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WH Water pump

Servo, energy-saving

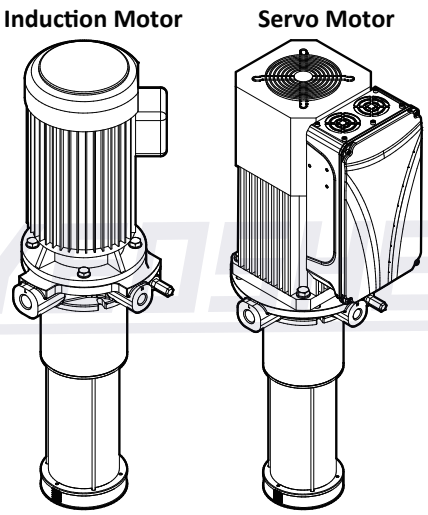
High-pressure through spindle coolant unit

YEOSHE HYDRAULICS TECHNOLOGY CO.,LTD.

WH High Pressure Central Water Pump

Product name

High Pressure Central Water Pump, specifically used in machining equipment. The tools have a central water outlet hole, significantly improving cutting performance. It uses over 3% water-soluble cutting fluid or cutting oil.



Product Description

Highly integrated and compact

Unlike Traditional Coolant Through Spindle System, this vertical design integrates the water tank, filter barrel, filter, and pump into one product, occupying only 25% of the space and allowing direct installation in the machine's water tank.

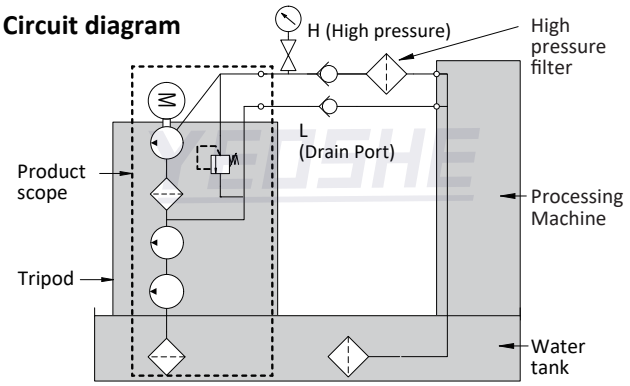
High pressure, energy-saving

The pump's high-pressure plunger withstands up to 70 kg/cm2. Its electric control allows on-demand switching, enhancing energy efficiency.
Standard filtration : 400 mesh (38 µm).
Optional high-pressure filter : 1250 mesh (10 µm).

Long lifespan, low wear

A high-precision filter safeguards the plunger, while the physical cleaning structure prolongs the filter's lifespan, and reduce its replacement rate.

Circuit diagram



Specification

Pump Type	Axial Piston Pump	-
Displacement	H High-pressure Outlet : 16、19、24、28 cc/rev	-
	L Drain Port : 10 cc/rev	-
Maximum Pressure	70kg/cm²	When the outlet is closed, the pressure reflects the operating pressure efficiency, which may decrease due to the outlet orifice size.
Pumped Fluid	For water-soluble cutting fluid or cutting oil with a concentration above 3 %. Viscosity : 2–15 cSt	Water has a viscosity of approximately 1 cSt and lacks anti-rust properties; it must not be used.
Max. Rotational Speed	2000 RPM	-
Filtration Accuracy	400Mesh (38 µ m)	For high-pressure discharge, a high-precision filter can be optionally installed.
Max. Passable Particle Size	Diameter : 2 mm	Particles larger than 2 mm will be blocked, while particles 2 mm or smaller will be drawn in and discharged through the drain outlet.
Noise Level	56~76 dB	1.5 meters from the water outlet pump

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WH High Pressure Central Water Pump

Order Model

Required motor HP(KW)	60HZ 1740RPM				50HZ 1450RPM			
	Maximum Pressure kg/cm²	Pump Output cc/rev	Pump Disp. LPM (L/min) 1740RPM	Model Specification	Maximum Pressure kg/cm²	Pump Output cc/rev	Pump Disp. LPM (L/min) 1450RPM	Model Specification
1 (0.75)	15	16	27.84	※ WH216S1-17A15	18	16	23.2	※ WH216S1-07A18
2 (1.5)	21	24	41.76	※ WH224S1-15A21	25	24	34.8	※ WH224S1-15A25
	27	19	33.06	※ WH219S1-15A27	32	19	27.55	※ WH219S1-15A32
	32	16	27.84	※ WH216S1-15A32	38	16	23.2	※ WH216S1-15A38
3 (2.2)	27	28	48.72	※ WH228S1-22A27	32	28	40.6	※ WH228S1-22A32
	32	24	41.76	※ WH224S1-22A32	38	24	34.8	※ WH224S1-22A38
	40	19	33.06	※ WH219S1-22A40	48	19	27.55	※ WH219S1-22A48
	48	16	27.84	※ WH216S1-22A48	56	16	23.2	※ WH216S1-22A56
5 (3.7)	46	28	48.72	※ WH228S1-37A46	55	28	40.6	※ WH228S1-37A55
	54	24	41.76	※ WH224S1-37A54	65	24	34.8	※ WH224S1-37A65
	68	19	33.06	※ WH219S1-37A68	80	19	23.2	※ WH219S1-37A80
7.5 (5.5)	68	28	48.72	※ WH228S1-55A68	83	28	40.6	※ WH228S1-55A83
	80	24	41.76	○ WH224S1-55A80	95	24	34.8	○ WH224S1-55A95
	98	19	33.06	○ WH219S1-55A98	110	19	23.2	○ WH219S1-55A110
10 (7.5)	92	28	48.72	○ WH228S1-75A92	110	28	40.6	○ WH228S1-75A110
	105	24	41.76	○ WH224S1-75A105	123	24	34.8	○ WH224S1-75A123
	130	19	33.06	○ WH219S1-75A130	155	19	23.2	○ WH219S1-75A155

※ In stock, regular item, ○ Customizable

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WH High Pressure Central Water Pump

Model description

WH : High Pressure Central Water Pump

2 : SIZE 2

※ 16 : 16 (cc/rev)
※ 19 : 19 (cc/rev)
※ 24 : 24 (cc/rev)
※ 28 : 28 (cc/rev)

※ In stock, regular item
◯ Customizable

▲ When induction motors or servo motors are not included, the customer may choose the shaft type freely.
▲ When induction motors or servo motors are included, the shaft type is fixed according to the selected motor.
S1 : Gear type 13T DP16/32 (for induction motor)
K1 : Key type ϕ22.22×6.35
K2 : Key type ϕ19.05×4.76 (for 2HP servo motor)

0 : Without motor (customer provides)
07 : 0.75 (KW)=1 HP 15 : 1.5 (KW)=2 HP
22 : 2.2 (KW)=3 HP 37 : 3.7 (KW)=5 HP
55 : 5.5 (KW)=7.5 HP 75 : 7.5 (KW)=10 HP

N : No voltage
A : Three-phase induction motor AC220V 50/60HZ
B : Three-phase induction motor AC220V 50/60HZ CE certified label with IE3 efficiency rating
S : Servo motor (external controller) AC220V
T : Servo motor (integrated controller) AC220V

Order model :

Series	Model body	Pump discharge rate	Shaft type	-	Required motor	Voltage	Maximum Pressure	Control	-	Special code
WH	2	16	S1	-	22	A	40	F	-	

00 : No pressure set
(requires customer-provided motor)

15 : 15 kg/cm² 21 : 21 kg/cm²
27 : 27 kg/cm² 32 : 32 kg/cm²
40 : 40 kg/cm² 46 : 46 kg/cm²
48 : 48 kg/cm² 54 : 54 kg/cm²
68 : 68 kg/cm² 80 : 80 kg/cm²

(Pressure when the outlet is closed.)
The above pressure must match the motor and discharge rate.
(please refer to the specification sheet.)

