

MDFO

Flow measuring orifice



TA

Pressurisation & Water Quality › Balancing & Control › Thermostatic Control

ENGINEERING ADVANTAGE

Flow measuring orifice with self-sealed measuring points.

> **Self-sealing measuring points**

For simple, accurate balancing.

> **Stainless steel**

Guarantees a longer lifetime.



> Technical description

Application:

Heating and cooling systems
Tapwater systems

Function:

Measuring

Dimensions:

DN 20-900

Pressure class:

PN 16 (DN 20-900)
PN 25 (DN 65-300)
PN 40 (DN 65-450)

Temperature:

Max. working temperature: 120°C
Min. working temperature: -20°C

Material:

Fixed orifice: Stainless steel X3CrNiMo17-13-3 (No. 1.4436 according to EN 10028-7 or EN 10272 (BS 970 316/S16)
Measuring points: AMETAL®
Sealing (measuring points): EPDM

AMETAL® is the dezincification resistant alloy of TA.

Marking:

TA, MDFO, DN, PN, Charge No, flow direction arrow.
DN 20-150 (PN 16): BS 7350.

> General

Wafer pattern orifice for fixing between EN 1092, ISO 7005 (BS 4504) flanges.

The measuring orifice fulfils the requirements of BS 1042: Section 1.1:1992 (ISO 5167-1:1991).

The calculation of flow rates are according to BS 1042: Section 1.4:1992.

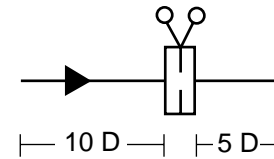
Measuring points

MDFO (52 176 and 52 276) with extended self-sealed measuring points.

Installation

Before you install the measuring orifice, check that:

- it is clean and undamaged.
- the surfaces that are to seal against are clean and undamaged.
- there is enough straight pipe lengths before and after the measuring orifice.



The measuring orifice should be installed between two counter flanges. Check that these counter flanges are parallel and that the gaskets are according to given standard for flanges. Check also that the measuring orifice and the gaskets are correctly centred before tightening.

Differential pressure measurement should take place with extreme care especially if this concerns hot media.

Pressure switch and thermostat

In order to guarantee the lowest and highest pressure as well as to ensure that the temperature is not exceeded the system should be fitted with a pressure switch and thermostat.

Commissioning

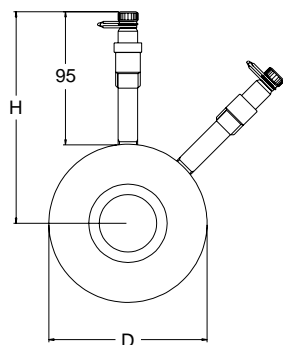
Test the pressure on the valve using cold water.

Tighten the flange joints and check for leakage in connection with commissioning.

Maintenance

The measuring orifice MDFO are maintenance free under the condition that they are used within their normal application area.

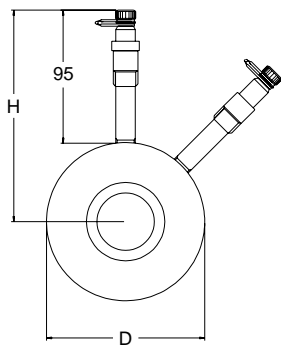
Articles



With self-sealed measuring points

PN 16

Article No	EAN	DN	D	H	Flange thickness	Kv _{max}	Kv _{signal}	Kg
52 176-920	7318792808203	20	63	127	18	6	4,68	0,59
52 176-925	7318792808302	25	73	131	18	11	8,64	0,70
52 176-932	7318792808401	32	84	137	18	23	16,6	0,83
52 176-940	7318792808500	40	94	142	18	35	24,5	0,98
52 176-950	7318792808609	50	109	150	18	72	46,1	1,2
52 176-965	7318792808708	65	127	159	18	154	90	1,5
52 176-980	7318792808807	80	142	166	18	220	120	1,8
52 176-990	7318792808906	100	162	176	18	373	220	2,0
52 176-991	7318792809002	125	192	191	18	570	342	2,5
52 176-992	7318792809101	150	218	204	18	789	468	3,0
52 176-993	7318792809200	200	273	231	18	1383	792	4,3
52 176-994	7318792809309	250	329	260	18	2122	1224	5,7
52 176-995	7318792809408	300	384	287	18	3116	1800	7,0
52 176-996	7318792809507	350	444	317	20	4000	2250	10
52 176-997	7318792809606	400	496	343	23	5300	3000	14
52 176-999	7318793777904	450	556	373	28	6400	3750	22
52 176-998	7318792809705	500	618	404	28	7950	4500	26
52 276-001	7318793805102	600	735	463	29	10700	6500	43
52 276-002	7318793805201	700	805	498	31	15000	9000	44
52 276-012	7318793966001	750	865	528	32	17500	10500	51
52 276-003	7318793805300	800	911	551	32	20300	12000	56
52 276-004	7318793805409	900	1011	601	33	26000	15500	65



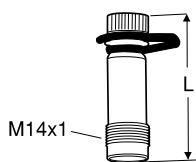
PN 25

Article No	EAN	DN	D	H	Flange thickness	Kv _{max}	Kv _{signal}	Kg
52 176-865	7318793783103	65	127	159	18	154	90	1,5
52 176-880	7318793783202	80	142	166	18	220	120	1,8
52 176-890	7318793783301	100	168	179	18	373	220	2,0
52 176-891	7318793783400	125	194	192	18	570	342	2,5
52 176-892	7318793783509	150	224	207	18	789	468	3,0
52 176-893	7318793783608	200	284	237	18	1383	792	4,3
52 176-894	7318793783707	250	340	265	18	2122	1224	5,7
52 176-895	7318793783806	300	400	295	18	3116	1800	7,0

PN 40

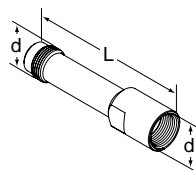
Article No	EAN	DN	D	H	Flange thickness	Kv _{max}	Kv _{signal}	Kg
52 176-765	7318793782304	65	127	159	18	154	90	1,5
52 176-780	7318793782403	80	142	166	18	220	120	1,8
52 176-790	7318793782502	100	168	179	18	373	220	2,0
52 176-791	7318793782601	125	194	192	18	570	342	2,5
52 176-792	7318793782700	150	224	207	18	789	468	3,0
52 176-793	7318793782809	200	290	240	18	1383	792	4,3
52 176-794	7318793782908	250	352	271	18	2122	1224	5,7
52 176-795	7318793783004	300	417	304	18	3116	1800	7,0
52 176-796	7318793955302	350	474	332	20	4000	2250	15,0
52 176-797	7318793955401	400	546	368	23	5300	3000	23,0
52 176-798	7318793955906	450	571	381	28	6400	3750	26,0

Accessories



Measuring points
Max 120°C (intermittent 150°C)

Article No	EAN	L
52 179-014	7318792813207	44
52 179-015	7318793858108	103



Extension for measuring point M14x1
Suitable when insulation is used.

Article No	EAN	d	L
52 179-016	7318793969507	M14x1	71

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