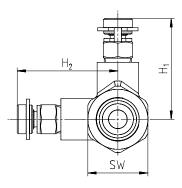


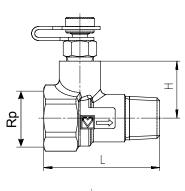
HERZ metering station

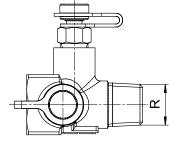
Data sheet for 4000, Issue 0321

☑ Dimensions in mm









☑ Order number

Order number	DN	R	Rp	L	Н	H ₁ =H ₂	SW	k _{vs}
1 4000 11	15 LF	1/2	1/2	56	27,5	52	29/6 Kt.	0,55
1 4000 21	15 MF	1/2	1/2	56	27,5	52	29/6 Kt.	1,1
1 4000 01	15	1/2	1/2	56	27,5	52	29/6 Kt.	2,20
1 4000 02	20	3/4	3/4	58	30	54,5	36/6 Kt.	4,25
1 4000 03	25	1	1	64	33	57,5	43/6 Kt.	8,6
1 4000 04	32	5/4	5/4	72	38,5	63	53/8 Kt.	15,9
1 4000 05	40	6/4	6/4	72	40	64,5	61/8 Kt.	23,7
1 4000 06	50	2	2	80	45	69,5	72/8 Kt.	48,0

☑ Materials

Body brass, CC770S Test point brass, CW602N

☑ Technical Data

Max. operating pressure PN 20 bar Min. operating temperature -20 °C

Max. operating temperature 130 °C (up to DN32), 110 °C (from DN40)

Medium:

Water purity in accordance with the OeNORM H5195 and VDI 2035 standards. Ethylene and propylene glycol can be mixed to a ratio of 25 - 50 vol. %. Please refer to manufacturers documentation when using ethylene glycol products for frost and corrosion protection. HERZ metering stations are not suitable for usage of agressive medium (such as: acids, alkalis, combustible and explosive gases), because it can destroy sealing components.

Model

The metering station made of DZR brass has two measuring valves. According to EN 10226, the inlet has an internal thread Rp and the outlet an external thread R.



☑ Application

HERZ metering stations are installed in the circuit of water heating and cooling systems and enable the hydraulic balancing of the circuits with one another.

The metering stations can be used in the supply line as well as in the return line.

They are either installed closely connected to a HERZ commissioning valve to form a complete set or used in connection with a HERZ shutoff valve. The circuit is adjusted by setting the commissioning valve while measuring the pressure loss on the metering station.

☑ Advantages

- Easy to handle through the usage of only one characteristic curve of the metering station.
- Can be installed separately e.g. as a constant metering station.
- Flow characteristics are stored in the HERZ measuring computers, order number 1 8900 05.

☑ HERZ connection adapters for plastic, copper and steel pipes

The metering station can optionally be connected to a threaded pipe or used with a calibrated copper pipe compression adapter. Compression adapters must be ordered separately. HERZ compression adapters for copper and steel pipes, allowable temperature and pressure ratings according to EN 1254-2 1998 Table 5.

The metering stations DN 15 and DN 20 can be used in systems with steel and copper pipes. HERZ connections are mounted on the special sleeves.

Pipe diameter mm

	12	14	15	15 x 1	18	18
Valve DN		15		15	20	20
Connection	1 6292 12	1 6292 14	1 6292 01	1 6294 01	1 6292 02	1 6276 18

For HERZ plastic pipe connections are following technical parameter applied: max. operating temperature 95 °C, max. operating pressure 10 bar, if approved by the pipe manufacturer.

Ammonia contained in hemp can damage brass valve bodies, EPDM gaskets can be affected by mineral oils lubricants and thus lead to failure of the EPDM seals. Please refer to manufacturers documentation when using ethylene glycol products for frost and corrosion protection.

1 8900 05 HERZ-Measuring computer

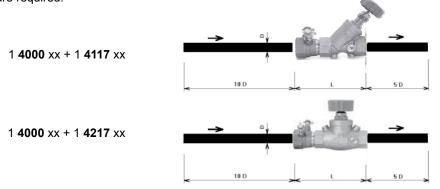
☑ Spare parts

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 (supply)

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 (supply)

Measuring

Fixed orifice double regulating valves must always be installed with a minimum of 10 pipe diameters of straight pipe, without intrusion, upstream of the metering station. Downstream of the valve a minimum of 5 pipe diameters of straight pipe are required.



Brass

HERZ uses top-quality brass that responds to the latest European norms EN 12164 and EN 12165. 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.

☑ Disposal instruction

The disposal of HERZ metering station must not endanger the health or the environment. National legal regulations for proper disposal of the HERZ metering station have to be followed.



