

## SIGMA Compact DN50-DN300

### Description

The SIGMA Compact is an externally adjustable dynamic balancing valve that provides simple, accurate and reliable flow limitation and isolation in heating and cooling systems.

SIGMA Compact is offered in 2 series:

- The Ultra series has reduced size and weight to offer an easy installation.
- The Standard series has higher flows to cover a wider flow range.

### Application

SIGMA Compact can be used in both heating and cooling systems for the effective distribution of flow in various sections of the system.

SIGMA Compact can be used instead of traditional double regulating valves and can be installed in both variable flow systems and constant flow systems.

### Operation

SIGMA Compact can be set to the required position easily by using the scale, to limit the flow rate in certain parts of a system, eliminating overflows and the unnecessary wastage of energy. The internal differential pressure control function of the SIGMA Compact ensures that the set flow rate is limited irrespective of differential pressure fluctuations in the system.

The hand wheel can be used to close the valve and to open it to the preset flow.

### Features

- Easy adjustment of the flow using the clear preset scale on the valve
- Hand wheel provides an isolation function up to 10 bar differential pressure
- No minimum straight pipe lengths required before or after the valve
- Built-in P/T plugs for needle system
- Size range: DN50 to DN300
- Flow range: 1,400 to 600,000 l/h
- Maximum differential pressure: 800 kPa



### Benefits

- Easy to size and select as only the flow rate is required
- Simplified system design with the number of balancing valves being reduced
- Removes the requirement for main circuit or branch balancing valves in the system
- Works as a flow limiter ensuring no overflows
- Easy to install and adjust on site
- Provides flexibility if the system is modified after the initial installation
- Simplifies the commissioning process and reduces commissioning time due to automatic balancing of the system
- High level comfort for the end-users as a result of the correct balance of the hydraulic system
- Reliable operation as a dynamic balancing valve automatically finds the hydraulic balance regardless of pressure fluctuations in the system

## SIGMA Compact DN50-DN300

### Function

The SIGMA Compact reacts to pressure fluctuations in a system in order to keep the differential pressure across the pre-set unit constant. By achieving this, a maximum flow limit is ensured in accordance with the design.

The following applies to all flow control valves:

$$Q = kV * \sqrt{\Delta p}$$

$Q$  = Flow (m<sup>3</sup>/h)

$kV$  = Opening area

$\Delta p$  = Differential pressure (Bar)

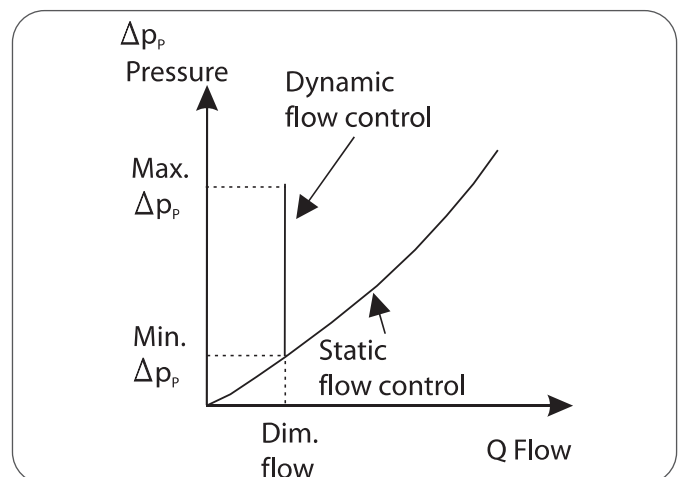
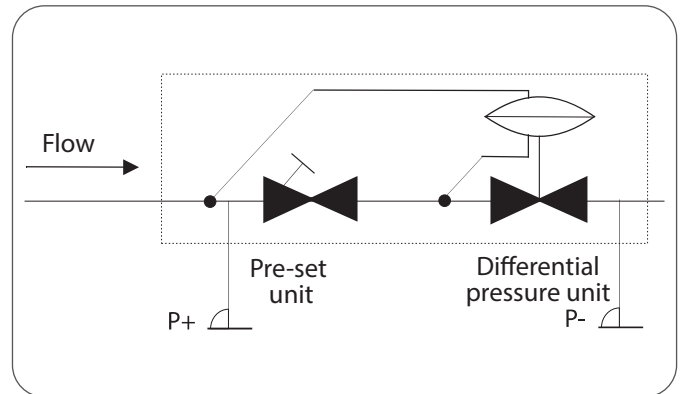
### Flow Characteristic

The illustration shows how the flow in a SIGMA Compact valve reacts in accordance to the pump pressure. For comparison we have added a typical flow characteristic for a static balancing valve.

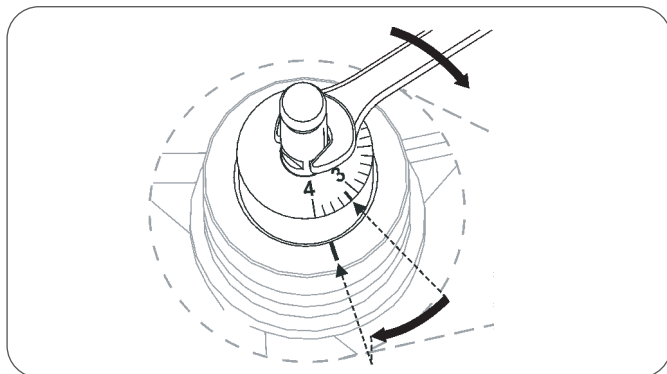
The differential pressure function of the valve will work when the differential pressure provided by the pump is sufficient to meet the required minimum differential pressure (which is dependent upon the required flow rate).

Once the minimum differential pressure is satisfied, the set flow rate is maintained regardless of any pressure fluctuations in the system.

### Simplified Outline

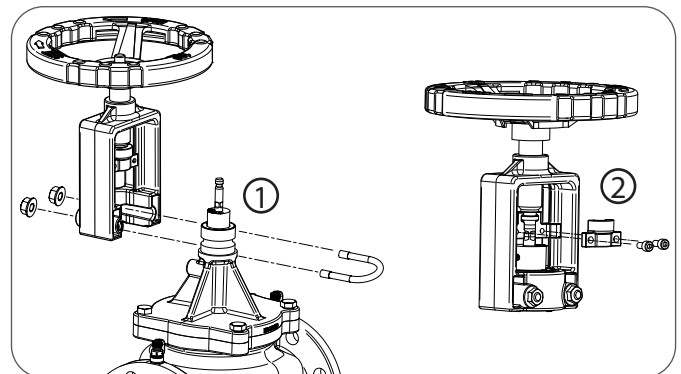


### Setting the Valve and Mounting the Hand Wheel



The SIGMA Compact is easily set using the pre-setting scale.

The set point of the valve can be determined by using the flow graphs (page 9 to 17) or the Frese APP for the valve dimension in question.



After pre-setting of the flow, the hand wheel is mounted on the valve neck (1) and locked to the valve stem (2).

To use the valve for isolation, turn the hand wheel clockwise to the fully closed position.

## SIGMA Compact DN50-DN300

### Verification of Dynamic Systems

In general the flow rate in a system can be verified in two ways:

- Direct flow rate verification in a circuit
- Measurement of the differential pressure across the balancing valve or metering station

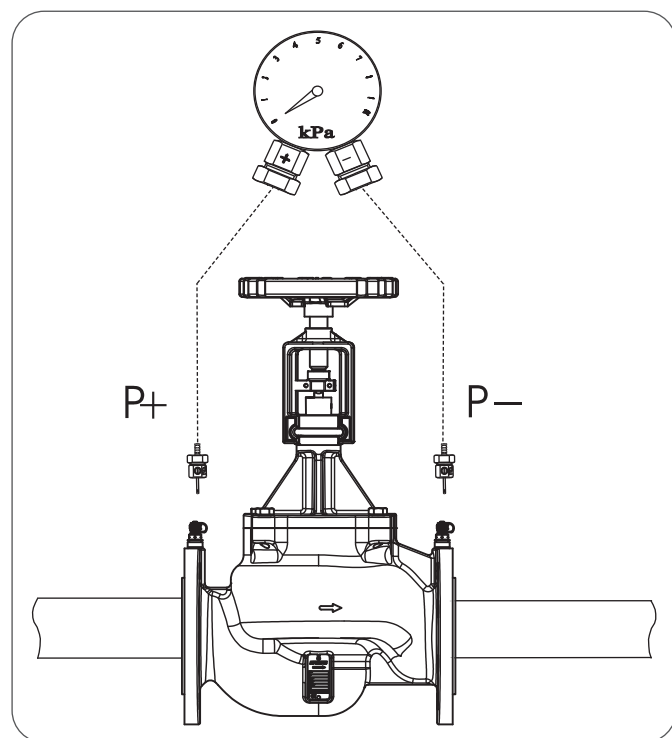
#### Direct flow rate verification

This can for example, be carried out by ultrasonic equipment. On the basis of the measured velocity of the flow and the pipe dimension the software will compute a flow rate. The use of ultrasonic verification requires free access to the pipes as the sensors are fitted directly to the pipe.

