Metering Stations PN 25 / PN 16

made of brass, cast iron or stainless steel

DN 15...800

Metering stations are installed in the pipelines of hot water central heating systems as well as cooling systems and enable the hydronic balancing of the pipelines with each other. It can be used both in the supply and the return pipe. They are installed either upstream or downstream of a double regulating valve or a shutoff valve or a butterfly valve. In conjunction with Oventrop valves, they can be installed tightly coupled to a double regulating valve or shutoff valve to form a complete set.

Balancing of the pipeline is done by adjusting the double regulating valve during pressure loss measurement at the metering station. This means that the change in flow rate values is independent of the presetting values of the valve, so that the flow rate can be read directly when the presetting is changed. For example, when using the Oventrop OV-DMC 3 measuring system.

Metering stations are available in threaded or intermediate flange versions and are equipped with Classic measuring valves.

Features

+ Ease of use
+ Flow determination by differential pressure measurement
+ Flow characteristic lines stored in the Oventrop OV-DMC 3 measuring system

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Product Details

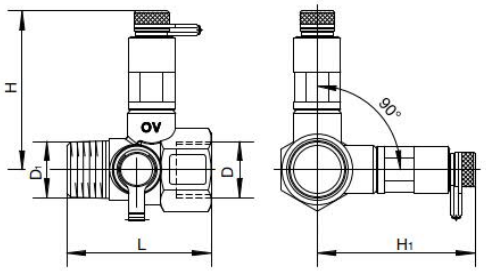
Metering Stations PN 25, DN 15...50

made of brass with internal thread/external thread according to EN 10226

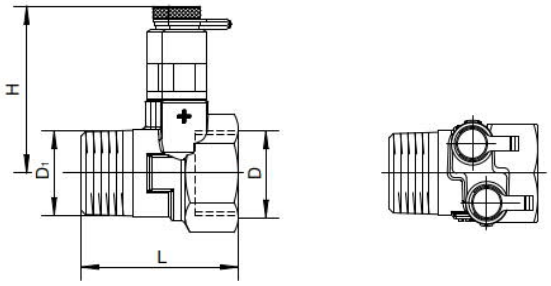
Technical Data

Nominal sizes	DN 15...50
Operating temperature	-20...150 °C
Operating pressure	25 bar / PN 25
Medium	Heating or cooling water according to VDI 2035 or ÖNORM 5195 Water-glycol mixture with max. 50 % glycol content
Kvs values	0.55...48

Dimensions and Item Numbers



DN 15...20



DN 25...50

DN	Kvs	D	D1	L	H	H1	Item No.
15 LF	0.55	Rp ½	R ½	54	60	60	1060644
15 MF	1.20	Rp ½	R ½	54	60	60	1060634
15	2.20	Rp ½	R ½	54	60	60	1060604
20	4.25	Rp ¾	R ¾	55	62	62	1060606
25	8.60	Rp 1	R 1	62	66	—	1060608
32	15.9	Rp 1 ¼	R 1 ¼	69	70.5	—	1060610
40	23.7	Rp 1 ½	R 1 ½	69	76	—	1060612
50	48.0	Rp 2	R 2	80	81	—	1060616

