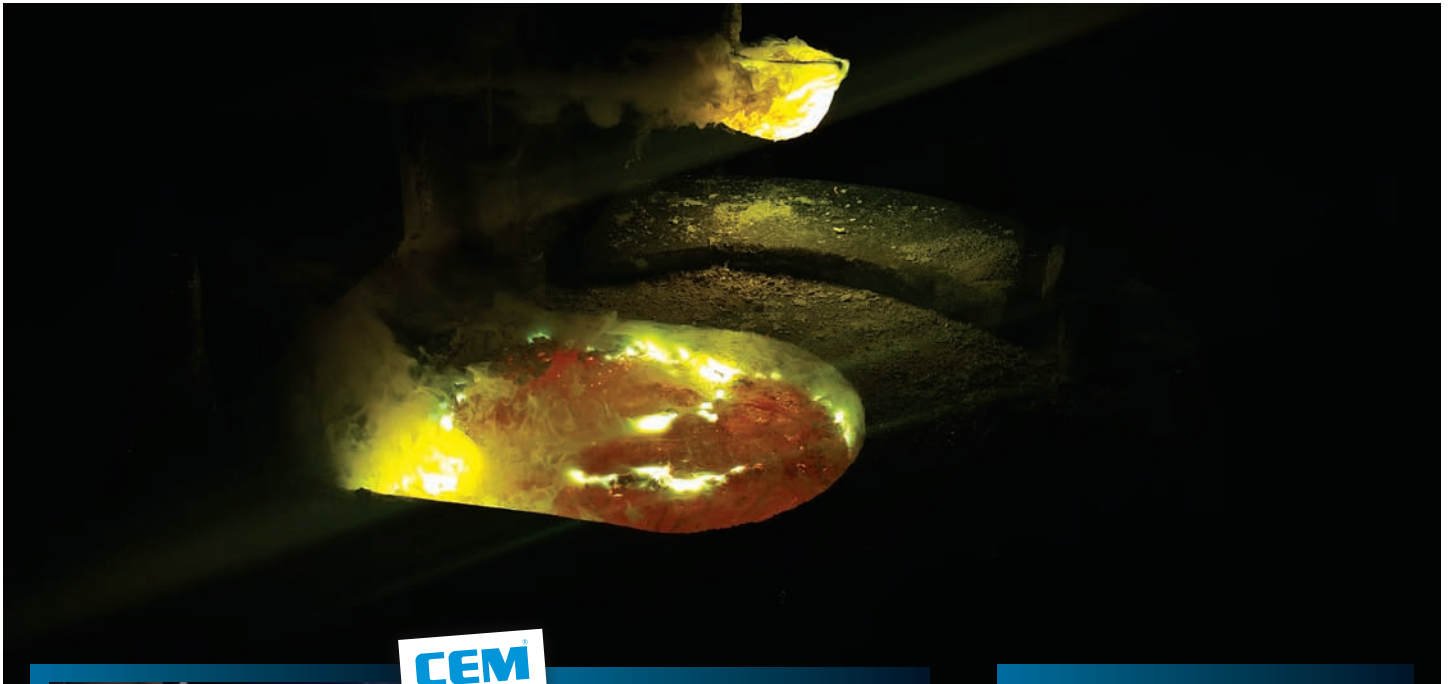


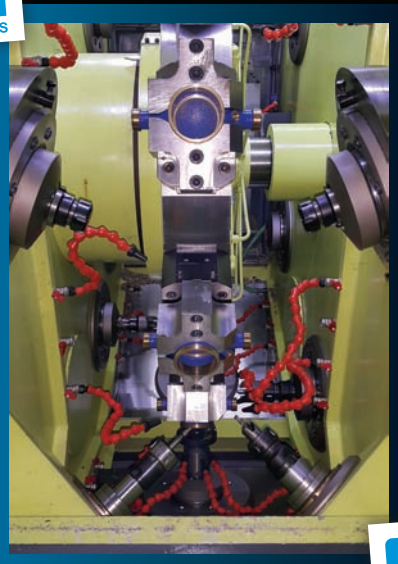


**CEM**<sup>®</sup> WATER METERS

**PRODUCT CATALOG**



**CEM**  
WATER METERS



**CEM**  
WATER METERS



# CEM<sup>®</sup> WATER METERS

From Half Century to Today...

Our company continue producing with 14.000 m<sup>2</sup> open, 9.000 m<sup>2</sup> closed modern facility area thanks to thirty years of experience and accumulation about production processes in TURKEY.

Our company, has half century of experience in the sector, incorporated into CEM trademark in 2012 and walks adding new goals seriously to stay the course being the new door of our country and cities to open the World.

Our company, purposed to catch the technological progress with staff comprised of R&D team and eager engineers, continues work everyday with a new hope.

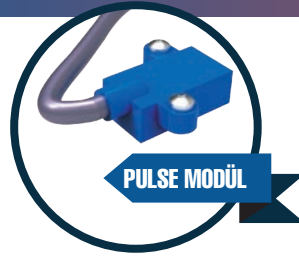
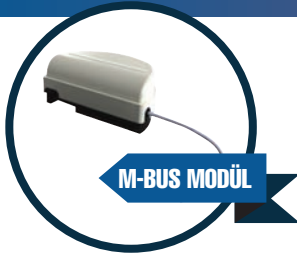
Our company, make production by means of our staff's meticulous works, has completed high-capacity works in TURKEY successfully and continue to produce best quality and efficient products

Our company, produces world class manufacturing about maesuring systems, posses all certificates gotten competent authorities related quality and environmental conscience.

Our company is glad to produce products without sacrificing quality thanks to thirty years of experience and accumulation, and purpose to produce and develop more sensitive measuring systems.

Best Regards...





**KDM1**

DN15  
110 mm



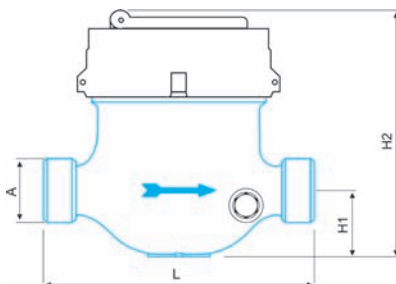
**KS1**

DN15  
110 mm



**METROLOGICAL SPECIFICATIONS**

MODEL NAME			KDM1	KS1	
Nominal Diameter	DN	mm	15		
Meter Length	L	mm	110		
Permanent Flowrate	Q3	m <sup>3</sup> /h	2,5		
Maximum Flowrate	Q4	m <sup>3</sup> /h	3,125		
Measuring Range Ratio	Horizontal Connection	H	100	125	160
Transitional Flowrate			0,040	0,032	0,025
Minimum Flowrate			0,025	0,020	0,016
Temperature Class	T	°C	50	70-90-30/90	
Transitional Flowrate Ratio	-	-	1,6		
Pressure Drop		bar	0,63		
Maximum Working Pressure		bar	16		
Registration Capacity		m <sup>3</sup>	99999		
Minimum Reading Resolution		lt	0,05		



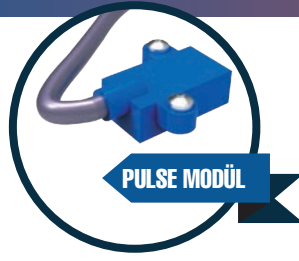
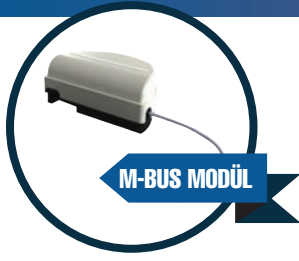
**GENERAL CHARACTERISTICS**

- Vacuum mechanism with dust and steam protection
- Protected against magnetic interference
- Long durability thanks to multi jet design
- Suitable for optical reading
- Corrosion resistant brass body
- Electrostatic painted inner and outer surfaces
- All parts are made of materials suitable for contact with water
- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m<sup>3</sup>
- Long service life with sapphire jewel bearing

**DIMENSIONS**



Nominal Diameter	DN	15	( 1/2 inch )
Length	L	110	mm
Axis Height	H1	28	mm
Total Height	H2	98	mm
Width	W	75	mm
Connection Diameter	A	G 3/4 B	
Weight		0,92	kg
Package Weight		9,5	kg
Package Dimensions		49x24x14	cm



