



SINCE 1978

APEX CONNECTOR

WATER PROOF CONNECTORS



APEX PRECISION TECHNOLOGY CORP.

Made In Taiwan

M Series Order Information



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D-SUB Water Proof Box



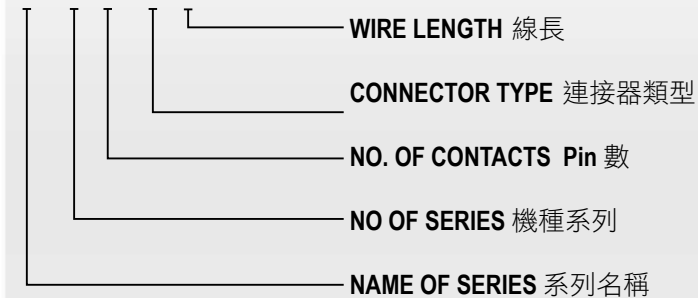
D-SUB Water Proof Box	27
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M Series

ORDERING INFORMATION

M-624-PML



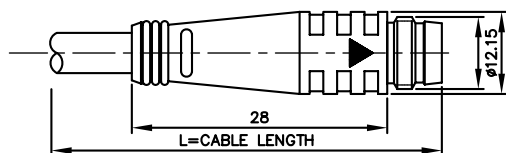
P:PLUG	R:Receptacle	F:Female	M:Male
插頭	插座	導梢	導針



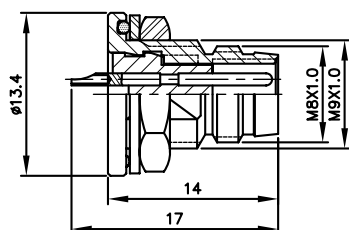
MATERIAL & FINISH

Description	Material	Finish
Shell / 外殼 本體	* Brass/銅 * Zinc Die-Casting/鋅合金壓鑄 * Aluminum alloy 鋁合金壓鑄	* Chrome-plated/鉻電鍍 * Gold-plated/金電鍍 * Nickle-plated/鎳電鍍 * Silver-plated/銀電鍍
Insulator / 絕緣體	* Bakelite /電木 * Delrin/ 塑鋼 * Nylon /耐龍	
Contact /接觸體	* Brass /銅 * P.Brass /磷銅 * B.Brass /鈹銅	* Gold-plated /金電鍍 * Silver-plated/銀電鍍 * Nickle-plated/鎳電鍍

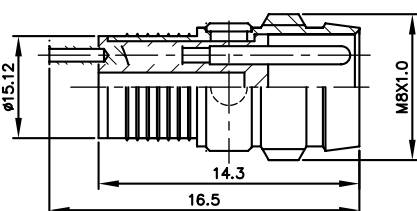
M-631/M-641/M642 ◆ -PML



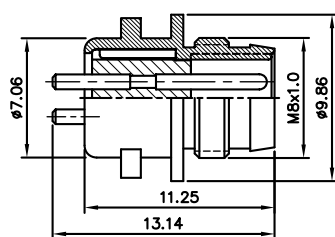
M-631/M-641/M642 ◆ -PMP



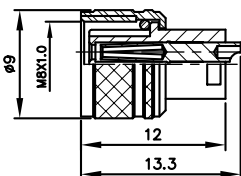
M-631/M-641/M642 ◆ -PM



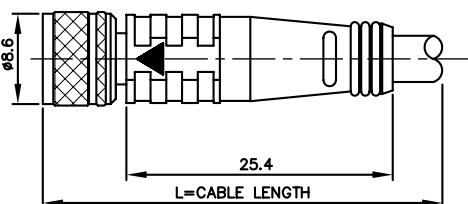
M-641 ◆ -RM



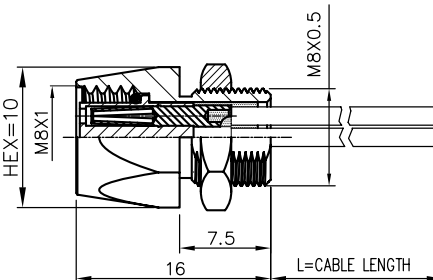
M-631/M-641/M642 ◆ -PF



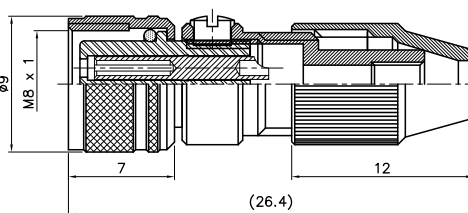
M-631/M-641/M642 ◆ -PFL



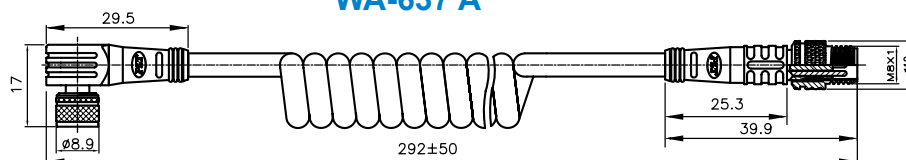
M-631/M-641/M642 ◆ -RFL



M641 ◆ -PFA-R

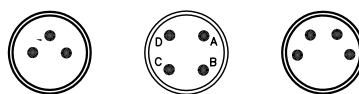


WA-637 A



◆ No. of contacts 接點數目

Contacts
Configuration
接點方位



Rated current / voltage 額定電流 / 電壓

1A 100V 1A 100V 1A 100V

Insulation resistance (MΩ MIN.) at DC 500V
絕緣阻抗

300 300 300

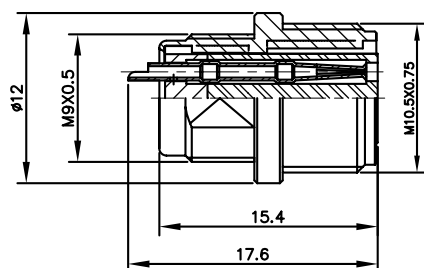
Contact resistance (mΩ MAX.) at DC 1A 接觸抗阻

3 3 3

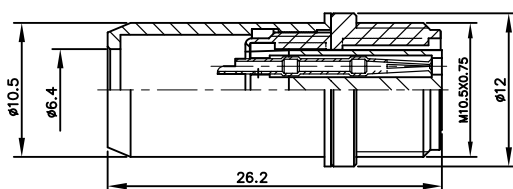
Solder inter diameter 焊孔內徑

1 1 1

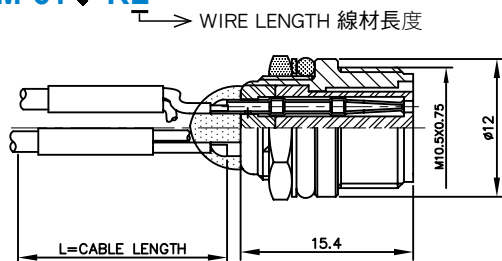
M-61 ◆ R



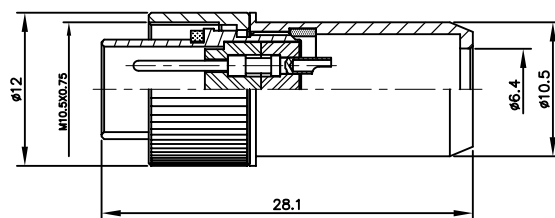
M-61 ◆ RA



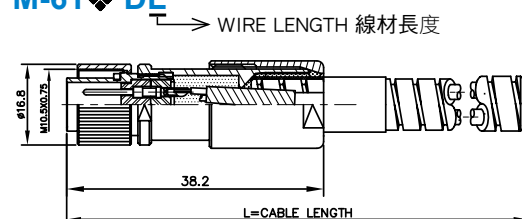
M-61 ◆ RL



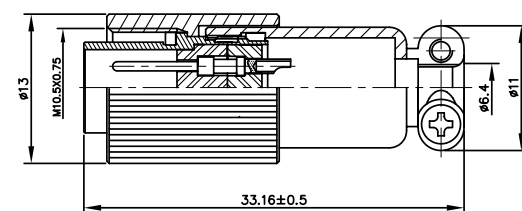
M-61 ◆ A



M-61 ◆ DL



M-61 ◆ E



No. of contacts 接點數目

2

3

4

5

Contacts

Configuration

接點方位



Rated current / voltage 額定電流／電壓

1A 100V

1A 100V

1A 100V

1A 100V

Withstanding voltage (AC.V.rms) 1 minute
耐電壓 1 分鐘

AC 300V
DC 500V

AC 300V
DC 500V

AC 300V
DC 500V

AC 300V
DC 500V

Insulation resistance (MΩ MIN.) at DC 500V
絕緣阻抗

200

200

200

200

Contact resistance (mΩ MAX.) at DC 1A 接觸抗阻

3

3

3

3

Solder inter diameter 焊孔內徑

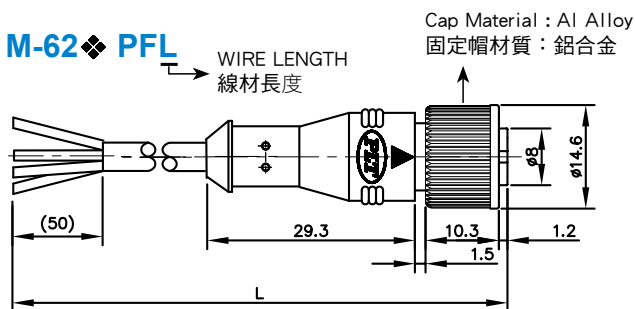
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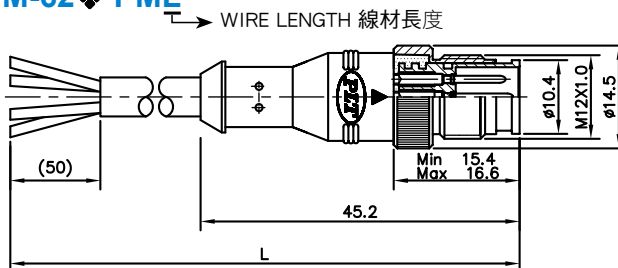
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M-62 ◆ PFL



