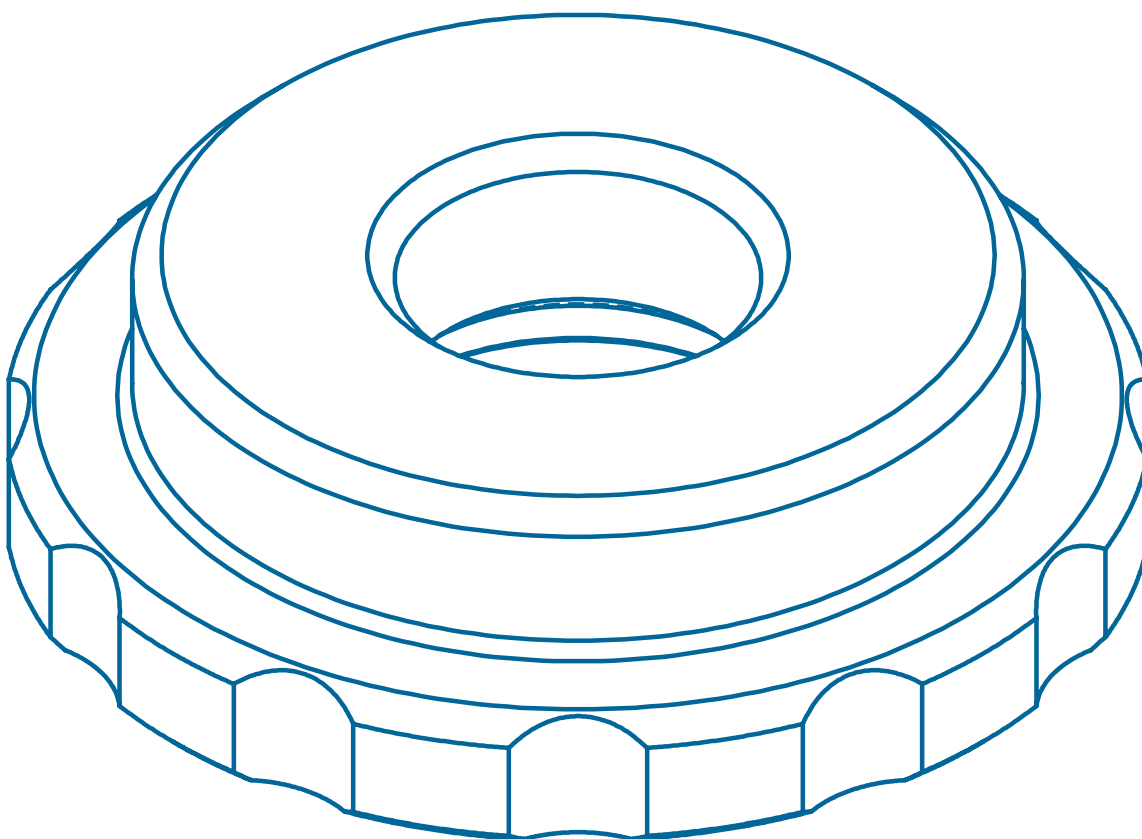


# VACUUM CUP FITTINGS

## SECTION 3



**VACUUM CUP FITTINGS**



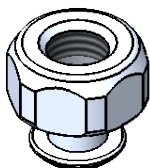
Ø 4-8 mm Cups



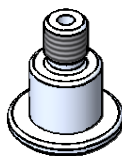
Ø 10-15 mm Cups



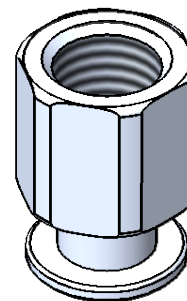
Ø 20-35 mm Cups



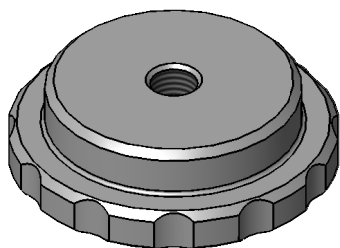
Ø 40 mm Cups



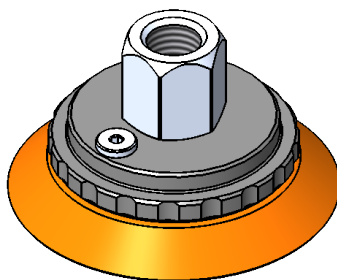
Ø 50 mm Cups



Ø 65 mm Cups



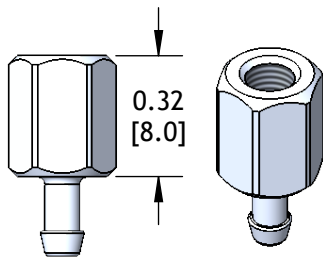
Ø 75 - 150 mm Cups



Accessories

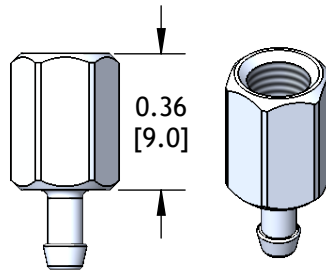
Ø 4-8 mm Cups	3
Ø 10-15 mm Cups	4
Ø 20-35 mm Cups	5
Ø 40 mm Cups	8
Ø 50 mm Cups	11
Ø 65 mm Cups	14
Ø 75-150 mm Cups	15
Fitting Accessories	15

**Ø 4-8 MM CUPS - STANDARD**



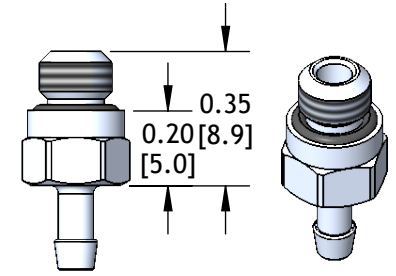
8-4F

Assembly Suffix:	-4F
Threads:	M4X0.7 Female
Thread Depth: in [mm]	0.23 [5.8]
Weight: oz [g]	0.04 [1.1]
Thru Hole: in [mm]	0.05 [1.3]
Hex Size: in [mm]	0.25 [6.4]



8-5F

Assembly Suffix:	-5F
Threads:	M5X0.8 Female
Thread Depth: in [mm]	0.25 [6.4]
Weight: oz [g]	0.04 [1.1]
Thru Hole: in [mm]	0.06 [1.5]
Hex Size: in [mm]	0.31 [8.0]

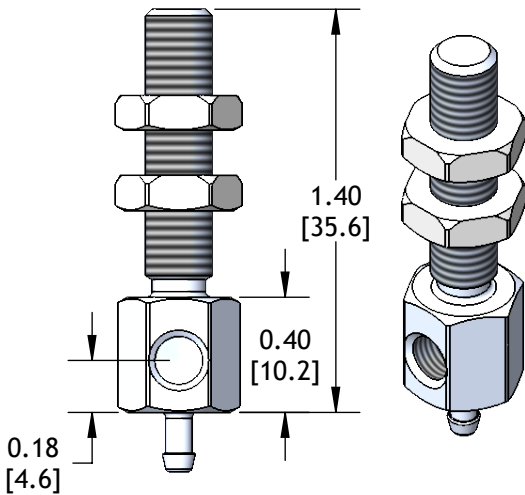


8-10M

Assembly Suffix:	-10M
Threads:	10-32 Male
Weight: oz [g]	0.08 [2.3]
Thru Hole: in [mm]	0.06 [1.4]
Hex Size: in [mm]	0.25 [6.4]

**Ø 4-8 MM CUPS - SIDE VACUUM PORT W/ MALE POST**

JN-M6X1.0 (2) jam nuts included.

