

Technical Data

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> Autoclaves



DESCRIPTION

Application

- Our interchangeable diaphragm autoclaves are ideal for any modern installation, applicable on any type of pump and suitable for food use

Features

- Greater water yield. The useful capacity of the membrane autoclave is far greater than that of normal tanks. Therefore, smaller footprint with the same water yield.
- Eliminate the compressor. The air supply is no longer necessary as a nitrogen pad, which is separated from the water by the rubber membrane, constantly keeps the autoclave under pressure.
- ISPESL waiver in the factory. No disturbance of subjecting the autoclave to ISPESL testing. The autoclave, the safety valve and the pressure gauge are supplied jointly already tested and exonerated in the factory.
- Use with difficult waters. Possibility of using the membrane autoclave even with calcareous water or in the presence of stray currents, since the water is in contact only with the membrane.
- No maintenance. Economy in installation and quick assembly. No maintenance or adjustment is required.
- Almost unlimited duration. The maximum duration of the membrane is ensured as it can neither bend nor rub against the sheet metal because it is fixed at the top to the fitting and at the bottom to the flange. Therefore, almost unlimited duration of the autoclave since the membrane is replaceable

Specifications

- Membrane: in butyl
- Maximum temperature: 99 °
- Paint: with epoxy powder - blue or red colors
- Testing: exonerated in the factory - CE (excluding mod. 24 liters)
- Mod. S - 24 SP: equipped with flange and interchangeable membrane
- Mod. S - 24 BP: threaded connection and non-interchangeable diaphragm
- On request we also provide models for the export market

VERTICAL AUTOCLAVES WITH BUTYL (SUITABLE FOR FOOD USE) INTERCHANGEABLE MEMBRANE - EPOXY PAINTED BODY (CE CERTIFICATION)

Type	Code	Positioning	Capacity liters	Diameter mm	Height	Fitting	Max pressure bar	Preload bar	
SZ - 24 SP	FID060	Vertical	24	362	281	1"	10	1,5	
SZ - 60 VERT	PAT158	Vertical	60	380	850	1"	10	1,5	
SZ - 100 VERT	PAT160	Vertical	100	450	935	1"	10	1,5	
SZ - 200 VERT	PAT161	Vertical	200	550	1.253	1½"	10	1,5	
SZ - 300 VERT	PAT162	Vertical	300	630	1.370	1½"	10	1,5	
SZ - 500 VERT	PAT164	Vertical	500	750	1.600	1½"	10	1,5	



VERTICAL AUTOCLAVES 10 BAR (CE / PED, WRAS, ACS, ISO-9001, GOST, APPROVED BY EVRAZ) BODY PAINTED WITH TWO-COMPONENT POLYURETHANE PAINT ON AN EPOXY PRIMER

Code	Type	Positioning	Capacity liters	
PAT176	Pressurwave	Vertical	60	
PAT177	Pressurwave	Vertical	80	
PAT174	Pressurwave	Vertical	100	
PAT178	Pressurwave	Vertical	150	
PAT179	Challenge	Vertical	200	
PAT180	Challenge	Vertical	250	
PAT181	Challenge	Vertical	300	



AUTOCLAVES ACCESSORIES

Code	Description
PAC052	Check valve and pressure gauge kit
KRA005	1" hydraulic kit* for autoclaves
KRA004	Hydraulic kit* 1½" for autoclaves

