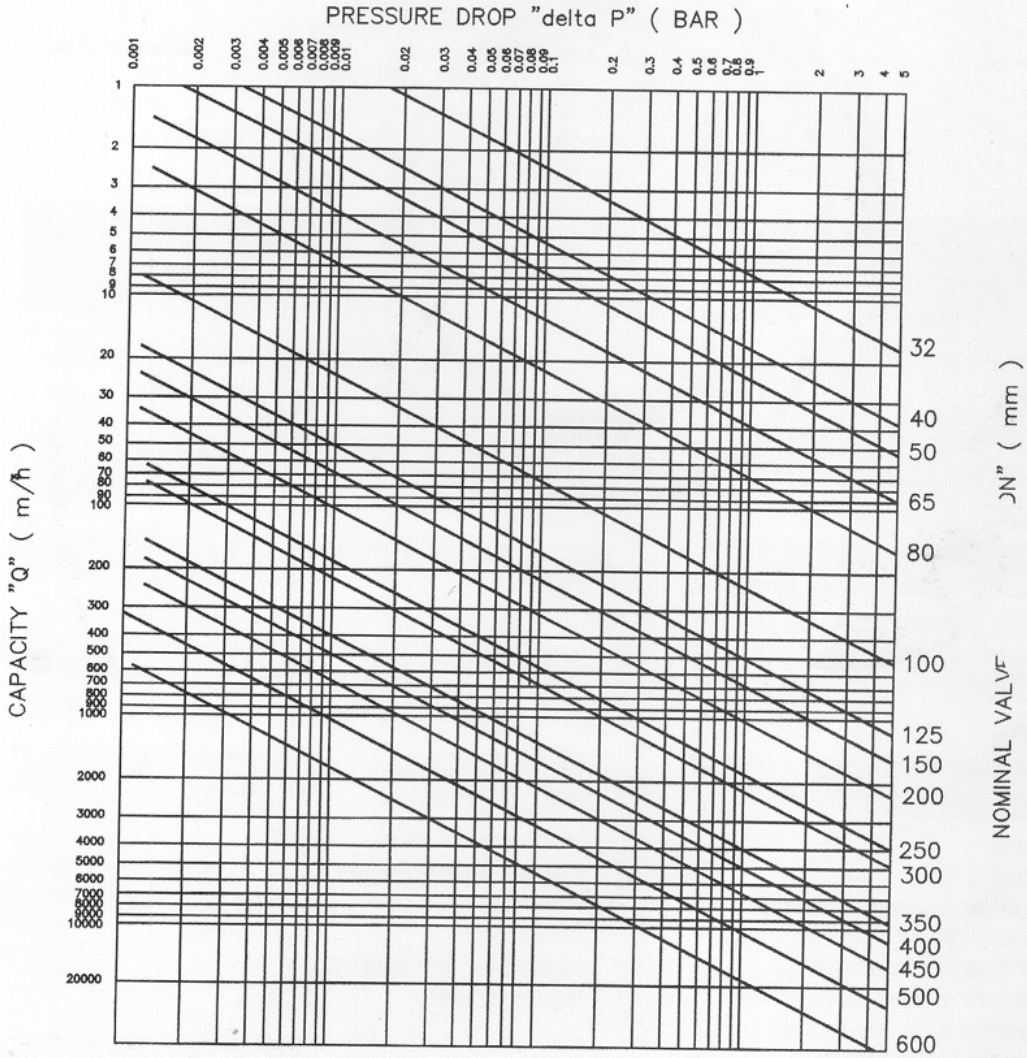
PRESSURE DROP DIAGRAM "delta P'

TEST CONDITIONS: Water (H2O)
Specific weight : 1 Kg/dm
Temperature : 15°C



The curves shown on the diagram represent pressure drop related to water at 15øC. Pressure drop related to fluids other than water (air or gas) is obtained by calculating the equivalent related water flow (Qe) and including this new value on the diagram.
To obtain the value of the equivalent water flow (Qe) the following formula should be applied:

$$Qe = \sqrt{\frac{Y}{1000}} \times Q$$

Qe = Equivalent water flow in m^3/h
Q = Fluid flow (air or gas) at operating conditions in m^3/h
Y = Fluid density measured in operating conditions in Kg/m^3

The pressure drops shown on the diagram and those obtained from the formula refer to valves fitted on horizontal pipelines. The valves indicated on the diagram are also applicable to valves fitted on vertical pipelines, only in case of partial valve opening.
The resulting differences are unimportant.

COEFFICIENT VALUES "CV"

DN		CV	DN		CV
32	1 ¼	8.7	200	8	1205
40	1 ½	20	250	10	2200
50	2	29.5	300	12	2560
65	2 ½	49	350	14	4820
80	3	78	400	16	6050
100	4	286	450	18	7740
125	5	635	500	20	11825
150	6	840	600	24	18800