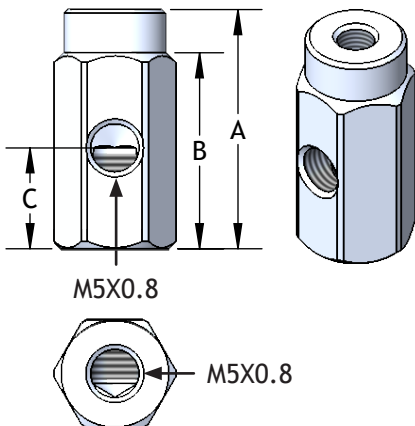


8-S5F-6M

Assembly Suffix:	-S5F-6M
Port Threads:	M5X0.8
Post Threads:	M6X1.0
Weight: oz [g]	0.22 [6.1]
Thru Hole: in [mm]	0.04 [1.0]
Hex Size: in [mm]	0.38 [9.5]

**Ø 4-8 MM CUPS - SIDE VACUUM PORT W/ FEMALE PORT**

For use with 8-10M and 10-10M cup fittings



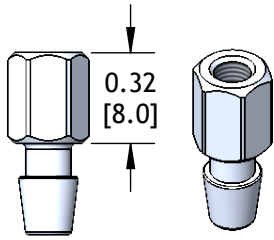
Technical Data

Fitting	Assembly Suffix	Weight oz [g]	Hex Size in [mm]
5F-S5F-5F	-S5F-5F	0.13 [3.7]	0.38 [9.5]
5F-S5F-6F	-S5F-8F	0.18 [5.0]	0.44 [11.1]

Dimensions

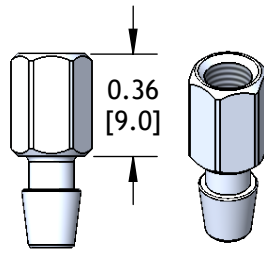
Fitting	A in [mm]	B in [mm]	C in [mm]	Thread	Thread Depth in [mm]
5F-S5F-5F	0.83 [21.0]	0.68 [17.3]	0.35 [8.9]	M5X0.8	0.22 [5.6]
5F-S5F-6F	0.86 [22.0]	0.63 [16.0]	0.33 [8.4]	M6X1.0	0.33 [8.4]

**Ø 10-15 MM CUPS - STANDARD**



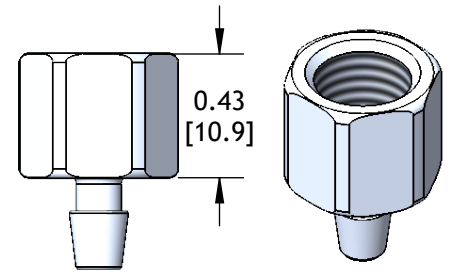
**10-4F**

Assembly Suffix:	-4F
Threads:	M4X0.7 Female
Thread Depth: in [mm]	0.23 [5.8]
Weight: oz [g]	0.05 [1.4]
Thru Hole: in [mm]	0.10 [2.5]
Hex Size: in [mm]	0.25 [6.4]



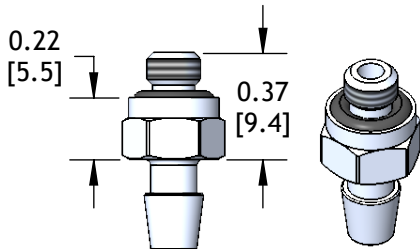
**10-5F**

Assembly Suffix:	-5F
Threads:	M5X0.8 Female
Thread Depth: in [mm]	0.20 [5.1]
Weight: oz [g]	0.05 [1.4]
Thru Hole: in [mm]	0.10 [2.5]
Hex Size: in [mm]	0.25 [6.4]



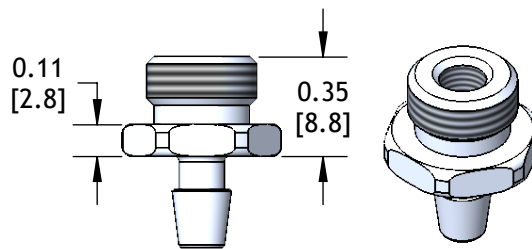
**10-18F**

Assembly Suffix:	-10M
Threads:	G 1/8-27 NPSF
Thread Depth: in [mm]	0.28 [7.1]
Weight: oz [g]	0.10 [2.8]
Thru Hole: in [mm]	0.10 [2.5]
Hex Size: in [mm]	0.5 [13.0]



**10-10M**

Assembly Suffix:	-10M
Threads:	10-32 Male
Weight: oz [g]	0.10 [2.8]
Thru Hole: in [mm]	0.10 [2.5]
Hex Size: in [mm]	0.31 [8.0]

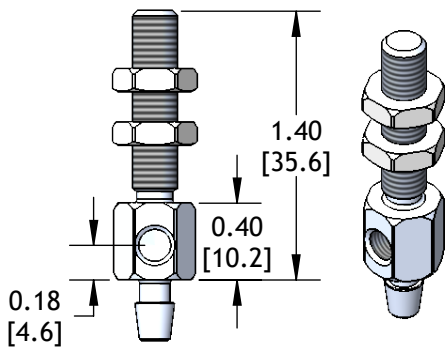


**10-18M**

Assembly Suffix:	-18M
Male Threads:	G 1/8-28 Male
Female Threads:	M5X0.8 Female
Thread Depth: in [mm]	0.21 [5.3]
Weight: oz [g]	0.08 [2.3]
Thru Hole: in [mm]	0.10 [2.5]
Hex Size: in [mm]	0.50 [13.0]

**Ø 10-15 MM CUPS - SIDE VACUUM PORT W/ MALE POST**

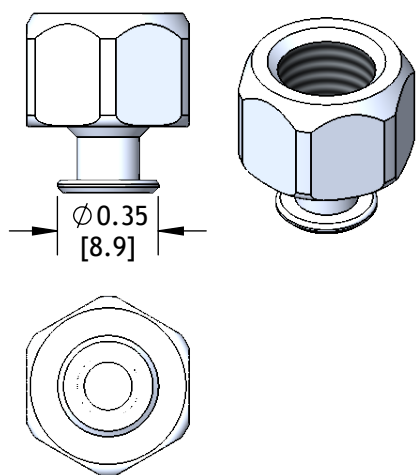
JN-M6X1.0 (2) jam nuts included.



**10-S5F-6M**

Assembly Suffix:	-S5F-6M
Port Threads:	M5X0.8
Post Threads:	M6X1.0
Weight: oz [g]	0.24 [6.8]
Thru Hole: in [mm]	0.10 [2.5]
Hex Size: in [mm]	0.38 [9.5]

**Ø 20-35 MM CUPS - FEMALE**



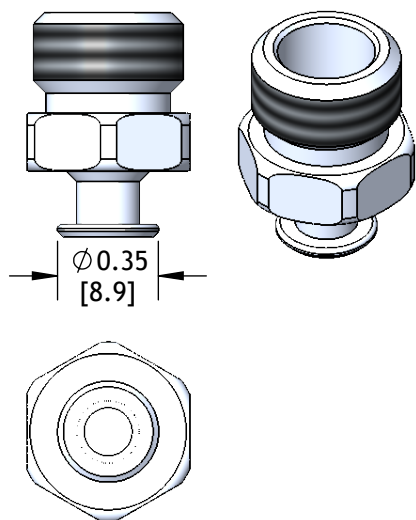
**Technical Data**

Fitting	Assembly Suffix	Weight oz [g]
32-5F	-5F	0.09 [2.6]
32-6F	-6F	0.23 [6.5]
32-8F	-8F	0.20 [5.7]
32-18F	-18F	0.12 [3.4]
32-G14F	-G14F	0.26 [7.3]

**Dimensions**

Fitting	Hex Height in [mm]	Hex Size in [mm]	Thru Hole in [mm]	Thread	Thread Depth in [mm]
32-5F	0.25 [6.4]	0.50 [12.7]	0.17 [4.2]	M5X0.8	0.20 [5.1]
32-6F	0.55 [14.0]	0.56 [14.5]	0.14 [3.6]	M6X1.0	0.25 [6.4]
32-8F	0.55 [14.0]	0.56 [14.5]	0.14 [3.6]	M8X1.25	0.32 [8.1]
32-18F	0.40 [10.0]	0.56 [14.5]	0.17 [4.2]	G 1/8 NPSF	0.25 [8.4]
32-G14F	0.65 [16.4]	0.69 [17.5]	0.17 [4.2]	G 1/4	0.45 [11.4]

