PuraLev®
Life Science Integrated Pump Series

PuraLev® i30MU (Multi-Use)

| 2.7 bar | (39 psi) |
| 3.9 liters/min | (1 gallons/min) |

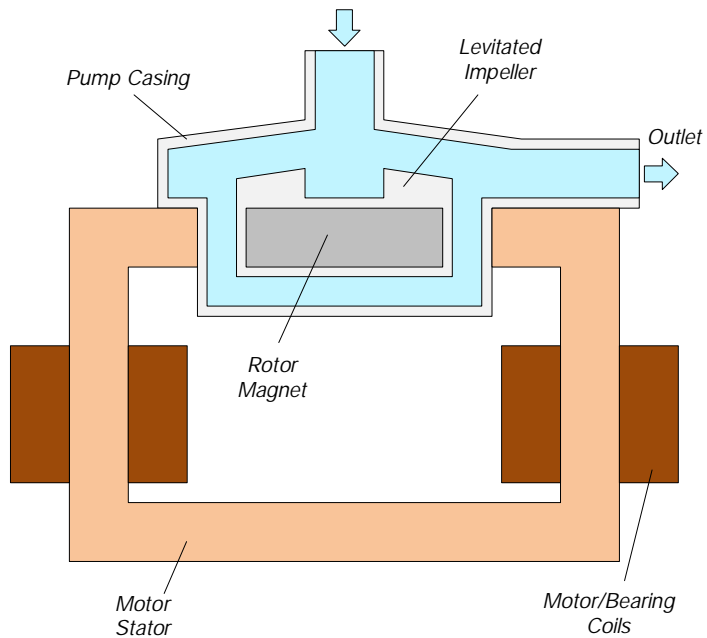## No Bearings. No Seals. No Contamination!

REVOLUTIONARY MAGLEV PUMP SYSTEM

Figure 1: Schematic of the main elements of the MagLev centrifugal pump

Labels: Pump Casing, Levitated Impeller, Outlet, Rotor Magnet, Motor Stator, Motor/Bearing Coils

Figure 2: Integrated MagLev pump driver with multi-use pump head

Labels: Multi-Use Pump Head, Integrated Driver (Motor and Controller)

INTRODUCTION

Levitronix® has developed a revolutionary pump that has no bearings to wear out or seals to break. Based on the principles of magnetic levitation, the pump's impeller is suspended, contact-free, inside a sealed casing and is driven by the magnetic field of the motor (*Figure 1*). The impeller and casing are both fabricated from biocompatible (FDA, USP-VI, BSE/TSE and Animal free) resins and together they make up the multi-use pump head. Flow rate or pressure is precisely controlled by electronically regulating the rotor speed, which eliminates any pulsation. With the lack of mechanical bearings plus the self-contained pump head design, the risk of contamination is drastically reduced. The absence of narrow gaps between the impeller and pump casing, plus the low-shear pump design allows the gentle pumping of sensitive liquids. The pump casing is fabricated with Triclamp fittings and has an aseptic seal design for the pump housing. The controller and the motor are integrated into the driver housing (see *Figure 2*), hence cabling effort is reduced.

SYSTEM BENEFITS

- Reduced risk of contamination due to the self-contained design with magnetic bearings
- Low shear-forces
- No particle generation
- No narrow gaps between the impeller and pump casing where bacteria could be entrapped
- Biocompatibility of wet materials: FDA, USP-VI, Animal/BSE/TSE free
- Easy disassembling of pump casing for cleaning
- Aseptic pump housing design with Triclamp fittings and sealing technology
- Small size
- Dry running capability
- Proven technology in the medical (disposable blood pumps) and semiconductor (high-purity pumps) industries
- High flow capability with compact design
- Pulsation free

APPLICATIONS

- Pumping of shear-sensitive liquids and cells
- Bioprocessing
- Recirculation and transfer applications in bioreactors
- Perfusion of hollow-fiber reactors
- Sterile and aseptic flow circuits in the pharmaceutical and food industry
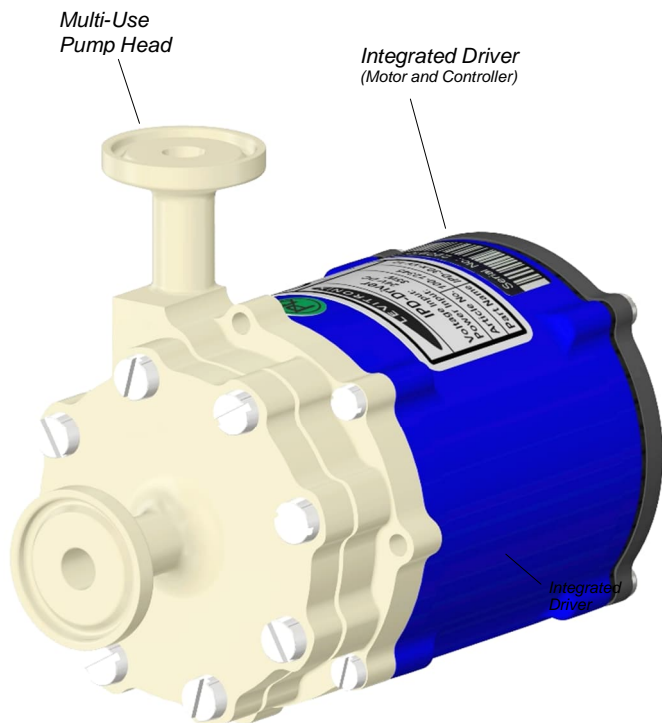
SYSTEM CONFIGURATION – "STAND-ALONE"

Figure 5 and *Figure 10* illustrate a "Plug and Play" stand-alone system with integrated user panel and buttons to set the speed manually. The driver also contains a PLC interface for remote speed control by analog and digital signals. Various accessories are available like a desktop power supply with relevant power cable and signal cables to connect to the PLC.

SYSTEM CONFIGURATION – "EASYCONNECT"

The "*EasyConnect*" models (see *Figure 8* and *Figure 12*) with according cable accessories are designed to realize various interface configurations with minimal setup effort.

Two Fieldbus connectors (IN and OUT) allow to setup arrays of multiple pumps. Therefore, serial pumping configurations as shown in *Figure 9* can be realized. The Fieldbus interface allows remote control over a PC, a user panel or other devices with Modbus protocol.

The PLC interface allows not only remote control by analog/digital signals but also connections of external sensors hence enabling for example a precise flow or pressure control.

SYSTEM CONFIGURATION – "OEM"

The "*OEM*" models are designed for a compact integration with one integrated driver cable containing all available interface signals (see *Figure 6* and *Figure 14*). Basically, all configurations as for the "*EasyConnect*" models are possible allowing the users with integration capabilities to adapt the cable to their needs.

PROCESS CONTROL WITH FEEDBACK SENSORS

Together with an external sensor, process parameters like flow or pressure can be controlled or monitored as shown in *Figure 6*.

Precise ultrapure flow control systems can be realized with the pump system in combination with *LEVIFLOW®* flowmeters. *Levitronix®* provides either turnkey solutions for closed loop flow control or helps to design your own flow control system. Experience has been gained with a wide range of applications.

The versatility of *Levitronix®* flow control systems goes far beyond the capabilities of simple flow controllers. In addition to the flow control function, the *Levitronix®* control firmware comes with several condition monitoring features to monitor the integrity of the fluid circuit. *Levitronix®* flow control systems can generate alarms for preventive filter exchange, no-flow condition or line clogging. Dynamic Condition Trending (DCT) enables failure prediction and scheduling of preventive maintenance.