#### Measurement of the differential pressure

This is the main method of flow verification.

Once the design flow rate is known, the valve can be set using the flow graphs or Frese APP. Either of these tools will show the required set point and the required minimum differential pressure for the set flow rate.



Measurement of the differential pressure ( $\Delta p$ ) across the valve

The SIGMA Compact valve contains a differential pressure regulator, to limit and maintain the design flow limited under fluctuating pressure conditions.

Use the procedure as described for verification of the flow and for optimization of the operation.

Once the differential pressure has been verified, the flow rate can be recorded according to the flow rate graphs provided.

### Measurement of the differential pressure ( $\Delta p$ ) across the valve

The flow through the valve can be identified by measuring the differential pressure ( $\Delta p$ ) across the valve.

If the measured differential pressure is above the minimum  $\Delta p$  required for that set point, the flow can be read from the graph.

If the measured differential pressure is below the minimum  $\Delta p$  required for that set point, the flow can be found by using the formulas below.

#### Flow Calculation

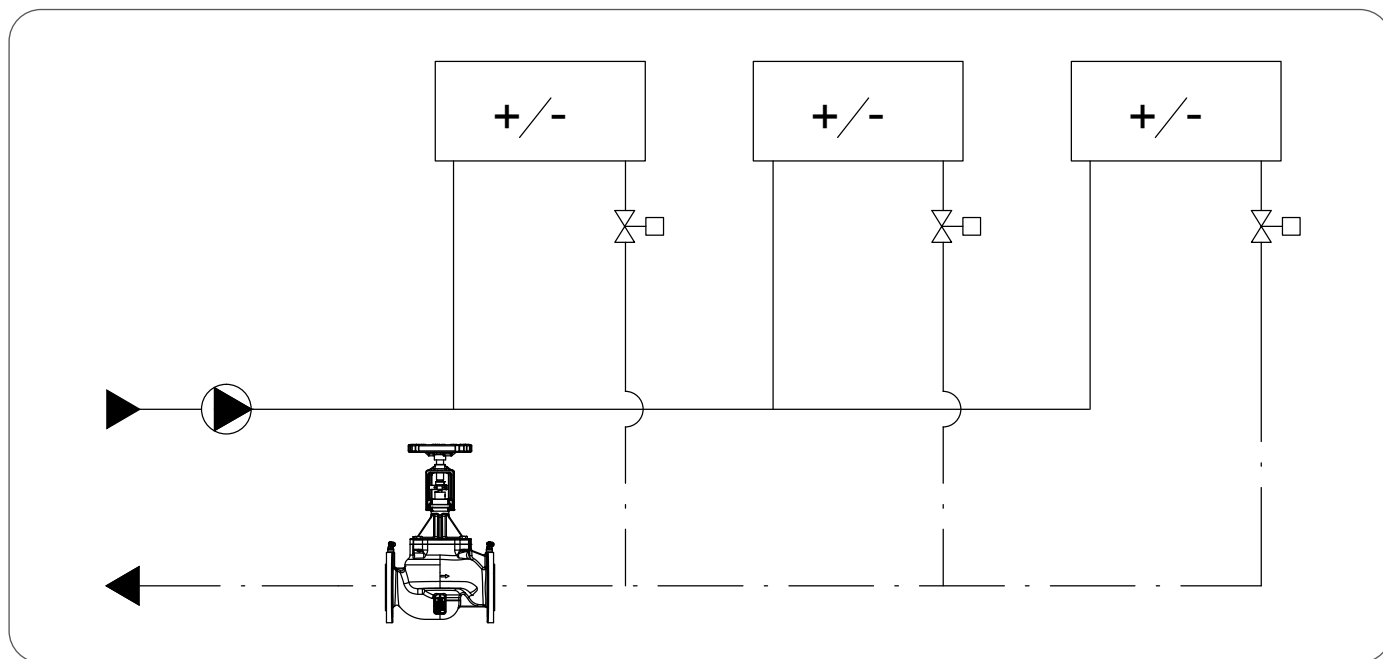
|                                           |                                                      |
|-------------------------------------------|------------------------------------------------------|
| $Q = kV \cdot \sqrt{\Delta p}$            | $Q = \text{m}^3/\text{h}$<br>$\Delta p = \text{Bar}$ |
| $Q = kV \cdot 100 \cdot \sqrt{\Delta p}$  | $Q = \text{l/h}$<br>$\Delta p = \text{kPa}$          |
| $Q = \frac{kV}{36} \cdot \sqrt{\Delta p}$ | $Q = \text{l/s}$<br>$\Delta p = \text{kPa}$          |

## SIGMA Compact DN50-DN300

### Application Diagrams | SIGMA Compact installed in a circuit with heating or cooling coils

The system is easily balanced by adjusting the pump according to the required differential pressure across the dynamic balancing valve located at the furthest point from the pump, known as the critical valve (P+ - P-).

When the minimum required differential pressure is available at the critical valve, sufficient differential pressure will be available in the rest of the system and the system will be automatically balanced.



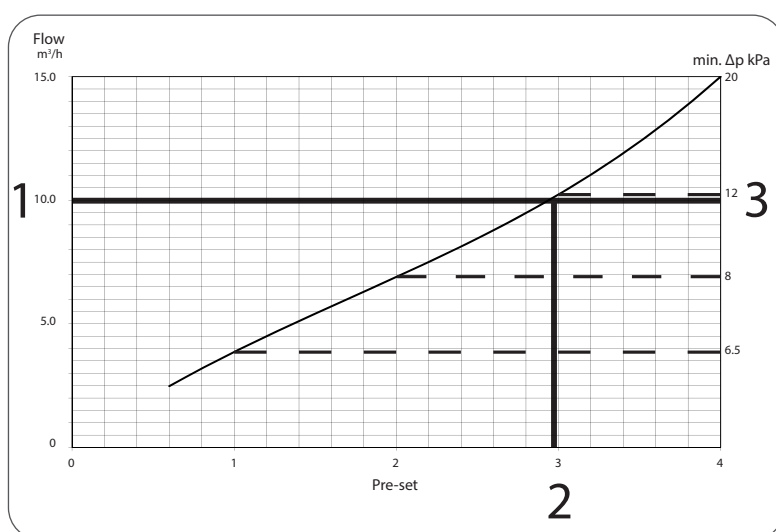
### Flow rate example | SIGMA Compact DN50 Low

Required design flow rate 10 m<sup>3</sup>/h - (2.78 l/s)

**1.** The required design flow rate is used as the point of reference for the overall rating of dynamic systems. (See the graph)

**2.** The pre-setting for the valve can be determined using the flow rate graph or the Frese APP.  
Setting = 2.9

**3.** On the right axis, the minimum differential pressure required from the pump can be determined.  
Minimum DP required approx. 12 kPa.



