

## Meter run Model FLC-MR

WIKA data sheet FL 10.02

### Applications

- Power generation
- Oil production and refining
- Water treatment and distribution
- Gas processing and transmission
- Chemical and petrochemical industries

### Special features

- Max. operating temperature and pressure limited by material and rating
- Suitable for liquid, gas and steam flow measurement
- Accuracy  $\leq \pm 1.0\%$  of actual flow rate
- Repeatability of measurement 0.1 %



Meter run, model FLC-MR

### Description

#### High accuracy

Differential pressure flow meters are used in many industrial applications. If a high measurement accuracy is requested, the best solution for primary elements is a meter run.

A meter run is an assembly consisting of an orifice plate with flanges and calibrated upstream and downstream pipes. Since the meter run is manufactured as one unit, it is possible to optimally match all components with each other. Thus any faults that might lead to measuring inaccuracies can be avoided.

#### Optimal solutions for each application

Standards use the term "meter run" only for small pipe diameters up to 1 ½". For larger pipe diameters starting from 2" the model FLC-MR-SP is the appropriate solution.

Irrespective of the size, the type of installation, the tapping point or the different transmitter connections, our portfolio offers the optimal solution for each application.

## General specifications

### Nominal size

Available in accordance with all relevant standards.

### Nominal pressure rating

Available in accordance with all relevant standards.

### Pipe schedule

The pipe schedule must be specified by the customer.

### Materials

See specifications of each model.

### Pressure tapings

See specifications of each model.

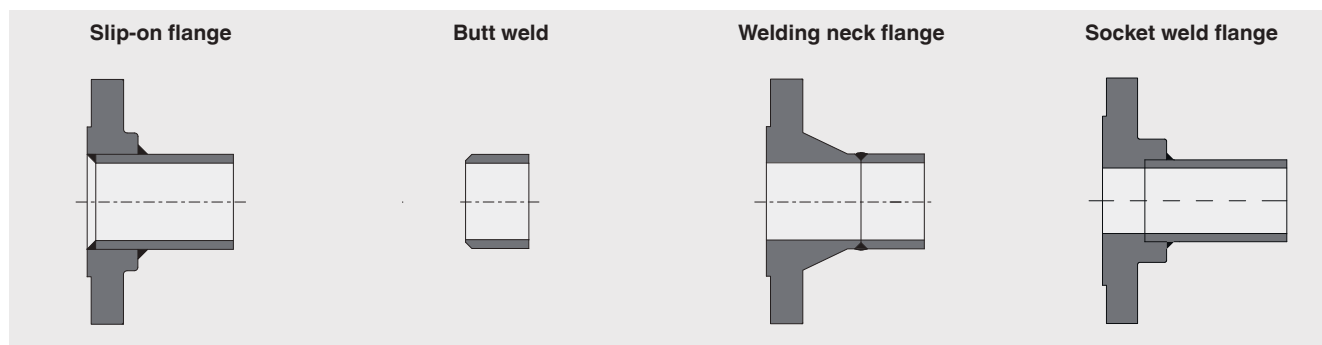
### Sealing faces

- Slip-on flange: ANSI 150, 300#
  - Welding neck flange (raised face): 150 ... 2500#
  - Welding neck flange (ring joint): 150 ... 2500#
- Other ratings on request.

### Orifice plate

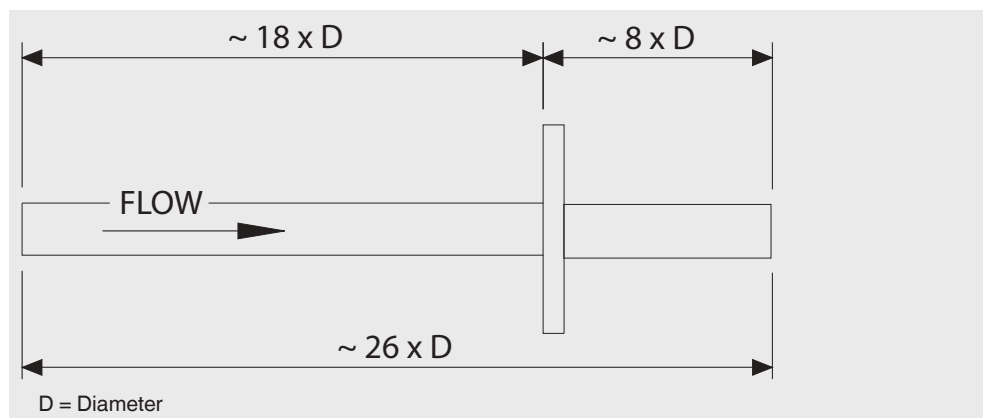
For detailed specifications see data sheet FL 10.01

### Mounting options



### Length rule

The illustration shows the standards relating to the length of upstream and downstream pipes.



