

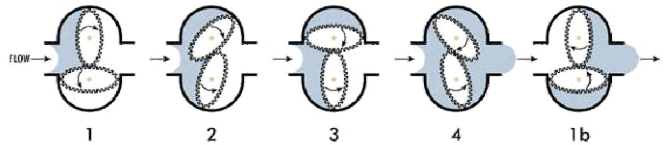


Oval Flow Meter

Oval Flow meter

Measuring Principle

Oval Gear Meters are displacement-type Volume meters that transport defined incremental volumes in individual measuring chambers. The measuring element consists of two high precision toothed oval gears, which are driven by the flow of the medium and mesh with each other. In this way, a defined volume is transported for each rotation of the pair of oval gears. The number of rotations is a measure of the amount of fluid that has passed through the meter. The rotations are detected by a sensor element.



Features:

- Meter size DN6 –DN200 (1/4"-8")
- High accuracy : $\pm 0.5\%$ RD (Option: $\pm 0.2\%$ RD)
- Metering chamber is of a pocket less configuration and is applicable to a wide range of liquids including chemical liquids.
- Low pressure loss, high durability

Benefits

- 12months warranty
- Low maintenance, Reliable meter

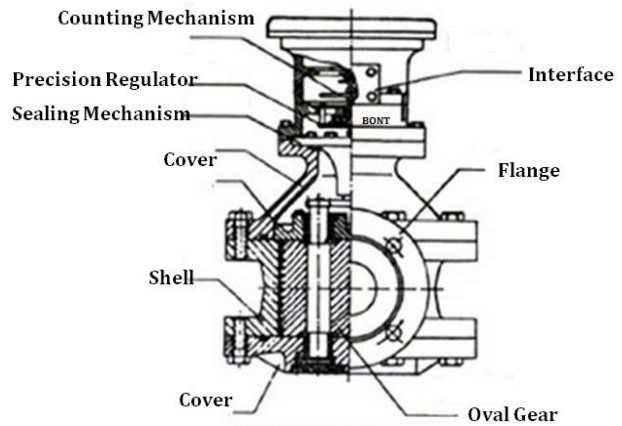
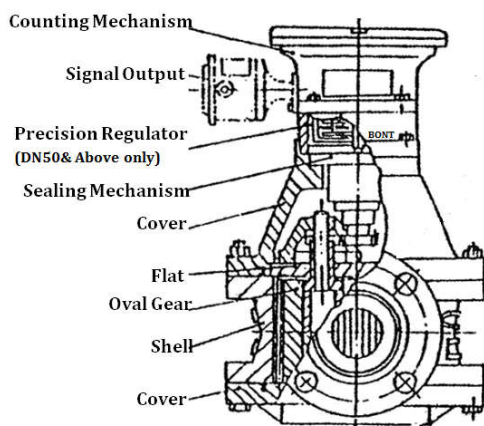
Application

- Petroleum Industry
- Process Industry
- Plastic Industry
- Palm Oil Mill
- Chemical Industry
- Food Industry

Specification

Transmitter Type	Pointer Display ;Pointer with zero returning ; Pointer display with output ;LCD
Medium	Oil ; Fuel Oil; Chemical ;Etc
Accuracy	±0.2% ; ±0.5%
Nominal Diameter	DN 8~ DN 200/mm
Nominal Pressure	PN1.6 ~6.3MPa
Medium Temperature	-10°C~280°C
Medium Viscosity	Accumulative Flow , Single Measurement (Mechanical Dial)
Power Supply	12 VDC ; 24 VDC
Output Signal	Pulse ; 4-20mA.DC ;RS485
Display	Accumulative Flow , Single Measurement (Mechanical Dial) ;Remote Transmission of total and instantaneous flow
Error Adjustment	Changing Gear Adjustment
Level of Protection	IP65
Explosion Proof	Flame-proof Type ,Exd IIBT4
Ambient Temperature	-20 ~55 °C
Sensor Material	Cast Iron ; Cast Steel ; Stainless Steel
Sensor Connection	Flange ,Screw , Sanitary tri-clamp