**Ø 20-35 MM CUPS - MALE**



**Technical Data**

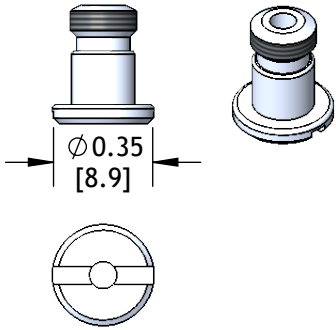
Fitting	Assembly Suffix	Weight oz [g]
32-5M	-5M	0.09 [2.6]
32-6M	-6M	0.11 [3.2]
32-8M	-8M	0.12 [3.4]
32-18M <sup>1</sup>	-18M	0.08 [2.3]
32-14M	-14M	0.18 [5.1]
32-G14M	-G14M	0.16 [4.5]

**Dimensions**

Fitting	Hex Height in [mm]	Hex Size in [mm]	Thru Hole in [mm]	Thread	Thread Length in [mm]
32-5M	0.20 [5.1]	0.50 [12.7]	0.08 [2.0]	M5X0.8	0.19 [4.8]
32-6M	0.20 [5.1]	0.56 [14.2]	0.10 [2.5]	M6X1.0	0.23 [5.9]
32-8M	0.20 [5.1]	0.56 [14.2]	0.14 [3.6]	M8X1.25	0.32 [8.1]
32-18M <sup>1</sup>	0.11 [2.8]	0.56 [14.2]	0.16 [4.1]	G 1/8 NPSF	0.24 [6.1]
32-14M	0.20 [5.1]	0.69 [17.5]	0.17 [4.2]	1/4 NPTF	0.35 [9.0]
32-G14M	0.20 [5.1]	0.69 [17.5]	0.17 [4.2]	G 1/4	0.35 [9.0]

<sup>1</sup>32-18M also has M5X0.8 Female threads 0.22 [5.7] deep.

**Ø 20-35 MM CUPS - MALE STUD**



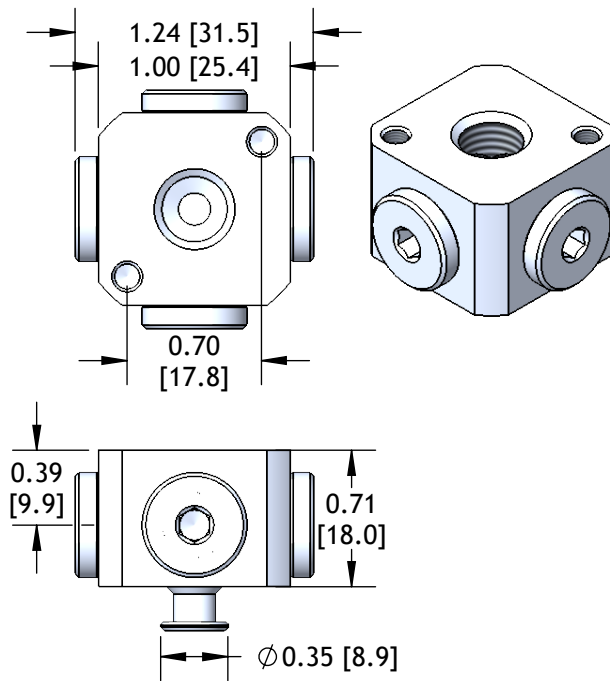
**Technical Data**

Fitting	Assembly Suffix	Weight oz [g]
32-6MS	-6MS	0.02 [0.7]
32-10MS	-10MS	0.02 [0.7]

**Dimensions**

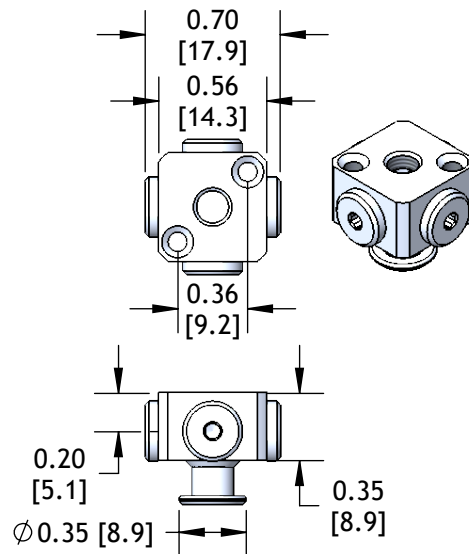
Fitting	Slot Width in [mm]	Thru Hole in [mm]	Thread	Thread Length in [mm]	Total Height in [mm]
32-6MS	0.06 [1.5]	0.09 [2.3]	M6X1.0	0.16 [4.1]	0.41 [10.4]
32-10MS	0.06 [1.5]	0.09 [2.3]	10-32	0.16 [4.1]	0.41 [10.4]

**Ø 20-35 MM CUPS - CROSS FITTINGS**



**32-5X18F**

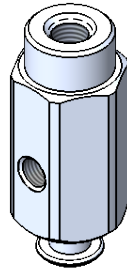
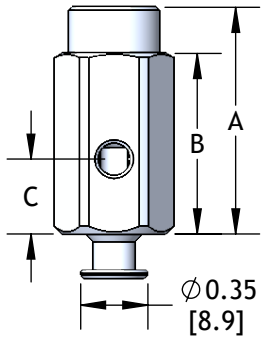
Assembly Suffix:	-5X18F
Threads:	G 1/8 NPSF (5)
Mount Threads:	M4X0.7 (2)
Weight: oz [g]	1.00 [28.3]
Thru Hole: in [mm]	0.17 [4.2]



**32-5X5F**

Assembly Suffix:	-5X5F
Threads:	M5X0.8 (5)
Mount Threads:	M3X0.5 (2)
Weight: oz [g]	0.18 [5.0]
Thru Hole: in [mm]	0.17 [4.2]

**Ø 20-35 MM CUPS - M5 FEMALE SIDE VACUUM PORT W/ FEMALE MOUNT**



**Technical Data**

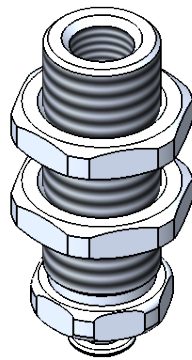
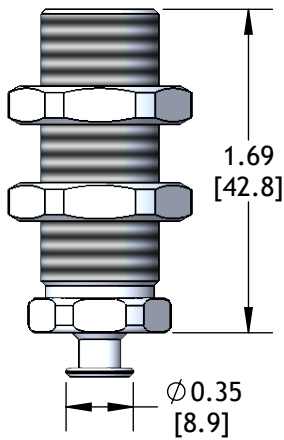
Fitting	Assembly Suffix	Weight oz [g]	Hex Size in [mm]
32-S5F-5F	-S5F-5F	0.34 [9.6]	0.56 [14.3]
32-S5F-6F	-S5F-6F	0.43 [12.8]	0.56 [14.3]
32-S5F-8F	-S5F-8F	0.41 [11.0]	0.56 [14.3]

**Dimensions**

Fitting	A in [mm]	B in [mm]	C in [mm]	Mount Thread	Thread Depth in [mm]
32-S5F-5F	0.89 [22.1]	0.69 [17.5]	0.35 [8.9]	M5X0.8	0.30 [7.6]
32-S5F-6F	1.18 [30.0]	0.94 [23.9]	0.39 [9.9]	M6X1.0	0.25 [6.3]
32-S5F-8F	1.18 [30.0]	0.87 [22.0]	0.39 [9.9]	M8X1.25	0.32 [8.1]

**Ø 20-35 MM CUPS - TOOL MOUNT**

JN-M16X1 (2) jam nuts included.