ATEX / IECEx SYSTEM CONFIGURATION

An ATEX / IECEx certified driver (OEM model only) together with the pump head allows installation within an ATEX Zone 2 area (see *Figure 7*). An Ex conform solution is needed for the motor cables to leave the ATEX area. One option is an ATEX certified cable sealing system as listed in *Table 3*.
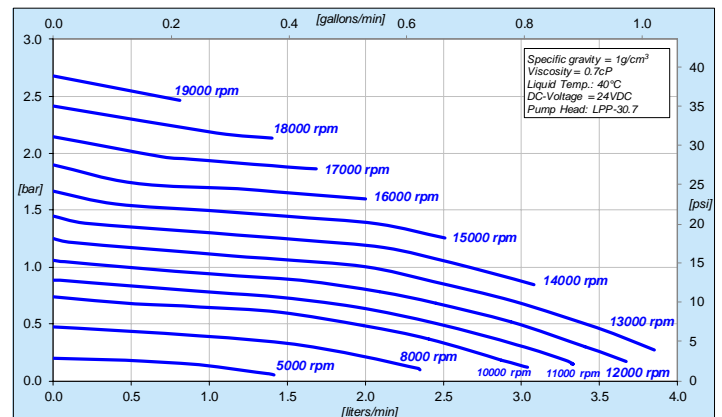

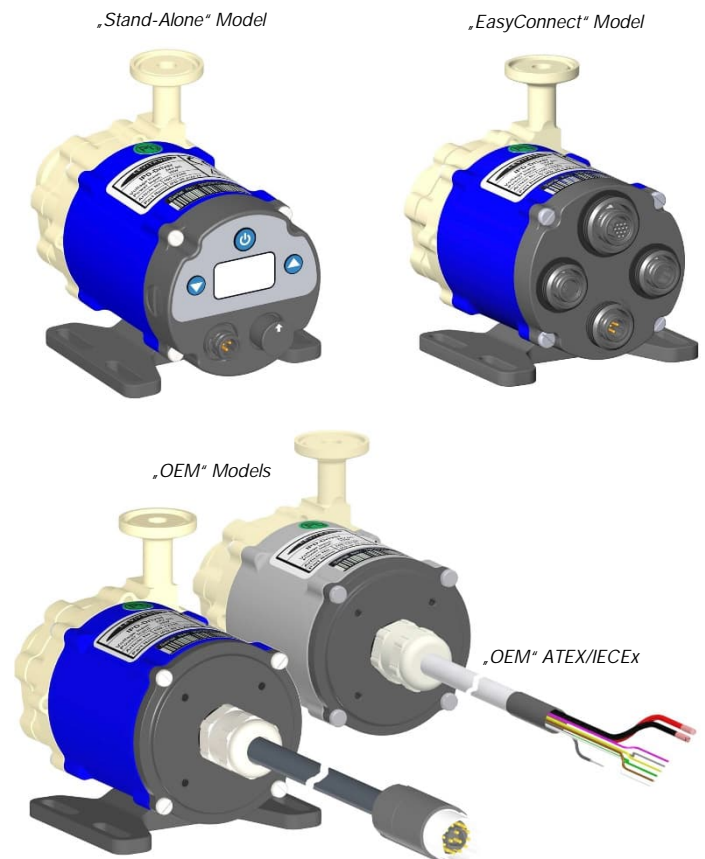**Figure 3:** *Pressure/flow curves for aqueous liquids (similar to water)*

Figure 4: *Pump system models*

SYSTEM CONFIGURATIONS

Outlet

Back-Side Display with
3 Button User Interface
for Speed Setting and Reading

Power Supply Connector

2c

Inlet

Multi-Use Pump Head

Integrated Pump Driver Stand-Alone Model

1

Desktop AC/DC Power Supply

5b

AC Cable
(International Adaptors)

5c

DC Output

AC Input

Screw type connector for open-wires
connection included in cable package

IPS Cable Signal

8b

PLC Connector

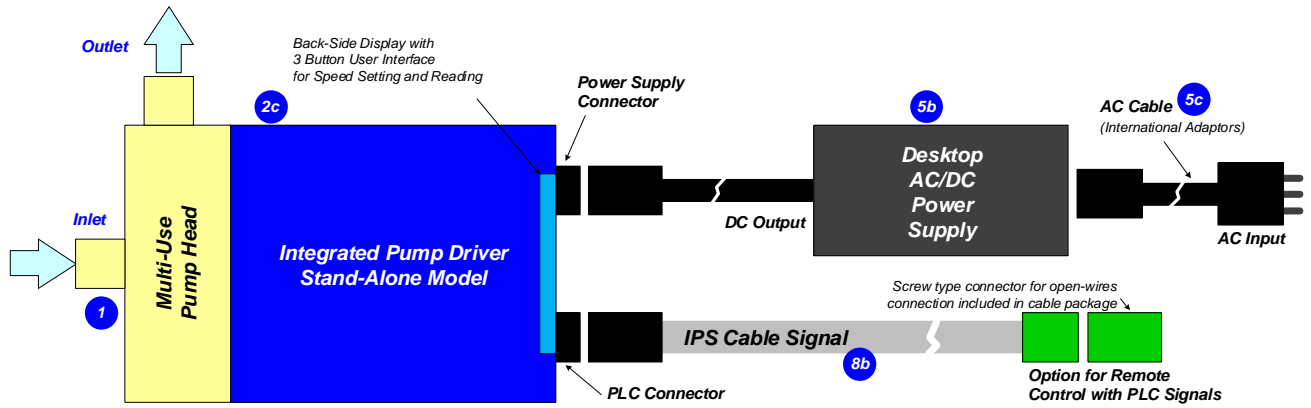**Option for Remote Control with PLC Signals**

Figure 5: *Standard "Stand-Alone" system configuration with main accessories*
(See section "Order Information" for details to numbered components and other options.)
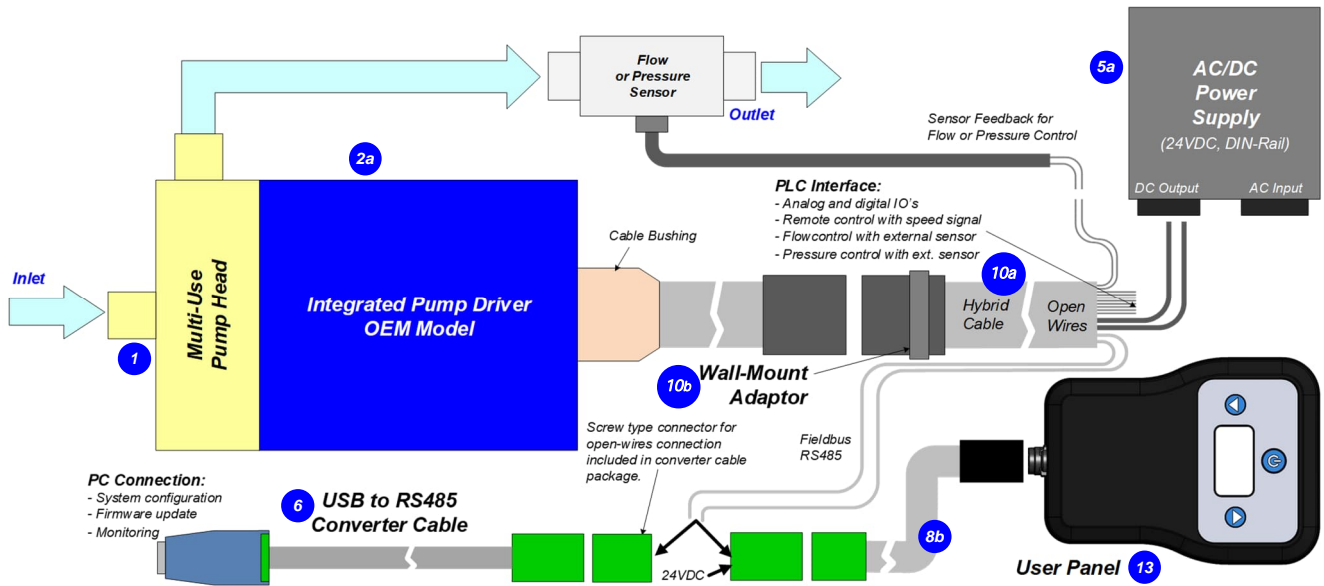

Flow or Pressure Sensor

Outlet

Sensor Feedback for
Flow or Pressure Control

AC/DC Power Supply
(24VDC, DIN-Rail)

5a

2a

Inlet

Multi-Use Pump Head

Integrated Pump Driver OEM Model

1

Cable Bushing

PLC Interface:
- Analog and digital IO's
- Remote control with speed signal
- Flowcontrol with external sensor
- Pressure control with ext. sensor

DC Output

AC Input

10a

Hybrid Cable

Open Wires

Wall-Mount Adaptor

10b

Screw type connector for
open-wires connection
included in converter cable
package.

