

# LANCASTER CENTRIFUGAL - "E" SERIES CLOSE-COUPLED END SUCTION PUMPS

The Lancaster "E" Series close-coupled, end suction pump offers the advantages of space saving and lower cost due to elimination of the need for a base plate, bearing frame, special coupling and guard.

## APPLICATIONS:

General industrial use, liquid transfer, circulating or booster service.

## PERFORMANCE:

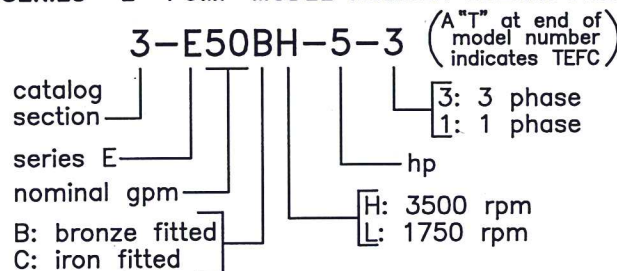
Capacities to 650 G.P.M., Heads to 300 feet. For higher capacity/flanged pumps, consult factory.



## FEATURES:

- Cast iron construction.
- Tapped N.P.T. openings.
- Tangential Discharge.
- Back pull out design.
- Enclosed type, fully balanced impellers. Series E50BH, E90BH, E145BH, E200BH, E25BL, E60BL and E80BL are bronze fitted. Series E400CH and E550CH are iron fitted.
- Maximum working pressure 150 PSI.
- Type 21 Mechanical shaft seal suitable for water to 211° F intermittent duty, 180° F continuous duty. Does not require any adjustment or maintenance. For higher temperatures and/or abrasive pumping applications - consult factory.
- Standard NEMA open drip proof motors. TEFC motors available - consult factory.

### SERIES "E" PUMP MODEL NUMBER BREAKDOWN



### HP CODE

|             |           |
|-------------|-----------|
| 1/3 = 03    | 7 1/2 = 7 |
| 1/2 = 05    | 10 = 10   |
| 3/4 = 07    | 15 = 15   |
| 1 = 010     | 20 = 20   |
| 1 1/2 = 015 | 25 = 25   |
| 2 = 2       | 30 = 30   |
| 3 = 3       | 40 = 40   |
| 5 = 5       | 50 = 50   |

For Pump Selection Chart →

# SERIES "E" PUMP SELECTION CHART

## BRONZE FITTED

### 3500 R.P.M.

| SERIES | HP | IMPELLER DIAMETER (INCHES) | CAPACITIES IN G.P.M. |    |    |    |     |     |     |     |     |     |     |  | SHUT OFF HEAD (FEET) | SUCTION (NPT) | DISCHARGE (NPT) |        |    |
|--------|----|----------------------------|----------------------|----|----|----|-----|-----|-----|-----|-----|-----|-----|--|----------------------|---------------|-----------------|--------|----|
|        |    |                            | TOTAL HEAD IN FEET   |    |    |    |     |     |     |     |     |     |     |  |                      |               |                 |        |    |
|        |    |                            | 60                   | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 |  |                      |               |                 |        |    |
| E50BH  | 2  | 5-1/2                      | 74                   | 68 | 61 | 53 | 45  | 33  |     |     |     |     |     |  |                      |               | 122             | 1-1/2" | 1" |
|        | 3  | 6-1/8                      |                      |    | 78 | 73 | 67  | 61  | 54  | 46  | 37  |     |     |  |                      |               | 151             |        |    |
|        | 5  | 6-7/16                     |                      |    |    |    |     | 80  | 74  | 68  | 62  | 53  | 42  |  |                      |               | 174             |        |    |

| SERIES | HP    | IMPELLER DIAMETER (INCHES) | CAPACITIES IN G.P.M. |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | SHUT OFF HEAD (FEET) | SUCTION (NPT) | DISCHARGE (NPT) |
|--------|-------|----------------------------|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------------|---------------|-----------------|
|        |       |                            | 30                   | 35  | 40  | 45  | 50  | 60  | 70  | 80  | 90  | 100 | 110 | 120 | 130 | 140 | 150 | 160 |                      |               |                 |
| E90BH  | 1     | 3-15/16                    |                      | 95  | 86  | 75  | 63  |     |     |     |     |     |     |     |     |     |     | 60  | 2"                   | 1-1/2"        |                 |
|        | 1-1/2 | 4-5/16                     | 123                  | 118 | 112 | 106 | 95  | 78  | 50  |     |     |     |     |     |     |     |     | 75  |                      |               |                 |
|        | 2     | 4-5/8                      |                      | 130 | 126 | 120 | 115 | 100 | 82  | 52  |     |     |     |     |     |     |     | 87  |                      |               |                 |
|        | 3     | 5-1/8                      |                      |     |     |     | 144 | 132 | 118 | 103 | 88  | 62  |     |     |     |     |     | 110 |                      |               |                 |
|        | 5     | 5-3/4                      |                      |     |     |     |     |     |     | 163 | 153 | 141 | 126 | 107 | 78  |     |     | 140 |                      |               |                 |
|        | 7-1/2 | 6-7/16                     |                      |     |     |     |     |     |     |     |     |     |     |     |     | 165 | 150 | 130 |                      |               | 170             |

