



MASON INDUSTRIES, Inc.

MERCER RUBBER Co.

350 Rabro Drive, Hauppauge, NY 11788  
Mason- 631/348-0282 • Info@Mason-Ind.com  
Mercer- 631/582-1524 • Info@Mercer-Rubber.com  
FAX 631/348-0279

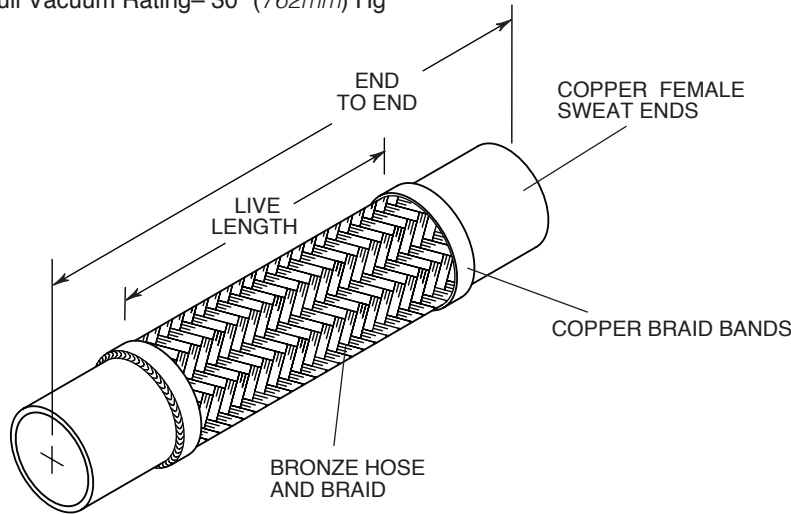


JOB NAME \_\_\_\_\_  
CUSTOMER \_\_\_\_\_  
CUSTOMER P.O. \_\_\_\_\_  
MASON M. \_\_\_\_\_  
DWG No. \_\_\_\_\_

**CPSB-MG**

**MEDICAL GAS  
RATED BRAIDED  
BRONZE HOSE  
with COPPER  
SWEAT ENDS**

Full Vacuum Rating- 30" (762mm) Hg

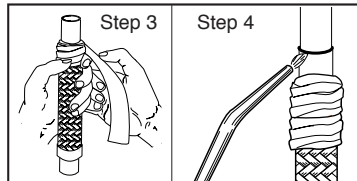


NOTE: CPSB-MG hoses are cleaned and bagged for medical gas applications. Manufactured in accordance with NFPA99 Requirements.

**Industry Standard  
Pump Connectors**  
Short lengths conserve space but allow minimum motion and attenuation. Offset Ratings are industry standard.

**INSTALLATION:**

1. Thoroughly clean male and female ends using steel wool and steel brushes.
2. Nitrogen purge- flux not permitted.
3. Wrap base of copper fitting on connector and 2" (50mm) of the braid with a wet cloth to prevent overheating during soldering.
4. Direct the torch away from the base of the copper fitting and braided section. Avoid contact of the flame with the base of the copper fitting and braid. Heat end of copper fitting for proper flow of silver solder. Silver solder flows at approximately 430°F (221°C).
5. Use caution with brazing rod or other higher temperature techniques. Overheating will cause leaks.
6. Remove wet cloth immediately after installation.



**RATED PRESSURES @  
ELEVATED TEMPERATURES (psi) (kg/cm²)**

Hose Size (in) (mm)	150°F 66°C Factor 0.92		300°F 149°C Factor 0.83		400°F 204°C Factor 0.78	
	1/2	15	460	32	415	29
3/4	20	432	30	390	27	367
1	25	414	29	373	26	351
1 1/4	32	368	25	332	23	312
1 1/2	40	308	21	278	19	261
2	50	216	15	195	13	183
2 1/2	65	212	15	191	13	179
3	80	207	14	187	12	175
4	100	202	14	183	12	172

When using CPSB-MG products in stainless steel water systems, dielectric unions must be used on each end to prevent leakage from galvanic action.

**CPSB-MG DIMENSIONS AND PRESSURE RATINGS (American Units)**

Type	Tubing Size & End to End (in)	Live Length (in)	Corrugations per foot	Maximum Permanent Lateral Offset (in)	Rated Pressure @70°F (psi)
CPSB-MG	1/2 X 6 1/2	23/4	73	1/8	500
CPSB-MG	3/4 X 7	23/4	67	1/8	470
CPSB-MG	1 X 8	33/8	58	1/8	450
CPSB-MG	1 1/4 X 8 1/2	33/4	55	1/8	400
CPSB-MG	1 1/2 X 9	4	53	1/8	335
CPSB-MG	2 X 12	6 1/2	51	1/4	235
CPSB-MG	2 1/2 X 12	4 3/4	34	1/8	230
CPSB-MG	3 X 12	4 1/2	30	1/8	225
CPSB-MG	4 X 18	9 1/2	28	1/2	220

