

STAR SHORT VERTICAL PUMP

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Section

1



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The short vertical pump is a close coupled end suction pump. Typical applications are in metal finishing pre-treatment, machine tool coolant filtration and tank top pumping where the liquid level covers the impeller at start up.

The pump is suitable for liquid temperatures up to 90°C.

Mechanical seals, gland packing or pump bearings are not required. The pump body is mounted directly to the pedestal which incorporates a splash guard to prevent the pumped liquid reaching the motor.

NOTES

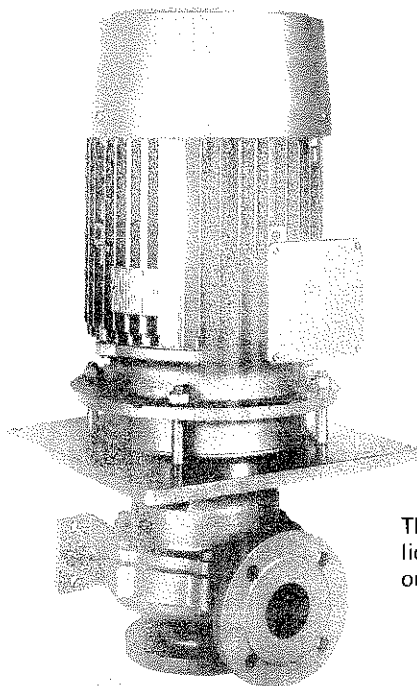
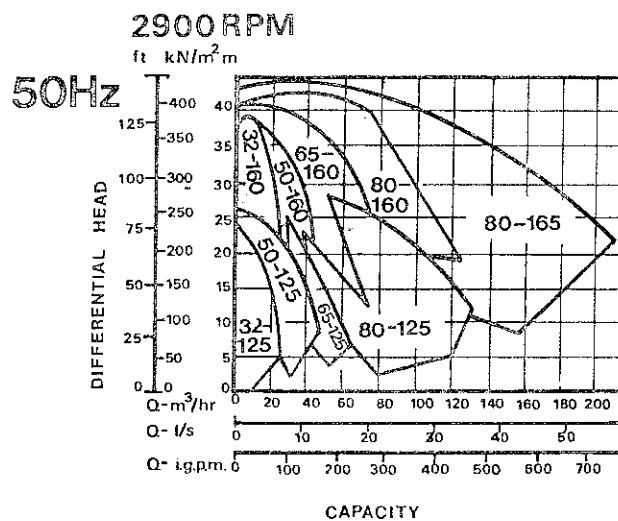
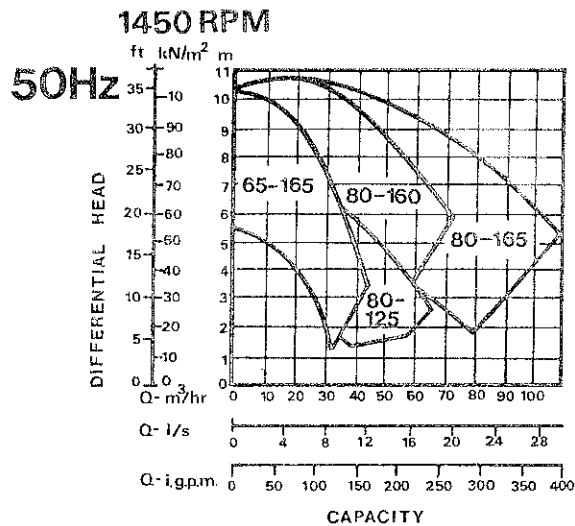
Parts which come into contact with the pumped liquid are supplied in iron and steel. A stainless steel impeller is available or the pumps can be stainless steel throughout.

Motors are Totally Enclosed Fan Ventilated with oil seal, 50Hz, 1450 or 2900 R.P.M. 60Hz, 1750 or 3500 R.P.M. motors are also available.

