EBARA

3D SERIES

CENTRIFUGAL PUMPS CLOSE COUPLED AND STANDARDIZED EN 733

60 Hz

3D SERIES

CENTRIFUGAL PUMPS CLOSE COUPLED AND STANDARDIZED EN 733

Centrifugal pumps close coupled (3D) and standardized EN 733 (3DS-3DP) in cast iron.

용도
- 청수 및 약케미컬 이송
- 냉방시스템 순화용
- 가압
- 세척 및 산업용
- 관개 및 농업용

기술정보
- 뛰어난 내구성,내식성
- 뛰어난 효율

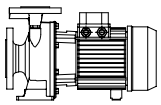
펌프기술자료
- 최대사용압력:10 bar
- 유체온도:
  -5°C ÷ +90°C
  -5°C ÷ +110°C (H-HS-HW-HSW 버전)
  -5°C ÷ +120°C (E 버전)

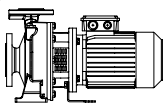
모터기술자료
- 자체환기 비동기식 모터
- 절연등급 : 3D = F
  3DS - 3DP = F (B for high temperatures)
- 보호등급:IP55
- 220/380-460V ±10% for 3D (4.0kW 까지 포함),
  380-460/660V ±10% for 3D (5,5 kW 이상),
  265/460V ±10% for 3DS - 3DP (4.0kW 까지 포함),
  460V ±10% for 3DS - 3DP (5,5 kW 이상),

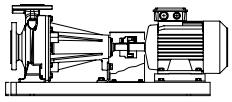
재질
- Pump casing in cast iron EN-GJL-250-EN 1561
- Impeller in:
  - AISI 304 for 3D(.) SERIES 32, 40, 50
  - AISI 316 microcasted for 3D(.) SERIES 65
- Shaft in AISI 304 (part in contact with the liquid)
- Mechanical seal in:
  - Ceramic/Carbon/NBR (standard)
  - Ceramic/Carbon/FPM (H version)
  - SiC/SiC/FPM (HS version)
  - Tungsten Carbide/Tungsten Carbide/FPM (HW version)
  - SiC/Tungsten Carbide/FPM (HSW version)
  - Ceramic/Carbon/EPDM (E version)

특수버전
- 특수전압
- 특수 매카니컬실

3가지 버전의 다양한 모델(2,4 Pole)


3D Monobloc with extended motor shaft

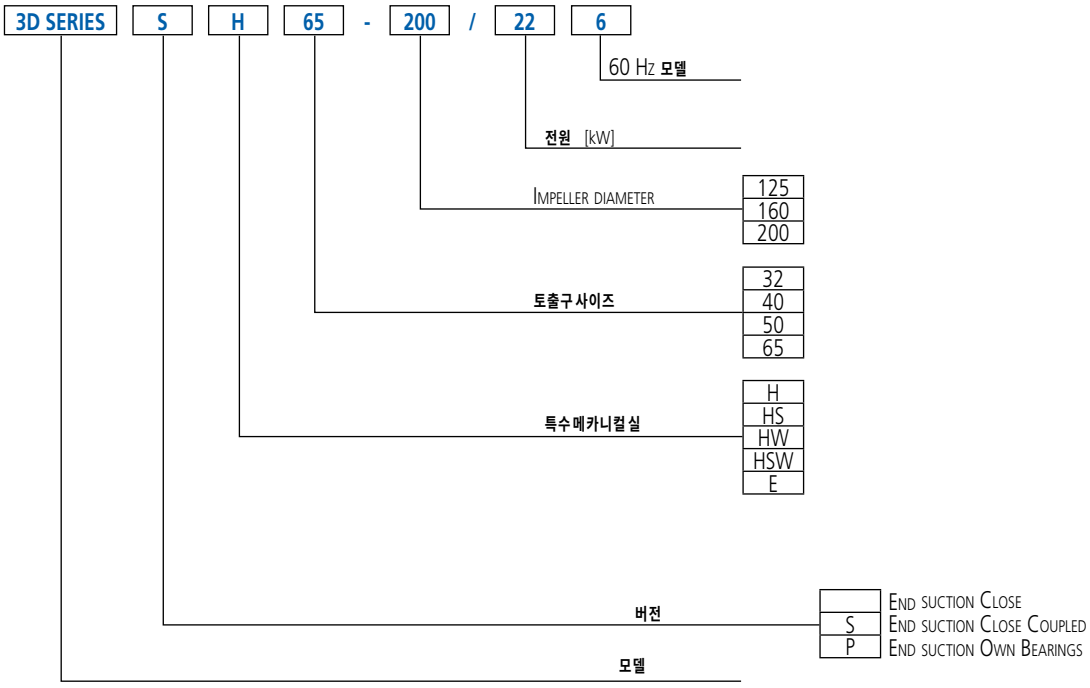

3DS Monobloc with standard motor and rigid joint


3DP On base, with standard motor and flexible coupling

3D SERIES

CENTRIFUGAL PUMPS CLOSE COUPLED AND STANDARDIZED EN 733

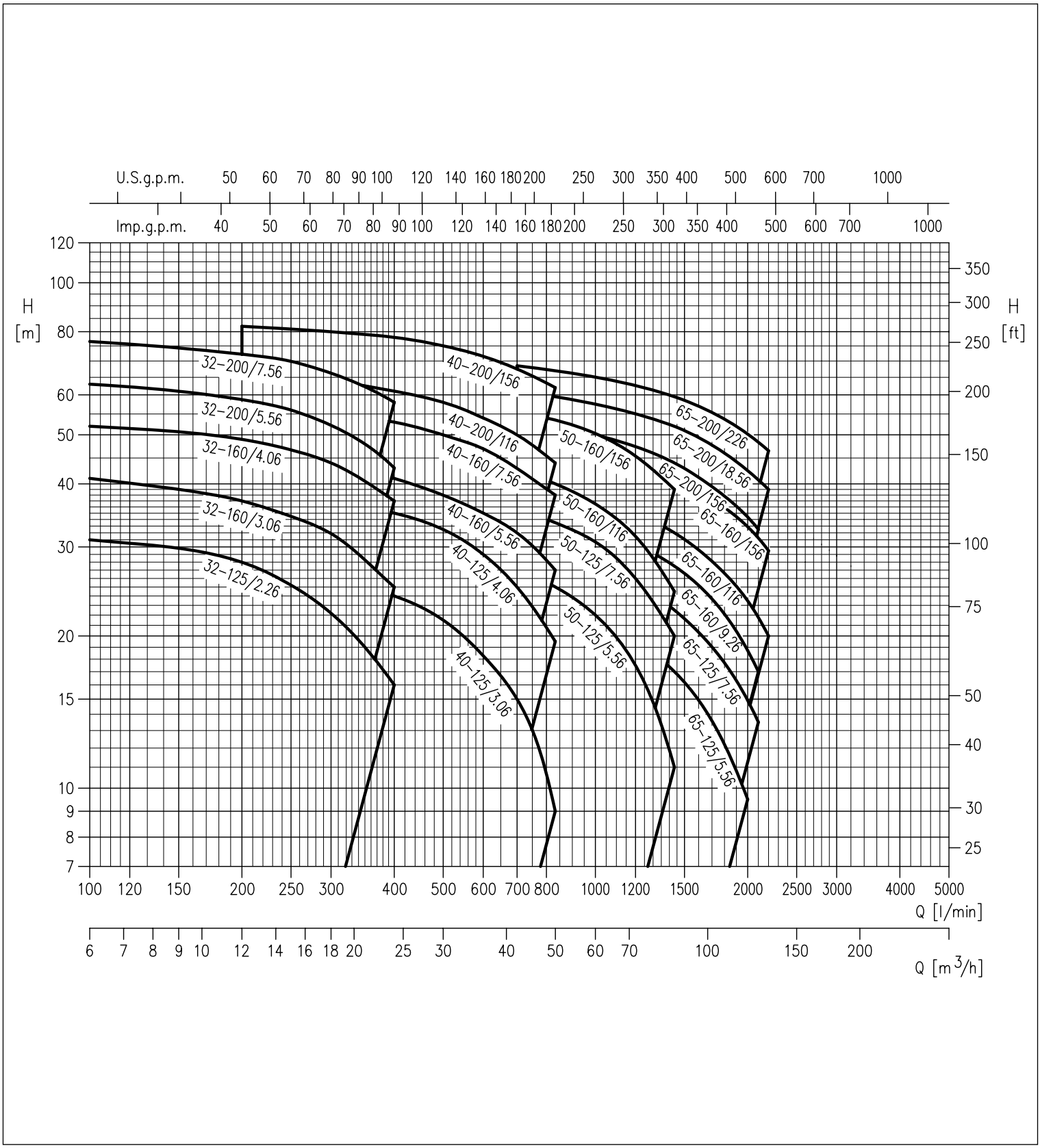
식별코드



CENTRIFUGAL PUMPS CLOSE COUPLED AND STANDARDIZED EN 733

성능차트

at 3600 min^{-1} (according to ISO 9906 Attachment A)



3D SERIES

CENTRIFUGAL PUMPS CLOSE COUPLED AND STANDARDIZED EN 733

성능표 3D(.) SERIES 32

모델	P2		Q=유량						
			l/min 100	150	200	250	300	350	400
	[HP]	[kW]	m³/h 6	9	12	15	18	21	24
			H=양정 [m]						
32-125/2.26	3	2,2	32,5	31,4	29,6	27,2	24,4	21,4	18,0
32-160/3.06	4	3	41,5	40,0	38,4	35,9	32,8	29,3	25,0
32-160/4.06	5,5	4	53,0	51,5	49,5	47,0	44,5	41,5	38,0
32-200/5.56	7,5	5,5	62,5	61,5	59,0	56,5	53,5	50,0	46,0
32-200/7.56	10	7,5	74,0	72,5	70,5	68,5	65,0	61,5	58,0

성능표 3D(.) SERIES 40

모델	P2		Q=유량						
			l/min 200	300	400	500	600	700	833
	[HP]	[kW]	m³/h 12	18	24	30	36	42	50
			H=양정 [m]						
40-125/3.06	4	3	26,7	25,5	23,6	21,1	18,3	14,8	9,5
40-125/4.06	5,5	4	36,5	35,8	34,6	32,7	30,2	27,1	22,7
40-160/5.56	7,5	5,5	43,5	42,0	39,8	37,2	34,6	31,8	27,5
40-160/7.56	10	7,5	54,0	52,5	50,5	48,0	45,5	42,5	38,5
40-200/116	15	11	65,0	63,5	62,0	60,0	57,0	54,0	49,5
40-200/156	20	15	80,0	78,5	77,0	75,0	73,0	70,5	66,5

성능표 3D(.) SERIES 50

모델	P2		Q=유량						
			l/min 500	600	700	800	1000	1200	1433
	[HP]	[kW]	m³/h 30	36	42	48	60	72	86
			H=양정 [m]						
50-125/5.56	7,5	5,5	31,8	31,2	30,2	28,9	25,6	21,7	16,8
50-125/7.56	10	7,5	37,1	36,5	35,6	34,3	31,0	27,2	22,0
50-160/116	15	11	46,5	45,5	44,5	43,0	39,8	35,5	29,4
50-160/156	20	15	56,0	55,5	54,5	53,5	50,5	46,5	40,5

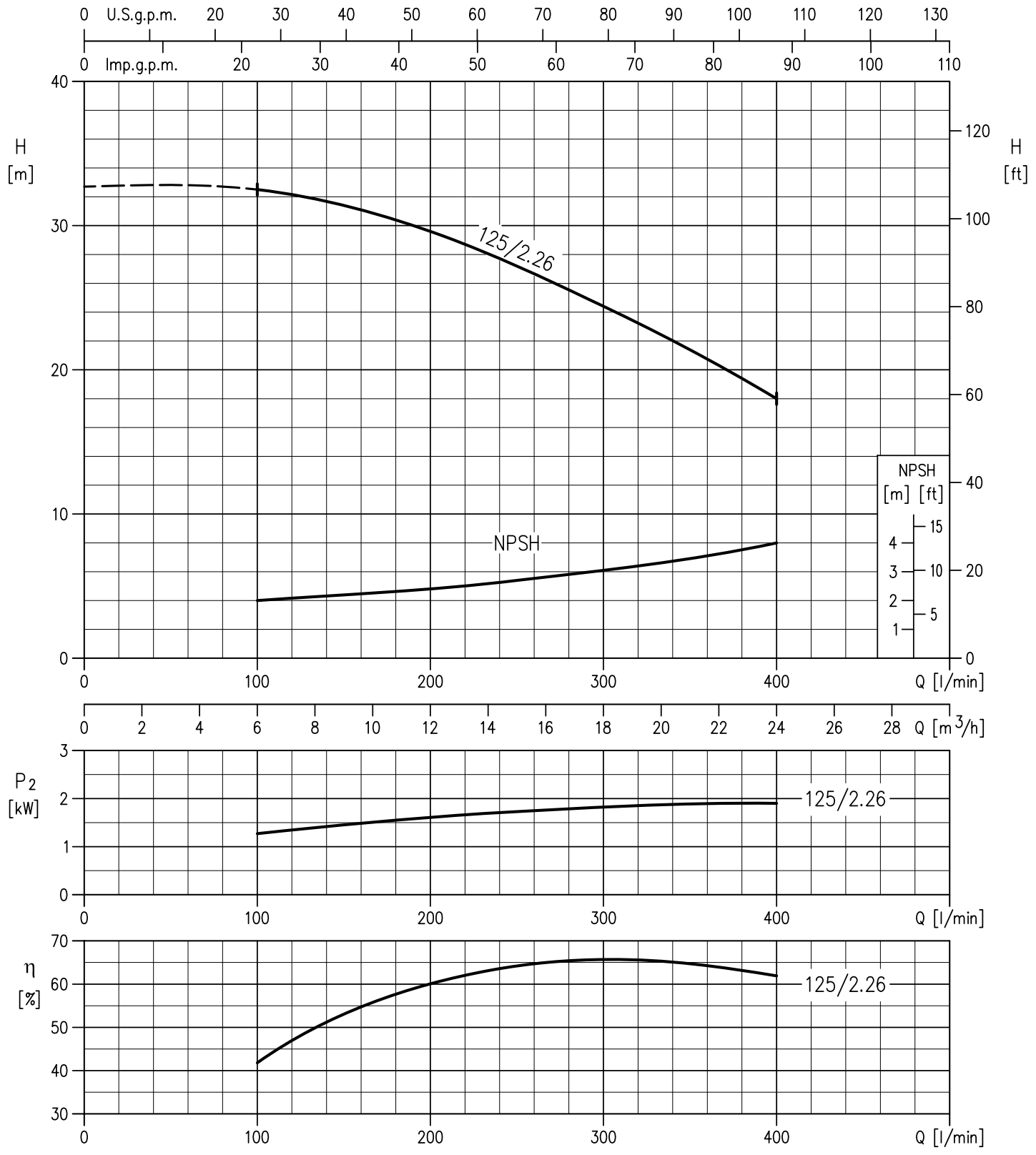
성능표 3D(.) SERIES 65

모델	P2		Q=유량									
			l/min 600	700	900	1200	1500	1600	1800	2000	2100	2200
	[HP]	[kW]	m³/h 36	42	54	72	90	96	108	120	126	132
			H=양정 [m]									
65-125/5.56	7,5	5,5	25,5	24,9	23,3	20,2	16,4	15,1	12,4	9,5	-	-
65-125/7.56	10	7,5	31,3	30,8	29,2	26,4	22,8	21,5	18,7	15,4	13,7	-
65-160/9.26	12,5	9,2	-	35,1	33,3	30,1	26,6	25,4	22,4	19,0	17,0	-
65-160/116	15	11	-	40,0	38,3	35,6	32,1	30,8	28,2	25,3	23,5	21,5
65-160/156	20	15	-	48,0	46,5	44,0	40,5	39,2	36,5	33,7	32,2	30,5
65-200/156	20	15	-	53,0	51,0	47,0	42,0	39,9	35,6	30,7	28	-
65-200/18.56	25	18,5	-	60,5	58,5	55	50,5	48,5	44,5	39,9	37,4	35,0
65-200/226	30	22	-	67,5	66	62,5	58,5	56,5	53,0	49,0	47,0	44,5

(M) Single phase version only for 3D SERIES

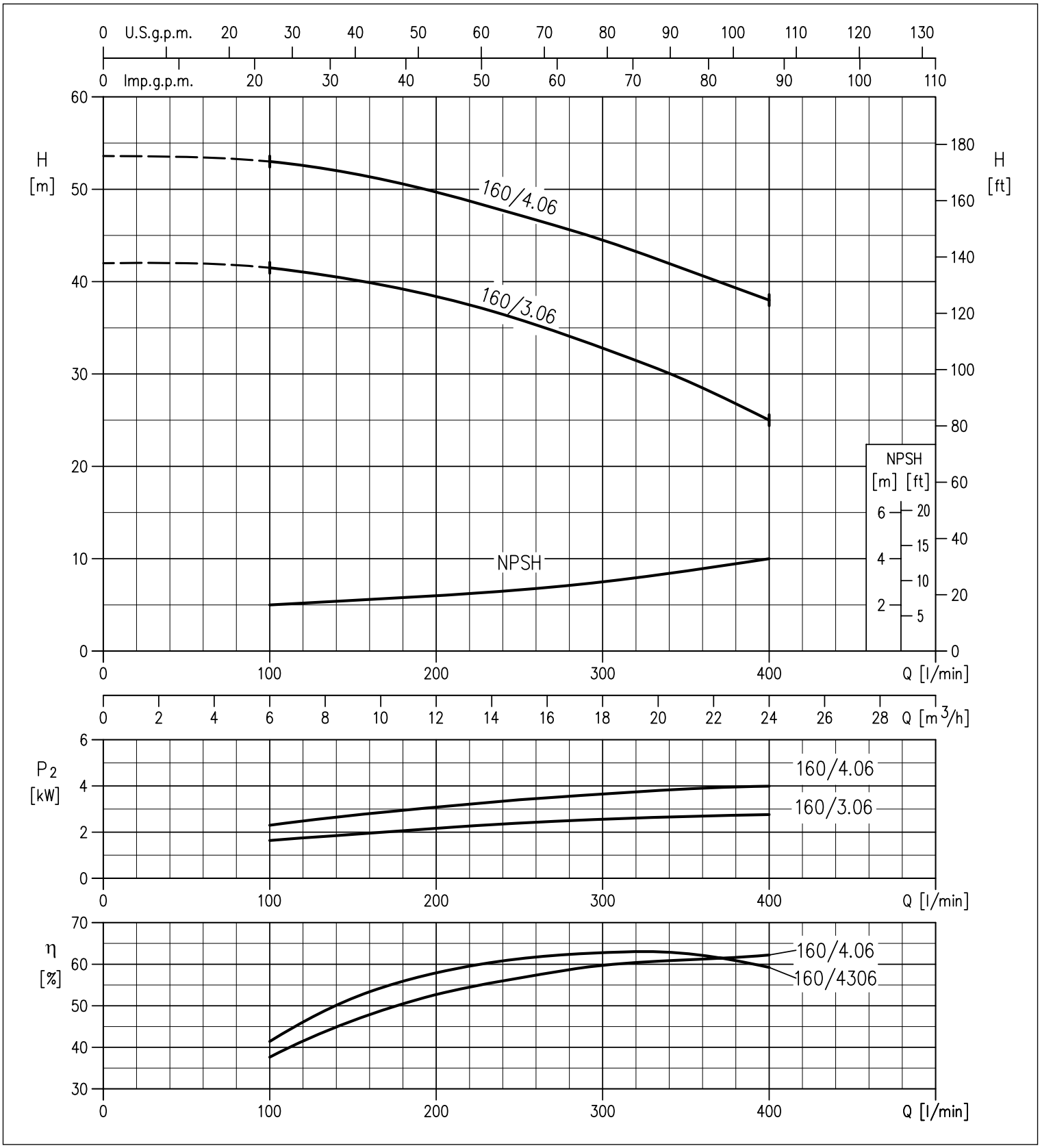
성능곡선 3D(.) SERIES 32-125

at 3600 min^{-1} (according to ISO 9906 Attachment A)



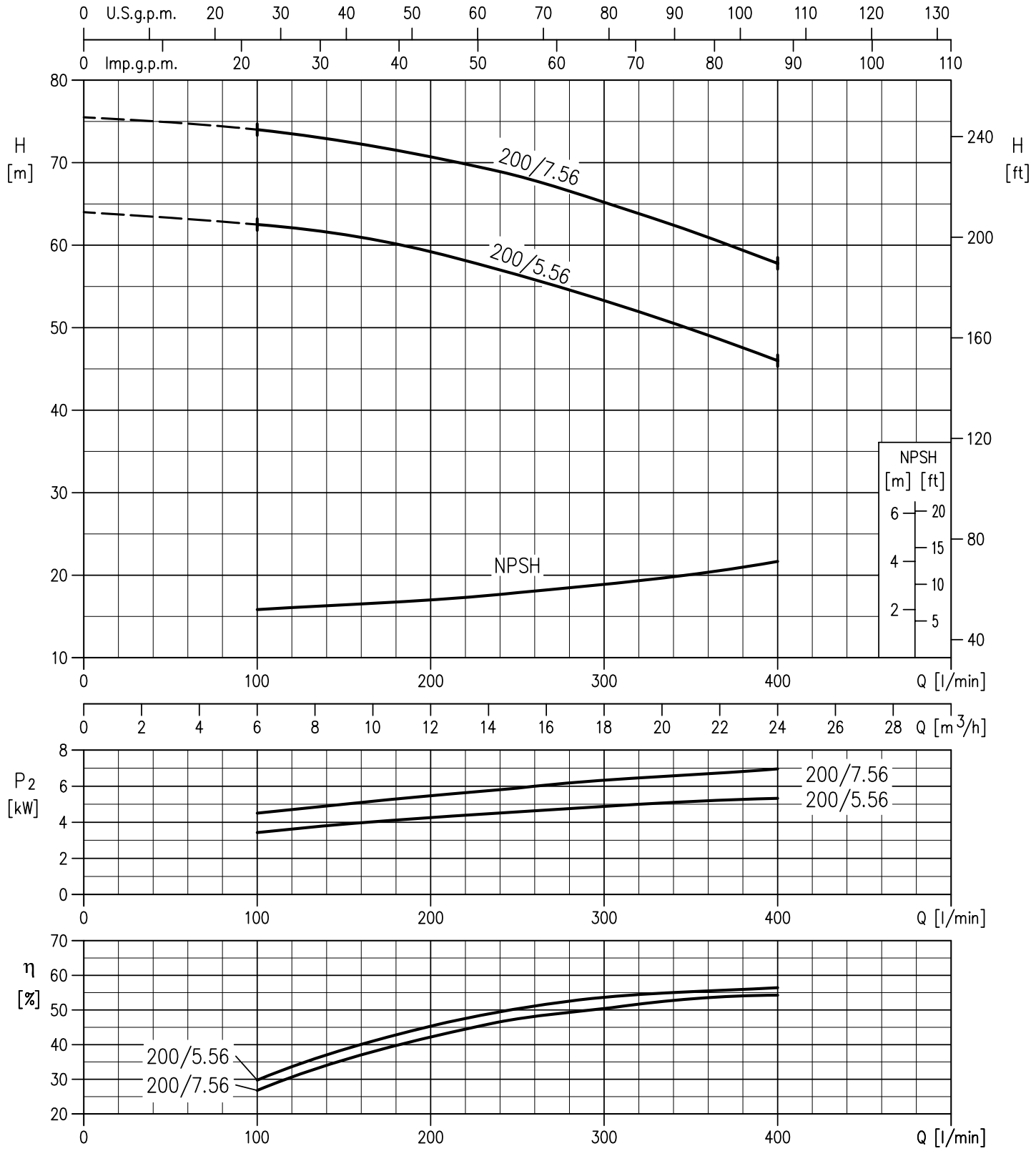
성능곡선 3D(.) SERIES 32-160

at 3600 min^{-1} (according to ISO 9906 Attachment A)



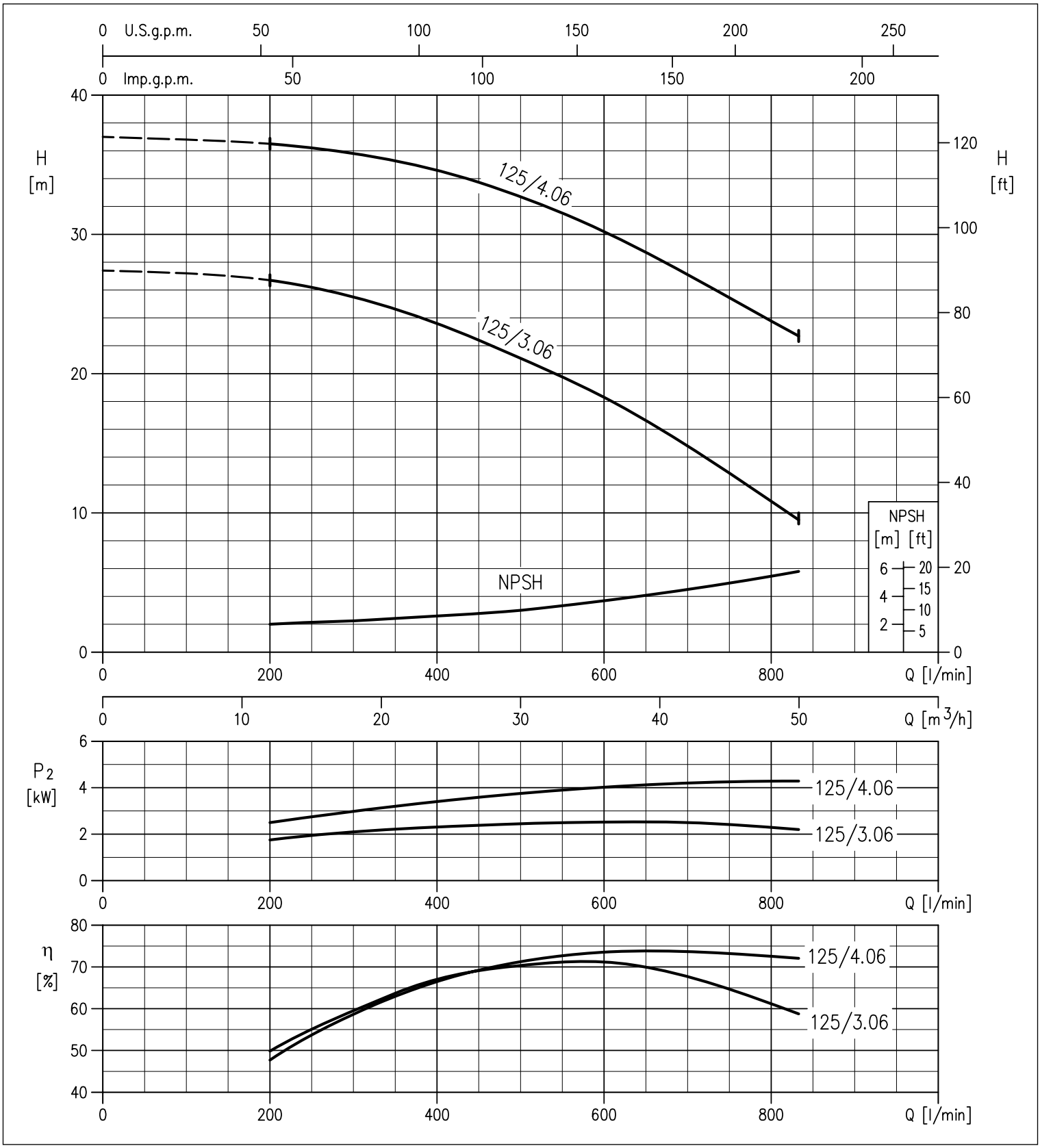
성능곡선 3D(.) SERIES 32-200

at 3600 min^{-1} (according to ISO 9906 Attachment A)



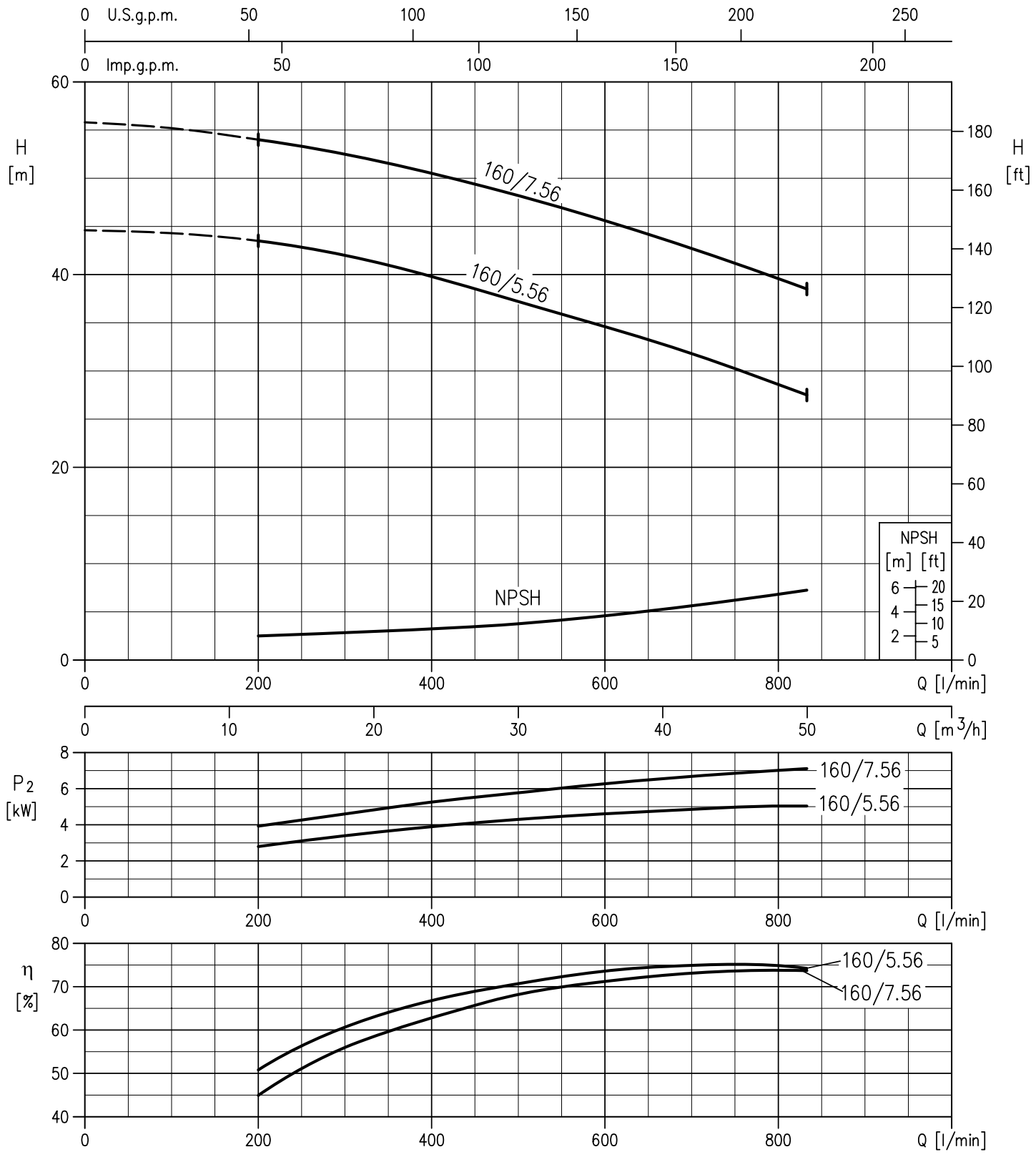
성능곡선 3D(.) SERIES 40-125

at 3600 min^{-1} (according to ISO 9906 Attachment A)



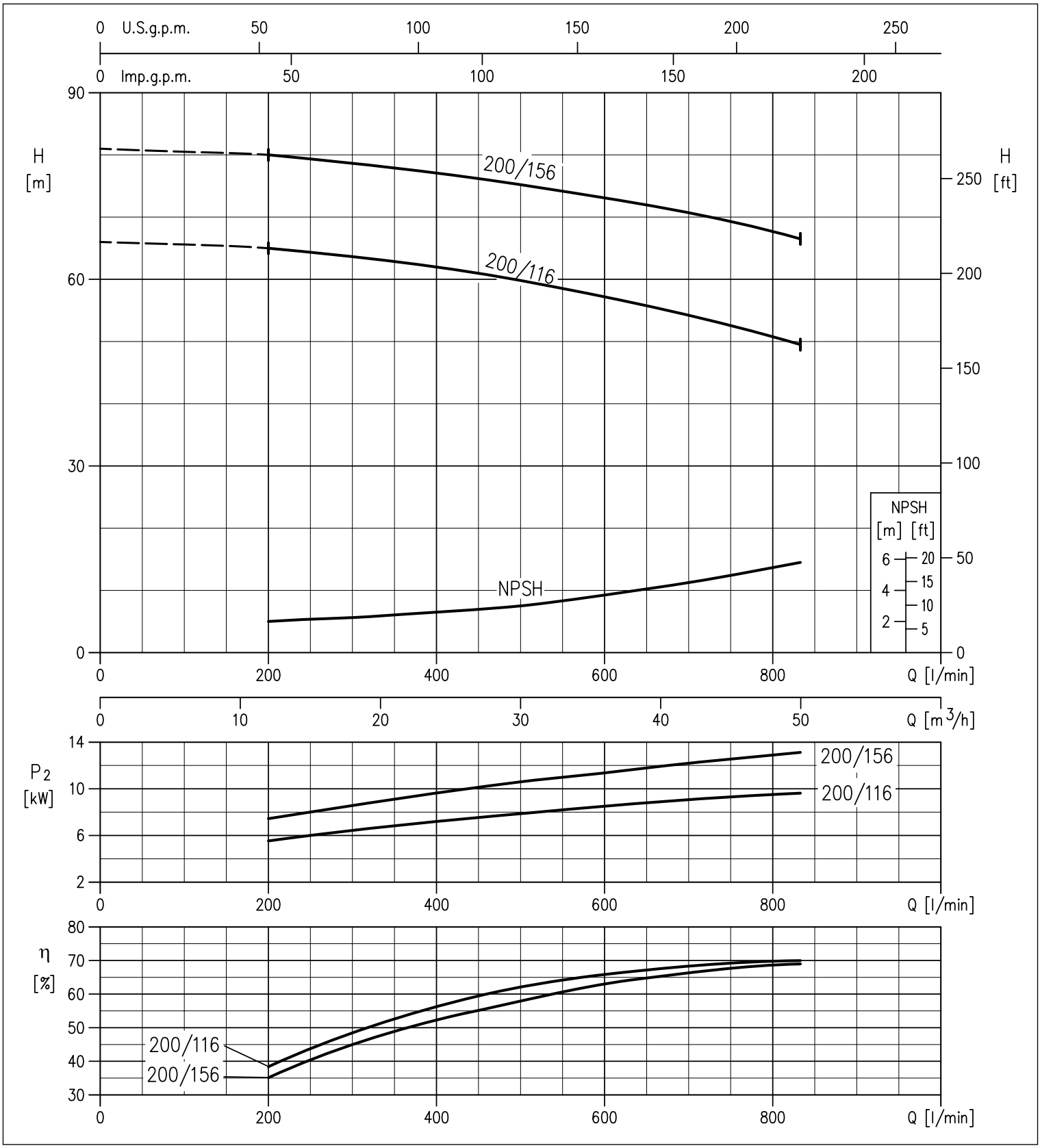
성능곡선 3D(.) SERIES 40-160

at 3600 min $^{-1}$ (according to ISO 9906 Attachment A)



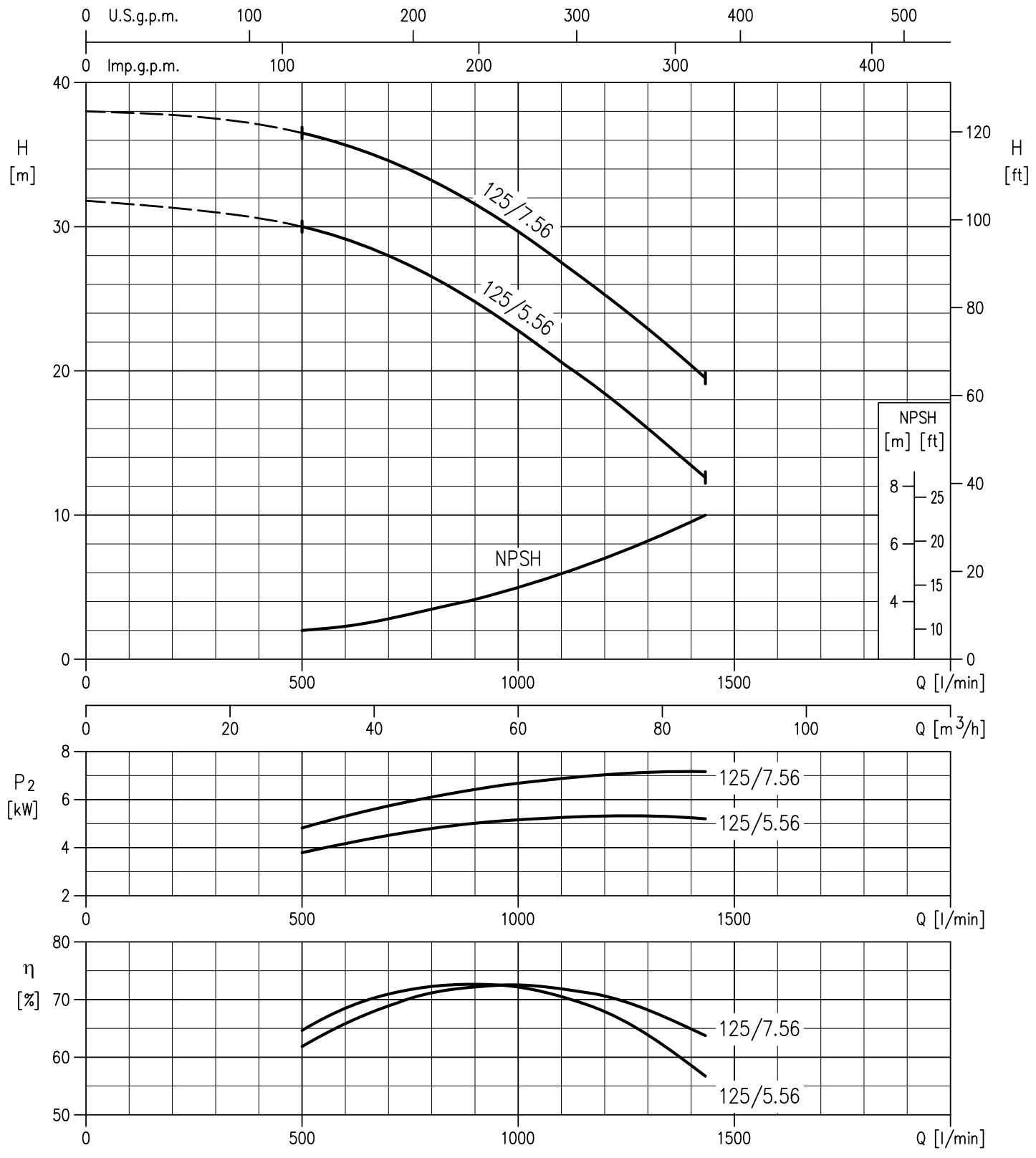
성능곡선 3D(.) SERIES 40-200

at 3600 min^{-1} (according to ISO 9906 Attachment A)



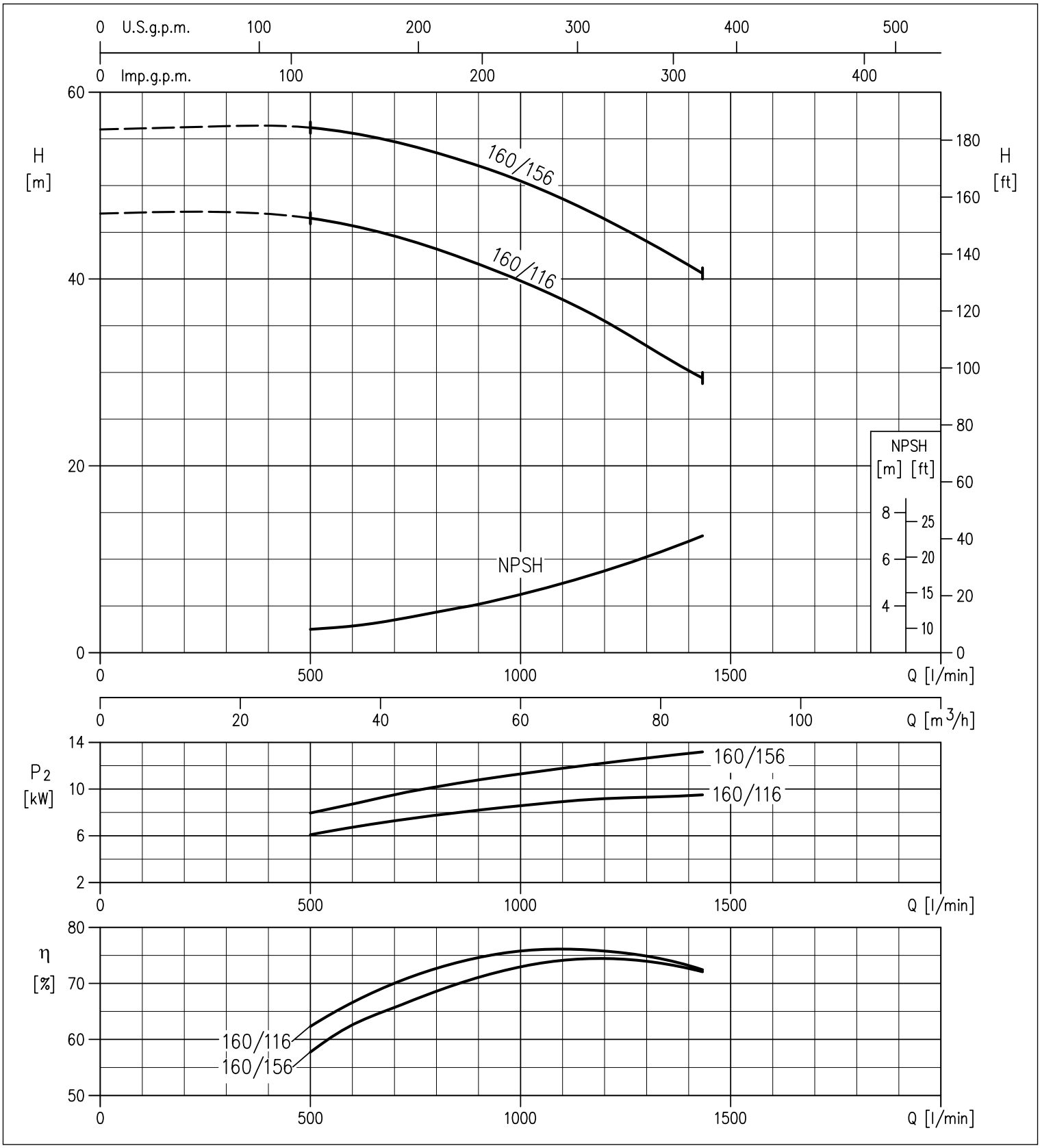
성능곡선 3D(.) SERIES 50-125

at 3600 min^{-1} (according to ISO 9906 Attachment A)



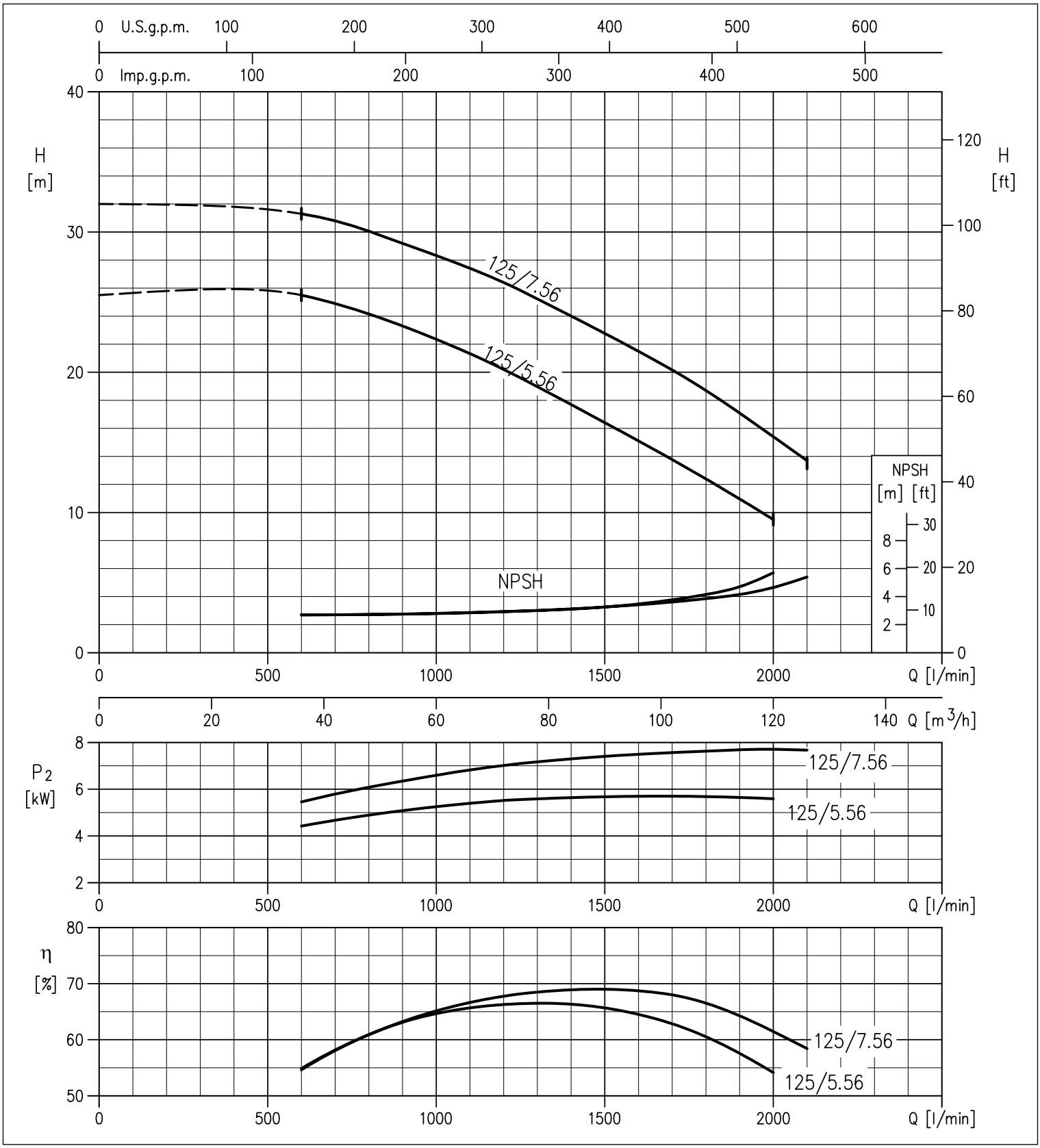
성능곡선 3D(.) SERIES 50-160

at 3600 min^{-1} (according to ISO 9906 Attachment A)



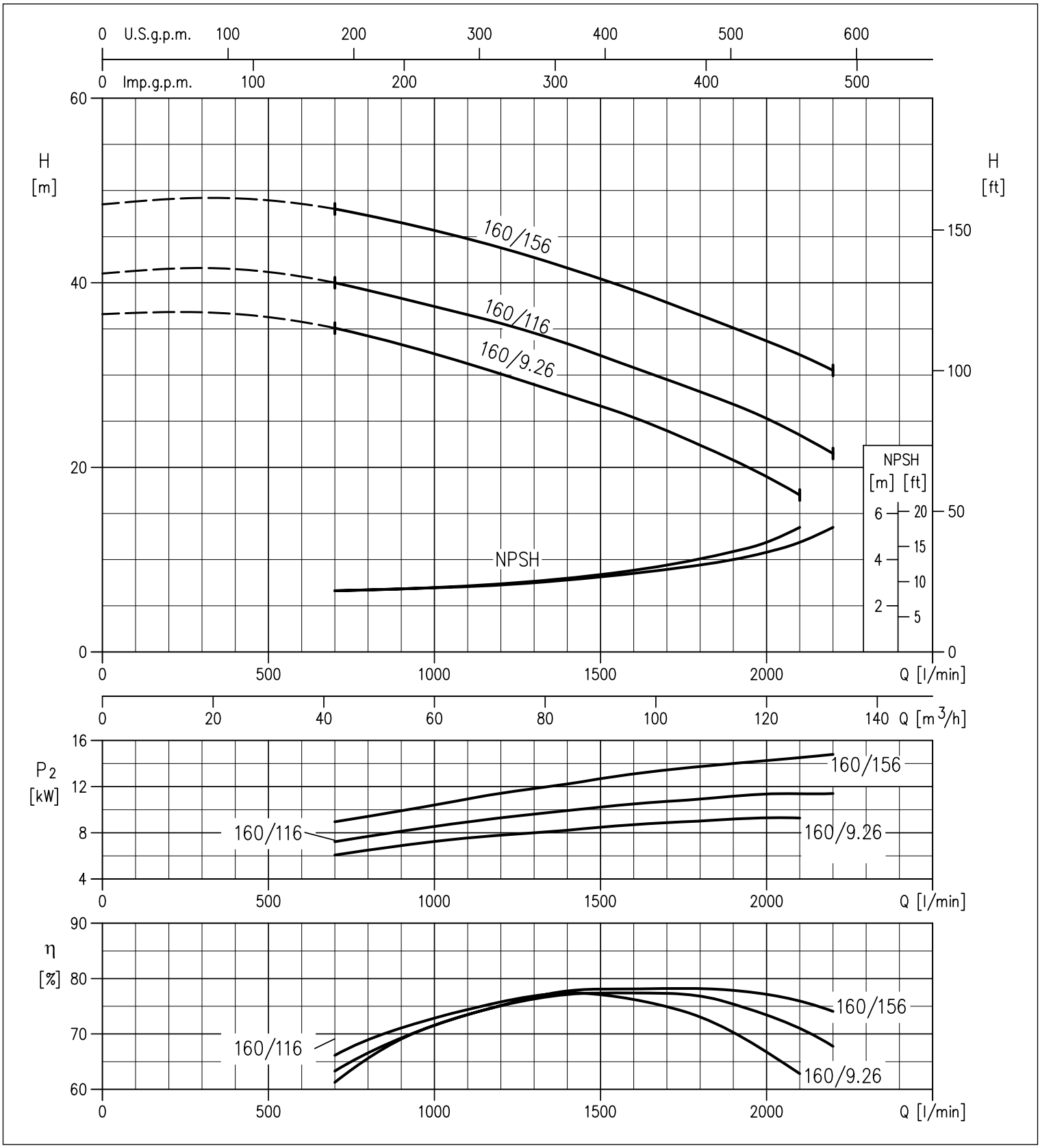
성능곡선 3D(.) SERIES 65-125

at 3600 min $^{-1}$ (according to ISO 9906 Attachment A)



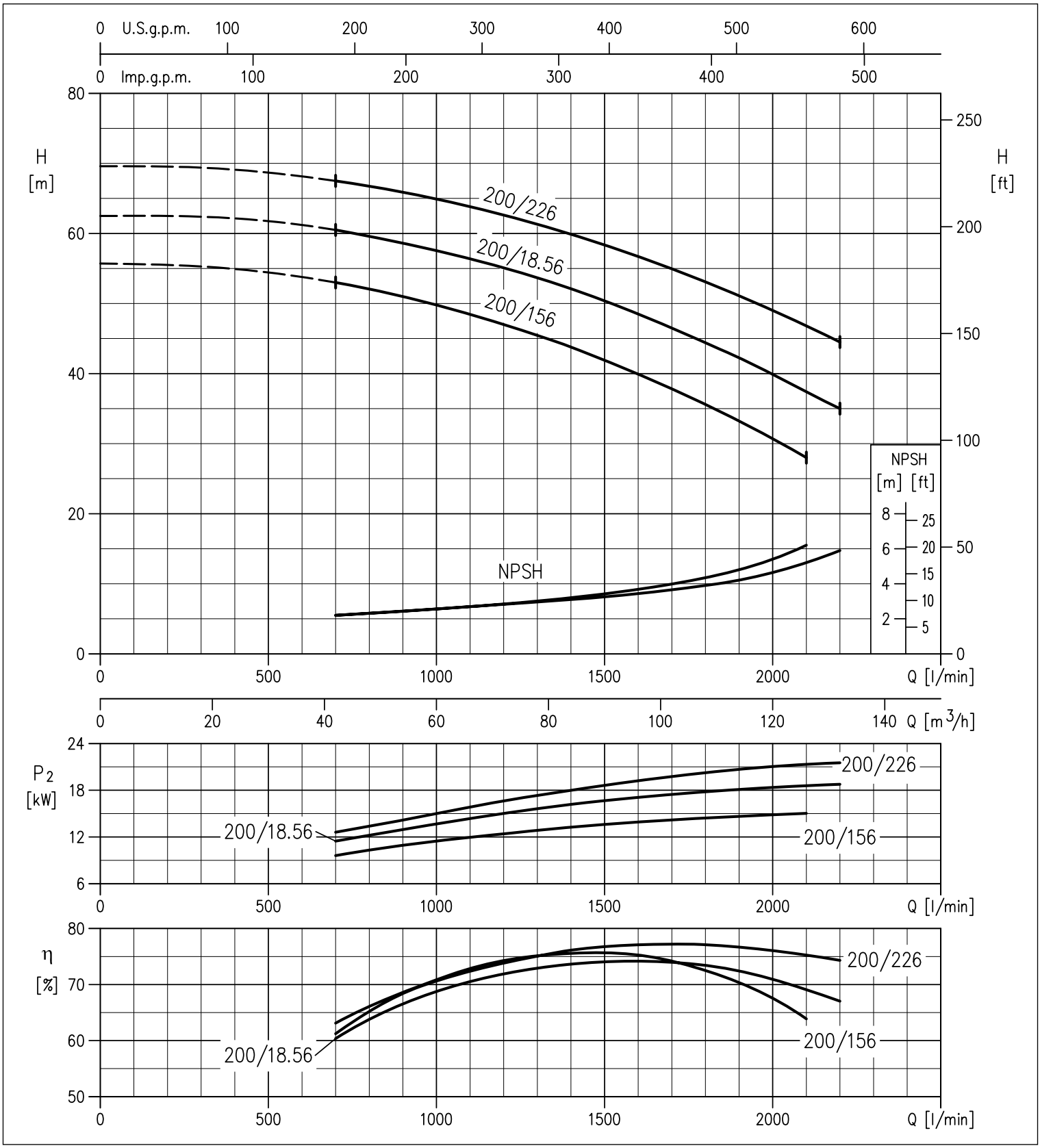
성능곡선 3D(.) SERIES 65-160

at 3600 min^{-1} (according to ISO 9906 Attachment A)

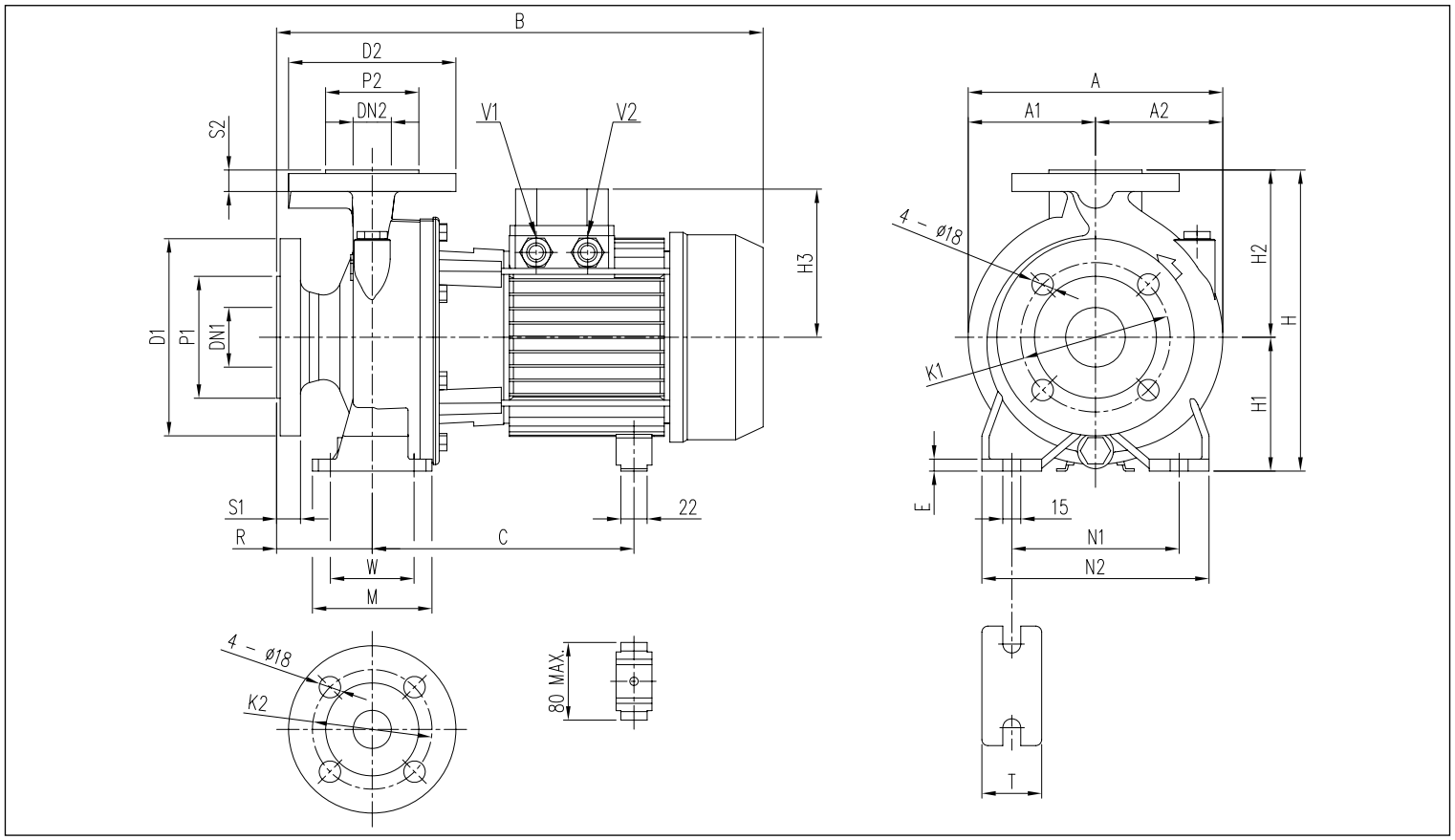


성능곡선 3D(.) SERIES 65-200

at 3600 min^{-1} (according to ISO 9906 Attachment A)



외형도 3D SERIES - up to 11kW



외형표

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	R	W	M	N1	N2	T	E	A	A1	A2	B	C	V1	V2	
3D 32-125/2.26	50	102	125	165	20	32	78	100	140	18	252	112	140	124	80	70	100	140	190	50	10	213	107	107	432	244÷255	-	PG 13,5	31,0
3D 32-160/3.06	50	102	125	165	20	32	78	100	140	18	292	132	160	124	80	70	100	190	240	50	10	254	127	127	471	244÷255	-	PG 13,5	37,6
3D 32-160/4.06	50	102	125	165	20	32	78	100	140	18	292	132	160	141	80	70	100	190	240	50	10	254	127	127	494	253	-	PG 16	45,9
3D 32-200/5.56	50	102	125	165	20	32	78	100	140	18	340	160	180	150	80	70	100	190	240	50	10	296	148	148	519	275	PG13,5	PG 16	59,9
3D 32-200/7.56	50	102	125	165	20	32	78	100	140	18	340	160	180	150	80	70	100	190	240	50	10	296	148	148	519	275	PG13,5	PG 16	59,4
3D 40-125/3.06	65	122	145	185	20	40	88	110	150	18	252	112	140	124	80	70	100	160	210	50	10	213	108	112	471	244÷255	-	PG 13,5	32,1
3D 40-125/4.06	65	122	145	185	20	40	88	110	150	18	252	112	140	141	80	70	100	160	210	50	10	213	108	112	494	253	-	PG 16	45,7
3D 40-160/5.56	65	122	145	185	20	40	88	110	150	18	292	132	160	150	80	70	100	190	240	50	12	254	127	127	519	275	PG13,5	PG 16	54,3
3D 40-160/7.56	65	122	145	185	20	40	88	110	150	18	292	132	160	150	80	70	100	190	240	50	12	254	127	127	519	275	PG13,5	PG 16	62,2
3D 40-200/116	65	122	145	185	20	40	88	110	150	18	340	160	180	178	100	70	100	212	265	50	12	296	148	148	595	359	PG13,5	PG 21	74,7
3D 50-125/5.56	65	122	145	185	20	50	102	125	165	20	292	132	160	150	100	70	100	190	240	50	10	254	127	127	539	275	PG13,5	PG 16	56,2
3D 50-125/7.56	65	122	145	185	20	50	102	125	165	20	292	132	160	150	100	70	100	190	240	50	10	254	127	127	539	275	PG13,5	PG 16	62,8
3D 50-160/116	65	122	145	185	20	50	102	125	165	20	340	160	180	178	100	70	100	212	265	50	10	296	148	148	595	359	PG13,5	PG 21	76,6
3D 65-125/5.56	80	138	160	200	22	65	122	145	185	20	340	160	180	150	100	95	125	212	280	65	12	254	127	136	539	275	PG13,5	PG 16	67,3
3D 65-125/7.56	80	138	160	200	22	65	122	145	185	20	340	160	180	150	100	95	125	212	280	65	23	254	127	136	539	275	PG13,5	PG 16	68,3
3D 65-160/9.26	80	138	160	200	22	65	122	145	185	20	360	160	200	178	100	95	125	212	280	65	12	296	148	148	595	359	PG13,5	PG 21	71,9
3D 65-160/116	80	138	160	200	22	65	122	145	185	20	360	160	200	178	100	95	125	212	280	65	12	296	148	148	595	359	PG13,5	PG 21	81,0

외형도 3D SERIES - from 15kW and above

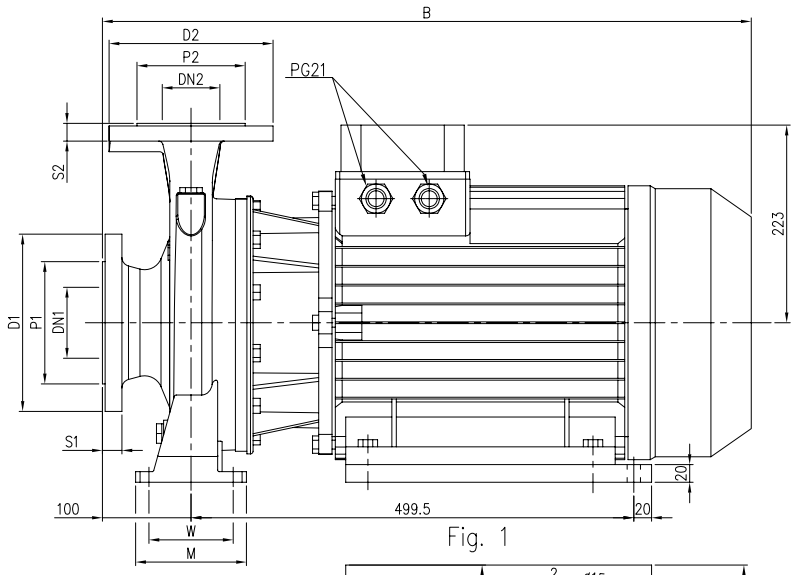
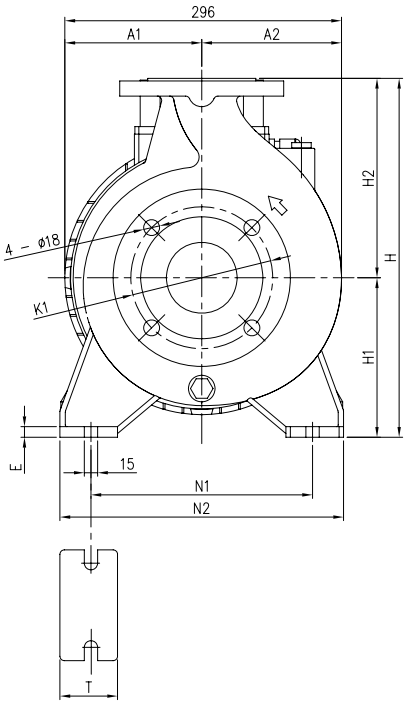


Fig. 1



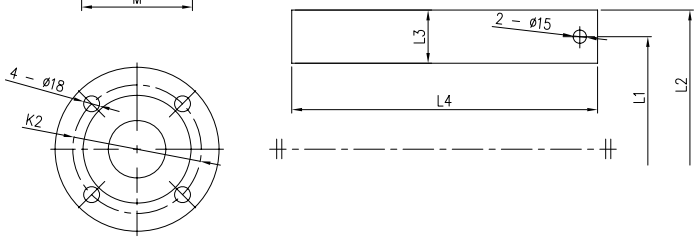
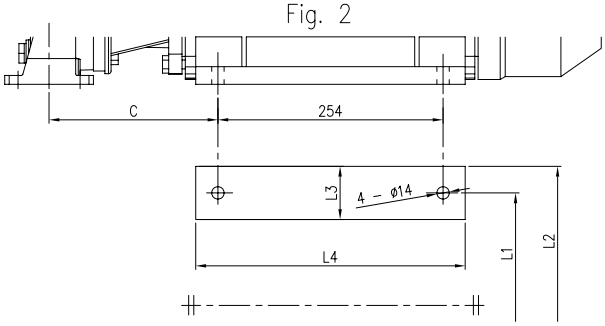


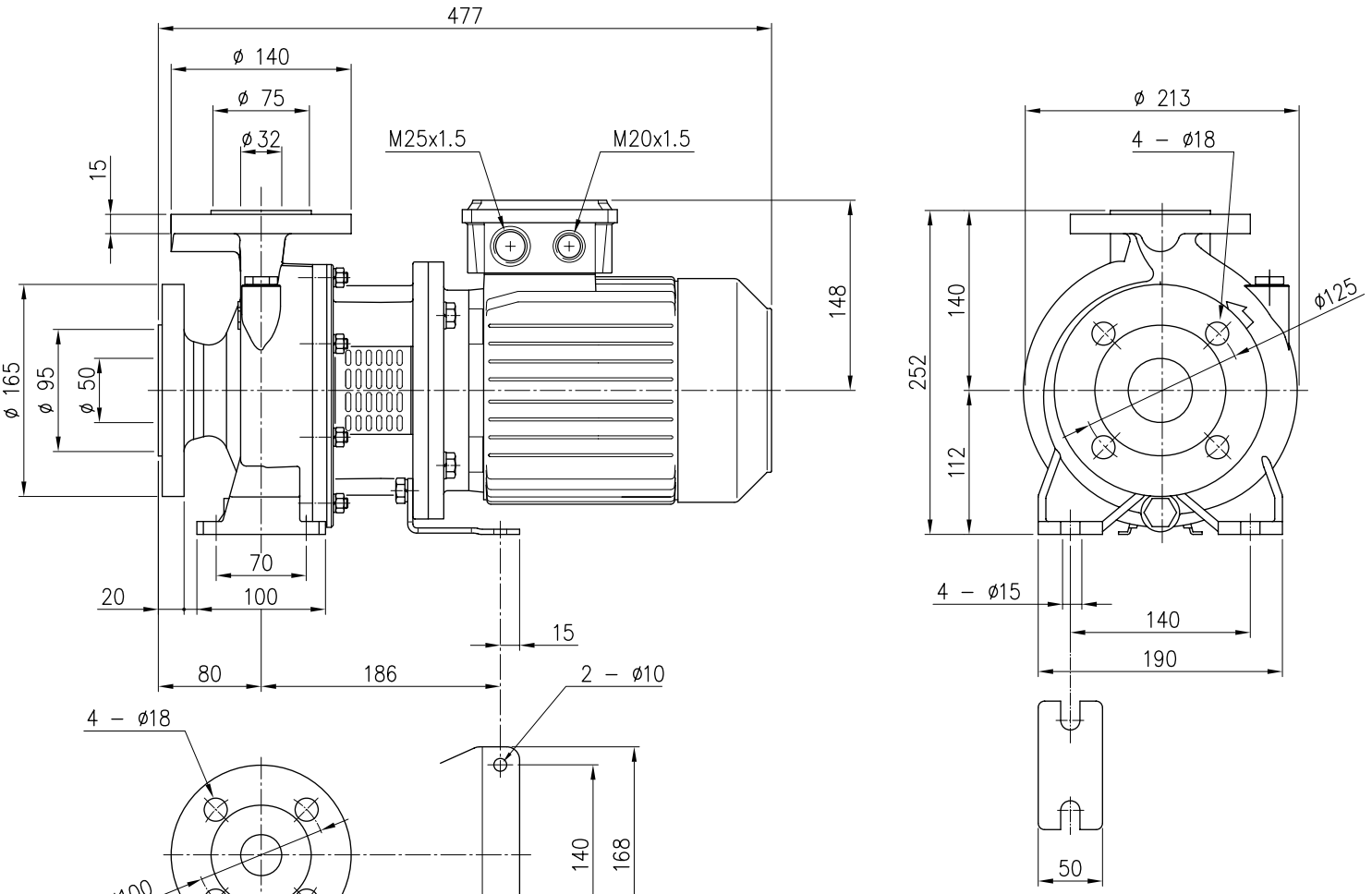
Fig. 2



외형표

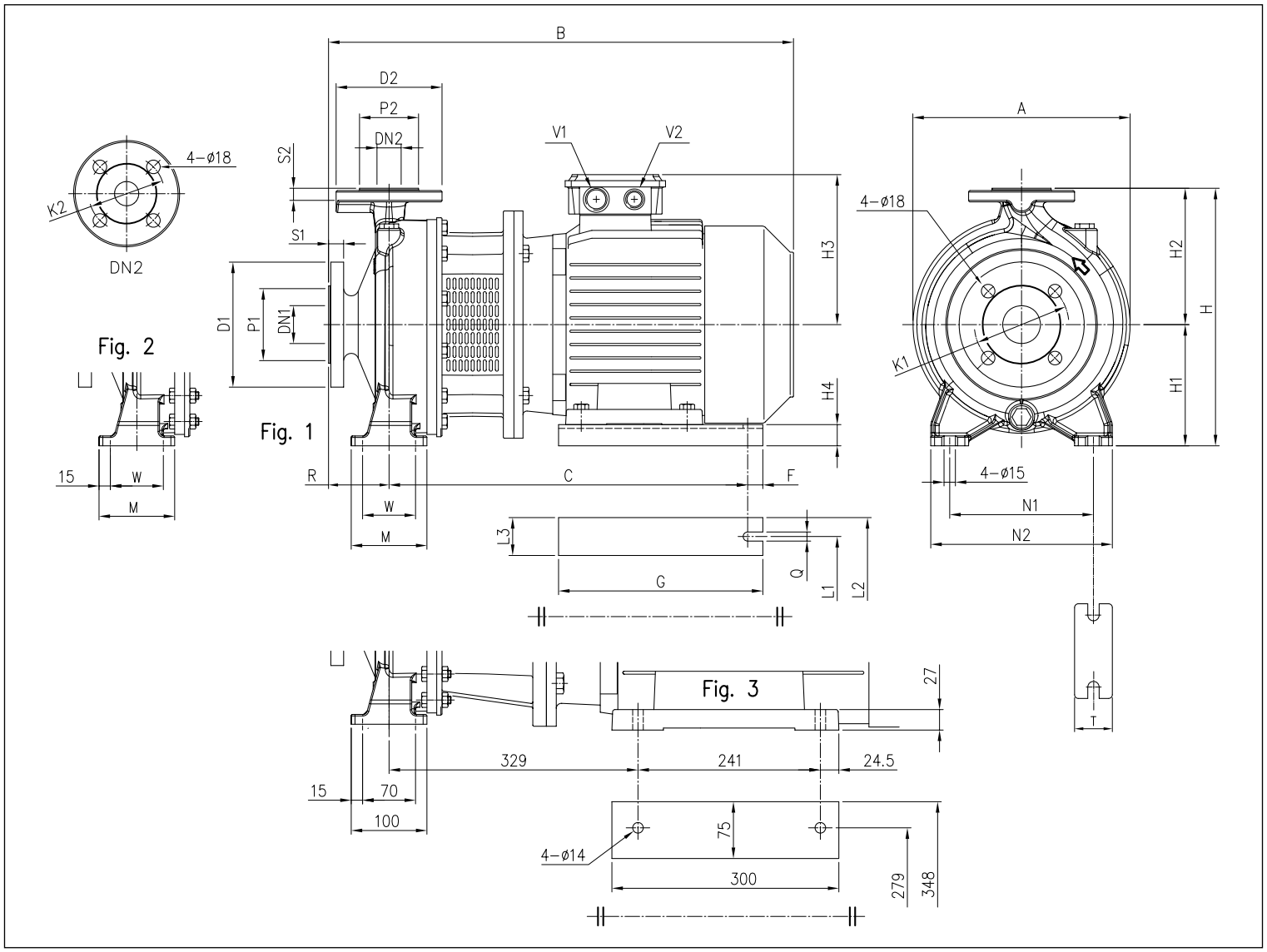
모델	외형치수 [mm]																											중량 [kg]
	DN1 Ø	P1 Ø	K1 Ø	D1 Ø	S1	DN2 Ø	P2 Ø	K2 Ø	D2 Ø	S2	Fig.	H	H1	H2	W	M	N1	N2	T	E	A1	A2	B	C	L1	L2	L3	L4	
3D 40-200/156	65	122	145	185	20	40	88	110	150	18	2	340	160	180	70	100	212	265	50	12	148	148	723	190,5	254	318	64	304	115,7
3D 50-160/156	65	122	145	185	20	50	102	125	165	20	2	340	160	180	70	100	212	265	50	10	148	148	723	190,5	254	318	64	304	93,1
3D 65-160/156	80	138	160	200	22	65	122	145	185	20	2	360	160	200	95	125	212	280	65	12	148	148	732	199,5	254	318	64	304	119,0
3D 65-200/156	80	138	160	200	22	65	122	145	185	20	1	405	180	225	95	125	250	320	65	12	154,5	157,5	732	-	254	314	60	345	122,5
3D 65-200/18.56	80	138	160	200	22	65	122	145	185	20	1	405	180	225	95	125	250	320	65	12	154,5	157,5	732	-	254	314	60	345	136,5
3D 65-200/226	80	138	160	200	22	65	122	145	185	20	1	405	180	225	95	125	250	320	65	12	154,5	157,5	732	-	254	314	60	345	144,5

외형도 3DS SERIES 32-125/2.26



Pump weight: 40,3 kg

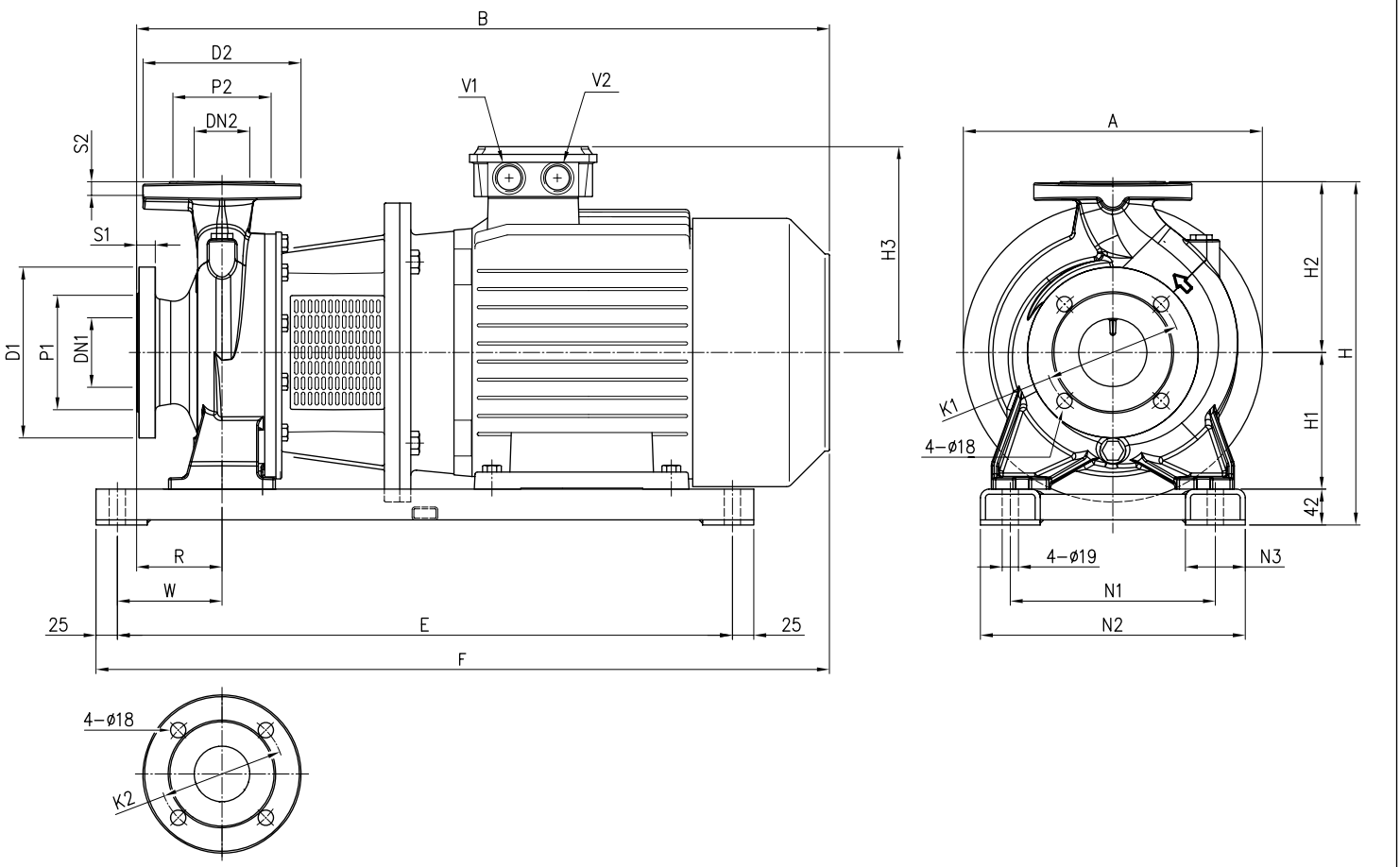
외형도 3DS SERIES 32, 65



외형표

모델	외형치수 [mm]																																무게 [kg]
	DN1 Ø	P1 Ø	K1 Ø	D1 Ø	S1	DN2 Ø	P2 Ø	K2 Ø	D2 Ø	S2	Fig.	H	H1	H2	H3	H4	R	W	M	N1	N2	T	A	B	C	F	G	Q	L1	L2	L3	V1	V2	
3DS 32-160/3.06	50	102	125	165	20	32	78	100	140	18	1	292	132	160	155	32	80	70	100	190	240	50	254	528	388	15	220	12	160	200	40	M25X1,5	M20X1,5	49,8
3DS 32-160/4.06	50	102	125	165	20	32	78	100	140	18	1	292	132	160	171	20	80	70	100	190	240	50	254	550	395	15	220	12	190	240	50	M25X1,5	M20X1,5	51,4
3DS 32-200/5.56	50	102	125	165	20	32	78	100	140	18	1	340	160	180	198	28	80	70	100	190	240	50	300	607	479	15	270	12	216	266	50	M32X1,5	M32X1,5	83,2
3DS 32-200/7.56	50	102	125	165	20	32	78	100	140	18	1	340	160	180	198	28	80	70	100	190	240	50	300	607	479	15	270	12	216	266	50	M32X1,5	M32X1,5	96,4
3DS 65-125/5.56	80	138	160	200	22	65	122	145	185	20	2	340	160	180	198	28	100	95	125	212	280	65	300	627	479	15	270	12	216	266	50	M32X1,5	M32X1,5	75,3
3DS 65-125/7.56	80	138	160	200	22	65	122	145	185	20	2	340	160	180	198	28	100	95	125	212	280	65	300	627	479	15	270	12	216	266	50	M32X1,5	M32X1,5	92,7
3DS 65-160/9.26	80	138	160	200	22	65	122	145	185	20	2	360	160	200	198	28	100	95	125	212	280	65	300	667	479	15	270	12	216	266	50	M32X1,5	M32X1,5	103,0
3DS 65-200/156	80	138	160	200	22	65	122	145	185	20	2	405	180	225	238	20	100	95	125	250	320	65	350	806	621	20	350	14	254	314	60	M40X1,5	M40X1,5	137,6
3DS 65-200/18.56	80	138	160	200	22	65	122	145	185	20	2	405	180	225	238	20	100	95	125	250	320	65	350	850	621	20	350	14	254	314	60	M40X1,5	M40X1,5	147,2
3DS 65-200/226	80	138	160	200	22	65	122	145	185	20	3	405	180	225	268	-	100	-	-	250	320	65	360	885	-	-	-	-	-	-	-	M32X1,5	M32X1,5	184,5

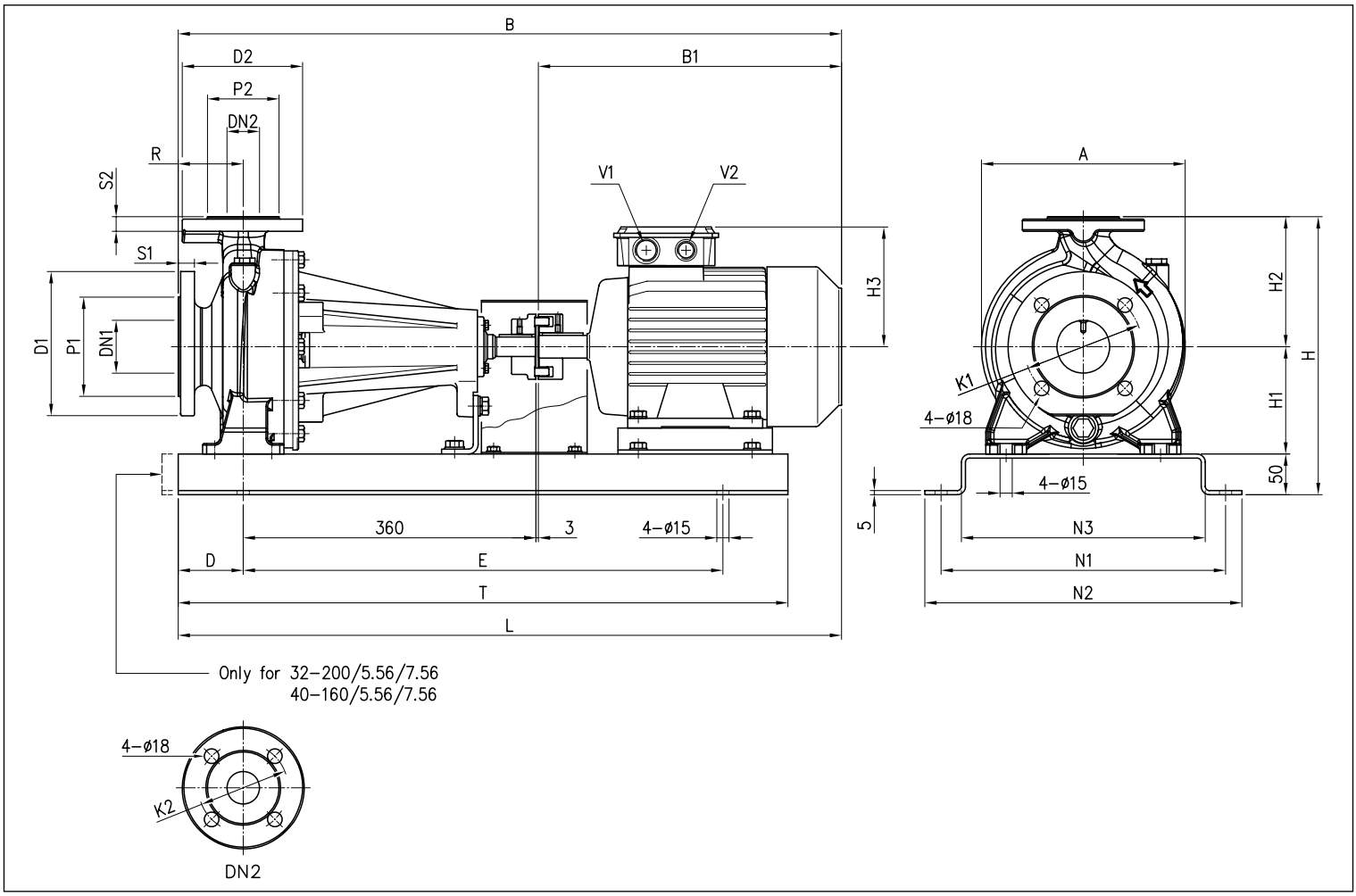
외형도 3DS SERIES 40, 50, 65



외형표

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	R	W	N1	N2	N3	A	B	E	F	V1	V2	
3DS 40-125/3.06	65	122	145	185	20	40	88	110	150	18	294	112	140	155	80	90	180	240	60	250	528	500	563	M25x1,5	M20x1,5	43,6
3DS 40-125/4.06	65	122	145	185	20	40	88	110	150	18	294	112	140	171	80	90	180	240	60	250	550	500	585	M25x1,5	M20x1,5	53,7
3DS 40-160/5.56	65	122	145	185	20	40	88	110	150	18	334	132	160	198	80	110	210	270	60	300	607	600	662	M32x1,5	M32x1,5	83,2
3DS 40-160/7.56	65	122	145	185	20	40	88	110	150	18	334	132	160	198	80	110	210	270	60	300	607	600	662	M32x1,5	M32x1,5	91,0
3DS 40-200/116	65	122	145	185	20	40	88	110	150	18	382	160	180	238	100	110	240	310	70	350	796	720	831	M40x1,5	M40x1,5	119,7
3DS 40-200/156	65	122	145	185	20	40	88	110	150	18	382	160	180	238	100	110	240	310	70	350	796	720	831	M40x1,5	M40x1,5	143,7
3DS 50-125/5.56	65	122	145	185	20	50	102	125	165	20	334	132	160	198	100	110	210	270	60	300	627	600	662	M32x1,5	M32x1,5	75,1
3DS 50-125/7.56	65	122	145	185	20	50	102	125	165	20	334	132	160	198	100	110	210	270	60	300	627	600	662	M32x1,5	M32x1,5	100,3
3DS 50-160/116	65	122	145	185	20	50	102	125	165	20	382	160	180	238	100	110	240	310	70	350	796	720	831	M40x1,5	M40x1,5	88,6
3DS 50-160/156	65	122	145	185	20	50	102	125	165	20	382	160	180	238	100	110	240	310	70	350	796	720	831	M40x1,5	M40x1,5	116,6
3DS 65-160/116	80	138	160	200	22	65	122	145	185	20	402	160	200	238	100	122.5	240	310	70	350	796	720	844	M40x1,5	M40x1,5	89,6
3DS 65-160/156	80	138	160	200	22	65	122	145	185	20	402	160	200	238	100	122.5	240	310	70	350	806	720	854	M40x1,5	M40x1,5	117,6

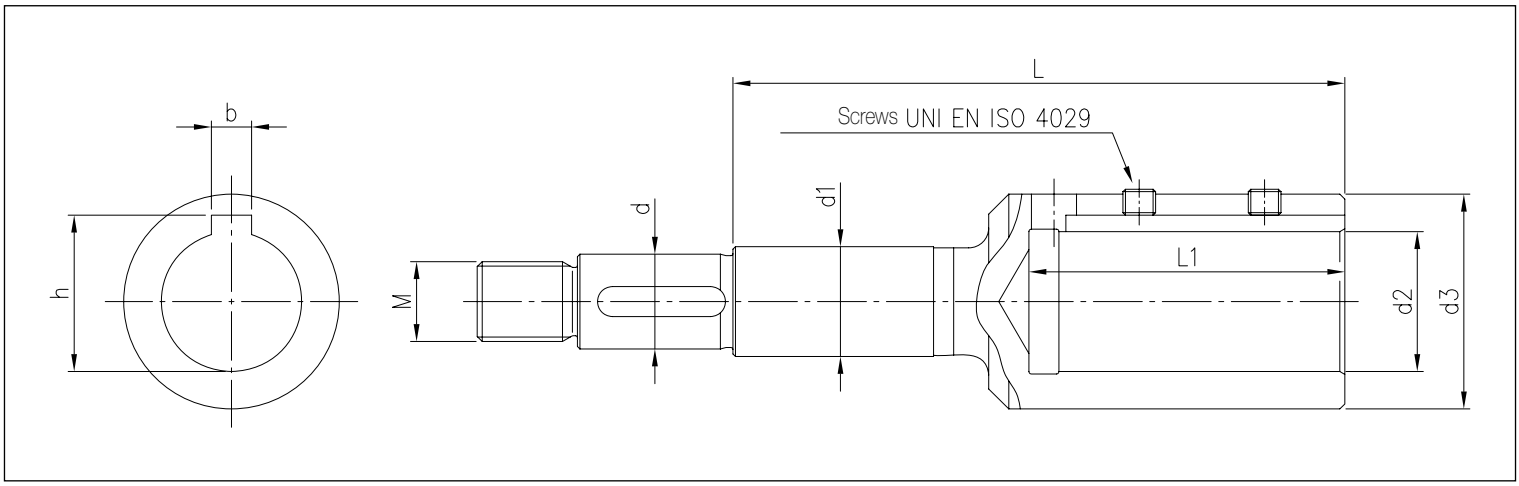
외형도 3DP 32, 40, 50, 65



외형표

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	R	A	B	B2	D	E	N1	N2	N3	T	L	V1	V2	
3DP 32-125/2.26	50	102	125	165	20	32	78	100	140	18	302	112	140	148	80	213	760	760	80	550	300	340	250	710	760	M25x1,5	M20x1,5	61,4
3DP 32-160/3.06	50	102	125	165	20	32	78	100	140	18	342	132	160	155	80	254	809	809	80	590	350	390	300	750	809	M25x1,5	M20x1,5	81,9
3DP 32-160/4.06	50	102	125	165	20	32	78	100	140	18	342	132	160	171	80	254	831	831	80	590	350	390	300	750	831	M25x1,5	M20x1,5	85,5
3DP 32-200/5.56	50	102	125	165	20	32	78	100	140	18	390	160	180	198	80	296	885	885	100	650	350	390	300	850	905	M32x1,5	M32x1,5	108,4
3DP 32-200/7.56	50	102	125	165	20	32	78	100	140	18	390	160	180	198	80	296	885	885	100	650	350	390	300	850	905	M32x1,5	M32x1,5	121,6
3DP 40-125/3.06	65	122	145	185	20	40	88	110	150	18	302	112	140	155	80	213	809	809	80	590	300	340	250	750	809	M25x1,5	M20x1,5	89,1
3DP 40-125/4.06	65	122	145	185	20	40	88	110	150	18	302	112	140	171	80	213	831	831	80	590	300	340	250	750	831	M25x1,5	M20x1,5	75,7
3DP 40-160/5.56	65	122	145	185	20	40	88	110	150	18	342	132	160	198	80	254	885	885	100	650	350	390	300	850	905	M32x1,5	M32x1,5	109,0
3DP 40-160/7.56	65	122	145	185	20	40	88	110	150	18	342	132	160	198	80	254	885	885	100	650	350	390	300	850	905	M32x1,5	M32x1,5	115,9
3DP 40-200/116	65	122	145	185	20	40	88	110	150	18	390	160	180	238	100	296	1071	1071	100	800	380	420	330	1000	1071	M40x1,5	M40x1,5	129,7
3DP 40-200/156	65	122	145	185	20	40	88	110	150	18	390	160	180	238	100	296	1071	1071	100	800	380	420	330	1000	1071	M40x1,5	M40x1,5	130,7
3DP 50-125/5.56	65	122	145	185	20	50	102	125	165	20	342	132	160	198	100	254	905	905	100	650	350	390	300	850	905	M32x1,5	M32x1,5	110,3
3DP 50-125/7.56	65	122	145	185	20	50	102	125	165	20	342	132	160	198	100	254	905	905	100	650	350	390	300	850	905	M32x1,5	M32x1,5	117,2
3DP 50-160/116	65	122	145	185	20	50	102	125	165	20	390	160	180	238	100	296	1071	1071	100	800	380	420	330	1000	1071	M40x1,5	M40x1,5	130,1
3DP 50-160/156	65	122	145	185	20	50	102	125	165	20	390	160	180	238	100	296	1071	1071	100	800	380	420	330	1000	1071	M40x1,5	M40x1,5	131,1
3DP 65-125/5.56	80	138	160	200	22	65	122	145	185	20	390	160	180	198	100	254	905	905	100	650	350	390	300	850	905	M32x1,5	M32x1,5	114,3
3DP 65-125/7.56	80	138	160	200	22	65	122	145	185	20	390	160	180	198	100	254	905	905	100	650	350	390	300	850	905	M32x1,5	M32x1,5	122,7
3DP 65-160/9.26	80	138	160	200	22	65	122	145	185	20	410	160	200	198	100	296	945	945	100	650	350	390	300	850	945	M32x1,5	M32x1,5	133,0
3DP 65-160/116	80	138	160	200	22	65	122	145	185	20	410	160	200	238	100	296	1071	1071	100	800	380	420	330	1000	1071	M40x1,5	M40x1,5	130,0
3DP 65-160/156	80	138	160	200	22	65	122	145	185	20	410	160	200	238	100	296	1071	1071	100	800	380	420	330	1000	1071	M40x1,5	M40x1,5	128,1
3DP 65-200/156	80	138	160	200	22	65	122	145	185	20	455	180	225	238	100	296	1071	1071	100	800	380	420	330	1000	1071	M40x1,5	M40x1,5	136,6
3DP 65-200/18.56	80	138	160	200	22	65	122	145	185	20	455	180	225	238	100	296	1115	1115	100	800	380	420	330	1000	1115	M40x1,5	M40x1,5	145,2
3DP 65-200/226	80	138	160	200	22	65	122	145	185	20	455	180	225	268	100	296	1150	1150	100	800	410	450	360	1000	1150	M32x1,5	M32x1,5	198,5

