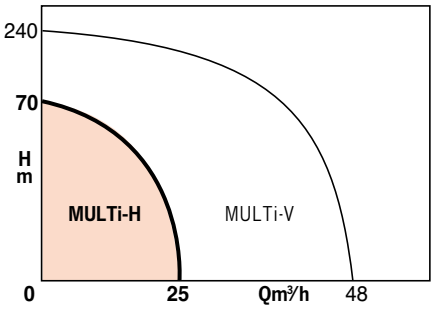
OPERATING RANGES

Flow rates of up to:	**25 m³/h**
Manometric heads of up to:	**70 m CE**
Max. operating pressure:	**10 bar**
Max. intake pressure:	**6 bar**
Temperature range:	**– 15° to + 110°C**
Max. ambient temperature:	**+ 40°C**
DN (nominal diameter) of ports:	**G1¼ to G2**

MULTI-H

HORIZONTAL Stainless steel MULTISTAGE PUMPS

2 pole - 50 Hz



APPLICATIONS

Pumping of clean, non-muddy liquids in the housing, agricultural and industrial sectors:
- Supply - Boosting
- Watering - Irrigation
- Washing stations
- Drainage -Filling (pools, swimming pools...)
- Heating - Air conditioning
- Water treatment (demineralisation, filtration...)

And for incorporation into all modular systems.
Abstraction from wells, springs, rivers, ponds...

Pumped fluids
- 304 range: clear and non-corrosive liquids (drinking water, glycol water...).
- 316L range: corrosive liquids (demineralised seawater, chlorinated water...).

ADVANTAGES

EFFICIENCY / RELIABILITY
- **IE2 motor.**
- **Optimal reliability: high outputs thanks to the impeller profile, which reduces the number of stages, the sizes of the shafts and the axial thrusts.**
- **Stainless steel hydraulic assembly: protection from corrosion and extended pump life.**
- **Suction rings between very thick cells: impervious to thermal expansion and eliminates the risk of seizing.**

INSTALLATION
- **Compact pump of one-piece design, requires little space and performs economically and quietly.**
- **Easy installation.**

MAINTENANCE
- **Standardised mechanical seal withstands max. temperatures of +110°C without any maintenance.**
- **Motor bearing fitted in the front shroud - generously dimensioned and leak-tight.**

• MULTI-H with three-phase motor

Certified ACS

• MULTI-H with single-phase motor

• ALL STAINLESS STEEL hydraulic assembly

MULTI-H

DESIGN

• Hydraulic part

ALL Stainless steel

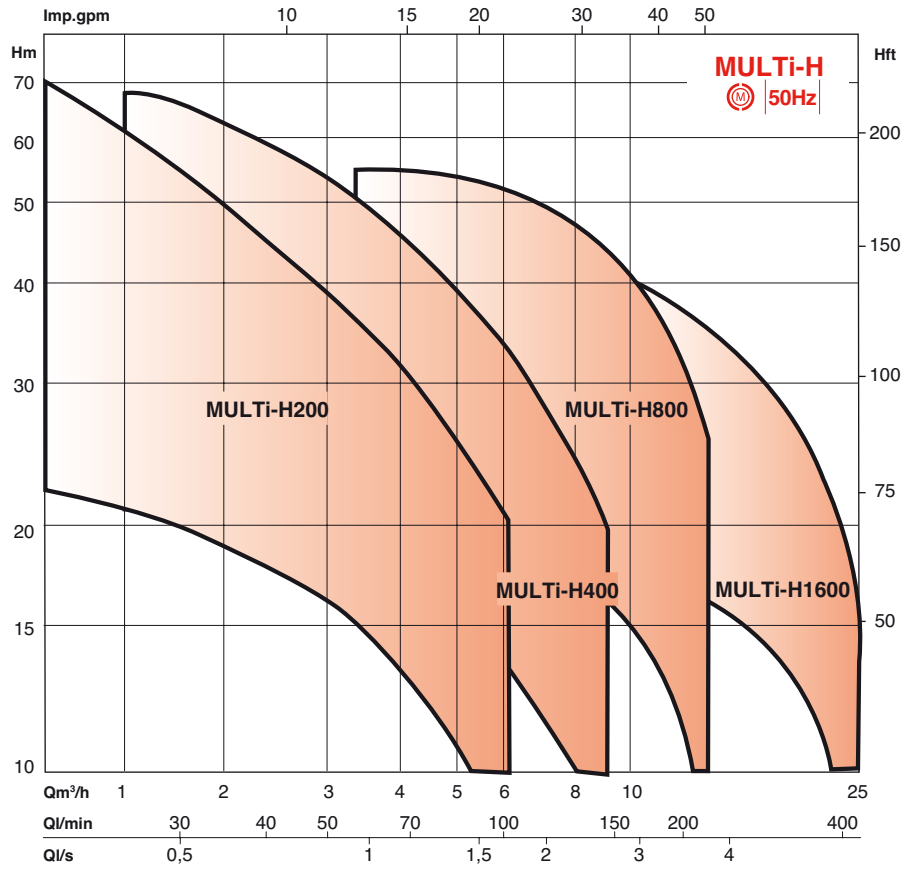
- Horizontal, centrifugal, not self-priming.
- Multi-stage, 2 to 6 stages.
- Axial intake and vertical, upward delivery.
- Impellers fitted directly onto the extended motor shaft.
- Standardised mechanical seal ensures leak-tightness of shaft passage.
- Hydraulic assembly fixed to a lantern ring at 8 points.

• Motor

- IE2 standard ventilated
- With extended shaft end
- Single-phase motor with integrated thermal protection and automatic reset; capacitor integrated into the terminal box.
- Rotor-shaft guide bearings lubricated for life.

Rotation speed:	2900 rpm
Three-phase winding:	230-400 V
Single-phase:	230 V
Frequency:	50 Hz (optional 60 Hz)
Insulation class:	155 (F)
Protection class:	IP 54

HYDRAULIC PRESELECTION RANGE



BASIC CONSTRUCTION

Main parts	Material	
	Non-corrosive liquids	Corrosive liquids*
Housing casing	S steel 304	S steel 316 L
Impellers	S steel 304	S steel 316 L
Cells (stage housing)	S steel 304	S steel 316 L
Pump shaft	S steel 316 L	S steel 316 L
Cell centring device	S steel 304	S steel 316 L
Mechanical seal	Carbon/ Ceramic	Tungsten carbide/ Carbon
O-rings	Ethylene Propylene EPDM	VITON
Plugs	S steel 316L	S steel 316 L
Attachment support bearing	Aluminium	Aluminium

* Except for MULTi-H1600 serie

NOTA : 304 (X2CrNiMo 17.12.2) or 316 L (X2CrNiMo17-12) stainless steel - recommended materials offering excellent corrosion resistance. Clean and clear liquids with no fibres and low sand/silica content (max. concentration 40 g/m3).

