



CF-800

Combined heat and cooling meter for large measuring points



Your benefits

- Large display:
Easy to read
- Backup battery with a backup period of 1 year:
To ensure time and metering values are not lost during a power outage
- Option cards for diverse functionalities:
 - **Economical basic device**
 - **Additional functionalities feasible**

Applications

- Metering of heat and/or cooling consumption in building management
- Energy measurement for local or remote reading
- Application for bulk measuring points
- Connections to management systems

Properties

- Electronic calculator and LCD resolution 7 digits
- Temperature measuring range 0 - 180 °C
- Temperature sensor Pt 100, two- or four-wire technology
- Non-volatile memory EEPROM and 24 month register
- Wall-mounted installation and mains supply 230 V AC
- Maximum values with time stamp
- Can be combined with the following volume measuring meters:
 - Impeller meters with reed-pulsar
 - Ultrasonic meters
 - MID
- 2 Pulse outputs
 - Heat energy: Output Heat energy + volume
 - Heat and cooling energy: Output Heat and cooling energy
- Double M-Bus (COMIO module + option card M-Bus)
- Standard EN 1434
- **CE** Conformity according European Measuring Instrument Directive (MID)

Options

- Special version for combined heat/cooling metering (special programming)
- Option cards Module 1
 - M-Bus
 - LonWorks, FTT-10A
 - Modbus RTU (RS485)
- Option card COMIO Module 2
 - 4 active, freely programmable analogue outputs 0/4...20 mA /
 - 2 alarm relay outputs or 2 water meter inputs / M-Bus
- Optional external EquaScan - wireless pulse Module pMIU
 - 📄 [Documentation: CF-800 meter- EPe20503](#)

Technical data MTW / MTW-VS / MTW-VF / MTH

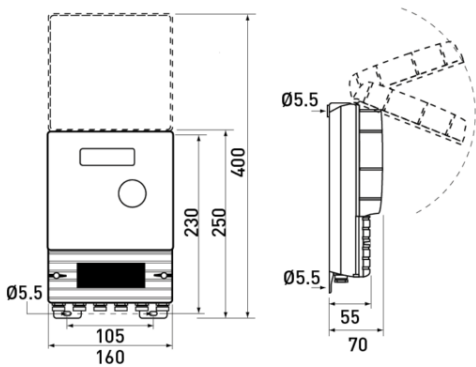
Execution			MTW (horizontal)					MTW-VS or VF (vertical) ¹⁾				MTH (horizontal)					MTH-VS or VF (vertical) ¹⁾			
Nominal diameter	DN	mm	20	25	32	40	50	20	25	32	40	20	25	32	40	50	20	25	32	40
Operating pressure	PN	bar	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
Operating pressure (flanged)	PN	bar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Connection thread on meter	G...B	Inch	1	1¼	1½	2	2¾	1	1¼	1½	2	1	1¼	1½	2	2¾	1	1¼	1½	2
Connection thread on coupling	R...	Inch	¾	1	1¼	1½	2	¾	1	1¼	1½	¾	1	1¼	1½	2	¾	1	1¼	1½
Nominal flow rate	q _p	m³/h	2,5	3,5	6	10	15	2,5	3,5	6	10	2,5	3,5	6	10	15	2,5	3,5	6	10
Maximum flow rate	q _s	m³/h	5	7	12	20	30	5	7	12	20	5	7	12	20	30	5	7	12	20
Minimum flow rate ±5%	q _i	l/h	50	70	120	200	300	50	70	120	200	50	70	120	200	300	50	70	120	200
Pulse value of volume measuring meter		l/imp.	2,5	2,5	2,5	25	25	2,5	2,5	2,5	25	2,5	2,5	2,5	25	25	2,5	2,5	2,5	25
Kvs-value		m³/h	5	10	12	20	30	5	10	12	20	5	10	12	20	30	5	10	12	20
Temperature		°C	2...90	2...90	2...90	2...90	2...90	2...90	2...90	2...90	2...90	2...130	2...130	2...130	2...130	2...130	2...130	2...130	2...130	2...130
Installation position			↔	↔	↔	↔	↔	↑↓	↑↓	↑↓	↑↓	↔	↔	↔	↔	↔	↑↓	↑↓	↑↓	↑↓
Standard measuring range	q _i /q _p		1:50	1:50	1:50	1:50	1:50	1:50	1:50	1:50	1:50	1:50	1:50	1:50	1:50	1:50	1:50	1:50	1:50	1:50