No notation : Standard type
F : Includes frequency converter

Special code usage :
For customer-specific product combinations (water pump, accessories, stand). When you purchase the same multiple items more than once, we can create a dedicated order code for you to facilitate ordering.

This model does not include accessories or a stand.

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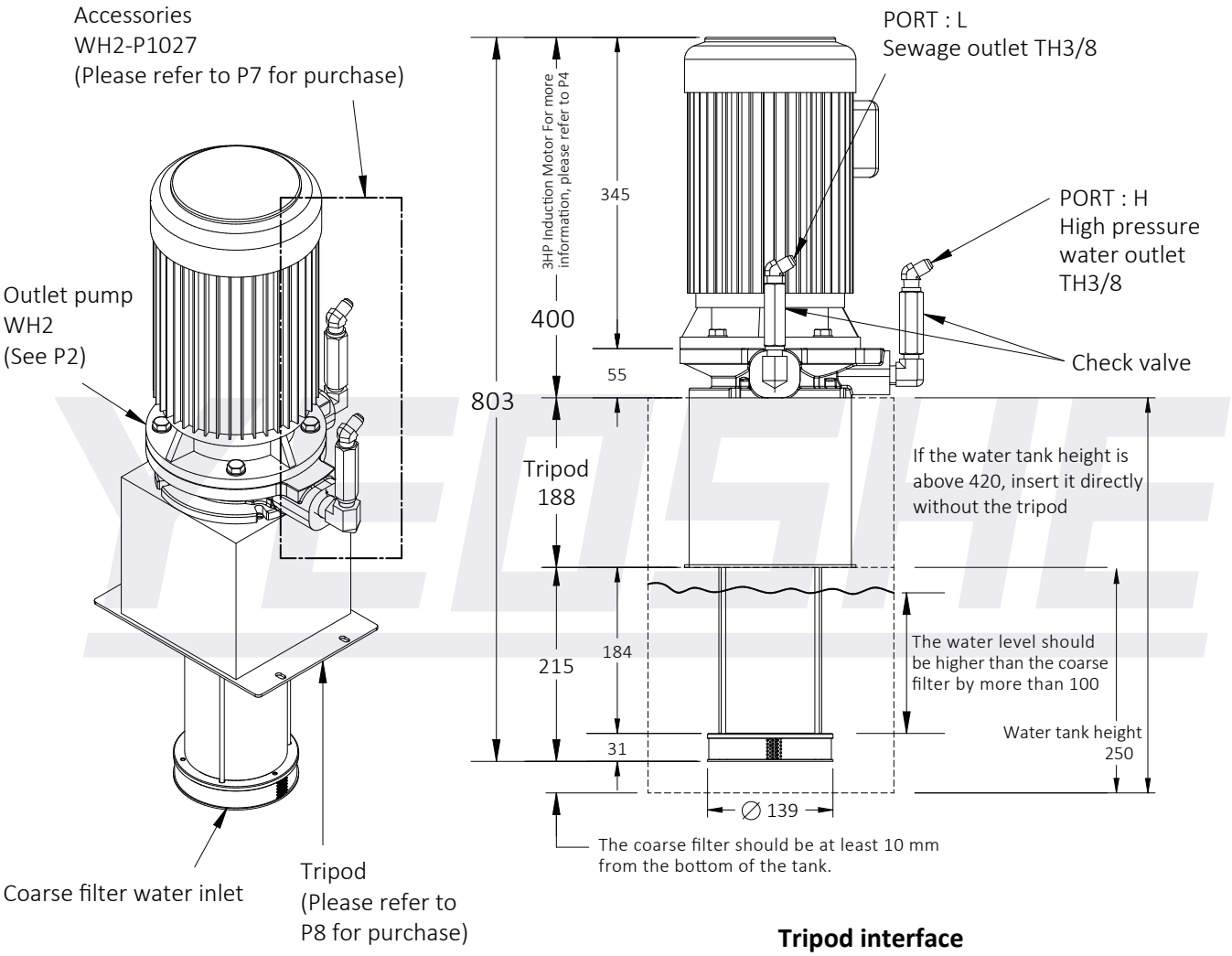
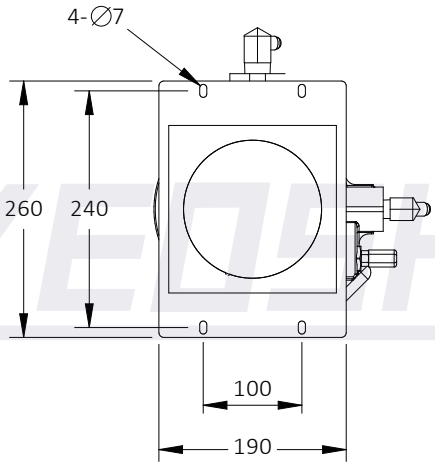
WH High Pressure Central Water Pump

Appearance size WH2 (Full Configuration)

Complete configuration, ready for direct installation on the water tank.



Tripod interface



Instructions for use

1. It is recommended to install the High Pressure Central Water Pump with a mounting bracket (see P9), positioned at the end of the filtration system. The inlet should be submerged at least 100 mm below the liquid surface.
2. The H high-pressure outlet should be connected with a check valve and a pressure gauge (see P8 Accessories), and linked to the machine tool's center-through coolant line.
3. The L drain port should be connected with a check valve (see P8 Accessories), and routed to the front end of the machine's filtration system.
4. Initial pressure setting: The factory default pressure is 0. After startup and air removal, adjust the pressure—turning clockwise increases pressure, counterclockwise decreases it.

