



## EX-PROOF PLANTS

Natural Gas, Biogas and Hydrogen



Compressors | Purification | Storage

High performance and economic compressors  
Made in Germany

## Lenhardt & Wagner

Back in 1980 the L&W co-founder Bernd Wagner realized the lack of alternative high-pressure solutions within the market. He started to do repair and service work on all types of high pressure devices and furthermore offered rebuilt compressor units for sale. On his next step he managed to incorporate various improvements on existing models and as a consequence founded his own brand. The aim was to create a new range of technically advanced and affordable solutions.

Decades of experience and real quality products made Lenhardt & Wagner GmbH one of the most known and respected brands within the high-pressure industry.

If compressor units, filtration systems, storage banks, filling panels or air quality control systems, we can offer the right solutions at right price.

Mobile, compact, stationary and sound isolated compressor units with plenty of customer orientated and useful options.

Our flexible and fast acting customer service is also one of our main benefits. If you need support in calculating and choosing the right components for your business or servicing and repairing your existing gear, please ask for advice. Our customized solutions will always equally match your requirements and ensure first class investment.

We are pleased to make you an individual offer.



## High pressure solutions made by L&W.

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## Certified L&W Quality

L&W delivers high-pressure compressors and the complementary modules for purification, storage and filling of Gases. Highest quality and continuous development and improvement of our products are our most significant target in the implementation of our daily tasks. Therefore, we meet all EU requirements as a standard and are certified to DIN ISO 9001. On requested, our products could also be certified by other authorities such as TÜV, Germanischer Lloyd, DNV, GOST, UDT or ABS.

To our core competencies are the developments of high-pressure components for our products, such as:

Compressor blocks, pressure vessels, safety valves, pressure maintaining- / non-return valves and filter systems for breathing air and gases. Due to the experiences and know-how of more than 40 years we are able to offer individual solutions for different customer requirements. In addition to our breathing air range and corresponding peripheral devices we are also able to offer compressors, storage systems and filter panels for vehicle refueling with natural gas, as well as high-pressure inert gases such as Argon, Helium or Nitrogen for industrial applications such as e.g. welding or laser cutting. We are also producing low, medium and high pressure compressors for hydrogen applications.

Our employees are aware of their responsibilities and they have the task to reach with expertise and experience the enormous needs of the market. Through continuous in-house quality control we face new challenges every day.

### L&W Network

In all parts of the world our customers appreciate reliability and our full support. Our products offer the maximum in durability and ease of maintenance. Low operating costs and excellent value for money are as a matter of course for L&W. Through our worldwide dealer network, our customers can always count on superb service and excellent support. A special offer from L&W are the personal training sessions that are conducted in specially equipped training facilities in our company. In this training, our customers learn the proper use and independent maintenance with our products.



Germanischer Lloyd



## L&W - Long-living, High Performance and Reliable

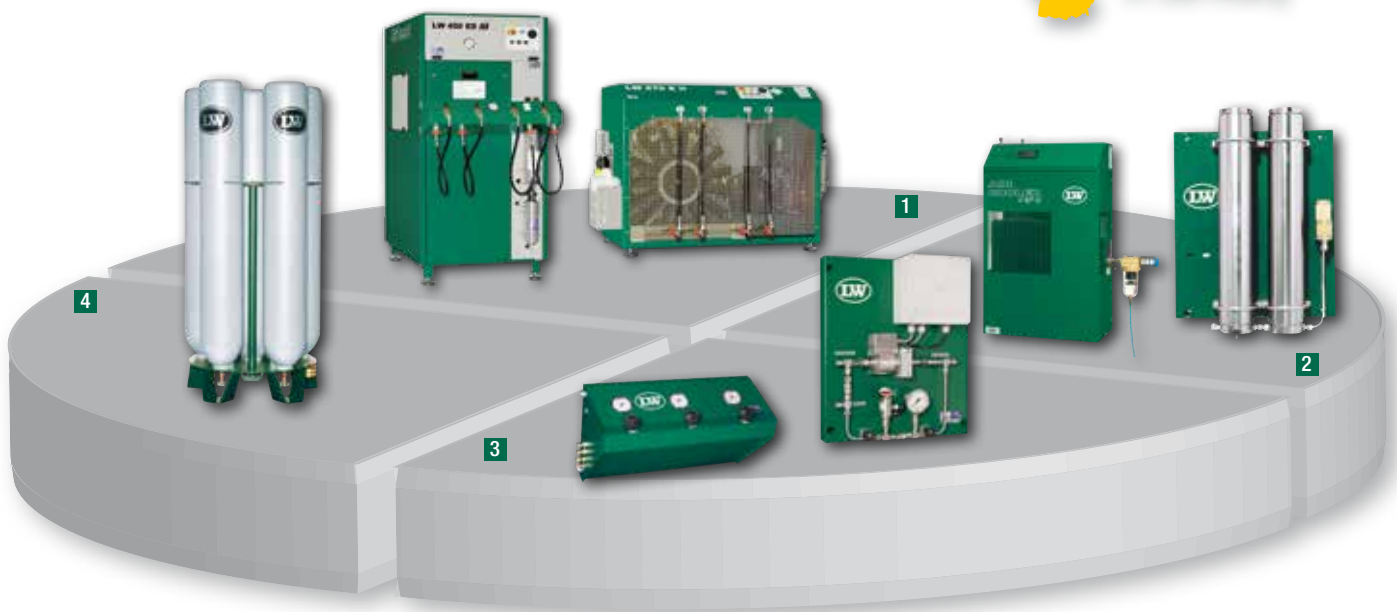
For more than 30 years, L&W has been delivering high pressure compressors and accessory modules for purifying, storing and filling of:

- » Air
- » Nitrogen
- » Inert gas
- » Natural gas and biogas

Our extensive know-how in the field of high-pressure applications and a continuous development of our product range have contributed to our worldwide success. We offer the maximum in reliability and durability for our products "Manufactured in Germany".



