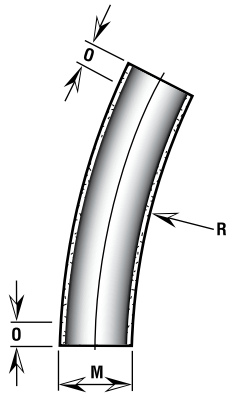


ELBOWS

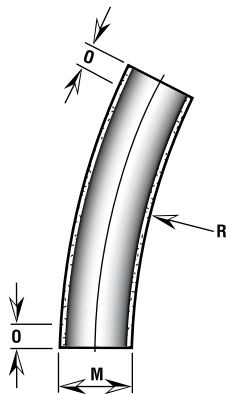


22 1/2° X 60"

| Nominal Size | Type | IPS Item No. | | M | O-Tangent (min) | R - Radius (min) | Weight | |
|--------------|------|--------------|-------------|------------|-----------------|------------------|--------|--------|
| | | Belowground | Aboveground | | | | lbs | kg |
| 3/4 | SW | 07A-SW-64-P | 07C-SW-64-P | 1.05 (27) | 6 (152) | 60 (1,524) | 0.50 | (0.23) |
| 1 | SW | 10A-SW-64-P | 10C-SW-64-P | 1.32 (33) | 6 (152) | 60 (1,524) | 0.55 | (0.25) |
| 1 1/4 | SW | 12A-SW-64-P | 12C-SW-64-P | 1.66 (42) | 6 (152) | 60 (1,524) | 0.67 | (0.30) |
| 1 1/2 | SW | 15A-SW-64-P | 15C-SW-64-P | 1.90 (48) | 6 (152) | 60 (1,524) | 0.96 | (0.44) |
| 2 | SW | 20A-SW-64-P | 20C-SW-64-P | 2.37 (60) | 6 (152) | 60 (1,524) | 1.11 | (0.50) |
| 2 1/2 | SW | 25A-SW-64-P | 25C-SW-64-P | 2.88 (73) | 6 (152) | 60 (1,524) | 1.34 | (0.61) |
| 3 | SW | 30A-SW-64-P | 30C-SW-64-P | 3.50 (89) | 6 (152) | 60 (1,524) | 1.75 | (0.80) |
| 4 | SW | 40A-SW-64-P | 40C-SW-64-P | 4.46 (113) | 6 (152) | 60 (1,524) | 2.10 | (0.95) |
| 4 | HW | 40A-HW-64-P | 40C-HW-64-P | 4.51 (115) | 6 (152) | 60 (1,524) | 2.83 | (1.29) |
| 5 | SW | 50A-SW-64-P | 50C-SW-64-P | 5.52 (140) | 6 (152) | 60 (1,524) | 2.63 | (1.19) |
| 5 | MW | 50A-MW-64-P | 50C-MW-64-P | 5.57 (141) | 6 (152) | 60 (1,524) | 3.50 | (1.59) |
| 5 | HW | 50A-HW-64-P | 50C-HW-64-P | 5.60 (142) | 6 (152) | 60 (1,524) | 3.79 | (1.72) |
| 6 | SW | 60A-SW-64-P | 60C-SW-64-P | 6.58 (167) | 6 (152) | 60 (1,524) | 2.92 | (1.33) |
| 6 | MW | 60A-MW-64-P | 60C-MW-64-P | 6.63 (168) | 6 (152) | 60 (1,524) | 4.14 | (1.88) |
| 6 | HW | 60A-HW-64-P | 60C-HW-64-P | 6.66 (170) | 6 (152) | 60 (1,524) | 4.75 | (2.16) |

| Nominal Size | Type | ID Item No. | | M | O-Tangent (min) | R - Radius (min) | Weight | |
|--------------|------|-------------|-------------|------------|-----------------|------------------|--------|--------|
| | | Belowground | Aboveground | | | | lbs | kg |
| 2 | SW | 20B-SW-64-P | 20D-SW-64-P | 2.14 (54) | 6 (152) | 60 (1,524) | 0.99 | (0.45) |
| 2 1/2 | SW | 25B-SW-64-P | 25D-SW-64-P | 2.64 (67) | 6 (152) | 60 (1,524) | 1.23 | (0.56) |
| 3 | SW | 30B-SW-64-P | 30D-SW-64-P | 3.14 (80) | 6 (152) | 60 (1,524) | 1.40 | (0.64) |
| 3 1/2 | SW | 35B-SW-64-P | 35D-SW-64-P | 3.64 (92) | 6 (152) | 60 (1,524) | 1.75 | (0.80) |
| 4 | SW | 40B-SW-64-P | 40D-SW-64-P | 4.14 (105) | 6 (152) | 60 (1,524) | 2.01 | (0.91) |
| 4 | HW | 40B-HW-64-P | 40D-HW-64-P | 4.19 (106) | 6 (152) | 60 (1,524) | 2.68 | (1.22) |
| 4 1/2 | SW | 45B-SW-64-P | 45D-SW-64-P | 4.64 (117) | 6 (152) | 60 (1,524) | 2.19 | (0.99) |
| 4 1/2 | HW | 45B-HW-64-P | 45D-HW-64-P | 4.69 (118) | 6 (152) | 60 (1,524) | 3.03 | (1.38) |
| 5 | SW | 50B-SW-64-P | 50D-SW-64-P | 5.14 (131) | 6 (152) | 60 (1,524) | 2.48 | (1.13) |
| 5 | MW | 50B-MW-64-P | 50D-MW-64-P | 5.19 (132) | 6 (152) | 60 (1,524) | 3.30 | (1.50) |
| 5 | HW | 50B-HW-64-P | 50D-HW-64-P | 5.22 (132) | 6 (152) | 60 (1,524) | 3.85 | (1.75) |
| 6 | SW | 60B-SW-64-P | 60D-SW-64-P | 6.14 (156) | 6 (152) | 60 (1,524) | 2.98 | (1.35) |
| 6 | MW | 60B-MW-64-P | 60D-MW-64-P | 6.19 (157) | 6 (152) | 60 (1,524) | 3.94 | (1.79) |
| 6 | HW | 60B-HW-64-P | 60D-HW-64-P | 6.22 (158) | 6 (152) | 60 (1,524) | 4.61 | (2.09) |

