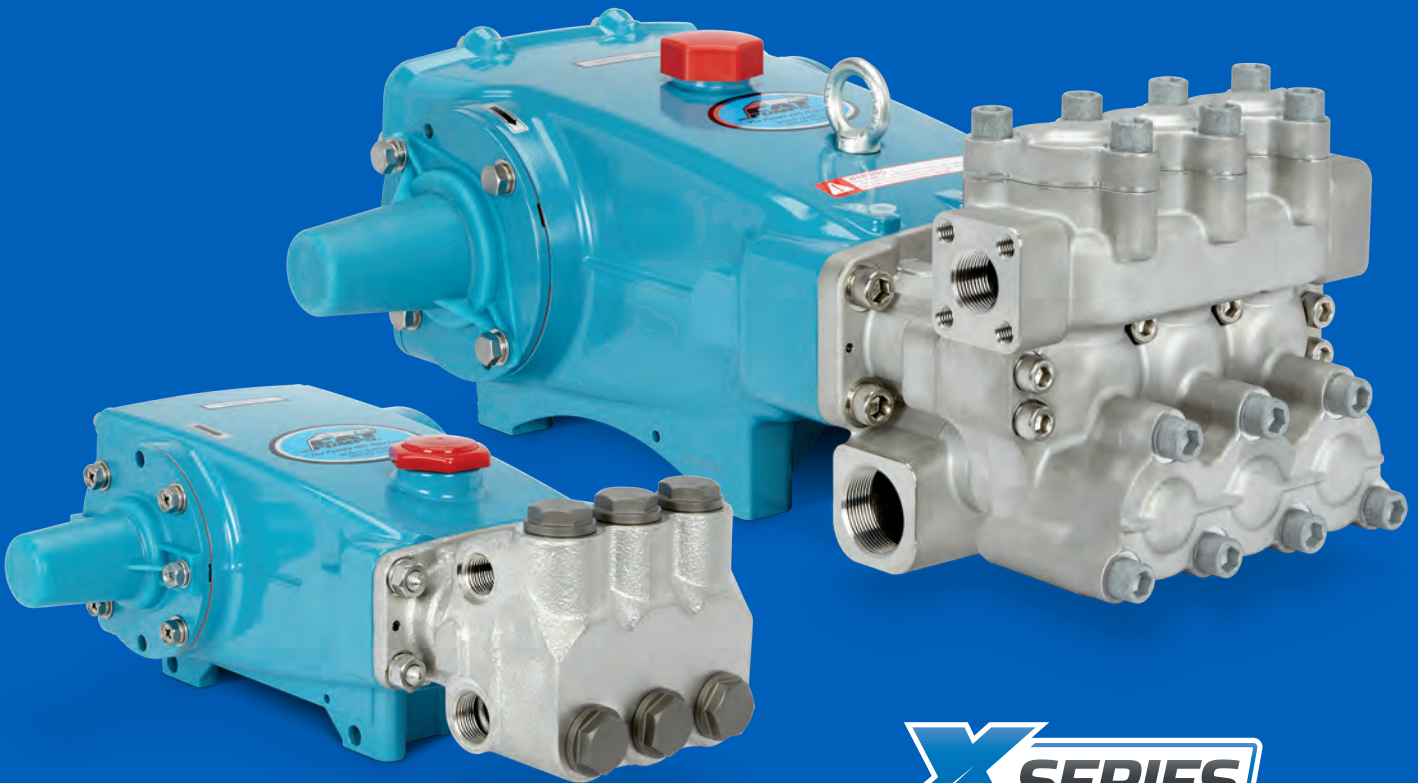


X-Series Plunger Pumps

Extended Service Life, Proven Reliability, Exceptional Value



X SERIES

The Longest-Lasting Pumps. Support You Can Trust.

www.catpumps.com



The Cat Pumps X-Series Advantage

More Uptime. Less Maintenance. Long-Term Value You Can Count On.

Seawater reverse osmosis systems demand equipment that performs around the clock, and under extreme conditions. The Cat Pumps X-Series models are engineered to minimize downtime and keep systems running at peak performance.