# SIGMA Compact

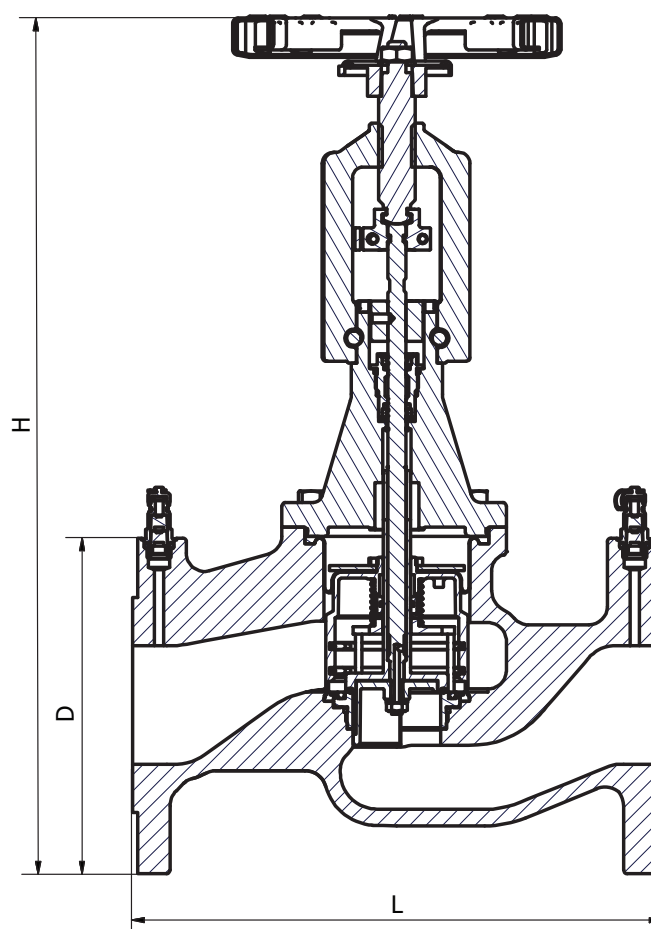
## DN50-DN300

### Technical Data DN50 - DN80

|                                    |                                                          |
|------------------------------------|----------------------------------------------------------|
| <b>Valve housing:</b>              | GJL-250/GJS-400                                          |
| <b>Valve cover:</b>                | GJS-400                                                  |
| <b>DN50 Ultra:</b>                 | DZR brass CW602N                                         |
| <b>DP controller:</b>              | Stainless steel/PPS                                      |
| <b>Spring:</b>                     | Stainless steel                                          |
| <b>Diaphragm:</b>                  | Reinforced EPDM/HNBR                                     |
| <b>O-rings:</b>                    | EPDM                                                     |
| <b>Pressure class:</b>             | PN16/25                                                  |
| <b>Flange connections:</b>         | ISO 7005-2 / EN 1092-2                                   |
| <b>Max. differential pressure:</b> | 800 kPa                                                  |
| <b>Needles for DP measurement:</b> | Max diameter, $\varnothing 3.2$ mm<br>Length, 25 - 40 mm |
| <b>Medium temperature range:</b>   | -10°C to 120°C                                           |
| <b>Hand wheel:</b>                 | Steel                                                    |
| <b>Hand wheel spindle:</b>         | Stainless steel                                          |
| <b>Yoke:</b>                       | Zinc alloy EN 1774                                       |

The pipe system shall be properly ventilated to avoid risk of air pockets. Glycolic mixtures up to 50% are applicable (both ethylene and propylene).

Recommendation: Water treatment to VDI 2035.



### Dimension & Weight · DN50 - DN80

| Valve Size      |   | DN50  |          | DN65  |          | DN80  |          |
|-----------------|---|-------|----------|-------|----------|-------|----------|
| Series          |   | Ultra | Standard | Ultra | Standard | Ultra | Standard |
| Dimensions [mm] | L | 230   |          | 290   |          | 310   |          |
|                 | H | 351   | 480      | 469   | 497      | 484   | 526      |
|                 | D | 165   |          | 185   |          | 200   |          |
| Weight [kg]     |   | 12.4  | 15.4     | 18.9  | 20.0     | 22.2  | 26.3     |

# SIGMA Compact

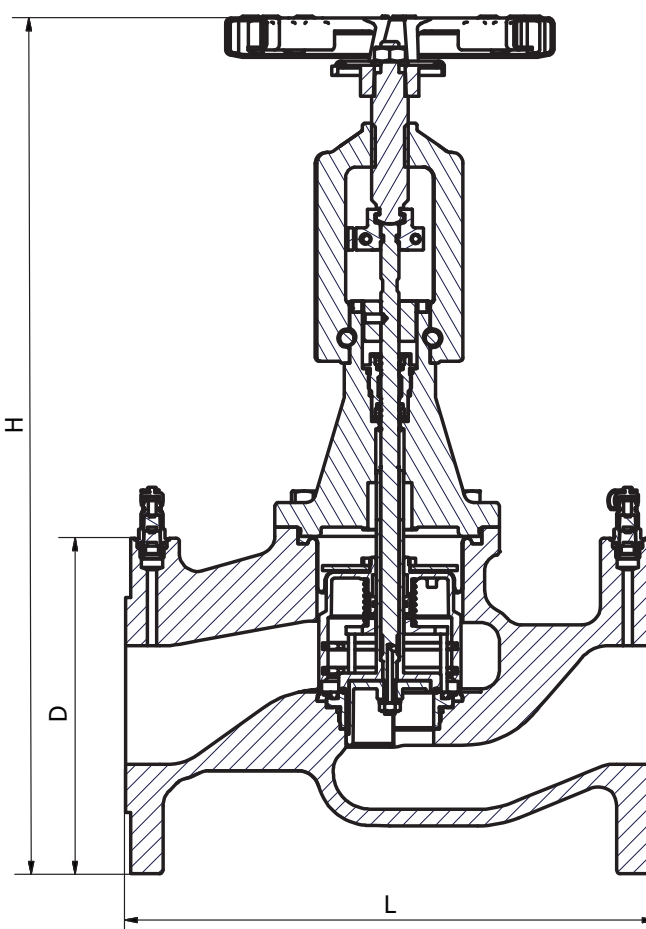
## DN50-DN300

### Technical Data DN100 - DN150

|                                    |                                                          |
|------------------------------------|----------------------------------------------------------|
| <b>Valve housing:</b>              | GJL-250/GJS-400                                          |
| <b>Valve cover:</b>                | GJS-400                                                  |
| <b>DP controller:</b>              | Stainless steel                                          |
| <b>Spring:</b>                     | Stainless steel                                          |
| <b>Diaphragm:</b>                  | Reinforced EPDM                                          |
| <b>O-rings:</b>                    | EPDM                                                     |
| <b>Pressure class:</b>             | PN16/25                                                  |
| <b>Flange connections:</b>         | ISO 7005-2 / EN 1092-2                                   |
| <b>Max. differential pressure:</b> | 800 kPa                                                  |
| <b>Needles for DP measurement:</b> | Max diameter, $\varnothing 3.2$ mm<br>Length, 25 - 40 mm |
| <b>Medium temperature range:</b>   |                                                          |
| <b>PN16 - DN100-DN150:</b>         | -10°C to 120°C                                           |
| <b>PN25 - DN100-DN125:</b>         | -10°C to 120°C                                           |
| <b>PN25 - DN150:</b>               | -10°C to 110°C                                           |
| <b>Hand wheel:</b>                 | Steel                                                    |
| <b>Hand wheel spindle:</b>         | Stainless steel                                          |
| <b>Yoke:</b>                       | Zinc alloy EN 1774                                       |

The pipe system shall be properly ventilated to avoid risk of air pockets. Glycolic mixtures up to 50% are applicable (both ethylene and propylene).

Recommendation: Water treatment to VDI 2035.



