EBARA

MD

MONOBLOC CENTRIFUGAL ELECTRIC PUMP IN COMPLIANCE WITH EN 733

60 Hz

MD

MONOBLOC CENTRIFUGAL ELECTRIC PUMP IN COMPLIANCE WITH EN 733
in cast iron

Cast iron monobloc centrifugal electric pumps in compliance with EN 733.

용도
- **생활용, 농업 및 산업용 청수처리, 가압시설, 난방 및 냉방**
- **농장관개**
- **스포츠센터**
- **세척**

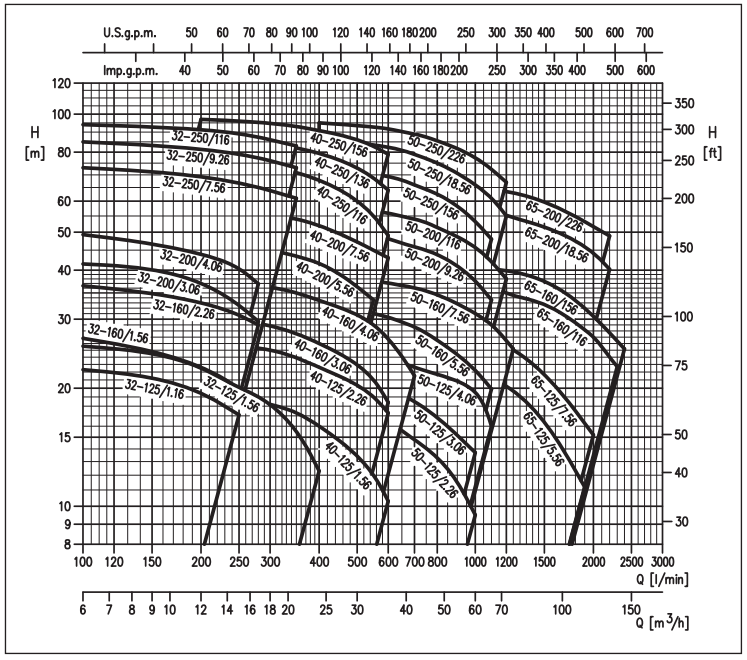
기술정보
- "H" **버전가능** (Ceramic/Carbon/FPM)
- "HS" **버전가능** (SiC/SiC/FPM)
- "HW" **버전가능** (Tungsten Carbide/Tungsten Carbide/FPM)

기술자료
- **최대유체온도:**
  +90°C for MD,
  +110°C for H-HS-HW versions
- **최대사용압력 : 10 bar**
- **자체환기 2극 비동기식 모터**
- **절연등급 : F**
- **보호등급 : IP55**
- 220-230 ±6%, 60Hz **단상**,
  220/380-460 ±6%, 60Hz **삼상** (4 kW **까지포함**),
  380-460/660 ±6%, 60Hz **삼상** (5.5 kW **이상**)

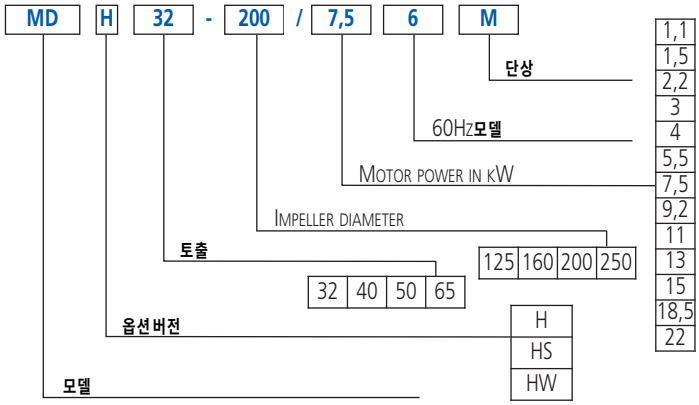
재질
- Cast iron pump body and bracket
- Shaft in AISI 304
- Mechanical seal in Carbon/Ceramic/NBR
- Impeller in cast iron or bronze (see materials table)

부속품 (on request)
- Galvanised counter-flange

성능곡선 (according to ISO 9906 Attachment A)



