

BR50i

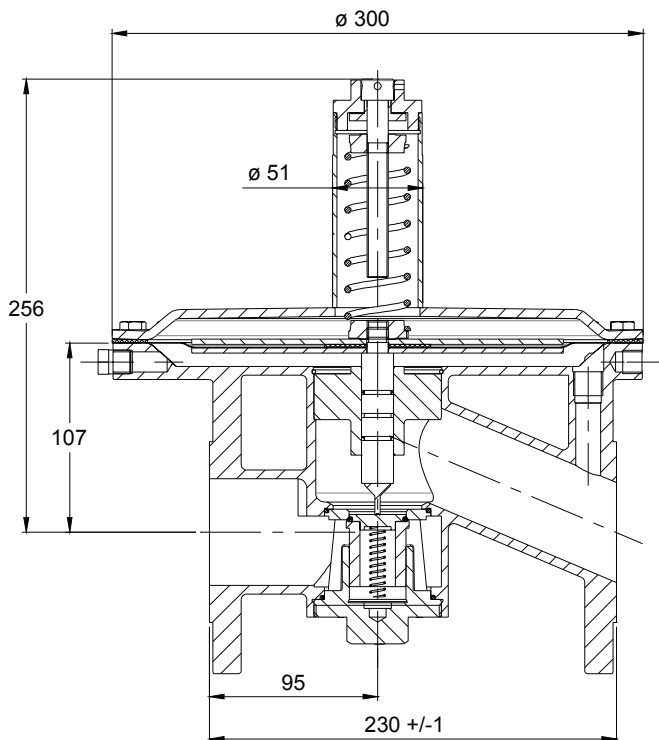
LOW PRESSURE REDUCER

APPLICATION

Spring loaded low pressure reducer for gases, in corrosion resistant design.

FEATURES

- counter pressure max. 2 bar
- control range until 900 mbar
- pressure proof until 16 bar
- inlet pressure up to 6bar (higher pressures upon request)
- Stainless steel cast
- Vacuum tight



Montage

Recommended mounting position is with vertical diaphragm. Mounting and dimensions see MA 4001.02

Technical data

Materials

Body	316L / 1.4409
Upper part	304
Inner parts	1.4404
Diaphragm	PTFE FPM EPDM
Seat O-ring	FFKM 6375 FFKM 6221FDA FPM EPDM

Flow	KVs
Seat Ø 10mm	3
Seat Ø 14mm	6.5
Seat Ø 21mm	12
Seat Ø 32mm	20

Ratio at an average for p1=1-6 bar (relation inlet pressure p1 -outlet pressure p2)

it is: when inlet pressure p1 increase, outlet pressure p2 drops)

Example

When inlet pressure p1 increases by 1bar the outlet pressure descends by 2mbar.

Ratio for direct acting piston

Seat Ø 10mm	- 2 mbar/bar
Seat Ø 14mm	- 5 mbar/bar
Seat Ø 21mm	- 8 mbar/bar

Ratio for compensated piston

Seat Ø 10mm	- 1 mbar/bar
Seat Ø 14mm	- 1 mbar/bar
Seat Ø 21mm	- 2 mbar/bar
Seat Ø 32mm	- 2 mbar/bar

Body tightness

tested at 2bar

Seat tightness

tested according to EN 12266 -1:2003

for T= -10°C bis +150°C:

leakage rate A

at T= -20°C bis -10°C:

leakage rate C

Standard adjustment

The reducers will be adjusted and leaded as follows.:

p1= 6 barg

p2= customer indication

Diaphragm vertical

flow 2 Nm3/h

temperature 20°C

medium air

Weight

approx. 19kg

Maximum controllable flow

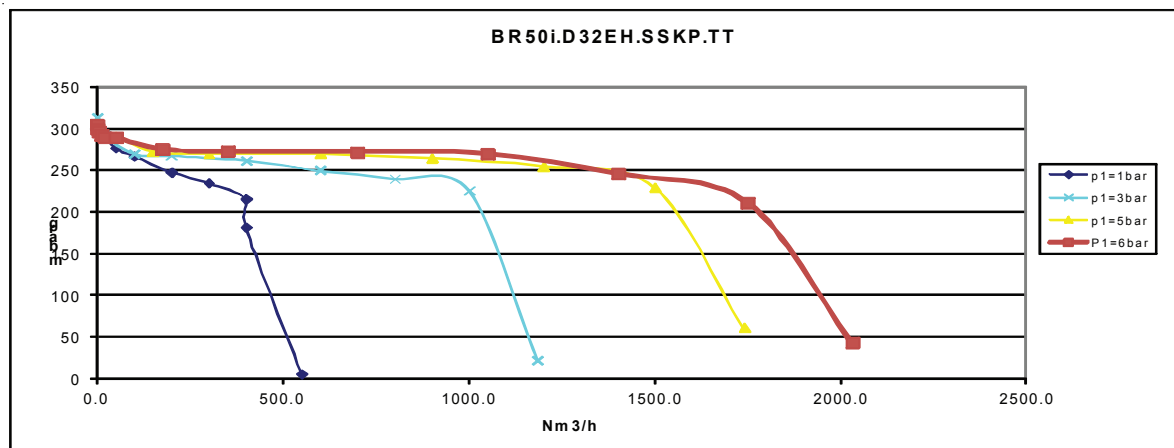
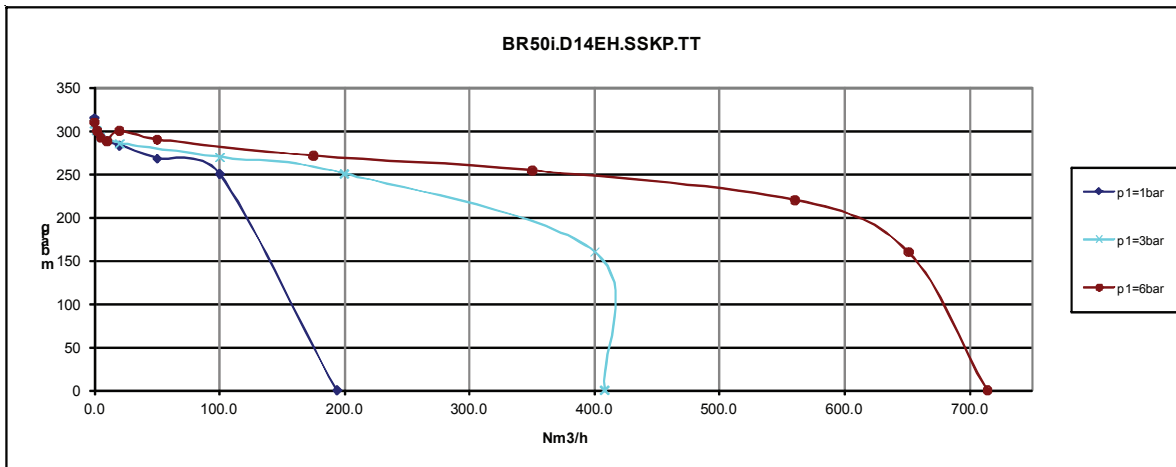
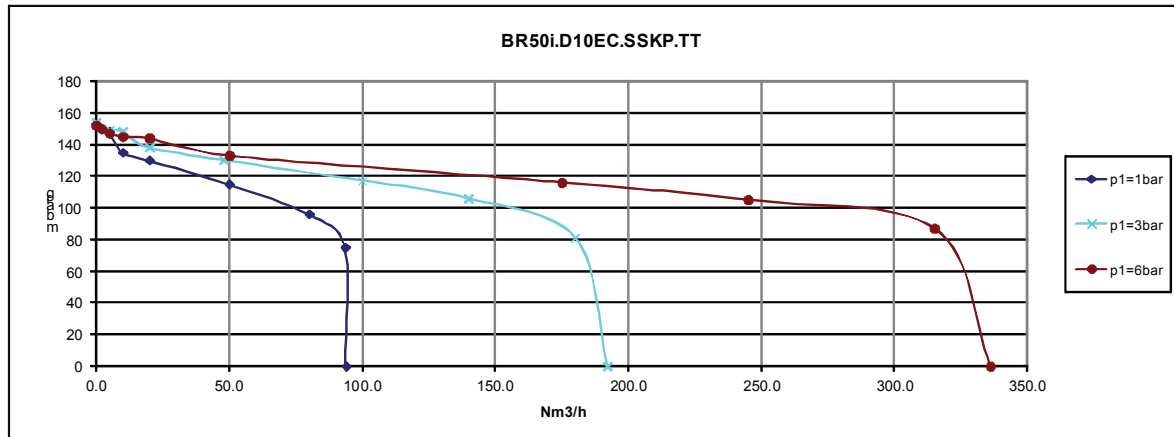
in Nm3/h air, without external sensing line. Values are valid for average spring range and set point of 2 Nm3/h. Other flow indications upon request.

