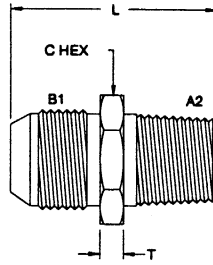


STAINLESS STEEL HYDRAULIC FITTINGS & ADAPTERS



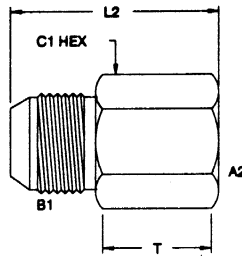
7800 Freedom Avenue N.W N. Canton, Ohio 44720-6978 Toll Free: 800-362-6533
Local: 330-497-9650 Fax: 330-497-0415



(070102) 2404

STRAIGHT ADAPTER 2404-SS SERIES

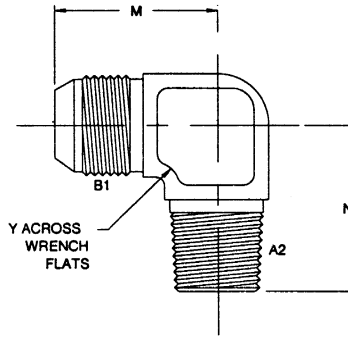
| PART NO. | SIZE | O.D. TUBE | B 1 SAE 37 | A 2 N.P.T.F. | L LGTH | M.M. | T WIDTH | M.M. | C HEX | M.M. |
|----------|----------|-----------|------------|--------------|--------|-------|---------|-------|---------|-------|
| 2404- | 02-02-SS | 1/8 | 5/16-24 | 1/8-27 | 1.11 | 28.19 | 0.220 | 5.59 | 7/16 | 11.13 |
| 2404- | 03-02-SS | 3/16 | 3/8-24 | 1/8-27 | 1.14 | 28.96 | 0.220 | 5.59 | 7/16 | 11.13 |
| 2404- | 04-02-SS | 1/4 | 7/16-20 | 1/8-27 | 1.22 | 30.94 | 0.220 | 5.59 | 1/2 | 12.70 |
| 2404- | 04-04-SS | 1/4 | 7/16-20 | 1/4-18 | 1.42 | 36.09 | 0.250 | 6.35 | 9/16 | 15.88 |
| 2404- | 04-06-SS | 1/4 | 7/16-20 | 3/8-18 | 1.43 | 36.32 | 0.250 | 6.35 | 3/4 | 19.05 |
| 2404- | 04-08-SS | 1/4 | 7/16-20 | 1/2-14 | 1.68 | 42.67 | 0.250 | 6.35 | 7/8 | 22.23 |
| 2404- | 05-02-SS | 5/16 | 1/2-20 | 1/8-27 | 1.22 | 30.94 | 0.220 | 5.59 | 9/16 | 14.27 |
| 2404- | 05-04-SS | 5/16 | 1/2-20 | 1/4-18 | 1.42 | 36.09 | 0.250 | 6.35 | 9/16 | 15.88 |
| 2404- | 06-02-SS | 3/8 | 9/16-18 | 1/8-27 | 1.25 | 31.75 | 0.250 | 6.35 | 5/8 | 15.88 |
| 2404- | 06-04-SS | 3/8 | 9/16-18 | 1/4-18 | 1.43 | 36.32 | 0.250 | 6.35 | 5/8 | 15.88 |
| 2404- | 06-06-SS | 3/8 | 9/16-18 | 3/8-18 | 1.42 | 36.09 | 0.250 | 6.35 | 13/16 | 19.05 |
| 2404- | 06-08-SS | 3/8 | 9/16-18 | 1/2-14 | 1.69 | 42.85 | 0.250 | 6.35 | 15/16 | 22.23 |
| 2404- | 08-04-SS | 1/2 | 3/4-16 | 1/4-18 | 1.53 | 38.89 | 0.250 | 6.35 | 13/16 | 20.62 |
| 2404- | 08-06-SS | 1/2 | 3/4-16 | 3/8-18 | 1.53 | 38.89 | 0.250 | 6.35 | 13/16 | 20.62 |
| 2404- | 08-08-SS | 1/2 | 3/4-16 | 1/2-14 | 1.78 | 45.24 | 0.310 | 7.87 | 15/16 | 22.23 |
