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# PEEK application in analytical instrument

# Reliable connection sharing and distribution



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JiangSu JunHua High Performance Specialty Engineering Plastics (PEEK) Products Co.,Ltd.



Junhua ChinaPEEK focuses on the research and manufacturing of high performance engineering plastic (PEEK, PI) stock shapes and finish parts.

Our High purity, corrosion resistant and low dissolution PEEK material has been widely used in analytical chromatography equipment, preparative and semi-preparative chromatography equipment, protein purification equipment, IVD equipment, sample pretreatment equipment, pharmaceutical and environmental monitoring equipment and other related equipment.

With 15 years' experience, by cooperating with customers in the analysis and biochemical instrument industry, Junhua chinaPEEK has developed nearly 500 kinds of injection molding molds for PEEK parts, and we keep ample stock of all of them.

Typical product: PEEK Fitting, PEEK Union, PEEK Connector, PEEK plug, PEEK Chromatographic column, PEEK filtering column, PEEK digesting vessel, PEEK tubing, PEEK sampling needle.

# ENTERPRISE **PROFILE**







View of Office Display Room Stock Shape



Warehouse Customers





江苏君华特种工量塑料制品有限公司

Jianasu Junhua High Performance Specification Plastics (PEEK) Products Co., Ltd.





AND POR









## ENTERPRISE HONOR

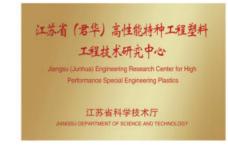
#### LOYALTY PRACTICALITY COOPERATION INNOVATION MUTUAL BENEFIT

















We are very willing to have the opportunity to participate in the development of new products of PEEK and PI parts. With our experience, we can provide our suggestions for material selection, cost accounting, product design, process selection, mold design and manufacturing to help you complete the product quick design, manufacturing and procurement process.

We sincerely looks forward to the exchanges and cooperation with the scientific research agency and users of special engineering plastics, to promote the application of PEEK and PI parts in various industries, to realize industry upgrades.

Welcome to our company for guidance and exchange!

Register and establish Changzhou Junhua Specialty Plastic Company, and settled in Jiangsu Yangtze River Mould City.

Develop the first domestic PEEK product enterprise standard and passed the record; the first domestic company to mold and process 2 meter long PEEK sheet.

Increase capital to 10 million and changed its name to Jiangsu Junhua Specialty Plastics; PEEK profiles passes RoHS, FDA Certification; the company has passed the certification of provincial private technology enterprises.

Pass ISO9001 quality management system certification.

Establish Shandong Junhao High Performance Polymer Co., Ltd. and started the PEEK resin polymerization industrial

Establish the medical industry division; Establish the CF/PEEK composite materials division

Passed the IATF16949 quality manage-

Establish Changzhou High Performance Special Engineering Plastic Engineering Technology Research Center; Pass biocompatibility testing and certifi-

cation.

The company's medical PEEK material preparation key technology-PEEK medical catheter R&D and industrial project (Changzhou Key R&D Program in 2020-Industrial Technology Support Program) received government funding support.

PEEK5600CF30 and CF/PEEK composite materials have passes the ISO10993 biocompatibility test.

The PEEK composite material developed by Junhua chinaPEEK has realized the high-reliability zero-locking performance of the booster servo mechanism, and contributed its own meager strength to the successful launch of the Long March 5B rocket.



2010



2013



2015



2016

2007

2012

2014



2017

2019

2018



2020



Establish Shanghai Chaoju New Material Technology Co., Ltd.



The first domestic company to successfully develop continuous extrusion process and equipment for PEEK plates, rods, tubes and other



Passes the national high-tech enterprise certification; Introduce the VIS corporate image system as a whole; Settles in the standard factory building of the Innovation Industrial Park of Wujin National High-tech Zone; Start the PEEK polymerization pilot plant and put it into production at the end of the year.



Establish Jiangsu Chaoju New Material Technology Co., Ltd. to operate PEEK plates, rods and



Establish a wholly-owned subsidiary-Changzhou Junhua Medical Technology Co., Ltd.; Increase the office and production area of 2000 square meters, and build a clean workshop of 280 Introduce an extrusion production line imported from Europe to

improve product quality and pro-

duction capacity;



Establish "Changzhou Industrial Design Center" and "Provincial Engineering Technology Research Center". The "Jiangsu Province Double Entrepreneurship Project" was successfully declared.

Pass the AS9100D aerospace system certification.

Win the title of "Changzhou Specialty, Specialty and New enterprise" and "2021 Material SAMPE China Innovation Finalist Award".





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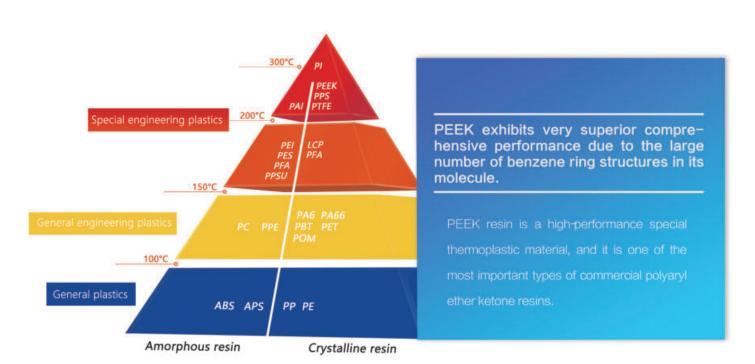
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#### Introduction of PEEK high-performance special engineering plastics

#### Plastic classification



#### PEEK features advantages























light weight



good biocompatibility

#### The main grades of PEEK and their typical performance indicators

Grade	PEEK5600G	PEEK5600CF30	PEEK5600GF30	PEEK5600LF30
resin raw materials		The state of the s		
rod tube profile				
finished parts	Harris Marie	220		(0.00)

#### Mechanical performance

item	Test Standard	Unit	PEEK5600G	PEEK5600CF30	PEEK5600GF30	PEEK5600LF30	PEEK5600FE20
iteili	Or Instrument	Onit	100%PEEK	PEEK+30%CF	PEEK+30%GF	PEEK+ ( CF+GR+PTFE )	PEEK+20%PTFE
Tensile strength ( 23°C )	ISO 527	MPa	90	210	155	134	59
Bending strength (23℃)	ISO 178	MPa	163	298	212	186	118
Compressive strength ( 23℃ )	ISO 604	MPa	118	240	215	150	105
Lzod impact strength (no notch)	ISO 180/IU	kJ/m²	No break	40	51	32	47

#### Thermal performance

ltem	Test Standard Or Instrument	Unit	PEEK5600G 100%PEEK	PEEK5600CF30 PEEK+30%CF	PEEK5600GF30 PEEK+30%GF	PEEK5600LF30 PEEK+ ( CF+GR+PTFE )	PEEK5600FE20 PEEK+20%PTFE
Melting point	ISO 11357	°C	343	343	343	343	343
heat distortion temperature	ISO 75-f	°C	163	315	315	293	1
continuous use temperature	UL 74685	°C	260	260	260	260	240
thermal expansion coefficient	ASTM D696	10 <sup>-5</sup> ℃	4.7	1.5	2.2	2.2	6
flammability level	UL 94	V-0@mm	1.5	1,5	1.5	0.75	1.5

#### **Electrical performance**

Item	Test Standard Or Instrument	Unit	PEEK5600G 100%PEEK	PEEK5600CF30 PEEK+30%	PEEK5600GF30 PEEK+30%	PEEK5600LF30 PEEK+30%	PEEK5600FE20 PEEK+20%PTFE
Dielectric strength	IEC 60243 - 1	kV/mm	18	1	19	1	20
permittivity	IEC 60250	1	3.0	1	3.3	1	2.7
surface resistivity	IEC 90093	Ω	1015	106	1015	106	1015

#### Other performance

lane.	Test Standard	Unit	PEEK5600G	PEEK5600CF30	PEEK5600GF30 PEEK+30%	PEEK5600LF30 PEEK+30%	PEEK5600FE20 PEEK+20%PTFE
Item	Or Instrument	Unit	100%PEEK	PEEK+30%			
Density	ISO 1183	g/cm3	1.3 ± 0.02	1.4 ± 0.02	1.5 ± 0.02	1.43 ± 0.02	1.41
Rockwell hardness	ISO 2039	HRR	118	121	119	108	116
Coefficient of friction	ASTM D3702	1	0.30 - 0.38	0.28	0.38 - 0.46	0.18	0.17 - 0.20
Water absorption	ISO 62	%	0.15	0.06	0.11	0.06	0.15
Mold shrinkage	3mm thickness, 170° C flow direction 3mm, 170° C	%	1.2	0.1	0.4	0.3	1.3
(25-24℃)	perpendicular to the flow direction (saturated crystals are larger)	%	1.5	0.5	0.8	0.5	1.8

The performance index is injection molded material index. If necessary, please call our technical department for more detailed technical indicators!

★ This performance index cannot be used as a material acceptance standard.





#### ■ PEEK Solvent resistance table

ACIDS	酸类	23° C	100° C	200° C	HYDROCARBONS	烃 类	23° C	100° C	200° C
Acetic Acid, 10% Conc.	10%醋酸溶液; 10%乙酸溶液	A	A	-	Acetylene	乙炔	Α	А	-
Acetic Acid, Conc.	浓醋酸; 浓乙酸	A	A	A	Aromatic Solvents	芳香族溶剂	A	A	-
Acetic Acid, Glacial	冰醋酸;冰乙酸	A	Α	-	Aviation Hydraulic Fluid	航空液压油	Α	-	
Acrylic Acid	丙烯酸	A	Α	-	Benzene	苯	Α	A	-
Aqua regia	王水	С	С	С	Brake Fluid (Mineral)	制动液、刹车油(无机的)	A	Α	A
Benzene Sulfonic Acid	苯磺酸	С	-	-	Brake Fluid (Polyglycol)	制动液, 刹车油(聚合醇)	Α	А	Α
Benzoic Acid	苯甲酸	A	Α	-	Butane	丁烷	Α	-	-
Benzoic Acid	硼酸	А	A	2	Crude Oil	原油	А		-
Carbolic Acid	石炭酸	А	-	-	Cyclohexane	环己烷	А	A	-
Carbonic Acid	碳酸	A	A	_	Diesel Oil	柴油	A	-	С
Chloroacetic Acid	氯乙酸; 氯醋酸	A	A	2	Dowtherm <sup>3</sup> A	Dowtherm <sup>3</sup> A【陶氏】	2	2	В
Chlorosulfonic Acid	氯磺酸	С	С	С	Dowtherm G	Dowtherm G【陶氏】	_	_	В
Chromic Acid, 40% Conc.	40%铬酸溶液	A			Dowtherm HT	Dowtherm HT【陶氏】			В
Chromic Acid, Conc.	浓铬酸	c	С	С	Dowtherm IF	Dowtherm IF【陶氏】			-
Citric Acid	柠檬酸	A	A	_	Ethane	乙烷	A	- 2	
			В		Fuel Oil				
Formic Acid	甲酸; 蚁酸	В		-		燃料油	A	-	-
Hydrobromic Acid	製溴酸	С	C	С	Gas (Manufactured)	瓦斯(合成)	A	7.	57.
Hydrochloric Acid, 10% Conc.	10%盐酸溶液	A	A	-	Gas (Natural)	瓦斯(天然)	A	-	-
Hydrochloric Acid, Conc.	浓盐酸	A	В	-	Gasoline	汽油	A	Α	-
Hydrocyanic Acid	氢氰酸	A	A	7	Heptane	庚烷	A	- 55	170
Hydrofluoric Acid, 40% Conc.	40%氢氟酸溶液	A	-	-	Hexane	己烷	Α	-	-
lactic Acid	乳酸	A	Α		Hydraulic Fluid	液压油	Α	_	-
Maleic Acid	马来酸; 顺丁烯二酸	A	Α	-	iso-Octane	标准异辛烷	A	75	-
Nitric Acid, 10% Conc.	10%硝酸溶液	A	Α	-	kerosene	煤油	Α	-	-
Nitric Acid, 30% Conc.	30%硝酸溶液	В	-2	2	lubricating Oil	润滑油	A	2	-
Nitric Acid, 50% Conc.	50%硝酸溶液	С	С	С	Methane (Gas)	甲烷; 沼气(气体)	A	Α	Α
Nitric Acid, Conc.	浓硝酸	С	С	С	Motor Oil	机油	Α	Α	Α
Nitrous Acid, 10% Conc.	10%亚硝酸溶液	A	-	-	Naphtha	石脑油, 轻烃, 粗汽油	A	Α	-
Oleic Acid	油酸	A	(*)	-	Naphthalene	萘	Α	A	-
Oleum	发烟硝酸	С	С	С	Oils (Petroleum)	油(石油)	Α	Α	-
Oxalic Acid	草酸	A	Α	_	Oils (Vegetable)	油(植物)	A	Α	-
Perchloric Acid	高氯酸; 过氯酸	A	A	-	Pentane	戊烷	Α	-	-
Phosphoric Acid, 10% Conc.	10%磷酸溶液	A	A	A	Petroleum Ether	石油醚	A	_	-
Phosphoric Acid, 50% Conc.	50%磷酸溶液	A	A	A	Propane	丙烷	A		
Phosphoric Acid, 80% Conc.	50%磷酸溶液	A	A	-	Skydrol* Hydraulic Fluid	【Skydrol】液压机液体	A	_	_
Phthalic Acid	邻苯二甲酸	A	A	_	Styrene (liquid)	苯乙烯 (液体)	A	_	-
Picric Acid	苦酸;三硝基酚	A	A		Toluene	甲苯	A		
Silicic Acid	硅酸	A	Δ		Transformer Oil	变压器油; 绝缘油	Δ	Δ	
Sulfuric Acid, < 40% Conc.	<40%硫酸溶液	В	В	В	Vaseline <sup>5</sup>	凡士林	A	A	
	>40%硫酸溶液					二甲苯			
Sulfuric Acid, > 40% Conc.		C	C	С	xylene	— 1" 本	А	A	-
Sulfurous Acid		A	A	-	ALDEHYDES AND KETONES	醛和酮类	23° C	100° C	200° C
Tannic Acid, 10% Conc.	10%軽酸溶液; 10%丹宁酸溶液	A	A	-		7 82			
Tartaric Acid	酒石酸	A	A	-	Acetaldehyde	乙醛	A	A	1970
Trifluoromethyl Sulfonic Acid	三氟甲基磺酸	С	С	С	Acetone	丙酮	A	A	
ETHERS	醚 类	23° C	100° C	200° C	Benzaldehyde	苯甲醇;安息香醛	Α .	-	-
- Activities and the control of the	1000000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Control Addition		Cyclohexanone	环己酮	A	- 7	
Diethylether	二乙醚	Α	Α	-	Formaldehyde	蚁醛; 甲醛	A	A	-
Dioxane	二氧六环; 二氧己环	Α	-	-	Formalin	福尔马林	Α	-	-
Ether	乙醚	Α	Α	17	ketones	酮类	Α	7	-
Ethylene Oxide (EtO)	环氧乙烷	A	-	-	Methylethyl ketone (MEk)	甲乙酮;甲基乙基酮	A	В	С
Tetrahydrofuran (THF)	四氢呋喃	A	-	4	N-Methyl-2-Pyrrolidone(NMP)	甲基吡咯烷酮	A	-	_

