



**Gerhard Götze KG**  
Armaturenfabrik

# PRESSURE REDUCING VALVES

INDIVIDUALITY FOR MORE SAFETY

## ΜΕΙΩΤΗΣ ΠΙΕΣΗΣ ΟΡΕΙΧΑΛΚΙΝΟΣ

### Pressure reducer of red brass with pressure-relieved single seat valve and built-in dirt trap

Tested by DVGW (German Gas & Water Control Board)  
Sound-proofing according to  
DIN 4109 + 52218  
Grade: group I

**No. 681**

Entirely made of metal, body and spring bonnet of red brass, screw joints made of brass, on both sides, for iron pipes. If requested, with soldered joint for copper pipes.

Spring made of anti-rust spring steel. Strainers made of stainless steel, mesh size

R 1/2" to R 1 1/4" = 0.6 mm,

R 1 1/2" and R 2" = 0.75 mm.

Diaphragm made of high-quality plastic with insert of fabric, collar, o-ring and seat gasket made of heat resistant plastic.

Body with R 1/4" connection for pressure gauge on both sides.

Primary pressure up to 25 bar

Secondary pressure 1 – 7 bar

Suitable for water up to 95°C, pressure air, neutral gas, neutral and non-adhesive liquids.

**Spare part:** complete valve inserts including dirt traps.

**Accessories:** Pressure gauge 0-10 bar, body with a diameter of 50 mm, connection pin R 1/4" at the rear end.



Seats R 1/2" - R 1 1/4" made of stainless steel  
R 1 1/2" and R 2" made of red brass.



**ΧΡΥΣΑΦΙΔΗΣ Α.Ε.**

Connection R	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Soldered joint f. copper pipe	15	22	28	35	42	54
Weight in kg	0.80	1.30	1.70	1.90	3.60	6.70



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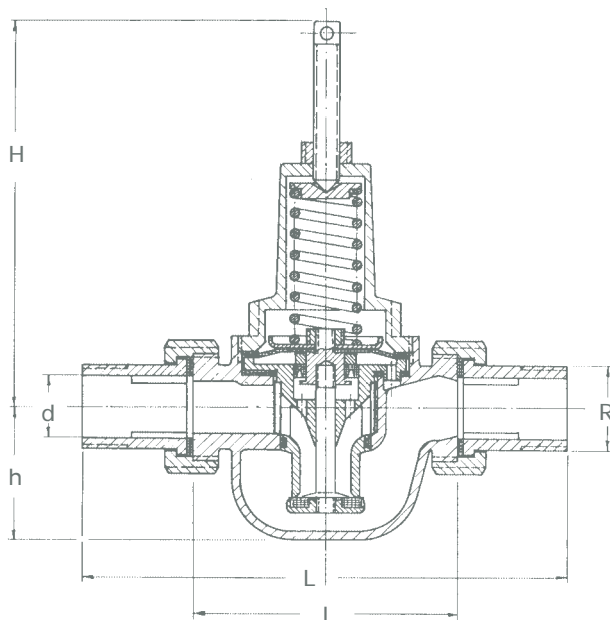
### Pressure reducer made of red brass with pressure-relieved single seat valve

Used for domestic water supply systems according to  
DIN 1988 as well as for industrial plants.



Από το 1882

ΧΡΥΣΑΦΙΔΗΣ Α.Ε.



Connection R		$\frac{1}{2}''$	$\frac{3}{4}''$	1''	1 $\frac{1}{4}''$	1 $\frac{1}{2}''$	2''
Installation dimensions in mm	d	15	22	28	35	42	54
	L	135	160	178	186	226	260
	I	75	92	98	98	128	148
	H	110	110	150	160	190	265
	h	30	42	46	46	52	75

#### Installation instructions:

Please install the pressure reducer with relaxed spring, in the direction of the arrow.

With no pressure (no consumption) please turn the screw to the right until the pressure gauge indicates the required end pressure. When adjusting please consider that the end pressure adjusted while there is no consumption, due to loss by friction will drop a bit more when water is drawn.

15/11/2005



## Determination of size and capacity of pressure reducers no. 681

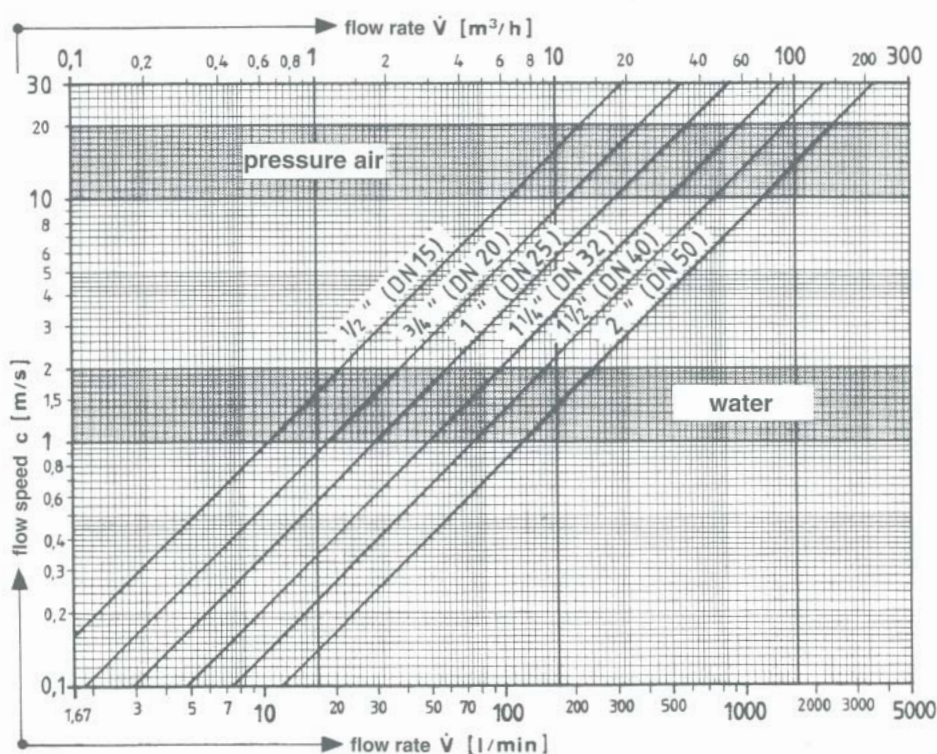


ΧΡΥΣΑΦΙΔΗΣ Α.Ε.

For liquids:

By the help of the diagram, the necessary diameter (DN) can be determined for a required flow rate  $V$  (m<sup>3</sup>/h).

In domestic water supply systems a flow speed of 2 m/s should not be exceeded according to the DVGW-guidelines (DIN 1988).



For pressure air and other gaseous media:

The usual flow speed for pressure air is 10 – 20 m/s.

For gaseous media the flow rate  $V$  always should be stated in industrial m<sup>3</sup>/h.

If the flow rate is given in normal cubic meters, these normal cubic meters should be converted into industrial cubic meters before using the diagram.

$$V(\text{m}^3/\text{h}) = \frac{V_{\text{norm.}} (\text{Nm}^3/\text{h})}{p_{\text{absol.}} (\text{bar})} = \frac{V_{\text{Norm}}}{p_u + 1}$$

Industrial cubic meters refer to the pressure condition of the medium behind the pressure reducer.