

IN-LINE PASLANMAZ HİDROFOR POMPA

IN-LINE STAINLESS STEEL VERTICAL MULTISTAGE (VMS) PUMPS



Kullanım Yerleri

Su temini ve proses suyu transferi
Yüksek basınçlı tıkama ve prosesler
Yangın söndürme sistemleri
Şebeke suyunun olmadığı yerleşim yerleri
Park, bahçe ve çiftlikler
Küçük su ikmal istasyonları
Şebeke suyunun basıncının yetmediği; çok katlı binalar, otel, hastane, okul, iş yerleri, siteler, sanayi

Applications

Water supply and process water transfer
High pressure blocking and processes
Fire fighting systems
Residential units without water mains
Parks, gardens and farms
Small water supply stations
Buildings where water pressure is not enough: hotel, hospital, school, work sites, sites, industrial places

Çalışma Koşulları

Maksimum Sıvı Sıcaklığı	35°C
Maksimum Kum Miktarı	25 gr/m ³
Motor Koruma Sınıfı	IP68
Maksimum Çalışma Sesi	70dB
Maksimum Kalkış Sayısı	20 (kalkış/saat)
Maksimum Çalışma Basıncı	25 bar
Motor Gücü:	Monofaze 0,37-2,2 kW
	Trifaze 2,2-55kW
Sıvı Sıcaklığı	-20°C - +120°C
Motor Dönüş Yönü	İki Yönlü

Operating Conditions

Max. Liquid Temperature	35°C
Max. Sand Content	25 gr/m ³
Motor Protection Class	IP68
Max. Operation Sound	70dB
Max. Starting Number	20 (start/hour)
Max. Operating Pressure	25 bar
Motor Power:	Monophase 0,37-2,2 kW
	Threephase 2,2-55kW
Liquid Temperature	-20°C - +120°C
Motor Rotation Direction	Bidirectional

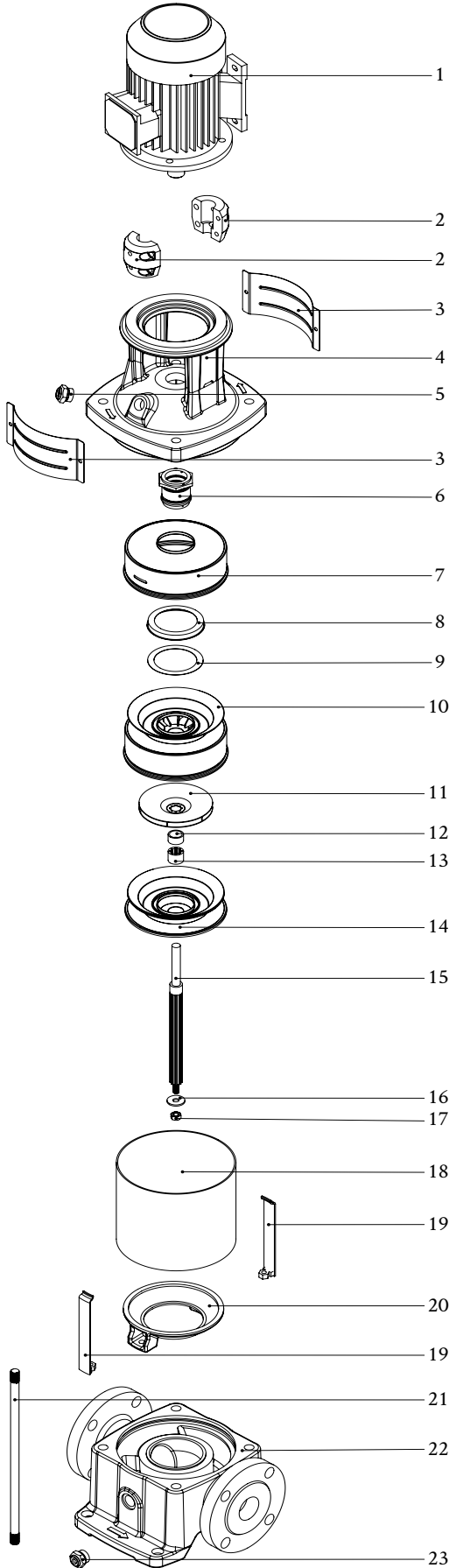
Pompa Çeşitleri**Pump Range**

Tipi	Type	5HCR	10HCR	15HCR	20HCR	32HCR	45HCR	64HCR	90HCR	120HCR	150HCR
Emiş	Suction	1	1 1/2"	2"	2"	2 1/2"	3"	4"	4"	5"	5"
Çıkış	Outlet	1	1 1/2"	2"	2"	2 1/2"	3"	4"	4"	5"	5"
Debi (m ³ /h)	Flow (m ³ /h)	2-7	6-13	11-23	12-29	16-36	25-55	30-80	50-110	40-160	60-200
Basma Yüksekliği (m)	Head (m)	7-200	11-220	6-222	3-239	7-265	11-298	9-181	7-175	16-130	7-108
Motor Gücü (kW)	Motor Power (kW)	0,37-4	0,75-5,5	1,1-15	1,1-18,5	1,5-30	3-45	4-37	5,5-45	15-55	15-55
Flanş	Flange	DN25	DN40	DN50	DN50	DN65	DN80	DN100	DN100	DN125	DN125
Pompa Mili: Paslanmaz Çelik (AISI 304)	Pump Shaft: Stainless Steel (AISI 304)	+	+	+	+	+	+	+	+	+	+
Kademe ve Fan: Paslanmaz Çelik	Stage and Impeller: Stainless Steel	+	+	+	+	+	+	+	+	+	+
Alt ve Üst Adaptörü: Pik Döküm (EN-GJL-250)	Lower and Upper Interconnector: Cast Iron (EN-GJL-250)	+	+	+	+	+	+	+	+	+	+
Mekanik Keçe Dolayısıyla Bakım Gerektirmez	Because of Mechanical Seal No Need to Maintenance										

Pompa Kodlaması**Identification Code**

Nominal Debi (m ³ /sa)	Nominal Flow Rate (m ³ /h)
Pompa Modeli	Pump Type
Motor Gücü (HP)	Motor Power (HP)
Kademe Sayısı	Stage Number

20 HCR 05 / 05



No	Ürün	Malzeme
1	Motor	-
2	Kaplin	Döküm (EN-GJL-250)
3	Kaplin Koruma Kapağı	Paslanmaz Çelik (AISI 304)
4	Motor Bağlantı Parçası	Döküm (EN-GJL-250)
5	Hava Tahliye Vidası	Paslanmaz Çelik (AISI 303)
6	Mekanik Keçe	SIC/SIC/VITON/SS304
7	Üst Kademe	Paslanmaz Çelik (AISI 304)
8	Aşınma Bileziği	Paslanmaz Çelik (AISI 304)
9	Boyun Halkası	POM
10	Kademe	Paslanmaz Çelik (AISI 304)
11	Fan	Paslanmaz Çelik (AISI 304)
12	Kademe Burcu	Paslanmaz Çelik (AISI 304)
13	Ara Burç	Bronz (ASTM B145-4A)
14	Başlangıç Kapağı	Paslanmaz Çelik (AISI 304)
15	Mil	Paslanmaz Çelik (AISI 304)
16	Kilitleme Somunu	Paslanmaz Çelik (AISI 304)
17	Son Sıkma Vidası	Paslanmaz Çelik (AISI 304)
18	Dış Kılıf Borusu	Paslanmaz Çelik (AISI 304)
19	Gergi Çıtası	Paslanmaz Çelik (AISI 304)
20	Çektirme Kapağı	Paslanmaz Çelik (AISI 304)
21	Gerdirma Saplaması	Paslanmaz Çelik (CK 45)
22	Emiş Haznesi	Döküm (EN-GJL-250)
23	Tahliye Tapası	Paslanmaz Çelik (AISI 303)

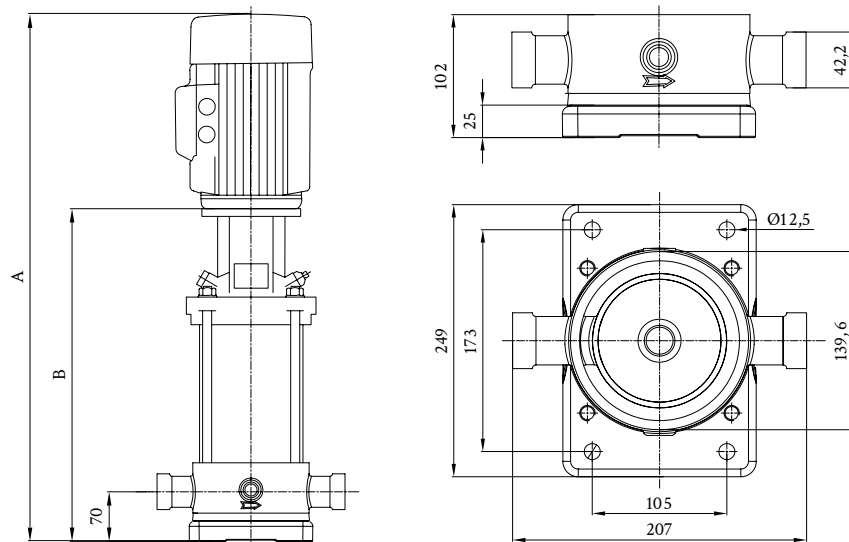
No	Components	Material
1	Motor	-
2	Coupling	Cast Iron (EN-GJL-250)
3	Coupling Guard	Stainless Steel (AISI 304)
4	Pump Head	Döküm (EN-GJL-250)
5	Air Vent Screw	Stainless Steel (AISI 303)
6	Mechanical Seal	SIC/SIC/VITON/SS304
7	Chamber / Stage, Top	Stainless Steel (AISI 304)
8	Neck Ring Retainer	Stainless Steel (AISI 304)
9	Neck Ring	POM
10	Chamber/Stage	Stainless Steel (AISI 304)
11	Impeller	Stainless Steel (AISI 304)
12	Bearing Ring	Stainless Steel (AISI 304)
13	Spacing Pipe	Bronze (ASTM B145-4A)
14	Inlet Part, Upper	Stainless Steel (AISI 304)
15	Shaft	Stainless Steel (AISI 304)
16	Lock washer	Stainless Steel (AISI 304)
17	Nut/screw	Stainless Steel (AISI 304)
18	Outer Sleeve	Stainless Steel (AISI 304)
19	Strap/Tie Rod	Stainless Steel (AISI 304)
20	Inlet Part, Lower	Stainless Steel (AISI 304)
21	Staybolt	Stainless Steel (CK 45)
22	Suction Base	Cast Iron (EN-GJL-250)
23	Drain Plug	Stainless Steel (AISI 303)

5HCR MONOBLOK HİDROFOR / MONOBLOCK VMS PUMP

Hidrofor Tipi VMS Pump	HP	kW	Kademe Stage	Emiş Ağızı Suction Entrance	Çıkış Ağızı Outlet Entrance	Boy / Length (mm)			Ağırlık Weight (kg)	
						A		B	Monofaze Monophase	Trifaze Threephase
						Monofaze Monophase	Trifaze Threephase			
5HCR 0,5/02	0,5	0,37	2	1"	1"	256	256	483	20,5	20
5HCR 0,7/03	0,75	0,55	3	1"	1"	283	283	510	22	21
5HCR 01/04	1	0,75	4	1"	1"	315	315	572	24	23
5HCR 1,5/05	1,5	1,1	5	1"	1"	339	339	599	25	24
5HCR 1,5/06	1,5	1,1	6	1"	1"	366	366	626	26	25
5HCR 02/07	2	1,5	7	1"	1"	400	400	710	31	29
5HCR 02/08	2	1,5	8	1"	1"	427	427	737	32	30
5HCR 03/09	3	2,2	9	1"	1"	454	454	764	34	32
5HCR 03/10	3	2,2	10	1"	1"	581	581	791	35	33
5HCR 03/12	3	2,2	12	1"	1"	535	535	845	37	35
5HCR 04/16	4	3	16	1"	1"	671	-	1001	50	50
5HCR 05/19	5,5	4	19	1"	1"	752	-	1082	62	62
5HCR 05/22	5,5	4	22	1"	1"	833	-	1163	65	65

5HCR TEKLİ / İKİLİ / ÜÇLÜ HİDROFOR / SINGLE / DOUBLE / TRIPLE VMS PUMP

Hidrofor Tipi VMS Pump	Ölçüler / Dimensions (mm)											Ağırlık / Weight (kg)		
	Yükseklik / Height		Tekli / Single			İkili / Double			Üçlü / Triple			Tekli Single	İkili Double	Üçlü Triple
	H	H1	B	B1	B2	B	B1	B2	B	B1	B2			
5HCR 0,5/02	755	190	320	320	480	640	350	800	950	350	1100	34	60	82
5HCR 0,7/03	785	190	320	320	480	640	350	800	950	350	1100	35	63	85
5HCR 01/04	815	190	320	320	480	640	350	800	950	350	1100	38	68	88
5HCR 1,5/05	845	190	320	320	480	640	350	800	950	350	1100	39	69	89
5HCR 1,5/06	875	190	320	320	480	640	350	800	950	350	1100	40	73	92
5HCR 02/07	900	190	320	320	480	640	350	800	950	350	1100	44	78	96
5HCR 02/08	930	190	320	320	480	640	350	800	950	350	1100	45	84	102
5HCR 03/09	960	190	320	320	480	640	350	800	950	350	1100	47	86	104
5HCR 03/10	990	190	320	320	480	640	350	800	950	350	1100	50	87	106
5HCR 03/12	1050	190	320	320	480	640	350	800	950	350	1100	52	91	109
5HCR 04/16	1170	190	320	320	480	640	350	800	950	350	1100	67	128	150
5HCR 05/19	1260	190	320	320	480	640	350	800	950	350	1100	80	136	152
5HCR 05/22	1350	190	320	320	480	640	350	800	950	350	1100	82	143	161