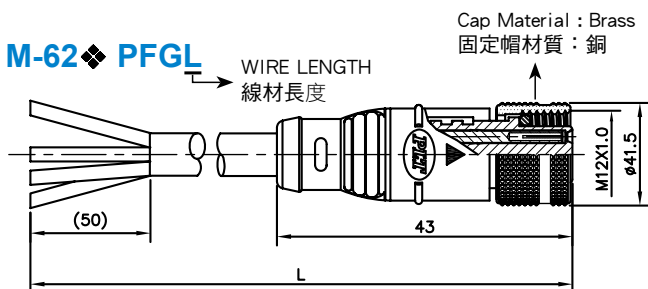
L	WIRE LENGTH
1	1M
2	2M
3	3M
4	4M
5	5M

M-62 ◆ PML



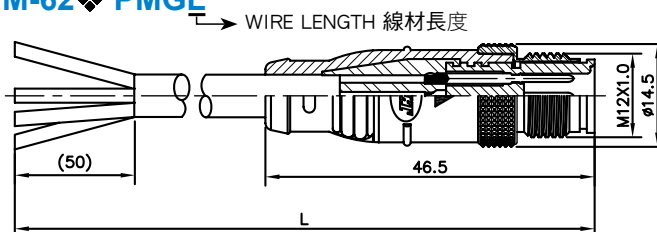
L	WIRE LENGTH
1	1M
2	2M
3	3M
4	4M
5	5M

M-62 ◆ PFGL



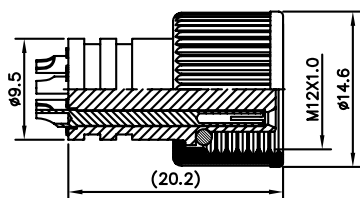
L	WIRE LENGTH
1	1M
2	2M
3	3M
4	4M
5	5M

M-62 ◆ PMGL

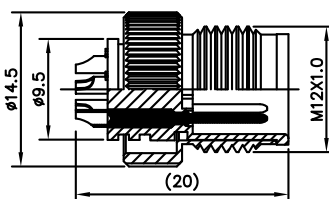


L	WIRE LENGTH
1	1M
2	2M
3	3M
4	4M
5	5M

M-62 ◆ -PF



M-62 ◆ -PM



◆ No. of contacts 接點數目

Contacts
Configuration
接點方位

Rated current / voltage 額定電流／電壓

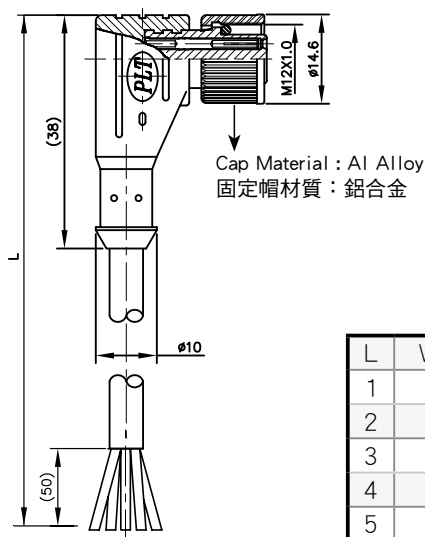
Withstanding voltage (AC.V.rms) 1 minute
耐電壓 1 分鐘

Contact resistance (mΩ MAX.) at DC 1A 接觸抗阻

4	5	6	8
3A-125V MAX. 5ma-5V MIN.	3A-125V MAX. 5ma-5V MIN.	3A-125V MAX. 5ma-5V MIN.	3A-125V MAX. 5ma-5V MIN.
300	300	300	300
3	3	3	3

M-62 ◆ LPFL

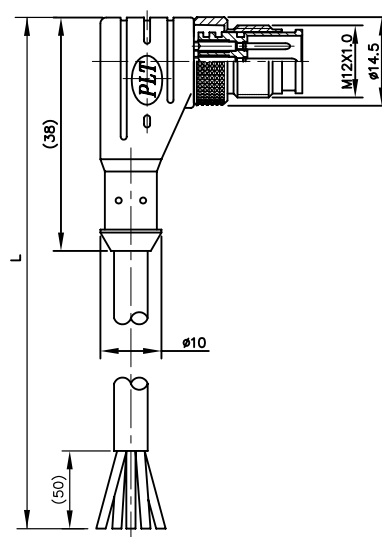
→ WIRE LENGTH 線材長度



L	WIRE LENGTH
1	1M
2	2M
3	3M
4	4M
5	5M

M-62 ◆ LPML

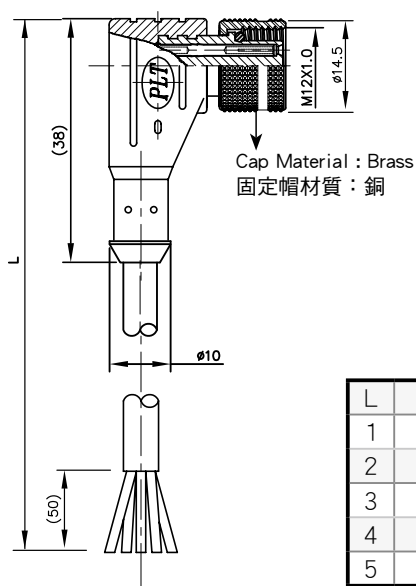
→ WIRE LENGTH 線材長度



L	WIRE LENGTH
1	1M
2	2M
3	3M
4	4M
5	5M

M-62 ◆ A-LPFL

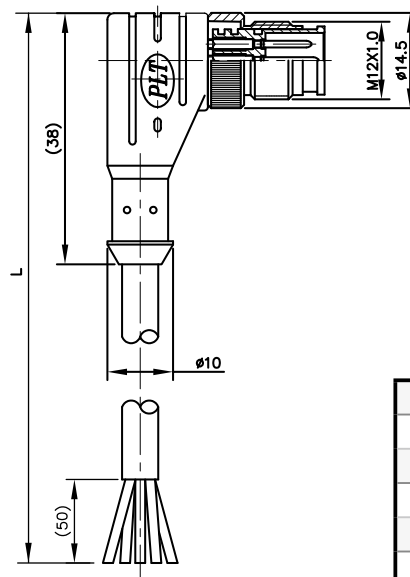
→ WIRE LENGTH 線材長度



L	WIRE LENGTH
1	1M
2	2M
3	3M
4	4M
5	5M

M-62 ◆ A-LPML

→ WIRE LENGTH 線材長度



L	WIRE LENGTH
1	1M
2	2M
3	3M
4	4M
5	5M

◆ No. of contacts 接點數目

Contacts
Configuration
接點方位



Rated current / voltage 額定電流／電壓

3A-125V MAX.
5ma-5V MIN.

3A-125V MAX.
5ma-5V MIN.

3A-125V MAX.
5ma-5V MIN.

3A-125V MAX.
5ma-5V MIN.

