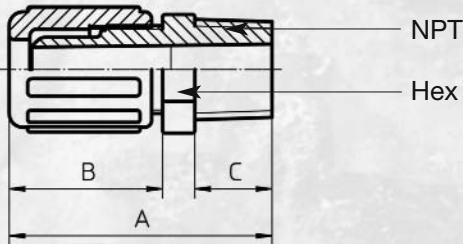
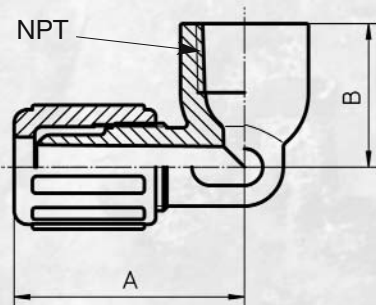


ULTRA PURE PFA TUBE FITTINGS



Male connector

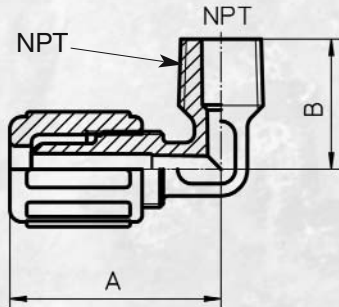
Fitting type **	O.D. Tube size	Male NPT size	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	Hex
FMC 75 4-2 HP	1/4"	1/8"	3.30 (0.13")	51.50 (2.03")	30.50 (1.20")	14.00 (0.55")	5/8"
FMC 75 4-4 HP	1/4"	1/4"	3.30 (0.13")	49.70 (1.95")	28.70 (1.12")	14.00 (0.55")	5/8"
FMC 75 6-4 HP	3/8"	1/4"	6.35 (0.25")	52.20 (2.06")	30.90 (1.22")	14.30 (0.56")	15/16"
FMC 75 6-6 HP	3/8"	3/8"	6.35 (0.25")	52.20 (2.06")	30.90 (1.22")	14.30 (0.56")	15/16"
FMC 75 6-8 HP	3/8"	1/2"	6.35 (0.25")	55.00 (2.17")	30.90 (1.22")	17.10 (0.67")	15/16"
FMC 75 8-4 HP	1/2"	1/4"	5.84 (0.23")	55.50 (2.19")	34.50 (1.36")	14.00 (0.55")	15/16"
FMC 75 8-6 HP	1/2"	3/8"	7.85 (0.31")	55.30 (2.18")	34.50 (1.36")	13.80 (0.54")	15/16"
FMC 75 8-8 HP	1/2"	1/2"	9.65 (0.38")	58.30 (2.30")	34.90 (1.37")	16.80 (0.66")	15/16"
FMC 75 12-8 HP	3/4"	1/2"	10.90 (0.43")	62.60 (2.46")	38.00 (1.50")	17.60 (0.69")	13/16"
FMC 75 12-8 HP	3/4"	1/2"	10.90 (0.43")	62.60 (2.46")	38.00 (1.50")	17.60 (0.69")	13/16"
FMC 75 12-12 HP	3/4"	3/4"	15.75 (0.62")	62.60 (2.46")	38.00 (1.50")	17.60 (0.69")	13/16"
FMC 75 16-12 HP	1"	3/4"	15.75 (0.62")	68.20 (2.68")	44.20 (1.74")	17.60 (0.69")	17/16"
FMC 75 16-16 HP	1"	1"	15.75 (0.62")	73.90 (2.91")	45.30 (1.78")	21.60 (0.85")	17/16"
FMC 75 20-16 HP	1 1/4"	1"	27.90 (1.09")	89.90 (3.50")	50.00 (1.97")	21.60 (0.85")	-



Female elbow

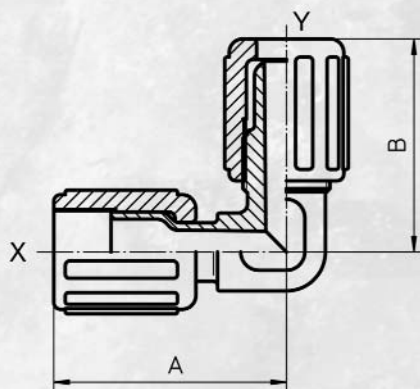
Fitting type **	O.D. Tube size	Female NPT size	Orifice mm (inch)	A mm (inch)	B mm (inch)
FFE 75 8-8 HP	1/2"	1/2"	9.56 (0.38")	51.00 (2.01")	31.00 (1.22")

ULTRA PURE PFA TUBE FITTINGS



Male elbow

Fitting type **	O.D. Tube size	Male NPT size	Orifice mm (inch)	A mm (inch)	B mm (inch)
FME 75 4-4 HP	1/4"	1/4"	3.30 (0.13")	40.7 (1.60")	27.0 (1.06")
FME 75 6-4 HP	3/8"	1/4"	6.00 (0.23")	43.9 (1.73")	27.0 (1.06")
FME 75 6-6 HP	3/8"	3/8"	6.35 (0.25")	43.9 (1.73")	27.0 (1.06")
FME 75 6-8 HP	3/8"	1/2"	6.35 (0.25")	44.4 (1.75")	30.0 (1.18")
FME 75 6-12 HP	3/8"	3/4"	6.35 (0.25")	49.4 (1.95")	34.5 (1.36")
FME 75 8-6 HP	1/2"	3/8"	9.65 (0.38")	46.3 (1.82")	27.0 (1.06")
FME 75 8-8 HP	1/2"	1/2"	9.65 (0.38")	46.3 (1.82")	30.0 (1.18")
FME 75 8-12 HP	1/2"	3/4"	9.65 (0.38")	50.8 (2.00")	34.5 (1.36")
FME 75 12-8 HP	3/4"	1/2"	10.80 (0.43")	55.2 (2.17")	35.0 (1.38")
FME 75 12-12 HP	3/4"	3/4"	16.00 (0.63")	55.2 (2.17")	35.0 (1.38")
FME 75 16-16 HP	1"	1"	22.10 (0.87")	68.6 (2.70")	45.7 (1.79")

