

Application:

Oventrop product assemblies “Regumaq X-30” and “Regumaq XZ-30” for the hygienic heating of potable water according to the continuous flow principle for the connection to a buffer storage cylinder.

Advantages:

- hygienic heating of potable water according to the continuous flow principle
- high functional reliability
- all components from one supplier
- high quality materials
- maximum continuous operating temperature 95 °C
- insulation made of EPP (expanded polypropylene) supplied with each “Regumaq”
- time-saving installation
- efficient bus-compatible control
- easy menu navigation via graphic display
- free relay outputs for additional functions
- model “Regumaq XZ-30”:
circulation pump with check valve integrated in the station

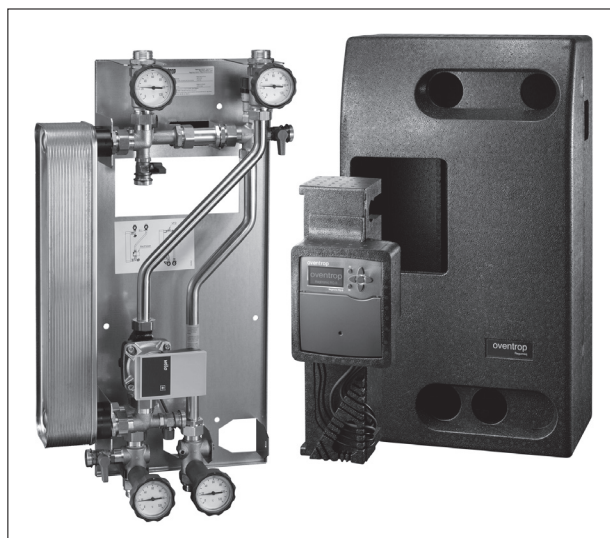
Tender specification:

“Regumaq X-30” fresh water station for the connection to the buffer and potable water circuit DN 25 G 1 flat sealing (connection sets to be ordered separately).

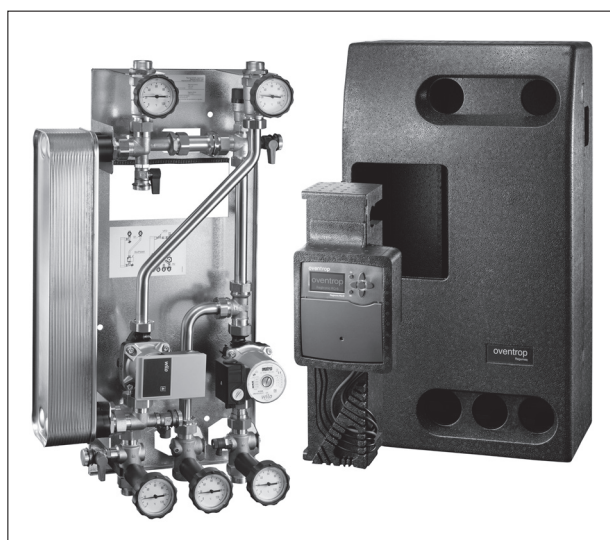
Complete, pre-assembled and leak tested unit with wall mounting device, insulation and electronic controller. Model “Regumaq XZ-30” with integrated circulation pump.

Technical data:

Max. continuous operating temperature:	95 °C
Max. operating pressure:	PN 10
Primary circuit:	
k_v value:	3.6
Opening pressure check valve:	35 mbar
Fluid:	Heating water
Pump type:	Wilo-Yonos PARA RS 130 15/7 PWM2
Power consumption during operation:	3-45 W
Secondary circuit:	
Safety valve:	10 bar
k_v value:	3.0
Fluid:	Potable water
Circulation pump (only “Regumaq XZ-30”)	Wilo-ZRS 130 15/4-3 KU/ Wilo-Yonos PARA Z RKC 130 15/7
Max. power consumption:	55 W/45 W
Dimensions:	
Distance between pipe centres:	100 mm
Width:	500 mm
Height:	860 mm
Depth:	260 mm
Distance between pipe centres – wall (primary side):	130 mm
Distance between pipe centres – wall (secondary side):	80 mm