식별코드



MD

MONOBLOC CENTRIFUGAL ELECTRIC PUMP IN COMPLIANCE WITH EN 733

in cast iron

성능표

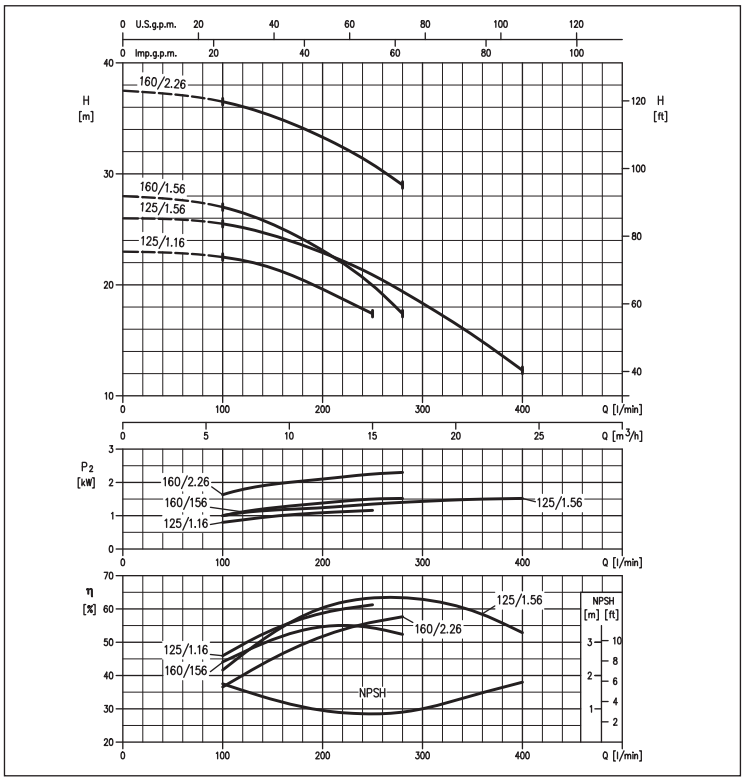
모델	P_2		Q=유량																					
			l/min	100	200	250	280	350	400	550	600	667	700	800	1000	1100	1200	1250	1400	1900	2000	2200	2300	2400
	[HP]	[kW]	m^3/h	6	12	15	17	21	24	33	36	40	42	48	60	66	72	75	84	114	120	132	138	144
													H=양정 [m]											
MD 32-125/1.16 (M)	1,5	1,1	22,5	19,6	17,4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-125/1.56 (M)	2	1,5	25,5	23,0	21,0	19,4	15,5	12,3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-160/1.56 (M)	2	1,5	27,0	23,0	20,0	17,4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-160/2.26 (M)	3	2,2	36,5	33,5	31,0	29,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-200/3.06	4	3	41,5	37,0	33,0	29,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-200/4.06	5,5	4	49,5	44,5	40,5	37,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-250/7.56	10	7,5	73,0	69,0	66,5	65,0	61,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-250/9.26	12,5	9,2	85,0	81,5	79,0	77,5	73,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 32-250/116	15	11	94,0	91,5	89,0	87,5	83,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 40-125/1.56 (M)	2	1,5	20,5	19,6	18,9	18,5	17,2	16,0	12,0	10,3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 40-125/2.26 (M)	3	2,2	27,5	26,5	25,5	25,0	23,5	22,5	18,6	17,3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 40-160/3.06	4	3	31,5	31,0	30,0	29,5	27,5	26,0	20,5	18,4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 40-160/4.06	5,5	4	38,5	38,0	37,0	36,5	35,0	33,5	28,5	26,5	23,0	21,5	-	-	-	-	-	-	-	-	-	-	-	-
MD 40-200/5.56	7,5	5,5	48,0	47,0	46,0	45,5	43,5	41,5	33,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 40-200/7.56	10	7,5	58,0	57,0	56,0	55,5	53,5	52,0	45,5	43,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 40-250/116	15	11	-	77,5	75,5	74,0	71,0	68,0	55,0	59,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 40-250/136	17,5	13	-	87,0	85,5	84,5	82,0	79,5	68,0	64,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 40-250/156	20	15	-	97,0	96,0	95,5	93,0	91,0	82,0	79,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MD 50-125/2.26 (M)	3	2,2	-	-	-	-	-	18,2	17,3	16,8	15,9	15,4	13,6	9,5	-	-	-	-	-	-	-	-	-	-
MD 50-125/3.06	4	3	-	-	-	-	-	22,0	20,5	19,9	19,0	18,5	17,1	13,7	-	-	-	-	-	-	-	-	-	-
MD 50-125/4.06	5,5	4	-	-	-	-	-	26,0	25,0	24,5	23,5	23,0	21,5	18,2	16,0	-	-	-	-	-	-	-	-	-
MD 50-160/5.56	7,5	5,5	-	-	-	-	-	32,0	31,0	30,5	29,5	29,0	27,0	22,5	19,9	-	-	-	-	-	-	-	-	-
MD 50-160/7.56	10	7,5	-	-	-	-	-	39,0	38,0	37,5	36,5	36,0	34,5	31,0	29,0	26,5	25,0	-	-	-	-	-	-	-
MD 50-200/9.26	12,5	9,2	-	-	-	-	-	51,5	50,0	49,0	47,5	47,0	44,5	37,5	33,5	-	-	-	-	-	-	-	-	-
MD 50-200/116	15	11	-	-	-	-	-	59,0	57,0	56,0	54,5	54,0	51,5	45,5	42,0	38,0	-	-	-	-	-	-	-	-
MD 50-250/156	20	15	-	-	-	-	-	75,0	70,5	69,5	67,5	66,5	62,5	53,0	55,0	-	-	-	-	-	-	-	-	-
MD 50-250/18.56	25	18,5	-	-	-	-	-	85,0	83,0	81,5	80,0	78,5	75,0	66,5	61,0	55,0	-	-	-	-	-	-	-	-
MD 50-250/226	30	22	-	-	-	-	-	95,0	93,0	92,0	90,0	89,0	85,5	77,5	72,5	67,0	-	-	-	-	-	-	-	-
MD 65-125/5.56	7,5	5,5	-	-	-	-	-	-	-	24,3	24,5	24,0	23,5	22,0	21,0	20,0	19,7	18,0	11,2	-	-	-	-	-
MD 65-125/7.56	10	7,5	-	-	-	-	-	-	-	29,3	29,5	29,5	29,0	27,5	26,5	25,5	25,0	23,5	16,7	15,2	-	-	-	-
MD 65-160/116	15	11	-	-	-	-	-	-	-	-	37,5	37,5	37,5	36,5	36,5	35,5	35,5	34,5	28,5	27,0	24,0	22,5	-	-
MD 65-160/156	20	15	-	-	-	-	-	-	-	-	-	-	40,5	40,5	40,0	39,5	39,5	38,5	33,5	32,0	29,0	27,0	25,0	-
MD 65-200/18.56	25	18,5	-	-	-	-	-	-	-	-	-	-	58,5	57,5	56,5	55,5	55,0	53,0	45,5	44,0	40,0	-	-	-
MD 65-200/226	30	22	-	-	-	-	-	-	-	-	-	-	65,5	65,0	64,5	64,0	63,5	62,5	54,5	53,0	49,0	-	-	-

MONOBLOC CENTRIFUGAL ELECTRIC PUMP IN COMPLIANCE WITH EN 733

in cast iron

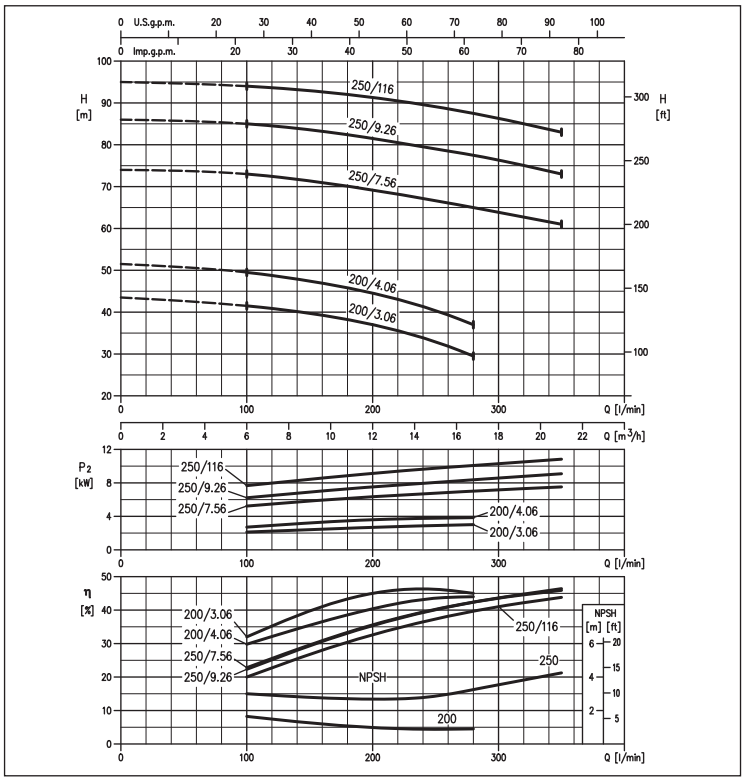
MD 32-125, 32-160 range 성능곡선

(according to ISO 9906 Attachment A)