HALOGENATED ORGANICS	卤代有机物	23° C	100° C	200° (
1,1,1 Trichloroethane(Genklene1)	1,1,1-三氯乙烷(金克林)	Α	-	(-)
1,2 Dichloroethane	1,2-二氯乙烷	A	-	-
Carbon Tetrachloride	四氯化碳	A	A	0.70
Chorobenzene	氯苯	Α	Α	-
Chloroform	氯仿;三氯甲烷	Α	Α	-
Dibromoethane	二溴乙烷	Α	-	-
Dichlorobenzene	二氯苯; 二氯代苯	Α	-	-
Dichloroethane	二氯乙烷	A	-	-
Ethylene Dichloride	二氯乙烯	Α	-	-
Freon <sup>2</sup> 11 Trichlorofluoromethane	[氟利昂-11]三氯氟甲烷	Α	-	-
Freon 113 Trichlorotrifluoroethane	[氟利昂-113]三氟三氯乙烷	Α	121	_
Freon 114 1,1 Dichloro 1,2,2,2 Tetrafluoroethane	[策利昂-114]1,2.2,2 -四氟-1,1-二氯乙烷	А	-	-
Freon 12 Dichlorodifluoromethane	[氟利昂-12]二氯二氟甲烷	A	-	-
Freon 22 Chlorodifluoromethane	[氟利昂-22]二氟一氯甲烷	A	A	_
Freon 134a	[氟利昂-134a]	Α		
Freon 502	[氟利昂-502]	Α	A	-
Methylene Chloride	二氯甲烷; 亚甲基氯	A	-	-
Perchloroethylene	全氯乙烯	А	Α	-
Trichloroethylene	三氯乙烯	Α	А	-
BASES	碱,金属氢氧化物	23° C	100° C	200° (
Ammonia 880	饱和浓氨水	А	-	_
Ammonia Anhydrous	无水氨	А	А	Α
Ammonia liquid	液氮	Α	Α	A
Ammonium Hydroxide,10% Conc.	10%氯氧化铵溶液	A	1	
Ammonium Hydroxide,Conc.	浓氢氧化铵	A		-
Calcium Hydroxide	氢氧化钙	Α	-	-
Hydrazine	联氮;酰肼	А	A	_
Hydroxides	氮氧化物	А	-	-
Magnesium Hydroxide	氯氧化镁	Α	-	-
Potassium Hydroxide, 10% Conc	10%氢氧化钾溶液	A	-	-
Potassium Hydroxide, 70% Conc	70%氢氧化钾溶液	А	-	-
Sodium Conc. Hydroxide, 10%	10%氢氧化钠溶液	Α	Α	А
Sodium Conc. Hydroxide, 50%	50%氯氧化钠溶液	А	Α	А
Sodium Hydroxide, Conc.	浓度氯氧化钠	A	-	-
ORGANO- NITROGENS	有机氮化物	23° C	100° C	200° (
Acetonitrile	乙氰	A	-	-
Acetonitrile Aniline	乙氰苯胺	A A	- В	-
			- В -	-
Aniline	苯胺	А	- В -	-
Aniline Dimethyl Formamide(DMF)	苯胺 二甲基甲酰胺	A A	- B - -	- - - - c
Aniline Dimethyl Formamide(DMF) Diethylamine	苯胺 二甲基甲酰胺 二乙胺	A A A	- B - - -	- - - - C
Aniline Dimethyl Formamide(DMF) Diethylamine Nitrobenzene	苯胺 二甲基甲酰胺 二乙胺 硝基苯	A A A	-	- - - - c -
Aniline Dimethyl Formamide(DMF) Diethylamine Nitrobenzene Pyridine SULFUR COMPOUNDS	苯胺 二甲基甲酰胺 二乙胺 硝基苯 嘧啶 硫化物	A A A A 23° C	- - - A 100° C	-
Aniline Dimethyl Formamide(DMF) Diethylamine Nitrobenzene Pyridine SULFUR COMPOUNDS Carbon Disulfide	苯胺 二甲基甲酰胺 二乙胺 硝基苯 嘧啶 硫化物 二硫化碳	A A A A 23° C	- - A 100° C	-
Aniline Dimethyl Formamide(DMF) Diethylamine Nitrobenzene Pyridine SULFUR COMPOUNDS	苯胺 二甲基甲酰胺 二乙胺 硝基苯 嘧啶 硫化物	A A A A 23° C	- - - A 100° C	-

ALCOHOLS	醇 类	23° C	100° C	200° C
Benzyl Alcohol	苄醇; 苯甲醇	А	-	-
Butanol	丁醇	A	-	-
Cyclohexanol	环己醇	А	-	=
Ethanol	乙醇; 酒精	A	Α	-
Ethylene Glycol	乙烯乙二醇	A	A	В
Ethylene Glycol, 50% Conc.	50%乙烯乙二醇溶液	Α	Α	Α
Glycerol	甘油; 丙三醇	Α	-	-
Glycols	乙二醇类	A	Α	_
isopropanol	异丙醇	А	-	-
Methanol	甲醇	Α	Α	2
Propanol	丙醇	Α	-	-
MISCELLANEOUS	其 他	23° C	100° C	200° C
Adhesives (not cyanoacrylates)	粘合剂(非丙烯酸树脂基)	А	-	-
Apple Juice	苹果汁	А	-	-
Aviation Spirit	航空汽油	A	~	~
Beer	啤酒	А	А	-
Cooking Oil	食用油	A	-	-
Creosote	木榴油; 杂芬油; 杂酚油	A	_	_
Detergent Solutions (nonphenolic)	清洁剂(非酚类)	A	A	-
Edible Fats and Oils	食用脂肪和油类	Α	-	-
Fatty Acids	脂肪酸	A	А	_
Fruit Juice	果汁	А	Α	-
Gelatin	明胶	A	A	-
ketchup	番茄酱	A	22	2
linseed Oil	亚麻籽油; 亚麻仁油	А	-	-
Milk	牛奶	Α	Α	-
Mineral Oil	矿物油	А	2	_
Molasses	蜜糖;糖浆	Α	Α	-
Olive Oil	橄榄油	Α	Α	-
Peanut Oil	花生油	A	A	-
Paraffin	石蜡	А	A	-
Sewage	污水	А	Α	-
Soap Solution	皂溶液	А	-	-
Starch	淀粉	A	Α	-
Tallow	动物油; 动物脂	A	Α	-
Turpentine	松节油; 松脂	А	-	-
Urea	=	А	Α	-
Varnish	-	А	2	_
Vinegar	-	А	A	-
Wax	-	Α	-	-

Unfilled PEEK sample strips are immersed in chemicals at a constant temperature for at least 7 days (Centralized, unless otherwise stated).

Chemical compatibility was assessed by retaining mechanical properties, supplemented by weight or size variations.

Compatibility is classified as A, B, or C, as follows:

A– Inactivity. Materials can be used in applications where they are exposed to these reagents. However, it is still recommended that practical applications be validated.

B- Minor action. Materials may be used for exposure to some of these reagents.

It is necessary to evaluate the performance criteria applied in these specific situations.

C- Serious effects. Materials are considered to be allowed to come into contact with such chemicals only under certain conditions.





#### Product processing and quality control

# Cod M.

#### Cool Jet dry ice deburring equipment

- improve product quality and reduce straig.

Improve the quality of machined parts

- h Na cocondon wooto
- Faster and more uniform removal of burns and flaps









Dry ice cleaning technology is an effective deburring solution for removing burrs and flaps from machined and molded parts. Including small holes, cross holes, pollution-free, can effectively prevent the pipeline flow reduction or blockage caused by burrs, and no residue.

#### Raw material performance testing equipment



Universal testing machine is used to test conventional mechanical performance parameters such as product tensile bending strength and modulus.



The impact tester is used for raw material inspection and testing the impact strength.



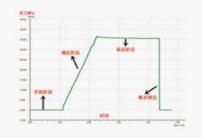
Hardness tester is used to test the Rockwell hardness of raw materials.



Density detector is used to detect the actual density of the product.



The liquid chromatograph can be used to detect the pressure-tightness and pressure-holding properties of pipe connections such as joints, two-way and three-way connections.



## Stock shapes and finished product inspection / &Dimensional appearance inspection equipment



In order to improve the quality of PEEK products, better meet the special application needs of customers in various industries. Our company in strict accordance with GMP standards to establish a hundred thousand class clean workshop, and equipped with a hundred class cleaning area. Maintaining the cleanliness of clean workshop and the continuous stability of pollution control is the core standard for the production of implantable PEEK.



Double-slot ultrasonic cleaning machine Equipped with a double-slot ultrasonic cleaning machine, it has a better cleaning effect on parts with small gaps, slits, and deep holes, and can effectively remove dust, impurities, and oil on the surface of the product. After cleaning, it is vacuum packed in a clean room to prevent secondary pollution. Ensure the cleanliness of the surface of our products, so that the analysis results of our customers' products are more accurate.



X-ray foreign object detection equipment is mainly used to detect whether the product contains foreign objects, such as metal chipping, etc. during the production process.



Ultrasonic detector is mainly used to detect whether there are impurities, looseness, cracks, pores and other defects inside the product.



Image measuring instrument is used to detect some products with high requirements for two-dimensional dimensional accuracy and form and position tolerance accuracy, and the detection accuracy can reach 0.001mm.



Three-coordinates are used to detect some products with high requirements for three-dimensional dimensional accuracy and form and position tolerance accuracy. The detection accuracy can reach 0.0005mm, and a three-dimensional inspection report recognized in the industry can be provided.



Surface roughness detector is used to control some products with high requirements on appearance, and can specifically measure the surface roughness of processed products.



Universal friction and wear testing machine, Test the friction coefficient and wear of the material under a certain load and speed.

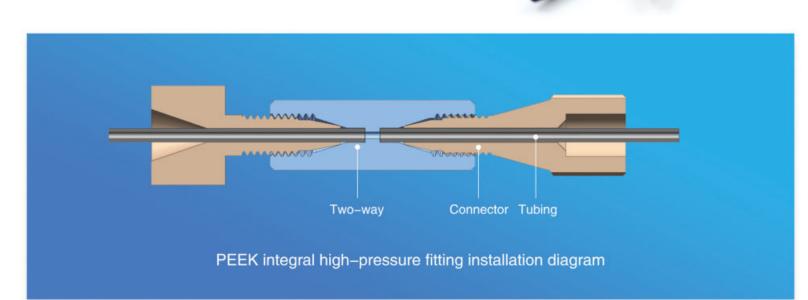
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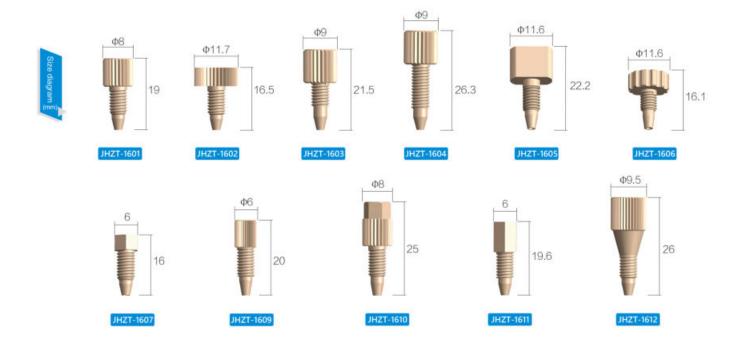




#### ■ PEEK integral high pressure fitting

- > Made of high-purity PEEK, with high strength, corrosion resistance, high pressure resistance and good biocompatibility.
- > The maximum withstand voltage is about 40MPa.
- > Integral design, no need for ferrule, convenient and easy to use, reusable
- > A variety of specifications are available, and can also be customized.
- > Suitable for PEEK tubing or fluoroplastic tubing with an outer diameter of 1/16.





#### **▼ PEEK integral high pressure fittings List**

No.	External thread/port	Applicable pipeline (outer diameter – mm)	Material/color	pressure resistance value	Head type
JHZT - 1601	10 - 32 UNF / Cone	1/16" (1.6mm)	PEEK / Natural	30 MPa	m=0.8 Knurled
JHZT - 1602	10 - 32 UNF / Cone	1/16" (1.6mm)	PEEK / Natural	35 MPa	m=1.0 Knurled
JHZT - 1603	10 - 32 UNF / Cone	1/16" (1.6mm)	PEEK / Natural	27 MPa	m=0.8 Knurled
JHZT - 1604	10 - 32 UNF / Cone	1/16" (1.6mm)	PEEK / Natural	30 MPa	m=1.0 Knurled
JHZT - 1605	10 - 32 UNF / Cone	1/16" (1.6mm)	PEEK / Natural	35 MPa	Kunrled + Flat position
JHZT - 1606	10 - 32 UNF / Cone	1/16" (1.6mm)	PEEK / Natural	25 MPa	Arc type knurling
JHZT - 1607	10 – 32 UNF / Cone	1/16" (1.6mm)	PEEK / Natural	30 MPa	Hexagon
JHZT - 1609	10 - 32 UNF / Cone	1/16" (1.6mm)	PEEK / Natural	30 MPa	m=0.8 Knurled
JHZT - 1610	10 – 32 UNF / Cone	1/16" (1.6mm)	PEEK / Natural	40 MPa	Knurled + Hexagon
JHZT - 1611	10 - 32 UNF / Cone	1/16" (1.6mm)	PEEK / Natural / Black	33 MPa	Hexagon
JHZT - 1612	10 - 32 UNF / Cone	1/16" (1.6mm)	PEEK / Natural	40 MPa	m=1.0 Knurled

#### Notes

- 1. Integral joints can be customized according to customer requirements, such as fittings for pipes of 2/2.5/3/3.2/4 sizes, large quantities of materials or colors can be customized.
- 2. The maximum pressure resistance is related to the strength of the pipeline, the internal dimensions of the fittings, and the strength of the hand-tightening.
- 3. JHZT-1609, JHZT-1610 and JHZT-1612 are machined, so they are with good appearance and dimensional accuracy.
- 4. Both Hexagon and flat fittings have matching wrenches, and some knurled fittings also have wrenches, please contact customer service for detailed inquiries!





