

TECHNICAL CATALOGUE

# Plate Heat Exchangers



## insulated stainless steel plate heat exchangers



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### **DV193 Plate Heat Exchanger**

Plate heat exchangers designed for effective heat transfer between various fluids. They are made of thin pressed stainless-steel plates and soldered with brass. Thermal insulation in EPDM rubber that resists temperatures up to 175 °C in short term is added on the heat exchangers, reducing thermal loss.

DV193 line is suitable primarily for thermal stores or storage water heaters heated by solar thermal systems.

### Drawing

	Dimensions with insulation		
B F E	HEIGHT (A)	223 mm	
	WIDTH (B)	113 mm	
	PITCH (C)	154 mm	
0 K	PITCH (D)	42 mm	
¢¢, c	THICKNESS (E)	by model see table below	
	SOCKET HEIGHT (F)	20 mm	

### **Technical Data**

MATERIAL MAX. WORKING PRESSURE MAX. WORKING TEMPERATURE CONNECTION DEIMENSIONS

AISI 316L 29.4 bar 150 °C permanent, 175 °C short term (1hour) 3/4" M

### **Connection Diagram**



### **Models**

		DV193-20E	DV193-30E	DV193-45E	DV193-60E
NUMBER OF PLATES		20	30	45	60
HEAT TRANSFER SURFACE AREA	sqm	0.28	0.42	0.63	0.84
FLUID VOLUME	I	0.32	0.45	0.62	0.87
WEIGHT - WITH/WITHOUT INSULATION	kg	1.7/1.6	2.2/2.1	2.9/2.8	3.7/3.6
THICKNESS (E)	mm	85	109	144	179
MAX. RECOMMENDED SURFACE AREA OF SOLAR PANELS*	sqm	6	10	16	21
CODE		9548	9549	9550	9551

\* at  $\Delta t_{mean} = 10$  K, the primary side – Solarten, flow rate = 1 l/min per sqm, secondary side = water, flow rate = min. 1000 l/h





### Graphs

# **DV193**

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### **DV285 Plate Heat Exchanger**

Plate heat exchangers designed for effective heat transfer between various fluids. They are made of thin pressed stainless-steel plates and soldered with brass. Thermal insulation in EPDM rubber that resists temperatures up to 175 °C in short term is added on the heat exchangers, reducing thermal loss.

DV285 line is suitable primarily for **pool heating by** a solar thermal system, boiler or a heat pump, and for instantaneous DHW heating (in a thermal store or boiler).

# DrawingDimensions with insulationHEIGHT (A)310 mmWIDTH (B)130 mmPITCH (C)230 mmPITCH (D)50 mmTHICKNESS (E)by model<br/>see table belowSOCKET HEIGHT (F)18 mm

### Technical Data

MATERIAL MAX. WORKING PRESSURE MAX. WORKING TEMPERATURE CONNECTION DEIMENSIONS

AISI 316L 29.4 bar 150 °C permanent, 175 °C short term (1hour) 1" M

### **Connection Diagram**



### **Models**

		DV285-10E	DV285-20E	DV285-30E	DV285-45E	DV285-60E
NUMBER OF PLATES		10	20	30	45	60
HEAT TRANSFER SURFACE AREA	sqm	0.27	0.54	0.81	1.22	1.62
FLUID VOLUME	I	0.34	0.60	0.85	1.28	1.65
WEIGHT - WITH/WITHOUT INSULATION	kg	2.4/2.3	3.3/3.2	5.1/5.0	5.5/5.4	7.0/6.9
THICKNESS (E)	mm	70	95	110	140	175
MAX. RECOMMENDED SURFACE AREA OF SOLAR PANELS*	sqm	4	10	15	23	31
CODE		9552	9553	9554	9555	9556

\* at  $\Delta t_{mean} = 10$  K, the primary side – Solarten, flow rate = 1 l/min per sqm, secondary side = water, flow rate = min. 1500 l/h







### **DV503 Stainless Steel Plate Heat Exchangers**

Plate heat exchangers designed for efficient heat transfer between various fluids. They are made of thin, pressed high quality stainless-steel sheets and soldered with copper. In order to reduce heat loss they are fitted with EPDM insulation that resists up to 175 °C temperature in short term.

Considering its design, the DV503 series is suitable for **continuous hot water heating or large solar thermal systems**. We calculate the heat exchanger size on an individual basis upon request, based on specific parameters of the heating system in question.

