

## Specification

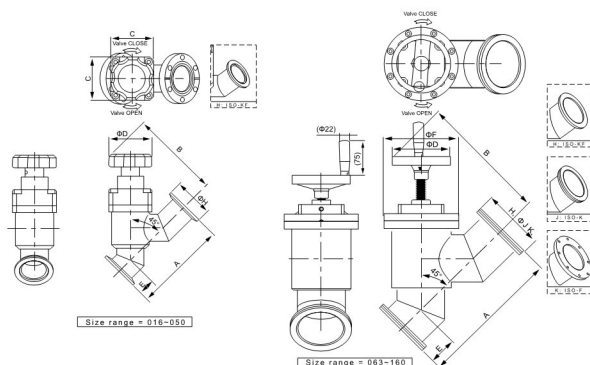
| VYAM series                           |         |                                                                                              | Vacuum Inline Valve / Manually                                                            |       |     |       |     |     |     |     |     |     |     |
|---------------------------------------|---------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------|-----|-------|-----|-----|-----|-----|-----|-----|-----|
|                                       |         |                                                                                              | Bellows STEM seal (A: SUS316L)                                                            |       |     |       |     |     |     |     |     |     |     |
| Valve port                            |         | SIZE                                                                                         | 16                                                                                        | 25    | 40  | 50    | 63  | 80  | 100 | 160 | 200 | 250 | 320 |
| Flange Standards                      | ISO-KF  | KF                                                                                           | ●                                                                                         | ●     | ●   | ●     | ●   | ●   | ●   | ●   | ×   | ×   | ×   |
|                                       | ISO-K   | KQ                                                                                           | ×                                                                                         | ×     | ×   | ×     | ●   | ●   | ●   | ●   | ×   | ×   | ×   |
|                                       | ISO-F   | KC                                                                                           | ×                                                                                         | ×     | ×   | ×     | ●   | ●   | ●   | ●   | ×   | ×   | ×   |
| Valve Actuating type                  |         |                                                                                              | Manual acting                                                                             |       |     |       |     |     |     |     |     |     |     |
| Fluid                                 |         |                                                                                              | Vacuum in an inert gas system                                                             |       |     |       |     |     |     |     |     |     |     |
| Operating temperature °C              |         |                                                                                              | ≤120                                                                                      |       |     |       |     |     |     |     |     |     |     |
| Operating pressure Pa (Abs)           |         |                                                                                              | 1×10 <sup>-5</sup> ~ to atmospheric pressure                                              |       |     |       |     |     |     |     |     |     |     |
| Conductance L / s <sup>(Note 1)</sup> |         |                                                                                              | 4.6                                                                                       | 11    | 35  | 62    | 106 | 152 | 304 | 778 | -   | -   | -   |
| Leakage Pa·m³/s                       | Inside  | Standard material (FKM) 1.0×10 <sup>-10</sup> at room temperature (excluding gas permeation) |                                                                                           |       |     |       |     |     |     |     |     |     |     |
|                                       | Outside | Standard material (FKM) 1.0×10 <sup>-11</sup> at room temperature (excluding gas permeation) |                                                                                           |       |     |       |     |     |     |     |     |     |     |
| Main material                         |         |                                                                                              | Body: SUS304, Bellows: (SUS316L / AM350) Main parts: SUS304, AL-6061, FKM (Standard seal) |       |     |       |     |     |     |     |     |     |     |
| Operating pressure MPa (G)            |         |                                                                                              | 0.4~0.7                                                                                   |       |     |       |     |     |     |     |     |     |     |
| Open stroke                           |         |                                                                                              | 14                                                                                        | 14    | 18  | 25    | 30  | 35  | 40  | 60  | -   | -   | -   |
| Number of Handle rotation             |         |                                                                                              | 7                                                                                         | 7     | 9   | 12.5  | 7.5 | 9   | 10  | 12  | -   | -   | -   |
| Seal distance (A-Value)               |         |                                                                                              | 101.6                                                                                     | 106.7 | 130 | 117.8 | 210 | 250 | 305 | 420 | -   | -   | -   |

(Note 1) Conductance is represented by "molecular flow" of elbow of the same dimension.

