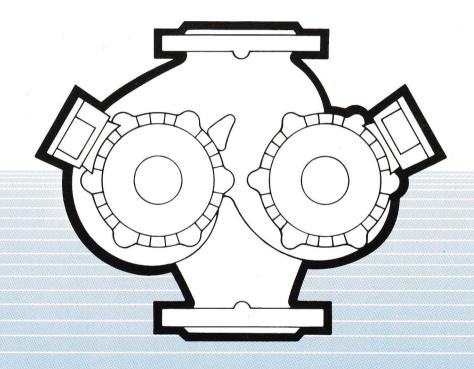
Glandless hot water circulators





## **Application**

Pumps D-NTV are intended for forced circulation of water in low-pressure systems of central heating and/or air conditioning systems.

Delivered liquid - clean, soft, chemically-neutral or drinking water without mechanical admixtures, anticorrosive treated or mixtures of water and glycol in proportion by volume 1:1.

Max.	temperature of pumped water		110 °C
	temperature of ambience		
Max.	delivery pressure	6 bar or	10 bar

# **Advantages**

- This pump in operation may displace two pumps connected in parallel;
- · There is a possibility of pump operation with only one or two motor units:
- · When operating both drive units double capacity (flow) may be reached like that;
- Two stepped speed control of self-contained motor units allows alternative operation of either one or two motors with maximal and/or minimal speed - speed control may be realized with the aid of switches placed in the motor terminal boards.

# Design

These pumps are of close-coupled glandless types, with electric motors cooled by a liquid being pumped. With respect to their construction, they are "twins", ie. two hydraulic and motor units are positioned in only one pump casing with suction and dischage branches on one axis.

### **Material options**

As standard the "LM" material version may be considered with the pump main parts in following material quality grades:

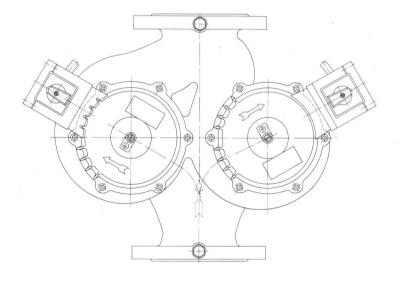
- · Pump casing is of grey cast iron;
- · Shaft, interstage diaphragm, can and rotor protector are of corrosion-proof steel;
- · Impeller is of brass or plastic;
- · Bearing bushes are of carbon.

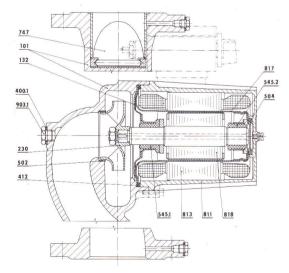
### Location and positioning

It is not recommended to install the pump in the lowest and/or highest spot of a heating system. In its lowest spot there fouling and mud silting may occur, in ist highest spot then aerating may come into existence.

In front of the pump and behind it valves and checking pressure gauges shall be installed. Piping near-by the pump should be thoroughly fastened to prevent transfer of forces induced by piping expansion or defects arisen during installation works.

Pumps may be mounted in a straight piping inclined as desired, but with electric motor axis always horizontal, to limited deviation +50.





101 - Pump casing

132 - Interstage diaphragm

230 - Impeller

400.1- Wear ring

412 - Interstage diaphragm wear ring

502 - Wear ring

504 - Ring of expansion

545.1- Radial-axial bearing bush

545.2- Radial bearing bush

747 - Non return flap valve

817 - Can 818 - Rotor

811 - Motor casing

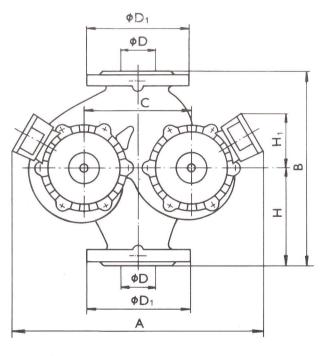
903.1- Plug

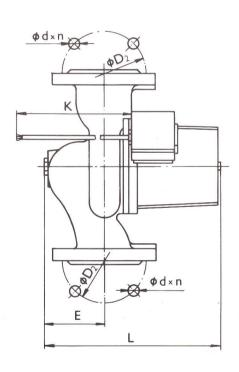
813 - Stator

#### Models Survey and Main Performance Data

Pump Model		-NTV 13	1000	D-65-NTV -79-14		D-65-NTV -92-12		-NTV 2-16		
Version (Number of alteration)			003	013	003	013	003	013	003	013
Capacity Delivery head Pump-set power input Speed	Q H P <sub>1</sub> n	(l.s <sup>-1</sup> ) (m) (W) (min <sup>-1</sup> )	4,1 285	- 6,4 - 4,3 - 780 - 2850	4,3 400	- 8,6 - 4,7 - 996 - 2810	5 580	- 11,2 - 5,9 - 1530 - 2850	960	- 8,5
Working pressure max.	р	(bar)	6	10	6	10	6	10	6	10
Electric motor Voltage Frequency Cut-out current +)	U f I		single-purpose 380 50 1,3		single-purpose 380 50 1,4		single-purpose 380 50 1,8		single-purpos 380 50 2,7	
Pump-set weight	m	(kg)	30	32	36	38	44	46	48	50

<sup>+)</sup>Cut-out current value "I" has been specified for only one motor unit.





#### **Dimensions**

			С	Е	Н	H <sub>1</sub>	К	L	Branches									
Pump type	А	В							for PN 6				for PN 10					
,									ØD	ØD <sub>1</sub>	$\emptyset D_2$	Ød	n	ØD	ØD₁	ØD <sub>2</sub>	Ød	n
D-50-NTV-74-13	360	140	170	90	280	1		265	50	140	110		4	50	165	125		4
D-65-NTV-79-14	390	150		0.5	200	130	2000	275	GE.	160 1	130	14		65		4.45		
D-65-NTV-92-12	470	130	200	95	300	100		305	65		130					145		
D-80-NTV-102-16	14/0	360		110	180	135		325	80	190	150	18		80	195	160		

Dimension of suction and discharge branches (D) flanges are for PN 10 or they may also be for PN 6, always with raised face.

#### Glandless hot water circulators



We reserve the right to alter specifications and illustrations without prior notice.

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