Lean Smart Peristaltic Pump is a new generation peristaltic pump based on a stepper motor controlled by an electronic Smart Driver:
it can provide great performances in efficiency in power consumption, in precision in shaft position control and in reliability.
Lean Smart Peristaltic Pump is designed to be integrated in Medical Devices compliant with IEC 60601-1 3rd ed.
Pumping function is based on a 2 springs loaded rollers that can perform automatic loading of the tube.
The transparent lid allows visual checks of the pumping section and performs a torque disabling action when it is open.

The Electronic Driver contains a 256 steps absolute contactless encoder with 1/256 micro steps resolution in current control
to get a huge precision in shaft position and torque control.
Lean Smart Peristaltic Pump can be driven with classic Dir/Freq controls or with the enhanced Smart Control protocol based on a Master/Slave communication through a rs422 serial line.
Using the innovative Smart Control protocol, developed by Lean, the Pump can receive command for target speed and direction and can return to control system status data as actual speed/direction, lid status, torque enable status, average current consuption.

Lean s.r.l.
Via Marconi, 2 – 41036 Medolla (MO) – ITALY
Tel. +39 (0)535 52200
www.lean.it

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TECHNICAL FEATURES

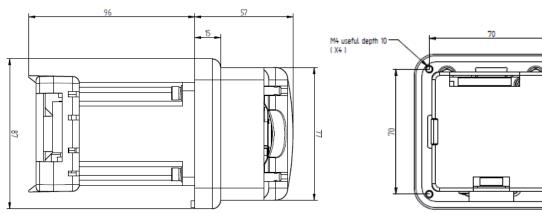|	
Tubing	4.8 mm x 6.8 mm, 60 ShA (typ.)
Flow Range	10÷200 ml/min
Motor speed	120 RPM, resolution 0.1 RPM
Motor	Bipolar Stepper motor NEMA 23
Electronic control	Stepper Motor Smart Driver (cod 02822xx)
Motor Torque	Typ. 1 Nm, Max 1.8 Nm (1)
Rotor	2 springs loaded rollers
Tube loading	Loading/unloading functions
Control protocol	Enhanced Smart control (Serial line RS422) Dir/Freq (2)
Dimensions	(153 x 87 x 87) mm
Weight	1,48 kg
Power Supply	24 V dc ± 5%.
Power Consumption	Typ. 8 W, Max 20 W (@1Nm)
Rotor movement/direction control	Absolute encoder 256 pulse/rev. (with 1/256 µ-steps)
Open lid sensor	Hall effect sensor
Status light	Bicolor Green/Red led

(1) *Torque can be configurable by Firmware (factory setup)*
(2) *Dir/Freq control in alternative to Smart Control protocol*

AVAILABLE CONFIGURATIONS
0306501 – Dir/Freq control, 5 V interface
0306502 – Dir/Freq control, 3.3 V interface
0306503 – Enhanced Smart Control protocol
Dimensions [mm]

Dimensions [mm]