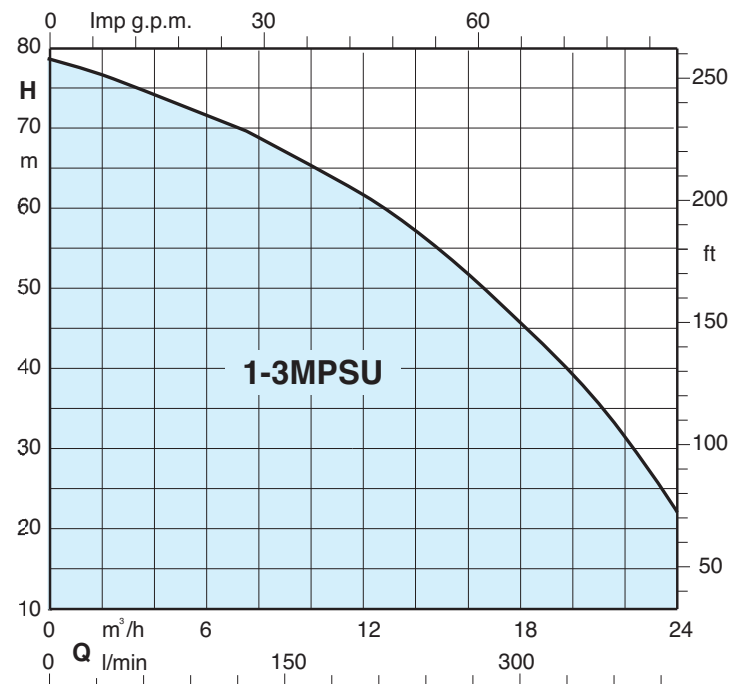




Coverage chart



Operation

BS 1-6F Pressure boosting sets with 1 to 6 fixed speed pump.
Sets with 4,5 and 6 pumps on request.
Depending on the reduction of the pressure in the system, the pressure switches determine the starting up of the pumps in sequence and the microprocessor alternates the starts.

BS1-3V Pressure boosting sets with 1 to 3 variable speed pumps (with EASYMAT).
Depending on water consumption, one or more pumps are activated, all at variable speed, in order to guarantee the quantity of water required at the set pressure.

BS1V2-5F Pressure boosting sets with 1 variable speed pump (with frequency converter into the control panel) and from 1 to 5 fixed speed pumps
Sets with 4,5 and 6 pumps on request.
According to the water consumption, one or more pumps start, one at variable speed and the others at fixed speed, to grant the water quantity required at the set pressure.

BS1-6V Pressure boosting sets with 1 to 6 variable speed pumps (with frequency converter into the control panel).
Sets with 4,5 and 6 pumps on request.
Depending on water consumption, one or more pumps are activated, all at variable speed, in order to guarantee the quantity of water required at the set pressure.

Construction

- Automatic pressure boosting plant consisting of 1 to 6 vertical multi-stage close coupled pumps complete with ball, non return valve on the suction side and ball valves on the delivery side.

Suction and delivery manifolds for boosting sets with 2,3 pumps:
- stainless steel AISI 304.
Connections are located on the delivery manifold for the installation of vessels G1 connection.

Electrical control boards:
- with microprocessor for fixed speed pump units.
- with frequency converter for variable speed pump units.

The unit includes one pressure gauge and three adjustable differential pressure switches or pressure transducer.

Applications

To supply water in civil and industrial buildings.
As pressure boosting pump to increase water pressure when needed (follow local rules).

Motors

2-pole induction motors, 50 Hz, $n \approx 2900$ rpm, suitable for operation with frequency converter.
- Three-phase 230V - 400V $\pm 10\%$;
- Single-phase 230 V $\pm 10\%$.
Insulation class F.
Protection IP 68.
Constructed in accordance with: IEC 60034.
Other voltages and frequencies on request.

