

Hoval calorifier
MultiVal ERR (300-500)

- Calorifier made of steel enamelled inside
- 2 plain-tube coils enamelled, permanently installed
 - for alternative use at the bottom
 - for additional heating with an oil, gas or wood boiler at the top
- Magnesium protection anode built in
- Flange for electric heating element
- Thermal insulation made of polyurethane hard foam hulls, foamed on the calorifier
- Dismantable foil casing, red coloured
- Sensor channel
- Immersion sleeve welded in
- Including thermometer
- 1½" sleeve for a screw-in electric heating element

Delivery

- Calorifier with foil casing, pre-installed

On request

- Screw-in electric heating element
- Flange-mounted electric heating element



Range

MultiVal
type

ERR	(300)	B
ERR	(400)	B
ERR	(500)	B

Calorifier



MultiVal ERR (300-500)

Made of enamelled steel, with 2 plain-tube coils.

MultiVal ERR type	Volume dm ³	Heating surface	
		top m ²	bottom m ²
(300)	B 295	0.80	1.55
(400)	B 381	1.00	2.15
(500)	B 471	1.30	2.15

Electric heating elements

see chapter "Electric heating elements"

Part No.

7015 971
7016 752
7016 753

Accessories



Flange cover 180 - 3/4"

for the installation of the Correx[®] impressed current anode in flange Ø 180/110 mm, enamelled on the inside with Rp 3/4" sleeve
Seal included

2077 035



Flange with immersion sleeve

for temperature sensor made of steel. On domestic water side, enamelled inside.

Flange dimensions:

- Outer Ø 180 mm,
- Pitch circle Ø 150 mm, 8 x M10

Immersion sleeve dimensions:

- Installation length = 120 mm,
- Outer Ø: 24 mm, inner Ø: 20 mm

6028 468



Kit Correx[®] impressed current anode UP2.3-919-L395/1

for long-term corrosion protection for installation in the enamelled calorifier with reduction R 1 1/4" (ET) – Rp 1" (IT) and R 1" (ET) – Rp 3/4" (IT)

Installation length: 395 mm

Connection cable length: 1 x 2000 mm

1 Correx[®] impressed current anode

684 760

In every case, **either** a Correx[®] impressed current anode **or** one/two magnesium anodes are allowed to be used.

Part No.



Immersion sensor TF/2P/5/6T, L = 5.0 m with plug
 for TopTronic® E controller modules/
 module expansions with exception of
 basic module district heating/fresh
 water or basic module district heating com,
 cable length: 5 m with plug
 sensor sleeve diameter: 6 x 50 mm,
 dewpoint-proof,
 operating temperature: -20...105 °C,
 protection class: IP67

2056 788



Immersion sensor TF/2P/5/6T, L = 5.0 m
 for TopTronic® E controller modules/
 module expansions with exception of
 basic module district heating/fresh
 water or basic module district
 heating com,
 cable length: 5 m without plug
 sensor sleeve diameter: 6 x 50 mm,
 dewpoint-proof,
 operating temperature: -20...105 °C,
 protection class: IP67

2055 888



Immersion sensor TF/12N/2.5/6T, L = 2.5 m
 for gas boiler with RS-OT
 Cable length: 2.5 m
 Sensor sleeve diameter: 6 x 50 mm,
 dewpoint-proof,
 operating temperature: -20...105 °C,
 protection class: IP67

2056 791

At TopTronic® E, immersion sensor is included in the boiler controller or in the heating controller set.



Calorifier thermostat control TW 12
 Universal thermostat controller
 for thermostatic pump charge
 demand, setting in
 casing, visible from outside.
 15-95 °C, switching difference 6 K,
 capillar length 700 mm
 incl. fastening material for
 Hoval calorifier, can be used with
 integrated immersion sleeve

6010 080

Thermal water mixer
 see "Various system components"

Services



Commissioning
 Commissioning by works service or Hoval
 trained authorised serviceman/company is
 condition for warranty.

For commissioning and other services
 please contact your Hoval sales office.

