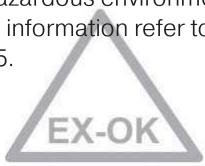


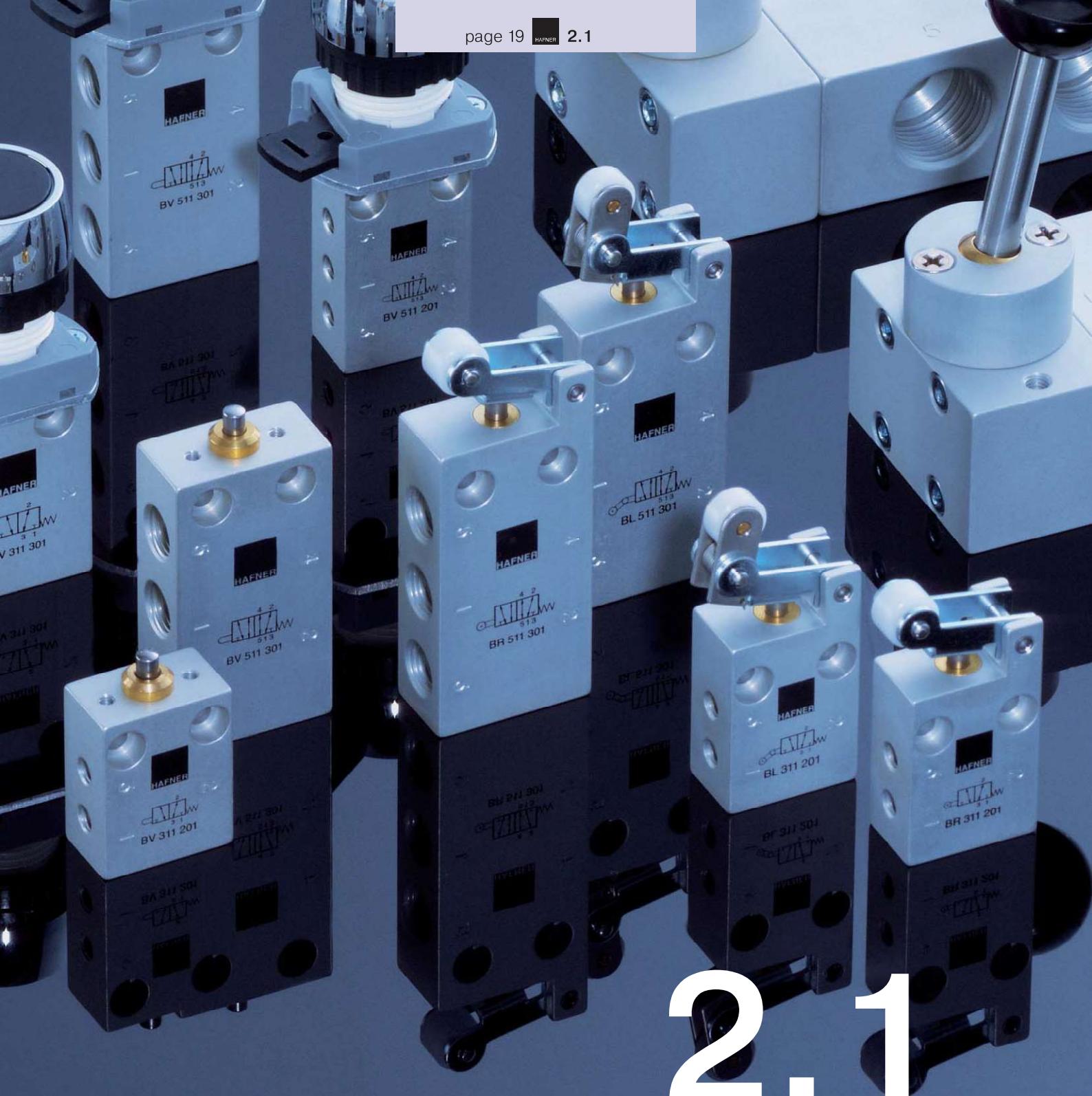
# 2.1

## Mechanically Actuated Valves

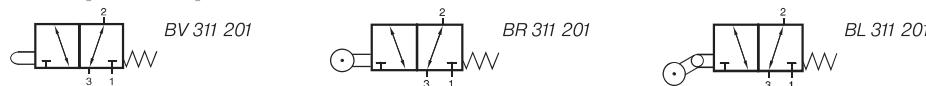
Selected models can be used in explosion hazardous environment.  
For detailed information refer to chapter 2.15.



