



# **BEST ONE**

## **Stainless Steel Domestic Sump Pumps**



**Best One**



**Best One Vox**  
*(Vortex Impeller)*



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50Hz

V10

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## FEATURES AND APPLICATIONS

50Hz

V10

**Best One MA**  
Automatic pump  
with Float Switch



**Best One MS**  
Automatic pump  
with Magnetic Switch



**Best One M**  
Manual  
Pump



**Best One Vox MA**  
Automatic pump  
with Float Switch



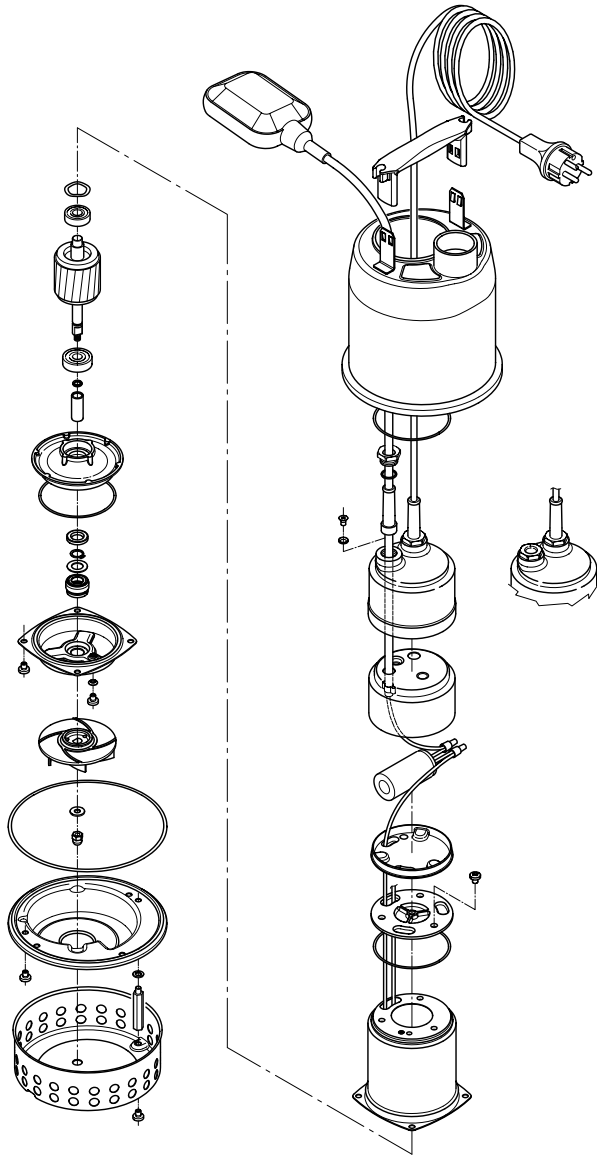
**Best One Vox M**  
Manual  
Pump



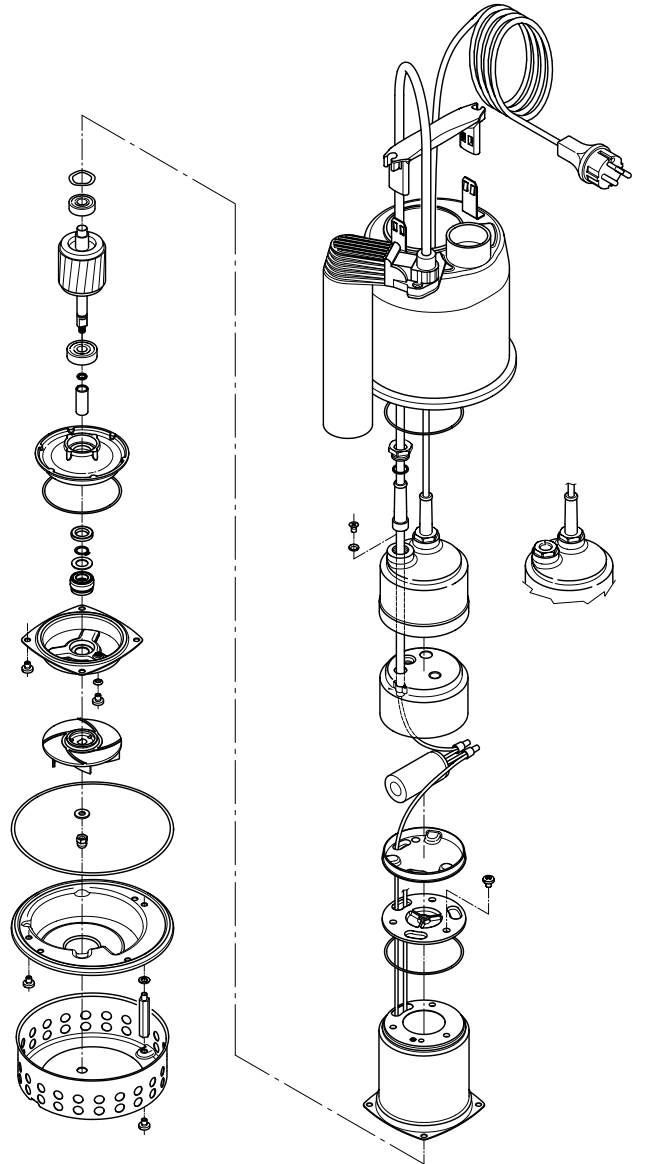
Domestic sump pump manufactured in 304 stainless steel with a semi open impeller (Best One) and a Semi Vortex impeller (Best One Vox). Suitable for many light dewatering applications, including: Draining wells, basements, cellars, etc. Emptying of tanks & drums, general transfer of water.

