

Unloading valve

Type DAM

NG 4 Bieri
up to 40 l/min, up to **500 bar**

Features

- Adjustable over the entire pressure range
- Zinc plated body (cartridge)



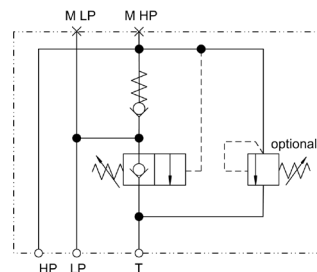
Applications

The unloading valve is used with a low pressure (LP) and a high pressure pump (HP) in a dual-pressure-system. They both supply the same working port. The valve unloads the low pressure pump flow at a set pressure to the tank.

Before the switchover both pumps supply the working port. After the switch over the low pressure pump flow is connected loss-free to the tank. The working port is supplied by the high pressure pump only.

Design

- Seated valve
- Directly operated
- In manifold only
- The unloading valve DAM is a part of the 500 bar series and is integrated together with a check valve into a valve block



Technical data

Hydraulic fluid	Mineral oil according to DIN 51524 (other fluids on request)
Fluid temperature range	-20 to 120 °C
Ambient temperature range	-20 to 120 °C
Viscosity range	10 to 400 mm ² /s
Porting	NG 4 according to Bieri standard
Max. operating pressure port HP	700 bar
Max. operating pressure port LP	150 bar
Pressure setting range port LP	25 to 150 bar
Max. flow rate	40 l/min
Filtration (recommendation)	According to NAS 1638 class 6 resp. ISO/ DIN 4406 17/15/12
Pressure loss (LP->T)	3 bar (at 25l/min and 32 mm ² /s)
Weight	See standard design
Material	Cartridge body: Free-cutting steel, zinc plated Cone: Hardened steel Manifold: Corrosion-free steel Back up ring: PTFE

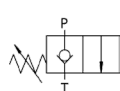
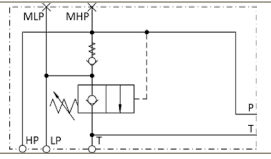
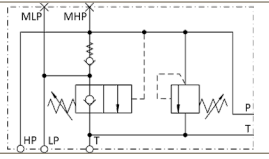
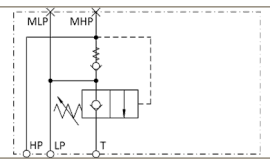
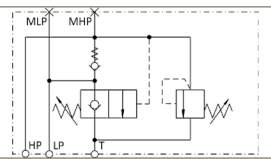
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Type code

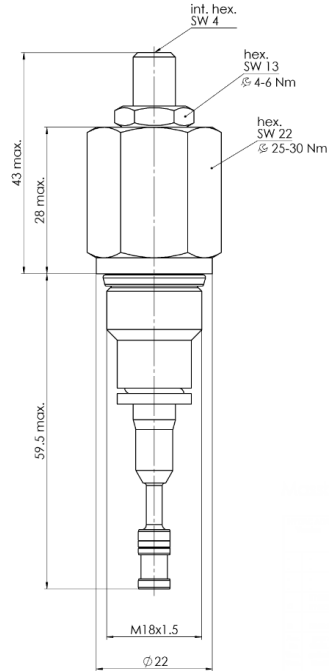
Example	DA	M	4B	VR	150	V	A	00
Unloading valve								
Size	500 bar							
Nominal size	4 ...							
Cartridge	... E							
Connection Bieri	... B							
Connection in-line body	... R							
Design	Cartridge							
X								
In manifold for valve bank:								
VR	Without pressure relief valve							
VRDV	With pressure relief valve							
In-line mounting								
X	Without pressure relief valve							
DV	With pressure relief valve							
Max. pressure setting port LP	150 bar							
Seal material	V FKM other seal materials on request							
	Special design 01 ... 99 (00 for standard)							
	Part index Please leave blank For internal purposes							
	Design revision For internal purposes							

