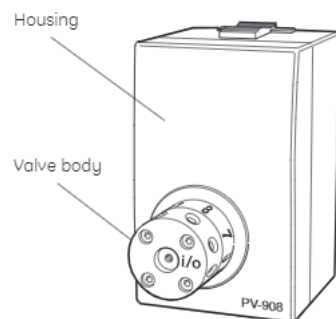


6 Reference information

Description

The valve consists of two main parts:

- Housing which encloses the motor and electronics.
- Valve body with a rotating 360° central core.



The main difference between the IV-908 and PV-908 is the diameter of the flow channels and the maximum pressure ratings. PV-908 has 0.8 mm channels while IV-908 has 1.2 mm channels which allow higher flow rates at lower back pressure.

As the channel plate is turned by the motor, the central port on the front is connected to one of the peripheral ports 1–8, allowing a clear liquid path.

Valve switching is controlled from UNICORN by reading the actual position of the channel plate.

The material used in the switching parts ensures both long mechanical and chemical lifetime.

The valve housing contains no user replaceable items.



Technical specifications

Operating data

Max Flow rate	
IV-908	100 ml/min
PV-908	100 ml/min
Max Pressure	
IV-908	2 MPa (20 bar, 290 psi)
PV-908	25 MPa (250 bar, 3600 psi)
Back pressure	
IV-908	< 3 kPa at 100 ml/min with water
PV-908	< 40 kPa at 100 ml/min with water
Leakage	
IV-908	< 0.1 µl/min at 2 MPa
PV-908	< 0.1 µl/min at 25 MPa
pH stability range	1–13, 1–14 (<1 day exposure)
Viscosity	Max. 5 cP

6 Reference information

Switch time	<260 ms between two adjacent positions
Operating life time	>50 000 cycles, two adjacent positions
Environment	+4 to +40 °C 20-95% relative humidity 84–106 kPa (840–1060 mbar) atmospheric pressure

Physical data

Internal volume, in/out to port	
IV-908	26 µl
PV-908	7 µl
Flow channel diameter	
IV-908	1.2 mm
PV-908	0.8 mm
Valve principle	Motor controlled valve
Functions	Switching 8-way, 8 positions controlled from UNICORN
Degree of protection	IP 43
Wetted materials	
Channel and Distribution plates	PEEK (polyetheretherketone)
Chemical resistance	The wetted parts are resistant to organic solvents and salt buffers commonly used in chromatography of biomolecules, except 100% ethylacetate, 100% hexane and 100% tetrahydrofuran (THF)
Power requirement	32 V DC ±10% from the system pump
Power consumption	Up to 9 W
UniNet 2 address	0–9
Inlet and outlet tubing	
IV-908	5/16"-24 UNF 2B for tubing with 3/16" outer diameter
PV-908	UNF 10-32 2B "Fingertights" for capillary tubing 1/16" outer diameter
Dimensions,	
H x W x D	135 x 80 x 120 mm
Weight	1.2 kg
EMC Standards	This product meets the requirement of the EMC Directive 89/336/EEC through the harmonized standards EN 50081-1 (emission) and EN 50082-1 (immunity)
	Note: The declaration of conformity is valid for the instrument when it is
	<ul style="list-style-type: none">• used in laboratory locations• used in the same state as it was delivered from GE Healthcare except for alterations described in the user manual• connected to other CE labelled GE Healthcare instruments or other products as recommended.