

<b>Equipment</b>	<b>Vertical measuring system</b>	
<b>Model</b>	<b>ZCE5-80 with electronic register</b>	
<b>Performance characteristics</b>		
Measured liquids	Liquid hydrocarbons, industrial oils, fatty acid esters, ethanol	
Static pressure	max	15 bar
Inlet pressure	max	10 bar
Liquid temperature	min / max	- 10°C / +90°C 14°F / +194°F
Working flow rate	min / max	8 m <sup>3</sup> /h - 133 L/min - 36 USGPM / 80 m <sup>3</sup> /h - 1333 L/min - 360 USGPM
Liquid viscosity	max	20 mm <sup>2</sup> /s (MID) - 800 mm <sup>2</sup> /s - at operating conditions
Accuracy	< +/- 0.15% of measured value	
Repeatability	< +/- 0.02% of measured value	
Pressure drop	See enclosed table	
Calibration report	On 3 points (8 m <sup>3</sup> /h, 40 m <sup>3</sup> /h, 80 m <sup>3</sup> /h)	
<b>Description of the measuring system</b>		
Components	<b>1-Manifold</b> <b>2-Strainer Air eliminator – EC29</b> <b>3-Positive displacement meter – ZC17-80</b> <b>4-Multi-function valve with electromechanical control box – XAD37</b> <b>5-Electronic register - Equalis S</b>	
<b>1-Manifold</b>		
Connection nominal size	DN 80 / 3"	
End connection style	Flanges ASA 150 RF	
Material	Steel (EN 1.0625)	
External coating	Acrylic-Epoxy coating RAL5010	
<b>2-Strainer air eliminator - EC29</b>		
Effective volume	53 L	
Materials	body / seal	Steel (EN 1.0625) / Viton, nitrile (option alcohols measurement)
Thermowell ports	Quantity: 2, ½ " gas, plugged	
Drain port	1" ¼ gas, plugged	
Gas release head	Automatic gas release controlled by float and differential valve	
Gas release connection	¼ "	
Dry contact for gas detection (AC10)	REED contact controlled by float position (option)	
Valve on gas release pipe	Ball valve (only with dry contact for gas detection)	
Filtering technology	2 Basket filters	
Filtering size	50 µm, 200 µm, 450 µm (selection depending on measured product)	
External coating	Acrylic-Epoxy coating RAL5010	
<b>3-Positive Displacement meter - ZC17-80</b>		
Displacement element type	Sliding vanes flowmeter	
Cyclic volume	2,27 L - 0,6 USG	
Body material	Ductile iron (EN 5.3201), Ni resist iron (EN-JL3011) (option)	
Cap/end cover material	Carbon steel (EN 1.0625) with protective coating	
Seal/O-ring material	Viton, Nitrile (option for alcohols measurement)	
Blades / Blades connection rods	Graphite / Stainless steel	
Rotor/ Bearings	Aluminum (EN AC-42100)/ Stainless steel (EN 1.4371)	
Swing joint	Viton, Nitrile (option for alcohol), PTFE (option for low ambient temperature)	
Accuracy adjuster type	Calibration constants	
Temperature compensation type	With external Pt100	
External coating	Acrylic-Epoxy coating RAL5010	

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<b>Equipment</b>	<b>Vertical measuring unit</b>		
<b>Model</b>	<b>ZCE5-80 with electronic register</b>		
<b>4-Multi-function valve – XAD37 with electromechanical control box</b>			
Operating principle	Piston operated by differential pressure with electromechanically controlled inlet circuit.		
Cylinder material	Aluminum (EN AC-42100)		
Piston material	Aluminum with lining (EN AW-7075)		
Retaining spring material	Stainless steel		
Decompression ball - Thermal relief valve	Calibrated at 0.4 bar		
Adjusting screw	For closing time adjustment		
Electrical control box - AC16	Drive shaft controlled by 2 electromagnets allowing operation in low flow rate and high flow rate.		
Electromagnets specifications	220VAC 50Hz, peak inrush intensity: 2A, holding intensity: 1A		
External coating	Acrylic-Epoxy coating RAL5010		
<b>5-Register</b>			
Register type	Electronic register		
Model	Equalis S		
<b>Environmental</b>			
Ambient working temperature	min / max	-25°C, -40°C (option) / +55°C	-13°F, -40°F (option) / +131°F
Storage temperature	min / max	-40°C / +80°C	-40°F / +176°F
<b>Certification</b>			
ATEX	II 2 G EX IIA T4 Gb		
European metrology	CE /MID Type examination certificate n°LNE-6184		
International metrology	OIMLR117-1, type compliance certificate n°LNE-24351		
Standards compliance	API, ASME, NATO. See note 1		

Note 1: Contact us for further information about standards compliance.

