



**EBARA**



**Agrometer a/s**

Fælledvej 10 • 7200 Grindsted  
Tlf. 76 72 13 00 • Fax 76 72 13 98  
[www.agrometer.dk](http://www.agrometer.dk) • [agrometer@agrometer.dk](mailto:agrometer@agrometer.dk)

	Page
<b>- SPECIFICATIONS</b>	200
SELECTION CHART	201
PERFORMANCE CHART JES 5	202
PERFORMANCE CHART JES 6	203
PERFORMANCE CHART JES 8	204
<b>- CONSTRUCTIONS</b>	300
SECTIONAL VIEW	300
MECHANICAL SEAL	301
DIAGRAM AND ELECTRIC CONNECTIONS	302
DIAGRAM AND ELECTRIC CONNECTIONS	303
<b>- DIMENSIONS</b>	400
PACKING AND WEIGHT	401
<b>- TECHNICAL DATA</b>	500
ATTENTION ON INSTALLATION OF THE PUMP	501

## SPECIFICATIONS

50Hz

Rev E

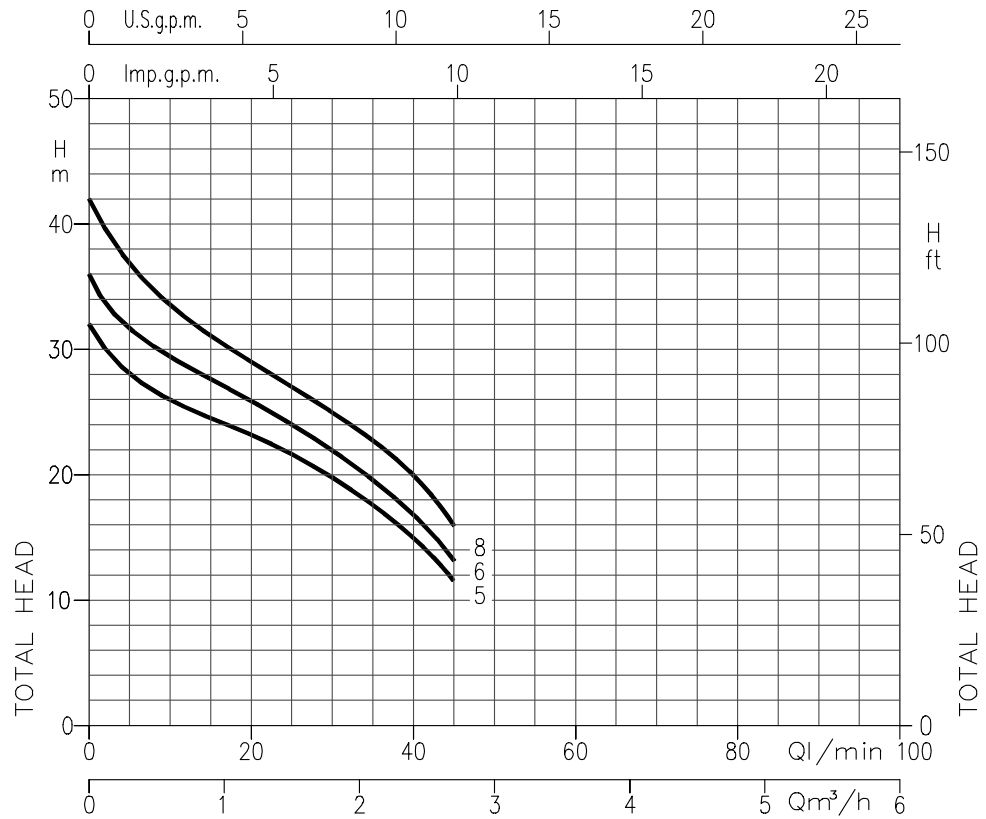
PUMP		
Liquid Handled	Type of liquid	Clean water
	Max temperature	45
Maximum working pressure	[MPa]	0.6
Maximum suction depth	[m]	8
Construction	Impeller	Closed centrifugal type
	Shaft seal type	Mechanical seal
	Bearing	Sealed ball bearing
Pipe Connection	Suction [inch]	G 1 UNI ISO 228
	Discharge [inch]	G 1 UNI ISO 228
Material	Casing	AISI 304
	Impeller	PPO mod. glass fibre reinforced
	Casing cover	AISI 304
	Shaft seal	Ceramic/Carbon/NBR
	Shaft	AISI 303 (Wet extension)
	Bracket	AISI 304
	Ejector	PPO mod. glass fibre reinforced
Diffuser	PPO mod. glass fibre reinforced	
Applicable standard of test		ISO 9906 – Annex A