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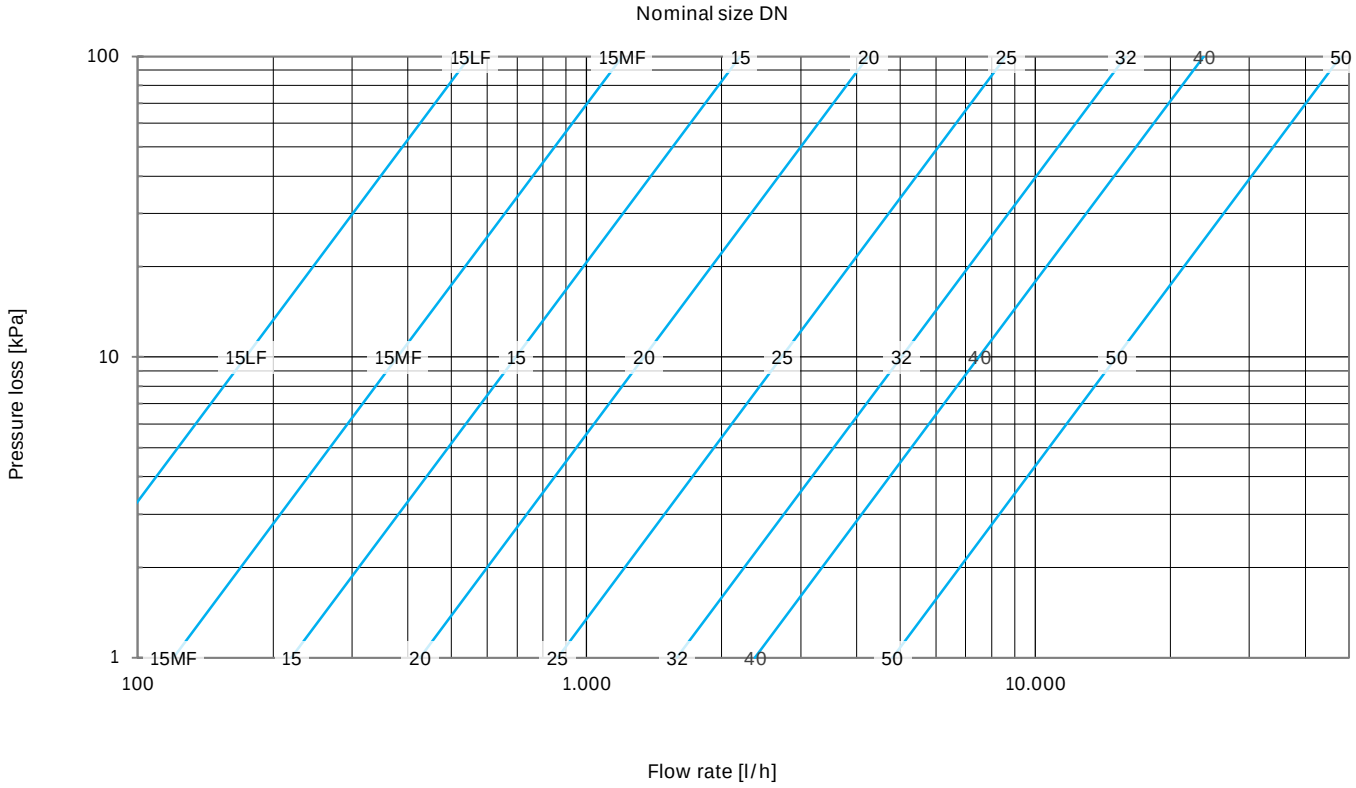
Metering stations PN 25, DN 15...50 made of brass with internal thread/external thread according to EN 10226

Flow chart



Kvs values

Nominal size	DN **15** LF	DN **15** MF	DN **15**	DN **20**	DN **25**	DN **32**	DN **40**	DN **50**
Kvs value	0.55	1.20	2.20	4.25	8.60	15.9	23.7	48.0

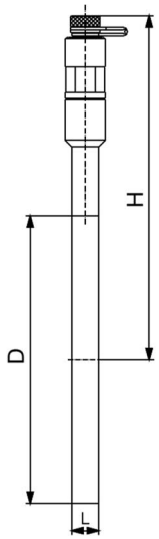
Metering stations PN 16, DN 65...800

made of stainless steel for flanges according to EN 1092 PN 16

Technical Data

Nominal sizes	DN 65...800
Operating temperature	-20...150 °C
Operating pressure	16 bar / PN 16
Medium	Heating or cooling water according to VDI 2035 or ÖNORM 5195 Water-glycol mixtures with max. 50 % glycol content
Kvs values	102...14,000

