

DSR-G Series Roots Blower

Product Introduce

Roots Blower

High efficiency tri-lobe rotor,
quiet running, small outline,
easy maintenance, low vibration.



DICHENG DSR-G Series Roots Blowers adopts the advanced technology of Japan, its air capacity is 0.45m³/min - 172.4m³/min, the pressure is from 63.7Kpa to 98Kpa. The main characteristic of our air blower is small volume, light weight, flow strong, noise small, steadily reliable operation. This air blower is mainly applied to such trades as water treatment, air transport, mine, vacuum packaging, aquaculture and etc. Our products export to Southeast Asia, Europe, North and South America and etc.

Product Feature



1. Air flow and pressure can be customized
2. Stable air flow and less pressure variation
3. Clean air not with oil moist
4. Construction simple and easy maintenance
5. Bearing are all lubricated by oil moist
6. Long service life

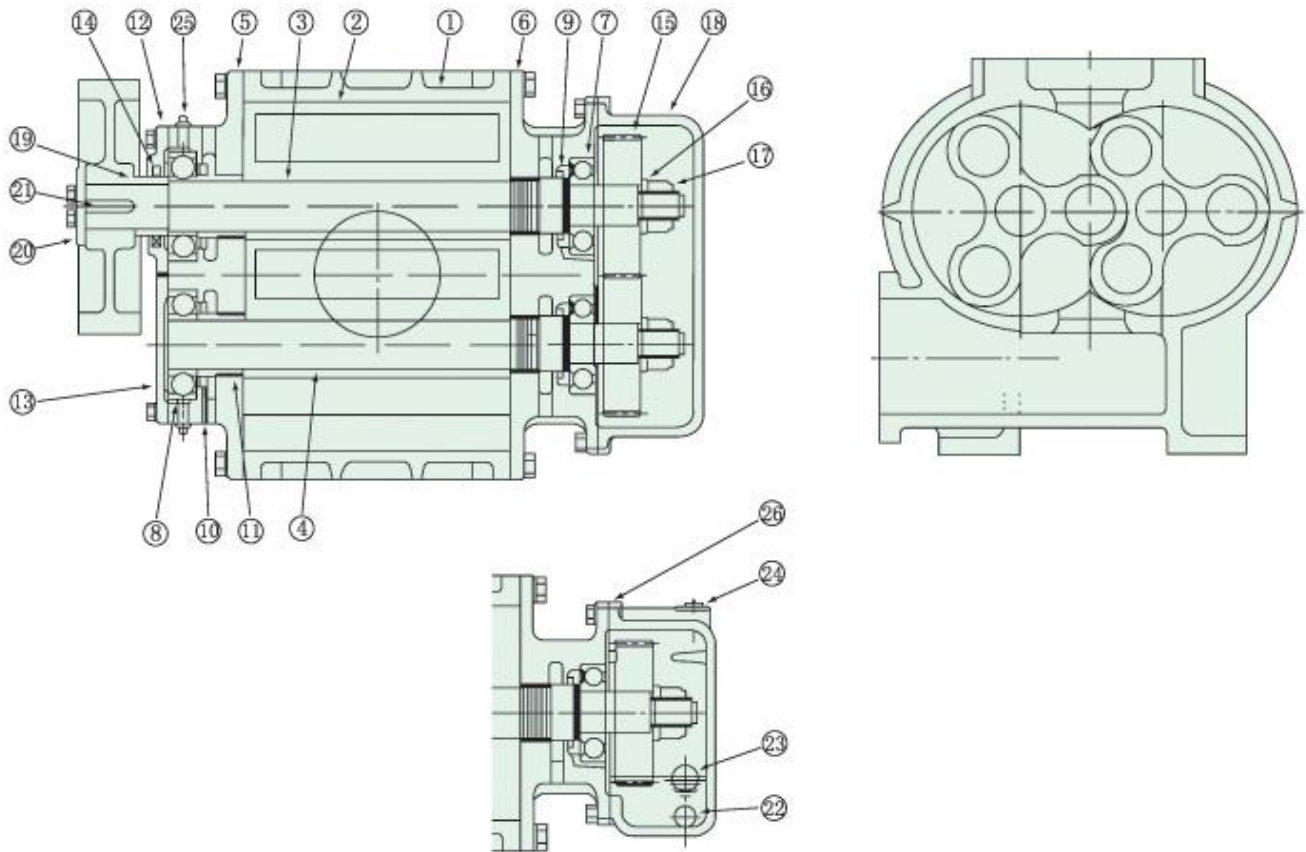
Blower Selection

DSR-G High Pressure Tri-lobe Roots Blower

DSR50G	0.45-2.31m ³ /min	63.7-98Kpa
DSR65G	0.78-3.09m ³ /min	63.7-98Kpa
DSR80G	1.82-5.26m ³ /min	63.7-98Kpa
DSR100G	2.65-8.65m ³ /min	63.7-98Kpa
DSR125G	4.64-12.23m ³ /min	63.7-98Kpa
DSR150G	9.53-28.35m ³ /min	63.7-98Kpa
DSR200DG	19.60-44.49m ³ /min	63.7-98Kpa
DSR200G	25.34-56.92m ³ /min	63.7-98Kpa
DSR250G	58.0-93.7m ³ /min	63.7-98Kpa
DSR300G	83.8-134.1m ³ /min	63.7-98Kpa
DSR300AG	66.18-144.1m ³ /min	63.7-98Kpa
DSR350G	97.9-172.4m ³ /min	63.7-98Kpa



