

# Adams Ricardo Range









The Adams Ricardo blower range is based on five gear centre sizes from 70.5mm to 197mm with low, medium and high pressure models available throughout. Virtually any combination of airflow and pressure is available from 20 to 8000 m3/hr (10 to 3650 cfm) with a full 1.035 bar gauge (15psig) delivery pressure available at all flows up to 4620 m3/hr (2721 cfm).

The unique engineering features include rotors of cyclonical form with carbon tip inserts which:

- Maximise airflow and efficiency
- Minimise energy consumption
- Minimise running temperatures

On start-up, the carbon tip beds in, leaving an absolute minimum running clearance compatible with blower duty. When the time comes eventually for an overhaul, these carbon tips can be quickly and easily replaced to restore the original clearances and efficiency. Timing gears are positively fixed to the rotor shafts by a unique, precision dowelling process. This ensures accurate and automatic phasing on assembly and eliminates the need for specialist tools and skills.

- Exhausters: All units are suitable for operation as vacuum pumps up to 150"hg vacuum.
- Performance graphs: detailed pressure and vacuum charts can be supplied for each selection.
- Oil free air: vented air gaps between the air chamber and the lubrication system prevent contamination of air flow.
- Guaranteed performance: all blowers/exhausters are dynamically balanced and fully tested.
   Test certificates are available if required.
- Full warranty: all units carry a warranty against faulty workmanship and materials



# Dimensions

weight

41.5kg (91.5lbs) 49.5kg (109lbs) 41kg (90.2lbs)

78.5kg (173lbs)

81kgs (179lbs)

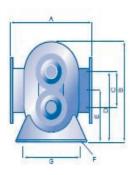
90kgs (198lbs)

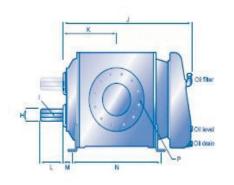
97kg (214lbs)

111kg (245lbs)

115kgs (253lbs)

#### Horizontal air flow

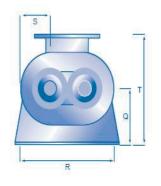


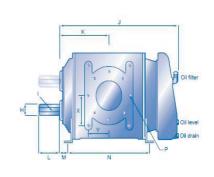


138kgs (304lbs)