**Manufactured  
in Germany**



## *Benefit from our individual and complete solutions*

### **1** Compression

Customised compressors and boosters for the application in your systems take profit of many years of experience in compressor design - from basic structure to detailed solutions. High efficient cooling systems enable long lifetime with less maintenance.

### **2** Purifying

Various modular combinations with specific filter elements leave nothing to be meets all your needs. Highest operational safety can be reached due to an optional filter monitoring.

### **3** Storage Control

L&W provides manual as well as automatic storage control systems. This always ensures an optimal interaction between compressor, storage and your application. A pressure reducing station can be combined directly with storage control.

### **4** Storage

L&W also provides storage units for each filling pressure and offers various modular solutions which can be expanded at any time according to the requirements.

## Natural Gas, Biogas and Hydrogen

Stationary high pressure compressors for the compression of natural gas, biogas and hydrogen. Our compressors are characterised by a sturdy construction, low speed, long service intervals and an excellent value for money.

Take profit of our know-how in planning and construction of special systems, e.g. natural gas stations, biogas compressors for industrial large-scale plants, hydrogen systems and energy storage.



LW 720 EBMG

## Examples



LW 450 EH2



LW 1300 E



150l tank for condensate return

## Natural Gas, Biogas and Hydrogen

### Standard equipment

- » Ex-proof electric motor
- » Powder coated steel frame in RAL 6026
- » 3- or 4-stage, industry-proven compressor block
- » Ex-proof solenoid valves for autom. condensate drainage
- » Ex-proof final pressure switch
- » Pressure maintaining- and none return valve
- » Pistons c/w piston rings
- » Industry-proven lubrication system c/w oil filter
- » Low-pressure oil pump
- » Oil- / water separator after each stage
- » Encapsulated safety valves after each stage
- » Buffer tank 90-500 litres (depending on the compressor)
- » Pressure switch for shut-off at low and high inlet pressure
- » Condensate return in 150-500 liter pressure vessel (depending on the compressor)
- » Suction- and pressure valves in each stage
- » Compressor control on request
- » TÜV approval of the tanks and complete compressor unit

### Applications

Type	From	To
Inlet pressure	atmospheric	25 bar (362 psi)
Delivery capacity	12 m <sup>3</sup> /h (7 cfm)	250 m <sup>3</sup> /h (147 cfm)
Final pressure	10 bar (140 psi)	410 bar (6100 psi)

We individually calculate compressor and drive power according to your application requirement. In this way, we perform the best possible efficiency and highest economic feasibility for you.

## Examples



LW1300 EG with water cooling



LW1300 EG with additional oil lubrication circuit



Changeable oil distribution for an oil change during a running machine (option)

## Compressors Overview

### Low Pressure Compressor working c/w ambient intake pressure

Compressor	Capacity	Intake P.	Final P.	Power
LW 300 E III BMG 5,5kW Pmax: 10 bar(g)	11 Nm <sup>3</sup> /h	0.3 bar(g)	10 bar(g)	5.5 kW
LW 450 E III BMG Compact Pmax. 10 bar(g)	50 Nm <sup>3</sup> /h	atmosph.	10 bar(g)	11 kW
LW 570 E II H2 Pmax. 10 bar(g)	78 Nm <sup>3</sup> /h	atmosph.	10 bar(g)	18.5 kW
LW 720 E H2 Pmax. 10 bar(g)	117 Nm <sup>3</sup> /h	atmosph.	10 bar(g)	22 kW
LW 1300 E H2 30 kW Pmax. 7,4 bar(g)	170 Nm <sup>3</sup> /h	0.25 bar(g)	7.4 bar(g)	30 kW
LW 1300 E H2 Pmax 8 barg (wg)	200 Nm <sup>3</sup> /h	atmosph.	8 bar(g)	37 kW

### Low Pressure Booster compressors c/w specific intake pressure

Compressor	Capacity	Intake P.	Final P.	Power
LW 300/160 E III H2 VD1 7,5 kW Pmax: 10 bar(g)	10 Nm <sup>3</sup> /h	1 bar(g)	10 bar(g)	7.5 kW
LW 570 E II H2 Pmax. 10 bar(g)	78 Nm <sup>3</sup> /h	1 bar(g)	10 bar(g)	18.5 kW

### Medium Pressure Compressor working c/w ambient intake pressure

Compressor	Capacity	Intake P.	Final P.	Power
LW 300 E III BMG 5.5kW Pmax: 30 bar(g)	11.8 Nm <sup>3</sup> /h	0.3 bar(g)	30 bar(g)	5.5
LW 300 EG III Compact 5.5 kW Pmax. 25 bar(g)	12 Nm <sup>3</sup> /h	atmosph.	25 bar(g)	5.5
LW 300/200 E III H2 7.5 kW Pmax: 20 bar(g)	12 Nm <sup>3</sup> /h	atmosph.	20 bar(g)	7.5
LW 450 E III H2 7.5 kW Pmax. 40 bar(g)	20 Nm <sup>3</sup> /h	atmosph.	40 bar(g)	7.5
LW 450 E III H2 7.5 kW Pmax. 30 bar(g)	28 Nm <sup>3</sup> /h	atmosph.	30 bar(g)	7.5
LW 720 E H2 Pmax. 30 bar(g)	30 Nm <sup>3</sup> /h	atmosph.	30 bar(g)	11
LW 720 E BMG Pmax. 15 bar(g)	38 Nm <sup>3</sup> /h	atmosph.	15 bar(g)	15
LW 720 E H2 Pmax 40 bar(g)	50-55 Nm <sup>3</sup> /h	atmosph.	40 bar(g)	18.5
LW 720 E H2 Pmax. 30 bar(g)	60 Nm <sup>3</sup> /h	atmosph.	30 bar(g)	18.5
LW 720 E H2 Pmax. 14 bar(g)	65.5 Nm <sup>3</sup> /h	atmosph.	14 bar(g)	15
LW 720 E H2 Pmax. 14 barg	80 Nm <sup>3</sup> /h	atmosph.	14 bar(g)	18.5
LW 1300 E H2Pmax. 30 bar(g)	90 Nm <sup>3</sup> /h	atmosph.	30 bar(g)	37
LW 1300 E H2 30 kW Pmax 40 bar(g)	100 Nm <sup>3</sup> /h	atmosph.	40 bar(g)	30
LW 1300 E H2 45kW Pmax: 30 bar(g)	150 Nm <sup>3</sup> /h	atmosph.	30 bar(g)	45
LW 1300 E BMG 37kW Pmax. 15 bar(g)	152 Nm <sup>3</sup> /h	atmosph.	15 bar(g)	37
LW 1300 E H2 VD0.3 Pmax. 15 bar(g)	200 Nm <sup>3</sup> /h	0.3 bar(g)	15 bar(g)	37
LW 1300 E H2 VD0.3 Pmax. 25 bar(g)	200 Nm <sup>3</sup> /h	0.3 bar(g)	25 bar(g)	45
LW 1300 E BMG 45 kW Pmax: 15 bar(g)	228 Nm <sup>3</sup> /h	atmosph.	15 bar(g)	45
LW 1300 E H2 VD0.3 Pmax 55 kW Pmax 16 bar(g)	225 Nm <sup>3</sup> /h	0.3 bar(g)	16 bar(g)	55



