

# RM-W Series

## Deepsea Screw Locking Metal Connector

W series has same insulator and contact configuration as B series:

- Secure high performance screw locking system
- Ideal for using underwater 300m
- High pin density contributing to equipment miniaturization
- Alignment Key and Polarized Keying System to avoid cross-interface
- Sealed up to IP68 and hermetic
- 360° EMC shielded
- Robust and shock resistant designs
- Functional in a wide temperature range from -50°C to +250°C
- Available solder, PCB and right angle PCB contact



# RM-W Series

## Plugs



FVG

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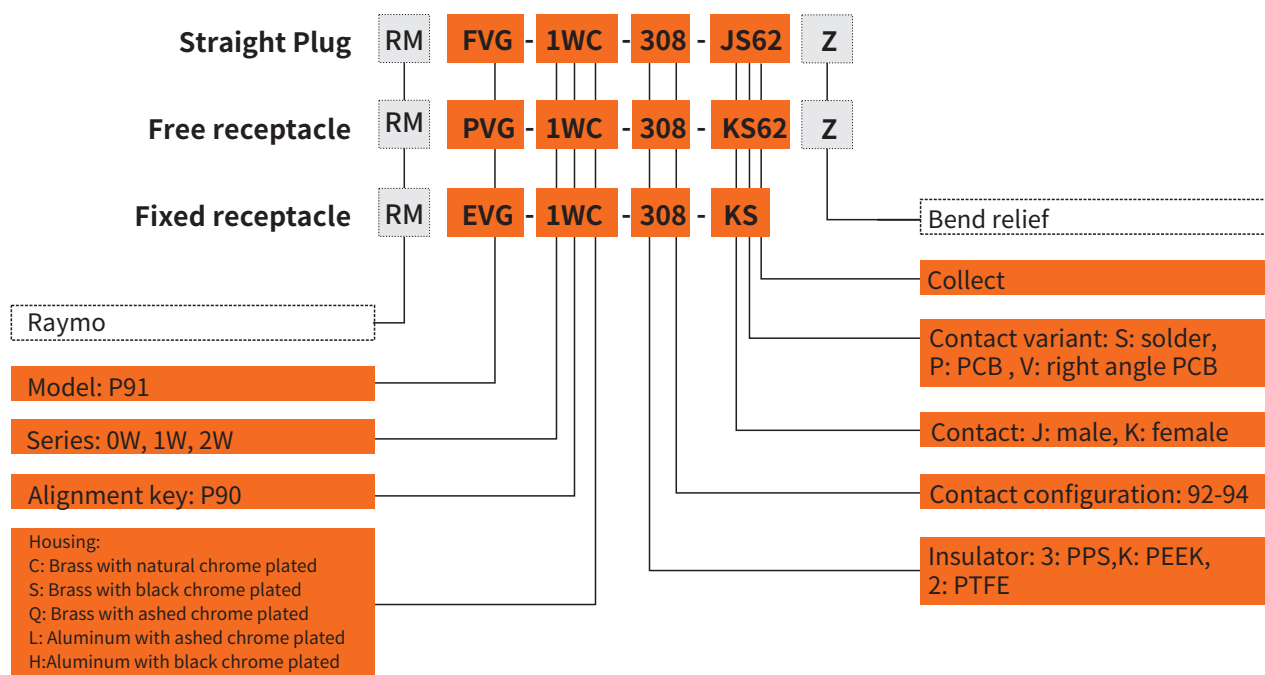
## Receptacles



EVG

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## Part Numbering System



## Part No. Example

### Straight plug with cable collet

RM-FVG-1WC-308-JS62Z= straight plug, 1W series, multipole 8 contacts, outer shell in natural chrome-plated brass, PPS insulator, male solder contacts, collet for 6.0 mm diameter cable, with a black bend relief IP68

### Fixed receptacle

RM-EVG-1WC-308-KS= fixed receptacle, 1W series, multipole 8pin, outer shell in natural chrome-plated brass, PPS insulator, female solder contacts, IP68