Withstanding voltage (AC.V.rms) 1 minute
耐電壓 1 分鐘

300

300

300

1500

Insulation resistance (MΩ MIN.) at DC 500V
絕緣阻抗

100

100

100

100

Contact resistance (mΩ MAX.) at DC 1A 接觸抗阻

3

3

3

3

Solder inter diameter 焊孔內徑

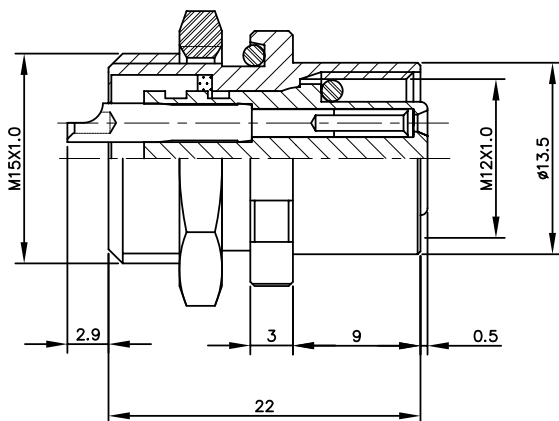
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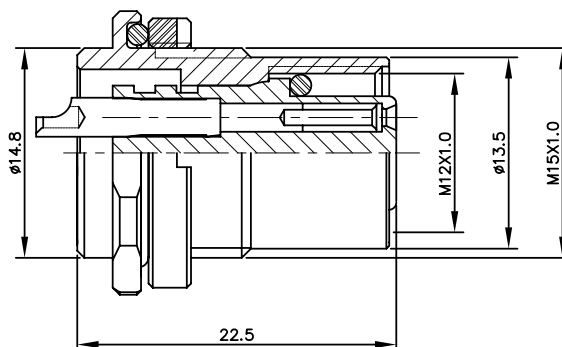
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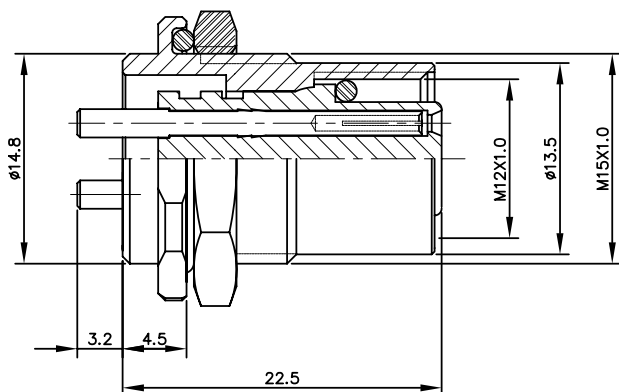
M-62◆-RF



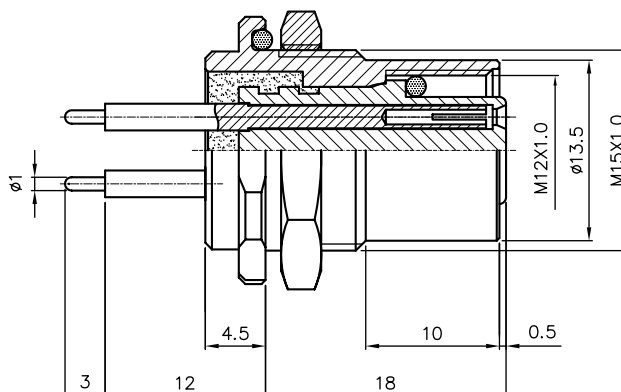
M-62◆-RFA



M-62◆-RFB



M-62◆-RFC



◆No. of contacts 接點數目

Contacts
Configuration
接點方位



Rated current / voltage 額定電流／電壓

3A-125V MAX.
5ma-5V MIN.

3A-125V MAX.
5ma-5V MIN.

3A-125V MAX.
5ma-5V MIN.

3A-125V MAX.
5ma-5V MIN.

Withstanding voltage (AC.V.rms) 1 minute
耐電壓 1 分鐘

1500

1500

1500

1500

Insulation resistance (MΩ MIN.) at DC 500V
絕緣阻抗

100

100

100

100

Contact resistance (mΩ MAX.) at DC 1A 接觸抗阻

3

3

3

3

Solder inter diameter 焊孔內徑

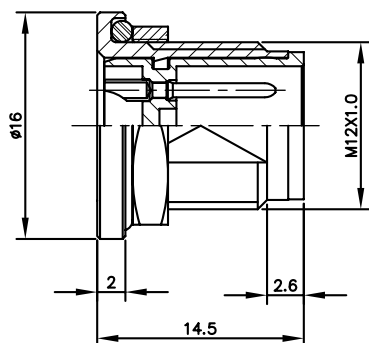
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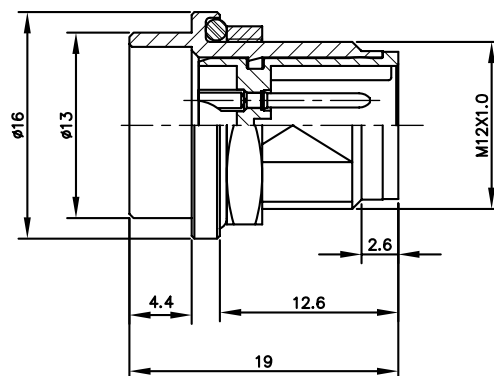
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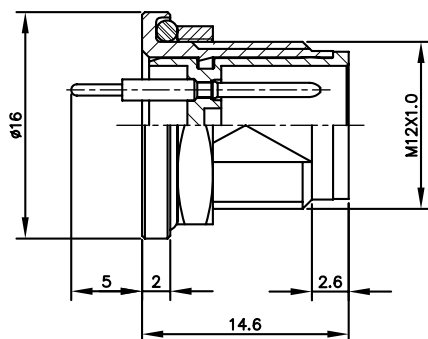
M-62◆-RM



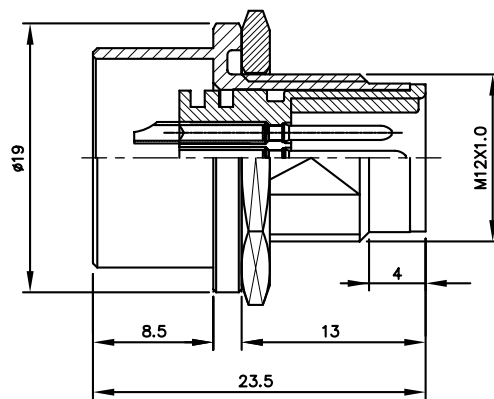
M-62◆-RMA



M-62◆-RMB



M-62◆-RMC



◆No. of contacts 接點數目

Contacts
Configuration
接點方位



Rated current / voltage 額定電流／電壓

3A-125V MAX.
5ma-5V MIN.

3A-125V MAX.
5ma-5V MIN.

3A-125V MAX.
5ma-5V MIN.

3A-125V MAX.
5ma-5V MIN.

Withstanding voltage (AC.V.rms) 1 minute
耐電壓 1 分鐘

1500

1500

1500

1500

Insulation resistance (MΩ MIN.) at DC 500V
絕緣阻抗

100

100

100

100

Contact resistance (mΩ MAX.) at DC 1A 接觸抗阻

3

3

3

3

Solder inter diameter 焊孔內徑

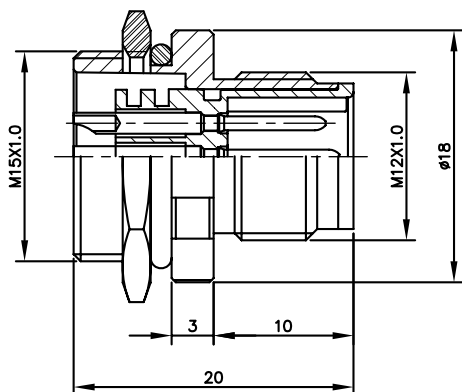
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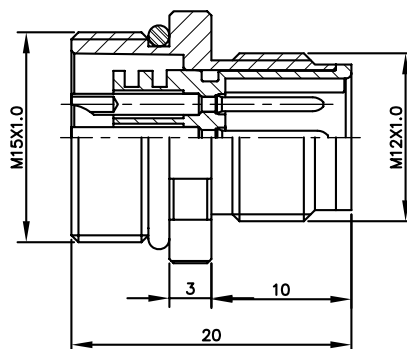
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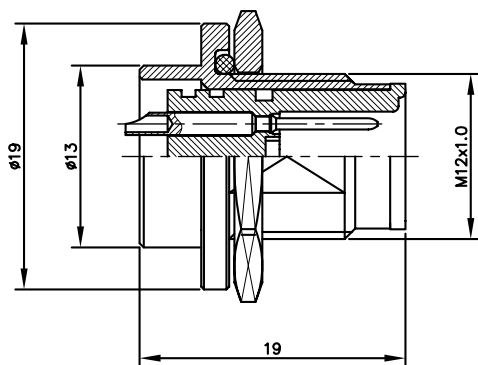
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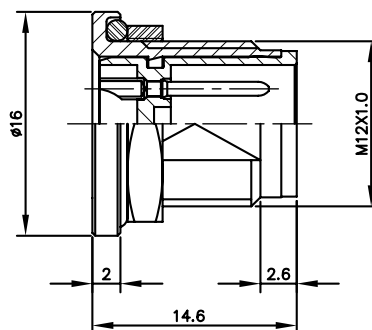
M-62 ◆ -RME



M-62 ◆ -RMH



M-62 ◆ -RMS



◆ No. of contacts 接點數目

Contacts
Configuration
接點方位

Rated current / voltage 額定電流／電壓

Withstanding voltage (AC.V.rms) 1 minute
耐電壓 1 分鐘

Insulation resistance (MΩ MIN.) at DC 500V
絕緣阻抗

Contact resistance (mΩ MAX.) at DC 1A 接觸抗阻

Solder inter diameter 焊孔內徑

4

5

6

8



3A-125V MAX.
5ma-5V MIN.

