



EBARA FLUID MACHINERY KOREA CO.,LTD (EFMK)

3FL., Hyunseok Tower. 50, Seolleung-ro 93-gil,
Gangnam-gu, Seoul 06151 Korea
TEL. +82-2-2135-6111
FAX. +82-70-8230-2030

EBARA Corporation
11-1, Haneda Asahi-cho, Ohta-ku,
Tokyo 144-8510
Japan
Phone +81 3 6275 7598
Fax +81 3 5736 3193
www.ebara.com



479705621 05/18



Japanese Technology since 1912

배수 수중 펌프

60Hz Product Catalogue





DW - DW VOX

SUBMERSIBLE ELECTRIC PUMPS FOR SEWAGE
in AISI 304

Submersible electric pumps in AISI 304 stainless steel for sewage.

용도

- 가정용 산업용 오수 배출
- 우물 배수 및 발굴
- 지면 배수
- 일반적으로 폐수 이송. (고체 또는 미세 물질이 들어있는 폐수)
- 침투수 배출
- 하수 이송 (sanitary services)
- 오물 배출

기술정보

- 10m of H07 RN-F (단상) 또는 FG50K (삼상) 전력 공급 케이블 갖춤
- 플로트 스위치 유/무 가능
- 보이지 않는 단일채널 임펠러 및 볼텍스 타입 (VOX)과 플랜지 (F)

기술자료

- 최대 침수 깊이 : 10m
- 최대유체온도 : 40°C
- 통과 가능한 최대 고형물 크기 : 50mm 구체
- 자체환기 2극 비동기식 모터
- 절연등급 F
- 보호등급 IPX8
- 110-115V ±6%, 60Hz 단상,
220-230V ±6%, 60Hz 단상,
220V -6 +10%, 60Hz 삼상,
380V -6 +10%, 60Hz 삼상,
440-460V ±6%, 60Hz 삼상

재질

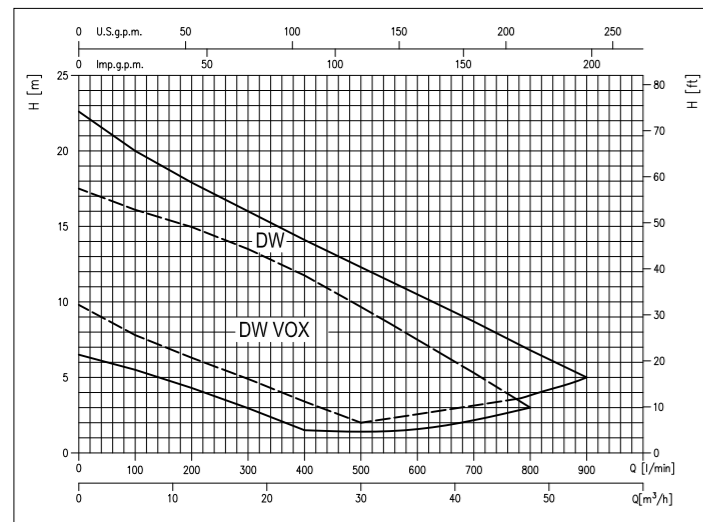
- Pump body, impeller, seal cover, casing cover and motor frame in AISI 304
- Shaft in AISI 303 (part in contact with the liquid)
- Twin mechanical seal with interposed oil chamber:
 - upper in Carbon/Ceramic/NBR (motor side)
 - lower in SiC/SiC/NBR (pump side)

특수버전

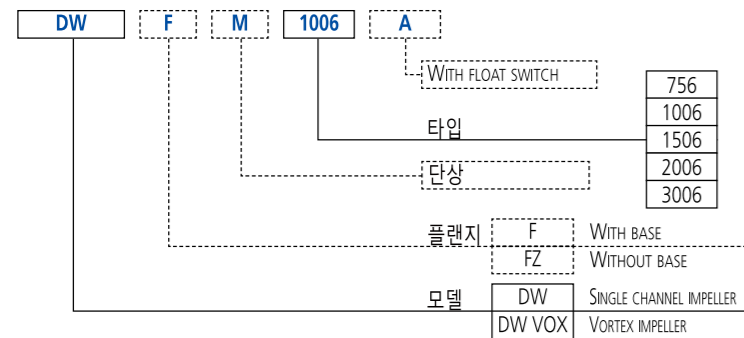
- VOX 버전 (볼텍스 임펠러 - VORTEX impeller)



