SUBMERSIBLE SEWAGE PUMPS

DAR-R LOWER

SPECIFICATION

50Hz

Rev. O

PUMP			
Liquid Handled	Type of liquid		Clean water
	Max temperature	[°C]	35
	Max solids size	[mm]	4
Maximum immersion		[m]	2 (with power cable length 5 m) 5 (with power cable length 10 m)
Construction	Impeller		Semi-open centrifugal
	Shaft seal type		Mechanical seal (pump side) + lip seal (motor side)
	Bearing		Sealed ball bearing
Pipe Connection	Suction-Flange	[mm]	Strainer
	Discharge-Flange		G1¼": UNI ISO 228
Material	Casing		AISI 304
	Impeller		Noryl
	Casing cover		PP + Glass fiber
	Shaft seal		Graphite/Alumina/NBR
	Seal cover		AISI 304
	Shaft		AISI 304 (wet extension)
Applicable standard of test			ISO 9906 - Annex A

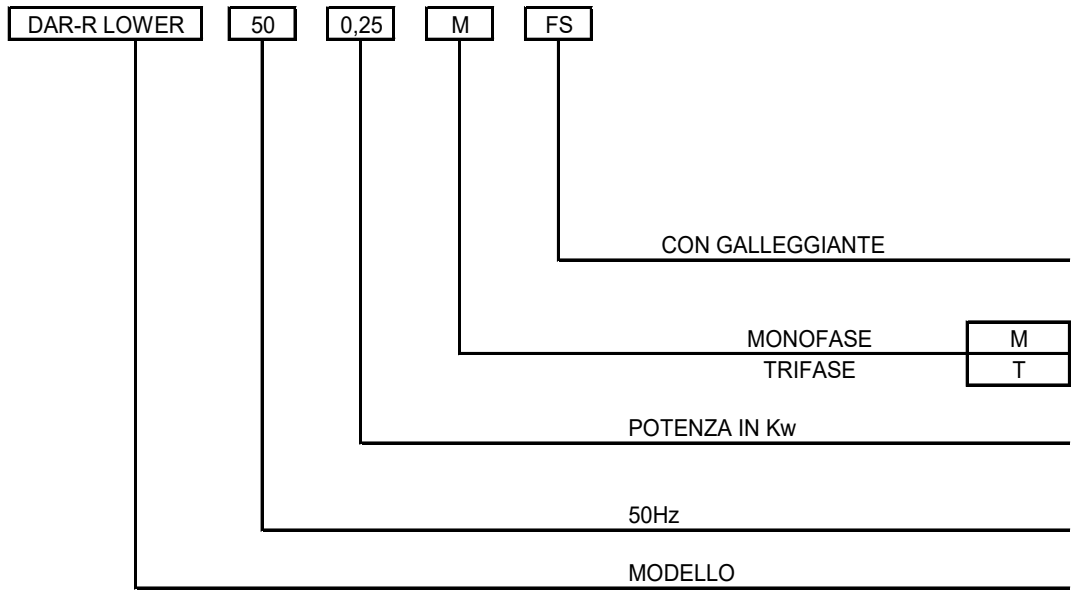
MOTOR			
Type			Submersible oil bath motor
			Single Phase
No. of Poles			2
Rotation speed		[min^{-1}]	≈2800
Insulation Class			F
Protection degree			IP X8
Power rating		[kW]	0,25
		[HP]	0,33
Frequency		[Hz]	50
Voltage		[V]	230 ±10%
Capacitor			Built in
Over load protection			Built in
Float switch			Optional
Float switch cable	material		H05VVF
	size		3G1
Power cable	length	[m]	5
	material		H05RN-F
	size		3G1
Dimensions of cable entry			Cable Gland

SUBMERSIBLE SEWAGE PUMPS DAR-R LOWER

PERFORMANCE CURVE 50Hz

Rev. O

TYPE KEY:



PERFORMANCE CURVE SPECIFICATIONS

The specifications below qualify the curves shown on the following pages.

Tolerances according to ISO 9906 Annex A
The curves refer to effective speed of asynchronous motors at 50 Hz
Measurements were carried out with clean water at 20°C of temperature and with a kinematic viscosity of ν = 1 mm^2/s (1 cSt)

In order to avoid the risk of over-heating, the pumps should not be used at a flow rate below 10% of best efficiency point.

