

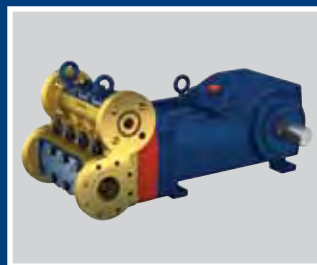
Hydra-Cell[®]

Seal-less Pumps

Reliable Pumps for Oil and Gas Processing with
No Seals or Packing to Leak or Replace



Oil & Gas Processing



Pressure Injecting and Mixing • Transfer • Spraying • Metering and Dosing

Compact, Seal-less Pumps for Reliable Operation and Long Service Life

With nearly 40 years of service experience to the industry, Hydra-Cell pumps are performance-proved for continuous use in a wide range of oil and gas applications.

- Can pump corrosive and abrasive fluids, even at high temperatures.
- Capable of running dry without damage to the pump.
- Easy maintenance with minimal downtime – no cups, packing or seals to leak or replace.

Field Production and Transport Applications

- Hot Glycol Injection
- Produced Water Transfer
- Condensate Transfer & Injection
- Sour Service
- Chemical Injection

Refinery Applications

- Catalytic Injection
- Crude Oil Sampling
- High Pressure Water
- Caustic Soda Wash Down
- Sour Gas Injection
- Emission Control
- Pumping Slurry for SO₂ Removal/Acidic Neutralization

“Before we installed our Hydra-Cell® pump, we were using a plunger pump. And, anytime you run a plunger pump you’re going to get some leakage in the packing or they end up burning out. At the speed we needed to run them at, they were burning up packing quite regularly. So we replaced our old plunger pumps with D04 Hydra-Cell pumps and since then we haven’t had an issue. Their durability and seal-less design have helped us reduce costly maintenance.”

Denis Boucher
Production Foreman
Trident Exploration Group Inc.

Hydra-Cell Standard Pumps, Hydra-Cell Metering Pumps and Hydra-Cell T Series Pumps

Hydra-Cell positive displacement pumps are available in 15 pump models covering a wide range of flows and pressures.



Eight (8) standard Hydra-Cell models are ideal for transfer, spraying, and pressure injecting and mixing.



Six (6) metering pump models are ideal for metering and dosing, spraying, and pressure injecting and mixing.

One (1) Hydra-Cell T8045 pump, the first in a series of high-pressure triplex pumps.



Hydra-Cell pumps are used for many oil and gas applications.



Offshore
(Chemical Injection & Reverse Osmosis)

Gas Extraction
(Water ReInjection, Well Dewatering & NGL Transfer)



Gas Processing & Distribution
(Glycol Injection and Odorizing)

Oil Refining
(Steam, Stripping, Additive Injection, Stack Cooling & Chemical Metering)



Jet Pumps
(Power Fluid Pressurization)

Pressure Testing
(Pipes and Well Testing)

Oil Extraction
(Well Simulation, Water ReInjection, Chemical Injection)



Crude Oil
(Transfer & Sampling)

