spirax /sarco

TI-P540-01-US Issue 1

Boiler Feed Pumps "GB" Series

Description

Spirax Sarco GB Series boiler feed pumps are packaged units, completely assembled, wired and tested at the factory.

GB Series boiler feed units are used to pump condensate and makeup water directly into the boiler(s). Pumping action is determined by a boiler mounted control which senses boiler water level requirements. Each boiler feed unit is equipped with a heavy duty makeup valve actuated by the position of its seamless float within the receiver. The mechanism is readily adjustable for various water levels. It is mounted on the end of the receiver and can be easily removed as a complete unit.

Available types

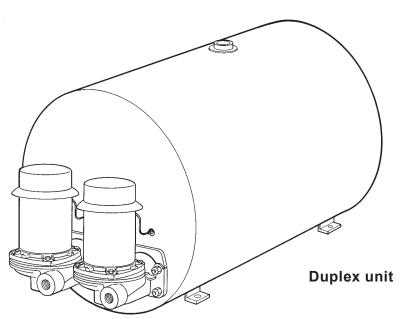
Simplex unit Duplex unit

Limiting conditions

Capacity to 18 gpm (68 liters per minute). Discharge pressures: 20,30 and 40 psi (1.4, 2.1, 2.8 bar)

Receiver

Cylindrical welded steel, 49, 71, and 117 gallon sizes (185, 269 and 443 litres) are standard. Water level gauge glass and float operated make-up valve are standard.



Pump and motor assembly

Pump and motor assembly is close coupled centrifugal design with enclosed type bronze impeller and wearing ring. The bronze impeller is designed to assure smooth, efficient water passage. No close clearances that are subject to rapid wear and reduced efficiency.

Mechanical shaft seal designed for temperatures to 250 °F (121 °C). Seal is vented to receiver to insure adequate lubrication at all times.

Heavy duty, open drip proof motors

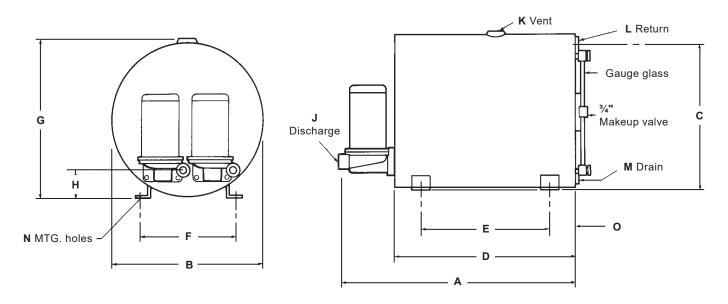
Heavy duty open drip proof motors are designed for continuous operation. Ball bearings are prelubricated and shielded. Motors have stainless steel shaft - operate at 3450 rpm 60 Hz. Both single phase 115/230 volt with built-in overload protection, and three phase 230/460 volt (or 208 volt) motors are available with O.D.P. standard, or special TEFC enclosures.

All parts of the pump and motor which are subject to normal wear are easily accessible by removal of motor and canopy, attached with universal 4 bolt flange mounting. Service of impeller and mechanical seal is also made easy, entire pump and motor can be removed without disturbing plumbing or electrical connections.

Model ordering codes

Moto	r	Pump		Receiver Sizes									
Phase and	НР	Discharge Pressure psi	gpm		allon er HP or less		allon r HP or less)	117 Gallon (for 120 boiler HP or less)					
Voltage				Simplex	Duplex	Simplex	Duplex	Simplex	Duplex				
Single 115/ 230 V.	1/3	20	18	GB2S491	GB2D491	GB2S711	GB2D711	GB2S1171	GB2D1171				
	1/2	30	18	GB3S491	GB3D491	GB3S711	GB3D711	GB3S1171	GB3D1171				
	3/4	40	18	GB4S491	GB4D491	GB4S711	GB4D711	GB4S1171	GB4D1171				
Three 230/ 460 V.	1/3	20	18	GB2S493	GB2D493	GB2S713	GB2D713	GB2S1173	GB2D1173				
	1/2	30	18	GB3S493	GB3D493	GB3S713	GB3D713	GB3S1173	GB3D1173				
	3/4	40	18	GB4S493	GB4D493	GB4S713	GB4D713	GB4S1173	GB4D1173				

Dimensions (approximate) in inches (mm)



Receiver size	Α	В	С	D	E	F	G	н	J	К	L	М	N	0
49 gallons	41	24	20.7	30	21	15	25	5.5	1	11/4	2½	3/4	5/8	4.5
	(1041)	(610)	(526)	(762)	(533)	(381)	(635)	(140)	(25)	(32)	(64)	(19)	(16)	(114)
71 gallons	47	24	22.5	36	27	16	25	5	1	1½	3	3/4	5/8	4.5
	(1194)	(610)	(572)	(914)	(686)	(406)	(635)	(127)	(25)	(38)	(76)	(19)	(16)	(114)
117 gallons	71	24	22.5	60	30	19	25	5	1	2	4	3/4	5/8	15
	(1803)	(610)	(572)	(1524)	(762)	(483)	(635)	(127)	(25)	(51)	(102)	(19)	(16)	(381)