3A-125V MAX.
5ma-5V MIN.

3A-125V MAX.
5ma-5V MIN.

3A-125V MAX.
5ma-5V MIN.

1500

1500

1500

1500

100

100

100

100

3

3

3

3

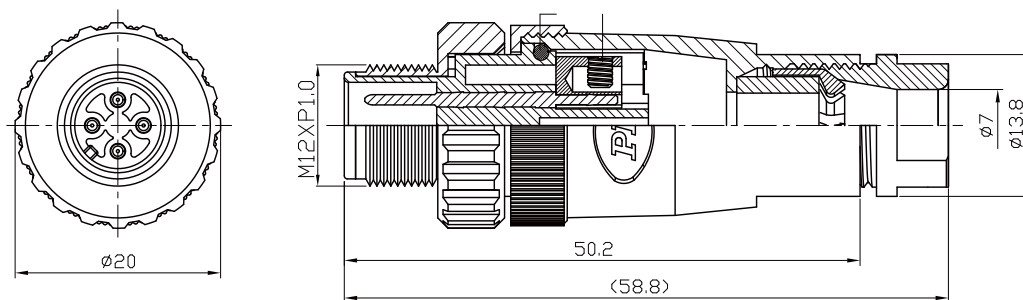
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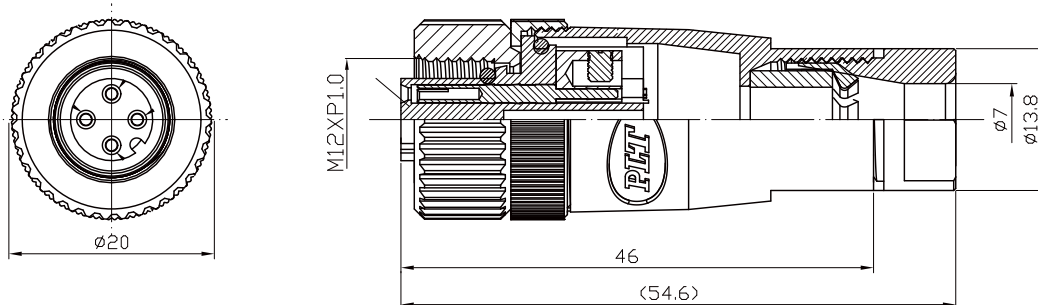
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M-62◆SP-PM-R



M-62◆SP-PF-R



◆No. of contacts 接點數目

Contacts
Configuration
接點方位



Rated current / voltage 額定電流／電壓

3A-125V MAX.
5ma-5V MIN.

3A-125V MAX.
5ma-5V MIN.

3A-125V MAX.
5ma-5V MIN.

3A-125V MAX.
5ma-5V MIN.

Withstanding voltage (AC.V.rms) 1 minute
耐電壓 1 分鐘

1500

1500

1500

1500

Insulation resistance (MΩ MIN.) at DC 500V
絕緣阻抗

100

100

100

100

Contact resistance (mΩ MAX.) at DC 1A 接觸抗阻

3

3

3

3

Solder inter diameter 焊孔內徑

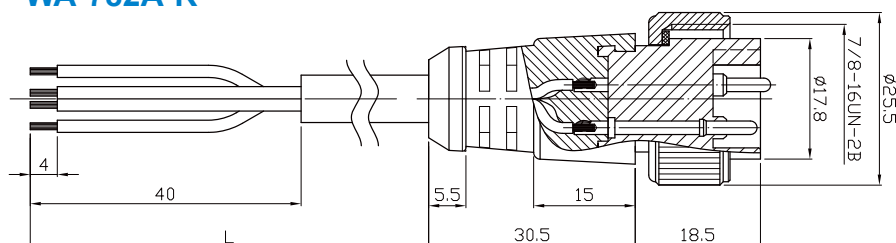
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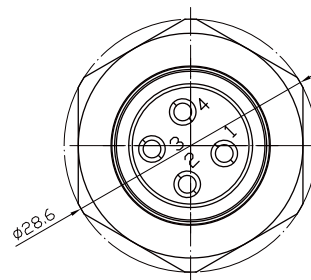
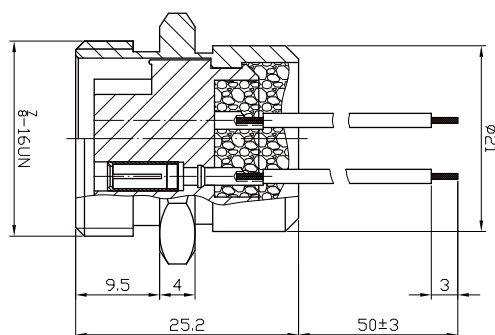
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WA-782A-R

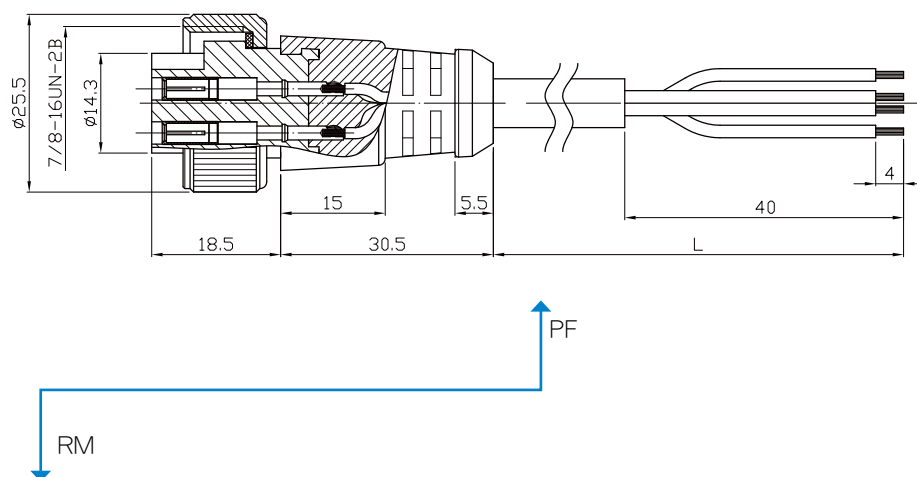


M-654-RFO

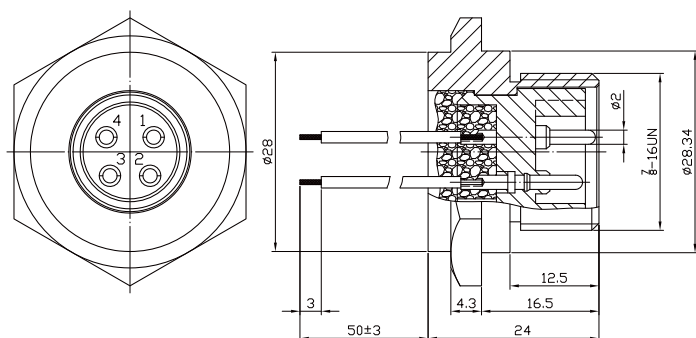


Items	Electrical specifications
Rated current / voltage 額定電流／電壓	AC/DC 5V-5mA min. AC/DC 600V-9A max.
Withstanding voltage (AC.V.rms) 1 minute 耐電壓 1 分鐘	1000
Insulation resistance (MΩ MIN.) at DC 500V 絕緣阻抗	100
Contact resistance (mΩ MAX.) at DC 1A 接觸抗阻	3

WA-783A-R



M-654-RML



Items	Electrical specifications
Rated current / voltage 額定電流／電壓	AC/DC 5V-5mA min. AC/DC 600V-9A max.
Withstanding voltage (AC.V.rms) 1 minute 耐電壓 1 分鐘	1000
Insulation resistance (MΩ MIN.) at DC 500V 絕緣阻抗	100
Contact resistance (mΩ MAX.) at DC 1A 接觸抗阻	3