Structure Diagram



Parameters

*Cast Iron type – A ; Cast Steel type – B ; Stainless Steel type – C

Item	BT-A Cast Iron		BT-E Cast Steel		BT-B Stainless Steel	
Pressure (Mpa)	1.0 , 1.6		2.5 , 4.0 ,6.4		1.0 , 1.6	
Medium Viscosity	2~200mPa.s					
Temperature	-20 °C ~100°C					
Size Accuracy	Flow Range (m³/h)					
	0.5	0.2	0.5	0.2	0.5	0.2
10	0.08~0.5	0.1~0.4	0.08~0.4	0.1~0.4	0.1~0.5	0.1~0.5
15	0.25~1.5	0.36~1.35	0.25~1.5	0.3~1.5	0.3~1.5	0.3~1.5
20	0.5~3	0.6~3	0.5~0.3	0.6~3	0.6~3	0.6~3
25	1~6	1.2~6	1~6	1.2~6	1.2~6	1.2~6
40	2.5~15	3~15	2.5~15	3~15	3~15	3~15
50	4~24	4.8~24	4~24	4.8~24	4.8~24	4.8~24
65	8~50	10~50	8~50	10~50	12~60	12~60
80	10~60	12~60	10~60	12~60	12~60	12~60
100	16~100	20~100	16~100	20~100	20~100	20~100
150	32~190	38~190	32~190	38~190	38~190	38~190
200	34~340	38~340	34~340	68~340	38~340	38~340

*High temperature Cast Iron type –TA ;Cast Steel type – TE ;Stainless Steel type - TB

Item	BTOG-TA Cast Iron		BTOG-TE Cast Steel		BTOG-TB Stainless Steel	
Pressure (Mpa)	1.0 , 1.6		2.5 , 4.0 ,6.4		1.0 , 1.6	
Medium Viscosity	2~200mPa.s					
Temperature	100°C ~ 280°C					
Size Accuracy	Flow Range (m³/h)					
	0.5	0.2	0.5	0.2	0.5	0.2
10	0.04~0.4	0.1~0.4	0.04~0.4	0.1~0.4	0.1~0.5	0.1~0.5
15	0.24~1.35	0.35~1.35	0.24~1.35	0.35~1.35	0.36~1.35	0.36~1.35
20	0.54~2.7	0.72~2.7	0.54~2.7	0.72~2.7	0.72~2.7	0.72~2.7
25	1.2~5.4	1.4~5.4	1.2~5.4	1.4~5.4	1.4~5.4	1.4~5.4
40	2.7~13.5	3.6~13.5	2.7~13.5	3.6~13.5	3.6~13.5	3.6~13.5
50	4.4~21.6	5.75~21.6	4.4~21.6	5.75~21.6	5.75~21.6	5.75~21.6
65	8.8~46	10.8~46	8.8~46	10.8~46	8.8~46	10.8~46
80	10.8~54	14.4~54	10.8~54	14.4~54	14.4~54	14.4~54
100	18~90	24~90	18~90	24~90	24~90	24~90
150	38~170	45.6~170	38~170	45.6~170	45.6~170	45.6~170
200	34~340	68~340	34~340	68~340	68~340	68~340

*High viscosity Cast Iron type- NA ; Cast Steel type –NE

Item	BTOG-NA Cast Iron				BTOG-NE Cast Steel				BTOG-TB Stainless Steel		
Pressure (Mpa)	1.6							2.5 ; 4.0			
Medium Viscosity	2~3000mPa.s										
Temperature	-10°C ~ 100°C										
Accuracy	0.5										
Size (mm/DN)	10	15	20	25	40	50	65	80	100	150	200
Flow Range	0.04 ~0.2	0.15 ~0.75	0.3 ~1.5	0.6 ~3	1.5 ~7.5	2.4 ~12	4~ 25	6~ 30	10~ 50	19~ 95	34~ 170

Dimension

- Dimension Cast Iron Type : High Viscosity ; High Temperature

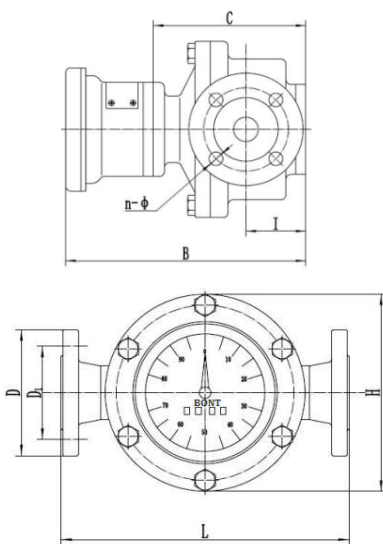
DN/MM	L	H	I	B	C	D	D1	n	Φ
10	150	100	455	213	135	90	60	4	14
15	170	118	48	226	147	95	65	4	14
20	200	150	53	238	155	105	75	4	14
25	260	180	60	246	164	115	85	4	14
40	245	180	77	271	199	150	110	4	18
50	340	250	88	379	249	165	125	4	18
65	420	325	118	443	311	185	142	4	18
80	420	325	118	443	311	200	160	8	18
100	515	418	131	467	337	220	180	8	18
150	540	515	210	565	435	280	240	8	23
200	650	650	247	624	494	335	295	12	23

