

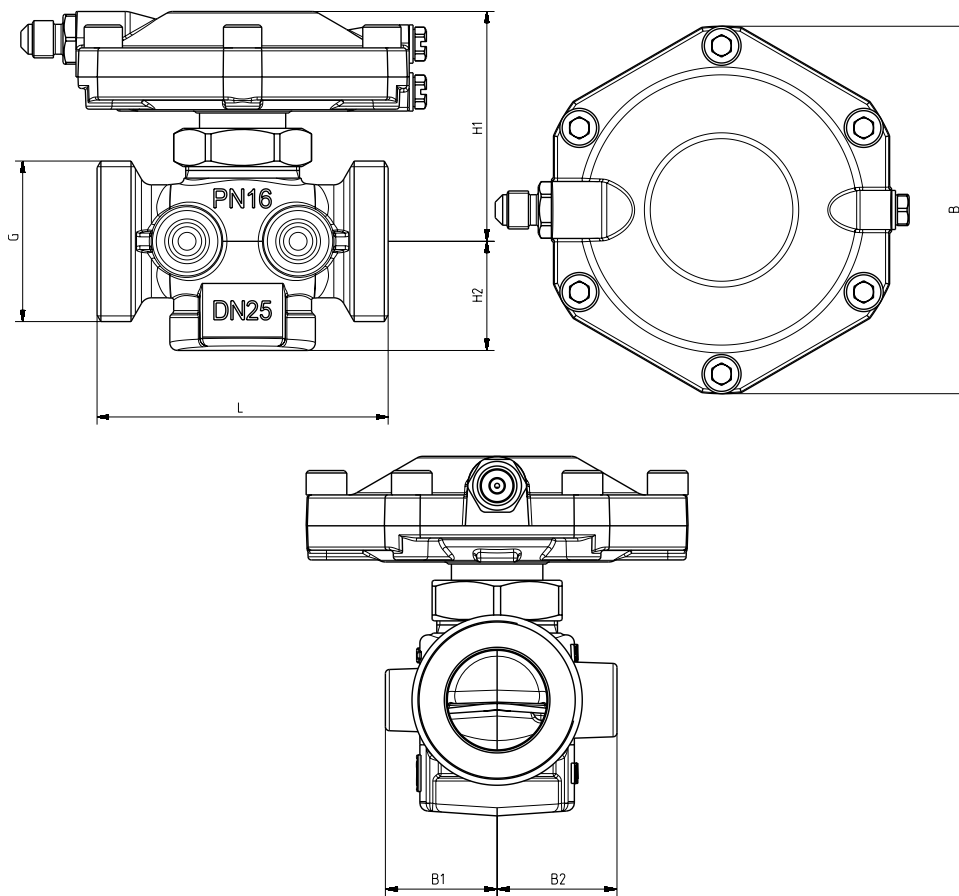
HERZ Regulating valve 4002

Differential pressure controller

Standard specification sheet

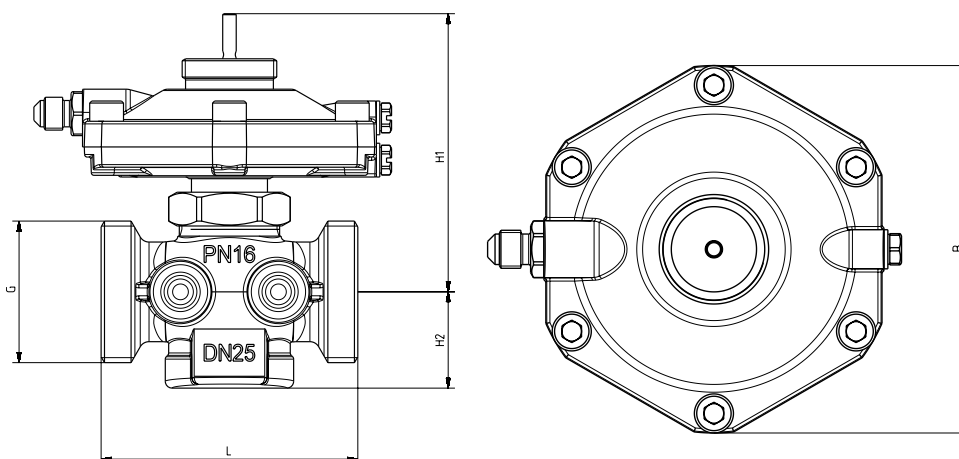
4002_2X-8X

Issue 1010



Dimensions in mm

	DN	G	L	H1	H2	B	B1	B2
1 4002 21	15	3/4 G	66	59	28	94	28.5	28.5
1 4002 22	20	1 G	76	60	28.5	94	27.5	29.5
1 4002 23	25	1¼ with flat seal	76	60	28.5	94	27.5	29.5
1 4002 24	32	1½ with flat seal	114	76	46	94	–	–
1 4002 25	40	1¾ with flat seal	132	86	55	94	–	–
1 4002 26	50	2¾ with flat seal	140	86	55	94	–	–

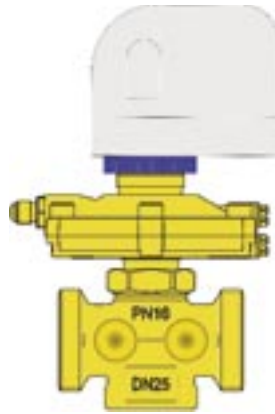
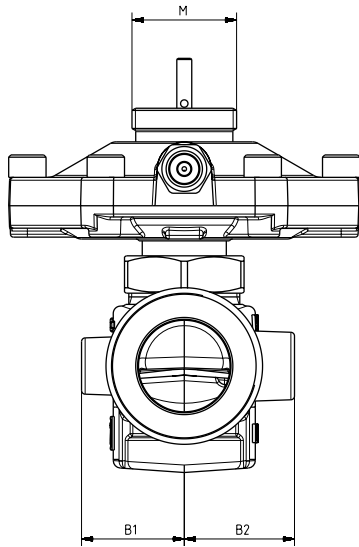


We reserve the right to make changes resulting from HERZ's ongoing development policy.

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	DN	G	L	H1	H2	B	B1	B2	M
1 4002 81	15	3/4 G	66	81.35	28	94	25.5	28.5	28 x 1.5
1 4002 82	20	1 G	76	82.35	28.5	94	27.5	29.5	28 x 1.5
1 4002 83	25	1¼ with flat seal	76	82.35	28.5	94	27.5	29.5	28 x 1.5
1 4002 84	32	1½ with flat seal	114	98.35	46.5	94	–	–	28 x 1.5
1 4002 85	40	1¾ with flat seal	132	108.35	55	94	–	–	28 x 1.5
1 4002 86	50	2¾ with flat seal	140	108.35	55	94	–	–	28 x 1.5

Maximum operating pressure 16 bar
 Test pressure
 Maximum differential pressure on the body 2 bar
 Minimum operating temperature 2 °C (pure water)
 Minimum operating temperature -20 °C (frost protection)
 Maximum operating temperature 120 °C

Technical data

The differential pressure controller is a straight-version linear controller and works without auxiliary power. The fixed nominal differential pressure is 23 kPa.

A capillary (1000 mm) is included and should be connected to the circuit regulating valve in the flow.

Application

Body: DZR brass
 Membranes and O-rings: EPDM

Materials

Water purity in accordance with the ÖNORM H 5195 and VDI 2035 standards

Ethylene and propylene glycol can be mixed to a ratio of 15 - 45 vol. [%].