	SR017	SR023	SR015	SR035	SR044	SR052	SR060	SR069	SR091	SR124
Horizon	ntal Airflow Blower					<b></b>				
Α	200mm (7.87")	200mm (7.87")	270 (10.62")	220mm (8.66")	220mm (8.66")	220mm (8.66")	235mm (9.25")	220mm (8.66")	220mm (8.66")	220mm (8.66"
В	233mm (9.17")	233mm (9.17")	300mm (11.81")	300mm (11.81")	300mm (11.81")	300mm (11.81")	376mm (14.8")	376mm (14.8")	376mm (14.8")	376mm (14.8"
С	70.5mm (2.78")	70.5mm (2.78")	90mm (3.54")	90mm (3.54")	90mm (3.54")	90mm (3.54")	117mm (4.61")	117mm (4.61")	117mm (4.61")	117mm (4.61")
D	160mm (6.30")	160mm (6.30")	202.1mm (7.957")	202.1mm (7.957")	202.1mm (7.957")	202.1mm (7.957")	260mm (10.24")	260mm (10.24")	260mm (10.24")	260mm (10.24")
E	125mm (4.92")	125mm (4.92")	157mm (6.18")	157mm (6.18")	157mm (6.18")	157mm (6.18")	201.5mm (7.93")	201.5mm (7.93")	201.5mm (7.93")	201.5mm (7.93")
F	4 holes	4 holes	4 holes	4 holes	4 holes	4 holes	4 holes	4 holes	4 holes	4 holes
	Ø 12mm (0.47")	Ø 12mm (0.47")	Ø 12mm (0.47")	Ø 12mm (0.47")	Ø 12mm (0.47")	Ø 12mm (0.47")	Ø 18mm (0.71")	Ø 18mm (0.71")	Ø 18mm (0.71")	Ø 18mm (0.71")
G	170mm (6.69") Ø 28.6mm fit k6	170mm (6.69") Ø 28.6mm fit k6	220mm (8.66") Ø 32.6mm fit k6	220mm (8.66") Ø 32.6mm fit k6	220mm (8.66") Ø 32.6mm fit k6	220mm (8.66") Ø 32.6mm fit k6	280mm (11.02") Ø 38.1mm fit k6	280mm (11.02")	280mm (11.02") Ø 42.6mm fit k6	, ,
Н	(1.10")	(1.10")	(1.26")	(1.26")	(1.26")	(1.26")	(1.5")	Ø 42.6mm fit k6 (1.65")	(1.65")	Ø 42.6mm fit k6 (1.65")
I	8 x 7 key	8 x 7 key	10 x 8 key	10 x 8 key	10 x 8 key	10 x 8 key	3/8 in sq key	12 x 8 key	12 x 8 key	12 x 8 key
	BS4235 Part 1	BS4235 Part 1	BS4235 Part 1	BS4235 Part 1	BS4235 Part 1	BS4235 Part 1	BS4235 Part 1	BS4235 Part 1	BS4235 Part 1	BS4235 Part 1
J	400mm (15.75")	460mm (18.08")	340mm ( 13.38")	465mm (18.31")	510mm (20.07")	568mm (22.36")	482mm (18.98")	510mm (20.8")	585mm (23.0")	696mm (27.4")
K	148mm ((5.83")	178mm (7")	122mm	179mm (7.05")	208mm (8.19")	232mm (9.13")	187mm (7.36")	201mm (7.91")	239mm (29.4")	295mm (11.61")
L	75mm (2.95")	75mm (2.95")	75mm (2.95")	75mm (2.95")	75mm (2.95")	75mm (2.95")	90mm (3.54")	91mm (3.58")	91mm (3.58")	91mm (3.58")
M	33mm (1.30")	33mm (1.30")	39mm (1.54")	39mm (1.54")	39mm (1.54")	39mm (1.54")	52mm (2.05")	52mm (2.05")	52mm (2.05")	52mm (2.05")
N	230mm (9.06")	290mm (11.40") Port dia 100mm	166mm (6.53") 21/2" BSP	280mm (11.02") Port dia 100mm	340mm (13.38") Port dia 100mm	387mm (15.24") Port dia 100mm	270mm (10.63")	298mm (11.73")	389mm (15.31") Port dia 125mm	, ,
Р	Port dia 80mm (3.15") 4 holes M16 equispaced on	(3.94") 4 holes M16 equispaced	threaded	(3.94") 4 holes M16 x 25mm (1")	(3.94") 4 holes M16 x 25mm (1")	(3.94") 4 holes M16 x 25mm (1")	Port nominal bore 125 each side	Port dia 125mm (4.92") 8 holes/port M16 equispaced	(4.92") 8 holes/port M16 equispaced	•
	150mm (5.19") PCD (PN6)	on 170mm (6.69")		equispaced on	on 170mm (6.69")	on 170mm (6.69")			on 200mm (7.87")	
	(*)	PCD (PN6)		170mm (6.69") PCD (PN6)	PCD (PN6)	PCD (PN6)		PCD (PN6)	PCD (PN6)	
Χ		- ( /		( -/	- ( - 7	- ( -,	133mm (5.25")	- (	- ( -,	- ( -)
Υ							79.4mm (3.12")			
weight	40.5kg (89lbs)	48.5kg (107lbs)	41kg (90.2lbs)	78.5kg (173lbs)	81kgs (179lbs)	90kgs (198lbs)	, ,	109.5kg (241lbs)	115kgs (253lbs)	138kgs (304lbs)
Vertical	Airflow Blower									
Q	130mm (5.12")	130mm (5.12")	162mm (6.38")	162mm (6.38")	162mm (6.38")	162mm (6.38")	200mm (7.87")	200mm (7.87")	200mm (7.87")	200mm (7.87")
R	220mm (8.66")	220mm (8.66")	310mm (12.21")	310mm (12.21")	310mm (12.21")	310mm (12.21")	360mm (14.17")	360mm (14.17")	360mm (14.17")	360mm (14.17")
S	74.75mm (2.94")	74.75mm (2.94")	14 x 9 key	14 x 9 key	14 x 9 key	14 x 9 key	121.5mm (4.78")	121.5mm (4.78")	121.5mm (4.78")	121.5mm (4.78")
T	230mm (9.06")	230mm (9.06")		240mm (9.45")	240mm (9.45")	240mm (9.45")	317.5mm (12.5")	370mm (14.57")	370mm (14.57")	370mm (14.57")