„Regumaq X-30“



„Regumaq XZ-30“

Materials:

Valves and fittings:	Brass / dezincification resistant brass
Seals:	EPDM
Insulation:	EPP (expanded polypropylene)
Check valves:	PPS (polyphenylene sulphide) / brass / dezincification resistant brass
Pipes:	Stainless steel 1.4401
Heat exchanger:	Stainless steel 1.4401 / brazed copper (item no.: 1381030, 1381035, 1381025) completely made of stainless steel 1.4401 (item no.: 1381032, 1381037, 1381027)

Note:

A copper brazed stainless steel heat exchanger is part of the fresh water stations “Regumaq X-30”, item no. 1381030, and “Regumaq XZ-30”, item no. 1381035 and 1381025.

The specifying engineer and the user of the system are responsible to incorporate and evaluate substances and other factors in the water, which influence corrosion and the formation of calcium deposits.

Please observe the document “Demands on potable water when using the Oventrop fresh water and dwelling stations”, see www.ventrop.com.

When operating a circulation system, the approved rules of technology and the hygiene regulations according to the DWGW work sheet W551 must be observed.

Function:

The buffer storage cylinder is integrated into the heating circuit and is supplied with heat by an autonomously controlled heat source. The only design intent of the electronic controller of the “Regumaq X-30” / “Regumat XZ-30” is the heating of the potable water via the speed controlled primary pump and, if required, the control of the circulation.

The integrated operating unit serves the control of all functions and the retrieval of the current operating data.

Free relay outputs are available for further applications, such as re-loading of the storage cylinder or ΔT function.

Connection diagram “Regumaq X-30” / “Regumaq XZ-30”

Primary circuit (heating side):

S1 Temperature sensor supply

R4 Power supply pump

PWM Signal input pump (for speed control)

Secondary circuit (potable water side):

VFD Flow sensor

Temperature sensor cold water inlet / circulation return

S2 Temperature sensor hot water outlet

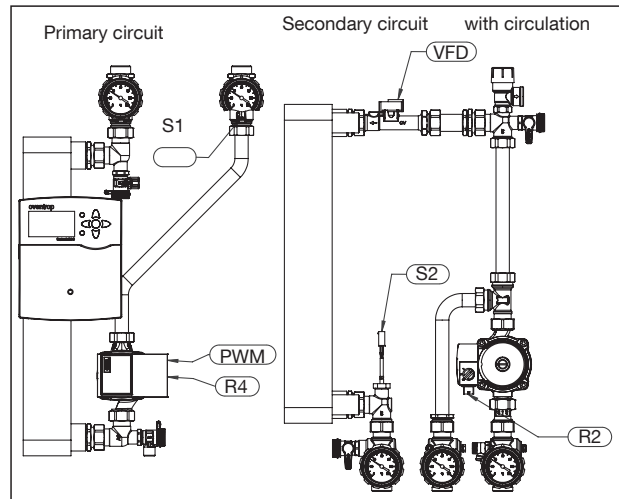
R2 Circulation pump (only “Regumaq XZ-30”)

Further connections at the controller:

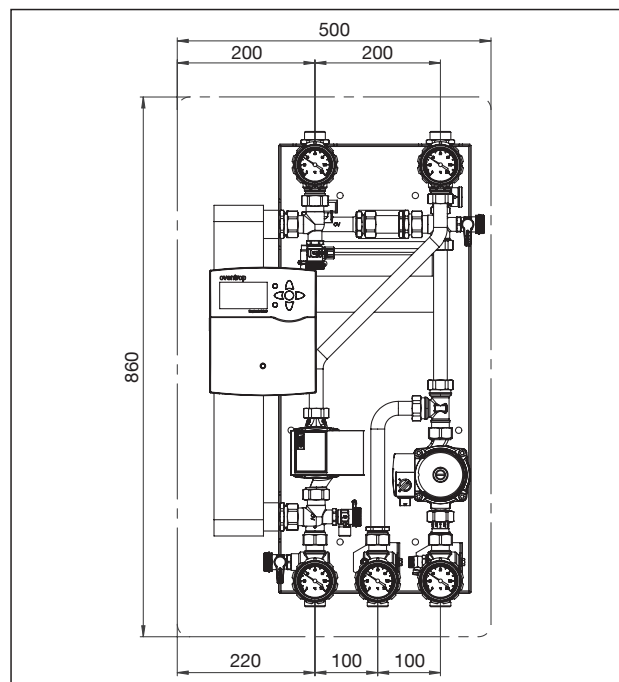
R1, R3 Free relays for additional functions