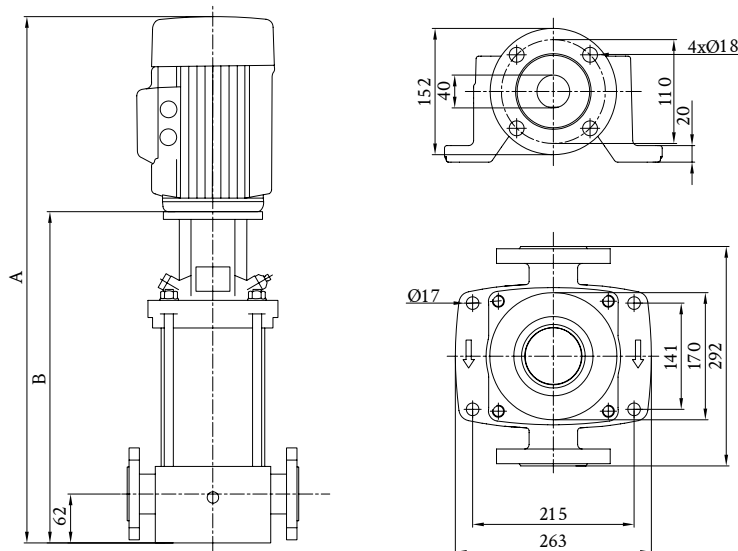


10HCR MONOBLOK HİDROFOR / MONOBLOCK VMS PUMP

Hidrofor Tipi VMS Pump	HP	kW	Kademe Stage	Emiş Ağızı Suction Entrance	Çıkış Ağızı Outlet Entrance	Boy / Length (mm)			Ağırlık Weight (kg)	
						A		B	Monofaze Monophase	Trifaze Threephase
						Monofaze Monophase	Trifaze Threephase			
10HCR 01/02	1	0,75	2	1 ^{1/2"}	1 ^{1/2"}	640	640	347	36	34
10HCR 1,5/03	1,5	1,1	3	1 ^{1/2"}	1 ^{1/2"}	670	670	377	39	38
10HCR 02/04	2	1,5	4	1 ^{1/2"}	1 ^{1/2"}	700	700	423	47	46
10HCR 03/05	3	2,2	5	1 ^{1/2"}	1 ^{1/2"}	730	730	453	49	47
10HCR 03/06	3	2,2	6	1 ^{1/2"}	1 ^{1/2"}	760	760	483	50	48
10HCR 04/07	4	3	7	1 ^{1/2"}	1 ^{1/2"}	-	790	518	55	54
10HCR 04/08	4	3	8	1 ^{1/2"}	1 ^{1/2"}	-	820	548	56	55
10HCR 04/09	4	3	9	1 ^{1/2"}	1 ^{1/2"}	-	850	578	57	56
10HCR 05/10	5,5	4	10	1 ^{1/2"}	1 ^{1/2"}	-	900	608	69	68
10HCR 05/12	5,5	4	12	1 ^{1/2"}	1 ^{1/2"}	-	960	668	70	70
10HCR 07/14	7,5	5,5	14	1 ^{1/2"}	1 ^{1/2"}	-	1020	760	94	93
10HCR 07/16	7,5	5,5	16	1 ^{1/2"}	1 ^{1/2"}	-	1080	820	96	95
10HCR 10/18	10	7,5	18	1 ^{1/2"}	1 ^{1/2"}	-	1150	880	101	99
10HCR 10/20	10	7,5	20	1 ^{1/2"}	1 ^{1/2"}	-	1220	940	103	101
10HCR 10/22	10	7,5	22	1 ^{1/2"}	1 ^{1/2"}	-	1280	1000	105	104

10HCR TEKLİ / İKİLİ / ÜÇLÜ HİDROFOR / SINGLE / DOUBLE / TRIPLE VMS PUMP

Hidrofor Tipi VMS Pump	Ölçüler / Dimensions (mm)											Ağırlık / Weight (kg)		
	Yükseklik / Height		Tekli / Single			İkili / Double			Üçlü / Triple			Tekli Single	İkili Double	Üçlü Triple
	H	H1	B	B1	B2	B	B1	B2	B	B1	B2			
10HCR 01/02	760	200	325	360	500	650	360	800	950	360	1100	48	81	103
10HCR 1,5/03	790	200	325	360	500	650	360	800	950	360	1100	51	84	106
10HCR 02/04	820	200	325	360	500	650	360	800	950	360	1100	59	92	114
10HCR 03/05	850	200	325	360	500	650	360	800	950	360	1100	61	94	116
10HCR 03/06	880	200	325	360	500	650	360	800	950	360	1100	62	95	117
10HCR 04/07	910	200	325	360	500	650	360	800	950	360	1100	67	100	122
10HCR 04/08	940	200	325	360	500	650	360	800	950	360	1100	68	101	123
10HCR 04/09	970	200	325	360	500	650	360	800	950	360	1100	69	102	124
10HCR 05/10	1020	200	325	360	500	650	360	800	950	360	1100	81	114	136
10HCR 05/12	1080	200	325	360	500	650	360	800	950	360	1100	83	116	138
10HCR 07/14	1140	200	325	360	500	650	360	800	950	360	1100	106	139	161
10HCR 07/16	1200	200	325	360	500	650	360	800	950	360	1100	108	141	163
10HCR 10/18	1270	200	325	360	500	650	360	800	950	360	1100	113	146	168
10HCR 10/20	1340	200	325	360	500	650	360	800	950	360	1100	115	148	170
10HCR 10/22	1400	200	325	360	500	650	360	800	950	360	1100	117	150	172

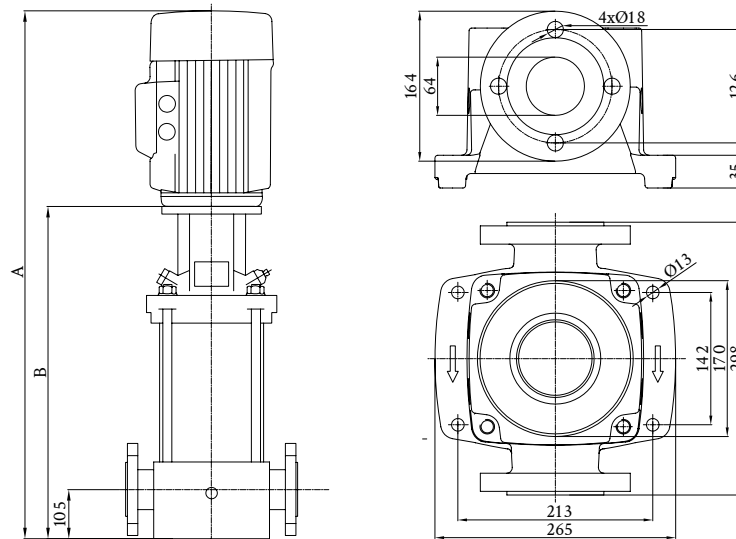


15HCR MONOBLOK HİDROFOR / MONOBLOCK VMS PUMP

Hidrofor Tipi VMS Pump	HP	kW	Kademe Stage	Emiş Ağızı Suction Entrance	Çıkış Ağızı Outlet Entrance	Boy / Length (mm)			Ağırlık Weight (kg)	
						A		B	Monofaze Monophase	Trifaze Threephase
						Monofaze Monophase	Trifaze Threephase			
15HCR 1,5/01	1,5	1,1	1	2"	2"	598	700	400	42	39
15HCR 03/02	3	2,2	2	2"	2"	747	750	415	50	47
15HCR 04/03	4	3	3	2"	2"	793	800	465	55	53
15HCR 05/04	5,5	4	4	2"	2"	846	850	510	68	65
15HCR 05/05	5,5	4	5	2"	2"	893	900	555	69	67
15HCR 07/06	7,5	5,5	6	2"	2"	-	940	632	-	89
15HCR 07/07	7,5	5,5	7	2"	2"	-	980	677	-	90
15HCR 10/08	10	7,5	8	2"	2"	-	1030	720	-	94
15HCR 10/09	10	7,5	9	2"	2"	-	1100	765	-	96
15HCR 15/10	15	11	10	2"	2"	-	1180	887	-	148
15HCR 15/12	15	11	12	2"	2"	-	1350	977	-	151
15HCR 15/14	15	11	14	2"	2"	-	1440	1067	-	154
15HCR 20/17	20	15	17	2"	2"	-	1550	1202	-	171

15HCR TEKLİ / İKİLİ / ÜÇLÜ HİDROFOR / SINGLE / DOUBLE / TRIPLE VMS PUMP

Hidrofor Tipi VMS Pump	Ölçüler / Dimensions (mm)											Ağırlık / Weight (kg)		
	Yükseklik / Height		Tekli / Single			İkili / Double			Üçlü / Triple			Tekli Single	İkili Double	Üçlü Triple
	H	H1	B	B1	B2	B	B1	B2	B	B1	B2			
15HCR 1,5/01	820	210	325	360	570	950	360	1100	950	360	1100	55	92	114
15HCR 03/02	870	210	325	360	570	950	360	1100	950	360	1100	63	100	122
15HCR 04/03	920	210	325	360	570	950	360	1100	950	360	1100	68	105	127
15HCR 05/04	970	210	325	360	570	950	360	1100	950	360	1100	81	118	140
15HCR 05/05	1020	210	325	360	570	950	360	1100	950	360	1100	82	119	141
15HCR 07/06	1060	210	325	360	570	950	360	1100	950	360	1100	102	139	161
15HCR 07/07	1100	210	325	360	570	950	360	1100	950	360	1100	103	140	162
15HCR 10/08	1150	210	325	360	570	950	360	1100	950	360	1100	107	144	166
15HCR 10/09	1200	210	325	360	570	950	360	1100	950	360	1100	109	146	168
15HCR 15/10	1250	210	325	360	570	950	360	1100	950	360	1100	161	198	220
15HCR 15/12	1340	210	325	360	570	950	360	1100	950	360	1100	164	201	223
15HCR 15/14	1430	210	325	360	570	950	360	1100	950	360	1100	167	204	226
15HCR 20/17	1620	210	325	360	570	950	360	1100	950	360	1100	184	221	243

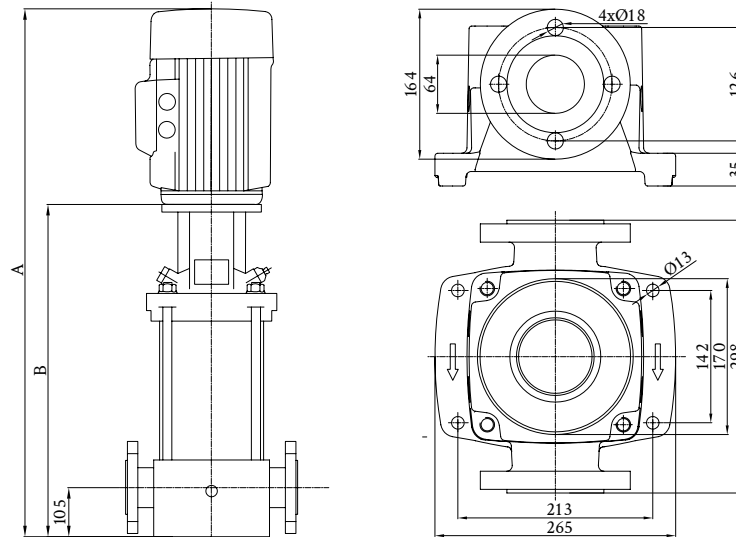


20HCR MONOBLOK HİDROFOR / MONOBLOCK VMS PUMP

Hidrofor Tipi VMS Pump	HP	kW	Kademe Stage	Emiş Ağızı Suction Entrance	Çıkış Ağızı Outlet Entrance	Boy / Length (mm)			Ağırlık Weight (kg)	
						A		B	Monofaze Monophase	Trifaze Threephase
						Monofaze Monophase	Trifaze Threephase			
20HCR 1,5/01	1,5	1,1	1	2 "	2 "	-	700	400	39	42
20HCR 03/02	3	2,2	2	2 "	2 "	-	750	415	47	50
20HCR 05/03	5,5	4	3	2 "	2 "	-	800	465	64	66
20HCR 07/04	7,5	5,5	4	2 "	2 "	-	850	542	86	88
20HCR 07/05	7,5	5,5	5	2 "	2 "	-	900	587	87	90
20HCR 10/06	10	7,5	6	2 "	2 "	-	940	632	111	93
20HCR 10/07	10	7,5	7	2 "	2 "	-	980	677	92	95
20HCR 15/08	15	11	8	2 "	2 "	-	1030	799	144	147
20HCR 15/10	15	11	10	2 "	2 "	-	1180	889	148	150
20HCR 20/12	20	15	12	2 "	2 "	-	1350	979	163	166
20HCR 20/14	20	15	14	2 "	2 "	-	1440	1069	166	170
20HCR 25/17	25	18,5	17	2 "	2 "	-	1550	1204	184	188

20HCR TEKLİ / İKİLİ / ÜÇLÜ HİDROFOR / SINGLE / DOUBLE / TRIPLE VMS PUMP

Hidrofor Tipi VMS Pump	Ölçüler / Dimensions (mm)											Ağırlık / Weight (kg)		
	Yükseklik / Height		Tekli / Single			İkili / Double			Üçlü / Triple			Tekli Single	İkili Double	Üçlü Triple
	H	H1	B	B1	B2	B	B1	B2	B	B1	B2			
20HCR 1,5/01	820	210	325	360	570	650	360	800	950	360	1100	55	134	198
20HCR 03/02	870	210	325	360	570	650	360	800	950	360	1100	63	150	222
20HCR 05/03	920	210	325	360	570	650	360	800	950	360	1100	79	182	270
20HCR 07/04	970	210	325	360	570	650	360	800	950	360	1100	101	226	336
20HCR 07/05	1020	210	325	360	570	650	360	800	950	360	1100	103	230	342
20HCR 10/06	1060	210	325	360	570	650	360	800	950	360	1100	106	236	351
20HCR 10/07	1100	210	325	360	570	650	360	800	950	360	1100	108	240	357
20HCR 15/08	1150	210	325	360	570	650	360	800	950	360	1100	160	34	513
20HCR 15/10	1250	210	325	360	570	650	360	800	950	360	1100	163	350	522
20HCR 20/12	1840	210	325	360	570	650	360	800	950	360	1100	179	382	570
20HCR 20/14	1430	210	325	360	570	650	360	800	950	360	1100	183	390	582
20HCR 25/17	1620	210	325	360	570	650	360	800	950	360	1100	201	426	635

