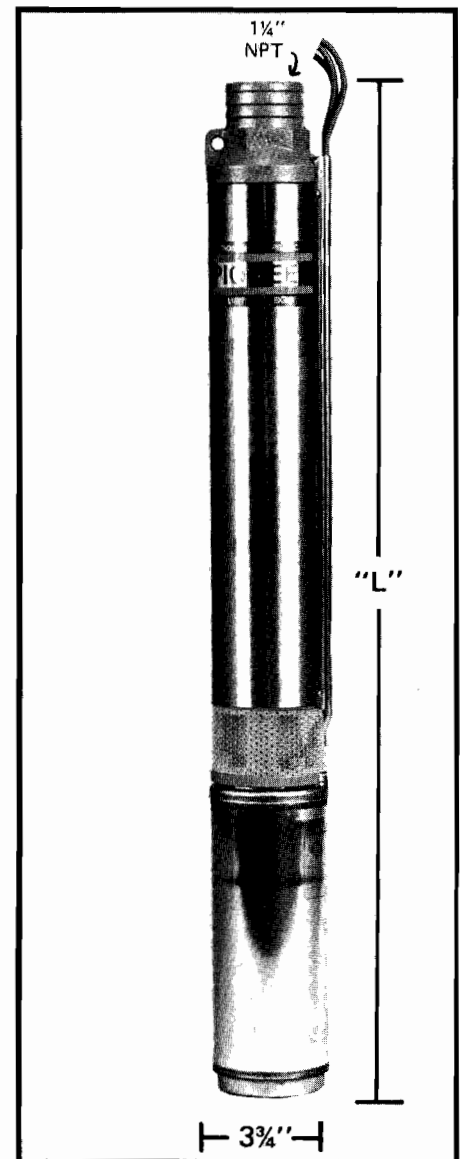
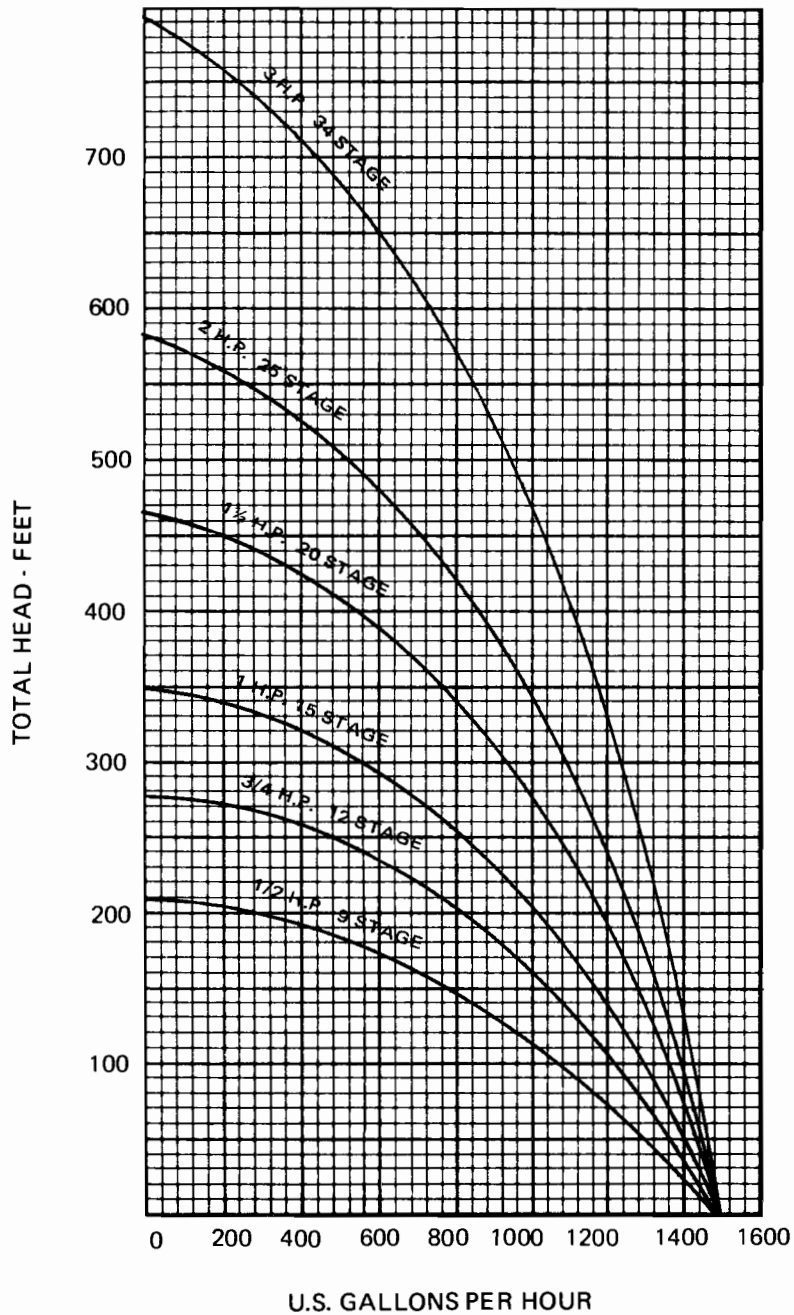


**PIONEER**

# COMPOSITE PERFORMANCE CURVES

MODEL  
**A-18**  
18 GPM



PIONEER PUMPS, INC. / P.O. BOX 6850 / LUBBOCK, TEXAS 79413

# PIONEER

## Performance Chart Gallons Per Hour

# A 18

| 18 GPM<br>9 Stages |                     |               |              |     |     |     | 1/2 H.P. CA 18     |                     |               |              |      |      |     | 18 GPM<br>12 Stages |                     |               |              |      |      |      | 3/4 H.P. DA 18     |                     |               |              |    |      |      | 18 GPM<br>15 Stages |                     |               |              |    |    |    | 1 H.P. EA 18 |    |    |    |    |  |  |
|--------------------|---------------------|---------------|--------------|-----|-----|-----|--------------------|---------------------|---------------|--------------|------|------|-----|---------------------|---------------------|---------------|--------------|------|------|------|--------------------|---------------------|---------------|--------------|----|------|------|---------------------|---------------------|---------------|--------------|----|----|----|--------------|----|----|----|----|--|--|
| 2 Wire             |                     |               | 3 Wire       |     |     |     | 2 Wire             |                     |               | 3 Wire       |      |      |     | 2 Wire              |                     |               | 3 Wire       |      |      |      | 2 Wire             |                     |               | 3 Wire       |    |      |      | 2 Wire              |                     |               | 3 Wire       |    |    |    |              |    |    |    |    |  |  |
| 1 PH. 115 V.       |                     |               | 1 PH. 115 V. |     |     |     | 1 PH. 230 V.       |                     |               | 1 PH. 230 V. |      |      |     | 1 PH. 230 V.        |                     |               | 1 PH. 230 V. |      |      |      | 1 PH. 230 V.       |                     |               | 1 PH. 230 V. |    |      |      | 1 PH. 230 V.        |                     |               | 1 PH. 230 V. |    |    |    |              |    |    |    |    |  |  |
| 2 A 18 1 1 C       |                     |               | A 18 1 1 C   |     |     |     | 2 A 18 1 2 D       |                     |               | A 18 1 2 D   |      |      |     | 2 A 18 1 2 E        |                     |               | A 18 1 2 E   |      |      |      | 2 A 18 1 2 E       |                     |               | A 18 1 2 E   |    |      |      | 2 A 18 1 2 E        |                     |               | A 18 1 2 E   |    |    |    |              |    |    |    |    |  |  |
| 1 PH. 230 V.       |                     |               | 1 PH. 230 V. |     |     |     |                    |                     |               |              |      |      |     |                     |                     |               |              |      |      |      |                    |                     |               |              |    |      |      |                     |                     |               |              |    |    |    |              |    |    |    |    |  |  |
| 2 A 18 1 2 C       |                     |               | A 18 1 2 C   |     |     |     |                    |                     |               |              |      |      |     |                     |                     |               |              |      |      |      |                    |                     |               |              |    |      |      |                     |                     |               |              |    |    |    |              |    |    |    |    |  |  |
| Gallons Per Hour   |                     |               |              |     |     |     |                    |                     |               |              |      |      |     |                     |                     |               |              |      |      |      |                    |                     |               |              |    |      |      |                     |                     |               |              |    |    |    |              |    |    |    |    |  |  |
| SHUT<br>OFF<br>PSI | DEPTH<br>IN<br>FEET | TANK PRESSURE |              |     |     |     | SHUT<br>OFF<br>PSI | DEPTH<br>IN<br>FEET | TANK PRESSURE |              |      |      |     | SHUT<br>OFF<br>PSI  | DEPTH<br>IN<br>FEET | TANK PRESSURE |              |      |      |      | SHUT<br>OFF<br>PSI | DEPTH<br>IN<br>FEET | TANK PRESSURE |              |    |      |      | SHUT<br>OFF<br>PSI  | DEPTH<br>IN<br>FEET | TANK PRESSURE |              |    |    |    |              |    |    |    |    |  |  |
