



NEWS:

> Latest news

> Component News

> Company News

> Policy News

> Conference News

> General News

> Subscription

> [Home](#) > [News](#) > [Latest News](#)

> Tests prove Egelhof valve to be the best solution

Higher cooling performance, simpler design and low production costs make Egelhof's expansion device the optimised solution for R744 (CO₂) cooling circuits, according to the latest study by OBRIST Engineering.

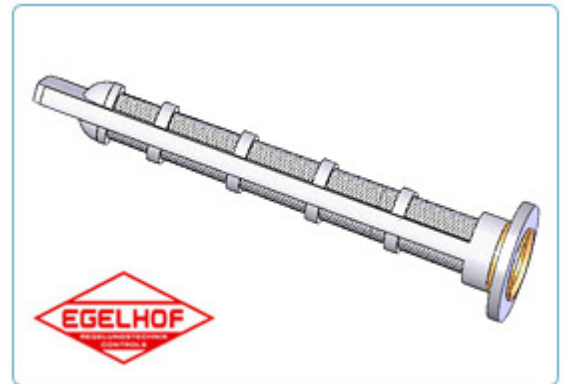
2007-05-24

Egelhof's differential pressure controlled expansion valve (PXV) for R744 combines an efficient cool down performance with a COP (coefficient of performance) optimised system operation at transcritical cooling operation, thus allowing for fuel savings. Featuring a small internal system volume and an optimised R744 charge it will ensure a maximum cool down by making the whole system more efficient.

Test results prove higher performance

R744 systems using Egelhof's expansion valve can reach an equivalent or even better pull down performance compared to current HFC-134a systems. This is a major result from wind tunnel tests performed by OBRIST Engineering that have also proved that the low refrigerant charge does not have any negative impact on the sub-critical operation of the system.

In addition, OBRIST's test results indicate that the compact and simple design of the PXV will lead to very low production costs, and an easy and leak-free implementation of the expansion device in the line set, such as the VisCO₂nect fitting technology from Visteon. The high performance of Egelhof's R744 valve, developed in cooperation with OBRIST Engineering GmbH, had been already proved in extensive rough road durability and vibration tests.



You will find a more explicit explanation and the concrete test results in the documents attached to this article.

Main features

Other key features and advantages of the R744 expansion valve are:

- Best NVH (noise, vibration, harshness) for improved passenger comfort especially in combination with low NVH compressors
- Implemented pop-open function for externally controlled compressors - to enable compressor start up and refrigerant flow in off mode

Reactions

According to Christian Blauth, Sales Manager of Egelhof, the company's "daily challenge means to be more innovative, cost-efficient and flexible in all our business activities."

"By developing an expansion valve for a R744 air conditioning circuit and presenting our product on R744.com we will further demonstrate that we are always investing in future-oriented projects to help our customers remain competitive," he adds.

Background

Otto Egelhof GmbH is a global supplier of thermostatic valves and temperature sensors, developing individual samples and prototypes up to serial production in close cooperation with leading car manufacturers and clients from the heating industry. Its headquarters are situated in Germany, with other facilities being located throughout Europe, China and the United States.

More information:



[Wind Tunnel Test Results - Graphs \(14 KB\)](#)



[Wind Tunnel Test Results - Text \(24 KB\)](#)

> [Find more about Egelhof's PXV in our Components section](#)

[RSS](#) • [Terms and conditions](#) • [Site map](#) • [Contact us](#)

Managed by Shecco™