Typical Chemicals and Liquids Pumped	Challenges in Pumping	The Hydra-Cell Advantage
Produced Water & Sour Water (Injection, Disposal, Transfer)	Corrosive – can contain H ₂ S, salt, CO ₂ plus other impurities forming acidic solutions that can damage a pump.	<ul style="list-style-type: none"> Seal-less design provides no leak path and handles corrosive fluids. Corrosion-resistant liquid end materials available.
	Abrasive – water contains sand and other contaminants (e.g.) barium, cadmium, sulfur, chromium, copper, iron, lead, nickel, silver, zinc.	<ul style="list-style-type: none"> Seal-less design and spring-loaded, horizontal disk check valves enable liquids with particulates up to 1/32" diameter (depending on pump model) to be pumped reliably without damage to the pump. No dynamic seals to wear.
	H ₂ S gas may not be fully contained by packing or seals.	<ul style="list-style-type: none"> No cups, packing or seals to leak gas. Seal-less pump chamber provides 100% containment.
Hot Triethylene Glycol (TEG) Diethylene Glycol (DEG) (Gas Drying)	Non-lubricating – requires internal gearing or reservoir with added maintenance issues.	<ul style="list-style-type: none"> Pumping action does not require lubrication.
	Handling high temperature of liquid pumped.	<ul style="list-style-type: none"> No dynamic seals to be damaged.
	Controllability of injected TEG/DEG.	<ul style="list-style-type: none"> Flow rate directly proportional to pump rpm. Shaft speed adjustable range from 10 to 1800 rpm (1200 rpm for some models).
Methanol (Well Icing Prevention)	Non-lubricating, especially pumping at pressure.	<ul style="list-style-type: none"> Pumping action does not require lubrication.
Natural Gas Liquids (Mixtures of Methane, Propane, Ethane)	Non-lubricating – requires internal gearing or reservoir with added maintenance issues.	<ul style="list-style-type: none"> Pumping action does not require lubrication.
Amines (Monoethanolamine, Diethanolamine, Methyl-diethanolamine, Diglycolamine)	Difficult to contain any H ₂ S saturated in an amine.	<ul style="list-style-type: none"> Seal-less pump chamber provides 100% containment.
	Control of flow rate must be responsive and accurate.	<ul style="list-style-type: none"> Utilizes speed control for greater accuracy. Exceeds API 675 performance criteria for linearity (speed/flow rate relationship).
Caustics (Sodium Hydroxide, Potassium Hydroxide)	Tend to crystallize when cold or in contact with air, forming solids that can damage mechanical seals and other pump components that require a lubricating film.	<ul style="list-style-type: none"> Seal-less design means no rotary shaft seals to wear or replace, preventing air and moisture contamination. Spring-loaded, horizontal disk check valves enable liquids with particulates up to 1/32" diameter (depending on pump model) to be pumped reliably without damage to the pump.
Acids (Sulfuric, Hydrochloric, Nitric)	Corrosive – can damage pump.	<ul style="list-style-type: none"> Seal-less design provides no leak path and handles corrosive fluids. Corrosion-resistant liquid end materials available.
	Tend to crystallize when cold or in contact with air, forming solids that can damage mechanical seals and other pump components that require a lubricating film.	<ul style="list-style-type: none"> Seal-less design and spring-loaded, horizontal disk check valves enable liquids with particulates up to 1/32" diameter (depending on pump model) to be pumped reliably without damage to the pump.
Condensates (Field, Lease)	Non-lubricating – requires internal gearing or reservoir with added maintenance concerns.	<ul style="list-style-type: none"> Pumping action does not require lubrication.
	Must be 100% contained to comply with VOC emissions legislation.	<ul style="list-style-type: none"> No cups, packing or seals to leak gas. Seal-less pump chamber provides 100% containment.
Polymers (Well Simulation)	Shear-sensitive gel structures can be broken down easily.	<ul style="list-style-type: none"> Provides low-shear pumping action and virtually pulse-less flow that protect polymers.
	Difficulty in pumping high-viscosity fluids.	<ul style="list-style-type: none"> Low-shear pumping action also handles higher-viscosity fluids.
	Abrasive – contains soda ash.	<ul style="list-style-type: none"> Seal-less design and spring-loaded, horizontal disk check valves enable liquids with particulates up to 1/32" diameter (depending on pump model) to be pumped reliably without damage to the pump.
	Control of flow rate must be responsive and accurate.	<ul style="list-style-type: none"> Utilizes speed control for greater accuracy. Exceeds API 675 performance criteria for linearity (speed/flow rate relationship).
Crude Oil (Transfer, Sampling)	Range of viscosities makes it difficult to pump.	<ul style="list-style-type: none"> Seal-less design and low-shear pumping action enable handling of liquids with viscosities from 0.01 to 5000 cPs or more as well as liquids containing a mixture of viscosities.

Lower Initial Investment and Lower Energy Costs

Uses lower HP motors

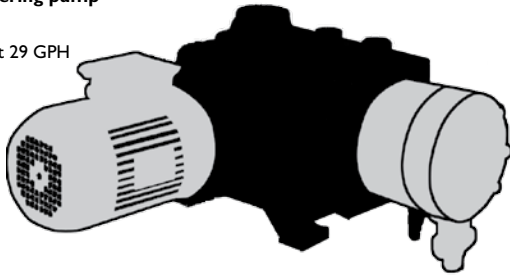
- Although both metering pumps have the same pressure rating, the lighter, more compact Hydra-Cell has a higher flow rating while requiring a less expensive, lower HP motor. This means Hydra-Cell saves approximately 30% to 55% on initial costs.