| SERIES | HP    | IMPELLER DIAMETER (INCHES) | CAPACITIES IN G.P.M. |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | SHUT OFF HEAD (FEET) | SUCTION (NPT) | DISCHARGE (NPT) |
|--------|-------|----------------------------|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------------|---------------|-----------------|
|        |       |                            | 70                   | 80  | 90  | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 | 220 | 240 |                      |               |                 |
| E145BH | 5     | 5-13/16                    | 155                  | 144 | 132 | 118 | 100 | 84  | 56  |     |     |     |     |     |     |     |     |     | 135                  | 2"            | 1-1/2"          |
|        | 7-1/2 | 6-5/8                      |                      |     |     | 180 | 170 | 160 | 150 | 130 | 110 | 80  |     |     |     |     |     |     | 180                  |               |                 |
|        | 10    | 7-5/16                     |                      |     |     |     |     |     |     | 176 | 167 | 156 | 143 | 126 | 106 |     |     |     | 220                  |               |                 |
|        | 15    | 8-3/8                      |                      |     |     |     |     |     |     |     |     |     |     |     |     | 184 | 167 | 140 | 100                  |               |                 |

| SERIES | HP    | IMPELLER DIAMETER (INCHES) | CAPACITIES IN G.P.M. |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | SHUT OFF HEAD (FEET) | SUCTION (NPT) | DISCHARGE (NPT) |
|--------|-------|----------------------------|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------------|---------------|-----------------|
|        |       |                            | 20                   | 25  | 30  | 35  | 40  | 45  | 50  | 60  | 70  | 80  | 90  | 100 | 110 | 120 | 150 | 200 |                      |               |                 |
| E200BH | 1-1/2 | 3-13/16                    | 175                  | 160 | 145 | 125 | 100 | 65  |     |     |     |     |     |     |     |     |     |     | 50                   | 3"            | 2"              |
|        | 2     | 4                          | 185                  | 170 | 160 | 145 | 125 | 100 |     |     |     |     |     |     |     |     |     |     | 58                   |               |                 |
|        | 3     | 4-1/2                      |                      |     |     |     | 175 | 165 | 140 | 90  |     |     |     |     |     |     |     |     | 75                   |               |                 |
|        | 5     | 5-1/8                      |                      |     |     |     |     |     | 235 | 210 | 190 | 160 |     |     |     |     |     |     | 100                  |               |                 |
|        | 7-1/2 | 5-13/16                    |                      |     |     |     |     |     |     |     | 260 | 240 | 225 | 200 | 160 |     |     |     | 135                  |               |                 |
|        | 10    | 6-7/16                     |                      |     |     |     |     |     |     |     | 310 | 290 | 275 | 260 | 185 |     |     |     | 170                  |               |                 |
|        | 15    | 7-1/4                      |                      |     |     |     |     |     |     |     |     |     |     | 350 | 305 | 205 |     |     | 230                  |               |                 |
|        | 20    | 7-15/16                    |                      |     |     |     |     |     |     |     |     |     |     |     | 365 | 275 | 130 |     | 260                  |               |                 |