| 2404- | 08-12-SS | 1/2 | 3/4-16 | 3/4-14 | 1.86 | 47.22 | 0.380 | 9.65 | 1 1/8 | 28.58 |
| 2404- | 08-16-SS | 1/2 | 3/4-16 | 1-11-1/2 | 2.05 | 51.97 | 0.380 | 9.65 | 1 3/8 | 34.93 |
| 2404- | 10-06-SS | 5/8 | 7/8-14 | 3/8-18 | 1.70 | 43.18 | 0.380 | 9.65 | 15/16 | 23.80 |
| 2404- | 10-08-SS | 5/8 | 7/8-14 | 1/2-14 | 1.89 | 48.01 | 0.310 | 7.87 | 15/16 | 23.80 |
| 2404- | 10-12-SS | 5/8 | 7/8-14 | 3/4-14 | 1.95 | 49.53 | 0.380 | 9.65 | 1 1/8 | 28.58 |
| 2404- | 10-16-SS | 5/8 | 7/8-14 | 1-11-1/2 | 2.15 | 54.53 | 0.380 | 9.65 | 1 3/8 | 34.93 |
| 2404- | 12-08-SS | 3/4 | 1 1/16-12 | 1/2-14 | 2.06 | 52.32 | 0.380 | 9.65 | 1 1/8 | 28.58 |
| 2404- | 12-12-SS | 3/4 | 1 1/16-12 | 3/4-14 | 2.06 | 52.37 | 0.380 | 9.65 | 1 1/8 | 28.58 |
| 2404- | 12-16-SS | 3/4 | 1 1/16-12 | 1-11-1/2 | 2.25 | 57.15 | 0.380 | 9.65 | 1 3/8 | 34.93 |
| 2404- | 14-12-SS | 7/8 | 1 3/16-12 | 3/4-14 | 2.09 | 53.09 | 0.380 | 9.65 | 1 1/4 | 28.58 |
| 2404- | 16-08-SS | 1 | 1 5/16-12 | 1/2-14 | 2.11 | 53.59 | 0.380 | 9.65 | 1 3/8 | 34.93 |
| 2404- | 16-12-SS | 1 | 1 5/16-12 | 3/4-14 | 2.11 | 53.57 | 0.380 | 9.65 | 1 3/8 | 34.93 |
| 2404- | 16-16-SS | 1 | 1 5/16-12 | 1-11-1/2 | 2.30 | 58.32 | 0.380 | 9.65 | 1 3/8 | 34.93 |
| 2404- | 16-20-SS | 1 | 1 5/16-12 | 1-1/4-11-1/2 | 2.40 | 60.96 | 0.460 | 11.68 | 1 3/4 | 44.45 |
| 2404- | 20-16-SS | 1 1/4 | 1 5/8-12 | 1-11-1/2 | 2.43 | 61.72 | 0.460 | 11.68 | 1 11/16 | 42.85 |
| 2404- | 20-20-SS | 1 1/4 | 1 5/8-12 | 1 1/4-11-1/2 | 2.45 | 62.31 | 0.460 | 11.68 | 1 11/16 | 42.85 |
| 2404- | 20-24-SS | 1 1/4 | 1 5/8-12 | 1-1/2-11-1/2 | 2.56 | 65.02 | 0.530 | 13.46 | 2 | 50.80 |
| 2404- | 24-20-SS | 1 1/2 | 1 7/8-12 | 1-1/4-11-1/2 | 2.68 | 68.07 | 0.530 | 13.46 | 2 | 50.80 |
| 2404- | 24-24-SS | 1 1/2 | 1 7/8-12 | 1 1/2-11-1/2 | 2.68 | 68.07 | 0.530 | 13.46 | 2 | 50.80 |
| 2404- | 32-24-SS | 2 | 2 1/2-12 | 1 1/2-11-1/2 | 3.08 | 78.23 | 0.680 | 17.27 | 2 5/8 | 66.68 |
| 2404- | 32-32-SS | 2 | 2 1/2-12 | 2-11-1/2 | 3.11 | 78.99 | 0.680 | 17.27 | 2 5/8 | 66.68 |