- Maximum solids handling 10mm (Best one) 20mm (Best One Vox)
- Maximum liquid Temperature: 50 C
- Maximum submergence: 5m
- Pump casing: 304 Stainless Steel
- Impeller: 304 Stainless Steel
- Outer casing: 304 Stainless Steel
- Shaft: 303 Stainless Steel
- Motor Frame: 304 Stainless Steel
- Motor Cap: 304 Stainless Steel
- Fasteners: 304 Stainless Steel
- Seal: Carbon/Ceramic Mechanical seal in oil chamber, upper lip seal
- Air Filled, dry submersible, 2 pole motor
- Insulation class F
- IPX8 protection
- 50 Hz, 1 phase 240 volt
- in built overload protection
- 5m of cable (with plug)
- 32mm discharge
- 0.25 kW motor
- Single phase, automatic, manual versions and magnetic switch (Best One MS only) available.

MA (float switch)



MS (magnetic switch)



**SPECIFICATION**

50Hz

V10

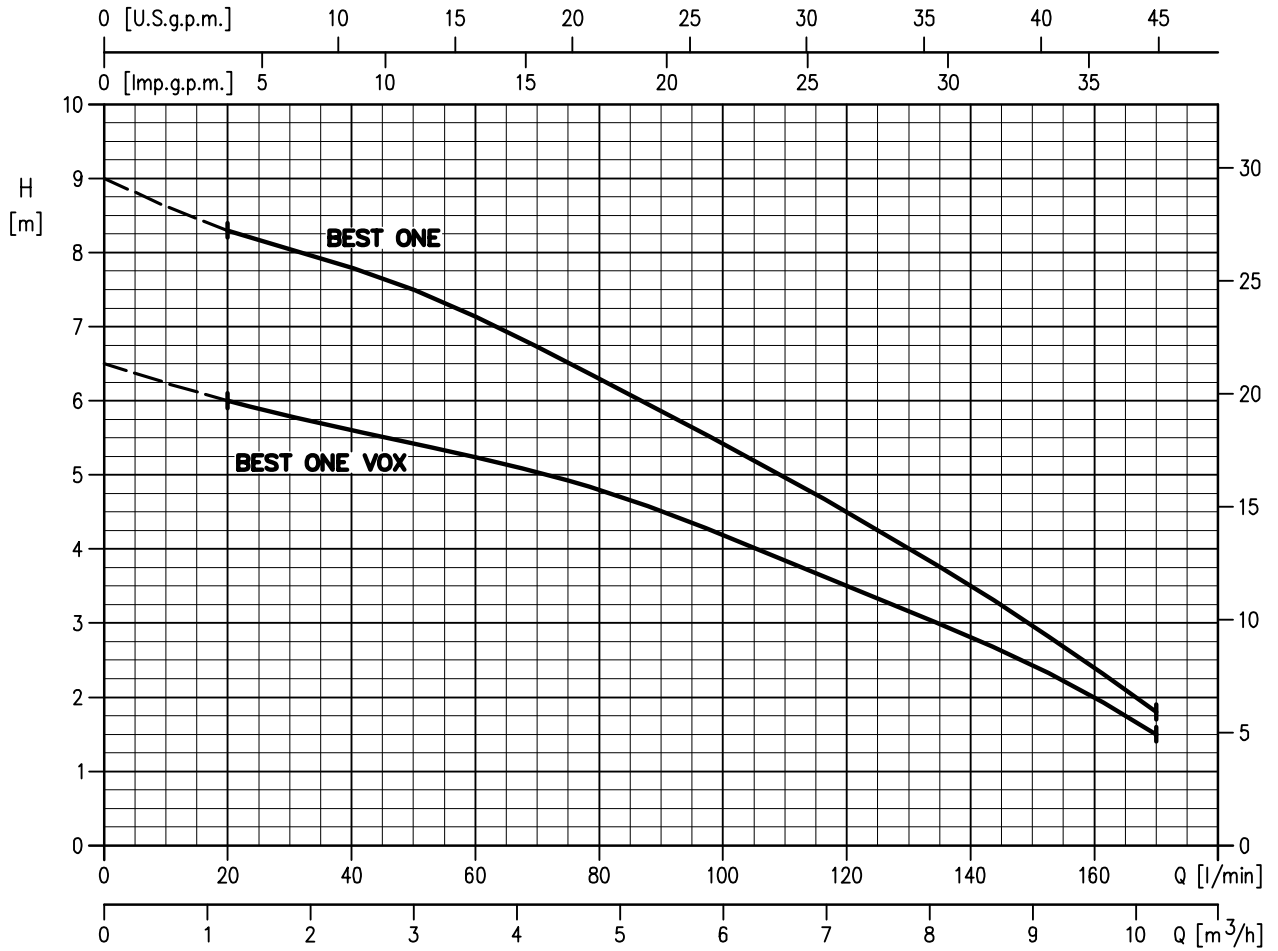
PUMP		
Liquid Handled	Type of liquid	Clear water (Clean water for MS version)
	Max temperature [°C]	50
	Max solids size [mm]	10 20 (for Vortex version)
Maximum immersion	[m]	5
Construction	Impeller	Semi-open centrifugal type (BEST ONE) Vortex type (BEST ONE VOX)
	Shaft seal type	Oil lubricated mechanical seal (pump side) + lip seal (motor side)
	Bearing	Sealed ball bearing
Pipe Connection	Suction	Strainer
	Discharge nozzle [inch]	G1¼": UNI ISO 228
Material	Pump casing	AISI 304
	Impeller	AISI 304
	Shaft seal	Mechanical seal: Ceramic/Carbon/NBR Lip seal: NBR
	Casing cover	AISI 304
	Shaft	AISI 303 + AISI 303 ceramic coated shaft sleeve
	Lubricating liquid	White mineral oil: Esso Marcol 152
Applicable standard of test		ISO 9906 – Annex A