Maximum pressure up to generated head of pump.
Temperature up to 90°C.

| | |
|-----------------------|--|
| Body | Cast iron BS 1452 GR.260 alt.SS BS 3100 GR316C16 |
| Pedestal | Cast iron BS 1452 GR.220 alt.SS BS 3100 GR316C16 |
| Impeller | Cast iron BS 1452 GR.260 alt.SS BS 3100 GR316C16 |
| Shaft | Stainless Steel BS 970 431S29 |
| Studs and nuts | H.T.S. alt. Stainless Steel |

Note:— Performance figures quoted are based on the specific gravity and viscosity of water. If these values are greater than for water, it may be necessary to derate the characteristics and increase the motor horsepower accordingly.



The level in the tank must be above the impeller before start up. Once running the liquid level can be allowed to fall below the impeller as the pumps will then operate on a suction lift.

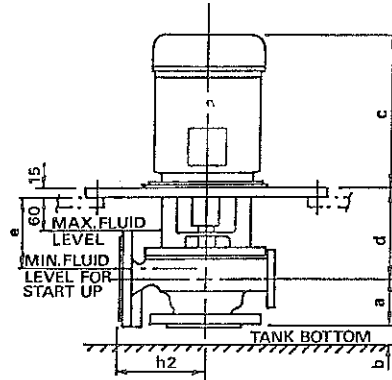
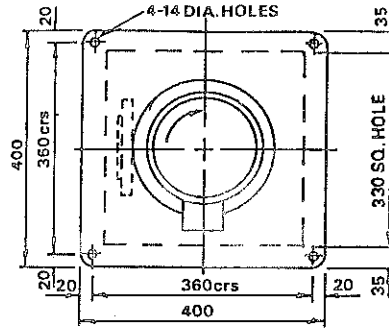
NOTE.

The suction can be extended by fitting a suction pipe. Providing the liquid level covers the impeller at start up the pump will hold prime in operation. If a suction pipe is fitted dimension 'b' becomes minimum between suction pipe and tank bottom.

NOTES:—

- 1) MAXIMUM FLUID LEVEL MUST NOT BE EXCEEDED. TANK OVERFLOW IS TO BE PROVIDED.
- 2) MINIMUM FLUID LEVEL ONLY APPLIES TO START CONDITIONS AFTER WHICH IT CAN BE ALLOWED TO DROP.

Specifications subject to change without notice.