These models are Cat Pumps' answer to the challenges of continuous-duty, high-pressure SWRO environments, where corrosive saltwater, scaling risk, and extended daily run cycles push equipment to its limits. At the core of every X-Series pump is Cat Pumps' most advanced high-pressure packing seal technology, engineered to last up to three times longer than standard designs.

Whether the application is on a sea vessel, an island resort, an offshore platform or an industrial facility, the X-Series delivers rugged performance and unmatched durability. It's not just a better pump — it's a long-term investment in service life, efficiency and lower total cost of ownership.



Engineered from the Inside Out to Outlast the Competition

Cat Pumps X-Series models are precision-built to deliver unmatched performance and extended life in demanding seawater reverse osmosis systems. Every design feature serves a purpose — keeping pumps running longer with less service, even in harsh, mineral-laden RO feedwater environments. Every X-Series component is meticulously engineered to perform reliably in corrosive, high-duty-cycle conditions:

X-Series High-Pressure Packings

Reduce friction and heat for longer seal life up to 3x longer than traditional seals

Corrosion-Resistant Stainless Steel Wet-Ends

Cast 316 or duplex stainless steel manifolds and internal components provide superior durability against harsh saltwater

High-Strength Connecting Rods and Plunger Rods

Built for continuous-duty performance in rugged applications, even at low RPMs

Exclusive Internal Crankcase Oil Porting

Delivers critical lubrication to the crossheads, reducing internal wear, especially during long, steady run times

Precision 316 or Duplex Stainless Steel Valve Assemblies

Optimized for saltwater resistance and positive seating for long-term performance

Proven Wet Seal Design

Keeps seals internally cooled and lubricated — ideal for salt-laden, scale-prone RO feedwater

Built for Harsh SWRO Environments

Why Choose Cat Pumps X-Series for SWRO?

- Extended seal life results in longer maintenance intervals and more uptime
- Designed to handle brine and minerals without issue
- Reduced maintenance and lower long-term operating costs
- Trusted worldwide in mobile, land-based and offshore SWRO systems
- Supported by Cat Pumps' global service and stocking network
- Built for true 24/7/365 continuous-duty performance

Proven in the Field — Trusted Worldwide

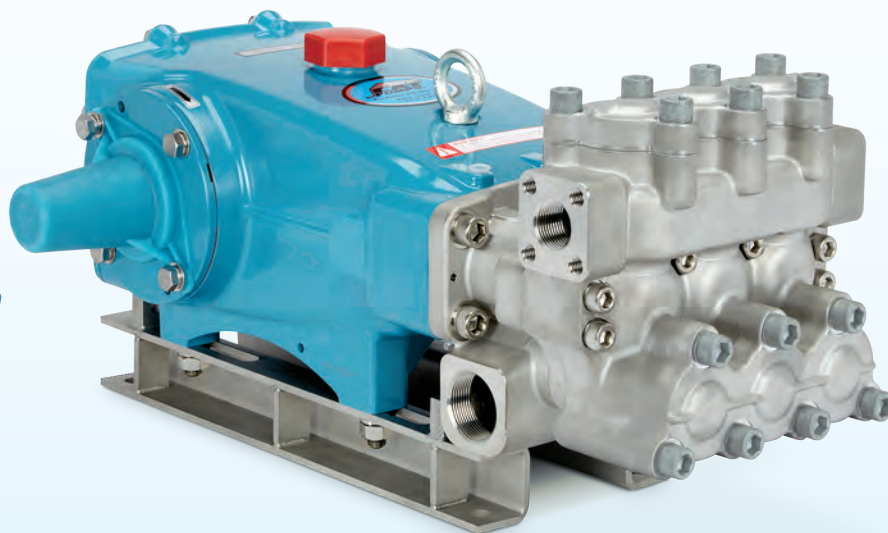
From desalination systems on remote islands to SWRO skids on oil rigs and naval vessels, Cat Pumps models are trusted in critical environments where failure is not an option. Cat Pumps' reputation for reliability is backed by rigorous in-house life testing and real-world performance data from customers worldwide.

Operators choose Cat Pumps because they need one less thing to worry about, and with X-Series, they get more uptime, fewer service calls and pumps that keep working when others fail.

