

1. Outline

CLEAN FLOW is a mass flow meter which realize high performance and high reliability. It can measure mass flow directly by detecting phase difference of measuring tube which is generated by Coriolis.

High-functionality transmitter has capacitance touch panel which makes setting and operation easy. And 3 lines LCD indication can be set various kind of indication article.

2. Feature

- It can measure mass flow directly, it is not affected temperature, pressure, viscosity, density, or flow distribution due to its measurement principle.
- Compact design
- It does not need special fixture. Easy installation.
- New type measuring tube realizes low pressure loss.
- Various indication article by 3 line LCD.
- Good visibility by Buck-light display.
- Plug-in card can add out/input easily. (Option)



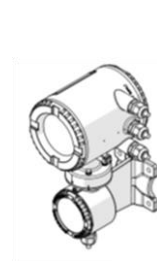
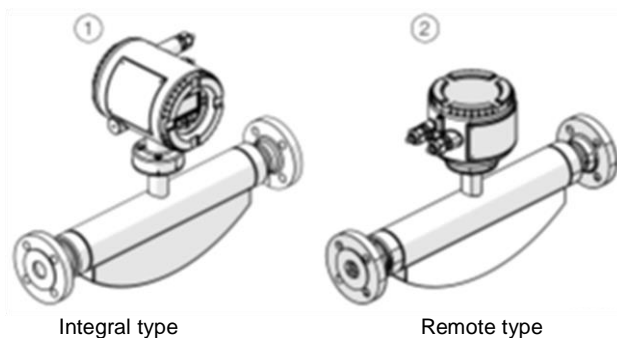
3. General specification

● Sensor

| Size | 015 | 025 | 050 | 080 | 100 | 150 |
|-----------------------|--|--|------------------------------|----------------------|-------|-----|
| Nominal diameter | 10A, 15A, 20A, 25A, 40A, 50A, 65A, 80A, 100A, 150A, 200A | | | | | |
| Connection end | JIS10K, 20K ASME/ANSI 150, 300, 600 JPI 150, 300, 600 DIN PN16, 40, 63 Tri-clamp | | | | | |
| Fluid | Liquid/Gas | | | | | |
| Flow range | 0 ~ 860,000 Kg/h (6 type) | | | | | |
| Accuracy | Volume | Liquid | General: | Mass flow | ±0.4% | |
| | | | High accuracy: | Volume flow | ±0.4% | |
| | Gas | General: | Mass flow | ±0.15% (±0.1%option) | | |
| | | High accuracy: | Volume flow | ±0.15% | | |
| Density | Liquid | General: | 0.010kg/L | | | |
| | | High accuracy: | 0.002kg/L (0.001kg/L option) | | | |
| Temperature | General: | | -50 ~ 160 °C | | | |
| | High accuracy: | | -50 ~ 205 °C | | | |
| | | Explosion-proof type is depending on the specification | | | | |
| Pressure | Depending on the connection end | | | | | |
| Wetted parts material | Stainless steel (Standard), Alloy C (Option) | | | | | |
| Explosion-proof | ATEX / IECEx, cFMus, TIIIS (Applying) | | | | | |

● Transmitter

| | |
|-----------------------|---|
| Power | 100 ~ 240V AC, 50/60Hz 11 ~ 30V DC |
| Power consumption | 20W |
| Protection level | Unit type : IP65 / IP67, NEMA 4X Remote type: IP65 / IP67 / IP68 (Sensor only, Immersion depth 5m), NEMA 4X |
| Housing material | Aluminum Stainless (Remote type: Option) |
| Output signal | Analog: 4-20mA DC (Active mode or Passive mode) Digital: 2 points (Pulse or switch) (Passive mode) HART (Protocol Ver. 7.1) |
| Dumping | 0.8 sec. (Available setting 0.2 ~ 100 sec) |
| Low cut-off | 1% of Max. flow rate. (Available setting 0~5%) |
| Transmission distance | Max. 200m (Remote type) |



Transmitter for remote type

4. Flow range, Accuracy

●Liquid measurement

| Size | 015 | 025 | 050 | 080 | 100 | 150 | |
|--|------------------------|---------|----------|----------|-----------|-----------|-----------|
| Flow range | MASS flow[kg/h] | 0~8,000 | 0~35,000 | 0~90,000 | 0~250,000 | 0~560,000 | 0~860,000 |
| | Volume flow [L/h] (※1) | 0~8,000 | 0~35,000 | 0~90,000 | 0~250,000 | 0~560,000 | 0~860,000 |
| (※1) Volume flow is according to the 1g/mL of density. In case of other than 1mg/mL Volume flow = Mass flow / Density. | | | | | | | |
| Zero-stability [kg/h] | 0.64 | 2.16 | 7.2 | 20 | 41.6 | 68.8 | |