### Dimension & Weight · DN100 - DN150

| Valve Size      |   | DN100 |          | DN125 |          | DN150    |
|-----------------|---|-------|----------|-------|----------|----------|
| Series          |   | Ultra | Standard | Ultra | Standard | Standard |
| Dimensions [mm] | L | 350   |          | 400   |          | 480      |
|                 | H | 523   | 714      | 726   | 761      | 782      |
|                 | D | 235   |          | 270   |          | 285      |
| Weight [kg]     |   | 35.3  | 50.2     | 63.1  | 71.4     | 97.8     |

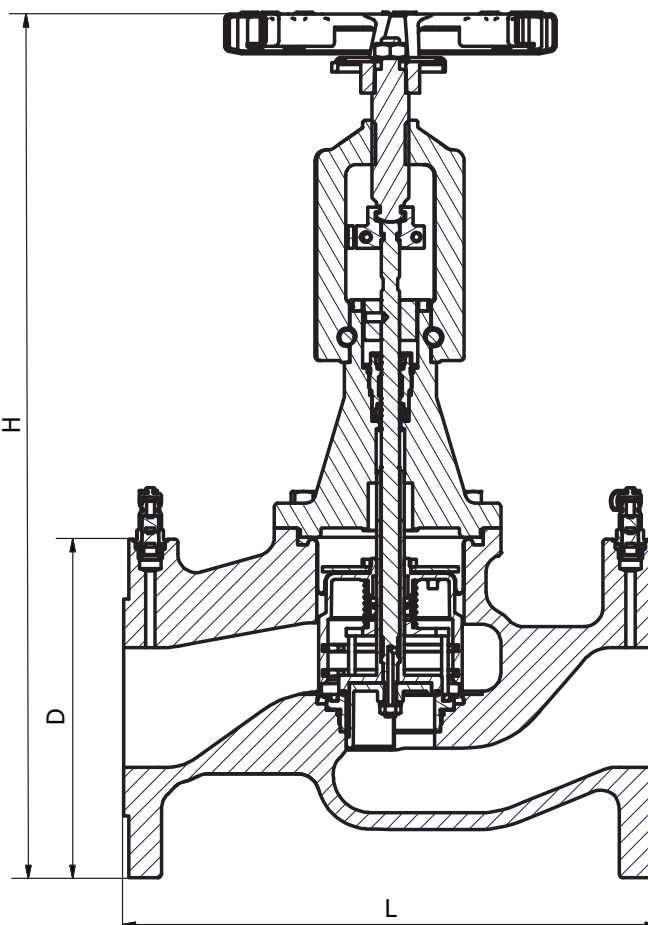
# SIGMA Compact DN50-DN300

## Technical Data DN200 - DN300

|                                    |                                                          |
|------------------------------------|----------------------------------------------------------|
| <b>Valve housing:</b>              | GJS-400                                                  |
| <b>Valve cover:</b>                | GJS-400                                                  |
| <b>DP controller:</b>              | Stainless steel                                          |
| <b>Spring:</b>                     | Stainless steel                                          |
| <b>Diaphragm:</b>                  | Reinforced EPDM                                          |
| <b>O-rings:</b>                    | EPDM                                                     |
| <b>Pressure class:</b>             | PN16/25                                                  |
| <b>Flange connections:</b>         | ISO 7005-2/EN 1092-2                                     |
| <b>Max. differential pressure:</b> | 800 kPa                                                  |
| <b>Needles for DP measurement:</b> | Max diameter, $\varnothing 3.2$ mm<br>Length, 25 - 40 mm |
| <b>Medium temperature range:</b>   |                                                          |
| <b>PN16 - DN200-DN300:</b>         | -10°C to 120°C                                           |
| <b>PN25 - DN200-DN300:</b>         | -10°C to 110°C                                           |
| <b>Hand wheel</b>                  | Steel                                                    |
| <b>Hand wheel spindle</b>          | Stainless steel                                          |
| <b>Yoke</b>                        | Zinc alloy EN 1774                                       |

The pipe system shall be properly ventilated to avoid risk of air pockets. Glycolic mixtures up to 50% are applicable (both ethylene and propylene).

Recommendation: Water treatment to VDI 2035.



## Dimension & Weight · DN200 - DN300

| Valve Size      |   | DN200    | DN250    | DN300    |
|-----------------|---|----------|----------|----------|
| Series          |   | Standard | Standard | Standard |
| Dimensions [mm] | L | 600      | 730      | 850      |
|                 | H | 853      | 1044     | 1082     |
|                 | D | 380      | 444      | 520      |
| Weight [kg]     |   | 175      | 307      | 470      |

# SIGMA Compact

## DN50-DN300

### Product programme

| Dim.  | Series   | Type      | Flow [m³/h] | PN16    | PN25    |
|-------|----------|-----------|-------------|---------|---------|
| DN50  | Ultra    | High Flow | 1.4 - 11.5  | 53-5410 | 53-5430 |
|       | Standard | Low Flow  | 2.5 - 15.0  | 53-2400 | 53-2420 |
|       |          | High Flow | 3.9 - 24.0  | 53-2410 | 53-2430 |
| DN65  | Ultra    | Low Flow  | 3.0 - 16.0  | 53-5401 | 53-5421 |
|       |          | High Flow | 4.2 - 24.0  | 53-5411 | 53-5431 |
|       | Standard | Low Flow  | 4.4 - 25.0  | 53-2401 | 53-2421 |
|       |          | High Flow | 5.9 - 35.0  | 53-2411 | 53-2431 |
| DN80  | Ultra    | Low Flow  | 4.4 - 25.0  | 53-5402 | 53-5422 |
|       |          | High Flow | 6.0 - 35.0  | 53-5412 | 53-5432 |
|       | Standard | Low Flow  | 5.3 - 34.0  | 53-2402 | 53-2422 |
|       |          | High Flow | 7.0 - 43.0  | 53-2412 | 53-2432 |
| DN100 | Ultra    | Low Flow  | 5.3 - 34.0  | 53-5403 | 53-5423 |
|       |          | High Flow | 7.0 - 43.0  | 53-5413 | 53-5433 |
|       | Standard | Low Flow  | 12.1-68.0   | 53-2403 | 53-2423 |
|       |          | High Flow | 14.8-90.0   | 53-2413 | 53-2433 |
| DN125 | Ultra    | Low Flow  | 12.1-68.0   | 53-5404 | 53-5424 |
|       |          | High Flow | 14.8-90.0   | 53-5414 | 53-5434 |
|       | Standard | Low Flow  | 18.5-110    | 53-2404 | 53-2424 |
|       |          | High Flow | 23.0-135    | 53-2414 | 53-2434 |
| DN150 | Standard | Low Flow  | 25.6-148    | 53-2405 | 53-2425 |
|       |          | High Flow | 32.0-195    | 53-2415 | 53-2435 |
| DN200 | Standard | Low Flow  | 95.0 - 210  | 53-2406 | 53-2426 |
|       |          | High Flow | 130 - 280   | 53-2416 | 53-2436 |
| DN250 | Standard | Low Flow  | 190 - 475   | 53-2407 | 53-2427 |
|       |          | High Flow | 245 - 600   | 53-2417 | 53-2437 |
| DN300 | Standard | Low Flow  | 190 - 475   | 53-2408 | 53-2428 |
|       |          | High Flow | 245 - 600   | 53-2418 | 53-2438 |

The valve can be ordered with a protective coating in C5 standard. The product will have the item code extension - **ST01**.  
Example: SIGMA Compact DN65 Standard PN16 Low Flow with C5 coating has item code **53-2401-ST01**



# SIGMA Compact

## DN50-DN300

### Setting and Flow

| Series  | Ultra     |          |          |            |
|---------|-----------|----------|----------|------------|
| Dim.    | DN50 HF   |          |          |            |
| Pre-set | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa |
| 0.6     | 1.40      | 0.389    | 6.16     | 10         |
| 0.8     | 1.71      | 0.474    | 7.52     | 11         |
| 1.0     | 2.05      | 0.569    | 9.03     | 11         |
| 1.2     | 2.42      | 0.673    | 10.7     | 11         |
| 1.4     | 2.82      | 0.783    | 12.4     | 11         |
| 1.6     | 3.24      | 0.900    | 14.3     | 12         |
| 1.8     | 3.68      | 1.02     | 16.2     | 12         |
| 2.0     | 4.15      | 1.15     | 18.3     | 13         |
| 2.2     | 4.64      | 1.29     | 20.5     | 14         |
| 2.4     | 5.17      | 1.44     | 22.8     | 16         |
| 2.6     | 5.73      | 1.59     | 25.2     | 17         |
| 2.8     | 6.34      | 1.76     | 27.9     | 20         |
| 3.0     | 7.00      | 1.94     | 30.8     | 22         |
| 3.2     | 7.72      | 2.15     | 34.0     | 25         |
| 3.4     | 8.52      | 2.37     | 37.5     | 28         |
| 3.6     | 9.40      | 2.61     | 41.4     | 30         |
| 3.8     | 10.4      | 2.89     | 45.8     | 33         |
| 4.0     | 11.5      | 3.19     | 50.6     | 36         |