## KDM2

DN15  
165 mm



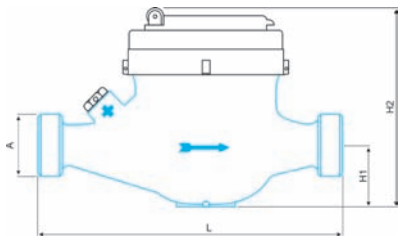
## KS2

DN15  
165 mm



### METROLOGICAL SPECIFICATIONS

MODEL NAME			KDM2	KS2	
Nominal Diameter	DN	mm	15		
Meter Length	L	mm	165		
Permanent Flowrate	Q3	m <sup>3</sup> /h	2,5		
Maximum Flowrate	Q4	m <sup>3</sup> /h	3,125		
Measuring Range Ratio	Horizontal Connection	H	100	125	160
Transitional Flowrate			0,040	0,032	0,025
Minimum Flowrate			0,025	0,020	0,016
Temperature Class	T	°C	50	70-90-30/90	
Transitional Flowrate Ratio	-	-	1,6		
Pressure Drop		bar	0,63		
Maximum Working Pressure		bar	16		
Registration Capacity		m <sup>3</sup>	99999		
Minimum Reading Resolution		lt	0,05		

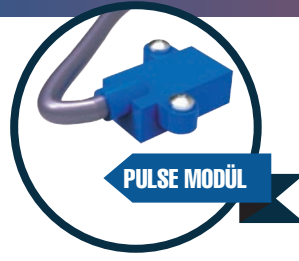
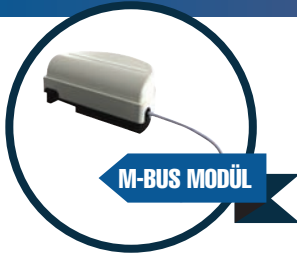


### GENERAL CHARACTERISTICS

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- Protected against magnetic interference
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- Suitable for optical reading
- Corrosion resistant brass body
- Electrostatic painted inner and outer surfaces
- All parts are made of materials suitable for contact with water
- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m<sup>3</sup>
- Long service life with sapphire jewel bearing

### DIMENSIONS

Nominal Diameter	DN	15	( 1/2 inch )
Length	L	165	mm
Axis Height	H1	30	mm
Total Height	H2	108	mm
Width	W	86	mm
Connection Diameter	A	G 3/4 B	
Weight		1,1	kg
Package Weight		11,5	kg
Package Dimensions		47x20x25	cm



**KDM3**

DN20  
110 mm



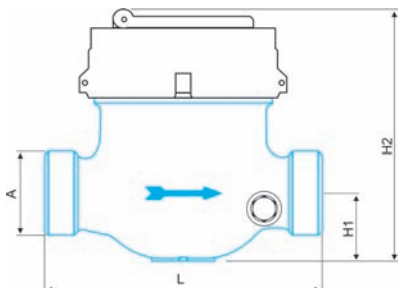
**KS3**

DN20  
110 mm



**METROLOGICAL SPECIFICATIONS**

MODEL NAME			KDM3	KS3	
Nominal Diameter	DN	mm	20		
Meter Length	L	mm	110		
Permanent Flowrate	Q3	m <sup>3</sup> /h	2,5		
Maximum Flowrate	Q4	m <sup>3</sup> /h	3,125		
Measuring Range Ratio	Horizontal Connection	H	100	125	160
Transitional Flowrate			0,040	0,032	0,025
Minimum Flowrate			0,025	0,020	0,016
Temperature Class	T	°C	50	70-90-30/90	
Transitional Flowrate Ratio	-	-	1,6		
Pressure Drop		bar	0,63		
Maximum Working Pressure		bar	16		
Registration Capacity		m <sup>3</sup>	99999		
Minimum Reading Resolution		lt	0,05		



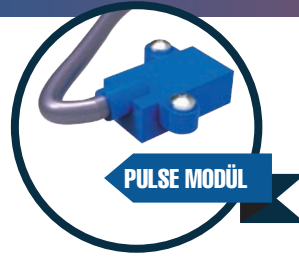
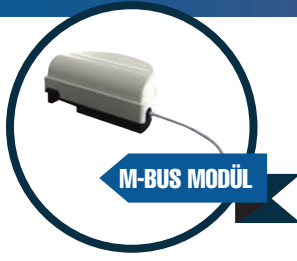
**GENERAL CHARACTERISTICS**

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- All parts are made of materials suitable for contact with water
- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m<sup>3</sup>
- Long service life with sapphire jewel bearing

**DIMENSIONS**



Nominal Diameter	DN	20	( 3/4 inch )
Length	L	110	mm
Axis Height	H1	28	mm
Total Height	H2	98	mm
Width	W	75	mm
Connection Diameter	A	G 1 B	
Weight		0,92	kg
Package Weight		9,5	kg
Package Dimensions		49x24x14	cm



## KDM4

DN20  
130 mm



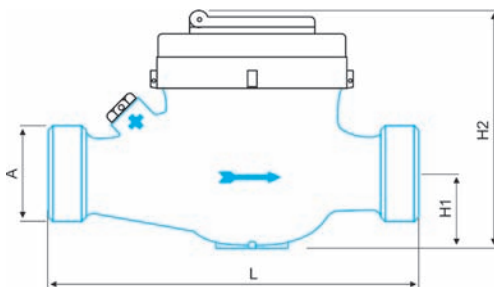
## KS4

DN20  
130 mm



### METROLOGICAL SPECIFICATIONS

MODEL NAME			KDM4	KS4	
Nominal Diameter	DN	mm	20		
Meter Length	L	mm	130		
Permanent Flowrate	Q3	m <sup>3</sup> /h	2,5		
Maximum Flowrate	Q4	m <sup>3</sup> /h	3,125		
Measuring Range Ratio	Horizontal Connection	H	100	125	160
Transitional Flowrate			0,040	0,032	0,025
Minimum Flowrate			0,025	0,020	0,016
Temperature Class	T	°C	50	70-90-30/90	
Transitional Flowrate Ratio	-	-	1,6		
Pressure Drop		bar	0,63		
Maximum Working Pressure		bar	16		
Registration Capacity		m <sup>3</sup>	99999		
Minimum Reading Resolution		lt	0,05		

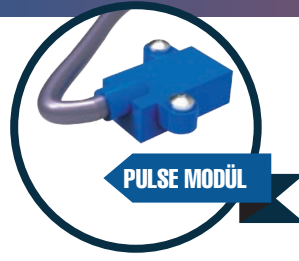
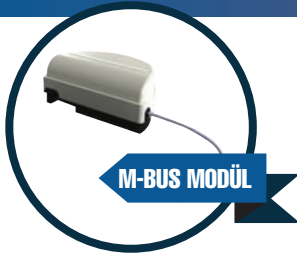


### GENERAL CHARACTERISTICS

- Vacuum mechanism with dust and steam protection
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- Long durability thanks to multi jet design
- Suitable for optical reading
- Corrosion resistant brass body
- Electrostatic painted inner and outer surfaces
- All parts are made of materials suitable for contact with water
- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m<sup>3</sup>
- Long service life with sapphire jewel bearing

### DIMENSIONS

Nominal Diameter	DN	20	( 3/4 inch )
Length	L	130	mm
Axis Height	H1	30	mm
Total Height	H2	108	mm
Width	W	86	mm
Connection Diameter	A	G 1 B	
Weight		1,1	kg
Package Weight		11,5	kg
Package Dimensions		47x22x25	cm



**KDM5**

DN20  
190 mm



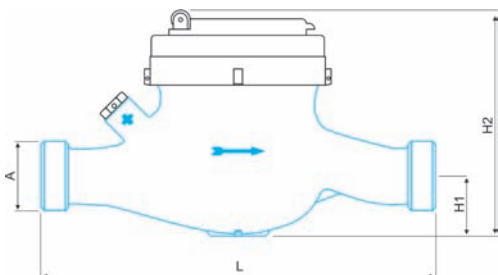
**KS5**

DN20  
190 mm



**METROLOGICAL SPECIFICATIONS**

MODEL NAME			KDM5	KS5	
Nominal Diameter	DN	mm	20		
Meter Length	L	mm	190		
Permanent Flowrate	Q3	m³/h	2,5		
Maximum Flowrate	Q4	m³/h	3,125		
Measuring Range Ratio	Horizontal Connection	H	100	125	160
Transitional Flowrate			0,040	0,032	0,025
Minimum Flowrate			0,025	0,020	0,016
Temperature Class	T	°C	50	70-90-30/90	
Transitional Flowrate Ratio	-	-	1,6		
Pressure Drop		bar	0,63		
Maximum Working Pressure		bar	16		
Registration Capacity		m³	99999		
Minimum Reading Resolution		lt	0,05		