MOTOR		
Type	Electric - TEFC	
	Single Phase	Three Phase
No. of Poles	2	
Synchronous speed	3000	
Insulation Class	Class F	
IP Rating	IP 44	
	IP 55 (on request)	
Power rating	[kW]	0.37 ÷ 0.6
	[HP]	0.5 ÷ 0.8
Frequency	50	
Voltage	230 ±10%	230/400 ±10%
Capacitor	Built in	-
Over load protection	Built in	Provided by the user
Casing material	AISI 304	
Base material/motor support	AISI 304	
Dimensions of cable entry	PG11	

## SELECTION CHART

50Hz

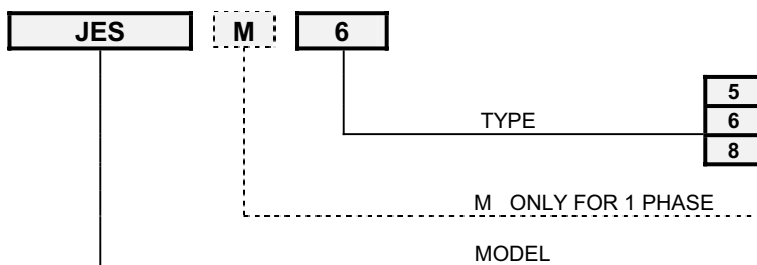
Rev E



Type pumps		kW	HP	Q=Capacity			
Single Phase 230 V 50 Hz	Three Phase 230/400 V 50 Hz			l/min 5	20	40	45
JESM 5	JES 5	0.37	0.5	28	23	15	11.5
JESM 6	JES 6	0.44	0.6	31.5	26	17	13.5
JESM 8	JES 8	0.6	0.8	37	29	20	16