| Series  | Standard  |          |          |            |           |          |          |            |
|---------|-----------|----------|----------|------------|-----------|----------|----------|------------|
| Dim.    | DN50 LF   |          |          |            | DN50 HF   |          |          |            |
| Pre-set | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa |
| 0.6     | 2.50      | 0.689    | 10.9     | 7          | 3.90      | 1.09     | 17.3     | 19         |
| 0.8     | 3.20      | 0.887    | 14.1     | 7          | 5.10      | 1.41     | 22.3     | 19         |
| 1.0     | 3.90      | 1.07     | 17.0     | 7          | 6.20      | 1.71     | 27.2     | 19         |
| 1.2     | 4.50      | 1.25     | 19.8     | 7          | 7.20      | 2.00     | 31.8     | 19         |
| 1.4     | 5.10      | 1.42     | 22.5     | 7          | 8.20      | 2.29     | 36.2     | 19         |
| 1.6     | 5.70      | 1.59     | 25.1     | 7          | 9.20      | 2.56     | 40.6     | 20         |
| 1.8     | 6.30      | 1.75     | 27.7     | 8          | 10.2      | 2.83     | 44.9     | 20         |
| 2.0     | 6.90      | 1.92     | 30.4     | 8          | 11.2      | 3.11     | 49.2     | 21         |
| 2.2     | 7.50      | 2.08     | 33.0     | 9          | 12.2      | 3.39     | 53.7     | 22         |
| 2.4     | 8.10      | 2.26     | 35.8     | 9          | 13.2      | 3.67     | 58.2     | 24         |
| 2.6     | 8.80      | 2.44     | 38.7     | 10         | 14.3      | 3.97     | 62.9     | 25         |
| 2.8     | 9.50      | 2.64     | 41.8     | 11         | 15.4      | 4.28     | 67.9     | 27         |
| 3.0     | 10.2      | 2.84     | 45.0     | 12         | 16.6      | 4.61     | 73.1     | 30         |
| 3.2     | 11.0      | 3.07     | 48.6     | 13         | 17.9      | 4.97     | 78.7     | 33         |
| 3.4     | 11.9      | 3.31     | 52.4     | 15         | 19.2      | 5.35     | 84.7     | 36         |
| 3.6     | 12.8      | 3.57     | 56.6     | 16         | 20.7      | 5.75     | 91.2     | 40         |
| 3.8     | 13.9      | 3.86     | 61.1     | 18         | 22.3      | 6.19     | 98.1     | 45         |
| 4.0     | 15.0      | 4.17     | 66.0     | 20         | 24.0      | 6.67     | 106      | 49         |

| Series  | Ultra     |          |          |            |           |          |          |            |
|---------|-----------|----------|----------|------------|-----------|----------|----------|------------|
| Dim.    | DN65 LF   |          |          |            | DN65 HF   |          |          |            |
| Pre-set | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa |
| 0.6     | 3.00      | 0.833    | 13.2     | 10         | 4.20      | 1.17     | 18.5     | 19         |
| 0.8     | 3.80      | 1.06     | 16.7     | 10         | 5.48      | 1.52     | 24.1     | 19         |
| 1.0     | 4.50      | 1.25     | 19.8     | 10         | 6.60      | 1.83     | 29.1     | 19         |
| 1.2     | 5.13      | 1.43     | 22.6     | 10         | 7.60      | 2.11     | 33.5     | 19         |
| 1.4     | 5.73      | 1.59     | 25.2     | 10         | 8.53      | 2.37     | 37.6     | 19         |
| 1.6     | 6.31      | 1.75     | 27.8     | 11         | 9.42      | 2.62     | 41.5     | 20         |
| 1.8     | 6.89      | 1.92     | 30.4     | 11         | 10.3      | 2.86     | 45.4     | 20         |
| 2.0     | 7.50      | 2.08     | 33.0     | 11         | 11.2      | 3.11     | 49.3     | 20         |
| 2.2     | 8.14      | 2.26     | 35.8     | 11         | 12.1      | 3.37     | 53.4     | 20         |
| 2.4     | 8.83      | 2.45     | 38.9     | 11         | 13.1      | 3.65     | 57.8     | 21         |
| 2.6     | 9.56      | 2.66     | 42.1     | 11         | 14.2      | 3.95     | 62.5     | 22         |
| 2.8     | 10.4      | 2.88     | 45.6     | 12         | 15.4      | 4.27     | 67.6     | 23         |
| 3.0     | 11.2      | 3.11     | 49.3     | 12         | 16.6      | 4.61     | 73.1     | 24         |
| 3.2     | 12.1      | 3.36     | 53.3     | 13         | 17.9      | 4.98     | 78.9     | 26         |
| 3.4     | 13.0      | 3.62     | 57.4     | 13         | 19.3      | 5.37     | 85.2     | 29         |
| 3.6     | 14.0      | 3.89     | 61.7     | 15         | 20.8      | 5.79     | 91.7     | 32         |
| 3.8     | 15.0      | 4.17     | 66.1     | 17         | 22.4      | 6.22     | 98.6     | 37         |
| 4.0     | 16.0      | 4.44     | 70.4     | 19         | 24.0      | 6.67     | 106      | 43         |

# SIGMA Compact

## DN50-DN300

### Setting and Flow

| Series  |           | Standard |          |            |           |          |          |            |
|---------|-----------|----------|----------|------------|-----------|----------|----------|------------|
| Dim.    | DN65 LF   |          |          |            | DN65 HF   |          |          |            |
| Pre-set | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa |
| 0.6     | 4.40      | 1.22     | 19.3     | 15         | 6.00      | 1.65     | 26.2     | 30         |
| 0.8     | 5.60      | 1.54     | 24.5     | 15         | 7.60      | 2.11     | 33.4     | 30         |
| 1.0     | 6.60      | 1.85     | 29.3     | 15         | 9.10      | 2.53     | 40.1     | 30         |
| 1.2     | 7.70      | 2.13     | 33.7     | 16         | 10.5      | 2.93     | 46.4     | 31         |
| 1.4     | 8.60      | 2.40     | 38.0     | 17         | 11.9      | 3.31     | 52.5     | 32         |
| 1.6     | 9.60      | 2.66     | 42.2     | 17         | 13.3      | 3.69     | 58.5     | 32         |
| 1.8     | 10.5      | 2.93     | 46.4     | 18         | 14.7      | 4.07     | 64.5     | 32         |
| 2.0     | 11.5      | 3.20     | 50.6     | 18         | 16.0      | 4.46     | 70.7     | 32         |
| 2.2     | 12.5      | 3.47     | 55.0     | 18         | 17.5      | 4.86     | 77.0     | 32         |
| 2.4     | 13.5      | 3.76     | 59.6     | 19         | 19.0      | 5.28     | 83.6     | 32         |
| 2.6     | 14.7      | 4.07     | 64.5     | 19         | 20.6      | 5.72     | 90.6     | 33         |
| 2.8     | 15.8      | 4.40     | 69.7     | 19         | 22.3      | 6.19     | 98.1     | 34         |
| 3.0     | 17.1      | 4.75     | 75.3     | 20         | 24.1      | 6.69     | 106      | 35         |
| 3.2     | 18.5      | 5.13     | 81.3     | 21         | 26.0      | 7.22     | 114      | 37         |
| 3.4     | 19.9      | 5.54     | 87.8     | 21         | 28.0      | 7.79     | 123      | 40         |
| 3.6     | 21.5      | 5.98     | 94.7     | 22         | 30.2      | 8.40     | 133      | 44         |
| 3.8     | 23.2      | 6.45     | 102      | 24         | 32.5      | 9.04     | 143      | 49         |
| 4.0     | 25.0      | 6.95     | 110      | 25         | 35.0      | 9.72     | 154      | 55         |