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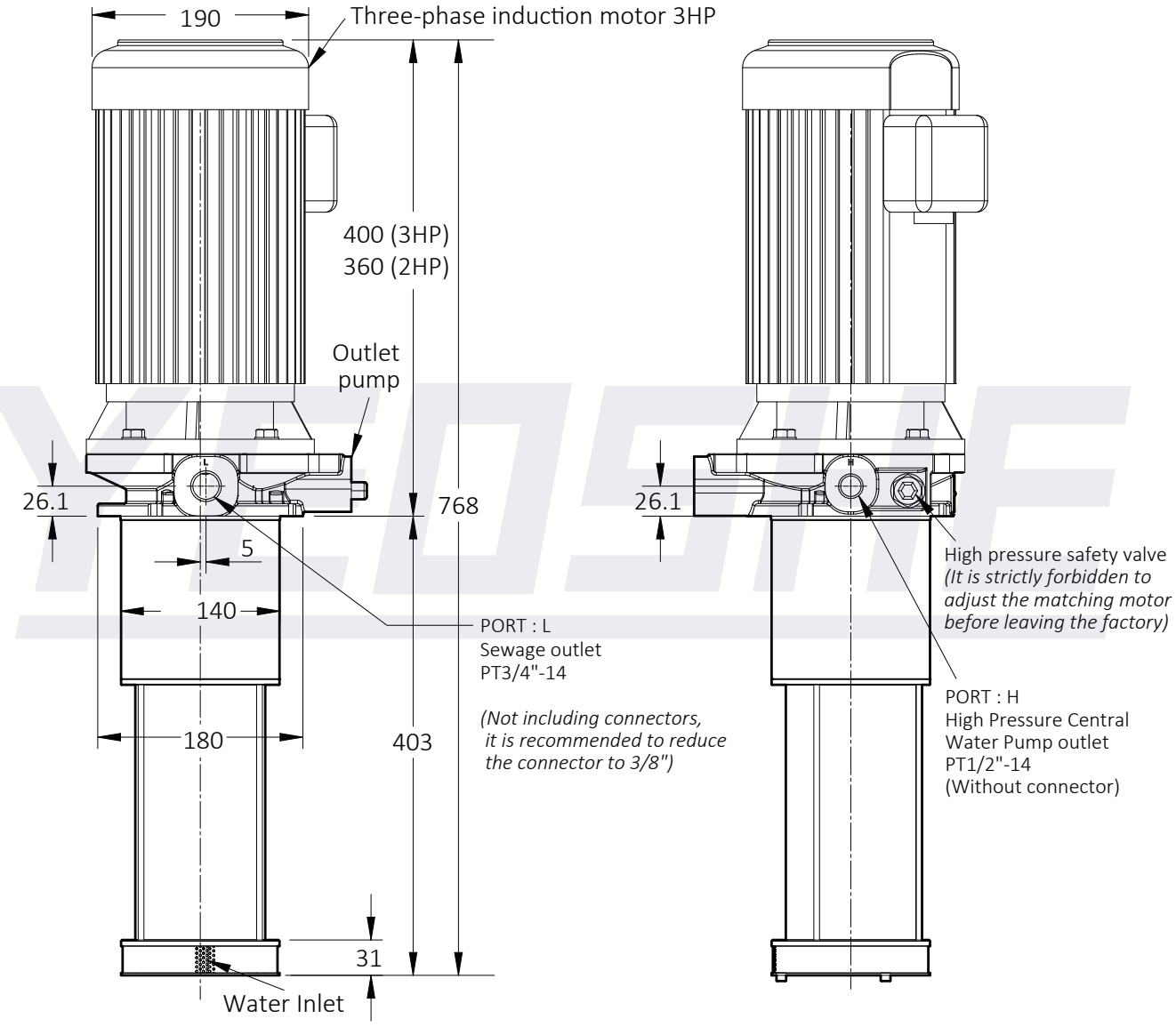
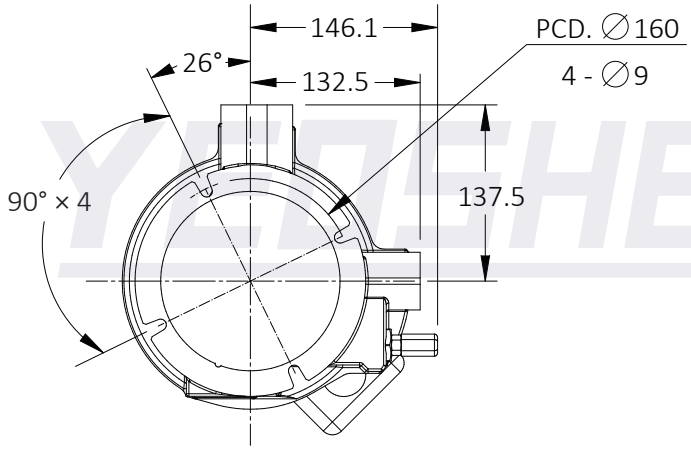
Appearance size WH2 (High Pressure Central Water Pump and three-phase induction motor)

During use, pipeline accessories (refer to P7) and a stand (refer to P8) should be utilized.





Bottom View

Additionally included screws :
M8 × P1.25 × 20mm length × 4pcs.

Flat washers : ∅8.5 × ∅16 × T1.5 × 4pcs

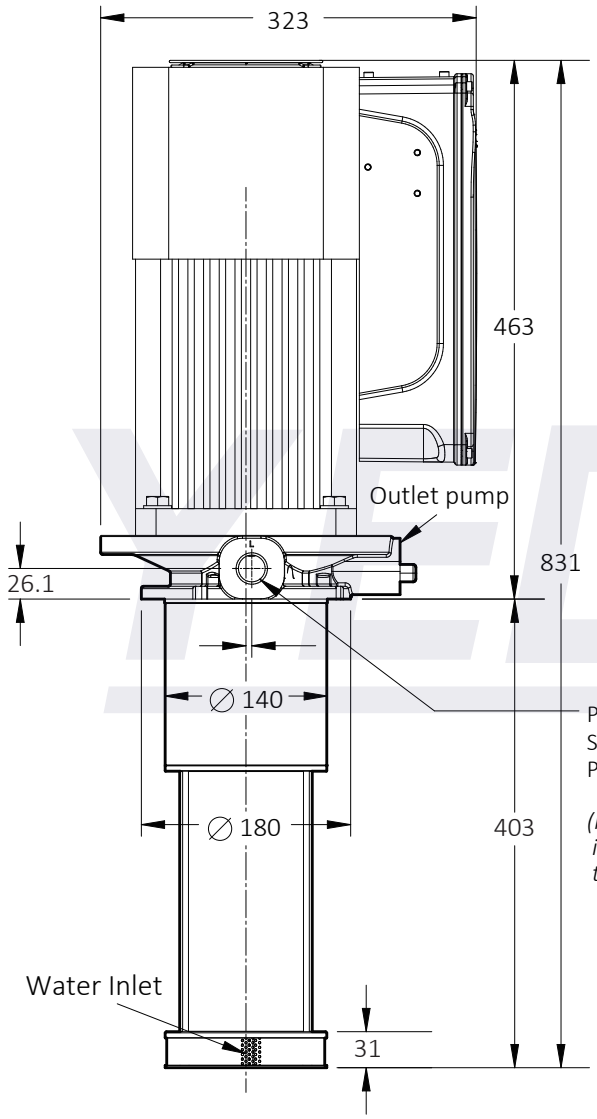
model	weight
WH2**-0* No motor	25 KG
WH2**-15*	45.5 KG
WH2**-22*	52.5 KG
WH2**-37*	57.5 KG

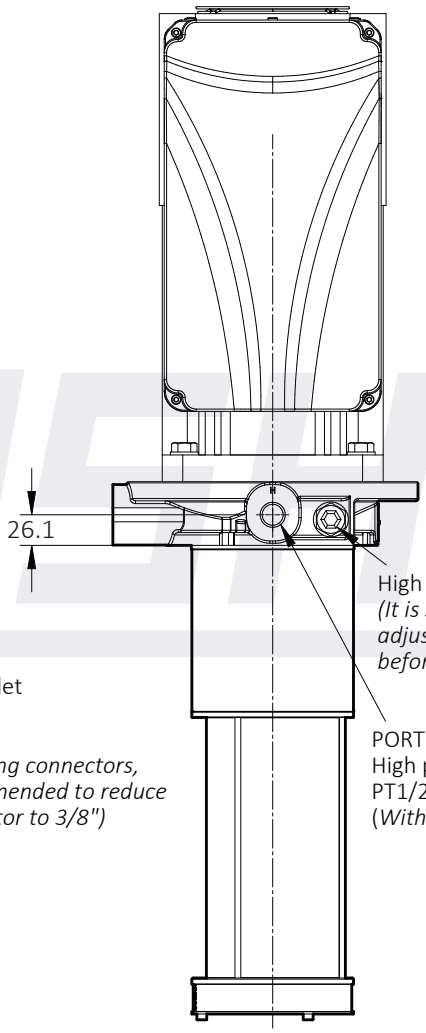
The weight is for the central water pump and motor, excluding accessory sets and the stand.