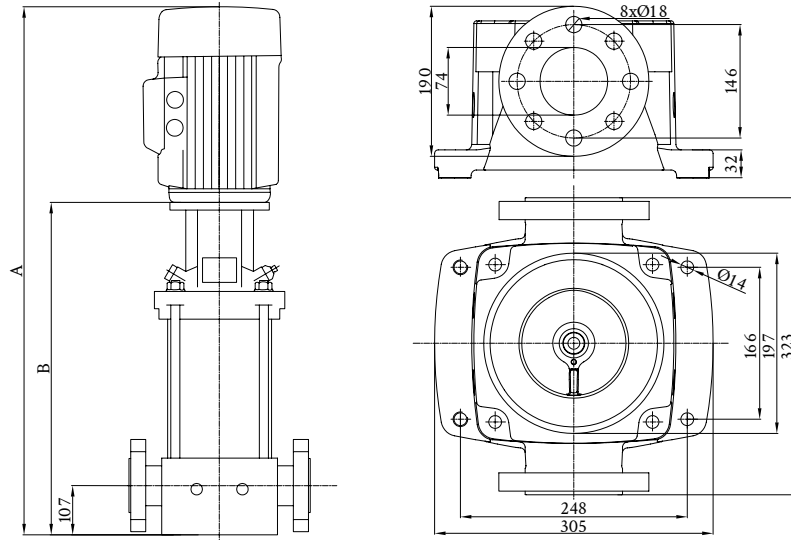


32HCR MONOBLOK HİDROFOR / MONOBLOCK VMS PUMP

Hidrofor Tipi VMS Pump	HP	kW	Kademe Stage	Emiş Ağızı Suction Entrance	Çıkış Ağızı Outlet Entrance	Boy / Length (mm)			Ağırlık Weight (kg)	
						A		B	Monofaze Monophase	Trifaze Threephase
						Monofaze Monophase	Trifaze Threephase			
32HCR 02/01-1	2	1,5	1	2 ^{1/2"}	2 ^{1/2"}	-	800	505	-	80
32HCR 03/01	3	2,2	1	2 ^{1/2"}	2 ^{1/2"}	-	800	505	-	85
32HCR 04/02-2	4	3	2	2 ^{1/2"}	2 ^{1/2"}	-	870	575	-	95
32HCR 05/02	5,5	4	2	2 ^{1/2"}	2 ^{1/2"}	-	870	575	-	105
32HCR 07/03	7,5	5,5	3	2 ^{1/2"}	2 ^{1/2"}	-	970	645	-	115
32HCR 10/04	10	7,5	4	2 ^{1/2"}	2 ^{1/2"}	-	1040	715	-	125
32HCR 15/05	15	11	5	2 ^{1/2"}	2 ^{1/2"}	-	1190	895	-	165
32HCR 15/06	15	11	6	2 ^{1/2"}	2 ^{1/2"}	-	1260	965	-	170
32HCR 20/07	20	15	7	2 ^{1/2"}	2 ^{1/2"}	-	1500	1035	-	205
32HCR 20/08	20	15	8	2 ^{1/2"}	2 ^{1/2"}	-	1570	1105	-	210
32HCR 25/09	25	18,5	9	2 ^{1/2"}	2 ^{1/2"}	-	1640	1175	-	220
32HCR 25/10	25	18,5	10	2 ^{1/2"}	2 ^{1/2"}	-	1710	1245	-	225
32HCR 30/11	30	22	11	2 ^{1/2"}	2 ^{1/2"}	-	1780	1315	-	285
32HCR 30/12	30	22	12	2 ^{1/2"}	2 ^{1/2"}	-	1850	1385	-	285
32HCR 40/13	40	30	13	2 ^{1/2"}	2 ^{1/2"}	-	1920	1455	-	370
32HCR 40/14	40	30	14	2 ^{1/2"}	2 ^{1/2"}	-	1990	1525	-	375

32HCR TEKLİ / İKİLİ / ÜÇLÜ HİDROFOR / SINGLE / DOUBLE / TRIPLE VMS PUMP

Hidrofor Tipi VMS Pump	Ölçüler / Dimensions (mm)											Ağırlık / Weight (kg)		
	Yükseklik / Height		Tekli / Single			İkili / Double			Üçlü / Triple			Tekli Single	İkili Double	Üçlü Triple
	H	H1	B	B1	B2	B	B1	B2	B	B1	B2			
32HCR 02/01-1	850	225	450	400	600	900	400	1000	450	400	600	95	215	320
32HCR 03/01	920	225	450	400	600	900	400	1000	450	400	600	100	225	335
32HCR 04/02-2	990	225	450	400	600	900	400	1000	450	400	600	110	245	365
32HCR 05/02	990	225	450	400	600	900	400	1000	450	400	600	120	265	395
32HCR 07/03	1090	225	450	400	600	900	400	1000	450	400	600	130	285	425
32HCR 10/04	1160	225	450	400	600	900	400	1000	450	400	600	140	305	455
32HCR 15/05	1310	225	450	400	600	900	400	1000	450	400	600	180	385	575
32HCR 15/06	1380	225	450	400	600	900	400	1000	450	400	600	185	395	590
32HCR 20/07	1620	225	450	400	600	900	400	1000	450	400	600	220	465	695
32HCR 20/08	1690	225	450	400	600	900	400	1000	450	400	600	225	475	710
32HCR 25/09	1760	225	450	400	600	900	400	1000	450	400	600	235	495	740
32HCR 25/10	1830	225	450	400	600	900	400	1000	450	400	600	240	505	755
32HCR 30/11	1900	225	450	400	600	900	400	1000	450	400	600	300	625	935
32HCR 30/12	1970	225	450	400	600	900	400	1000	450	400	600	342	625	935
32HCR 40/13	2040	225	450	400	600	900	400	1000	450	400	600	385	795	1190
32HCR 40/14	2110	225	450	400	600	900	400	1000	450	400	600	390	805	1205

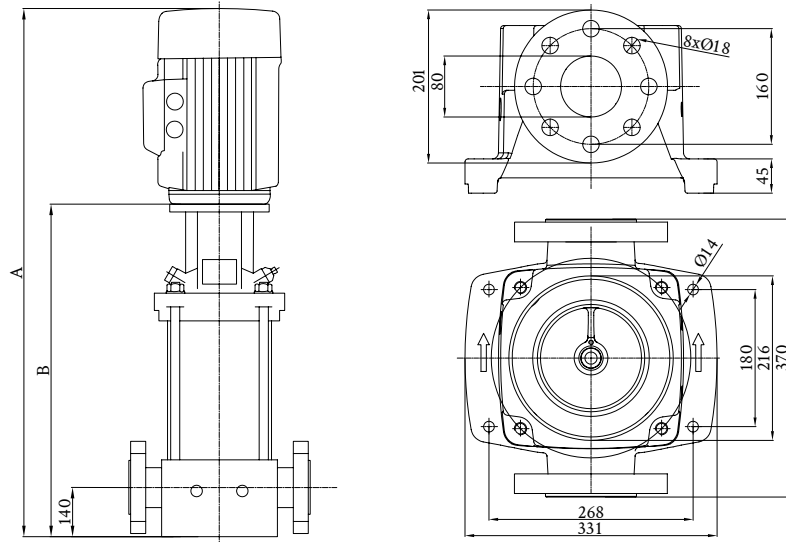


45HCR MONOBLOK HİDROFOR / MONOBLOCK VMS PUMP

Hidrofor Tipi VMS Pump	HP	kW	Kademe Stage	Emiş Ağız Suction Entrance	Çıkış Ağız Outlet Entrance	Boy / Length (mm)			Ağırlık Weight (kg)	
						A		B	Monofaze Monophase	Trifaze Threephase
						Monofaze Monophase	Trifaze Threephase			
45HCR 04/01-1	4	3	1	3"	3"	-	860	558	-	36
45HCR 05/01	5,5	4	1	3"	3"	-	860	558	-	39
45HCR 07/02-2	7,5	5,5	2	3"	3"	-	1000	638	-	47
45HCR 10/02	10	7,5	2	3"	3"	-	1000	638	-	49
45HCR 15/03	15	11	3	3"	3"	-	1140	828	-	50
45HCR 20/04	20	15	4	3"	3"	-	1360	908	-	55
45HCR 25/05	25	18,5	5	3"	3"	-	1440	988	-	56
45HCR 30/06	30	22	6	3"	3"	-	1520	1068	-	57
45HCR 40/07	40	30	7	3"	3"	-	1600	1148	-	69
45HCR 40/08	40	30	8	3"	3"	-	1680	1228	-	70
45HCR 40/09-2	40	30	9	3"	3"	-	1760	1308	-	94
45HCR 50/09	50	37	9	3"	3"	-	1760	1308	-	96
45HCR 50/10	50	37	10	3"	3"	-	1840	1388	-	101
45HCR 60/11	60	45	11	3"	3"	-	1920	1468	-	103
45HCR 60/12	60	45	12	3"	3"	-	2000	1556	-	105

45HCR TEKLİ / İKİLİ / ÜÇLÜ HİDROFOR / SINGLE / DOUBLE / TRIPLE VMS PUMP

Hidrofor Tipi VMS Pump	Ölçüler / Dimensions (mm)											Ağırlık / Weight (kg)		
	Yükseklik / Height		Tekli / Single			İkili / Double			Üçlü / Triple			Tekli Single	İkili Double	Üçlü Triple
	H	H1	B	B1	B2	B	B1	B2	B	B1	B2			
45HCR 04/01-1	980	260	450	400	700	900	400	1000	1300	400	1500	117	260	390
45HCR 05/01	980	260	450	400	700	900	400	1000	1300	400	1500	127	280	420
45HCR 07/02-2	1120	260	450	400	700	900	400	1000	1300	400	1500	137	300	450
45HCR 10/02	1120	260	450	400	700	900	400	1000	1300	400	1500	142	310	465
45HCR 15/03	1260	260	450	400	700	900	400	1000	1300	400	1500	182	390	585
45HCR 20/04	1480	260	450	400	700	900	400	1000	1300	400	1500	222	470	705
45HCR 25/05	1560	260	450	400	700	900	400	1000	1300	400	1500	232	490	735
45HCR 30/06	1640	260	450	400	700	900	400	1000	1300	400	1500	292	610	915
45HCR 40/07	1720	260	450	400	700	900	400	1000	1300	400	1500	372	770	1155
45HCR 40/08	1800	260	450	400	700	900	400	1000	1300	400	1500	377	780	1170
45HCR 40/09-2	1880	260	450	400	700	900	400	1000	1300	400	1500	382	790	1185
45HCR 50/09	1880	260	450	400	700	900	400	1000	1300	400	1500	382	790	1185
45HCR 50/10	1960	260	450	400	700	900	400	1000	1300	400	1500	407	840	1260
45HCR 60/11	2040	260	450	400	700	900	400	1000	1300	400	1500	472	970	1455
45HCR 60/12	2120	260	450	400	700	900	400	1000	1300	400	1500	477	980	1470

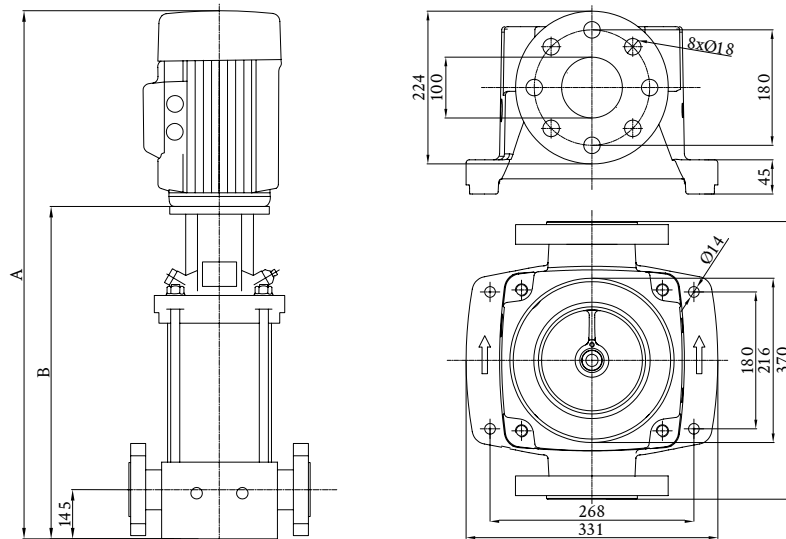


64HCR MONOBLOK HİDROFOR / MONOBLOCK VMS PUMP

Hidrofor Tipi VMS Pump	HP	kW	Kademe Stage	Emiş Ağızı Suction Entrance	Çıkış Ağızı Outlet Entrance	Boy / Length (mm)			Ağırlık Weight (kg)	
						A		B	Monofaze Monophase	Trifaze Threephase
						Monofaze Monophase	Trifaze Threephase			
64HCR 05/01-1	5,5	4	1	4"	4"	740	1020	561	-	105
64HCR 07/01	7,5	5,5	1	4"	4"	740	1020	561	-	120
64HCR 10/02-2	10	7,5	2	4"	4"	760	1140	644	-	130
64HCR 15/02	15	11	2	4"	4"	760	1140	754	-	165
64HCR 20/03-1	20	15	3	4"	4"	850	1300	836	-	205
64HCR 25/03	25	18,5	3	4"	4"	850	1300	836	-	205
64HCR 25/04-2	25	18,5	4	4"	4"	930	1380	919	-	215
64HCR 30/04	30	22	4	4"	4"	930	1380	919	-	270
64HCR 40/05	40	30	5	4"	4"	1000	1470	1001	-	350
64HCR 40/06-2	40	30	6	4"	4"	1070	1550	1084	-	355
64HCR 50/06	50	37	6	4"	4"	1070	1550	1084	-	375
64HCR 50/07-2	50	37	7	4"	4"	1150	1630	1166	-	380

