



EUROMAG
INTERNATIONAL

Electromagnetic flowmeters



Sensors MUT 2200 EL / MUT 2500 EL

DS100-3-ENG

Sensors MUT 2200 EL / MUT 2500 EL

MUT 2200 EL / MUT 2500 EL sensors represent the state of the art of EUROMAG INTERNATIONAL production for water cycle and process applications. The new structure for the generation of the magnetic field, the innovative route of the signal generated by the electrodes, provide a sensor with an extremely wide measurement range:

EL= Extended Linearity.

This new sensors series follows the successful tradition of the MUT 2200 / MUT 2500, introducing a measurement range of more than 1:1000 without linearization software. These kinds of performances allow very accurate measures on a wide flow rate range and to count lower flow rates that, before, would have been reset because of the effect of the converters cut off. This flanged sensors series bases its operation on the Faraday Principle, by which a conductor crossing a magnetic field generates a potential perpendicularly orientated to the same field. In this case the flow tube made in stainless steel AISI 304 is equipped with carbon or stainless steel flanges, two coils are installed on the top and inferior part; the magnetic field, generated by the electric current crossing the coil, induces in the electrodes a difference in the potential proportional to the flow rate. With the aim of measuring such potential of very low values, the interior of the flow tube is electrically insulated, thus the process liquid is no longer in contact neither with the material of the flow tube nor with that of the flange. The converter used generates the current supplying the coil, acquires the electrodes difference of potential, process the signal to calculate the flowrate and administers the communication with the exterior. The entire sensor, when installed in the separate version, has a degree of protection IP 68 suitable for a permanent immersion in water up to a depth of 1.5m thanks to a welded plate structure containing the coil and the electrodes.

1. Body and flange

The flange and the sensor external surface are acrylic painted. This treatment gives the sensor an excellent resistance to water, even in permanent immersion. When special ambient conditions require it, the MUT 2000 EL / MUT 2500 EL may be supplied in stainless steel, flange included (see Table 2).

2. Internal lining

The standard internal insulating lining is in PTFE for diameters from ND 15 to ND 150, in hard rubber (ebonite for food) for diameters of more than ND 150. On request, the sensors may be supplied coated with PTFE with diameters of more than ND 150. The temperature of the liquid to be measured is limited by the kind of internal lining used. (see Table 4).

3. Electrodes

The standard electrodes are in nickel alloys C 22 and, therefore, guarantee a wide compatibility with the process liquids, if required, they may be supplied in the materials shown in Table 3.

4. Coupling and connecting to sensor

MUT 2200 EL / MUT 2500 EL sensors may be coupled with any EUROMAG converters (see Table 5). In the separate version the sensor is connected to the converter by means of a cable whose length depends on the liquid conductivity; the maximum length not exceeding 100 metres as shown in Figure 1. If these sensors are inserted in a plastic or lined pipe line, they require the use of two grounding rings of the liquid, which are inserted between the flange and the counter flange or the installation of the grounding electrode. An empty pipe device is also available .

5. Choice of diameter

When choosing the diameter we advice keeping at the full scale flow rate, a liquid velocity of at least 2÷3 m/s. The maximum acceptable velocity is of 10 m/s. Figure 3 provides the flow rate for each ND (nominal diameter) according to the liquid velocity.

6. Maximum temperature of the liquid

In the separate version the maximum liquid temperature allowed is shown in Table 4. In the compact version instead, the maximum temperature allowed depends on the ambient temperature. This is due to the required cooling of the electronics. The maximum liquid temperature allowed for the compact version should be 80°C.

7. Calibration and maximum error

MUT 2200 EL / MUT 2500 EL sensors belong to the reference Group B1 (ISO 11631). Each sensor is calibrated by a hydraulic bench equipped with a reference weighting system and SIT certified. The uncertainty of the measure is equal to 0.2% of the read flowrate value when the velocity of the liquid is more than 0.2 m/s. The repeatability of the measure is in the order of 0.1%

8. Reference standards

The EUROMAG magnetic meters are marked CE and are manufactured according to the following standards:

- * CEI EN 61010-1
- * EN 50081 - 1
- * UNI EN ISO 6817
- * EN 50082 - 1
- * EN 1434

On request, MUT 2200 EL and MUT 2500 EL sensors can be provided with certification ATEX II 2 GD EEx mb IIC T4 U.

9. Applications

The sensors of the family MUT 2200 EL / MUT 2500 EL are suitable for any application of on-line mensuration. These sensors are typically used in the measure of potable o reflow water, industrial waste water, industrial process liquids, mud and concretes.



Maximum length of cables according to the liquid conductivity

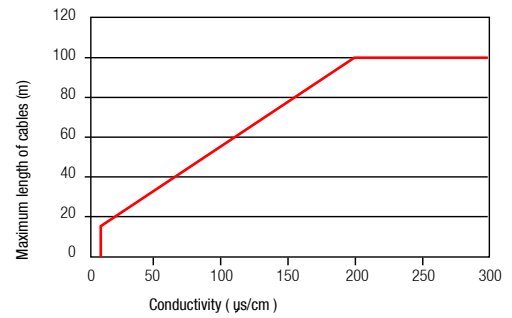


figure 1

Standard diameters

millimeters (mm)	15	20	25	32	40	50	65	80
inches (")	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"	2.1/2"	3"
millimeters (mm)	100	125	150	200	250	300	350	400
inches (")	4"	5"	6"	8"	10"	12"	14"	16"
millimeters (mm)	450	500	600	700	800	900	1000	1200
inches (")	18"	20"	24"	28"	32"	36"	40"	48"
millimeters (mm)	1300	1400	1500	1600	1700	1800	2000	
inches (")	52"	56"	60"	64"	68"	72"	80"	

table 1

Flow tube materials

AISI 304 (Inox)

Flanges materials

Carbon Steel Painted (std)

AISI 304 (Inox)

AISI 316 (Inox)

table 2

Available electrodes

Hastelloy C (std)