성능곡선 (according to ISO 9906 Attachment A)



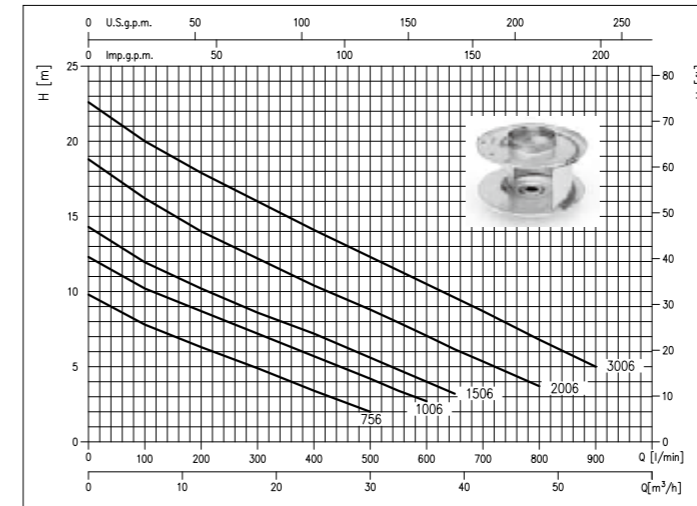
식별코드



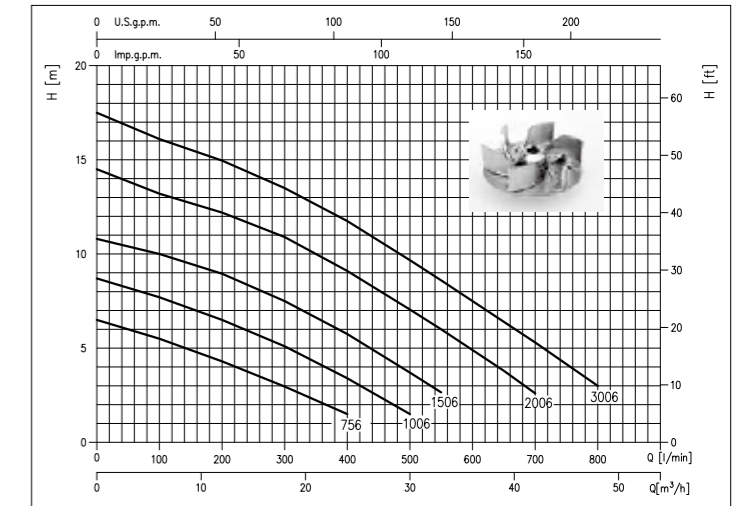
DW - DW VOX

SUBMERSIBLE ELECTRIC PUMPS FOR SEWAGE
in AISI 304

DW 성능곡선 (according to ISO 9906 Attachment A)



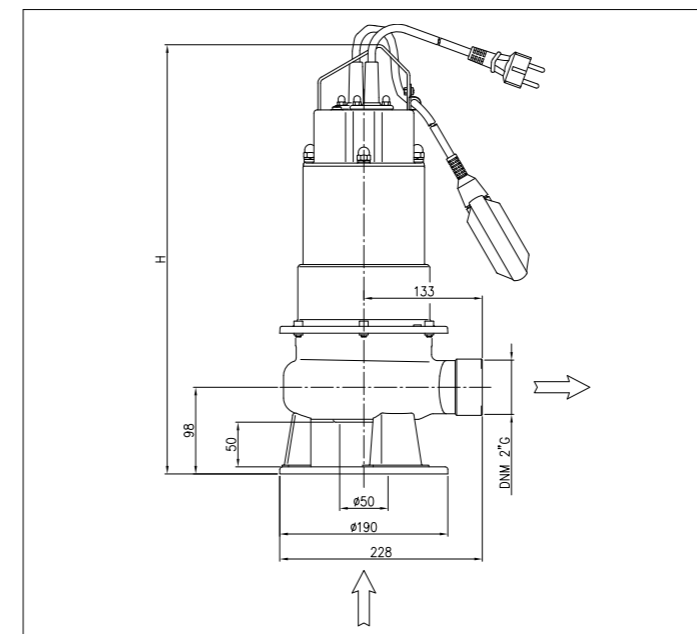
DW VOX 성능곡선 (according to ISO 9906 Attachment A)



