



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.

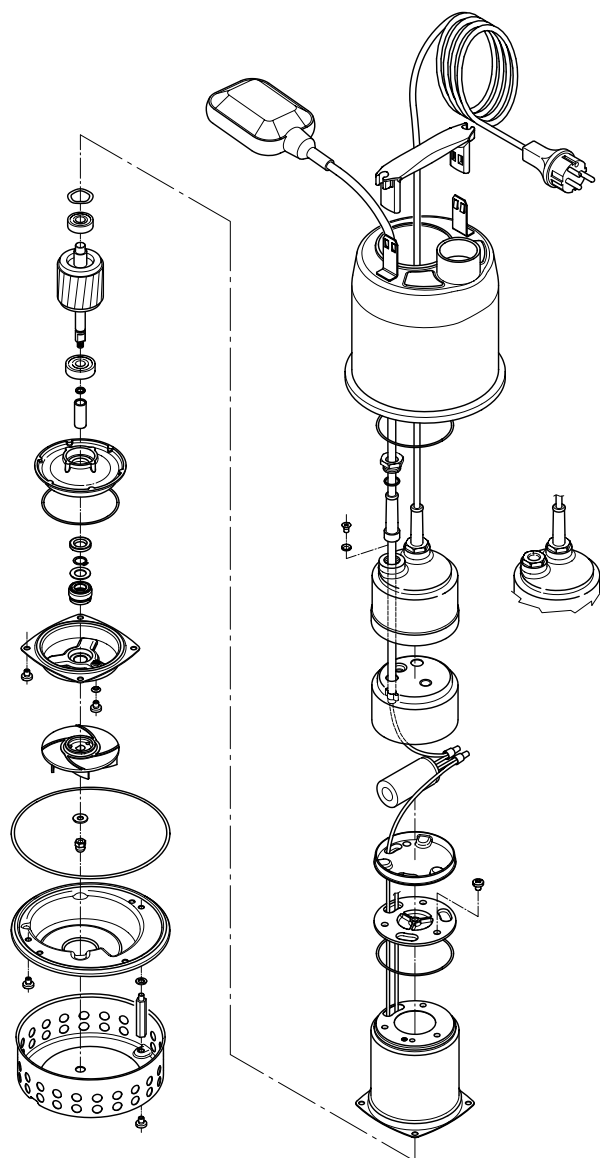
- Maximum solids handling 10mm (Best one) 20mm (Best One Vox)
- Maximum liquid Temperature: 50 C
- Maximum submergence: 5m
- Pump casing: 304 Stainless Steel
- Impeller: 304 Stainless Steel
- Outer casing: 304 Stainless Steel
- Shaft: 303 Stainless Steel
- Motor Frame: 304 Stainless Steel
- Motor Cap: 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.