## Compressors Overview

### Medium Pressure Booster compressors c/w specific intake pressure

Compressor	Capacity	Intake P.	Final P.	Power
LW 300 E III BMG 5,5kW Pmax: 30 bar(g)	11.8 Nm <sup>3</sup> /h	0.3 bar(g)	30 bar(g)	5.5
LW 300/450 E III H2 VD10 Pmax. 45 bar(g)	15 Nm <sup>3</sup> /h	10 bar(g)	45 bar(g)	7.5
LW 300 E III H2 VD6 Pmax: 20 bar(g)	15 Nm <sup>3</sup> /h	6 bar(g)	20 bar(g)	5.5
LW 300 E III H2 VD7 5,5 kW Pmax. 35 bar(g)	18 Nm <sup>3</sup> /h	7 bar(g)	35 bar(g)	5.5
LW 450 E III H2 VD4 7,5 kW Pmax. 25 bar(g)	20 Nm <sup>3</sup> /h	4 bar(g)	25 bar(g)	7.5
LW 450 E III H2 VD10 7,5 kW Pmax. 45 bar(g)	20 Nm <sup>3</sup> /h	10 bar(g)	45 bar(g)	7.5
LW 450 E H2 VD5 7.5 kW	25 Nm <sup>3</sup> /h	5 bar(g)	30 bar(g)	7.5
LW 450 E III H2 VD10 7,5 kW Pmax. 45 bar(g)	30 Nm <sup>3</sup> /h	10 bar(g)	45 bar(g)	7.5
LW 720 E H2 VD0,5 11 kW Pmax. 14 bar(g)	36 Nm <sup>3</sup> /h	0.5 bar(g)	14 bar(g)	11
LW 720 E H2 VD6 15kW Pmax. 45 bar(g)	65 Nm <sup>3</sup> /h	6 bar(g)	45 bar(g)	15
LW 720 E H2 VD2 Pmax. 30 bar(g)	72 Nm <sup>3</sup> /h	2 bar(g)	30 bar(g)	18.5
LW 720 E H2 VD20 11 kW Pmax. 35 bar(g)	150 Nm <sup>3</sup> /h	20 bar(g)	35 bar(g)	11
LW 1300 E H2 VD2 45kW Pmax: 30 bar(g)	190 Nm <sup>3</sup> /h	2 bar(g)	30 bar(g)	45
LW 1300 E H2 VD0,3 Pmax. 15 bar(g)	200 Nm <sup>3</sup> /h	0.3 bar(g)	15 bar(g)	37
LW 1300 E H2 VD0,3 Pmax. 25 bar(g)	200 Nm <sup>3</sup> /h	0.3 bar(g)	25 bar(g)	45
LW 1300 E H2 VD0,3 Pmax 55 kW Pmax 16 bar(g)	225 Nm <sup>3</sup> /h	0.3 bar(g)	16 bar(g)	55
LW 1300 E H2 VD20 18,5 kW Pmax: 35 bar(g)	250 Nm <sup>3</sup> /h	20 bar(g)	35 bar(g)	18.5
LW 1300 E H2 VD24,4 45 kW Pmax 40 bar(g) (wg.)	1300 Nm <sup>3</sup> /h	24.4 bar(g)	40 bar(g)	45

## Compressors Overview

### High Pressure Compressor working c/w ambient intake pressure

Compressor	Capacity	Intake P.	Final P.	Power
LW 300 E III CNG Pmax. 50 bar(g)	8.85 Nm <sup>3</sup> /h	atmosph.	50 bar(g)	5.5 kW
LW 300 E III H2	12 Nm <sup>3</sup> /h	atmosph.	200 bar(g)	7.5 kW
LW 300 E III H2	12 Nm <sup>3</sup> /h	atmosph.	300 bar(g)	7.5 kW
LW 300 E III H2	18 Nm <sup>3</sup> /h	atmosph.	330 bar(g)	7.5 kW
LW 450 E III H2 7,5 kW Pmax. 80 bar(g)	20 Nm <sup>3</sup> /h	atmosph.	80 bar(g)	7.5 kW
LW 450 E III G VDO,1 Pmax. 60 bar(g)	30 Nm <sup>3</sup> /h	atmosph.	60 bar(g)	11 kW
LW 570 E II H2 Pmax. 300 bar(g)	21 Nm <sup>3</sup> /h	atmosph.	300 bar(g)	15 kW
LW 570 E II H2	34.2 Nm <sup>3</sup> /h	atmosph.	350 bar(g)	15 kW
LW 720 E H2 Pmax. 320 bar(g)	24 Nm <sup>3</sup> /h	atmosph.	320 bar(g)	18.5 kW
LW 720 E H2 22kW	43.2 Nm <sup>3</sup> /h	atmosph.	350 bar(g)	22 kW
LW 720 E H2 22kW Pmax. 415 bar(g)	43.2 Nm <sup>3</sup> /h	atmosph.	415 bar(g)	22 kW
LW 1300 E H2 30 kW Pmax. 200 bar(g)	54.5 Nm <sup>3</sup> /h	atmosph.	200 bar(g)	30 kW
LW 1300 E H2 30 kW Pmax. 300 bar(g)	55 Nm <sup>3</sup> /h	atmosph.	300 bar(g)	30 kW
LW 1300 E H2 30 kW	60 Nm <sup>3</sup> /h	atmosph.	300 bar(g)	30 kW
LW 1300 E H2 Pmax. 150 bar(g)	60 Nm <sup>3</sup> /h	atmosph.	150 bar(g)	37 kW
LW 1300 E H2	78 Nm <sup>3</sup> /h	atmosph.	330 bar(g)	37 kW