| Series  |           | Ultra    |          |            |           |          |          |            |
|---------|-----------|----------|----------|------------|-----------|----------|----------|------------|
| Dim.    | DN80 LF   |          |          |            | DN80 HF   |          |          |            |
| Pre-set | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa |
| 0.6     | 4.40      | 1.22     | 19.4     | 15         | 6.00      | 1.67     | 26.4     | 27         |
| 0.8     | 5.53      | 1.54     | 24.4     | 15         | 7.61      | 2.11     | 33.5     | 27         |
| 1.0     | 6.60      | 1.83     | 29.1     | 15         | 9.10      | 2.53     | 40.1     | 27         |
| 1.2     | 7.61      | 2.12     | 33.5     | 15         | 10.5      | 2.92     | 46.3     | 27         |
| 1.4     | 8.60      | 2.39     | 37.8     | 16         | 11.9      | 3.30     | 52.3     | 27         |
| 1.6     | 9.56      | 2.66     | 42.1     | 17         | 13.2      | 3.68     | 58.3     | 27         |
| 1.8     | 10.5      | 2.92     | 46.3     | 17         | 14.6      | 4.06     | 64.3     | 27         |
| 2.0     | 11.5      | 3.19     | 50.6     | 18         | 16.0      | 4.44     | 70.4     | 27         |
| 2.2     | 12.5      | 3.47     | 55.1     | 19         | 17.4      | 4.85     | 76.8     | 27         |
| 2.4     | 13.6      | 3.77     | 59.7     | 19         | 19.0      | 5.27     | 83.5     | 28         |
| 2.6     | 14.7      | 4.07     | 64.6     | 19         | 20.6      | 5.72     | 90.6     | 29         |
| 2.8     | 15.8      | 4.40     | 69.7     | 20         | 22.3      | 6.19     | 98.1     | 30         |
| 3.0     | 17.1      | 4.75     | 75.3     | 20         | 24.1      | 6.69     | 106      | 32         |
| 3.2     | 18.5      | 5.13     | 81.2     | 20         | 26.0      | 7.23     | 115      | 35         |
| 3.4     | 19.9      | 5.53     | 87.7     | 21         | 28.1      | 7.80     | 124      | 38         |
| 3.6     | 21.5      | 5.97     | 94.6     | 22         | 30.3      | 8.41     | 133      | 42         |
| 3.8     | 23.2      | 6.44     | 102      | 23         | 32.6      | 9.05     | 143      | 48         |
| 4.0     | 25.0      | 6.94     | 110      | 25         | 35.0      | 9.72     | 154      | 55         |

| Series  |           | Standard |          |            |           |          |          |            |
|---------|-----------|----------|----------|------------|-----------|----------|----------|------------|
| Dim.    | DN80 LF   |          |          |            | DN80 HF   |          |          |            |
| Pre-set | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa |
| 0.6     | 5.30      | 1.48     | 23.5     | 9          | 7.00      | 1.95     | 30.9     | 15         |
| 0.8     | 6.90      | 1.91     | 30.2     | 9          | 9.00      | 2.51     | 39.8     | 15         |
| 1.0     | 8.30      | 2.30     | 36.5     | 9          | 11.0      | 3.04     | 48.2     | 15         |
| 1.2     | 9.60      | 2.68     | 42.4     | 9          | 12.8      | 3.55     | 56.2     | 15         |
| 1.4     | 10.9      | 3.04     | 48.2     | 9          | 14.5      | 4.03     | 63.9     | 15         |
| 1.6     | 12.2      | 3.40     | 53.8     | 9          | 16.2      | 4.51     | 71.5     | 15         |
| 1.8     | 13.5      | 3.75     | 59.5     | 9          | 18.0      | 4.98     | 79.0     | 16         |
| 2.0     | 14.8      | 4.11     | 65.2     | 9          | 19.6      | 5.46     | 86.5     | 16         |
| 2.2     | 16.2      | 4.49     | 71.1     | 9          | 21.4      | 5.94     | 94.2     | 16         |
| 2.4     | 17.6      | 4.88     | 77.3     | 9          | 23.2      | 6.45     | 102      | 17         |
| 2.6     | 19.1      | 5.30     | 83.9     | 10         | 25.1      | 6.97     | 111      | 17         |
| 2.8     | 20.7      | 5.74     | 91.0     | 10         | 27.1      | 7.53     | 119      | 18         |
| 3.0     | 22.4      | 6.23     | 98.7     | 11         | 29.3      | 8.13     | 129      | 19         |
| 3.2     | 24.3      | 6.76     | 107      | 12         | 31.6      | 8.78     | 139      | 20         |
| 3.4     | 26.4      | 7.34     | 116      | 13         | 34.1      | 9.47     | 150      | 22         |
| 3.6     | 28.7      | 7.98     | 126      | 15         | 36.8      | 10.2     | 162      | 24         |
| 3.8     | 31.2      | 8.68     | 138      | 17         | 39.8      | 11.1     | 175      | 26         |
| 4.0     | 34.0      | 9.45     | 150      | 19         | 43.0      | 12.0     | 189      | 29         |

# SIGMA Compact

## DN50-DN300

### Setting and Flow

| Series  |           | Ultra    |          |            |           |          |          |            |
|---------|-----------|----------|----------|------------|-----------|----------|----------|------------|
| Dim.    | DN100 LF  |          |          |            | DN100 HF  |          |          |            |
| Pre-set | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa |
| 0.6     | 5.30      | 1.47     | 23.3     | 9          | 7.00      | 1.94     | 30.8     | 15         |
| 0.8     | 6.86      | 1.90     | 30.2     | 9          | 9.08      | 2.52     | 40.0     | 15         |
| 1.0     | 8.30      | 2.31     | 36.5     | 9          | 11.0      | 3.06     | 48.4     | 15         |
| 1.2     | 9.66      | 2.68     | 42.5     | 9          | 12.8      | 3.56     | 56.4     | 15         |
| 1.4     | 11.0      | 3.05     | 48.3     | 9          | 14.5      | 4.04     | 64.0     | 15         |
| 1.6     | 12.2      | 3.40     | 53.9     | 9          | 16.2      | 4.51     | 71.5     | 15         |
| 1.8     | 13.5      | 3.75     | 59.5     | 9          | 17.9      | 4.97     | 78.8     | 16         |
| 2.0     | 14.8      | 4.11     | 65.2     | 9          | 19.6      | 5.44     | 86.3     | 16         |
| 2.2     | 16.1      | 4.48     | 71.0     | 9          | 21.3      | 5.93     | 94.0     | 16         |
| 2.4     | 17.5      | 4.87     | 77.2     | 9          | 23.2      | 6.43     | 102      | 17         |
| 2.6     | 19.0      | 5.29     | 83.8     | 10         | 25.1      | 6.97     | 110      | 17         |
| 2.8     | 20.6      | 5.74     | 90.9     | 10         | 27.1      | 7.53     | 119      | 18         |
| 3.0     | 22.4      | 6.22     | 98.6     | 11         | 29.3      | 8.14     | 129      | 19         |
| 3.2     | 24.3      | 6.75     | 107      | 12         | 31.6      | 8.79     | 139      | 20         |
| 3.4     | 26.4      | 7.34     | 116      | 13         | 34.2      | 9.49     | 150      | 22         |
| 3.6     | 28.7      | 7.97     | 126      | 15         | 36.9      | 10.3     | 162      | 24         |
| 3.8     | 31.2      | 8.68     | 138      | 17         | 39.8      | 11.1     | 175      | 26         |
| 4.0     | 34.0      | 9.44     | 150      | 19         | 43.0      | 11.9     | 189      | 29         |

