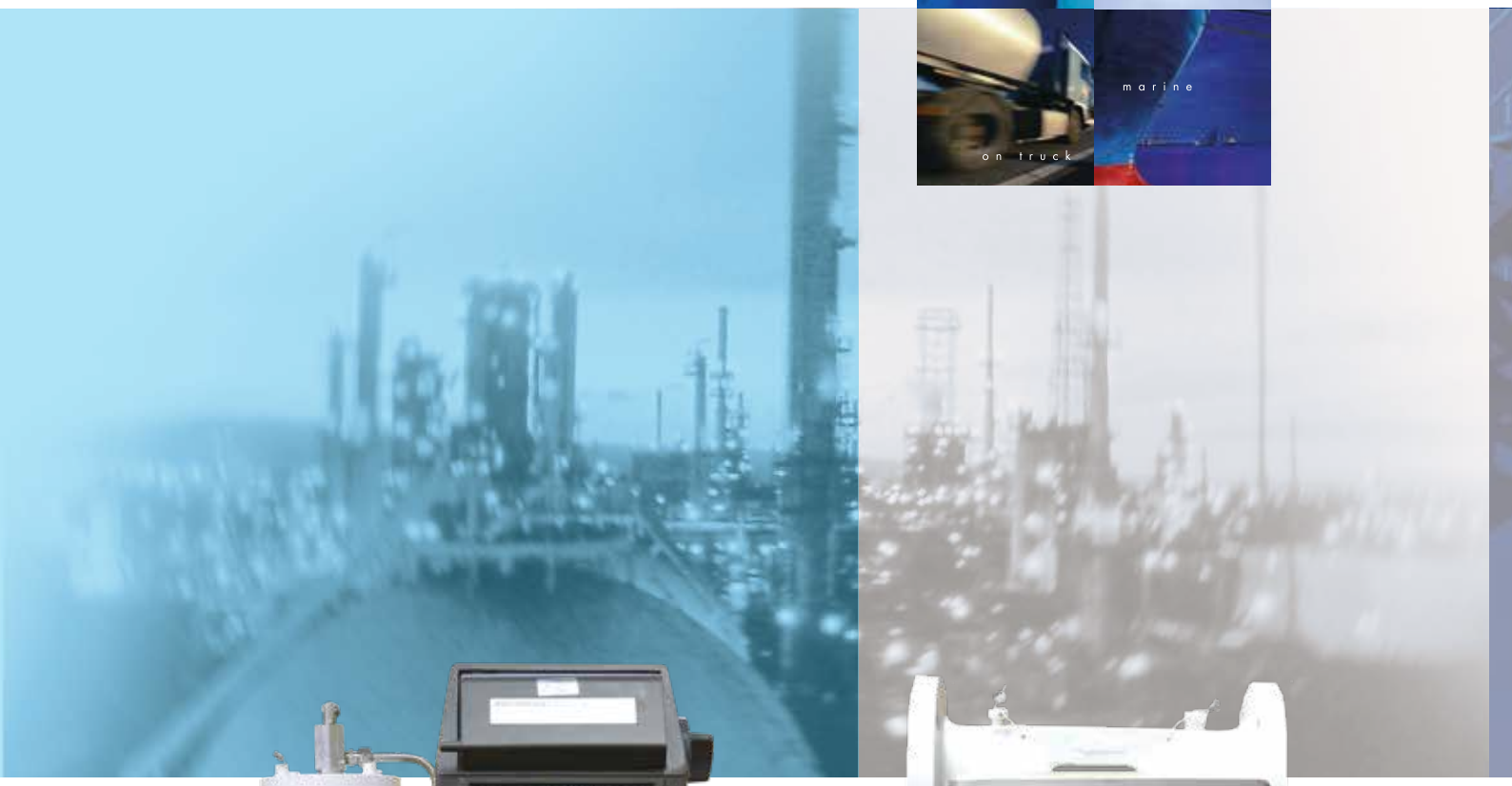
Stainless Steel p.d. meters
SBMX 75
BMX 200 400 - 600



