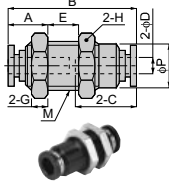


PM

Bulkhead Union



Model	Tube dia. ϕD	M	A	B	ϕP	C	E	H	G	Mass (g)	Orifice (ϕmm)	Eff. a. (mm^2)
PM 4	4	M12x1	9.5	31.5	11	15	7	14	4	10.5	3	5.3
PM 6	6	M14x1	10	35.5	12.5	17	10	17	4	16	4.6	12.5
PM 8	8	M16x1	10.5	38	14.5	18	9	19	4	19.5	6	20
PM 10	10	M20x1	11.5	43	18.5	20	13	24	5	37.5	8	35
PM 12	12	M22x1	12.5	48	20.5	23.5	18	27	6	56	11	71
PM 1/4	1/4	M14x1	9.5	35	12.5	17	10	17	4	15.5	4.6	12.5
PM 5/16	5/16	M16x1	10	37.5	14.5	18	9	19	4	19.5	6	20
PM 3/8	3/8	M20x1	11	43	18.5	20	13	24	5	38	8	35



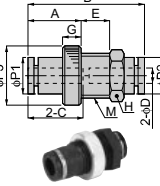
1

unit:inch

MODEL	Tube dia. ϕD	M(UNF)	A	B	ϕP	C	E	H	Weight (g)	Orifice ϕMM	Eff. a. mm^2	Cv
PM 5/32U	5/32	1/2-20	0.37	1.22	0.43	0.59	0.28	9/16	11.3	3.0	5.3	0.29
PM 3/16U	3/16	9/16-18	0.39	1.38	0.49	0.67	0.39	11/16	19.7	4.0	6.1	0.33
PM 1/4U	1/4	9/16-18	0.39	1.38	0.49	0.67	0.39	11/16	19.3	4.6	12.5	0.68
PM 5/16U	5/16	5/8-18	0.41	1.48	0.56	0.71	0.35	3/4	22.9	6.0	20.0	1.08
PM 3/8U	3/8	7/8-14	0.45	1.69	0.73	0.79	0.51	1	48.5	8.0	29.4	1.59
PM 1/2U	1/2	7/8-14	0.49	1.85	0.80	0.93	0.71	1	50.1	11.0	71.0	3.85

PMP

Bulkhead Union P



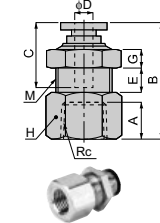
Model	Tube dia. ϕD	M	A	B	$\phi P1$	$\phi P2$	$\phi P3$	C	E	H	G	Mass (g)	Orifice (ϕmm)	Eff. a. (mm^2)
PMP 4	4	M12x1.5	14	32	10.5	10	16	15	8	14	5	7	3	4.2
PMP 6	6	M14x1.5	15	36	13	12.5	19	17	11	17	5	9.5	5	10.7
PMP 8	8	M16x1.5	17	39	15	14.5	22	18	11	19	6	13.5	7	19.1
PMP 10	10	M20x2	17.5	43.5	18	17.5	27.5	20	13	24	6	23	8	39.6
PMP 12	12	M24x2	20	49	21.5	21	31	23.5	16	27	6	31	11	47.6
PMP 1/4	1/4	M14x1.5	15	36	12.5	12.5	19	17	11	17	5	9.5	5	13.2
PMP 5/16	5/16	M16x1.5	17	39	14.5	14.5	22	18	11	19	6	13.5	7	19.2
PMP 3/8	3/8	M20x2	17.5	43.5	17.5	17.5	27.5	20	13	24	6	23	8	32.5