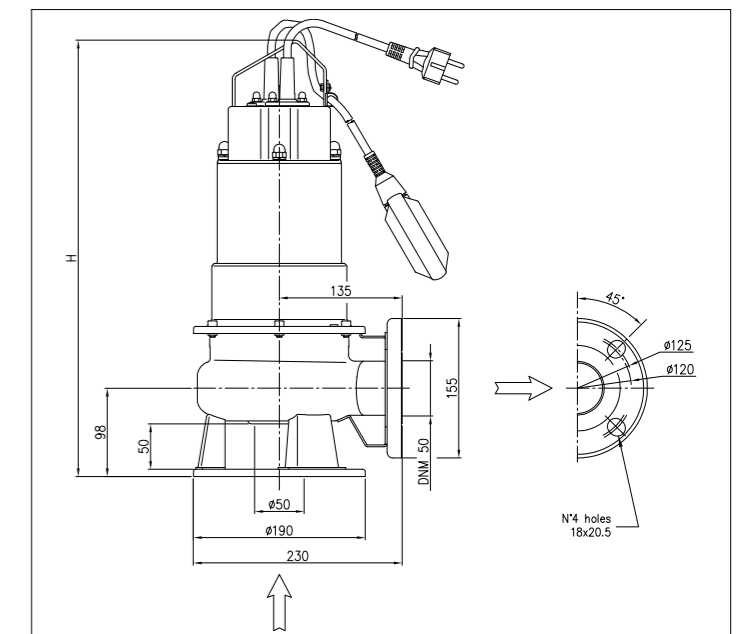
성능표

| 단상 | 모델 | 삼상 | P ₂ | | Q=유량 | | | | | | | | | | | | |
|---------------|-------------|----|----------------|------|-------|------|------|------|------|------|------|-----|-----|-----|-----|-----|---|
| | | | [HP] | [kW] | l/min | 100 | 200 | 300 | 400 | 500 | 550 | 600 | 650 | 700 | 800 | 900 | |
| | | | | | m³/h | 6 | 12 | 18 | 24 | 30 | 33 | 36 | 39 | 42 | 48 | 54 | |
| DW 756 M | DW 756 | | 0,75 | 0,55 | 7,8 | 6,3 | 4,9 | 3,4 | 2,0 | - | - | - | - | - | - | - | - |
| DW 1006 M | DW 1006 | | 1 | 0,75 | 10,2 | 8,7 | 7,2 | 5,7 | 4,2 | 3,4 | 2,7 | - | - | - | - | - | - |
| DW 1506 M | DW 1506 | | 1,5 | 1,1 | 12,0 | 10,2 | 8,6 | 7,2 | 5,6 | 4,8 | 4,0 | 3,2 | - | - | - | - | - |
| DW 2006 M | DW 2006 | | 2 | 1,5 | 16,2 | 14,0 | 12,2 | 10,4 | 8,8 | 7,9 | 7,1 | 6,2 | 5,4 | 3,7 | - | - | - |
| - | DW 3006 | | 3 | 2,2 | 20,0 | 17,9 | 16,0 | 14,1 | 12,3 | 11,4 | 10,5 | 9,6 | 8,7 | 6,8 | 5,0 | - | - |
| DW VOX 756 M | DW VOX 756 | | 0,75 | 0,55 | 5,5 | 4,3 | 3,0 | 1,5 | - | - | - | - | - | - | - | - | - |
| DW VOX 1006 M | DW VOX 1006 | | 1 | 0,75 | 7,7 | 6,5 | 5,1 | 3,4 | 1,5 | - | - | - | - | - | - | - | - |
| DW VOX 1506 M | DW VOX 1506 | | 1,5 | 1,1 | 10,0 | 9,0 | 7,5 | 5,8 | 3,7 | 2,7 | - | - | - | - | - | - | - |
| DW VOX 2006 M | DW VOX 2006 | | 2 | 1,5 | 13,2 | 12,2 | 10,9 | 9,1 | 7,1 | 6,0 | 4,9 | 3,8 | 2,6 | - | - | - | - |
| - | DW VOX 3006 | | 3 | 2,2 | 16,1 | 15,0 | 13,5 | 11,8 | 9,7 | 8,6 | 7,5 | 6,4 | 5,3 | 3,0 | - | - | - |