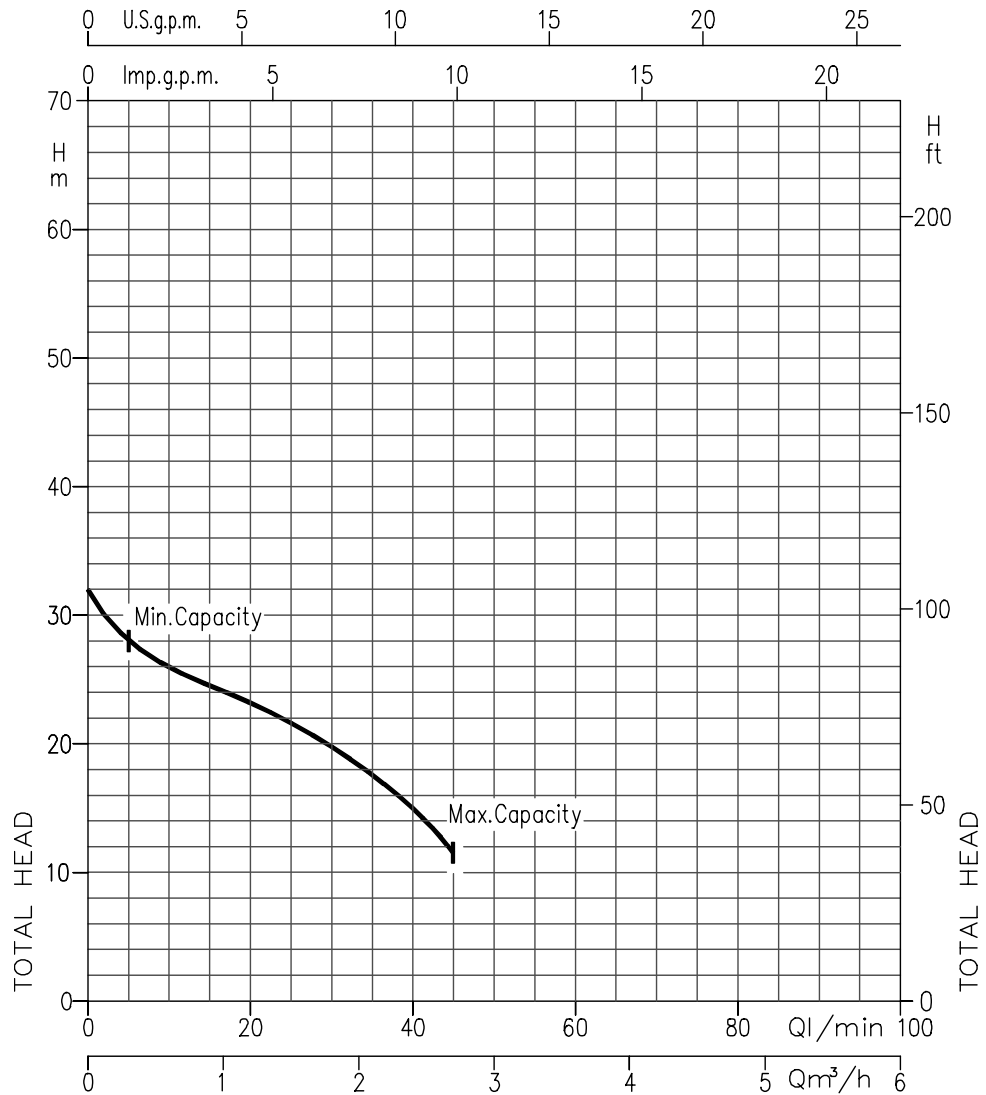
H=Total manometric head in meters

### TYPE KEY



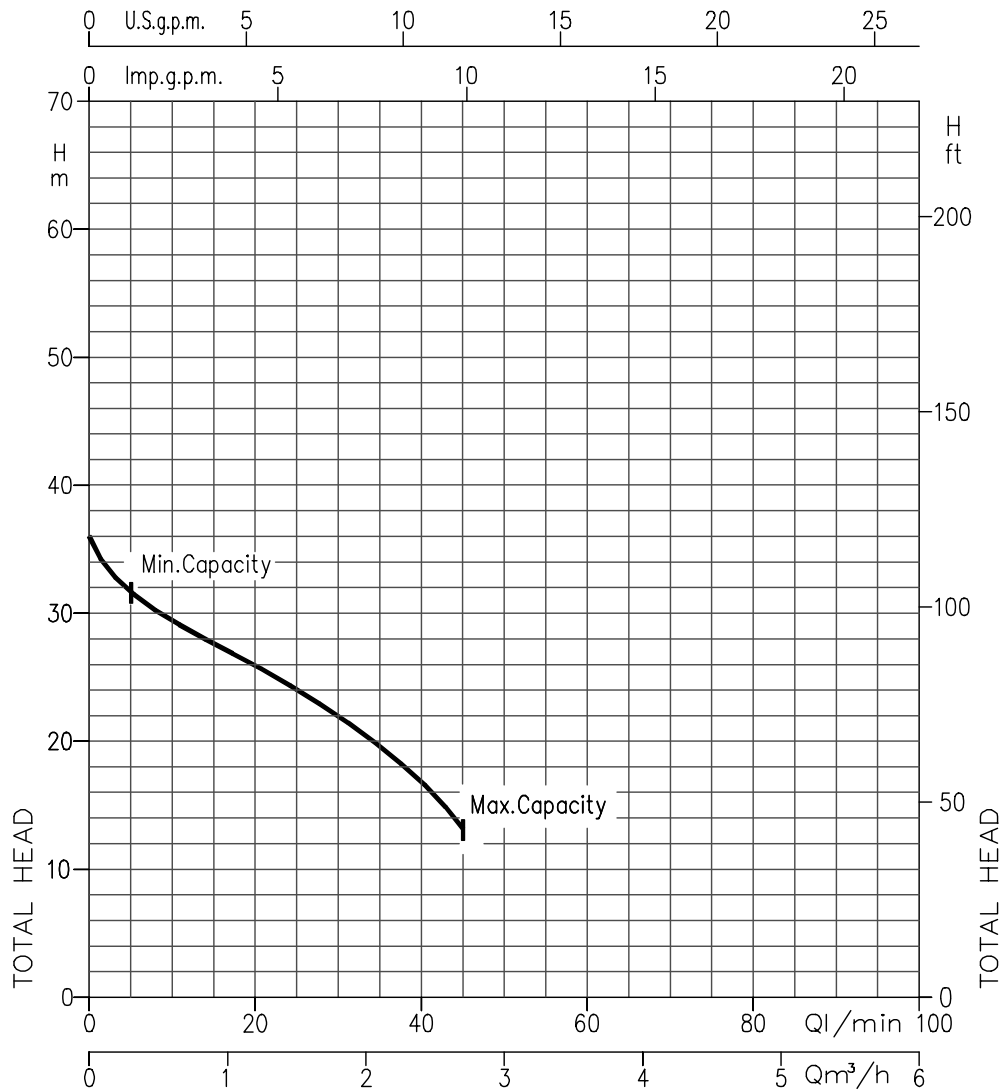
PUMP CHARACTERISTIC PERFORMANCE

JES 5 (0.37 kW) SYNCHRONOUS SPEED : 3000 min<sup>-1</sup>