Hydra-Cell metering pump
Weight: 51 lbs.
Rated: 2500 PSI at 35 GPH
Motor: 1-1/2 HP

Traditional metering pump

Weight: 220 lbs.
Rated: 2500 PSI at 29 GPH
Motor: 5 HP



Small footprint for savings

- Compact design can mean up to 30% lower initial cost compared to other pumps.
- Space-saving design creates a smaller footprint for more efficient use of plant space and easier servicing.



This Hydra-Cell pump shown to scale has the same flow capacity and pressure rating as this conventional triplex metering pump system.

Low power consumption - 85% to 90% energy efficiency

- The lower HP requirement of the Hydra-Cell pump achieves the same performance but with greater energy efficiency and less power consumption.
- Hydra-Cell positive displacement pumps show significant energy savings when compared to screw pumps and multi-stage centrifugal pumps.



The multiple-diaphragm liquid head of Hydra-Cell also allows a less expensive, energy-saving motor to be used.

Compared with multi-stage centrifugal pumps for fluid pumped at 290 PSI.

Flow (ft ³ /hr)	Energy Used (kw)		Energy Saving	Potential Annual Savings*
	Centrifugal	Hydra-Cell		
21	1.54	0.50	67%	\$250
53	2.0	1.44	28%	\$134

Compared with multi-stage centrifugal pumps for fluid pumped at 580 PSI.

Flow (ft ³ /hr)	Energy Used (kw)		Energy Saving	Potential Annual Savings*
	Centrifugal	Hydra-Cell		
148	9.34	6.10	35%	\$778
268	15.40	11.00	28%	\$1,056

* Based on pumps running 2,000 hr/yr @ USA average of 12¢/kwh.

"We've had our pump for three years – four years this fall and it's been great. There's very little maintenance and it's cost effective to run."

Pat Hollman
Senior Operator
Macklin Facility • Husky Energy

Pumps Abrasives and Low-to-High Viscosity Fluids



Hydra-Cell's horizontal check valves operate in a horizontal liquid flow and will handle abrasives and particulates without clogging or damage to the pump.

Handles abrasives and particulates

- Seal-less design and spring-loaded, horizontal disk check valves provide superior handling of abrasives and particulates.
- Efficient pumping of liquids with solids (e.g. lime slurries, sour water containing sand).

Runs dry without damage

- Hydraulically-balanced diaphragms with Kel-Cell® technology enable Hydra-Cell pumps to run dry or in a blocked suction line without damage.
- Seal-less, leak-free pumping chamber; no seal maintenance required.
- Liquids are 100% sealed from the atmosphere.
- No leak path for toxic vapors.
- Can pump liquids containing solid particles up to 1/32" diameter and up to 9 hardness on the MOH scale.
- Non-lubricating liquids can be pumped reliably.

Low-shear pumping action

- Ideal for pumping and protecting shear-sensitive polymers.
- Pumps non-viscous as well as viscous liquids up to 5000 cPs (or more, depending on pump model).

Reduced filtration maintenance and management

- No mechanical seals or tight tolerances that need protection by fine filtration.
- Can handle particulates up to 1/32" (depending on model).
- Can pump liquids with non-dissolved solids up to 40%, depending on particle distribution.
- Unaffected by lapses in filtration, reducing costly pump repairs.

"The longevity of the pump is what makes it such a great tool. With the Hydra-Cell, we just don't have any of the packing or leaking issues that most normal pumps do."

Trevor Clay
Field Operator
Talisman Energy

One Reliable, Low-Maintenance Pump Design

No seals or packing to leak, wear or replace

- Since there are no dynamic seals to wear or replace, Hydra-Cell pumps need little maintenance and will operate reliably under continuous duty at high pressure.
- Containment of Volatile Organic Compounds (VOC) and potentially harmful gases such as H₂S.
- No tight tolerances that could be susceptible to corrosion or damaged by solid particles.
- No drop-off in performance common to sealed pumps as the seals wear.

