



Gas Probe **Inlet Deflectors** & **Porous Filters**

ASI Model **DFL/PFT Series**

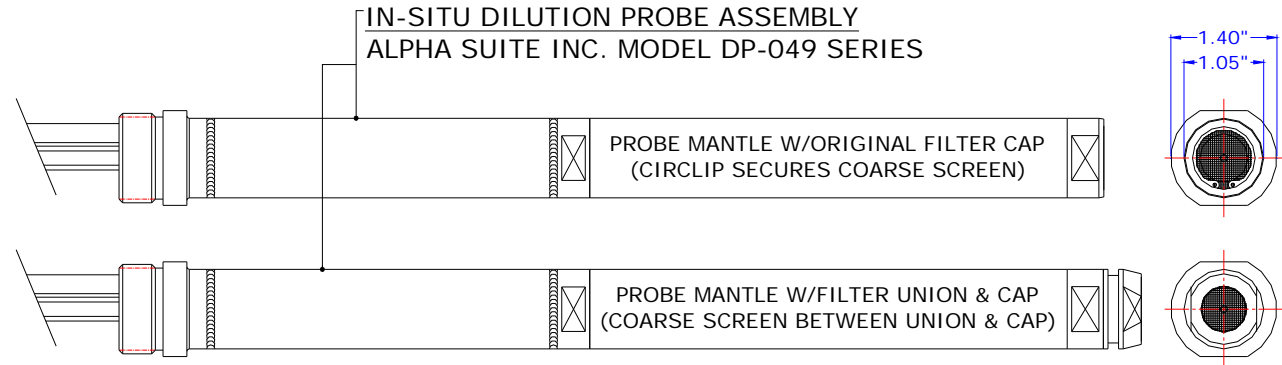


For your **CEMS, RATA, and PROCESS GAS** Sampling ...



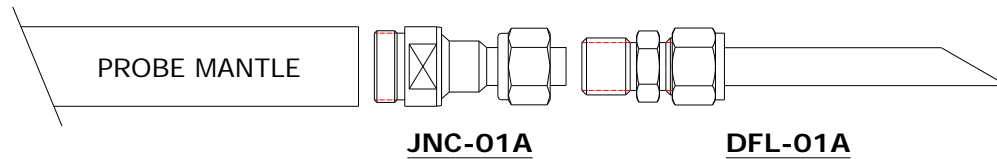
THE ASI PARTICULATE DEFLECTORS AND PARTICULATE FILTERS SHOWN ARE USED IN CONJUNCTION WITH ASI IN-SITU UNHEATED PROBES. A SPECIALLY DESIGNED "JOINER CAP" ASSEMBLY ("JNC") IS USED IN THIS SERIES.

THE EXAMPLES HEREIN SHOW THE "DFL-01A" DEFLECTOR ATTACHED. HOWEVER, ANY DEFLECTOR (DFL) OR POROUS TUBE (PFT) LISTED MAY BE ATTACHED TO THE JOINER (JNC).

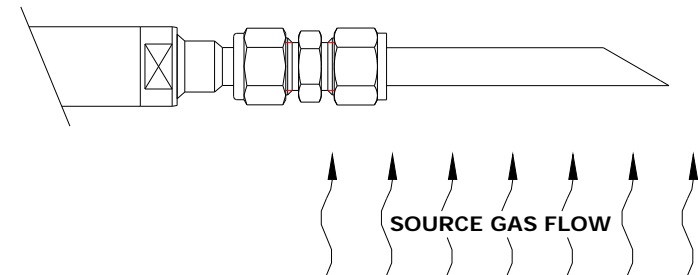


DEFLECTOR TUBE ASSEMBLY:

!! JOINER CAP USES A MODIFIED VERSION OF THE "ORIGINAL STYLE CAP"...
NOTE: THE CIRCLIP AND COARSE SCREEN CANNOT BE USED HERE.

