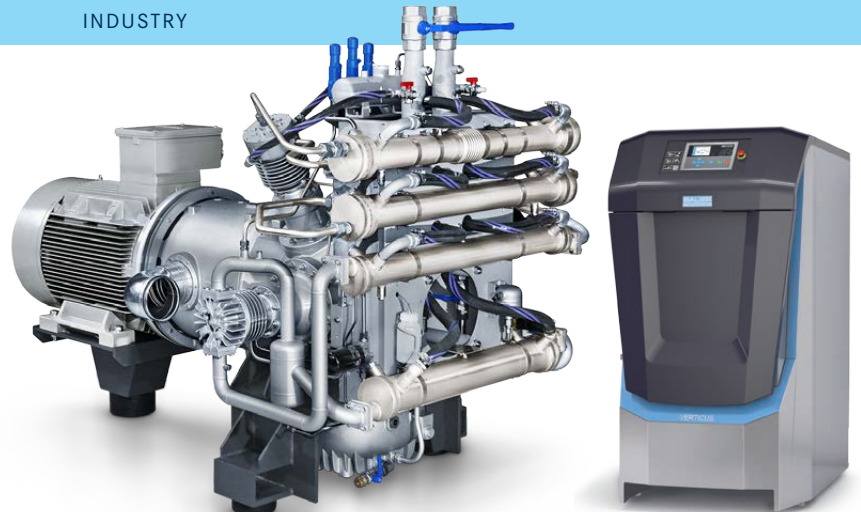


COMPRESSORS FOR INDUSTRY

TAILORED TO YOUR REQUIREMENTS



INDUSTRY



OUR COMPANY

BAUER – PASSIONATE ABOUT PERFECT SOLUTIONS.

The name BAUER stands for a long tradition of mechanical engineering excellence. Johann Bauer, a blacksmith, founded an agricultural machinery factory in the Bavarian town of Arnsdorf in 1888. His son Hans then launched a German post-war success story in 1946, starting with low-pressure compressors, before rapidly recognising the potential in the new field of high-pressure compression technology. Powered by this expertise, in the 1960s BAUER KOMPRESSOREN rose to become the leading global producer of breathing air compressors for diving and firefighting.

Then as now, our passion for the perfect solution – in terms of both technology and cost-effectiveness – and our rigorous quality standards formed the cornerstone of our company's success and laid the foundations for our global expansion. Today BAUER KOMPRESSOREN operates a worldwide network of companies and is represented by subsidiaries in many high-growth markets where German quality is particularly highly esteemed.

BAUER KOMPRESSOREN supplies the industrial sector with a full scope of medium- and high-pressure compressors and boosters for air and gas compression. Because our systems are designed to a modular concept, our customers receive tailored solutions with a comprehensive choice of pressure ranges, outputs and compressed gases – perfectly matched to your individual customer requirements.



BAUER KOMPRESSOREN Plant I – Geretsried, Germany

OUR APPLICATIONS

TRUST IN BAUER QUALITY. FROM THE DESERT TO THE ARCTIC.

As one of the leading manufacturers of high-pressure compressor systems for industrial applications, we develop solutions tailored to your individual needs. From the arctic to the desert and even on the high seas, BAUER compressor systems deliver reliable performance under even the most challenging conditions, in even the harshest environments.

- › Automotive industry and component supplier
- › Oil and Gas industry
- › Gas logistics
- › Production
- › Energy sector
- › Shipping
- › Chemical industry
- › Petrochemical industry
- › Mining
- › Research facilities
- › Food industry
- › Aerospace industry