**GENERAL CHARACTERISTICS**

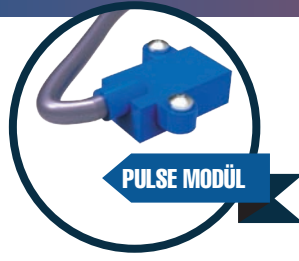
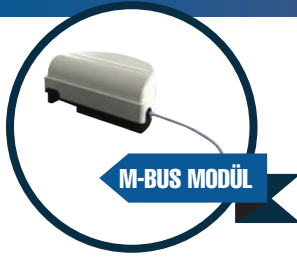
- Vacuum mechanism with dust and steam protection
- Protected against magnetic interference
- Long durability thanks to multi jet design
- Suitable for optical reading
- Corrosion resistant brass body
- Electrostatic painted inner and outer surfaces
- All parts are made of materials suitable for contact with water
- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m³
- Long service life with sapphire jewel bearing

**DIMENSIONS**



Nominal Diameter	DN	20	( 3/4 inch )
Length	L	190	mm
Axis Height	H1	30	mm
Total Height	H2	108	mm
Width	W	86	mm
Connection Diameter	A	G 1 B	
Weight		1,2	kg
Package Weight		12	kg
Package Dimensions		47x22x25	cm





## KDM6

DN20  
190 mm



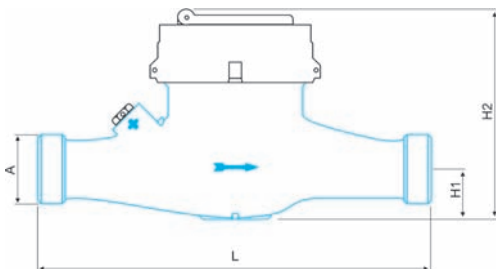
## KS6

DN20  
190 mm



### METROLOGICAL SPECIFICATIONS

MODEL NAME			KDM6	KS6	
Nominal Diameter	DN	mm	25		
Meter Length	L	mm	190		
Permanent Flowrate	Q3	m <sup>3</sup> /h	2,5		
Maximum Flowrate	Q4	m <sup>3</sup> /h	3,125		
Measuring Range Ratio	Horizontal Connection	H	100	125	160
Transitional Flowrate			0,040	0,032	0,025
Minimum Flowrate			0,025	0,020	0,016
Temperature Class	T	°C	50	70-90-30/90	
Transitional Flowrate Ratio	-	-	1,6		
Pressure Drop		bar	0,63		
Maximum Working Pressure		bar	16		
Registration Capacity		m <sup>3</sup>	99999		
Minimum Reading Resolution		lt	0,05		

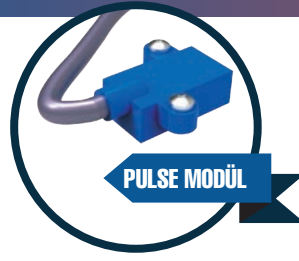
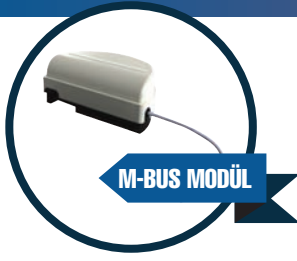


### GENERAL CHARACTERISTICS

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- Corrosion resistant brass body
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- All parts are made of materials suitable for contact with water
- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m<sup>3</sup>
- Long service life with sapphire jewel bearing

### DIMENSIONS

Nominal Diameter	DN	20	( 3/4 inch )
Length	L	190	mm
Axis Height	H1	30	mm
Total Height	H2	108	mm
Width	W	75	mm
Connection Diameter	A	G 1 B	
Weight		1,1	kg
Package Weight		11	kg
Package Dimensions		47x22x25	cm



**KDM7**

DN20  
190 mm



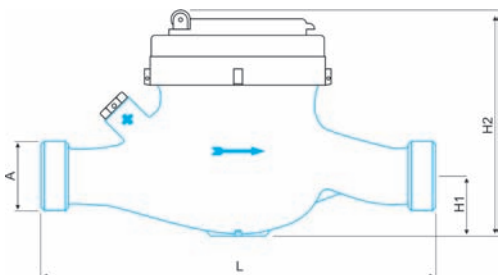
**KS7**

DN20  
190 mm



**METROLOGICAL SPECIFICATIONS**

MODEL NAME			KDM7	KS7	
Nominal Diameter	DN	mm	20		
Meter Length	L	mm	190		
Permanent Flowrate	Q3	m³/h	4		
Maximum Flowrate	Q4	m³/h	5		
Measuring Range Ratio	Horizontal Connection	H	100	125	160
Transitional Flowrate			0,064	0,051	0,040
Minimum Flowrate			0,040	0,032	0,025
Temperature Class	T	°C	50	70-90-30/90	
Transitional Flowrate Ratio	-	-	1,6		
Pressure Drop		bar	0,63		
Maximum Working Pressure		bar	16		
Registration Capacity		m³	99999		
Minimum Reading Resolution		lt	0,05		

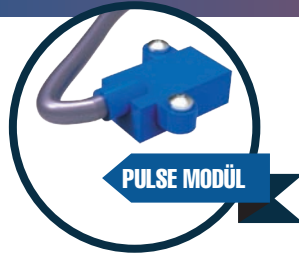
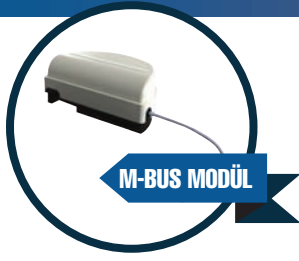


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- All parts are made of materials suitable for contact with water
- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m³
- Long service life with sapphire jewel bearing

**DIMENSIONS**

Parameter	Symbol	Value	Unit
Nominal Diameter	DN	20	( 3/4 inch )
Length	L	190	mm
Axis Height	H1	30	mm
Total Height	H2	108	mm
Width	W	86	mm
Connection Diameter	A	G 1 B	
Weight		1,2	kg
Package Weight		12	kg
Package Dimensions		47x22x25	cm



## KDM8

DN25  
260 mm



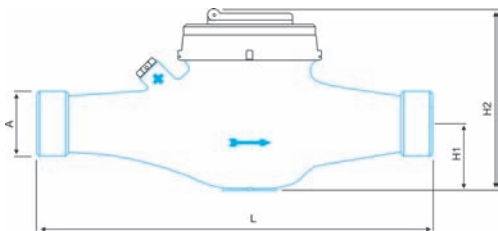
## KS8

DN25  
260 mm



### METROLOGICAL SPECIFICATIONS

MODEL NAME			KDM8	KS8	
Nominal Diameter	DN	mm	25		
Meter Length	L	mm	260		
Permanent Flowrate	Q3	m <sup>3</sup> /h	6,3		
Maximum Flowrate	Q4	m <sup>3</sup> /h	7,88		
Measuring Range Ratio	Horizontal Connection	H	100	125	160
Transitional Flowrate			0,101	0,081	0,063
Minimum Flowrate			0,063	0,050	0,039
Temperature Class	T	°C	50	70-90-30/90	
Transitional Flowrate Ratio	-	-	1,6		
Pressure Drop		bar	0,63		
Maximum Working Pressure		bar	16		
Registration Capacity		m <sup>3</sup>	99999		
Minimum Reading Resolution		lt	0,05		

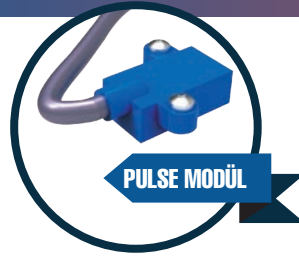
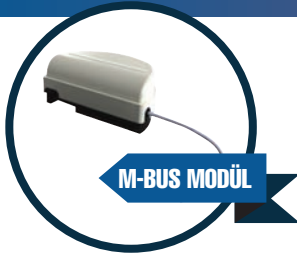


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- Corrosion resistant brass body
- Electrostatic painted inner and outer surfaces
- All parts are made of materials suitable for contact with water
- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m<sup>3</sup>
- Long service life with sapphire jewel bearing

### DIMENSIONS

Nominal Diameter	DN	25	( 1 inch )
Length	L	260	mm
Axis Height	H1	43	mm
Total Height	H2	120	mm
Width	W	98	mm
Connection Diameter	A	G 1 ¼ B	
Weight		2,1	kg
Package Weight		12,5	kg
Package Dimensions		54x30x17	cm



