





## TECHNICAL SPECIFICATIONS

DN		15	20	25	32	40	50	65	80	100	125	150				
$K_{vs}^{1)}$ [m <sup>3</sup> /h]	full flow	3,2	5	8	12,5	20	32	50	80	125	special execution, technical data according to individual inquiries					
	reduced flow	1	1,6	2,5	5	8	12,5	20	32	50						
		1,6	2,5	3,2	5	8	12,5	20	32	50						
Stroke [mm]		6			8			12		14						
Noise coefficient Z		0,65	0,6	0,55		0,45	0,4		0,35							
Control characteristics		proportional														
Spring range [kPa] <sup>2)</sup>		40...160;			100...400;			200...800;		280...1120						
Maximum pressure in actuator chamber [bar]		20														
Allowed pressure drop in valve [bar]		12						10								
Valve nominal pressure		valve body in grey iron						PN 16								
		valve body in spheroidal iron						PN 16; PN 25; PN 40								
		valve body in carbon steel and stainless steel						PN 16; PN 25; PN 40								
Maximum medium temperature [°C]		water						200								
		steam														
		gases						80								

<sup>1)</sup> other flow ratios  $K_{vs}$  subject to order specification.

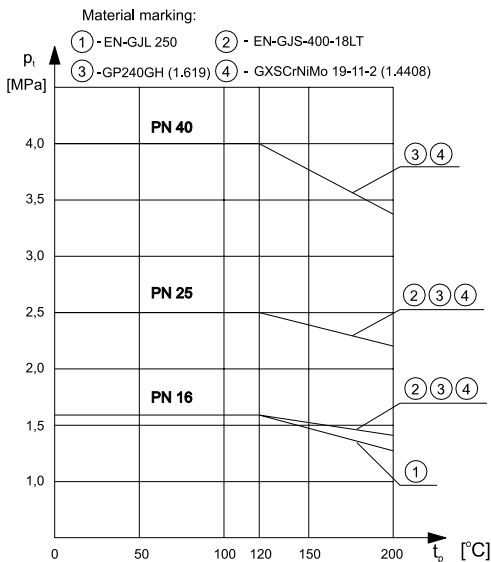
<sup>2)</sup> other ranges subject to order specification.

## MATERIALS as per PN

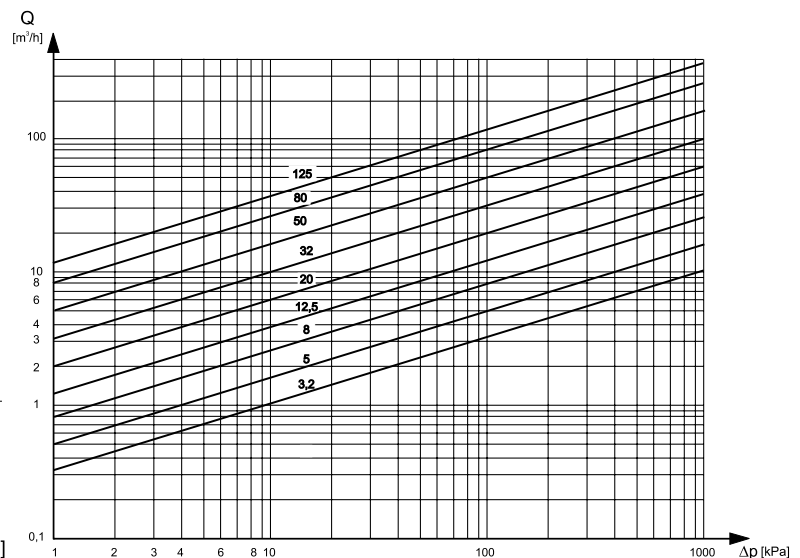
Regulator	ZSN 3.1	ZSN 3.2
	<b>VALVE (01)</b>	
Body	grey iron EN-GJL-250 spheroidal iron EN-GJS-400-178LT carbon steel GP240GH (1.0619) stainless steel GX5CrNiMo 19-11-2 (1.4408)	
Plug and seat	X6CrNiMoTi 17-12-2 (1.4571)	
Guide sleeve		
Packing	EPDM <sup>3)</sup>	
	<b>ACTUATOR (02)</b>	
Housing	carbon steel S235JRG2C (1.0122)	stainless steel X6CrNiTi 18-10 (1.4541)
Stem	X17CrNi 16-2 (1.4057)	
Diaphragm	EPDM + polyester fabric <sup>3)</sup>	
Packing	EPDM <sup>3)</sup>	
	<b>Adjuster (03)</b>	
Adjuster components	carbon steel C45 (1.0503)	
Springs	spring steel 60Si7	