## Specifications, model FLC-MR-IO

### Nominal size

¼ ... 1 ½" (DN 15 ... 40)

### Pressure tappings

- Corner taps
- Two oval flanges for a direct connection of a differential pressure transmitter

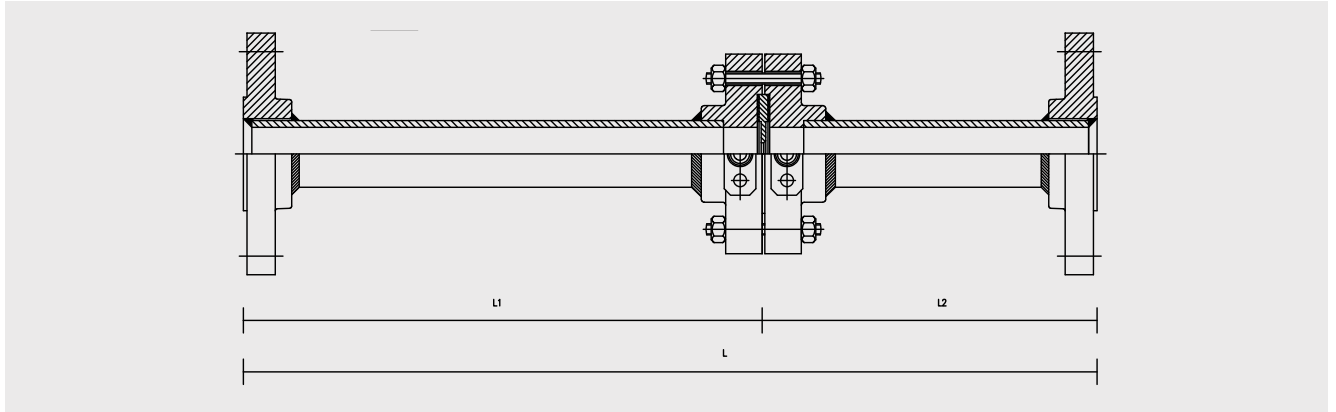
### Materials

- Pipe: Stainless steel 316/316L
  - Pipe flanges: Stainless steel 316/316L
  - Orifice flanges: Stainless steel 316/316L
  - Studs: Stainless steel ASTM A 193 Gr. B8
  - Nuts: Stainless steel ASTM A 194 Gr. 8
  - Plug: Stainless steel 316
  - Sealing: PTFE/Graphite
  - Orifice plate: Stainless steel 316/316L
- Other solutions on request.



Integral orifice, model FLC-MR-IO

### Dimensions



Nominal size		Dimensions in mm			Weight in kg
		L	L1	L2	
½"	(DN 15)	550	380	170	5
¾"	(DN 20)	700	500	200	8
1"	(DN 25)	900	650	250	10
1 ½"	(DN 40)	1,300	1,000	300	22

Dimensions reported in the table are independent from the mounting option selected.  
The weight indicated is referred to the slip-on flange as also indicated in the drawing.

## Specifications, model FLC-MR-STD

### Nominal size

½ ... 1 ½" (DN 15 ... 40)

### Pressure tappings

- Corner taps
- Two ½ NPT connections

### Materials

- Pipe: Stainless steel 316/316L
- Pipe flanges: Stainless steel 316/316L
- Orifice flanges: Stainless steel 316/316L
- Studs: Stainless steel ASTM A 193 Gr. B8
- Nuts: Stainless steel ASTM A 194 Gr. 8
- Plug: Stainless steel 316
- Sealing: PTFE/Graphite
- Orifice plate: Stainless steel 316/316L

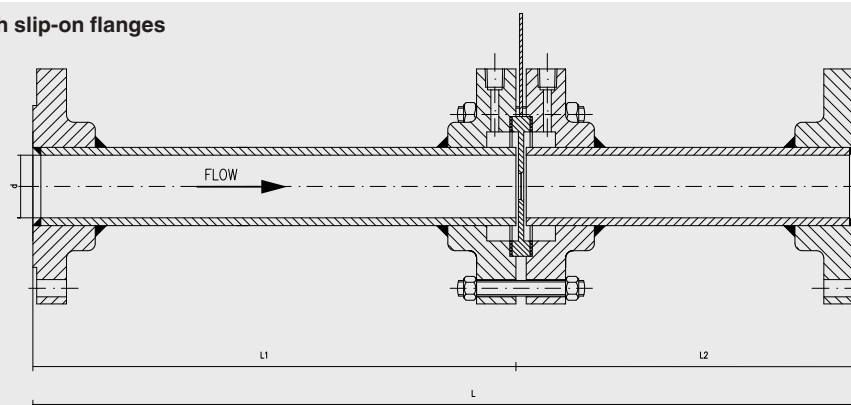
Other solutions on request.