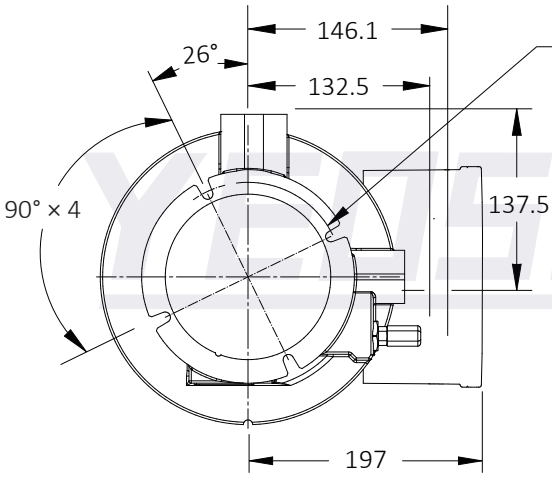
WH High Pressure Central Water Pump

Appearance size WH2 (High Pressure Central Water Pump with integrated servo motor controller)

During use, pipeline accessories (refer to P7) and a stand (refer to P8) should be utilized.







Additionally included screws :
M8 × P1.25 × 20mm length × 4pcs.

Flat washers : ∅8.5 × ∅16 × T1.5 × 4pcs

Bottom View

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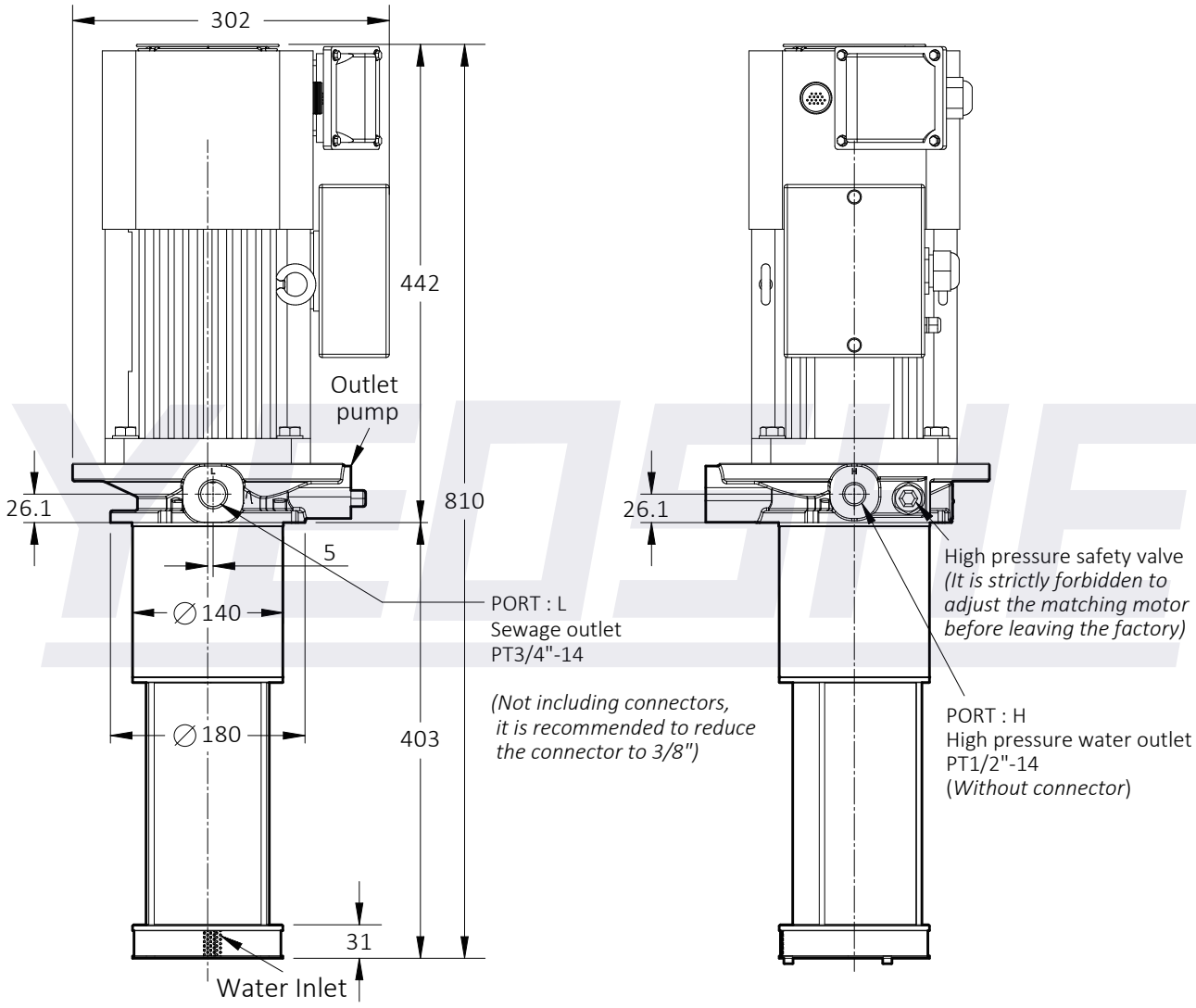
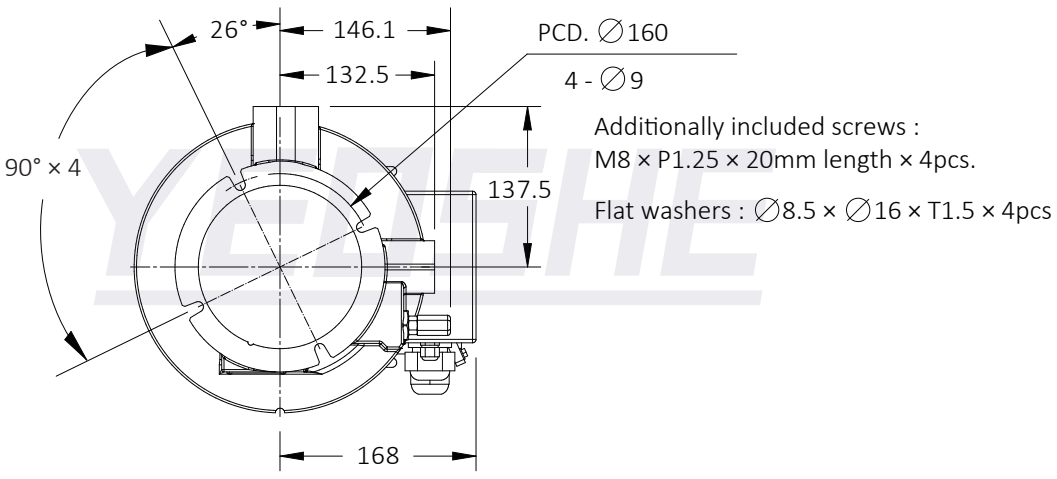
WH High Pressure Central Water Pump

Appearance size WH2

(High Pressure Central Water Pump with servo motor controller located externally)

During use, pipeline accessories (refer to P7) and a stand (refer to P8) should be utilized.





