

Positive Displacement Blowers NX Series

Better by design

With experience dating back more than a century, Ingersoll Rand Air Solutions **hibon** has supplied with great success to the market a world-class range of air blowers and vacuum equipment used to provide air/gas volumes at varying pressures above atmospheric, and for vacuum duties.

Continuous research and development of the **hibon** Product range has led to the introduction of the new NX Series of bareshaft blowers.

Their new design incorporates the benefits of improved assembly, lifetime reliability, competitive solution and interchangeability with the previous range.

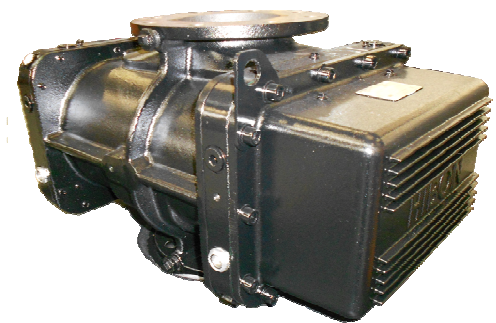
Range	From	Up to
NX2, NX3 & NX5	100 m ³ /h	1 570 m ³ /h*
NX 8 & NX 12	400 m ³ /h	2 822 m ³ /h*
NX 18 & NX 26	700 m ³ /h	4 635 m ³ /h*
NX 43	1 800 m ³ /h	6 492 m ³ /h*
NX 54	1 950 m ³ /h	7 820 m ³ /h*
NX 80	3 400 m ³ /h	9 700 m ³ /h*
NX 100	4 200 m ³ /h	11 400 m ³ /h*
NX120	5 000 m ³ /h	13 000 m ³ /h*

Pressure up to 1 bar g. — Vacuum up to 500 mbar

* At maximum speed, except internal leak of the machine.

Benefits

- High mechanical and volumetric efficiency.
- Auto-adjustments of the lateral clearance to improve repeatability.
- Lifetime reliability.
- 100% oil free operation.
- Blowers without maintenance for 40 000 hours (except oil each year or every two years if you use HIBON LUBE).
- Interchangeable with the previous range.
- Lifting lugs.
- Option: Mounting feet.



Material of construction

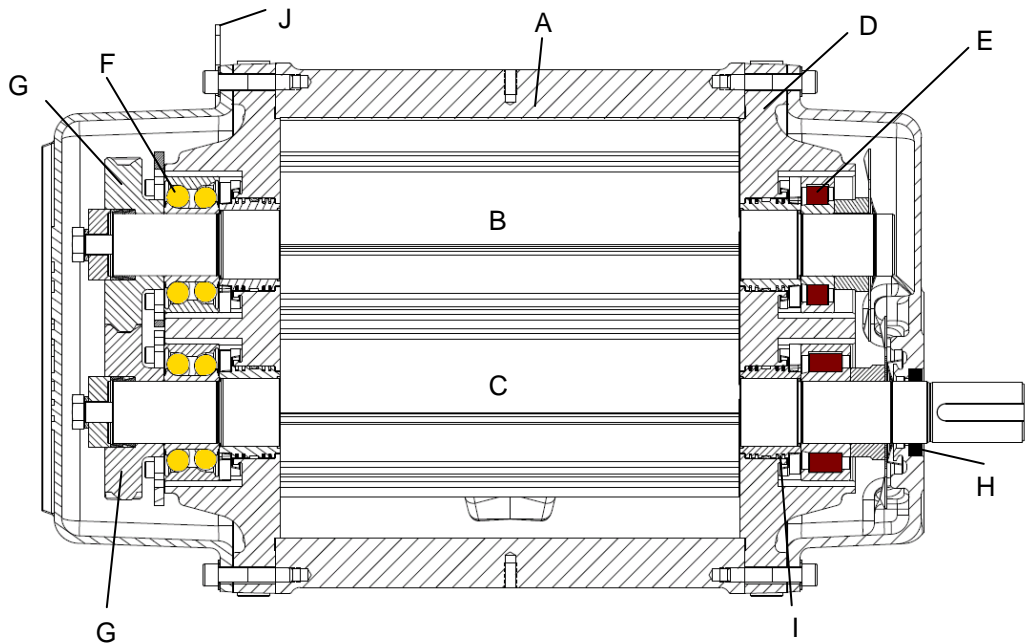
Part	European
Rotor housing	EN-GJL 200
Head plate	EN-GJL 250
Rotors	EN-GJS-400-15
Impeller from NX 43	XC 48
Gears	42 Cr Mo4

