

**TECHNICAL DATA** 

# QUICK RELEASE VALVE

#### The Viking Corporation | 210 N Industrial Park Drive | Hastings MI 49058

Viking Special Hazards | Technical Services: 877-384-5464 | Email: techsvcs@vikingcorp.com | www.vikinggroupinc.com The technical data described herein is for components of the Viking Oxeo PR Fire Extinguishing Systems. Visit the Viking website for the latest edition of the technical data and system manuals.

## 1. DESCRIPTION / FUNCTION

The quick release total discharge valve operates via a differential pressure system. Each valve is equipped with an integrated pneumatic release device, but can be fitted with an electrical release or manual release device as well. When the release device is activated, the pilot valve integrated within the assembly opens and the upper pressure chamber is ventilated. This pressure drop causes the pressure in the extinguishing agent cylinder to push the closing piston into an open position, opening the valve. The quick release total discharge valve remains open after activation, until the entire extinguishing agent cylinder is empty. The extinguishing cylinder is filled via valve outlet.

Each valve is equipped with a pressure gauge connection with an integrated check valve and a pilot connection. The valve is available in two pressure ratings, one for 4351 psi and another for 2901 psi. As a protection against impermissibly high pressure, each valve is also fitted with a burst disk device. As soon as the pressure in the extinguishing agent cylinder is around 22 psi, the valve closes automatically.



# **A**CAUTION

## Risk of injury due to residual pressure

Once a valve has been opened, a residual pressure of 22 psi remains within the extinguishing agent cylinder. Escaping extinguishing agent may cause severe injury. Close the valve outlet with a plug if the connection to the fire extinguishing system is disconnected at the valve outlet.

#### 2. LISTINGS AND APPROVALS



cULus Listed - EX5248 (Oxeo PR CF)

FM Approved: Oxeo PR CF

#### 3. TECHNICAL DATA

Specifications Extinguishing agent: Argon (IG-01), Nitrogen (IG-100), Type: QRV-TD 200 bar Nominal diameter: DN12 Minimum flow cross-sectional area: 0.1589 sq.inch (102.5 mm<sup>2</sup>)

- Max. working pressure at 50 °C (122 °F):
  - 2901 psi valve: 3408 psi (235 bar)
- 4351 psi valve: 5221 psi (360 bar) Working pressure at 59 °F (15 °C):
- - 2901 psi valve: 2901 psi (200 bar)
- 4351 psi valve: 4351 psi (300 bar) Bursting disk:
  - 2901 psi valve: 3916 psi (270 bar)
  - 4351 psi valve: 5874 psi (405 bar)

Permissible pilot pressure of the integrated pneumatic release device: 116 to 5221 psi (8 to 360 bar) Temperature range:

- -4 °F to 122 °F (-20 °C to +50 °C)
- during transport and storage in depressurized state: -4 °F to 149 °F (-20 °C to 65 °C)
- Valve type according to:
  - EN 12094-4: type 2
  - ATR D2/11: type C

### Material

Housing, caps, plugs, several parts: brass Pilot valve, closing piston, springs: stainless steel Elastomer seal: EPDM / NBR Burst disk device: nickel, copper alloy Seating seal, damper: PA 6

Designation	Part no.	Weight
Quick release valve - 2901 psi	914041	3.73 lb (1.69 kg)
Quick release valve - 4351 psi	930367	3.73 lb (1.69 kg)





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