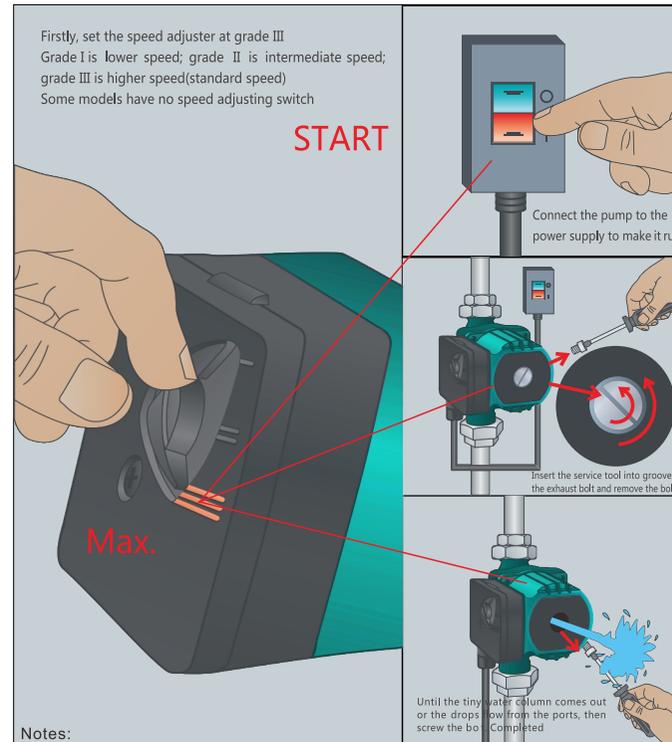


21. Pump Exhaust

The gas within the pump must be also exhausted after the system being exhausted to ensure the pump to work in best condition.

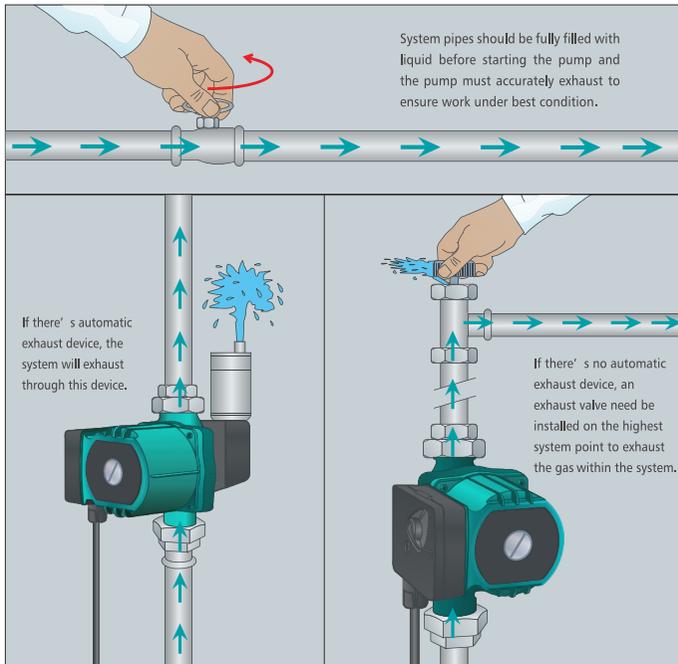
Note: care must be taken not to splash the water column or drops go into the junction box to avoid the electric fault.



- All the figures in this manual are schematic diagrams, and please understand that the electric pumps and accessories you buy may be different from the diagrams in this manual.
- The performance of the product is improved constantly, and all products (including appearance and color, etc.) are subject to physical products; no further notice will be given in case of any change.

20. Pipe Exhaust

We suggest installing automatic exhaust valve in pipe ensure smooth emission of the system gas.
 If the pump is used in household heat system, switch on the water source and turn on each tap, then the gas can be exhausted.



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 Thank you very much for choosing our company's products. Please read the instructions carefully and save it properly before installation and use.

Warnings

- Please read the instructions carefully before installation and use.
- The electric pump must be reliably grounded and installed with leakage protection devices before use.
- It is strictly forbidden to touch the electric pump during operation.

Warning for Children

- It is strictly forbidden for children, incapacitated persons, or person limited in disposing capacity (If have not been taught how to use this product safely and understand the hazards involved) to use this product without supervision by a guardian.

Electricity Warning

- The electric power system may be used only when it has the safety protection measures specified by the existing provisions of the country where the product is installed.

