

SERIES R VALVE FLOW CHART

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SAMPLES

a). With water.
 Flow velocity: 2,5 m/s
 Product: $\rho \cdot v^2 = 6250$
 Pressure drop: 1,15 w.c.m
 With spring.
 Valve completely open.

b). With air in vertical pipe
 Air density: 1,3 Kg/m³
 Flow velocity: 14 m/s
 Product: $\rho \cdot v^2 = 254,8$
 Pressure drop: 0,046 wcm.
 Valve completely open.

c). With air in horizontal pipe.
 Air density: 1,3 Kg/m³
 Flow velocity: 14 m/s
 Product: $\rho \cdot v^2 = 254,8$
 Pressure drop: 0,069 wcm.
 Valve partly open
 Without spring.
 Vibrations risk.
 Convenient to choose a
 smaller dimension.

NOTES

For choosing the size of the
 valve follow this:

Choose the product $\rho \cdot v^2$ in the
 horizontal axis and observe the curves

If product $\rho \cdot v^2 > 200$ (point V
 of Fig. 1 y 2) in vertical pipe,
 spring will be necessary. (Gases)

If product $\rho \cdot v^2 < 400$ (punto IV
 de Fig. 1 y 2) in horizontal pipe,
 it will not need spring.

If product $\rho \cdot v^2 = 900$ y 1000
 (point III y II de Fig. 1 y 2) in
 horizontal pipe, will need spring

For liquids read this pressure drop as shown

For gases, apply the following coefficients:

DN300 y DN350 $\Delta p = x \cdot 0,89$

DN400 - DN700 $\Delta p = x \cdot 0,83$

DN750 - DN1000 $\Delta p = x \cdot 0,78$

Valve in vertical pipe

Valve in horizontal pipe

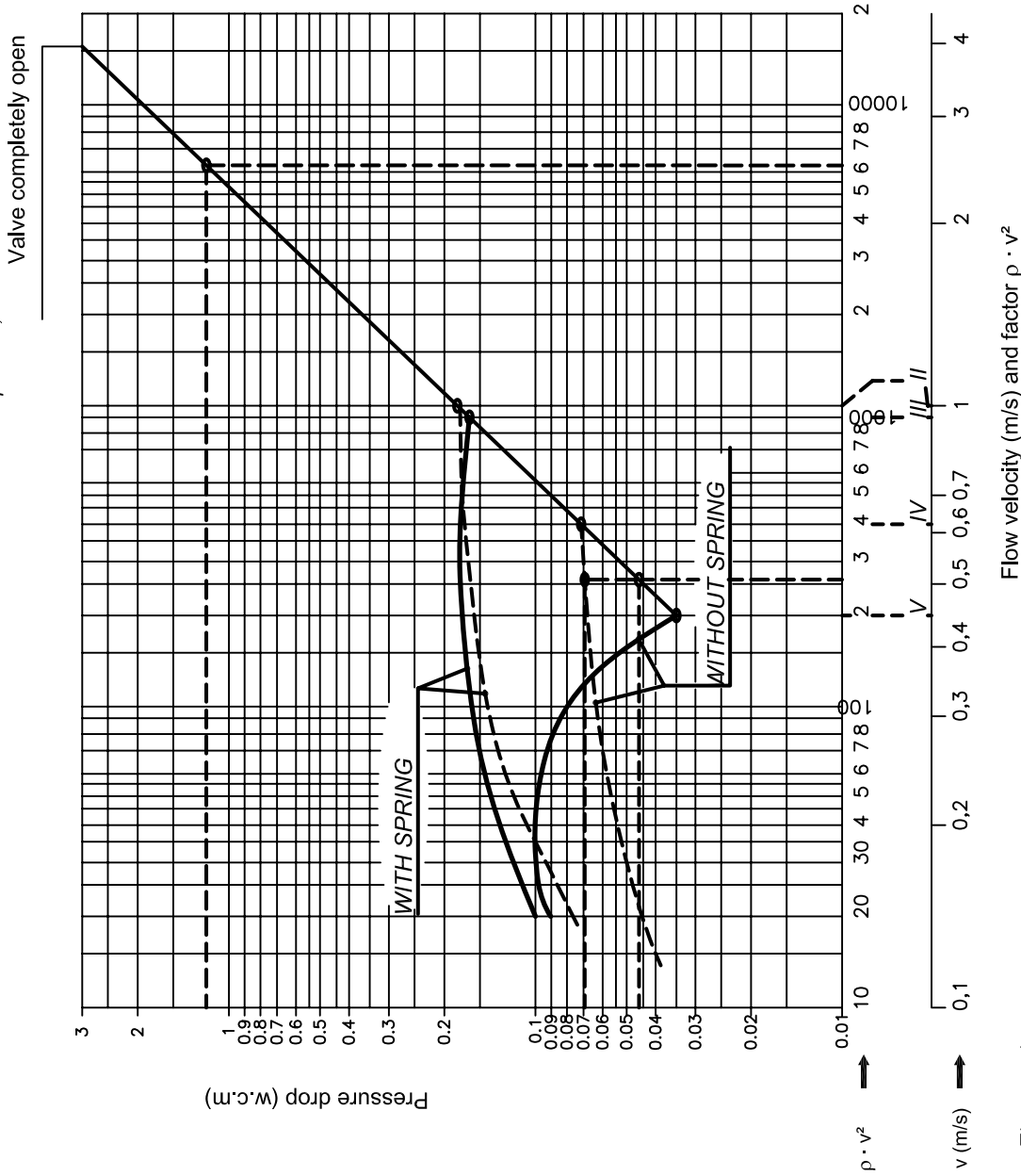
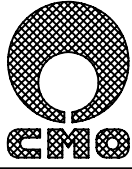