Built for continuous duty and long service life

- One design for all applications minimizes the need for standby pumps and spare parts, which optimizes training and service expertise and reduces inventory size and expense.
- Typically run 6,000 hours before changing lubricating oil (compared to 1,500 hours recommended by many piston pump manufacturers).

Simple pump head design

- Liquid head materials can be changed readily, enabling Hydra-Cell to be used for many different chemicals and liquids pumped.
- Minimal maintenance required.
- Low cost of spare parts.



Adaptable to many applications

- One Hydra-Cell seal-less design with 15 models (8 standard; 6 metering; 1 high-pressure) covers a wide range of operating flows and pressures.
- Can be fitted with ANSI or DIN flanges, IEC or NEMA motor mounts, or provided with ATEX certification to adapt to specific applications or meet international standards.
- Proven record of replacing different pump technologies with improved abrasives handling, less maintenance, and other benefits (as detailed on pages 8-9).

Accurate Metering and Dosing with Pulse-free, Linear Flow

Accurate electronic flow control

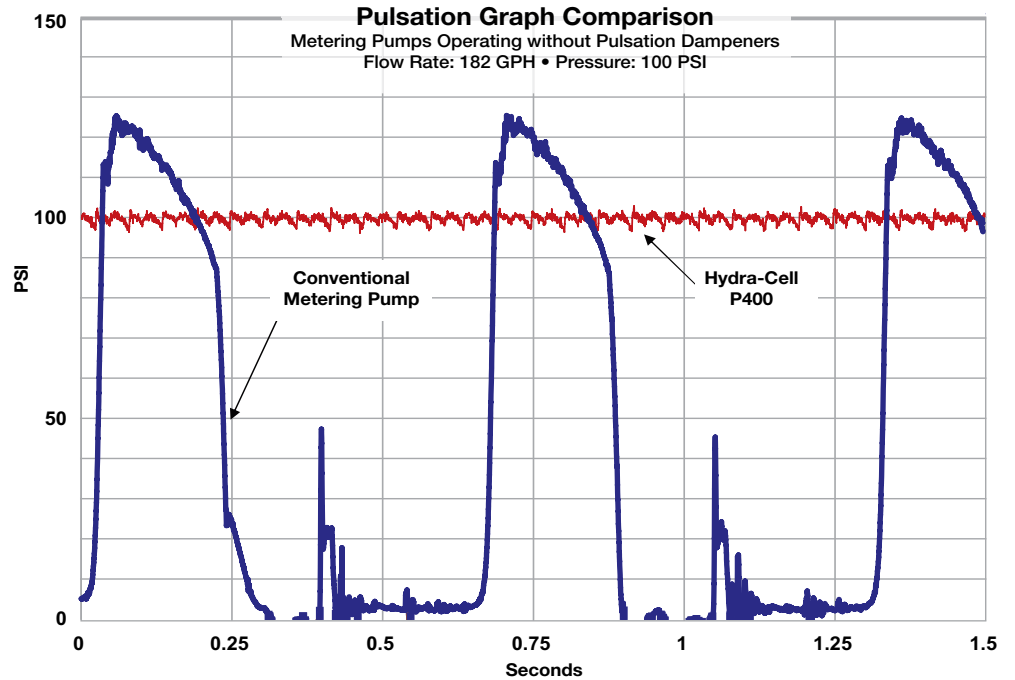
- Compared to pumps that rely on manual stroke adjustment or expensive actuators to change flow, Hydra-Cell metering pumps utilize speed control for greater accuracy throughout the turn-down range.
- Can be equipped with solid-state electronic flow control where the volume per every stroke is constant and a known value.
- Electronic flow also provides easy calibration of the desired feed rate and a near instantaneous rate of change (0 to maximum rpm in 0.3 seconds).

	Standard Models	Metering Pumps
Steady State Accuracy	>±1%	>±0.5%
Repeatability	>±3%	>±1%
Linearity	>±3%	>±1%

Typical results for recommended speed range

Virtually pulse-free flow

- Multiple-diaphragm design minimizes pulsations, eliminating the need for expensive pulsation dampeners for most Hydra-Cell models.
- Reduces pipe strain.
- Enhances operating safety.
- Minimizes maintenance.
- Reduces acceleration/friction losses in the suction line.
- Provides accurate metering with linear, constant flow.
- Lowers system acquisition costs.