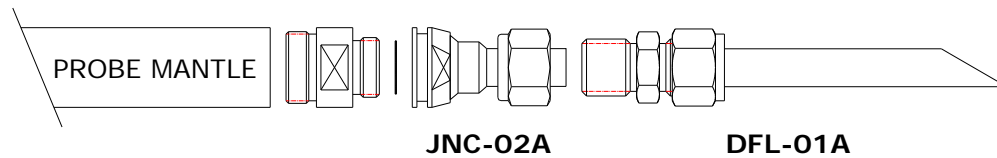


COMPLETED ASSEMBLY:

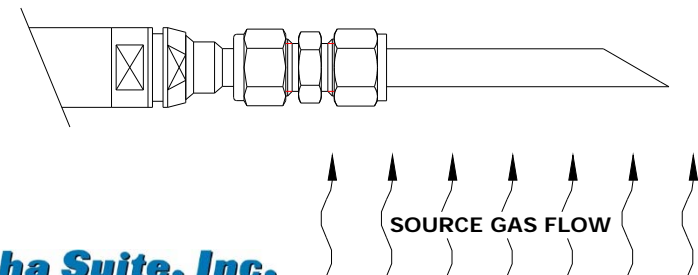


DEFLECTOR TUBE ASSEMBLY:

!! JOINER CAP USES A MODIFIED VERSION OF THE "NEWER STYLE CAP"...
NOTE: THE UNION AND COARSE SCREEN ARE USED HERE.



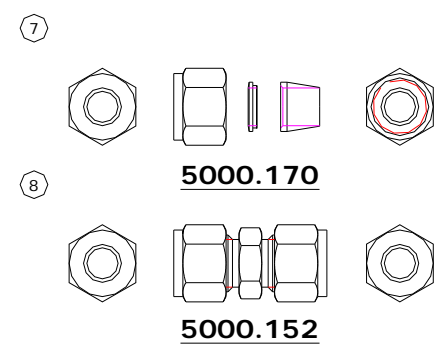
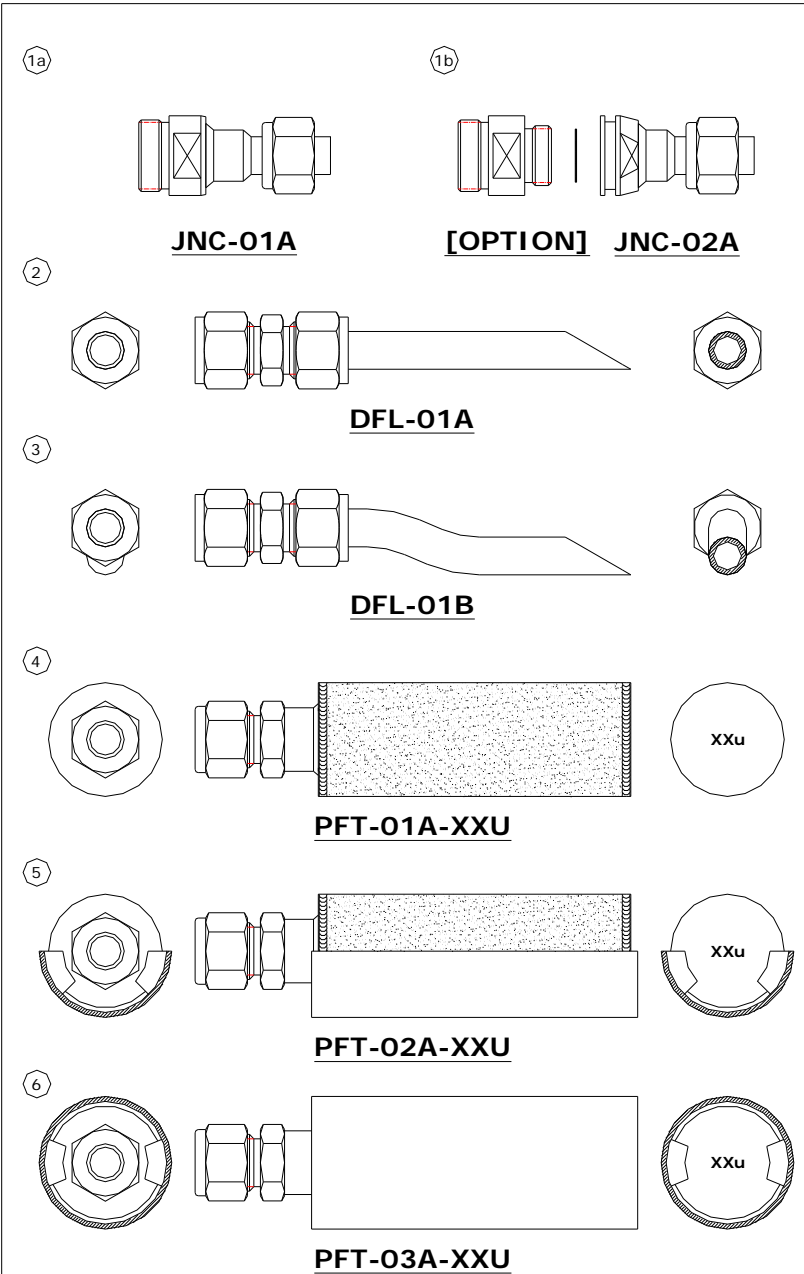
COMPLETED ASSEMBLY:



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TITLE: ALPHA SUITE INC. DESIGNS	DWG: FILTERS-DEFLECTORS_v070919a.dwg
FILTERS/DEFLECTORS [HEATED PROBES]	ASSEMBLY#: SERIES #JNF/PFT/DFL



POROUS MEDIA SPECS:

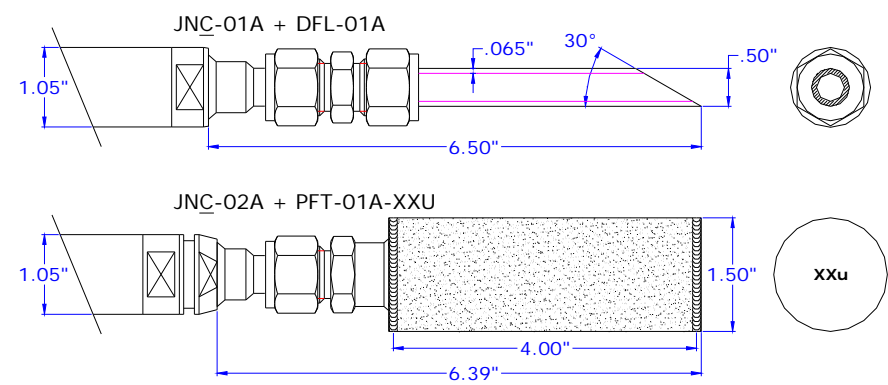
ASI STANDARD POROUS TUBES ARE FROM SS-316L SEAMLESS, 1.5"OD x 1.25"ID, WITH CAPPED FRONTS. 18.85sq" OF FILTERING SURFACE AREA.

STANDARD MICRON SIZES:
0.2u, 0.5u, 1.0u, 2.0u, 5.0u, 10.0u

SPECIAL ORDER SIZES:
20u, 40u, 60u, 100u

REPLACE "XX" SUFFIX IN THE PFT PART# TO SPECIFY DESIRED MICRON SIZE.

GENERAL DIMS FOR EXAMPLE ASSEMBLIES:



POS.	DESCRIPTION	PART NUMBER	UNIT LIST
1a	JOINER CAP: FOR UNHEATED PROBE, 1600 (ORIG CAP)	JNC-01A	\$ XXX.XX
1b	JOINER CAP: FOR UNHEATED PROBE, 1600 (NEW TYPE)	JNC-02A	\$ XXX.XX
	UNION: 1600 !!REQUIRED, BUT "OPTIONAL" SEE NOTE*	E-IS-RPLC-006	\$ XXX.XX
	COARSE SCREEN: MONEL-400 MESH (OPTION)	E-IS-RPLC-005	\$ XXX.XX
	COARSE SCREEN: HASTELLOY C-276 MESH (OPTION)	E-IS-RPLC-005H	\$ XXX.XX
2	DEFLECTOR TUBE ASSY: STD, 1/2" W/UNION, SS-316L	DFL-01A	\$ XXX.XX
3	DEFLECTOR TUBE ASSY: OFFSET, W/UNION, SS-316L	DFL-01B	\$ XXX.XX
4	POROUS FILTER TUBE ASSY - STANDARD, SS-316L	PFT-01A-XX	\$ XXX.XX
5	POROUS FILT TUBE ASSY - W/HALF SHIELD, SS-316L	PFT-02A-XX	\$ XXX.XX
6	POROUS FILT TUBE ASSY - W/FULL SHIELD, SS-316L	PFT-03A-XX	\$ XXX.XX
7	1/2" TUBE NUT WITH FRONT/BACK FERRULE SS-316	5000.170	\$ XXX.XX
8	1/2"-1/2" TUBE UNION (COMPLETE) SS-316	5000.152	\$ XXX.XX

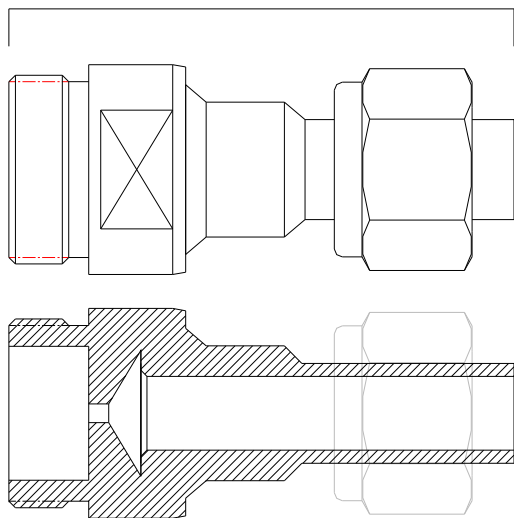
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*THE UNION (AND MESH) ARE "OPTIONS" AS CUSTOMER MAY ALREADY HAVE THESE PARTS

TITLE: ALPHA SUITE INC. DESIGNS
 FILTERS/DEFLECTORS [UNHEATED PRB]

DWG: FILTERS-DEFLECTORS_v030720b.dwg
 ASSEMBLY#: SERIES #JNC/PFT/DFL

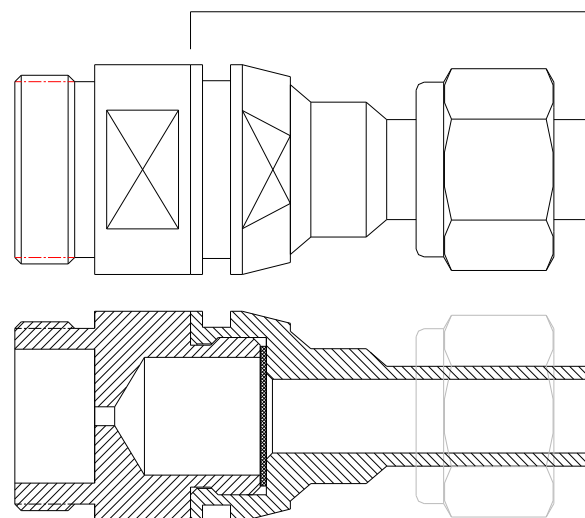
JNC-01A



NOTES:

1. THE JNC-01A IS A COMPLETE "JOINER" ASSEMBLY, READY TO ATTACH TO THE PROBE'S FRONT MANTLE.
2. THIS ASSEMBLY USES A MODIFIED ASI #E-IS-RPLC-015 FILTER CAP, BUT CAN NO LONGER USE THE COARSE SCREEN AND CIRCLIP WHICH WAS ORIGINALLY PART OF THAT ASSEMBLY.
3. THIS ASSEMBLY STILL MAINTAINS THE ORIGINAL "BARRIER HOLE" (AS SHOWN ON LEFT OF THE ASSEMBLY). THIS SMALL HOLE SEPARATES THE PROBE'S "SAMPLING CHAMBER" FROM THE SOURCE STREAM, AND THEREFORE ALLOWS LOW-FLOW CALIBRATION GAS TO EFFECTIVELY PRODUCE A "BARRIER" FROM SOURCE GAS ENTRY DURING CAL.
4. THE JNC-01A WAS DEVELOPED SPECIFICALLY FOR THE ASI UNHEATED IN-SITU GAS PROBES, BUT CAN (IN SOME CASES) BE USED IN CONJUNCTION WITH SOME OF THE OLD "KVB" TYPE PROBE HEATER ASSEMBLIES. CONTACT ASI FOR FURTHER DETAILS.
5. WITH A JOINER ASSEMBLY ATTACHED, VARIOUS TYPES OF ASI PARTICULATE DEFLECTORS ("DFL") OR POROUS FILTER TUBE ASSEMBLIES ("PFT") CAN THEN BE ATTACHED TO THE FRONT.