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The solutions that count

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Stainless Steel p.d. meters
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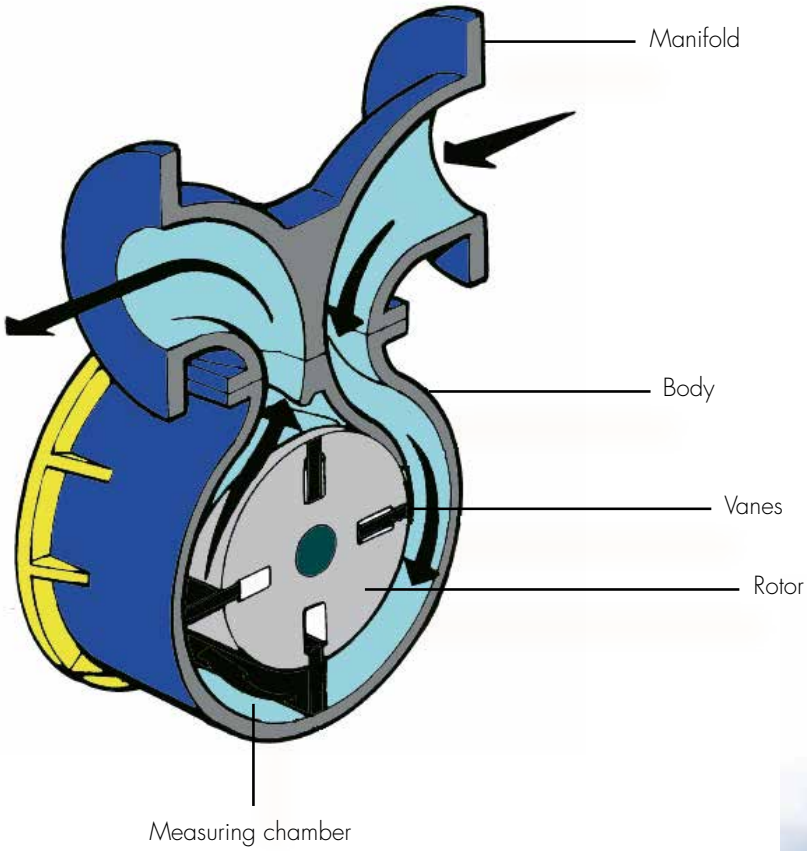
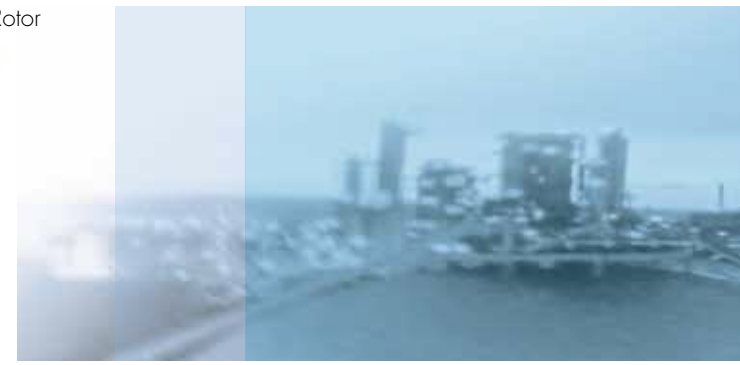
ISOIL **SBMX 75** and **BMX** p.d. meters sizes 2", 3", 4" and 6" grant high accuracy in measurement (±0,1% for BMX and ±0,15% for SBMX 75) and a repeatability of 0,02% over a wide range of flow rates. Correct usage and maintenance ensure this accuracy through long periods of use.
Measured flow rate can be displayed on a mechanical register or, thanks to a pulses emitter, on an electronic counter (e.g. ISOIL mod. VEGA T, VEGA II and VEGA 3).
Stainless steel construction makes these p.d. meters suitable for measurement of aggressive liquids.