- Dimension Cast Steel Type : High Viscosity ; High Temperature

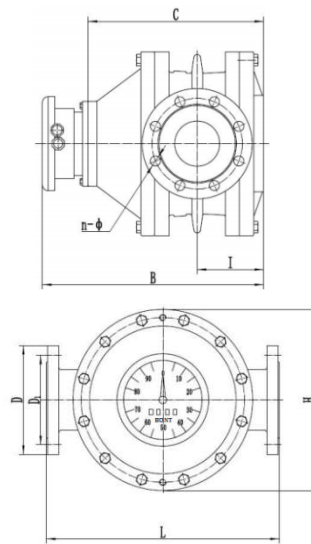
DN/MM	L	H	I	B	C	D	D1	n	Φ
15	200	138	53	220	145	105	75	4	14
20	250	164	65	245	165	125	90	4	18
25	300	202	68	255	175	135	100	4	18
40	300	202	83	285	205	165	125	4	23
50	384	262	88	400	270	175	135	4	23
80	450	337	118	460	330	210	170	8	23
100	555	442	131	485	355	250	200	8	25
150	540	510	210	565	435	300	250	8	26
200	650	650	247	625	495	300	310	12	26

• Dimension Stainless Steel Type : High Viscosity ; High Temperature

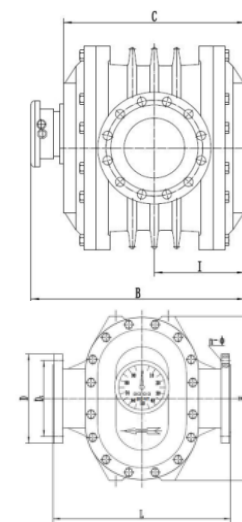
DN/MM	L	H	I	B	C	D	D1	n	Φ
10	170	100	45	216	133	90	60	4	14
15	200	120	45	226	226	95	65	4	14
20	230	150	48	238	238	105	75	4	14
25	280	195	58	246	249	115	85	4	14
40	265	178	64	370	370	150	110	4	18
50	265	178	92	370	370	165	125	4	18
65	365	265	125	460	460	165	145	4	18
80	420	305	133	459	459	200	160	8	18
100	515	400	181	554	554	220	180	8	18
150	540	515	210	607	607	280	240	8	23
200	650	650	247	646	646	340	295	12	23



DN 10~ DN40



DN 50~ DN100



DN 150~ DN200

Selection Model

BT-OG										
Instrument Type	S									Standard
	N									High Viscosity
	U									Warm-Keeping Sleeve
	T									High Temperature
Material-Body	A									Cast Iron
	B									Stainless Steel
	E									Cast Steel
Material-Gear	1									Cast Iron
	2									Cast Steel
	3									Other (Please Specified)
Diameter			DN50							Exp: DN50 /mm
Nominal Pressure	1									1.6MPa
	2									2.5MPa
	4									4.0MPa
	(Exp: 6.3Mpa)									Other (Please Specified)
Counter	1									Mech Counter \leq DN40
	2									Mech Counter \geq DN50
	3									With Zero Reset
	4									Digital Display -Electronic
	5									Other (Please Specified)
Signal	1									12VDC/Pulse Output
	2									24VDC/Pulse Output
	3									4-20mA
	4									Other (Please Specified)
Optional									(-)	(Please Specified)

Exp: BT-OGLC-S11-DN25-143-0.5/OP :Build In Battery (lasting 2year)

Bont Technologies Oval Gear Flow Mete – LC Type : Standard ; Material :Body & Gear Cast Iron ;Size : DN25/1” ; 1.6Mpa ; Digital type with 4-20mAout put ;Optional: with build in battery

*Build in battery life 2year .

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