WPS / WPM Series

ORDERING INFORMATION





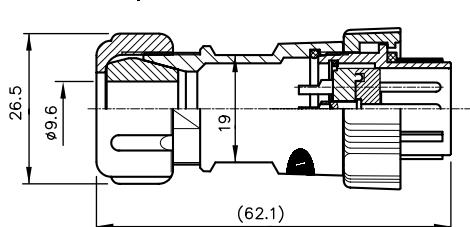
SINCE 1978
APEX CONNECTOR

www.plt.com.tw

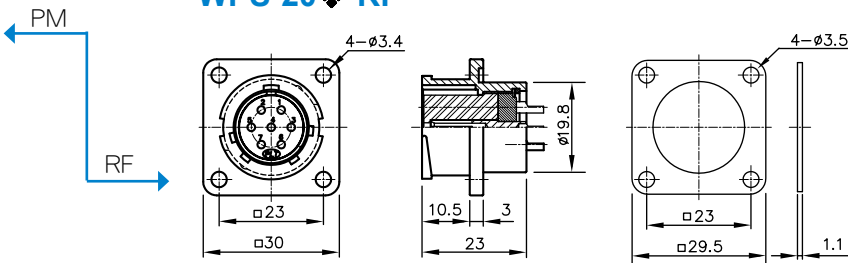
WPS-20 Series

IP67

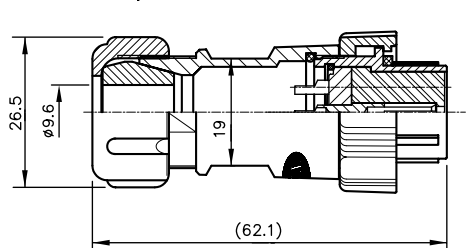
WPS-20◆-PM



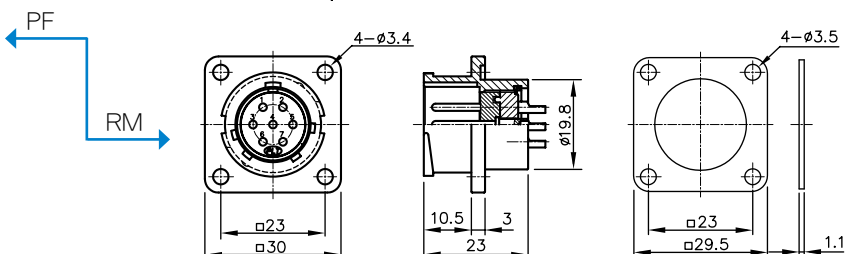
WPS-20◆-RF



WPS-20◆-PF



WPS-20◆-RM



◆No. of contacts 接點數目

Contacts

Configuration

接點方位



Rated current / voltage 額定電流／電壓

3A-125V MAX.
5ma-5V MIN.

3A-125V MAX.
5ma-5V MIN.

3A-125V MAX.
5ma-5V MIN.

3A-125V MAX.
5ma-5V MIN.

Operation limit voltage (AC.V.rms) 操作電壓限制

250

250

250

250

Withstanding voltage (AC.V.rms) 1 minute

耐電壓 1 分鐘

1500

1500

1500

1500

Insulation resistance (MΩ MIN.) at DC 500V

絕緣阻抗

2000

2000

2000

2000

Contact resistance (mΩ MAX.) at DC 1A 接觸抗阻

3

3

3

3

Solder inter diameter 焊孔內徑

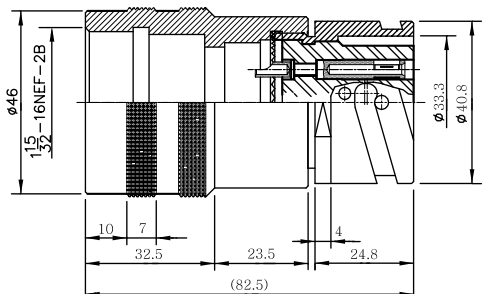
1.6

1.6

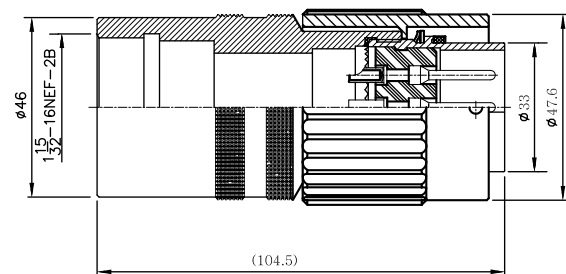
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1.6

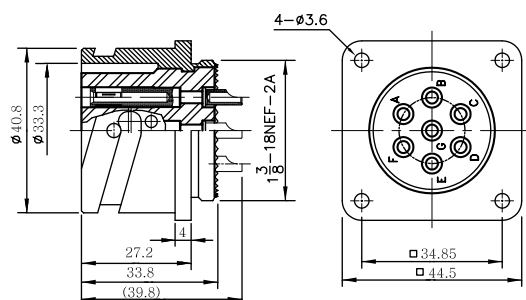
WPS-2407-LF



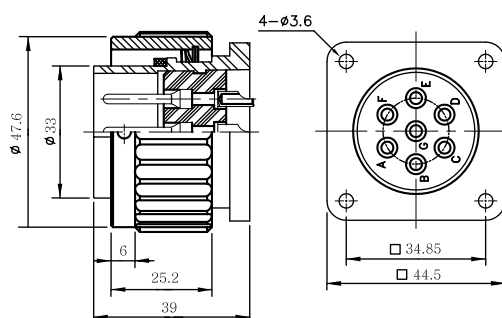
WPS-2407-LM



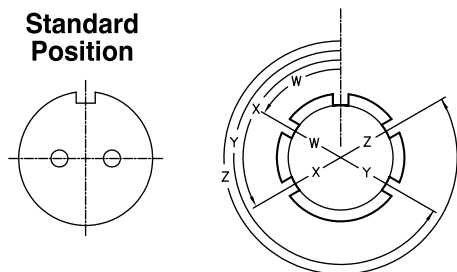
WPS-2407-SF



WPS-2407-SM



Standard Position

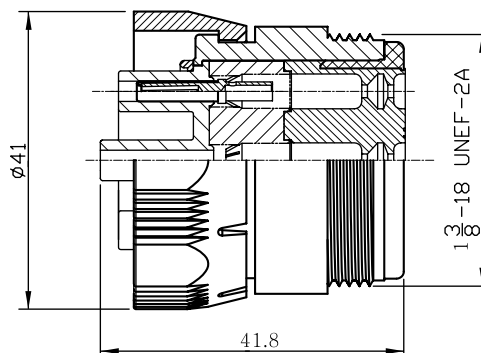
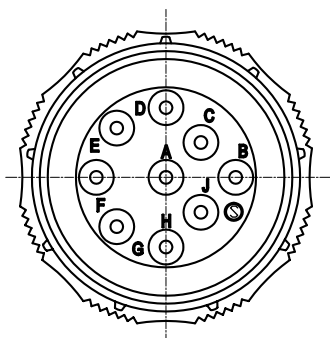


In contrast with the standard inserted position. After the guide key of its shell has formed into certain angle, the position changed shall be indicated by the marks W,X,Y,Z. According to the layout of connector, there is difference on the changable angles. Please refer to the instructions of the said table. Furthermore, what the figure has shown is observed from the joining part of the pins.

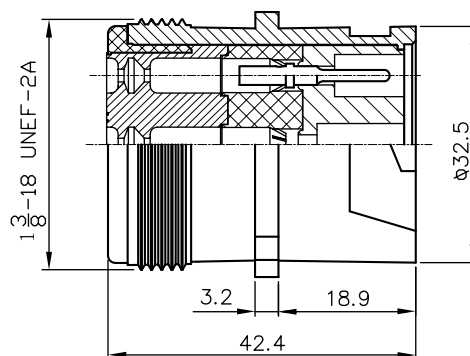
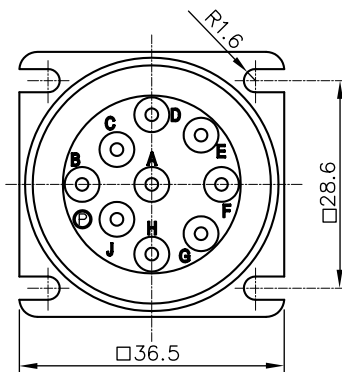
No. ELECTRICAL SPECIFICATION

Operation voltage (v)	* DC 700 * AC(rms):500
Withstanding voltage	AC 2000V one minute
Test current	22 Amperes
Insulation resistance	5000MΩ min. at DC 500V

WPM06B-9-16S



WPM02A-9-16P



◆ No. of contacts 接點數目

9

Contacts

Configuration

接點方位



Rated current / voltage 額定電流／電壓

13A 250V

Operation limit voltage (AC.V.rms) 操作電壓限制

250

Withstanding voltage (AC.V.rms) 1 minute
耐電壓 1 分鐘

2000

Insulation resistance (MΩ MIN.) at DC 500V
絕緣阻抗

5000

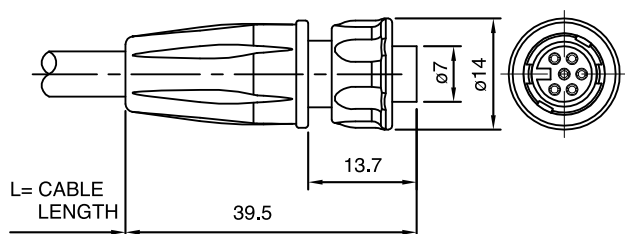
Contact resistance (mΩ MAX.) at DC 1A 接觸抗阻

