

# Stainless Steel P.D. Meters

## SBM 75 MK2 - BMX 200

## BMX 400 - BMX 600



BMX 200 with ENCODER



SBM 75 MK2 with mechanical counter

[www.isoilmeter.com](http://www.isoilmeter.com)



## Stainless Steel P.D. Meters SBM 75 MK2 - BMX 200 BMX 400 - BMX 600

ISOIL PD meter series **SBM 75 MK2** and **BMX** and sizes 2", 3", 4" and 6" offers high accuracy:  $\pm 0,1\%$  (BMX) and  $\pm 0,15\%$  (SBM 75 MK2) with a repeatability better than  $\pm 0,02\%$ , over a large range of flow rate. This accuracy remains constant during long periods of use. Visual indication of the flow rate measured can be obtained when associated with mechanical register or electronic flow computer directly mounted on the meter or remote by means of a pulses emitter (see VEGA II or VEGA T leaflets). Stainless steel construction guarantees compatibility with aggressive liquids.

### Applications

» for chemical, pharmaceutical and alimentary industries

### Filtering and air elimination

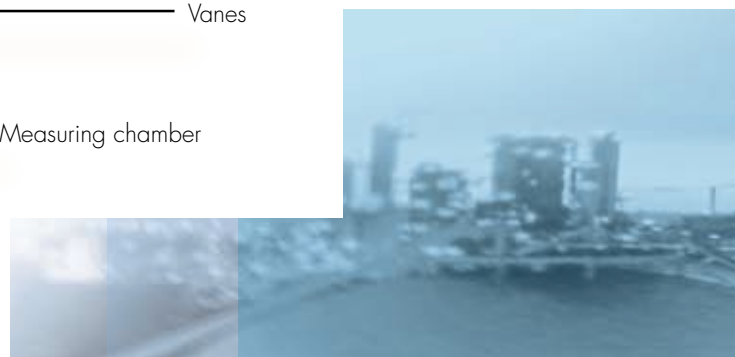
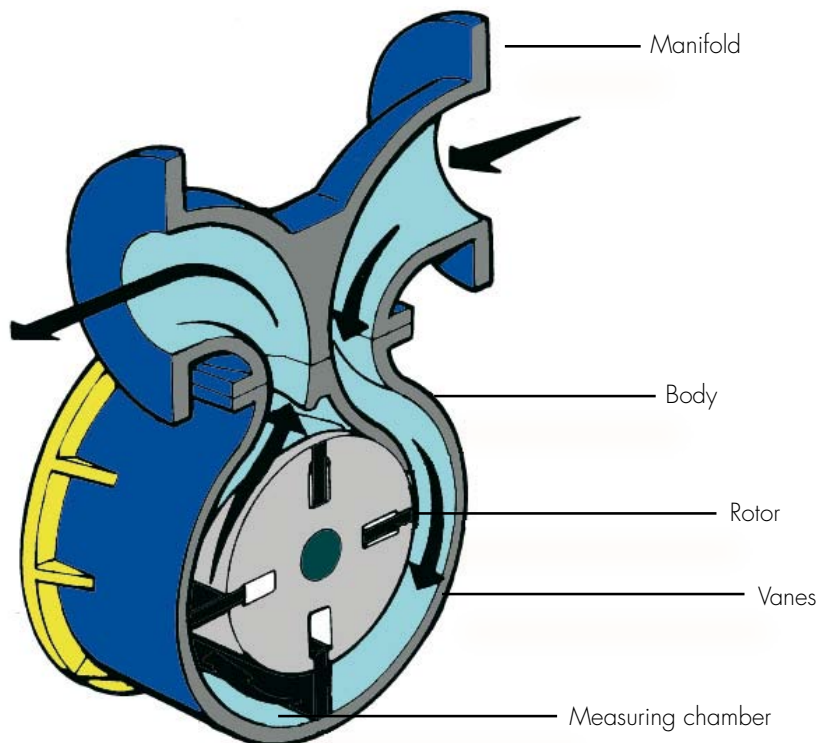
To assure a measuring accuracy and preserve the meter from damage, the fluid under measurement must be properly filtered and air or gas must be eliminated. Isoil produces a wide range of strainers and strainer - air separators (see SFA - SFDA - FA - FDA leaflet).

### Operation

While rotating, the vanes are driven by the internal surface of the single body. This means that the self - lubricating vanes are always in contact with the internal surface of measuring chamber, therefore product leakage is avoided and though high accuracy is granted.

