

# REGULATORI TLAKA ZA VODU PRESSURE REDUCERS FOR WATER



## PRIMJENA:

Regulatori tlaka se koriste u vodovodnim sustavima za:

- smanjenje promjenjivog ulaznog tlaka
- regulaciju na željenu vrijednost
- zaštitu instalacija od prekomjernog tlaka

Za rad se koristi potencijalna energija vode, pa nije potrebno dovođenje vanjske pomoćne energije.

## TEHNIČKE KARAKTERISTIKE:

<u>Medij:</u>	voda
<u>Ulazni tlak:</u>	do 16 bar (25 bar na zahtjev)
<u>Izlazni tlak:</u>	- 0,5 - 2,0 bar - 1,5 - 6,0 bar - 1,5 - 12,0 bar

Podšavanje izlaznog tlaka vrši se jednostavnim ručnim okretanjem matice na upravljačkom ventilu.

Prirubnice: Bušene standardno za PN16 (DIN 2501)  
Na zahtjev za PN25 (DIN 2501)

Nazivne veličine: DN50 - DN300

Radna temperatura: 0°C - 40°C

Konstruktivnim prilagođavanjem moguće je regulatore tlaka koristiti i za druge medije i radne uvjete.

## APLICACION:

Water pressure regulators are used in water supply systems for:

- reduction of variable inlet pressure
- regulation of outlet pressure
- protection of pipelines from too high pressure

For operating is used potential water energy, so there is no need for external energy.

## TEHNIČKE KARAKTERISTIKE:

<u>Medium:</u>	water
<u>Inlet pressure:</u>	up to 16 bar (25 bar on request)
<u>Outlet pressure:</u>	- 0,5 - 2,0 bar - 1,5 - 6,0 bar - 1,5 - 12,0 bar

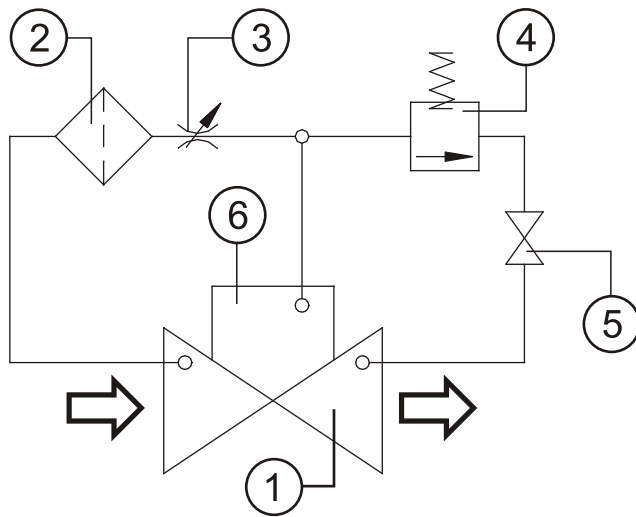
Desired outlet pressure is very simply adjusted by hand, rotating the ring on pilot valve.

Flanges: Drilled standardly for PN16 (DIN 2501)  
On request for PN25 (DIN 2501)

Normal sizes: DN50 - DN300

Operating temperature: 0°C - 40°C

It is possible, by design adjustments, to use these regulators also for other media and operating conditions.



1. Tijelo ventila
2. Pročistač (filter)
3. Prigušni ventil
4. Regulatorni (pilot) ventil
5. Kuglasti ventil
6. Cilindar s klipom