IDENTIFICATION

MULTi-H 206 N -S E - M
X V - T

Pump code
HORIZONTALE
MULTI-STAGE
STAINLESS STEEL

Nominal flowrate in m³/h

Number of stages

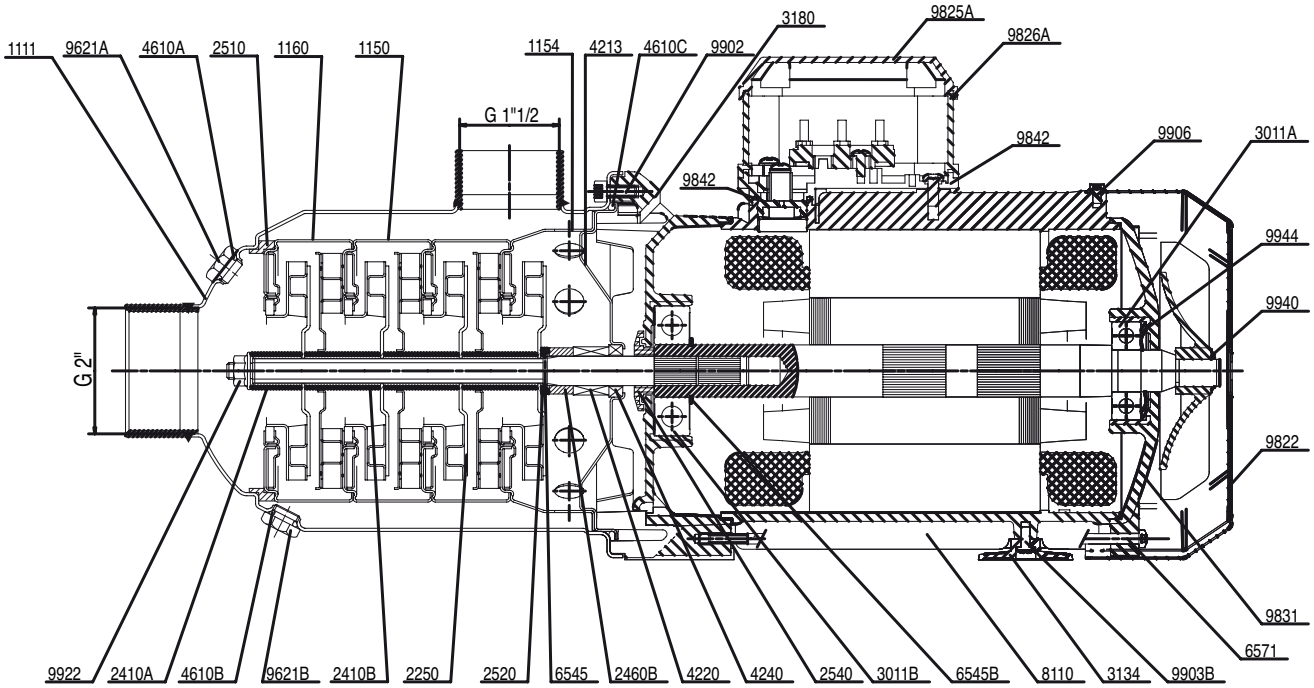
IE2 motor

S: S steel 304
X: S steel 316L

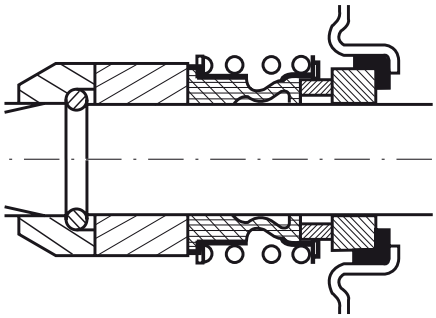
E : EPDM
V : VITON

T: three-phase motor
M: single-phase motor

SECTIONAL DIAGRAM



MECHANICAL SEAL



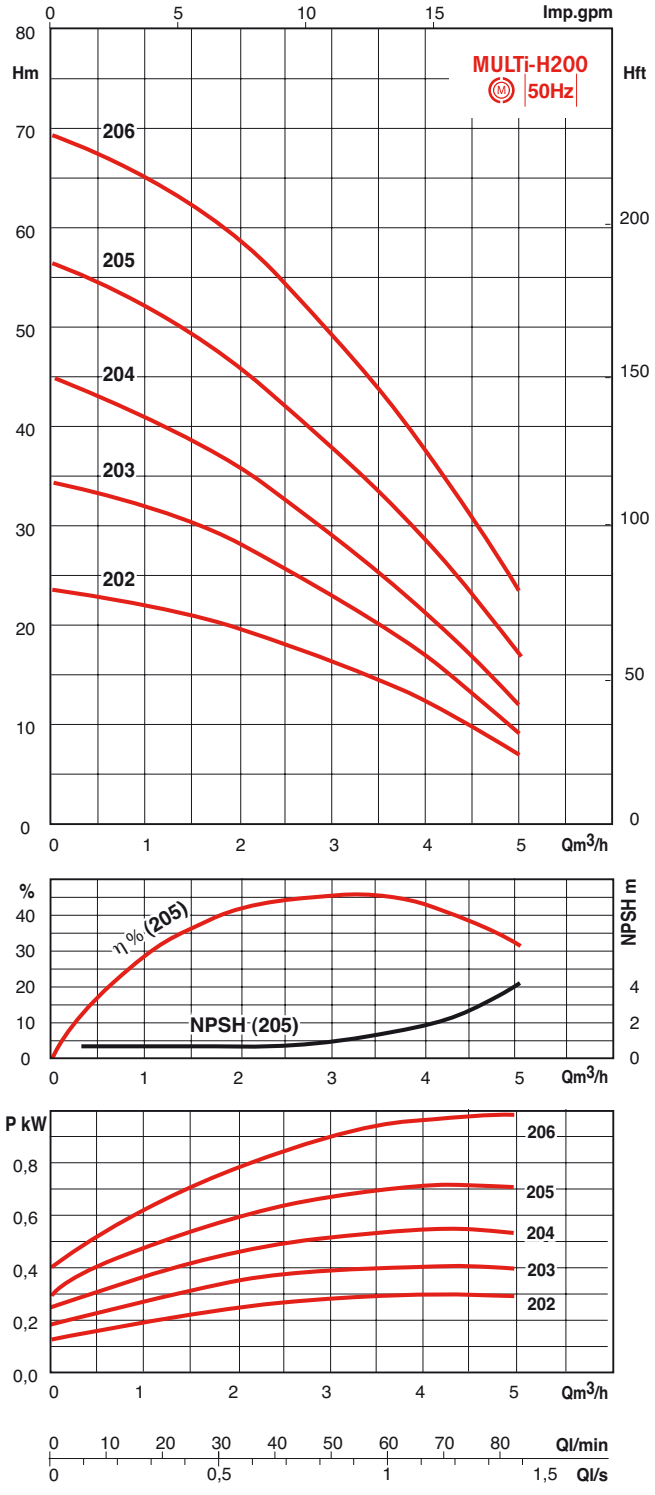
PARTS LIST

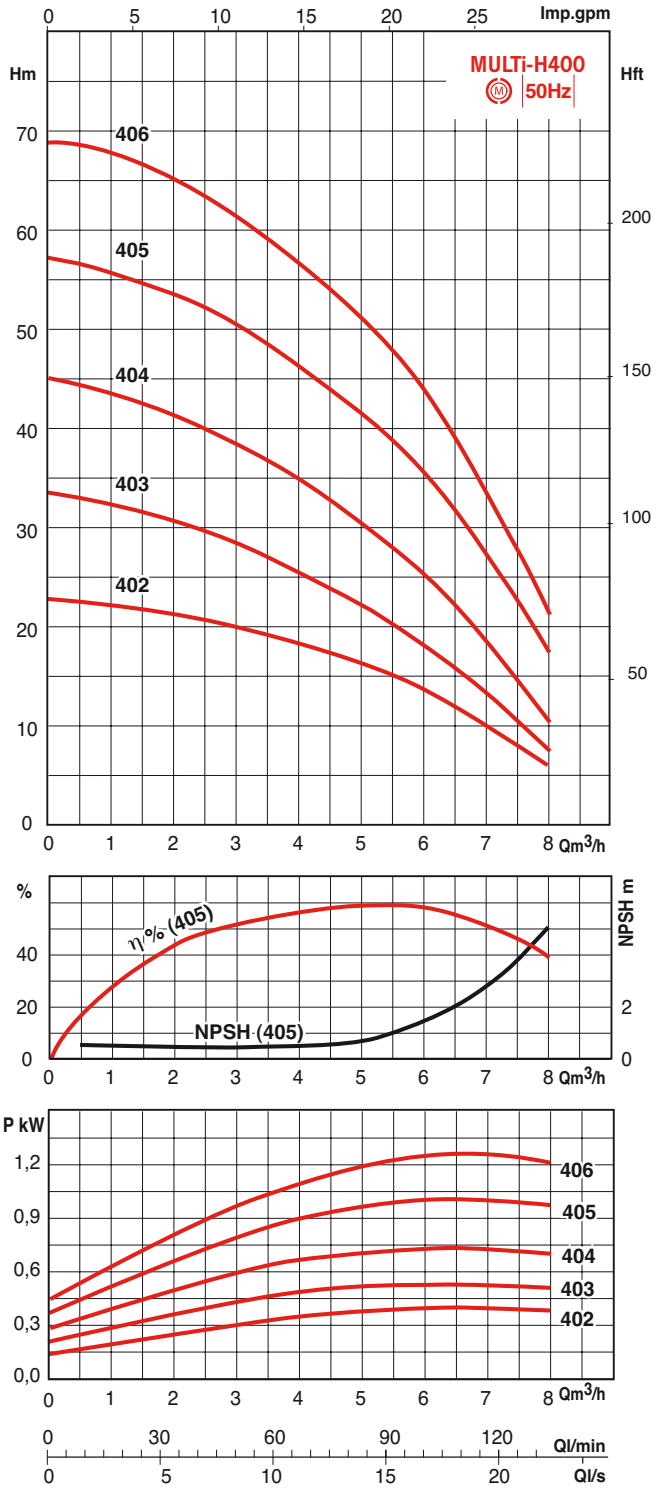
1111	- Housing	
• 1150	- Stage housing with interstage crossover	
• 1154	- Stage housing centring device	
• 1160	- Stage housing without interstage crossover	
• 2250	- Impeller	
2410	- Impeller spacer	
2460 A	- Impeller thickness washer	
2460 B	- Mechanical seal spacer	
2520	- Impeller support ring-snap ring	
2540	- Deflector	
2911	- Shaft end washer	
• 3011 A	- Rolling bearing fan side	
• 3011 B	- Rolling bearing pump side	
• 3134	- Motor mounting base	
3180	- Lantern ring	
4213	- Throat bushing casing	
• 4220	- Rotating part	Seal
• 4240	- Fixed part	Mechanical
• 4610 A	- O-ring (filler plug)	
• 4610 B	- O-ring (drain plug)	
• 4610 C	- O-ring (lantern ring housing)	
6515	- Drain plug	
6521	- Bleeding and filling plug	
• 6545	- Snap ring (support ring)	
6571	- Motor assembly stud bolt	
• 8110	- Electric motor housing	
• 9220	- Rotor shaft	
• 9460	- Terminal cover gasket	
• 9820	- Fan	
9822	- Fan housing	
• 9825	- Motor terminal cover	
• 9831	- Rear motor bearing	
• 9860	- Capacitor	
9902 A	- Lantern ring housing attachment screw	
9902 B	- Shaft end screw	
9902 C	- Cleaning screw	
9942	- External tooth lock washer	
9944	- Spring washer	
9966	- Elastic pin	

(•) Recommended spare parts.

