

2025

## Product Selection Guide

# Product selection



Application fields: aerospace, semiconductor processing, medical biology, electronic automobile, iron and steel metallurgy, Marine electronics, industrial gas production and other industries.

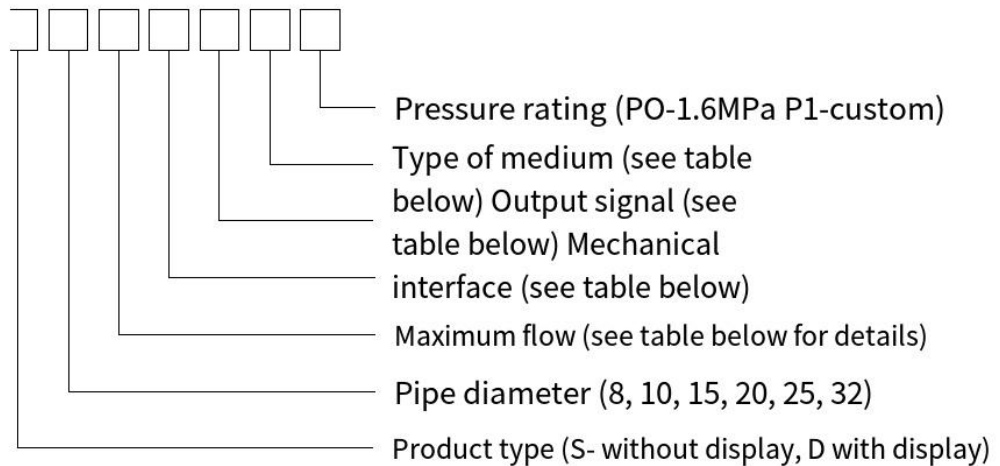


Product features:

- ★ MEMS sensor, fast response speed;
- ★ Zero stability, high precision, good repeatability;
- ★ Wide range ratio, optional flow range;
- ★ Display direction (0°, 90°, 180°, 270°) optional;
- ★ A variety of signal output optional;
- ★ Standard mechanical interface optional;

Product selection

HJYTK



| Product Series | Presence or absence display | Pipe diameter | Flow | Mechanical interface | Output signal | Media | Pressure rating |
|----------------|-----------------------------|---------------|------|----------------------|---------------|-------|-----------------|
| HJYTK          | D                           | 10            | L200 | PN1                  | N0            | AIR   | P0              |

Examples:

Model number: HJYTK-D10L200PN1N0AIRP0

Parameters: HJYTK series, measuring medium: air, measuring range: 2-200L/min, pipe diameter: DN10, mechanical interface :PT3/8 internal thread, output signal: RS485 and 4-20mA, pressure less than 1.6MPa

| No display           | S- with no display D- with display                                                                                     |      |                                     |
|----------------------|------------------------------------------------------------------------------------------------------------------------|------|-------------------------------------|
| Pipe diameter        | 8                                                                                                                      | DN8  | Flow measurement range 1.8-180L/min |
|                      | 10                                                                                                                     | DN10 | Flow measurement range 2.8-280L/min |
|                      | 15                                                                                                                     | DN15 | Flow measurement range 6-600L/min   |
|                      | 20                                                                                                                     | DN20 | Flow measurement range 10-1000L/min |
|                      | 25                                                                                                                     | DN25 | Flow measurement range 15-1500L/min |
|                      | 32                                                                                                                     | DN32 | Flow measurement range 25-2500L/min |
| Maximum flow         | L1 means 1L/min, L200 means 200L/min, and L1500 means 1500L/min                                                        |      |                                     |
| Mechanical interface | PN                                                                                                                     | 0    | PT1/4 Internal thread (DN8)         |
|                      |                                                                                                                        | 1    | PT3/8 Internal thread (DN10)        |
|                      |                                                                                                                        | 2    | PT1/2 internal thread (DN15)        |
|                      |                                                                                                                        | 3    | PT3/4 internal thread (DN20)        |
|                      |                                                                                                                        | 4    | PT1 internal thread (DN25)          |
|                      |                                                                                                                        | 5    | PT1-1/4 internal thread (DN32)      |
|                      | GN means G internal thread, NW means NPT external thread, NT is special custom thread; (default PN)                    |      |                                     |
| Output signal        | N0 indicates RS485 and 4-20mA (default)                                                                                |      |                                     |
|                      | N1 means RS485 and 1-5V                                                                                                |      |                                     |
|                      | N2 means RS485 and 4-20mA, pulse                                                                                       |      |                                     |
|                      | N3 means RS485 and 4-20mA, PNP                                                                                         |      |                                     |
| Type of media        | Measure the type of medium, AIR is air (default), N2 is nitrogen, O2 is oxygen, CO2 is carbon dioxide, MG is mixed gas |      |                                     |
| Pressure rating      | P0 indicates $\leq 1.6\text{MPa}$ (default), P1 indicates custom type higher pressure rating                           |      |                                     |

Note: The flow measurement range is based on air measurement.

Air calibration measures the range range of other medium gases

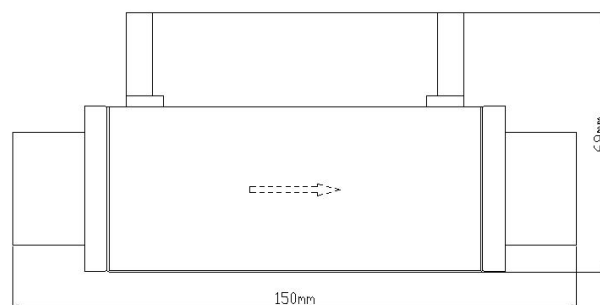
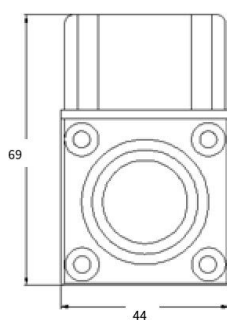
| Serial number | Gas                  | Conversion factor | Percentage of range |
|---------------|----------------------|-------------------|---------------------|
| 1             | AIR Air              | 1.0               | 100%                |
| 2             | Oxygen O2            | 0.9861            | 98.61%              |
| 3             | nitrogen             | 0.994             | 99.4%               |
| 4             | Argon AR             | 1.4066            | 140.66%             |
| 5             | Nitric oxide NO      | 0.9702            | 97.02%              |
| 6             | Nitrogen dioxide NO2 | 0.7366            | 73.66%              |
| 7             | Carbon dioxide CO2   | 0.7326            | 73.26%              |
| 8             | Methane CH4          | 0.7147            | 71.47%              |
| 9             | Ethane C2H6          | 0.4781            | 47.81%              |
| 10            | Propane C3H8         | 0.3459            | 34.59%              |