Features

- **Rotors:** One-piece three-Lobe rotors. Shrinked-on impeller (from NX 43)
- **Gears:** Helical gears located on the opposite drive side.
- **Bearings:** Four sized bearings for lifetime reliability.
- **Oil reservoir:** Large oil reservoir for improved bearing lubrication.
- **Oil thrower:** Oil thrower and oil passages for good bearing lubrication and long life.
- **Seals:** Four piston ring seals plus a shoulder by sealing for totally oil free operation.
- **Shaft seals:** Dynamic shaft seals arrangement.

Part description

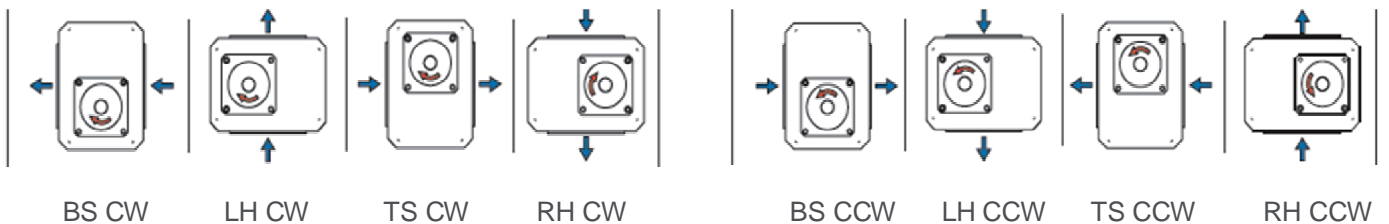
A	Housing
B	Driven Rotor
C	Driver Rotor
D	Head Plate
E	Roller bearings
F	Ball bearings
G	Gears
H	SCP ring
I	Piston ring seals
J	Lifting lugs



Main application

- Water Treatment
- Pneumatic conveying
- Fluidisation
- Flue gas desulphurisation...
- Cement Work
- Metallurgy
- Food industries
- Chemical, petrochemical industries...