EXPLODED VIEW

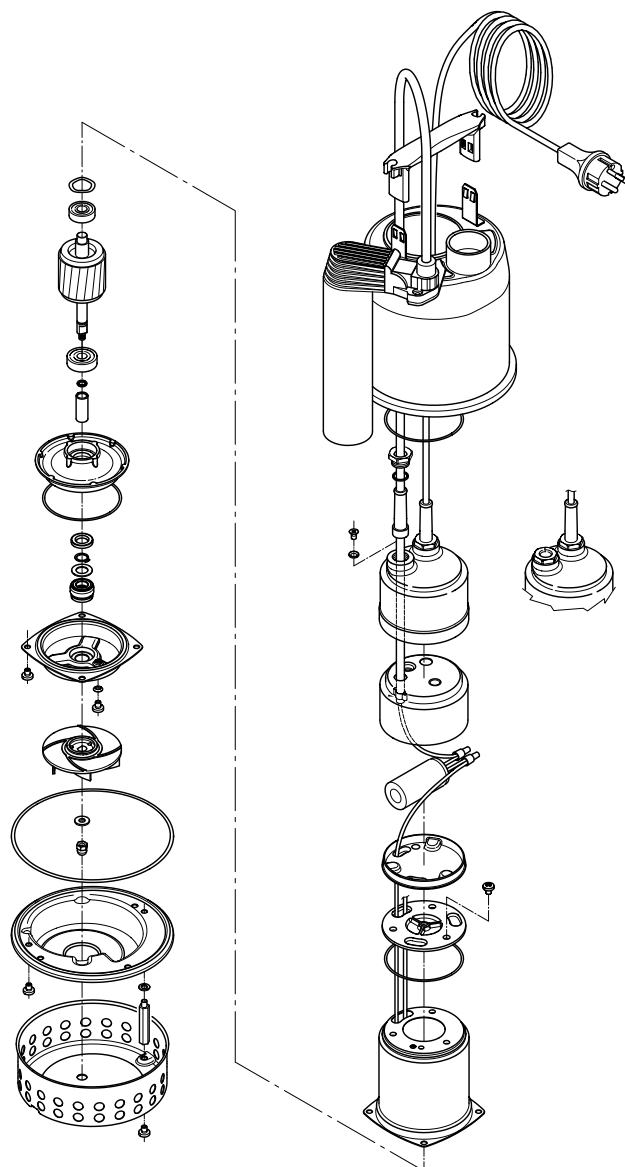
50Hz

V10

MA (float switch)



MS (magnetic switch)



SPECIFICATION

50Hz

V10

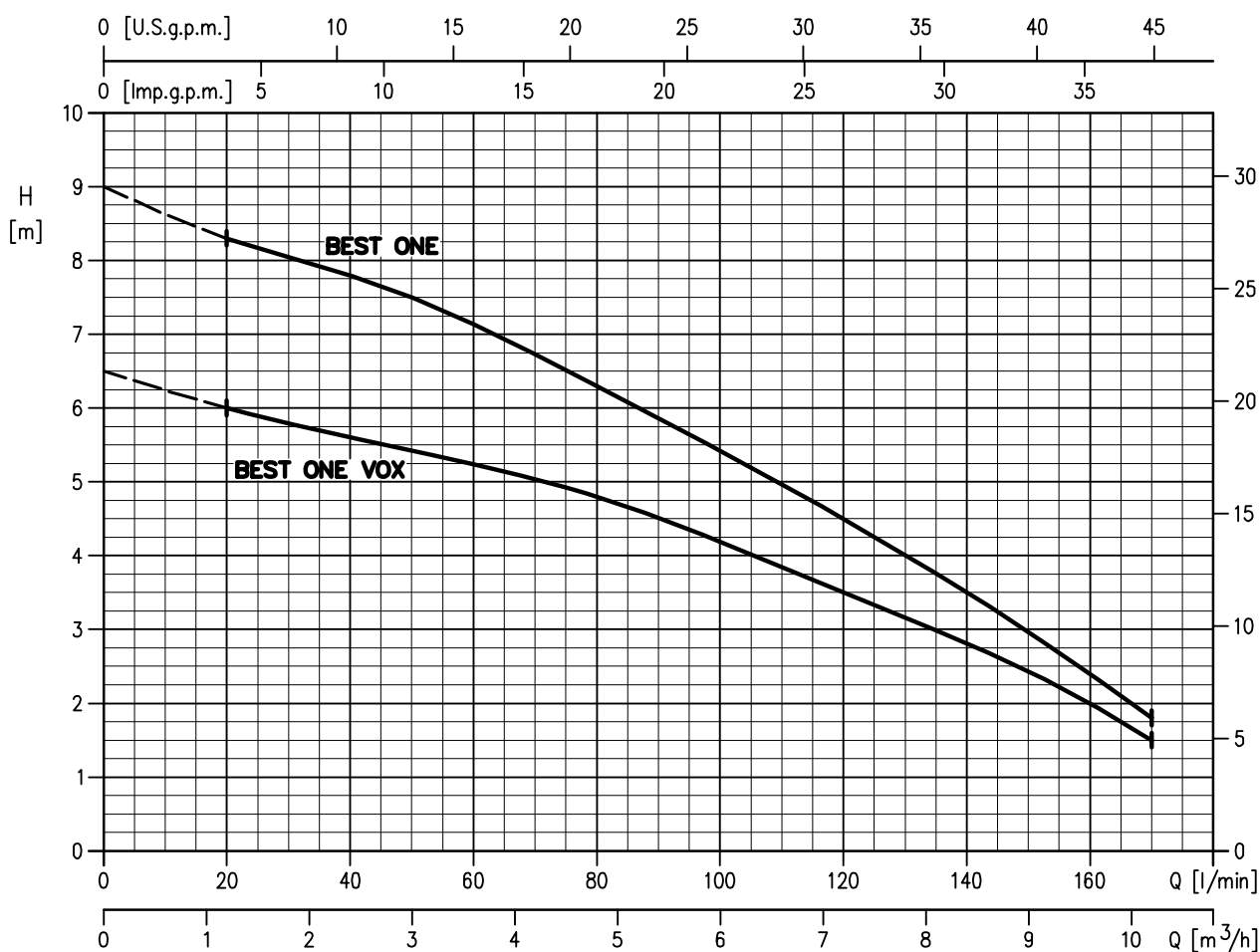
PUMP		
Liquid Handled	Type of liquid	Clear water (Clean water for MS version)
	Max temperature [°C]	50
	Max solids size [mm]	10 20 (for Vortex version)
Maximum immersion [m]		5
Construction	Impeller	Semi-open centrifugal type (BEST ONE) Vortex type (BEST ONE VOX)
	Shaft seal type	Oil lubricated mechanical 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 ⁻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
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

