# PRICE PUMP

## SEALLESS PUMPS

THINK QUALITY THINK DELIVERY THINK PRICE



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## WHY CHOOSE PRICE PUMP®

ZERO LEAKAGE - PREVENTS LOSS OF HAZARDOUS AND/OR EXPENSIVE PROCESS FLUIDS DUE TO TOTAL PRODUCT CONTAINMENT

**EMISSION FREE** - PROVIDES A SAFER, CLEANER WORKING ENVIRONMENT

SEALLESS DESIGN - ELIMINATION OF THE ROTATING MECHANICAL SEAL RIDS THE USER OF POTENTIAL PROBLEMS WITH MECHANICAL SEALS

LOW MAINTENANCE - RELIABLE PUMP OPERATION REDUCES DOWN TIME AND KEEPS MAINTENANCE COSTS AT A MINIMUM

#### **APPLICATIONS**

• REFRIGERATION • CHEMICAL PROCESSES • SEMI-CONDUCTOR • BIODIESEL PRODUCTION •

• WATER TREATMENT • PHARMACEUTICAL • CRYOGENIC • GALVANIC PROCESSES •

• PULP AND PAPER • AUTOMOTIVE • VAPOR DEGREASERS • TOXIC FLUIDS • SCRUBBER •

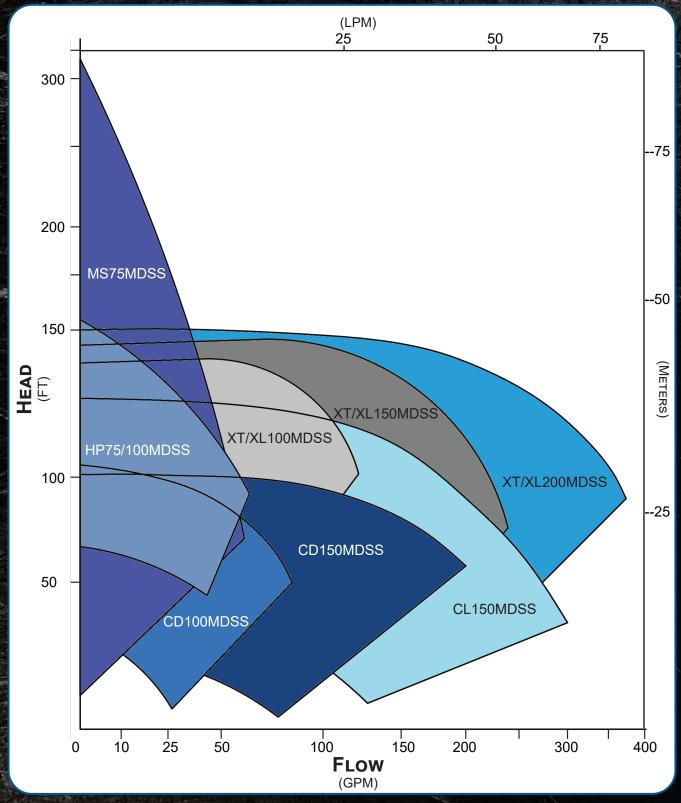


#### **INDUSTRY LEADING CUSTOMER SERVICE AND LEAD TIMES**

AT PRICE PUMP® WE PRIDE OURSELVES IN OUR WORLD CLASS CUSTOMER SERVICE, AND OUR DEDICATION TO CUSTOMER SATISFACTION. TO AID IN THIS, WE OFFER THE INDUSTRY'S BEST 7-10 DAY LEAD TIME ON OUR PUMPS. WE STOCK ALL MATERIAL OPTIONS ON OUR PUMPS, SO NO MATTER THE CONFIGURATION, YOUR PARTS AND PUMPS WILL BE IN STOCK AND READY TO SHIP WHEN YOU NEED THEM.



## FAMILY CURVE



WITH PUMP FLOWS REACHING 400 GPM AND HEADS UP TO 320 FEET PRICE PUMP<sup>®</sup> HAS A SEALLESS PUMP TO FIT YOUR NEEDS!