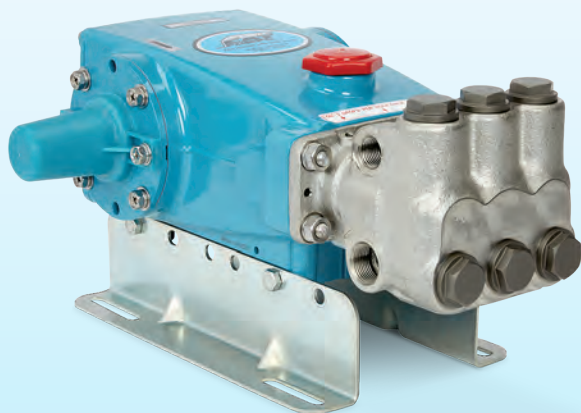
Quality You Need to Keep Your SWRO System Running Longer

Cat Pumps offers a wide range of X-Series pump models and configurations to meet seawater RO requirements:

- **Seal Materials:** X-Series packings and NBR seals and O-rings provide full seawater compatibility and longer life
- **Flow Range:** 10 to 45 gpm (38 to 170 lpm)
- **Pressure Range:** Up to 1,000 psi (69 bar) for typical SWRO system pressures
- **Manifold Materials:** Duplex Stainless Steel or 316 Stainless Steel for superior corrosion resistance
- **Drive Options:** Electric, hydraulic or engine-driven configurations available

The logo features a large, stylized blue 'X' followed by the word 'SERIES' in a bold, black, sans-serif font, all enclosed within a blue rectangular border.

▲ **36-Frame X-Series Plunger Pump**
25–45 gpm (94.6–170 lpm)
1,000–2,000 psi (69–138 bar)



▶ **1061X Plunger Pump**
10–12.3 gpm (38–46.6 lpm)
1,800–2,200 psi (124–152 bar)

The X-Series Advantage

Built Stronger. Runs Longer. Engineered to Be the Best Pumps You'll Ever Own.

Manifolds and Valve Plate Covers

(36-Frame X-Series Only)

- New 36-Frame manifold and valve plate cover design eliminates threaded stainless steel valve plugs — no seized threads, no special tools, faster service in the field.
- 316 stainless steel construction offers superior corrosion resistance; select models (3622X, 3632X, 3642X) feature duplex stainless steel throughout.