Selected models are available for low temperature application.  
For detailed information refer to chapter 2.12.



# BV/BR/BL 311 201



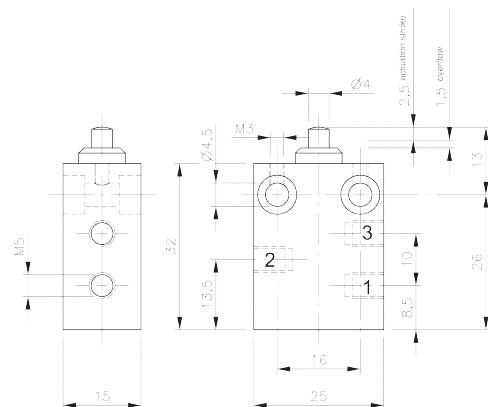
Mechanically actuated 3/2-way spool valve with mechanical spring. All ports are on the side of the valve.

If pressure is applied to port 1 the function is normally closed.  
If pressure is applied to port 3 the function is normally open.

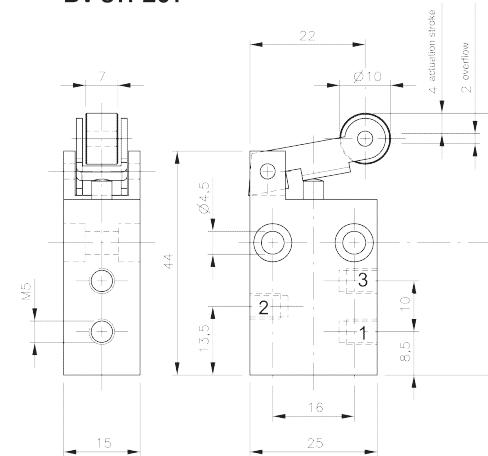
The use of the ports is interchangeable.

Exhaust can be throttled.

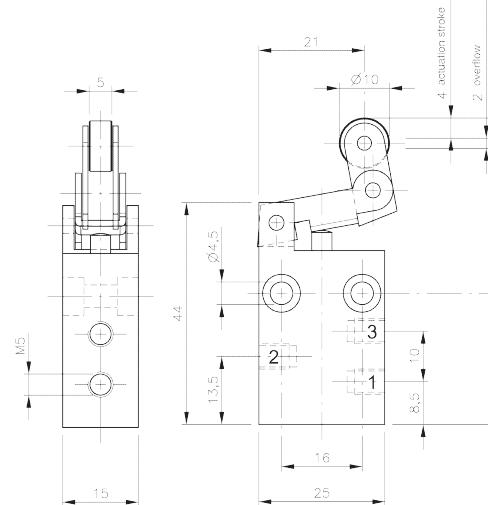
Valves can be used for technical vacuum too.



**BV 311 201**



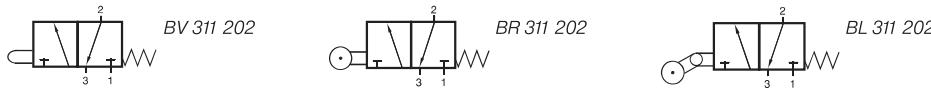
**BR 311 201**



**BL 311 201**

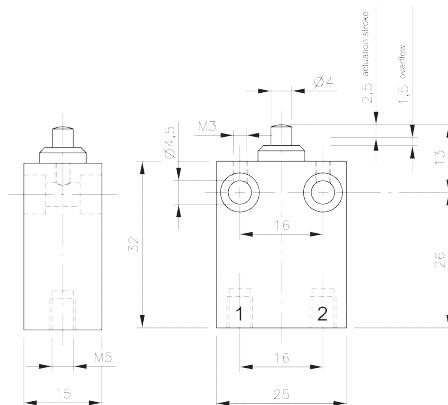
Type	Port size	Air flow	Operating press.	Actuating force	Weight
BV 311 201	M5	125 l/min	-0,9 - 10 bar	14 N	0,033 kg
BR 311 201	M5	125 l/min	-0,9 - 10 bar	9 N	0,041 kg
BL 311 201	M5	125 l/min	-0,9 - 10 bar	9 N	0,044 kg

# BV/BR/BL 311 202



Mechanically actuated 3/2-way spool valve with mechanical spring.