*Consisting of: galvanized fittings, pressure gauge, sectioning ball valves

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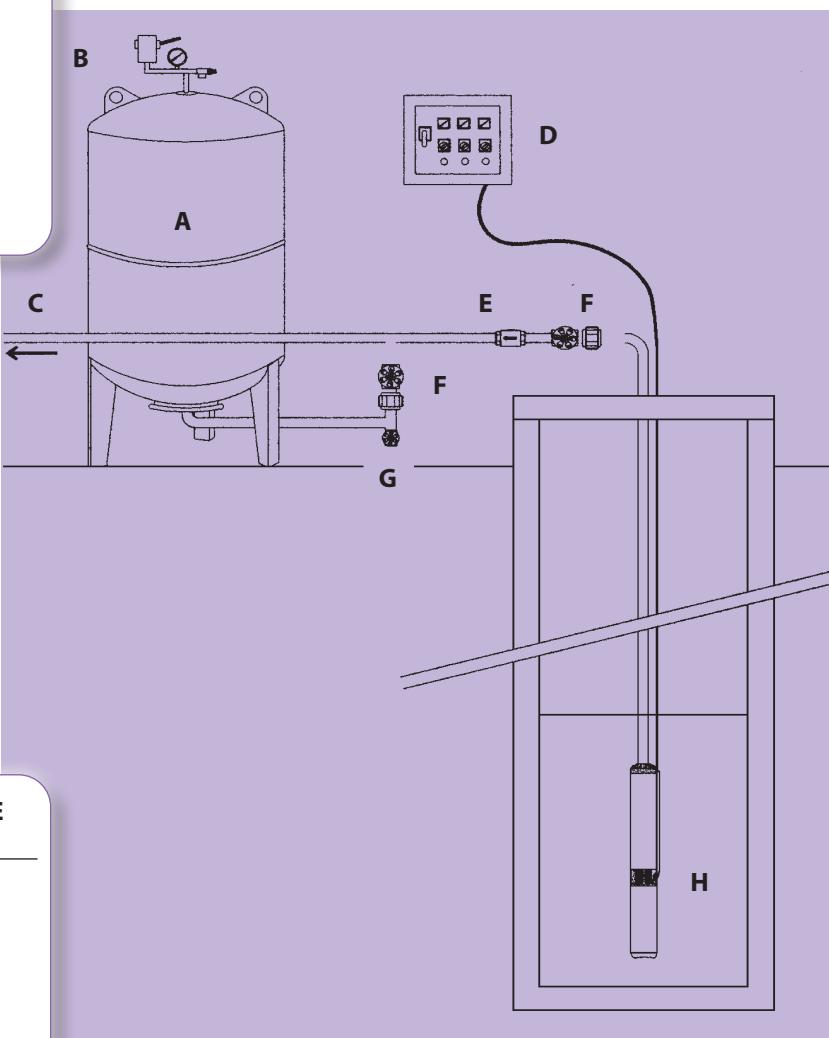
INDICATIONS FOR SELECTING THE AUTOCLAVE

To avoid an excessive number of pump starts, we must calculate the minimum reserve of water contained in the autoclave, which can be obtained from the formula specified below:

$$V_u = ((A_{\max} \times c)/4) \times (P_f + 1)/(P_f - P_i)$$

where:

- **V_u** = Autoclave water reserve
- **A_{max}** = Maximum absorption of the system
- **c** = Multiplier for pumps above 2 Hp:
 - = 1,5 for pumps from 2,5 to 4 Hp
 - = 2,5 for pumps from 5 to 8 Hp
 - = 3,5 for pumps from 9 to 12 Hp
- **P_f** = Maximum pressure of the pressure switch
- **P_i** = Minimum pressure of the pressure switch



SIZING AND ASSEMBLY OF THE AUTOCLAVE LEGEND

- **A** (Interchangeable membrane autoclave)
- **B** (Group: pressure switch - pressure gauge - safety valve)
- **C** (Plant - water network)
- **D** (Electric control panel)
- **E** (Non-return valve)
- **F** (Union sectioning gate group)
- **G** (Discharge gate valve)
- **H** (Supply well or tank with submersible pump)

MINIMUM WATER RESERVE CONTAINED IN THE AUTOCLAVE

Autoclave Lt	Min pressure Max pressure	Pressure switch calibration										
		1 2	1 2,5	1 3	1,5 2,5	1,5 3	2 2,5	2 4	2,5 4	2,5 5	4 8	5 10
24		8,0	10,3	12,0	6,9	9,0	3,4	9,6	7,2	10,0	10,7	10,9
60		20,0	25,7	30,0	17,1	22,5	8,6	24,0	18,0	25,0	26,7	27,3
100		33,3	42,9	50,0	28,6	37,5	14,3	40,0	30,0	41,7	44,4	45,5
200		66,7	85,7	100,0	57,1	75,0	28,6	80,0	60,0	83,3	88,9	90,9
300		100,0	128,6	150,0	85,7	112,5	42,9	120,0	90,0	125,0	133,3	136,4
500		166,7	214,3	250,0	142,9	187,5	71,4	200,0	150,0	208,3	222,2	227,3
750		250,0	321,4	375,0	214,3	281,3	107,1	300,0	225,0	312,5	333,3	340,9