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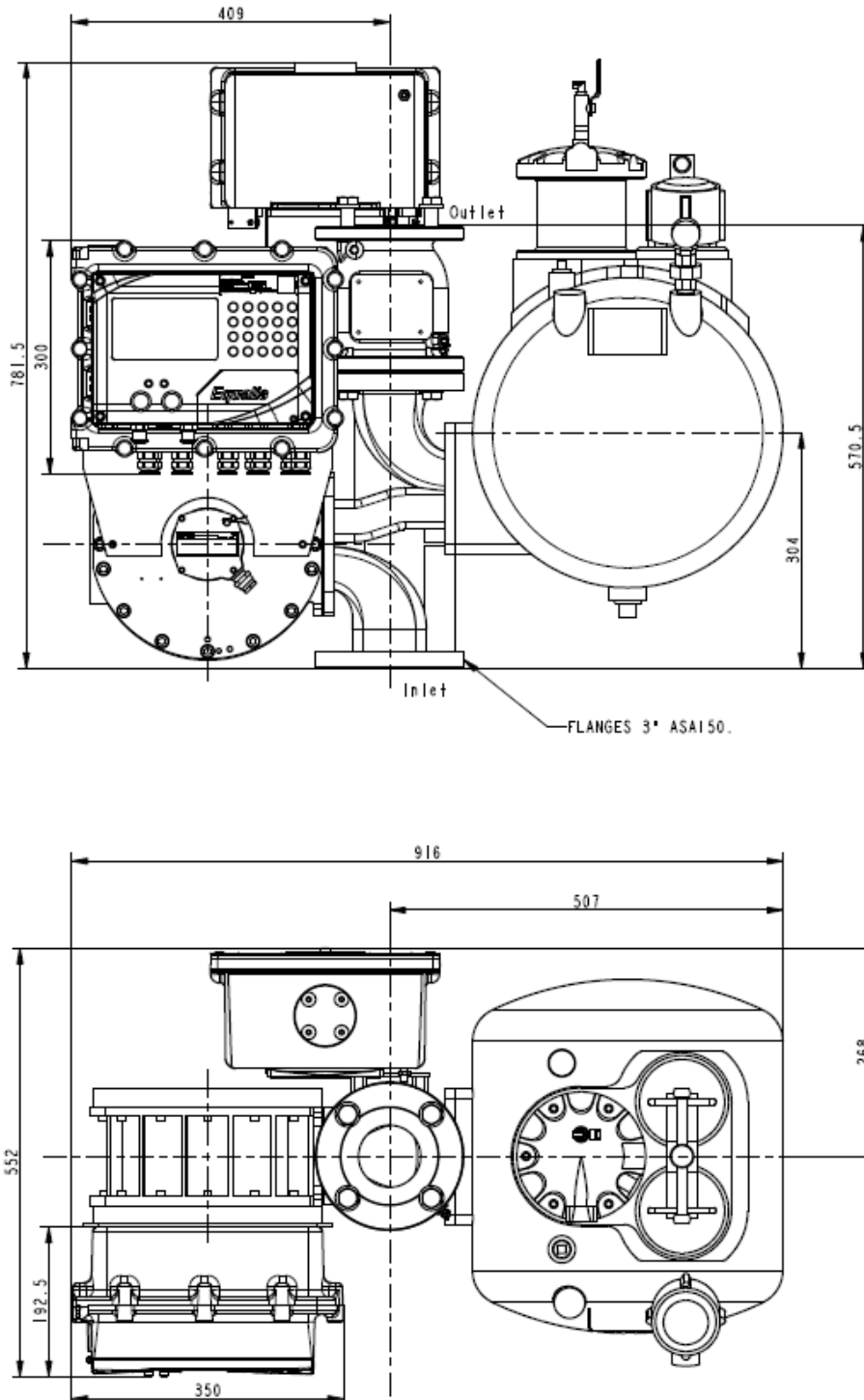
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<b>Equipment</b>	<b>Vertical measuring system</b>
<b>Model</b>	<b>ZCE5-80 with electronic register</b>

**Dimensions and weight**



**Weight: 200 kg**

Weight is mentioned without electronic register. Please refer to Equalis S data sheet for information about weight of electronic register.