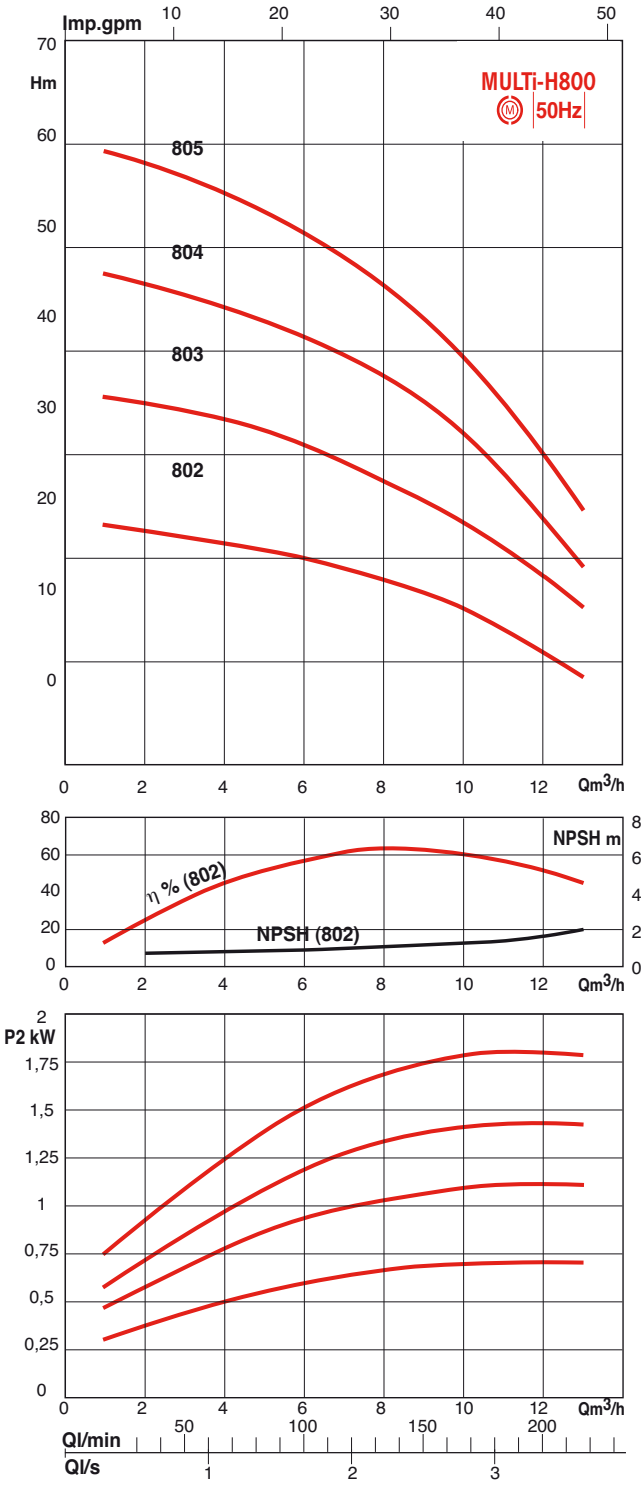
MULTI-H

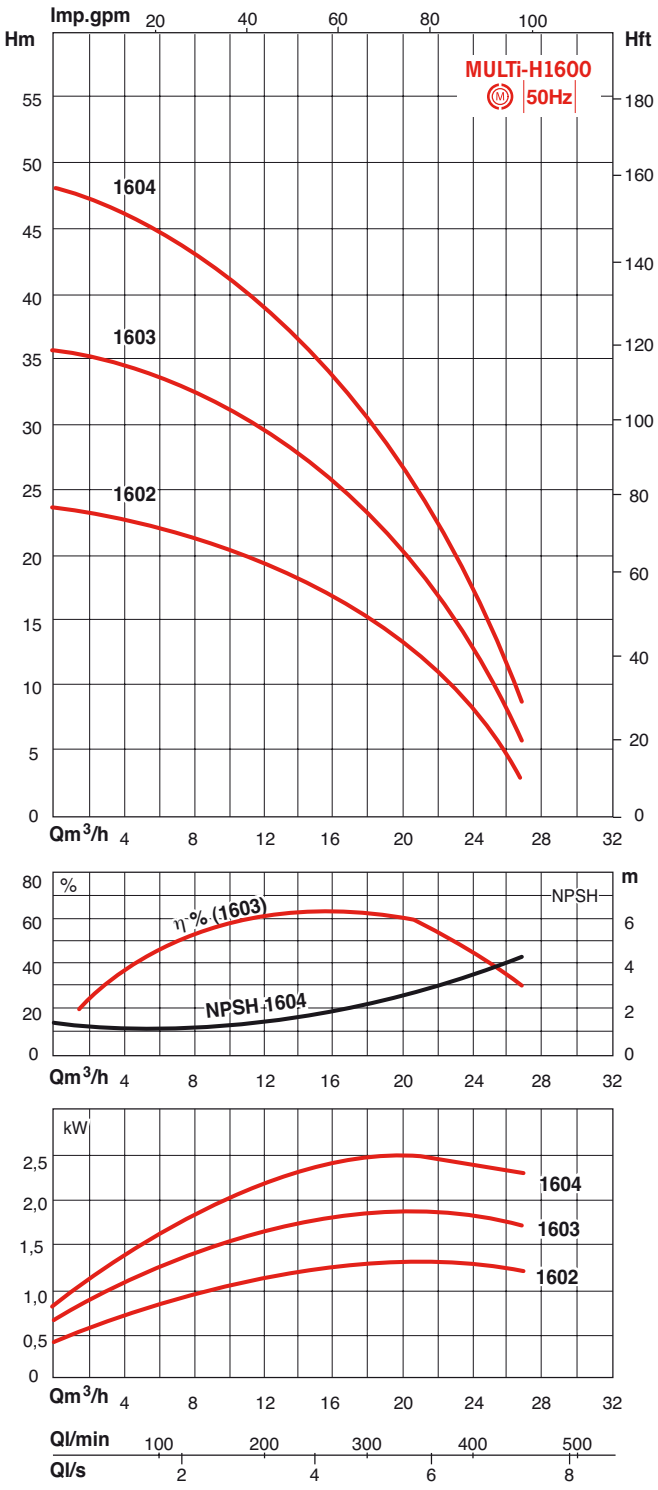
HYDRAULIC PERFORMANCE – SERIES 200 AND 400 - 2 POLE