(re-loading of storage cylinder etc.)

S3-S8 Free temperature sensors for additional functions

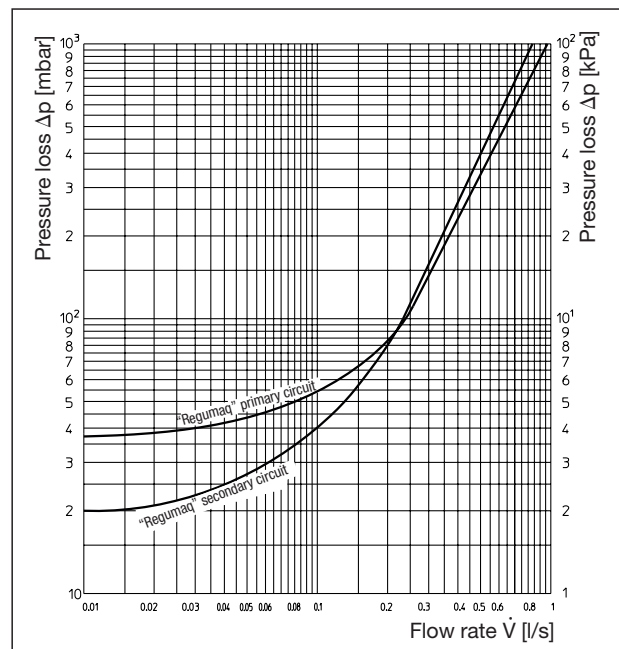


Connection diagram “Regumaq X-30” / “Regumaq XZ-30”



Dimensions

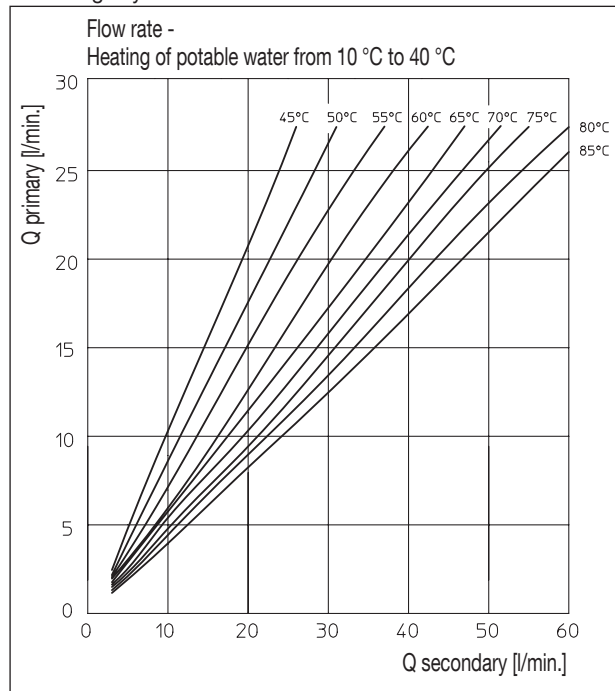
	“Regumaq X-30”	“Regumaq XZ-30”	
Copper brazed heat exchanger	Item no.: 1381030	Item no.: 1381035	Item no.: 1381025
Stainless steel-brazed heat exchanger	1381032	1381037	1381027
Pump (buffer side)	Wilo-Yonos PARA RS 130 15/7 PWM2	Wilo-Yonos PARA RS 130 15/7 PWM2	Wilo-Yonos PARA RS 130 15/7 PWM2
Pump (Circulation)	—	Wilo-ZRS 130 15/4-3KU	Wilo-Yonos PARA Z RKC 130 15/7