DN 15	2,66 m³/h	DN 32	9,48 m³/h
DN 20	4,36 m³/h	DN 40	14,95 m³/h
DN 25	5,38 m³/h	DN 50	14,95 m³/h

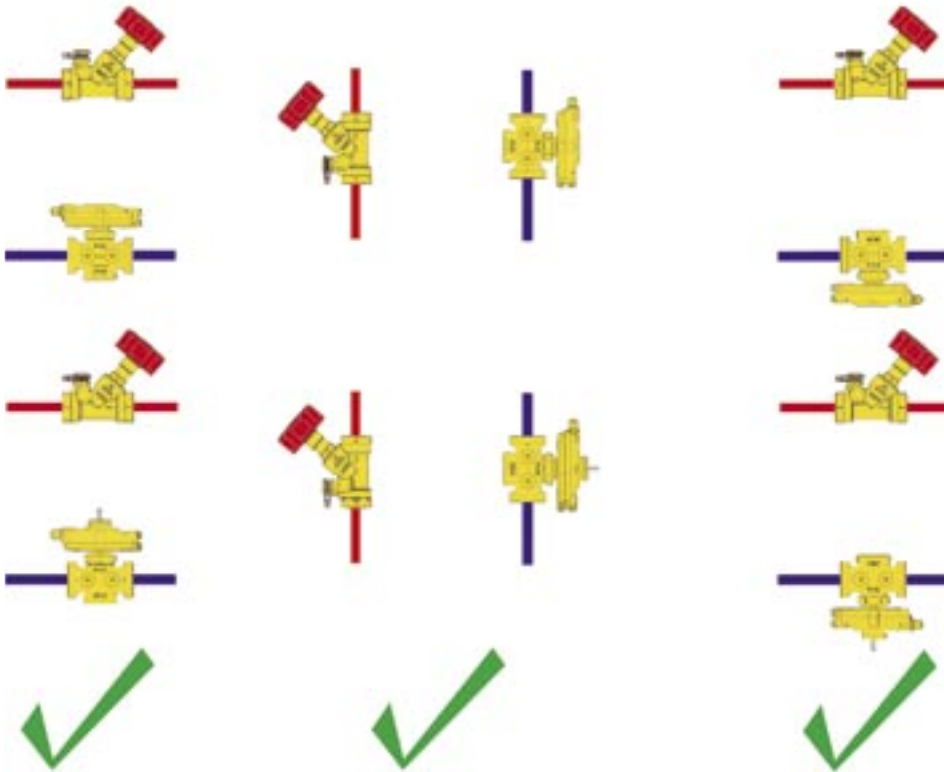
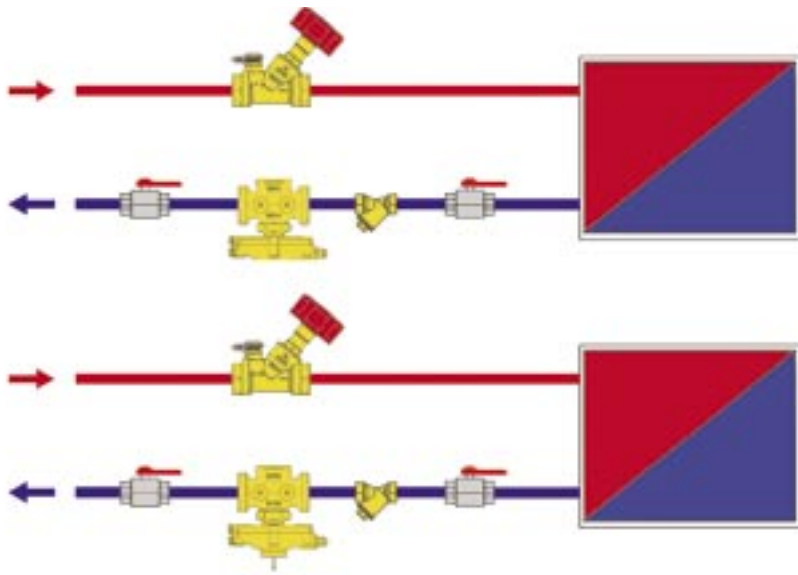
kvs-values

The differential pressure controller (4002 8x) can be fitted with an actuator (7709).

