

# TPR

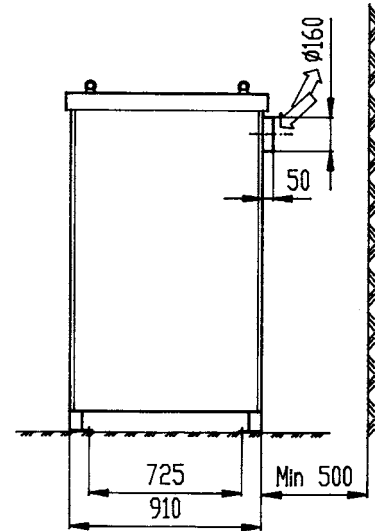
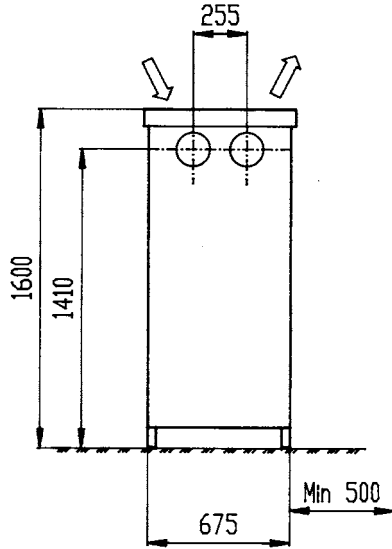
Turbopumps with TPR designation are parallel connected twin impeller belt driven units. Cooling air is introduced into the unit through an adjustable vacuum relief valve. The vacuum pressure in the system can be held constant when different outlets are opened. The turbopumps are equipped with thermal overload protection on the outboard bearing which will trip out when bearing temperature becomes excessive. A back flow valve is built into the unit on the inlet side.

# TSR

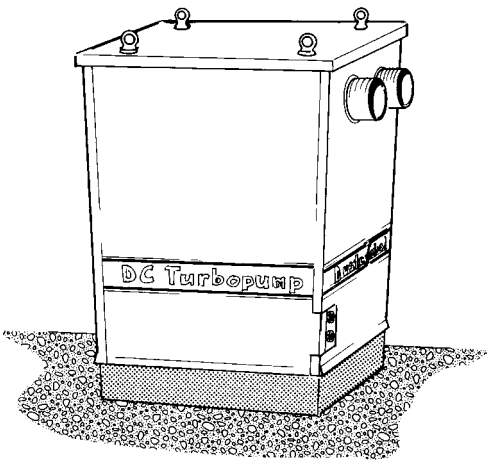
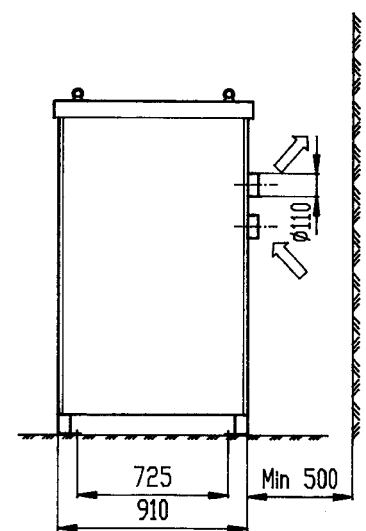
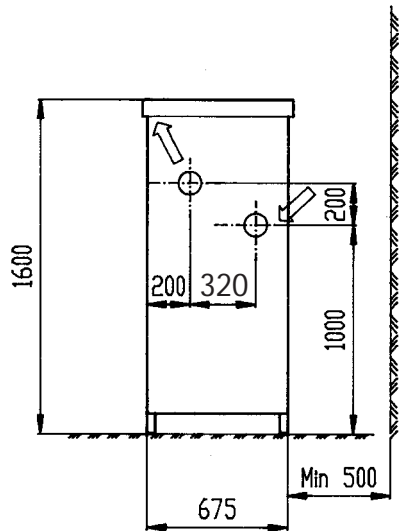
Turbopumps with TSR designation are series connected two stage belt driven units. Cooling air is introduced into the pump through a slot between the two stages. In this way the second stage cools the first stage indirectly, allowing the pump to run at extremely high vacuum and low airflow without overheating. The turbopumps are equipped with thermal overload protection on the outboard bearing which will trip out when bearing temperature becomes excessive. A back flow valve must be optionally installed on the inlet side of the unit when several units are to be installed in parallel.

## Dimensions, Installation Example

TPR



TSR



The belt driven pumps are delivered in a sound insulated enclosure. Sound levels from these units is therefore as low as 66 dB(A).