1. Valve body
2. Strainer (filter)
3. Throttle valve
4. Regulating (pilot) valve
5. Ball valve
6. Cylinder with piston

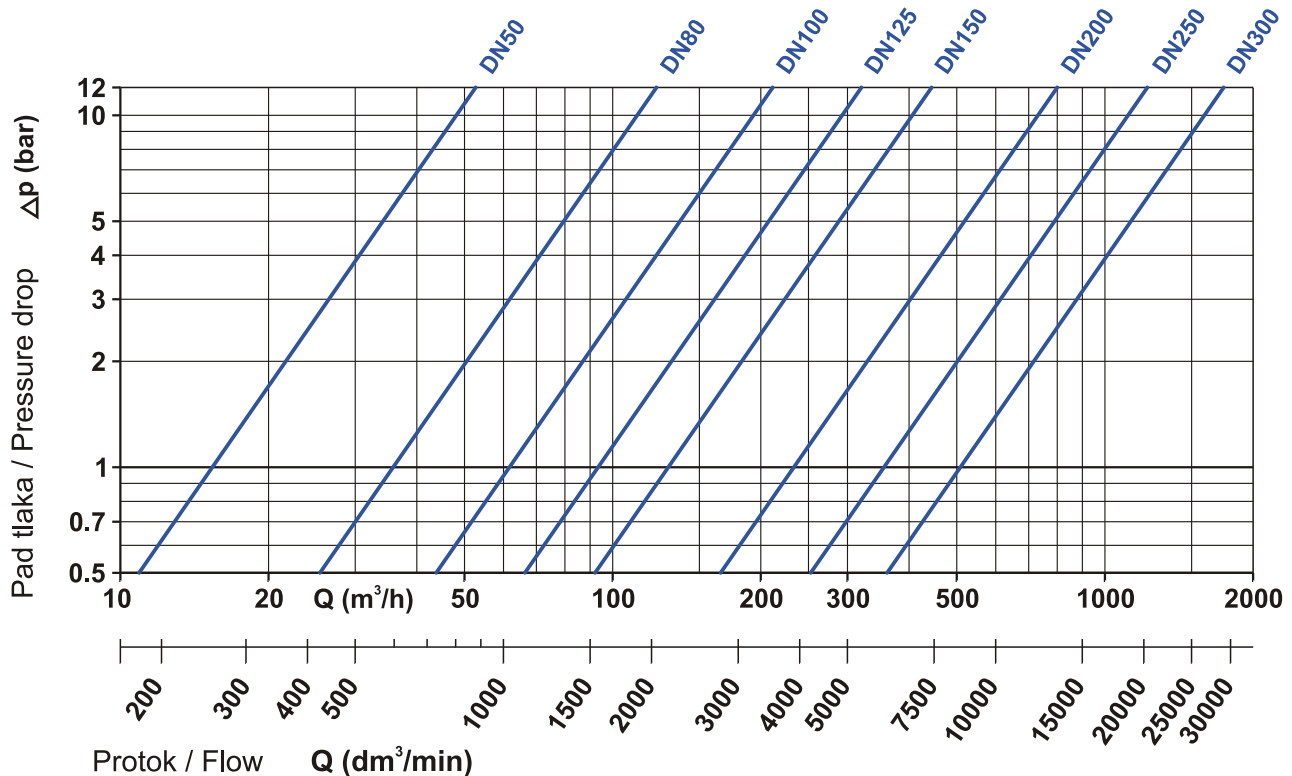
**NAČIN RADA:**

Regulator tlaka je upravljani pilot ventilom koji vrlo precizno otvara ili zatvara klip, upravo koliko je potrebno da se održava konstantan izlazni tlak.

**OPERATION:**

Pressure reducer is designed with pilot valve which controls piston and opens or closes it very precisely in order to regulate constantly outlet pressure.

**DIJAGRAM PROTOKA / FLOW DIAGRAM**

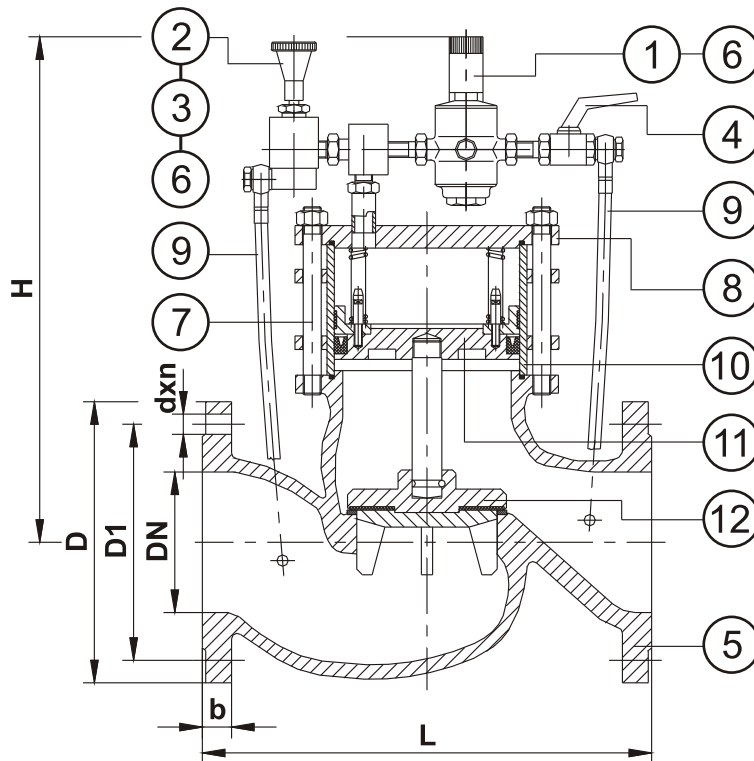


**SMJERICE ZA IZBOR VELIČINE REGULATORA:**

- Izabrati veličinu regulatora prema dimenziji cjevovoda.
- Provjeriti izbor veličine prema dijagramu protoka.
- Brzina strujanja vode ne bi trebala preći 5 m/s.

