

# HP 32/40 Epoxy Fittings

(Filament wound with reinforced epoxy inner liner - Compatible with Red Thread and Green Thread HP 32/40 piping systems)



2"-24" fittings and accessories. Sizes 2"-12" are rated to 40 bar and 14"-24" are rated to 32 bar.

## 90° Elbow

| Pipe Size |     | A     |      | X <sup>(1)</sup> |     | Weight |      |
|-----------|-----|-------|------|------------------|-----|--------|------|
| in        | mm  | in    | mm   | in               | mm  | lbs    | kg   |
| 2         | 50  | 6.25  | 159  | 2.50             | 64  | 8      | 3.6  |
| 3         | 80  | 9.00  | 229  | 3.25             | 83  | 12     | 5.4  |
| 4         | 100 | 11.25 | 286  | 4.00             | 102 | 16     | 7.3  |
| 6         | 150 | 14.75 | 375  | 4.50             | 114 | 24     | 10.9 |
| 8         | 200 | 21.75 | 552  | 7.75             | 197 | 46     | 21.0 |
| 10        | 250 | 26.00 | 660  | 8.88             | 225 | 93     | 42.0 |
| 12        | 300 | 30.50 | 775  | 10.25            | 260 | 140    | 63.5 |
| 14        | 350 | 33.00 | 838  | 8.75             | 222 | 447    | 203  |
| 16        | 400 | 37.00 | 940  | 10.00            | 254 | 587    | 267  |
| 18        | 450 | 41.50 | 1054 | 10.52            | 267 | 648    | 294  |
| 20        | 500 | 46.75 | 1187 | 12.32            | 313 | 743    | 337  |
| 24        | 600 | 56.25 | 1429 | 15.61            | 397 | 878    | 398  |

## Tees

| Pipe Size |     | A     |     | X <sup>(1)</sup> |     | Weight |      |
|-----------|-----|-------|-----|------------------|-----|--------|------|
| in        | mm  | in    | mm  | in               | mm  | lbs    | kg   |
| 2         | 50  | 5.5   | 140 | 2.50             | 64  | 14     | 6.2  |
| 3         | 80  | 7.25  | 184 | 3.25             | 83  | 21     | 9.3  |
| 4         | 100 | 9.00  | 229 | 4.00             | 102 | 27     | 12.4 |
| 6         | 150 | 11.50 | 292 | 4.50             | 114 | 56     | 25.3 |
| 8         | 200 | 15.75 | 400 | 7.75             | 197 | 119    | 53.9 |
| 10        | 250 | 18.50 | 470 | 8.88             | 225 | 164    | 74.4 |
| 12        | 300 | 20.50 | 521 | 10.25            | 260 | 258    | 117  |
| 14        | 350 | 22.50 | 521 | 8.75             | 222 | 352    | 160  |
| 16        | 400 | 24.50 | 622 | 10.00            | 254 | 440    | 200  |
| 18        | 450 | 27.13 | 689 | 10.52            | 267 | 513    | 233  |
| 20        | 500 | 30.75 | 781 | 12.32            | 313 | 756    | 343  |
| 24        | 600 | 34.25 | 870 | 15.61            | 397 | 1000   | 454  |