## Compressors Overview

### High Pressure Booster compressors c/w specific intake pressure

Compressor	Capacity	Intake P.	Final P.	Power
LW 300 E III H2 VD8 5,5kW Pmax 150 bar(g)	10 Nm <sup>3</sup> /h	8 bar(g)	150 bar(g)	5.5 kW
LW 300/450 E III H2 VD15	25 to 12 Nm <sup>3</sup> /h	15 bar(g)	340 bar(g)	7.5 kW
LW 450 E III H2 VD15 7,5 kW Pmax. 300 bar(g)	20 Nm <sup>3</sup> /h	15 bar(g)	300 bar(g)	7.5 kW
LW 450 EH/H/CO/CO2 VD14	22 Nm <sup>3</sup> /h	14 bar(g)	55 bar(g)	5.5 kW
LW 450 E III H2 VD15 7.5 kW Pmax 410 bar(g)	27 Nm <sup>3</sup> /h	15 bar(g)	410 bar(g)	7.5 kW
LW 570 E II H2 VD13 7,5 kW Pmax. 200 bar(g)	15 Nm <sup>3</sup> /h	13 bar(g)	200 bar(g)	7.5 kW
LW 570 E II H2 VD20 7,5 kW Pmax. 200 bar(g)	20 Nm <sup>3</sup> /h	20 bar(g)	200 bar(g)	7.5 kW
LW 570 E II H2 VD13 7,5 kW Pmax. 350 bar(g)	20/15 Nm <sup>3</sup> /h	13.5 bar(g)	350 bar(g)	7.5 kW
LW 570 E II H2 VD13,5 7,5 kW Pmax. 200 bar(g)	20 Nm <sup>3</sup> /h	13.5 bar(g)	200 bar(g)	7.5 kW
LW 570 E II H2 VD13,5 7,5 kW Pmax. 350 bar(g)	20 Nm <sup>3</sup> /h	13.5 bar(g)	350 bar(g)	7.5 kW
LW 570 E II H2 VD25 7,5 kW Pmax. 150 bar(g)	23 Nm <sup>3</sup> /h	25 bar(g)	150 bar(g)	7.5 kW
LW 570 E II H2 VD5 11/8 kW Pmax. 210 bar(g)	25 Nm <sup>3</sup> /h	5 bar(g)	210 bar(g)	11 kW
LW 570 E II H2 VD1 7,5 kW Pmax. 50 bar(g)	26 Nm <sup>3</sup> /h	1 bar(g)	50 bar(g)	7.5 kW
LW 570 E II H2 VD16 11 kW Pmax. 420 bar(g)	28 Nm <sup>3</sup> /h	16 bar(g)	420 bar(g)	11 kW
LW 570 E II H2 VD20 7,5 kW Pmax. 200 bar(g)	30 Nm <sup>3</sup> /h	20 bar(g)	200 bar(g)	7.5 kW
LW 570 E II H2 VD20 7,5 kW Pmax. 350 bar(g)	30 Nm <sup>3</sup> /h	20 bar(g)	350 bar(g)	7.5 kW
LW 570 E II H2 VD5 11 kW Pmax. 210 bar(g)	40 Nm <sup>3</sup> /h	5 bar(g)	210 bar(g)	11 kW
LW 570 E II H2 VD4 11 kW	40 Nm <sup>3</sup> /h	4 bar(g)	250 bar(g)	11 kW
LW 570 E II H2 VD5	50 Nm <sup>3</sup> /h	5 bar(g)	350 bar(g)	15 kW
LW 570 E II H2 VD7 Pmax. 380 bar(g)	50 Nm <sup>3</sup> /h	7 bar(g)	380 bar(g)	15 kW
LW 570 E II H2 II VD4	60 Nm <sup>3</sup> /h	4 bar(g)	350 bar(g)	15 kW
LW 720 E H2 VD0,5 Pmax. 285 bar direkt	35 Nm <sup>3</sup> /h	0.5 bar(g)	285 bar(g)	18.5 kW
LW 720 E H2 VD1 Pmax. 200 bar(g)	39 Nm <sup>3</sup> /h	1 bar(g)	200 bar(g)	18.5 kW
LW 720 E H2 VD15 Pmax. 250 bar(g)	40 Nm <sup>3</sup> /h	15 bar(g)	250 bar(g)	18.5 kW
LW 720 E H2 VD15 Pmax. 250 bar(g) (WG)	40 Nm <sup>3</sup> /h	15 bar(g)	250 bar(g)	18.5 kW
LW 720 E H2 VD4 Pmax. 285 bar(g) direkt	42 Nm <sup>3</sup> /h	4 bar(g)	285 bar(g)	18.5 kW
LW 720 E H2 VD7 Pmax. 100 bar(g)	42 Nm <sup>3</sup> /h	7 bar(g)	100 bar(g)	18.5 kW
LW 720 E H2 VD1,5 22 kW	42 Nm <sup>3</sup> /h	1.5 bar(g)	200 bar(g)	22 kW
LW 720 E H2 VD10 Pmax. 410 bar(g)	50 Nm <sup>3</sup> /h	10 bar(g)	400 bar(g)	18.5 kW
LW 720 E H2 VD10 Pmax. 350 bar(g)	50 Nm <sup>3</sup> /h	10 bar(g)	350 bar(g)	18.5 kW
LW 720 E H2 VD25 Pmax. 320 bar(g)	60 Nm <sup>3</sup> /h	25 bar(g)	320 bar(g)	18.5 kW
LW 720 E H2 VD0,8 30kW Pmax. 250 bar(g)	67 Nm <sup>3</sup> /h	0.8 bar(g)	250 bar(g)	18.5 kW
LW 720 E H2 VD0,8 30 kW Pmax. 250 bar(g)	67 Nm <sup>3</sup> /h	0.8 bar(g)	250 bar(g)	18.5 kW
LW 720 E H2 VD25 11 kW Pmax. 100 bar(g)	67 Nm <sup>3</sup> /h	25 bar(g)	100 bar(g)	11 kW
LW 720 E H2 VD2 30 kW Pmax. 410 bar(g)	70 Nm <sup>3</sup> /h	2 bar(g)	410 bar(g)	30 kW
LW 720 E H2 VD2 Pmax. 250 bar(g)	72 Nm <sup>3</sup> /h	2 bar(g)	250 bar(g)	18.5 kW
LW 720 E H2 VD8 22 kW	78 Nm <sup>3</sup> /h	8 bar(g)	350 bar(g)	22 kW
LW 720 E H2 VD25 Pmax. 330 bar(g)	80 Nm <sup>3</sup> /h	25 bar(g)	330 bar(g)	18.5 kW

