FLOW RATES & SPEEDS OBTAINED BY GAUCKLER-STRICKLER FORMULA

(safety coefficent K_S = 80 $m^{1/3}$ s^{-1})

Pipe filling = 50%		i = 0,5%		i = 1%	
DN (mm)	DN int. (mm)	speed (m/sec)	f-rate (m^3/sec)	speed (m/sec)	f-rate (m^3/sec)
125	107	0,506	0,002	0,715	0,003
160	136	0,593	0,004	0,839	0,006
200	174	0,699	0,008	0,989	0,012
250	214	0,803	0,014	1,135	0,020
315	273	0,944	0,028	1,335	0,039
400	343	1,100	0,051	1,555	0,072
500	427	1,272	0,091	1,799	0,129
630	533	1,475	0,164	2,086	0,233
800	673	1,723	0,306	2,437	0,433
1000	849	2,012	0,569	2,845	0,805
1200	1030	2,289	0,953	3,237	1,348

Pipe filling = 70%		i = 0,5%		i = 1%	
DN (mm)	DN int. (mm)	speed (m/sec)	f-rate (m^3/sec)	speed (m/sec)	f-rate (m^3/sec)
125	107	0,566	0,004	0,801	0,005
160	136	0,665	0,007	0,940	0,010
200	174	0,783	0,014	1,108	0,020
250	214	0,899	0,024	1,271	0,034
315	273	1,057	0,046	1,496	0,065
400	343	1,231	0,085	1,741	0,120
500	427	1,425	0,152	2,015	0,216
630	533	1,652	0,275	2,336	0,390
800	673	1,930	0,513	2,729	0,726
1000	849	2,253	0,953	3,186	1,348
1200	1030	2,563	1,596	3,624	2,257

Pipe filling = 95%		i = 0,5%		Riempimento = 50%	
DN (mm)	DN int. (mm)	speed (m/sec)	f-rate (m^3/sec)	speed (m/sec)	f-rate (m^3/sec)
125	107	0,554	0,005	0,783	0,007
160	136	0,650	0,009	0,919	0,013
200	174	0,766	0,018	1,083	0,025
250	214	0,879	0,031	1,243	0,044
315	273	1,034	0,059	1,462	0,084
400	343	1,204	0,109	1,703	0,154
500	427	1,393	0,196	1,971	0,277
630	533	1,615	0,354	2,284	0,500
800	673	1,887	0,658	2,669	0,931
1000	849	2,203	1,223	3,116	1,730
1200	1030	2,506	2,048	3,544	2,897

Pipe filling = 50%		i = 2%		i = 3%		i = 5%	
DN (mm)	DN int. (mm)	speed (m/sec)	f-rate (m^3/sec)	speed (m/sec)	f-rate (m^3/sec)	speed (m/sec)	f-rate (m^3/sec)
125	107	1,012	0,005	1,239	0,006	1,599	0,007
160	136	1,17	0,009	1,454	0,011	1,877	0,014
200	174	1,399	0,017	1,713	0,020	2,212	0,026
250	214	1,606	0,029	1,967	0,035	2,539	0,046
315	273	1,889	0,055	2,313	0,068	2,986	0,087
400	343	2,199	0,102	2,693	0,124	3,477	0,161
500	427	2,545	0,182	3,117	0,223	4,024	0,288
630	533	2,950	0,329	3,613	0,403	4,665	0,520
800	673	3,447	0,613	4,221	0,750	5,450	0,969
1000	849	4,024	1,138	4,928	1,934	6,362	1,800
1200	1030	4,577	1,906	5,606	2,334	7,237	3,014

Pipe filling = 70%		i = 2%		i = 3%		i = 5%	
DN (mm)	DN int. (mm)	speed (m/sec)	f-rate (m^3/sec)	speed (m/sec)	f-rate (m^3/sec)	speed (m/sec)	f-rate (m^3/sec)
125	107	1,133	0,008	1,387	0,009	1,791	0,012
160	136	1,329	0,014	1,628	0,018	2,102	0,023
200	174	1,566	0,028	1,918	0,034	2,477	0,044
250	214	1,798	0,048	2,202	0,059	2,843	0,076
315	273	2,115	0,093	2,590	0,113	3,344	0,146
400	343	2,463	0,170	3,016	0,208	3,894	0,269
500	427	2,850	0,305	3,490	0,374	4,506	0,482
630	533	3,304	0,551	4,046	0,675	5,224	0,871
800	673	3,860	1,026	4,727	1,257	6,103	1,622
1000	849	4,506	1,907	5,519	2,335	7,125	3,014
1200	1030	5,126	3,192	6,278	3,909	8,105	5,047

Pipe filling = 95%		i = 2%		i = 3%		i = 5%	
DN (mm)	DN int. (mm)	speed (m/sec)	f-rate (m^3/sec)	speed (m/sec)	f-rate (m^3/sec)	speed (m/sec)	f-rate (m^3/sec)
125	107	1,108	0,010	1,357	0,012	1,751	0,015
160	136	1,300	0,019	1,592	0,023	2,055	0,029
200	174	1,532	0,036	1,876	0,044	2,422	0,056
250	214	1,758	0,062	2,153	0,076	2,780	0,098
315	273	2,068	0,119	2,533	0,145	3,270	0,188
400	343	2,408	0,218	2,949	0,267	3,807	0,345
500	427	2,787	0,391	3,413	0,479	4,406	0,619
630	533	3,231	0,707	3,957	0,866	5,108	1,118
800	673	3,774	1,317	4,622	1,613	5,967	2,082
1000	849	4,406	2,447	5,397	2,997	6,967	3,869
1200	1030	5,012	4,096	6,139	5,017	7,925	6,477

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