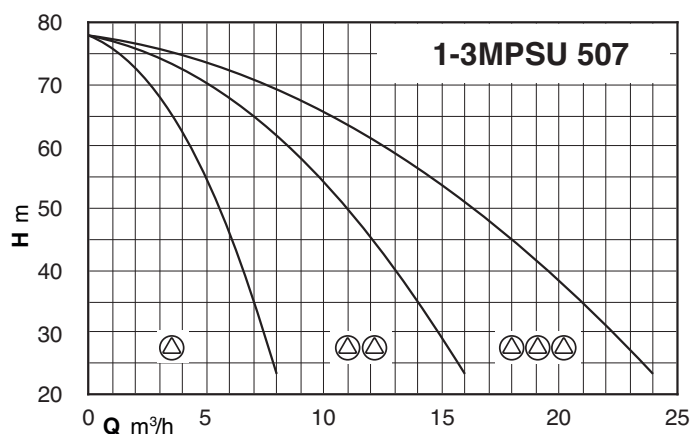
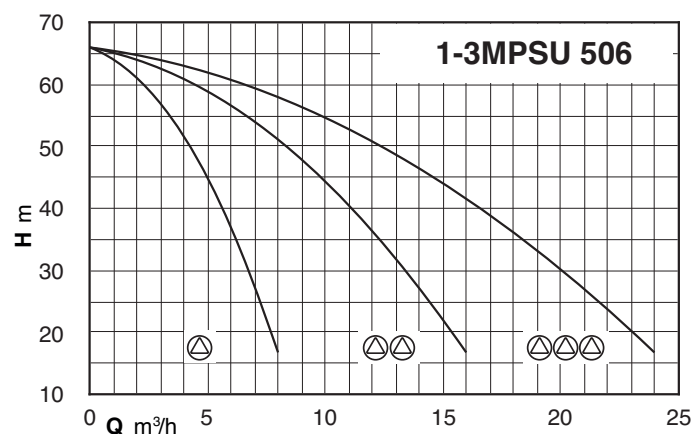
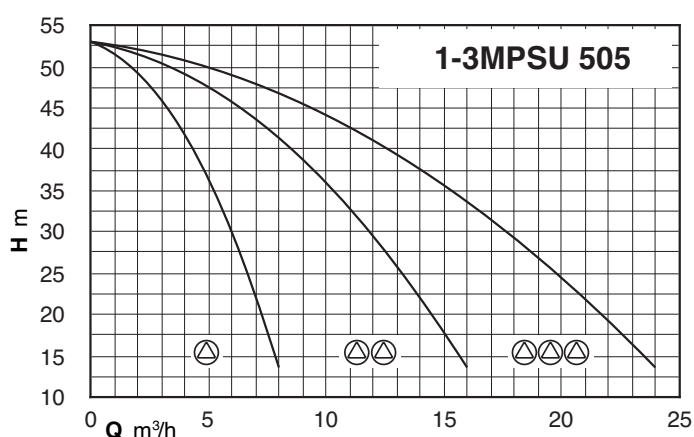
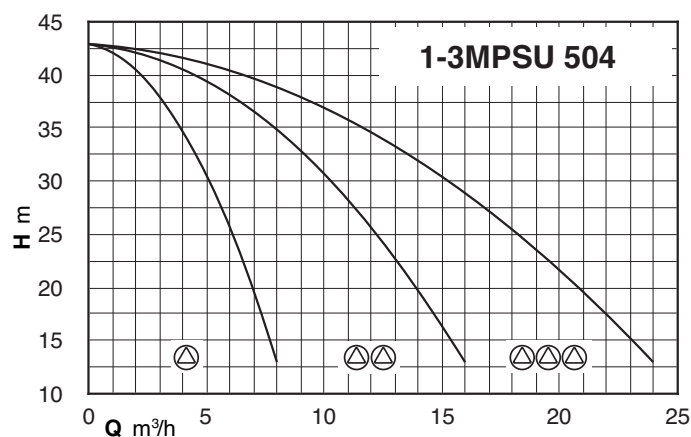