## 45° Elbow

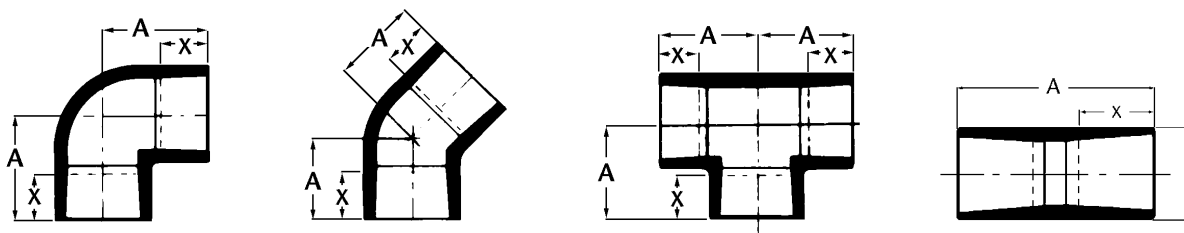
| Pipe Size |     | A     |     | X <sup>(1)</sup> |     | Weight |      |
|-----------|-----|-------|-----|------------------|-----|--------|------|
| in        | mm  | in    | mm  | in               | mm  | lbs    | kg   |
| 2         | 50  | 4.50  | 114 | 2.50             | 64  | 14     | 6.2  |
| 3         | 80  | 6.25  | 159 | 3.25             | 83  | 17     | 7.8  |
| 4         | 100 | 7.75  | 197 | 4.00             | 102 | 28     | 12.5 |
| 6         | 150 | 9.50  | 241 | 4.50             | 114 | 33     | 14.9 |
| 8         | 200 | 14.75 | 375 | 7.75             | 197 | 93     | 42.0 |
| 10        | 250 | 17.00 | 432 | 8.88             | 225 | 145    | 65.8 |
| 12        | 300 | 20.00 | 508 | 10.25            | 260 | 200    | 90.7 |
| 14        | 350 | 20.75 | 527 | 8.75             | 222 | 235    | 107  |
| 16        | 400 | 23.00 | 584 | 10.00            | 254 | 309    | 140  |
| 18        | 450 | 25.68 | 652 | 10.52            | 267 | 392    | 178  |
| 20        | 500 | 29.18 | 741 | 12.32            | 313 | 446    | 202  |
| 24        | 600 | 35.16 | 893 | 15.61            | 397 | 540    | 245  |

## Sleeve Couplings

| Pipe Size |     | A     |      | X <sup>(1)</sup> |     | Weight |      |
|-----------|-----|-------|------|------------------|-----|--------|------|
| in        | mm  | in    | mm   | in               | mm  | lbs    | kg   |
| 2         | 50  | 6.50  | 161  | 2.50             | 64  | 0.9    | 0.4  |
| 3         | 80  | 8.00  | 203  | 3.25             | 83  | 1.9    | 0.8  |
| 4         | 100 | 9.50  | 241  | 4.00             | 102 | 2.0    | 0.9  |
| 6         | 150 | 10.50 | 266  | 4.50             | 114 | 4.4    | 2.0  |
| 8         | 200 | 18.50 | 470  | 7.75             | 197 | 11.5   | 5.2  |
| 10        | 250 | 20.75 | 527  | 8.88             | 225 | 17.6   | 8.0  |
| 12        | 300 | 24.00 | 610  | 10.25            | 260 | 25.4   | 11.5 |
| 14        | 350 | 25.00 | 635  | 8.75             | 222 | 156    | 71.0 |
| 16        | 400 | 27.25 | 692  | 10.00            | 254 | 206    | 93.4 |
| 18        | 450 | 30.50 | 775  | 10.52            | 267 | 168    | 76   |
| 20        | 500 | 35.00 | 889  | 12.32            | 313 | 216    | 98   |
| 24        | 600 | 42.00 | 1067 | 15.61            | 397 | 263    | 119  |

<sup>(1)</sup> Nominal make-up dimension for drawing layout work only using non-threaded spigots. Do not use for assembly dimensions.