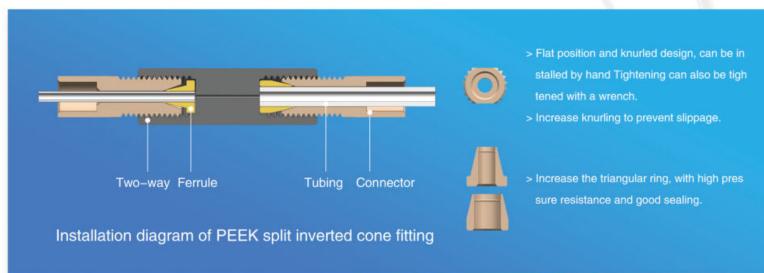


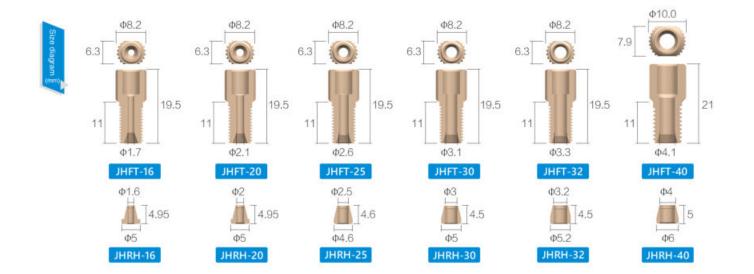


#### ■ PEEK split inverted cone fitting

- > Made of PEEK material with corrosion resistance, high temperature resistance, high purity and low dissolution.
- > The ferrule and the fitting are divided into two independent parts to prevent the capillary tube from twisting due to the rotation of the connector during installation.
- > Economical and practical, the ferrule can be used repeatedly. When the ferrule is damaged, only the ferrule needs to be replaced, instead of a complete set of replacement.
- > The inner hole of the ferrules is increased with a tightening inverted triangle ring, which is more pressure resistant.
- > A large inventory of a variety of specifications.

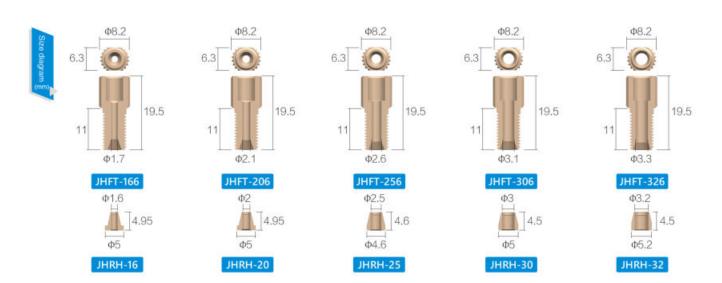






#### **▼** PEEK split inverted taper joint list (1/4–28)

No.	Applicable pipeline (outer diameter) mm	Matching ferrule number	Fitting external thread	Fitting material/color	Ferrule material
JHFT – 16	1.6	JHRH – 16	1/4 – 28	PEEK / Natural	ETFE / PEEK / PTFE
JHFT - 20	2.0	JHRH - 20	1/4 – 28	PEEK / Natural	ETFE / PEEK / PTFE
JHFT - 25	2.5	JHRH – 25	1/4 – 28	PEEK / Natural	ETFE / PEEK / PTFE
JHFT - 30	3.0	JHRH - 30	1/4 – 28	PEEK / Natural	ETFE / PEEK / PTFE
JHFT - 32	3.2	JHRH - 32	1/4 – 28	PEEK / Natural	ETFE / PEEK / PTFE
JHFT - 40	4.0	JHRH – 40	5/16 – 24	PEEK / Natural	ETFE / PEEK / PTFE



#### ▼ PEEK split inverted taper fitting list (M6)

No.	Applicable pipeline (outer diameter) mm	Matching ferrule number	Fitting external thread	Fitting material/color	Ferrule material
JHFT - 166	1.6	JHRH – 16	M6*1	PEEK / Natural	ETFE / PEEK / PTFE
JHFT - 206	2.0	JHRH - 20	M6*1	PEEK / Natural	ETFE / PEEK / PTFE
JHFT - 256	2.5	JHRH – 25	M6*1	PEEK / Natural	ETFE / PEEK / PTFE
JHFT - 306	3.0	JHRH - 30	M6*1	PEEK / Natural	ETFE / PEEK / PTFE
JHFT - 326	3.2	JHRH - 32	M6*1	PEEK / Natural	ETFE / PEEK / PTFE

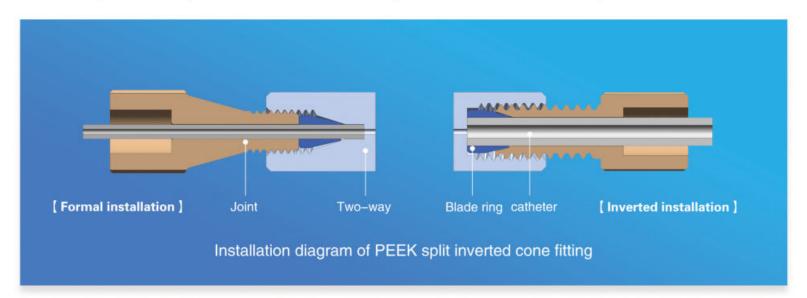
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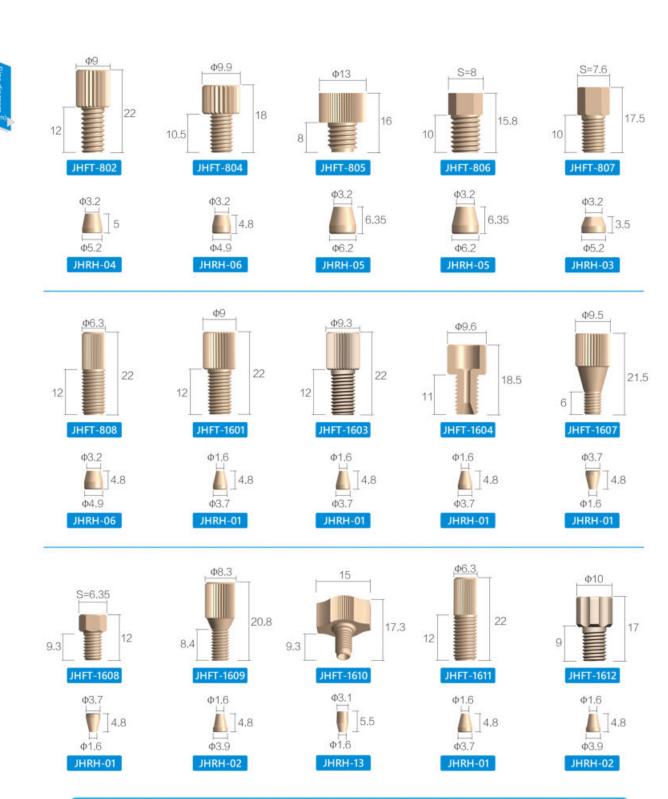
#### ■ PEEK split inverted cone fitting(continued)

- > Made of high-purity PEEK, with high strength, corrosion resistance, high pressure resistance and good biocompatibility.
- > The maximum withstand voltage is about 40Mpa.
- > Split design, economical and practical, only need to replace the ferrule.
- > Use with matching blade ring, the pipeline will not be twisted when installing and tightening.
- > A variety of threads and apertures are available. Most of them are injection molded, which is economical and practical.



#### ▼ PEEK split inverted cone fitting (continued) list

No.	Fitting external thread	Applicable pipeline (outer diameter) mm	Matching ferrule	Ferrule installation method	Material/color	Pressure resistance value	Head type
JHFT - 802	1/4 – 28 UNF	1/8" (3.2)	JHRH - 04 / JHRH - 06	Inverted installation	PEEK / Natural	5 MPa	m=1.0 Knurled
JHFT - 804	1/4 - 28 UNF	1/8" (3.2)	JHRH - 06	Inverted installation	PEEK / Natural	4 MPa	m=0.8 Knurled
JHFT - 805	5/16 - 24 UNF	1/8" (3.2)	JHRH - 05	Formal installation	PEEK / Natural	5 MPa	m=0.5 Knurled
JHFT - 806	5/16 - 24 UNF	1/8" (3.2)	JHRH - 05 / JHRH - 06	Formal installation / Inverted installation	PEEK / Natural	9 MPa	Hexagon
JHFT - 807	1/4 - 28 UNF	1/8" (3.2)	JHRH - 03	Inverted installation	PEEK / Natural	3.5 MPa	Hexagon
JHFT - 808	1/4 - 28 UNF	1/8" (3.2)	JHRH - 06	Inverted installation	PEEK / Natural	5 MPa	m=0.8 Knurled
JHFT - 1601	1/4 - 28 UNF	1/16" (1.6)	JHRH - 01	Inverted installation	PEEK / Natural	33 MPa	m=1.0 Knurled
JHFT - 1603	M6*1	1/16" (1.6)	JHRH - 01	Inverted installation	PEEK / Natural	27 MPa	m=1.0 Knurled
JHFT - 1604	1/4 - 28 UNF	1/16" (1.6)	JHRH - 01	Inverted installation	PEEK / Natural	30 MPa	m=0.8 Knurled
JHFT - 1607	10 – 32 UNF	1/16" (1.6)	JHRH - 01	Formal installation	PEEK / Natural	35 MPa	m=1.0 Knurled
JHFT - 1608	10 – 32 UNF	1/16" (1.6)	JHRH - 01	Formal installation	PEEK / Natural	40 MPa	Hexagon
JHFT - 1609	10 – 32 UNF	1/16" (1.6)	JHRH - 02	Inverted installation	PEEK / Natural	35 MPa	m=1.0 Knurled
JHFT - 1610	10 – 32 UNF	1/16" (1.6)	JHRH - 13	Formal installation	PEEK / Natural	40 MPa	Oval
JHFT - 1611	1/4 – 28 UNF	1/16" (1.6)	JHRH - 01	Inverted installation	PEEK / Natural	27 MPa	m=0.8 Knurled
JHFT - 1612	1/4 – 28 UNF	1/16" (1.6)	JHRH - 02	Inverted installation	PEEK / Natural	30 MPa	Plum blossom type



- 1. Among them, JHFT-806/JHFT-1607/JHFT-1609/JHFT-1610 are machined, so they are with good appearance and dimensional accuracy.
- dimensions of the fitting, and the strength of the hand screw.

2. The maximum pressure resistance is related to the strength of the pipeline, the internal

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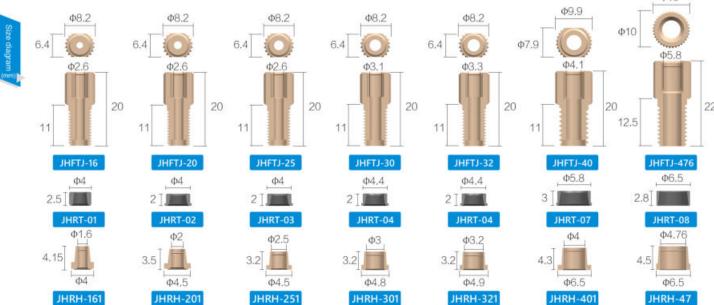




#### ■ PEEK split fitting with stainless steel ferrule sleeve

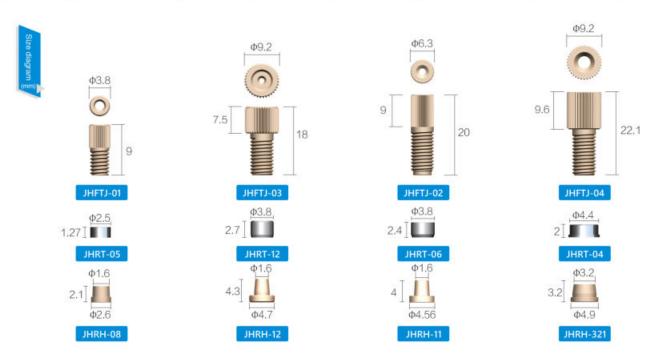
- > The ferrule and fitting are made of corrosion-resistant, low-dissolution, and high-purity PEEK material.
- > The ferrule sleeve is made of medical stainless steel, and the surface is treated with corrosion resistance.
- > The pipeline can be pre-fastened with special tools, the pipeline is not twisted during the split design and installation, and it has anti-vibration effect.
- > A variety of specifications are suitable for pipelines with outer diameters of 1.6/2.0/2.5/3.0/3.2/4, which can be reused.
- > Split design and installation, the pipeline will not be twisted, and it has anti-vibration effect at the same time.
- > Used in in vitro diagnostic equipment, liquid chromatography equipment, environmental testing equipment, genetic testing and other analytical industries.





