Range Configurations

Retrotec Blower Door Fan systems create airflow over a very wide range. The Open Range yields the most flow, but as fan speed is decreased the fan pressure drops too low to be accurately measured. Range Rings and Plates can then be installed to restrict the fan inlet, forcing the fan speed to be increased to maintain the required flow and increase the fan pressure.

Use the Range Configurations shown below to optimize the fan pressure readings.

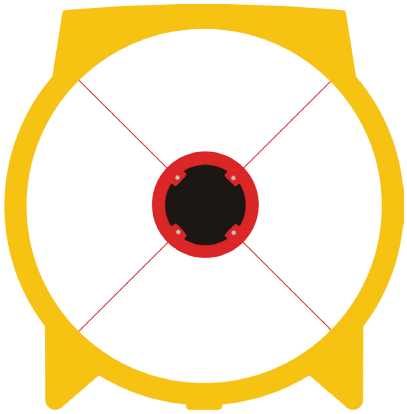
- If you cannot achieve the desired building pressure, use a more open range.
- If your gauge says "TOO LOW", change to more restrictive range.

Large flow ranges for large and leaky buildings

There are three high flow Range options:

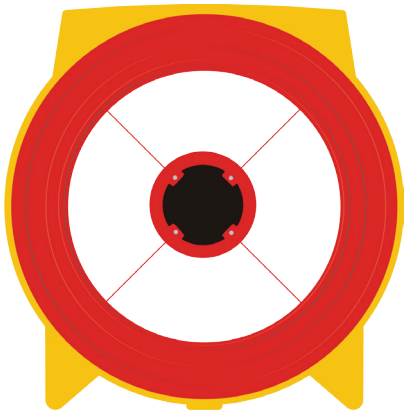
Open(22) Range

all Range Rings and Plates are removed



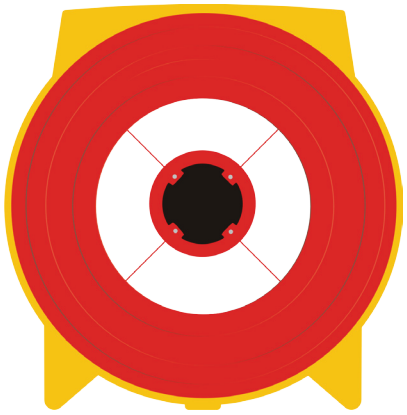
Range A

install the largest Ring



Range B

add the B Ring on top of the A Ring; a good place to start a test

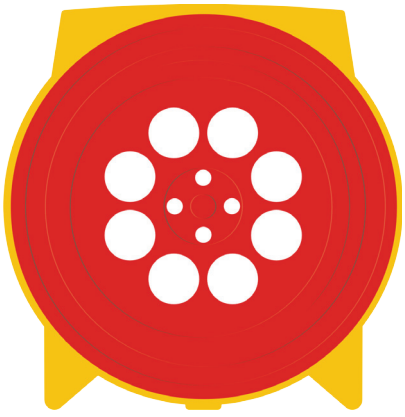


Mid flow Ranges for average to tight buildings and enclosures

To reduce or restrict the flow: attach the magnetic C8 Plate over top of the A&B Rings.

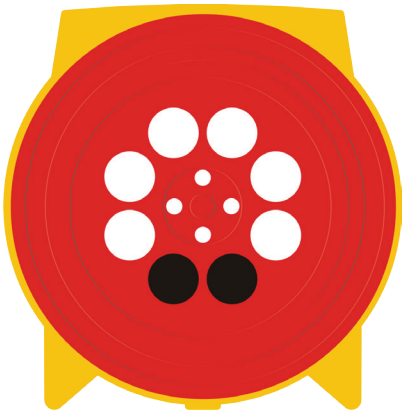
Range C8

8 large + 4 small holes open



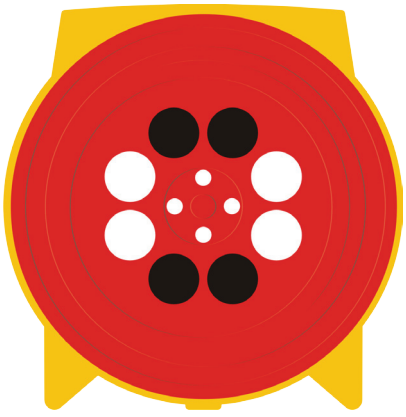
Range C6

6 large + 4 small holes open



Range C4

4 large + 4 small holes open



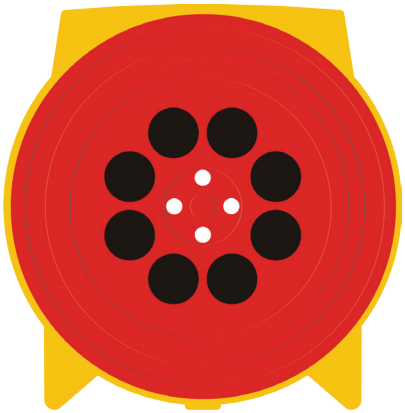
QuickGuide Range Configurations

Range C2
2 large + 4 small holes open

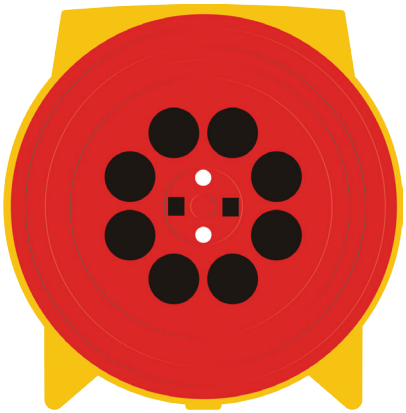
Range C1
1 large + 4 small holes open

Low flow Ranges for very tight enclosures
Further reduce or restrict the flow: L ranges always have Ring A + B + C8 plate installed with the 8 large holes covered. Tape is then used to cover the small holes to create each L Range.

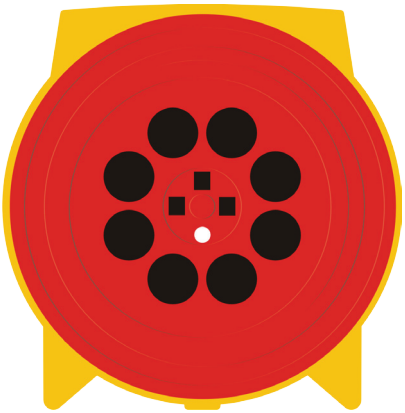
Range L4
0 large + 4 small holes open



Range L2
2 one inch holes are covered with tape



Range L1
3 one inch holes are covered with tape



Fan Model	Voltage	Hz	Maximum Flow at 50 Pa on Range Configuration												
			L1	L2	L4	C1	C2	C3	C4	C6	C8	B	A	Open	Units
US1000, 2350*	120	60	20	40	70	270	450	600	800	1200	1600	2900	3700	5600	CFM
3300SR*	120/240	60/50	25	45	80	305	520	730	975	1500	2100	4000	5300	8300	CFM
EU1000	240	50	25	48	85	374	612	815	1053	1682	2209	4077	6116	8665	m^3/hr
* Model 2350 Fans are used in Retrotec Q46, Q56 systems. * Model 3300SR Fans are used in Retrotec Q4E, Q5E, and QMG systems.															
			Minimum Flow at 50 Pa on Range Configuration												
All Systems			5	10	27	50	98	145	188	294	402	677	1966	3682	CFM

Performance will vary based on altitude, temperature, run time, power cable length, local voltage variations, tip clearance, and fan calibration.

For the latest documentation, visit retrotec.com