

Oil Mist Traps TM/TMX Series



TMX40



TMX-2

When an oil rotary pump is started at atmospheric pressure, and operated during low vacuum operation, the pump oil is exhausted together along with the exhaust gas that is being pumped. This oil-laden exhaust mist, which consists of tiny oil droplets, appears as smoke exiting from the exhaust port of the pump. The TM and TMX series oil mist traps help to ensure a clean working environment and protect indoor equipment from contamination that would otherwise be caused by this oil mist.

Features

- Removes oil droplets and smoke
Contamination caused by pump oil scattering is greatly reduced and consequently, the need to regularly replenish the pump oil is likewise greatly reduced.
- Excellent noise reduction effect
Noise is most effectively reduced when pump operation involves startup from atmospheric pressure, during low vacuum pumping, and during gas ballast operations. In particular, a very large noise reduction is obtained relative to low frequency noise.
- Selectable oil recovery method (optional)
When trapped oil is returned directly to the main pumping unit and reused, the filter lifespan is decreased and pump problems may occur. Since recovery functions relative to the trapped oil can be selected depending on pump operating conditions, please consult with Ulvac for advise about your particular pumping task, and to help ensure the correct match of components for your application.
- Simple connection to pump
Since the connection ports of TM and TMX series units are made to match standard pump exhaust ports, attachment is simple (excluding PVD, D-240DK, and VS series oil rotary vacuum pumps).
- The internal filter element is a replaceable cartridge.
Replacing this filter cartridge is simple.
(An adapter is required when changing filters of old TM-3, 4, and 4S models to cartridge filters)

*1 Be sure to use an oil mist trap that is appropriately sized to match the pumping speed of the pump and the volume of the chamber which is being evacuated.

*2 An adapter is required for attachment to PVD series oil rotary vacuum pumps.

*3 Oil recovery functions cannot be selected for TMX-1 and TMX-2 models.

*4 Conversion to the cartridge filter is not possible for TMX-1, TMX-2, and TM-2 (old model) units.

*5 Oil mist traps other than TMX-40, 60, and 80 are for general use and are not suitable for pumping of corrosive gases and other special situations.

Specifications

| Model | Attachment flange*1 | Applicable vacuum pumps | Weight (kg) | Material |
|-----------------------|--------------------------------------|---|-------------|--|
| TMX-1 | Special flange/G1.1/2 | D-330 (K,DK) D-650 (K,DK) PVD-180 (B) *2 PVD-360 (B) | 1.1 | Main unit: Soft steel (SPCC) Filter: Glass wool |
| TMX-2 | Special flange/G2 | D-950 (K,DK) | 1.5 | |
| TMX40 | VF40/G1 · 1/2 | EC403 | 12 | Main unit: Stainless steel (SUS 304) |
| TMX60 | VF40/G1 · 1/2 | EC603 | 13 | |
| TMX80 | VF40/G1 · 1/2 | EC803 | 14 | Filter: Polyethylene |
| TM201 (Standard, F)*3 | VF40/G1 · 1/2 | VD301 (for low loads) VD401 (for low loads) EC403 (for low loads) *5 | 8.5 (9) *4 | |
| TM401 (Standard, F)*3 | VF40/G1 · 1/2 | VD301 (for high loads) *6 VD401 (for high loads) EC403 (for high loads) EC603 (for high loads) EC803 (for high loads) | 10 (10.5) | Main unit: Soft steel (SPCC) Filter: Glass wool |
| TM-2 (Standard, F) | VG50/G2 | PKS-016 | 5.7 (6.2) | |
| TM-3 (Standard, F) | PKS-030: VG80/G3 VS1501: VF50/G3 | PKS-030 VS1501 | 10 (11.5) | |
| TM-4 (Standard, F) | PKS-070: VG100/G4 VS2401: VF50/G4 | PKS-070 VS2401 | 23.5 (25) | Main unit: Soft steel (SPCC) Filter: Glass wool |
| TM-4S | PKS-070: VG100/G4 VS2401: VF50/G4 | PKS-070 (for high loads) VS2401 (for high loads) | 59 | |

*1 Pump attachment flange: JIS B2290 vacuum flange (excluding special flanges)/screw diameter of exhaust side tube

*2 Adapter is required when attaching to PVD-180 (B), PVD-360 (B), and D-240 DK.

*3 Standard: Umbrella model, F: Flange model

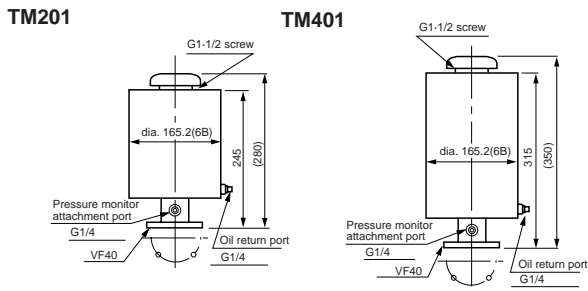
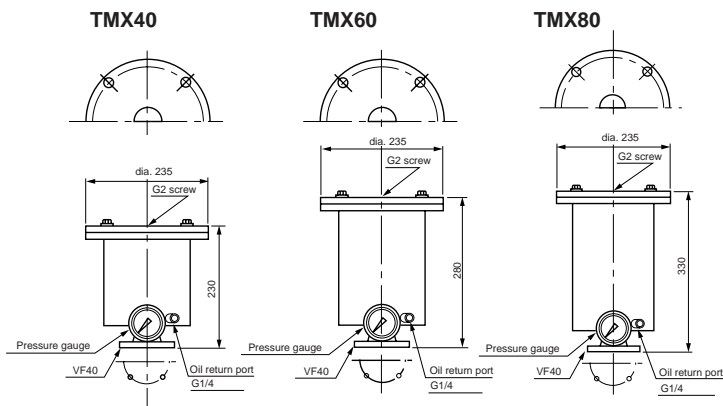
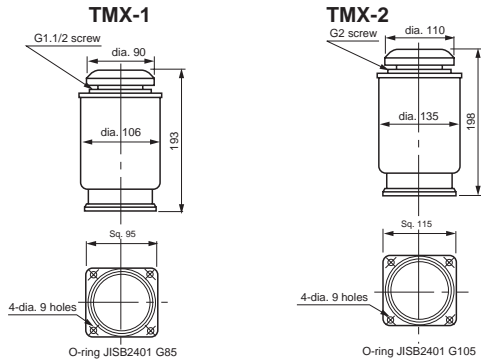
*4 Values in () indicate mass with flange attached.

*5 Low load models should have a continuous suction pressure of 10 kPa or less.

*6 High load models should have a continuous suction pressure of 100kPa or less.

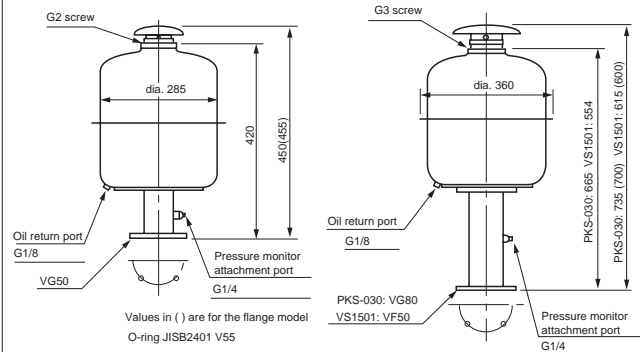
External Dimension Diagram

(unit: mm)



TM-2 (Standard, F)

TM-3 (Standard, F)



TM-4 (Standard, F)

TM-4S