Valves

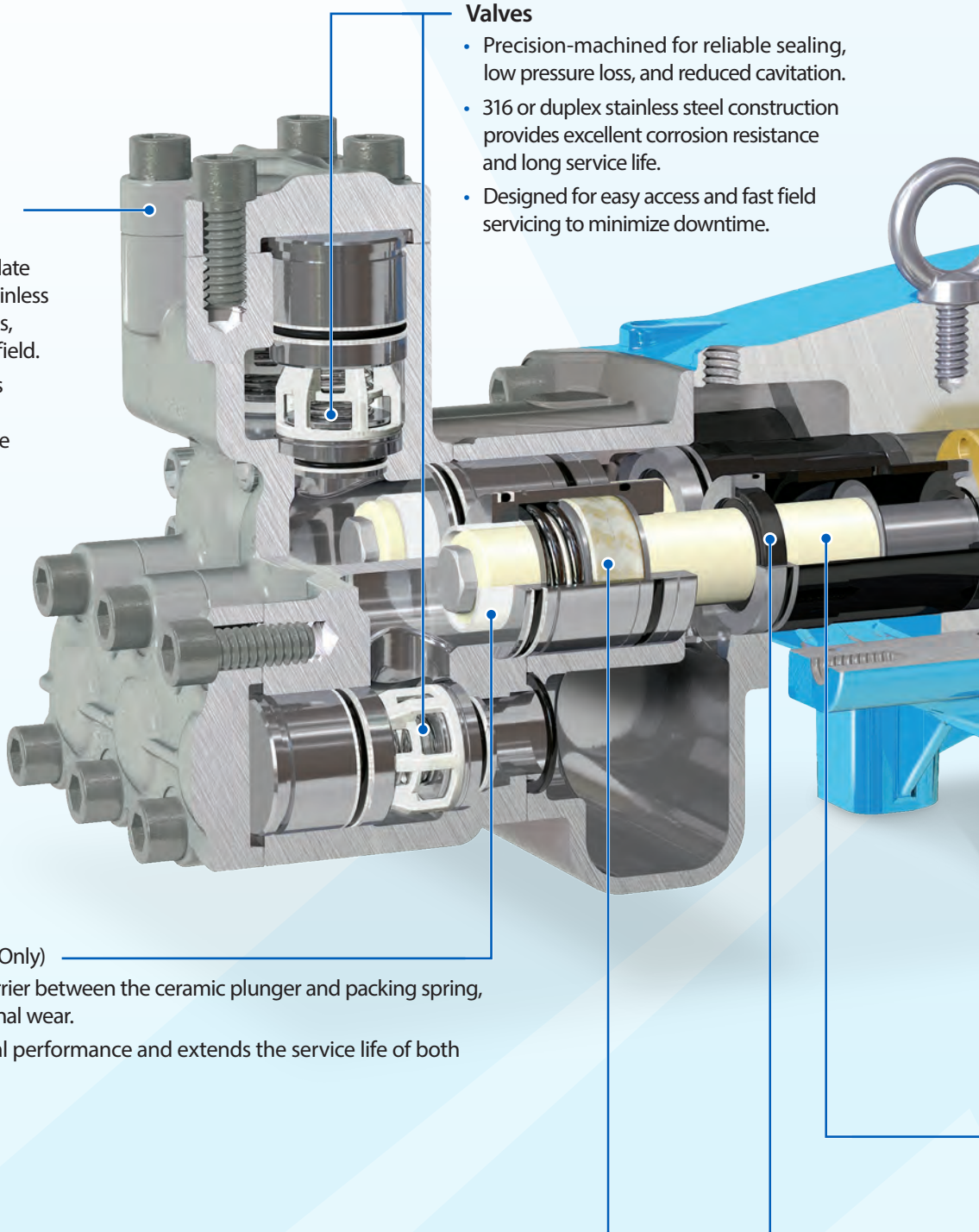
- Precision-machined for reliable sealing, low pressure loss, and reduced cavitation.
- 316 or duplex stainless steel construction provides excellent corrosion resistance and long service life.
- Designed for easy access and fast field servicing to minimize downtime.

