

LDR1 – Paint Pressure Regulator 1:1

Reverse-flushable with leakage indicator



Structure and Function

The paint pressure regulator LDR1 is attached to the outlet of the colour changer and provides the pulsation free material flow to the gear pump dosing units or ensures the painting pressure regulation proportionally 1:1. It is pneumatically remotely controlled by a proportional regulation valve or air pressure regulator.

The paint pass is dead space free and designed to achieve best possible cleaning effect with lowest solvent consumption.

The paint pressure regulator is provided with a double diaphragm and a leakage indicator by which in case of the damage of a diaphragm the leaving medium is led away and the regulator works also as a medium locking device. This pressure change can be recorded with a sensor which actuates an alarm signal.

The paint is supplied to the regulator by the connection fitting. A ceramic ball which is pushed with the help of a

spring into an o-ring seat blocks in a not steered condition the pass way. During the painting process the regulator is pressurized with control air and a tappet presses the ball. As soon as the spring force is overcome, the ball releases the duct and paint flows in flow direction.

The paint pressure changes by 1 bar if the control air pressure is changed by 1 bar. During the reverse -flushing the material is fed to the regulator through the outlet bore and applies pressure on the ball during this operation. Once the spring force is overcome the ball is pushed from the o-ring seat, a circular gap opens and enables the reverse paint flow.

Application Area

The paint pressure regulator LDR1 is designed for the pulsation free regulation of material pressure in systems in which conventional paints and waterborne paints are processed, as well their rinsing materials. The paint inlet is adapted by means of adapters for all common installations as a flushable and reverse flushable paint pressure regulator.

The operation is independent of the mounting position.

Features and Advantages

- Pneumatic telecontrol
- Highest control accuracy
- Immediate signal reaction
- Reproducibility of the metering curve
- Fast flushing by hydrodynamic paint cell optimization
- Medium routing parts in high vanadium
- High quality Teflon® membrane



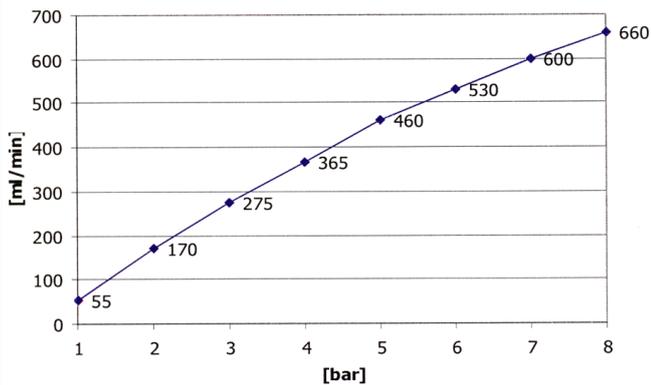
BETTER SOLUTIONS ARE THE RESULT OF CONVINCING DETAILS.

Technical data

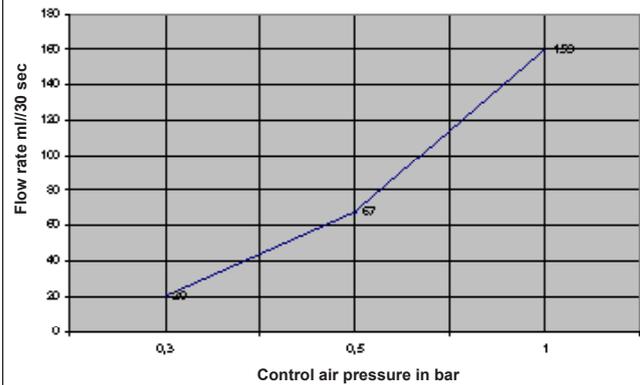
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Operating pressure:	0,6 – 16 bar
Maximum advance pressure:	16 bar
Control air pressure:	1 - 8 bar
Temperature range:	+10 – +40 °C
Viscosity range (dynam. viscosity):	10 – 500 mPas

Performance chart (flow rate)



Performance chart (flow rate at 28 mPas)



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