Applications
» chemical and petrochemical applications

Filtering and air elimination
In order to assure precise measurement and preserve the meter from damage, the fluid under measurement should be properly filtered and air or gas must be eliminated. Strainer air separators (e.g. ISOIL mod. SFA, SFDA, FDA, DSH, DSV) or strainers (Y strainers) together with air separators (ISOIL mod. DV) are therefore required.

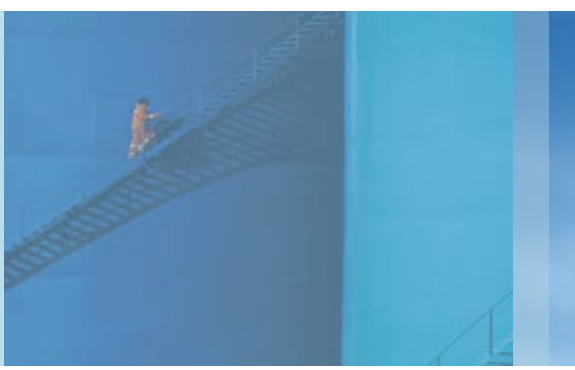
Working principle
Fluid enters the meter trough the manifold thus exerting pressure on the rotor vanes. Therefore the rotor rotates inside the measuring chamber where the vanes, made of self-lubricating material, flow on the internal surface, thus preventing leakage and granting high accuracy in measurement.
Since the measuring chamber has a fixed and known volume for each meter type, flowing liquid can be measured.
Thanks to a seal mounted on the front cover or to a magnetic drive, a shaft connects rotor movement to a mechanical or electronic counter. In this way the number of rotor rotations can be counted and the toral amount of fluid is then calculated by multiplying the number of rotor rotations by the volume of the measuring chamber.