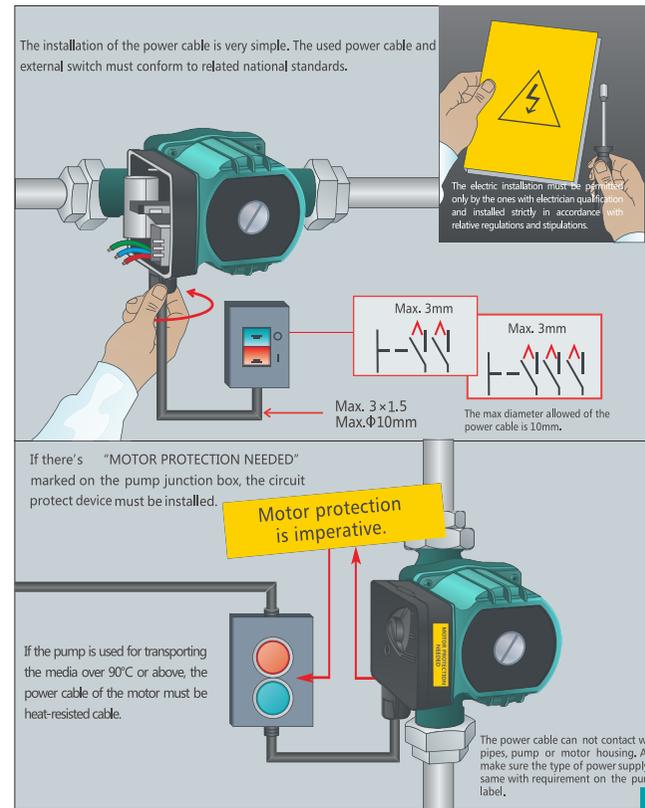
Pressure Warning

- The pump system must be able to withstand the maximum pressure of the pump.

Modification-related Warning

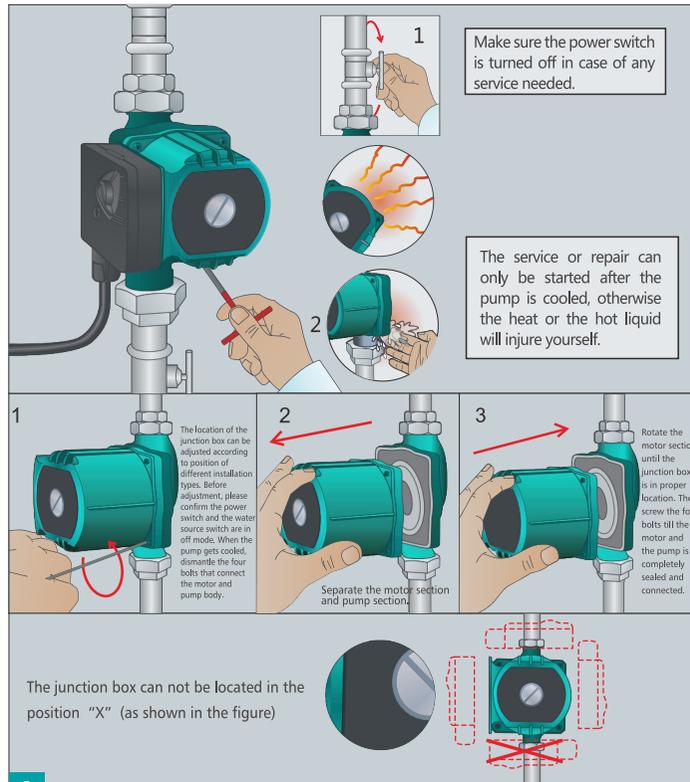
- The manufacturer is not responsible for any consequences caused by the user changing the electric pump or operating the electric pump beyond the operating conditions.

19. Grounded protection is needed.



18. The way to adjust the position of junction box;

The above operations can only be completed by qualified personnel.



I . Introduction

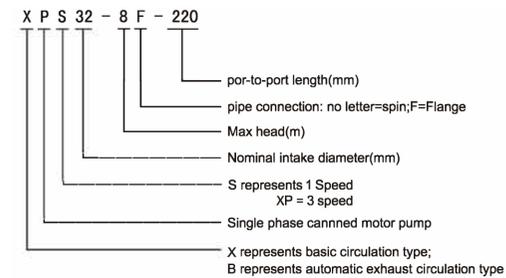
1. XPS/BPS/XP shielded muting circulating pump (hereinafter called as "electronic pump"). The motor stator will be totally shielded and the rotary components will emerge into clean water, playing an important role in cooling and lubricating during working; the thin housing structure is used as pump shielded sleeve, which fully separates the inner core and external water. It also cancels the traditional mechanical sealing structure and successfully solves the common leakage. The rotary components are adopted on ceramic bearing, which is durable and can be purified with clean water. Ceramic bearing can not only effectively cool the motor, but also reduce the noise, and guarantee no overload during all the working process. This product is able to be free of service if accurately used.

2. There are three-grades settings on switch knob of junction box for speed adjusting and the flow and total head change. Grade I is low speed with min flow and head; Grade II is intermediate speed; Grade III is the rated speed. That is, high speed with max flow and total head.