| Series  |           | Standard |          |            |           |          |          |            |
|---------|-----------|----------|----------|------------|-----------|----------|----------|------------|
| Dim.    | DN100 LF  |          |          |            | DN100 HF  |          |          |            |
| Pre-set | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa |
| 0.6     | 12.1      | 3.37     | 53.4     | 10         | 14.8      | 4.10     | 65.0     | 16         |
| 0.8     | 15.3      | 4.25     | 67.3     | 10         | 18.9      | 5.25     | 83.2     | 16         |
| 1.0     | 18.1      | 5.04     | 79.9     | 10         | 22.6      | 6.28     | 99.5     | 16         |
| 1.2     | 20.8      | 5.76     | 91.4     | 10         | 26.0      | 7.22     | 114      | 16         |
| 1.4     | 23.2      | 6.44     | 102      | 10         | 29.1      | 8.09     | 128      | 16         |
| 1.6     | 25.5      | 7.08     | 112      | 10         | 32.1      | 8.92     | 141      | 16         |
| 1.8     | 27.8      | 7.71     | 122      | 10         | 35.1      | 9.74     | 154      | 16         |
| 2.0     | 30.0      | 8.35     | 132      | 10         | 38.1      | 10.6     | 168      | 16         |
| 2.2     | 32.4      | 9.00     | 143      | 10         | 41.2      | 11.4     | 181      | 16         |
| 2.4     | 34.9      | 9.70     | 154      | 11         | 44.5      | 12.4     | 196      | 16         |
| 2.6     | 37.6      | 10.5     | 166      | 11         | 48.2      | 13.4     | 212      | 18         |
| 2.8     | 40.6      | 11.3     | 179      | 12         | 52.2      | 14.5     | 230      | 19         |
| 3.0     | 44.0      | 12.2     | 194      | 13         | 56.7      | 15.8     | 250      | 22         |
| 3.2     | 47.7      | 13.3     | 210      | 14         | 61.9      | 17.2     | 272      | 25         |
| 3.4     | 51.9      | 14.4     | 229      | 16         | 67.7      | 18.8     | 298      | 29         |
| 3.6     | 56.7      | 15.7     | 249      | 19         | 74.2      | 20.6     | 327      | 34         |
| 3.8     | 62.0      | 17.2     | 273      | 22         | 81.7      | 22.7     | 360      | 39         |
| 4.0     | 68.0      | 18.9     | 299      | 25         | 90.0      | 25.0     | 396      | 45         |

| Series  |           | Ultra    |          |            |           |          |          |            |
|---------|-----------|----------|----------|------------|-----------|----------|----------|------------|
| Dim.    | DN125 LF  |          |          |            | DN125 HF  |          |          |            |
| Pre-set | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa |
| 0.6     | 12.1      | 3.36     | 53.3     | 10         | 14.8      | 4.11     | 65.2     | 16         |
| 0.8     | 15.3      | 4.24     | 67.2     | 10         | 18.9      | 5.25     | 83.2     | 16         |
| 1.0     | 18.1      | 5.03     | 79.7     | 10         | 22.6      | 6.28     | 99.5     | 16         |
| 1.2     | 20.7      | 5.75     | 91.1     | 10         | 26.0      | 7.22     | 114      | 16         |
| 1.4     | 23.1      | 6.42     | 102      | 10         | 29.1      | 8.09     | 128      | 16         |
| 1.6     | 25.4      | 7.07     | 112      | 10         | 32.2      | 8.93     | 142      | 16         |
| 1.8     | 27.7      | 7.70     | 122      | 10         | 35.1      | 9.75     | 155      | 16         |
| 2.0     | 30.0      | 8.33     | 132      | 10         | 38.1      | 10.6     | 168      | 16         |
| 2.2     | 32.4      | 8.99     | 143      | 10         | 41.2      | 11.4     | 181      | 16         |
| 2.4     | 34.9      | 9.69     | 154      | 11         | 44.5      | 12.4     | 196      | 16         |
| 2.6     | 37.6      | 10.5     | 166      | 11         | 48.2      | 13.4     | 212      | 18         |
| 2.8     | 40.6      | 11.3     | 179      | 12         | 52.2      | 14.5     | 230      | 19         |
| 3.0     | 44.0      | 12.2     | 194      | 13         | 56.7      | 15.7     | 250      | 22         |
| 3.2     | 47.8      | 13.3     | 210      | 14         | 61.8      | 17.2     | 272      | 25         |
| 3.4     | 52.0      | 14.4     | 229      | 16         | 67.6      | 18.8     | 298      | 29         |
| 3.6     | 56.7      | 15.8     | 250      | 19         | 74.1      | 20.6     | 326      | 34         |
| 3.8     | 62.0      | 17.2     | 273      | 22         | 81.6      | 22.7     | 359      | 39         |
| 4.0     | 68.0      | 18.9     | 299      | 25         | 90.0      | 25.0     | 396      | 45         |

# SIGMA Compact

## DN50-DN300

### Setting and Flow

| Series  |           | Standard |          |            |           |          |          |            |
|---------|-----------|----------|----------|------------|-----------|----------|----------|------------|
| Dim.    | DN125 LF  |          |          |            | DN125 HF  |          |          |            |
| Pre-set | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa |
| 0.6     | 18.5      | 5.14     | 81.5     | 16         | 23.0      | 6.39     | 101      | 27         |
| 0.8     | 23.6      | 6.54     | 104      | 16         | 29.9      | 8.31     | 132      | 27         |
| 1.0     | 28.5      | 7.92     | 125      | 16         | 36.5      | 10.1     | 161      | 27         |
| 1.2     | 33.3      | 9.26     | 147      | 17         | 42.8      | 11.9     | 188      | 28         |
| 1.4     | 38.0      | 10.6     | 167      | 17         | 48.7      | 13.5     | 215      | 28         |
| 1.6     | 42.6      | 11.8     | 188      | 17         | 54.5      | 15.1     | 240      | 28         |
| 1.8     | 47.1      | 13.1     | 207      | 18         | 60.0      | 16.7     | 264      | 29         |
| 2.0     | 51.5      | 14.3     | 227      | 18         | 65.5      | 18.2     | 288      | 29         |
| 2.2     | 55.9      | 15.5     | 246      | 18         | 70.9      | 19.7     | 312      | 29         |
| 2.4     | 60.4      | 16.8     | 266      | 19         | 76.4      | 21.2     | 336      | 30         |
| 2.6     | 65.0      | 18.1     | 286      | 19         | 82.0      | 22.8     | 361      | 31         |
| 2.8     | 69.8      | 19.4     | 308      | 20         | 87.8      | 24.4     | 387      | 32         |
| 3.0     | 75.0      | 20.8     | 330      | 21         | 94.0      | 26.1     | 414      | 33         |
| 3.2     | 80.6      | 22.4     | 355      | 22         | 101       | 28.0     | 443      | 35         |
| 3.4     | 86.7      | 24.1     | 382      | 24         | 108       | 30.0     | 475      | 37         |
| 3.6     | 93.6      | 26.0     | 412      | 26         | 116       | 32.2     | 511      | 41         |
| 3.8     | 101       | 28.1     | 446      | 30         | 125       | 34.7     | 550      | 46         |
| 4.0     | 110       | 30.6     | 484      | 35         | 135       | 37.5     | 594      | 53         |

| Series  |           | Standard |          |            |           |          |          |            |
|---------|-----------|----------|----------|------------|-----------|----------|----------|------------|
| Dim.    | DN150 LF  |          |          |            | DN150 HF  |          |          |            |
| Pre-set | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa |
| 0.6     | 25.6      | 7.11     | 113      | 21         | 32.0      | 8.89     | 141      | 33         |
| 0.8     | 32.6      | 9.05     | 143      | 21         | 41.3      | 11.5     | 182      | 33         |
| 1.0     | 39.2      | 10.9     | 173      | 21         | 50.0      | 13.9     | 220      | 33         |
| 1.2     | 45.6      | 12.7     | 201      | 21         | 58.2      | 16.2     | 256      | 33         |
| 1.4     | 51.8      | 14.4     | 228      | 21         | 66.0      | 18.3     | 291      | 33         |
| 1.6     | 58.0      | 16.1     | 255      | 21         | 73.7      | 20.5     | 324      | 33         |
| 1.8     | 64.1      | 17.8     | 282      | 21         | 81.3      | 22.6     | 358      | 33         |
| 2.0     | 70.4      | 19.6     | 310      | 22         | 89.0      | 24.7     | 392      | 34         |
| 2.2     | 76.8      | 21.3     | 338      | 23         | 96.9      | 26.9     | 427      | 36         |
| 2.4     | 83.4      | 23.2     | 367      | 25         | 105       | 29.2     | 463      | 38         |
| 2.6     | 90.3      | 25.1     | 398      | 27         | 114       | 31.6     | 501      | 40         |
| 2.8     | 97.5      | 27.1     | 429      | 28         | 123       | 34.2     | 542      | 43         |
| 3.0     | 105       | 29.2     | 462      | 30         | 133       | 36.9     | 586      | 46         |
| 3.2     | 113       | 31.3     | 497      | 32         | 144       | 39.9     | 632      | 49         |
| 3.4     | 121       | 33.6     | 533      | 33         | 155       | 43.1     | 683      | 53         |
| 3.6     | 130       | 36.0     | 571      | 34         | 167       | 46.5     | 737      | 57         |
| 3.8     | 139       | 38.5     | 610      | 35         | 181       | 50.2     | 796      | 61         |
| 4.0     | 148       | 41.1     | 652      | 35         | 195       | 54.2     | 859      | 65         |

