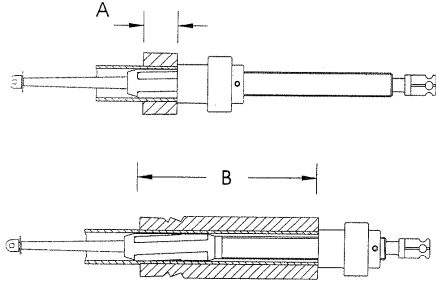


R8012 Series

Condenser and Heat Exchanger Tube Expander

A-Tube Sheet Minimum
B-Tube Sheet Maximum



FOR TUBES WITH INTERNAL DIAMETER
FROM 1.420" (36.1 mm) TO 4.870" (123.7 mm)

| TUBE EXPANDERS FITTED WITH ROLLER LENGTH | | FOR TUBE SHEET ADJUSTABLE RANGE | |
|--|-----------|------------------------------------|---------------|
| | | MINIMUM A | MAXIMUM B |
| 2-1/4" (57.1 mm) | STD REACH | 1/2" (12.7 mm) | 4" (101.4 mm) |
| | 6" REACH | 1/2" (12.7 mm) | 6" (152.4 mm) |
| | 8" REACH | 1/2" (12.7 mm) | 8" (203.2 mm) |

| Tube O.D. in mm | Tube Thickness bwg. in mm. | Tube I.D. in mm. | Minimum I.D. Tool Enters | | Maximum I.D. Expansion of Tool | | Expander with 1" (25.4 mm) Long Rollers | | | SQ. DR. |
|--------------------------|----------------------------------|------------------------|-----------------------------|-------------------|--------------------------------------|------|--|----------------|--------------------|------------|
| | | | in | mm. | in | mm. | Complete Tool No. | Mandrel No. | Rollers Set No. | |
| 1-3/4" 44.45 | 8 .165 (4.19) | 1.420 (36.1) | 1.368 (34.7) | 1.550 (39.3) | R8012-1.3/4-8 | M-90 | R-33-A | in 3/4 | | |
| | 10 .134 (3.40) | 1.482 (37.6) | 1.420 (36.0) | 1.607 (40.8) | R8012-1.3/4-10 | M-90 | R-37-A | | | |
| | 11 .120 (3.04) | 1.510 (38.3) | 1.454 (36.9) | 1.635 (41.5) | R8012-1.3/4-11 | M-90 | R-42 | | | |
| | 12 .109 (2.76) | 1.532 (38.9) | 1.482 (37.6) | 1.657 (42.0) | R8012-1.3/4-12 | M-90 | R-44 | | | |
| | 13 .095 (2.41) | 1.560 (39.6) | 1.510 (38.3) | 1.685 (42.7) | R8012-1.3/4-13 | M-90 | R-46 | | | |
| | 14 .083 (2.10) | 1.584 (40.2) | 1.532 (38.9) | 1.709 (43.4) | R8012-1.3/4-14 | M-90 | R-48 | | | |
| 2" 50.80 | 7 .180 (4.57) | 1.640 (41.6) | 1.570 (39.8) | 1.770 (45.0) | R8012-2-7 | M-91 | R-46 | mm 19.0 | | |
| | 8 .165 (4.19) | 1.670 (42.4) | 1.595 (40.5) | 1.795 (45.6) | R8012-2-8 | M-91 | R-48 | | | |
| | 10 .134 (3.40) | 1.732 (43.9) | 1.640 (41.6) | 1.857 (47.1) | R8012-2-10 | M-91 | R-50 | | | |
| | 11 .120 (3.04) | 1.760 (44.7) | 1.670 (42.4) | 1.885 (47.8) | R8012-11 | M-91 | R-52 | | | |
| | 12 .109 (2.76) | 1.782 (45.2) | 1.704 (43.2) | 1.907 (48.4) | R8012-2-12 | M-91 | R-54 | | | |
| | 13 .095 (2.41) | 1.810 (45.9) | 1.732 (43.9) | 1.956 (49.6) | R8012-2-13-18 | M-91 | R-56 | | | |
| | 14 .083 (2.10) | 1.834 (46.5) | 1.732 (43.9) | 1.956 (49.6) | R8012-2-13-18 | M-91 | R-56 | | | |
| | 15 .072 (1.83) | 1.856 (47.1) | 1.732 (43.9) | 1.956 (49.6) | R8012-2-13-18 | M-91 | R-56 | | | |
| | 16 .065 (1.65) | 1.870 (47.4) | 1.732 (43.9) | 1.956 (49.6) | R8012-2-13-18 | M-91 | R-56 | | | |