Hastelloy B

Titanium

Tantalum

Platinum

table 3

Internal lining - Liquid temperature

Internal lining	Liquid temperature
PTFE	Standard -40 /+140°C (up to +180° on request)
EBANITE FOR FOOD	-40°C / +80°C

table 4

General characteristics of Sensor MUT2200 EL / MUT 2500 EL

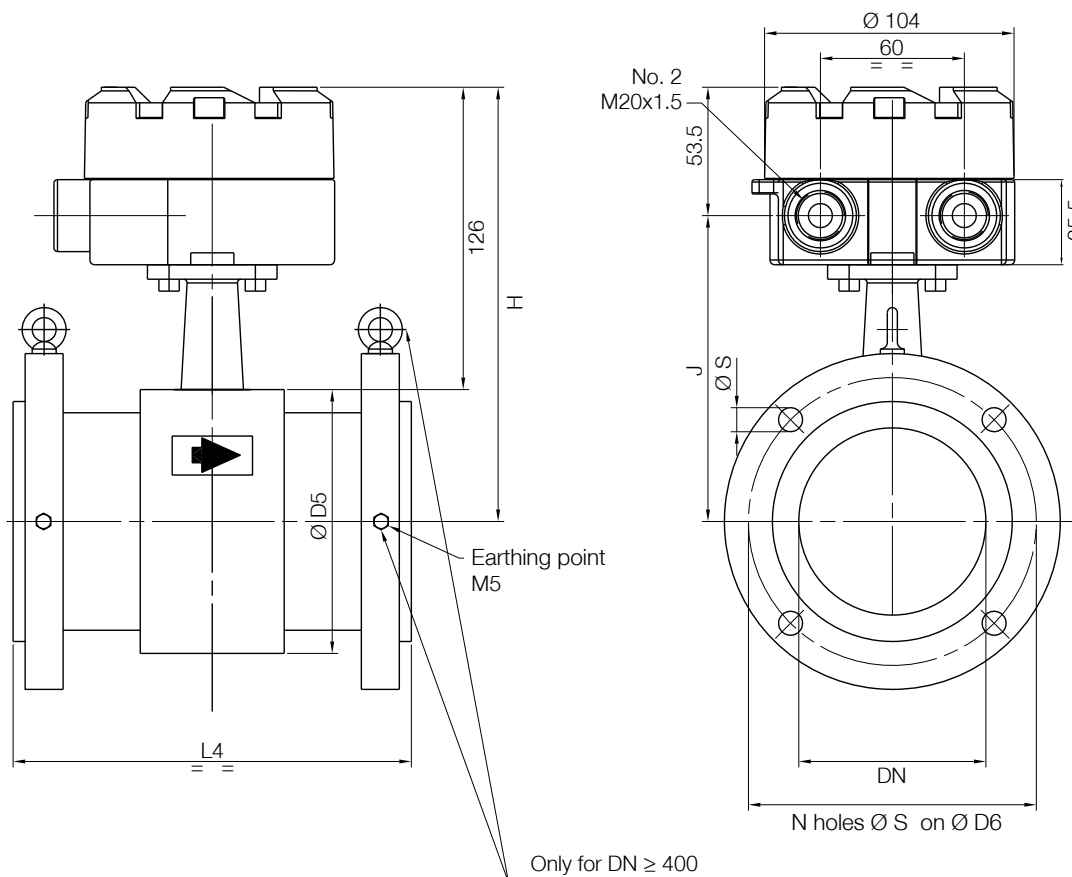
Available diameters	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400
	1/2"	3/4"	1"	1.1/4"	1.1/2"	2"	2.1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"
	450	500	600	700	800	900	1000	1200	1300	1400	1500	1600	1700	1800	2000	
	18"	20"	24"	28"	32"	36"	40"	48"	52"	56"	60"	64"	68"	72"	80"	
Standard flanged connections	UNI2223				ANSI 150				ANSI 300				DIN2501			
Flanged connections on request	BS45404				AWWA				ISO7005				KS			
Standard operation pressure [1]	16 bar															
Degree of protection	IP68 continuous immersion at 1,5 m (IEC 529)															
Converters compatibility	MC 106 A		MC 106 B		MC 308		MC 308 C		MC 108		MC 108/ET					
Dimensions	See figure 2															
Parts in contact with the liquid [2]	PTFE								Ebonite for food stuff							
Electrical connections	Cableglands PG 11 + terminal box + sealing resin															

[1] On request up to 150 bar

table 5

[2] Others on request.

Fig. 2 - Overall dimensions.



MUT 2200 EL Separate PN10

Ø DN	Ø D5	L4	J	Ø D6	N	Ø S	H
15	84	200 ⁰ ₋₃	114.5	65	4	14	168
20	84	200 ⁰ ₋₃	114.5	75	4	14	168
25	64	200 ⁰ ₋₃	104.5	85	4	14	158
32	77	200 ⁰ ₋₃	111	100	4	18	164.5
40	82	200 ⁰ ₋₃	113.5	110	4	18	167
50	98	200 ⁰ ₋₃	121.5	125	4	18	175
65	114	200 ⁰ ₋₃	129.5	145	4	18	183
80	127	200 ⁰ ₋₃	136	160	4	18	189.5
100	152	250 ⁰ ₋₃	148.5	180	8	18	202
125	178	250 ⁰ ₋₃	161.5	210	8	18	215
150	206	300 ⁰ ₋₃	175.5	240	8	22	229
200	257	350 ⁰ ₋₃	201	295	8	22	254.5
250	311	450 ⁰ ₋₅	228	350	12	22	281.5
300	362	500 ⁰ ₋₅	253.5	400	12	22	307
350	394	550 ⁰ ₋₅	269.5	460	16	22	323
400	444	600 ⁰ ₋₅	294.5	515	16	25	348

table 6

MUT 2200 EL Separate PN16

Ø DN	Ø D5	L4	J	Ø D6	N	Ø S	H
15	84	200 ⁰ ₋₃	114.5	65	4	14	168
20	84	200 ⁰ ₋₃	114.5	75	4	14	168
25	64	200 ⁰ ₋₃	104.5	85	4	14	158
32	77	200 ⁰ ₋₃	111	100	4	18	164.5
40	82	200 ⁰ ₋₃	113.5	110	4	18	167
50	98	200 ⁰ ₋₃	121.5	125	4	18	175
65	114	200 ⁰ ₋₃	129.5	145	4	18	183
80	127	200 ⁰ ₋₃	136	160	8	18	189.5
100	152	250 ⁰ ₋₃	148.5	180	8	18	202
125	178	250 ⁰ ₋₃	161.5	210	8	18	215
150	206	300 ⁰ ₋₃	175.5	240	8	22	229
200	257	350 ⁰ ₋₃	201	295	12	22	254.5
250	311	450 ⁰ ₋₅	228	355	12	25	281.5
300	362	500 ⁰ ₋₅	253.5	410	12	25	307
350	394	550 ⁰ ₋₅	269.5	470	16	25	323
400	444	600 ⁰ ₋₅	294.5	525	16	30	348