Dimensions and Item Numbers



DN	Kvs	L	D	H	Item no.
65	102	12	127	201	1060751
80	120	12	142	208	1060752
100	234	12	162	218	1060753
125	335	12	192	233	1060754
150	522	12	218	246	1060755
200	780	12	273	274	1060756
250	1,197	12	329	302	1060757
300	1,810	12	384	330	1060758
350	2,050	12	444	409	1060759
400	2,650	12	495	435	1060760
450	3,400	12	555	465	1060761
500	4,200	12	617	496	1060762
600	6,250	12	734	554	1060763
700	10,690	12	804	590	1060764
800	14,000	12	911	643	1060765

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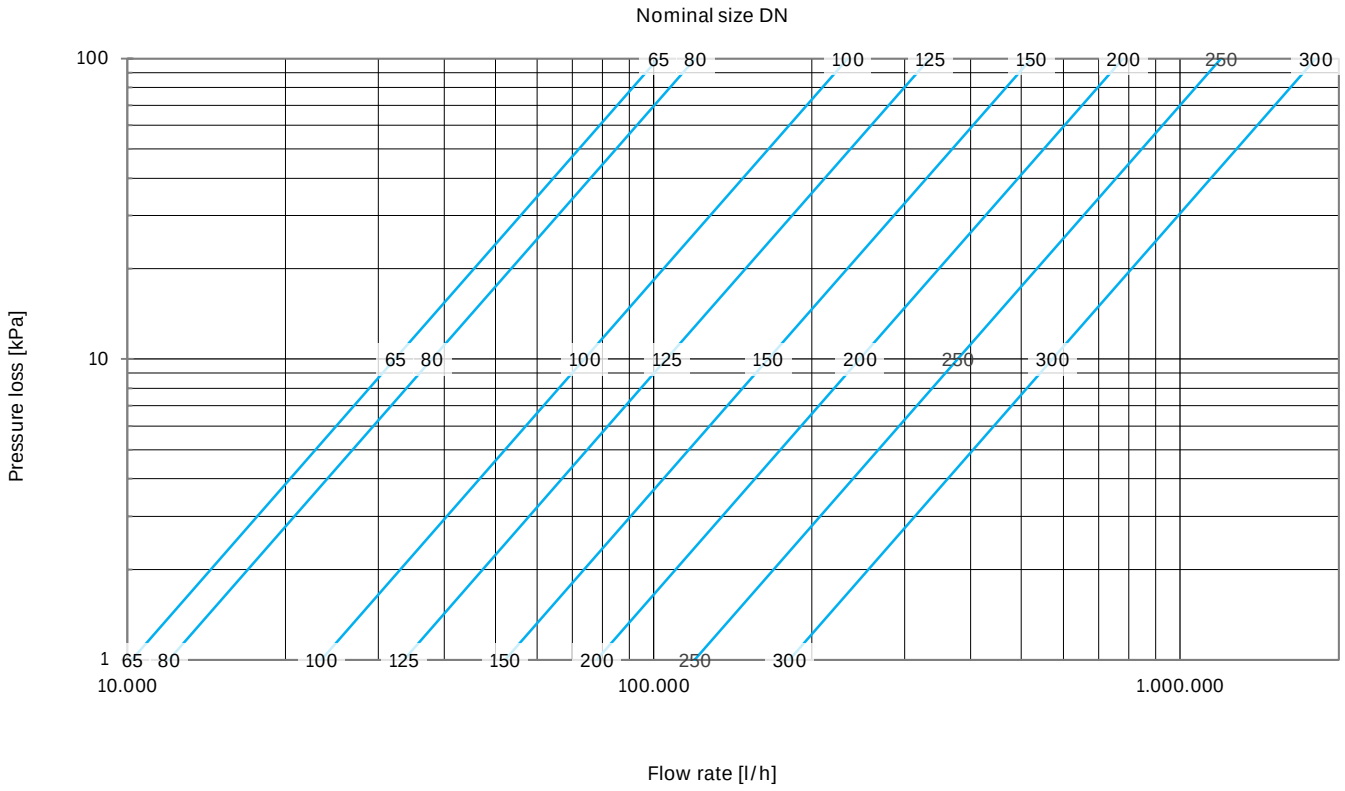
Metering stations PN 16, DN 65...800 made of stainless steel for flanges according to EN 1092 PN 16

