

室外光纤防水连接器产品手册

OUTDOOR FIBER OPTIC WATERPROOF CONNECTORS





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ODVA SERIES WATERPROOF CONNECTOR

ODVA系列防水连接器



ODVA系列防水连接器，是一款具有塑料外壳体保护的室外型防水光纤连接器，防水防尘等级为IP67等级。
ODVA series of waterproof connectors has plastic housing for protection, it's for outdoor waterproof use, and the grade is IP67.

产品特点/Features

- 型号多样：ODVA系列防水连接头，有LC双工，SC单工，MPO三种系列。
- 对接快捷：独特的螺旋卡扣式对接，对接方便，快捷，速度快。
- 抗拉力强：接头适用 $\phi 5.0-7.0\text{mm}$ 室外拉远光缆，多重压接工艺，抗拉力强。
- 防水防尘：内置橡胶防水垫，密封性能优异，防水等级可达IP67。
- 配套齐全：设计有相应的室外防水模块盒，防水适配器，提供防水设计方案。
- Various types: It has 3 series- LC duplex, SC simplex and MPO.
- Fast connection: the unique spiral structure makes connection easy and fast.
- High intensity of tension: it's suitable for fiber cables of $\phi 5.0-7.0\text{mm}$.
- Water and dust proof: there's rubber cushion inside, the stability is good and the grade can be IP67.
- Complete solutions: we have the related complete outdoor waterproof boxes, adapters and solutions.

产品展示/Product display



ODVA/MPO



ODVA/SC



ODVA/LC

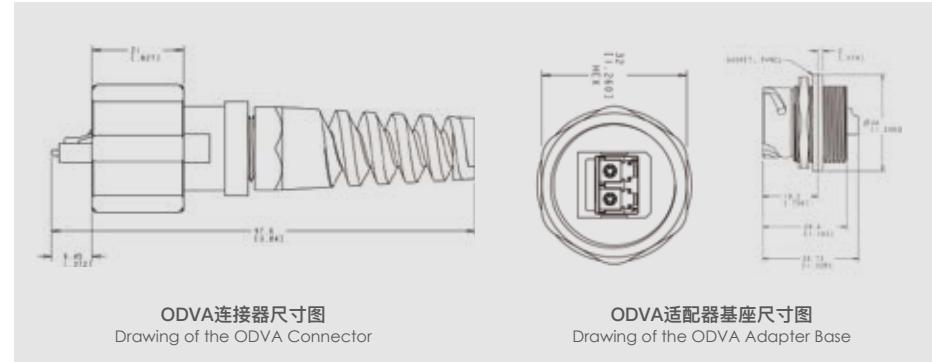
在不同的对接环境下，ODVA使用的适配器也有结构上的区分。我司分为对接款适配器和端接款适配器。
To suit different projects, there're two types for ODVA adapters: terminal- terminal, and terminal- equipment

ODVA对接款式适配器/ODVA Adapter of Terminal-Terminal

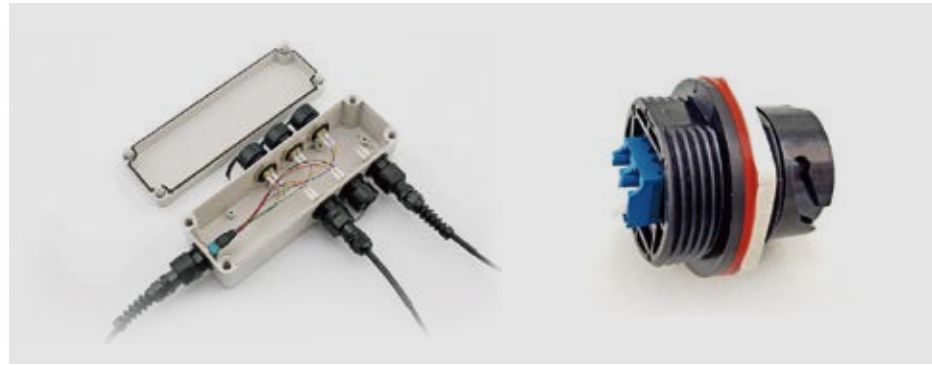


该款适配器使用在两个ODVA连接头相互对接的情况下。适配器的两端均为螺旋卡口式的导向槽，以适配ODVA连接头。
This type of adapter is used to connect two ODVA connectors. Two ends of the adapter are both spiral bayonet grooves, for matching the ODVA connectors.

尺寸图/Dimensions



ODVA端接款式适配器/ODVA Adapter of Terminal-Equipment



该款适配器使用在ODVA连接头与设备对接的情况下。适配器的一端为螺旋卡口导向槽，适配ODVA连接头，另外一端为螺纹口+六角固定螺母，以方便安装在设备上。
This type of adapter is used to connect ODVA connector and equipment. One end of the adapter is spiral bayonet groove(for matching the ODVA connector), the other end is thread& hexagon nut(for fixing the adapter onto the equipment).

部分ODVA防水模块盒展示/Some of our Waterproof Boxes





FULLAXS

FULLAXS SERIES WATERPROOF CONNECTOR

Fullaxs系列防水连接器

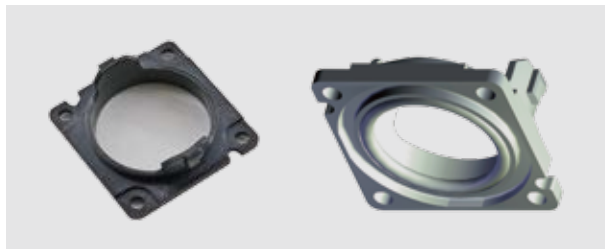
为满足新一代WiMAX和长期演进（LTE）光纤到天线（FTTA）技术的户外连接设计要求，由TE Connectivity (泰科)设计推出了FullAXS连接器，该系统能在远程无线电和电信应用基站间提供SFP链接。该产品可兼容市场上各种SFP收发器，允许终端用户选择符合其特定系统要求的收发器。

To meet requirements of new technology of connection for WiMAX/ LTE/ FTTA, TE Connectivity worked out Fullaxs connectors—it can be used to provide SFP connections between Radio Remote Unit(RRU) and Building Base Band Unit(BBU). It's compatible for various types of SFP, this allows end users to be able to choose the media converters they need.

