

NOP® FILTER PUMP CS

Wear Resistant Type Medium Pressure Unit



Double-cyclone filter

Two layers of double cyclones (one large cyclone and six small cyclones) remove swarf from the coolant fluid.



Trochoid™ pump / 2.0 MPa

A rotor turning in a trochoidal curve generates pressure to suck and discharge fluid. This is an extremely efficient self-priming pump.

■ Specification

TOP-YTH1500A3-S216CVD20

Motor specification	Pump specification
1.5 kW	Trochoid™ pump, 16 cc/rev
AC200/200/220/230V 50/60/60/60Hz	Flow rate (ℓ/min) 24.0: 50 Hz / 28.8: 60 Hz
3 phase electric induction motor (IE3) with CE marking	Maximum pressure (MPa) 2.0: 50 Hz / 2.0: 60 Hz

Filtration method	Relief valve	Relief pressure setting	Approximate weight (Kg)
Double-cyclone type	External return type	2.0 MPa	39

*For further details about the local motors, please contact our overseas branch or subsidiaries

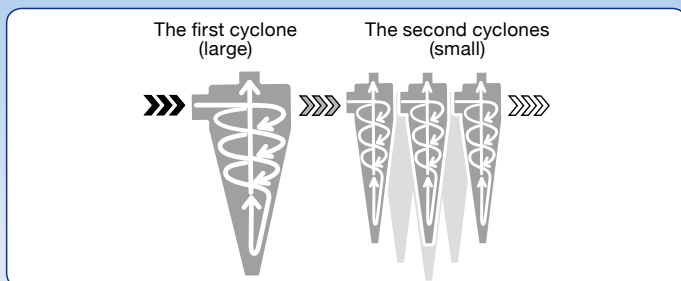
■ Features

All-in-one Medium-pressure Coolant Pump

- Maximum operating pressure: 2.0 MPa
- Maximum flow rate: 28.8 liters/min
- No suction filter is required
- No plumbing is required to connect to cyclone filter

A proprietary double-cyclone system removes swarf. The first cyclone removes larger debris, while the second cyclones remove smaller particles. According to our internal testing, the line-filter cleaning cycle is extended by 24.

*Swarf larger than 20 μm can be removed (When using water-soluble coolant fluid).



Filtration performance (Nominal value)

Suction strainer	3 mm (Solids larger than this must be removed from the tank)
Filter	Water-soluble coolant fluid 50 μm: 95% (Specific weight 2.7) 100 μm: 99.9% (Specific weight 2.7)

*The filtration performance above can only be achieved when running the pump continuously. (Intermittent running is not allowed)



High-efficiency Trochoid™ Pump

- Compatible fluid type
 - Water-soluble cutting fluids
 - *Not for straight oils, lubricant oils or fuel oils
 - *Not for clear water, demineralised water, aqueous solutions and viscous fluids without rust-preventive property, corrosive fluids, and solvents
- Relief valve is built into the unit

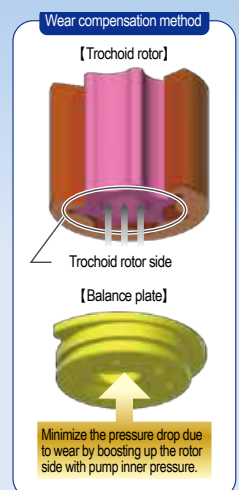
CS Type (Wear Resistance)

For its special wear resistant structure, CT type can be installed on coolant tanks of machines which are machining materials which generate hard and abrasive swarf.

- Balance plate
Pump generates inner pressure to press the balance plate toward the Trochoid rotor side, which helps in reducing the clearance created due to wear and thereby minimize the pressure drop, ensuring desired performance for a longer time

- Shaft and bearing reinforcement
Improved wear resistance by employing sprayed ceramic on shaft bearing area.

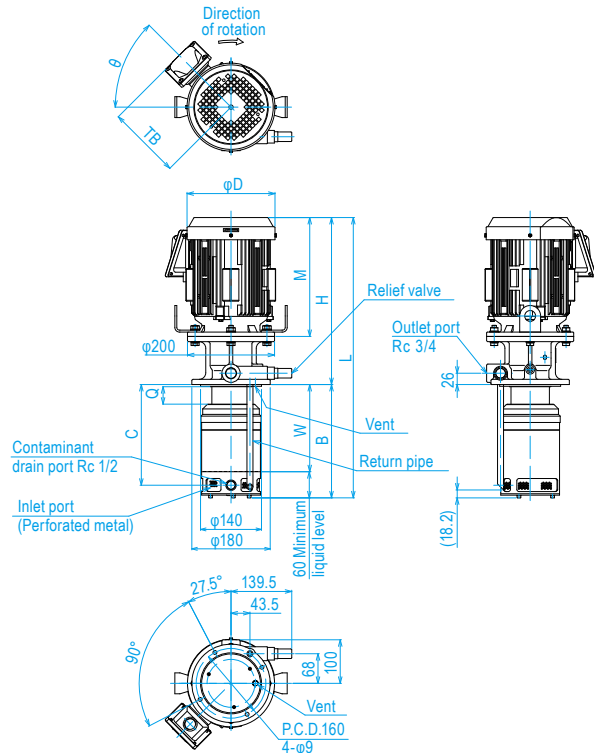
- Double seal & cartridge system
Seal Area is reinforced to prevent leakage and Cartridge system ensures ease of replacement