|                    |                     | 0             | 20           | 30  | 40  | 50  |                    |                     | 0             | 20           | 30   | 40   | 50  |                     |                     | 0             | 20           | 30   | 40   | 50   |                    |                     | 0             | 20           | 30 | 40   | 50   |                     |                     | 0             | 20           | 30 | 40 | 50 | 0            | 20 | 30 | 40 | 50 |  |  |
| 82                 | 20                  |               |              |     |     |     | 113                | 20                  |               |              |      |      |     | 135                 | 40                  |               |              |      |      |      |                    |                     |               |              |    | 1200 |      |                     |                     |               |              |    |    |    |              |    |    |    |    |  |  |
| 74                 | 40                  |               |              |     |     |     | 104                | 40                  |               |              |      |      |     | 126                 | 60                  |               |              |      |      |      |                    |                     |               |              |    | 1200 | 1120 |                     |                     |               |              |    |    |    |              |    |    |    |    |  |  |
| 65                 | 60                  |               |              |     |     |     | 95                 | 60                  |               |              |      |      |     | 117                 | 80                  |               |              |      |      |      |                    |                     |               |              |    | 1200 | 1120 | 1040                |                     |               |              |    |    |    |              |    |    |    |    |  |  |
| 56                 | 80                  | 1240          | 980          | 800 | 600 | 320 | 87                 | 80                  |               |              | 1160 | 1080 | 980 | 109                 | 100                 |               |              | 1220 | 1140 | 1060 | 960                |                     |               |              |    |      |      |                     |                     |               |              |    |    |    |              |    |    |    |    |  |  |
| 48                 | 100                 | 1120          | 860          | 600 | 400 |     | 78                 | 100                 |               |              | 1100 | 1000 | 880 | 100                 | 120                 |               |              | 1160 | 1080 | 980  | 860                |                     |               |              |    |      |      |                     |                     |               |              |    |    |    |              |    |    |    |    |  |  |
| 39                 | 120                 | 1040          | 680          | 400 |     |     | 69                 | 120                 | 1200          | 1000         | 880  | 760  | 580 | 91                  | 140                 | 1240          | 1080         | 1000 | 880  | 780  |                    |                     |               |              |    |      |      |                     |                     |               |              |    |    |    |              |    |    |    |    |  |  |
| 30                 | 140                 | 880           | 440          |     |     |     | 61                 | 140                 | 1120          | 880          | 760  | 600  | 380 | 82                  | 160                 | 1160          | 1000         | 880  | 800  | 660  |                    |                     |               |              |    |      |      |                     |                     |               |              |    |    |    |              |    |    |    |    |  |  |
| 22                 | 160                 | 760           |              |     |     |     | 52                 | 160                 | 1040          | 800          | 600  | 400  |     | 74                  | 180                 | 1120          | 920          | 800  | 680  | 540  |                    |                     |               |              |    |      |      |                     |                     |               |              |    |    |    |              |    |    |    |    |  |  |
