

Vertical INW G/GT Roots blowers with recirculated cooling



INW G/GT Roots blowers



INECO[®]

**Air and Vacuum
Components**

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1

Vertical INW G/GT Roots blowers with recirculated cooling

Advantages:

- > Air recirculation chamber
- > Anti-vibration check valve
- > Adjustable anti-vibration base
- > Two-stage inlet silencer
- > Stainless steel silencer material
- > 2 three-toothed rotors
- > Air-cooled blower
- > No-gear transmission
- > Quiet transmission and extreme low vibration energy, high efficiency
- > Vertical installation
- > Space-saving
- > Stable construction
- > Easy maintenance
- > Oil-free air transport, cleaner air

Application:

- > WWTP - wastewater treatment plants, aquaculture
- > Galvanization
- > Grain transport, paper production
- > Food industry
- > Chemical industry
- > Particularly suitable for installation in hospitals, schools, office buildings and wherever low noise is required

1

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Low vibration and long life

Roots blowers have a vertical construction - they are space-saving. The rotors are shaped with precise dynamic balance and the bearings are fixed with specific spring washers, which leads to motor vibrations of less than 15 µm. (It is possible to place the coin on the blower upright without falling.)

Beltless transfer

The INW G uses a specific shaft coupling to connect the blower to the motor, so there is no need to use a belt. As a result, there is no environmental pollution caused by belt dust during operation.

Silencer material

The silencer at the inlet is made of stainless steel - to prevent corrosion.

Two-stage noise suppression at the entrance

1

The combination of a silencer on the inlet and outlet pipes can effectively reduce the noise of the blower.

Air recirculation chamber

2

The accessories are cooled by recirculating cold air. By using natural air from the inlet, the bearing cools down quickly, so neither the bearings nor the lubricant can overheat, which prolongs the oil change time.

Return valve

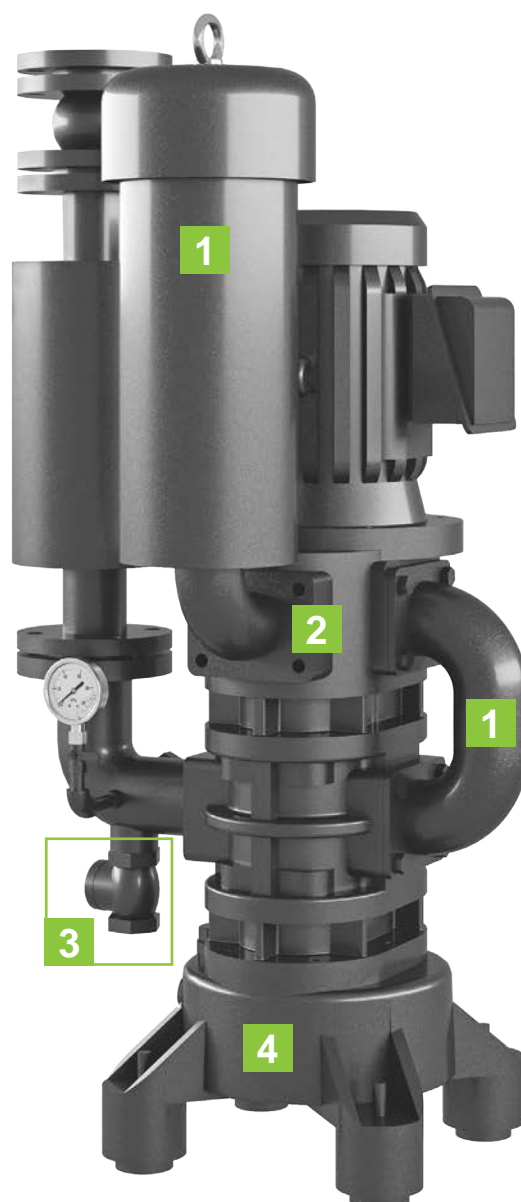
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If the motor rotates in the opposite direction, the blower is protected against being sucked back into the working chamber and consequent damage to the device.