table 8

MUT 2500 EL Separate PN10

Ø DN	Ø D5	L4	J	Ø D6	N	Ø S	H
450	519	450 ⁰ ₋₇	332	565	20	25	385.5
500	570	500 ⁰ ₋₉	357.5	620	20	25	411
600	682	600 ⁰ ₋₉	413.5	725	20	30	467
700	783	700 ⁰ ₋₉	464	840	24	30	517.5
800	885	800 ⁰ ₋₉	515	950	24	33	568.5
900	996	900 ⁰ ₋₁₅	570.5	1050	28	33	624
1000	1098	1000 ⁰ ₋₁₅	621.5	1160	28	36	675
1200	1312	1200 ⁰ ₋₁₅	728.5	1380	32	39	782
1400	1512	1400 ⁰ ₋₁₅	828.5	1590	36	42	882
1500	1616	1500 ⁰ ₋₁₅	880.5				934
1600	1712	1600 ⁰ ₋₁₅	928.5	1820	40	48	982
1800	1922	1800 ⁰ ₋₁₅	1033.5	2020	44	48	1087
2000	2122	2000 ⁰ ₋₁₅	1133.5	2230	48	48	1187

table 7

MUT 2500 EL Separate PN16

Ø DN	Ø D5	L4	J	Ø D6	N	Ø S	H
450	519	450 ⁰ ₋₇	332	585	20	30	385.5
500	570	500 ⁰ ₋₉	357.5	605	20	33	411
600	682	600 ⁰ ₋₉	413.5	770	20	36	467
700	783	700 ⁰ ₋₉	464	840	24	36	517.5
800	885	800 ⁰ ₋₉	515	950	24	39	568.5
900	996	900 ⁰ ₋₁₅	570.5	1050	28	39	624
1000	1098	1000 ⁰ ₋₁₅	621.5	1170	28	42	675
1200	1312	1200 ⁰ ₋₁₅	728.5	1390	32	48	782
1400	1512	1400 ⁰ ₋₁₅	828.5	1590	36	48	882
1500	1616	1500 ⁰ ₋₁₅	880.5				934
1600	1712	1600 ⁰ ₋₁₅	928.5	1820	40	56	982
1800	1922	1800 ⁰ ₋₁₅	1033.5	2020	44	56	1087
2000	2122	2000 ⁰ ₋₁₅	1133.5	2230	48	62	1187

table 9

MUT 2200 EL Separate PN25

Ø DN	Ø D5	L4	J	Ø D6	N	Ø S	H
15	84	200 ⁰ ₋₃	114.5	65	4	14	168
20	84	200 ⁰ ₋₃	114.5	75	4	14	168
25	64	200 ⁰ ₋₃	104.5	85	4	14	158
32	77	200 ⁰ ₋₃	111	100	4	18	164.5
40	82	200 ⁰ ₋₃	113.5	110	4	18	167
50	98	200 ⁰ ₋₃	121.5	125	4	18	175
65	114	200 ⁰ ₋₃	129.5	145	8	18	183
80	127	200 ⁰ ₋₃	136	160	8	18	189.5
100	152	250 ⁰ ₋₃	148.5	190	8	22	202
125	178	250 ⁰ ₋₃	161.5	220	8	25	215
150	206	300 ⁰ ₋₃	175.5	250	8	25	229
200	257	350 ⁰ ₋₃	201	310	12	25	254.5
250	311	450 ⁰ ₋₅	228	370	12	30	281.5
300	362	500 ⁰ ₋₅	253.5	430	16	30	307
350	394	550 ⁰ ₋₅	269.5	490	16	33	323
400	444	600 ⁰ ₋₅	294.5	550	16	36	348

table 10

MUT 2200 EL Separate PN40

Ø DN	Ø D5	L4	J	Ø D6	N	Ø S	H
15	84	200 ⁰ ₋₃	114.5	65	4	14	168
20	84	200 ⁰ ₋₃	114.5	75	4	14	168
25	64	200 ⁰ ₋₃	104.5	85	4	14	158
32	77	200 ⁰ ₋₃	111	100	4	18	164.5
40	82	200 ⁰ ₋₃	113.5	110	4	18	167
50	98	200 ⁰ ₋₃	121.5	125	4	18	175
65	114	200 ⁰ ₋₃	129.5	145	8	18	183
80	127	200 ⁰ ₋₃	136	160	8	18	189.5
100	152	250 ⁰ ₋₃	148.5	190	8	22	202
125	178	250 ⁰ ₋₃	161.5	220	8	25	215
150	206	300 ⁰ ₋₃	175.5	250	8	25	229
200	257	350 ⁰ ₋₃	201	320	12	30	254.5
250	311	450 ⁰ ₋₅	228	385	12	33	281.5
300	362	500 ⁰ ₋₅	253.5	450	16	33	307
350	394	550 ⁰ ₋₅	269.5	510	16	36	323
400	444	600 ⁰ ₋₅	294.5	585	16	39	348

table 12

MUT 2500 EL Separate PN25

Ø DN	Ø D5	L4	J	Ø D6	N	Ø S	H
450	519	450 ⁰ ₋₇	332	600	20	36	385.5
500	570	500 ⁰ ₋₉	357.5	660	20	36	411
600	682	600 ⁰ ₋₉	413.5	770	20	39	467
700	783	700 ⁰ ₋₉	464	875	24	42	517.5
800	885	800 ⁰ ₋₉	515	990	24	48	568.5
900	996	900 ⁰ ₋₁₅	570.5	1090	28	48	624
1000	1098	1000 ⁰ ₋₁₅	621.5	1210	28	56	675
1200	1312	1200 ⁰ ₋₁₅	728.5				782
1400	1512	1400 ⁰ ₋₁₅	828.5				882
1500	1616	1500 ⁰ ₋₁₅	880.5				934
1600	1712	1600 ⁰ ₋₁₅	928.5				982
1800	1922	1800 ⁰ ₋₁₅	1033.5				1087
2000	2122	2000 ⁰ ₋₁₅	1133.5				1187

