

Flow meter Type Recordall® (RCDL)



Features

- Magnetic coupling
- Compatible with many liquids
- Wide flow range
- Low pressure loss
- Low weight
- High durability, accuracy
- Low-cost
- Modular system

Description

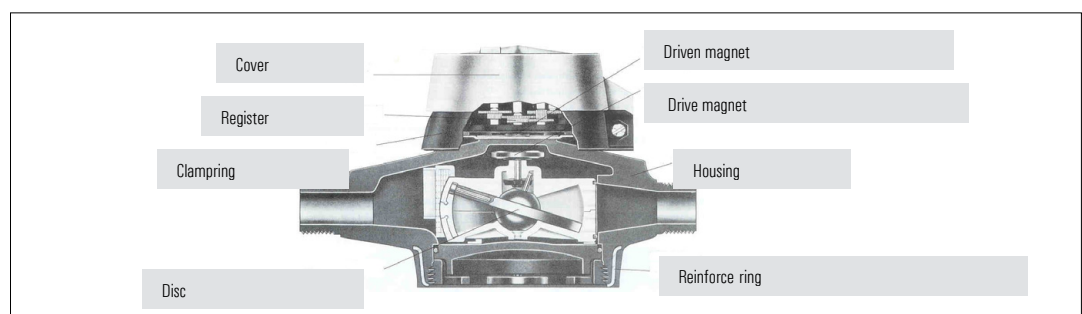
The Recordall® series is a positive displacement meter. The series is best suited for metering fluids up to a viscosity of 700 mPas and at an operating temperature of 50°C up to 120°C.

Applications

Clean and moderately dirty liquids, hard and demineralized water, oils, fuel, solvents, etc.

Design

The metering chamber includes disc, positioning bar and transmission magnet. The chamber is inserted into the meter body. A screen in the inlet side of the body protects the chamber against penetration of larger solid particles.

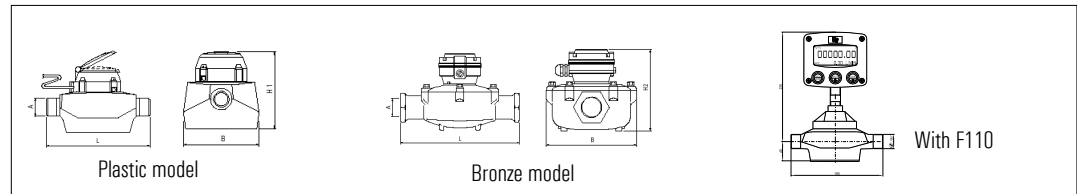


Working principle

The top and lower part of the meter chamber are spherical shaped. A ball bearing centralizes the disc between the two spherical cups. A nutating motion of the disc is generated when flow enters the meter chamber. Complete separation between inlet and outlet chamber volumes is always achieved

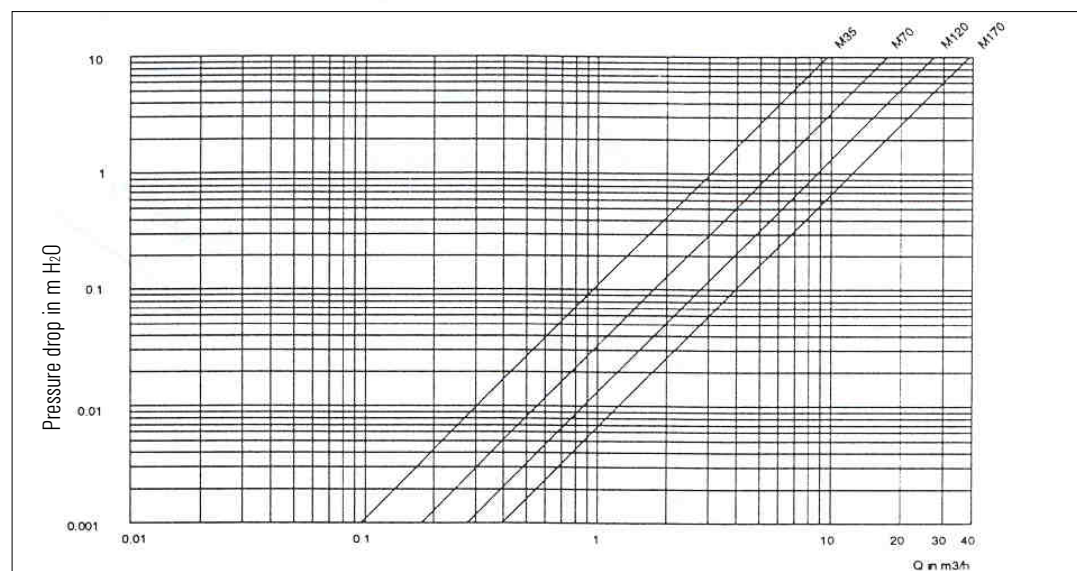
by one dedicated disc diameter line. The inlet and outlet parts of the meter chamber are separated by a partition plate. The positioning bar forces the disc to nutate around the center axis of the chamber thus driving the transmission magnet.