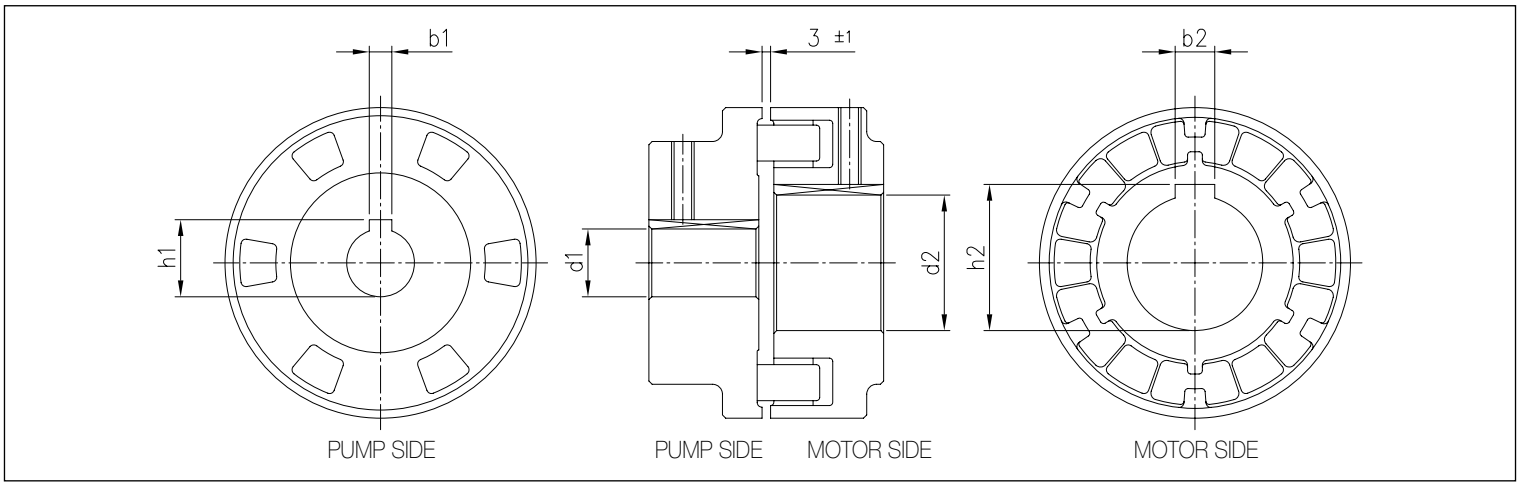
3DS SERIES 연결



외형표

모델	[HP]	[kW]	모터 사이즈	외형치수 [mm]									
				d	d1	d2	d3	M	L	L1	b	h	나사
3DS 32-125/2.26	3	2.2	90	19	22	24	39	M16x1.5	110	53	8	27.3	M8x8
3DS 32-160/3.06	4	3	100	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8
3DS 32-160/4.06	5.5	4	112	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8
3DS 32-200/5.56	7.5	5.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8
3DS 32-200/7.56	10	7.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8
3DS 40-125/3.06	4	3	100	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8
3DS 40-125/4.06	5.5	4	112	19	22	28	43	M16x1.5	122	63	8	31.3	M8x8
3DS 40-160/5.56	7.5	5.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8
3DS 40-160/7.56	10	7.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8
3DS 40-200/116	15	11	160	19	22	42	63	M16x1.5	178	114	12	45.3	M8x8
3DS 40-200/156	20	15	160	19	22	42	63	M16x1.5	178	114	12	45.3	M8x8
3DS 50-125/5.56	7.5	5.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8
3DS 50-125/7.56	10	7.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8
3DS 50-160/116	15	11	160	19	22	42	63	M16x1.5	178	114	12	45.3	M8x8
3DS 50-160/156	20	15	160	19	22	42	63	M16x1.5	178	114	12	45.3	M8x8
3DS 65-125/5.56	7.5	5.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8
3DS 65-125/7.56	10	7.5	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8
3DS 65-160/9.26	12.5	9.2	132	19	22	38	58	M16x1.5	145	84	10	41.3	M8x8
3DS 65-160/116	15	11	160	19	22	42	63	M16x1.5	178	114	12	45.3	M8x8
3DS 65-160/156	20	15	160	24	30	42	63	M20x1.5	184	114	12	45.3	M8x8
3DS 65-200/156	20	15	160	24	30	42	63	M20x1.5	184	114	12	45.3	M8x8
3DS 65-200/18.56	25	18.5	160	24	30	42	63	M20x1.5	184	114	12	45.3	M8x8
3DS 65-200/226	30	22	180	24	30	48	72	M20x1.5	184	114	14	51.8	M10x10

3DP SERIES 연결



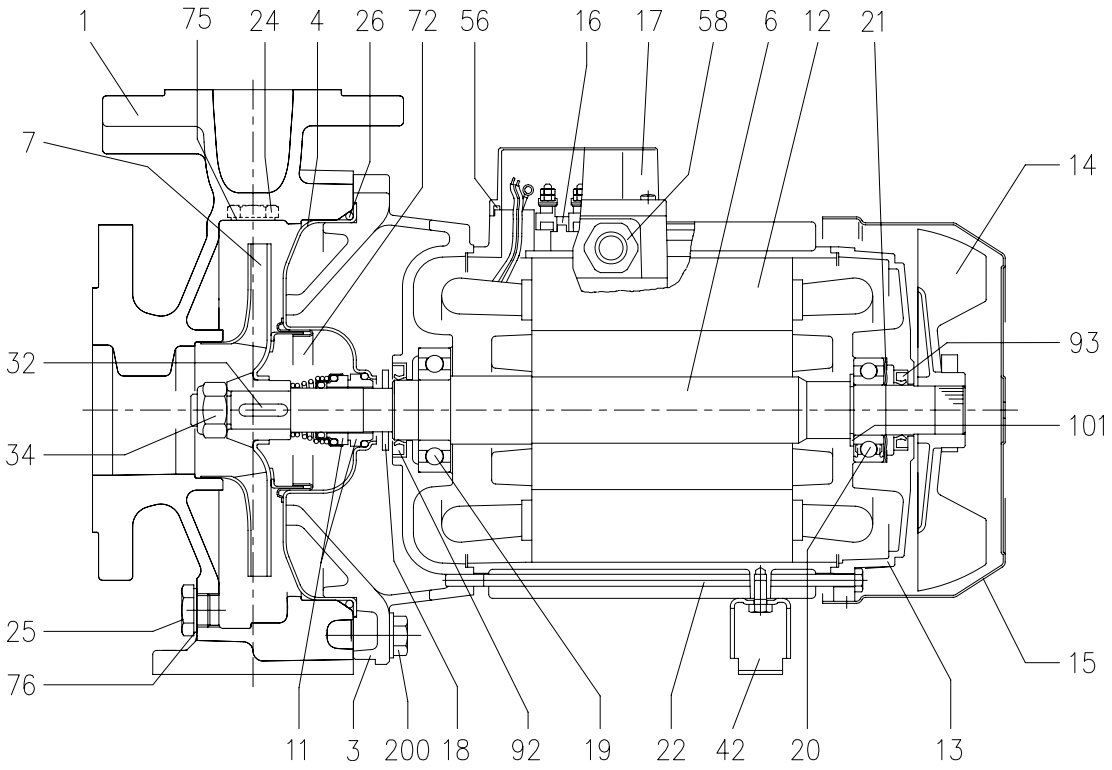
외형표

모델	[HP]	[kW]	모터 사이즈	외형치수 [mm]					
				d1	b1	h1	d2	b2	h2
3DP 32-125/2.26	2,2	3	90	24	8	27.3	24	8	27.3
3DP 32-160/3.06	3	4	100	24	8	27.3	28	8	31.3
3DP 32-160/4.06	4	5,5	112	24	8	27.3	28	8	31.3
3DP 32-200/5.56	5,5	7,5	132	24	8	27.3	38	10	41.3
3DP 32-200/7.56	7,5	10	132	24	8	27.3	38	10	41.3
3DP 40-125/3.06	3	4	100	24	8	27.3	28	8	31.3
3DP 40-125/4.06	4	5,5	112	24	8	27.3	28	8	31.3
3DP 40-160/5.56	5,5	7,5	132	24	8	27.3	38	10	41.3
3DP 40-160/7.56	7,5	10	132	24	8	27.3	38	10	41.3
3DP 40-200/116	11	15	160	24	8	27.3	42	12	45.3
3DP 40-200/156	15	20	160	24	8	27.3	42	12	45.3
3DP 50-125/5.56	5,5	7,5	132	24	8	27.3	38	10	41.3
3DP 50-125/7.56	7,5	10	132	24	8	27.3	38	10	41.3
3DP 50-160/116	11	15	160	24	8	27.3	42	12	45.3
3DP 50-160/156	15	20	160	24	8	27.3	42	12	45.3
3DP 65-125/5.56	5,5	7,5	132	24	8	27.3	38	10	41.3
3DP 65-125/7.56	7,5	10	132	24	8	27.3	38	10	41.3
3DP 65-160/9.26	9,2	12,5	132	24	8	27.3	38	10	41.3
3DP 65-160/116	11	15	160	24	8	27.3	42	12	45.3
3DP 65-160/156	15	20	160	24	8	27.3	42	12	45.3
3DP 65-200/156	15	20	160	24	8	27.3	42	12	45.3
3DP 65-200/18.56	18,5	25	160	24	8	27.3	42	12	45.3
3DP 65-200/226	22	30	180	24	8	27.3	48	14	51.8

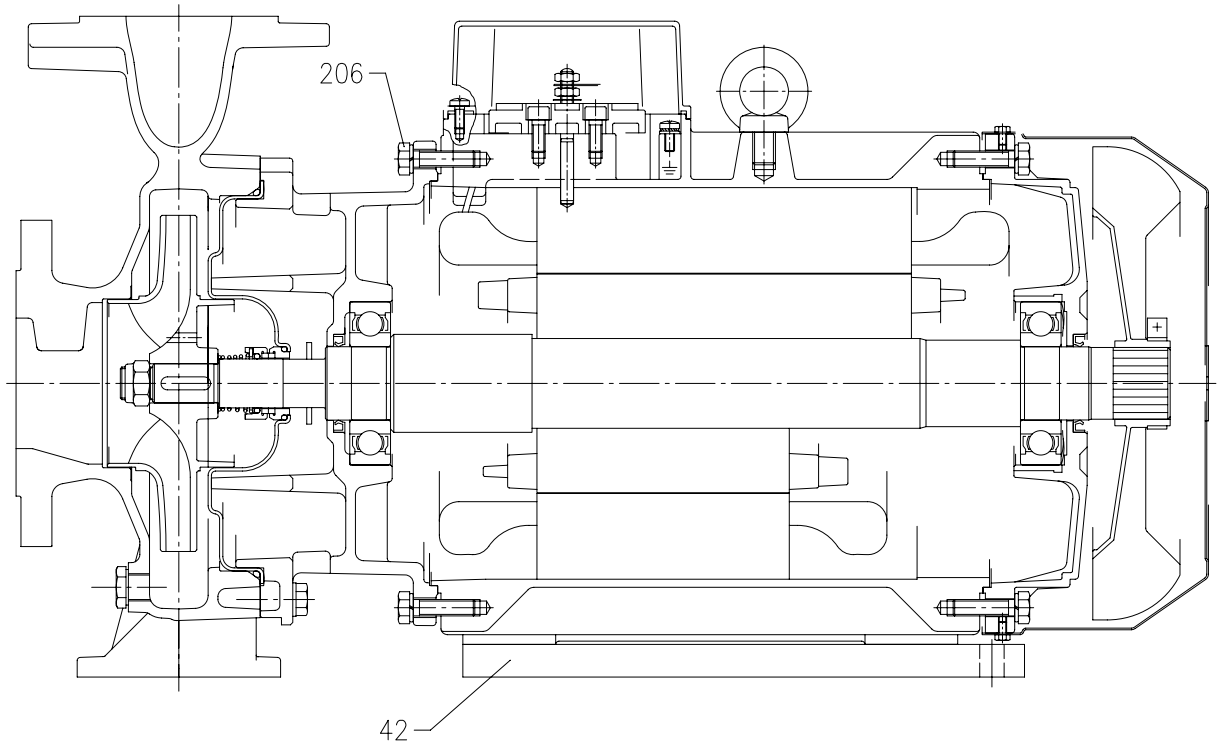
3D SERIES

CENTRIFUGAL PUMPS CLOSE COUPLED AND STANDARDIZED EN 733

단면도 3D SERIES 32, 40, 50, 65 - up to 11 kW



단면도 3D SERIES 32, 40, 50, 65 - from 15 kW and above

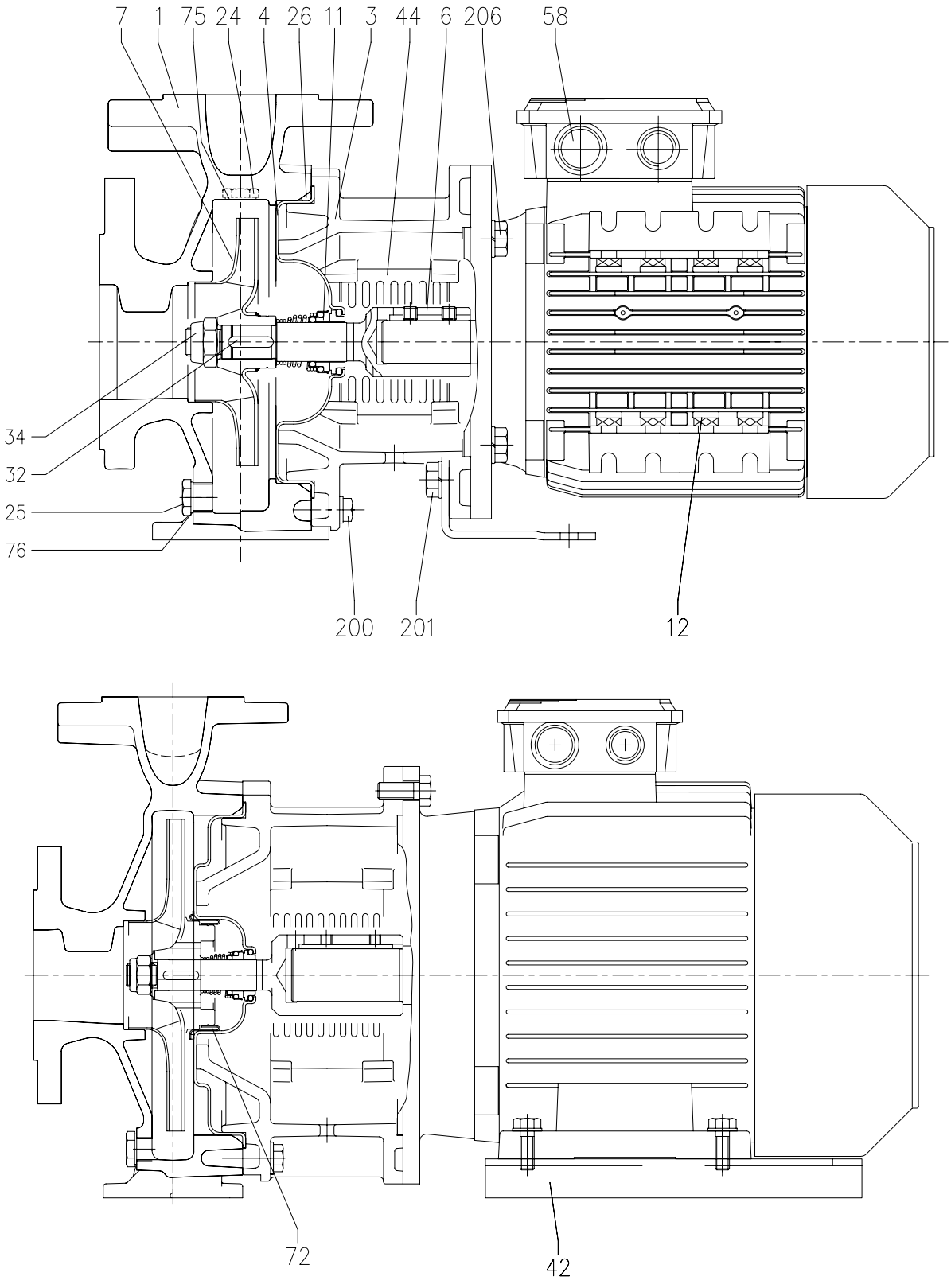


부품표

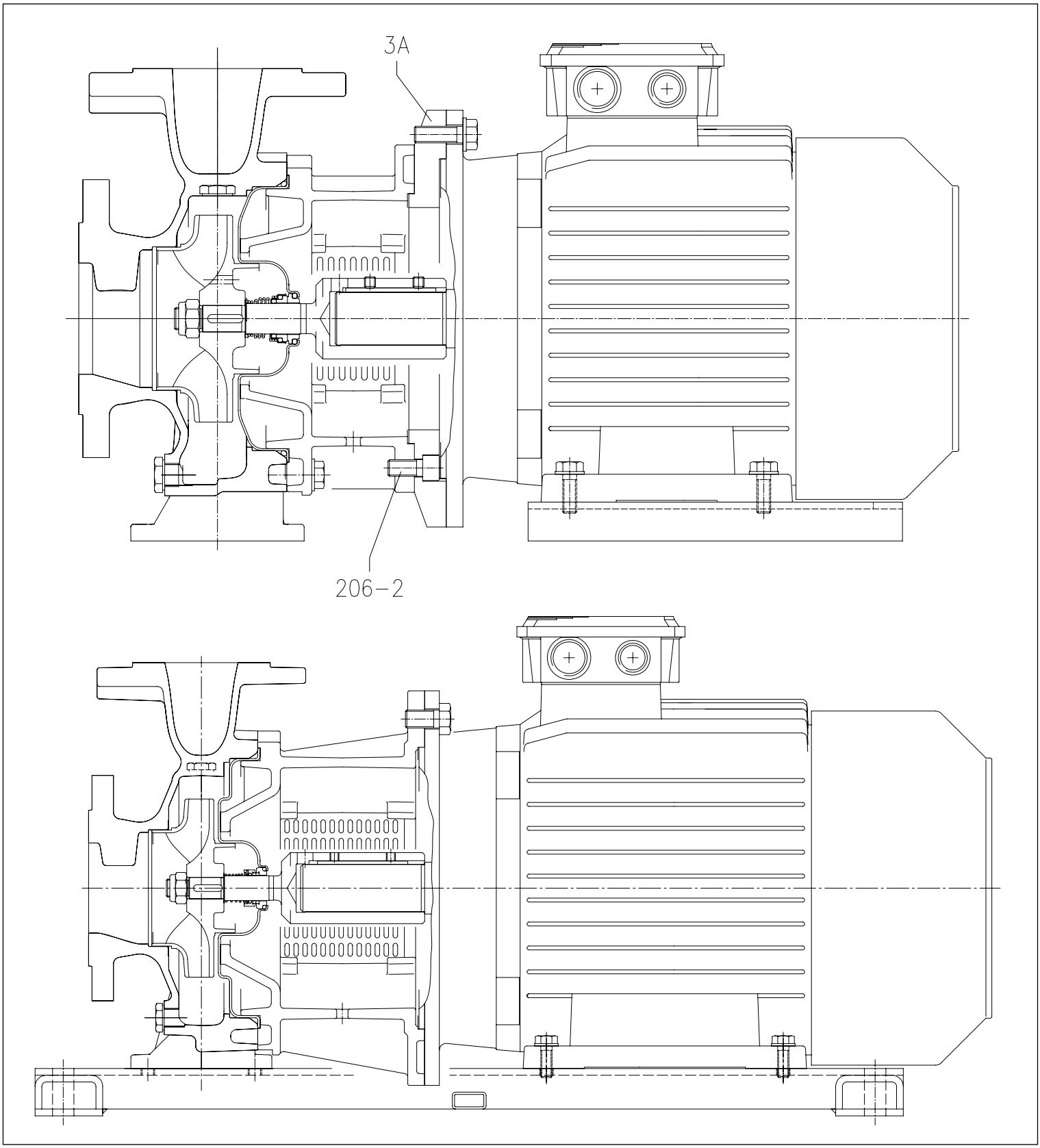
Ref.	부품명	재질
001	Pump casing	Cast iron EN-GJL-250-EN 1561
003	Motor bracket	[1]
004	Seal housing disc	EN 1.4301 (AISI 304)
006	Rotor shaft (part in contact with the liquid)	EN 1.4301 (AISI 304)
007	Impeller	[2]
011	Mechanical seal	Ceramic/Carbon/NBR
012	Motor frame	-
013	Motor cover	Aluminium
014	Fan	PA
015	Fan cover	Fe P04 Galvanized
016	Terminal box	-
017	Terminal box cover	Aluminium (three phase only)
018	Spray protector washer	NBR
019	Bearing (pump side)	-
020	Bearing (motor side)	-
021	Adjusting ring	Steel C70
022	Tie-rod	Fe 42 Galvanized
	Screw	Galvanized steel 8.8 class ISO 898-1
024	Plug	Brass
025	Plug	Brass
026	O-Ring	NBR [3]
032	Key	EN 1.4401 (AISI 304)
034	Impeller nut	EN 1.4301 (AISI 304)
042	Motor support	Aluminium / Galvanized steel
056	Terminal box gasket	NBR
058	Cable gland	-
072	Casing ring [4]	EN 1.4301 (AISI 304)
075	Washer	Aluminium
076	Washer	Aluminium
092	Seal ring	-
093	Seal ring	-
101	Seeger ring [5]	Carbon steel TC 80
200	Screw	Galvanized steel 8.8 class ISO 898-1
235	Washer	Galvanized steel
206	Screw (support) [6]	Galvanized steel 8.8 class ISO 898-1

[1]= Cast iron EN-GJL-200-EN 1561 for 3D SERIES 32-200/3 and models from 15, 18.5 and 22 kW; aluminium AL-EN-1706-AC-46000-D for the rest of the range
[2]= EN 1.4301 (AISI 304) for 3D SERIES 32, 40, 50; EN 1.4401 (AISI 316) for 3D SERIES 65
[3]= FPM for H, HS, HW, HSW versions; EDPM for E version
[4]= Only for 3D SERIES 32-200, 40-200, 50-160, 50-200
[5]= Only for 9,2 and 11 kW models
[6]= Only for 11 kW models

단면도 3DS SERIES 32, 40, 50



단면도 3DS SERIES 65



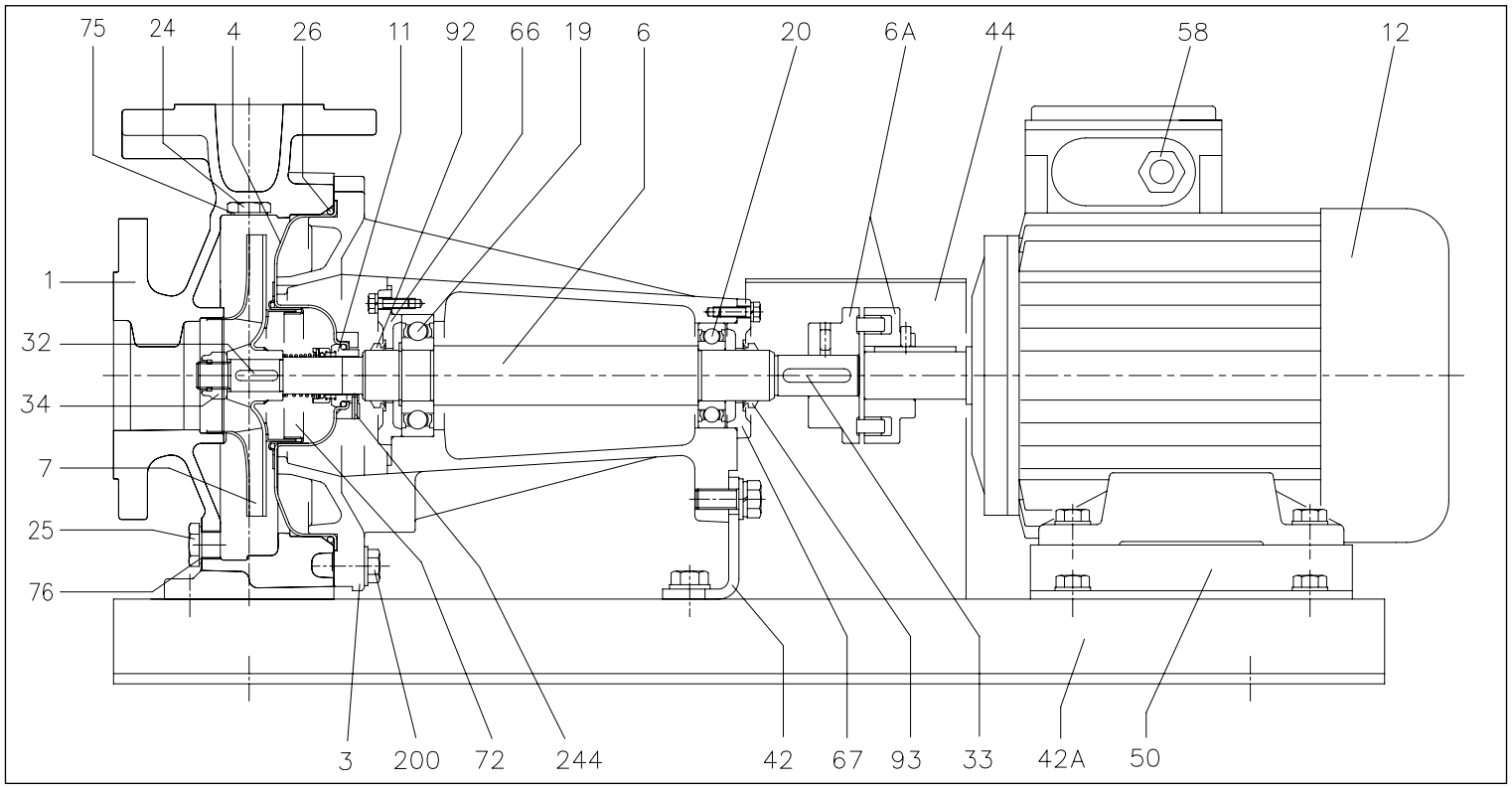
CENTRIFUGAL PUMPS CLOSE COUPLED AND STANDARDIZED EN 733

부품표

Ref.	부품명	재질
001	Pump casing	Cast iron EN-GJL-250-EN 1561
003	Motor bracket	Cast iron EN-GJL-250-EN 1561
003A	Adapter ring [1]	Cast iron EN-GJL-250-EN 1561
004	Rotor shaft	EN 1.4301 (AISI 304)
006	Joint (part in contact with the liquid)	EN 1.4301 (AISI 304)
007	Impeller	[2]
011	Mechanical seal	Ceramic/Carbon/NBR
012	Motor	-
024	Plug	Brass
025	Plug	Brass
026	O-Ring	NBR [3]
032	Key	EN 1.4401 (AISI 304)
034	Impeller nut	EN 1.4301 (AISI 304)
042	Motor support	Galvanized steel
044	Support protection	EN 1.4301 (AISI 304)
058	Cable gland	-
072	Casing ring [4]	EN 1.4301 (AISI 304)
075	Washer	Aluminium
076	Washer	Aluminium
200	Screw	Galvanized steel 8.8 class ISO 898-1
201	Screw [5]	Galvanized steel 8.8 class ISO 898-1
206	Screw (support)	Galvanized steel 8.8 class ISO 898-1
206-2	Adapter ring screw	Galvanized steel 8.8 class ISO 898-1
235	Washer	Galvanized steel

[1]= Only for 3D SERIES 65-125/5.5 and 65-125/7.5 models
[2]= EN 1.4301 (AISI 304) for 3D SERIES 32, 40, 50; EN 1.4401 (AISI 316) for 3D SERIES 65
[3]= FPM for H, HS, HW, HSW versions; EPDM for E version
[4]= Only for 3D SERIES 32-200, 40-200, 50-160, 50-200
[5]= Only for 3D SERIES 32-125/1.1, 32-160/1.5, 32-160/2.2, 40-125/1.5, 40-125/2.2, 50-125/2.2

단면도 3DP SERIES 32, 40, 50, 65

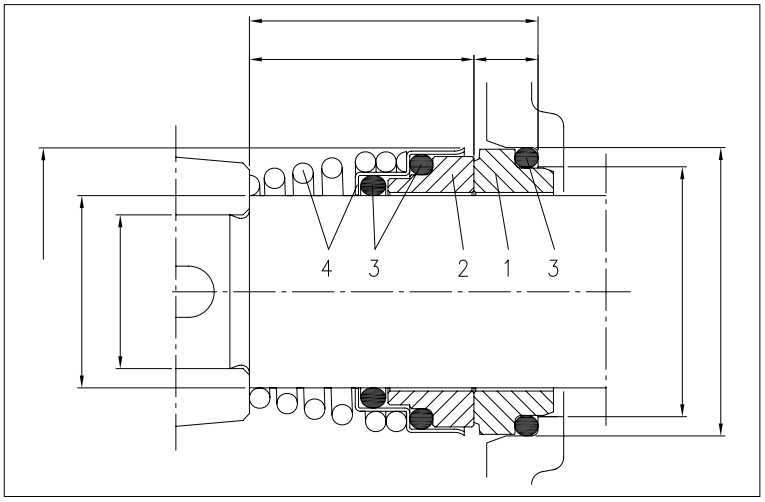


부품표

Ref.	부품명	재질
001	Pump casing	Cast iron EN-GJL-250-EN 1561
003	Motor bracket	Cast iron EN-GJL-250-EN 1561
004	Seal housing disc	EN 1.4301 (AISI 304)
006	Shaft (part in contact with the liquid)	EN 1.4301 (AISI 304)
006A	Flexible joint	Cast iron EN-GJL-250-EN 1561
007	Impeller	[1]
011	Mechanical seal	Ceramic/Carbon/NBR
012	Motor	-
019	Bearing	-
020	Bearing	-
024	Plug	Brass
025	Plug	Brass
026	O-Ring	NBR [2]
032	Key	EN 1.4401 (AISI 316)
033	Key	C 40
034	Impeller nut	EN 1.4301 (AISI 304)
042	Pump support	Fe 37 Galvanized
042A	Base	Fe 37 Galvanized
044	Support protection	Fe 37 Galvanized
050	Motor support	Aluminium / Galvanized steel
058	Cable gland	-
066	Bearing cover (impeller side)	Cast iron EN-GJL-250-EN 1561
067	Bearing cover (motor side)	Cast iron EN-GJL-250-EN 1561
072	Casing ring [3]	EN 1.4301 (AISI 304)
075	Washer	Aluminium
076	Washer	Aluminium
092	V ring	-
093	V ring	-
200	Screw	Galvanized steel 8.8 class ISO 898-1
235	Washer	Galvanized steel

[1]= EN 1.4301 (AISI 304) for 3D SERIES 32, 40, 50; EN 1.4401 (AISI 316) for 3D SERIES 65
[2]= FPM for H, HS, HW, HSW versions; EPDM for E version
[3]= Only for 3D SERIES 32-200, 40-200, 50-160, 50-200

매카니컬실 standard version



부품상세

Ref.	부품명	재질
1	Fixed part	Carbon
2	Rotating part	Ceramic
3	Gasket	NBR
4	Frame + spring	EN 1.4401 (AISI 316)

특수 매카니컬실 (on request)

Ref.	부품명	재질				
		H version	HS version	HW version	HSW version	E version
1	Fixed part	Carbon	SiC	Tungsten Carbide	Tungsten Carbide	Carbon
2	Rotating part	Ceramic	SiC	Tungsten Carbide	SiC	Ceramic
3	Gasket	FPM	FPM	FPM	FPM	EPDM
4	Frame + spring	EN 1.4401 (AISI 316)	EN 1.4571 (AISI 316Ti)	EN 1.4401 (AISI 316)	EN 1.4401 (AISI 316)	EN 1.4401 (AISI 316)

전기관련표 3D SERIES

모델	P2		Efficiency (%) 삼상 (380V) η %			Efficiency (%) 삼상 (460V) η %			Input [kW]	Absorbed current [A] 삼상			
	[HP]	[kW]	50%	75%	100%	50%	75%	100%		220V	380V	460V	660V
3D 32-125/2.26	3,0	2,2	80.5	83.3	83.5	77.3	82.4	84.1	2.9	7.0	4.1	4.1	-
3D 32-160/3.06	4,0	3,0	84.0	85.9	85.2	80.2	83.5	84.6	3.9	10.5	6.1	5.6	-
3D 32-160/4.06	5,5	4,0	83.2	85.8	86.1	81.0	85.1	86.7	5.1	14.7	8.5	8.0	-
3D 32-200/5.56	7,5	5,5	83.4	85.3	85.7	82.9	86.0	87.4	7.0	-	11.6	9.5	6.7
3D 32-200/7.56	10,0	7,5	83.1	85.4	85.8	82.6	86.1	87.5	9.4	-	14.9	12.7	8.6
3D 40-125/3.06	4,0	3,0	84.0	85.9	85.2	80.2	83.5	84.6	3.9	10.5	6.1	5.6	-
3D 40-125/4.06	5,5	4,0	83.2	85.8	86.1	81.0	85.1	86.7	5.1	14.7	8.5	8.0	-
3D 40-160/5.56	7,5	5,5	83.4	85.3	85.7	82.9	86.0	87.4	7.0	-	11.6	9.5	6.7
3D 40-160/7.56	10,0	7,5	83.1	85.4	85.8	82.6	86.1	87.5	9.4	-	14.9	12.7	8.6
3D 40-200/116	15,0	11,0	87.3	88.8	88.6	85.9	88.7	89.6	11.3	-	17.7	15.4	10.3
3D 40-200/156	20,0	15,0	90.9	91.5	91.0	89.4	91.3	91.8	17.9	-	28.7	25.0	16.6
3D 50-125/5.56	7,5	5,5	83.4	85.3	85.7	82.9	86.0	87.4	7.0	-	11.6	9.5	6.7
3D 50-125/7.56	10,0	7,5	83.1	85.4	85.8	82.6	86.1	87.5	9.4	-	14.9	12.7	8.6
3D 50-160/116	15,0	11,0	87.3	88.8	88.6	85.9	88.7	89.6	11.3	-	17.7	15.4	10.3
3D 50-160/156	20,0	15,0	90.9	91.5	91.0	89.4	91.3	91.8	17.9	-	28.7	25.0	16.6
3D 65-125/5.56	7,5	5,5	83.4	85.3	85.7	82.9	86.0	87.4	7.0	-	11.6	9.5	6.7
3D 65-125/7.56	10,0	7,5	83.1	85.4	85.8	82.6	86.1	87.5	9.4	-	14.9	12.7	8.6
3D 65-160/9.26	13,0	9,2	87.3	88.8	88.6	85.9	88.7	89.6	11.3	-	17.7	15.4	10.3
3D 65-160/116	15,0	11,0	91.9	91.8	91.2	90.9	92.0	91.9	13.2	-	18.3	18.3	10.5
3D 65-160/156	20,0	15,0	90.9	91.5	91.0	89.4	91.3	91.8	17.9	-	28.7	25.0	16.6
3D 65-200/156	20,0	15,0	90.9	91.5	91.0	89.4	91.3	91.8	17.9	-	28.7	25.0	16.6
3D 65-200/18.56	25,0	18,5	91.7	92.8	92.5	90.3	92.1	92.9	21.9	-	34.8	31.0	20.1
3D 65-200/226	30,0	22,0	89.7	91.2	91.3	88.4	91.0	91.7	26.4	-	41.7	36.4	24.0

전기관련표 3DS - 3DP SERIES

모델 3DS	3DP	P_2 [HP]	P_2 [kW]	Input [kW]	Efficiency (%) 삼상 η % 50%	75%	100%	cos-ϕ	Absorbed current [A] 삼상 265V	460V
3DS 32-125/2.26	3DP 32-125/2.26	3	2,2	2.65	79.6	83.2	84.3	0.81	7.1	4.1
3DS 32-160/3.06	3DP 32-160/3.06	4	3	3.56	80.7	84.4	85.5	0.86	9.0	5.2
3DS 32-160/4.06	3DP 32-160/4.06	5,5	4	4.70	81.3	84.2	85.0	0.83	12.3	7.1
3DS 32-200/5.56	3DP 32-200/5.56	7,5	5,5	6.22	83.5	86.6	87.8	0.84	-	9.3
3DS 32-200/7.56	3DP 32-200/7.56	10	7,5	8.36	86.3	88.7	89.3	0.86	-	12.2
3DS 40-125/3.06	3DP 40-125/3.06	4	3	3.56	80.7	84.4	85.5	0.86	9.0	5.2
3DS 40-125/4.06	3DP 40-125/4.06	5,5	4	4.70	81.3	84.2	85.0	0.83	12.3	7.1
3DS 40-160/5.56	3DP 40-160/5.56	7,5	5,5	6.22	83.5	86.6	87.8	0.84	-	9.3
3DS 40-160/7.56	3DP 40-160/7.56	10	7,5	8.36	86.3	88.7	89.3	0.86	-	12.2
3DS 40-200/116	3DP 40-200/116	15	11	12.15	85.2	88.0	90.0	0.82	-	18.6
3DS 40-200/156	3DP 40-200/156	20	15	16.71	88.2	90.1	90.2	0.90	-	23.3
3DS 50-125/5.56	3DP 50-125/5.56	7,5	5,5	6.22	83.5	86.6	87.8	0.84	-	9.3
3DS 50-125/7.56	3DP 50-125/7.56	10	7,5	8.36	86.3	88.7	89.3	0.86	-	12.2
3DS 50-160/116	3DP 50-160/116	15	11	12.15	85.2	88.0	90.0	0.82	-	18.6
3DS 50-160/156	3DP 50-160/156	20	15	16.71	88.2	90.1	90.2	0.90	-	23.3
3DS 65-125/5.56	3DP 65-125/5.56	7,5	5,5	6.22	83.5	86.6	87.8	0.84	-	9.3
3DS 65-125/7.56	3DP 65-125/7.56	10	7,5	8.36	86.3	88.7	89.3	0.86	-	12.2
3DS 65-160/9.26	3DP 65-160/9.26	12,5	9,2	10.40	86.5	88.9	89.5	0.90	-	14.5
3DS 65-160/116	3DP 65-160/116	15	11	12.15	85.2	88.0	90.0	0.82	-	18.6
3DS 65-160/156	3DP 65-160/156	20	15	16.71	88.2	90.1	90.2	0.90	-	23.3
3DS 65-200/156	3DP 65-200/156	20	15	16.71	88.2	90.1	90.2	0.90	-	23.3
3DS 65-200/18.56	3DP 65-200/18.56	25	18,5	20.32	88.7	90.8	90.9	0.82	-	31.1
3DS 65-200/226	3DP 65-200/226	30	22	24.11	-	-	91.3	0.89	-	34.0

소음자료표 3D SERIES

모델	P_2		L_{pA} - dB(A)*
	[HP]	[kW]	
3D 32-125/2.26	3,0	2,2	68
3D 32-160/3.06	4,0	3,0	75
3D 32-160/4.06	5,5	4,0	
3D 32-200/5.56	7,5	5,5	78
3D 32-200/7.56	10,0	7,5	
3D 40-125/3.06	4,0	3,0	75
3D 40-125/4.06	5,5	4,0	
3D 40-160/5.56	7,5	5,5	78
3D 40-160/7.56	10,0	7,5	
3D 40-200/116	15,0	11,0	82
3D 40-200/156	20,0	15,0	
3D 50-125/5.56	7,5	5,5	78
3D 50-125/7.56	10,0	7,5	
3D 50-160/116	15,0	11,0	82
3D 50-160/156	20,0	15,0	
3D 65-125/5.56	7,5	5,5	78
3D 65-125/7.56	10,0	7,5	
3D 65-160/9.26	13,0	9,2	82
3D 65-160/116	15,0	11,0	
3D 65-160/156	20,0	15,0	86
3D 65-200/156	20,0	15,0	
3D 65-200/18.56	25,0	18,5	
3D 65-200/226	30,0	22,0	

* Mean value of several measures at 1m distance around the pump.
Tollerance ± 2.5 dB.

소음자료표 3DS - 3DP SERIES

모델		P_2		L_{pA} - dB(A)*
3DS	3DP	[HP]	[kW]	
3DS 32-125/2.26	3DP 32-125/2.26	3	2,2	70
3DS 32-160/3.06	3DP 32-160/3.06	4	3	74
3DS 32-160/4.06	3DP 32-160/4.06	5,5	4	78
3DS 32-200/5.56	3DP 32-200/5.56	7,5	5,5	82
3DS 32-200/7.56	3DP 32-200/7.56	10	7,5	
3DS 40-125/3.06	3DP 40-125/3.06	4	3	74
3DS 40-125/4.06	3DP 40-125/4.06	5,5	4	78
3DS 40-160/5.56	3DP 40-160/5.56	7,5	5,5	82
3DS 40-160/7.56	3DP 40-160/7.56	10	7,5	
3DS 40-200/116	3DP 40-200/116	15	11	84
3DS 40-200/156	3DP 40-200/156	20	15	
3DS 50-125/5.56	3DP 50-125/5.56	7,5	5,5	82
3DS 50-125/7.56	3DP 50-125/7.56	10	7,5	
3DS 50-160/116	3DP 50-160/116	15	11	84
3DS 50-160/156	3DP 50-160/156	20	15	
3DS 65-125/5.56	3DP 65-125/5.56	7,5	5,5	82
3DS 65-125/7.56	3DP 65-125/7.56	10	7,5	
3DS 65-160/9.26	3DP 65-160/9.26	12,5	9,2	
3DS 65-160/116	3DP 65-160/116	15	11	84
3DS 65-160/156	3DP 65-160/156	20	15	
3DS 65-200/156	3DP 65-200/156	20	15	
3DS 65-200/18.56	3DP 65-200/18.56	25	18,5	
3DS 65-200/226	3DP 65-200/226	30	22	85

* Mean value of several measures at 1m distance around the pump.
Tollerance ± 2.5 dB.

EBARA

EBARA

JESX-JEX

SELF-PRIMING ELECTRIC PUMPS

60 Hz

JESX - JEX

SELF-PRIMING ELECTRIC PUMPS
in AISI 304

Self-priming electric pumps in AISI 304 stainless steel.

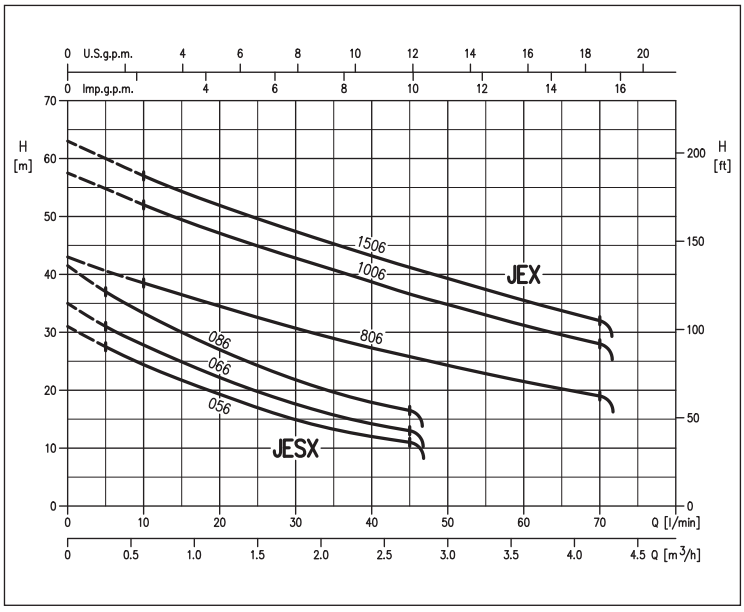
용도
- 음용수공급
- 생활용수부스터
- 소규모관개
- 배수탱크및수영장
- 청수이송

기술정보
- 실용적
- 가벼움

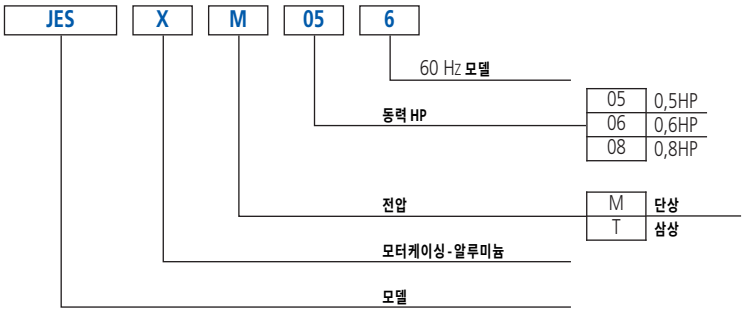
기술자료
- **최대사용압력 : JESX - 6 bar, JEX - 8 bar**
- **최대유체온도 :** 45°C
- **최대흡입관깊이 : 8m**
- **자체환기 2극 비동기식모터**
- **절연등급 F**
- **보호등급** IP54 (on request IP55)
- 110-115V ±6%, 60Hz **단상**,
  220-230V ±6%, 60Hz **단상**,
  220/380V -6%+10%, 60Hz **삼상**
- **흡입구 :** JESX - G1 , JEX - G1¼
- **토출구 :** G1

재질
- Pump body and seal housing disc in AISI 304
- Shaft in AISI 303 (part in contact with the liquid)
- Impeller in AISI 304 for JEX, in PPE+PS reinforced with fibreglass for JESX
- Mechanical seal in Carbon/Ceramic/NBR
- Support and motor casing in aluminium

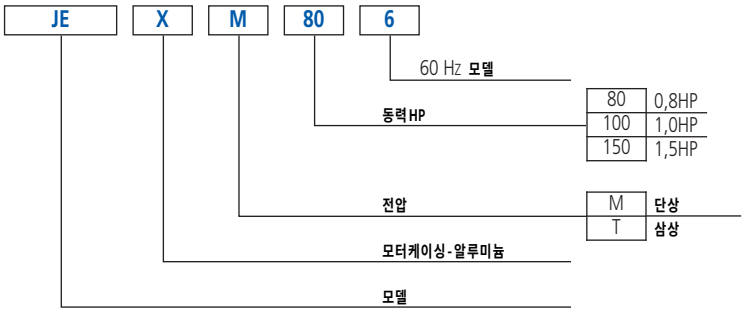
성능곡선 (according to ISO 9906 Attachment A)



JESX 식별코드



JEX 식별코드



JESX - JEX

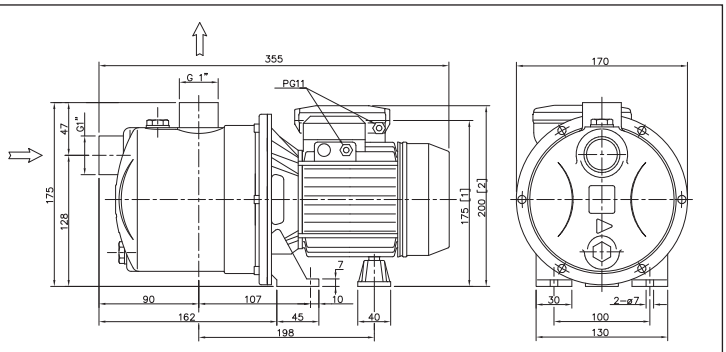
SELF-PRIMING ELECTRIC PUMPS

in AISI 304

JESX 성능표

모델 단상 110-115/220-230V	모델 삼상 220/380V	P_2 [HP]	P_2 [kW]	Q=유량 l/min	5	10	20	30	40	45
				m^3/h	0,3	0,6	1,2	1,8	2,4	2,7
				H=양정 [m]						
JESXM 056	JESX 056	0,5	0,37		27,5	24,4	19,3	14,9	12,0	11,0
JESXM 066	JESX 066	0,6	0,44		31,0	27,8	22,2	17,6	14,2	13,0
JESXM 086	JESX 086	0,8	0,6		37,0	33,3	27,0	21,8	17,9	16,5

JESX 외형도



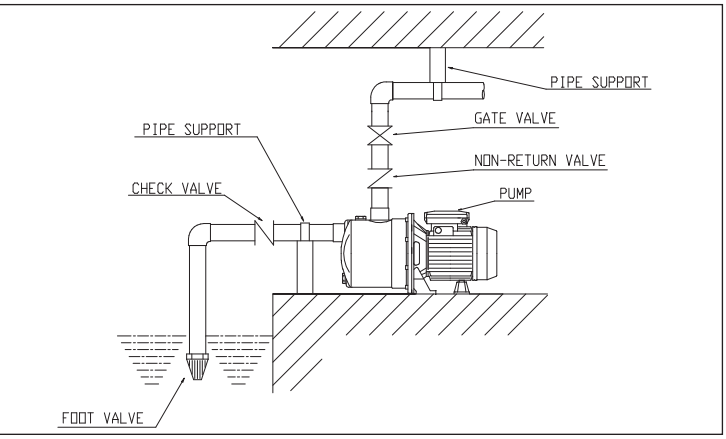
[1]= Three phase only
[2]= Single phase only

외형표

모델	중량 [kg] [2]	[1]
JESX(M) 056	5,2	5,0
JESX(M) 066	5,5	5,1
JESX(M) 086	6,0	6,0

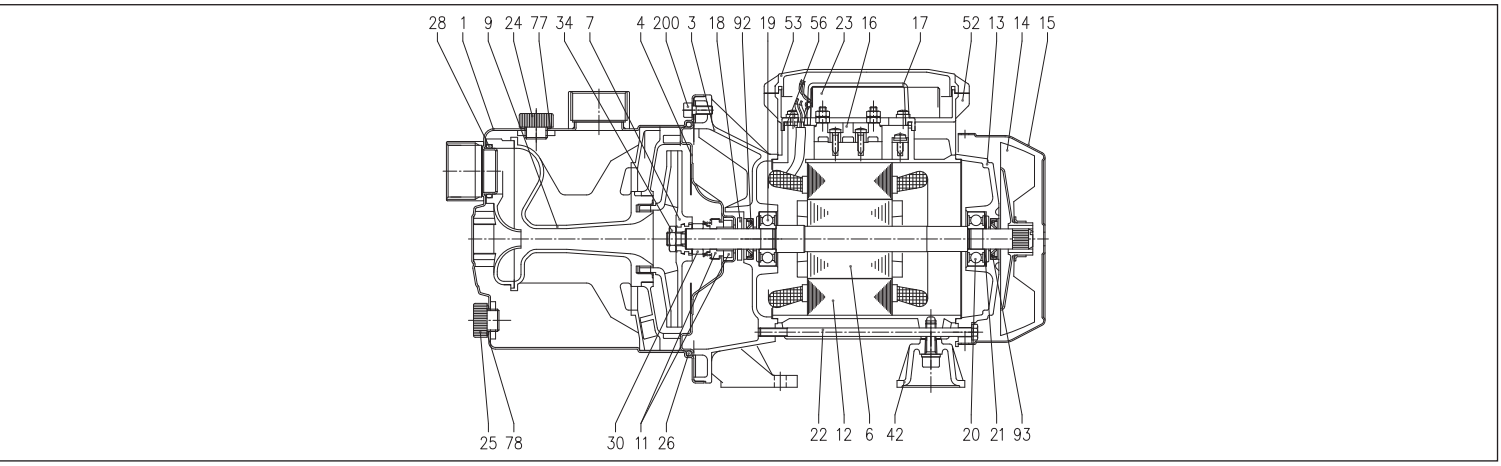
[1]= Three phase only
[2]= Single phase only

설치



For correct installation of the system, it is recommended to fit a foot valve on the suction and support/anchorage for the piping.

JESX 단면도



JESX - JEX

SELF-PRIMING ELECTRIC PUMPS

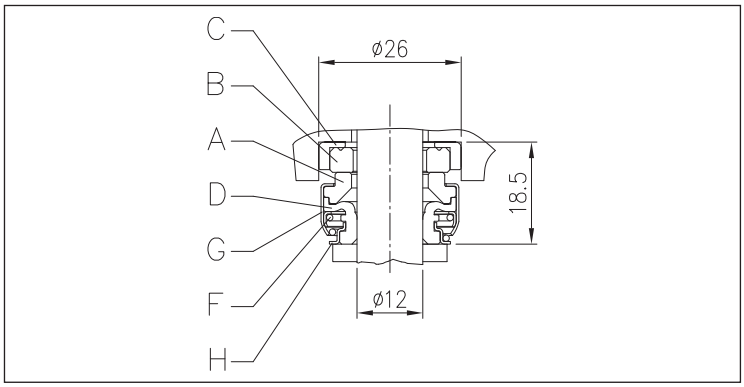
in AISI 304

부품표

Ref.	부품명	재질	Ref.	부품명	재질
1	Pump body	AISI 304	22	Tie-rod	Galvanised Fe 42
3	Motor support	Aluminium	23	Capacitor [2]	-
4	Seal housing disc	AISI 304	24	Filler cap	PA6
6	Rotor shaft	AISI 303 (Part in contact with the liquid)	25	Drain plug	PA6
7	Impeller	PPE+PS reinforced with fibreglass	26	O-Ring	NBR
9	Venturi Unit + nozzle	PPE+PS reinforced with fibreglass	28	O-Ring	NBR
11	Mechanical seal	Carbon/Ceramic/NBR	30	Mechanical seal spacer	Brass
12	Motor case	-	34	Impeller nut [1]	AISI 304
13	Motor cover	Aluminium	42	Foot	Aluminium
14	Fan	PA6	52	Capacitor-holder box [2]	ABS
15	Fan cover	Galvanised Fe P04	53	Cover gasket [2]	ABS+NBR
16	Terminal box	-	56	Terminal box cover gasket	NBR
17	Terminal box cover [1]	Aluminium	77	O-Ring	NBR
18	Spray protector washer	NBR	78	O-Ring	NBR
19	Bearing (pump side)	-	92	Sealing ring [3]	-
20	Bearing (motor side)	-	93	Sealing ring [3]	-
21	Adjusting ring	Steel C70	200	Screw (pump body)	A2 UNI7323 stainless steel

[1]= For three phase only
[2]= For single phase only
[3]= For IP55 only

JESX 매카니컬실



부품상세

Ref.	부품명	재질
A	Rotating part	Carbon
B	Fixed part	Ceramic
C	Gasket	NBR
D	Bellows	NBR
F	Spring	AISI 304
G	Structure/frame	AISI 304
H	Retainer ring	AISI 304

JESX 전기관련표

모델 단상 110-115/220-230V	모델 삼상 220/380V	P_2		Capacitor 단상				P_1		Absorbed Current [A]			
				110-115V		220-230V		단상	삼상	단상		삼상	
		[HP]	[kW]	µF	V_c	µF	V_c	[kW]	[kW]	110-115V	220-230V	220V	380V
JESXM 056	JESX 056	0,5	0,37	31,5	250	8	450	0,4	0,37	3,6	2,0	1,3	0,7
JESXM 066	JESX 066	0,6	0,44	30	250	8	450	0,46	0,4	4,1	2,2	1,4	0,8
JESXM 086	JESX 086	0,8	0,6	50	250	10	450	0,54	0,47	4,9	2,5	1,6	0,9

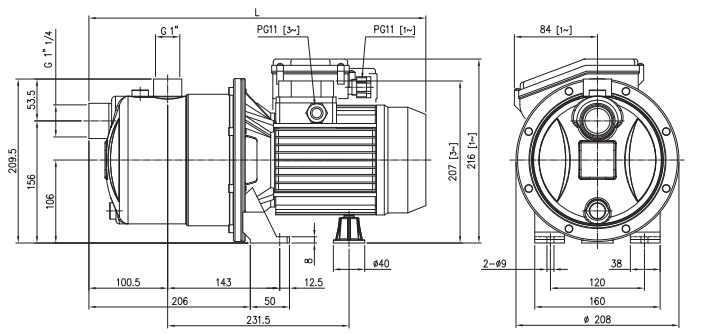
JESX - JEX

SELF-PRIMING ELECTRIC PUMPS
in AISI 304

JEX 성능표

모델 단상 110-115/220-230V	모델 삼상 220/380V	P_2 [HP]	P_2 [kW]	Q=유량 l/min	10	20	30	40	45	50	60	70
				m^3/h	0,6	1,2	1,8	2,4	2,7	3	3,6	4,2
				H=양정 [m]								
JEXM 806	JEX 806	0,8	0,6		38,5	35,0	30,7	27,3	25,8	24,3	21,5	19,0
JEXM 1006	JEX 1006	1	0,75		52,0	47,0	43,0	38,7	36,6	34,8	31,2	28,0
JEXM 1506	JEX 1506	1,5	1,1		57,0	52,0	47,5	43,2	41,2	39,3	35,5	32,0

JEX 외형도



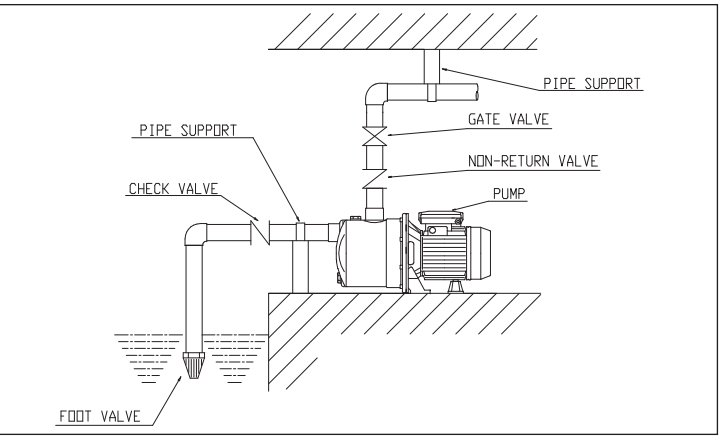
[1]= Three phase only
[2]= Single phase only

외형표

모델	L [2]	L [1]	중량 [kg] [2]	중량 [kg] [1]
JEX(M) 086	419	418	10,2	10,2
JEX(M) 1006	419	418	11,6	11,6
JEX(M) 1506	419	430	14,3	15,3

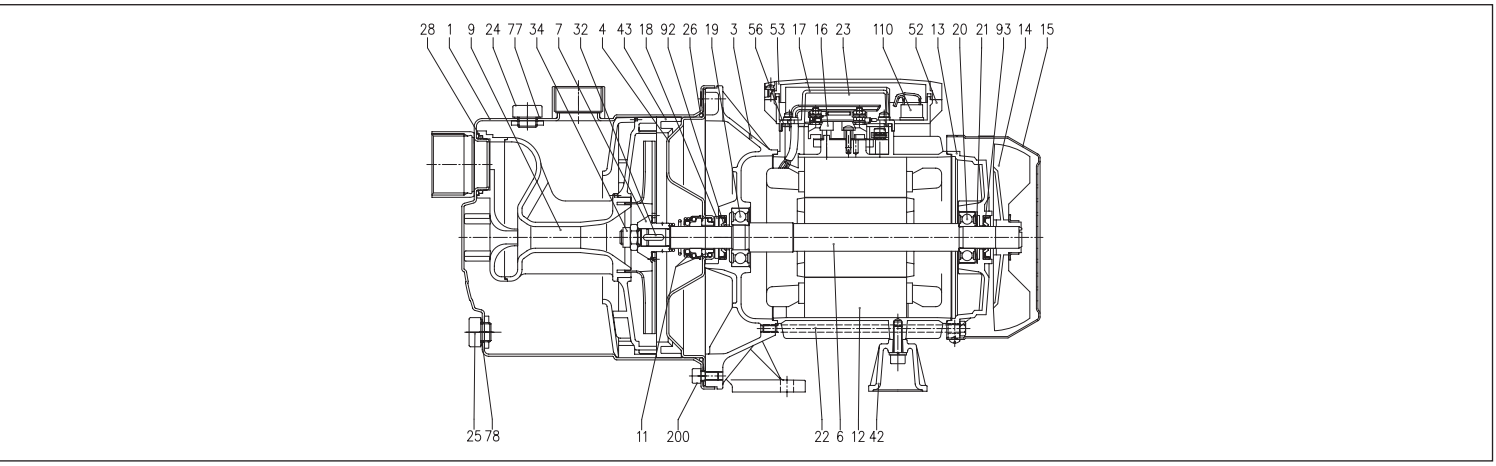
[1]= Three phase only
[2]= Single phase only

설치



For correct installation of the system, it is recommended to fit a foot valve on the suction and support/anchorage for the piping.

JEX 단면도



JESX - JEX

SELF-PRIMING ELECTRIC PUMPS

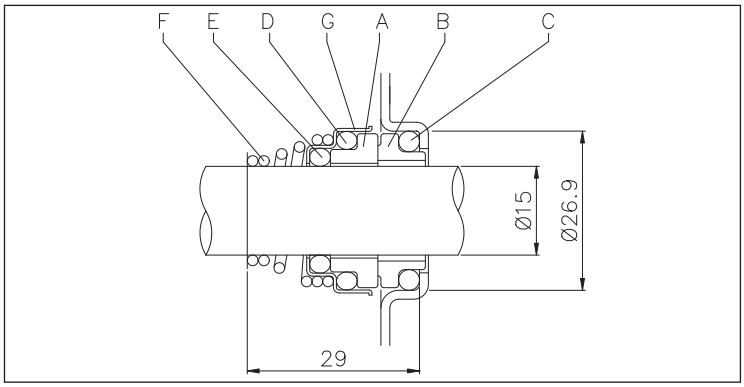
in AISI 304

부품표

Ref.	부품명	재질	Ref.	부품명	재질
1	Pump body	AISI 304	24	Filler cap	PA6
3	Motor support	Aluminium	25	Drain plug	PA6
4	Seal housing disc	AISI 304	26	O-Ring	NBR
6	Rotor shaft	AISI 303 (Part in contact with the liquid)	28	O-Ring	NBR
7	Impeller	AISI 304	32	Key	AISI 304
9	Venturi Unit + nozzle	PPE+PS reinforced with fibreglass	34	Impeller nut	AISI 304
11	Mechanical seal	Carbon/Ceramic/NBR	42	Foot	Aluminium
12	Motor case	-	43	Nozzle spacer	PPE+PS reinforced with fibreglass
13	Motor cover	Aluminium	52	Capacitor-holder box [2]	ABS
14	Fan	PA6	53	Cover gasket [2]	ABS
15	Fan cover	Galvanised Fe P04	56	Box gasket	NBR
16	Terminal box	-	77	O-Ring	NBR
17	Terminal box cover [1]	Aluminium	78	O-Ring	NBR
18	Spray protector washer	NBR	90	Terminal box cover gasket [2]	NBR
19	Bearing (pump side)	-	92	Sealing ring [3]	-
20	Bearing (motor side)	-	93	Sealing ring [3]	-
21	Adjusting ring	Steel C70	110	Motorprotector [2]	-
22	Tie-rod	Galvanised Fe 42	200	Screw (pump body)	A2 UNI7323 stainless steel
23	Capacitor [2]	-			

[1]= For three phase only
[2]= For single phase only
[3]= For IP55 only

JEX 매카니컬실



부품상세

Ref.	부품명	재질
A	Rotating part	Ceramic
B	Fixed part	Carbon
C	O-Ring	NBR
D	O-Ring	NBR
E	O-Ring	NBR
F	Spring	AISI 316
G	Structure/frame	AISI 304

JEX 전기관련표

모델 단상 110-115/220-230V	모델 삼상 220/380V	P_2 [HP]	P_2 [kW]	Capacitor 단상 110-115V µF	Capacitor 단상 110-115V V_c	Capacitor 단상 220-230V µF	Capacitor 단상 220-230V V_c	P_1 단상 [kW]	P_1 삼상 [kW]	Absorbed Current [A] 단상 110-115V	Absorbed Current [A] 단상 220-230V	Absorbed Current [A] 삼상 220V	Absorbed Current [A] 삼상 380V
JEXM 806	JEX 806	0,8	0,6	60	250	14	450	1,0	0,87	9,2	4,9	2,8	1,6
JEXM 1006	JEX 1006	1	0,75	70	250	20	450	1,5	1,00	13,3	7,2	2,9	1,7
JEXM 1506	JEX 1506	1,5	1,1	-	-	25	450	1,7	1,50	-	8,1	3,8	2,2

EBARA

EBARA

MATRIX

HORIZONTAL MULTISTAGE CENTRIFUGAL PUMPS

60 Hz

MATRIX

HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS
in AISI 304

Horizontal multistage centrifugal electric pumps in AISI 304 stainless steel.

WRAS APPROVED PRODUCT

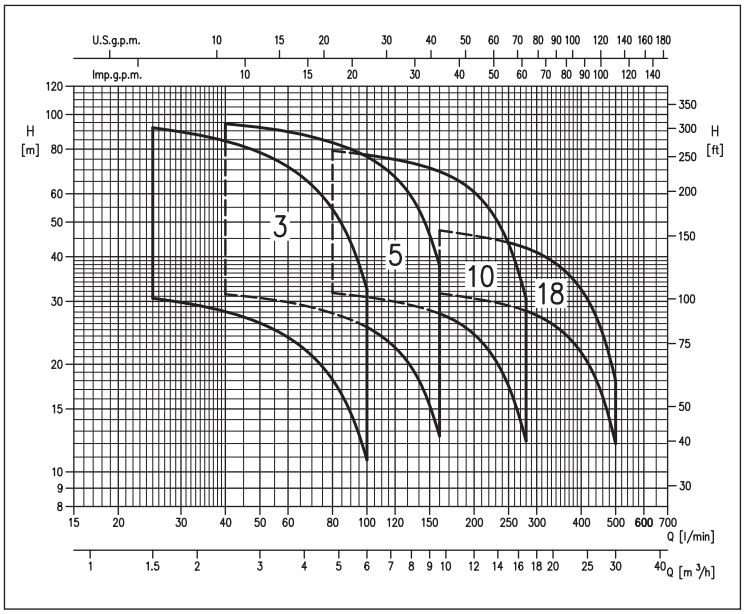
용도
- 산업용 세척
- 가압
- 산업공장
- 유체의 분배, 처리
- 난방 및 냉방
- 냉장, 냉각
- 관개
- 우수재사용

기술정보
- 뛰어난 내구성
- 다양한 옵션 적용가능
- 스탠다드버전 WRAS 인증획득 (85°C 까지)

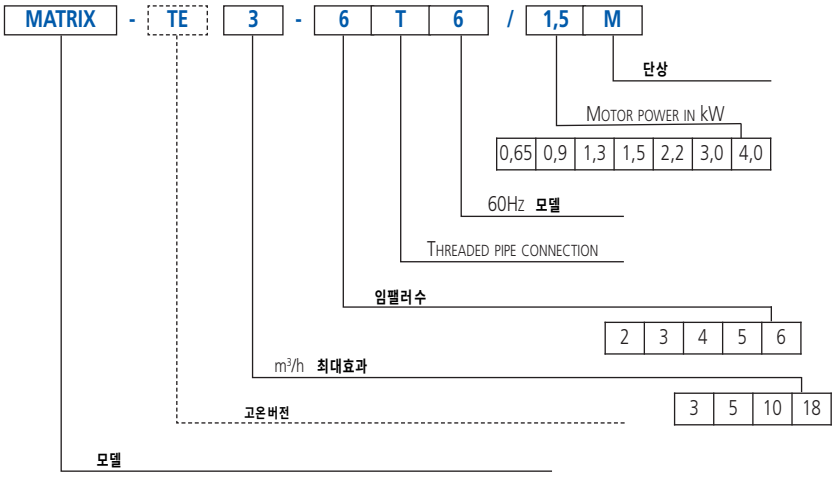
기술자료
- 유체온도 :
  -15°C 부터 +85°C 까지 (스탠다드)
  -15°C 부터 +110°C 까지 (TE 버전)
- 최대사용압력 : 10 bar
- 최대염소함유량 : 500 ppm
- 자체환기 2극 비동기식 모터
- 절연등급 : F
- 보호등급 : IP55
- 220-230V ±6%, 60Hz 단상,
  220/380-460V -6%+10%, 60Hz 삼상
- 흡입구 : MATRIX 3 - G1, MATRIX 5 - G1¼,
  MATRIX 10 - G1½, MATRIX 18 - G2
- 토출구 : MATRIX 3~5 - G1, MATRIX 10 - G1¼,
  MATRIX 18 - G1½

재질
- Pump body, impeller, intermediate stages, casing cover and shaft (part in contact with the liquid) in AISI 304
- Mechanical seal in Carbon/Ceramic/EPDM
- Bracket in EN AB-AlSi11Cu2(Fe) (Die cast Aluminium)

성능차트 (according to ISO 9906 Attachment A)



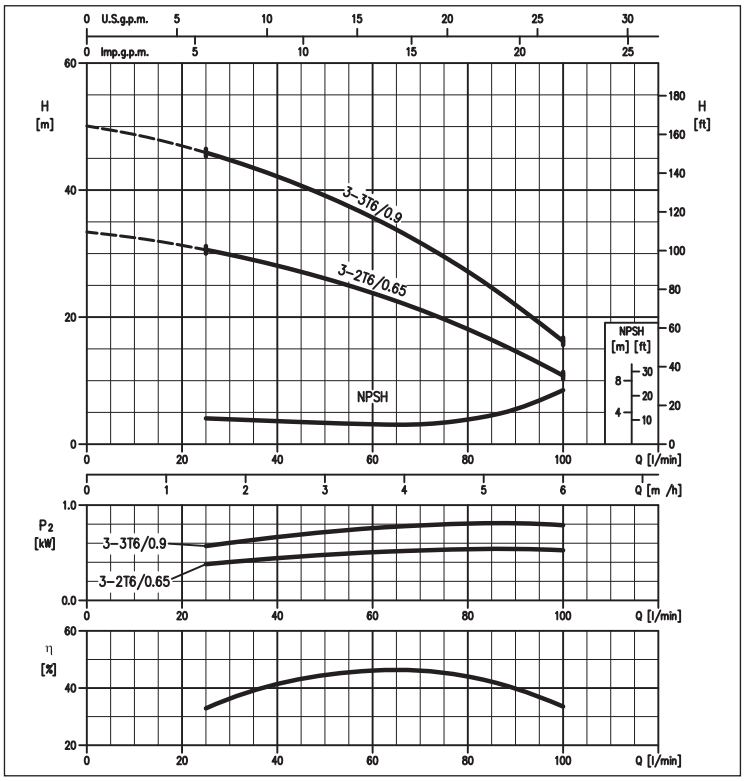
식별코드



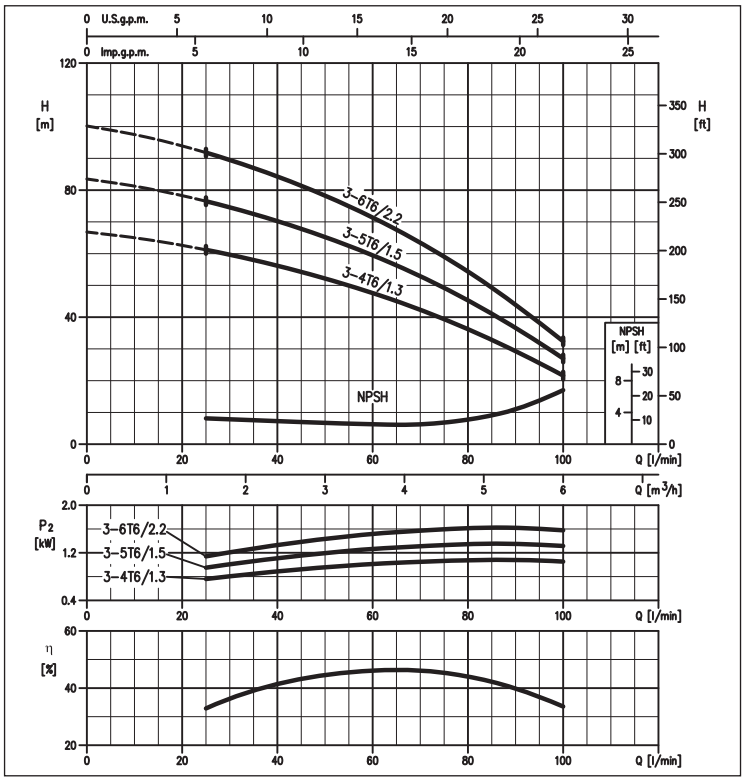
MATRIX

HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS
in AISI 304

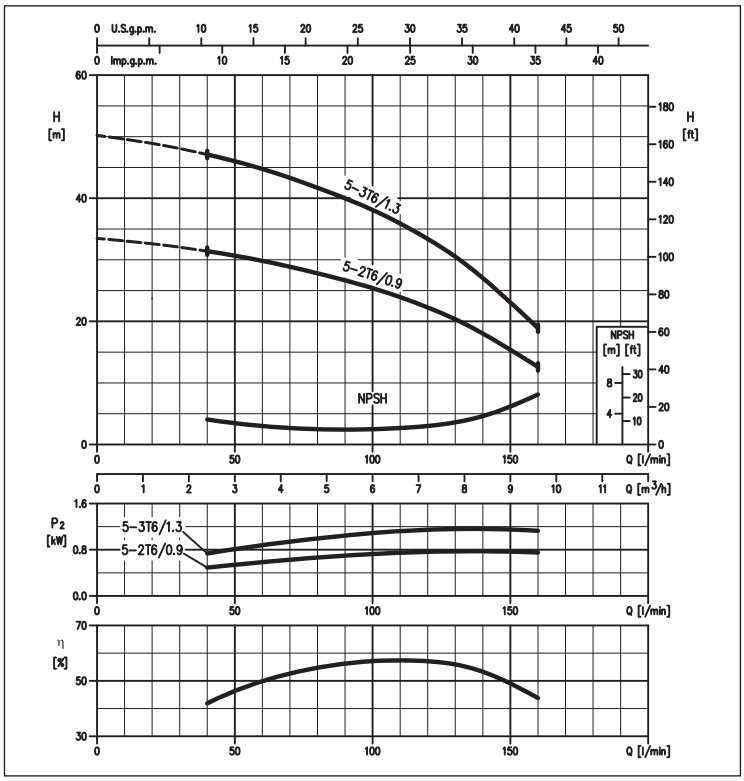
MATRIX 3 range 성능곡선 (from 2 to 3 impellers)
(according to ISO 9906 Attachment A)



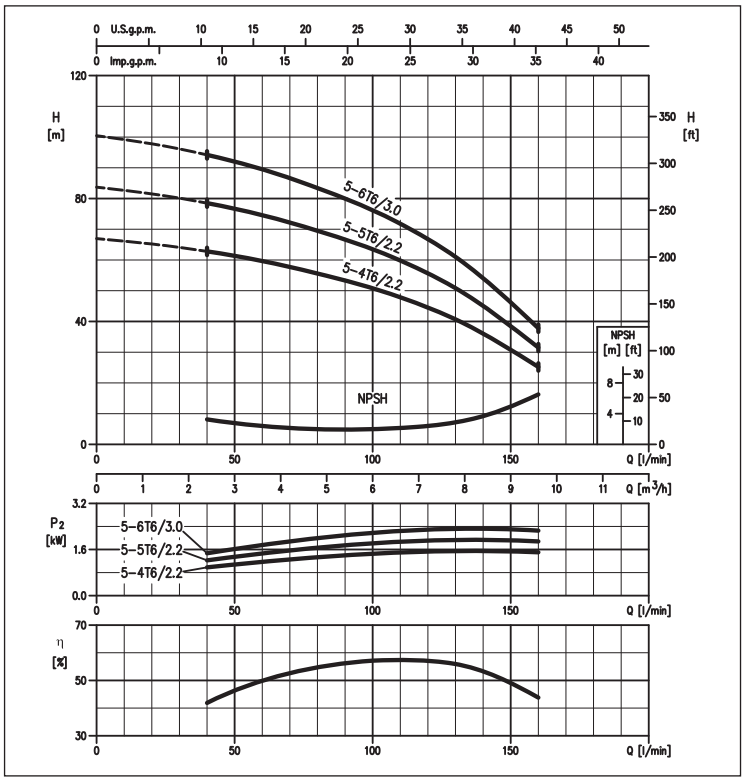
MATRIX 3 range 성능곡선 (from 4 to 6 impellers)
(according to ISO 9906 Attachment A)



MATRIX 5 range 성능곡선 (from 2 to 3 impellers)
(according to ISO 9906 Attachment A)



MATRIX 5 range 성능곡선 (from 4 to 6 impellers)
(according to ISO 9906 Attachment A)



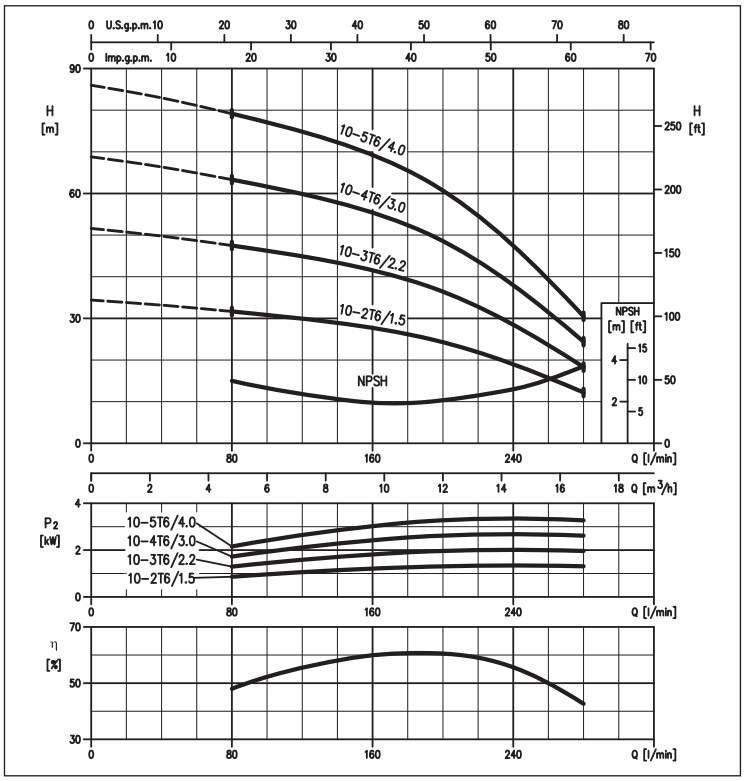
MATRIX

HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

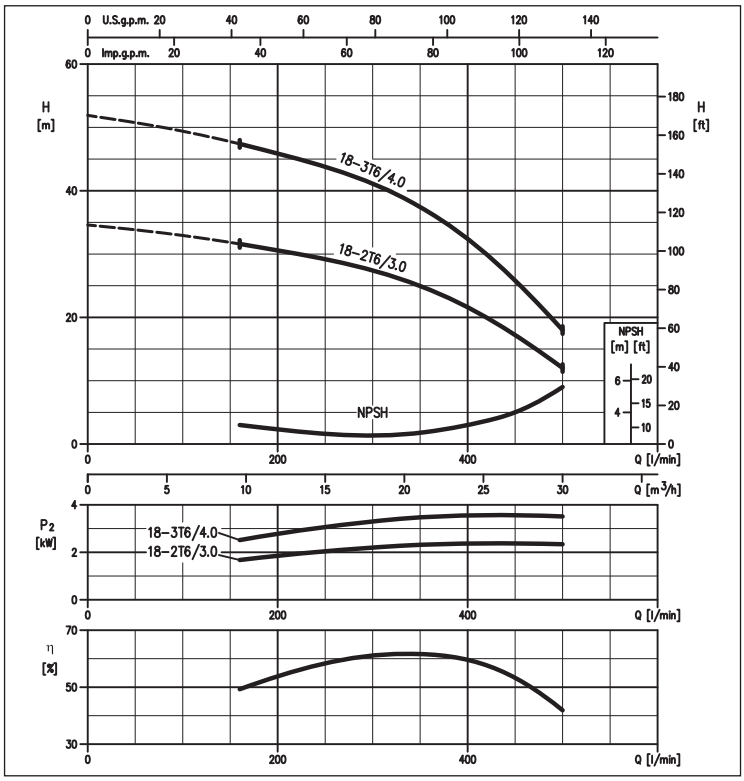
MATRIX 10 range 성능곡선 (from 2 to 5 impellers)

(according to ISO 9906 Attachment A)



MATRIX 18 range 성능곡선 (from 2 to 3 impellers)

(according to ISO 9906 Attachment A)



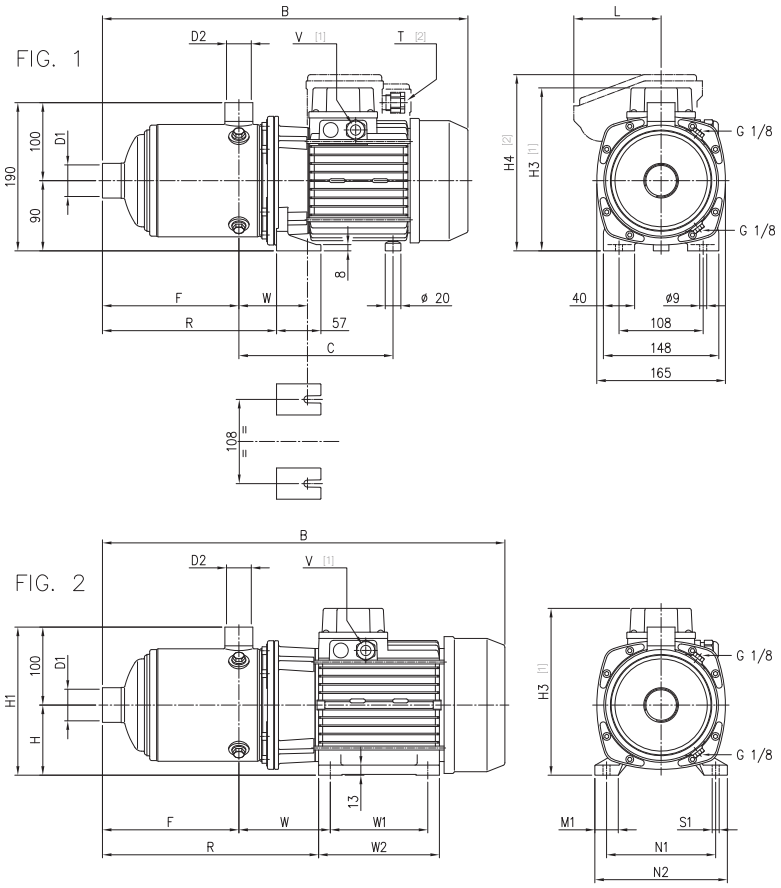
성능표

모델 단상 220-230V	모델 삼상 220/380-460V	P_2 [HP]	P_2 [kW]	Q=유량 l/min 25	40	60	80	100	130	160	220	280	340	400	460	500
				m^3/h 1,5	2,4	3,6	4,8	6	7,8	9,6	13,2	16,8	20,4	24	27,6	30
				H=양정 [m]												
MATRIX 3-2T6/0.65M	MATRIX 3-2T6/0.65	0,9	0,65	30,6	28,1	23,8	18,1	10,8	-	-	-	-	-	-	-	-
MATRIX 3-3T6/0.9M	MATRIX 3-3T6/0.9	1,2	0,9	46,0	42,0	35,7	27,2	16,2	-	-	-	-	-	-	-	-
MATRIX 3-4T6/1.3M	MATRIX 3-4T6/1.3	1,8	1,3	61,0	56,0	47,5	36,2	21,6	-	-	-	-	-	-	-	-
MATRIX 3-5T6/1.5M	MATRIX 3-5T6/1.5	2	1,5	76,5	70,5	59,5	45,5	27,0	-	-	-	-	-	-	-	-
-	MATRIX 3-6T6/2.2	3	2,2	92,0	84,5	71,5	54,5	32,4	-	-	-	-	-	-	-	-
MATRIX 5-2T6/0.9M	MATRIX 5-2T6/0.9	1,2	0,9	-	31,4	29,8	27,8	25,4	20,3	12,6	-	-	-	-	-	-
MATRIX 5-3T6/1.3M	MATRIX 5-3T6/1.3	1,8	1,3	-	47,0	45,0	41,5	38,1	30,5	18,9	-	-	-	-	-	-
-	MATRIX 5-4T6/2.2	3	2,2	-	63,0	59,5	55,5	51,0	40,5	25,2	-	-	-	-	-	-
-	MATRIX 5-5T6/2.2	3	2,2	-	78,5	74,5	69,5	63,5	51,0	31,5	-	-	-	-	-	-
-	MATRIX 5-6T6/3	4	3	-	94,0	89,5	83,5	76,0	61,0	37,8	-	-	-	-	-	-
MATRIX 10-2T6/1.5M	MATRIX 10-2T6/1.5	2	1,5	-	-	-	31,7	30,8	29,4	27,7	21,9	12,2	-	-	-	-
-	MATRIX 10-3T6/2.2	3	2,2	-	-	-	47,5	46,5	44,0	41,5	32,8	18,3	-	-	-	-
-	MATRIX 10-4T6/3	4	3	-	-	-	63,5	61,5	59,0	55,5	43,5	24,4	-	-	-	-
-	MATRIX 10-5T6/4	5,5	4	-	-	-	79,0	77,0	73,5	69,5	54,5	30,5	-	-	-	-
-	MATRIX 18-2T6/3	4	3	-	-	-	-	-	-	31,6	30,0	28,2	25,5	21,6	16,2	12,0
-	MATRIX 18-3T6/4	5,5	4	-	-	-	-	-	-	47,5	45,0	42,5	38,3	32,4	24,3	18,0

MATRIX

HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS
in AISI 304

외형도



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

외형표

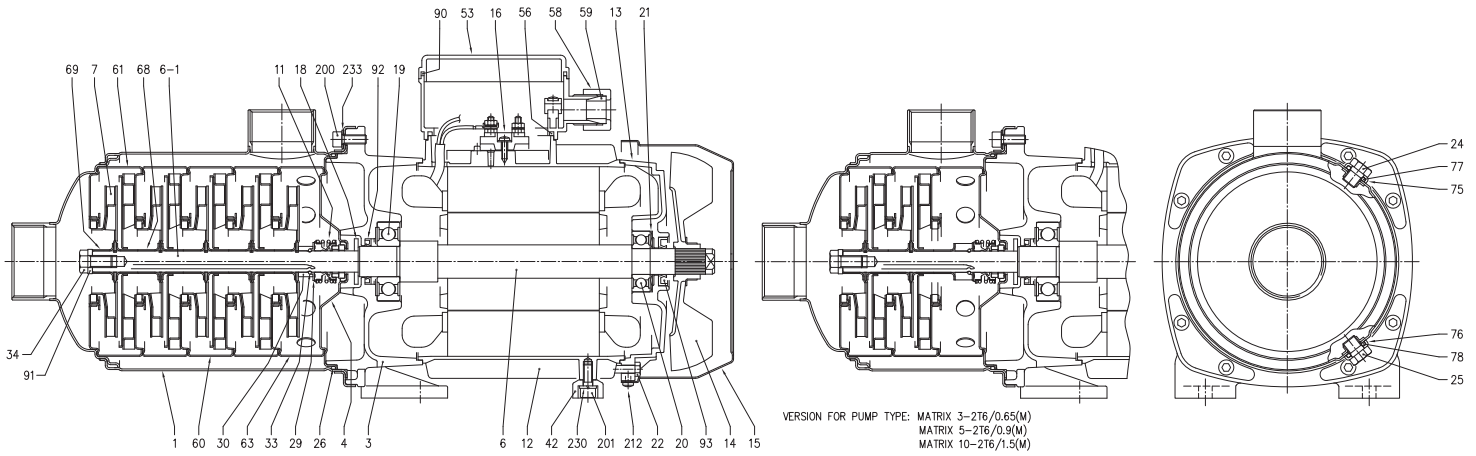
모델	외형치수 [mm]																				중량
	Fig.	B	C	F	H	H1	H3 [1]	H4 [2]	L	R	T [2]	V [1]	W	W1	W2	M1	N1	N2	S1	D1	D2	[kg]
MATRIX 3-2T6/0.65M	1	360	171	103	-	-	-	200	86,5	151,5	PG11	-	88÷97	-	-	-	-	-	-	1″	1″	9,8
MATRIX 3-2T6/0.65	1	360	171	103	-	-	192	-	-	151,5	-	PG11	88÷97	-	-	-	-	-	-	1″	1″	9,7
MATRIX 3-3T6/0.9M	1	360	171	103	-	-	-	219	106	151,5	M20x1,5	-	88÷97	-	-	-	-	-	-	1″	1″	11,7
MATRIX 3-3T6/0.9	1	372	171	103	-	-	192	-	-	151,5	-	PG11	88÷97	-	-	-	-	-	-	1″	1″	12,4
MATRIX 3-4T6/1.3M	1	421	198	127	-	-	-	226	112	175,5	M20x1,5	-	88÷97	-	-	-	-	-	-	1″	1″	14,7
MATRIX 3-4T6/1.3	1	421	198	127	-	-	209	-	-	175,5	-	PG11	88÷97	-	-	-	-	-	-	1″	1″	14,4
MATRIX 3-5T6/1.5M	1	458	198	151	-	-	-	226	112	199,5	M20x1,5	-	88÷97	-	-	-	-	-	-	1″	1″	16,0
MATRIX 3-5T6/1.5	1	458	198	151	-	-	209	-	-	199,5	-	PG11	88÷97	-	-	-	-	-	-	1″	1″	17,8
MATRIX 3-6T6/2.2	1	482	198	175	-	-	209	-	-	223,5	-	PG11	88÷97	-	-	-	-	-	-	1″	1″	18,3
MATRIX 5-2T6/0.9M	1	360	171	103	-	-	-	219	106	151,5	M20x1,5	-	88÷97	-	-	-	-	-	-	1″¼	1″	11,6
MATRIX 5-2T6/0.9	1	372	171	103	-	-	192	-	-	151,5	-	PG11	88÷97	-	-	-	-	-	-	1″¼	1″	12,3
MATRIX 5-3T6/1.3M	1	397	198	103	-	-	-	226	112	151,5	M20x1,5	-	88÷97	-	-	-	-	-	-	1″¼	1″	14,0
MATRIX 5-3T6/1.3	1	397	198	103	-	-	209	-	-	151,5	-	PG11	88÷97	-	-	-	-	-	-	1″¼	1″	13,8
MATRIX 5-4T6/2.2	1	434	198	127	-	-	209	-	-	175,5	-	PG11	88÷97	-	-	-	-	-	-	1″¼	1″	16,7
MATRIX 5-5T6/2.2	1	458	198	151	-	-	209	-	-	199,5	-	PG11	88÷97	-	-	-	-	-	-	1″¼	1″	16,9
MATRIX 5-6T6/3	2	554	-	175	90	90	214	-	-	277,5	-	PG13,5	117,5	125	155	30	140	170	9	1″¼	1″	22,4
MATRIX 10-2T6/1.5M	1	429	202	118	-	-	-	226	112	170,5	M20x1,5	-	92÷101	-	-	-	-	-	-	1″½	1″¼	14,8
MATRIX 10-2T6/1.5	1	429	202	118	-	-	209	-	-	170,5	-	PG11	92÷101	-	-	-	-	-	-	1″½	1″¼	16,5
MATRIX 10-3T6/2.2	1	429	202	118	-	-	209	-	-	170,5	-	PG11	92÷101	-	-	-	-	-	-	1″½	1″¼	16,3
MATRIX 10-4T6/3	2	531	-	148	90	190	214	-	-	254,5	-	PG13,5	121,5	125	155	30	140	170	9	1″½	1″¼	22,7
MATRIX 10-5T6/4	2	574	-	178	100	200	241	-	-	274	-	PG16	111	140	170	35	160	192	11	1″½	1″¼	26,2
MATRIX 18-2T6/3	2	527	-	141	90	190	214	-	-	250,5	-	PG13,5	124,5	125	155	30	140	170	9	2″	1″½	21,6
MATRIX 18-3T6/4	2	540	-	141	100	200	241	-	-	240	-	PG16	114	140	170	35	160	192	11	2″	1″½	25,4

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

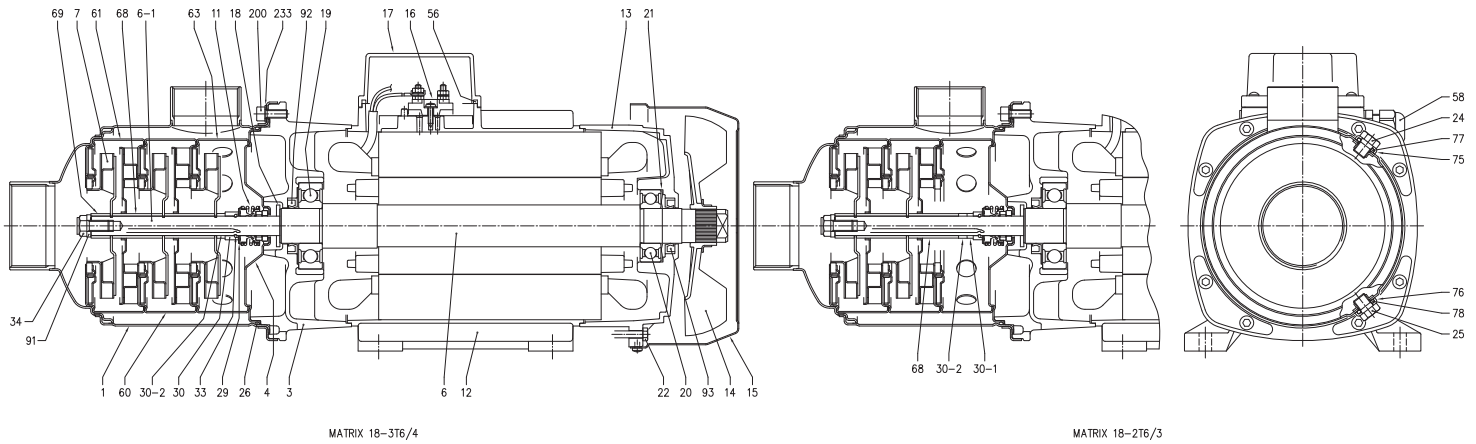
HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

MATRIX 3-5-10 단면도



MATRIX 18 S단면도



HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

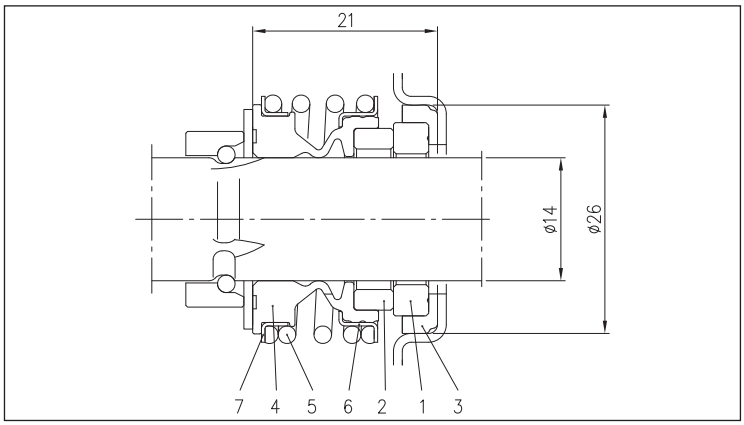
in AISI 304

부품표

Ref.	부품명	재질	Ref.	부품명	재질
1	Pump body	EN 1.4301 (AISI 304)	34	Screw	EN 1.4301 (AISI 304)
3	Bracket	EN AB-AlSi11Cu2(Fe)	42	Foot	Aluminium
4	Casing cover	EN 1.4301 (AISI 304)	50	Motor spacer [3]	Aluminium
6	Shaft with rotor	-	52	Capacitor box [2]	ABS
6-1	Pump shaft	EN 1.4301 (AISI 304)	53	Capacitor box cover [2] [4]	ABS
7	Impeller	EN 1.4301 (AISI 304)	56	Box gasket	NBR
11	Mechanical seal	Ceramic/Carbon/EPDM	58	Ring nut	-
	High temperature mechanical seal	Ceramic/Carbon/EPDM	59	Conic gasket [2]	NBR
12	Motor frame with stator	-	60	Intermediate casing	EN 1.4301 (AISI 304)+PTFE
13	Motor cover	Aluminium	61	Intermediate casing (suction)	EN 1.4301 (AISI 304)+PTFE
14	Fan	PA6	63	Intermediate casing (discharge)	EN 1.4301 (AISI 304)+PTFE
15	Fan cover	Galvanised Fe P04	68	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)
16	Terminal board	-	69	Impeller spacer	EN 1.4301 (AISI 304)
17	Terminal box cover [1]	Aluminium	75	Washer	EN 1.4301 (AISI 304)
18	Splash ring	NBR	76	Washer	EN 1.4301 (AISI 304)
19	Bearing (pump side)	-	77	O-Ring	EPDM
20	Bearing (motor side)	-	78	O-Ring	EPDM
21	Adjusting ring	Steel C70	90	Cover box gasket [2]	NBR
22	Tie rod	Galvanised Fe 42	91	Shaft washer	EN 1.4301 (AISI 304)
24	Filler cap	EN 1.4301 (AISI 304)	92	Lip seal	-
25	Drain plug	EN 1.4301 (AISI 304)	93	Lip seal	-
26	O-Ring	EPDM	200	Screw (pump body)	EN 1.4301 (AISI 304)
29	Washer	EN 1.4301 (AISI 304)	201	Screw	Steel 8.8 strenght class ISO 898/1
30	Ring holder	EN 1.4301 (AISI 304)	230	Washer	Steel C70
30-1/2	Shaft sleeve	EN 1.4301 (AISI 304)	233	Plate	EN 1.4301 (AISI 304)
33	Ring	EN 1.4301 (AISI 304)			

[1]= Three phase only
[2]= Single phase only
[3]= Only for 10-5T6/4 and 18-3T6/4
[4]= With gasket in NBR only for 3-2T6/0.65M, 3-3T6/0.9M, 5-2T6/0.9M single phase version

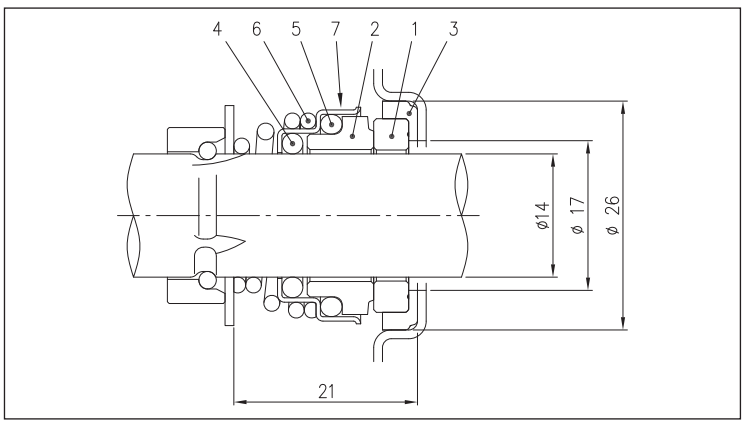
매카니컬실 standard



부품상세 standard

Ref.	부품명	재질
1	Fixed part	Ceramic
2	Rotating part	Carbon
3	Gasket	EPDM
4	Bellows	EPDM
5	Spring	EN 1.4402 (AISI 316)
6	Structure/frame	EN 1.4402 (AISI 316)
7	Retainer ring	EN 1.4402 (AISI 316)

매카니컬실 TE version (high temperature)



부품상세 TE version (high temperature)

Ref.	부품명	재질
1	Fixed part	Ceramic
2	Rotating part	Carbon
3	Gasket	EPDM
4	O-Ring	EPDM
5	O-Ring	EPDM
6	Spring	EN 1.4402 (AISI 316)
7	Retainer ring	EN 1.4301 (AISI 304)

HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

전기관련표

모델		P_2		Capacitor 단상		P_1		Absorbed Current [A]			
단상 220-230V	삼상 220/380-460V	[HP]	[kW]	μF	V_c	단상 [kW]	삼상 [kW]	단상 220-230V	삼상 220V	삼상 380V	삼상 460V
MATRIX 3-2T6/0.65M	MATRIX 3-2T6/0.65	0,9	0,65	14	450	0,97	0,90	4,7	2,8	1,6	1,5
MATRIX 3-3T6/0.9M	MATRIX 3-3T6/0.9	1,2	0,9	25	450	1,34	1,50	6,3	3,8	2,2	2,2
MATRIX 3-4T6/1.3M	MATRIX 3-4T6/1.3	1,8	1,3	35	450	1,70	2,00	7,7	5,7	3,3	2,9
MATRIX 3-5T6/1.5M	MATRIX 3-5T6/1.5	2	1,5	35	450	1,88	2,90	8,7	8,1	4,7	4,3
-	MATRIX 3-6T6/2.2	3	2,2	-	-	-	2,90	-	8,1	4,7	4,3
MATRIX 5-2T6/0.9M	MATRIX 5-2T6/0.9	1,2	0,9	25	450	1,34	1,50	6,3	3,8	2,2	2,2
MATRIX 5-3T6/1.3M	MATRIX 5-3T6/1.3	1,8	1,3	35	450	1,70	2,00	7,7	5,7	3,3	2,9
-	MATRIX 5-4T6/2.2	3	2,2	-	-	-	2,90	-	8,1	4,7	4,3
-	MATRIX 5-5T6/2.2	3	2,2	-	-	-	2,90	-	8,1	4,7	4,3
-	MATRIX 5-6T6/3	4	3	-	-	-	3,90	-	10,5	6,1	5,6
MATRIX 10-2T6/1.5M	MATRIX 10-2T6/1.5	2	1,5	35	450	1,88	2,90	8,7	8,1	4,7	4,3
-	MATRIX 10-3T6/2.2	3	2,2	-	-	-	2,90	-	8,1	4,7	4,3
-	MATRIX 10-4T6/3	4	3	-	-	-	3,90	-	10,5	6,1	5,6
-	MATRIX 10-5T6/4	5,5	4	-	-	-	5,10	-	14,7	8,5	8,0
-	MATRIX 18-2T6/3	4	3	-	-	-	3,90	-	10,5	6,1	5,6
-	MATRIX 18-3T6/4	5,5	4	-	-	-	5,10	-	14,7	8,5	8,0

EBARA

EBARA

CDA

DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

60 Hz

CDA

DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in cast iron

Cast iron dual impeller centrifugal electric pumps.

