

# Impact-Type Rotameters

71K1020 Series

- Easy installation for larger pipe sizes, direct reading in gpm for water.

This flowmeter is unique—a combination impact tube and direct-reading rotameter. It has only a single line connection, and it reads only when the READ knob is pushed, not continuously.

It has unique advantages. It installs easily, using a service clamp. Mounts in pipes running at any angle. It has no pressure drop. It's easy to clean—no need to shut down or drain anything.

It works like this: Its metal impact tube is installed in the main stream. There it picks up a portion of the flowing fluid and directs it to the bottom of the meter. When the READ knob is pushed, fluid is allowed to flow in and up the tapered center tube and past the ball float. Float position indicates flow rate on a direct reading scale.

From the top of the tapered tube, fluid returns to the main stream by flowing down through a larger glass tube that surrounds the metering tube, and then through a line that parallels the impact tube.

Three models are available: one for 1½, 2, 2½, and 3" pipe; one for 4, 5, 6 and 8" pipe; and

one for 10, 12, 14 and 16" pipe. Each tube has four 5" long direct-reading scales for these pipe sizes. Except for the impact tubes and scales, all models are identical.

Designed and calibrated for metering water flow, but useful for other fluids with similar properties. Not suitable for particle-carrying fluids, or those incompatible with their materials of construction.

### SPECIFICATIONS

**Accuracy:** ±5% of full scale

**Repeatability:** ±2% of full scale

**Scales:** 5" long, direct reading gpm, four on each tube—one for each appropriate pipe size.

### Materials of construction

End fittings, impact tube, mounting connections: brass

O-Rings: Buna-N

Body: extruded aluminum (not wetted by process fluid)

Float stop bushing: Teflon

Spring: stainless steel

Service clamp: iron with neoprene rubber grommet

**Temperature limit:** 200°F (93°C)

**Pressure limit:** 175 psig (1207 kPa)

**Piping connections:** Service clamp or welding bushing, ½" NPT male, fits ½" NPTI service clamp or welding fitting.

**Piping arrangements:** Optimum accuracy requires 15 pipe diameters of straight pipe upstream, and 5 pipe diameters downstream. Exception: on 1½" pipe, requires 30 inches straight run upstream and 7½ inches downstream. For use on schedule 40 pipe only.

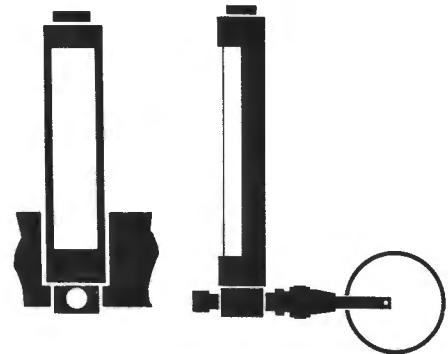


Table I— Sizes, Ranges and Catalog Numbers

Pipe Size (Inches)	Flow Rate Range gpm Water	Model Number	Catalog Number	Accessory Part Numbers Service Clamp	How to order 1. Specify Catalog Number from Table I. 2. Specify Part Numbers for accessories, if required.  For complete technical data please see Fischer & Porter SPECIFICATION 71K1020.
1½	8-80	71K1021A	821A004U86	108B064U01	
2	10-135			108B065U01	
2½	15-195			108B066U01	
3	30-300			108B067U01	
4	40-520	71K1022A	821A004U87	108B068U01	
5	80-820			108B069U01	
6	100-1200			108B070U01	
8	200-2100			108B071U01	
10	300-3300	71K1025A	821A004U88	—	
12	400-4600			—	
14	400-5600			—	
16	600-7400			—	

Many other capacities and options are available — not for quick shipment. Please consult factory for details.