JNC-02A



NOTES:

1. THE JNC-02A REQUIRES A SPECIAL UNION (ASI #E-IS-RPLC-006, SHOWN ON THE LEFT) TO COMPLETE THE ASSEMBLY, WHICH CAN THEN BE ATTACHED TO THE PROBE'S FRONT MANTLE. IF THE CUSTOMER ALREADY USES THIS UNION, THE FRONT CAP IS SIMPLY CHANGED TO THE JNC-02A. OTHERWISE THE UNION ASI #E-IS-RPLC-006 CAN BE PURCHASED SEPARATELY.
2. THIS ASSEMBLY USES A MODIFIED ASI #E-IS-RPLC-004 FRONT CAP, WHICH CAN STILL USE THE COARSE SCREEN WHICH WAS ORIGINALLY PART OF THAT ASSEMBLY.
3. THIS ASSEMBLY (WITH UNION) STILL MAINTAINS THE ORIGINAL "BARRIER HOLE" (AS SHOWN ON LEFT OF THE ASSEMBLY). THIS SMALL HOLE SEPARATES THE PROBE'S "SAMPLING CHAMBER" FROM THE SOURCE STREAM, AND THEREFORE ALLOWS LOW-FLOW CALIBRATION GAS TO EFFECTIVELY PRODUCE A "BARRIER" FROM SOURCE GAS ENTRY DURING CAL.
4. THE JNC-02A WAS DEVELOPED SPECIFICALLY FOR THE ASI UNHEATED IN-SITU GAS PROBES, BUT CAN STILL BE USED IN CONJUNCTION WITH ANY OF THE ASI OR OLD EPM TYPE PROBE HEATER ASSEMBLIES. IF USING AN ASI PROBE HEATER, WE SUGGEST USING THE JNF-01A JOINER FLANGE ASSEMBLIES INSTEAD OF THE JNC-02A. THE JNF-01A ATTACHES TO HEATER TIP AND REDUCES HEAT TRANSFER/LOSS. CONTACT ASI FOR FURTHER DETAILS.

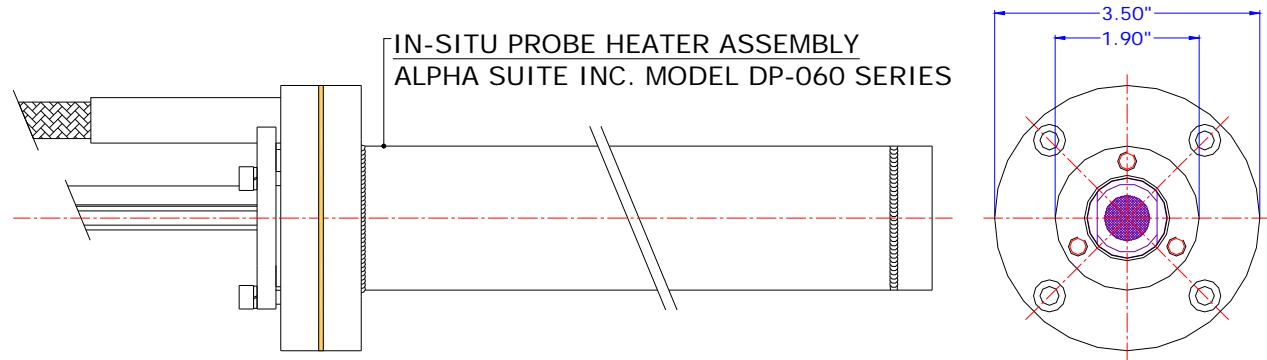
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TITLE: ALPHA SUITE INC. DESIGNS
JOINER CAP ASSEMBLIES ["JNC"]

