Rapid Opening Closure

The Rapid Opening Closure (ROC) provides a quick opening access point to pipelines or pressure vessels, for the installation / removal of equipment.

The Rapid Opening Closure (ROC) is designed in accordance with ASME VIII Divison 1, ASME B31.4 (Oil & Liquid Products Code) & ASME B31.8 (Gas Pipeline Code).

The design consists of five main components:

- Hub (Pressure Retaining)
- Door (Pressure Retaining)
- Locking segments (Pressure Retaining)
- 1 x vent/bleeder screw (Pressure Retaining)
- Self-Energizing Lip Seal (Pressure Retaining)

Features of the Rapid Opening Closure:

- Range from 6”ns up to to 72”ns
- ASME Class rating up to ASME Class 2500
- Standard wall thickness range dependent upon ASME Class rating
- Integral pressure warning screw/mechanical interlock
- Meets code requirements of external, visible pressure warning device
- Temperature range up to 392°F (200°C)
- Pressure retaining parts in accordance with NACE MR0175
- Self energizing lip seal
- Suitable for both left and right hand opening
- Paint System - Zinc rich temporary transit primer - RAL 5010

Optional Features:

- Additional material testing on pressure retaining components upon request (UT, HIC, SSC)
Rapid Opening Closure Product Codes

The nine digit product code (defined as a five digit prefix and a four digit suffix) allows for multiple Rapid Opening Closure configurations to be easily defined covering a wide range of operational and service requirements.

Prefix 5 Digit Code:
- Orientation:
  - 5 = Horizontal Right
  - 6 = Horizontal Left
- Closure Nominal Size:
  - 04 = 4”
  - 06 = 6”
  - 08 = 8”
  - 10 = 10”
  - 12 = 12”
  - 14 = 14”
  - 16 = 16”
  - 18 = 18”
  - 20 = 20”
- Class:
  - 1 = 150
  - 2 = 300
  - 3 = 600
- Wall Thickness:
  - 1 = 0.25”
  - 2 = 0.313”
  - 3 = 0.375”
  - 4 = 0.5”
  - 5 = 0.625”

Suffix 4 Digit Code:
- Hub / Door Material:
  - 1 = ASTM A105 / ASTM A350 LF2 (Dual Certified)
  - 2 = ASTM A694 F52
  - 3 = ASTM A694 F60
  - 4 = ASTM A694 F65
  - 5 = ASTM A694 F70
  - 6 = ASME SA105
  - 7 = ASME SA350 LF2
- Material Certification Level / ASME Certification / Hydrotest:
  - 1 = EN 10204 3.1
  - 2 = EN 10204 3.1 c/w USTAMP
  - 3 = EN 10204 3.2
  - 4 = EN 10204 3.2 c/w USTAMP
  - 5 = EN 10204 3.1 + Hydrotest
  - 6 = EN 10204 3.1 c/w USTAMP + Hydrotest
  - 7 = EN 10204 3.2 + Hydrotest
  - 8 = EN 10204 3.2 c/w USTAMP + Hydrotest
- Lip-Seal Material: Please note that other materials are available upon request.
  - 1 = FKM
  - 2 = FFKM
  - 3 = NBR
  - 4 = HNBR
- Connection / Face:
  - 1 = Weld Prep
  - 2 = RF
  - 3 = RTJ

Example: Rapid Opening Closure Definition:
- Horizontally Mounted, Right Hinged
- 16” Nominal Size
- ASME CL600
- 0.625” Wall Thickness
- ASTM A105 / A350 LF2 Dual Certified Material
- EN10204 3.1 Material Certification
- FKM O-Ring Seal Material
- Provided with Weld Prep

Example: Rapid Opening Closure Product Code: 51635-1111

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