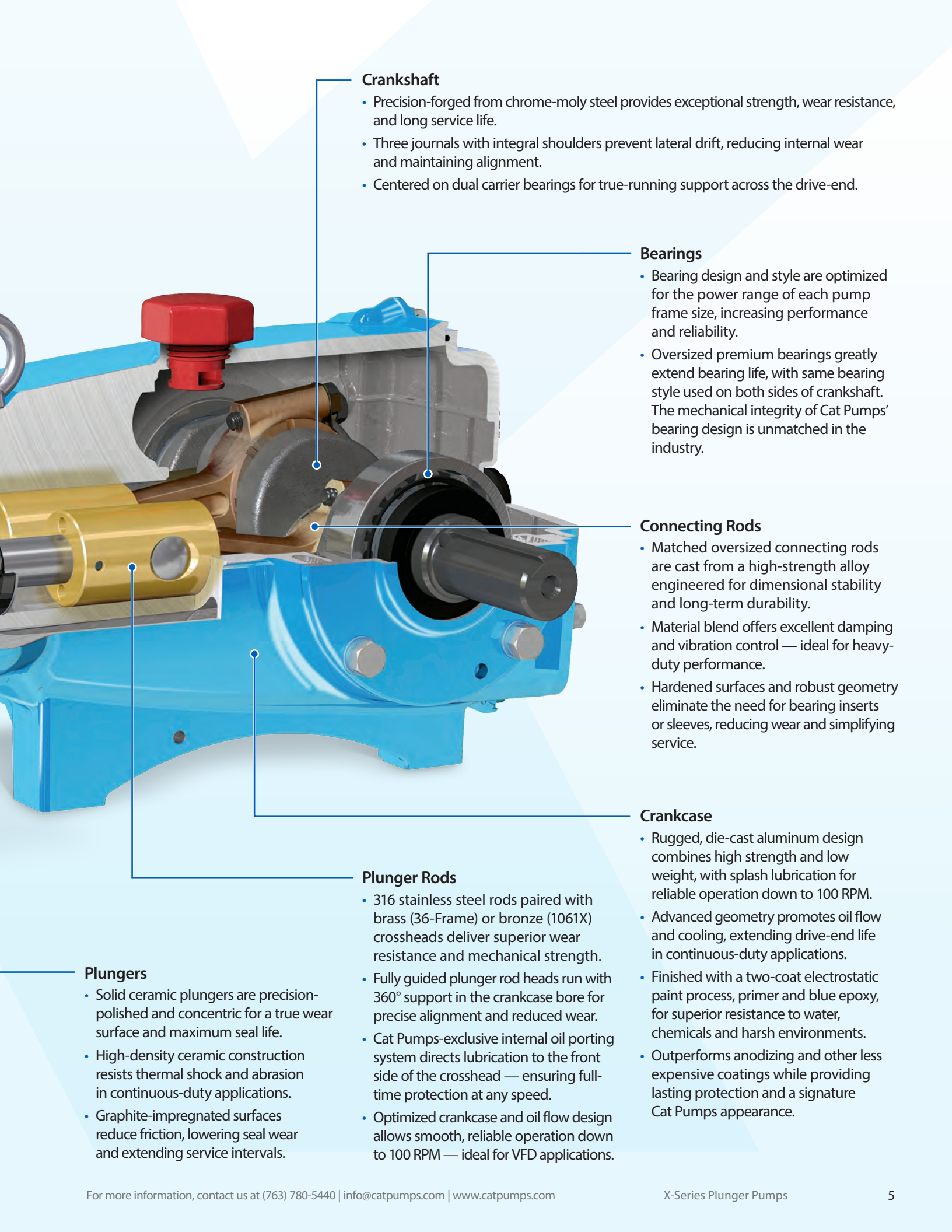
Plunger Sleeves (36-Frame X-Series Only)

- Delrin sleeves create a protective barrier between the ceramic plunger and packing spring, reducing unswept volume and internal wear.
- This added separation enhances seal performance and extends the service life of both plungers and packings.

Seals

- X-Series high-pressure packings deliver up to three times the life of standard designs for maximum uptime.
- Original wet-seal design lubricates from the inside, reducing wear and extending seal life in demanding applications.
- Seal kits and wear parts are stocked for same-day shipping, minimizing downtime and inventory requirements.





Crankshaft

- Precision-forged from chrome-moly steel provides exceptional strength, wear resistance, and long service life.
- Three journals with integral shoulders prevent lateral drift, reducing internal wear and maintaining alignment.
- Centered on dual carrier bearings for true-running support across the drive-end.

Bearings

- Bearing design and style are optimized for the power range of each pump frame size, increasing performance and reliability.
- Oversized premium bearings greatly extend bearing life, with same bearing style used on both sides of crankshaft. The mechanical integrity of Cat Pumps' bearing design is unmatched in the industry.

Connecting Rods

- Matched oversized connecting rods are cast from a high-strength alloy engineered for dimensional stability and long-term durability.
- Material blend offers excellent damping and vibration control — ideal for heavy-duty performance.
- Hardened surfaces and robust geometry eliminate the need for bearing inserts or sleeves, reducing wear and simplifying service.

Crankcase

- Rugged, die-cast aluminum design combines high strength and low weight, with splash lubrication for reliable operation down to 100 RPM.
- Advanced geometry promotes oil flow and cooling, extending drive-end life in continuous-duty applications.
- Finished with a two-coat electrostatic paint process, primer and blue epoxy, for superior resistance to water, chemicals and harsh environments.
- Outperforms anodizing and other less expensive coatings while providing lasting protection and a signature Cat Pumps appearance.

Plunger Rods

- 316 stainless steel rods paired with brass (36-Frame) or bronze (1061X) crossheads deliver superior wear resistance and mechanical strength.
- Fully guided plunger rod heads run with 360° support in the crankcase bore for precise alignment and reduced wear.
- Cat Pumps-exclusive internal oil porting system directs lubrication to the front side of the crosshead — ensuring full-time protection at any speed.
- Optimized crankcase and oil flow design allows smooth, reliable operation down to 100 RPM — ideal for VFD applications.

