

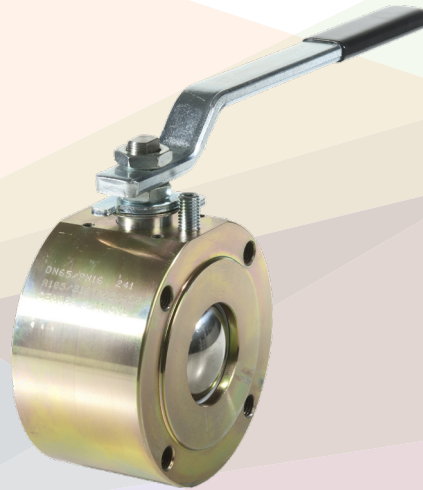
# 01.411系列

钢制对夹式法兰球阀

*Wafer steel flanged ball valve*



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## 钢制对夹式法兰球阀 / Wafer steel flanged ball valve

此系列球阀阀体材质为A105碳钢，球体为浮球，严格按照相关的产品质量标准生产，符合ISO 9001标准。可分为以下两类：PN 16和PN 40。

适用于化工和工业系统，供热和空调系统，集中供热，农业系统，介质可以是油类及碳氢化合物。（请确保您的选择与适用范围一致）

**YES:** 可安装于管路中部及末端，可频繁开启，可连接手动、电动和气动执行器。

全口径可有效减少流体扰动和水头损失。

**NO:** 不适用于蒸汽系统及流量调节。

*Shut-off wafer ball valves with the body in carbon steel A 105, with a floating ball, manufactured in accordance with the most severe product standards and the quality management of ISO 9001. They are available in the following versions: PN 16 and PN 40.*

*Suitable for chemical and industrial plants, for heating and conditioning (HVAC), district heating, agricultural applications, oils and hydrocarbons. (Please ensure the choice of the corresponding item)*

**YES:** *for installation in line and end of line, for services with frequent actuation, suitable for installation of manual, electric and pneumatic servo commands.*

*Full and straight bore reducing turbulences and minimizing head loss.*

**NO:** *for steam, for choking and regulation of the flow.*

### 驱动器

- 气动执行器：单作用/双作用
- 电动执行器
- 齿轮箱

### Actuators

- Double acting and single acting pneumatic actuators
- Electric actuators
- Gear box

### 认证 / Certifications



符合2014/68/UE (ex 97/23/CE PED) 标准

*In conformity with directive 2014/68/UE (ex 97/23/CE PED)*

#### 结构及检测标准：

法兰标准：EN 1092 ISO 7005

结构长标准：非标准

设计标准：EN12516, ISO 5211

检测标准：EN 12266 cat. A (ISO 5208 cat. A)