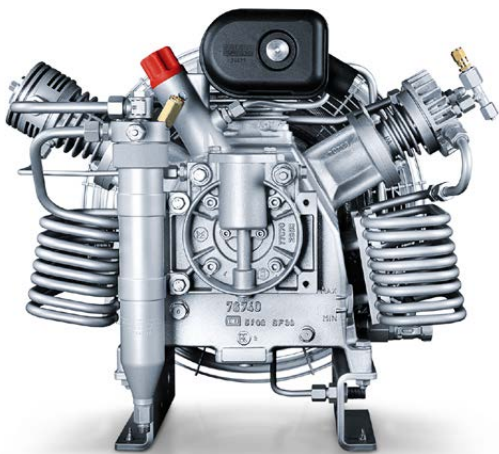
HIGHLIGHT FEATURES

COMPRESSOR BLOCK

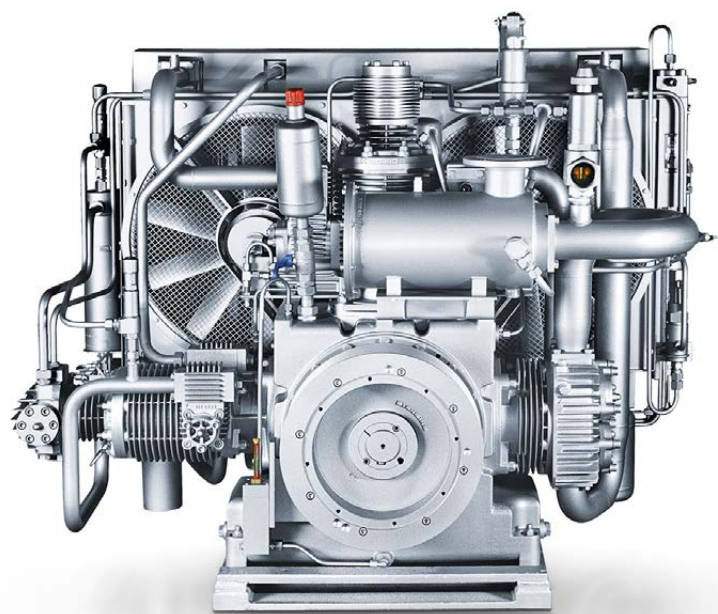
Each and every one of our compressor blocks contains decades of experience and the expertise of our Testing and Development Centre. BAUER compressor blocks have built a legendary reputation on their reliability and long service life. They are the result of advanced design, intelligent in-depth solutions, the use of exceptionally high-quality materials and outstanding production quality.

COMPRESSOR BLOCKS FOR MINI-VERTICUS, VERTICUS AND K 22 – K 28 SERIES

- › An intelligent air-cooling system with generously dimensioned coolers combined with cylinders with heavy ribbing can be relied upon for best possible cooling of each individual compressor stage.
- › Ultra-rugged industrial roller bearings are designed for continuous operation under challenging operating conditions.
- › Powerful pressure lubrication and oil microfilter for minimum wear of moving parts.
- › Long maintenance intervals for valves and piston rings and for oil changes keep the running costs of the unit low.
- › All drive units are dynamically balanced for quiet and vibration-free running.



Compressor block K 120



Compressor block K 28

DRIVE SYSTEM

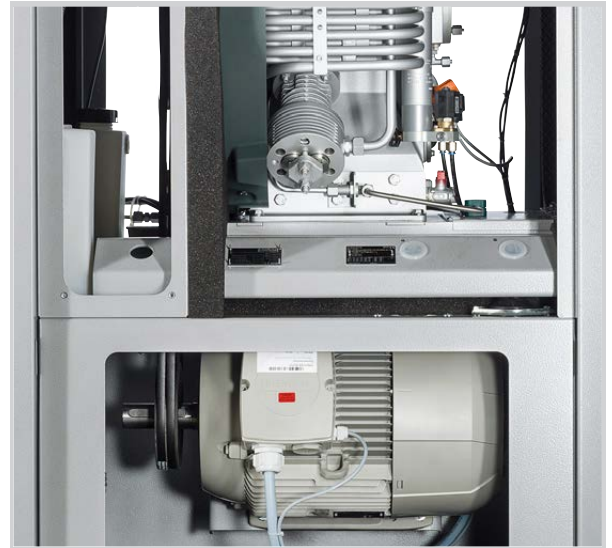
V-BELT DRIVE

The low-maintenance V-belt drive enables the compressor block speed to be optimised regardless of the network frequency and motor type.

