ENERGY VALVES S.R.L. Italy a Socio Unico Via Repubblica, 17 23841 Annone di Brianza (LC) - ITALY Phone: +39 (0)341 260384 info@energyvalves.it www.energyvalves.it





DOUBLE EXPANDING

PLUG VALVES

INTRODUCTION

Energy Valves, with headquarter close to Milan - Italy, was founded in 2007 by Engineers with over 30 years experience in valve manufacturing companies.

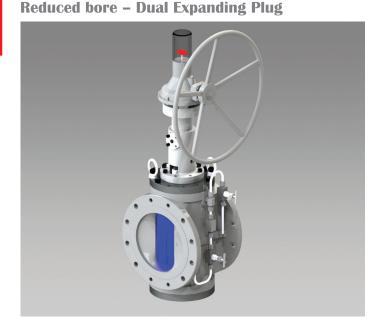
Energy Valves mission is to design, manufacture, test and certify valves based on client needs and in accordance with the most stringent International Standards and Customer Specifications.

Energy Valves's internal organization is structured in order to achieve very short lead time ensuring the highest quality levels.

Energy Valves products are used in major applications for upstream, downstream & transportation segments of the Oil & Gas Industry, E&P, Petrolchemical, Chemical, Mining/Minerals, Power, Marine and Industrial markets.

Energy Valves product line includes:

• Full and Reduced bore Dual Expanding Plug valves



CERTIFICATION AND STANDARD:

| API 6D |
|-------------|
| ASME B16.34 |
| API 6FA |
| API 607 |
| ISO 10497 |
| API Q1 |
| ISO 9001 |
| ATEX |
| CE/PED |
| |

IEC 61508 & 61511 (SIL)

| Specification for Pipeline and Piping Valves |
|--|
| Valves - Flanged, Threaded and Welding End |
| Specification for Fire Test for Valves |
| ire Test for Quarter-turn Valves and Valves Equipped with Nonmetallic Seats |
| Testing of Valves - Fire Type-testing Requirements |
| Specification for QMS Requirements for Manufacturing Drganizations for the Petroleum and Natural Gas Industry |
| Quality Management Systems |
| European Directive for Explosive Atmosphere |
| Pressure Equipment Directive |
| Measurement of Performance Required for Safety Instrumented Function |







PRODUCT RANGE:

FULL BORE SIZE: • From 2" to 24" PRESSURE CLASS: • ASME class from 150 to 600

REDUCED BORE SIZE: • From 2" to 24" PRESSURE CLASS:

• ASME class from 150 to 600

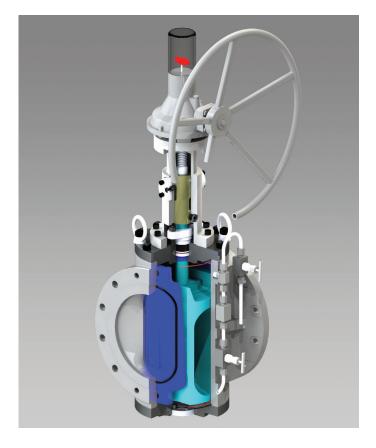


Energy Valves Dual Expanding plug valve has been developed to provide a compact solution for applications where positive shut-off, verifiable zero leakage and double block and bleed (DB&B) and or double isolation and bleed (DIB) capabilities are required. Unlike other valve types, the Energy Valves Dual Expanding plug valve guarantees bubble tight seal without causing any abrasion or wear on the slips seals due to its mechanism of retract/expand the slips from/to the body before starting with rotation.

This solution provide "Zero-leakage" upstream and downstream, secure a long life-time of valves and seals as well as a low opening and closing torque.

This unique design is combined with a

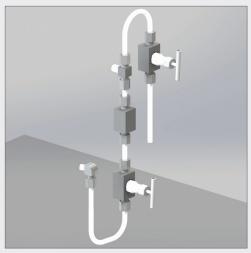
bleed function to prevent pressure buildup in the body cavity. Several types of bleed system have been developed and can also be customized based on client needs.



Thermal Relief to Body



Manual Bleed and Thermal Relief





This system includes a thermal relief valve in order to relieve to upstream pressure build up which might occur in the body cavity from thermal expansion. The thermal relief valve automatically operates when the pressure in the body cavity increase of 1.5 Bar (22psi) respect to the pipeline pressure.

This system combines an automatic bleed to the body and a way to check the seal integrity of the Dual Expanding Plug Valve.