<sup>3)</sup> other materials, subject to medium type.

## NOMINAL PRESSURE, WORKING TEMPERATURE AND WORKING PRESSURE



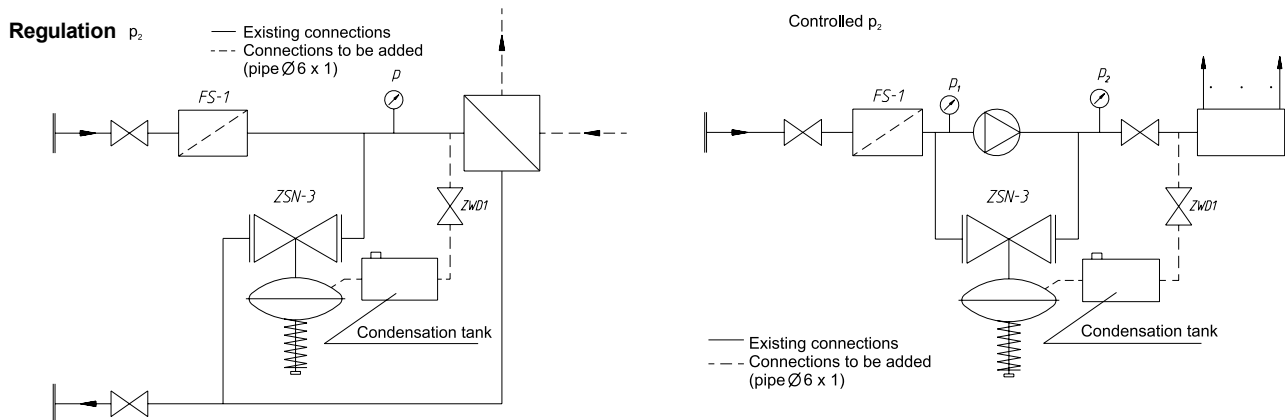
## FLOW DIAGRAM FOR WATER



## INSTALLATION

Regulator is to be installed on horizontal pipeline. Medium flow direction is to conform to arrow on body. At medium temperature lower than 130°C regulator position is optional, at higher temperatures it is recommended to install regulator with adjuster unit (03) down. To ensure reliable operation of regulator apply strainer FS1 upstream and needle valve ZWD 1 at impulse collection point. When applying regulator for steam installation of condensation tank is recommended.

## EXAMPLES OF APPLICATION



## ACCESSORIES

### Delivered:

- nut and cutting ring for impulse tube,

### Optional (ordered separately):

- strainer FS1,
- straight tube connection  $\varnothing 6 \times 1$ ,
- connection stub NPT 1/4"
- impulse tube  $\varnothing 6 \times 1$ ,
- adjustment wrench,
- condensation tank,
- needle valve ZWD 1.

## ORDERING

In your order specify regulator type and marking, ZSN 3.1 or ZSN 3.2, DN nominal diameter, PN nominal pressure, flow ratio  $K_{vs}$ , body material, spring range.

Example of order:

**ZSN 3.1 – DN 32; PN 16; Kvs 8; spheroidal iron; 200...800 kPa.**