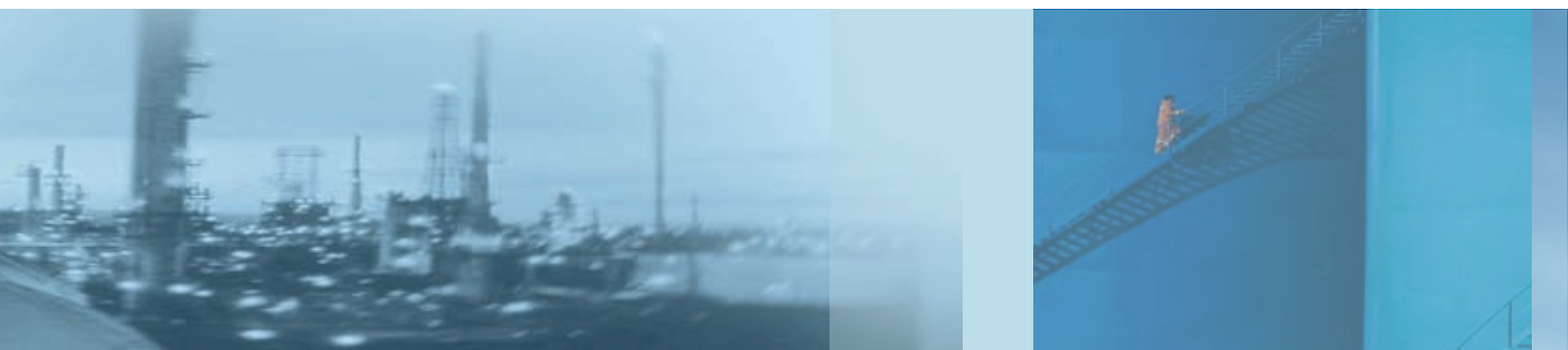
The calibration mechanism allows micrometric adjustment. It is not necessary to change gears.

When an electronic counter is used, the calibration mechanism is substituted with a  $90^\circ$  driving gear, if the electronic counter is mounted directly on the meter. If the electronic counter is remote, the meter mounts a pulses emitter or encoder (see Encoder Isoil 6422 data sheet).