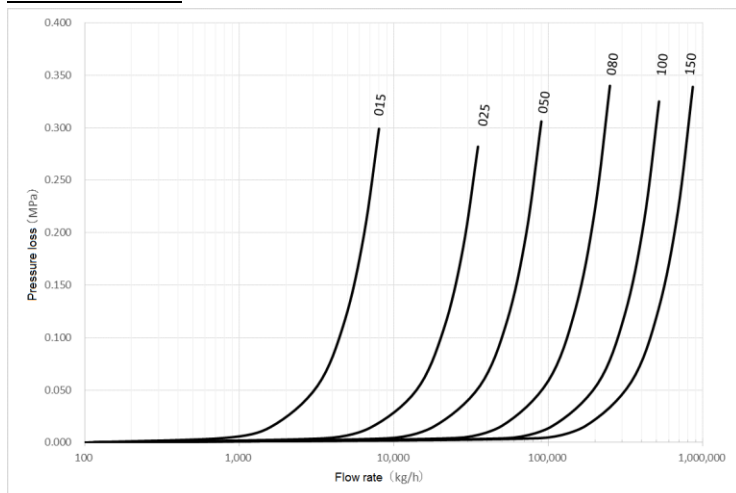
●Basic accuracy

| Model | 430 (General type) | 450 (High accuracy type) |
|-------------------------|----------------------|--------------------------|
| Mass flow (Liquid) | ±0.4% | ±0.15% |
| | ±0.25% (Option) | ±0.10% (Option) |
| | ±0.20% (Option) | |
| Mass flow (Gas) | ±1.0% | ±0.5% |
| Volume flow | ±0.4% | ±0.15% |
| | ±0.25% (Option) | |
| | ±0.20% (Option) | |
| Repeatability (volume) | Refer to below table | |
| Density (Liquid) | 0.010kg/L | 0.002kg/L |
| | | 0.001kg/L |
| Repeatability (density) | 0.002kg/L | 0.002kg/L |
| | | 0.001kg/L |

●Measuring accuracy

| | | Max. measuring accuracy | Repeatability |
|---|--|---|---|
| 1 | Flow rate $\geq \frac{\text{Zero-stability}}{(\text{General accuracy}/100)}$ | ±General accuracy | ±1/2×General accuracy |
| 2 | Flow rate $< \frac{\text{Zero-stability}}{(\text{General accuracy}/100)}$ | ± (Zero-stability/Measured value) ×100% | ±1/2× (Zero-stability/Measured value) ×100% |

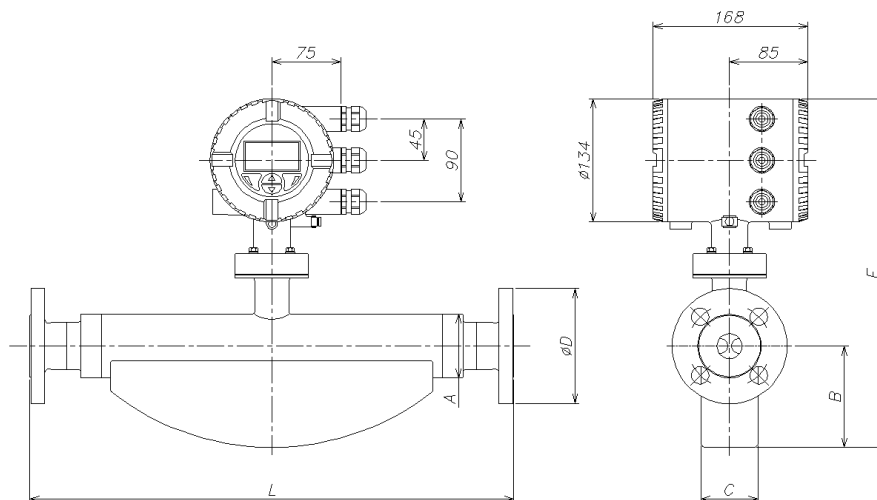
5. Pressure loss



Pressure loss (result by water @ 20°C /1mPa.s)
Please inquiry in case of other viscosity.