Standard design

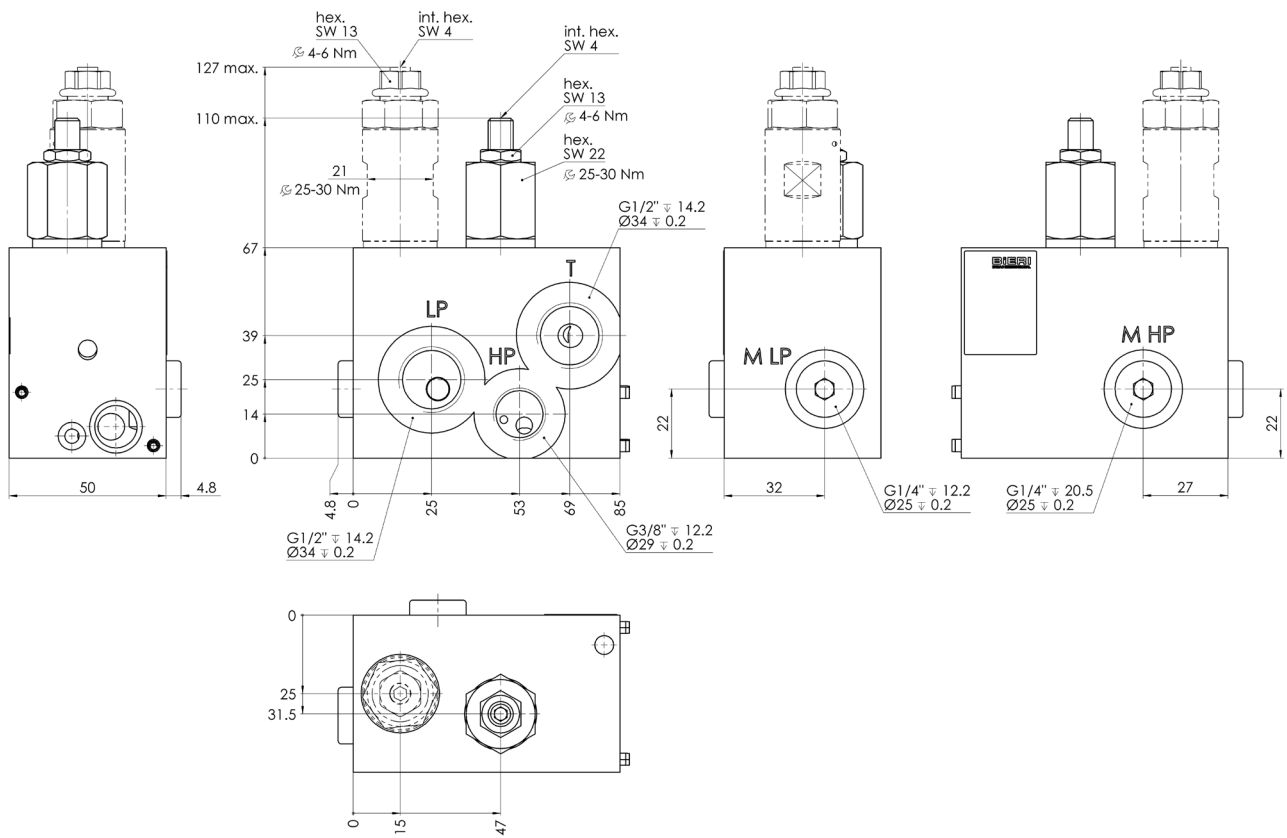
Connection	4E		4B	
Design	X		VR	VRDV
Type code	DAM-4E-X-150-V-A*00		DAM-4B-VR-150-V-A*00	DAM-4B-VRDV-150-V-A*00
Part No.	3958418		3830757	3830759
Symbol				
Weight	0.18 kg		0.20 kg	0.34 kg
Connection	4R			
Design	X	DV		
Type code	DAM-4R-X-150-V-A*00	DAM-4R-DV-150-V-A*00		
Part No.	3830758	3830762		
Symbol				
Weight	0.20 kg	0.34 kg		