#### ▼ PEEK split fitting with stainless steel ferrule sleeve list

No.	Applicable pipeline (outer diameter) mm	Fitting external thread	Material/color	Matching ferrule number	Ferrule material	Matching ferrule sleeve number	Ferrule sleeve material
JHFTJ – 16	1.6	1/4 – 28	PEEK / Natural	JHRH - 161	ETFE / PEEK / PTFE	JHRT - 01	316 Stainless steel
JHFTJ – 20	2.0	1/4 – 28	PEEK / Natural	JHRH - 201	ETFE / PEEK / PTFE	JHRT - 02	316 Stainless steel
JHFTJ - 25	2.5	1/4 – 28	PEEK / Natural	JHRH - 251	ETFE/PEEK/PTFE	JHRT - 03	316 Stainless steel
JHFTJ - 30	3.0	1/4 – 28	PEEK / Natural	JHRH - 301	ETFE / PEEK / PTFE	JHRT - 04	316 Stainless steel
JHFTJ - 32	3.2	1/4 – 28	PEEK / Natural	JHRH - 321	ETFE/PEEK/PTFE	JHRT - 04	316 Stainless steel
JHFTJ – 40	4.0	1/4 – 28	PEEK / Natural	JHRH - 401	ETFE / PEEK / PTFE	JHRT - 07	316 Stainless steel
JHFTJ – 476	4.76	5/16 – 24	PEEK / Natural	JHRH – 47	ETFE / PEEK / PTFE	JHRT - 08	316 Stainless steel



#### ▼ PEEK split fittings with stainless steel ferrule sleeves list(continued)

No.	Applicable pipeline (outer diameter) mm	Fitting external thread	Matching ferrule number	Matching ferrule sleeve number	Material/color	Ferrule sleeve material
JHFTJ – 01	1/16" (1.6)	6 – 40	JHRH - 08	JHRT - 05	PEEK / Natural	316L Stainless steel
JHFTJ - 02	1/16" (1.6)	1/4 – 28	JHRH - 11	JHRT - 06	PEEK / Natural	316L Stainless steel
JHFTJ - 03	1/16" (1.6)	1/4 – 28	JHRH - 12	JHRT – 12	PEEK / Natural	316L Stainless steel
JHFTJ - 04	1/8" (3.2)	1/4 – 28	JHRH - 321	JHRT - 03	PEEK / Natural	316L Stainless steel

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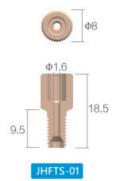
#### ■ PEEK Split-type fitting of bidirectional fastening high pressure

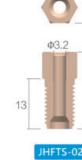
- > Blade ring with bidirectional locking structure. Higher pressure resistance. Maximum pressure up to 58Mpa.
- > Made of PEEK with high purity, high strength, corrosion resistance, high-pressure resistance, good biocompatibility.
- > Split design, economical and practical, only need to replace the ferrule.
- > Supporting the use of ferrule, installation and screwing will not distort the pipeline.

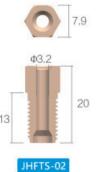
#### ▼ PEEK split two-way fastening high-pressure fitting list

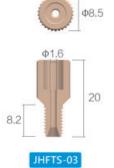
No.	Fitting external thread	Applicable pipeline (outer diameter) mm	the state of the s	Matching ferrule sleeve number	Pressure resistance value	Head type	Forming method	Material/color
JHFTS - 01	10 – 32 UNF	1/16" (1.6)	JHRH - 09	1	58 MPa	m=0.8 Knurled	Machined	PEEK / Natural
JHFTS - 02	5/16 – 24 UNF	1/8" (3.2)	JHRH - 14	1	35 MPa	Hexagon	Machined	PEEK / Natural
JHFTS - 03	10 – 32 UNF	1/16" (1.6)	JHRH - 07	1	53 MPa	m=0.8 Knurled	Machined	PEEK / Natural
JHFTS - 04	10 – 32 UNF	1/16" (1.6)	JHRH - 10	JHRT - 12	45 MPa	m=1.0 Knurled	Machined	PEEK / Natural

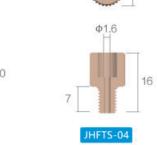
















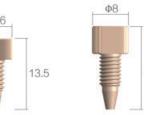




2.7

#### ■ PEEK micropipe fitting

- > Suitable for joints of small pipelines such as 0.79/0.36.
- > Machined and formed with corrosion-resistant PEEK material.
- > Split type can be customized according to customer requirements.







#### **▼ PEEK micropipe fittings list**

No.	Fitting external thread	Applicable pipeline (outer diameter) mm	Pressure resistance value	Head type	Forming method	Material/color
JHWG – 01	6 – 32 UNC	0.8	50 MPa	m=0.5 Knurled	Machined	PEEK / Natural
JHWG - 02	10 – 32 UNF	0.8	60 MPa	m=0.5 Knurled + Flat position	Machined	PEEK / Natural
JHWG - 03	6 – 40 UNF	0.36	35 MPa	m=0.5 Knurled	Machined	PEEK / Natural

#### ■ PEEK microfluidic biochip connector and base

- > Supporting the use of biochip base, for microfluidic can be used through the wall.
- > Can be customized according to customer requirements.
- > Injection molding or machine molding, cost-effective.
- > PEEK material, corrosion resistance, low stripping, high temperature, and high-pressure resistance.





JHFT-32 / JHDZ-02

#### ▼ PEEK microfluidic biochip connector and base product list

No.	Fitting external thread	适配底座编号	Applicable pipeline (outer diameter) mm			Forming method	Material/color
JHZT - 1608	10 – 32 UNF	JHDZ – 01	1.6	/	20 MPa	njection molding	PEEK / Natural
JHFT - 32	1/4 – 28 UNF	JHDZ - 02	3.2	JHRH- 32	7 MPa	Machined	PEEK / Natural















#### ■ Product List of Universal Ferrule

> This kind of ferrule can be used for PEEK tube, metal tube, quartz tube, and fluoroplastic tube, with strong ver satility. Suitable for most split fittings on the market.

No.	Outer Diameter(mm)	Inner diameter(mm)	Length(mm)	Material/color	Remark
JHRH - 01	3.7	1.6	4.8	PEEK / ETFE / PTFE / Natural	1
JHRH - 02	3.9	1.6	4.8	PEEK 本色 / ETFE / Natural	Flanging ferrule
JHRH - 03	5.2	3.2	3.5	PEEK / Natural	1
JHRH - 04	5.2	3.2	5	PEEK / ETFE / PTFE / Natural	/
JHRH - 05	6.2	3.2	6.35	PEEK / Natural	1
JHRH - 06	4.9	3.2	4.8	PEEK / ETFE / PTFE / Natural	/
JHRH - 07	3.2	1.6	6	PEEK / Natural	Double ferrule
JHRH – 08	2.6	1.6	2.1	PEEK / Natural	6-40 or 6-32 fitting matched
JHRH - 09	3.2	1.6	5.95	PEEK / Natural	Slotted double end fastening ferrule
JHRH – 10	3.3	1.6	5.6	PEEK / Natural	Double ferrule
JHRH - 11	4.56	1.6	4	PEEK / Natural	Flanging ferrule
JHRH - 12	4.7	1.6	4.3	PEEK / Natural	Flanging ferrule
JHRH - 13	3.1	1.6	5.5	PEEK / Natural	1
JHRH – 14	4.9	3.2	6.8	PEEK / Natural	Slotted double end fastening ferrule

#### ■ Product list of fluorinated plastic tubing matched ferrule

> The special structure of this ferrule can lock the fluorinated plastic tubing more tightly, so the tubing is not easy to pop out when the pressure is high, and the sealing effect is better. So it is especially suitable for PTFE/FEP/PFA/ETFE and other fluorine plastic pipe connections; Suitable for the outer diameter of 4.76/2.5/3.0/3.2/4.0/1.6/2.0 mm tubes; Suitable for inverted taper joints or joints with metal ferrule; This ferrule made with PEEK material is also suitable for locking PEEK capillary tubing.

No.	Outer Diameter(mm)	Inner diameter(mm)	Length(mm)	Material/color	Remark
JHRH - 16	5	1.6	4.95	ETFE / PEEK / Natural	Flanging ferrule
JHRH - 20	5	2	4.95	PEEK / Natural	Flanging ferrule
JHRH - 25	4.6	2.5	4.6	PEEK / Natural	Flanging ferrule
JHRH - 30	5	3	4.5	PEEK / Natural	Flanging ferrule
JHRH - 32	5.2	3.2	4.5	PEEK / Natural	Flanging ferrule
JHRH - 40	6	4	5	PEEK / Natural	Flanging ferrule
JHRH - 161	4	1.6	4.15	PEEK / Natural	Flanging ferrule
JHRH - 201	4.5	2	3.5	PEEK / Natural	Flanging ferrule
JHRH - 251	4.5	2.5	3.2	PEEK / Natural	Flanging ferrule
JHRH - 301	4.8	3	3.2	PEEK / Natural	Flanging ferrule
JHRH - 321	4.9	3.2	3.2	PEEK / Natural	Flanging ferrule
JHRH - 401	6.5	4	4.3	PEEK / Natural	Flanging ferrule
JHRH - 476	6.5	4.76	4.5	PEEK / Natural	Flanging ferrule

#### ■ Product List of High-temperature Resistant Ferrule

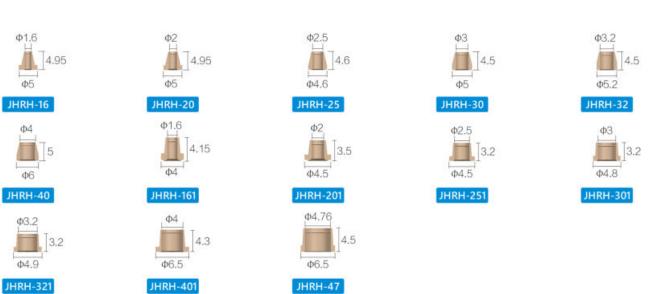
> The ferrule is made of polyimide (PI) + graphite and can withstand a temperature of about 380 degrees. Corrosion resistance. Re sistant to wear and tear. It is especially suitable for locking quartz tubing or metal tubing at high temperatures.

No.	Outer Diameter(mm)	Inner diameter(mm)	Length <sub>(mm)</sub>	Material/color	Remark
JHRH - 15	3.2	0.6	3.8	Black	PI + Graphite
JHRH - 17	3.1	0.4	2.3	Black	PI + Graphite
JHRH - 18	3.57	0.4 / 0.5 / 0.8	7.7	Black	PI + Graphite













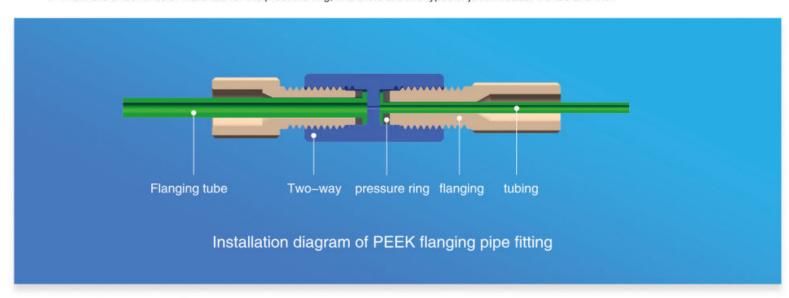


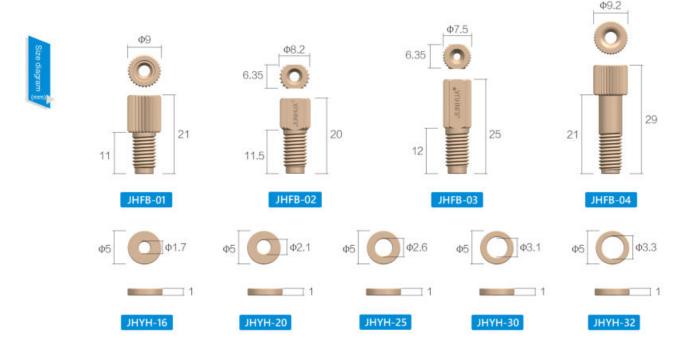




#### ■ PEEK flanged tubing fittings

- > All fittings are made of PEEK material with excellent inertness and biocompatibility, corrosion resistance, high purity, low dissolution, and high strength.
- > The tubing head is flanged, suitable for low–pressure sealing, and the tubing will not be twisted when tightening.
- > Provide a variety of professional customization services, flanging or reaming customization of different materials, different inner holes, and different lengths of capillary tubes.
- > Various specifications of heat-shrinkable number tubes, snap-on logos, model logos and other customized services.
- > There are three kinds of materials for the pressure ring, and there are two types of joint threads: 1/4-28 and M6.





#### Product model

JHFB - 01

Model
Normal: JHFB - 1
Flat position: JHFB - 2
Long: JHFB - 3
Extra long: JHFB - 4

28 Screw model

28 : 1/4 - 28 M6 : M6\*1 Adapting tubing OD

16

16: 1.6 mm 20: 2.0 mm 25: 2.5 mm 30: 3.0 mm 32: 3.2 mm Adapting tubing material

PT

PT: PTFE
PE: FEP
PA: PFA
ET: ETFE

#### Pressure ring model

JHYH

Model

16

Adapting tubing OD 16: 1.6mm

> 30 : 3.0mm 32 : 3.2mm

20 : 2.0mm 25 : 2.5mm PT

Adapting tubing material PE: PEEK

SS: 316 Stainless steel ET: ETFE

#### **▼ PEEKPEEK flanged tubing fittings list**

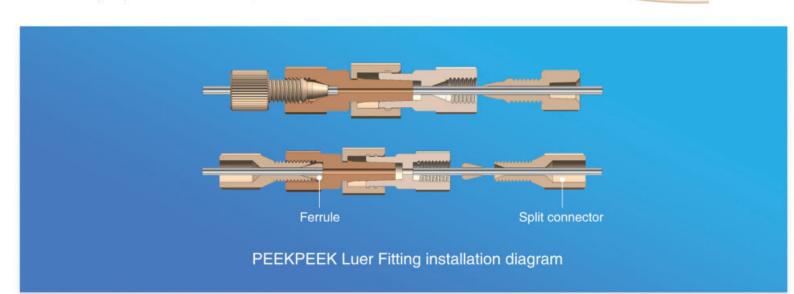
No.	Fitting external thread	Applicable pipeline (outer diameter) mm	Pressure ring model	接头材质	压环材质
		1.6	JHYH – 16		
JHFB - 01					
JHFB - 02	1/4 – 28	2.0	JHYH – 20		
	/	2.5	JHYH - 25	PEEK	PEEK / 316L Stainless steel / ETFE
JHFB - 03	M6				
	IVIO	3.0	JHYH – 30		
JHFB - 04		3.2	JHYH - 32		

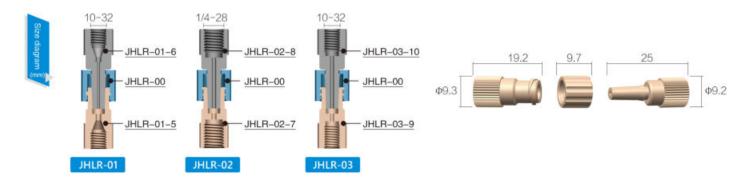




#### ■ PEEK Luer fitting

- > Suitable for quick disassembly and assembly, and can be used repeatedly.
- > Corrosion-resistant, high-purity, high-strength, low-dissolution PEEK material, formed by machining.
- > A syringe can also be connected for manual injection.
- > A variety of specifications are available, and can also be customized.