Symbols explanation:

Q = volume flow rate
H = total head

SUBMERSIBLE SEWAGE PUMPS

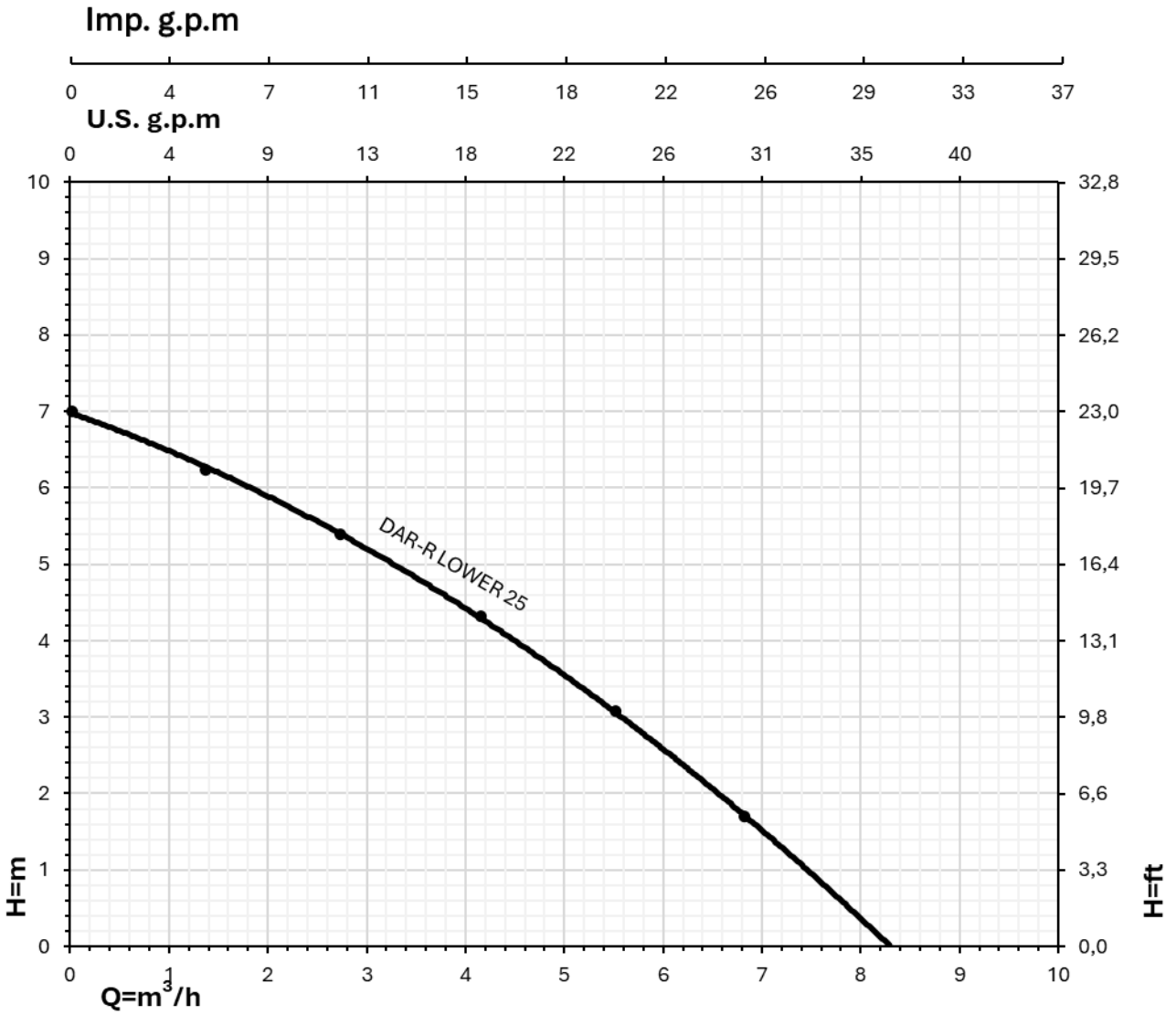
DAR-R LOWER

PERFORMANCE CURVE

50Hz

Rev. O

DAR-R LOWER 25



Pump Type	Q=Capacity [l/min]	0	25	50	75	100	125
	[m³/h]	0	1,5	3	4,5	6	7,5
	H=Total manometric head in meters						
DAR-R LOWER 25		7,0	6,2	5,2	4,0	2,5	1,0