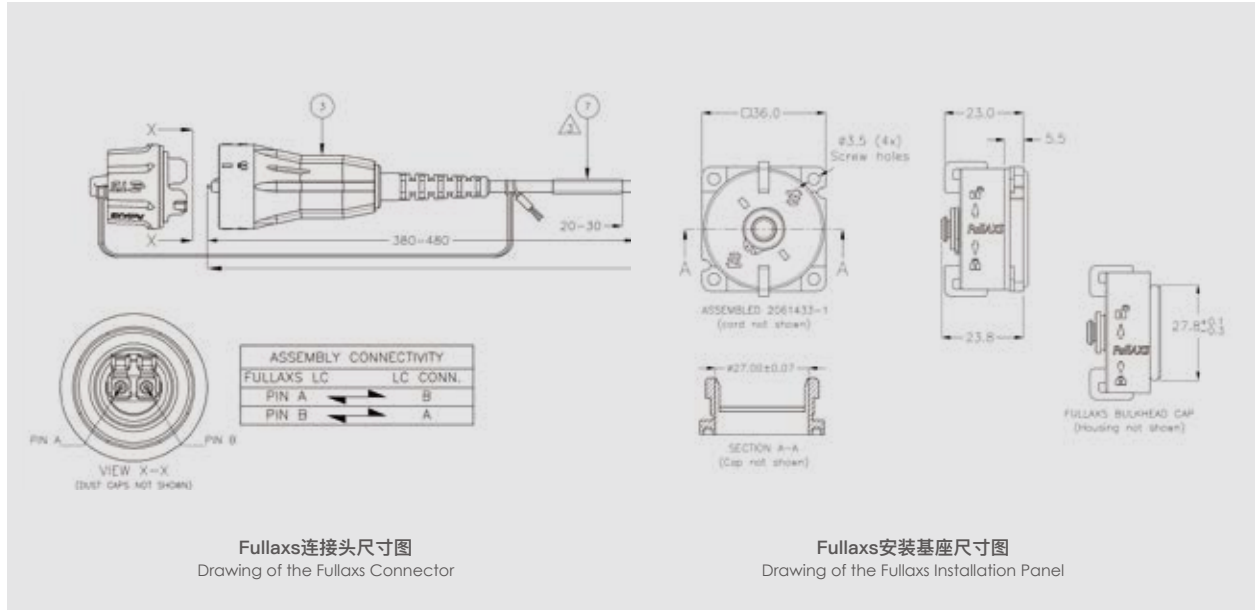
Fullaxs光纤跳线与连接器实物图/Images:



Fullaxs安装基座实物图+3D视图/ Fullaxs Installation Panel& The 3D View



尺寸图/Dimensions



Fullaxs经由推出后，受到市场的一致好评，该款连接器操作简便，防水性能高，可达IP68级别。后被广泛的应用在各式户外光纤设备的光纤端口处，尤以爱立信的通信设备应用的最为广泛。为满足市场需求，TE公司又相继推出了其它款式的Fullaxs系列，一些市场上其它的通信厂商，也推出了一系列匹配Fullaxs安装基座的防水连接器，以满足市场的需求。以下为部分匹配Fullaxs端口的其它品牌的防水连接器：

Once came to the market, Fullaxs acquired very good reputation. It's easy to operate, and has a high grade of IP68. It's widely used in various kinds of terminals of outdoor fiber optic equipments, especially Ericsson's. To meet market's requirements, TE then worked out other types of connectors of Fullaxs series, and other telecom companies made the relevant waterproof connectors which are compatible with Fullaxs, below are part of them:

罗森伯格/(ROSENBERGER-RFE)



金信诺/(KINGSIGNAL-FPM)



安菲洛/(Amphenol IP-FX)



适配同一款安装底座/ All above three connectors match the same installation panel



MINI-SC

MINI-SC SERIES

WATERPROOF CONNECTORS

Mini-SC系列防水连接器

Mini-SC连接器是一款新型的室外光纤防水连接器，主要用于FTTH室外防水安装对接，该连接器体积小巧，安装快接方便，防水密封性能优异，可达IP67等级。目前市场上主流Mini-SC光纤连接器主要有三种品牌，华为Huawei，康宁Corning（后期为安费诺所代工，所以也可看成Amphenol品牌），下面为三种连接器的产品简介：

Mini-SC is a new outdoor waterproof fiber optic connector, it's mainly used for FTTH outdoor installation. It's small and easy to be installed, and the grade can be IP67. Now there're three types of such Mini-SC connector: Huawei, Corning- later Amphenol will be its foundry, so the third one is Amphenol. Here are their brief introductions:IP67.

华为Mini-SC/Huawei Mini-SC

华为Mini-SC防水连接器，采用内置SC无外框内芯，螺旋卡口对接方式，多层橡胶防水垫圈，保证密封性。适用3.0-5.0mm圆形光缆，FTTH皮线光缆。
Huawei Mini-SC waterproof connector has SC houseless core, spiral bayonet and multilayer rubber cushions. It's suitable for Φ3.0-5.0mm round cables and FTTH drop cables.



康宁Mini-SC/Corning Mini-SC

康宁Mini-SC防水连接器，采用内置SC无外框内芯，螺纹口对接方式，多层橡胶防水垫圈，保证密封性。适用3.0-5.0mm圆形光缆，FTTH皮线光缆。康宁连接器相比华为连接器，最大的不同点在对接口对接方式上，一个为螺旋卡口，一个为螺纹口。康宁Mini-SC连接器后授权美国安费诺代工生产，安菲洛公司对其进行了进一步的延伸，前期的MINI-SC连接器只能用于接头和设备对接，命名为H-Connector。后期生产出连接头与连接头相互对接的款式，安菲洛公司命名为H-Connector（In-Line）。

Corning Mini-SC waterproof connector has SC houseless core, spiral bayonet and multilayer rubber cushions. It's suitable for Φ 3.0-5.0mm round cables and FTTH drop cables. Compare with Huawei Mini-SC connector, Corning's biggest difference is the way of connection, one is spiral bayonet connection, and the other one is thread connection. Corning has authorized Amphe-nol as Mini-SC's foundry, the Mini-SC could only be used to connect the connector and equipment which were named as H-Connector, later Amphenol made a new design—it can connect two connectors, and it's named as H-Connector(In-Line).