Configurations



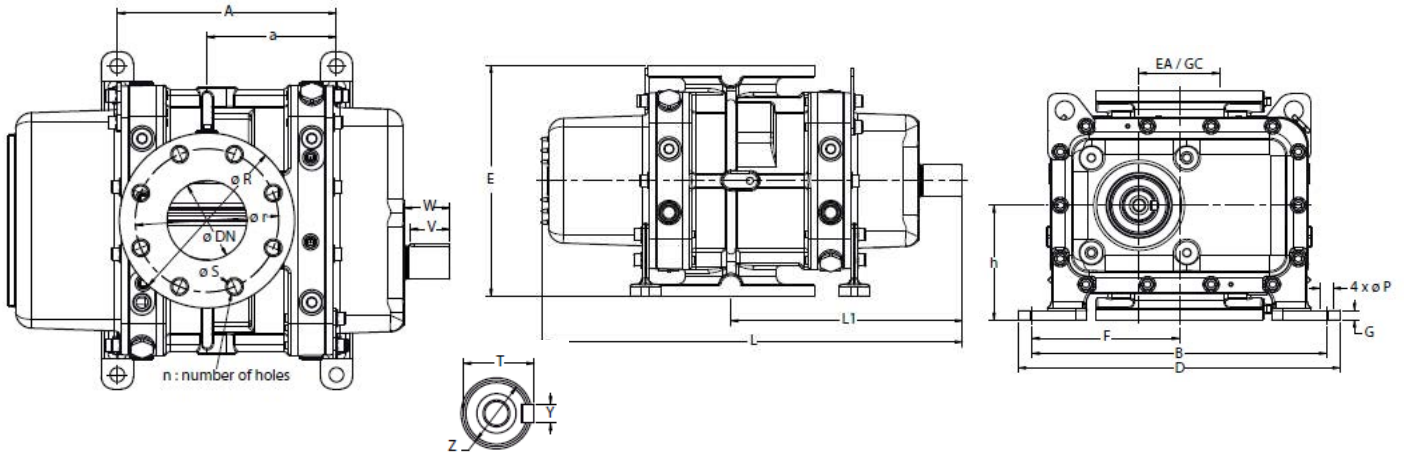
 Direction of drive shaft rotation

RH = Right Hand
 LH = Left Hand
 BS = Bottom Shaft
 TS = Top Shaft

CCW = Counter CW
 CW = CW

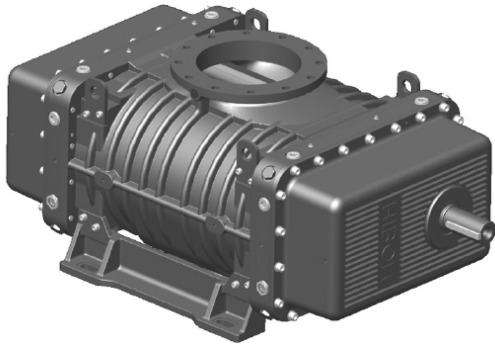


Dimensions (LH-Left hand or RH-Right Hand)

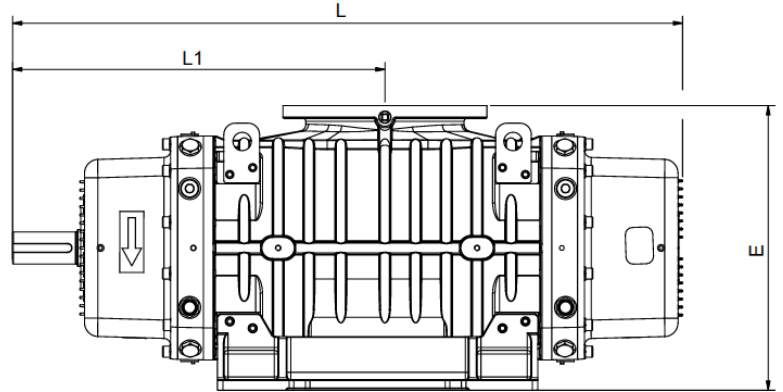
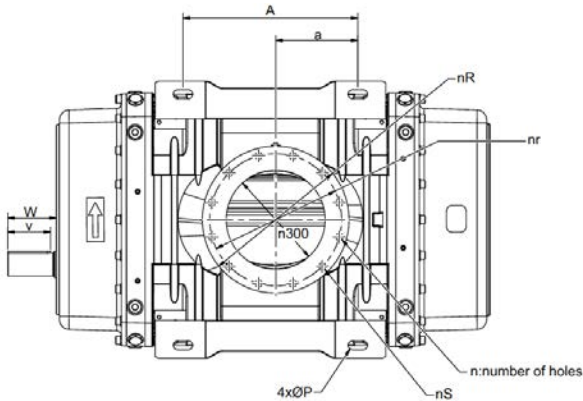


