

# Sentinel WRSV-5E/10E Safety Valve

The Sentinel™ WRSV compact design uses a metal-to-metal flapper closure seal and an optional self-equalizing flapper to provide 100% well containment when closed.

The WRSV is primarily used when a tubing retrievable safety valve (TRSV) cannot be used because of dimensional constraints in the well completion. It also functions as a backup, redundant safety valve to nonfunctioning TRSVs. Downhole-specific material selection options are available for both corrosive and erosive environments.

The WRSV-5E/10E is connected to a downhole lock and landed in either a dedicated hydraulic landing nipple or inside a TRSV where hydraulic communication has been established. The WRSV operates with a surface-controlled emergency shutdown (ESD) system that supplies hydraulic control pressure to actuate the WRSV's flow tube to open and close the flapper. The WRSV is a fail-safe, normally closed valve that will protect production installations from uncontrolled flow if wellhead equipment is damaged in a catastrophic event. After shut-ins, the optional self-equalizing flapper design facilitates a rapid return to production, reducing operational downtime.

The WRSV is tested/certified to API-14A-V1 and manufactured in accordance with ISO-9001:2015 standards. Materials selection options are based on NACE MR-0175 compliance.

We provide global service support for installation, field repair, and maintenance worldwide. Contact your NOV sales representative or application engineer to discuss your specific requirements.



## Features

- Field redressable
- Compact design
- Standard self-equalizing
- Configurable to special applications

## Optional features

- Equalizing and non-equalizing versions
- Premium piston stops
- H<sub>2</sub>S/CO<sub>2</sub> trim
- 1,000- or 2,000-ft (305- or 610-m) placement options

## Benefits

- Serviceable by wireline
- Easy to install and operate

## Technical data

Tubing size in. (mm)	Max. OD in. (mm)	Polished bores in. (mm)	Working pressure psi (MPa)	Min. ID in. (mm)
2.875 (73.03)	2.278 (57.86)	2.313 (58.75)	5,000 (34.5) / 10,000 (69)	1.100 (27.94)
3.500 (88.90)	2.773 (70.43)	2.813 (71.45)	5,000 (34.5) / 10,000 (69)	1.560 (39.62)

Note: The engineering data provided illustrates the scope of this product offering and is not all inclusive. Additional sizes and functionality are available upon request.