Temperature of water: 20°C  
 Impeller diameter = 104 mm  
 Applicable standard of test: ISO 9906 – Annex A

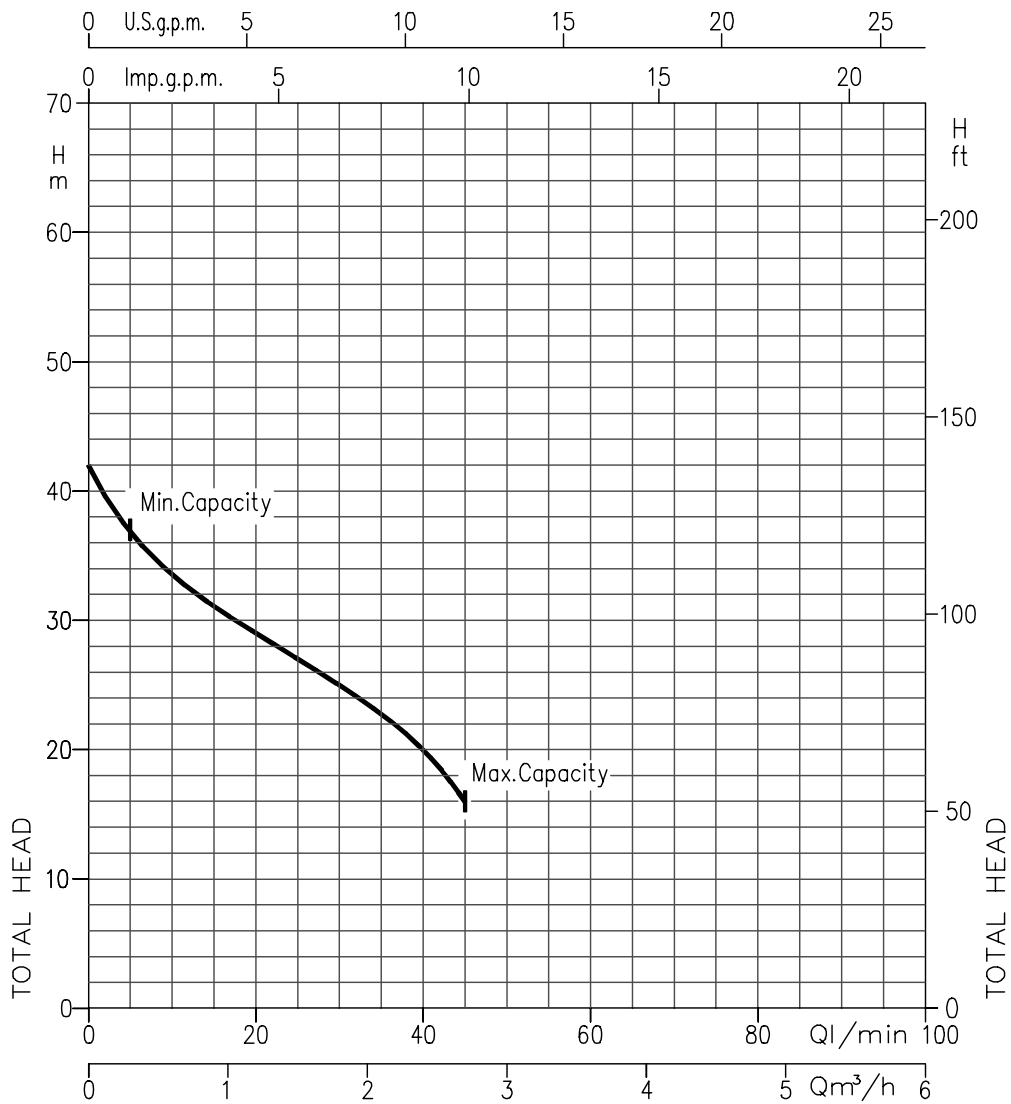
**PUMP CHARACTERISTIC PERFORMANCE**  
**JES 6 (0.44 kW) SYNCHRONOUS SPEED: 3000 min<sup>-1</sup>**



