

## Electro-Submersible Compressor TMV



**ORPU**

ORANIENBURGER PUMPEN UND VERDICHTER GmbH

# Using ORPU equipment, you will make a big whirl

Water is one of our most important resources. It is integrated into a continuous cycle. This water cycle is often disturbed by oxygen deficiency. In such a case, reliable equipment will be necessary.

## ► The equipment made by us is perfect.

ORPU electro-submersible compressors are high-quality products combined with excellent product advantages. Being variable with regard to their applications, they are reliable and require little maintenance.

## ► A successful concept: ORPU electro-submersible compressors.

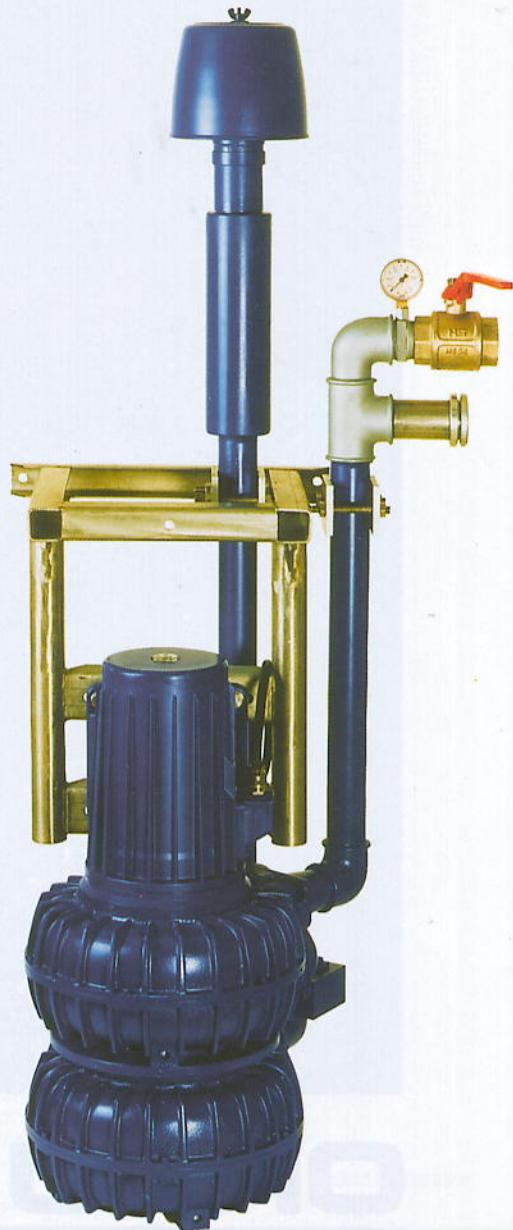
The operation of the electro-submersible compressors is based on the side channel principle, i.e.

- the air is oil-free;
- the number of moving parts is minimized;
- the compressors do not include any valves;
- sealing systems affected by friction are not used.

The experience gained by our company in the field of electro-submersible pump and compressor construction over many years has enabled us to construct electro-submersible compressors in series production as a first manufacturer.

## ► A compact design - although various applications are possible.

We offer diverse additional units to meet our customer's demands. The range of products offered by us includes the basic unit, supplementary accessories and complete system solutions.



# Advantages in application

What requirements do you place on a compressor? You will be certainly interested in a high technical reliability and low-noise operation, low energy consumption and solid construction.... and a fair price!

If you use ORPU electro-submersible compressors, you can "kill two birds with one stone":

## ► Your capital expense will be lower.

As the compressor is submerged directly in the liquid, the capital expense will be many times lower.

## ► You will reduce the operating cost.

A sophisticated design makes it possible to increase the maintenance intervals and the component's service life.

## ► You will save driving energy.

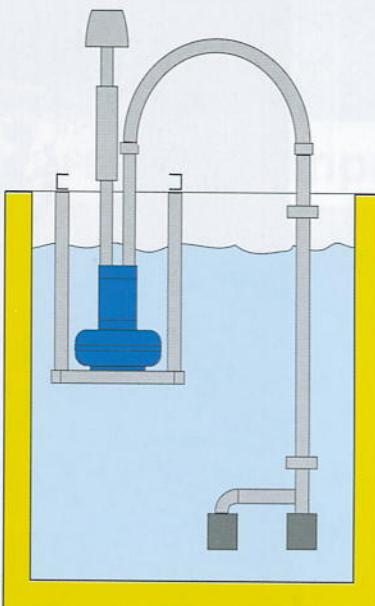
An improved energetic efficiency enables the compressor running times to be shortened.