Flow chart DN 65...300

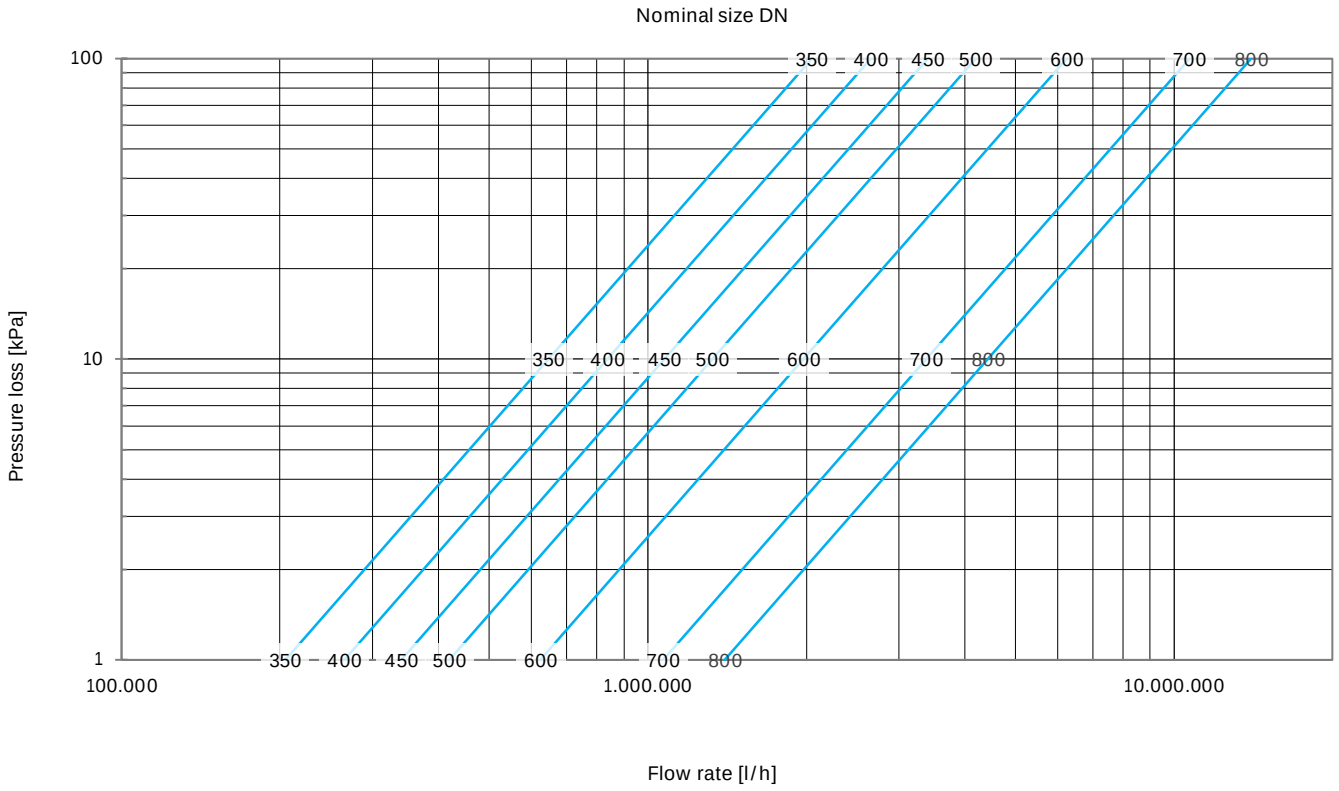


Kvs values DN 65...300

Nominal size	DN **65**	DN **80**	DN **100**	DN **125**	DN **150**	DN **200**	DN **250**	DN **300**
Kvs value	102	120	234	335	522	780	1,197	1,810

