5-6.5	8-10.5	8-10.5	10.5-12.5	15.5-17	18-20	I:18-20 II:24.5-26	24.5-26

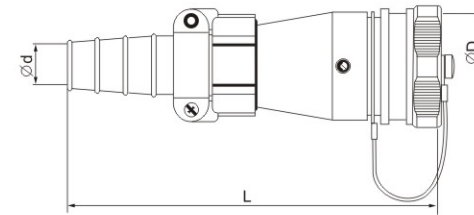
- Plug with right angle back shell and metal clamping nut : TU IP66



Dimension(mm)	WY16	WY20	WY24	WY28	WY32	WY40	WY48	WY55
H	43.2	50.3	54	56.7	74.6	80	98	105.2
L2	47.5	55	58.3	72	82.5	91.5	98.5	109.2
∅d2	5-6.5	8-10.5	8-10.5	10.5-12.5	15.5-17	18-20	18-20	24.5-26

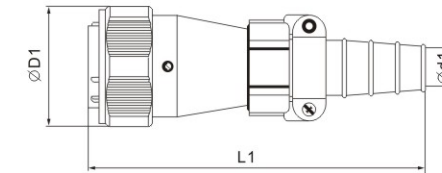


- In-line receptacle with mechanical clamp : ZI IP65



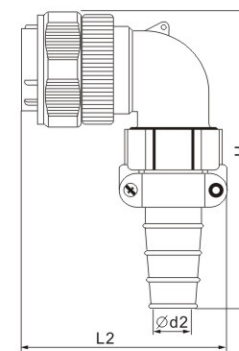
Dimension(mm)	WY16	WY20	WY24	WY28	WY32	WY40	WY48	WY55
∅D	18	22	26	30	35	44	52	59
L	73	85.7	92	101	118.6	130.2	137	210.5
∅d	7-8	8-10.5	8-10.5	10-14	13-15.6	15-18.8	I:15-18.8 II:24-28	21-28

- Plug with mechanical clamp : TI IP65



Dimension(mm)	WY16	WY20	WY24	WY28	WY32	WY40	WY48	WY55
∅D1	25	30	34	38.5	44.5	54	62	68.5
L1	72.3	86.9	92.5	100.6	118.3	130.4	137.2	161.1
∅d1	7-8	8-10.5	8-10.5	10-14	13-15.6	15-18.8	I:15-18.8 II:24-28	21-28

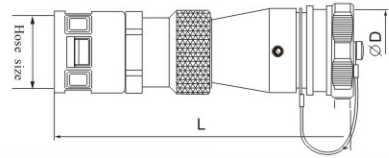
- Plug with right angle back shell and mechanical clamp : TV IP65



Dimension(mm)	WY16	WY20	WY24	WY28	WY32	WY40	WY48	WY55
H	60	80	80	93	107	118	127	140
L2	45.5	53	56.3	70	80.5	89.5	98	107.2
∅d2	7-8	8-10.5	8-10.5	10-14	13-15.6	15-18.8	15-18.8	21-28

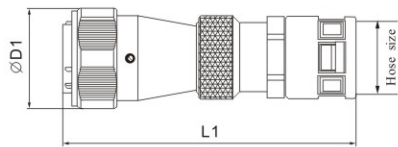


● In-line receptacle for plastic-hose: ZB IP55



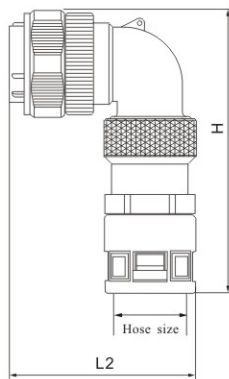
Dimension(mm)	WY16	WY20	WY24	WY28	WY32	WY40	WY48	WY55
Ø D	18	22	26	30	35	44	52	59
L	78	89.3	95.7	102.3	122.9	133.4	138.8	155
Adapter size	PG7	PG11	PG11	PG16	PG21	PG29	I: PG29 II: PG36	PG36
Hose size	1/4"	3/8"	3/8"	1/2"	3/4"	1"	I: 1" II: 1 1/4"	1 1/4"