## ► You will have no noise problems.

The compressors cause extremely low noise so that they are hardly to hear.

**Thus ORPU electro-submersible compressors offer you numerous advantages.**

Layout of application

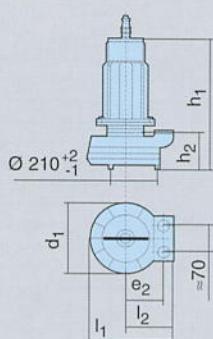


## These are the most important data:

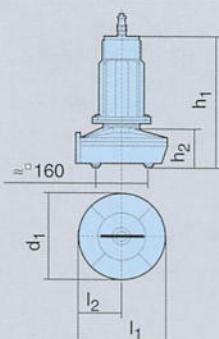
Model	Size	Capacity				Weight ≈ [kg]
		Volume rate of flow in the suction connection 1) 2) V <sub>S</sub> [m <sup>3</sup> /h]	Quiescent pressure differential/Discharge mode Δp <sub>R</sub> [mbar]	Brake horsepower 2) 3) p <sub>K</sub> [kW]	Speed n [r.p.m.]	
TMV	01 X	80	75	0.25	2850	22
	01 Y	80	110	0.33		26
	11 X	100	100	0.47		32
	11 Y	105	150	0.55		32
	12 XR	100	170	0.80		38
	12 YR	105	270	1.1		38
	12 XP	200	100	0.85		38
	12 YP	200	150	1.1		38
	22 XR	130	280	1.8		58
	22 YR	150	400	2.2		58
	22 XP	260	160	1.9		58
	22 YP	300	200	2.2		58
	24 YR	160	700	4.0		58
	24 YP	500	200	5.5		58

1) with  $\Delta p_R = 0$

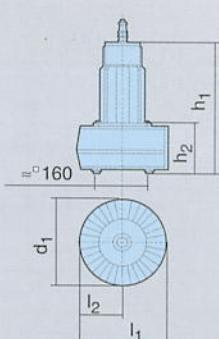
2) referred to air at 735.5 Torr and 20 °C