**BV 311 202**



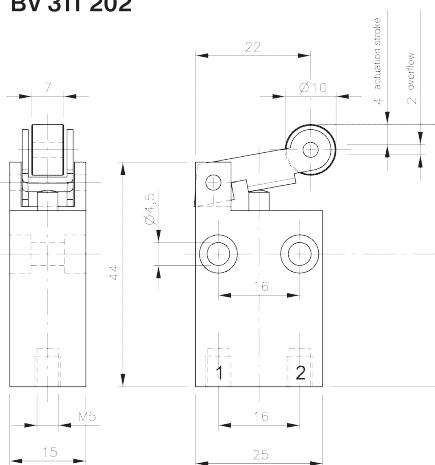
All ports are at the bottom of the valve.

Function is normally closed. When operated the valve opens from 1 to 2.

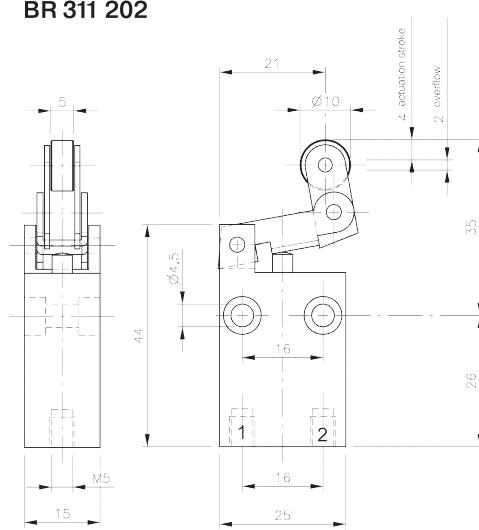
Exhaust through stem.

Normally open versions can be delivered on request.

Valves can be used for technical vacuum too.



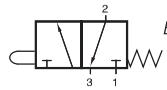
**BR 311 202**



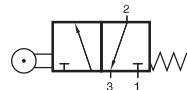
**BL 311 202**

Type	Port size	Air flow	Operating press.	Actuating force	Weight
BV 311 202	M5	115 l/min	-0,9 - 10 bar	14 N	0,033 kg
BR 311 202	M5	115 l/min	-0,9 - 10 bar	9 N	0,041 kg
BL 311 202	M5	115 l/min	-0,9 - 10 bar	9 N	0,044 kg

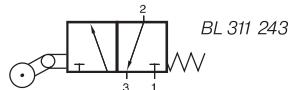
# BV/BR/BL 311 243



BV 311 243



BR 311 243



BL 311 243



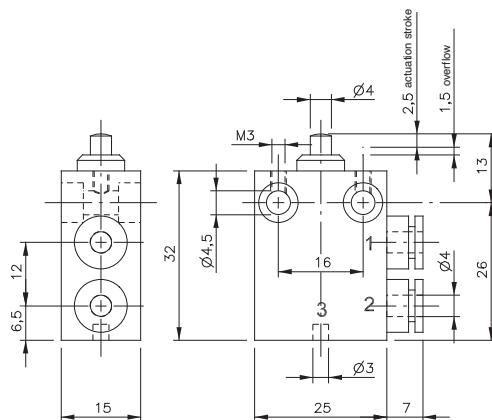
Mechanically actuated 3/2-way spool valve with mechanical spring. Ports 1 and 2 are on one side of the valve, equipped with 4 mm push-in fittings.

Function is normally closed. When operated the valve opens from 1 to 2.