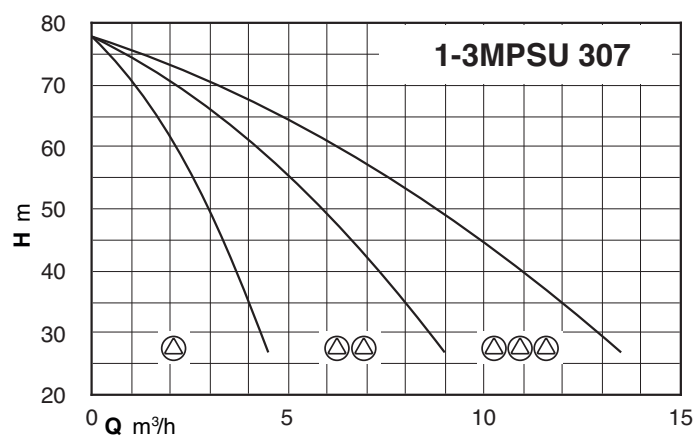
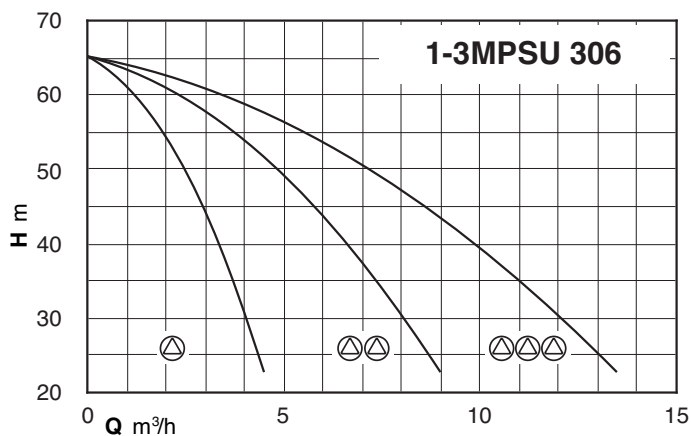
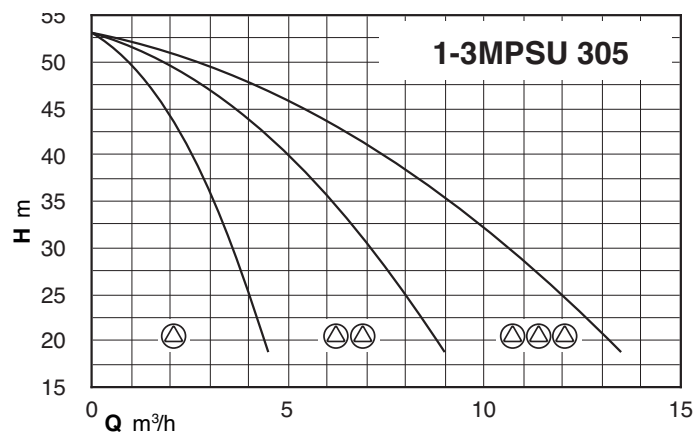
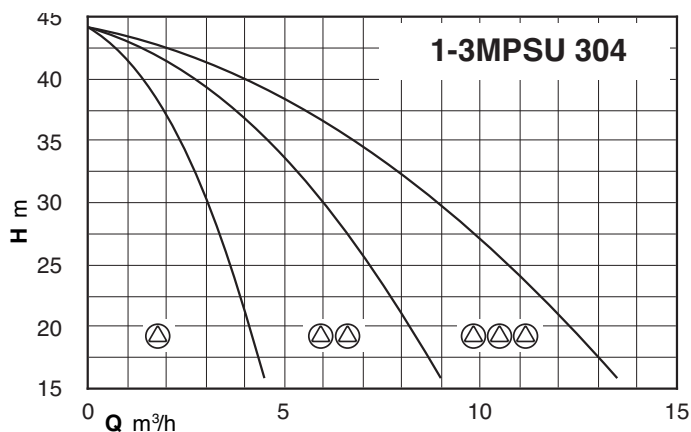
Vessels on request