1

PMF

Bulkhead Female Straight



Model	Tube dia. ϕD	Rc	M	A	B	C	E	H	G	Mass (g)	Orifice (ϕmm)	Eff. a. (mm^2)
PMF 4-01	4	Rc1/8	M12x1	8	24.5	15	5.5	14	4	18.5	3	5.8
PMF 6-01	6	Rc1/8	M14x1	8	27.5	17	7.5	17	4	29.5	6	12.7
PMF 6-02	6	Rc1/4	M14x1	11	30.5	17	7.5	17	4	29.5	6	12.7
PMF 8-01	8	Rc1/8	M16x1	8	29	18	11	19	4	38.5	8	22.5
PMF 8-02	8	Rc1/4	M16x1	11	32	18	11	19	4	40.5	8	23.4
PMF 8-03	8	Rc3/8	M16x1	12	33	18	11	19	4	34	8	22.3
PMF 10-02	10	Rc1/4	M20x1	11	35	20	9.5	24	5	77.5	10	41.1
PMF 10-03	10	Rc3/8	M20x1	12	36	20	9.5	24	5	73	10	40
PMF 12-03	12	Rc3/8	M22x1	12	39	23.5	11.5	24	6	85	12	70.3
PMF 12-04	12	Rc1/2	M22x1	15	42	23.5	11.5	24	6	80	12	70.1



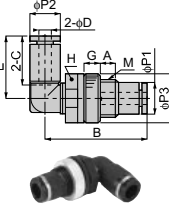
2

unit:inch

MODEL	Tube dia. ϕD	NPT	M(UNF)	A	B	C	E	H	Weight (g)	Orifice ϕMM	Eff. a. mm^2	Cv
PMF 5/32-N1U	5/32	1/8	1/2-20	0.31	0.98	0.59	0.22	9/16	18.8	3.0	5.8	0.31
PMF 3/16-N1U	3/16	1/8	9/16-18	0.31	1.08	0.67	0.30	11/16	32.3	4.6	6.4	0.35
PMF 3/16-N2U	3/16	1/4	9/16-18	0.43	1.20	0.67	0.30	11/16	32.7	4.6	6.0	0.33
PMF 1/4-N1U	1/4	1/8	9/16-18	0.31	1.08	0.67	0.30	11/16	31.0	4.6	13.8	0.75
PMF 1/4-N2U	1/4	1/4	9/16-18	0.43	1.20	0.67	0.30	11/16	30.2	4.6	12.7	0.69
PMF 5/16-N1U	5/16	1/8	5/8-18	0.31	1.14	0.71	0.43	3/4	39.3	6.0	22.5	1.22
PMF 5/16-N2U	5/16	1/4	5/8-18	0.43	1.26	0.71	0.43	3/4	40.2	6.0	23.4	1.27
PMF 5/16-N3U	5/16	3/8	5/8-18	0.47	1.30	0.71	0.43	3/4	34.9	6.0	22.3	1.21
PMF 3/8-N2U	3/8	1/4	7/8-14	0.43	1.38	0.79	0.37	1	92.4	8.5	32.0	1.73
PMF 3/8-N3U	3/8	3/8	7/8-14	0.47	1.42	0.79	0.37	1	89.3	8.5	32.7	1.77
PMF 1/2-N3U	1/2	3/8	7/8-14	0.47	1.54	0.93	0.45	1	86.3	11.0	70.3	3.81
PMF 1/2-N4U	1/2	1/2	7/8-14	0.59	1.65	0.93	0.45	1	82.3	11.0	70.1	3.80

PML

Bulkhead Union Elbow



Model	Tube dia. ϕD	M	A	B	$\phi P1$	$\phi P2$	$\phi P3$	C	E	H	G	Mass (g)	Orifice (ϕmm)	Eff. a. (mm^2)
PML 4	4	M12x1.5	6	33	10	10	16	15	20	14	5	9.5	2.9	3.4
PML 6	6	M14x1.5	9	38	12.5	12.5	19	17	23	17	5	14	3.5	9.4
PML 8	8	M16x1.5	9	42	14.5	14.5	22	18	24	19	6	20.5	6.2	19.3
PML 10	10	M20x2	11	48	17.5	17.5	27.5	20	29.5	24	6	36	8	28.1
PML 12	12	M24x2	14	55	21	21	31	23.5	33	27	6	52	9.2	37.2
PML 1/4	1/4	M14x1.5	9	38	12.5	12.5	19	17	23	17	5	14	3.5	10.8
PML 5/16	5/16	M16x1.5	9	42	14.5	14.5	22	18	24	19	6	20.5	6.2	19.3
PML 3/8	3/8	M20x2	11	48	17.5	17.5	27.5	20	29.5	24	6	36	8	22.8



1