



D Series Cast Iron Gear Pumps

Peak Performance

Every component of the rugged D Series pump is specifically designed for maximum efficiency, dependability, durability and reliability in performing continuous operation in heavy duty applications with severe duty cycles and temperature conditions, all within the industry leading package size and power density.

D Series pumps exceed the capabilities of aluminum pumps in applications, such as skid steer loader applications and construction equipment.

Tremendous Design Flexibility

From the specially designed pressure-loaded bronze-on-steel thrust plates to the single piece gear and shaft construction, dependability is assured to OEM's and their customers.

Standard and custom options for displacement, mounting flanges, shafts, ports, and integral valve options are used in virtually any combination to create a pump for your specific application requirements (high pressure, high temperature, compact design).

Local Address:



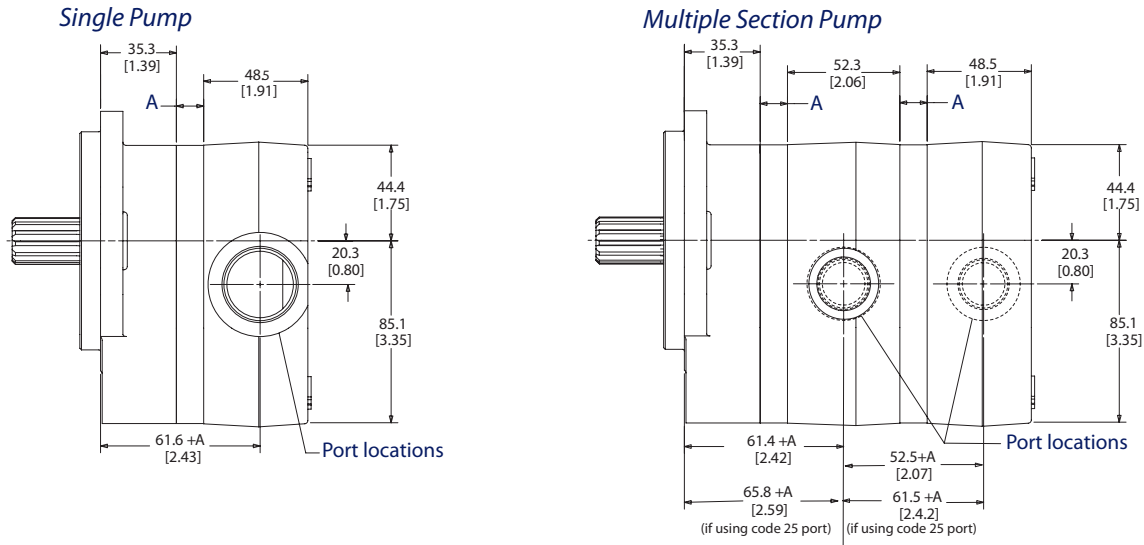
D Series Cast Iron Gear Pumps

Features and Benefits

- Compact design 20% smaller than conventional
 - Ease of installation in optimized machines
- First to patent non-tin-coated external surface bearings
 - Eliminates bearing failures due to spinning in their bores and allowing higher bearing loads due to high pressures
- Bearings located in the covers instead of the body
 - Smaller power dense package that does not require the extra cost and complexity of an outrigger bearing
- Single piece gear and shaft construction
 - Durable construction for long service life by eliminating the potential problems of fatigue stress and gear face mismatch often associated with two-piece gear shaft designs
- Pressure-loaded bronze-on-steel thrust plates
 - Higher efficiency due to less internal leakage over a wide temperature range in comparison to fixed clearance gear pumps
- High temperature seals
 - Higher temperature capabilities for today's hotter running machines
- Heavy duty; low-friction Teflon[®] PTFE-lined bronze sleeve bushings
 - Extended life under extreme temperature and pressure conditions
- Designed not to crack the housing if over pressured
 - No fluid leaking on the environment and no spraying of hydraulic oil on super hot engine components
- Three-piece housing constructed of high-strength ductile iron
 - Providing higher pressure loading in a smaller package and the ability to stack 4 sections together without support — saving space on the machine for ease of assembly and maintenance
- Side or rear port options, in a variety of styles
 - Lower costs, simpler installations, and greater design flexibility in a wide variety of applications.
- Optional flow control with dynamic load sensing priority flow or fixed priority divider valve
 - Priority system integrity for safety

Dimensions

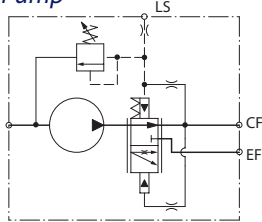
D Series Cast Iron Gear Pumps Mounting Dimensions in Millimeters [Inches]



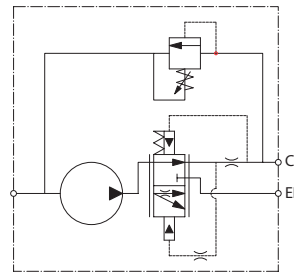
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Optional Flow Controls

LS Pump



PFD Pump



2458

Specifications

Product Parameters

Construction	Heavy duty ductile iron 3-piece construction
Displacements	7 to 45 cm ³ [0.43 to 2.75 in ³ /rev]
Pressure (inlet)	0.8 bar absolute [6.3 in Hg] recommended, 0.6 bar abs [12.2 in Hg vac] cold start
Pressure (outlet)	276 bar [4000 psi] to 32.8 cm ³ [1.94 in ³ /rev]
Speed	600 - 3400 min ⁻¹ (rpm)
Mounting	SAE-A, SAE-B, Perkins® engine mount and specials available upon request
Shaft (types)	SAE splined, keyed, tapered, and specials available upon request
Axial / radial load	Contact Sauer-Danfoss Technical Support
Fluid viscosity	10 mm ² /sec (cSt) [60 SUS] minimum, 1600 mm ² /sec (cSt) [7500 SUS] maximum
Filtration requirement	22/18/13 ISO 4406 at pump inlet

Flow velocity	4.3 m/sec [14 ft/sec] maximum inlet velocity and 8 m/sec [26 ft/sec] maximum recommended discharge velocity
Multiple configurations	Single, double, triple, and quadruple configurations
Inlet options	Single or reduced inlet options
Fluids	Mineral based and biodegradable fluids
Operating temperature	-30° C [-20° F] minimum for cold start 104° C [220° F] normal operating conditions 113° C [235° F] peak intermittent
Noise level	< 75 dB(A) (under normal operation conditions)
Efficiency	96% volumetric, 90% overall = minimized operating costs

Comprehensive technical information: *Series D Hydraulic Gear Pumps Technical Information*, **520L0781**
Sauer-Danfoss product literature on line at: www.sauer-danfoss.com