64HCR TEKLİ / İKİLİ / ÜÇLÜ HİDROFOR / SINGLE / DOUBLE / TRIPLE VMS PUMP

Hidrofor Tipi VMS Pump	Ölçüler / Dimensions (mm)											Ağırlık / Weight (kg)		
	Yükseklik / Height		Tekli / Single			İkili / Double			Üçlü / Triple			Tekli Single	İkili Double	Üçlü Triple
	H	H1	B	B1	B2	B	B1	B2	B	B1	B2			
64HCR 05/01-1	1140	260	450	400	700	900	400	1100	1300	400	1500	125	280	413
64HCR 07/01	1140	260	450	400	700	900	400	1100	1300	400	1500	140	310	458
64HCR 10/02-2	1260	260	450	400	700	900	400	1100	1300	400	1500	150	330	488
64HCR 15/02	1260	260	450	400	700	900	400	1100	1300	400	1500	185	400	593
64HCR 20/03-1	1420	260	450	400	700	900	400	1100	1300	400	1500	225	480	713
64HCR 25/03	1420	260	450	400	700	900	400	1100	1300	400	1500	235	500	743
64HCR 25/04-2	1500	260	450	400	700	900	400	1100	1300	400	1500	235	500	743
64HCR 30/04	1500	260	450	400	700	900	400	1100	1300	400	1500	290	610	908
64HCR 40/05	1590	260	450	400	700	900	400	1100	1300	400	1500	370	770	1148
64HCR 40/06-2	1670	260	450	400	700	900	400	1100	1300	400	1500	375	780	1163
64HCR 50/06	1670	260	450	400	700	900	400	1100	1300	400	1500	395	820	1223
64HCR 50/07-2	1750	260	450	400	700	900	400	1100	1300	400	1500	400	830	1238

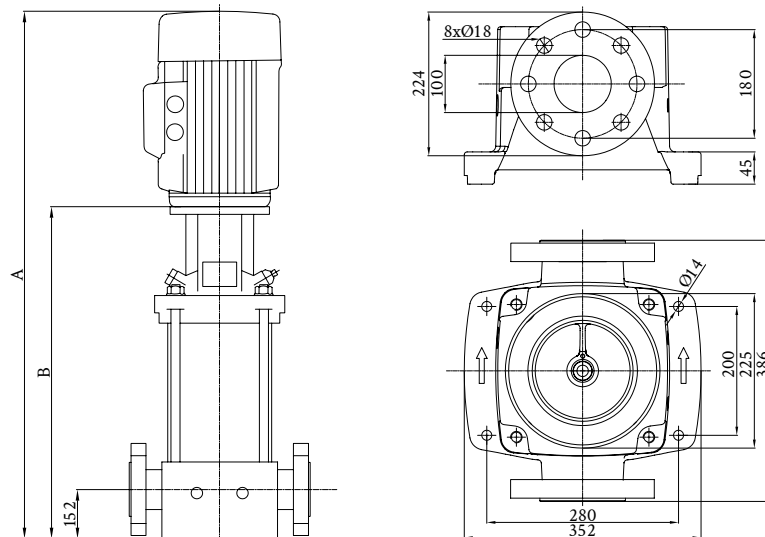


90HCR MONOBLOK HİDROFOR / MONOBLOCK VMS PUMP

Hidrofor Tipi VMS Pump	HP	kW	Kademe Stage	Emiş Ağızı Suction Entrance	Çıkış Ağızı Outlet Entrance	Boy / Length (mm)			Ağırlık Weight (kg)	
						A		B	Monofaze Monophase	Trifaze Threephase
						Monofaze Monophase	Trifaze Threephase			
90HCR 07/01-1	7,5	5,5	1	4"	4"	-	104	571	-	125
90HCR 10/01	10	7,5	1	4"	4"	-	104	571	-	130
90HCR 15/02-2	15	11	2	4"	4"	-	113	773	-	170
90HCR 20/02	20	15	2	4"	4"	-	130	773	-	205
90HCR 25/03-2	25	18,5	3	4"	4"	-	140	865	-	220
90HCR 30/03	30	22	3	4"	4"	-	140	865	-	270
90HCR 40/04	40	30	4	4"	4"	-	149	957	-	355
90HCR 50/05	50	37	5	4"	4"	-	158	1049	-	380
90HCR 60/06	60	45	6	4"	4"	-	167	1141	-	445

90HCR TEKLİ / İKİLİ / ÜÇLÜ HİDROFOR / SINGLE / DOUBLE / TRIPLE VMS PUMP

Hidrofor Tipi VMS Pump	Ölçüler / Dimensions (mm)											Ağırlık / Weight (kg)		
	Yükseklik / Height		Tekli / Single			İkili / Double			Üçlü / Triple			Tekli Single	İkili Double	Üçlü Triple
	H	H1	B	B1	B2	B	B1	B2	B	B1	B2			
90HCR 07/01-1	1160	260	450	400	700	900	400	1100	1300	400	1500	145	318	472
90HCR 10/01	1160	260	450	400	700	900	400	1100	1300	400	1500	150	328	487
90HCR 15/02-2	1250	260	450	400	700	900	400	1100	1300	400	1500	190	408	607
90HCR 20/02	1420	260	450	400	700	900	400	1100	1300	400	1500	225	478	712
90HCR 25/03-2	1520	260	450	400	700	900	400	1100	1300	400	1500	240	508	757
90HCR 30/03	1520	260	450	400	700	900	400	1100	1300	400	1500	290	608	907
90HCR 40/04	1610	260	450	400	700	900	400	1100	1300	400	1500	375	778	1162
90HCR 50/05	1700	260	450	400	700	900	400	1100	1300	400	1500	400	828	1237
90HCR 60/06	1790	260	450	400	700	900	400	1100	1300	400	1500	465	958	1432



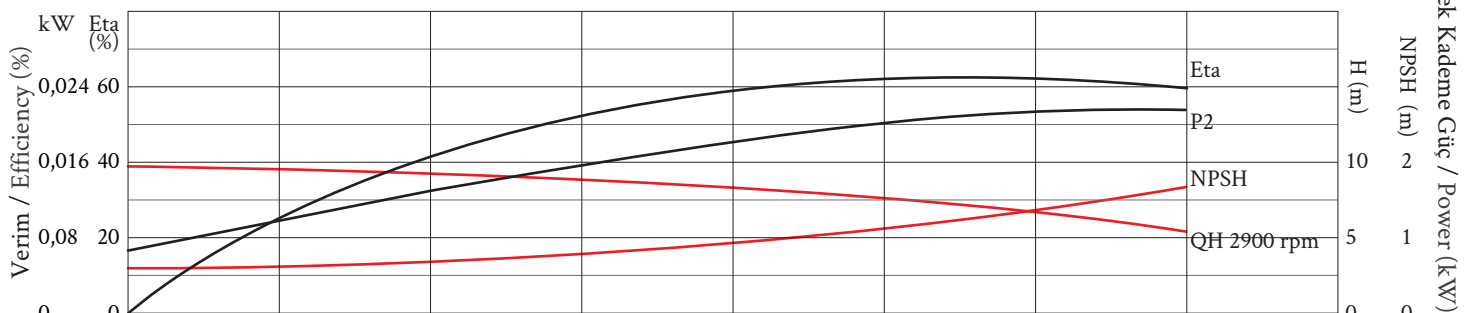
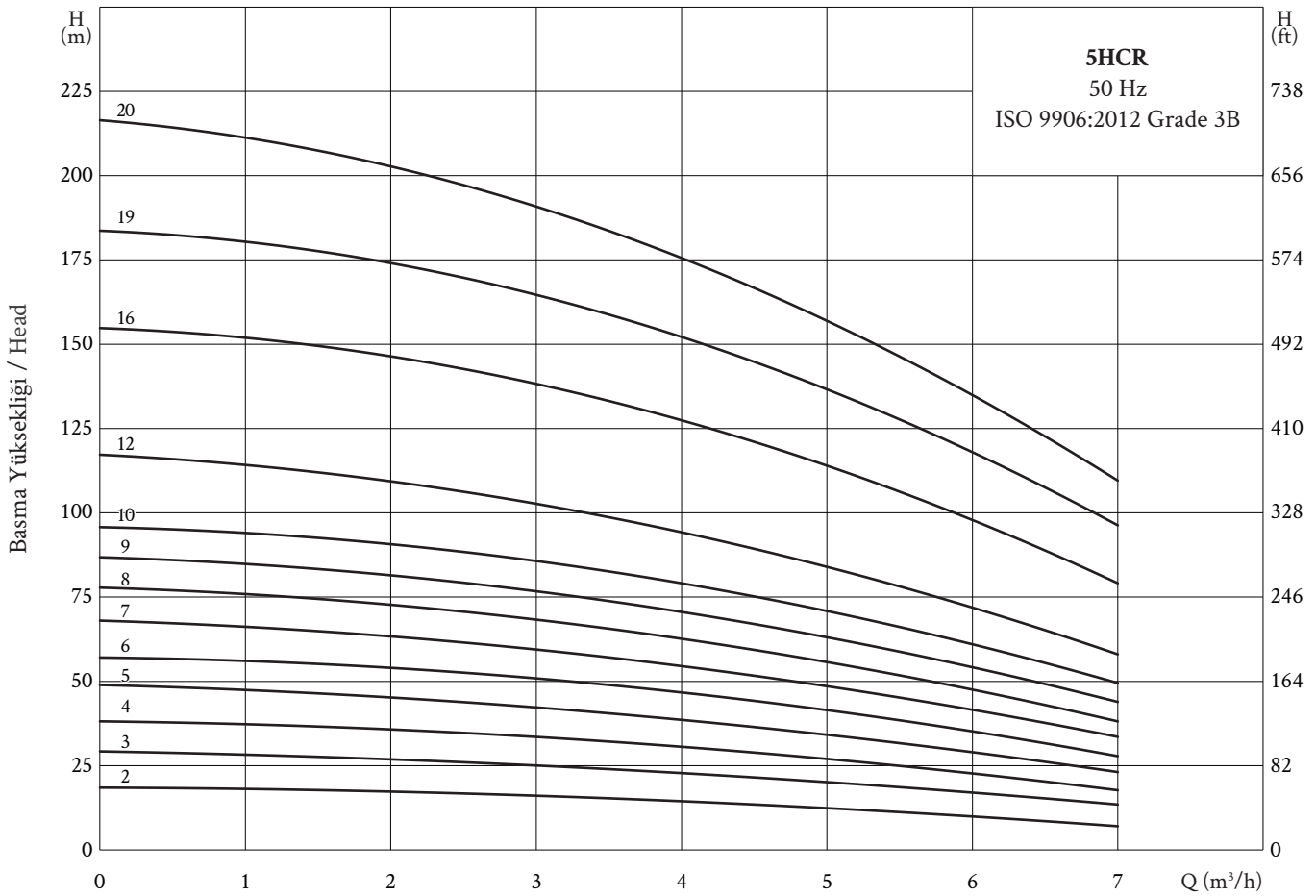
Emiş - Çıkış / Suction - Outlet

Tekli / Single: 1" - 1"

İkili / Double: 1 1/2" - 1 1/2"

