



FAR Series (Diffuser type Submersible Aerator)

In diffuser type aerators, the liquid flow generated by an impeller causes negative pressure to form on the impeller vanes and draw in air from atmosphere. The aspirated air mixed with water viciously by mechanical forces inside the impeller and guide van transform into tiny bubbles. Moreover, the mixed flow of air and water is evenly discharged in multiple directions along the circumference. The compounded action of the air lift and convective currents that are generated in the process makes aeration and agitation very efficient and increases the amount of oxygen dissolved in the water

Operating parameters

Oxygen Transfer	1 - 9 kg O ₂ /hr
Maximum Liquid Temperature	upto 40°C
Impeller Type	Semi Open Impeller
Maximum Air Intake	upto 125m ³ /hr
Service	S1 Duty
No. of Starts / Per Hour	20
Max. immersion depth	20m
pH range	6 to 12
Liquid Viscosity	1 mm ² /s
Liquid Density	1kg/dm ³
Max. Noise level	≤ 70dB

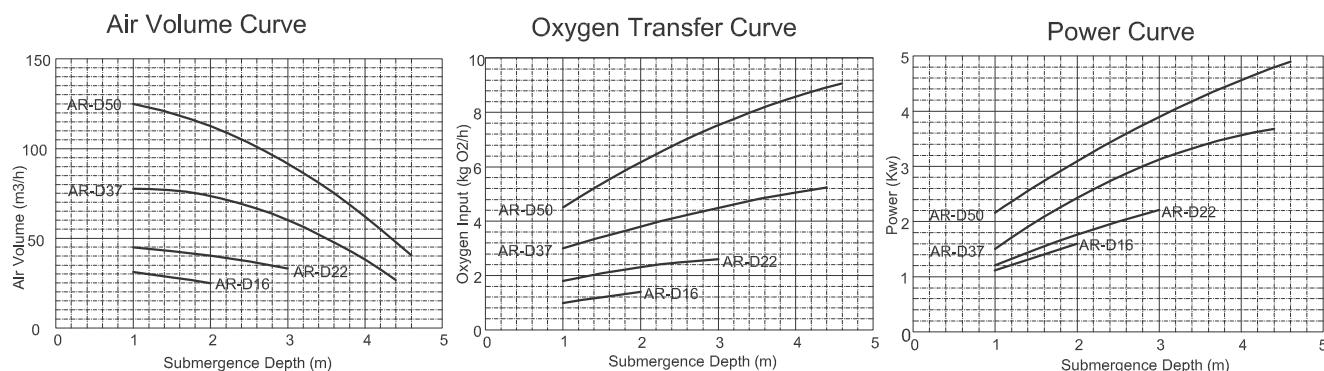
Specifications

Power Range	1.6 to 5 kW
Power Supply	380-415V - Three Phase, 50Hz, AC.
Ingress Protection	IP68
Motor	Dry Type Induction motor
Speed	1450 / 2850 rpm
Class of Insulation	H
Moisture sensor	# Available
Thermal Overload Protector	* Available
Starting Method	Three Phase - DOL & SD
Shaft Seal	Single / Double Mechanical seal
Mechanical Seal Face Combination	Motor Side : Graphite / Alumina Pump Side : Silicon Carbide / Silicon Carbide
Bearing Type	Shielded prelubricated bearing
Cable Type	HO7RNF
Standard Cable Length	10m

Material of Construction

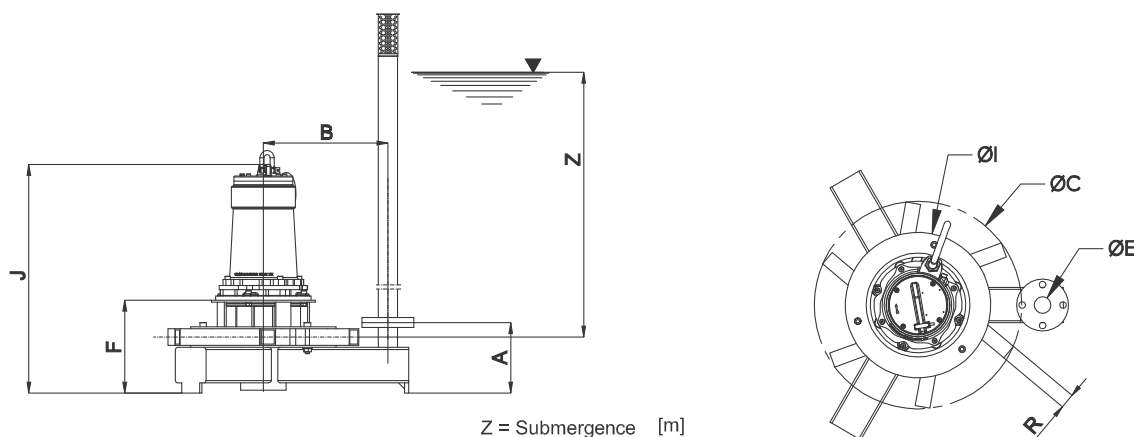
Impeller	Mild Steel
Motor Housing	Cast iron EN-GJL-260
Shaft	Stainless Steel X30 Cr13 (AISI 420)
Fasteners	Stainless Steel A2 (AISI 304)