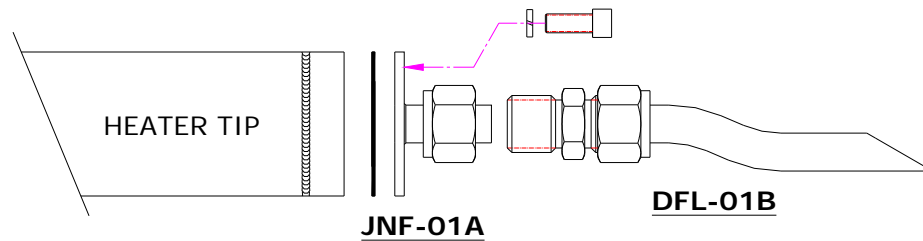
DWG: JOINER-CAP-ASSEM-CS_v071819a.dwg
ASSEMBLY#: SERIES #JNC/PFT/DFL

THE ASI PARTICULATE DEFLECTORS AND PARTICULATE FILTERS SHOWN ARE USED IN CONJUNCTION WITH ASI IN-SITU HEATED PROBES. A SPECIALLY DESIGNED "JOINER FLANGE" ASSEMBLY ("JNF") IS USED IN THIS SERIES.

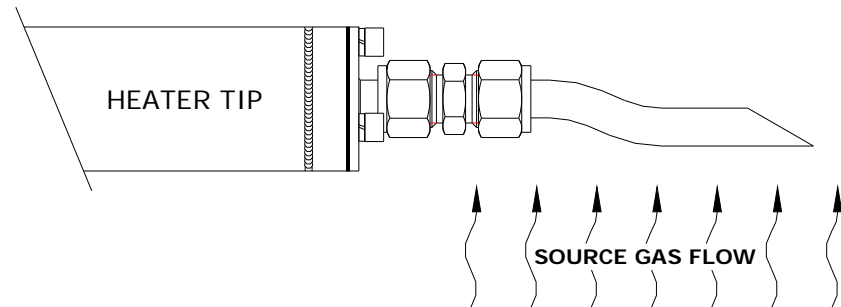
THE EXAMPLES HEREIN SHOW THE "DFL-01B" AND "PFT-02A" ATTACHED. HOWEVER, ANY DEFLECTOR (DFL) OR POROUS TUBE (PFT) LISTED MAY BE ATTACHED TO THE JOINER (JNF).



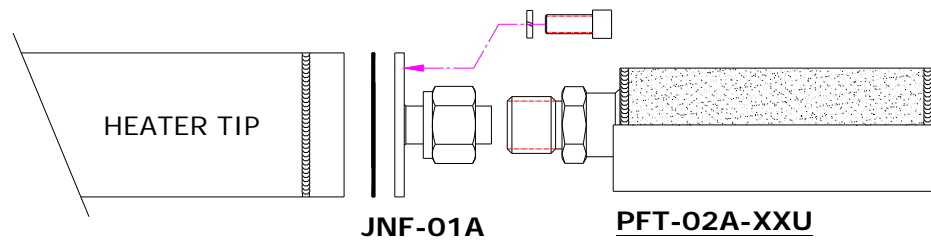
DEFLECTOR TUBE ASSEMBLY:



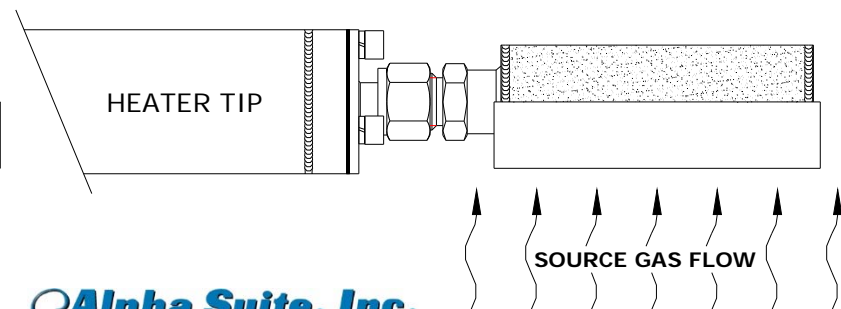
COMPLETED ASSEMBLY:



POROUS FILTER TUBE ASSEMBLY:



COMPLETED ASSEMBLY:

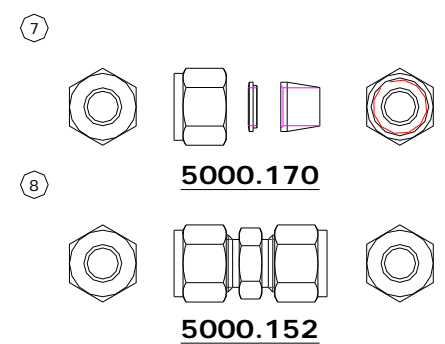
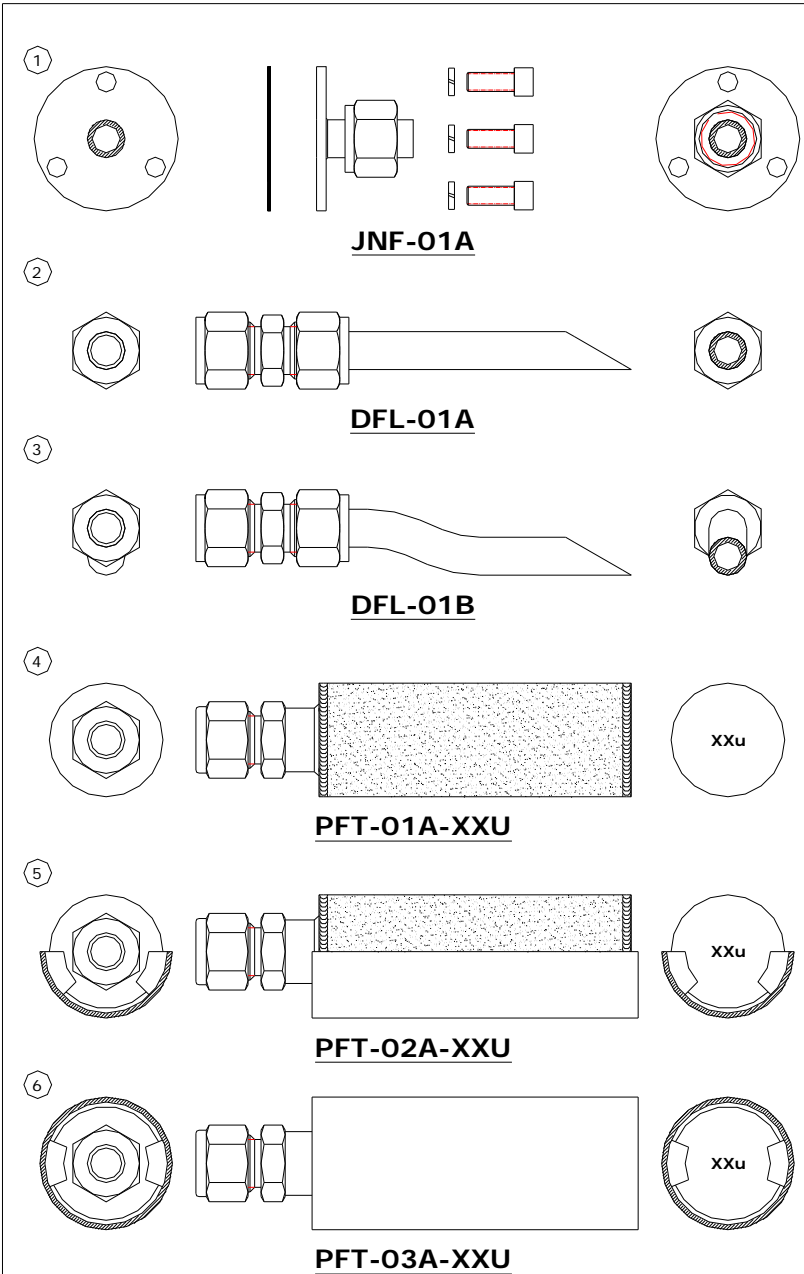