6. External dimensions

●Integral type

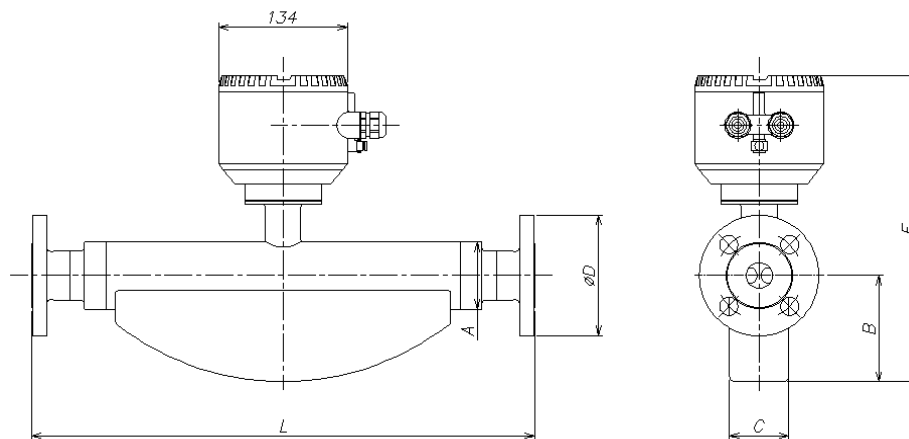


| Meter size | Size (mm) | | | | Approx. weight (kg) |
|------------|-----------|-------|-------|-------|---------------------|
| | A | B | C | E | |
| 0 1 5 | φ 4 4 . 5 | 7 7 | 4 6 | 3 4 0 | 9 |
| 0 2 5 | φ 6 9 . 5 | 1 0 3 | 6 2 | 3 7 9 | 1 1 |
| 0 5 0 | φ 9 9 | 1 2 5 | 8 0 | 4 1 6 | 2 7 |
| 0 8 0 | φ 1 5 5 | 1 8 3 | 1 2 3 | 5 0 5 | 7 1 |
| 1 0 0 | φ 1 8 5 | 2 6 1 | 1 6 8 | 6 0 3 | 1 2 3 |
| 1 5 0 | □ 2 6 0 | 3 2 0 | 2 0 5 | 6 9 1 | 1 8 1 |

Note) Approximate weight may be changed as per connection end and material.

External dimensions are changed as per meter size.

●Remote type



| Meter size | Size (mm) | | | | Approx. weight (kg) |
|------------|-----------|-------|-------|-------|---------------------|
| | A | B | C | E | |
| 0 1 5 | φ 4 4 . 5 | 7 7 | 4 6 | 3 4 0 | 9 |
| 0 2 5 | φ 6 9 . 5 | 1 0 3 | 6 2 | 3 7 9 | 1 1 |
| 0 5 0 | φ 9 9 | 1 2 5 | 8 0 | 4 1 6 | 2 7 |
| 0 8 0 | φ 1 5 5 | 1 8 3 | 1 2 3 | 5 0 5 | 7 1 |
| 1 0 0 | φ 1 8 5 | 2 6 1 | 1 6 8 | 6 0 3 | 1 2 3 |
| 1 5 0 | □ 2 6 0 | 3 2 0 | 2 0 5 | 6 9 1 | 1 8 1 |

Note) Approximate weight may be changed as per connection end and material.

External dimensions are changed as per meter size.

●015 sensor connection standard

| Connection end | Specification code | L (mm) | D (mm) |
|-------------------------------------|--------------------|--------|--------|
| 10A JIS10K | 015E1J1 | 385 | 90 |
| 15A JIS10K | 015R0J1 | 385 | 95 |
| 1/2" CL150 (ASME B 16.5) | 015R0A1 | 435 | 89 |
| 1/2" CL300 (ASME B 16.5) | 015R0A3 | 421 | 95 |
| 20A JIS10K | 015R1J1 | 421 | 100 |
| 3/4" CL150 (ASME B 16.5) | 015R1A1 | 421 | 98 |
| Conform to DIN 32676 1/2" Tri-clamp | 015R0T1 | 413 | 34 |
| Conform to ASME BPE 1/2" Tri-clamp | 015R0T3 | 433 | 25 |

●025 sensor connection standard

| Connection end | Specification code | L (mm) | D (mm) |
|---|--------------------|--------|--------|
| 20A JIS10K | 025E1J1 | 576 | 100 |
| 3/4" CL150 (ASME B 16.5) | 025E1A1 | 575 | 98 |
| 25A JIS10K | 025R0J1 | 525 | 125 |
| 1" CL150 (ASME B 16.5) | 025R0A1 | 575 | 108 |
| 1" CL300 (ASME B 16.5) | 025R0A3 | 576 | 124 |
| 40A JIS10K | 025R2J1 | 576 | 140 |
| 1-1/2" CL150 (ASME B 16.5) | 025R2A1 | 576 | 127 |
| In accordance with DIN 32676 1" Tri-clamp | 025R0T1 | 590 | 50.5 |
| In accordance with ASME BPE 1" Tri-clamp | 025R0T3 | 590 | 50.4 |