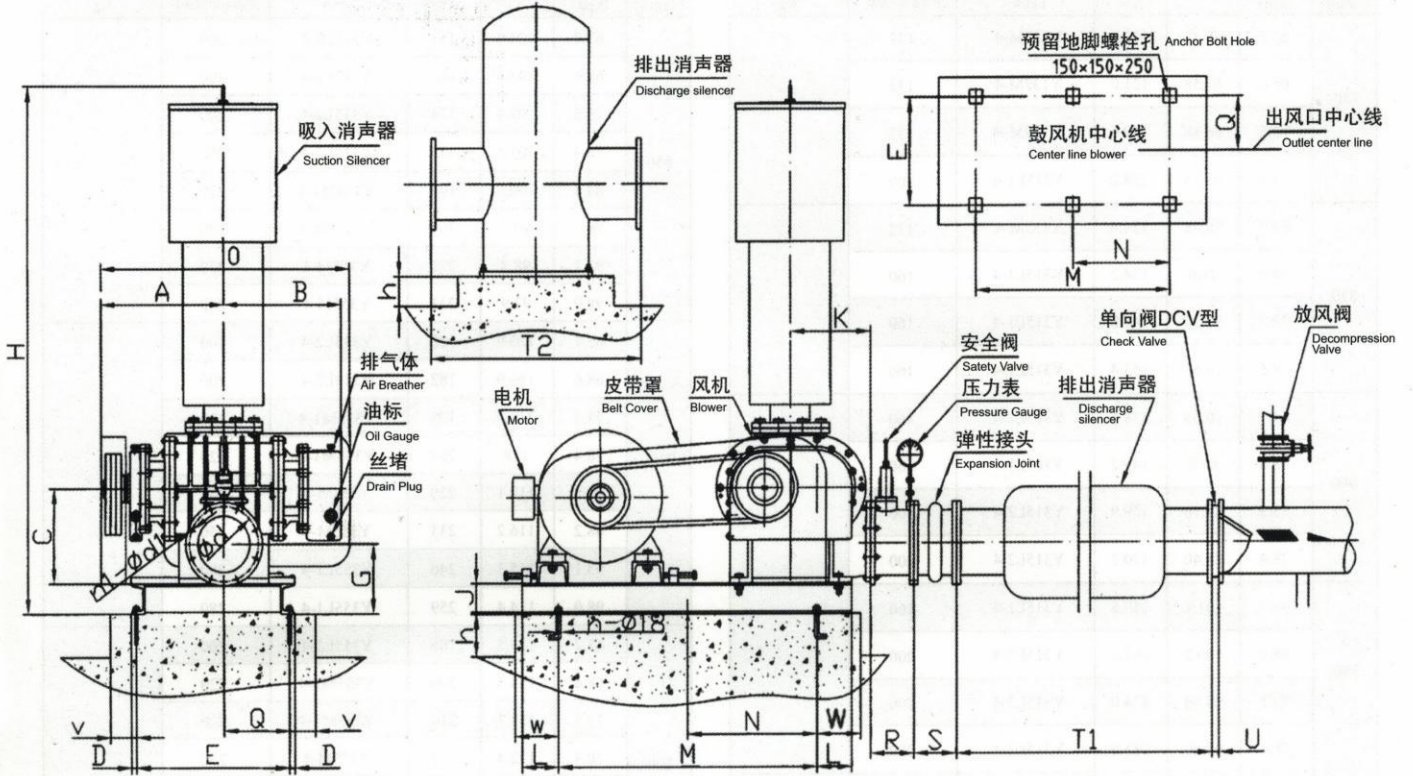
Blower Structure Diagram



No.	Name	Material	Q' ty	No.	Name	Material	Q' ty
1	Shell	HT200	1	14	Z sealing ring	Nitrile rubber	1
2	Impeller	HT200	2	15	Gear	35CrM	2
3	Drive shaft	45Cr	1	16	Gear lock washer	Q235	2
4	Driven shaft	45Cr	1	17	Gear lock nut	SS400	2
5	Drive side siding	HT200	1	18	Gearbox	HT200	1
6	Gear side siding	HT200	1	19	Sleeve	45	1
7	Drive bearing	NSK	2	20	End cover	Q235	2
8	Driven bearing	NSK	2	21	Pin	45	1
9	Sealing ring	Nitrile rubber	2	22	Plug	35	1
10	Sealing ring	Nitrile rubber	2	23	Oil gauge		1
11	Bearing sleeve	45	4	24	Vent		1
12	Bearing cover	HT200	1	25	Grease nipple	C3605	2
13	Bearing cover	HT200	1	26	Gearbox seals	Barley paper	2