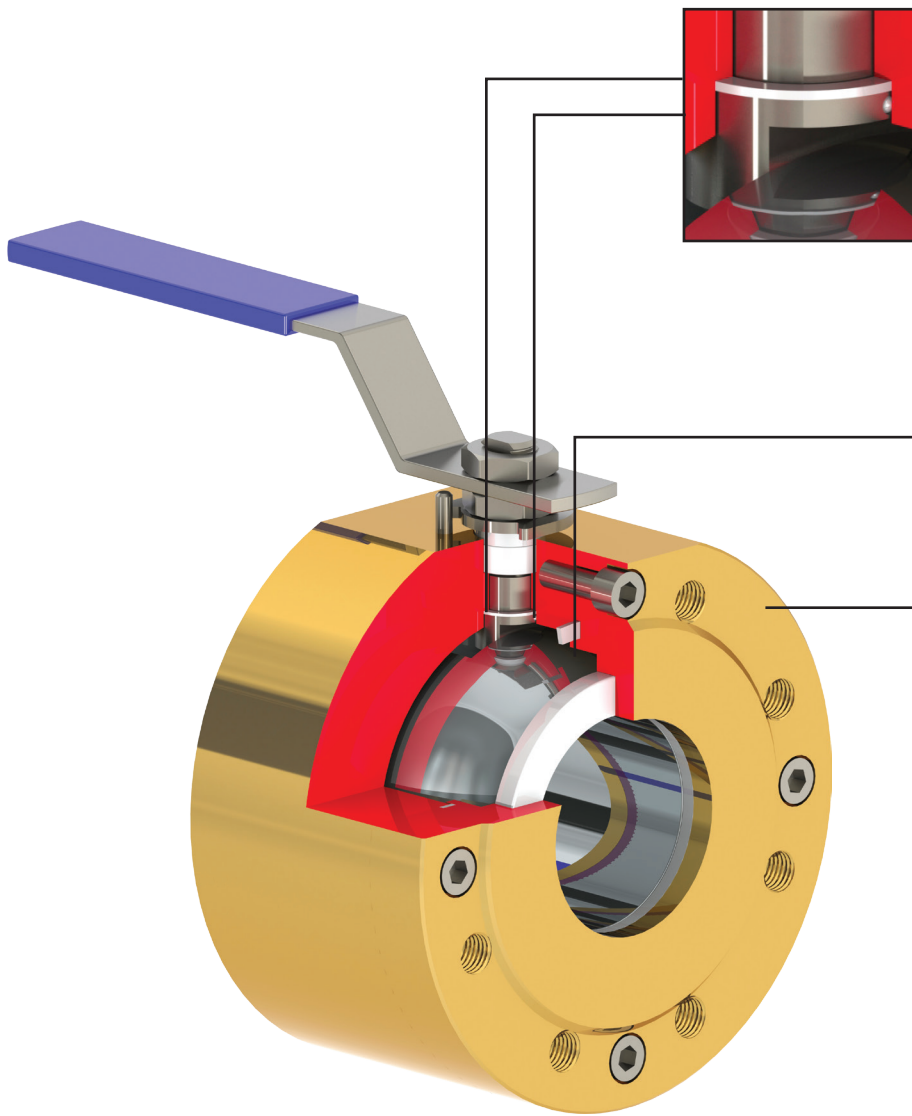
#### **Design and testing standards** (correspondences) :

*Flanges: EN 1092 ISO 7005*

*Face-to-face: Not standardized*

*Design: EN12516, ISO 5211*

*Testing: in accordance with EN 12266 cat. A (ISO 5208 cat. A)*



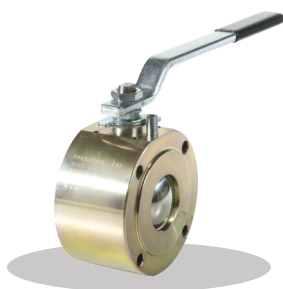
防脱出阀杆。  
可根据客户要求定制防静电装置。  
可根据客户要求定制Gas型阀门。  
*Blow-out proof stem.  
On request antistatic device.  
On request Gas version.*

不锈钢球阀和阀杆。  
*Stainless steel ball and stem.*

对夹式，缩径。  
*Wafer type, reduced face to face.*

## 钢制对夹式法兰球阀 / Wafer steel flanged ball valve

### ASTM A 105



#### 01.411 PN 16

阀体: ASTM A 105  
 阀球: AISI304  
 阀杆: AISI316  
 工作温度: -25 + 150 °C

Body: Carbon steel  
 Ball: Stainless steel  
 Stem: Stainless steel  
 Temp: -25 +150 °C

### ASTM A 105



#### 01.411 PN 40

阀体: ASTM A 105  
 阀球: AISI304  
 阀杆: AISI316  
 工作温度: -25 + 150 °C

Body: Carbon steel  
 Ball: Stainless steel  
 Stem: Stainless steel  
 Temp: -25 +150 °C

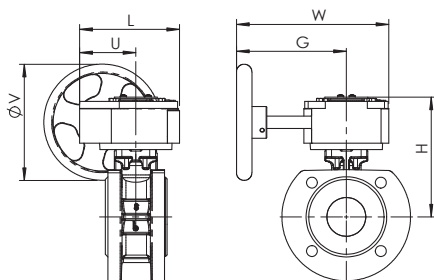
可根据客户要求定制防静电装置和Gas型阀门。  
 On request antistatic device and Gas version.