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Alpha Suite, Inc.
www.alphasuite.com

TITLE: ALPHA SUITE INC. DESIGNS
FILTERS/DEFLECTORS [HEATED PROBES]

DWG: FILTERS-DEFLECTORS_v070919c.dwg
ASSEMBLY#: SERIES #JNF/PFT/DFL



POROUS MEDIA SPECS:

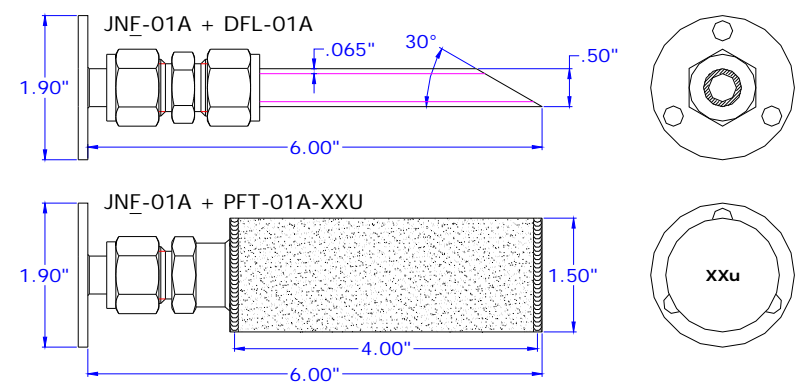
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STANDARD MICRON SIZES:
0.2u, 0.5u, 1.0u, 2.0u, 5.0u, 10.0u

SPECIAL ORDER SIZES:
20u, 40u, 60u, 100u

REPLACE "XX" SUFFIX IN THE PFT PART# TO SPECIFY DESIRED MICRON SIZE.

GENERAL DIMS FOR EXAMPLE ASSEMBLIES:



POS.	DESCRIPTION	PART NUMBER	UNIT LIST
1	JOINER FLANGE ASSEMBLY: FOR HEATER TIP, SS-316	JNF-01A	\$ XXX.XX
	1/4"-28 x 5/8"LG. SHCS (CAP SCREW), SS-316, x3	5400.148	\$ XXX.XX
	1/4" HIGH COLLAR LOCK WASHER, SS-316, 3x	5400.128	\$ XXX.XX
	GASKET: TYP GARLOCK, 1/32" THICK, 1x	GS-JFA-01A	\$ XXX.XX
2	DEFLECTOR TUBE ASSY: STD, 1/2" W/UNION, SS-316L	DFL-01A	\$ XXX.XX
3	DEFLECTOR TUBE ASSY: OFFSET, W/UNION, SS-316L	DFL-01B	\$ XXX.XX
4	POROUS FILTER TUBE ASSY - STANDARD, SS-316L	PFT-01A-XX	\$ XXX.XX
5	POROUS FILT TUBE ASSY - W/HALF SHIELD, SS-316L	PFT-02A-XX	\$ XXX.XX
6	POROUS FILT TUBE ASSY - W/FULL SHIELD, SS-316L	PFT-03A-XX	\$ XXX.XX
7	1/2" TUBE NUT WITH FRONT/BACK FERRULE SS-316	5000.170	\$ XXX.XX
8	1/2"-1/2" TUBE UNION (COMPLETE) SS-316	5000.152	\$ XXX.XX
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-	-	-	-

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TITLE: ALPHA SUITE INC. DESIGNS
FILTERS/DEFLECTORS [HEATED PROBES]

DWG: FILTERS-DEFLECTORS_v030720d.dwg
ASSEMBLY#: SERIES #JNF/PFT/DFL