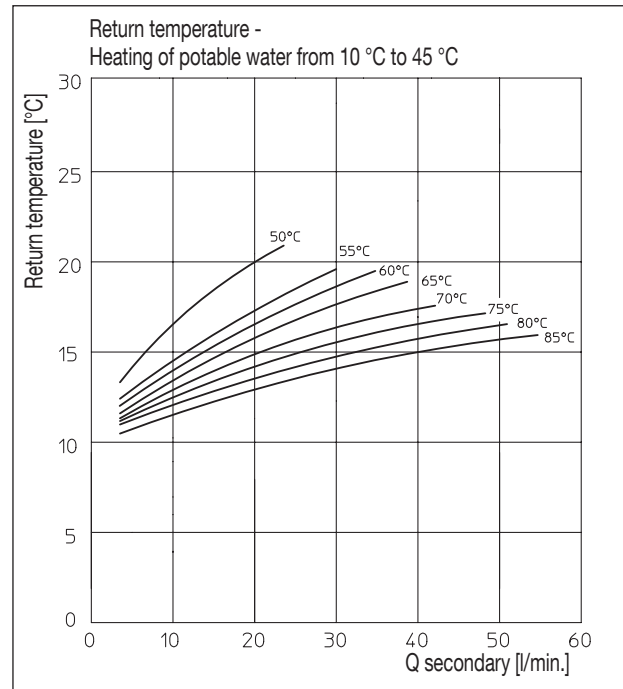
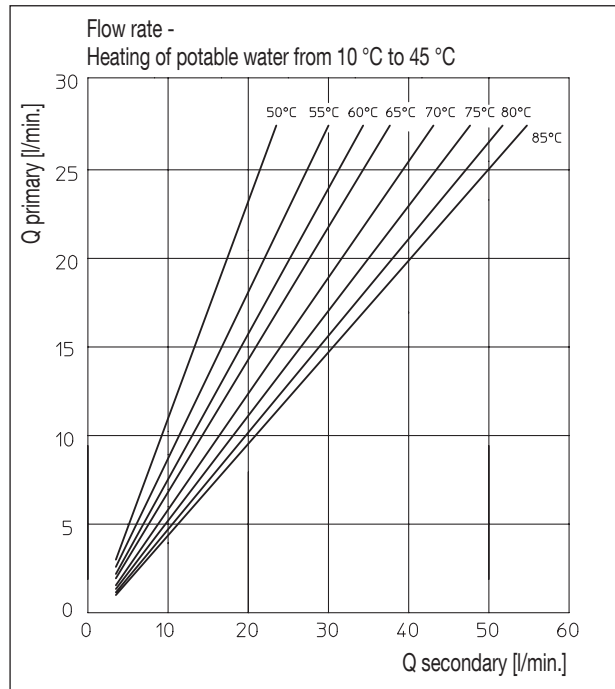
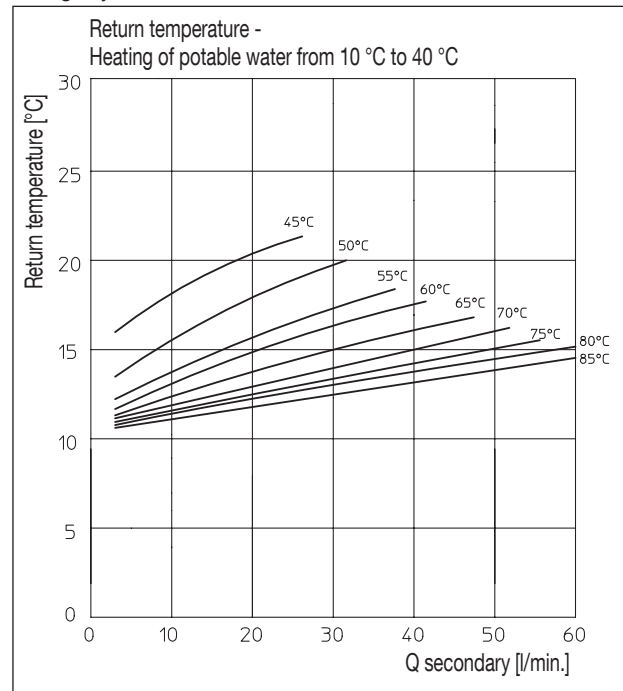
Flow chart “Regumaq X-30” / “Regumaq XZ-30”

