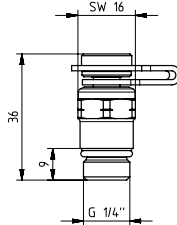


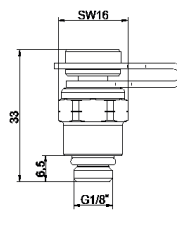
# MEASURING VALVES

Data sheet **0284**, Issue 1023

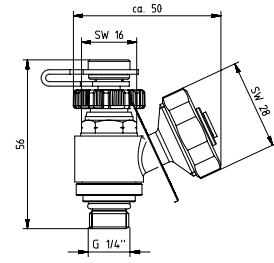
## ☑ Dimensions in mm



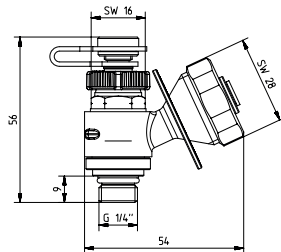
1 0284 01  
1 0284 02  
2 0284 01  
2 0284 02



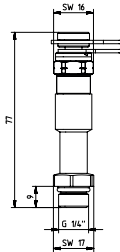
1 0284 05  
1 0284 06  
2 0284 05  
2 0284 06



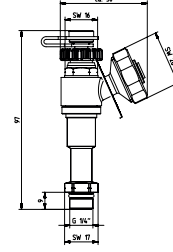
2 0284 20  
1 0284 22  
1 0284 21



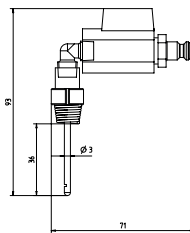
1 0284 03  
1 0284 04



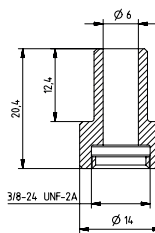
1 0284 11  
1 0284 12



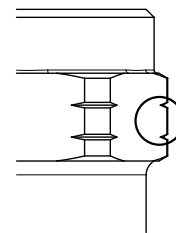
1 0284 23  
1 0284 24



1 0284 00



1 0284 10



2 notches as marks for drinking water

## ☑ Models

- |           |     |                                                                                                                                                                                                                               |
|-----------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 0284 01 | 1/4 | Test points for HERZ-STRÖMAX-Double regulating valves (manufactured from 2004), DZR brass version, blue marked cap (return), for pressure transducer.                                                                         |
| 1 0284 02 | 1/4 | Test points for HERZ-STRÖMAX-Double regulating valves (manufactured from 2004), DZR brass version, red marked cap (flow), for pressure transducer.                                                                            |
| 2 0284 01 | 1/4 | Test points for HERZ-STRÖMAX- <b>MW</b> -Double regulating valves, DZR brass version, blue marked cap (return), for flow computer, valves are marked with two notches ( <b>for drinking water</b> ), for pressure transducer. |
| 2 0284 02 | 1/4 | Test points for HERZ-STRÖMAX- <b>MW</b> -Double regulating valves, DZR brass version, red marked cap (flow), for flow computer, valves are marked with two notches ( <b>for drinking water</b> ), for pressure transducer.    |
| 1 0284 05 | 1/8 | Test point for HERZ combi valve SMART and HERZ-STRÖMAX GN commissioning valves, brass version, blue cap (return), for pressure transducer.                                                                                    |
| 1 0284 06 | 1/8 | Test point for HERZ combi valve SMART and HERZ-STRÖMAX GN commissioning valves, brass version, red cap (supply), for pressure transducer.                                                                                     |
| 2 0284 05 | 1/8 | Test point for HERZ-STRÖMAX <b>GNW</b> commissioning valves, brass version, blue cap (return) for pressure transducer, valves are marked with two notches ( <b>for drinking water</b> ), for pressure transducer.             |
| 2 0284 06 | 1/8 | Test point for HERZ-STRÖMAX <b>GNW</b> commissioning valves, brass version, red cap (supply) for pressure transducer, valves are marked with two notches ( <b>for drinking water</b> ), for pressure transducer.              |

