Rail Pressure Limiting Valve

RPLV

DATA SHEET

Description

Primarily the Rail Pressure Limiting Valves (RPLV) are designed to protect common rail equipment against overpressure.

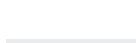
Differing to RPLV-1S the 2S-version additionally offers the important limp-

home function. After opening due to overpressure RPLV-2S works as a rail pressure control valve and keeps up some holding pressure under any system conditions even without risk of overheating. This provides high reliability and ensures engine running.

Overpressure in the rail system is detected precisely. A venting device supports fast valve action that performs quick pressure drop. A version with additional Compressed Air Release (CAR) is available.

After duty RPLV is absolutely tight again. Double-walled design offers leakproof connection. The free turnable coupling of fuel-return enables mounting with free orientation.

Variants / Technical data



Features

Precise, reliable and reproducible limitation of rail pressure

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Offers limp-home mode of operation

Self cooling allows unlimited active operation without overheating

Turnable fuel return flow connection, any orientation is possible

Double seating offers leakproof connection

Preset and absolutely maintenance-free

Version with Compressed Air Release (CAR) available

Venting device assures precise and reliable operation

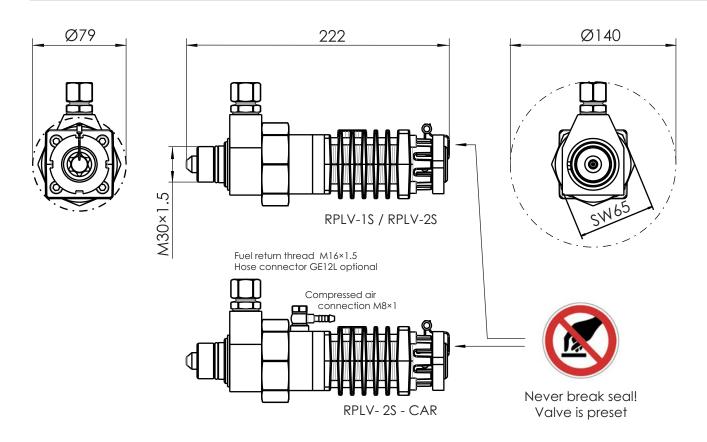
Continually tight when disengaged

High-quality materials

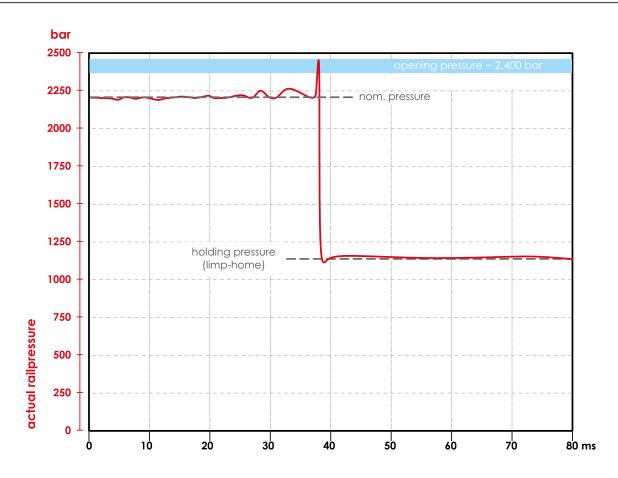
	RPLV-1S	RPLV-2S *	RPLV-2S-CAR *
Function	Pressure limitation, temporary safety function only. Engine stop required.	Pressure limitation, followed by pressure drop to holding pressure (limp-home).	Pressure limitation, followed by pressure drop to holding pressure (limp-home). Operating on preset overpressure or additionally via compressed air release.
Opening pressure	up to 2400 bar	up to 2400 bar	up to 2400 bar
Holding pressure	—	0.48 × opening pressure	0.48 × opening pressure
Release air pressure (CAR versions only)	_	_	30 ± 5 bar
Preset accuracy	± 25 bar	± 25 bar	± 25 bar
Weight approx.	2.3 kg	2.3 kg	2.3 kg
Fastening torque	120 ± 5 Nm	120 ± 5 Nm	120 ± 5 Nm
Fuel types	HFO (DIN ISO 8217), MDO (DIN ISO 8217), Diesel (EN 590)		

* Note: Intended for overpressure protection only, not for pressure control! Valve has to be overhauled after 100 hours limp-home!

Dimensions



Functional diagram



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