## Technical parameters

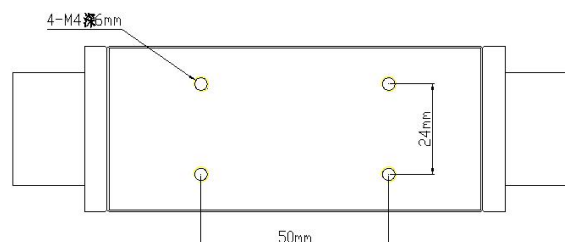
|                       |                                |                       |                                     |
|-----------------------|--------------------------------|-----------------------|-------------------------------------|
| Measurement accuracy  | Plus or minus (1.5 + 0.2 FS) % | Working power supply  | DC15-24V/100mA                      |
| Response time         | 50-1000 ms                     | Output mode           | 4-20mA, pulse (optional)            |
| Zero drift            | ±20mV                          | Display format        | Instantaneous flow, cumulative flow |
| Operating temperature | - 10 ~ 55 °C                   | Operating humidity    | <95%RH(no frost, no icing)          |
| Storage temperature   | - 10 ~ 65 °C                   | Communication methods | RS485(Modbus RTU protocol)          |
| Working pressure      | 1.6 MPa or less                | Calibration medium    | Air (25°C, 101.325kPa)              |

Note: The above data is measured under dry air at 25°C, 101.32kPa

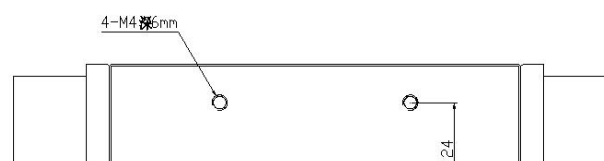
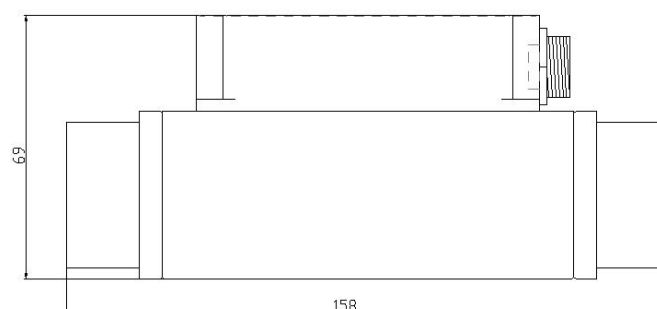
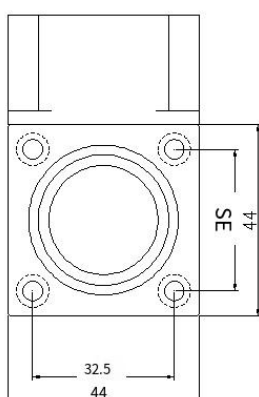
## Dimensions of DN8-DN20



| Mechanical interface connection dimensions |                       |
|--------------------------------------------|-----------------------|
| DN8                                        | PT1/4 internal thread |
| DN10                                       | PT3/8 internal thread |
| DN15                                       | PT1/2 internal thread |
| DN20                                       | PT3/4 internal thread |

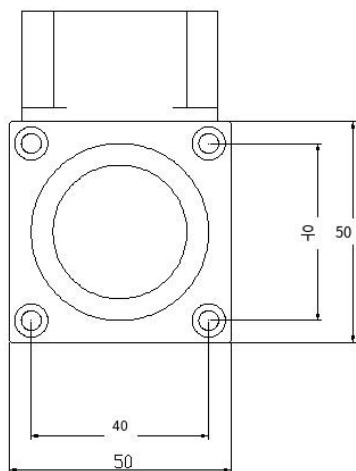


## DN25 Overall dimensions

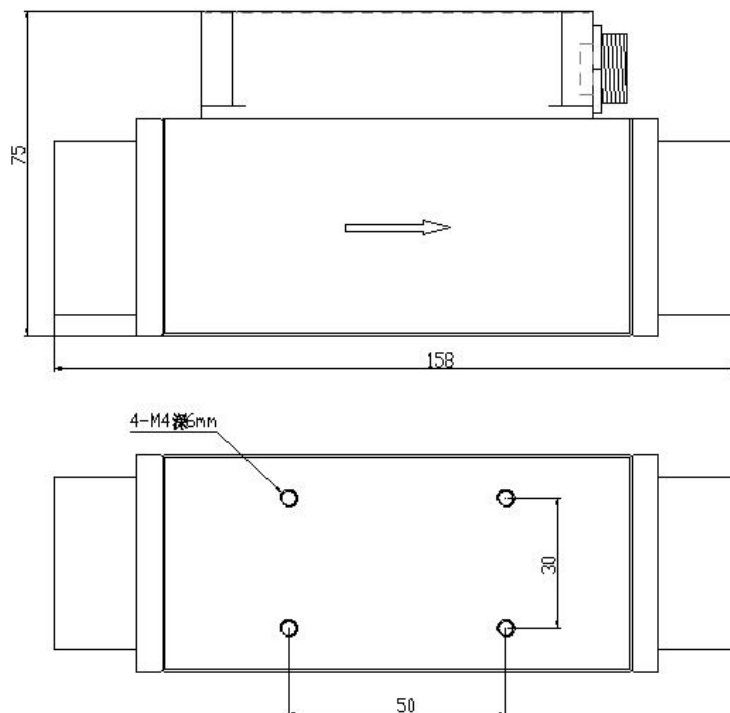


| Mechanical interface connection dimensions |                     |
|--------------------------------------------|---------------------|
| DN25                                       | PT1 internal thread |