DW - DW VOX 외형도



DWF - DWF VOX 외형도



DW - DW VOX

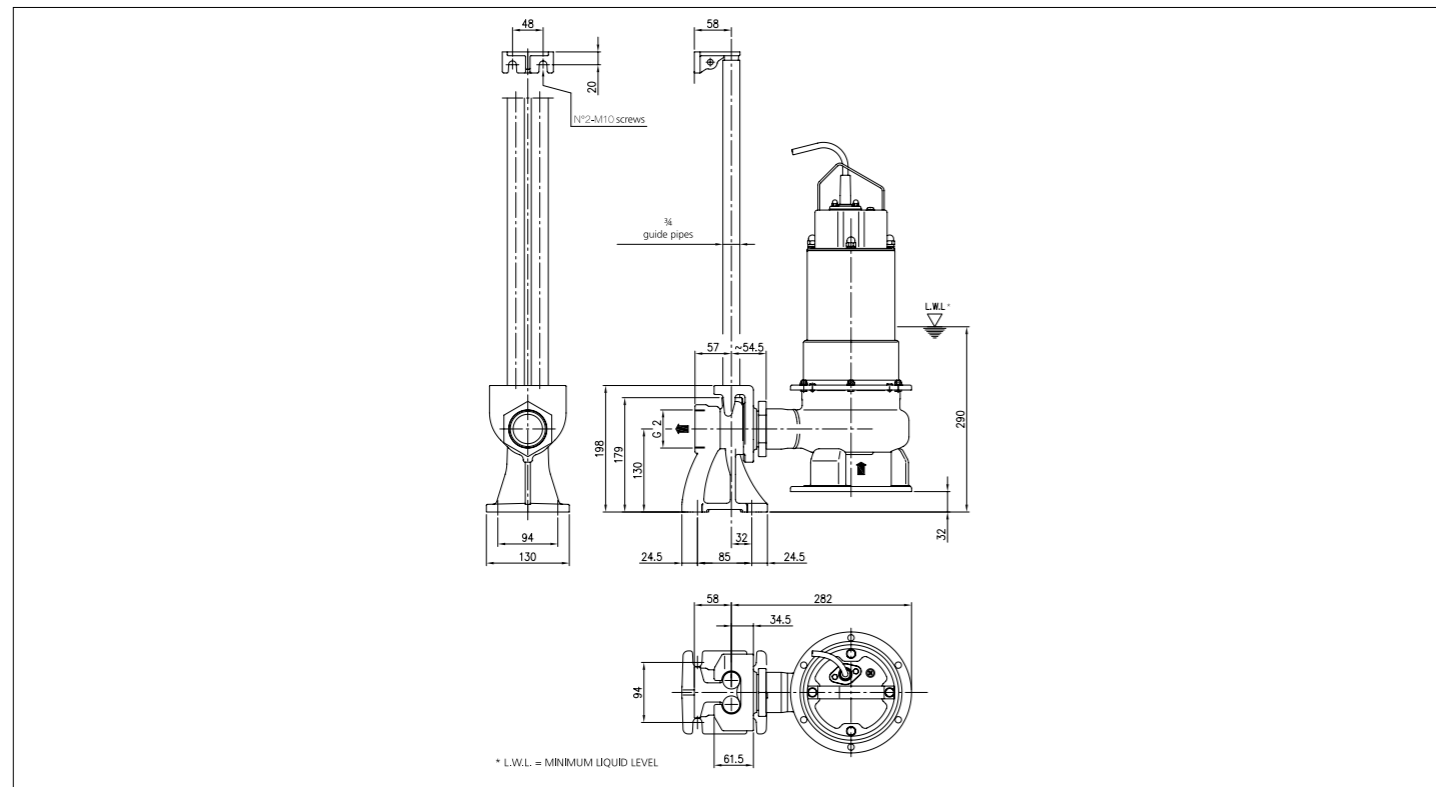
SUBMERSIBLE ELECTRIC PUMPS FOR SEWAGE
in AISI 304

