

STARFIX

Belt Driven, In-Line Circulator.

Publication No.

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Section

1



Holden and Brooke Limited

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INTRODUCTION

The STARFIX is a metric dimensioned, belt driven pump mounted in-line. It is particularly suited for Building Service applications.

COMPACT, IN-LINE, BACK PULL-OUT

Designed for horizontal pipelines the pump is free standing and occupies a minimum of floor space. Slotted pedestal feet allow the removal of the pedestal, seal housing, mechanical seal, and rotating assembly whilst leaving the pump casing undisturbed in the pipeline.

VARIABLE PERFORMANCE CHARACTERISTICS

Readily achieved by changing pulley ratios, to vary the speed.

CONNECTIONS

Pump inlet and outlet have either screwed tailpieces or flanged connection to BS 4504 Class 16 dependant on pump size (see arrangement drawing).

MOTORS

Standard horizontal Drip Proof or Totally Enclosed. Commercially quiet 1450 R.P.M. 50Hz. or 1750 R.P.M. 60Hz. Cylent motors can be supplied as an option. Single phase motors 50Hz/220-240 volts up to 0.75kW. Three phase 50Hz/380-440 volts up to and including 4kW. We recommend the fitting of three phase motors to keep motor noise to a minimum.

OPERATING CONDITIONS

Maximum working pressure 10 bar (145 lb/in²).

Maximum working temperature 150°C.

Pressure and temperature limitations are the maximum in each case and are not a combination of both, refer to BS 4504.

MATERIAL SPECIFICATION

Body: Cast iron BS.1452 GR.260

Pedestal: Cast iron BS.1452 GR.220

Impeller: Gunmetal BS.1400 LG2C

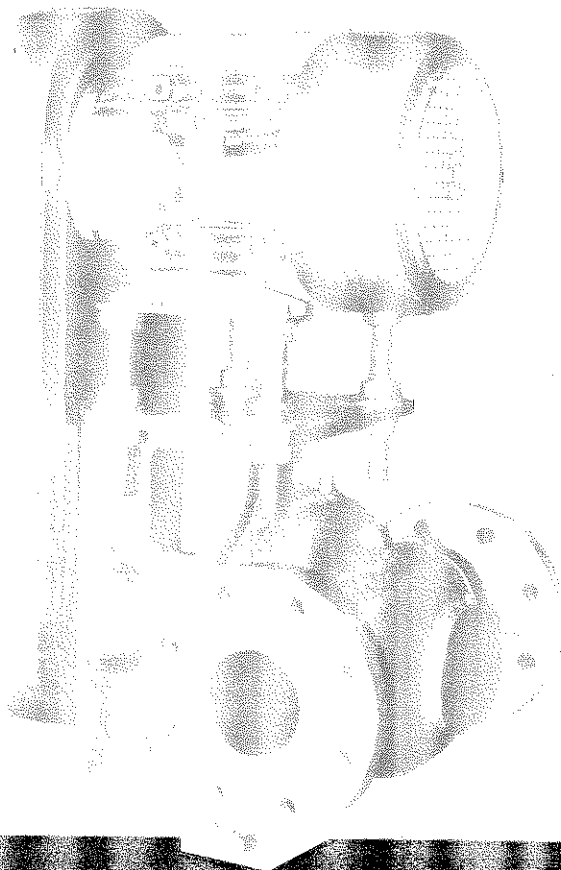
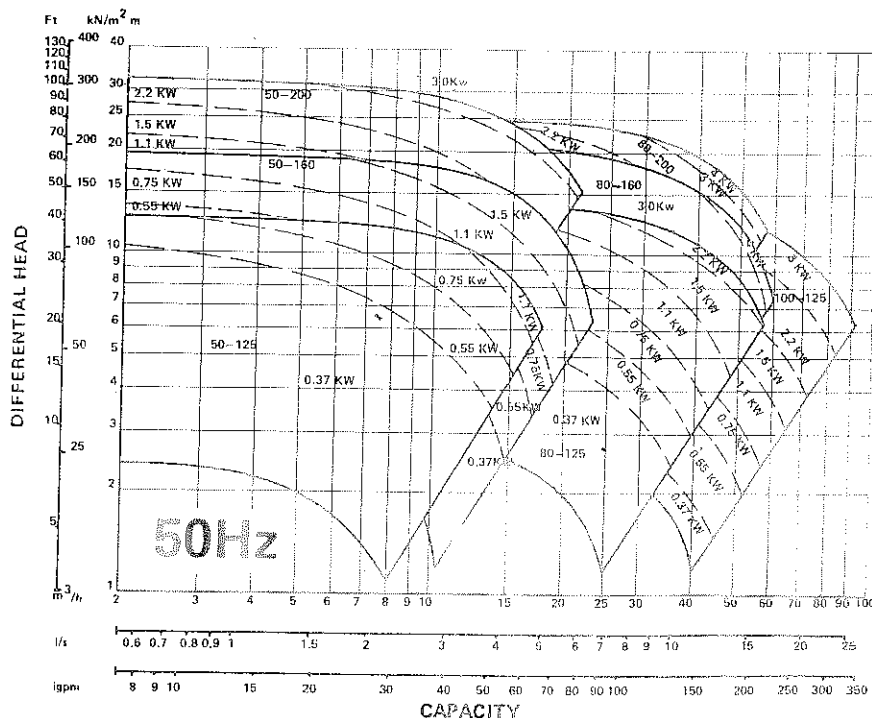
Shaft: Stainless Steel BS.970 431S29

