HOX

hertz® KOMPRESSOREN

0,25-240,5 Nm³/h

OXYGEN GENERATORS

Hertz Kompressoren Oxygen Generators utilize Pressure Swing Adsorption (PSA) technology to separate nitrogen, water vapor, and hydrocarbons from ambient air using advanced zeolite molecular sieves, delivering oxygen with high purity. In the dual-bed system, one bed captures unwanted gases while the other undergoes regeneration, enabling uninterrupted and continuous oxygen production. The produced oxygen is stored in dedicated buffer tanks and supplied to the user with up to 95% purity, ensuring reliability and consistency. Thanks to specially engineered high-performance zeolite granules, the system offers both efficient operation and a durable oxygen generation solution.

Advantages

- On-demand oxygen production at 90–95% purity with high capacity
- Quick start-up capability
- Quiet operation with extremely low outlet noise levels
- Long service life thanks to special zeolite granules
- Low maintenance cost

Standard

- Oxygen Tanks
- Silencer
- Mini PLC
- Pressure Transmitter
- Particle Filter*
- Tank Manometers
- ECO Mode
- Valve Control Regulator
- Piston Valves

*Replace filter elements periodically, and get normal service for the compressor.

Optional

- Carbolescer
- Touch Screen PLC
- Oil Indicator
- Flowmeter
- Dew Point Sensor
- Oxygen Analyzer

NITROGEN AND OXYGEN GENERATORS

Oxygen Production Steps with PSA Technology

- **Pressurization:** By compressing air into the tank, the desired oxygen pressure is achieved.
- Adsorption: Zeolite molecular sieves allow oxygen to pass through under high pressure while retaining nitrogen and other gases.
- **Regeneration:** By reducing the tank pressure, the saturated zeolite molecules are released and made ready for reuse.
- **Pressure Equalization:** After the regeneration cycle, the valve is opened to equalize the pressure between the two tanks, minimizing energy loss.

Model	Air Demand @ Following Purity Level						Free Oxygen Delivery @ Following Purity Level					
	90%		93%		95%		90%		93%		95%	
	m³/h	cfm	m³/h	cfm	m³/h	cfm	m³/h	cfm	m³/h	cfm	m³/h	cfm
HOX-25	2,79	1,64	2,73	1,61	2,76	1,62	0,25	0,15	0,23	0,14	0,21	0,12
HOX-40	4,66	2,74	4,54	2,67	4,61	2,71	0,42	0,47	0,38	0,22	0,35	0,21
HOX-70	8,38	4,93	8,18	4,82	8,29	4,88	0,76	0,45	0,68	0,4	0,64	0,38
HOX-120	14,29	8,41	13,94	8,21	14,13	8,32	1,3	0,77	1,16	0,68	1,09	0,64
HOX-140	17,15	10,1	16,73	9,85	16,95	9,98	1,56	0,92	1,39	0,82	1,3	0,77
HOX-175	21,44	12,62	20,91	12,31	21,19	12,47	1,95	1,15	1,74	1,02	1,63	0,96
HOX-240	28,58	16,81	27,88	16,4	28,26	16,62	2,6	1,53	2,32	1,36	2,17	1,28
HOX-380	46,1	27,13	44,97	26,45	45,57	26,83	4,19	2,46	3,75	2,21	3,51	2,07
HOX-530	64,20	37,78	62,63	36,87	63,47	37,37	5,84	3,44	5,22	3,07	4,88	2,87
HOX-660	80,67	47,46	78,69	46,3	79,75	46,95	7,33	4,32	6,56	3,86	6,13	3,61
HOX-800	98,78	58,13	96,36	56,69	97,65	57,45	8,98	5,29	8,03	4,73	7,51	4,42
HOX-970	118,5	69,7	115,6	68,1	117,2	69	10,8	6,34	9,64	5,67	9,01	5,3
HOX-1210	148,2	87,3	144,5	85,1	146,5	86,2	13,5	7,93	12,04	7,09	11,27	6,63
HOX-1900	233	137	227,3	133,7	230,3	135,6	21,18	12,46	18,94	11,15	17,72	10,43
HOX-2310	283,3	166,6	276,3	162,7	280	164,8	25,75	15,16	23,03	13,56	21,54	12,68
HOX-2850	346,2	203,8	337,8	198,8	342,3	201,5	31,48	18,52	28,15	16,57	26,33	15,49
HOX-3810	468,1	275,6	456,7	268,9	462,8	272,3	42,56	25,04	38,06	22,4	35,6	20,95
HOX-4440	545,9	321,2	532,6	313,3	539,7	317,7	49,63	29,22	44,38	26,11	41,52	24,45
HOX-5350	654,4	385,4	638,4	375,7	647	380,9	59,5	35,03	53,2	31,31	49,77	29,28
HOX-6570	807,2	475,1	787,5	463,3	798,1	469,7	73,38	43,23	65,62	38,62	61,39	36,14
HOX-7700	946	556,8	922,9	543,2	935,3	550,4	86	50,62	76,91	45,28	71,95	42,34
HOX-9050	1109	652,7	1082	636,9	1097	645,4	100,8	59,3	90,19	53,07	84,37	49,66
HOX-13200	1621	953,9	1581	930,9	1603	942,7	147,3	86,8	131,8	77,5	123,3	72,5
HOX-15700	1928	1135	1881	1107	1906	1122	175,3	103,2	156,8	92,2	146,7	86,4
HOX-17700	2166	1275	2113	1244	2141	1260	196,9	115,9	176,1	103,6	164,7	97
HOX-21600	2646	1558	2581	1518	2616	1540	240,5	141,5	215,1	126,6	201,2	118,4

Inlet Temperature (°C)	10	15	20	25	30	35	40	45	-
F1	1	1	1	1	0,91	0,82	0,74	0,6	-
Inlet Pressure (bar)	6	6,5	7	7,5	8	8,5	9	9,5	10
F2	1	1	1	1	1,05	1,11	1,17	1,25	1,33

Correction Factor

To determine the oxygen generator model in the reference conditions, divide the oxygen flow rate to the related factors value.

Correct Model= (Oxygen Flow Rate) / (F1) / (F2)

HERTZ KOMPRESSOREN GLOBAL
export@hertz-kompressoren.com
www.hertz-kompressoren.com

HERTZ KOMPRESSOREN GmbH
Kronacherstr. 60, 96052 Bamberg
Tel: +49 951 96 43 13 88 Fax: +49 951 96 43 13 50
info@hertz-kompressoren.de

HERTZ KOMPRESSOREN USA Inc.
11910 Mount Holly-Huntersville Road
Huntersville, NC 28078 USA
Tel : +1 704 579 59 00 info@hertz-kompressoren.us