ODC SERIES

WATERPROOF CONNECTORS

ODC系列防水连接器



ODC光纤防水连接器，为Out Door Connector的英文缩写，具有结构坚固、连接可靠、防水防尘等特点。广泛应用于光纤拉远无线基站FTTA（光纤到塔顶）以及矿井、传感、电力等户外恶劣环境下的光传输连接。该款防水连接器采用不锈钢外壳保护，内置防水橡胶垫圈，螺纹卡口对接，单键导针对位。防水防尘等级为IP67级别，抗拉力强。接头类型分为插头Plug和插座Socket，直接对接，无需适配器法兰。常用芯数为2芯、4芯。特殊情况下可根据客户需求订制6芯，8芯接头。目前较为通用的ODC品牌有瑞士的H&S、美国安菲洛Amphenol，德国罗森博格ROSENBERGER，TE泰科等品牌，各个品牌之间的ODC接头可以相互兼容。深圳毅宏也自主研发了自己品牌的ODC光纤连接器，我司分为IH-ODC A款，IH-ODC B款，IH-ODC C款三个系列。A、B款与市面大多ODC接头能相互兼容，但是更具性价比。C款设计了自己独特的产品结构，不能与其它厂家的ODC接头兼容，但是提供了更多的芯数和结构的变化，给客户提供了更多选择！

ODC= Out Door Connector, it's stable and water& dust proof. It's widely used in fiber optic transmission in harsh environments like FTTA(Fiber To The Antenna), mine, sensor, electric. It's designed with stainless steel housing, rubber cushions inside, spiral bayonet and single-key& pin guide connection, and high intensity of tension. The grade is IP 67. For ODC, there're two types- plug and socket, and they are connected directly without adapter. Normally there're 2 and 4cores, 6 and 8cores can be customized. Currently there're these brands of ODC, Huber& Suhner, Amphenol, Rosenberger, TE and so on, and ODC of these brands are compatible. We also develop our own ODC connectors independently, they are: IH-ODC A, IH-ODC B, IH-ODC C. A and B are compatible with most ODC connectors of other brands, and ours are more competitive on prices and quality. C owns its unique design, it's not compatible with others, while it's available for multi cores and provides customers more options.

ODC国产普通A款连接器/ODC A

ODC国产普通A款连接器，兼容市面大多ODC连接器，采用纯铜外框材料，表面电镀处理，无尾套套管，内置芯数有2芯，4芯，插芯固定孔位采用金属机加工定位孔。

ODC A is compatible with most ODC connectors of other brands, it's housing is pure copper and electroplated, there's no boot. It's available for 2cores and 4cores, and the ferrules ports are located with metal mechanical technology.



ODC A款Plug插头(圆)&Socket插座(方)-2芯，金属机加工定位孔
ODC A's plug(round) and socket(square)- 2cores, with ferrules ports of metal mechanical technology

ODC A款Plug插头(圆)&Socket插座(方)-4芯，金属机加工定位孔
ODC A's plug(round) and socket(square)- 4cores, with ferrules ports of metal mechanical technology

ODC国产普通B款连接器/ODC B

ODC国产普通B款连接器，兼容市面大多ODC连接器，采用纯铜外框材料，表面电镀处理，可添置橡胶尾套或铜管体尾套，内置芯数有2芯，4芯，插芯固定孔位采用塑料模块定位孔。

ODC B is compatible with most ODC connectors of other brands, it's housing is pure copper and electroplated, rubber or copper boot is optional. It's available for 2cores and 4cores, and the ferrules ports are located with plastic modules technology.



ODC B款Plug插头(圆)&Socket插座(方)-2芯
ODC B's plug(round) and socket(square)- 2cores

ODC B款Plug插头(圆)&Socket插座(方)-4芯
ODC B's plug(round) and socket(square)- 4cores

ODC国产普通C款连接器/ODC C

ODC国产普通C款连接器，不兼容其它ODC连接器，采用铝合金外框材料，表面电镀处理，可添置铜铝制管体尾套，内置芯数有2，4芯，但4芯排列方式不同于A、B款和市面其它款的一字排列方式，采用的是正方形的井字排列，插芯固定孔位采用金属机加工定位孔。另外可以根据客户的需求，设计6.8芯的内置芯数，或者修改外框尺寸。

ODC C is not compatible with other ODC connectors, it's housing is ardal and electroplated, copper-aluminum boot is optional. It's available for 2cores and 4cores, and ferrules ports of this type is different with other ODC connectors(they are on a line), it's one a square position, and are located with metal mechanical technology. 6 and 8cores of this type are available to be customized, and the dimension can be also modified.



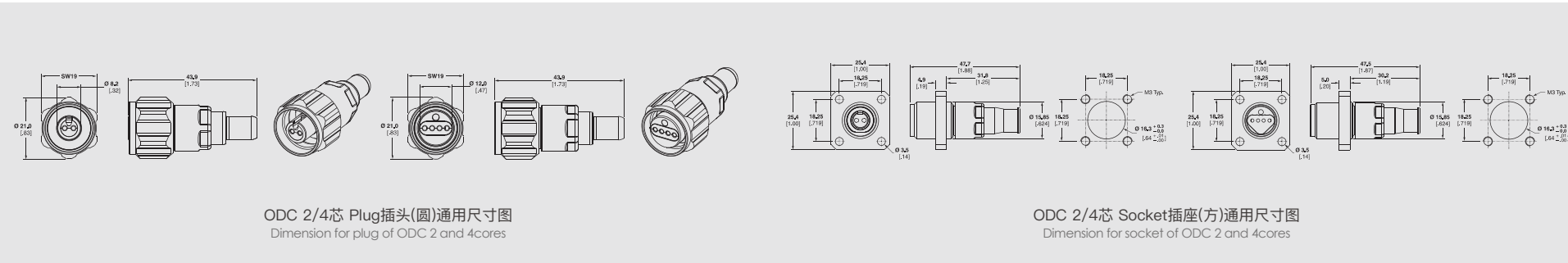
ODC C款Plug插头(圆)&Socket插座(方)-4芯井字排列，金属机加工定位孔
ODC C's plug(round) and socket(square)- 4cores, with ferrules ports of metal mechanical technology

ODC C款Plug插头(圆)&Socket插座(方)-塑料管体尾套
ODC C's plug(round) and socket(square)- Metal boot

ODC C款Plug插头(圆)&Socket插座(方)-金属管体尾套
ODC C's plug(round) and socket(square)- metal boot

通用尺寸图/Dimension

各款ODC连接器，虽然在内部插芯排列，尾套材料和外观上有所区别，但是基本的安装尺寸，对接处的圆形螺纹口尺寸基本一致。Even though the ODC connectors are different on positions of ferrules ports, materials of boot and appearance, the installation and dimension of round spiral bayonet are substantially the same.



ODC 2/4芯 Plug插头(圆)通用尺寸图
Dimension for plug of ODC 2 and 4cores

ODC 2/4芯 Socket插座(方)通用尺寸图
Dimension for socket of ODC 2 and 4cores

FIELD TACTICAL WATERPROOF CONNECTORS

野战壁车式防水连接器

野战壁车式光纤防水连接器，又名YG型雌雄同体光纤连接器。该连接器最早由中国光电子研究所研发，用于军用的野战快速通信布线环境中，由于该连接器通常使用中都是与野战光缆络车配套使用的，故取名壁车式光纤连接器。该连接器的主要特点是，连接器不分插头插座，不分公母，不用光纤适配器。相互对接的两个光纤连接器的结构是一样的，采用PIN针对位，螺旋旋转互卡，对接后的连接器结合的非常牢固，可以承受比较大的外部冲击、拉拽，防水密封性也比较优异，一般的防水防尘等级IP65左右。随着光纤通信的应用越来越广泛，这种前期专用于军事领域的光纤连接器也慢慢渗透到民用领域中，比如临时设备对接，舞台布线，现场直播，通信应急抢修等等。

Field tactical waterproof connector is also named YG telianthus connector. It was early designed by China Fiber& Electric Research Institute, and used for military field telecommunication wirings, normally it's used with field tactical cable reels. There's no plug or socket, male or female. Two connectors can be connected directly(without adapter) with pins and threads, the connection is very stable and can stand large impulse and tension. The grade is IP65. With fiber optic telecommunication is spread widely, such military connectors are generally used in civil fields, like instant connections, stage wirings, live broadcasts, emergency repairs of telecommunications and so on.

