

HP-35s Calculator Program –

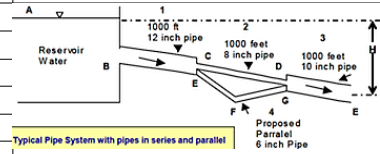
HAZEN WILLIAMS PARALLEL & SERIAL

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Line	Instruction	Process	User Instruction
K001	LBL K	Establishing the library (Any letter will do)	
K002	CLΣ	Clearing the statistical variables	
K003	HAZEN WILLIAMS	Title	
K004	PSE	Short Pause	
K005	PIPE SYSTEM		
K006	PSE	Short Pause	
K007	0		
K008	STO S	Storing the value of 0 in variables that will be used	
K009	STO Z		
K010	STO N		
K011	0	There will be a return to this line (necessary process)	
K012	STO N		
K013	STO Z		
K014	XEQ K075		
K015	RCL X		
K016	STO K		
K017	LOOP FOR		
K018	PSE		
K019	PARALLEL PIPE		
K020	PSE		
K021	INPUT P	Input 1 (or any value ≠0) for Yes, 0 for No to parallel	Nomenclature:
K022	x≠0?		
K023	XEQ K096		C = Coefficient of Roughness
K024	K VALUE		D = Diameter
K025	PSE		D = Water depth
K026	RCL X		H = Head Loss
K027	INPUT K		K = Cumulative coefficient of Roughness
K028	RCL K		L = Length
K029	Σ+		Q = Flow
K030	ADD ANOTHER		
K031	PSE		
K032	IN SERIES		
K033	PSE		
K034	INPUT Y	Input 1 (or any value ≠0) for Yes, 0 for No to another pipe in series	
K035	x≠0?		
K036	GTO K011		
K037	Σx		
K038	STO K		
K039	CUMULATIVE K		
K040	PSE		
K041	VIEW K	Viewing cumulative K coefficient	
K042	CLSTK	Clear Stack	
K043	STO Y		
K044	SOLVE FLOW Q		
K045	PSE		
K046	INPUT Y	Input 1 (or any value ≠0) for Yes, 0 for No	
K047	x=0?		
K048	GTO K059		
K049	HEAD LOSS (FT)		
K050	PSE		
K051	INPUT H	Input the height of head loss	
K052	RCK K		
K053	÷		
K054	1.85		
K055	1/x		
K056	y^x		
K057	STO Q		
K058	GTO K072		
K059	SOLVE H		
K060	PSE		
K061	INPUT Y		



K062	x=0?		
K063	GTO K074		
K064	FLOW Q (CFS)		
K065	PSE		
K066	INPUT Q		
K067	1.85		
K068	y^x		
K069	RCL K		
K070	x		
K071	STO H		
K072	VIEW Q		
K073	VIEW H		
K074	STOP		
K075	LENGTH		
K076	PSE		
K077	INPUT L	Input the length	
K078	4.73		
K079	x		
K080	ROUGH COEFF		
K081	PSE		
K082	INPUT C	Input the value of the Roughness Coefficient	
K083	1.85		
K084	y^x		
K085	÷		
K086	DIAMETER INCH		
K087	PSE		
K088	INPUT D	Input the diameter in inches	
K089	12		
K090	÷		
K091	4.865		
K092	y^x		
K093	÷		
K094	STO X		
K095	RTN		
K096	LOOP PROCESS		
K097	PSE		
K098	RCLZ		
K099	RCL X		
K100	1/x		
K101	0.5404		
K102	y^x		
K103	+		
K104	STO Z		
K105	1/x		
K106	1.85		
K107	y^x		
K108	STO X		
K109	STO K		
K110	ADD PARALLEL		
K111	PSE		
K112	INPUT P	Input 1 (or any value ≠0) for Yes, 0 for No	
K113	x=0?		
K114	RTN		
K115	XEQ K075		
K116	GTO K096		
K117	RTN		