When installing the unit, connect in the delivery section to a diaphragm or galvanised tank.
The recommended sized are shown in the following page.

Special features on request

Pressure boosting sets with 4,5 and 6 pumps.

Coverage chart



Performance

BS1F

BSM1F

Mains: 400V 3~ Motor: 400V 3~	Mains: 230V 1~ Motor: 230V 1~	Motor		Pres. switch 1 bar		Maximum capacity *		Vessel Membrane litre	Vessel litre
		kW	HP	min	max	Q l/min	H m		
BS1F 1MPSU 304	BSM1F 1MPSUM 304	0,55	0,75	2,3	3,8	63	23	40	100
BS1F 1MPSU 305	BSM1F 1MPSUM 305	0,75	1	3	4,5	58	31	40	100
BS1F 1MPSU 306	BSM1F 1MPSUM 306	0,9	1,2	3,8	5,8	56	39	50	100
BS1F 1MPSU 307	BSM1F 1MPSUM 307	0,9	1,2	4,7	6,4	52	48	50	100
BS1F 1MPSU 504	BSM1F 1MPSUM 504	0,9	1,2	2,1	3,6	115	21	60	100
BS1F 1MPSU 505	BSM1F 1MPSUM 505	1,1	1,5	3	4,5	104	31	80	200
BS1F 1MPSU 506	BSM1F 1MPSUM 506	1,1	1,5	4,3	6	85	44	150	200
BS1F 1MPSU 507	BSM1F 1MPSUM 507	1,5	2	5,3	7,1	84	54	150	200

* Maximum pumps flow at minimum setting pressure switch.

BS2F

BSM2F

Mains: 400V 3~ Motor: 400V 3~	Alimentazione 230V 1~ Motore 230V 1~	Motor		Pres. switch 1 bar		Pres. switch 2 bar		Maximum capacity *		Vessel Membrane litre	Vessel litre
		kW	HP	min	max	min	max	Q l/min	H m		
BS2F 2MPSU 304	BSM2F 2MPSUM 304	0,55 x2	0,75 x2	2,3	3,8	1,8	3,3	143	18	40	100
BS2F 2MPSU 305	BSM2F 2MPSUM 305	0,75 x2	1 x2	3	4,5	2,5	4	133	25	40	100
BS2F 2MPSU 306	BSM2F 2MPSUM 306	0,9 x2	1,2 x2	3,8	5,8	3,5	5,5	121	36	50	100
BS2F 2MPSU 307	BSM2F 2MPSUM 307	0,9 x2	1,2 x2	4,7	6,4	4,4	6,1	110	45	50	100
BS2F 2MPSU 504	BSM2F 2MPSUM 504	0,9 x2	1,2 x2	2,1	3,6	1,7	3,2	251	17	60	100
BS2F 2MPSU 505	BSM2F 2MPSUM 505	1,1 x2	1,5 x2	3	4,5	2,5	4	233	25	80	200
BS2F 2MPSU 506	BSM2F 2MPSUM 506	1,1 x2	1,5 x2	4,3	6	4,1	5,7	180	41	150	200
BS2F 2MPSU 507	BSM2F 2MPSUM 507	1,5 x2	2 x2	5,3	7,1	5	6,8	178	51	150	200

* Maximum pumps flow at minimum setting pressure of 2nd pressure switch.

BS3F

Mains: 400V 3~ Motor: 400V 3~	Motor		Pres. switch 1 bar		Pres. switch 2 bar		Pres. switch 3 bar		Maximum capacity *		Vessel Membrane litre	Vessel litre
	kW	HP	min	max	min	max	min	max	Q l/min	H m		
BS3F 3MPSU 304	0,55 x3	0,75 x3	2,3	3,8	1,8	3,3	1,3	2,8	235	13	40	100
BS3F 3MPSU 305	0,75 x3	1 x3	3	4,5	2,5	4	2	3,5	220	20	40	100
BS3F 3MPSU 306	0,9 x3	1,2 x3	3,8	5,8	3,5	5,5	3,2	5,2	194	33	40	100
BS3F 3MPSU 307	0,9 x3	1,2 x3	4,7	6,4	4,4	6,1	4,2	5,8	175	42	50	100
BS3F 3MPSU 504	0,9 x3	1,2 x3	2,1	3,6	1,7	3,2	1,2	2,7	403	12	60	100
BS3F 3MPSU 505	1,1 x3	1,5 x3	3	4,5	2,5	4	2	3,5	379	20	80	200
BS3F 3MPSU 506	1,1 x3	1,5 x3	4,3	6	4,1	5,7	3,5	5,4	284	39	150	200
BS3F 3MPSU 507	1,5 x3	2 x3	5,3	7,1	5	6,8	4,8	6,5	279	48	150	200

* Maximum pumps flow at minimum setting pressure of 3rd pressure switch.

BS..

