



Calculation pressure drop Δp for thermostatic control valve model M...

This table is intended to calculate the pressure drop Δp : For this you need to enter four sizes:

- The medium: "0" for water or "46" for oil ISO VG 46
- Flow q: Choose unit l/min or m³/h, enter flow corresponding to the unit
- Valve dimension: Choose diameter of the valve from DN 20 to DN 150
- Temperature fluid T: Choose specified mix-temperature in °C

From line 14 to line 32 the result get administered. Please note that the result of Δp isn't higher than 1,35 bar.

You can specify the valve more precisely from line 33 housing and data options. These data have no influence on the calculation of the pressure drop.

On the next side is an example calculation.

If you are interested in our table in Excel format, or you would like to make future valve selections on your own, please contact us. The table can be obtained from us free of charge via Email or CD.

MVA Mess- und Verfahrenstechnik GmbH



Calculation pressure drop Δp

1				
2	PROJECT:		example	
3	MVA No.:			
4	Model:			
5	TAG No.:			
6	Input/System Data:			
7	Oil typ (water = 0)	ISO-VG	46	← specify typ of oil for example "46" ISO VG 46 or "0" for water
8	flow q	l/min	1000,00	← specify volume flow rate incl. unit
9	Valve dimension	DN	80	← specify desired diameter of valve
10	Temperature fluid T	°C	45	← specify desired temperature in degree Celsius
11				
12				
13	Result:			
14	flow q	l/min	1000,00	
15	Code MVA temperatur control valve		M80T....	
16	specific gravity γ	kg/l	0,90	
17	Oil code		10	
18	Temp. Rounded	°C	50,00	
19	flow coefficient Kvs	l/min	1455	
20	flow coefficient Kvs	m ³ /h	87,30	
21	A0 min.	cm ²	21,64	
22	velocity	m/s	3,32	
23	Viskosität	cSt	30,00	
24	correction value viscosity f	./.	0,79	
25	Pressure drop Δp	bar	0,68	
26	design pressure:		19,00	
27	test pressure:		28,50	
28	Valve selection:		M150T....	
29	DN	mm	80	
30	flow coefficient Kvs	l/min	1455	
31	flow coefficient Kvs	m ³ /h	87	
32				
33	Housing, material and options:			
33	Connections		ANSI-150lbs	
34	Reducing bush for low flow		nein	
35	Housing material		A216-WCB	
36	Elements		Standard	
37	Sealing		NBR (Buna N)	
38	Laek hole		keine	
39	Manuale Override		ja	