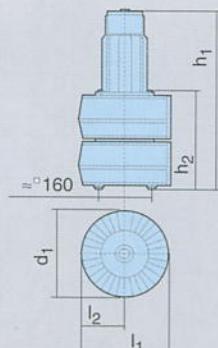
TMV 01 X  
TMV 01 Y



TMV 11 X  
TMV 11 Y



TMV 12 XR, TMV 22 XR  
TMV 12 YR, TMV 22 YR  
TMV 12 XP, TMV 22 XP  
TMV 12 YP, TMV 22 YP



TMV 24 YR

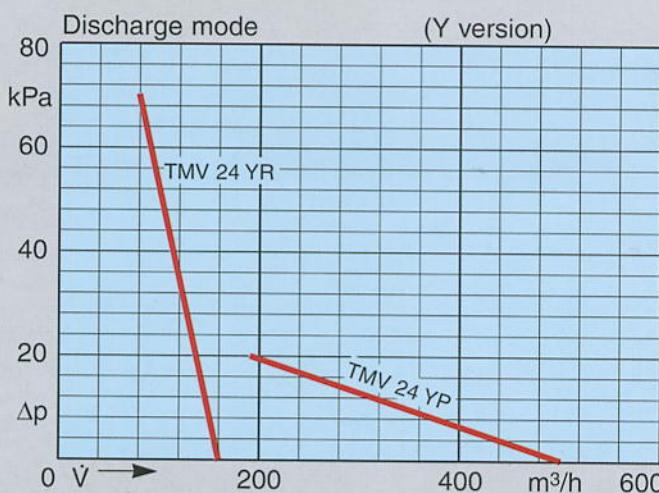
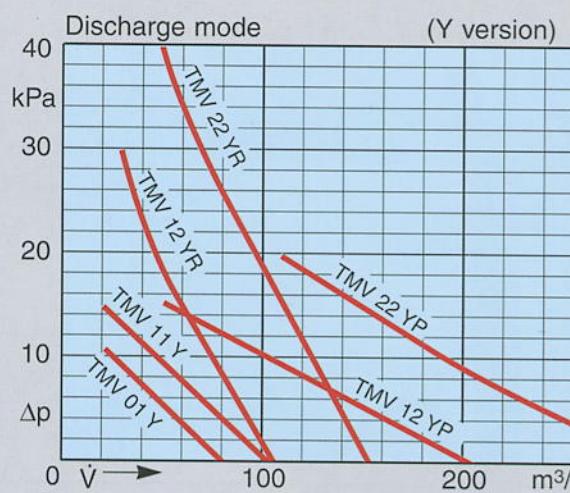
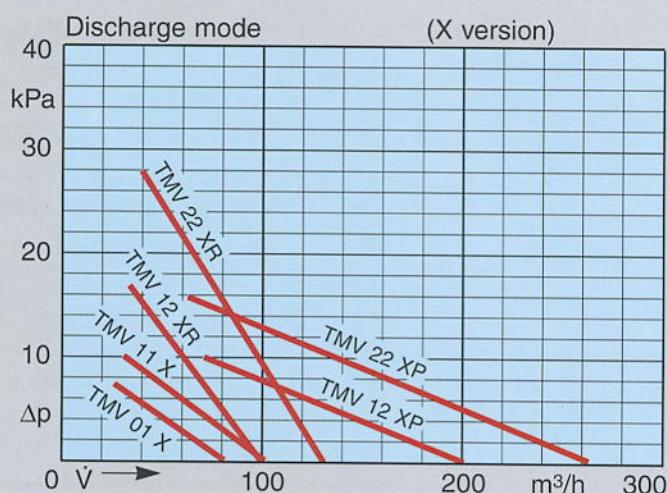
# If capacity is required . . .

... you can use confidently an ORPU electro-submersible compressor.

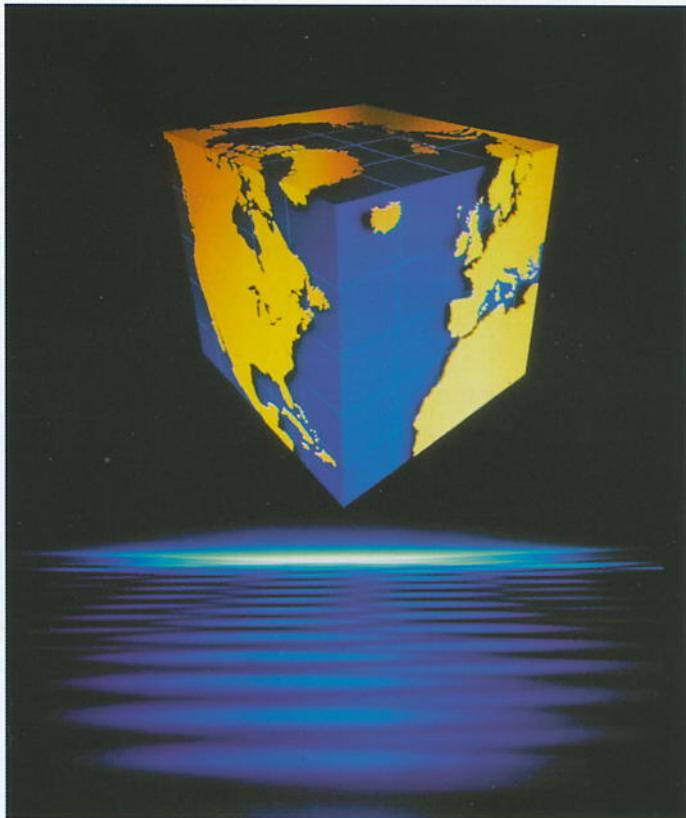
The equipment produced by us enables you to optimize your plants, the above-mentioned and other applications. We supply you a tailored solution to meet your demands.

## Environmental equipment for all cases

- Aeration of clarification plants
- Mixing/Whirling of water and waste water
- Aeration in fish-farming
- Aeration of biologically and chemically polluted water bodies



These are the most important qualities a pump can have.



**ORPU**

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Technical data are subject to alteration.  
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