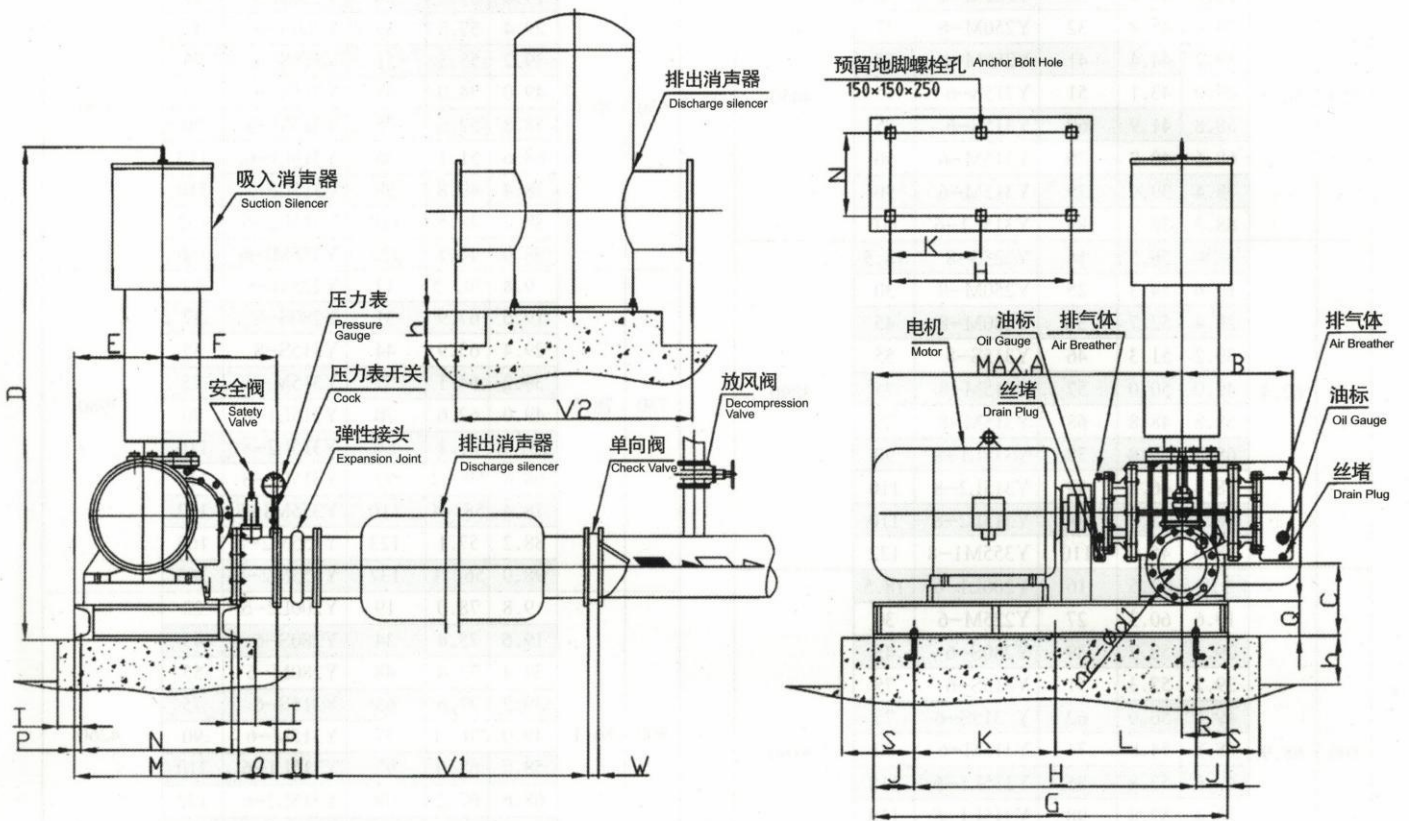
Outline drawings and foundation installation

DSR Roots blower (Belt drive)