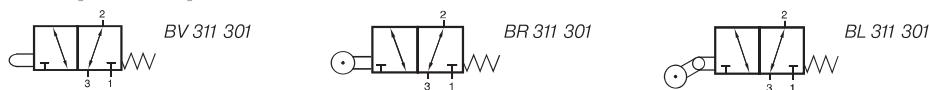
Exhaust through endcap.

Normally open versions can be delivered on request.

Valves can be used for technical vacuum too.



**BV/BR/BL 311 301**



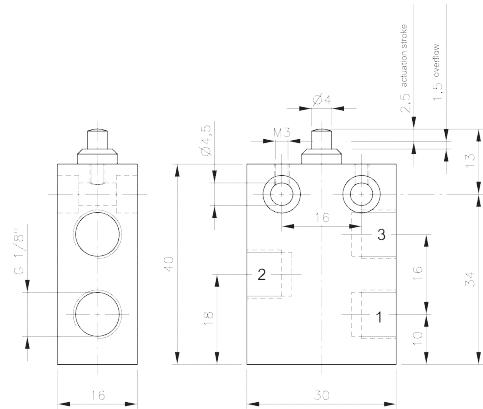
Mechanically actuated 3/2-way spool valve with mechanical spring. All ports are on the side of the valve.

If pressure is applied to port 1 the function is normally closed.  
If pressure is applied to port 3 the function is normally open.

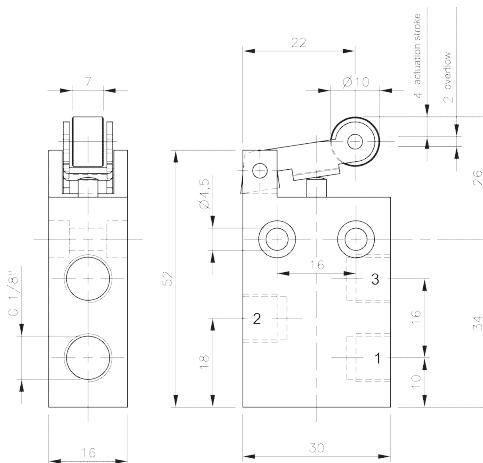
The use of the ports is interchangeable.

Exhaust can be throttled.

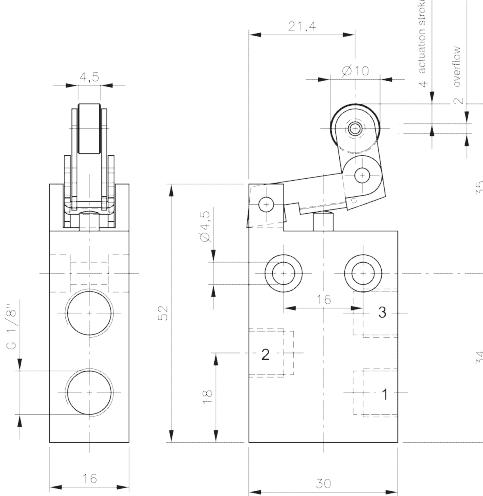
Valves can be used for technical vacuum too.



BV 311 301



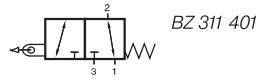
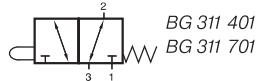
BR 311 301



BL 311 301

Type	Port size	Air flow	Operating press.	Actuating force	Weight
BV 311 301	G 1/8"	280 l/min	-0,9 - 10 bar	14 N	0,047 kg
BR 311 301	G 1/8"	280 l/min	-0,9 - 10 bar	10 N	0,059 kg
BL 311 301	G 1/8"	280 l/min	-0,9 - 10 bar	10 N	0,061 kg

# BG 311 401/BG 311 701



**BG 311 401** stem actuated 3/2-way spool valve with mechanical spring, G 1/8".

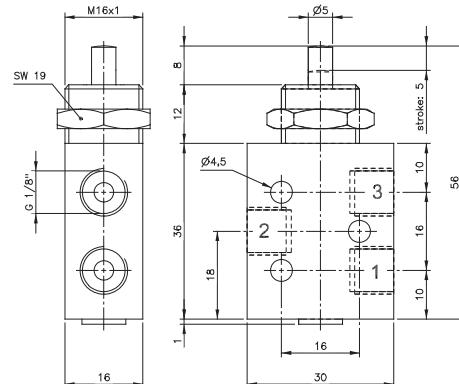
**BG 311 701** heavy duty stem actuated 3/2-way spool valve with mechanical spring, G 1/4".