MOTOR		
Type	Submersible dry type	
No. of Poles	2	
Rotation speed [min <sup>-1</sup> ]	≈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	
Casing material	AISI 304	
Switch	float	MA version (no maintenance required)
	magnetic	MS version (maintenance required)
Float/magnetic switch cable	material	H07RN-F
	size	3G1
Power cable	length [m]	5 (only for internal usage)
	material	H05RN-F
	size	3G0.75
Cable entry	Cable Gland	

## SELECTION CHART & TYPE KEY

50Hz

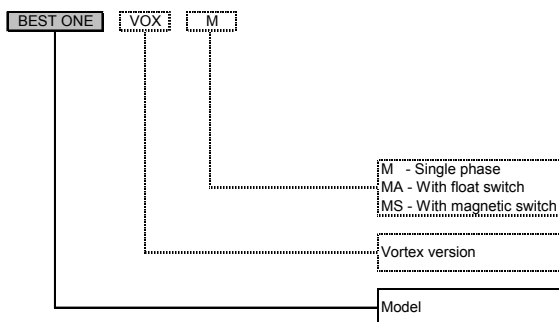
V10



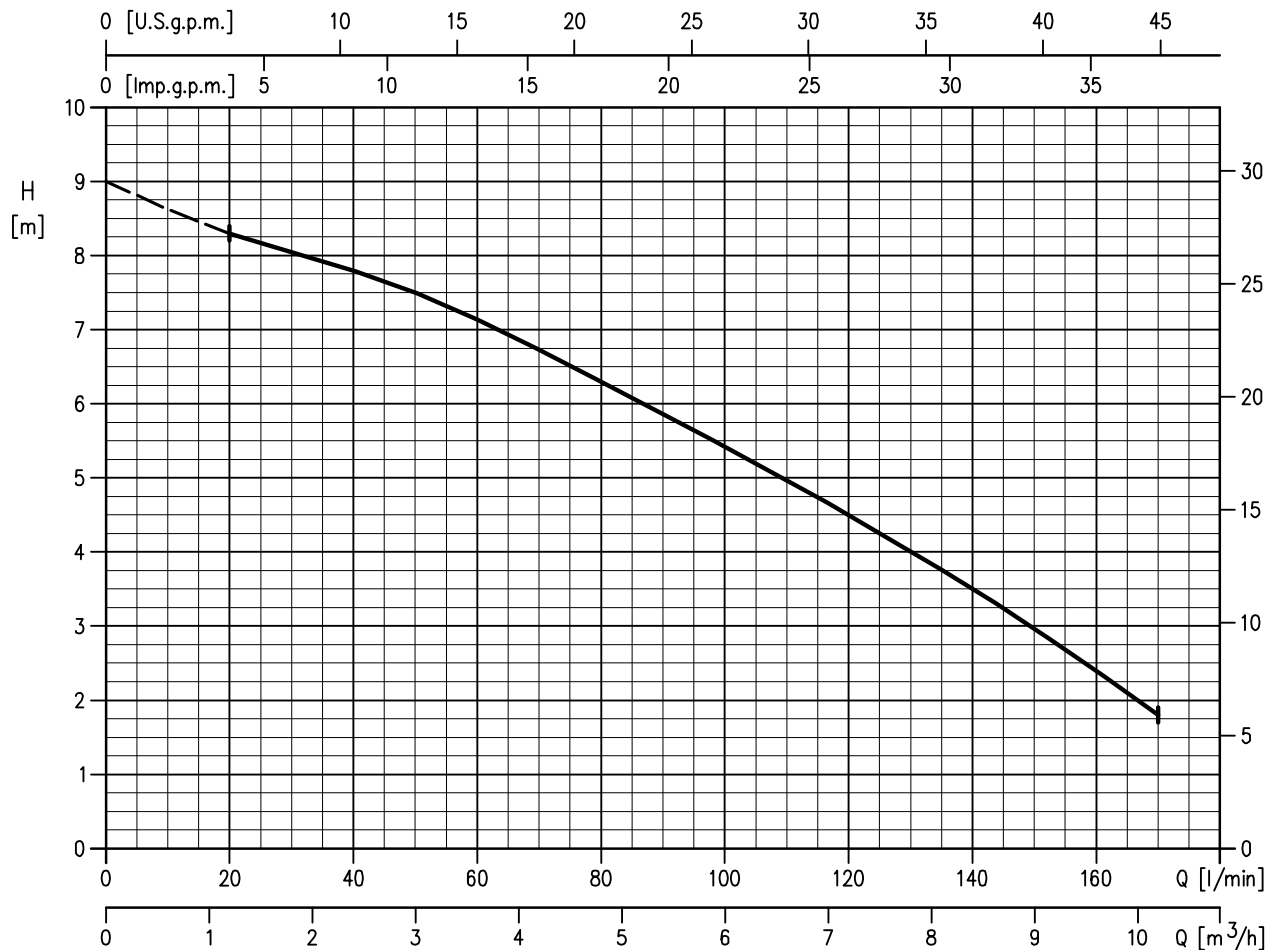
Type pumps	Power		Q=Capacity						
	kW	HP	l/min 0	20	40	80	120	160	170
BEST ONE M	0,25	0,33	9,0	8,3	7,8	6,3	4,5	2,4	1,8
BEST ONE VOX M	0,25	0,33	6,5	6,0	5,6	4,8	3,5	2,0	1,5