Actuator for 1 4002 8x

The valve is fitted in the return flow in any orientation. The arrow on the valve body should align with the direction of flow.

It is recommended that an isolation valve is fitted both upstream and downstream of the differential pressure controller.



Installation

Accessories and spare parts

- 4117** HERZ-STRÖMAX circuit control valves, angle version
- 4217** HERZ- STRÖMAX circuit control valves, straight version
- 4017** HERZ- STRÖMAX circuit control valves with integrated metering orifice plate
- 4125** HERZ shut-off valves, angle version
- 4115** HERZ shut-off valves, angle version
- 4215** HERZ shut-off valves, straight version, also variants with male threads. For details please refer to the corresponding data sheets.
- 1 **0284** 01 test point for HERZ circuit control valve, blue cap (return)
- 1 **0284** 02 test point for HERZ circuit control valve, red cap (flow)
- 1 **0284** 11 test point for HERZ circuit control valve, extended model, blue cap (return)
- 1 **0284** 12 test point for HERZ circuit control valve, extended model, red cap (flow)
- 1 **0284** 21 HERZ test point with draining function, blue cap (return)
- 1 **0284** 22 HERZ test point with draining function, red cap (flow)
- 1 **0284** 00 test point adapter set
- 1 **7710** 00 HERZ actuating drive for two-point or pulse control (230V/50Hz)
- 1 **7710** 01 HERZ actuating drive for two-point or pulse control (24V)
- 1 **0273** 09 screw plug 1/4
- 1 **7709** xx HERZ actuating drive for two-point or pulse control (24V)
- 1 **7711** 10 HERZ-Aktuating drivers for 2-point or pulse control; NC (230V/50Hz)
- 1 **7711** 11:00 HERZ- Aktuating drivers for 2-point or pulse control; NO (230V/50Hz)
- 1 **7711** 12 HERZ- Aktuating drivers for 2-point or pulse control; NC (24V)
- 1 **7711** 13 HERZ- Aktuating drivers for 2-point or pulse control; NO (24V)

Junction press screw fitting		Order number
with flat seal	14 x 2 - G 3/4	P 7014 41
	16 x 2 - G 3/4	P 7016 41
	18 x 2 - G 3/4	P 7018 41
	20 x 2 - G 3/4	P 7020 41
	16 x 2 - G 1	P 7016 42
	18 x 2 - G 1	P 7018 42
	20 x 2 - G 1	P 7020 42
	26 x 3 - G 1	P 7026 42
	26 x 3 - G 1¼	P 7026 43
	32 x 3 - G 1¼	P 7032 43
	40 x 3,5 - G 1¼	P 7040 43
	32 x 3 - G 1½	P 7032 44
	40 x 3.5 - G 1½	P 7040 44
	50 x 4 - G 1½	P 7050 44
	with cone seal	14 x 2 - G 3/4
16 x 2 - G 3/4		P 7016 81
18 x 2 - G 3/4		P 7020 81
20 x 2 - G 3/4		P 7020 81

Connections

Pipe		8	10	12	14	15	16	18	22
Valve		DN 15	DN 15	DN 15	DN 15	DN 15	DN 15	DN 15	DN 20
Nut G		3/4	3/4	3/4	3/4	3/4	3/4	3/4	1
Connection	with metal-lic seal	1 6274 18	1 6274 00	1 6274 01	1 6274 02	1 6274 03	1 6274 04	---	1 6273 01
Connection	with soft seal	---	---	1 6276 12	1 6276 14	1 6276 15	1 6276 16	1 6276 18	

Pipe connections (with cone seal) for metal pipes

Compression union for calibrated soft steel and copper pipes (for details please refer to the corresponding data sheets)

