TECHNAFLO

PROUDLY MANUFACTURED BY INGERSOLL RAND

D SERIES

Powered by ORBIS™ Technology

ENGINEERING DATA PACK

Ingersoll Rand

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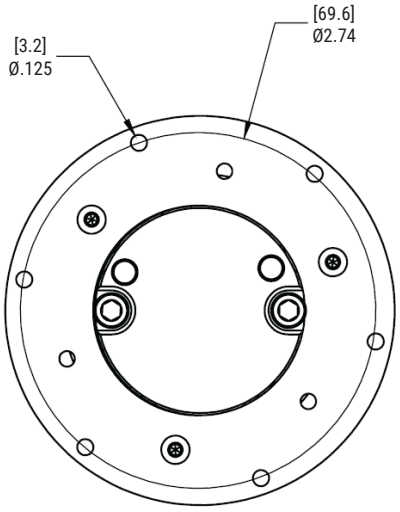
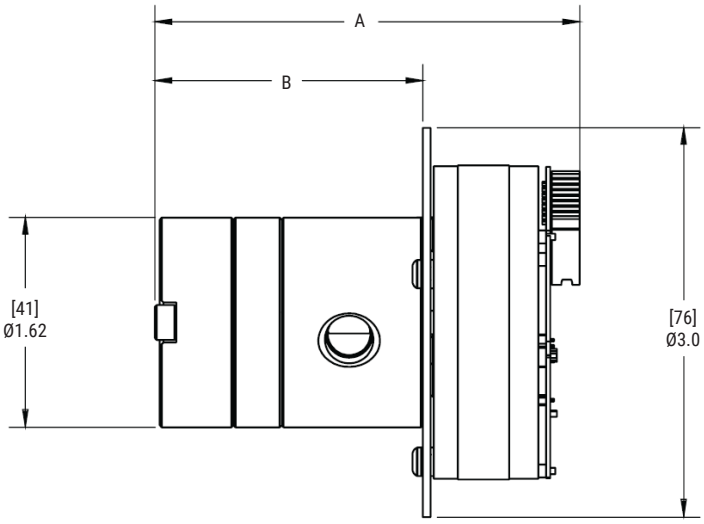
D Series Powered by ORBIS Technology Description

Ingersoll Rand Pump Group has been a leader in the development and manufacturing of positive displacement pumps since 1927. Building on a vast knowledge of hydraulics, mechanics and electronics, comes D Series pumps powered by OBIS technology. These pumps combine time proven external gear design and magnetically coupled sealless construction. Powerful Neodymium magnet and integrated brushless DC motor increase life and reliability ideal for a wide variety of applications.

D Series with ORBIS are designed with an open format to allow for ease of integration into OEM equipment. Every D Series pump with ORBIS technology is backed by 125 years of engineering, available to support the mechanical, hydraulic, and electrical needs of OEMs.

D Series Powered by ORBIS Technology Mounting Dimensions





Displacement	Dimension A Inch [mm]	Dimension B Inch [mm]
.38	3.15 [79.9]	1.94 [49.3]
.57	3.27 [83.1]	2.06 [52.4]
.80	3.35 [85]	2.14 [54.3]

D Series Powered by ORBIS Technology Integrated Drive Performance Data

Size (ml/rev)	GPH @ 0 PSI and 3500 RPM	LPH @ 0 PSI and 3500 RPM	Maximum Differential Pressure PSI (bar) @ 3500 RPM
.38	20	76	100 (6.8)
.57	30	114	60 (4.1)
.80	42	160	45 (3.1)

D Series Powered by ORBIS Technology Temperature Limits

D Series Powered by ORBIS - Max Fluid Temp
-40 °F (-40 °C) to 248 °F (120 °C)

D Series Powered by ORBIS Technology Materials of Construction

Part	Material
Body	Stainless Steel - ASTM A276-316 SS
Cavity Plate	Stainless Steel - ASTM A276-316 SS
Cap	Stainless Steel - ASTM A276-316 SS
Gears	PPS (Polyphenylene Sulfide) - 30% Carbon / 15% PTFE
	PEEK (Polyetheretherketone) -15% Carbon
O-Rings	Viton
	Buna N
	EPR
Shaft	Stainless Steel - ASTM A276 - 316 SS
Magnet	Neodymium Iron Boron (NdFeB)
Magnet Cup	Stainless Steel - ASTM A 167
Magnet Shroud	Stainless Steel - AMS 5524

WARNING

The magnets in magnetically coupled pumps create very strong magnetic fields.
Special care must be taken with the following:

- Pacemakers - Magnets can upset the timing of pacemakers. These magnets should be kept away from all pacemakers. Because of the health risks involved the importance of this cannot be overstated.
- Credit Cards - Magnets can scramble the information on a credit card's magnetic tape.
- Computers, Computer Tapes and Computer Disks - Magnets can scramble the information on the memory device.
- Watches - Magnets can affect the workings of traditional mechanical spring driven watches as well as chip and electronically controlled designs.
- Electronic Instruments - Sensitive electronic instruments and devices may change calibration or be damaged by a powerful magnetic field.
- Explosive Atmosphere - Rare earth magnets and magnetic materials may create sparks through contact in handling. Never handle rare earth magnets in explosive atmospheres because sparking may ignite the atmosphere.

Ingersoll Rand

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