용도

- 가압시설
- 소규모관개
- 세척기
- 세차

기술정보

- 산업용기계부착가능

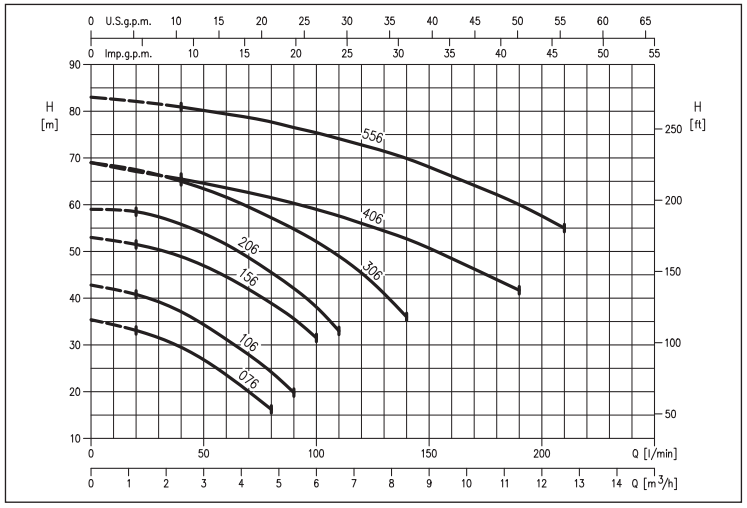
기술자료

- 최대사용압력:CDA076-106:6bar,
  그외:10bar
- 최대유체온도:
  CDA076 - 106:+40°C,
  그외:+90°C
- 자체환기2극비동기식모터
- 절연등급:F
- 보호등급:IP44
- 220-230V±6%,60Hz단상
  220/380V-6%+10%,60Hz삼상
- 흡입구연결:
  CDA076-106:G1
  CDA156 - 206 - 306:G1¼,CDA406 - 556:G1½
- 토출구연결:CDA076-106-156-206-306:G1
  CDA406 - 556:G1¼

재료

- Pump body in cast iron
- Mechanical seal in Carbon/Ceramic/NBR
- Impeller in PPE+PS reinforced with fibreglass for CDA 076 - 106, in brass for the rest of the range
- Shaft in AISI 303 for CDA 076 - 106 - 156 - 206 - 306, in AISI 304 for CDA 406 - 556
- Support in aluminium for CDA 076 - 106, in cast iron for the rest of the range
- Seal housing disc in AISI 304 for CDA 076 - 106, in cast iron built-in the motor bracket for the rest of the range

성능곡선 (according to ISO 9906 Attachment A)



식별코드

CDA | 156 | M

- M: 단상
- T: 삼상

동력 [HP]: 076, 106, 156, 206, 306, 406, 556

모델

CDA

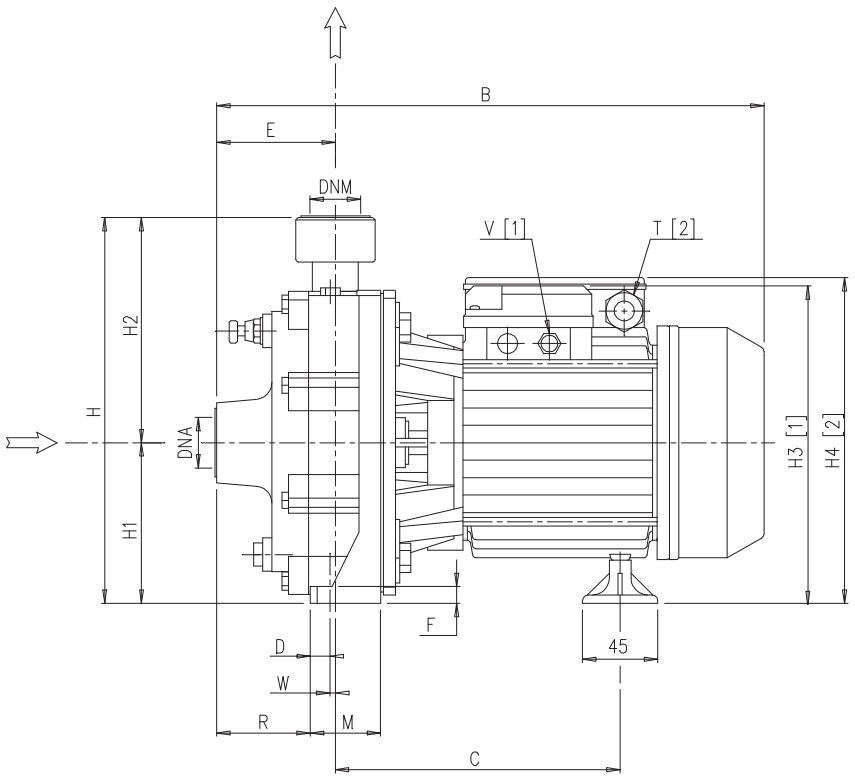
DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in cast iron

성능표

모델 단상 220-230V	모델 삼상 220/380V	P_2 [HP]	P_2 [kW]	Q=유량 l/min	20	40	60	80	90	100	110	120	140	160	190	210
				m^3/h	1,2	2,4	3,6	4,8	5,4	6	6,6	7,2	8,4	9,6	11,4	12,6
				H=양정 [m]												
CDA 076 M	CDA 076 T	0,75	0,55		33,1	29,5	23,5	16,2	-	-	-	-	-	-	-	-
CDA 106 M	CDA 106 T	1	0,75		41,0	37,0	31,0	24,0	19,8	-	-	-	-	-	-	-
CDA 156 M	CDA 156 T	1,5	1,1		51,5	49,0	44,5	39,0	35,5	31,5	-	-	-	-	-	-
CDA 206 M	CDA 206 T	2	1,5		58,5	56,0	51,5	45,5	42,0	38,0	33,0	-	-	-	-	-
-	CDA 306 T	3	2,2		-	65,0	61,5	57,0	55,0	52,0	49,0	45,5	36,0	-	-	-
-	CDA 406 T	4	3		-	65,5	63,5	61,5	60,5	59,0	57,5	56,0	52,5	48,5	41,5	-
-	CDA 556 T	5,5	4		-	81,0	79,5	77,5	76,5	75,5	74,0	73,0	70,0	66,0	60,0	55,0

외형도



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

외형표

모델	외형치수 [mm] A	B	C	D	E	F	H	H1	H2	[1] H3	[2] H4	M	M1	N	N1	R	[2] T	[1] V	W	S	DNA	DNM	중량 [kg]
CDA 076 M	183	336,3	179,8	8,3	73	9	227	97	130	-	198	42	40	140	180	57,5	PG11	-	6,8	9,5	G1	G1	13,3
CDA 076 T	183	336,3	179,8	8,3	73	9	227	97	130	197,5	-	42	40	140	180	57,5	-	PG11	6,8	9,5	G1	G1	13,8
CDA 106 M	183	336,3	179,8	8,3	73	9	227	97	130	-	198	42	40	140	180	57,5	PG11	-	6,8	9,5	G1	G1	14,5
CDA 106 T	183	336,3	179,8	8,3	73	9	227	97	130	197,5	-	42	40	140	180	57,5	-	PG11	6,8	9,5	G1	G1	15,0
CDA 156 M	209	394,8	218,3	8,3	86	9	265	110	155	-	242	48	40	155	195	65,5	PG13,5	-	12,3	9,5	G1¼	G1	23,6
CDA 156 T	194	394,8	218,3	8,3	86	9	265	110	155	224	-	48	40	155	195	65,5	-	PG11	12,3	9,5	G1¼	G1	23,0
CDA 206 M	209	410,8	218,3	8,3	86	9	265	110	155	-	242	48	40	155	195	65,5	PG13,5	-	12,3	9,5	G1¼	G1	25,5
CDA 206 T	194	408	218,3	8,3	86	9	265	110	155	224	-	48	40	155	195	65,5	-	PG11	12,3	9,5	G1¼	G1	27,4
CDA 306 T	194	410,8	218,3	8,3	86	9	265	110	155	224	-	48	40	155	195	65,5	-	PG11	12,3	9,5	G1¼	G1	25,8
CDA 406 T	228	467,3	225,3	12	95,5	12	308,5	133,5	175	264,5	-	57	50	180	230	71,5	-	G1½	12	12	G1½	G1¼	46,8
CDA 556 T	228	508	225,3	12	95,5	12	308,5	133,5	175	264,5	-	57	50	180	230	71,5	-	G1½	12	12	G1½	G1¼	52,2

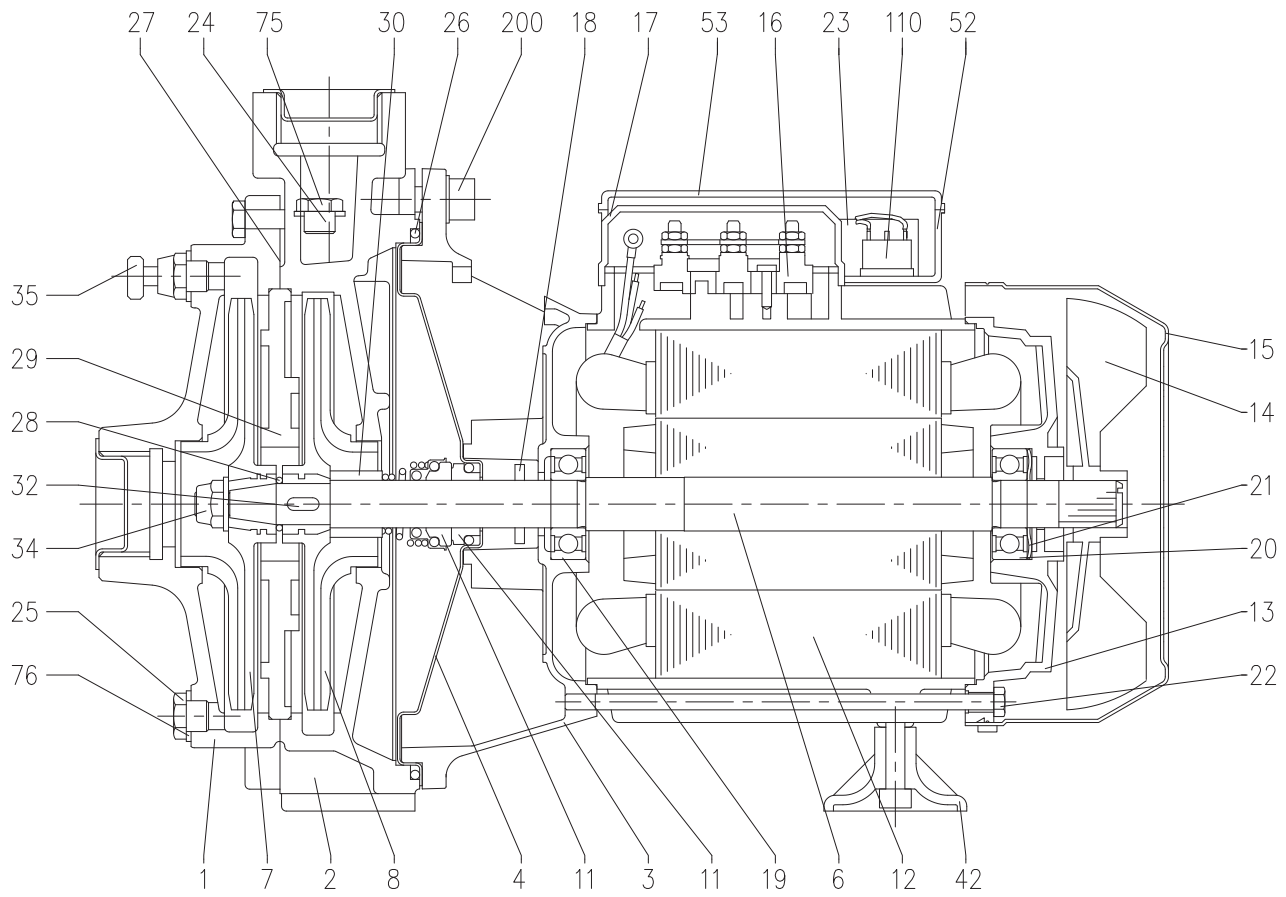
[1]= Three phase only
[2]= Single phase only

CDA

DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in cast iron

단면도



부품표

Ref.	부품명	재질	Ref.	부품명	재질
1	Pump body	Cast iron	23	Capacitor [2]	-
2	Pump body	Cast iron	24	Filler cap	Brass
3	Motor support	see page 3	25	Drain plug	Brass
4	Seal housing disc	see page 3	26	O-Ring	NBR
6	Shaft	see page 3	27	Pump body gasket	Compression cellulose fibres
7	Impeller	see page 3	28	O-Ring	NBR
8	Impeller	see page 3	29	Intermediate disc	Cast iron
11	Mechanical seal	Carbon/Ceramic/NBR	30	Seal spacer	Brass
12	Motor case	-	32	Key	AISI 316
13	Motor cover	Aluminium	34	Impeller nut [3]	AISI 304
14	Fan	PP	35	Air breather valve	Brass
15	Fan cover	Galvanised Fe P04	42	Foot	PP
16	Terminal box	-	52	Terminal box [2]	ABS
17	Terminal box cover [1]	Aluminium	53	Terminal box cover [2] [5]	ABS
18	Spray protector ring	NBR	75	Washer	Aluminium
19	Bearing (pump side)	-	76	Washer	Aluminium
20	Bearing (motor side)	-	110	Motorprotector [4]	-
21	Adjusting ring	Steel C70	200	Screw (pump body)	Zn Steel Cl. 8.8 ISO 898-1
22	Tie-rod	Galvanised Fe 42			

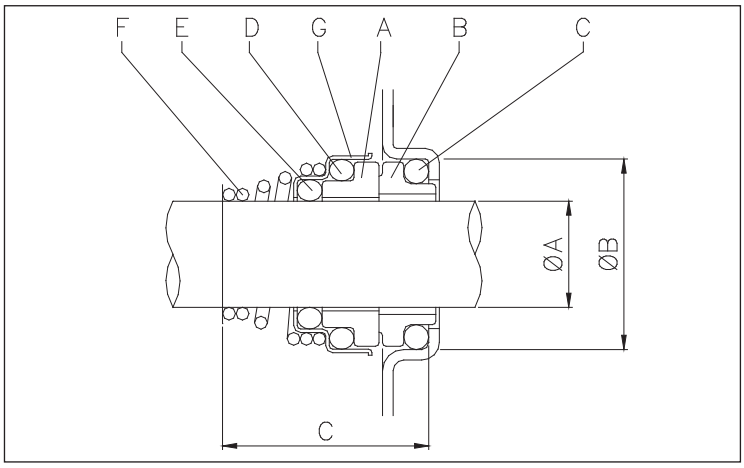
[1]= For three phase only [2]= For single phase only
[3]= For the version with brass impeller only
[4]= For single phase CDA 156 - 206 versions only
[5]= With gasket in NBR for CDA 076, CDA 106 single phase versions only

CDA

DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in cast iron

매카니컬실



부품상세

Ref.	부품명	재질
A	Rotating part	Ceramic
B	Fixed part	Carbon
C	O-Ring	NBR
D	O-Ring	NBR
E	O-Ring	NBR
F	Spring	AISI 316
G	Structure/frame	AISI 304

외형치수

단상	삼상	ØA	ØB	C
CDA 076 M	CDA 076 T	15	26	29
CDA 106 M	CDA 106 T	15	26	29
CDA 156 M	CDA 156 T	18	30,9	32
CDA 206 M	CDA 206 T	18	30,9	32
-	CDA 306 T	18	30,9	32
-	CDA 406 T	20	30,9	33
-	CDA 556 T	20	30,9	33

전기관련표

모델		P_2		Capacitor 단상		P_1		Absorbed Current [A]		
단상 220-230V	삼상 220/380V	[HP]	[kW]	μF	V_c	단상 [kW]	삼상 [kW]	단상 220-230V	삼상 220V	삼상 380V
CDA 076 M	CDA 076 T	0,75	0,55	14	450	1,1	0,9	5,3	2,8	1,6
CDA 106 M	CDA 106 T	1	0,75	20	450	1,3	1	6,7	2,9	1,7
CDA 156 M	CDA 156 T	1,5	1,1	35	450	1,92	2	9,1	5,7	3,3
CDA 206 M	CDA 206 T	2	1,5	35	450	2,26	2,9	10,5	8,1	4,7
-	CDA 306 T	3	2,2	-	-	-	2,9	-	8,1	4,7
-	CDA 406 T	4	3	-	-	-	3,8	-	11,1	6,4
-	CDA 556 T	5,5	4	-	-	-	5,1	-	14,7	8,5

EBARA

EBARA

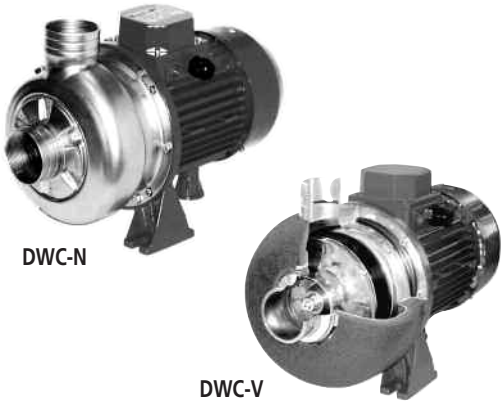
DWC

CLOSED IMPELLER CENTRIFUGAL ELECTRIC PUMPS

60 Hz

DWC

CLOSED IMPELLER CENTRIFUGAL ELECTRIC PUMPS
in AISI 304



Closed impeller centrifugal electric pumps in AISI 304 stainless steel.

용도
- 냉장,냉방 및 난방 시스템
- 냉각장치
- 세척시스템
- 생활용 및 산업용수 공급

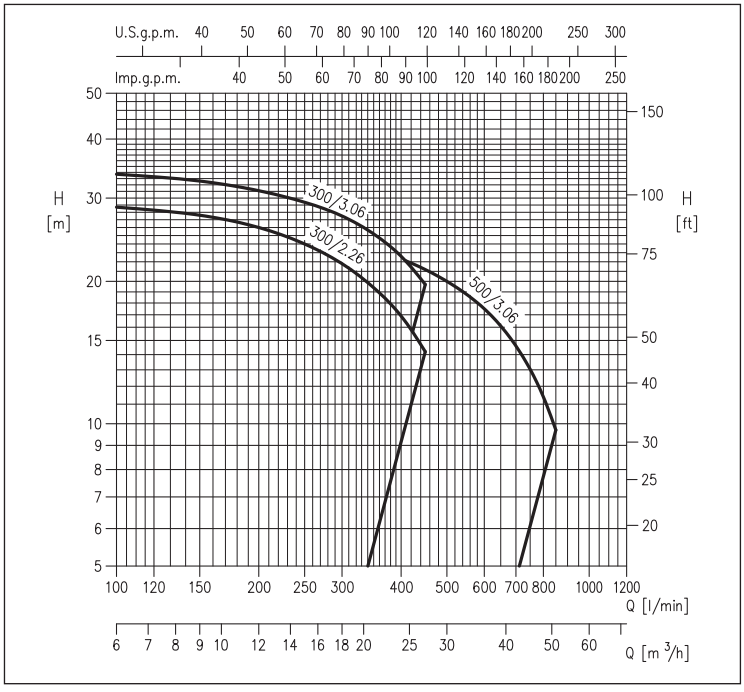
기술정보
- Threaded (DWC - N) and Victaulic connections (DWC - V) **버전가능**
- Insulation as per standard for the Victaulic version (DWC-V)

기술자료
- **최대사용압력:8bar**
- **유체온도:** -15°C **부터** +90°C **까지**
- **자체환기2극비동기식모터**
- **절연등급:** F
- **보호등급:**IP55
- 220/380-460V -6%+10%, 60Hz **삼상**
- DWC - N **흡토출구연결 : G2**
- DWC - V **흡토출구연결 :** Ø2" (60.3 mm)

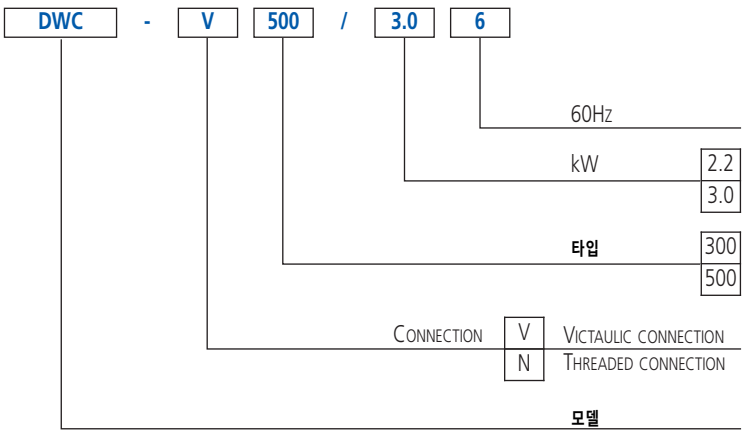
재질
- **Pump body, casing cover, impeller and shaft in AISI 304**
- **Bracket and motor casing in aluminium**
- **Mechanical seal in:**
  - **Ceramic/Carbon/EPDM (standard)**
  - **Ceramic/Carbon/FPM (H version)**
  - **SiC/SiC/FPM (HS version)**
  - **Tungsten carbide/Tungsten carbide/FPM (HW version)**

옵션 (on request)
- **DWC body insulation casing**

성능곡선 (according to ISO 9906 Attachment A)



식별코드



DWC

CLOSED IMPELLER CENTRIFUGAL ELECTRIC PUMPS

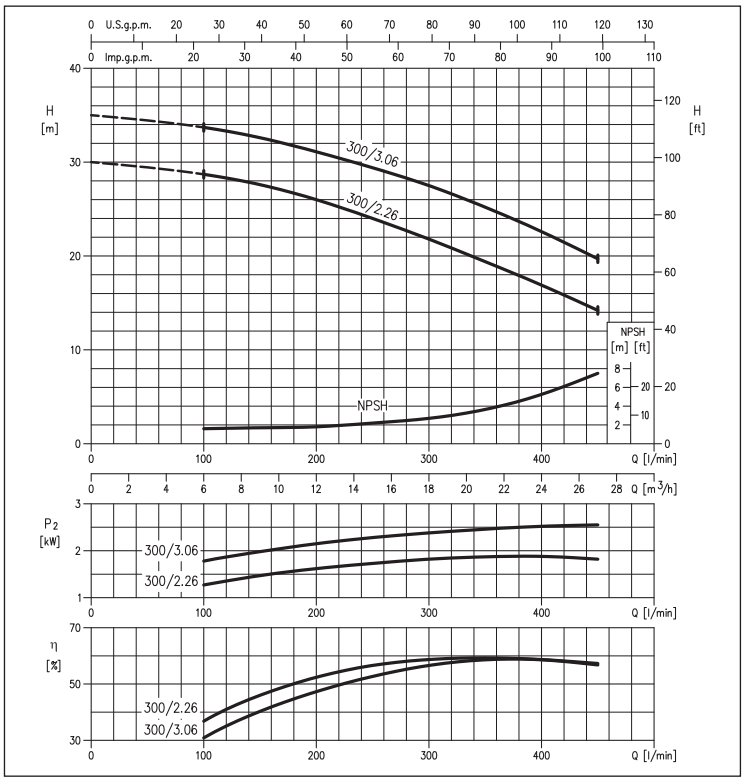
in AISI 304

성능표

모델 삼상 220/380-460V	P_2 [HP]	P_2 [kW]	Q=유량 l/min	100	150	200	250	300	350	400	450	500	600	700	800	850
			m^3/h	6	9	12	15	18	21	24	27	30	36	42	48	51
			H=양정 [m]													
DWC 300/2.26	3	2,2		28,7	27,6	26,0	24,0	21,8	19,4	16,9	14,2	-	-	-	-	-
DWC 300/3.06	4	3		33,7	32,6	31,1	29,4	27,5	25,2	22,6	19,7	-	-	-	-	-
DWC 500/3.06	4	3		-	-	25,8	25,1	24,3	23,3	22,3	21,2	20,0	17,5	14,6	11,4	9,7

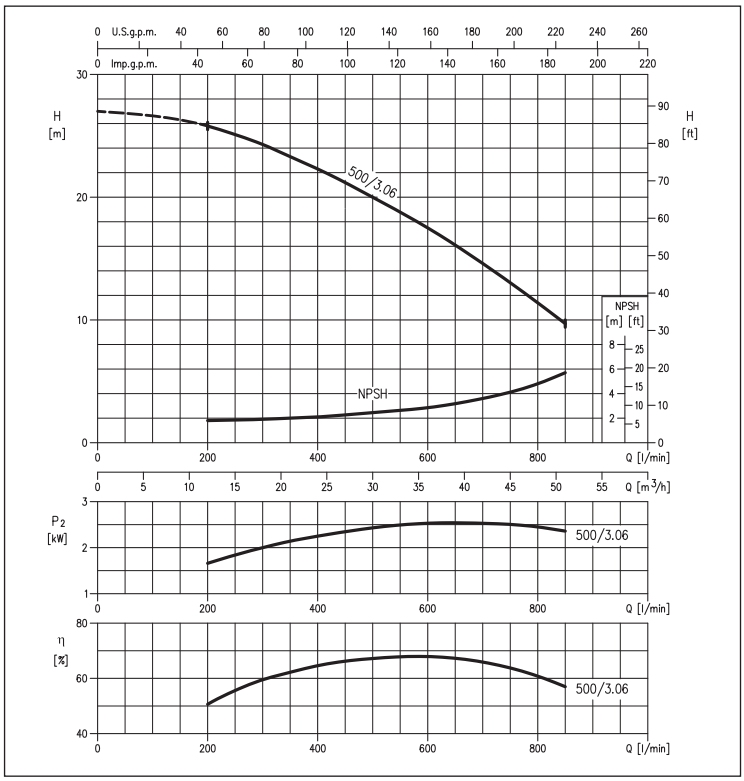
DWC 300 range 성능곡선

(according to ISO 9906 Attachment A)

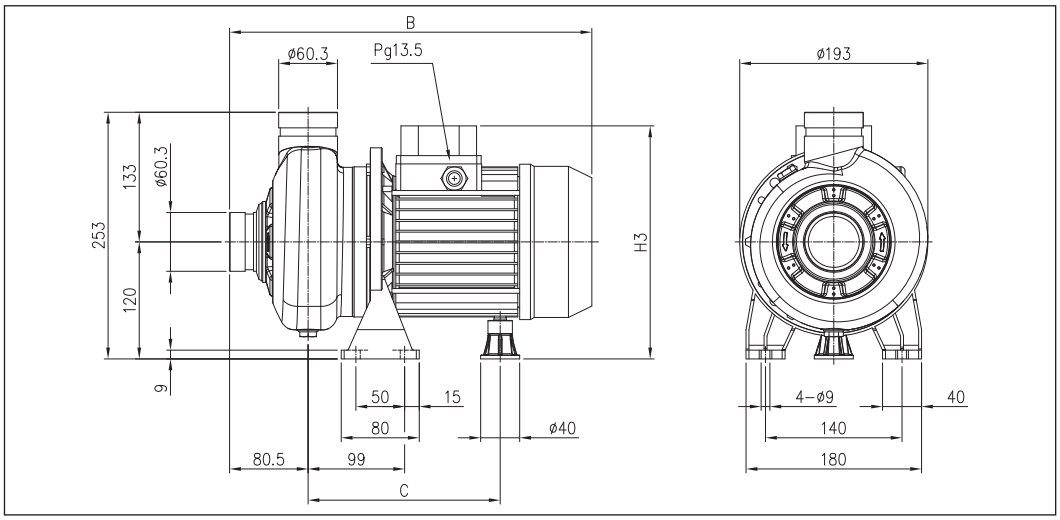


DWC 500 성능곡선

(according to ISO 9906 Attachment A)



DWC-V 외형도 (VICTAULIC CONNECTION)



외형표

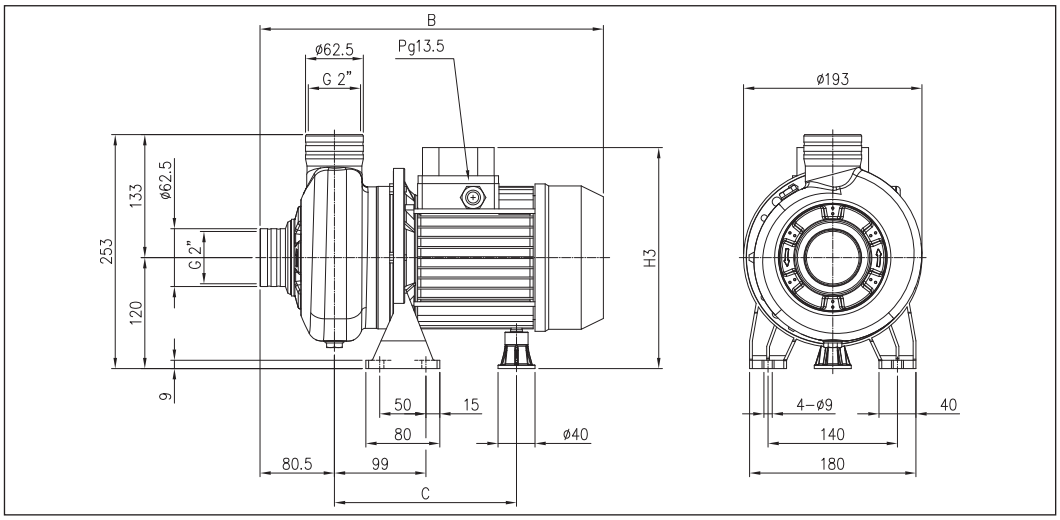
모델	외형치수 [mm] B	C	H3	중량 [kg]
DWC-V 300/2.26	418	230÷241	244	19,7
DWC-V 300/3.06	457	230÷241	244	21,5
DWC-V 500/3.06	457	230÷241	244	22,3

DWC

CLOSED IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

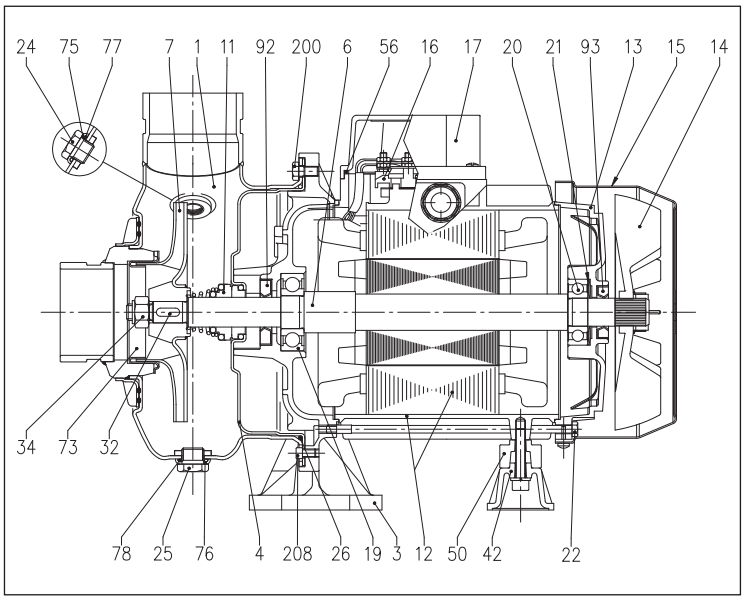
DWC-N 외형도 (THREADED CONNECTION)



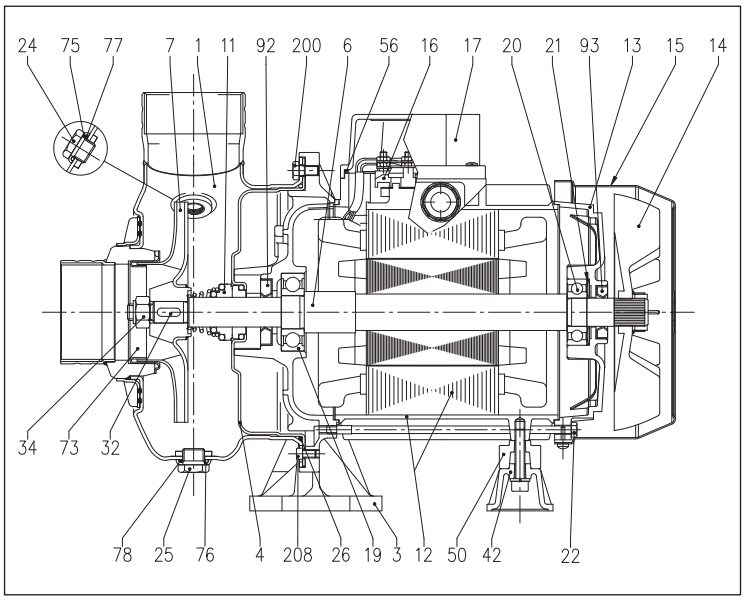
외형표

모델	외형치수[mm] B	C	H3	중량 [kg]
DWC-N 300/2.26	418	230÷241	244	19,7
DWC-N 300/3.06	457	230÷241	244	21,5
DWC-N 500/3.06	457	230÷241	244	22,3

DWC-V 단면도 (VICTAULIC CONNECTION)



DWC-N 단면도 (THREADED CONNECTION)



부품표

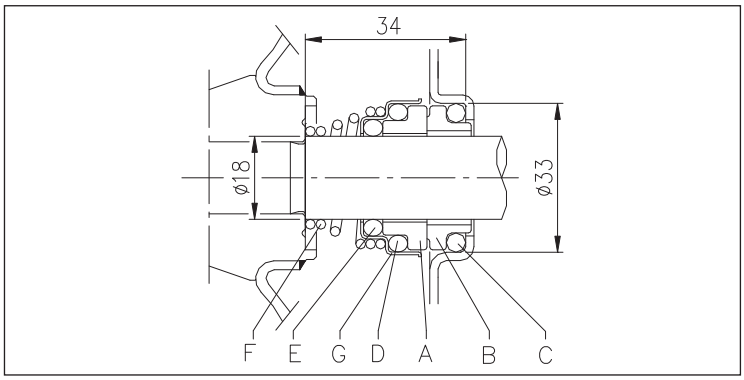
Ref.	부품명	재질	Ref.	부품명	재질
001	Pump body	EN 1.4301 (AISI 304)	025	Drain plug	EN 1.4301 (AISI 304)
003	Motor bracket	Aluminium	026	O-Ring	EPDM / FPM (H, HS and HW versions)
004	Casing cover	EN 1.4301 (AISI 304)	032	Key	EN 1.4401 (AISI 316)
006	Shaft	EN 1.4301 (AISI 304)	034	Impeller nut	EN 1.4301 (AISI 304)
007	Impeller	EN 1.4301 (AISI 304)	042	Foot	Aluminium / Galvanised Steel
011	Mechanical seal	Ceramic/Carbon/EPDM	050	Spacer	-
012	Motor frame with stator	-	056	Box gasket	NBR
013	Motor cover	Aluminium	073	Casing ring	EN 1.4301 (AISI 304)
014	Fan	PA6	075	Washer	EN 1.4301 (AISI 304)
015	Fan cover	Galvanised steel Fe P04	076	Washer	EN 1.4301 (AISI 304)
016	Terminal board	-	077	O-Ring	EPDM / FPM (H, HS and HW versions)
017	Terminal board cover	Aluminium	078	O-Ring	EPDM / FPM (H, HS and HW versions)
019	Bearing (pump side)	-	092	Lip seal	-
020	Bearing (motor side)	-	093	Lip seal	-
021	Adjusting ring	Steel C70	200	Screw (pump body)	Stainless steel A2-70 class ISO 3506/1
022	Tie-rod	Galvanised Fe 42	208	Screw	Stainless steel A2-70 class ISO 3506/1
024	Priming plug	EN 1.4301 (AISI 304)			

DWC

CLOSED IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

매카니컬실 DWC standard



부품상세

Ref.	부품명	재질
A	Rotating part	Ceramic
B	Fixed part	Carbon
C	O-Ring	EPDM
D	O-Ring	EPDM
E	O-Ring	EPDM
F	Spring	AISI 316
G	Structure/frame	AISI 304

특수매카니컬실 (on request)

Name	재질		
	H version	HS version	HW version
Fixed Part	Carbon	SiC	Tungsten Carbide
Rotating Part	Ceramic	SiC	Tungsten Carbide
Elastomers	FPM	FPM	FPM
Spring	AISI 316	AISI 316	AISI 316
Structure/Frame	AISI 304	AISI 316	AISI 304

전기관련표

모델 삼상 220/380-460V	P_2		P_1	Absorbed Current [A] 삼상		
	[HP]	[kW]	삼상 [kW]	220V	380V	460V
DWC 300/2.26	3	2,2	2,9	7,0	4,1	4,1
DWC 300/3.06	4	3	3,9	10,5	6,1	5,6
DWC 500/3.06	4	3	3,9	10,5	6,1	5,6

EBARA

EBARA

DWO

OPEN IMPELLER CENTRIFUGAL ELECTRIC PUMPS

60 Hz

DWO

OPEN IMPELLER CENTRIFUGAL ELECTRIC PUMPS
in AISI 304

Open impeller centrifugal electric pumps in AISI 304 stainless steel.

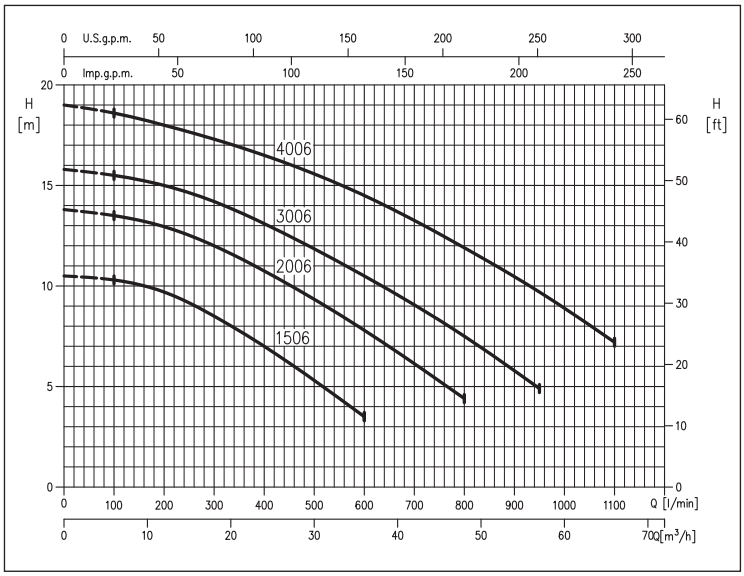
용도
- 산업용,재활용 자재 세척
- 금속부품의 세정 및 표면처리,캔,병,항아리,유리용기 세척
- 식기세척기,유리그릇세척기,컵 세척기
- 도장부스

기술정보
- 뛰어난 내구성
- 컴팩트한 사이즈
- 저소음

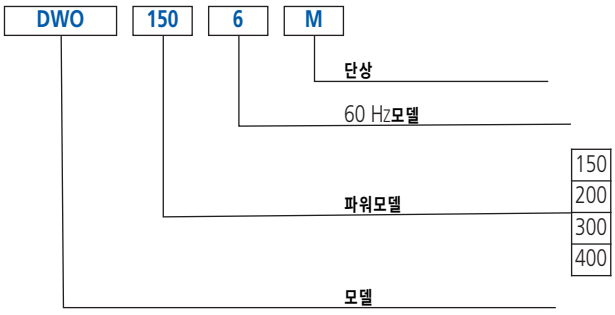
기술자료
- 최대사용압력 : 8bar
- 최대유체온도 : +90°C
  H-HS-HW 버전 +110°C
- 통과가능한 최대 고형물 크기 : 9mm
- 자체환기 2극 비동기식 모터
- 절연등급 F
- 보호등급 IP55
- 220-230V ± 6%, 60Hz 단상
  220/380V -6 +10% 60Hz 삼상
- 흡입구 연결 : DWO 3006~4006 - G2½ , 그외 G2
- 토출구 연결 : G2

재료
- Pump body, seal housing disc, impeller and shaft in AISI 304
- Support and motor casing in aluminium
- Mechanical seal in: Ceramic/Carbon/NBR (standard)
  - Ceramic/Carbon/FPM (H version)
  - SiC/SiC/FPM (HS version)
  - Tungsten carbide/Tungsten carbide/FPM (HW version)

성능곡선 (according to ISO 9906 Attachment A)



식별코드



DWO

OPEN IMPELLER CENTRIFUGAL ELECTRIC PUMPS

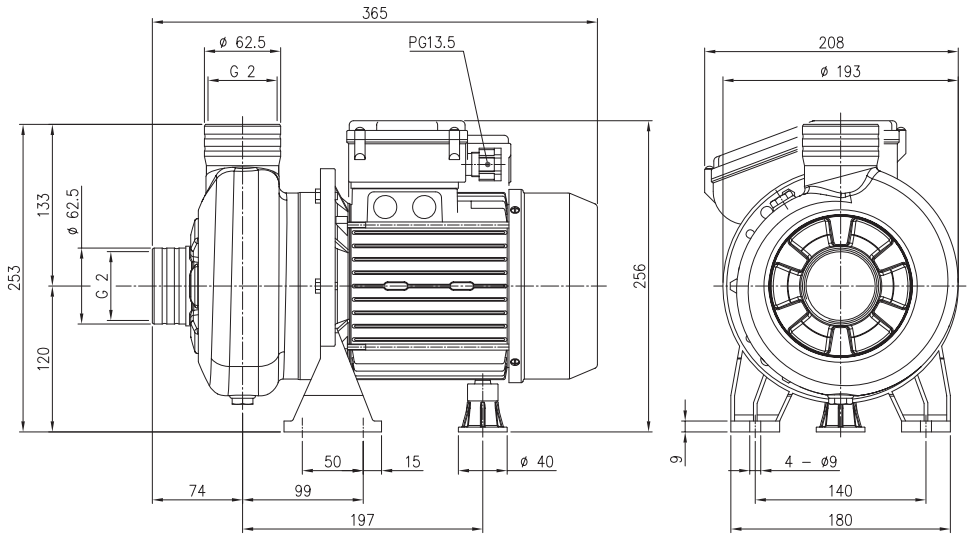
in AISI 304

성능표

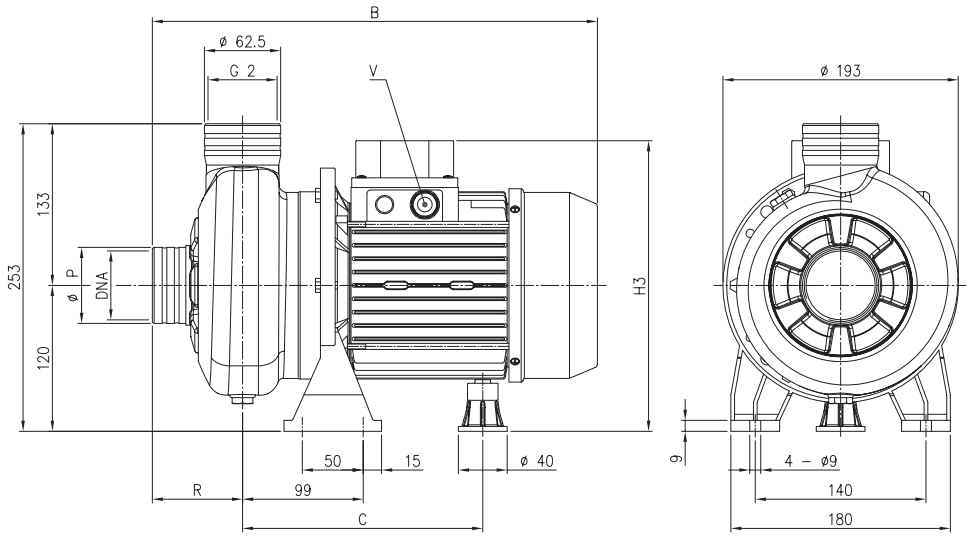
모델 단상 220-230V	모델 삼상 220/380V	P_2 [HP]	P_2 [kW]	Q=유량 l/min	100	200	300	400	600	800	950	1100
				m^3/h	6	12	18	24	33	42	57	66
				H=양정 [m]								
DWO 1506 M	DWO 1506	1,5	1,1		10,3	9,7	8,5	7,0	3,5	-	-	-
DWO 2006 M	DWO 2006	2	1,5		13,5	12,9	12,0	10,7	7,8	4,4	-	-
-	DWO 3006	3	2,2		15,5	15,0	14,2	13,1	10,5	7,5	4,9	-
-	DWO 4006	4	3		18,6	18,0	17,3	16,5	14,5	11,9	9,7	7,2

외형도

[1~] Single phase
DWO 1506
DWO 2006



[3~] Three phase
DWO 1506
DWO 2006
DWO 3006
DWO 4006



외형표

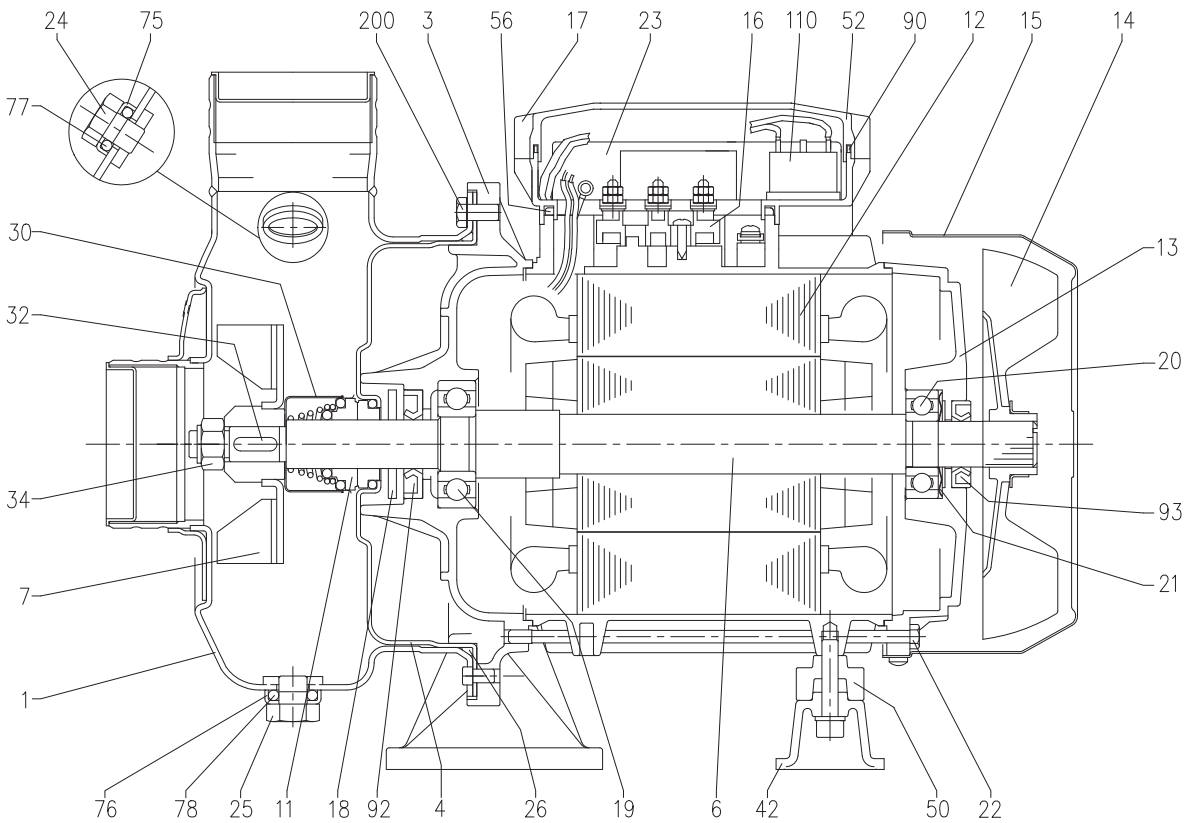
모델	외형치수 [mm] B [1]	C [1]	H3 [1]	R [1]	P [1]	V [1]	DNA [1]	중량 [kg] [2]	[1]
DWO 1506	365	197	239	74	62,5	PG11	G2	13,6	14,6
DWO 2006	378	197	239	74	62,5	PG11	G2	15,7	16,4
DWO 3006	416	230÷241	244	78	80	PG13,5	G2½	-	19,2
DWO 4006	455	230÷241	244	78	80	PG13,5	G2½	-	22,3

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

DWO

OPEN IMPELLER CENTRIFUGAL ELECTRIC PUMPS
in AISI 304

단면도



부품표

Ref.	부품명	재질	Ref.	부품명	재질
1	Pump body	EN 1.4301 (AISI 304)	25	Drain plug	AISI 303
3	Motor support	Aluminium	26	O-Ring	NBR
4	Seal housing disc	EN 1.4301 (AISI 304)	30	Spray protector washer	EN 1.4301 (AISI 304)
6	Shaft	EN 1.4301 (AISI 304) Part in contact with the liquid	32	Key	EN 1.4301 (AISI 304)
7	Impeller	EN 1.4301 (AISI 304)	34	Impeller nut	EN 1.4301 (AISI 304)
11	Mechanical seal	Carbon/Ceramic/NBR	42	Foot	Aluminium
12	Motor case	-	50	Foot spacer	-
13	Motor cover	Aluminium	52	Capacitor-holder box [2]	PP
14	Fan	PP	56	Terminal box cover gasket	NBR
15	Fan cover	Galvanised Fe P04	75	Washer	EN 1.4301 (AISI 304)
16	Terminal box	-	76	Washer	EN 1.4301 (AISI 304)
17	Terminal box cover [1]	Aluminium	77	O-Ring	NBR
18	Spray protector ring	NBR	78	O-Ring	NBR
19	Bearing (pump side)	-	90	Terminal box cover box gasket [2]	NBR
20	Bearing (motor side)	-	92	Sealing ring	-
21	Adjusting ring	Steel C70	93	Sealing ring	-
22	Tie-rod	Galvanised Fe 42	110	Motorprotector [2]	-
23	Capacitor [2]	-	200	Screw (pump body)	A2 UNI7323 stainless steel
24	Filler cap	AISI 303			

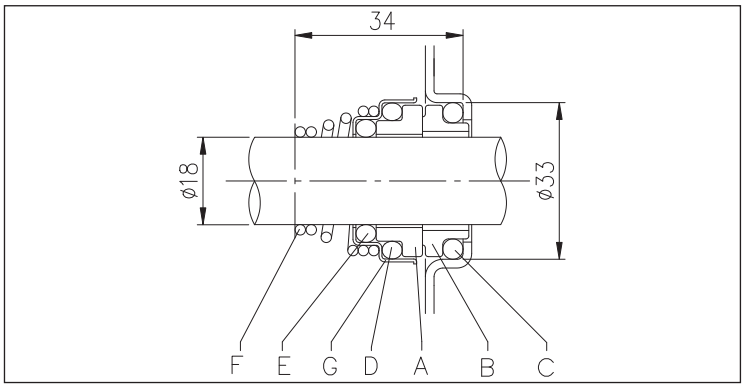
[1]= Three phase only
[2]= Single phase only

DWO

OPEN IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

매카니컬실



부품상세

Ref.	부품명	재질
A	Rotating part	Ceramic
B	Fixed part	Carbon
C	O-Ring	NBR
D	O-Ring	NBR
E	O-Ring	NBR
F	Spring	AISI 316
G	Structure/frame	AISI 304

특수 매카니컬실 (on request)

부품명	재질		
	H version	HS version	HW version
Fixed Part	Carbon	SiC	Tungsten Carbide
Rotating Part	Ceramic	SiC	Tungsten Carbide
Elastomers	FPM	FPM	FPM
Spring	AISI 316	AISI 316	AISI 316
Structure/Frame	AISI 304	AISI 316	AISI 316

전기관련표

모델		P_2		Capacitor 단상		P_1		Absorbed Current [A]		
단상 220-230V	삼상 220/380V	[HP]	[kW]	μF	V_c	단상 [kW]	삼상 [kW]	단상 220-230V	삼상 220V	삼상 380V
DWO 1506 M	DWO 1506	1,5	1,1	35	450	1,5	2	7,2	5,7	3,3
DWO 2006 M	DWO 2006	2	1,5	35	450	2,06	2,9	9,8	8,1	4,7
-	DWO 3006	3	2,2	-	-	-	2,9	-	7,0	4,1
-	DWO 4006	4	3	-	-	-	3,9	-	10,5	6,1

EBARA

EBARA

COMPACT

HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

60 Hz

COMPACT

HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

in cast iron

Cast iron horizontal multistage centrifugal electric pumps.

용도

- 생활용수 부스터
- 가압
- 소규모 관개
- 세차
- 청수이송

기술정보

- 저소음
- 컴팩스한 사이즈,조작용이

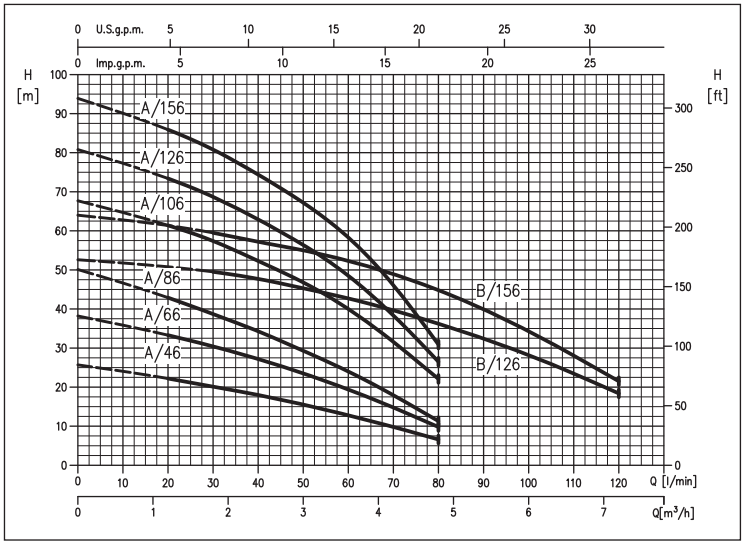
기술자료

- 최대사용압력 : 10 bar
- 최대유체온도 : 40°C
- 자체환기 2극 비동기식 모터
- 절연등급 : F
- 보호등급 IP44
- 220-230 ±6%, 60Hz **단상**,
  220/380 -6%+10%, 60Hz **삼상**
- 흡입구 : **COMPACT B -** G1¼ , COMPACT A - G1
- 토출구 : G1

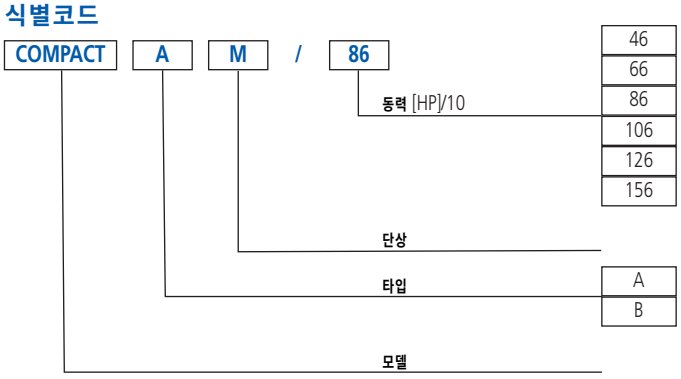
재료

- Cast iron pump body and bracket
- External pump casing in AISI 304
- Impeller and diffuser in PPE+PS reinforced with fibreglass
- Stages in PPE+PS reinforced with fibreglass/PTFE
- Shaft in AISI 416
- Mechanical seal in Carbon/Ceramic/NBR

성능곡선 (according to ISO 9906 Attachment A)



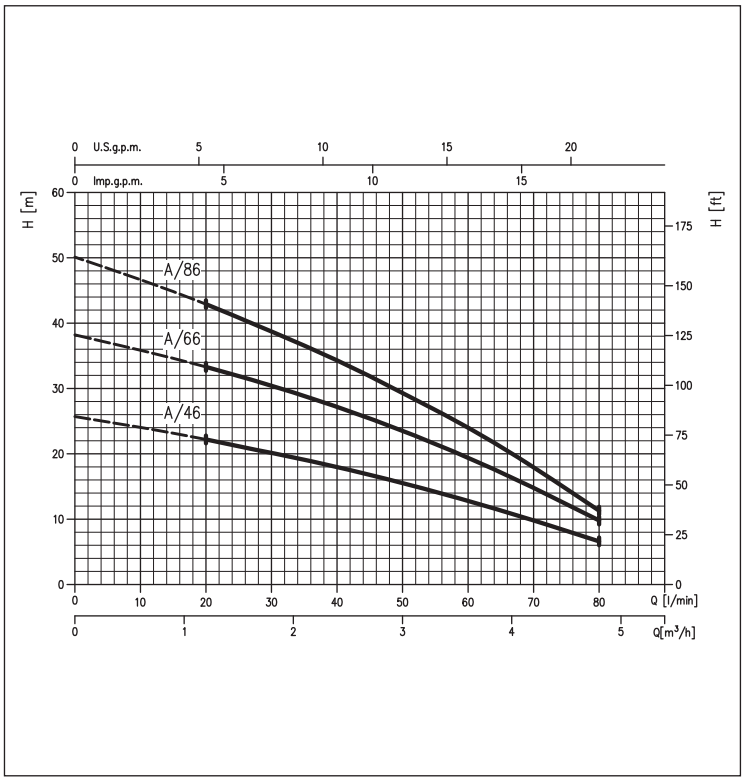
식별코드



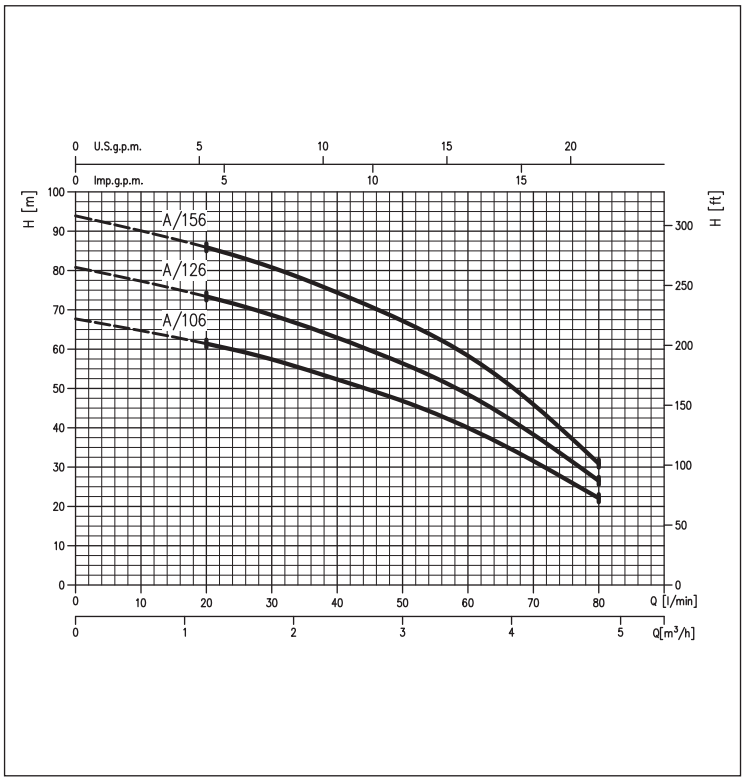
COMPACT

HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS
in cast iron

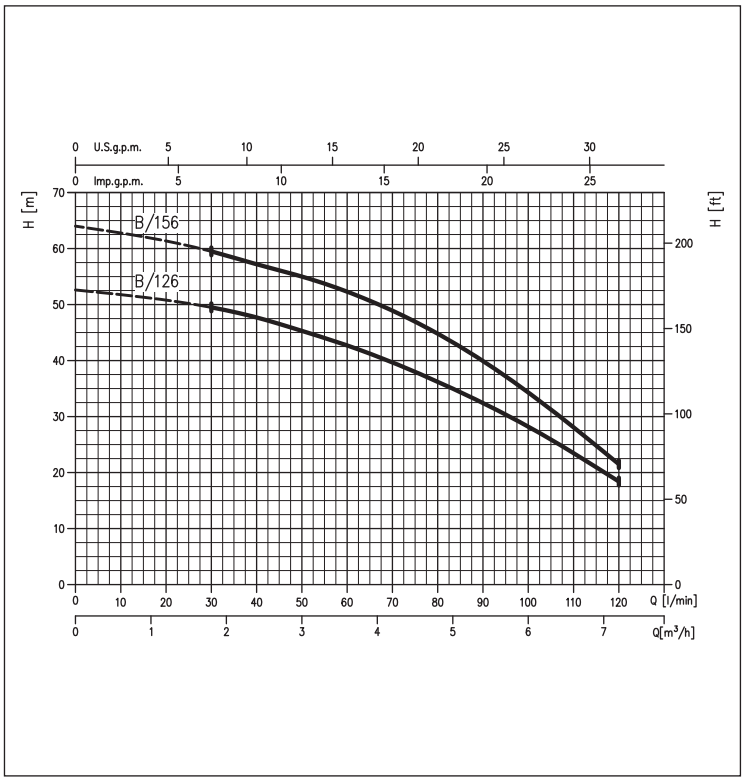
COMPACT A range 성능곡선 up to 0,6 kW
(according to ISO 9906 Attachment A)



COMPACT A range 성능곡선 from 0,75 kW and above
(according to ISO 9906 Attachment A)



COMPACT B range 성능곡선
(according to ISO 9906 Attachment A)



COMPACT

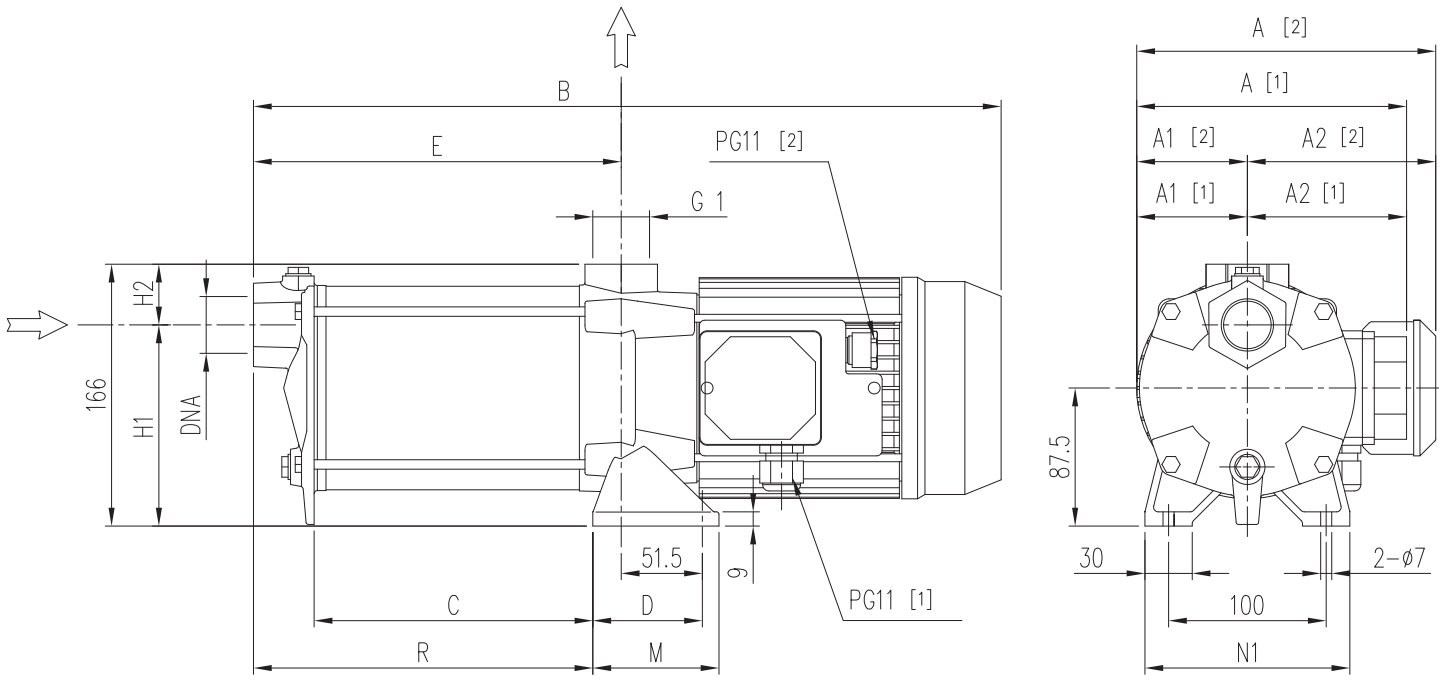
HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

in cast iron

성능표

모델 단상 220-230V	모델 삼상 220/380V	P_2 [HP]	P_2 [kW]	Q=유량 l/min	20	30	40	50	60	80	100	120
				m^3/h	1,2	1,8	2,4	3	3,6	4,8	6	7,2
				H=양정 [m]								
COMPACT AM/46	COMPACT A/46	0,4	0,3		22,2	20,1	18,0	15,5	12,8	6,6	-	-
COMPACT AM/66	COMPACT A/66	0,6	0,44		33,3	30,4	27,2	23,5	19,4	9,8	-	-
COMPACT AM/86	COMPACT A/86	0,8	0,6		43,0	38,7	34,3	29,3	24,0	11,3	-	-
COMPACT AM/106	COMPACT A/106	1	0,75		61,5	57,5	52,5	47,0	40,0	22,1	-	-
COMPACT AM/126	COMPACT A/126	1,2	0,9		73,5	68,5	63,0	56,5	48,5	26,5	-	-
COMPACT AM/156	COMPACT A/156	1,5	1,1		86,0	81,0	74,5	67,0	58,5	30,9	-	-
COMPACT BM/126	COMPACT B/126	1,2	0,9		-	49,5	47,5	45,5	42,5	36,2	28,2	18,4
COMPACT BM/156	COMPACT B/156	1,5	1,1		-	59,5	57,0	55,0	52,5	45,0	34,3	21,5

외형도



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

외형표

모델 단상	모델 삼상	외형치수 [mm] A [2]	A [1]	A1 [2]	A1 [1]	A2 [2]	A2 [1]	B [2]	B [1]	C	D	E	H1	H2	M	N1	R	DNA	중량 [kg] [2]	중량 [kg] [1]
COMPACT AM/46	COMPACT A/46	159	161	68,5	68,5	90,5	92	307,5	309,5	82	51,5	121	128	38,5	62	133	121	G 1	8,4	8,4
COMPACT AM/66	COMPACT A/66	159	161	68,5	68,5	90,5	92	333,5	335,5	108	51,5	147	128	38,5	62	133	147	G 1	9,3	9,3
COMPACT AM/86	COMPACT A/86	159	161	68,5	68,5	90,5	92	359,5	361,5	134	51,5	173	128	38,5	62	133	173	G 1	10,0	10,0
COMPACT AM/106	COMPACT A/106	169	171	70,2	70,2	98,8	101	426	428	142	69,5	199	128	38,5	80	130	181	G 1	15,0	15,0
COMPACT AM/126	COMPACT A/126	169	171	70,2	70,2	98,8	101	452	466	168	69,5	225	128	38,5	80	130	207	G 1	16,0	16,0
COMPACT AM/156	COMPACT A/156	169	171	70,2	70,2	98,8	101	490	492	194	69,5	251	128	38,5	80	130	233	G 1	17,0	17,0
COMPACT BM/126	COMPACT B/126	169	171	70,2	70,2	98,8	101	400	414	116	69,5	173	124	42,5	80	130	155	G 1¼	15,0	15,0
COMPACT BM/156	COMPACT B/156	169	171	70,2	70,2	98,8	101	438	440	142	69,5	199	124	42,5	80	130	181	G 1¼	16,0	16,0

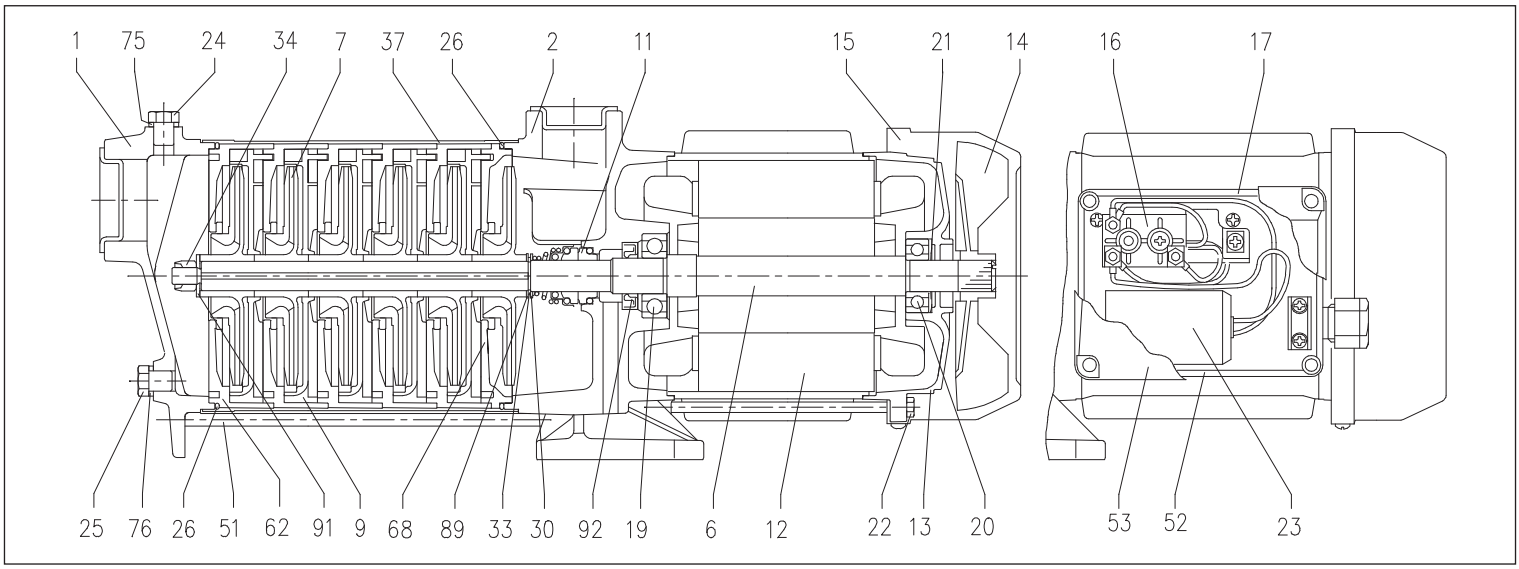
[1]= Three phase only
[2]= Single phase only

COMPACT

HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

in cast iron

단면도

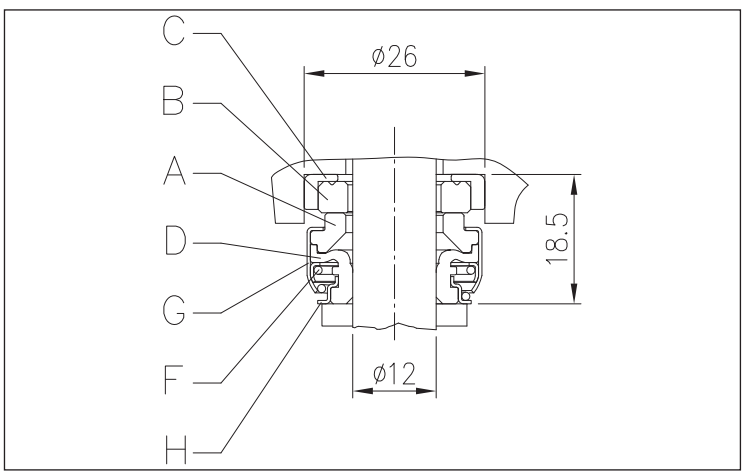


부품표

Ref.	부품명	재질	Ref.	부품명	재질
1	Suction casing	Cast iron EN-GJL-200-EN 1561	25	Drain plug	OT 58 UNI 5705
2	Delivery casing	Cast iron EN-GJL-200-EN 1561	26	O-Ring	NBR
6	Shaft	AISI 416	30	Washer	AISI 304
7	Impeller	PPE+PS reinforced with fibreglass	33	Seeger ring	AISI 420
9	Nozzle	PPE+PS reinforced with fibreglass			AISI 304
11	Mechanical seal	Carbon/Ceramic/NBR	34	Impeller nut	AISI 304
12	Motor case	-	37	External pump casing	AISI 304
13	Motor cover	Aluminium	51	Pump tie-rod	Galvanised Fe P04
14	Fan	PA6	52	Capacitor box [2]	PP
15	Fan cover	Galvanised Fe P04	53	Capacitor box cover [2]	PP
16	Terminal box	-	62	Stage housing	PPE+PS reinforced with fibreglass/PTFE
17	Terminal box cover [1]	Aluminium	68	Stage	PPE+PS reinforced with fibreglass/PTFE
19	Bearing (pump side)	-	75	Washer	Aluminium
20	Bearing (motor side)	-	76	Washer	Aluminium
21	Adjusting ring	Steel C70	89	Washer	AISI 304
22	Motor tie-rod	Galvanised Fe 42	91	Washer	AISI 304
23	Capacitor [2]	-	92	Sealing ring	NBR
24	Filler cap	OT 58 UNI 5705			

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

매카니컬실 for COMPACT up to 0.6 kW



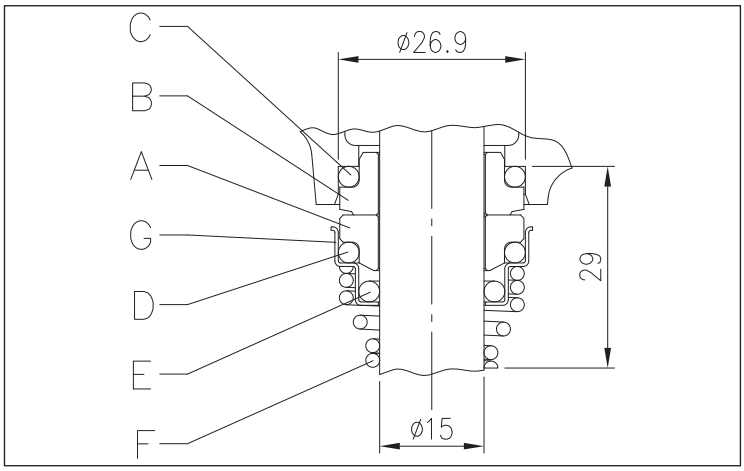
제품상세

Ref.	부품명	재질
A	Rotating part	Carbon
B	Fixed part	Ceramic
C	Gasket	NBR
D	Diaphragm	NBR
F	Spring	AISI 304
G	Structure/frame	AISI 304
H	Retainer ring	AISI 304

COMPACT

HORIZONTAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS
in cast iron

매카니컬실 for COMPACT from 0.75 kW and above



제품상세

Ref.	부품명	재질
A	Rotating part	Ceramic
B	Fixed part	Carbon
C	O-Ring	NBR
D	O-Ring	NBR
E	O-Ring	NBR
F	Spring	AISI 316
G	Structure/frame	AISI 304

전기관련표

모델		P_2		단상 Capacitor		P_1		Absorbed Current [A]		
단상 220-230	삼상 220/380	[HP]	[kW]	µF	V_c	단상 [kW]	삼상 [kW]	단상 220-230V	삼상 220V	삼상 380V
COMPACT AM/46	COMPACT A/46	0,4	0,3	10	450	0,54	0,45	2,9	1,6	0,9
COMPACT AM/66	COMPACT A/66	0,6	0,44	12,5	450	0,73	0,63	3,5	2,1	1,2
COMPACT AM/86	COMPACT A/86	0,8	0,6	14	450	0,91	0,75	4,3	2,4	1,4
COMPACT AM/106	COMPACT A/106	1	0,75	20	450	1,33	1,00	6,7	2,9	1,7
COMPACT AM/126	COMPACT A/126	1,2	0,9	31,5	450	1,53	1,50	7,0	3,8	2,2
COMPACT AM/156	COMPACT A/156	1,5	1,1	31,5	450	1,60	1,50	7,5	3,8	2,2
COMPACT BM/126	COMPACT B/126	1,2	0,9	31,5	450	1,46	1,50	6,8	3,8	2,2
COMPACT BM/156	COMPACT B/156	1,5	1,1	31,5	450	1,58	1,50	7,4	3,8	2,2

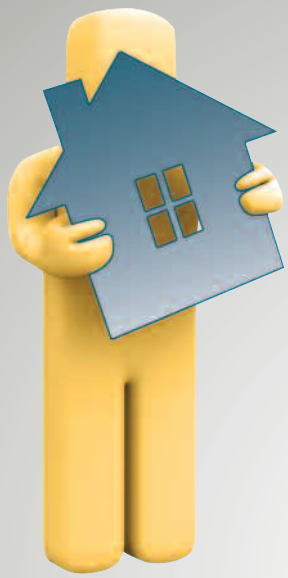
EBARA

EBARA

CVM

VERTICAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

60 Hz



CVM

VERTICAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS
in cast iron

Cast iron vertical multistage centrifugal electric pumps.