|           |     |                                                                                                                                                                   |
|-----------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 0284 11 | 1/4 | Test points for HERZ-STRÖMAX-Double regulating valves, DZR brass version, blue marked cap (return), extended model for insulated valves, for pressure transducer. |
| 1 0284 12 | 1/4 | Test points for HERZ-STRÖMAX-Double regulating valves, DZR brass version, red marked cap (flow), extended model for insulated valves, for pressure transducer.    |
| 2 0284 20 | 1/4 | Test points with draining function, DZR brass version, green marked cap, with swivel hose connection. Test points for pressure transducer.                        |
| 1 0284 22 | 1/4 | Test points with draining function, DZR brass version, red marked cap, with swivel hose connection. Test points for pressure transducer.                          |
| 1 0284 21 | 1/4 | Test points with draining function, DZR brass version, blue marked cap, with swivel hose connection. Test points for pressure transducer.                         |
| 1 0284 23 | 1/4 | Extended test points, drain function, blue marked cap, for pressure transducer.                                                                                   |
| 1 0284 24 | 1/4 | Extended test points, drain function, red marked cap, for pressure transducer.                                                                                    |
| 1 0284 03 | 1/4 | Test points with capillary connection, DZR brass version, blue marked cap (return), for pressure transducer.                                                      |
| 1 0284 04 | 1/4 | Test points with capillary connection, DZR brass version, red marked cap (flow), for pressure transducer.                                                         |
| 1 0284 00 | 1/4 | Test point adaptors.                                                                                                                                              |
| 1 0284 10 | 1/4 | Extension lead for measuring valves, 1 set = 2 pieces.                                                                                                            |

#### Operating data

##### Heating- and cooling systems 1 0284 0x, 1 0284 1x:

|                             |                                |                                     |
|-----------------------------|--------------------------------|-------------------------------------|
| Max. operation pressure:    | PN25                           | Installation position: any position |
| Min. operation temperature: | 2 °C (water)                   |                                     |
|                             | -20 °C (with frost protection) |                                     |
| Max. operation temperature: | 120 °C (10 bar)                |                                     |

##### Heating- and cooling systems 1 0284 2x:

|                             |                                |                                     |
|-----------------------------|--------------------------------|-------------------------------------|
| Max. operation pressure:    | PN16                           | Installation position: any position |
| Min. operation temperature: | 2 °C (water)                   |                                     |
|                             | -20 °C (with frost protection) |                                     |
| Max. operation temperature: | 120 °C (10 bar)                |                                     |

Water purity in accordance with the OENORM H5195 and VDI 2035 standards. Usage of frost protection: ethylene and propylene glycol 25 - 50 vol. [%].

Warranty claims will be rendered void in the event of non-compliance with this requirement.

#### Materials:

|           |                                 |
|-----------|---------------------------------|
| Body:     | dezincification resistant brass |
| Sealings: | EPDM                            |

#### Operating data

##### Drinking water 2 0284 0x:

|                             |                |                                     |
|-----------------------------|----------------|-------------------------------------|
| Max. operation pressure:    | PN25           | Installation position: any position |
| Min. operation temperature: | 2 °C           | Medium: water                       |
| Max. operation temperature: | 85 °C (10 bar) |                                     |

##### Drinking water 2 0284 20:

|                             |                |                                     |
|-----------------------------|----------------|-------------------------------------|
| Max. operation pressure:    | PN16           | Installation position: any position |
| Min. operation temperature: | 2 °C           | Medium: water                       |
| Max. operation temperature: | 85 °C (10 bar) |                                     |

#### Materials:

|           |                                                                                                                     |
|-----------|---------------------------------------------------------------------------------------------------------------------|
| Body:     | Brass suitable for drinking water hygiene according to the current UBA list (BWGL Metalle) and the current 4MS list |
| Sealings: | physiologically harmless material                                                                                   |

#### Brass

Pursuant to Article 33 of the REACH Regulation (EC No. 1907/2006), we are obliged to point out that the material lead is listed on the SVHC list and that all brass components manufactured in our products exceed 0.1 % (w / w) lead (CAS: 7439-92-1 / EINECS: 231-100-4). Since lead is a component part of an alloy, actual exposure is not possible and therefore no additional information on safe use is necessary.