	NX 2		NX 3		NX 5		NX 8		NX 12		NX 18		NX 26	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
A	205	8.07	275	10.83	370	14.57	355	13.98	476	18.74	444	17.48	589	23.19
a	103	4.04	163	6.40	213	8.39	208	8.19	278	10.94	222	8.74	339.5	13.37
B	388	15.28	388	15.28	388	15.28	475	18.70	475	18.70	586	23.07	586	23.07
D	424	16.69	424	16.69	424	16.69	515	20.28	515	20.28	626	24.65	626	24.65
E	305	12.01	305	12.01	305	12.01	370	14.57	370	14.57	450	17.72	450	17.72
GC	106	4.17	106	4.17	106	4.17	135	5.31	135	5.31	173	6.81	173	6.81
F	194	7.64	194	7.64	194	7.64	238	9.37	238	9.37	293	11.54	293	11.54
G	13	0.51	13	0.51	13	0.51	13	0.51	13	0.51	15	0.59	15	0.59
h	153	6.00	153	6.00	153	6.00	185	7.28	185	7.28	225	8.86	225	8.86
L	485	19.09	555	21.85	650	25.59	671	26.42	791	31.14	848	33.39	993	39.09
L1	245	9.65	305	12.01	356	14.02	385	15.16	454	17.87	441	17.36	559	22.01
T	45	1.77	45	1.77	45	1.77	51,5	2.03	51,5	2.03	69	2.72	69	2.72
V	50	1.97	50	1.97	50	1.97	70	2.76	70	2.76	90	3.54	90	3.54
W	57	2.24	57	2.24	58	2.28	81	3.19	80	3,15	102	4.02	102	4.02
Y	12	0.47	12	0.47	12	0.47	14	0.55	14	0.55	18	0.71	18	0.71
ØZ*	42	1.65	42	1.65	42	1.65	48	1.89	48	1.89	65	2.56	65	2.56
ØR	200	7.87	220	8.66	220	8.66	250	9.84	285	11.22	340	13.39	340	13.39
Ør	160	6.30	180	7.09	180	7.09	210	8.27	240	9.45	295	11.61	295	11.61
ØDN	80	3.15	100	3.94	100	3.94	125	4.92	150	5.91	200	7.87	200	7.87
ØP	18	0.71	18	0.71	18	0.71	18	0.71	18	0.71	22	0.87	22	0.87
ØS	18	0.71	18	0.71	18	0.71	18	0.71	22	0.87	22	0.87	22	0.87
n	8		8		8		8		8		8		8	
Weight (kg /lb)	112	247	126	278	146	322	211	465	258	569	415	915	480	1058

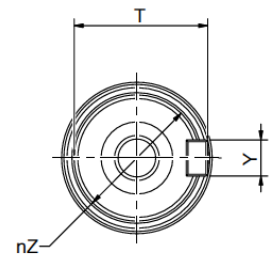
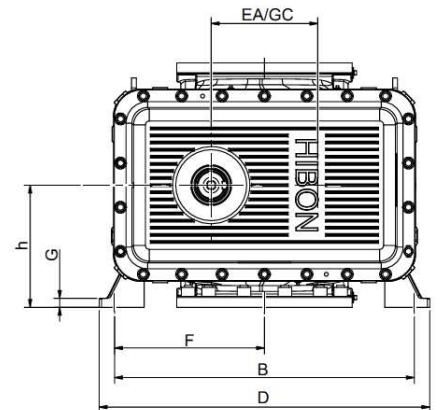
* Fitting tolerance range : m6



Dimensions (LH-Left hand or RH-Right Hand)