RM-W

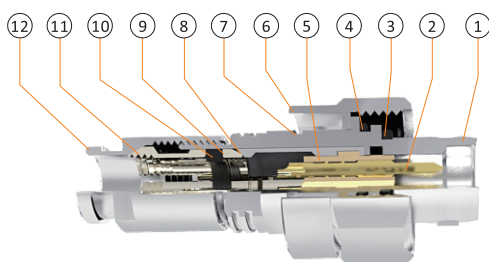
### Free receptacle

RM-PVG-1WC-308-KS62Z= free receptacle, 1W series, multipole 8pin, outer shell in natural chrome-plated brass, PPS insulator, female solder contacts, collet for 6.0 mm diameter cable, with a black bend relief IP68

## Part Section Showing Internal Components

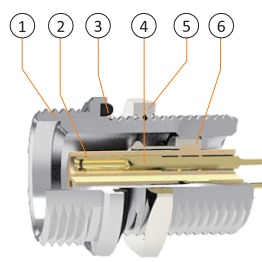
### Cable Mount Plug

- ① Inner shell
- ② Male contact
- ③ O-ring 1
- ④ O-ring 2
- ⑤ Insulator
- ⑥ Plug screw
- ⑦ Snap Spring
- ⑧ Earthing tag
- ⑨ Conical gasket
- ⑩ Inner washer
- ⑪ Cable collet
- ⑫ Collet nut



### Fixed Receptacle

- ① Outer shell
- ② Insulator
- ③ Washer
- ④ Female contact
- ⑤ Hexagonal nut
- ⑥ Retaining ring



## Technical Characteristics

### Mechanical and Climatrical

Characteristics	Value	Standard
Endurance	>1000cycles	IEC60512-5test9a
Humidity	Up to 95% at 60°C	
Temperature range	-20°C, +200°C	
Resistance to vibration	10-2000Hz, 15g	IEC 60512-4 test 6d
Shock resistance	100g, 6ms	IEC 60512-4 test 6c
Salt spray corrosion test	>144hrs	IEC 60512-6 test 11f
Protection index (mated)	IP68	IEC 60529
Climatrical category	20/200/21	IEC 60068-1

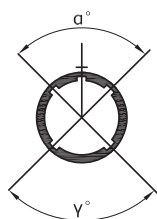
### Electrical

Characteristics		Value	Standard
Shielding efficiency	at 10 MHz	>95 dB	IEC 60619-1-3
	at 1 GHz	>80 dB	IEC 60619-1-3

### Alignment key and Polarized Keys(RM-W series)

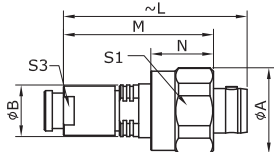
RM-W series connector model type are composed of five letters. The LASTLETTER indicates the key position and the contact type(male or female)

Front view of receptacle



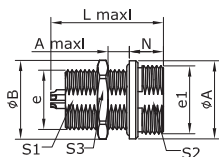
Code	Keys No.	Angles	Series				Contact Type		Remark
			0W	1W	2W	3W	Plug	Receptacle	
G	1		0°	0°	0°	0°	Male	Female	●
A	2	α	30°	30°	30°	30°	Male	Female	●
B	2		45°	45°	45°	45°	Male	Female	●
C	2	γ	60°	60°	60°	60°	Male	Female	○

● Available  
○ Optional



### RM-FVG Cable Mount Straight plug, nut for fitting a bend relief

Reference		Dimensions(mm)						
Model	Series	A	B	L	M	N	S3	S3
RM-FVG	0W	17.2	8.9	35.5	30.8	13.5	16	8
RM-FVG	1W	19.3	11.0	43.7	35.5	14.0	18	9
RM-FVG	2W	23.5	14.0	52.5	43.0	15.5	22	12

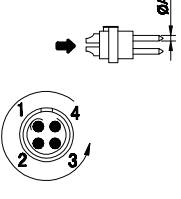
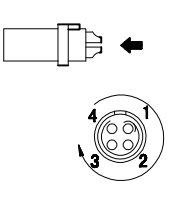
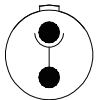
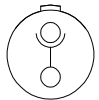