Temperature of water: 20°C  
 Impeller diameter = 104 mm  
 Applicable standard of test: ISO 9906 – Annex A

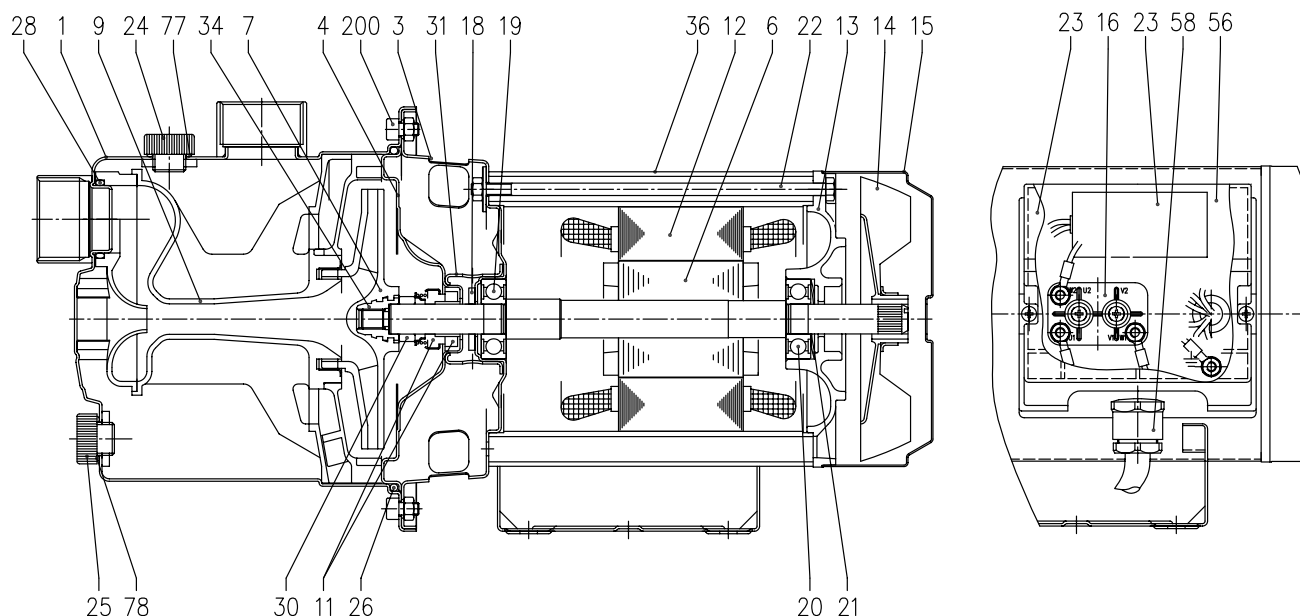
PUMP CHARACTERISTIC PERFORMANCE

JES 8 (0.6 kW) SYNCHRONOUS SPEED : 3000 min<sup>-1</sup>



Temperature of water: 20°C  
 Impeller diameter = 110 mm  
 Applicable standard of test: ISO 9906 – Annex A