Metering stations PN 16, DN 65...800 made of stainless steel for flanges according to EN 1092 PN 16

Flow chart DN 350...800



Kvs values DN 350...800

Nominal size	DN **350**	DN **400**	DN **450**	DN **500**	DN **600**	DN **700**	DN **800**
Kvs value	2,050	2,650	3,400	4,200	6,250	10,690	14,000

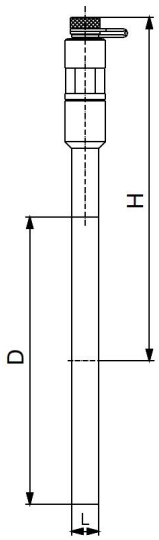
Metering stations PN 16, DN 65...300

made of cast iron for flanges according to EN 1092 PN 16

Technical Data

Nominal sizes	DN 65...300
Operating temperature	-10...120 °C
Operating pressure	16 bar / PN 16
Medium	Heating and cooling water according to VDI 2035 or ÖNORM 5195 Water-glycol mixtures with max. 50 % glycol content
Kvs values	93...2,400

Dimensions and Item Numbers



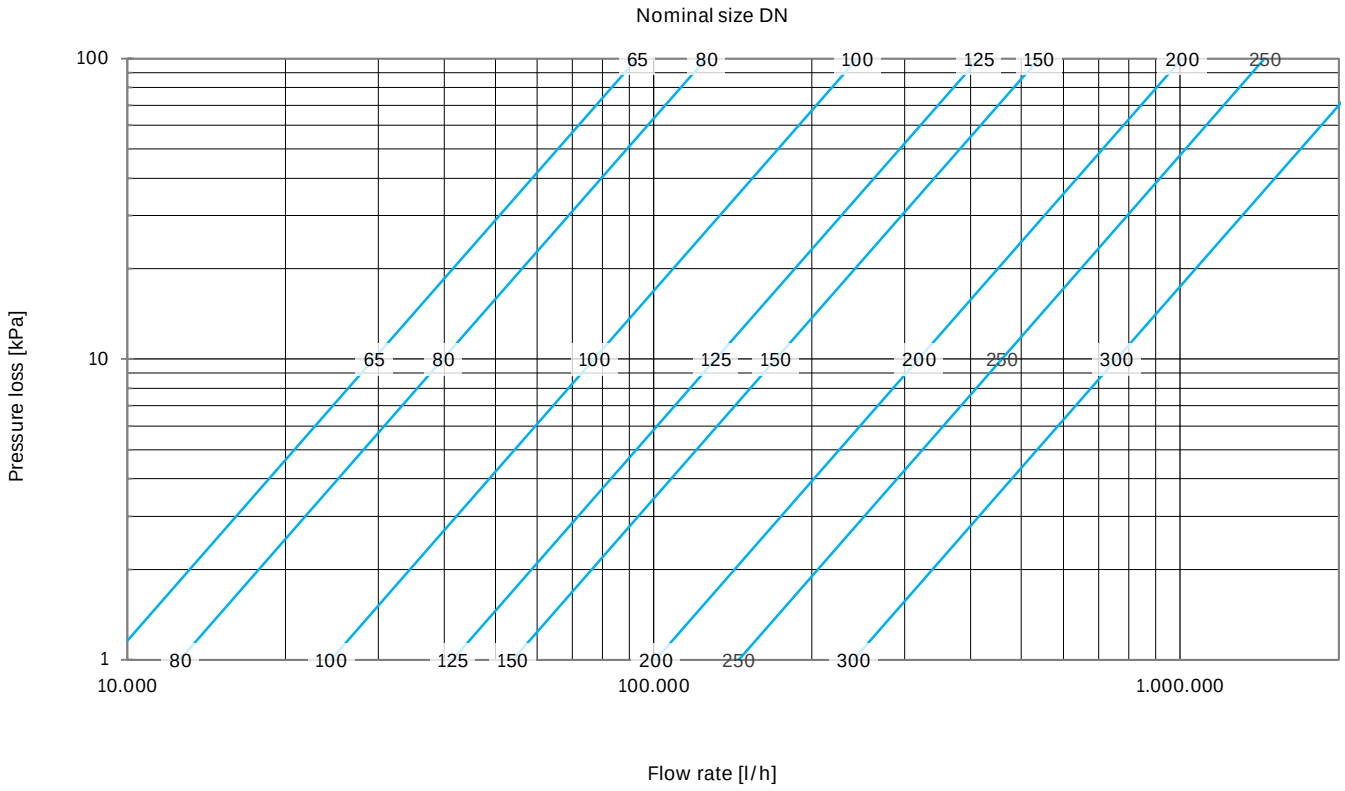
DN	Kvs	L	D	H	Item no.
65	93	20	127	127	1060771
80	126	20	142	134	1060772
100	244	20	162	144	1060773
125	415	20	192	159	1060774
150	540	20	218	172	1060775
200	1,020	20	273	200	1060776
250	1,450	20	329	228	1060777
300	2,400	20	384	255	1060778