Rotation speed ≈ 2800 min^{-1}

Test standard: ISO 9906 – Annex A

SUBMERSIBLE SEWAGE PUMPS

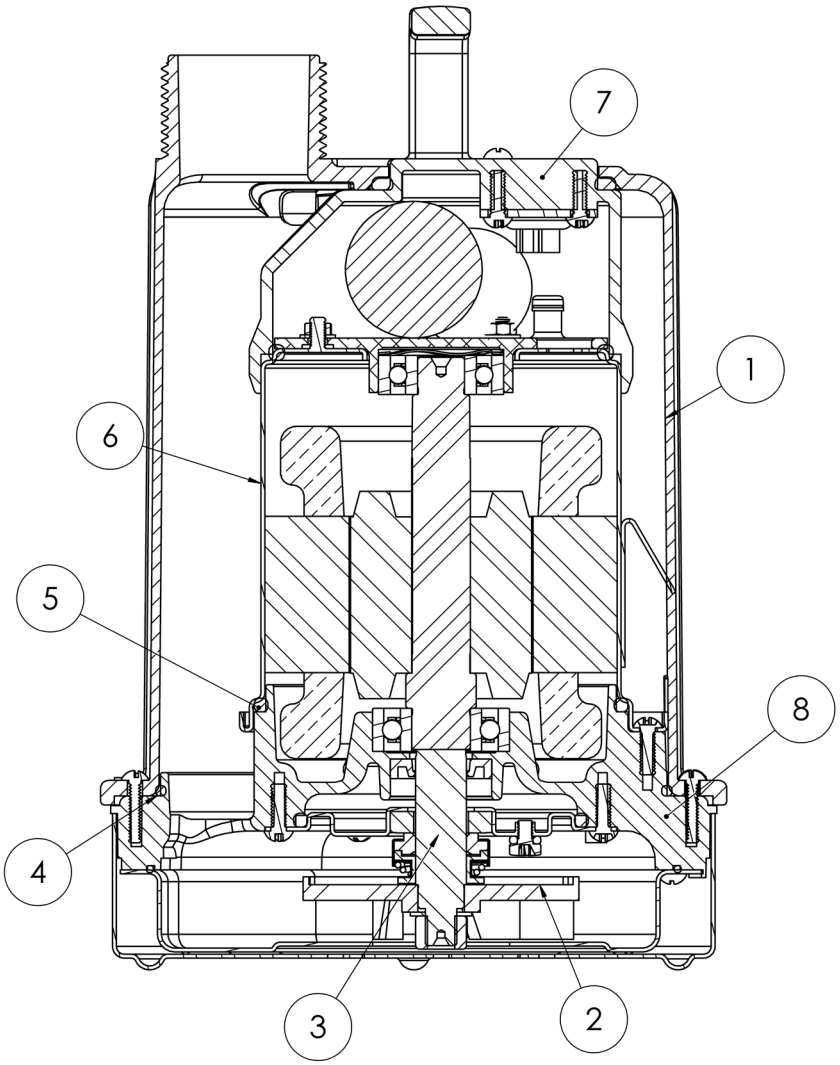
DAR-R LOWER

PERFORMANCE CURVE

50Hz

Rev. O

SECTIONAL VIEW DAR



N°	PART NAME	MATERIAL	Q.TY
1	External housing	PP + Glass fiber	1
2	Impeller	Noryl	1
3	Shaft pump side	AISI304	1
4	O-ring	NBR	1
5	O-ring	AISI304	1
6	Porta motore	AISI304	1
7	Coperchio	G20	1
8	Pump body	IXEF	1

PERFORMANCE CURVE

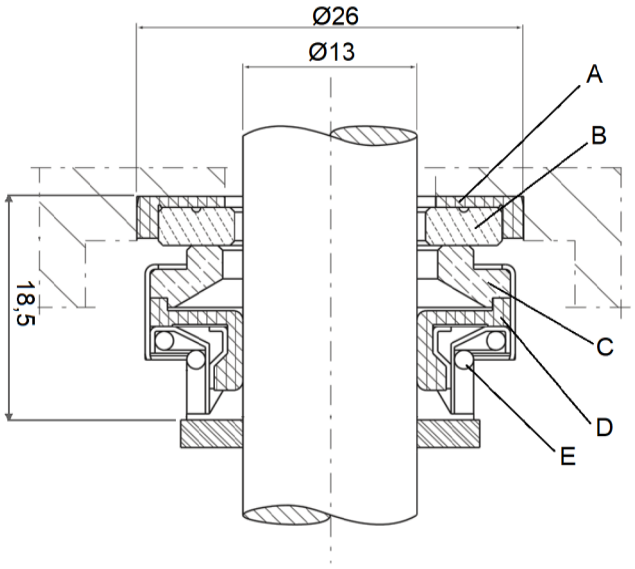
50Hz

Rev. O

BEARINGS

Pump Type	Ball Bearing	
Single Phase	Pump side	Cover side
DAR-R LOWER 25	6202 ZZ	6201 ZZ

