



**3500 RPM  
SINGLE STAGE PERFORMANCE**

**MODEL 8BCAL  
STANDARD CONSTRUCTION**

See reverse side for detailed information.

TOTAL HEAD  
IN FEET

STAGES REQUIRED

130

120

110

100

90

80

70

NPSHR  
IN FEET

30

20

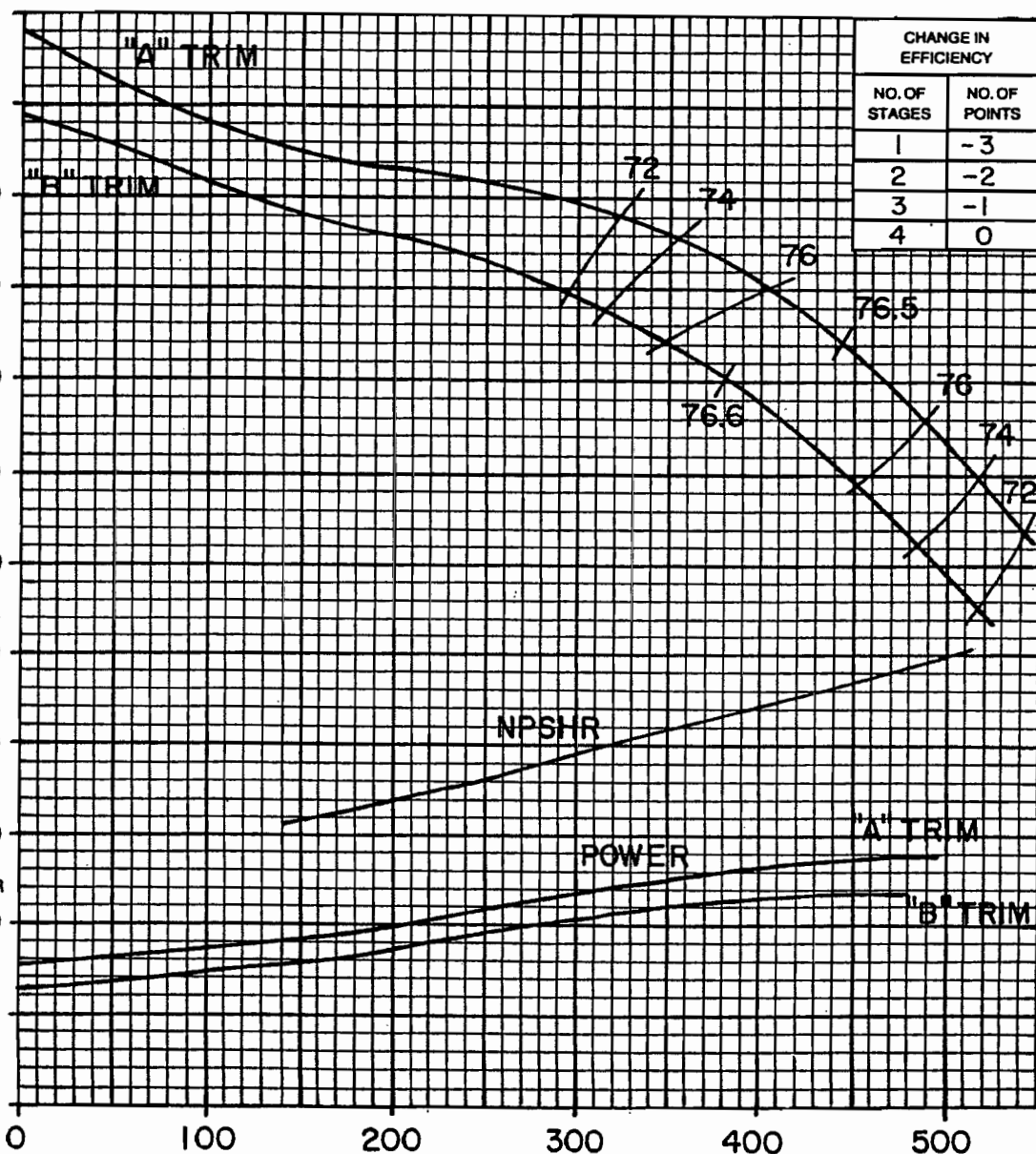
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BRAKE  
HORSEPOWER