Fieldbus RS485

PC Connection:
- System configuration
- Firmware update
- Monitoring

6 **USB to RS485 Converter Cable**

24VDC

8b

User Panel *13*

Figure 6: *Standard "OEM" system configuration*
(See section "Order Information" for details to numbered components and other options.)

Outlet

Ⓔx **Ex classified Location**

Cabinet Boundary for Ex classified Area

AC/DC Power Supply
(DIN-Rail)

2d

Inlet

Multi-Use Pump Head

Integrated Ex Pump Driver OEM Model

1

Cable Bushing

Integrated Driver Cable Open Wires

DC Output

AC Input

DC Supply 24 V

PLC Interface:
- Analog and Digital IO's
- Remote Control with Speed Signal
- Flowcontrol with external Sensor
- Pressure Control with ext. Sensor

12 **Ex conform cable sealing system**

Fieldbus Interface:
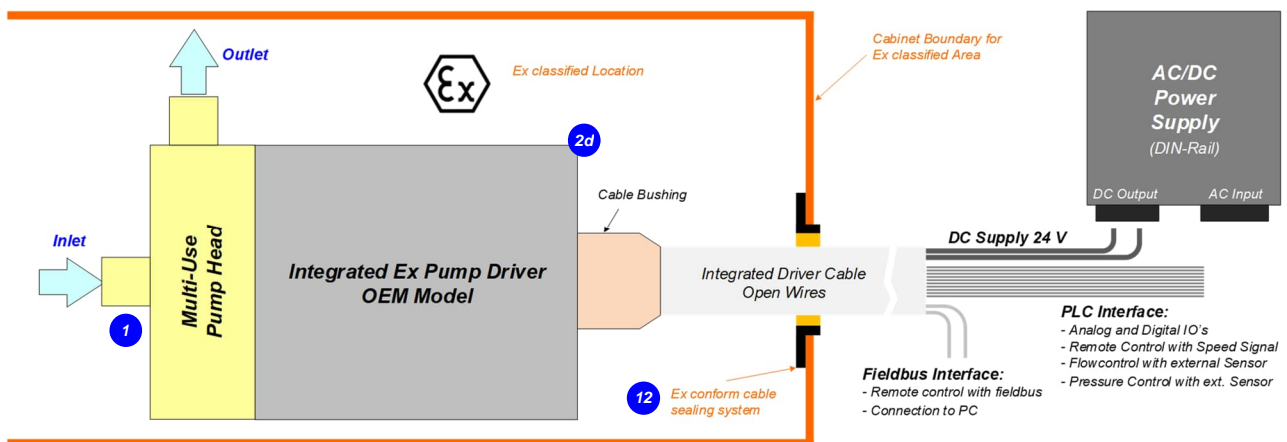- Remote control with fieldbus
- Connection to PC

Figure 7: *ATEX/IECEx "OEM" configuration*
(See section "Order Information" for details to numbered components and other options.)
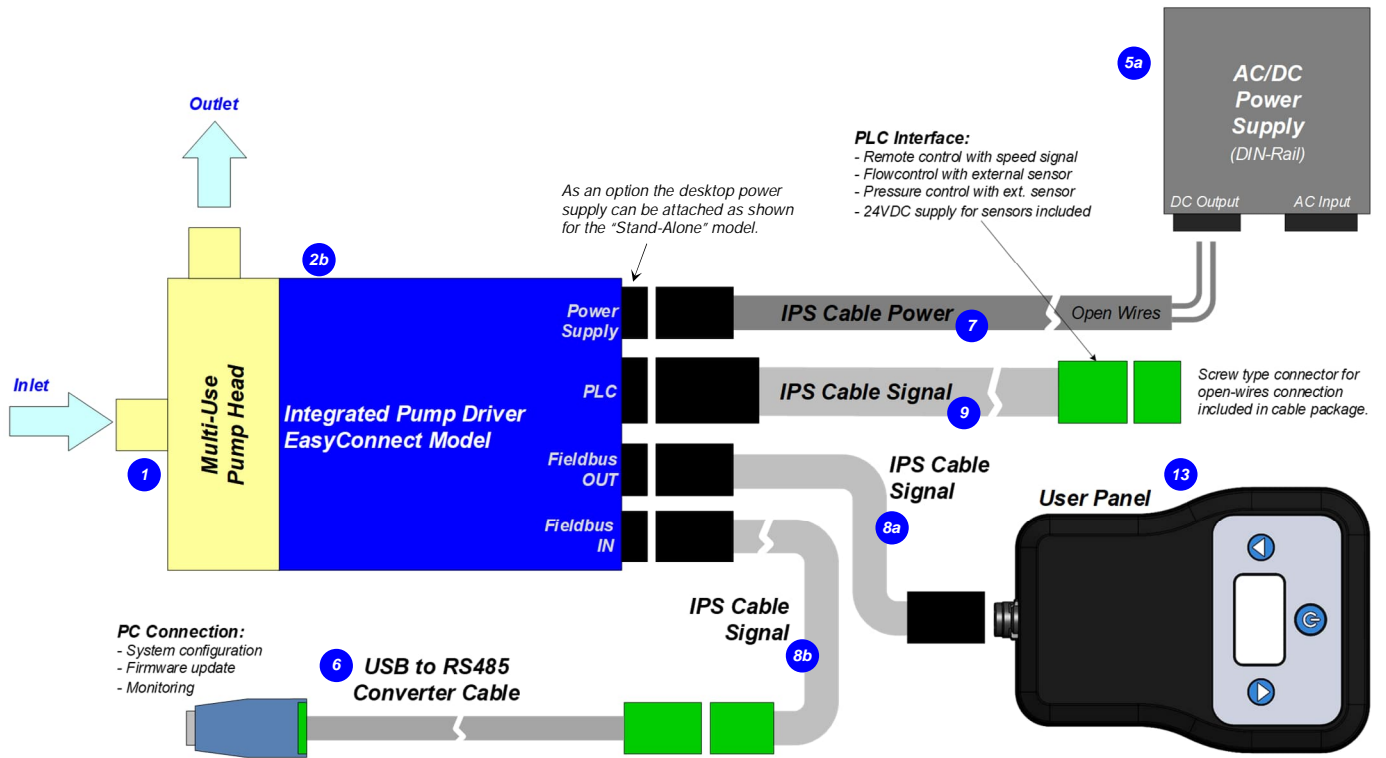
SYSTEM CONFIGURATIONS

Outlet

Inlet

Multi-Use Pump Head — 1, 2b

Integrated Pump Driver EasyConnect Model

Power Supply

PLC

Fieldbus OUT

Fieldbus IN

As an option the desktop power supply can be attached as shown for the "Stand-Alone" model.

PLC Interface:
- Remote control with speed signal
- Flowcontrol with external sensor
- Pressure control with ext. sensor
- 24VDC supply for sensors included

AC/DC Power Supply (DIN-Rail) — 5a

DC Output   AC Input

IPS Cable Power — 7   Open Wires

IPS Cable Signal — 9

Screw type connector for open-wires connection included in cable package.

