

Perdite di carico continue TUBI IN ACCIAIO (mm) - Temperatura acqua = 50°C

		$r =$ perdite di carico continue, mm c.a./m														$G =$ portate, l/h														$v =$ velocità, m/s											
r	\varnothing_e	101,6	108	114,3	133	139,7	159	168,3	193,7	219,1	244,5	273	323,9	\varnothing_e	r	\varnothing_i	94,4	100,8	107,1	125	131,7	150	159,3	182,9	207,3	231,9	260,4	309,7	\varnothing_i	r											
	G	v	G	v	G	v	G	v	G	v	G	v	G	v		G	v	G	v	G	v	G	v	G	v	G	v	G	v												
2	10.209	0,41	12.170	0,42	14.317	0,44	21.661	0,49	24.913	0,51	35.303	0,55	41.476	0,58	60.054	0,63	83.994	0,69	113.430	0,75	154.738	0,81	246.228	0,91	G	2	G	2													
4	14.790	0,59	17.631	0,61	20.741	0,64	31.380	0,71	36.091	0,74	51.143	0,80	60.087	0,84	87.001	0,92	121.683	1,00	164.326	1,08	224.169	1,17	356.711	1,32	G	4	G	4													
6	18.371	0,73	21.900	0,76	25.763	0,79	38.978	0,88	44.830	0,91	63.526	1,00	74.636	1,04	108.066	1,14	151.146	1,24	204.115	1,34	278.447	1,45	443.081	1,63	G	6	G	6													
8	21.426	0,85	25.543	0,89	30.047	0,93	45.460	1,03	52.285	1,07	74.091	1,16	87.048	1,21	126.038	1,33	176.282	1,45	238.060	1,57	324.754	1,69	516.767	1,91	G	8	G	8													
10	24.141	0,96	28.780	1,00	33.855	1,04	51.221	1,16	58.912	1,20	83.481	1,31	98.080	1,37	142.012	1,50	198.624	1,63	268.231	1,76	365.914	1,91	582.262	2,15	G	10	G	10													
12	26.614	1,06	31.727	1,10	37.322	1,15	56.467	1,28	64.945	1,32	92.031	1,45	108.125	1,51	156.555	1,66	218.965	1,80	295.701	1,94	403.386	2,10	641.891	2,37	G	12	G	12													
14	28.901	1,15	34.453	1,20	40.529	1,25	61.319	1,39	70.526	1,44	99.939	1,57	117.415	1,64	170.007	1,80	237.780	1,96	321.109	2,11	438.048	2,28	697.047	2,57	G	14	G	14													
16	31.040	1,23	37.003	1,29	43.529	1,34	65.858	1,49	75.746	1,54	107.336	1,69	126.106	1,76	182.591	1,93	255.380	2,10	344.877	2,27	470.472	2,45	748.641	2,76	G	16	G	16													
18	33.058	1,31	39.409	1,37	46.359	1,43	70.139	1,59	80.670	1,64	114.314	1,80	134.305	1,87	194.462	2,06	271.982	2,24	367.298	2,42	501.058	2,61	797.311	2,94	G	18	G	18													
20	34.974	1,39	41.693	1,45	49.046	1,51	74.205	1,68	85.346	1,74	120.940	1,90	142.089	1,98	205.733	2,18	287.747	2,37	388.587	2,56	530.099	2,76	843.524	3,11	G	20	G	20													
22	36.802	1,46	43.873	1,53	51.611	1,59	78.085	1,77	89.809	1,83	127.264	2,00	149.519	2,08	216.490	2,29	302.793	2,49	408.906	2,69	557.818	2,91	887.631	3,27	G	22	G	22													
24	38.555	1,53	45.963	1,60	54.069	1,67	81.804	1,85	94.086	1,92	133.325	2,10	156.640	2,18	226.802	2,40	317.214	2,61	428.382	2,82	584.386	3,05	929.908	3,43	G	24	G	24													
26	40.241	1,60	47.973	1,67	56.434	1,74	85.381	1,93	98.201	2,00	139.156	2,19	163.490	2,28	236.720	2,50	331.087	2,72	447.116	2,94	609.943	3,18	970.576	3,58	G	26	G	26													