### SECTIONAL VIEW



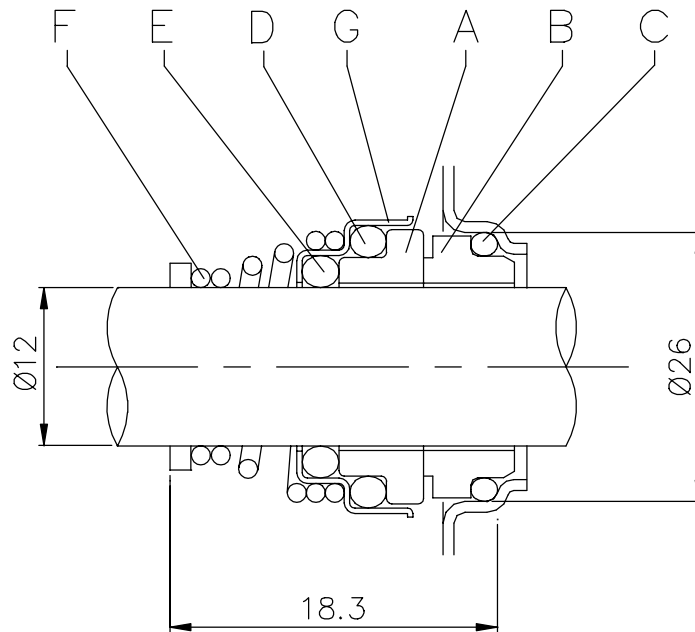
N°	PART NAME	MATERIAL	Q.TY	N°	PART NAME	MATERIAL	Q.TY
1	Casing	AISI 304	1	21	Adjusting ring	Steel C70	1
3	Motor bracket	AISI 304	1	22	Tie rod	Fe 42 Zinked	4
4	Casing cover	AISI 304	1	23	Capacitor [1]	-	1
6	Shaft with rotor	AISI 303 (Wet extension)	1	24	Priming plug	PA6	1
7	Impeller	PPO mod. glass fibre reinforced	1	25	Drain plug	PA6	1
9	Diffuser Venturi tube	PPO mod. glass fibre reinforced	1	26	O-ring	NBR	1
11	Mechanical seal	Carbon/Ceramic/NBR	1	28	O-ring	NBR	1
12	Motor frame with stator	-	1	30	Mechanical seal spacer	Brass	1
13	Motor cover	Aluminium	1	31	Thrust flange	AISI 304	1
14	Fan	PA6	1	34	Impeller nut [2]	AISI 304	1
15	Fan cover	Fe P04 Zinked	1	36	External motor casing	AISI 304	1
16	Terminal board	-	1	56	Box gasket	NBR	1
17	Terminal box cover	PA66 glass fibre reinforced	1	58	Cable entry	-	1
18	Splash ring	NBR	1	77	O-ring	NBR	1
19	Pump side ball bearing	-	1	78	O-ring	NBR	1
20	Fan side ball bearing	-	1	200	Screw	Stainless steel A2 UNI7323	6

[1] Only for single phase

[2] Only for three phase



## MECHANICAL SEAL



REF	PART NAME	MATERIAL
A	Rotary seal ring	ceramic
B	Stationary seal ring	carbon graphite
C	O Ring	NBR
D	O Ring	NBR
E	O Ring	NBR
F	Self driving spring	AISI 316
G	Frame	AISI 304