table 11

MUT 2500 EL Separate PN40

Ø DN	Ø D5	L4	J	Ø D6	N	Ø S	H
450	519	450 ⁰ ₋₇	332	610	20	39	385.5
500	570	500 ⁰ ₋₉	357.5	670	20	42	411
600	682	600 ⁰ ₋₉	413.5	795	20	48	467
700	783	700 ⁰ ₋₉	464	900	24	48	517.5
800	885	800 ⁰ ₋₉	515				568.5
900	996	900 ⁰ ₋₁₅	570.5				624
1000	1098	1000 ⁰ ₋₁₅	621.5				675
1200	1312	1200 ⁰ ₋₁₅	728.5				782
1400	1512	1400 ⁰ ₋₁₅	828.5				882
1500	1616	1500 ⁰ ₋₁₅	880.5				934
1600	1712	1600 ⁰ ₋₁₅	928.5				982
1800	1922	1800 ⁰ ₋₁₅	1033.5				1087
2000	2122	2000 ⁰ ₋₁₅	1133.5				1187

table 13

MUT 2200 EL Separate ANSI 150

Ø DN	Ø D5	L4	J	Ø D6	N	Ø S	H
15	84	200 ⁰ ₋₃	114.5	60.3	4	16	168
20	84	200 ⁰ ₋₃	114.5	69.8	4	16	168
25	64	200 ⁰ ₋₃	104.5	79.4	4	15.9	158
32	77	200 ⁰ ₋₃	111	88.9	4	15.9	164.5
40	82	200 ⁰ ₋₃	113.5	98.4	4	15.9	167
50	98	200 ⁰ ₋₃	121.5	120.6	4	19	175
65	114	200 ⁰ ₋₃	129.5	139.7	4	19	183
80	127	200 ⁰ ₋₃	136	152.4	4	19	189.5
100	152	250 ⁰ ₋₃	148.5	190.5	8	19	202
125	178	250 ⁰ ₋₃	161.5	215.9	8	22.2	215
150	206	300 ⁰ ₋₃	175.5	241.3	8	22.2	229
200	257	350 ⁰ ₋₃	201	298.4	8	22.2	254.5
250	311	450 ⁰ ₋₅	228	361.9	12	25.4	281.5
300	362	500 ⁰ ₋₅	253.5	431.8	12	25.5	307
350	394	550 ⁰ ₋₅	269.5	476.2	12	28.6	323
400	444	600 ⁰ ₋₅	294.5	539.7	16	28.6	348

table 14

MUT 2200 EL Separate ANSI 300

Ø DN	Ø D5	L4	J	Ø D6	N	Ø S	H
15	84	200 ⁰ ₋₃	114.5	66.7	4	16	168
20	84	200 ⁰ ₋₃	114.5	82.5	4	19	168
25	64	200 ⁰ ₋₃	104.5	88.9	4	19	158
32	77	200 ⁰ ₋₃	111	98.4	4	19	164.5
40	82	200 ⁰ ₋₃	113.5	114.3	4	22.2	167
50	98	200 ⁰ ₋₃	121.5	127	8	19	175
65	114	200 ⁰ ₋₃	129.5	149.2	8	22.2	183
80	127	200 ⁰ ₋₃	136	168.3	8	22.2	189.5
100	152	250 ⁰ ₋₃	148.5	200	8	22.2	202
125	178	250 ⁰ ₋₃	161.5	234.9	8	22.2	215
150	206	300 ⁰ ₋₃	175.5	269.9	12	22.2	229
200	257	350 ⁰ ₋₃	201	330.2	12	25.4	254.5
250	311	450 ⁰ ₋₅	228	387.3	16	28.6	281.5
300	362	500 ⁰ ₋₅	253.5	450.8	16	31.7	307
350	394	550 ⁰ ₋₅	269.5	514.3	20	31.7	323
400	444	600 ⁰ ₋₅	294.5	571.5	20	34.9	348

table 16

MUT 2500 EL Separate ANSI 150

Ø DN	Ø D5	L4	J	Ø D6	N	Ø S	H
450	519	450 ⁰ ₋₇	332	577.6	16	31.7	385.5
500	570	500 ⁰ ₋₉	357.5	635	20	31.7	411
600	682	600 ⁰ ₋₉	413.5	749.3	20	34.9	467
700	783	700 ⁰ ₋₉	464	863.6	28	35	517.5
800	885	800 ⁰ ₋₉	515	977.9	28	41	568.5
900	996	900 ⁰ ₋₁₅	570.5	1085.9	32	41	624
1000	1098	1000 ⁰ ₋₁₅	621.5	1200	36	41	675
1200	1312	1200 ⁰ ₋₁₅	728.5	1422.4	44	41	782
1400	1512	1400 ⁰ ₋₁₅	828.5	1651	48	47.8	882
1500	1616	1500 ⁰ ₋₁₅	880.5	1760	52	47.8	934
1600	1712	1600 ⁰ ₋₁₅	928.5				982
1800	1922	1800 ⁰ ₋₁₅	1033.5				1087
2000	2122	2000 ⁰ ₋₁₅	1133.5				1187

