

iFIT (10°C)

Druckverlustdiagramm für iFIT PB- und ML Röhre:

Rohrreibungsdruckgefälle in Abhängigkeit vom Volumenstrom

Berechnungsgrundlage:

Wassertemperatur	= 10°C
Oberflächenrauigkeit k	= 0.007 mm
Viskosität	= 0.00131 Pa·s
Dichte ρ	= 999.70 kg/m ³

Empfohlene Fließgeschwindigkeit nach SVGW Richtlinie W3/2013:

- max. 4.0 m/s für Ausstossleitungen
- max. 3.0 m/s für Apparategruppen
- max. 3.0 m/s für Stockwerksverteilungen
- max. 2.0 m/s für Verteilungen

Diagramme des pertes de charge dans les tuyaux iFIT PB et ML:

Perte de charge par frottement dépendant du débit volumique:

Base de calcul:

Température d'eau	= 10°C
Rugosité des parois k	= 0.007 mm
Viscosité	= 0.00131 Pa·s
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Débit recommandé pour la politique SSIGE W3/2013:

- max. 4.0 m/s pour conduite d'évacuation
- max. 3.0 m/s pour groupe d'appareils
- max. 3.0 m/s pour distribution d'étage
- max. 2.0 m/s pour conduite de distribution

Diagramma della perdita di carico per tubi sintetici iFIT PB e ML:

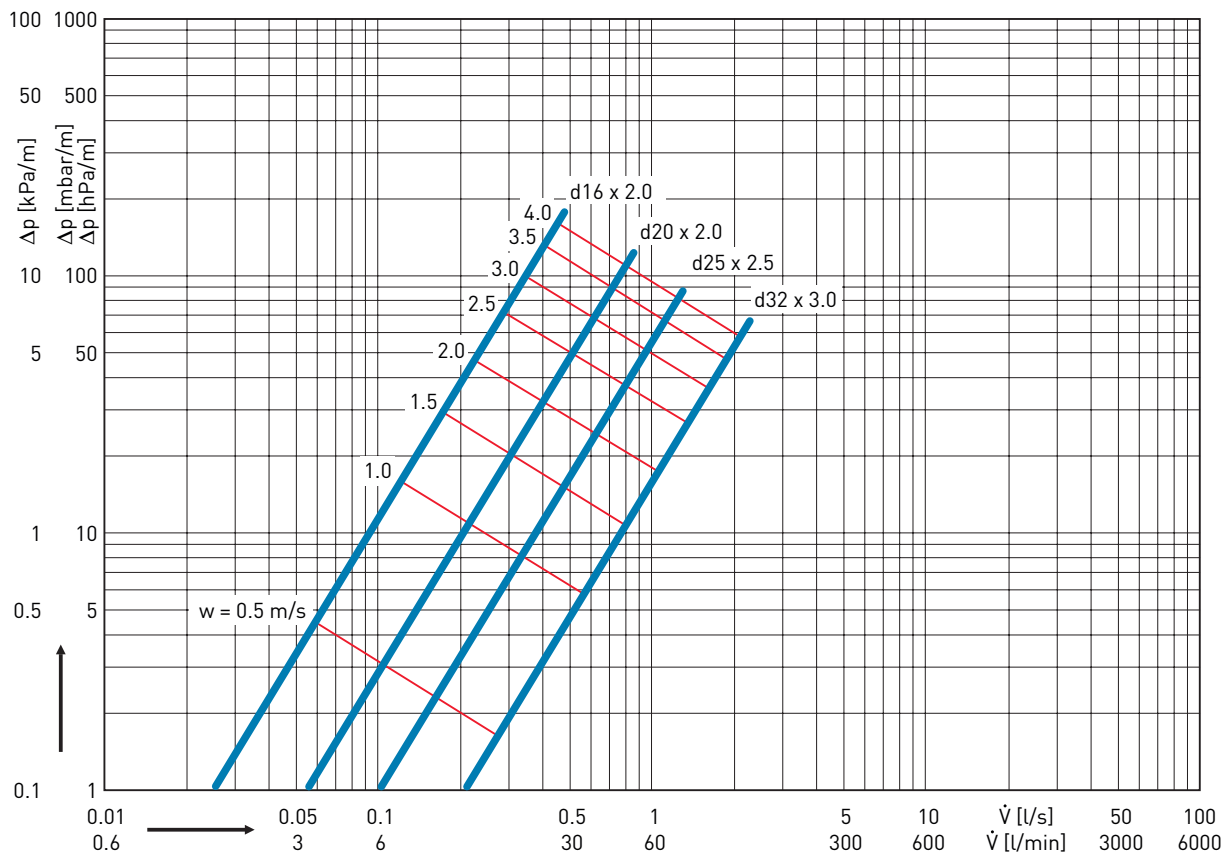
Caduta di pressione per attrito del tubo a dipendenza del flusso volumetrico:

Base di calcolo:

Temperatura d'acqua	= 10°C
Rugosità del tubo k	= 0.007 mm
Viscosità	= 0.00131 Pa·s
Densità ρ	= 999.70 kg/m ³

Portata consigliata dal SSIGA politica W3/2013:

- max. 4.0 m/s per linee di getto
- max. 3.0 m/s per gruppi di apparecchiature
- max. 3.0 m/s per linee di piano
- max. 2.0 m/s per linee di distribuzione



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Pressure loss chart for iFIT PB- and ML pipes:

Pipe friction loss in relation to flow rate

Basis of calculation:

Water temperature	= 10°C
Surface roughness k	= 0.007 mm
Viscosity	= 0.00131 Pa·s
Density ρ	= 999.70 kg/m ³

Recommended flow velocity according SVGW guideline W3/2013:

- max. 4.0 m/s for single outlet lines
- max. 3.0 m/s for apparatus lines
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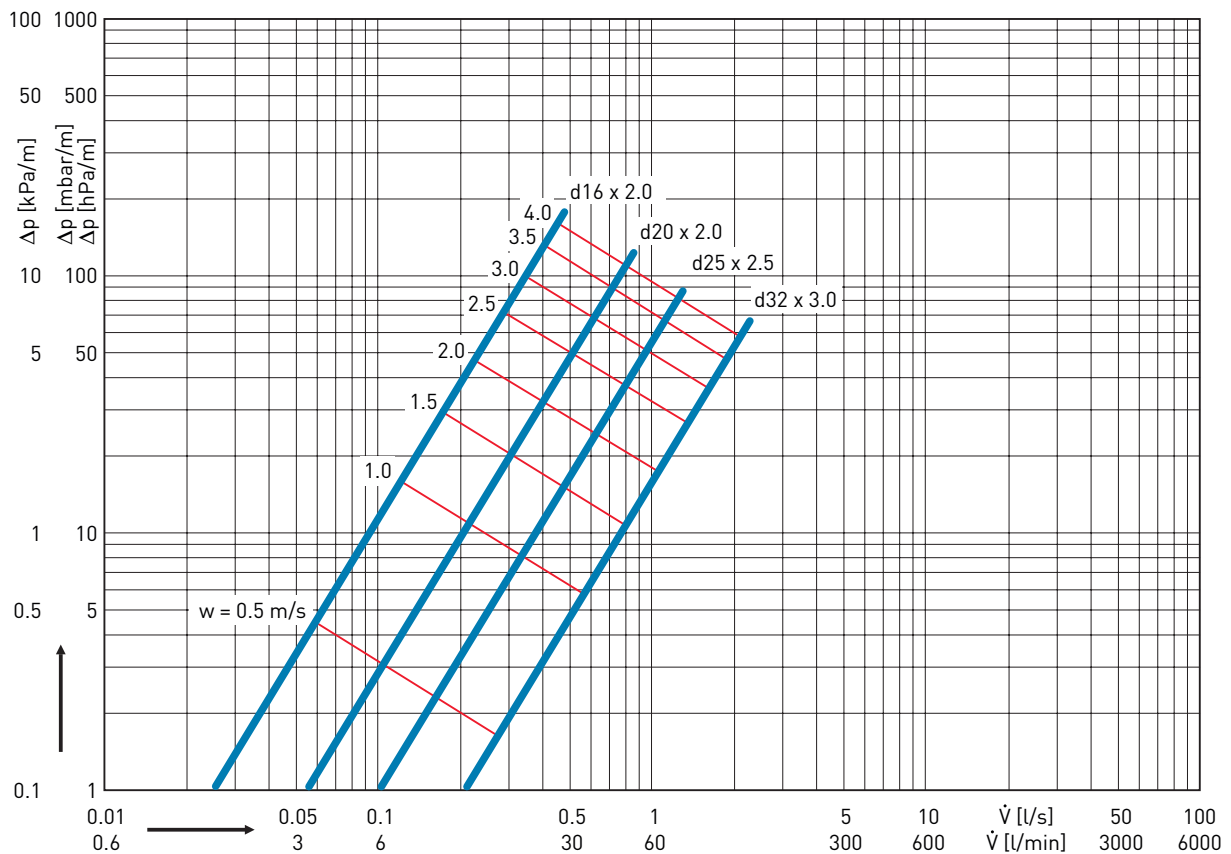
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IFIT (10°C)