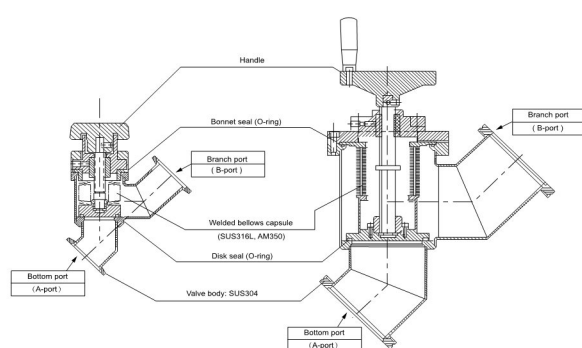
## External dimension table

| SIZE | 16    | 25    | 40   | 50    | 63   | 80   | 100  | 160  |
|------|-------|-------|------|-------|------|------|------|------|
| A    | 101.6 | 106.7 | 130  | 117.8 | 210  | 250  | 305  | 420  |
| B    | 110   | 110   | 125  | 145   | 209  | 229  | 277  | 406  |
| C    | 48    | 48    | 60   | 69    | -    | -    | -    | -    |
| D    | Ø63   | Ø63   | Ø63  | Ø63   | Ø100 | Ø100 | Ø125 | Ø200 |
| F    | 16.3  | 18.7  | 21.5 | 27.5  | 40   | 50   | 60   | 90   |
| G    | -     | -     | -    | -     | Ø119 | Ø119 | Ø159 | Ø208 |
| H    | Ø30   | Ø40   | Ø55  | Ø75   | Ø95  | Ø114 | Ø134 | Ø190 |
| J    | -     | -     | -    | -     | Ø95  | Ø110 | Ø130 | Ø180 |
| K    | -     | -     | -    | -     | Ø130 | Ø145 | Ø165 | Ø225 |

## Dimensional drawing



## Internal detail



## How to Order

Valve **VA@C** - ① ② - ③ - ④ - ⑤ ⑥ - (⑦)