Dimensions			MTW (horizontal)					MTW-VS or VF (vertical) ¹⁾				MTH (horizontal)					MTH-VS or VF (vertical) ¹⁾			
Length without couplings	A	mm	220 ²⁾	260	260	300	300	105	150	150	200	220 ²⁾	260	260	300	300	105	150	150	200
Length with couplings		mm	312	352	372	432	452	197	242	262	332	312	352	372	432	452	197	242	262	332
Total height	B	mm	127	137	137	163	177	-	-	-	-	133	143	143	169	183	-	-	-	-
Meter height from pipe centre line	C	mm	87	94	94	117	120	-	-	-	-	93	100	100	123	126	-	-	-	-
Meter depth	D	mm	-	-	-	-	-	148	169	183	226	-	-	-	-	-	148	169	183	226
Meter depth from pipe centre line	E	mm	-	-	-	-	-	130	143	156	190	-	-	-	-	-	130	143	156	190
Meter width	F	mm	95	100	100	135	151	95	98	101	139	95	100	100	135	151	95	98	101	139
Length with flanges PN 16/25	A	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Height with flanges	H	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Flange external dimension ³⁾	D	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hole circle diameter ³⁾	L	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Number of screws ³⁾	Pcs.		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

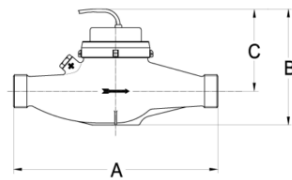
¹⁾ -VS = vertical riser / VF = vertical down pipe ²⁾ Also supplied in length 190 mm ³⁾ DIN EN 1092-2

Dimension Diagram CF-800 / MTW(-V) / MTH(-V)

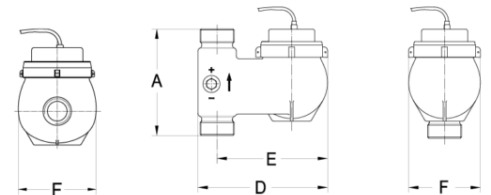
Calculator CF-800



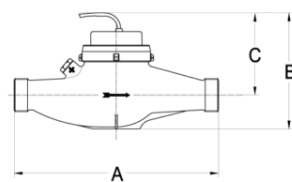
MTW



MTW-V./MTH-V.



MTH



Technical Data WPD FS

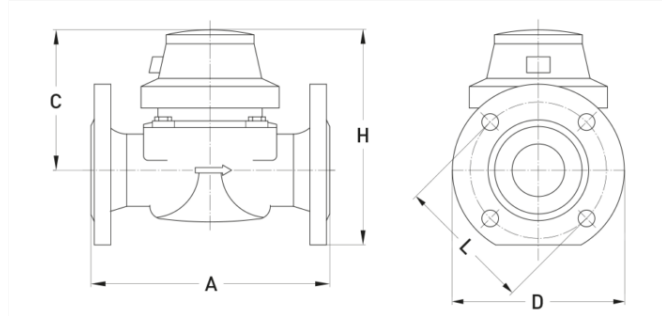
Series			WPD FS									
Nominal diameter	DN	mm	50	50	65	65	80	80	100	100	125	150
Operating pressure	PN	bar	-	-	-	-	-	-	-	-	-	-
Operating pressure (flanged)	PN	bar	16	16	16	16	16	16	16	16	16	16
Connecting thread on meter	G...B	Inch	-	-	-	-	-	-	-	-	-	-
Connecting thread on coupling	R...	Inch	-	-	-	-	-	-	-	-	-	-
Nominal flow rate	q _P	m ³ /h	15	15	25	25	40	40	60	60	100	150
Maximum flow rate	q _S	m ³ /h	30	30	50	50	80	80	120	120	200	300
Minimum flow rate ±5%	q _i	m ³ /h	1,5	1,5	2,5	2,5	4	4	6	6	10	15
Pulse value of volume measuring meter		l/Imp.	25	25	25	25	25	25	25	25	100	250
Kvs-value		m ³ /h	110	110	110	110	340	340	380	380	520	810
Temperature range		°C	10...130	10...130	10...130	10...130	10...130	10...130	10...130	10...130	10...130	10...130
Installation position			↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔
			↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓
Standard measuring range	q _i /q _P		1:10	1:10	1:10	1:10	1:10	1:10	1:10	1:10	1:10	1:10