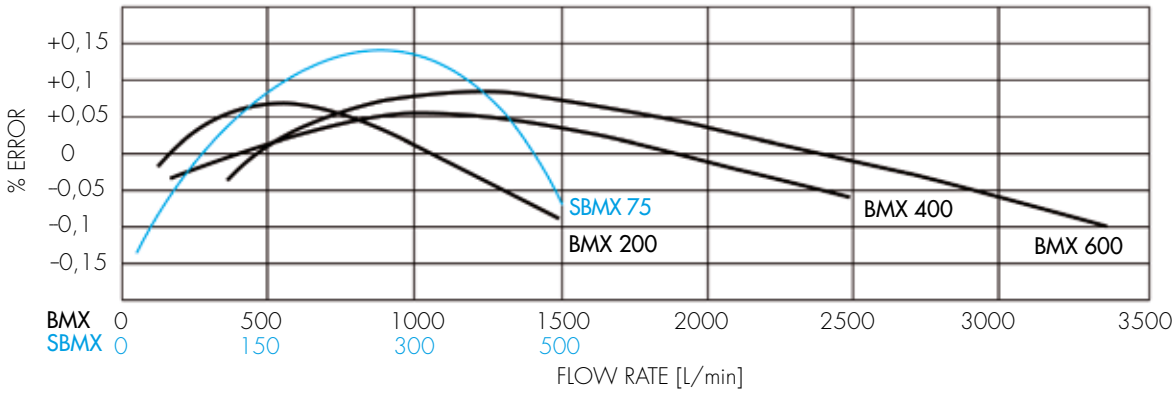


Technical specifications

	STANDARD				UPON REQUEST
	SBMX 75	**BMX 200**	**BMX 400**	**BMX 600**	
EU Directives					
PED	Compliant with Directive 2014/68/UE. Risk category depending on the measured liquid.				
ATEX	Non electrical equipment compliant with Directive 2014/34/UE. Suitable for installation in hazardous area II 2G. Marking Ex II 2 G c Tx.				
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				Higher values
Test pressure:	2,990 kPa				Higher values
Working temperature:	[-10; +100] °C				Other values
Construction					
Manifold and flanges:	Stainless Steel				
Body:	Stainless Steel				
Covers:	Stainless Steel				
Rotor:	Stainless Steel				
Vanes:	Graphite				PTFE
Gaskets:	PTFE				Viton
Ball Bearings:	Stainless Steel				Graphite bushes
Seal:	Magnetic				Mechanical coupling
Flanges:	2" ANSI150 FF	3" ANSI150 RF	4" ANSI150 RF	6" ANSI150 RF	Other sizes and standards
Readout (with mechanical register):	Litres		Litres or m^3	m^3	Others
Volume per revolution:	0.625 Litre	2.275 Litres	4.55 Litres	6.825 Litres	
Outlet:	Right				Left
Performances					
Accuracy:	± 0.15%	± 0.1%			
Repeatability:	0.04%	0.02%			

