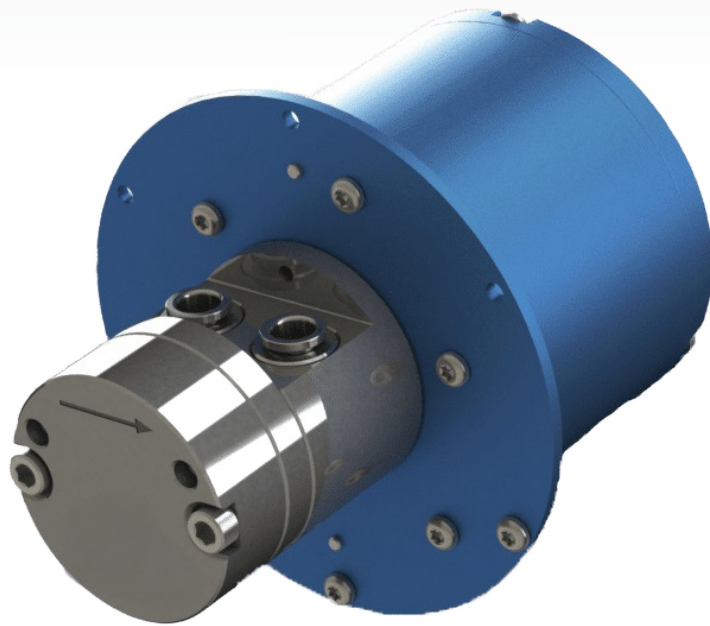


# ***TECHNAFLO***

***PROUDLY MANUFACTURED BY INGERSOLL RAND***



**D SERIES**  
Powered by ORBIS™ Technology

# ORBIS TECHNOLOGY

ORBIS Technology enhanced drive solution for Ingersoll Rand D Series pumps offers an integrated brushless DC motor with closed-loop control allowing customers to precisely manage performance requirements. This combination provided a reduced package size, long life, reliability, and a performance range that satisfies a high variety of applications. D Series external gear pumps provide non-pulsing flow while the seal-less design provide a leak-free pumping solution.

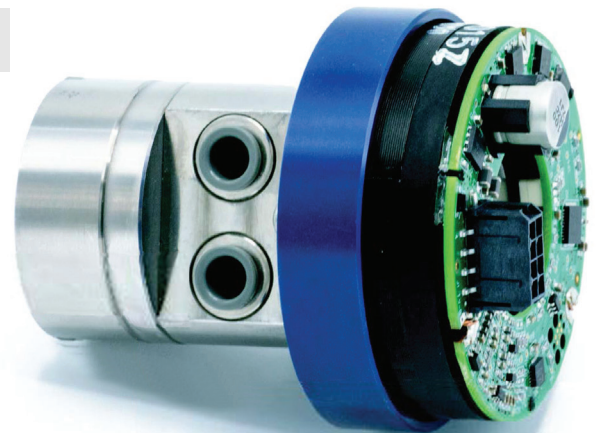


## Suggested Applications

- Clinical Chemistry
- Continuous Ink Jet
- Dialysis Equipment
- Laser Cooling
- Slide Staining

## Performance Range

<b>Flow Range</b>	up to 42 GPH (up to 160 LPH)
<b>Differential Pressure</b>	to 80 PSI (5 BAR)
<b>System Pressure</b>	to 150 PSI (10 BAR)
<b>Viscosity</b>	0.0 CPS to 2,000 CPS



# INTRODUCING A NEW DARING SOLUTION...

Ingersoll Rand Group has drawn on over 125 years of positive displacement pump design and manufacturing experience to solve our customers' most challenging problems. Building on a vast knowledge of hydraulics, mechanics and electronics comes proven D Series pump powered by ORBIS Technology. ORBIS Technology enhanced drive solution offers an integrated brushless DC motor with closed-loop control delivering performance that satisfies a high variety of applications in a compact design with exceptional reliability and extended life.

D Series external gear pumps are known for their seal-less construction and non-pulsing flow which makes them perfect for precise circulating, dosing, and metering applications. If the application requires a leak-free, compact, and technically advanced pump, Ingersoll Rand's D Series pumps with ORBIS Technology is the solution.

## Features

- Robust D Series Platform
- Compact Footprint
- Only Static O-Ring Seals
- Available Integrated Push-to-Connect Fittings
- Neodymium Driven Magnet
- Closed-Loop Speed Control
- Variety of Control Options

## Benefits:

ORBIS Technology utilizes a closed-loop speed control system that achieves a set point for speed very quickly and holds this point independent of load which ensures fluid delivery will be consistent regardless of application and system variables. Standard product supports four-wire and two-wire configurations. The four-wire configuration allows speed control of 0 to 5 volts from 800 to 3600 RPM, tach out for speed monitoring reversing control, as well as fault-out and current-out. An alternate simplified two-wire configuration can easily replace a brushed motor in OEM applications.

Ingersoll Rand's robust D Series platform has proven performance and long life of up to 20,000 hours. The pump is driven by a Neodymium magnet that delivers 85 mNm of torque to cover a wide range of applications.

The compact footprint of ORBIS Pump and motor allows it to integrate into almost any application. Static O-Ring seals are leak-free and make field repair with service packs simple. Also, optional integrated push-to-connect tube fittings reduces installation time by at least 50% and saves additional space compared to traditional ports.

# SPECIFICATION DATA

DISPLACEMENT	PUMP	MAXIMUM SPEED	MAXIMUM DIFFERENTIAL PRESSURE	MAXIMUM SYSTEM PRESSURE	FLOW @ 0 PSI 3500 RPM
ML/REV	SERIES	RPM	PSIG (BARG)	PSIG (BARG)	GPH (LPH)
0.38	D	3600	80 (5.5)	150 (10.3)	20 (76)
0.57	D	3600	70 (4.8)	150 (10.3)	30 (114)
0.68	D	3600	60 (4.1)	150 (10.3)	36 (136)
0.80	D	3600	50 (3.4)	150 (10.3)	42 (160)

# MATERIALS OF CONSTRUCTION

D SERIES	
Wetted Components	316 SS
Gears	PPS, PEEK
Bearing	PEEK
O-Rings	Viton, PTFE, EPR, Nitrile, or Neoprene
Magnets	Neodymium

316 SS = Stainless Steel | PPS = Polyphenylene Sufliide | PEEK = PolyEtherEtherKetone | EPR = Ethylene Propylene Rubber





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