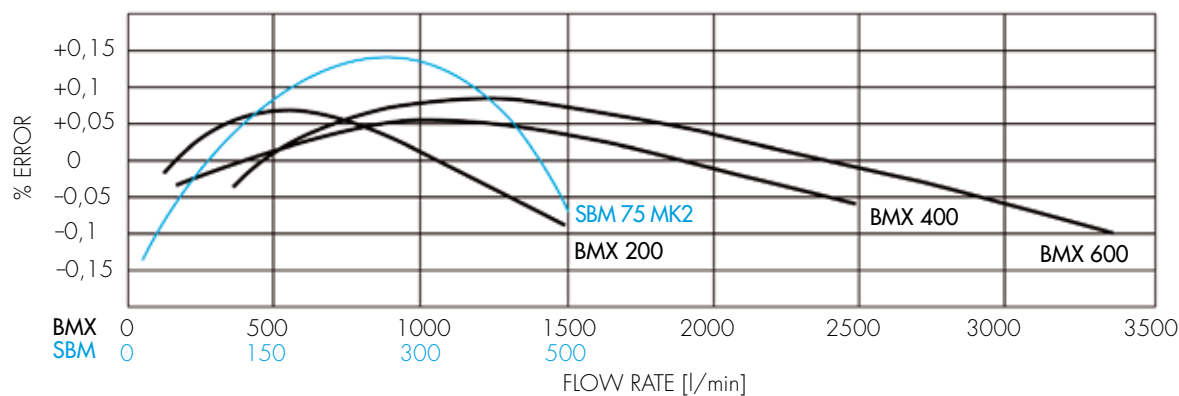


## Technical specifications

EU Directives compliance	STANDARD				UPON REQUEST	
	SBM 75 MK2	BMX 200	BMX 400	BMD 600	SBM 75 MK2 BMX 200 BMX 400 BMX 600	
	PED (dir. 97/23/CE)	Compliant directive 97/23/CE, with risk category depending on the measured liquid				
	ATEX (dir. 94/9/CE)	Non electrical equipment, compliant directive 94/9/CE, suitable for installation in hazardous area II 2G, marking Ex II 2 G c T1 ... T6				
Working conditions						
Flow rate:	[50 ; 500] l/min @ 10 cSt	[100 ; 1,300] l/min @ 10 cSt	[200 ; 2,400] l/min @ 10 cSt	[300 ; 3,400] l/min @ 10 cSt		
Working pressure:	1,930 KPa max	1,930 KPa max	1,930 KPa max	1,930 KPa max	Higher available upon request	
Test pressure:	2,990 KPa	2,990 KPa	2,990 KPa	2,990 KPa	Higher available upon request	
Working temperature:	[-30; +100] °C	[-30; +100] °C	[-30; +100] °C	[-30; +100] °C	Higher and lower available upon request	
Construction						
Manifold and flanges:	Stainless steel	Stainless steel	Stainless steel	Stainless steel		
Body:	Stainless steel	Stainless steel	Stainless steel	Stainless steel		
Covers:	Stainless steel	Stainless steel	Stainless steel	Stainless steel		
Rotor:	Stainless steel	Stainless steel	Stainless steel	Stainless steel		
Vanes:	Graphite	Graphite	Graphite	Graphite	PTFE	
Gaskets:	PTFE	PTFE	PTFE	PTFE	Viton	
Ball Bearings:	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel	Graphite bushes	
Drive:	Magnetic	Magnetic	Magnetic	Magnetic	Mechanical or magnetic drive	
Flanged:	2" ANSI150 RF	3" ANSI150 RF	4" ANSI150 RF	6" ANSI150 RF	Other sizes and standards	
Readout (with mechanical register)	litres	litres	litres or m³	m³	Others upon request	
Volume per revolution:	0.625 litre	2.275 litres	4.55 litres	6.825 litres		
Flow direction:	Left (IN) to right (OUT)	Left (IN) to right (OUT)	Left (IN) to right (OUT)	Left (IN) to right (OUT)	Right (IN) to left (OUT)	
Performances						
Accuracy:	± 0.15%	± 0.1%	± 0.1%	± 0.1%		
Repeatability:	± 0.02%	± 0.01%	± 0.01%	± 0.01%		
Pressure drop:	Refer to the diagram attached	Refer to the diagram attached	Refer to the diagram attached	Refer to the diagram attached		

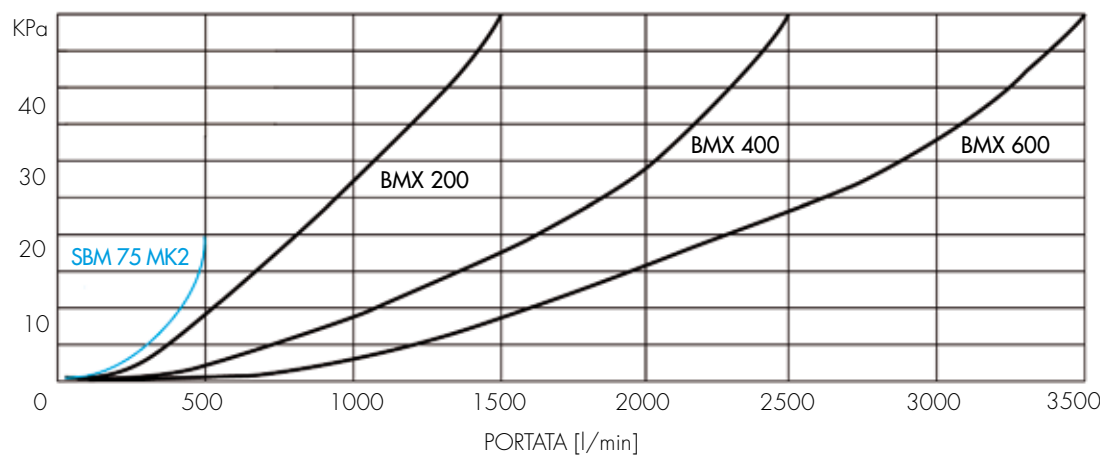


Accuracy curves

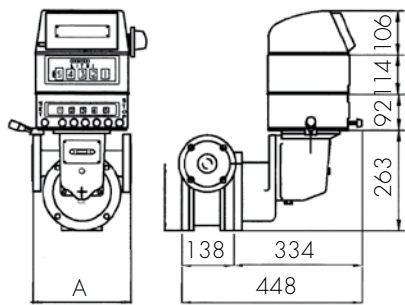


Perdita di carico

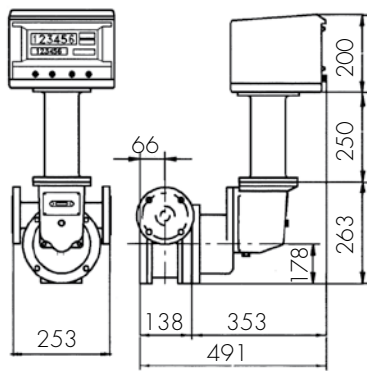
Viscosità a 15°C: 2 cSt  
Densità: 795 Kg/m³