## Compressors Overview

### High Pressure Booster compressors c/w specific intake pressure

Compressor	Capacity	Intake P.	Final P.	Power
LW 720 E H2 VD10 Pmax 70 bar(g)	96 Nm <sup>3</sup> /h	10 bar(g)	70 bar(g)	18.5 kW
LW 720 E H2 VD12 Pmax. 50 bar(g)	100 Nm <sup>3</sup> /h	12 bar(g)	50 bar(g)	18.5 kW
LW 720 E H2 VD25 Pmax. 150 bar(g)	100 Nm <sup>3</sup> /h	25 bar(g)	150 bar(g)	18.5 kW
LW 720 E H2 VD4 30 kW	102 Nm <sup>3</sup> /h	4 bar(g)	300 bar(g)	30 kW
LW 720 E H2 VD4 37 kW	120 Nm <sup>3</sup> /h	4 bar(g)	300 bar(g)	37 kW
LW 720 E H2 VD25 Pmax. 150 bar(g)	125 Nm <sup>3</sup> /h	25 bar(g)	150 bar(g)	18.5 kW
LW 720 E H2 VD8 37 kW	140 Nm <sup>3</sup> /h	8 bar(g)	300 bar(g)	37 kW
LW 720 E H2 VD16 37kW	150 Nm <sup>3</sup> /h	16 bar(g)	320 bar(g)	37 kW
LW 1300 E H2 VD7 18,5 kW	85 Nm <sup>3</sup> /h	7 bar(g)	100 bar(g)	18.5 kW
LW 1300 E H2 VD25 30kW Pmax 410 bar(g)	99 Nm <sup>3</sup> /h	25 bar(g)	410 bar(g)	30 kW
LW 1300 E H2 VD7 Pmax. 380 bar(g)	100 Nm <sup>3</sup> /h	7 bar(g)	380 bar(g)	37 kW
LW 1300 E H2 VD10 30 kW Pmax. 420 bar(g)	100 Nm <sup>3</sup> /h	10 bar(g)	420 bar(g)	30 kW
LW 1300 E H2 VD2,5 Pmax.: 300 bar(g)	110 Nm <sup>3</sup> /h	2.5 bar(g)	300 bar(g)	37 kW
LW 1300 E H2 VD2 30 kW Pmax. 75 bar(g)	112 Nm <sup>3</sup> /h	2 bar(g)	75 bar(g)	30 kW
LW 1300 E H2 VD20 30 kW	112 Nm <sup>3</sup> /h	20 bar(g)	350 bar(g)	30 kW
LW 1300 E H2 VD20 37 kW Pmax: 410 bar(g)	112 Nm <sup>3</sup> /h	20 bar(g)	410 bar(g)	37 kW
LW 1300 E H2 VD10 30 kW Pmax: 300 bar(g)	115 Nm <sup>3</sup> /h	10 bar(g)	300 bar(g)	30 kW
LW 1300 E H2 VD8	117 Nm <sup>3</sup> /h	8 bar(g)	350 bar(g)	37 kW
LW 1300 E H2 VD0,8 45 kW	117.8 Nm <sup>3</sup> /h	0.8 bar(g)	250 bar(g)	45 kW
LW 1300 E H2 VD0,8 45 kW	117.8 Nm <sup>3</sup> /h	0.8 bar(g)	350 bar(g)	45 kW
LW 1300 E H2 VD0,8 45 kW (wg)	117.8 Nm <sup>3</sup> /h	0.8 bar(g)	350 bar(g)	45 kW
LW 1300 E H2 VD0,8 45 kW	117.8 Nm <sup>3</sup> /h	0.8 bar(g)	410 bar(g)	45 kW
LW 1300 E H2 VD6 Pmax. 60 bar(g)	123 Nm <sup>3</sup> /h	6 bar(g)	60 bar(g)	37 kW
LW 1300 E H2 VD4 Pmax 180 bar(g)	150 Nm <sup>3</sup> /h	4 bar(g)	180 bar(g)	37 kW
LW 1300 E H2 VD17 30 kW Pmax. 300 bar(g)	150 Nm <sup>3</sup> /h	17 bar(g)	300 bar(g)	30 kW
LW 1300 E H2 VD1 55 kW Pmax. 250 bar(g)	153.6 Nm <sup>3</sup> /h	1 bar(g)	250 bar(g)	55 kW
LW 1300 E H2 VD25 Pmax 420 bar(g)	175 Nm <sup>3</sup> /h	25 bar(g)	420 bar(g)	37 kW
LW 1300 E H2 VD25 37 kW Pmax 330 bar(g)	200 Nm <sup>3</sup> /h	25 bar(g)	330 bar(g)	37 kW
LW 1300 E H2 VD25 45 kW Pmax 410 bar(g)	200 Nm <sup>3</sup> /h	25 bar(g)	410 bar(g)	45 kW
LW 1300 E H2 VD15 Pmax. 230 bar(g)	200 Nm <sup>3</sup> /h	15 bar(g)	230 bar(g)	37 kW
LW 1300 E H2 VD20 Pmax. 300 bar(g)	200 Nm <sup>3</sup> /h	20 bar(g)	300 bar(g)	45 kW
LW 1300 E H2 VD8 55kW Pmax. 380 bar(g)	200 Nm <sup>3</sup> /h	8 bar(g)	380 bar(g)	55 kW
LW 1300 E H2 + CO2 VD10 30 kW	206 Nm <sup>3</sup> /h	10 bar(g)	50 bar(g)	30 kW
LW 1300 E H2 VD10 45 kW Pmax: 300 bar(g)	200 Nm <sup>3</sup> /h	10 bar(g)	300 bar(g)	45 kW
LW 1300 E H2 VD8 55 kW Pmax: 420 bar(g)	210 Nm <sup>3</sup> /h	8 bar(g)	420 bar(g)	55 kW
LW 1300 E H2 VD13 Pmax. 300 bar(g)	210 Nm <sup>3</sup> /h	13 bar(g)	300 bar(g)	45 kW
LW 1300 E H2 VD8 55 kW Pmax: 420 bar(g)	210 Nm <sup>3</sup> /h	8 bar(g)	420 bar(g)	55 kW
LW 1300 E H2 VD20 55 kW	270 Nm <sup>3</sup> /h	20 bar(g)	350 bar(g)	55 kW