Adjustable anti-vibration base

4

A special anti-vibration base ensures shock-free stability of the blower. If the position is uneven, the base can be adjusted to balance the blower.



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Performance table

Type	Input power (kW)	Max. pressure (mbar)	100 mbar		200 mbar		300 mbar		400 mbar		500 mbar		600 mbar	
			m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW
Three phases														
INW G40 H75	0,75	200	52	0,69	45,6	0,74								
INW G40 H15	1,5	500	52	0,69	45,6	0,74	39,8	0,8	34	0,87	27,6	0,96		
INW G50 H15	1,5	400	112,4	0,75	96,3	0,93	80,3	1,09	70,6	1,27				
INW G50 H22	2,2	600	112,4	0,75	96,3	0,93	80,3	1,09	70,6	1,27	59,1	1,5	44,9	1,63
INW G60 H22	2,2	400	154,1	1,5	134,8	1,7	128,4	1,8	115,6	1,9				
INW G60 H40	4	600	154,1	1,5	134,8	1,7	128,4	1,8	115,6	1,9	102,7	2,1	96,3	2,3
INW G75 H22	2,2	300	218,3	1,6	205,4	1,8	192,6	2						
INW G75 H40	4	600	218,3	1,6	205,4	1,8	192,6	2	173,3	2,2	160,5	2,5	147,7	2,8
INW G80 H40	4	300	288,9	2,5	272,9	2,9	250,4	3,1						
INW G80 H55	5,5	600	288,9	2,5	272,9	2,9	250,4	3,1	231,1	3,5	211,9	3,9	199	4,4
INW G90 H40	4	200	353,1	2,7	340,3	3,1								
INW G90 H55	5,5	500	353,1	2,7	340,3	3,1	321	3,7	301,7	4,2	282,5	4,7		
INW G90 H75	7,5	600	353,1	2,7	340,3	3,1	321	3,7	301,7	4,2	282,5	4,7	263,2	5,2
INW G100 H55	5,5	300	500,8	3,4	481,5	3,9	455,8	4,5						
INW G100 H75	7,5	500	500,8	3,4	481,5	3,9	455,8	4,5	436,6	5,6	417,3	6,1		
INW G100 H11	11	600	500,8	3,4	481,5	3,9	455,8	4,5	436,6	5,6	417,3	6,1	391,6	6,7
INW G110 H11	11	600	609,9	4,8	584,2	5,6	558,5	6,5	539,3	7,4	513,6	8,9	481,5	9,9
INW G125 H15	15	400	770,4	6,5	738,3	7,9	712,6	9,3	674,1	10,8				
INW G125 H18	18,5	600	770,4	6,5	738,3	7,9	712,6	9,3	674,1	10,8	648,4	12,7	609,9	14,6
INW G150 H22	22	500	1079	8,8	1059	10,6	1034	12,6	995,1	14,9	963	17,9		
INW G150 H30	30	600	1079	8,8	1059	10,6	1034	12,6	995,1	14,9	963	17,9	930,9	20,4
INW G160 H30	30	600	1541	11	1502	12,8	1470	15,4	1438	19,7	1400	23,5	1374	27,1
INW G200 H37	37	500	1823	13,8	1759	16,8	1714	20,3	1669	25,4	1611	29,8		
INW G200 H45	45	600	1823	13,8	1759	16,8	1714	20,3	1669	25,4	1611	29,8	1560	34,6
INW G210 H45	45	400	2472	17,5	2440	22,5	2388	27,5	2350	34,2				
INW G210 H55	55	600	2472	17,5	2440	22,5	2388	27,5	2350	34,2	2311	39,2	2260	44,2
Single phase														
INW G40 A75	0,75	200	52	0,69	45,6	0,74								
INW G40 A15	1,5	500	52	0,69	45,6	0,74	39,8	0,8	34	0,87	27,6	0,96		
INW G50 A15	1,5	400	112,4	0,75	96,3	0,93	80,3	1,09	70,6	1,27				

When controlling the blower speed with a frequency converter, the motor power may differ from the table values.