MECHANICAL SEAL
DAR



DAR-R LOWER 25		
REF	PART NAME	MATERIAL
A	Rubber cup	NBR
B	Seat	Alumina
C	Seal face	Graphite
D	Bellow	NBR
E	Spring	AISI 304

SUBMERSIBLE SEWAGE PUMPS

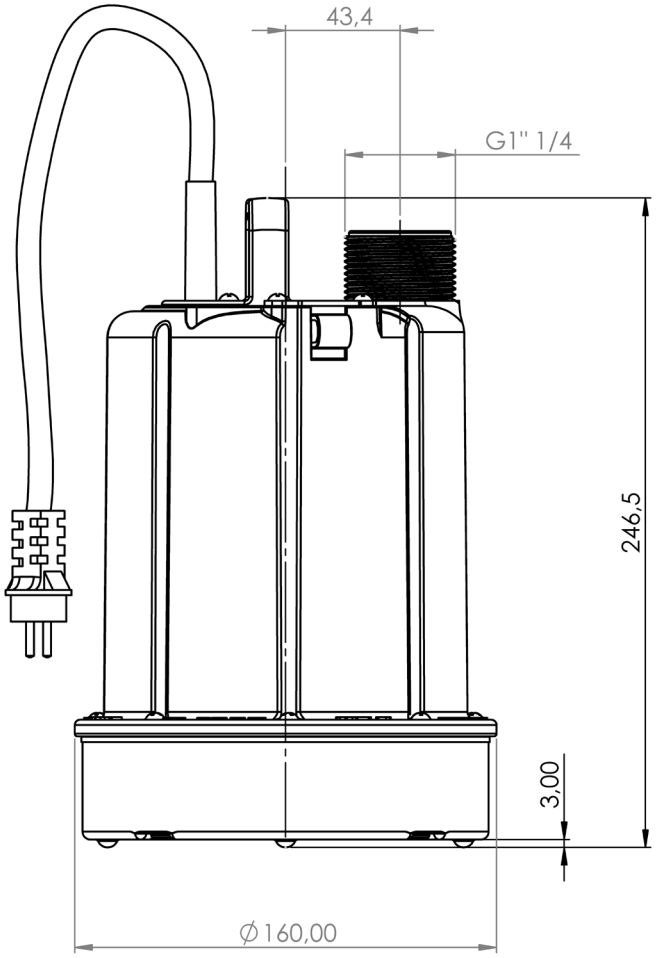
DAR-R LOWER

DIMENSIONS AND WEIGHT

50Hz

Rev. O

DAR



Pump type	H [mm]	B [mm]	Weight [kgf]
			1~
			(Without float switch)
DAR-R LOWER 25	246,5	Ø160	4,9

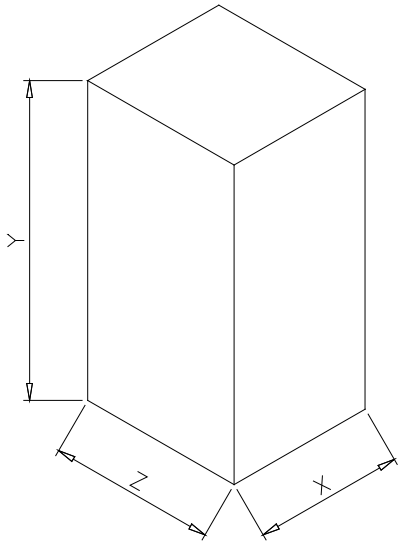
SUBMERSIBLE SEWAGE PUMPS DAR-R LOWER

DIMENSIONS AND WEIGHT

50Hz

Rev. O

PACKING



Pump type	1~ Packing [mm]			Weight [kgf]
	Z	X	Y	Automatic (With float switch)
DAR-R LOWER 25	220	190	320	4,9

MOTOR DATA

DAR-R LOWER

Pump Type	Power		Capacitor Single Phase		Input Power [kW]	Full load current [A]
Single Phase	Single Phase [kW]	[HP]	[μF]	Vc [V]	Single Phase	Single Phase
DAR-R LOWER 25	0,22	0,33	8	450	0,4	2,0

INSTALLATION

DAR-R LOWER