MultiVal ERR (300-500)

Type		(300)	(400)	(500)
• Volume	l	295	381	471
• Max. operating/test pressure SVGW	bar	6/12	6/12	6/12
• Max. operating/test pressure DVGW	bar	10/13	10/13	10/13
• Max. operating temperature	°C	95	95	95
• Expanded PU hard foam thermal insulation	mm	75	75	75
• Thermal insulation λ	W/mK	0.027	0.027	0.027
• Fire protection class		B2	B2	B2
• Heat loss at 65 °C	W	61	69	78
• Transport weight	kg	128	149	170
• U value	W/m ² K	0.307	0.326	0.316
Heating battery bottom		Plain tube heat exchanger for solar use		
• Heating surface	m ²	1.55	2.15	2.15
• Heating water	l	10.3	15.1	15.1
• Flow resistance ¹⁾ water	z value	10	3.6	3.6
• Flow resistance ¹⁾ water/glycol 50 %	z value	13	3.9	3.9
• Max. operating/test pressure SVGW	bar	8/13	8/13	8/13
• Max. operating/test pressure DVGW	bar	10/13	10/13	10/13
• Max. operating temperature	°C	110	110	110
• For flat collectors up to ²⁾	m ²	8	10	11
Heating battery top		Plain tube heat exchanger for supplemental heating		
• Heating surface	m ²	0.80	1.00	1.30
• Heating water	l	5.7	6.95	8.9
• Flow resistance ¹⁾	z value	6	8	9
• Max. operating/test pressure SVGW	bar	8/13	8/13	8/13
• Max. operating/test pressure DVGW	bar	10/13	10/13	10/13
• Max. operating temperature	°C	110	110	110
• Dimensions		see table of dimensions		

¹⁾ Flow resistance heating battery in mbar = flow rate (m³/h)² x z (1 mbar = 0.1 kPa)

²⁾ Collector surface area, with regard to coil heating surface only

Performance figure

Selection of the calorifier type
at a hot water temperature of 45 °C

Reading example
see engineering

T >	Comfort ¹⁾			Standard ²⁾		
	60 °C	70 °C	80 °C	60 °C	70 °C	80 °C
NL v						
1	300/400			300/400		
2	500	300	300	500	300	300
3		400	400		400	400
4		500	500		500	500
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T >	Comfort ¹⁾			Standard ²⁾		
	60 °C	70 °C	80 °C	60 °C	70 °C	80 °C
NL v						
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T = heating flow

NL = performance figure

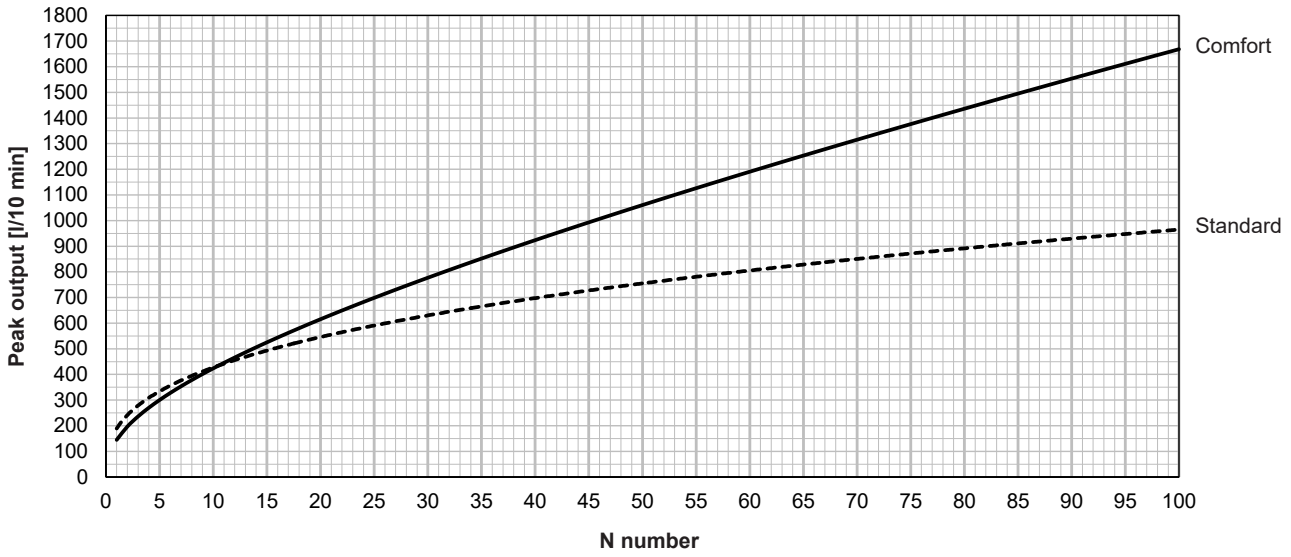
Performance figure NL acc. to DIN 4708 = number of flats which can be supplied with domestic hot water when the calorifier is heated and permanently reheated with the heat generator (standard flat: 1 bathroom - 4 rooms - 3.5 persons)

¹⁾ Calculation with simultaneity factor according to DIN 4708 (preferred for Switzerland)

²⁾ Calculation with simultaneity factor according to Dresden Technical University

10 min peak output/N number with domestic hot water 45 °C
according to DIN 4708 (Comfort) and Dresden Technical University (Standard)