The compressor can be set up in vertical or horizontal format. V-belt tension is ensured by the weight of the motor in vertical format (MINI-VERTICUS, VERTICUS) and by belt tensioners in horizontal format (K 22 - K 28).

Compressor series with V-belt drive

- › MINI-VERTICUS
- › VERTICUS
- › K 22 - K 28
- › BK 23



Interior view of VERTICUS: Adjustment of the v-belt is not necessary because of the vertical format and suspended motor mounting.

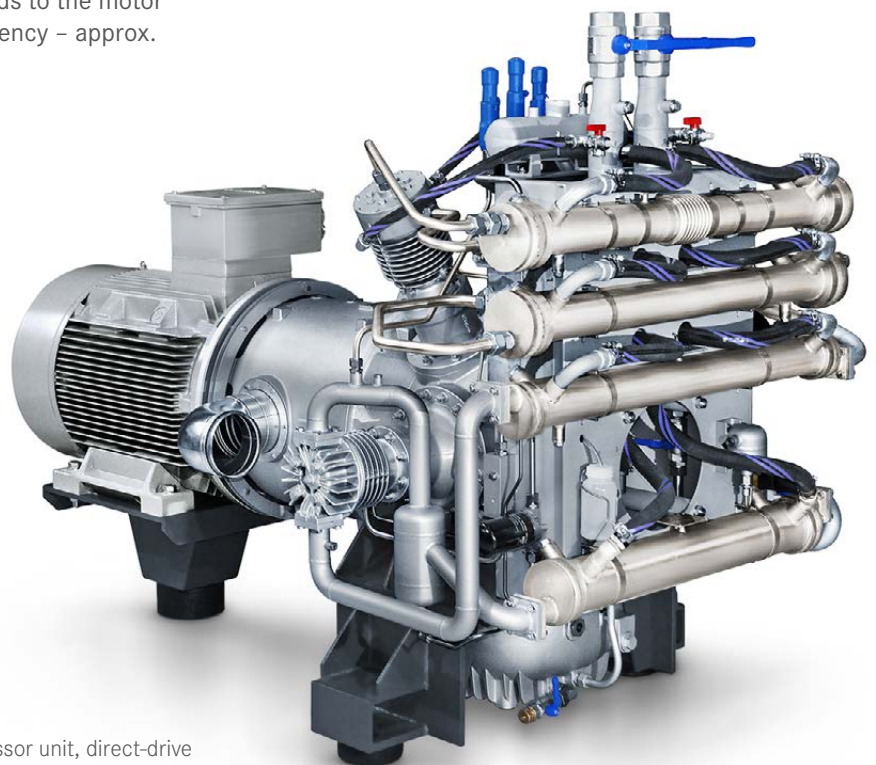
DIRECT DRIVE

The motor and compressor block are connected by an elastic coupling.

The speed of the compressor block corresponds to the motor speed and thus depends on the network frequency – approx. 1485 rpm at 50 Hz.

Direct-drive compressor series

- › DS Series
- › BK 24 - BK 52



GIB 26 Compressor unit, direct-drive

HELIUM CONFIGURATION

The G Series MINI-VERTICUS and VERTICUS are purpose-designed helium / gas compressors for industrial applications. They are especially modified for compression of helium and other rare gases. The compressors are available in a range of configurations to match customers' needs.

On request, the intake buffer tank and condensate reservoir can be located as free-standing units next to the compressor system, or supplied as an ex-works pre-installed plug-and-play system, mounted complete with compressor on a shared base frame.