**KDM9**

**DN32  
260 mm**



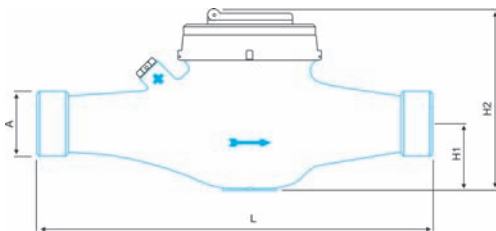
**KS9**

**DN32  
260 mm**



**METROLOGICAL SPECIFICATIONS**

MODEL NAME			KDM9	KS9	
Nominal Diameter	DN	mm	32		
Meter Length	L	mm	260		
Permanent Flowrate	Q3	m <sup>3</sup> /h	10		
Maximum Flowrate	Q4	m <sup>3</sup> /h	12,50		
Measuring Range Ratio	Horizontal Connection	H	100	125	160
Transitional Flowrate			0,160	0,128	0,100
Minimum Flowrate			0,100	0,080	0,063
Temperature Class	T	°C	50	70-90-30/90	
Transitional Flowrate Ratio	-	-	1,6		
Pressure Drop		bar	0,63		
Maximum Working Pressure		bar	16		
Registration Capacity		m <sup>3</sup>	99999		
Minimum Reading Resolution		lt	0,05		



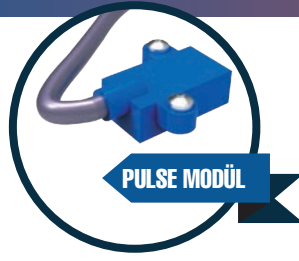
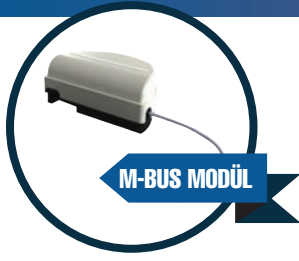
**GENERAL CHARACTERISTICS**

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- All parts are made of materials suitable for contact with water
- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m<sup>3</sup>
- Long service life with sapphire jewel bearing

**DIMENSIONS**



Nominal Diameter	DN	32	( 1¼ inch )
Length	L	260	mm
Axis Height	H1	43	mm
Total Height	H2	120	mm
Width	W	98	mm
Connection Diameter	A	G 1½ B	
Weight		2,2	kg
Package Weight		11,5	kg
Package Dimensions		54x30x17 cm	



## KDM10

DN40  
300 mm



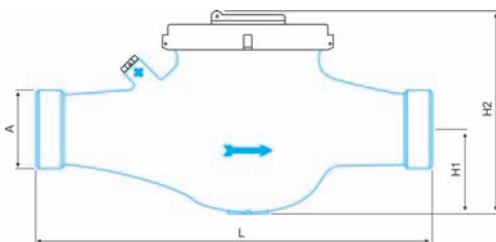
## KS10

DN40  
300 mm



### METROLOGICAL SPECIFICATIONS

MODEL NAME			KDM10	KS10	
Nominal Diameter	DN	mm	40		
Meter Length	L	mm	300		
Permanent Flowrate	Q3	m <sup>3</sup> /h	16		
Maximum Flowrate	Q4	m <sup>3</sup> /h	20,00		
Measuring Range Ratio	Horizontal Connection	H	100	125	160
Transitional Flowrate			0,256	0,205	0,160
Minimum Flowrate			0,160	0,128	0,100
Temperature Class	T	°C	50	70-90-30/90	
Transitional Flowrate Ratio	-	-	1,6		
Pressure Drop		bar	0,63		
Maximum Working Pressure		bar	16		
Registration Capacity		m <sup>3</sup>	99999		
Minimum Reading Resolution		lt	0,05		



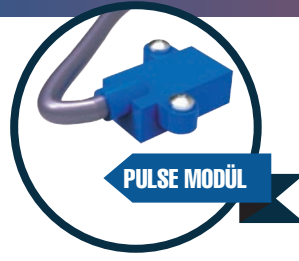
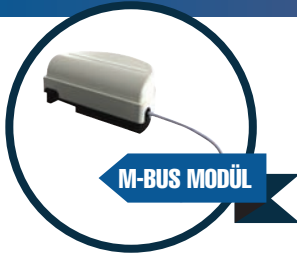
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- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m<sup>3</sup>
- Long service life with sapphire jewel bearing

### DIMENSIONS



Nominal Diameter	DN	40	( 1½ inch )
Length	L	300	mm
Axis Height	H1	62	mm
Total Height	H2	150	mm
Width	W	127	mm
Connection Diameter	A	G 2 B	
Weight		4,6	kg
Package Weight		14,2	kg
Package Dimensions		47x36x20	cm



**KDM11**

DN50  
300 mm



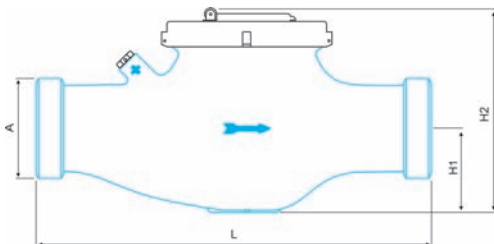
**KS11**

DN50  
300 mm



**METROLOGICAL SPECIFICATIONS**

MODEL NAME			KDM11	KS11	
Nominal Diameter	DN	mm	50		
Meter Length	L	mm	300		
Permanent Flowrate	Q3	m <sup>3</sup> /h	25		
Maximum Flowrate	Q4	m <sup>3</sup> /h	31,25		
Measuring Range Ratio	Horizontal Connection	H	100	125	160
Transitional Flowrate			0,400	0,320	0,250
Minimum Flowrate			0,250	0,200	0,156
Temperature Class	T	°C	50	70-90-30/90	
Transitional Flowrate Ratio	-	-	1,6		
Pressure Drop		bar	0,63		
Maximum Working Pressure		bar	16		
Registration Capacity		m <sup>3</sup>	99999		
Minimum Reading Resolution		lt	0,05		



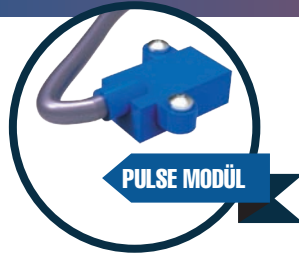
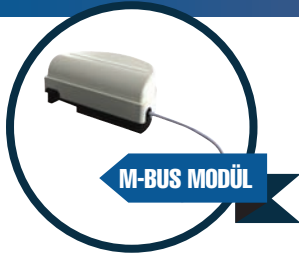
**GENERAL CHARACTERISTICS**

- Vacuum mechanism with dust and steam protection
- Protected against magnetic interference
- Long durability thanks to multi jet design
- Suitable for optical reading
- Corrosion resistant brass body
- Electrostatic painted inner and outer surfaces
- All parts are made of materials suitable for contact with water
- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m<sup>3</sup>
- Long service life with sapphire jewel bearing

**DIMENSIONS**



Nominal Diameter	DN	50	( 2 inch )
Length	L	300	mm
Axis Height	H1	62	mm
Total Height	H2	150	mm
Width	W	127	mm
Connection Diameter	A	G 2½ B	
Weight		5	kg
Package Weight		15,3	kg
Package Dimensions		47x36x20	cm



## KDM12

DN50  
350 mm



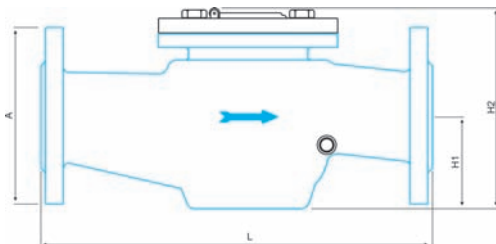
## KS12

DN50  
350 mm



### METROLOGICAL SPECIFICATIONS

MODEL NAME			KDM12	KS12	
Nominal Diameter	DN	mm	50		
Meter Length	L	mm	350		
Permanent Flowrate	Q3	m³/h	25		
Maximum Flowrate	Q4	m³/h	31,25		
Measuring Range Ratio	Horizontal Connection	H	100	125	160
Transitional Flowrate			0,400	0,320	0,250
Minimum Flowrate			0,250	0,200	0,156
Temperature Class	T	°C	50	70-90-30/90	
Transitional Flowrate Ratio	-	-	1,6		
Pressure Drop		bar	0,63		
Maximum Working Pressure		bar	16		
Registration Capacity		m³	99999		
Minimum Reading Resolution		lt	0,05		