DW - DW VOX 외형표

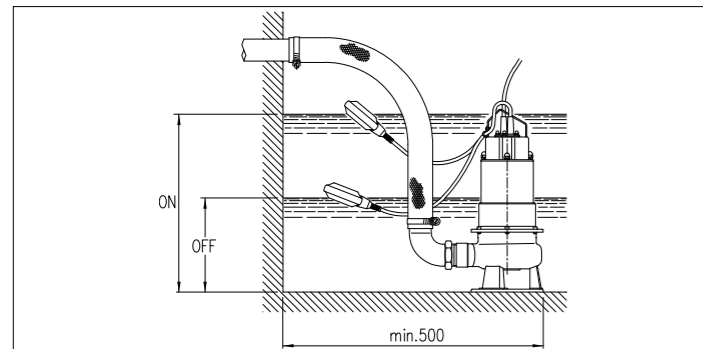
| 모델 | 외형치수 [mm] | | 중량 [kg] | | |
|-------------|-----------|--------|------------------------------|--------|---------|
| | 1~ | 3~ | 1~ MA (with float switch) | Manual | 3~ |
| DW 756 | 486 | (*551) | 486 | 16 | (*16,2) |
| DW 1006 | 516 | (*581) | 486 | 18 | (*18,2) |
| DW 1506 | 516 | 516 | 19,4 | 19,2 | 18,6 |
| DW 2006 | 611 | 516 | - | 25,2 | 20 |
| DW 3006 | - | 546 | - | - | 25,8 |
| DW VOX 756 | 486 | (*551) | 486 | 15,6 | (*15,8) |
| DW VOX 1006 | 516 | (*581) | 486 | 17,6 | (*17,8) |
| DW VOX 1506 | 516 | 516 | 19 | 18,8 | 18,1 |
| DW VOX 2006 | 611 | 516 | - | 24,8 | 19,6 |
| DW VOX 3006 | - | 546 | - | - | 25,4 |