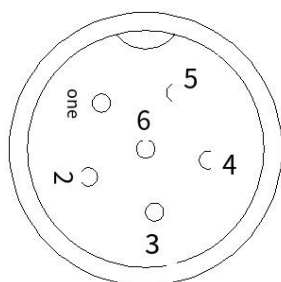
## DN32 External dimensions



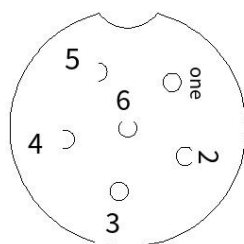
| Mechanical interface connection dimensions |                         |
|--------------------------------------------|-------------------------|
| DN32                                       | PT1-1/4 internal thread |



## Wiring instructions for aviation sockets



The male head is mounted on the housing



Female head 6 cores

| 6-core aviation wiring instructions |                              |
|-------------------------------------|------------------------------|
| identification                      | Meaning                      |
| 1 -- Red                            | 24V+                         |
| 2 -- Green                          | PNP(optional)                |
| 3 -- Yellow                         | RS485 communication output A |
| 4 -- Black                          | 24V-/ Current I-             |
| 5 -- Brown                          | Current I+                   |
| 6 -- white                          | RS485 communication output B |

## HJSL series

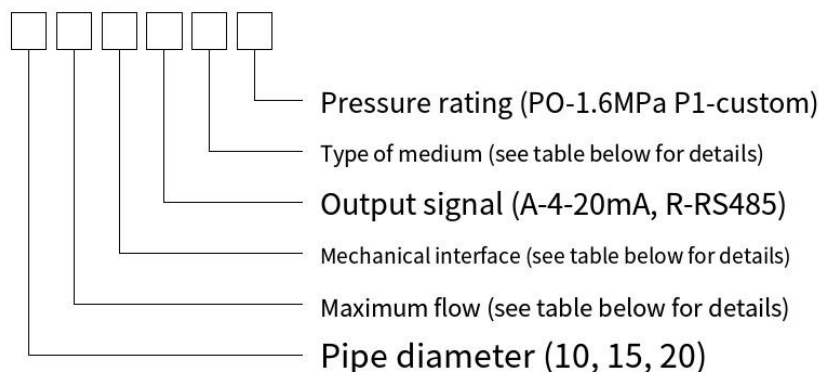


### Product features:

- ★ MEMS sensor, fast response speed;
- ★ Zero stability, high precision, good repeatability;
- ★ Wide range ratio, optional flow range;
- ★ LCM display, clear and intuitive;
- ★ A variety of signal output optional;
- ★ Standard mechanical interface optional;

## Product selection

HJSL



| Product Series       | Pipe Diameter                                                                                                          | Flow | Mechanical interface                | Output signal | Media | Pressure rating |
|----------------------|------------------------------------------------------------------------------------------------------------------------|------|-------------------------------------|---------------|-------|-----------------|
| HJSL                 | 10                                                                                                                     | L200 | GW1                                 | A             | AIR   | P0              |
| For example:         |                                                                                                                        |      |                                     |               |       |                 |
| Pipe diameter        | 10                                                                                                                     | DN10 | Flow measurement range 2.8-280L/min |               |       |                 |
|                      | 15                                                                                                                     | DN15 | Flow measurement range 6-600L/min   |               |       |                 |
|                      | 20                                                                                                                     | DN20 | Flow measurement range 10-1000L/min |               |       |                 |
| Maximum flow         | L1 means 1L/min, L200 means 200L/min, and L1500 means 1500L/min                                                        |      |                                     |               |       |                 |
| Mechanical interface | GW                                                                                                                     | 1    | G3/8 External thread (DN10)         |               |       |                 |
|                      |                                                                                                                        | 2    | G1/2 External thread (DN15)         |               |       |                 |
|                      |                                                                                                                        | 3    | G3/4 External thread (DN20)         |               |       |                 |
|                      | GN means G internal thread, NW means NPT external thread, NT is special custom thread; (default GW)                    |      |                                     |               |       |                 |
| Output signal        | A means 4-20mA                                                                                                         |      |                                     |               |       |                 |
|                      | R indicates RS485.                                                                                                     |      |                                     |               |       |                 |
| Type of media        | Measure the type of medium, AIR is air (default), N2 is nitrogen, O2 is oxygen, CO2 is carbon dioxide, MG is mixed gas |      |                                     |               |       |                 |
| Pressure rating      | P0 indicates ≤1.6MPa (default), P1 indicates custom type higher pressure rating                                        |      |                                     |               |       |                 |

Model number: HJSL-10L200GW1AAIRP0

Parameters: HJSL series, measuring medium: air, measuring range: 2-200L/min, pipe diameter: DN10, mechanical interface :G3/8 external thread, output signal: 4-20mA, pressure less than 1.6MPa

Note: The flow measurement range is based on air measurement.

Air calibration measures the range range of other medium gases

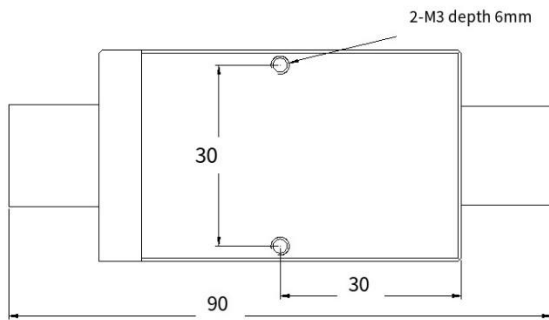
| number | Gas                   | Conversion factor | Percentage of range |
|--------|-----------------------|-------------------|---------------------|
| 1      | AIR Air               | 1.0               | 100%                |
| 2      | Oxygen O2             | 0.9861            | 98.61%              |
| 3      | Nitrogen N2           | 0.994             | 99.4%               |
| 4      | Argon AR              | 1.4066            | 140.66%             |
| 5      | Nitric oxide NO       | 0.9702            | 97.02%              |
| 6      | Nitrogen dioxide, NO2 | 0.7366            | 73.66%              |
| 7      | Carbon dioxide CO2    | 0.7326            | 73.26%              |
| 8      | Methane CH4           | 0.7147            | 71.47%              |
| 9      | Ethane C2H6           | 0.4781            | 47.81%              |
| 10     | Propane C3H8          | 0.3459            | 34.59%              |