Model VLAP - □□□ □□-□□ - □ - □□

|                                    |                     |               |                             |                                                                                                                               |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|------------------------------------|---------------------|---------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------|-------|-----------|------|--------------|----------------|------|-----|----------|-----|----------|--|----------|--|---------|--|---------|--|--------------|--|
| Series                             | A<br>Body shape     | VLⓅC          | L                           | L-type(Angle valve) 304SS Body                                                                                                |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     | VYⓅC          | Y                           | Y-type(Inline valve) 304SS Body                                                                                               |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    | B<br>Stem Seal      | VⓂAⓅC         | A                           | 316L Bellows STEM Seal                                                                                                        |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     | VⓂAⓅBⓄC       | B                           | AM350 Bellows STEM Seal                                                                                                       |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     | VⓂAⓅSⓄC       | S                           | O-Ring STEM Seal                                                                                                              |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    | C<br>Operation type | VⓂAⓅBⓄP       | P                           | Double Acting (Pneumatic)                                                                                                     |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     | VⓂAⓅBⓄS       | S                           | Single Acting (N.C.)                                                                                                          |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     | VⓂAⓅBⓄM       | M                           | Manual operation                                                                                                              |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     | VⓂAⓅBⓄQ       | Q                           | Double Acting, w/Heater (Pneumatic)                                                                                           |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     | VⓂAⓅBⓄR       | R                           | Single Acting, w/Heater (N.C.)                                                                                                |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     | VⓂAⓅBⓄH       | H                           | Double Acting, Heating model(Pneumatic)                                                                                       |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     | VⓂAⓅBⓄK       | K                           | Double Acting, Heating model, w/Heater(Pneumatic)                                                                             |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     | VLⓅD          | D                           | Double Acting, w/Soft start bypass valve(Pneumatic)                                                                           |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     | VLⓅT          | T                           | Single Acting, w/Soft start bypass valve(N.C.)                                                                                |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     | VLⓅX          | X                           | Single Acting, w/Soft start integrated valve(N.C.)                                                                            |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     | VLⓅW          | W                           | Bonnet gasket seal type, Double Acting (Pneumatic)                                                                            |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     | VLⓅY          | Y                           | Bonnet gasket seal type, Single Acting (N.C.)                                                                                 |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     | VLⓅZ          | Z                           | Bonnet gasket seal type, Manual operation                                                                                     |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
| Port flange                        | Valve size          | ①             | □□□                         | 016                                                                                                                           | 025       | 040   | 050       | 063  | 080          | 100            | 160  | 200 | 250      | 320 |          |  |          |  |         |  |         |  |              |  |
|                                    | Flange Spec.        | ②             | □□<br>Specific              | KF                                                                                                                            |           | KQ    |           | KC   |              | CF             |      | JF  |          |     |          |  |          |  |         |  |         |  |              |  |
| Seal material (Disc, Bonnet, Stem) | ③<br>(Note 1)       | □□            | N1                          |                                                                                                                               | ED        |       | S1        |      | FS           |                | R1   |     | R2       |     | R3       |  | P1       |  | P2      |  | U1      |  |              |  |
|                                    |                     |               | FKM                         |                                                                                                                               | NBR       |       | EPDM      |      | VMQ          |                | FFKM |     | Chemraz® |     | Chemraz® |  | Chemraz® |  | Kalrez® |  | Kalrez® |  | ULTIC ARMOR® |  |
|                                    |                     |               | SS592                       |                                                                                                                               | SS630     |       | SSE38     |      | 4079         |                | 9100 |     | UA4640   |     |          |  |          |  |         |  |         |  |              |  |
|                                    | CDA port position   | ④<br>(Note 2) | □<br>Branch port Lower part | Im case of FFKM (FS), please specify a separate material.                                                                     |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     |               |                             | None                                                                                                                          |           | E     |           | S    |              | W              |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     |               |                             | Rear                                                                                                                          |           | Right |           | Left |              | Same Direction |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
| Sensor                             | ⑤                   | □             | 0                           |                                                                                                                               | 1         |       | 2         |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     |               | None                        |                                                                                                                               | 1 EA      |       | 2 EA      |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
| Solenoid or Heater Mounting        | ⑥                   | □             | C                           |                                                                                                                               | N         |       | P         |      | H            |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     |               | W8H(TPC)                    |                                                                                                                               | W9HN(TPC) |       | W9HP(TPC) |      | D-*****(SMC) |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
| Valve                              | (Note 3)            | ⑦             | (G) or (W)                  | G: Mounting Solenoid valve(Applicable Model) / W:Heater exclude (Not installed)                                               |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |
|                                    |                     |               |                             | VLAP- / VLBP- / VLAS- / VLBS- / VLAD- / VLBD- / VLAT- / VLSP- / VLSS- / VLBT- / VYAP- / VYAS- / VYBP- / VYBS- / VYSP- / VYSS- |           |       |           |      |              |                |      |     |          |     |          |  |          |  |         |  |         |  |              |  |

| Modified special                                                                 |            | ( )                  | ※Please consult our technical department. |     |     |     |                |      |                |               |     |     |
|----------------------------------------------------------------------------------|------------|----------------------|-------------------------------------------|-----|-----|-----|----------------|------|----------------|---------------|-----|-----|
| w/Solenoid Valve Spec.                                                           | size range | 016                  | 025                                       | 040 | 050 | 063 | 080            | 100  | 160            | 200           | 250 | 320 |
| Single acting                                                                    | [VA@S]     | Solenoid Valve Spec. | RDV412-5DZ-01                             |     |     |     | RDS301-5DZ-01A |      | (Note 4)       | Not Available |     |     |
| Double acting                                                                    | [VA@P]     |                      | DS2120-5HZ-01                             |     |     |     |                |      | RDS5120-5DZ-03 |               |     |     |
| Solenoid valve maker: TPC / Electric power: DC24V                                |            |                      |                                           |     |     |     |                |      |                |               |     |     |
| w/Heater Spec.                                                                   | size range | 016                  | 025                                       | 040 | 050 | 063 | 080            | 100  | 160            | 200           | 250 | 320 |
| Type: Silicon Rubber Heater                                                      |            | 25W                  | 25W                                       | 30W | 45W | 70W | 90W            | 150W | Not Available  |               |     |     |
| Temperature Max.: Amb.~150℃ / TC.sensor control: K-Type / Electric power: AC220V |            |                      |                                           |     |     |     |                |      |                |               |     |     |

(Note 1) For standard products, use sealing material of vacuum secretion as a FKM (flammable O-ring).

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(Note 2) Applies only to the double and single operating valves (except VABM-series)

(Note 3) Specifications that are partially changed in standards or standards other than standard products can be specially designed to meet the customer's needs, so please consult with them.

(Note 4) Solenoid valve specification: RDS301-5DZ-02A