DIAGRAM AND ELECTRIC CONNECTIONS

SINGLE PHASE MOTOR

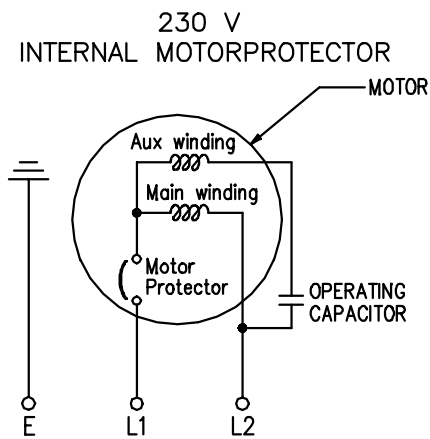
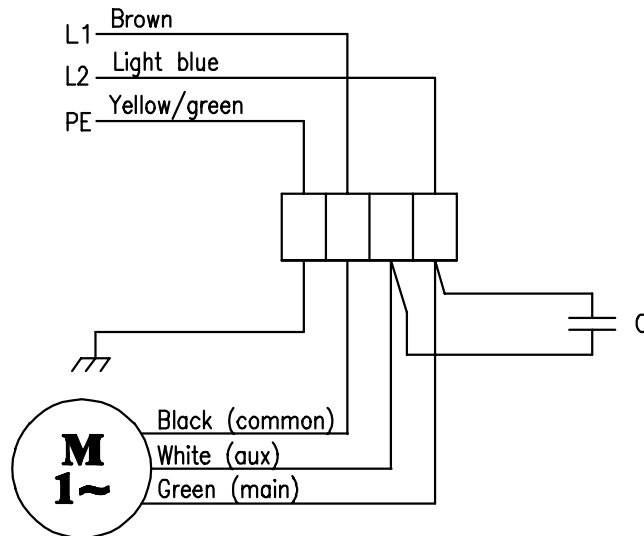
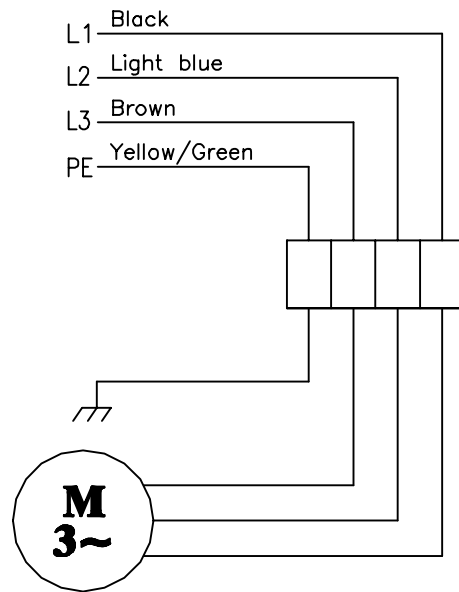


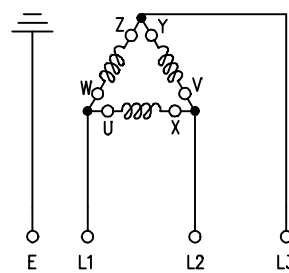
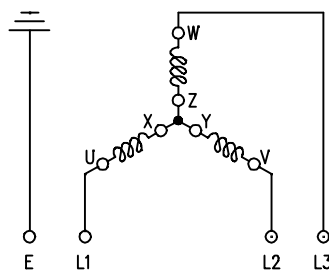
DIAGRAM AND ELECTRIC CONNECTIONS