If pressure is applied to port 1 the function is normally closed.  
If pressure is applied to port 3 the function is normally open.

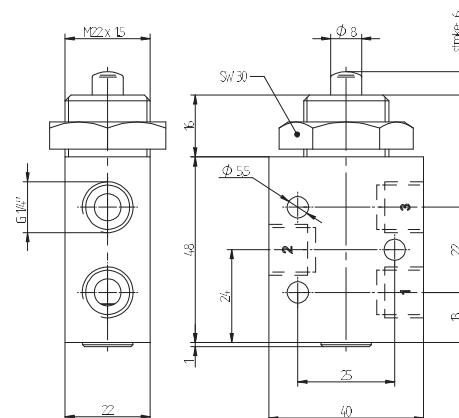
Suitable for wall or panel mounting. Nut for panel mounting M16 x 1 for G 1/8"-valves or M22 x 1,5 for G 1/4"-valves are included.

The use of the ports is interchangeable.

Exhaust can be throttled.



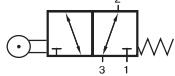
**BG 311 401**



**BG 311 701**

Type	Actuation	Port size	Air flow	Operating press.	Actuating force	Weight
BG 311 401	push	G 1/8"	450 l/min	2 - 10 bar	11 N	0,56 kg
BG 311 701	push	G 1/4"	1250 l/min	1 - 10 bar	17 N	0,13 kg

# BR 311 501/BR 311 701



*BR 311 501*



Heavy-duty 3/2-way roller-lever spool valve with mechanical spring, offering high air flow.

Lever-construction has proven capabilities in rough environmental applications for decades.

Lever is made from zinc plated steel.

If pressure is applied to port 1 the function is normally closed.  
If pressure is applied to port 3 the function is normally open.

The use of the ports is interchangeable.

Exhaust can be throttled.

On request:

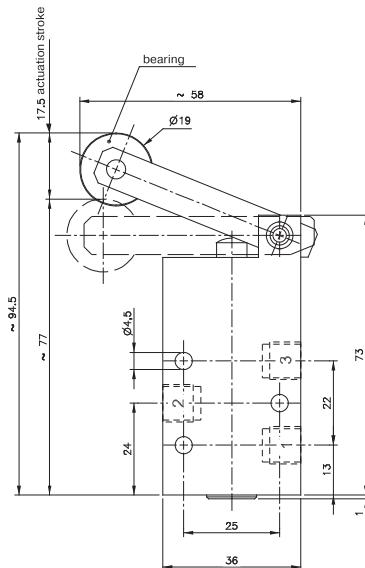
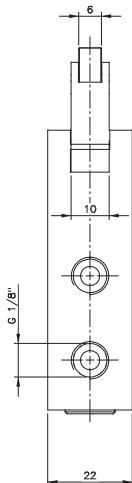
Roller-lever valves with idle return.

Low temperature version:

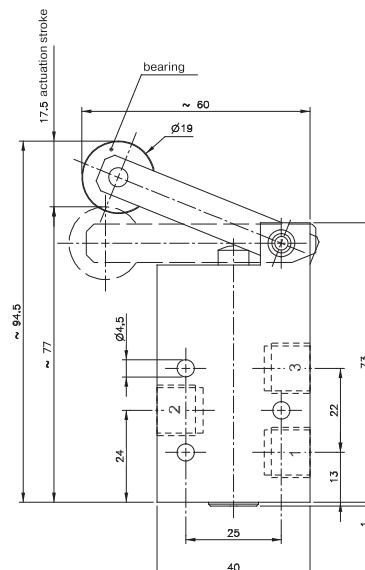
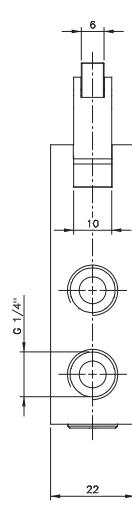
In this case the ports are not interchangeable, standard:  
Pressure at port 1 = normally closed, normally open version to

be ordered separately.