*= For 110-115V

DW - DW VOX COUPLING KIT 치수



설치

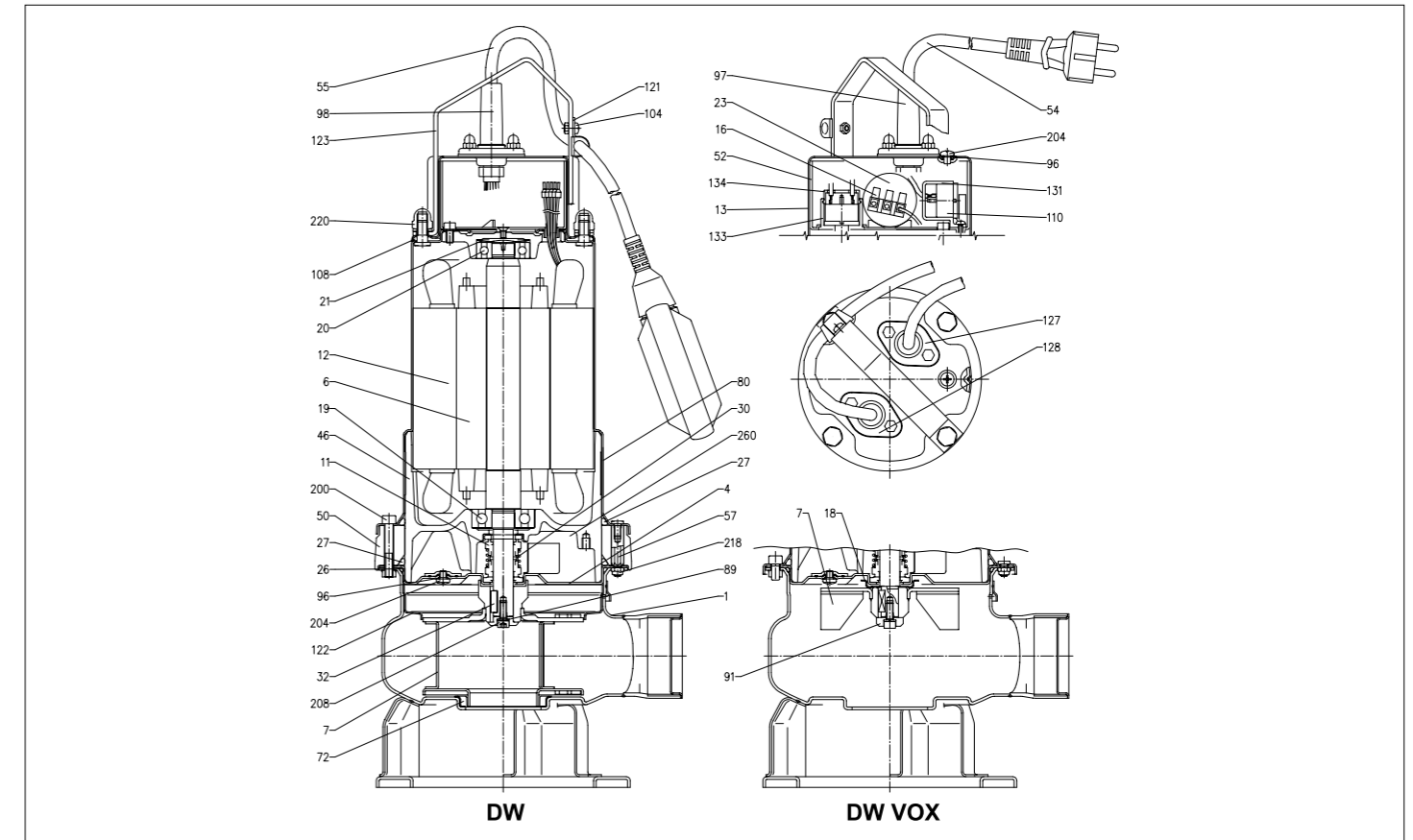


| 모델 | 치수 [mm] | |
|---------|---------|-----|
| | ON | OFF |
| 756 MA | 460 | 250 |
| 1006 MA | 470 | 260 |
| 1506 MA | 470 | 260 |

DW - DW VOX

SUBMERSIBLE ELECTRIC PUMPS FOR SEWAGE
in AISI 304

단면도



부품표

| Ref. | 부품명 | 재질 | Ref. | 부품명 | 재질 |
|------|--------------------------------|--------------------|------|----------------------------------|-----------------------------|
| 1 | Casing | AISI 304 | 57 | Spacer [3] | AISI 304 |
| 4 | Casing cover | AISI 304 | 72 | Casing ring [5] | NBR |
| 6 | Shaft with rotor | AISI 303 | 89 | Washer | AISI 304 |
| 7 | Impeller | AISI 304 | 91 | Washer [2] | AISI 304 |
| 11 | Mechanical seal | SiC/SiC/NBR | 96 | O ring | NBR |
| 11 | Mechanical seal | Carbon/Ceramic/NBR | 97 | Power cable entry | NBR |
| 12 | Motor frame with stator | - | 98 | Floating sw cable entry [4] | NBR |
| 13 | Motor cover | AISI 304 | 104 | Cable guard [4] | NBR |
| 16 | Terminal | - | 108 | Cover gasket | NBR |
| 18 | Mechanical seal protection [2] | AISI 304 | 110 | Protector [1] | - |
| 19 | Lower side ball bearing | - | 121 | Support for float switch [4] | AISI 304 |
| 20 | Upper side ball bearing | - | 122 | Impeller protection ring [6] | AISI 304 |
| 21 | Adjusting ring | Steel C70 | 123 | Handle | AISI 304 |
| 23 | Capacitor [1] | - | 127 | Power cable connector | AISI 304 |
| 26 | O ring | NBR | 128 | Floating sw. cable connector [4] | AISI 304 |
| 27 | O ring | NBR | 131 | Support for protector [7] | PA66 |
| 27 | O ring [3] | NBR | 133 | Support for probe [7] | Aluminium |
| 30 | Mechanical seal spacer | Brass | 134 | Cover for support probe [7] | PA66 |
| 32 | Key | AISI 316 | 200 | Screw | Stainless steel A2 UNI 7323 |
| 46 | Bearing housing | G20 | 204 | Screw | Stainless steel A2 UNI 7323 |
| 50 | Spacer [3] | G20 | 208 | Screw | Stainless steel A2 UNI 7323 |
| 52 | Terminal insulating box | PA66 | 218 | Nut | Stainless steel A2 UNI 7323 |
| 54 | Power cable | - | 220 | Nut | Stainless steel A2 UNI 7323 |
| 55 | Float switch [4] | - | 260 | Lubricating liquid | White mineral oil |