## Compressors Overview

### High Pressure Booster compressors c/w specific intake pressure

Compressor	Capacity	Intake P.	Final P.	Power
LW 1300 E H2 VD25 22 kW Pmax. 100 bar(g)	213 Nm <sup>3</sup> /h	25 bar(g)	100 bar(g)	22 kW
LW 1300 E H2 VD20 45 kW Pmax: 380 bar(g)	220 Nm <sup>3</sup> /h	20 bar(g)	380 bar(g)	45 kW
LW 1300 E H2 VD3 75 kW Pmax: 300 bar(g)	220 Nm <sup>3</sup> /h	3 bar(g)	300 bar(g)	75 kW
LW 1300 E H2 VD4 Pmax: 65 bar(g)	240 Nm <sup>3</sup> /h	4 bar(g)	65 bar(g)	45 kW
LW 1300 E H2 VD13 55 kW Pmax: 300 bar(g)	247 Nm <sup>3</sup> /h	13 bar(g)	300 bar(g)	55 kW
LW 1300 E H2 VD20 45 kW Pmax. 300 bar(g)	247 Nm <sup>3</sup> /h	20 bar(g)	300 bar(g)	45 kW
LW 1300 E H2 VD20 45 kW Pmax. 250 bar(g)	250 Nm <sup>3</sup> /h	20 bar(g)	250 bar(g)	45 kW
LW 1300 E H2 VD7 75 kW Pmax: 67 bar(g)	250 Nm <sup>3</sup> /h	7 bar(g)	67 bar(g)	75 kW
LW 1300 E H2 VD15 Pmax: 80 bar(g)	260 Nm <sup>3</sup> /h	15 bar(g)	80 bar(g)	37 kW
LW 1300 E H2 VD15 45 kW Pmax: 200 bar(g)	260 Nm <sup>3</sup> /h	15 bar(g)	200 bar(g)	45 kW
LW 1300 E H2 VD20 55 kW Pmax. 410 bar(g)	275 Nm <sup>3</sup> /h	20 bar(g)	410 bar(g)	55 kW
LW 1300 E H2 VD12 55 kW Pmax. 200 bar(g)	280 Nm <sup>3</sup> /h	12 bar(g)	200 bar(g)	55 kW
LW 1300 E H2 VD 12,5 55 kW Pmax. 230 bar(g)	280 Nm <sup>3</sup> /h	12.5 bar(g)	230 bar(g)	55 kW
LW 1300 E H2 VD15 55 kW	280 Nm <sup>3</sup> /h	15 bar(g)	350 bar(g)	55 kW
LW 1300 E H2 VD25 45 kW Pmax 100 bar(g)	350 Nm <sup>3</sup> /h	25 bar(g)	100 bar(g)	37 kW
LW 1300 E H2 VD20 45 kW Pmax. 85 bar(g)	400 Nm <sup>3</sup> /h	20 bar(g)	85 bar(g)	45 kW
LW 1300 E H2 VD25 45 kW Pmax 100 bar(g)	450 Nm <sup>3</sup> /h	25 bar(g)	100 bar(g)	45 kW
LW 1300 E H2 VD8 75 kW	450 Nm <sup>3</sup> /h	8 bar(g)	80 bar(g)	75 kW
LW 1300 E H2 VD25 Pmax 50 bar(g)	500 Nm <sup>3</sup> /h	25 bar(g)	50 bar(g)	37 kW

**Do you have special requirements?**

**We would be pleased to adapt existing machines or calculate additional special systems for your specific needs.**

## Installation

Below you will find further information on the set-up and installation of our machines. Please note that these are general information and may deviate depending on the system type.

It is important to comply with the minimum distances and to ensure adequate ventilation. The following information are very important and must be complied with in any case.

### Minimum distances

- » Make sure that the compressor always has a sufficient amount of fresh air available.
- » To prevent serious damage, ensure that the cooling air flow can flow freely.
- » The following minimum distances must be adhered:  
Front side min. 1500 mm, sides and rear side min. 500 mm, distance to the ceiling min. 500 mm.  
Avoid anything in this area which can restrict the cooling air flow.