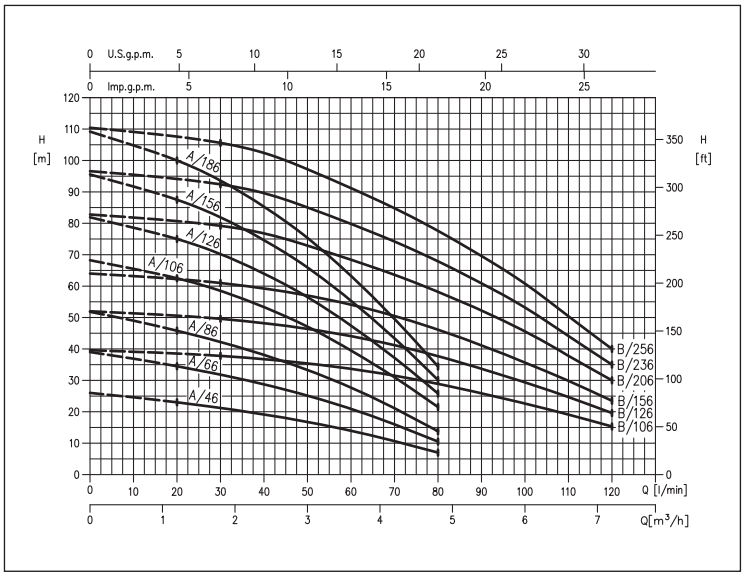
용도
- **공장**
- **가압**
- **관개**
- **세척장치**
- **청수이송**

기술정보
- **뛰어난 내구성**
- **저소음**
- **유지보수 용이**

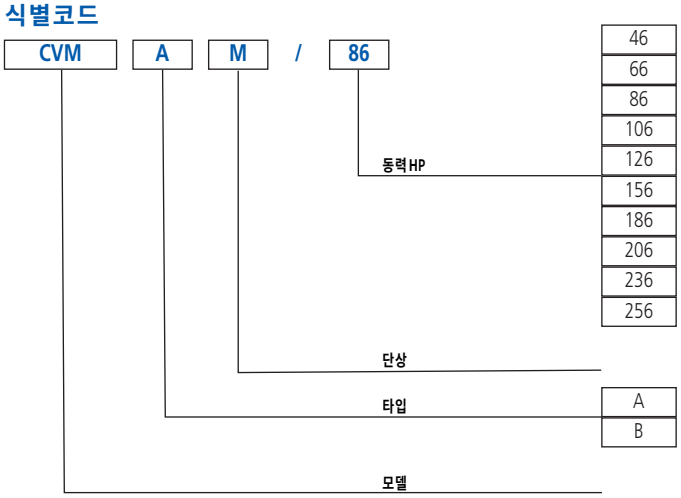
기술자료
- **최대압력 : 11 bar**
- **최대유체온도 :** 40°C
- **자체환기 2극 비동기식모터**
- **절연등급 : F**
- **보호등급 : IP44**
- 220-230V ±6%, 60Hz **단상**,
  220/380V -6%+10%, 60Hz **삼상**
- **흡토출구 연결** G1¼

재질
- Cast iron pump body and bracket
- External casing in AISI 304
- Impeller and diffuser in PPE+PS reinforced with fibreglass
- Stages in PPE+PS reinforced with fibreglass/PTFE
- Shaft in AISI 416
- Mechanical seal in Carbon/Ceramic/NBR

성능곡선 (according to ISO 9906 Attachment A)



식별코드

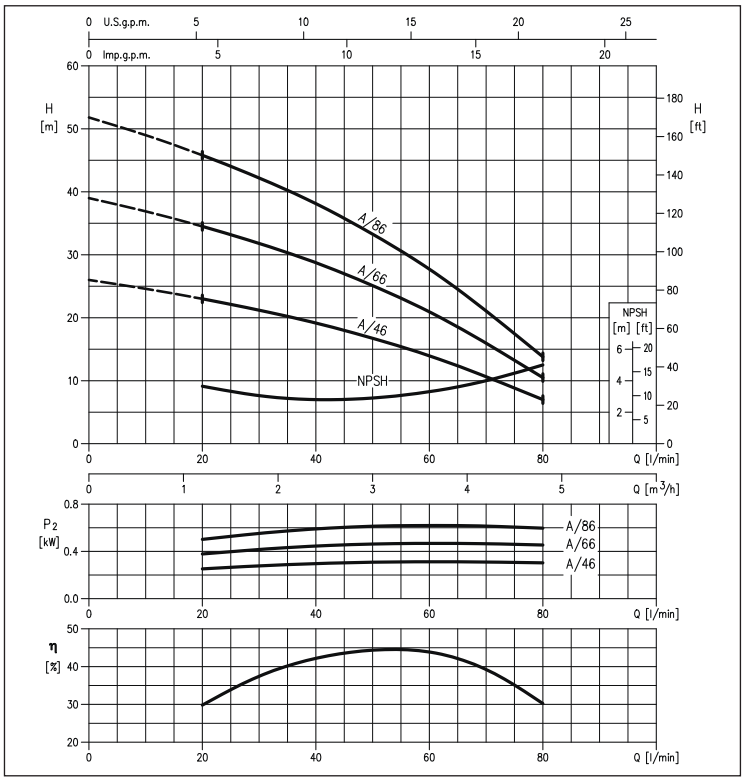


VERTICAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

in cast iron

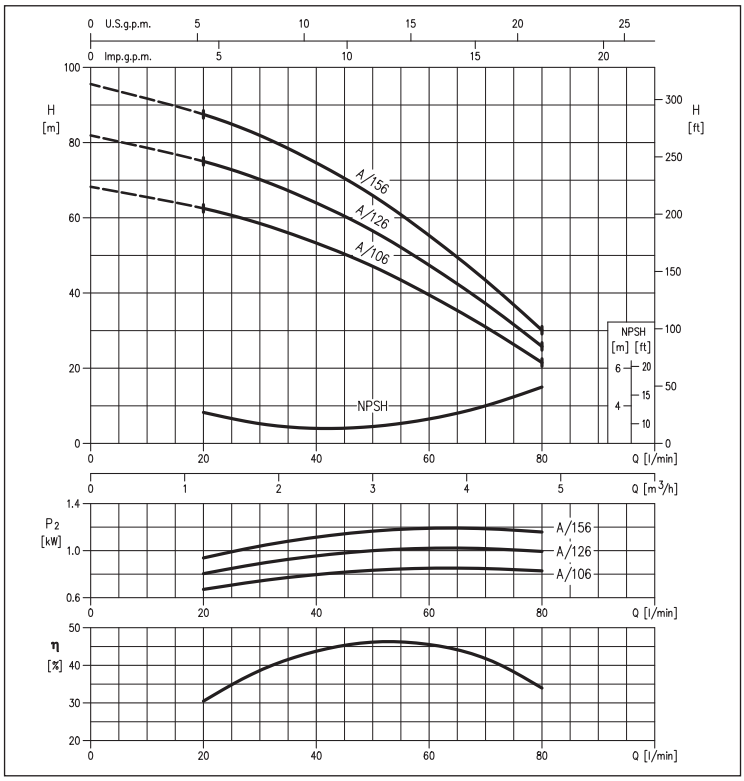
CVM A range 성능곡선 (from 0.3 to 0.6 kW)

(according to ISO 9906 Attachment A)



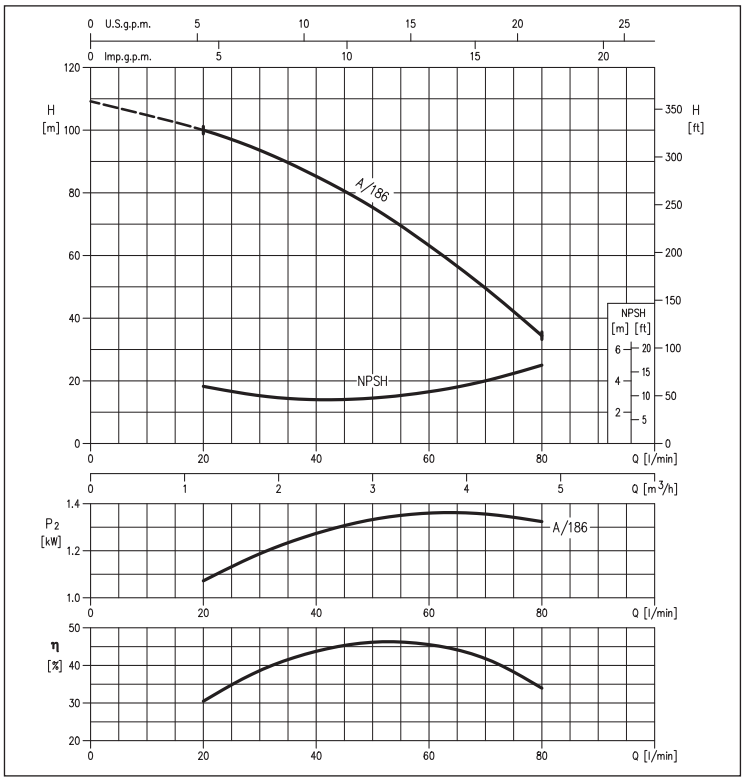
CVM A range 성능곡선 (from 0.75 to 1.1 kW)

(according to ISO 9906 Attachment A)



CVM A range 성능곡선 (1.3 kW)

(according to ISO 9906 Attachment A)



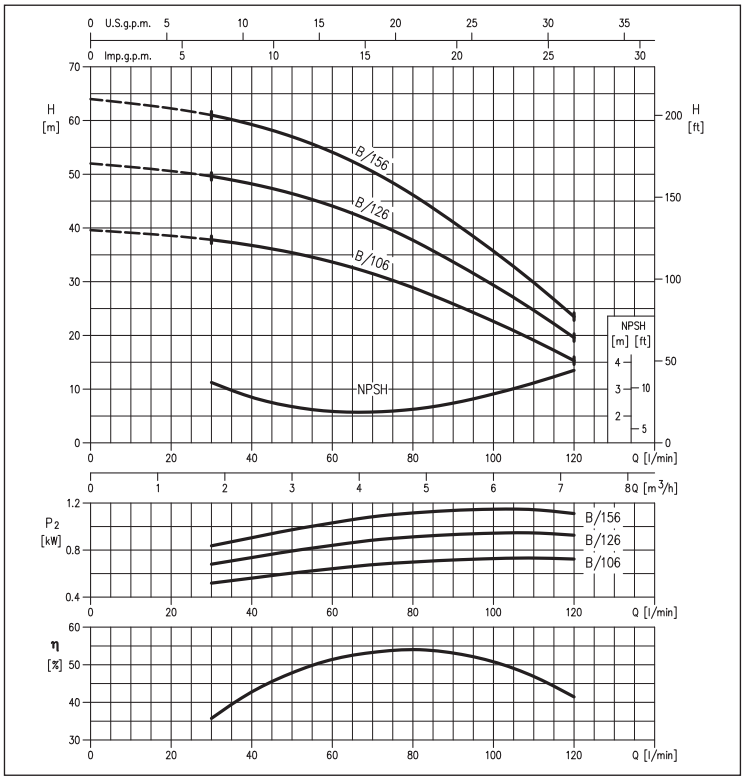
CVM

VERTICAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

in cast iron

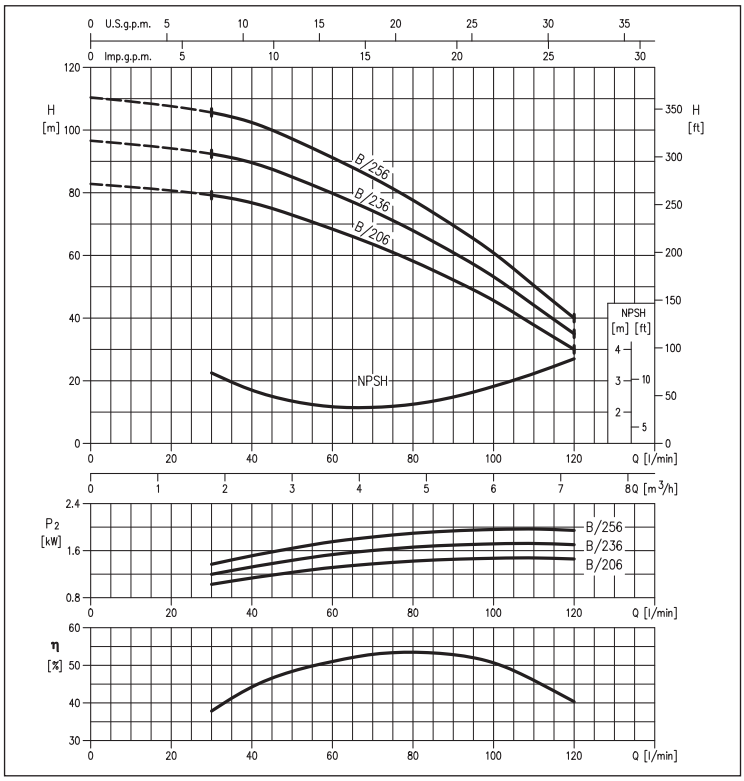
CVM B range 성능곡선 (from 0.75 to 1.1 kW)

(according to ISO 9906 Attachment A)



CVM B range 성능곡선 (from 1.5 to 1.9 kW)

(according to ISO 9906 Attachment A)



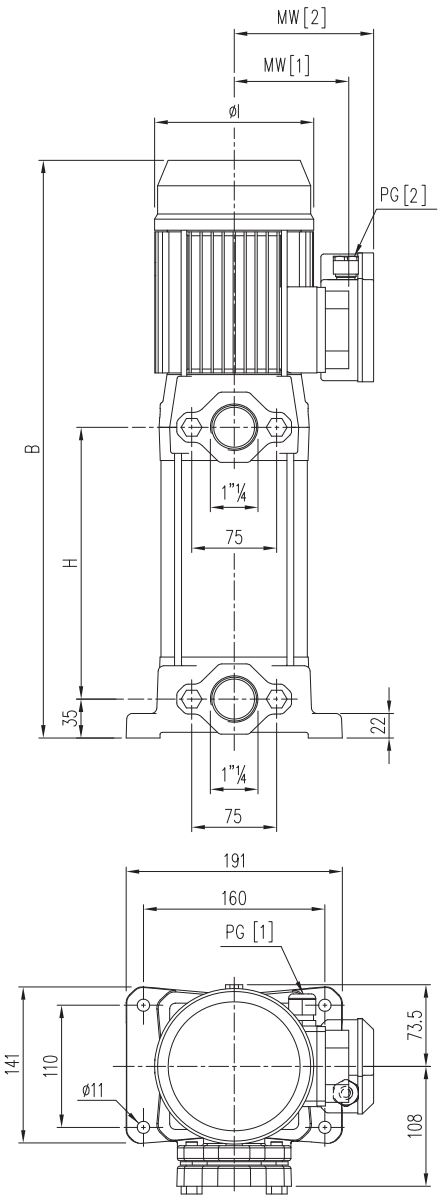
성능표

모델 단상 220-230V	모델 삼상 220/380V	P_2 [HP]	P_2 [kW]	Q=유량 l/min	20	30	40	50	60	80	100	120
				m^3/h	1,2	1,8	2,4	3	3,6	4,8	6	7,2
				H=양정 [m]								
CVM AM/46	CVM A/46	0,4	0,3		23,0	21,2	19,2	16,7	14,0	7,0	-	-
CVM AM/66	CVM A/66	0,6	0,44		34,5	31,8	28,7	25,1	20,9	10,5	-	-
CVM AM/86	CVM A/86	0,8	0,6		45,5	42,0	38,1	33,3	27,7	13,8	-	-
CVM AM/106	CVM A/106	1	0,75		62,5	58,5	53,0	47,0	39,5	21,5	-	-
CVM AM/126	CVM A/126	1,2	0,9		75,0	70,0	64,0	56,5	47,5	25,8	-	-
CVM AM/156	CVM A/156	1,5	1,1		87,5	82,0	74,5	66,0	55,5	30,1	-	-
CVM AM/186	CVM A/186	1,8	1,3		100,0	93,5	85,5	75,5	63,0	34,4	-	-
CVM BM/106	CVM B/106	1	0,75		-	37,8	36,8	35,4	33,7	28,9	22,6	15,3
CVM BM/126	CVM B/126	1,2	0,9		-	49,5	48,0	46,5	44,0	37,7	29,4	19,6
CVM BM/156	CVM B/156	1,5	1,1		-	61,0	59,5	57,0	54,0	46,0	35,7	23,5
CVM BM/206	CVM B/206	2	1,5		-	79,0	77,0	73,0	68,5	58,0	45,5	30,0
CVM BM/236	CVM B/236	2,3	1,7		-	92,5	89,5	85,0	80,0	68,0	53,0	35,0
-	CVM B/256	2,5	1,9		-	106,0	102,0	97,0	91,0	77,5	61,0	40,0

VERTICAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

in cast iron

외형도



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

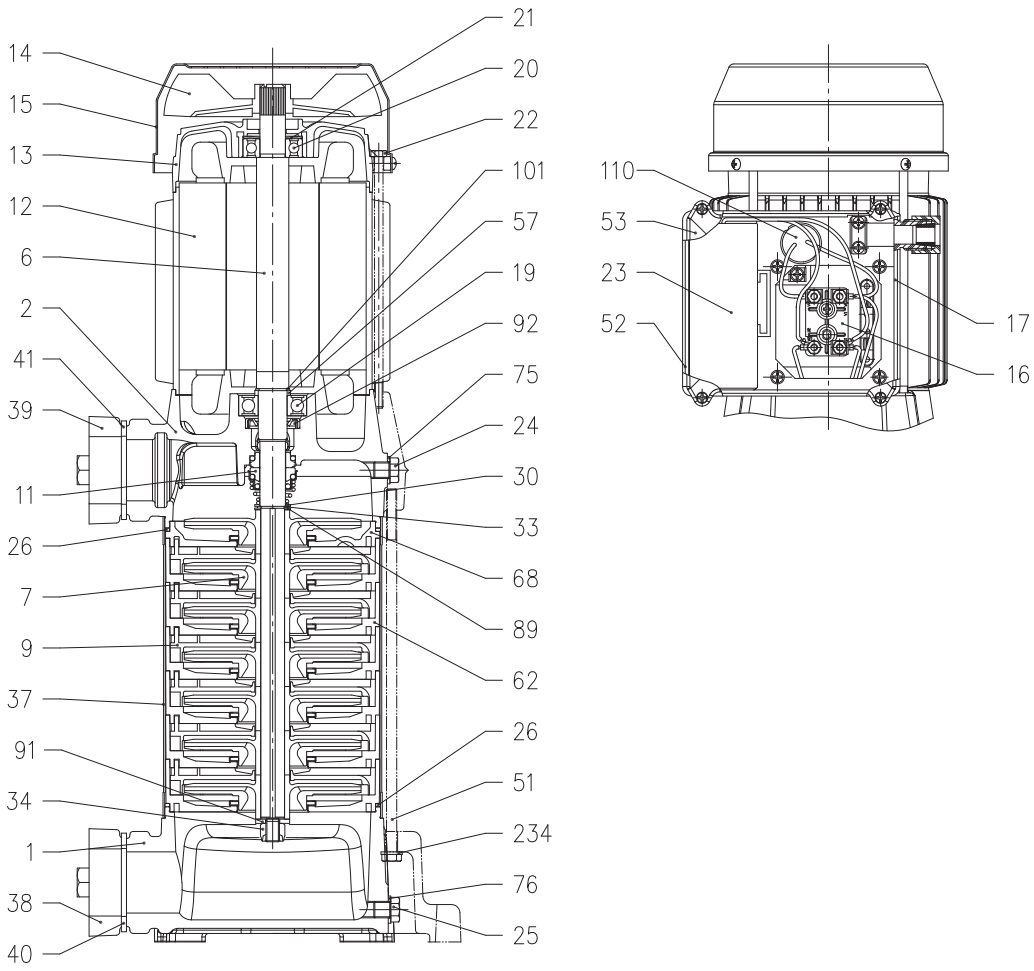
외형표

모델		모터 사이즈	외형치수 [mm]								중량 [kg]	
단상 220-230V	삼상 220/380V		B		H	ØI	MW		PG			
			[2]	[1]			[2]	[1]	[2]	[1]	[2]	[1]
CVM AM/46	CVM A/46	63	336	336	112	124	101	92	11	11	11,0	11,0
CVM AM/66	CVM A/66	63	362	362	138	124	101	92	11	11	11,7	11,6
CVM AM/86	CVM A/86	63	388	388	164	124	101	92	11	11	12,7	12,6
CVM AM/106	CVM A/106	71	452	454	190	140	110,5	101	11	11	16,5	16,6
CVM AM/126	CVM A/126	71	478	492	216	140	110,5	101	11	11	17,5	17,6
CVM AM/156	CVM A/156	71	516	518	242	140	110,5	101	11	11	18,5	18,6
CVM AM/186	CVM A/186	80	565	565	268	159	136	119	13,5	11	20,5	20,6
CVM BM/106	CVM B/106	71	400	402	138	140	110,5	101	11	11	15,9	15,9
CVM BM/126	CVM B/126	71	426	440	164	140	110,5	101	11	11	16,8	16,7
CVM BM/156	CVM B/156	71	464	466	190	140	110,5	101	11	11	18,0	17,9
CVM BM/206	CVM B/206	80	526	526	216	159	134,5	119	13,5	11	21,2	21,3
CVM BM/236	CVM B/236	80	552	552	242	159	134,5	119	13,5	11	22,2	22,3
-	CVM B/256	80	578	578	268	159	-	119	-	11	-	24,0

VERTICAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

in cast iron

단면도



부품표

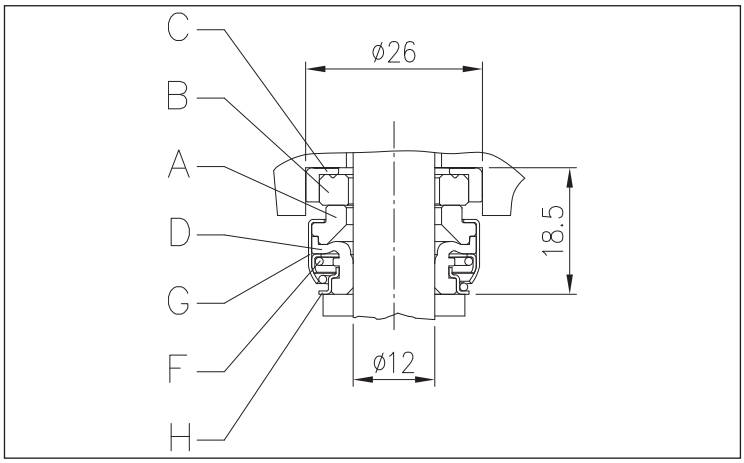
Ref.	부품명	재질	Ref.	부품명	재질
1	Suction casing	Cast iron EN-GJL-200-EN 1561	33	Seeger ring	EN 1.4021 (AISI 420) (Dim. 12)
2	Delivery casing	Cast iron EN-GJL-200-EN 1561			EN 1.4301 (AISI 304) (Dim. 14)
6	Shaft	EN 1.4005 (AISI 416)	34	Impeller nut	EN 1.4301 (AISI 304)
7	Impeller	PPE+PS reinforced with fibreglass	37	External pump casing	EN 1.4301 (AISI 304)
9	Diffuser	PPE+PS reinforced with fibreglass	38	Counterflange	Cast iron EN-GJL-200-EN 1561
11	Mechanical seal	Carbon/Ceramic/ NBR	39	Counterflange	Cast iron EN-GJL-200-EN 1561
12	Motor f rame with stator	-	40	Counterflange gasket	NBR
13	Motor cover	Aluminium	41	Counterflange gasket	NBR
14	Fan	PA6	51	Tie-rod	Galvanised Fe P04
15	Fan cover	Galvanised Fe P04	52	Capacitor box [2]	ABS
16	Terminal board	-	53	Capacitor box cover [2] [5]	ABS
17	Terminal box cover [1]	Aluminium	57	Pump side ball bearing spacer [3]	Steel C40
19	Bearing (pump side)	-	62	Stage housing	PPE+PS reinforced with fibreglass/PTFE
20	Bearing (motor side)	-	68	Stage	PPE+PS reinforced with fibreglass/PTFE
21	Adjusting ring	Steel C70	75	Washer	Aluminium
22	Motor tie-rod	Galvanised Fe 42	76	Washer	Aluminium
23	Capacitor [2]	-	89	Washer	EN 1.4301 (AISI 304)
24	Priming plug	OT 58 UNI 5705	91	Washer	EN 1.4301 (AISI 304)
25	Drain plug	OT 58 UNI 5705	92	Lip seal	NBR
26	O-Ring	NBR	101	Seeger ring [3]	EN 1.4301 (AISI 304)
30	Washer	EN 1.4301 (AISI 304)	110	Motorprotector [4]	-
			234	Washer	Galvanised steel

[1]= For three phase only [2]= For single phase only [3]= For motor size 80 only
[4]= For motor size 71 and 80 single phase only [5]= With gasket in NBR only for single phase version: CVM A from 0,3 kW up to 1,1 kW, CVM B from 0,75 kW up to 1,1 kW

VERTICAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS

in cast iron

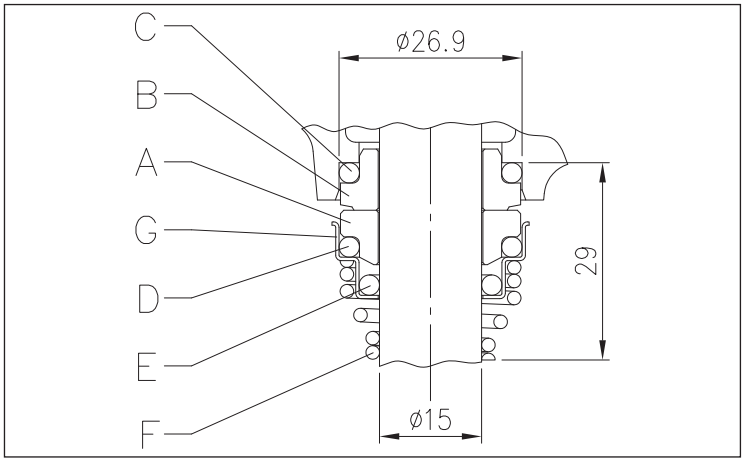
매카니컬실 for CVM up to 0.6 kW



부품상세

Ref.	부품명	재질
A	Rotating part	Carbon
B	Fixed part	Ceramic
C	Gasket	NBR
D	Diaphragm	NBR
F	Spring	AISI 304
G	Structure/frame	AISI 304
H	Retainer ring	AISI 304

매카니컬실 for CVM 0.75 kW and over



부품상세

Ref.	부품명	재질
A	Rotating part	Ceramic
B	Fixed part	Carbon
C	O-Ring	NBR
D	O-Ring	NBR
E	O-Ring	NBR
F	Spring	AISI 316
G	Structure/frame	AISI 304

전기관련표

모델		P_2		Capacitor 단상		P_1		Absorbed Current [A]		
단상 220-230V	삼상 220/380V	[HP]	[kW]	µF	V_c	단상 [kW]	삼상 [kW]	단상 220-230V	삼상 220V	삼상 380V
CVM AM/46	CVM A/46	0,4	0,3	10	450	0,54	0,45	2,9	1,6	0,9
CVM AM/66	CVM A/66	0,6	0,44	12,5	450	0,73	0,63	3,5	2,1	1,2
CVM AM/86	CVM A/86	0,8	0,6	14	450	0,91	0,75	4,3	2,4	1,4
CVM AM/106	CVM A/106	1	0,75	20	450	1,33	1,0	6,7	2,9	1,7
CVM AM/126	CVM A/126	1,2	0,9	31,5	450	1,53	1,5	7,0	3,8	2,2
CVM AM/156	CVM A/156	1,5	1,1	31,5	450	1,60	1,5	7,5	3,8	2,2
CVM AM/186	CVM A/186	1,8	1,3	35	450	1,87	2,0	8,2	5,7	3,3
CVM BM/106	CVM B/106	1	0,75	20	450	1,19	1,0	6,4	2,9	1,7
CVM BM/126	CVM B/126	1,2	0,9	31,5	450	1,46	1,5	6,8	3,8	2,2
CVM BM/156	CVM B/156	1,5	1,1	31,5	450	1,58	1,5	7,4	3,8	2,2
CVM BM/206	CVM B/206	2	1,5	40	450	1,97	2,9	8,9	8,1	4,7
CVM BM/236	CVM B/236	2,3	1,7	40	450	2,29	2,9	10,7	8,1	4,7
-	CVM B/256	2,5	1,9	-	-	-	2,9	-	8,1	4,7

EBARA

EBARA

PRA

PERIPHERAL ELECTRIC PUMPS

60 Hz

PRA

PERIPHERAL ELECTRIC PUMPS
in cast iron

Cast iron peripheral electric pumps.

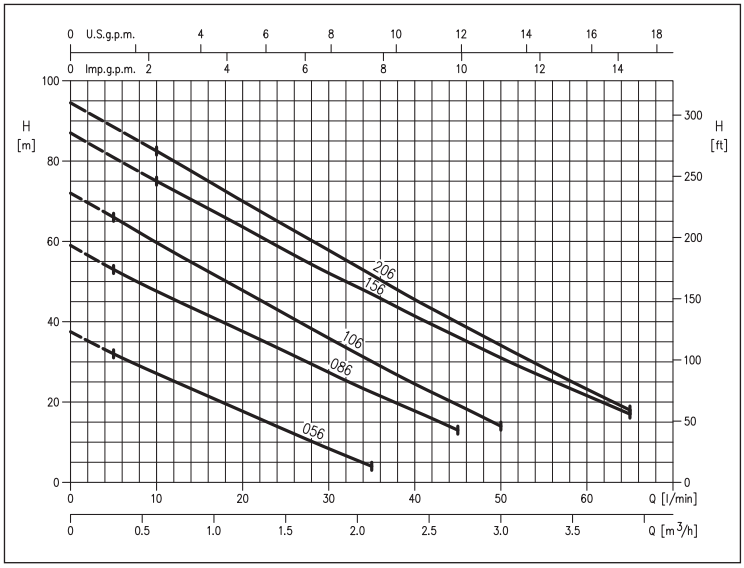
용도
- 가정용
- 보일러급수
- 압력용기유닛

기술정보
- 저소음
- 실용적

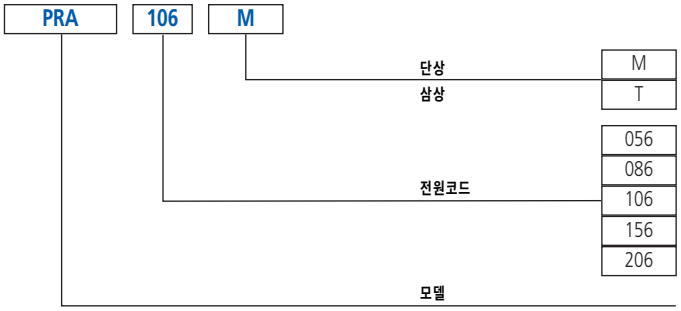
기술자료
- **최대사용압력:**
  PRA 056 - 6 bar
  PRA 086 - 7.5 bar
  그외 - 12 bar
- **최대액체온도:** 80°C
- **2극 비동기식모터**
- **절연등급:F**
- **보호등급:IP44**
- 110-115V ±6%, 60Hz **단상**,
  220-230V ±6%, 60Hz **단상**,
  220/380V -6%+10%, 60Hz **삼상**
- **흡출구:** G1
- **토출구:** G1

재질
- **Pump body and bracket in cast iron**
- **Shaft in 1.0736 for PRA 056, in AISI 303 (parti in contact with the liquid) for the rest of the range**
- **Impeller in brass**
- **Mechanical seal in Carbon/Ceramic/NBR**

성능곡선 (according to ISO 9906 Attachment A)



식별코드



PRA

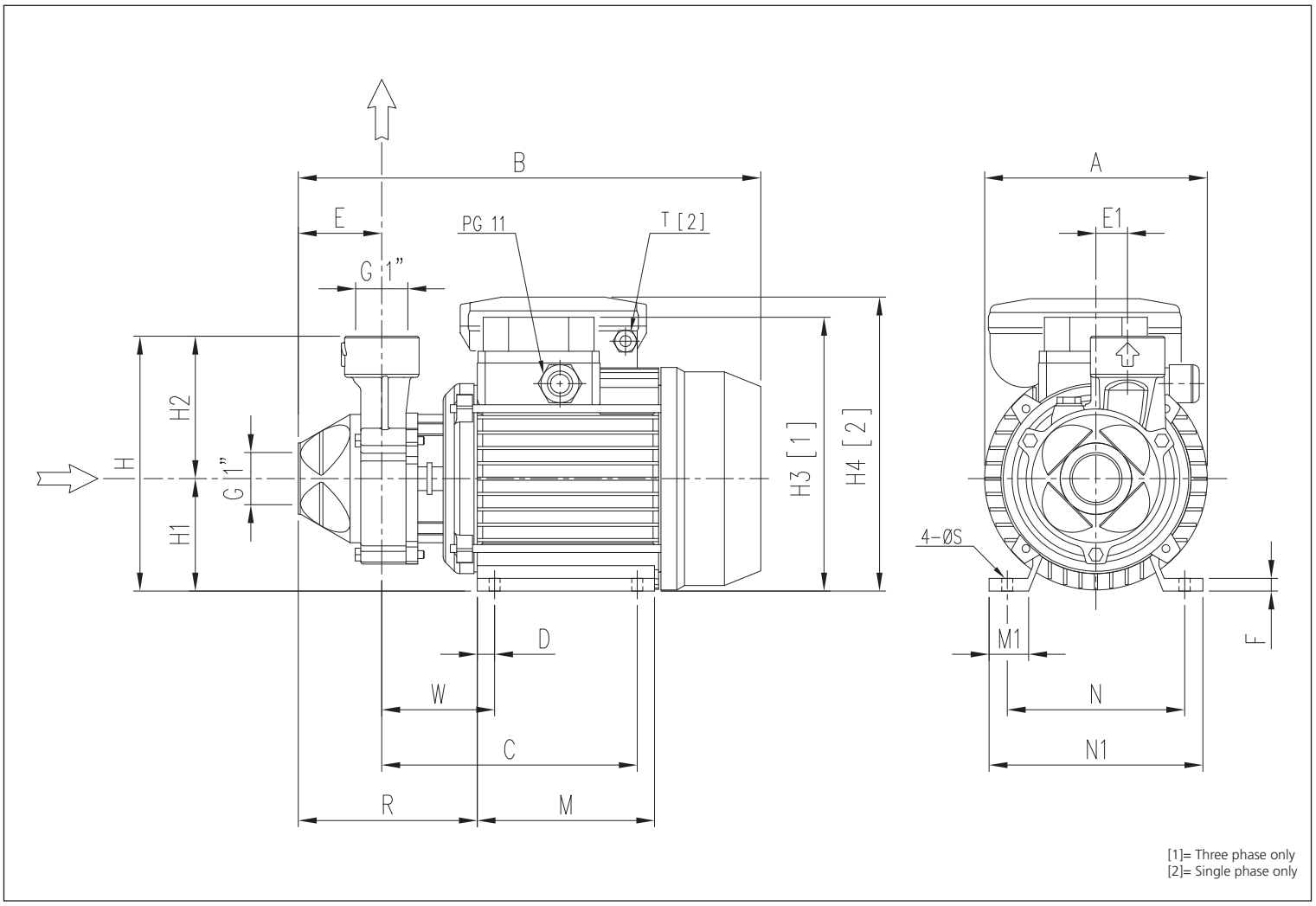
PERIPHERAL ELECTRIC PUMPS

in cast iron

성능표

모델 단상 110-115V/220-230V	모델 삼상 220/380V	P_2 [HP]	P_2 [kW]	Q=유량 l/min	5	10	20	30	35	40	45	50	60	65
				m^3/h	0,3	0,6	1,2	1,8	2,1	2,4	2,7	3	3,6	3,9
				H=양정 [m]										
PRA 056 M	PRA 056 T	0,5	0,37		32,0	27,0	17,7	8,4	4,0	-	-	-	-	-
PRA 086 M	PRA 086 T	0,8	0,6		53,0	48,0	37,6	27,5	22,2	17,9	13,0	-	-	-
PRA 106 M	PRA 106 T	1	0,75		66,0	60,0	48,0	35,9	30,1	24,5	19,4	14,0	-	-
PRA 156 M	PRA 156 T	1,5	1,1		-	75,0	63,5	52,0	47,0	41,5	36,2	31,0	21,8	17,0
-	PRA 206 T	2	1,5		-	82,5	70,0	57,8	51,6	45,5	39,8	34,1	23,2	18,0

외형도



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

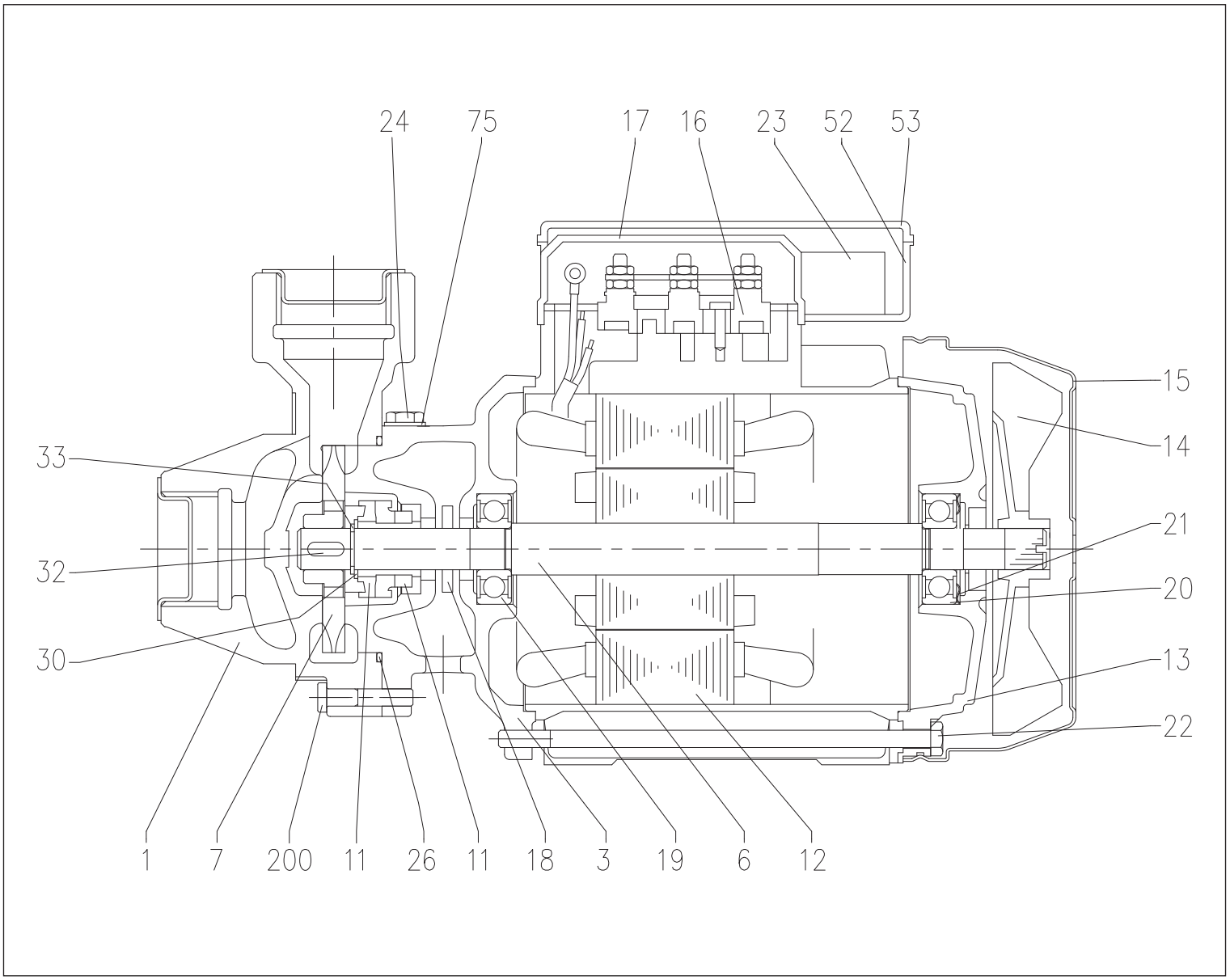
외형표

모델	외형치수 [mm] A	B	C	D	E	E1	F	H	H1	H2	H3	H4	M	M1	N	N1	R	T	W	S	중량 [kg]
PRA 056 M	125	263,5	151	10	50	20	7	143	63	80	-	160	100	22	100	120	111	PG11	71	7	5,6
PRA 056 T	125	265,5	151	10	50	20	7	143	63	80	156	-	100	22	100	120	111	-	71	7	5,6
PRA 086 M	141	290,5	161,3	11	52,7	20	9	161	71	90	-	178	112	25	112	135	113	PG11	71,3	7	9,2
PRA 086 T	141	292	161,3	11	52,7	20	8	161	71	90	172	-	112	25	112	135	113	-	71,3	7	9,2
PRA 106 M	141	290,5	161,3	11	52,7	20	9	161	71	90	-	178	112	25	112	135	113	PG11	71,3	7	9,7
PRA 106 T	141	292	161,3	11	52,7	20	8	161	71	90	172	-	112	25	112	135	113	-	71,3	7	9,7
PRA 156 M	160	330,5	191	12	56	20	10	175	80	95	-	212	124	26	125	152	135	PG13,5	91	9	14,5
PRA 156 T	160	335	191	12	56	20	10	175	80	95	199	-	124	26	125	152	135	-	91	9	14,5
PRA 206 T	160	348	191	12	56	20	10	175	80	95	199	-	124	26	125	152	135	-	91	9	15,8

PRA

PERIPHERAL ELECTRIC PUMPS
in cast iron

단면도



부품표

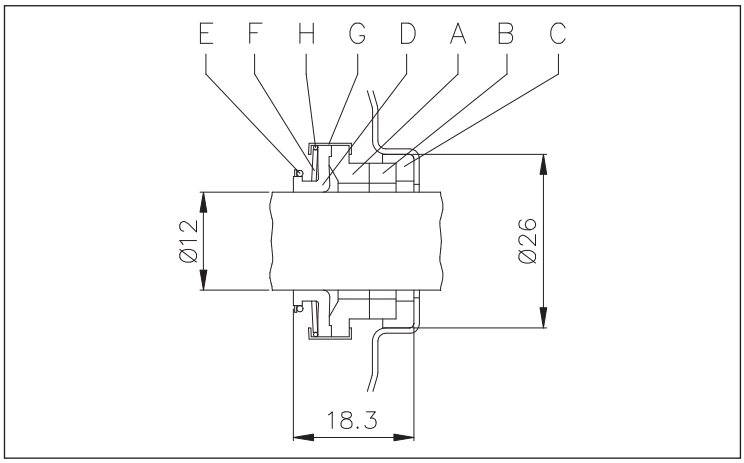
Ref.	부품명	재질	Ref.	부품명	재질
1	Pump body	Cast iron	20	Bearing (motor side)	-
3	Motor bracket	Cast iron	21	Adjusting ring	Steel C70
6	Shaft with rotor	[3]	22	Tie-rod	Galvanised Fe 42
7	Impeller	Brass	23	Capacitor [2]	-
11	Mechanical seal	Carbon/Ceramic/NBR	24	Priming plug	Brass
12	Motor frame with stator	-	26	O-Ring	NBR
13	Motor cover	Aluminium	30	Washer	AISI 304
14	Fan	PP	32	Key	AISI 316
15	Fan cover	Galvanised Fe P04	33	Seeger ring	AISI 304
16	Terminal box	-	52	Capacitor box [2]	ABS
17	Terminal box cover [1]	Aluminium	53	Capacitor box cover [2] [4]	ABS
18	Splash ring	NBR	75	Washer	Aluminium
19	Bearing (pump side)	-	200	Screw	Zn Steel Cl. 8.8 ISO 898-1

[1]= For three phase only [2]= For single phase only
[3]= Material: 1.0736 for PRA 056, AISI 303 (part in contact with the liquid) for the rest of the range [4]= With gasket in NBR for PRA 056-086-106 single phase versions

PERIPHERAL ELECTRIC PUMPS

in cast iron

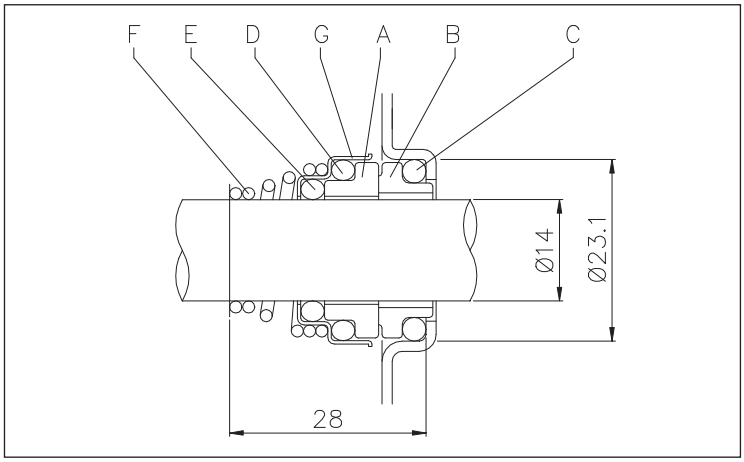
매카니컬실 for PRA 056 - 086 - 106



제품상세 for PRA 056 - 086 - 106

Ref.	부품명	재질
A	Rotating part	Carbon
B	Fixed part	Ceramic
C	Gasket	NBR
D	Bellows	NBR
E	Ring	AISI 304
F	Spring	AISI 304
G	Structure/frame	AISI 304
H	Retainer ring	AISI 304

매카니컬실 for PRA 156 - 206



제품상세 for PRA 156 - 206

Ref.	부품명	재질
A	Rotating part	Ceramic
B	Fixed part	Carbon
C	O-Ring	NBR
D	O-Ring	NBR
E	O-Ring	NBR
F	Spring	AISI 316
G	Structure/frame	AISI 304

전기관련표

모델		P_2		Capacitor 단상				P_1		Absorbed Current [A]			
단상 110-115V/220-230V	삼상 220/380V	[HP]	[kW]	110-115V		220-230V		단상 [kW]	삼상 [kW]	단상		삼상	
				µF	V_c	µF	V_c			110-115V	220-230V	220V	380V
PRA 056 M	PRA 056 T	0,5	0,37	31,5	250	8	450	0,58	0,56	5,5	2,8	1,9	1,1
PRA 086 M	PRA 086 T	0,8	0,6	60	250	14	450	1,37	1,33	12,5	6,3	4,0	2,3
PRA 106 M	PRA 106 T	1	0,75	60	250	20	450	1,54	1,0	15,3	7,1	2,9	1,7
PRA 156 M	PRA 156 T	1,5	1,1	-	-	35	450	2,2	2,0	-	10,4	5,7	3,3
-	PRA 206 T	2	1,5	-	-	-	-	-	2,9	-	-	8,1	4,7

EBARA

EBARA

AGA

SELF-PRIMING ELECTRIC PUMPS

60 Hz

AGA

SELF-PRIMING ELECTRIC PUMPS
in cast iron

Cast iron self-priming electric pumps.

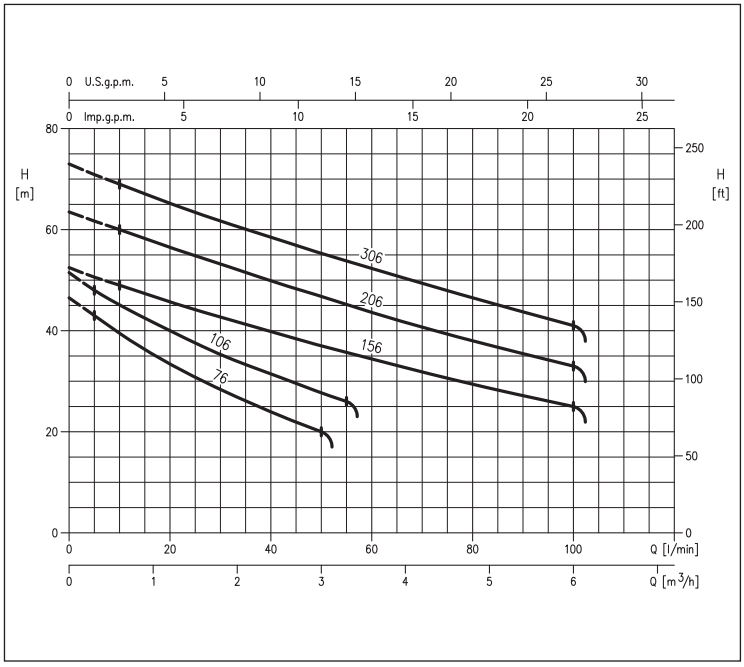
용도
- 생활용수부스터
- 소규모정원급수
- 세차
- 청수이송

기술정보
- 뛰어난내구성
- 실용적

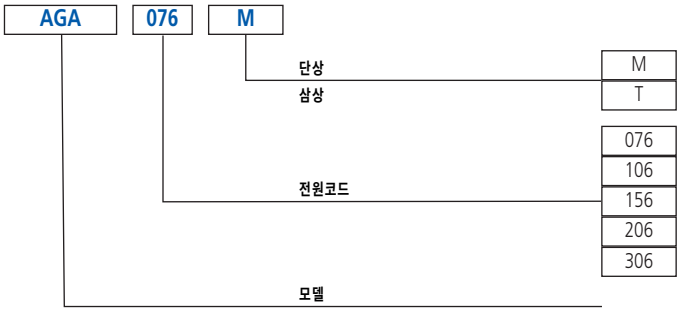
기술자료
- 최대사용압력:
  AGA076 - 106 - 6bar
  그외-10bar
- 최대유체온도:45°C
- 최대흡입관깊이:8m
- 자체환기2극비동기식모터
- 절연등급:F
- 보호등급:IP44
- 110-115V±6%,60Hz단상
  220-230V±6%,60Hz단상,
  220/380V-6+10%,60Hz삼상
- 흡입구:AGA076-106:G1,그외:G1½
- 토출구:G1

재질
- Cast iron pump body
- Seal housing disc in AISI 304 for AGA 076-106, in cast iron built-in the motor bracket for the rest of the range
- Shaft in AISI 303
- Impeller in PPE+PS reinforced with fibreglass for AGA 076-106, in brass for the rest of the range
- Mechanical seal in Carbon/Ceramic/NBR
- Ejector and diffuser in PPE+PS reinforced with fibreglass

성능곡선 (according to ISO 9906 Attachment A)



식별코드



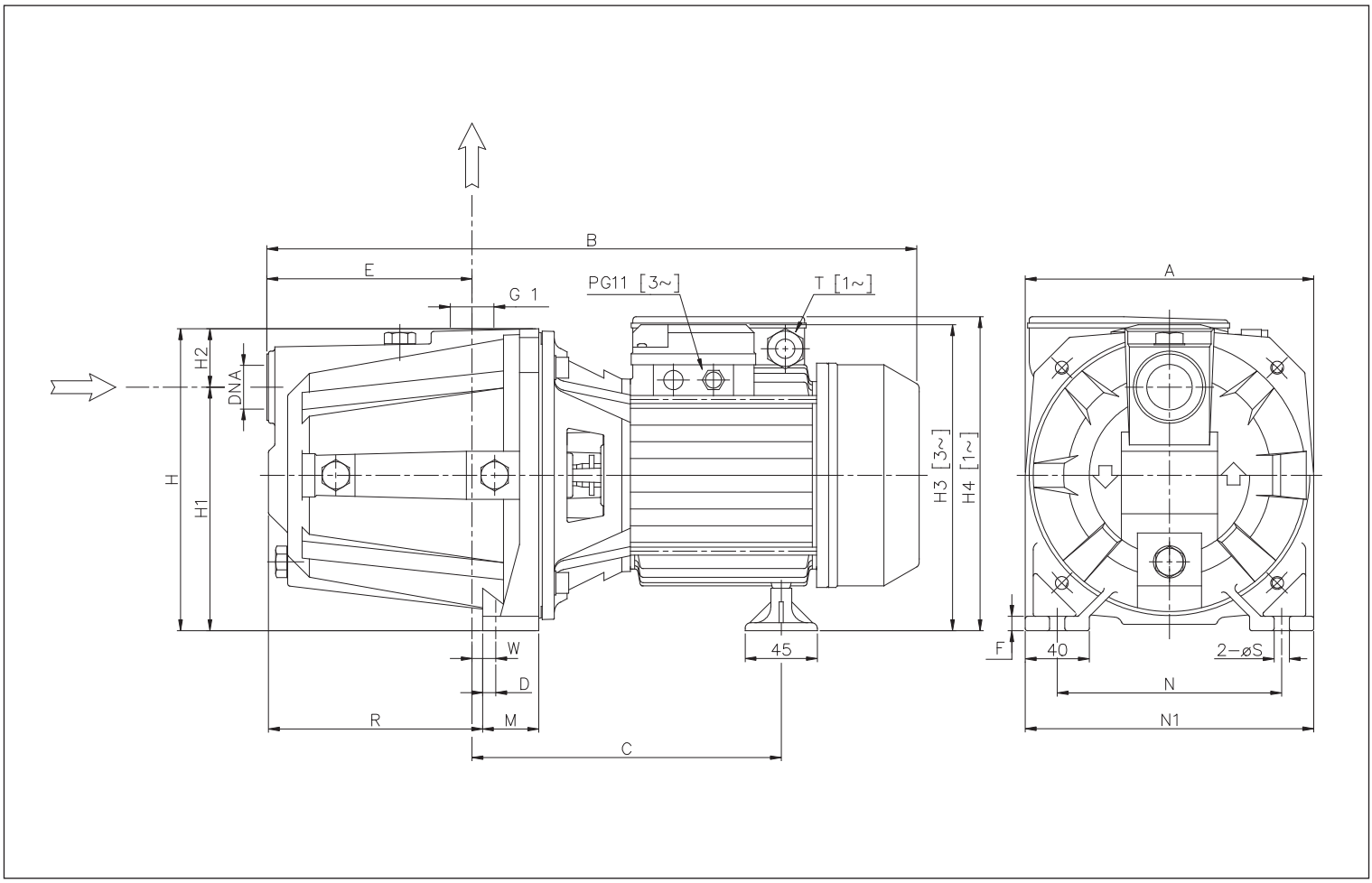
AGA

SELF-PRIMING ELECTRIC PUMPS
in cast iron

성능표

모델 단상	모델 삼상	P_2 [HP]	P_2 [kW]	Q=유량 l/min	5	10	20	30	45	50	55	80	100
				m^3/h	0,3	0,6	1,2	1,8	2,7	3	3,3	4,8	6
				H=양정 [m]									
AGA 076 M	AGA 076 T	0,75	0,55		43,0	39,5	33,4	28,4	21,9	20,0	-	-	-
AGA 106 M	AGA 106 T	1	0,75		48,0	45,1	40,0	35,3	29,6	27,7	26,0	-	-
AGA 156 M	AGA 156 T	1,5	1,1		-	49,0	45,7	42,7	38,4	37,0	35,7	29,4	25,0
AGA 206 M	AGA 206 T	2	1,5		-	60,0	56,5	53,2	48,3	46,8	45,2	38,0	33,0
-	AGA 306 T	3	2,2		-	69,0	65,2	61,7	56,9	55,3	53,8	46,5	41,0

외형도



외형표

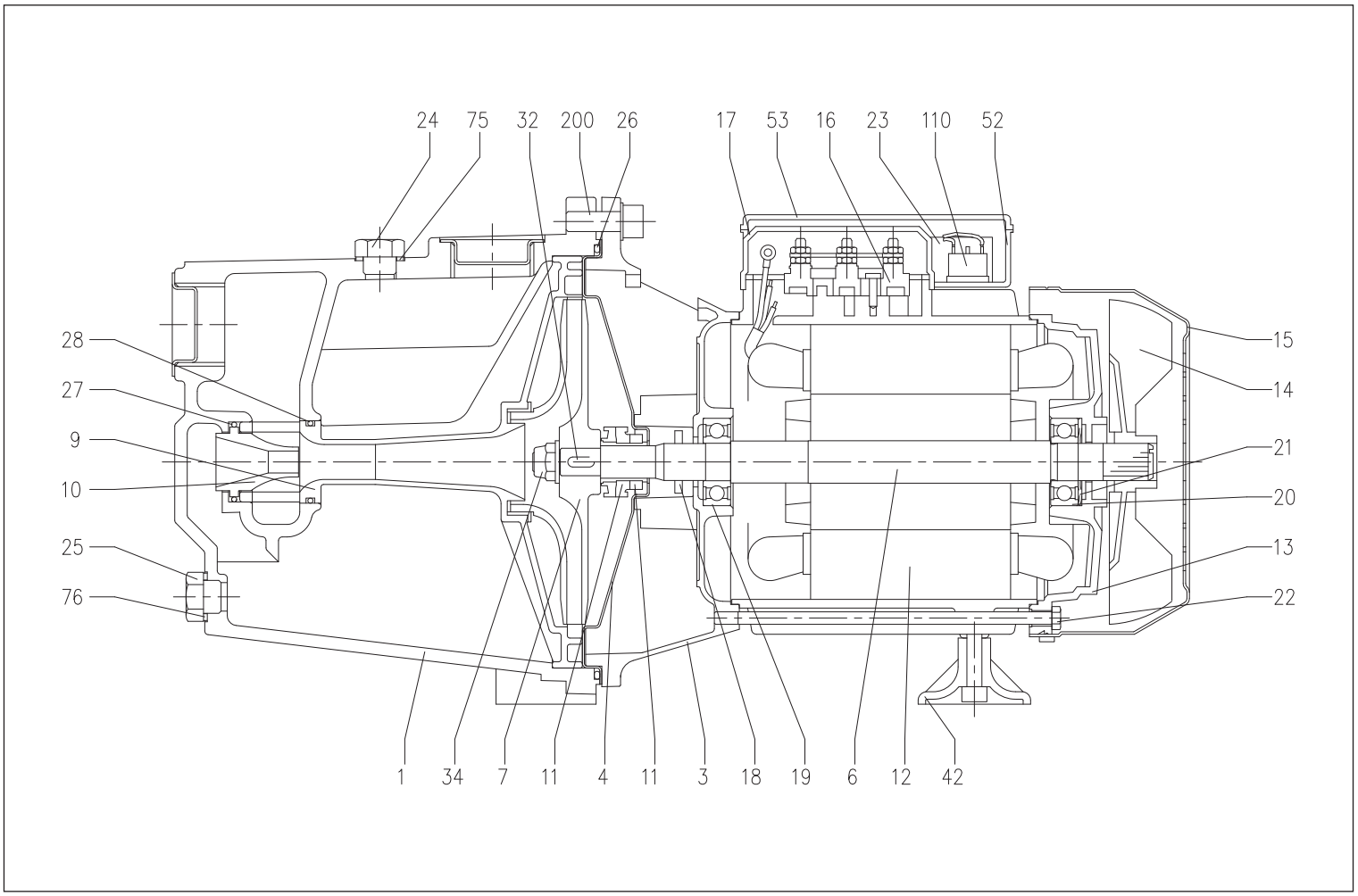
모델	외형치수 [mm] A	B	C	D	E	F	H	H1	H2	H3 [1]	H4 [2]	M	N	N1	R	T [2]	W	S	DNA	중량 [kg]
AGA 076 M	180	405	195	10,3	127	9	185	152	33	-	199	40	140	180	128,5	PG11	11,8	9,5	G 1	12,5
AGA 076 T	180	405	195	10,3	127	9	185	152	33	197,5	-	40	140	180	128,5	-	11,8	9,5	G 1	12,5
AGA 106 M	180	405	195	10,3	127	9	185	152	33	-	199	40	140	180	128,5	PG11	11,8	9,5	G 1	13,8
AGA 106 T	180	405	195	10,3	127	9	185	152	33	197,5	-	40	140	180	128,5	-	11,8	9,5	G 1	13,8
AGA 156 M	220	495	244	10	157	10	223	170	53	-	247	48	180	220	167,5	PG13,5	15,5	9	G 1½	25,5
AGA 156 T	220	495	244	10	157	10	223	170	53	229	-	48	180	220	167,5	-	15,5	9	G 1½	25,5
AGA 206 M	220	521	244	10	157	10	223	170	53	-	247	48	180	220	167,5	PG13,5	15,5	9	G 1½	26,6
AGA 206 T	220	495	244	10	157	10	223	170	53	229	-	48	180	220	167,5	-	15,5	9	G 1½	27,6
AGA 306 T	220	508	244	10	157	10	223	170	53	229	-	48	180	220	167,5	-	15,5	9	G 1½	27,7

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

AGA

SELF-PRIMING ELECTRIC PUMPS
in cast iron

단면도



부품표

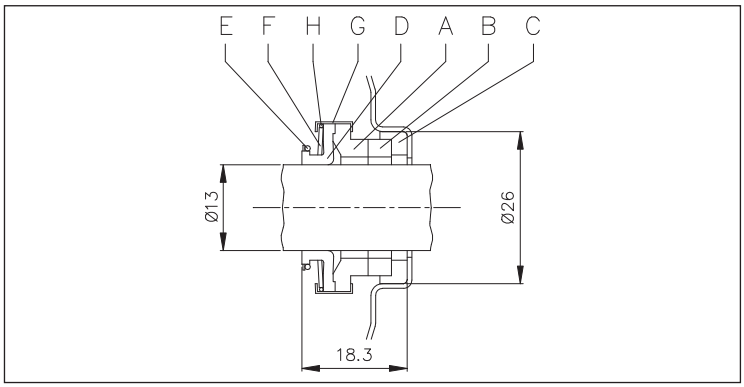
Ref.	부품명	재질	Ref.	부품명	재질
1	Pump body	Cast iron	21	Adjusting ring	Steel C70
3	Motor support	[7]	22	Tie-rod	Galvanised Fe 42
4	Seal housing disc	AISI 304 [6]	23	Capacitor [2]	-
6	Shaft	AISI 303	24	Filler cap	Brass
7	Impeller	[4]	25	Drain plug	Brass
9	Diffuser + Venturi tube	PPE+PS reinforced with fibreglass	26	O-Ring	NBR
10	Venturi Nozzle	PPE+PS reinforced with fibreglass	27	O-Ring	NBR
11	Mechanical seal	Carbon/Ceramic/NBR	28	O-Ring	NBR
12	Motor casing with stator	-	32	Key	AISI 316
13	Motor cover	Aluminium	34	Impeller nut [3]	AISI 304
14	Fan	PA6	42	Foot	PP
15	Fan cover	Galvanised Fe P04	52	Capacitor box [2]	ABS
16	Terminal box	-	53	Capacitor box cover [2] [8]	ABS
17	Terminal box cover [1]	Aluminium	75	Washer	Aluminium
18	Spray protector ring	NBR	76	Washer	Aluminium
19	Bearing (pump side)	-	110	Motorprotector [5]	-
20	Bearing (motor side)	-	200	Screw (pump body)	Zn Steel Cl. 8.8 ISO 898-1

[1]= For three phase only
[2]= For single phase only
[3]= For the version with brass impeller only
[4]= PPE+PS reinforced with fibreglass for AGA 076 - 106, brass for AGA 156 - 206 - 306
[5]= For single phase AGA 156 - 206 versions only
[6]= For AGA 076 - 106 only
[7]= Cast iron for AGA 156 - 206 - 306, aluminium for AGA 076 - 106
[8]= With gasket in NBR for single phase AGA 106 version only

AGA

SELF-PRIMING ELECTRIC PUMPS
in cast iron

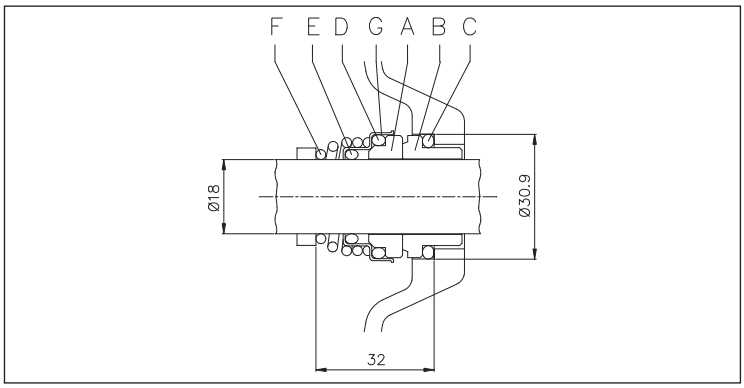
매카니컬실 for AGA 076 - 106



부품상세 for AGA 076 - 106

Ref.	부품명	재질
A	Rotating part	Carbon
B	Fixed part	Ceramic
C	Gasket	NBR
D	Bellows	NBR
E	Ring	AISI 304
F	Spring	AISI 304
G	Structure/frame	AISI 304
H	Retainer ring	AISI 304

매카니컬실 for AGA 156 - 206 - 306



부품상세 for AGA 156 - 206 - 306

Ref.	부품명	재질
A	Rotating part	Ceramic
B	Fixed part	Carbon
C	O-Ring	NBR
D	O-Ring	NBR
E	O-Ring	NBR
F	Spring	AISI 316
G	Structure/frame	AISI 304

전기관련표

모델		P_2		Capacitor 단상				P_1		Absorbed Current [A]			
단상	삼상	[HP]	[kW]	110-115V		220-230V		단상 [kW]	삼상 [kW]	단상		삼상	
				µF	V_c	µF	V_c			110-115V	220-230V	220V	380V
AGA 076 M	AGA 076 T	0,75	0,55	60	250	16	450	0,94	0,9	9,5	4,3	2,8	1,6
AGA 106 M	AGA 106 T	1	0,75	60	250	20	450	1,1	1	11,4	5,5	2,9	1,7
AGA 156 M	AGA 156 T	1,5	1,1	100	250	35	450	1,65	2	17,1	8,0	5,7	3,3
AGA 206 M	AGA 206 T	2	1,5	-	-	35	450	2,1	2	-	11,0	5,7	3,3
-	AGA 306 T	3	2,2	-	-	-	-	-	2,9	-	-	8,1	4,7

EBARA

EBARA

CMA-B-D-CMR

SINGLE IMPELLER CENTRIFUGAL ELECTRIC PUMPS

60 Hz

CMA-B-D - CMR

SINGLE IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in cast iron

CMA-B-D

CMR

Cast iron single impeller centrifugal electric pumps.

용도

- **공장용가압**
- **소규모관개**
- **상업용,산업용**
- **세척기**
- **세차**

기술정보

- CMR **타입:오픈임펠러**
- **산업용기계부착가능**

기술자료

- **최대사용압력:**
  CMA 056 - 076 - 106, CMB 076 - 106 - 156 - 206 - 306, CMD, CMR : 6 bar
  그외: 8 bar
- **최대유체온도:**
  CMA 056 - 076 - 106 : 40°C
  그외: 90°C
- **자체환기2극비동기식모터**
- **절연등급:F**
- **보호등급:IP44**
- 220-230V ±6%, 60Hz **단상**,
  220/380V -6%+10%, 60Hz **삼상**
- **흡입구:** G1 for CMA 056 - 076 - 106,
  G1¼ for CMA 156 - 206 - 306, G1½ for CMR, G2 for CMB,
  G2½ for CMD
- **토출구:** G1 for CMA, G1¼ for CMB, G1½ for CMR,
  G2½ for CMD

재질

- Cast iron pump body
- Mechanical seal in Carbon/Ceramic/NBR
- Impeller:
  - in PPE+PS reinforced with fibreglass for CMA 056 - 076 - 106
  - in brass for CMA 156 - 206 - 306, CMB 206 - 306 - 406 - 556, CMR
  - in cast iron for CMB 076 - 106 - 156, CMD
- Shaft:
  - in AISI 303 (part in contact with the liquid) for CMA 076 - 106 - 156 - 206 - 306, CMB 076 - 106 - 156 - 206 - 306, CMD 206 - 306 - CMR
  - in AISI 304 (part in contact with the liquid) for CMB 406 - 556, CMD 406
  - in AISI 416 (integral) for CMA 056
- Bracket:
  - in aluminium for CMA 056 - 076 - 106, CMB 076 - 106, CMR
  - in cast iron for the rest of the range

CMA-B-D - CMR 식별코드

CMA	156	M

단상	M
삼상	T
전원코드	056
	076
	106
	156
	206
	306
	406
	556
모델	CMA
	CMB
	CMD
	CMR

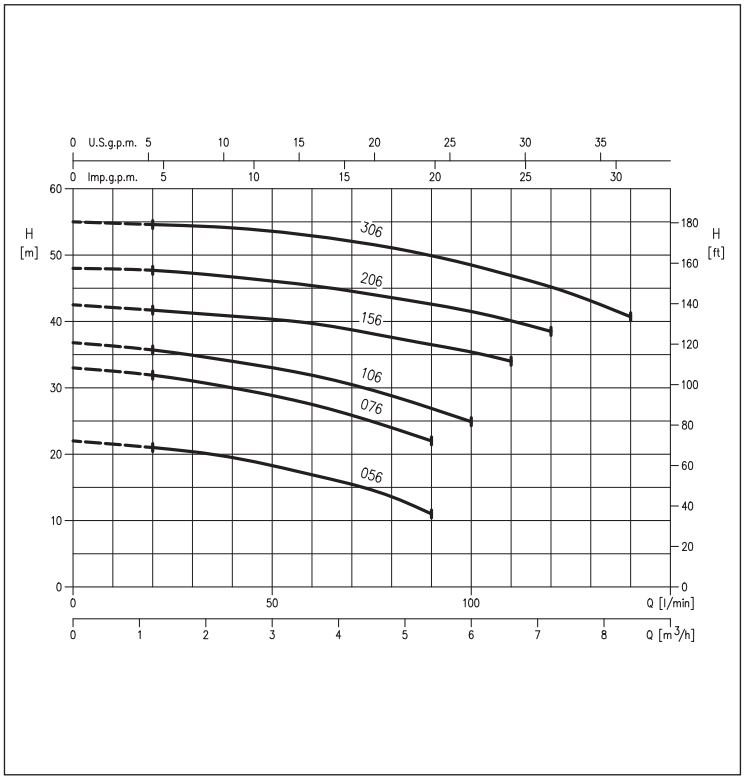
CMA-B-D - CMR

SINGLE IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in cast iron

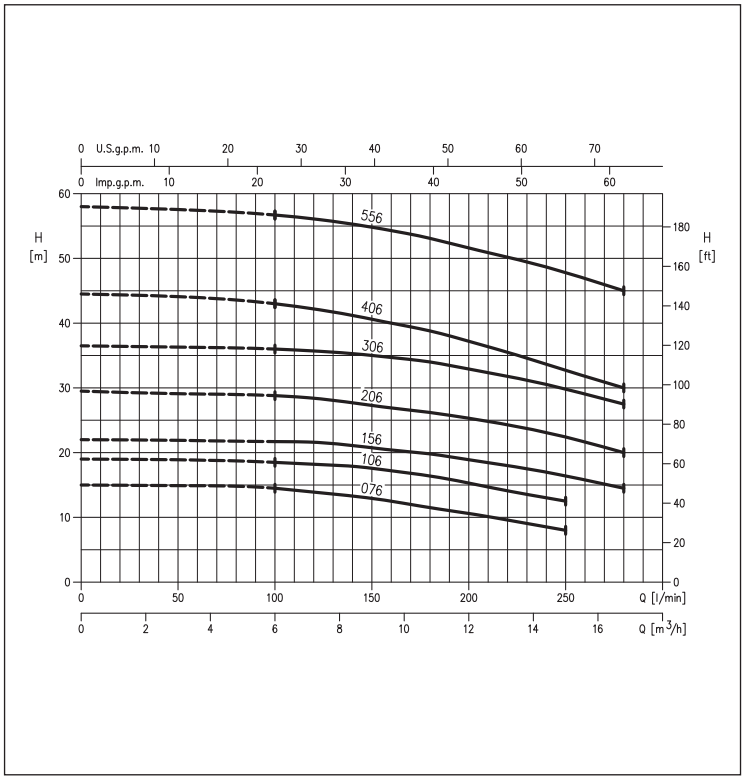
CMA range 성능곡선

(according to ISO 9906 Attachment A)



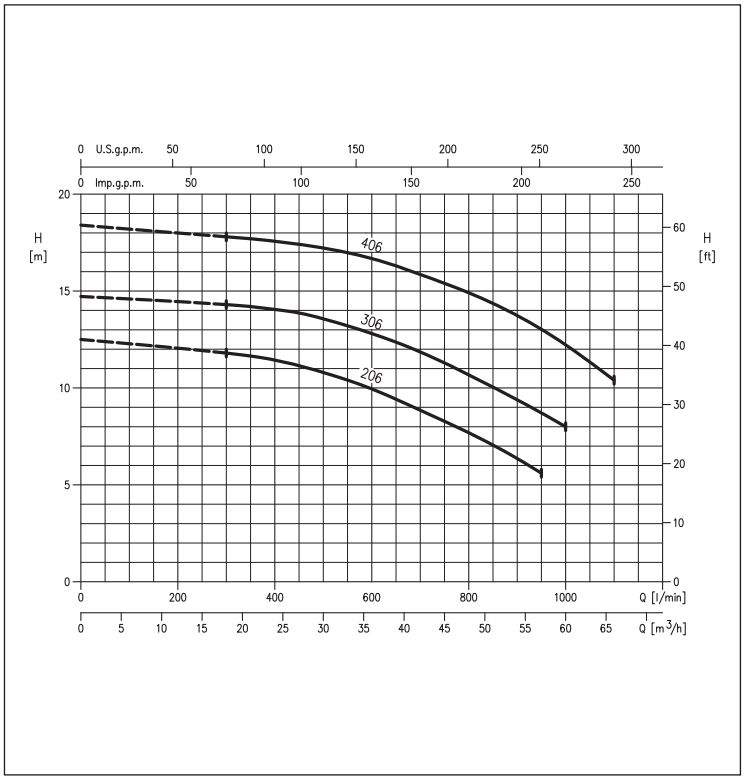
CMB range 성능곡선

(according to ISO 9906 Attachment A)



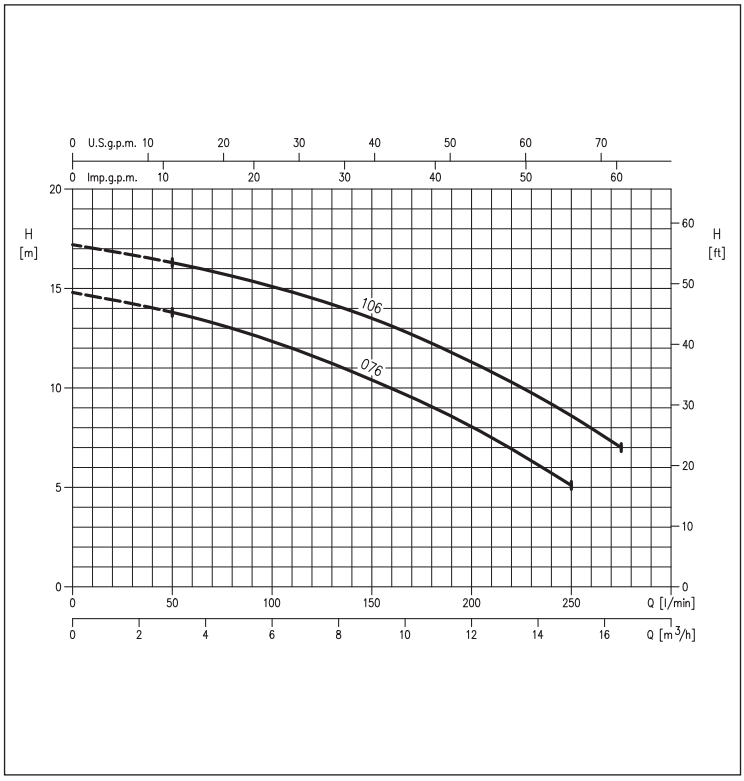
CMD range 성능곡선

(according to ISO 9906 Attachment A)



CMR range 성능곡선

(according to ISO 9906 Attachment A)



CMA-B-D - CMR

SINGLE IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in cast iron

CMA 성능표

모델 단상 220-230V	모델 삼상 220/380V	P_2 [HP]	P_2 [kW]	Q=유량 l/min	20	30	40	50	60	70	80	90	100	110	120	130	140
				m^3/h	1,2	1,8	2,4	3	3,6	4	4,8	5,4	6	6,6	7,2	7,8	8,4
				H=양정 [m]													
CMA 056 M	CMA 056 T	0,5	0,37		21,0	20,5	19,5	18,0	16,9	15,5	13,6	11,0	-	-	-	-	-
CMA 076 M	CMA 076 T	0,75	0,55		31,9	31,0	30,0	28,5	27,5	26,0	24,0	22,0	-	-	-	-	-
CMA 106 M	CMA 106 T	1	0,75		35,7	35,0	34,0	33,0	32,0	30,5	29,0	27,0	24,9	-	-	-	-
CMA 156 M	CMA 156 T	1,5	1,1		41,5	41,0	40,5	40,0	39,5	38,5	37,5	36,5	35,5	34,0	-	-	-
CMA 206 M	CMA 206 T	2	1,5		47,5	47,0	46,5	46,0	45,5	44,5	43,5	42,5	41,5	40,0	38,5	-	-
-	CMA 306 T	3	2,2		54,5	54,3	54,0	53,5	53,0	52,0	51,0	50,0	48,5	47,0	45,0	43,0	40,5

CMB 성능표

모델 단상 220-230V	모델 삼상 220/380V	P_2 [HP]	P_2 [kW]	Q=유량 l/min	100	120	140	160	180	200	220	250	280
				m^3/h	6	7,2	8,4	9,6	10,8	12	13,2	15	16,8
				H=양정 [m]									
CMB 076 M	CMB 076 T	0,75	0,55		14,5	13,9	13,3	12,5	11,5	10,6	9,6	8,0	-
CMB 106 M	CMB 106 T	1	0,75		18,5	18,2	17,9	17,2	16,4	15,3	14,1	12,5	-
CMB 156 M	CMB 156 T	1,5	1,1		21,7	21,6	21,1	20,4	19,8	18,9	18,0	16,4	14,5
CMB 206 M	CMB 206 T	2	1,5		28,8	28,4	27,7	26,9	26,2	25,3	24,3	22,4	20,0
-	CMB 306 T	3	2,2		36,0	35,7	35,3	34,7	34,0	32,9	31,8	29,8	27,5
-	CMB 406 T	4	3		43,0	42,0	41,0	40,0	38,8	37,2	35,5	32,7	30,0
-	CMB 556 T	5,5	4		56,5	56,0	55,0	54,0	53,0	51,5	50,0	48,0	45,0

CMD 성능표

모델 단상 220-230V	모델 삼상 220/380V	P_2 [HP]	P_2 [kW]	Q=유량 l/min	300	350	400	450	500	600	700	800	900	950	1000	1100
				m^3/h	18	21	24	27	30	36	42	48	54	57	60	66
				H=양정 [m]												
CMD 206 M	CMD 206 T	2	1,5		11,8	11,6	11,4	11,1	10,8	9,9	8,8	7,7	6,3	5,6	-	-
-	CMD 306 T	3	2,2		14,3	14,2	14,0	13,9	13,6	12,8	11,8	10,7	9,4	8,7	8,0	-
-	CMD 406 T	4	3		17,8	17,7	17,6	17,4	17,2	16,7	15,9	14,9	13,7	13,0	12,2	10,4

CMR 성능표

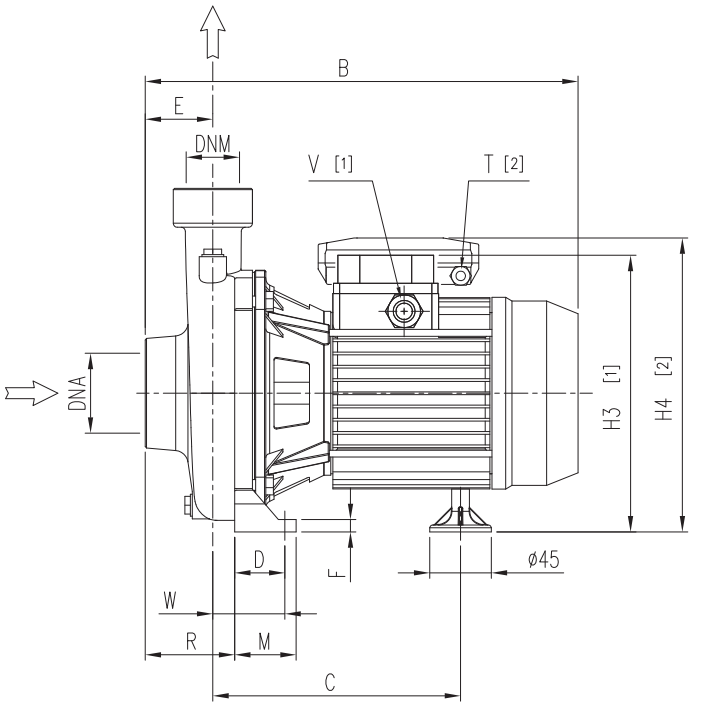
모델 단상 220-230V	모델 삼상 220/380V	P_2 [HP]	P_2 [kW]	Q=유량 l/min	50	100	150	200	250	275
				m^3/h	1,2	6	9	12	15	16,5
				H=양정 [m]						
CMR 076 M	CMR 076 T	0,75	0,55		13,8	12,3	10,5	8,0	5,1	-
CMR 106 M	CMR 106 T	1	0,75		16,3	15,1	13,5	11,3	8,6	7,0

CMA-B-D - CMR

SINGLE IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in cast iron

CMA-B-D - CMR 외형도



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

외형표

모델	외형치수 [mm]																							중량
	A	A1	A2	B	C	D	E	F	H	H1	H2	H3 [1]	H4 [2]	M	M1	N	N1	R	T [2]	V [1]	W	S	DNA	DNM	[kg]
CMA 056 M	158,5	76,5	82	264	156	30	44	8	202	82	120	-	174,5	40	40	110	150	44	PG11	-	30	9,5	G1	G1	7,3
CMA 056 T	158,5	76,5	82	262	159	30	44	8	202	82	120	172,5	-	40	40	110	150	44	-	PG11	30	9,5	G1	G1	7,2
CMA 076 M	187	91	96	302	171	37	45	9	232	97	135	-	199	45	40	140	180	45	PG11	-	37	9,5	G1	G1	10,3
CMA 076 T	187	91	96	301	172	37	45	9	232	97	135	197,5	-	45	40	140	180	45	-	PG11	37	9,5	G1	G1	10,2
CMA 106 M	187	91	96	301	172	37	45	9	232	97	135	-	198	45	40	140	180	45	PG11	-	37	9,5	G1	G1	11,5
CMA 106 T	187	91	96	302	171	37	45	9	232	97	135	198	-	45	40	140	180	45	-	PG11	37	9,5	G1	G1	11,5
CMA 156 M	196	97	99	348	209	42	45,5	9	252	100	152	-	232	50	40	155	194	45,5	PG13,5	-	42	9,5	G1¼	G1	19,5
CMA 156 T	196	97	99	346	207	42	45,5	9	252	100	152	219	-	50	40	155	194	45,5	-	PG11	42	9,5	G1¼	G1	18,0
CMA 206 M	223	110,5	112,5	361	209	42	45,5	9	285	115	170	-	247	50	40	180	220	45,5	PG13,5	-	42	9,5	G1¼	G1	22,8
CMA 206 T	223	110,5	112,5	346	207	42	45,5	9	285	115	170	234	-	50	40	180	220	45,5	-	PG11	42	9,5	G1¼	G1	21,5
CMA 306 T	223	110,5	112,5	359	207	42	45,5	9	285	115	170	234	-	50	40	180	220	45,5	-	PG11	42	9,5	G1¼	G1	23,4
CMB 076 M	188	90	98	316	183	37	49,5	9	251,5	101,5	150	-	127,5	45	40	140	180	65,5	PG11	-	53	9,5	G2	G1¼	11,5
CMB 076 T	188	90	98	317	182	37	49,5	9	251,5	101,5	150	203,5	-	45	40	140	180	65,5	-	PG11	53	9,5	G2	G1¼	11,6
CMB 106 M	188	90	98	316	183	37	49,5	9	251,5	101,5	150	-	127,5	45	40	140	180	65,5	PG11	-	53	9,5	G2	G1¼	13,7
CMB 106 T	188	90	98	317	182	37	49,5	9	251,5	101,5	150	202,5	-	45	40	140	180	65,5	-	PG11	53	9,5	G2	G1¼	13,5
CMB 156 M	188	90	98	350	207	37	49,5	9	251,5	101,5	150	-	233,5	45	40	140	180	65,5	PG13,5	-	53	9,5	G2	G1¼	19,0
CMB 156 T	188	90	98	348	205	37	49,5	9	251,5	101,5	150	220,5	-	45	40	140	180	65,5	-	PG11	53	9,5	G2	G1¼	17,6
CMB 206 M	212,5	102	110,5	374	210	37	57,5	9	271,5	111,5	160	-	243,5	45	40	160	200	76,5	PG13,5	-	56	9,5	G2	G1¼	21,0
CMB 206 T	212,5	102	110,5	372	208	37	57,5	9	271,5	111,5	160	230,5	-	45	40	160	200	76,5	-	PG11	56	9,5	G2	G1¼	20,1
CMB 306 T	212,5	102	110,5	372	208	37	57,5	9	271,5	111,5	160	230,5	-	45	40	160	200	76,5	-	PG11	56	9,5	G2	G1¼	21,3
CMB 406 T	248,5	121	127,5	427	246	48	60	12	323,5	133,5	190	274,5	-	60	50	190	240	77,5	-	PG16	66	12	G2	G1¼	39,0
CMB 556 T	248,5	121	127,5	467	246	48	60	12	323,5	133,5	190	274,5	-	60	50	190	240	77,5	-	PG16	66	12	G2	G1¼	41,0
CMD 206 M	211	97	114	398	223	37	68	12	271,5	111,5	160	-	243,5	45	40	160	200	100,5	PG13,5	-	70	9,5	G2½	G2½	23,0
CMD 206 T	211	97	114	396	221	37	68	12	271,5	111,5	160	230,5	-	45	40	160	200	100,5	-	PG11	70	9,5	G2½	G2½	21,4
CMD 306 T	211	97	114	396	221	37	68	12	271,5	111,5	160	230,5	-	45	40	160	200	100,5	-	PG11	70	9,5	G2½	G2½	23,0
CMD 406 T	211	97	114	444	255	37	68	12	271,5	111,5	160	252,5	-	45	40	160	200	100,5	-	PG16	70	9,5	G2½	G2½	30,0
CMR 076 M	180	90	90	311	182	37	45	9	229	97	132	-	198	45	40	140	180	60,5	PG11	-	53	9,5	G1½	G1½	10,7
CMR 076 T	180	90	90	312	181	37	45	9	229	97	132	199	-	45	40	140	180	60,5	-	PG11	53	9,5	G1½	G1½	10,7
CMR 106 M	180	90	90	311	182	37	45	9	229	97	132	-	198	45	40	140	180	60,5	PG11	-	53	9,5	G1½	G1½	11,9
CMR 106 T	180	90	90	312	181	37	45	9	229	97	132	198	-	45	40	140	180	60,5	-	PG11	53	9,5	G1½	G1½	11,9

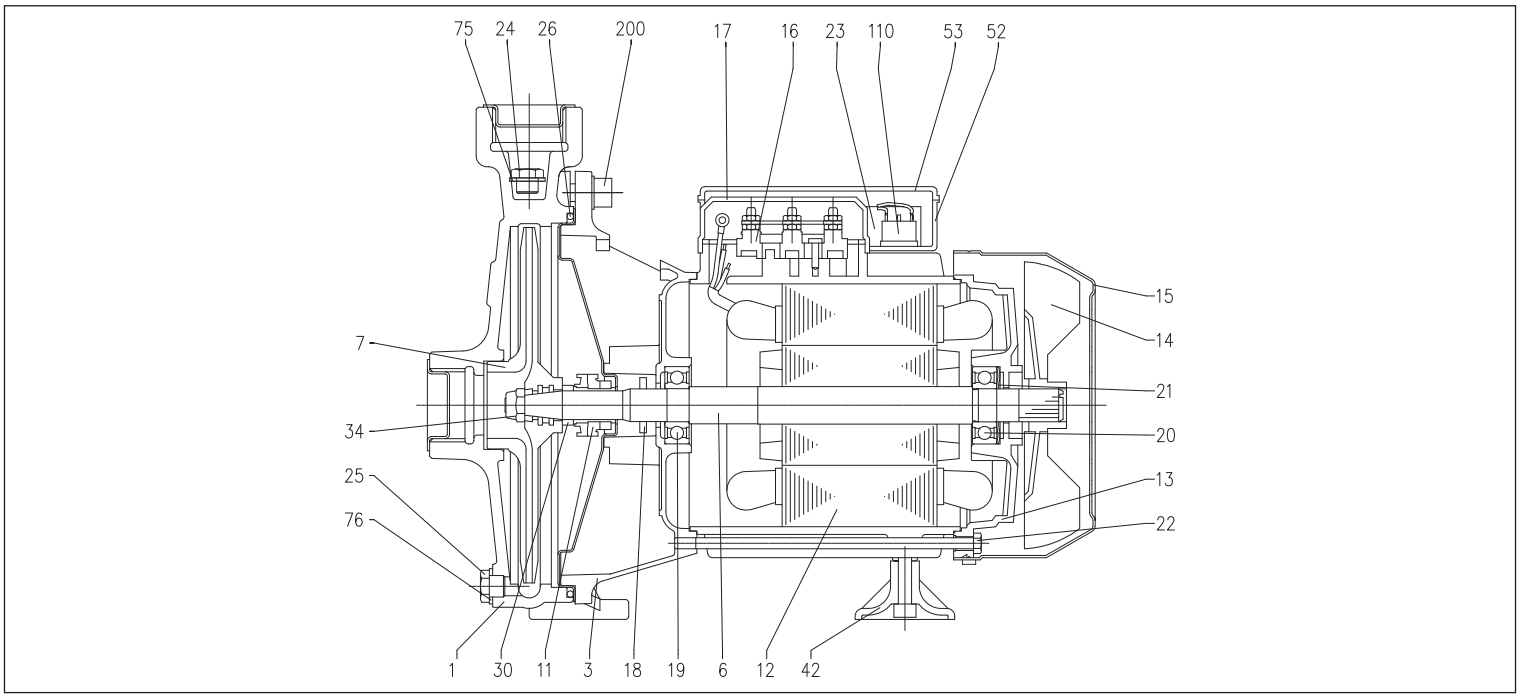
[1]= Three phase only
[2]= Single phase only

CMA-B-D - CMR

SINGLE IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in cast iron

단면도 for CMA-B-D up to 1.00 HP

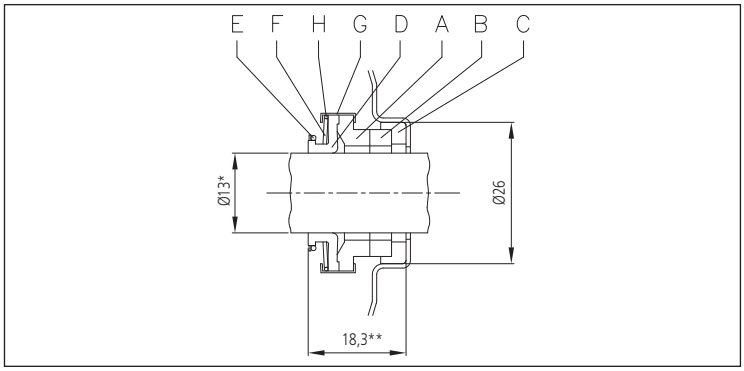


부품표

Ref.	부품명	재질	Ref.	부품명	재질
1	Pump body	Cast iron	21	Adjusting ring	Steel C70
3	Motor support	Aluminium	22	Tie-rod	Galvanised Fe 42
4	Casing cover	AISI 304	23	Capacitor [2]	-
6	Shaft	see page 3	24	Priming plug	Brass
7	Impeller	see page 3	25	Drain plug	Brass
11	Mechanical seal	Carbon/Ceramic/NBR	26	O-Ring	NBR
12	Motor frame with stator	-	30	Mechanical seal spacer [3]	Brass
13	Motor cover	Aluminium	34	Impeller nut [4]	AISI 304
14	Fan	PA6	42	Foot	PP
15	Fan cover	Galvanised Fe P04	52	Capacitor box [2]	ABS
16	Terminal box	-	53	Capacitor box cover [2] [5]	ABS
17	Terminal box cover [1]	Aluminium	75	Washer	Aluminium
18	Splash ring	NBR	76	Washer	Aluminium
19	Bearing (pump side)	-	110	Protector [2]	-
20	Bearing (motor side)	-	200	Screw (pump body)	Zn Steel Cl. 8.8 ISO 898-1