(070103) 2405

STRAIGHT ADAPTER FEMALE 2405-SS SERIES

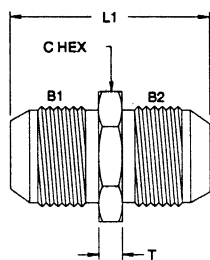
| PART NO. | SIZE | TUBE O.D. | B 1 THD | A 2 N.P.T.F. | L 2 LGTH | M.M. | T REF | M.M. | | C 1 HEX | M.M. |
|----------|----------|-----------|-----------|--------------|----------|-------|-------|-------|--|---------|-------|
| 2405- | 02-02-SS | 1/8 | 5/16-24 | 1/8-27 | 1.12 | 28.45 | 0.46 | 11.68 | | 9/16 | 14.30 |
| 2405- | 03-02-SS | 3/16 | 3/8-24 | 1/8-27 | 1.13 | 28.70 | 0.46 | 11.68 | | 9/16 | 14.30 |
| 2405- | 04-02-SS | 1/4 | 7/16-20 | 1/8-27 | 1.19 | 30.15 | 0.46 | 11.68 | | 9/16 | 14.27 |
| 2405- | 04-04-SS | 1/4 | 7/16-20 | 1/4-18 | 1.39 | 35.31 | 0.84 | 21.34 | | 3/4 | 19.05 |
| 2405- | 05-04-SS | 5/16 | 1/2-20 | 1/4-18 | 1.39 | 35.41 | 0.84 | 21.41 | | 3/4 | 19.05 |
| 2405- | 06-04-SS | 3/8 | 9/16-18 | 1/4-18 | 1.40 | 35.56 | 0.67 | 17.02 | | 3/4 | 19.05 |
| 2405- | 06-06-SS | 3/8 | 9/16-18 | 3/8-18 | 1.46 | 37.06 | 0.91 | 23.01 | | 7/8 | 22.23 |
| 2405- | 06-08-SS | 3/8 | 9/16-18 | 1/2-14 | 1.70 | 43.10 | 1.13 | 28.58 | | 1 1/8 | 28.58 |
| 2405- | 08-06-SS | 1/2 | 3/4-16 | 3/8-18 | 1.56 | 39.67 | 0.68 | 17.27 | | 7/8 | 22.23 |
| 2405- | 08-08-SS | 1/2 | 3/4-16 | 1/2-14 | 1.79 | 45.44 | 1.13 | 28.58 | | 1 1/8 | 28.58 |
| 2405- | 08-12-SS | 1/2 | 3/4-16 | 3/4-14 | 1.85 | 46.91 | 1.18 | 29.97 | | 1 3/8 | 34.80 |
| 2405- | 10-08-SS | 5/8 | 7/8-14 | 1/2-14 | 1.89 | 48.01 | 0.90 | 22.86 | | 1 1/8 | 28.58 |
| 2405- | 10-12-SS | 5/8 | 7/8-14 | 3/4-14 | 1.97 | 49.97 | 1.21 | 30.66 | | 1 3/8 | 34.93 |
| 2405- | 12-12-SS | 3/4 | 1 1/16-12 | 3/4-14 | 2.06 | 52.37 | 0.91 | 23.11 | | 1 3/8 | 34.93 |
| 2405- | 12-16-SS | 3/4 | 1 1/16-12 | 1-11-1/2 | 2.30 | 58.42 | 1.14 | 28.96 | | 1 5/8 | 41.15 |
| 2405- | 16-16-SS | 1 | 1 5/16-12 | 1-11-1/2 | 2.35 | 59.69 | 1.14 | 28.96 | | 1 5/8 | 41.28 |
| 2405- | 20-20-SS | 1 1/4 | 1 5/8-12 | 1-1/4-11-1/2 | 2.49 | 63.25 | 1.16 | 29.46 | | 2 | 50.80 |
| 2405- | 20-24-SS | 1 1/4 | 1 5/8-12 | 1-1/2-11-1/2 | 2.49 | 63.25 | 1.16 | 29.46 | | 2 3/8 | 60.33 |
| 2405- | 24-24-SS | 1 1/2 | 1 7/8-12 | 1-1/2-11-1/2 | 2.62 | 66.55 | 1.16 | 29.46 | | 2 3/8 | 60.33 |
| 2405- | 32-32-SS | 2 | 2 1/2-12 | 2-11-1/2 | 2.97 | 75.44 | 1.18 | 29.97 | | 2 7/8 | 73.03 |