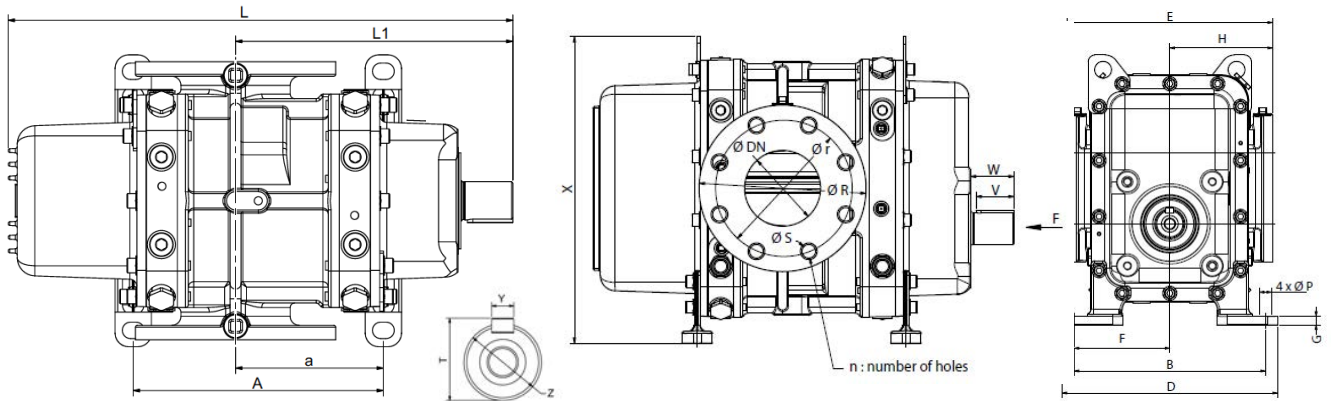
	NX 43		NX 54		NX 80		NX 100		NX 120	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
A	375	14.76	450	17.72	430	16.93	530	20.87	680	26.77
a	217.5	8.56	245	9.65	229	9.02	281	11.06	356	14.02
B	600	23.62	660	25.98	730	28.74	760	29.92	760	29.92
D	667	26.26	727	28.62	810	31.89	838	32.99	838	32.99
E	540	21.26	540	21.26	620	24.41	620	24.41	620	24.41
GC	217	8.54	217	8.54	270	10.63	270	10.63	270	10.63
F	300	11.81	330	12.99	365	14.37	380	14.96	380	14.96
G	21	0.83	23	0.91	23	0.91	23	0.91	23	0.91
h	270	10.63	270	10.63	310	12.20	310	12.20	310	12.20
L	1159	45.63	1287	50.67	1316	51.81	2462	96.93	1611	63.43
L1	660	25.98	717	28.23	737	29.02	812	31.97	887	34.92
T	69	2.72	74.5	2.93	74.5	2.93	74.5	2.93	74.5	2.93
V	105	4.13	105	4.13	130	5.12	130	5.12	130	5.12
W	124	4.88	125	4.92	146	5.75	147	5.79	146	5.75
Y	18	0.71	20	0.79	20	0.79	20	0.79	20	0.79
ØZ*	65	2.56	70	2.76	70	2.76	70	2.76	70	2.76
ØR	395	15.55	395	15.55	445	17.52	445	17.52	505	19.88
Ør	350	13.78	350	13.78	300	11.81	400	15.75	460	18.11
ØDN	250	9.84	22	9.84	300	11.81	300	11.81	350	13.78
ØP	27	1.06	27	1.06	27	1.06	27	1.06	27	1.06
ØS	22	0.87	22	0.87	12	0.47	22	0.87	22	0.87
n	12		12		12		12		16	
Weight (kg/lb)	775	1708	1036	2284	1250	2756	1487	3278	1654	3646



* Fitting tolerance range : m6



Dimensions NX (TS - Top Shaft or BS - Bottom Shaft)

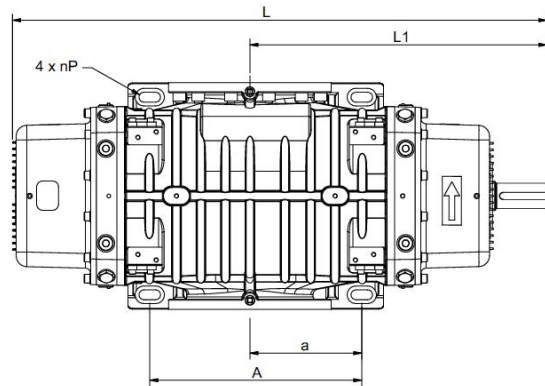
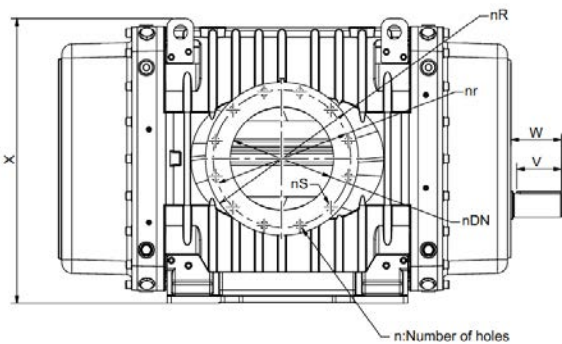