Submersible Aerator - Diffuser type

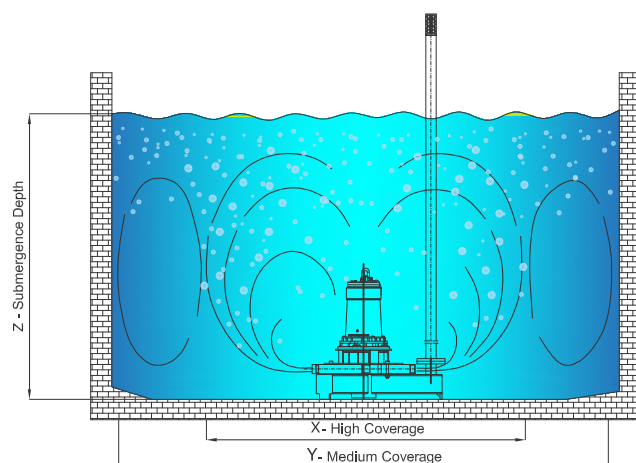


S.No.	Model Name		Power (kw)	Min-Max Water depth (m)	Air Inlet pipe diameter (mm)	Maximum Intake of Air (m³/h)	Oxygen Transfer Capacity (Kg O₂/h)	Weight (kg)
1	FAR-SD16-CT-4	FAR-FD16-CT-4	1.6	1 - 2	40	30	1.4 - 1	65
2	FAR-SD22-DT-4	FAR-FD22-DT-4	2.2	1 - 3	50	45	2.6 - 1.8	75
3	FAR-SD37-ET-4	FAR-FD37-ET-4	3.7	1 - 4.4	65	77	5.2 - 3	76
4	FAR-SD50-ET-4	FAR-FD50-ET-4	5	1 - 4.6	65	125	9 - 4.5	78

* S - Stainless steel diffuser / F - Carbon steel diffuser.



Model Name		A	B	C	E	F	I	J	R
FAR-SD16-CT	FAR-FD16-CT	170	300	350	40	219	484	550	36
FAR-SD22-DT	FAR-FD22-DT	170	310	400	50	220	481	613	36
FAR-SD37-ET	FAR-FD37-ET	170	310	400	50	220	481	613	36
FAR-SD50-ET	FAR-FD50-ET	225	370	400	65	260	720	702	45



Model Name		High Coverage X (m)	Medium Coverage Y (m)	Submergence Z (m)
FAR-SD16-CT	FAR-FD16-CT	1.2	2.6	2
FAR-SD22-DT	FAR-FD22-DT	2.5	5.2	3
FAR-SD37-ET	FAR-FD37-ET	3.5	6	4.4
FAR-SD50-ET	FAR-FD50-ET	4	8.2	4.6



FJET Series (Jet type Submersible Aerator)

FJET type aerator is a submersible pump combined with a venturi and jet based diffuser. The primary purpose is to transfer oxygen to the liquid or sludge. Jet aerators are easily configured into any basin geometry including circular, rectangular, looped reactors and sloped wall basins. In this aerator the aspirated air mixes with water and is ejected through the diffuser simultaneously agitating and aerating the ponded water. The mixed air water is ejected powerfully in one direction which effectively agitates the water across a wide area.

Operating parameters

Oxygen Transfer	0.98 - 16.2 kg O ₂ /hr
Maximum Liquid Temperature	upto 40°C
Impeller Type	Mono channel Impeller
Maximum Air Intake	upto 110 l/s
Service	S1 Duty
No. of Starts / Per Hour	20
Max. immersion depth	20m
pH range	6 to 12
Liquid Viscosity	1 mm ² /s
Liquid Density	1kg/dm ³
Max. Noise level	≤ 70dB