(070202) 2501

90 MALE ELBOW 2501-SS SERIES

| PART NO. | SIZE | TUBE O.D. | B 1 THREAD | A 2 N.P.T.F. | M LENGTH | M.M. | N LENGTH | M.M. | Y FLATS | M.M. |
|----------------|------|-----------|------------|--------------|----------|-------|----------|-------|---------|-------|
| 2501- 02-02-SS | | 1/4 | 5/16-24 | 1/8-27 | 0.77 | 19.56 | 0.72 | 18.29 | 7/16 | 11.13 |
| 2501- 03-02-SS | | 3/16 | 3/8-24 | 1/8-27 | 0.83 | 21.08 | 0.72 | 18.29 | 7/16 | 9.53 |
| 2501- 04-02-SS | | 1/4 | 7/16-20 | 1/8-27 | 0.89 | 22.61 | 0.78 | 19.84 | 7/16 | 11.13 |
| 2501- 04-04-SS | | 1/4 | 7/16-20 | 1/4-18 | 1.06 | 26.92 | 1.09 | 27.76 | 9/16 | 14.27 |
| 2501- 04-06-SS | | 1/4 | 7/16-20 | 3/8-18 | 1.05 | 26.67 | 1.22 | 30.99 | 13/16 | 20.62 |
| 2501- 04-08-SS | | 1/4 | 7/16-20 | 1/2-14 | 1.11 | 28.19 | 1.47 | 37.34 | 15/16 | 23.80 |
| 2501- 05-02-SS | | 5/16 | 1/2-20 | 1/8-27 | 0.95 | 24.21 | 0.78 | 19.84 | 1/2 | 14.27 |
| 2501- 05-04-SS | | 5/16 | 1/2-20 | 1/4-18 | 1.06 | 26.92 | 1.09 | 27.76 | 9/16 | 14.27 |
| 2501- 06-02-SS | | 3/8 | 9/16-18 | 1/8-27 | 1.06 | 26.97 | 0.90 | 22.86 | 9/16 | 14.27 |
| 2501- 06-04-SS | | 3/8 | 9/16-18 | 1/4-18 | 1.06 | 26.97 | 1.09 | 27.76 | 9/16 | 14.27 |
| 2501- 06-06-SS | | 3/8 | 9/16-18 | 3/8-18 | 1.14 | 28.96 | 1.22 | 30.94 | 3/4 | 19.05 |
| 2501- 06-08-SS | | 3/8 | 9/16-18 | 1/2-14 | 1.23 | 31.24 | 1.47 | 37.29 | 7/8 | 22.23 |
| 2501- 06-12-SS | | 3/8 | 9/16-18 | 1/2-14 | 1.32 | 33.53 | 1.59 | 40.46 | 1 1/16 | 26.97 |
| 2501- 08-04-SS | | 1/2 | 3/4-16 | 1/4-18 | 1.25 | 31.75 | 1.22 | 30.99 | 3/4 | 19.05 |
| 2501- 08-06-SS | | 1/2 | 3/4-16 | 3/8-18 | 1.25 | 31.75 | 1.22 | 30.94 | 3/4 | 19.05 |