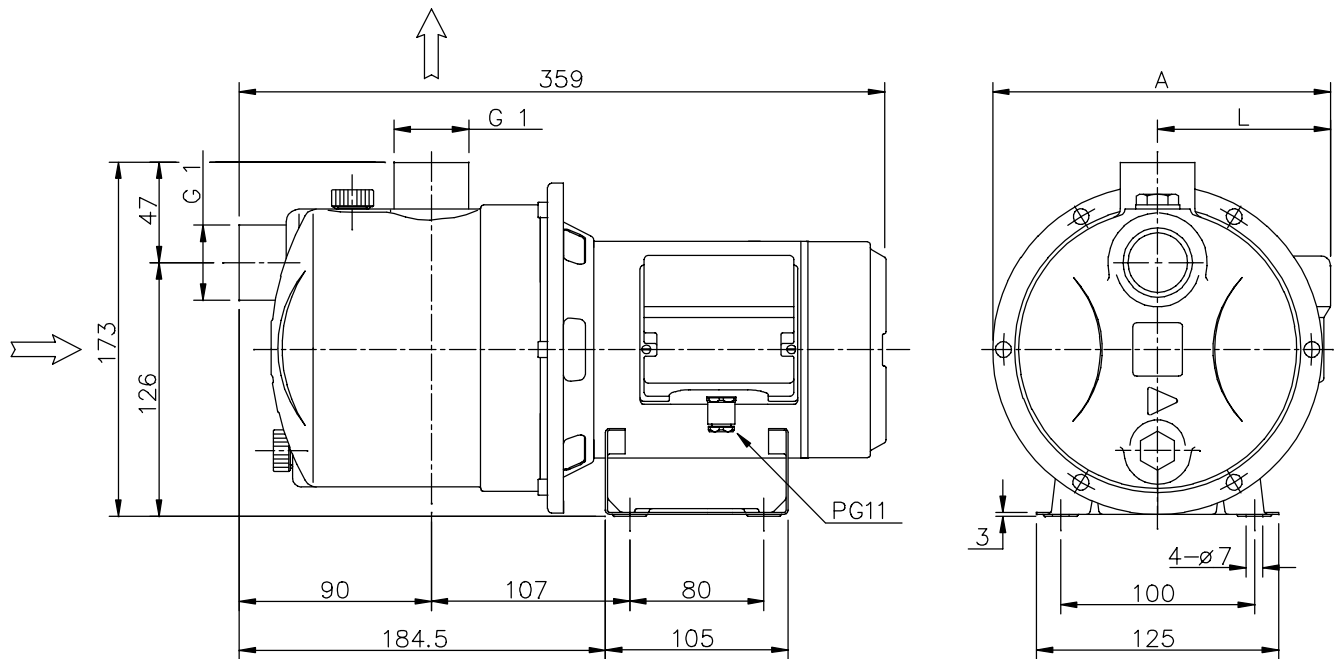
THREE PHASE MOTOR



400 V  
STAR CONNECTION

230 V  
DELTA CONNECTION

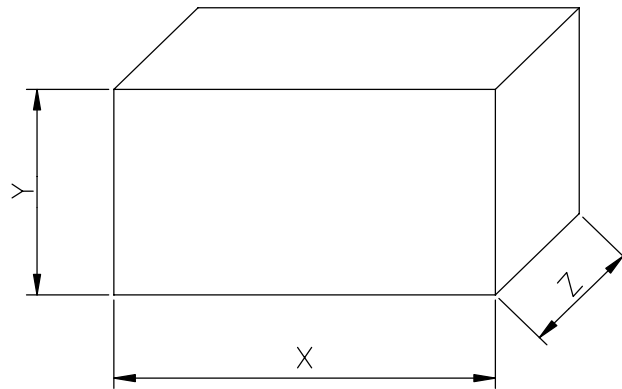




Pump type JES	Dimensions in mm			
	[1]	A	[2]	L
5	181	177	96	92
6	181	177	96	92
8	181	177	96	92

[1] = Only for single phase

[2] = Only for three phase



Type pumps		PACKING [mm]			WEIGHT [kg]	
Single Phase	Three Phase	X	Y	Z	Single Phase	Three Phase
JESM 5	JES 5	190	190	370	5.6	5.6
JESM 6	JES 6	190	190	370	5.8	5.8
JESM 8	JES 8	190	190	370	6	6

Type pumps		kW	HP	Capacitor		Input		Full load current			Locked rotor current		
Single Phase 230 V 50 Hz	Three Phase 230/400 V 50 Hz			Single Phase $\mu\text{F}$	Vc	Single Phase	Three Phase	Single Phase	Three Phase 230 V	400 V	Single Phase 230 V 50 Hz	Three Phase 230 V 50 Hz	400 V 50 Hz
JESM 5	JES 5	0.37	0.5	10	450	0.44	0.43	2.1	1.5	0.85	6.3	6.4	3.7
JESM 6	JES 6	0.45	0.6	10	450	0.54	0.49	2.4	1.9	1.1	8.5	8.6	5
JESM 8	JES 8	0.6	0.8	12.5	450	0.63	0.58	3.0	2.25	1.3	10.6	10.7	6.2

Type pumps		Ball Bearing	
Single Phase 230 V 50 Hz	Three Phase 230/400 V 50 Hz	Pump side	Fan side
JESM 5	JES 5	6201 ZZ	6201 ZZ
JESM 6	JES 6	6201 ZZ	6201 ZZ
JESM 8	JES 8	6201 ZZ	6201 ZZ

## ATTENTION ON INSTALLATION OF THE PUMP

50Hz

Rev E

If you use this pump on suction condition, it tends to breathe the air from outside because the pressure in pump becomes vacuum condition when it stopped. So water in the pump sometimes fall down to breath the air from pipe connection. If it is used to operate continuously under this condition, this is the cause of breakdown to overheat inside the pump.



**So please install foot valve or check valve at suction pipe in order to prevent the pump from such a condition. And moreover will you please support the suction pipe and the delivery one to prevent the pump from leaning the weight of pipe.**