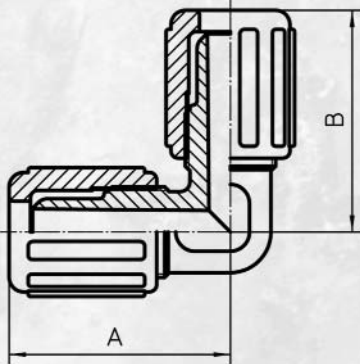


Union space saver elbow

Fitting type **	O.D. Tube size	Orifice mm (inch)	A mm (inch)	B mm (inch)
FUSE 75 X6-6 HP	3/8"	9.65 (0.38")	44.50 (1.75")	47.30 (1.86")
FUSE 75 X8-8 HP	1/2"	16.00 (0.63")	47.00 (1.85")	51.00 (2.01")
FUSE 75 X12-12 HP	3/4"	16.00 (0.63")	56.00 (2.20")	60.50 (2.38")
FUSE 75 X16-16 HP	1"	22.10 (0.87")	78.60 (3.09")	68.60 (2.70")
FUSE 75 X20-20 HP	1 1/4"	27.90 (1.09")	81.20 (3.19")	81.40 (3.20")

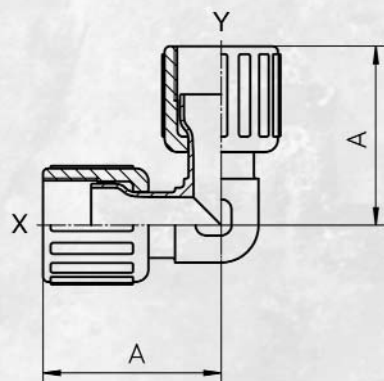
** With PVDF nut (standard); with PFA nut = ref. no. 77 (except size 1 1/4").

ULTRA PURE PFA TUBE FITTINGS



Union elbow

Fitting type **	O.D. Tube size	Orifice mm (inch)	A mm (inch)	B mm (inch)
FUE 75 4 HP	1/4"	3.30 (0.13")	40.90 (1.61")	40.90 (1.61")
FUE 75 6 HP	3/8"	6.35 (0.25")	44.50 (1.75")	44.50 (1.75")
FUE 75 8 HP	1/2"	9.65 (0.38")	46.50 (1.83")	46.50 (1.83")
FUE 75 12 HP	3/4"	16.00 (0.63")	53.30 (2.10")	53.30 (2.10")
FUE 75 16 HP	1"	22.10 (0.87")	68.90 (2.71")	68.90 (2.71")
FUE 75 20 HP	1 1/4"	27.80 (1.09")	86.70 (3.41")	86.70 (3.41")



**Union space saver
elbow (both sides)**

Fitting type **	O.D. Tube size	Orifice mm (inch)	A mm (inch)	B mm (inch)
FSE 75 X4-Y4 HP	1/4"	3.30 (0.13")	40.20 (1.58")	40.20 (1.58")
FSE 75 X6-Y6 HP	3/8"	6.35 (0.25")	43.10 (1.69")	43.10 (1.69")
FSE 75 X8-Y8 HP	1/2"	9.65 (0.38")	49.90 (1.96")	49.90 (1.96")
FSE 75 X12-Y12 HP	3/4"	16.00 (0.63")	57.20 (2.25")	57.20 (2.25")
FSE 75 X16-Y16 HP	1"	22.10 (0.87")	69.30 (2.72")	69.30 (2.72")
FSE 75 X20-Y20 HP	1 1/4"	27.90 (1.09")	86.60 (3.40")	86.60 (3.40")

** With PVDF nut (standard); with PFA nut = ref. no. 77.

ULTRA PURE PFA TUBE FITTINGS



Reducer elbow

Fitting type **	O.D. Tube size	Orifice mm (inch)	A mm (inch)	B mm (inch)
FRE 75 6-4 HP	3/8" x 1/4"	3.30 (0.13")	44.50 (1.75")	40.50 (1.59")
FRE 75 8-6 HP	1/2" x 3/8"	6.35 (0.25")	46.40 (1.83")	44.50 (1.75")
FRE 75 12-6 HP	3/4" x 3/8"	6.35 (0.25")	56.90 (2.24")	48.70 (1.92")
FRE 75 12-8 HP	3/4" x 1/2"	9.65 (0.38")	51.00 (2.01")	51.00 (2.01")
FRE 75 16-12 HP	1" x 3/4"	16.00 (0.63")	68.90 (2.71")	62.80 (2.47")
FRE 75 20-16 HP	1 1/4" x 1"	22.10 (0.87")	85.70 (3.38")	70.00 (2.75")



**Space saver
reducer elbow**

Fitting type **	O.D. Tube size	Orifice mm (inch)	A mm (inch)	B mm (inch)
FSRE 75 4-Y6 HP	1/4" x 3/8"	3.30 (0.13")	40.70 (1.60")	43.10 (1.69")
FSRE 75 4-Y8 HP	1/4" x 1/2"	3.30 (0.13")	40.70 (1.60")	49.90 (1.96")
FSRE 75 6-Y4 HP	3/8" x 1/4"	3.30 (0.13")	43.40 (1.70")	40.20 (1.58")
FSRE 75 6-Y8 HP	3/8" x 1/2"	6.35 (0.25")	44.40 (1.74")	49.90 (1.96")
FSRE 75 6-Y12 HP	3/8" x 3/4"	6.35 (0.25")	43.40 (1.70")	57.20 (2.25")
FSRE 75 8-Y6 HP	1/2" x 3/8"	6.35 (0.25")	46.30 (1.82")	43.10 (1.69")
FSRE 75 8-Y12 HP	1/2" x 3/4"	9.65 (0.38")	45.80 (1.80")	57.20 (2.25")
FSRE 75 8-Y16 HP	1/2" x 1"	9.65 (0.38")	45.80 (1.80")	71.10 (2.79")
FSRE 75 12-Y16 HP	3/4" x 1"	16.00 (0.63")	53.20 (2.09")	69.30 (2.72")
FSRE 75 16-Y12 HP	1" x 3/4"	16.00 (0.63")	60.60 (2.38")	57.50 (2.26")
FSRE 75 16-Y20 HP	1" x 1 1/4"	22.10 (0.87")	69.90 (2.75")	86.20 (3.39")
FSRE 75 20-Y16 HP	1 1/4" x 1"	22.10 (0.87")	85.30 (3.35")	79.30 (3.12")