| 2501- 08-08-SS | | 1/2 | 3/4-16 | 1/2-14 | 1.33 | 33.78 | 1.47 | 37.29 | 7/8 | 22.23 |
| 2501- 08-12-SS | | 1/2 | 3/4-16 | 3/4-14 | 1.42 | 36.07 | 1.59 | 40.46 | 1 1/16 | 26.97 |
| 2501- 10-06-SS | | 5/8 | 7/8-14 | 1/2-14 | 1.45 | 36.83 | 1.30 | 33.02 | 7/8 | 22.23 |
| 2501- 10-08-SS | | 5/8 | 7/8-14 | 1/2-14 | 1.45 | 36.91 | 1.47 | 37.29 | 7/8 | 22.23 |
| 2501- 10-12-SS | | 5/8 | 7/8-14 | 3/4-14 | 1.53 | 38.86 | 1.59 | 40.39 | 1 1/16 | 26.97 |
| 2501- 12-08-SS | | 3/4 | 1 1/16-12 | 1/2-14 | 1.66 | 42.06 | 1.59 | 40.39 | 1 1/16 | 26.97 |
| 2501- 12-12-SS | | 3/4 | 1 1/16-12 | 3/4-14 | 1.66 | 42.06 | 1.59 | 40.46 | 1 1/16 | 26.97 |
| 2501- 12-16-SS | | 3/4 | 1 1/16-12 | 1-11 1/2 | 1.81 | 45.97 | 1.97 | 50.04 | 1 3/8 | 34.93 |
| 2501- 16-12-SS | | 1 | 1 5/16-12 | 3/4-14 | 1.81 | 45.97 | 1.78 | 45.21 | 1 3/8 | 34.93 |
| 2501- 16-16-SS | | 1 | 1 5/16-12 | 1-11 1/2 | 1.81 | 46.02 | 1.97 | 49.99 | 1 5/16 | 33.32 |
| 2501- 16-20-SS | | 1 | 1 5/16-12 | 1-1/4-11-1/2 | 2.02 | 51.31 | 2.38 | 60.45 | 1 5/8 | 41.28 |
| 2501- 20-16-SS | | 1 1/4 | 1 5/8-12 | 1-11-1/2 | 2.06 | 52.32 | 2.35 | 59.69 | 1 5/8 | 41.28 |
| 2501- 20-20-SS | | 1 1/4 | 1 5/8-12 | 1 1/4-11 1/2 | 2.06 | 52.37 | 2.38 | 60.33 | 1 5/8 | 41.28 |
| 2501- 20-24-SS | | 1 1/4 | 1 5/8-12 | 1-1/2-11-1/2 | 2.30 | 58.42 | 2.64 | 67.06 | 1 7/8 | 47.63 |
| 2501- 24-20-SS | | 1 1/2 | 1 7/8-12 | 1-1/4-11-1/2 | 2.33 | 59.18 | 2.38 | 60.45 | 1 7/8 | 47.63 |
| 2501- 24-24-SS | | 1 1/2 | 1 7/8-12 | 1 1/2-11 1/2 | 2.33 | 59.13 | 2.64 | 67.06 | 1 7/8 | 47.63 |
| 2501- 32-32-SS | | 2 | 2 1/2-12 | 2-11-1/2 | 3.06 | 77.72 | 2.50 | 63.50 | 2 1/2 | 63.50 |