壁车式防水连接器/Field Tactical Waterproof Connectors



YG-B/塑料款(大款)
YG-B/ plastic(big size)



YG-A/金属款插头&插座(中款)
YG-A/metal plug& socket(mid-size)



YG-Mini/C金属款(小款)
YG-Mini/ C metal(small size)

壁车式防水连接器的对接演示/ Diagram for connection of field tactical waterproof connectors



壁车式防水连接器的应用实景/Applications



J599 SERIES AVIATION CONNECTORS

J599系列航空光纤插头

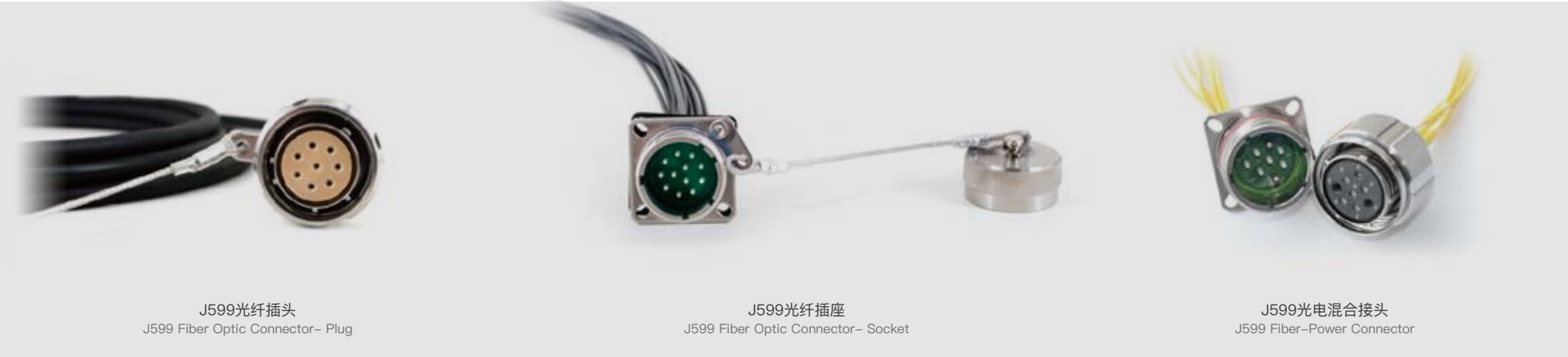
J599室外防水连接器，采用三螺纹快速链接，五键定位，防止盲插，误插，并提升抗震功能。壳体材料选用专业316L不锈钢，接触件密度高，抗电磁屏蔽功能，光缆组件可拆卸，方便现场安装。连接器损耗小，可靠性高，防水防尘等级IP67级别。主要用于工业设备端口对接，船用设备，车载设备等高要求的民用端口对接。目前主要的芯数有1.2.4.6.8.12芯，少数情况可以定制16芯。

J599 outdoor waterproof optical fiber connector joints with three thread fast connection, and adapt with Five keys locate at the same time, blind and wrong insertion are impossible, and it's anti vibration. The housing is made of stainless steel 316L. It has features of high density of connecting, anti electromagnetic shielding, parts are detachable, convenient for fields installation. It has low insertion loss and high reliability. The grade is IP67. It's mainly used in high standards of terminals connections of equipments for industries, marines, vehicles and so on. Now 1/ 2/ 4/ 6/ 8/ 12cores are optional, and 16cores can be customized.

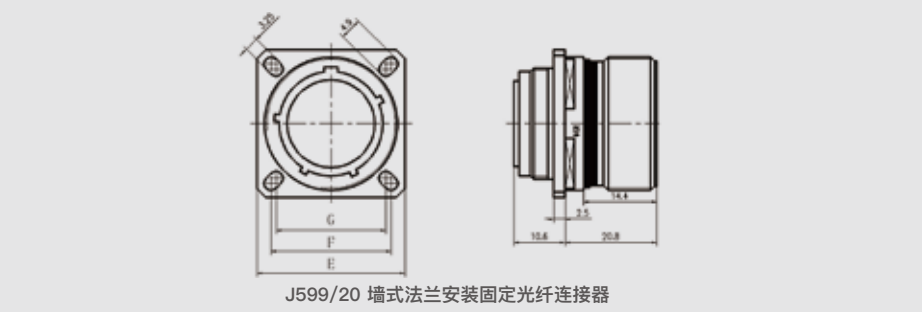
J599系列航空光纤插头 /J599 Series of Aviation Connectors

J599系列早期为军用多芯电缆防水插头的专用接头，由于光纤在信息传输系统中应用的越来越广泛，逐渐取代了弱电缆线的应用，J599接头也随之改成了光纤防水插头。而在某些特殊的使用环境中，光纤和电缆需要混合使用，J599接头也能根据实际使用要求将接头设计成光电混合接头。常用的J599光电混合接头有2光2电，4光2电，4光4电等等。

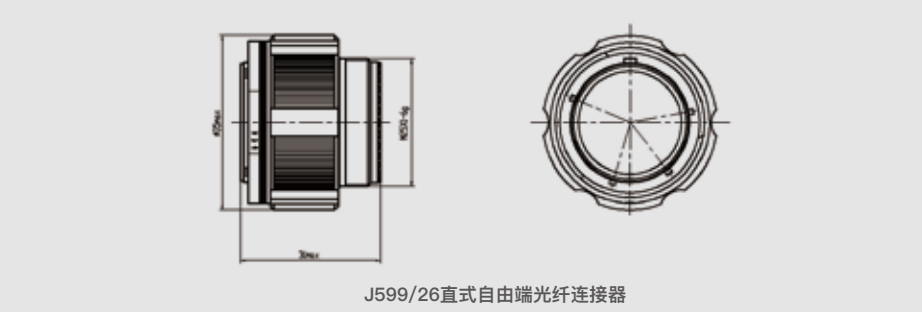
J599 connector was early only used for multi-cores power cables, as fiber optic is widely used in signals transmission, weak current cables are generally replaced, and J599 were also used as fiber optic connectors. Sometimes fiber optic cables and power cables are mixed as one, then J599 can be also used as fiber-power connector. Such fiber-power connectors are available for 2 fiber+ 2copper, 4fiber+2copper and 4fiber+4copper, or customized.