	NX 2		NX 3		NX 5		NX 8		NX 12		NX 18		NX 26	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
A	205	8.07	275	10.83	370	14.57	355	13.98	476	18.74	444	17.48	589	23.19
a	103	4.04	163	6.40	213	8.39	208	8.19	278	10.94	222	8.74	339.5	13.37
B	284	11.18	284	11.18	284	11.18	336	13.23	336	13.23	414	16.30	414	16.30
D	320	12.60	320	12.60	320	12.60	376	14.80	376	14.80	454	17.87	454	17.87
E	305	12.01	305	12.01	305	12.01	370	14.57	370	14.57	450	17.72	450	17.72
GC	106	4.17	106	4.17	106	4.17	135	5.31	135	5.31	173	6.81	173	6.81
F	142	5.59	142	5.59	142	5.59	168	6.61	168	6.61	207	8.15	207	8.15
G	13	0.51	13	0.51	13	0.51	13	0.51	13	0.51	15	0.59	15	0.59
H	153	6.00	153	6.00	153	6.00	185	7.28	185	7.28	225	8.86	225	8.86
h	152	5.96	152	5.96	152	5.96	187	7.36	187	7.36	225	8.84	224.5	8.84
L	485	19.09	555	21.85	650	25.59	671	26.42	791	31.14	848	33.39	993	39.09
L1	245	9.65	305	12.01	356	14.02	385	15.16	454	17.87	441	17.36	559	22.01
T	45	1.77	45	1.77	45	1.77	51.5	2.03	51.5	2.03	69	2.72	69	2.72
V	50	1.97	50	1.97	50	1.97	70	2.76	70	2.76	90	3.54	90	3.54
W	57	2.24	57	2.24	58	2.28	81	3.19	80	3.15	102	4.02	102	4.02
X	405	15.93	405	15.93	405	15.93	499	19.65	499	19.65	621	24.45	621	24.45
Y	12	0.47	12	0.47	12	0.47	14	0.55	14	0.55	18	0.71	18	0.71
ØZ*	42	1.65	42	1.65	42	1.65	48	1.89	48	1.89	65	2.56	65	2.56
ØR	200	7.87	220	8.66	220	8.66	250	9.84	285	11.22	340	13.39	340	13.39
Ør	160	6.30	180	7.09	180	7.09	210	8.27	240	9.45	295	11.61	295	11.61
ØDN	80	3.15	100	3.94	100	3.94	125	4.92	150	5.91	200	7.87	200	7.87
ØP	18	0.71	18	0.71	18	0.71	18	0.71	18	0.71	22	0.87	22	0.87
ØS	18	0.71	18	0.71	18	0.71	18	0.71	22	0.87	22	0.87	22	0.87
n	8		8		8		8		8		8		8	
Weight (kg/lb)	112	247	126	278	146	322	211	465	258	569	415	915	480	1058

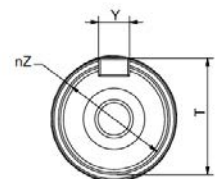
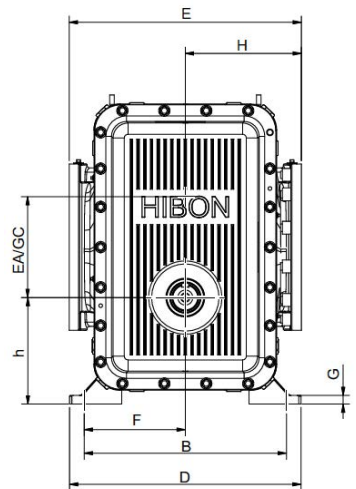
* Fitting tolerance range : m6



Dimensions NX (TS - Top Shaft or BS - Bottom Shaft)



