

Data Sheet

Full Flow High Pressure Relief Valve for H1B Motors

For more than 50 years, Danfoss has been developing state-of-the-art components and systems for mobile machinery used in off-highway operations around the world.

The pressure relief valve block for H1B motors is designed to protect the motor and the main hydraulic lines from pressure peaks.

The valve block will be installed directly on the motor port flange, and is available in following sizes:

- DN19 (3/4") for H1B060
- DN25 (1") for H1B080 / H1B110
- DN32 (1-1/4") for H1B160 and H1B210 / H1B250

The valve block consists of a housing containing two high pressure relief cartridges, with integrated check valves. Cartridges are available in non-adjustable pressure settings between 180 and 510 bar

The valve block includes main port O-rings and pressure cartridges.

Features

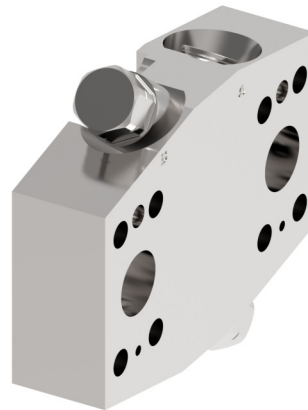
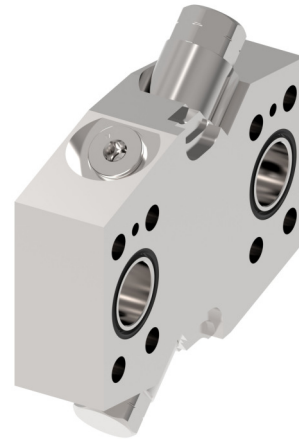
Designed for quality and reliability

- Proven H1B reliability
- HPRVs from H1 pump
- Protect motors from pressure transients / disruptions due to sudden load changes (overload)

Installation and packaging

- Designed to be flanged to axial ported H1B motors *
- Can be combined with CBV Counterbalance Valves

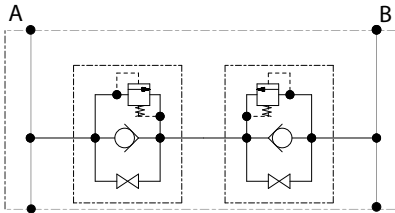
* For details refer to *Technical Information, Full flow High Pressure Relief Valve, BC504472327536*



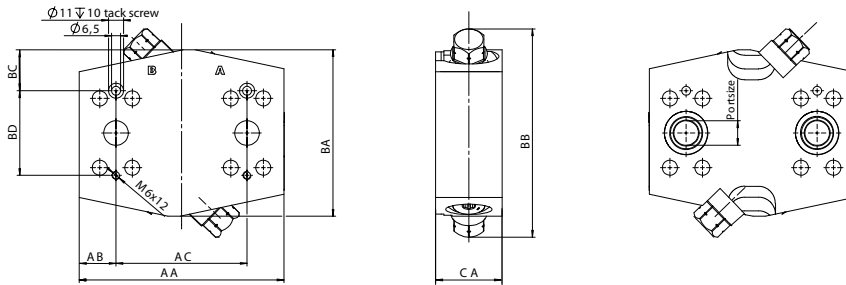
Technical specifications

Size	DN19	DN25	DN32A	DN32B
Weight	5.2 kg [11.5 lbs]	5.6 kg [12.3 lbs]	6.5 kg [14.3 lbs]	7.2 kg [15.9 lbs]
Pressure options	180 bar [2610 psi] to 510 bar [7397 psi] in 30 bar [435 psi] increments			

Schematic



Dimensions



Dimension table in mm [inches]

Size	DN19	DN25	DN32A	DN32B
AA	150 [5.9]	160 [6.3]	180 [7.1]	190 [7.5]
AB	27 [1.1]	30 [1.2]	30 [1.2]	30 [1.2]
AC	96 [3.8]	100 [3.9]	120 [4.7]	130 [5.1]
BA	122 [4.8]	127 [5.0]	132 [5.2]	132 [5.2]
BB	152.6 [6.0]	159 [6.3]	162.6 [6.4]	189.7 [7.5]
BC	30 [1.2]	32.5 [1.3]	46.3 [1.8]	59.9 [2.4]
BD	62 [2.4]	62 [2.4]	70 [2.8]	70 [2.8]
CA	48.6 [1.9]	48.6 [1.9]	48.6 [1.9]	48.6 [1.9]

Port information

Size	H1B 060 with FHPRV 19	H1B 080/110 with FHPRV 25	H1B 160 with FHPRV 32A	H1B 210 & H1B 250 with FHPRV 32B
A,B Split flange boss system	DN 19 Typ I 40 MPa Series per ISO 6162 Thread: M10x1.5; 18 mm full thread depth	DN 25 Typ I 40 MPa Series per ISO 6162 Thread: M12x1.75; 21.5 mm full thread depth	DN 32 Typ I 40 MPa Series per ISO 6162 Thread: M12x1.75; 21.5 mm full thread depth	DN 32 Typ I 40 MPa Series per ISO 6162 Thread: M12x1.75; 21.5 mm full thread depth

For more information, see [Technical Information, H1B 060/080/110/160/210/250 Bent Axis Motors, BC152886483576](#) or [Technical Information, Counterbalance valve systems for H1B motors in Open Circuits, BC428678672746](#)