## 驱动器和附件 / Actuators and accessories



#### 01.411 + RM

齿轮箱  
 Gear box

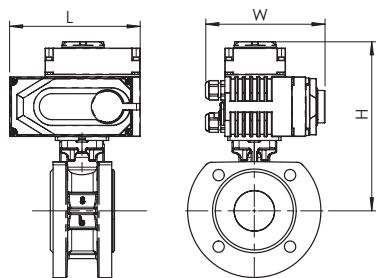


| DN             | 15      | 20      | 25      | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     |
|----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 01.411 + RM    | RM.0250 | RM.0250 | RM.0250 | RM.0250 | RM.0250 | RM.0250 | RM.0250 | RM.0250 | RM.0250 | RM.0750 | RM.0750 |
| L              | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 180     | 180     |
| U              | 77      | 77      | 77      | 77      | 77      | 77      | 77      | 77      | 77      | 104     | 104     |
| H              | 133     | 139     | 144     | 163     | 172     | 176     | 201     | 213     | 227     | 273     | 290     |
| W              | 225     | 225     | 225     | 225     | 225     | 225     | 225     | 225     | 225     | 338     | 338     |
| G              | 170     | 170     | 170     | 170     | 170     | 170     | 170     | 170     | 170     | 260     | 260     |
| V              | 150     | 150     | 150     | 150     | 150     | 150     | 150     | 150     | 150     | 300     | 300     |
| 重量 / Weight Kg | 5.8     | 6.3     | 7       | 8.1     | 10.8    | 12.3    | 19.3    | 24.3    | 34.3    | 57.3    | 79.3    |

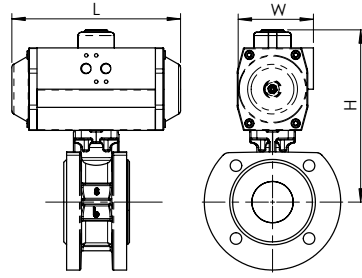


#### 01.411 + AOX

电动执行器  
 Electric Actuators



| DN             | 15  | 20  | 25  | 32  | 40   | 50   | 65   | 80   | 100 | 125  | 150  |
|----------------|-----|-----|-----|-----|------|------|------|------|-----|------|------|
| 01.4 + AOX     | 003 | 003 | 003 | 003 | 005  | 005  | 010  | 015  | 020 | 030  | 040  |
| L              | 123 | 123 | 123 | 123 | 160  | 160  | 189  | 189  | 268 | 268  | 268  |
| H              | 184 | 190 | 195 | 214 | 231  | 235  | 268  | 280  | 329 | 359  | 376  |
| W              | 100 | 100 | 100 | 100 | 121  | 121  | 145  | 145  | 225 | 225  | 225  |
| 重量 / Weight Kg | 3.6 | 4.1 | 4.8 | 5.9 | 10.1 | 11.6 | 19.6 | 24.6 | 43  | 60.4 | 82.8 |

