

## GENERAL

**ALIAMAG** AMF601 Series is a sanitary type electromagnetic flowmeter ideal for conductive liquids. It comes in sizes from 25mm to 100 mm. The AMF601 is widely used for drink water, milk, food & beverage juice and many other industrial fluid.

AMF601 Series electromagnetic flowmeter could be used in compact or separate model with AMC Series converter of electromagnetic flowmeter.

## FEATURES

- ❑ Light and compact version
- ❑ Flow Velocity range: 0-12 m/s, precise in low flow applications
- ❑ IDF Tri-Clamp or Union screw Connection
- ❑ Excellent for high pressure application
- ❑ Protection class: IP68 available; sensor submersible
- ❑ PTFE Liner is suitable for vacuum tube
- ❑ High accuracy of +/-0.4% value of reading (or +/-0.2% value of reading)
- ❑ With Forward / Reverse flowrate measurement function

## STANDARD SPECIFICATION

- |                    |  |                        |   |
|--------------------|--|------------------------|---|
| ● Size             | : 25, 32, 40, 50, 65, 80, 100 mm<br>1", 1-1/4", 1-1/2", 2", 2-1/2", 3", 4"                                   | ● Cable Entry          | : Standard :PG11 Option:1/2"NPTF  |
| ● Measuring Range  | : Velocity 0-0.25 m/s min.<br>0-12 m/s max.  | ● Ambient Temperature  | : -25 to +60 °C   |
| ● Material         |  | ● Process Connection   | : IDF Tri-Clamp<br>Union Screw  |
| Tube & Connection  | : Stainless Steel 304 or 316   | ● Grounding Resistance | : Must be less than 10 Ω  |
| Coil Housing       | : Stainless Steel 304 (Standard)<br>Stainless Steel 316 (Option)   | ● Accuracy             | : +/-0.5% reading (Velocity ≥ 0.5m/s)<br>+/-0.2% reading<br>(Suitable for AMC3100 converter only) |
| Liner              | : PTFE   |                        | : +/-0.0025 m/s (Velocity < 0.5 m/s)  |
| Electrode          | : Stainless Steel 316L<br>Hastelloy B<br>Hastelloy C<br>Titanium<br>Tantalum<br>Tungsten Carbide<br>Platinum | ● Temperature          | : -40 to +150 °C  |
| ● Protection Class | : Junction box IP67, Body IP68<br>IP68 (Submersible)   | ● Max. Pressure        | : 10 Kg/cm2 (Standard)<br>40 Kg/cm2 (Option)  |
| ● Conductivity     | : More than 5 uS/cm  | ● Explosion Proof      | : Exd(ib)ibqIBT5<br>(with AMC3100/AMC3200 only)   |

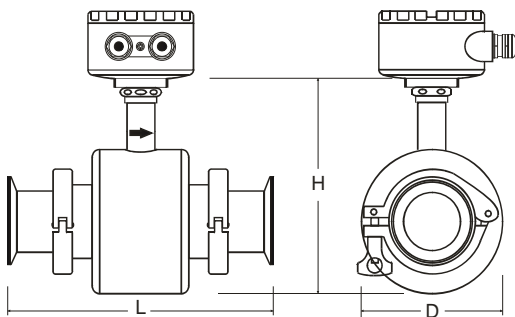


**FLOW RANGE**

Unit: M<sup>3</sup>/Hr

| Normal Size |        | Flow Range & Velocity Table |         |         |         |         |          |                    |
|-------------|--------|-----------------------------|---------|---------|---------|---------|----------|--------------------|
| mm          | Inch   | Min.<br>0 - 0.25M/S         | 1.0 M/S | 2.0 M/S | 3.0 M/S | 5.0 M/S | 10.0 M/S | Max.<br>0 - 12 M/S |
| 25          | 1"     | 0 to 0.44                   | 1.77    | 3.53    | 5.30    | 8.84    | 17.7     | 0 to 21.2          |
| 32          | 1-1/4" | 0 to 0.72                   | 2.90    | 5.79    | 8.69    | 14.5    | 29.0     | 0 to 34.7          |
| 40          | 1-1/2" | 0 to 1.13                   | 4.52    | 9.05    | 13.6    | 22.6    | 45.2     | 0 to 54.3          |
| 50          | 2"     | 0 to 1.77                   | 7.07    | 14.1    | 21.2    | 35.3    | 70.7     | 0 to 84.8          |
| 65          | 2-1/2" | 0 to 2.99                   | 11.9    | 23.9    | 35.8    | 59.7    | 119      | 0 to 143           |
| 80          | 3"     | 0 to 4.52                   | 18.1    | 36.2    | 54.3    | 90.5    | 181      | 0 to 217           |
| 100         | 4"     | 0 to 7.07                   | 28.3    | 56.5    | 84.8    | 141     | 283      | 0 to 339           |