HYDRAULIC PERFORMANCE – SERIES 800 AND 1600 - 2 POLE

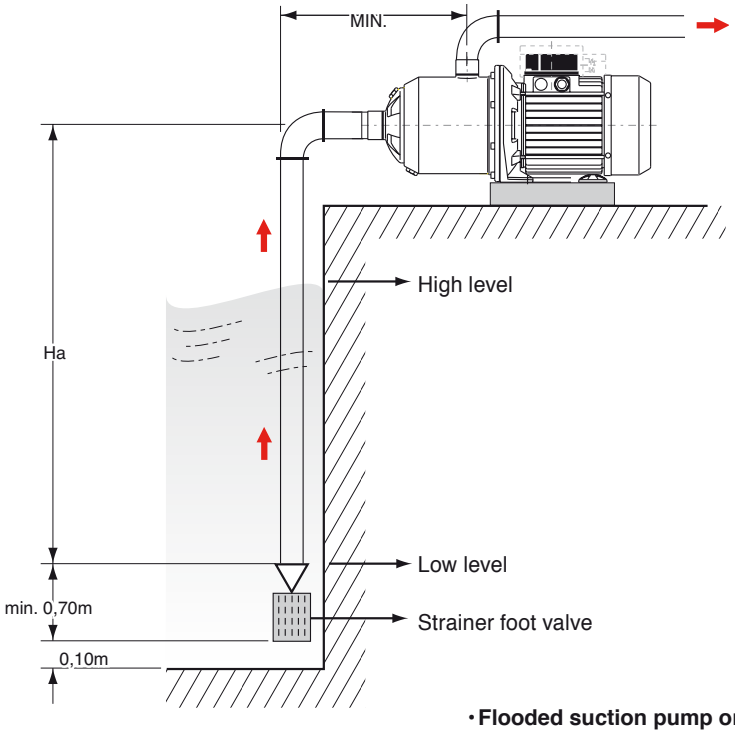




MULTI-H

SECTIONAL VIEW OF THE INSTALLATION

• **Suction pump**

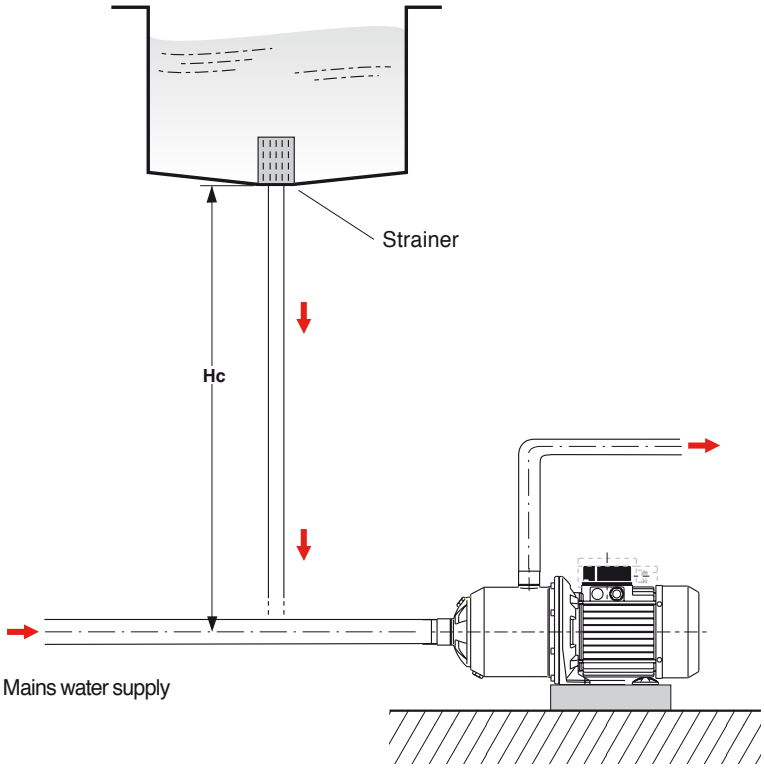


Max. suction heads (Ha) and min. flooded heads (Hc) at the pump's nominal flowrate.

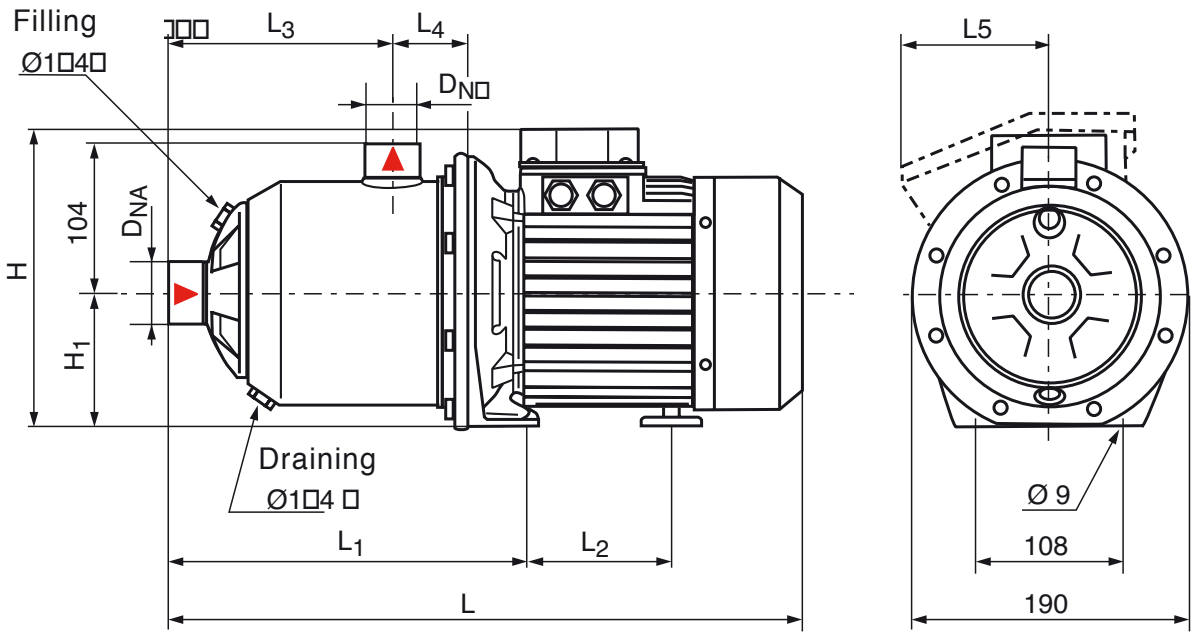
Fluid temperature	MULTi-H 200		MULTi-H 400/800/1600	
	Ha mCL	Hc mCL	Ha mCL	Hc mCL
+ 20°C	7	---	7	---
+ 50°C	6	---	6	---
+ 80°C	2,2	---	3	---
+110°C	---	8,1	---	7

These values do not take account of losses of head in the suction pipe.