[1]= For three phase only
[2]= For single phase only
[3]= For CMA 056, CMB 076-106 only
[4]= Except for CMA 056
[5]= With gasket in NBR for single phase CMA 056-076-106, CMB 076-106 versions only

매카니컬실 for CMA-B-D up to 1.00 HP



*= Ø12 for CMA 056
**= 18,5 for CMA 056

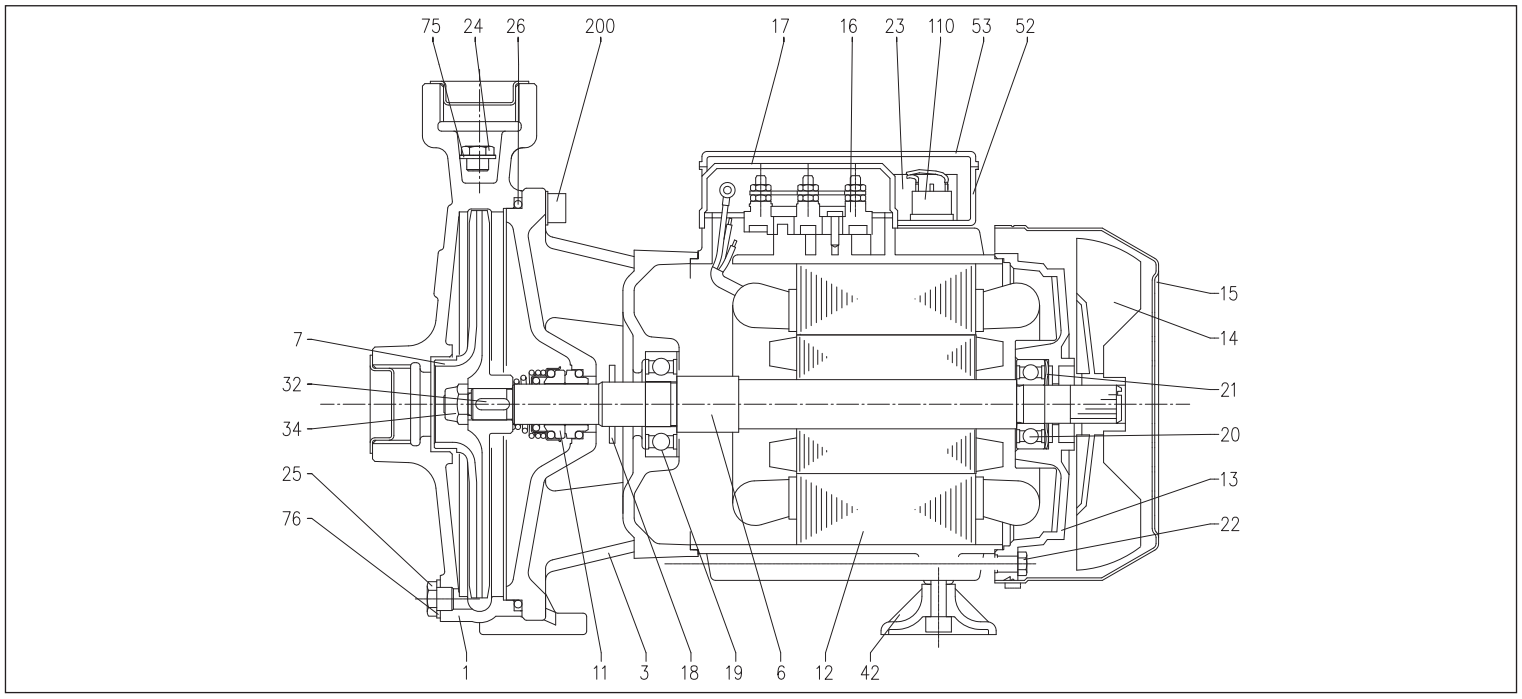
부품상세

Ref.	부품명	재질
A	Rotating part	Carbon
B	Fixed part	Ceramic
C	Gasket	NBR
D	Bellows	NBR
E	Ring	AISI 304
F	Spring	AISI 304
G	Structure/frame	AISI 304
H	Retainer ring	AISI 304

CMA-B-D - CMR

SINGLE IMPELLER CENTRIFUGAL ELECTRIC PUMPS
in cast iron

단면도 for CMA-B-D from 1.50 HP and above

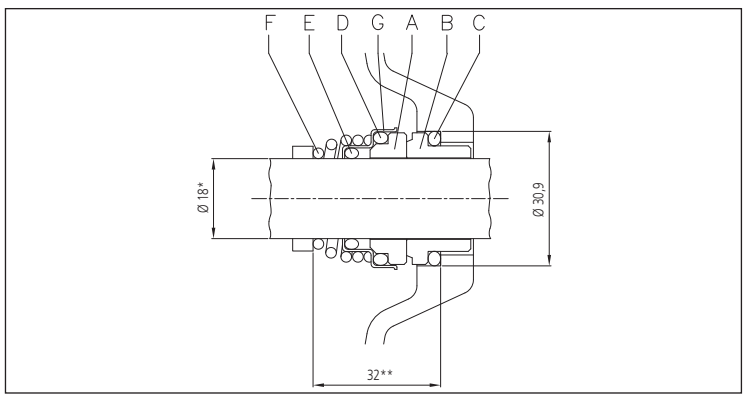


부품표

Ref.	부품명	재질	Ref.	부품명	재질
1	Pump body	Cast iron	22	Tie-rod	Galvanised Fe 42
3	Motor bracket	Cast iron	23	Capacitor [2]	-
6	Shaft with rotor	see page 3	24	Priming plug	Brass
7	Impeller	see page 3	25	Drain plug	Brass
11	Mechanical seal	Carbon/Ceramic/NBR	26	O-Ring	NBR
12	Motor frame with stator	-	32	Key	AISI 316
13	Motor cover	Aluminium	34	Impeller nut	AISI 304
14	Fan	PA6	42	Foot	PP
15	Fan cover	Galvanised Fe P04	52	Capacitor box [2]	ABS
16	Terminal board	-	53	Capacitor box cover [2]	ABS
17	Terminal box board [1]	Aluminium	75	Washer	Aluminium
18	Splash ring	NBR	76	Washer	Aluminium
19	Bearing (pump side)	-	101	Seeger ring	AISI 420
20	Bearing (motor side)	-	110	Motorprotector [2]	-
21	Adjusting ring	Steel C70	200	Screw (pump body)	Zn Steel Cl. 8.8 ISO 898-1

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

매카니컬실 for CMA-B-D from 1.50 HP and above



*= Ø20 for CMB 406 - 556 **= 33 for CMB 406 - 556

부품상세

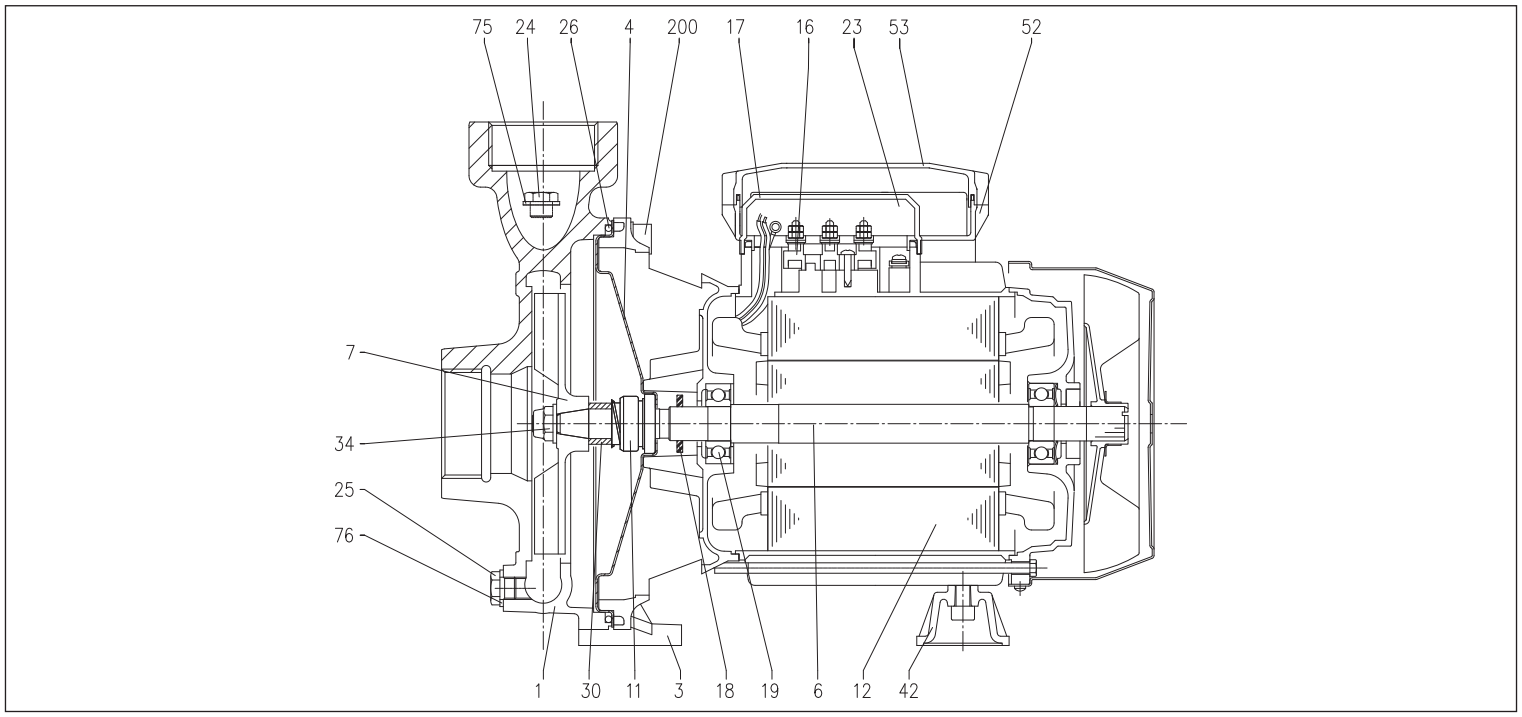
Ref.	부품명	재질
A	Rotating part	Ceramic
B	Fixed part	Carbon
C	O-Ring	NBR
D	O-Ring	NBR
E	O-Ring	NBR
F	Spring	AISI 316
G	Structure/frame	AISI 304

CMA-B-D - CMR

SINGLE IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in cast iron

단면도 for CMR

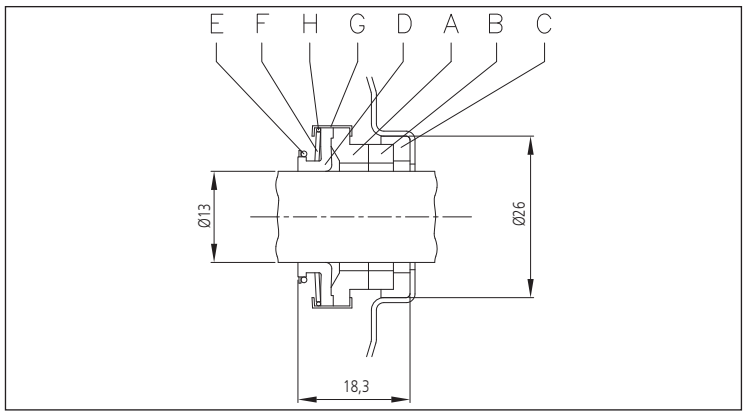


부품표

Ref.	부품명	재질	Ref.	부품명	재질
1	Pump body	Cast iron	21	Adjusting ring	Steel C70
3	Motor bracket	Aluminium	22	Tie-rod	Galvanised Fe 42
4	Casing cover	AISI 304	23	Capacitor [2]	-
6	Shaft with rotor	AISI 303 (part in contact with the liquid)	24	Priming plug	Brass
7	Impeller	Brass	25	Drain plug	Brass
11	Mechanical seal	Carbon/Ceramic/NBR	26	O-Ring	NBR
12	Motor frame with stator	-	30	Mechanical seal spacer	Brass
13	Motor cover [1]	Aluminium	34	Impeller nut	AISI 304
14	Fan	PP	42	Foot	PP
15	Fan cover	Galvanised Fe P04	52	Capacitor box [2]	ABS
16	Terminal box	-	53	Capacitor box cover [2]	ABS+NBR
17	Terminal box cover [1]	Aluminium	75	Washer	Aluminium
18	Splash ring	NBR	76	Washer	Aluminium
19	Bearing (pump side)	-	200	Screw (pump body)	Zn Steel Cl. 8.8 ISO 898-1
20	Bearing (motor side)	-			

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

매카니컬실 for CMR



부품상세

Ref.	부품명	재질
A	Rotating part	Carbon
B	Fixed part	Ceramic
C	Gasket	NBR
D	Bellows	NBR
E	Ring	AISI 304
F	Spring	AISI 304
G	Structure/frame	AISI 304
H	Retainer ring	AISI 304

CMA-B-D - CMR

SINGLE IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in cast iron

전기관련표

모델		P_2		Capacitor 단상		P_1		Absorbed Current [A]		
단상 220-230V	삼상 220/380V	[HP]	[kW]	µF	V_c	단상 [kW]	삼상 [kW]	단상 220-230V	삼상 220V	삼상 380V
CMA 056 M	CMA 056 T	0,5	0,37	10	450	0,7		3,5		
CMA 076 M	CMA 076 T	0,75	0,55	16	450	1,2		5,6		
CMA 106 M	CMA 106 T	1	0,75	20	450	1,3	1,0	6,3	2,9	1,7
CMA 156 M	CMA 156 T	1,5	1,1	35	450	1,9	2,0	9,2	5,7	3,3
CMA 206 M	CMA 206 T	2	1,5	35	450	2,33	2,9	10,9	8,1	4,7
-	CMA 306 T	3	2,2	-	-	-	2,9	-	8,1	4,7
CMB 076 M	CMB 076 T	0,75	0,55	14	450	0,93	0,84	4,5	2,6	1,5
CMB 106 M	CMB 106 T	1	0,75	20	450	1,3	1,0	6,4	2,9	1,7
CMB 156 M	CMB 156 T	1,5	1,1	35	450	1,6	2,0	7,8	5,7	3,3
CMB 206 M	CMB 206 T	2	1,5	35	450	2,0	2,9	9,8	8,1	4,7
-	CMB 306 T	3	2,2	-	-	-	2,9	-	8,1	4,7
-	CMB 406 T	4	3	-	-	-	3,8	-	11,1	6,4
-	CMB 556 T	5,5	4	-	-	-	5,1	-	14,7	8,5
CMD 206 M	CMD 206 T	2	1,5	31,5	450	2,3	2,9	10,5	8,1	4,7
-	CMD 306 T	3	2,2	-	-	-	2,9	-	8,1	4,7
-	CMD 406 T	4	3	-	-	-	3,8	-	11,1	6,4
CMR 076 M	CMR 076 T	0,75	0,55	12,5	450	0,84	0,73	3,9	2,3	1,3
CMR 106 M	CMR 106 T	1	0,75	20	450	1,07	1,0	5,0	2,9	1,7

EBARA

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**

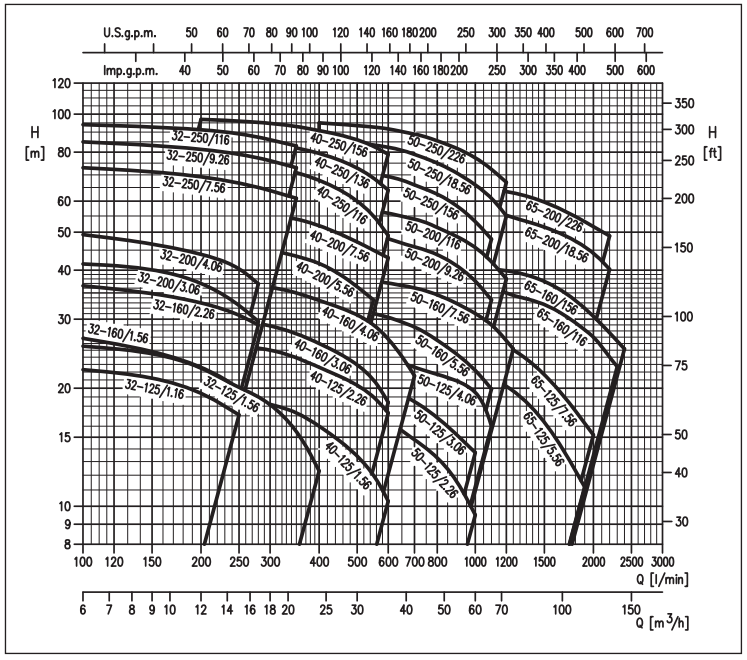
기술정보
- "H" **버전가능** (Ceramic/Carbon/FPM)
- "HS" **버전가능** (SiC/SiC/FPM)
- "HW" **버전가능** (Tungsten Carbide/Tungsten Carbide/FPM)

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**)

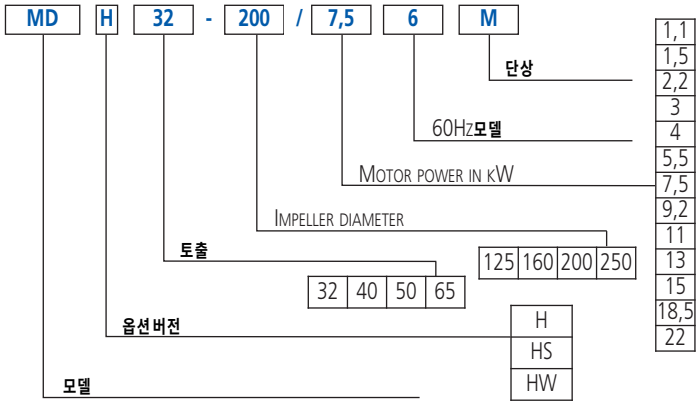
재질
- Cast iron pump body and bracket
- Shaft in AISI 304
- Mechanical seal in Carbon/Ceramic/NBR
- Impeller in cast iron or bronze (see materials table)

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

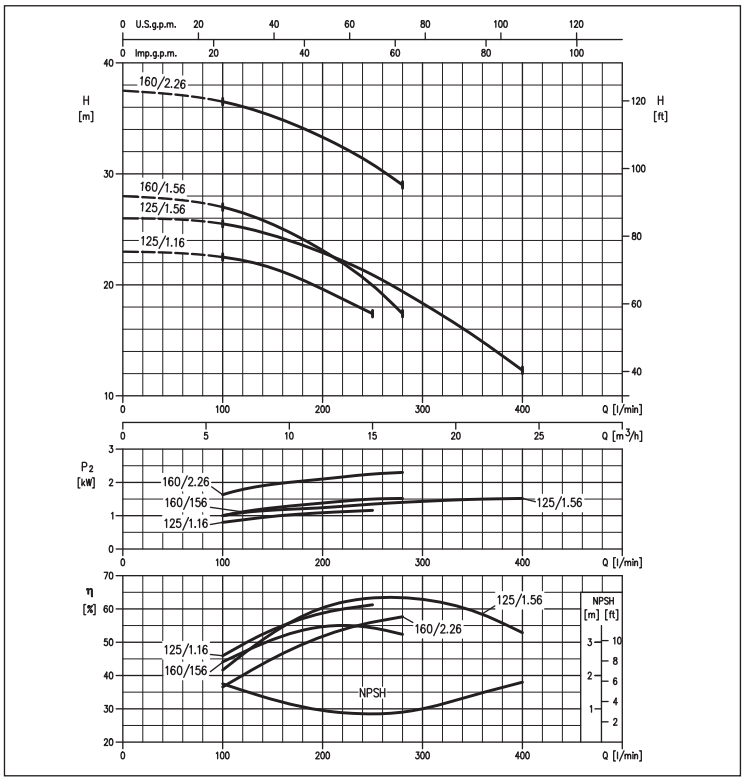
모델	P_2		Q=유량																					
			l/min	100	200	250	280	350	400	550	600	667	700	800	1000	1100	1200	1250	1400	1900	2000	2200	2300	2400
	[HP]	[kW]	m^3/h	6	12	15	17	21	24	33	36	40	42	48	60	66	72	75	84	114	120	132	138	144
													H=양정 [m]											
MD 32-125/1.16 (M)	1,5	1,1	22,5	19,6	17,4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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

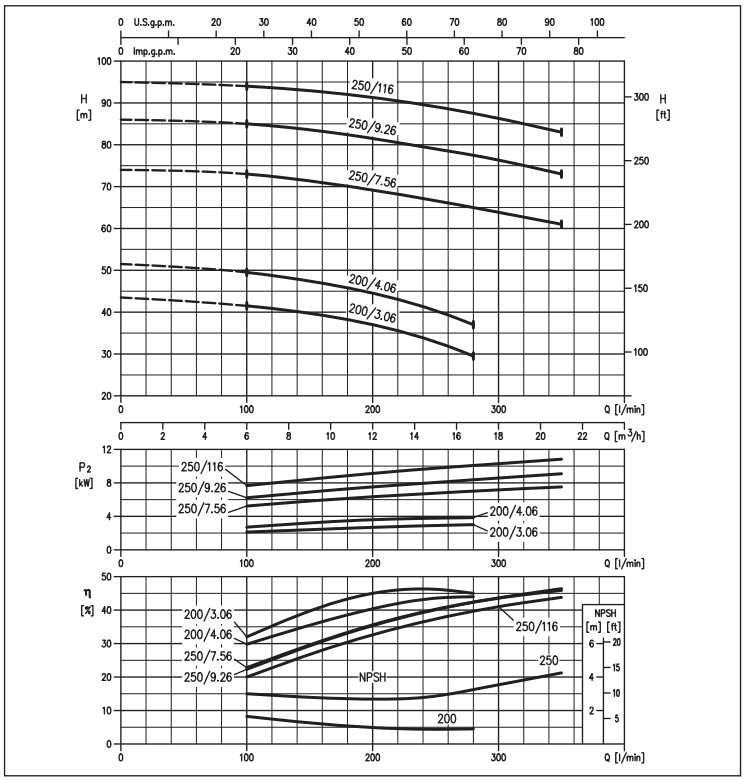
MD 32-125, 32-160 range 성능곡선

(according to ISO 9906 Attachment A)



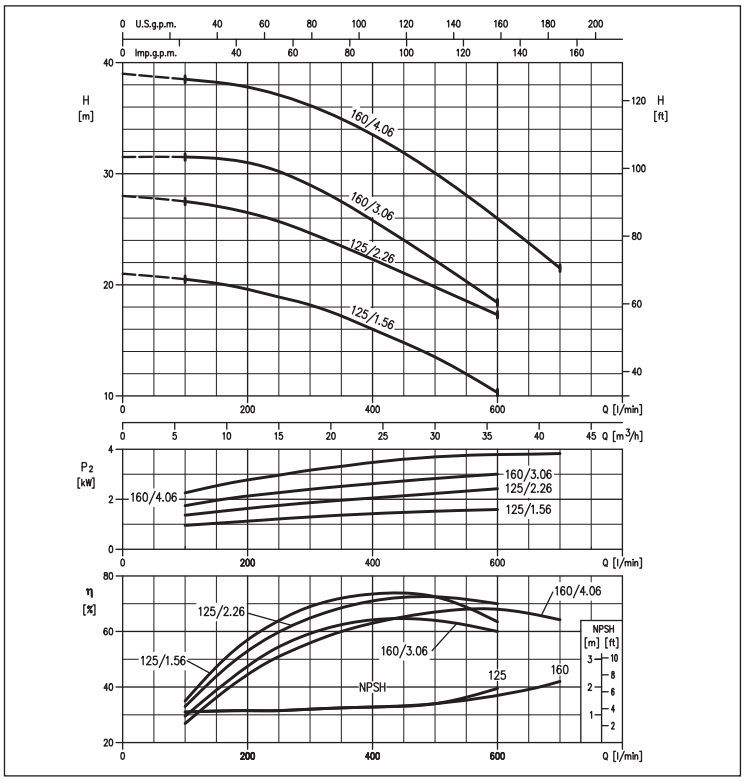
MD 32-200, 32-250 range 성능곡선

(according to ISO 9906 Attachment A)



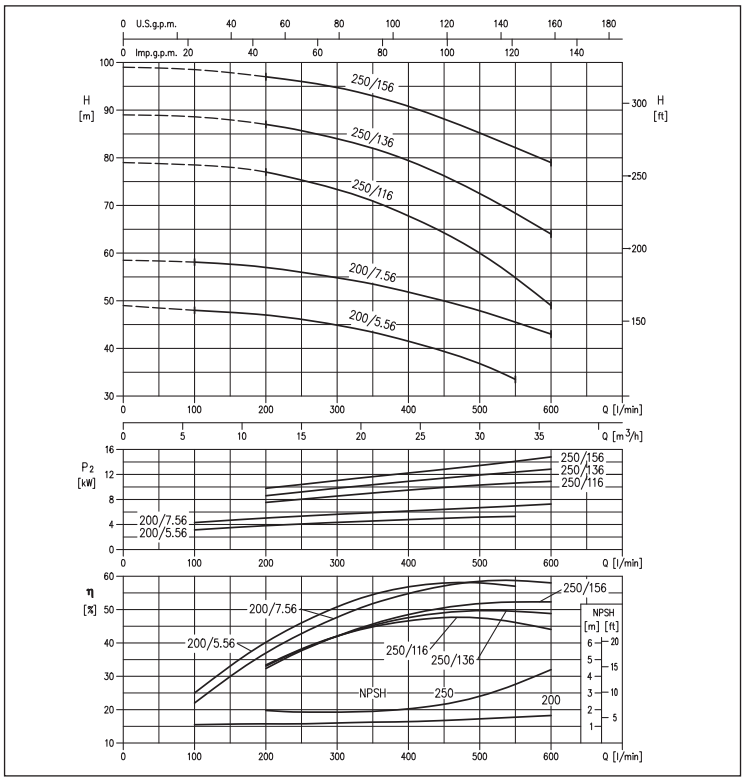
MD 40-125, 40-160 range 성능곡선

(according to ISO 9906 Attachment A)



MD 40-200, 40-250 range 성능곡선

(according to ISO 9906 Attachment A)

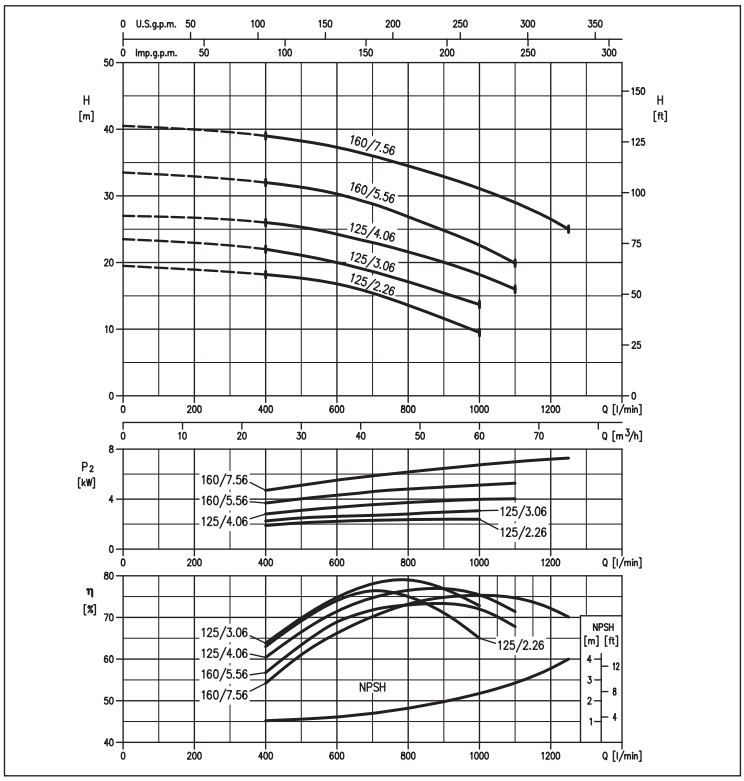


MONOBLOC CENTRIFUGAL ELECTRIC PUMP IN COMPLIANCE WITH EN 733

in cast iron

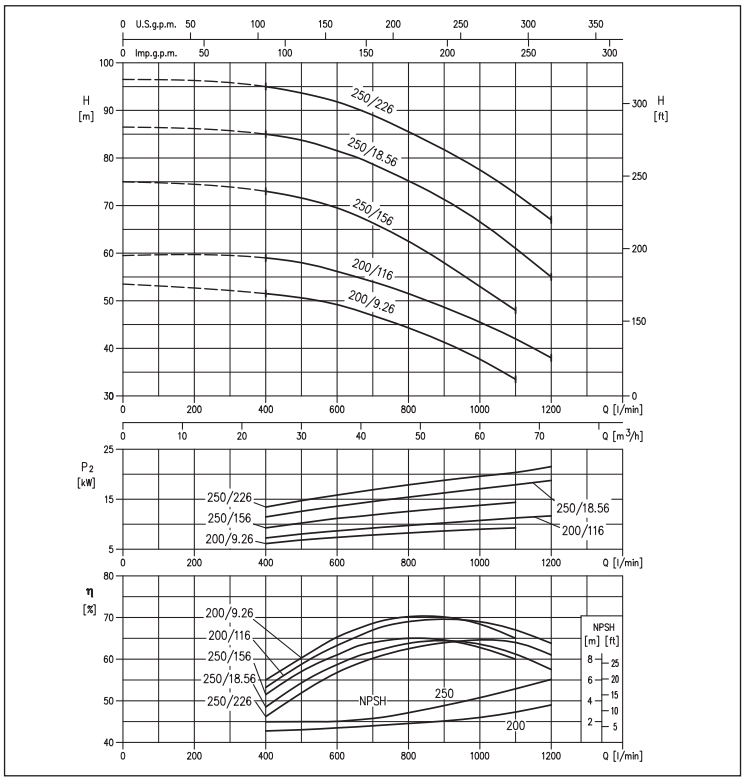
MD 50-125, 50-160 range 성능곡선

(according to ISO 9906 Attachment A)



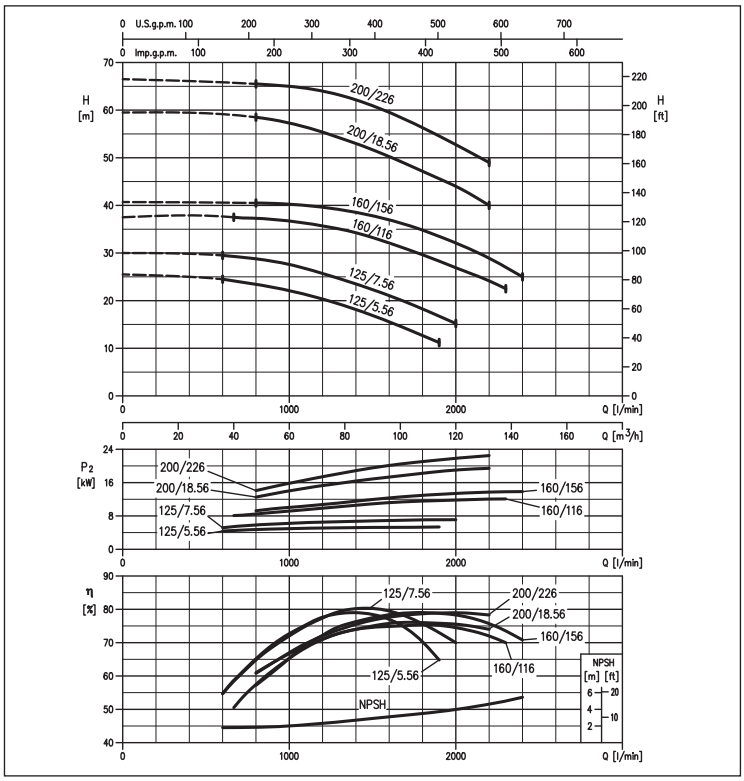
MD 50-200, 50-250 range 성능곡선

(according to ISO 9906 Attachment A)



MD 65 range 성능곡선

(according to ISO 9906 Attachment A)

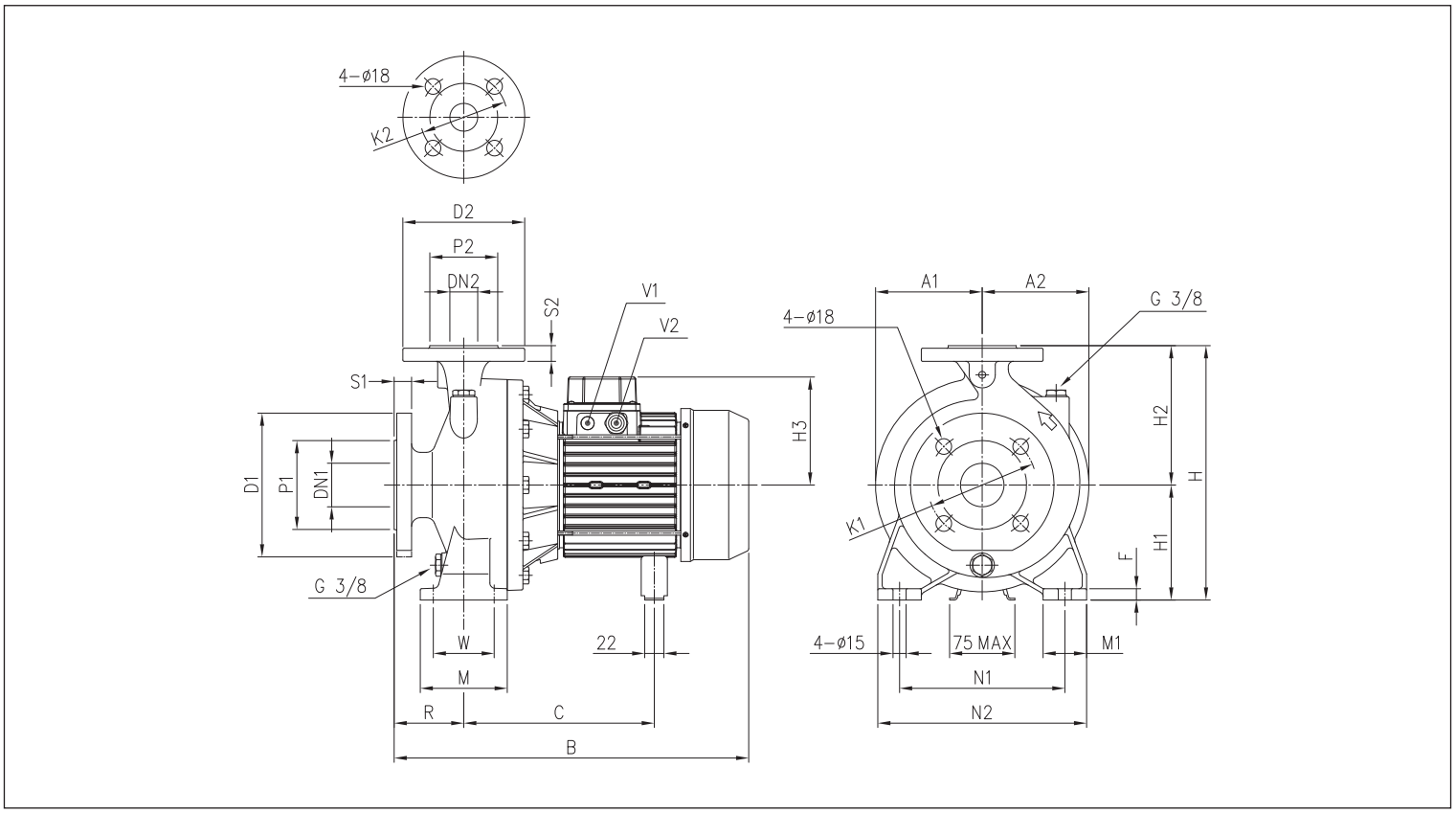


MD

MONOBLOC CENTRIFUGAL ELECTRIC PUMP IN COMPLIANCE WITH EN 733

in cast iron

외형도 up to 11 kW



외형표 up to 11 kW

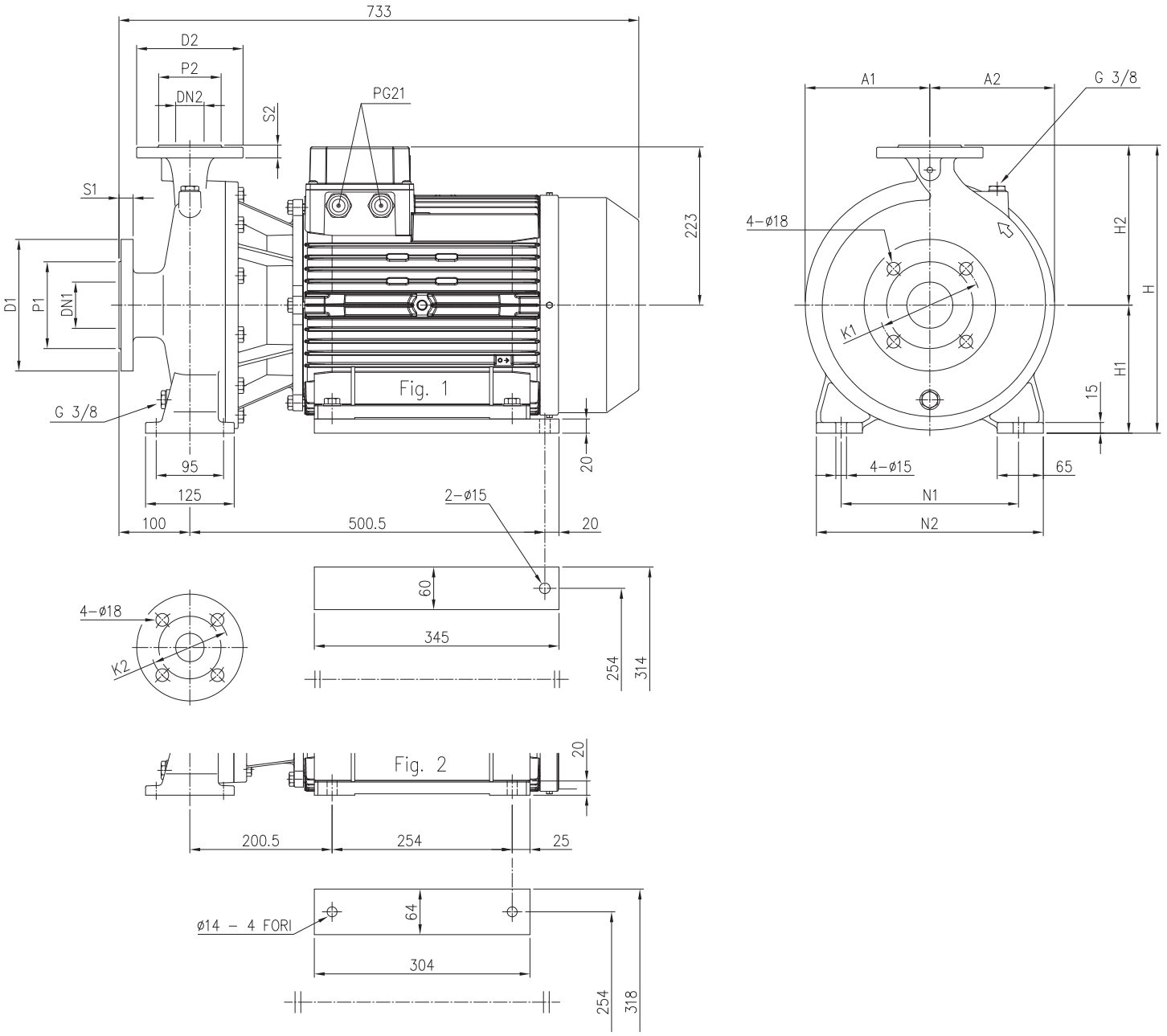
모델	외형치수 [mm]																														중량 [kg]	
	DN1 Ø	P1 Ø	K1 Ø	D1 Ø	S1	DN2 Ø	P2 Ø	K2 Ø	D2 Ø	S2	H	H1	H2	H3 [1]	H3 [2]	R	W	M	M1	N1	N2	A1	A2	B [2]	B [1]	C	F	V1 [1]	V2 [1]	V2 [2]	[2]	[1]
MD 32-125/1.16 (M)	50	102	125	165	20	32	78	100	140	18	252	112	140	124	141	80	70	100	50	140	190	104	104	408	407	219÷230	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



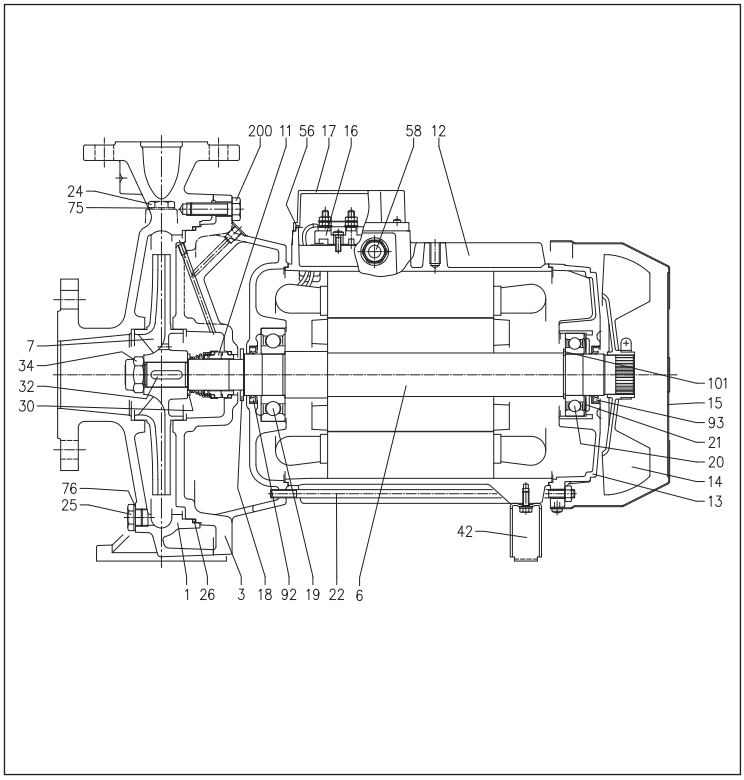
외형표 from 13 kW and above

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

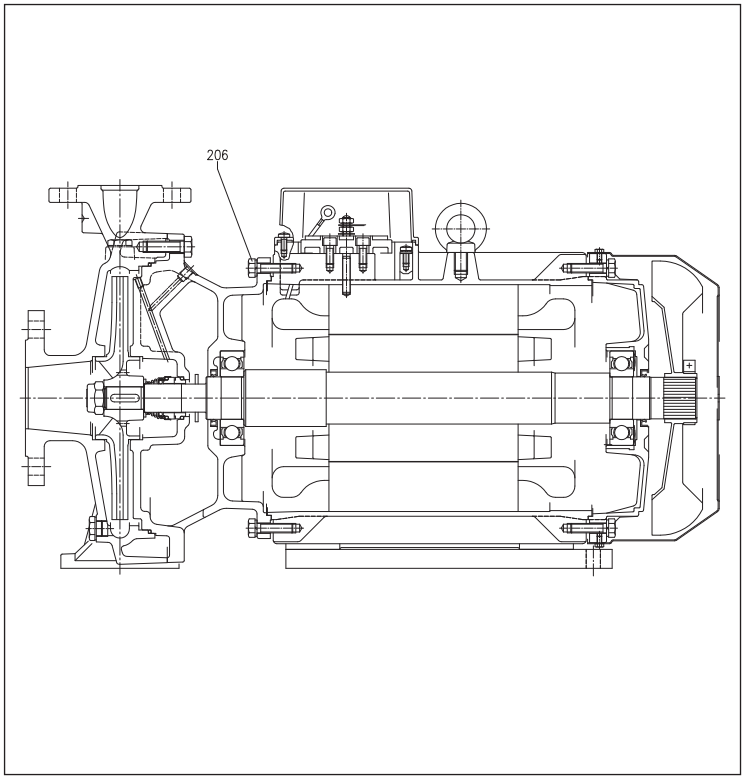
MD

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

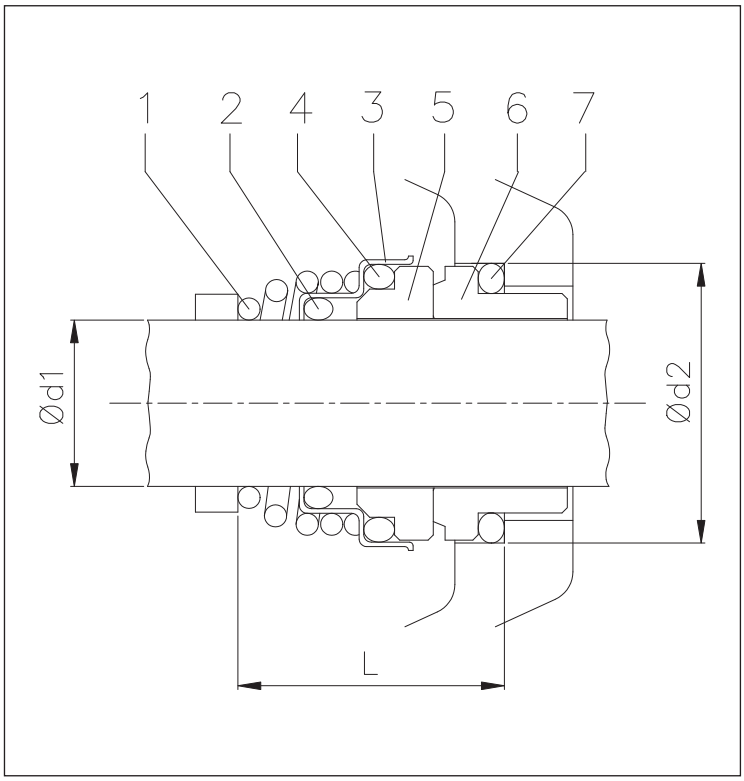
Ref.	부품명	재질	Ref.	부품명	재질
1	Casing	Cast iron EN-GJL-200-EN 1561	24	Filler cap	Brass
3	Motor bracket	Cast iron EN-GJL-200-EN 1561	25	Drain plug	Brass
6	Shaft	AISI 304 (part in contact with the liquid)	26	O-Ring	NBR
7	Impeller (MD xx-125, xx-160, xx-200)	Cast iron EN-GJL-200-EN 1561	30	Spacer	AISI 304
	Impeller (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

EBARA

EBARA

CDX-2CDX

SINGLE IMPELLER CENTRIFUGAL ELECTRIC PUMPS
DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

60 Hz

CDX(L)

SINGLE IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304 and AISI 316

Single impeller centrifugal electric pumps with hydraulic parts in AISI 304 and AISI 316 stainless steel.

용도

- **생활용수부스터**
- **소규모관개**
- **세척**
- **수처리**
- **냉각타워**
- **청수이송**

기술정보

- **뛰어난내구성**
- **컴팩트한사이즈**

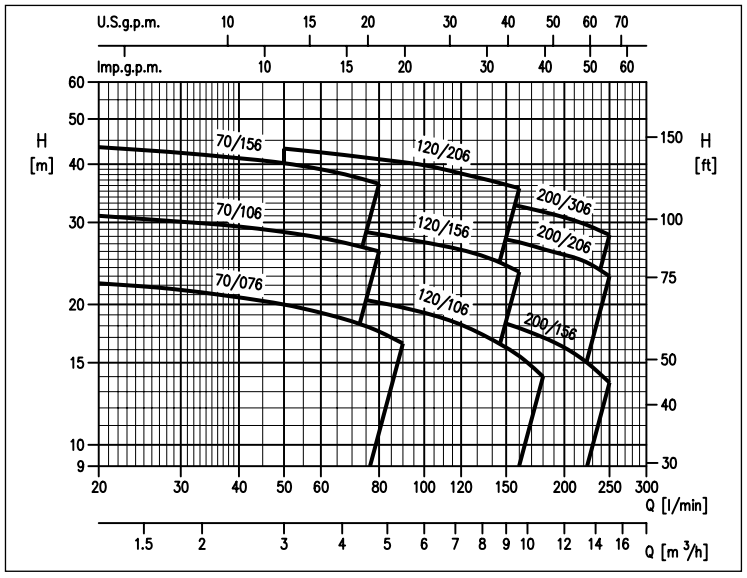
기술자료

- **최대사용압력 : 8bar**
- **최대유체온도** :
  CDX 70 -5°C **부터** +60°C **까지**
  그외 -5°C **부터** +90°C **까지**
  H-HS-HW-HSW **버전** -5°C **부터** +110°C **까지**
- **자체환기2극비동기식모터**
- **절연등급** F
- **보호등급** IP55
- 110-115V ±6%, 60Hz **단상**
  220-230V ±6%, 60Hz **단상**
  220/380-460V -6%+10%, 60Hz **삼상**
- CDX 200 **흡입구 연결** G1½, **그외** G1¼
- **토출구연결** G1

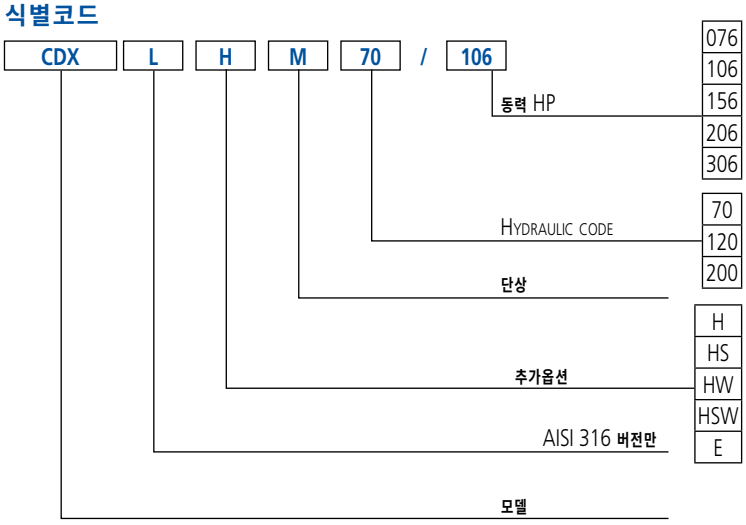
재료

- Casing, impeller, diffuser and casing cover in AISI 304 or AISI 316 for "L" version
- Shaft in AISI 303 or AISI 316 for "L" version
- Motor bracket and motor cover in aluminium
- Mechanical seal in:
  - Ceramic/Carbon/NBR (standard)
  - Ceramic/Carbon/FPM (H version)
  - SiC/SiC/FPM (HS version)
  - Tungsten carbide/Tungsten carbide/FPM (HW version - seal with reduced slide face)
  - SiC/Tungsten carbide/FPM (HSW version)
  - Ceramic/Graphite/EPDM (E version)

성능곡선 (according to ISO 9906 Attachment A)



식별코드



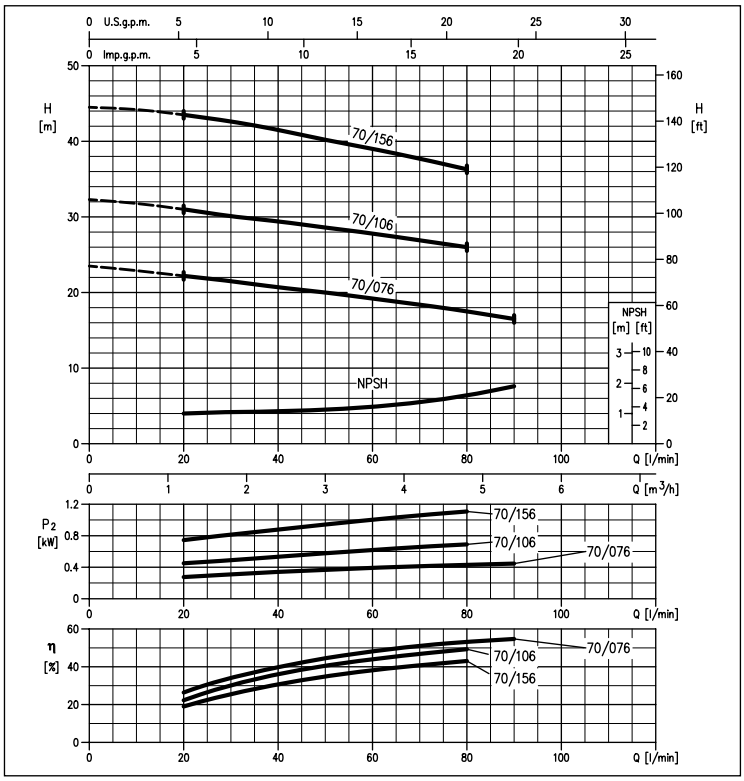
CDX(L)

SINGLE IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304 and AISI 316

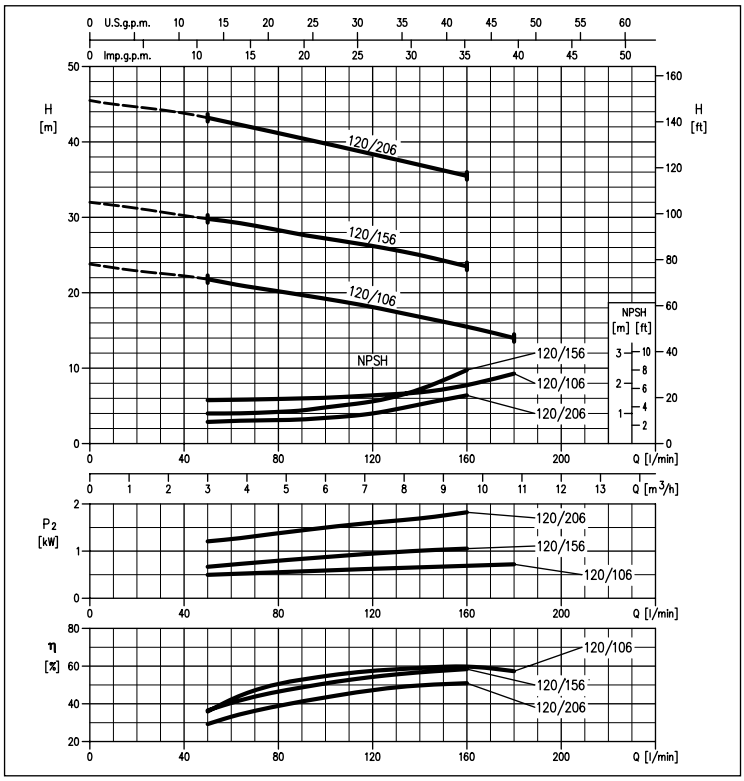
CDX 70 range 성능곡선

(according to ISO 9906 Attachment A)



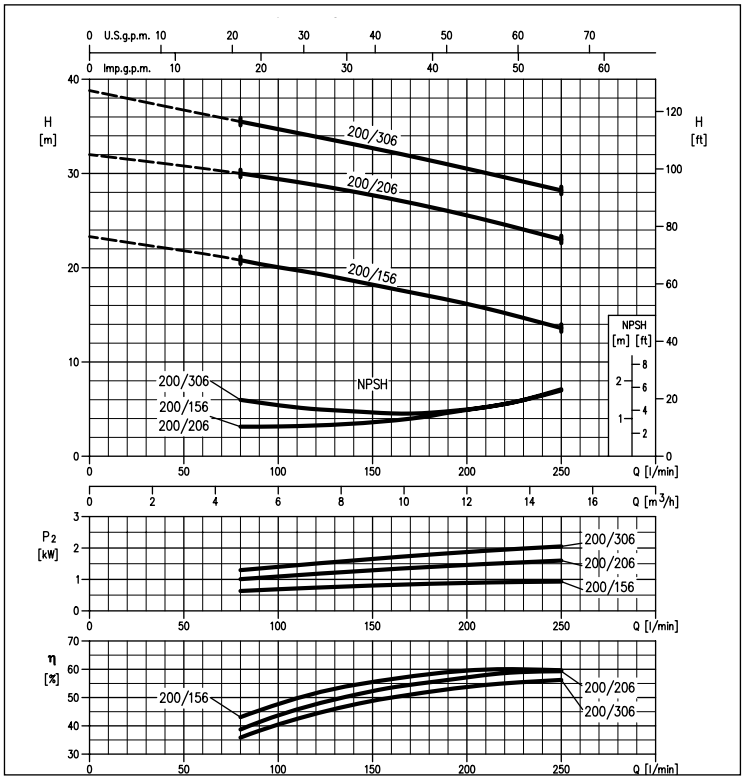
CDX 120 range 성능곡선

(according to ISO 9906 Attachment A)



CDX 200 range 성능곡선

(according to ISO 9906 Attachment A)



CDX(L)

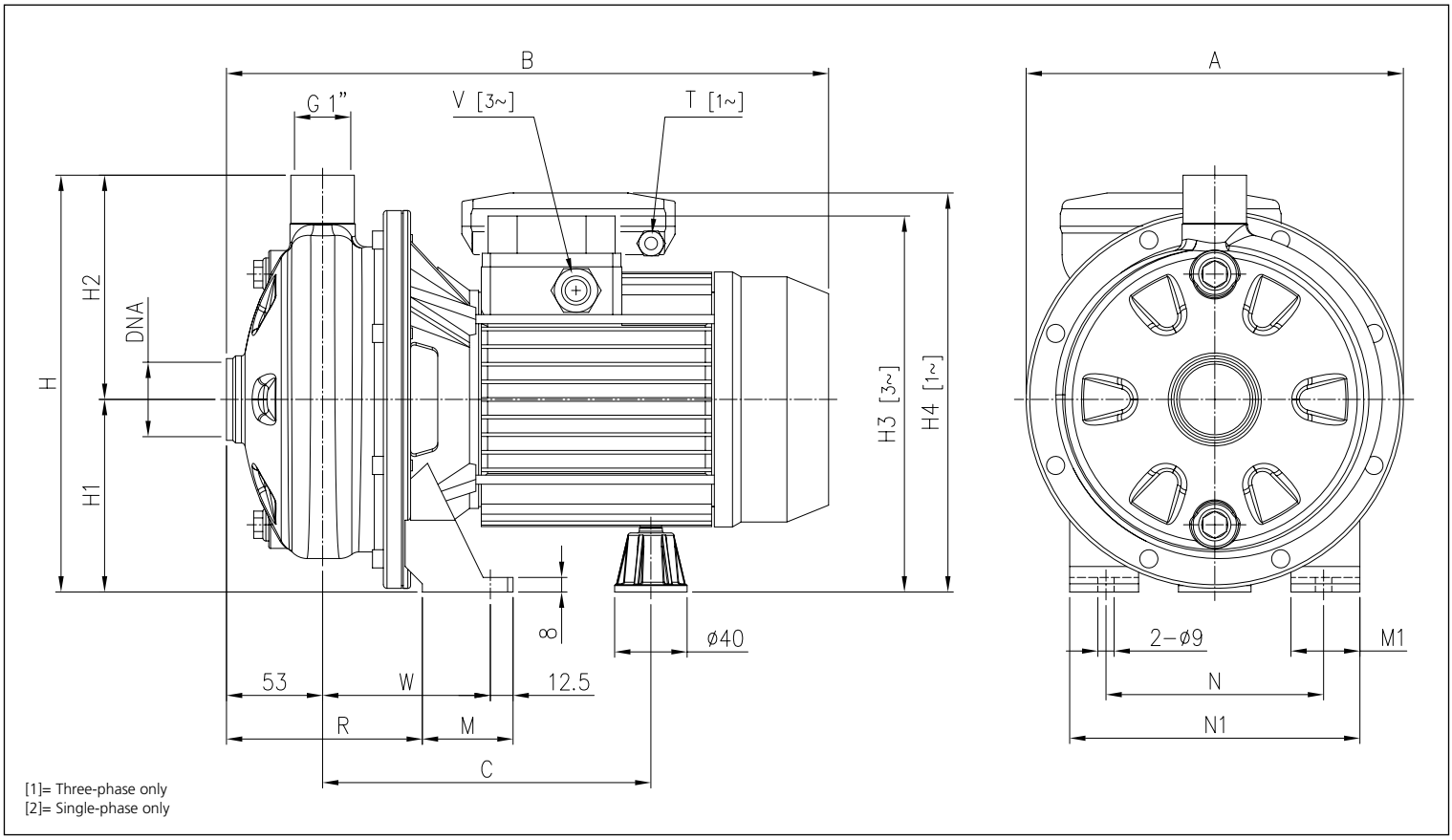
SINGLE IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304 and AISI 316

성능표

모델 단상 110-115/220-230V	모델 삼상 220/380-460V	P2 [HP]	P2 [kW]	Q=유량 l/min	20	50	80	90	120	140	160	180	220	250
				m³/h	1,2	3	4,8	5,4	7,2	8,4	9,6	10,8	13,2	15,0
				H=양정 [m]										
CDXM 70/076	CDX 70/076	0,75	0,55		22,2	20,0	17,5	16,5	-	-	-	-	-	-
CDXM 70/106	CDX 70/106	1	0,75		31,0	28,6	26,0	-	-	-	-	-	-	-
CDXM 70/156	CDX 70/156	1,5	1,1		43,5	40,2	36,3	-	-	-	-	-	-	-
CDXM 120/106	CDX 120/106	1	0,75		-	21,8	20,2	19,7	18,1	16,8	15,5	14,0	-	-
CDXM 120/156	CDX 120/156	1,5	1,1		-	29,8	28,3	27,7	26,2	25,0	23,5	-	-	-
CDXM 120/206	CDX 120/206	2	1,5		-	43,2	41,0	40,4	38,2	36,8	35,5	-	-	-
CDXM 200/156	CDX 200/156	1,5	1,1		-	-	20,8	20,4	19,4	18,6	17,8	17,0	15,2	13,5
CDXM 200/206	CDX 200/206	2	1,5		-	-	30,0	29,5	28,6	27,9	27,2	26,3	24,6	23,0
-	CDX 200/306	3	2,2		-	-	35,5	35,1	34,0	33,3	32,5	31,6	29,8	28,3

외형도



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

외형표

모델	외형치수 [mm] A	B [1]	B [2]	C	H	H1	H2	H3 [1]	H4 [2]	M	M1	N	N1	R	T [2]	V [1]	W	DNA	중량 [kg] [2]	[1]
CDX(M) 70/076	208	320	321	181	229,5	106	123,5	207	216	50	38	120	160	108	PG11	PG11	92,5	G1 ?	8,5	8,4
CDX(M) 70/106	208	320	321	181	229,5	106	123,5	207	216	50	38	120	160	108	PG11	PG11	92,5	G1 ?	9,5	9,6
CDX(M) 70/156	208	332	321	181	229,5	106	123,5	207	216	50	38	120	160	108	PG11	PG11	92,5	G1 ?	11,7	12,5
CDX(M) 120/106	208	320	321	181	229,5	106	123,5	207	216	50	38	120	160	108	PG11	PG11	92,5	G1 ?	9,5	9,5
CDX(M) 120/156	208	332	321	181	229,5	106	123,5	207	216	50	38	120	160	108	PG11	PG11	92,5	G1 ?	11,7	12,4
CDX(M) 120/206	232	359	347	198,5	229,5	116	123,5	225	249	55	40	140	180	105,5	PG13,5	PG11	95	G1 ?	15,3	14,5
CDX(M) 200/156	208	320	321	181	229,5	106	123,5	207	216	50	38	120	160	108	PG11	PG11	92,5	G1 ?	11,0	10,7
CDX(M) 200/206	208	359	347	198,5	229,5	106	123,5	225	237	55	40	140	180	105,5	PG13,5	PG11	95	G1 ?	15,0	15,7
CDX 200/306	232	359	-	198,5	250	118	132	237	-	55	40	140	180	105,5	-	PG11	95	G1 ?	-	16,9

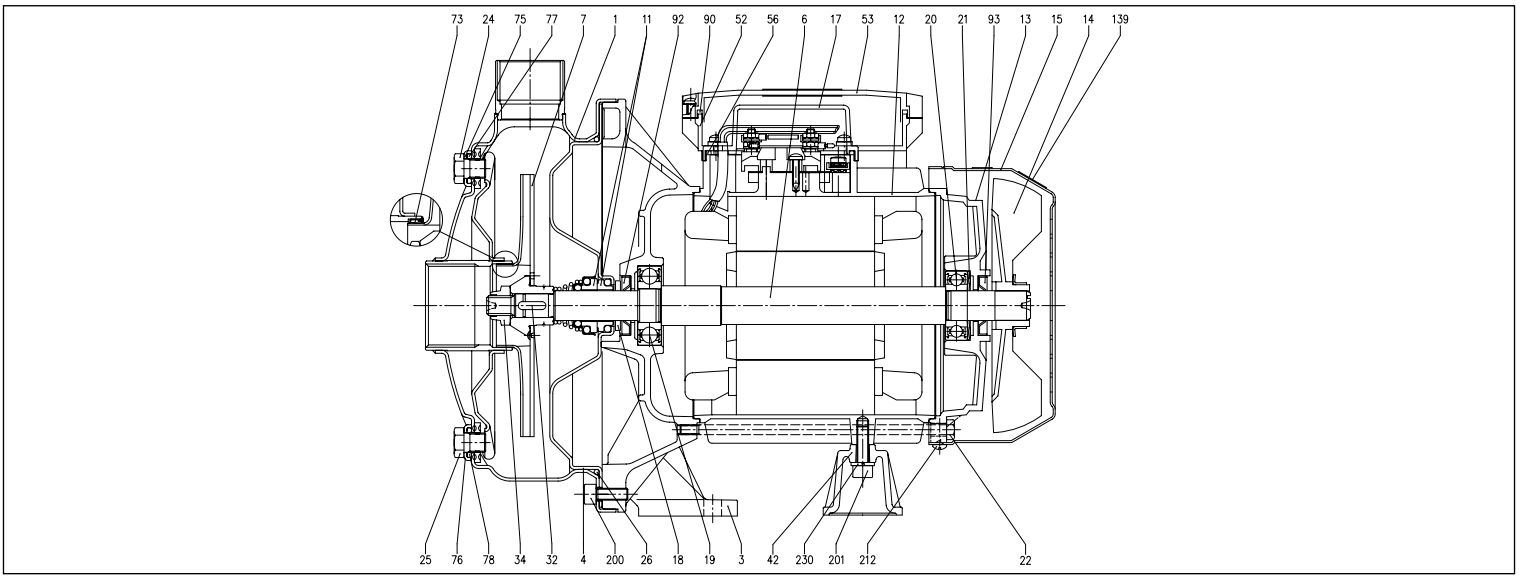
[1]= Three-phase only
[2]= Single-phase only

CDX(L)

SINGLE IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304 and AISI 316

단면도

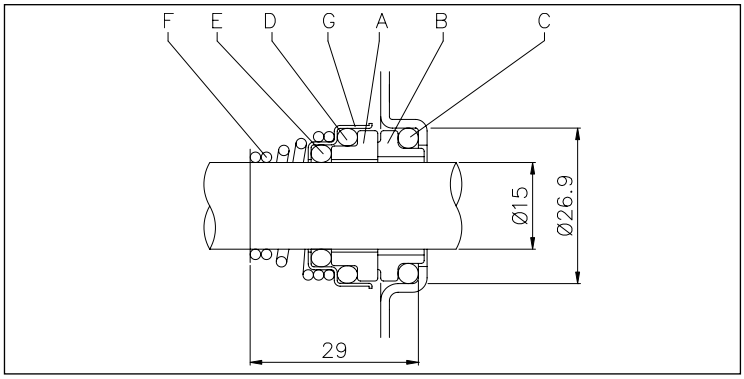


부품표

Ref.	부품명	재질	Ref.	부품명	재질
1	Casing	AISI 304 / AISI 316 [8]	25	Drain plug	AISI 303 / AISI 316 [8]
3	Motor bracket	Aluminium	26	O-ring [3]	NBR
4	Casing cover	AISI 304 / AISI 316 [8]	32	Key	AISI 316
6	Shaft with rotor	AISI 303 / AISI 316 [8] (Wet extension)	34	Impeller nut	AISI 304 / AISI 316 [8]
7	Impeller	AISI 304 / AISI 316 [8]	42	Motor support	Aluminium
11	Mechanical seal [3] - [4]	Carbon/Ceramic/NBR	52	Terminal box [1]	ABS
12	Motor frame with stator	-	53	Terminal box cover [6]	ABS [6]
13	Motor cover	Aluminium	56	Box gasket	NBR
14	Fan	PA	73	Casing ring [5]	AISI 304 / AISI 316 [8]
15	Fan cover	Fe P04 Galvanized	75	Washer	AISI 304 / AISI 316 [8]
16	Terminal board	-	76	Washer	AISI 304 / AISI 316 [8]
17	Terminal box cover [2]	Aluminium	77	O-ring [3]	NBR
18	Splash ring	NBR	78	O-ring [3]	NBR
19	Pump side ball bearing	-	90	Terminal box cover gasket [7]	NBR
20	Fan side ball bearing	-	92	Lip seal	-
21	Adjusting ring	Steel C70	93	Lip seal	-
22	Tie rod	Fe 420 Galvanized	110	Protector [1]	-
23	Capacitor [1]	-	200	Screw	Stainless steel A2 UNI7323
24	Priming plug	AISI 303 / AISI 316 [8]			

[1] Only for single phase [2] Only for three phase [3] FPM for CDX H-HS-HW-HSW [4] Special version, see page 301
[5] NBR for CDX 70/076-70/106-70/156
FPM for CDX H-HS-HW-HSW of the CDX 70/076-70/106-70/156
[6] Whit gasket in NBR only for version single phase CDXM 70/076, 70/106, 70/156, 120/106, 120/156, 200/156
[7] Only for version single phase CDXM 120/206, 200/206 [8] Only for "L" version

매카니컬실 CDX standard



부품상세

Ref.	부품명	재질
A	Rotating part	Ceramic
B	Fixed part	Carbon
C	O-Ring	NBR
D	O-Ring	NBR
E	O-Ring	NBR
F	Spring	AISI 316
G	Structure/frame	AISI 304

CDX(L)

SINGLE IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304 and AISI 316

특수매카니컬실 (on request)

부품명	재질				
	H version	HS version	HW version	HSW version	E version
Fixed Part	Carbon	SiC	Tungsten Carbide	Tungsten Carbide	Carbon
Rotating Part	Ceramic	SiC	Tungsten Carbide	SiC	Ceramic
Elastomers	FPM	FPM	FPM	FPM	EPDM
Spring	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316
Structure/Frame	AISI 304	AISI 316	AISI 316	AISI 316	AISI 316

전기관련표

모델		P_2		Capacitor 단상				P_1		Absorbed Current [A]				
단상 110-115/220-230V	삼상 220/380-460V	[HP]	[kW]	110-115V		220-230V		단상 [kW]	삼상 [kW]	단상		삼상		
				µF	V_c	µF	V_c			110-115V	220-230V	220V	380V	460V
CDXM 70/076	CDX 70/076	0,75	0,55	45	250	12,5	450	0,7	0,74	7,5	3,4	2,0	1,2	1,2
CDXM 70/106	CDX 70/106	1	0,75	60	250	14	450	1,05	0,97	9,4	5,1	2,9	1,7	1,6
CDXM 70/156	CDX 70/156	1,5	1,1	-	-	25	450	1,56	1,5	-	7,5	3,8	2,2	2,2
CDXM 120/106	CDX 120/106	1	0,75	60	250	14	450	1,06	0,99	10,4	5,2	2,9	1,7	1,7
CDXM 120/156	CDX 120/156	1,5	1,1	-	-	25	450	1,5	1,5	-	7,2	3,8	2,2	2,2
CDXM 120/206	CDX 120/206	2	1,5	-	-	35	450	2,34	2,9	-	11,3	8,1	4,7	4,3
CDXM 200/156	CDX 200/156	1,5	1,1	-	-	20	450	1,35	1,	-	6,6	2,9	1,7	1,6
CDXM 200/206	CDX 200/206	2	1,5	-	-	35	450	2,06	2,9	-	10,0	8,1	4,7	4,3
-	CDX 200/306	3	2,2	-	-	-	-	-	2,9	-	-	8,1	4,7	4,3

2CDX(L)

DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304 and AISI 316

Dual impeller centrifugal electric pumps with hydraulic parts in AISI 304 and AISI 316 stainless steel.

용도

- **생활용수부스터**
- **소규모관개**
- **세척**
- **수처리**
- **냉각타워**
- **청수이송**

기술정보

- **뛰어난 내구성**
- **컴팩트한 사이즈**

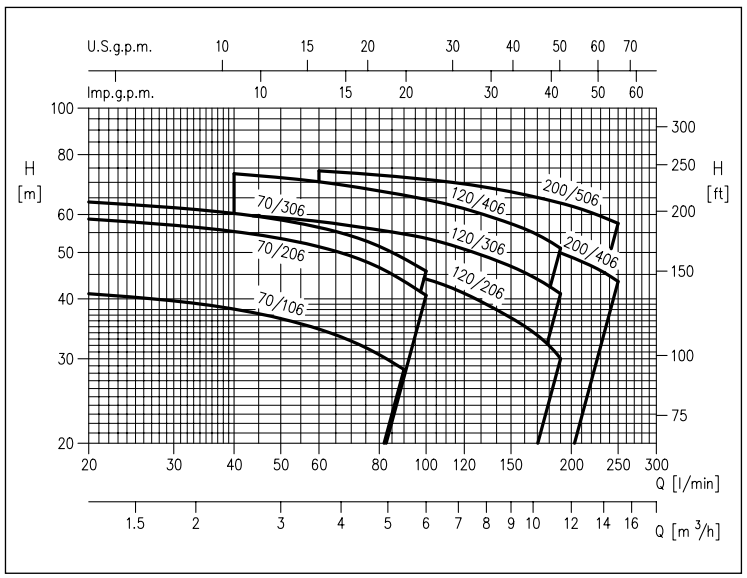
기술자료

- **최대사용압력 : 8 bar**
- **최대유체온도 :**
  -5°C **부터** +60°C **까지**
  H-HS버전 -5°C **부터** +110° **까지**
- **자체환기 2극 비동기식모터**
- **절연등급** F
- **보호등급** IP55
- 220-230V ±6%, 60Hz **단상**
  220/380-460V -6%+10%, 60Hz **삼상**
- CDX 200 **흡입구** G1½ , **그외** G1¼
- **토출구** G1

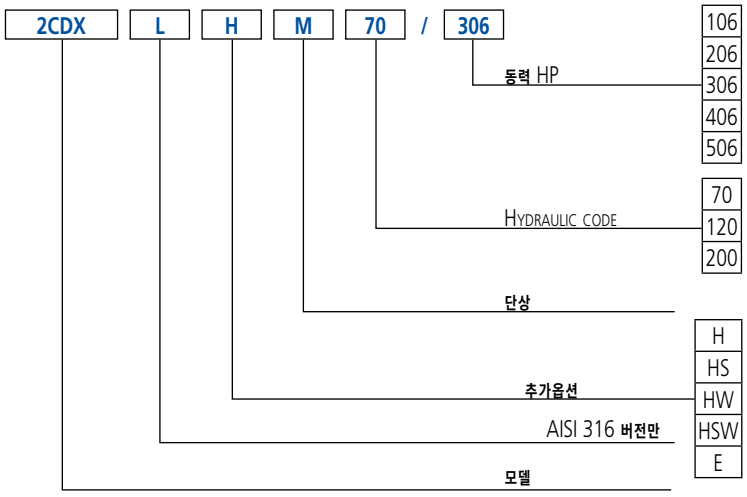
재질

- Casing, impeller, shaft, diffuser and casing cover in AISI 304 or AISI 316 for "L" version
- Motor bracket: in aluminium (up to 2,2 kW included), in cast iron (3 kW and above)
- Mechanical seal in:
  - Ceramic/Carbon/NBR (standard)
  - Ceramic/Carbon/FPM (H version)
  - SiC/SiC/FPM (HS version)
  - Tungsten carbide/Tungsten carbide/FPM (HW version - seal with reduced slide face)
  - SiC/Tungsten carbide/FPM (HSW version)
  - Ceramic/Graphite/EPDM (E version)

성능곡선 (according to ISO 9906 Attachment A)



식별코드



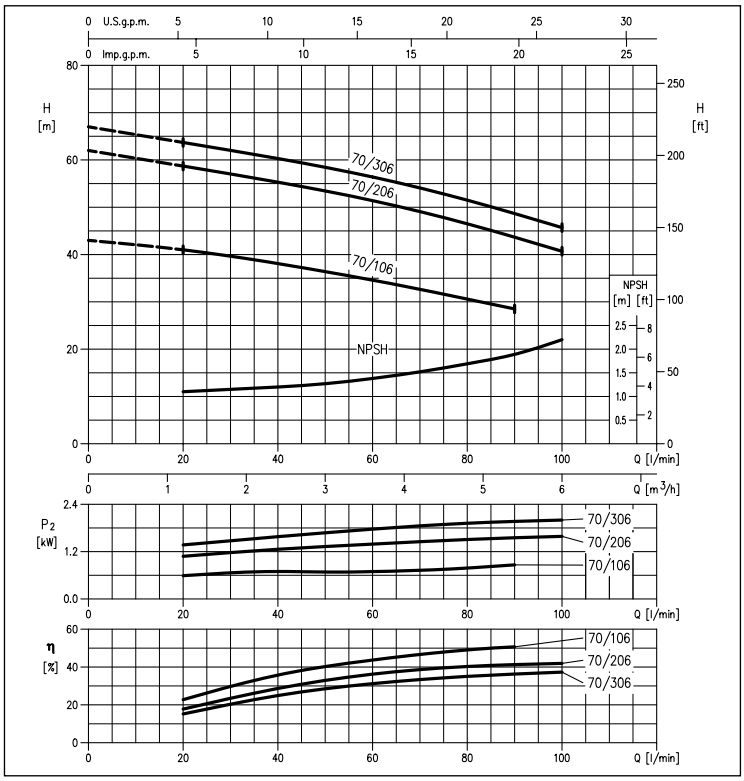
2CDX(L)

DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304 and AISI 316

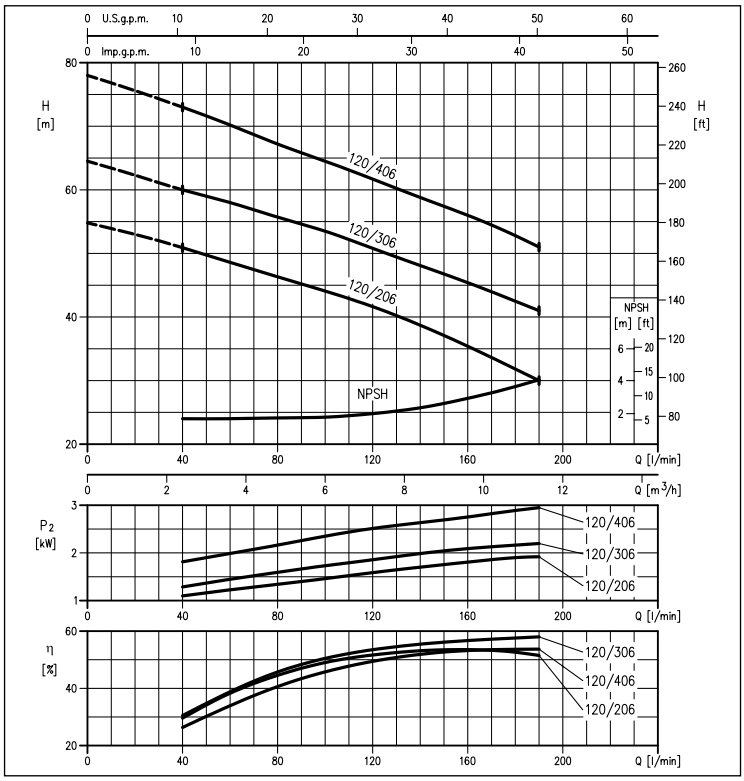
2CDX 70 range 성능곡선

(according to ISO 9906 Attachment A)



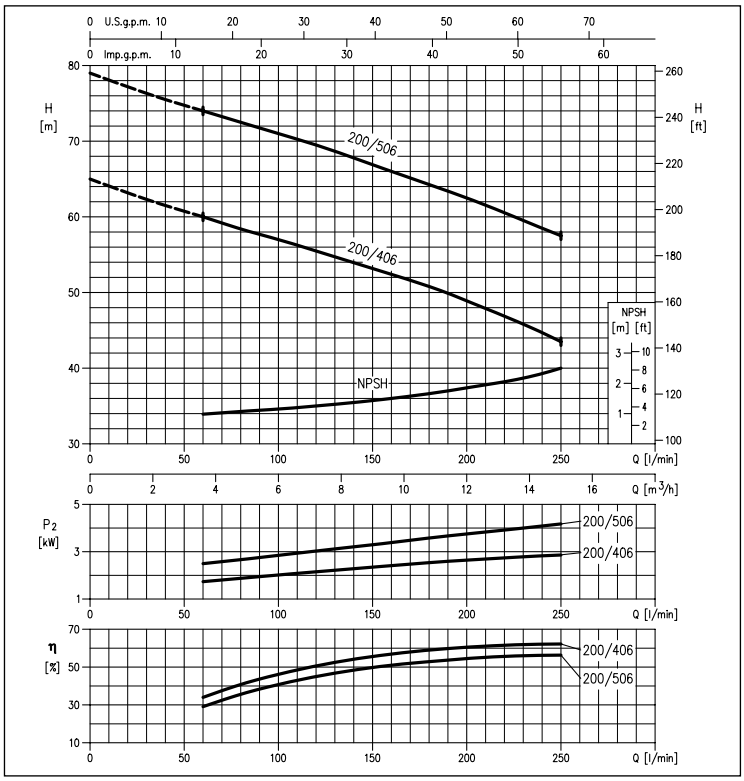
2CDX 120 range 성능곡선

(according to ISO 9906 Attachment A)



2CDX 200 range 성능곡선

(according to ISO 9906 Attachment A)



2CDX(L)

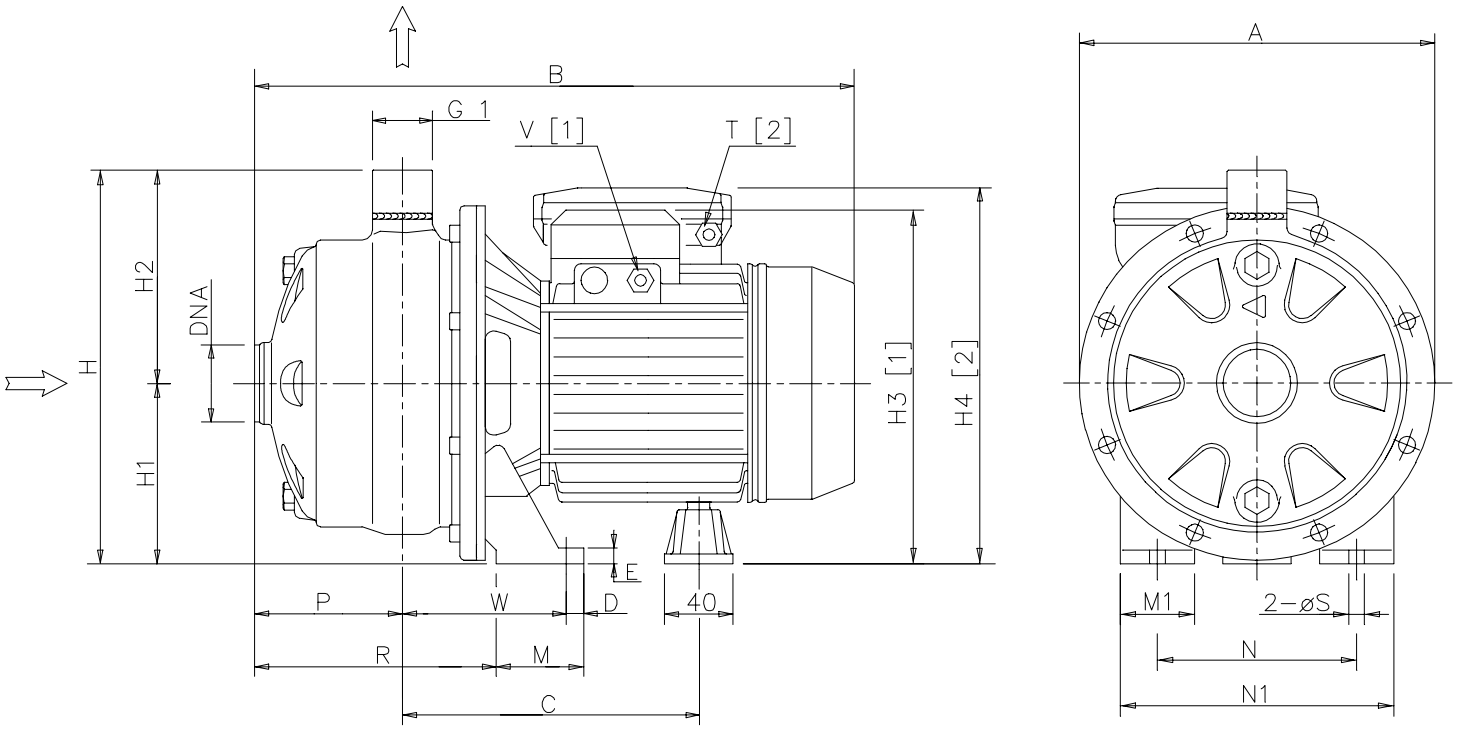
DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304 and AISI 316

성능표

모델 단상 220-230V	모델 삼상 220/380-460V	P2 [HP]	P2 [kW]	Q=유량 l/min	20	40	60	90	100	120	140	160	190	240	250
				m³/h	1,2	2,4	3,6	5,4	6	7,2	8,4	9,6	11,4	14,4	15
				H=양정 [m]											
2CDXM 70/106	2CDX 70/106	1	0,75		41,0	38,1	34,6	28,5	-	-	-	-	-	-	-
2CDXM 70/206	2CDX 70/206	2	1,5		58,5	55,5	51,5	44,0	40,5	-	-	-	-	-	-
2CDXM 70/306	2CDX 70/306	3	2,2		63,5	60,5	56,5	49,0	45,5	-	-	-	-	-	-
-	2CDX 120/206	2	1,5		-	50,5	48,5	45,0	44,0	41,5	38,6	35,6	30,0	-	-
-	2CDX 120/306	3	2,2		-	60,0	58,0	54,5	53,5	51,0	48,5	45,5	41,0	-	-
-	2CDX 120/406	4	3		-	73,0	70,0	66,0	64,5	62,0	59,0	56,0	51,0	-	-
-	2CDX 200/406	4	3		-	-	60,0	58,0	57,0	55,5	54,0	52,5	50,0	45,0	43,5
-	2CDX 200/506	5,5	4		-	-	74,0	72,0	71,0	69,5	68,0	66,0	63,5	58,5	57,5

외형도



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

외형표

모델	외형치수 [mm] A	B [1]	B [2]	C	D	E	H	H1	H2	H3 [1]	H4 [2]	M	M1	N	N1	P	R	S	T [2]	V [1]	W	DNA	중량 [kg] [2]	[1]
2CDX(M) 70/106	208	354	354	181	12,5	8	229	106	123	208	216	50	38	120	160	87	142	Ø9	PG 11	PG 11	93	G1?	12,6	12,0
2CDX(M) 70/206	208	380	393	199	12,5	8	229	106	123	225	242	55	40	140	180	87	140	Ø9	PG 13,5	PG 11	95	G1?	16,6	16,0
2CDX(M) 70/306	208	380	393	199	12,5	8	229	106	123	225	242	55	40	140	180	87	140	Ø9	PG 13,5	PG 11	95	G1?	16,9	16,0
2CDX 120/206	208	395	-	199	12,5	8	229	106	123	225	-	55	40	140	180	89	142	Ø9	-	PG 11	95	G1?	-	17,5
2CDX 120/306	208	395	-	199	12,5	8	229	106	123	225	-	55	40	140	180	89	142	Ø9	-	PG 11	95	G1?	-	20,1
2CDX 120/406	208	459	-	224/235	12,5	8	229	106	123	230	-	65	40	140	180	89	146	Ø9	-	PG 13,5	109	G1?	-	25,9
2CDX 200/406	208	457	-	224/235	12,5	8	229	106	123	230	-	65	40	140	180	87	144	Ø9	-	PG 13,5	109	G1?	-	25,7
2CDX 200/506	208	480	-	233	16,0	12	241	118	123	259	-	68	50	160	210	87	144	Ø12	-	PG16	109	G1?	-	35,7

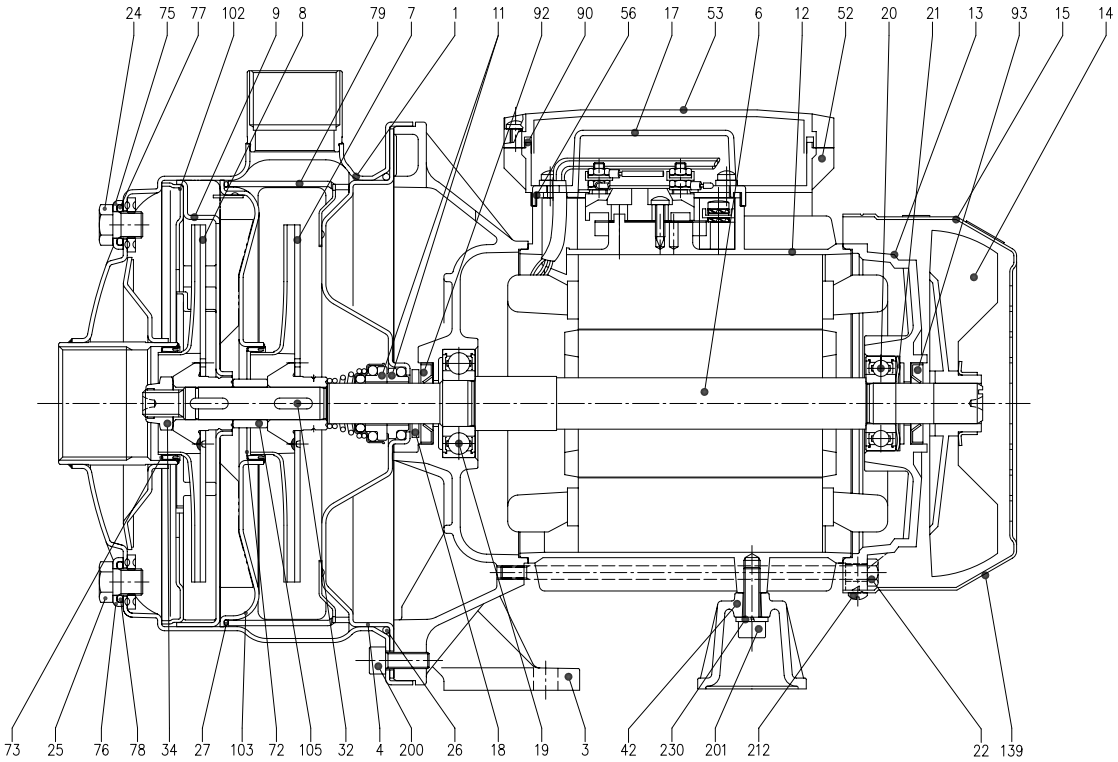
[1]= Three-phase only
[2]= Single-phase only

2CDX(L)

DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304 and AISI 316

단면도



부품표

Ref.	부품명	재질	Ref.	부품명	재질
1	Casing	EN 1.4301 (AISI 304)	26	O-Ring [3]	NBR
3	Motor bracket	Aluminium (up to 2,2 kW included) Cast iron (from 3 kW and above)	27	O-Ring [3]	NBR
			32	Key	AISI 316
4	Casing cover	EN 1.4301 (AISI 304)	34	Impeller nut	EN 1.4301 (AISI 304)
6	Shaft	EN 1.4301 (AISI 304) Part in contact with the liquid	42	Motor support	Aluminium
7	Impeller	EN 1.4301 (AISI 304)	52	Terminal box [2]	ABS
8	Impeller	EN 1.4301 (AISI 304)	53	Terminal box cover [2] [4]	ABS
9	Diffuser	EN 1.4301 (AISI 304)	56	Terminal box cover gasket	NBR
11	Mechanical seal [3]	Carbon/Ceramic/NBR	72	Casing ring [3]	NBR
12	Motor frame with stator	-	73	Casing ring [3]	NBR
13	Motor cover	Aluminium	75	Washer	EN 1.4301 (AISI 304)
14	Fan	PA	76	Washer	EN 1.4301 (AISI 304)
15	Fan cover	Galvanised Fe P04	77	O-Ring [3]	NBR
16	Terminal box	-	78	O-Ring [3]	NBR
17	Terminal box cover [2]	Aluminium	79	Space diffuser	EN 1.4301 (AISI 304)
18	Splash ring	NBR	90	Terminal box cover gasket [7]	NBR
19	Bearing (pump side)	-	92	Lip seal	-
20	Bearing (motor side)	-	93	Lip seal	-
21	Adjusting ring	Steel C70	102	Suction cover	EN 1.4301 (AISI 304)
22	Tie-rod	Galvanised Fe 42	103	Conveyor cover	EN 1.4301 (AISI 304)
23	Capacitor [1]	-	105	Sleeve	EN 1.4301 (AISI 304)
24	Priming plug	AISI 303	110	Protector [2]	-
25	Drain plug	AISI 303	200	Screw (pump body)	A2 UNI7323 stainless steel

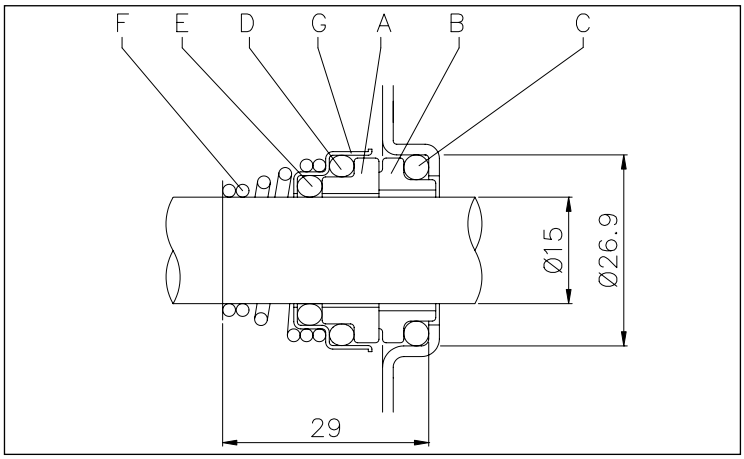
[1]= Three-phase only [2]= Single-phase only [3]= FPM for H-HS-HW-HSW versions
[4]= Whit gasket in NBR only for 2CDXM 70/106
[5]= Only for 2CDXM 70/206-70/306

2CDX(L)

DUAL IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304 and AISI 316

매카니컬실 2CDX standard



부품상세

Ref.	부품명	재질
A	Rotating part	Ceramic
B	Fixed part	Carbon
C	O-Ring	NBR
D	O-Ring	NBR
E	O-Ring	NBR
F	Spring	AISI 316
G	Structure/frame	AISI 304

특수매카니컬실 (on request)

부품명	재질				
	H version	HS version	HW version	HSW version	E version
Fixed Part	Carbon	SiC	Tungsten Carbide	Tungsten Carbide	Carbon
Rotating Part	Ceramic	SiC	Tungsten Carbide	SiC	Ceramic
Elastomers	FPM	FPM	FPM	FPM	EPDM
Spring	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316
Structure/Frame	AISI 304	AISI 316	AISI 316	AISI 316	AISI 316

전기관련표

모델		P_2		Capacitor		P_1		Absorbed Current [A]			
단상 220-230V	삼상 220/380-460V	[HP]	[kW]	단상 μF	단상 V_c	단상 [kW]	삼상 [kW]	단상 220-230V	삼상 220V	삼상 380V	삼상 460V
2CDXM 70/106	2CDX 70/106	1	0,75	20	450	1,37	1	6,4	2,9	1,7	1,6
2CDXM 70/206	2CDX 70/206	2	1,5	35	450	2,05	2,9	9,9	8,1	4,7	4,3
2CDXM 70/306	2CDX 70/306	3	2,2	35	450	2,63	2,9	11,9	8,1	4,7	4,3
-	2CDX 120/206	2	1,5	-	-	-	2,9	-	8,1	4,7	4,3
-	2CDX 120/306	3	2,2	-	-	-	2,9	-	8,1	4,7	4,3
-	2CDX 120/406	4	3	-	-	-	3,9	-	10,5	6,1	5,6
-	2CDX 200/406	4	3	-	-	-	3,9	-	10,5	6,1	5,6
-	2CDX 200/506	5,5	4	-	-	-	5,1	-	14,7	8,5	8,0

EBARA

EBARA

3-3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

60 Hz

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

Standardised centrifugal electric pumps built in stainless steel AISI 304 (3 SERIES) and AISI 316L (3L SERIES).