### 1750 R.P.M.

| SERIES | HP    | IMPELLER DIAMETER (INCHES) | CAPACITIES IN G.P.M. |     |     |     |     |     | SHUT OFF HEAD (FEET) | SUCTION (NPT) | DISCHARGE (NPT) |
|--------|-------|----------------------------|----------------------|-----|-----|-----|-----|-----|----------------------|---------------|-----------------|
|        |       |                            | TOTAL HEAD IN FEET   |     |     |     |     |     |                      |               |                 |
|        |       |                            | 10                   | 15  | 20  | 25  | 30  | 40  |                      |               |                 |
| E25BL  | 1/3   | 6-1/8                      |                      |     | 39  | 33  | 26  | 16  | 38                   | 1-1/2"        | 1"              |
|        | 1/2   | 6-7/16                     |                      |     |     | 40  | 35  | 30  | 21                   |               |                 |
| E60BL  | 1/3   | 4-5/8                      | 64                   |     | 50  | 24  |     |     | 21                   | 2"            | 1-1/2"          |
|        | 1/2   | 5-1/8                      |                      | 66  | 52  | 30  |     | 27  |                      |               |                 |
|        | 3/4   | 5-3/4                      |                      |     | 84  | 70  | 54  | 35  |                      |               |                 |
|        | 1     | 6-7/16                     |                      |     |     | 98  | 86  | 70  | 46                   |               |                 |
| E80BL  | 1/2   | 4-7/8                      | 114                  |     | 90  | 56  |     |     | 22                   | 3"            | 2"              |
|        | 3/4   | 5-1/8                      |                      | 112 | 88  |     |     | 25  |                      |               |                 |
|        | 1     | 5-13/16                    |                      |     | 127 | 104 | 70  | 33  |                      |               |                 |
|        | 1-1/2 | 6-7/16                     |                      |     | 156 | 144 | 128 | 108 | 69                   |               |                 |

## IRON FITTED

### 3500 R.P.M.

| SERIES | HP    | IMPELLER DIAMETER (INCHES) | CAPACITIES IN G.P.M. |     |     |     |     |     |     |     |     |     |     |     | SHUT OFF HEAD (FEET) | SUCTION (NPT) | DISCHARGE (NPT) |     |     |    |
|--------|-------|----------------------------|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------------|---------------|-----------------|-----|-----|----|
|        |       |                            | TOTAL HEAD IN FEET   |     |     |     |     |     |     |     |     |     |     |     |                      |               |                 |     |     |    |
|        |       |                            | 25                   | 30  | 35  | 40  | 45  | 50  | 60  | 70  | 80  | 90  | 100 | 110 |                      |               |                 | 120 | 130 |    |
| E400CH | 5     | 4-1/2                      | 335                  | 305 | 280 | 250 | 220 | 200 |     |     |     |     |     |     |                      |               |                 | 60  | 4"  | 3" |
|        | 7-1/2 | 4-15/16                    |                      | 440 | 425 | 405 | 385 | 365 | 320 | 280 |     |     |     |     |                      |               |                 | 81  |     |    |
|        | 10    | 5-5/16                     |                      |     |     | 505 | 490 | 470 | 440 | 400 | 360 | 250 |     |     |                      |               |                 | 101 |     |    |
|        | 15    | 5-3/4                      |                      |     |     |     |     | 600 | 580 | 550 | 510 | 480 | 430 | 380 | 300                  |               |                 | 128 |     |    |
|        | 20    | 6                          |                      |     |     |     |     |     | 630 | 610 | 590 | 550 | 530 | 510 | 450                  | 380           |                 | 146 |     |    |

| SERIES | HP | IMPELLER DIAMETER (INCHES) | CAPACITIES IN G.P.M. |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | SHUT OFF HEAD (FEET) | SUCTION (NPT) | DISCHARGE (NPT) |
|--------|----|----------------------------|----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------------|---------------|-----------------|
|        |    |                            | 90                   | 100 | 120 | 140 | 150 | 160 | 170 | 180 | 190 | 200 | 210 | 220 | 240 | 260 | 280 | 290 |                      |               |                 |
| E550CH | 20 | 7-1/32                     | 650                  | 620 | 545 | 430 | 350 | 200 |     |     |     |     |     |     |     |     |     | 185 | 4"                   | 4"            |                 |
|        | 25 | 7-15/32                    |                      |     | 650 | 595 | 550 | 500 | 450 | 350 |     |     |     |     |     |     |     | 190 |                      |               |                 |
|        | 30 | 7-7/8                      |                      |     |     | 650 | 620 | 590 | 545 | 500 | 430 | 320 |     |     |     |     |     | 215 |                      |               |                 |
|        | 40 | 8-7/16                     |                      |     |     |     |     |     |     | 640 | 605 | 560 | 515 | 375 |     |     |     | 260 |                      |               |                 |
|        | 50 | 9-1/32                     |                      |     |     |     |     |     |     |     |     |     | 660 | 600 | 515 | 400 | 280 | 300 |                      |               |                 |

## LANCASTER PUMP A DIVISION OF C-B TOOL CO.

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