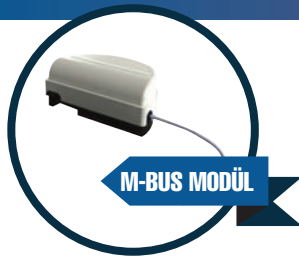
### GENERAL CHARACTERISTICS

- Vacuum mechanism with dust and steam protection
- Protected against magnetic interference
- Long durability thanks to multi jet design
- Suitable for optical reading
- Corrosion resistant brass body
- Electrostatic painted inner and outer surfaces
- All parts are made of materials suitable for contact with water
- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m³
- Long service life with sapphire jewel bearing

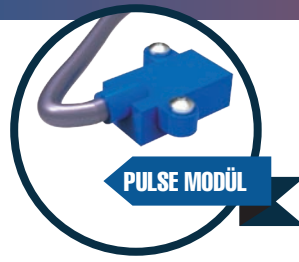
### DIMENSIONS



Nominal Diameter	DN	50	( 2 inch )
Length	L	350	mm
Axis Height	H1	80	mm
Total Height	H2	150	mm
Width	W	160	mm
Connection Diameter	A	2	inch (Flanşlı)
Weight (Flanşlar dahil)		18	kg
Package Dimensions		41x18,5x20	cm



M-BUS MODÜL



PULSE MODÜL



WM-BUS MODÜL

**KT Series**

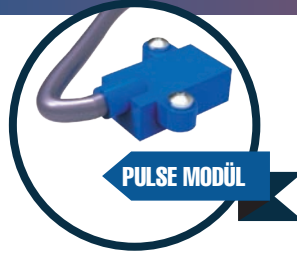
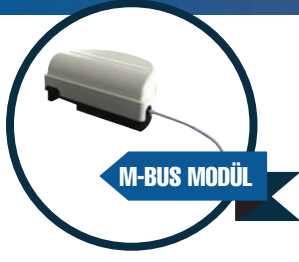
**DN15-20  
80-190 mm**



**METROLOGICAL SPECIFICATIONS**

MODEL NAME			KT9	KT11	KT10	KT12	KT13	KT14	KT15	KT16	KT17	KT18	
Nominal Diameter	DN	mm	15		15		20			20			
Meter Length	L	mm	80	110	80	110	110	130	190	110	130	190	
Permanent Flowrate	Q3	m³/h	1,6		2,5		2,5			4			
Maximum Flowrate	Q4	m³/h	2		3,125		3,125			5			
Measuring Range Ratio	Horizontal Connection	H	80	100	80	100	160	80	100	160	80	100	160
Transitional Flowrate			0,0320	0,0256	0,0500	0,0400	0,0250	0,0500	0,0400	0,0250	0,08	0,064	0,04
Minimum Flowrate			0,0200	0,0160	0,0313	0,0250	0,0156	0,0313	0,0250	0,0156	0,05	0,04	0,025
Measuring Range Ratio	Vertical Connection	V	40	50	40	50	40	50	40	50	40	50	
Transitional Flowrate			0,0640	0,0512	0,1000	0,0800	0,1000	0,0800	0,1600	0,1280			
Minimum Flowrate			0,0400	0,0320	0,0625	0,0500	0,0625	0,0500	0,1000	0,0800			
Temperature Class			T30 T50 T70 T90 T30/90										
Transitional Flowrate Ratio	-	-	1,6										
Pressure Drop		bar	0,63										
Maximum Working Pressure		bar	16										
Registration Capacity		m³	99999										
Minimum Reading Resolution		lt	0,05										



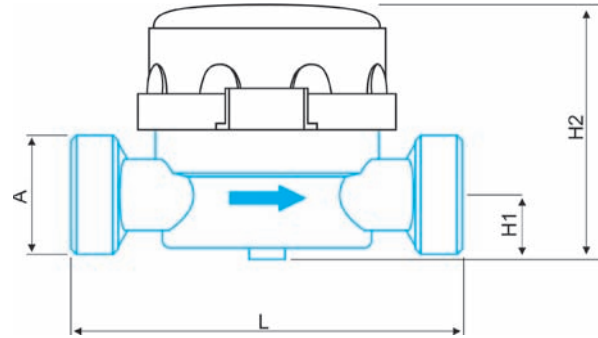


**KT Series**

**DN15-20  
80-190 mm**

## GENERAL CHARACTERISTICS

- MID ve GOST direktiflerine uygun
- Tek hüzmeli, kuru tip
- Vakumlu, toz ve buharlanmaya karşı korumalı mekanizma
- Manyetik müdahaleye karşı korumalı
- 360° dönebilen yazıcı grubu ile kolay okuma imkanı
- Optik okumaya uygun
- Korozyona dayanıklı pirinç gövde
- Tüm parçaları su ile temasa uygun malzemeden üretilmiş
- 99999 m<sup>3</sup> kayıt kapasitesi
- Safir taşı yataklama ile uzun ömürlü çalışma
- Opsiyonel olarak PULSE çıkış modülü ekleyebilme



## DIMENSIONS



MODEL NAME			KT9	KT10	KT11	KT12	KT13	KT14	KT15	KT16	KT17	KT18
Nominal Diameter	DN	mm	15					20			20	
		inch	1/2"					3/4"			3/4"	
Length	L	mm	80		110	110	130	190		110	130	190
Axis Height	H1		18		18		18				18	
Total Height	H2		71		71		71				71	
Connection Diameter	A		G 3/4 B		G 3/4 B		G 1 B			G 1 B		



M-BUS MODÜL



PULSE MODÜL



WM-BUS MODÜL

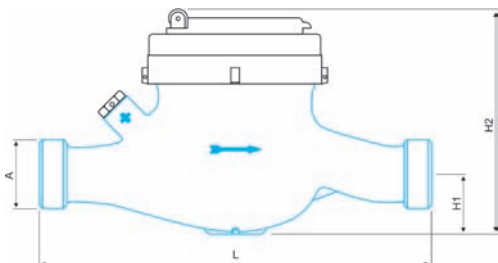
**ÇYT1**

**DN20  
190 mm**



**METROLOGICAL SPECIFICATIONS**

MODEL NAME			ÇYT1
Nominal Diameter	DN	mm	20
Meter Length	L	mm	190
Permanent Flowrate	Q3	m <sup>3</sup> /h	2,5
Maximum Flowrate	Q4	m <sup>3</sup> /h	3,125
Measuring Range Ratio	Horizontal Connection	H	100
Transitional Flowrate			0,040
Minimum Flowrate			0,025
Temperature Class	T	°C	50
Transitional Flowrate Ratio	-	-	1,6
Pressure Drop		bar	0,63
Maximum Working Pressure		bar	16
Registration Capacity		m <sup>3</sup>	99999
Minimum Reading Resolution		lt	0,05

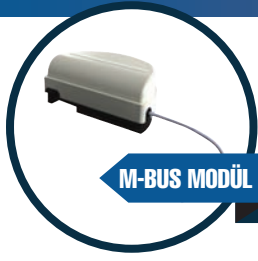


**GENERAL CHARACTERISTICS**

- Semi-dry type mechanism with glycerin
- Long durability thanks to multi jet design
- Suitable for optical reading
- Corrosion resistant brass body
- Electrostatic painted inner and outer surfaces
- All parts are made of materials suitable for contact with water
- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m<sup>3</sup>
- Long service life with sapphire jewel bearing

**DIMENSIONS**

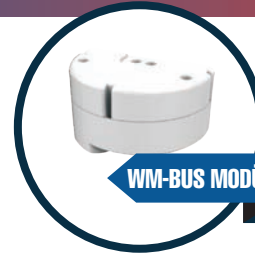
Parameter	Symbol	Value	Unit
Nominal Diameter	DN	20	( 3/4 inch )
Length	L	190	mm
Axis Height	H1	30	mm
Total Height	H2	108	mm
Width	W	86	mm
Connection Diameter	A	G 1 B	
Weight		1,2	kg
Package Weight		12	kg
Package Dimensions		47x22x25	cm



M-BUS MODÜL



PULSE MODÜL



WM-BUS MODÜL

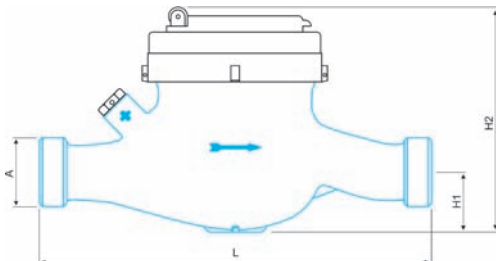


ÇYT2

DN20  
190 mm

## TEKNİK ÖZELLİKLER

MODEL NAME			ÇYT2
Nominal Diameter	DN	mm	20
Meter Length	L	mm	190
Permanent Flowrate	Q3	m <sup>3</sup> /h	2,5
Maximum Flowrate	Q4	m <sup>3</sup> /h	3,125
Measuring Range Ratio	Horizontal Connection	H	160
Transitional Flowrate			0,025
Minimum Flowrate			0,016
Temperature Class	T	°C	50
Transitional Flowrate Ratio	-	-	1,6
Pressure Drop		bar	0,63
Maximum Working Pressure		bar	16
Registration Capacity		m <sup>3</sup>	99999
Minimum Reading Resolution		lt	0,05

