

## DB21.. Pressure Proportioning Valves

### Function

A **Pressure Proportioning Valve** is used to reduce the downstream (delivered) pressure by a fixed ratio relative to the supply pressure.

The valve has a quick release function to speed up the exhaust of delivered air.

A typical application on trucks, tractors and trailers would be to provide finer control of the service brake when using larger actuators than the maximum axle load would require.

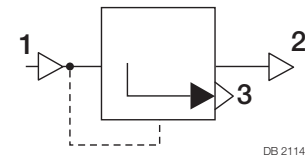
*Note:*

These valves should not be used in combination with EBS since it would cause a conflict between electrical and pneumatic control systems.

The valve has an integral mounting bracket for easy installation.



### Standard Symbol as DIN ISO 1219



### Technical Features

Maximum operating pressure:	10 bar
Operating Temperature Range:	-40 °C to +80 °C
Air port threads:	M22 x 1.5
Weight:	0.6 kg approx.

### Range Overview

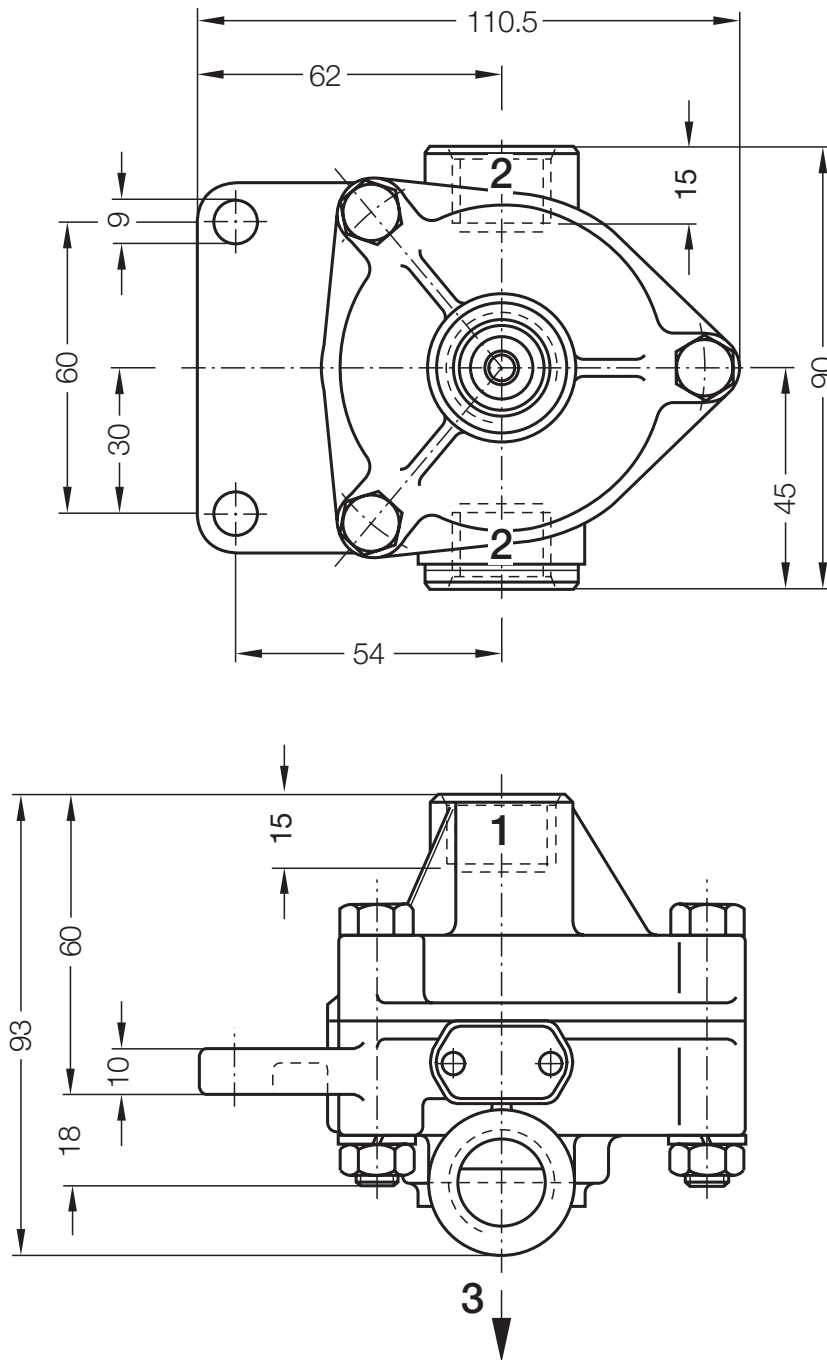
Part No.	Type No.	Reduction ratio	Pressure [bar]	
			Supply Port 1	Delivery Port 2 <sup>1)</sup>
I86153	DB2114	2.00:1	6.5	3.1
I86154	DB2115	1.50:1		4.1
I86155	DB2116	1.15:1		5.4
I86156	DB2118	1.35:1		4.6
I86157	DB2121	1.80:1		3.4
I86158	DB2122	1.25:1		5.0
I86159	DB2123	2.70:1		2.3

<sup>1)</sup> Calculation of the outlet pressure  $P_A = (6,5 - 0,3 + \text{trailer brake valve advance}) / \text{reduction ratio}$

Valves are also available with exhaust silencers fitted.

