

SECOH Linear Diaphragm Air Blower – Service Check List (Aerated Sewage Treatment Plants)

CHECK	FINDINGS	CAUSE	ACTION
Air filter element	Sticky grease like residue	Foul air ingress	Seal airline ducting to prevent biozone from venting into blower housing, consider relocating blower to cleaner environment
	Black dust	Blower working in a dirty environment	Clean filter quarterly, consider relocating blower housing to cleaner environment
	Brown 'Carbon' dust	Off-set magnet	Check magnet alignment, if off-set, install new diaphragms
Diaphragms	Split diaphragms	Fatigue	Replace annually (Serviceable items)
		High back pressure	Check system operating pressure (See table below, use BP1)
Magnet	Off-set magnet	Diaphragm fatigue	Replace diaphragms
		High back pressure	Check system operating pressure (See table below, use BP1)
		Excessive heat	Check blower housing ventilation is clear
			Check system operating pressure (See table below, use BP1)
Auto-Stopper	Activated	Diaphragm fatigue / split	Replace diaphragms
	Not tripped, diaphragms intact, service light activated	Off-set magnet	Replace diaphragms
		Foul air ingress corroded auto-stopper micro-switch	Replace auto-stopper, check airline ducting is sealed to prevent foul air ingress
System Operating Pressure	High pressure	Blocked / kinked airline, blocked diffuser, etc	Rectify & check system operating pressure (See table below, use BP1)
		Airlift sludge return	Check solenoid timer valve, ball valves are not restricting air flow, re-set and check system operating pressure (See table below, use BP1)
	Pressure relief valve venting (If installed)	High operating pressure over	Check operating temperature (See table below), Blocked / kinked airline, blocked diffuser, etc
Thermal trip	Intermittent operation	Overheating	Check ventilation, system operating temperature (See table below), Blocked / kinked airline, blocked diffuser, etc
		Off-set magnet contact with solenoid coils	Replace diaphragms, centralize magnet
Service light 'S' / flashing beacon 'C'	Illuminated	Split diaphragms / auto-stopper activation	Replace diaphragms, re-set auto-stopper

Model	Optimum (Continuous) Pressure Ratings (Bar)	Maximum (Continuous) Pressure Ratings (Bar)	Power Consumption (W) @ Pressure Rating	Current Consumption (A) @ Pressure Rating
JDK-40	0.2	0.15	35	0.35
JDK-50	0.2	0.15	42	0.5
JDK-S-60	0.2	0.25	40	0.3
JDK-S-80	0.2	0.25	50	0.35
JDK-S-100	0.2	0.25	75	0.5
JDK-S-120	0.2	0.25	95	0.6
*JDK-S-150	0.2	0.3	115	0.95
*JDK-S-200	0.2	0.3	180	1.5
*JDK-S-250	0.2	0.3	225	1.6
*JDK-S-300	0.2	0.3	230	1.9
*JDK-S-400	0.2	0.3	360	3.0
*JDK-S-500	0.2	0.3	450	3.2

* Models supplied with Pressure Relief Valve, pre-set to start opening @ 0.25bar (Maximum pressure rating) then progressively open @ 0.27 bar so that it was not possible for the blower to work over 0.3bar pressure.