IPS Cable Signal — 8a

User Panel — 13

IPS Cable Signal — 8b

PC Connection:
- System configuration
- Firmware update
- Monitoring

USB to RS485 Converter Cable — 6

Figure 8: *Standard "EasyConnect" system configuration with main accessories*
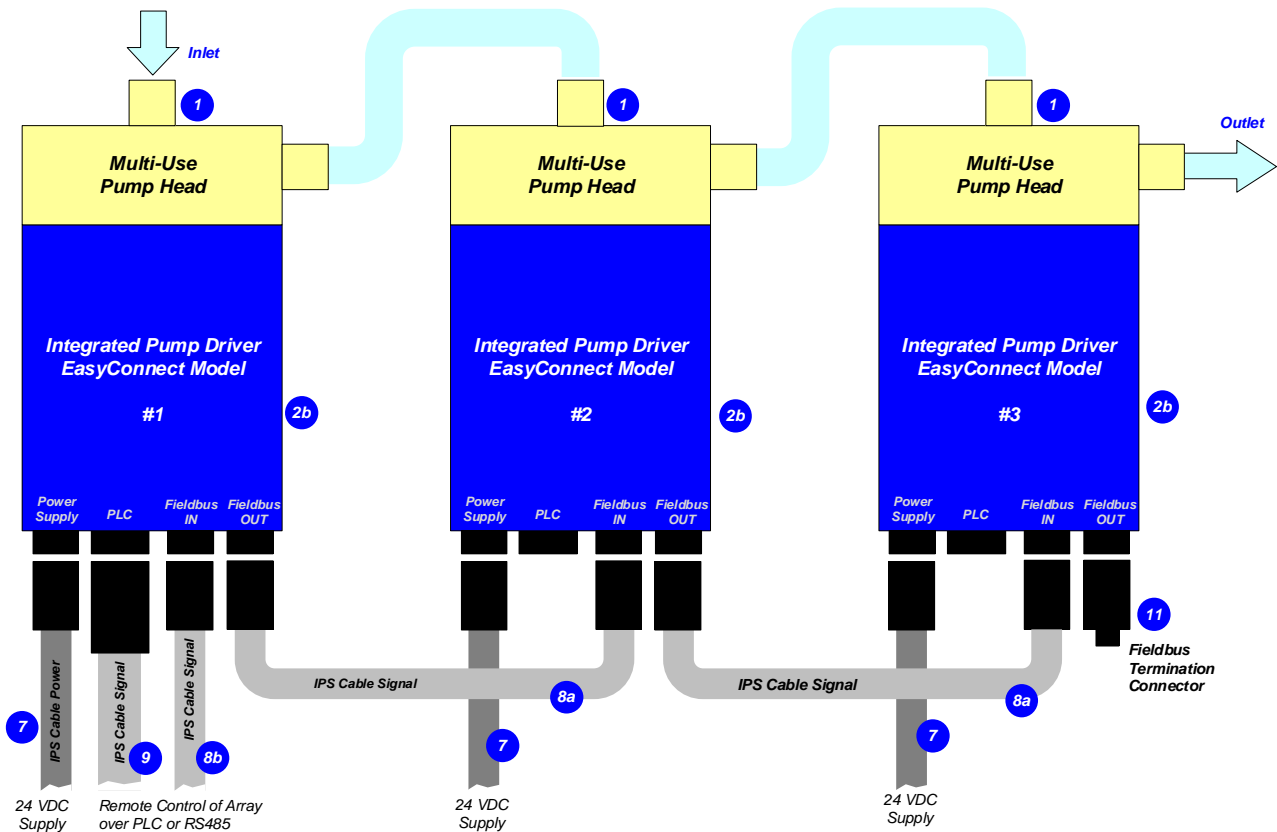*(See section "Order Information" for details to numbered components and other options.)*

Inlet

Outlet

Multi-Use Pump Head — 1 (×3)

Integrated Pump Driver EasyConnect Model #1 — 2b

Integrated Pump Driver EasyConnect Model #2 — 2b

Integrated Pump Driver EasyConnect Model #3 — 2b

Power Supply   PLC   Fieldbus IN   Fieldbus OUT

IPS Cable Power — 7

IPS Cable Signal — 9

IPS Cable Signal — 8b

IPS Cable Signal — 8a

IPS Cable Signal — 8a

11

Fieldbus Termination Connector

24 VDC Supply

Remote Control of Array over PLC or RS485

24 VDC Supply — 7

24 VDC Supply — 7

Figure 9: *Serial pumping configuration with "EasyConnect" models*
(See section "Order Information" for details to numbered components and other options.)
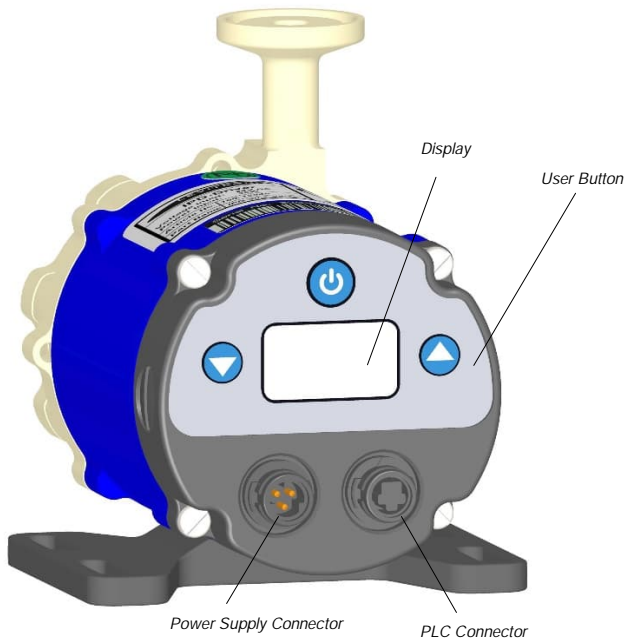
Interface	PIN Name	Description	Standard Designation	Hardware Specification
Power Supply	P+	+ 24 VDC	Supply	Voltage: 24 VDC
	P-	Power Input Ground / Earth		Power: 40 W
	NC	Not connected.	--	--
PLC 6	Ain	Analog Input (Current Input)	Remote Speed	Analog current input: 4 – 20 mA (450 Ohm shunt input, no galvanic isolation)
	Ain_GND	Analog In. GND	--	Reference for Ain
	Dout	Digital Output 1	Status	Open drain, max. 24V, 100mA Reference ground is GND
	GND	Analog Ground	--	Reference for Dout
	Din1	Digital Input 1	Enable (Reset)	Galvanic separation with optocoupler 2.2 kΩ input resistance, 5-24V for active input
	Din_COM	Com. Digi. Input	--	Reference for digital input.
Display and Buttons	--	Display	Speed and Status Display	
	--	Up/Down	Setting speed	--
	--	On/Off	Enable/Disable	--

Figure 10: *Interface specifications of standard "Stand-Alone" model*

Pump Head Inlet and Outlet Fitting:
Inlet/Outlet Fitting: 3.8" Triclamp
Clamp OD = 25mm
Bore ID = 6.5 mm

Multi-Use Pump Head LPP-30.7

Driver IPD-30.5

Mounting Base Plate MBP-i30
(Included in driver Package).