Valves can be used for technical vacuum too.

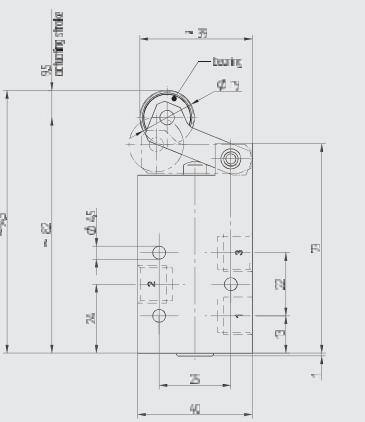
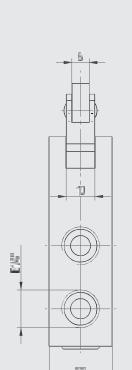


BR 311 501



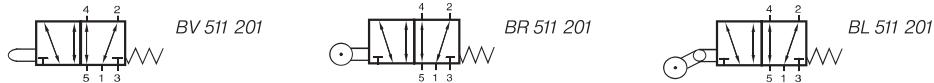
BR 311 701

*Also available with a short stainless steel lever. Actuating force is around 9 N.*



Type	Port size	Air flow	Operating press.	Actuating force	Weight
BR 311 501	G 1/8"	650 l/min	1 - 10 bar	3,5 N	0,19 kg
BR 311 701	G 1/4"	1250 l/min	1 - 10 bar	3,5 N	0,20 kg

**BV/BR/BL 511 201**

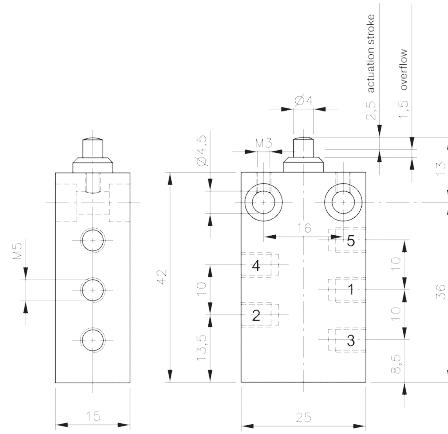


Mechanically actuated 5/2-way spool valve with mechanical spring.

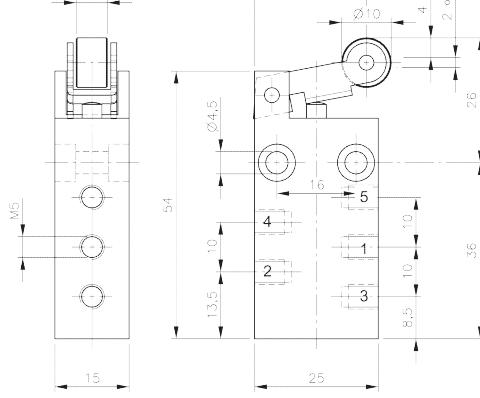
Normally open from 1 to 2 and from 4 to 5. Operated open from 1 to 4 and 2 to 3.

Exhaust can be throttled.

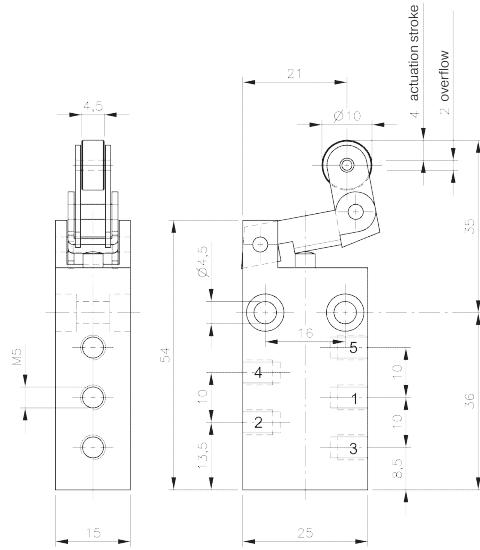
Valves can be used for technical vacuum too.