3

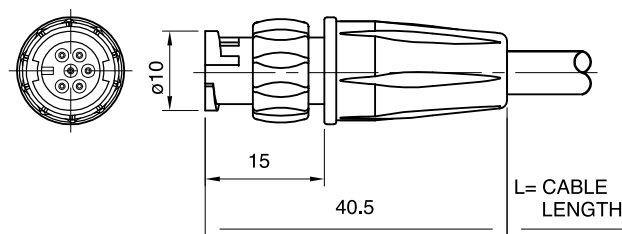
Solder inter diameter 焊孔內徑

1.7

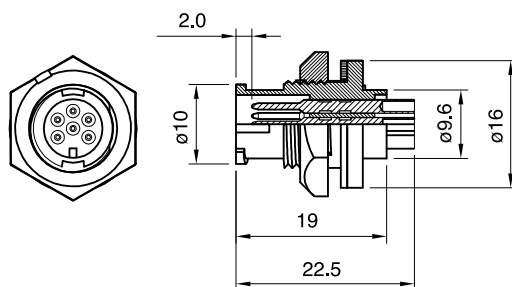
WPM16A11-6SL



WPM16A11-6PL



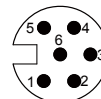
WPM16A11-6P



◆No. Electrical Specification

6

Contacts
Configuration
接點方位



Rated current / voltage 額定電流／電壓

3A 125V

Insulation resistance (M Ω MIN.) at DC 500V 絕緣阻抗

$\geq 100M \Omega$ at DC 500V

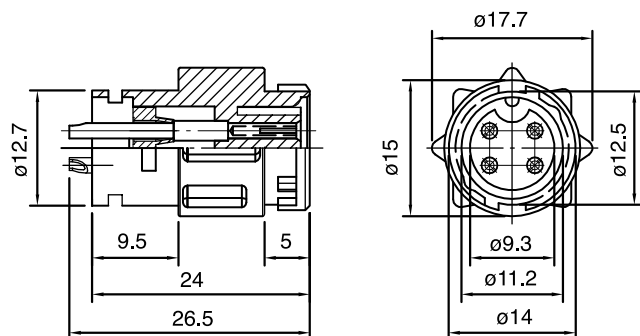
Current rating

$\geq 100V$, 2A

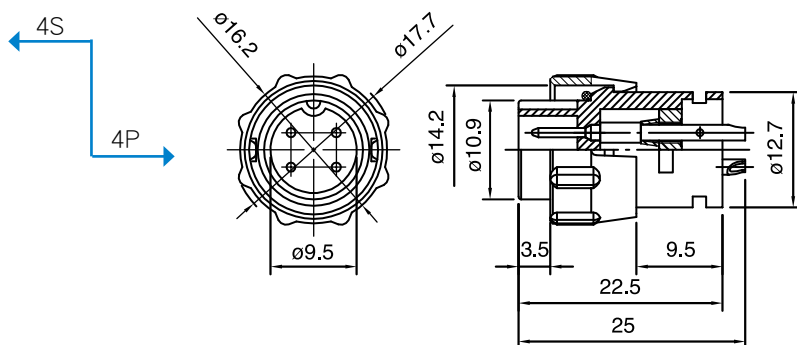
Withstanding voltage (AC.V.rms) 1 minute 耐電壓 1 分鐘