Bottom View

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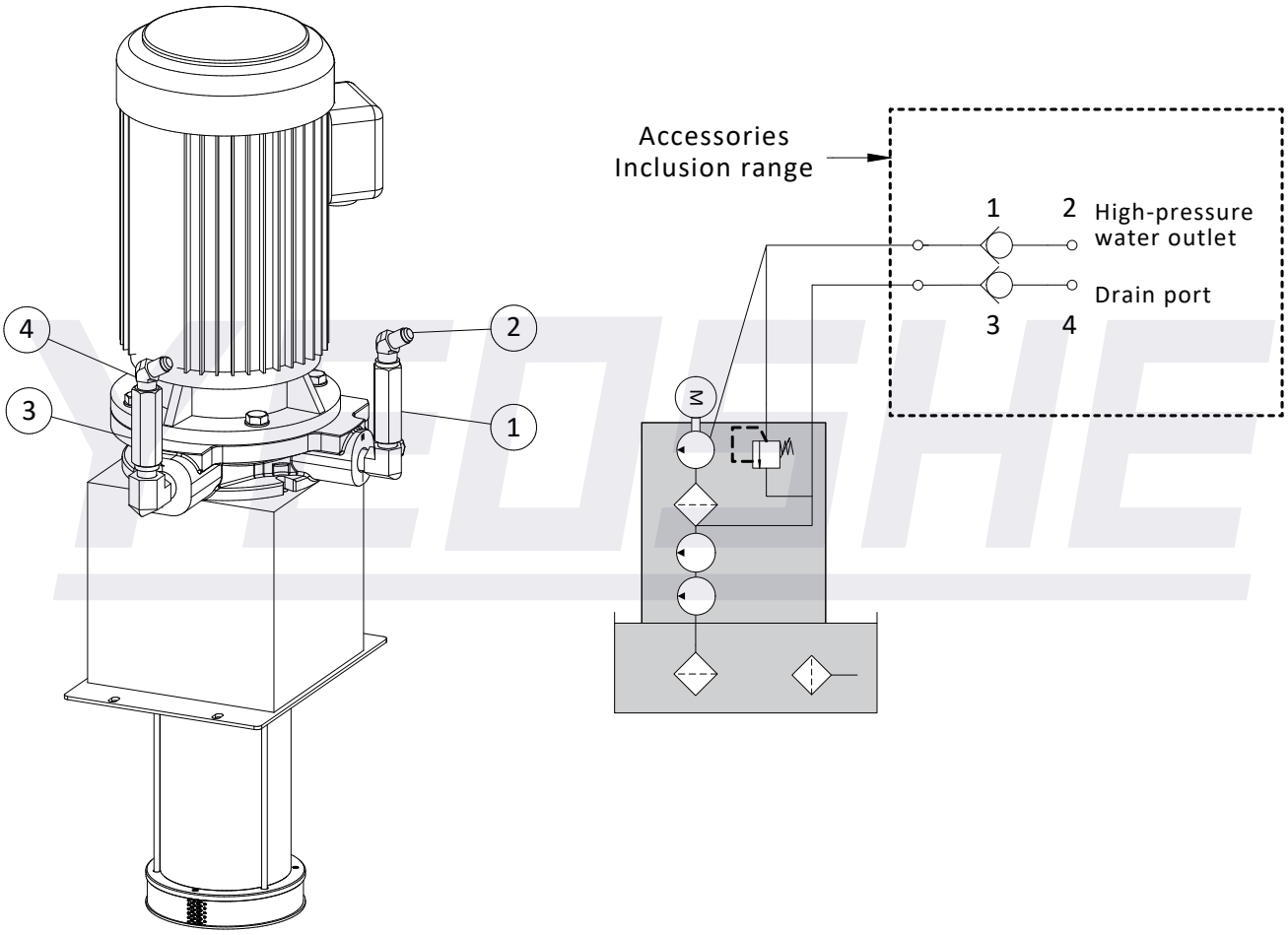
Accessories combination WH2-P1026

(Standard accessories)



WH2-P1027

Standard accessories

1. Equipped with a check valve to prevent cutting fluid from flowing back into the tank, avoiding delayed water output.
2. Equipped with a pipe connector for easy connection to the machine.

Item	Product	Specifications
1	Check Valve	3/8"
2	Connector	45° TH3/8"
3	Check Valve	3/8"
4	Connector	45° TH3/8"

For other configuration needs, special orders are required.
Note 1: TH refers to a 37° MALE connector (ISO 8434-2).

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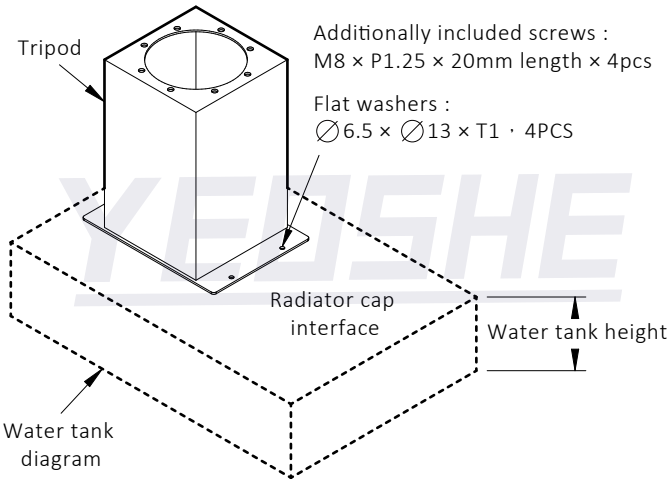
Tripod size

Tripod Model Specification Table

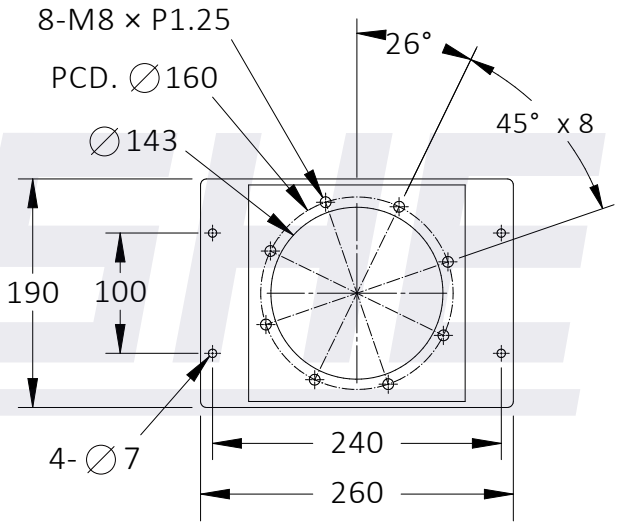
Model	Water Tank Height (B)	Stand Length (L)	External (S)
Without stand	420	--	--
WH2-F250	250	188	215
WH2-F200	200	238	165