** With PVDF nut (standard); with PFA nut = ref. no. 77.

ULTRA PURE PFA TUBE FITTINGS



Union elbow adapter,
flare/butt weld spigot

Fitting type **	O.D. Tube size	Pipe size	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)
FWEA 75 8-8 HP	1/2"	1/2"	9.65 (0.38")	37.00 (1.45")	21.30 (0.83")	15.40 (0.60")	19.00 (0.75")	49.80 (1.96")
FWEA 75 12-12 HP	3/4"	3/4"	16.00 (0.63")	43.00 (1.69")	26.70 (1.05")	20.60 (0.81")	19.00 (0.75")	62.20 (2.44")

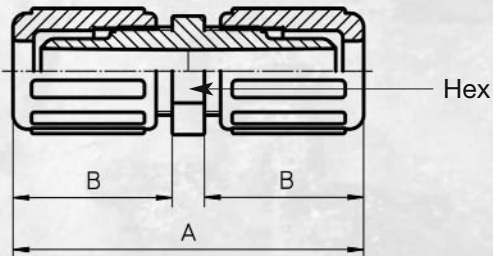


Union elbow adapter, space
saver/butt weld spigot

Fitting type **	O.D. Tube size	Pipe size	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)
FWES 75 X8-8 HP	1/2" S	1/2"	9.65 (0.38")	37.00 (1.45")	21.30 (0.83")	15.40 (0.60")	19.00 (0.75")	50.90 (2.00")
FWES 75 X12-12 HP	3/4" S	3/4"	16.00 (0.63")	43.00 (1.69")	26.70 (1.05")	20.60 (0.81")	19.00 (0.75")	63.20 (2.48")

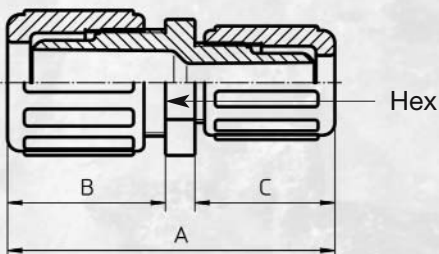
** With PVDF nut (standard); with PFA nut = ref. no. 77.

ULTRA PURE PFA TUBE FITTINGS



Straight union

Fitting type **	O.D. Tube size	Orifice mm (inch)	A mm (inch)	B mm (inch)	Hex
FSU 75 4 HP	1/4"	3.30 (0.13")	68.00 (2.68")	3.30 (0.13")	11/16"
FSU 75 6 HP	3/8"	6.35 (0.25")	69.00 (2.72")	3.30 (0.13")	13/16"
FSU 75 8 HP	1/2"	9.65 (0.38")	76.00 (2.99")	3.30 (0.13")	15/16"
FSU 75 12 HP	3/4"	16.00 (0.63")	83.00 (3.27")	3.30 (0.13")	13/16"
FSU 75 16 HP	1"	22.10 (0.87")	97.60 (3.84")	3.30 (0.13")	17/16"
FSU 75 20 HP	1 1/4"	27.80 (1.09")	126.00 (4.36")		-



Straight reducer union

Fitting type **	O.D. Tube size	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	Hex
FSR 75 6-4 HP	3/8" x 1/4"	3.30 (0.13")	69.40 (2.73")	30.90 (1.22")	30.50 (1.20")	13/16"
FSR 75 8-4 HP	1/2" x 1/4"	3.30 (0.13")	73.00 (2.87")	34.50 (1.36")	30.50 (1.20")	15/16"
FSR 75 8-6 HP	1/2" x 3/8"	6.35 (0.25")	72.40 (2.85")	35.50 (1.40")	30.90 (1.22")	15/16"
FSR 75 12-4 HP	3/4" x 1/4"	3.30 (0.13")	73.50 (2.89")	36.50 (1.44")	30.00 (1.18")	13/16"
FSR 75 12-6 HP	3/4" x 3/8"	6.35 (0.25")	75.90 (3.00")	38.00 (1.50")	30.90 (1.22")	13/16"
FSR 75 12-8 HP	3/4" x 1/2"	9.65 (0.38")	79.50 (3.13")	37.00 (1.50")	34.50 (1.36")	1 3/16"
FSR 75 16-12 HP	1" x 3/4"	16.00 (0.63")	90.30 (3.56")	45.30 (1.78")	38.00 (1.50")	1 7/16"
FSR 75 20-16 HP	1 1/4" x 1"	21.10 (0.87")	113.00 (4.45")	50.00 (1.97")	47.50 (1.87")	-

** With PVDF nut (standard); with PFA nut = ref. no. 77.

ULTRA PURE PFA TUBE FITTINGS



Straight „Space saver” reducer union

Fitting type **	O.D. Tube size	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	Hex
FSSR 75 X 8-6 HP	1/2" S - 3/8"	6.35 (0.25")	74.60 (2.94")	31.40 (1.24")	36.20 (1.43")	13/16"



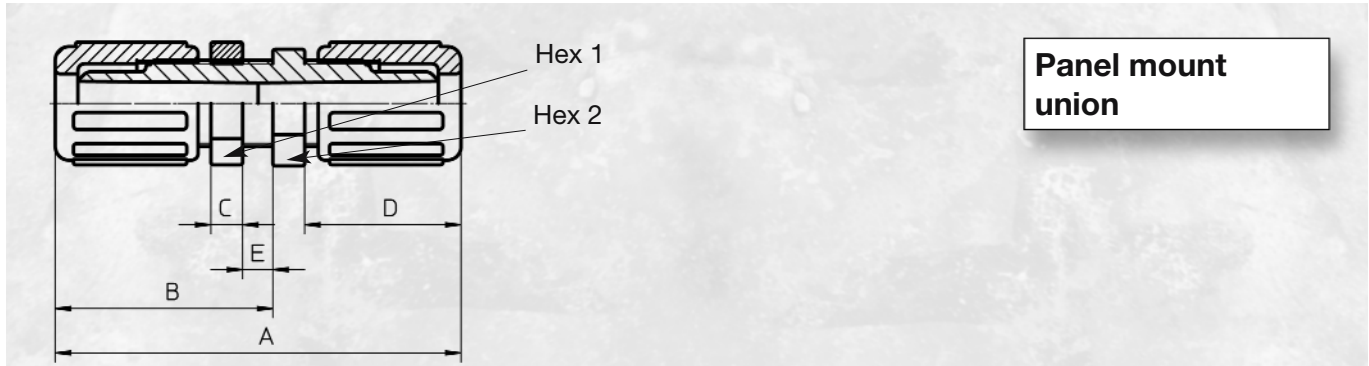
**Straight adapter, flare/
DIN flange adapter**