Figure 1



SERIES R VALVE FLOW CHART

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NOTES

- I. Before the valve is fully open the pressure drop across it exceeds the value shown
 - II. With spring and fitted in a horizontal pipe
 - III. With spring and fitted in a vertical pipe
 - IV. Without spring and fitted in a horizontal pipe.
 - V. Without spring and fitted in a vertical pipe.
- Q = Flow in m^3/h
 ρ = Density of fluid (Kg/m^3)

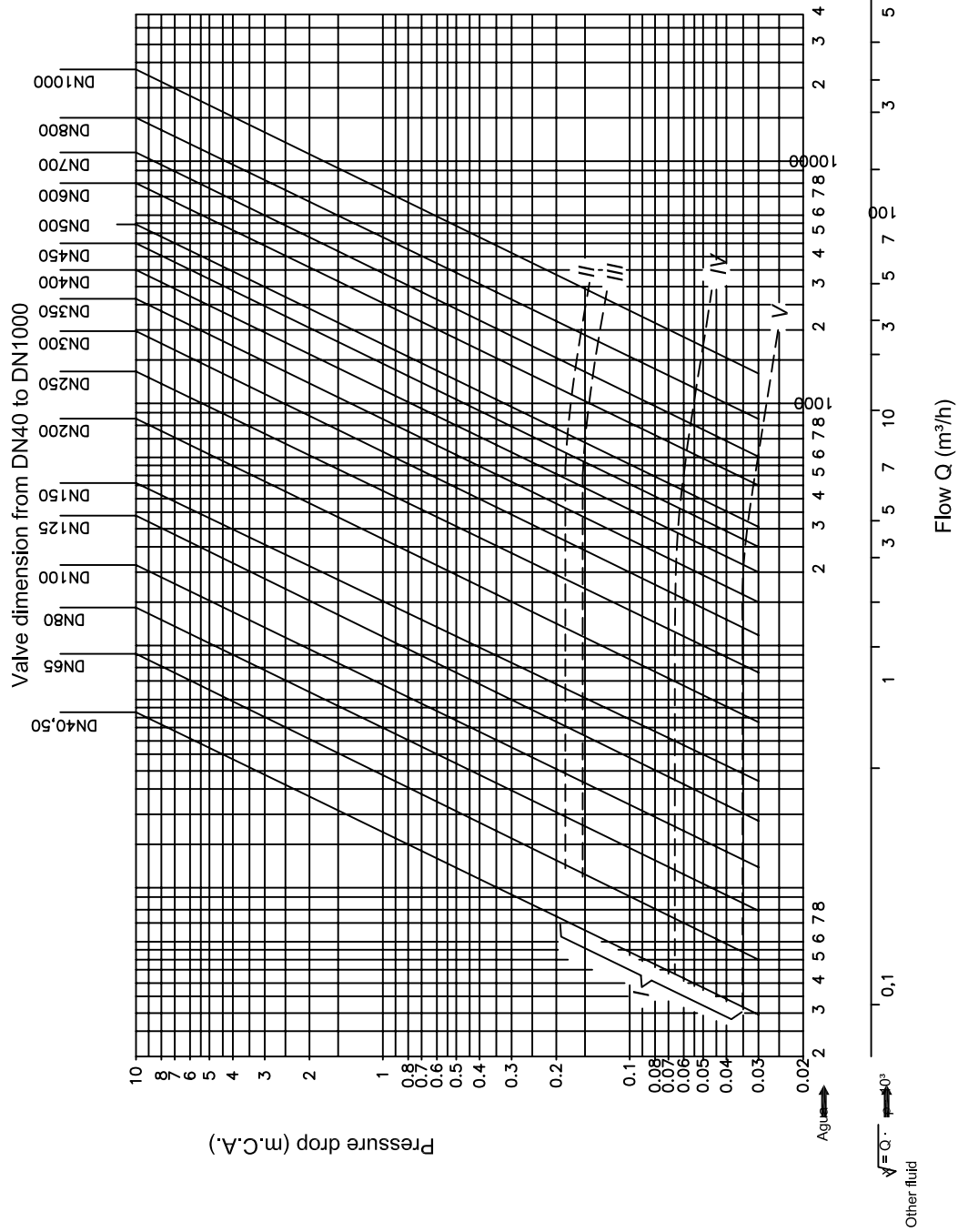


Figure 2