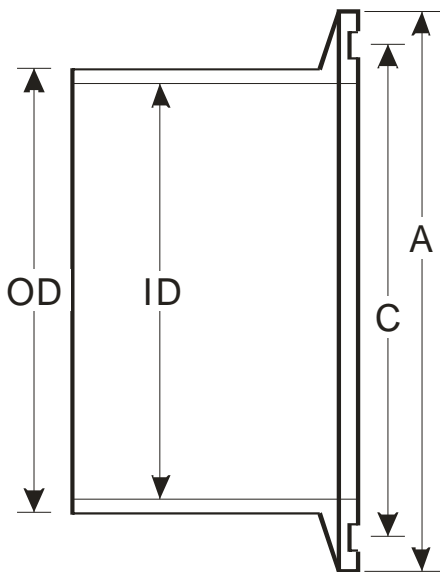
**DIMENSIONS**



| Size |        | Dimensions (mm) |     |     | Weight |
|------|--------|-----------------|-----|-----|--------|
| mm   | Inch   | L               | D   | H   | Kg     |
| 25   | 1"     | 220             | 99  | 160 | 2.6    |
| 32   | 1-1/4" | 220             | 104 | 165 | 3.0    |
| 40   | 1-1/2" | 220             | 104 | 165 | 3.6    |
| 50   | 2"     | 250             | 124 | 185 | 4.7    |
| 65   | 2-1/2" | 250             | 144 | 205 | 6.0    |
| 80   | 3"     | 250             | 154 | 215 | 8.1    |
| 100  | 4"     | 290             | 192 | 253 | 8.8    |

**TRI-CLAMP SPECIFICATIONS**

Unit: mm

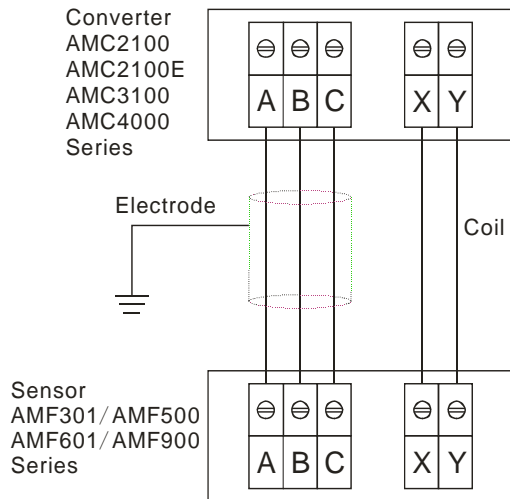


|           |      | HAB    |      |        |      |       |  |
|-----------|------|--------|------|--------|------|-------|--|
| Pipe Size | 1"   | 1-1/2" | 2"   | 2-1/2" | 3"   | 4"    |  |
|           | 25   | 40     | 50   | 65     | 80   | 100   |  |
| ID        | 22.1 | 34.8   | 47.5 | 60.2   | 72.9 | 97.4  |  |
| OD        | 25.4 | 38.1   | 50.8 | 63.5   | 76.2 | 101.6 |  |
| A         | 50.4 | 50.4   | 64.0 | 77.4   | 91.0 | 118.9 |  |
| C         | 43.6 | 43.6   | 56.3 | 70.6   | 83.3 | 110.3 |  |