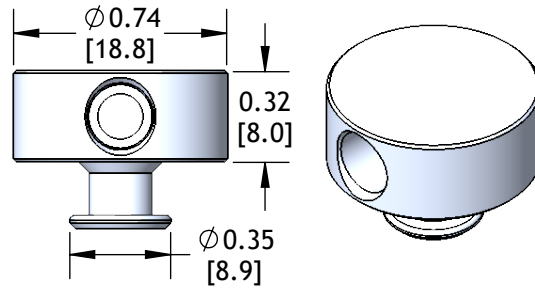


**32-18FX40**

Assembly Suffix:	-18FX40
Female Threads:	G 1/8 NPSF
Thread Depth: in [mm]	0.38 [9.7]
Post Threads:	M16X1.0
Hex Size: in [mm]	0.69 [17.5]
Hex Height: in [mm]	0.18 [4.6]
Weight: oz [g]	0.78 [22.1]
Thru Hole: in [mm]	0.16 [4.1]

**Ø 20-35 MM CUPS - DIE CUTTING**

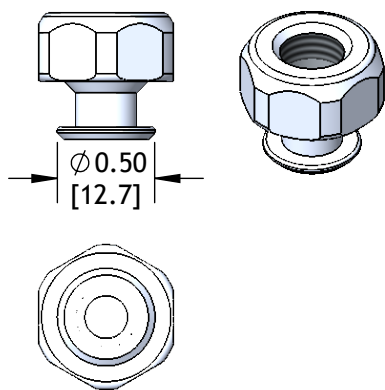
Contains push-in bore (2) for Ø 6 mm tubing.



**32-DC75X31**

Assembly Suffix:	-DC75X31
Weight: oz [g]	0.18 [5.2]
Thru Hole: in [mm]	0.16 [4.1]

**Ø 40 MM CUPS - FEMALE**



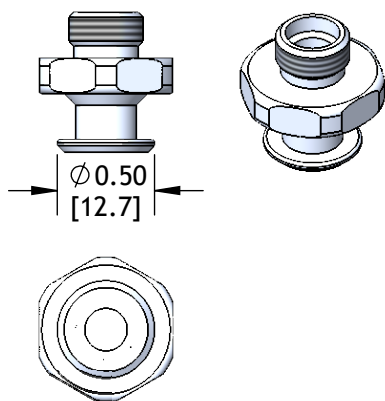
**Technical Data**

Fitting	Assembly Suffix	Weight oz [g]
40-6F	-6F	0.38 [10.8]
40-8F	-8F	0.34 [9.6]
40-18F	-18F	0.20 [5.7]
40-38F	-38F	0.46 [13.2]
40-G14F	-G14F	0.26 [7.3]

**Dimensions**

Fitting	Hex Height in [mm]	Hex Size in [mm]	Thru Hole in [mm]	Thread	Thread Depth in [mm]
40-6F	0.55 [14.0]	0.69 [17.5]	0.14 [3.6]	M6X1.0	0.25 [6.4]
40-8F	0.55 [14.0]	0.69 [17.5]	0.14 [3.6]	M8X1.25	0.32 [8.1]
40-18F	0.35 [8.8]	0.69 [17.5]	0.22 [5.6]	G 1/8 NPSF	0.25 [6.4]
40-38F	0.70 [17.8]	0.88 [22.2]	0.22 [5.6]	3/8 NPTF	0.55 [14.0]
40-G14F	0.63 [15.9]	0.75 [19.0]	0.22 [5.6]	G 1/4	0.45 [11.4]

**Ø 40 MM CUPS - MALE**



**Technical Data**

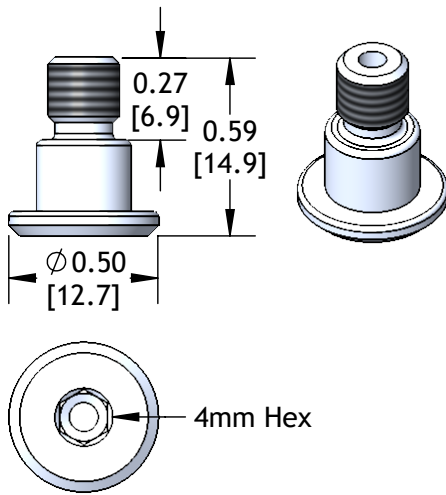
Fitting	Assembly Suffix	Weight oz [g]
40-6M	-6M	0.38 [10.8]
40-8M	-8M	0.19 [5.4]
40-18M	-18M	0.16 [4.5]
40-14M	-14M	0.19 [5.4]
40-38M	-38M	0.27 [7.7]
40-G14M	-G14M	0.21 [5.9]
40-G38M	-G38M	0.27 [7.7]

**Dimensions**

Fitting	Hex Height in [mm]	Hex Size in [mm]	Thru Hole in [mm]	Thread	Thread Length in [mm]
40-6M	0.20 [5.1]	0.69 [17.5]	0.14 [3.6]	M6X1.0	0.32 [8.1]
40-8M	0.20 [5.1]	0.69 [17.5]	0.14 [3.6]	M8X1.25	0.32 [8.1]
40-18M	0.19 [4.9]	0.69 [17.5]	0.22 [5.6]	G 1/8 NPSF	0.23 [5.9]
40-14M	0.20 [5.1]	0.69 [17.5]	0.22 [5.6]	1/4 NPT	0.36 [9.0]
40-38M	0.20 [5.1]	0.75 [19.0]	0.22 [5.6]	3/8 NPT	0.36 [9.0]
40-G14M	0.20 [5.1]	0.69 [17.5]	0.22 [5.6]	G 1/4	0.36 [9.0]
40-G38M	0.20 [5.1]	0.75 [19.0]	0.22 [5.6]	G 3/8	0.36 [9.0]