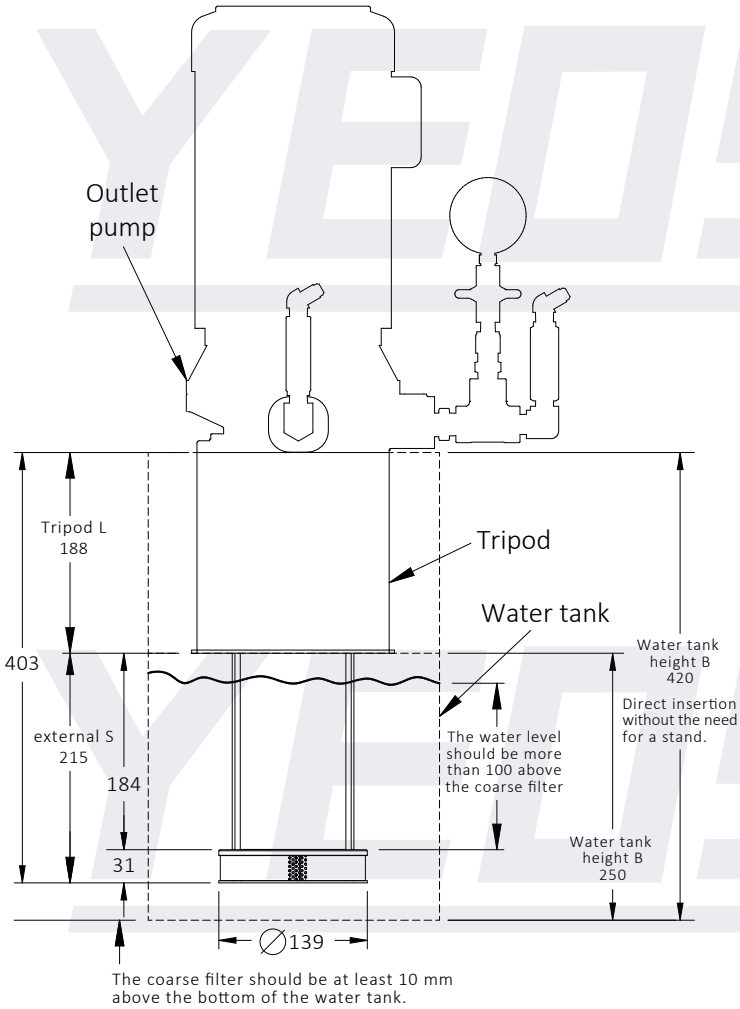
Tripod Description

1. If the water tank height reaches 420 or above, the water pump can be directly inserted for use. If the height is less than 420, a stand is required.
2. The water level should be more than 100 above the coarse filter.
3. The coarse filter should be at least 10 mm above the bottom of the water tank.

Pump interface

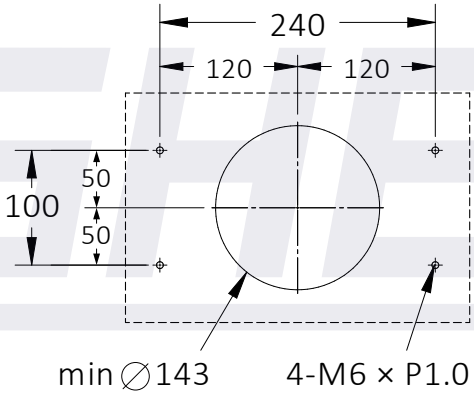


Tripod installation (schematic)



Water tank cover interface

(Requires configuration at the end the of filtration system)



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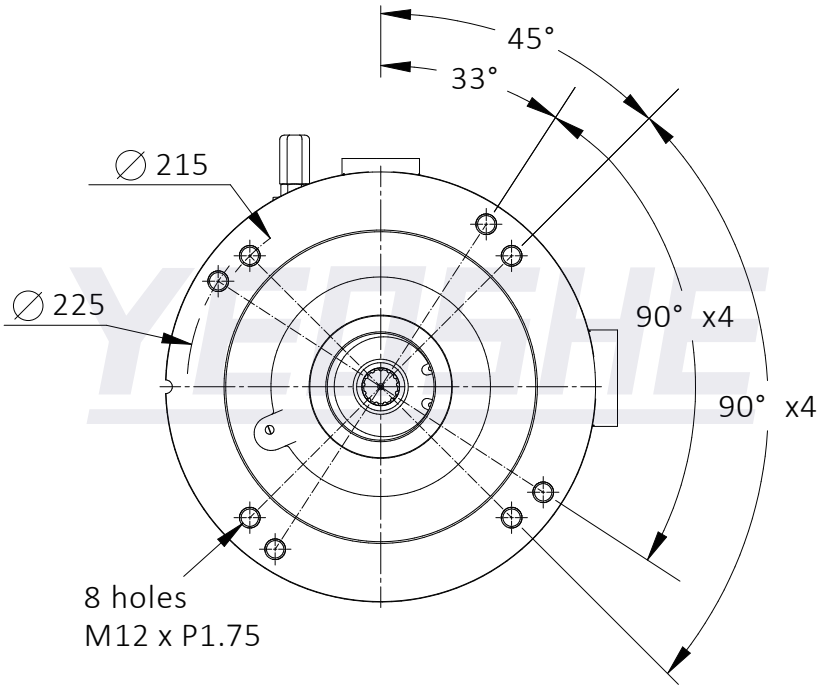
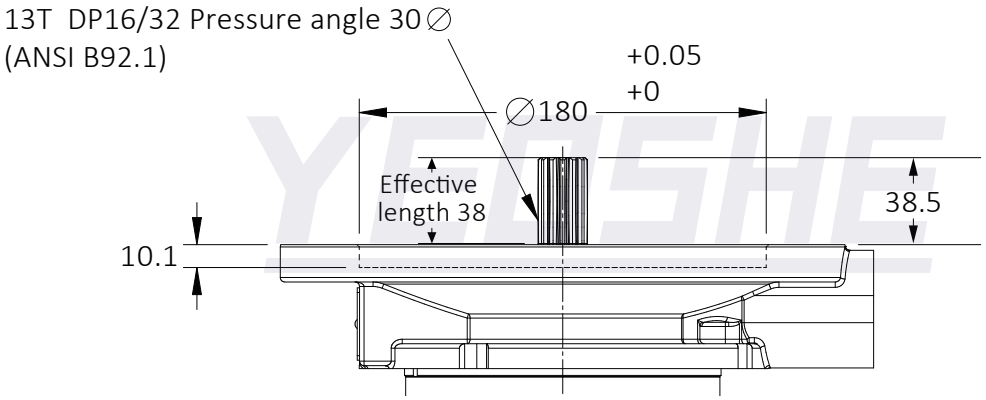
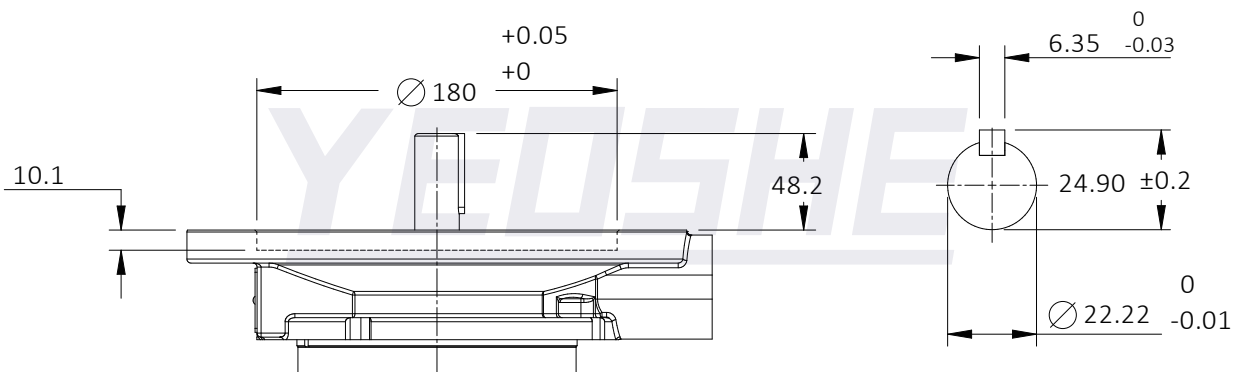
Water Outlet Pump Interface and Shaft