### View of Fitting Illustrations



90° Elbow

45° Elbow

Tee

Sleeve Coupling

## Reducing Tees

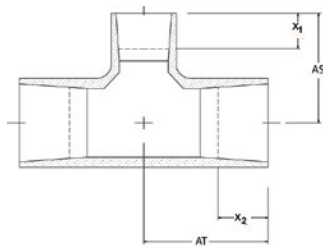
| Pipe Size |           | AT    |     | AS    |     | X <sub>1</sub> <sup>(1)</sup> |     | X <sub>2</sub> <sup>(1)</sup> |     | Weight |      |
|-----------|-----------|-------|-----|-------|-----|-------------------------------|-----|-------------------------------|-----|--------|------|
| in        | mm        | in    | mm  | in    | mm  | in                            | mm  | in                            | mm  | lbs    | kg   |
| 3 x 2     | 80 x 50   | 7.19  | 183 | 7.01  | 178 | 3.25                          | 83  | 2.50                          | 64  | 21     | 9.3  |
| 4 x 3     | 100 x 80  | 8.87  | 225 | 8.45  | 215 | 4.00                          | 102 | 3.25                          | 83  | 27     | 12.4 |
| 4 x 2     | 100 x 50  | 8.87  | 225 | 7.48  | 190 | 4.00                          | 102 | 2.50                          | 64  | 27     | 12.4 |
| 6 x 4     | 150 x 100 | 11.5  | 292 | 10.39 | 264 | 4.50                          | 114 | 4.00                          | 102 | 56     | 25.3 |
| 6 x 3     | 150 x 80  | 11.5  | 292 | 9.51  | 242 | 4.50                          | 114 | 3.25                          | 83  | 56     | 25.3 |
| 8 x 6     | 200 x 150 | 15.75 | 400 | 12.25 | 311 | 7.75                          | 197 | 4.50                          | 114 | 119    | 53.9 |
| 8 x 4     | 200 x 100 | 15.75 | 400 | 11.75 | 298 | 7.75                          | 197 | 4.00                          | 102 | 119    | 53.9 |
| 10 x 8    | 250 x 200 | 18.38 | 467 | 17.75 | 451 | 8.87                          | 225 | 7.75                          | 197 | 164    | 74.4 |
| 10 x 6    | 250 x 150 | 18.38 | 467 | 13.75 | 349 | 8.87                          | 225 | 4.50                          | 114 | 164    | 74.4 |
| 12 x 10   | 300 x 250 | 20.50 | 521 | 20.38 | 518 | 10.25                         | 260 | 8.87                          | 225 | 258    | 117  |
| 12 x 8    | 300 x 200 | 20.50 | 521 | 19.25 | 489 | 10.25                         | 260 | 7.75                          | 197 | 258    | 117  |
| 14 x 12   | 350 x 300 | 22.50 | 571 | 22.52 | 572 | 8.75                          | 222 | 10.25                         | 260 | 352    | 160  |
| 14 x 10   | 350 x 250 | 22.50 | 571 | 20.90 | 531 | 8.75                          | 222 | 8.75                          | 222 | 352    | 160  |
| 16 x 14   | 400 x 350 | 24.38 | 619 | 23.03 | 585 | 9.75                          | 251 | 8.75                          | 222 | 440    | 200  |
| 16 x 12   | 400 x 300 | 24.38 | 619 | 23.53 | 598 | 9.75                          | 251 | 10.25                         | 260 | 440    | 200  |
| 18 x 16   | 450 x 400 | 27.13 | 689 | 25.15 | 638 | 10.52                         | 267 | 10.00                         | 254 | 513    | 233  |
| 18 x 14   | 450 x 350 | 27.13 | 689 | 24.02 | 610 | 10.52                         | 267 | 8.75                          | 222 | 513    | 233  |
| 20 x 18   | 500 x 450 | 30.75 | 781 | 27.52 | 699 | 12.32                         | 313 | 10.52                         | 267 | 756    | 343  |
| 20 x 16   | 500 x 400 | 30.75 | 781 | 26.15 | 664 | 12.32                         | 313 | 10.00                         | 254 | 756    | 343  |
| 24 x 20   | 600 x 500 | 34.25 | 870 | 32.27 | 820 | 15.61                         | 397 | 12.32                         | 313 | 1000   | 454  |
| 24 x 18   | 600 x 450 | 34.25 | 870 | 30.02 | 763 | 15.61                         | 396 | 10.52                         | 267 | 1000   | 454  |