Plungers

- Solid ceramic plungers are precision-polished and concentric for a true wear surface and maximum seal life.
- High-density ceramic construction resists thermal shock and abrasion in continuous-duty applications.
- Graphite-impregnated surfaces reduce friction, lowering seal wear and extending service intervals.

Specifications & Accessories

X-Series Specifications

MODEL	MATERIAL	FLOW	MAX PRESSURE	RPM	INLET PRESSURE RANGE	MAX LIQUID TEMP	INLET PORTS (2)	DISCHARGE PORTS (2)
1061X	316 SS	10 gpm 38 lpm	2200 psi 152 bar	958	-5 to 60 psi -0.35 to 4.1 bar	160° F 70° C	¾" NPT(F)	½" NPT(F)
1061X (Alternate)	316 SS	12.3 gpm 46.6 lpm	1800 psi 124 bar	1180	20 to 60 psi 1.4 to 4.1 bar	100° F 38° C		
3621X	316 SS	25 gpm 94.6 lpm	2000 psi 138 bar	870	Flooded to 70 psi 4.8 bar	140° F 60° C	1½" NPT(F)	1" NPT(F)
3622X	Duplex SS							
3631X	316 SS	36 gpm 136 lpm	1200 psi 83 bar	800				
3632X	Duplex SS							
3641X	316 SS	45 gpm 170 lpm	1000 psi 69 bar	765				
3642X	Duplex SS							

Popular 15-Frame X-Series Accessories



Pressure Regulator
PN 7011
1 – 10 gpm
100 – 1000 psi



Pop-Off Valve
PN 9941
0 – 25 gpm
1000 – 4000 psi



Pressure Gauge
PN 6085
0 – 1500 psi



Pulsation Dampener
PN 6031
Up to 15 gpm
0 – 2400 psi
NBR Diaphragm



Crankcase Oil
PN 6107
21 oz. Bottle
Specially-Formulated
for Extended Protection

Popular 36-Frame X-Series Accessories



Pressure Regulator
PN 7376
10 – 75 gpm
500 – 2000 psi



Pop-Off Valve
PN 9952
0 – 50 gpm
500 – 2000 psi



Pressure Gauge
PN 6085
0 – 1500 psi



Pulsation Dampener
PN 6015
Up to 70 gpm
0 – 1500 psi



Crankcase Oil
PN 6102
2.5 Gallon Jug
Specially-Formulated
for Extended Protection

The Cat Pumps Difference

Custom Pumping Systems — You Define, We Design and Deliver

Cat Pumps is an industry leader in providing customers with quality custom-engineered pumping systems to meet a wide range of application needs. By selecting a Cat Pumps pumping system, customers eliminate the hassle and expense of designing, multiple source buying, fabrication and testing. Our knowledgeable and helpful technical sales team assists with proper component selection as well as installation, operation and maintenance support.

Select Cat Pumps for your next custom system to save the time and expenses of these activities:

- Initial Design
- Multiple Source Buying
- Fabrication
- Assembly
- Testing

Typical Configurations

Base

- Standard • Vertically Stacked • Portable • Enclosed • Multiple Pump

Power Source

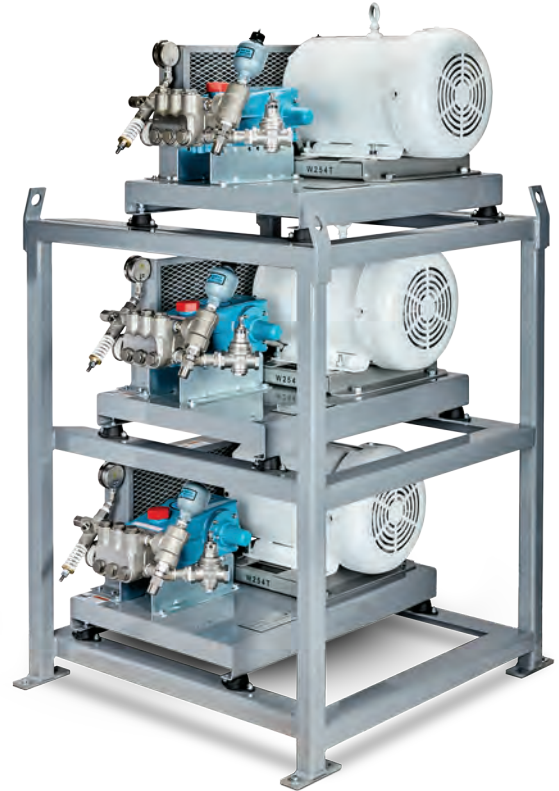
- Electric • Gas • Diesel • Hydraulic • Pneumatic