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Performance table

Type	Input power (kW)	Max. pressure (mbar)	100 mbar		200 mbar		300 mbar		400 mbar		500 mbar		600 mbar	
			m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW	m ³ /h	kW
Three phases														
INW GT32 H55	0,55	350	26,1	0,26	23,5	0,35	21,4	0,45						
INW GT45 H75	0,75	400	64,2	0,32	53,3	0,45	50,1	0,68	46,9	0,75				
INW GT45 H15	1,5	600	64,2	0,65	53,3	0,73	50,1	0,84	46,9	0,97	44,3	1,13	41,1	1,32
Single phase														
INW GT32 A55	0,55	300	26,1	0,26	23,5	0,35	21,4	0,45						
INW GT45 A75	0,75	400	64,2	0,32	53,3	0,45	50,1	0,68	46,9	0,75				
INW GT45 A15	1,5	600	64,2	0,65	53,3	0,73	50,1	0,84	46,9	0,97	44,3	1,13	41,1	1,32

Accessories supplied as part of the blower

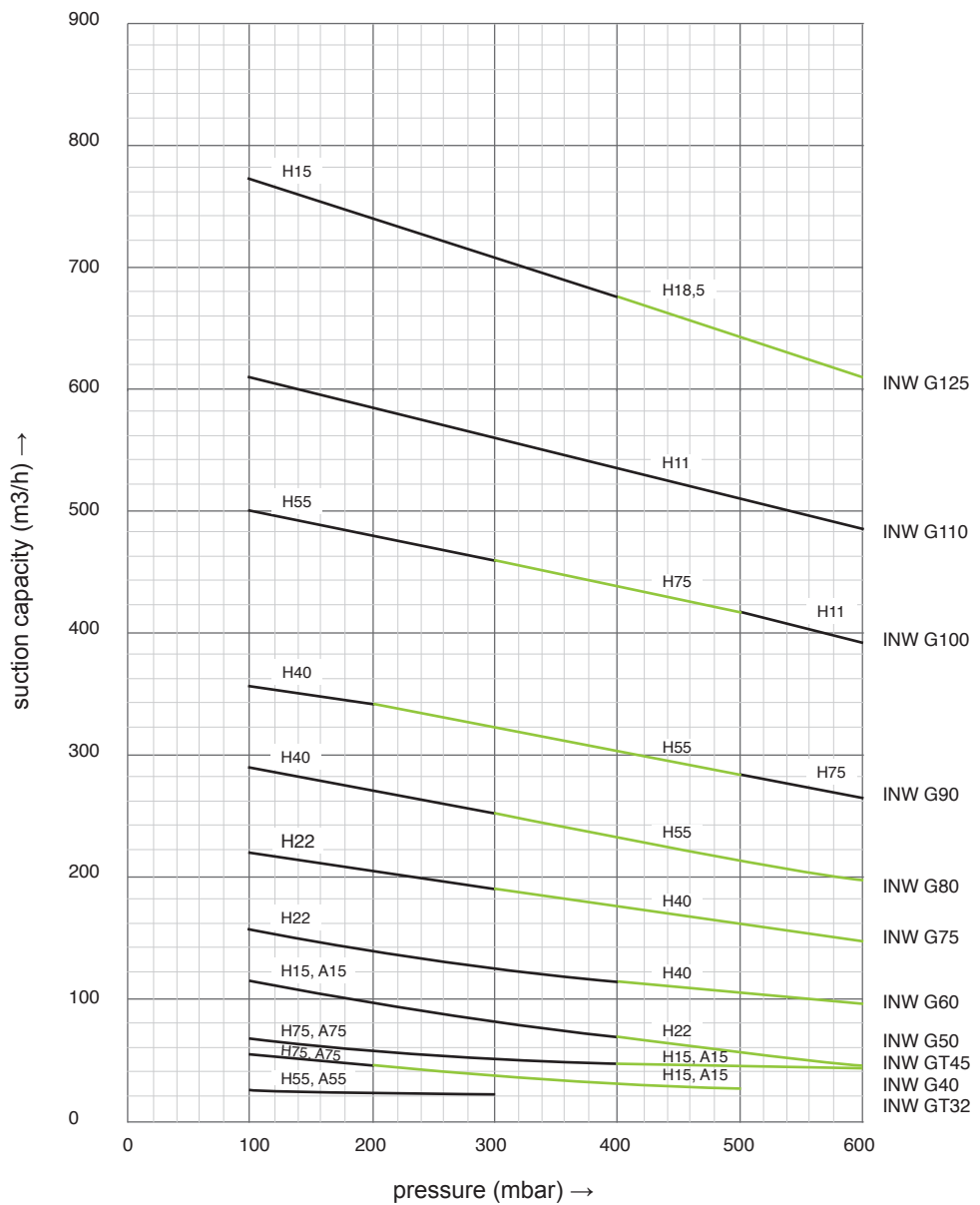
Model	INW G40, INW G50, INW G60, INW G75, INW G80, INW G90, INW G100, INW G110, INW G125, INW G150, INW G160, INW G200, INW G210	INW GT32, INW GT45
INW G/GT blower accessories	Main blower, Motor, Intel silencer, Air filter inlet, Outlet silencer, Flexible joint, Safety valve, Check valve, Pressure gauge, Anti vibration foot	Main blower, Motor, Intel silencer, Air filter inlet, Safety valve, Check valve, Pressure gauge, Anti vibration foot