### TYPE XL/XT-MD FLOWS TO 400 GPM / HEADS TO 150 FEET



#### MODELS

XT100MDSS – 1" x 1.5" x 5.98" XT150MDSS –1.5" x 2" x 5.98" XT200MDSS – 2" x 3" x 5.98"

XL100MDSS – 1" x 1.5" x 5.98" XL150MDSS – 1.5" x 3" x 5.98" XL200MDSS – 2" x 3" x 5.98"

#### FEATURES

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- HIGH FLOW/HIGH HEAD PUMP
- ANSI FLANGED (XL) AND THREADED (XT)
- OPTIONS AVAILABLE
- HEX DRIVE SHAFT OPTION
- CLOSED IMPELLER
- MAXIMUM IMPELLER DIAMETER: 5.98"

#### **SPECIFICATIONS**

- MATERIALS OF CONSTRUCTION: 316SS
- STANDARD NEMA C-FACE MOTORS
- MULTIPLE MATERIAL OPTIONS AVAILABLE FOR BUSHINGS, WASHERS, AND SHAFTS

#### **OPERATING LIMITS**

- TEMPERATURES FROM CRYOGENIC TO 400°F
- Working pressures to 300 psi

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## TYPE CD-MD

FLOWS TO 170 GPM / HEADS TO 95 FEET

## **TYPE CL-MD**

FLOWS TO 350 GPM / HEADS TO 155 FEET



#### MODELS

CD100MDSS - 1" x 1.25" x 4.94" CD150MDSS - 1,5" x 2" x 4.94"

#### **FEATURES**

MID-RANGE COMPACT PUMP
SEMI-OPEN IMPELLER
MAXIMUM IMPELLER DIAMETER: 4.94"



#### MODELS

CL150MDSS - 1.5" x 2" x 5.76"

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#### **FEATURES**

- HIGH FLOW/HIGH EFFICIENCY PUMP
- HEX DRIVE SHAFT OPTION
- SEMI-OPEN IMPELLER
- MAXIMUM IMPELLER DIAMETER: 5.76"

#### **Specifications**

- MATERIALS OF CONSTRUCTION : 316SS
- STANDARD NEMA C-FACE MOTORS
- MULTIPLE MATERIAL OPTIONS AVAILABLE FOR BUSHINGS, WADHERS, AND SHAFTS

#### **OPERATING LIMITS**

- TEMPERATURES FROM CRYOGENIC TO 400°F
- Working pressures to 300 psi



### **TYPE 2MS-MD** FLOWS TO 60 GPM / HEADS TO 320 FEET FLOWS TO 68 GPM / HEADS TO 180 FEET

## **TYPE HP-MD**



#### MODELS

2MS75MD - .75" x 1" x 5.98"

#### **FEATURES**

- INNOVATIVE 2-STAGE PUMP
- CLOSED IMPELLER
- MAXIMUM IMPELLER DIAMETER: 5.98"



#### MODELS

0 HP75MDSS - ,75" x .75" x 6" HP100MDSS - 1" x 1" x 6"

#### FEATURES

- LOW FLOW, HIGH HEAD PUMPING
- CLOSED IMPELLER
- MAXIMUM IMPELLER DIAMETER: 6"

#### **SPECIFICATIONS**

- MATERIALS OF CONSTRUCTION : 316SS
- STANDARD NEMA C-Face motors
- MULTIPLE MATERIAL OPTIONS AVAILABLE FOR BUSHINGS, WADHERS, AND SHAFTS

#### **OPERATING LIMITS**

• TEMPERATURES FROM CRYOGENIC TO 400°F

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WORKING PRESSURES TO 300 PSI

## **SEALLESS PUMP ANATOMY**

VERSATILE 316 SS MOTOR BRACKET DESIGNED TO FIT A WIDE RANGE OF, MOTORS

Replaceable Carbon, Ceramic, or Silicon Carbide thrust washers and bushings provide axial and radial support

SAMARIUM COBALT HIGH TEMPERATURE MAGNETS WITH MULTIPLE STRENGTH OPTIONS

> A HERMETICALLY SEALED PUMP END ALLOWS MOTOR REPAIR AND REPLACEMENT WITHOUT HAVING TO DRAIN THE SYSTEM, RESULTING IN MINIMIZED DOWNTIME.

