

Electrical Connections

WARNING



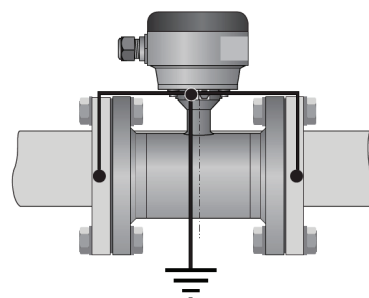
All electrical maintenance and service must be carried out with the power disconnected. Take note of the voltage data on the device nameplate.

The device must be grounded in accordance with regulations in order to protect personnel against electric shocks.

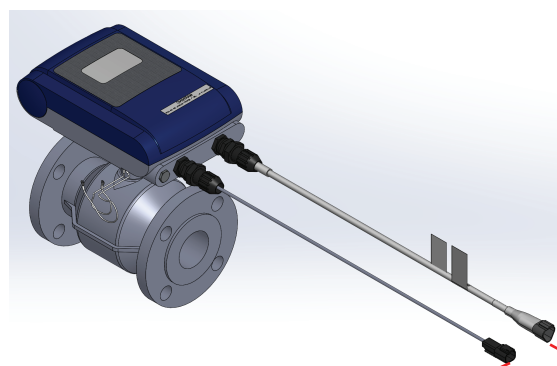
Observe occupational health and safety regulations. Any work done on the electrical components of the flow meter must be performed by a properly trained specialist.

Grounding

Grounding without grounding rings on metal pipelines, not internally coated.

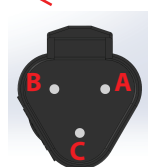


Connectors



Views from connector mating end.

No connection - Pin 1
Battery ground - Pin 2



Pin A - +12 VDC Battery
Pin B - Flow Signal Ground (not battery ground)
Pin C - Flow Signal

Mates with Deutsch 2-pin (P/N DT06-2S)

Mates with Deutsch 3-pin (P/N DT06-3S)

Use the RCM Liquid Slurry 3-pin Mag Meter cable (P/N 115-7100-052) or the RCM Rate Monitor Product Adapter Cable (P/N 115-0172-633) to connect the flow meter to the RCM.

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Krohne Mag Meter Quick Installation Guide

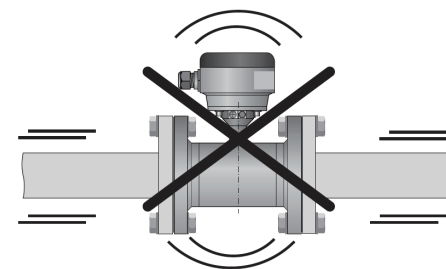
Pre-Installation Notes

The following precautions must be taken to ensure reliable installation.

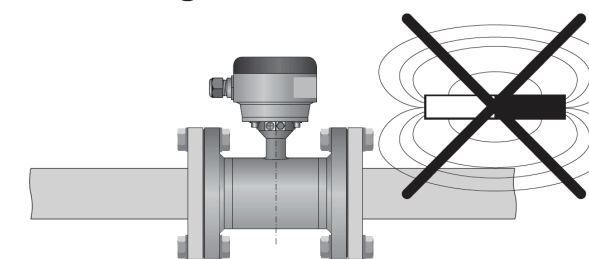
- Protect flow meters from direct sunlight. Fit a sunshade if necessary.
- Electrode axis must be approximately horizontal.
- Make sure there is sufficient room next to pipe flanges to install stud bolts and nuts.
- Use adapter pipes for large meter sizes (>8 in [20.3 cm]) to permit axial shifting of counter flanges to facilitate installation.
- Avoid strong electromagnetic fields in the vicinity of the flow meter.
- Do not insulate the flow meter.
- Do not pressure wash the flow meter.
- Do not expose the flow meter to intense vibration. Support pipe on both sides of the flow meter.