Dimensions (mm)



Type	M 25			M 35	M 40		M 70	M 120	M 170
	Plastic	Bronze	Stainless steel	Bronze	Plastic	stainless steel	Bronze	Bronze	Bronze
Connection A	R 3/4" / 1"	R 3/4" / 1"	1"	R 1"	R 1 - 1/4"	1 1/4"	R 1 - 1/4"	1 - 1/2"NPT	2" NPT
Lay length L	190	190	190	230	270	230	270	321	387
Width B	122	122	135	133	151	135	184	223	240
Height register H 1	125	125	130	132	150	130	165	178	204
Height transmitter H 2	128	128	155	168	180	155	200	213	239
Height F110	265	265	265	270	290	265	310	323	349

Pressure drop














Technical data

Type	M 25			M 35	M 40		M 70	M 120	M 170
	Plastic	Bronze	Stainless steel	Bronze	Plastic	Stainless steel	Bronze	Bronze	Bronze
Size DN	15 / 20	15 / 20	20	20	25	25	25	40	50
Nominal pressure PN	16	16	16	16	16	16	16	16	16
Max. Temperature (PPO)	50°C	50°C	50°C	50°C	50°C	50°C	50°C	50°C	50°C
Max. temperature (Vectra)	-	120°C	120°C	-	-	-	120°C	120°C	-
Flow range l/min (PPO)	1 – 100	1 – 100	1 – 100	2 – 132	2 – 160	2 – 160	4 – 265	8 – 454	8 – 643
Flow range l/min (Vectra)	-	3 - 100	3 – 100	-	-	-	19 – 265	18 – 454	-
Accuracy (1:10)	±0,5 %								
Accuracy (flow range)	±1,5 %								
Weight	1,2 kg	1,8 kg	5,8 kg	2,7 kg	1,8 kg	7 kg	5,5 kg	10,5 kg	13,6 kg

Materials

Type	M 25				M 35		M 40		M 70		M 120		M 170	
Housing	Nylon	Bronze	Nickel coated Bronze	SS 1.4571	Bronze	Nickel coated	Polkar- bonat	SS 1.4571	Bronze	Nickel coated	Bronze	Nickel coated	Bronze	Nickel coated
Measuring chamber	PPO	PPO / Vectra			PPO	PPO / Vectra	PPO		PPO / Vectra		PPO / Vectra		PPO	PPO
O -rings	Buna	Buna /Viton			Buna	Buna / Viton	Buna		Buna / Viton		Buna / Viton		Buna	Buna
Retainer strap (PPO)	Nylon													
Retainer strap (Vectra)	Stainless steel 316						PPO		Stainless steel 316					
Screen	PPO													
Bottom (PPO)	Nylon	Cast iron	Cast iron/ Nickel coated	SS	Cast iron	Cast iron/ Nickel coated	Polykar- bonat	SS	Cast iron	Cast iron/ Nickel coated	Cast iron	Cast iron/ Ni- ckel coated	Cast iron	Cast iron/ Nickel coated
Bottom (Vectra)	-	Bronze	Bronze nickel coated	SS	-	Bronze nickel coated	-	SS	Bronze	Bronze nickel coated	Bronze	Bronze nickel coated	-	Bronze nickel coated
Retainer ring	Nylon	-	-	-	-	-	Polykar- bonat	-	-	-	-	-	-	-
Magnet	Bariumferrit													
Crossbar	Nylon													
Thrust roller	Nylon													
Roller insert	Stainless steel 316 / 316 S/S													

Accessories

Accessories for	Fluid meter Type Recordall®	Turbo Meter	Oscillating piston meter Type OP
			
Pulse transmitter series PFT Type FT - 1/2/5, PM 5 Mechanic and electronic pulse transmitter Type FT - E - PFT - E Electronic pulse transmitter 	+	+	+
Process controller PC 100 	+	+	+
Totalizer/Flow rate indicator ER-9/10 	+	+	+
Pulse transmitter type MS-E 5 Reedswitch (only on OP meters) 			+
Pulse transmitter type MS-E1 (only on Turbo meters)  Pulse transmitter type MS-ER 1 (only on Turbo meters) 		+	
Totalizer type F012-F110 (from easy display up to batch controller) 	+		
LCR register 	+		+