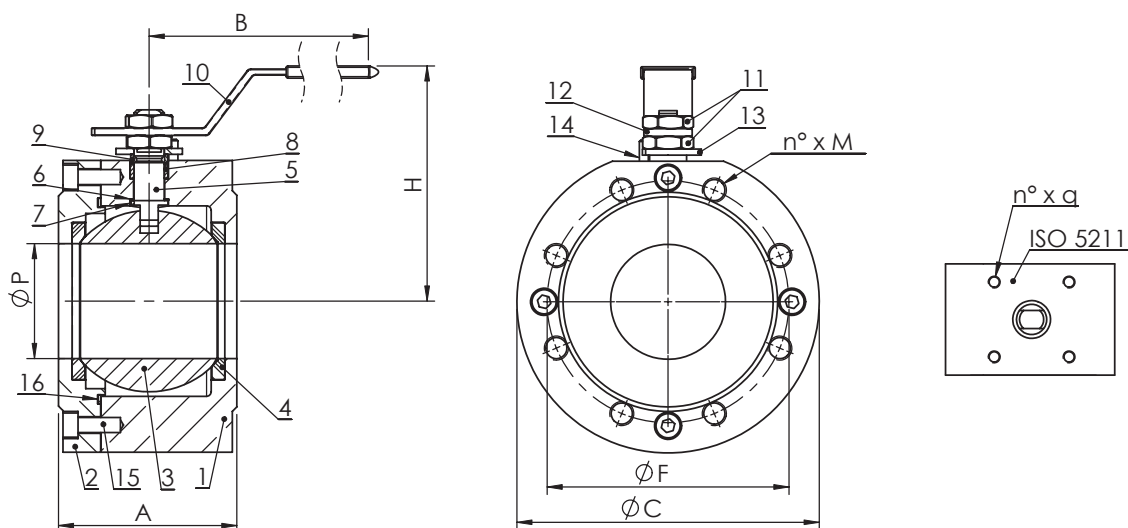


## 01.411 + AP

气动执行器

Pneumatic actuator

|                                     |      |      |      |        |      |       |        |       |        |       |        |
|-------------------------------------|------|------|------|--------|------|-------|--------|-------|--------|-------|--------|
| DN                                  | 15   | 20   | 25   | 32     | 40   | 50    | 65     | 80    | 100    | 125   | 150    |
| 01.4 + AP DE - DA                   | AP1  | AP1  | AP2  | AP3    | AP3  | AP3   | AP4    | AP4   | AP4.5  | AP5.5 | AP5.5  |
| L                                   | 142  | 142  | 155  | 213    | 213  | 213   | 276    | 276   | 310    | 388   | 388    |
| H                                   | 158  | 164  | 185  | 221    | 230  | 234   | 284    | 296   | 337    | 401   | 418    |
| W                                   | 60   | 60   | 73   | 85     | 85   | 85    | 110    | 110   | 128    | 160   | 160    |
| 重量 / Weight Kg                      | 2.5  | 3    | 4.12 | 6.34   | 9.04 | 10.54 | 20.1   | 25.1  | 38.24  | 60.94 | 82.94  |
| 01.4 + AP SE - 弹簧复位 / SPRING RETURN | AP2S | AP2S | AP3S | AP3.5S | AP4S | AP4S  | AP4.5S | AP5S  | AP5.5S | AP8S  | AP8S   |
| L                                   | 155  | 155  | 213  | 236    | 276  | 276   | 310    | 366   | 388    | 563   | 563    |
| H                                   | 174  | 180  | 202  | 231    | 255  | 259   | 311    | 336   | 371    | 495   | 512    |
| W                                   | 73   | 73   | 85   | 98     | 110  | 110   | 128    | 140   | 160    | 215   | 215    |
| 重量 / Weight Kg                      | 3.06 | 3.56 | 5.8  | 8.1    | 12.7 | 14.2  | 24.67  | 32.62 | 47.09  | 91.82 | 113.82 |



### 尺寸 (mm) / Dimensions (mm)

| DN       |                         | 15    | 20    | 25    | 32    | 40    | 50    | 65    | 80    | 100   | 125    | 150    |
|----------|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| P        |                         | 15    | 20    | 25    | 32    | 40    | 50    | 65    | 76    | 100   | 127    | 150    |
| A        | 非标准<br>Not standardized | 35    | 42    | 46    | 55    | 66    | 72    | 98    | 120   | 140   | 177    | 210    |
| H        |                         | 78    | 87    | 91    | 106   | 111   | 120   | 157   | 161   | 181   | 205    | 220    |
| B        |                         | 145   | 185   | 185   | 270   | 270   | 270   | 355   | 355   | 460   | 460    | 460    |
| C        |                         | 88    | 98    | 108   | 128   | 138   | 148   | 168   | 188   | 220   | 250    | 280    |
| F        |                         | 65    | 75    | 85    | 100   | 110   | 125   | 145   | 160   | 180   | 200    | 240    |
| n° x M   | EN 1092/1 PN16          | 4xM12 | 4xM12 | 4xM12 | 4xM16 | 4xM16 | 4xM16 | 4xM16 | 8xM16 | 8xM16 | 8xM16  | 8xM20  |
| F        | EN 1092/1 PN40          | 65    | 75    | 85    | 100   | 110   | 125   | 145   | 160   | 190   | 220    | 250    |
| n° x M   |                         | 4xM12 | 4xM12 | 4xM12 | 4xM16 | 4xM16 | 4xM16 | 8xM16 | 8xM16 | 8xM20 | 8xM24  | 8xM24  |
| ISO 5211 |                         | F03   | F04   | F04   | F05   | F05   | F05   | F07   | F07   | F07   | F10    | F10    |
| n° x q   |                         | 4x M5 | 4x M5 | 4x M5 | 4x M6 | 4x M6 | 4x M6 | 4x M8 | 4x M8 | 4x M8 | 4x M10 | 4x M10 |

### 重量 (kg) / Weight (kg)

| kg |  | 1.5 | 2 | 3 | 5 | 6.5 | 8 | 14 | 21 | 31 | 50 | 64 |
|----|--|-----|---|---|---|-----|---|----|----|----|----|----|
|    |  |     |   |   |   |     |   |    |    |    |    |    |