Installation Requirements

Avoid Vibrations



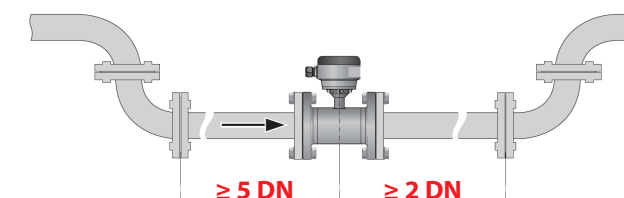
Avoid Magnetic Fields



Inlet and Outlet

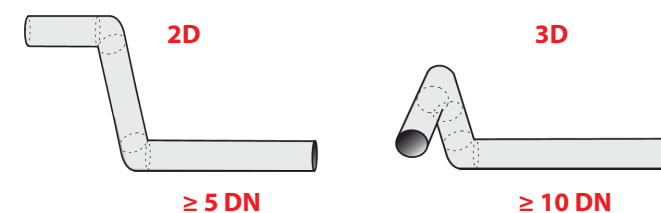
To avoid measuring errors due to air inclusion, allow straight inlet and outlet runs.

- Inlet = 5 times the meter size
- Outlet = 2 times the meter size



Inlet Bends in 2 and 3 Dimensions

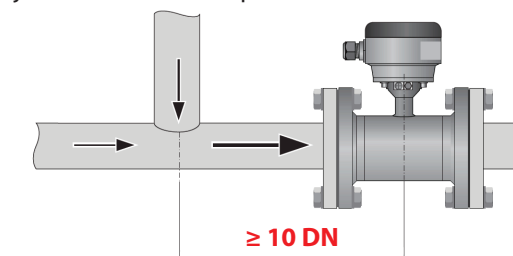
Provide additional inlet spacing if 3 dimensional bends are included upstream from the meter.



Note: 2 dimensional bends occur in the vertical plane only while 3 dimensional bends occur in both the vertical and horizontal plane.

Inlet Tees

Provide additional inlet spacing if tee joints are included upstream from the meter.

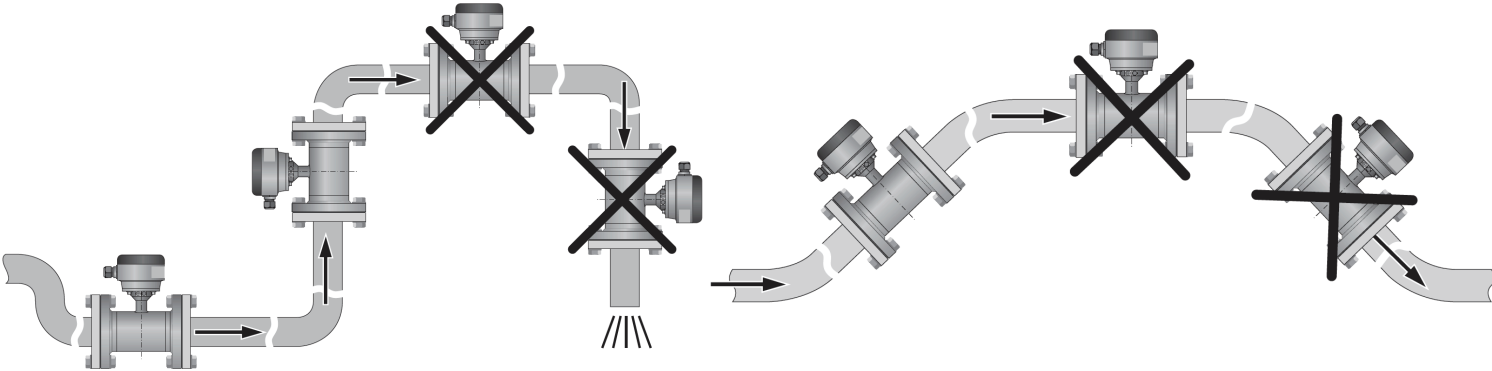


Preferred Locations

To avoid measurement errors due to air inclusion, observe the following:

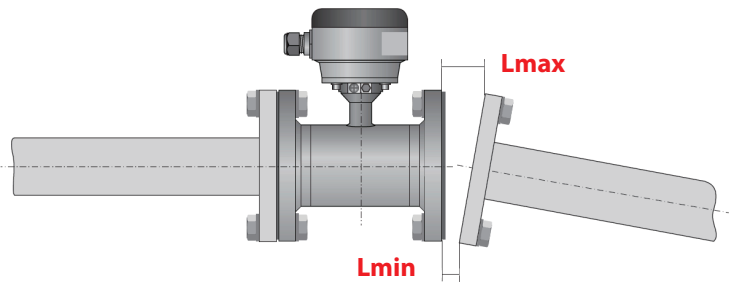
Bends

- Avoid draining or partial filling of the flow sensor. Keep meter upstream of the highest point in the pipe run to avoid air bubbles and faulty measurements.
- Avoid down pipe where the flow meter will drain.
- Install in a slightly ascending pipe section for long horizontal runs.
- Do not insulate the flow meter.



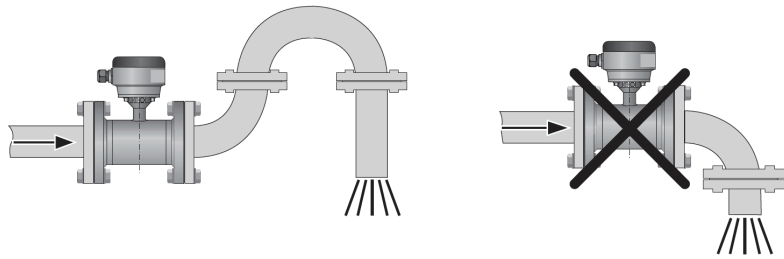
Flange Deviation

- Maximum permissible deviation of pipe flange faces is $L_{max} - L_{min} \leq 0.5 \text{ mm} / 0.02''$



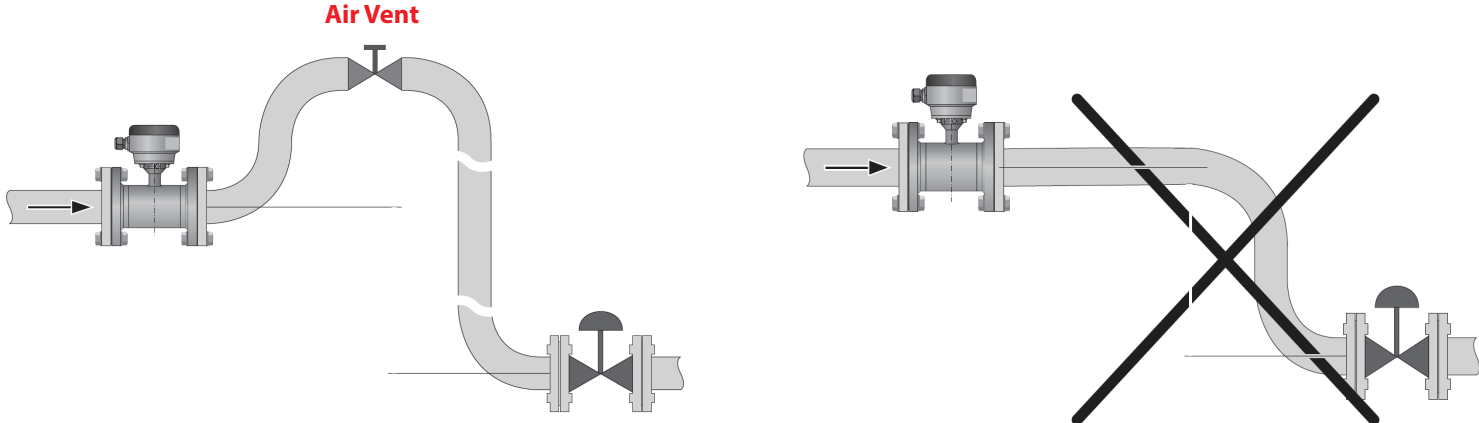
Open Feed or Discharge

- Install the meter in a low section of pipe so the meter can stay full.



Air Venting and Vacuum

- Install an air valve downstream of meter for drops greater than 16 ft [5 m].



Control Valve and Pump

- Install the meter upstream of a control valve.
- Install the meter downstream of a pump (vacuum).

