



FLOW CONTROLS

FLOWMETERS CATALOGUE



FCM Series Positive Displacement Flow Meter



FCM50 Meter with Register
Strainer & Air Eliminator

Characteristics

- Excellent stepless adjusting mechanism allows a micro adjustment of the meter
- High accuracy and repeatability over the widest range of flow; Superior accuracy at constant flow
- Low maintenance, no metal-to-metal contact in measuring chamber, long life service
- Low pressure loss, a true gravity flow meter
- Accuracy regardless of pressure fluctuations, temperature variation, viscosity
- Choice of aluminum, cast iron and stainless steel materials of construction with head chrome stainless steel rotor with aluminum alloy body meter

*Illustration shows meter with Full SS316 Body, Rotor, and Construction

Construction



Technical Specification

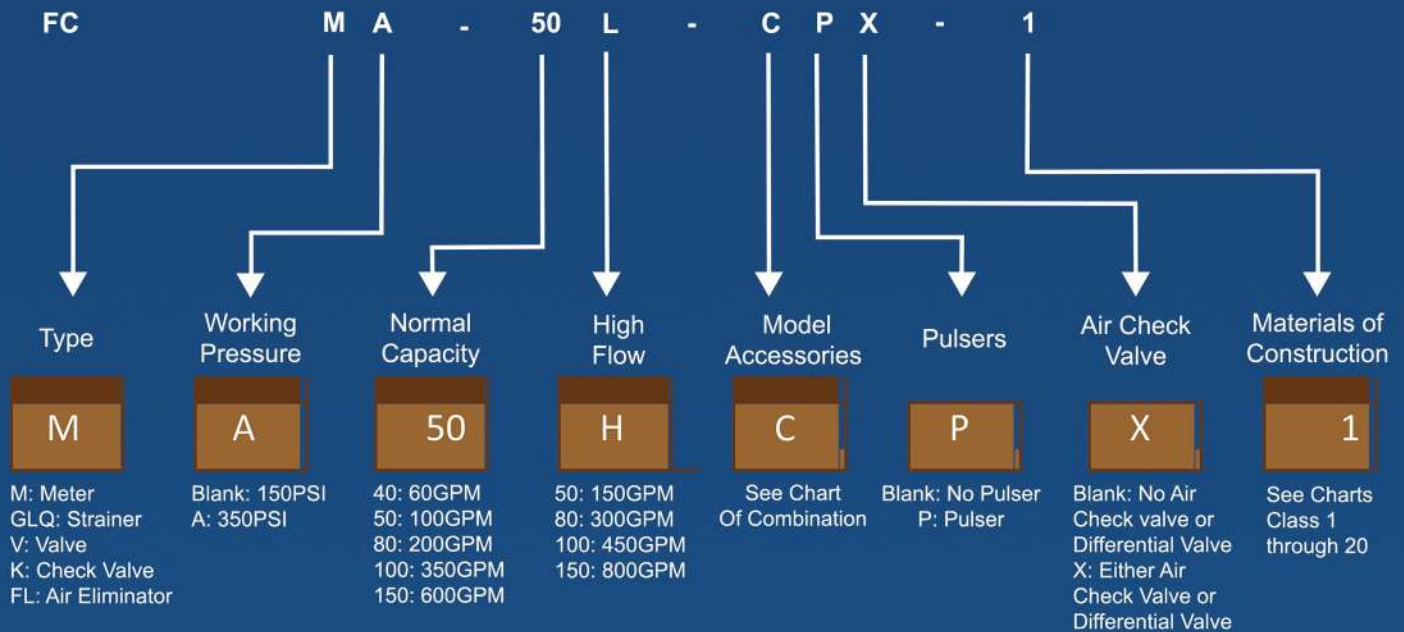
Model	FCM40	FCM50	FCM50	FCM80	FCM80	FCM100	FCM100	FCM150	FCM200
Size	40mm / 1.5"	50mm / 2 "		80mm / 3 "		100mm / 4 "		150mm / 6 "	
Flow Range (L/Min)	25 250	38 380	55 550	75 750	115 1150	130 1300	170 1700	225 2250	300 3000
Volume /Rev.	0.309L	0.681L		1.839L		5.102L		9.507L	
Max. Pressure	10Bar/150PSI							25Bar/350PSI	
Accuracy	±0.1%								
Repeatability	≤0.05%								
Standar Measurement	Liter / US Gallon/IMP Gallon								
Viscosity	30SSU~1,500,000SSU								

Note:4"&6" flange available for FCM150/6" Meter.