Fitting type **	O.D. Tube size	DIN flange adapter	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)
FFC 75 16 25 HP	1"	DN 25	22,1 (0,87")	87 (3,42")	28 (1,10")	41 (1,61")	68 (2,67")	10 (0,39")

Machined from TFM 1700.

** With PVDF nut (standard); with PFA nut = ref. no. 77.

ULTRA PURE PFA TUBE FITTINGS



Fitting type **	O.D. Tube size	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E max mm (inch)	Hex 1	Hex 2
FPM 75 4 HP	1/4"	3.30 (0.13")	76.80 (3.02")	43.80 (1.72")	7.00 (0.28")	26.00 (1.02")	9.30 (0.37")	11/16"	11/16"
FPM 75 6 HP	3/8"	6.35 (0.25")	77.90 (3.07")	44.50 (1.75")	7.00 (0.28")	26.14 (1.04")	9.50 (0.37")	15/16"	13/16"
FPM 75 8 HP	1/2"	9.65 (0.38")	84.50 (3.33")	48.00 (1.89")	7.00 (0.28")	29.50 (1.16")	9.00 (0.35")	1 1/16"	15/16"
FPM 75 12 HP	3/4"	16.00 (0.63")	98.50 (3.88")	52.50 (2.07")	7.00 (0.28")	38.00 (1.50")	9.50 (0.37")	1 5/16"	1 3/16"
FPM 75 16 HP	1"	22.10 (0.87")	104.10 (4.11")	58.70 (2.31")	7.00 (0.28")	38.80 (1.53")	9.70 (0.38")	1 3/4"	1 7/16"



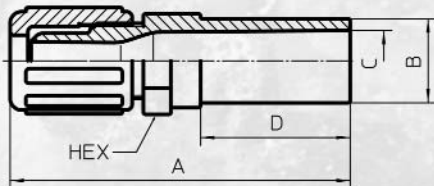
Fitting type **	O.D. Tube size	Orifice mm (inch)	A mm (inch)	B mm (inch)
Normal length				
FSUT 75 8-8 N	1/2"	9.65 (0.38")	99.00 (3.9")	65.00 (2.6")
FSUT 75 12-12 N	3/4"	16.00 (0.63")	114.00 (4.5")	75.00 (3.0")
Intermediate length				
FSUT 75 8-8 J	1/2"	9.65 (0.38")	66.00 (2.6")	32.00 (1.2")
FSUT 75 12-12 J	3/4"	16.00 (0.63")	72.00 (2.8")	33.00 (1.3")
Minimum length				
FSUT 75 8-8 M	1/2"	9.65 (0.38")	51.00 (2.0")	17.00 (0.7")
FSUT 75 12-12 M	3/4"	16.00 (0.63")	53.00 (2.1")	14.00 (0.5")

Other tube sizes available.

** With PVDF nut (standard); with PFA nut = ref. no. 77.

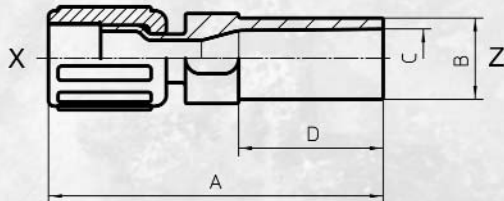
ULTRA PURE PFA TUBE FITTINGS

Straight adapter, flare/butt weld spigot



Fitting type **	O.D. Tube size	Pipe size	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	Hex
FSA 75 8-8 HP	1/2"	1/2"	9.65 (0.38")	85.80 (3.37")	21.30 (0.83")	15.40 (0.60")	38.00 (1.50")	15/16"
FSA 75 12-12 HP	3/4"	3/4"	16.00 (0.63")	90.20 (3.55")	26.70 (1.05")	20.60 (0.81")	38.00 (1.50")	1 3/16"
FSA 75 16-16 HP	1"	1"	22.10 (0.87")	97.10 (3.82")	33.40 (1.31")	26.30 (1.04")	38.00 (1.50")	1 7/16"
FSA 75 20-16 HP	1 1/4"	1"	25.40 (1.00")	105.00 (4.13")	33.40 (1.31")	26.30 (1.04")	38.00 (1.50")	-

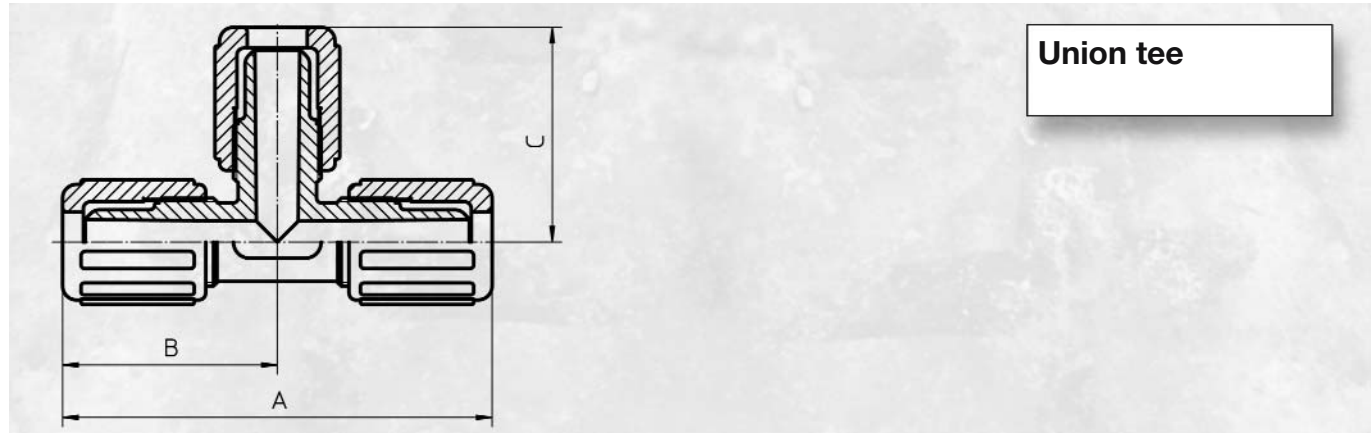
Straight adapter, space saver/butt weld spigot