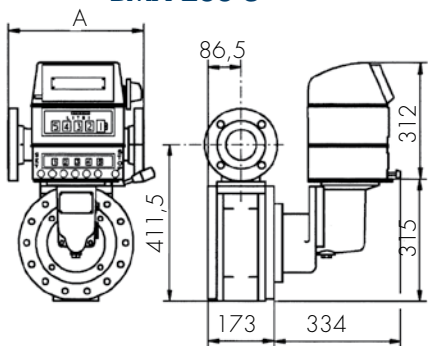
SBM 75 MK2 2"



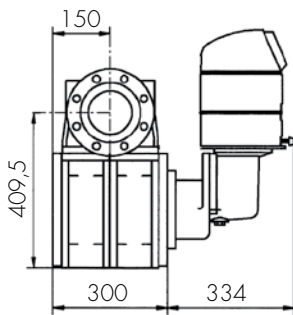
SBM 75 MK2 2"



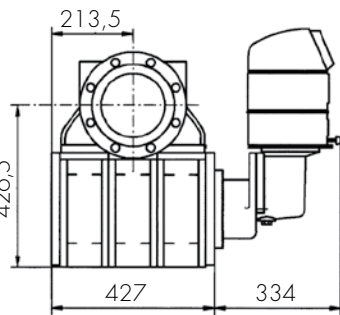
BMX 200 3"



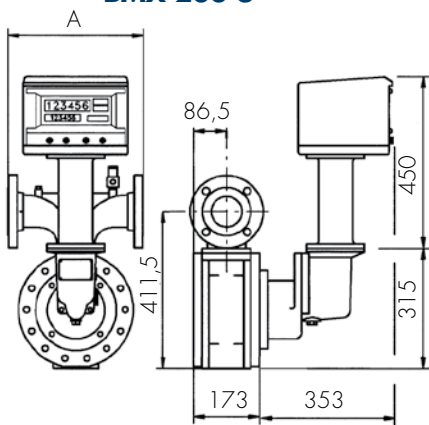
BMX 400 4"



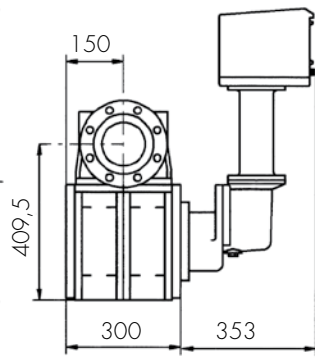
BMX 600 6"



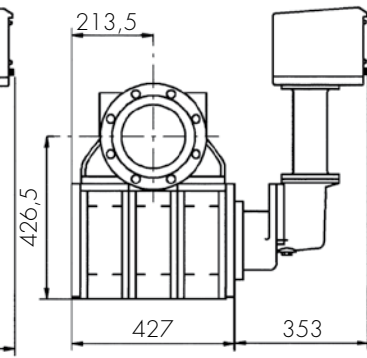
BMX 200 3"



BMX 400 4"



BMX 600 6"



Type	Dimension A	Weight
BMX 200	356 mm	76 Kg
BMX 400	430 mm	132 Kg
BMX 600	733 mm	203 Kg
SBM 75 MK2	253 mm	36 Kg





# Stainless Steel P.D. Meters

## SBM 75 MK2 - BMX 200

## BMX 400 - BMX 600

### Accessories

<b>Mechanical preset valve</b> Flanges ANSI 150 3" in stainless steel
<b>Pulses eitter</b> Model EM 6422 EEx-d. Model EM 345 EEx-i.
<b>Mechanical temperature compensation</b> Setting "alfa" coefficient (only with Veeder Root 7887 register)
<b>With VEGA II compensation</b> Is achieved by an algorithm based on "alfa" coefficient or on ASTM tables
<b>Instant flow rate</b> Mechanical needle indicator
<b>Ticket printer</b> Zero start or accumulative
<b>Preset</b> With one or two EEx-d microswitches or pnumatical switches



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The solutions that count

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