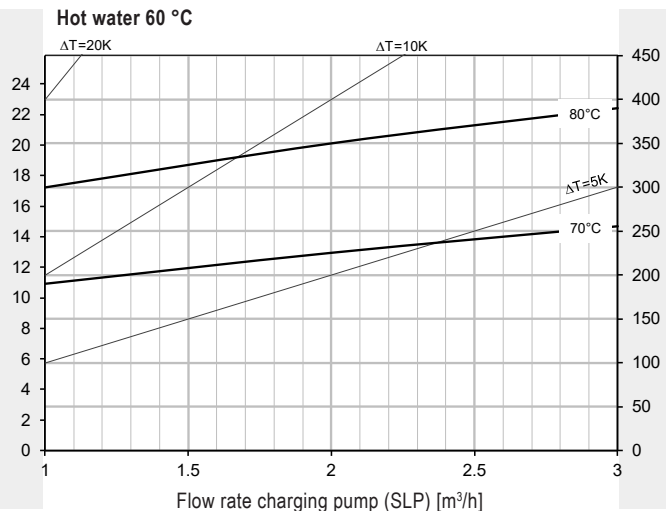
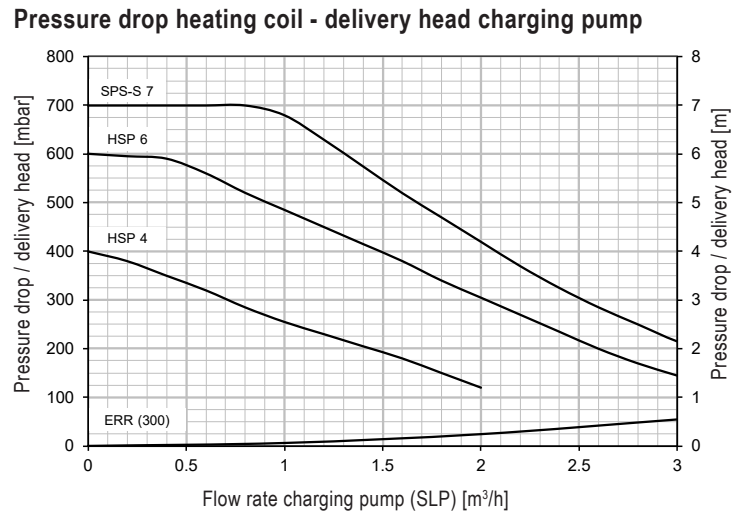
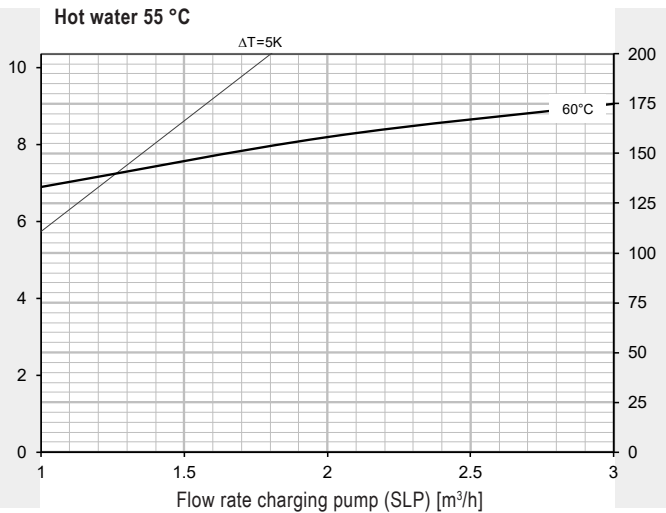
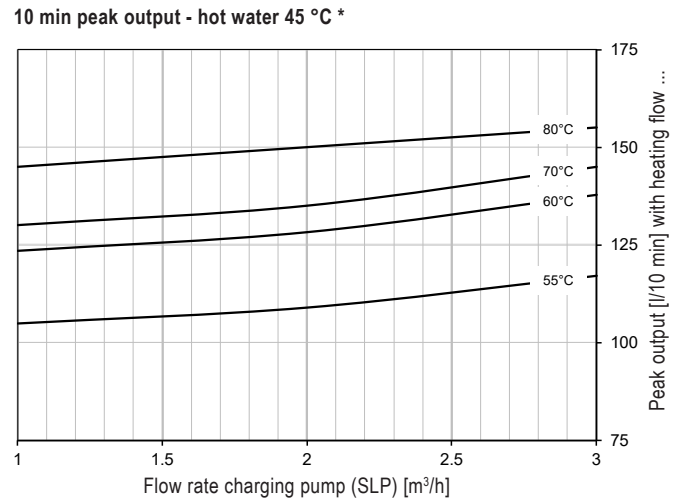
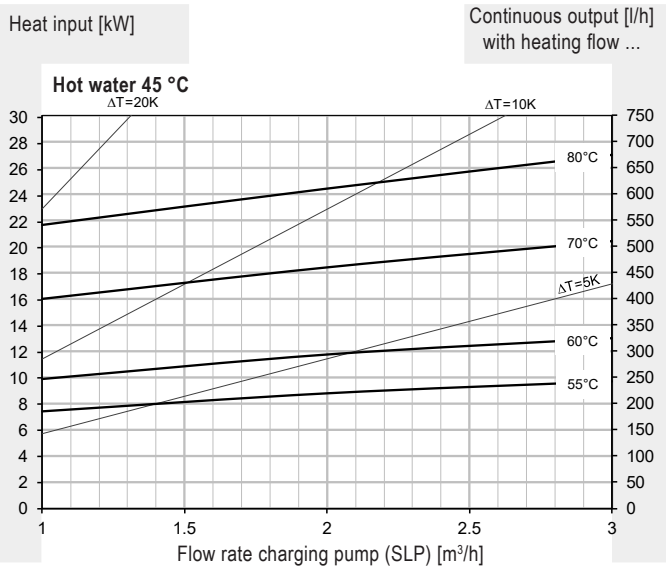
Reading example
see Engineering