## Technical parameters

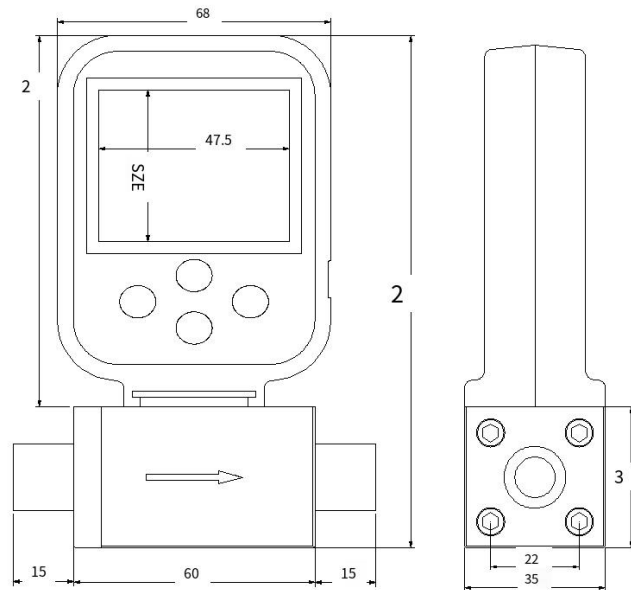
|                       |                                |                       |                                     |
|-----------------------|--------------------------------|-----------------------|-------------------------------------|
| Measurement accuracy  | Plus or minus (2.0 + 0.2 FS) % | Working power supply  | DC15-24V/100mA                      |
| Response time         | 50-1000 ms                     | Output mode           | 4-20mA or RS485                     |
| Zero drift            | ±20mV                          | Display format        | Instantaneous flow, cumulative flow |
| Operating temperature | - 10 ~ 55 °C                   | Operating humidity    | <95%RH(no frost, no icing)          |
| Storage temperature   | - 10 ~ 65 °C                   | Communication methods | RS485(Modbus RTU protocol)          |
| Working pressure      | 1.6 MPa or less                | Calibration medium    | Air (25 ° C, 101.325kPa)            |

Note: The above data is measured under dry air at 25°C, 101.32kPa

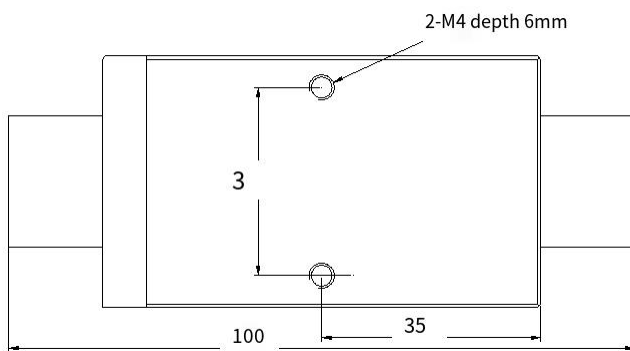
## Dimensions of DN10



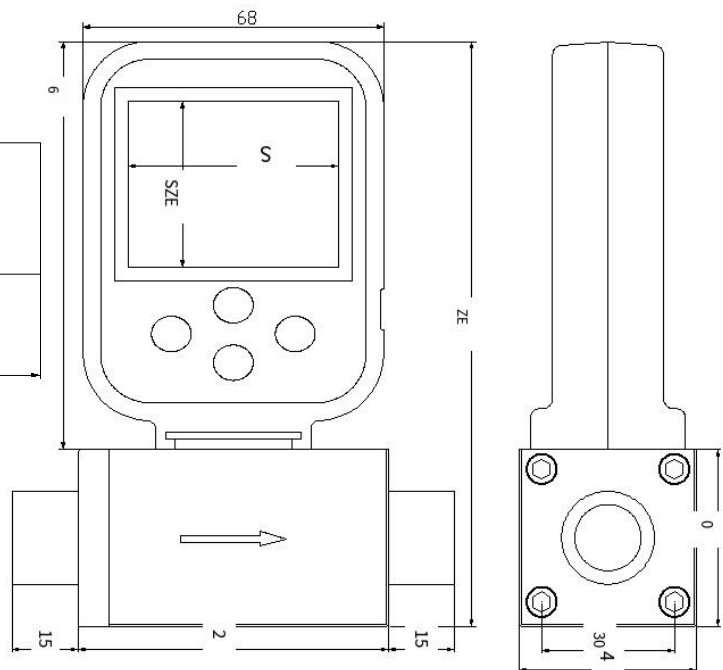
| Mechanical interface connection dimensions |                      |
|--------------------------------------------|----------------------|
| DN10                                       | G3/8 external thread |



## DN15/DN20 overall dimensions



| Mechanical interface connection dimensions |                       |
|--------------------------------------------|-----------------------|
| DN15                                       | G1/2 external thread  |
| DN20                                       | G3/4 external threads |



## USB Wiring Instructions



### MICRO male 4-core USB cable instructions

| Identification                               | Meaning                         |
|----------------------------------------------|---------------------------------|
| 1 -- Red                                     | 24V+                            |
| 2 -- black                                   | 24V-                            |
| 3 -- white                                   | I+/RS485 communication Output A |
| 4 -- Green                                   | I-/RS485 Communication Output B |
| Note: Choose between 4-20mA and RS485 output |                                 |

## HJPT series

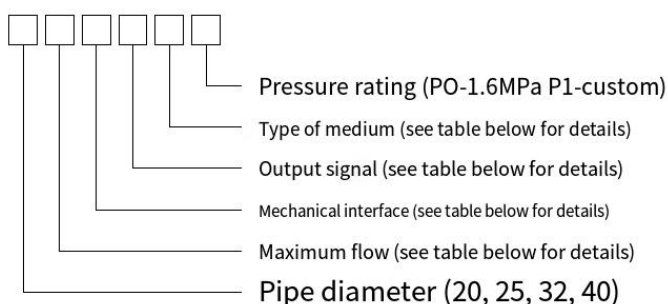


### Product features:

- ★ Platinum resistance sensor, stainless steel protective sleeve;
- ★ Zero stability, high precision, good repeatability;
- ★ Wide range ratio, optional flow range;
- ★ Display direction (0°, 180°) optional;
- ★ A variety of signal output optional;
- ★ Standard mechanical interface optional;

## Product selection

HJPT



| Product Series | Pipe Diameter | Flow | Mechanical interface | Output signal | medium | Pressure rating |
|----------------|---------------|------|----------------------|---------------|--------|-----------------|
| HJPT           | 20            | M50  | GN3                  | N0            | AIR    | P0              |