## Concentric Reducers

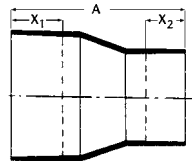
| Pipe Size |           | A     |      | X <sub>1</sub> <sup>(1)</sup> |     | X <sub>2</sub> <sup>(1)</sup> |     | Weight |       |
|-----------|-----------|-------|------|-------------------------------|-----|-------------------------------|-----|--------|-------|
| in        | mm        | in    | mm   | in                            | mm  | in                            | mm  | lbs    | kg    |
| 3 x 2     | 80 x 50   | 9.25  | 235  | 3.25                          | 83  | 2.50                          | 64  | 8.1    | 3.7   |
| 4 x 3     | 100 x 80  | 11.75 | 298  | 4.00                          | 102 | 3.25                          | 83  | 11.7   | 5.3   |
| 6 x 4     | 150 x 100 | 15.00 | 381  | 4.50                          | 114 | 4.00                          | 102 | 15.4   | 7.0   |
| 8 x 6     | 200 x 150 | 21.00 | 533  | 7.75                          | 167 | 4.50                          | 114 | 27.0   | 12.2  |
| 10 x 8    | 250 x 200 | 26.00 | 660  | 8.875                         | 229 | 7.75                          | 167 | 44.5   | 20.2  |
| 12 x 10   | 300 x 250 | 29.75 | 756  | 10.25                         | 261 | 8.875                         | 225 | 69.4   | 31.5  |
| 14 x 12   | 350 x 300 | 32.75 | 834  | 8.875                         | 225 | 10.25                         | 261 | 107    | 48.4  |
| 16 x 14   | 400 x 350 | 35.75 | 906  | 10.00                         | 254 | 8.75                          | 222 | 154    | 70.1  |
| 18 x 14   | 450 x 350 | 37.13 | 943  | 10.52                         | 267 | 8.75                          | 222 | 182    | 82.6  |
| 18 x 16   | 450 x 400 | 37.63 | 956  | 10.52                         | 267 | 10.00                         | 254 | 190    | 86.2  |
| 20 x 16   | 500 x 400 | 40.51 | 1029 | 12.32                         | 313 | 10.00                         | 254 | 237    | 107.5 |
| 20 x 18   | 500 x 450 | 41.25 | 1048 | 12.32                         | 313 | 10.52                         | 267 | 256    | 116.1 |
| 24 x 18   | 600 x 450 | 47.00 | 1194 | 15.61                         | 396 | 10.52                         | 267 | 295    | 133.8 |
| 24 x 20   | 600 x 500 | 57.00 | 1448 | 15.61                         | 396 | 12.32                         | 313 | 310    | 140.6 |

<sup>(1)</sup> Nominal make-up dimension for drawing layout work only using non-threaded spigots. Do not use for assembly dimensions.

### View of Fitting Illustrations



Reducing Tee



Concentric Reducer

## Flanges

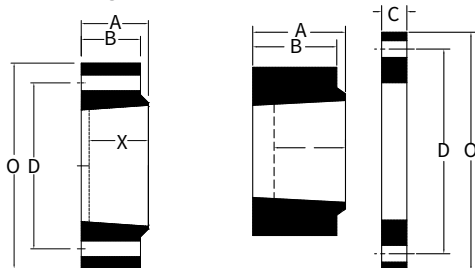
| Pipe Size       |     | A    |     | B    |     | D     |     | O     |     | X <sup>(1)</sup> |     | Hole Size |    | # of Bolts | Max Bolt Torque |     | Weight |      |
|-----------------|-----|------|-----|------|-----|-------|-----|-------|-----|------------------|-----|-----------|----|------------|-----------------|-----|--------|------|
| in              | mm  | in   | mm  | in   | mm  | in    | mm  | in    | mm  | in               | mm  | in        | mm |            | ft·lbs          | N·m | lbs    | kg   |
| <b>ANSI 150</b> |     |      |     |      |     |       |     |       |     |                  |     |           |    |            |                 |     |        |      |
| 2               | 50  | 3.00 | 74  | 2.75 | 70  | 4.75  | 121 | 6.00  | 152 | 2.75             | 70  | 0.75      | 19 | 4          | 100             | 136 | 4.8    | 2.2  |
| 3               | 80  | 3.25 | 82  | 3.00 | 76  | 6.00  | 152 | 7.50  | 190 | 3.00             | 76  | 0.75      | 19 | 4          | 100             | 136 | 7.5    | 3.4  |
| 4               | 100 | 3.75 | 95  | 3.50 | 89  | 7.50  | 191 | 9.00  | 228 | 3.50             | 89  | 0.75      | 19 | 8          | 150             | 204 | 11.9   | 5.4  |
| 6               | 150 | 4.25 | 107 | 4.00 | 100 | 9.50  | 241 | 11.00 | 279 | 4.00             | 101 | 0.88      | 22 | 8          | 150             | 204 | 17.4   | 7.9  |
| <b>ANSI 300</b> |     |      |     |      |     |       |     |       |     |                  |     |           |    |            |                 |     |        |      |
| 2               | 50  | 3.00 | 74  | 2.75 | 70  | 5.00  | 127 | 6.50  | 165 | 2.75             | 68  | 0.75      | 19 | 8          | 100             | 136 | 5.4    | 2.5  |
| 3               | 80  | 3.25 | 82  | 3.00 | 76  | 6.63  | 168 | 8.25  | 210 | 3.00             | 75  | 0.88      | 22 | 8          | 100             | 136 | 9.0    | 4.1  |
| 4               | 100 | 3.75 | 95  | 3.50 | 89  | 7.88  | 200 | 10.00 | 254 | 3.50             | 89  | 0.88      | 22 | 8          | 150             | 204 | 16.0   | 7.1  |
| 6               | 150 | 4.25 | 107 | 4.00 | 100 | 10.63 | 270 | 12.50 | 317 | 4.00             | 101 | 0.88      | 22 | 12         | 150             | 204 | 25.5   | 11.6 |