Pipe	10 x 1.3	12 x 2	14 x 2	15 x 2.5	16 x 2	16 x 2.2	17 x 2	17 x 2.5	18 x 2.5	18 x 2
Valve	DN 15		DN 15	DN 15	DN 15	DN 15	DN 15	DN 15	DN 15	DN 15
Nut G	3/4		3/4	3/4	3/4	3/4	3/4	3/4		1
Connection	1 6098 18		1 6098 02	1 6098 16	1 6098 03	1 6098 12	1 6098 04	1 6098 05	1 6098 06	1 6098 07

Pipe connections (with cone seal) for plastic pipes

Pipe	20 x 2	20 x 3.5	20 x 2.5	25 x 3.5	26 x 3
Valve	DN 15	DN 15	DN 15		
Nut G	3/4	3/4	3/4		
Connection	1 6098 08	1 6098 10	1 6098 11		
Valve	DN 15			DN 15	DN 15
Nut G				1	1
Connection	1 6198 12			1 6098 00	1 6098 01

Plastic pipe connections for PE-X, PB and aluminium composite pipes (for details please refer to the corresponding data sheets)

When installing soft steel or copper pipes with a pipe wall of 1 mm or less with compression unions, we recommend the use of support sleeves (order no.: 1 **0674** xx). When installing plastic pipes, suitable calibration tools are needed. Please refer to our instruction manual. For proper installation use silicone oil to lubricate the thread of the locking nut or olive screw as well as the olive.

- 1 **6220** .. Iron pipe connection, consisting of nut, seal and pipe nipple with male pipe thread
- 1 **6236** .. Soldering connection, consisting of nut, seal and soldering nipple
- 1 **6240** .. Welding connection, consisting of nut, seal and welding nipple
- 1 **6210** .. Iron pipe connection consisting of nut, seal and pipe nipple with male pipe thread
- 1 **6235** .. Soldering connection, consisting of nut, seal and soldering nipple

Connection elements

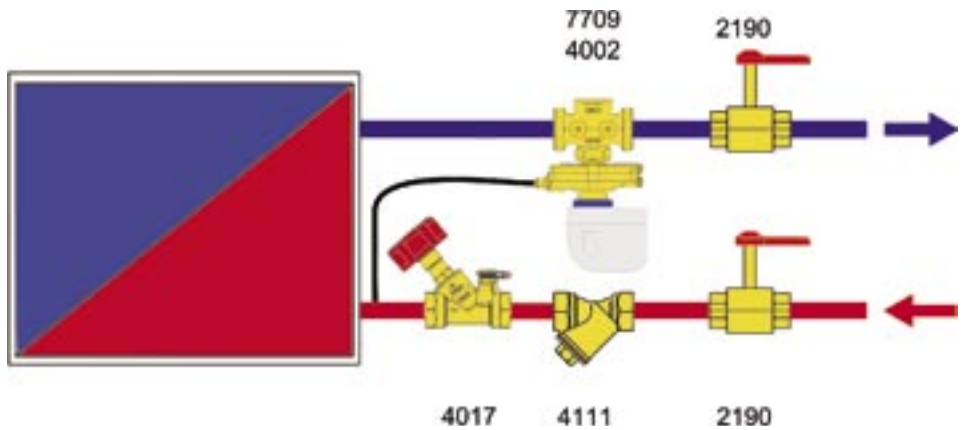
Considering how the fitting is used, clean workmanship is required.
A HERZ strainer (**4111**) should be fitted to prevent impurities.

Tips

Two test points are fitted on the same side of the valve and factory sealed.

Thanks to this arrangement they are easily accessible and measurement devices can be quickly fitted, no matter in what position the flow rate controller has been installed.

Test points



Application examples

Please note: all diagrams are indicative in nature and do not claim to be complete.