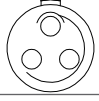


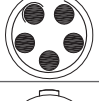
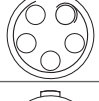


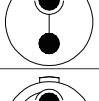
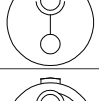
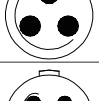
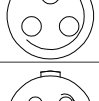


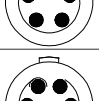
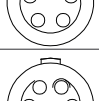


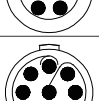
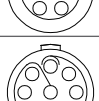
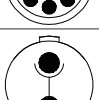
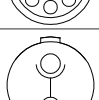
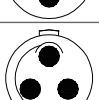
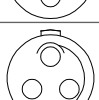




### RM-EVG Fixed socket

Reference		Dimensions(mm)									
Model	Series	A	B	e	e1	E	L	N	S1	S2	S3
RM-EVG	0W	16.2	16.0	M12*1.0	M14*1.0	4.0	21.7	8	10.5	12.5	14
RM-EVG	1W	18.3	19.5	M14*1.0	M16*1.0	8.0	27.0	9	12.5	14.5	17
RM-EVG	2W	22.5	21.8	M16*1.0	M20*1.0	9.0	30.7	12	14.5	18.5	19

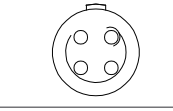
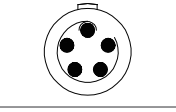
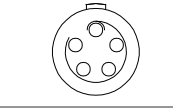
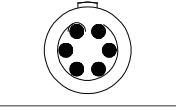
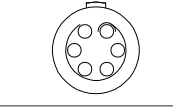
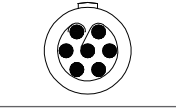
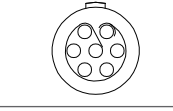
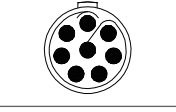
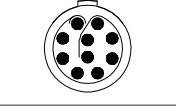
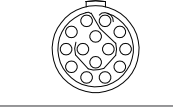

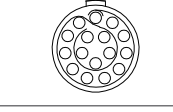
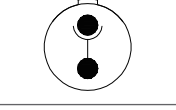
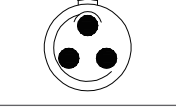
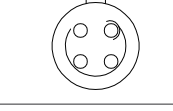
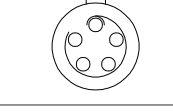
RM-W

## Insulator Configuration

	solder male contact 	solder female contact 	Insulator	Contact No.	ØA(MM)	Contact type			Test voltage(contact -shell) k/v AC-rms	Test voltage(contact -contact)k/v AC-rms	Rated current /A
						Solder contact	PCB straight contact	PCB elbow contact			
00			302	2	0.5	●	●	●	1.00	0.95	5.0
			303	3	0.5	●	●	●	0.80	0.95	3.0
			304	4	0.5	●	●	●	0.80	0.65	2.0
			305	5	0.35	●	●	●	0.7	0.6	1.5
			307	7	0.3	●	●	●	0.50	0.6	1.0
0B 0K 0W			302	2	0.9	●	●	●	1.30	1.05	10.0
			303	3	0.9	●	●	●	1.20	0.90	8.0
			304	4	0.7	●	●	●	0.85	0.70	7.0
			305	5	0.7	●	●	●	1.00	0.70	6.5
			306	6	0.5	●	●	●	0.85	0.65	2.5
			307	7	0.5	●	●	●	0.80	0.70	2.5
			309	9	0.5	●	●	●	0.60	0.50	2.0
			302	2	1.3	●	●	●	1.50	1.35	15.0
1B 1K 1W			303	3	1.3	●	●	●	1.30	1.55	12.0

- First choice alternative
- Special order alternative

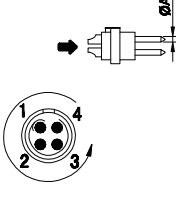
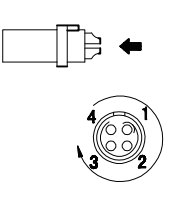