## Van Stone Flanges

| Pipe Size       |     | A     |     | B     |     | C    |    | D     |     | O     |     | X <sup>(1)</sup> |     | Hole Size |    | # of Bolts | Max Bolt Torque |     | Weight |      |
|-----------------|-----|-------|-----|-------|-----|------|----|-------|-----|-------|-----|------------------|-----|-----------|----|------------|-----------------|-----|--------|------|
| in              | mm  | in    | mm  | in    | mm  | in   | mm | in    | mm  | in    | mm  | in               | mm  | in        | mm |            | ft·lbs          | N·m | lbs    | kg   |
| <b>ANSI 300</b> |     |       |     |       |     |      |    |       |     |       |     |                  |     |           |    |            |                 |     |        |      |
| 8               | 200 | 5.00  | 127 | 4.75  | 121 | 1.50 | 38 | 13.00 | 330 | 15.00 | 381 | 5.00             | 124 | 1.00      | 25 | 12         | 200             | 272 | 50.7   | 23.0 |
| 10              | 250 | 6.25  | 159 | 6.00  | 152 | 1.88 | 48 | 15.25 | 387 | 17.50 | 445 | 6.00             | 156 | 1.13      | 28 | 16         | 200             | 272 | 78.4   | 35.6 |
| 12              | 300 | 7.50  | 191 | 7.25  | 184 | 1.88 | 48 | 17.75 | 451 | 20.50 | 521 | 7.50             | 187 | 1.25      | 31 | 16         | 200             | 272 | 113    | 51.3 |
| 14              | 350 | 7.00  | 178 | 6.50  | 165 | 2.25 | 57 | 20.25 | 514 | 23.00 | 584 | 7.00             | 175 | 1.25      | 31 | 20         | 250             | 340 | 130    | 58.9 |
| 16              | 400 | 7.88  | 200 | 7.38  | 187 | 2.25 | 57 | 22.50 | 572 | 25.50 | 648 | 7.75             | 197 | 1.38      | 35 | 20         | 250             | 340 | 174    | 78.9 |
| 18              | 450 | 9.00  | 229 | 8.50  | 216 | 2.25 | 57 | 24.75 | 629 | 28.00 | 711 | 8.37             | 213 | 1.38      | 35 | 24         | 450             | 610 | 88     | 39.9 |
| 20              | 500 | 9.88  | 251 | 9.38  | 238 | 2.25 | 57 | 27.00 | 686 | 30.50 | 775 | 10.02            | 255 | 1.38      | 35 | 24         | 450             | 610 | 136    | 61.7 |
| 24              | 600 | 10.75 | 273 | 11.25 | 286 | 2.50 | 64 | 32.00 | 813 | 36.00 | 914 | 12.83            | 326 | 1.63      | 41 | 24         | 450             | 610 | 183    | 83.0 |

<sup>(1)</sup> X dimension is a nominal make-up dimension for drawing layout work only. Do not use for assembly dimensions.

### View of Fitting Illustrations



Flange

Van Stone Flange

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