

1. VZE 15 ... 50 (Standard)

Technical data ¹⁾



- with electronic display of total volume, resettable volume and flow rate, units: litres or US gallons ²⁾
- fuel oil meter with threaded or flanged connection
- for mounting in a horizontal, vertical or inclined position

Option: with inductive INA pulser

Versions available on request:

- different flange drillings, such as ANSI, JIS

Type		VZE 15	VZE 20	VZE 25	VZE 40	VZE 50
Nominal diameter	DN	15	20	25	40	50
	mm	1/2	3/4	1	1 1/2	2
	inch					
Installation length	mm	165	165	190	300	350
Nominal pressure with threaded ends	PN	16				
with flanges	PN	25				
Maximum temperature	°C	70, 130, 180				
Maximum flow rate	Q _{max} ³⁾	600	1500	3000	9000	30000
Nominal flow rate	Q_n ³⁾	400	1000	2000	6000	20000
Minimal flow rate	Q _{min}	10	30	75	225	750
Approx. starting flow rate	l/h	4	12	30	90	300
Measurement error limit		± 1% of actual value				
Repeatability		± 0,2%				
Smallest readable amount:		No decimals				
Total volume	l	3 decimal places with floating decimal point				
Resettable volume	l	1 decimal place				
Digital flow rate display	l/h	100 000				
Registration capacity	m ³	250 000				
Registration at Q _n before return to zero	h	100 000	50 000	16 660	5 000	
Safety filter mesh width	mm	0,400	0,400	0,400	0,800	0,800
Dirt trap mesh width	mm	0,250	0,400	0,400	0,600	0,600
Volume of the measuring chamber	cm ³	12	36	100	330	1200
Housing finish		enamelled red RAL 3013				
Weight with threaded ends ⁴⁾	ca. kg	2,2	2,5	4,2	17,3	–
with flanges PN 25	ca. kg	3,8	4,5	7,5	20,3	41,0
Pulse values of pulsers:						
INA inductive according to DIN 19234 ⁵⁾	l/Impuls	0.0006	0.00185	0.005	0.017	0.060
Pulse frequency INA	at Q _{max}	277,778	225,225	166,667	147,059	138,889
	at Q _{min}	4,630	4,505	4,167	3,676	3,472

1) Manufacturer's specification, valid for the following reference condition: EL heating fuel / diesel at 20°C.

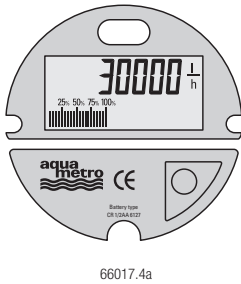
2) 1 US gallon corresponds to 3.785 litres.

3) For burners and engines or motors, the meter must basically be selected for permanent flow. For higher viscosity, or if the meter is installed on the suction side, the pressure drop and any reduction in the measuring range must also be considered; see Chapters 5 and 8.

4) Weight without couplings.

5) The precise pulse value can be taken from the meter; it is only known after the calibration. The next device must have an adjustable input.

Electronic display



66017.4a

Display values:

- total volume, resettable volume, flow rate
- In the service level, service hours and other information can be read out

Display:

- 8-character LCD with identification of the parameter, height of numbers: 8 mm, flow rate (meter load) using bar diagram

Temperature:

- ambient temperature $-10 \dots +70^\circ\text{C}$, storage temperature $-20^\circ \dots +80^\circ\text{C}$

Safety:

- CE, vibration and shock test to DIN IEC 68

Supply:

- usual commercial lithium battery, type CR 1/2AA or CR2

Data reception:

- by non-volatile memory (EEPROM)

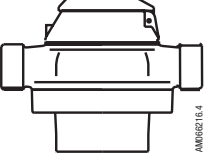
Change of battery:

- after 5 years, based on a battery lifetime of 6 years with a maximum of 10 hours' digital display of the flow rate

Pressure drop curves

in chapter 5

Dimensions in mm

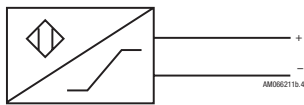
	Meter	Length	Width	Height für Zähler VZE			
				VZE ... 70° C		VZE ... 130° C and 180° C	
				L	W	-INA	-INA
VZE 15	165	105	106	147	185	185	
VZE 20	165	105	115	156	194	194	
VZE 25	190	130	142	183	221	221	
VZE 40	300	210	194	235	273	273	
VZE 50	350	280	250	291	329	329	

Detailed dimensional drawings in chapter 5

INA pulsers

High-resolution pulsers for industrial applications.