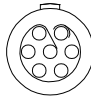



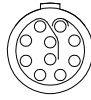

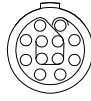










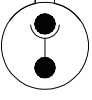
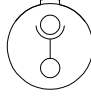

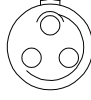
## Insulator Configuration

	solder male contact 	solder female contact 	Insulator	Contact No.	ØA(MM)	Contact type			Test voltage(contact -shell) k/v AC-rms	Test voltage(contact -contact)k/v AC-rms	Rated current /A
						Solder contact	PCB straight contact	PCB elbow contact			
1B 1K 1W			304	4	0.9	●	●	●	1.35	1.45	10.0
			305	5	0.9	●	●	●	1.25	1.15	9.0
			306	6	0.7	●	●	●	1.05	1.20	7.0
			307	7	0.7	●	●	●	0.95	1.05	7.0
			308	8	0.7	●	●	●	0.95	1.15	5.0
			310	10	0.5	●	●	●	0.90	1.50	2.5
			314	14	0.5	●	●	●	0.80	1.20	2.0
			316	16	0.5	●	●	●	0.80	1.25	1.5
2B 2K 2W			302	2	2.0	●	●	●	2.10	1.75	25.0
			303	3	1.6	●	●	●	2.40	1.85	17.0
			304	4	1.3	●	●	●	1.85	1.85	15.0
			305	5	1.3	●	●	●	1.75	1.60	14.0

- First choice alternative
- Special order alternative

RM-W

## Insulator Configuration

	solder male contact 	solder female contact 	Insulator	Contact No.	ØA(MM)	Contact type			Test voltage(contact -shell) k/v AC-rms	Test voltage(contact -contact)k/v AC-rms	Rated current /A
						Solder contact	PCB straight contact	PCB elbow contact			
2B 2K 2W			306	4	1.3	●	●	●	1.35	1.45	12.0
			307	7	1.3	●	●	●	1.75	1.60	11.0
			308	8	0.9	●	●	●	1.50	1.25	10.0
			310	10	0.9	●	●	●	1.45	1.30	8.0
			312	12	0.7	●	●	●	1.25	1.35	7.0
			314	14	0.7	●	●	●	1.15	1.35	6.5
			316	16	0.7	●	●	●	0.95	1.25	6.0
			318	18	0.7	●	●	●	0.85	1.20	5.5
			319	19	0.7	●	●	●	0.95	1.25	5.0
			326	26	0.5	●	●	○	0.95	1.30	2.0
3B 3K			302	2	3.0	●	●	-	2.10	1.55	35.0
			303	3	2.0	●	●	●	1.90	1.50	25.0

- First choice alternative
- Special order alternative



## Insulator Configuration

	solder male contact 	solder female contact 	Insulator	Contact No.	ØA(MM)	Contact type			Test voltage(contact -shell)k/v AC-rms	Test voltage(contact -contact)k/v AC-rms	Rated current /A
						Solder contact	PCB straight contact	PCB elbow contact			
3B 3K			304	4	2.0	●	●	●	1.45	1.25	19.0
			305	5	1.6	●	●	●	1.90	1.25	19.0
			306	6	1.6	●	●	●	1.60	1.15	17.0
			307	7	1.6	●	●	●	1.70	1.25	15.0
			308	8	1.3	●	●	●	1.65	1.15	13.0
			309	8 1	1.3 2.0	●	●	-	1.35 1.35	1.05 1.05	6.0 15.0
			310	10	1.3	●	●	●	1.25	0.90	12.0
			312	12	0.9	●	●	●	1.45	1.00	9.0
			314	14	0.9	●	●	●	1.20	1.20	9.0
			316	16	0.9	●	●	●	1.20	0.85	8.0
			330	30	0.7	●	●	●	0.80	0.70	3.5
			332	32	0.7	●	●	●	0.75	0.70	3.0

- First choice alternative
- Special order alternative

RM-W