

# TS Series

## NRV - Non Return Valve

The RMS pumptools NRV is a high specification precision engineered check-valve for use above an ESP and is specified when reliable long-term sealing is critical to prevent reverse direction of fluid. The NRV can be pressured against from above to 5000psi, to allow a tubing string test or packer setting.

It is typically used with ESP completions above the pump discharge to prevent flow back when the pump is deactivated - applications include:

Single ESP installation to prevent fluid fall-back.

Dual ESP installations to provide intervention - free ability to operate either ESP automatically.

### NRV Size Options

Sizes	OD	Length	Connection	Casing
2-7/8"	4.625"	25"	Vam Top	5.5"
3-1/2"	4.810"	25"	Vam Top	7"
4-1/2"	6.500"	36"	Vam Top	7-5/8"
5-1/2"	7.500"	36"	Vam Top	8-5/8"
7"	8.250"	36"	Vam Top	9-5/8"

### Key Performance Features

Piston-type Design for Reliability

High Specification Inconel Metal-to-Metal Seal Faces to maintain protection against erosion and provide Long Operational Life

Self-aligning Seal Faces

Internal Flow Areas match Tubing ID

Optional Pin and Box Connections to customer choice

Material Housing options of Carbon Steel or 13% Chrome Steel

