

Manual – Marquest Needle Valves

PARTS LIST

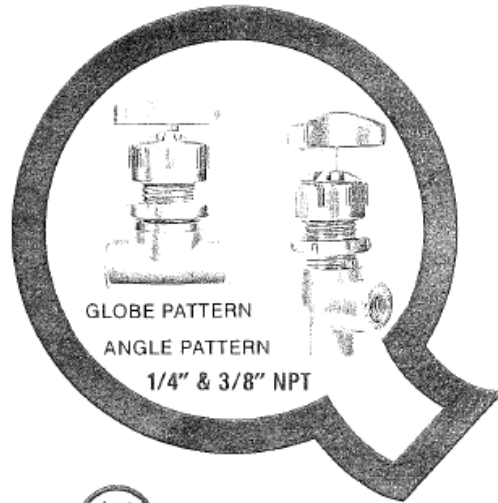
1	IDENT. BUTTON
2	S.S. SCREW
3	HANDLE
4	NEEDLE
5	CAP
6	THREAD INSERT
7	PANEL NUT
8	TEFLON SEAL
9	BODY (GLOBE OR ANGLE)

Special port connections available on request.



MARQUEST
SCIENTIFIC

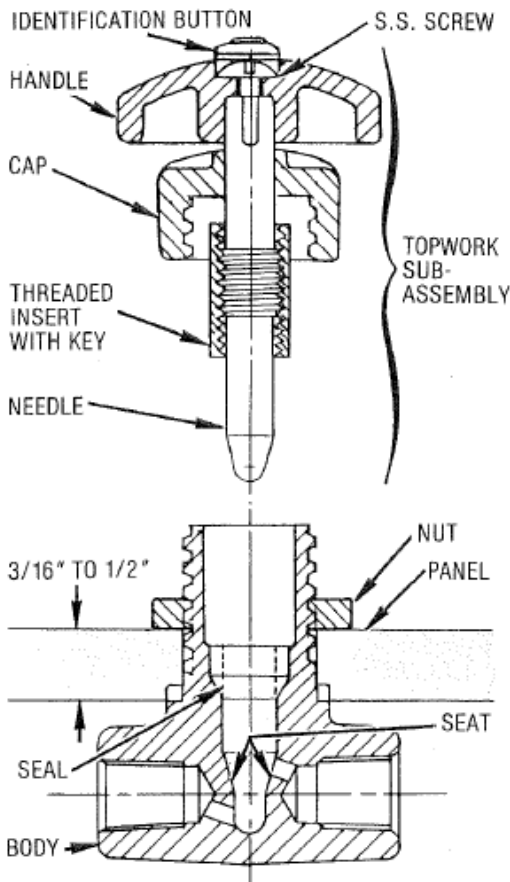
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MARQUEST
SCIENTIFIC

NEEDLE VALVES

Installation procedure
and parts list



Before panel mounting . . . re

Marquest needle valves may be used in a wide range of services where the materials of construction are suitable in the chemical, thermal, and general environment limits of the installation.

Specific applications should be evaluated on the basis of pressure, temperature (see pressure temperature chart and data sheet for particular materials) and the joining system.

MOUNTING VALVES

To relieve strain on the system and its components, the Marquest valve can be mounted on a panel or bracket in the following manner: After providing the proper hole to the "template dimensions," it is necessary to remove the top work sub-assembly and panel nut from the body. It is not required or recommended to disassemble the top work sub-assembly for this purpose. The body is then inserted into the 1" hole, the panel nut secured, and the top work sub-assembly replaced.

CAUTION: Care should be taken to back off or position the needle sufficiently so that it will not engage the seat while tightening the "cap" on reassembly. *See position of "threaded insert with key" on adjacent drawing. Note space between threaded insert and cap.

CONNECTIONS

The 1/4" and 3/8" ports are standard pipe threads (NPT) and may be adapted to tube fittings, socket adapters or other piping components.

Read these instructions . . .

Teflon tape is recommended as a thread sealant. No pipe dope, not specifically recommended for plastic pipe by the manufacturers, should be used.

A firm, hand tight torque is normally sufficient for small plastic pipe threads; over tightening may deform threads and cause leaking.

STEM SEAL

The single seal in the Marquest Needle Valve is precision machined of virgin teflon and is virtually immune to chemical attack and it will NOT contaminate sensitive media.

This stability, low friction, and high sealing effectiveness, provides an almost unlimited life potential in this component—the small wear can be taken up by simple tightening of the cap.

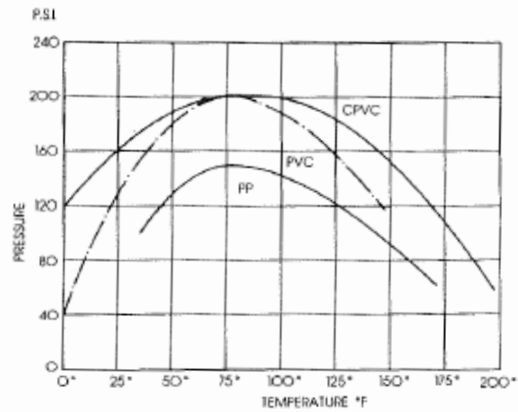
CHEMICAL RESISTANCE DATA

Chemical resistance data is not provided by MARQUEST due to the complex potential of combinations, concentrations, temperature and degree of safety factors required.

A specific inquiry to MARQUEST providing complete service data and service requirements will provide you with an opinion as to suitability.

MARQUEST cannot guarantee suitability for any service.

PRESSURE/TEMPERATURE RANGE NON-SHOCK



FLOW DATA

ORIFICES

GLOBE PATTERN

INLET .187
OUTLET .187 $C_v = .310$

ANGLE PATTERN

INLET .250
OUTLET .187 $C_v = .426$

C_v (1 PSIG WATER @ 60°F)

MOUNTING TEMPLATE

The template provided, outlines the hole and orientation slots for the panel or bracket, where required. The orientation slots may be cut in multiple positions to allow versatility in mounting the valve to accommodate the piping alignment requirements.

Panel thicknesses of 3/16" to 1/2" are accepted range, thinner or thicker sizes can be handled by shims or modifications.