• **Flooded suction pump on storage tank or mains water system**
(with low water protection kit)



ELECTRICAL DATA AND DIMENSIONS



ORDER REFERENCE	MOTOR										PUMP											mass
	P2	Efficiency according to load (%)			Power factor	Speed	motor voltage			Capacitor	Suction ports.	Ports ref.	H	H1	H2	L	L1	L2	L3	L4	L5	
	kW	4/4	3/4	2/4	cos ϕ	rpm	1x230 V	3x230 V	3x400 V	μF	DNA	DNR	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
MULTI-H202-SE-M	0,55	-	-	-	0,76	2860	4	–	–	12	1	1	216	90	104	375	204	95	109,5	51	106	9,8
MULTI-H202-SE-T	0,55	-	-	-	0,76	2860	–	3	1,7	–	1	1	192	90	104	375	204	95	109,5	51	106	8,9
MULTI-H203-SE-M	0,55	-	-	-	0,76	2860	4	–	–	12	1	1	216	90	104	375	204	95	109,5	51	106	9,8
MULTI-H203-SE-T	0,55	-	-	-	0,76	2860	–	3	1,7	–	1	1	192	90	104	375	204	95	109,5	51	106	8,9
MULTI-H204-SE-M	0,55	-	-	-	0,76	2860	4	–	–	12	1	1	216	90	104	423	252	95	157,5	51	106	10,6
MULTI-H204-SE-T	0,55	-	-	-	0,76	2860	–	3	1,7	–	1	1	192	90	104	423	252	95	157,5	51	106	9,7
MULTI-H205-SE-M	0,75	79	78	76	0,82	2850	5,1	–	–	16	1	1	216	90	104	423	252	95	157,5	51	106	12,2
MULTI-H206-SE-M	1,1	80,5	80,5	78,0	0,82	2850	7,2	–	–	30	1	1	224	90	104	472	276	103,5	181,5	51	106	15,7
MULTI-H402-SE-M	0,55	-	-	-	0,76	2860	4	–	–	12	1¼	1	216	90	104	375	204	95	109,5	51	106	9,8
MULTI-H402-SE-T	0,55	-	-	-	0,76	2860	–	3	1,7	–	1¼	1	192	90	104	375	204	95	109,5	51	106	8,9
MULTI-H403-SE-M	0,55	-	-	-	0,76	2860	4	–	–	12	1¼	1	216	90	104	375	204	95	109,5	51	106	10,7
MULTI-H403-SE-T	0,55	-	-	-	0,76	2860	–	3	1,7	–	1¼	1	192	90	104	375	204	95	109,5	51	106	9,8
MULTI-H404-SE-M	0,75	79	78	76	0,82	2850	5,1	–	–	16	1¼	1	216	90	104	423	252	95	157,5	51	106	12,2
MULTI-H405-SE-M	1,1	80,5	80,5	78,0	0,82	2850	7,2	–	–	30	1¼	1	224	90	104	448	252	103,5	157,5	51	106	15,2
MULTI-H406-SE-M	1,5	82	82	80	0,77	2900	9,2	–	–	40	1¼	1	224	90	104	472	276	103,5	181,5	51	106	17,8
MULTI-H802-SE-M	0,75	79	78	76	0,82	2850	5,1	–	–	16	1½	1¼	216	90	104	387	216	95	121,5	51	106	15,8
MULTI-H803-SE-M	1,1	80,5	80,5	78,0	0,82	2850	7,2	–	–	30	1½	1¼	224	90	104	412	216	103,5	121,5	51	106	14,5
MULTI-H804-SE-M	1,5	82	82	80	0,77	2900	9,2	–	–	40	1½	1¼	224	90	104	472	276	103,5	181,5	51	106	16

ORDER REFERENCE	MOTOR								PUMP											mass
	P2	Efficiency according to load (%)			Power factor	Speed	motor voltage		Suction ports.	Ports ref.	H	H1	H2	L	L1	L2	L3	L4	L5	
	kW	4/4	3/4	2/4	cos ϕ	rpm	3x230 V	3x400 V	DNA	DNR	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg
MULTI-H205N-SE-T	0,75	79	78	76	0,82	2850	3,2	1,85	1	1	219	90	104	457	252	110	157,5	52	52	13
MULTI-H206N-SE-T	1,1	80,5	80,5	78,0	0,82	2850	4,3	2,5	1	1	219	90	104	481	276	110	181,5	52	52	13,8
MULTI-H404N-SE-T	0,75	79	78	76	0,82	2850	3,2	1,85	1¼	1	219	90	104	457	252	110	157,5	52	52	13
MULTI-H405N-SE-T	1,1	80,5	80,5	78,0	0,82	2850	4,3	2,5	1¼	1	219	90	104	457	252	110	157,5	52	52	13,8
MULTI-H406N-SE-T	1,1	80,5	80,5	78,0	0,82	2850	4,3	2,5	1¼	1	219	90	104	481	276	110	181,5	52	52	16
MULTI-H802N-SE-T	0,75	79	78	76	0,82	2850	3,2	1,85	1½	1¼	219	90	104	421	216	110	121,5	52	52	12,3
MULTI-H803N-SE-T	1,1	80,5	80,5	78,0	0,82	2850	4,3	2,5	1½	1¼	219	90	104	421	216	110	121,5	52	52	13,1
MULTI-H804N-SE-T	1,5	82	82	80	0,77	2900	5,7	3,3	1½	1¼	240	90	104	523	276	148	181,5	52	52	19,1
MULTI-H805N-SE-T	2,2	84	84	82	0,89	2900	8,8	5,1	1½	1¼	240	90	104	523	276	148	181,5	52	52	20,5
MULTI-H1602N-SE-T	1,5	82	82	80	0,77	2900	5,7	3,3	2	1½	240	90	105	482	236	148	138	55	52	19
MULTI-H1603N-SE-T	2,2	84	84	82	0,89	2900	8,8	5,1	2	1½	240	90	105	482	235,5	148	138	55	52	21,4
MULTI-H1604N-SE-T	2,2	84	84	82	0,89	2900	8,8	5,1	2	1½	240	90	105	526	280,5	148	183	55	52	22,1

MULTI-H

RECOMMENDED ACCESSORIES

• ACSON : ON/OFF control device and protection against lack of water.

