



# Poseidon Deepwater Solutions

## TRITON NEEDLE VALVE

### Technical Data

20,000 psi  
30,000 psi  
60,000 psi

### Temperature Range

35°F to 180°F

### Qualification

NAS 11water

### Operating Mediums

Water-based Fluids  
Oil-based Fluids

### Material Construction

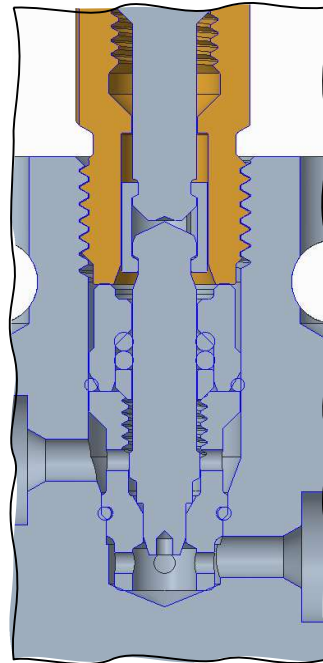
Body 316  
Sealing Element N50  
Seal Seat N50  
PTFE Seals

### Configurations

Angle  
Straight

### Orifices

1/8"  
1/4"  
\*3/8"  
\*1/2"

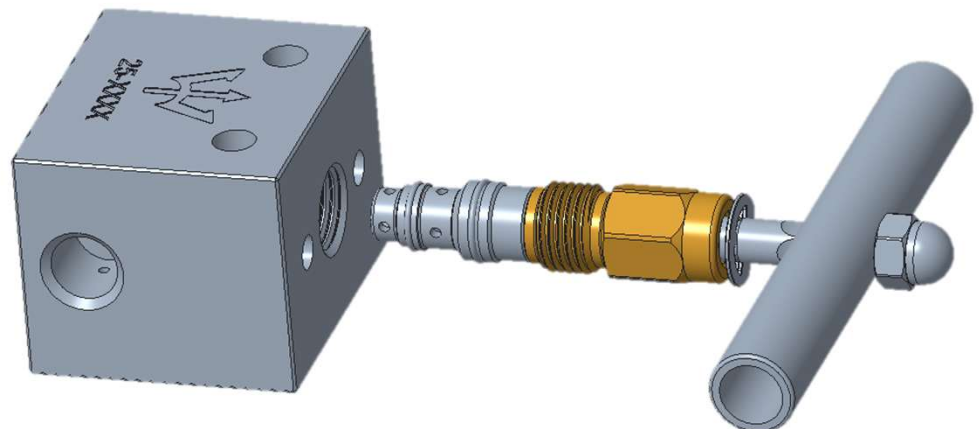


The 20k/30k/60k TRITON Needle Valve features a two-stage metal-to-metal sealing element. The entire sealing system is repairable from the operator side of the valve. This allows a full repair within minutes without breaking any connections behind the panel.

Unlike existing needle valves the main seal seat is not used to throttle the flow. By having a primary static seal and a secondary velocity seal, the valve can be full shut off/full flow and also throttle in one package.

The TRITON offers a highly reliable and debris tolerant sealing system. The same components are matched to a variety of connections based on flow orifice, allowing common repair parts across many valves in a system.

*Field Repairable – the Triton Isolation Valve is field repairable. In most applications the valve is panel repairable. Both parts of the metal-to-metal seal are replaced at the same time with a repair cartridge. This cartridge is shared across other products and sizes of valves regardless of pressure rating.*



**Warranty**  
12/18 Against Materials,  
Craftsmanship, and Defects.  
Full 3-year field warranty  
for repairability

[www.poseidondeepwatersolutions.com](http://www.poseidondeepwatersolutions.com)

[Sales@poseidonds.com](mailto:Sales@poseidonds.com)

Office 281-725-0030



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Connection	Pressure	Port Orifice	Tubing ID	Triton Valve Core			
				Available		Future	
				0.125	0.250	0.375	0.500
1/4" mp	20000	0.125	0.109	X			
1/4" hp	30000	0.094	0.083	X			
1/4" hp	60000	0.094	0.083	X			
3/8" mp	20000	0.219	0.203	X	X		
3/8" hp	30000	0.188	0.125	X	X		
3/8" hp	60000	0.188	0.125	X	X		
9/16" mp	20000	0.359	0.312		X	X	
9/16" hp	30000	0.250	0.250		X	X	
9/16" hp	60000	0.250	0.188		X	X	
3/4" mp	20000	0.516	0.438			X	X
1" mp	20000	0.688	0.562			X	X
1" hp	30000	0.438	0.437			X	X

\*Future Development. Contact PDS Sales for other sizes, configurations, connections, etc.

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