Dimensions			WPD FS										
Length without couplings	A	mm	-	-	-	-	-	-	-	-	-	-	
Length with couplings		mm	-	-	-	-	-	-	-	-	-	-	
Total height	B	mm	-	-	-	-	-	-	-	-	-	-	
Meter height from pipe centre line	C	mm	120	120	120	120	150	150	150	150	160	177	
Meter depth	D	mm	-	-	-	-	-	-	-	-	-	-	
Meter depth from pipe centre line	E	mm	-	-	-	-	-	-	-	-	-	-	
Meter width	F	mm	-	-	-	-	-	-	-	-	-	-	
Length with flanges	A	mm	200	270	200	300	225	300	250	360	250	300	500
Height with flanges	H	mm	193	193	205	205	245	245	255	255	278	312	312
Flange external dimension ³⁾	D	mm	165	165	185	185	200	200	220	220	250	285	285
Hole circle diameter ³⁾	L	mm	125	125	145	145	160	160	180	180	210	240	240
Number of screws ³⁾		Pcs.	4	4	4	4	8	8	8	8	8	8	8

3) DIN EN 1092-2

Dimension Diagram WPD FS

WPD FS



Technical Data AXONIC / OPTIFLUX 4300

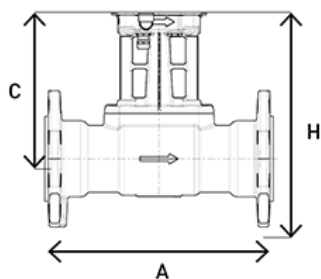
Series			AXONIC								OPTIFLUX 4300												
Nominal diameter	DN	mm	65	65	80	80	100	100	150	150	25	40	50	65	65	80	100	125	150	200	200	250	300
Operating pressure	PN	bar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operating pressure (flanged)	PN	bar	16	25	16	25	16	25	16	25	40	40	40	16	40	40	16	16	16	10	16	10	10
Connecting thread on meter	G...B	Zoll	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Connecting thread on coupling	R...	Zoll	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nominal flow rate	q _p	m ³ /h	25	25	40	40	60	60	150	150	-	-	-	-	-	-	-	-	-	-	-	-	-
Maximum flow rate	q _s	m ³ /h	50	50	80	80	120	120	300	300	16	25	40	100	100	160	250	400	650	1000	1000	1600	2500
Minimum flow rate ±5%	q _i	m ³ /h	0,1	0,1	0,16	0,16	0,24	0,24	0,6	0,6	0,08	0,125	0,2	0,5	0,5	0,8	1,25	4	6,5	10	10	16	25
Pulse value of volume measuring meter		l/Imp.	10	10	10	10	10	10	100	100	10	10	10	10	10	10	100	100	100	100	100	100	1000
Kvs-value		m ³ /h	80	80	110	97	200	200	390	390	-	-	-	-	-	-	-	-	-	-	-	-	-
Temperature range		max. °C	130	130	130	130	130	130	130	130	180	180	180	180	180	180	180	180	180	120	120	120	120
Installation position			↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔	↔↔
Standard measuring range	q _i /q _p		1:250	1:250	1:250	1:250	1:250	1:250	1:250	1:250	-	-	-	-	-	-	-	-	-	-	-	-	-

Dimensions			AXONIC								OPTIFLUX 4300												
Length without couplings	A	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Length with couplings		mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total height	B	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meter height from pipe centre line	C	mm	204	204	209	209	219	219	244	244	238	246	259	263	263	264	282	296	313	346	346	366	391
Meter depth	D	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meter depth from pipe centre line	E	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Meter width	F	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Length with flanges	A	mm	200	300	225	300	360 ⁴⁾	360	500 ⁵⁾	500	150	150	200	200	200	200	250	250	300	350	350	400	500
Height with flanges	H	mm	297	297	309	309	330	337	387	394	295	321	341	355	355	364	392	421	455	516	516	563	613
Flange external dimension ³⁾	D	mm	185	185	200	200	220	235	285	300	115	150	165	185	185	200	220	250	285	340	340	395	445
Hole circle diameter ³⁾	L	mm	145	145	160	160	180	190	240	250	85	110	125	145	145	160	180	210	240	295	295	350	400
Number of screws ³⁾	Stk.		4	8	8	8	8	8	8	8	4	4	4	4	8	8	8	8	8	8	12	12	12

³⁾ DIN EN 1092-2 ⁴⁾ Also supplied in length 250 mm ⁵⁾ Also supplied in length 300 mm

Dimension Diagram Axonic

AXONIC



Calculator executions

Wall-mounted model (split version)

CF-800 WNZ

- Mains supply (230 V AC)
- Incl. option card COMIO
- Additional option cards possible