용도
- **주거용수공급,농업및산업시스템**
- **가압**
- **소방,난방,냉방시스템**
- **산업용액체처리**
- **관개**
- **냉각탑**
- **수영장**
- **배수**
- **세척**

기술정보
- **뛰어난내구성및내식성**
- EBARA **특허적용**

펌프기술자료
- **최대사용압력:10bar**
- **최대유체온도:**

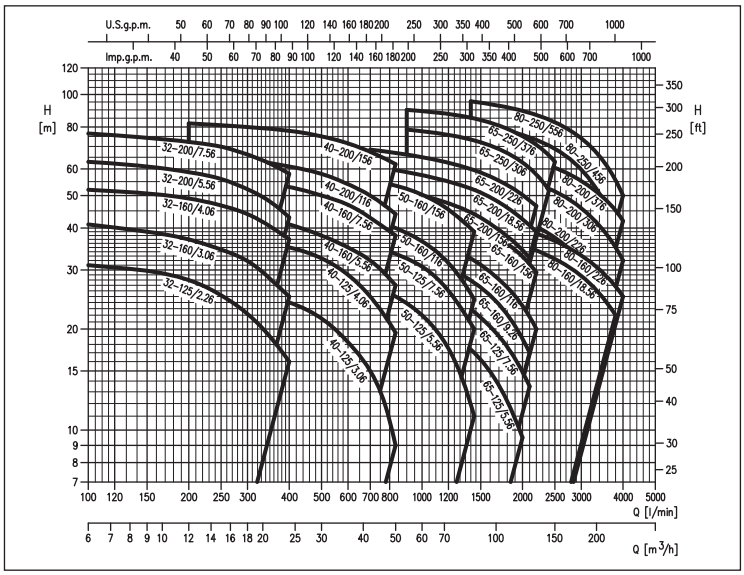
  -10°C ÷ +90°C
  -10°C ÷ +110°C (L-H-HS-HW-HSW-E **버전**)
  -10°C ÷ +120°C (ES **버전**)

모터기술자료
- **자체환기2극비동기식모터**
- **절연등급** F (**높은온도는** B)
- **보호등급:**IP 55
- 220/380-460V ±10% (4kW **까지포함**) **삼상**, 60Hz for 3(L)M SERIES,
- 380-460/660V ±10% (5,5kW **이상**) **삼상**, 60Hz for 3(L)M SERIES,
- 265/460V ±10% (4kW **까지포함**) **삼상**, 60Hz for 3(L)S-3(L)P SERIES
- 460V ±10% (5,5 kW **이상**) **삼상**, 60Hz for 3(L)S - 3(L)P SERIES

재질
- Pump casing and casing cover in:
  - AISI 304 for 3 SERIES 32-125/160/200
    40-125/160/200
    50-125/160
    65-125/160/200
  - AISI 316L for 3L SERIES 32-125/160/200
    40-125/160/200
    50-125/160
    65-125/160/200
  - AISI 316 microcasted for 3L SERIES 65-250
    80-160/200/250
- Impeller in:
  - AISI 304 for 3 SERIES 32-125/160/200
    40-125/160/200
    50-125/160
  - AISI 316L for 3L SERIES 32-125/160/200
    40-125/160/200
    50-125/160
  - AISI 316 microcasted for 3 SERIES 65-125/160/200
    3L SERIES 65-125/160/200
    65-250
    80-160/200/250
- Mechanical seal standard in:
  - Carbon/Ceramic/NBR for 3 SERIES 32-125/160/200
    40-125/160/200
    50-125/160
    65-125/160/200
  - SiC/SiC/FPM for 3L SERIES 32-125/160/200
    40-125/160/200
    50-125/160
    65-125/160/200/250
    80-160/200/250
  - Special mechanical seals available on request

부속품 (On request)
- Counter-flanges available in the following materials:
  - galvanised
  - AISI 304
  - AISI 316

성능곡선 3 SERIES
at 2900 min^{-1} (according to ISO 9906 Attachment A)

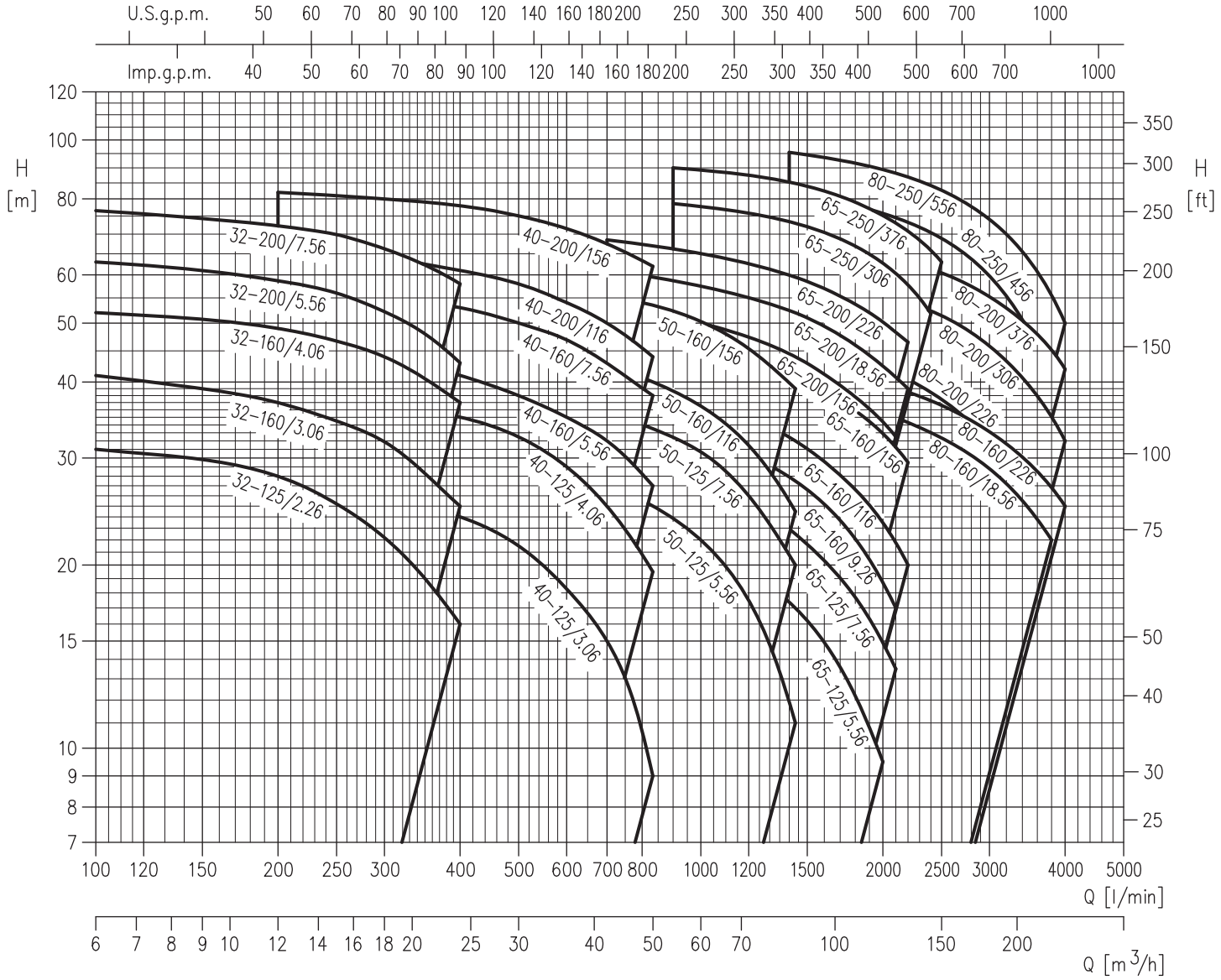


3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

성능곡선 3 SERIES

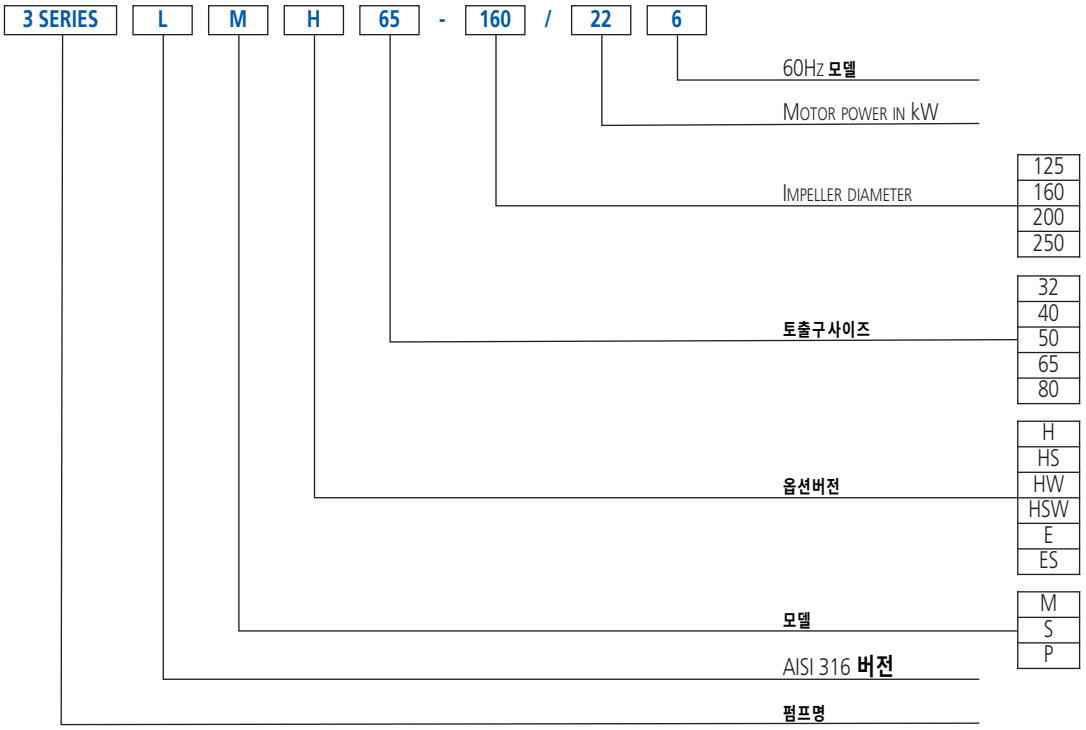
at 2900 min^{-1} (according to ISO 9906 Attachment A)



3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

식별코드



	버전	3M	3S	3P	3LM	3LS	3LP
펌프	32-125	√	√	√	√	√	√
	32-160	√	√	√	√	√	√
	32-200	√	√	√	√	√	√
	40-125	√	√	√	√	√	√
	40-160	√	√	√	√	√	√
	40-200	√	√	√	√	√	√
	50-125	√	√	√	√	√	√
	50-160	√	√	√	√	√	√
	65-125	√	√	√	√	√	√
	65-160	√	√	√	√	√	√
	65-200	√	√	√	√	√	√
	65-250	-	-	-	-	●	●
	80-160	-	-	-	●	●	●
	80-200	-	-	-	-	●	●
	80-250	-	-	-	-	●	●

√ = Models also available in H-HS-HW-HSW version for 32, 40, 50, 65-125/160/200
• = Models also available in H-HW-HSW-E version for 65-250, 80 and in ES version for 80-250 Ø35

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

성능표 32-40-50

모델	P_2		Q=유량													
	[HP]	[kW]	l/min	100	150	200	250	300	350	400	500	600	700	833	1000	1200	1433
			m^3/h	6	9	12	15	18	21	24	30	36	42	50	60	72	86
			H=양정 [m]														
3(.) SERIES 32-125/2.26	3	2,2		31,4	30,4	28,6	26,1	23,3	20,2	17,0	-	-	-	-	-	-	-
3(.) SERIES 32-160/3.06	4	3		41,0	39,6	37,8	35,4	32,5	29,4	26,0	-	-	-	-	-	-	-
3(.) SERIES 32-160/4.06	5,5	4		51,5	50,5	48,5	46,5	43,5	40,0	36,6	-	-	-	-	-	-	-
3(.) SERIES 32-200/5.56	7,5	5,5		62,5	61,0	59,0	56,0	53,0	48,5	44,0	-	-	-	-	-	-	-
3(.) SERIES 32-200/7.56	10	7,5		76,0	74,5	72,5	69,5	66,0	62,0	57,0	-	-	-	-	-	-	-
3(.) SERIES 40-125/3.06	4	3		-	-	28,2	27,7	27,0	26,1	24,9	22,3	19,1	15,4	10,0	-	-	-
3(.) SERIES 40-125/4.06	5,5	4		-	-	37,2	36,8	36,0	35,1	34,0	31,6	28,6	25,2	20,0	-	-	-
3(.) SERIES 40-160/5.56	7,5	5,5		-	-	44,0	43,5	42,5	41,5	40,0	37,2	34,0	30,7	26,2	-	-	-
3(.) SERIES 40-160/7.56	10	7,5		-	-	56,0	55,5	54,5	53,5	52,0	49,0	46,0	42,5	38,0	-	-	-
3(.) SERIES 40-200/116	15	11		-	-	66,5	66,0	65,0	63,5	62,0	58,5	55,0	51,0	45,0	-	-	-
3(.) SERIES 40-200/156	20	15		-	-	82,0	81,5	80,5	79,5	78,0	75,0	71,5	67,5	62,0	-	-	-
3(.) SERIES 50-125/5.56	7,5	5,5		-	-	-	-	-	-	-	30,0	29,2	28,0	26,0	22,8	18,4	12,6
3(.) SERIES 50-125/7.56	10	7,5		-	-	-	-	-	-	-	36,5	35,7	34,6	32,7	29,7	25,3	19,5
3(.) SERIES 50-160/116	15	11		-	-	-	-	-	-	-	46,0	45,0	43,5	41,0	37,4	32,4	25,8
3(.) SERIES 50-160/156	20	15		-	-	-	-	-	-	-	56,0	55,5	54,0	52,0	49,0	45,0	39,0

성능표 65-80

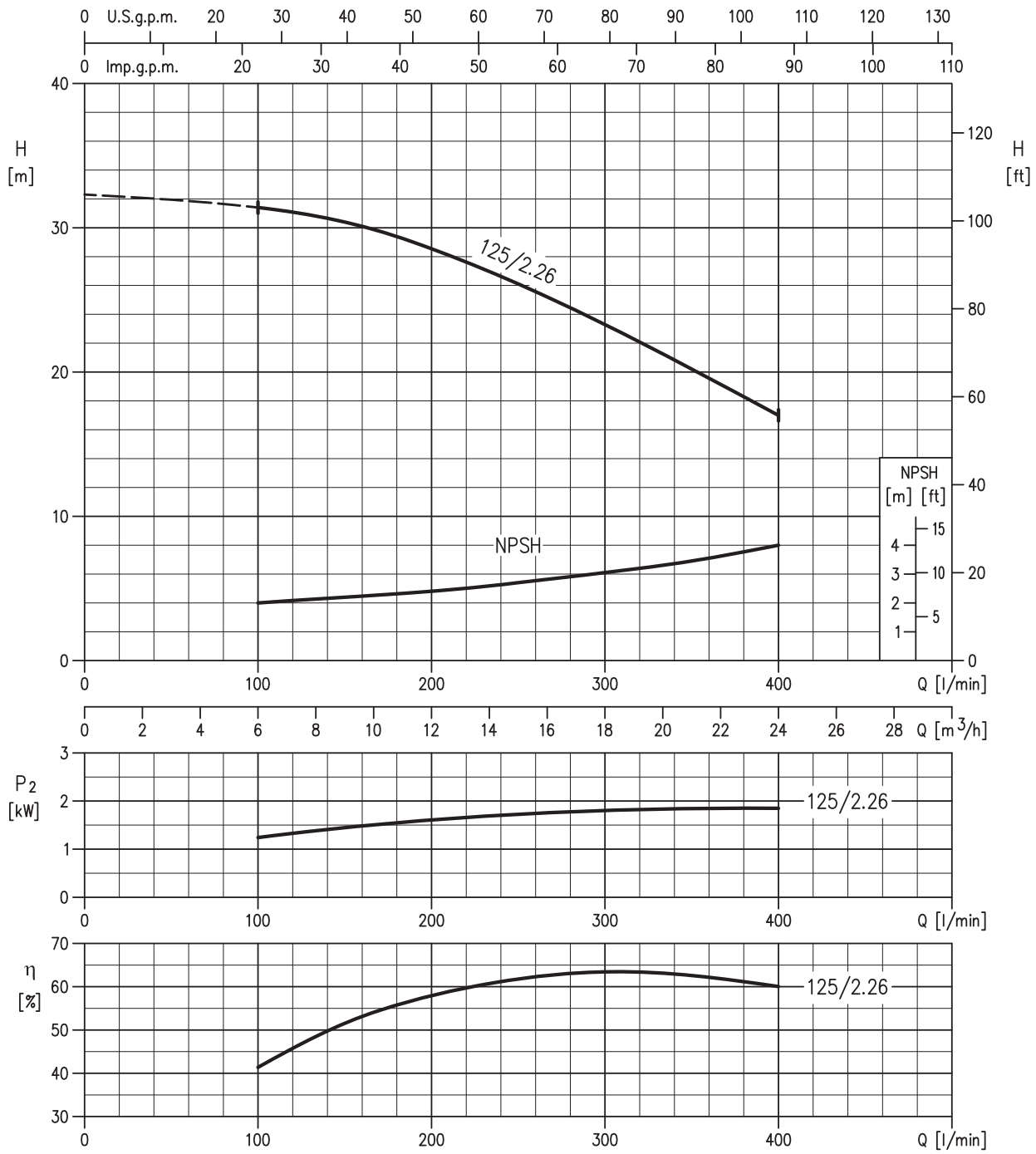
모델	P_2		Q=유량															
	[HP]	[kW]	l/min	600	700	900	1200	1400	1600	1800	2000	2100	2200	2400	2500	3100	3600	3800	4000
			m^3/h	36	42	54	72	84	96	108	120	126	132	144	150	186	216	228	240
			H=양정 [m]																
3(.) SERIES 65-125/5.56	7,5	5,5		25,7	24,9	22,9	19,6	17,2	14,8	12,2	9,5	-	-	-	-	-	-	-	-
3(.) SERIES 65-125/7.56	10	7,5		31,5	30,7	28,8	25,5	23,0	20,4	17,7	14,9	13,5	-	-	-	-	-	-	-
3(.) SERIES 65-160/9.26	12,5	9,2		-	35,5	33,6	30,3	27,9	25,2	22,1	18,7	17,0	-	-	-	-	-	-	-
3(.) SERIES 65-160/116	15	11		-	40,5	38,5	35,0	32,4	29,6	26,6	23,5	21,8	20,0	-	-	-	-	-	-
3(.) SERIES 65-160/156	20	15		-	48,5	47,0	43,5	41,5	38,7	35,9	32,9	31,3	29,5	-	-	-	-	-	-
3(.) SERIES 65-200/156	20	15		-	53,5	51,5	47,5	44,5	41,0	37,8	34,4	32,5	-	-	-	-	-	-	-
3(.) SERIES 65-200/18.56	25	18,5		-	61,0	59,0	55,0	52,5	49,5	46,0	42,5	40,5	39,0	-	-	-	-	-	-
3(.) SERIES 65-200/226	30	22		-	68,5	66,5	62,5	60,0	57,0	53,5	50,0	48,5	46,5	-	-	-	-	-	-
3(.) SERIES 65-250/306	40	30		-	-	78,5	76,0	73,5	70,5	67,0	62,5	60,5	58,0	52,0	-	-	-	-	-
3(.) SERIES 65-250/376	50	37		-	-	90,0	87,5	85,0	82,5	79,0	75,0	73,0	71,0	66,0	63,0	-	-	-	-
3(.) SERIES 80-160/18.56	25	18,5		-	-	-	-	38,8	37,9	36,8	35,6	35,0	34,3	33,0	32,4	28,1	23,8	22,0	-
3(.) SERIES 80-160/226	30	22		-	-	-	-	42,5	42,0	41,0	39,7	39,0	38,5	37,3	36,6	32,4	28,5	26,9	25,0
3(.) SERIES 80-200/226	30	22		-	-	-	-	47,0	45,5	44,0	42,5	41,5	40,5	38,5	37,5	30,5	24,0	-	-
3(.) SERIES 80-200/306	40	30		-	-	-	-	60,0	59,0	57,5	56,0	55,0	54,0	52,5	51,5	44,5	37,9	35,1	32,0
3(.) SERIES 80-200/376	50	37		-	-	-	-	68,5	67,5	66,0	64,5	64,0	63,0	61,5	60,5	54,0	48,0	45,0	42,0
3(.) SERIES 80-250/456	60	45		-	-	-	-	82,0	80,0	78,0	75,5	74,5	73,0	70,5	69,0	57,5	45,5	40,0	-
3(.) SERIES 80-250/556	75	55		-	-	-	-	95,5	93,5	91,5	89,5	88,0	87,0	84,0	82,5	72,0	61,0	55,5	50,0

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

성능곡선 3(L)M-3(L)S-3(L)P SERIES 32-125

at 2900 min^{-1} (according to ISO 9906 Attachment A)

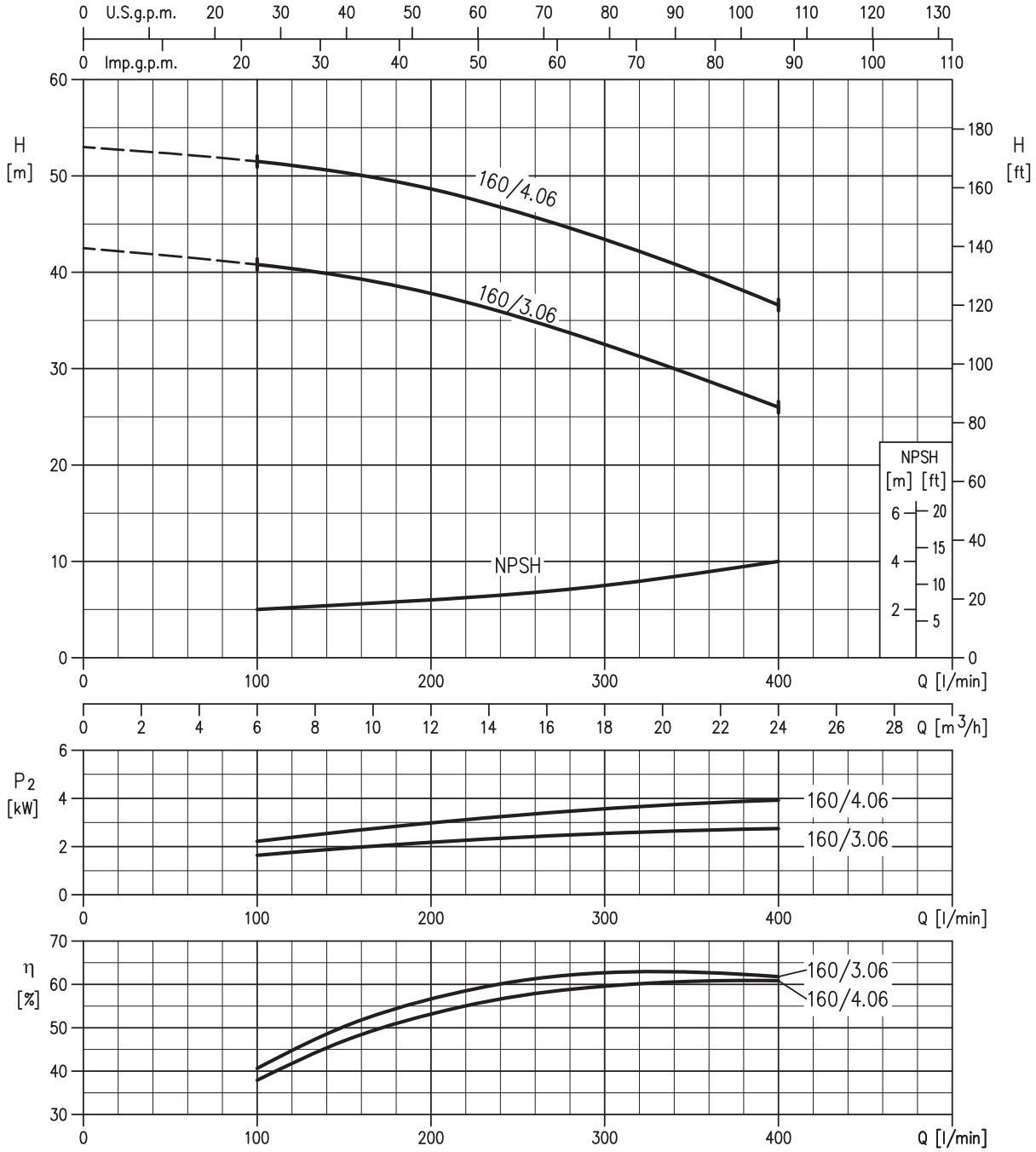


3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

성능곡선 3(L)M-3(L)S-3(L)P SERIES 32-160

at 2900 min^{-1} (according to ISO 9906 Attachment A)

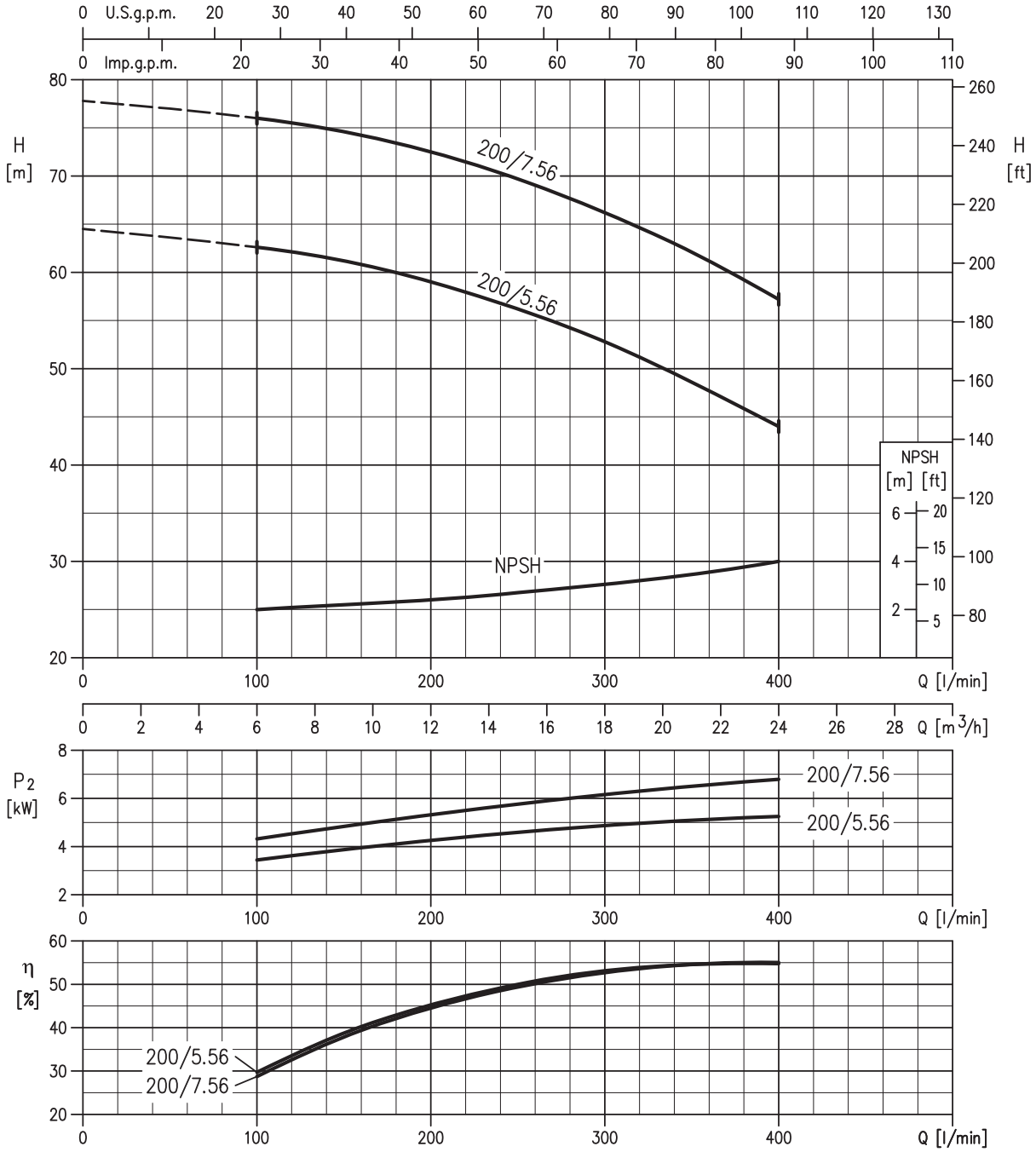


3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

성능곡선 3(L)M-3(L)S-3(L)P SERIES 32-200

at 2900 min $^{-1}$ (according to ISO 9906 Attachment A)

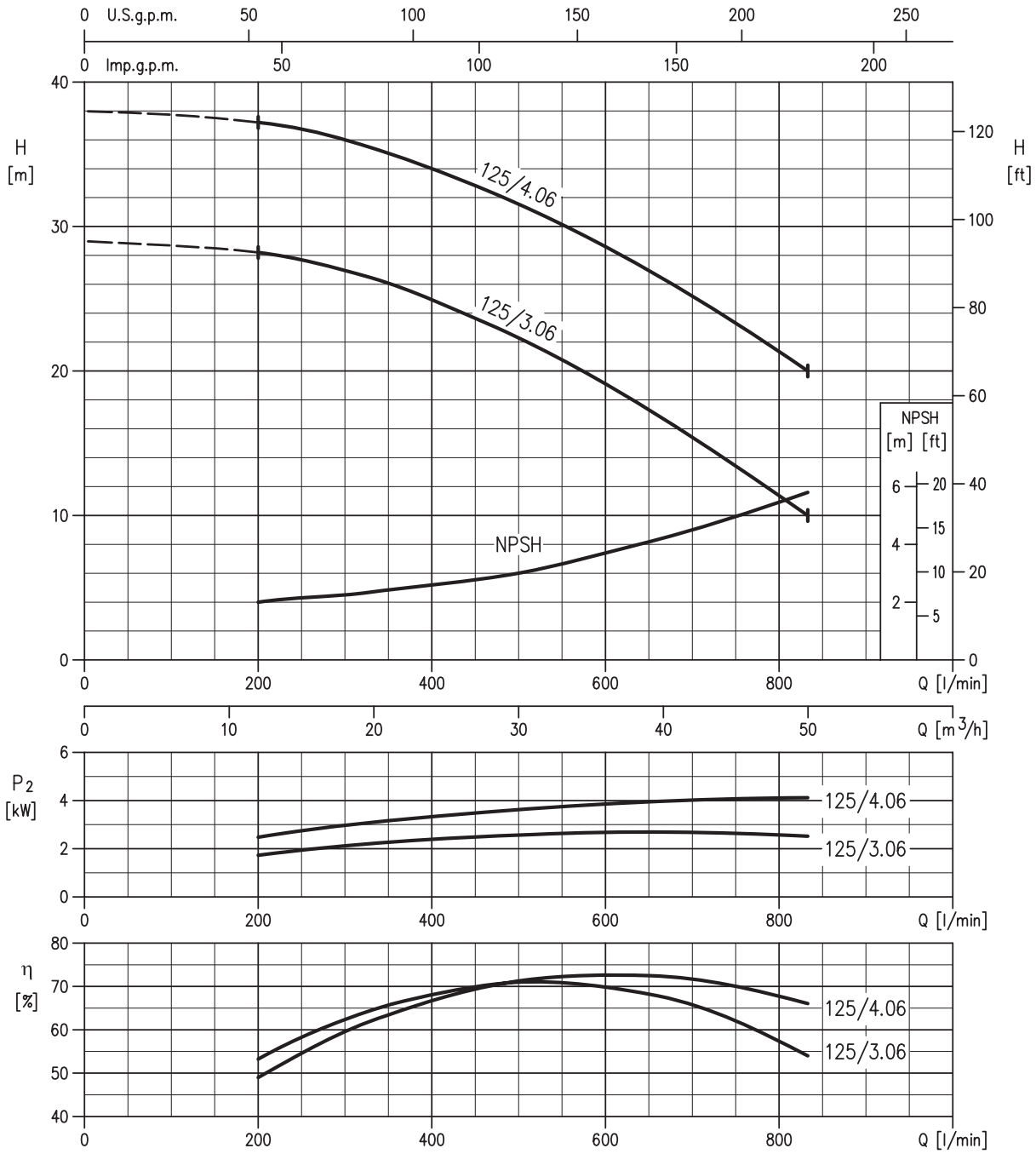


3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

성능곡선 3(L)M-3(L)S-3(L)P SERIES 40-125

at 2900 min^{-1} (according to ISO 9906 Attachment A)

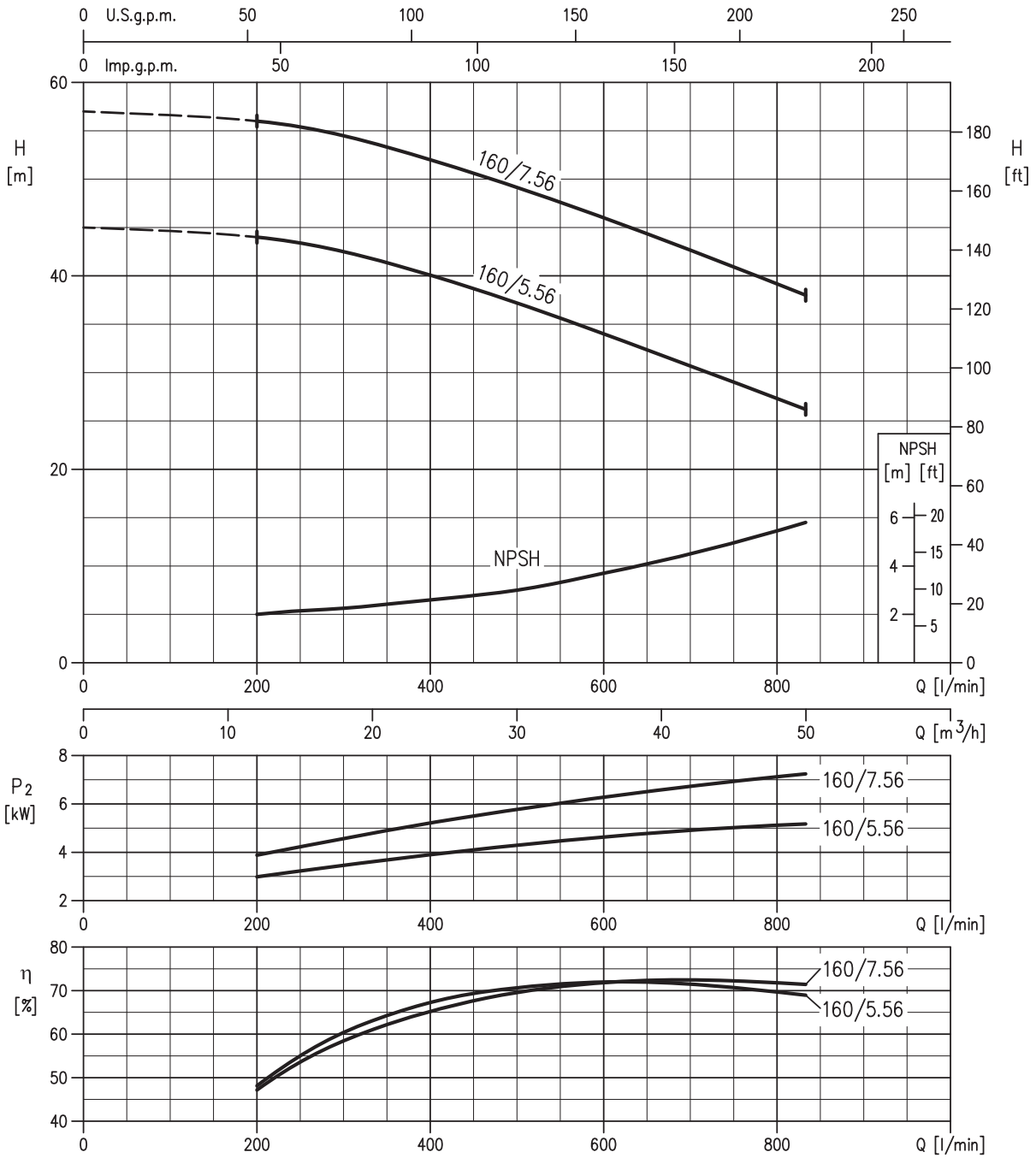


3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

성능곡선 3(L)M-3(L)S-3(L)P SERIES 40-160

at 2900 min^{-1} (according to ISO 9906 Attachment A)

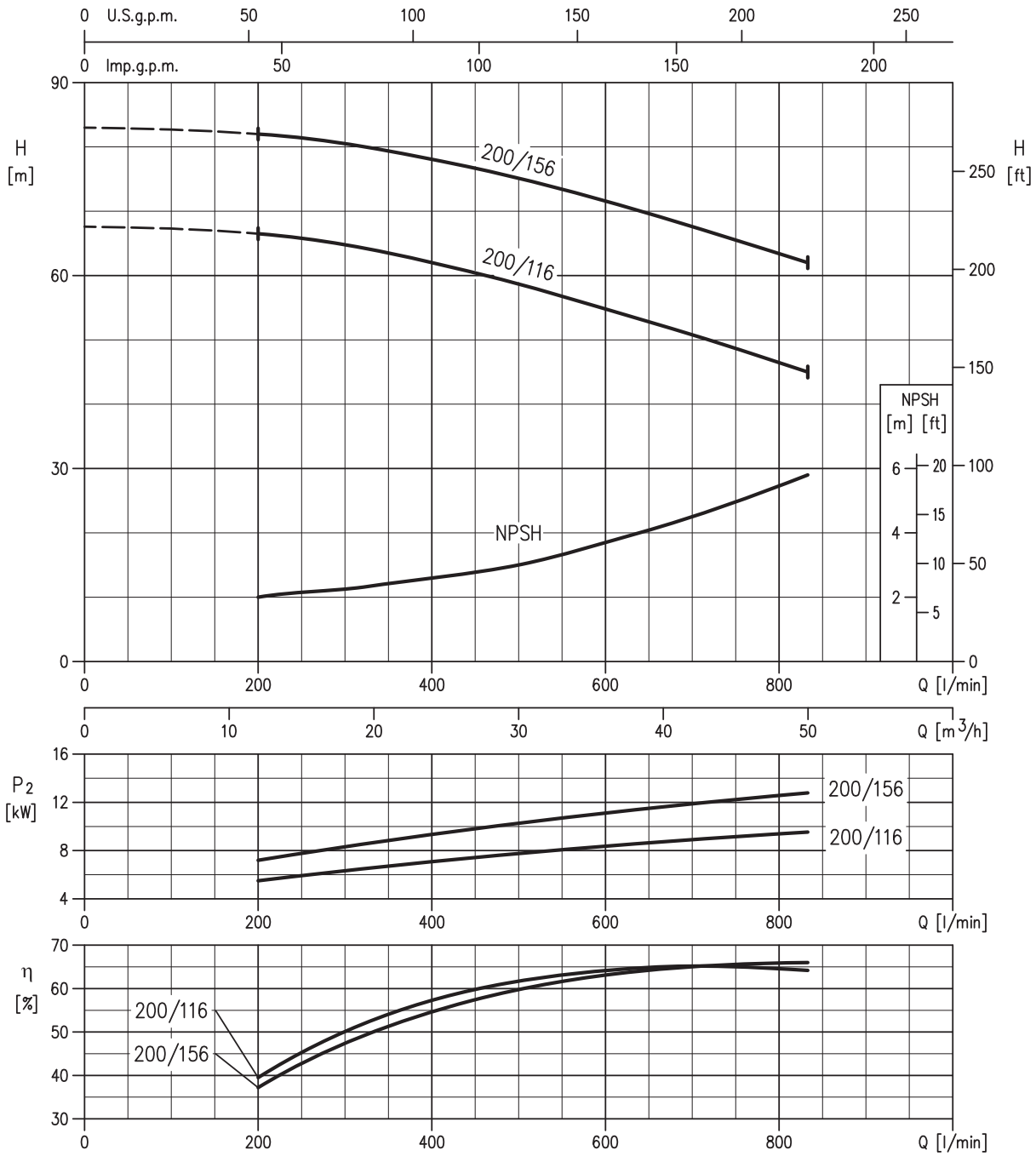


3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

성능곡선 3(L)M-3(L)S-3(L)P SERIES 40-200

at 2900 min $^{-1}$ (according to ISO 9906 Attachment A)

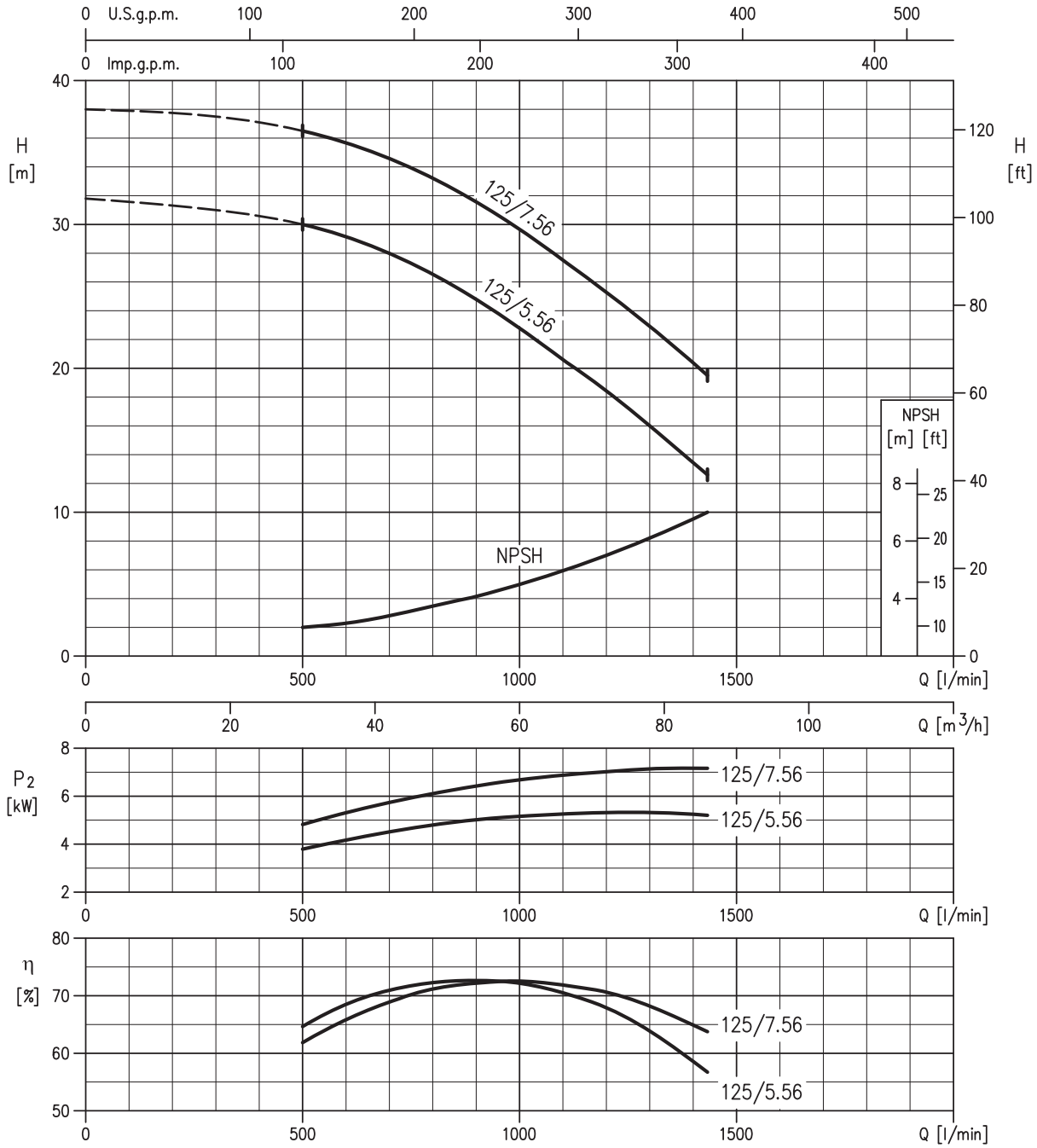


3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

성능곡선 3(L)M-3(L)S-3(L)P SERIES 50-125

at 2900 min^{-1} (according to ISO 9906 Attachment A)

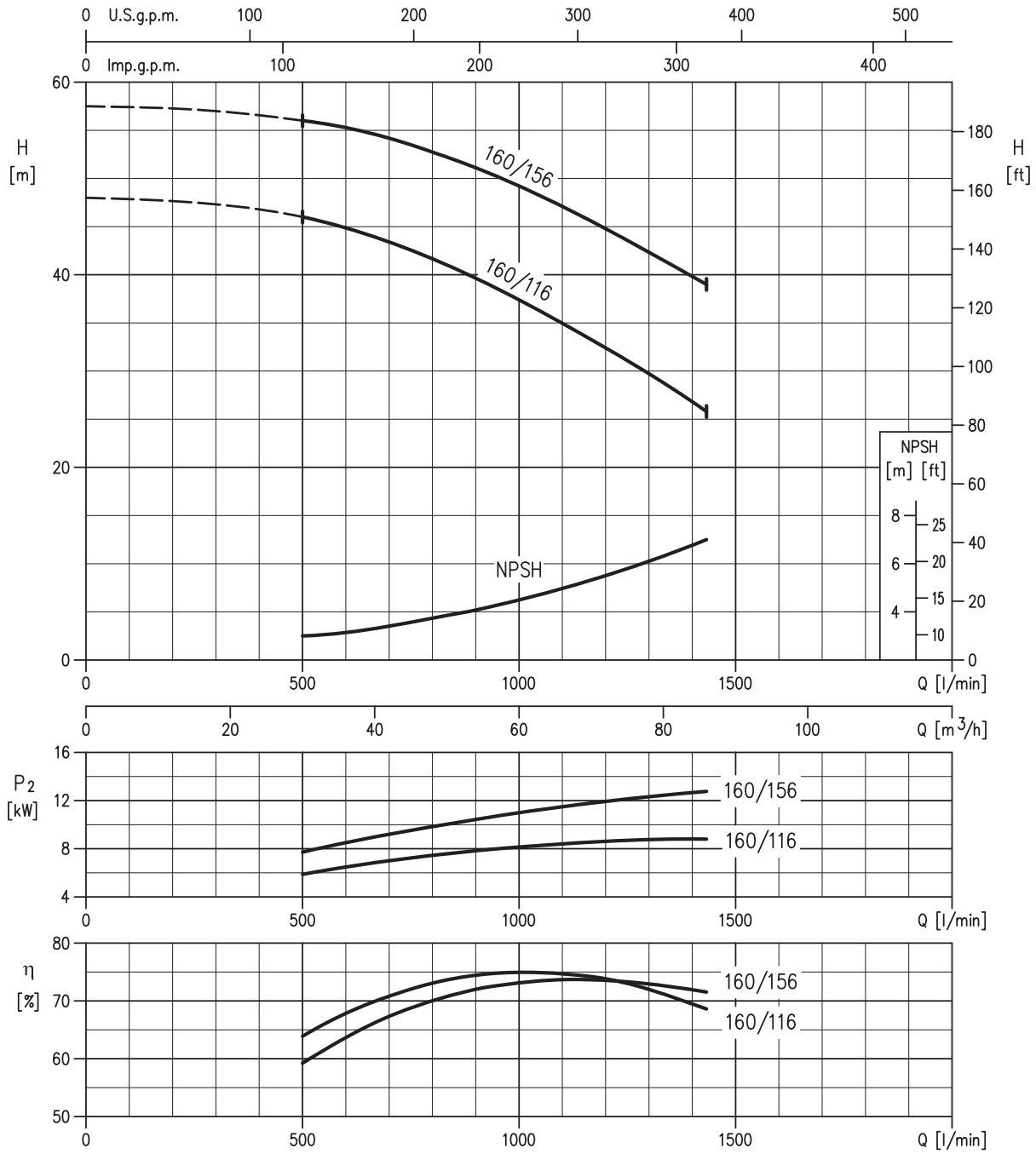


3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

성능곡선 3(L)M-3(L)S-3(L)P SERIES 50-160

at 2900 min $^{-1}$ (according to ISO 9906 Attachment A)

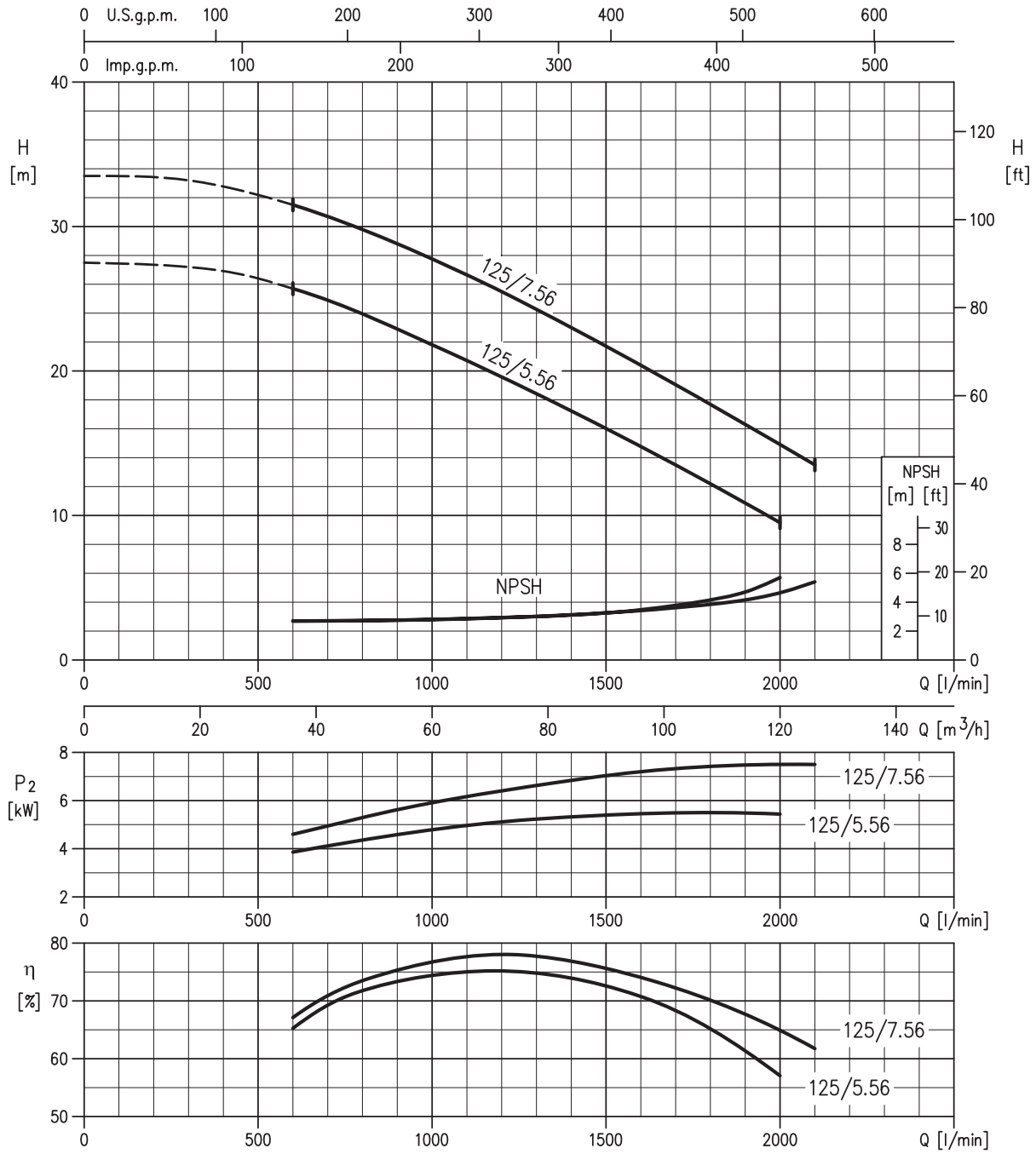


3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

성능곡선 3(L)M-3(L)S-3(L)P SERIES 65-125

at 2900 min^{-1} (according to ISO 9906 Attachment A)

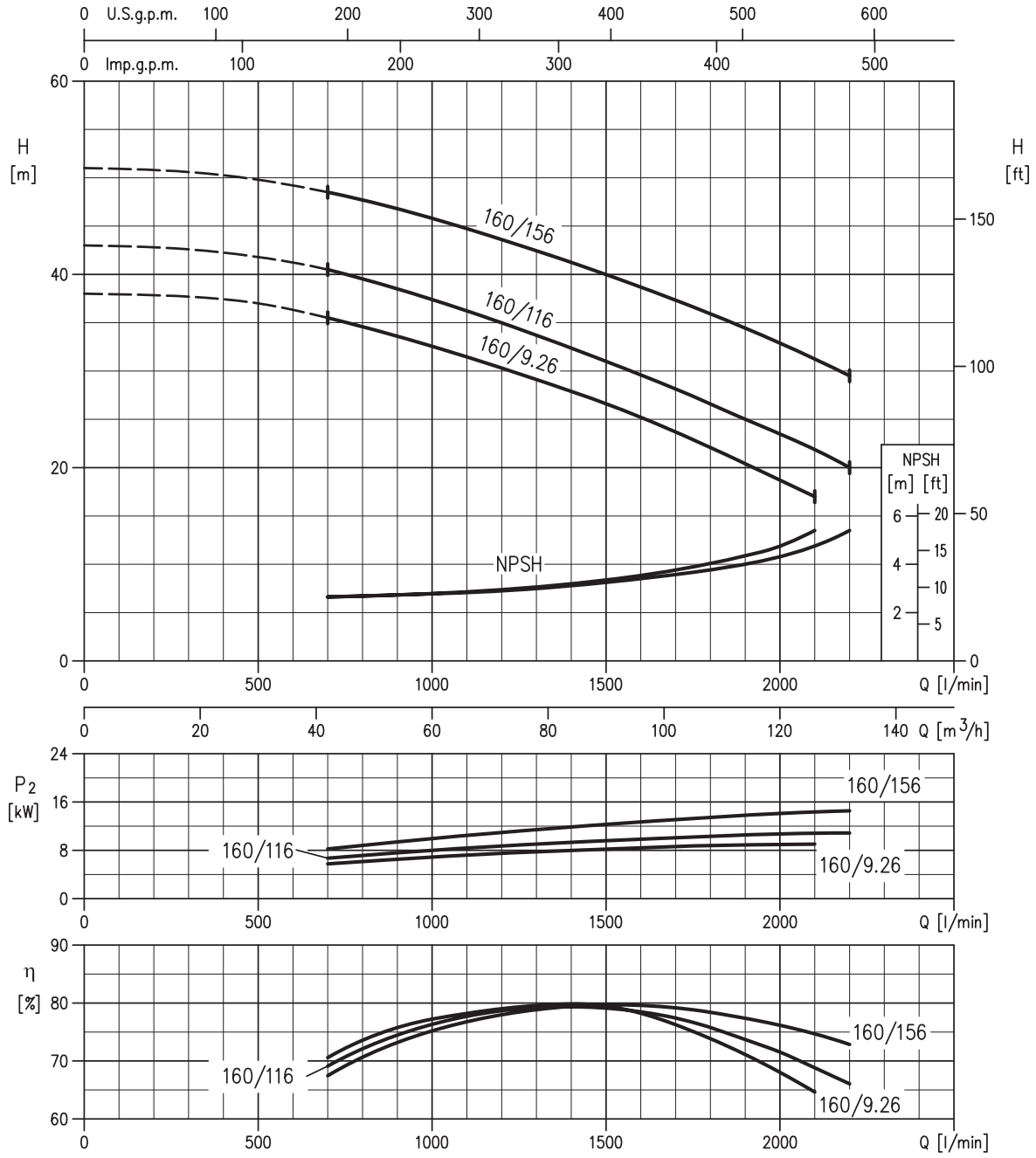


3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

성능곡선 3(L)M-3(L)S-3(L)P SERIES 65-160

at 2900 min $^{-1}$ (according to ISO 9906 Attachment A)

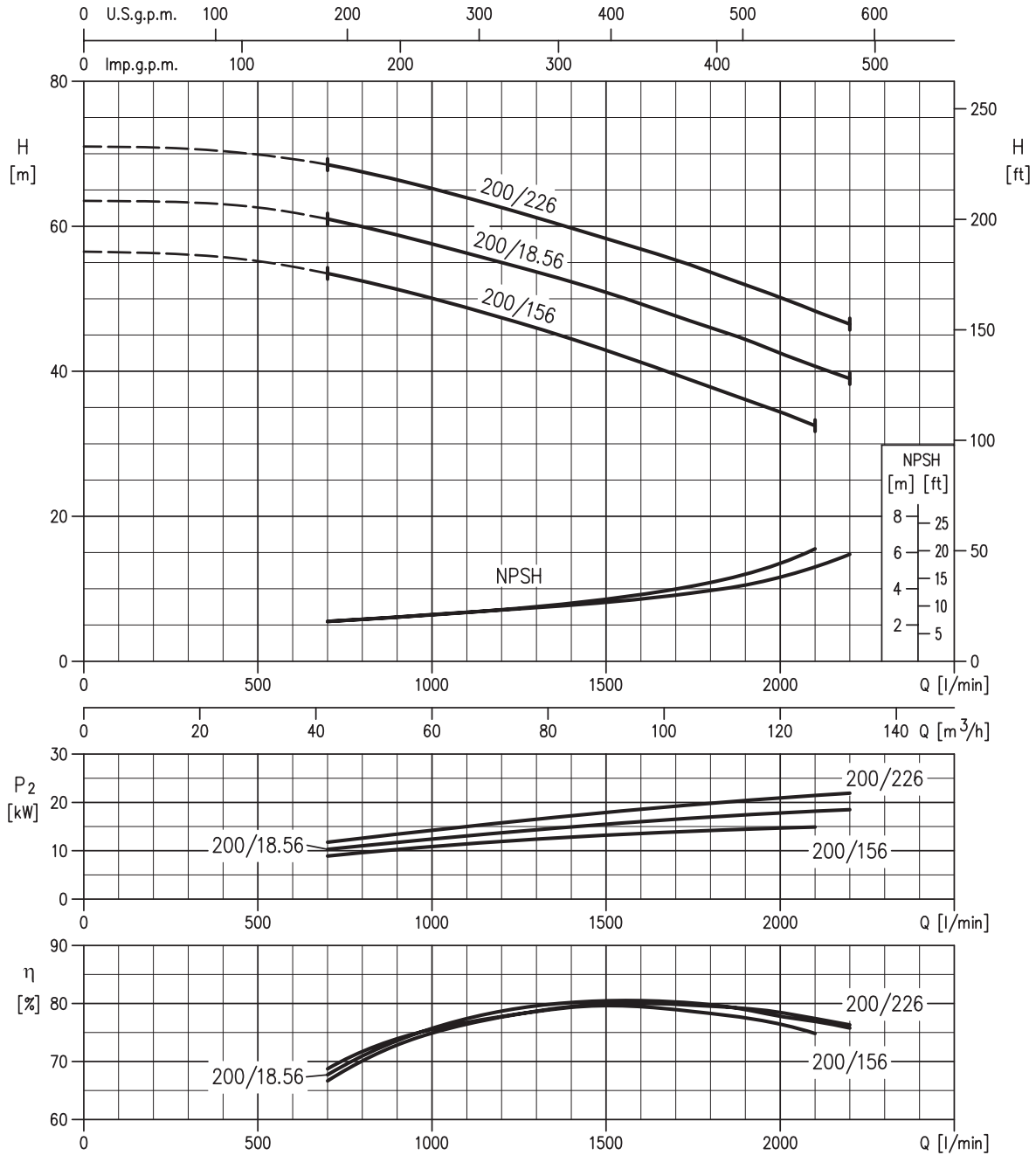


3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

성능곡선 3(L)M-3(L)S-3(L)P SERIES 65-200

at 2900 min $^{-1}$ (according to ISO 9906 Attachment A)

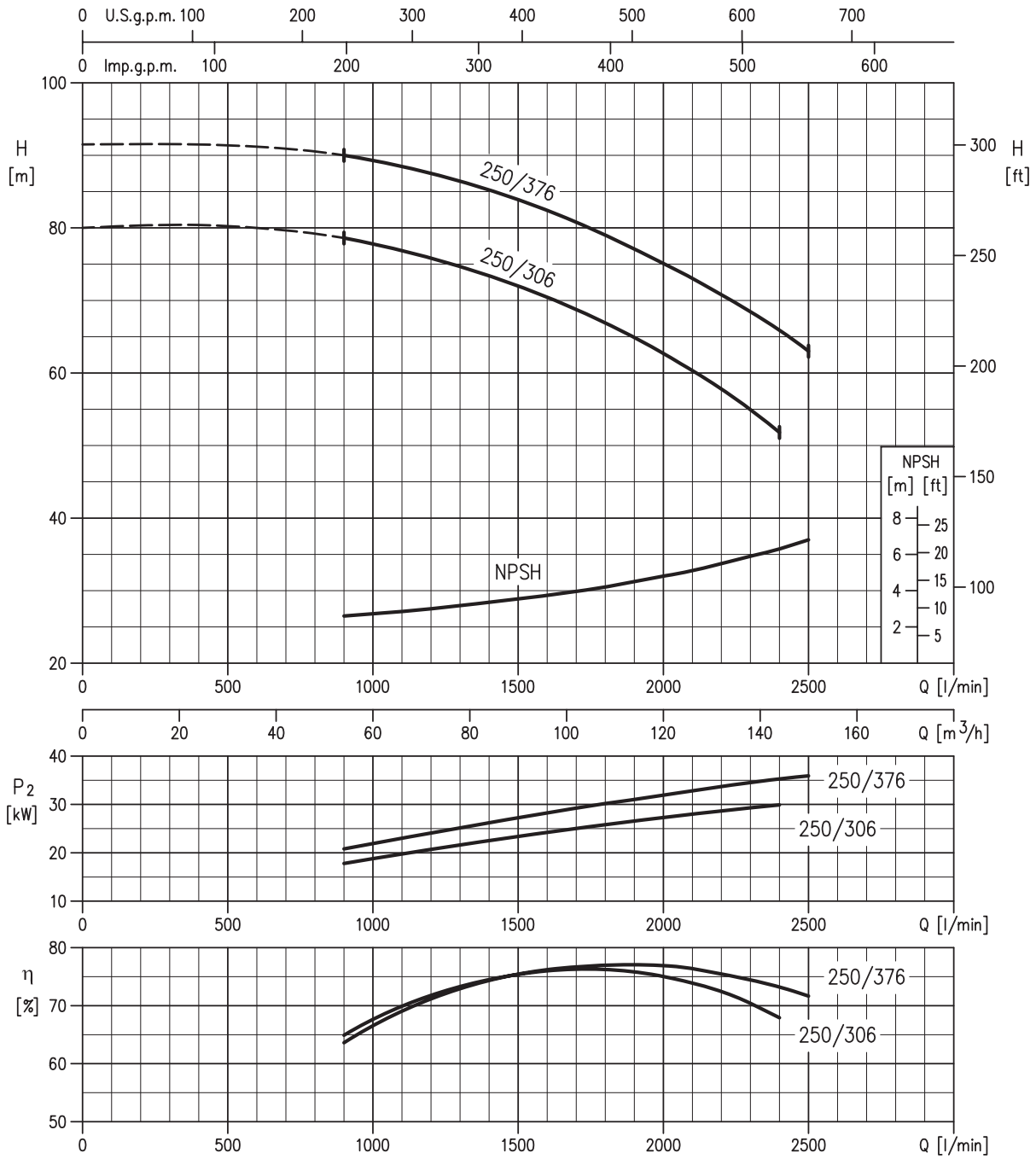


3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

성능곡선 3LS-3LP SERIES 65-250

at 2900 min $^{-1}$ (according to ISO 9906 Attachment A)

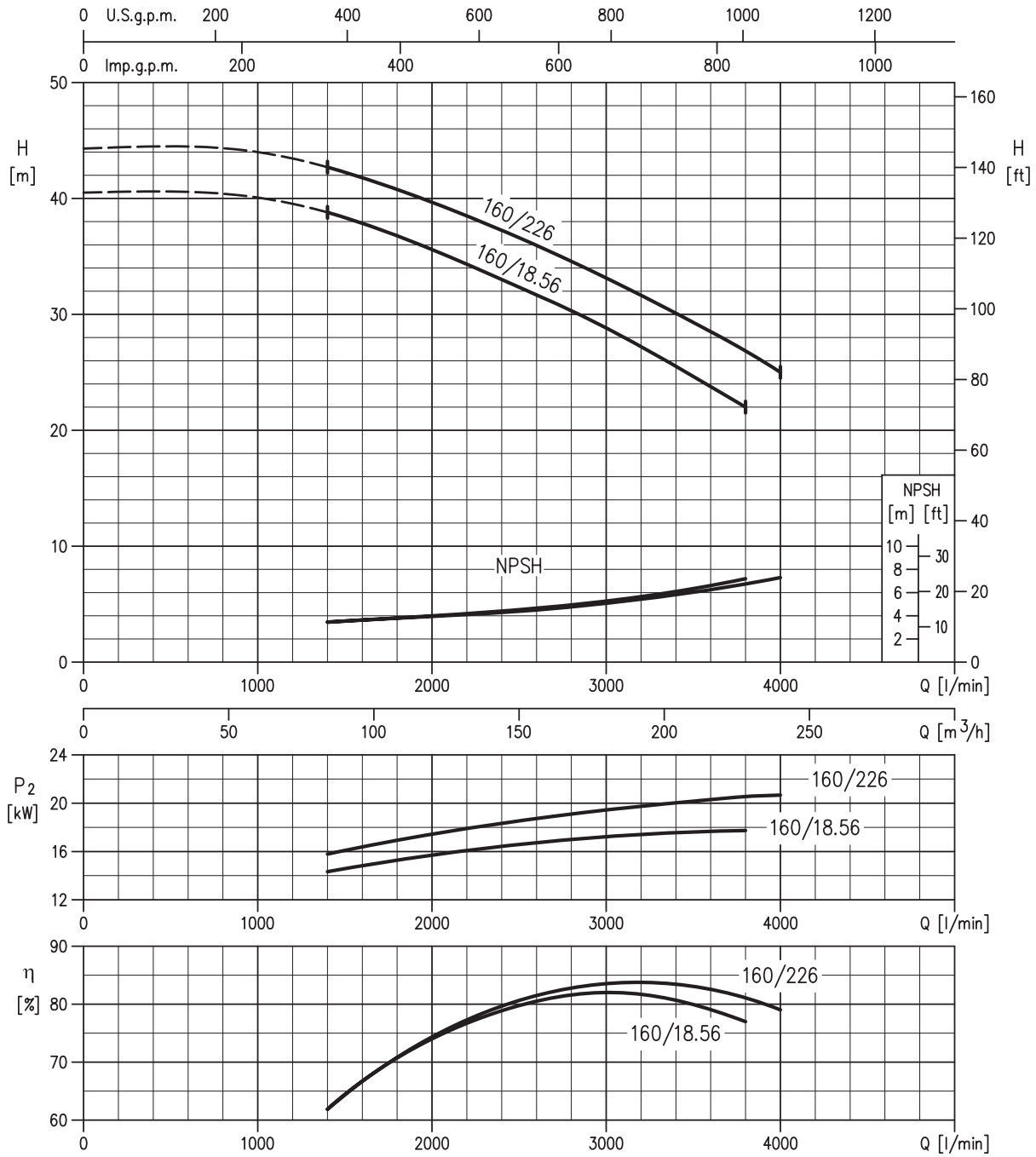


3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

성능곡선 3LM-3LS-3LP SERIES 80-160

at 2900 min $^{-1}$ (according to ISO 9906 Attachment A)

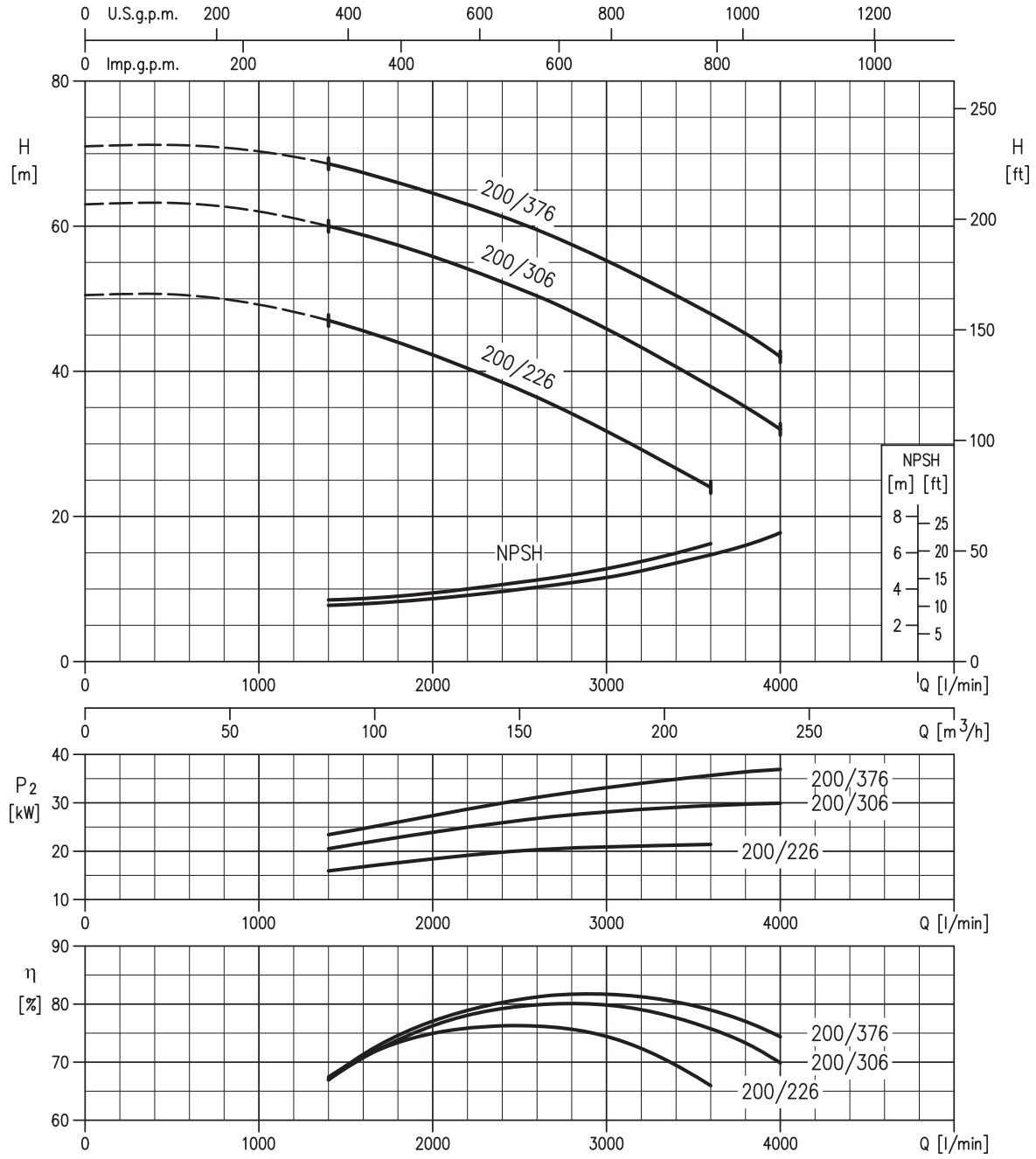


3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

성능곡선 3LS-3LP SERIES 80-200

at 2900 min $^{-1}$ (according to ISO 9906 Attachment A)

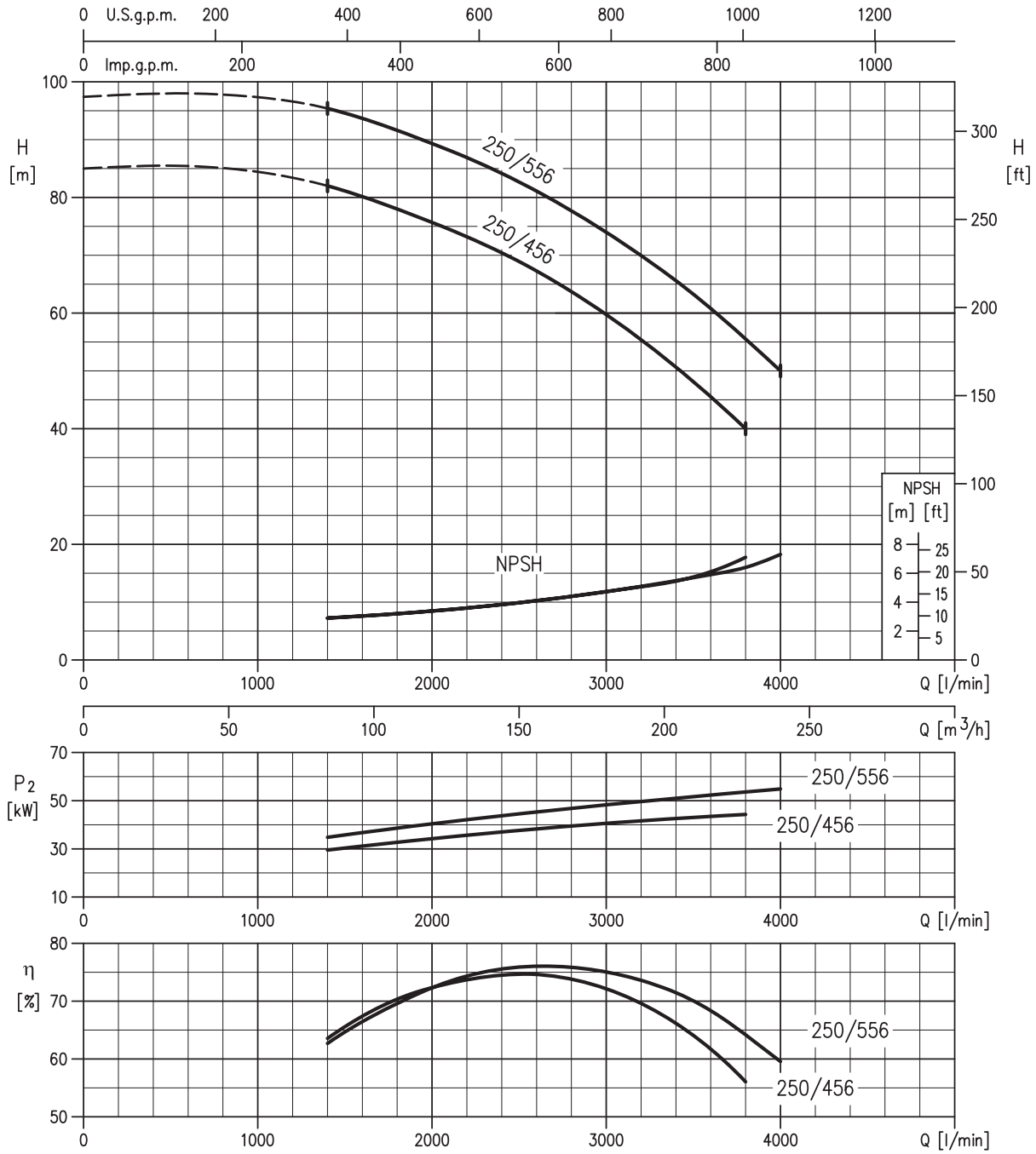


3 - 3L SERIES

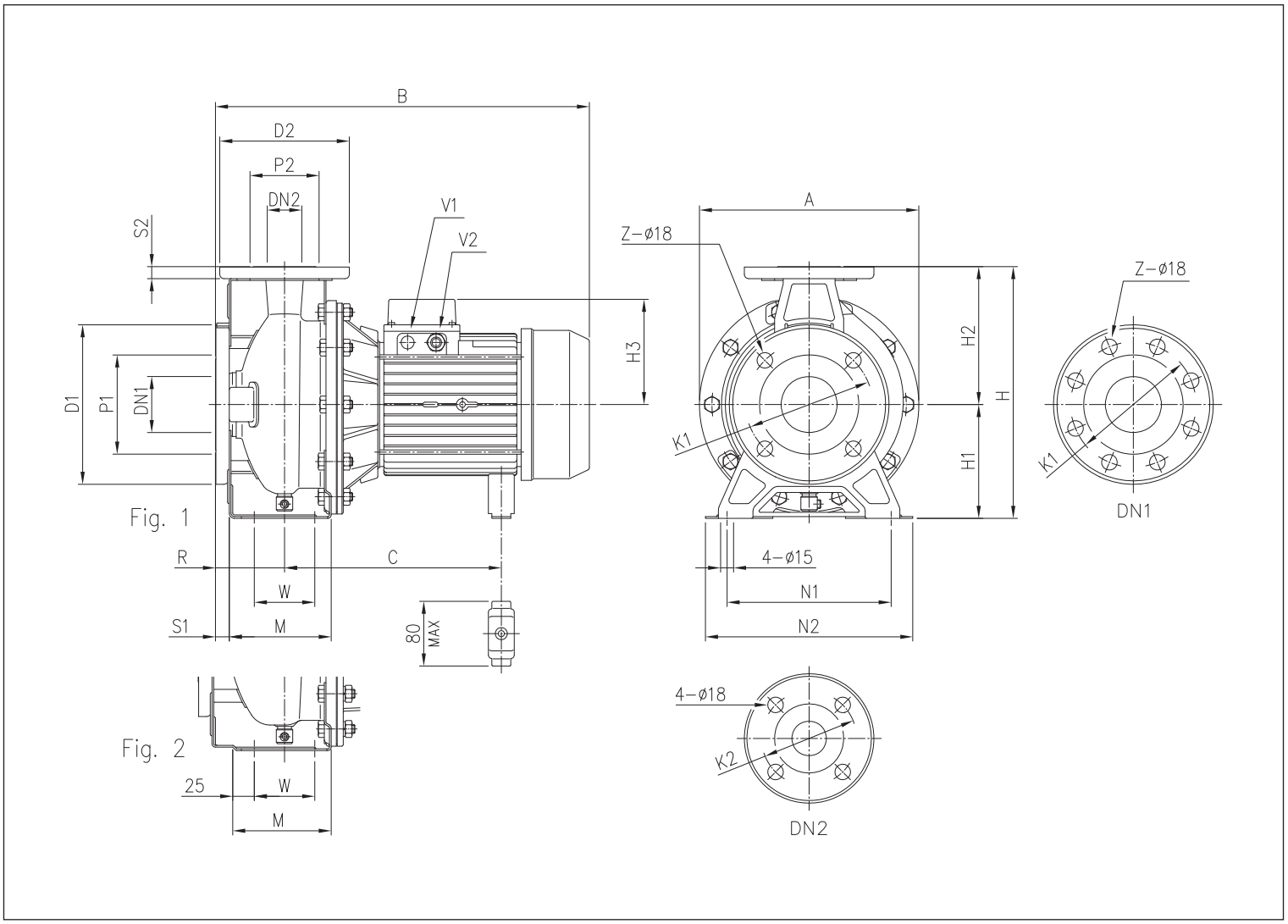
CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

성능곡선 3LS-3LP SERIES 80-250

at 2900 min $^{-1}$ (according to ISO 9906 Attachment A)



외형도 3(L)M 32, 40-125/160/200, 50-125/160, 65-125/160



외형표

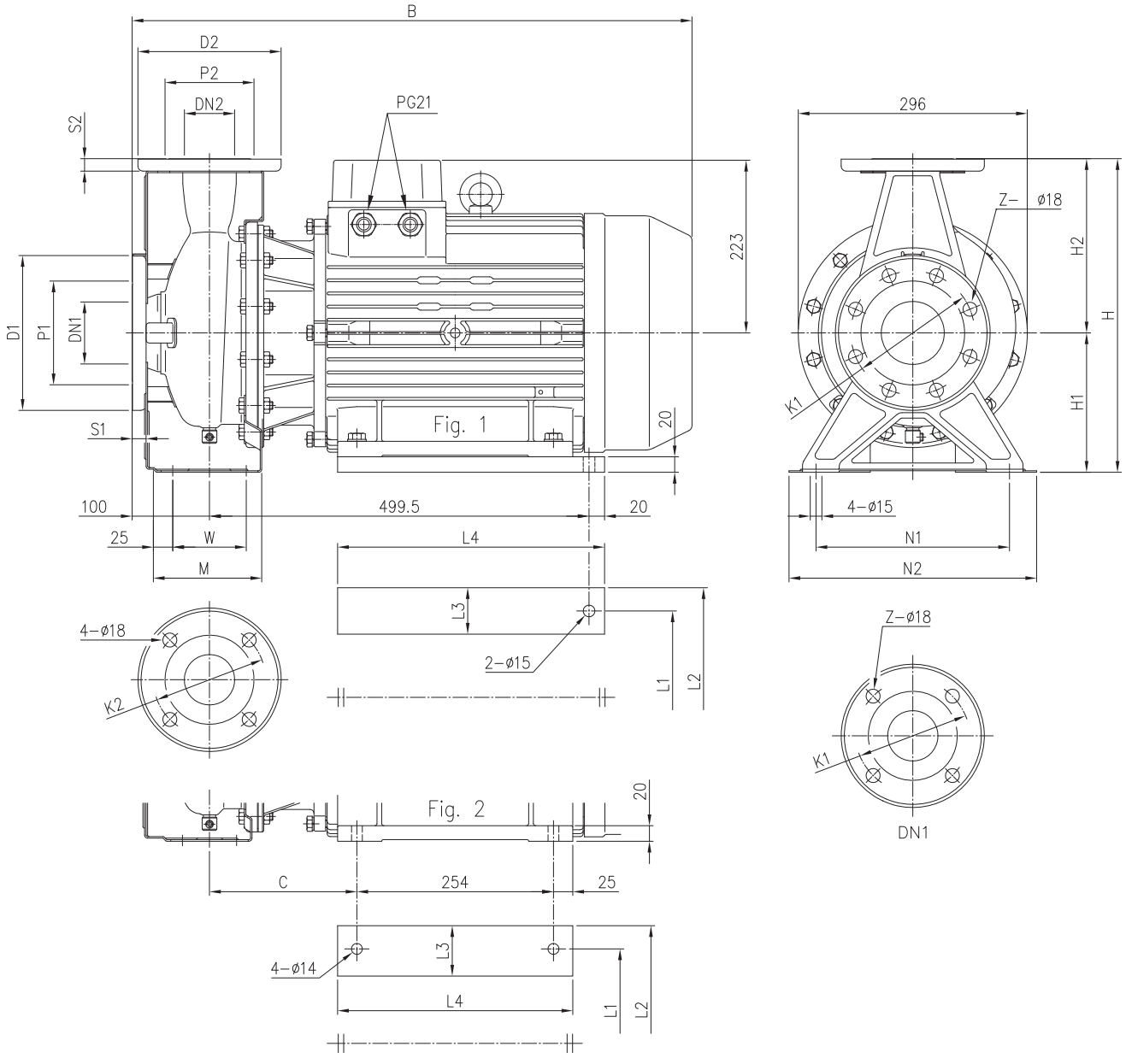
모델	외형치수 [mm]																											중량 [kg]
	DN1 Ø	P1 Ø	K1 Ø	D1 Ø	S1	Z [1]	Z [2]	DN2 Ø	P2 Ø	K2 Ø	D2 Ø	S2	Fig.	H	H1	H2	H3	R	W	M	N1	N2	A	B	C	V1	V2	
32-125/2.26	50	95	125	165	16	4	-	32	75	100	140	14	1	252	112	140	124	80	70	114	140	190	213	432	244÷255	-	PG13,5	22,1
32-160/3.06	50	95	125	165	16	4	-	32	75	100	140	14	1	292	132	160	124	80	70	118	190	240	254	471	244÷255	-	PG13,5	26,2
32-160/4.06	50	95	125	165	16	4	-	32	75	100	140	14	1	292	132	160	141	80	70	118	190	240	254	494	253	-	PG16	34,5
32-200/5.56	50	95	125	165	16	4	-	32	75	100	140	14	1	340	160	180	150	80	70	119	190	240	296	519	275	PG13,5	PG16	48,5
32-200/7.56	50	95	125	165	16	4	-	32	75	100	140	14	1	340	160	180	150	80	70	119	190	240	296	519	275	PG13,5	PG16	48,0
40-125/3.06	65	115	145	185	16	4	-	40	80	110	150	14	1	252	112	140	124	80	70	114	160	210	213	471	244÷255	-	PG13,5	23,0
40-125/4.06	65	115	145	185	16	4	-	40	80	110	150	14	1	252	112	140	141	80	70	114	160	210	213	494	253	-	PG16	36,6
40-160/5.56	65	115	145	185	16	4	-	40	80	110	150	14	1	292	132	160	150	80	70	118	190	240	254	519	275	PG13,5	PG16	42,3
40-160/7.56	65	115	145	185	16	4	-	40	80	110	150	14	1	292	132	160	150	80	70	118	190	240	254	519	275	PG13,5	PG16	50,2
40-200/116	65	115	145	185	16	4	-	40	80	110	150	14	2	340	160	180	178	100	70	115	212	265	296	595	359	PG13,5	PG21	62,0
50-125/5.56	65	115	145	185	16	4	-	50	95	125	165	16	2	292	132	160	150	100	70	114	190	240	254	539	275	PG13,5	PG16	43,9
50-125/7.56	65	115	145	185	16	4	-	50	95	125	165	16	2	292	132	160	150	100	70	114	190	240	254	539	275	PG13,5	PG16	50,5
50-160/116	65	115	145	185	16	4	-	50	95	125	165	16	2	340	160	180	178	100	70	115	212	265	296	595	359	PG13,5	PG21	63,0
65-125/5.56	80	134	160	200	18	8	4	65	115	145	185	16	2	340	160	180	150	100	95	140	212	280	254	539	275	PG13,5	PG16	52,0
65-125/7.56	80	134	160	200	18	8	4	65	115	145	185	16	2	340	160	180	150	100	95	140	212	280	254	539	275	PG13,5	PG16	53,0
65-160/9.26	80	134	160	200	18	8	4	65	115	145	185	16	2	360	160	200	178	100	95	140	212	280	296	595	359	PG13,5	PG21	55,9
65-160/116	80	134	160	200	18	8	4	65	115	145	185	16	2	360	160	200	178	100	95	140	212	280	296	595	359	PG13,5	PG21	65,0