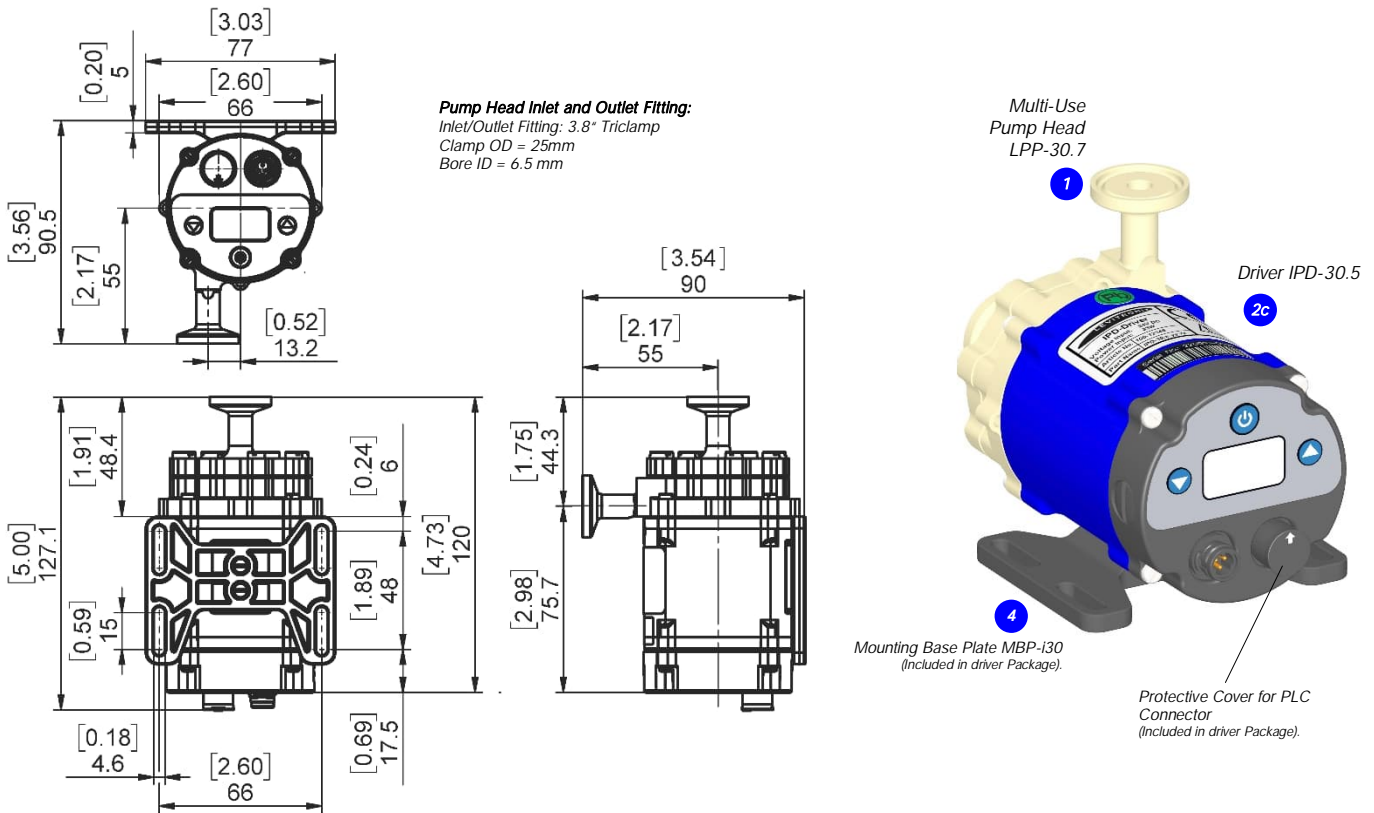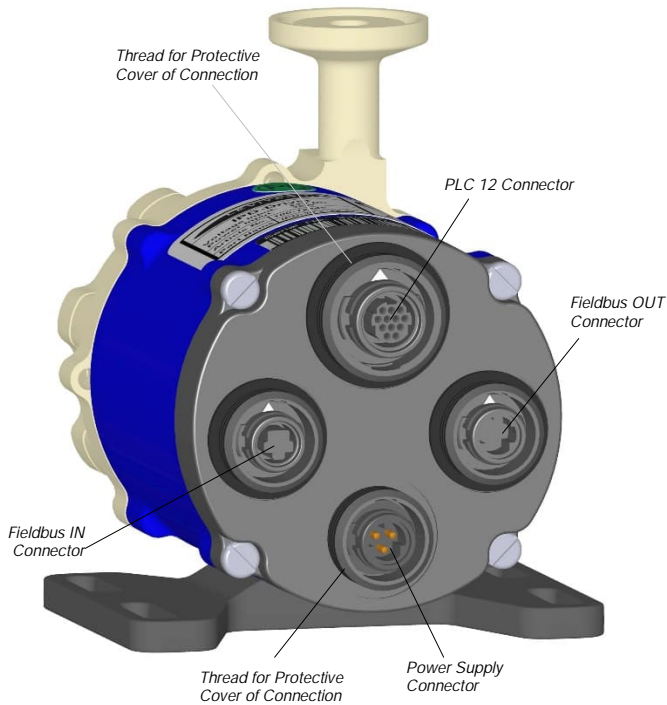*Protective Cover for PLC Connector*
(Included in driver Package).

Figure 11: *Basic dimensions and description of standard "Stand-Alone" model*
Note 1: Dimensions without tolerance are for reference only.

Connector	PIN Name	Description	Standard Designation	Hardware Specification
Power Supply	P+	+ 24 VDC	Supply	Voltage: 24 VDC Power: 40 W
	P-	Ground / Earth		
	NC	Not connected.	--	--
PLC 12	Dout1	Digital Output 1	Status	Open drain, max. 24V, 100mA Reference ground is GND
	Dout2	Digital Output 2	Error	
	Din1	Digital Input 1	Enable (Reset)	Galvanic separation with optocoupler 2.2 kΩ input resistance, 5-24V for active input
	Din2	Digital Input 2	Process Mode	
	Din_COM	Com. Digi. Input	--	Reference for digital input.
	Ain1	Analog Input 1 (Current Input)	Actual Process Value	Analog current input: 4 – 20 mA (450 Ohm shunt input, no galvanic isolation)
	Ain2	Analog Input 2 (Voltage Input)	Reference Value	Analog voltage input: 0 – 10V (7.9 kOhm, no galvanic isolation)
	Ain_GND	Analog In. GND	--	Reference for Ain1 and Ain2
	Aout1	Analog Output (Voltage Output)	Actual Speed	0 – 10V (no galvanic isolation) GND is reference
	GND	Analog Ground	--	Reference for Aout1, Dout1, Dout2 and Pout
	Supply	Output 24 VDC	Supply Output	For supply of external devices (e.g. sensors)
	NC	Not connected.	--	--
Fieldbus OUT	GND	Ground	--	Reference for Pout.
	Pout	Output 24 VDC	Supply Output	For supply of external devices (user panels)
	RS485+	RS485 +	Fieldbus	Modbus protocol
	RS485-	RS485 -		
	Internal	Internal Bus	Do not connect	Internal bus needed to connect pumps for serial pumping.
	Internal	Internal Bus	Do not connect	
Fieldbus IN	GND	Ground	--	--
	NC	Not connected.	--	--
	RS485+	RS485 +	Fieldbus	Modbus protocol
	RS485-	RS485 -		
	Internal	Internal Bus	Do not connect	Internal bus needed to connect pumps for serial pumping.
	Internal	Internal Bus	Do not connect	

Figure 12: *Interface specifications of standard "EasyConnect" model*
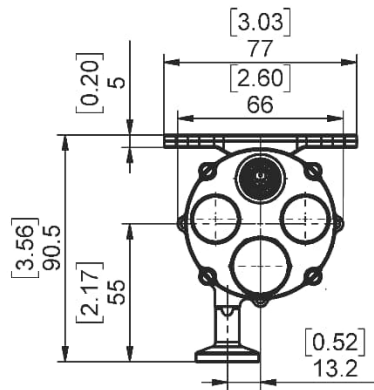
Pump Head Inlet and Outlet Fitting:
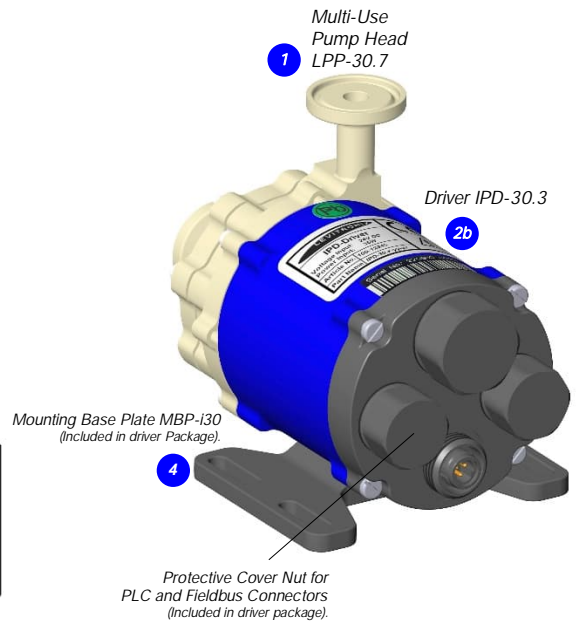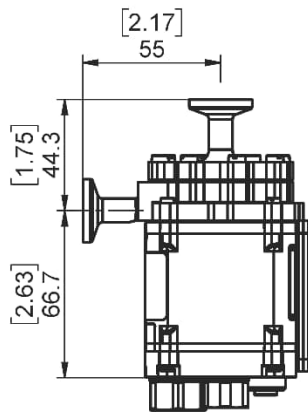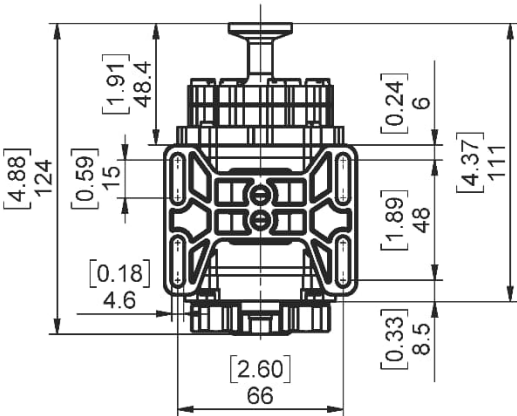*Inlet/Outlet Fitting: 3.8" Triclamp
Clamp OD = 25mm
Bore ID = 6.5 mm*

Multi-Use Pump Head LPP-30.7

Driver IPD-30.3

Mounting Base Plate MBP-i30 (Included in driver Package).