●050 sensor connection standard

| Connection end | Specification code | L (mm) | D (mm) |
|---|--------------------|--------|--------|
| 40A JIS10K | 050E1J1 | 763 | 140 |
| 1-1/2" CL150 (ASME B 16.5) | 050E1A1 | 763 | 127 |
| 1-1/2" CL300 (ASME B 16.5) | 050E1A3 | 756 | 156 |
| 50A JIS10K | 050R0J1 | 715 | 155 |
| 2" CL150 (ASME B 16.5) | 050R0A1 | 715 | 152 |
| 2" CL300 (ASME B 16.5) | 050R0A3 | 763 | 165 |
| 65A JIS10K | 050R1J1 | 763 | 175 |
| 2-1/2" CL150 (ASME B 16.5) | 050R1A1 | 756 | 178 |
| In accordance with DIN 32676 2" Tri-clamp | 050R0T1 | 740 | 64 |
| In accordance with ASME BPE 2" Tri-clamp | 050R0T3 | 740 | 63.9 |

●080 sensor connection standard

| Connection end | Specification code | L (mm) | D (mm) |
|---|--------------------|--------|--------|
| 65A JIS10K | 080E1J1 | 910 | 175 |
| 2-1/2" CL300 (ASME B 16.5) | 080E1A3 | 920 | 178 |
| 80A JIS10K | 080R0J1 | 870 | 185 |
| 3" CL150 (ASME B 16.5) | 080R0A1 | 880 | 191 |
| 3" CL300 (ASME B 16.5) | 080R0A3 | 895 | 210 |
| 100A JIS10K | 080R1J1 | 1060 | 210 |
| 4" CL150 (ASME B 16.5) | 080R1A1 | 880 | 229 |
| In accordance with DIN 32676 3" Tri-clamp | 080R0T1 | 910 | 106 |
| In accordance with ASME BPE 3" Tri-clamp | 080R0T3 | 910 | 90.9 |

●100 sensor connection standard

| Connection end | Specification code | L (mm) | D (mm) |
|------------------------|--------------------|--------|--------|
| 80A JIS10K | 100E1J1 | 1275 | 185 |
| 3" CL300 (ASME B 16.5) | 100E1A3 | 1244 | 210 |
| 100A JIS10K | 100R0J1 | 1150 | 210 |
| 4" CL150 (ASME B 16.5) | 100R0A1 | 1144 | 229 |
| 4" CL300 (ASME B 16.5) | 100R0A3 | 1324 | 254 |
| 150A JIS10K | 100R2J1 | 1300 | 280 |
| 6" CL150 (ASME B 16.5) | 100R2A1 | 1330 | 279 |

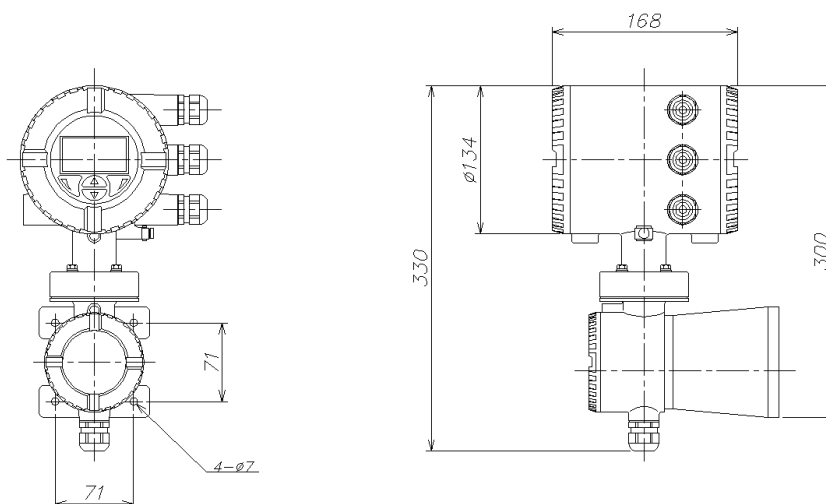
Note) This size is for major item. Unavailable for manufacturing depend on the combination.