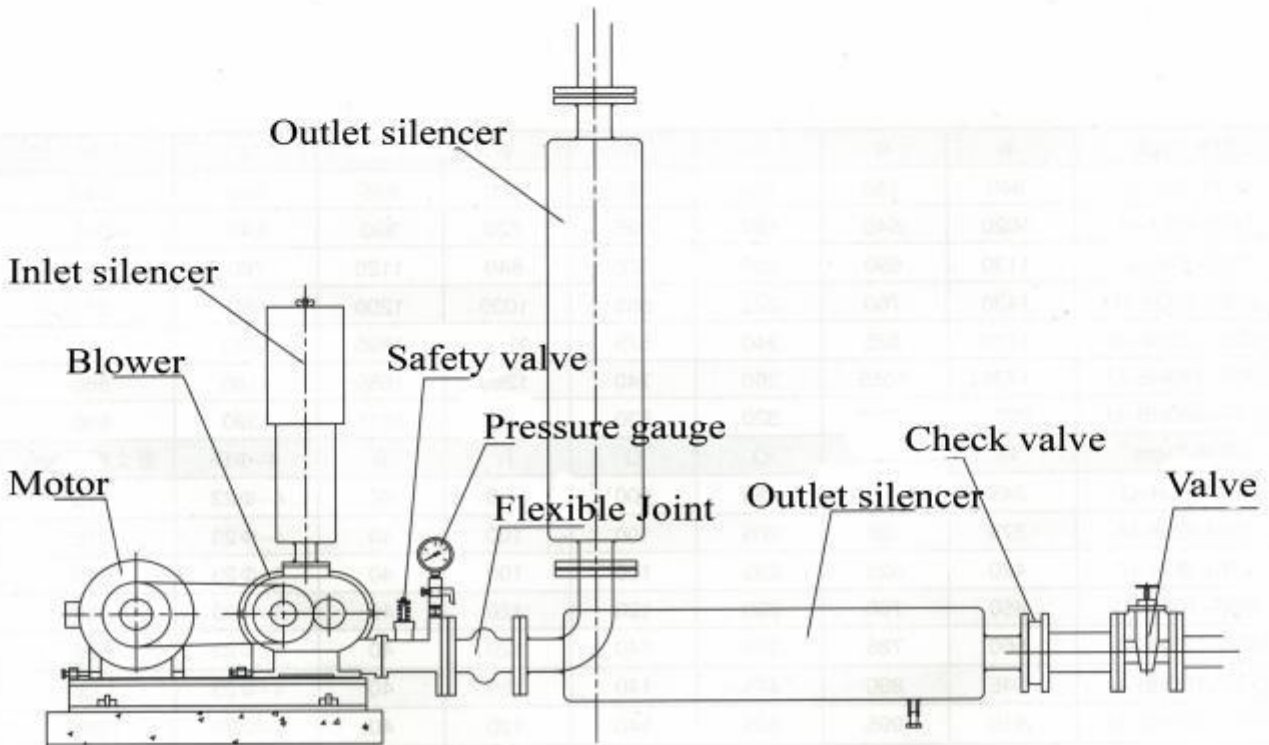
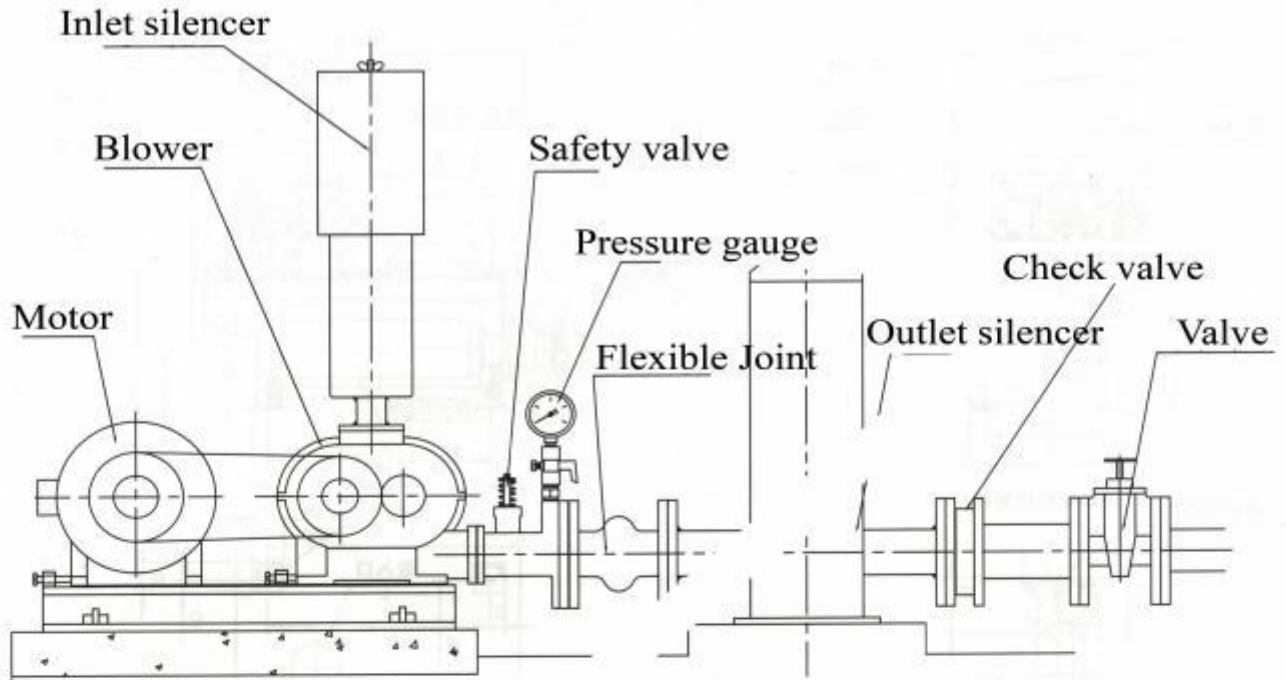
型号	口径	A	B	C	D	E	G	H	J	K	L	M	N	O	Q	R	S	T1	T2	U	V	W	h	n	ϕd	$n1-\phi d1$	重量(kg)
DSR-50G	50A	240	195	143	15	270	125	895	80	140	100	410	-	500	120	120	105	600	300	19	100	150	100	4	125	4- $\phi 18$	80
DSR-65G	65A	264	219	150	15	310	135	970	80	140	100	450	-	550	130	125	115	700	350	19	100	150	100	4	145	4- $\phi 18$	91
DSR-80G	80A	290	255	200	15	330	150	1130	80	200	100	500	-	590	150	150	135	900	400	19	100	150	100	4	160	8- $\phi 18$	153
DSR-100G	100A	330	295	207	15	440	160	1255	80	200	100	580	-	660	220	150	150	1200	450	19	100	150	100	4	180	8- $\phi 18$	207
DSR-125G	125A	340	306	237	15	440	190	1515	10	230	110	700	-	780	180	160	165	1400	500	21	100	150	100	4	210	8- $\phi 22$	295
DSR-150G	150A	442	412	300	20	550	210	1730	100	270	155	750	-	920	210	155	180	1600	600	24	120	255	100	4	240	8- $\phi 22$	465
DSR-200G	200A	595	510	385	25	705	250	2210	120	350	200	1000	500	1180	300	200	190	1800	650	29	150	300	100	6	295	8- $\phi 22$	1000
DSR-250G	250A	734	586	420	30	890	370	2785	160	460	205	1490	745	1380	440	250	230	2000	700	30	200	305	100	6	350	12- $\phi 22$	1758
DSR-300G	300A	819	683	510	30	890	400	2975	160	460	205	1490	745	1533	490	260	245	2000	1120	40	200	305	100	6	400	12- $\phi 22$	2300