Examples:

Model number: HJPT-20M50GN3N0AIRP0

Parameters: HJPT series, measuring medium: air, measuring range: 0.5-50 Nm<sup>3</sup>/h, pipe diameter: DN20, mechanical interface :G3/4 internal thread, output signal: 4-20mA+RS485, pressure less than 1.6MPa

|                      |                                                                                                                        |      |                                                  |
|----------------------|------------------------------------------------------------------------------------------------------------------------|------|--------------------------------------------------|
| Pipe diameter        | 20                                                                                                                     | DN20 | Flow measurement range 0.6-60Nm <sup>3</sup> /h  |
|                      | 25                                                                                                                     | DN25 | Flow measurement range 1-100Nm <sup>3</sup> /h   |
|                      | 32                                                                                                                     | DN32 | Flow measurement range 1.6-160Nm <sup>3</sup> /h |
|                      | 40                                                                                                                     | DN40 | Flow measurement range 2.4-240Nm <sup>3</sup> /h |
| Maximum flow         | M60 means 60Nm <sup>3</sup> /h, M100 means 100Nm <sup>3</sup> /h, and M40 means 40Nm <sup>3</sup> /h                   |      |                                                  |
| Mechanical interface | GN                                                                                                                     | 3    | G3/4 Internal thread (DN20)                      |
|                      |                                                                                                                        | 4    | G1 Internal thread (DN25)                        |
|                      |                                                                                                                        | 5    | G1-1/4 internal thread (DN32)                    |
|                      |                                                                                                                        | 6    | G1-1/2 internal thread (DN40)                    |
|                      | GN means G internal thread (default), NT is a special custom thread;                                                   |      |                                                  |
| Output signal        | N0 for RS485 and 4-20mA (default)                                                                                      |      |                                                  |
|                      | N1 means RS485 and 1-5V                                                                                                |      |                                                  |
|                      | N2 means RS485, 4-20mA, pulse                                                                                          |      |                                                  |
| Type of media        | Measure the type of medium, AIR is air (default), N2 is nitrogen, O2 is oxygen, CO2 is carbon dioxide, MG is mixed gas |      |                                                  |
| Pressure rating      | P0 indicates ≤1.6MPa (default), P1 indicates custom type higher pressure rating                                        |      |                                                  |

Note: The flow measurement range is based on air measurement.  
Air calibration measures the range range of other medium gases

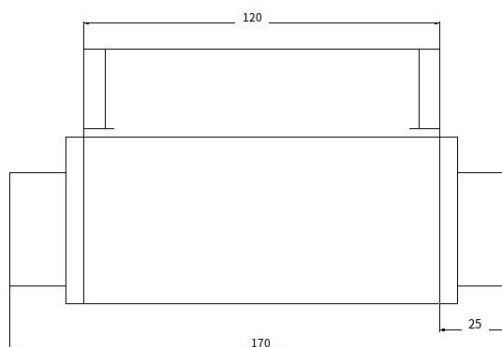
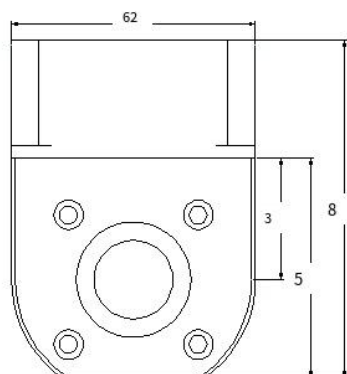
| Serial number | Gas                   | Conversion coefficient | Percentage of range |
|---------------|-----------------------|------------------------|---------------------|
| 1             | AIR Air               | 1.0                    | 100%                |
| 2             | Oxygen O2             | 0.9861                 | 98.61%              |
| 3             | Nitrogen N2           | 0.994                  | 99.4%               |
| 4             | Argon AR              | 1.4066                 | 140.66%             |
| 5             | Nitric oxide NO       | 0.9702                 | 97.02%              |
| 6             | Nitrogen dioxide, NO2 | 0.7366                 | 73.66%              |
| 7             | Carbon dioxide CO2    | 0.7326                 | 73.26%              |
| 8             | Methane CH4           | 0.7147                 | 71.47%              |
| 9             | Ethane C2H6           | 0.4781                 | 47.81%              |
| 10            | Propane C3H8          | 0.3459                 | 34.59%              |

## Technical parameters

|                       |                                |                       |                                     |
|-----------------------|--------------------------------|-----------------------|-------------------------------------|
| Measurement accuracy  | Plus or minus (1.5 + 0.2 FS) % | Working power supply  | DC24V/1A                            |
| Response time         | 1-5 s                          | Output mode           | 4-20mA\RS485                        |
| Zero drift            | ±20mV                          | Display format        | Instantaneous flow, cumulative flow |
| Operating temperature | - 10 ~ 55 °C                   | Operating humidity    | <95%RH(no frost, no icing)          |
| Storage temperature   | - 10 ~ 65 °C                   | Communication methods | RS485(Modbus RTU protocol)          |
| Working pressure      | 1.6 MPa or less                | Calibration medium    | Air (25 ° C, 101.325kPa)            |

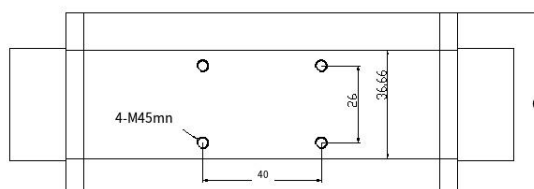
Note: The above data is measured under dry air at 25°C, 101.32kPa