MultiVal ERR (300)

Hot water output
Continuous output

Reading example
see engineering

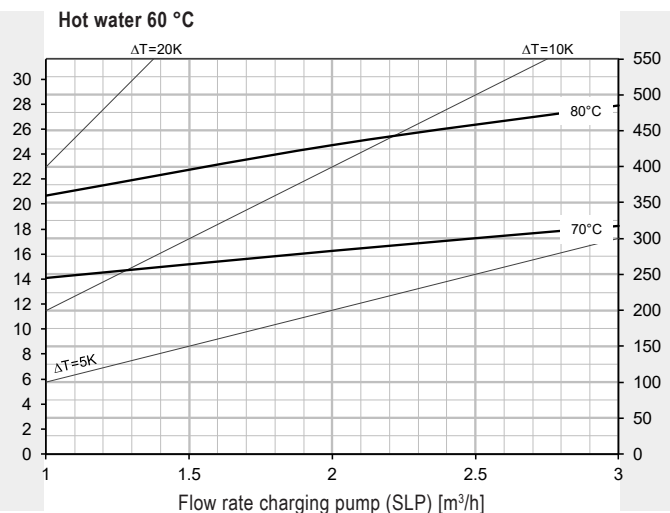
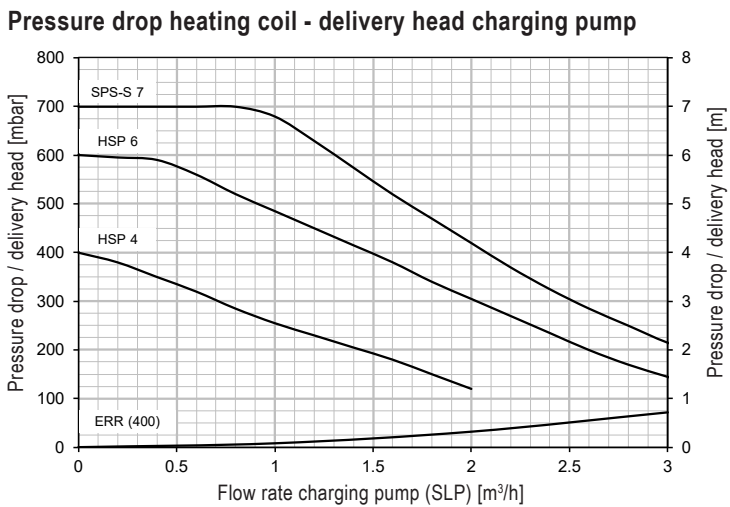
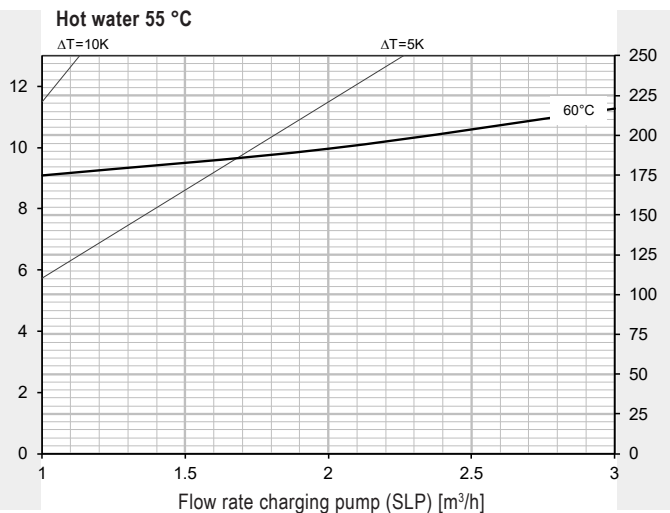
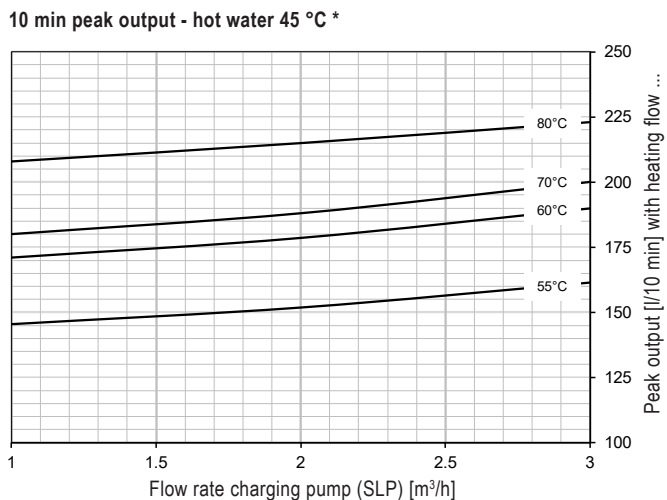
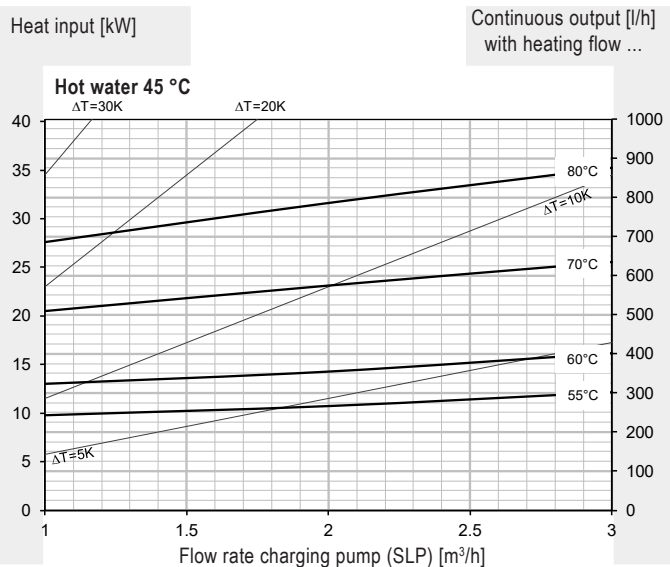


