

MasterSense™ I/P® Stainless Steel Pump System

NEW drives have evolved
for hygienic environments.

Masterflex® MasterSense™ I/P® pumps have evolved to give you the best of both worlds: versatile and cost-effective pumps that can also reliably handle aseptic fluid transfer thanks to new, stainless steel construction. Though still ideal for process applications with nominal flow rates and pressures, the new I/P series is now ready for hygienic environments like bioprocess suites and clean rooms.

The heart of this new efficient system is the Masterflex I/P Rapid-Load® Pump Head — the only I/P pump head currently available that can accept thick-walled “high performance” tubing for viscous fluid. The unique design allows for fast tubing replacement and its positive retention secures tubing in place to enhance performance and repeatability.

Streamline and simplify your process with an enhanced user experience, greater data security and intuitive system functionality that automatically monitors media quality — so you can rest assured that every drop counts.



MASTERFLEX I/P STAINLESS STEEL PUMP FEATURES AND BENEFITS

- Durable and corrosion resistant
- Designed for scalability — from research to production
- Minimizes risk with a closed system
- Easily transfers shear-sensitive and viscous fluids
- Compact and modular
- Available for any I/P drive (legacy or MasterSense)

All Masterflex I/P pump heads are designed to work best with I/P Precision or I/P High-Performance Precision pump tubing, ensuring lot-to-lot traceability and confidence in accuracy and repeatability.

MASTERSENSE I/P PUMP SYSTEM ENHANCEMENTS

- NEW integrated sensors monitor fluid pressure and alert before potential failure
- Store up to 50 commonly used protocols
- Intuitive digital touchscreen can be used with wet gloves
- Powerful drives that accept all I/P pump head and tubing options
- Over-the-air firmware updates in situ, without product removal
- Network connection via standard Ethernet/IP, Profibus, analog, or MasterflexLive®

MasterSense digital technology transforms legacy Masterflex pump systems to meet the ever-demanding needs of bioprocess or aseptic fluid transfer manufacturing.

Model	77421-00	77421-02
Plug type	US	US
Min. to Max. flow rate	0.0006 to 19 L/min	19 L/min
Housing material	316 stainless steel -- IP 66 and NEMA 4X rated for washdown	316 stainless steel -- IP 66 and NEMA 4X rated for washdown
Max. RPM	001 to 650 rpm	650 rpm
Dimensions H x W x L	346 mm (13.6") x 260 mm (10.2") x 356 mm (14")	346 mm (13.6")
Frequency	50/60 Hz	50/60 Hz
Voltage	90 - 260 VAC	90 - 260 VAC
Power	115/230 VAC	115/230 VAC
Anti-drip	Yes	Yes
Cloud connected	Yes	Yes
Control Type	Digital	Digital
Digital dispensing	Yes	Yes
Drive IP rating	IP 66 - Washdown rated	IP 66
Open-head sensor	Yes	Yes
Remote I/O	EtherNet/IP, MasterflexLive, 0 - 20 mA, 4 - 20 mA, 0 - 10 V, start/stop, direction, and prime via contact closure	Profibus, MasterflexLive, 0 - 20 mA, 4 - 20 mA, 0 - 10 V, start/stop, direction, and prime via contact closure
Reversible motor	Yes	Yes
Pump series	I/P	I/P
Type of pump heads accepted	I/P Standard, I/P Easy-Load, I/P High-Performance	I/P Standard, I/P Easy-Load, I/P High-Performance
Warranty	2 years	2 years



For more information about MasterSense I/P Stainless Steel Pump, or the Rapid Load head, scan the QR code or visit www.vwr.com