Fitting type **	O.D. Tube size	Pipe size	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)
FWSA 75X8-8 HP	1/2" S	1/2"	9.65 (0.38")	88.00 (3.46")	21.30 (0.83")	15.40 (0.60")	38.00 (1.49")

** With PVDF nut (standard); with PFA nut = ref. no. 77.

ULTRA PURE PFA TUBE FITTINGS



Union tee

Fitting type **	O.D. Tube size	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)
FUT 75 4 HP	1/4"	3.30 (0.13")	81.80 (3.22")	40.90 (1.61")	40.90 (1.61")
FUT 75 6 HP	3/8"	6.35 (0.25")	89.00 (3.50")	44.50 (1.75")	44.50 (1.75")
FUT 75 8 HP	1/2"	9.65 (0.38")	93.00 (3.66")	46.50 (1.83")	46.50 (1.83")
FUT 75 12 HP	3/4"	16.00 (0.63")	106.50 (4.19")	53.30 (2.10")	53.30 (2.10")
FUT 75 16 HP	1"	22.10 (0.87")	138.00 (5.43")	69.00 (2.72")	69.00 (2.72")
FUT 75 20 HP	1 1/4"	27.90 (1.10")	173.00 (6.81")	86.50 (3.40")	87.00 (3.43")



Union reducer tee

Fitting type **	O.D. Tube size			Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)
	X	Y	Z					
FRT 75 4-6-6 HP	1/4"	3/8"	3/8"	3.30 (0.13")	85.30 (3.36")	44.40 (1.75")	40.90 (1.61")	44.40 (1.75")
FRT 75 6-4-6 HP	3/8"	1/4"	3/8"	3.30 (0.13")	87.80 (3.45")	43.90 (1.73")	43.90 (1.73")	40.70 (1.60")
FRT 75 6-12-6 HP	3/8"	3/4"	3/8"	6.25 (0.25")	96.30 (3.79")	48.15 (1.89")	48.15 (1.89")	56.20 (2.25")
FRT 75 8-4- 8 HP	1/2"	1/4"	1/2"	3.30 (0.13")	94.30 (3.70")	47.00 (1.85")	47.00 (1.85")	40.90 (1.61")
FRT 75 8-6- 6 HP	1/2"	3/8"	3/8"	6.35 (0.25")	90.20 (3.55")	46.30 (1.82")	46.30 (1.78")	43.90 (1.78")
FRT 75 8-6- 8 HP	1/2"	3/8"	1/2"	6.35 (0.25")	94.00 (3.70")	47.00 (1.85")	47.00 (1.85")	44.50 (1.75")
FRT 75 12-4-12 HP	3/4"	1/4"	3/4"	3.30 (0.13")	112.00 (4.41")	56.00 (2.20")	56.00 (2.20")	45.50 (1.79")
FRT 75 12-8-4 HP	3/4"	1/2"	1/4"	3.30 (0.13")	98.50 (3.87")	53.80 (2.11")	44.70 (1.75")	50.80 (2.00")
FRT 75 12-8- 8 HP	3/4"	1/2"	1/2"	9.65 (0.38")	106.00 (4.17")	55.20 (2.12")	50.80 (2.00")	50.80 (2.00")
FRT 75 12-12- 8 HP	3/4"	3/4"	1/2"	9.65 (0.38")	107.00 (4.19")	56.00 (2.20")	51.00 (2.01")	56.20 (2.21")
FRT 75 12-8-12 HP	3/4"	1/2"	3/4"	9.65 (0.38")	106.50 (4.21")	53.30 (2.10")	53.30 (2.10")	51.00 (2.01")
FRT 75 16-8-16 HP	1"	1/2"	1"	9.65 (0.38")	134.20 (5.28")	67.10 (2.69")	67.10 (2.69")	61.30 (2.41")
FRT 75 16-12-16 HP	1"	3/4"	1"	16.00 (0.63")	136.80 (5.39")	68.40 (2.69")	68.40 (2.69")	62.50 (2.46")
FRT 75 20-16-20 HP	1 1/4"	1"	1 1/4"	16.00 (0.63")	173.00 (6.81")	86.50 (3.40")	86.50 (3.40")	70.00 (2.76")