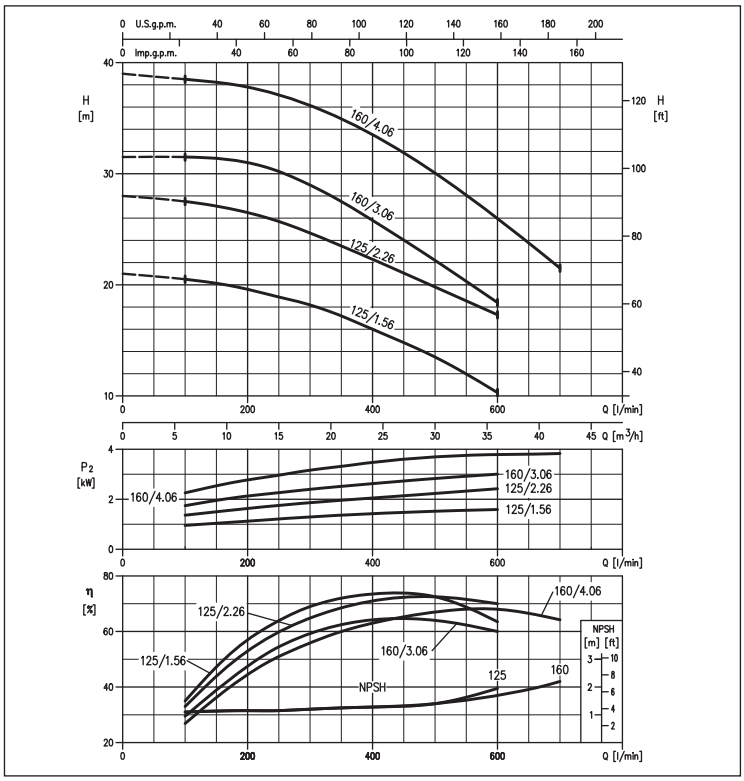
MD 32-200, 32-250 range 성능곡선

(according to ISO 9906 Attachment A)



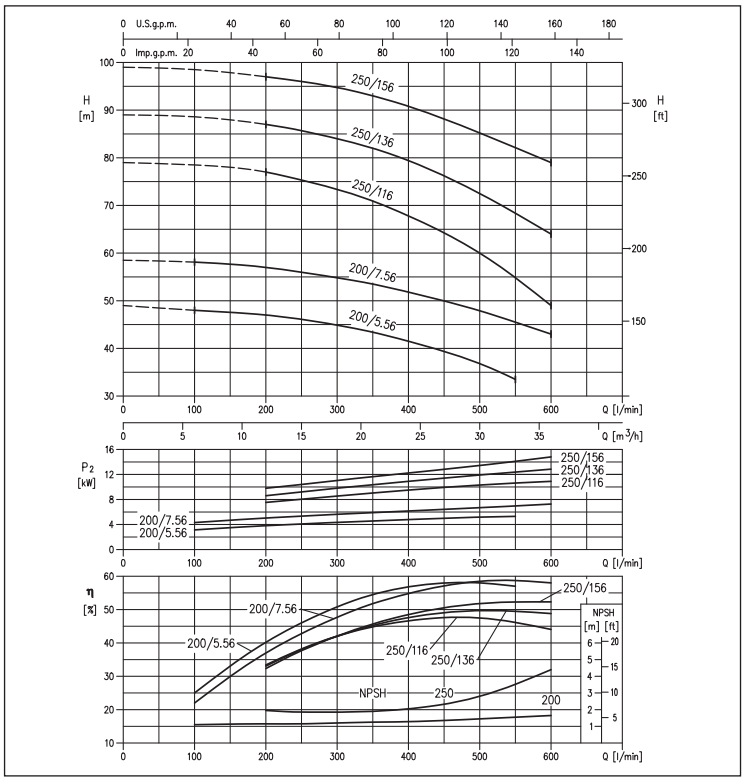
MD 40-125, 40-160 range 성능곡선

(according to ISO 9906 Attachment A)



MD 40-200, 40-250 range 성능곡선

(according to ISO 9906 Attachment A)