[1] Standard [2] On request

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

외형도 3(L)M 40-200, 50-160, 65-160/200



외형표

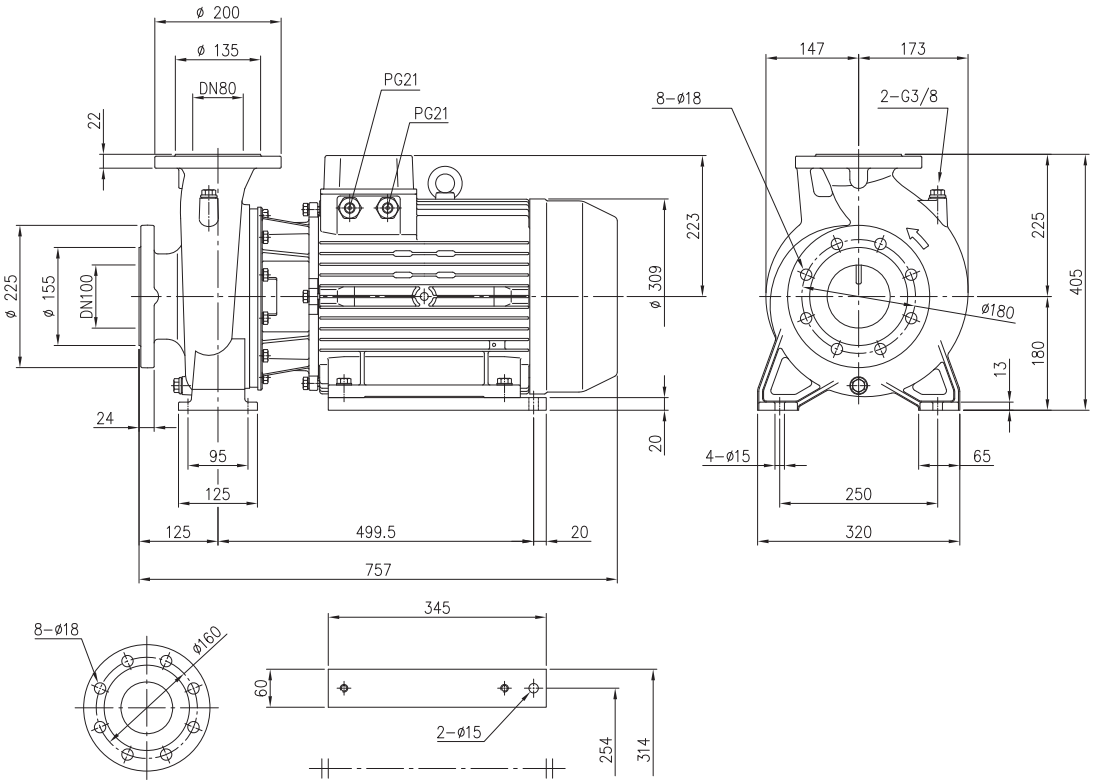
모델	외형치수 [mm]																										중량 [kg]
	DN1 Ø	P1 Ø	K1 Ø	D1 Ø	S1	Z [1]	Z [2]	DN2 Ø	P2 Ø	K2 Ø	D2 Ø	S	Fig.	H	H1	H2	W	M	N1	N2	B	C	L1	L2	L3	L4	
40-200/156	65	115	145	185	16	4	-	40	80	110	150	14	2	340	160	180	70	115	212	265	723	190,5	254	318	64	304	103,0
50-160/156	65	115	145	185	16	4	-	50	95	125	165	16	2	340	160	180	70	115	212	265	723	190,5	254	318	64	304	79,5
65-160/156	80	134	160	200	18	8	4	65	115	145	185	16	2	360	160	200	95	140	212	280	732	199,5	254	318	64	304	103,0
65-200/156	80	134	160	200	18	8	4	65	115	145	185	16	1	405	180	225	95	140	250	320	732	-	254	314	60	345	106,0
65-200/18.56	80	134	160	200	18	8	4	65	115	145	185	16	1	405	180	225	95	140	250	320	732	-	254	314	60	345	120,0
65-200/226	80	134	160	200	18	8	4	65	115	145	185	16	1	405	180	225	95	140	250	320	732	-	254	314	60	345	128,0

[1] Standard [2] On request

3 - 3L SERIES

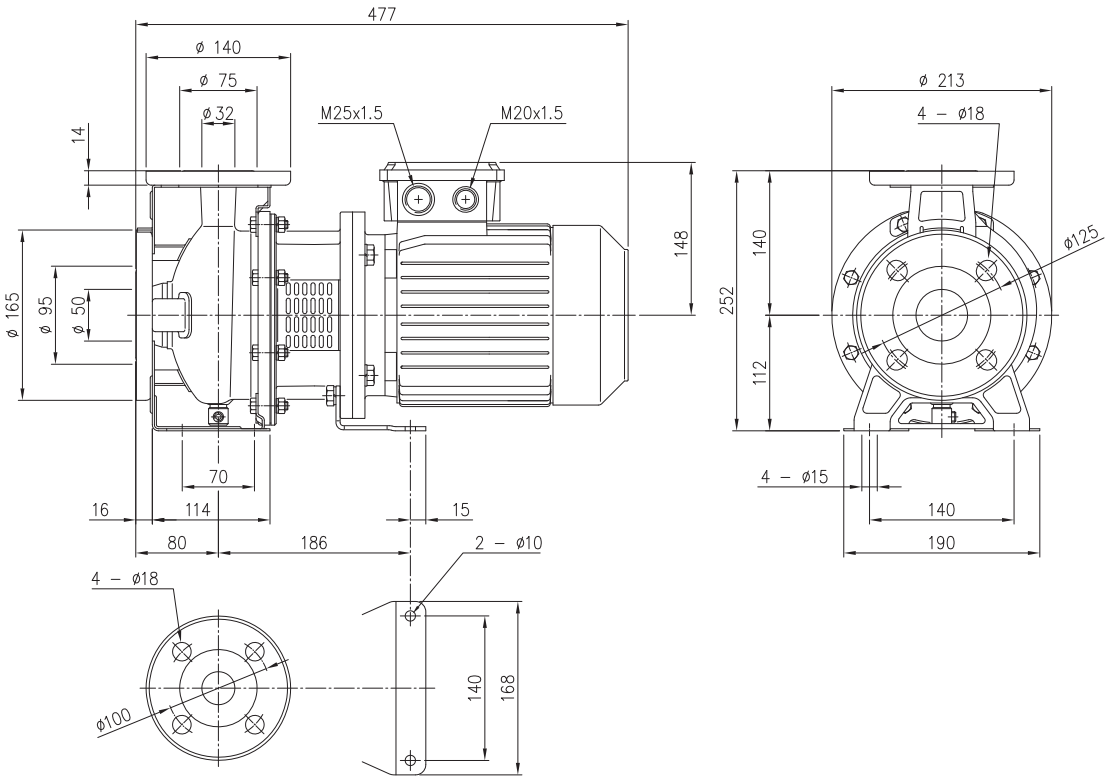
CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

외형도 3LM 80-160/18.56 - 3LM 80-160/226



Weight
80-160/18.56: 139,0 kg
80-160/226: 152,0 kg

외형도 3(L)S 32-125/2.26

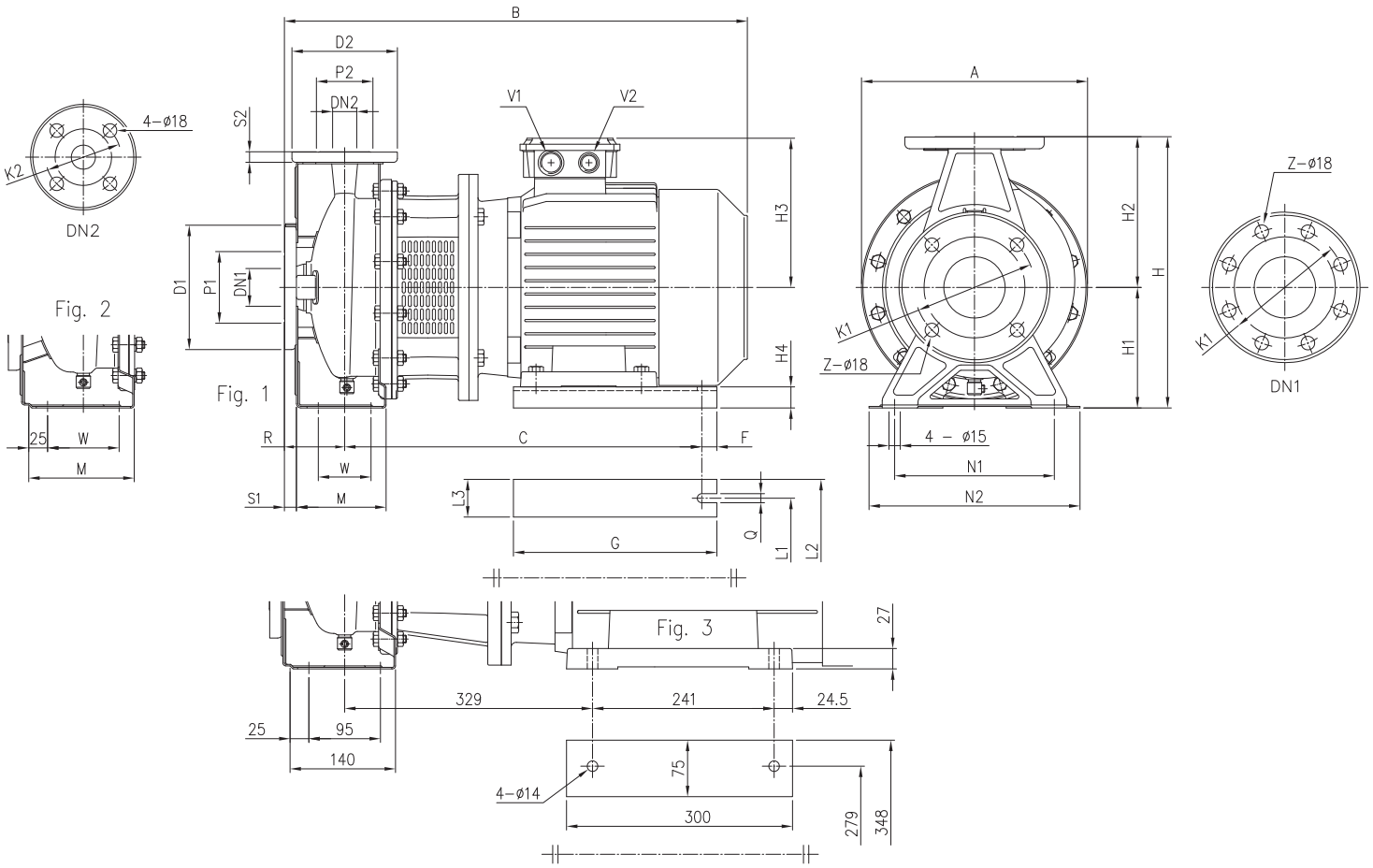


Weight
32-125/2.26: 31,4 kg

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

외형도 3(L)S 32, 65-125/160/200



외형표

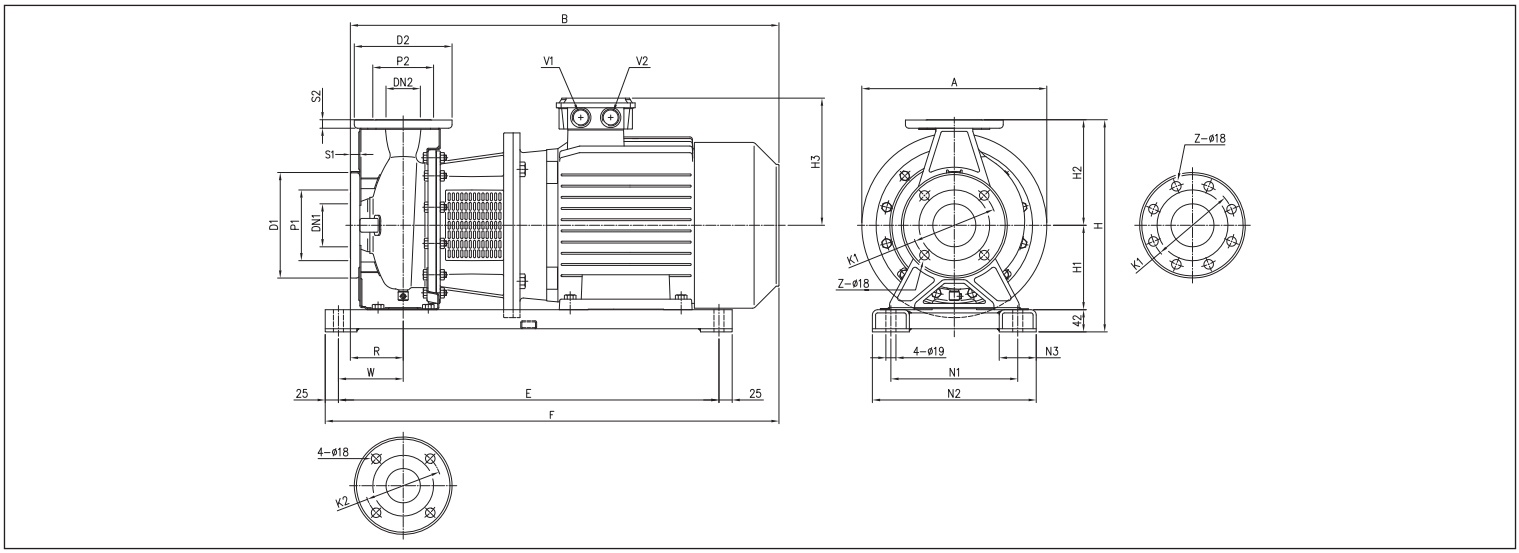
모델	외형치수 [mm]																																	중량 [kg]
	DN1 Ø	P1 Ø	K1 Ø	D1 Ø	S1	Z [1]	Z [2]	DN2 Ø	P2	K2	D2	S2	Fig.	H	H1	H2	H3	H4	R	W	M	N1	N2	A	B	C	F	G	Q	L1	L2	L3	V1	V2	
32-160/3.06	50	95	125	165	16	4	-	32	75	100	140	14	1	292	132	160	155	32	80	70	118	190	240	254	528	388	15	220	12	160	200	40	M25x1,5	M20x1,5	38,4
32-160/4.06	50	95	125	165	16	4	-	32	75	100	140	14	1	292	132	160	171	20	80	70	118	190	240	254	550	395	15	220	12	190	240	50	M25x1,5	M20x1,5	40,0
32-200/5.56	50	95	125	165	16	4	-	32	75	100	140	14	1	340	160	180	198	28	80	70	119	190	240	300	607	479	15	270	12	216	266	50	M32x1,5	M32x1,5	71,8
32-200/7.56	50	95	125	165	16	4	-	32	75	100	140	14	1	340	160	180	198	28	80	70	119	190	240	300	607	479	15	270	12	216	266	50	M32x1,5	M32x1,5	85,0
65-125/5.56	80	134	160	200	18	8	4	45	115	145	185	16	2	340	160	180	198	28	100	95	140	212	280	300	627	479	15	270	12	216	266	50	M32x1,5	M32x1,5	60,0
65-125/7.56	80	134	160	200	18	8	4	45	115	145	185	16	2	340	160	180	198	28	100	95	140	212	280	300	627	479	15	270	12	216	266	50	M32x1,5	M32x1,5	77,4
65-160/9.26	80	134	160	200	18	8	4	45	115	145	185	16	2	360	160	200	198	28	100	95	140	212	280	300	667	479	15	270	12	216	266	50	M32x1,5	M32x1,5	87,0
65-200/156	80	134	160	200	18	8	4	45	115	145	185	16	2	405	180	225	238	20	100	95	140	250	320	350	806	621	20	350	14	254	314	60	M40x1,5	M40x1,5	121,1
65-200/18.56	80	134	160	200	18	8	4	45	115	145	185	16	2	405	180	225	238	20	100	95	140	250	320	350	850	621	20	350	14	254	314	60	M40x1,5	M40x1,5	130,7
65-200/226	80	134	160	200	18	8	4	45	115	145	185	16	3	405	180	225	268	-	100	-	-	250	320	360	885	-	-	-	-	-	-	-	M32x1,5	M32x1,5	168,0

[1] Standard [2] On request

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

외형도 3(L)S 40, 50, 65-160

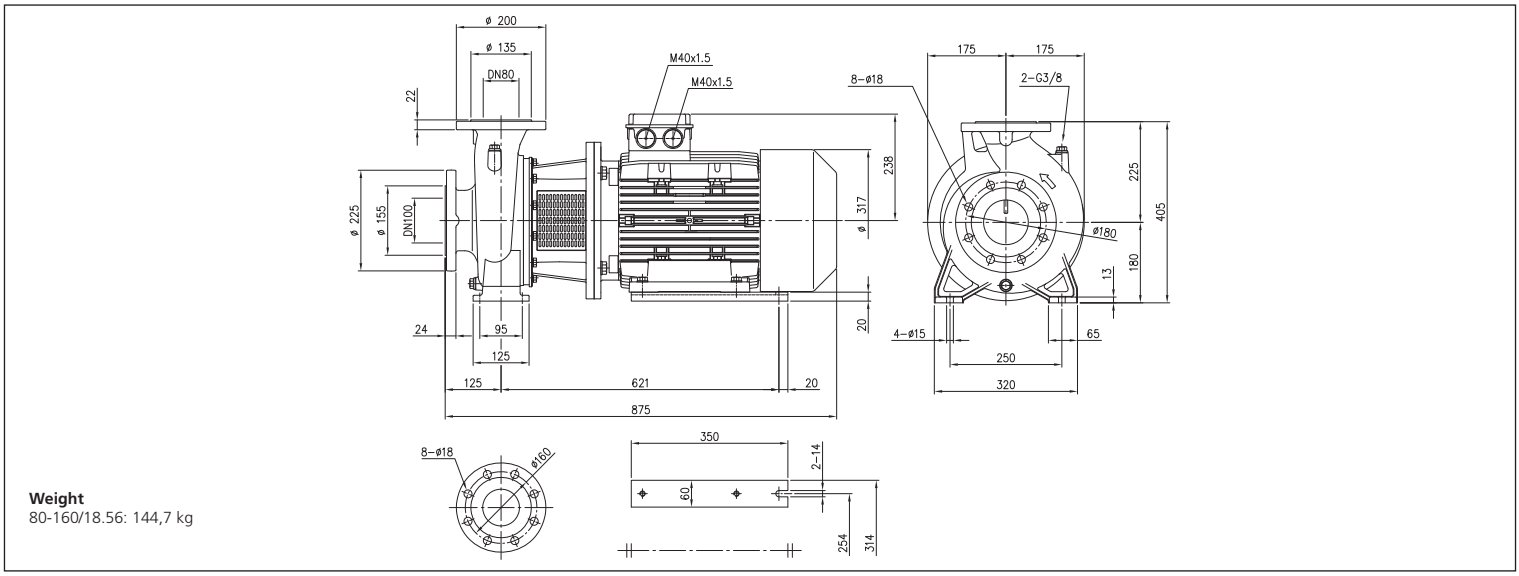


외형표

모델	외형치수 [mm]																										중량 [kg]
	DN1 Ø	P1 Ø	K1 Ø	D1 Ø	S1	Z [1]	Z [2]	DN2 Ø	P2 Ø	K2 Ø	D2 Ø	S2	H	H1	H2	H3	R	W	N1	N2	N3	A	B	E	F	V1	V2	
40-125/3.06	65	115	145	185	16	4	-	40	80	110	150	14	294	112	140	155	80	90	180	240	60	250	528	500	563	M25x1,5	M20x1,5	34,5
40-125/4.06	65	115	145	185	16	4	-	40	80	110	150	14	294	112	140	171	80	90	180	240	60	250	550	500	585	M25x1,5	M20x1,5	44,6
40-160/5.56	65	115	145	185	16	4	-	40	80	110	150	14	334	132	160	198	80	110	210	270	60	300	607	600	662	M32x1,5	M32x1,5	71,2
40-160/7.56	65	115	145	185	16	4	-	40	80	110	150	14	334	132	160	198	80	110	210	270	60	300	607	600	662	M32x1,5	M32x1,5	79,0
40-200/116	65	115	145	185	16	4	-	40	80	110	150	14	382	160	180	238	100	110	240	310	70	350	796	720	831	M40x1,5	M40x1,5	107,0
40-200/156	65	115	145	185	16	4	-	40	80	110	150	14	382	160	180	238	100	110	240	310	70	350	796	720	831	M40x1,5	M40x1,5	131,0
50-125/5.56	65	115	145	185	16	4	-	50	95	125	165	16	334	132	160	198	100	110	210	270	60	300	627	600	662	M32x1,5	M32x1,5	62,8
50-125/7.56	65	115	145	185	16	4	-	50	95	125	165	16	334	132	160	198	100	110	210	270	60	300	627	600	662	M32x1,5	M32x1,5	88,0
50-160/116	65	115	145	185	16	4	-	50	95	125	165	16	382	160	180	238	100	110	240	310	70	350	796	720	831	M40x1,5	M40x1,5	75,0
50-160/156	65	115	145	185	16	4	-	50	95	125	165	16	382	160	180	238	100	110	240	310	70	350	796	720	831	M40x1,5	M40x1,5	103,0
65-160/116	80	134	160	200	18	8	4	65	115	145	185	16	402	160	200	238	100	122,5	240	310	70	350	796	720	844	M40x1,5	M40x1,5	76,0
65-160/156	80	134	160	200	18	8	4	65	115	145	185	16	402	160	200	238	100	122,5	240	310	70	350	806	720	854	M40x1,5	M40x1,5	104,0

[1] Standard [2] On request

외형도 3LS 80-160/18.56

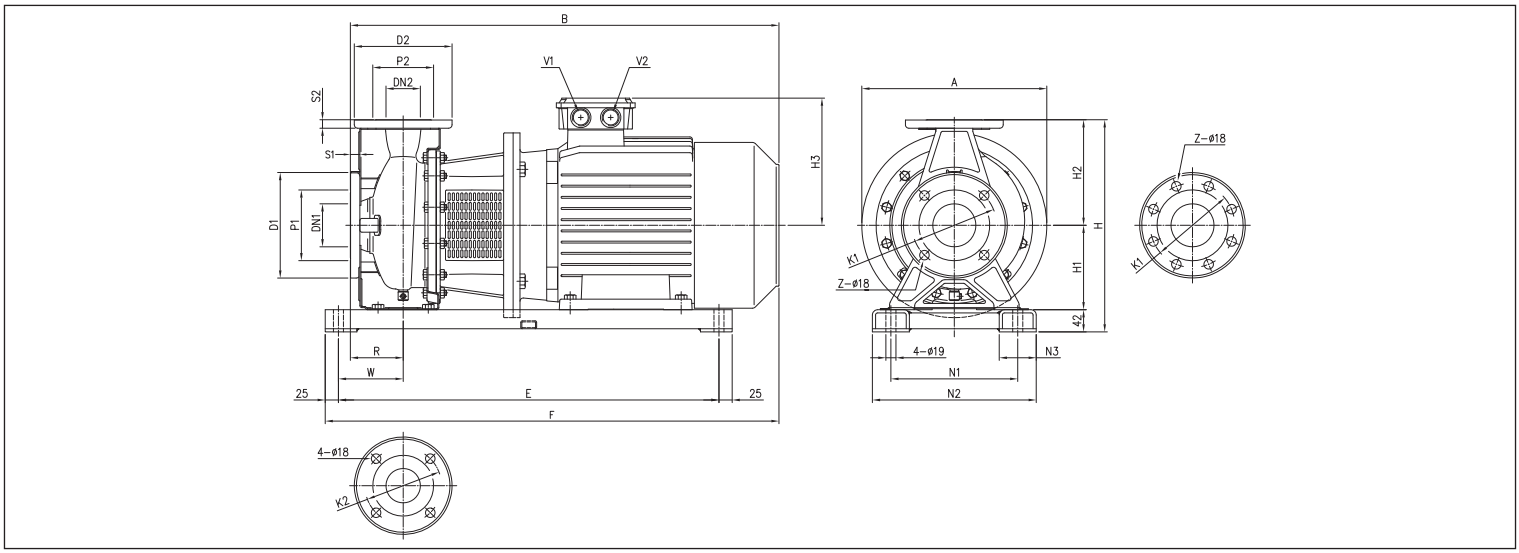


Weight
80-160/18.56: 144,7 kg

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

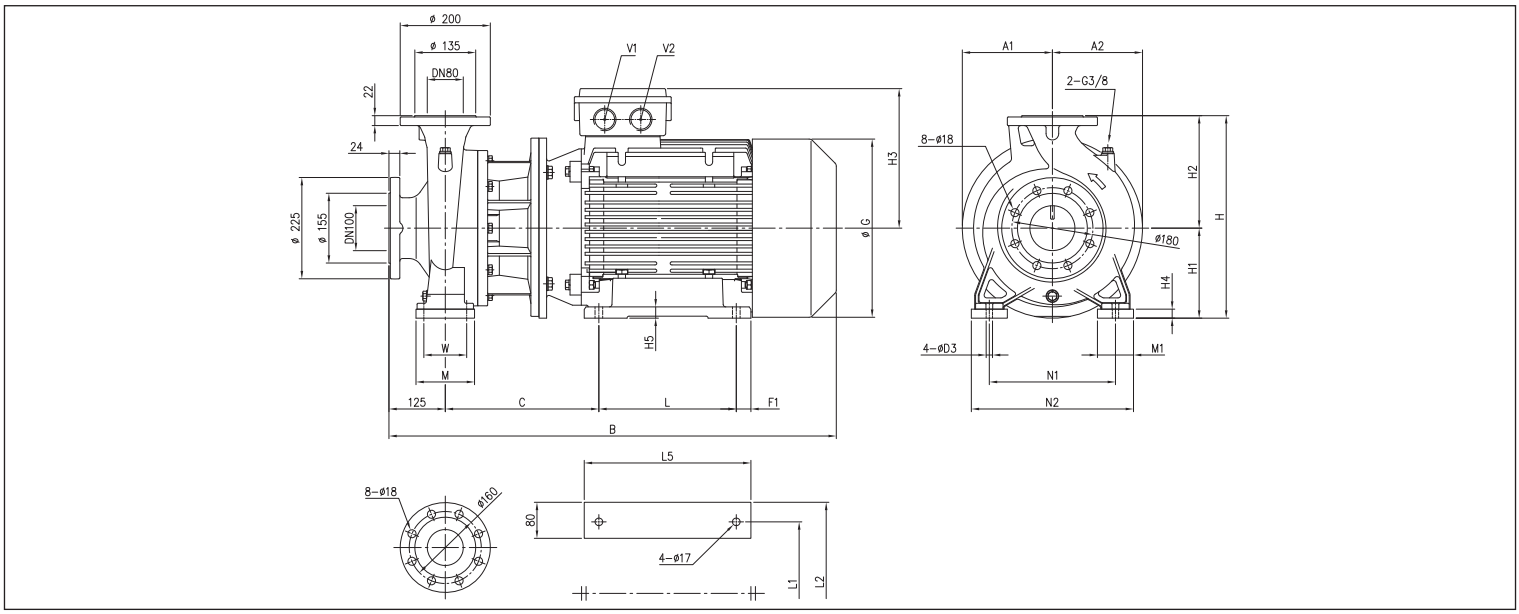
외형도 3LS 65-250, 80-160/200



외형표

모델	외형치수 [mm]																															중량 [kg]
	DN1 Ø	P1 Ø	K1 Ø	D1 Ø	S1	DN2 Ø	P2 Ø	D2 Ø	S2	H	H1	H2	H3	H4	H5	R	W	N1	N2	M	M1	L	L1	L2	L3	L5	A1	A2	B	C	F1	G	D3	D5	V1	V2	
65-250/306	80	135	160	200	22	65 Fig.1	120	185	20	450	200	250	300	15	25	100	120	280	360	160	80	305	318	388	80	358	200	200	966	341	21,5	399	19	17	M40x1,5	M40x1,5	303,0
65-250/376	80	135	160	200	22	65 Fig.1	120	185	20	450	200	250	300	15	25	100	120	280	360	160	80	305	318	388	80	358	200	200	966	341	21,5	399	19	17	M40x1,5	M40x1,5	320,0
80-160/226	100	155	180	225	24	80 Fig.2	135	200	22	405	180	225	268	13	27	125	95	250	320	125	65	241	279	348	75	300	175	175	910	329	24,5	360	15	14	M32x1,5	M32x1,5	200,0
80-200/226	100	155	180	225	24	80 Fig.2	135	200	22	430	180	250	268	13	27	125	95	280	345	125	65	241	279	348	75	300	175	182	910	329	24,5	360	15	14	M32x1,5	M32x1,5	200,0

외형도 3LS 80-200/250



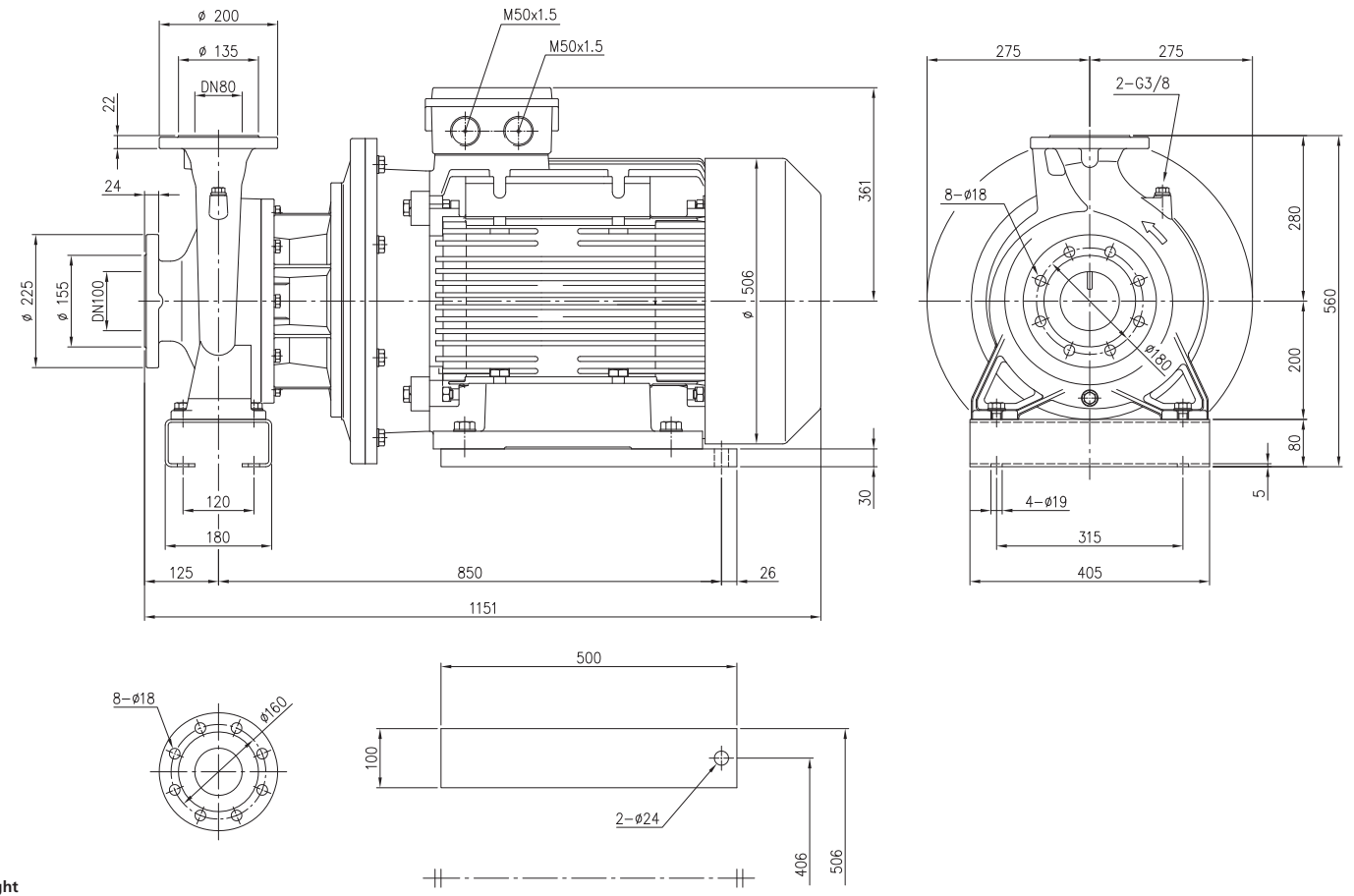
외형표

모델	외형치수 [mm]																							중량 [kg]
	H	H1	H2	H3	H4	H5	W	N1	N2	M	M1	L	L1	L2	L5	A1	A2	B	C	F1	G	D3	V1	V2	
80-200/306	450	200	250	300	20	25	95	280	360	130	80	305	318	388	358	200	200	991	341	21,5	399	14	M40x1,5	M40x1,5	306,0
80-200/376	450	200	250	300	20	25	95	280	360	130	80	305	318	388	358	200	200	991	341	21,5	399	14	M40x1,5	M40x1,5	325,0
80-250/456	505	225	280	335	25	28	120	315	415	165	100	311	356	436	386	225	225	1060	385	37,5	465	18	M50x1,5	M50x1,5	401,0

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

외형도 3LS 80-250/556

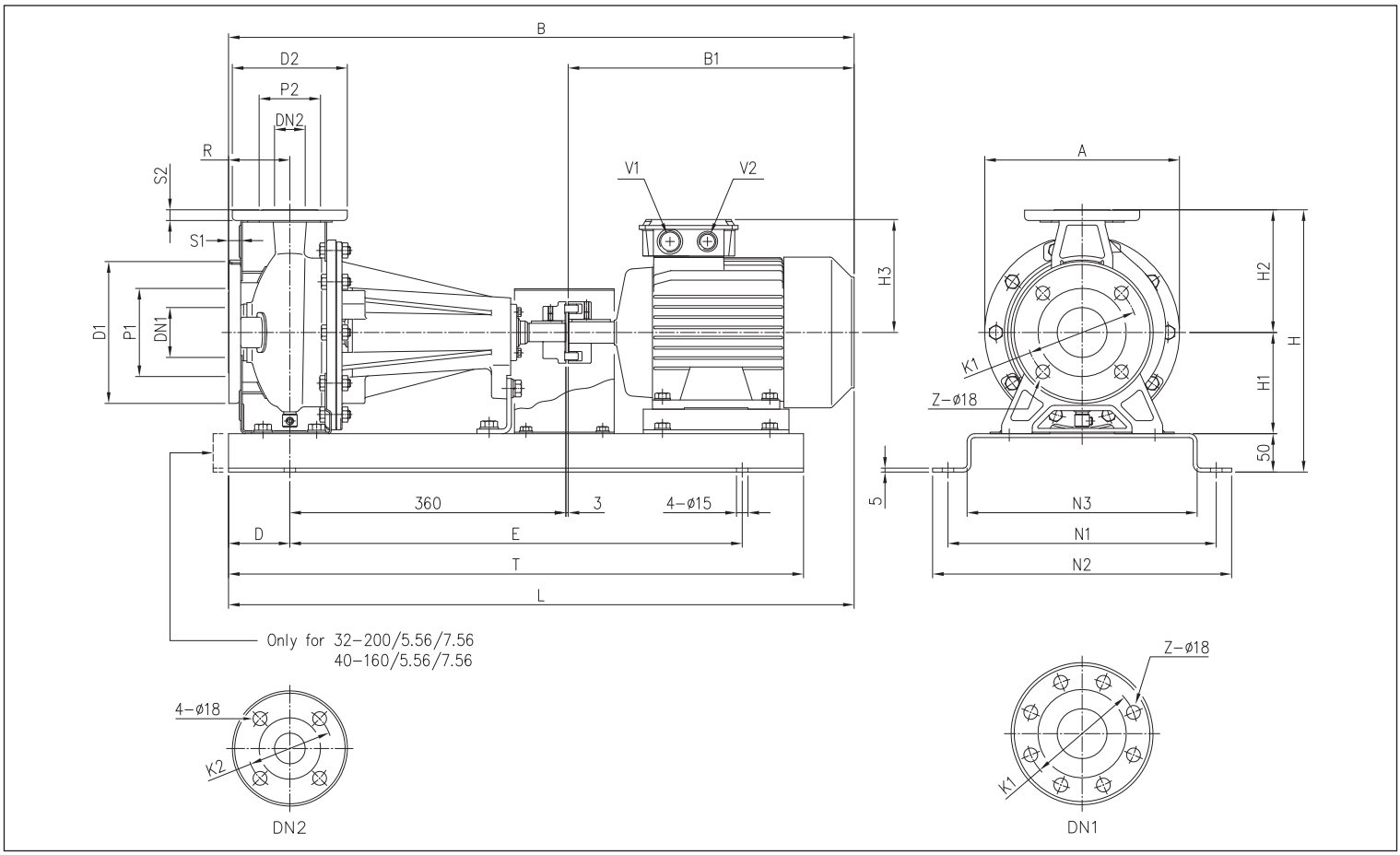


Weight
80-250/556: 489,0 kg

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

외형도 3(L)P 32, 40, 50, 65-125/160/200

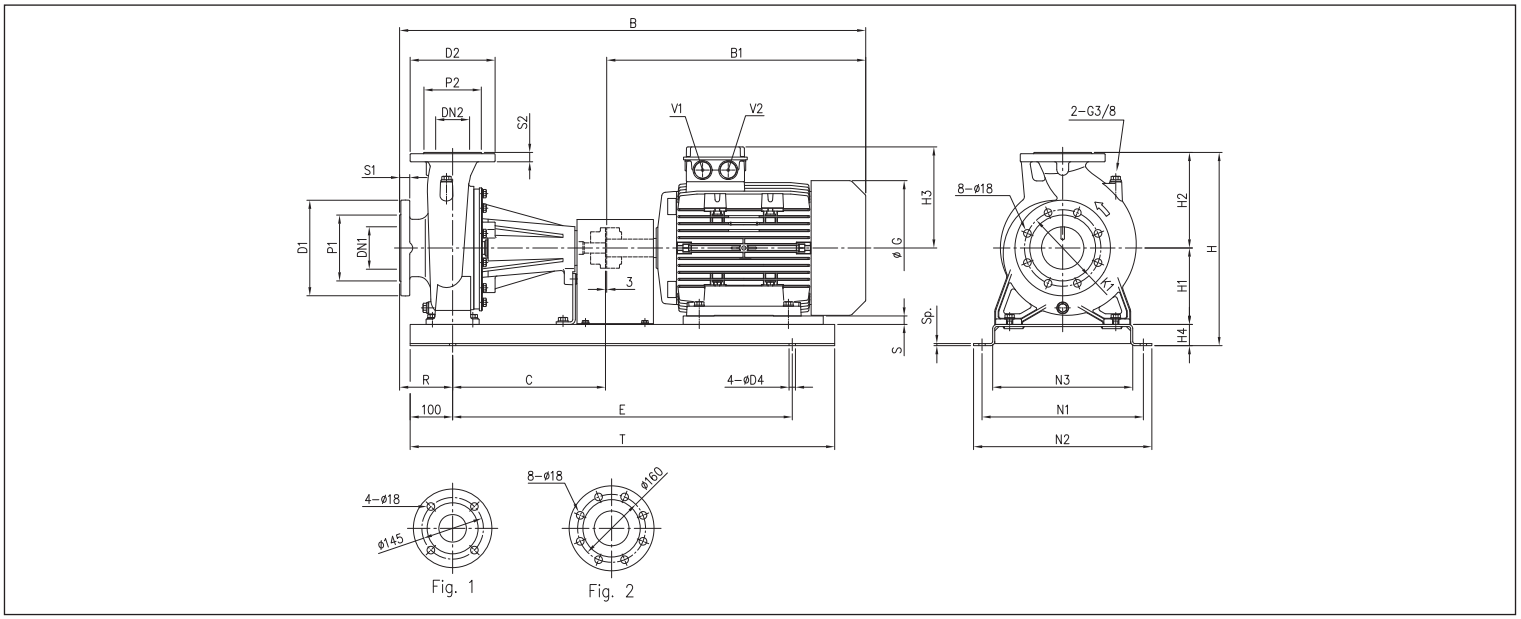


외형표

모델	외형치수 [mm]																												중량 [kg]
	DN1 Ø	P1 Ø	K1 Ø	D1 Ø	S1	Z [1]	Z [2]	DN2 Ø	P2 Ø	K2 Ø	D2 Ø	S2	H	H1	H2	H3	R	A	B	B1	D	E	N1	N2	N3	T	L	V1	V2	
32-125/2.26	50	95	125	165	16	4	-	32	75	100	140	14	302	112	140	148	80	213	760	317	80	550	300	340	250	710	760	M25x1.5	M20x1.5	52,5
32-160/3.06	50	95	125	165	16	4	-	32	75	100	140	14	342	132	160	155	80	254	809	366	80	590	350	390	300	750	809	M25x1.5	M20x1.5	70,5
32-160/4.06	50	95	125	165	16	4	-	32	75	100	140	14	342	132	160	171	80	254	831	388	80	590	350	390	300	750	831	M25x1.5	M20x1.5	74,1
32-200/5.56	50	95	125	165	16	4	-	32	75	100	140	14	390	160	180	198	80	296	885	442	100	650	350	390	300	850	905	M32x1.5	M32x1.5	97,0
32-200/7.56	50	95	125	165	16	4	-	32	75	100	140	14	390	160	180	198	80	296	885	442	100	650	350	390	300	850	905	M32x1.5	M32x1.5	110,2
40-125/3.06	65	115	145	185	16	4	-	40	80	110	150	14	302	112	140	155	80	213	809	366	80	590	300	340	250	750	809	M25x1.5	M20x1.5	80,0
40-125/4.06	65	115	145	185	16	4	-	40	80	110	150	14	302	112	140	171	80	213	831	388	80	590	300	340	250	750	831	M25x1.5	M20x1.5	66,6
40-160/5.56	65	115	145	185	16	4	-	40	80	110	150	14	342	132	160	198	80	254	885	442	100	650	350	390	300	850	905	M32x1.5	M32x1.5	97,0
40-160/7.56	65	115	145	185	16	4	-	40	80	110	150	14	342	132	160	198	80	254	885	442	100	650	350	390	300	850	905	M32x1.5	M32x1.5	103,9
40-200/116	65	115	145	185	16	4	-	40	80	110	150	14	390	160	180	238	100	296	1071	608	100	800	380	420	330	1000	1071	M40x1.5	M40x1.5	117,0
40-200/156	65	115	145	185	16	4	-	40	80	110	150	14	390	160	180	238	100	296	1071	608	100	800	380	420	330	1000	1071	M40x1.5	M40x1.5	118,0
50-125/5.56	65	115	145	185	16	4	-	50	95	125	165	16	342	132	160	198	100	254	905	442	100	650	350	390	300	850	905	M32x1.5	M32x1.5	98,0
50-125/7.56	65	115	145	185	16	4	-	50	95	125	165	16	342	132	160	198	100	254	905	442	100	650	350	390	300	850	905	M32x1.5	M32x1.5	104,9
50-160/116	65	115	145	185	16	4	-	50	95	125	165	16	390	160	180	238	100	296	1071	608	100	800	380	420	330	1000	1071	M40x1.5	M40x1.5	116,5
50-160/156	65	115	145	185	16	4	-	50	95	125	165	16	390	160	180	238	100	296	1071	608	100	800	380	420	330	1000	1071	M40x1.5	M40x1.5	117,5
65-125/5.56	80	134	160	200	18	8	4	65	115	145	185	16	390	160	180	198	100	254	905	442	100	650	350	390	300	850	905	M32x1.5	M32x1.5	99,0
65-125/7.56	80	134	160	200	18	8	4	65	115	145	185	16	390	160	180	198	100	254	905	442	100	650	350	390	300	850	905	M32x1.5	M32x1.5	107,4
65-160/9.26	80	134	160	200	18	8	4	65	115	145	185	16	410	160	200	198	100	296	945	482	100	650	350	390	300	850	945	M32x1.5	M32x1.5	117,0
65-160/116	80	134	160	200	18	8	4	65	115	145	185	16	410	160	200	238	100	296	1071	608	100	800	380	420	330	1000	1071	M40x1.5	M40x1.5	114,0
65-160/156	80	134	160	200	18	8	4	65	115	145	185	16	410	160	200	238	100	296	1071	608	100	800	380	420	330	1000	1071	M40x1.5	M40x1.5	112,1
65-200/156	80	134	160	200	18	8	4	65	115	145	185	16	455	180	225	238	100	296	1071	608	100	800	380	420	330	1000	1071	M40x1.5	M40x1.5	120,1
65-200/18.56	80	134	160	200	18	8	4	65	115	145	185	16	455	180	225	238	100	296	1115	652	100	800	380	420	330	1000	1115	M40x1.5	M40x1.5	128,7
65-200/226	80	134	160	200	18	8	4	65	115	145	185	16	455	180	225	268	100	296	1150	687	100	800	410	450	360	1000	1150	M32x1.5	M32x1.5	182,0

[1] Standard [2] On request

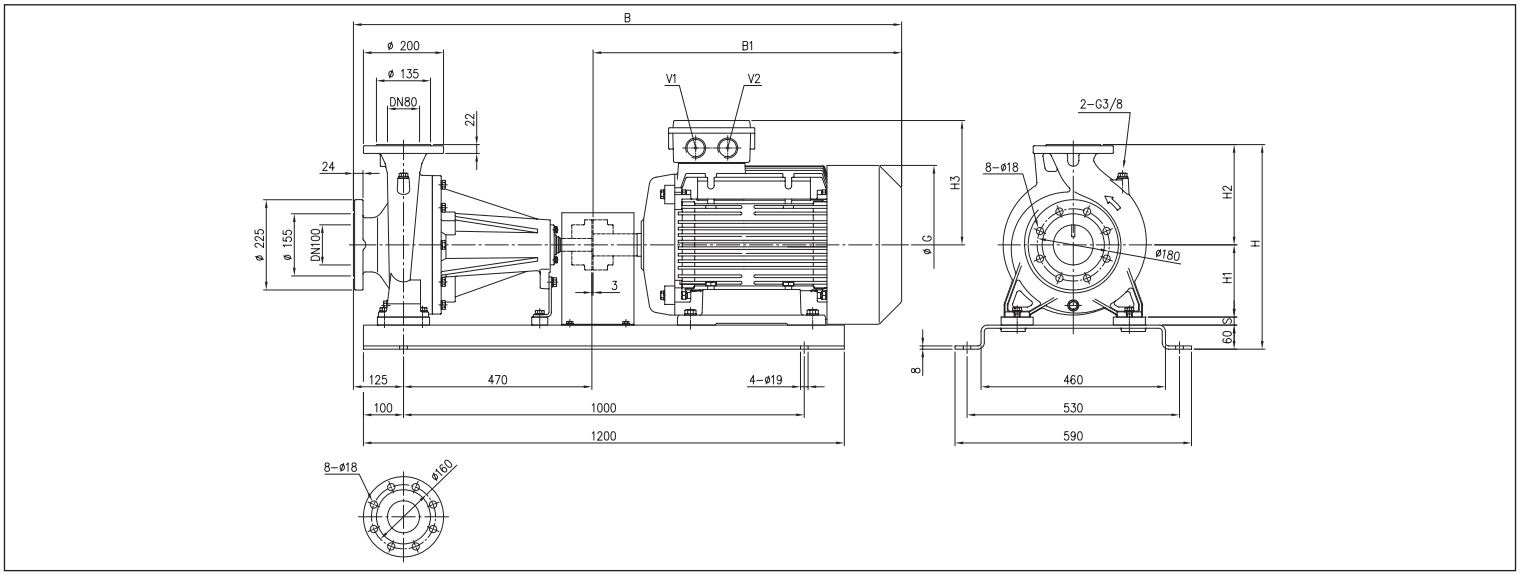
외형도 3LP 65-250, 80-160/200



외형표

모델	외형치수 [mm]																										중량 [kg]
	DN1	P1	K1	D1	S1	DN2	P2	D2	S2	H	H1	H2	H3	H4	R	N1	N2	N3	B	B1	C	G	E	T	S	D4	Sp.	V1	V2	
65-250/306	80	135	160	200	22	65 Fig.1	120	185	20	510	200	250	300	60	100	530	590	460	1341	399	470	768	1000	1200	-	19	8	M40x1.5	M40x1.5	354,0
65-250/376	80	135	160	200	22	65 Fig.1	120	185	20	510	200	250	300	60	100	530	590	460	1341	399	470	768	1000	1200	-	19	8	M40x1.5	M40x1.5	373,0
80-160/18.56	100	155	180	225	24	80 Fig.2	135	200	22	455	180	225	238	50	125	380	420	330	1140	317	360	652	800	1000	20	15	5	M40x1.5	M40x1.5	174,7
80-160/226	100	155	180	225	24	80 Fig.2	135	200	22	455	180	225	268	50	125	410	450	360	1175	360	360	687	800	1000	-	15	5	M32x1.5	M32x1.5	250,0
80-200/226	100	155	180	225	24	80 Fig.2	135	200	22	490	180	250	268	60	125	530	590	460	1285	360	470	687	1000	1200	-	19	8	M32x1.5	M32x1.5	252,0

외형도 3LP 80-200/250



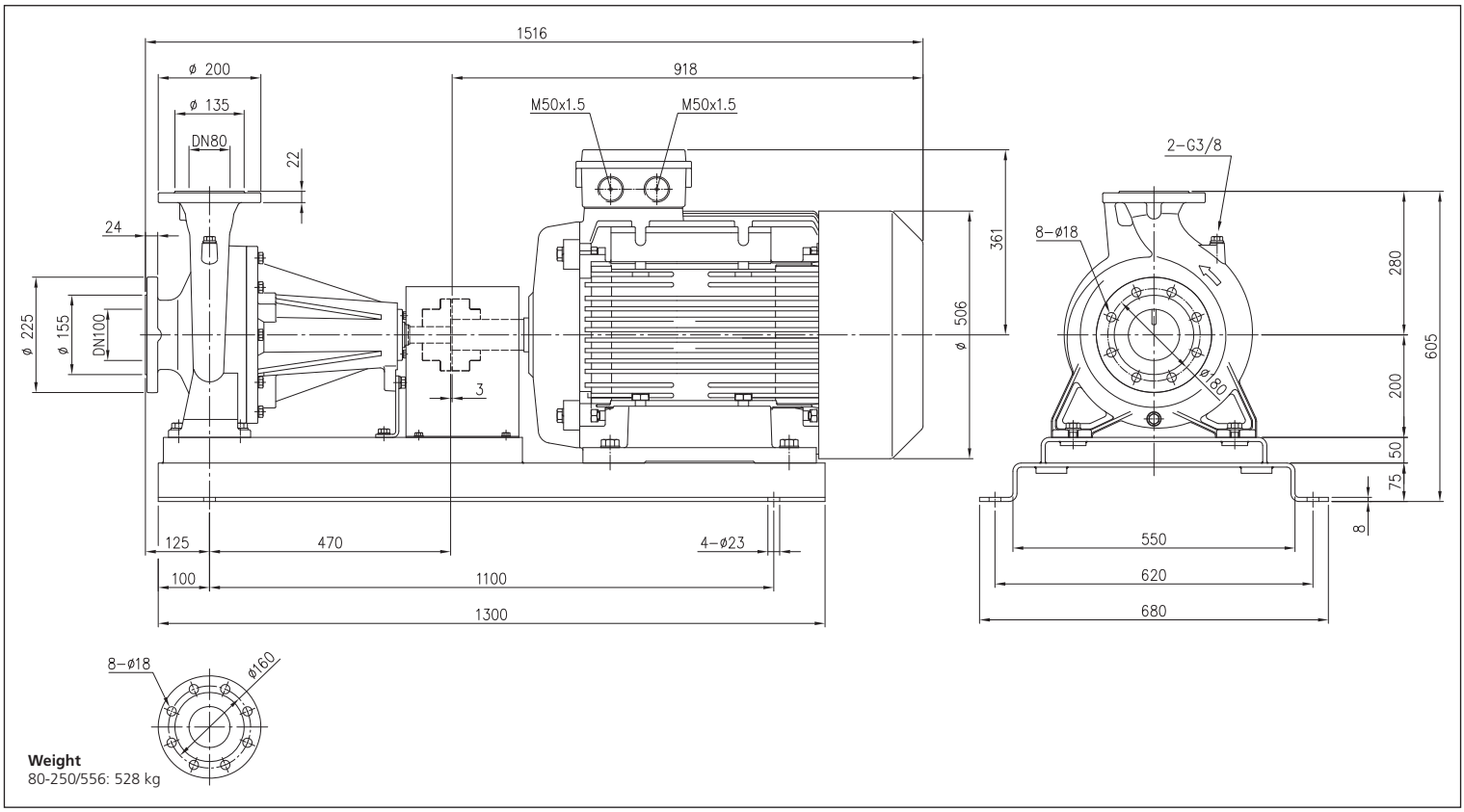
외형표

모델	외형치수 [mm]										중량 [kg]
	H	H1	H2	H3	B	B1	G	S	V1	V2	
80-200/306	510	180	250	300	1366	768	399	20	M40x1.5	M40x1.5	356,0
80-200/376	510	180	250	300	1366	768	399	20	M40x1.5	M40x1.5	365,0
80-250/456	565	200	280	335	1407	809	465	25	M50x1.5	M50x1.5	440,0

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

외형도 3LP 80-250/556

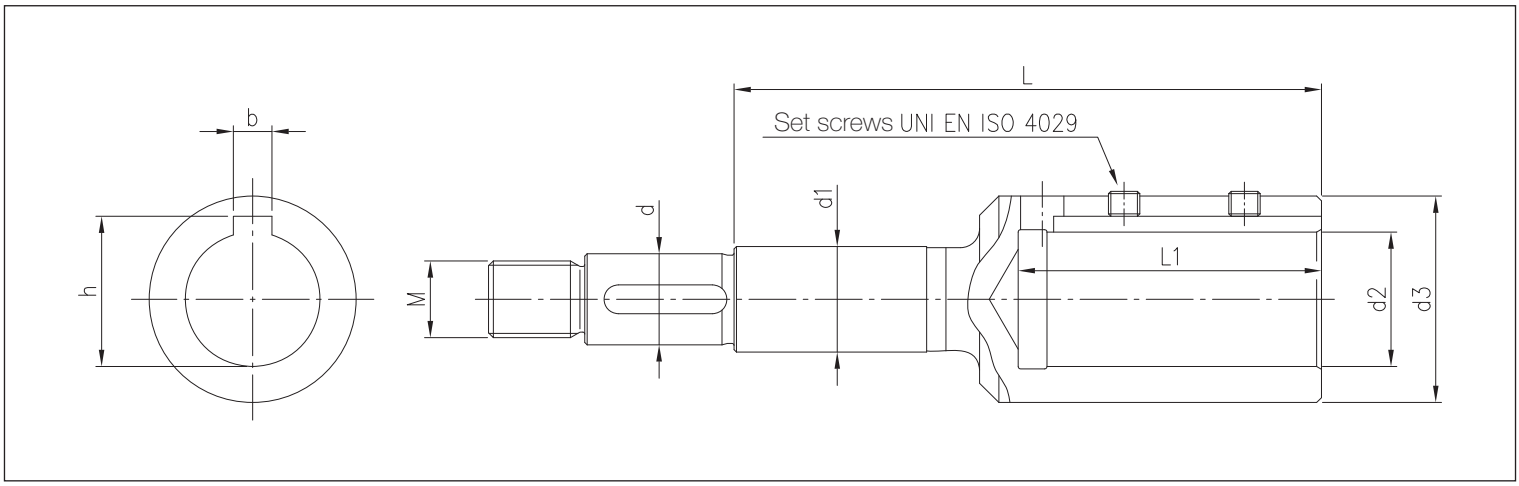


Weight
80-250/556: 528 kg

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

3(L)S - 3SF SERIES 연결



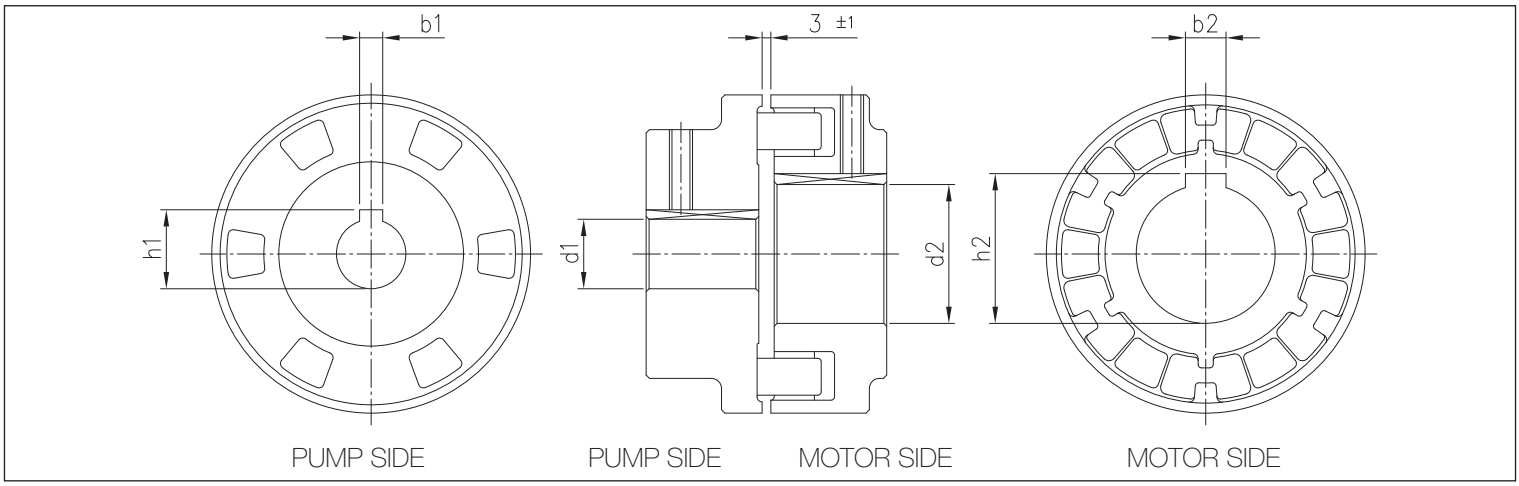
외형표

모델	[HP]	[kW]	모터 사이즈	외형치수 [mm] d	d1	d2	d3	M	L	L1	b	h	나사
32-125/2.26	3	2,2	90	19	22	24	39	M16x1,5	110	53	8	27,3	M8x8
32-160/3.06	4	3	100	19	22	28	43	M16x1,5	122	63	8	31,3	M8x8
32-160/4.06	5,5	4	112	19	22	28	43	M16x1,5	122	63	8	31,3	M8x8
32-200/5.56	7,5	5,5	132	19	22	38	58	M16x1,5	145	84	10	41,3	M8x8
32-200/7.56	10	7,5	132	19	22	38	58	M16x1,5	145	84	10	41,3	M8x8
40-125/3.06	4	3	100	19	22	28	43	M16x1,5	122	63	8	31,3	M8x8
40-125/4.06	5,5	4	112	19	22	28	43	M16x1,5	122	63	8	31,3	M8x8
40-160/5.56	7,5	5,5	132	19	22	38	58	M16x1,5	145	84	10	41,3	M8x8
40-160/7.56	10	7,5	132	19	22	38	58	M16x1,5	145	84	10	41,3	M8x8
40-200/116	15	11	160	19	22	42	63	M16x1,5	178	114	12	45,3	M8x8
40-200/156	20	15	160	19	22	42	63	M16x1,5	178	114	12	45,3	M8x8
50-125/5.56	7,5	5,5	132	19	22	38	58	M16x1,5	145	84	10	41,3	M8x8
50-125/7.56	10	7,5	132	19	22	38	58	M16x1,5	145	84	10	41,3	M8x8
50-160/116	15	11	160	19	22	42	63	M16x1,5	178	114	12	45,3	M8x8
50-160/156	20	15	160	19	22	42	63	M16x1,5	178	114	12	45,3	M8x8
65-125/5.56	7,5	5,5	132	19	22	38	58	M16x1,5	145	84	10	41,3	M8x8
65-125/7.56	10	7,5	132	19	22	38	58	M16x1,5	145	84	10	41,3	M8x8
65-160/9.26	12,5	9,2	132	19	22	38	58	M16x1,5	145	84	10	41,3	M8x8
65-160/116	15	11	160	19	22	42	63	M16x1,5	178	114	12	45,3	M8x8
65-160/156	20	15	160	24	30	42	63	M20x1,5	184	114	12	45,3	M8x8
65-200/156	20	15	160	24	30	42	63	M20x1,5	184	114	12	45,3	M8x8
65-200/18.56	25	18,5	160	24	30	42	63	M20x1,5	184	114	12	45,3	M8x8
65-200/226	30	22	180	24	30	48	72	M20x1,5	184	114	14	51,8	M10x10
65-250/306	40	30	200	24	30	55	85	M20x1,5	184	114	16	59,3	M12x12
65-250/376	50	37	200	24	30	55	85	M20x1,5	184	114	16	59,3	M12x12
80-160/18.56	25	18,5	160	24	30	42	63	M20x1,5	184	114	12	45,3	M8x8
80-160/226	30	22	180	24	30	48	72	M20x1,5	184	114	14	51,8	M10x10
80-200/226	30	22	180	24	30	48	72	M20x1,5	184	114	14	51,8	M10x10
80-200/306	40	30	200	24	30	55	85	M20x1,5	184	114	16	59,3	M12x12
80-200/376	50	37	200	24	30	55	85	M20x1,5	184	114	16	59,3	M12x12
80-250/456	60	45	225	29	35	55	85	M24x2	206	114	16	59,3	M12x12
80-250/556	75	55	250	29	35	60	89	M24x2	218	144	18	64,4	M12x12

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

3(L)P SERIES 연결



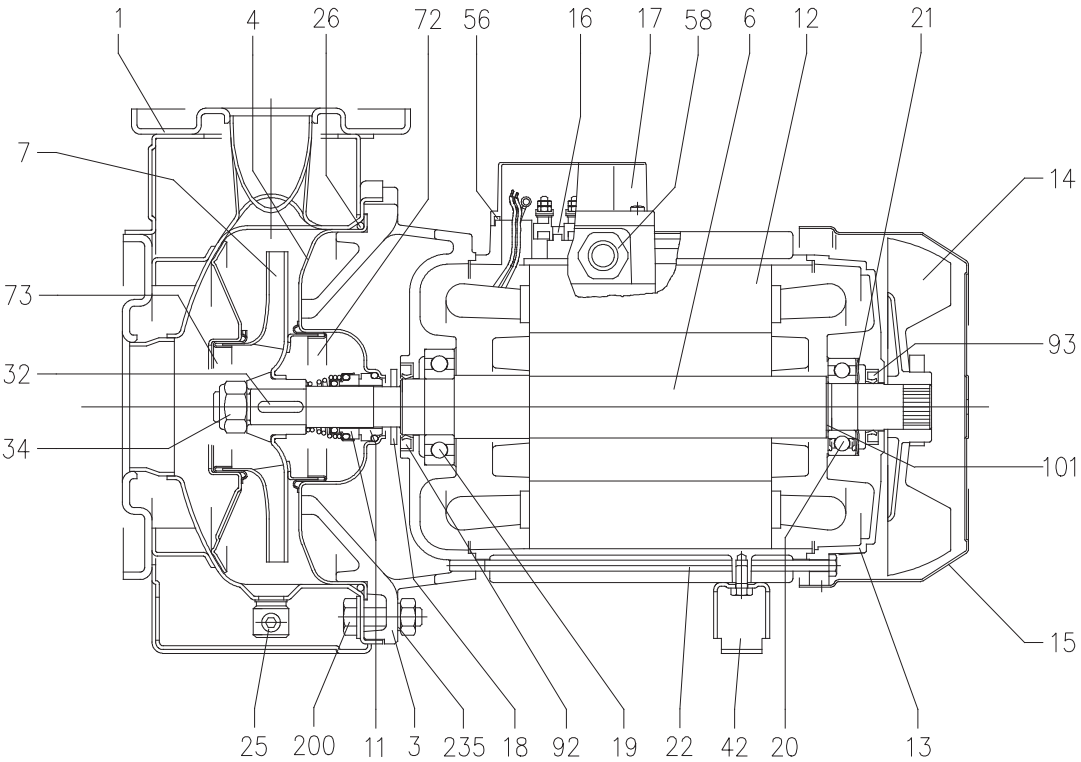
외형표

모델	[HP]	[kW]	모델사이즈	외형치수 [mm]					
				d1	b1	h1	d2	b2	h2
32-125/2,26	3	2,2	90	24	8	27,3	24	8	27,3
32-160/3,06	4	3	100	24	8	27,3	28	8	31,3
32-160/4,06	5,5	4	112	24	8	27,3	28	8	31,3
32-200/5,56	7,5	5,5	132	24	8	27,3	38	10	41,3
32-200/7,56	10	7,5	132	24	8	27,3	38	10	41,3
40-125/3,06	4	3	100	24	8	27,3	28	8	31,3
40-125/4,06	5,5	4	112	24	8	27,3	28	8	31,3
40-160/5,56	7,5	5,5	132	24	8	27,3	38	10	41,3
40-160/7,56	10	7,5	132	24	8	27,3	38	10	41,3
40-200/116	15	11	160	24	8	27,3	42	12	45,3
40-200/156	20	15	160	24	8	27,3	42	12	45,3
50-125/5,56	7,5	5,5	132	24	8	27,3	38	10	41,3
50-125/7,56	10	7,5	132	24	8	27,3	38	10	41,3
50-160/116	15	11	160	24	8	27,3	42	12	45,3
50-160/156	20	15	160	24	8	27,3	42	12	45,3
65-125/5,56	7,5	5,5	132	24	8	27,3	38	10	41,3
65-125/7,56	10	7,5	132	24	8	27,3	38	10	41,3
65-160/9,26	12,5	9,2	132	24	8	27,3	38	10	41,3
65-160/116	15	11	160	24	8	27,3	42	12	45,3
65-160/156	20	15	160	24	8	27,3	42	12	45,3
65-200/156	20	15	160	24	8	27,3	42	12	45,3
65-200/18,56	25	18,5	160	24	8	27,3	42	12	45,3
65-200/226	30	22	180	24	8	27,3	48	14	51,8
65-250/306	40	30	200	32	10	35,3	55	16	59,3
65-250/376	50	37	200	32	10	35,3	55	16	59,3
80-160/18,56	25	18,5	160	24	8	27,3	42	12	45,3
80-160/226	30	22	180	24	8	27,3	48	14	51,8
80-200/226	30	22	180	32	10	35,3	48	14	51,8
80-200/306	40	30	200	32	10	35,3	55	16	59,3
80-200/376	50	37	200	32	10	35,3	55	16	59,3
80-250/456	60	45	225	32	10	35,3	55	16	59,3
80-250/556	75	55	250	32	10	35,3	60	18	64,4

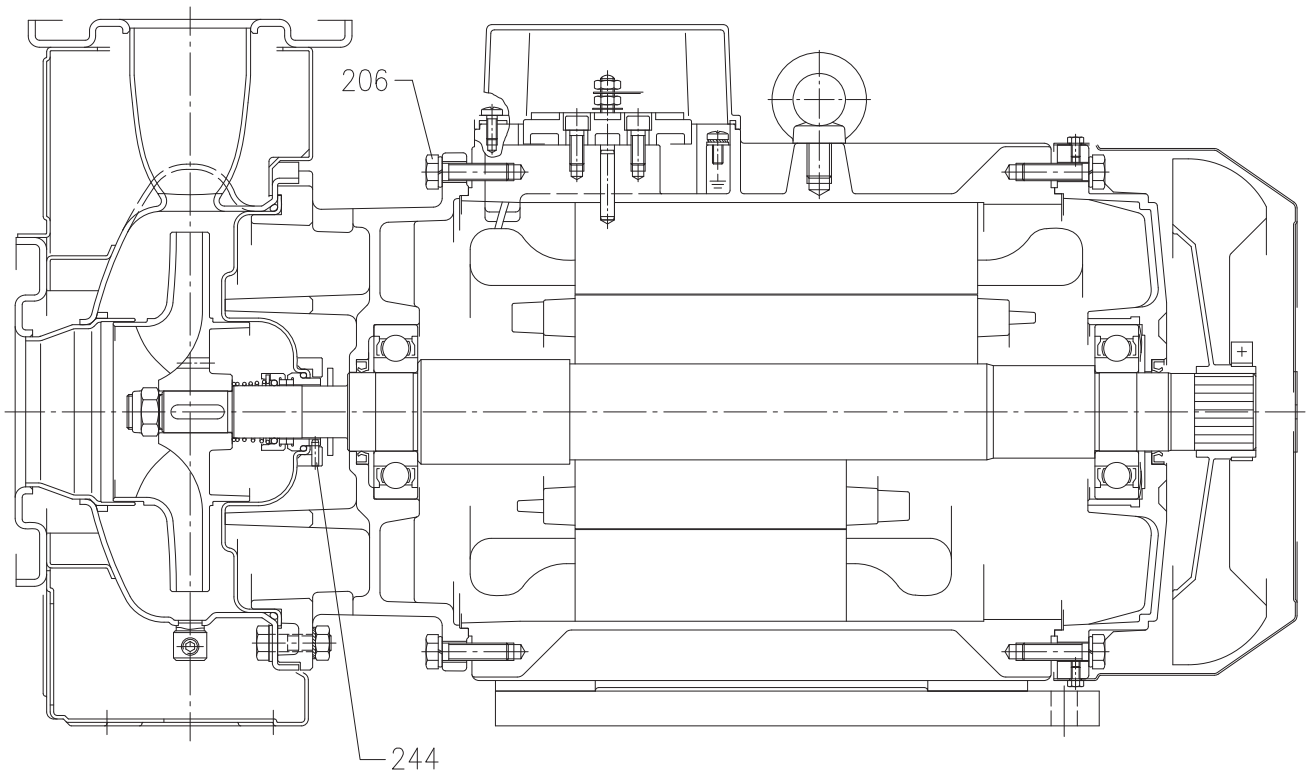
3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

단면도 3(L)M SERIES 32, 40, 50, 65 - up to 11 kW



단면도 3(L)M 32, 40, 50, 65 SERIES - from 15 kW and over



3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

부품표

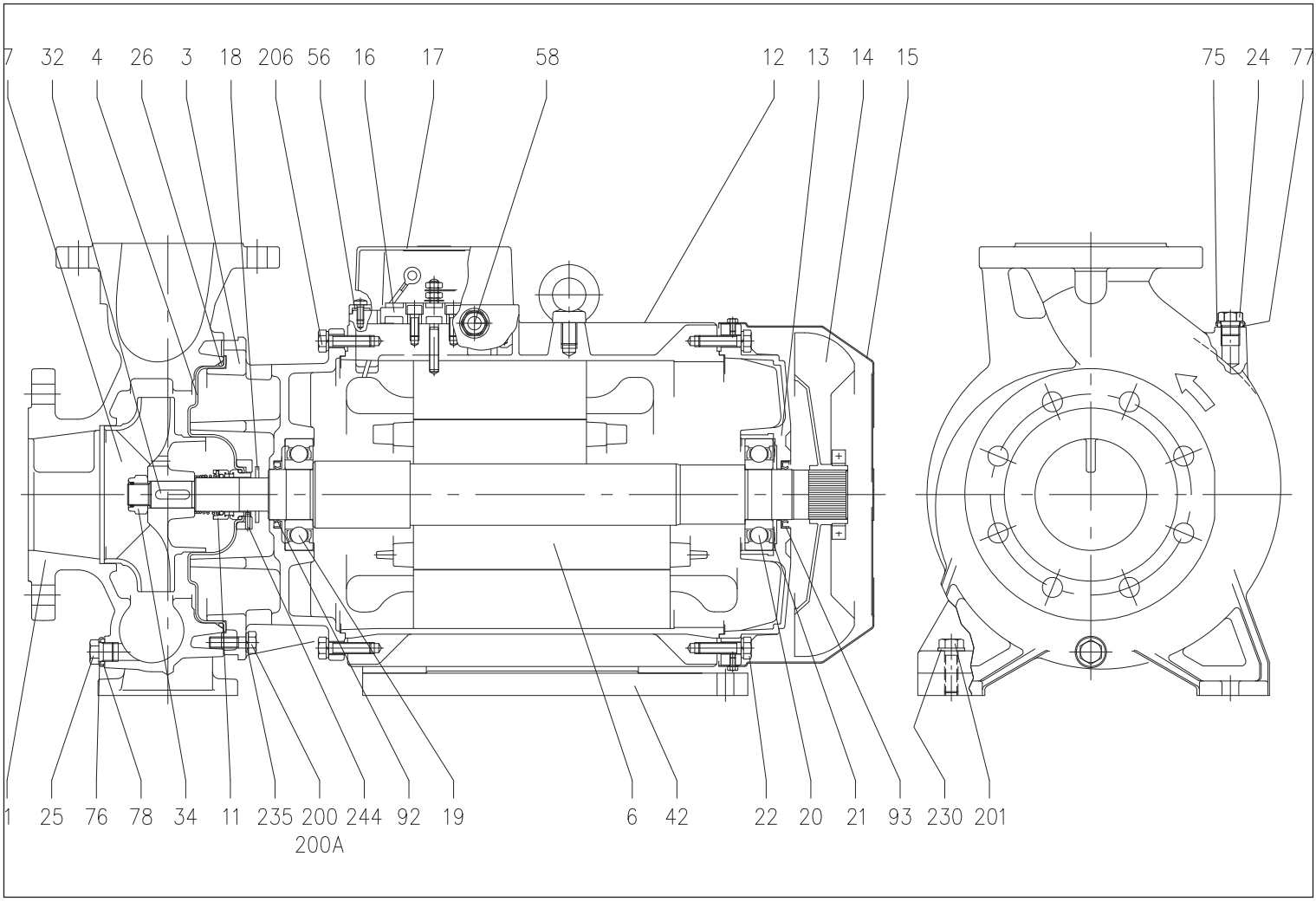
Ref.	부품명	재질	
		3M	3LM
001	Pump casing	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
003	Motor bracket	[2]	
004	Casing cover	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
006	Shaft	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
007	Impeller	EN 1.4301 (AISI 304) [4]	EN 1.4404 (AISI 316L) [4]
011	Mechanical seal	Carbon/Ceramic/NBR	SiC/SiC/FPM
012	Motor frame	-	
013	Motor cover	Aluminium	
014	Fan	PA	
015	Fan cover	Galvanised steel Fe P04	
016	Terminal box	-	
017	Terminal box cover	Aluminium (three phase version)	
018	Spray protector washer	NBR	-
019	Bearing (pump side)	-	
020	Bearing (motor side)	-	
021	Adjusting ring	Steel C70	
022	Tie-rod	Galvanised steel Fe 42	
025	Plug	EN 1.4401 (AISI 316) / PTFE	
026	O-Ring	NBR [3]	FPM
032	Key	EN 1.4401 (AISI 316)	
034	Impeller nut	A.270 EN ISO 35062 [5]	
042	Motor support	Aluminium / Galvanised Steel	
056	Terminal box gasket	NBR	
058	Cable gland	-	
072	Casing ring [1]	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
073	Casing ring	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
092	Seal ring	-	-
093	Seal ring	-	-
101	Seeger ring	Carbon steel TC 80	
200	Screw (pump body)	Stainless steel A2 70 class ISO 3506/1	
206	Screw (bracket) [6]	Zincate steel 8.8 strenght class ISO 898/1	
235	Washer	EN 1.4301 (AISI 304)	
244	Pin [7]		EN 1.4301 (AISI 304)

[1]= For 32-200/5.56, 32-200/7.56, 40-200/5.5, 40-200/116, 40-200/156, 50-160/116, 50-160/156 models
[2]= Aluminium EN 1706 AC 46000 D for 40-200/116, 40-200/156, 50-160/116, 50-160/156, 50-200/9.26, 50-200/116, 65-160/9.26, 65-160/116 models, cast iron EN-GJL-200-EN 1561 for other models
[3]= FPM for H, HS, HW, HSW versions, EPDM for E version
[4]= EN 1.4401 (AISI 316) for 3(L)M 65
[5]= EN 1.4301 (AISI 304) for 3M 65, EN 1.4404 (AISI 316L) for 3LM 65
[6]= For 3(L)M 65 from 15kW and above only
[7]= For 3(L)M 65-160/156 and 65-200 only

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

단면도 3LM 80-160



부품표

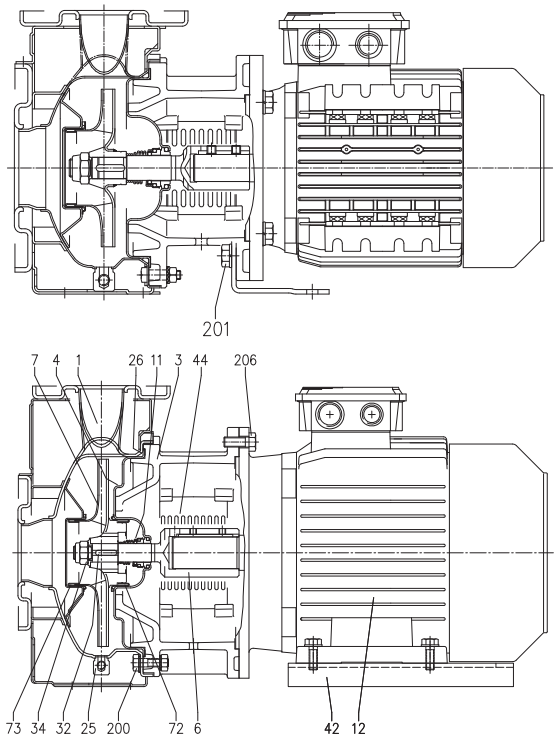
Ref.	부품명	재질	Ref.	부품명	재질
001	Pump casing	EN 1.4401 (AISI 316)	026	O-Ring	FPM
003	Motor bracket	Cast iron EN-GJL-200-EN 1561	032	Key	EN 1.4401 (AISI 316)
004	Casing cover	EN 1.4404 (AISI 316L)	034	Impeller nut	EN 1.4404 (AISI 316L)
006	Shaft with rotor	EN 1.4404 (AISI 316L) - Part in contact with the liquid	042	Motor support	Aluminium
007	Impeller	EN 1.4401 (AISI 316)	056	Terminal box gasket	NBR
011	Mechanical seal	SiC/SiC/FPM	058	Fasting nut	-
012	Motor frame with stator	-	075	Washer	EN 1.4404 (AISI 316L)
013	Motor cover	Aluminium	076	Washer	EN 1.4404 (AISI 316L)
014	Fan	PA	077	O-Ring	FPM [2]
015	Fan cover	Galvanised steel Fe P04	078	O-Ring	
016	Terminal box	-	092	Seal ring	-
017	Terminal box cover	Aluminium	093	Seal ring	-
018	Spray protector washer	NBR	200	Screw	Stainless steel A2-70 class ISO 3506/1
019	Bearing (pump side)	-	200A	Screw	Stainless steel A2-70 class ISO 3506/1
020	Bearing (motor side)	-	201	Screw	Zincate steel 8.8 strenght class ISO 898/1
021	Adjusting ring	Steel C70	206	Screw for bracket	Zincate steel 8.8 strenght class ISO 898/1
022	Screw	Zn. Steel 8.8 strenght class ISO 898/1	230	Washer	Galvanised Steel
024	Plug	EN 1.4404 (AISI 316L)	235	Washer	EN 1.4301(AISI 304)
025	Plug	EN 1.4404 (AISI 316L)	244	Plug [1]	EN 1.4301(AISI 304)

[1]= Not for H, HW, HSW, E version
[2]= EPDM for E version

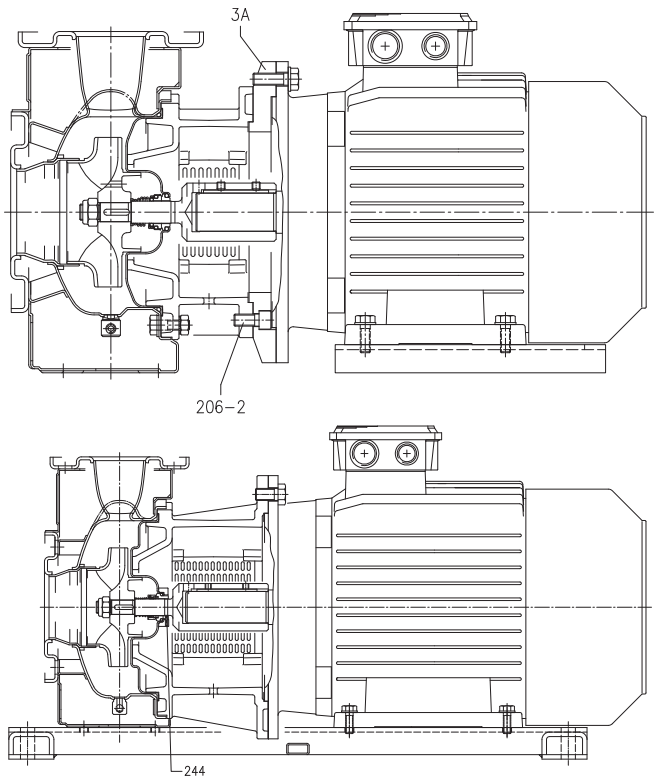
3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

단면도 3(L)S 32, 40, 50



단면도 3(L)S 65-125/160/200



3 - 3L SERIES

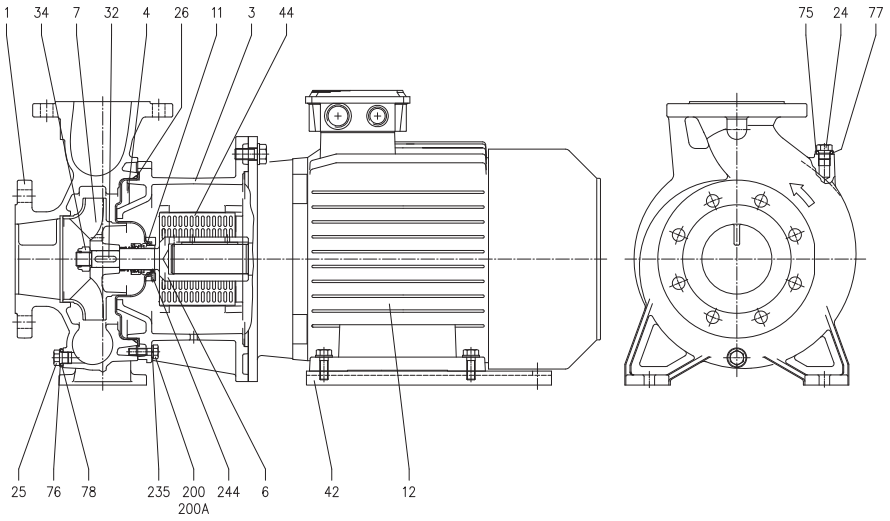
CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

부품표

Ref.	부품명	재질	
		3S	3LS
001	Pump casing	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
003	Motor bracket	Cast iron EN-GJL-200-EN 1561	
003A	Adapter ring [1]	Cast iron EN-GJL-200-EN 1561	
004	Casing cover	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
006	Joint - Part in contact with the liquid	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
007	Impeller	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
011	Mechanical seal	Carbon/Ceramic/NBR	SiC/SiC/FPM
012	Motor	-	
025	Plug	EN 1.4401 (AISI 316) / PTFE	
026	O-Ring	NBR [4]	FPM
032	Key	EN 1.4401 (AISI 316)	
034	Impeller nut	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
042	Motor support	Aluminium / Galvanised Steel	
044	Support protection	EN 1.4301 (AISI 304)	
072	Casing ring [2]	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
073	Casing ring (not for 65)	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
200	Screw (pump body)	Stainless steel A2 70 class ISO 3506/1	
201	Screw	Zn. Steel 8.8 strenght class ISO 898/1	
206	Support screw	Zn. Steel 8.8 strenght class ISO 898/1	
206-2	Adapter ring screw [5]	Zn. Steel 8.8 strenght class ISO 898/1	
235	Washer	Stainless steel A2 70 class ISO 3506/1	
244	Plug [3]	-	EN 1.4301 (AISI 304)

[1]= For 65-125/5.56 and 65-125/7.56 versions only
[2]= For 32-200, 40-200, 50-160 versions only
[3]= For 65-160/156, 65-200 versions only
[4]= FPM for H, HS, HW, HSW versions and EPDM for E version
[5]= For 65-125/5.56 and 65-125/7.56 versions only

단면도 3LS 80-160

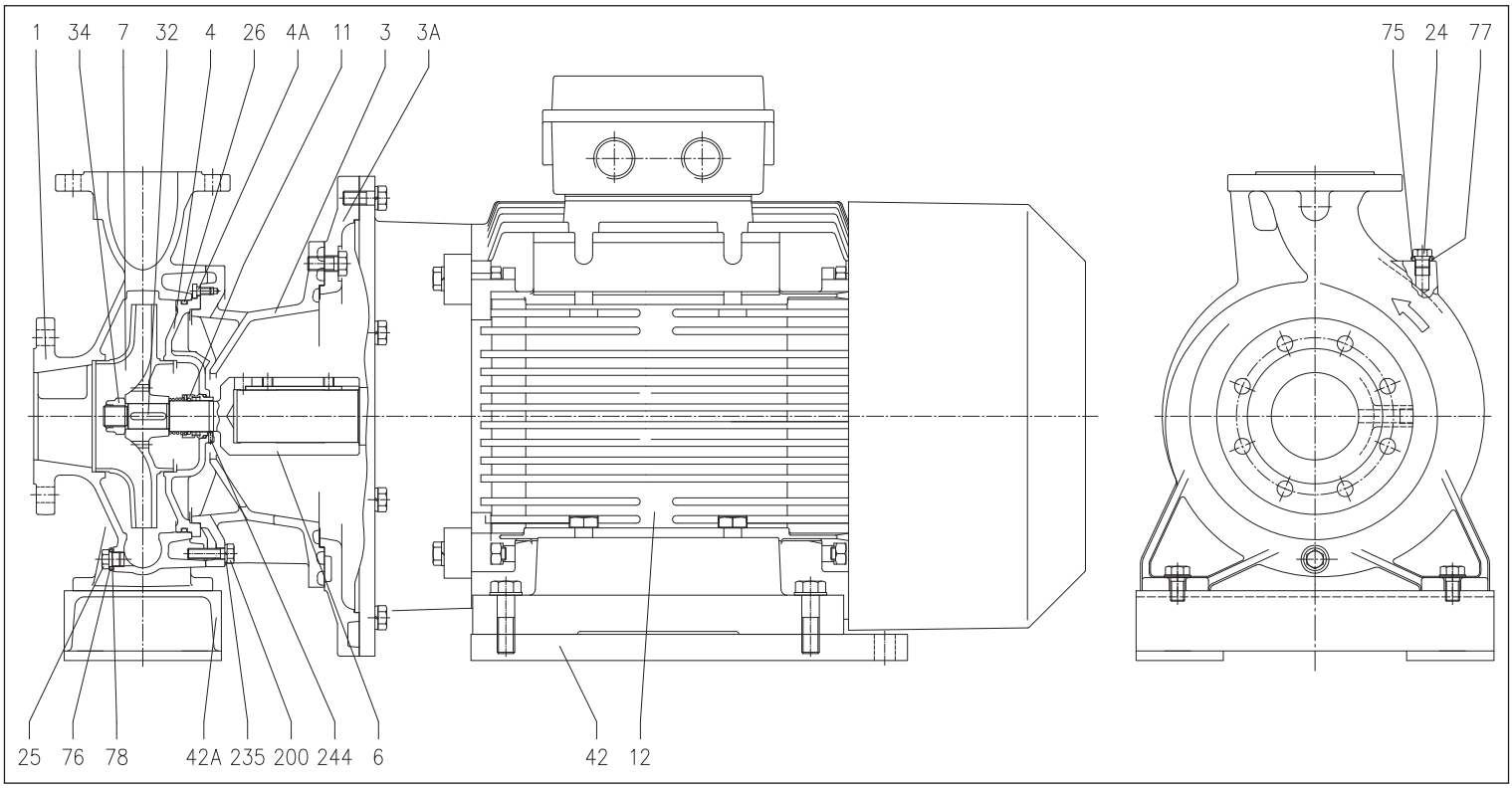


부품표

Ref.	부품명	재질	Ref.	부품명	재질
001	Pump casing	EN 1.4401 (AISI 316)	034	Impeller nut	EN 1.4404 (AISI 316L)
003	Motor bracket	Cast iron EN-GJL-200-EN 1561	042	Motor support	Aluminium
004	Casing cover	EN 1.4404 (AISI 316L)	044	Protection	EN 1.4301 (AISI 304)
006	Joint	EN 1.4404 (AISI 316L)	075	Washer	EN 1.4404 (AISI 316L)
007	Impeller	EN 1.4401 (AISI 316)	076	Washer	
011	Mechanical seal	SiC/SiC/FPM	077	O-Ring	FPM [2]
012	Motor	-	078	O-Ring	
024	Plug	EN 1.4404 (AISI 316L)	200	Screw	Stainless steel A2-70 class ISO 3506/1
025	Plug	EN 1.4404 (AISI 316L)	200A	Screw	Stainless steel A2-70 class ISO 3506/1
026	O-Ring	FPM [2]	235	Washer	EN 1.4301(AISI 304)
032	Key	EN 1.4401 (AISI 316)	244	Plug [1]	EN 1.4301(AISI 304)