|                    |                     |               |              |     |     |     | 43                 | 180                 | 960           | 640          | 400  |      |     | 65                  | 200                 | 1040          | 820          | 680  | 560  | 380  |                    |                     |               |              |    |      |      |                     |                     |               |              |    |    |    |              |    |    |    |    |  |  |
|                    |                     |               |              |     |     |     | 35                 | 200                 | 800           | 480          |      |      |     | 56                  | 220                 | 960           | 680          | 560  | 400  |      |                    |                     |               |              |    |      |      |                     |                     |               |              |    |    |    |              |    |    |    |    |  |  |
|                    |                     |               |              |     |     |     | 26                 | 220                 | 680           |              |      |      |     | 48                  | 240                 | 840           | 580          | 400  |      |      |                    |                     |               |              |    |      |      |                     |                     |               |              |    |    |    |              |    |    |    |    |  |  |
|                    |                     |               |              |     |     |     | 17                 | 240                 | 520           |              |      |      |     | 39                  | 260                 | 760           | 480          |      |      |      |                    |                     |               |              |    |      |      |                     |                     |               |              |    |    |    |              |    |    |    |    |  |  |
|                    |                     |               |              |     |     |     | 9                  | 260                 | 320           |              |      |      |     | 30                  | 280                 | 600           |              |      |      |      |                    |                     |               |              |    |      |      |                     |                     |               |              |    |    |    |              |    |    |    |    |  |  |
|                    |                     |               |              |     |     |     |                    |                     |               |              |      |      |     | 22                  | 300                 | 480           |              |      |      |      |                    |                     |               |              |    |      |      |                     |                     |               |              |    |    |    |              |    |    |    |    |  |  |
|                    |                     |               |              |     |     |     |                    |                     |               |              |      |      |     | 13                  | 320                 | 320           |              |      |      |      |                    |                     |               |              |    |      |      |                     |                     |               |              |    |    |    |              |    |    |    |    |  |  |

| 18 GPM<br>20 Stages |                     |               |              |      |      |      | 1-1/2 H.P. FA 18   |                     |               |              |      |      |      | 18 GPM<br>25 Stages |                     |               |              |      |      |      | 2 H.P. GA 18       |                     |               |              |    |    |    | 18 GPM<br>34 Stages |    |    |              |    |  |  | 3 H.P. HA 18 |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------|---------------------|---------------|--------------|------|------|------|--------------------|---------------------|---------------|--------------|------|------|------|---------------------|---------------------|---------------|--------------|------|------|------|--------------------|---------------------|---------------|--------------|----|----|----|---------------------|----|----|--------------|----|--|--|--------------|--|--|--|--|--|--|--|--|--|--|--|--|