### 扭矩 (Nm) / Operating torque (Nm)

| Nm | PN 16 | 8  | 10 | 20 | 28 | 30 | 40 | 80 | 110 | 180 | 260 | 330 |
|----|-------|----|----|----|----|----|----|----|-----|-----|-----|-----|
| Nm | PN 40 | 10 | 12 | 24 | 35 | 40 | 50 | 90 | 130 | 200 | 310 | 450 |

注意：请将扭矩数值乘以1.5倍作为选择驱动装置的依据。

N.B.: In order to choose the right actuator, we recommend multiplying the operating torque figure by a safety coefficient, K=1.5

## 材质 / Materials

|    | 组件 - Component        | 材质 - Material                                      |
|----|-----------------------|--|
| 1  | 阀体 - Body             | 碳钢 - Carbon steel ASTM A105                        |
| 2  | 法兰 - Flange           | 碳钢 - Carbon steel ASTM A105                        |
| 3  | 阀球 - Ball             | 不锈钢 - Stainless steel AISI 304                     |
| 4  | 球座 - Ball seat        | PTFE   |
| 5  | 阀杆 - Stem             | 不锈钢 - Stainless steel AISI 316                     |
| 6  | 滑动垫圈 - Sliding washer | PTFE   |
| 7  | 防静电装置 - Anti-static   | 不锈钢 - Stainless steel AISI 316                     |
| 8  | 阀杆填料 - Stem packing   | 加强型PTFE - Reinforced PTFE                          |
| 9  | 压块 - Pressing bush    | 不锈钢 - Stainless steel AISI 304                     |
| 10 | 手柄 - Lever            | 镀锌钢 (带塑料把套) - Galvanized steel with plastic sleeve |
| 11 | 螺母 - Nut              | 镀锌钢 - Galvanized steel                             |
| 12 | 圆环 - Spring washer    | 镀锌钢 - Galvanized steel                             |
| 13 | 定位板 - Stop plate      | 镀锌钢 - Galvanized steel                             |
| 14 | 限位柱 - Stop pin        | 镀锌钢 - Galvanized steel                             |
| 15 | 螺栓 - Screws           | 镀锌钢 - Galvanized steel                             |
| 16 | 阀体密封圈 - Body seal     | 加强型PTFE - Reinforced PTFE                          |

## 最大工作压力 / Maximum pressure

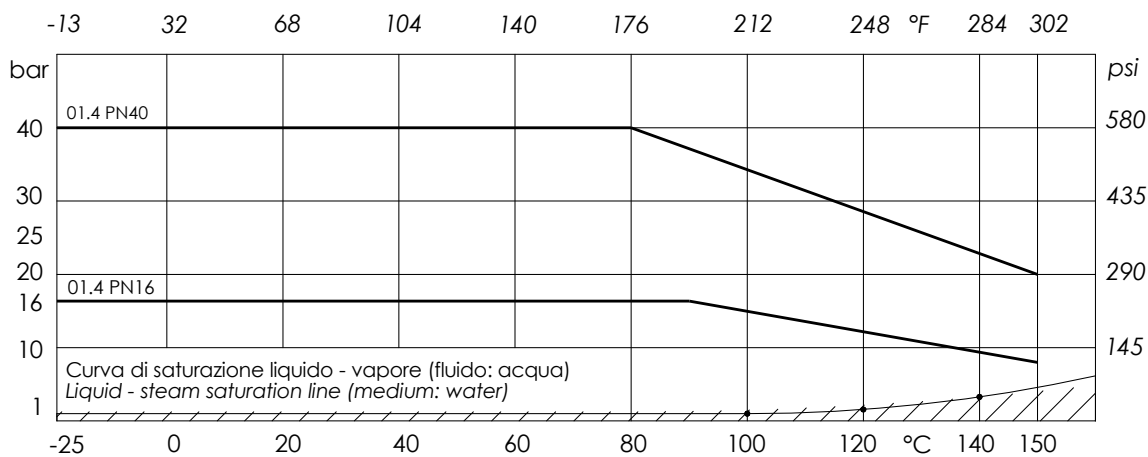
| 类型 - Article | 压力 - bar |
|--------------|----------|
| 01.411 PN16  | 16 bar   |
| 01.411 PN40  | 40 bar   |