J599壳体尺寸号对照表 /Below is table of the different housings

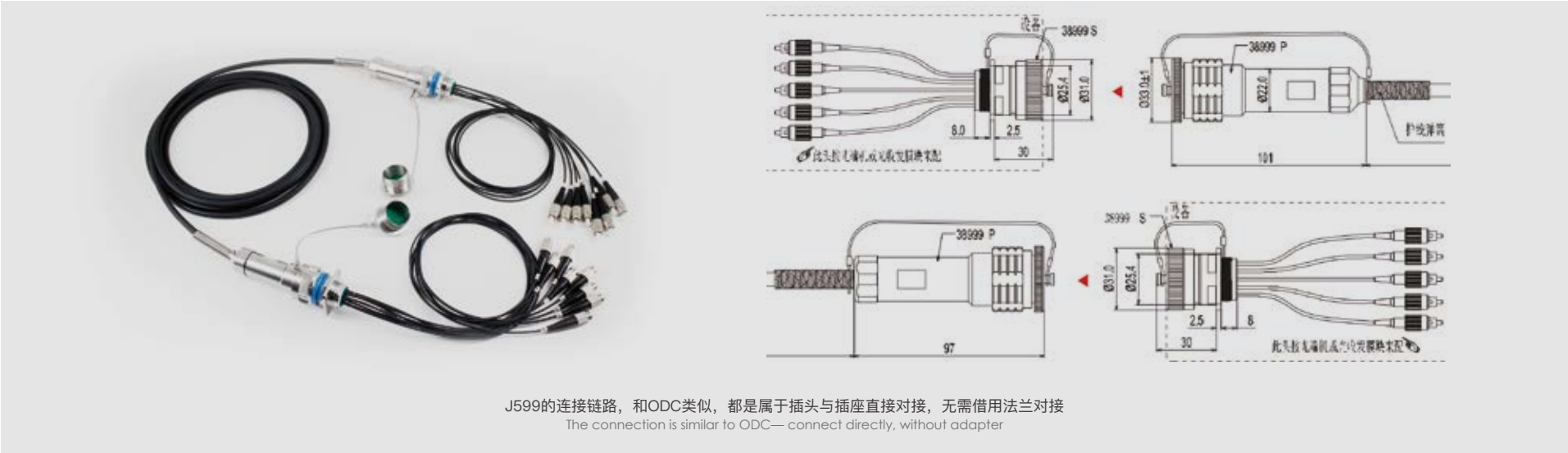


连体号	11	13	15	17	19	21
E ± 0.3	26.20	28.60	31.00	33.30	36.50	39.70
F ± 0.2	20.62	23.01	24.61	26.97	29.36	31.75
G ± 0.2	18.26	20.62	23.01	24.61	26.97	29.36
H ± 0.2	3.25	3.25	3.25	3.25	3.25	3.25



连体号	11	13	15	17	19	21
E ± 0.3	26.20	28.60	31.00	33.30	36.50	39.70
F ± 0.2	20.62	23.01	24.61	26.97	29.36	31.75
G ± 0.2	18.26	20.62	23.01	24.61	26.97	29.36
H ± 0.2	3.25	3.25	3.25	3.25	3.25	3.25

J599常用链路链接示意图 /Diagram for connection of J599 waterproof connectors



OTHER WATERPROOF CONNECTORS

其它品牌防水接头

市场上，防水光纤连接器的品牌和类型很多，我司均可提供代购服务。下面简单介绍一些品质可靠，可用范围较广的品牌光纤防水连接器。

There are many variants of brands and types of waterproof connectors in the market. We can offer original ones. Here we recommend some connectors which are reliable and widely used.

中兴ZTE-PDLC光纤防水连接器/ ZET-PDLC Fiber Optic Waterproof Connector

主要用于室外FTTA中兴华为的RRU设备端防水端口，该连接器的主要优点是结构简单，操作方便，散件成本较低。

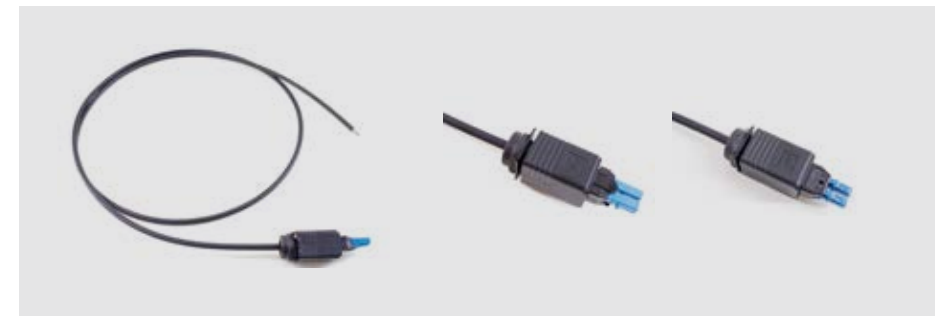
Mainly used in the RRU terminal from/of HUAWEI& ZTE in the FTTA System.Main advantages of this connector: simple structure,easy handling and Low cost.



德国哈丁HARTING PushPull-DLC模块式光纤连接器/ Harting Pushpull-DLC Rectangular Connector

德国哈丁生产的模块式光纤防水连接器，主要用于设备的防水端口连接，连接器采用模块式的设计方式，可按照模块自由组合连接器的大小，控制芯数，可做成光电混合的模块式接头。该产品可操作性强，支持用户自定义设定，模块拼接式的设计理念给用户带来更多的选择性。

Mainly used in the equipments' waterproof terminals, Harting connector adopts with rectangular design□ adopted modules allow connectors to be with different dimensions and cores. Harting connector also can be made into HYBRID types. The main advantages:□easy handling,customizable,and rectangular design (this makes more options for customers).



