



# Wiratama Mitra Abadi



**AIR SIGNAL<sup>®</sup>**  
**OIL SIGNAL<sup>®</sup>**  
**WATER SIGNAL<sup>®</sup>**

流体の流れがひと目で見える

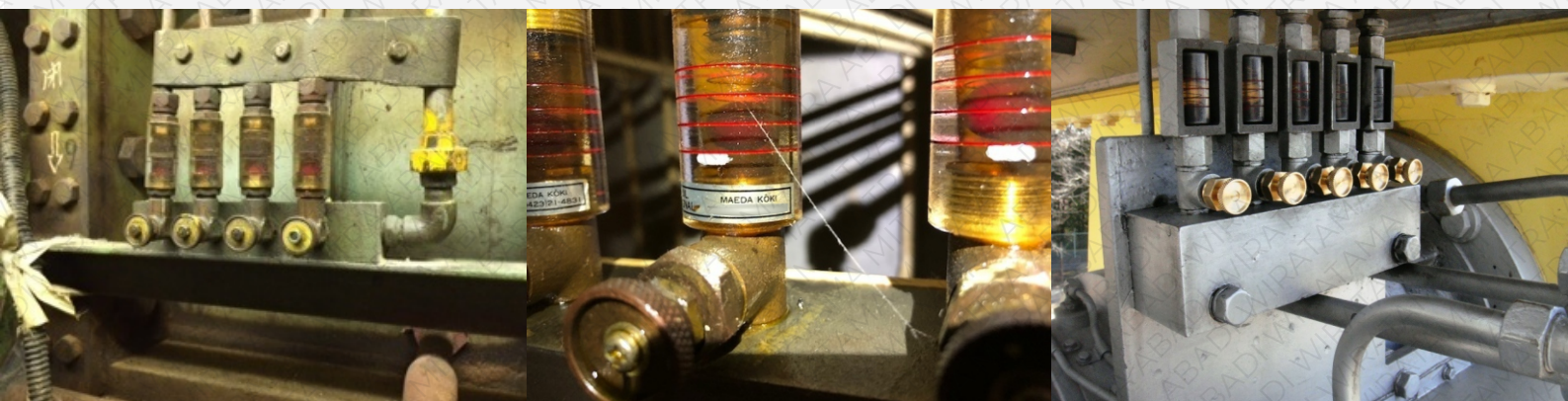
## MAEDA KOKI Since 1963

- Flow Switch
- Flow Indicator
- Low Flow Dripping
- With Adjustment



**MAEDA KOKI**

有限会社 前田工機研究所



[www.wma.co.id](http://www.wma.co.id)

## MKT Water Signal / Oil Signal



### Features

#### 《Visible Flow Rate》

Since a transparent taper tube is used, the approximate flow rate can be confirmed by looking at the position of the relationship between the ball and the indicated red line.

#### 《Free Installation Posture》

Because using a spring inside, it can be installed in any posture, such as upward, downward, or sideways.

### Specifications

Connection		See Model Type	Changeable to R-screw
Flow Rate		See Model Type	Consult us for non-standard flow rates.
Heat Resistance		Max. 80°C	-
Pressure Resistance		1 MPa	-
Material	Transparent Tube	Acrylic Resin	-
	Joint	C3604	SUS is also available.
	Spring	SUS 304	-
	Ball	Nylon 66	Cylindrical float may be used.
	O-Ring	Nitrile Rubber	-

### How to Order

Model Type MKT□□-□□□	Regular Flow Rate □L/min	For Oil, Fluid Name or Viscosity□cSt
-------------------------	-----------------------------	---



# MKT Water Signal / Oil Signal

## Models

### 《Water Signal》

Model Type		Connection	Dimensions (mm)		Standard Flow Rate (L/min)
			Length	Width	
Threaded Type	MKT25-1TW	Rc1/8	78	25	Approx. 1~6
	MKT25-2TW	Rc1/4	78	25	Approx. 1~6
	MKT25-3TW	Rc3/8	84	25	Approx. 1~6
	MKT30-2TW	Rc1/4	104	30	Approx. 3~20
	MKT30-3TW	Rc3/8	104	30	Approx. 3~20
	MKT30-4TW	Rc1/2	110	30	Approx. 3~20