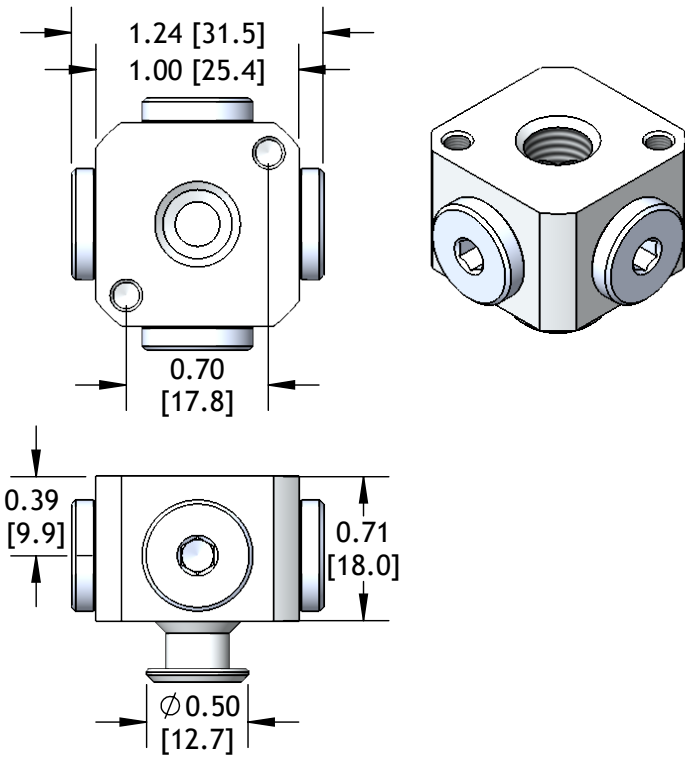
**Ø 40 MM CUPS - MALE STUD**



**40-6MS**

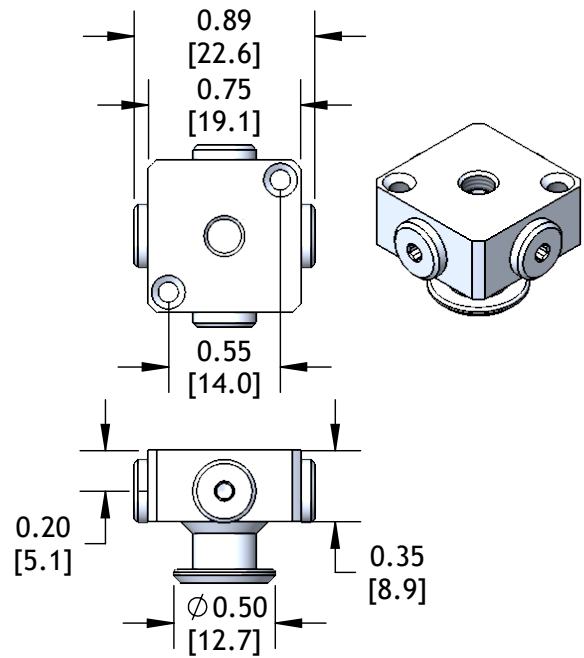
Assembly Suffix:	-6MS
Thread:	M6X1.0
Weight: oz [g]	0.07 [1.9]
Thru Hole: in [mm]	0.09 [2.4]

**Ø 40 MM CUPS - CROSS FITTINGS**



**40-5X18F**

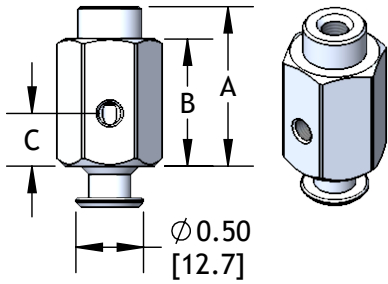
Assembly Suffix:	-5X18F
Threads:	G 1/8 NPSF (5)
Mount Threads:	M4X0.7 (2)
Weight: oz [g]	1.00 [28.3]
Thru Hole: in [mm]	0.22 [5.6]



**40-5X5F**

Assembly Suffix:	-5X5F
Threads:	M5X0.8 (5)
Mount Threads:	M3X0.5 (2)
Weight: oz [g]	0.32 [9.0]
Thru Hole: in [mm]	0.16 [4.1]

**Ø 40 MM CUPS - M5 FEMALE SIDE VACUUM PORT W/ FEMALE MOUNT**



**Technical Data**

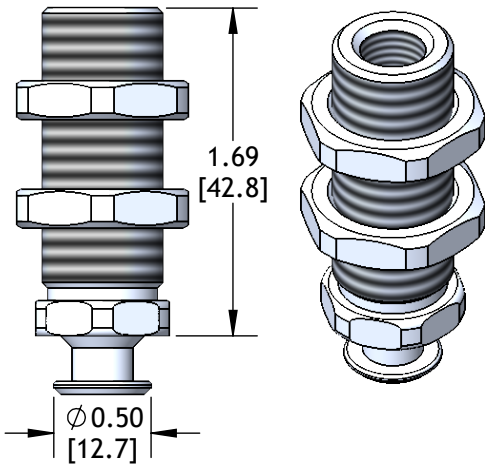
Fitting	Assembly Suffix	Weight oz [g]	Hex Size in [mm]
40-S5F-6F	-S5F-6F	0.69 [19.6]	0.69 [17.5]
40-S5F-8F	-S5F-8F	0.63 [17.9]	0.69 [17.5]

**Dimensions**

Fitting	A in [mm]	B in [mm]	C in [mm]	Mount Thread	Thread Depth in [mm]
40-S5F-6F	1.18 [30.0]	0.94 [23.9]	0.39 [9.9]	M6X1.0	0.25 [6.3]
40-S5F-8F	1.18 [30.0]	0.87 [22.0]	0.39 [9.9]	M8X1.25	0.32 [8.1]

**Ø 40 MM CUPS - TOOL MOUNT**

JN-M16X1 (2) jam nuts included.

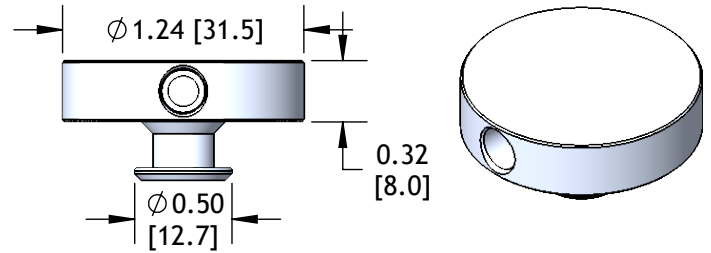


**40-18FX40**

Assembly Suffix:	-18FX40
Female Threads:	G 1/8 NPSF
Thread Depth: in [mm]	0.38 [9.7]
Post Threads:	M16X1.0
Hex Size: in [mm]	0.69 [17.5]
Hex Height: in [mm]	0.18 [4.6]
Weight: oz [g]	0.80 [22.7]
Thru Hole: in [mm]	0.22 [5.5]

**Ø 40 MM CUPS - DIE CUTTING**

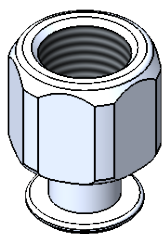
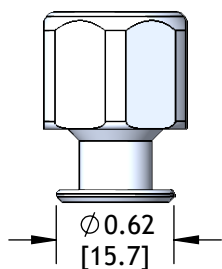
Contains push-in bore (2) for Ø 6 mm tubing.



**40-DC125X31**

Assembly Suffix:	-DC125X31
Weight: oz [g]	0.58 [16.3]
Thru Hole: in [mm]	0.16 [4.0]

**Ø 50 MM CUPS - FEMALE**



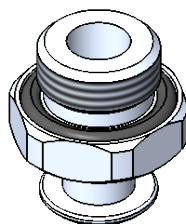
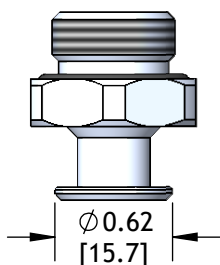
**Technical Data**

Fitting	Assembly Suffix	Weight oz [g]
50-6F	-6F	0.42 [11.9]
50-8F	-8F	0.38 [10.8]
50-18F	-18F	0.23 [6.5]
50-14F	-14F	0.36 [10.2]
50-38F	-38F	0.51 [14.5]
50-G14F	-G14F	0.37 [10.5]

**Dimensions**

Fitting	Hex Height in [mm]	Hex Size in [mm]	Thru Hole in [mm]	Thread	Thread Depth in [mm]
50-6F	0.55 [14.0]	0.69 [17.5]	0.14 [3.6]	M6X1.0	0.25 [6.4]
50-8F	0.55 [14.0]	0.69 [17.5]	0.14 [3.6]	M8X1.25	0.32 [8.1]
50-18F	0.35 [8.8]	0.69 [17.5]	0.22 [5.6]	G 1/8 NPSF	0.25 [6.4]
50-14F	0.62 [15.6]	0.75 [19.0]	0.22 [5.6]	1/4 NPTF	0.40 [10.0]
50-38F	0.70 [17.8]	0.88 [22.2]	0.22 [5.6]	3/8 NPSF	0.45 [11.4]
50-G14F	0.63 [15.9]	0.75 [19.0]	0.22 [5.6]	G 1/4	0.45 [11.4]