Vertical INW G/GT Roots blowers with recirculated cooling

Performance curves

Operating curves (50 Hz)

Performance curves are defined for the air transportation with the temperature 15°C set for the suction by the atmospheric pressure 1013 mbar with the permissible deviation +/- 10%. Total pressure difference is valid for the temperature of the suction air and the ambient operating temperature 25°C.



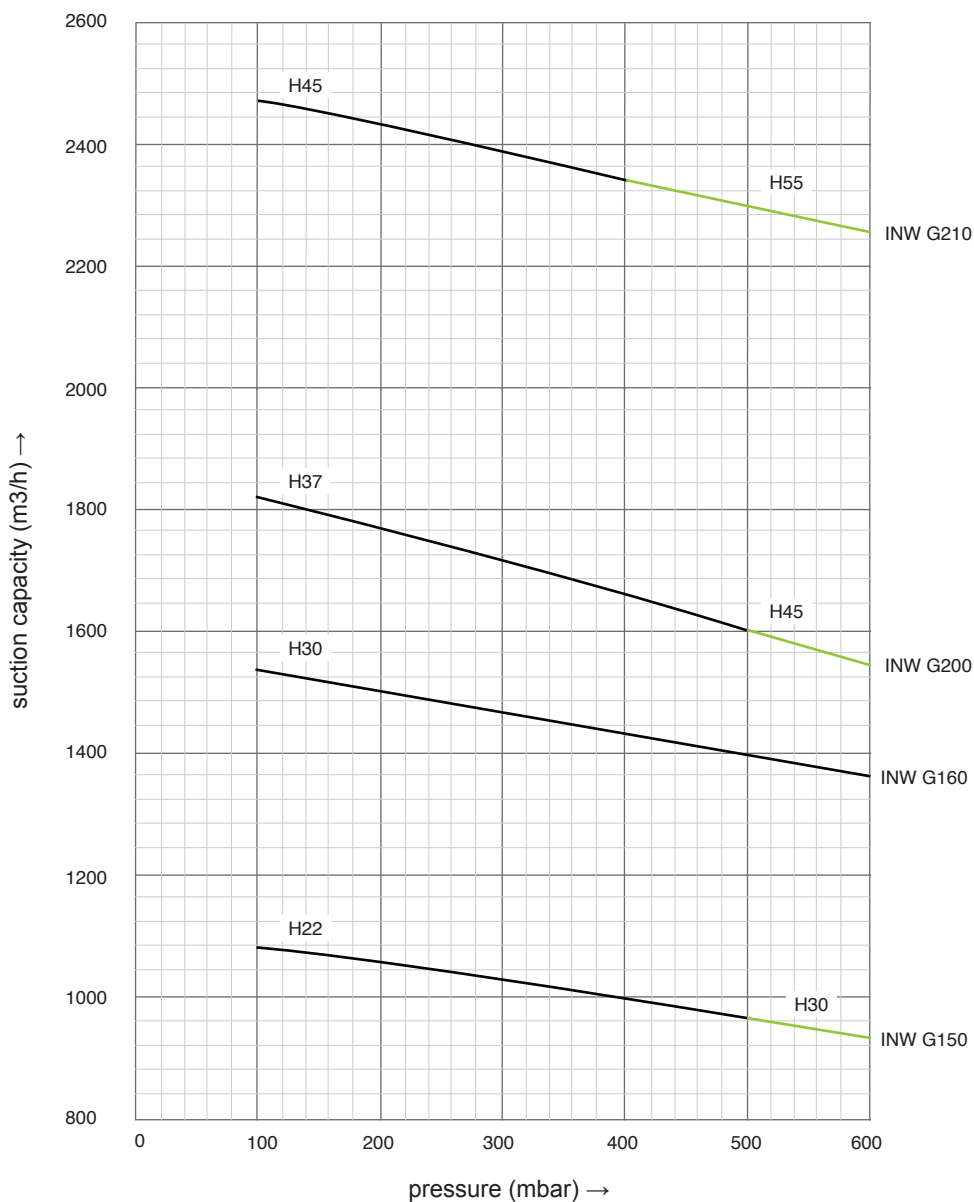
* Please request 60 Hz data

Vertical INW G/GT Roots blowers with recirculated cooling