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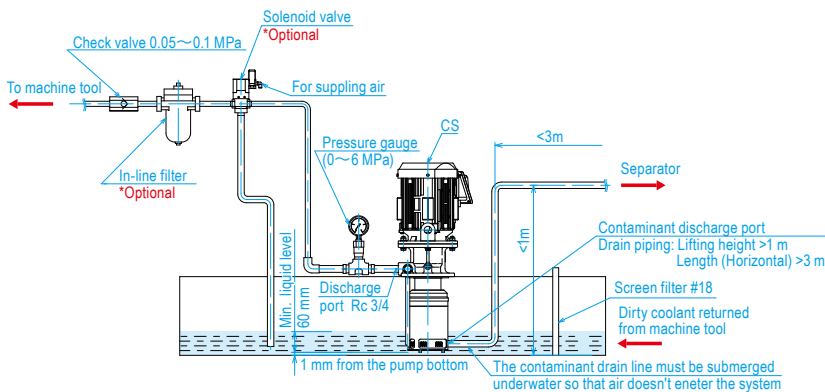
■ Dimensional Drawing (Typical / Motor type : A3)



(mm)

Model	Item	L	B	C	W	Q	H	M	φD	θ (°)	TB
YTH1500A3-S216CVD20		643.7	260.2	231.2	200.2	40	383.5	273	202	45	168

A Sample System Layout

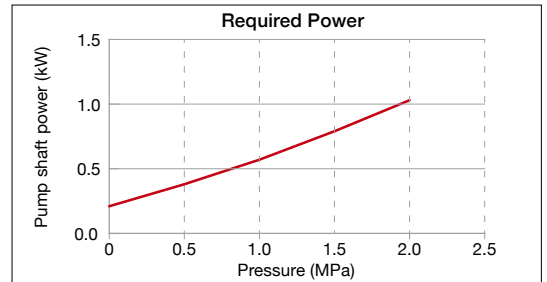
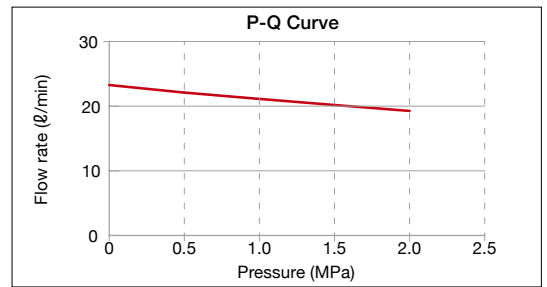


■ Performance Curves

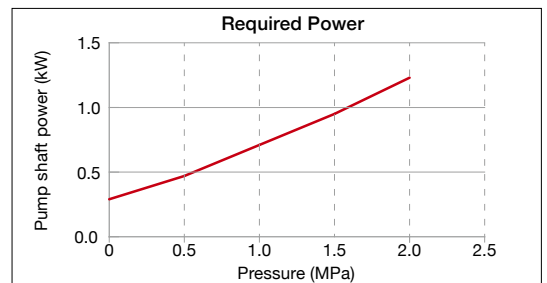
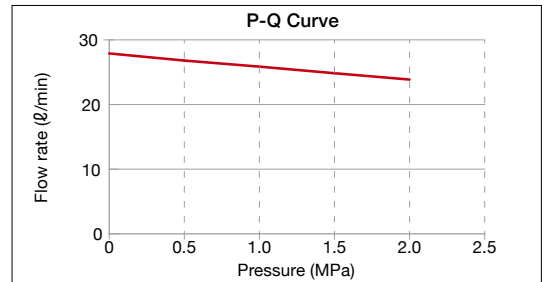
Water-soluble coolant (general performance)

Oil used: JIS K2241, Type A3 solution containing 2% water-soluble cutting fluid

50 Hz



60 Hz



Scan the QR code for more technical data

NCP FILTER PUMP

HP: **NOP COOLANT UNIT** <http://coolant-unit.nopgroup.com/en/>



Safety notice: For safe operation of our products, please peruse the User's Instruction Manual provided with the product.

NCP Nippon Oil Pump Co., Ltd.

This catalog is valid through March, 2021.

For further information:

Search

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