

CONTOIL® Classic VZO 4...50

VZO 4 and 8

Technical data 1)



- oil meter with internal threaded connections located on the bottom plate
- with mechanical roller counter, volume display in litres
- meters in US-Gallons 2)
- for mounting in horizontal, vertical and inclined positions
- VZO 4 and 8 with type approval / official verification

Option: Reed pulser 48 V

Type		VZO 4	VZO 4	VZO 8		
		Q_{min} 0.5				
Nominal diameter	mm	4	4	8		
	inch	1/8	1/8	1/4		
Connection threads of meter		inch	1/8	1/4		
Nominal pressure		bar	25			
Temperature	T _{max}	° C	60			
Maximum flow rate	Q _{max} 3)	l/h	40	80	200	
Nominal flow rate	Q_n 3)	l/h	25	50	135	
Minimal flow rate	Q _{min} 4)	l/h	0.5	1	4	
Approx. starting flow rate		l/h	0.3	0.4	1.6	
Max. permissible error		± 1% of actual value 4)				
Repeatability		± 0.2%				
Smallest readable amount		l	0.001	0.001	0.01	
Registration capacity		m ³	100	100	1000	
Registration at Q _n until overrunning to zero		h	4 000	2 000	7 400	
Safety filter mesh size		mm	0.125	0.125	0.150	
Dirt filter mesh size		mm	0.080	0.080	0.100	
Volume of the measuring chamber		approx. cm ³	5	5	12.5	
Weight without couplings		approx. kg	0.65	0.65	0.75	
Reed pulsers	RE 1	l/pulse	–	–	1	
	RE 0.1		–	0.1	0.1	
	RE 0.01		–	0.01	–	
	RE 0.00125		–	0.00125	–	
	RE 0.00311		–	–	0.00311	
Pulse frequency for	RE 0.00125 5)	at Q _{max}	Hz	–	17.777	–
		at Q _{min}	Hz	–	0.222	–
Pulse frequency for	RE 0.00311 5)	at Q _{max}	Hz	–	–	17.864
		at Q _{min}	Hz	–	–	0.357

1) Manufacturer's specification, valid for the reference conditions as specified under "APPENDIX: Meter data".

2) 1 US gallon corresponds to 3.785 litres

3) For burners and engines or motors, the meter must be selected on the basis of the permanent flow rate. For higher viscosities, or if the meter is installed on the suction side, the pressure drop and any reduction in the measuring range must also be taken into consideration.

4) Max. permissible error: VZO 4 Q_{min} 0.5: 0.5 l/h ... 2 l/h = + 1% / - 2%. VZO 4: 1 l/h ... 2 l/h = + 1% / - 2%.

5) Note: pulses of short duration!

VZOA 4 and 8 with type approval

Technical data for VZOA with PTB type approval: 5.232 / 04.37 Class 1

Data according to type approval specifications			VZOA 4	VZOA 8
Temperature max.	T _{max}	° C	60	60
Maximum flow rate	Q _{max}	l/h	20	140
Nominal flow rate	Q_n	l/h	20	140
Minimal flow rate	Q _{min}	l/h	2	14
Max. permissible error		± % of actual value	0.5	0.5

Technical data for VZOA with type approval / EU official verification D 04/5.232.14

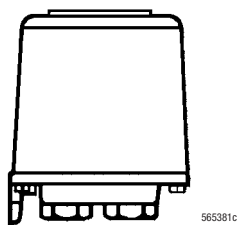
Data according to type approval specifications			VZOA 4	VZOA 8
Temperature max.	T_{max}	°C	50	50
Maximum flow rate	Q_{max}	l/h	20	140
Nominal flow rate	Q_n	l/h	20	140
Minimal flow rate	Q_{min}	l/h	2	14
Max. permissible error	± % of actual value		0.5	0.3

Two items are required when ordering: the VZOA meter and EU official verification, Order No. 96026.

Pressure drop curves

See "APPENDIX: Meter data"

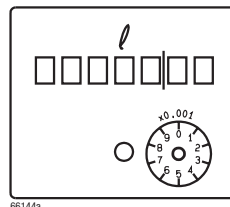
Dimensions in mm



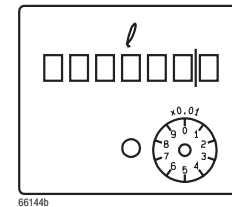
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Dial

VZO 4

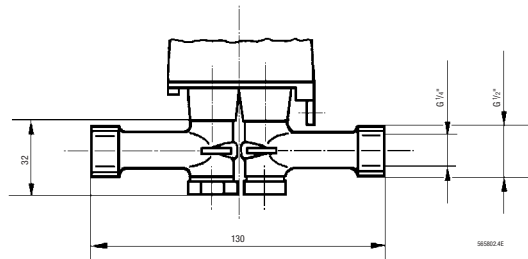


VZO 8

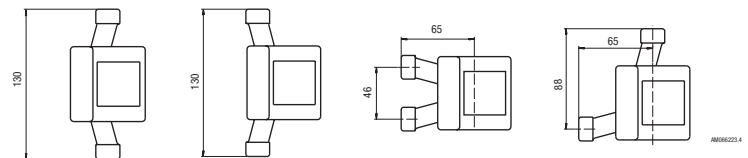


Detailed dimensional drawings in "APPENDIX: Meter data"

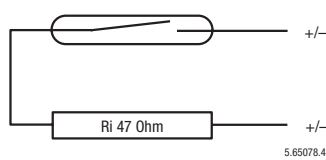
Mounting kit for VZO 8



Order No. 81130: some possible mounting positions



RE Pulsers



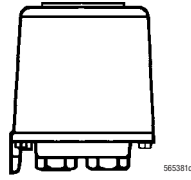
Switching element:
Switching voltage:
Switching current:
Quiescent current:
Switching power:
ON-time:

- Reed switch with dry contact (inert gas)
- Max. 48 V AC/DC
- Max. 50 mA
- Open Contact
- Max. 3 VA
- VZO 4-RE 0.00125: 65...90 %
- VZO 4-RE 0.01: 10...30 %
- VZO 4-RE 1: 30...70 %
- VZO 8-RE 0.00311: 65...90 %
- VZO 8-RE 0.1: 10...30 %
- VZO 8-RE 1: 30...70 %
- Ambient -10 ... +60 °C
- Meters without pulser:
 - IP 65 (IEC 60529) against water-jets and dust
- Meters with pulser RE:
 - IP 50 (IEC 60529) against dust deposits
 - On plug supplied with product for cable, 2 × 0.35 mm²

Temperature:
Protection class:

Connections:

Ordering specifications

	Type	Order No.	Type	Order No.
	VZO 4	92680	VZO 8	92630
VZO 4 RE 0.00125	89763	VZO 8 RE 0.00311	89733	
VZO 4 RE 0.01	89760	VZO 8 RE 0.1	89730	
VZO 4 RE 0.1	89761	VZO 8 RE 1	89731	
VZO 4 Q _{min} 0.5	92678			
VZO A 4	93162	VZO A 8	93163	

Modifications / Options

Modification	with EC official verification	96026
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Special versions with FMP fluoroelastomer gaskets

VZO 4 V	Order No. 92487
VZO 4 V - RE 0.01	Order No. 92488
VZO 4 V - RE 0.1	Order No. 92489