### 《Oil Signal》

Model Type		Connection	Dimensions (mm)		Maximum Flow Rate (L/min)
			Length	Width	
Threaded Type	MKT25-1TL	Rc1/8	78	25	5
	MKT25-2TL	Rc1/4	78	25	5
	MKT25-3TL	Rc3/8	84	25	5
	MKT30-2TL	Rc1/4	104	30	10
	MKT30-3TL	Rc3/8	104	30	10
	MKT30-4TL	Rc1/2	110	30	10
Copper Pipe Type	MKT25-4	φ4	96	25	1.5
	MKT25-6	φ6	98	25	3
	MKT25-8	φ8	100	25	5
	MKT25-10	φ10	105	25	5

# MKTV Water Signal / Oil Signal



## Features

### 《Visible Flow Rate》

Since a transparent taper tube is used, the approximate flow rate can be confirmed by looking at the position of the relationship between the ball and the indicated red line.

### 《With Flow Adjustment Valve》

By adjusting the miniature valve, the required flow rate can be set by aligning the ball with the red line.

## Specifications

Connection (Output Side)		See Model Type	Threaded Type Models are changeable to R-screw.
Flow Rate		See Model Type	Consult us for non-standard flow rates.
Heat Resistance		Max.80°C	-
Pressure Resistance		1 MPa	-
Material	Transparent Tube	Acrylic Resin	-
	Joint	C3604	-
	Spring	SUS304	-
	Ball	Nylon 66	Cylindrical float may be used.
	Miniature Valve	BC	Valve with lock nut is also available.
	O-Ring	Nitrile Rubber	-

## How to Order

Model Type MKTV□□-□□□	Regular Flow Rate □L/min	For Oil, Fluid Name or Viscosity□cSt
--------------------------	-----------------------------	---

# MKTV Water Signal / Oil Signal

## Models

### 《Water Signal》

Model Type		Connection	Dimensions (mm)			Standard Flow Rate (L/min)
			Length	Width	Depth	
Threaded Type	MKTV25-1TW	Rc1/8	94	25	51	Approx. 1~5
	MKTV25-2TW	Rc1/4	94	25	51	Approx. 1~5
	MKTV25-3TW	Rc3/8	99	25	51	Approx. 1~5

### 《Oil Signal》

Model Type		Connection	Dimensions (mm)			Maximum Flow Rate (L/min)
			Length	Width	Depth	
Threaded Type	MKTV25-1TL	Rc1/8	94	25	51	3
	MKTV25-2TL	Rc1/4	94	25	51	3
	MKTV25-3TL	Rc3/8	99	25	51	4
Copper Pipe Type	MKTV25-4	φ4	110	25	51	1.5
	MKTV25-6	φ6	112	25	51	3
	MKTV25-8	φ8	114	25	51	5
	MKTV25-10	φ10	119	25	51	5



# MKCT Water Signal / Oil Signal



## Features

### 《Visible Flow Rate》

Since a transparent taper tube is used, the approximate flow rate can be confirmed by looking at the position of the relationship between the ball and the indicated red line.

### 《With Protective Cover》

The metal protective cover reduces the possibility of damage due to impact from the outside.

## Specifications

Connection		See Model Type	Threaded Type Models are changeable to R-screw.
Flow Rate		See Model Type	Consult us for non-standard flow rates.
Heat Resistance		Max. 80°C	-
Pressure Resistance		1 MPa	-
Material	Transparent Tube	Acrylic Resin	-
	Joint	C3604	SUS is also available.
	Spring	SUS304	-
	Ball	Nylon 66	Cylindrical float may be used.
	Protective Cover	BC	Aluminum is also available.
	O-Ring	Nitrile Rubber	-

## How to Order

Model Type MKCT□□-□□□	Regular Flow Rate □L/min	For Oil, Fluid Name or Viscosity□cSt
--------------------------	-----------------------------	---