H=Total manometric head in meters

### TYPE KEY



**BEST ONE**



**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  $\nu = 1 \text{ mm}^2/\text{s}$  (1 cSt)

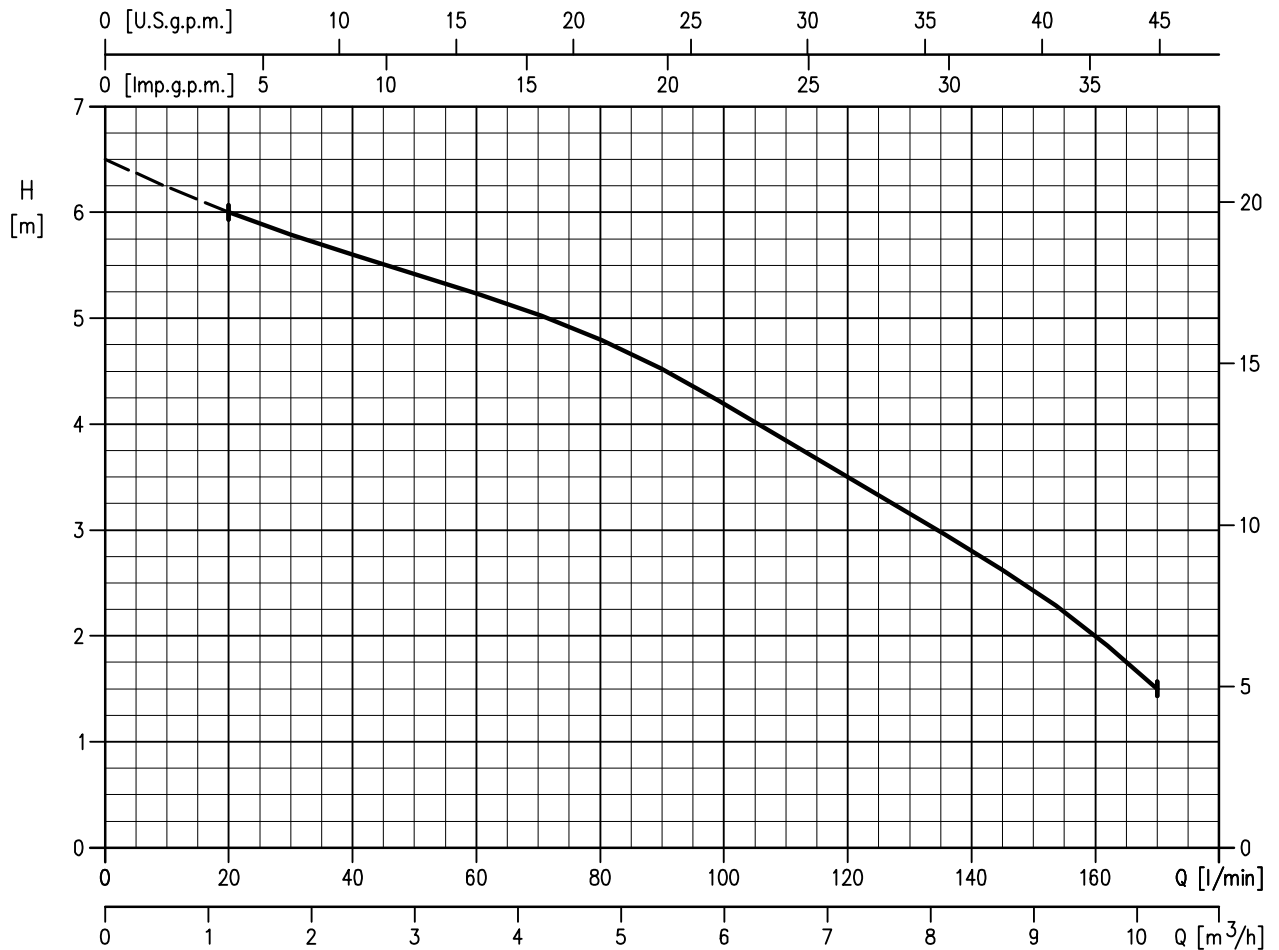
In order to avoid the risk of over-heating, the pumps should not be used at a flow rate below 10% of best efficiency point.