|           |      | HDB (DIN 32676) |        |      |        |      |     |
|-----------|------|-----------------|--------|------|--------|------|-----|
| Pipe Size | 1"   | 1-1/4"          | 1-1/2" | 2"   | 2-1/2" | 3"   | 4"  |
|           | 25   | 32              | 40     | 50   | 65     | 80   | 100 |
| ID        | 26.0 | 32.0            | 38.0   | 50.0 | 66.0   | 81.0 | 100 |
| OD        | 30.0 | 36.0            | 42.0   | 54.0 | 70.0   | 85.0 | 104 |
| A         | 50.5 | 50.5            | 50.5   | 64.0 | 91.0   | 106  | 119 |
| C         | 43.5 | 43.5            | 43.5   | 56.5 | 83.5   | 97.0 | 110 |

|           |      | HKB (ISO 2852) |        |      |        |      |       |
|-----------|------|----------------|--------|------|--------|------|-------|
| Pipe Size | 1"   | 1-1/4"         | 1-1/2" | 2"   | 2-1/2" | 3"   | 4"    |
|           | 25   | 32             | 40     | 50   | 65     | 80   | 100   |
| ID        | 22.6 | 31.3           | 35.6   | 48.6 | 60.3   | 72.9 | 97.6  |
| OD        | 25.6 | 34.3           | 38.6   | 51.6 | 64.1   | 76.7 | 102.5 |
| A         | 50.5 | 50.5           | 50.5   | 64.0 | 77.5   | 91.0 | 119   |
| C         | 43.5 | 43.5           | 43.5   | 56.5 | 70.5   | 83.5 | 110   |

➤ WIRING DIAGRAM



➤ MODEL SELECTION GUIDE

| AMF601 Series                  |           |    |   |    |     |   |             |
|--------------------------------|-----------|----|---|----|-----|---|-------------|
| Example:AMF601-080-SK6-030-X/P |           |    |   |    |     |   |             |
| AMF601-                        | XXX       | -X | X | -X | XXX | -X  | Description |
| Size                           | 025 ~ 100 |    |   |    |     | 25 ~ 100mm  |             |
| Electrode Material             | -S        |    |   |    |     | Stainless Steel 316L  |             |
|                                | -T        |    |   |    |     | Titanium  |             |
|                                | -B        |    |   |    |     | Hastelloy B   |             |
|                                | -C        |    |   |    |     | Hastelloy C   |             |
|                                | -A        |    |   |    |     | Tantalum  |             |
|                                | -P        |    |   |    |     | Platinum  |             |
|                                | -U        |    |   |    |     | Tungsten Carbide  |             |
|                                | -Z        |    |   |    |     | Others  |             |
| Process Connection             | A         |    |   |    |     | Tri-Clamps, HAB   |             |
|                                | D         |    |   |    |     | Tri-Clamps, HDB (DIN 32676)                                 |             |
|                                | K         |    |   |    |     | Tri-Clamps, HKB (ISO2852)                                   |             |
|                                | S         |    |   |    |     | Screw Unions (DIN 11851)                                    |             |
| Connections / Housing Material | -4        |    |   |    |     | S.S.304 Connections / S.S.304 Housing                       |             |
|                                | -6        |    |   |    |     | S.S.316 Connections / S.S.304 Housing                       |             |
|                                | -9        |    |   |    |     | S.S.316 Connections / S.S.316 Housing                       |             |
| Installation & Cable Length    | NNN       |    |   |    |     | Compact Version   |             |
|                                | 010~300   |    |   |    |     | Separate Version, Cable 10M ~ 300M                          |             |
| Option                         | -N        |    |   |    |     | None  |             |
|                                | -X        |    |   |    |     | Explosion Proof, Exd(ib)ibqIBT5 (with AMC3100/AMC3200 Only) |             |
|                                | -P        |    |   |    |     | Pressure Higher Than 10 Kg/cm2                              |             |
|                                | -T1       |    |   |    |     | Max. Temp.:120-140 °C                                       |             |
|                                | -T2       |    |   |    |     | Max. Temp.:140-150 °C                                       |             |
|                                | -PT       |    |   |    |     | Cable Entry 1/2" NPTF                                       |             |

**➤ BUILD OPTIONS-(COMPACT OR REMOTE)**