Protective Cover Nut for PLC and Fieldbus Connectors (Included in driver package).

Figure 13: *Basic dimensions and description of standard "EasyConnect" model*
Note 1: Dimensions without tolerance are for reference only.

Signal Wires

Power Supply Wires

Shield Wire

Hybrid Cable ICH-1.1
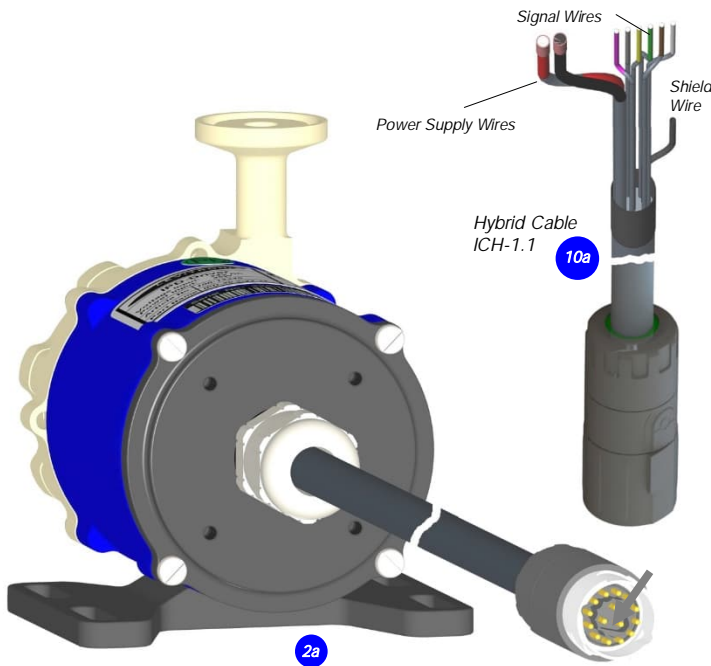
Wire Name	Description	Standard Designation	Hardware Specification
P+	+ 24 VDC	Supply	Voltage: 24 VDC Power: 40 W P- to be connected to earth
P-	Power Input Ground / Earth		
Ain1	Analog Input 1 (Current Input)	Actual Process Value	Analog current input: 4 – 20 mA (450 Ohm shunt input, no galvanic isolation)
Ain2	Analog Input 2 (Voltage Input)	Reference Value	Analog voltage input: 0 – 10V (7.9 kOhm, no galvanic isolation)
Ain_GND	Analog Input Ground	--	Reference for Ain1 and Ain2
Din1	Digital Input 1	Enable (Reset)	Galvanic separation with optocoupler
Din2	Digital Input 2	Process Mode	2.2 kΩ input resistance, 5-24V for active input
Din_COM	Common Digital Input	--	--
Aout1	Analog Output (Voltage Output)	Actual Speed	0 – 10V (no galvanic isolation) GND is reference
Dout1	Digital Output 1	Status	Open drain, max. 24V, 100mA
Dout2	Digital Output 2	Error	Reference ground is GND
GND	Analog Ground	--	Reference for Aout1, Dout1 and Dout2
RS485+	RS485 +	Fieldbus	Modbus protocol
RS485-	RS485 -		
Internal	Internal Bus	Do not connect	--
Internal	Internal Bus	Do not connect	--
Shield	Shielding	Shielding	To be connected to earth (see wire No. 2, P-)

Figure 14: *Interface specifications of standard "OEM" model*
Note 1: Power supply wire cross-section is 1.5 mm² and for signal wires 0.14 mm²   Note 2: For more detailed description of interfaces consult user manual
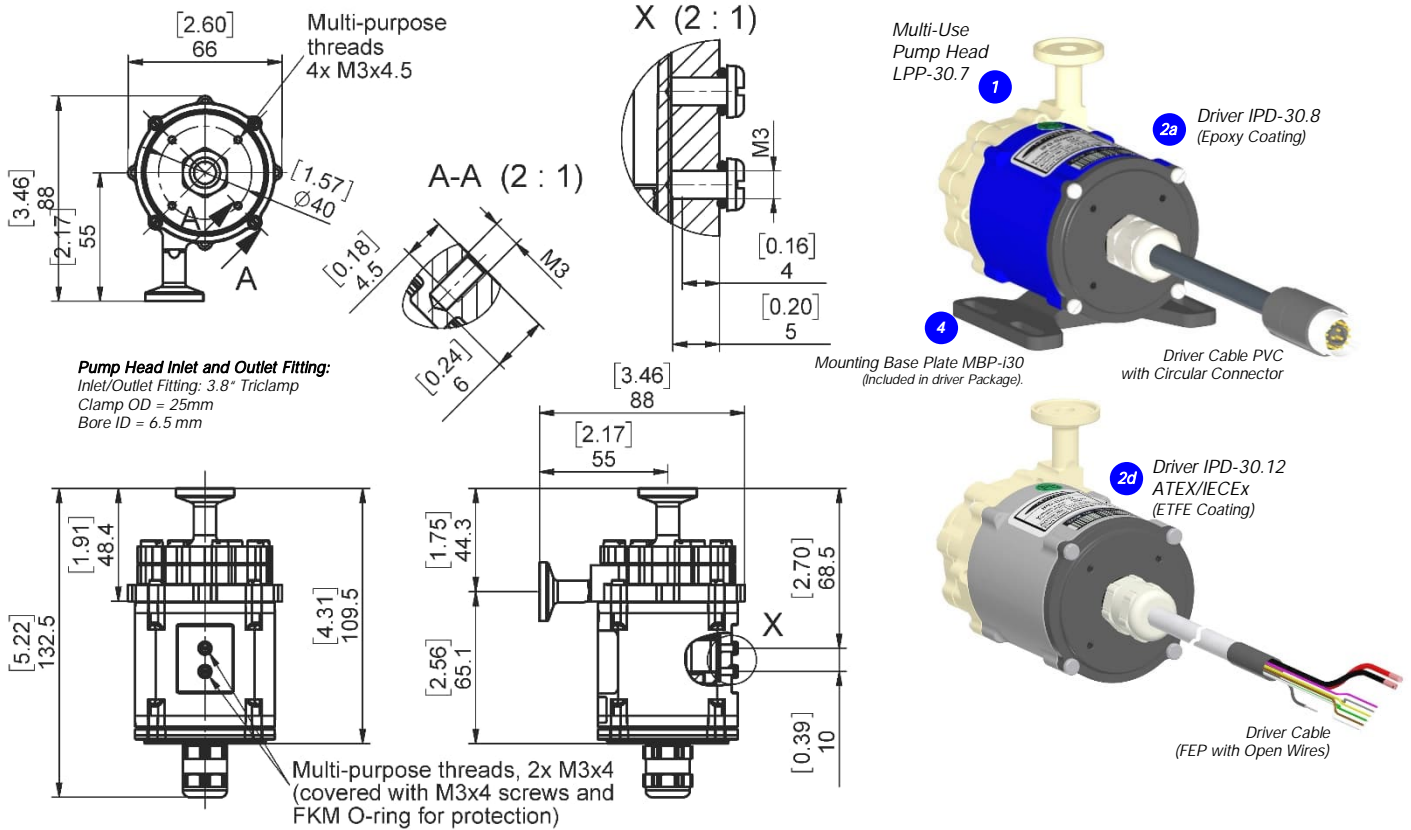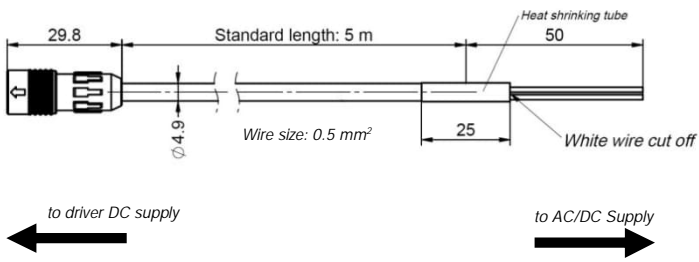

Multi-Use Pump Head LPP-30.7

Driver IPD-30.8 (Epoxy Coating)

Mounting Base Plate MBP-i30 (Included in driver Package).