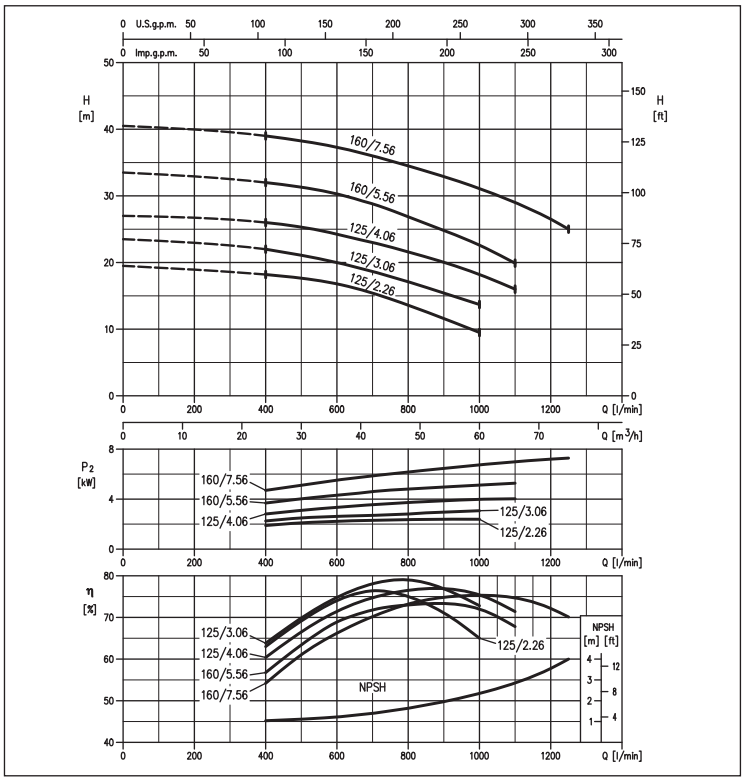


MONOBLOC CENTRIFUGAL ELECTRIC PUMP IN COMPLIANCE WITH EN 733

in cast iron

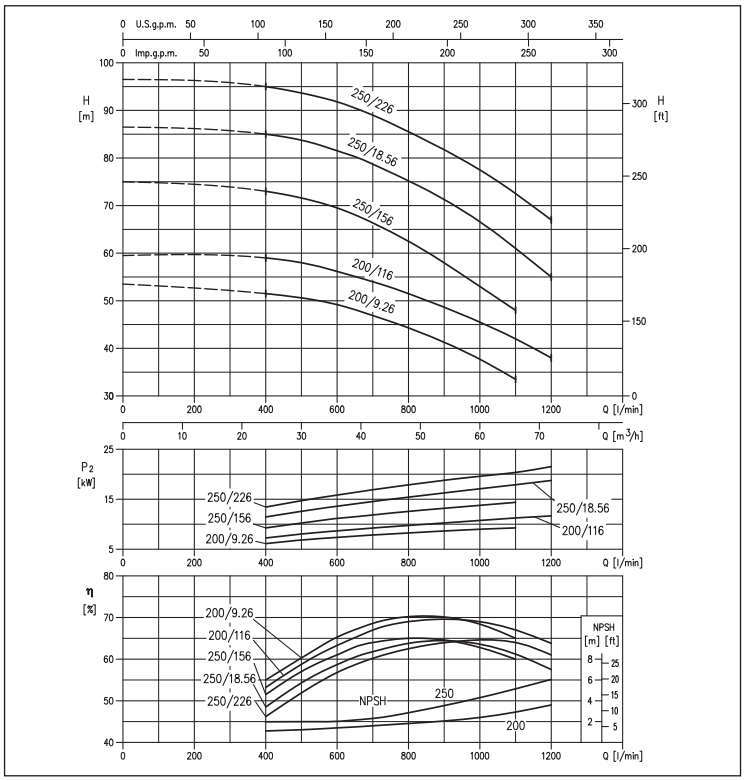
MD 50-125, 50-160 range 성능곡선

(according to ISO 9906 Attachment A)



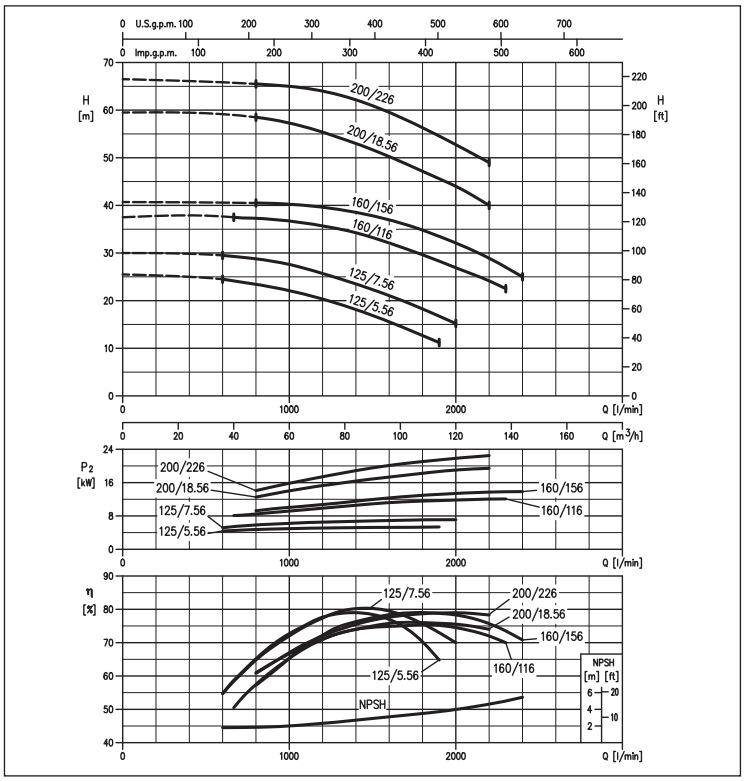
MD 50-200, 50-250 range 성능곡선

(according to ISO 9906 Attachment A)



MD 65 range 성능곡선

(according to ISO 9906 Attachment A)