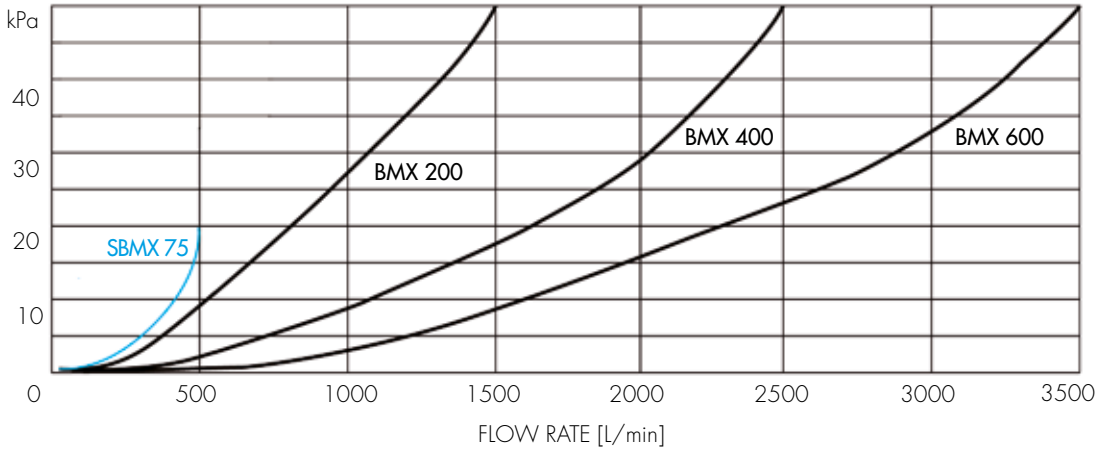


Accuracy curves

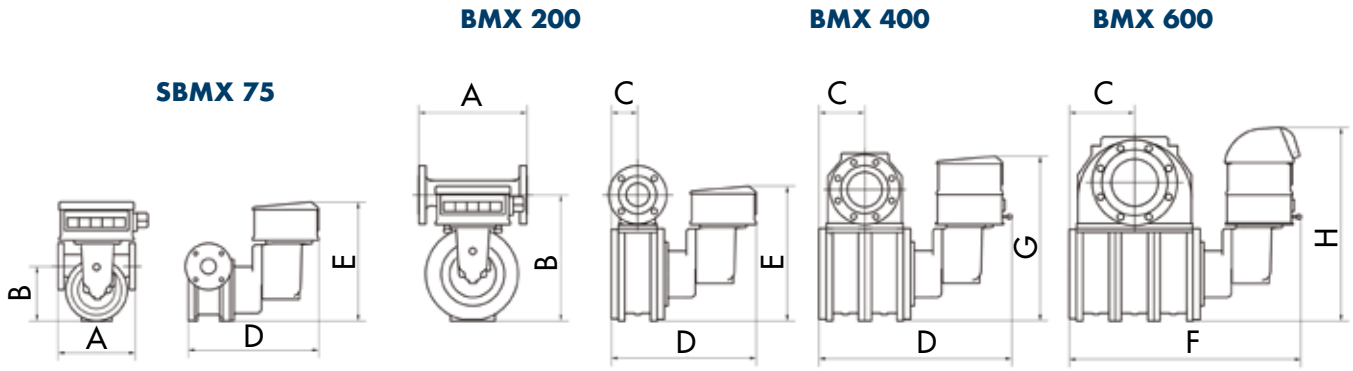


Pressure drop

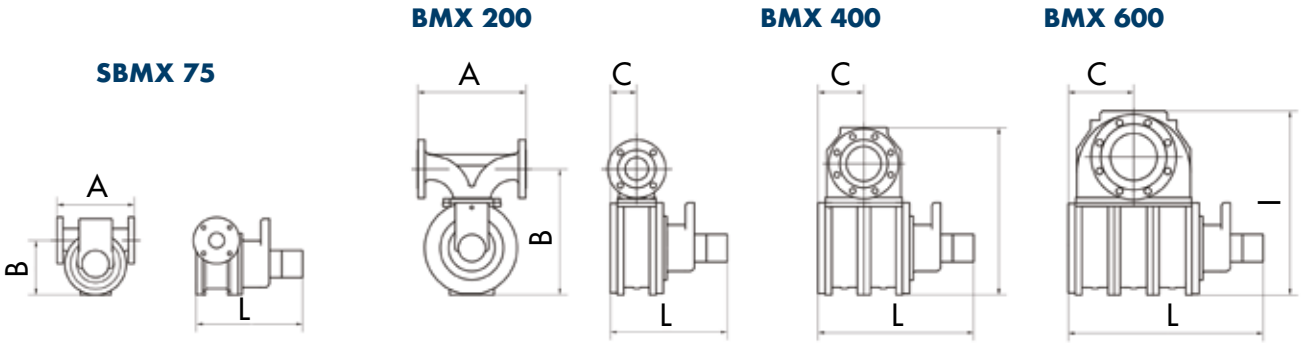
Viscosity at 15°C= 2 cSt
Density= 795 kg/m³



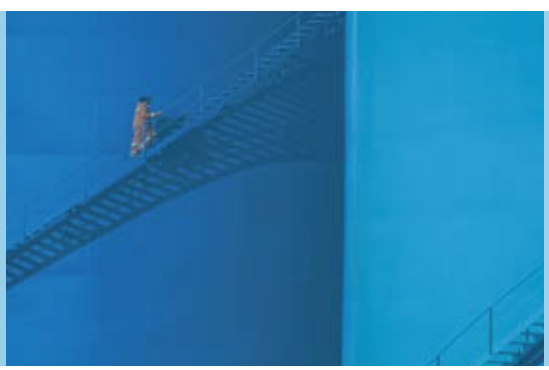
P.D. Meter with mechanical counter



P.D. Meter with pulse emitter



Tipo	A	B	C	D	E	F	G	H	I	L	**Weight** mechanical counter	**Weight** pulse emitter
SBMX 75 2"	253	178	82	457	388	484	535	630	-	371	55 kg	37 kg
BMX 200 3"	356	411,5	100	493	440	520	535	630	-	407	102 kg	84 kg
BMX 400 4"	400	428,5	165	620	440	627	535	630	546,5	534	148 kg	130 kg
BMX 600 6"	400	451,5	230	657	440	684	535	630	601,5	571	218 kg	200 kg



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Accessories

Mechanical preset valve	Flanges ANSI 150 3" in stainless steel
Pulses emitter	EM6422 Ex-d EM345 Ex-i
Mechanical temperature compensator	By setting "alfa" coefficient (with Veeder Root 7887 register only)
VEGA II compensation	By an algorithm based on "alfa" coefficient or on ASTM tables
Instant flow rate	Mechanical needle indicator
Ticket printer	Zero start or accumulative
Preset	With one or two Ex-d microswitches or pnumatical switches

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