

18³/₄-in Surface Rotating Control Device (RCD)

FEATURES

- 18³/₄-in pass-through
- Redundant, reliable design that requires no wear sleeve
- Piston land and lock mechanism
- Integrated sealed bearing assembly
- Dual sealing elements
- Single trip deployment of bearing assembly
- API16RCD compliant
- Latching integrity (proximity sensors, landing sensor, volume, pressure, overpull test, pressure test)
- Rotary table installation (49.5 in and greater)
- Single interface connection for hydraulic and controls

BENEFITS

- Saves time during installation and removal of bearing and sealing elements
- Eliminates need for personnel below rig floor
- Allows drilling to continue while isolating potentially harmful wellbore fluids
- Prevents release of bearing assembly in presence of wellbore pressure

True 18³/₄-in pass-through RCD



Sealing element selection

Sealing elements are available in four different elastomer compounds—natural rubber, nitrile, butyl, and urethane—each of which has performance characteristics to meet application requirements. Dual-sealing bearing assembly configuration can be installed and removed from the rig floor.

Physical properties

Hydraulic Pressure Unit footprint, in 72 × 72 × 96¹/₂

Weight, lbm 6,500

Utilities 480 volts; 3 phase; 3 amps air; 100 psi at 150 ft³/min

Accessories

- Bearing stabbing stand and transportation stand
- 6⁵/₈-in FH and 5¹/₂-in FH bearing running tool
- Bearing assembly
- Toolbox
- Housing transportation skid
- Remote human-machine interface

APPLICATIONS

- Jackup, land, and semisubmersible rigs and tension-leg platforms (above tension ring)
- Managed-pressure drilling, pressurized mud-cap drilling, underbalanced drilling, and containment

Specifications	
Electrical	Class 1 Division 1; Gas Group D; Temperature T3 per API 14F ATEX Zone 1 Gas Group IIA; Temperature T3
Lifting	DNV 2.7-3

RCD Specifications	
Maximum bearing assembly pass-through	9¼ in
Bearing assembly OD	18¾ in
Rotating working pressure [†]	1,000 psi
Static test pressure [†]	2,500 psi
Maximum rotary speed	150 rpm
Sealing elements	Dual
Sealing element mounting	Bolt on
NACE compliant	Yes

[†] Actual field operational pressure ratings are dependent on various factors, including the sealing element compound, drill pipe size and mud properties.

RCD Housing Specifications				
Bottom Flange	Top Flange	Outlet	OD	Height
18¾-in API 5K	18¾-in API 5K	3 × 7 1/16-in API 5K	49 in	86 in
18¾-in API 10K (Optional)	na	1 × 4 1/16-in API 5K		

na = Not applicable.

Pressure ratings for the bearing and internal seals have been determined through in-house lab testing with a test plug installed. Due to the uncontrolled environment of well drilling operations, M-I SWACO, its operating units, agents, and affiliates make no warranty, either expressed or implied, on the pressure ratings contained herein. M-I SWACO does not, under any circumstances, recommend that its RCDs be used as primary blowout prevention equipment. Pressure ratings vary by sealing elements material and drill pipe size. Contact M-I SWACO for application needs.



This information is supplied solely for informational purposes and M-I SWACO makes no guarantees or warranties, either expressed or implied, with respect to the accuracy and use of this data. All product warranties and guarantees shall be governed by the Standard Terms of Sale. Nothing in this document is legal advice or is a substitute for competent legal advice.

P.O. Box 42842
Houston, Texas 77242-2842
www.miswaco.slb.com
Email: questions@miswaco.slb.com