WATEROUS COMPANY
South St. Paul, Minnesota 55075

# CS SERIES CENTRIFUGAL FIRE PUMP PERFORMANCE SHEET

## (Speed and Power Data)

Issued: December, 1972
Revised: 5/17/21

IMPELLER DIAMETER – 10–1/2 INCH

| PUMP TEST | | SERIES– PARALLEL NO. STAGES | IMPELLER COMBINATIONS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 71799 5'' Eye Dia | | 81357 4–3/8 '' Eye Dia | | | | | | | |
| GPM | PSI | | RPM | HP | RPM | HP | RPM | HP | RPM | HP | RPM | HP |
| 750 | 150 | Single | 3087 | 94 | 3195 | 92 | | | | | | |
| 525 | 200 | Single | 3496 | 110 | 3590 | 103 | | | | | | |
| 375 | 250 | Single | 3904 | 136 | 3985 | 117 | | | | | | |
| 750 | 165 | Single | 3212 | 104 | 3340 | 101 | | | | | | |
| 1000 | 150 | Single | 3139 | 115 | 3450 | 120 | | | | | | |
| 700 | 200 | Single | 3507 | 126 | 3740 | 122 | | | | | | |
| 500 | 250 | Single | 3916 | 146 | 4115 | 134 | | | | | | |
| 1000 | 165 | Single | 3269 | 128 | 3555 | 130 | | | | | | |
| 1250 | 150 | Single | 3253 | 143 | | | | | | | | |
| 875 | 200 | Single | 3530 | 144 | | | | | | | | |
| 625 | 250 | Single | 3927 | 158 | | | | | | | | |
| 1250 | 165 | Single | 3360 | 157 | | | | | | | | |
| 80 | 250 | Single | 3850 | 114 | | | | | | | | |
| 60 | 300 | Single | 4210 | 146 | | | | | | | | |
| 20 | 80 | Single | 2169 | 21 | | | | | | | | |
| 100 | 100 | Single | 2444 | 31 | | | | | | | | |
| 60 | 500 | Series – 2 Stage* | 4000 | 160 | | | | | | | | |
| 80 | 500 | Series – 2 Stage* | 4015 | 166 | | | | | | | | |

*Impeller 71670 added.

PERFORMANCE CURVES

| CURVE | IMPELLER |
|---|---|
| 771213 | 71799 (single stage) |
| 771214 | 71799, 71670 (2 stage) |



Form No. F–1178

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# CS SERIES CENTRIFUGAL FIRE PUMP PERFORMANCE SHEET

## (Lift and Elevation Data)

Issued: December, 1972
Revised: 5/17/21

| PUMP TEST | | SUCTION HOSE DIA (20 FT LENGTH) | IMPELLER COMBINATIONS | | | |
|---|---|---|---|---|---|---|
| | | | 71799 | | 81357 | |
| | | | Maximum Lift Sea Level (Ft) | Maximum Alt (Ft) 10 Ft Lift | Maximum Lift Sea Level (Ft) | Maximum Alt (Ft) 10 Ft Lift |
| GPM | PSI | | | | | |
| 750 | 150 | 4–1/2” | 16.0* | 7000 | 12.0 | 2000 |
| 750 | 150 | 5” | 19.0* | 9000 | 14.5 | 4000 |
| 1000 | 150 | 5” | 14.5* | 5500 | 12.0 | 2000 |
| 1000 | 150 | 6” | 19.0* | 9000 | 14.5 | 4000 |
| 1250 | 150 | 6” | 15.5* | 5600 | | |
| 1250 | 150 | 6”** | 18.0** | 7500 | | |

*Based on the use of 30’–0’’ suction hose.

**Dual suction hose operation – one on each side of pump.

Data shown is generally applicable. Performance for a specific configuration of pump may vary from that shown. See form F–1096, (latest revision).

However, the design of the suction piping and the inclusion of intake valves will have an adverse effect on lift and alti- tude performance

Friction loss in hose and strainer is based on data in NFPA Standard No. 1901, 1999 edition, Table 14–2.4.1.(b)



Form No. F–1178