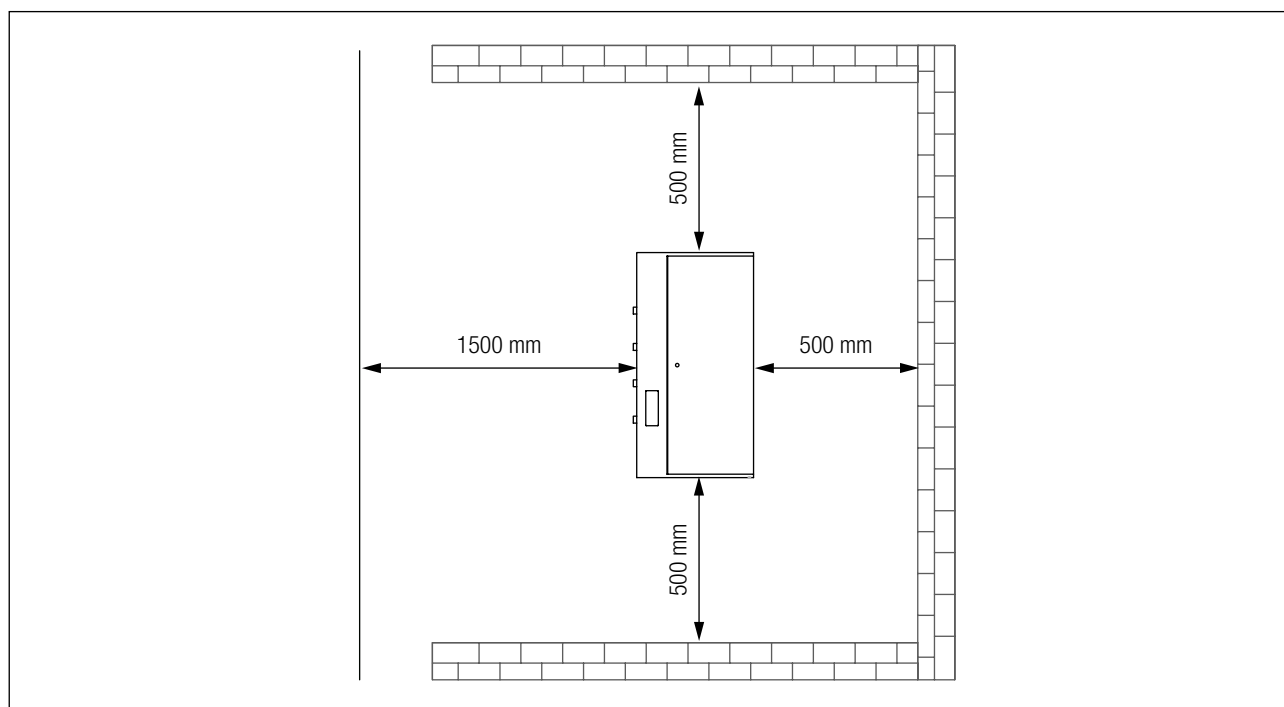


Fig. Minimum distances

## Installation

### Ventilation

- » Make sure that the compressor always has a sufficient amount of fresh air available for cooling.
- » To prevent serious damage, ensure that the cooling air flow can flow freely.
- » The necessary cooling air flow can be calculated by using the following formula:  
 $300 \times \text{drive power [kW]} = \text{required cooling air flow [m}^3/\text{h]}$   
Example 11kW motor:  $300 \times 11\text{kW} = 3300 \text{ m}^3/\text{h} = \text{required cooling air flow.}$
- » The fan capacity for fresh air and warm air must meet at least the required cooling air flow.  
The fans must have the same capacity.