Senko-IP系列光纤防水连接器/Senko IP Series Waterproof Fiber Optic Connector

日本扇港生产的IP系列的光纤防水连接器，形状功能结构都类似ODVA的光纤防水连接器，分LC,SC,MPO三种，另外还设计了光电混合的IP-ONE光电混合防水连接器。

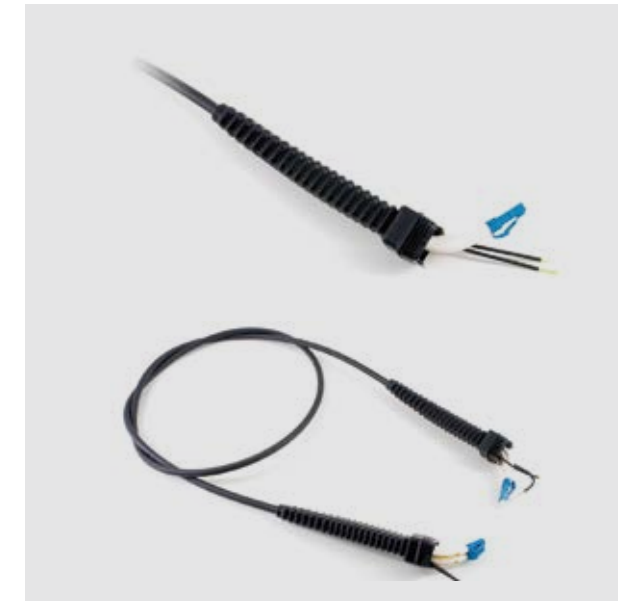
The Senko IP series waterproof connector is similar with ODVA. There are 4 types: LC,SC, MPO and HYBIRD of power and fiber.



洛基亚西门子NSN防水尾套/ Nokia Siemens NSN Waterproof Boot

洛基亚西门子NSN防水尾套，是一款橡胶材质的方形端口波纹式护线防水尾套，内置一般为LC双芯连接器，用于洛基亚西门子的设备端口连接，具有一定的防尘性能。

Mainly used in terminal systems of Nokia Siemens.This boot is corrugated waterproof square rubber- for protecting LC Duplex connectors inside.



Neutrik光纤防水连接器/Neutrik Waterproof Connector

Neutrik防水光纤连接器系列，是由瑞士Neutrik公司设计生产的一款高品质的光纤防水连接器。该连接器分为opticalCON和opticalCON LITE两种型号，每种型号又分为opticalCON-DUO（2通道光纤），opticalCON-QUAD（4通道光纤），opticalCON-MTP（多通道光纤），opticalCON LITE-DUO（2通道光纤），opticalCON LITE-QUAD（4通道光纤），opticalCON LITE-MTP（多通道光纤）六种接头类型。所有光纤连接器均可实现光电混合的接头方案，最多可容纳2-4芯的电源通道。

Neutrik waterproof connector is designed and produced by Neutrik company.There are two types: opticalCON- (DUO/QUAD/MTP) and opticalCON LITE- (DUO/QUAD/MTP). All connectors could be made as HYBRID(fiber-power) type, and 2-4cores are available for power.



凌科Cnlinko光纤防水连接器/Cnlinko waterproof connector

Cnlinko光纤防水连接器，是由深圳市凌科电气设计生产。该连接器分为LP-24和DH-24两种型号，内部均内置LC双芯连接器，是一款性能优良，插拔方便，操作简单的高品质高性能的国产防水连接器。

This connector is designed and produced by Cnlinko company.There are two types: LP-24 and DH-24. Both types have LC duplex connectors inside. It has features of easy handling and high performance.



PORTABLE

PORTABLE FIELD TACTICAL CABLE REELS

移动野战光缆绕线盘



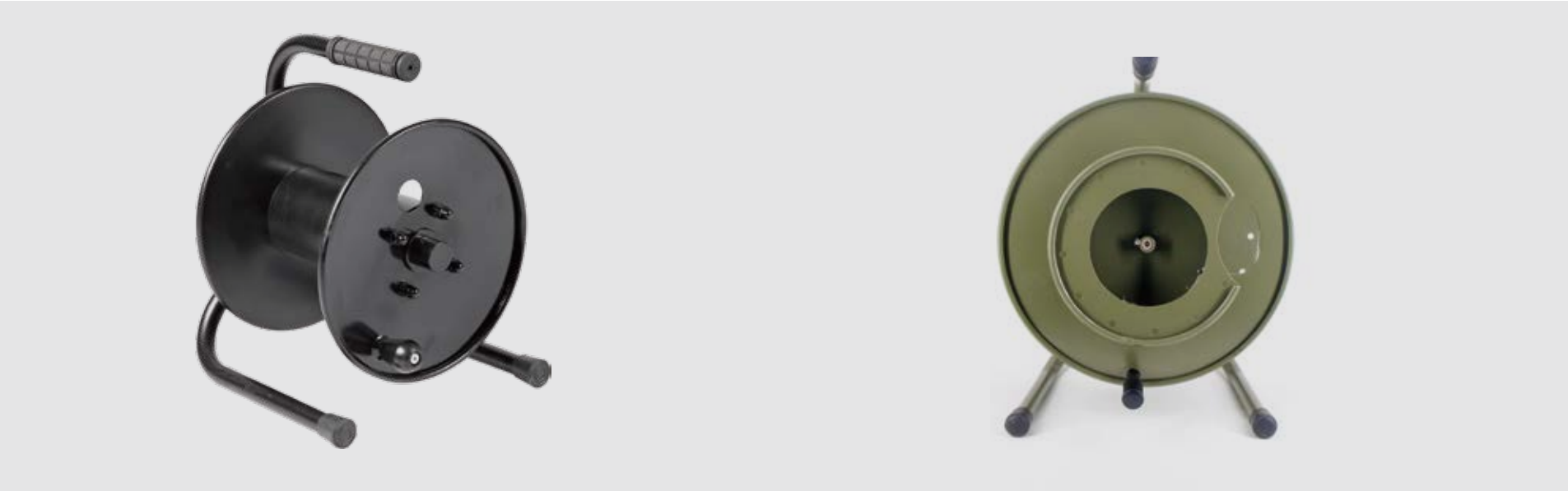
移动野战光缆盘（又名移动绕线盘、移动绞线盘，便携式放线车），主要用于电视转播车上，可绕制光纤、信号线、电源线等线缆；野战光缆盘多配合防水光纤连接器一同使用，是防水光纤布线中无源线材最重要的配件之一。我司设计生产了各种不同型号和功能的防水野战光缆盘，满足不同客户的不同需求。

我司生产的移动野战光缆盘主要分为，ST(手提式)系列，BF(背负式)系列，BX（便携拉杆式），TC（四轮平移推车式）系列，LZP(移动架式缆盘)系列。每种系列均可提供不同大小的缆盘，满足不同线径和米数的光缆绕线收放。

Field Tactical cable reels[or:Portable mobile pre-terminated cable reels/Transportable spool carts]is developed for temporary field deployment where fiber connections are required. It comes in a portable cable reel for ease of transportation and deployment. It's widely used in mobile television vans, can be spooled with fiber cable. network cable, power cable. etc. These reels mostly work together with waterproof cables and connectors outdoor. It's most important accessory in the filed of waterproof cabling systems.We supplies 5 types to meet the ever-growing demand: ST Series (portable), BF Series(backpack), BX Series(Push-pull), TC series(4 reels), LZP Series (Shelf).All types are able to be supplied variants of size for different cable diameters and lengths.