## Dimensions of DN20/DN25

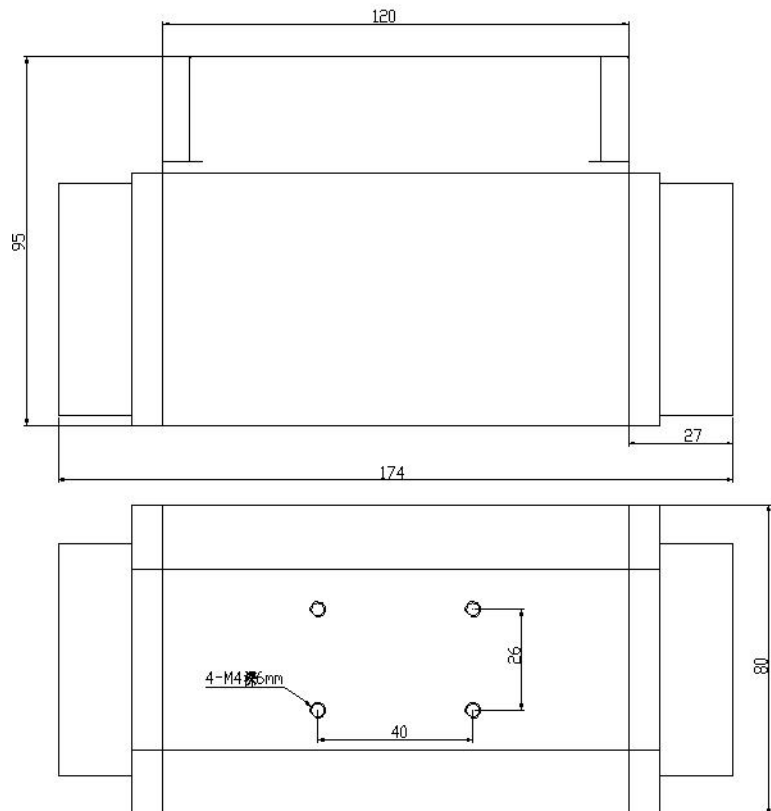
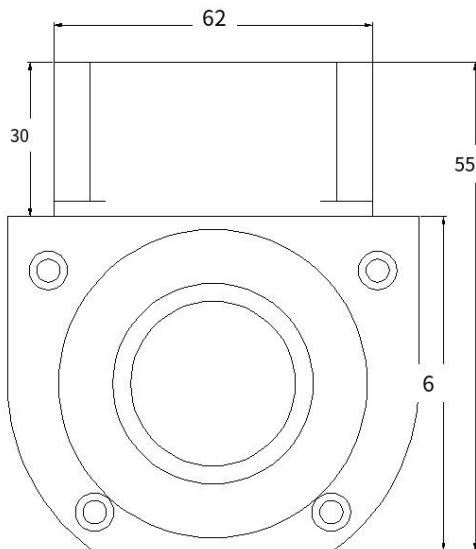


### Mechanical interface connection dimensions

|      |                      |
|------|----------------------|
| DN20 | G3/4 internal thread |
| DN25 | G1 internal thread   |



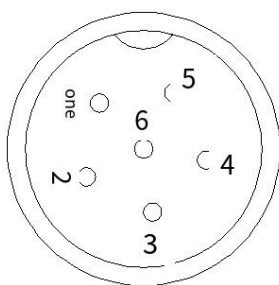
## DN32/DN40 Overall dimensions



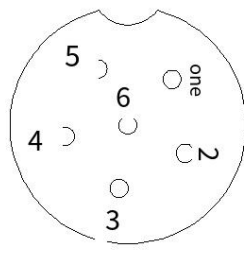
### Mechanical interface connection dimensions

|      |                         |
|------|-------------------------|
| DN32 | G1-1/4 external thread  |
| DN40 | G1-1/2 external threads |

## Wiring instructions for aviation sockets



The male head is mounted on the housing



Female head 6 cores

### 6-core aviation wiring instructions

| Signage     | Meaning                      |
|-------------|------------------------------|
| 1 -- Red    | 24V+                         |
| 2 -- Green  | Pulse, PNP(optional)         |
| 3 -- Yellow | RS485 communication output A |
| 4 -- Black  | 24V-/ Current I-             |
| 5 -- Brown  | Current I+                   |
| 6 -- white  | RS485 communication output B |

## HJFC series

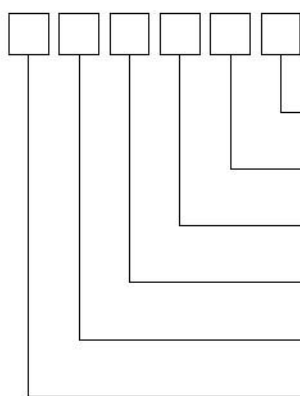


### Product features:

- ★ MEMS sensor, fast response speed;
- ★ Zero stability, high precision, good repeatability;
- ★ Wide range ratio, optional flow range;
- ★ Can input set flow rate, valve response speed is fast;
- ★ A variety of signal output optional;
- ★ Standard mechanical interface optional;

## Product selection

### HJFC



Media type (see table below)

Output signal (see table below for details)

Input signal (see table below)

Mechanical interface (see table below for details)

Flow range (see table below for details)

Body material (FO-anodic aluminum F1-304 F2-316)

| Product Series | Body material | Flow range | Mechanical interface | Input signal | Output signal | Media |
|----------------|---------------|------------|----------------------|--------------|---------------|-------|
| HJFC           | F0            | S0         | GN0                  | P0           | N0            | AIR   |

#### Examples:

Model number: HJFC-F0S0GN0P0N0AIR

Parameters: HJFC series, measuring medium: air, measuring range :1~100SCCM, mechanical interface :G3/4 internal thread, input control signal: 4-20mA, output signal: 4-20mA+RS485, pressure less than 1.0MPa

|                      |                                                                                                                        |                            |
|----------------------|------------------------------------------------------------------------------------------------------------------------|----------------------------|
| Body material        | F0-anodized aluminum, F1-304, F2-316                                                                                   |                            |
| Flow range           | S0                                                                                                                     | 1~100SCCM                  |
|                      | S1                                                                                                                     | 5~500SCCM                  |
|                      | S2                                                                                                                     | 10~1000SCCM                |
|                      | S3                                                                                                                     | 0.1 ~ 10 SLPM              |
|                      | S4                                                                                                                     | 0.3 ~ 30 SLPM              |
|                      | S5                                                                                                                     | 0.5 ~ 50 SLPM              |
|                      | S6                                                                                                                     | 1~100SLPM                  |
|                      | S7                                                                                                                     | 2~200SLPM                  |
|                      | S8                                                                                                                     | 3~ 300SLPM                 |
| Mechanical interface | GN0                                                                                                                    | G1/4 internal thread       |
|                      | PT2                                                                                                                    | PT1/2 internal thread      |
|                      | NT is a special custom thread;                                                                                         |                            |
| Input signal         | P0                                                                                                                     | 4-20mA (default)           |
|                      | P1                                                                                                                     | 1-5V                       |
|                      | P2                                                                                                                     | RS485                      |
| Output signal        | N0                                                                                                                     | RS485 and 4-20mA (default) |
|                      | N1                                                                                                                     | RS485 and 1-5V             |
|                      | N2                                                                                                                     | RS485, 4-20mA, pulse       |
| Type of media        | Measure the type of medium, AIR is air (default), N2 is nitrogen, O2 is oxygen, CO2 is carbon dioxide, MG is mixed gas |                            |

Note: The flow measurement range is based on air measurement.