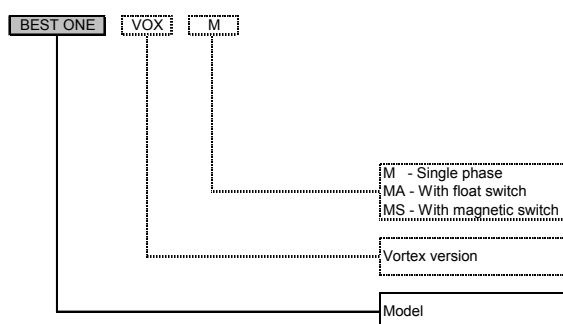
50Hz

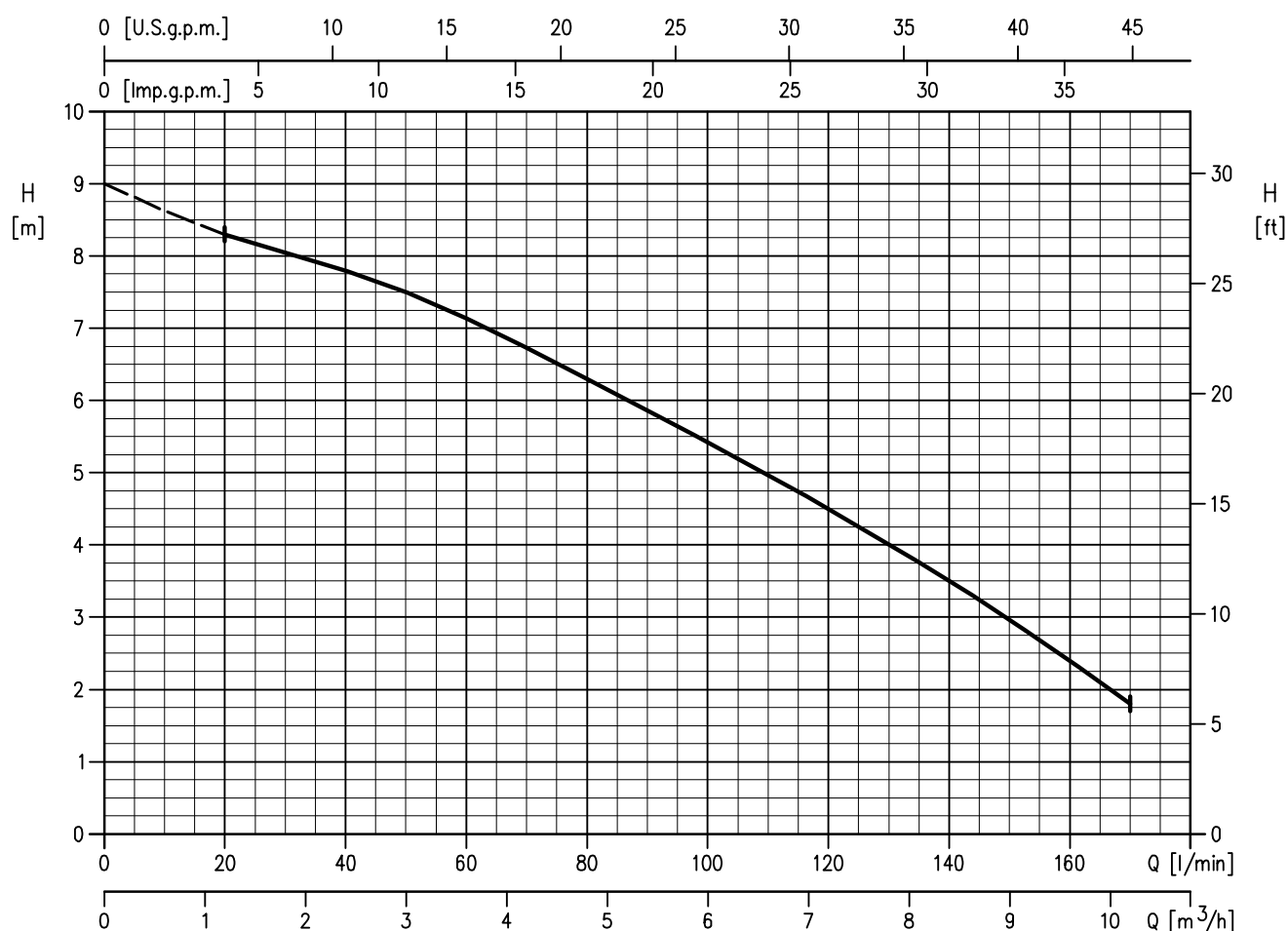
V10



Type pumps	Power		Q=Capacity						
	kW	HP	l/min 0	20	40	80	120	160	170
			m³/h 0	1,2	2,4	4,8	7,2	9,6	10,2
H=Total manometric head in meters									