PUMPS Nos						PUMP TYPE	P ₂ For each pump	
1	2	3	4	5	6		kW	HP
BS1V	BS2V BS1V1F BSM1V1F* BSM2V**	BS3V BS1V2F	BS4V BS1V3F	BS5V BS1V4F	BS6V BS1V5F	MPSU 304	0,55	0,75
						MPSU 305	0,75	1
						MPSU 306	0,9	1,2
						MPSU 307	0,9	1,2
						MPSU 504	0,9	1,2
						MPSU 505	1,1	1,5
						MPSU 506	1,1	1,5
						MPSU 507	1,5	2

(*) SYSTEMS WITH:

- 1 variable speed pump three-phase motor
- 1 fixed speed pump single-phase motor
- Power supply to control panel 230 V single-phase

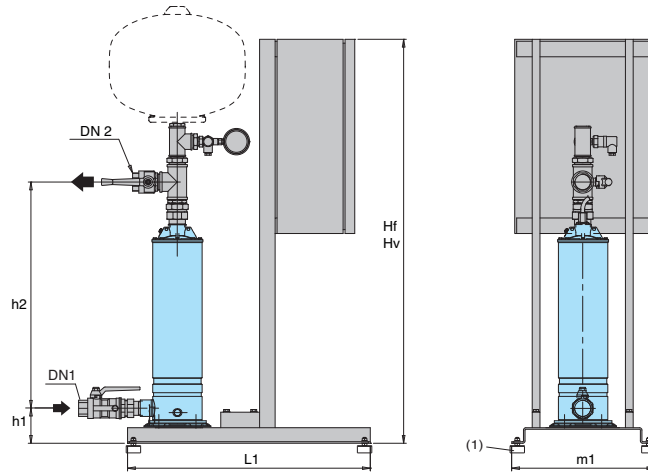
BS.. ..-EMT, EMM

PUMPS Nos			PUMP TYPE	P ₂ For each pump	
1	2	3		kW	HP
BS1V -EMT -EMM	BS2V -EMT	BS3V -EMT	MPSU 304-EMT	0,55	0,75
			MPSU 305-EMT	0,75	1
			MPSU 306-EMT	0,9	1,2
			MPSU 307-EMT	0,9	1,2
			MPSU 504-EMT	0,9	1,2
			MPSU 505-EMT	1,1	1,5
			MPSU 506-EMT	1,1	1,5
			MPSU 507-EMT	1,5	2

(**) Three-phase motor 230 V.

- Power supply to control panel: - 230 V three-phase
- 230 V single-phase
- Frequency converter output is always 230 V three-phase.

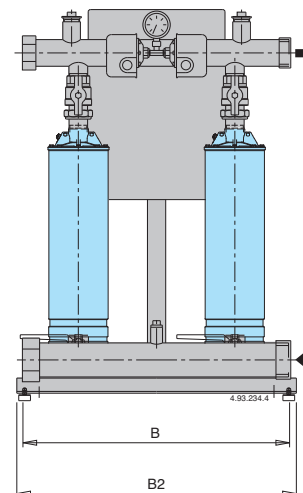
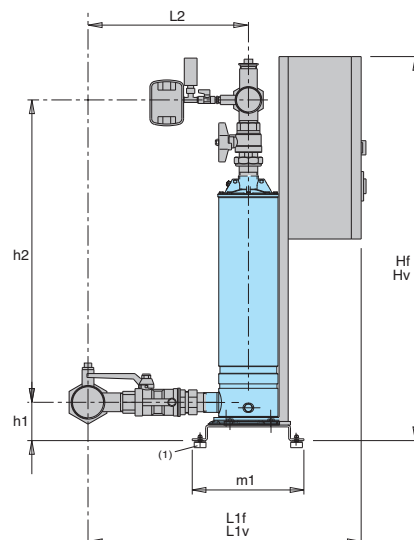
Dimensions and weights