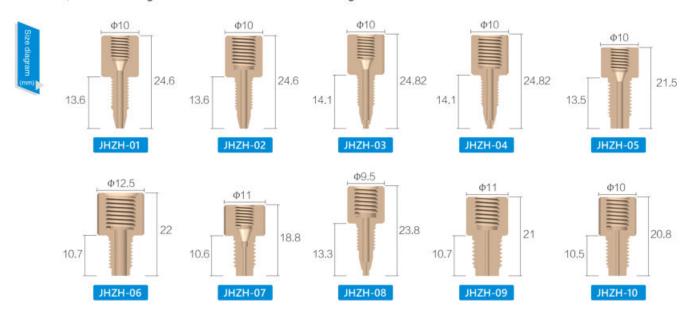


#### **▼ PEEK Luer Fitting List**

No.	Internal thread at both ends	Suitable tubing (mm)	Pressure resistance value	Forming method	Material/color	Ferrule sleeve material
JHLR - 01	10 – 32 Cone bottom	1.6	20 MPa	Machined	PEEK / Natural	m=0.8 Knurled
JHLR - 02	1/4 - 28 Flat botom	1.6 / 3.2	20 MPa	Machined	PEEK / Natural	m=0.8 Knurled
JHLR - 03	10 – 32 Flat botom	1.6	20 MPa	Machined	PEEK / Natural	m=0.8 Knurled

#### ■ PEEK adapter

- > A variety of specifications are available, metric threads and inch threads are interchangeable.
- > Machining forming, high dimensional accuracy, good sealing performance, beautiful appearance without burrs
- > Made of high-purity PEEK, with high strength, corrosion resistance, high pressure resistance and good biocompatibility.
- > Material, color and through hole size can be customized according to customer needs.



#### **▼ PEEK adapters list**

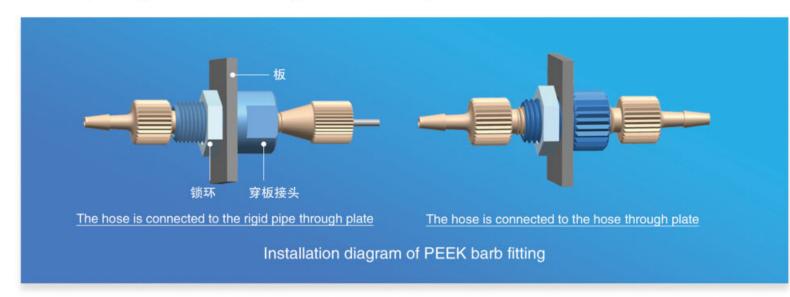
No.	External thread /port	Internal thread /port	Through hole size (mm)	Pressure resistance value	Head type	Forming method	Material/color
JHZH - 01	10 – 32 / Cone	10 – 32 / Cone bottom	1.6	30 MPa	m=0.8 Knurled	Machined	PEEK / Natural
JHZH - 02	10 – 32 / Cone	1/4 - 28 / Flat bottom	1.6	8 MPa	m=0.8 Knurled	Machined	PEEK / Natural
JHZH - 03	10 – 32 / Cone	10 – 32 / Cone bottom	0.6	30 MPa	m=0.8 Knurled	Machined	PEEK / Natural
JHZH - 04	10 – 32 / Cone	1/4 - 28 / Flat bottom	0.6	8 MPa	m=0.8 Knurled	Machined	PEEK / Natural
JHZH - 05	1/4 - 28 / Flat end	10 – 32 / Cone bottom	1.7	10 MPa	8mm Flat position	Machined	PEEK / Natural
JHZH - 06	1/4 – 28 / Flat end	5/16 - 24 / Flat bottom	3.3	6.5 MPa	m=1.0 Knurled	Machined	PEEK / Natural
JHZH - 07	M6 / Flat end	10 – 32 / Cone bottom	1.0	8 MPa	m=0.8 Knurled	Machined	PEEK / Natural
JHZH - 08	10 – 32 / Cone	M6 / Flat bottom	0.5	8 MPa	m=1.0 Knurled	Machined	PEEK / Natural
JHZH - 09	5/16 - 24 / Flat end	1/4 - 28 / Flat bottom	1.0	6.5 MPa	m=1.0 Knurled	Machined	PEEK / Natural
JHZH - 10	1/4 - 28 / Flat end	M6 / Flat bottom	1.0	6.5 MPa	m=1.0 Knurled	Machined	PEEK / Natural





#### ■ PEEK barb adapter

- > It can be used together with Junhua chinaPEEK adapter, two-way, three-way, four-way, through plate fitting, etc.
- > Realize any connection between hard tubing and hoses, hard tubing and hard tubing, and hoses and hoses of different specifications of pipe diameters.
- > Corrosion-resistant, high-purity, high-strength, low-dissolution PEEK material formed by machining, with high precision, good sealing and beautiful appearance.
- > The inner hole adopts the dry ice deburring process to ensure no burrs can block the pipeline.
- > Enlarged knurling, convenient for hand screwing, suitable for hoses with apertures between 1-6mm.

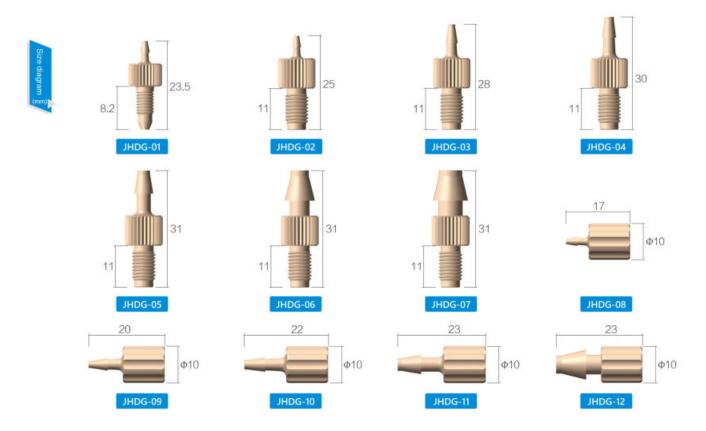




Hose and hard tubing connection



Hose and hose connection



#### ▼ Barb fitting list

No.	Applicable hose inner diameter (mm)	External thread /port	Internal thread /port	Head type	Forming method	Material/color
JHDG - 01	0.7 - 1.6	1/4 - 32 / Cone	1	m=1.0 Knurled	Machined	PEEK / Natural
JHDG - 02	1 – 1,4	1/4 – 28 / Flat end	/	m=1.0 Knurled	Machined	PEEK / Natural
JHDG - 03	1.4 – 2.1	1/4 - 28 / Flat end	1	m=1.0 Knurled	Machined	PEEK / Natural
JHDG - 04	2.1 – 2.9	1/4 - 28 / Flat end	1	m=1.0 Knurled	Machined	PEEK / Natural
JHDG - 05	2.9 - 3.6	1/4 - 28 / Flat end	1	m=1.0 Knurled	Machined	PEEK / Natural
JHDG - 06	4	1/4 – 28 / Flat end	1	m=1.0 Knurled	Machined	PEEK / Natural
JHDG - 07	6	1/4 - 28 / Flat end	1	m=1.0 Knurled	Machined	PEEK / Natural
JHDG - 08	1 – 1.4	1	1/4 - 28 / Flat bottom	Plum blossom type	Machined	PEEK / Natural
JHDG - 09	1.4 – 2.1	1	1/4 - 28 / Flat bottom	Plum blossom type	Machined	PEEK / Natural
JHDG - 10	2.1 – 2.9	1	1/4 - 28 / Flat bottom	Plum blossom type	Machined	PEEK / Natural
JHDG – 11	2.9 – 3.6	1	1/4 - 28 / Flat bottom	Plum blossom type	Machined	PEEK / Natural
JHDG - 12	4	1	1/4 - 28 / Flat bottom	Plum blossom type	Machined	PEEK / Natural





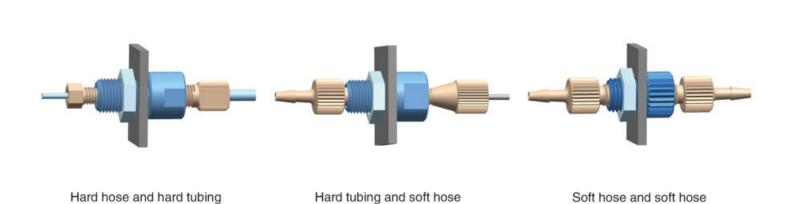
#### **■ PEEK Union**

- > Corrosion resistance, high purity, high strength, low dissolution, made by CNC machining.
- > Supporting POM lock ring to achieve through-plate connection. It can be used with most split or integral connectors in the market.
- > The supporting barb connector can be used to connect the soft hose with the hard tubing through plate.
- > The perforation diameter on the plate shall be greater than 9.5mm and less than 12.5mm.
- > Dead volume is very small.

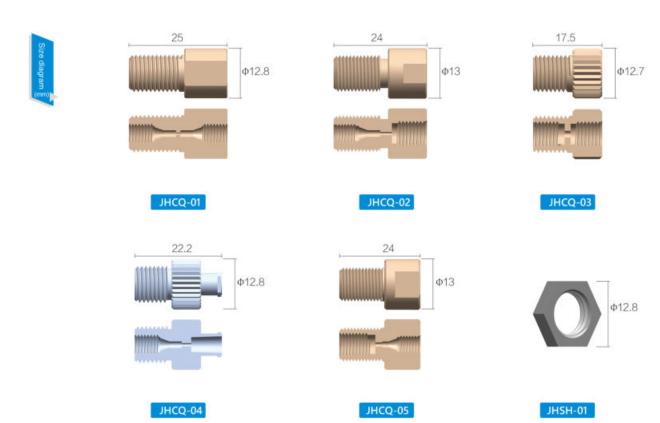


connected through plate





connected through plate



#### **▼ PEEK union product list**

No.	Inside thread	Outer thread	Lock ring	Head type	Material / color
JHCQ - 01	10 – 32 Sloping bottom 10 – 32 Sloping bottom	3/8 – 24	JHSH - 01	Flat position	PEEK / Natural
JHCQ - 02	10 – 32 Sloping bottom 1/4 – 28 Flat bottom	3/8 – 24	JHSH - 01	Flat position	PEEK / Natural
JHCQ - 03	1/4 – 28 Flat bottom 1/4 – 28 Flat bottom	3/8 – 24	JHSH - 01	m=1.0 Knurling	PEEK / Natural
JHCQ - 04	10 – 32 Sloping bottom  Luer connector	3/8 – 24	JHSH - 01	m=1.0 Knurling	POM / White
JHCQ - 05	1/4 – 28 Flat bottom 10 – 32 Sloping bottom	3/8 – 24	JHSH - 01	Flat position	PEEK / Natural

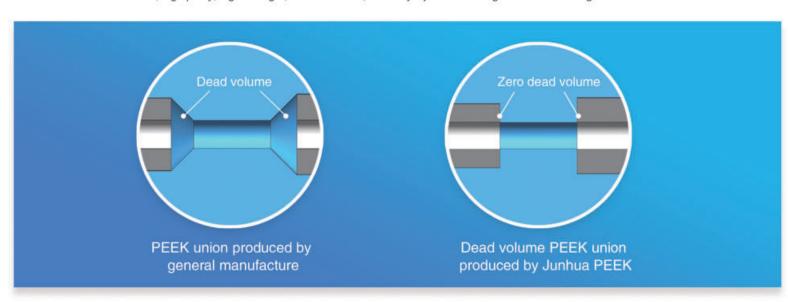
connected through plate

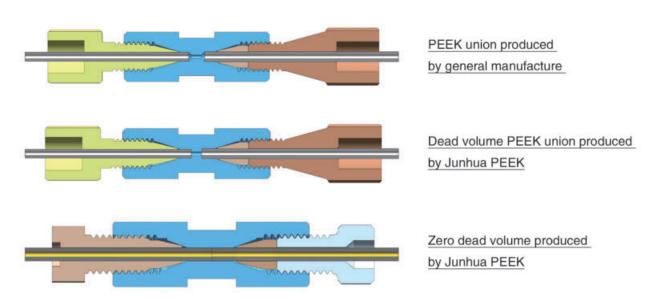


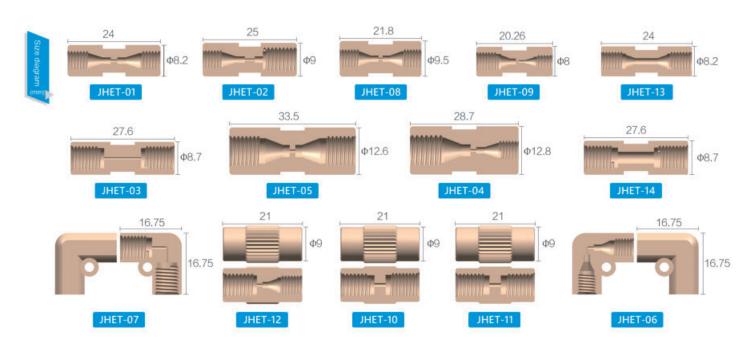


#### **■ PEEK Union**

- > It can be used together with JUNHUA split PEEK fitting, one–piece fitting , flanging connector, barb connector, and so on.
- > Any connection between hard pipe and hose, hard pipe and hard pipe, hose and hose of different specifications diameter can be realized freely.
- > There are two types for option: normal volume and zero dead volume. When placing an order, you can note which one is required. It will be a normal volume type if there is no note.
- > The inner hole adopts dry ice deburring process to ensure no burr and blockage of the pipeline.
- > Corrosion resistance, high purity, high strength, low dissolution, made by injection molding or CNC machining.