$\geq AC300V$ / 1 minute

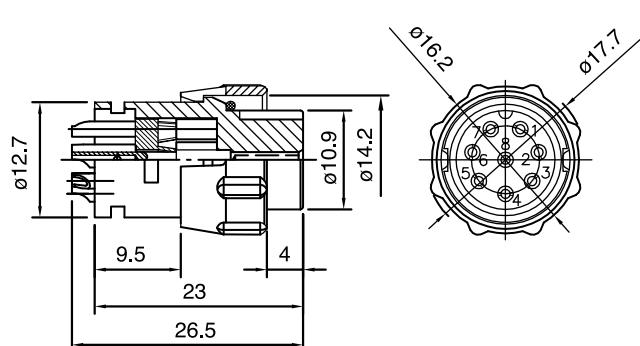
WPM16C12-4S



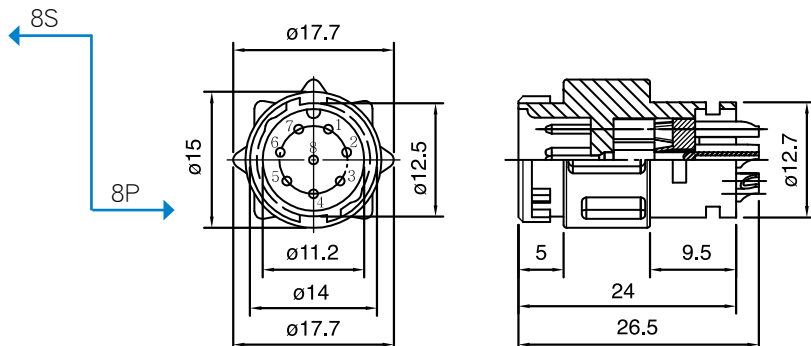
WPM16C12-4P



WPM16C12-8S



WPM16C12-8P



◆No. Electrical Specification

Contacts
Configuration
接點方位

Rated current / voltage 額定電流／電壓

Withstanding voltage (AC.V.rms) 1 minute 耐電壓 1 分鐘

Insulation resistance (M Ω MIN.) at DC 500V 絕緣阻抗

Contact resistance (m Ω MAX.) at DC 1A 接觸抗阻

4



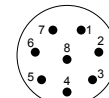
3A 125V

1000

100 M Ω

3

8



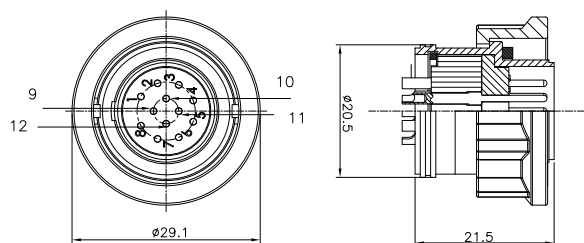
3A 125V

1000

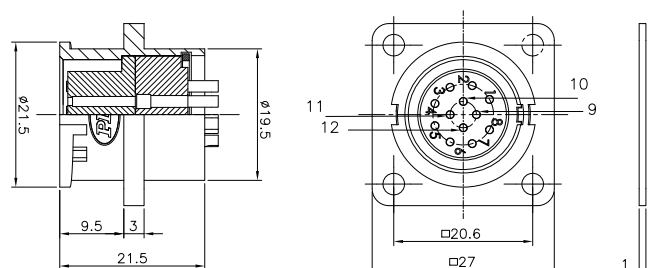
100 M Ω

3

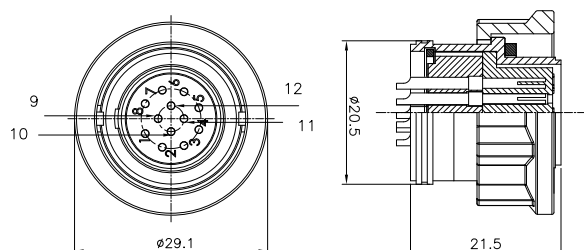
WPM-19◆-PM



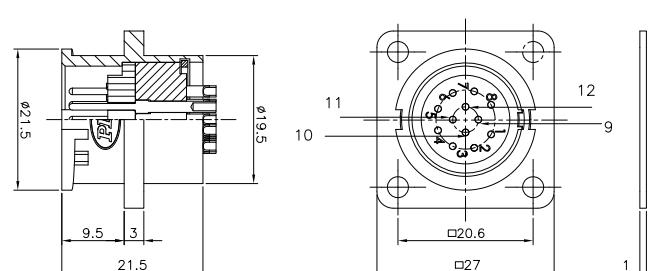
WPM-19◆-RF



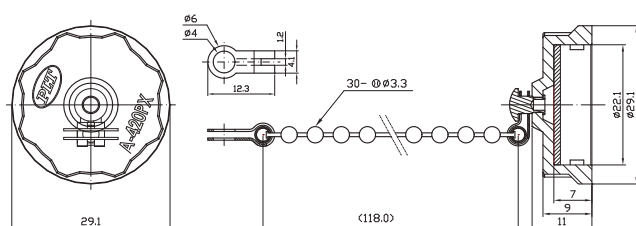
WPM-19◆-PF



WPM-19◆-RM



WPM-19◆-RCa



No. of contacts 接點數目

8

12

Contacts

Configuration

接點方位



Rated current / voltage 額定電流／電壓

5A 125V

5A 125V

Operation limit voltage (AC.V.rms) 操作電壓限制

125

125

Withstanding voltage (AC.V.rms) 1 minute

耐電壓 1 分鐘

300

300

Insulation resistance (MΩ MIN.) at DC 500V

絕緣阻抗

1000

1000

Contact resistance (mΩ MAX.) at DC 1A 接觸抗阻

3

3

Solder inter diameter 焊孔內徑

1.2

1.2

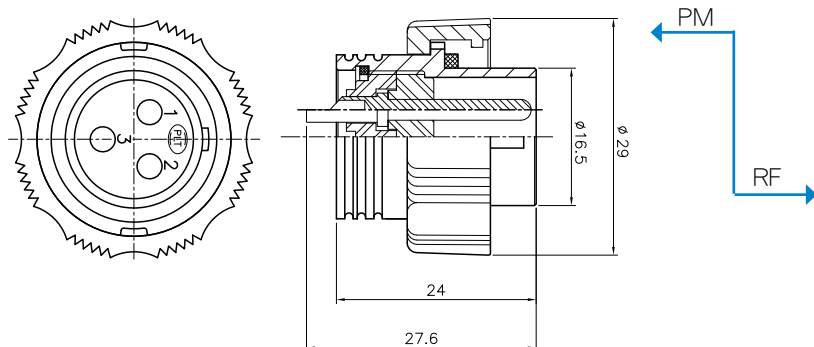


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APEX CONNECTOR

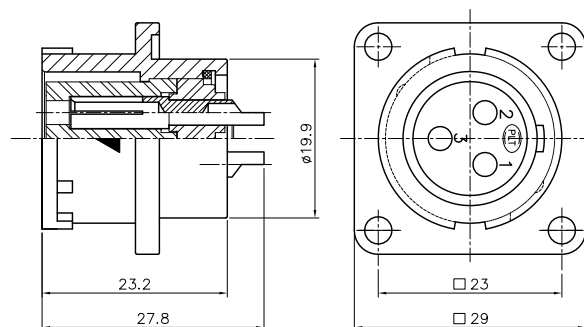
www.plt.com.tw

IP67

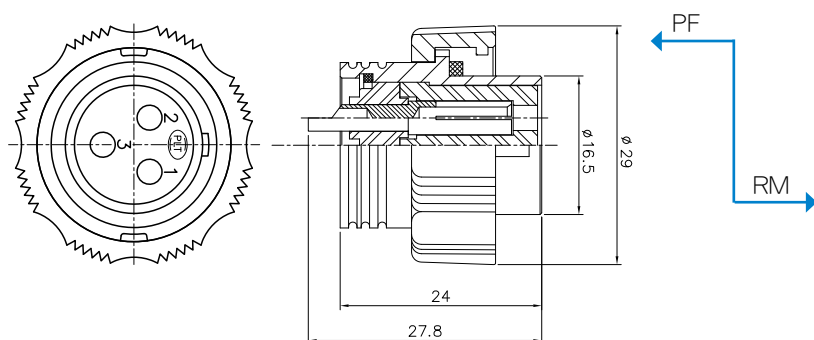
WPM-20◆-PM



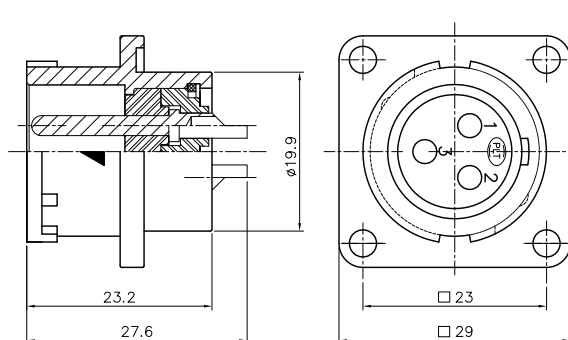
WPM-20◆-RF



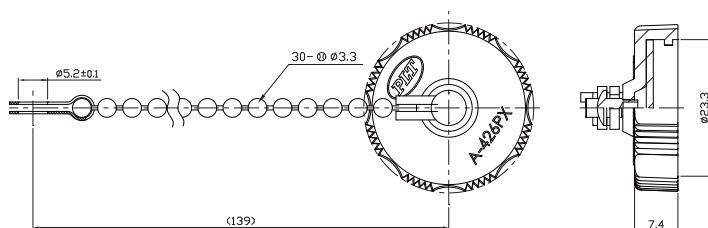
WPM-20◆-PF



WPM-20◆-RM



WPM-20◆-RCa-R



No. of contacts 接點數目

2

3

4

7

Contacts

Configuration

接點方位



Rated current / voltage 額定電流／電壓

15A 250V

15A 250V

10A 250V

10A 250V

Operation limit voltage (AC.V.rms) 操作電壓限制

250

250

250

250

Withstanding voltage (AC.V.rms) 1 minute
耐電壓 1 分鐘

1500

1500

1500

1000

Insulation resistance (MΩ MIN.) at DC 500V
絕緣阻抗

2000

2000

2000

2000

Contact resistance (mΩ MAX.) at DC 1A 接觸抗阻

3

3

3

3

Solder inter diameter 焊孔內徑

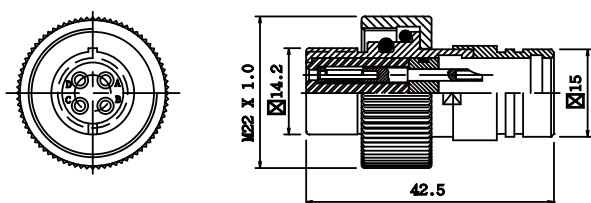
1.8

1.8

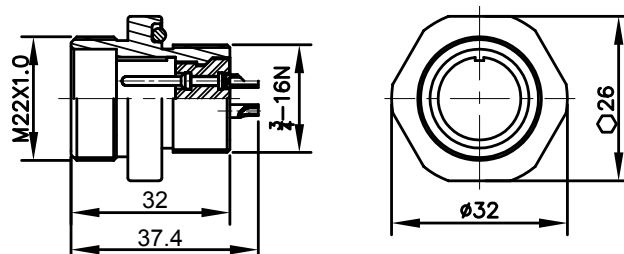
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1.6

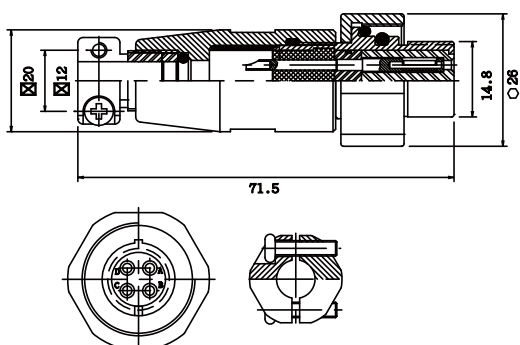
WPM-21 ◆ -PL



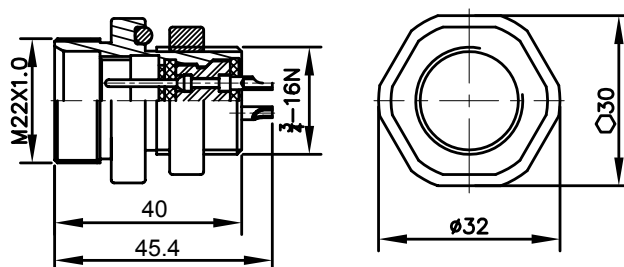
WPM-21 ◆ -R



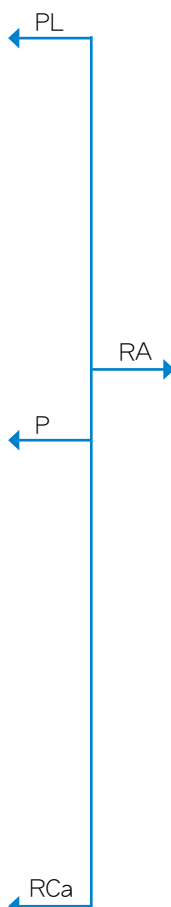
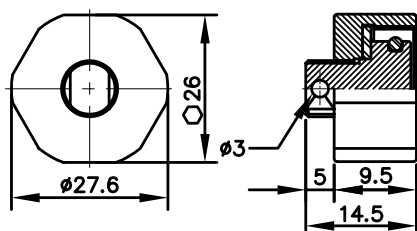
WPM-21 ◆ -P



