# VERDERFLEX iDura 45

#### Description

The Verderflex iDura 45 is a "ready to use" Dura hose pump complete with a pump mounted inverter and hose burst protection.

The iDura 45 is a compact, industrial hose pump with superior secondary containment for dosing, metering, sampling and sump emptying in chemical and industrial processing complexes, food and beverage facilities and clean and wastewater treatment plants. The pump mounted inverter provides the flexibility of local pump control or automatic monitoring and control real time via external systems. The factory connected hose burst sensor will stop the pump unit on hose burst for enhanced plant operator's peace of mind.



#### Your benefits

- → Ideal for abrasive or high solid content slurries.
- → Self-priming, problem free pumping of gaseous liquid.
- Easily pump viscous liquids.
- → Gentle low shear pumping action.
- → Dry running capabilities.
- → Long life hoses.
- No seals or valves.
- → Hose burst pump protection.
- → Easy to use controls for use and maintenance.

#### **Features**

- ➤ Variable speed control, between maximum and minimum flow rates.
- Name of the pump of a hose burst protection automatically stops the pump on a hose burst.
- Intuitive speed and directional controls with realtime monitoring of parameters using built-in display.
- → Displays nominal flow rate ¹.
- Notation Scalable 4-20mA speed control input as standard, MODBUS/CANBUS digital remote control option 2.
- 1. This is factory set to indicate nominal flowrate in I/hr
- 2. Inverter will have to be programmed by the user to access this function, please refer to the manual.

#### **Technical data**

Flow rate range	97 - 7761 l/h	
RPM range	1 - 76	
Power supply rating	380-480VAC, 50-60Hz, 3phase	
Installed motor power	4kW	
Installed inverter power	4kW	
IP ratings	IP66 / NEMA 4x outdoor rating (inverter), IP55 (motor)	
Maximum discharge pressure	6 bar	
Maximum suction lift	9,5mwc	
Hose ID	45mm	
Maximum medium temperature	80°C	
Maximum incompressible size	4,5mm	
Maximum compressible size	11,25mm	
Ambient temperature	-5 to +40°C	
Weight	265kg	

### **VERDERFLEX**

### iDura 45

#### **Options and accessories**

- → Optional hose: FDA CFR21 and EC/1935.
- → Ball valve on drain port.
- → Service access port on bottom of front cover.
- → Weather canopy.

#### **Materials**

Description	Materials	Paint detail
Pump housing	Cast iron (GG25)	Green powder coated
Front cover	Steel	Powder coated
Window	Plexyglass	
Rotor	SG Iron	
Rotor shoes	Cast aluminium, other materials to order	
Bearing housing	Cast iron	Green powder coated
Hose burst kit	Brass	
Front / rear bearings	Steel	
Drive shaft	Heat treated steel	
Shaft seals	FKM	
Mounting frame	Steel	Powder coated
Hose options	Natural Rubber (NR) Options: Nitrile Buna Rubber (NBR), Ethylene Propylene Diene Monomer (EPDM), Nitrile Buna Rubber Foodgrade (NBRF), Hypalon® (CSM)	
Port flange	CF-8M (316) stainless steel universal slotted design complies with DIN PN16, DN 50, ANSI 150# 2" & JIS10K Options: Polypropylene or P.V.D.F insert 1, DIN11851 hygienic, DIN32676 tri-clamp	
Lubricant options	Verderlube - Glycerine based lubricant <sup>2</sup> Verdersil - Silicone based lubricant <sup>3</sup>	
Inverter	ABS with corrosion resistant aluminium heatsink	
Motor	Cast aluminium finished in UNI-EN-ISO-12944-2	
Gearbox	SG iron UNI-EN-ISO-12944-2	

<sup>1)</sup> Temperature limit for PP insert is 40°C and for PVDF insert is 80°C.

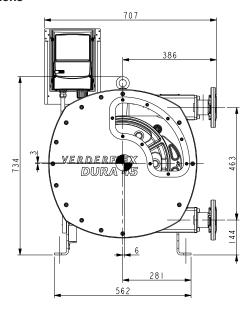
<sup>2)</sup> Temperature limit for Verderlube is  $50^{\circ}$ C.

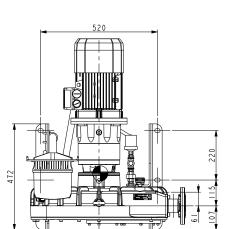
<sup>3)</sup> Suitable application above 50°C but subject to maximum temperature limit of the hose and applications involving strong oxidising agents and nitrogenous compounds.

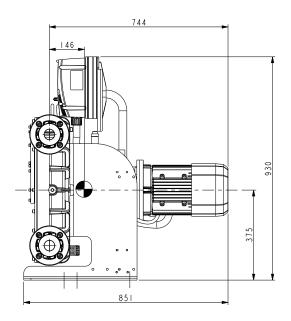
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#### **Dimensions**







All dimensions are in mm. All dimensions and weights are for guidance only.

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#### Performance curve



Flows are typical and were measured with water at 20 °C with no suction lift or discharge pressure. Actual flows will vary according to suction conditions, discharge pressure and normal component production tolerances.

#### **Trademarks**

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<sup>\*</sup> For the number of shims of required, please refer to the manual. Pumps operating above 6 bar require consultation with manufacturer or distributor.