

R-Valve

Pneumatic material diverter valve for CLEAN CUT systems

APPLICATIONS

- When using CLEAN CUT systems
 - Deepwater and offshore environments using water- or oil-based drilling fluids

BENEFITS

- Ensures reliability through simple, two-position operation
- Produces low levels of noise
- Eliminates risk of blockage associated with gate or butterfly valves

FEATURES

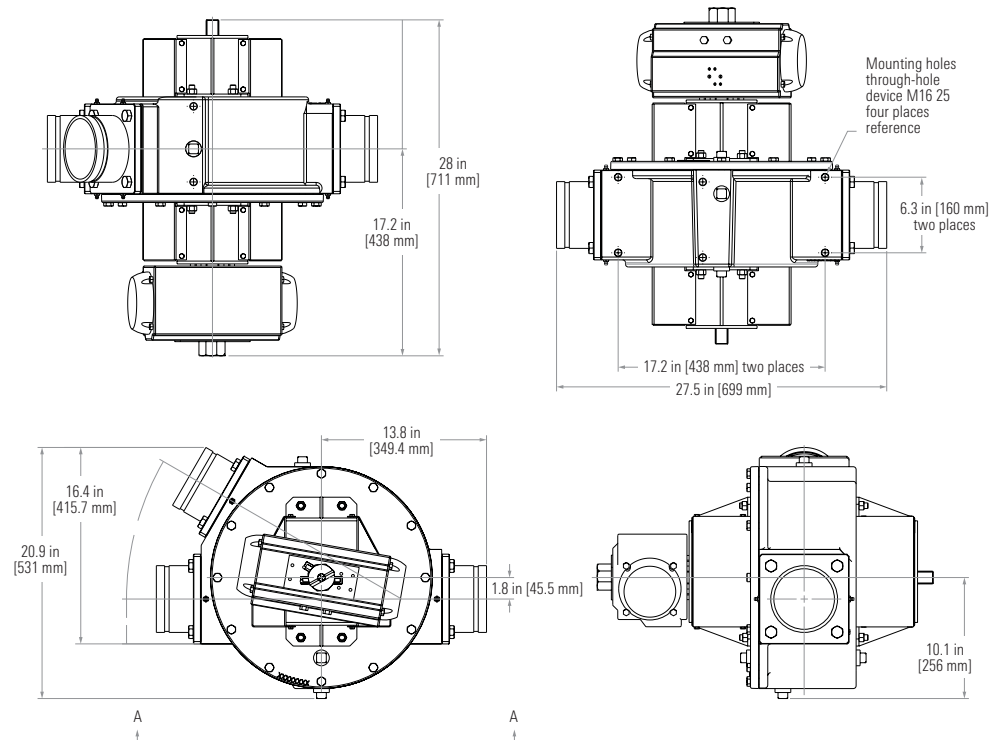
- Environmentally secure design
- Pneumatically actuated system that enables optimal system performance
- Smooth, fullbore transfer for clog-free lines
- Inline flow diversion that eliminates spills caused by breaking connections

Specially developed for use with CLEAN CUT* cuttings collection and transportation systems, the R-Valve is a pneumatically operated material diverter valve that enables real-time switching of bulk material flow between discharge points. The valve is an enclosed unit that is operated by compressed air. It eliminates the need to make and break hose connections that could release contaminated material. The system enables real-time switching between cuttings receiving points such as ISO-Pump* cuttings collection and conveying units, which when open, create an obstruction. The R-Valve maintains a full, unrestricted pipe bore for material movement at all times unlike butterfly valves, which act by creating obstructions that can cause material blockage.

Application

R-Valves are positioned in the cuttings conveying pipework and are used to direct cuttings. This enables great flexibility in the system layout and arrangement of destinations. Generally, rig applications require one R-Valve for each ISO-Pump unit in the line except the last one; for five ISO-Pump units, four R-Valves are required. For skip loading, a four-skip station would normally require three R-Valves. On a supply vessel, the arrangement is slightly different, and as a rule, fewer R-Valves are required.

Specifications	Length, in [mm]	Width, in [mm]	Height, in [mm]	Weight, lbm [kg]	Actuating air supply pressure, psi [bar]
R-Valve for CLEAN CUT systems	27.5 [699]	28 [711]	20.9 [531]	413.2 [187.4]	87 [6]



Engineering drawing of the R-Valve for CLEAN CUT systems.

R-Valve

How it works

The R-Valve is a proprietary valve design specially developed for the CLEAN CUT system. It is an air-actuated rotational valve with two operating positions: "divert" (D) and "through" (T). The valve is designed to maintain a smooth full-bore transfer at all times at conveying pressure up to 101.5 psi [7 bar], preventing material buildup that could lead to pipe blockage.

The valve is pneumatically actuated and is normally operated manually but can be linked into a remote operator panel.

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