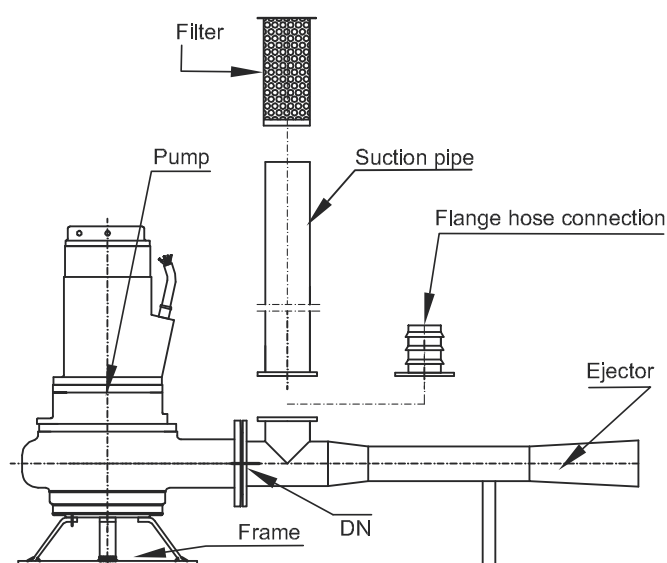
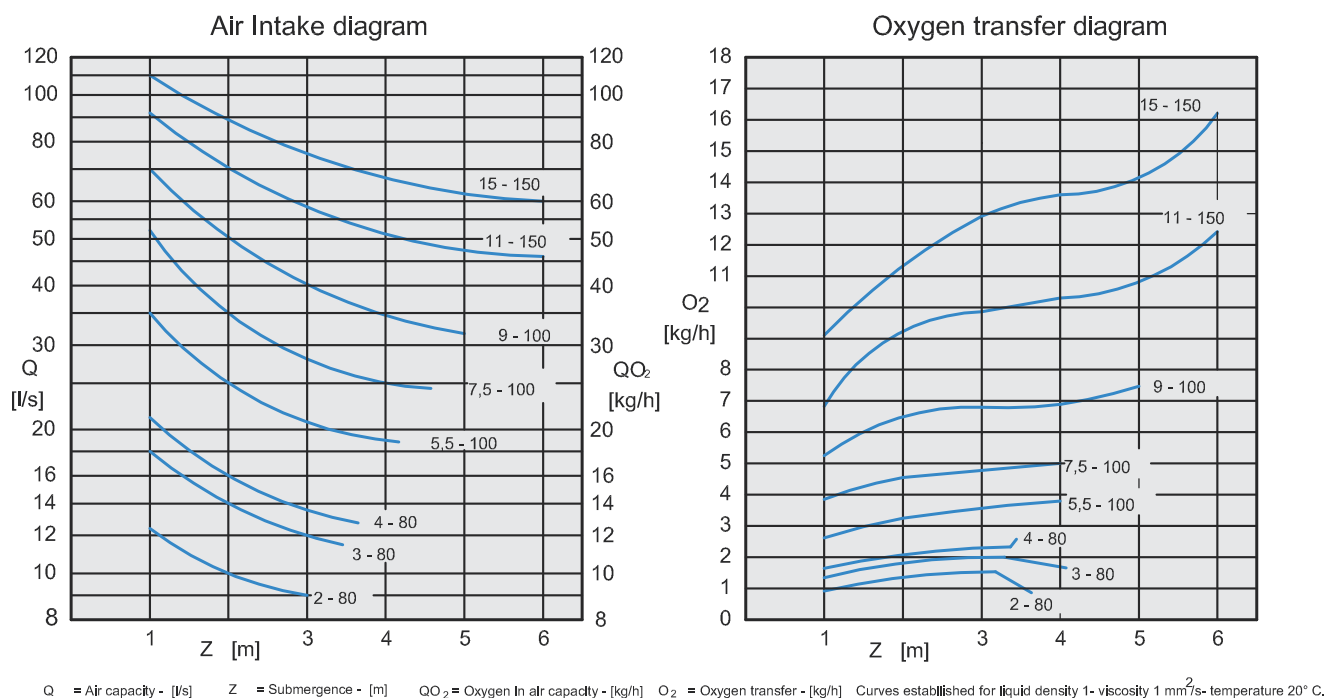
Specifications

Power Range	2.2 to 14 kW
Power Supply	380-415V - Three Phase, 50Hz, AC.
Ingress Protection	IP68
Motor	Dry Type Induction motor
Speed	1450 rpm
Class of Insulation	H
Moisture sensor	# Available
Thermal Overload Protector	* Available
Starting Method	Three Phase - DOL & SD
Shaft Seal	Single / Double Mechanical seal
Mechanical Seal Face Combination	Motor Side : Graphite / Alumina Pump Side : Silicon Carbide / Silicon Carbide
Bearing Type	Shielded prelubricated bearing
Cable Type	HO7RNF
Standard Cable Length	10m