FEATURES

- › **MINI-VERTICUS and VERTICUS supply helium and other rare gases at final pressures up to 230 bar / 365 bar depending on the process gas.**
- › **The compressor block is designed specifically for rare gases, to maximize efficiency and minimize leakage.**
- › **Supplied as standard with gas-tight ferrule compression fittings on high-pressure side**
- › **Closed-loop system: gas from the crankcase ventilation system and the condensate valves is recovered and returned to the intake area. This simultaneously reduces the risk of external contamination of the process gas.**
- › **Flexible design: supplied with integrated or separate intake buffer tank/condensate reservoir depending on customer requirements**
- › **On request, helium can be used in final pre-delivery testing of these compressors.**



VERTICUS with Super Silent soundproof housing in Helium version as all-in-one solution

MINI-VERTICUS & VERTICUS

THE NEW GENERATION OF STATIONARY COMPRESSORS FROM THE MINI-VERTICUS AND VERTICUS SERIES ONCE AGAIN DEMONSTRATES BAUER'S LEADING-EDGE TECHNOLOGICAL STATUS.

The MINI-VERTICUS and VERTICUS series has been developed and built specifically to meet high performance requirements in continuous operation in professional applications.

The new MINI-VERTICUS and VERTICUS combine the legendary BAUER compressor blocks with improved components and ultra-modern design! During the redesign, the focus was on ergonomics, making operation as easy as possible, reducing noise and boosting efficiency.

All control elements that are important for everyday operation are ergonomically arranged and easily accessible from the front. A new condensate vessel integrated into the housing allows for 40% more capacity. The compressor control monitors the fill level and informs the operator in good time if the condensate needs to be emptied.

The advanced B-CONTROL MICRO is more powerful and ready to communicate with the B-APP for remotely controlling and monitoring the compressor.

FEATURES

- › **Now significantly quieter: thanks to the new anti-vibration frame and noise-optimised Super Silent housing**
- › **Compact dimensions: For installation wherever space is at a premium**
- › **Ergonomic design: optimum accessibility and operation**
- › **B-DRAIN: The new automatic condensate drain is quieter and saves energy**
- › **Very easy to maintain: The tension of the V-belt does not have to be adjusted**
- › **B-APP: Remote control and monitoring of the units via smartphone or tablet**



MINI-VERTICUS - Super Silent

- › **3 - 7.5 kW**
- › **85 - 475 l/min**
- › **30 - 365 bar**

MINI-VERTICUS and VERTICUS have different dimensions and power ranges. VERTICUS is suitable for the power range from 11 to 15 kW. MINI-VERTICUS is more compact and is available for motor powers up to 7.5 kW.



VERTICUS – Super Silent

EQUIPMENT OPTIONS

- › **NEW!** Remote control and monitoring with the B-APP
- › **NEW!** Oil level monitoring for safely switching off the compressor unit when the oil level is low
- › **NEW!** Particle filter conforming to ISO 8573 class 2
- › Super Silent housing
- › B-CONTROL II compressor control unit – e.g. for inter-connected operation etc.
- › Monitoring intermediate stage pressures and temperatures
- › Air and gas purification system P 61 or P 81
- › B-SECURUS filter monitoring system
- › B-KOOL refrigeration dryer for extending the filter service life
- › Intermediate pressure gauges
- › Intake system - essential in nitrogen compression
- › Intake pressure reduction
- › 60-litre condensate vessel
- › Extended base frame
- › Exhaust shaft

