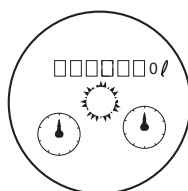
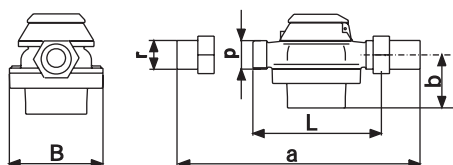


**Contoil Fuel Oil Meters**
**TYPE : VZO/VZF**

**VZO**

**VZF**
**Dial:**

**VZO/VZF DN 15, 20, 25 : with threaded ends.**

**Dimensions in mm**

Nominal width	L	B	a	b	p	r
DN 15	165	105	260	45	G 3/4"	G 1/2"
DN 20	165	105	260	54	G 1"	G 3/4"
DN 25	190	130	305	77	G 1 1/4"	G 1"

**Technical data**
**VZO:**

- Volume display on roller register, in litres
- Fuel oil meter with threaded or flanged ends
- For horizontal, vertical or inclined mounting
- Suitable for the following media: heavy oil, naphtha extralight oil, petrol, diesel fuel, media for lubrication purposes

**Option:** Reed pulser or RV/IN pulser

**VZF:**

- With electronic display of total volume, resettable volume and flow rate, units: litres or US gallons<sup>2)</sup>
- Fuel oil meter with threaded or flanged connection
- For mounting in a horizontal, vertical or inclined position

**Output signal:**

- Outputs for volumetric pulses.
- Analogue output 4...20 mA or frequency output 0...100 Hz for flow rate.
- Limit switch.

**Versions available on request:**

- Different flange drillings, such as ANSI, JIS

**Material**

Part	Material
Housing with threaded ends	Cast brass
Housing with flanges	Spheroidal graphite iron GGG
Measuring chamber	
PN16/25	Cast brass
Seals	FPM Fluor-Elastomer
Rotary piston	Aluminium anodized
Ancillaries	Plastic

Type	DN	mm	VZO 15	VZO 20	VZO 25	VZO 40	VZO 50
Nominal diameter		inch	15 1/2	20 3/4	25 1	40 1 1/2	50 2
Installation length		mm	165	165	190	300	350
Nominal pressure with threaded ends	PN	bar	16				
with flanged	PN	bar	25, 40				
Maximum temperature		°C	130, 180				
Maximum flow rate	Q <sub>max</sub> <sup>3)</sup>	l/h	600	1500	3 000	9 000	30 000
<b>Nominal flow rate</b>	<b>Q<sub>n</sub><sup>3)</sup></b>	<b>l/h</b>	<b>400</b>	<b>1000</b>	<b>2 000</b>	<b>6 000</b>	<b>20 000</b>
Minimal flow rate	Q <sub>min</sub>	l/h	10	30	75	225	750
Approx. starting flow rate		l/h	4	12	30	90	300
Max. permissible error			± 1% of actual value				
Repeatability			± 0,2%				
Smallest readable amount	l		0,01	0,1	0,1	0,1	1
Registration capacity	m <sup>3</sup>		1000	10 000	10 000	10 000	100 000
Registration at Q <sub>n</sub> before return to zero	h		2500	10 000	5 000	1667	5 000
Safety filter mesh width	mm		0,400	0,400	0,400	0,800	0,800
<b>Dirt trap mesh width</b>	<b>mm</b>		<b>0,250</b>	<b>0,400</b>	<b>0,400</b>	<b>0,600</b>	<b>0,600</b>
Volume of the measuring chamber	approx. cm <sup>3</sup>		12	36	100	330	1200
Housing finish			enamelled red RAL 3013				
Weight with threaded ends <sup>4)</sup>	approx. kg		2,2	2,5	4,2	17,3	-
with flanges PN25	approx. kg		3,8	4,5	7,5	20,3	41,0
with flanges PN40	approx. kg		4,4	5,5	7,8	20,5	42,0
Pulse values of pulsers:							
In inductive according to DIN 19234	l/pulse		0,01	0,01	0,1	0,1	1
RV Reed	l/pulse		0,1	1	1	1	10
RV Reed	l/pulse		1	-	-	10	100
Pulse frequency IN	at Q <sub>max</sub>	Hz	16,667	41,667	8,333	25,000	8,333
	at Q <sub>min</sub>	Hz	0,278	0,833	0,208	0,625	0,208

1) Manufacturer's specification, valid for the reference condition as specified under meter data (annex).

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.

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 (for VZF).