

Oil Diffusion Vacuum Pump F&U Series



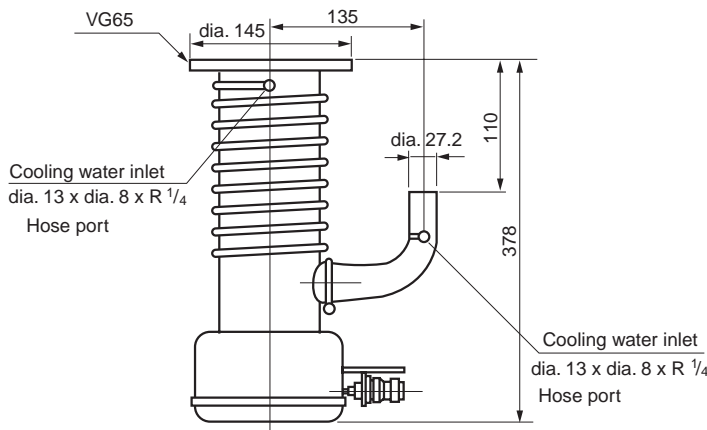
U-250

Ongoing research has led to the development and production of the F&U Series high vacuum oil diffusion pump for UHV applications.

Features

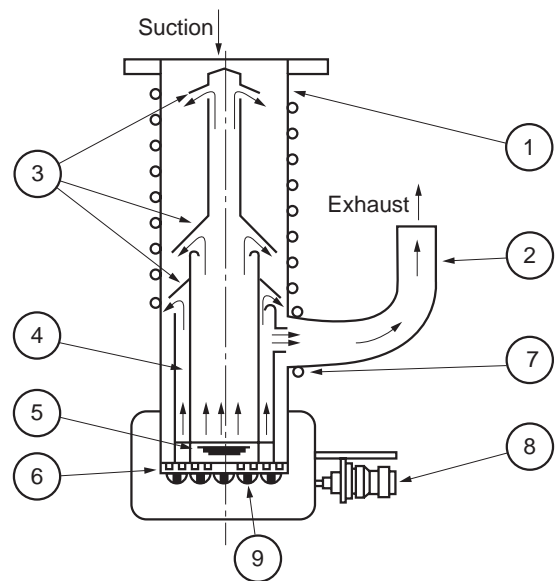
- Higher critical backing pressure**
 Jet assembly design enables operation at pressure from 40 Pa. (0.3 Torr)
- Increased Maximum throughput (Q)**
 High pumping speed and high critical backing pressure result in increased maximum throughput (Q).
- Quick start-up**
 Design of boiler is such that pumps will begin to operate in half the time of conventional pumps.
- Long life of heater**
 Simple structure and lightweight
 Easy maintenance.
 Reduced running cost

External Dimension Diagram (unit: mm)



- Standard accessories**
 Oil for one pump
 One set of intake flange gasket
 One set of Cooling water hose connection
- Option**
 Water-cooled baffle (BW-2 1/2)
 Flanges
 Others

Working Principle and Structure



①	Pump body	⑥	Boiler base plate
②	Exhaust pipe	⑦	Cooling body
③	Jet	⑧	Power connector
④	Chimney	⑨	Sheath heater
⑤	Working fluid		

Specifications

Item	Model	F-250	U-250
Pumping speed	L/s	200	200
Ultimate pressure*1	Pa	2.6×10^{-5}	2.6×10^{-6}
Critical backing pressure*1	Pa	40	53
Power required	kW	100 V single phase 0.38	100 V single phase 0.45
Heater		Sheath	Sheath
Oil required	L	0.1	0.1
Oil used		ULVOIL® D-11	ULVOIL® D-31
Cooling water	L/min	1.0	1.0
Intake flange diameter*2	B	2 1/2	2 1/2
Exhaust port diameter*2	B	3/4	3/4
Weight	kg	4	4
Material		SUS	SUS

*1 Values obtained by measurement using JIS B8317-1986.

*2 Exhaust pipe of F-250 and U-250 is not a flange but connected with rubber hose. JIS

B2290 for vacuum equipment is used as a suction flange.

* Oil rotary pump, D-240DK, is recommended as a backing pump.

Pumping Speed Curve