Performance curves

Operating curves (50 Hz)

Performance curves are defined for the air transportation with the temperature 15°C set for the suction by the atmospheric pressure 1013 mbar with the permissible deviation +/- 10%. Total pressure difference is valid for the temperature of the suction air and the ambient operating temperature 25°C.



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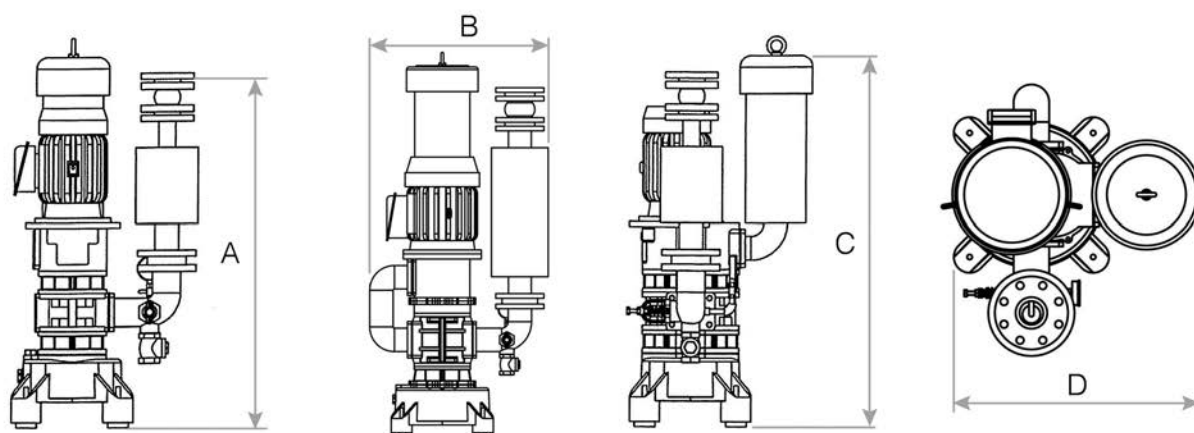
Vertical INW G Roots blowers with recirculated cooling