BV 511 201



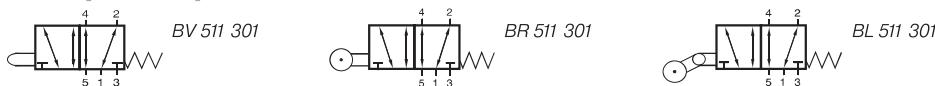
BR 511 201



BL 511 201

Type	Port size	Air flow	Operating press.	Actuating force	Weight
BV 511 201	M5	125 l/min	-0,9 - 10 bar	14 N	0,043 kg
BR 511 201	M5	125 l/min	-0,9 - 10 bar	9 N	0,051 kg
BL 511 201	M5	125 l/min	-0,9 - 10 bar	9 N	0,054 kg

# BV/BR/BL 511 301

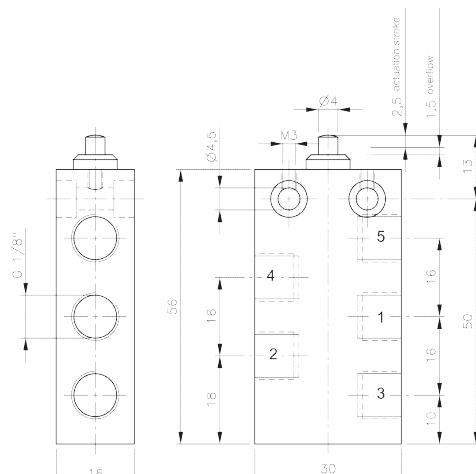


Mechanically actuated 5/2-way spool valve with mechanical spring.

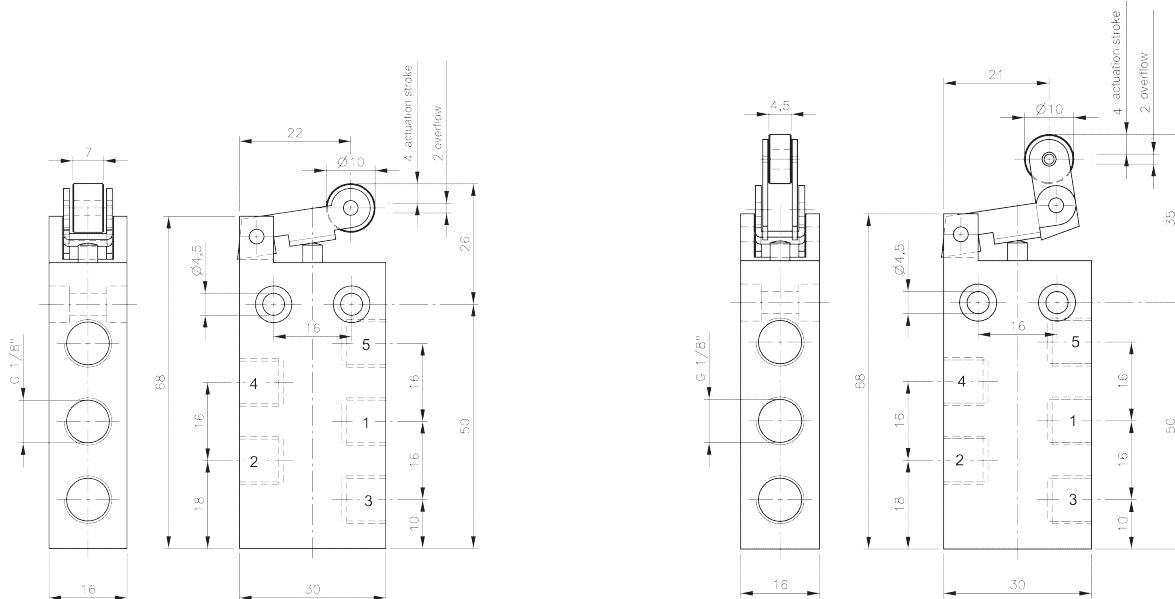
Normally open from 1 to 2 and from 4 to 5. Operated open from 1 to 4 and 2 to 3.

Exhaust can be throttled.

Valves can be used for technical vacuum too.