#### Vertical air flow





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305mm (12")	330mm (13")	440mm (17.32")	330mm (13")	440mm (17.32")	440mm (17.32")	406mm (16")	406mm (16")	600mm (23.62")	600mm (23.62")
508mm (20")	508mm (20")	520mm (20.47")	508mm (20")	520mm (20.47")	520mm (20.47")	637.5mm (25.1")	637.5mm (25.1")	637.5mm (25.1")	1200mm (47.24")
152.4mm (6")	152.4mm (6")	152.4mm (6")	152.4mm (6")	152.4mm (6")	152.4mm (6")	196.85mm (7.75")	196.85mm (7.75")	196.85mm (7.75")	300mm (11.08")
307.7mm (12.12")	307.7mm (12.12")	332.4mm (13.09")	307.7mm (12.12")	332.4mm (13.09")	332.4mm (13.09")	422mm (16.61")	422mm (16.61")	422mm (16.61")	750mm (29.52")
231.5mm (9.12")	231.5mm (9.12")	256mm (10.08")	231.5mm (9.12")	256mm (10.08")	256mm (10.08")	323mm (12.72")	323mm (12.72")	323mm (12.72")	600mm (23.62")
4 holes	4 holes	4 holes	4 holes	4 holes	4 holes	4 holes	4 holes	4 holes	4 holes
Ø 17.5mm (0.688")	Ø 17.5mm (0.688")	Ø 18mm (0.71")	Ø 18mm (0.71")	Ø 18mm (0.71")	Ø 18mm (0.71")	Ø 18mm (0.71")	Ø 18mm (0.71")	Ø 22mm (0.86")	Ø 28mm (1.10")
356mm (14")	356mm (14")	360mm (14.17") Ø 48.6mm fit k6	356mm (14")	360mm (14.17") Ø 48.6mm fit k6	360mm (14.17") Ø 48.6mm fit k6	460mm (18.11") Ø 70.6mm fit f6	460mm (18.11") Ø 70.6mm fit f6	460mm (18.11") Ø 70.6mm fit f6	500mm (19/68") Ø 85mm fit f6
Ø 38.1mm (1.5")	Ø 38.1mm (1.5")	(1.89")	Ø 38.1mm (1.5")	(1.89")	(1.89")	(2.7547")	(2.7547")	(2.7547")	(3.346"")
3/8 in sq key	3/8 in sq key	14 x 9 key	3/8" sq key	14 x 9 key	14 x 9 key	20 x 12 key	20 x 12 key	20 x 12 key	25 x 9 key
BS46 Part 1	BS4235 Part 1	BS4235 Part 1		BS4235 Part 1	BS4235 Part 1				
561mm (22.1")	612mm (24.1")	606mm (23.84")	663mm (26.1")	714mm (28.1")	849mm (33.45")	685mm (27")	783mm (30.84")	948mm (37.32")	1212mm (47.71")
197mm (7.77")	223mm (8.78")	231mm (9.09")	249mm (9.79")	285mm (11.22")	352mm(13.86")	268mm (10.5")	318mm (12.5")	394mm (15.5")	510mm (20.07")
93mm (3.67")	93mm (3.67")	124mm (4.88")	93mm (3.67")	124mm (4.88")	124mm (4.88")	165mm (6.5")	165mm (6.5")	165mm (6.5")	285mm (11.22")
39mm (1.54")	39mm (1.54")	45mm (1.77")	39mm (1.54")	45mm (1.77")	45mm (1.77")	82.5mm (3.25")	82.5mm (3.25")	82.5mm (3.25")	130mm (5.11")
355mm (13.98")	368mm (14.49")	372mm (14.65") Port dia 200mm	420mm (16.54")	480mm (18.9") Port dia 200mm	615mm (24.2") Port dia 200mm	375mm (14.76") Port dia 200mm	490mm (19.29") Port dia 200mm	625mm (24.61") Port dia 250mm	760mm (29.92") Port dia 305mm
8 holes	8 holes	(7.87")	8 holes M16 x 25mm	(7.87")	(7.87")	(7.87") 8 holes/port M16 x	(7.87") 8 holes/port M16 x	(9.84")	(12")
M12 x 25mm (1")	M16 x 25mm (1") equispaced on 209.6	8 holes/port M16 equispaced on	equispaced on 235mm (9.25") PCD (BS10	8 holes/port M16	8 holes/port M16	25mm (1") equispaced on	25mm (1") equispaced on	12 holes/port M16 equispaced on	6 Holes/ Port M16 equispaced on
	mm (8.25") PCD (BS10	280mm (11.02") PCD	table D)	equispaced on 280mm	equispaced on 280mm	280mm	280mm	335mm	400mm
	table D)	(PN6)		(11.02") PCD (PN6)	(11.02") PCD (PN6)	(11.024") PCD (PN6)	(11.024") PCD (PN6)	(13.19") PCD (PN6)	(15.74") PCD (PN6)
	133mm (5.25")		133mm (5.25")						
	106mm (4.14")		130.5mm (5.15")						
128kg (282lbs)	157kg (346lbs)	179kg (395lbs)	171kg (377lbs)	203kgs 9447lbs)	233kgs (513lbs)	364kg (802lbs)	420kg (926lbs)	496kg (1093lbs)	1100kgs (2420lbs)
152.5mm (6")	152.5mm (6")	220mm (8.66")	152.5mm (6")	220mm (8.66")	220mm (8.66")	300mm (11.81")	300mm (11.81")	300mm (11.81")	
266mm (10.47")	266mm (10.47")	450mm (17.72")	266mm (10.47")	450mm (17.72")	450mm (17.72")	580mm (22.83")	580mm (22.83")	580mm (22.83")	
56.8mm (2.24")	56.8mm (2.24")	148.8mm (5.86")	56.8mm (2.24")	148.8mm (5.86")	148.8mm (5.86")	191.6mm (7.54")	191.6mm (7.54")	191.6mm (7.54")	
305mm (12")	317.5mm (12.5")	440mm (17.32")	317.5mm (12.5")	440mm (17.32")	440mm (17.32")	503mm (19.8")	503mm (19.8")	600mm (23.62")	
125kg (275.5lbs)	154kg (339.5lbs)	177kg (390lbs)	168kg (370lbs)	203kgs 9447lbs)	233kgs (513lbs)	370kg (815lbs)	426kg (939lbs)	502kg (1107lbs)	