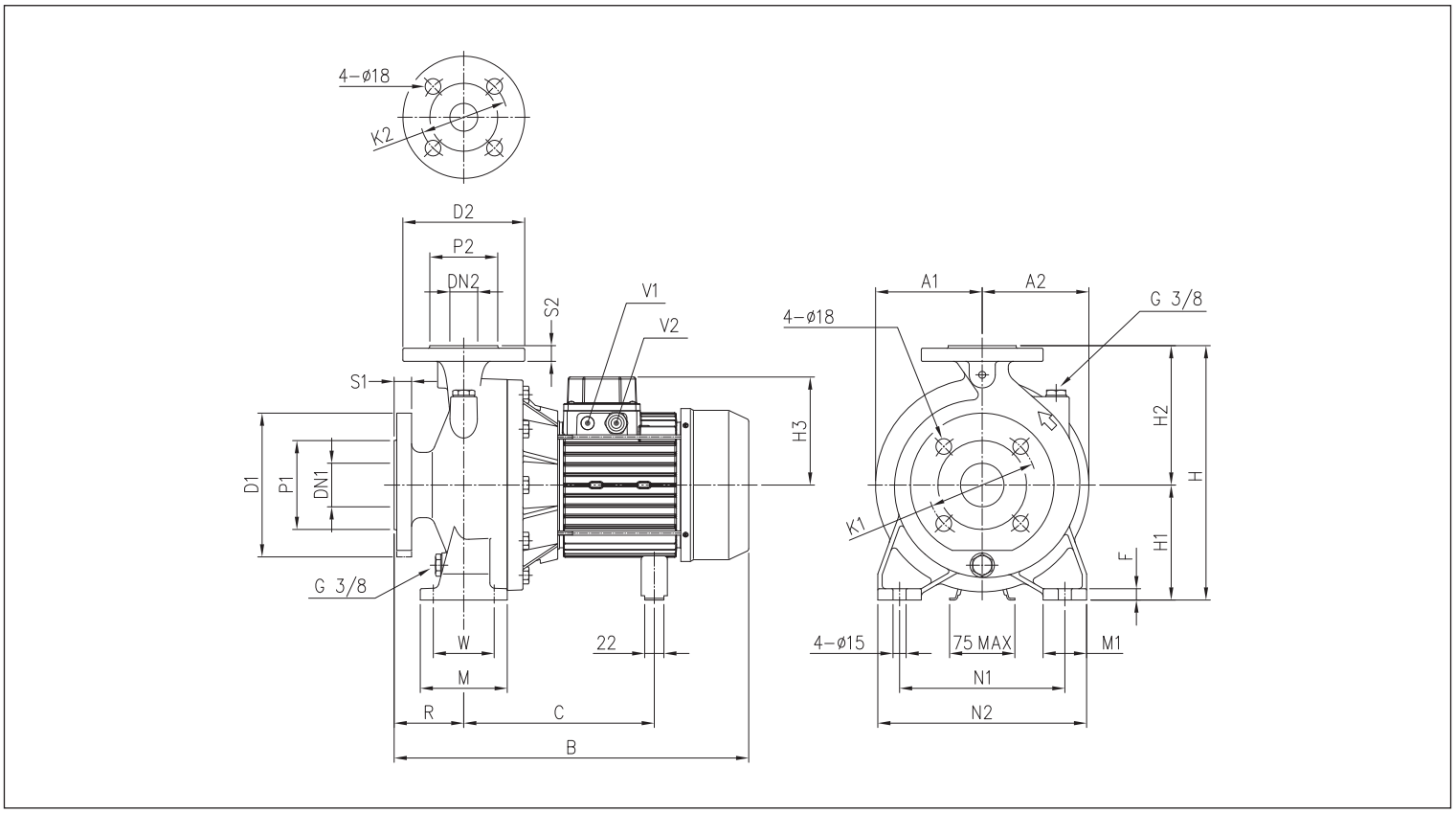


MD

MONOBLOC CENTRIFUGAL ELECTRIC PUMP IN COMPLIANCE WITH EN 733

in cast iron

외형도 up to 11 kW



외형표 up to 11 kW

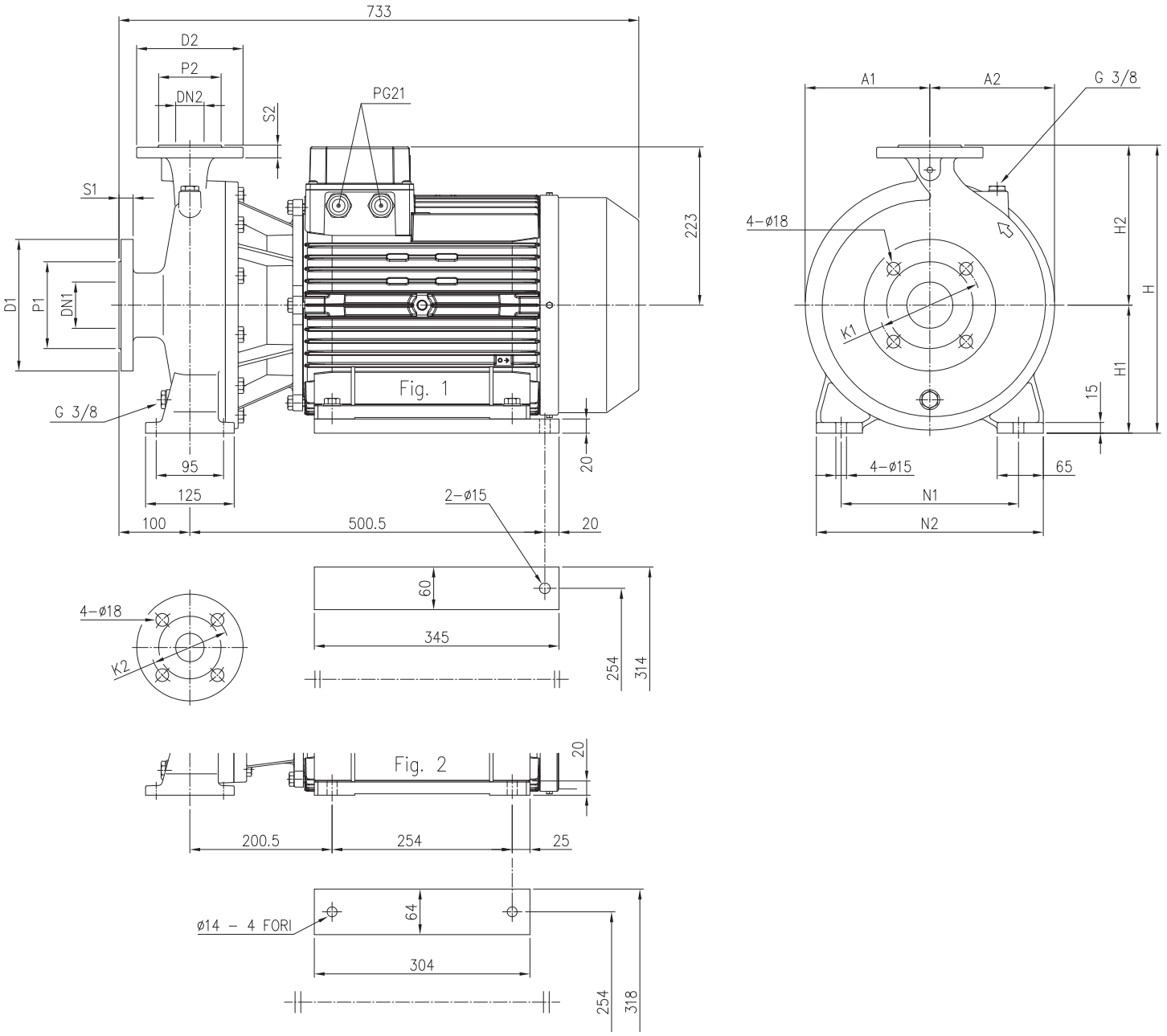
모델	외형치수 [mm]																														중량 [kg]	
	DN1 Ø	P1 Ø	K1 Ø	D1 Ø	S1	DN2 Ø	P2 Ø	K2 Ø	D2 Ø	S2	H	H1	H2	H3 [1]	H3 [2]	R	W	M	M1	N1	N2	A1	A2	B [2]	B [1]	C	F	V1 [1]	V2 [1]	V2 [2]	[2]	[1]
MD 32-125/1.16 (M)	50	102	125	165	20	32	78	100	140	18	252	112	140	124	141	80	70	100	50	140	190	104	104	408	407	219÷230	13	-	PG 13,5	M20x1,5	27,1	31,6
MD 32-125/1.56 (M)	50	102	125	165	20	32	78	100	140	18	252	112	140	124	141	80	70	100	50	140	190	104	104	408	407	219÷230	13	-	PG 13,5	M20x1,5	27,8	32,3
MD 32-160/1.56 (M)	50	102	125	165	20	32	78	100	140	18	292	132	160	124	141	80	70	100	50	190	240	123	123	408	407	219÷230	13	-	PG 13,5	M20x1,5	32,5	37,0
MD 32-160/2.26 (M)	50	102	125	165	20	32	78	100	140	18	292	132	160	124	141	80	70	100	50	190	240	123	123	408	432	244÷255	13	-	PG 13,5	M20x1,5	34,9	38,3
MD 32-200/3.06	50	102	125	165	20	32	78	100	140	18	340	160	180	124	-	80	70	100	50	190	240	144	144	-	471	244÷255	13	-	PG 13,5	-	-	46,0
MD 32-200/4.06	50	102	125	165	20	32	78	100	140	18	340	160	180	141	-	80	70	100	50	190	240	144	144	-	494	253	13	-	PG 16	-	-	55,7
MD 32-250/7.56	50	102	125	165	20	32	78	100	140	18	405	180	225	150	-	100	95	125	65	250	320	176	176	-	539	275	15	PG 13,5	PG 16	-	-	74,0
MD 32-250/9.26	50	102	125	165	20	32	78	100	140	18	405	180	225	178	-	100	95	125	65	250	320	176	176	-	590	354	15	PG 13,5	PG 21	-	-	94,0
MD 32-250/116	50	102	125	165	20	32	78	100	140	18	405	180	225	178	-	100	95	125	65	250	320	176	176	-	590	354	15	PG 13,5	PG 21	-	-	93,5
MD 40-125/1.56 (M)	65	122	145	185	20	40	88	110	150	18	252	112	140	124	141	80	70	100	50	160	210	104	111	408	407	219÷230	13	-	PG 13,5	M20x1,5	28,4	33,0
MD 40-125/2.26 (M)	65	122	145	185	20	40	88	110	150	18	252	112	140	124	141	80	70	100	50	160	210	104	111	408	432	244÷255	13	-	PG 13,5	M20x1,5	31,4	34,8
MD 40-160/3.06	65	122	145	185	20	40	88	110	150	18	292	132	160	124	-	80	70	100	50	190	240	123	123	-	471	244÷255	13	-	PG 13,5	-	-	40,8
MD 40-160/4.06	65	122	145	185	20	40	88	110	150	18	292	132	160	141	-	80	70	100	50	190	240	123	123	-	494	253	13	-	PG 16	-	-	48,2
MD 40-200/5.56	65	122	145	185	20	40	88	110	150	18	340	160	180	150	-	100	70	100	50	212	265	144	144	-	539	275	13	PG 13,5	PG 16	-	-	64,0
MD 40-200/7.56	65	122	145	185	20	40	88	110	150	18	340	160	180	150	-	100	70	100	50	212	265	144	144	-	539	275	13	PG 13,5	PG 16	-	-	68,0
MD 40-250/116	65	122	145	185	20	40	88	110	150	18	405	180	225	178	-	100	95	125	65	250	320	176	176	-	590	354	15	PG 13,5	PG 21	-	-	97,5
MD 50-125/2.26 (M)	65	122	145	185	20	50	102	125	165	20	292	132	160	124	141	100	70	100	50	190	240	104	124	428	452	244÷255	13	-	PG 13,5	M20x1,5	33,8	37,2
MD 50-125/3.06	65	122	145	185	20	50	102	125	165	20	292	132	160	124	-	100	70	100	50	190	240	104	124	-	491	244÷255	13	-	PG 13,5	-	-	37,8
MD 50-125/4.06	65	122	145	185	20	50	102	125	165	20	292	132	160	141	-	100	70	100	50	190	240	104	124	-	514	253	13	-	PG 16	-	-	47,5
MD 50-160/5.56	65	122	145	185	20	50	102	125	165	20	340	160	180	150	-	100	70	100	50	212	265	123	136	-	539	275	13	PG 13,5	PG 16	-	-	61,0
MD 50-160/7.56	65	122	145	185	20	50	102	125	165	20	340	160	180	150	-	100	70	100	50	212	265	123	136	-	539	275	13	PG 13,5	PG 16	-	-	68,0
MD 50-200/9.26	65	122	145	185	20	50	102	125	165	20	360	160	200	178	-	100	70	100	50	212	265	144	154	-	590	354	13	PG 13,5	PG 21	-	-	84,0
MD 50-200/116	65	122	145	185	20	50	102	125	165	20	360	160	200	178	-	100	70	100	50	212	265	144	154	-	590	354	13	PG 13,5	PG 21	-	-	88,0
MD 65-125/5.56	80	138	160	200	22	65	122	145	185	20	340	160	180	150	-	100	95	125	65	212	280	123	139	-	539	275	13	PG 13,5	PG 16	-	-	62,0
MD 65-125/7.56	80	138	160	200	22	65	122	145	185	20	340	160	180	150	-	100	95	125	65	212	280	123	139	-	539	275	13	PG 13,5	PG 16	-	-	66,5
MD 65-160/116	80	138	160	200	22	65	122	145	185	20	360	160	200	178	-	100	95	125	65	212	280	144	154	-	590	354	13	PG 13,5	PG 21	-	-	94,0