• Protective slave switch for three-phase motor

• Water hammer tank

• Bladder tank

• Shut-off valve

• Strainer foot valve

• Non-return valve

• Vibration-damping sleeves

FEATURES

a) Electrical

- IE2 “T” types: 230-400 V - 50 Hz three-phase
- “M” types: - 230 V - 50 Hz single-phase with capacitor integrated into the terminal box.
- Three-phase motors MUST be protected by a slave switch.
- Stuffing box used for connections to the motor terminal box

Provide a switch and low-water protection box in both single-phase and three-phase.

b) Fitting

- On solid base using foundation bolts.
- Installation of pump in suction mode with compulsory strainer foot valve, or flooded suction mode on storage tank or mains water system with low water protection kit.
- Connection to pump via a flexible hose or rigid piping.
- The installation must allow for the protection of the pump against adverse weather conditions and frost (avoid direct exposure to rain or sun).

c) Packaging

Pump delivered in cardboard packaging, without connection fittings.

d) Maintenance

Replacement of recommended spare parts (•) subject to wear.

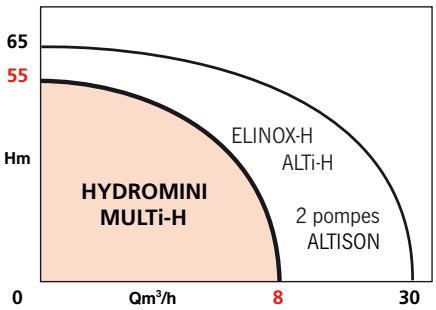
OPTIONS AND ACCESSORIES

- Shut-off valves
- Non-return valves
- Strainer foot valve
- Vibration-damping sleeves
- Suction kit
- Bladder or galvanised tanks
- Water hammer tanks
- ME low-water protection kit
- ACSON: ON/OFF control device and protection against lack of water
- Protective slave switch for three-phase motor…

HYDROMINI MULTI-H

OPERATING RANGES

Flow rates of up to:	**8 m³/h**
Manometric heads of up to:	**55 m**
Max. operating pressure:	**4 bar**
Max. temperature:	**+50°C**
Max. suction head:	**7 m**
DN suction:	**1" - 1"1/4**
DN delivery:	**1"**

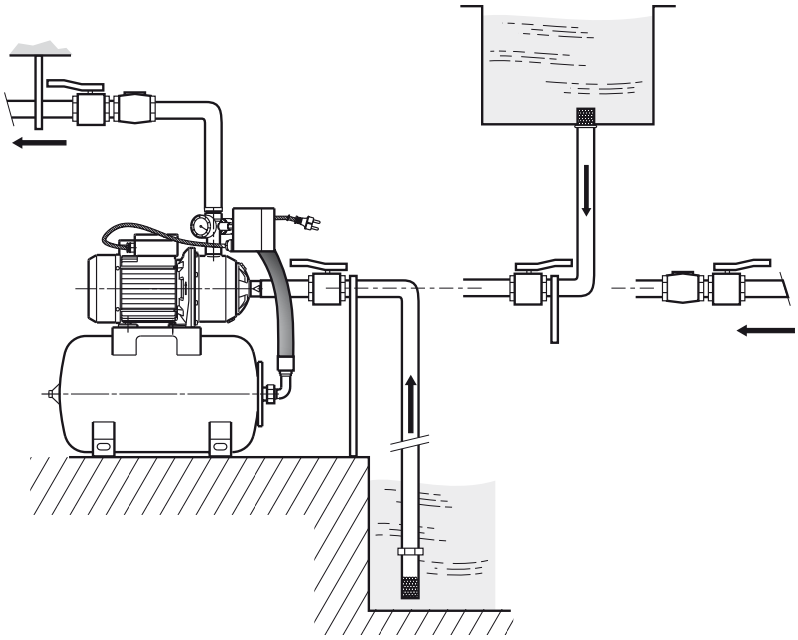


APPLICATIONS

Pressure maintenance for water distribution systems with insufficient or non-existent pressure in the domestic and small-scale collective sectors:

- Water supply and distribution from wells, springs or storage tanks.
- Irrigation - watering.
- Raising the pressure of a weak mains water system (if the total pressure does not exceed 4 bar).

For detached houses, rural homes, small farms, small-scale industries...



• HYDROMINI MULTi-H

ADVANTAGES

- **Surpresseurs entièrement montés, câblés et préréglés, prêts à l'emploi.**
- **Easy installation: one electrical connection and two hydraulic connections.**
- **Stainless steel hydraulic assembly.**
- **Interchangeable butyl, food-grade bladder tank.**
- **Integrated thermal protection of motor on all models.**
- **User-friendly operation and maintenance at low cost**

DESIGN

Automatic booster pumps, pre-assembled and ready for fitting, equipped with:

- MULTi-H single-phase or three-phase pump (203; 204; 205; 404; 405)
- Tank with an interchangeable bladder (24, 50 and 100 l)
- Filler plug
- Drain plug
- Cable and plug (single-phase version)
- Pump/tank connection hose
- Inflation valve
- Pressure gauge and pressure switch.

HYDROMINI SINGLE-PHASE

- Thermal protection integrated into the winding, automatic resetting after cooling.

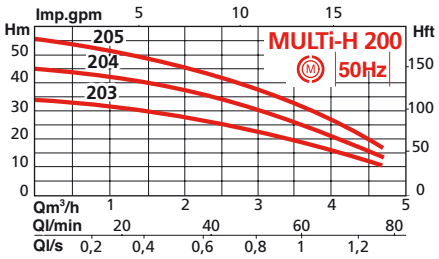
HYDROMINI THREE-PHASE

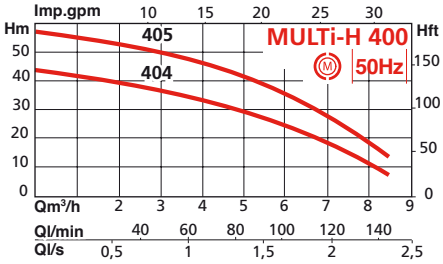
- Thermal protection of motor integrated into the pressure switch; manual resetting.