DSR Roots blower (Coupling drive)



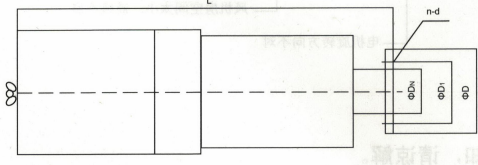
型号	口径	A	B	C	D	E	F	G	H	J	K	L	M	N	O	Q	R	S	T	U	V1	V2	W	h	n	Φd	n1-Φd1	重量(kg)
DSR-50G	50A	570	179	125	895	152	140	540	420	60	-	-	260	220	120	80	60	150	100	105	600	300	19	100	4	125	4-Φ18	80
DSR-65G	65A	610	202	135	970	192	140	600	440	80	-	-	300	260	125	80	80	150	100	115	700	350	19	100	4	145	4-Φ18	91
DSR-80G	80A	720	225	150	1130	217	200	650	500	75	-	-	370	330	150	80	75	150	100	135	900	400	19	100	4	160	8-Φ18	153
DSR-100G	100A	920	265	160	1255	234	200	850	630	110	-	-	400	360	150	80	110	150	100	150	1200	450	19	100	4	180	8-Φ18	207
DSR-125G	125A	965	294	190	1515	260	230	920	710	105	355	355	430	390	160	100	105	150	100	165	1400	500	21	100	6	210	8-Φ22	295
DSR-150G	150A	1185	377	210	1730	305	270	1250	950	150	475	475	500	455	155	100	165	200	120	180	1600	600	24	100	6	240	8-Φ22	465
DSR-200G	200A	1600	550	250	2210	405	350	1600	1300	150	650	650	650	605	200	120	240	200	150	190	1800	650	29	100	6	295	8-Φ22	1000
DSR-250G	250A	1867	596	370	2785	520	460	2100	1800	150	900	900	1020	950	250	160	250	250	200	230	2000	700	30	100	6	350	12-Φ22	1758
DSR-300G	300A	2197	683	400	2975	520	460	2200	2000	100	1000	1000	1020	950	260	160	270	250	200	245	2000	1120	40	100	6	400	12-Φ22	2300