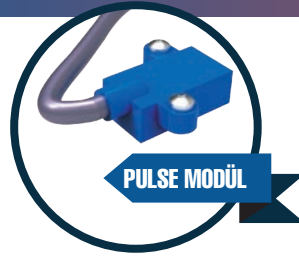
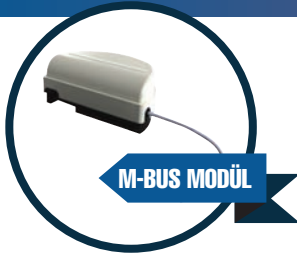


## GENERAL CHARACTERISTICS

- Semi-dry type mechanism with glycerin
- Long durability thanks to multi jet design
- Suitable for optical reading
- Corrosion resistant brass body
- Electrostatic painted inner and outer surfaces
- All parts are made of materials suitable for contact with water
- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m<sup>3</sup>
- Long service life with sapphire jewel bearing

## DIMENSIONS

Parameter	Symbol	Value	Unit
Nominal Diameter	DN	20	( 3/4 inch )
Length	L	190	mm
Axis Height	H1	30	mm
Total Height	H2	108	mm
Width	W	86	mm
Connection Diameter	A	G 1 B	
Weight		1,2	kg
Package Weight		12	kg
Package Dimensions		47x22x25	cm



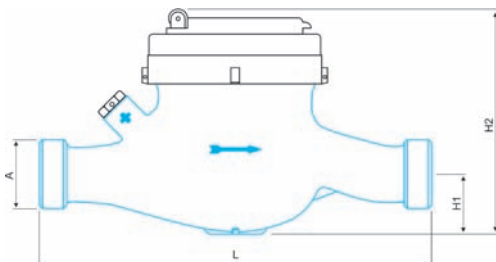
**ÇYT3**

**DN20  
190 mm**



**METROLOGICAL SPECIFICATIONS**

MODEL NAME			ÇYT3
Nominal Diameter	DN	mm	20
Meter Length	L	mm	190
Permanent Flowrate	Q3	m <sup>3</sup> /h	2,5
Maximum Flowrate	Q4	m <sup>3</sup> /h	3,125
Measuring Range Ratio	Horizontal Connection	H	100
Transitional Flowrate			0,040
Minimum Flowrate			0,025
Temperature Class	T	°C	50
Transitional Flowrate Ratio	-	-	1,6
Pressure Drop		bar	0,63
Maximum Working Pressure		bar	16
Registration Capacity		m <sup>3</sup>	99999
Minimum Reading Resolution		lt	0,05



**GENERAL CHARACTERISTICS**

- Semi-dry type mechanism with glycerin
- Long durability thanks to multi jet design
- Suitable for optical reading
- Corrosion resistant brass body
- Electrostatic painted inner and outer surfaces
- All parts are made of materials suitable for contact with water
- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m<sup>3</sup>
- Long service life with sapphire jewel bearing

**DIMENSIONS**

Nominal Diameter	DN	20	( 3/4 inch )
Length	L	190	mm
Axis Height	H1	30	mm
Total Height	H2	108	mm
Width	W	86	mm
Connection Diameter	A	G 1 B	
Weight		1,2	kg
Package Weight		12	kg
Package Dimensions		47x22x25	cm



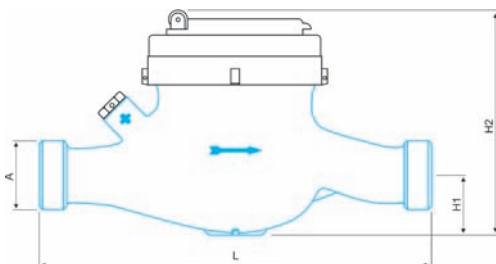
## ÇYT5

DN20  
190 mm



### METROLOGICAL SPECIFICATIONS

MODEL NAME			ÇYT5
Nominal Diameter	DN	mm	20
Meter Length	L	mm	190
Permanent Flowrate	Q3	m <sup>3</sup> /h	2,5
Maximum Flowrate	Q4	m <sup>3</sup> /h	3,125
Measuring Range Ratio	Horizontal Connection	H	160
Transitional Flowrate			0,025
Minimum Flowrate			0,016
Temperature Class	T	°C	50
Transitional Flowrate Ratio	-	-	1,6
Pressure Drop		bar	0,63
Maximum Working Pressure		bar	16
Registration Capacity		m <sup>3</sup>	99999
Minimum Readin Resolution		lt	0,05



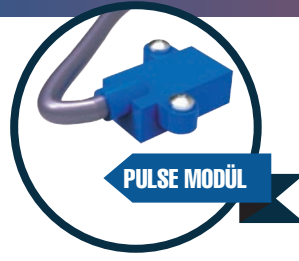
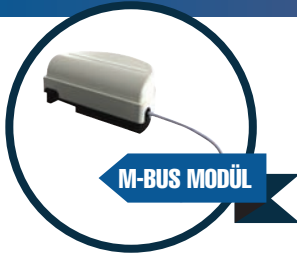
### GENERAL CHARACTERISTICS

- Semi-dry type mechanism with glycerin
- Long durability thanks to multi jet design
- Suitable for optical reading
- Corrosion resistant brass body
- Electrostatic painted inner and outer surfaces
- All parts are made of materials suitable for contact with water
- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m<sup>3</sup>
- Long service life with sapphire jewel bearing

### DIMENSIONS



Nominal Diameter	DN	20	( 3/4 inch )
Length	L	190	mm
Axis Height	H1	30	mm
Total Height	H2	108	mm
Width	W	86	mm
Connection Diameter	A	G 1 B	
Weight		1,2	kg
Package Weight		12	kg
Package Dimensions		47x22x25	cm



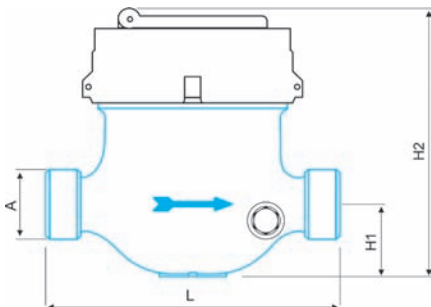
**ÇYT6**

**DN20  
110 mm**



**METROLOGICAL SPECIFICATIONS**

MODEL NAME			ÇYT6
Nominal Diameter	DN	mm	20
Meter Length	L	mm	110
Permanent Flowrate	Q3	m³/h	2,5
Maximum Flowrate	Q4	m³/h	3,125
Measuring Range Ratio	Horizontal Connection	H	80
Transitional Flowrate			0,050
Minimum Flowrate			0,031
Temperature Class	T	°C	50
Transitional Flowrate Ratio	-	-	1,6
Pressure Drop		bar	0,63
Maximum Working Pressure		bar	16
Registration Capacity		m³	99999
Minimum Reading Resolution		lt	0,05

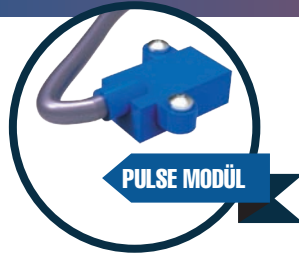
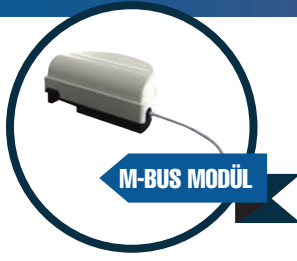


**GENERAL CHARACTERISTICS**

- Semi-dry type mechanism with glycerin
- Long durability thanks to multi jet design
- Suitable for optical reading
- Corrosion resistant brass body
- Electrostatic painted inner and outer surfaces
- All parts are made of materials suitable for contact with water
- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m³
- Long service life with sapphire jewel bearing

**DIMENSIONS**

Parameter	Symbol	Value	Unit
Nominal Diameter	DN	20	( 3/4 inch )
Length	L	110	mm
Axis Height	H1	28	mm
Total Height	H2	98	mm
Width	W	75	mm
Connection Diameter	A	G 1 B	
Weight		0,92	kg
Package Weight		9,5	kg
Package Dimensions		49x24x14	cm