[1]= Not for H, HW, HSW, E version [2]= EPDM for E version

단면도 3LS 65-250,80-200/250



부품표

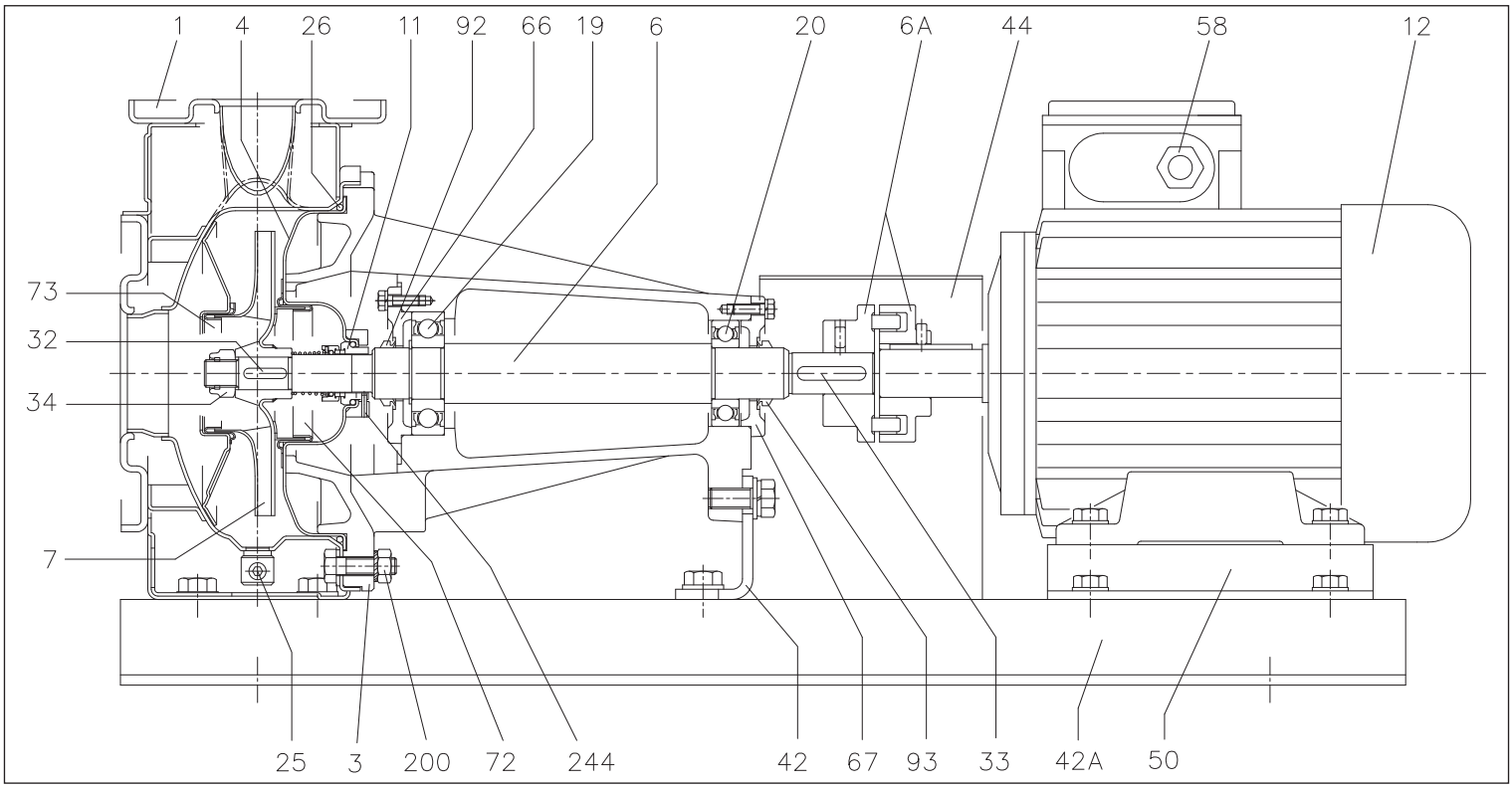
Ref.	부품명		재질	Ref.	부품명		재질
001	Pump casing		EN 1.4401 (AISI 316)	032	Key	65-250 d=24 mm 80-200 d=24 mm	EN 1.4401 (AISI 316)
003	Motor bracket		Cast iron EN-GJL-200-EN 1561			80-250 d=29 mm	
003A	Adapter ring		Cast iron EN-GJL-200-EN 1561	034	Impeller nut	65-250 d=24 mm 80-200 d=24 mm	EN 1.4404 (AISI 316L)
004	Casing cover		EN 1.4401 (AISI 316)			80-250 d=29 mm	
004A	Screw for casing cover		EN 1.4301(AISI 304)	042	Motor bracket		Aluminium
006	Joint	65-250 d=24 mm	EN 1.4404 (AISI 316L) for 22 kW EN 1.4462 (Duplex stainless steel) for 30-37 kW	042A	Pump bracket		Aluminium/zincate steel (only for 80-250/55)
		80-200 d=24 mm	EN 1.4404 (AISI 316L) for 22 kW EN 1.4462 (Duplex stainless steel) for 30-37 kW	075	Washer (plug)		EN 1.4404 (AISI 316L)
		80-250 d=29 mm	EN 1.4462 (duplex steel)	076	Washer (plug)		
007	Impeller		EN 1.4401 (AISI 316)	077	O-Ring (plug)		FPM [2]
011	Mechanical seal		SiC/SiC/FPM	078	O-Ring (plug)		
012	Motor		-	200	Screw (pump body)		Stainless steel A2-70 class ISO 3506/1
024	Plug		EN 1.4404 (AISI 316L)	235	Washer		C70
025	Plug		EN 1.4404 (AISI 316L)	244	Plug [1]		EN 1.4301(AISI 304)
026	O-Ring		FPM [2]				

[1]= Not for H, HW, HSW, E version
[2]= EPDM for E version

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

단면도 3(L)P 32, 40, 50, 65-125/160/200



부품표

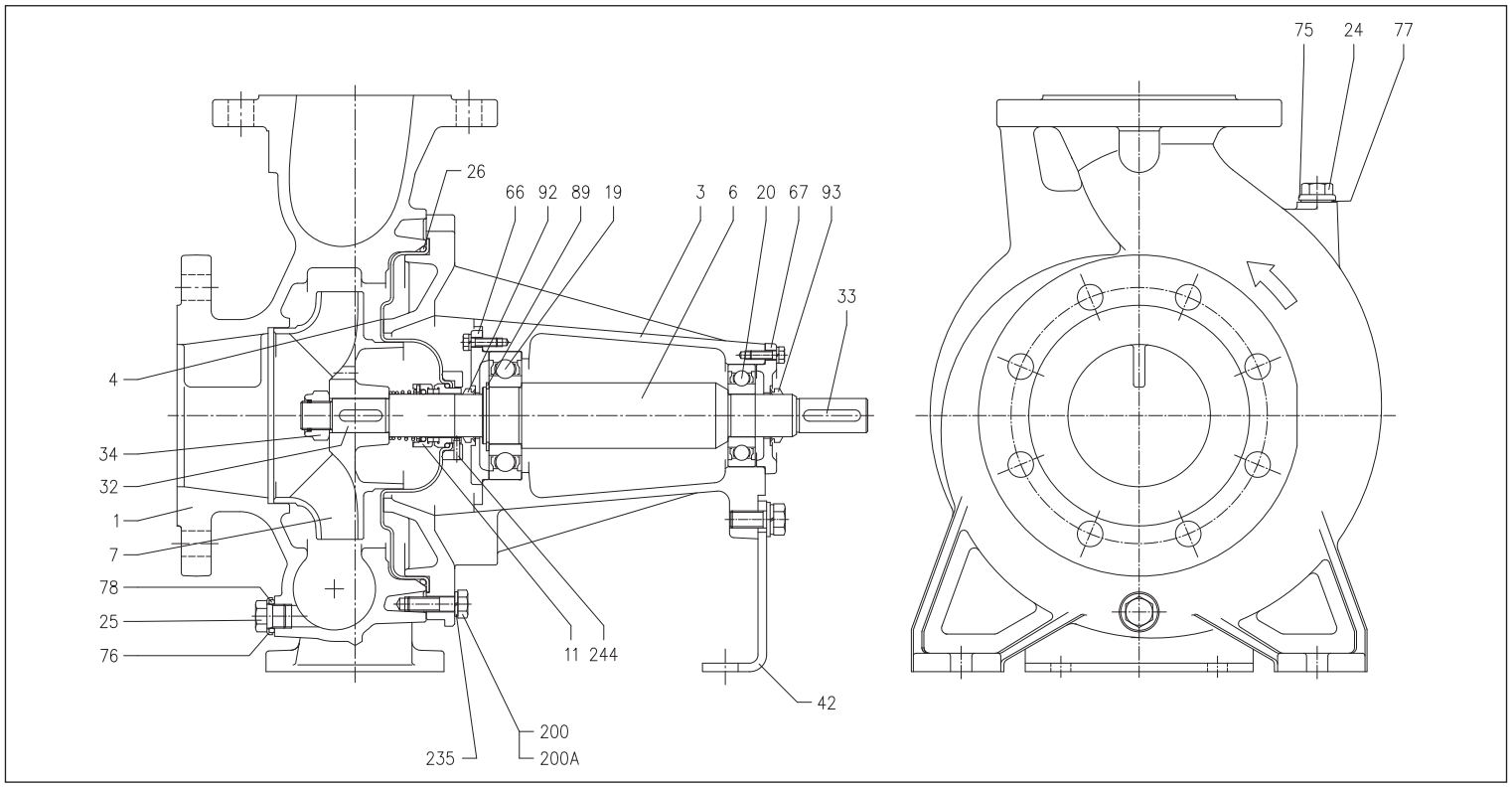
Ref.	부품명	재질	
		3P	3LP
001	Pump casing	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
003	Motor bracket	Cast iron EN-GJL-200-EN 1561	
004	Casing cover	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
006	Shaft - Part in contact with the liquid	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
006A	Flexible coupling	Cast iron EN-GJL-250-EN 1561	
007	Impeller	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
011	Mechanical seal	Carbon/Ceramic/NBR	SiC/SiC/FPM
012	Motor	-	
019	Bearing (pump side)	-	
020	Bearing (motor side)	-	
025	Plug	EN 1.4401 (AISI 316) / PTFE	
026	O-Ring	NBR [3]	FPM
032	Key	EN 1.4401 (AISI 316)	
033	Key	C 40	
034	Impeller nut	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
042	Motor support	Fe 37 galvanised steel	
042A	Base	Fe 37 galvanised steel	
044	Joint cover	Fe 37 galvanised steel	
050	Motor support	Aluminium / Galvanised Steel	
058	Cable gland	-	
066	Impeller side bearing cover	Cast iron EN-GJL-250-EN 1561	
067	Motor side bearing cover	Cast iron EN-GJL-250-EN 1561	
072	Casing ring [1]	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
073	Casing ring (not for 65 version)	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)
092	V ring	-	
093	V ring	-	
200	Screw (pump body)	Stainless steel A2 70 class ISO 3506/1	
244	Plug [2]	-	EN 1.4301 (AISI 304)

[1]= For 32-200/5.56, 40-200/116, 50-200/116, 50-200/156 versions only
[2]= For 65-160/156 and 65-200 versions only
[3]= FPM for H, HS, HW, HSW versions and EPDM for E version

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

단면도 3LP 80-160



부품표

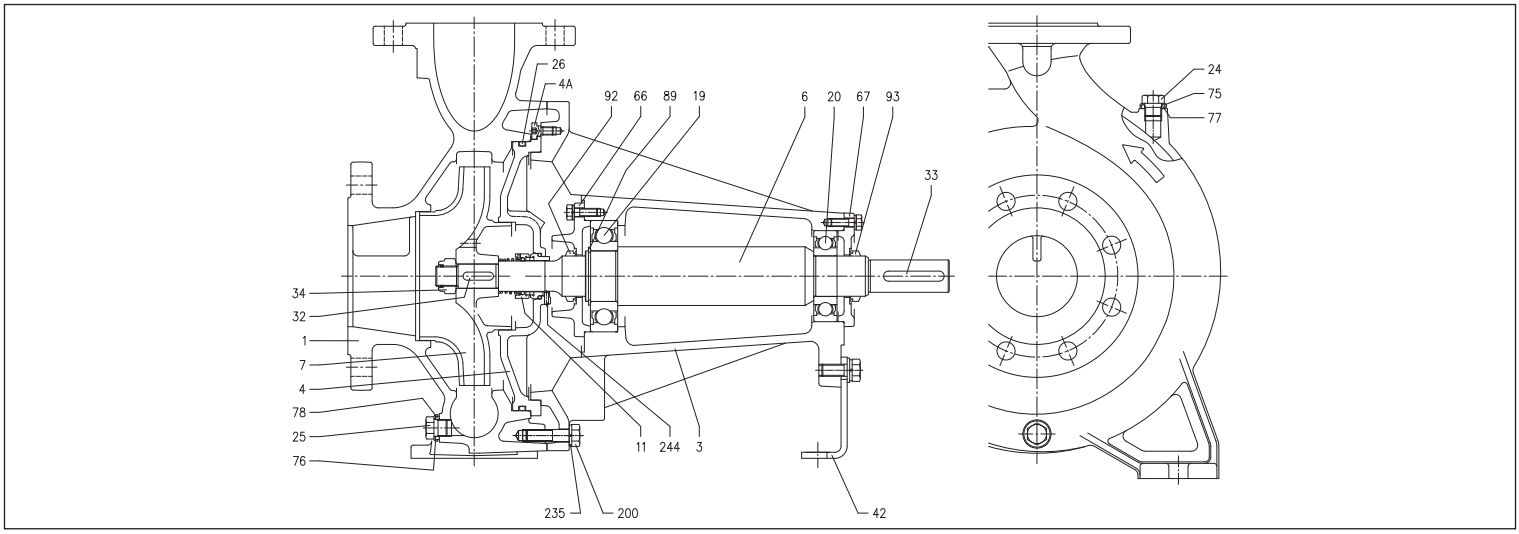
Ref.	부품명	재질	Ref.	부품명	재질
001	Pump casing	EN 1.4401 (AISI 316)	050	Foot	Aluminium
003	Motor bracket	Cast iron EN-GJL-200-EN 1561	050A	Pump spacer	-
004	Casing cover	EN 1.4404 (AISI 316L)	050B	Pump spacer	-
006	Shaft	EN 1.4404 (AISI316L) Part in contact with the liquid	050C	Spacer for protection	-
006A	Flexible coupling	Cast iron EN-GJL-250-EN 1561	066	Impeller side bearing cover	Cast iron EN-GJL-200-EN 1561
007	Impeller	EN 1.4401 (AISI 316)	067	Motor side bearing cover	Cast iron EN-GJL-200-EN 1561
011	Mechanical seal	SiC/SiC/FPM	075	Washer	EN 1.4404 (AISI 316L)
012	Motor	-	076	Washer	
019	Bearing (pump side)	-	077	O-Ring	FPM [2]
020	Bearing (motor side)	-	078	O-Ring	
024	Plug	EN 1.4404 (AISI 316L)	089	Seeger ring	Carbon tool steels TC 80
025	Plug	EN 1.4404 (AISI 316L)	092	"V" ring	-
026	O-Ring	FPM [2]	093	"V" ring	
032	Key	EN 1.4401 (AISI 316)	200	Screw	Stainless steel A2 70 class ISO 3506/1
033	Key	C 40	200A	Screw	Stainless steel A2 70 class ISO 3506/1
034	Impeller nut	EN 1.4404 (AISI 316L)	235	Washer	EN 1.4301(AISI 304)
042	Motor support	Galvanised Steel	244	Plug [1]	EN 1.4301(AISI 304)
042A	Base	Galvanised Steel			
044	Joint cover	Galvanised Steel			

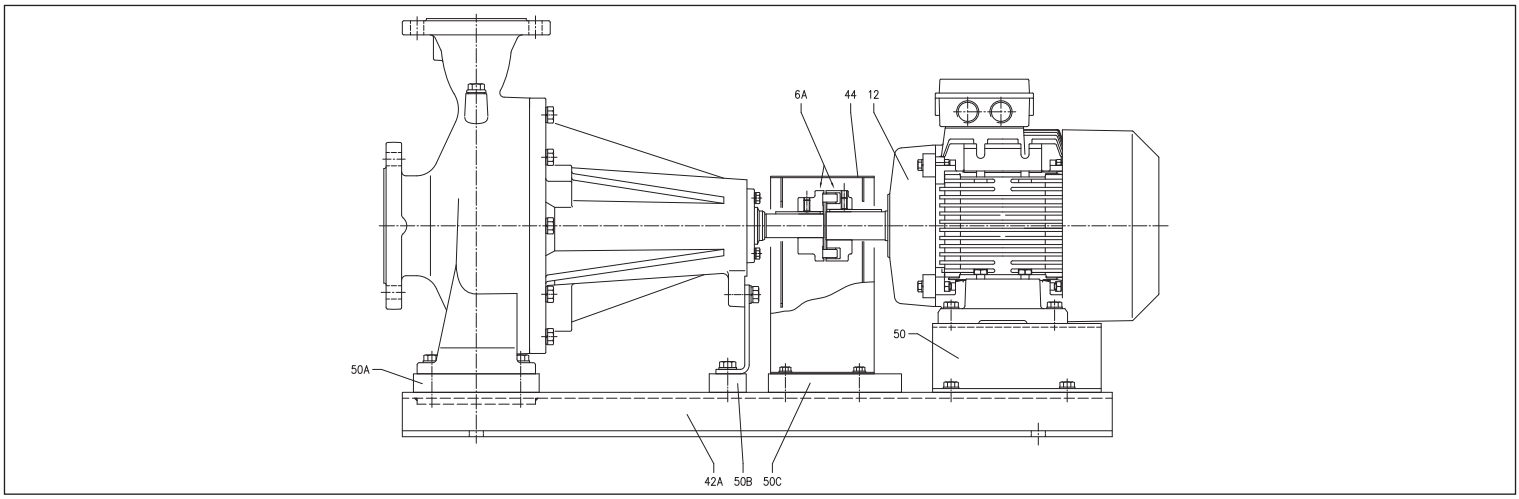
[1]= Not for H, HW, HSW, E version
[2]= EPDM for E version

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

단면도 3LP 65-250, 80-200/250





부품표

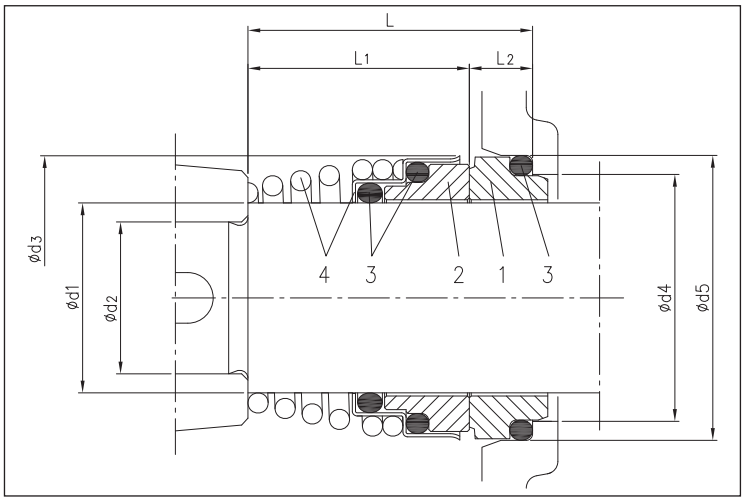
Ref.	부품명	재질	Ref.	부품명	재질
001	Pump casing	EN 1.4401 (AISI 316)	042	Motor support	Galvanised Steel
003	Motor bracket	Cast iron EN-GJL-200-EN 1561	042A	Base	Galvanised Steel
004	Casing cover	EN 1.4401 (AISI 316)	044	Joint cover	Galvanised Steel
004A	Screw for casing cover	EN 1.4301(AISI 304)	050	Motor support	Aluminium
006	Shaft - Part in contact with the liquid	EN 1.4462 (Duplex stainless steel)	050A	Pump spacer	Aluminium
006A	Flexible coupling	Cast iron EN-GJL-200-EN 1561	050B	Pump spacer	Aluminium
007	Impeller	EN 1.4401 (AISI316)	050C	Joint cover spacer	Aluminium
011	Mechanical seal	SiC/SiC/FPM	066	Impeller side bearing cover	Cast iron EN-GJL-200-EN 1561
012	Motor	-	067	Motor side bearing cover	Cast iron EN-GJL-200-EN 1561
019	Bearing (pump side)	-	075	Washer	EN 1.4404 (AISI 316L)
020	Bearing (motor side)	-	076	Washer	
024	Plug	EN 1.4404 (AISI 316L)	077	O-Ring	FPM [2]
025	Plug	EN 1.4404 (AISI 316L)	078	O-Ring	
026	O-Ring	FPM [2]	089	Seeger ring	Carbon tool steels TC 80
032	Key 65-250 d=24 mm 80-200 d=24 mm 80-250 d=29 mm	EN 1.4401 (AISI 316)	092	"V" ring	-
			093	"V" ring	-
			200	Screw (pump body)	Stainless steel A2 70 class ISO 3506/1
033	Key	C 40	235	Washer	EN 1.4301 (AISI 304)
034	Impeller nut 65-250 d=24 mm 80-200 d=24 mm 80-250 d=29 mm	EN 1.4404 (AISI 316L)	244	Plug [1]	EN 1.4301 (AISI 304)

[1]= Not for H, HW, HSW, E version [2]= EPDM for E version

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

매카니컬실 standard version



부품상세

Ref.	부품명	재질	
		3 SERIES	3L SERIES
1	Fixed part	Carbon	SiC
2	Rotating part	Ceramic	SiC
3	Gasket	NBR	FPM
4	Frame + spring	EN 1.4401 (AISI 316)	EN 1.4571 (AISI 316Ti)

특수 매카니컬실 3 SERIES (on request)

부품명	재질				
	H version	HS version	HW version	HSW version	E version
Fixed part	Carbon	SiC	Tungsten Carbide	Tungsten Carbide	Carbon
Rotating part	Ceramic	SiC	Tungsten Carbide	SiC	Ceramic
Elastomers	FPM	FPM	FPM	FPM	EPDM
Spring	AISI 316	AISI 316Ti	AISI 316	AISI 316	AISI 316Ti
Structure/Frame	AISI 316	AISI 316Ti	AISI 316	AISI 316	AISI 316Ti

특수 매카니컬실 3 SERIESL (on request)

부품명	재질				
	H version	HW version	HSW version	E version*	ES version**
Fixed part	Carbon	Tungsten Carbide	Tungsten Carbide	Carbon	Carbon
Rotating part	Ceramic	Tungsten Carbide	SiC	Ceramic	SiC
Elastomers	FPM	FPM	FPM	EPDM	EPDM
Spring	AISI 316	AISI 316	AISI 316	AISI 316Ti	AISI 316Ti
Structure/Frame	AISI 316	AISI 316	AISI 316	AISI 316Ti	AISI 316Ti

* Not available for 3L SERIES 80-250
** Available only for 3L SERIES 80-250

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

전기관련표 3(L)M SERIES

모델 삼상	P_2 [HP]	P_2 [kW]	P_1 삼상 [kW]	Absorbed Current [A] 삼상 220V	380V	460V	660V
3(L)M 32-125/2.26	3,0	2,2	2,9	7,0	4,1	4,1	-
3(L)M 32-160/3.06	4,0	3,0	3,9	10,5	6,1	5,6	-
3(L)M 32-160/4.06	5,5	4,0	5,1	14,7	8,5	8,0	-
3(L)M 32-200/5.56	7,5	5,5	7,0	-	11,6	9,5	6,7
3(L)M 32-200/7.56	10,0	7,5	9,4	-	14,9	12,7	8,6
3(L)M 40-125/3.06	4,0	3,0	3,9	10,5	6,1	5,6	-
3(L)M 40-125/4.06	5,5	4,0	5,1	14,7	8,5	8,0	-
3(L)M 40-160/5.56	7,5	5,5	7,0	-	11,6	9,5	6,7
3(L)M 40-160/7.56	10,0	7,5	9,4	-	14,9	12,7	8,6
3(L)M 40-200/116	15,0	11,0	11,3	-	17,7	15,4	10,3
3(L)M 40-200/156	20,0	15,0	17,9	-	28,7	25,0	16,6
3(L)M 50-125/5.56	7,5	5,5	7,0	-	11,6	9,5	6,7
3(L)M 50-125/7.56	10,0	7,5	9,4	-	14,9	12,7	8,6
3(L)M 50-160/116	15,0	11,0	11,3	-	17,7	15,4	10,3
3(L)M 50-160/156	20,0	15,0	17,9	-	28,7	25,0	16,6
3(L)M 65-125/5.56	7,5	5,5	7,0	-	11,6	9,5	6,7
3(L)M 65-125/7.56	10,0	7,5	9,4	-	14,9	12,7	8,6
3(L)M 65-160/9.26	13,0	9,2	11,3	-	17,7	15,4	10,3
3(L)M 65-160/116	15,0	11,0	13,2	-	18,3	18,3	10,5
3(L)M 65-160/156	20,0	15,0	17,9	-	28,7	25,0	16,6
3(L)M 65-200/156	20,0	15,0	17,9	-	28,7	25,0	16,6
3(L)M 65-200/18.56	25,0	18,5	21,9	-	34,8	31,0	20,1
3(L)M 65-200/226	30,0	22,0	26,4	-	41,7	36,4	24,0
3LM 80-160/18.56	25,0	18,5	21,9	-	34,8	31,0	20,1
3LM 80-160/226	30,0	22,0	26,4	-	41,7	36,4	24,0

전기관련표 3(L)S - 3(L)P SERIES

모델 삼상	모델 삼상	P_2 [HP]	P_2 [kW]	P_1 [kW]	Absorbed Current [A] 삼상 265V	460V
3(L)S 32-125/2.26	3(L)P 32-125/2.26	3	2,2	2,65	7,1	4,1
3(L)S 32-160/3.06	3(L)P 32-160/3.06	4	3	3,56	9,0	5,2
3(L)S 32-160/4.06	3(L)P 32-160/4.06	5,5	4	4,70	12,3	7,1
3(L)S 32-200/5.56	3(L)P 32-200/5.56	7,5	5,5	6,22	-	9,3
3(L)S 32-200/7.56	3(L)P 32-200/7.56	10	7,5	8,36	-	12,2
3(L)S 40-125/3.06	3(L)P 40-125/3.06	4	3	3,56	9,0	5,2
3(L)S 40-125/4.06	3(L)P 40-125/4.06	5,5	4	4,70	12,3	7,1
3(L)S 40-160/5.56	3(L)P 40-160/5.56	7,5	5,5	6,22	-	9,3
3(L)S 40-160/7.56	3(L)P 40-160/7.56	10	7,5	8,36	-	12,2
3(L)S 40-200/116	3(L)P 40-200/116	15	11	12,15	-	18,6
3(L)S 40-200/156	3(L)P 40-200/156	20	15	16,71	-	23,3
3(L)S 50-125/5.56	3(L)P 50-125/5.56	7,5	5,5	6,22	-	9,3
3(L)S 50-125/7.56	3(L)P 50-125/7.56	10	7,5	8,36	-	12,2
3(L)S 50-160/116	3(L)P 50-160/116	15	11	12,15	-	18,6
3(L)S 50-160/156	3(L)P 50-160/156	20	15	16,71	-	23,3
3(L)S 65-125/5.56	3(L)P 65-125/5.56	7,5	5,5	6,22	-	9,3
3(L)S 65-125/7.56	3(L)P 65-125/7.56	10	7,5	8,36	-	12,2
3(L)S 65-160/9.26	3(L)P 65-160/9.26	12,5	9,2	10,40	-	14,5
3(L)S 65-160/116	3(L)P 65-160/116	15	11	12,15	-	18,6
3(L)S 65-160/156	3(L)P 65-160/156	20	15	16,71	-	23,3
3(L)S 65-200/156	3(L)P 65-200/156	20	15	16,71	-	23,3
3(L)S 65-200/18.56	3(L)P 65-200/18.56	25	18,5	20,32	-	31,1
3(L)S 65-200/226	3(L)P 65-200/226	30	22	24,11	-	34,0
3LS 65-250/306	3LP 65-250/306	40	30	32,58	-	47,0
3LS 65-250/376	3LP 65-250/376	50	37	40,16	-	56,0
3LS 80-160/18.56	3LP 80-160/18.56	25	18,5	20,32	-	31,1
3LS 80-160/226	3LP 80-160/226	30	22	24,11	-	34,0
3LS 80-200/226	3LP 80-200/226	30	22	24,11	-	34,0
3LS 80-200/306	3LP 80-200/306	40	30	32,58	-	47,0
3LS 80-200/376	3LP 80-200/376	50	37	40,16	-	56,0
3LS 80-250/456	3LP 80-250/456	60	45	48,22	-	68,0
3LS 80-250/556	3LP 80-250/556	75	55	58,50	-	82,5

3 - 3L SERIES

CENTRIFUGAL ELECTRIC PUMPS STANDARDISED IN COMPLIANCE WITH EN 733 (EX DIN 24255)

소음자료표

모델 삼상	P_2 [HP]	P_2 [kW]	L_{pA} - dB(A)*
3(L)M 32-125/2.26	3,0	2,2	72
3(L)M 32-160/3.06	4,0	3,0	76
3(L)M 32-160/4.06	5,5	4,0	
3(L)M 32-200/5.56	7,5	5,5	80
3(L)M 32-200/7.56	10,0	7,5	
3(L)M 40-125/3.06	4,0	3,0	76
3(L)M 40-125/4.06	5,5	4,0	
3(L)M 40-160/5.56	7,5	5,5	80
3(L)M 40-160/7.56	10,0	7,5	
3(L)M 40-200/116	15,0	11,0	85
3(L)M 40-200/156	20,0	15,0	
3(L)M 50-125/5.56	7,5	5,5	80
3(L)M 50-125/7.56	10,0	7,5	
3(L)M 50-160/116	15,0	11,0	85
3(L)M 50-160/156	20,0	15,0	
3(L)M 65-125/5.56	7,5	5,5	80
3(L)M 65-125/7.56	10,0	7,5	
3(L)M 65-160/9.26	13,0	9,2	85
3(L)M 65-160/116	15,0	11,0	
3(L)M 65-160/156	20,0	15,0	88
3(L)M 65-200/156	20,0	15,0	
3(L)M 65-200/18.56	25,0	18,5	
3(L)M 65-200/226	30,0	22,0	
3LM 80-160/18.56	25,0	18,5	88
3LM 80-160/226	30,0	22,0	

* Mean value of several measures at 1m distance around the pump.
Tollerance ± 2.5 dB.

모델 삼상	모델 삼상	P_2 [HP]	P_2 [kW]	L_{pA} - dB(A)*
3(L)S 32-125/2.26	3(L)P 32-125/2.26	3	2,2	70
3(L)S 32-160/3.06	3(L)P 32-160/3.06	4	3	74
3(L)S 32-160/4.06	3(L)P 32-160/4.06	5,5	4	78
3(L)S 32-200/5.56	3(L)P 32-200/5.56	7,5	5,5	82
3(L)S 32-200/7.56	3(L)P 32-200/7.56	10	7,5	
3(L)S 40-125/3.06	3(L)P 40-125/3.06	4	3	74
3(L)S 40-125/4.06	3(L)P 40-125/4.06	5,5	4	78
3(L)S 40-160/5.56	3(L)P 40-160/5.56	7,5	5,5	82
3(L)S 40-160/7.56	3(L)P 40-160/7.56	10	7,5	
3(L)S 40-200/116	3(L)P 40-200/116	15	11	84
3(L)S 40-200/156	3(L)P 40-200/156	20	15	
3(L)S 50-125/5.56	3(L)P 50-125/5.56	7,5	5,5	82
3(L)S 50-125/7.56	3(L)P 50-125/7.56	10	7,5	
3(L)S 50-160/116	3(L)P 50-160/116	15	11	84
3(L)S 50-160/156	3(L)P 50-160/156	20	15	
3(L)S 65-125/5.56	3(L)P 65-125/5.56	7,5	5,5	82
3(L)S 65-125/7.56	3(L)P 65-125/7.56	10	7,5	
3(L)S 65-160/9.26	3(L)P 65-160/9.26	12,5	9,2	
3(L)S 65-160/116	3(L)P 65-160/116	15	11	84
3(L)S 65-160/156	3(L)P 65-160/156	20	15	
3(L)S 65-200/156	3(L)P 65-200/156	20	15	
3(L)S 65-200/18.56	3(L)P 65-200/18.56	25	18,5	
3(L)S 65-200/226	3(L)P 65-200/226	30	22	85
3LS 65-250/306	3LP 65-250/306	40	30	87
3LS 65-250/376	3LP 65-250/376	50	37	
3LS 80-160/18.56	3LP 80-160/18.56	25	18,5	84
3LS 80-160/226	3LP 80-160/226	30	22	85
3LS 80-200/226	3LP 80-200/226	30	22	
3LS 80-200/306	3LP 80-200/306	40	30	87
3LS 80-200/376	3LP 80-200/376	50	37	
3LS 80-250/456	3LP 80-250/456	60	45	90
3LS 80-250/556	3LP 80-250/556	75	55	91

* Mean value of several measures at 1m distance around the pump.
Tollerance ± 2.5 dB.

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Japanese Technology since 1912

EVMS - Vertical Multistage Pumps

제품 카탈로그

Japanese Technology since 1912

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Built like a Kata刀a

Katana는 기원전 300년 경부터 일본 전통의 노하우로 제작되고 있는
검 입니다. Katana는 매우 신중하고 고귀한 일본의 장인정신을
기반으로 만들어 집니다.
오직 다년간의 경험과 노하우만이 이러한 걸작을 만들어 낼 수 있는
기초가 됩니다.

이것이 바로 우리가 펌프를 만드는 기준 입니다.
펌프 제조업체로서의 100여년의 경험은 다양한 프로젝트의
뿌리가 되고 있으며 또한 이러한 경험을 기반으로 고품질, 고성능
그리고 뛰어난 내구성의 제품을 비로소 탄생시킬 수 있었습니다.

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에바라의 신형 입형 다단펌프인 "EVMS" 는
높은 품질기준을 적용하여 생산되며, 전 제조공정에 대한
엄격한 기술적 평가기준과 제어프로그램으로,
안정된 제품 성능 제공을 위해 노력하고 있습니다.

우리는 항상 시장의 소리에 귀를 기울입니다.
또 우리의 디자인은 특별합니다.
EVMS는 고객의 니즈에 기반한 최첨단 솔루션을 통해
조금 더 특별한 가치를 고객에게 제공해 드릴 것입니다.

정확함,
우수함,
최첨단

■ **펌프타입**
EBARA **수직다단 인라인 펌프** EVMS

■ **모델범위**
양정 - 1, 3, 5, 10, 15, 20 m³/h

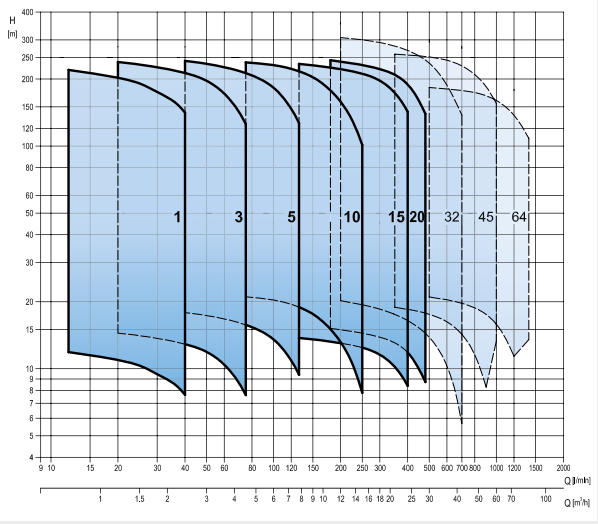
■ **최대 작동 범위 (압력/액체온도)**
16 bar **또는** 25 bar / - 30 to + 140 °C

■ **재질 버전 (하부 캐이싱)**
EVMS (AISI 304), EVMSL (AISI 316), EVMSG (Cast iron)

■ **파이프 연결**
Round flange / Loose Flange / Oval flange / Victaulic® / Clamp

■ **모터**
고효율 모터 IE3 over 0.75 kW, 50 Hz / 60Hz,
삼상 / 단상
PTC as standard for the above 1.5 kW

EVMS 1-3-5-10-15-20
EVM 32-45-64
50 Hz



주된 제품특징

1

획기적인 유압식 솔루션

Any motor, anywhere.

- 상업용 모터는 낮은 축추력방향하중으로 어떠한 변경없이 모든 펌프모델에 설치될 수 있음.
- 수명이 긴 모터 베어링
- 고효율펌프 MEI > 0.7 가장 효율적인 모델로 구분됨
- 특허출원 n.VI2014A000271

2

에너지 보존

- 고효율 IE3 모터 0.75 kW 부터 EuP 2005/32/EC 와 ErP 2009/125/EC 지시에 따름
- VFD 와 상업용 센서는 사용컨디션에 따른 펌핑압력과 같은 물리적으로 거듭되는 작동을 유지하기 위해 EVMS에 바로 고정될 수 있음.

3

파이프 연결 옵션

- 다양한 파이프 연결은 용도의 요구사항에 따라 가능함.
- 외부치수는 다수의 기존펌프대체를 위해 조정될 수 있음.

재질	Round flange DIN (incl. ANSI depending on models)	Loose Flange DIN (incl. ANSI depending on models)	Oval Flange	Plug-In connection (Victaulic®, Clamp)
AISI304/ AISI316				
Cast Iron				

4

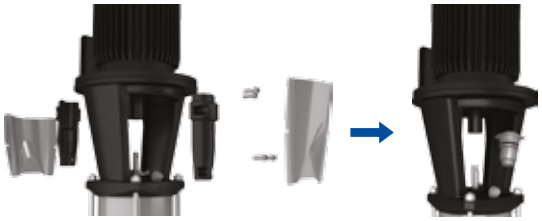
샤프트실 솔루션

- 샤프트실 재질:
  B: Resin impregnated carbon graphite
  Q: Sintered silicon carbide
  Q_g: Silicon carbide with carbon graphite

  Carbon or graphite inclusions with silicon carbide can be used as **dry lubricant to reduce friction.**

- It's conforming to EN12756 (ex DIN 24960)

5



유지보수 용이

- 카트리지 샤프트실은 모터브라켓을 해체하지 않고 샤프트실의 플러그인 대체가 가능함.
- 스페이서 커플링은 5.5kW이상의 무거운 모터를 치우지 않고 유지보수가 용이하도록 함.

6

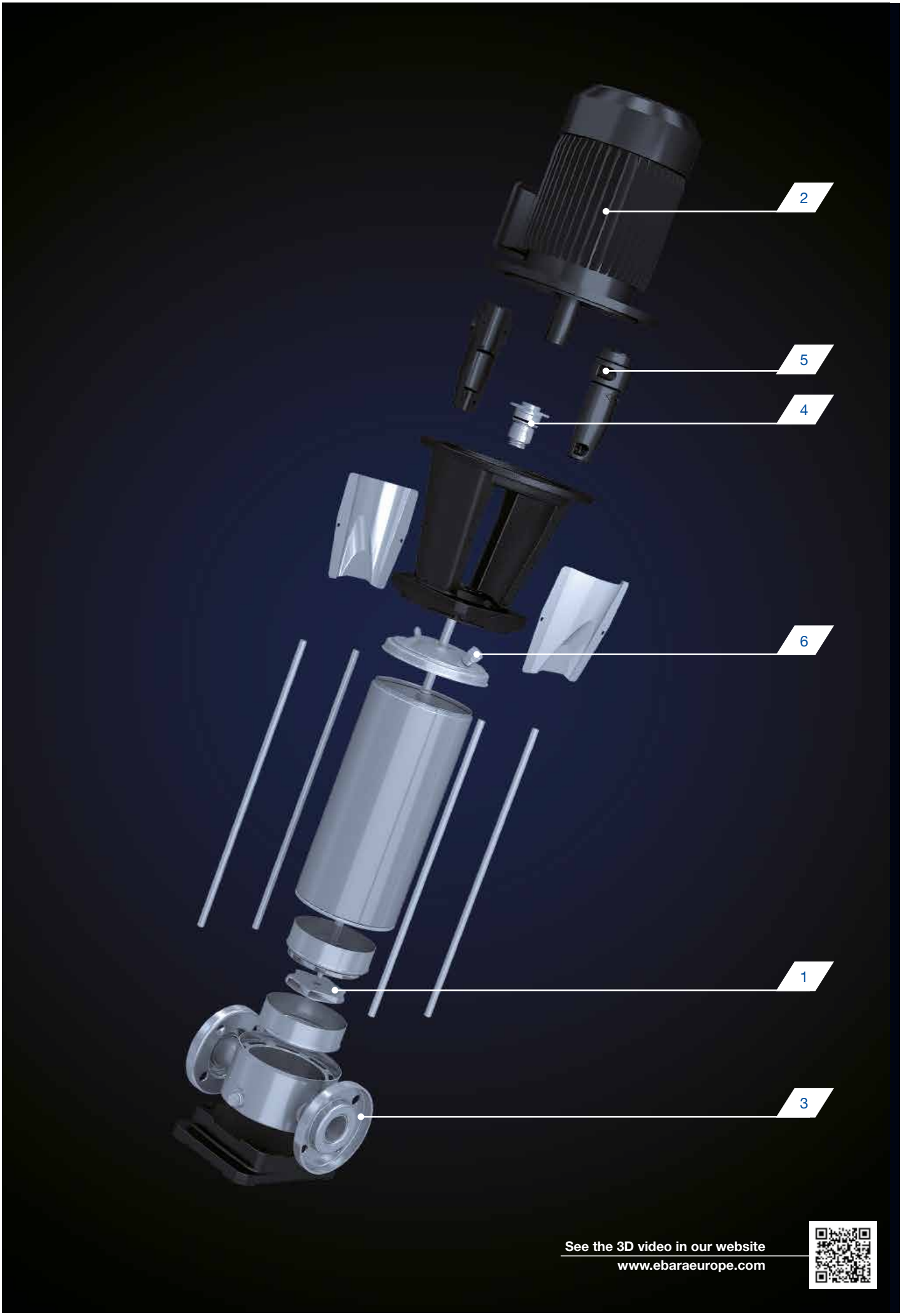
스마트 플러그 솔루션

환기 플러그

워터필링 & 센서 플러그

상업용 센서 고정

흡토출 압력 / 배수관 측정



See the 3D video in our website
www.ebaraeurope.com

신뢰도는 숫자로 만들어집니다

1
Million

내구성 테스트
사이클*

2
Times

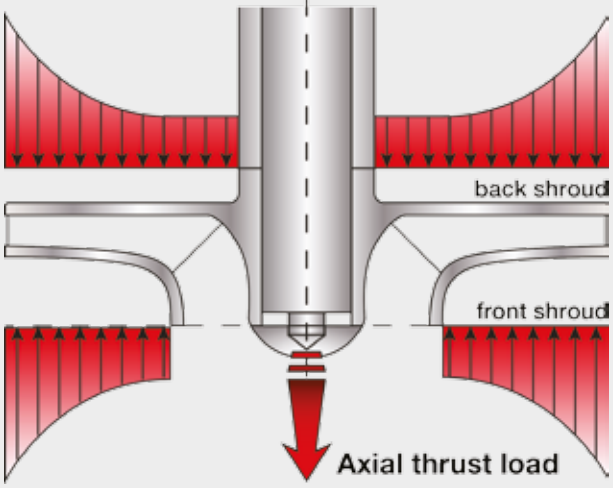
적은 작동상태보다
높은 시험기준*

3
Times

보통펌프포다 훨씬 낮은
축추력 방향 하중

* 메인부품

Solve axial thrust load



펌프의 축추력방향 하중은 임팰러의 앞뒤 보호판 정압의 불균형으로 인해 일어난다. 그는 모터 베어링의 수명을 감소시키는 원인이 된다.

축추력방향 하중 작동의 일반적인 방법은 아래와 같다.

- 모터베어링의 사이즈를 크게하거나 강화된 모터베어링을 사용한다.
- 펌프 브라켓에 추가적인 볼베어링을 고정시킨다. 이 측정은 역사상 복잡한 기계구조를 야기시키는 것으로 알려져있다.

에바라에서 새롭게 디자인 된 임팰러 "Shurricane"은 획기적인 유압식 디자인 방법에의한 높은 펌프효율로 축추력방향 하중을 감소시킬 수 있다.

EVMS는 아무런 변경없이 상업용모터로 사용될 수 있고, 모터베어링의 유지보수 주기를 개선할 수 있다.

Any motor, anywhere.

용도

INDUSTRY

- **Water treatment**
  reverse osmosis
  ultra-filtration
  water purification
  micro-filtration
  softening, ionizing and demineralising systems
  swimming pools
  separators
- **Boiler feeding**
  steam systems
  condensate systems
- **Wash and clean**
  vehicle washing systems
  industrial part washing
  laundry systems
  supply of liquids with acids and bases
  supply of chemical liquids
- **Chilling**
  handling of refrigerants for cooling
  thermal control systems
  industrial cooling
  laser cooling
- **Machine tooling**
  cooling lubricant supply for tooling machines
- **Pressure boosting**
  pressure boosting for industrial use
- **Food & beverage**
  food washing systems
  bottle wash systems
- **Pharmaceutical industries**
- **Marine applications**
  freshwater, deckwash, high fog and fire fighting on ships

BUILDING SERVICE

- **Pressure boosting**
  pressure boosting for buildings
  pressure boosting for high rise buildings/hotels
- **Sprinkler systems**
- **Fire fighting systems**
  jockey pump
- **District heating**
- **Heat exchangers / fan heaters**
- **Air conditioning systems**
- **Heating systems**

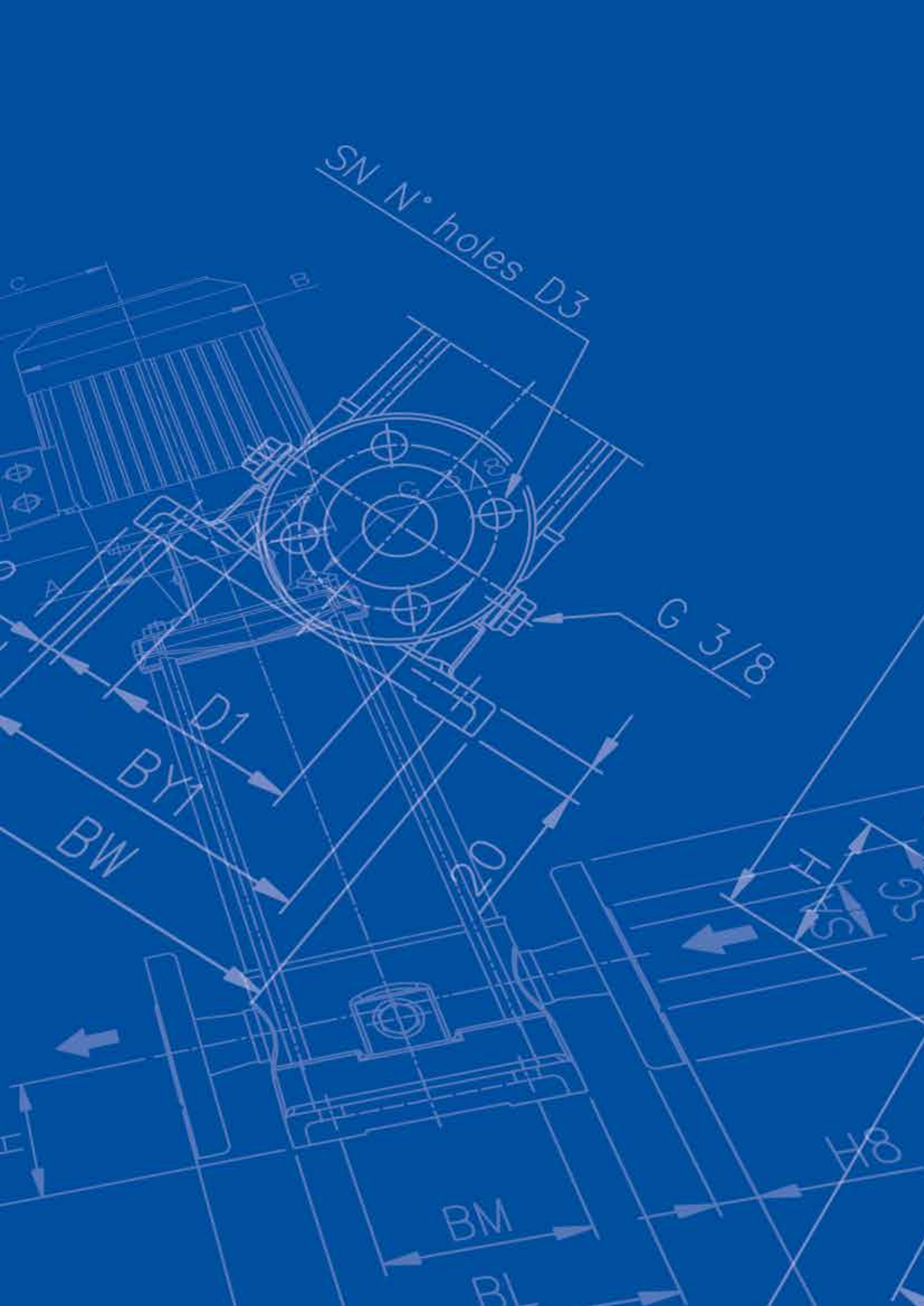
WATER SUPPLY

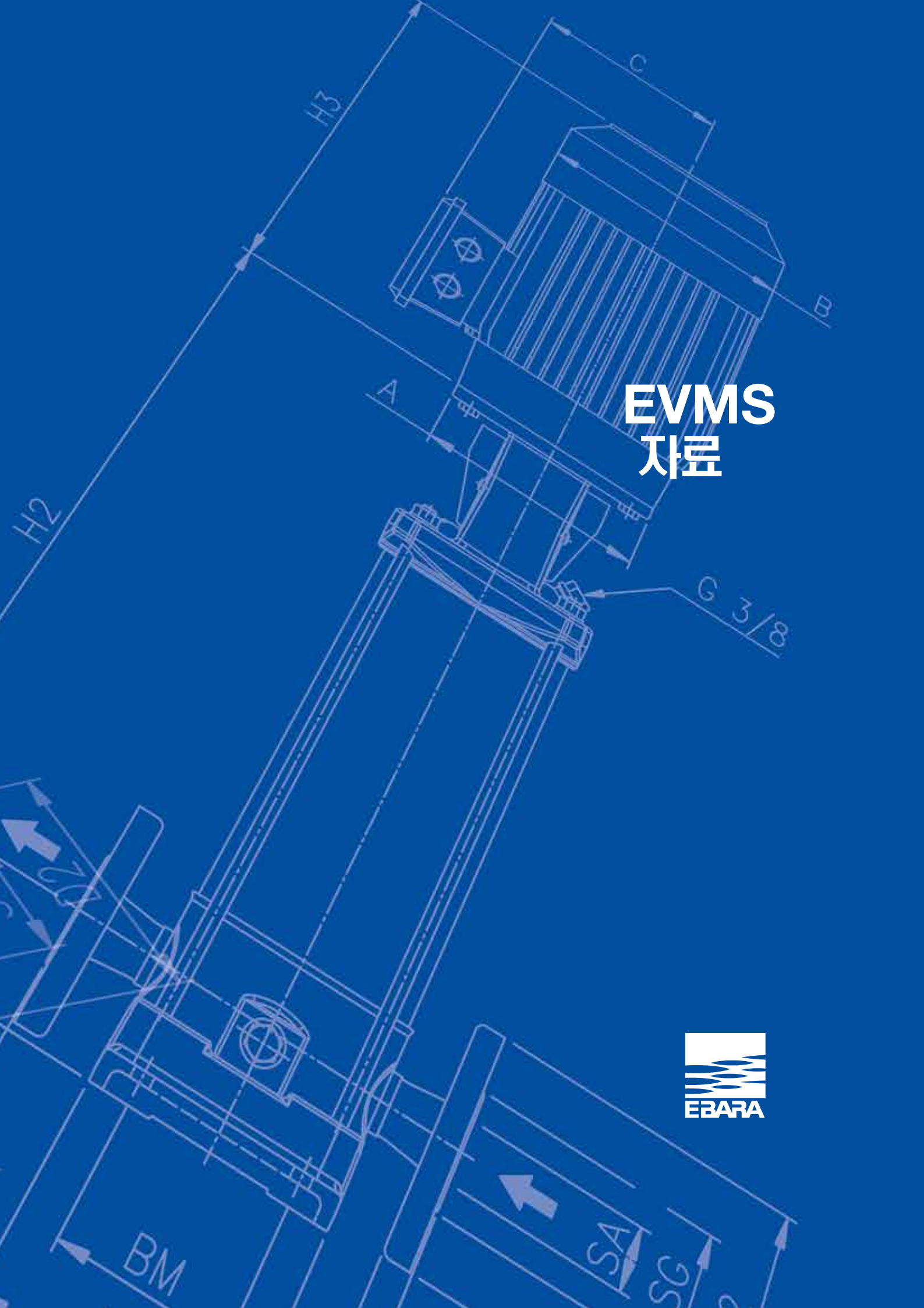
- **Water treatment**
  water treatment plants filtration
  water treatment plants transfer
- **Pressure boosting**
  transfer from water treatment plants (mains)
- **Irrigation**
  golf course / sport fields irrigation
- **Agriculture**
  sprinkler irrigation
  drip irrigation

고객과의 조화

EBARA의 세계적인 서비스 장소

please see the contact list on page 21.


SN N° holes D3
G 3/8
D1
BY1
BW
BM
H8



EVMS
자료

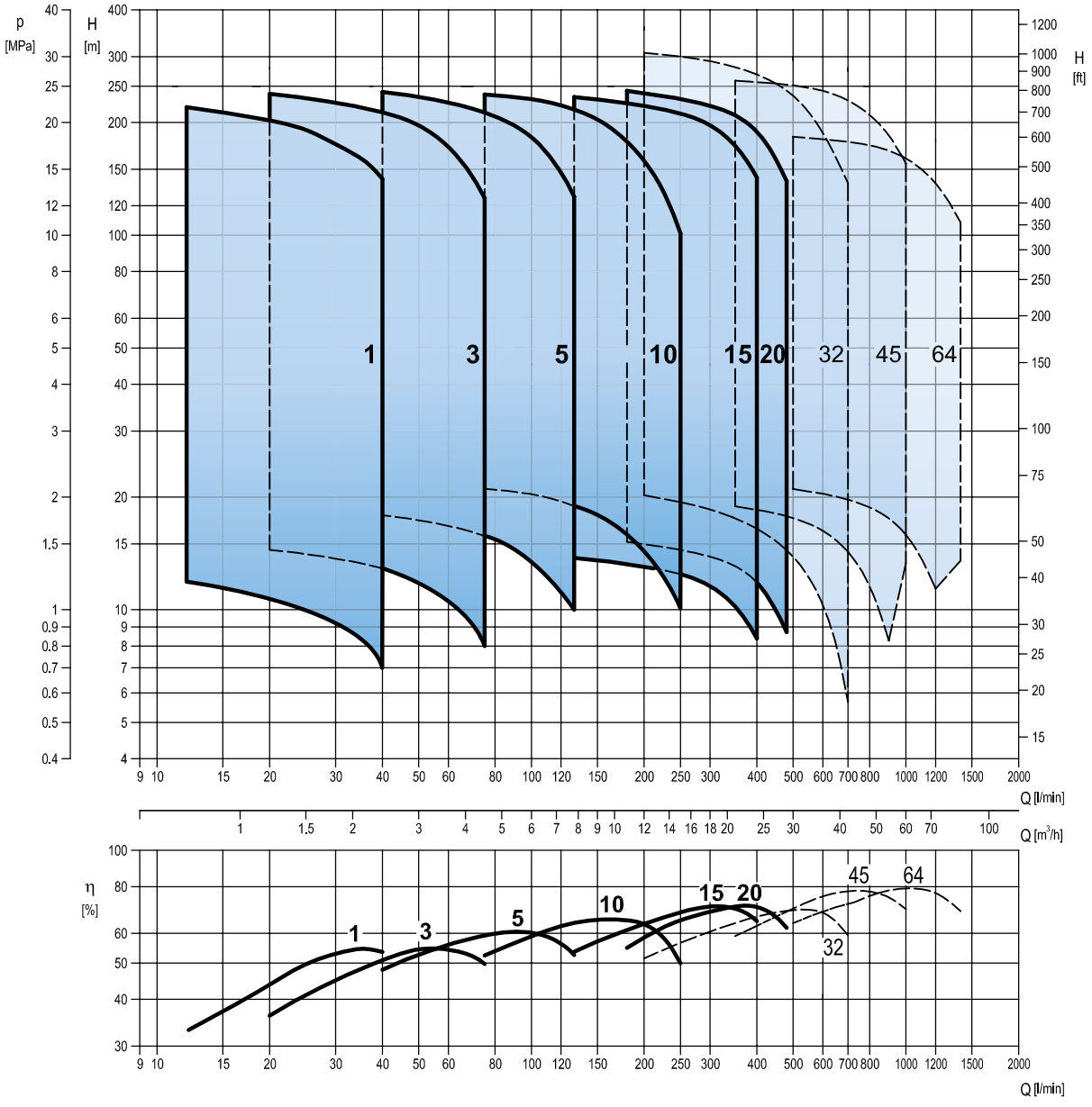
EBARA

Performance Range

50Hz

EVMS 1-3-5-10-15-20

EVM 32-45-64



Minimum efficiency index (MEI)

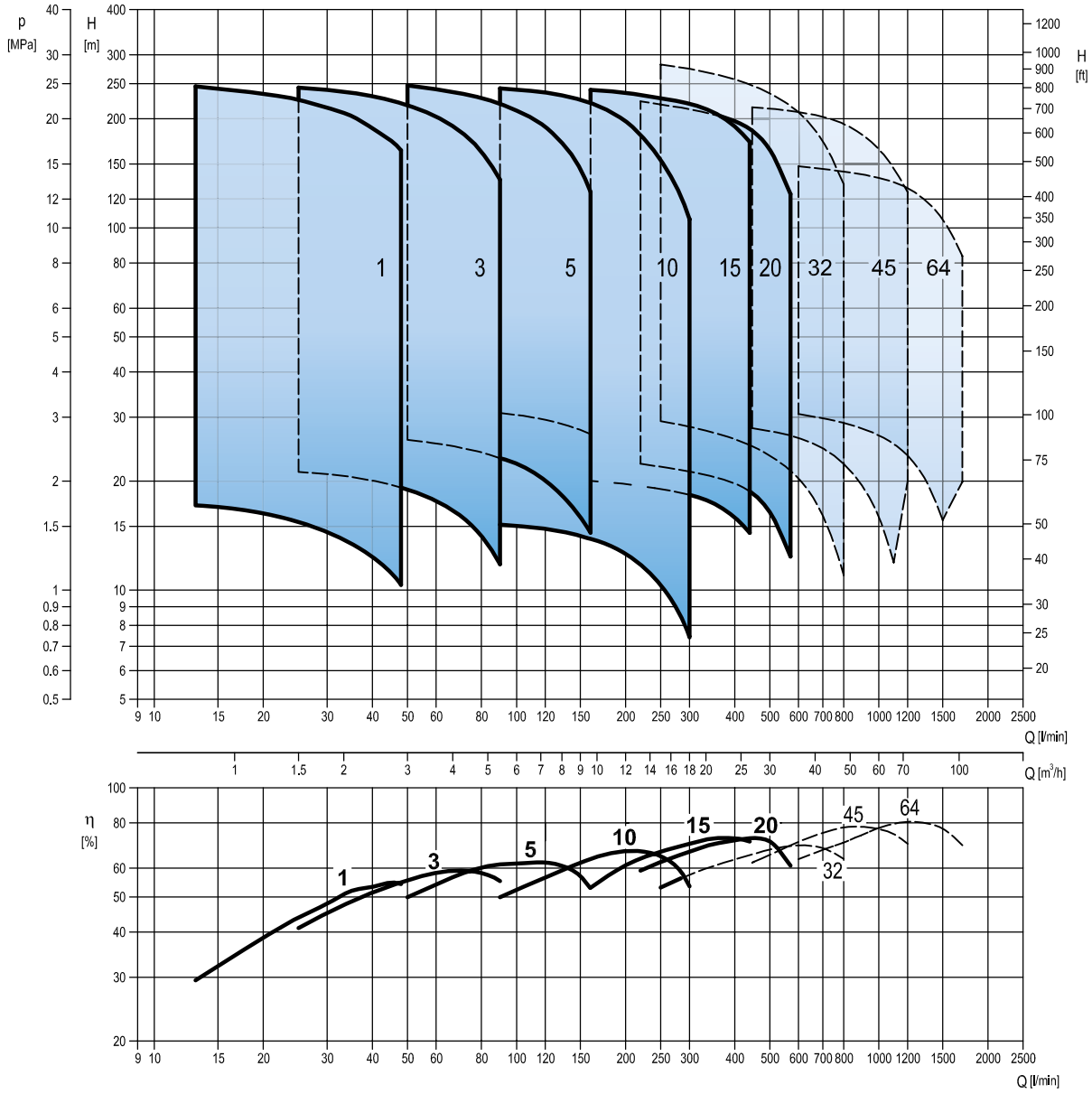
Pump type	MEI
EVMS(.)1	> 0.70
EVMS(.)3	> 0.70
EVMS(.)5	> 0.70
EVMS(.)10	> 0.70
EVMS(.)15	> 0.70
EVMS(.)20	> 0.70

Performance Range

60Hz

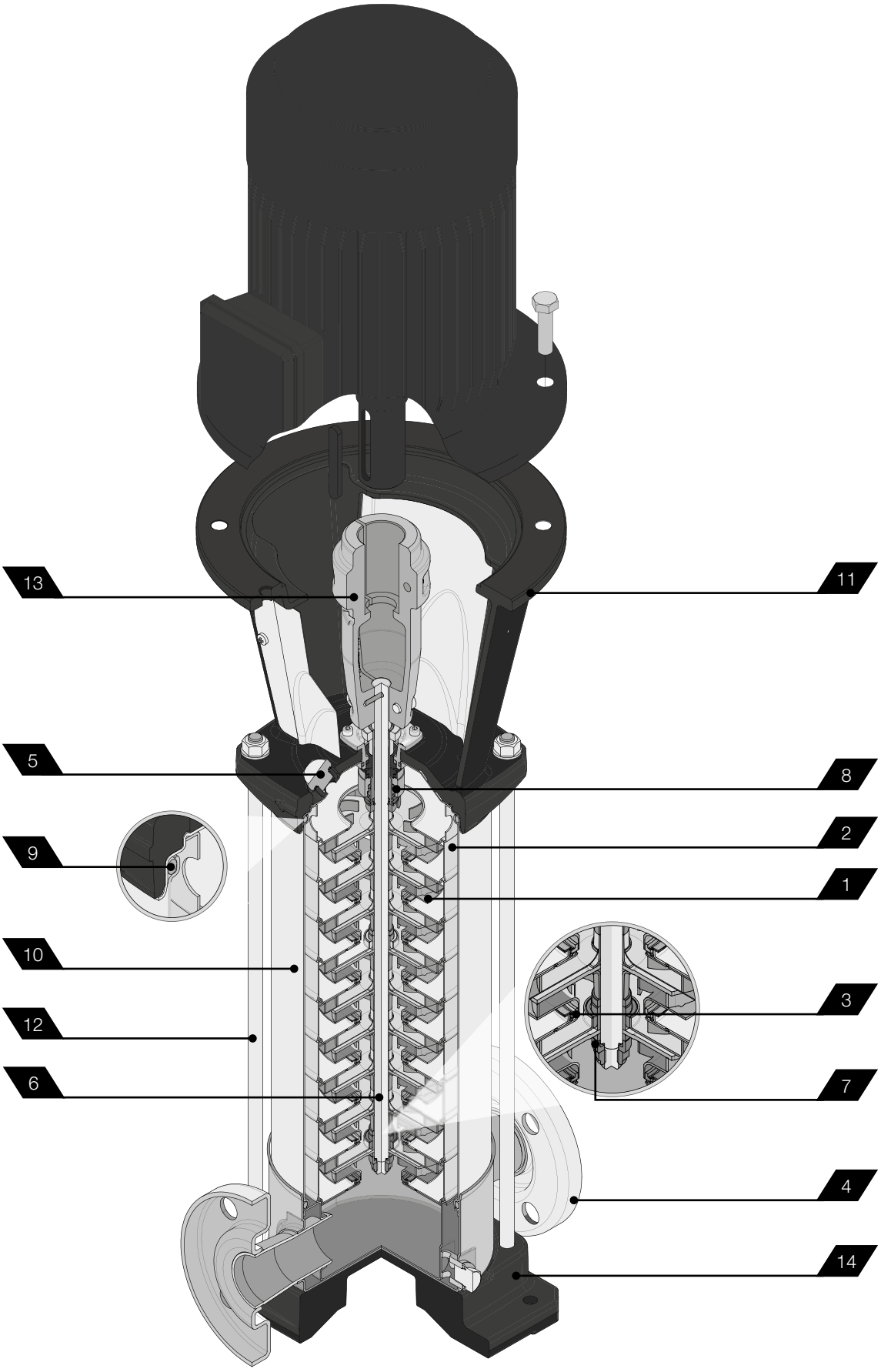
EVMS 1-3-5-10-15-20

EVM 32-45-64



단면도

EVMS 1-3-5-10-15-20



제품사양

EVMS 1-3-5-10-15-20

펌프

버전			EVMSG						EVMS						EVMSL					
작동 범위	Nominal flow rate (m^3/h)		1	3	5	10	15	20	1	3	5	10	15	20	1	3	5	10	15	20
	Maximum working pressure		1.6/2.5 MPa (16 bar/25 bar)																	
	Maximum liquid temperature range		-30° to 140°C																	
키 부품 재질	1. Impeller		EN 1.4301 (AISI 304)												EN 1.4401 (AISI 316)					
	2. Intermediate casing		EN 1.4301 (AISI 304)												EN 1.4401 (AISI 316)					
	3. Liner ring		EN 1.4301 (AISI 304) + PPS												EN 1.4401 (AISI 316) + PPS					
	4. Bottom casing		Cast Iron						EN 1.4301 (AISI 304)						EN 1.4401 (AISI 316)					
	5. Casing cover		EN 1.4301 (AISI 304)												EN 1.4401 (AISI 316)					
	6. Shaft	EN 1.4301 (AISI 304)	EVMS(G) 1-3-10 EVMSG 5-15-20 (depend on models)																	
		EN 1.4404 (AISI 316L)	EVMSL 1-3-10 EVMSL5-15-20 (depend on models)																	
		EN 1.4460 (AISI 329A)	EVMS(G)(L) 5-15-20 (depend on models)																	
	7. Shaft sleeve bearing		Tungsten carbide																	
	8. Shaft seal		Please see the shaft seal options on page 18.																	
	9. O ring	EPDM	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
		FPM	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	10. Outer casing		EN 1.4301 (AISI 304)												EN 1.4404 (AISI 316L)					
	11. Motor bracket		Cast Iron																	
	12. Tie rod		Galvanized steel 6.8 strength class ISO 898/1																	
	13. Coupling		Die cast aluminium (up to 4 kW), Cast iron (from 5.5 kW)																	
	14. Base		Cast iron						Die cast aluminium											
파이프 연결	Oval flange	up to 16 bar	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Round flange DIN (EVMS(L)1-3-5 DIN/ANSI)	up to 16 bar	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
		from 16 bar to 25 bar	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Loose Flange DIN (EVMS(L)1-3-5 DIN/ANSI)	up to 16 bar							○	○	○	○	○	○	○	○	○	○	○	○
		from 16 bar to 25 bar							○	○	○	○	○	○	○	○	○	○	○	○
	Victaulic®	up to 25 bar							○	○	○	○	○	○	○	○	○	○	○	○
	Clamp	up to 25 bar							○	○	○	○	○	○	○	○	○	○	○	○

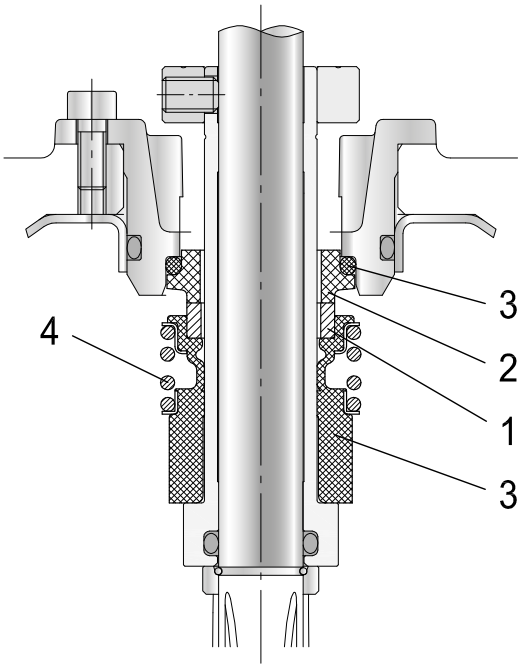
Legend: ● Standard ○ Options

모터

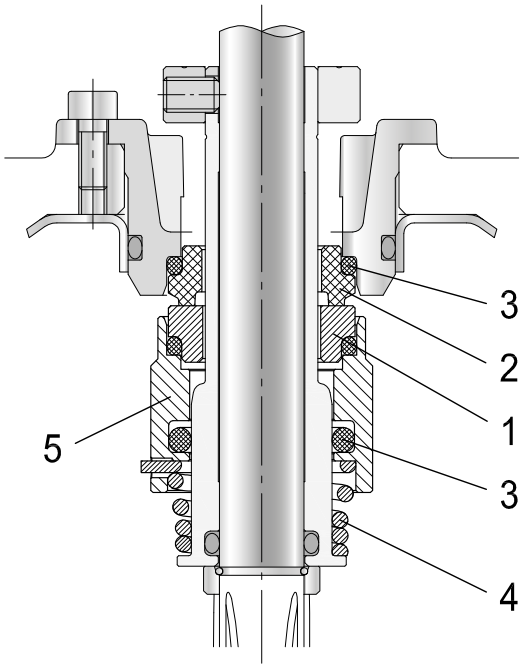
동력원	Frequency	50 Hz		60 Hz
	Phase	Single Phase	Three Phase	Three Phase
	Rotation Speed	~ 2900 min^{-1}		~ 3500 min^{-1}
	Power Rating	0.37 ÷ 2.2 kW	0.37 ÷ 18.5 kW	0.37 ÷ 18.5 kW
		0.5 ÷ 3.0 HP	0.5 ÷ 25 HP	0.5 ÷ 25 HP
	Voltage	230 ± 10%	230/400 ± 10% (up to 4kW) 400/690 ± 10% (above 5.5 kW)	220/380 ± 10% V (up to 4kW) 380/660 ± 10% V (above 5.5 kW) / 265/460 ± 10% V (up to 4kW) 460 ± 10% V (above 5.5 kW)
타입	Type	Electric - TEFC		Electric - TEFC
	Efficiency	from 0.37 to 2.2 kW	from 0.37 to 0.55 kW IE3 from 0.75 to 18.5 kW	from 0.37 kW to 0.55 kW IE2/IE3 from 0.75 to 18.5 kW
	No° of poles	2		2
	Protection Degree	IP 55		IP 55
	Insulation Class	F (temperature rise class B)		F (temperature rise class B)
그 외	Thermal Protection	PTC as standard for the above 1.5 kW		PTC as standard for the above 1.5 kW
	Casing Material	Aluminium		Aluminium
	Flange Mount (IEC motor)	IM B14 (up to 4 kW) IM B5 (above 5.5 kW)		IM B14 (up to 4 kW) IM B5 (above 5.5 kW)

샤프트 실 자료

EVMS 1-3-5-10-15-20



up to 16 bar



from 16 bar
to 25 bar

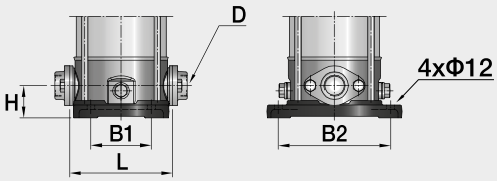
Legend: ● Standard ○ Options ( ) Type key

펌프 모델	최대 액상온도 범위	샤프트실 타입 카트리지		샤프트 실 재질					Type key
		불균형	균형	1 회전부분	2 고정부분	3 엘라스토머	4 스프링	5 이음고리	
16 bar 까지	- 30°C to + 120°C	●		SiC (Q_1)	Carbon (B)	EPDM (E)	AISI316 (G)		Q_1BEG
	- 30°C to + 80°C	○		SiC (Q_1)	Carbon (B)	FPM (V)	AISI316 (G)		Q_1BVG
	- 30°C to + 140°C		○	SiC with graphite (Q_g)	SiC (Q_1)	EPDM (E)	AISI316 (G)		HQ_gQ_1EG
	- 30°C to + 80°C		○	SiC with graphite (Q_g)	SiC (Q_1)	FPM (V)	AISI316 (G)		HQ_gQ_1VG
	- 30°C to + 140°C		○	SiC (Q_1)	Carbon (B)	EPDM (E)	AISI316 (G)		HQ_1BEG
from 16 bar to 25 bar	- 30°C to + 140°C		●	SiC (Q_1)	Carbon (B)	EPDM (E)	AISI316 (G)		HQ_1BEG
	- 30°C to + 80°C		○	SiC (Q_1)	Carbon (B)	FPM (V)	AISI316 (G)		HQ_1BVG
	- 30°C to + 140°C		○	SiC with graphite (Q_g)	SiC (Q_1)	EPDM (E)	AISI316 (G)		HQ_gQ_1EG
	- 30°C to + 80°C		○	SiC with graphite (Qg)	SiC (Q_1)	FPM (V)	AISI316 (G)		HQ_gQ_1VG

파이프연결자료

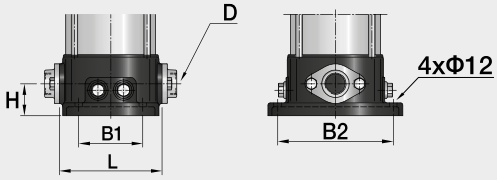
EVMS 1-3-5-10-15-20

Oval Flange (N)



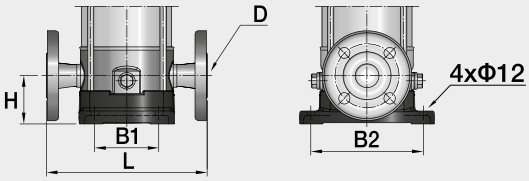
최대 사용압력	외형치수	EVMS (AISI 1.4301) EVMSL (AISI 1.4401)			
		1/3	5	10	15/20
PN16	D	G1	G1¼	G1½	G2
	L	160	160	200	200
	B1 / B2	100/180	100/180	130/215	130/215
	H	50	50	80	90

Oval Flange (N)



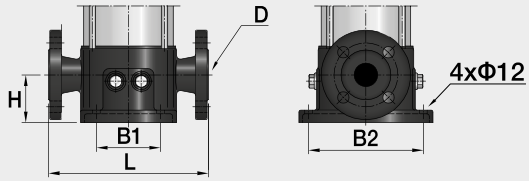
최대 사용압력	외형치수	EVMSG (Cast Iron)			
		1/3	5	10	15/20
PN16	D	G1	G1¼	G1½	G2
	L	160	160	200	200
	B1 / B2	100/180	100/180	130/215	130/215
	H	50	50	80	90

Round Flange (F)



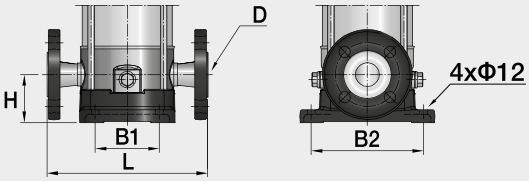
최대 사용압력	외형치수	EVMS (AISI 1.4301) EVMSL (AISI 1.4401)			
		1/3	5	10	15/20
PN25	D	DN25	DN32	DN40	DN50
	L	250	250	280	300
	B1 / B2	100/180	100/180	130/215	130/215
	H	75	75	80	90

Round Flange (F)



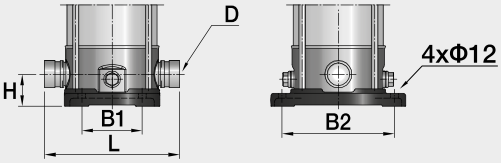
최대 사용압력	외형치수	EVMSG (Cast Iron)			
		1/3	5	10	15/20
PN25	D	DN25	DN32	DN40	DN50
	L	250	250	280	300
	B1 / B2	100/180	100/180	130/215	130/215
	H	75	75	80	90

Loose Flange (LF)



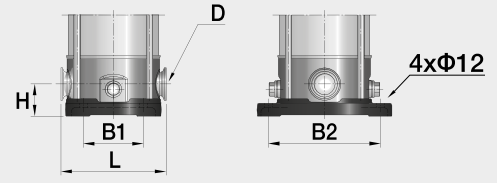
최대 사용압력	외형치수	EVMS (AISI 1.4301) EVMSL (AISI 1.4401)			
		1/3	5	10	15/20
PN25	D	DN25	DN32	DN40	DN50
	L	250	250	280	300
	B1 / B2	100/180	100/180	130/215	130/215
	H	75	75	80	90

Victaulic® (V)



최대 사용압력	외형치수	EVMS (AISI 1.4301) EVMSL (AISI 1.4401)			
		1/3	5	10	15/20
PN25	D	DN32	DN32	DN50	DN50
	L	210	210	261	261
	B1 / B2	100/180	100/180	130/215	130/215
	H	50	50	80	90

Clamp (C)



최대 사용압력	외형치수	EVMS (AISI 1.4301) EVMSL (AISI 1.4401)			
		1/3	5	10	15/20
PN25	D	Φ59	Φ59	Φ87	Φ87
	L	162	162	202	202
	B1 / B2	100/180	100/180	130/215	130/215
	H	50	50	80	90

For further information

Data book

Instruction Manual

Kensaku
system for spare parts selection

Pump Selector
www.ebara.com

Please visit our website
www.ebaraeurope.com

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Japanese Technology since 1912

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cod. 479705550A 06/15

EBARA

E-drive

FREQUENCY INVENTER FOR THE CONTROL OF ELECTRIC PUMPS

60 Hz

E-drive

FREQUENCY INVERTER FOR THE CONTROL OF ELECTRIC PUMPS

NEW

E-*drive*는 펌프에 공급되는 전력의 주파수를 변환하여 펌프시스템을 제어하고 보호하는 기기입니다.
E-*drive*는 한국시장에 유통되는 모든 펌프에 적용가능하며 사용환경의 요구에 따라 유체의 압력, 유량 그리고 유체의 온도를 일정하게 유지제어 가능합니다.
따라서 에너지의 낭비없이 펌프를 제어할 수 있으며, 제품의 수명 역시 증가합니다.

용도

- 가정용, 산업용수 공급
- 관개
- 난방 및 에어컨
- 세척기 및 분수

기술적 특징

- 에너지 및 경비절감
- 시스템 설치용이, 저비용
- 연장된 수명
- 뛰어난 내구성

특징

- **공급주파수** : 50 - 60 Hz (+/- 2%)
- **공칭하중으로 인한 최대사용주변온도** : 40°C (104 °F)
- **공칭하중으로 인한 최대 고도**: 1000 m
- **보호등급** : IP55 (NEMA 4)
- **설정 가능한 디지털 아웃풋** NO **또는** NC:
  1. **모터작동신호**
  2. **알람**
  3. **펌프컨트롤** DOL 1
  4. **펌프컨트롤** DOL 2
- **아날로그 인풋**, (10 or 15 Vdc):
  1. 4-20 mA
  2. 4-20 mA
  3. 4-20 mA / 0 - 10 Vdc (**설정가능**)
  4. 4-20 mA / 0 - 10 Vdc (**설정가능**)
- 4 **디지털인풋**, **설정가능한** NO **또는** NC, **모터의 시작, 정지 제어**

전기관련표

모델	V_{in} +/- 15% [V]	Max. V_{out} [V]	I_{out} [A]	P_2 Typical motor [kW]
E-*drive* 1500	1 ~ 230	3 x 230	7	1,5
E-*drive* 3000	1 ~ 230	3 x 230	11	3
E-*drive* 2200	3 ~ 400	3 x 400	6	2,2
E-*drive* 4000	3 ~ 400	3 x 400	9	4
E-*drive* 5500	3 ~ 400	3 x 400	14	5,5
E-*drive* 7500	3 ~ 400	3 x 400	18	7,5
E-*drive* 11000	3 ~ 400	3 x 400	25	11
E-*drive* 15000	3 ~ 400	3 x 400	30	15

EBARA

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4WP SERIES

ENCAPSULATED SUBMERSIBLE MOROTS

60 Hz

4WP SERIES
4" ENCAPSULATED SUBMERSIBLE MOTORS

15년 이상의 역사를 가진 4인치 제품입니다.
스모토는 높은 기술력을 기반으로
많은 수요가 필요한 시장 및 그 외 시장에
4WP 시리즈를 소개하게 되어
매우 자랑스럽게 생각합니다.
이전 세대의 제품과는 전혀 다른 신기술을
적용하여 성능 및 디자인이 월등히 개선되었습니다.

4WP 모터 기술사양

- **Motor frame : AISI 304**
- Shaft end : AISI 303
- Motor bracket : **Cast Iron G20**
- Bracket's cover : **AISI 304**
- Shaft sealinh system : labyrinth seal, sand slinger and lip seal
- 4" NEMA**플랜지**
- **보호등급 : IP68**
- **절연등급** : F
- **냉각수 복구 밸브**

운전제한조건

- **최고유체온도 : 35°C**
- **최저유량속도 : 0.08 m/s**
- **시간당 최대 시동횟수 : 30**
- **전압오차 : +6% / -10%**
- **최대흡입관깊이 : 150 m**
- **기판의 탑재위치 : 수직 / 수평**
- **유체산도 : Ph 5.8 ~ 8.6**
- 60Hz **모터에서 서비스팩터는 1보다 높음**
- **축추력방향 :**

1500 Newton	up to 0,75 kW
3000 Newton	up to 2,20 kW
6500 Newton	up to 5,50 kW
4000 Newton	optional

제품정보

50 Hz.

단상

	Type	Thrust Load N	Weight Kg	H mm	kW	Hp	In Amp	Istart Amp	RPM	Cosφ	Ts/Tn PSC	EFF%	Crun μF	C start μF
220/230V	4WP 050 M	1500	6,8	250	0,37	0,5	3,4	11,0	2850	0,91	0,65	58	16	36 - 46
	4WP 075 M	1500	8,1	265	0,55	0,75	4,4	16,6	2840	0,92	0,63	62	20	72 - 86
	4WP 100 M	1500	10,6	295	0,75	1	5,9	19,8	2860	0,94	0,62	65	30	88 - 106
	4WP 150 M	3000	11,2	340	1,1	1,5	7,8	29,5	2850	0,94	0,62	66	40	88 - 106
	4WP 200 M	3000	14	375	1,5	2	10,2	36,4	2850	0,95	0,61	68	50	130 - 156
	4WP 300 M	3000	16,4	430	2,2	3	15	52,5	2840	0,94	0,55	69	70	189 - 227
	4WP 500 M	6500	29,3	675	3,7	5	24	102	2840	0,92	0,50	72	100	189 - 227

삼상

	Type	Thrust Load N	Weight Kg	H mm	kW	Hp	In Amp	Istart Amp	RPM	Cosφ	Ts/Tn PSC	EFF%	Crun μF	C start μF
400V	4WP 050 T	1500	5,8	235	0,37	0,5	1,2	5,1	2840	0,73	2,1	63		
	4WP 075 T	1500	7	250	0,55	0,75	1,7	6,5	2840	0,73	2,0	64		
	4WP 100 T	1500	8,3	265	0,75	1	2,2	9,2	2840	0,75	1,9	67		
	4WP 150 T	3000	10,9	295	1,1	1,5	3,0	14,2	2840	0,76	2,3	71		
	4WP 200 T	3000	11,4	340	1,5	2	4,0	18,5	2830	0,78	2,1	72		
	4WP 300 T	3000	14,2	375	2,2	3	5,6	26,5	2830	0,79	2,4	74		
	4WP 400 T	6500	18,3	480	3	4	7,5	34,3	2830	0,79	2,2	76		
	4WP 550 T	6500	23,4	555	4	5,5	10,1	44	2840	0,77	2,3	75		
	4WP 750 T	6500	29,4	675	5,5	7,5	13,6	62	2840	0,80	2,2	76		
	4WP 1000 T	6500	33,8	765	7,5	10	18,3	90	2830	0,80	2,2	75		

제품정보

60 Hz.

단상

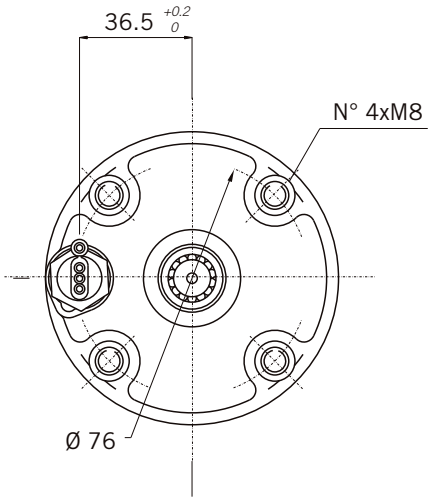
	Type	Thrust Load N	Weight Kg	H mm	kW	Hp	In Amp	Istart Amp	Imax	RPM	Cosφ	EFF%	Cr μF	Cs μF	S.F.
220V	4WP 050 M	1500	6,8	250	0,37	0,5	5,5	22	6,4	3430	0,78	58		59-71	1,6
	4WP 075 M	1500	8,1	265	0,55	0,75	7	32	9,3	3435	0,74	58		86-103	1,5
	4WP 100 M	1500	10,6	295	0,75	1	8,4	40	10,2	3430	0,75	59		105-126	1,4
	4WP 150 M	3000	11,2	340	1,1	1,5	10,1	49	11,7	3450	0,83	67	10	116-125	1,3
	4WP 200 M	3000	14	375	1,5	2	11,4	52	13,5	3455	0,87	68	20	116-125	1,25
	4WP 300 M	3000	16,4	430	2,2	3	14,2	68	16,9	3420	0,93	71	35	208-250	1,15
	4WP 500 M	6500	29,3	675	3,7	5	24,6	88	27,8	3450	0,92	72	80	290-310	1,15

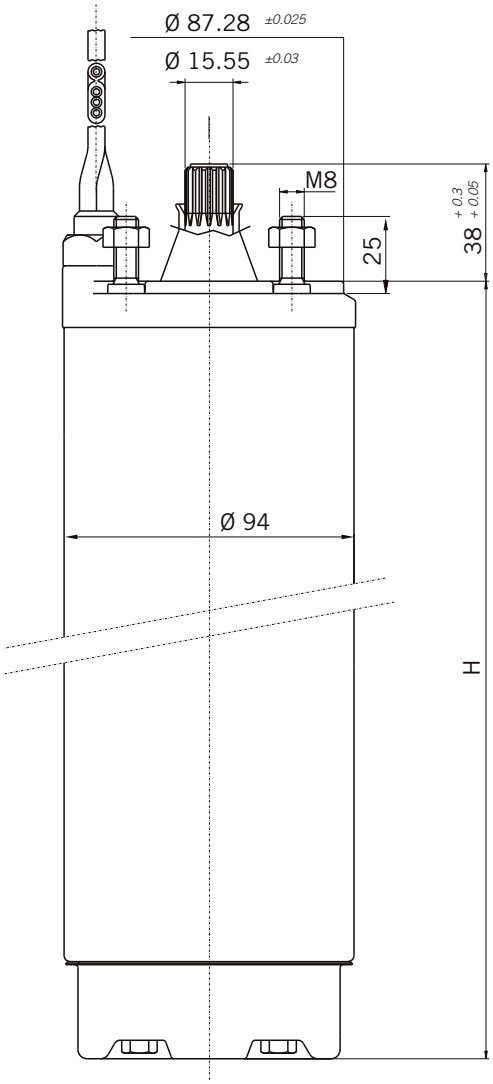
삼상

	Type	Thrust Load N	Weight Kg	H mm	kW	Hp	In Amp	Istart Amp	Imax	RPM	Cosφ	EFF%	Cr μF	Cs μF	S.F.
220/230V	4WP 050 T	1500	5,8	235	0,37	0,5	2,3	10,4	3,1	3410	0,80	62			1,6
	4WP 075 T	1500	7	250	0,55	0,75	3,5	17,3	4,3	3420	0,77	66			1,5
	4WP 100 T	1500	8,3	265	0,75	1	4,5	22,5	5,4	3430	0,76	69			1,4
	4WP 150 T	3000	10,9	295	1,1	1,5	5,7	31,2	6,6	3420	0,80	72			1,3
	4WP 200 T	3000	11,4	340	1,5	2	7,3	43,3	8,4	3420	0,80	74			1,25
	4WP 300 T	3000	14,2	375	2,2	3	10,9	60,6	11,9	3430	0,76	75			1,15
	4WP 400 T	6500	18,3	480	3	4	13,2	69,3	14,7	3420	0,79	76			1,15
	4WP 550 T	6500	23,4	555	4	5,5	17,7	95,3	19,4	3420	0,79	77			1,15
	4WP 750 T	6500	29,4	675	5,5	7,5	25,1	142,0	27,0	3420	0,78	78			1,15
460V	4WP 050 T	1500	5,8	235	0,37	0,5	1,2	6,8	1,60	3420	0,78	64			1,6
	4WP 075 T	1500	7	250	0,55	0,75	1,6	10,5	1,95	3420	0,79	65			1,5
	4WP 100 T	1500	8,3	265	0,75	1	1,95	12,5	2,50	3420	0,80	66			1,4
	4WP 150 T	3000	10,9	295	1,1	1,5	2,8	15	3,30	3420	0,79	68			1,3
	4WP 200 T	3000	11,4	340	1,5	2	3,5	22	4,20	3420	0,81	69			1,25
	4WP 300 T	3000	14,2	375	2,2	3	4,9	30,5	5,50	3420	0,78	73			1,15
	4WP 400 T	6500	18,3	480	3	4	6,5	45	7,20	3430	0,78	75			1,15
	4WP 550 T	6500	23,4	555	4	5,5	9	62	9,90	3420	0,76	77			1,15
	4WP 750 T	6500	29,4	675	5,5	7,5	12	77	13,30	3420	0,78	77			1,15

Sumoto®

4WP SERIES
4” ENCAPSULATED SUBMERSIBLE MOTORS





외형치수 / 중량

50 HZ & 60 HZ

	Type	kW	Hp	Thrust Load	H	Cable			Weight
					mm	Sez. mm²	A mm	B mm	Kg
Single Phase 220/240V	4WP 050	0,37	0,5	1500	250	1,5	5,6	18,8	6,8
	4WP 075	0,55	0,75	1500	250	1,5	5,6	18,8	8,1
	4WP 100	0,75	1	1500	295	1,5	5,6	18,8	10,6
	4WP 150	1,1	1,5	3000	340	1,5	5,6	18,8	11,2
	4WP 200	1,5	2	3000	375	1,5	5,6	18,8	14
	4WP 300	2,2	3	3000	430	1,5	5,6	18,8	16,4
Three Phase 380/415V	4WP 050	0,37	0,5	1500	235	1,5	5,6	18,8	5,8
	4WP 050	0,55	0,75	1500	250	1,5	5,6	18,8	8,1
	4WP 100	0,75	1	1500	295	1,5	5,6	18,8	10,6
	4WP 150	1,1	1,5	3000	340	1,5	5,6	18,8	11,2
	4WP 200	1,5	2	3000	375	1,5	5,6	18,8	14
	4WP 300	2,2	3	3000	430	1,5	5,6	18,8	16,4
Single Phase 220/240V	4WP 500	3,7	5	6500	675	1,5	5,6	18,8	29,4
Three Phase 380/415V	4WP 400	3	4	6500	480	1,5	5,6	18,8	18,3
	4WP 550	4	5,5	6500	555	1,5	5,6	18,8	23,4
	4WP 750	5,5	7,5	6500	675	1,5	5,6	18,8	29,4

전력공급케이블

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4WP SERIES

4” ENCAPSULATED SUBMERSIBLE MOTORS

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뛰어난 내구성

EBARA