Dimensions / Noise / Volume of oil

Type	A (mm)	B (mm)	C (mm)	D (mm)	Blower connection JIS 10K	Weight (kg)	Noise (dB)	Gear oil volume (ml)
Three phases								
INW G40 H75	275	535	930	480	1 1/2"	99	54	2500
INW G40 H15	275	535	930	480	1 1/2"	106	56	2500
INW G50 H15	1020	550	984	480	1 1/2"	144	58	2500
INW G50 H22	1020	550	984	480	1 1/2"	157	59	2500
INW G60 H22	1050	550	1040	480	2"	165	62	2500
INW G60 H40	1050	550	1040	480	2"	174	63	2500
INW G75 H22	1130	590	1090	480	2 1/2"	180	64	2500
INW G75 H40	1130	590	1090	480	2 1/2"	190	67	2500
INW G80 H40	1120	630	1350	550	2 1/2"	230	68	5500
INW G80 H55	1120	630	1350	550	2 1/2"	243	69	5500
INW G90 H40	1335	685	1420	620	3"	250	68	5500
INW G90 H55	1335	685	1420	620	3"	263	69	5500
INW G90 H75	1335	685	1420	620	3"	274	72	5500
INW G100 H55	1350	755	1470	620	4"	295	73	5500
INW G100 H75	1350	755	1470	620	4"	300	75	5500
INW G100 H11	1350	755	1470	620	4"	346	77	5500
INW G110 H11	1665	835	1625	695	5"	370	80	5500
INW G125 H15	1670	855	1685	755	5"	505	82	10000
INW G125 H18	1670	855	1685	755	5"	560	85	10000
INW G150 H22	2140	1132	2180	946	6"	741	88	10200
INW G150 H30	2140	1132	2180	946	6"	770	89	10200
INW G160 H30	2182	1132	2269	946	6"	849	90	10200
INW G200 H37	2288	1132	2379	946	8"	1165	91	10200
INW G200 H45	2288	1132	2379	946	8"	1165	92	10200
INW G210 H45	2862	1418	3290	1520	8"	1658	94	18000
INW G210 H55	2862	1418	3290	1520	8"	1746	95	18000
Single phase								
INW G40 H75	275	535	930	480	1 1/2"	99	54	2500
INW G40 A15	275	535	930	480	1 1/2"	106	56	2500
INW G50 A15	1020	550	984	480	1 1/2"	144	58	2500

Vertical INW G Roots blowers with recirculated cooling

Dimensions / Noise / Volume of oil

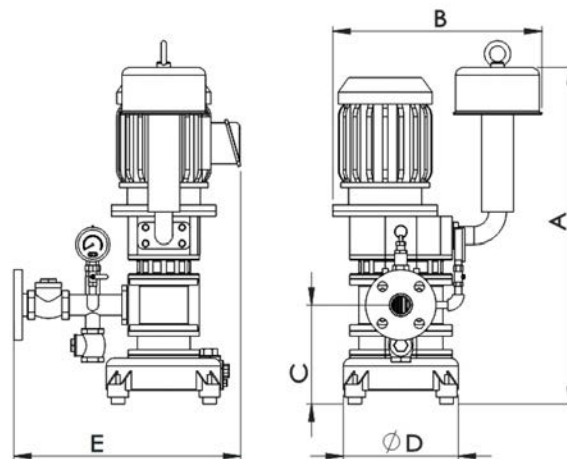
INW G40 - INW G210

Vertical INW GT Roots blowers with recirculated cooling

Dimensions / Noise / Volume of oil

Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Blower connection JIS 10K	Weight (kg)	Noise (dB)	Gear oil volume (ml)
Three phases									
INW GT32 H55	650	400	200	220	430	1 1/4"	54	56	850
INW GT45 H75	860	400	230	220	470	1 1/2"	71	58	1100
INW GT45 H15	860	400	230	220	470	1 1/2"	75	61	1100
Single phase									
INW GT32 A55	650	400	200	220	430	1 1/4"	54	56	850
INW GT45 A75	860	400	230	220	470	1 1/2"	71	58	1100
INW GT45 A15	860	400	230	220	470	1 1/2"	75	61	1100

INW GT32 - INW GT45



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IN-ECO, spol. s r.o.
Radlinského 13
034 01 Ružomberok
Slovak Republic

T +421 44 4304662
E info@in-eco.eu

Notes

Place for your notes

INECO®

IN-ECO, spol. s r.o.
Radlinského 13
034 01 Ružomberok
Slovak Republic
T +421 44 4304662
E info@in-eco.eu
www.in-eco.eu

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