* Calorifier heated to 60 °C

MultiVal ERR (400)

Hot water output
Continuous output

Reading example
see engineering

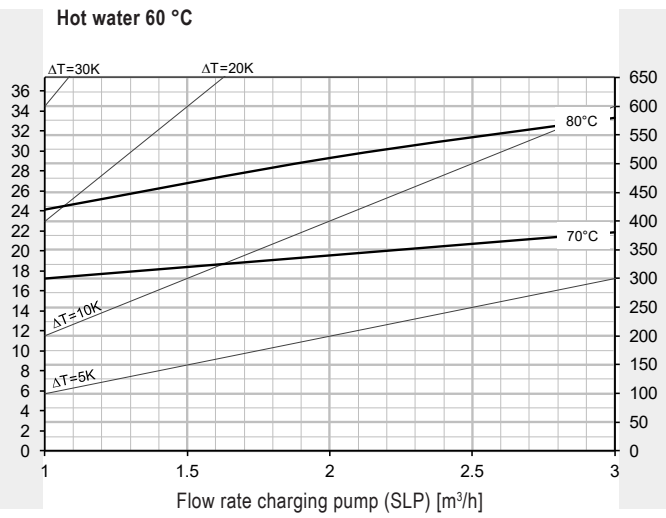
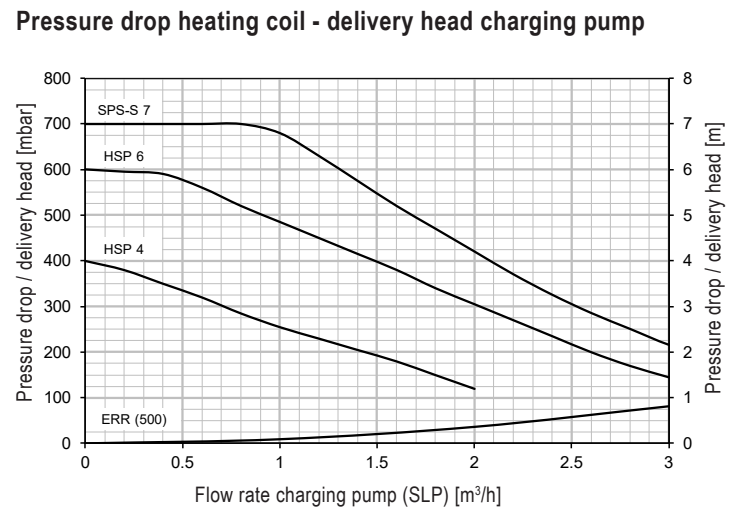
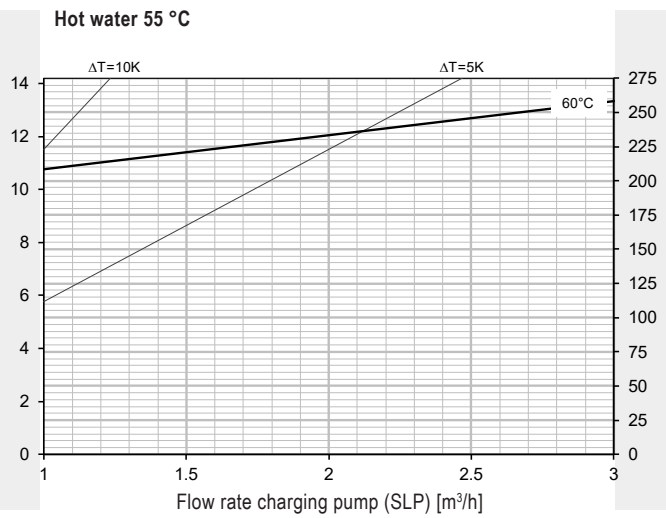
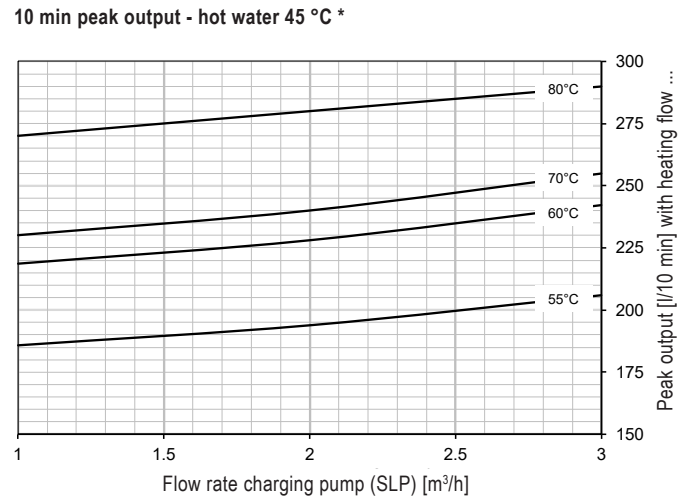
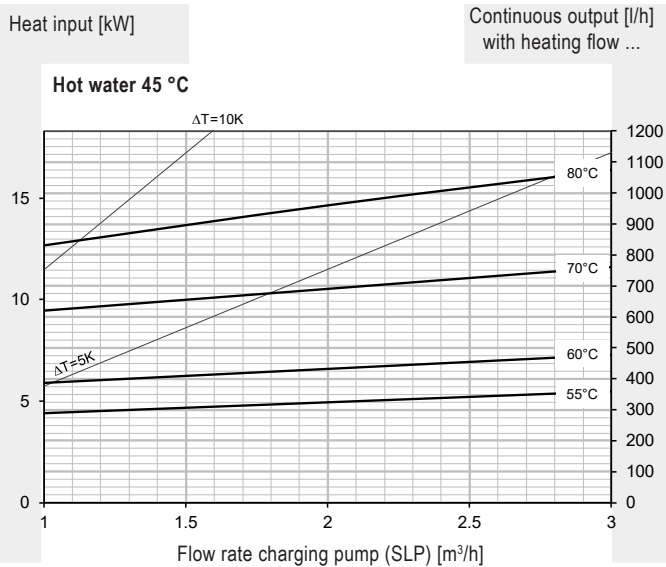


* Calorifier heated to 60 °C

MultiVal ERR (500)