Versatility for Field and Refinery Applications

Variety of liquid end materials

A choice of liquid end materials is available to suit the fluid being pumped:

- Hastelloy®
- Duplex SS
- 316 SS
- Brass
- Cast Iron
- Polypropylene
- Kynar®



Variety of pipe connections



SAE flange connections.



ANSI flange connections.

Variety of diaphragm materials

Diaphragms are available in a choice of materials to operate over a wide range of processing and performance conditions:

- EPDM
- Viton®
- PTFE
- Neoprene
- Buna
- Aflas



Threaded connections NPT or BPST

Hydra-Cell High-Pressure Triplex Pumps for Economical and Environmentally-Sound Operation



Hydra-Cell® T-Series High-Pressure Pump

- Seal-less design eliminates leaks, hazards and the expense associated with seals and packing.
- Low NPSH requirements allow for operation with a vacuum condition on the suction - positive suction pressure is not necessary.
- Can operate with a closed or blocked suction line and run dry indefinitely without damage, eliminating downtime and repair costs.
- Unique diaphragm design handles more abrasives with less wear than gear, screw or plunger pumps.
- Hydraulically balanced diaphragms to handle high pressures with low stress.
- Lower energy costs than centrifugal pumps.
- Rugged construction for long life with minimal maintenance.
- Compact design and double-ended shaft provides a variety of installation options.



Designed for higher pressures, the Hydra-Cell T80 Series packing-free, triplex pump received a "Spotlight on New Technology" award from the Offshore Technology Conference.



Stainless steel manifold option.

Model T8045

- Flow Rates to 45 GPM.
- High Pressure to 3000 PSI.
- Maximum Operating Temperature to 180°F.
- Available manifold material options include Nickel Aluminum Bronze and 316 Stainless Steel.

For complete specifications and ordering information, consult the Hydra-Cell T8045 product bulletin.

Hydra-Cell® Performance Advantages Compared to Other Types of Pumps



Plunger pumps (shown) have maintenance, wear, lubrication, and environmental issues that Hydra-Cell pumps avoid because of its seal-less, multiple-diaphragm design.

Plunger Pump Disadvantages:	Hydra-Cell Advantages:
<ul style="list-style-type: none"> • Packing requires frequent adjustments and then replacement as it wears. 	<ul style="list-style-type: none"> • Seal-less design uses no packing, reducing downtime and maintenance costs.
<ul style="list-style-type: none"> • Packing must leak to provide lubrication – creating maintenance, containment, disposal, safety, and housekeeping issues and their associated costs. 	<ul style="list-style-type: none"> • No packing means no secondary containment requirements, no clean-up or disposal issues, improved safety, and reduced maintenance costs.
<ul style="list-style-type: none"> • Packing allows emissions that require expensive “vapor-less” alternatives or vapor recovery systems. 	<ul style="list-style-type: none"> • Seal-less design eliminates emissions and costly associated fines.
<ul style="list-style-type: none"> • Packing causes plunger wear, which is exacerbated by abrasives; both plunger and packing must be compatible with product being pumped. 	<ul style="list-style-type: none"> • Diaphragm design allows pumping of abrasive and corrosive media without concern for wear, compatibility or replacement of packing or plunger.
<ul style="list-style-type: none"> • May require external lubrication systems at an additional cost of up to \$3,000 – another maintenance and repair factor. 	<ul style="list-style-type: none"> • No lubrication necessary, resulting in less maintenance and lower cost of ownership expenses.