| 2 Wire              |                     |               | 3 Wire       |      |      |      |                    |                     |               | 3 Wire       |      |      |      |                     |                     |               | 3 Wire       |      |      |      |                    |                     |               | 3 Wire       |    |    |    |                     |    |    | 3 Wire       |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 PH. 230 V.        |                     |               | 1 PH. 230 V. |      |      |      |                    |                     |               | 1 PH. 230 V. |      |      |      |                     |                     |               | 1 PH. 230 V. |      |      |      |                    |                     |               | 1 PH. 230 V. |    |    |    |                     |    |    | 1 PH. 230 V. |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 A 18 1 2 F        |                     |               | A 18 1 2 F   |      |      |      |                    |                     |               | A 18 1 2 G   |      |      |      |                     |                     |               | A 18 1 2 H   |      |      |      |                    |                     |               | A 18 1 2 I   |    |    |    |                     |    |    | A 18 1 2 J   |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
|                     |                     |               | 3 PH. 230 V. |      |      |      |                    |                     |               | 3 PH. 230 V. |      |      |      |                     |                     |               | 3 PH. 230 V. |      |      |      |                    |                     |               | 3 PH. 230 V. |    |    |    |                     |    |    | 3 PH. 230 V. |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
|                     |                     |               | A 18 3 2 F   |      |      |      |                    |                     |               | A 18 3 2 G   |      |      |      |                     |                     |               | A 18 3 2 H   |      |      |      |                    |                     |               | A 18 3 2 I   |    |    |    |                     |    |    | A 18 3 2 J   |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
|                     |                     |               | 3 PH. 460 V. |      |      |      |                    |                     |               | 3 PH. 460 V. |      |      |      |                     |                     |               | 3 PH. 460 V. |      |      |      |                    |                     |               | 3 PH. 460 V. |    |    |    |                     |    |    | 3 PH. 460 V. |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
|                     |                     |               | A 18 3 4 F   |      |      |      |                    |                     |               | A 18 3 4 G   |      |      |      |                     |                     |               | A 18 3 4 H   |      |      |      |                    |                     |               | A 18 3 4 I   |    |    |    |                     |    |    | A 18 3 4 J   |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
|                     |                     |               | 3 PH. 200 V. |      |      |      |                    |                     |               | 3 PH. 200 V. |      |      |      |                     |                     |               | 3 PH. 200 V. |      |      |      |                    |                     |               | 3 PH. 200 V. |    |    |    |                     |    |    | 3 PH. 200 V. |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
|                     |                     |               | A 18 3 5 F   |      |      |      |                    |                     |               | A 18 3 5 G   |      |      |      |                     |                     |               | A 18 3 5 H   |      |      |      |                    |                     |               | A 18 3 5 I   |    |    |    |                     |    |    | A 18 3 5 J   |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| Gallons Per Hour    |                     |               |              |      |      |      | Gallons Per Hour   |                     |               |              |      |      |      | Gallons Per Hour    |                     |               |              |      |      |      | Gallons Per Hour   |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| SHUT<br>OFF<br>PSI  | DEPTH<br>IN<br>FEET | TANK PRESSURE |              |      |      |      | SHUT<br>OFF<br>PSI | DEPTH<br>IN<br>FEET | TANK PRESSURE |              |      |      |      | SHUT<br>OFF<br>PSI  | DEPTH<br>IN<br>FEET | TANK PRESSURE |              |      |      |      | SHUT<br>OFF<br>PSI | DEPTH<br>IN<br>FEET | TANK PRESSURE |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