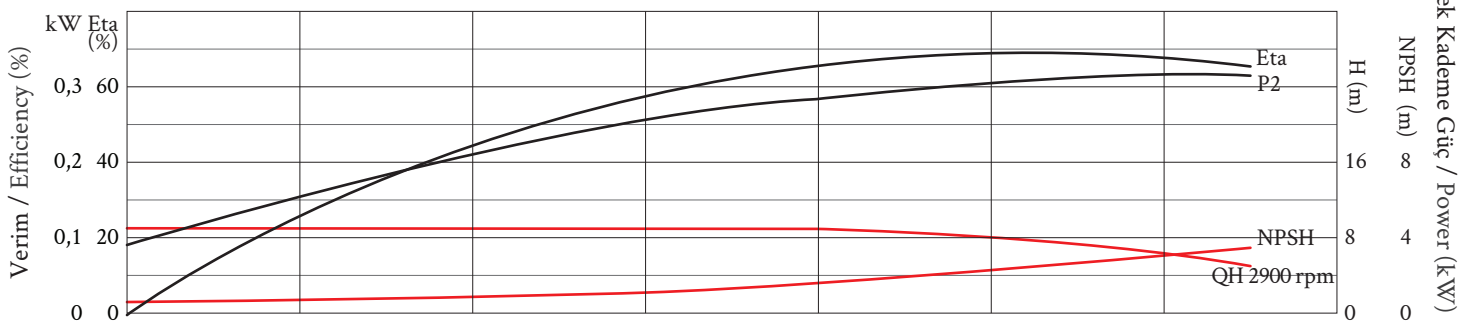
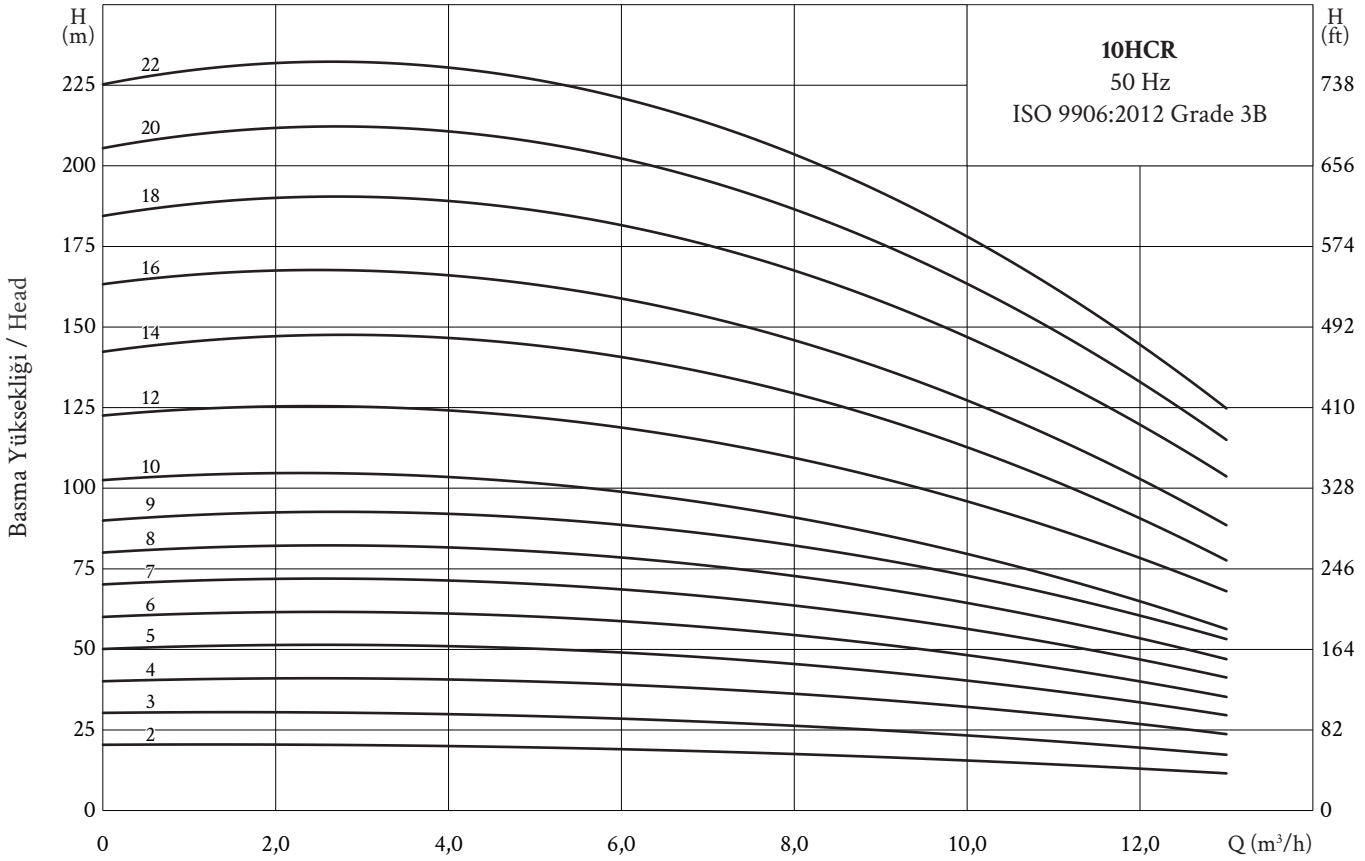
Üçlü / Triple: 2" - 2"

Hidrofor Tipi VMS Pump	Kademe Sayısı Stage No.	HP	kW	V	Basma Yüksekliği / Head (m)							
					I	0 (m³/h)	2	3	4	5	6	7
					II	0 (m³/h)	4	6	8	10	12	14
					III	0 (m³/h)	6	9	12	15	18	21
5HCR 0,5/02	2	0,5	0,37	380	18	17	16	14	12	9	7	
5HCR 0,7/03	3	0,75	0,55	380	29	26	25	23	19	17	13	
5HCR 01/04	4	1	0,75	380	38	35	33	31	26	23	17	
5HCR 1,5/05	5	1,5	1,1	380	49	44	42	39	33	30	22	
5HCR 1,5/06	6	1,5	1,1	380	57	53	51	47	40	36	27	
5HCR 02/07	7	2	1,5	380	68	62	60	55	47	42	33	
5HCR 02/08	8	2	1,5	380	78	71	69	63	54	49	37	
5HCR 03/09	9	3	2,2	380	87	80	77	71	62	55	43	
5HCR 03/10	10	3	2,2	380	96	89	86	80	70	61	49	
5HCR 03/12	12	3	2,2	380	118	107	103	94	84	74	56	
5HCR 04/16	16	4	3	380	156	143	139	128	114	100	77	
5HCR 05/19	19	5,5	4	380	185	170	167	152	136	121	94	
5HCR 05/22	22	5,5	4	380	218	200	190	176	159	137	107	



Emiş - Çıkış / Suction - Outlet Tekli / Single: 1 1/2" - 1 1/2" İkili / Double: 2" - 2" Üçlü / Triple: 2 1/2" - 2 1/2"

Hidrofor Tipi VMS Pump	Kademe Sayısı Stage No.	HP	kW	V	Basma Yüksekliği / Head (m)								
					I	6	7	8	9	10	11	12	13
					II	12	14	16	18	20	22	24	26
					III	18	21	24	27	30	33	36	39
10HCR 01/02	2	1	0,75	380	20	19	18	17	16	15	14	13	11
10HCR 1,5/03	3	1,5	1,1	380	30	28	27	26	25	23	21	19	17
10HCR 02/04	4	2	1,5	380	40	38	37	36	35	32	30	26	23
10HCR 03/05	5	3	2,2	380	50	48	47	45	44	40	37	33	29
10HCR 03/06	6	3	2,2	380	60	58	56	54	52	48	45	40	34
10HCR 04/07	7	4	3	380	70	68	66	63	61	56	52	46	41
10HCR 04/08	8	4	3	380	80	78	75	72	70	64	60	53	46
10HCR 04/09	9	4	3	380	90	88	85	81	79	73	68	60	52
10HCR 05/10	10	5,5	4	380	102	100	95	90	88	80	66	66	58
10HCR 05/12	12	5,5	4	380	122	119	117	108	104	97	80	80	70
10HCR 07/14	14	7,5	5,5	380	142	140	138	128	123	117	92	92	80
10HCR 07/16	16	7,5	5,5	380	163	158	156	144	140	129	106	106	90
10HCR 10/18	18	10	7,5	380	184	181	178	168	160	150	121	121	108
10HCR 10/20	20	10	7,5	380	205	202	198	188	178	163	137	137	118
10HCR 10/22	22	10	7,5	380	225	220	216	205	193	182	148	148	128



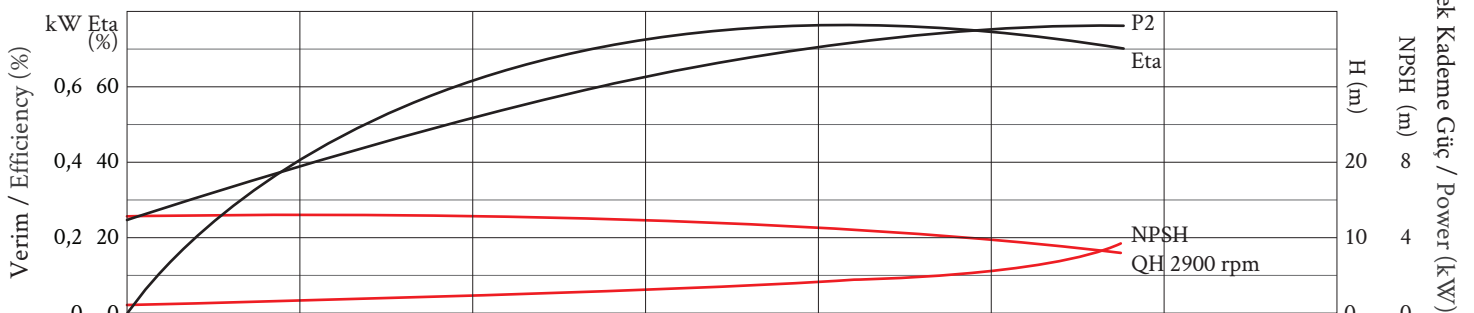
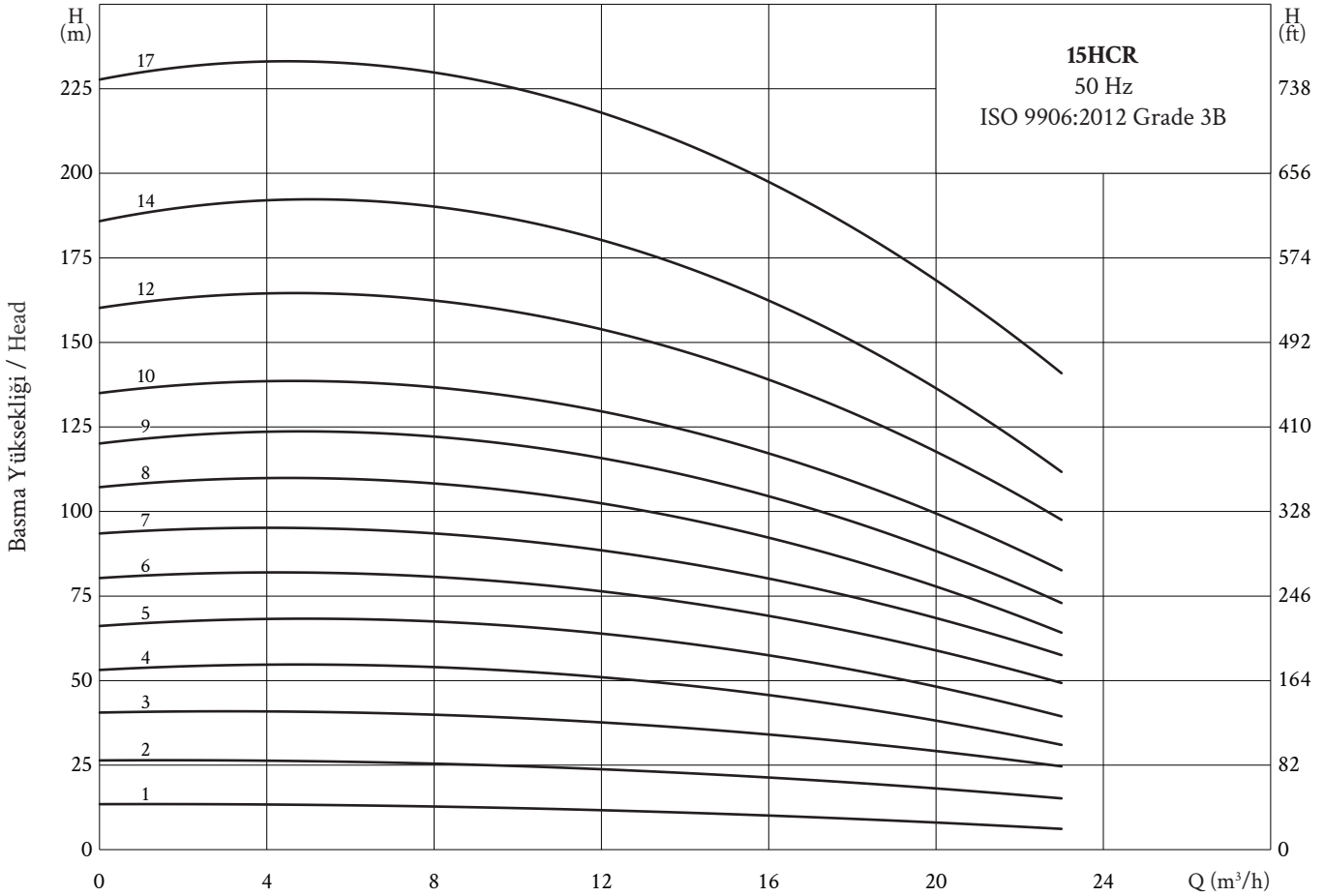
Emiş - Çıkış / Suction - Outlet

Tekli / Single: 2" - 2"

İkili / Double: 2 1/2" - 2 1/2"

Üçlü / Triple: 3" - 3"

Hidrofor Tipi VMS Pump	Kademe Sayısı Stage No.	HP	kW	V	Basma Yüksekliği / Head (m)								
					I	0 (m³/h)	11	13	15	17	19	21	23
					II	0 (m³/h)	22	26	30	34	38	42	46
					III	0 (m³/h)	33	39	45	51	57	63	59
15HCR 1,5/01	1	1,5	1,1	380	13	12	11	10	9	8	7	6	
15HCR 03/02	2	3	2,2	380	26	25	22	21	20	19	18	14	
15HCR 04/03	3	4	3	380	40	39	38	33	31	30	29	24	
15HCR 05/04	4	5,5	4	380	53	51	49	48	44	41	34	31	
15HCR 05/05	5	5,5	4	380	66	64	62	60	56	51	43	40	
15HCR 07/06	6	7,5	5,5	380	80	77	76	71	67	61	53	51	
15HCR 07/07	7	7,5	5,5	380	93	91	87	82	78	70	62	60	
15HCR 10/08	8	10	7,5	380	107	104	100	96	89	81	72	65	
15HCR 10/09	9	10	7,5	380	120	118	112	109	101	92	83	73	
15HCR 15/10	10	15	11	380	135	131	128	121	112	103	97	81	
15HCR 15/12	12	15	11	380	160	157	151	144	134	122	110	99	
15HCR 15/14	14	15	11	380	186	183	176	169	157	142	130	111	
15HCR 20/17	17	20	15	380	228	222	212	205	190	178	160	140	