#### **▼ PEEK union list**

NO.	Inner thread	Matched connectors	Through-hole size	Material/color	Forming method	Remark
JHET - 01	10 – 32 Sloping bottom 10 – 32 Sloping bottom	One-piece PEEK fitting Split PEEK fitting Barb connector	0.3 / 0.5 / 0.8 / 1.0	PEEK / Natural	Injection molding	Through-hole 0.5
JHET - 02	10 – 32 Sloping bottom 1/4 – 28 Flat bottom	One-piece PEEK fitting Split PEEK fitting Flanging connector Barb connector	0.3 / 0.5 / 0.8 / 1.0	PEEK / Natural	Injection molding	Through-hole 0.8
JHET - 03	1/4 – 28 Flat bottom 1/4 – 28 Flat bottom	One-piece PEEK fitting Split PEEK fitting Flanging connector Barb connector	0.5 / 0.8 / 1.0 / 1.5	PEEK / Natural/Black	Injection molding	Through-hole 1.0
JHET - 04	10 – 32 Sloping bottom 5/16 – 24 Sloping bottom	One-piece PEEK fitting Split PEEK fitting Barb connector	0.6	PEEK / Natural	Injection molding	1
JHET - 05	5/16 – 25 Sloping bottom 5/16 – 24 Sloping bottom	One-piece PEEK fitting Split PEEK fitting	0.8	PEEK / Natural	CNC machining	1
JHET - 06	10 – 32 Sloping bottom 10 – 32 Sloping bottom	One-piece PEEK fitting Split PEEK fitting Barb connector	0.6	PEEK / Natural	Injection molding	Right-angel union
JHET - 07	1/4 – 28 Flat bottom 1/4 – 28 Flat bottom	One-piece PEEK fitting Split PEEK fitting Flanging connector Barb connector	0.6	PEEK / Natural	Injection molding	Right-angel union
JHET - 08	10 – 32 Sloping bottom 10 – 32 Sloping bottom	One-piece PEEK fitting Split PEEK fitting Barb connector	0.5	PEEK / Natural	CNC machining	1
JHET - 09	10 – 32 Sloping bottom 6 – 32 Sloping bottom	One-piece PEEK fitting Split PEEK fitting Barb connector	0.6	PEEK / Natural	CNC machining	m=1.0 Knurling
JHET - 10	1/4 – 28 Flat bottom M6 Flat bottom	One-piece PEEK fitting Split PEEK fitting Flanging connector Barb connector	1.0	PEEK / Natural	CNC machining	m=1.0 Knurling
JHET - 11	M6 Flat bottom M6 Flat bottom	One-piece PEEK fitting Split PEEK fitting	1.0	PEEK / Natural	CNC machining	m=1.0 Knurling
JHET - 12	M6 Flat bottom 10 – 32 Flat bottom	One-piece PEEK fitting Split PEEK fitting	0.8	PEEK / Natural	CNC machining	1
JHET - 13	10 – 32 Sloping bottom 10 – 32 Sloping bottom	One-piece PEEK fitting Split PEEK fitting	1.6	PEEK / Natural	CNC machining	1
JHET - 14	1/4 – 28 Flat bottom 1/4 – 28 Flat bottom	One-piece PEEK fitting Split PEEK fitting	3.2	PEEK / Natural	CNC machining	1





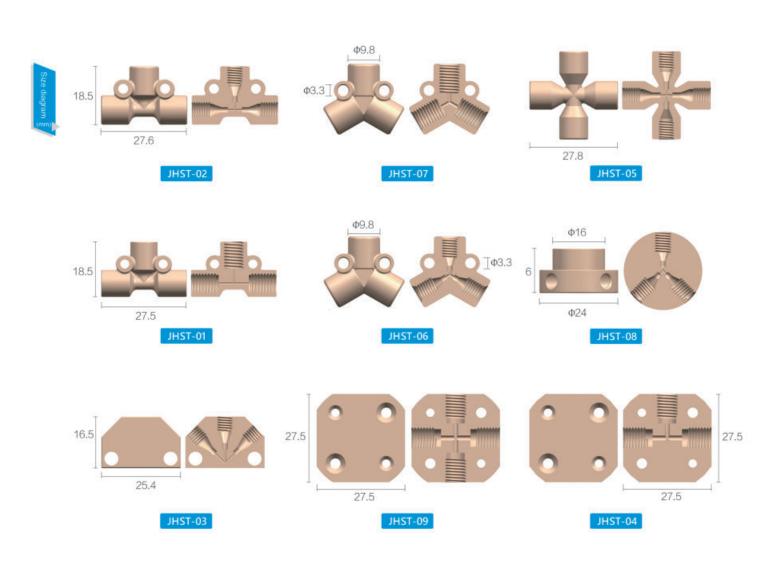
#### ■ PEEK Tee Connector / Cross Connector

- > It can be used together with JUNHUA split PEEK fitting, one-piece fitting, flanging connector, barb connector, and so on.
- > Any connection between hard pipe and hose, hard pipe and hard pipe, hose and hose of different specifications diameter can be realized freely.
- > Made of PEEK with high purity, good corrosion resistance, high-pressure resistance, and biocompatibility.
- > The inner hole adopts dry ice deburring process to ensure no burr and blockage of a pipeline.
- > Corrosion resistance, high purity, high strength, low dissolution, made by injection molding or CNC machining.



#### ▼ PEEK tee connector/cross connector product list

No.	Inside thread / Port	Through-hole size	Pressure resistance value	Material/color	Forming method	Installation hole
JHST - 01	1/4 – 28 Flat bottom / 3	0.8	8 MPa	PEEK / Natural	Injection molding	M3
JHST - 02	10 – 32 Sloping bottom / 3	0.5	30 MPa	PEEK / Natural	Injection molding	M3
JHST - 03	10 – 32 Sloping bottom / 3	0.5 + 0.5 + 0.8	35 MPa	PEEK / Natural	CNC machining	M4
JHST - 04	1/4 - 28 Flat bottom / 3	1.5	10 MPa	PEEK / Natural	CNC machining	M3
JHST - 05	10 – 32 Sloping bottom / 4	0.5	30 MPa	PEEK / Natural	Injection molding	1
JHST - 06	10 – 32 Sloping bottom / 3	0.8	32 MPa	PEEK / Natural	Injection molding	M3
JHST - 07	1/4 - 28 Flat bottom / 3	1.0	8 MPa	PEEK / Natural	Injection molding	МЗ
JHST - 08	10 – 32 Sloping bottom / 3	0.5	35 MPa	PEEK / Natural	CNC machining	1
JHST - 09	1/4 - 28 平底Flat bottom / 4	1.5	10 MPa	PEEK / Natural	CNC machining	M3
JHST - 10	1/4 - 28 平底 Flat bottom / 3	1.0	10 MPa	PEEK / Natural	CNC machining	M3





JHST-10





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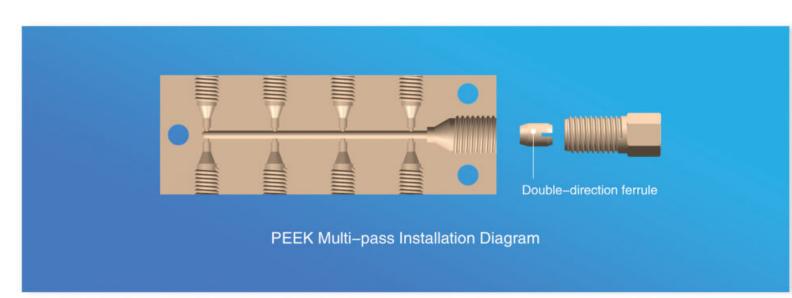




#### ■ PEEK Multi-pass

- > It can be customized according to customer requirements of various specifications of multi-pass. Such as 7, 8, 10, 12, 20, and so on.
- > Can be connected with Junhua PEEK fittings to realize the combination of multiple liquid paths into one liquid path, or one liquid path evenly divided into multiple liquid paths.
- > Made of PEEK with high purity, good corrosion resistance, high-pressure resistance, and biocompatibility.
- > The inner hole adopts dry ice deburring process to ensure no burr and blockage of a pipeline.
- <The dead volume made by special technology is very small.







PEEK Eight-way



PEEK Ten-way



PEEK Twenty-way



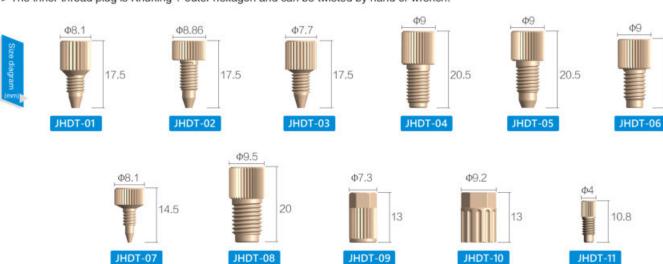
PEEK Twenty-way



PEEK Multi-pass

#### ■ PEEK / POM End plug

- > High-pressure end plug is made of PEEK or POM with high strength.
- > A variety of thread specifications are available and can also be customized.
- > POM plug colors include red, white, black, and Khaki.
- > The inner thread plug is Knurling + outer hexagon and can be twisted by hand or wrench.



#### **▼ PEEK/POM End plug list**

No.	thread/port	Inside thread / Port	pressure resistance value	Head type	Forming method	Material/color
JHDT – 01	10 – 32 / Cone	1	35 MPa	m=0.8 Knurled	Injection molding	PEEK / Natural
JHDT - 02	10 – 33 / Cone	1	30 MPa	m=0.8 Knurled	Injection molding	POM (white/red/black/Khaki/etc
JHDT - 03	10 – 32 / Cone	/	35 MPa	m=0.8 Knurled	Injection molding	PEEK / Natural
JHDT – 04	1/4 - 28 / Flat end	/	27 MPa	m=1.0 Knurled	CNC machining	PEEK / Natural
JHDT - 05	1/4 – 28 / Cone	1	28 MPa	m=1.0 Knurled	CNC machining	PEEK / Natural
JHDT – 06	M6 / Flat end	/	25 MPa	m=0.8 Knurled	CNC machining	PEEK / Natural
JHDT – 07	6 – 32 / Cone	/	36 MPa	m=0.8 Knurled	CNC machining	PEEK / Natural
JHDT – 08	5/16 - 24 / Flat end	1	42 MPa	m=1.0 Knurled	CNC machining	PEEK / Natural
JHDT – 09	1	10 – 32 UNF / Sloping bottom	36 MPa	Knurled + Hexagon	CNC machining	PEEK / Natural
JHDT – 10	1	1/4 - 28 / Flat bottom	27 MPa	Knurled + Hexagon	CNC machining	PEEK / Natural
JHDT – 11	6-40 / Flat end	1	30 MPa	m=0.5 Knurled	CNC machining	PEEK / Natural



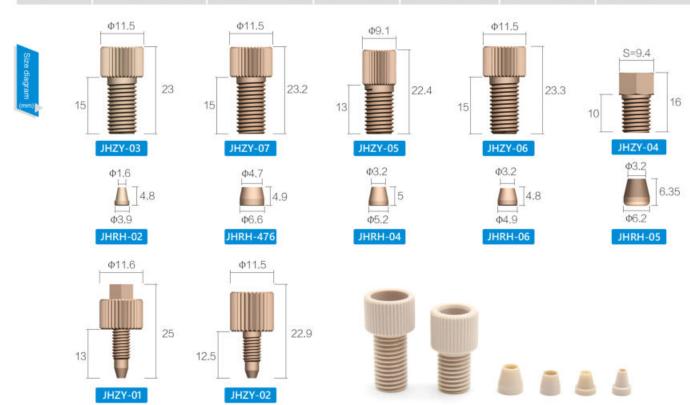


#### ■ Pharmaceutical industry PEEK fitting

- > Several kinds of PEEK fitting we designed for the biopharmaceutical industry especially. All of them are produced by CNC machining, high precision, good sealing.
- > Designing for tubing diameter 1/16, 1/8, 3/16, etc. It also can be customized if you wanna match with the larger outer diameter one.
- > PEEK fitting is made by Junhua PEEK with certificates FDA, ROHS, REACH, and ISO10993.
- > Plus, medical-grade and high-purity grade PEEK raw materials can be used for customers to choose from.

#### **▼** Pharmaceutical industry PEEK fitting list

No.	Applicable pipeline (outer diameter) mm	Fitting external thread	Inner thread	Supporting ferrule number	Head type	Material/color
JHZY- 01	1/16" (1.6mm)	10 – 32	1	1	Knurled + Hexagon	PEEK / Natural
JHZY- 02	1/16" (1.6mm)	10 – 32	5/16 – 24	1	m=1.0 Knurled	PEEK / Natural
JHZY- 03	1/16" (1.6mm)	5/16 – 24	1	JHRH- 02	m=1.0 Knurled	PEEK / Natural
JHZY- 04	1/8" (3.2mm)	5/16 – 24	1	JHRH- 05	Hexagon	PEEK / Natural
JHZY- 05	1/8" (3.2mm)	5/16 – 24	1	JHRH- 04	m=1.0 Knurled	PEEK / Natural
JHZY- 06	1/8" (3.2mm)	5/16 – 24	1	JHRH- 06	m=1.0 Knurled	PEEK / Natural
JHZY- 07	3/16" (4.76mm)	5/16 – 24	1	JHRH- 476	m=1.0 Knurled	PEEK / Natural



#### ■ 5、PEEK Pump

> PEEK has been used successfully in the analytical test instrument of HPLC, solving many technical problems. PEEK pump head, PEEK column, PEEK end plug, PEEK switching valve top cover, PEEK vent valve, PEEK loop, PEEK rotor seal, PEEK filter, which is processed by PEEK and its modified composite materials, can replace copper alloy, stainless steel, general engi neering plastic stools, traditional materials processing parts, meet the demanding technical requirements of high-temperature resistance, corrosion resistance, self-lubrication, high strength, high precision, the dimensional stability of analytical test equip ment squadron parts, can reduce the cost and help equipment testing the accuracy.



















