



MASTERFLEX® I/P® SERIES

DIGITAL PERISTALTIC
PUMP DRIVES



Quick Start **Guide**

**SAFETY
PRECAUTIONS**

-  **DANGER:** Remove power from the pump before any cleaning operation is started.
-  **WARNINGS:** Remove power from the pump before attempting any maintenance.
- A contactor or other device that routinely disconnects and reapplies the AC line to the drive to start and stop the motor can cause drive hardware damage. The drive is designed to use control input signals that will start and stop the motor.
-  **WARNINGS:** Tubing breakage may result in fluid being sprayed from pump. Use appropriate measures to protect operator and equipment.
- Turn Pump System off before removing or installing tubing. Fingers or loose clothing could be caught in drive mechanism.
-  **CAUTIONS:** Replace the fuse only with one of the same type and rating. The fuse rating and type are stated on the rear panel.
- Power must be turned off before connecting the external remote control cable to prevent damage to the drive.
- CAUTIONS:** To avoid electrical shock, the power cord protective grounding conductor must be connected to ground. Not for operation in wet locations as defined by EN61010-1.
- If the product is not used in a manner specified in the instructions, the protection provided by the equipment may be impaired.

**Explanation of
Symbols**

-  **CAUTION:** Risk of Danger. Consult Operator's manual for nature of hazard and corrective actions.
-  **CAUTION:** Risk of crushing. Keep fingers away from rotor while pump is in operation. Stop pump before loading or unloading tubing.
-  **CAUTION:** Hot Surface. Do not touch.
-  **CAUTION:** Risk of electric shock. Consult Operator's manual for nature of hazard and corrective actions.

**WARNING:
Product Use
Limitation**

-  This product is not designed for, nor intended for use in patient connected applications; including, but not limited to, medical and dental use, and accordingly has not been submitted for FDA approval.
- This product is not designed for, nor intended for use in hazardous duty areas as defined by ATEX or the NEC (National Electrical Code); including, but not limited to use with flammable liquids. Consult the factory for products suitable for these types of applications.



EN61010-1 L.V. DIR.
EN61326-1 EMC DIR.
EN60529 / IEC 60034-5



**2 year
warranty**



77420-10, 77420-20 0.1-650 rpm



+0C, +32F



+40C, +104F



70 dba @ 1M



77420-10
77420-20 IP66 (NEMA 4X)



77420-10,
77420-20
40 lbs. (18 kg)



-25C, -13F



+65C, +149F

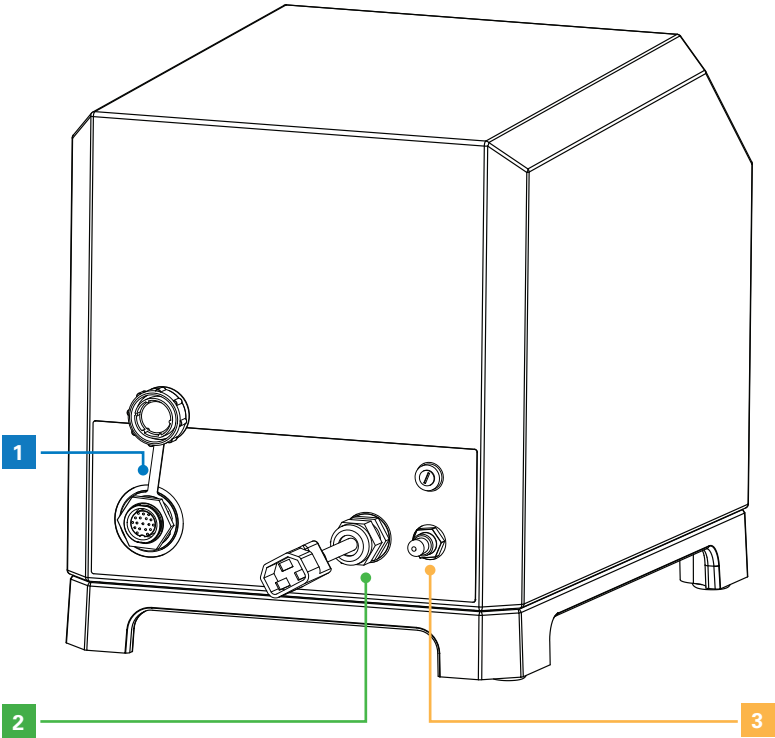
Replacement Cord/Plug Sets Ordering Information