**Ø 50 MM CUPS - MALE**



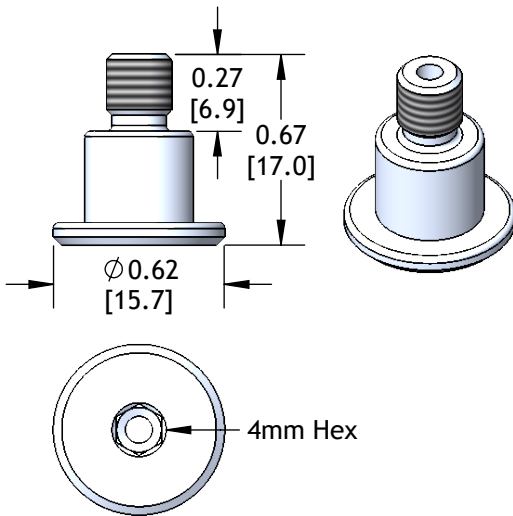
**Technical Data**

Fitting	Assembly Suffix	Weight oz [g]
50-6M	-6M	0.23 [6.5]
50-8M	-8M	0.23 [6.5]
50-18M	-18M	0.20 [5.7]
50-14M	-14M	0.23 [6.5]
50-38M	-38M	0.31 [8.8]
50-G14M	-G14M	0.25 [7.1]
50-G38M	-G38M	0.31 [8.8]
50-N18M	-N18M	0.20 [5.7]

**Dimensions**

Fitting	Hex Height in [mm]	Hex Size in [mm]	Thru Hole in [mm]	Thread	Thread Length in [mm]
50-6M	0.20 [5.1]	0.69 [17.5]	0.14 [3.6]	M6X1.0	0.32 [8.1]
50-8M	0.20 [5.1]	0.69 [17.5]	0.14 [3.6]	M8X1.25	0.32 [8.1]
50-18M	0.20 [5.1]	0.69 [17.5]	0.22 [5.6]	G 1/8 NPSF	0.23 [5.9]
50-14M	0.20 [5.1]	0.69 [17.5]	0.22 [5.6]	1/4 NPT	0.35 [9.0]
50-38M	0.20 [5.1]	0.75 [19.0]	0.22 [5.6]	3/8 NPSF	0.35 [9.0]
50-G14M	0.20 [5.1]	0.69 [17.5]	0.22 [5.6]	G 1/4	0.35 [9.0]
50-G38M	0.20 [5.1]	0.75 [19.0]	0.22 [5.6]	G 3/8	0.35 [9.0]
50-N18M	0.20 [5.1]	0.69 [17.5]	0.22 [5.6]	1/8 NPT	0.39 [9.9]

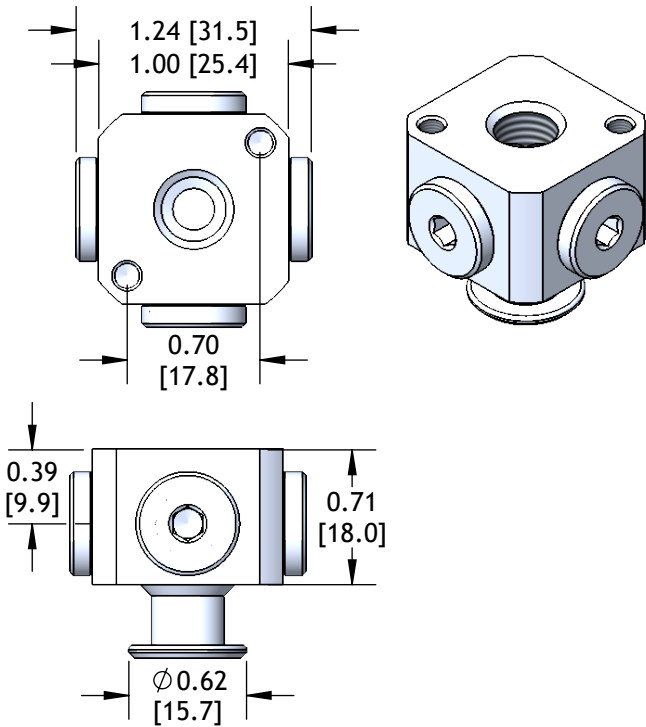
**Ø 50 MM CUPS - MALE STUD**



**50-6MS**

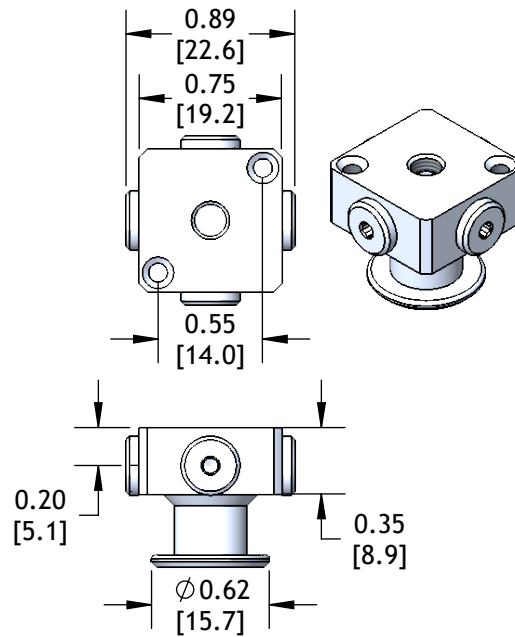
Assembly Suffix:	-6MS
Thread:	M6X1.0
Weight: oz [g]	0.12 [3.4]
Thru Hole: in [mm]	0.02 [2.5]

**Ø 50 MM CUPS - CROSS FITTINGS**



**50-5X18F**

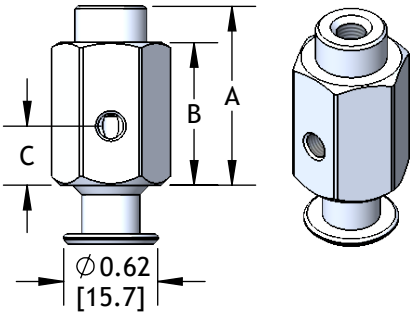
Assembly Suffix:	-5X18F
Threads:	G 1/8 NPSF (5)
Mount Threads:	M4X0.7 (2)
Weight: oz [g]	1.00 [29.7]
Thru Hole: in [mm]	0.22 [5.6]



**50-5X5F**

Assembly Suffix:	-5X5F
Threads:	M5X0.8 (5)
Mount Threads:	M3X0.5 (2)
Weight: oz [g]	0.36 [10.1]
Thru Hole: in [mm]	0.16 [4.1]

**Ø 50 MM CUPS - M5 FEMALE SIDE VACUUM W/ FEMALE PORT**



**Technical Data**

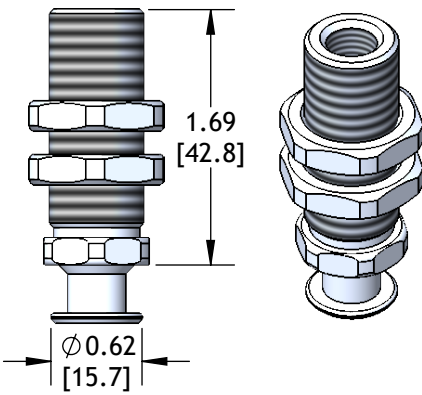
Fitting	Assembly Suffix	Weight oz [g]	Hex Size in [mm]
50-S5F-6F	-S5F-6F	0.74 [21.0]	0.69 [17.5]
50-S5F-8F	-S5F-8F	0.68 [19.3]	0.69 [17.5]

**Dimensions**

Fitting	A in [mm]	B in [mm]	C in [mm]	Mount Thread	Thread Depth in [mm]
50-S5F-6F	1.18 [30.0]	0.94 [23.9]	0.39 [9.9]	M6X1.0	0.25 [6.3]
50-S5F-8F	1.18 [30.0]	0.87 [22.0]	0.39 [9.9]	M8X1.25	0.32 [8.1]

**Ø 50 MM CUPS - TOOL MOUNT**

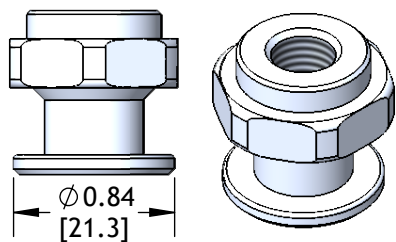
JN-M16X1 (2) jam nuts included.