#### ■ PEEK vent valve and handwheel











#### **■ PEEK Column**

- > Various sizes of PEEK columns (without internal filing) we make.
- > PEEK column is more resistant to corrosion than the stainless steel one. When the sample is sensitive to metal ions especially, PEEK is the ideal material. For instance, PEEK column is used on the ion chromatography instrument, protein analysis instrument.
- > The surface roughness of our PEEK column can be around 0.3, which greatly reduces the resistance and residue when the sample flows.



#### **▼ PEEK column product list**

No.	Outer Diameter(mm)	Inner diameter(mm)	Length(mm)	Material/color
1	10.3	4.6	30	PEEK / Natural
2	10.3	4.6	50	PEEK / Natural
3	10.3	4.6	100	PEEK / Natural
4	10.3	4.6	150	PEEK / Natural
5	10.3	4.6	250	PEEK / Natural
6	10.3	4.0	50	PEEK / Natural
7	10.3	4.0	100	PEEK / Natural
8	10.3	4.0	150	PEEK / Natural
9	10.3	4.0	250	PEEK / Natural
10	10.3	2.0	50	PEEK / Natural
11	10.3	2.0	100	PEEK / Natural
12	10.3	2.0	150	PEEK / Natural
13	10.3	2.0	200	PEEK / Natural







- > Two kinds of filter plates we have , one inner filter is made of sintered stainless steel, the another is made of ultra high molecular weight polyethylene(UHMWPE). The outer rings of both are made of corrosion–resistant PEEK.
- > High filtration precision, good purification effect, uniform and stable pores, can effectively remove suspended matter and particles.
- > Filter accuracy can be customized from 0.5–50 microns.
- > Suitable for mounting in online filter or protection column, also installing directly in the column inside the column, filtering sample impurities particles, and playing a role in protecting the column.
- > Customized outer diameter and thickness are available.

#### ▼ PEEK filter product list

No.	Filter precision	Filter OD(mm)	Filter thickness(mm)	Ring OD(mm)	Filter material	Ring material
1	2 µ m	4.8	1.6	6.4	UPE	PEEK
2	5 µ m	4.8	1.6	6.4	UPE	PEEK
3	10 µ m	4.8	1.6	6.4	UPE	PEEK
4	2 µ m	5.8	1.6	7.5	UPE	PEEK
5	5 μ m	5.8	1.6	7.5	UPE	PEEK
6	2 µ m	4.8	1.6	6.4	316	PEEK
7	5 µ m	4.8	1.6	6.4	316	PEEK
8	10 µ m	4.8	1.6	6.4	316	PEEK

#### **■ PEEK Microwave Digestion Inner Tank**

- > Made of imported PTFE material.
- > High-temperature resistance, acid and alkali resistance and organic solvent, good sealing.









#### ■ PEEK Microwave Digestion Outer Tank

- > Made of PEEK+ glass fiber modified polymer material, it can penetrate and absorb microwave.
- > The compressive strength is up to 6000psi and temperature resistance up to 300°C.
- > One more microwave digestion, produced by PEEK+ Continuous Carbon Fiber composite, the pressure resistance is up to 10000psi. It ensures that the user is safe and reliable in extreme conditions.



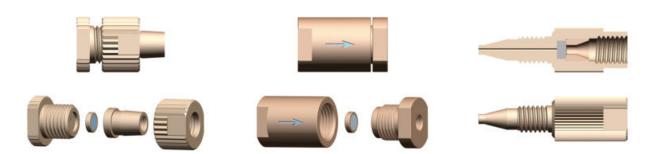
#### **▼ PEEK Microwave digestion outer tank list**

No.	Outer Diameter(mm)	Inner diameter(mm)	Length(mm)
JHXJG-01	38	26.6	166
JHXJG-02	35	26.6	175
JHXJG-03	35	26.6	86
JHXJG-04	33.15	28.5	185
JHXJG-05	33.15	28.5	225
JHXJG-06	41.2	30.2	135.5
JHXJG-07	41	33.3	195
JHXJG-08	60.6	43	100
JHXJG-09	66	56	185



#### ■ Online Filter/Pre-column Filter

- > Biocompatible pre-column filter, which is made of ultra-high molecular weight polyethylene( UHMWPE) or sintered stainless steel, other parts is made of corrosion-resistant PEEK material.
- > Filter precision is available for 2  $\mu$  m, 5  $\mu$  m, and 10  $\mu$  m.
- > Two ends with internal threads 10-32 slopping bottom for 1/16 " tubing connection.



#### ■ PEEK Check Valve

> Our non-metallic check valves are made of PEEK with a ruby ball and sapphire seat, all of the materials are corrosion-resis tant and wear-resistant. It is guaranteed to have excellent chemical resistance and can be used for corrosive liquids or bio logical samples. On-line PEEK check valves do an excellent job of preventing backflow and protecting sensitive equipment as shown in Figures 1 and 2. In addition, we also have the one-way valve spool, commonly used in liquid chromatography, as shown in Figure 3.







#### **■ PEEK Pressure Sensor**

> PEEK is used widely in pressure sensors (pressure transmitters), due to its excellent corrosion resistance, wear resistance, high-temperature resistance, high strength, and stability and sealing performance under high temperature and pressure.





#### ■ PEEK Rotor Gasket

> The Rotor gasket machined from PEEK composites material has good wear resistance and corrosion resistance.
The surface roughness can reach Ra0.1 and the flatness is about 0.002, which guarantees good sealing and wear performance.





#### ■ PEEK Wireless Real-time Temperature Sensor Housing

> The wireless real-time pressure/temperature recorder has a wide temperature range from 0 ° c to 140 ° c. It is used in steam, dry heat, cleaning machines, and other sterilizers with pressure up to 5bar. The shell is made of PEEK. This material can meet the strict technical requirements of high-temperature resistance, corrosion resistance, self-lubrication, high strength, high precision, and size stability of parts in analysis and testing instruments, which can reduce the use cost and help the accuracy of equipment testing, and improve the real-time verification to a new height.





#### ■ PEEK Injection Valve / Switching Valve / Valve Head

















#### **■ PEEK Loop**

> All of our PEEK loops are made of PEEK. This material is chemically inert to almost all organic solvents and is biocompatible and resistant to high pressures. Therefore, it has many advantages in replacing stainless steel loops.





#### **▼ PEEK loop list**

No.	Specification	Tubing size( ID*OD)
JHDLH-05	5 µ L	0.13mm ID * 1.6mm OD
JHDLH-10	10 µ L	0.25mm ID * 1.6mm OD
JHDLH-20	20 µ L	0.25mm ID * 1.6mm OD
JHDLH-50	50 µ L	0.5mm ID * 1.6mm OD
JHDLH-100	100 µ L	0.5mm ID * 1.6mm OD
JHDLH-200	200 µ L	0.75mm ID * 1.6mm OD
JHDLH-500	500 µ L	0.75mm ID * 1.6mm OD
JHDLH-1.0	1.0 m L	0.75mm ID * 1.6mm OD
JHDLH-5.0	5.0 m L	1.6mm ID * 3.2mm OD
JHDLH-10.0	10 m L	1.6mm ID * 3.2mm OD

#### **■ PEEK Suppressor Liner**

> The suppressor is the core component of ion chromatography, and membrane structure and column structure are mainly two types on the market. The membrane structure is generally composed of a PEEK plastic part, a resin filler, and a resin film. The suppressor liner and the upper and lower covers are typically made of corro sion–resistant PEEK material.





### ■ PEEK Sampling Cannula / PEEK Syringe / Nitrogen Blowing Needle/Fluoroplastic Carbon Fiber Needle

> PEEK needle is widely used in the automatic sampler, nitrogen blowing concentrator, dissolution tester, purge, and capture concentrator, and other instruments instead of stainless steel needle, due to its advantages of chemical inertness, biocompat ibility, less dissolution, and high strength.

#### **▼ PEEK needles product list**

No.	Outer Diameter(mm)	Inner diameter(mm)	Length(mm)	Material/color
1	3.2	0.5	customized	PEEK / Natural
2	3.2	0.8	customized	PEEK / Natural
3	3.2	1	customized	PEEK / Natural
4	3.2	1.2	customized	PEEK / Natural
5	3.2	1.6	customized	PEEK / Natural
6	2.5	0.8	customized	PEEK / Natural
7	1.6	0.25	customized	PEEK / Natural
8	1.6	0.5	customized	PEEK / Natural
9	1.6	0.75	customized	PEEK / Natural







#### ■ Solvent Filter Head

- > Our bottom filter is made of sintered stainless steel, and the upper connecting part and joint are made of corrosion–resistant PEEK or all stainless steel structures.
- > Filter precision 2  $\mu$  m/5  $\mu$  m/10  $\mu$  m and 20  $\mu$  m are available.
- > Can be connected to silicone tubing, as well as fluorine plastic hard tube.
- > No bubbles, high solvent utilization.



#### ▼ Solvent filter head list

No.	Outer Diameter(mm)	Length(mm)	Filter precision	Connected tube/size	The upper part	Fitting material
JHGL - 01	12.7	28.5		OD 1/16" ( 1.6mm ) / Hard tubing	PEEK	PEEK
JHGL - 02	12.7	28.5		OD 1/8" ( 3.2mm ) / Hard tubing	PEEK	PEEK
JHGL - 03	25	58.5		OD 1/8" ( 3.2mm ) / Hard tubing	PEEK	PEEK
JHGL - 04	25	58.5	2 µ m / 5 µ m	OD 1/4" ( 6.35mm ) / Hard tubing	PEEK	PEEK
JHGL - 05	25	58.5	10 µ m / 20 µ m	OD 3/16" ( 4.76mm ) / Hard tubing	PEEK	PEEK
JHGL - 06	12.7	28.5		ID 1/16" ( 1.6mm ) / Soft tubing	316L	1
JHGL - 07	12.7	28.5		ID 1/8" (3.2mm) / Soft tubing	316L	1
JHGL - 08	25	30		ID 3/16" ( 4.76mm ) / Soft tubing	316L	1

#### ■ Rotor Frame

- > Made of high polymer polycarbonate (PC) or polypropylene (PP).
- > High impact resistance, strong mechanical properties, resistance to a variety of organic solvents and acid and alkali corrosion.





#### ■ Fluoroplastic Capillary

- > Made of high molecular polymer polycarbonate (PC) or polypropylene (PP).
- > High impact resistance, strong mechanical properties, resistance to various organic solvents, and acid and alkali corrosion.





#### ▼ Fluoroplastic capillary list

No.	PF	A	FI	ΕP	PT	FE	ET	FE	Material/color
IVO.	OD(mm)	ID(mm)	OD(mm)	ID(mm)	OD(mm)	ID(mm)	OD(mm)	ID(mm)	iviaterial/color
1	1.6	0.8	1.6	0.8	1.6	0.5	1.6	0.5	
2	1.6	1	1.6	1	1.6	0.8	1.6	1	
3	3.2	1.6	3.2	1.6	1.6	1	1.6	0.75	FEP / Transparent
4	3	1.5	3	1.5	3.2	1.6	3.2	1.6	PFA / Natural
5	2	1	2	1	3	1.5	1	1	PTFE / Milky white
6	2.5	1.5	2.5	1.5	2	1	1	7	-
7	6.35	4.35	6.35	4.35	2.5	1.5	1	1	Translucent / Black
8	4.76	3.2	1	1	6.35	4.35	1	1	ETFE / Natural
9	i	1	1	1	4.76	3.2	1	1	





#### ■ PEEK Capillary Tube

- > PEEK is widely used in analytical instruments and the semiconductor industry due to its excellent chemical stability and corrosion resistance, such as chromatography, analysis instrument, sequencer, and other testing equipment.
- > High-tenacity, high-strength PEEK capillary tube is made by the continuous extrusion process, good dimensional stability can be extruded thousands of meters without fracture.





#### ■ PEEK after capillary processing

- > The second processing can be handled on the tubing.
- > Tubing ends: Flanging, Expanding, Sealing the head, welding, etc.
- > Tubing printing: Scale printing, Ring printing.
- > Punch Holes: round hole, elliptical hole, through-hole, single side hole, square hole, shaped hole (Hole dia. 0.1–10mm).
- > Tubing shaping: Bending, different angles and shapes forming.

#### **▼ PEEK capillary tube list**

No.	OD <sub>(mm)</sub>	ID <sub>(mm)</sub>	Material / Color
1	1.6	0.13	PEEK / Natural
2	1.6	0.18	PEEK / Natural
3	1.6	0.25	PEEK / Natural
4	1.6	0.5	PEEK / Natural
5	1.6	0.75	PEEK / Natural
6	1.6	1	PEEK / Natural
7	1.75	1.4	PEEK / Natural
8	1.8	1.1	PEEK / Natural
9	2.6	2.4	PEEK / Natural
10	3	2.5	PEEK / Natural
11	3.2	1.6	PEEK / Natural
12	3.2	1.0	PEEK / Natural
13	3.2	0.8	PEEK / Natural
14	3.2	1.2	PEEK / Natural
15	5.0	2.5	PEEK / Natural
16	5.1	1.9	PEEK / Natural
17	6	4	PEEK / Natural







Flaring

Bending

Ring printing

Flanging





#### **PEEK Sheet**

1250mm Width PEEK sheet is produced by the advanced Europe production line of Junhua ChinaPEEK company. This is an extrusion breakthrough from 600mm to 1250mm width, which meets the valve industry and others of large size PEEK parts for extra-wide PEEK sheet demand, higher production efficiency, improved PEEK product quality, faster lead time, less cost, and high utilization rate of plate size.