● Plug for plastic-hose: TB IP55

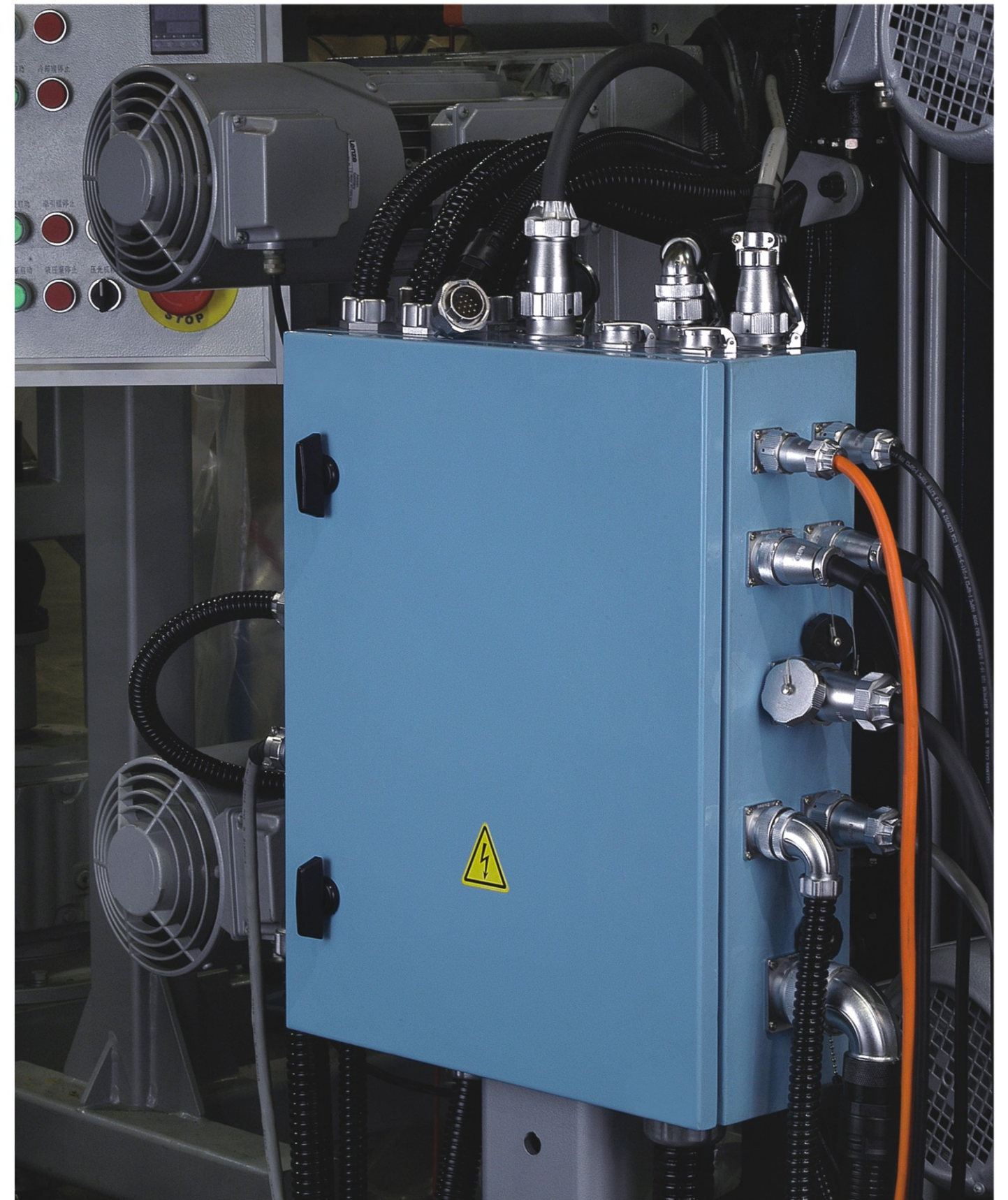


Dimension(mm)	WY16	WY20	WY24	WY28	WY32	WY40	WY48	WY55
Ø D1	25	30	34	38.5	44.5	54	62	68.5
L1	76.7	90.1	94.6	101.7	119.5	133.4	140	157
Adapter size	PG7	PG11	PG11	PG16	PG21	PG29	I: PG29 II: PG36	PG36
Hose size	1/4"	3/8"	3/8"	1/2"	3/4"	1"	I: 1" II: 1 1/4"	1 1/4"

● Plug with right angle back shell for plastic-hose : TW IP55

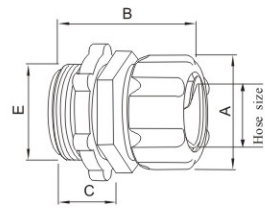


Dimension(mm)	WY16	WY20	WY24	WY28	WY32	WY40	WY48	WY55
H	58	78	78	91	105	120	125	132
L2	46.5	54	57.3	71	81.5	90.5	98	108
Adapter size	PG7	PG11	PG11	PG16	PG21	PG29	PG29	PG36
Hose size	1/4"	3/8"	3/8"	1/2"	3/4"	1"	1"	1 1/4"