● 150 sensor connection standard

| Connection end | Specification code | L (mm) | D (mm) |
|------------------------|--------------------|--------|--------|
| 4" PN16 (EN 1092-1) | 150E2D2 | 1569 | 220 |
| 6" PN16 (EN 1092-1) | 150R0D2 | 1421 | 285 |
| 6" CL150 (ASME B 16.5) | 150R0A1 | 1485 | 279 |
| 6" CL300 (ASME B 16.5) | 150R0A3 | 1505 | 318 |
| 8" CL150 (ASME B 16.5) | 150R2A1 | 1650 | 343 |
| 8" CL300 (ASME B 16.5) | 150R2A3 | 1670 | 381 |

Note) This size is for major item. Unavailable for manufacturing depend on the combination.

● Transmitter for remote type (Type FT)



Weight: 4.5Kg.

7. Transmitter

● Indication contents

Mass flow, Volume flow, Density, Temperature, and any others (Available for select).

4 kind of monitor for operator can be set, and it can indicate several measuring result simultaneously.

Indicator has 3 line LCD, and variety of indication is available.

● Operation

Operated by capacitance touch panel through the glass is available.

Set according to the menu by 4 operation keys.

● Standard output

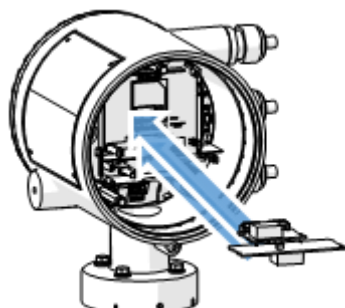
Analog output: 1 point (4~20mA/DC/HART7)





Digital output: 2 points (Pulse, frequency)

● Optional plug-in cards (for additional output)

The transmitter has two slots in which plug-in cards can be inserted to provide additional inputs and outputs.

The slots are located on the transmitter motherboard and can be accessed after removing the front housing cover.



| Plug-in card | Description | Number ¹⁾ |
|---|---------------------------------------|----------------------|
|  | Passive current output, 4~20 mA (red) | Two cards |
|  | Passive digital output (green) | One card |
|  | Passive digital input (yellow) | One card |
|  | 24 V DC power supply (blue) | One card |

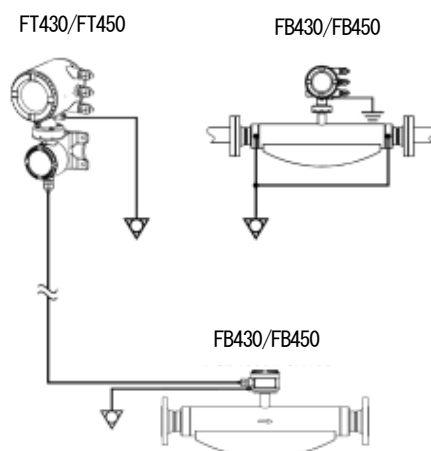
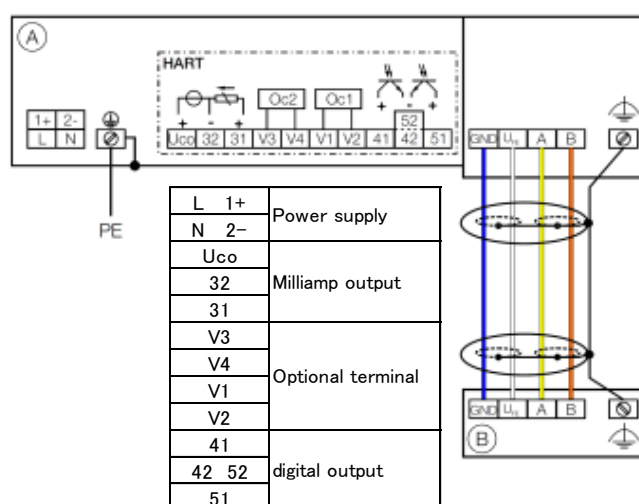
1) The "Number" column indicates the maximum number of plug-in cards of the same type that can be used.

Note: Please refer to next page for the possible combination of plug-in cards

● The possible combination of plug-in cards

| Output code | Additional output code | | Slot OC1 Terminals V1 / V2 | Slot OC2 Terminals V3 / V4 |
|-------------|------------------------|----------|---------------------------------------|---------------------------------------|
| | Output 1 | Output 2 | | |
| G0 | — | — | — | — |
| G1 | x | — | 24 V DC power supply (blue) | — |
| G2 | — | x | — | Passive current output, 4~20 mA (red) |
| G3 | x | x | Passive current output, 4~20 mA (red) | Passive current output, 4~20 mA (red) |
| G0 | DRT | DSN | 24 V DC power supply (blue) | Passive digital input (yellow) |
| G0 | DRT | DSG | 24 V DC power supply (blue) | Passive digital output (green) |
| G0 | DRT | DSA | 24 V DC power supply (blue) | Passive current output, 4~20 mA (red) |
| G0 | DRN | — | Passive digital input (yellow) | — |
| G0 | DRN | DSG | Passive digital input (yellow) | Passive digital output (green) |
| G0 | DRN | DSA | Passive digital input (yellow) | Passive current output, 4~20 mA (red) |
| G0 | DRG | DSN | Passive digital output (green) | Passive digital input (yellow) |
| G0 | DRG | DSA | Passive digital output (green) | Passive current output, 4~20 mA (red) |