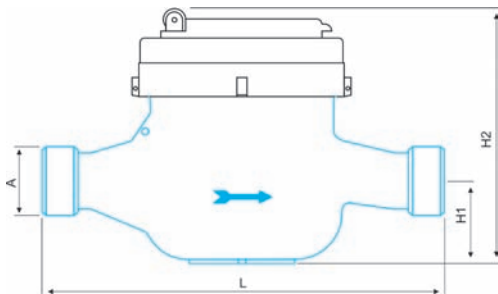
**VD2**

**DN15  
165 mm**



## METROLOGICAL SPECIFICATIONS

MODEL NAME			VD2				
Nominal Diameter	DN	mm	15				
Meter Length	L	mm	165				
Permanent Flowrate	Q3	m <sup>3</sup> /h	2,5				
Maximum Flowrate	Q4	m <sup>3</sup> /h	3,125				
Measuring Range Ratio	All Positions		160	200	250	315	400
Transitional Flowrate			0,025	0,020	0,016	0,013	0,010
Minimum Flowrate			0,016	0,013	0,010	0,008	0,006
Temperature Class	T	°C	50				
Transitional Flowrate Ratio	-	-	1,6				
Pressure Drop		bar	0,63				
Maximum Working Pressure		bar	16				
Registration Capacity		m <sup>3</sup>	99999				
Minimum Reading Resolution		lt	0,05				



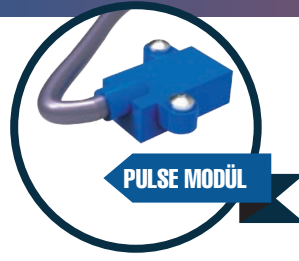
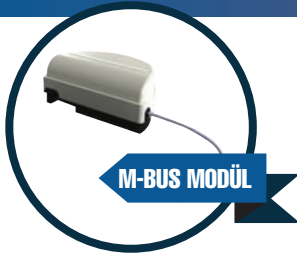
## GENERAL CHARACTERISTICS

- Precise measurement with volumetric design
- Vacuum mechanism with dust and steam protection
- Protected against magnetic interference
- Suitable for optical reading
- Corrosion resistant brass body
- Electrostatic painted inner and outer surfaces
- All parts are made of materials suitable for contact with water
- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m<sup>3</sup>
- Long service life with sapphire jewel bearing

## DIMENSIONS



Nominal Diameter	DN	15	( 1/2 inch )
Length	L	165	mm
Axis Height	H1	38	mm
Total Height	H2	115	mm
Width	W	86	mm
Connection Diameter	A	G 3/4 B	
Weight		1,1	kg
Package Weight		11	kg
Package Dimensions		47x22x25	cm



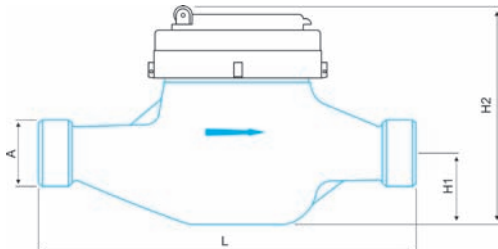
**VD5**

**DN20  
190 mm**



**METROLOGICAL SPECIFICATIONS**

MODEL NAME			VD5				
Nominal Diameter	DN	mm	20				
Meter Length	L	mm	190				
Permanent Flowrate	Q3	m³/h	2,5				
Maximum Flowrate	Q4	m³/h	3,125				
Measuring Range Ratio	All Positions		160	200	250	315	400
Transitional Flowrate			0,025	0,020	0,016	0,013	0,010
Minimum Flowrate			0,016	0,013	0,010	0,008	0,006
Temperature Class	T	°C	50				
Transitional Flowrate Ratio	-	-	1,6				
Pressure Drop		bar	0,63				
Maximum Working Pressure		bar	16				
Registration Capacity		m³	99999				
Minimum Reading Resolution		lt	0,05				



**GENERAL CHARACTERISTICS**

- Precise measurement with volumetric design
- Vacuum mechanism with dust and steam protection
- Protected against magnetic interference
- Suitable for optical reading
- Corrosion resistant brass body
- Electrostatic painted inner and outer surfaces
- All parts are made of materials suitable for contact with water
- 360° rotating and 180° opening lid for easy reading
- Registration capacity 99999 m³
- Long service life with sapphire jewel bearing

**DIMENSIONS**



Nominal Diameter	DN	20	( 3/4 inch )
Length	L	190	mm
Axis Height	H1	38	mm
Total Height	H2	115	mm
Width	W	86	mm
Connection Diameter	A	G 1 B	
Weight		1,2	kg
Package Weight		11	kg
Package Dimensions		47x22x25	cm





## GENERAL CHARACTERISTICS

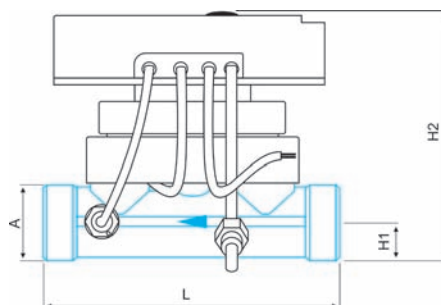
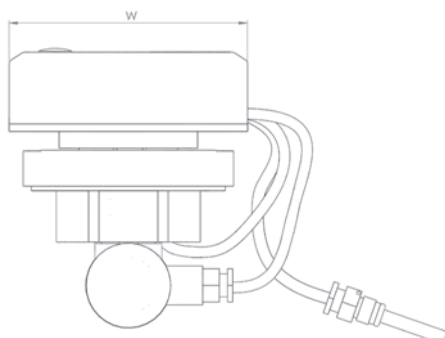
- Easy installation and use
- Ergonomic design
- LCD display unit rotating 350° and separable from the counter
- Possibility of horizontal and vertical installation
- PT1000 calibrated temperature sensors
- 10 years battery life with lithium-ion battery technology
- Heating, Cooling and Heating & Cooling operation modes
- Optical interface, wired or wireless communication with M-Bus protocols
- EN 1434 Directive 2004/22 / EC MID Certificate

## METROLOGICAL SPECIFICATIONS

MODEL NAME	KALORİMETRE																															
Nominal Diameter	DN	mm	15	20	25		32	40	50	65	80	100	125	150	200	250	300															
Meter Length	L	mm	110	130 - 190	160	260	180	200	200	200	225	250	350	350	350	400	450															
Permanent Flowrate	Q3	(m³/h)	1,5	2,5	3,5	6	6	10	15	25	40	60	100	150	250	400	600															
Maximum Flowrate	Q4	(m³/h)	3	5	7	12	12	20	30	50	80	120	200	300	500	800	1200															
Minimum Flowrate	Q1	(m³/h)	0,03	0,015	0,05	0,025	0,07	0,035	0,12	0,06	0,12	0,06	0,2	0,1	0,3	0,15	0,5	0,25	0,8	0,4	1,2	0,6	2	1	3	1,5	5	2,5	8	4	12	6
Hassasiyet	R		50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100	50	100
Temperature Class		°C	T4/95																													
Pressure drop		bar	0,63																													
Çalışma Basıncı		bar	16																													
Registration Capacity		(m³/h)	999,999.99										999999999																			
Capacity		(kW/h)	99,999.999										999,999.99																			

## DIMENSIONS

MODEL NAME	KALORİMETRE																											
Nominal Diameter	DN	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300												
		inch	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"												
Length	L	mm	110	130	190	160	260	180	200	200	200	225	250	350	350	350	400	250										
Axis Height	H1	mm	12	18	20	26	30	80	90	100	110	125	145	170	200	230												
Total Height	H2	mm	210	280	280	300	330	350	370	400	420	500	530	580	650	700												
Connection Diameter	A		G 3/4 B	G 1 B	G 1 1/4 B	G 1 1/2 B	G 2 B	4 - Ø18 -Ø125	4 - Ø18 -Ø145	8 - Ø18 -Ø160	8 - Ø18 -Ø180	8 - Ø18 -Ø210	8 - Ø22 -Ø240	12 - Ø22 -Ø295	12 - Ø26 -Ø355	12 - Ø26 -Ø3410												