Packaging Data

Model	FCM40	FCM50	FCM80	FCM100	FCM150
Packaging	1 pc/Wooden Case				
Net Weight	23Kgs	26Kgs	40Kgs	70Kgs	130Kgs
Gross Weight	35Kgs	38Kgs	55Kgs	90Kgs	155Kgs
Size	53×48×53cm	53×48×53cm	58×50×61cm	76×64×72cm	80×65×79cm

Model No. Description



Industries

- Automotive;
- Adhesives;
- Agriculture;
- Asphalt ;
- Aviation fueling ;
- Animal feeds; Beverage;
- Cosmetics ;
- Chemical processing;
- Concrete Add mixtures;
- Dairy; Liquid fertilizers;
- Food processing ;
- Fuel oil delivery;
- General industrial;
- Hydrocarbon processing;
- Liquefied gases;
- Lube oils; Marine;
- Paint and varnish;
- Petroleum marketing;
- Petroleum production ;
- Pharmaceutical;
- Printing ink;
- Pulp & paper;
- Refining commercial Solvents;
- Recycling Railroad ;
- Textile.

Application

- Refined petroleum products;
- Aviation gasolines and jet fuels;
- A wide variety of products such as: liquid sugars, corn syrup, corn sweeteners, dextrose, fructose, sucrose, maltose, lactose, corn oil, soy bean oil, cotton seed oil, coconut oil;
- Treated waters (deionized, demineralized, and potable);
- Chlorinated solvents and general solvent metering;
- Acid pH liquids;
- Liquefied petroleum gas(LPG);
- Crude oil, also for heated and/or viscous liquids;
- Oil or water based latex products, polyester resins, and adhesives (neutral pH), also for metering herbicides and nitrogen fertilizer solutions;
- Herbicide;
- Sodium hydroxide (caustic) solutions, high sulfur crude oil (LACT and NOD) and other alkaline pH liquids;
- Abrasive liquids.

Positive Displacement Flow Meter



FCM80 Meter



FCM80 Meter with Counter



FCM80 Meter with Counter & Strainer



FCM80 Meter with Counter, Strainer & Air Eliminator



FCM-100 Meter Counter Strainer Air Eliminator



FCM-50 Meter, Counter, Strainer, Air Eliminator

Positive Displacement Flow Meter



FCM-80-G-1 Meter with Counter, Strainer, Air Eliminator & Printer



FCM-50-DX-1 Meter, Digital Counter, Strainer, Air Eliminator, Pulser



FCM-80-KPX-1 Meter with Electronic Register, Strainer, Air Eliminator & Solenoid Valve



FCM-100-KPX-1 Digital Counter, Strainer, Air Eliminator, Meter



FCM-50-NX-1 SS316 Meter, Counter, Strainer, Air Eliminator



FCM-50-CX-10 Meter with Register Counter, Differential Valve, Strainer & Air Eliminator

FCL Air Eliminator

Aluminum, cast iron, stainless steel available.



FCL Air Eliminator



FCL Air Eliminator with Plate

FCST series Strainer

Technical Specification

Model	Diameter
FCST-50	50mm/2"
FCST-80	80mm/3"
FCST-100	100mm/4"
FCST-150	150mm/6"



FCST-50 Strainer



FCST-150 Strainer & FCL Air Eliminator

Strainer Basket

The proper strainer basket to use depends on the different product and its viscosity over the expected range of metering temperature.

Strainer Mesh	General Application
200M	LPG only
100M	Gasoline, Solvents, LPG
80M	Gasoline, Solvents
40M	Heating Oil, Diesel fuel, Light oils
20M	Motor oils&other viscous products



Strainer Basket

FCLX Series Filter & Air Eliminator

LPGX Series Filter and Air Eliminator integrates the function of filter and air Eliminator into one body. It not only can filter the solid impurity, but also can expel the gas out the liquid at one time. It can be used to match with many kinds of flow meters to improve the measuring accuracy.