● Terminal block



● IP rating

In accordance with EN 60529 : IP65/IP67, NEMA4X

● Vibration

In accordance with EN 60068-2

10~58Hz, Max deflection 0.15mm (Peak load)

58~150Hz, Max. acceleration 2G (Peak load)

● Ambient temperature

Standard : -20~70°C Option : -40~70°C

Note) When operating below -20°C, visibility of the LCD display may be worse.

● Signal cable (Remote type: between sensor and transmitter)

Impedance 100~200Ω

Withstand voltage 120V

Outer diameter 6~12mm

Cable design 4 core shielded cable (2 wire pairs as a star-quad cable)

Max. signal cable length

0.25mm² : 50m

0.34mm² : 100m

0.50mm² : 150m

0.75mm² : 200m

●Power

| | | |
|-------------------|---|--------------------|
| AC Power Terminal | : | L/N |
| Operating voltage | : | 100~240VAC 50/60Hz |
| Power consumption | : | 20VA |
| DC Power Terminal | : | 1+/2- |
| Operating voltage | : | 11~30VDC |
| Power consumption | : | 20W |

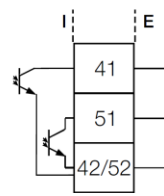
●Output

Standard output

Current output

| Current output | Active mode | Passive mode |
|-----------------|------------------------------------|---------------|
| Terminal | Uco(+)/32(-) | 31 (+)/32 (-) |
| Output signal | 4~20mADC or 4~12~20mADC Switchable | 4~20mADC |
| Load resistance | 250~300Ω | 250~600Ω |
| Source voltage | — | 12~30V |
| Measuring error | 0.1% or less of measured value | |

Digital output

| Digital output | Pulse/frequency output (passive) | Binary output (passive) |  |
|-----------------|---|-----------------------------------|---|
| Terminal | 41(+)/42(-), 51(+)/52(-) | 41(+)/42(-), 51(+)/52(-) | |
| Output "closed" | Voltage 3VDC or less 2.5kHz or less : 2~30mA More than 2.5kHz : 10~30mA | Voltage 3VDC or less 2~30mA | |
| Output "open" | Voltage 16~30VDC 0.2mA or less | Voltage 16~30VDC 0.2mA or less | |
| Max. frequency | 10.5kHz | — | |
| Pulse width | 0.1~2,000ms | — | |

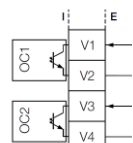
Option output

Option (by plug-in card)

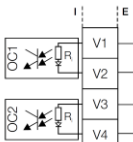
• Passive current output (red)

| | | |
|-----------------|--------------------------------|---|
| Terminal | V1(+)/V2(-), V3(+)/V4(-) | The plug-in card can be used in slot OC1 or OC2 |
| Output signal | 4~20mA | |
| Load resistance | 250~600Ω | |
| Source voltage | 12~30VDC | |
| Measuring error | 0.1% or less of measured value | |

• Digital output (green): Binary output (Passive)

| | | | |
|-----------------|-----------------------------------|---|---|
| Terminal | V1/V2, V3/V4 | The plug-in card can be used in slot OC1 or OC2 |  |
| Output "closed" | Voltage 3VDC or less 2~30mA | | |
| Output "open" | Voltage 16~30VDC 0.2mA or less | | |

• Digital input (Yellow)

| | | | |
|---------------------|--------------------------|---|---|
| Terminal | V1(+)/V2(-), V3(+)/V4(-) | The plug-in card can be used in slot OC1 or OC2 |  |
| Input "ON" | Voltage 16V~30VDC | | |
| Input "OFF" | Voltage 3VDC or less | | |
| Internal resistance | 6.5kΩ | | |

• 24VDC Power supply (blue)

| | | |
|----------------|--|--|
| Terminal | V1(+)/V2(-) | The plug-in card can be used in slot OC1 only. |
| Function | For active connection of passive outputs | |
| Output voltage | 24VDC at 0mA 17VDC at 25mA | |
| Load rating | 25mA, permanently short circuit-proof | |