Symbols explanation:

Q = volume flow rate

H = total head

**BEST ONE VOX**



**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  $\nu = 1 \text{ mm}^2/\text{s}$  (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.

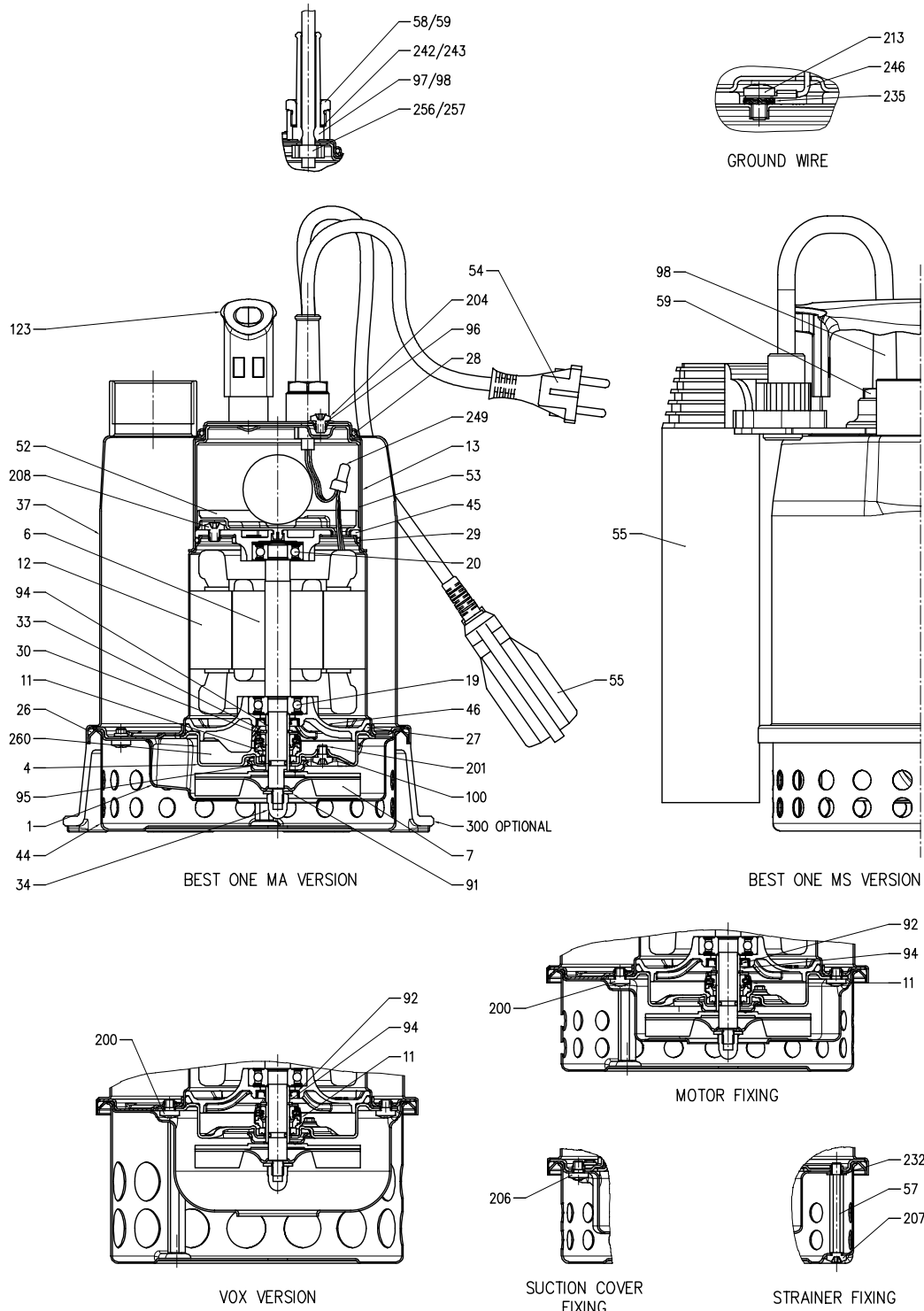
Symbols explanation:

Q = volume flow rate

H = total head



SECTIONAL VIEW



### SECTIONAL VIEW TABLE

V10

N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD	Q.ty
1	Suction cover	EN 1.4301 (AISI 304)	-	-	1
4	Casing cover	EN 1.4301 (AISI 304)	-	-	1
6	Shaft with rotor	EN 1.4305 (AISI 303)	-	-	1
7	Impeller	EN 1.4301 (AISI 304)	-	-	1
11	Mechanical seal [1]	[1]	[1]	-	1
12	Motor frame with stator	EN 1.4301 (AISI 304)	-	-	1
13	Motor cover	EN 1.4301 (AISI 304)	-	-	1
19	Lower ball bearing	-	-	-	1
20	Upper ball bearing	-	-	-	1
21	Adjusting ring	-	-	-	1
23	Capacitor	-	-	-	1
26	O-ring	NBR	159,5x3	-	1
27	O-ring	NBR	88,5x3,53	-	1
28	O-ring	NBR	75,87x2,62	-	1
29	O-ring	NBR	75,87x2,62	-	1
30	Washer	EN 1.4301 (AISI 304)	12x21x1	-	1
33	Seeger ring	Carbon steel TC80	12	UNI 7435	1
34	Impeller nut	A2 - 70 UNI 7323	M6	UNI 5721	1
37	Pump casing	EN 1.4301 (AISI 304)	-	-	1
44	Strainer	EN 1.4301 (AISI 304)	-	-	1
45	Upper bearing housing	EN 1706 AC-46000 D	-	-	1
46	Lower bearing housing	EN 1706 AC-46000 D	-	-	1
52	Terminal insulating base	PA6	-	-	1
53	Terminal insulating box	PA6	-	-	1
54	Power cable	-	-	-	1
55	Switch [2] [3]	-	-	-	1
57	Spacer	EN 1.4301 (AISI 304)	-	-	2
58	Power cable connector	OT 58 UNI 5705-65 Nickel-plated Brass	-	-	1
59	Switch cable connector [2]	OT 58 UNI 5705-65 Nickel-plated Brass	-	-	1
91	Washer	EN 1.4301 (AISI 304)	-	-	1
92	Lip seal	NBR	22x12x4	-	1
94	Shaft sleeve	EN 1.4305 (AISI 303) ceramic coated	-	-	1
95	O-ring	NBR	6,07x1,78	-	1
96	O-ring	NBR	4,48x1,78	-	1
97	Power cable connector	NBR	-	-	1
98	Switch cable connector [2]	NBR	-	-	1
100	O-ring	NBR	4,48x1,78	-	1
123	Handle	PP	-	-	1
200	Screw	A2 - 70 UNI 7323	M5x6	UNI 7687	4
201	Screw	A2 - 70 UNI 7323	M5x6	UNI 7687	1
204	Screw	A2 - 70 UNI 7323	M5x6	UNI 7687	1
206	Screw	A2 - 70 UNI 7323	M5x6	UNI 7687	3
207	Screw	A2 - 70 UNI 7323	M5x6	UNI 7687	2
208	Screw	A2 - 70 UNI 7323	M5x6	UNI 7687	3
213	Screw	A2 - 70 UNI 7323	M4x6	UNI 7687	1
232	Washer	PA6	5,5x10x1	-	1
235	Washer	Zincd Steel	4	UNI 8842	1
242	Washer	EN 1.4301 (AISI 304)	13,4x15,9x1	-	1
243	Washer [2]	EN 1.4301 (AISI 304)	13,4x15,9x1	-	1
246	Ground wire	-	-	-	1
256	Strain relief	-	-	-	1
257	Strain relief [2]	-	-	-	1
260	Oil	Esso Marcol 152	-	-	40 cc
300	Minimum suction system [4]	Thermoplastic	-	-	-