PRECISION MACHINED SEPARATOR PLATES ARE ENGINEERED WITH RECIRCULATION PATHS TO ALLOW ENHANCED LUBRICATION AND COOLING OF THE BUSHINGS AND WASHERS

> DYNAMICALLY BALANCED IMPELLER DESIGNED WITH BALANCE HOLES TO REDUCE AXIAL THRUST LOADS

316 SS or Tungsten Carbide coated pump shaft provides superior corrosion and wear resistance

> MULTIPLE O-RING MATERIAL OPTIONS ALLOWING FOR TEMPERATURES RANGING FROM CRYOGENIC TO 400°F

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## **VFD FREQUENTLY ASKED QUESTIONS**

#### WHAT IS A VFD?

A VFD, ALSO KNOWN AS A VARIABLE FREQUENCY DRIVE, IS AN ELECTRICAL DEVICE USED TO REGULATE THE SPEED OF ELECTRIC MOTORS. THESE DEVICES GAINED POPULARITY DURING THE 1970'S DUE TO THE ENERGY CRISIS AT THE TIME. VFDS REGULATE SPEED USING THE INPUT FREQUENCY TO THE MOTOR. BY ALTERING THE FREQUENCY, THEY CAN THEREFORE ALTER THE SPEEDS RESULTING IN FINE TUNED PERFORMANCE FOR YOUR PUMP.

#### WHY DO I WANT A VFD?

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THERE ARE MANY BENEFITS TO USING A VFD. SOME OF THE MANY BENEFITS ARE LISTED BELOW:

- SPEED CONTROL: ALLOWS FOR BETTER CONTROL OF THE SPEED OF THE ELECTRIC MOTOR. THIS RESULTS IN RELIABLE FLOW CONTROLS.
- SOFT START: UTILIZING A VFD AS A SOFT STARTER REDUCES THE TORQUE AND STRAIN ON THE MOTOR AND POWER FRAME. BY MINIMIZING TORQUE, THE INITIAL CURRENT AT STARTUP IS ALSO LOWER.
- GREATER EFFICIENCY: VFD'S ARE KNOWN FOR THEIR ABILITY TO CREATE A MORE EFFICIENT SYSTEM. GREATER EFFICIENCIES OFTEN RESULT IN GREATER COST SAVINGS IN BOTH ENERGY AND EXTENDED EQUIPMENT LIFE. MANY COMPANIES REPORT A RETURN ON INVESTMENT IN AS LITTLE AS 3-6 MONTHS.

#### WHAT IS THE DIFFERENCE BETWEEN A VFD AND A THROTTLING DEVICE?

While both could be used to regulate flow, a throttling device, such as a valve, will dramatically reduce system efficiency and cause unnecessary wear on the pump and motor. Using a VFD controls the rotation speed of the motor and does not block off a portion of the flow, instead it lowers the overall output of the pump to get the desired flow. This results in reducing the energy usage of the pump.



### VFD VARIABLE FREQUENCY DRIVES

#### D700 SERIES

THIS ULTRA COMPACT, MICRO-DRIVE AND IS DESIGNED TO BE USER FRIENDLY, COST EFFECTIVE, AND RELIABLE.

- D710W: 1/8-1 HP, 1-Pн (110-115V)
- D720S: 1/8-3 HP, 1-Pн (200-240V)
- D720: 1/8-10 HP, 3-Pн (200-240V)
- D740: <sup>1</sup>/<sub>2</sub>-10 HP, 3-Pн (380-480V)

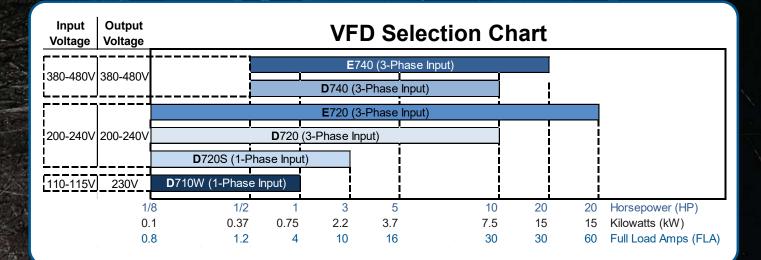
#### E700 SERIES

This compact drive has more features and capabilites than the D700 making it more versatile and expandable, with the same cost effectiveness and reliability.