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

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

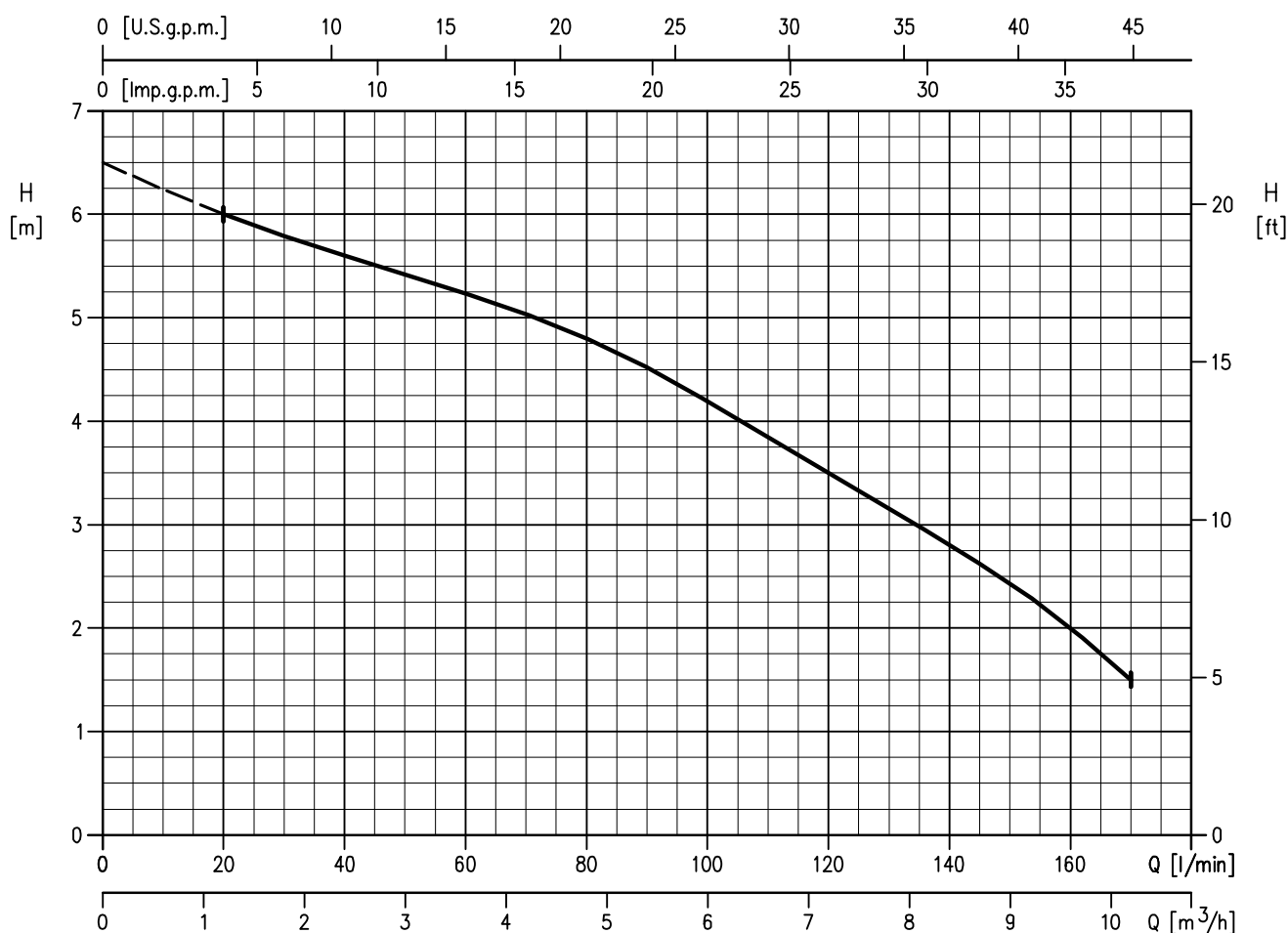
Measurements were carried out with clean water at 20°C of temperature and with a kinematic viscosity of $\nu = 1 \text{ mm}^2/\text{s}$ (1 cSt)