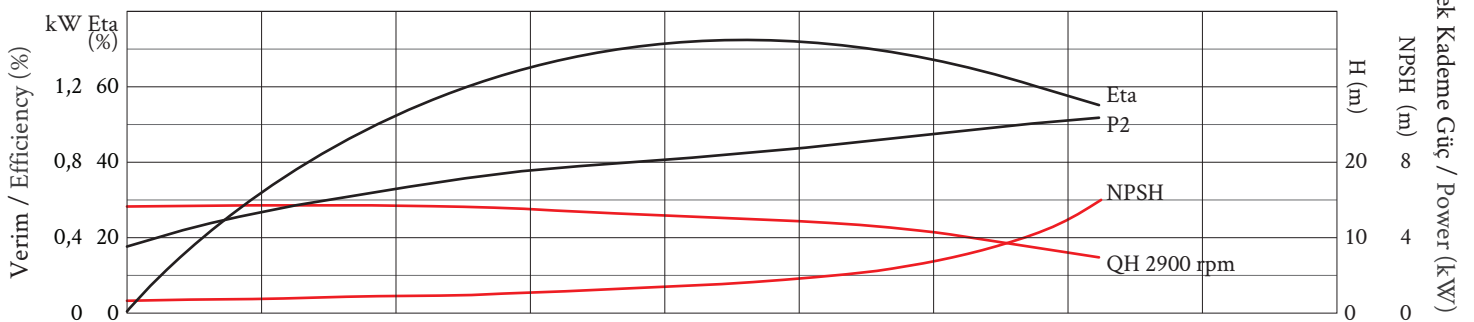
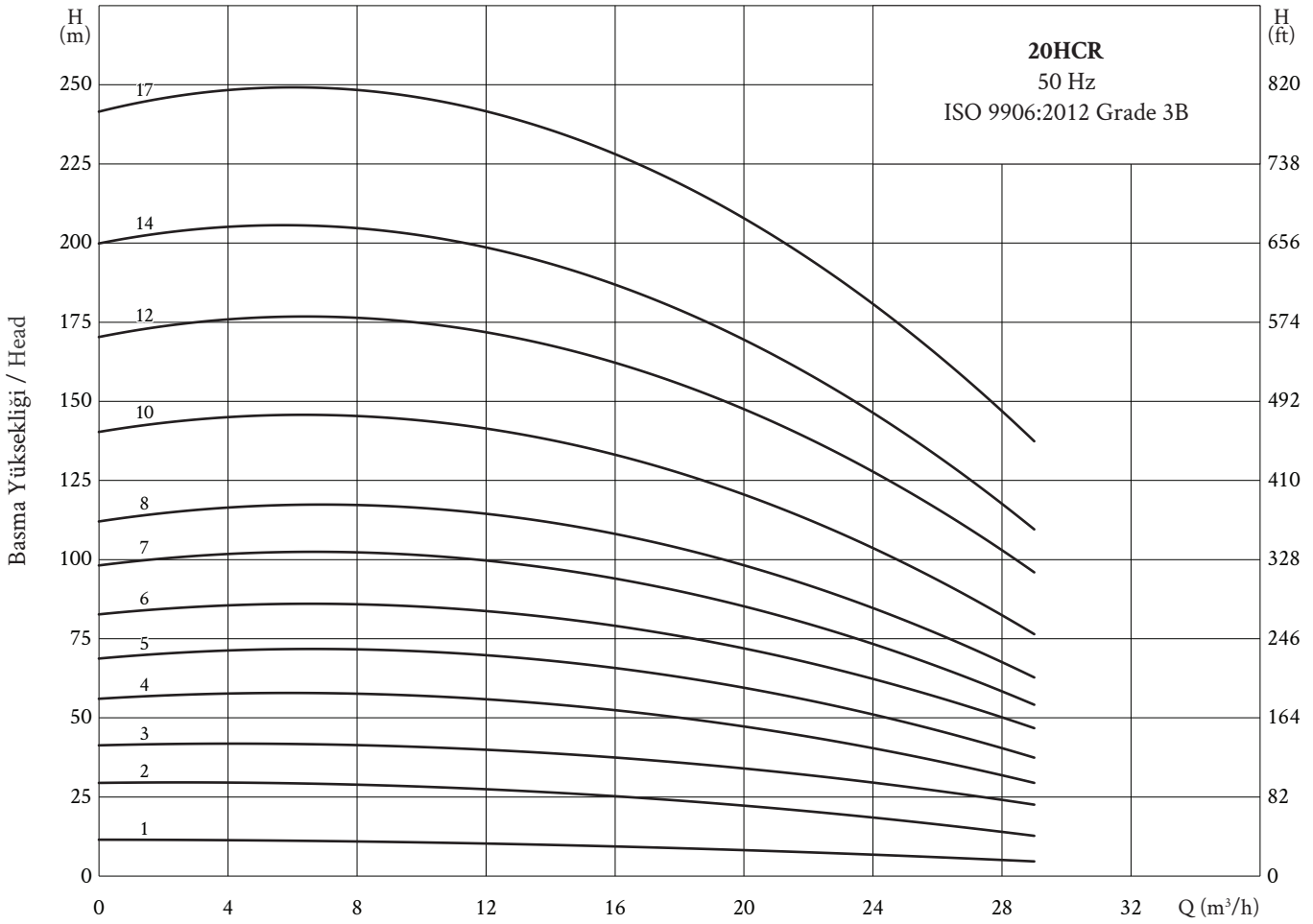
Emiş - Çıkış / Suction - Outlet

Tekli / Single: 2" - 2"

İkili / Double: 2 1/2" - 2 1/2"

Üçlü / Triple: 3" - 3"

Hidrofor Tipi VMS Pump	Kademe Sayısı Stage No.	HP	kW	V	Basma Yüksekliği / Head (m)								
					I	11	13	15	17	19	21	21	23
					II	22	26	30	34	38	42	42	46
					III	33	39	45	51	57	63	63	59
20HCR 1,5/01	1	1,5	1,1	380	11	10	9	8	8	7	6	5	4
20HCR 03/02	2	3	2,2	380	29	27	25	24	21	20	18	14	12
20HCR 05/03	3	5,5	4	380	41	39	37	36	35	30	29	24	22
20HCR 07/04	4	7,5	5,5	380	56	54	52	50	49	43	40	31	29
20HCR 07/05	5	7,5	5,5	380	69	67	66	62	60	58	50	40	36
20HCR 10/06	6	10	7,5	380	83	81	79	75	73	70	61	49	46
20HCR 10/07	7	10	7,5	380	99	97	91	88	86	86	75	57	51
20HCR 15/08	8	15	11	380	113	110	107	104	99	96	85	67	60
20HCR 15/10	10	15	11	380	141	138	133	128	120	115	105	81	75
20HCR 20/12	12	20	15	380	171	169	160	158	149	139	128	103	94
20HCR 20/14	14	20	15	380	200	197	189	179	169	159	145	117	110
20HCR 25/17	17	25	18,5	380	242	239	230	220	207	197	180	143	140



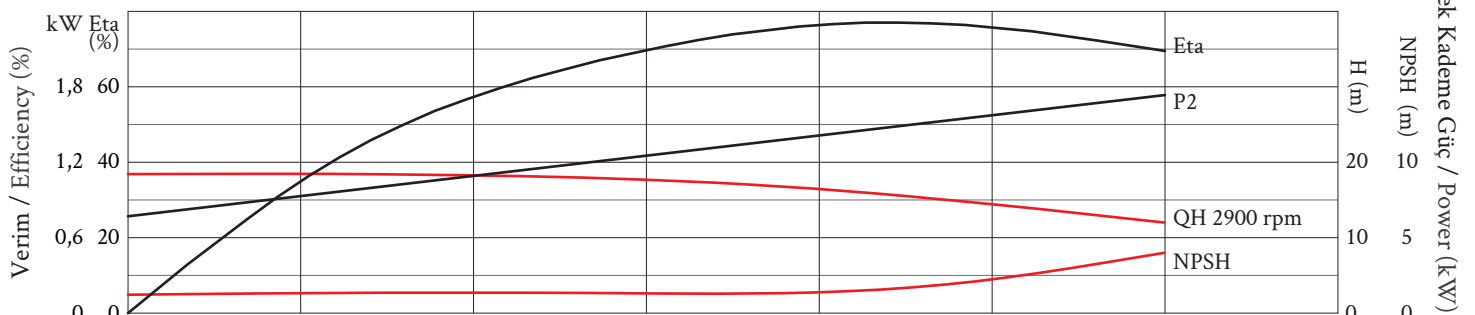
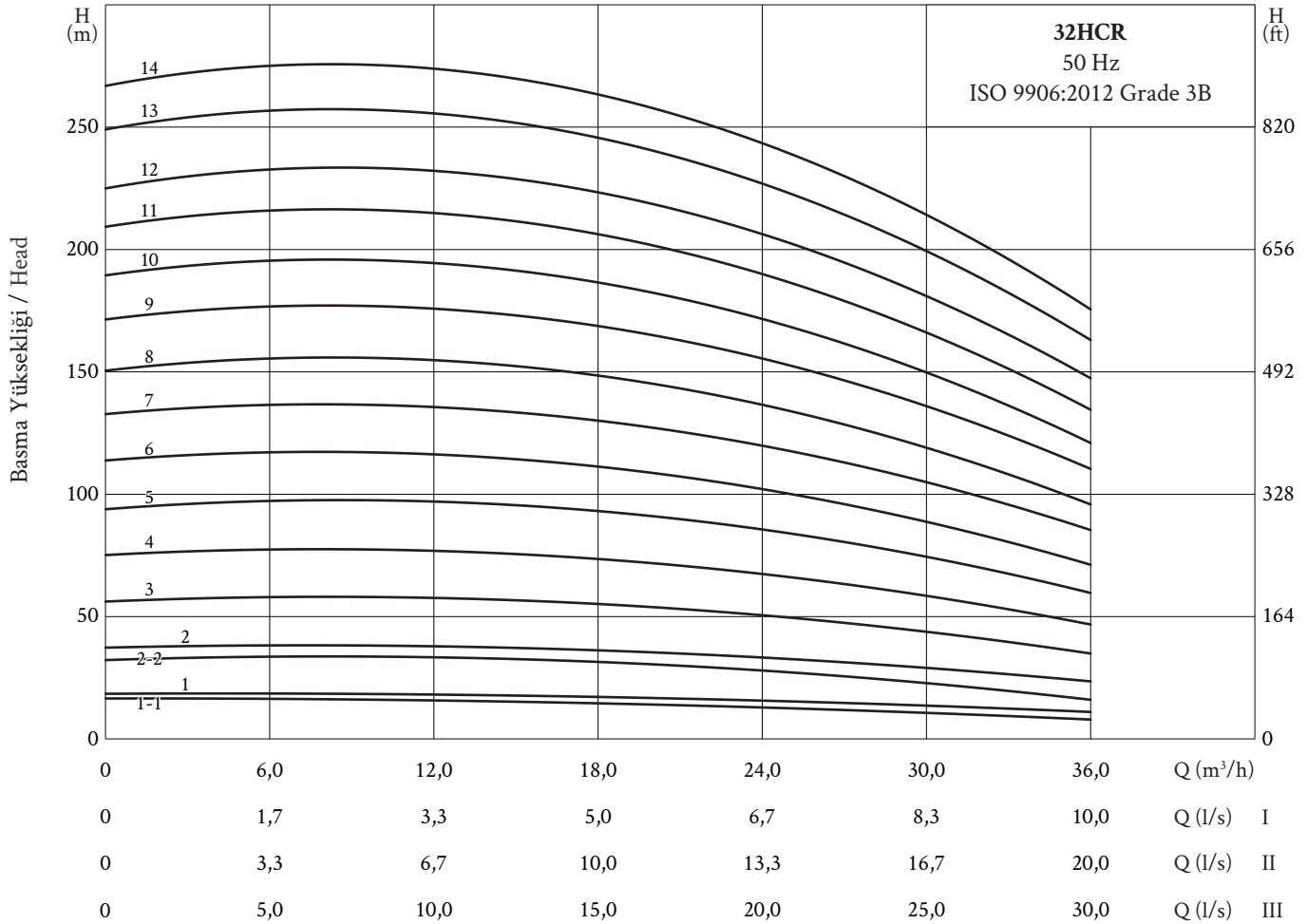
Emiş - Çıkış / Suction - Outlet

Tekli / Single: 2 1/2" - 2 1/2"

İkili / Double: 3" - 3"

Üçlü / Triple: 4" - 4"

Hidrofor Tipi VMS Pump	Kademe Sayısı Stage No.	HP	kW	V	Basma Yüksekliği / Head (m)							
					I	0 (m³/h)	16	20	24	28	32	36
					II	0 (m³/h)	32	40	48	56	64	72
					III	0 (m³/h)	48	60	72	84	96	108
32HCR 02/01-1	1	2	1,5	380	16	15	13	12	11	10	7	
32HCR 03/01	1	3	2,2	380	18	17	16	15	14	13	10	
32HCR 04/02-2	2	4	3	380	32	31	30	27	25	22	14	
32HCR 05/02	2	5,5	4	380	37	36	35	32	31	28	22	
32HCR 07/03	3	7,5	5,5	380	56	55	53	50	47	42	33	
32HCR 10/04	4	10	7,5	380	75	74	71	67	62	56	45	
32HCR 15/05	5	15	11	380	94	93	90	86	79	72	57	
32HCR 15/06	6	15	11	380	114	112	107	102	95	86	68	
32HCR 20/07	7	20	15	380	133	131	126	119	112	102	82	
32HCR 20/08	8	20	15	380	151	149	144	136	128	115	92	
32HCR 25/09	9	25	18,5	380	172	170	163	155	146	132	106	
32HCR 25/10	10	25	18,5	380	190	188	181	172	159	145	117	
32HCR 30/11	11	30	22	380	210	208	200	190	177	161	130	
32HCR 30/12	12	30	22	380	226	224	217	207	193	176	142	
32HCR 40/13	13	40	30	380	250	248	238	227	213	193	158	
32HCR 40/14	14	40	30	380	268	265	256	244	228	208	170	