Spindle type : S1



Spindle type : K1



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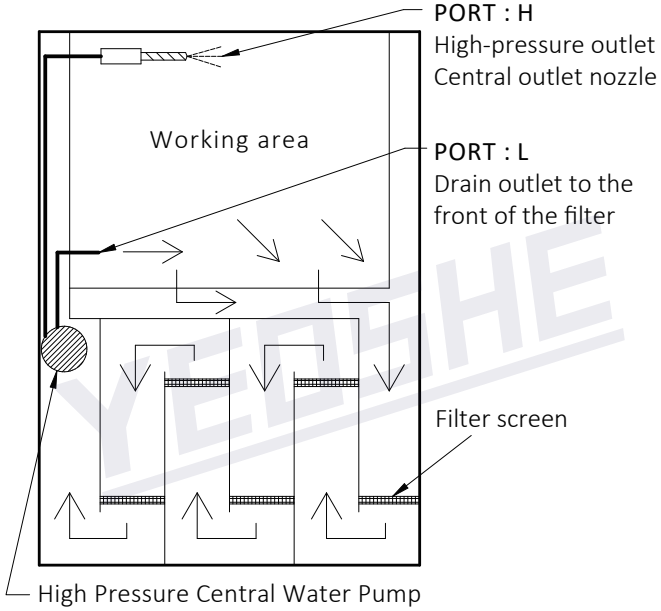
WH High Pressure Central Water Pump

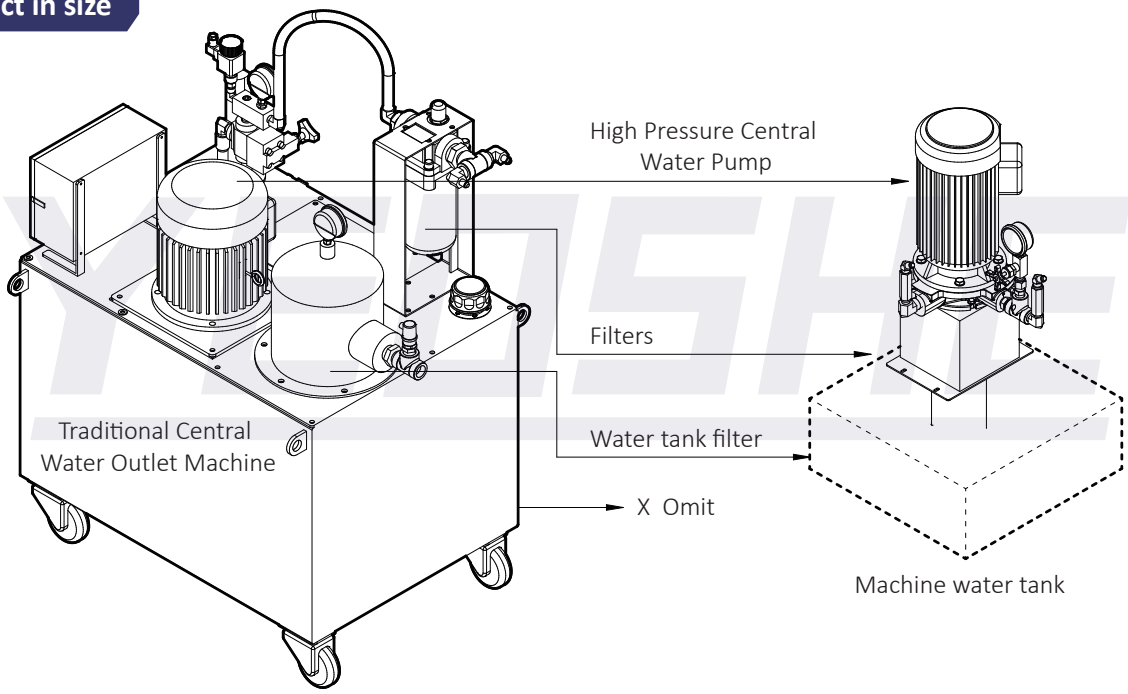
Instructions for use

1. It is recommended to install the High Pressure Central Water Pump using a mounting bracket (see P8 Bracket), positioned at the end of the filtration system. The inlet should be submerged more than 100 mm below the liquid surface.
2. The H high-pressure outlet should be connected with a check valve and a pressure gauge (see P7 Accessories), and routed to the center-through coolant line of the cutting tool.
3. The L drain port is recommended to be connected with a check valve (see P7 Accessories) and linked to the front section of the machine's filtration system. Do not connect directly for suction return.
4. Initial pressure setting: Factory default pressure is set to 0. After startup and air removal, adjust the pressure—turn clockwise to increase pressure, counterclockwise to decrease.
5. The High Pressure Central Water Pump is equipped with an internal filter for protection. It must also be used in conjunction with an external filtration system. The external filter mesh should be cleaned regularly to ensure long service life.

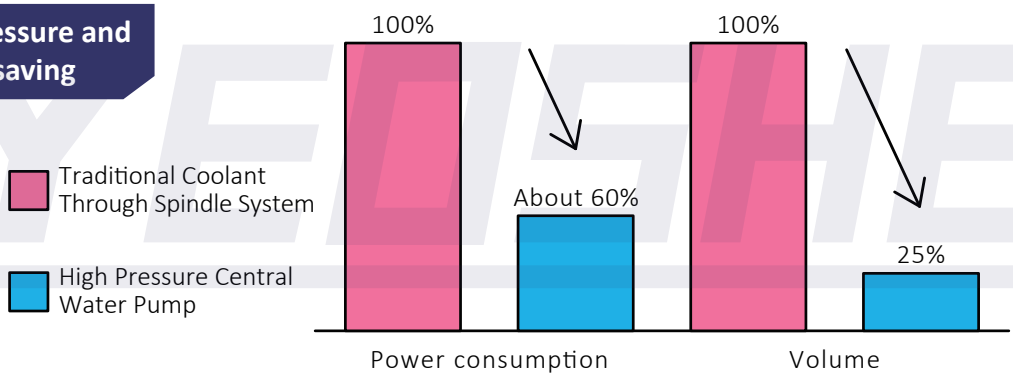


Installation configuration diagram (schematic)