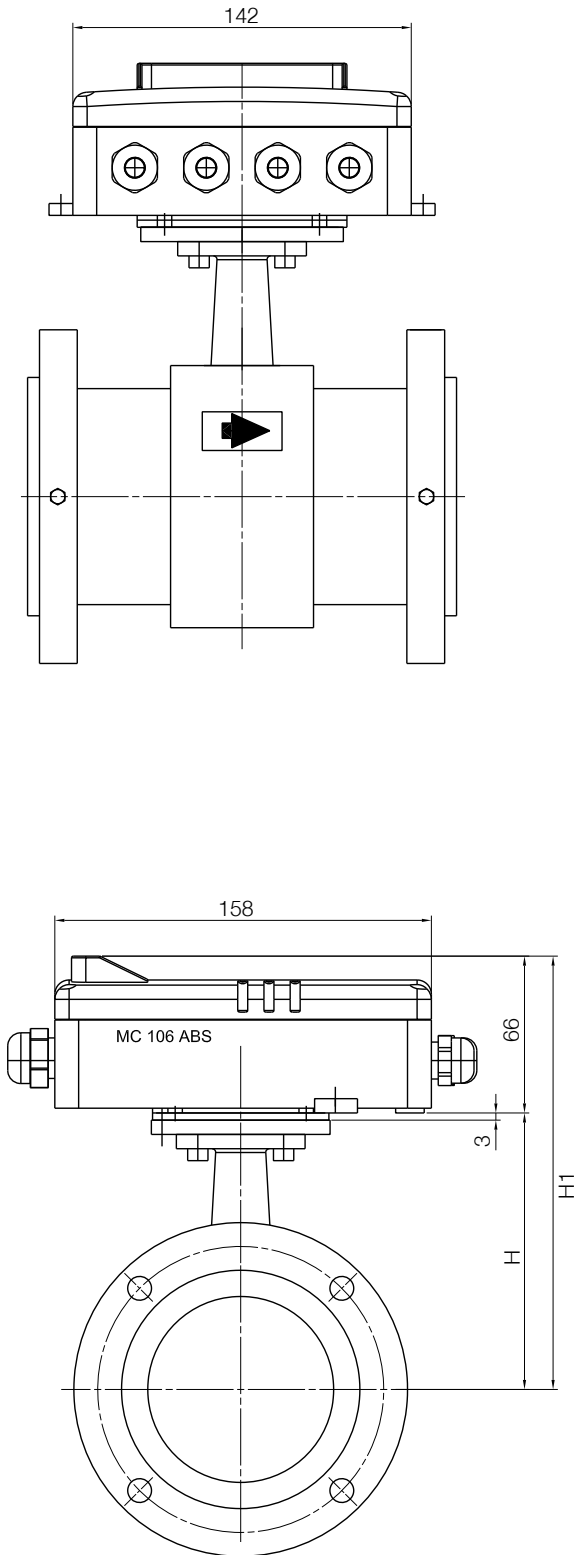
table 15

MUT 2500 EL Separate ANSI 300

Ø DN	Ø D5	L4	J	Ø D6	N	Ø S	H
450	519	450 ⁰ ₋₇	332	628.6	24	34.9	385.5
500	570	500 ⁰ ₋₉	357.5	685.8	24	34.9	411
600	682	600 ⁰ ₋₉	413.5	812.8	24	41.3	467
700	783	700 ⁰ ₋₉	464	939.8	28	44.5	517.5
800	885	800 ⁰ ₋₉	515	1054.1	28	50.8	568.5
900	996	900 ⁰ ₋₁₅	570.5	1168.4	32	53.8	624
1000	1098	1000 ⁰ ₋₁₅	621.5	1155.7	32	44.5	675
1200	1312	1200 ⁰ ₋₁₅	728.5	1371.6	32	50.8	782
1400	1512	1400 ⁰ ₋₁₅	828.5	1600.2	28	60.5	882
1500	1616	1500 ⁰ ₋₁₅	880.5	1701.8	32	60.5	934
1600	1712	1600 ⁰ ₋₁₅	928.5				982
1800	1922	1800 ⁰ ₋₁₅	1033.5				1087
2000	2122	2000 ⁰ ₋₁₅	1133.5				1187

table 17

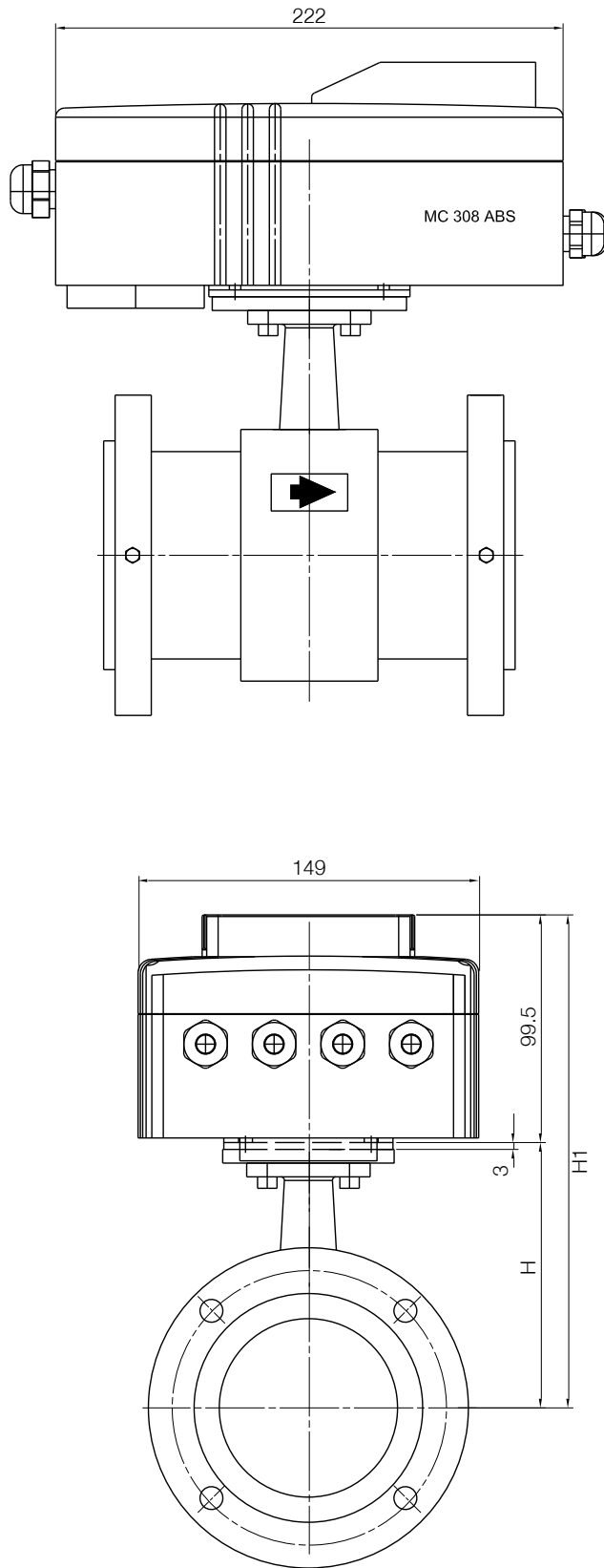
Fig. 3 - MUT 2200 EL / MUT 2500 EL Compact - Converter MC 106 Horizontal ABS Case