Drive Package

- Belt • Direct Drive • Gearbox • Flex Coupling/Bell Housing • Clutch

Accessories

- Regulator • Unloader • Relief/Pop-Off Valve • Pressure Gauge • Guns
- Pulsation Dampener • Inlet Stabilizer • Inlet Filter/Strainer • Oil



Products and Service You Can Count On

In addition to receiving the most durable high-pressure pumps available, Cat Pumps customers benefit from unmatched service and global support:

- Live, industry-leading technical support, Monday–Friday, 8:00 a.m. – 5:00 p.m. CST (excluding national holidays)
- 97.70% order fill rate, supported by world-class inventory management system
- 99.97% shipping accuracy, which means customers receive what they ordered
- Global distribution network with in-stock Cat Pumps products
- Application engineering assistance for system design, installation and maintenance

Cat Pumps has built its reputation by supplying pumps that perform where others fail. The X-Series extends that legacy, providing operators in the SWRO industry with a pump that delivers more uptime, less maintenance and long-term confidence.

CUSTOMER SERVICE PERFORMANCE
97.70%
Fill Rates

CUSTOMER SERVICE PERFORMANCE
99.97%
Shipping Accuracy

ABOUT CAT PUMPS

Proven Quality, Customer Focused

Cat Pumps is the world leader in the design, manufacture and marketing of the most dependable high-pressure positive displacement reciprocating triplex pumps and systems in the market. Our mission to exceed customer expectations for quality, reliability, availability, delivery, technical expertise and aftermarket support to assure the best value in all the industries served.

LOCATIONS

Worldwide Headquarters

Cat Pumps

1681 94th Lane Northeast
Minneapolis, MN 55449
USA

P: 763-780-5440
F: 763-780-2958
techsupport@catpumps.com
www.catpumps.com

Territories Served

U.S., Canada

International Division

P: 763-780-5440
F: 763-785-4329
intlsales@catpumps.com
www.catpumps.com

Territories Served

Africa, Asia, Australia, Central and
South America, Mexico, Middle East,
New Zealand, Turkey

Cat Pumps International N.V.

Heiveldekens 6A
2550 Kontich
Belgium

P: 32 3 450 71 50
F: 32 3 450 71 51
cpi@catpumps.be
www.catpumps.be

Territories Served

Western Europe (except U.K.,
Germany, and Austria)

Cat Pump (U.K.) Ltd.

1 Fleet Business Park, Sandy Lane
Church Crookham
FLEET, Hampshire GU52 8BF
England

P: +44 1252 622031
F: +44 1252 626655
sales@catpumps.co.uk
technical@catpumps.co.uk
www.catpumps.co.uk

Territories Served

England, Ireland, Scotland,
N. Ireland, Wales

Cat Pumps Deutschland GmbH

Buchwiese 2, D-65510
Idstein
Germany

P: +49 6126 9303 0
F: +49 6126 9303 33
catpumps@t-online.de
www.catpumps.de

Territories Served

Austria, Commonwealth of Independent States
(CIS), Germany and Eastern Europe

SALES, DISTRIBUTION, SERVICE

Call today for product and application assistance.
763-780-5440 or visit us at www.catpumps.com



CAT PUMPS

1681 - 94TH LANE N.E. MINNEAPOLIS, MN 55449-4324
PHONE (763) 780-5440 — FAX (763) 780-2958
e-mail: techsupport@catpumps.com
www.catpumps.com

For International inquiries go to www.catpumps.com and navigate to the "Contact Us" link.