[1]= Three phase only
[2]= Single phase only

MONOBLOC CENTRIFUGAL ELECTRIC PUMP IN COMPLIANCE WITH EN 733

in cast iron

외형도 from 13 kW and above



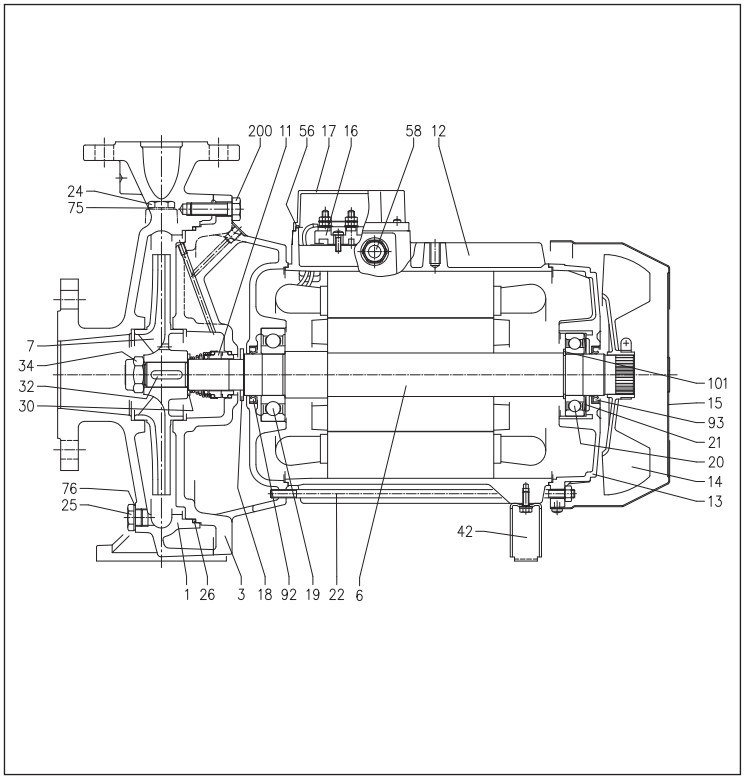
외형표 from 13 kW and above

모델	외형치수 [mm]																		중량 [kg]
	DN1 Ø	P1 Ø	K1 Ø	D1 Ø	S1	DN2 Ø	P2 Ø	K2 Ø	D2 Ø	S2	Fig.	H	H1	H2	N1	N2	A1	A2	
MD 40-250/136	65	122	145	185	20	40	88	110	150	18	1	405	180	225	250	320	176	176	100,0
MD 40-250/156	65	122	145	185	20	40	88	110	150	18	1	405	180	225	250	320	176	176	101,0
MD 50-250/156	65	122	145	185	20	50	102	125	165	20	1	405	180	225	250	320	176	176	102,0
MD 50-250/18.56	65	122	145	185	20	50	102	125	165	20	1	405	180	225	250	320	176	176	129,0
MD 50-250/226	65	122	145	185	20	50	102	125	165	20	1	405	180	225	250	320	176	176	154,0
MD 65-160/156	80	138	160	200	22	65	122	145	185	20	2	360	160	200	212	280	144	154	122,0
MD 65-200/18.56	80	138	160	200	22	65	122	145	185	20	1	405	180	225	250	320	144	168	137,0
MD 65-200/226	80	138	160	200	22	65	122	145	185	20	1	405	180	225	250	320	144	168	142,0