Air calibration measures the range range of other medium gases

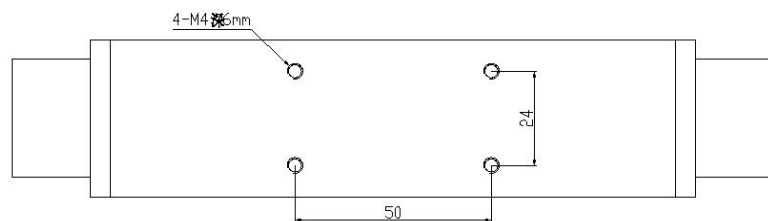
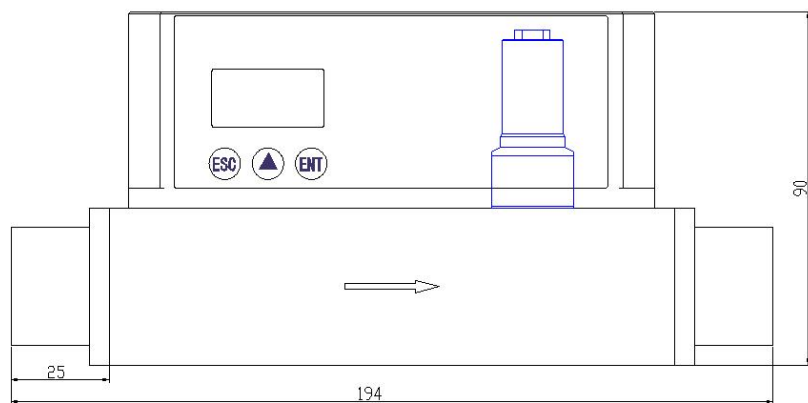
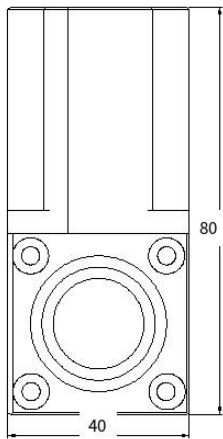
| Serial number | Gas                  | Conversion factor | Percentage of range |
|---------------|----------------------|-------------------|---------------------|
| 1             | AIR Air              | 1.0               | 100%                |
| 2             | Oxygen O2            | 0.9861            | 98.61%              |
| 3             | Nitrogen N2          | 0.994             | 99.4%               |
| 4             | Argon AR             | 1.4066            | 140.66%             |
| 5             | Nitric oxide NO      | 0.9702            | 97.02%              |
| 6             | Nitrogen dioxide NO2 | 0.7366            | 73.66%              |
| 7             | Carbon dioxide CO2   | 0.7326            | 73.26%              |
| 8             | Methane CH4          | 0.7147            | 71.47%              |
| 9             | Ethane C2H6          | 0.4781            | 47.81%              |
| 10            | Propane C3H8         | 0.3459            | 34.59%              |

## Technical parameters

|                       |                                |                       |                                     |
|-----------------------|--------------------------------|-----------------------|-------------------------------------|
| Measurement accuracy  | Plus or minus (1.5 + 0.2 FS) % | Working power supply  | DC24V/200mA                         |
| Response time         | 1-5 s                          | Output mode           | 4-20mA\RS485                        |
| Zero drift            | ±20mV                          | Display format        | Instantaneous flow, cumulative flow |
| Operating temperature | - 10 ~ 55 °C                   | Operating humidity    | <95%RH(no frost, no icing)          |
| Storage temperature   | - 10 ~ 65 °C                   | Communication methods | RS485(Modbus RTU protocol)          |
| Working pressure      | 1.0 MPa or less                | Calibration medium    | Air (25 ° C, 101.325kPa)            |