- › **11 - 15 kW**
- › **240 - 800 l/min**
- › **90 - 500 bar**

TECHNICAL DATA

AIR COOLED COMPRESSOR UNITS

35 - 40 BAR



Model	F.A.D. ¹			Frequency	Max. operating pressure ²		No. of stages	Speed	Motor-power	Power-consumption ¹	Net weight approx.	
	l/min	m ³ /h	cfm		bar	psig					rpm	kW
DS RANGE, 35 - 40 bar												
DS 14-4	200	12	7	50	40	580	2	1440	4	3.3	200	440
	230	13.8	8	60	40	580	2	1720	4.4	3.9	200	440
DS 17-4	245	14.7	8.6	50	40	580	2	1440	4	3.7	200	440
	280	16.8	9.8	60	40	580	2	1720	4.4	4.4	200	440
DS 35-10	500	30	17.6	50	40	580	2	1450	7.5	7.5	350	770
	575	34.5	20.2	60	40	580	2	1740	11	9	350	770
DS 70-18.5	990	594	34.8	50	35	500	2	1440	15	15	710	1565
	1140	68.4	40	60	35	500	2	1720	20	18	745	1640
DS 76-18.5	1100	66	38.6	50	40	580	3	1450	18.5	17	660	1455
	1265	76	44.4	60	40	580	3	1740	20.4	20	660	1455
DS 166-37	2400	144	85	50	40	580	3	1470	37	31	805	1775
	2760	166	97	60	40	580	3	1760	41	37	805	1775
DS 181-45	3020	181	107	50	40	580	3	1470	45	40	825	1820
	--	--	--	60	40	580	3	--	--	--	825	1820

30 - 68 BAR



Model	F.A.D. ¹			Max. operating pressure ²	No. of stages	Speed	Motor-power	Power-consumption ¹	Net weight approx.		
	l/min	m ³ /h	cfm						bar	psig	rpm
MINI-VERTICUS, 215 l/min, 30 - 68 bar											
B 12.4-4-MV	215	13	7.6	68	1000	3	1420	4	3.5	250	550
K 22 - K 28 SERIES, 670 - 6800 l/min, 30 - 63 bar											
B 22.5-11	670	40	24	68	1000	3	920	11	10	450	1000
B 22.5-15	950	57	34	68	1000	3	1310	15	14	460	1010
B 23.4-22	1350	81	48	68	1000	3	920	22	20	670	1470
B 23.4-30	1730	104	61	68	1000	3	1200	30	26	740	1630
B 25.4-37	2400	144	85	68	1000	3	1070	37	36	1430	3150
B 25.4-45	2850	171	100	68	1000	3	1270	45	43	1460	3210
B 28.2-55	3400	204	120	68	1000	3	1050	55	51	1500	3300
B 28.3-90	5900	354	208	68	1000	3	940	90	88	2160	4750
B 28.3-110	6800	408	240	68	1000	3	1050	110	102	2330	5130

¹ Volume flow rate according to ISO 1217; power consumption at max. final pressure under defined framework conditions. Different ambient conditions will result in differing performance values

² Maximum allowable working pressure = max. setting safety valve; final pressure (shut-down pressure) lower.

64 – 105 BAR



Model	F.A.D. ¹			Max. operating pressure ²		No. of stages	Speed	Motor-power	Power-consumption ¹	Net weight approx.	
	l/min	m ³ /h	cfm	bar	psig					rpm	kW
K 22 – K 28, 850 – 3300 l/min, 64 – 85 bar											
E 22.5-15	850	51	30	85	1230	3	1150	15	14	460	1010
E 23.4-22	1280	77	45	85	1230	3	920	22	20	670	1470
E 23.4-30	1700	102	60	85	1230	3	1200	30	27	735	1620
E 25.4-37	2000	120	71	85	1230	3	940	37	33	1430	3150
E 25.4-45	2600	156	92	85	1230	3	1200	45	42	1460	3210
E 28.2-55	3300	198	120	85	1230	3	1050	55	53	1500	3300
MINI-VERTICUS SERIES, 170 - 215 l/min, 64 - 85 bar											
E 12.4-3-MV	170	10.2	6	85	1230	3	1150	3	2.7	245	540
E 12.4-4-MV	215	13	7.6	85	1230	3	1420	4	3.7	250	550
MINI-VERTICUS SERIES, 215 l/min, 75 - 100 bar											
E 120-4-MV	215	13	7.6	100	1450	3	1420	4	3.7	250	550