| Nominal Size | Type | Item No. | | M | O-Tangent (min) | R - Radius (min) | Weight | |
|--------------|------|-------------|-------------|------------|-----------------|------------------|--------|--------|
| | | Belowground | Aboveground | | | | lbs | kg |
| 2 | XW | 20B-XW-64-P | 20D-XW-64-P | 2.50 (65) | 6 (152) | 60 (1,524) | 3.68 | (1.67) |
| 2 1/2 | XW | 25B-XW-64-P | 25D-XW-64-P | 3.00 (76) | 6 (152) | 60 (1,524) | 4.50 | (2.04) |
| 3 | XW | 30B-XW-64-P | 30D-XW-64-P | 3.50 (89) | 6 (152) | 60 (1,524) | 5.31 | (2.41) |
| 3 1/2 | XW | 35B-XW-64-P | 35D-XW-64-P | 4.00 (102) | 6 (152) | 60 (1,524) | 6.13 | (2.78) |
| 4 1/2 | XW | 40B-XW-64-P | 40D-XW-64-P | 4.50 (114) | 6 (152) | 60 (1,524) | 6.94 | (3.15) |
| 5 | XW | 50B-XW-64-P | 50D-XW-64-P | 5.50 (140) | 6 (152) | 60 (1,524) | 8.58 | (3.90) |
| 6 | XW | 60B-XW-64-P | 60D-XW-64-P | 6.50 (165) | 6 (152) | 60 (1,524) | 10.21 | (4.64) |



30° X 12"

| Nominal Size | Type | IPS Item No. | | M | O-Tangent (min) | R-Radius (min) | Weight | |
|--------------|------|--------------|-------------|-----------|-----------------|----------------|--------|--------|
| | | Belowground | Aboveground | | | | lbs | kg |
| 3/4 | SW | 07A-SW-70-P | 07C-SW-70-P | 1.05 (27) | 6 (152) | 12 (305) | 0.27 | (0.12) |
| 1 | SW | 10A-SW-70-P | 10C-SW-70-P | 1.32 (33) | 6 (152) | 12 (305) | 0.30 | (0.14) |
| 1 1/4 | SW | 12A-SW-70-P | 12C-SW-70-P | 1.66 (42) | 6 (152) | 12 (305) | 0.36 | (0.16) |
| 1 1/2 | SW | 15A-SW-70-P | 15C-SW-70-P | 1.90 (48) | 6 (152) | 12 (305) | 0.52 | (0.24) |
| 2 | SW | 20A-SW-70-P | 20C-SW-70-P | 2.37 (60) | 6 (152) | 12 (305) | 0.60 | (0.27) |
| 2 1/2 | SW | 25A-SW-70-P | 25C-SW-70-P | 2.88 (73) | 6 (152) | 12 (305) | 0.73 | (0.33) |

| Nominal Size | Type | IPS Item No. | | M | O-Tangent (min) | R-Radius (min) | Weight | |
|--------------|------|--------------|-------------|-----------|-----------------|----------------|--------|--------|
| | | Belowground | Aboveground | | | | lbs | kg |
| 2 | SW | 20B-SW-70-P | 20D-SW-70-P | 2.14 (54) | 6 (152) | 12 (305) | 0.54 | (0.25) |
| 2 1/2 | SW | 25B-SW-70-P | 25D-SW-70-P | 2.64 (67) | 6 (152) | 12 (305) | 0.67 | (0.30) |

| Nominal Size | Type | IPS Item No. | | M | O-Tangent (min) | R-Radius (min) | Weight | |
|--------------|------|--------------|-------------|------------|-----------------|----------------|--------|--------|
| | | Belowground | Aboveground | | | | lbs | kg |
| 2 | XW | 20B-XW-70-P | 20D-XW-70-P | 2.50 (63) | 6 (152) | 12 (305) | 2.00 | (0.91) |
| 2 1/2 | XW | 25B-XW-70-P | 25D-XW-70-P | 3.00 (76) | 6 (152) | 12 (305) | 2.44 | (1.11) |
| 3 | XW | 30B-XW-70-P | 30D-XW-70-P | 3.50 (89) | 6 (152) | 12 (305) | 2.89 | (1.31) |
| 3 1/2 | XW | 35B-XW-70-P | 35D-XW-70-P | 4.00 (102) | 6 (152) | 12 (305) | 3.33 | (1.51) |