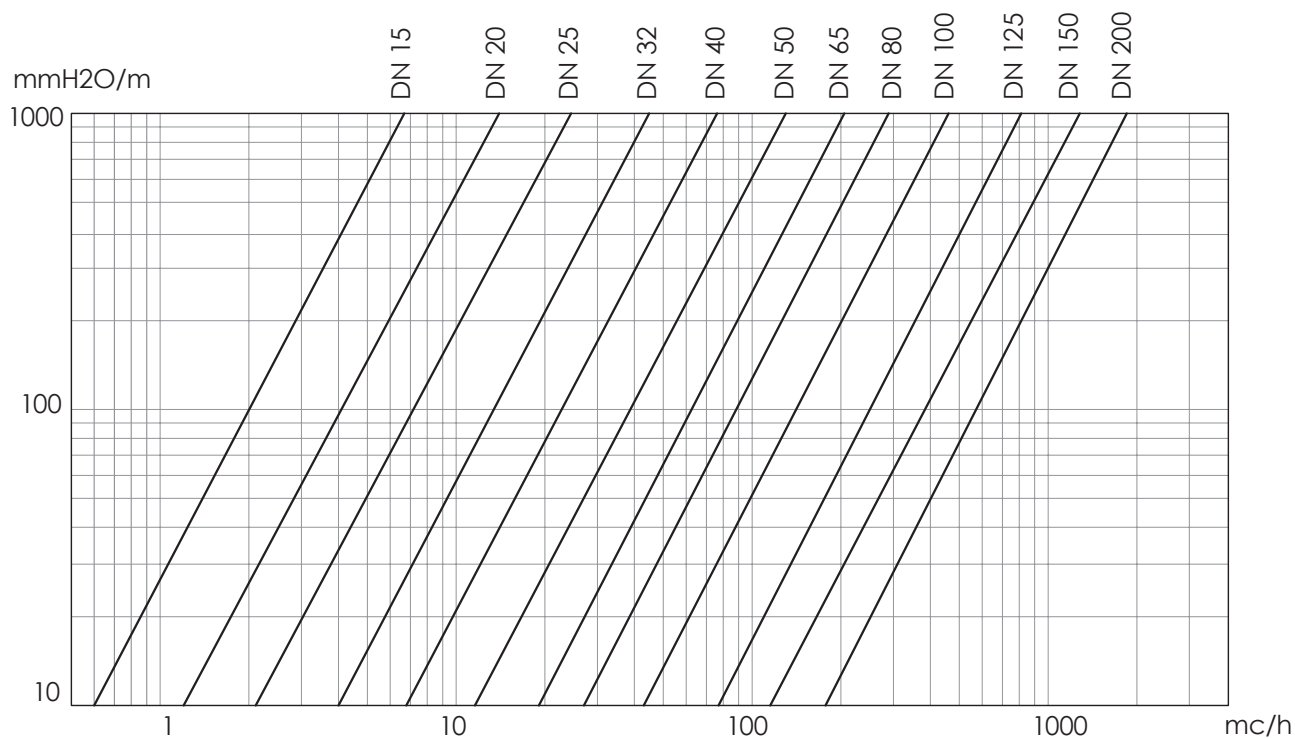
## 工作温度 / Temperature (°C)

| 温度 - Temperature | 最低 - Min | 最高 - Max |
|------------------|----------|----------|
|                  | -25      | 150      |

注意：温度上升时最大工作压力会有所下降；详情请参考压力温度曲线  
 NB: the maximum working pressure decreases while the temperature increases; please refer to "pressure/temperature"

## 压力温度曲线 - Pressure/temperature chart



压力温度曲线 介质: 水 (1m H<sub>2</sub>O = 0,098bar) / Head loss Fluid: water (1m H<sub>2</sub>O = 0,098bar)

## Kv - DN表 / Kv - DN chart

| DN |      | 15   | 20   | 25   | 32    | 40  | 50  | 65  | 80  | 100   | 125   | 150   | 200   |
|----|------|------|------|------|-------|-----|-----|-----|-----|-------|-------|-------|-------|
| Kv | mc/h | 22,3 | 47,7 | 83,5 | 150,4 | 255 | 435 | 672 | 947 | 1'508 | 2'633 | 4'261 | 5'957 |