TYPE	TYPE	Connection		mm						weight kg
		DN 1	DN 2	Hf	Hv	h1	h2	L1	m1	
BS1. 1MPSU 304	BSM1. 1MPSUM 304	G 1 1/4	G 1 1/4	875	1045	94	619	625	365	-
BS1. 1MPSU 305	BSM1. 1MPSUM 305						668			
BS1. 1MPSU 306	BSM1. 1MPSUM 306						692			
BS1. 1MPSU 307	BSM1. 1MPSUM 307						716			
BS1. 1MPSU 504	BSM1. 1MPSUM 504						644			
BS1. 1MPSU 505	BSM1. 1MPSUM 505						668			
BS1. 1MPSU 506	BSM1. 1MPSUM 506						737			
BS1. 1MPSU 507	BSM1. 1MPSUM 507						786			

Dimensions not binding to be verified when ordering
Hf= Fixed speed boosting sets
Hv= Variable speed boosting sets

(1) Anti-vibration pads kit supplied loose as standard

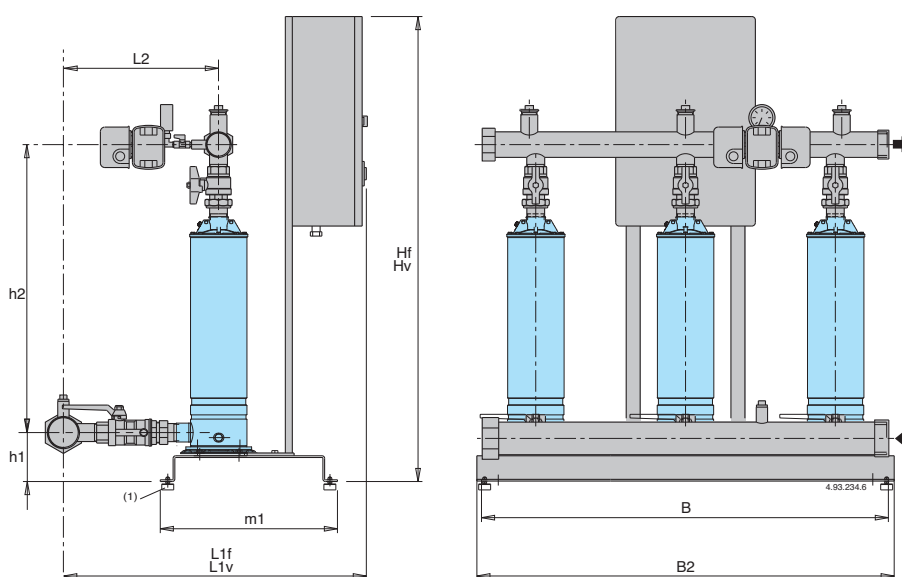


TYPE	TYPE	Connection		mm										weight kg
		DN 1	DN 2	Hf	Hv	h1	h2	L1f	L1v	L2	m1	B	B2	
BS.. 2MPSU 304	BSM.. 2MPSUM 304	G 2	G 2	865	1135	84	629	690	740	320	240	600	625	50 - 50
BS.. 2MPSU 305	BSM.. 2MPSUM 305						698							52 - 52
BS.. 2MPSU 306	BSM.. 2MPSUM 306						722							54 - 55
BS.. 2MPSU 307	BSM.. 2MPSUM 307						746							56 - 58
BS.. 2MPSU 504	BSM.. 2MPSUM 504						674							52 - 52
BS.. 2MPSU 505	BSM.. 2MPSUM 505						698							54 - 54
BS.. 2MPSU 506	BSM.. 2MPSUM 506						767							56 - 57
BS.. 2MPSU 507	BSM.. 2MPSUM 507						816							58 - 60

Dimensions not binding to be verified when ordering

(1) Anti-vibration pads kit supplied loose as standard

Dimensions and weights



TYPE	Connection		mm										weight kg
	DN 1	DN 2	Hf	Hv	h1	h2	L1f	L1v	L2	m1	B	B2	
BS.. 3MPSU 304	G 2 1/2	G 2	1090	1260	105	636	735	805	329	406	950	1000	85
BS.. 3MPSU 305						705							88
BS.. 3MPSU 306						729							91
BS.. 3MPSU 307						753							94
BS.. 3MPSU 504						681							87
BS.. 3MPSU 505						705							90
BS.. 3MPSU 506						774							93
BS.. 3MPSU 507						823							96

Dimensions not binding to be verified when ordering

(1) Anti-vibration pads kit supplied loose as standard

Hf= Fixed speed boosting sets
Hv= Variable speed boosting sets