Dimensional drawings

Cartridge



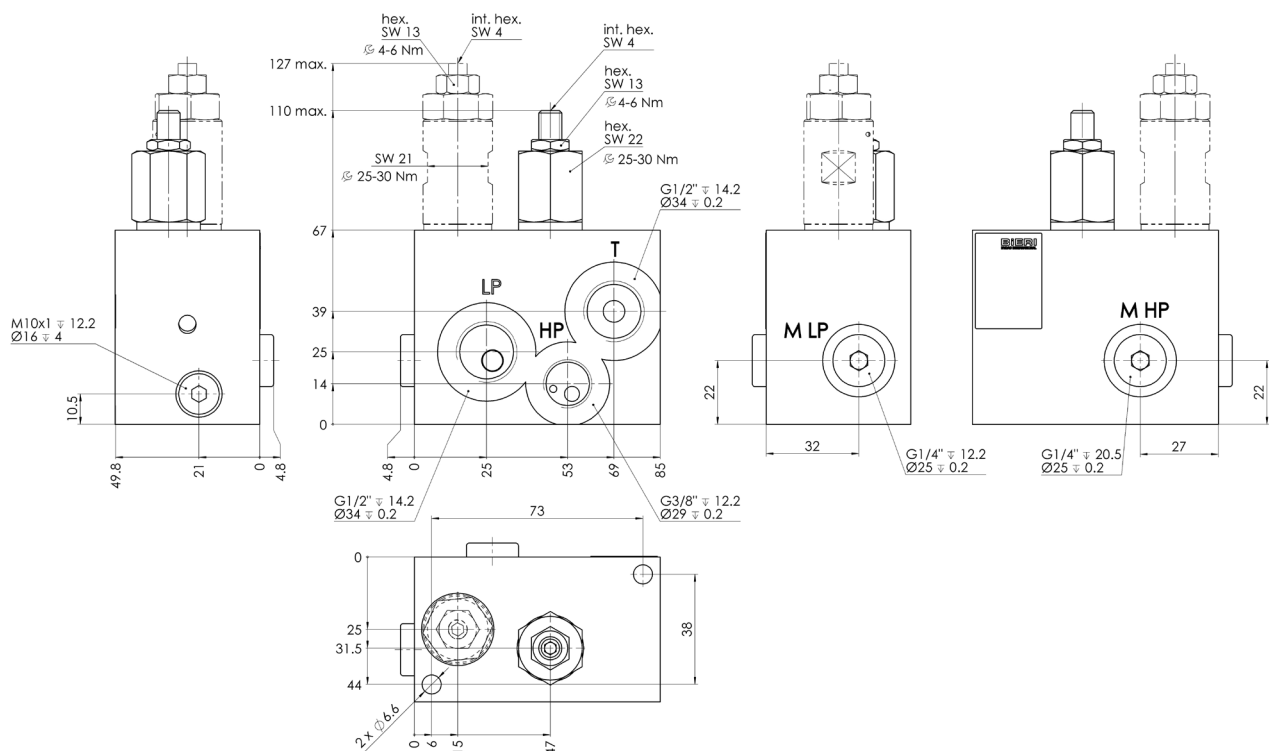
In manifold for valve bank



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In-line mounting



Note: HP to be connected with high pressure pump and system (T-piece). If the optional relief valve is not applied, another separate HP-relief valve must be installed. Also a low pressure relief valve must be installed.

Bieri Hydraulik AG

Könizstrasse 274
CH-3097 Liebefeld
Tel. +41 31 970 09 09 | Fax +41 31 970 09 10
info@bierihydraulics.com | www.bierihydraulics.com

The information in this brochure relates to the operating conditions and applications described.

For applications and operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.