Model EC-A

Electric Contacting Register

Technical Brief

GENERAL

Badger Meter's Electric Contacting Register, Model EC-A, is used on Disc and Turbo meters to provide an electric pulse output for a given quantity of liquid metered. In a typical application, the pulses would be transmitted to a chemical feed pump for boiler makeup water or for cooling towers.

The top portion of the EC-A unit consists of a register with a nonresettable totalizer. This register is mounted on top of the contactor section which consists of a gear train assembly, cam-operated switch and appropriate change gears.

The contact rates of the EC-A accessory can be adjusted in the field with the use of change gears and/or different gear train assemblies.

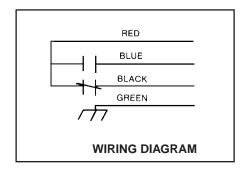
The register can be indicating one unit of measure while the contact rate is supplied in a different unit of measure. For example, gallons and cubic feet.



EC-A on 3" Turbo Meter

OPERATION

Water or other liquid flowing through the meter will cause the cam in the contactor section to rotate. The cam operates a single-pole, double-throw (SPDT) switch. When connected to a suitable power supply, the EC-A register will provide a pulse output corresponding to a predetermined quantity of liquid. The pulse rates range is from 10 gallons to 10,000 gallons per contact, depending on the meter size. If desired, the pulses can be used to actuate a relay which, in turn, would operate other equipment.



FEATURES

- Unit can be calibrated in field.
- Non-ressettable totalizer.
- Scaled pulse output.

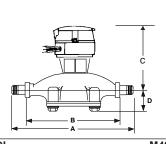
SWITCH

Single-pole, double-throw ... N.O. or N.C. connections ... Ratings of 10 amps and 1/4 h.p., 125 or 250 volts AC, 1/2 amp, 125 volts DC, 1/4 amp, 250 volts DC.

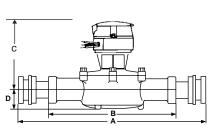
EC-A REGISTER MODELS

| Meter Size | 5/8" M25 RCDL Disc | 3/4", 1" M35, M40, M70 RCDL Disc | 1 ^{1/} ₂ " M120 RCDL Disc | 2" & 3" Turbo & 2" M170 RCDL Disc | 4" Turbo | 6" Turbo | |
|----------------------|--|--|--|---|--|-------------------|--|
| Test | 10 Gallons | 10 Gallons | 100 Gallons | 100 Gallons | 1000 Gallons | 1000 Gallons | |
| Circle* Units of | 1 Cubic Ft. | 1 Cubic Ft. | 10 Cubic Ft. | 10 Cubic Ft. | 100 Cubic Ft. | 100 Cubic Ft. | |
| Measure | 100 Pounds | 100 Pounds | 1000 Pounds | 1000 Pounds | 10,000 Pounds | 10,000 Pounds | |
| | 10 Liters | 100 Liters | 100 Liters | 1 M ³ | 1 M ³ | 10 M ³ | |
| Range of Contacts | 10 Gallons/Contact to 500 Gallons/Contact | | 50 Gallons/Contact to 5000 Gallons/Contact | | 100 Gallons/Contact to 10,000 Gallons/Contact | | |
| | NOTE: Units per contact are expressed in gallons. Other units of equivalent volumes are available. | | | | | | |

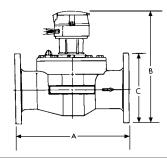
^{*}Meter Test Circle equals one complete revolution of the sweep pointer.



| RCDL | | | M40 |
|-----------------|------|------|------|
| Disc Meter Size | M25 | M35 | & 70 |
| Dimen. (Inches) | | | |
| À | 121/ | 14 | 16 |
| В | 71/2 | 9 | 103/ |
| С | 6.98 | 7.58 | 8.18 |
| D | 1.7 | 1.7 | 2.3 |



| RCDL | | |
|-----------------|-------|--------------------------------|
| Disc Meter Size | M120 | M170 |
| Dimen. (Inches) | | |
| A | 18.37 | 22.87 |
| В | 12.62 | 15. ^{1/} ₄ |
| С | 8.58 | 9.08 |
| D | 2.4 | 2.9 |



| Turbo Meter Size | 2 | 3 | 4 | 6 |
|----------------------|---------------------|----------------------|-------|--------------------|
| Dimen. (Inches) | | | | |
| A | 10 | 12 | 14 | 18 |
| В | 11 ^{1/} 16 | 11 ^{13/} 16 | 141/4 | 16 ^{3/} 4 |
| C Appr. Ship. Wt. | 6 | 71/2 | 9 | 11 |
| (Lbs.) | 30 | 40 | 85 | 125 |



Please see our website at www.badgermeter.com for specific contacts. Due to continuous research, product improvements and enhancements, Badger Meter reserves the right to change product or system specifications without notice, except to the extent an outstanding bid obligation exists.



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