- E720: 1/8-20 HP, 3-Pн (200-240V)
- Е740: 1⁄2-20 HP, 3-Рн (380-480V)

#### FEATURES

- STANDARD 3 PHASE OUTPUT
- PRECISION CONTROL
- 5-YEAR FACTORY WARRANTY
- DYNAMIC APPLICATION: PROVIDES VARIABLE PUMP HYDRAULIC PERFORMANCE
- COST EFFECTIVE AND ENERGY SAVING SOLUTION





## P PRICE PUMP

## **CASE STUDY: CBD OIL PRODUCTION**

PUMP TYPE: HP100MDSS

FLUID PROPERTIES: **DYNALENE AT -60°F** 

#### **SPECIAL CONFIGURATIONS:**

**TUNGSTEN COATED SHAFT** ALPHA SILICON CARBIDE BUSHING/WASHER FLUOROSILICON O-RING



THIS APPLICATION IS JUST ONE OF MANY THAT

#### **APPLICATION:**

#### **CBD OIL EXTRACTION**

UTILIZES A PRICE PUMP®! ONE OF THE GROWING TRENDS IN MEDICINE IS THE USE OF CBD OIL. CBD OIL IS A PRODUCT DERIVED FROM THE CANNABIS PLANT. SINCE IT LACKS THE THC, THE INTOXICATING CHEMICAL THAT CREATES A HIGH EFFECT, CBD OIL IS OFTEN USED IN THE TREATEMENT OF ANXIETY, SEIZURES, CHRONIC PAIN, AND EVEN CANCER. WHILE IT IS NOT NECESSARILY APPROVED AS A MEDICAL TREATMENT FOR THESE CONDITIONS, IT IS GROWING IN POPULARITY AS A HOMEOPATHIC SOLUTION.

THE EXTRACTION PROCESS OF CBD OFTEN REQUIRES VERY LOW TEMPERATURES. THE EXTRACTING OF THE "CRUDE" CBD OIL CAN BE DONE THROUGH A VARIETY OF METHODS. HOWEVER, THE PURIFYING PROCESS IS MOST COMMONLY DONE VIA WINTERIZATION. THE WINTERIZATION PROCESS TAKES THE CRUDE EXTRACT AND DISOLVES IT INTO ETHANOL AT SUB-ZERO TEMPERATURES CREATING A MIXTURE CALLED MISCELLA. THE MISCELLA IS THEN FILTERED AND THE ALCOHOL IS EVAPORATED OFF RESULTING IN A FILTERED MIXITURE OF CANNABINOIDS.

MOST ALCOHOLS HAVE A VERY LOW FREEZING TEMPERATURE, AROUND -40°F. THIS IS WHERE PRICE PUMP® COMES INTO PLAY. OUR PUMP PLAYS THE CRUCIAL ROLE OF CIRCULATING -60°F AND COLDER REFRIGERANTS THROUGHOUT THE WINTERIZATION PROCESS, ALLOWING THE ALCOHOL-CRUDE MIXTURE TO COAGULATE. OUR SEALLESS PUMPS, LIKE THE HP100MDSS, ARE CAPABLE OF REACHING THESE LOW TEMPERATURES AND MORE, MAKING THEM THE PERFECT FIT FOR THESE SUPER LOW TEMP APPLICATIONS!

PRICE PUMP'S<sup>®</sup> SEALLESS PUMPS USE A MAGNETICALLY DRIVEN IMPELLER THAT PREVENTS STALLING AT LOW TEMPERATURES AND SEALS THE PUMP END OFF FROM THE MOTOR. THIS CREATES A WIDER RANGE OF FLUID AND TEMPERATURE AVAILABILITY AND ALSO PROVIDES A MUCH CLEANER AND ENVIRONMENTALLY FRIENDLY WAY TO REPAIR OR REPLACE THE MOTORS IF NEEDED. THE SEALLESS DESIGN BUILDS THE PUMP END DIRECTLY INTO THE SYSTEM'S PLUMBING ALLOWING YOU TO REMOVE THE MOTOR WITHOUT HAVING TO DRAIN THE SYSTEM.