Traditional Metering Pump Disadvantages:	Hydra-Cell Advantages:
<ul style="list-style-type: none"> • Use manual stroke adjusters or expensive actuators to control flow, which can result in pumping inaccuracies, lost motion, operator error, and a greater chance of leakage. 	<ul style="list-style-type: none"> • Hydra-Cell employs optional Variable Frequency Drive (VFD) electronic flow control for greater accuracy and repeatability, eliminating lost motion, reducing the chance of operator error, and removing a potential leak path.
<ul style="list-style-type: none"> • Require expensive pulsation dampeners to minimize pulsations. 	<ul style="list-style-type: none"> • Multiple-diaphragm design provides virtually pulse-free flow, so expensive pulsation dampeners may not be required.
<ul style="list-style-type: none"> • May only offer PTFE diaphragms, requiring frequent replacement due to stress and poor elastomeric memory. 	<ul style="list-style-type: none"> • Available with a wide choice of cost-effective, elastomeric diaphragm materials.
<ul style="list-style-type: none"> • Large footprint to achieve required maximum flow and pressure. 	<ul style="list-style-type: none"> • Can meet the same flow and pressure requirements with a much smaller footprint, saving space and costs.
<ul style="list-style-type: none"> • Different plunger and liquid end sizes needed to accommodate changes in operating pressures. 	<ul style="list-style-type: none"> • Operates over a wide range of pressures without changes to the plunger or liquid end size.
<ul style="list-style-type: none"> • Integral gearing (necessary to prevent cross-contamination of actuating oil) is difficult and expensive to maintain. 	<ul style="list-style-type: none"> • The simplicity of design means lower parts and maintenance costs. • Separate gearbox prevents cross-contamination of the actuating oil.



Compared to other pumps, Hydra-Cell requires minimal maintenance for oil and gas processing. Hydra-Cell has no packing or seals that leak or need to be replaced and no internal gears to wear.

Internal Gear Pump Disadvantages:	Hydra-Cell Advantages:
<ul style="list-style-type: none"> Mechanical seals and packing require maintenance, and replacement or adjustment. 	<ul style="list-style-type: none"> The seal-less design of Hydra-Cell means that there are no seals or packing to leak or replace.
<ul style="list-style-type: none"> Does not tolerate thin/non-lubricating liquids, and does not handle solids, abrasives or particulates well. 	<ul style="list-style-type: none"> Seal-less pumping chamber and spring-loaded, horizontal disk check valves can pump solids, abrasive fillers and particulates while handling liquids thick or thin.
<ul style="list-style-type: none"> Designed for operating at low speeds and low pressure ratings. Low volumetric efficiency. 	<ul style="list-style-type: none"> Operates at low-to-high speeds and at higher pressures with higher volumetric efficiency.
<ul style="list-style-type: none"> Component wear reduces accuracy and efficiency. 	<ul style="list-style-type: none"> No internal gears to wear so there is less maintenance and spare part replacement. Accuracy and efficiency are more stable.
<ul style="list-style-type: none"> One bearing runs in the pumped fluid. 	<ul style="list-style-type: none"> No bearings in the pumped fluid.
<ul style="list-style-type: none"> Unbalanced - overhung load on the shaft bearing. 	<ul style="list-style-type: none"> Hydraulically balanced design so there is no overhung load.

External Gear Pump Disadvantages:	Hydra-Cell Advantages:
<ul style="list-style-type: none"> Mechanical seals and packing require maintenance, and replacement or adjustment. 	<ul style="list-style-type: none"> The seal-less design of Hydra-Cell means that there are no seals or packing to leak or replace.
<ul style="list-style-type: none"> Does not tolerate solids, abrasives, or particulates. 	<ul style="list-style-type: none"> Seal-less pumping chamber and spring-loaded, horizontal disk check valves can pump solids, abrasive fillers and particulates.
<ul style="list-style-type: none"> Component wear reduces accuracy and efficiency. 	<ul style="list-style-type: none"> No internal gears to wear so there is less maintenance and spare part replacement. Efficiency is more stable.
<ul style="list-style-type: none"> Contains four bushings in the fluid area. 	<ul style="list-style-type: none"> No bushings in the pumped fluid.
<ul style="list-style-type: none"> Fixed end clearances. 	<ul style="list-style-type: none"> Design does not rely on clearances.
<ul style="list-style-type: none"> Efficiency drops over 1500 PSI. 	<ul style="list-style-type: none"> Efficiency remains relatively constant over its range of operating pressures.