Driver Cable PVC with Circular Connector

Driver IPD-30.12 ATEX/IECEx (ETFE Coating)

Driver Cable (FEP with Open Wires)

Pump Head Inlet and Outlet Fitting:
Inlet/Outlet Fitting: 3.8" Triclamp
Clamp OD = 25mm
Bore ID = 6.5 mm

Multi-purpose threads 4x M3x4.5

Multi-purpose threads, 2x M3x4 (covered with M3x4 screws and FKM O-ring for protection)

Figure 15: *Basic dimensions and description of standard "OEM" model*
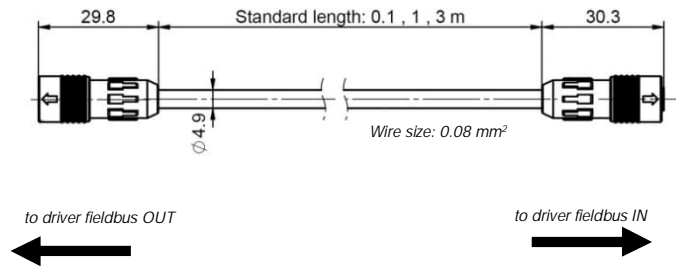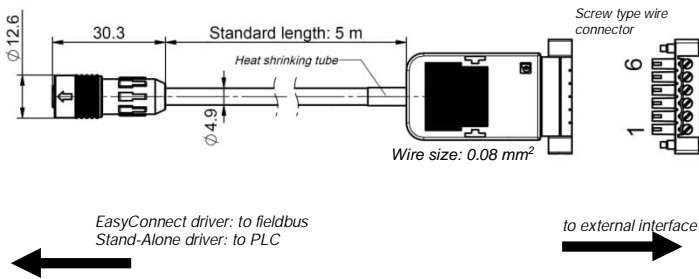*Note 1: Dimensions without tolerance are for reference only.*

7 IPS Cable Power ICS-1.1 (EasyConnect and Stand-Alone drivers)

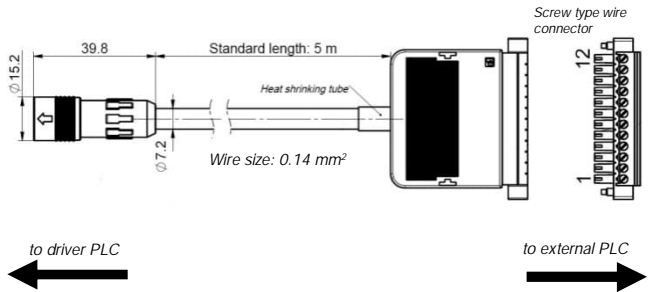29.8 | Standard length: 5 m | Heat shrinking tube 50

Ø4.9

Wire size: 0.5 mm^2 | 25 | White wire cut off

to driver DC supply

to AC/DC Supply

8a IPS Cable Signal ICS-1.1 (for EasyConnect drivers)

29.8 | Standard length: 0.1 , 1 , 3 m | 30.3

Ø4.9

Wire size: 0.08 mm^2

to driver fieldbus OUT

to driver fieldbus IN

8b IPS Cable Signal ICS-1.2 (for EasyConnect and Stand-Alone drivers)

Ø12.6 | 30.3 | Standard length: 5 m | Screw type wire connector

Heat shrinking tube

Ø4.9

Wire size: 0.08 mm^2

6
1

EasyConnect driver: to fieldbus
Stand-Alone driver: to PLC

to external interface

9 IPS Cable Signal ICS-2.1 (for EasyConnect drivers)

Ø15.2 | 39.8 | Standard length: 5 m | Screw type wire connector

Heat shrinking tube

Ø7.2

Wire size: 0.14 mm^2

12
1

to driver PLC

to external PLC

10 IPS Cable Signal ICH-1.1 (for OEM driver)

42 | Standard length: 5 m | 180

Heat shrinking tube

Ø8.4 | 25

Wire size signals: 0.14 mm^2
Wire size power: 0.5 mm^2

to OEM driver connector

to external interface
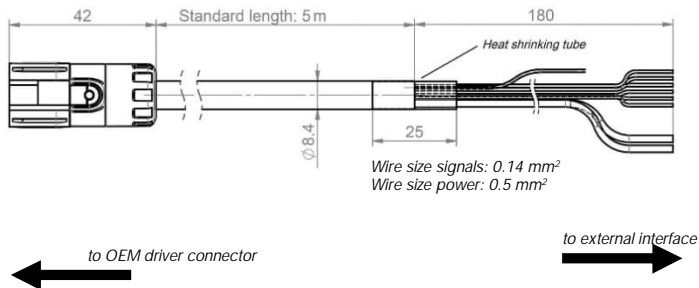
Figure 16: Basic dimensions and specifications of standard cables

System Name	Article #	Pump Head	Driver	Note
PuraLev-i30MU.1	100-91558	LPP-30.7	IPD-30.8-03-06	*OEM - Driver, 0.3 m PVC cable with circular connector*
PuraLev-i30MU.2	100-91559	LPP-30.7	IPD-30.12-50-06	*OEM ATEX/IECEx - Driver, 5 m FEP cable with open wires, pump head socket.*
PuraLev-i30MU.3	100-91560	LPP-30.7	IPD-30.3-06	*EasyConnect - Driver with interface connectors*
PuraLev-i30MU.4	100-91561	LPP-30.7	IPD-30.5-06	*Stand-Alone - Driver with integrated user panel*

Table 1: *Standard driver system configurations*

Pos.	Component	Article Name	Article #	Characteristics	Value / Feature
1	Multi-Use Pump Head	LPP-30.7	100-91557	Impeller / Pump Housing Housing Sealing O-Ring In-/Outlet Fittings	*PTFE/PEEK (FDA, USP Class VI, BSE/TSE/Animal free)* *EPDM (FDA, USP VI, Animal/BSE/TSE free)* *Triclamp 3/8" for in/outlet*
				Max. Flow Max. Diff.-Pressure Max. Viscosity	*3.9 liters/min / 1 gallons/min* *2.7 bar / 39 psi* *< 10 cP*
				Wet Pump Volume/Surface Max. Liquid Temp. Sterilization Methods	*6.75 ml / 56.6 cm^2* *70 °C / 158 °F* *CIP (clean in place), Autoclaving (needs tool Pos. 3 in Table 3), SIP [3]*
2a	Integrated Pump Driver ("OEM Model")	IPD-30.8-03-06 (MBP-i30.1 included)	100-10212	Voltage, Power Housing / Cable Interfaces Standard Firmware	*24 VDC ±10%, 40 W* *Epoxy coated Alu., PP for bottom lid, IP65 [1] / PVC jacket, connector, cable length 0.3m* *PLC and RS485 with Modbus protocol (see Figure 14 for details)* *H3.48*
2b	Integrated Pump Driver ("EasyConnect" Model)	IPD-30.3-06 (MBP-i30.1 included)	100-10210	Housing Interfaces Standard Firmware	*Epoxy coated Aluminum, PP for bottom lid, IP65* *2x Fieldbus RS485 with Modbus protocol, PLC and power supply* *H3.48 [2]*
2c	Integrated Pump Driver ("Stand-Alone" Model)	IPD-30.5-06 (MBP-i30.1 included)	100-10211	Housing Interfaces Standard Firmware	*Epoxy coated Aluminum, PP for bottom lid, IP65* *User panel with 3 user buttons, PLC and power supply* *H3.48*
2d	Integrated Pump Driver ("OEM ATEX" Model)	IPD-30.12-50-06	100-10213	Housing / Cable Interfaces ATEX / IECEx Marking Standard Firmware	*ETFE coated Alu., IP65 [1] / FEP jacket, open wires, cable length 5 m* *PLC and RS485 with Modbus protocol (see Figure 14 for details)* CE UKCA ⟨Ex⟩ *II 3G Ex ec h mc IIC T4 Gc /* CE UKCA ⟨Ex⟩ *II 3D Ex h tc IIIC T90°C Dc* *H3.48*

Table 2: *Specification of standard components*

Note 1: Designed and tested for IP67.   *Note 2: Special firmware for serial pumping as one unit available on request.*   *Note 3: For more details to SIP contact Levitronix.*