	Ø DN	H	H1
MUT 2200 EL	25	93	159
	32	99.5	165.5
	40	102	168
	50	110	176
	65	118	184
	80	124.5	190.5
	100	137	203
	125	150	216
	150	164	230
	200	189.5	255.5
	250	216.5	282.5
	300	242	308
MUT 2500 EL	350	258	324
	400	283	349
	450	320.5	386.5
	500	346	412
	600	402	468
	700	452.5	518.5
	800	503.5	569.5
	900	559	625
	1000	610	676
	1200	717	783
1400	818	883	
1500	869	935	
1600	917	983	
1800	1022	1088	
2000	1122	1188	

table 18

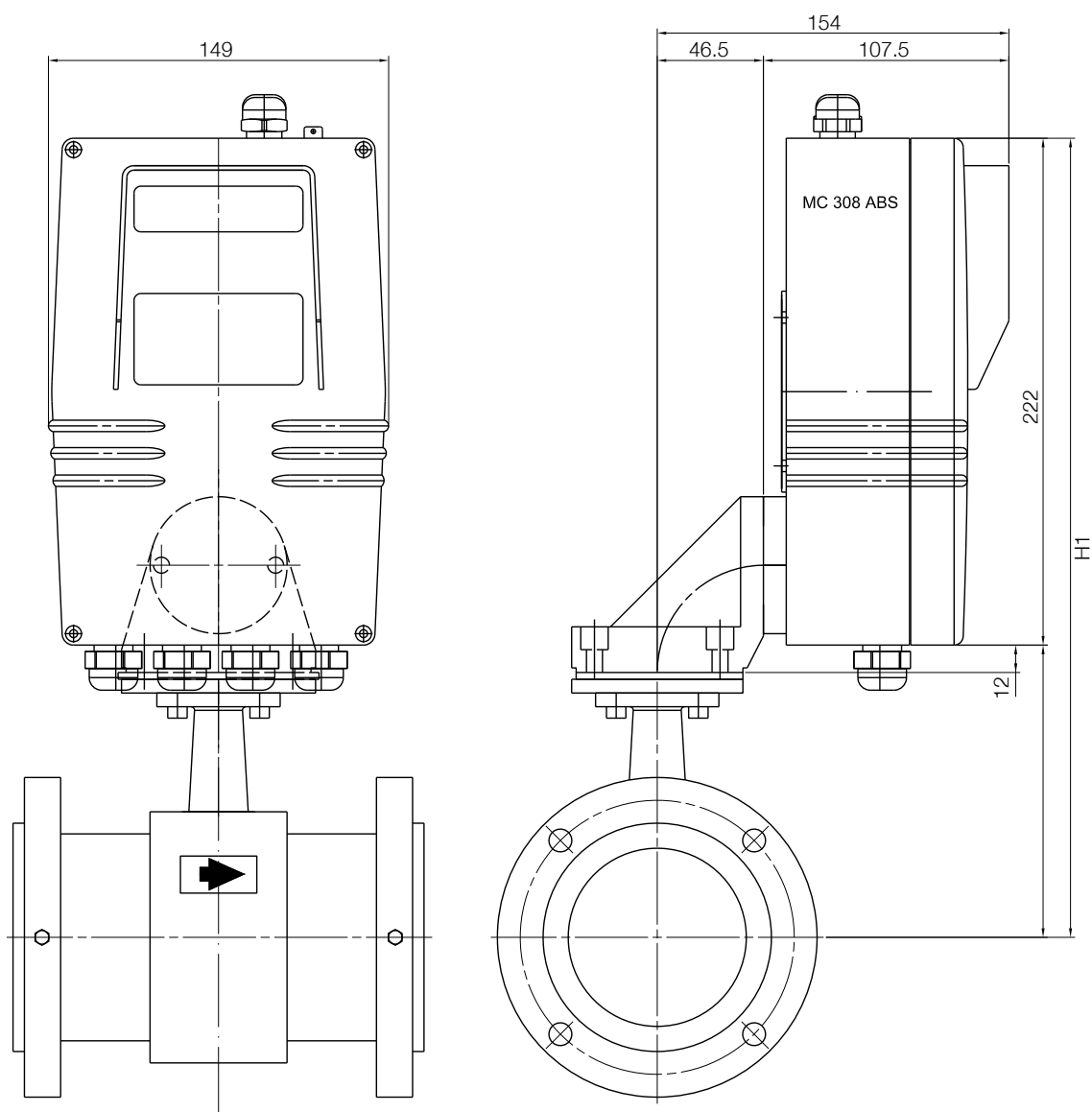
Fig. 4 - MUT 2200 EL / MUT 2500 EL Compact - Converter MC 308 Horizontal ABS Case



	Ø DN	H	H1
MUT 2200 EL	25	93	192.5
	32	99.5	199
	40	102	201.5
	50	110	209.5
	65	118	217.5
	80	124.5	224
	100	137	236.5
	125	150	249.5
	150	164	263.5
	200	189.5	289
	250	216.5	316
	300	242	341.5
MUT 2500 EL	350	258	357.5
	400	283	382.5
	450	320.5	420
	500	346	445.5
	600	402	501.5
	700	452.5	552
	800	503.5	603
	900	559	658.5
	1000	610	709.5
	1200	717	816.5
1400	817	916.5	
1500	869	968.5	
1600	917	1016.5	
1800	1022	1121.5	
2000	1122	1221.5	

