

The Need For Every
Process Industry

SPINK CONTROLS[®]

An ISO 9001:2008 Certified Company



ORI FLOW METER (BY- PASS ROTAMETER)

MODEL: SC / R - 700

FLOW

ORI FLOW METER (BY- PASS ROTAMETER)

MODEL : SC / R - 700



The Ori-flowmeter measures the flow by inserting an Orifice Plate in the pipe line by generating the differential pressure across the Orifice Plate, extracting this differential pressure by suitable method.

Differential pressure (P_1-P_2) of main orifice & the flow (Q) have shown in Equation given below. The flow is proportional to square root of the differential pressure.

$$Q = CF \sqrt{\frac{2g}{\delta} (P_1 - P_2)}$$

Q : Volumetric flow

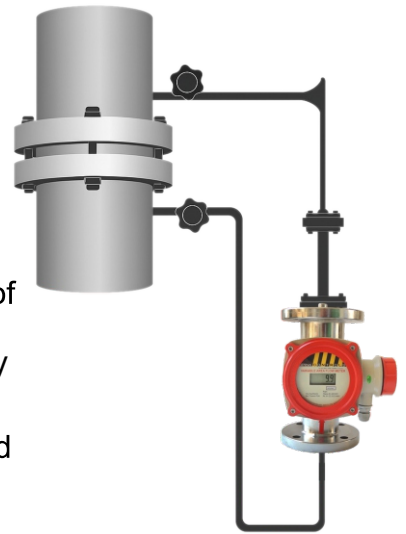
C : Flow co-efficient

F : Cross sectional area of orifice hole

g : Acceleration of gravity

P_1-P_2 : Differential pressure

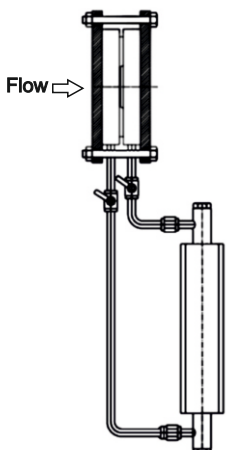
δ : Specific weight of fluid



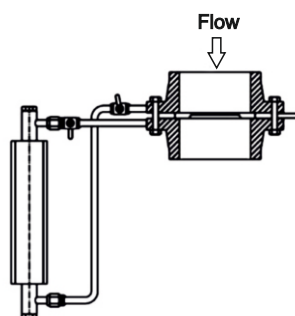
ENGINEERING SPECIFICATION

ACCURACY	: $\pm 2\%$ of FSR.
REPEATABILITY	: $\pm 0.5\%$ of FSR.
RANGEABILITY	: 8:1
MAX TEMPERATURE	: 150°C .
MAX PRESSURE	: 25 kg/cm^2

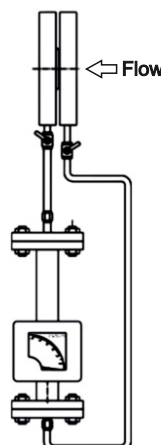
Left to Right



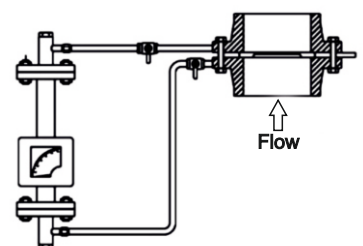
Top to Bottom



Right to Left



Bottom to Top



FLOW CHART

Main Pipe Inch		Main pipe maximum flow of water m³/h(20°C) ΔP			Code
Inch	Millimeter	1500mm WC	2500 mm WC	5000mm WC	
2	50	15	20	28	1A
2½"	65	22	28	40	1B
3	80	30	40	44	1C
4	100	55	70	100	1D
5	125	90	110	160	1E
6	150	130	150	220	1F
8	200	220	280	380	1G
10	250	350	450	600	1H
12	300	500	650	850	1I
14	350	600	800	1050	1J
16	400	800	1000	1400	1K

MODEL CODING

Suffix Code	1	2	3	4	5	6	7	8	9	10	11	12	13	Parameters
Model	SC/R-700													Left To Right
	SC/R-701													Right To Left
	SC/R-702													Top To Bottom
	SC/R-703													Bottom To Top
Line Code		XX												Flow chart
Fluid			L											Liquid
			G											Gas
Application				R-101										Glass Tube Rotameter
				R-200/A										Analog Metal Tube Rotameter
				R-300/D										Digital Metal Tube Rotameter
Rotameter line size				1										15 NB
				2										25 NB
Orifice Plate						OP1								SS316
						OPX								On request
Carrier Ring-MOC							CR1							SS316
							CR2							Mild Steel
							CR3							PP/PVC
							CR4							HDP
Flanged-MOC							F1							ASTM-A-105
							F2							SS 304
							F3							SS 316
By Pass Piping-MOC								BP1						SS316
								BP2						Mild Steel
								BP3						PU tubing
Indicating Rotameter-MOC									IN1					SS304
									IN2					SS316
									IN3					Mild Steel
Casing Material										C1				MS duly Powder coated
										C2				SS 304
										C3				SS 316
Isolation Valve-MOC											IV1			SS304
											IV2			SS316
											IV3			Mild Steel
Elastomer-MOC												E1		CAF
												E2		PTFE
												E3		Spr. Wnd SS 304 CAF filled
												E4		Spr. Wnd SS 316 CAF filled



	
Head Office	Plant
303, SIDDHARTH TOWER, G.P. PAI ROAD, KOPRI, THANE(E) - 400 603 MAHARASHTRA, INDIA Fax : +91 22 2532 4845 Phone : +91 22 2532 8223 +91 22 2532 8224 Email : info@spinkcontrolsindia.com	GALA No. F-4 A WING, UDYOG BHAVAN-2 ADDITIONAL AMBERNATH, INDUSTRIAL AREA, ANAND NAGAR MIDC AMBERNATH, Dist - THANE 421501 Phone : +91 9594991196 Email : rupa.thakkar@spinkcontrols.com