# Construction and Components

#### Materials of Construction

Item	Material Specification			
Case, Head Plate, End Caps	Grey cast iron EN-GJL-250/EN-JL 1040 (EN 1561)			
Rotors	2 lobes Fitted with Graflon HY22 Tip Strips Spheroidal graphite cast iron EN-GJS-700-2/EN-JS1070 (EN 1563)			
Gears	Spur gears. Case hardening steel 15NiCr13/1.5752 (EN 10084) Hardened and quenched to HV 750 (minimum) Profile ground to accuracy grade 5 (ISO 1328-1)			
Gear Cover (all except below)	Grey cast iron EN-GJL-250/EN-JL 1040 (EN 1561)			
Gear Cover (SR113, SR142, SR170)	Aluminium alloy casting EN-AC-AlsiCu3Mn/EN AC-45200SF (EN 1706)			
Ball Bearings (SR017, SR023, SR035)	Paired, angular contact with metal cages. Clearance - normal (CN)			
Ball Bearings (SR060, SR069, SR113, SR142, SR160, SR170, SR272, SR363, SR500)	Double row, angular contact with metal cages. Clearance - normal (CN)			
Roller Bearings	Single row, cylindrical roller with metal cage. Clearance - normal (CN)			
Lip Seals	Viton®			

Туре	Gear Centres mm	Airflow m³/hr	Maximum pressure (continuous running) mbar	Maximum Speed rpm
SRO 17	70.5	15-370	760	4000
SRO 23	70.5	20-495	550	4000
SRO 15	90	15-325	1035	4000
SRO 35	90	35-750	1035	4000
SRO 44	90	60-965	830	4000
SRO 52	90	65-1140	700	4000
SRO 60	117	60-1138	1035	3500
SRO 69	117	100-1340	1035	3500
SRO 91	117	195-1775	760	3500
SR 124	117	320-2420	550	3500
SR 113	152.4	240-1860	1035	3000
SR142	152.4	310-2310	830	3000
SR 170	152.4	410-2750	700	3000
SR 160	152.4	340-2685	1035	3000
SR 220	152.4	580-3700	760	3000
SR 295	152.4	880-4980	550	3000
SR 272	196.9	700-3465	1035	2300
SR 363	196.9	1030-4620	1035	2300
SR 500	196.9	1670-6400	760	2300
SR 800	300	4000-9100	1035	1600

### Features and Benefits

Features	Benefits				
Rotors with carbon/PTFE inserts	Maximises airflow and efficiency				
All units are built for universal mounting	Minimise energy consumption				
Flexible rotor rotation	Minimise running temperatures				
Dynamically balanced rotors	Giving total package flexibility				
Universal package frame	Machines can be driven clockwise and anti-clockwise				
Established design	Reduces vibration and noise				
	Allows SR Package set to replace an alternative blower within the same footprint				

Giving a trusted and proven performance



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