












MASTERFLEX® L/S® Series Digital Pump Drives

Quick Start Guide

 Cole-Parmer®

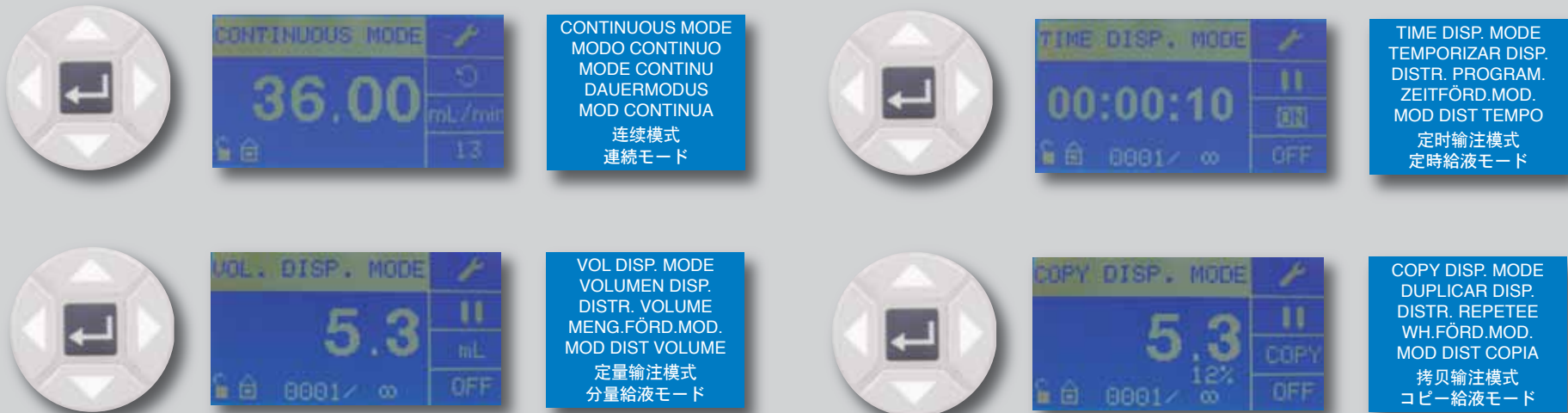


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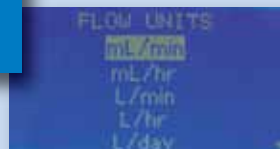
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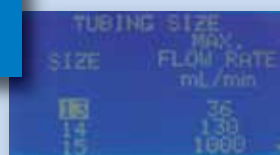
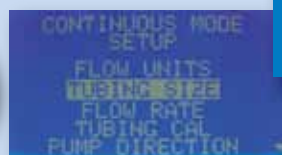


SETUP
MONTAJE
INSTALLATION
SETUP
IMPOSTAZIONE
設置
セッアップ

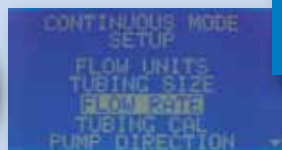
FLOW UNITS
UNIDADES DE FLUJO
UNITÉS DE DÉBIT
DURCHFLOSSEINHEIT
UNITÀ DI FLUSSO
流量單位
フロー単位



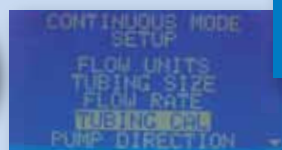
TUBING SIZE
TAMAÑO DEL TUBO
TAILLE DU TUYAU
ROHRLEITUNGSGR.
DIMENSIONE TUBI
管路尺寸
管サイズ



FLOW RATE
CAUDAL
DÉBIT
DURCHFLOßRATE
INDICE DI FLUSSO
流量
流量



TUBING CAL
CAL DE TUBERÍA
ÉTALON. TUYAU
ROHRLEITUNGSKAL
TARATURA TUBI
管路校正
配管較正



EN609.2001 MACH. DIR.
EN61010-1 2001 L.V. DIR.
EN61326-1 2006 EMC DIR.
EN60529 / IEC 60034-5 (IP33)
& (IP66)



US

2 year
warranty

24
HOUR
DUTY



600 RPM/100 RPM Max



+0C, +32F



70 dba @ 1M



+40C, +104F



6.8kg/15lbs
or 11.8kg/26lbs

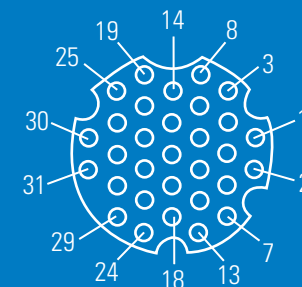


-25C, -13F



+65C +149F


13 12 11 10 9 8 7 6 5 4 3 2 1
25 24 23 22 21 20 19 18 17 16 15 14



1	1	Speed Control Voltage Input (0-10 V)
3	2	Speed Control Current Input (0-20 mA)
5	3	Speed Control Input Ground Return
7	4	Speed Signal Current Output (0-20 mA)
9	5	Speed Signal Output Ground Reference
11	6	(Motor Running N.O. Default) 1A @24V
13	7	Logic COM (Motor Running)
15	8	(Motor Running N.C. Default) 1A @24V
2	14	Speed Signal Voltage Output (0-10 V)
4	15	Remote Start/Stop Input
6	16	Remote CW/CCW Input
8	17	Remote Start/Stop, CW/CCW, Prime Grnd Ref.
10	18	Tach Ground Reference
12	19	Tach Output (open collector)
14	20	Remote Prime Input
20	23	General Alarm Output
22	24	Local/Remote Indicator
16-19, 21	9-12	Reserved - Not Used
23, 26-31	21-22	Reserved - Not Used
24	25	Aux 24V+
25	13	Aux 24V-

SAFETY PRECAUTIONS

 **DANGER:** High voltages exist and are accessible. Use extreme caution when servicing internal components.


 **WARNINGS:** Tubing breakage may result in fluid being sprayed from pump. Use appropriate measures to protect operator and equipment.


Turn drive off before removing or installing tubing. Fingers or loose clothing could get caught in drive mechanism.

 **CAUTION:** Power must be turned off before connecting the external remote control cable to prevent damage to the drive.

CAUTION: Do not contaminate the lubricant in the container, on the shaft or on the seal with foreign material. Failure to observe this precaution may result in damage to the seal and premature failure of the seal.

CAUTION: No foreign matter should be allowed under the gasket on the back of the front plate or under the heads of the screws. Failure to observe this precaution may result in leakage during washdown of the drive.


 **CAUTION:** 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.

 **CAUTION:** Keep fingers away from rotor while pump is in operation. Stop pump before loading or unloading tubing.

CAUTION: To reduce the possibility of tipping, use the stacking clip provided with the unit.

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

L/S Standard Digital Drives



L/S Computer-Compatible Drives



L/S Digital Process Drive

 **Cole-Parmer**[®]

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CERTIFIED

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