Note: The above data is measured under dry air at 25°C, 101.32kPa

## Dimensions of HJFC-XXS0~S5

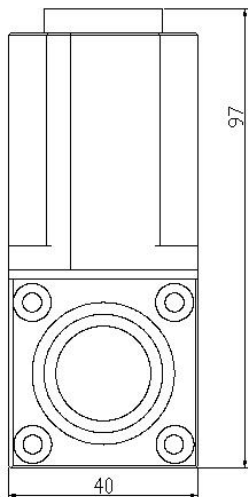


Dimensions of  
mechanical interface  
connection

G1/4 internal thread

PT1/2 internal thread

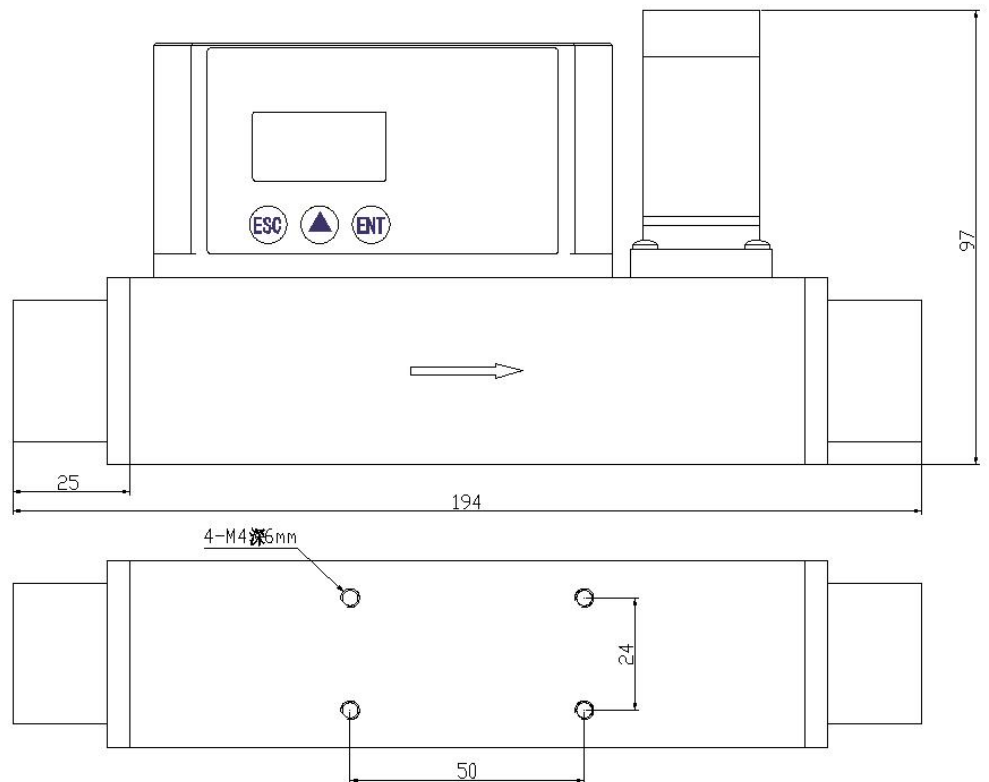
## HJFC-XXS6 Overall dimensions



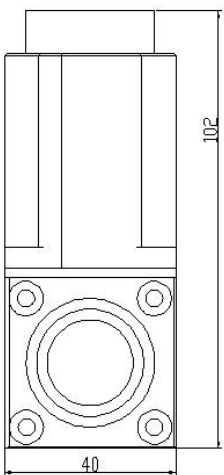
Dimensions of  
mechanical interface  
connection

G1/4 internal thread

PT1/2 internal thread



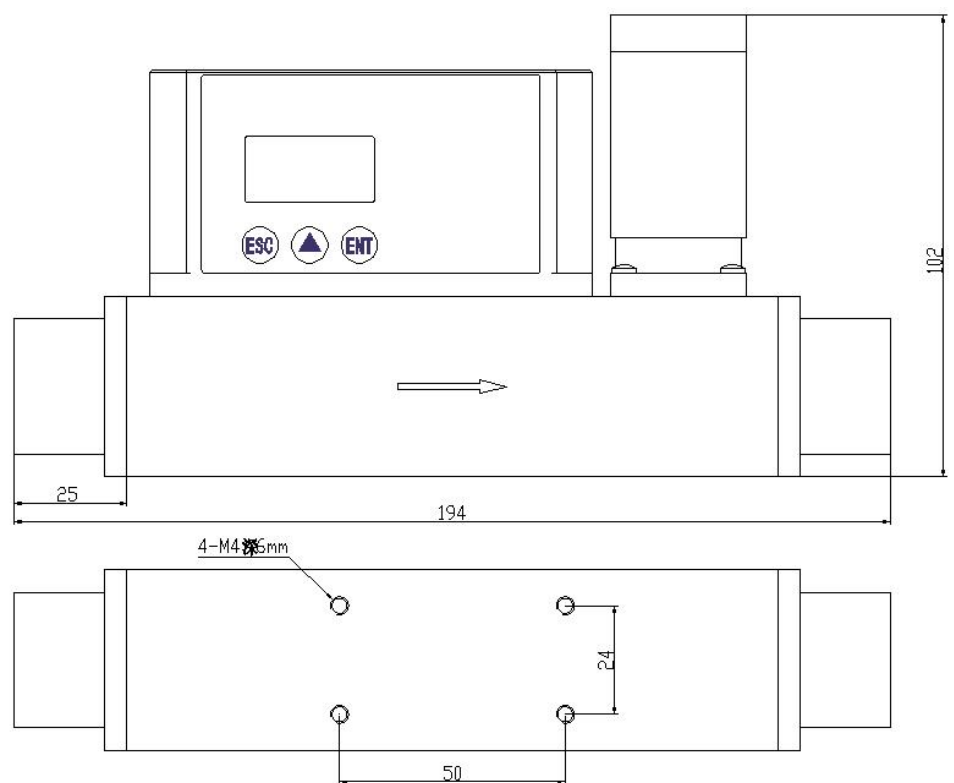
## HJFC-XXS7/S8 Overall dimensions



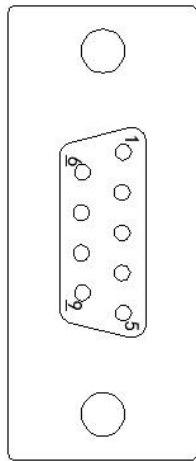
Dimensions of  
mechanical interface  
connection

G1/4 internal thread

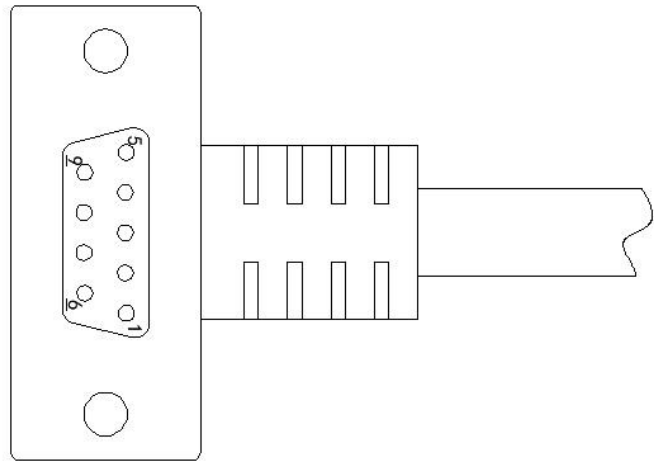
PT1/2 internal thread



## DB9 9 Core wire description



The male head is mounted on the housing



Female head 9 cores

| DB9 Interface Definition |                              |
|--------------------------|------------------------------|
| PIN                      | Meaning                      |
| 1 - Black                | 4-20mA current I+            |
| 2 - Brown                | RS485 communication output B |
| 3 -- Red                 | RS485 Communication Output A |
| 4 - Orange               | Spare                        |
| 5 - Yellow               | 4-20mA current I-            |
| 6 - Green                | Spare                        |
| 7 - Blue                 | GND power negative           |
| 8 - Gray                 | Spare                        |
| 9 - white                | Spare                        |