Catalog Number	Description	Catalog Number	Description	Catalog Number	Description
50001-60	Australia	50001-69	Israel	50001-76	Italy
50001-62	Denmark	50001-70	Europe	50001-78	U.S. 230V
50001-64	India	50001-72	England	—	—
50001-68	U.S. STD. 115V	50001-74	Switzerland	—	—

Product Accessories

07575-80 Remote control cable 31-pin (NEMA 4X), 25ft (7.62m)

07575-84 Footswitch (NEMA 4X)



Step 1

Screw in Motor cable

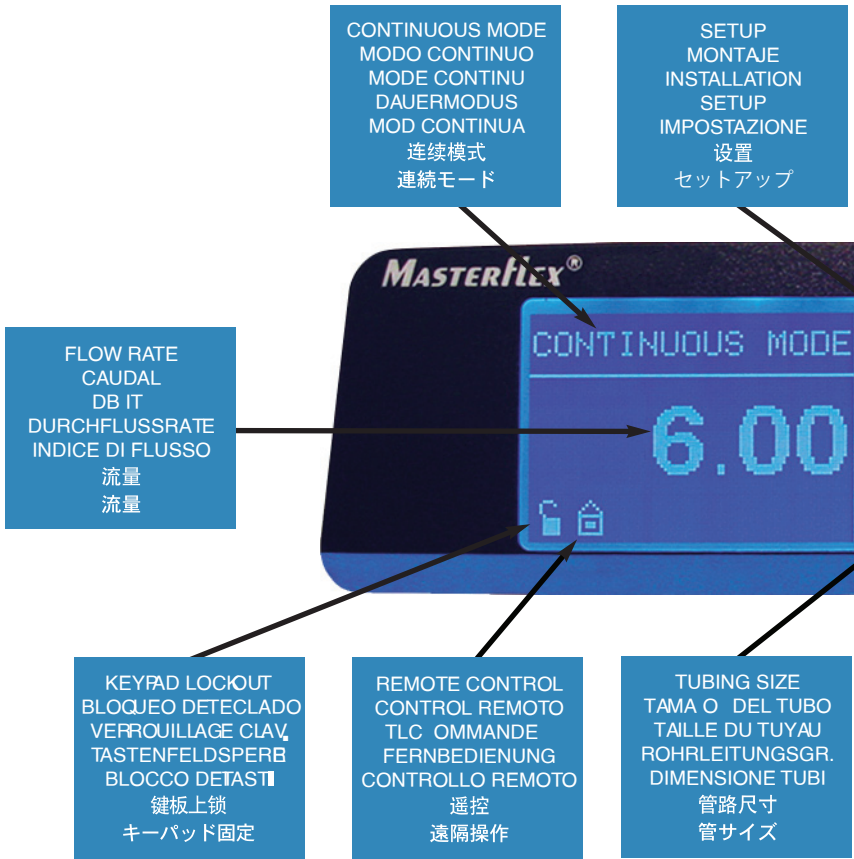
Step 2

Plug in Power Cable

Step 3

Switch On Power

Graphic Interface



Keypad Legend

PUMP DIRECTION
DIRECCI N BOMBA
DIRECTION POMPE
PUMPRICHTUNG
DIREZIONE POMPA
泵流方向
ポンプ方向

ANTI-DRIP
SIN GOTE
ANTI-GOUTTES
KEIN TROEN
ANTISGOCCIOLO
防漏

START/STOP
INICIO/DETENCI N
DM ARRER/ARR TER
START/STOPP
AVVIO/ARRESTO
启动/停止
始動/停止

ENTER
ENTRE
ENTRER
EINGABE
INSERIRE
输入
入力

FLOW UNITS
UNIDADES DE FLUJO
UNITS DE DB IT
DURCHFUSSEINHEIT
UNIT DI FLUSSO
流量单位
フロー単位

PRIME
CEBAR
AMOR ER
ANSAUGEN
ADESCARE
灌泵
呼び水

6

CONTINUOUS MODE
MODO CONTINUO
MODE CONTINU
DAUERMODUS
MOD CONTINUA
连续模式
連続モード

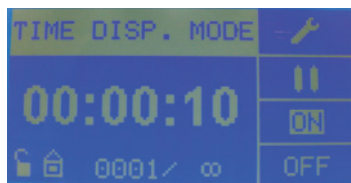
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CONTINUOUS MODE
MODO CONTINUO
MODE CONTINU
DAUERMODUS
MOD CONTINUA
连续模式
連続モード