Technical Data

Diameter: DN40-200

Nominal Pressure:1.6,2.5,4.0,6.4Mpa

Fluid Temperature:-30°C~+250°C

Press Loss:≤0.03Mpa

Note: bigger size can be manufactured as per requirement



FCLX Series Filter & Air Eliminator

VFC & VFCS series Piston Valves



VFC-80 Piston Valve

VFC series Mechanically actuated piston valves are designed for mounting on the meter outlet to completely shutoff the liquid flow with easy operation under any pressure system. The valve can be operated manually or connected via a mechanical linkage to a preset counter on the meter for single stage closure or two-stage closure to eliminate hydraulic shock. The valve is indexable in 90° turn for up & down or side facing outlet. 2", 3", 4" available for option.

Technical Specification

Model	Diameter	Used for Meter	Max. Flow Rate L/Min	Material
VFC-50	1.5"&2"	FCM40, FCM50, FCM50-L	550	Alumunium
VFC-80	3"	FCM80, FCM80-L	1136	
VFC-100	4"	FCM100, FCM100-L	2271	

VFD Series Air Activated Differential Check Valve



VFCD-80 Check Valve

K Series Air Activated Differential Check Valves are installed at the outlet of the meter, which is designed to stop the flow of liquid whenever air is present to ensure accurate measurement.

Model	Diameter	Used for Meter	Max. Flow Rate L/Min	Material
VFCD-50	1.5"&2"	FCM40, FCM50, FCM50-L	550	Alumunium
VFCD-80	3"	FCM80, FCM80-L	1136	

VFD-50-LPG Differential Valve

The differential valve is mounted at the outlet of the meter and connected with the vapor eliminator with the function to shut off the liquid flow whenever vapor occurs in the tube system. The valve maintains sufficient pressure to ensure the high-vapor pressure products, such as LPG & Anhydrous Ammonia (NH₃) to be always remained in liquid state. The valve is spring loaded and to fail if closed.

Model	Diameter	Used for Meter	Max. Flow Rate L/Min	Material	Working Pressure
VFD-50-LPG	1.5"&2"	FCM40, FCM50, FCM50-L	760	Alumunium	350PSI

Solenoid Valve

Solenoid Plug Valve &
Solenoid Air Check Valve
Size: 2", 3", 4" & 6"
Power: 220V/50HZ or 24V



Stainless Steel
Solenoid Plug Valve



Cast Iron Solenoid
Air Check Valve



VFD-LPG
Differential Valve

FCR Electronic Register

Description

EFCR Electronic Register System adopts the modern high performance ARM microprocessor with the function of high operation speed, low power consumption, stable performance and resource-rich interface. Intrinsically safe designed, it is more stable and reliable with the strong functions. EFCR Electronic Register System is the ideal substitute product for the traditional mechanical register with advantage of high precision measurement, stable performance, widely installed on all kinds of flow meters with the LCD display, easy & friendly operation, widely used in stock terminal, oil tank truck, service station, boatyard, etc.

Characteristics

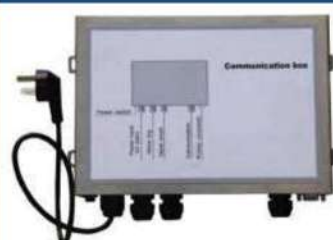
- Matching with the variety pulser to achieve the measurement of high-precision large flow.
- Flow rate compensation and temperature compensation for choice to improve the measurement precision.
- Free refueling and preset refueling for option.
- With the automatically adjustment function.
- Equipped with printer to print the transaction records. It makes the operation very direct-viewing.

Technical Specification

Power	AC220 $\pm$ 20%, 50Hz $\pm$ 1Hz
Temperature	20°C~+55°C
Humidity	$\leq$ 95%
Sub-total	6 Digital
Totalizer	8 Digital
Precision	$\pm$ 0.1%



EFCR Electronic Register



EFCR Electronic Register

FC-100 Encoder

Specification

Voltage (V+): +8~24VDC Current: 26mA typical
100 pulses per encoder revolution
Operating temperature range: -
40°C~+85°C (- 40°F~185°F)



FC-100 Encoder

Output Wave