**DN15-20-25**  
190 mm



**DN32-40**  
490-530 mm



**DN50**  
570 mm



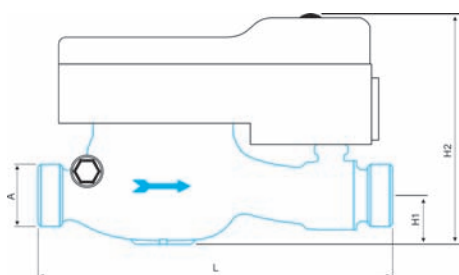
**GENERAL CHARACTERISTICS**

- Easy use of contactless operation with contactless card
- Reading of the screen even in areas where light is insufficient with high-resolution LCD with backlight
- Electronic circuit with high magnetic field protection
- Operation in reverse or direct water flow
- Supply of water at emergency with Fire Mode
- Detecting, recording, and penalizing upon dismantling from the facility
- Detecting, recording, and penalizing upon opening cover of the meter
- Detecting, recording, and penalizing upon battery removal
- Detecting, recording, and penalizing magnetic field
- 10 years battery life with lithium-ion battery
- Low battery warning
- Real time clock pursuant to RTC IEC 61038
- MID (Measuring Instruments Directive) Certified
- Suitable for remote reading with optional Wireless MBus equipment



**METROLOGICAL SPECIFICATIONS**

MODEL NAME	PRE-PAID																										
Nominal Diameter	DN	mm	15				20				25				32				40				50				
Meter Length	L	mm	190				190				320				490				530				570				
Permanent Flowrate	Q3	(m³/h)	2,5				2,5				4				6,3				10				25				
			3,125				3,125				5				7,875				12,5				20				31,25
Transitional Flowrate	Q2	(m³/h)	0,04	0,032	0,025	0,04	0,032	0,025	0,064	0,051	0,04	0,101	0,0806	0,063	0,2	0,13	0,1	0,26	0,2	0,16	0,4	0,32	0,25				
Minimum Flowrate	Q1	(m³/h)	0,025	0,02	0,016	0,025	0,02	0,016	0,04	0,032	0,025	0,063	0,0504	0,039375	0,1	0,08	0,0625	0,16	0,13	0,1	0,25	0,2	0,15625				
First Motion Flow	Qs	(m³/h)	8	7	5	8	7	5																			
Adjustment	R		100	125	160	100	125	160	100	125	160	100	125	160	100	125	160	100	125	160	100	125	160				
Temperature Class		°C	T50																								
Pressure Drop		bar	0,63																								
Maximum Working Pressure		bar	16 bar																								
Registration Capacity		(m³/h)	99999																								



**DIMENSIONS**



MODEL NAME	PRE-PAID							
Nominal Diameter	DN	mm	15	20	25	32	40	50
		inch	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Length	L	mm	190	190	320	490	530	570
Axis Height	H1	mm	26	26	20	26	30	80
Total Height	H2	mm	120	120	230	230	230	230
Connection Diameter	A		G 3/4 B	G 1 B	G 1 1/4 B	G 1 1/2 B	G 2 B	4 - Ø18 -Ø125

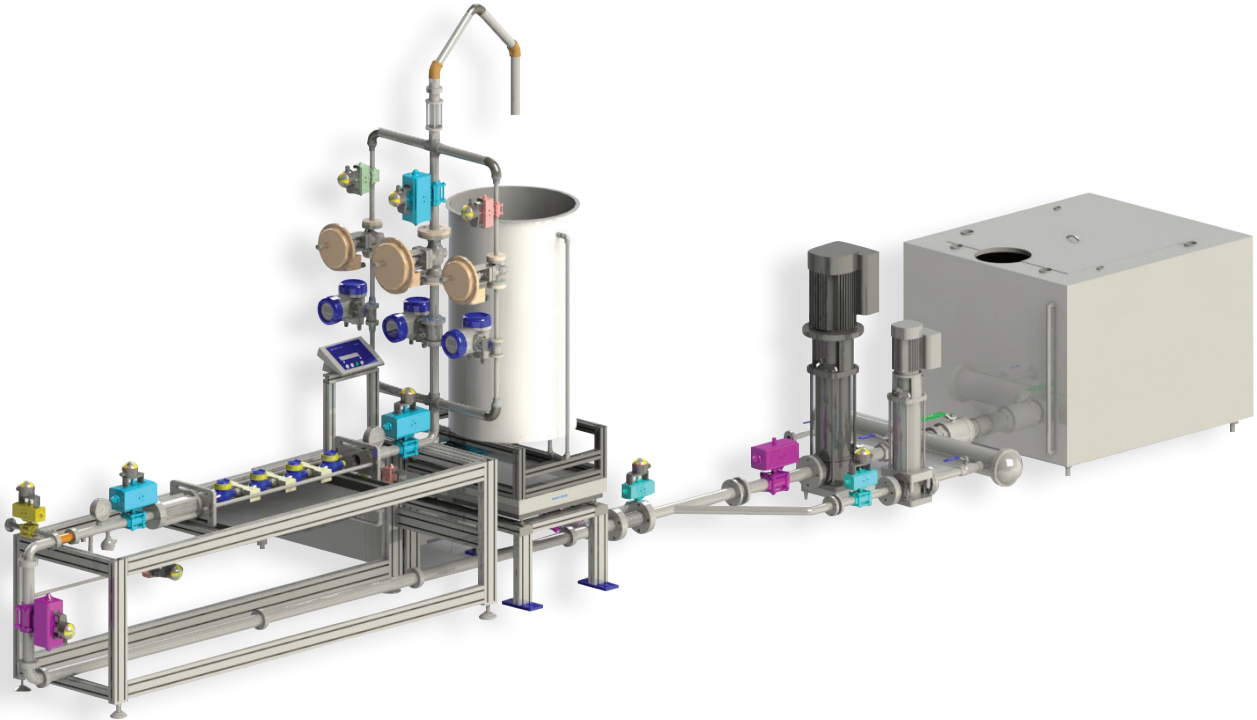


**M-BUS**



## METROLOGICAL SPECIFICATIONS

<b>Housing</b>	Gri, ABS plastic 200x150x75 mm
<b>Protective Class</b>	IP 52
<b>Operating Voltage</b>	220 VAC
<b>Power Consumption</b>	Max. 100W
<b>Operating Temperature Range</b>	-20 , +70
<b>Power Socket</b>	Avrupa Tipi, 2 metre
<b>M-Bus Voltage</b>	42 V ( Mark), 28V (Space)
<b>M-Bus Basic Current</b>	Max. 375 mA
<b>Overcurrent Threshold</b>	> 500 mA
<b>Led Status Indicators</b>	Power, RX , TX , Overload, M-Bus Short Circuit
<b>Slave Number</b>	Maximum 250 (1.5 mA * 250 Slave)
<b>Standart</b>	EN 13757 (M-Bus)
<b>Baudrate</b>	300 ... 38400
<b>Protection</b>	Overcurrent and short-circuit 7/24 Elektrikte çalışabilme
<b>Galvanic Isolation</b>	Galvanic isolation of all interfaces from M-Bus and power supply.
<b>Interfaces</b>	1 x RS232C with DSUB9 socket (FTDI)
<b>Interfaces</b>	1x USB 2.0 with B type socket Transparent level converting
<b>Terminals</b>	3 pairs screw terminals for M-Bus
<b>Cable Glands</b>	For power supply
<b>Maximum cable length for recommended cable type JYSTY 1 x 2 x 0,8 mm</b>	Total (all wires): 1km (9600 baud), 4km (2400 baud), 10km (300 baud) Max. distance to slave (250 slaves at the end of the cable): 350 m Max. distance to slave (250 slaves equally distributed): 900 m



**METROLOGICAL SPECIFICATIONS**

<b>Measuring System</b>	Gravimetric				
<b>Usage Areas</b>	Optionally, it water meter production companies, water management systems and controls are suitable for laboratory work.				
<b>Water Meter Capacity</b>	Optional; It is designed to cover all diameters from DN15 to DN40 or to serve only the diameters required by the customer.				
<b>Water Meter Pcs and Lengths (max)</b>	DN15	DN20	DN25	DN32	DN40
	110/165 mm	110/190 mm	260 mm	260 mm	300 mm
	10 Pcs	10 Pcs	3 Pcs	3 Pcs	2 Pcs
	These quantities may vary depending on the area of use and the meter capacity.				
<b>Flow Range</b>	Optionally, it is tested in all flow rates from 0.006 m <sup>3</sup> / h to 20 m <sup>3</sup> / h.				
<b>Operating Pressure</b>	Working pressure can be changed according to desired test flow and pressure. Maximum test pressure is 16 bar.				
<b>Scale Capacity</b>	Max 300 kg				
<b>Measurement Resolutions</b>	2 gr				
<b>Reading System</b>	In line with customer demand, suitable for optical or visual reading				
<b>Measuring Areas</b>	The pressure and temperature of the water tested can be measured mechanically or electronically.				





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# CEM<sup>®</sup> WATER METERS



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