| Series  |           | Standard |          |            |           |          |          |            |
|---------|-----------|----------|----------|------------|-----------|----------|----------|------------|
| Dim.    | DN200 LF  |          |          |            | DN200 HF  |          |          |            |
| Pre-set | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa |
| 1.0     | 95        | 26.4     | 418      | 11         | 130       | 36.1     | 572      | 31         |
| 1.2     | 100       | 27.8     | 440      | 12         | 137       | 38.1     | 604      | 32         |
| 1.4     | 105       | 29.3     | 464      | 12         | 145       | 40.2     | 638      | 33         |
| 1.6     | 112       | 31.0     | 491      | 13         | 153       | 42.4     | 673      | 35         |
| 1.8     | 118       | 32.8     | 520      | 15         | 161       | 44.8     | 710      | 38         |
| 2.0     | 125       | 34.7     | 550      | 16         | 170       | 47.2     | 748      | 41         |
| 2.2     | 132       | 36.8     | 583      | 17         | 179       | 49.8     | 789      | 45         |
| 2.4     | 140       | 38.9     | 617      | 19         | 189       | 52.4     | 831      | 49         |
| 2.6     | 148       | 41.1     | 652      | 21         | 199       | 55.2     | 875      | 53         |
| 2.8     | 156       | 43.5     | 689      | 22         | 209       | 58.1     | 921      | 57         |
| 3.0     | 165       | 45.8     | 726      | 24         | 220       | 61.1     | 969      | 61         |
| 3.2     | 174       | 48.3     | 765      | 26         | 231       | 64.2     | 1018     | 65         |
| 3.4     | 183       | 50.7     | 804      | 27         | 243       | 67.4     | 1069     | 69         |
| 3.6     | 192       | 53.3     | 844      | 29         | 255       | 70.8     | 1122     | 72         |
| 3.8     | 201       | 55.8     | 884      | 31         | 267       | 74.2     | 1176     | 75         |
| 4.0     | 210       | 58.3     | 925      | 32         | 280       | 77.8     | 1233     | 78         |

# SIGMA Compact

## DN50-DN300

### Setting and Flow

| Series  |           | Standard |          |            |           |          |          |            |
|---------|-----------|----------|----------|------------|-----------|----------|----------|------------|
| Dim.    | DN250 LF  |          |          |            | DN250 HF  |          |          |            |
| Pre-set | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa |
| 1.0     | 190       | 52.8     | 837      | 10         | 245       | 68.1     | 1079     | 15         |
| 1.2     | 205       | 57.0     | 904      | 10         | 256       | 71.2     | 1129     | 16         |
| 1.4     | 220       | 61.0     | 967      | 11         | 270       | 75.1     | 1190     | 17         |
| 1.6     | 233       | 64.8     | 1027     | 12         | 286       | 79.6     | 1261     | 20         |
| 1.8     | 247       | 68.5     | 1086     | 13         | 305       | 84.7     | 1342     | 22         |
| 2.0     | 260       | 72.2     | 1145     | 15         | 325       | 90.3     | 1431     | 25         |
| 2.2     | 274       | 76.0     | 1205     | 17         | 347       | 96.4     | 1528     | 28         |
| 2.4     | 288       | 80.1     | 1269     | 19         | 371       | 103      | 1632     | 32         |
| 2.6     | 304       | 84.4     | 1338     | 21         | 396       | 110      | 1743     | 36         |
| 2.8     | 321       | 89.2     | 1413     | 23         | 422       | 117      | 1860     | 40         |
| 3.0     | 340       | 94.4     | 1497     | 25         | 450       | 125      | 1981     | 45         |
| 3.2     | 361       | 100      | 1590     | 27         | 479       | 133      | 2107     | 50         |
| 3.4     | 385       | 107      | 1695     | 29         | 508       | 141      | 2237     | 55         |
| 3.6     | 412       | 114      | 1812     | 31         | 538       | 150      | 2370     | 60         |
| 3.8     | 441       | 123      | 1944     | 33         | 569       | 158      | 2505     | 65         |
| 4.0     | 475       | 132      | 2091     | 35         | 600       | 167      | 2642     | 70         |

| Series  |           | Standard |          |            |           |          |          |            |
|---------|-----------|----------|----------|------------|-----------|----------|----------|------------|
| Dim.    | DN300 LF  |          |          |            | DN300 HF  |          |          |            |
| Pre-set | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa | Flow m³/h | Flow l/s | Flow gpm | Min.Δp kPa |
| 1.0     | 190       | 52.8     | 837      | 10         | 245       | 68.1     | 1079     | 15         |
| 1.2     | 205       | 57.0     | 904      | 10         | 256       | 71.2     | 1129     | 16         |
| 1.4     | 220       | 61.0     | 967      | 11         | 270       | 75.1     | 1190     | 17         |
| 1.6     | 233       | 64.8     | 1027     | 12         | 286       | 79.6     | 1261     | 20         |
| 1.8     | 247       | 68.5     | 1086     | 13         | 305       | 84.7     | 1342     | 22         |
| 2.0     | 260       | 72.2     | 1145     | 15         | 325       | 90.3     | 1431     | 25         |
| 2.2     | 274       | 76.0     | 1205     | 17         | 347       | 96.4     | 1528     | 28         |
| 2.4     | 288       | 80.1     | 1269     | 19         | 371       | 103      | 1632     | 32         |
| 2.6     | 304       | 84.4     | 1338     | 21         | 396       | 110      | 1743     | 36         |
| 2.8     | 321       | 89.2     | 1413     | 23         | 422       | 117      | 1860     | 40         |
| 3.0     | 340       | 94.4     | 1497     | 25         | 450       | 125      | 1981     | 45         |
| 3.2     | 361       | 100      | 1590     | 27         | 479       | 133      | 2107     | 50         |
| 3.4     | 385       | 107      | 1695     | 29         | 508       | 141      | 2237     | 55         |
| 3.6     | 412       | 114      | 1812     | 31         | 538       | 150      | 2370     | 60         |
| 3.8     | 441       | 123      | 1944     | 33         | 569       | 158      | 2505     | 65         |
| 4.0     | 475       | 132      | 2091     | 35         | 600       | 167      | 2642     | 70         |

## SIGMA Compact DN50-DN300

### Text for technical specifications

The integrated differential pressure control and the flow setting shall be one combined unit

The flow setting control unit shall be pressure independent

The Dynamic Control Valve shall contain a combined flow setting and differential pressure control bonnet assembly

The valve housing shall be GJL-250 or GJS-400

The valve shall have a spring made of stainless steel, a Diaphragm made of Reinforced EPDM/HNBR and O-rings made of EPDM

The valve shall have flange connections according to EN 1092

The valve shall have a maximum operating differential pressure of 800 kPa (8 Bar)

The valve shall have an external adjustable analogue step less presetting scale from minimum to maximum flow

P/T plugs shall be available

The valve shall be capable of closing against a maximum differential pressure of 800 kPa (8 bar) with a leakage rate at maximum 0,01% of max rated volumetric flow and comply to EN1349 Class IV

Frese A/S assumes no responsibility for errors, if any, in catalogues, brochures, and other printed matter. Frese A/S reserves the right to modify its products without prior notice, including already ordered products, if this does not alter existing specifications. All registered trademarks in this material are the property of Frese A/S. All rights reserved.

Frese A/S  
Tel: +45 58 56 00 00  
info@frese.dk