	NX 43		NX 54		NX 80		NX 100		NX 120	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
A	375	14.76	450	17.72	430	16.93	550	22.83	730	28.74
a	217.5	8.56	245	9.65	229	9.02	306	12.05	381	15
B	460	18.11	660	25.98	250	9.84	540	21.26	540	21.26
D	530	20.87	330	12.99	618	24.33	618	24.33	615	24.33
E	540	21.26	540	21.26	620	24.41	620	24.41	620	24.41
GC	217	8.54	217	8.54	270	10.63	270	10.63	270	10.63
F	230	9.06	330	12.99	270	10.63	270	10.63	270	10.63
G	23	0.91	23	0.91	23	0.91	23	0.91	23	0.91
H	270	10.63	270	10.63	310	12.20	310	12.20	310	12.20
h	235	9.25	270	10.63	285	11.22	285	11.22	285	11.22
L	1159	45.63	1287	50.67	1316	51.81	2462	96.93	1611	63.43
L1	660	25.98	717	28.23	737	29.02	812	31.97	887	34.92
T	69	2.72	74.5	2.93	74.5	2.93	74.5	2.93	74.5	2.93
V	105	4.13	105	4.13	130	5.12	130	5.12	130	5.12
W	124	4.88	125	4.92	146	5.75	147	5.79	146	5.75
X	681	26.81	731	28.78	827	32.56	827	32.56	827	32.56
Y	18	0.71	20	0.79	20	0.79	20	0.79	20	0.79
ØZ*	65	2.56	70	2.76	70	2.76	70	2.76	70	2.76
ØR	395	15.55	395	15.55	445	17.52	445	17.52	505	19.88
Ør	350	13.78	350	13.78	300	11.81	400	15.75	460	18.11
ØDN	250	9.84	250	9.84	300	11.81	300	11.81	350	13.78
ØP	27	1.06	27	1.06	27	1.06	27	1.06	27	1.06
ØS	22	0.87	22	0.87	12	0.47	22	0.87	22	0.87
n	12		12		12		12		16	
Weight (kg/lb)	775	1708	1036	2284	1250	2756	1487	3278	1654	3646



* Fitting tolerance range : m6

Part numbers

Blower model	Shaft position	Rotation direction	Standard blowers	
			Without Feet	With Feet
NX 2	Bottom	CCW	F014 150 110	F0141 501 101
	Bottom	CW	F014 150 111	F0141 501 111
	Top	CCW	F014 150 120	F0141 501 201
	Top	CW	F014 150 121	F0141 501 211
	Left	CCW	F014 150 100	F0141 501 001
	Left	CW	F014 150 101	F0141 501 011
	Right	CCW	F014 150 130	F0141 501 301
	Right	CW	F014 150 131	F0141 501 311
NX 3	Bottom	CCW	F014 160 110	F0141 601 101
	Bottom	CW	F014 160 111	F0141 601 111
	Top	CCW	F014 160 120	F0141 601 201
	Top	CW	F014 160 121	F0141 601 211
	Left	CCW	F014 160 100	F0141 601 001
	Left	CW	F014 160 101	F0141 601 011
	Right	CCW	F014 160 130	F0141 601 301
	Right	CW	F014 160 131	F0141 601 311
NX 5	Bottom	CCW	F014 170 110	F0141 701 101
	Bottom	CW	F014 170 111	F0141 701 111
	Top	CCW	F014 170 120	F0141 701 201
	Top	CW	F014 170 121	F0141 701 211
	Left	CCW	F014 170 100	F0141 701 001
	Left	CW	F014 170 101	F0141 701 011
	Right	CCW	F014 170 130	F0141 701 301
	Right	CW	F014 170 131	F0141 701 311
NX 8	Bottom	CCW	F015 100 110	F0151 001 101
	Bottom	CW	F015 100 111	F0151 001 111
	Top	CCW	F015 100 120	F0151 001 201
	Top	CW	F015 100 121	F0151 001 211
	Left	CCW	F015 150 100	F0151 501 001
	Left	CW	F015 150 101	F0151 501 011
	Right	CCW	F015 150 130	F0151 501 301
	Right	CW	F015 150 131	F0151 501 311
NX 12	Bottom	CCW	F015 120 110	F0151 201 101
	Bottom	CW	F015 120 111	F0151 201 111
	Top	CCW	F015 120 120	F0151 201 201
	Top	CW	F015 120 121	F0151 201 211
	Left	CCW	F015 170 100	F0151 701 001
	Left	CW	F015 170 101	F0151 701 011
	Right	CCW	F015 170 130	F0151 701 301
	Right	CW	F015 170 131	F0151 701 311
NX 18	Bottom	CCW	F016 150 110	F0161 501 101
	Bottom	CW	F016 150 111	F0161 501 111
	Top	CCW	F016 150 120	F0161 501 201
	Top	CW	F016 150 121	F0161 501 211
	Left	CCW	F016 150 100	F0161 501 001
	Left	CW	F016 150 101	F0161 501 011
	Right	CCW	F016 150 130	F0161 501 301
	Right	CW	F016 150 131	F0161 501 311
NX 26	Bottom	CCW	F016 170 110	F0161 701 101
	Bottom	CW	F016 170 111	F0161 701 111
	Top	CCW	F016 170 120	F0161 701 201
	Top	CW	F016 170 121	F0161 701 211
	Left	CCW	F016 170 100	F0161 701 001
	Left	CW	F016 170 101	F0161 701 011
	Right	CCW	F016 170 130	F0161 701 301
	Right	CW	F016 170 131	F0161 701 311