| | 17 .058 (1.47) | 1.884 (47.9) | 1.732 (43.9) | 1.956 (49.6) | R8012-2-13-18 | M-91 | R-56 | | | |
| 18 .049 (1.24) | 1.902 (48.3) | 1.732 (43.9) | 1.956 (49.6) | R8012-2-13-18 | M-91 | R-56 | | | | |
| 2-1/4" 57.15 | 10 .134 (3.40) | 1.982 (50.3) | 1.890 (48.0) | 2.107 (53.5) | R8012-2.1/4-10 | M-92 | R-56 | mm 19.0 | | |
| | 11 .120 (3.04) | 2.010 (51.0) | 1.920 (48.7) | 2.135 (54.2) | R8012-2.1/4-11 | M-92 | R-58 | | | |
| | 12 .109 (2.76) | 2.032 (51.6) | 1.954 (49.6) | 2.157 (54.7) | R8012-2.1/4-12 | M-92 | R-60 | | | |
| | 13 .095 (2.41) | 2.060 (52.3) | 1.982 (50.3) | 2.185 (55.4) | R8012-2.1/4-13-16 | M-92 | R-62 | | | |
| | 14 .083 (2.10) | 2.084 (52.9) | 1.982 (50.3) | 2.185 (55.4) | R8012-2.1/4-13-16 | M-92 | R-62 | | | |
| | 15 .072 (1.83) | 2.106 (53.4) | 1.982 (50.3) | 2.185 (55.4) | R8012-2.1/4-13-16 | M-92 | R-62 | | | |
| 2-1/2" 63.50 | 16 .065 (1.65) | 2.120 (53.8) | 1.982 (50.3) | 2.185 (55.4) | R8012-2.1/4-13-16 | M-92 | R-62 | mm 19.0 | | |
| | 7-8 .177 (4.50) | 2.146 (54.5) | 2.050 (52.0) | 2.335 (59.3) | R8012-2.1/2-7-8 | M-92 | R-45-A | | | |
| | 9 .148 (3.75) | 2.204 (56.0) | 2.106 (53.5) | 2.380 (60.4) | R8012-2.1/2-9 | M-93 | R-46-A | | | |
| | 10 .134 (3.40) | 2.232 (56.6) | 2.140 (54.3) | 2.407 (61.1) | R8012-2.1/2-10-12 | M-93 | R-64 | | | |
| | 11 .120 (3.04) | 2.260 (57.4) | 2.140 (54.3) | 2.407 (61.1) | R8012-2.1/2-10-12 | M-93 | R-64 | | | |
| | 12 .109 (2.76) | 2.282 (57.9) | 2.140 (54.3) | 2.407 (61.1) | R8012-2.1/2-10-12 | M-93 | R-64 | | | |
| | 13 .095 (2.41) | 2.310 (58.6) | 2.232 (56.6) | 2.450 (62.2) | R8012-2.1/2-13-18 | M-94 | R-64 | | | |
| | 14 .083 (2.10) | 2.334 (59.2) | 2.232 (56.6) | 2.450 (62.2) | R8012-2.1/2-13-18 | M-94 | R-64 | | | |
| | 15 .072 (1.83) | 2.356 (59.8) | 2.232 (56.6) | 2.450 (62.2) | R8012-2.1/2-13-18 | M-94 | R-64 | | | |
| | 16 .065 (1.65) | 2.370 (60.1) | 2.232 (56.6) | 2.450 (62.2) | R8012-2.1/2-13-18 | M-94 | R-64 | | | |
| 2-3/4" 69.85 | 17 .058 (1.47) | 2.384 (60.6) | 2.232 (56.6) | 2.450 (62.2) | R8012-2.1/2-13-18 | M-94 | R-64 | mm 19.0 | | |
| | 18 .049 (1.24) | 2.402 (61.0) | 2.232 (56.6) | 2.450 (62.2) | R8012-2.1/2-13-18 | M-94 | R-64 | | | |
| | 10 .134 (3.40) | 2.482 (63.0) | 2.390 (60.7) | 2.702 (68.6) | R8012-2.3/4-10-16 | M-96 | R-66 | | | |
| | 11 .120 (3.04) | 2.510 (63.7) | 2.390 (60.7) | 2.702 (68.6) | R8012-2.3/4-10-16 | M-96 | R-66 | | | |
| | 12 .109 (2.76) | 2.532 (64.3) | 2.390 (60.7) | 2.702 (68.6) | R8012-2.3/4-10-16 | M-96 | R-66 | | | |
| | 13 .095 (2.41) | 2.560 (65.0) | 2.390 (60.7) | 2.702 (68.6) | R8012-2.3/4-10-16 | M-96 | R-66 | | | |
| 14 .083 (2.10) | 2.584 (65.6) | 2.390 (60.7) | 2.702 (68.6) | R8012-2.3/4-10-16 | M-96 | R-66 | | | | |