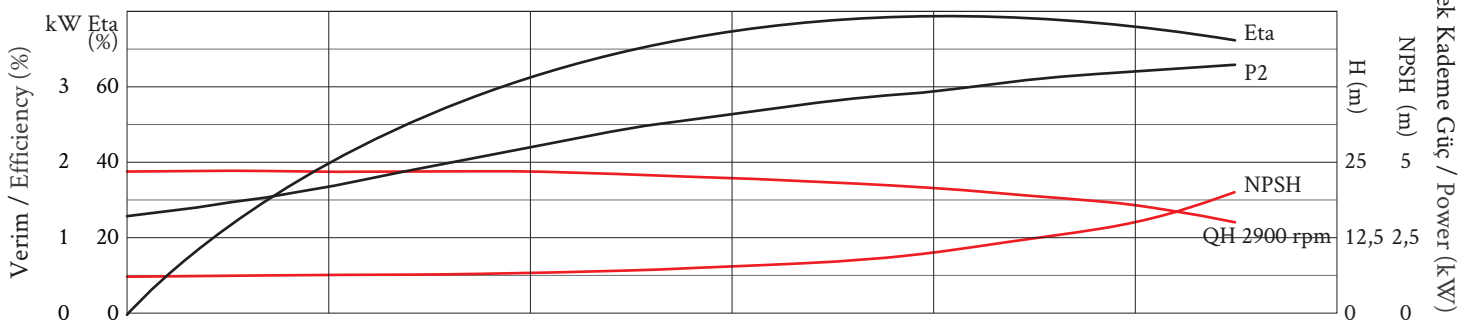
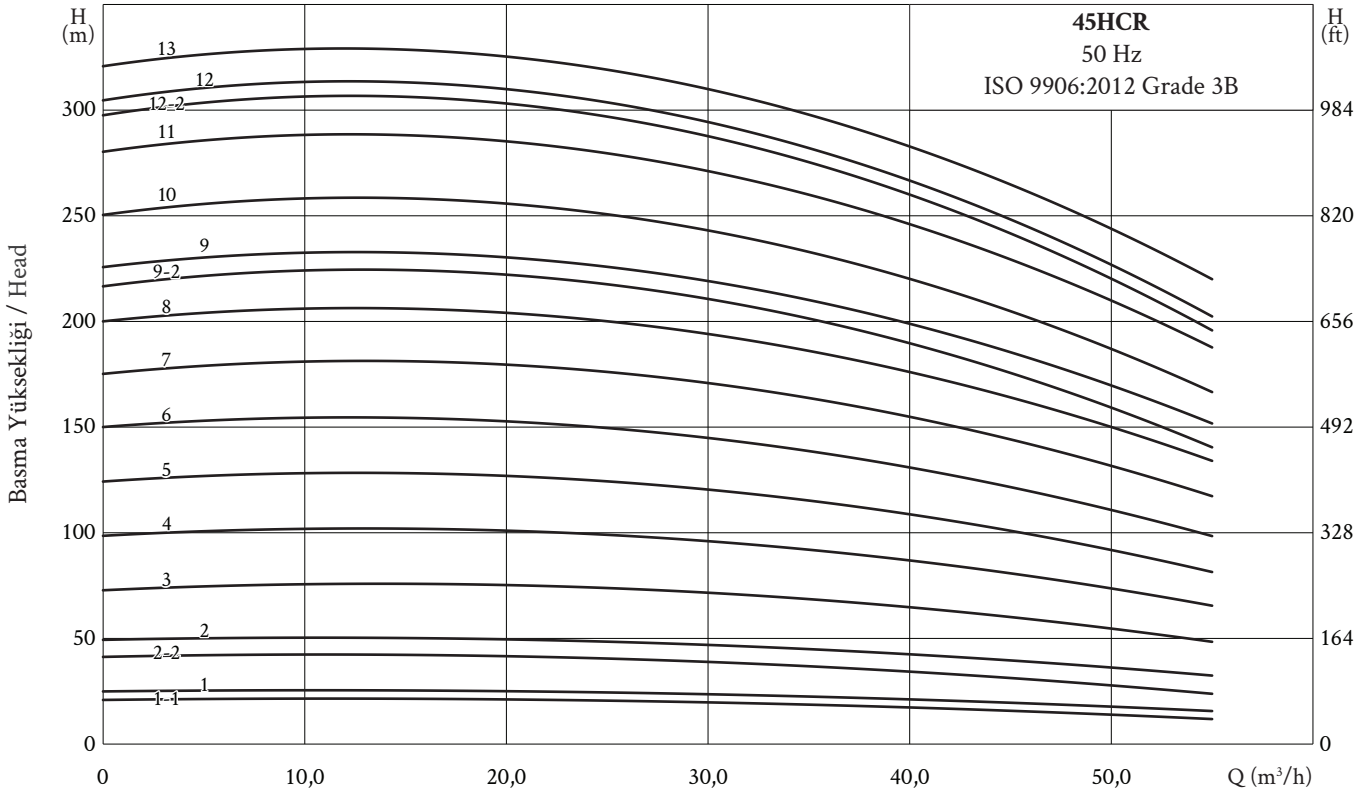
Emiş - Çıkış / Suction - Outlet

Tekli / Single: 3" - 3"

İkili / Double: 4" - 4"

Üçlü / Triple: 5" - 5"

Hidrofor Tipi VMS Pump	Kademe Sayısı Stage No.	HP	kW	V	Basma Yüksekliği / Head (m)								
					I	0 (m/h)	25	30	35	40	45	50	55
					II	0 (m/h)	50	60	70	80	90	100	110
					III	0 (m/h)	75	90	105	120	135	150	165
45HCR 04/01-1	1	4	3	380	21	20	19	18	17	16	13	11	
45HCR 05/01	1	5,5	4	380	25	24	23	22	21	19	17	15	
45HCR 07/02-2	2	7,5	5,5	380	42	40	38	37	34	31	27	23	
45HCR 10/02	2	10	7,5	380	50	48	47	45	42	38	36	32	
45HCR 15/03	3	15	11	380	74	72	72	68	65	59	54	48	
45HCR 20/04	4	20	15	380	100	98	96	92	87	80	73	65	
45HCR 25/05	5	25	18,5	380	126	124	120	115	109	101	92	80	
45HCR 30/06	6	30	22	380	152	150	145	138	131	122	111	97	
45HCR 40/07	7	40	30	380	178	175	171	164	155	144	132	116	
45HCR 40/08	8	40	30	380	203	200	194	187	176	164	150	133	
45HCR 40/09-2	9	40	30	380	220	217	211	202	190	176	158	140	
45HCR 50/09	9	50	37	380	229	226	219	211	198	187	170	150	
45HCR 50/10	10	50	37	380	254	251	244	233	220	205	188	165	
45HCR 60/11	11	60	45	380	284	281	272	261	246	229	210	187	
45HCR 60/12-2	12	60	45	380	302	298	289	276	260	242	220	195	
45HCR 60/12	12	60	45	380	310	304	295	282	268	250	226	201	
45HCR 60/13	13	60	45	380	326	320	310	300	284	265	242	220	



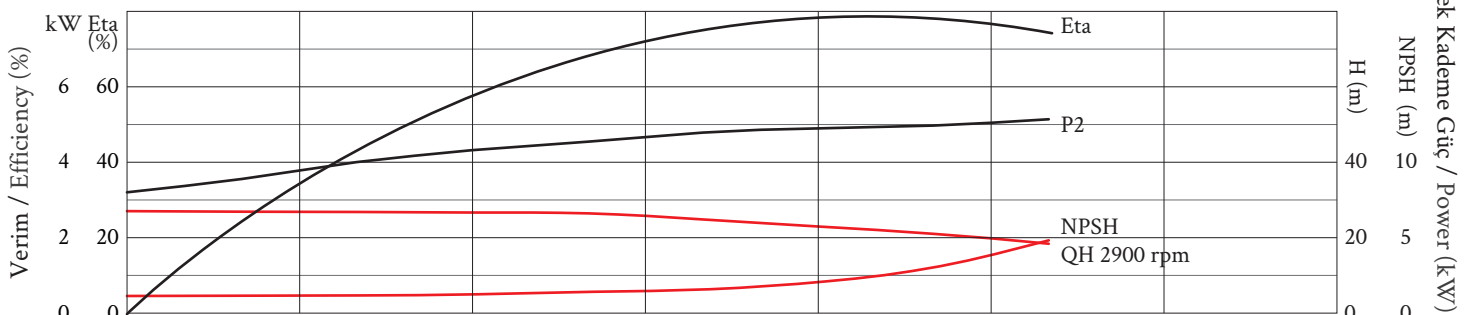
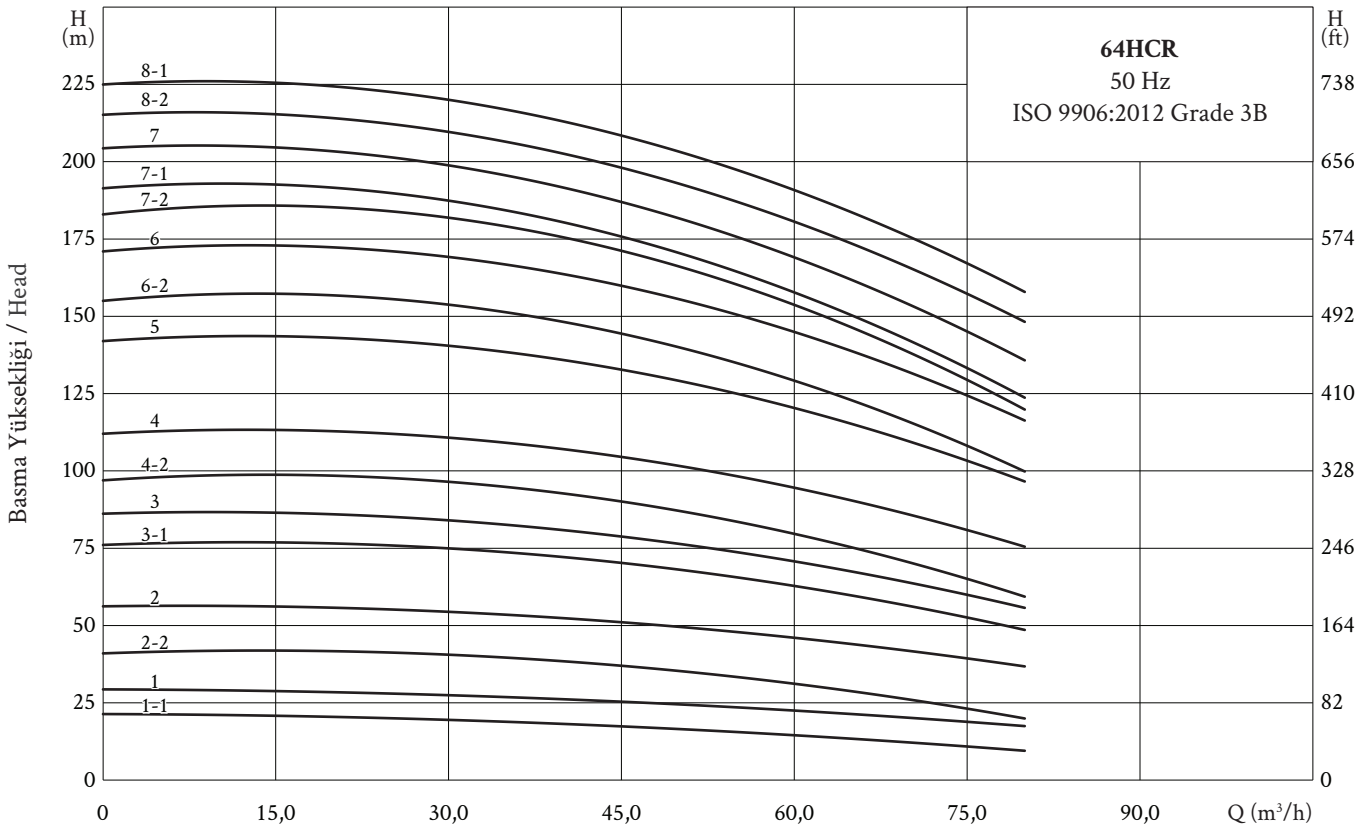
Emiş - Çıkış / Suction - Outlet

Tekli / Single: 4" - 4"

İkili / Double: 5" - 5"

Üçlü / Triple: 6" - 6"

Hidrofor Tipi VMS Pump	Kademe Sayısı Stage No.	HP	kW	V	Basma Yüksekliği / Head (m)							
					I	0 (m³/h)	30	40	50	60	70	80
					II	0 (m³/h)	60	80	100	120	140	160
					III	0 (m³/h)	90	120	150	180	210	240
64HCR 05/01-1	1	5,5	4	380	21	19	18	16	14	12	9	
64HCR 07/01	1	7,5	5,5	380	29	27	26	24	22	20	17	
64HCR 10/02-2	2	10	7,5	380	41	39	38	36	31	26	19	
64HCR 15/02	2	15	11	380	56	54	52	49	46	42	36	
64HCR 20/03-1	3	20	15	380	76	74	72	68	63	56	48	
64HCR 25/03	3	25	18,5	380	86	84	80	76	71	64	55	
64HCR 25/04-2	4	25	18,5	380	97	95	93	88	79	70	59	
64HCR 30/04	4	30	22	380	112	110	107	102	94	86	75	
64HCR 40/05	5	40	30	380	142	140	136	129	120	110	96	
64HCR 40/06-2	6	40	30	380	155	153	149	140	129	115	100	
64HCR 50/06	6	50	37	380	171	169	164	155	145	132	116	
64HCR 50/07-2	7	50	37	380	183	181	177	166	153	138	120	
64HCR 50/07-1	7	50	37	380	191	189	180	170	158	140	125	
64HCR 60/07	7	60	45	380	204	200	192	181	169	152	137	
64HCR 60/08-2	8	60	45	380	215	210	204	192	180	165	149	
64HCR 60/08-1	8	60	45	380	225	220	213	205	190	174	159	