Material of Construction

Casing	Cast iron EN-GJL-260
Impeller	Cast iron EN-GJL-260
Motor Housing	Cast iron EN-GJL-260
Shaft	Stainless Steel X30 Cr13 (AISI 420)
Fasteners	Stainless Steel A2 (AISI 304)

Submersible Aerator - Jet type



Indicative selection

$$P = 0,03 \times V$$

P = Motor rating [kW]

V = Volume of liquid sump [m³]

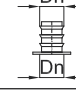
S.No.	Model	Jet Type Aerator		
		Min Max water depth(m)	Maximum intake of air(l/s)	Oxygen transfer capacity(kg/h)
1	FJET-2,2-80	1 - 3	12	0.98 - 1.5
2	FJET-3,5-80	1 - 3.5	18	1.5 - 2
3	FJET-4,2-80	1 - 3.7	21	1.7 - 2.3
4	FJET-5-100	1 - 4.2	35	2.6 - 3.8
5	FJET-7,5-100	1 - 4.6	52	3.9 - 5
6	FJET-9-100	1 - 5	70	5.3 - 7.5
7	FJET-12-150	1 - 6	90	6.8 - 12.5
8	FJET-14-150	1 - 6	110	9 - 16.2

Performance curve tolerances are as per HI : 14.6 / ISO : 9906, Grade - 2B.

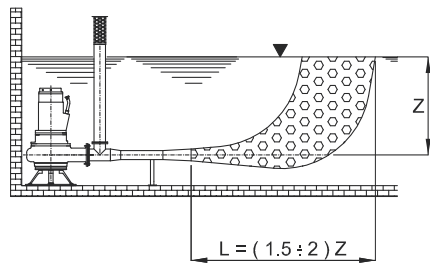
In view of continuous developments, the information / descriptions / specifications / illustrations are subject to change without notice.

FJET Series

Assembly Pump + Ejector		Composition														
		Electric Pump								Ejector		Accessories				
		Pump Type	Discharge	Motor rating	Voltage	Current	RPM	Startup		Ejector Type	Suction Pipe	Filter	Hose Connection	Frame		
Aerator Type	Product Code		DN	[kW]	[V]	[A (400V)]	n	Direct	Δ - Δ							
FJET-2,2-80	612069	FMc 80.2,2-4/212		2,2		5,4	1450	Δ		80 - 55	S 80	F 80	HC 80	FR 80		
FJET-3,5-80	600040	FMc 80.3,5-4/218	80	3,5	400	6,6	1450	Δ								
FJET-4,2-80	601579	FMc 80.4,2-4/228		4,2		9,9	1450	Δ	Δ - Δ							
FJET-5-100	602179	FMc 100.5-4/230		5		11	1450	Δ	Δ - Δ	100 - 63	S 100	F 100	HC 100	FR 100		
FJET-7,5-100	612704	FMc 100.7,5-4/246	100	7,5	400	16	1450	Δ	Δ - Δ							
FJET-9-100	613165	FMc 100.9-4/263		9		20	1450	Δ	Δ - Δ							
FJET-12-150	616407	FMc 150.12-4/280		11		24	1450	Δ	Δ - Δ	150 - 95	S 150	F 150	HC 150	FR 150		
FJET-14-150	624606	FMc 150.14-4/298	150	14		30	1450	Δ	Δ - Δ							

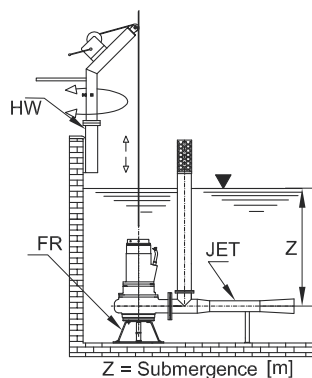
OVERALL DIMENSIONS [mm]														ACCESSORIES					
														Frame	Hoist & Winch	Hose Connection with Flange	Suction pipe	Air Intake Filter	
Aerator Type	DN1	DN2	A	B	C	D	E	F	G	H	I	L	M	N					
FJET-2,2-80	80	80	240	630	390	88,9	200	360	632	420	118	1016	240	360	FR 80	HW 80	HCF 80	S 80	AIF 80
FJET-3,5-80				670	430					460			280						
FJET-4,2-80				800	413					460			280						
FJET-5-100	100	100	240	806	566	114	260	421	632	525	118	1016	345	457	FR 100	HW 100	HCF 100	S 100	AIF 100
FJET-7,5-100				826	586					525			345						
FJET-9-100				945	603					525			345						
FJET-12-150	150	150	342	1019	677	168	395	491	943	516	202	1592	370	468	FR 150	HW 150	HCF 150	S 150	AIF 150
FJET-14-150																			

Jet shape



Z = Submergence [m]

Possible Installations



Z = Submergence [m]