### SERVICES

#### **STANDARD PRODUCT SERVICES**



PUMP LEAD TIME – 7 TO 10 WORKING DAYS TWO YEAR PRODUCT WARRANTY NEXT-DAY SHIPMENT ON ALL SPARE PARTS WORLDWIDE AUTHORIZED SERVICE CENTERS "PUMP SELECTION INSTRUCTOR" (PSI) PUMP SELECTION PROGRAM WORLDWIDE PRODUCT DISTRIBUTION, SERVICE AND SUPPORT

#### VIP Expedited Services



SAME DAY EXPEDITED SHIPPING FOR PUMPS AND PARTS PARTS ORDER NEEDED YESTERDAY (PONY) SHIPPING AVAILABLE NEXT-DAY EXPEDITED SHIPPING FOR PUMPS MULTIPLE STANDARD CONFIGURATIONS AVAILABLE FOR MOST PRODUCTS ALL PUMPS CAN BE CUSTOM SPECIFIED/MODIFIED

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#### **APPLICATION SUPPORT SERVICES**

Application Specialists available to discuss your applications Applications Support response within 24 hours Test and Evaluation product available VFD programming, troubleshooting and technical support

#### **ENGINEERING / OEM SUPPORT SERVICES**



CUSTOM OR APPLICATION SPECIFIC DESIGN SERVICES PERFORMANCE / LIFE TESTING AND PRODUCT DEVELOPMENT SERVICES COMPLIANCE TESTING SERVICES OEM SPECIFIC MODIFICATIONS / SYSTEM INTEGRATION

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## ABOUT PRICE PUMP®

#### 1932

FOUNDED BY E.L. PRICE IN EMERYVILLE, CALIFORNIA.

#### 1962

PRICE PUMP<sup>®</sup> IS ACQUIRED BY LEON J. PAUL AND THE NAME IS RETAINED DUE TO THE REPUTATION FOR QUALITY AND SERVICE.

#### 1980

THE AGRICULTURE MARKET IS REPLACED BY CHEMICAL, LASER, AND SEMICONDUCTOR MARKETS.

#### 1989

PRICE PUMP<sup>®</sup> RELOCATES TO THEIR 32,000 SQUARE FOOT SONOMA CALIFORNIA FACILITY.

#### 1992

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BOB PIAZZA JOINS AS PRESIDENT AND BRINGS A LIFETIME OF PUMP EXPERIENCE.

#### 1994

PRICE PUMP<sup>®</sup> CONTINUES TO INNOVATE AND LAUNCHES A LINE OF MAGNETICALLY DRIVEN SEALLESS PUMPS.

## 1999 0

AIR OPERATED DIAPHRAGM (AOD<sup>®</sup>) PUMPS ARE ACQUIRED FROM ITT-MARLOW.



#### 2007

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PRICE PUMP<sup>®</sup> PARTNERS WITH MITSUBISHI ELECTRIC AUTOMATION AND INTRODUCES VARIABLE FREQUENCY DRIVES (VFD).

#### 2010

The XJ400 is introduced producing flows over 1000 gallons per minute.

#### 2012

PRICE PUMP<sup>®</sup> BECOMES AN ISO 9001 CERTIFIED COMPANY.



#### 2012-2017

The purchase of a new 3D printer and additional investment in engineering design and development lead to rapid prototyping. This leads to several new pump releases.

#### 2019

New corporate headquarters opened at 2203 Smeed Parkway in Caldwell Idaho. Price Pump<sup>®</sup> moves all production to this new facility.



#### 2020

PRICE PUMP<sup>®</sup> FINISHES COMPLIANCE TESTING IN THEIR NEWLY CONSTRUCTED STATE OF THE ART TEST FACILITY; VERIFICATION OF COMPLIANCE WITH DEPARTMENT OF ENERGY PUMP ENERGY INDEX STANDARDS IS COMPLETED.

## PRICE PUMP

## CHECK OUT OUR OTHER PRODUCT OFFERINGS



HORIZONTAL CENTRIFUGAL PUMPS



VERTICAL CENTRIFUGAL PUMPS



AIR OPERATED DIAPHRAGM (AOD®) PUMPS

FOR MORE INFORMATION PLEASE VISIT WWW.PRICEPUMP.COM

Notes

# PRICE PUMP

FOR ALL OF OUR CURRENT OFFERINGS AND LOCAL REPRESENTATIVES PLEASE VISIT WWW.PRICEPUMP.COM

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