d	16		20		25		32	
DN	12		15		20		25	
\dot{V}	v	R	v	R	v	R	v	R
[l/s]	[m/s]	[hPa/m]	[m/s]	[hPa/m]	[m/s]	[hPa/m]	[m/s]	[hPa/m]
0.01	0.1	0.2	0.0	0.1				
0.02	0.2	0.7	0.1	0.2				
0.03	0.3	1.4	0.1	0.3	0.1	0.1		
0.04	0.4	2.3	0.2	0.6	0.1	0.2		
0.05	0.4	3.4	0.2	0.8	0.2	0.3		
0.06	0.5	4.7	0.3	1.2	0.2	0.4		
0.07	0.6	6.1	0.3	1.5	0.2	0.5	0.1	0.1
0.08	0.7	7.7	0.4	1.9	0.3	0.7	0.2	0.2
0.09	0.8	9.5	0.4	2.4	0.3	0.8	0.2	0.2
0.10	0.9	11.4	0.5	2.9	0.3	1.0	0.2	0.3
0.15	1.3	23.3	0.7	5.8	0.5	2.0	0.3	0.6
0.20	1.8	38.5	1.0	9.7	0.6	3.3	0.4	0.9
0.25	2.2	57.0	1.2	14.3	0.8	4.9	0.5	1.4
0.30	2.7	78.5	1.5	19.7	1.0	6.8	0.6	1.9
0.35	3.1	102.9	1.7	25.9	1.1	8.9	0.7	2.5
0.40	3.5	130.1	2.0	32.7	1.3	11.2	0.8	3.2
0.45	4.0	160.0	2.2	40.2	1.4	13.8	0.8	3.9
0.50			2.5	48.4	1.6	16.6	0.9	4.7
0.55			2.7	57.2	1.8	19.6	1.0	5.6
0.60			3.0	66.6	1.9	22.8	1.1	6.5
0.65			3.2	76.7	2.1	26.3	1.2	7.5
0.70			3.5	87.4	2.2	29.9	1.3	8.5
0.75			3.7	98.6	2.4	33.8	1.4	9.6
0.80			4.0	110.4	2.5	37.8	1.5	10.7
0.85					2.7	42.1	1.6	11.9
0.90					2.9	46.5	1.7	13.2
0.95					3.0	51.2	1.8	14.5
1.00					3.2	56.0	1.9	15.9
1.05					3.3	61.0	2.0	17.3
1.10					3.5	66.2	2.1	18.8
1.15					3.7	71.5	2.2	20.3
1.20					3.8	77.1	2.3	21.9
1.25					4.0	82.8	2.4	23.5
1.30							2.4	25.2
1.35							2.5	26.9
1.40							2.6	28.7
1.45							2.7	30.5
1.50							2.8	32.4
1.55							2.9	34.3
1.60							3.0	36.3
1.65							3.1	38.3
1.70							3.2	40.3
1.75							3.3	42.4
1.80							3.4	44.6
1.85							3.5	46.8
1.90							3.6	49.0
1.95							3.7	51.3
2.00							3.8	53.6
2.10							4.0	58.4

iFIT (60°C)

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Berechnungsgrundlage:

Wassertemperatur	= 60°C
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Dichte ρ	= 983.19 kg/m ³