**CPSB-MG DIMENSIONS AND PRESSURE RATINGS (Metric Units)**

Type	Tubing Size & End to End (mm)	Live Length (mm)	Corrugations per meter	Maximum Permanent Lateral Offset (mm)	Rated Pressure @21°C (kg/cm²)
CPSB-MG	15 X 165	70	240	3	37
CPSB-MG	20 X 178	70	220	3	32
CPSB-MG	25 X 203	86	190	3	31
CPSB-MG	32 X 216	95	180	3	28
CPSB-MG	40 X 229	102	174	3	23
CPSB-MG	50 X 305	165	167	6	16
CPSB-MG	65 X 305	121	112	3	16
CPSB-MG	80 X 305	114	98	3	15
CPSB-MG	100 X 457	241	92	13	15

End to End Tolerance: minus 1% plus 3%. Minimum Burst is four times the Rated Pressure. Safety factor of 4.  
Female end fits over copper tubing, e.g. 1/2 x 6 1/2 (15 x 163mm) fits over 1/2" (15mm) tubing.  
Lateral Offset one side of centerline and normal machinery vibration. If intermittent in both directions, reduce by 50%.

QTY	SIZE	TAG

QTY	SIZE	TAG



MASON INDUSTRIES, Inc.

MERCER RUBBER Co.

350 Rabro Drive, Hauppauge, NY 11788  
 Mason- 631/348-0282 • Info@Mason-Ind.com  
 Mercer- 631/582-1524 • Info@Mercer-Rubber.com  
 FAX 631/348-0279

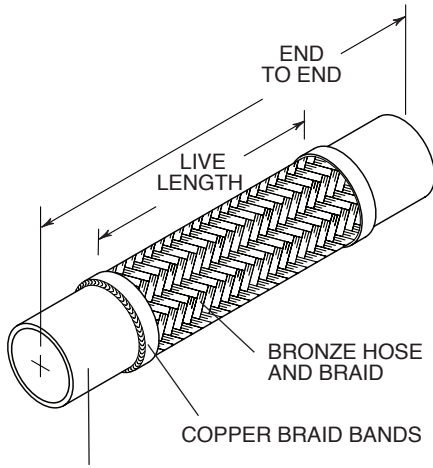


JOB NAME \_\_\_\_\_  
 CUSTOMER \_\_\_\_\_  
 CUSTOMER P.O. \_\_\_\_\_  
 MASON M. \_\_\_\_\_  
 DWG No. \_\_\_\_\_

**CPSB-MG**

**MEDICAL GAS  
 RATED BRAIDED  
 BRONZE HOSE  
 with COPPER  
 SWEAT ENDS**

Full Vacuum Rating— 30" (762mm) Hg



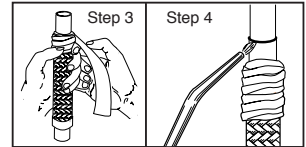
COPPER FEMALE  
 SWEAT ENDS

**NOTE:** CPSB-MG hoses are cleaned and bagged for medical gas applications. Manufactured in accordance with NFPA99 Requirements.

When using CPSB-MG products in stainless steel water systems, dielectric unions must be used on each end to prevent leakage from galvanic action.

**INSTALLATION:**

1. Thoroughly clean male and female ends using steel wool and steel brushes.
2. Nitrogen purge— flux not permitted.
3. Wrap base of copper fitting on connector and 2" (50mm) of the braid with a wet cloth to prevent overheating during soldering.
4. Direct the torch away from the base of the copper fitting and braided section. Avoid contact of the flame with the base of the copper fitting and braid. Heat end of copper fitting for proper flow of silver solder. Silver solder flows at approximately 430°F (221°C).
5. Use caution with brazing rod or other higher temperature techniques. Overheating will cause leaks.
6. Remove wet cloth immediately after installation.



**RATED PRESSURES @ ELEVATED TEMPERATURES (psi) (kg/cm²)**

Hose Size (in) (mm)	150°F	300°F	400°F
	66°C Factor 0.92	149°C Factor 0.83	204°C Factor 0.78
1/2 15	460 32	415 29	390 27
3/4 20	432 30	390 27	367 25
1 25	414 29	373 26	351 24
1 1/4 32	368 25	332 23	312 22
1 1/2 40	308 21	278 19	261 18
2 50	216 15	195 13	183 13
2 1/2 65	212 15	191 13	179 12
3 80	207 14	187 12	175 12
4 100	202 14	183 12	172 12

