

Vordimensionierungstabellen für die Schweiz

Erdgas bei 2.6 mbar Druckverlust

Systemdruck 20-24 mbar
Temperatur 15°C

Relative Dichte 0.612
Heizwert 9.34 kWh/m³

		Volumenstrom V [m ³ /h]						Nennbelastung [kW]					
		DN15	DN20	DN25	DN32	DN40	DN50	DN15	DN20	DN25	DN32	DN40	DN50
Länge Gesamtleitung	10m	2.06	4.26	7.70	14.18	28.75	56.62	19.3	39.8	71.9	132.5	268.7	529.1
	15m	1.69	3.52	6.25	11.70	23.17	45.51	15.8	32.9	58.4	109.3	216.5	425.3
	20m	1.46	3.07	5.40	10.21	19.88	38.98	13.7	28.7	50.4	95.4	185.8	364.3
	25m	1.31	2.76	4.82	9.18	17.65	34.57	12.2	25.8	45.0	85.8	165.0	323.0
	30m	1.20	2.53	4.39	8.42	16.02	31.33	11.2	23.7	41.0	78.7	149.7	292.8
	35m	1.11	2.36	4.05	7.83	14.76	28.84	10.3	22.0	37.9	73.1	137.9	269.5
	40m	1.04	2.21	3.79	7.35	13.74	26.84	9.7	20.7	35.4	68.6	128.4	250.8
	50m	0.93	1.99	3.38	6.61	12.20	23.80	8.7	18.6	31.6	61.7	114.1	222.4
	60m	0.85	1.83	3.08	6.06	11.08	21.57	7.9	17.1	28.8	56.6	103.5	201.6
	70m	0.78	1.70	2.84	5.63	10.20	19.85	7.3	15.9	26.6	52.6	95.3	185.5
	80m	0.72	1.59	2.66	5.29	9.50	18.48	6.8	14.9	24.8	49.4	88.8	172.7
	90m	0.62	1.51	2.50	5.00	8.93	17.34	5.8	14.1	23.4	46.7	83.4	162.1
	100m	0.54	1.43	2.37	4.76	8.44	16.38	5.0	13.4	22.1	44.4	78.9	153.1
	110m	0.47	1.37	2.26	4.55	8.02	15.57	4.4	12.8	21.1	42.5	75.0	145.5
120m	0.42	1.32	2.16	4.36	7.66	14.85	3.9	12.3	20.2	40.8	71.6	138.8	

Erdgas bei 4.0 mbar Druckverlust

Systemdruck 20-24 mbar
Temperatur 15°C

Relative Dichte 0.612
Heizwert 9.73 kWh/m³

		Volumenstrom V [m ³ /h]						Nennbelastung [kW]					
		DN15	DN20	DN25	DN32	DN40	DN50	DN15	DN20	DN25	DN32	DN40	DN50
Länge Gesamtleitung	10m	2.56	5.22	9.60	17.40	36.17	71.40	23.9	48.8	89.7	162.6	338.0	667.2
	15m	2.09	4.31	7.80	14.35	29.14	57.39	19.5	40.3	72.9	134.1	272.4	536.3
	20m	1.81	3.76	6.73	12.52	25.01	49.16	16.9	35.2	62.9	117.0	233.7	459.4
	25m	1.62	3.39	6.00	11.26	22.20	43.59	15.1	31.6	56.1	105.2	207.5	407.4
	30m	1.48	3.11	5.47	10.33	20.15	39.52	13.8	29.0	51.1	96.5	188.3	369.3
	35m	1.37	2.89	5.05	9.60	18.56	36.37	12.8	27.0	47.2	89.7	173.5	339.8
	40m	1.28	2.71	4.72	9.01	17.29	33.84	12.0	25.3	44.1	84.2	161.6	316.3
	50m	1.15	2.44	4.21	8.11	15.35	30.01	10.7	22.8	39.3	75.8	143.5	280.5
	60m	1.05	2.24	3.84	7.43	13.93	27.21	9.8	20.9	35.8	69.5	130.2	254.2
	70m	0.97	2.08	3.54	6.91	12.83	25.04	9.1	19.5	33.1	64.6	119.9	234.0
	80m	0.91	1.95	3.31	6.49	11.95	23.30	8.5	18.3	30.9	60.6	111.7	217.7
	90m	0.86	1.85	3.12	6.13	11.23	21.87	8.0	17.3	29.1	57.3	104.9	204.4
	100m	0.81	1.76	2.95	5.83	10.61	20.66	7.6	16.4	27.6	54.5	99.2	193.1
	110m	0.78	1.68	2.81	5.58	10.09	19.63	7.3	15.7	26.3	52.1	94.3	183.4
120m	0.74	1.61	2.69	5.35	9.63	18.73	6.9	15.1	25.1	50.0	90.0	175.0	

Propan G31 (EN 437) bei 4.0 mbar Druckverlust

Systemdruck 50 mbar
Temperatur 15°C

Relative Dichte 1.555
Heizwert 25.65 kWh/m³

		Volumenstrom V [m ³ /h]						Nennbelastung [kW]					
		DN15	DN20	DN25	DN32	DN40	DN50	DN15	DN20	DN25	DN32	DN40	DN50
Länge Gesamtleitung	10m	1.58	3.24	5.94	10.78	22.38	44.17	40.6	83.0	152.4	276.5	574.0	1133
	15m	1.29	2.67	4.83	8.89	18.03	35.51	33.2	68.5	123.8	228.1	462.6	910.8
	20m	1.12	2.33	4.17	7.76	15.47	30.41	28.8	59.8	106.9	199.0	396.9	780.1
	25m	1.00	2.10	3.72	6.98	13.74	26.97	25.8	53.8	95.3	179.0	352.4	691.7
	30m	0.92	1.93	3.39	6.40	12.47	24.45	23.5	49.4	86.8	164.2	319.8	627.1
	35m	0.85	1.79	3.13	5.95	11.49	22.50	21.8	45.9	80.3	152.6	294.6	577.1
	40m	0.79	1.68	2.92	5.58	10.70	20.94	20.4	43.1	75.0	143.2	274.4	537.1
	50m	0.71	1.51	2.61	5.02	9.50	18.57	18.2	38.8	66.9	128.9	243.7	476.3
	60m	0.65	1.39	2.37	4.61	8.62	16.83	16.7	35.6	60.9	118.2	221.1	431.7
	70m	0.60	1.29	2.19	4.28	7.94	15.49	15.4	33.1	56.3	109.8	203.7	397.3
	80m	0.56	1.21	2.05	4.02	7.40	14.42	14.4	31.1	52.6	103.1	189.7	369.8
	90m	0.53	1.15	1.93	3.80	6.95	13.53	13.6	29.4	49.5	97.5	178.2	347.0
	100m	0.50	1.09	1.83	3.62	6.57	12.78	12.9	28.0	46.9	92.7	168.5	327.9
	110m	0.48	1.04	1.74	3.46	6.24	12.14	12.3	26.7	44.7	88.6	160.1	311.5
120m	0.45	1.00	1.67	3.32	5.96	11.59	11.6	25.7	42.7	85.1	152.9	297.2	