**50-18FX40**

Assembly Suffix:	-18FX40
Female Threads:	G 1/8 NPSF
Thread Depth: in [mm]	0.38 [9.7]
Post Threads:	M16X1.0
Hex Size: in [mm]	0.69 [17.5]
Hex Height: in [mm]	0.18 [4.6]
Weight: oz [g]	0.83 [23.5]
Thru Hole: in [mm]	0.21 [5.3]

**Ø 65 MM CUPS - FEMALE**



Technical Data

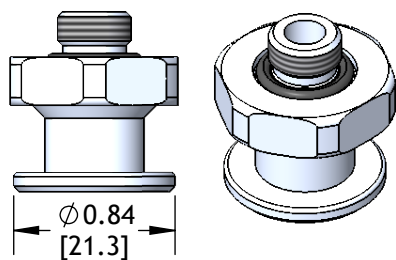
Fitting	Assembly Suffix	Weight oz [g]
65-18F	-18F	0.43 [12.2]
65-38F	-38F	0.66 [18.6]
65-G14F	-G14F	0.45 [12.7]

Dimensions

Fitting	Hex Height in [mm]	Offset Height in [mm]	Thru Hole in [mm]	Thread	Thread Depth in [mm]
65-18F	0.25 [6.4]	0.15 [3.8]	0.34 [8.6]	G 1/8 NPSF	0.38 [7.1]
65-38F	0.82 [20.8]	N/A	0.34 [8.6]	3/8 NPSF	0.55 [14.0]
65-G14F	0.25 [6.4]	0.34 [8.5]	0.34 [8.6]	G 1/4	0.45 [11.4]

Hex Size = 0.88 [22.4] for all 65 mm Cup Fittings

**Ø 65 MM CUPS - MALE**



Technical Data

Fitting	Assembly Suffix	Weight oz [g]
65-18M	-18M	0.43 [12.3]
65-14M	-14M	0.45 [12.7]
65-38M	-38M	0.45 [12.7]
65-G14M	-G14M	0.45 [12.7]
65-G38M	-G38M	0.45 [12.7]

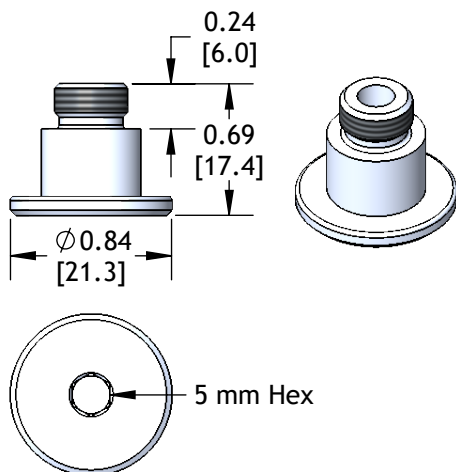
Dimensions

Fitting	Hex Height in [mm]	Thru Hole in [mm]	Thread	Thread Length in [mm]
65-18M	0.25 [6.4]	0.22 [5.6]	G 1/8 NPSF	0.24 [6.1]
65-14M	0.29 [7.4]	0.28 [7.1]	1/4 NPT	0.27 [6.9]
65-38M	0.25 [6.4]	0.34 [8.6]	3/8 NPSF	0.35 [8.9]
65-G14M	0.29 [7.4]	0.28 [7.1]	G 1/4	0.27 [6.9]
65-G38M	0.25 [6.4]	0.34 [8.6]	G 3/8	0.35 [8.9]

65-38M and 65-G38M also have G 1/8 NPSF Female Threads

Hex Size = 0.88 [22.4] on all 65 mm Cup Fittings

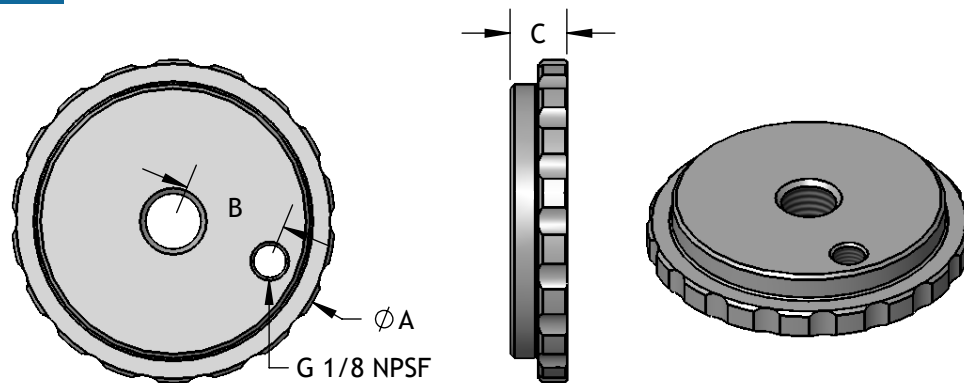
**Ø 65 MM CUPS - MALE STUD**



65-18MS

Assembly Suffix:	-18MS
Thread:	G 1/8 NPT
Weight: oz [g]	0.21 [5.9]
Thru Hole: in [mm]	0.20 [5.0]

**Ø 75-150 MM CUPS**



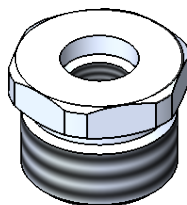
Fitting	Assembly Suffix	Weight oz [g]	A in [mm]	B in [mm]	C in [mm]	Thread
75-18F	-18F	2.80 [79.4]	2.36 [60.0]	N/A	0.68 [17.3]	G 1/8 NPSF
75-14F	-14F	2.70 [76.5]	2.36 [60.0]	N/A	0.68 [17.3]	1/4 NPSF
75-G14F	-G14F	2.70 [76.5]	2.36 [60.0]	N/A	0.68 [17.3]	G 1/4
75-38F	-38F	2.70 [76.5]	2.36 [60.0]	N/A	0.68 [17.3]	3/8 NPSF
75-G38F	-G38F	2.70 [76.5]	2.36 [60.0]	N/A	0.68 [17.3]	G 3/8
75-12F	-12F	2.60 [73.7]	2.36 [60.0]	N/A	0.68 [17.3]	G 1/2 NPSF
110-38F	-38F	5.10 [145.0]	3.35 [85.1]	1.10 [27.9]	0.59 [15.0]	3/8 NPSF
110-12F	-12F	5.10 [145.0]	3.35 [85.1]	1.10 [27.9]	0.59 [15.0]	G 1/2 NPSF
150-38F	-38F	8.50 [241.0]	4.72 [120.0]	1.38 [25.0]	0.56 [14.2]	3/8 NPSF
150-12F	-12F	8.50 [241.0]	4.72 [120.0]	1.38 [25.0]	0.56 [14.2]	G 1/2 NPSF

All 75 - 150 fittings include M4X10-965A Stainless Steel Screws and SS Filter Screen.  
 Sizes 110 and 150 fittings also include an FS21 Filter Screen and P18 Plug for Auxiliary Port.

**METRIC BUSHINGS**

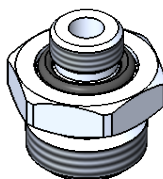
For use with 75-12F, 110-12F, and 150-12F fittings.