8. Specification code

Unit type/ Remote type sensor

| Article | Specification code | | Note |
|---|--------------------|--|---|
| Model | FB450 | | Coliolis Mass flow meter / High accuracy type |
| | FB430 | | Coliolis Mass flow meter / General type |
| Explosion Protection Certificate | Y0 | | General Purpose |
| | A2 | | ATEX/IECEX (Zone 2/22) |
| | A1 | | ATEX/IECEX (Zone 1/21) |
| | F2 | | cFMus version Class 1 Div. 2 (Zone 2/21) |
| | F1 | | cFMus version Class 1 Div. 1 (Zone 1/21) |
| Transmitter type / Material / Cable Gland | Y0 | | When select "Unit type" |
| | U1 | | Remote type / Aluminum / 1-M20x1.5 |
| | U2 | | Remote type / Aluminum / 1-NPT1/2 |
| | A1 | | Remote type / Stainless / 1-M20x1.5 |
| | A2 | | Remote type / Stainless / 1-NPT1/2 |
| Meter size / Connection size | 015E1 | | 015/10A (3/8B) |
| | 015R0 | | 015/15A (1/2B) : Standard |
| | 015R1 | | 015/20A (3/4B) |
| | 025E1 | | 025/20A (3/4B) |
| | 025R0 | | 025/25A (1B) : Standard |
| | 025R2 | | 025/40A (1-1/2B) |
| | 050E1 | | 050/40A (1-1/2B) |
| | 050R0 | | 050/50A (1B) : Standard |
| | 050R1 | | 050/65A (2-1/2B) |
| | 080E1 | | 080/65A (2-1/2B) |
| | 080R0 | | 080/80A (3B) : Standard |
| | 080R1 | | 080/100A (4B) |
| | 100E1 | | 100/80A (3B) |
| | 100R0 | | 100/100A (4B) : Standard |
| | 100R2 | | 100/150A (6B) |
| | 150E2 | | 150/100A (4B) |
| 150R0 | | 150/150A (6B) : Standard | |
| 150R2 | | 150/200A (8B) | |
| Process Connection Type | J1 | | Flange JIS 10K |
| | J2 | | Flange JIS 20K |
| | D2 | | Flange DIN PN16 |
| | D4 | | Flange DIN PN40 |
| | D5 | | Flange DIN PN63 |
| | D6 | | Flange DIN PN100 |
| | A1 | | Flange ANSI/ASME B16.5 Class 150 |
| | A3 | | Flange ANSI/ASME B16.5 Class 300 |
| | A6 | | Flange ANSI/ASME B16.5 Class 600 |
| | A7 | | Flange ANSI/ASME B16.5 Class 900 |
| | A8 | | Flange ANSI/ASME B16.5 Class 1500 |
| | T1 | | In accordance with DIN 32676 Tri-clamp |
| T3 | | In accordance with ASME BPE Tri-clamp | |
| F1 | | In accordance with DIN 11851 Fitting | |
| Material of Wetted Parts | A1 | | Stainless steel |
| | C1 | | Ni-Alloy (Alloy-C) |
| Flow Calibration | A | | Flow forward : Liquid±0.4 % , Gas : ±1.0 % General type |
| | B | | Flow forward : Liquid±0.25 % , Gas : ±1.0 % General type |
| | E | | Flow forward : Liquid±0.2 % , Gas : ±1.0 % General type |
| | C | | Flow forward : Liquid±0.15 % , Gas : ±0.5 % High accuracy type |
| | D | | Flow forward : Liquid±0.1 % , Gas : ±0.5 % High accuracy type |
| | J | | Flow forward/reverse : Liquid±0.4 % , Gas : ±1.0 % General type |
| | K | | Flow forward/reverse : Liquid±0.25 % , Gas : ±1.0 % General type |
| Density Calibration | N | | Flow forward/reverse : Liquid±0.2 % , Gas : ±1.0 % General type |
| | L | | Flow forward/reverse : Liquid±0.15 % , Gas : ±0.5 % High accuracy type |
| | M | | Flow forward/reverse : Liquid±0.1 % , Gas : ±0.5 % High accuracy type |
| | 1 | | Density 10 g/L General type |
| | 3 | | Density 2 g/L High accuracy type |
| 4 | | Density 1 g/L High accuracy type | |
| 9 | | Others | |
| Transmitter Type / Material / Cable Grand | D1 | | Unit type / Aluminum / 3-M20x1.5 |
| | D2 | | Unit type / Aluminum / 3-NPT1/2 |
| | D5 | | Unit type / Aluminum / 3-NPT1/2 (Explosion protection) |
| | D6 | | Unit type / Aluminum / 3-M20x1.5 (Explosion protection) |
| | Y0 | | When select "Remote type" |
| Output | G0 | | Current output 1 (AorP) , Digital output 1&2 (P) , HART |
| | G1 | | Current output 1 (AorP) , Digital output 1&2 (P) , 24VDC loop supply , HART |
| | G2 | | Current output 1 (A) , Digital output 1&2 (P) , current output 2 (P) , HART |
| | G3 | | Current output 1 (A) , Digital output 1&2 (P) , current output 2 & 3 (P) , HART |
| Y0 | | Without: when select remote type | |
| Power supply | A | | 100~230VAC |
| | C | | 11~30VDC |
| | Y | | Without: when select remote type |

