

Unloading valves

Type DAM

NG 4 Bieri
up to 40 l/min, up to **700 bar**

Features

- Adjustable over the entire pressure range
- Good corrosion resistance
- High operational safety and reliable switching
- Poppet tight



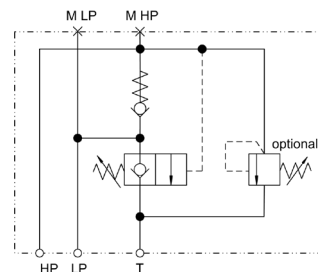
Applications

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

- Poppet valve
- Directly operated
- The unloading valve DAM 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 connection HP	700 bar
Max. operating pressure connection LP	150 bar
Pressure setting range connection 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 drop (LP->T)	3 bar (at 25l/min and 32 mm ² /s)
Weight	see overview "Product information"
Material	cartridge body: free-cutting steel cone: hardened steel valve body: stainless steel

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Type code

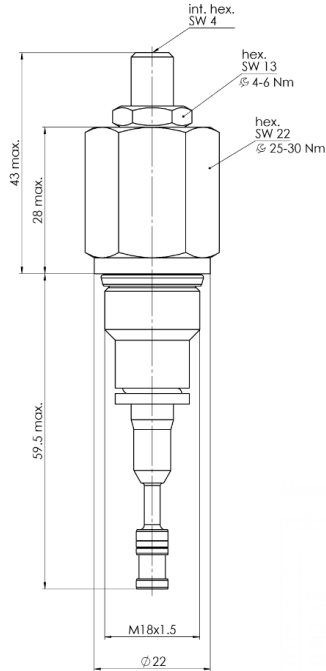
Example	DA	M	4R	DV	150	V	A	00
Unloading valves								Design 00 ... 99 For internal purposes
Size	700 bar							Index Please leave blank For internal purposes
Nominal size	4 ...							
Cartridge	... E							
Connection in-line body	... R							
Design X	Cartridge							Design revision For internal purposes
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							

Product information

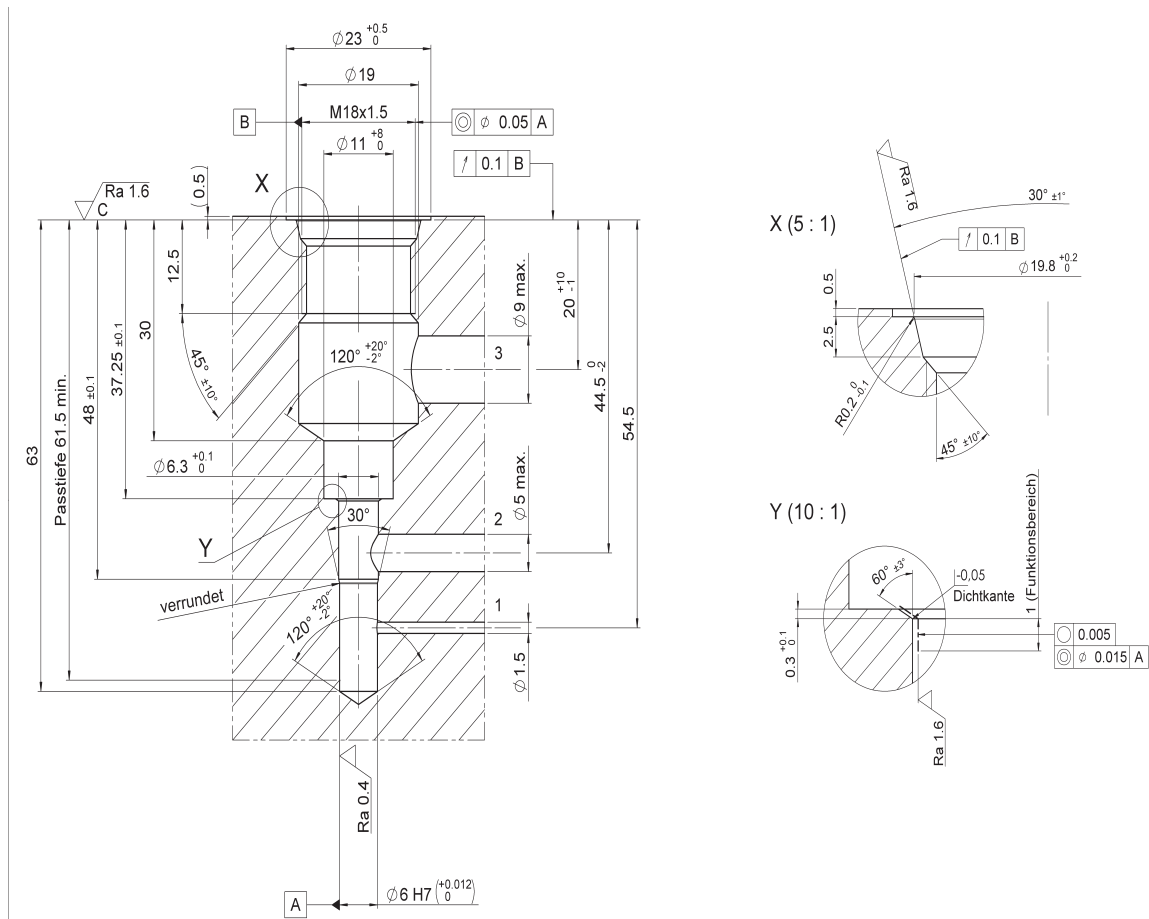
Connection	4E	
Design	X	
Type code	DAM-4E-X-150-V-A*00	
Part No.	3958418	
Symbol		
Weight	0.18 kg	
Connection	4R	
Design	X	DV
Type code	DAM-4R-X-150-V-A*00	DAM-4R-DV-150-V-A*00
Part No.	3830758	3830762
Symbol		
Weight	2.11 kg	2.21 kg