### ☑ Scope

The measuring valves are used in technical installations with drinking water as well as hot and cold water. They are used for hydraulic balancing in heating or cooling systems, presetting of distribution lines, circuits, heat exchangers, heating and cooling coils.

### Note!

The caps of the measuring valves may only be removed for measuring. During operation, the caps must always be screwed on tightly.

### ☑ Field of application

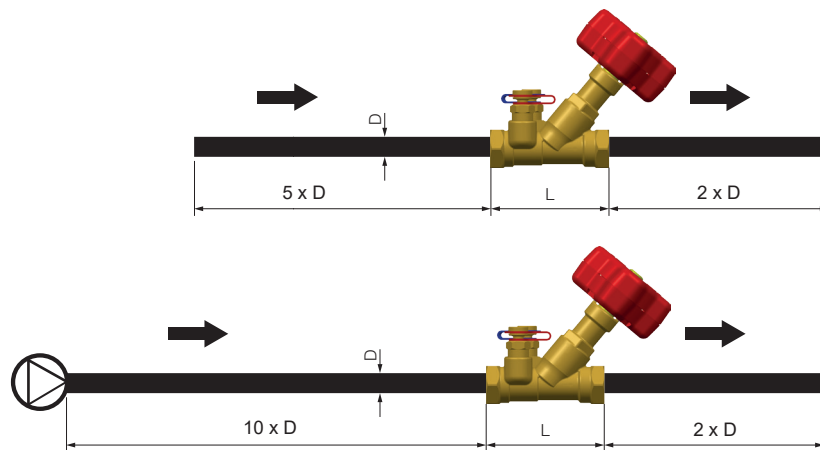
For the measurement of the differential pressure and flow.  
Flow Computer 1 **8900 05** recommended.

### ☑ Installation

There is no sealing material needed, because the measuring valves are o-ring sealed. The installation is by screwing in clockwise, the demounting is counterclockwise. **Maximum torque: 5 Nm.**  
Keys for installation: key width 15 or key width 16 (depending on the version).

### ☑ Measuring

To maintain meaningful measurement results, it is important to observe the calming distances in the inlet and outlet. According to CIBSE Code W double regulating valves must always be installed with a minimum of 5 pipe diameters of straight pipe, without intrusion, upstream of the valve. Downstream of the valve a minimum of 2 pipe diameters of straight pipe are required. If a pump is installed directly before the valve, we recommend 10 pipe diameters of straight pipe, without intrusion, upstream of the valve.



A correction factor needs to be considered in installations with frost protection. The water-glycol mixture has a different (temperature dependent) viscosity than pure water. Therefore, when measurements are done with the flow computer a distorted value is displayed. It is necessary to enter the type of glycol (ethylene glycol, propylene glycol), glycol proportion and medium temperature in the measuring computer.

### ☑ Disposal

The disposal of HERZ measuring valve must not endanger the health or the environment. Local and currently valid legislation must be observed for disposal.

**Note:** All diagrams are indicative in nature and do not claim to be complete. All specifications and statements within this brochure are according to information available at the time of printing and meant for informational purpose only. Herz Armaturen reserves the right to modify and change products as well as its technical specifications and/or its functioning according to technological progress and requirements. It is understood that all images of Herz products are symbolic representations and therefore may visually differ from the actual product. Colours may differ due to printing technology used. In case of any further questions don't hesitate to contact your closest HERZ Branch-office.