	p1 barg						mm
	1	2	3	4	5	6	
	Q Nm3/h						
Average spring range	80	110	160	190	230	270	10
A 30 mbarg	160	240	320	400	480	560	14
B 70 mbarg	280	430	570	720	860	1000	21
H 300 mbarg	460	690	920	1150	1390	1600	32
U 500 mbarg							

Zubehör / accessoires / accessories

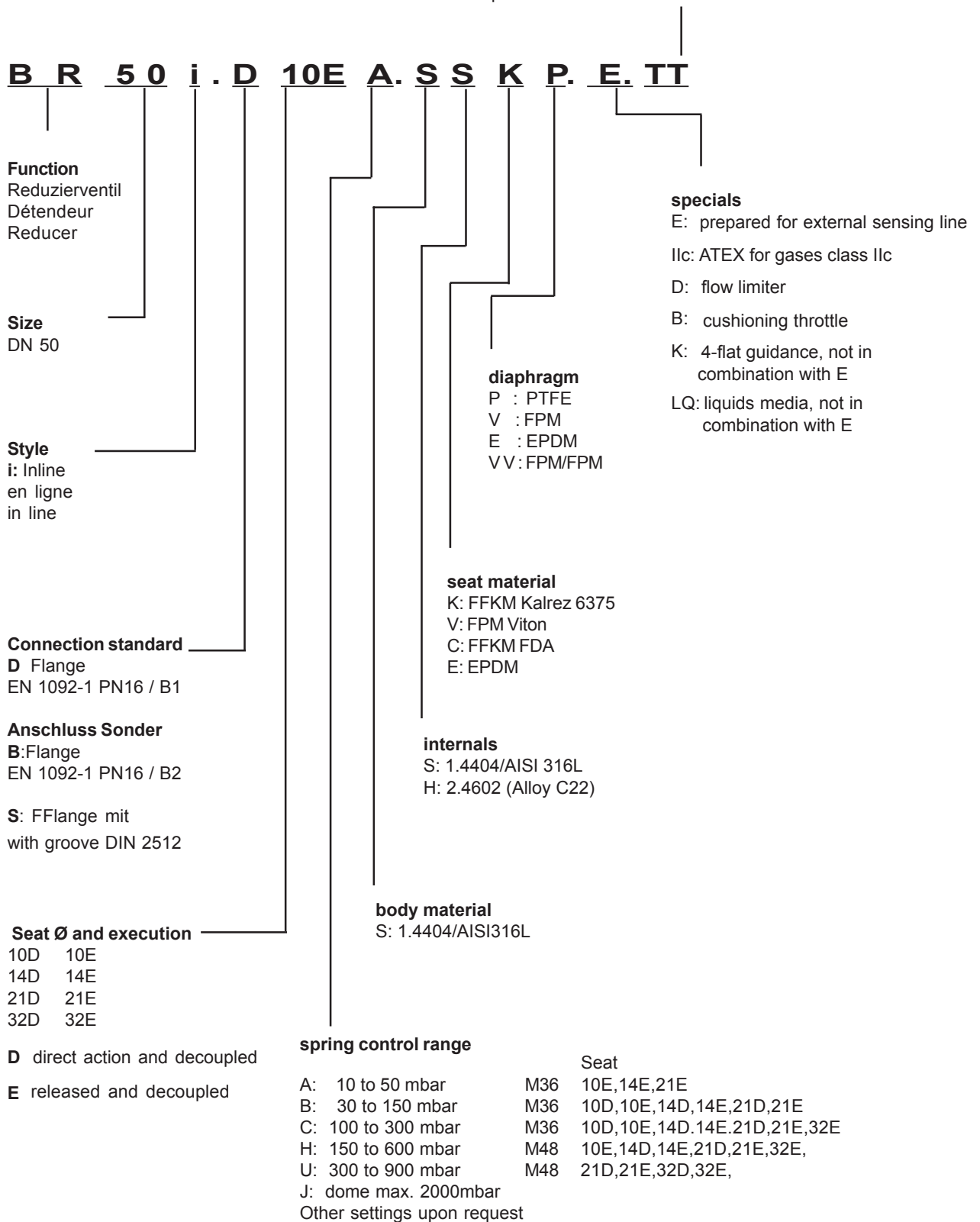
- A ATEX without gas class IIc
- P: Adjusted and sealed
- M: Gauge Ø63 inox
- V: Pressure gauge connection straight
- R: Rain hood

Flow-pressure p2



Order code BR50i

state of development



Our test stand for testing and adjusting of the low pressure reducers