Pipe installation reference drawing



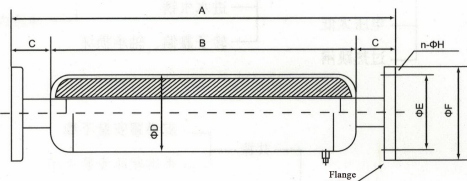
Blower Accessorie

Inlet silencer



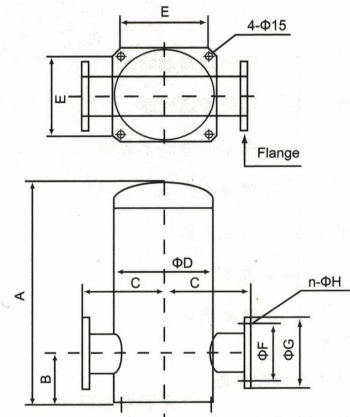
Model	Dn	D1	D	L	N-Φh	Weight (Kg)
XF-40	Φ40	85	110	220	4-Φ14	4
XF-50	Φ50	85	150	500	4-Φ14	5
XF-65	Φ65	110	155	550	4-Φ14	7
XF-80	Φ80	130	180	800	4-Φ14	15
XF-100	Φ100	145	207	850	8-Φ18	19
XF-125	Φ125	165	260	915	8-Φ18	22
XF-150	Φ150	200	260	1100	8-Φ18	35
XF-200	Φ200	280	320	1450	8-Φ20	60
XF-250	Φ250	350	395	1650	12-Φ20	120
XF-300	Φ300	400	445	1750	12-Φ22	140

Outlet silencer



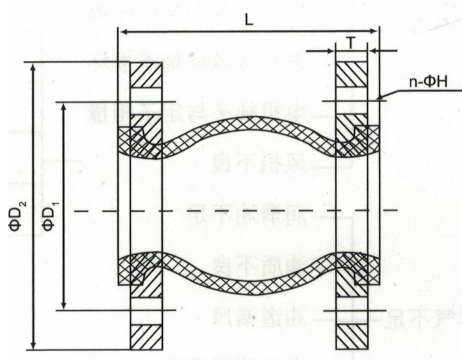
Model	ΦE	A	B	C	D	N-Φh	Weight (Kg)
KM-40	Φ40	500	135	110	150	4-Φ19	9
KM-50	Φ50	600	140	125	165	4-Φ19	12
KM-65	Φ65	700	165	145	185	4-Φ19	16
KM-80	Φ80	900	190	160	200	8-Φ19	20
KM-100	Φ100	1200	217	180	220	8-Φ19	38
KM-125	Φ125	1400	261	210	250	8-Φ22	45
KM-150	Φ150	1600	286	240	285	8-Φ22	68
KM-200	Φ200	1800	320	295	310	8-Φ22	85
KM-250	Φ250	2000	450	350	395	12-Φ22	130
KM-300	Φ300	2000	500	400	445	12-Φ22	160

Vertical outlet silencer

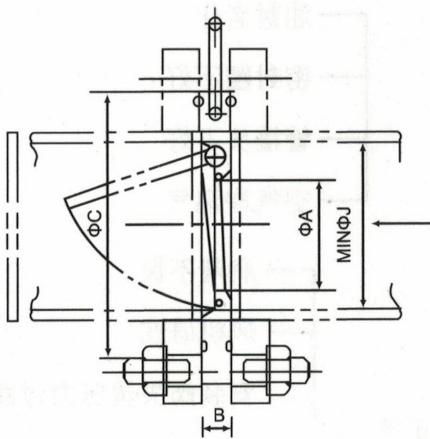


Model	ΦF	A	B	C	D	E	F	G	N-Φh	Weight (Kg)
RKM-40	Φ40	350	90	125	145	125	110	150	4-Φ18	10
RKM-50	Φ50	450	130	140	165	140	125	165	4-Φ19	15
RKM-65	Φ65	500	140	170	190	170	145	185	4-Φ19	20
RKM-80	Φ80	610	150	190	217	190	160	200	8-Φ19	27
RKM-100	Φ100	680	160	220	261	220	180	220	8-Φ19	34
RKM-125	Φ125	820	200	240	286	240	210	250	8-Φ22	58
RKM-150	Φ150	940	220	290	370	290	240	285	8-Φ22	80
RKM-200	Φ200	1060	260	320	420	320	295	340	8-Φ22	97
RKM-250	Φ250	1250	400	350	500	500	350	395	12-Φ22	140
RKM-300	Φ300	1300	430	560	560	560	400	445	12-Φ22	180

