PRODUCT DATA SHEET HYDROPHORE



MS SMART BOX PM

A compact, lightweight and functional device which, thanks to the use of a frequency converter integrated with the pump, an electronic control panel and a pressure sensor, maintains a constant, user-selected water pressure in the system (within the range of hydraulic parameters achieved by the pump). Through the above control solution and the use of a PM (permanent magnet) motor, the MS SMART BOX PM hydrophore is highly efficient and energy-saving, as it consumes significantly less electricity compared to classic hydrophores. The MS SMART BOX PM fully replaces the traditional hydrophore set for drawing water from the source, as well as being a perfect device for "boosting" the pressure in a municipal water system.

FEATURES

- Integrated frequency converter and pressure sensor in the pump and fully electronic control - the hydrophore maintains a constant user-selected water pressure in the system within the hydraulic parameters of the pump
- The use of a PM (permanent magnet) motor and advanced control results in high efficiency and significantly lower electricity consumption compared to conventional hydrophores
- Gentle switching on and off of the pump motor eliminates hydraulic shocks in the water system



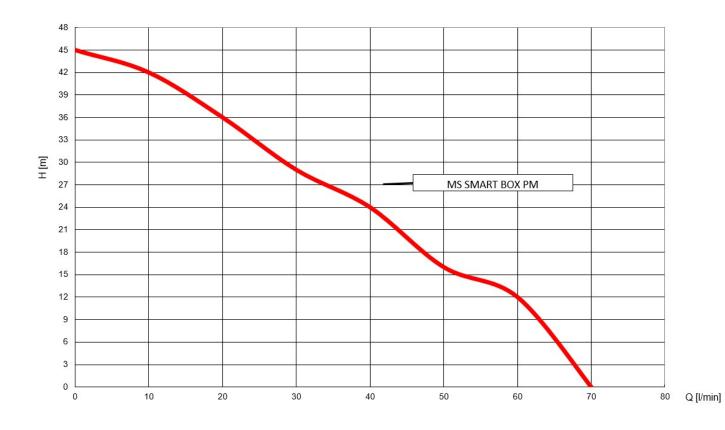
- Automatic start-up when water is drawn (turning on the tap) and automatic shut-off at the end of consumption (turning off the tap)
- Extremely quiet operation allows the unit to be installed in close proximity to the living area of the house
- Built-in protection against:
 - dry-running (operation without water)
 - water temperature too high
 - O motor overload
 - engine overheating
 - too high or too low electrical voltage
 - freezing of the water in the pump casing

TECHNICAL DATA					
Max. water temperature:	0÷90 ⁰ C				
Ambient temperature (operation)	0÷40 ⁰ C				
Water pH	5÷8				
Max. suction depth	8m				
Length of power cable	1.1m				
Degree of protection:	IP 44				
Motor speed (no load)	4000 rpm				
Max. pressure	4.5 bar				
Tank pre-pressure	1.3 bar				
Insulation class	IP42				

MATERIALS						
Pump casing	nylon					
Rotor	techno polymer					
Mechanical gland	CER/CAR					
Pump shaft	stainless steel					
Pump base	techno polymer					

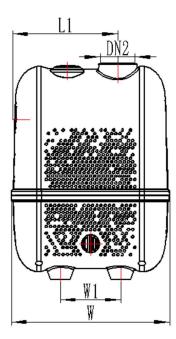
Table of parameters

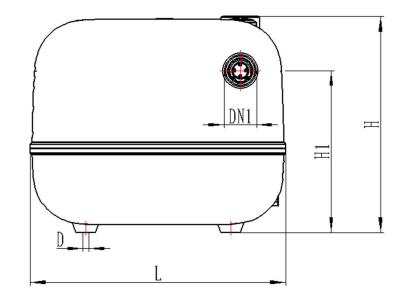
Model	Q max	H max	H max P max		1	
	Performance	Lifting height	Motor power	Voltage	Current	
	[l/min]	[m]	[W]	[V]	[A]	
MS SMART BOX PM	70	45	0,5	230	3,9	



Dimensional drawing

Model	L [mm]	L1 [mm]	W [mm]	W1 [mm]	H [mm]	H1 [mm]	D [mm]	DN1/DN2 [inch/mm]	Pack size [cm]	Weight
MS SMART BOX P	M 285	115	183	93,5	253	188	4,2	1" / 25	38.8x23.8x31.5	6,6





The manufacturer reserves the right to introduce design modifications and product colour version changes, at any time and without any prior notice. All photos, drawings and charts are included in this document for illustrative purposes. Verification of product parameters was carried out on a selected batch. Depending on the production series, these parameters may vary. Before purchasing the product and installing it, check the specifications of the specific unit on the nameplate. The specified parameters are obtained at the device output without taking into account external factors, e.g. in pumps - resistance of the discharge and suction installation. Device parameters were obtained under laboratory conditions. Under operating conditions, there may be a difference of +/- 10 % from that indicated on the nameplate of the specific unit. The stated maximum engine power is the power given out at the engine shaft. Version 04/2024