b = MIN. DIST. TO TANK BOTTOM

| PUMP SIZE | BRANCH DETAILS | | | PEDESTAL No | MOTOR | KW | SPEED | a | b | c | d | e | h2 | WEIGHT kg |
|--------------------------|-----------------------|-------|--------|-------------|--------|-----|--------|------|------|-----|-----|-----|-----|-----------|
| | BS 4504 CLASS 10 | INLET | OUTLET | | | | | | | | | | | |
| 32-125 | BORE | 50 | 32 | 1 | D90S | 1.5 | 2900 | 80 | 25 | 259 | 153 | 120 | 140 | 59 |
| | FLANGE DIA | 165 | 140 | | D90L | 2.2 | | | | | | | | 61 |
| 32-160 | THICKNESS | 20 | 18 | 2 | D90S | 1.5 | 2900 | 80 | 25 | 259 | 171 | 145 | 160 | 68 |
| | INCLUDING RAISED FACE | 4-M16 | 4-M16 | | D90L | 2.2 | | | | | | | | 70 |
| No & SIZE OF BOLTS | 125 | | | 100 | 78 | 1 | D100L | 3 | 2900 | 80 | 33 | 317 | 153 | 120 |
| EQUI-SPACED OFF ϕ_s | | 102 | 102 | | | | D90S | 1.5 | | | | | | |
| PC DIA | 145 | | | 125 | 102 | 2 | D90L | 2.2 | 2900 | 80 | 33 | 315 | 171 | 145 |
| RAISED FACE DIA | | 122 | 102 | | | | D100L | 3 | | | | | | |
| 50-125 | BORE | | | 65 | 50 | 1 | D100L | 3 | 2900 | 80 | 33 | 317 | 171 | 145 |
| | FLANGE DIA | 185 | 165 | D112M | 4 | | 92 | | | | | | | |
| 50-160 | THICKNESS | 20 | 20 | 2 | D132Sa | 5.5 | 2900 | 80 | 33 | 404 | 171 | 145 | 160 | 113 |
| | INCLUDING RAISED FACE | 4-M16 | 4-M16 | | D90S | 1.5 | | | | | | | | 65 |
| No & SIZE OF BOLTS | 145 | | | 125 | 102 | 1 | D90L | 2.2 | 2900 | 80 | 33 | 315 | 171 | 145 |
| EQUI-SPACED OFF ϕ_s | | 122 | 102 | | | | D100L | 3 | | | | | | |
| PC DIA | 160 | | | 145 | 122 | 2 | D112M | 4 | 2900 | 80 | 33 | 317 | 171 | 145 |
| RAISED FACE DIA | | 138 | 122 | | | | D132Sa | 5.5 | | | | | | |
| 65-125 | BORE | | | 80 | 65 | 1 | D132Sb | 7.5 | 2900 | 80 | 33 | 404 | 171 | 145 |
| | FLANGE DIA | 200 | 185 | D160Ma | 11 | | 158 | | | | | | | |
| 65-160 | THICKNESS | 22 | 20 | 2 | D90S | 1.1 | 1450 | 100 | 40 | 259 | 171 | 145 | 180 | 74 |
| | INCLUDING RAISED FACE | 8-M16 | 4-M16 | | D112M | 4 | | | | | | | | 93 |
| No & SIZE OF BOLTS | 160 | | | 145 | 122 | 1 | D132Sa | 5.5 | 2900 | 100 | 40 | 337 | 171 | 145 |
| EQUI-SPACED OFF ϕ_s | | 138 | 122 | | | | D132Sb | 7.5 | | | | | | |
| PC DIA | 138 | | | 122 | 122 | 2 | D160Ma | 11 | 2900 | 100 | 40 | 551 | 171 | 145 |
| RAISED FACE DIA | | 138 | 122 | | | | D90S | 1.1 | | | | | | |
| 80-125 | BORE | | | 100 | 80 | 1 | D100L | 3 | 2900 | 100 | 50 | 315 | 153 | 120 |
| | FLANGE DIA | 220 | 200 | D112M | 4 | | 90 | | | | | | | |
| 80-160 | THICKNESS | 24 | 22 | 2 | D132Sa | 5.5 | 2900 | 100 | 50 | 402 | 171 | 145 | 200 | 111 |
| | INCLUDING RAISED FACE | 8-M16 | 8-M16 | | D132Sb | 7.5 | | | | | | | | 155 |
| No & SIZE OF BOLTS | 180 | | | 160 | 138 | 1 | D160Ma | 11 | 2900 | 100 | 50 | 549 | 171 | 145 |
| EQUI-SPACED OFF ϕ_s | | 158 | 138 | | | | D90S | 1.1 | | | | | | |
| PC DIA | 158 | | | 138 | 138 | 2 | D90L | 1.5 | 2900 | 100 | 50 | 284 | 171 | 145 |
| RAISED FACE DIA | | 138 | 138 | | | | D100La | 2.2 | | | | | | |
| 80-165 | BORE | | | 125 | 80 | 2 | D132Sb | 7.5 | 2900 | 100 | 50 | 404 | 171 | 145 |
| | FLANGE DIA | 250 | 200 | D160Ma | 11 | | 166 | | | | | | | |
| 80-165 | THICKNESS | 26 | 22 | 2 | D100Lb | 3 | 2900 | 100 | 50 | 317 | 171 | 145 | 225 | 91 |
| | INCLUDING RAISED FACE | 8-M16 | 8-M16 | | D160Mb | 15 | | | | | | | | 170 |
| No & SIZE OF BOLTS | 210 | | | 180 | 138 | 1 | D160L | 18.5 | 2900 | 100 | 50 | 551 | 171 | 145 |
| EQUI-SPACED OFF ϕ_s | | 188 | 138 | | | | D180M | 22 | | | | | | |
| PC DIA | 188 | | | 138 | 138 | 2 | | | 2900 | 100 | 50 | 617 | 171 | 145 |
| RAISED FACE DIA | | 138 | 138 | | | | | | | | | | | |

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