Dimensional drawings

Cartridge



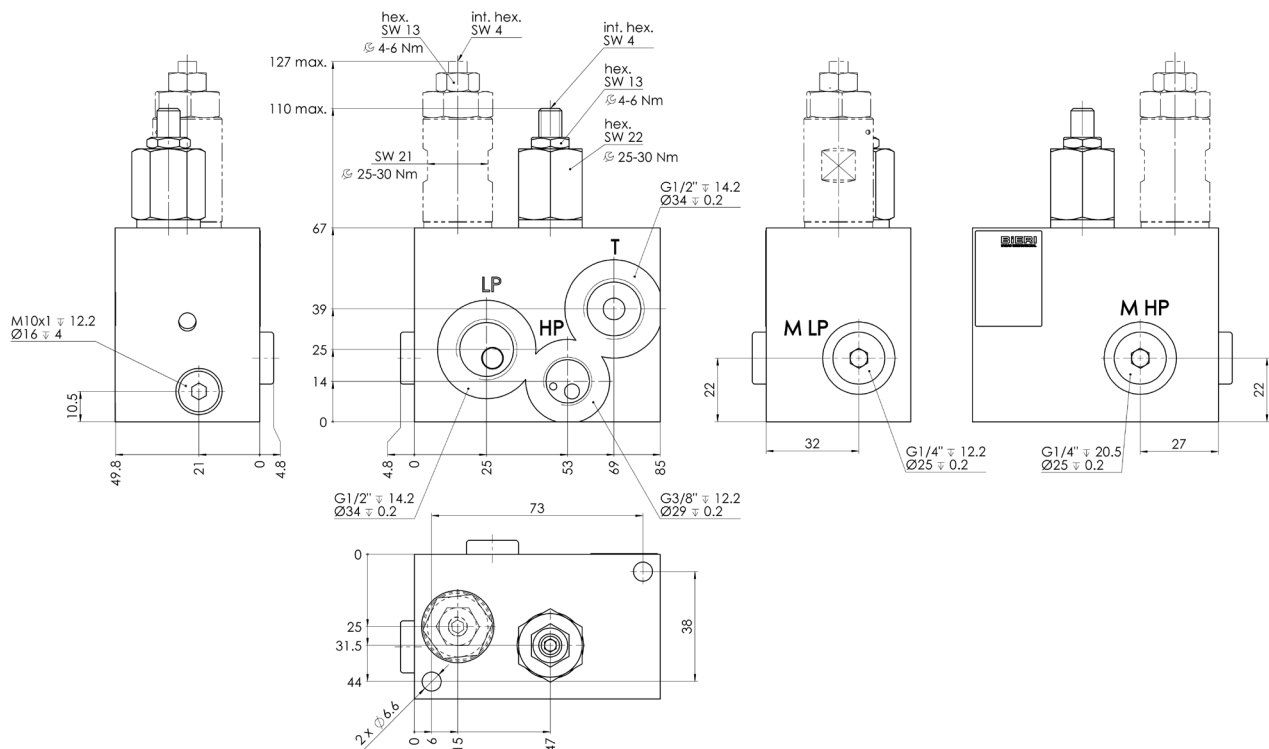
Cavity



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In-line mounting



Note: The consumer must be connected externally to the HP connection (e.g. via a T-piece) (see wiring example). If the optional pressure relief valve in the unloading valve block is not used, the HP pump must be protected by a separate pressure relief valve.

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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.