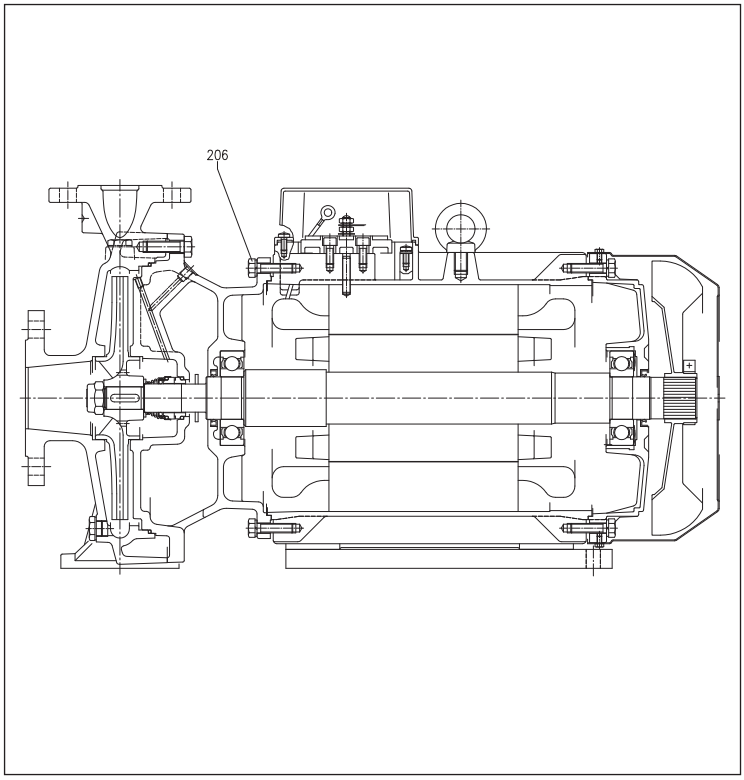
MD

MONOBLOC CENTRIFUGAL ELECTRIC PUMP IN COMPLIANCE WITH EN 733
in cast iron

단면도 up to13 kW



단면도 from 15 kW and above (excluding 65-160/156)



부품표

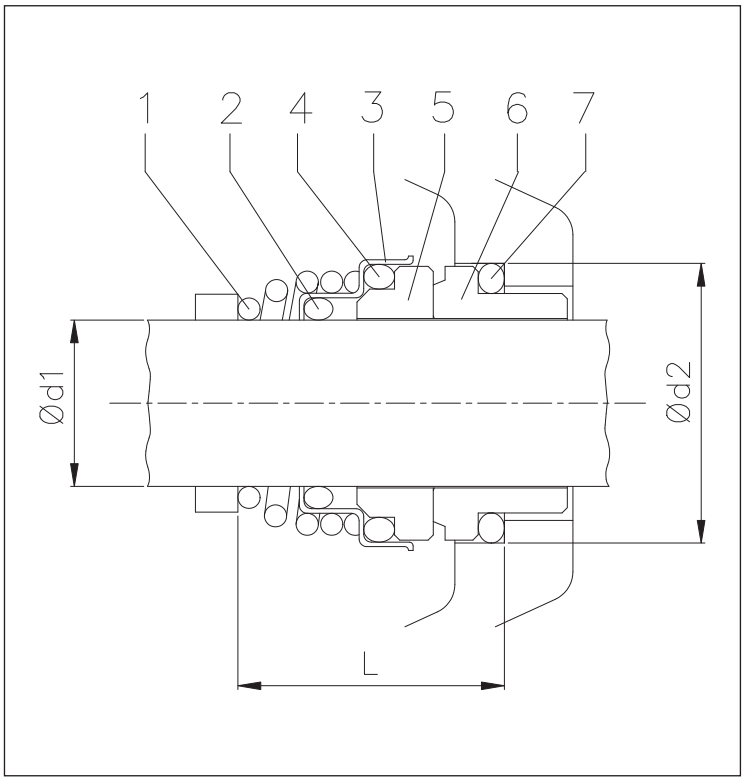
Ref.	부품명	재질	Ref.	부품명	재질
1	Casing	Cast iron EN-GJL-200-EN 1561	24	Filler cap	Brass
3	Motor bracket	Cast iron EN-GJL-200-EN 1561	25	Drain plug	Brass
6	Shaft	AISI 304 (part in contact with the liquid)	26	O-Ring	NBR
7	Impeller (MD xx-125, xx-160, xx-200)	Cast iron EN-GJL-200-EN 1561	30	Spacer	AISI 304
	Impeller (MD xx-250)	Bronze	32	Key	AISI 316
11	Mechanical seal	Carbon/Ceramic/NBR	34	Impeller nut	AISI 304
12	Motor frame with stator	-	42	Foot	Fe P04
13	Motor cover	Aluminium	56	Box gasket	NBR
14	Fan	PP	58	Cable entry [1]	-
15	Fan cover	Galvanised steel Fe P04	75	Washer	Aluminium
16	Terminal box	-	76	Washer	Aluminium
17	Terminal box cover	Plastic [2] / Aluminium [1]	85*	Kit counterflange - Flange	Galvanised steel
18	Splash ring	NBR		Kit counterflange - Screw for flange	AISI 304
19	Bearing (pump side)	-		Kit counterflange - Gasket	EPDM
20	Bearing (motor side)	-	92/93	Sealing ring	-
21	Adjusting ring	Steel C70	101	Snap ring (only for 9,2-11-13 kW)	Carbon tool steels TC 80
22	Tie-rod up to 13 kW and MD 65-160/15	Galvanised steel Fe 42	200	Screw (pump body)	Zn. steel 8.8 strenght class ISO 898/1
	Tie-rod 15 kW and above	Zn. steel 8.8 strenght class ISO 898/1	206	Screw (motor support)	Zn. steel 8.8 strenght class ISO 898/1

