

# Operating instructions

## Electronically adjustable pressure control valve

VDBV 15-J  
VDBV 20-J  
VDBV 30-J  
VDBV 40-J

In order to ensure an efficient operation of our maintenance-free pressure regulation valve, the following points must be noted:

1.) Before fitting the valve into the pipework, check that the lines are absolutely clean, so that no residue from the pipe installation process can be washed into the valve during operation.

### 2.) PIPING

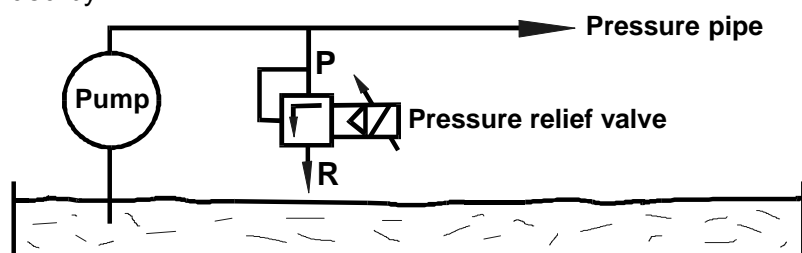
The pressure regulation valve works as a BYPASS valve. There must be no nozzles or valves behind outlet "R". There must be a free return into the tank.

To avoid possible oscillation, there should be a straight tube with a length from minimum 5-times the tube diameter in front of and after the valve.

Also, the pressure build-up after the valve should be minimized by applying a shortest possible tube with a largest possible diameter.

The pipe connection should be done in such a way, that no forces act along the valve's longitudinal axis.

For a correct pressure regulation, the indicated flow direction ("P" = pressure side, "R" = return to tank) must be abided by.



### 3.) Actuating pressure:

must be connected to port 1 (G1/8"). We recommend interposing a lubrication unit. The required actuating pressure must be between following values:

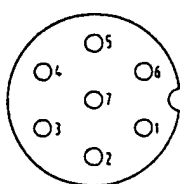
	min. actuating pressure	max. actuating pressure
64 bar- versions	10 % of medium pressure	10 bar / 145 psi
100 bar- versions	5 % of medium pressure	10 bar / 145 psi

### 4.) Elektrical connection:

Power supply:  $U_B = 24 \text{ V DC}$  with less than 10% residual ripple

Control signal: standard :  $U_E = 0 - 10 \text{ V}$

plug- in connection



1: + 24 V DC  
2: 0 Volt  
3: Control signal 0 - 10 Volt  
4: 0 Volt

# KNOLL

Kühlmittelreinigungsanlagen  
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KNOLL Maschinenbau GmbH  
Schwarzachstr. 20, Postf. 1362  
D-88348 Bad Saulgau

Telefon 07581/2008-0  
Telefax 07581/2008-140  
E-mail info@knoll-mb.de  
web www.knoll-mb.de