**DIRECTIONS FOR REDUCER SIZE CHOICE:**

- Reducer size to be same as pipeline size.
- Check size selection according to diagram.
- Flow velocity not to exceed 5 m/s.



- 1. Pilot ventil
  - 2. Prigušni ventil
  - 3. Filter
  - 4. Kuglasti ventil
  - 5. Kućište
  - 6. Manometar
  - 7. Stezni vijak
  - 8. Poklopac
  - 9. Prikjučne cijevi
  - 10. Cilindar
  - 11. Klip
  - 12. Zaporno tijelo
- 
- 1. Pilot valve
  - 2. Throttle valve
  - 3. Filter
  - 4. Ball valve
  - 5. Housing
  - 6. Pressure gauge
  - 7. Tightening screw
  - 8. Cover
  - 9. Connecting hose
  - 10. Cylinder
  - 11. Piston
  - 12. Gasket body

TIP	DN	PN 16					PN 25					L	H	Masa (kg)
		D	D1	d	n	b	D	D1	d	n	b			
RP-50.02	50	165	125	18	4	20	165	125	18	4	20	230	260	16
RP-80.02	80	200	160	18	8	22	200	160	18	8	24	310	295	26
RP-100.03	100	220	180	18	8	24						350	405	45
RP-125.03	125	250	210	18	8	26						400	450	67
RP-150.03	150	285	240	23	8	26						480	500	101
RP-200.04	200	340	295	23	12	30						600	560	160
RP-250.03	250	405	355	26	12	32						730	630	250
RP-300.02	300	460	410	26	12	32						850	680	495

Izvedbu naznačiti kod naručivanja / Performance to be defined in purchasing order

IZVEDBE PERFORMANCES	NP kućišta Body NP	Ulazni tlak Inlet Pressure	Izlazni tlak Outlet Pressure
Standardna / Standard	NP16	16 bar	0,5 - 2,0 bar
Na zahtjev / On request	NP25	25 bar	1,5 - 6,0 bar 1,5 - 12,0 bar

**MATERIJALI:**

Kućište: nodularni lijev  
Cilindar: nehrđajući čelik  
Klip: legura bakra  
Brtve: guma, tesnit  
Vodilice: teflon  
Ostali dijelovi: galvanizirani čelik

Druge vrste materijala ugrađujemo na zahtjev.

**MATERIALS:**

Housing: ductile cast iron  
Cylinder: stainless steel  
Piston: cooper alloy  
Gaskets: rubber, tesnit  
Guides: teflon (PTFE)  
Other parts: galvanized steel

Other materials are built-in on request.

**Podložno izmjenama. / Subject to modifications.**

**PREDNOSTI REGULATORA TLAKA RP U ODNOSU  
NASLIČNE PROIZVODE:**

- Moguće postavljanje na bilo kojem dijelu cjevovoda jer nije potrebno dovođenje vanjske energije.
- Velika točnost održavanja izlaznog tlaka.
- Dobro prigušivanje vibracija.
- Jednostavno podešavanje tijekom rada (bez alata).
- Jednostavno servisiranje (i na mjestu ugradnje).
- Prilikom kontrole i održavanja, ventil nije potrebno vaditi iz cjevovoda.
- Pouzdan i dokazan u radu.
- Svi ugrađeni materijali su fiziološki neškodljivi.
- Manja ukupna potrošnja vode.

**ADVANTAGES OF PRESSURE REDUCERS  
COMPARED TO SIMILAR PRODUCTS:**

- No external energy for operation required so installation is possible in any part of pipeline.
- High accuracy of outlet pressure.
- Quick closing and opening without shocks and vibrations.
- Good vibrations damping.
- Simple adjustment during operation (with no tools).
- Simple maintenance (on a site - without removal).
- Reliable and proven operation.
- All built-in material physiologically and toxicologically harmless.
- Reduced total water consumption.

**REFERENC LISTA / REFERENCE LIST**

- Vodovod Daruvar
- Vodovod Zagreb
- Vodovod Rijeka
- Vodovod Dubrovnik
- Vodovod Petrinja
- Vodovod Sarajevo
- Vodovod Slavonski Brod