90 – 500 BAR



Model	F.A.D. ¹			Max. operating pressure ²		No. of stages	Speed	Motor-power	Power-consumption ¹	Net weight approx.	
	l/min	m ³ /h	cfm	bar	psig					rpm	kW
MINI-VERTICUS SERIES, 85 - 300 l/min, 90 - 365 bar											
I 100-3-MV	85	5.1	3	365	5300	3	900	3	2.2	250	560
I 100-4-MV	125	7.5	4.4	365	5300	3	1270	4	3.3	255	560
I 120-4-MV	170	10.2	6	365	5300	3	1200	4	3.7	260	570
I 120-5.5-MV	215	13	7.6	365	5300	3	1470	5.5	4.7	260	570
I 12.14-7.5-MV ³	300	18	10.6	365	5300	4	1450	7.5	6.5	310	680

¹ Volume flow rate according to ISO 1217; power consumption at max. final pressure under defined framework conditions. Different ambient conditions will result in differing performance values

² Maximum allowable working pressure = max. setting safety valve; final pressure (shut-down pressure) lower.

³ Not suitable for compression of nitrogen.

90 - 500 BAR

AIR N₂

Model	F.A.D. ¹			Max. operating pressure ²		No. of stages	Speed	Motor-power	Power-consumption ¹	Net weight approx.	
	l/min	m ³ /h	cfm	bar	psig					kg	lbs
VERTICUS SERIES, 340 - 610 l/min, 90 - 500 bar											
I 15.1-7.5-V	340	20.4	12	365	5300	4	1050	7.5	6.9	340	750
I 15.1-11-V	420	25.2	15	365	5300	4	1320	11	9.6	350	770
I 150-11-V	500	30	18	365	5300	4	1230	11	10.2	350	770
I 180-15-V	610	36.6	21	365	5300	4	1320	15	12.0	365	805
VERTICUS SERIES, 310 - 515 l/min, 350 - 420 bar											
I 15.11-7.5-V	310	18.6	11	420	6100	4	960	7.5	7.0	350	770
I 15.11-11-V	420	25.2	15	420	6100	4	1320	11	10.4	360	790
I 18.1-15-V	515	30.9	18.2	420	6100	5	1490	15	13.0	375	825
VERTICUS SERIES, 310 - 510 l/min, 420 - 525 bar											
I 15.11-7.5-V	310	18.6	11	525	7600	4	960	7.5	7.0	350	770
I 15.11-11-V	420	25.2	15	525	7600	4	1320	11	10.4	360	790
I 18.1-15-V	510	30.6	18	525	7600	5	1490	15	13.5	375	825

90 - 500 BAR

AIR N₂

Model	F.A.D. ¹			Max. operating pressure ²		No. of stages	Speed	Motor-power	Power-consumption ¹	Net weight approx.	
	l/min	m ³ /h	cfm	bar	psig					kg	lbs
K 22 - K 28 SERIES, 800 - 3500 l/min, 90 - 350/365 bar											
I 22.0-18.5	800	48	28	365	5300	4	1180	18,5	17.9	510	1120
I 22.0-22	930	56	33	365	5300	4	1320	22	20.5	570	1255
I 23.0-30	1300	78	46	350	5100	4	1200	30	28	760	1670
I 23.0-37	1480	89	52	350	5100	4	1400	37	34	780	1715
I 25.0-45	1900	114	67	350	5100	4	1180	45	41	1750	3850
I 28.0-55	2500	150	88	350	5000	4	830	55	50	1860	4090
I 28.0-75	3500	210	125	350	5100	4	1180	75	72	1950	4290
K 22 SERIES, 800 l/min, 350 - 420 bar											
I 22.0-22-420 ³	800	48	28	420	6100	4	1180	22	19	570	1255
K 25 SERIES, 1900 - 2300 l/min, 420 - 500 bar											
I 25.9-45	1900	114	67	500	7200	5	1180	45	42	1900	4180
I 25.18-55	2300	138	81	500	7200	5	1100	55	55	1950	4290

¹ Volume flow rate according to ISO 1217; power consumption at max. final pressure under defined framework conditions. Different ambient conditions will result in differing performance values

² Maximum allowable working pressure = max. setting safety valve; final pressure (shut-down pressure) lower.