Seal: Up to 130°C Carbon/Ni. Resist.

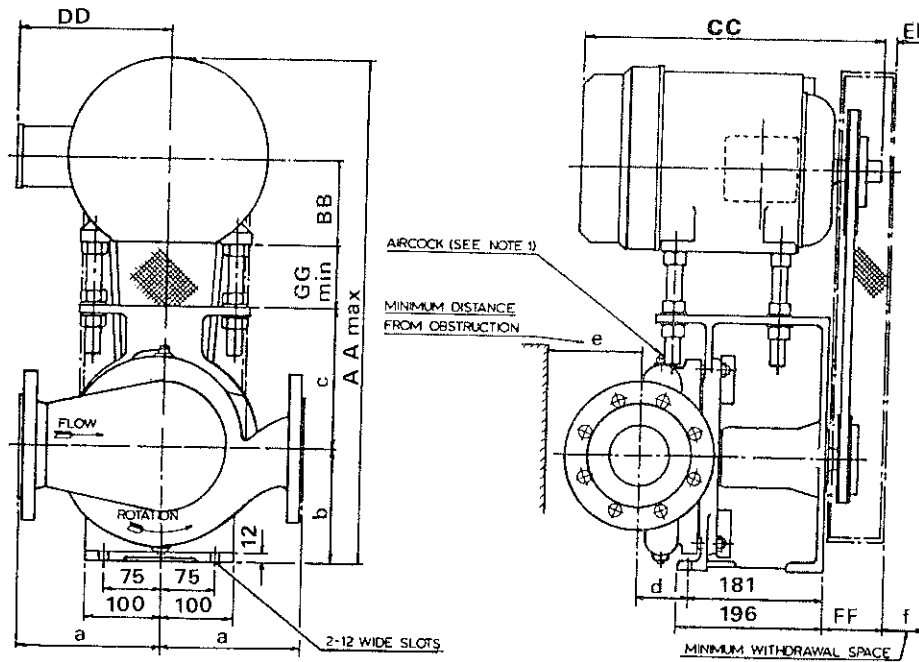
130-150°C Carbon/Sintered Tungston

All seals are uncooled.

SELECTION CHART STAR RANGE IN-LINE PUMPS 1450 RPM MOTOR SPEED PERFORMANCE ON WATER SG = 1.0



DIMENSIONS



NOTES:-

1) PUMP MUST BE VENTED BEFORE STARTING WITH RADIATOR TYPE ARCOCK (SCREWDRIVER SLOT) TWO CONNECTIONS ARE PROVIDED (ONE FLUGGED), TO FACILITATE REVERSE FLOW.