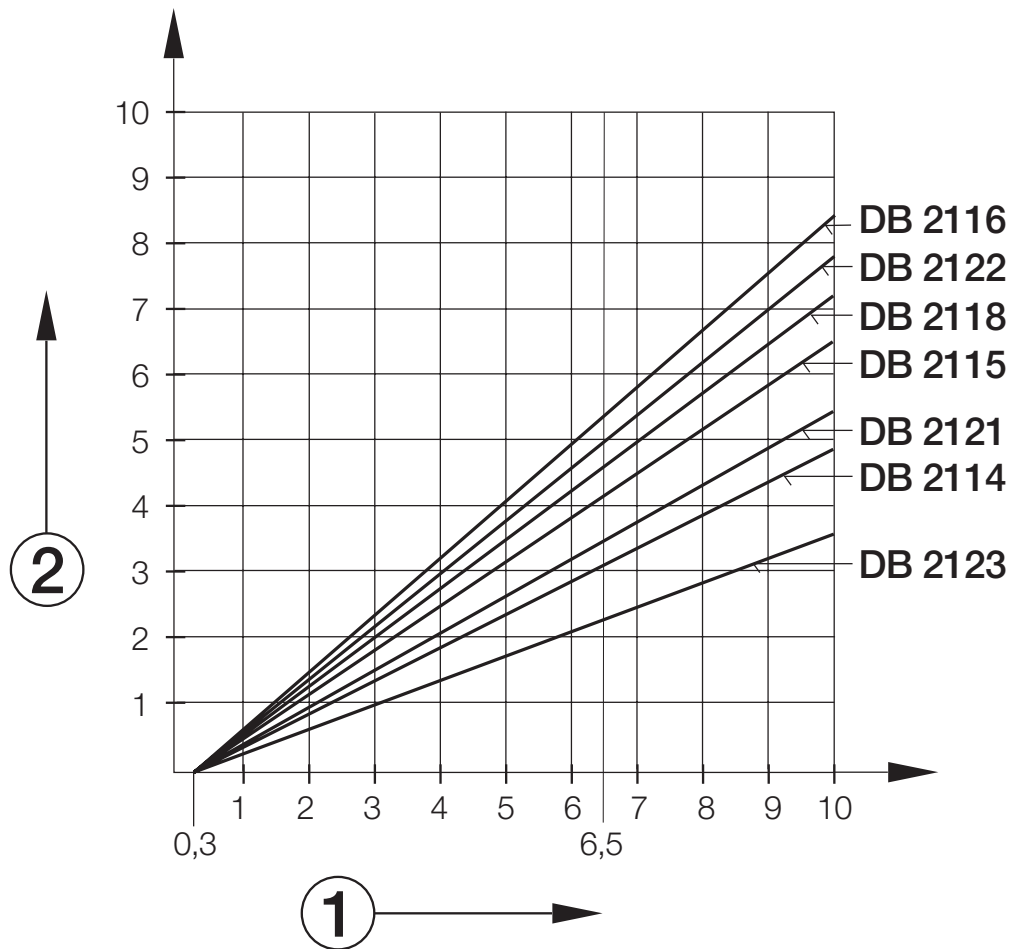
**Dimensions**

- DB2114
- DB2115
- DB2116
- DB2118
- DB2121
- DB2122
- DB2123



- Air Ports:
- 1 = Supply
  - 2 = Delivery
  - 3 = Exhaust

**Performance Graphs**



- ① = Supply Pressure at Port 1 [bar]
- ② = Delivery Pressure at Port 2 [bar]

**Installation**

1. Mount the Pressure Proportioning Valve in an upright position, exhaust port 3 facing downwards.
2. Never block the exhaust port or allow it to be close to any part of the vehicle.

*Note:*

Ensure that the exhaust or silencer (if fitted) is masked during any painting of the vehicle.

**Servicing**

For information on the servicing of Pressure Proportioning Valves refer to the Product Search area of the website [www.Knorr-BremseCVS.com](http://www.Knorr-BremseCVS.com).

**Revision Details**

Rev. 003	April 2019	New Layout
Rev. 004	April 2022	New Layout, updated Range overview



**Knorr-Bremse Systems for Commercial Vehicles**  
Moosacher Strasse 80 | 80809 Munich | Germany  
Tel: +49 89 3547-0  
Fax: +49 89 3547-2767  
[truckservices.knorr-bremse.com](http://truckservices.knorr-bremse.com)

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