## Part No. / Motor

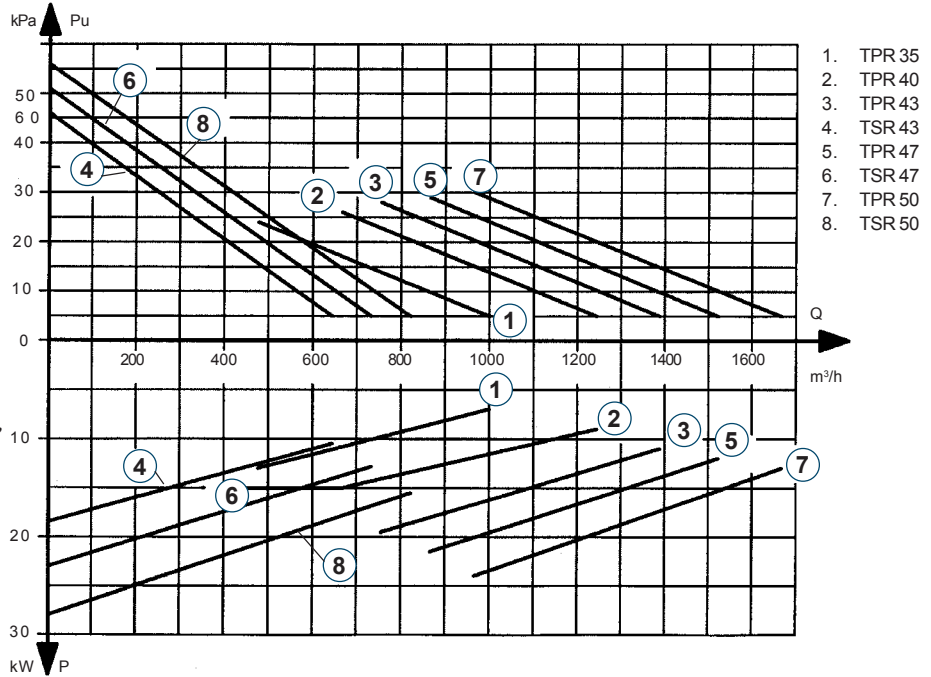
V	Hz	TPR 35	TPR 40	TPR 43	TSR 43	TPR 47	TSR 47	TPR 50	TSR 50
230	50		106802/15kW	107202/18,5kW	107252/18,5kW	107702/22kW	107752/22kW	109202/30kW	109252/30kW
400	50	106600/11kW	106800/15kW	107200/18,5kW	107250/18,5kW	107700/22 kW	107750/22kW	109200/30kW	109250/30kW
460 USA	60		106805/23,1HP	107205/28HP	107255/28HP	107705/33HP	107755/33HP	109205/45HP	109255/45HP
460 CAN	60		106807/20HP	107207/25HP	107257/25HP	107707/30HP	107757/30HP	109207/40HP	109257/40HP

**TECHNICAL DATA**

Description	TPR 35	TPR 40	TPR 43	TSR 43	TPR 47	TSR 47	TPR 50	TSR 50
Pump RPM rpm	3500	4000	4300	4300	4700	4700	5000	5000
Weight kg	400	400	430	430	450	450	530	530
Max dP kPa	22	26	28	46	29	50	30	54
Nominal Pressure kPa	20	20	20	35	21	37	23	40
Max Q m <sup>3</sup> /h	1000	1200	1400	650	1500	700	1600	800
Sound Level of Unit 1m dB(A)	66	66	66	66	66	66	66	66
Inlet/Outlet Ømm	160/160	160/160	160/160	108/108	160/160	108/108	160/160	108/108

**Capacity and Power Consumption**

The diagram shows available capacity for an extraction system, see further explanation p. 7.



**Lubrication Interval**

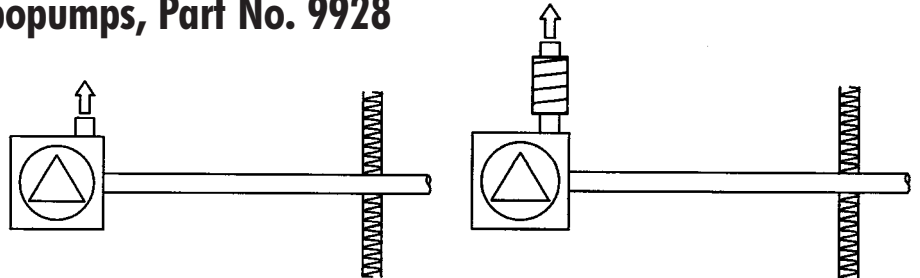
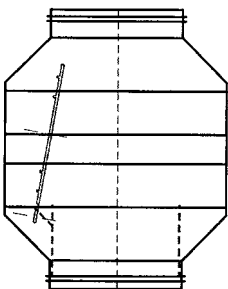
$\Delta p$	TPR 35	TPR 40	TPR 43	TSR 43	TPR 47	TSR 47	TPR 50	TSR 50
22 kPa	1500 h	1500 h	1500 h	-	1500 h	-	1500 h	-
25 kPa	750 h	750 h	1500 h	-	1500 h	-	1500 h	-
28 kPa	-	-	1000 h	-	1000 h	-	1000 h	-
30 kPa	-	-	-	1500 h	-	1500 h	750 h	1500 h
40 kPa	-	-	-	1000 h	-	1000 h	-	1000 h

**Grease for Dustcontrol Turbopumps, Part No. 9928**

**Accessories**

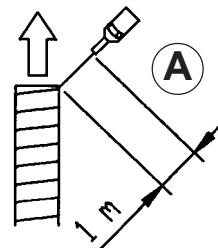
**Silencer**

Part No	Conn.	Dimensions
3182	ø160	L=1200, ø355
3183	ø160	L=600, ø355
3184	ø160	L=600, ø260



**Part No. 8051 Back Flow Valve 160 mm**

Installed on the inlet side of the TSR when two or more units are parallel installed. For complimentary tubing details, see pages 36 – 40.



Part No	(A)
-	75 dB(A)
3184	64 dB(A)
3182	62 dB(A)