**BV 511 301**

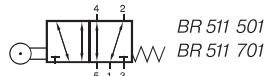


**BR 511 301**

**BL 511 301**

Type	Port size	Air flow	Operating press.	Actuating force	Weight
BV 511 301	G 1/8"	280 l/min	-0,9 - 10 bar	14 N	0,065 kg ▲
BR 511 301	G 1/8"	280 l/min	-0,9 - 10 bar	10 N	0,077 kg
BL 511 301	G 1/8"	280 l/min	-0,9 - 10 bar	10 N	0,079 kg

# BR 511 501/BR 511 701



Heavy-duty 5/2-way roller-lever spool valve with mechanical spring. High flow especially for the trucking and railway industry. Lever-construction has proven capabilities in railway applications for decades.

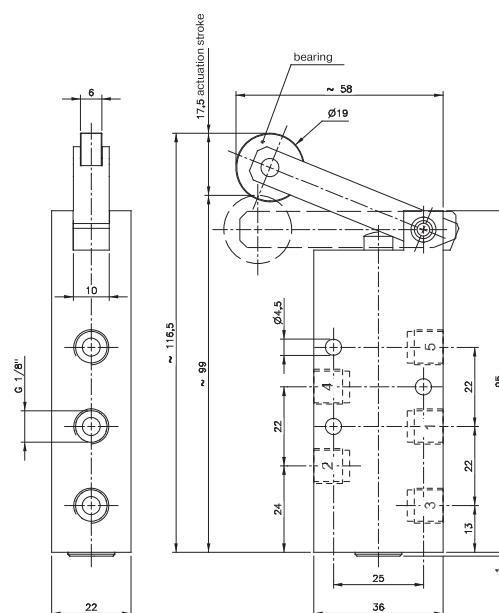
Normally open from 1 to 2 and 4 to 5.  
Operated open from 1 to 4 and 2 to 3.

Exhaust can be throttled.

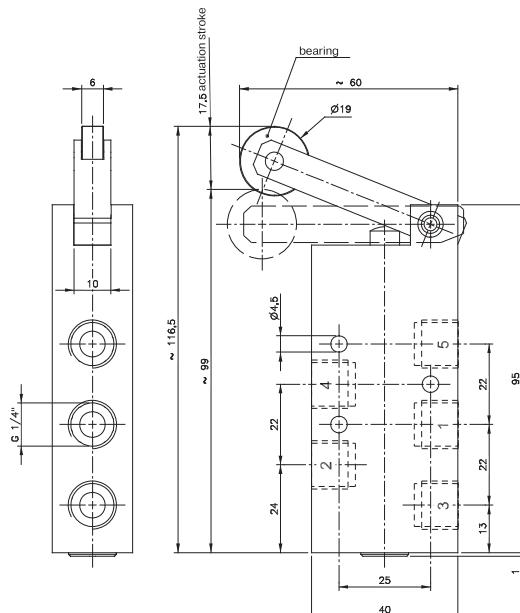
On request:  
Roller-lever valves with idle return.

Low temperature version:  
In this case the ports are not interchangeable, standard:  
Pressure at port 1 = normally closed, normally open version to be ordered separately.

Valves can be used for technical vacuum too.

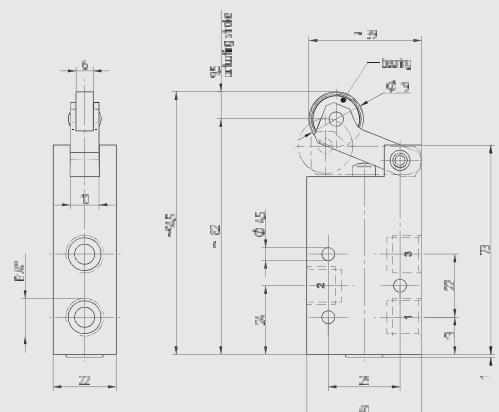


**BR 511 501**



**BR 511 701**

Also available with a short stainless steel lever. Actuating force is around 9 N.



Type	Port size	Air flow	Operating press.	Actuating force	Weight
BR 511 501	G 1/8"	650 l/min	1 - 10 bar	3,5 N	0,23 kg
BR 511 701	G 1/4"	1250 l/min	1 - 10 bar	3,5 N	0,25 kg