

**Picture:** pm3/val/evv/d. Dump Valve

The dump valve size 8 is used as a safety valve. It discharges the hydraulic pressure supply under the following conditions:

- emergency stop
- cable break
- loss of power
- user defined pressure ratio between *Pout* and R

Only one hydraulic relief valve is required within the monitored hydraulic circuit between the pump and the first hydraulic block.

When in neutral, the dump valve blocks *Pin* and discharges pressure in *Pout* via the return line R. When active, the dump valve switches *Pin* through to *Pout*.

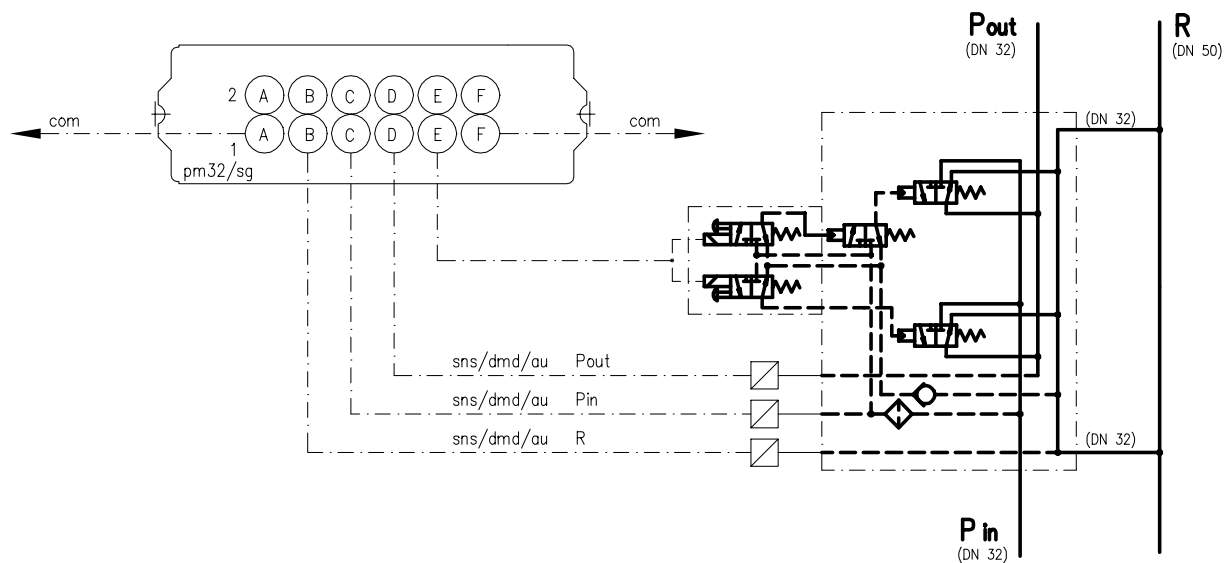
Malfunctions in a longwall are often caused by too high pressure in the return line. The dump valve cannot solve this problem since it reduces the pressure P but increases R temporarily.

The two-stage switching process prevents bursts of extra high pressure occurring during activation. Total supply pressure is available at *Pout* when the switching-on process has finished.

This valve is also available in other sizes.

The dump valve is operated by a PM32 controller pm32/sg/.. via an electromagnetic pilot valve pm3/val/evv/a. The control unit pm32/sg/.. is mounted on the valve. It monitors the *Pin*, *Pout* und R circuits and switches the dump valve. Three pressure transducers sns/dmd/au measure the pressure on *Pin*, *Pout* and R. In stand-alone applications the power supply ntz/d/.. can be provided for electric power supply.

The dump valve has an emergency off facility.



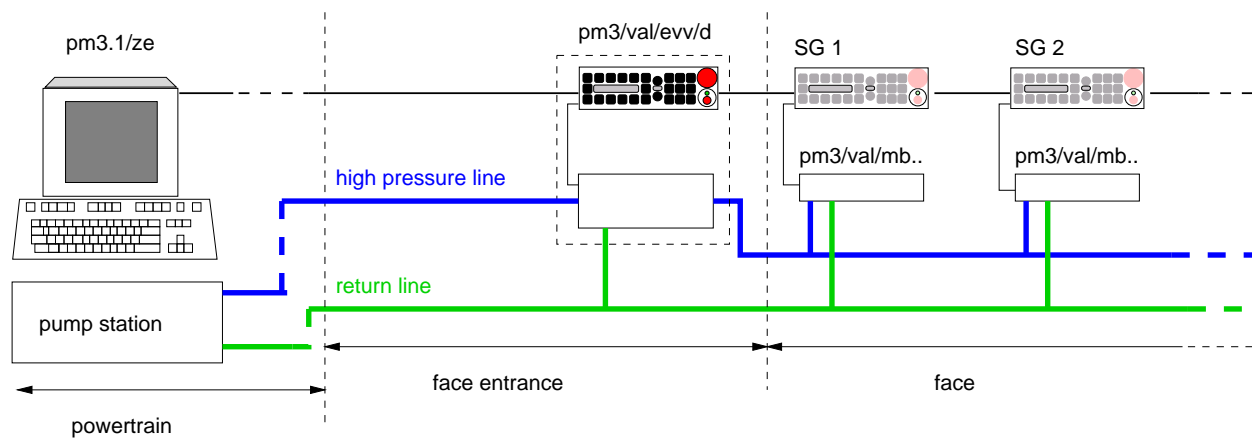
### Features

Dimensions	ca. 395 x 316 x 168 mm
Weight	ca. 40 kg
Operating pressure	350 bar
Throughput	ca. 5000 l/min
Medium	please contact marco.
Power consumption	180 mA
Power supply	12 V
Connector on valve	4-pole M12 stainless steel connector
Connections	<i>P in</i> , <i>P out</i> , <i>R</i> (all DN32, clamps DN32)
	3 x pressure transducer <i>sns/dmd/au</i> (clamp DN12)
	1 x pilot valve <i>pm3/val/evv/a</i>
Construction	according to prEN 1804-4:2004
Russian and Ukraine approval	ПОСС DE.ГБ05.В02014
Russian permission for use	PPC 00-25498 Rostechndasor
Ukraine permission for use	1910073029521 Derzhgirpromnaglad

### Application

The dump valve is implemented in the longwall as a face safety valve. The emergency-off facility is integrated in the emergency-off system of the complete longwall. In the case of an emergency-off or lack of power, the dump valve switches to neutral.

The dump valve is installed between pump station and the first hydraulic block in the longwall.



Order Number	Release	Description
<b>pm3/val/evv/d</b>	<b>1.0</b>	<b>Dump valve with controller</b>
f3pm3/val/evv/da	1.0	Dump valve without controller
pm3/val/evv/a		Double solenoid pilot valve
pm32/sg/a		PM32 Controller
sns/dmd/au		Pressure transducer
ntz/d/1x1,5		Power supply
di:0-3x1,5sh90		Spare o-ring
di:0-7x1,5sh90		Spare o-ring