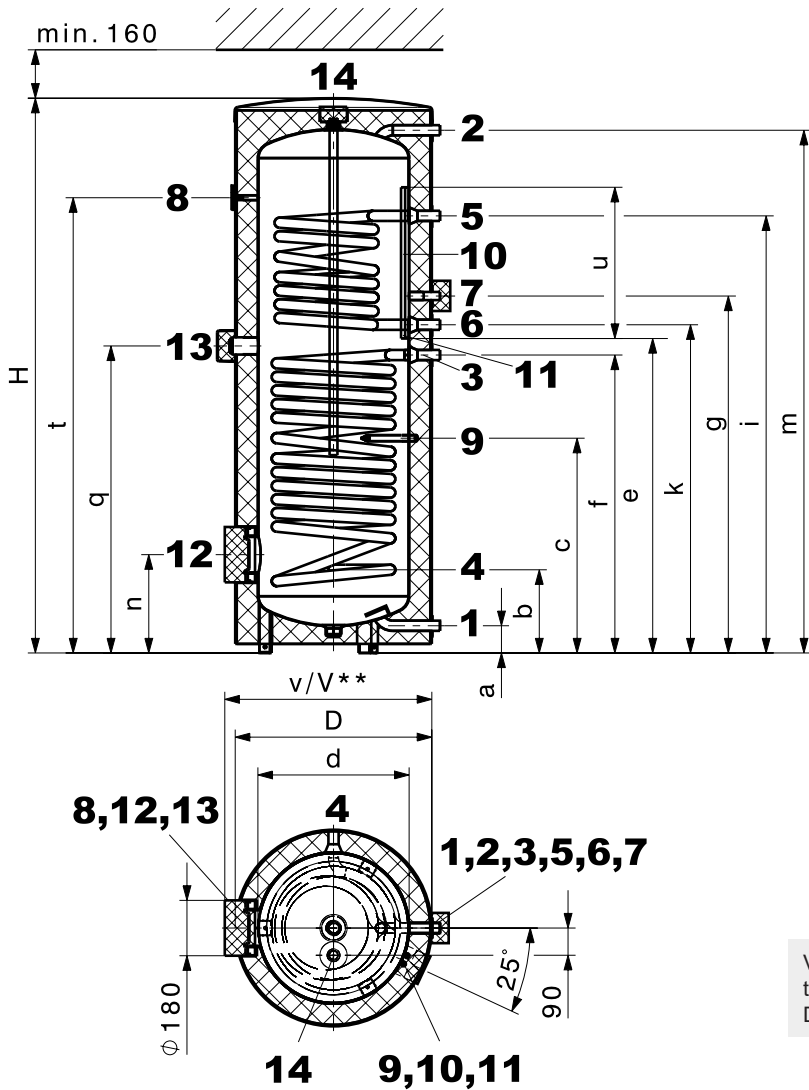
Hot water output
Continuous output

Reading example
see engineering



* Calorifier heated to 60 °C