| | | | | | | | | | |
|-------|----|-------------|--------------|--------------|--------------|-------------------|------|------|------------|
| | 15 | .072 (1.83) | 2.606 (66.1) | 2.390 (60.7) | 2.702 (68.6) | R8012-2.3/4-10-16 | M-96 | R-66 | in 1 |
| | 16 | .065 (1.65) | 2.620 (66.5) | 2.390 (60.7) | 2.702 (68.6) | R8012-2.3/4-10-16 | M-96 | R-66 | |
| 3" | 8 | .165 (4.19) | 2.670 (67.8) | 2.560 (65.0) | 2.829 (71.8) | R8012-3-8-9 | M-97 | R-67 | mm 25.4 |
| | 9 | .148 (3.75) | 2.704 (68.6) | 2.560 (65.0) | 2.829 (71.8) | R8012-3-8-9 | M-97 | R-67 | |
| | 10 | .134 (3.40) | 2.732 (69.3) | 2.640 (67.0) | 2.952 (74.9) | R8012-3-10-18 | M-96 | R-67 | |
| 76.20 | 11 | .120 (3.04) | 2.760 (70.1) | 2.640 (67.0) | 2.952 (74.9) | R8012-3-10-18 | M-96 | R-67 | |
| | 12 | .109 (2.76) | 2.782 (70.6) | 2.640 (67.0) | 2.952 (74.9) | R8012-3-10-18 | M-96 | R-67 | |
| | 13 | .095 (2.41) | 2.810 (71.3) | 2.640 (67.0) | 2.952 (74.9) | R8012-3-10-18 | M-96 | R-67 | |
| | 14 | .083 (2.10) | 2.834 (71.9) | 2.640 (67.0) | 2.952 (74.9) | R8012-3-10-18 | M-96 | R-67 | |
| | 15 | .072 (1.82) | 2.856 (72.5) | 2.640 (67.0) | 2.952 (74.9) | R8012-3-10-18 | M-96 | R-67 | |
| | 16 | .065 (1.65) | 2.870 (72.8) | 2.640 (67.0) | 2.952 (74.9) | R8012-3-10-18 | M-96 | R-67 | |
| | 17 | .058 (1.47) | 2.884 (73.3) | 2.640 (67.0) | 2.952 (74.9) | R8012-3-10-18 | M-96 | R-67 | |
| | 18 | .049 (1.24) | 2.902 (73.7) | 2.640 (67.0) | 2.952 (74.9) | R8012-3-10-18 | M-96 | R-67 | |