Measuring valves with extension

	Length	Suitable for	Item no.
2 measuring valves G ¼ with extension for cast iron metering stations for intermediate flanges	L = 80 mm	Item no. 1060771...78	1688291

Metering stations PN 16, DN 65...300 made of cast iron for flanges according to EN 1092 PN 16

Flow chart



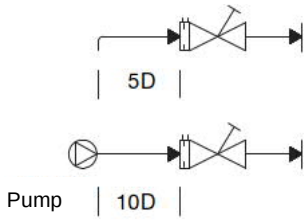
Kvs values

Nominal size	DN 65	DN 80	DN 100	DN 125	DN 150	DN 200	DN 250	DN 300
Kvs value	93	126	244	415	540	1,010	1,450	2,400

Installation instructions

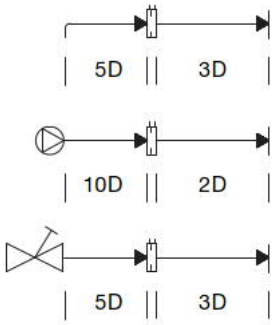
We recommend installing a straight pipe with a minimum length of 5 times the diameter at the inlet of the metering station without any other elements between the metering station and the downstream fitting. When installing, ensure that the metering stations are aligned centrically to the adjacent flange axes.

Calming sections



D = Inner pipe diameter

Recommended calming sections for installation directly upstream of an Oventrop double regulating valve



Recommended calming sections for installation upstream of other components

Accessories

OV-DMC 3		Suitable for	Item no.
	System for flow measurement at valves and for regulation of heating and cooling systems. For use with all Oventrop products equipped with Classic or Eco measuring valves or HydroPort auxiliary valves: HydroControl, HydroCom, Cocon, Hycocon and metering stations. With interfaces for communication with commercially available smartphones and tablets using the Oventrop app for convenient measuring and logging. The data determined with the OVplan and OVselect calculation programmes can be accessed. After entering the valve data and the desired flow rate, a calculation of the presetting for Oventrop double regulating valves is possible. The permanent recording of differential pressure and flow rate is also possible. The optional connection of two temperature sensors, for example for supply and return, enables direct performance calculation. The OV-DMC 3 is supplied in a sturdy case with all necessary adapters for connection to Oventrop valves. Smartphone or tablet are not included in the scope of delivery.	All variants, all nominal sizes	1069278

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