Characteristic lines:

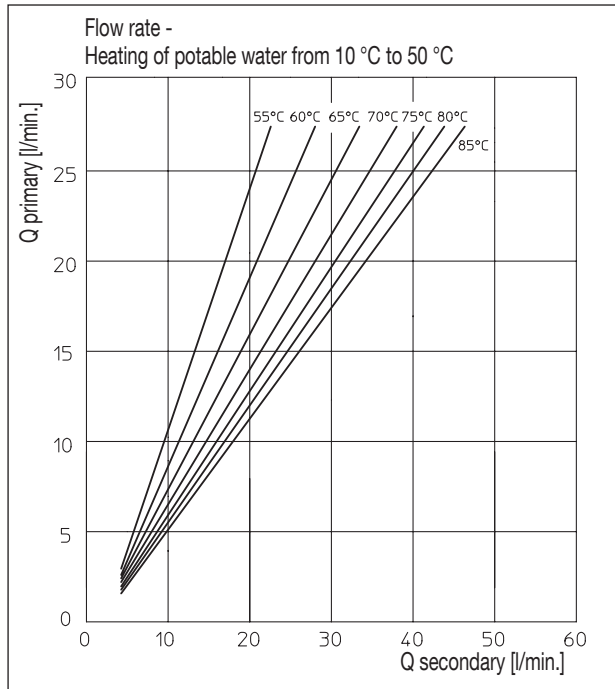
Required flow of heating water (Q primary) with draw off quantity of potable water (Q secondary) and existing temperature inside the storage cylinder