(070101) 2403

STRAIGHT TUBE UNION 2403-SS SERIES

| PART NO. | SIZE | TUBE O.D. | B 1 SAE 37 | B 2 SAE 37 | L1 LGTH | M.M. | T WIDTH | M.M. | C HEX | M.M. |
|----------|----------|-----------|------------|------------|---------|-------|---------|-------|---------|-------|
| 2403- | 02-02-SS | 1/8 | 5/16-24 | 5/16-24 | 1.170 | 29.72 | 0.22 | 5.59 | 7/16 | 11.13 |
| 2403- | 03-03-SS | 3/16 | 3/8-24 | 3/8-24 | 1.230 | 31.24 | 0.22 | 5.59 | 7/16 | 11.13 |
| 2403- | 04-04-SS | 1/4 | 7/16-20 | 7/16-20 | 1.370 | 34.80 | 0.22 | 5.59 | 1/2 | 12.70 |
| 2403- | 05-05-SS | 5/16 | 1/2-20 | 1/2-20 | 1.370 | 34.80 | 0.22 | 5.59 | 9/16 | 14.27 |
| 2403- | 06-04-SS | 3/8-1/4 | 9/16-18 | 7/16-20 | 1.410 | 35.81 | 0.25 | 6.35 | 5/8 | 15.88 |
| 2403- | 06-06-SS | 3/8 | 9/16-18 | 9/16-18 | 1.410 | 35.81 | 0.25 | 6.35 | 5/8 | 15.88 |
| 2403- | 08-08-SS | 1/2 | 3/4-16 | 3/4-16 | 1.620 | 41.15 | 0.25 | 6.35 | 13/16 | 20.62 |
| 2403- | 10-06-SS | 5/8-3/8 | 7/8-14 | 9/16-18 | 1.671 | 42.44 | 0.31 | 7.87 | 15/16 | 23.81 |
| 2403- | 10-08-SS | 5/8-1/2 | 7/8-14 | 3/4-16 | 1.781 | 45.24 | 0.31 | 7.87 | 15/16 | 23.81 |
| 2403- | 10-10-SS | 5/8 | 7/8-14 | 7/8-14 | 1.880 | 47.75 | 0.31 | 7.87 | 15/16 | 23.81 |
| 2403- | 12-06-SS | 3/4-3/8 | 1 1/16-12 | 9/16-18 | 1.852 | 47.04 | 0.38 | 9.65 | 1 1/8 | 28.58 |
| 2403- | 12-08-SS | 3/4-1/2 | 1 1/16-12 | 3/4-16 | 1.953 | 49.61 | 0.38 | 9.65 | 1 1/8 | 28.58 |
| 2403- | 12-10-SS | 3/4-5/8 | 1 1/16-12 | 7/8-14 | 2.062 | 52.37 | 0.38 | 9.65 | 1 1/8 | 28.58 |
| 2403- | 12-12-SS | 3/4 | 1 1/16-12 | 1 1/16-12 | 2.160 | 54.86 | 0.38 | 9.65 | 1 1/8 | 28.58 |
| 2403- | 14-14-SS | 7/8 | 1 3/16-12 | 1 3/16-12 | 2.210 | 56.13 | 0.38 | 9.65 | 1 1/4 | 28.58 |
| 2403- | 16-06-SS | 1-3/8 | 1 5/16-12 | 9/16-18 | 1.726 | 43.84 | 0.38 | 9.65 | 1 3/8 | 34.93 |
| 2403- | 16-08-SS | 1-1/2 | 1 5/16-12 | 3/4-16 | 2.016 | 51.21 | 0.38 | 9.65 | 1 3/8 | 34.93 |
| 2403- | 16-10-SS | 1-5/8 | 1 5/16-12 | 1 1/16-12 | 2.101 | 53.37 | 0.38 | 9.65 | 1 3/8 | 34.93 |
| 2403- | 16-12-SS | 1-3/4 | 1 5/16-12 | 1 1/16-12 | 2.216 | 56.29 | 0.38 | 9.65 | 1 3/8 | 34.93 |
| 2403- | 16-16-SS | 1 | 1 5/16-12 | 1 5/16-12 | 2.250 | 57.15 | 0.38 | 9.65 | 1 3/8 | 34.93 |
| 2403- | 20-20-SS | 1 1/4 | 1 5/8-12 | 1 5/8-12 | 2.430 | 61.72 | 0.46 | 11.68 | 1 11/16 | 42.85 |
| 2403- | 24-24-SS | 1 1/2 | 1 7/8-12 | 1 7/8-12 | 2.750 | 69.85 | 0.53 | 13.46 | 2 | 50.80 |
| 2403- | 32-32-SS | 2 | 2 1/2-12 | 2 1/2-12 | 3.400 | 86.36 | 0.68 | 17.27 | 2 5/8 | 69.85 |