[1] Only for single phase

[4] Only for single phase with float switch

[7] Only for single phase with external motor protector

[2] Except for DW-DW VOX 3006

[5] Only for DW

[3] Only for DW-DW VOX 3006

[6] Except for DW VOX 1506, 2006 and 3006



DW - DW VOX

SUBMERSIBLE ELECTRIC PUMPS FOR SEWAGE

in AISI 304

DW - DW VOX 전기관련표 단상

| 모델 단상 | P ₂ | | Capacitor 단상 | | | | P ₁ | | Absorbed Current [A] | |
|-------------|----------------|------|-----------------|----------------|----------|----------------|----------------|------------|-------------------------|----------|
| | [HP] | [kW] | 110-115V | | 220-230V | | 단상 [kW] | 삼상 [kW] | 110-115V | 220-230V |
| | | | μF | V _c | μF | V _c | | | | |
| DW 756 | 0,75 | 0,55 | 55 | 250 | 20 | 450 | 0,94 | 0,94 | 8,3 | 4,3 |
| DW 1006 | 1 | 0,75 | 80 | 250 | 25 | 450 | 1,25 | 1,25 | 10,8 | 6,0 |
| DW 1506 | 1,5 | 1,1 | - | - | 31,5 | 450 | - | 1,40 | - | 6,5 |
| DW 2006 | 2 | 1,5 | - | - | 50 | 450 | - | 1,93 | - | 9,1 |
| DW VOX 756 | 0,75 | 0,55 | 55 | 250 | 20 | 450 | 0,95 | 0,95 | 8,3 | 4,4 |
| DW VOX 1006 | 1 | 0,75 | 80 | 250 | 25 | 450 | 1,32 | 1,32 | 11,0 | 6,5 |
| DW VOX 1506 | 1,5 | 1,1 | - | - | 31,5 | 450 | - | 1,60 | - | 7,5 |
| DW VOX 2006 | 2 | 1,5 | - | - | 50 | 450 | - | 2,30 | - | 11,1 |

DW - DW VOX 전기관련표 삼상

| 모델 삼상 | P ₂ | | P ₁ [kW] | | | Absorbed Current [A] | | |
|-------------|----------------|------|------------------------|------------|----------|-------------------------|------------|----------|
| | [HP] | [kW] | 220V | 삼상 380V | 440-460V | 220V | 삼상 380V | 440-460V |
| DW 756 | 0,75 | 0,55 | 0,86 | 0,86 | 0,86 | 3,0 | 1,7 | 1,4 |
| DW 1006 | 1 | 0,75 | 1,20 | 1,20 | 1,20 | 3,7 | 2,3 | 1,9 |
| DW 1506 | 1,5 | 1,1 | 1,40 | 1,40 | 1,40 | 4,8 | 2,8 | 2,3 |
| DW 2006 | 2 | 1,5 | 2,20 | 2,20 | 2,20 | 7,0 | 3,9 | 3,2 |
| DW 3006 | 3 | 2,2 | 2,71 | 2,71 | 2,71 | 7,9 | 4,6 | 4,2 |
| DW VOX 756 | 0,75 | 0,55 | 0,90 | 0,90 | 0,90 | 3,0 | 1,6 | 1,3 |
| DW VOX 1006 | 1 | 0,75 | 1,30 | 1,30 | 1,30 | 4,2 | 2,4 | 2,0 |
| DW VOX 1506 | 1,5 | 1,1 | 1,50 | 1,50 | 1,50 | 5,1 | 3,0 | 2,5 |
| DW VOX 2006 | 2 | 1,5 | 2,35 | 2,35 | 2,35 | 7,3 | 4,4 | 3,6 |
| DW VOX 3006 | 3 | 2,2 | 2,77 | 2,77 | 2,77 | 8,0 | 4,6 | 4,2 |



EBARA Corporation
11-1, Haneda Asahi-cho, Ohta-ku,
Tokyo 144-8510
Japan
Phone +81 3 6275 7598
Fax +81 3 5736 3193
www.ebara.com