Standard meter run, model FLC-MR-STD

### Dimensions

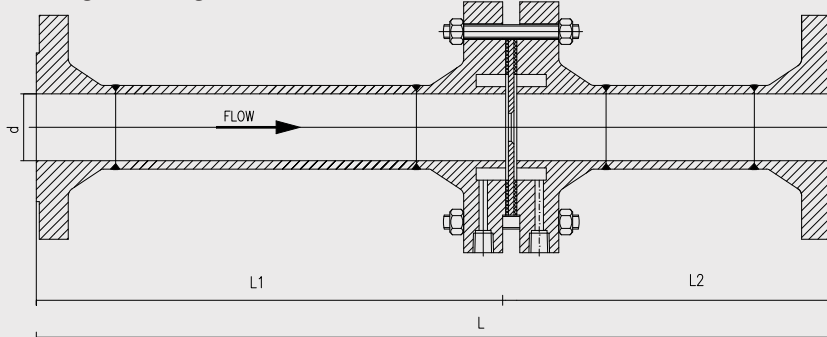
#### Meter run with slip-on flanges



Nominal size		Dimensions in mm			Weight in kg
		L	L1	L2	
½"	(DN 15)	550	380	170	6
¾"	(DN 20)	700	500	200	9
1"	(DN 25)	900	650	250	11
1 ½"	(DN 40)	1,300	1,000	300	23

The weight indicated is referred to the slip-on flange as also indicated in the drawing.

#### Meter run with welding neck flanges



Nominal size		Dimensions in mm			Weight in kg
		L	L1	L2	
½"	(DN 15)	600	400	200	10
¾"	(DN 20)	700	500	200	14
1"	(DN 25)	900	600	300	19
1 ½"	(DN 40)	1.300	900	400	40

The weight indicated is referred to the welding neck flange as also indicated in the drawing.

## Specifications, model FLC-MR-SP

### Nominal size

≥ 2" (≥ DN 50)

### Pressure tappings

- Flange taps
- Two ½ NPT connections

### Materials

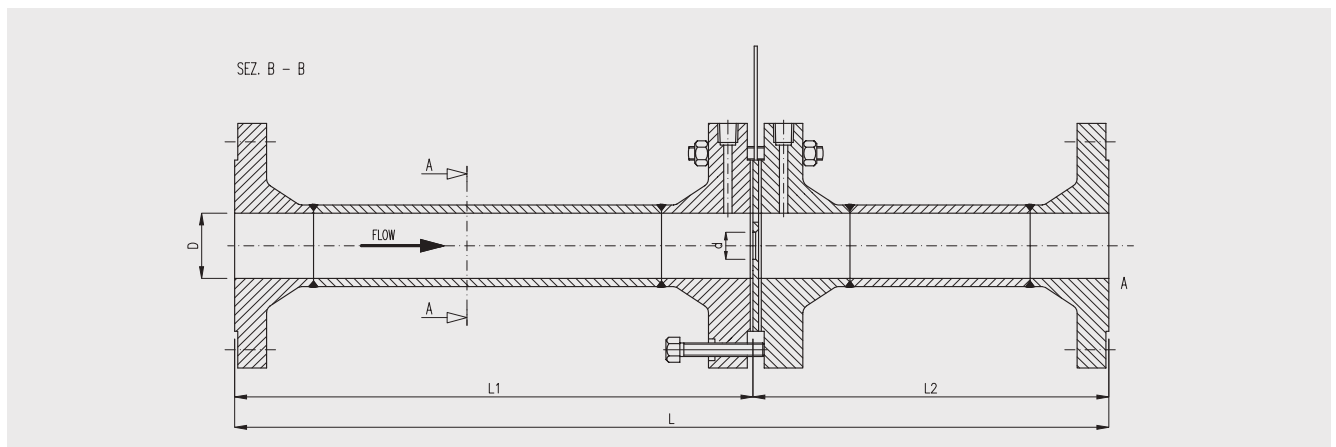
- Pipe: Carbon steel ASTM A106 gr. B
- Pipe flanges: Carbon steel ASTM A105
- Orifice flanges: Carbon steel ASTM A105
- Studs: Stainless steel ASTM A 194 Gr. B7
- Nuts: Stainless steel ASTM A 194 Gr. 2H
- Plug: Carbon steel
- Sealing: Stainless steel 316, graphite, carbon steel
- Orifice plate: Stainless steel 316/316L

Other solutions on request (e.g. with annular chambers).



Special meter run, model FLC-MR-SP

### Dimensions



Nominal size	Dimensions in mm			Weight in kg
	L	L1	L2	
2" (DN 50)	1,500	1,200	300	25
2 ½" (DN 65)	1,600	1,250	350	38
3" (DN 80)	1,800	1,400	400	51
4" (DN 100)	2,200	1,700	500	82

Dimensions reported in the table are independent from the mounting option selected.  
The weight indicated is referred to the welding neck flange as also indicated in the drawing.

### Ordering information

Model / Nominal size / Nominal pressure rating / Pipe schedule / Material / Sealing face

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