

DE M

Duplex pressure booster

Fully automatic, non self-priming, duplex pressure boosting system made from stainless steel (1.4301) for particle-free water.

The pump is switched on by an installed pressure monitor, with the diaphragm vessel serving as a buffer storage. The adjustable run-on time of the pump reduces the switching frequency, especially in the case of cyclical or small consumption quantities. Due to a hydraulic switching delay in combination with the diaphragm vessel, pressure surges are minimized. The achievable total pressure is given by the addition of feed pressure and pressure increase due to the booster system, it must not exceed 10 bar. Double systems have the additional functions of automatic pump changeover on every request and automatic switchover in the event of any fault.

BENEFITS

- Rugged, corrosion-proof industrial design suitable for permeate delivery
- Connection port for external dry running protection device
- Connection port for external release contact
- Auto-start of the system after elimination of the dry running fault
- Redundancy guarantees reliable supply
- Adjustable run-on time of operating pump
- Collective fault message to the central control system

APPLICATIONS

- Increases the pressure in the water supply pipe to a constant value, can be installed upstream or downstream of water softening, reverse osmosis or other water treatment installations



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DESCRIPTION

Scope of delivery

- Two stainless steel centrifugal pumps (1.4301, AISI 304) mounted on stainless steel frame
- Incl. diaphragm vessel, non-return valve, manometer and pressure switch
- Shut-off valves on suction and pressure side
- Controller for demand-dependent switching on/off of the operating pump with every request
- Selector switch for operation of pump 1, operation of pump 2
- Automatic and off
- Motor protection switch
- Automatic fault switchover if a pump fails as a result of triggering motor protection
- Terminals with mains connection, potential-free on/off contact
- Collective fault message as a potential-free changeover contact
- Piping and fittings in stainless steel (1.4301)

Optionally available

- Adapter kit for connecting stainless steel pipes to PVC pipes
- Pump version made of stainless steel 1.4404 (AISI 316)

CONDITIONS OF USE

Typically particle-free water, non-aggressive, or non-explosive media without abrasive or long-fibered components. The pumped medium must not attack the pump materials chemically.

Operating pressure	0 – 10 bar
Operating temperature	2 – 40 °C

TECHNICAL DATA OF SERIES

Voltage	3 x 380 - 415 V
Frequency	50 Hz
Protection class	IP 55

Product name	El. load	Hydraulic connection	Dimensions in mm	Pump cap. / head	Item number
Nom. Vol. m ³ /h	kW	suction / pressure	W x D x H	m ³ /h / m	
DE 1 M	0.46	Rp 1 ½" / Rp 1 ½"	550 x 810 x 1,615	0.2 – 2.4 / 52 – 20	440 400
DE 3 M	0.65	Rp 1 ½" / Rp 1 ½"	550 x 810 x 1,615	0.3 – 4.2 / 53 – 22	440 401
DE 5 M	1.5	Rp 2" / Rp 1 ½"	550 x 810 x 1,615	0.5 – 6.2 / 57 – 32	440 402
DE 10 M	2.2	DN 65 / DN 65	660 x 910 x 1,615	1.0 – 15.0 / 48 – 23	440 403