7



VOL DISP. MODE
VOLUMEN DISP.
DISTR. VOLUME
MENG.F RD .MOD.
MOD DIST VOLUME
定量輸注模式
分量給液モード

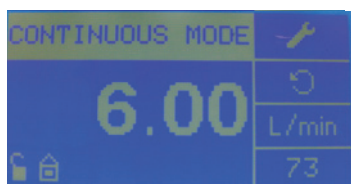


TIME DISP. MODE
TEMPORIZAR DISP.
DISTR. PROGRAM.
ZEITFR D.MOD.
MOD DIST TEMPO
定时輸注模式
定時給液モード



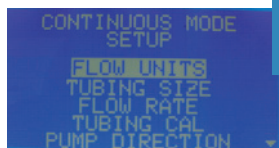
COPY DISP. MODE
DUPLICAR DISP.
DISTR. REPETEE
WH.F RD .MOD.
MOD DIST COPIA
拷贝輸注模式
コピー給液モード

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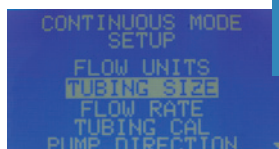
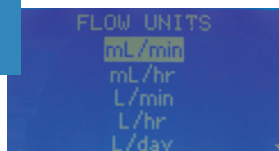


SETUP
MONTAJE
INSTALLATION
SETUP
IMPOSTAZIONE
設置
セットアップ

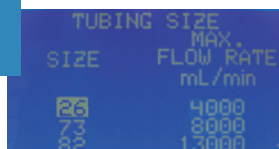
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FLOW UNITS
UNIDADES DE FLUJO
UNITS DE DB IT
DURCHFUSSEINHEIT
UNIT DI FLUSSO
流量単位
フロー単位



TUBING SIZE
TAMA O DEL TUBO
TAILLE DU TUYAU
ROHRLEITUNGSGR.
DIMENSIONE TUBI
管路尺寸
管サイズ



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CONTINUOUS MODE
SETUP
FLOW UNITS
TUBING SIZE
FLOW RATE
TUBING CAL
PUMP DIRECTION

FLOW RATE
CAUDAL
DB IT
DURCHFLOSSRATE
INDICE DI FLUSSO
流量
流量

FLOW RATE mL/min
36.00
EXIT



CONTINUOUS MODE
SETUP
FLOW UNITS
TUBING SIZE
FLOW RATE
TUBING CAL
PUMP DIRECTION

TUBING CAL
CAL DE TUBERÍA
TALON. TUYAU
ROHRLEITUNGSKAL
TARATURA TUBI
管路校准
配管校正

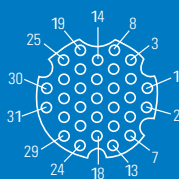
TUBING CAL	START
6.000 mL	↺
36.00	mL/min
EXIT	13



ANTI-DRIP
ON
OFF
EXIT

ANTI-DRIP
SIN GOTEOS
ANTI-GOUTTES
KEIN TROEN
ANTISGOCCIOLO
液ダレなし
防漏

ANTI-DRIP
45 °
EXIT



Pin No. Circ.-31

Pin No. Circ.-31	Description
1	Speed Control Voltage Input (0-10V)
3	Speed Control Current Input (0-20 mA)
5	Speed Control Input Ground Return
7	Speed Signal Current Output (0-20 mA)
9	Speed Signal Output Ground Reference
11	(Motor Running N.O. Default) 1A @24V
13	Logic COM (Motor Running)
15	(Motor Running N.C. Default) 1A @24V
2	Speed Signal Voltage Output (0-10V)
4	Remote Start/Stop Input
6	Remote CW/CCW Input
8	Remote Start/Stop, CW/CCW, Prime Grnd Ref
10	Tach Ground Reference
12	Tach Output (open collector)
14	Remote Prime Input
20	General Alarm Output
22	Local/Remote Indicator
16-19, 21	Reserved - Not Used
23, 26-31	Reserved - Not Used
24	Aux 24V+
25	Aux 24V-

I/P Digital Peristaltic Pump Drives and Systems	
	Bench Top
CATALOG NUMBER	
Drive Only - Stainless Steel (No Pump Head)	77420-10
Pump System with Easy-Load I/P Pump	77964-20
Drive Only - White Powder Coated (No Pump Head)	77420-20
Pump System with Easy-Load I/P Pump	77964-30



**I/P Series Digital
Peristaltic Pump Drive
With Easy-Load® Pump
Head 77420-10**

**I/P Series Digital
Peristaltic Pump Drive
With Easy-Load® Pump
Head 77420-20**



MASTERFLEX®

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1-847-381-7050

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