Hydra-Cell Positive Displacement Diaphragm Pumps are Ideal for Handling Abrasives and Particulates



- Unmatched versatility for a wide range of pumping applications required in oil and gas processing.
- Features a seal-less design and horizontal disk check valves that enable the pump to handle abrasives and particulates that might damage or destroy other types of pumps.
- Simple, compact design reduces initial investment and lowers maintenance costs.
- Variety of models that can operate with very low to very high flow rates and discharge pressures up to 2500 PSI.
- Available in a wide range of pump head materials of construction and diaphragm materials.
- Variety of options and accessories to optimize performance.

In his work throughout Southern and Central California, Steve Burks of Oil Field Solutions, has found it challenging at times to get customers to change the way they operate.

“But once I get them using a Hydra-Cell and they see the difference it can make in reducing maintenance headaches and operating costs for their well operations, they are all for it.”

Steve Burks
Owner
Oil Field Solutions

Flow Capacities (Barrels Per Day & Gallons Per Minute) & Pressure Ratings

Model*	Maximum Capacities	Maximum Discharge Pressure		Maximum Discharge Pressure		Maximum Suction Pressure
		Non-Metallic	Metallic	Non-Metallic	Metallic	
F20	34.3 BPD (1 gpm)	250 PSI	1500 PSI	140°F	250°F	250 PSI
M03	102.8 BPD (3 gpm)	250 PSI	1000 PSI	140°F	250°F	250 PSI
D04	102.8 BPD (3 gpm)	N/A	2500 PSI	N/A	250°F	500 PSI
D10/12	274.3 BPD (8 gpm)	250 PSI	1000 PSI	140°F	250°F	250 PSI
D15/17	514.3 BPD (13 gpm)	N/A	2500 PSI	N/A	250°F	500 PSI
H25	685.7 BPD (20 gpm)	250 PSI	1000 PSI	140°F	250°F	250 PSI
D35	1268.5 BPD (37 gpm)	250 PSI	1200 PSI	140°F	250°F	250 PSI

* Ratings are for X-Cam design

For complete specifications and ordering information, consult the Hydra-Cell catalog.

Hydra-Cell Metering Pumps Exceed API 675 Standards and Provide “Pulse-free” Linear Flow



Hydra-Cell[®]
METERING SOLUTIONS™

- Designed for use with Variable Frequency Drive (VFD) electronic flow control to maintain greater accuracy throughout the turn-down range.
- Multiple-diaphragm design (except the P100) provides virtually pulse-free flow, eliminating the need to purchase expensive pulsation dampeners.
- Offers all the features and benefits of standard Hydra-Cell pumps (F/M/D & H Series*) including seal-less design, horizontal disk check valves, and space-saving, compact design.
- Custom P100 available to operate at low flow of 0.032 GPH at approximately 6 RPM.
- Variety of models that can operate with very low to very high flow rates and discharge pressures up to 2500 PSI.
- Available in a wide range of pump head materials of construction and diaphragm materials.
- Every model is available with a variety of gear box ratios to meet your application needs.
- Variety of options and accessories to optimize performance.

“We use our Hydra-Cell to pump ethanol glycol for dehydrating natural gas and it’s been working well. We’ve had it for over two years and it’s easy to use and there’s minimal maintenance, which makes for a longer lasting pump.”

Bud Bessler
Worland Plant Manager
Hiland Partners

Flow Capacities (Gallons Per Hour) & Pressure Ratings

Model	Maximum Capacities	Maximum Discharge Pressure		Maximum Discharge Pressure **		Maximum Suction Pressure
		Non-Metallic*	Metallic	Non-Metallic*	Metallic	
P100	27 GPH	250 PSI	1500 PSI	140°F	250°F	250 PSI
P200	81 GPH	250 PSI	1000 PSI	140°F	250°F	250 PSI
P300	82 GPH	N/A	2500 PSI	N/A	250°F	500 PSI
P400	243 GPH	250 PSI	1000 PSI	140°F	250°F	250 PSI
P500	426 GPH	N/A	2500 PSI	N/A	250°F	500 PSI
P600	895 GPH	250 PSI	1000 PSI	140°F	250°F	250 PSI

** 350 PSI maximum with Kynar[®] liquid end.

** Consult factory for correct component selection for temperatures above 160°F.

For complete specifications and ordering information, consult the Hydra-Cell metering pumps catalog.

Hydra-Cell®

Seal-less Pumps

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