**CPSB-MG DIMENSIONS AND PRESSURE RATINGS (American Units)**

Type	Tubing Size & End to End (in)	Live Length (in)	Corrugations per foot	Maximum Permanent Lateral Offset (in)	Rated Pressure @70°F (psi)
CPSB-MG	1/2 X 12	81/4	73	1	500
CPSB-MG	1/2 X 18	141/4	73	3	500
CPSB-MG	1/2 X 24	201/4	73	6	500
CPSB-MG	1/2 X 36	321/4	73	12 1/2	500
CPSB-MG	3/4 X 12	73/4	67	3/4	470
CPSB-MG	3/4 X 18	133/4	67	2 1/2	470
CPSB-MG	3/4 X 24	193/4	67	5 1/2	470
CPSB-MG	3/4 X 36	313/4	67	11	470
CPSB-MG	1 X 12	73/8	58	5/8	450
CPSB-MG	1 X 18	133/8	58	2 1/4	450
CPSB-MG	1 X 24	193/8	58	5	450
CPSB-MG	1 X 36	313/8	58	8 1/2	450
CPSB-MG	1 1/4 X 12	71/4	55	1/2	400
CPSB-MG	1 1/4 X 18	131/4	55	1 3/4	400
CPSB-MG	1 1/4 X 24	191/4	55	4	400
CPSB-MG	1 1/4 X 36	311/4	55	8	400
CPSB-MG	1 1/2 X 12	7	53	1/2	335
CPSB-MG	1 1/2 X 18	13	53	1 1/2	335
CPSB-MG	1 1/2 X 24	19	53	3 1/2	335
CPSB-MG	1 1/2 X 36	31	53	7 1/2	335
CPSB-MG	2 X 12	61/2	51	1/4	235
CPSB-MG	2 X 18	121/2	51	1 3/8	235
CPSB-MG	2 X 24	181/2	51	3 1/4	235
CPSB-MG	2 X 36	301/2	51	7	235
CPSB-MG	2 1/2 X 18	103/4	34	7/8	230
CPSB-MG	2 1/2 X 24	163/4	34	2	230
CPSB-MG	2 1/2 X 36	283/4	34	4 1/2	230
CPSB-MG	3 X 18	101/2	30	3/4	225
CPSB-MG	3 X 24	161/2	30	1 1/2	225
CPSB-MG	3 X 36	281/2	30	4 1/4	225
CPSB-MG	4 X 24	151/2	28	1 1/4	220
CPSB-MG	4 X 36	271/2	28	4	220

**CPSB-MG DIMENSIONS AND PRESSURE RATINGS (Metric Units)**

Type	Tubing Size & End to End (mm)	Live Length (mm)	Corrugations per meter	Maximum Permanent Lateral Offset (mm)	Rated Pressure @21°C (kg/cm²)
CPSB-MG	15 X 305	210	240	25	34
CPSB-MG	15 X 457	362	240	76	34
CPSB-MG	15 X 610	514	240	152	34
CPSB-MG	15 X 915	819	240	318	34
CPSB-MG	20 X 305	197	220	19	32
CPSB-MG	20 X 457	349	220	64	32
CPSB-MG	20 X 610	502	220	140	32
CPSB-MG	20 X 915	806	220	279	32
CPSB-MG	25 X 305	187	190	16	31
CPSB-MG	25 X 457	340	190	57	31
CPSB-MG	25 X 610	492	190	127	31
CPSB-MG	25 X 915	797	190	216	31
CPSB-MG	32 X 305	184	180	13	28
CPSB-MG	32 X 457	337	180	44	28
CPSB-MG	32 X 610	489	180	102	28
CPSB-MG	32 X 915	793	180	203	28
CPSB-MG	40 X 305	178	174	13	23
CPSB-MG	40 X 457	330	174	38	23
CPSB-MG	40 X 610	483	174	89	23
CPSB-MG	40 X 915	787	174	191	23
CPSB-MG	50 X 305	165	167	6	16
CPSB-MG	50 X 457	318	167	35	16
CPSB-MG	50 X 610	470	167	83	16
CPSB-MG	50 X 915	775	167	178	16
CPSB-MG	65 X 457	273	112	22	16
CPSB-MG	65 X 610	425	112	51	16
CPSB-MG	65 X 915	730	112	114	16
CPSB-MG	80 X 457	267	98	19	15
CPSB-MG	80 X 610	419	98	38	15
CPSB-MG	80 X 915	724	98	108	15
CPSB-MG	100 X 610	394	92	32	15
CPSB-MG	100 X 915	699	92	102	15

End to End Tolerance: minus 1% plus 3%. Minimum Burst is four times the Rated Pressure. Safety factor of 4.

Female end fits over copper tubing, e.g. 1/2 x 12 (15 x 300mm) fits over 1/2" (15mm) tubing.

Lateral Offset one side of centerline and normal machinery vibration. If intermittent in both directions, reduce by 50%.

QTY	SIZE	TAG

QTY	SIZE	TAG