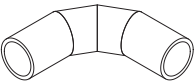
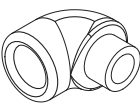
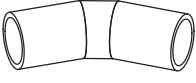
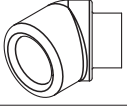
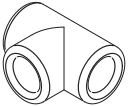
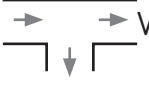
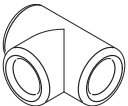
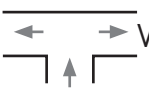
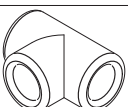
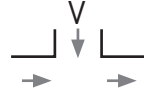
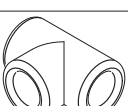
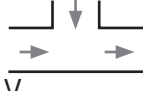
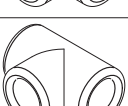
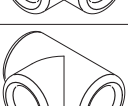
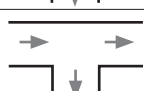
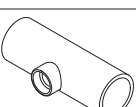


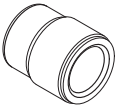
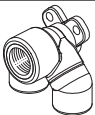
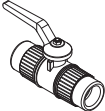
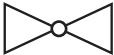
Coefficient of loss ζ aquatherm green - & aquatherm blue -fittings

The formula symbol v for flow velocity indicates the location of the decisive reference velocity in the moulding and connecting piece.

Fitting	Drawing	Graphic illustration	ζ -Value																			
			16	20	25	32	40	50	63	75	90	110	125	160	200	250	315	355	400	450	500	630
Socket			0,8	0,5	0,5	0,7	0,9	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2
Elbow 90°			2	1,3	1,2	2	1,9	0,5	0,5	0,7	0,7	0,7	0,7	0,7	0,7	0,7						
Segment Elbow 90°																	0,8	0,8	0,8	0,8	0,8	0,8
Elbow 90° m./f.			2,0	1,3	1,2	2	1,9															
Angle/Elbow 45°				1,9	1,9	0,5	0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,4						
Elbow 45°														0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,4
Elbow 45° m./f.				1,9	1,9	0,5	0,4															
T-piece Passage Current separation			1,1	0,9	0,9	0,9	0,6	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2
T-piece Counterflow Current separation			0	0,3	0,3	0,4	0,7	0,7	1,1	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3	1,3
T-piece branch Current separation			2	1,9	1,8	1,8	1,6	1,6	1,6	2	2	2	2	2	2	2	2	2	2	2	2	2
T-piece Passage Current connection			3,8	3,5	3,2	3,2	3	3,2	3,2	4	4	4	4	4	4	4	4	4	4	4	4	4
T-piece Counterflow Current unification			2,2	2,3	2,3	2	1,6	1,9	1,9	2,7	2,7	2,7	2,7	2,7	2,7	2,7	2,7	2,7	2,7	2,7	2,7	2,7
T-piece Branch Current disconnection			2,4	2,6	1,4	2,3	1,8	1,2	1,1	1,2	1,3	2,3	2,3	2,3	2,3	2,3	2,3	2,3	2,3	2,3	2,3	2,3
Reducing tee (saddle technology)			In the case of reduced T-pieces, the resistance value of the original T-piece is with the smallest dimension of the reduced T-piece is used for the flow path to be calculated.																			
Reducing tee																						

(→ = flow direction)

Coefficient of loss ζ **aquatherm green** - & **aquatherm blue** -fittings __

Fitting	Drawing	Graphic illustration	ζ -Value																			
			16	20	25	32	40	50	63	75	90	110	125	160	200	250	315	355	400	450	500	630
Reducer			2.4	1.9	1.9	1.9	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Back plate				3.7	3.7																	
Back plate				3.5	3.5																	
Back plate				2	2																	
Stop valve/ inclined valve				2	2	2	2															
Ball valve				0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3								
Screw-down stop globe valve				7	7	7	7															

($\rightarrow$ = flow direction)

Source: DIN 1988 Part 300

$$Z = \frac{\zeta v^2 \delta}{2}$$

Z = Pressure lost in [Pa]

v = Flow rate [m/s]

ζ = Coefficient of loss of fitting

δ = Density of medium [kg/m³]

K_v = volume flow [m³/h] of water [5–30 °C] at a pressure difference of 1 bar

Note: For the determination of pressure loss in (mbar) the result has to be divided by the factor 100 (100Pa = 1 mbar).