6D SERIES PUMP

THREE-SCREW PUMPS STANDARD PRODUCT SPECIFICATIONS

CIRCOR INDUSTRIAL SOLUTIONS

Series 6D IMO® pumps are intended for high pressure service on fluids with viscosity from 2cSt to 25,000ssu. Typical applications include crude oil pipeline service, fuel atomization for combustion gas turbine fuel injection, fluid power service on hydraulically operated machinery, gas sealing in centrifugal compressors and hydrostatic bearing support.

These pumps are hydraulically balanced in both the axial and radial directions, which eliminates bearing loads due to differential pressure. The single grease packed ball bearing is external to the liquid pumped and does not rely on the lubrication qualities of the pumped liquid. The single mechanical seal is exposed only to inlet pressure. Very low airborne noise levels are normal for IMO® three-screw positive displacement pumps as are high operating efficiencies and non-pulsating delivered flow.



G6DB-137 SHOWN

Picture typical for pumps through 156 rotor size

Larger pumps have ANSI inlet port flanges

PRODUCT SPECIFICATIONS

| Casing | High shock capacity ductile (nodular) iron. Consult IMO for steel case availablity. |
|-----------------|---|
| Rotor housing | Pearlitic gray iron for rotor sizes 106 through 187; bronze sizes 218 and larger. |
| Power rotor | Alloy steel, nitride hardened and thread ground. |
| Idler rotors | Pearlitic gray iron, induction hardened and thread ground for sizes 106 through 187; alloy steel, nitride hardened and thread ground sizes 218 and larger. |
| Gaskets | Cellulose and non-asbestos fiber. |
| Seal & bearing | Type B: Buna N bellows mechanical seal, Buna N O-rings and standard external, permanently greased packed, deep groove ball bearing - recommended for distillate fuels and lubricating oil or hydraulic fluids. Type H: Positive drive mechanical seal, fluorocarbon O-rings and external high temperature, permanently greased packed, deep groove ball bearing. |
| Accessories | Completely mounted, built to order pump/driver assemblies are available with baseplates, ANSI RF spool pieces, NEMA "C" face adapters. |
| Outlet pressure | 1500 PSIG (103 BAR) maximum for lube, seal and hydraulic oils. 1000 PSIG (70 BAR) maximum for distillate & residual fuels and crude oils. Minimum recommended differential pressure is 40 PSI (2.8 BAR) when viscosity is >100 ssu and 25 PSI (1.7 BAR) when viscosity is <100 ssu. |
| Inlet pressure | Type B & H: 75 PSIG (5 BAR) maximum, sizes 106 - 187 50 PSIG (3 BAR) maximum, sizes 218 - 400 |
| Viscosity | 33 ssu (2.0 CST) minimum: Type B - 3000 ssu (650 CST) maximum (consider cold start) Type H - Viscosities above 3000 ssu (650 CST) |
| | |

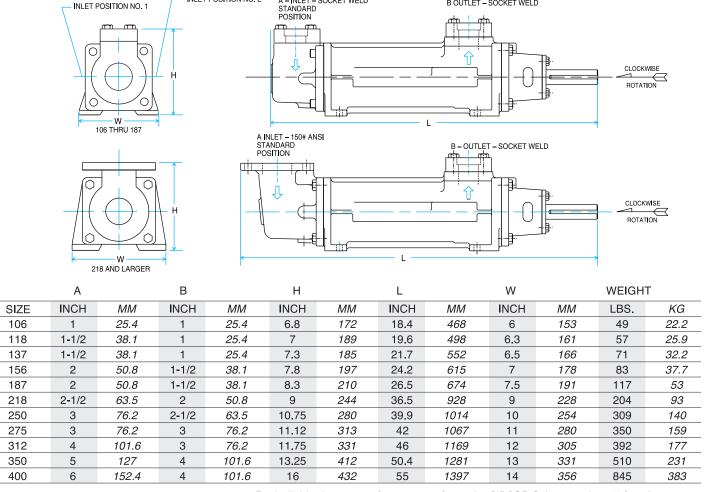


6D SERIES PUMP SPECIFICATIONS CONTINUED

INLET POSITION NO. 2

| Temperature | Type B: 0 to 180°F Type H: Sizes 106 - 187 0 to 225°F (-18 to 107°C) Sizes 218 and up 0 to 200°F (-18 to 93°C) |
|-------------|---|
| Speed | Do not exceed 1800 RPM when pumping residual fuels or crude oil due to the presence of abrasives and contaminants. |
| Drive | Direct only (no shaft side loading). |
| Rotation | Clockwise facing pump shaft |
| Mounting | May be foot mounted in any orientation. Flange mounting optional for certain applications. |
| Filtration | Inlet strainers are required to keep contaminents and abrasives out of the pump. They must be selected in consultation with the strainer vendor to prevent pump starvation. Normally, 60 mesh (0.01 inch - 238 micron) for light and 1/8 - 3/16 inch (3 - 5mm) openings for heavy oils are recommended. |

A - INLET - SOCKET WELD



For individual pump performance, refer to the CIRCOR Selector at http://cfx-selector.com Data Nominal / Request certified drawing for construction

BOUTLET - SOCKET WELD

CIRCOR

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CIRCOR Products & Services



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