Plug-in proximity switch with Ex approval.



Switching element:

- inductive slot initiator to DIN 19234

Switching voltage:

- 5 ... 15 VDC

Residual ripple:

- max. 5%

Switching current:

- $> 3 \text{ mA}$ at 8 VDC / 1 kOhm

Static current:

- $< 1 \text{ mA}$ at 8 VDC / 1 kOhm

ON-time:

- $50\% \pm 10\%$

Ambient temperature:

- $-10 \dots +70^\circ\text{C}$

Type of protection:

- IP 65 (IEC 144) against water jets and dust

Connection:

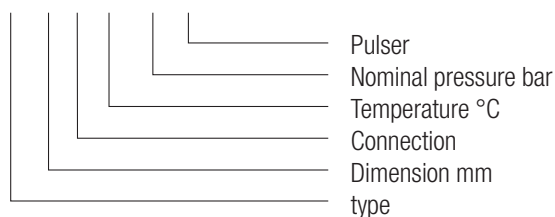
- Cable, min. $2 \times 0,35 \text{ mm}^2$ und 4 ... 6 mm external diameter, on plug supplied with product.

Ex approval:

- EEx ia IIC T6

Type designation key

VZE 25 FL 130/25-INA



Pulser

Nominal pressure bar

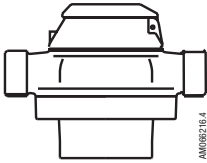
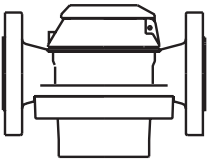
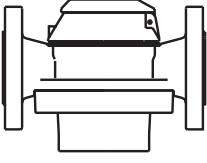
Temperature °C

Connection

Dimension mm

type

Ordering specifications

Threaded ends 	Type	Order No.	Type	Order No.
	VZE 15 RC 70/16	92206	VZE 25 RC 70/16	92224
	VZE 15 RC 70/16-INA	92207	VZE 25 RC 70/16-INA	92225
	VZE 15 RC 130/16	92208	VZE 25 RC 130/16	92226
	VZE 15 RC 130/16-INA	92209	VZE 25 RC 130/16-INA	92227
	VZE 20 RC 70/16	92214	VZE 40 RC 70/16	92234
	VZE 20 RC 70/16-INA	92215	VZE 40 RC 70/16-INA	92235
	VZE 20 RC 130/16	92216	VZE 40 RC 130/16	92236
VZE 20 RC 130/16-INA	92217	VZE 40 RC 130/16-INA	92237	
Flanges 130° C / PN 25 	VZE 15 FL 130/25	92212	VZE 40 FL 130/25	92240
	VZE 15 FL 130/25-INA	92213	VZE 40 FL 130/25-INA	92241
	VZE 20 FL 130/25	92220	VZE 50 FL 130/25	92246
	VZE 20 FL 130/25-INA	92221	VZE 50 FL 130/25-INA	92247
	VZE 25 FL 130/25	92230		
	VZE 25 FL 130/25-INA	92231		
Flanges 180° C / PN 25 	VZE 20 FL 180/25	92222	VZE 40 FL 180/25	92242
	VZE 20 FL 180/25-INA	92223	VZE 40 FL 180/25-INA	92243
	VZE 25 FL 180/25	92232	VZE 50 FL 180/25	92248
	VZE 25 FL 180/25-INA	92233	VZE 50 FL 180/25-INA	92249

DN 15 meters are not suitable for heavy fuel oil; this is only possible if special precautions are taken.