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)

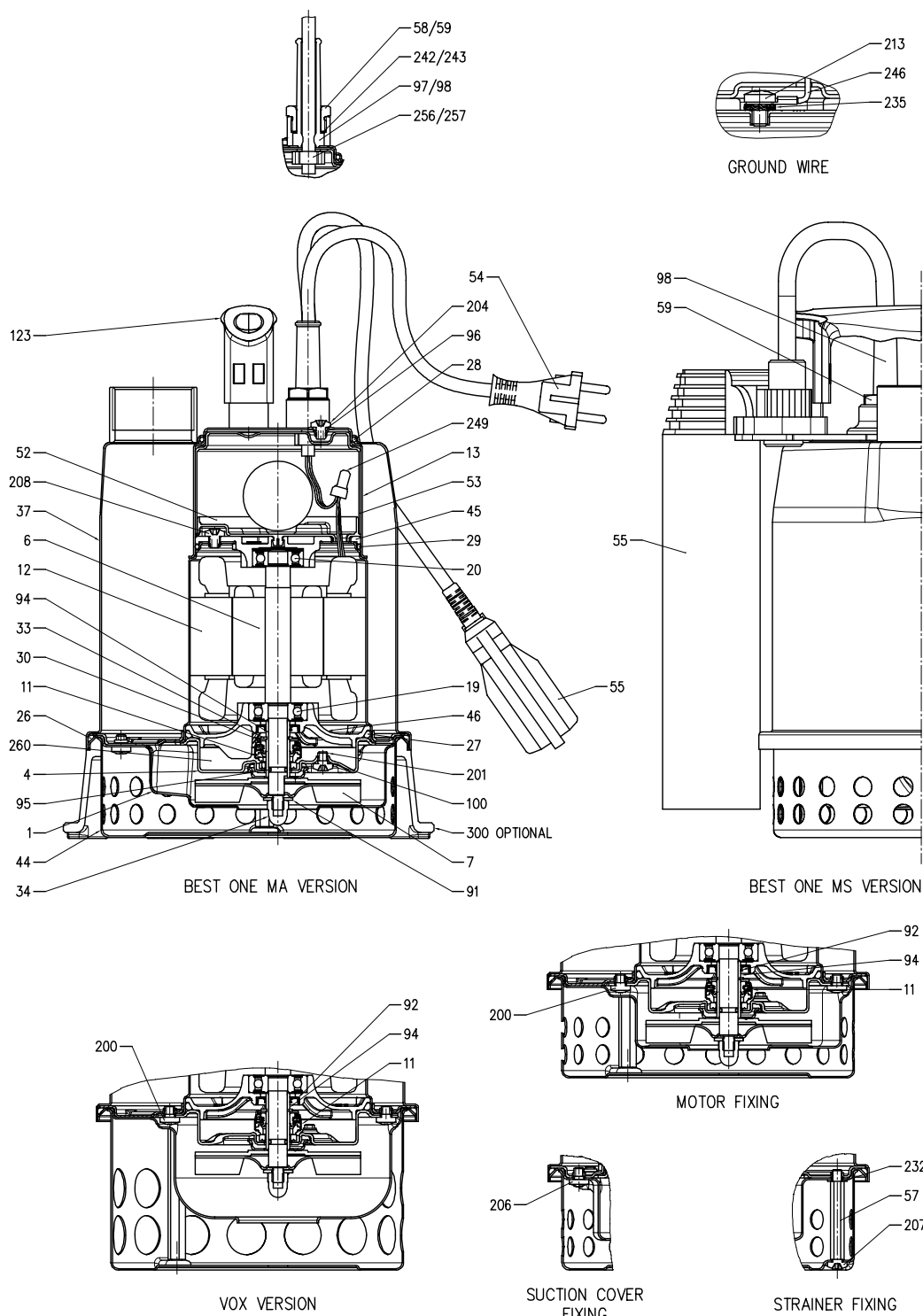
In order to avoid the risk of over-heating, the pumps should not be used at a flow rate below 10% of best efficiency point.

