

HP-35s Calculator Program –

ORIFICE/VENTURI FLOW

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Line	Instruction	Process	User Instruction
F001	LBL F	Establishing library – F FOR ORIFICE/VENTURI FLOW	
F002	ORIFICE VENTUR	Title: ORIFICE/VENTURI FLOW	Key in using EQN, RCL O, RCL R, et
F003	PSE	Short Pause	
F004	USE FEET	Prompt to use feet as units	
F005	PSE	Short Pause	
F006	DIAM 2 (FT)	Prompt to input diameter 2 in feet	
F007	PSE	Short Pause	
F008	INPUT D	User inputs value for diameter 2 on variable D	
F009	STO E	Datum stored in variable E	
F010	RCL D	Recall D	
F011	2	Processing Data	
F012	÷		
F013	x ²		
F014	π		
F015	x		
F016	STO A	Storing cross sectional area in variable A	
F017	RCL E		
F018	DIAM 1		
F019	PSE	Short Pause	
F020	INPUT D	Prompt to input the diameter 1 (again in feet)	
F021	÷		
F022	4		
F023	y ^x		
F024	+/-		
F025	1		
F026	+		
F027	STO U	Storing Datum in variable U	
F028	SPGRAV FLUID 0	Prompt for the specific gravity of used fluid	
F029	PSE	Short Pause	
F030	13.6		
F031	STO T		
F032	Clx	Clearing mantissa	
F033	R↓	Dropping stack	
F034	INPUT T		
F035	SPGRAV FLUID 1	Prompt for the specific gravity of second used fluid	
F036	PSE	Short Pause	
F037	FOR H2O USE 1	Prompt to use value of "1" for water	
F038	PSE	Short Pause	
F039	1		
F040	STO S	Temporarily storing value "1" on variable S	
F041	Clx		
F042	R↓		
F043	INPUT S	Prompt to input variable for fluid specific gravity	
F044	÷	Processing Data	
F045	1		
F046	-		
F047	64.4		
F048	x		
F049	PRESS DROP	Prompt for Pressure Drop	
F050	PSE	Short Pause	
F051	IN FEET		
F052	PSE	Short Pause	
F053	INPUT R		
F054	x		
F055	RCL U		
F056	÷		
F057	√x		
F058	RCL A		

F059	VIEW A		
F060	×		
F061	STO U		
F062	IS IT VENTURI		
F063	PSE	Short Pause	
F064	INPUT C	1 for yes 0 for no	
F065	x=0?		
F066	GTO F070		
F067	0.95		
F068	STO C		
F069	GTO F077		
F070	IS IT ORIFICE		
F071	PSE	Short Pause	
F072	INPUT C	1 for yes 0 for no	
F073	x=0?		
F074	GTO F087		
F075	0.99		
F076	STO C		
F077	DISCH COEFF		
F078	PSE	Short Pause	
F079	INPUT C		
F080	RCL U		
F081	×		
F082	STO Q		
F083	VIEW Q	Viewing Flow	
F084	STOP		
F085	RTN		
F086	STOP		
F087	RTN		