

Rate of flow transmitter

Model RIDA4-20AK With 4-20mA analog output signal



6 digit red LED 0.56" (14.2mm) high digits
Requires 85 to 250 VAC power source
Provides 12 VDC for sensors (pulsers) 100mA max, short circuit protected

3 programmable function keys, 5 total
3 programmable user inputs, 30V max continuous

Totalizer

6 digit display: -999,999 to 999,999
greater than 6 digits alternating between high and low order (8 digit max)

3 configurable totalizers

Rate meter

5 digit display 0 to 99,999
Max count rate 20kHz
Min count rate 0.01Hz

Analog output 4 to 20mA
Isolation 500 Vrms for 1 minute
Signal accuracy 0.4% of full scale
Compliance 500 ohm load max

DIP switch settings for count input configuration
Non-volatile EEPROM memory
Wire clamp screw terminal connections 30-14 AWG

Environmental rating NEMA 4/IP65 - face only
IP20 - rear
Operating temperature 0 to 50°C
Vibration protection IEC 68-2-6 5-150Hz 1.5 hrs, 2g's
Shock protection IEC 68-2-27 10 g's, 11ms
UL listed UL508, UL50
Weight 10.1 oz (286g)
DIN cut-out (3.62+0.03/-0)x(1.77+0.02/-0) in
(68+0.8/-0)x(33+6/-0) mm

Features

Red LCD display
Independent rate and total factors
Selectable decimal position

Benefits

Easy to read
Display in multiple engineering units
Scale as needed for low or high flows

Description

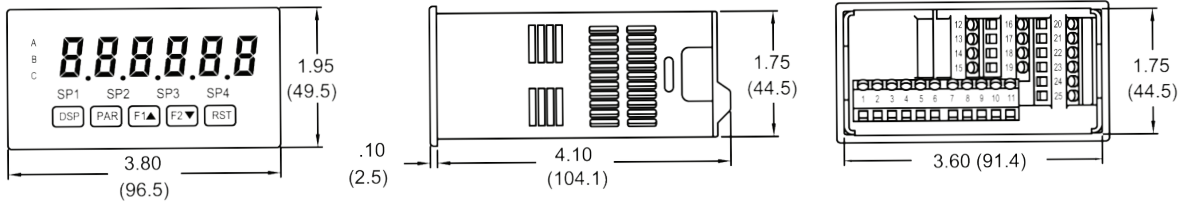
The model RIDA4-20AK is an economical rate of flow transmitter with 4-20mA output. It is particularly suited for use in providing a flow rate signal from Elster AMCO meter products, for use with use with programmable logic controllers, building management systems, and supervisory control and data acquisition (SCADA) systems.

It includes large red, easy to read 0.56" tall characters. Separately programmable count and rate scale factor values and decimal points allow for operation in various engineering units. The RIDA4-20AK allows users to program the zero and span of their systems anticipated flow range (i.e. 4mA value and 20mA value).

The low speed input is suited to contact closures such as reed switches or Elster AMCO Water's oil meters. The high speed input may be used with solid state, current sourcing pulsers such as Elster's evoQ4 with pulse output or oil meters with inductive pulse output options.

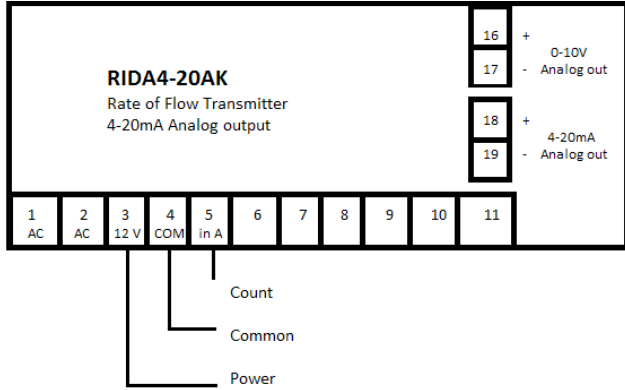
Wiring diagram examples are shown on the reverse page. Full size wiring diagrams detailing the connection of the RIDA4-20AK to our industrial metering products are available from Elster AMCO Water.





Dimensions in inches (mm).

Note: Recommended minimum clearance (behind the panel) for mounting clip installation is 2.1" (53.4) H x 5" (127) W.



Programming quick reference

Module 1 input parameters

| T-INP | Description | Typical selection |
|--------|-----------------------|------------------------------|
| x cnt | count mod | a cnt |
| xrESET | action at reset | zero |
| xdECPt | counter decimal point | 0 |
| xSCFAC | counter scale factor | 1 |
| xSCALr | scale multiplier | 1, .1, or .01 based on meter |

Module 4 input parameters

| 4-rtE | Description | Typical selection |
|---------|-----------------------|--|
| rAtEE n | rate assignment | rATE-A |
| L0-Udt | display update | 1 (can be increased to smooth) |
| HI-Udt | rate at zero | .2-99 based on input frequency |
| rtE dP | rate decimal position | 0 (resolution can be changed for low flow) |
| SEGS | linearizer segments | 0 |
| rDSP# | rate scaling display | 1= per sec, 60= per min, 3600=per hr |
| rINP# | rate scaling input | 1= gallons, 3.785= liter |

Wire diagram and DIP switch settings

| Meter | Count | Common | Power | 1 | 2 | 3 | Jumper |
|---------------------|---------------|---------------|-------|-----|-----|------|--------|
| V100 | red or yellow | blue or black | NA | off | off | off | sink |
| H4000 (PR7) | red or yellow | black | NA | off | off | off* | sink |
| M190 | either | either | NA | off | off | off | sink |
| H4400 inductive | brown | resistor** | black | off | off | off | src |
| Oil meter inductive | + (right pin) | - (left pin) | NA | off | off | off | src |
| evoQ4 | red or white | green | NA | off | off | off* | sink |

* may depend on pulse weight and flow rate combinations;

** add 650 Ohm resistor between terminal 4 and 5

Module 8 analog output parameters

| 8-ANA | Description | Typical selection |
|-------|-------------------|----------------------------------|
| type | analog type | 4-20 (can be 0-20mA or 0-10 VDC) |
| ASIN | analog assignment | rATE |
| AN-L0 | analog low scale | 0 |
| AN-HI | analog high scale | process or meter dependent |



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