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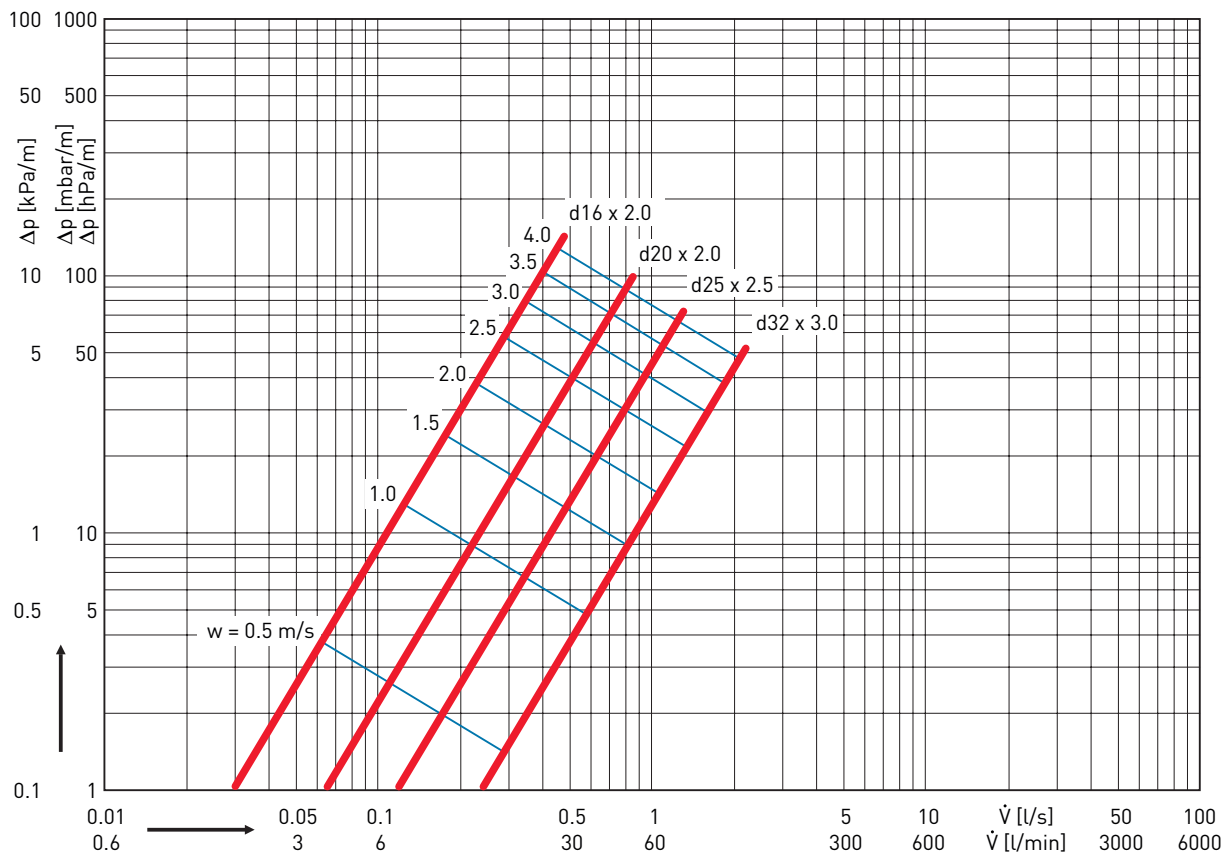
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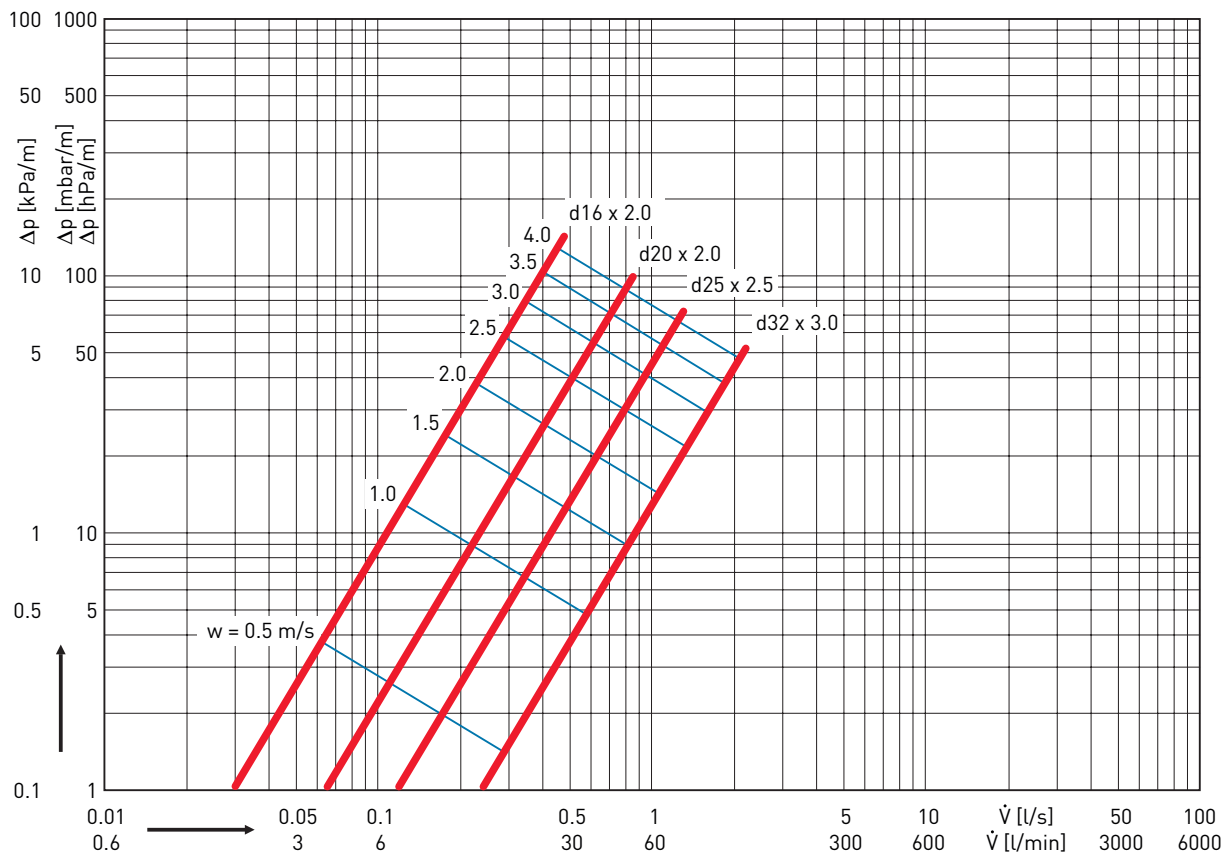
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0.09	0.8	7.3	0.4	1.8	0.3	0.6	0.2	0.2
0.10	0.9	8.8	0.5	2.2	0.3	0.8	0.2	0.2
0.15	1.3	18.2	0.7	4.6	0.5	1.6	0.3	0.4
0.20	1.8	30.4	1.0	7.6	0.6	2.6	0.4	0.7
0.25	2.2	45.2	1.2	11.3	0.8	3.9	0.5	1.1
0.30	2.7	62.6	1.5	15.7	1.0	5.3	0.6	1.5
0.35	3.1	82.4	1.7	20.6	1.1	7.0	0.7	2.0
0.40	3.5	104.5	2.0	26.2	1.3	8.9	0.8	2.5
0.45	4.0	128.9	2.2	32.3	1.4	11.0	0.8	3.1
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0.70			3.5	70.9	2.2	24.2	1.3	6.8
0.75			3.7	80.2	2.4	27.4	1.4	7.7
0.80			4.0	89.9	2.5	30.7	1.5	8.7
0.85					2.7	34.2	1.6	9.7
0.90					2.9	37.9	1.7	10.7
0.95					3.0	41.7	1.8	11.8
1.00					3.2	45.7	1.9	12.9
1.05					3.3	49.9	2.0	14.1
1.10					3.5	54.2	2.1	15.3
1.15					3.7	58.6	2.2	16.6
1.20					3.8	63.3	2.3	17.9
1.25					4.0	68.0	2.4	19.2
1.30							2.4	20.6
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