28	41.868	1,66	49.913	1,74	58.715	1,81	88.833	2,01	102.171	2,08	144.781	2,28	170.100	2,37	246.290	2,60	344.472	2,84	465.191	3,06	634.600	3,31	1.009.812	3,72	G	28	G	28													
30	43.442	1,72	51.788	1,80	60.922	1,88	92.172	2,09	106.010	2,16	150.223	2,36	176.493	2,46	255.546	2,70	357.418	2,94	482.675	3,17	658.451	3,43	1.047.764	3,86	G	30	G	30													
35	47.175	1,87	56.238	1,96	66.156	2,04	100.092	2,27	115.120	2,35	163.131	2,56	191.658	2,67	277.505	2,93	388.130	3,19	524.149	3,45	715.029	3,73	1.137.795	4,20	G	35	G	35													
40	50.666	2,01	60.401	2,10	71.053	2,19	107.500	2,43	123.641	2,52	175.205	2,75	205.844	2,87	298.045	3,15	416.859	3,43	562.946	3,70	767.955	4,01	1.222.013	4,51	G	40	G	40													
45	53.960	2,14	64.328	2,24	75.672	2,33	114.489	2,59	131.679	2,69	186.596	2,93	219.226	3,06	317.421	3,36	443.959	3,65	599.544	3,94	817.881	4,27	1.301.458	4,80	G	45	G	45													
50	57.088	2,27	68.056	2,37	80.058	2,47	121.125	2,74	139.311	2,84	197.411	3,10	231.933	3,23	335.819	3,55	469.691	3,87	634.294	4,17	865.285	4,51	1.376.890	5,08	G	50	G	50													
60	62.934	2,50	75.026	2,61	88.257	2,72	133.529	3,02	153.577	3,13	217.628	3,42	255.685	3,56	370.210	3,91	517.792	4,26	699.251	4,60	953.898	4,98	1.517.897	5,60	G	60	G	60													
70	68.342	2,71	81.473	2,84	95.841	2,96	145.003	3,28	166.774	3,40	236.327	3,71	277.655	3,87	402.021	4,25	562.284	4,63	759.336	4,99	1.035.863	5,40	1.648.324	6,08	G	70	G	70													
80	73.400	2,91	87.503	3,05	102.935	3,17	155.736	3,53	179.118	3,65	253.820	3,99	298.207	4,16	431.778	4,56	603.903	4,97	815.540	5,36	1.112.536	5,80	1.770.331	6,53	G	80	G	80													
90	78.172	3,10	93.192	3,24	109.627	3,38	165.860	3,75	190.763	3,89	270.321	4,25	317.594	4,43	459.848	4,86	643.164	5,29	868.560	5,71	1.184.864	6,18	1.885.423	6,95	G	90	G	90													
100	82.703	3,28	98.593	3,43	115.981	3,58	175.473	3,97	201.820	4,12	285.989	4,50	336.001	4,68	486.501	5,14	680.442	5,60	918.902	6,04	1.253.539	6,54	1.994.702	7,36	G	100	G	100													

Se = superficie esterna, m²/m **Si** = sezione interna, mm² **V** = contenuto acqua, l/m **P** = peso tubo, kg/m

\varnothing_e [mm]	101,6	108	114,3	133	139,7	159	168,3	193,7	219,1	244,5	273	323,9	\varnothing_e [mm]
\varnothing_i [mm]	94,4	100,8	107,1	125	131,7	150	159,3	182,9	207,3	231,9	260,4	309,7	\varnothing_i [mm]
Se [m ² /m]	0,319	0,339	0,359	0,418	0,439	0,500	0,529	0,609	0,688	0,768	0,858	1,018	Se [m ² /m]
Si [mm ²]	6.999	7.980	9.009	12.272	13.623	17.671	19.931	26.273	33.751	42.237	53.256	75.331	Si [mm ²]
V [l/m]	7,00	7,98	9,01	12,27	13,62	17,67	19,93	26,27	33,75	42,24	53,26	75,33	V [l/m]
P [kg/m]	8,70	9,26	9,82	12,72	13,38	17,13	18,17	25,06	31,00	36,98	41,41	55,44	P [kg/m]