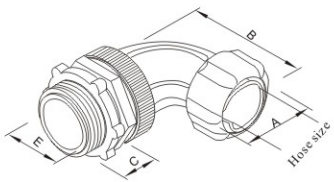


● Metal hose adapter



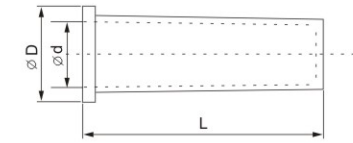
Part No.	WAB-16	WAB-20	WAB-24	WAB-30	WAB-36	WAB-45
Dimension(mm)						
A	19.6	24.8	29.1	35.7	41.8	52
B	26.7	33.3	37	37.9	41.5	43.1
C	9	14	15	16	17	18
E	16	20	24	30	36	45
Hose size	—	3/8"	1/2"	3/4"	1"	—
Thread	M16X1.5	M20X1.5	M24X1.5	M30X2	M36X2	M45X2

● Angled metal hose adapter



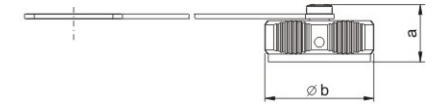
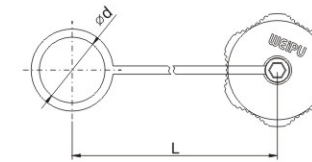
Part No.	WAL-20	WAL-24	WAL-30	WAL-36	WAL-45
Dimension(mm)					
A	24.8	29.1	35.7	41.8	52
B	48.5	53	59	70	91.5
C	14	15	16	17	18
E	20	24	30	36	45
Hose size	3/8"	1/2"	3/4"	1"	—
Thread	M20X1.5	M24X1.5	M30X2	M36X2	M45X2

● PVC cable protection sleeve for WS series



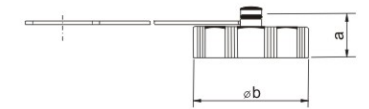
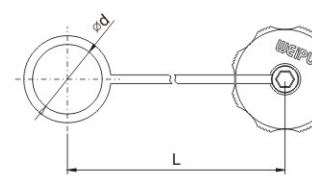
Dimension(mm)	WS16	WS20	WS24	WS28	WS32	WS40	WS48	WS55
D	11.5	16.5	16.5	19	25	30	30	36
L	30	38	38	38	51	53	53	59
d Max	6	6	6	7	13	17.8	17.8	23

● Metal receptacle cover for WY IP67



Dimension(mm)	WY16	WY20	WY24	WY28	WY32	WY40	WY48	WY55
a	13.5	14.5	14.5	14.5	17	17	17	17
∅b	20	29.5	34	38.5	44	54	62	68.5
∅d	16	20	24	28	32	40	48	55
L	55	60	65	70	90	100	110	120

● Plastic receptacle cover for WS and WF IP44



Dimension(mm)	WS/WF16	WS/WF20	WS/WF24	WS/WF28	WS/WF32	WS/WF40	WS/WF48	WS/WF55
a	14	14.5	14.5	14.5	20	20	20	20
∅b	21	26	29.5	34	39	48	55.5	62.5
∅d	16	20	24	28	32	40	48	55
L	55	60	65	70	90	100	110	120

WS、WF、WY Contact arrangement and spec

WS16、WF16、WY16	2	3	4	5	7	9
Male contact face view						
Rated current (A)	10A	10A	5A	5A	5A	5A
Contact diameter	∅1.5X2	∅1.5X3	∅1X4	∅1X5	∅1X7	∅1X9
Rated voltage (AC.V)	500V	500V	500V	500V	400V	400V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1500V	1200V	1200V
Contact resistance _{mΩ}	2.5	2.5	5	5	5	5
Insulation resistance MΩ	2000	2000	2000	2000	2000	2000
Wire size mm ² /AWG	≤2/14	≤2/14	≤0.785/18	≤0.785/18	≤0.785/18	≤0.785/18

WS20、WF20、WY20	2	3	4	5	7	9	12
Male contact face view							
Rated current (A)	25A	25A	25A	10A	10A	5A	5A
Contact diameter	∅2.5X2	∅2.5X3	∅2.5X4	∅1.5X5	∅1.5X7	∅1X9	∅1X12
Rated voltage (AC.V)	500V	500V	500V	500V	500V	500V	400V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1500V	1500V	1500V	1200V
Contact resistance _{mΩ}	1	1	1	2.5	2.5	5	5
Insulation resistance MΩ	2000	2000	2000	2000	2000	2000	2000
Wire size mm ² /AWG	≤2.5/13	≤2.5/13	≤2.5/13	≤2/14	≤2/14	≤0.785/18	≤0.785/18

WS24、WF24、WY24	2	4	10	12	19
Male contact face view					
Rated current (A)	25A	25A	10A	10A	5A
Contact diameter	∅2.5X2	∅2.5X4	∅1.5X10	∅1.5X12	∅1X19
Rated voltage (AC.V)	500V	500V	500V	500V	500V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1500V	1500V
Contact resistance _{mΩ}	1	1	2.5	2.5	5
Insulation resistance MΩ	2000	2000	2000	2000	2000
Wire size mm ² /AWG	≤2.5/13	≤2.5/13	≤2/14	≤2/14	≤0.785/18