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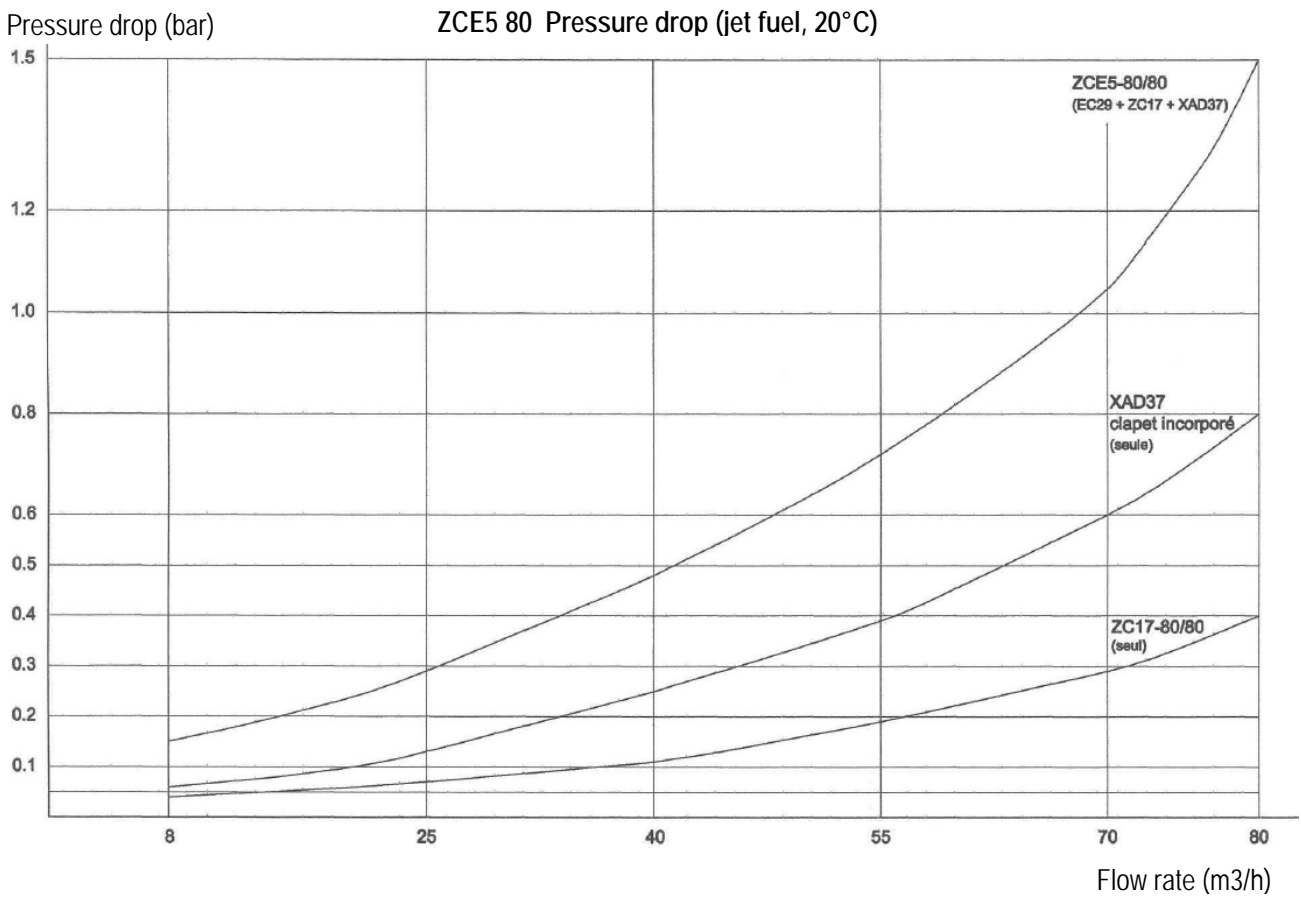
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<b>Equipment</b>	<b>Positive Displacement meter</b>
<b>Model</b>	<b>ZCE5-80 with electronic register</b>

## Pressure drop chart



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