3. Heat-proof material is adopted in inner motor available for heat circulating compression system.

II . Model instruction

1. Model instructions



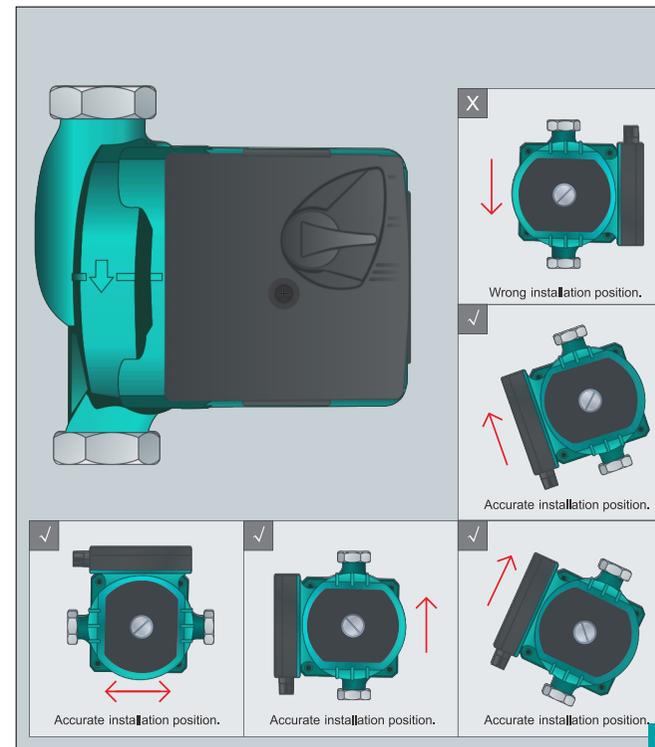
2. Technical parameters

Model	Pipe Distance (mm)	Voltage	Input power P1(W)	Current (A)	Max. head (m)	Head range (m)
BPS15-5A	/	220V/50Hz	95/75/50	0,41/0,33/0,23	5	0-5
BPS15-6A	/		105/80/55	0,43/0,36/0,26	6	0-6
BPS15-7A	/		135/115/80	0,58/0,53/0,38	6.5	0 ~ 6.5
BPS15-5B	130		95/75/50	0,41/0,33/0,23	5	0-5
BPS15-6B	130		105/80/55	0,43/0,36/0,26	6	0-6
BPS15-7B	130		135/115/80	0,58/0,53/0,38	6.5	0-6.5
BPS15-5C	/		95/75/50	0,41/0,33/0,23	5	0-5
BPS15-6C	/		105/80/55	0,43/0,36/0,26	6	0-6
BPS15-7C	/		135/115/80	0,58/0,53/0,38	6.5	0-6.5
BPS15-5D	/		95/75/50	0,41/0,33/0,23	5	0-5
BPS15-6D	/		105/80/55	0,43/0,36/0,26	6	0-6
BPS15-7D	/		135/115/80	0,58/0,53/0,38	6.5	0-6.5
BPS15-5E	/		95/75/50	0,41/0,33/0,23	5	0-5
BPS15-6E	/		105/80/55	0,43/0,36/0,26	6	0-6
BPS15-7E	/	135/115/80	0,58/0,53/0,38	6.5	0-6.5	

Model	Pipe Distance (mm)	Input power P1(W)	Current (A)		Max. head (m)	Head range (m)
			220V/50Hz	380V/50Hz		
XP25-12-200	200	300	1,5	/	12	0-12
XP25-16-220	220	500	2,4	/	16	0-16
XP32-12-220	220	500	2,2	/	12	0-12
XP32-16-230	230	700	3,4	1,6	16	0-16
XP32-18-230		1000	4,9	2	18	0-18
XP40-9F-250	250	500	2,2	/	9	0-9
XP40-12F-250		700	3,4	1,6	12	0-12
XP40-16F-250		1000	4,9	2	16	0-16
XP40-18F-250		1300	5,8	2,9	18	0-18
XP50-9F-280	280	700	3,4	1,6	9	0-9
XP50-12F-280		1000	4,9	2	12	0-12
XP50-16F-280		1300	5,8	2,9	16	0-16
XP65-9F-300	300	1000	4,9	2	9	0-9
XP65-12F-300		1300	5,8	2,9	12	0-12

17. Pump installation

The motor shaft must be kept in horizontal direction when installing; the liquid flowing direction in pipe must be same with the arrow marked on pump body.