** With PVDF nut (standard); with PFA nut = ref. no. 77.

ULTRA PURE PFA TUBE FITTINGS

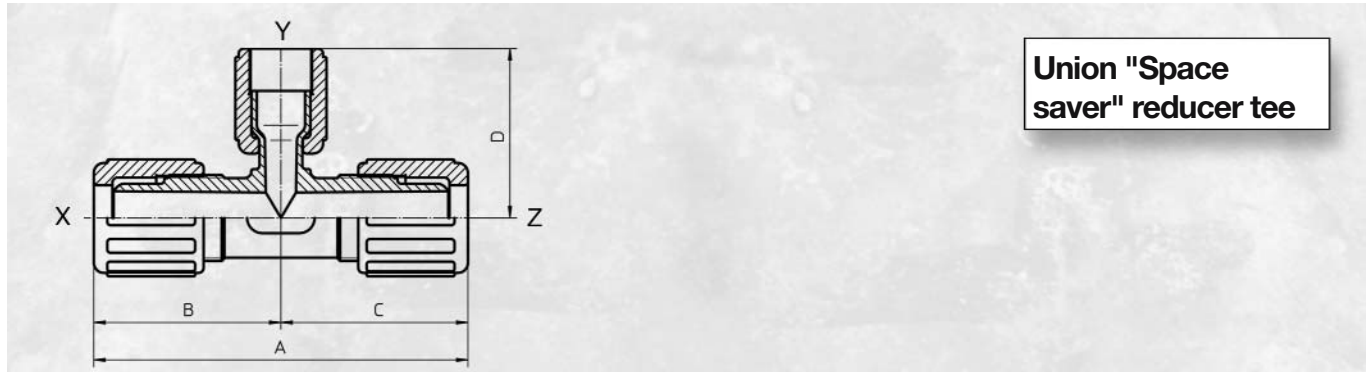


Fitting type **	O.D. Tube size			Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)
	X	Y	Z					
FUST 75 6-6-Z 6 HP	3/8"	3/8"	3/8" S	6.35 (0.25")	92.50 (3.64")	44.40 (1.75")	48.11 (1.89")	44.40 (1.75")
FUST 75 8-8-Z 8 HP	1/2"	1/2"	1/2" S	9.65 (0.38")	96.70 (3.80")	45.80 (1.80")	50.90 (2.00")	45.80 (1.80")
FUST 75 12-12-Z12 HP	3/4"	3/4"	3/4" S	16.00 (0.63")	117.00 (4.61")	56.10 (2.21")	60.90 (2.40")	56.00 (2.20")
FUST 75 16-16-Z16 HP	1"	1"	1" S	22.10 (0.87")	142.00 (5.59")	68.60 (2.70")	73.60 (2.89")	68.60 (2.70")
FUST 75X 8-8-Z 8 HP	1/2" S	1/2"	1/2" S	9.65 (0.28")	95.80 (3.77")	47.90 (1.88")	47.90 (1.88")	46.30 (1.82")
FUST 75X12-12-Z12 HP	3/4" S	3/4"	3/4" S	16.00 (0.63")	117.00 (4.52")	57.50 (2.26")	57.50 (2.26")	56.00 (2.20")
FUST 75X16-16-Z16 HP	1" S	1"	1" S	22.10 (0.87")	150.20 (5.95")	75.10 (2.95")	75.10 (2.95")	68.60 (2.70")
FUST 75 6-Y6-6 HP	3/8"	3/8" S	3/8"	6.35 (0.25")	88.80 (3.49")	44.40 (1.75")	44.40 (1.75")	43.10 (1.69")
FUST 75 8-Y8-8 HP	1/2"	1/2" S	1/2"	9.65 (0.38")	94.00 (3.70")	47.00 (1.85")	47.00 (1.85")	44.50 (1.75")
FUST 75 12-Y12-12 HP	3/4"	3/4" S	3/4"	16.00 (0.63")	112.00 (4.41")	56.00 (2.20")	56.00 (2.20")	45.00 (1.77")
FUST 75 16-Y16-16 HP	1"	1" S	1"	22.10 (0.87")	137.50 (5.41")	68.75 (2.70")	68.75 (2.70")	70.10 (2.75")
FUST 75 6-Y6-Z6 HP	3/8"	3/8" S	3/8"	6.35 (0.25")	87.50 (3.44")	44.40 (1.75")	43.10 (1.69")	43.10 (1.69")
FUST 75 16-Y16-Z16 HP	1"	1" S	1"	22.10 (0.87")	137.50 (5.41")	68.00 (2.67")	69.30 (2.72")	69.30 (2.72")
FUST 75 X12-Y12-Z12 HP	3/4"	3/4" S	3/4"	16.00 (0.63")	115.00 (4.52")	57.50 (2.26")	57.50 (2.26")	57.50 (2.26")

X, Y, Z indicates the position of the space saver(s) in the type key.
S means space saver connection in the section "tube size".

** With PVDF nut (standard); with PFA nut = ref. no. 77.

ULTRA PURE PFA TUBE FITTINGS



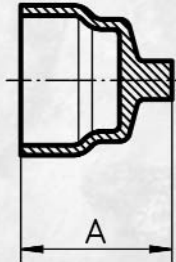
Fitting type **	O.D. Tube size			Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)
	X	Y	Z					
FRST 75 8-Y6-8 HP	1/2"	3/8" S	1/2"	6.35 (0.25")	91.00 (3.58")	45.50 (1.79")	45.50 (1.79")	43.10 (1.69")
FRST 75 12-Y8-12 HP	3/4"	1/2" S	3/4"	6.35 (0.25")	112.00 (4.41")	56.00 (2.20")	56.00 (2.20")	50.80 (2.00")
FRST 75 16-Y8-16 HP	1"	1/2" S	1"	9.65 (0.38")	138.90 (5.46")	69.45 (2.73")	69.45 (2.73")	53.90 (2.12")
FRST 75 16-Y12-16 HP	1"	3/4" S	1"	16.00 (0.63")	138.90 (5.46")	69.45 (2.73")	69.45 (2.73")	60.20 (2.37")

X, Y, Z indicates the position of the space saver(s) in the type key.

S means space saver connection in the section "tube size".

**With PVDF nut (standard); with PFA nut = ref. no. 77.

ULTRA PURE PFA TUBE FITTINGS



**Cap
(for male flare spigot)**

Fitting type **	O.D. Tube size	A mm (inch)
FLC 4 HP	1/4"	16.50 (0.65")
FLC 6 HP	3/8"	21.50 (0.85")
FLC 8 HP	1/2"	22.60 (0.89")
FLC 12 HP	3/4"	23.60 (0.93")
FLC 16 HP	1"	32.00 (1.26")
FLC 20 HP	1 1/4"	35.00 (1.38")



Flaring mandrel

Assembly tool for PFA
flare connection

Type designation	O.D. Tube size	DN/mm
1098 4Z 01	1/4"	4
1098 6Z 01	3/8"	6
1098 8Z 01	1/2"	10
1098 12Z 01	3/4"	15
1098 16Z 01	1"	20
1098 20Z 01	1 1/4"	25