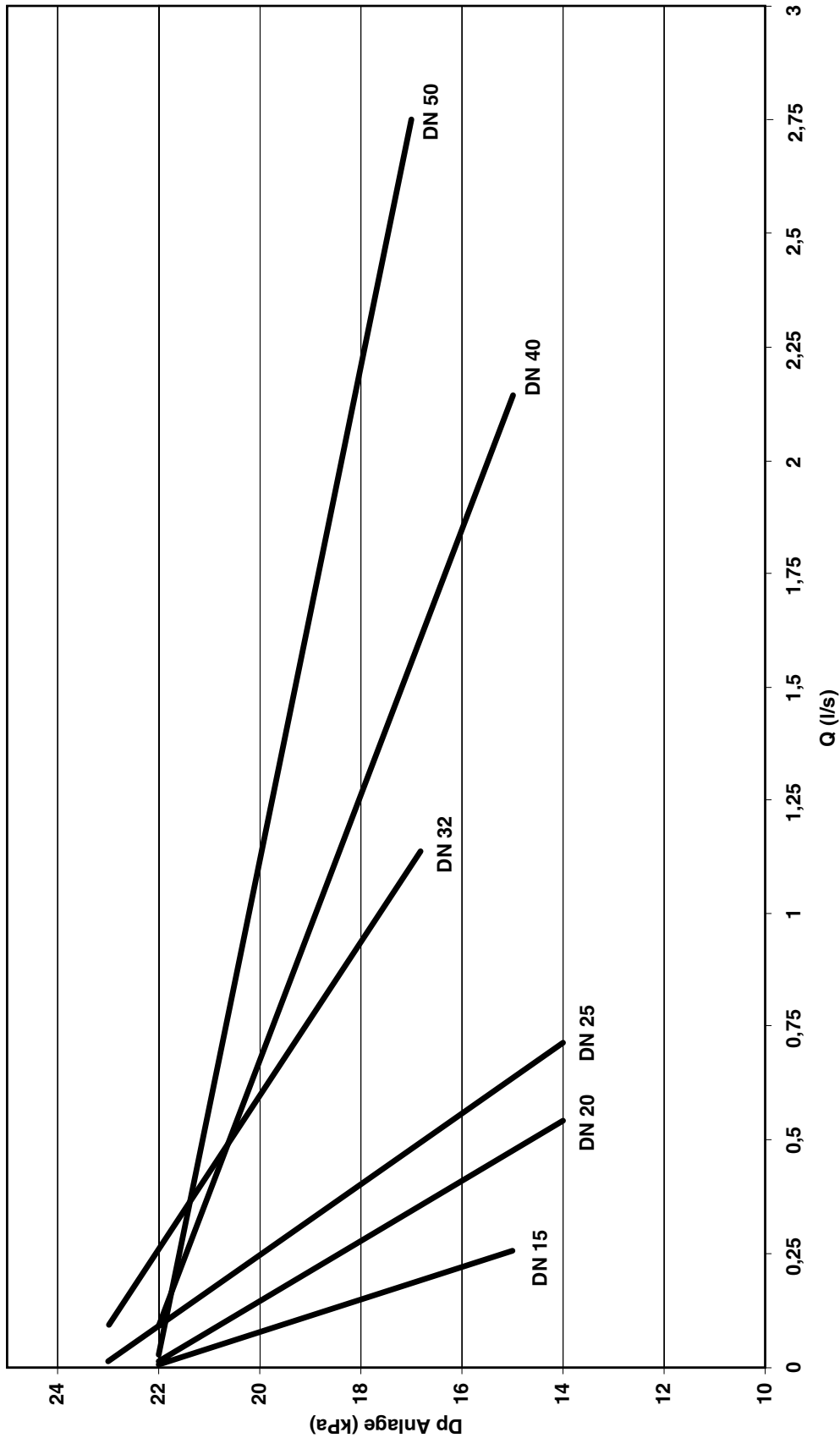
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HERZ standard diagram

Differential pressure controller

Order no. 1 **4002 2X**; 1 **4002 8X**

Dim. DN 15 - DN 50



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