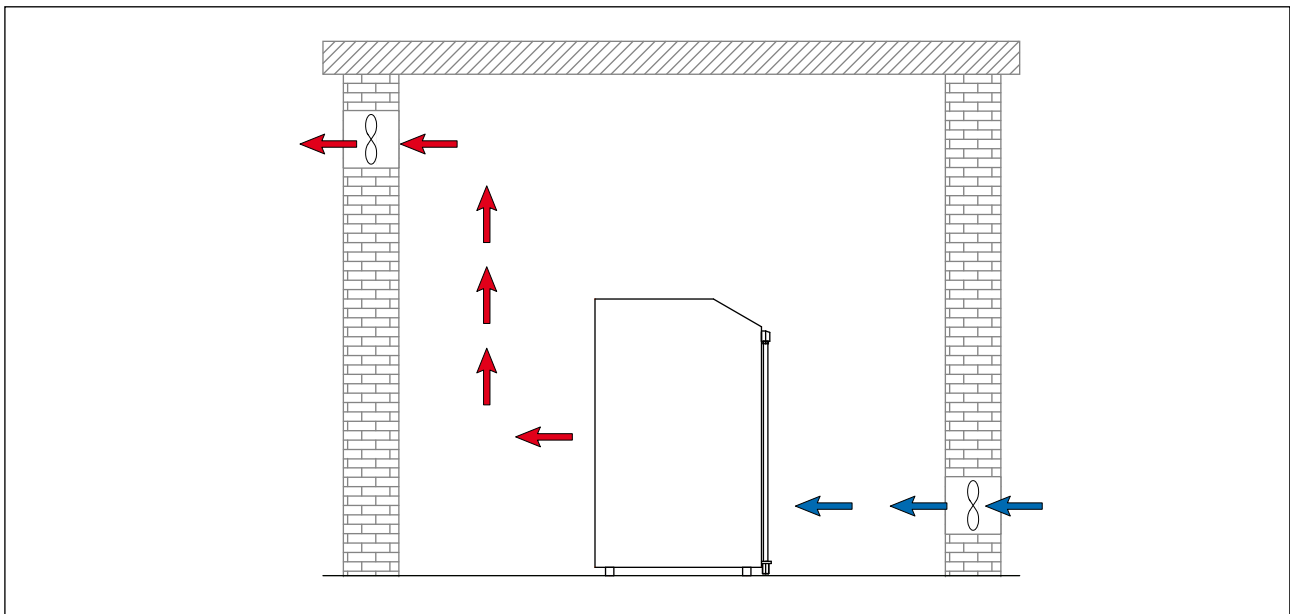


Fig. Ventilation through facade

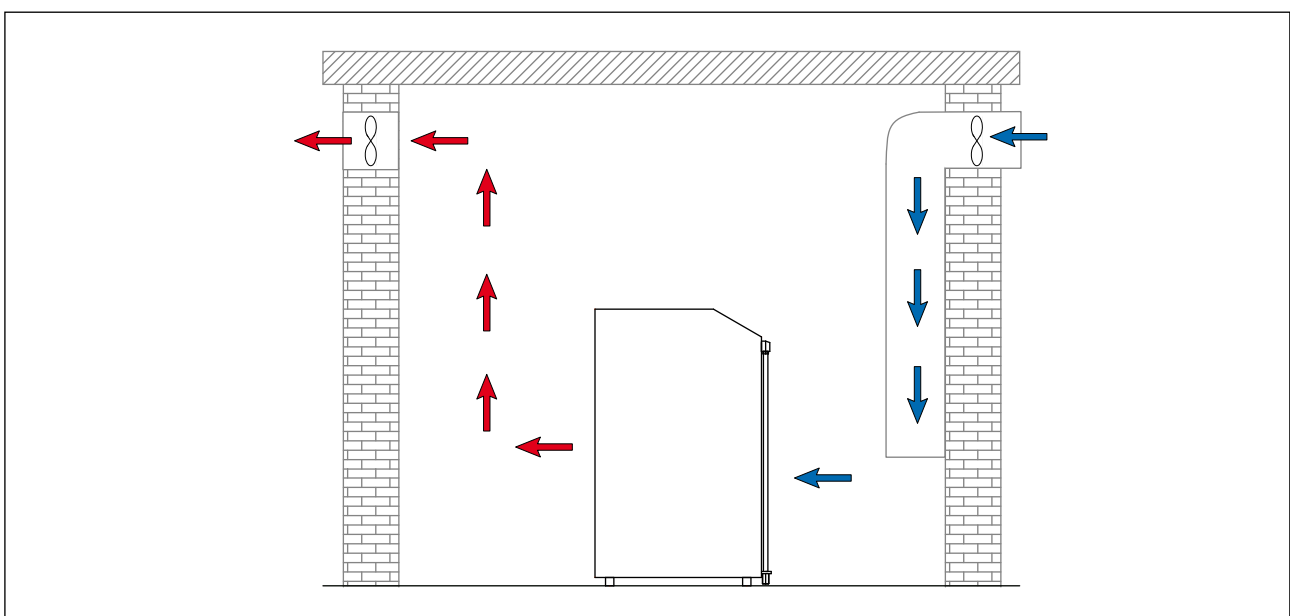


Fig. Ventilation via ventilation stack

## Electrical Installation

All L&W CNG-, biogas or hydrogen compressors are delivered without control as standard.

Optionally we are able to offer explosion-proof electrical controls (e.g. contacts and relays) or explosion-proof electronic controls (e.g. programmable logic circuits).

All controls are designed for connection with three phases (brown, black, grey), neutral line (blue) and protective line (green/yellow).



Fig. Electrical control

### Recommended fuses for 360 - 500 V operating voltage

Nominal motor power		Fusing start A		Connection in mm <sup>2</sup>	
[kw]	[A]	Direct	Star/Delta	Contactor supply	Motor S/D
5.5	11.3	25	20	2.5	1.5
7.5	15.2	30	25	2.5	1.5
11	21.7	-	35	4	2.5
15	29.9	-	35	6	4
18.5	36	-	50	6	4
22	41	-	50	10	4
30	55	-	63	10	6
37	68	100	80	16	6
45	81	125	100	25	10

### Recommended fuses for 220 - 240 V operating voltage

Nominal motor power		Fusing start A		Connection in mm <sup>2</sup>	
[kw]	[A]	Direct	Star/Delta	Contactor supply	Motor S/D
5.5	19.6	35	25	4	2.5
7.5	26.4	50	35	6	4
11	38	-	50	6	4
15	51	-	63	10	4
18.5	63	-	80	16	6
22	71	-	80	16	6
30	96	-	125	25	10
37	117	200	160	35	16
45	141	250	160	50	16



## Electronic control - Remote Pro Control - RPC

The new Remote Pro Control has been added to the successful Remote Tab Control range. The further developed RPC contains all components (incl. a Windows-based software) which enable to control and monitor the compressor worldwide. 32,000 storable data units allow recording measurements per second, minute, hour or day in real time. Location-independent remote-maintenance, adjustments, as well as displaying all machine parameters can be continuously controlled and called up.

### Consists of

- » Control board incl. 2.8" LCD display
- » L&W software for Windows-based systems (PC, laptop, notebook, tablet or mobile phone)
- » Pressure sensor for start / stop operation
- » Sensor for temperature monitoring of the ambient temperature
- » Phase monitoring module
- » 1 x potential-free contact for collective alarms
- » Emergency operation (can be operated without circuit board)
- » Emergency stop switch

### Features

- » Semi & fully automatic operation
- » Remote control possible via LAN / W-LAN
- » Remote maintenance / settings by L&W possible after permission
- » Condensate, leakage and safety valve test function
- » Ambient temperature monitoring with automatic shutdown
- » Phase monitoring with automatic start prevention
- » Start cycle counter
- » Stroke and cycle counter for condensate drain
- » Timer for next condensate drainage
- » Operating hours counter for compressor and filter cartridge
- » Graphic display of machine parameters (Storage of 32,000 data units, display update per sec, min, h or d freely selectable)
- » Display of filling time [min] / timer for bottle filling
- » Service intervals with counter
- » Pin Lock
- » Dynamic pressure- and temperature display
- » Unlimited alarm memory in the log
- » Available languages: German / English / French / Italian / Spanish / Chinese / Russian (Portugues on request)

### Options

- » Windows-based end device for external display (e.g. PC, laptop, tablet and much more)
- » Display / monitoring of pressures (levels / oil)
- » Display / monitoring of temperatures (cylinder heads / oil)
- » Installation of additional software on the company server for external operation





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