Flexible joint

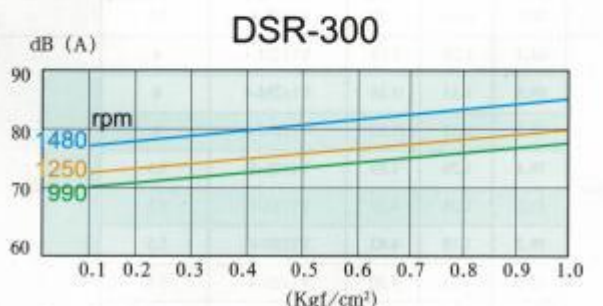
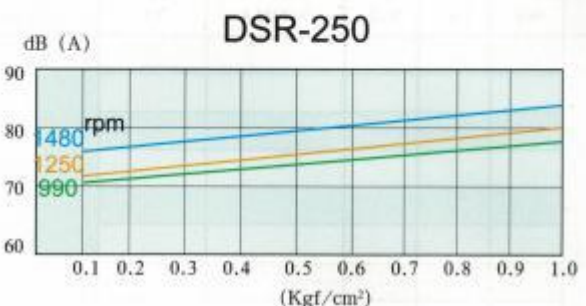
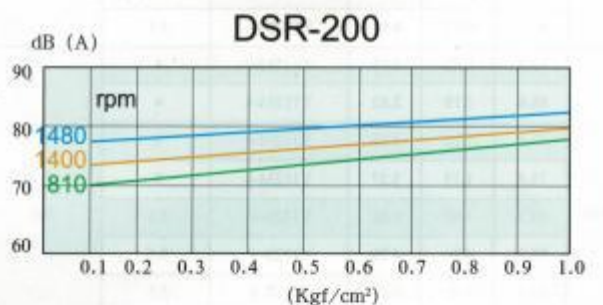
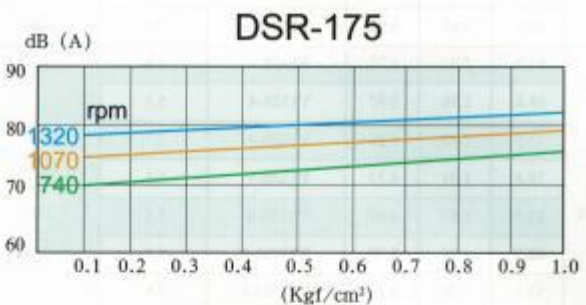
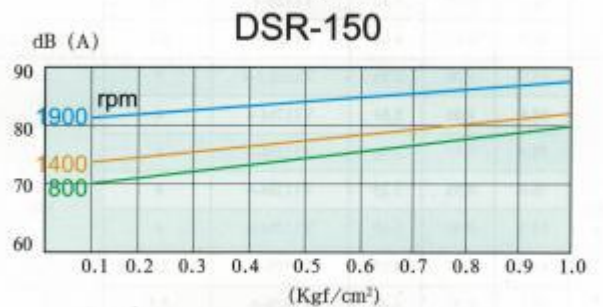
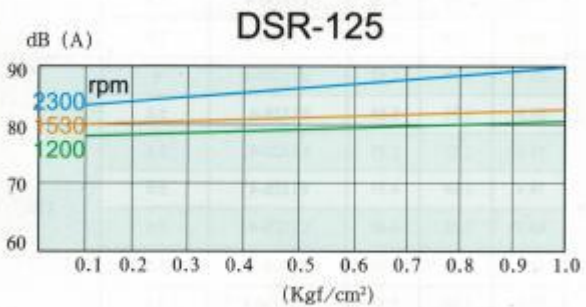
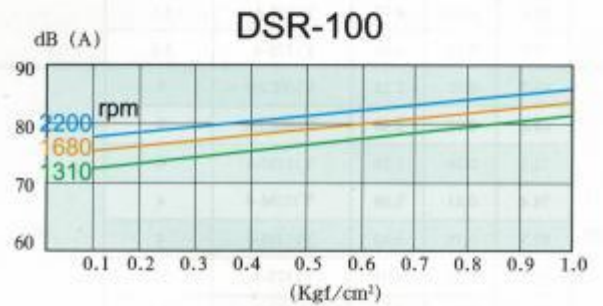
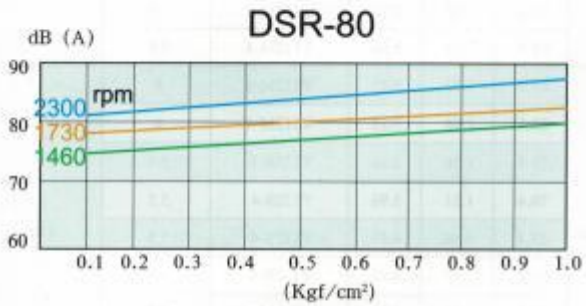
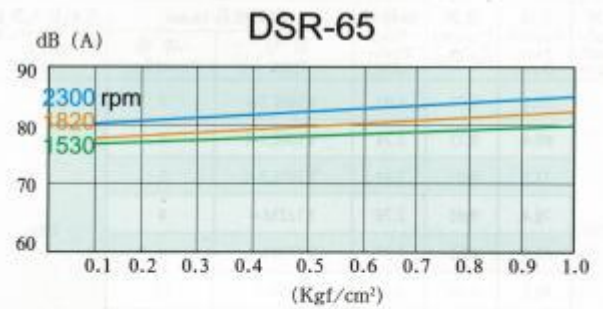
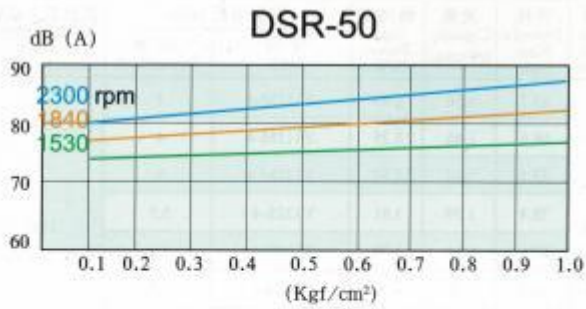
	Model	Φ	D1	D2	L	T	N-Φh	Weight (Kg)
	KXT-40	Φ40	110	150	90	16	4-Φ18	2
KXT-50	Φ50	125	165	105	18	4-Φ19	3	
KXT-65	Φ65	145	185	115	20	4-Φ19	3.5	
KXT-80	Φ80	160	200	135	20	8-Φ19	4	
KXT-100	Φ100	180	220	150	22	8-Φ19	5	
KXT-125	Φ125	210	250	165	24	8-Φ19	6.5	
KXT-150	Φ150	240	285	180	24	8-Φ22	9.5	
KXT-200	Φ200	295	340	190	24	8-Φ22	16	
KXT-250	Φ250	350	395	230	24	12-Φ22	25	
KXT-300	Φ300	400	445	245	24	12-Φ22	38	

