

Q-Rohr®-3 & Q-Box Flameless Vents

Explosion Protection System Components

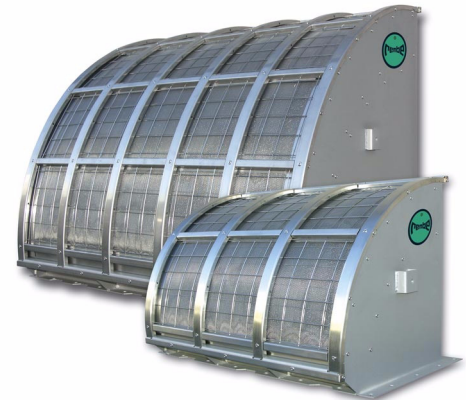
Advantages:

- Proven design provides fast, reliable operation
- Suitable for venting applications where use of vent duct is not practical or feasible
- Eliminates flame emissions
- Substantially reduces both the pressure and the thermal energy of the explosion
- Requires minimal maintenance
- Easy and quick installation

Q-Rohr®-3



Q-Box



Application

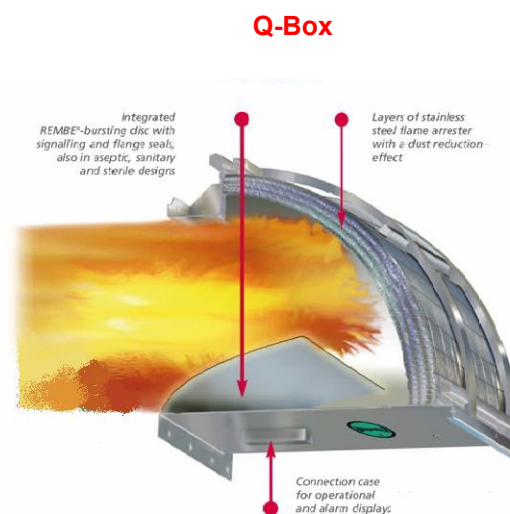
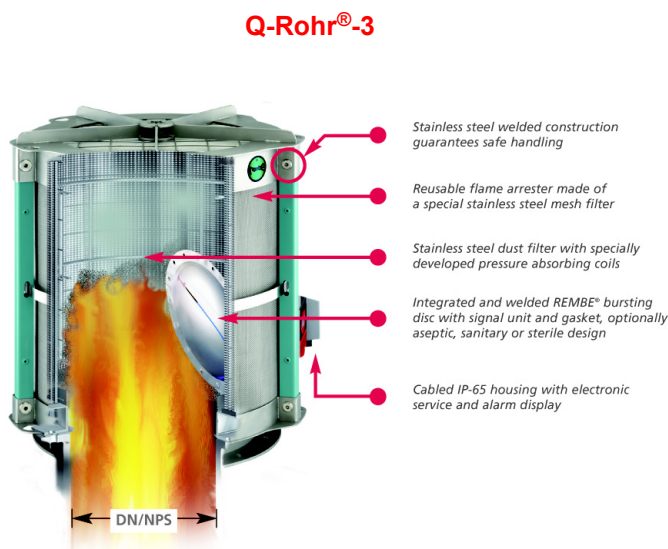
FENWAL® Protection Systems formed a strategic alliance with REMBE® Inc. to offer flameless vents for applications requiring indoor or outdoor explosion relief venting where flames cannot be safely directed to a safe location or where use of a vent duct is not practical or feasible. With this offer, FENWAL® expands its explosion protection capabilities to include the original REMBE® Q-Rohr®-3 and Q-Box Flameless Vents.

Description

The Q-Rohr® and Q-Box flameless vents are high capacity systems that decrease the immense energy during a dust explosion. The bursting disc, burst-sensor, gasket and transformer isolated barrier are integral elements of each flameless vent system. When an explosion occurs, the bursting disc ruptures and directs the vented explosion in a controlled manner into the flameless vent chamber, where the flame is arrested, and gasses are cooled as they pass through the stainless mesh. The integrated electronic control panel keeps plant personnel informed of the status of the system. The specially developed stainless steel mesh does not allow any dust (burnt or not) to pass through the Q-Rohr®-3 flameless vents. A sanitary cover is available for both types of flameless vents to avoid dust deposits on the units.

Specifications

	Q-Rohr®-3	Q-Box
Material of Construction	304 SST	
Bursting Pressure, P_{stat}	1.45 psig @72°F	
Reduced Pressure, P_{red}	1.45 to 18.9 psig	≤ 7.25 psig
Maximum K_{st} (bar-m/s)	250 bar-m/s *	200 bar-m/s
Operating Temperature (°F)	14 to 446	-22 to 356
Available Vent Sizes (in)	8, 12, 16, 20, 24, 28, 32	12 x 24, 23.2 x 36.2
Effective Venting Area (in²)	47, 101, 170, 263, 387, 527, 697	170, 542
Approximate Weight (lbs)	55, 66, 106, 132, 276, 430, 529	77, 209
Approvals	FM, ATEX, CE	ATEX, CE
* Special designs allowing for K _{st} up to 350 bar-m/s are available. Please contact Fenwal for more information.		



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Ordering Information

Flameless venting systems are designed in accordance with the NFPA 68 Standard on Explosion Protection by Deflagration Venting. Information required for product selection includes volume of enclosure to be protected, process temperature and pressure ranges, details of material(s) processed, and the required reduced explosion pressure. Consult FENWAL Protection Systems for technical design assistance in selecting the proper flameless vent panel(s) for your specific application.

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