10

5

0



TOTAL HEAD  
IN METERS

35

30

25

20

NPSHR  
IN METERS

8

4

KILOWATTS

7.5

3.7

U.S. GALLONS PER MINUTE

5

10

15

20

25

30

LITERS PER SECOND

25

50

75

100

CUBIC METERS PER HOUR

Pump hydraulic performance is based on handling cold clear, fresh nonaerated water, free of foreign materials.

Customer: \_\_\_\_\_

Item No.: \_\_\_\_\_

Capacity: \_\_\_\_\_ TDH \_\_\_\_\_ Bowl HP \_\_\_\_\_ Bowl Efficiency \_\_\_\_\_

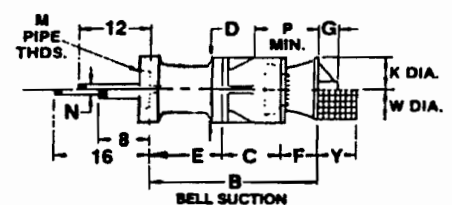
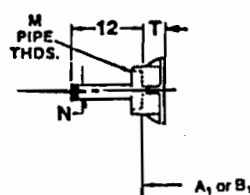
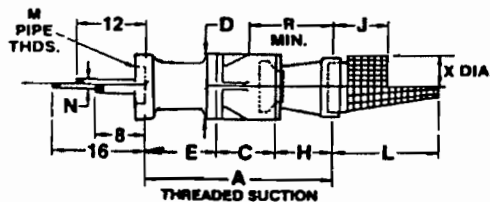
# IMPELLER DATA

8BCAL  
3500

IMPELLER NO. 408-3-3007 . TYPE CLOSED . DIAMETER: A 5.95 ", 151.1 mm,  
B 5.50 ", 139.7 mm,  
EFFECTIVE EYE AREA 11.79 sq. inches, 7606.4 sq. mm. NUMBER OF VANES 6 .  
THRUST CONSTANT K 4.57 lbs. / ft. 6.2 N / m of head. WEIGHT 4.00 lbs., 1.8 Kg.  
WR<sup>2</sup> .492 lbs. / ft<sup>2</sup>, 2.40 Kg / m<sup>2</sup>.  
EYE FLUID VELOCITY CK .027 ft. / sec. / GPM, .008 m / sec. / LPS.  
PERIPHERAL VELOCITY 15.27 ft. / sec. / inch, 4.65 m / sec. / mm of impeller dia. Ns 1041.4

## BOWL DATA

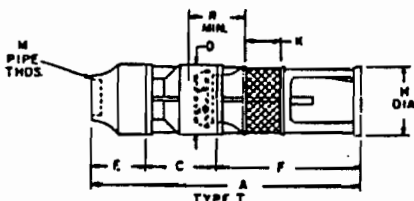
BOWL NO. 408-3-2020. CONNECTION TYPE FLANGE . NOMINAL DIAMETER (E) 7.50 ", 190.5 mm.  
MINIMUM DIAMETER (E) 7.50 ", 190.5 mm.  
COLUMN PIPE SIZE 6 ", 150 mm, STANDARD, 6 ", 150 mm, MAXIMUM  
SUCTION PIPE SIZE 6 ", 150 mm, STANDARD, 6 ", 150 mm, MAXIMUM.  
PUMP SHAFT DIAMETER 1.19 ", 30.2 mm, STANDARD 1.25 ", 31.8 mm MAXIMUM.  
LATERAL .469 ", 11.91 mm, STANDARD, ★ ", ★ mm MAXIMUM.  
SHAFT BEARING CLEARANCE .010 ", .254 mm. IMPELLER SKIRT CLEARANCE .015 ", .381 mm  
MAXIMUM NUMBER OF STAGES 7 (std. construction).  
MAXIMUM HEAD 687 ft., 209.4 m (std. construction). MAXIMUM SPHERE SIZE .56 ", 14.2 mm.  
PROJECTIONS ABOVE COLUMN PIPE BUTT: **TUBE** 8",203.2mm; **SHAFT** 16",406.4mm. FOR ENCLOSED  
LINESHAFT. 12",304.8mm. FOR OPEN LINESHAFT.