### **Technical Data**

MATERIAL	AISI 316L
MAX. WORKING PRESSURE	12 bar
MAX. WORKING TEMPERATURE	permanent 150 °C, short term (1 h) 175 °C
CONNECTION SIZE	1" M

### Drawing

HEIGHT (A)
WIDTH (B)
PITCH (C)
PITCH (D)
THICKNESS (E)
PORT LENGTH (F)

Dimensions with insulation			
HEIGHT (A)	533 mm		
WIDTH (B)	153 mm		
PITCH (C)	445 mm		
PITCH (D)	70 mm		
THICKNESS (E)	by model see chart below		
PORT LENGTH (F)	23 mm		

### Chart



### **Models**

		DV503-20E	DV503-40E	DV503-60E
NUMBER OF PLATES		20	40	60
HEAT TRANSFER SURFACE AREA	sqm	1.1	2.2	3.3
FLUID VOLUME	I	1.2	2.3	3.4
WEIGHT WITH/WITHOUT INSULATION	kg	11/9	14/13	19/17
THICKNESS (E)	mm	90	130	195
CODE		11045	10495	10496

### **HEAT EXCHANGERS**



### **DV800 Stainless Steel Plate Heat Exchangers**

Plate heat exchangers designed for efficient heat transfer between various fluids. They are made of thin, pressed high quality stainless-steel sheets and soldered with copper. In order to reduce heat loss they are fitted with EPDM insulation that resists up to 175 °C temperature in short term.

Considering its design, the DV800 series is suitable for **large** solar thermal systems, district heating transfer stations, or high-output systems. We calculate the heat exchanger size on an individual basis upon request, based on specific parameters of the heating system in question.

### **Technical Data**

MATERIAL MAX. WORKING PRESSURE MAX. WORKING TEMPERATURE CONNECTION SIZE AISI 316L by model see chart below permanent 150 °C, short term (1 h) 175 °C 2″ M

### Drawing

	Dimensions with insulation			
	HEIGHT (A)	605 mm		
	WIDTH (B)	310 mm		
	PITCH (C)	475 mm		
	PITCH (D)	185 mm		
	THICKNESS (E)	by model see chart below		
	PORT LENGTH (F)	35 mm		

### Chart



### **Models**

		DV800-30E	DV800-50E
NUMBER OF PLATES		30	50
HEAT TRANSFER SURFACE AREA	sqm	4.8	8.0
FLUID VOLUME	I	4.4	7.7
WEIGHT WITH/WITHOUT INSULATION	kg	34/31	47/44
THICKNESS (E)	mm	115	165
MAX. WORKING PRESSURE	bar	10	6
CODE		10490	10491

### **KITS WITH PLATE HEAT EXCHANGERS**

### **KITS WITH WILO YONOS CIRCULATION PUMP**

DV193 or DV285 Plate Heat Exchangers amended with a load unit consisting of a Wilo Yonos Para high-efficiency circulation pump, 2 threaded fittings with shut-off ball valves + el. wall plug w. switch and LED.



	couc
DV193-30E insulated & CS KK VYP W Load Unit	13199
DV193-45E insulated & CS KK VYP W Load Unit	13200
DV285-30E insulated & CS KK VYP W Load Unit	13204
DV285-45E insulated & CS KK VYP W Load Unit	13205

Codo

### KITS FOR SOLAR HEATING OF STORES AND TANKS WITH NO SOLAR HEAT EXCHANGER

Heat Exchanger and Load Unit Kits differ in the heat exchanger performance and circulation pump type. The Kits with Grundfos UPM3 DHW pump are suitable for solar heating of drinking water in HW storage tanks, while the Kits with Wilo Yonos Para 25/6 are designed for solar heating of heating water in thermal stores.



Kits with heating water pumpCodeDV193-20E with CSE OTS ZV W Load Unit15945DV193-30E with CSE OTS ZV W Load Unit15946

Kit with heating water pump



Kit with drinking water pump

Kits with drinking water pump	Code
DV193-20E with CSE TV ZV G Load Unit	16065
DV193-30E with CSE TV ZV G Load Unit	16066
DV193-45E with CSE TV ZV G Load Unit	17148
DV193-60E with CSE TV ZV G Load Unit	17149

### KITS WITH PLATE HEAT EXCHANGERS

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