2) TO REVERSE FLOW, PUMP BODY CAN BE ROTATED THRO' 180°.

3) FIT GUARD CLOSELY TO MOTOR FRAME.

| PUMP SIZE | BRANCH DETAILS | | a | b | c | d | e | f | MOTOR | AA | BB | CC | DD | EE | FF | GG | WEIGHT kg. |
|-----------|--|----------------|-----|-----|-----|----|-----|-----|-------|-----|-----|-----|-----|----|-----|-----|------------|
| | BS 4504 CLASS 16 | INLET & OUTLET | | | | | | | | | | | | | | | |
| 50-125 | BORE | 50 | 133 | 152 | 190 | 46 | 90 | 120 | B 56 | 670 | 89 | 331 | 120 | 27 | 80 | 85 | 61 |
| | FLANGE DIA. | 165 | | | | | | | D90S | | 90 | 314 | 140 | 25 | | 91 | |
| 50-160 | THICKNESS (Including Raised Face) | 20 | 165 | 152 | 190 | 46 | 90 | 120 | B 56 | 670 | 89 | 331 | 120 | 27 | 80 | 85 | 68 |
| | | | | | | | | | D90S | | 90 | 314 | 140 | 25 | | 91 | |
| 50-200 | No. & SIZE OF BOLTS (Equi-spaced Off CL's) | 4-M16 | | | | | | | D90L | | 100 | 371 | 138 | 15 | | 78 | 76 |
| | P.C. DIA. | 125 | 180 | 175 | 200 | 40 | 90 | 130 | B 56 | 690 | 89 | 331 | 120 | 27 | 80 | 91 | |
| 80-125 | BORE | 80 | 178 | 152 | 190 | 71 | 120 | 140 | D90S | 670 | 90 | 314 | 140 | 25 | 80 | 84 | 72 |
| | FLANGE DIA. | 200 | | | | | | | D90L | | 100 | 371 | 138 | 15 | | 74 | |
| 80-160 | THICKNESS (Including Raised Face) | 22 | 190 | 152 | 190 | 68 | 120 | 130 | D100L | 670 | 100 | 371 | 138 | 15 | | 80 | 76 |
| | | | | | | | | | B 56 | | 89 | 331 | 120 | 27 | | 85 | |
| 80-200 | No. & SIZE OF BOLTS (Equi-spaced Off CL's) | 8-M16 | | | | | | | D90S | 670 | 90 | 314 | 140 | 25 | 80 | 84 | 78 |
| | P.C. DIA. | 160 | 200 | 175 | 200 | 55 | 120 | 140 | D90L | 690 | 90 | 339 | 140 | 25 | 80 | 91 | |
| 100-125 | BORE | 100 | 200 | 152 | 190 | 76 | 130 | 140 | D100L | 735 | 100 | 371 | 138 | 40 | 105 | 90 | 83 |
| | FLANGE DIA. | 220 | | | | | | | D112M | 735 | 112 | 377 | 179 | 15 | | 80 | |
| 100-160 | THICKNESS (Including Raised Face) | 24 | | | | | | | B 56 | 670 | 89 | 331 | 120 | 27 | | 85 | 79 |
| | | | | | | | | | D90S | 690 | 90 | 314 | 140 | 25 | 80 | 84 | |
| 100-200 | No. & SIZE OF BOLTS (Equi-spaced Off CL's) | 8-M16 | | | | | | | D90L | 715 | 100 | 371 | 138 | 40 | 105 | 94 | 81 |
| | P.C. DIA. | 180 | | | | | | | D100L | 715 | 112 | 377 | 179 | 15 | | 80 | |
| 100-250 | RAISED FACE DIA. | 158 | | | | | | | D112M | 715 | 112 | 377 | 179 | 15 | | 109 | 98 |
| | | | | | | | | | B 56 | 670 | 89 | 331 | 120 | 27 | | 85 | |

Note: — Improvements in general design and modifications will be embodied for the benefit of clients as and when introduced; consequently the specification is subject to alteration as may be necessary, without notification.

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