table 19

Fig. 5 - MUT 2200 EL / MUT 2500 EL Compact - Converter MC 308 Vertical ABS Case

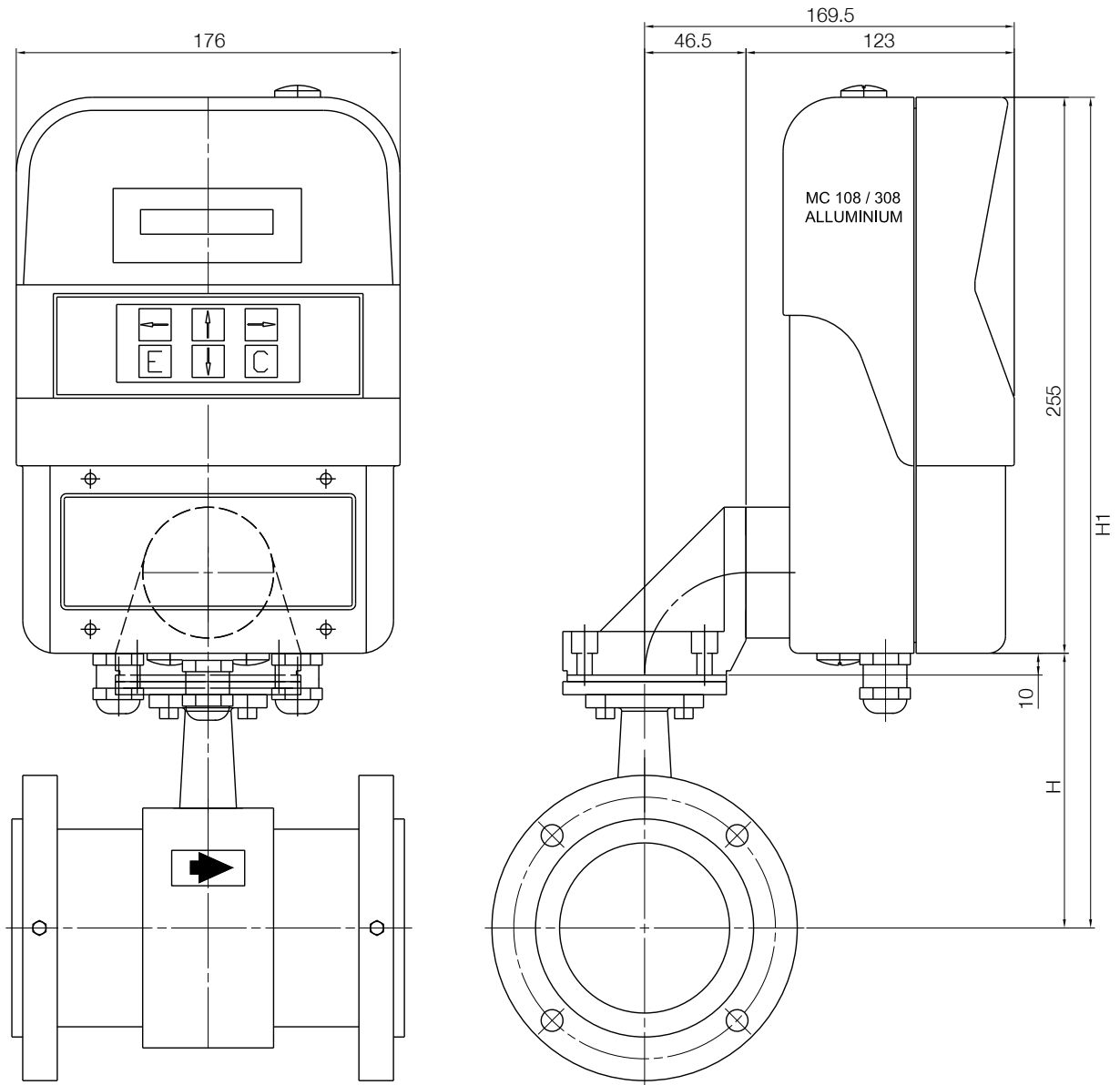


	Ø DN	H	H1
MUT 2200 EL	25	105	327
	32	111.5	333.5
	40	114	336
	50	122	344
	65	130	352
	80	136.5	358.5
	100	149	371
	125	162	384
	150	176	398
	200	201.5	423.5
	250	228.5	450.5
	300	254	476
	350	270	492
	400	295	517

	Ø DN	H	H1
MUT 2500 EL	450	332.5	554.5
	500	358	580
	600	414	636
	700	464.5	686.5
	800	515.5	737.5
	900	571	793
	1000	622	844
	1200	729	951
	1400	829	1051
	1500	881	1103
	1600	929	1151
1800	1034	1256	
2000	1134	1356	

table 20

Fig. 6 - MUT 2200 EL / MUT 2500 EL Compact - Converter MC 108 / 308 Vertical Aluminium Case