WPM-21 ◆ -RA



WPM-21 ◆ -RCa



◆ No. of contacts 接點數目

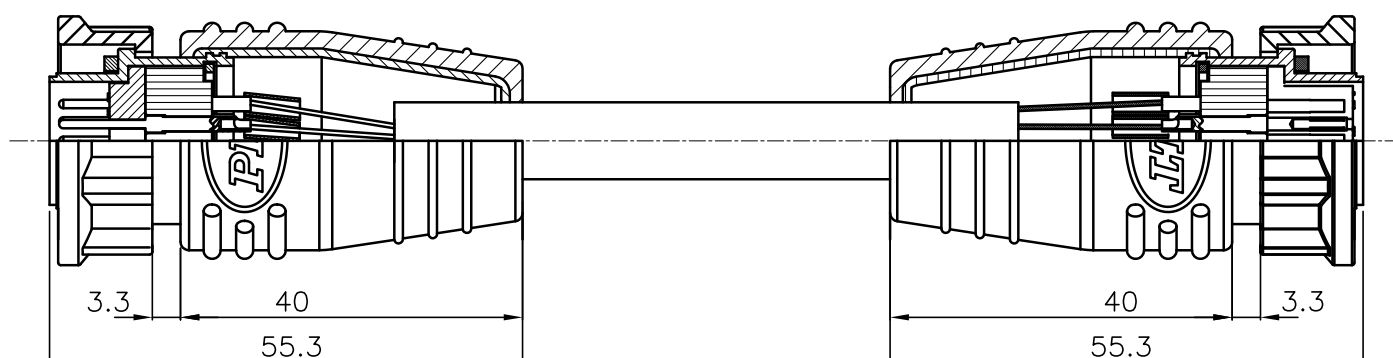
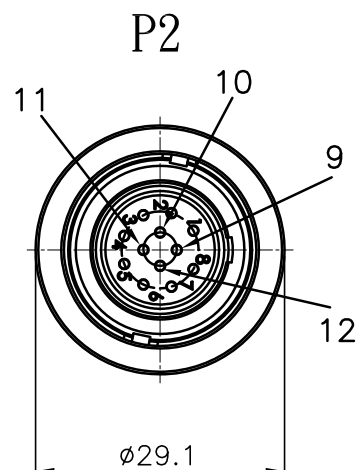
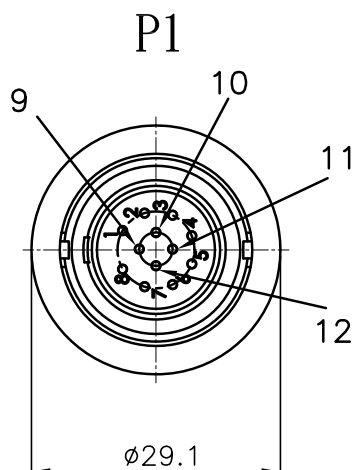
4

Contacts
Configuration
接點方位



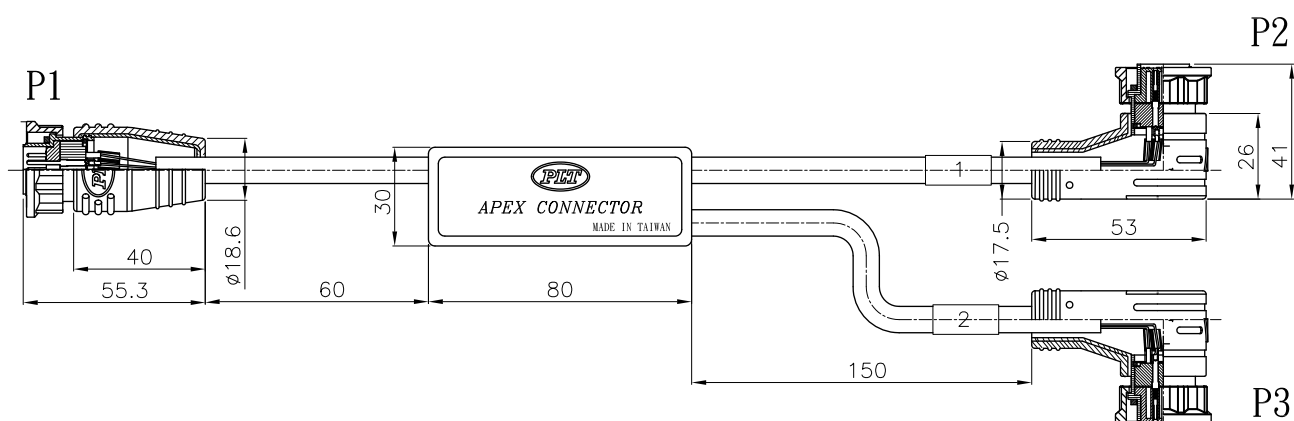
Rated current / voltage 額定電流／電壓	10A 100V				
Operation limit voltage (AC.V.rms) 操作電壓限制	100				
Insulation resistance (MΩ MIN.) at DC 500V 絕緣阻抗	200				
Contact resistance (mΩ MAX.) at DC 1A 接觸抗阻	3				
Solder inter diameter 焊孔內徑	1.5				

WA-715A



◆No. Electrical Specification	P1	P2
Contacts Configuration 接點方位		
Withstanding voltage (AC.V.rms) 1 minute 耐電壓 1 分鐘	$\geq 100\text{M}\Omega$ at DC 500V	$\geq 100\text{M}\Omega$ at DC 500V
Insulation resistance (M Ω MIN.) at DC 500V 絕緣阻抗	$\geq 300\text{V} / 1\text{Minute}$	$\geq 300\text{V} / 1\text{Minute}$

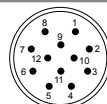
WA-738A



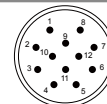
◆No. Electrical Specification

Contacts
Configuration
接點方位

P1



P2



Withstanding voltage (AC.V. rms) 1 minute 耐電壓1分鐘

≥10MΩ at DC 100V

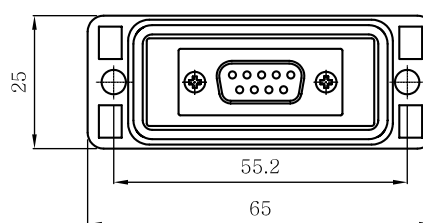
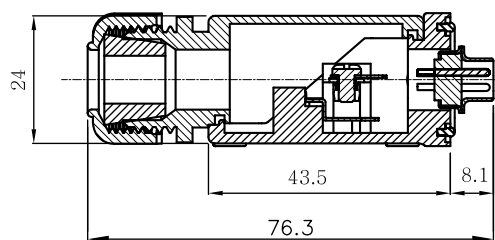
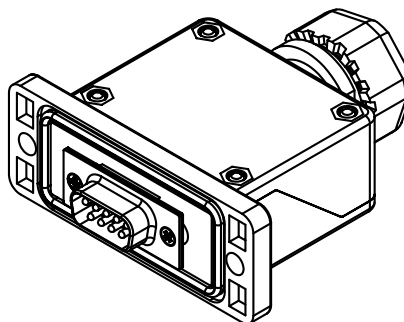
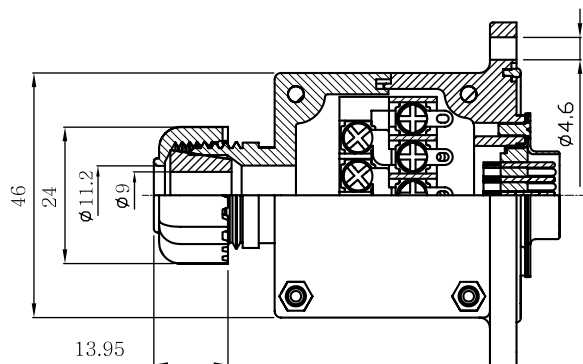
≥10MΩ at DC 100V

Insulation resistance (MΩ MIN.) at DC 500V 絕緣阻抗

≥ AC 100V / 1Minute

≥ AC 100V / 1Minute

MODEL:PLP-123-P9



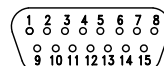
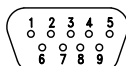
◆No. of contacts 接點數目

9

Contacts

Configuration

接點方位



Rated current / voltage 額定電流／電壓

3A / AC 350V.

3A / AC 350V.

Operation limit voltage (AC.V.rms) 操作電壓限制

Withstanding voltage (AC.V.rms) 1 minute

耐電壓 1 分鐘

1250

1250

Insulation resistance (MΩ MIN.) at DC 500V

絕緣阻抗

5000

5000

Contact resistance (mΩ MAX.) at DC 1A 接觸抗阻

25

25



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CP2_Status=Active

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CP2_Status=Active

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Business Scope

The 1st Manufacturing Dept.

Connector / Military spec / Industrial / Waterproof Connectors Series

The 2nd Manufacturing Dept.

Precise Mold/Machinery / Tool / Automatic Facility / Designing & Manufacturing

The 3rd Manufacturing Dept.

Auto controller / Wiring & Assembly

The 4th Manufacturing Dept.

Wireless Communication / Security Monitoring System

The 5th Production Dept.

RF Digital Technology Corporation / Logistic & Circulation



專業製造廠 / Manufacturer

錫鋼精密科技股份有限公司

APEX PRECISION TECHNOLOGY CORP.

地址：24264 台北縣新莊市民安西路405號

No.405, Min-an W. Rd., Sinhuang City, Taipei County 24264, Taiwan R.O.C

Tel: +886-2-2206-8899 Fax: +886-2-2208-0559

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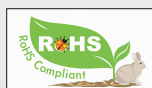
APEX CONNECTOR CO., LTD.



ISO 14001 ISO 9001



International Q/C Certification



RoHS Compliant

Agent / 代理商