* On request
[1]= Three phase only
[2]= Single phase only

MONOBLOC CENTRIFUGAL ELECTRIC PUMP IN COMPLIANCE WITH EN 733

in cast iron

매카니컬실 standard



부품상세

Ref.	부품명	재질
1	Spring	AISI 316
2	O-Ring	NBR
3	Structure/frame	AISI 304
4	O-Ring	NBR
5	Rotating part	Ceramic
6	Fixed part	Carbon
7	O-Ring	NBR

외형표

모델	외형치수 [mm] Ød1	Ød2	L	모델	외형치수 [mm] Ød1	Ød2	L
MD 32-125/1.16 (M)	22	37	37,5	MD 50-125/2.26 (M)	22	37	37,5
MD 32-125/1.56 (M)				MD 50-125/3.06			
MD 32-160/1.56 (M)				MD 50-125/4.06			
MD 32-160/2.26 (M)				MD 50-160/5.56			
MD 32-200/3.06				MD 50-160/7.56			
MD 32-200/4.06				MD 50-200/9.26	30	45	42,5
MD 32-250/7.56				MD 50-200/116			
MD 32-250/9.26	30	45	42,5	MD 50-250/156			
MD 32-250/116				MD 50-250/18,56			
MD 40-125/1.56 (M)	22	37	37,5	MD 50-250/226			
MD 40-125/2.26 (M)				MD 65-125/5.56	22	37	37,5
MD 40-160/3.06				MD 65-125/7.56			
MD 40-160/4.06				MD 65-160/116	30	45	42,5
MD 40-200/5.56				MD 65-160/156			
MD 40-200/7.56				MD 65-200/18.56			
MD 40-250/116	30	45	42,5	MD 65-200/226			
MD 40-250/136							
MD 40-250/156							

특수 매카니컬실 (on request)

Ref.	부품명	재질 H version	HS version	HW version
1	Spring	AISI 316	AISI 316	AISI 316
2	O-Ring	FPM	FPM	FPM
3	Structure/frame	AISI 304/AISI 316*	AISI 316	AISI 316
4	O-Ring	FPM	FPM	FPM
5	Rotating part	Ceramic	SiC	Tung. carbide
6	Fixed part	Carbon	SiC	Tung. carbide
7	O-Ring	FPM	FPM	FPM

* Only for Ø30

MONOBLOC CENTRIFUGAL ELECTRIC PUMP IN COMPLIANCE WITH EN 733

in cast iron

전기관련표

모델 단상	모델 삼상	P_2 [HP]	P_2 [kW]	Capacitor 단상 µF	Capacitor 단상 V_c	P_1 단상 [kW]	P_1 삼상 [kW]	Absorbed Current [A] 단상 220-230V	Absorbed Current [A] 삼상 220V	삼상 380V	삼상 460V	삼상 660V
MD 32-125/1.16 M	MD 32-125/1.16	1,5	1,1	25	450	1,65	2,0	7,9	5,4	3,2	2,8	-
MD 32-125/1.56 M	MD 32-125/1.56	2	1,5	35	450	2,2	2,0	10,4	5,4	3,2	2,8	-
MD 32-160/1.56 M	MD 32-160/1.56	2	1,5	35	450	2,16	2,0	10,2	5,4	3,2	2,8	-
MD 32-160/2.26 M	MD 32-160/2.26	3	2,2	50	450	3,1	2,9	14,8	7,0	4,1	4,1	-
-	MD 32-200/3.06	4	3	-	-	-	3,9	-	10,5	6,1	5,6	-
-	MD 32-200/4.06	5,5	4	-	-	-	5,1	-	14,7	8,5	8,0	-
-	MD 32-250/7.56	10	7,5	-	-	-	9,4	-	-	14,9	12,7	8,6
-	MD 32-250/9.26	12,5	9,2	-	-	-	11,3	-	-	17,7	15,4	10,3
-	MD 32-250/116	15	11	-	-	-	13,2	-	-	18,3	18,3	10,5
MD 40-125/1.56 M	MD 40-125/1.56	2	1,5	35	450	2,26	2,0	10,7	5,4	3,2	2,8	-
MD 40-125/2.26 M	MD 40-125/2.26	3	2,2	50	450	3,2	2,9	15,2	7,0	4,1	4,1	-
-	MD 40-160/3.06	4	3	-	-	-	3,9	-	10,5	6,1	5,6	-
-	MD 40-160/4.06	5,5	4	-	-	-	5,1	-	14,7	8,5	8,0	-
-	MD 40-200/5.56	7,5	5,5	-	-	-	7,0	-	-	11,6	9,5	6,7
-	MD 40-200/7.56	10	7,5	-	-	-	9,4	-	-	14,9	12,7	8,6
-	MD 40-250/116	15	11	-	-	-	13,2	-	-	18,3	18,3	10,5
-	MD 40-250/136	17,5	13	-	-	-	17,9	-	-	28,7	25,0	16,6
-	MD 40-250/156	20	15	-	-	-	17,9	-	-	28,7	25,0	16,6
MD 50-125/2.26 M	MD 50-125/2.26	3	2,2	50	450	3,1	2,9	14,8	7,0	4,1	4,1	-
-	MD 50-125/3.06	4	3	-	-	-	3,9	-	10,5	6,1	5,6	-
-	MD 50-125/4.06	5,5	4	-	-	-	5,1	-	14,7	8,5	8,0	-
-	MD 50-160/5.56	7,5	5,5	-	-	-	7,0	-	-	11,6	9,5	6,7
-	MD 50-160/7.56	10	7,5	-	-	-	9,4	-	-	14,9	12,7	8,6
-	MD 50-200/9.26	12,5	9,2	-	-	-	11,3	-	-	17,7	15,4	10,3
-	MD 50-200/116	15	11	-	-	-	13,2	-	-	18,3	18,3	10,5
-	MD 50-250/156	20	15	-	-	-	17,9	-	-	28,7	25,0	16,6
-	MD 50-250/18,56	25	18,5	-	-	-	21,9	-	-	34,8	31,0	20,1
-	MD 50-250/226	30	22	-	-	-	26,4	-	-	41,7	36,4	24,0
-	MD 65-125/5.56	7,5	5,5	-	-	-	7,0	-	-	11,6	9,5	6,7
-	MD 65-125/7.56	10	7,5	-	-	-	9,4	-	-	14,9	12,7	8,6
-	MD 65-160/116	15	11	-	-	-	13,2	-	-	18,3	18,3	10,5
-	MD 65-160/156	20	15	-	-	-	17,9	-	-	28,7	25,0	16,6
-	MD 65-200/18.56	25	18,5	-	-	-	21,9	-	-	34,8	31,0	20,1
-	MD 65-200/226	30	22	-	-	-	26,4	-	-	41,7	36,4	24,0

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