16. Cautions:

System temperature (t1) must be higher than environment temperature (t2) to avoid pump condensation resulting in short circuit of the junction box. The pump of different models has its own liquid transporting temperature range. Please refer to the temperature instructions on the product label.

lowest transporting liquid temperature - - - - 2°C
 XP series highest transporting liquid temperature - - - - 110°C
 XPS series highest transporting liquid temperature - - - - 110°C
 BPS series highest transporting liquid temperature - - - - 95°C

lowest environment temperature.....2°C
 highest environment temperature.....40°C

If the highest temperature of the pump liquid is allowed at 110°C, please refer to the following

		$t_1 \geq t_2$							
TF110	t_1 °C	2	40	60	80	90	100	105	110
	Max t_2 °C	2	40	40	40	40	40	40	40

Model	Pipe Distance (mm)	Input Power P1(W)	Current (A)			Max. head (m)	Head range (m)
			220V 50Hz	220V 60Hz	127V 60Hz		
XP 15-4-130	130	60 / 45 / 30	0.26/0.20/0.13	/	/	4	0-4
XP 15-6-130		90 / 65 / 45	0.40/0.30/0.20	0.40/0.30/0.20	0.80/0.65/0.4	6	0-6
XP 15-9-140	140	120 / 85 / 60	0.48 / 0.38/0.26	0.48 / 0.38/0.26	0.95/0.66/0.4	9	0-9
XP 20-4-130	130	60 / 45 / 30	0.26/0.20/0.13	/	/	4	0-4
XP 20-6-130		90 / 65 / 45	0.40/0.30/0.20	0.40/0.30/0.20	0.80/0.65/0.4	6	0-6
XP 25-4-130		60 / 45 / 30	0.26/0.20/0.13	/	/	4	0-4
XP 25-6-130		90 / 65 / 45	0.40/0.30/0.20	0.40/0.30/0.20	0.80/0.65/0.4	6	0-6
XP 25-4-180	180	60 / 45 / 30	0.26/0.20/0.13	/	/	4	0-4
XP 25-6-180		90 / 65 / 45	0.40/0.30/0.20	0.40/0.30/0.20	0.80/0.65/0.41	6	0-6
XP 32-4-180		60 / 45 / 30	0.26/0.20/0.13	/	/	4	0-4
XP 32-6-180		90 / 65 / 45	0.40/0.30/0.20	0.40/0.30/0.20	0.80/0.65/0.41	6	0-6
XP 20-12-180	180	245/210/140	1.04/0.92/0.63	1.04/0.92/0.63	1.80/1.60/1.10	12	0-12
XP 25-8-180		200/185/145	0.83/0.78/0.62	0.83/0.78/0.62	1.65/1.55/1.45	8	0-8
XP 25-12-180		245/210/140	1.04/0.92/0.63	1.04/0.92/0.63	1.80/1.60/1.10	12	0-12
XP 80-180 XM		245/210/140	1.04/0.92/0.63	1.04/0.92/0.63	1.80/1.60/1.10	8	0-8

III . Installation and Cautions

1. Make sure that the pipe system is securely connected before installation and verify that the impurities, soldering leftover and wastes have been cleaned within the pipes.
2. Make sure the pump is located in dry and ventilation environment to avoid short circuit due to moisture or splashing into the casing, and guarantee its availability to service and replacement.
3. The protection cover must be added, for the requirement of outdoor installation: while actions must be taken to avoid being splashed and to prevent electric shock risk in indoor installation. Warning: do not install in bathroom to prevent vapor or water or moisture from going into the junction box resulting in electric leakage.
4. When complete installing the pump, connect the power supply as pilot run and set the speed adjusting switch at rated max grade to check if the starting is normal, but the pilot running time can not be over 10 seconds so as to avoid idle running influencing shelf life of the bearing.
5. We strongly suggest you esteemed users to install shutoff valves at intake and outlet ports for the sake of following pump service and maintenance.
6. When the pump is supplying water to match the heat system, do not touch the pump and/or other pipes to avoid burning.
7. The power plug must be strictly grounded. Securely connect the GND pin of the power plug to the power plug grounded hole. Do not attempt to defeat the GND plug of the pump.
8. The striking security caution markings must be set up during pump working to avoid any accident.
9. The power supply must be firstly disconnected before adjusting pump location or before any action that may touch the pump during the pump is working to avoid any accident.
10. Regularly check the pump and timely replace in case of any damage.
11. Regularly check the insulating resistor of the pump, the insulating resistor in cooled state can not be lower than 50M Ω ; and the insulating resistor can not be lower than 5 M Ω when it closes to working temperature.
12. The power cable can only be replaced with corresponding cords or the dedicating components.
13. In Winter, when the environment temperature is below 0°C, the water within the pipes must be exhausted thoroughly if the pump ceases working to avoid pump frost crack.
14. The heat supply pipes can not be always compensated with non-soft water to avoid the calcareous that water contained increasing even jam the impeller.

15. Pumping Liquid

The medium transmitted must be the soft water, thin clean non-erosive, non-explosive. non-solid particle contained liquid without fiber and minerals, the PH is 6.5~8.5.