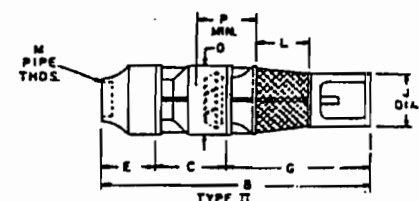
### STANDARD DIMENSIONS

★ REFER TO FACTORY.

|     | A     | A <sub>1</sub> | B                              | B <sub>1</sub>                 | C     | D                             | E     | F                             | G    | H     | J     | K                             | L                              | M     | N                               | P                             | R                               | T    | W                             | X     | Y     |
|-----|-------|----------------|--------------------------------|--------------------------------|-------|-------------------------------|-------|-------------------------------|------|-------|-------|-------------------------------|--------------------------------|-------|---------------------------------|-------------------------------|---------------------------------|------|-------------------------------|-------|-------|
| IN. | 25    | 18             | 19 <sup>7</sup> / <sub>8</sub> | 12 <sup>7</sup> / <sub>8</sub> | 6     | 7 <sup>1</sup> / <sub>2</sub> | 10    | 3 <sup>7</sup> / <sub>8</sub> | 3    | 9     | 8     | 7 <sup>3</sup> / <sub>4</sub> | 16 <sup>1</sup> / <sub>4</sub> | 6     | 13 <sup>1</sup> / <sub>16</sub> | 5 <sup>3</sup> / <sub>8</sub> | 11 <sup>9</sup> / <sub>16</sub> | 3    | 8 <sup>1</sup> / <sub>4</sub> | 10    | 5     |
| MM. | 635.0 | 457.2          | 505.0                          | 327.2                          | 152.4 | 190.5                         | 254.0 | 98.6                          | 76.2 | 228.6 | 203.2 | 196.9                         | 412.8                          | 152.4 | 30.2                            | 136.7                         | 293.6                           | 76.2 | 209.6                         | 254.0 | 127.0 |



### STANDARD DIMENSIONS



|     | A     | B                              | C     | D                             | E    | F     | G                              | H                             | J                             | K     | L                             | M     | P                             | Y                             |
|-----|-------|--------------------------------|-------|-------------------------------|------|-------|--------------------------------|-------------------------------|-------------------------------|-------|-------------------------------|-------|-------------------------------|-------------------------------|
| IN. | 23    | 19 <sup>1</sup> / <sub>2</sub> | 6     | 7 <sup>7</sup> / <sub>8</sub> | 3    | 14    | 10 <sup>1</sup> / <sub>2</sub> | 7 <sup>1</sup> / <sub>2</sub> | 5 <sup>3</sup> / <sub>8</sub> | 12    | 6 <sup>1</sup> / <sub>4</sub> | 6     | 2 <sup>1</sup> / <sub>4</sub> | 2 <sup>3</sup> / <sub>8</sub> |
| MM. | 584.2 | 495.3                          | 152.4 | 200.0                         | 76.2 | 355.6 | 266.7                          | 190.5                         | 136.7                         | 304.8 | 158.8                         | 152.4 | 57.2                          | 60.5                          |

WEIGHT: SINGLE STAGE 65 lbs., 29.4 Kgs. ADDITIONAL STAGE 22 lbs., 9.97 Kgs.