HERZ	standard diagram	HERZ Metering station						
Order	Nr.: 1 4000 11	Dim. DN 15 LF						
30 -								
20								
10 -								
8								
6								
4								
2		Kvs = 0.55						
P 0.8								
o AP Signal - kPa		isign modifications						
	0.01 0.02 Flowrate - I/s ->	0.03 0.04 0.05 0.08 0.1						



Order Nr.: 1 4000 21 Dim. DN 15 MF 30 10 8 4 4 2 Kvs = 1,1 0,01 Flowrate - 1/s Flowrate - 1/s Dim. DN 15 MF	HERZ standard diagram	HERZ Metering station							
20	Order Nr.: 1 4000 21	Dim. DN 15 MF							
20									
20									
20	30								
10									
8	20								
8									
8									
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A									
2 Kvs = 1.1	°								
2 Kvs = 1.1									
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1 - QX - Q		Kvs = 1.1							
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0.01 0.02 0.03 0.04 0.05 0.06 0.08 0.1 0.2 Flowrate - I/s	0.4								
	0.01 0.02 0.03 (Flowrate - I/s ->	0.04 0.05 0.06 0.08 0.1 0.2							



HERZ	standard diagram	HERZ Metering station						
Order	Nr.: 1 4000 01	Dim. DN 15						
30 —								
20 -								
10 —								
8 -								
6 -								
4 -								
2 -		Kvs = 2.2						
1 -								
- 8.0 -		w w						
Signa		odification						
O AP Signal - kPa		e design m						
0.	.03 0.04 0.05 0.06 0.08 Flowrate - I/s	0.1 0.2 0.3 0.3 Herz reserve the right to make design modifications						



HERZ standard diagram								HERZ Metering station													
Order Nr.: 1 4000 02							Dim. DN 20														
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						/															
† 1 –																				L	
0.8																				-	
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Signo			/																		modificatic
o ∆P Signal - kPa		1																			Herz reserve the right to make design modifications
0	.06 Flow	0.	08	0.	1				0	.2			0.3		0.4	().5	0.6	0	7	ight to mal
	Flow	rate	- 1/9	-	→																serve the r
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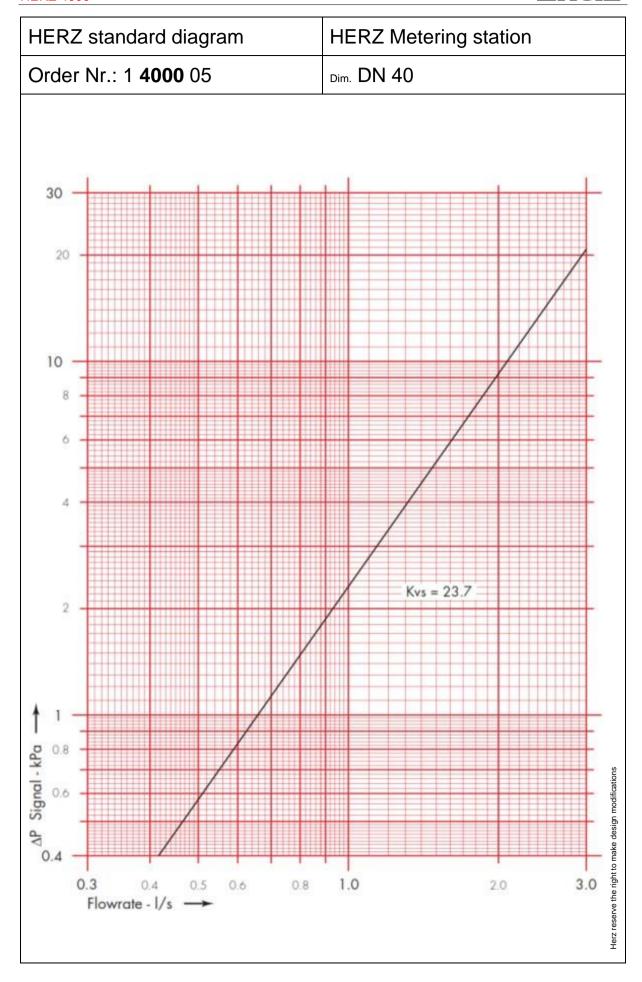


HERZ standard diagram						HERZ Metering station						
Order Nr.: 1 4000 03					Dim.	Dim. DN 25						
30 —												
20 -												
											/	
10 -												
8 -									/			
6 -								/				
4												
2 -							Kvs =	8.6				
					/							
				/								
1 -												
B 0.8												
o.o .												
AP Signal - kPa												1.0
0.4 -			00		0.2	0.					0	10
	Flowrate	-1/s →	0.2		0.3	0.4	0.	3 (0.6	0.	ō	1.0



ERZ	standard d	iagram	HEF	HERZ Metering station						
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20								_		
						/				
10										
8										
-										
6										
				,						
4										
+										
				K	s = 15.9					
2								-		
1 -										
0.8										
0.6										
0.8										
0.3	2 0.3	0.4 0.5	0.6	0.8	1.0		2.	0		
F	2 0.3 Flowrate - I/s	→								







HERZ	standard diagram	HERZ Metering station							
Order	Nr.: 1 4000 06	Dim. DN 50							
30 —									
20 -									
10 -									
8 -									
6 -									
4 -									
2 -		Kvs = 48.0							
1 -									
O AP Signal - kPa		odifications							
S d∇		e design m							
	0.7 0.8 1.0 Flowrate - I/s →	30 30 40 90 90 90 Herz reserve the night to make design modifications							