ST(手提式)系列/ST Series (portable)



ST(手提式) 系列/ST Series (portable)

Model	ST-01				ST-02				ST-03				STS-03			
Size	340*350*370mm				350*350*380mm				410*440*400mm				410*440*400mm			
Main reel'swidth	260mm				280mm				320mm				320mm			
Aixs's diameter	142mm				142mm				150mm				150mm			
Main reel's width	156mm				180mm				160mm				160mm			
Packing size	370*410*430mm(wooden carton木箱)				380*410*430mm(wooden carton木箱)				440*500*460mm(wooden carton木箱)				440*500*460mm(wooden carton木箱)			
Gross weight	6.5KG				7.0KG				8.0KG				7.0Kg			
Net weight	3.5KG				4.0KG				4.5KG				3.5Kg			
Cable's OD	3.0mm	4.0mm	5.0mm	6.0mm	3.0mm	4.0mm	5.0mm	6.0mm	3.0mm	4.0mm	5.0mm	6.0mm	400RMB			
	7.0mm	8.0mm	9.0mm	10.0mm	7.0mm	8.0mm	9.0mm	10.0mm	7.0mm	8.0mm	9.0mm	10.0mm	3.0mm	4.0mm	5.0mm	6.0mm
Capacity	300M	160M	100M	75M	600M	330M	200M	150M	1000M	550M	300M	240M	7.0mm	8.0mm	9.0mm	10.0mm
	55M	45M	35M	30M	100M	80M	60M	50M	180M	130M	100M	80M	1000M	550M	300M	240M
Remark													180M	130M	100M	80M

BF(背负式)系列/BF Series (Backpack)



BF(背负式) 系列/BF Series (Backpack)

Model	BF-06				BF-06				BF-D02				BF-LP05			
Size	560*520*470mm				340*300*450mm				281mm*344mm*615mm				430*453*420mm			
Main reel'swidth	400mm				300mm				230mm				280mm			
Aixs's diameter	200mm				80mm				74mm				150mm			
Main reel's width	280mm				270mm				200mm				193mm			
Packing size	500*520*620mm (wooden carton木箱)				385*365*520mm				290*370*640mm(paper carton纸箱)				460*510*480mm			
Gross weight	15KG				9.72Kg				7.12Kg				8Kg			
Net weight	8KG				5Kg				6.2Kg				4kg			
Cable's OD	3.0mm	4.0mm	5.0mm	6.0mm	3.0mm	4.0mm	5.0mm	6.0mm	3.0mm	4.0mm	5.0mm	6.0mm	3.0mm	4.0mm	5.0mm	6.0mm
	7.0mm	8.0mm	9.0mm	10.0mm	7.0mm	8.0mm	9.0mm	10.0mm	7.0mm	8.0mm	9.0mm	10.0mm	7.0mm	8.0mm	9.0mm	10.0mm
Capacity	1800M	1000M	600M	450M	1800M	1000M	600M	450M	1800M	1000M	600M	450M	1000M	550M	300M	240M
	320M	250M	200M	160M	320M	250M	200M	160M	320M	250M	200M	160M	180M	130M	100M	80M
Remark																

BX(便携拉杆式)/BX Series(Push-pull)



BX(便携拉杆式)/BX Series(Push-pull)

Model	BX-02				BX-04				BX-06				BX-12			
Size	416*320*461mm				475*344*508mm				570*360*520mm				570*470*520mm			
Main reel'swidth	φ320mm				φ400mm				φ450mm				φ450mm			
Aixs's diameter	φ200mm				φ200mm				φ200mm				φ200mm			
Main reel's width	150mm				170mm				180mm				300mm			
Packing size	480*380*500mm (wooden carton木箱)				520*380*550mm(wooden carton木箱)				600*420*580mm(wooden carton木箱)				600*560*580mm(wooden carton木箱)			
Gross weight	13KG				16KG				19KG				22KG			
Net weight	9KG				11KG				13KG				15KG			
Cable's OD	3.0mm	4.0mm	5.0mm	6.0mm	3.0mm	4.0mm	5.0mm	6.0mm	3.0mm	4.0mm	5.0mm	6.0mm	3.0mm	4.0mm	5.0mm	6.0mm
	7.0mm	8.0mm	9.0mm	10.0mm	7.0mm	8.0mm	9.0mm	10.0mm	7.0mm	8.0mm	9.0mm	10.0mm	7.0mm	8.0mm	9.0mm	10.0mm
Capacity	600M	330M	200M	150M	1200M	650M	400M	300M	1800M	1000M	600M	450M	3600M	2000M	1200M	900M
	100M	80M	60M	50M	220M	170M	130M	110M	320M	250M	200M	160M	650M	500M	400M	320M
Remark																

TC(四轮平移推车式)系列/TC series(4 reels)



TC（四轮平移推车式）系列/TC series(4 reels)

Model	TC-12				TC-10S			
Size	495*380*755mm				390mm*490mm*590mm			
Main reel'swidth	φ450mm				465mm			
Aixs's diameter	φ180mm				200mm			
Main reel's width	280mm				225mm			
Packing size	515*415*790mm(paper carton纸箱)				440*540*605mm(wooden carton木箱)			
Gross weight	17KG				23Kg			
Net weight	15KG				16.5Kg			
Cable's OD	3.0mm	4.0mm	5.0mm	6.0mm	3.0mm	4.0mm	5.0mm	6.0mm
	7.0mm	8.0mm	9.0mm	10.0mm	7.0mm	8.0mm	9.0mm	10.0mm
Capacity	3600M	2000M	1200M	900M	3000M	1650M	1000M	750M
	650M	500M	400M	320M	540M	420M	330M	270M
Remark								

LZP(移动架式缆盘) 系列: LZP Series (Shelf)



LZP(移动架式缆盘) 系列/LZP Series (Shelf)

Model	LZP-05				LZP-10				LP4625-10				LP4625-20			
Size	420*510*770mm				870*170*700				930*220*640mm				980*320*830			
Main reel'swidth	400mm				500mm				500mm				500mm			
Aixs's diameter	200mm				230mm				230mm				230mm			
Main reel's width	280mm				328mm				328mm				328mm			
Packing size	440*570*830mm				930*200*760mm				990*300*760mm				1040*880*340mm			
Gross weight	30Kg				37Kg				31kg				45Kg			
Net weight	20Kg				29Kg				21Kg(不含盘)				32Kg(不含盘)			
Cable's OD	3.0mm	4.0mm	5.0mm	6.0mm	3.0mm	4.0mm	5.0mm	6.0mm	3.0mm	4.0mm	5.0mm	6.0mm	3.0mm	4.0mm	5.0mm	6.0mm
	7.0mm	8.0mm	9.0mm	10.0mm	7.0mm	8.0mm	9.0mm	10.0mm	7.0mm	8.0mm	9.0mm	10.0mm	7.0mm	8.0mm	9.0mm	10.0mm
Capacity	1800M	1000M	600M	450M	3600M	2000M	1200M	900M	3600M	2000M	1200M	900M	5600M	3100M	2000M	1400M
	320M	250M	200M	160M	650M	500M	400M	320M	650M	500M	400M	320M	1000M	800M	620M	500M
Remark																