Check valve

	Model	Φ	A	B	C	J	Weight (Kg)
	DCV-40	Φ40	20	16	90	40	1.0
DCV-50	Φ50	25	19	105	50	1.2	
DCV-65	Φ65	36	19	125	65	1.5	
DCV-80	Φ80	46	19	135	80	1.8	
DCV-100	Φ100	67	19	160	100	2.5	
DCV-125	Φ125	88	21	190	125	3.6	
DCV-150	Φ150	108	24	220	150	5.2	
DCV-200	Φ200	138	29	270	200	11.0	
DCV-250	Φ250	200	30	330	250	15.0	
DCV-300	Φ300	240	40	380	300	22.0	

				
Silencer	Shell	Siding	OPT belt	Shaft
				
Impeller	NSK bearing	Check valve	Flexible joint	Package

Noise test results



Note:

- 1: The noise test result is tested at a distance of 1 meter from the blower.
- 2: The noise level is affected by the length of the line, the number of turns and the surrounding environment.

Common malfunctions and Solution

Malfunctions		Reason	Solution			
Blower	Can not rotate	Can rotated by hand	The motor is damaged	Repair or replace the motor		
		Can rotated round by hand	The lobes are locked	Open to repair		
	Abnormal sound or vibration	Can rotate	The impurity in blower		Open to clean	
			Skid, v-belt is too tight or too loose		Adjust v-belt tension	
			Pulley offset		Reset pulley	
			Pulley and belt cover friction		Adjust belt cover	
			Bearing oil lack or aging		To replace the oil	
			Gear oil lack or aging		To replace the oil	
			The safe valve leakage		Adjust the safe valve	
			Foundation insufficient strength		To strengthen the foundation strength	
			Piping resonance		Eliminate by the silencer and support	
			Exhaust pressure rises abruptly		See ※annotated	
			Anchor bolt is too loose		Tighten	
			Rotor interference		Open to repair	
			The impurity in blower		Open to clean	
			Check valve bad		Replace	
			Overheating	Exhaust pressure rises abruptly		See ※annotated
				Temperature of working environment exceeds 40 °C		Ventilated working environment
	Inlet silencer obstruction			Cleaning/replace filter		
	Airflow insufficient	Pipeline leaks		Tighten the pipe connection		
		Inlet silencer obstruction		Cleaning/replace filter		
		The safe valve leakage		Adjust the safe valve		
		V-belt is too loose		Adjust v-belt tension		
	Exhaust pressure rises abruptly	Exhaust pressure rises abruptly		See ※annotated		
		Shut off the valve		Fully open the valve		
		The water level rises		Adjust water level		
		Inlet/outlet pipe jams		Cleaning debris		
		Valve bad or twist reversed direction		Replace or reverse direction twist		
Oil leak	Airflow overpowered		Reduce round speed or exhaust			
	Lubrication oil overmuch		Refuel to the center of oil standard			

FAQ

1. What's the information should I provide when inquiry?

A: Air capacity

B: Pressure

C: Application

D: Use environment(Temperature, atmospheric pressure)

E: Do you need motor?

Or other specials you give us will be more appreciated.

2. What is your warranty?

Our warranty is 12 months after received the roots blower. During the warranty period, replace the damaged parts for free of charge. Out warranty period, to provide timely, high-quality technical services and price concessions spare parts to ensure continuous safe and high-quality equipment operation.

3. How long is the service life of roots blower?

In normal use environment

A- Service life of blower is more than 10 years.

B- Service life of Impeller is more than 60,000 hours.

C- Service life of bearing is more than 30,000 hours.

D- Service life of gear is more than 60,000 hours.

Contact Us

Shandong Dacheng Machinery Technology Co., LTD

Address: Zhangqiu Mingshui, Jinan City, Shandong province, China 250200.

Website: <http://www.chinadicheng.com>

Tel: +86 0531-83216898

Fax: +86 0531-83216898

Cellphone: +86 013188890202

WhatsApp: +86 013188890202

Skype: <live:zqdicheng>

Email: zqdicheng@chinadicheng.com