MultiVal ERR (300)
(Dimensions in mm)



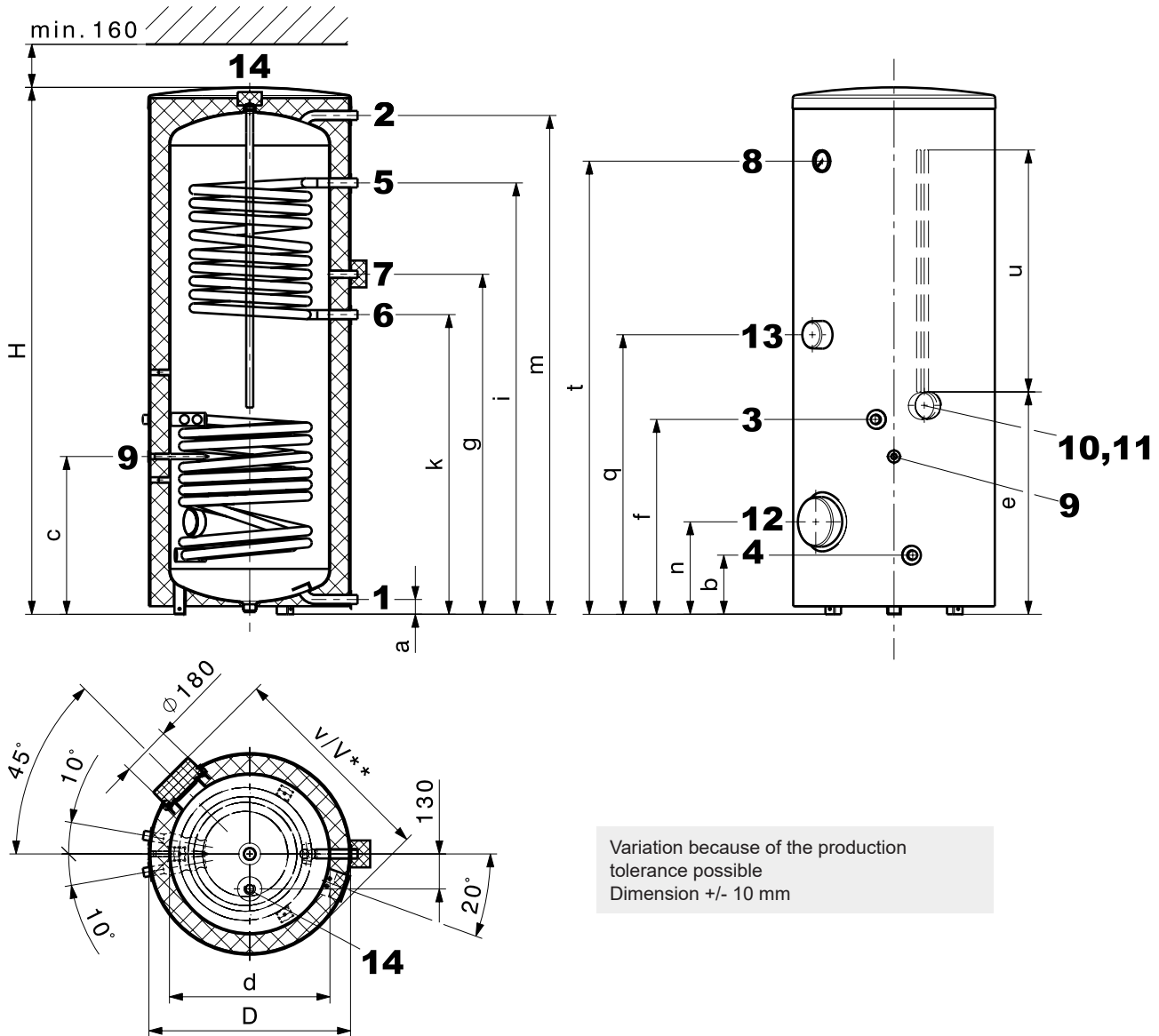
Variation because of the production tolerance possible
Dimension +/- 10 mm