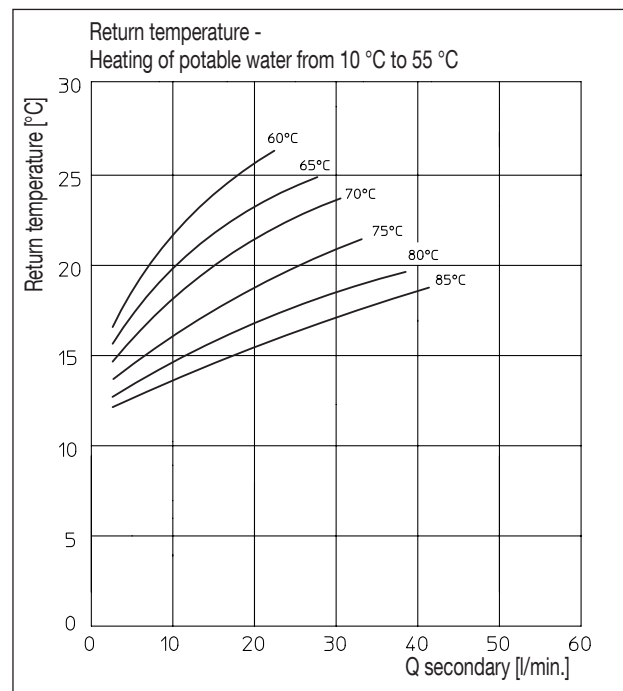
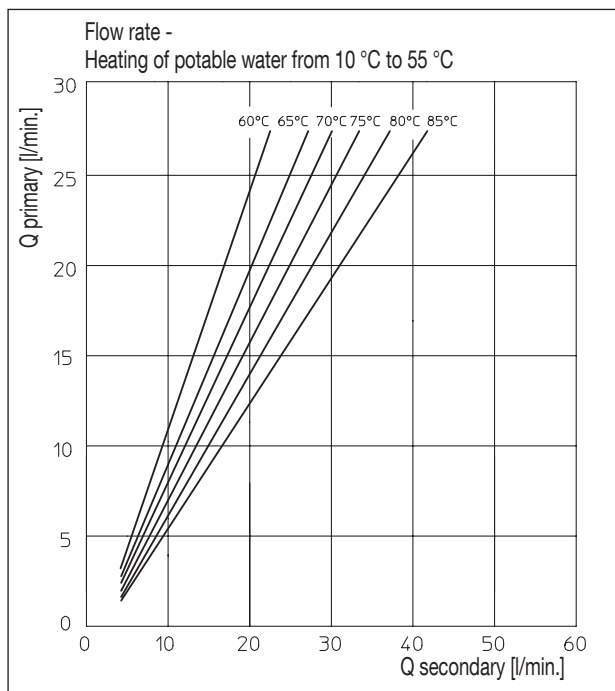
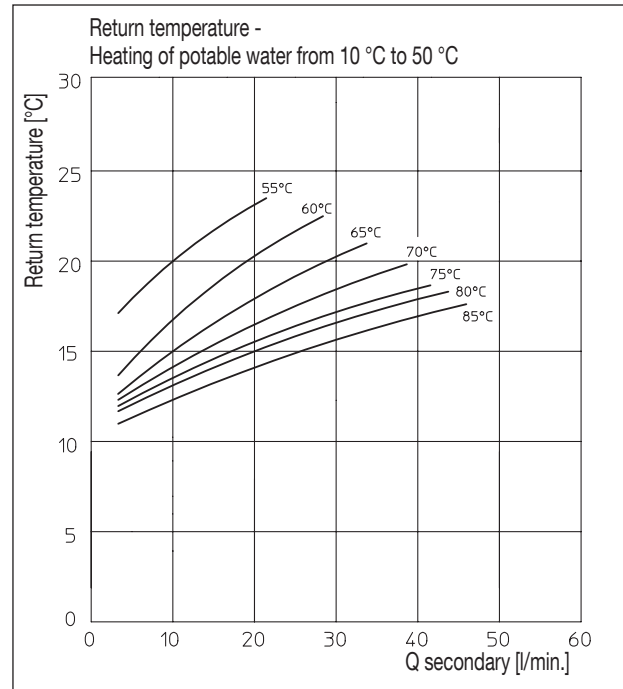
Return temperature to storage cylinder with draw off quantity of potable water (Q secondary) and existing temperature inside the storage cylinder



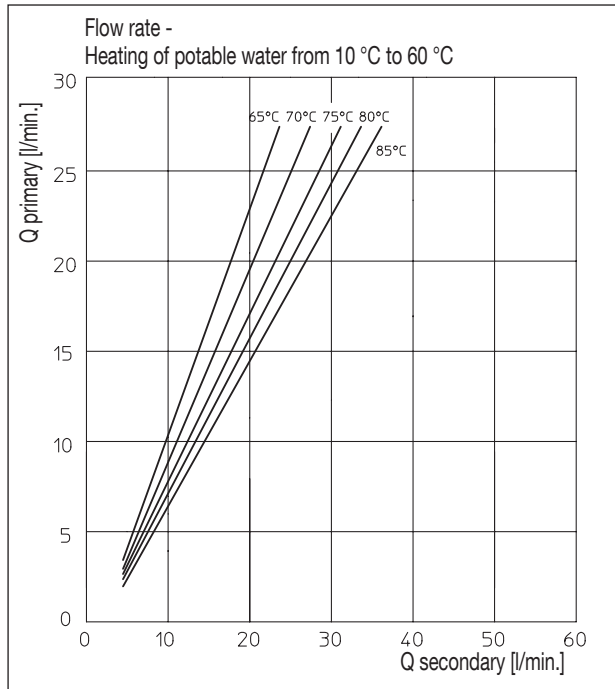
Required flow of heating water (Q primary) with draw off quantity of potable water (Q secondary) and existing temperature inside the storage cylinder