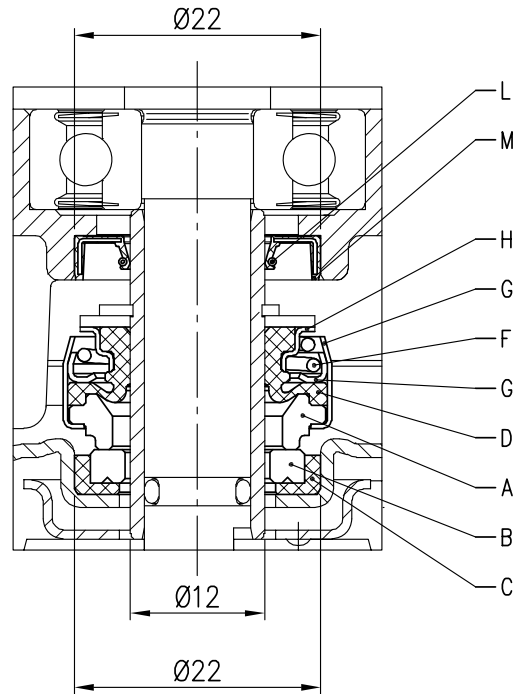
[1] See pag. 303

[2] Only for automatic version

[3] It could be floating or magnetic type

[4] OPTIONAL See pag.500

**MECHANICAL SEAL**



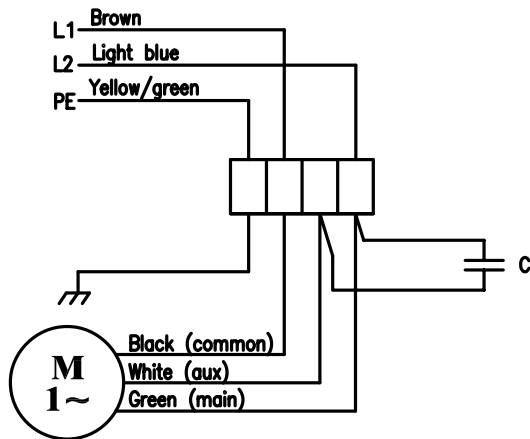
REF	PART NAME	MATERIAL
A	Rotary seal ring	Carbon graphite
B	Stationary seal ring	Ceramic
C	Gasket	NBR
D	Bellows	NBR
F	Self driving spring	EN 1.4301 (AISI 304)
G	Frame	EN 1.4301 (AISI 304)
H	Retainer ring	EN 1.4301 (AISI 304)
L	Spring	EN 1.4318 (AISI 302)
M	Lip	NBR

**BEARINGS**

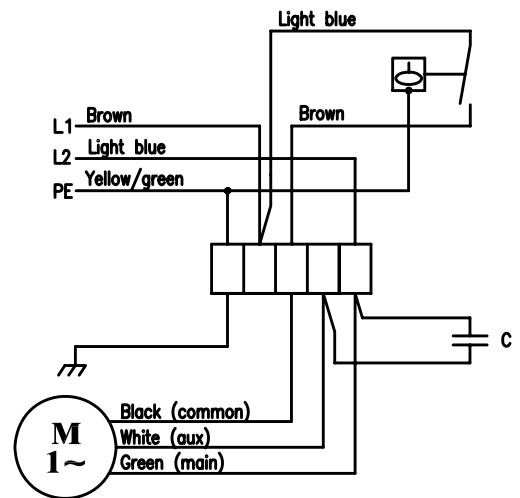
Type pumps	Ball Bearing	
	Lower side	Upper side
BEST ONE M	6200 ZZ C3	6000 ZZ C3