Bushing	Female Thread	Weight oz [g]
G12M-M8X1.25F	M8X1.25	0.49 [13.8]
G12M-M10X1.25F	M10X1.25	0.45 [12.7]
G12M-M10X1.5F	M10X1.5	0.45 [12.7]
G12M-M12X1.75F	M12X1.75	0.40 [11.3]
G12M-M16X1.5F	M16X1.5	0.24 [6.8]



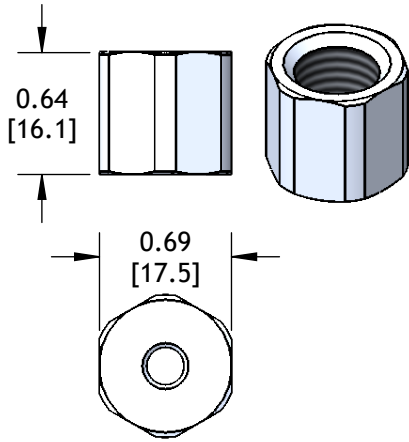
**CUP FITTING ADAPTERS**

Adapter	Thread 1	Thread 2	Weight oz [g]
38MX18M	G 3/8 NPT	G 1/8 NPT	0.26 [7.3]
38MX38M	G 3/8 NPT	G 3/8 NPT	0.31 [8.9]
38MX12M	G 3/8 NPT	G 1/2 NPT	0.59 [16.8]
12MX12M	G 1/2 NPT	G 1/2 NPT	0.77 [21.7]



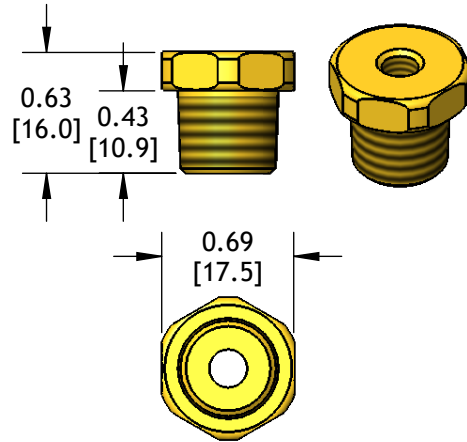
## MALE STUD ADAPTERS

For use with 32-6MS, 40-6MS, and 50-6MS fittings.



**6F-G14F**

Thread 1:	G 1/4
Thread 2:	M6X1.0
Weight: oz [g]	0.28 [7.9]

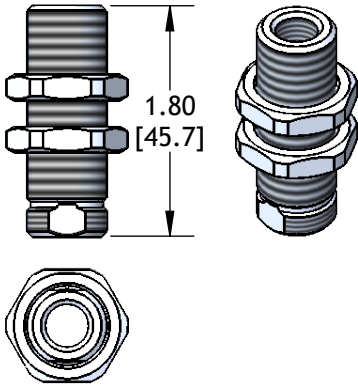


**6F-14M**

Thread 1:	1/4 NPTF
Thread 2:	M6X1.0
Weight: oz [g]	0.68 [19.3]

## TOOL MOUNT ADAPTERS

For use with -18M fittings. JN-M16X1 (2) jam nuts included.

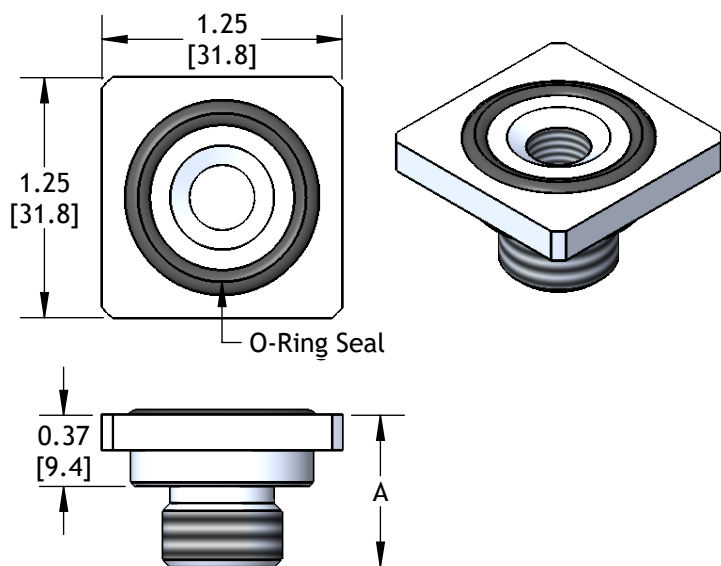


**18F-16X40**

Port Threads:	G 1/8 NPSF
Post Threads:	M16X1.0
Weight: oz [g]	1.10 [31.2]



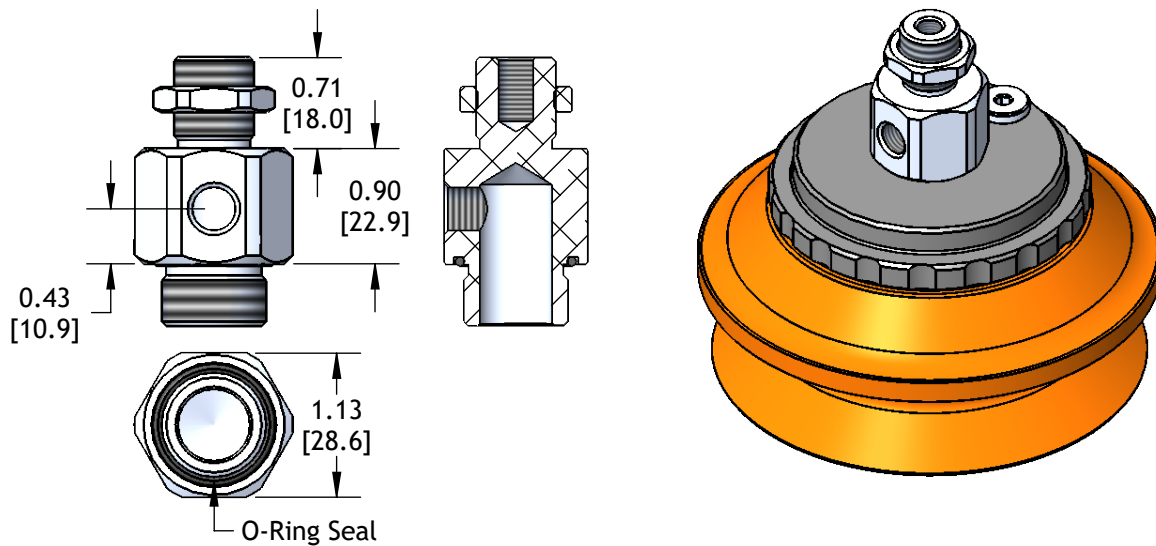
### T-SLOT ADAPTERS



Adapter	A in [mm]	Thread	Weight oz [g]
TSA-18M	0.61 [15.5]	G 1/8 NPS	0.75 [21.3]
TSA-38M	0.79 [20.0]	3/8 NPSF	0.68 [19.3]
TSA-12M	0.79 [20.0]	G 1/2 NPS	0.59 [16.7]

### SIDE VACUUM PORT ADAPTER

For use with 75-12F, 110-12F, and 150-12F fittings. JN-M16X1 (1) jam nut included.



12M-S18F-16M

Port Threads:	G 1/8 NPSF
Post Threads:	M16X1.0
Female Post Threads:	M8X1.25
Connection Threads:	G 1/2 NPSF
Weight: oz [g]	1.80 [50.8]

**SS12: SHEET SEPARATOR**

Used to warp the edges of sheet goods to promote separation from the next sheet in a stack. As vacuum is applied to the vacuum cup, the cup pulls the sheet against a crowned brass center post and warps it slightly to produce a small air passage under the sheet edge which facilitates sheet separation. One separator per corner is recommended. Depending on the size and thickness of sheet material, more units may be required. The degree of the warp can be adjusted by changing the projection distance of the center post from the cup cleats or the amount of vacuum applied to the vacuum cup. A 150 mm size cup produces a very large force and should only be used with thicker materials to prevent marking the product.

Sheet Separators can be ordered on their own to add to your cup by using the SS-12 part number. To order a sheet separator with a cup already attached, use the chart below. Sheet Separators are compatible with XP-F110 and XP-F150 cups using 12F fittings.

Cup Size & Style		Cup Material	
XP-	F110	N	-12F-SS
F110	Flat Cup, 110 mm	N	Nitrile
F150	Flat Cup, 150 mm	S	Silicone
		V	Viton