- | | | |
|--|-----------|---|
| 1 Cold water | G 1" (ET) | 10 2 sensor channels inner Ø 11 mm |
| 2 Domestic hot water | G 1" (ET) | 11 Removable cap (Ø 100 mm)
for positioning the sensor in the sensor channel |
| 3 Solar circuit flow | G 1" (ET) | 12 Hand-hole flange (flange-mounted electric heating element)
Ø 180/120 mm, pitch circle 150 mm, 8 x M10 |
| 4 Solar circuit return | G 1" (ET) | 13 Connection for screw-in electric heating element
(cap Ø 100 mm) |
| 5 Flow supplemental heating | G 1" (ET) | 14 Anode sleeve
Screw connection uninsulated |
| 6 Return supplemental heating | G 1" (ET) | |
| 7 Circulation
(removable insulated cap Ø 100 mm) | G ¾" (ET) | |
| 8 Thermometer | | |
| 9 Connection for sensor/thermostat, inner Ø 16 mm
(turned through 25° in section) | | |

MultiVal ERR type	D	d	H	a	b	c	e	f	g	i	k	m	n	q	t	u	v	v**	Tilting dimension
(300)	650	500	1835	90	275	710	1040	985	1180	1445	1085	1728	325	1015	1505	500	695	710	2093

** when using a flange-mounted electric heating element

MultiVal ERR (400,500)
(Dimensions in mm)



Variation because of the production tolerance possible
Dimension +/- 10 mm

- | | | |
|---|-----------|---|
| 1 Cold water | G 1" (ET) | 10 2 sensor channels inner Ø 11 mm |
| 2 Domestic hot water | G 1" (ET) | 11 Removable cap (Ø 100 mm)
for positioning the sensor in the sensor channel |
| 3 Solar circuit flow | G 1" (ET) | 12 Hand-hole flange (flange-mounted electric heating element)
Ø 180/120 mm, pitch circle 150 mm, 8 x M10 |
| 4 Solar circuit return | G 1" (ET) | 13 Connection for screw-in electric heating element
(cap Ø 100 mm) |
| 5 Flow supplemental heating | G 1" (ET) | 14 Anode sleeve |
| 6 Return supplemental heating | G 1" (ET) | Screw connection uninsulated |
| 7 Circulation
(removable insulated cap Ø 100 mm) | G ¾" (ET) | |
| 8 Thermometer | | |
| 9 Connection for sensor/thermostat, inner Ø 16 mm | | |

MultiVal ERR type	D	d	H	a	b	c	e	f	g	i	k	m	n	q	t	u	v	v**	Tilting dimension
(400)	750	597	1624	55	220	587	862	725	1112	1355	1007	1526	344	958	1356	500	791	831	1731
(500)	750	597	1951	55	220	587	820	725	1265	1605	1115	1856	344	1040	1686	900	791	831	2029

** when using a flange-mounted electric heating element