**SINGLE PHASE MOTOR DIAGRAM AND ELECTRIC CONNECTIONS**

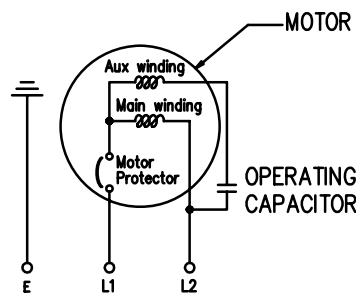
WITHOUT FLOAT SWITCH



WITH FLOAT SWITCH

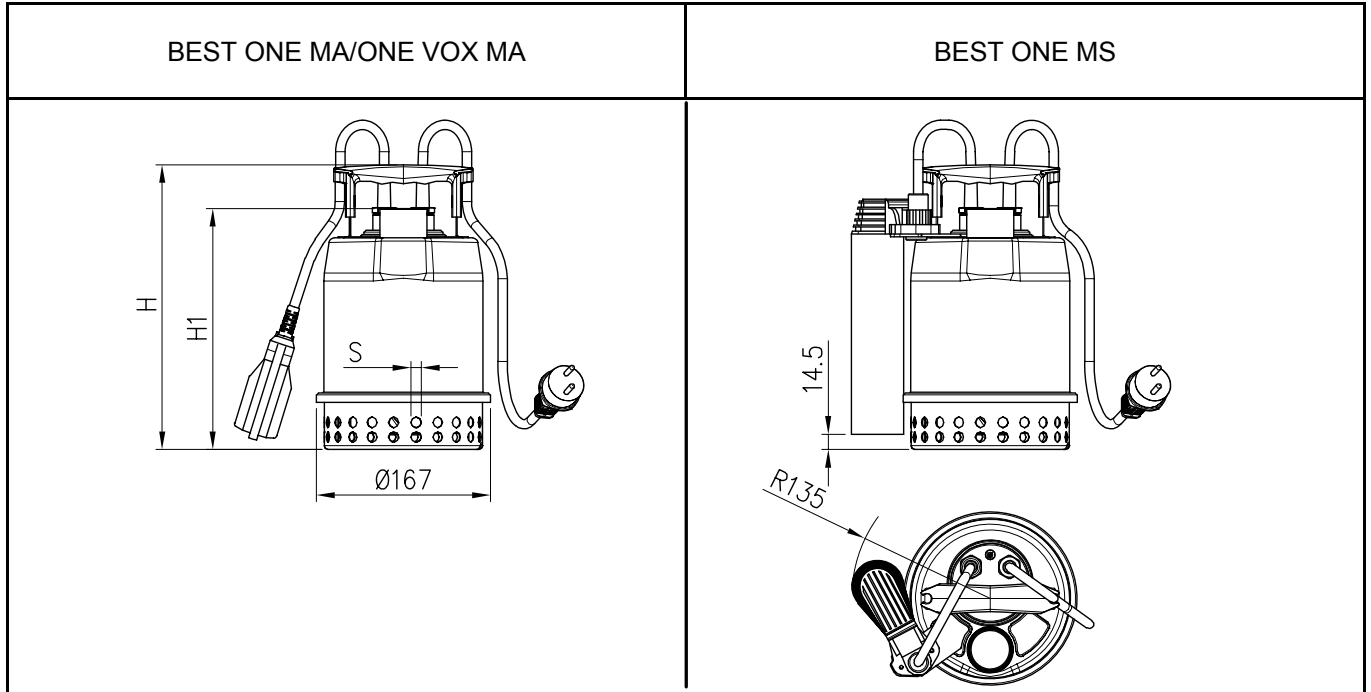


230 V  
INTERNAL MOTORPROTECTOR



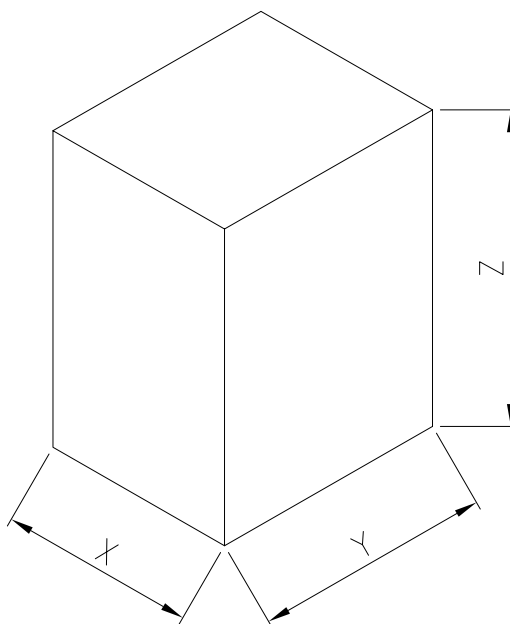
BEST ONE MA/ONE VOX MA	BEST ONE MS									
<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th>Pump</th> <th>A</th> <th>B</th> </tr> </thead> <tbody> <tr> <td>BEST ONE MA</td> <td style="text-align: center;">110</td> <td style="text-align: center;">305</td> </tr> <tr> <td>BEST ONE VOX MA</td> <td></td> <td style="text-align: center;">330</td> </tr> </tbody> </table>	Pump	A	B	BEST ONE MA	110	305	BEST ONE VOX MA		330	
Pump	A	B								
BEST ONE MA	110	305								
BEST ONE VOX MA		330								

PUMP



Type Pumps	Dimensions [mm]			Weight [kgf]
	H	H1	S	
BEST ONE	273	231	10	4.3
BEST ONE M				4.4
BEST ONE MA				4.6
BEST ONE MS				4.8
BEST ONE VOX	304	262	20	4.4
BEST ONE VOX M				4.5
BEST ONE VOX MA				4.7

PACKING

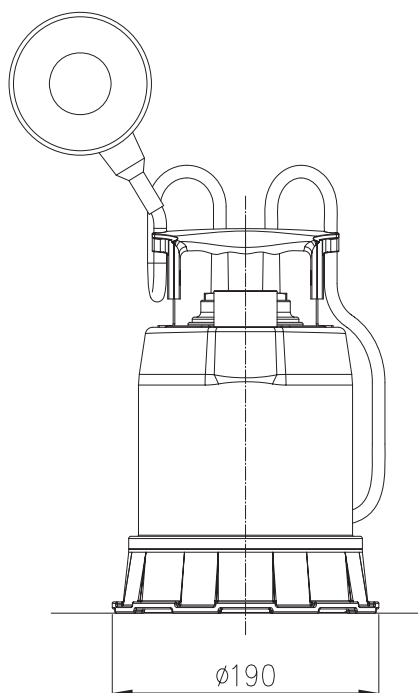


Type Pumps	Dimensions [mm]			Weight [kgf]
	X	Y	Z	
BEST ONE M	180	220	330	4.9
BEST ONE MA				5.1
BEST ONE MS				5.3
BEST ONE VOX M				5.0
BEST ONE VOX MA				5.2

ELECTRIC DATA							
Type pumps	kW	HP	Capacitor Single Phase		Input [kW]	Full load current [A]	Locked rotor current [A]
			μF	Vc [V]			
Best One M	0,25	0,33	8	450	0,51	2,3	5,8
Best One Vox M	0,25	0,33	8	450	0,50	2,2	5,6



MINIMUM SUCTION SYSTEM



LEVEL	
Minimum starting suction level	10 mm
Minimum suction level capability	3 mm

COMPATIBILITY			
Type pumps	Version		
	1~		
	M	MA	MS
Best One	✓	✓	✗
Best One Vox	✗	✗	✗