³ Not suitable for compression of nitrogen.

90 - 350 BAR

HE

Model	F.A.D. ¹			Max. operating pressure ²		No. of stages	Speed rpm	Motor-power kW	Power-consumption ¹ kW	Net weight approx.	
	l/min	m ³ /h	cfm	bar	psig					kg	lbs
MIN-VERTICUS SERIES, 70 - 140 l/min, 90 - 230 bar, HELIUM											
G 100-3-MV	70	4,2	2,4	230	3350	3	900	3	2,1	535	1180
G 120-4-MV	105	6,3	3,7	230	3350	3	900	4	2,7	540	1190
G 120-5.5-MV	140	8,4	5	230	3350	3	1250	5,5	3,8	555	1220
VERTICUS SERIES, 240 - 420 l/min, 90 - 350 bar, HELIUM											
G 15.1-7.5-V	240	14.4	8.5	350	5100	4	880	7.5	6.3	620	1360
G 15.1-11-V	320	19.2	11.2	350	5100	4	1230	11	9.1	650	1430
G 18.1-15-V	420	25.2	14.7	350	5100	5	1490	15	13.3	670	1470
K 22 - K 25 SERIES, 580 - 1520 l/min, 90 - 230 bar, HELIUM											
G 22.0-18.5	580	35	20	230	3350	4	1050	18.5	15	540	1190
G 23.1-22	670	40	24	230	3350	4	990	22	17	740	1630
G 23.1-30	850	51	30	230	3350	4	1250	30	22	790	1740
G 25.9-45	1520	91	54	230	3350	5	1180	45	38	1780	3920
K 25 SERIES, 1320 l/min, 230 - 350 bar, HELIUM											
G 25.9-45	1320	79	47	350	5100	5	1050	45	36	1780	3920

¹ Volume flow rate according to ISO 1217; power consumption at max. final pressure under defined framework conditions, valid for helium. Different ambient conditions will result in differing performance values.

² Maximum allowable working pressure = max. setting safety valve; final pressure (shut-down pressure) lower. Values for other noble gases are available on request.

ACCEPTANCE AND SERVICES

MANUFACTURING IS ONLY PART OF WHAT WE DO

ISO 9001 CERTIFICATION

- › BAUER assures consistent maximum product quality by applying extensive quality control measures during and after production in line with DIN EN ISO 9001.

ACCEPTANCE TESTING

- › A factory acceptance test or site acceptance test in the presence of the customer or certifying body can be performed in addition to the standard BAUER final test. Many BAUER compressors can also be produced in compliance with other standards, e.g. according to ASME, KHK etc.

PACKING & PROTECTION

- › Our compressors are packed ex works for transport by truck or air freight. We offer appropriate packing designs tailored for shipping, transport to tropical regions or long storage periods.

INSTALLATION

- › Professional installation is a vital basic factor in safe operation of high-pressure systems. Our global network of branches and qualified partners provides smooth, trouble-free support in planning and implementation, wherever you are.

COMMISSIONING

- › When installation is completed, BAUER's expert staff check and confirm the system functions correctly during commissioning. Detailed operator training is naturally an integral part and lays the foundations for optimum system use – which is later reflected in lower operating costs, and thus higher value added.

TRAINING

- › To ensure your staff are always up-to-date, we provide a comprehensive range of practical training courses for our customers, where users and operators can benefit directly from our expertise.



**INTERESTED IN OUR
PRODUCTS?**

**CONTACT US – WE ARE HAPPY TO
PROVIDE INFORMATION AND ASSISTANCE.**

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