Pos.	Component	Article Name	Article #	Characteristics	Value / Feature
3	Autoclaving Reinforcing Tool	ART-30.1	190-10521	Purpose Material Mounting Screws	*Stabilization of pump housing during autoclaving* *Anodized Aluminum* *4 pcs M3 x 10 mm (Stainless steel)*
4	Mounting Base Plate	MBP-i30.1	190-10313	Material / Mounting Screws	*PP + 30% GF / 2 pieces, stainless steel FEP coated, M3 x 10 mm*
5a	AC/DC Power Supply	TPC 055-124 HR30 (Traco)	100-40014	Voltage Output / Input Basic Dimensions Certification or Standards	*24 VDC with 55 W / 85 – 264 VAC, 47-63 Hz* *45 x 90 x 96.5 mm (mountable on DIN rail 35 mm)* *UL, CSA, CB, Semi F47*
5b	Desktop AC/DC Power Supply	AC/DC Power Supply VEC50US24 HR30 (HR30 Connector)	100-40015	Voltage Output / Input Basic Dimensions Safety Approvals Note	*24VDC, 50 W / 90 – 264 VAC, 47-63 Hz* *116 x 52 x 31 mm* *IEC60950-1, EN60950-1, UL/cUL60950-1* *Connector for direct connection to power supply of driver with cable length 1.2m.*
5c	AC Mains Cables (for Desktop power supply 5b)	AMC-1.1 (2 m) / AMC-1.2 (2.5 m) AMC-1.3 (2.5 m) / AMC-1.4 (2.5 m) AMC-1.5 (2.5 m)	190-1033**1** / **32** 190-1033**3** / **34** 190-10335	Country Country Country	*US, Canada / Germ., Denm., Norway, Finland, Belgium, Netherland, Sweden, Austria* *PSE, Japan / Switzerland* *CE, United Kingdom*
6	USB to RS485 Adaptor-TR Isolated	YN-485I-TR	100-30392	Structure/Design Purpose	*USB connector (A) with termination resistor and cable (2m) with connector pair (B and C)* *for external RS485 wire connection. Magnetically isolated. Cable length is 2m. Included is* *a USB space saver cable (D).* *Communication over fieldbus of driver with PC*
7	IPS Cable Power 3 Wires	ICP-1.1-50 (5 m)	190-10342	Cable Material / Wires Connection In / Out Main Purpose	*PVC jacket / 3x 0.5 mm ^{2} (only 2 wires used, 1 is cut)* *Open wires / Circular Hirose type to driver* *Connection of power supply to "Stand-Alone" and "EasyConnect" drivers*
8a	IPS Cable Signal 6 Wires	ICS-1.1-01 (0.1 m) ICS-1.1-10 (1 m) ICS-1.1-30 (3 m)	190-10343 190-10344 190-10345	Cable Material / Wires Connection In / Out Main Purpose	*PVC jacket / 6x 0.08 mm^2 and shielding* *Circular Hirose type / Circular Hirose type* *Fieldbus connection between "EasyConnect" drivers (e.g. multi-pump arrays)*
8b	IPS Cable Signal 6 Wires	ICS-1.2-50 (5 m)	190-10346	Cable Material / Wires Connection In / Out Main Purpose	*PVC jacket / 6x 0.08 mm^2 and shielding* *Connector with screw type plug for open wire connection / Circular Hirose type* *Fieldbus connection to "EasyConnect" drivers and to PLC of "Stand-Alone" drivers.*
9	IPS Cable Signal 12 Wires	ICS-2.1-50 (5 m)	190-10347	Cable Material / Wires Connection In / Out Main Purpose	*PVC jacket / 12x 0.14 mm^2 and shielding* *Connector with screw type plug for open wire connection / Circular Hirose type* *General connection to PLC of "EasyConnect" drivers.*
10a	IP Cable Hybrid 15 Wires	ICH-1.1-30 (3 m)	190-10386	Specifications Main Purpose	*PVC jacket, open wires: 2x 1.5 mm^2 for supply, 13x 0.14 mm^2 for signals, connector: circ.* *Connection with open wires to "OEM" driver configuration.*
10b	Wall-Mount Adaptor Metal Flange Hinged	E0.242.02	190-10467	Specifications Main Purpose	*Zinc, nickel plated, FKM sealing* *For cabinet wall mounting of the ICH-1.1 cable connector.*
11	Fieldbus Termination Connector	FTC-1.1	190-10348	Materials Main Purpose	*PPS for connector housing and FPM for sealing.* *Termination of fieldbus.*
12 (A-F)	ATEX Cable Sealing System	ACS-A.1 (Roxtec)	100-90292	Sleeve (A) / Gasket (B) Frame (C) / 2x Cable Module (D)	*Stainless Steel / EPDM* *Note: Lubricant (E) and measurement plates* *Roxylon (EPDM rubber) / Roxylon* *(F) are included.*
13	User Panel	LUI-B.1-01	100-30448	Interface / Housing Rating Standard Firmware	*RS485 / IP65* *A3.00*

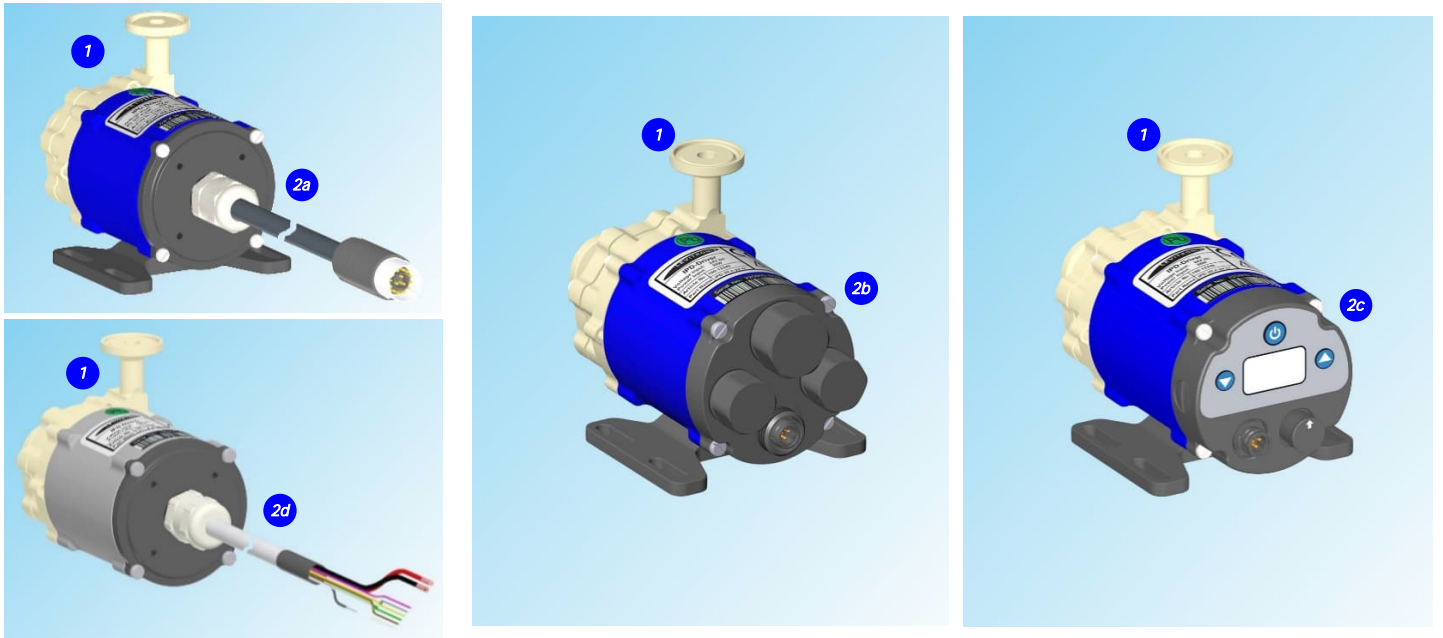***Table 3:*** *Specification of accessories*

Figure 17: Main standard components

Figure 18: Cables and other accessories

LEVITRONIX® THE COMPANY

Levitronix® is the world-wide leader in magnetically levitated bearingless motor technology. *Levitronix®* was the first company to introduce bearingless motor technology to the Semiconductor, Medical and Life Science markets. The company is ISO 9001 certified. Production and quality control facilities are located in Switzerland. In addition, *Levitronix®* is committed to bring other highly innovative products like the *LEVIFLOW®* flowmeter series to the market.

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