|                     |                     | 0             | 20           | 30   | 40   | 50   |                    |                     | 0             | 20           | 30   | 40   | 50   |                     |                     | 0             | 20           | 30   | 40   | 50   |                    |                     | 0             | 20           | 30 | 40 | 50 | 0                   | 20 | 30 | 40           | 50 |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| 158                 | 100                 |               |              |      |      | 1160 | 192                | 140                 |               |              |      |      | 1180 | 249                 | 220                 |               |              |      |      | 1180 |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| 150                 | 120                 |               |              |      |      | 1160 | 184                | 160                 |               |              |      |      | 1140 | 240                 | 240                 |               |              |      | 1200 | 1160 |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| 141                 | 140                 |               |              |      |      | 1160 | 175                | 180                 |               |              |      |      | 1100 | 231                 | 260                 |               |              | 1200 | 1180 | 1140 |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| 132                 | 160                 |               | 1180         | 1120 | 1080 | 1020 | 166                | 200                 |               | 1200         | 1140 | 1100 | 1060 | 223                 | 280                 |               | 1200         | 1160 | 1140 | 1100 |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| 124                 | 180                 |               | 1140         | 1080 | 1020 | 940  | 158                | 220                 |               | 1140         | 1100 | 1060 | 1000 | 214                 | 300                 |               | 1180         | 1140 | 1120 | 1060 |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| 115                 | 200                 | 1200          | 1080         | 1020 | 960  | 860  | 149                | 240                 | 1200          | 1100         | 1060 | 1000 | 940  | 205                 | 320                 | 1200          | 1160         | 1120 | 1080 | 1040 |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| 106                 | 220                 | 1160          | 1040         | 960  | 880  | 800  | 140                | 260                 | 1160          | 1040         | 1000 | 960  | 900  | 197                 | 340                 | 1180          | 1120         | 1080 | 1040 | 1000 |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| 98                  | 240                 | 1100          | 980          | 880  | 800  | 720  | 132                | 280                 | 1120          | 1000         | 960  | 920  | 840  | 188                 | 360                 | 1160          | 1080         | 1040 | 1020 | 980  |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| 89                  | 260                 | 1040          | 920          | 820  | 720  | 640  | 123                | 300                 | 1080          | 960          | 920  | 860  | 800  | 179                 | 380                 | 1120          | 1040         | 1000 | 980  | 940  |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                  | 280                 | 1000          | 840          | 740  | 640  | 520  | 114                | 320                 | 1040          | 920          | 860  | 800  | 760  | 171                 | 400                 | 1100          | 1020         | 980  | 940  | 900  |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| 72                  | 300                 | 920           | 760          | 640  | 520  | 400  | 105                | 340                 | 1000          | 860          | 800  | 760  | 680  | 162                 | 420                 | 1060          | 980          | 940  | 920  | 860  |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| 63                  | 320                 | 880           | 660          | 520  | 400  |      | 97                 | 360                 | 940           | 800          | 760  | 680  | 600  | 153                 | 440                 | 1040          | 940          | 920  | 880  | 820  |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| 54                  | 340                 | 760           | 560          | 400  |      |      | 88                 | 380                 | 880           | 760          | 680  | 600  | 540  | 145                 | 460                 | 1000          | 920          | 880  | 840  | 780  |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| 46                  | 360                 | 680           | 480          |      |      |      | 79                 | 400                 | 840           | 680          | 600  | 560  | 460  | 136                 | 480                 | 960           | 880          | 840  | 800  | 740  |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| 37                  | 380                 | 600           | 320          |      |      |      | 71                 | 420                 | 780           | 600          | 560  | 480  | 380  | 127                 | 500                 | 920           | 840          | 800  | 760  | 700  |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
| 28                  | 400                 | 480           |              |      |      |      | 62                 | 440                 | 720           | 560          | 480  | 400  |      | 118                 | 520                 | 900           | 820          | 760  | 720  | 640  |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
|                     |                     |               |              |      |      |      | 53                 | 460                 | 660           | 480          | 400  |      |      | 110                 | 540                 | 860           | 760          | 720  | 660  | 580  |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
|                     |                     |               |              |      |      |      | 45                 | 480                 | 600           | 400          |      |      |      | 101                 | 560                 | 820           | 720          | 660  | 600  | 540  |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
|                     |                     |               |              |      |      |      | 36                 | 500                 | 520           |              |      |      |      | 92                  | 580                 | 780           | 660          | 600  | 560  | 460  |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
|                     |                     |               |              |      |      |      |                    |                     |               |              |      |      |      | 84                  | 600                 | 720           | 600          | 560  | 480  | 380  |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
|                     |                     |               |              |      |      |      |                    |                     |               |              |      |      |      | 75                  | 625                 | 680           | 560          | 480  | 400  |      |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
|                     |                     |               |              |      |      |      |                    |                     |               |              |      |      |      | 65                  | 640                 | 640           | 480          | 400  |      |      |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
|                     |                     |               |              |      |      |      |                    |                     |               |              |      |      |      | 58                  | 660                 | 580           | 400          |      |      |      |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
|                     |                     |               |              |      |      |      |                    |                     |               |              |      |      |      | 49                  | 680                 | 520           |              |      |      |      |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |
|                     |                     |               |              |      |      |      |                    |                     |               |              |      |      |      | 32                  | 720                 | 380           |              |      |      |      |                    |                     |               |              |    |    |    |                     |    |    |              |    |  |  |              |  |  |  |  |  |  |  |  |  |  |  |  |