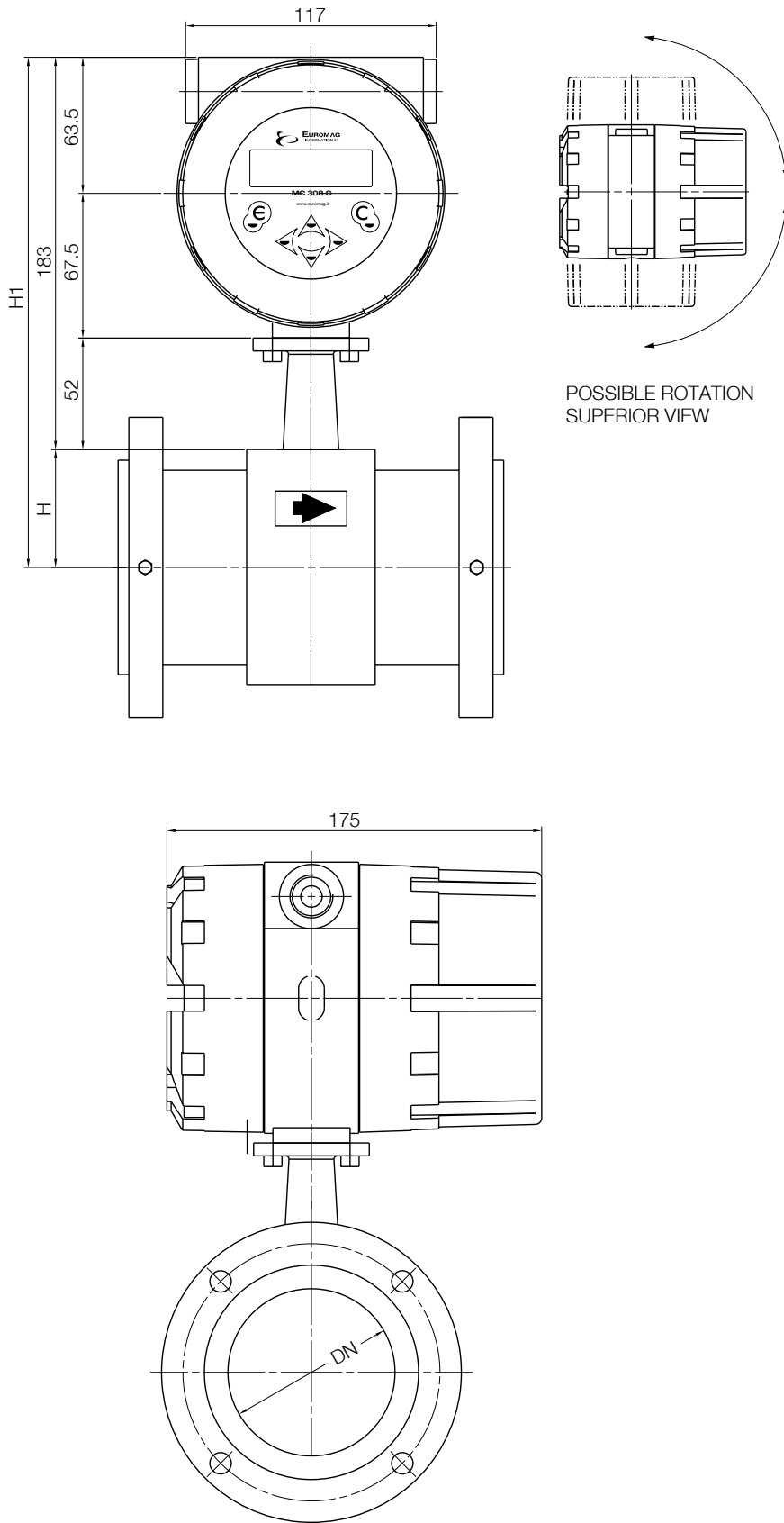


	Ø DN	H	H1
MUT 2200 EL	25	103	358
	32	109.5	364.5
	40	112	367
	50	120	375
	65	128	383
	80	134.5	389.5
	100	147	402
	125	160	415
	150	174	429
	200	199.5	454.5
	250	226.5	481.5
	300	252	507
	350	268	523
	400	293	548

	Ø DN	H	H1
MUT 2500 EL	450	330.5	585.5
	500	356	611
	600	412	667
	700	462.5	717.5
	800	513.5	768.5
	900	569	824
	1000	620	875
	1200	727	982
	1400	827	1082
	1500	879	1134
	1600	927	1182
	1800	1032	1287
2000	1132	1387	

table 21

Fig. 7 - MUT 2200 EL / MUT 2500 EL Compact - Converter MC 308 C



	Ø DN	H	H1
MUT 2200 EL	25	32	215
	32	38.5	221.5
	40	41	224
	50	49	232
	65	57	240
	80	63.5	246.5
	100	76	259
	125	89	272
	150	103	286
	200	128.5	311.5
	250	155.5	338.5
	300	181	364
MUT 2500 EL	350	197	380
	400	222	405
	450	259.5	442.5
	500	285	468
	600	341	524
	700	391.5	574.5
	800	442.5	625.5
	900	498	681
	1000	549	732
	1200	656	839
	1400	756	939
	1500	808	991
1600	856	1039	
1800	961	1144	
2000	1061	1244	

table 22

Flowrate Table (Blue values are preferable)

	DN	VELOCITY [m/s]			
		0,05	0,5	5	10
MUT 2200 EL	25	88,36 l/h	883,57 l/h	8.835,73 l/h	17.671,46 l/h
	32	0,14 m ³ /h	1,45 m ³ /h	14,48 m ³ /h	28,95 m ³ /h
	40	0,23 m ³ /h	2,26 m ³ /h	22,62 m ³ /h	45,24 m ³ /h
	50	0,35 m ³ /h	3,53 m ³ /h	35,34 m ³ /h	70,69 m ³ /h
	65	0,60 m ³ /h	5,97 m ³ /h	59,73 m ³ /h	119,46 m ³ /h
	80	0,90 m ³ /h	9,05 m ³ /h	90,48 m ³ /h	180,96 m ³ /h
	100	1,41 m ³ /h	14,14 m ³ /h	141,37 m ³ /h	282,74 m ³ /h
	125	2,21 m ³ /h	22,09 m ³ /h	220,89 m ³ /h	441,79 m ³ /h
	150	3,18 m ³ /h	31,81 m ³ /h	318,09 m ³ /h	636,17 m ³ /h
	200	5,65 m ³ /h	56,55 m ³ /h	565,49 m ³ /h	1.130,97 m ³ /h
	250	8,84 m ³ /h	88,36 m ³ /h	883,57 m ³ /h	1.767,15 m ³ /h
	300	12,72 m ³ /h	127,23 m ³ /h	1.272,35 m ³ /h	2.544,69 m ³ /h
	350	17,32 m ³ /h	173,18 m ³ /h	1.731,80 m ³ /h	3.463,61 m ³ /h
	400	22,62 m ³ /h	226,19 m ³ /h	2.261,95 m ³ /h	4.523,89 m ³ /h
MUT 2500 EL	450	28,63 m ³ /h	286,28 m ³ /h	2.862,78 m ³ /h	5.725,55 m ³ /h
	500	35,34 m ³ /h	353,43 m ³ /h	3.534,29 m ³ /h	7.068,58 m ³ /h
	550	42,76 m ³ /h	427,65 m ³ /h	4.276,49 m ³ /h	8.552,99 m ³ /h
	600	50,89 m ³ /h	508,94 m ³ /h	5.089,38 m ³ /h	10.178,76 m ³ /h
	650	59,73 m ³ /h	597,30 m ³ /h	5.972,95 m ³ /h	11.945,91 m ³ /h
	700	69,27 m ³ /h	692,72 m ³ /h	6.927,21 m ³ /h	13.854,42 m ³ /h
	750	79,52 m ³ /h	795,22 m ³ /h	7.952,16 m ³ /h	15.904,31 m ³ /h
	800	90,48 m ³ /h	904,78 m ³ /h	9.047,79 m ³ /h	18.095,57 m ³ /h
	900	114,51 m ³ /h	1.145,11 m ³ /h	11.451,11 m ³ /h	22.902,21 m ³ /h
	1000	141,37 m ³ /h	1.413,72 m ³ /h	14.137,17 m ³ /h	28.274,33 m ³ /h
	1200	203,58 m ³ /h	2.035,75 m ³ /h	20.357,52 m ³ /h	40.715,04 m ³ /h
	1300	238,92 m ³ /h	2.389,18 m ³ /h	23.891,81 m ³ /h	47.783,62 m ³ /h
	1400	277,09 m ³ /h	2.770,88 m ³ /h	27.708,85 m ³ /h	55.417,69 m ³ /h
	1500	318,09 m ³ /h	3.180,86 m ³ /h	31.808,63 m ³ /h	63.617,25 m ³ /h
	1600	361,91 m ³ /h	3.619,11 m ³ /h	36.191,15 m ³ /h	72.382,29 m ³ /h
	1700	408,56 m ³ /h	4.085,64 m ³ /h	40.856,41 m ³ /h	81.712,82 m ³ /h
1800	458,04 m ³ /h	4.580,44 m ³ /h	45.804,42 m ³ /h	91.608,84 m ³ /h	
2000	565,49 m ³ /h	5.654,87 m ³ /h	56.548,67 m ³ /h	113.097,34 m ³ /h	

table 23



The data shown in this catalogue are subject to modification without prior notice.