Ultrasonic Flowmeter Calculation Sensor Spacing Manual　　For website

This tool is used for calculating the sensor spacing of the ultrasonic flowmeter.

File name：　File name: Click “Calculation Sensor Spacing”.

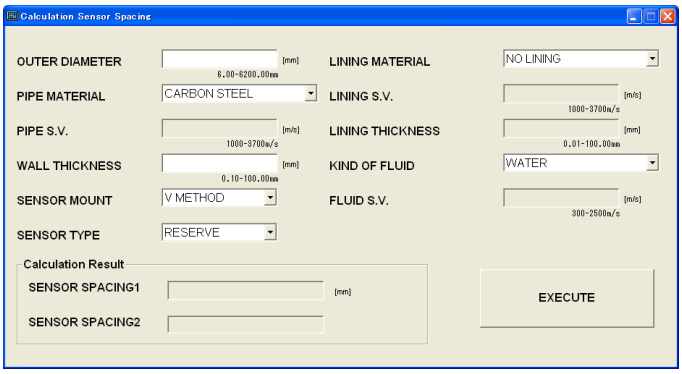
“Calculation Sensor Spacing” screen is displayed.

1. Calculation sensor spacing screen

Select the necessary information to enter. After entry, press the “EXECUTE” button, and the calculation result is displayed on the “SENSOR SPACING1” and “SENSOR SPACING2”.

See the following table for input items of calculation sensor spacing tool.

(Note) The values after the decimal point may deffer from those of the main unit depending on the accuracy of calculation.

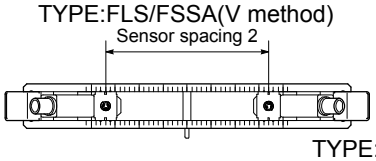


2. Explanation of input items

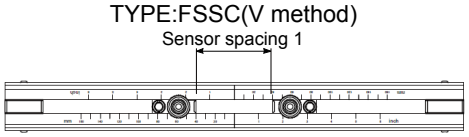
Item	Contents
OUTER DIAMETER	Enter in the range from 6.00 to 6200.00 mm (two decimal places)
PIPE MATERIAL	Select from carbon steel, stainless steel, PVC, copper, cast iron, aluminum, FRP, ductile iron, PEEK, PVDF, acrylic, PP, and pipe S.V.
PIPE SOUND VEROCITY	Enter in the range from 1000 to 3700 m/s (no decimal point)
WALL THICKNESS	Enter in the range from 0.10 to 100.00 mm (two decimal places)
LINING MATERIAL	Select from no lining, tar epoxy, mortar, rubber, Teflon, pyrex glass, PVC and lining S.V.
LINING SOUND VELOCITY	Enter in the range from 1000 to 3700 m/s (no decimal point) (If “Lining S.V.” is selected as lining material”.)
LINING THICKNESS	Enter in the range from 0.01 to 100.00 mm (two decimal places) (If “No lining” is selected as lining material.)
KIND OF FLUID	Select for water, seawater, dist. water, ammonia, alcohol, benzene, bromide, ethanol, glycol, kerosene, milk, methanol, toluene, lube oil, fuel oil, petrol, coolant R410, and fluid S.V.
FLUID S.V.	Enter in the range from 300 to 2500 m/s (no decimal point)
SENSOR MOUNT	Select from V method and Z method.
SENSOR TYPE	FSSA/FSSG, FLS_12/FLS_22, FSSC,FSG_32, FSG_31/FSG-41, FSSE/FSG_50, FSSF/FSG_51, FSD12, FSSD/FSD22,FSSH/FSD32 **Note) If the sensor type is previous type, make a setting change for current type.**
SENSOR SPACING 1	Displays the calculation result of sensor spacing 1.
SENSOR SPACING 2	Displays the calculation result of sensor spacing 2. (If FLS_12 or FLS_22, FSSA is selected as sensor type.)

Previous type	Current type	Previous type	Current type
FLD22	FSD22	FLW41	FSG_41
FLD32	FSD32	FLW50	FSG_50
FLW11	FSG_31	FLW51	FSG_51
FLW12	FSG_32		

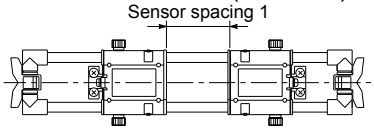
TYPE:FLS/FSSA(V method)



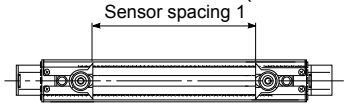
TYPE:FSSC(V method)



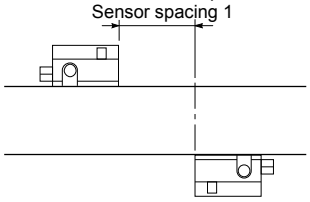
TYPE:FLW/FSG3(V method)



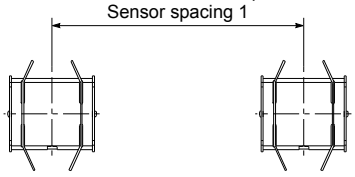
TYPE:FLD/FSD/FSSD(V method)



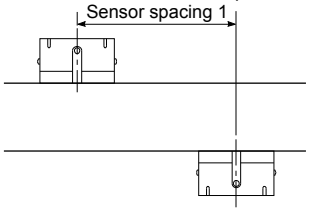
TYPE:FLW4/FSG4(Z method)



TYPE:FLW5/FSG5/FSSE(V method)



TYPE:FLW5/FSG5/FSSE(Z method)



Fuji Electric Co., Ltd.