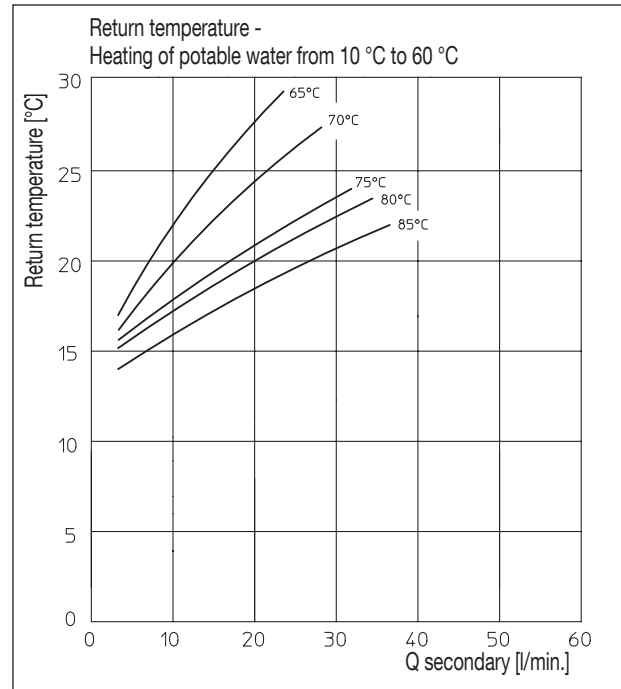
Return temperature to storage cylinder with draw off quantity of potable water (Q secondary) and existing temperature inside the storage cylinder



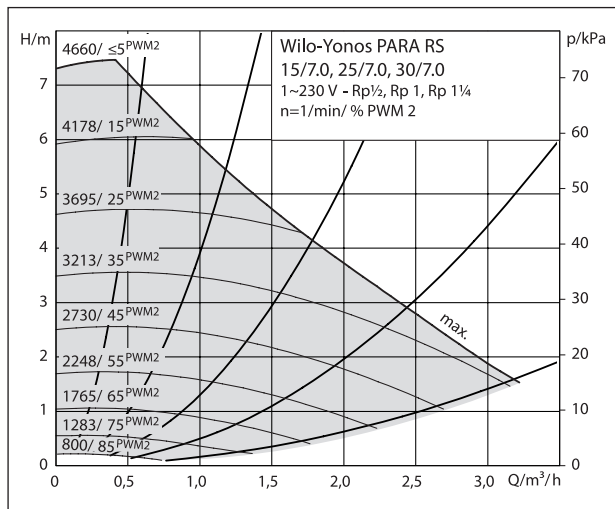
Required flow of heating water (Q primary) with draw off quantity of potable water (Q secondary) and existing temperature inside the storage cylinder



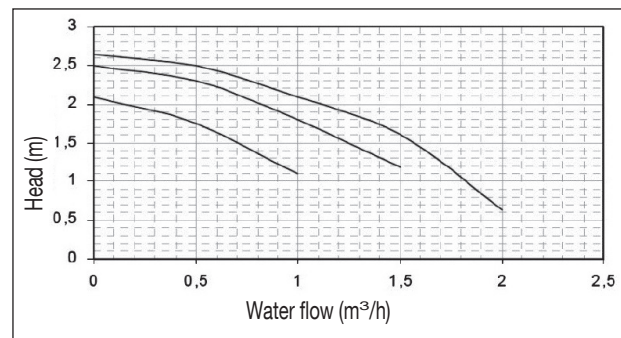
Return temperature to storage cylinder with draw off quantity of potable water (Q secondary) and existing temperature inside the storage cylinder



Pump characteristic lines:



Wilo-Yonos PARA RS 130 15/7 PWM2 (primary circuit)



Wilo-ZRS 130 15/4-3 KU (circulation)

Subject to technical modifications without notice.

Product range 6
ti 299-EN/10/MW
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