Symbols explanation:

Q = volume flow rate

H = total head

SECTIONAL VIEW



SECTIONAL VIEW TABLE

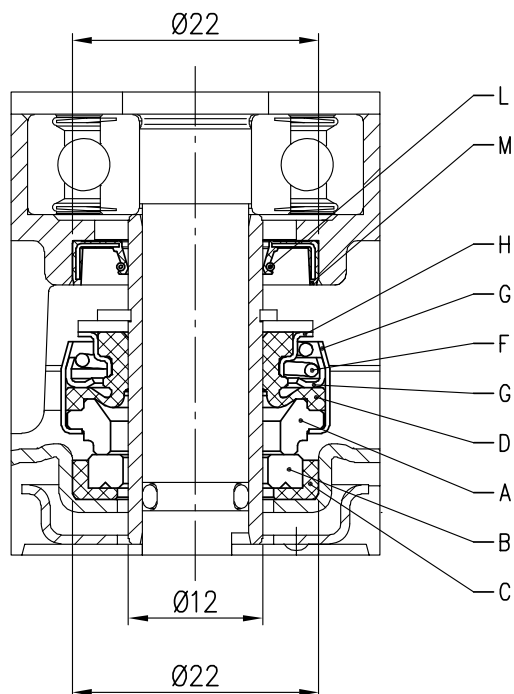
N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD	Q.ty
1	Suction cover	EN 1.4301 (AISI 304)	-	-	1
4	Casing cover	EN 1.4301 (AISI 304)	-	-	1
6	Shaft with rotor	EN 1.4305 (AISI 303)	-	-	1
7	Impeller	EN 1.4301 (AISI 304)	-	-	1
11	Mechanical seal [1]	[1]	[1]	-	1
12	Motor frame with stator	EN 1.4301 (AISI 304)	-	-	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	Zinced 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