Note) A: Active mode

Sensor option

| Article | Additional specification code | | Note |
|------------------------------------|-------------------------------|------|---|
| Additional output 1 | DRN | | 1xDigital input |
| | DRG | | 1xDigital output |
| | DRA | | 1xAnalog output (P) (4~20mA) |
| | DRT | | 24VDC transmitter loop power supply |
| Additional output 2 | DSN | | 1xDigital input |
| | DSG | | 1xDigital output |
| | DSA | | 1xAnalog output (P) (4~20mA) |
| Special operation mode | N6 | | Standard + DensiMass : concentration measurement :only 450 type |
| | N5 | | Standard + Filling application |
| | N7 | | VeriMass function: Meter verification : only 450 type |
| Pressure-resistance Sensor Housing | PR5 | | Max. burst pressure 6MPa (Include tower length extension) |
| | PR6 | | Max. burst pressure 10MPa(Include tower length extension): Meter size 015 |
| | PR7 | | Max. burst pressure 15MPa(Include tower length extension): Meter size 015 |
| Signal Cable Length | SC0 | | Without |
| | SC1 | | 5m |
| | SC2 | | 10m |
| | SC4 | | 20m |
| | SC5 | | 25m |
| | SC6 | | 30m |
| | SC8 | | 40m |
| | SCA | | 50m |
| | SCE | | 100m |
| | SCG | | 150m |
| SCJ | | 200m | |
| TAG No. Plate | T1 | | With TAG No. Plate |
| Ambient Temperature Range | | TA9 | -40~70°C |
| Extend Tower Length | TE1 | | Tower length extension 1, Meter insukation Single |
| | TE2 | | Tower length extension 2, Meter insukation Double |

Note) P: Passive mode

Remote type (Transmitter)

| Article | Specification code | | Note |
|---|--------------------|--|--|
| Model | FT450 | | Coliolis Mass flow meter High accuracy type |
| | FT430 | | Coliolis Mass flow meter General type |
| Explosion Protection Certificate | Y0 | | General Purpose |
| | A2 | | ATEX/IECEX (Zone 2/22) |
| | A1 | | ATEX/IECEX (Zone 1/21) |
| | F2 | | cFMus version Class 1 Div 2 (Zone 2/21) |
| | F1 | | cFMus version Class 1 Div 1 (Zone 1/21) |
| Transmitter type / Material / Cable Grand | R1 | | Remote type / Aluminum / 1-M20x1.5 |
| | R2 | | Remote type / Aluminum / 1-NPT1/2 |
| | R5 | | Remote type / Staineless / 1-M20x1.5 |
| | R6 | | Remote type / Staineless / 1-NPT1/2 |
| Output | G0 | | Current output 1 (AorP), Digital output 1&2 (P), HART |
| | G1 | | Current output 1 (AorP), Digital output 1&2 (P), 24VDC loop power, HART |
| | G2 | | Current output 1 (A), Digital output 1&2 (P), Current output 2 (P), HART |
| | G3 | | Current output 1 (A), Digital output 1&2 (P), Current output 2&3 (P), HART |
| Power supplu | A | | 100~230VAC |
| | C | | 11~30VDC |

Option

| | | | |
|----------------------------------|-----|--|-------------------------------------|
| Mounting Bracket Shape/ Material | B1 | | 2B Pipe mounting / Carbon steel |
| Additional output 1 | DRN | | 1xDigital input |
| | DRG | | 1xDigital output |
| | DRA | | 1xAnalog output (P) (4~20mA) |
| | DRT | | 24VDC transmitter loop power supply |
| Additional output 2 | DSN | | 1xDigital input |
| | DSG | | 1xDigital output |
| | DSA | | 1xAnalog output (P) (4~20mA) |
| TAG No. Plate | T1 | | With TAG No. Plate |

Note) A: Active mode
P: Passive mode

▼The contents given here are subject to change without notice.

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