APPENDIX: FIBER OPTIC CABLES FOR EACH WATERPROOF CONNECTOR

附件： 防水连接器配缆说明

不同的防水光纤连接器，所适用的光缆的外径各不相同。下面简单介绍下本册中介绍的各式光纤防水连接器的适用光缆线径，具体见下表：

The Waterproof Connectors suit fiber optic cables with different outer diameters(OD). Below is a table of brief introduction for fiber cables that suit the waterproof connectors in this catalog:

Waterproof Connectors	Fiber Count/ Cores	OD of the Fiber Optic Cables	OD for Subunit Cables
ODVA-SC	1	φ5.0mm/φ7.0mm	φ2.0mm
ODVA-LC	2	φ5.0mm/φ7.0mm	φ2.0mm
ODVA-MPO	8/12	φ5.0mm/φ7.0mm	φ3.0mm
Fullaxs-DLC	2	φ5.0mm	φ0.9mm
KINGSIGNAL-FPM	2	φ5.0mm/φ7.0mm	φ0.9mm/φ2.0mm
ROSENBERGER-RFE	2	φ5.0mm/φ7.0mm	φ0.9mm/φ2.0mm
Amphenol IP-FX	2	φ5.0mm/φ7.0mm	φ0.9mm/φ2.0mm
Huawei Mini-SC	1	φ3.0mm/φ5.0mm	φ0.9mm
Corning Mini-SC	1	φ3.0mm/φ5.0mm	φ0.9mm
IH-ODC A	2/4	φ5.0mm	φ0.9mm
IH-ODC B	2/4	φ6.0mm	φ0.9mm
IH-ODC C	2/4/6/8	φ5.0mm	φ0.25mm/φ0.9mm
IH-YG-A/ metal	2/4	φ5.0mm	φ0.9mm
IH-YG-B/ Plastic	2/4	φ5.0mm	φ0.9mm
IH-YG-C/ metal	2/4	φ3.0mm	φ0.25mm
J599 2/4C	2/4	φ5.0mm	φ0.9mm
J599 6/8C	6/8	φ5.0mm	φ0.6mm
J599 10/12C	10/12	φ5.0mm	φ0.25mm
ZTE-PDLC	2	φ7.0mm	φ2.0mm
HARTING PushPull-DLC	2	φ5.0mm	φ0.9mm
Senko-IP/SC	1	φ7.0mm	φ2.0mm
Senko-IP/LC	2	φ7.0mm	φ2.0mm
Senko-IP/MPO	39806	φ7.0mm	φ3.0mm
NOKIA NSN-DLC	2	φ5.0mm/φ7.0mm	φ0.9mm/φ2.0mm
Neutrik DUO	2	φ5.0mm	φ0.9mm
Neutrik QUAD	4	φ5.0mm	φ0.9mm
Neutrik MTP	39806	φ5.0mm	φ0.25mm
Cnlinko-LP24	2	φ5.0mm	φ0.9mm
Cnlinko-DH24	2	φ5.0mm	φ0.9mm

防水光纤连接器在不同的应用环境中，我们会使用不同结构和材料的光缆，以满足各种不同的需求。下面将简单介绍下一些防水连接器比较常用的配缆结构：Except for the OD, structure and material of fiber cables are also different to match the waterproof connectors. Here are some normal types:

非铠装系列光缆/Non-metallic Fiber Optic Cables

LSZH室内外两用拉远光缆GYFJH GYFJH- Indoor/Outdoor Cable, LSZH jacket

常配合ODVA,Mini-SC,Fullaxs, Senko-IP, ZTE-PDLC, Harting-DLC系列连接器使用。多应用于FTTA塔顶基站布线， 机房设备对接等常规的布线环境中。
Normally it matches connectors of ODVA, Mini-SC,Fullaxs□Senko-IP□ZTE-PDLC□Harting-DLC. It's mostly used in connection systems like FTTA/ CPRI/ WIMAX, data rooms.

TPU室内外两用野战光缆GYFJU GYFJU- Indoor/Outdoor Field Tactical Cable, TPU jacket

常配合ODC,YG壁车式, J599航空插头等系列连接器使用。多应用于舞台布线，临时设备连接，应急通信抢修等经常需要收放的布线环境中。
Normally it matches connectors of ODC, YG and J599.it's mostly used in wiring systems like stage, instant connections, emergency repairs of telecommunications.

铠装系列光缆/Armored Cables

LSZH室内外两用铠装拉远光缆GYFJH GYFJH- Indoor/ Outdoor Cable, LSZH jacket

常配合ODVA,Mini-SC,Fullaxs, Senko-IP, ZTE-PDLC, Harting-DLC系列连接器使用。多应用于需要防鼠咬，抗压抗拉要求较高的常规布线环境中。
Normally it matches connectors of ODVA, Mini-SC,Fullaxs□Senko-IP□ZTE-PDLC□Harting-DLC. It's anti-rodent, and mostly used in tensile wiring systems□

TPU室内外两用铠装野战光缆GYFJU GYFJU- Indoor/ Outdoor Armored Field Tactical Cable, TPU jacket

常配合ODC, YG壁车式, J599航空插头等系列连接器使用。多应用于矿井， 矿山， 现场直播， 军事通信等需要经常收放， 并且对光缆强度要求严格的布线环境中。是目前军用光缆里面最常用的一种。
Normally it matches connectors of ODC, YG and J599.it's mostly used in wiring systems like mines, live broadcasts, military telecommunications. Currently this is the most common cables used for military.

光电混合缆/Fiber-Power Hybrid Cable

常配合J599, Neutrik,YG壁车式, Senko-IP/ONE系列连接器使用。应用于需要对光纤和弱电通信线缆进行集成传输的环境中。
Normally it matches connectors of Neutrik, YG, Senko-IP/ONE. It's mostly used for integrated transmission of fiber-weak current telecommu-nication.

电力系统专用光缆/Dedicated Fiber Optic Cable for Power System

常配合J599, ROSENBERGER-RMC, ODC, Neutrik系列连接器使用。应用于需要在强电环境下传输光纤信号的环境中，比如高压电线，变电站，大功率电器设备内部等。
Normally it matches connectors of J599□ROSENBERGER-RMC□ODC□Neutrik. It's used in fiber optic systems under high voltage, like high-voltage wires, substations, and electrical equipments with high power.