# MKCT Water Signal / Oil Signal

## Models

### 《Water Signal》

Model Type		Connection	Dimensions (mm)			Standard Flow Rate (L/min)
			Length	Width	Depth	
Threaded Type	MKCT20-1TW	Rc1/8	80	30	22	Approx. 1~5
	MKCT20-2TW	Rc1/4	80	30	22	Approx. 1~5
	MKCT20-3TW	Rc3/8	86	30	22	Approx. 1~5
	MKCT30-2TW	Rc1/4	104	43	32	Approx. 4~17
	MKCT30-3TW	Rc3/8	104	43	32	Approx. 4~17
	MKCT30-4TW	Rc1/2	110	43	32	Approx. 4~17
	MKCT35-4TW	Rc1/2	145	50	44	Approx. 8~30
	MKCT35-6TW	Rc3/4	145	50	44	Approx. 8~30
	MKCT45-6TW	Rc3/4	172	62	50	Approx. 10~40
	MKCT45-8TW	Rc1	172	62	50	Approx. 10~40

### 《Oil Signal》

Model Type		Connection	Dimensions (mm)			Maximum Flow Rate (L/min)
			Length	Width	Depth	
Threaded Type	MKCT20-1TL	Rc1/8	80	30	22	5
	MKCT20-2TL	Rc1/4	80	30	22	5
	MKCT20-3TL	Rc3/8	86	30	22	5
	MKCT30-2TL	Rc1/4	104	43	32	10
	MKCT30-3TL	Rc3/8	104	43	32	10
	MKCT30-4TL	Rc1/2	110	43	32	10
	MKCT35-4TL	Rc1/2	145	50	44	25
	MKCT35-6TL	Rc3/4	145	50	44	25
	MKCT45-6TL	Rc3/4	172	62	50	50
	MKCT45-8TL	Rc1	172	62	50	50
Copper Pipe Type	MKCT20-4	φ4	98	30	22	1.5
	MKCT20-6	φ6	100	30	22	4
	MKCT20-8	φ8	102	30	22	5
	MKCT20-10	φ10	107	30	22	5
	MKCT30-10	φ10	126	43	32	10
	MKCT30-12	φ12	126	43	32	10
	MKCT30-14	φ14	135	43	32	10

# MKCTV Water Signal / Oil Signal



## Features

### 《Visible Flow Rate》

Since a transparent taper tube is used, the approximate flow rate can be confirmed by looking at the position of the relationship between the ball and the indicated red line.

### 《With Flow Adjustment Valve》

By adjusting the miniature valve, the required flow rate can be set by aligning the ball with the red line.

### 《With Protective Cover》

The metal protective cover reduces the possibility of damage due to impact from the outside.

## Specifications

Connection (Output Side)		See Model Type	Threaded Type Models are changeable to R-screw. Only R-screw can be connected to the valve.
Flow Rate		See Model Type	Consult us for non-standard flow rates.
Heat Resistance		Max. 80°C	-
Pressure Resistance		1 MPa	-
Material	Transparent Tube	Acrylic Resin	-
	Joint	C3604	For copper pipe, cap nut (C3604) and chuck sleeve (Cu) are attached.
	Spring	SUS304	-
	Ball	Nylon 66	Cylindrical float may be used.
	Miniature Valve	BC	Valve with lock nut is also available.
	Protective Cover	BC	-
	O-Ring	Nitrile Rubber	-

## How to Order

Model Type MKCTV□□-□□□	Regular Flow Rate □L/min	For oil, Fluid Name or Viscosity□cSt
---------------------------	-----------------------------	---



# MKCTV Water Signal / Oil Signal

## Models

### 《Water Signal》

Model Type		Connection	Dimensions (mm)			Standard Flow Rate (L/min)
			Length	Width	Depth	
Threaded Type	MKCTV20-1TW	Rc1/8	115	30	51	Approx. 1~5
	MKCTV20-2TW	Rc1/4	115	30	51	Approx. 1~5
	MKCTV20-3TW	Rc3/8	122	30	51	Approx. 1~5

### 《Oil Signal》

Model Type		Connection	Dimensions (mm)			Maximum Flow Rate (L/min)
			Length	Width	Depth	
Threaded Type	MKCTV20-1TL	Rc1/8	115	30	51	3
	MKCTV20-2TL	Rc1/4	115	30	51	3
	MKCTV20-3TL	Rc3/8	122	30	51	4
Copper Pipe Type	MKCTV20-4	φ4	129	30	51	1.5
	MKCTV20-6	φ6	131	30	51	3
	MKCTV-20-8	φ8	134	30	51	3
	MKCTV20-10	φ10	142	30	51	4

# MKCM Water / Oil Flow Switch



## Features

### 《With Flow Switch》

By detecting the fluid flow, the switch is turned ON or OFF at the specified flow rate. The switch is fixed. The flow rate value cannot be changed later.