[3] It could be floating or magnetic type

[2] Only for automatic version

[4] OPTIONAL See pag.500

MECHANICAL SEAL

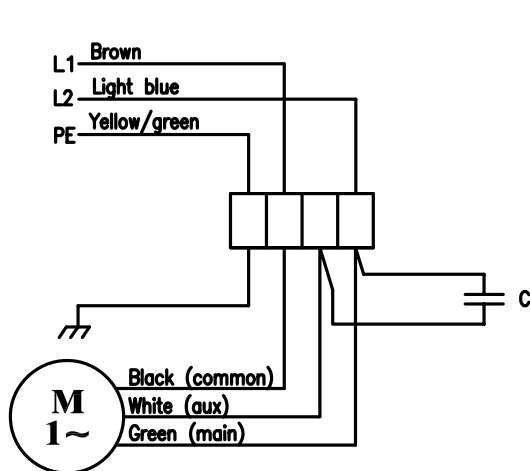
REF	PART NAME	MATERIAL
A	Rotary seal ring	Carbon graphite
B	Stationary seal ring	Ceramic
C	Gasket	NBR
D	Bellows	NBR
F	Self driving spring	EN 1.4301 (AISI 304)
G	Frame	EN 1.4301 (AISI 304)
H	Retainer ring	EN 1.4301 (AISI 304)
L	Spring	EN 1.4318 (AISI 302)
M	Lip	NBR

BEARINGS

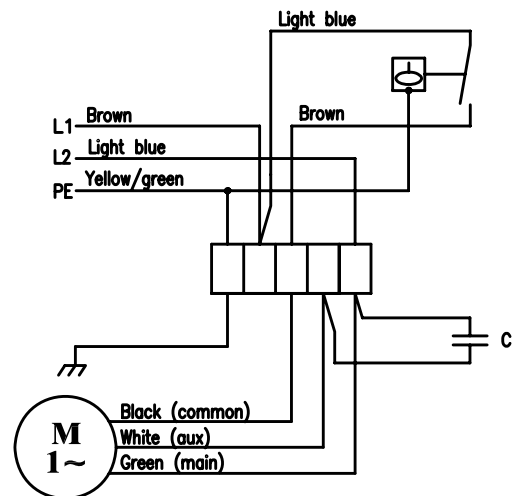
Type pumps	Ball Bearing	
	Lower side	Upper side
BEST ONE M	6200 ZZ C3	6000 ZZ C3

SINGLE PHASE MOTOR DIAGRAM AND ELECTRIC CONNECTIONS

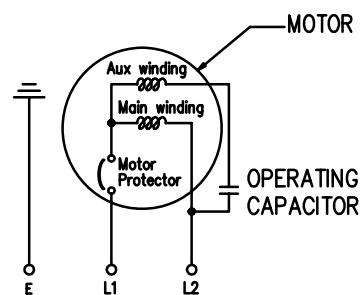
WITHOUT FLOAT SWITCH



WITH FLOAT SWITCH



230 V
INTERNAL MOTOR PROTECTOR



BEST ONE MA/ONE VOX MA

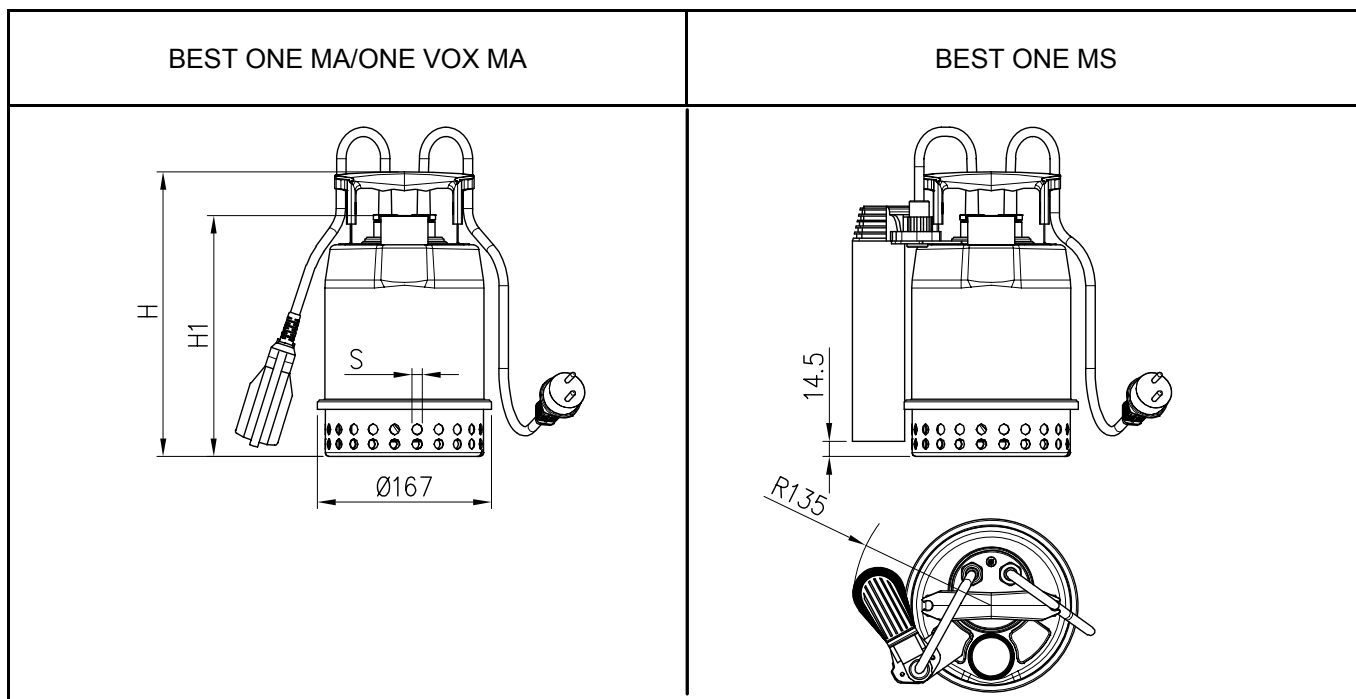
Diagram illustrating the installation of the BEST ONE MA/ONE VOX MA pump. The pump is shown in a cross-section view, mounted in a concrete wall. The pump body is labeled "ON" and "OFF". The dimensions are indicated as 400x400 mm for the pump body and A and B for the mounting dimensions.

