

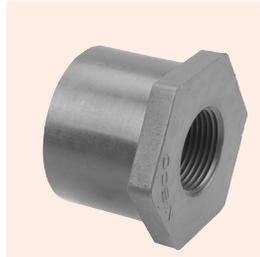
## Bushings

### Design Styles

The design style of most bushings is to have a solid wall between the inside and outside connections. Some of the multistep reductions with exceedingly thick cross-sections are not solid. This design style achieves structural support with a web of ribs attaching the inner and outer connection walls, with the open area toward the exterior bushing face. The styles are denoted by W and S for webbed and solid designs respectively.



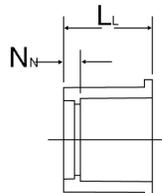
Webbed design



Solid design

Chemtrol  
Fig. No.

### 4518 Flush Socket Reducer Bushing (SPG x S)



Nominal Size	Universal Part No.	Approx. Lbs./Ea.	Design Style	Dim. L <sub>L</sub>	Dim. N <sub>N</sub>
1/2 x 1/4	837-072	0.03	S	1.17	0.53
3/4 x 1/2	837-101	0.05	S	1.15	0.26
1 x 1/2	837-130	0.06	S	1.28	0.39
1 x 3/4	837-131	0.05	S	1.28	0.27
1 1/4 x 1/2	837-166	0.10	S	1.41	0.52
1 1/4 x 3/4	837-167	0.10	S	1.41	0.40
1 1/4 x 1	837-168	0.06	S	1.41	0.27
1 1/2 x 1/2	837-209	0.12	W	1.53	0.64
1 1/2 x 3/4	837-210	0.10	S	1.53	0.52
1 1/2 x 1	837-211	0.08	S	1.53	0.39
1 1/2 x 1 1/4	837-212	0.06	S	1.53	0.27
2 x 1/2	837-247	0.20	W	1.66	0.77
2 x 3/4	837-248	0.20	W	1.66	0.65
2 x 1	837-249	0.20	W	1.66	0.52
2 x 1 1/4	837-250	0.19	S	1.66	0.40
2 x 1 1/2	837-251	0.15	S	1.66	0.27
2 1/2 x 1	837-289	0.31	W	1.94	0.80
2 1/2 x 1 1/4	837-290	0.31	W	1.94	0.68
2 1/2 x 1 1/2	837-291	0.27	S	1.94	0.55
2 1/2 x 2	837-292	0.24	S	1.94	0.43
3 x 1	837-335	0.65	W	2.42	1.28
3 x 1 1/2	837-337	0.67	W	2.42	1.03
3 x 2	837-338	0.64	S	2.42	0.91
3 x 2 1/2	837-339	0.48	S	2.42	0.64

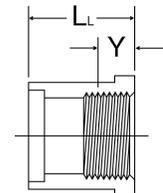
Chemtrol  
Fig. No.

### 4518 Flush Socket Reducer Bushing (SPG x S) (cont.)

Nominal Size	Universal Part No.	Approx. Lbs./Ea.	Design Style	Dim. L <sub>L</sub>	Dim. N <sub>N</sub>
4 x 2	837-420	1.14	W	2.81	1.30
4 x 2 1/2	837-421	1.14	S	2.81	1.03
4 x 3	837-422	0.93	S	2.81	0.91
6 x 2	837-528	3.28	W	3.06	1.55
6 x 4	837-532	2.68	S	3.06	0.78
8 x 6	837-585	5.46	S	4.59	1.56
10 x 6	837-626	10.68	W	5.59	2.56
10 x 8	837-628	9.36	S	5.59	1.09
12 x 8	837-668	16.73	W	6.59	2.09
12 x 10	837-670	12.77	S	6.59	1.09

Other Reducing Couplings are produced by solvent cementing appropriate Reducer Bushings into Socket Couplings. They may be ordered as factory fabrications or may be assembled in the field.

### 4518-3 Flush Spigot x Thread Reducer Bushing (SPG x FPT)



Nominal Size	Universal Part No.	Approx. Lbs./Ea.	Design Style	Dim. L <sub>L</sub>	Dim. Y*
1/2 x 1/4	838-072	0.03	S	1.17	0.31
3/4 x 1/4	838-098	0.04	S	1.29	0.31
3/4 x 1/2	838-101	0.03	S	1.29	0.43
1 x 1/2	838-130	0.07	S	1.56	0.43
1 x 3/4	838-131	0.05	S	1.56	0.45
1 1/4 x 1/2	838-166	0.14	S	1.66	0.43
1 1/4 x 3/4	838-167	0.12	S	1.66	0.45
1 1/4 x 1	838-168	0.10	S	1.66	0.53
1 1/2 x 1/2	838-209	0.21	S	1.78	0.43
1 1/2 x 3/4	838-210	0.19	S	1.78	0.45
1 1/2 x 1	838-211	0.17	S	1.78	0.53
1 1/2 x 1 1/4	838-212	0.18	S	1.78	0.55
2 x 1/2	838-247	0.34	S	1.92	0.43
2 x 3/4	838-248	0.32	S	1.92	0.45
2 x 1	838-249	0.29	S	1.92	0.53
2 x 1 1/4	838-250	0.24	S	1.92	0.55
2 x 1 1/2	838-251	0.20	S	1.92	0.55
2 1/2 x 2	838-292	0.25	S	2.18	0.57
3 x 1	838-335	0.65	S	2.42	0.53
3 x 1 1/2	838-337	0.70	S	2.42	0.55
3 x 2	838-338	0.67	S	2.42	0.57
3 x 2 1/2	838-339	0.52	S	2.42	0.87
4 x 2	838-420	1.17	S	2.81	0.57
4 x 3	838-422	1.01	S	2.81	0.95

Other size reductions are produced by solvent cementing appropriate Reducer Bushings together. They may be ordered as factory fabrications or may be assembled in the field.

\*Typical male component engagement, hand tight (L<sub>1</sub> in ASME B1.20.1 thread spec.) plus 1 1/2 turns.