** With PVDF nut (standard); with PFA nut = ref. no. 77.

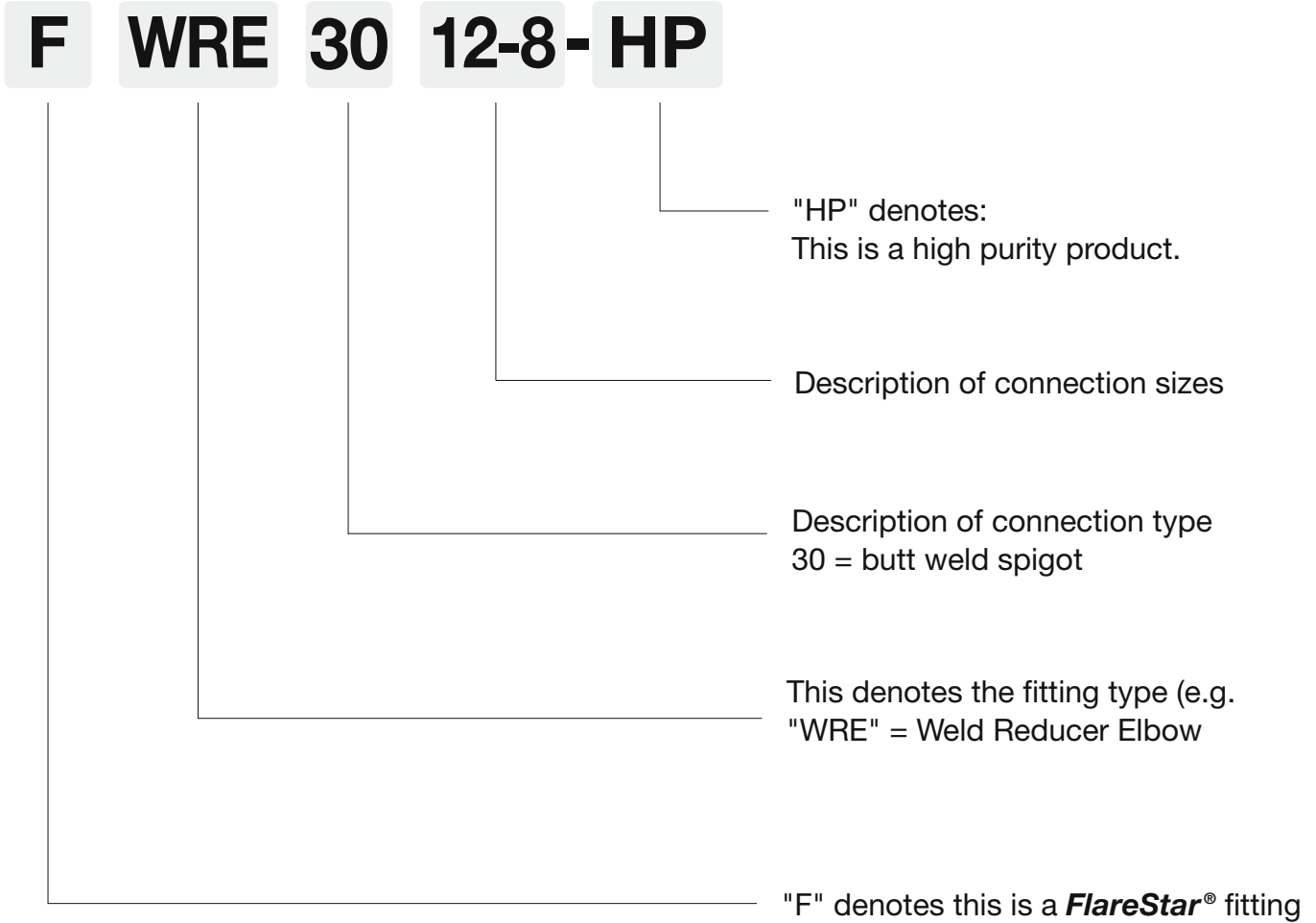
ULTRA PURE PFA TUBE FITTINGS



PVDF			PFA		
Type designation	O.D. Tube size	DN/mm	Type designation	O.D. Tube size	DN/mm
CF 75 4Z HP	1/4"	4	CF 77 4Z HP	1/4"	4
CF 75 6Z HP	3/8"	6	CF 77 6Z HP	3/8"	6
CF 75 8Z HP	1/2"	10	CF 77 8Z HP	1/2"	10
CF 75 12Z HP	3/4"	15	CF 77 12Z HP	3/4"	15
CF 75 16Z HP	1"	20	CF 77 16Z HP	1"	20
CF 75 20Z HP	1 1/4"	25	CF 77 20Z HP	1 1/4"	25

CPFA nut on request

ORDER EXAMPLE - WELD FITTINGS



FlareStar® FITTING TYPES

- FWUE** Union elbow 90°
- FWRE** Reducer elbow 90°
- FWEA** Union elbow adapter, flare/butt weld spigot
- FWES** Union elbow adapter, space saver/butt weld spigot
- FWSR** Straight reducer
- FSA** Straight adapter, flare/butt weld spigot
- FWSA** Straight adapter, space saver/butt weld spigot
- FWUT** Union tee
- FWRT** Union reducer tee

ULTRA PURE PFA TUBE FITTINGS



Union elbow 90°

Fitting type **	Pipe size	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)
FWUE 30 8 HP	1/2"	15.40 (0.60")	56.00 (2.20")	21.30 (0.83")	15.40 (0.60")	37.00 (1.45")
FWUE 30 12 HP	3/4"	20.60 (0.81")	60.00 (2.30")	26.70 (1.05")	20.60 (0.81")	38.00 (1.50")
FWUE 30 16 HP	1"	26.30 (1.04")	62.00 (2.44")	33.40 (1.31")	26.30 (1.04")	38.00 (1.50")



Reducer elbow 90°

Fitting type **	Pipe size	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)
FWRE 30 8-4 HP	1/2" x 1/4"	9.00 (0.35")	38.00 (1.49")	38.00 (1.49")	21.30 (0.83")	15.40 (0.60")	13.70 (0.53")	9.00 (0.35")
FWRE 30 12-8 HP	3/4" x 1/2"	15.40 (0.60")	39.00 (1.53")	38.00 (1.49")	26.70 (1.05")	20.60 (0.81")	21.30 (0.83")	15.40 (0.60")