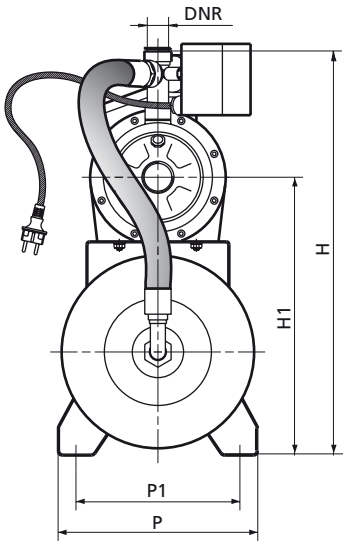
The installation must allow for the protection of the pump against adverse weather conditions and frost (avoid direct exposure to rain or sun).
The setting of on-off pressures on the contact or pressure switch is carried out in the factory.
Standards: EN 60335-2-41

HYDROMINI MULTI-H

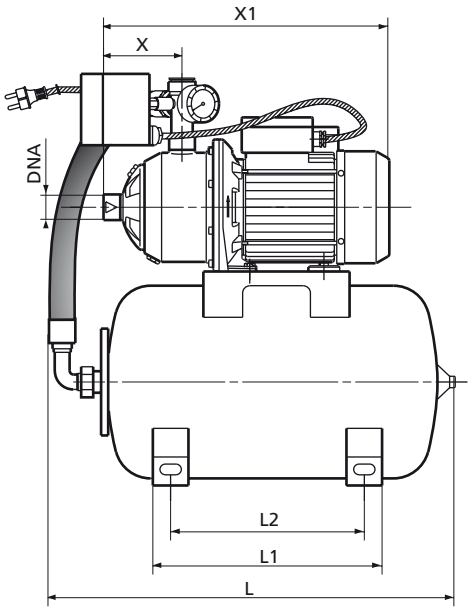
HYDRAULIC, ELECTRICAL AND DIMENSIONAL SPECIFICATIONS







Product	DNA	DNR	Voltage	Volume	H	L	P	H1	L1	L2	P1	X	X1
			50Hz	L	mm	mm	mm	mm	mm	mm	mm	mm	mm
Multi-H-203-M-H20	1”	1”	1~230 V	20	570	500	280	385	220	170	230	110	375
Multi-H-203-M-H50	1”	1”	1~230 V	50	655	700	360	470	350	300	280	110	375
Multi-H-203-M-H100	1”	1”	1~230 V	100	750	820	450	565	400	350	320	110	375
Multi-H-203-T-H20	1”	1”	3~230/400 V	20	570	500	280	385	220	170	230	110	375
Multi-H-203-T-H50	1”	1”	3~230/400 V	50	655	700	360	470	350	300	280	110	375
Multi-H-203-T-H100	1”	1”	3~230/400 V	100	750	820	450	565	400	350	320	110	375
Multi-H-204-M-H20	1”	1”	1~230 V	20	570	500	280	385	220	170	230	158	423
Multi-H-204-M-H50	1”	1”	1~230 V	50	655	700	360	470	350	300	280	158	423
Multi-H-204-M-H100	1”	1”	1~230 V	100	750	820	450	565	400	350	320	158	423
Multi-H-204-T-H20	1”	1”	3~230/400 V	20	570	500	280	385	220	170	230	158	423
Multi-H-204-T-H50	1”	1”	3~230/400 V	50	655	700	360	470	350	300	280	158	423
Multi-H-204-T-H100	1”	1”	3~230/400 V	100	750	820	450	565	400	350	320	158	423
Multi-H-205-M-H20	1”	1”	1~230 V	20	570	500	280	385	220	170	230	158	423
Multi-H-205-M-H50	1”	1”	1~230 V	50	655	700	360	470	350	300	280	158	423
Multi-H-205-M-H100	1”	1”	1~230 V	100	750	820	450	565	400	350	320	158	423
Multi-H-205N-T-H20	1”	1”	3~230/400 V	20	597	500	280	385	220	170	230	158	457
Multi-H-205N-T-H50	1”	1”	3~230/400 V	50	682	700	360	470	350	300	280	158	457
Multi-H-205N-T-H100	1”	1”	3~230/400 V	100	777	820	450	565	400	350	320	158	457
Multi-H-404-M-H20	1”1/4	1”	1~230 V	20	570	500	280	385	220	170	230	158	423
Multi-H-404-M-H50	1”1/4	1”	1~230 V	50	655	700	360	470	350	300	280	158	423
Multi-H-404-M-H100	1”1/4	1”	1~230 V	100	750	820	450	565	400	350	320	158	423
Multi-H-404N-T-H20	1”1/4	1”	3~230/400 V	20	597	500	280	385	220	170	230	158	457
Multi-H-404N-T-H50	1”1/4	1”	3~230/400 V	50	682	700	360	470	350	300	280	158	457
Multi-H-404N-T-H100	1”1/4	1”	3~230/400 V	100	777	820	450	565	400	350	320	158	457
Multi-H-405-M-H20	1”1/4	1”	1~230 V	20	570	500	280	385	220	170	230	158	448
Multi-H-405-M-H50	1”1/4	1”	1~230 V	50	655	700	360	470	350	300	280	158	448
Multi-H-405-M-H100	1”1/4	1”	1~230 V	100	750	820	450	565	400	350	320	158	448
Multi-H-405N-T-H20	1”1/4	1”	3~230/400 V	20	597	500	280	385	220	170	230	158	457
Multi-H-405N-T-H50	1”1/4	1”	3~230/400 V	50	682	700	360	470	350	300	280	158	457
Multi-H-405N-T-H100	1”1/4	1”	3~230/400 V	100	777	820	450	565	400	350	320	158	457



TANKS

Mean flow rate:	2 000 to 8 000 l/h
Capacity:	20 to 100 l
Pressure on:	1,5 to 2 bar
Pressure off:	3 to 3,5 bar
DN (nominal diameter) suction:	1” - 1”1/4
DN delivery:	1”

- **Low-water protection kit**
  for connecting HYDROMINI to the mains system.

RECOMMENDED ACCESSORIES

- Strainer foot valve (max. flow section 1 mm).
- 1/4 T valve on suction.
- 1/4 T valve on delivery.
- Non-return valve
- Pipe hanger.
- Low-water protection kit (connection to mains system).
- Float switch, pressure switch or PMS