WS28、WF28、WY28	2	3	4	7	12	16	17	20	24	26
Male contact face view										
Rated current (A)	25A	50A	25A	25A	10A	10A	10A	5A	5A	5A
Contact diameter	∅2.5X2	∅3.5X3	∅2.5X4	∅2.5X7	∅1.5X12	∅1.5X16	∅1.5X17	∅1X20	∅1X24	∅1X26
Rated voltage (AC.V)	500V	500V	500V	500V	500V	500V	500V	400V	400V	400V
Test voltage(AC.V) 1 min	2000V	1500V	1500V	1500V	1500V	1500V	1500V	1200V	1200V	1200V
Contact resistance _{mΩ}	1	0.5	1	1	2.5	2.5	2.5	5	5	5
Insulation resistance MΩ	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Wire size mm ² /AWG	≤2.5/13	≤6/9	≤2.5/13	≤2.5/13	≤2/14	≤2/14	≤2/14	≤0.785/18	≤0.785/18	≤0.785/18

WS、WF、WY Contact arrangement and spec

WS32、WF32、WY32	4	6	8	10	10B	11	13	19
Male contact face view								
Rated current (A)	50A	10A、25A	10A、25A	10A、25A	25A	25A	10A、25A	10A
Contact diameter	∅3.5X4	∅1.5X2 ∅3.5X4	∅1.5X5 ∅3.5X3	∅1.5X5 ∅2.5X5	∅2.5X10	∅2.5X11	∅1.5X9 ∅2.5X4	∅1.5X19
Rated voltage (AC.V)	500V	500V	500V	500V	500V	500V	500V	500V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1500V	1500V	1500V	1500V	1500V
Contact resistance _{mΩ}	0.5	2.5、0.5	2.5、0.5	2.5、1	1	1	2.5、1	2.5
Insulation resistance MΩ	2000	2000	2000	2000	2000	2000	2000	2000
Wire size mm ² /AWG	≤6/9	≤2/14 ≤2.5/13	≤2/14 ≤2.5/13	≤2/14 ≤2.5/13	≤2.5/13	≤2.5/13	≤2/14 ≤2.5/13	≤2/14

WS40、WF40、WY40	5	9	15	26	31
Male contact face view					
Rated current (A)	50A	25A、50A	10A	10A、25A	10A
Contact diameter	∅3.5X5	∅2.5X5 ∅3.5X4	∅1.5X15	∅1.5X22 ∅2.5X4	∅1.5X31
Rated voltage (AC.V)	500V	500V	500V	500V	500V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1500V	1500V
Contact resistance _{mΩ}	0.5	1、0.5	2.5	2.5、1	2.5
Insulation resistance MΩ	2000	2000	2000	2000	2000
Wire size mm ² /AWG	≤6/9	≤2.5/13 ≤6/9	≤2/14	≤2/14 ≤2.5/13	≤2/14

WS48、WF48、WY48	5	7	20	27	38	42
Male contact face view						
Rated current (A)	100A	50A	25A	10A、25A	10A、25A	10A
Contact diameter	∅5.5X5	∅3.5X7	∅2.5X20	∅1.5X26 ∅2.5X1	∅1.5X33 ∅2.5X5	∅1.5X42
Rated voltage (AC.V)	500V	500V	500V	500V	500V	500V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1500V	1500V	1500V
Contact resistance _{mΩ}	0.3	0.5	1	2.5、1	2.5、1	2.5
Insulation resistance MΩ	2000	2000	2000	2000	2000	2000
Wire size mm ² /AWG	≤16/5	≤6/9	≤2.5/13	≤2/14 ≤2.5/13	≤2/14 ≤2.5/13	≤2/14

WS55、WF55、WY55	4	7	40	53	61
Male contact face view					
Rated current (A)	50A、200A	50A、100A	10A、25A	10A、25A	10A
Contact diameter	∅3.5X1 ∅10X3	∅3.5X1 ∅5.5X6	∅1.5X25 ∅2.5X15	∅1.5X48 ∅2.5X5	∅1.5X61
Rated voltage (AC.V)	500V	500V	500V	500V	500V
Test voltage(AC.V) 1 min	1500V	1500V	1500V	1500V	1500V
Contact resistance _{mΩ}	0.5、0.2	0.5、0.3	2.5、1	2.5、1	2.5
Insulation resistance MΩ	2000	2000	2000	2000	2000
Wire size mm ² /AWG	≤6/9 ≤35/2	≤6/9 ≤16/5	≤2/14 ≤2.5/13	≤2/14 ≤2.5/13	≤2/14