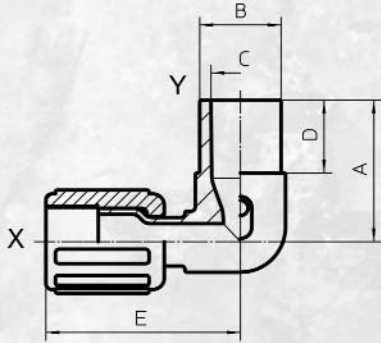


**Union elbow,
flare/butt weld spigot**

Fitting type **	O.D. Tube size	Pipe size	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)
FWEA 75 8-8 HP	1/2"	1/2"	9.65 (0.38")	37.00 (1.45")	21.30 (0.83")	15.40 (0.60")	19.00 (0.75")	49.80 (1.96")
FWEA 75 12-12 HP	3/4"	3/4"	16.00 (0.63")	43.00 (1.69")	26.70 (1.05")	20.60 (0.81")	19.00 (0.75")	62.20 (2.44")

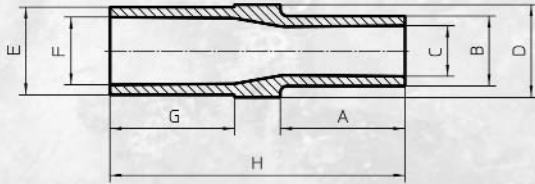
** With PVDF nut (standard); with PFA nut = ref. no. 77.

ULTRA PURE PFA TUBE FITTINGS



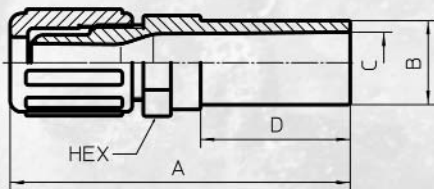
Union elbow, space saver/butt weld spigot

Fitting type **	O.D. Tube size	Pipe size	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)
FWES 75 X8-8 HP	1/2" S	1/2"	9.65 (0.38")	37.00 (1.45")	21.30 (0.83")	15.40 (0.60")	19.00 (0.75")	50.90 (2.00")
FWES 75 X12-12 HP	3/4" S	3/4"	16.00 (0.63")	43.00 (1.69")	26.70 (1.05")	20.60 (0.81")	19.00 (0.75")	63.20 (2.48")



Straight reducer

Fitting type **	Pipe size	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)	G mm (inch)	H mm (inch)
FWSR 30 12-8 HP	3/4" x 1/2"	15.40 (0.60")	39.00 (1.53")	21.30 (0.83")	15.40 (0.60")	28.60 (1.12")	26.70 (1.05")	20.60 (0.81")	38.00 (1.49")	90.00 (3.54")

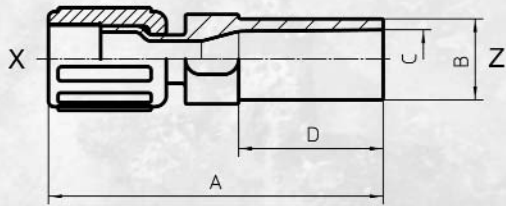


Straight adapter, flare/butt weld spigot

Fitting type **	O.D. Tube size	Pipe size	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	Hex
FSA 75 8-8 HP	1/2"	1/2"	9.65 (0.38")	85.80 (3.37")	21.30 (0.83")	15.40 (0.60")	38.00 (1.50")	15/16"
FSA 75 12-12 HP	3/4"	3/4"	16.00 (0.63")	90.20 (3.55")	26.70 (1.05")	20.60 (0.81")	38.00 (1.50")	1 3/16"
FSA 75 16-16 HP	1"	1"	22.10 (0.87")	97.10 (3.82")	33.40 (1.31")	26.30 (1.04")	38.00 (1.50")	1 7/16"
FSA 75 20-16 HP	1 1/4"	1"	25.40 (1.00")	105.00 (4.13")	33.40 (1.31")	26.30 (1.04")	38.00 (1.50")	-

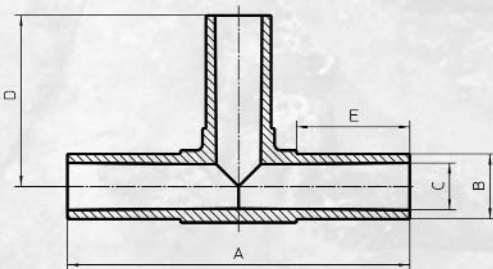
** With PVDF nut (standard); with PFA nut = ref. no. 77.

ULTRA PURE PFA TUBE FITTINGS



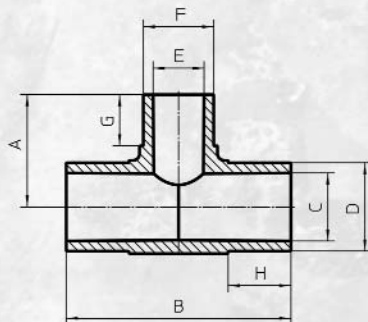
Straight adapter, space saver/butt weld spigot

Fitting type **	O.D. Tube size	Pipe size	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)
FWSA 75X8-8 HP	1/2" S	1/2"	9.65 (0.38")	88.00 (3.46")	21.30 (0.83")	15.40 (0.60")	38.00 (1.49")



Union tee

Fitting type **	Pipe size	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)
FWUT 30 8 HP	1/2"	15.40 (0.60")	112.00 (4.40")	21.30 (0.83")	15.40 (0.60")	56.00 (2.20")	37.00 (1.45")
FWUT 30 12 HP	3/4"	20.60 (0.81")	116.00 (4.56")	26.70 (1.05")	20.60 (0.81")	58.00 (2.28")	38.00 (1.49")



Union reducer tee

Fitting type **	Pipe size	Orifice mm (inch)	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)	G mm (inch)	H mm (inch)
FWRT 30 12-8-12 HP	3/4" x 1/2" x 3/4"	15.40 (0.60")	34.00 (1.33")	68.00 (2.67")	20.60 (0.81")	26.70 (1.05")	15.40 (0.60")	21.30 (0.83")	15.50 (0.61")	19.00 (0.75")

** With PVDF nut (standard); with PFA nut = ref. no. 77.