Blower model	Shaft position	Rotation direction	Standard blowers			
			Without Feet		With Feet	
NX 43	Bottom	CCW	-	-	F0171 601 101	A
	Bottom	CW	-	-	F0171 601 111	B
	Top	CCW	-	-	F0171 601 201	C
	Top	CW	-	-	F0171 601 211	D
	Left	CCW	-	-	F0171 601 001	E
	Left	CW	-	-	F0171 601 011	F
	Right	CCW	-	-	F0171 601 301	G
	Right	CW	-	-	F0171 601 311	H
NX 54	Bottom	CCW	-	-	F0171 701 101	A
	Bottom	CW	-	-	F0171 701 111	B
	Top	CCW	-	-	F0171 701 201	C
	Top	CW	-	-	F0171 701 211	D
	Left	CCW	-	-	F0171 701 001	E
	Left	CW	-	-	F0171 701 011	F
	Right	CCW	-	-	F0171 701 301	G
	Right	CW	-	-	F0171 701 311	H
NX 80	Bottom	CCW	-	-	F0181 601 101	A
	Bottom	CW	-	-	F0181 601 111	B
	Top	CCW	-	-	F0181 601 201	C
	Top	CW	-	-	F0181 601 211	D
	Left	CCW	-	-	F0181 601 001	E
	Left	CW	-	-	F0181 601 011	F
	Right	CCW	-	-	F0181 601 301	G
	Right	CW	-	-	F0181 601 311	H
NX 100	Bottom	CCW	-	-	F0181 701 101	A
	Bottom	CW	-	-	F0181 701 111	B
	Top	CCW	-	-	F0181 701 201	C
	Top	CW	-	-	F0181 701 211	D
	Left	CCW	-	-	F0181 701 001	E
	Left	CW	-	-	F0181 701 011	F
	Right	CCW	-	-	F0181 701 301	G
	Right	CW	-	-	F0181 701 311	H
NX 120	Bottom	CCW	-	-	F0181 801 101	A
	Bottom	CW	-	-	F0181 801 111	B
	Top	CCW	-	-	F0181 801 201	C
	Top	CW	-	-	F0181 801 211	D
	Left	CCW	-	-	F0181 801 001	E
	Left	CW	-	-	F0181 801 011	F
	Right	CCW	-	-	F0181 801 301	G
	Right	CW	-	-	F0181 801 311	H



Nothing contained on this leaflet is intended to extend any warranty or representation, expressed or implied, regarding the product described herein. Any such warranties or other terms and conditions of sale of product shall be in accordance with Ingersoll Rand's standard terms and conditions of sale for such products, which are available upon request. Product improvement is a continuing goal at Ingersoll Rand. Designs and specification are subject to change without notice or obligation.

HIBON is a brand of Ingersoll Rand. Ingersoll Rand (NYSE:IR) advances the quality of life by creating and sustaining safe, comfortable and efficient environments. Our people and our family of brands work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; secure homes and commercial properties; and increase industrial productivity and efficiency. We are a \$14 billion global business committed to a world of sustainable progress and enduring results. For more information, visit ingersollrand.com or www.hibon.com



Authorized Hibon Distributor, Service & Repair Facility
 120 – 10293 276 ST, Acheson, Alberta, Canada T7X 6A5
 T: 780.962.1827 F: 780.962.1830 E: sales@fraserwoods.ca
www.fraserwoods.ca