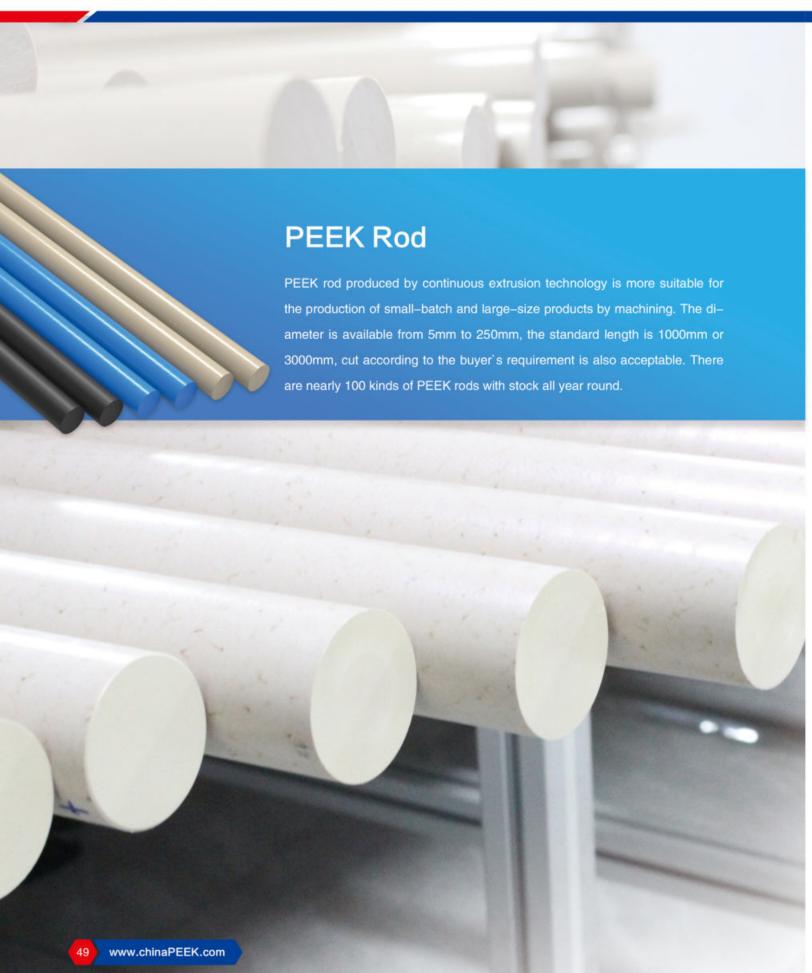
#### **▼ PEEK sheet list**

No.	Width(mm)	Thickness(mm)	Length(mm)	Color
PEEK5600G	600 ~ 1250	6 ~ 60	1000 、3000	Natural / Black / Red / Yellow
PEEK5600CF30	600 ~ 1250	6 ~ 60	1000 、3000	Natural / Black
PEEK5600LF30	600 ~ 1250	6 ~ 60	1000 、3000	Natural / Black
PEEK5600GF30	600 ~ 1250	6 ~ 60	1000 、3000	Natural / Black
ESD PEEK	600 ~ 1250	6 ~ 60	1000 、3000	Black
CF / PEEK	150 ~ 600	6 ~ 40	200 ~ 1000	Black

NO.	W * THK(mm)								
1	66 * 30	20	408 * 15	39	800 * 30	58	1280 * 23	77	1280 * 42
2	79 * 12	21	408 * 64	40	1280 * 5	59	1280 * 24	78	1280 * 43
3	98 * 24	22	407 * 125	41	1280 * 6	60	1280 * 25	79	1280 * 44
4	116 * 37	23	600 * 6	42	1280 * 7	61	1280 * 26	80	1280 * 45
5	140 * 12	24	600 * 8	43	1280 * 8	62	1280 * 27	81	1280 * 46
6	140 * 14	25	600 * 9	44	1280 * 9	63	1280 * 28	82	1280 * 47
7	140 * 16	26	600 * 10	45	1280 * 10	64	1280 * 29	83	1280 * 48
8	140 * 18	27	600 * 12	46	1280 * 11	65	1280 * 30	84	1280 * 49
9	140 * 20	28	600 * 15	47	1280 * 12	66	1280 * 31	85	1280 * 50
10	140 * 22	29	600 * 20	48	1280 * 13	67	1280 * 32	86	1280 * 51
11	140 * 25	30	600 * 25	49	1280 * 14	68	1280 * 33	87	1280 * 52
12	151 * 53	31	600 * 30	50	1280 * 15	69	1280 * 34	88	1280 * 53
13	185 * 173	32	600 * 35	51	1280 * 16	70	1280 * 35	89	1280 * 54
14	186 * 141	33	600 * 40	52	1280 * 17	71	1280 * 36	90	1280 * 55
15	191 * 28	34	600 * 45	53	1280 * 18	72	1280 * 37	91	1280 * 56
16	195 * 32	35	600 * 50	54	1280 * 19	73	1280 * 38	92	1280 * 57
17	207 * 78	36	600 * 60	55	1280 * 20	74	1280 * 39	93	1280 * 58
18	365 * 205	37	604 * 104	56	1280 * 21	75	1280 * 40	94	1280 * 59
19	385 * 12	38	800 * 20	57	1280 * 22	76	1280 * 41	95	1280 * 60







#### **▼ PEEK rod list**

No.	Diameter(mm)	Length (mm)	Color
PEEK5600CF30	5 ~ 250	1000 ~ 3000	Natural / Black
PEEK5600LF30	5 ~ 250	1000 ~ 3000	Natural / Black
PEEK5600GF30	5 ~ 250	1000 ~ 3000	Natural / Black
ESD PEEK	5 ~ 250	1000 ~ 3000	Black
PEEK5600G	5 ~ 250	1000 ~ 3000	Natural

			Weight/ meter ( kg/m )			ALC: N		Weight/ meter(kg/m)				
No.	Diameter	PEEK5600G	PEEK5600CF30	The state of the s	PEEK5600LF30	No.	Diameter	PEEK5600G		PEEK5600GF30	PEEK5600LF30	
1	5	0.03	0.04	0.04	0.04	30	65	4.37	4.76	5.42	4.37	
2	6	0.05	0.05	0.06	0.06	31	70	5.51	5.61	6.23	5.82	
3	8	0.06	0.07	0.08	0.08	32	75	5.99	6.36	6.92	6.54	
4	10	0.11	0.13	0.14	0.13	33	80	7.08	7.61	7.94	7.82	
5	12	0.16	0.17	0.19	0.18	34	85	7.67	8.22	8.81	8.43	
6	13	0.20	0.21	0.23	0.22	35	90	8.55	9.39	10.21	9.67	
7	15	0.25	0.27	0.29	0.28	36	94	9.27	9.91	10.91	10.27	
8	16	0.27	0.28	0.31	0.29	37	95	9.43	10.13	11.08	10.42	
9	18	0.36	0.38	0.42	0.39	38	96.5	9.66	10.28	11.17	10.64	
10	20	0.45	0.45	0.53	0.51	39	100	10.73	10.81	12.09	11.44	
11	21	0.49	0.52	0.58	0.54	40	106	11.68	12.51	13.84	12.71	
12	22	0.53	0.56	0.61	0.58	41	110	12.9.	12.91	14.59	13.57	
13	25	0.67	0.65	0.76	0.72	42	115	13.53	14.78	16.06	15.22	
14	26	0.73	0.78	0.86	0.81	43	120	15.44	16.42	17.62	16.67	
15	26.7	0.76	0.80	0.88	0.83	44	125	16.18	17.21	18.73	17.74	
16	28	0.84	0.92	1.03	0.95	45	130	20.08	19.21	21.82	19.57	
17	30	0.94	0.97	1.18	1.02	46	140	20.55	21.66	23.78	22.89	
18	32	1.07	1.12	1.29	1.22	47	150	23.81	26.29	27.64	26.36	
19	33	1.19	1.28	1.39	1.31	48	160	26.85	29.81	33.71	30.67	
20	35	1.35	1.34	1.42	1.35	49	165	29.01	30.18	33.89	31.02	
21	38	1.52	1.66	1.81	1.71	50	170	30.22	32.49	35.04	33.43	
22	40	1.71	1.76	2.02	2.02	51	180	33.99	35.93	38.94	36.88	
23	42	1.91	2.05	2.22	2.11	52	190	37.86	1	1	1	
24	45	2.13	2.32	2.56	2.39	53	200	43.26	1	1	1	
25	48	2.52	2.62	2.85	2.71	54	210	46.08	1	1	1	
26	50	2.66	2.81	3.13	3.14	55	220	50.79	1	1	1	
27	53	2.95	3.15	3.45	3.26	56	230	55.56	1	1	1	
28	55	3.14	3.64	3.72	3.15	57	250	65.51	1	1	1	
29	60	3.95	4.16	4.6	4.21	58	264	72.14	1	1	1	

Remark: the above information is only for your reference, the actual weight is subject to weighing.



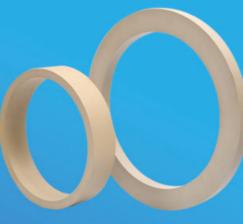




#### **PEEK Tube**

PEEK tube produced by continuous extrusion process solves the technical problem that molding process products are limited on the height, and injection process is easy to produce internal shrinkage holes. Meanwhile, material loss is reduced and machining cost is reduced. There are nearly 100 kinds of PEEK extrusion molds with complete specifications and perennial stock. It can be processed into a sealing ring, piston ring, wear-resistant shaft sleeve, and valve seat, and other ring parts, widely used in petrochemical, electronic semiconductor, and other industries.









#### **▼ PEEK tube list**

No.	OD * ID(mm)	No.	OD * ID(mm)	No.	OD * ID(mm)	No.	OD * ID(mm)	No.	OD * ID(mm)
1	20 * 15	27	46.5 * 36	53	95 * 70 ~ 90	79	144 * 110	105	243 * 162
2	23.6 * 12	28	46.4 * 23	54	97 * 66	80	146 * 110.6	106	251 * 186
3	24.7 * 17	29	48.9 * 39.7	55	99 * 67.8	81	155 * 120	107	261 * 219
4	24.7 * 22	30	50 * 25 ~ 45	56	100 * 75 ~ 95	82	160 * 89	108	260 * 214
5	25 * 15 ~ 20	31	52.8 * 30	57	105 * 75	83	160 * 113	109	283 * 201
6	26.7 * 15	32	55 * 30 ~ 45	58	105 * 78	84	160 * 130	110	283 * 226
7	27.5 * 13	33	58.9 * 38	59	105 * 80	85	160 * 140	111	284 * 248
8	28.4 * 20	34	60 * 35 ~ 55	60	113 * 43	86	170 * 129	112	284 * 261
9	28.5 * 26	35	61.9 * 38	61	113 * 60	87	171 * 134	113	290 * 252
10	29.4 * 15	36	61.9 * 32	62	113 * 69	88	171 * 150	114	290 * 261
11	30 * 15 ~ 25	37	62 * 46	63	113 * 81	89	186 * 151	115	290 * 267
12	31.1 * 20	38	65 * 40 ~ 60	64	119 * 90	90	189 * 134	116	294 * 261
13	33.2 * 20	39	66.5 * 30	65	121 * 99.5	91	189 * 158	117	294 * 267
14	33.6 * 25	40	66.5 * 45	66	123 * 93	92	203 * 123	118	304 * 241
15	33.6 * 22	41	70 * 45 ~ 65	67	126 * 103	93	205 * 181	119	303 * 235
16	35 * 15 ~ 30	42	71 * 48.3	68	130 * 100	94	205 * 174	120	332 * 284
17	35.5 * 20	43	73 * 40	69	131 * 99.5	95	207 * 170	121	335 * 240
18	37.2 * 29	44	75 * 50 ~ 70	70	134 * 54	96	218 * 140	122	343 * 241
19	38.6 * 35	45	78 * 48.3	71	134 * 54.6	97	222 * 141	123	347 * 317
20	39.7 * 32	46	78 * 55	72	134 * 71	98	223 * 195	124	362 * 270
21	39.7 * 20	47	80 * 55 ~ 75	73	134 * 98	99	228 * 210	125	362 * 290
22	39.8 * 25	48	83 * 51	74	134 * 110	100	238 * 145	126	362 * 313
23	40 * 15 ~ 35	49	85 * 60 ~ 80	75	134 * 114	101	238 * 142	127	377 * 313
24	42 * 33	50	86.8 * 54	76	135 * 67	102	238 * 170	128	382 * 318
25	45 * 20 ~ 40	51	90 * 65 ~ 85	77	142 * 74	103	241 * 210	129	429 * 379
26	45.3 * 35	52	91 * 69	78	142 * 118	104	243 * 219	130	458 * 398
								131	597 * 447



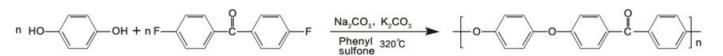




#### **PEEK Resin**

Shandong Junhao High Performance Polymer Co., Ltd. was established in the 2018 year. It's a subsidiary corporation of Junhua ChinaP-EEK, focusing on making high-performance PEEK resin. Our PEEK material adopts the patented technology of Jilin University (patent number: ZL201210185007.6). In the aprotic polar solvent, diphenyl sulfone is used as a solvent, and 4.4-difuorobenzophenone and hydroquinone are used as monomers. In the presence of an alkali metal carbonate, it is formed by polycondensation at a high temperature. During the polymerization, the purpose of controlling the molecular weight of PEEK is achieved by controlling the viscosity of the polymerization. To meet the various needs of customers, we will modify PEEK, adding carbon fiber, glass fiber, and other reinforcing materials to improve the mechanical properties of PEEK; adding PTFE, molybdenum disulfide, etc. to improve the self-lubricating ability of PEEK, and then Improve wear resistance; add titanium dioxide, zirconium dioxide, etc. to improve mechanical rigidity and ensure electrical performance. In addition, to meet customer needs, we can provide white, black, yellow, green, and other colors PEEK particles.











PEEK has outstanding properties like high and low-temperature resistance, flame retardant, radiation resistance, and mechanical properties, which makes it can be used as an ultra-high temperature conductor in the aerospace industry. In the petroleum industry, it can be used as the submerged pump motor winding wire and connecting line. In the atomic power plant, the winding coil which can be used as the nuclear island driving mechanism is used under radiation conditions for a long time.