Compact in size



High pressure and energy-saving



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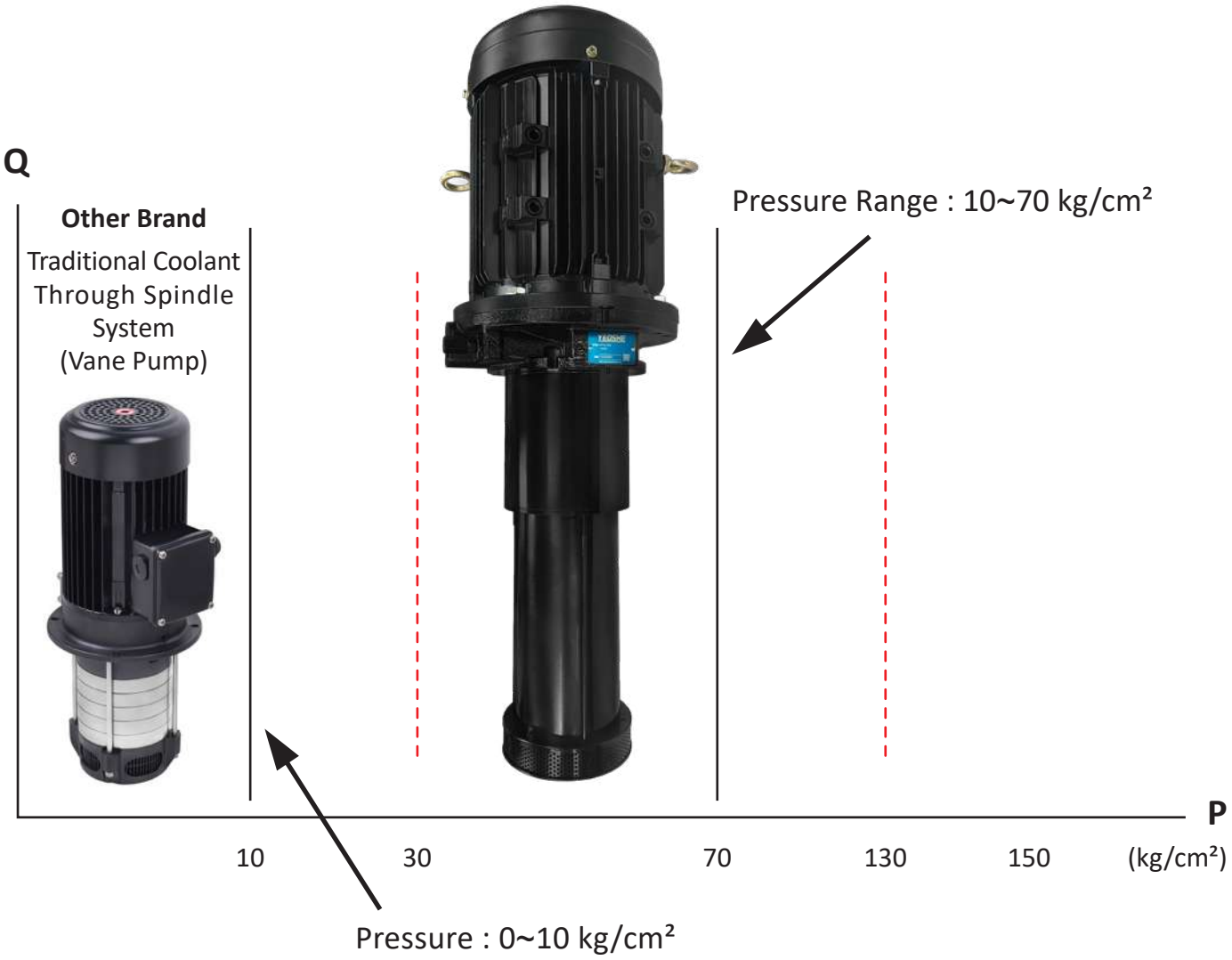
WH High Pressure Central Water Pump

Product Pressure Range

WH High Pressure Central Water Pump



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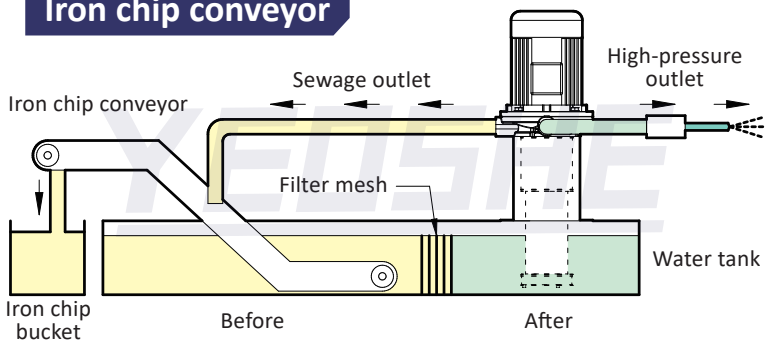
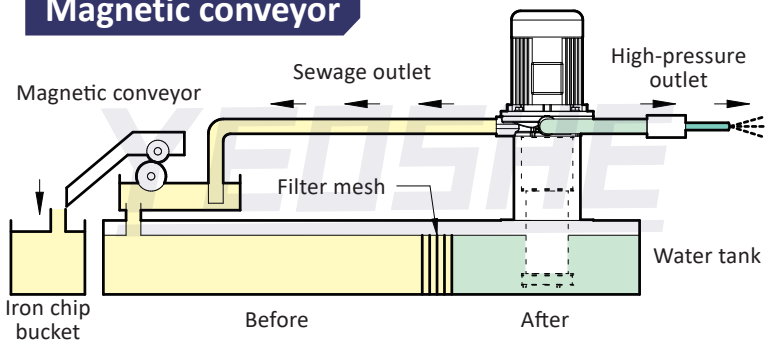
Pipeline configuration

Iron chip conveyor



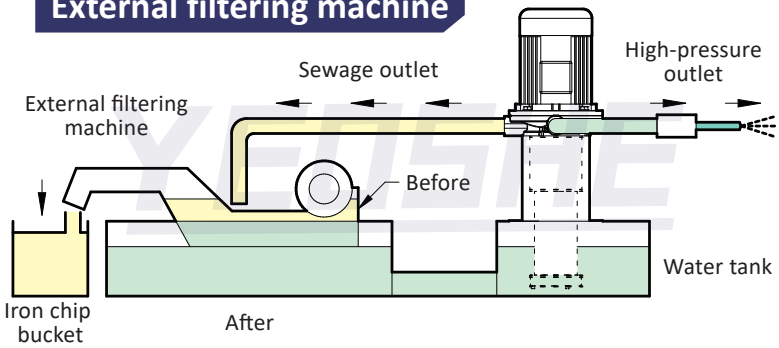
- Applicable Machines :
  NC Lathe, Milling Machine
- Chip Recovery :
  Filter iron chips through an iron chip conveyor
- Type of Chips :
  Larger iron chips or iron powder and particles
- Filtration Method :
  Filter mesh, replace regularly

Magnetic conveyor



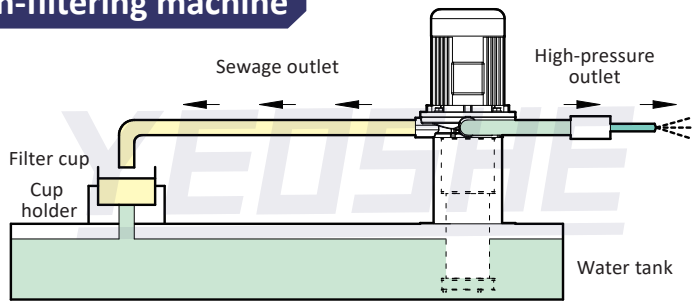
- Applicable Machines :
  Grinding Machine
- Chip Recovery :
  Filter iron powder through a magnetic conveyor
- Type of Chips :
  Smaller magnetic iron chips or iron powder
- Filtration Method :
  Filter mesh, replace regularly

External filtering machine



- Applicable Machines :
  External Filtering Machine
- Chip Recovery :
  Filter non-magnetic impurities through an external filtering machine
- Type of Chips :
  Copper, aluminum, or non-magnetic dust
- Filtration Method :
  Filter mesh, replace regularly

Non-filtering machine



- Applicable Machines :
  Traditional Machines (Traditional Drill Press)
- Chip Recovery :
  Isolate iron powder particles through a filter cup
- Type of Chips :
  General iron powder and particles
- Filtration Method :
  Filter cup, replace regularly

YEOSHE BEST CHOICE Efficient Performance
Innovative Technology Reliable Quality and Service

YEOSHE

油聖液壓科技有限公司
YEOSHE HYDRAULICS TECHNOLOGY CO.,LTD.

413 台灣台中市霧峰區霧工一路68號
No.68, Wugong 1st Rd., Wufong Dist., Taichung City, Taiwan, 413
TEL +886-4-2333339 FAX +886-4-23333817 E-mail yeoshe@yeoshe.com.tw

東莞辦事處 Dongguan
CP +86-13600266957 (Miss Zhong) E-mail yeoshe@yeoshe.com.tw

上海辦事處 Shanghai
CP +86-15021931394 (Mr. Wu)
CP +86-18939716986 (Mr. Chen)

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www.yeoshehydraulic.com