### 《Visible Flow at a glance》

The flow of the fluid can be confirmed by the movement of the float in the transparent tube.

### 《With Protective Cover》

The metal protective cover reduces the possibility of damage due to impact from the outside.

## Specifications

Operating Flow Rate	See “ Range of Specified Flow Rate for Switch Operation” . It is desirable to specify with 1/3 or less of working flow rate.		
Connection	Rc-Female Thread	Changeable to R-screw or combinable with R-screw.	
Heat Resistance	Max. 60℃	Heat-resistance product (Max. 100℃) is available.	
Pressure Resistance	1 MPa	Pressure-resistance product (Max. 5 MPa) is available.	
Max. Working Voltage	DC, AC 300V		
Max. Working Current	DC, AC 0.5A		
Contact Capacity	50VA		
Material	Transparent Tube	Acrylic Resin	C3604 tube is used for heat/pressure-resistance products, and it is not visible.
	Protective Cover	BC	Aluminum is also available. (except MKCM20)
	Joint	C3604	SUS is also available.
	Spring	SUS304	-
	Float (containing a magnet)	Acrylic Resin (for Water) Aluminum (for Oil)	Nylon may be used.
	O-Ring	Nitrile Rubber	Fluoro rubber is used for heat/pressure-resistance products.
	Reed Switch	Commercial Product	-
	Lead Wire	Commercial Product	Standard length : 200mm / The length can be specified.

## How to Order

Model: MKCM□□-□□□-OFF or ON OFF : Contacts are open when fluid does not flow. ON : Contacts are closed when fluid does not flow	Working Flow Rate □ L/min	For oil, Fluid Name or Viscosity□cSt
---	------------------------------	---

# MKCM Water / Oil Flow Switch

## Models

### 《Water Signal》

Model Type	Connection	Dimensions (mm)				Flow Rate (L/min)	
		Length	Width	Depth	Min. Inner Diameter $\phi$	Range of Specified Flow Rate for Switch Operation	Max.
MKCM20-1TW-OFF or ON	Rc1/8	80	30	22	6.5	0.1~4	10
MKCM20-2TW-OFF or ON	Rc1/4	80	30	22	6.5	0.1~4	10
MKCM20-3TW-OFF or ON	Rc3/8	86	30	25	6.5	0.1~4	10
MKCM30-2TW-OFF or ON	Rc1/4	104	43	32	9.5	0.5~10	20
MKCM30-3TW-OFF or ON	Rc3/8	104	43	32	9.5	0.5~10	20
MKCM30-4TW-OFF or ON	Rc1/2	110	43	32	9.5	0.5~10	20
MKCM35-4TW-OFF or ON	Rc1/2	124	49	44	13.5	3~15	50
MKCM35-6TW-OFF or ON	Rc3/4	124	49	44	13.5	3~15	50
MKCM45-6TW-OFF or ON	Rc3/4	142	62	50	18	5~30	100
MKCM45-8TW-OFF or ON	Rc1	142	62	50	18	5~30	100

### 《Oil Signal》

Model Type	Connection	Dimensions (mm)				Flow Rate (L/min)	
		Length	Width	Depth	Min. Inner Diameter $\phi$	Range of Specified Flow Rate for Switch Operation	Max.
MKCM20-1TL-OFF or ON	Rc1/8	80	30	22	6.5	0.005~2	5
MKCM20-2TL-OFF or ON	Rc1/4	80	30	22	6.5	0.005~2	5
MKCM20-3TL-OFF or ON	Rc3/8	86	30	25	6.5	0.005~2	5
MKCM30-2TL-OFF or ON	Rc1/4	104	43	32	9.5	0.05~5	10
MKCM30-3TL-OFF or ON	Rc3/8	104	43	32	9.5	0.05~5	10
MKCM30-4TL-OFF or ON	Rc1/2	110	43	32	9.5	0.05~5	10
MKCM35-4TL-OFF or ON	Rc1/2	124	49	44	13.5	1~10	25
MKCM35-6TL-OFF or ON	Rc3/4	124	49	44	13.5	1~10	25
MKCM45-6TL-OFF or ON	Rc3/4	142	62	50	18	3~15	50
MKCM45-8TL-OFF or ON	Rc1	142	62	50	18	3~15	50