Pump	A	B
BEST ONE MA	110	305
BEST ONE VOX MA		330

BEST ONE MS

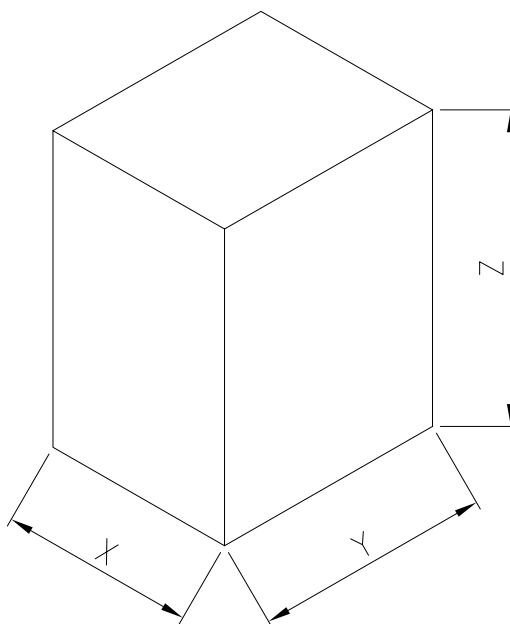
Diagram illustrating the installation of the BEST ONE MS pump. The pump is shown in a cross-section view, mounted in a concrete wall. The pump body is labeled "ON" and "OFF". The dimensions are indicated as 200x220 mm for the pump body and 170 and 100 for the mounting dimensions.

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

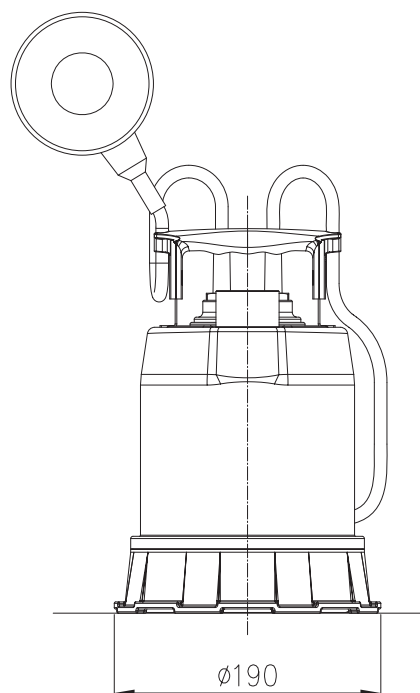
PACKING



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	V _c [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	✗	✗	✗