



DESCRIPTION

The **KVS** and **KV Series** target flow meters are highly durable and reliable flow meters for steam, liquids, and gases. With no moving parts, they measure flow with a strain gauge bridge circuit (outside the fluid) on a shaft attached to a stainless steel target in the pipe. The signal from the strain gauge circuit is converted to an analog signal by a transmitter mounted in an integral explosionproof housing (standard).

FEATURES

- *Hermetically sealed, bonded strain gage technology*
- *No moving parts for long life and high durability*
- *Integral linear analog transmitter*
- *NEMA 4X housing standard*



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MEASUREMENT

Fixed insertion meter with Model 2000 4-20mA transmitter

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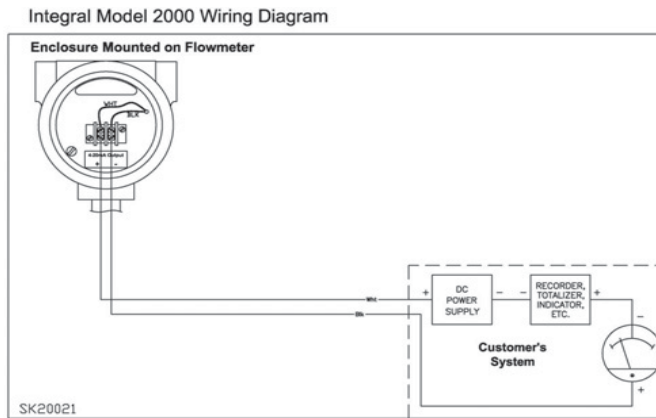
FLOW

SPECIFICATIONS	
Supply Voltage	12-42 VDC
Maximum Output Impedance	$RL = (V_{supply} - 12) * 43.33$
Output Signal	2-wire, 4-20 mA, linear to flow
Wiring Terminations	Screw terminals inside housing
Conduit Connection	3/4" FNPT
Configuration	Factory pre-configuration required to assure application/product match: specify pipe size and material/schedule, fluid/gas type, operating pressure and temperatures, and minimum/maximum flow rates
Accuracy	± .05% for pipe sizes up to 8", 1% to 2% for pipe sizes over 8"
Repeatability	± 0.15% of flow rate
Response Time	.002 to 0.1 seconds
Display	2-line alphanumeric with bar graph
Operating Temperature	-4° to 170°F (-20° to 75°C)
Flow Range	19.6 gpm (4" pipe) to 98,000 gpm (60" pipe)
Velocity Range	Liquid flow: 1.5 fps (0.5 mps) minimum, 32 fps (9 mps) maximum
Pipe Size Range	4" to 60" (100 to 1500 cm)
Installation	Install in straight pipe section with a minimum distance of 10 pipe diameters upstream and 5 pipe diameters downstream to any bend, obstruction or transition
Mounting	ANSI flanges standard, other options available
Media Compatibility	Liquid, gas or steam
Media Temperature Range	-65° to 425°F (-54° to 218°C), other ranges special order
Maximum Pressure	>1000 psi (69 bar) for primary sensing elements; piping connections per applicable ANSI specs
Materials of Construction	Wetted parts: 304 and 316 stainless steel (or cast equivalent), Teflon® seals; Electronics housing: Polyester coated Aluminum
Enclosure Rating	NEMA 4X
Dimensions	Height 10.8" (27.3 cm) from mounting flange to top of transmitter; insertion length depends on pipe size specified, target locates in center of pipe
Weight	9 lb (4.1 kg) maximum
Warranty	2 years



TARGET FLOW METERS KVS, KV SERIES

WIRING



ORDERING INFORMATION

MODEL	DESCRIPTION
KV	Insertion target flow meter, integral transmitter, for water
KVS	Insertion target flow meter, integral transmitter, for steam
	LINE SIZE (inches) DESCRIPTION
	4, 5, 6, 8, 10, 12, etc. Select pipe size (larger insertion and smaller in-line models also available)
	MOUNTING DESCRIPTION
M	2" raised-face flange
P	4" raised-face flange
	FLANGE RATING DESCRIPTION
1	150 # raised-face ANSI
2	300 # raised-face ANSI
	BODY, ELEMENT DESCRIPTION
S1K	303/304 SS Body, 1,000 psi, 425 DF rating

KV — **6** — **M** — **1** — **S1K**

Example: KV-6-M-1-S1K Insertion target flow meter for water, 6" pipe size, 2" RF 150 # mounting flange, 303/304 SS body, 1,000 psi, 425 DF rating

NOTES: The following information is required. Each flow meter is factory-configured for a specific application.

- 1) Type of fluid or gas
- 2) Operation pressure and temperature
- 3) Maximum flow rate (gpm, lb/hr, scfm, etc.)
- 4) Transmitter output required (4-20 mA, pulse, mass flow, batch relay control, etc.)
- 5) Constant or varying pressure

Smaller pipe size inline target flow meters (1/2" - 3") also available. Remote transmitters, retractable type flow meters, and many other options also available. Consult Kele.

DCP-1.5-W

ACCESSORIES

Power supply, 24 VAC IN to 24 VDC OUT

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