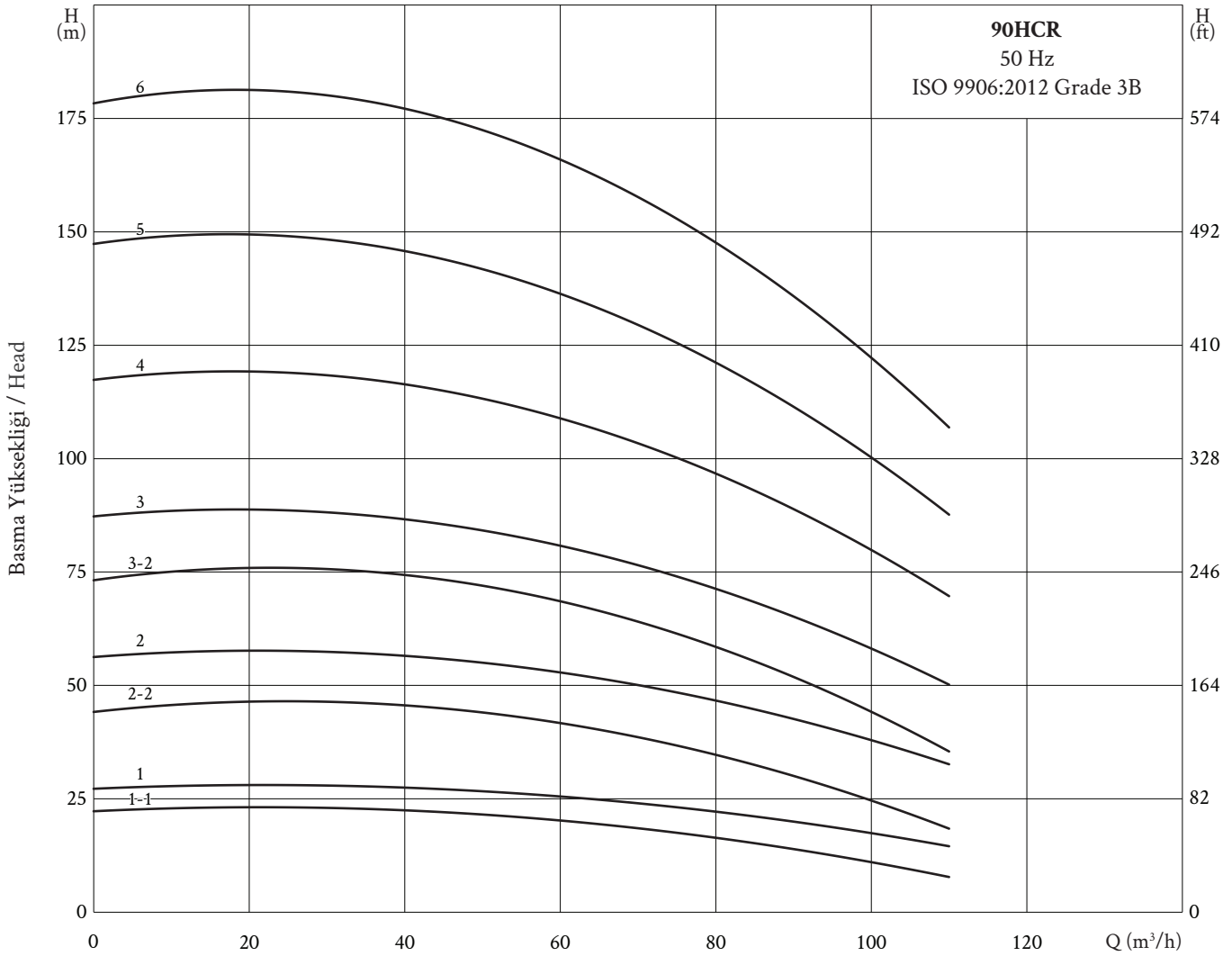
Emiş - Çıkış / Suction - Outlet

Tekli / Single: 4" - 4"

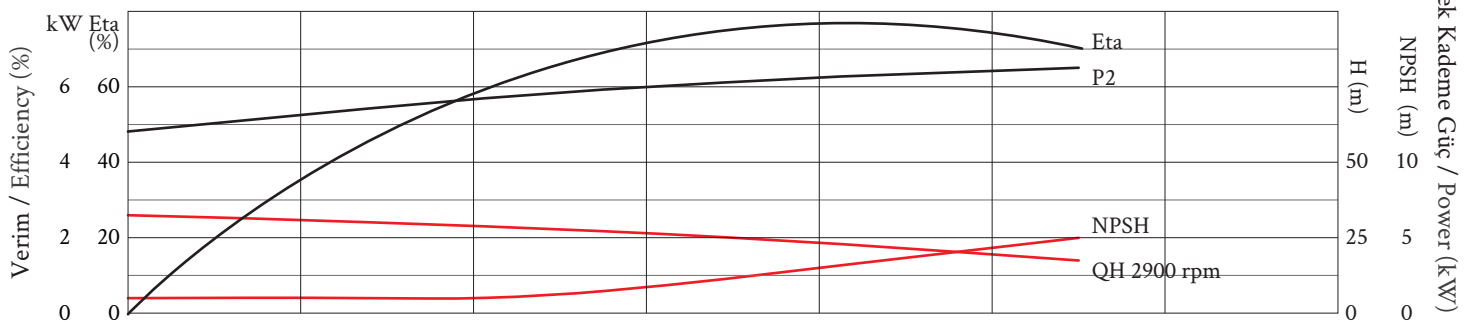
İkili / Double: 5" - 5"

Üçlü / Triple: 5" - 5"

Hidrofor Tipi VMS Pump	Kademe Sayısı Stage No.	HP	kW	V	Basma Yüksekliği / Head (m)								
					I	0 (m³/h)	50	60	70	80	90	100	110
					II	0 (m³/h)	100	120	140	160	180	200	220
					III	0 (m³/h)	150	180	210	240	270	300	330
90HCR 07/01-1	1	7,5	5,5	380	22	21	20	18	16	14	11	7	
90HCR 10/01	1	10	7,5	380	27	26	25	24	22	20	17	14	
90HCR 15/02-2	2	15	11	380	44	43	42	38	35	30	24	18	
90HCR 20/02	2	20	15	380	56	55	53	49	46	43	38	32	
90HCR 25/03-2	3	25	18,5	380	73	72	68	64	58	52	44	35	
90HCR 30/03	3	30	22	380	87	85	80	76	71	65	58	50	
90HCR 40/04	4	40	30	380	117	115	108	103	96	88	80	70	
90HCR 50/05	5	50	37	380	147	144	136	128	120	112	100	88	
90HCR 60/06	6	60	45	380	178	175	166	156	146	136	123	107	

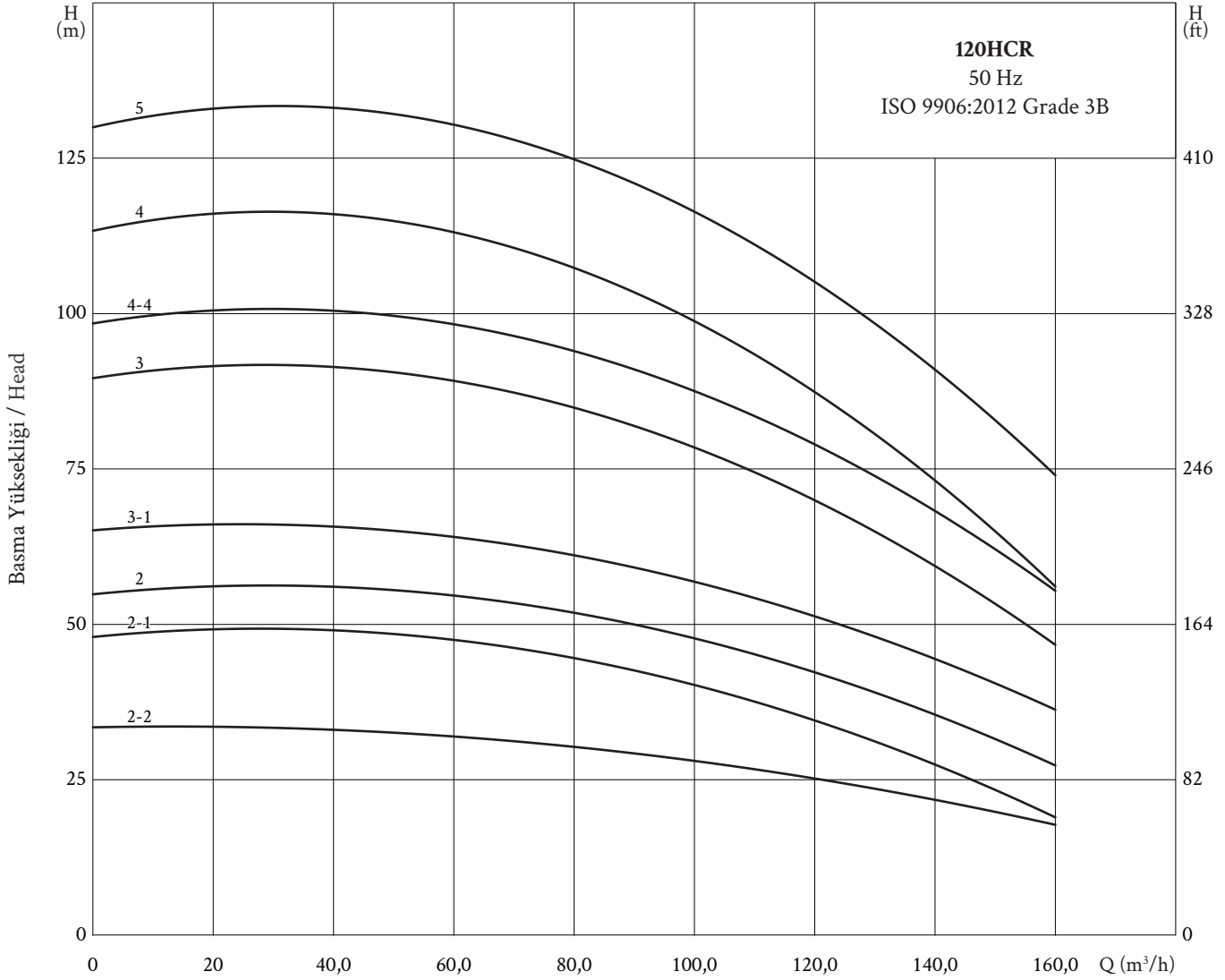


0	20	40	60	80	100	120	Q (m³/h)
0	5,6	11,1	16,7	22,2	27,8	33,3	Q (l/s) I
0	11,1	22,2	33,3	44,4	55,6	66,7	Q (l/s) II
0	16,7	33,3	50,0	66,7	83,3	100,0	Q (l/s) III

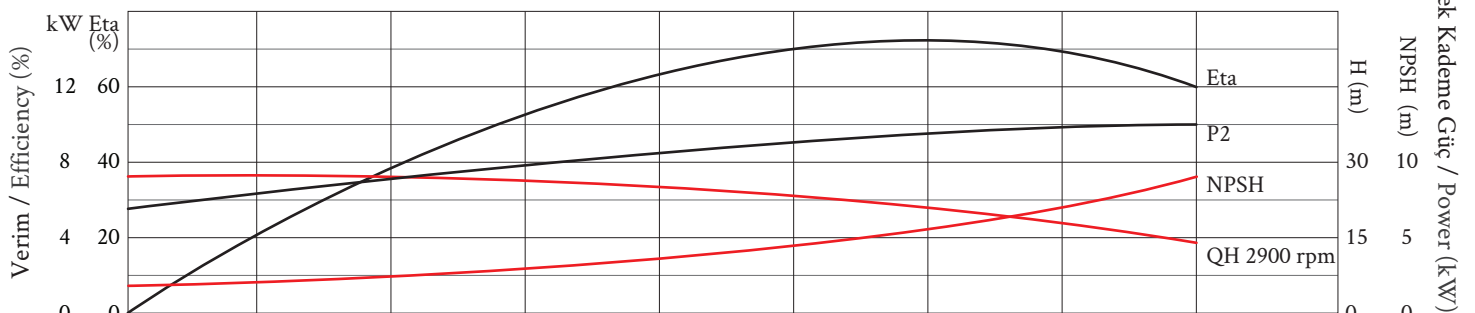


Emiş - Çıkış / Suction - Outlet Tekli / Single: 5" - 5" İkili / Double: 6" - 6" Üçlü / Triple: 8" - 8"

Hidrofor Tipi VMS Pump	Kademe Sayısı Stage No.	HP	kW	V	I II III	Basma Yüksekliği / Head (m)							
						0 (m³/h)	40	60	80	100	120	140	160
						0 (m³/h)	80	120	160	200	240	280	320
						0 (m³/h)	120	180	240	300	360	420	480
120HCR 20/02-2	2	20	15	380	34	32	31	30	28	26	23	16	
120HCR 25/02-1	2	25	18,5	380	49	47	46	45	42	35	27	18	
120HCR 30/02	2	30	22	380	56	54	53	52	49	44	35	26	
120HCR 40/03-1	3	40	30	380	66	64	63	62	57	52	45	35	
120HCR 50/03	3	50	37	380	91	89	88	85	80	71	60	45	
120HCR 50/04-2	4	50	37	380	100	98	97	94	89	80	70	53	
120HCR 60/04	4	60	45	380	115	113	112	108	100	90	72	55	
120HCR 75/05	5	75	55	380	132	130	129	125	118	108	91	72	



0	20	40,0	60,0	80,0	100,0	120,0	140,0	160,0	Q (m³/h)	
0	5,6	11,1	16,7	22,2	27,8	33,3	38,9	44,4	Q (l/s)	I
0	11	22	33	44	56	67	78	89	Q (l/s)	II
0	17	33	50	67	83	100	117	133	Q (l/s)	III



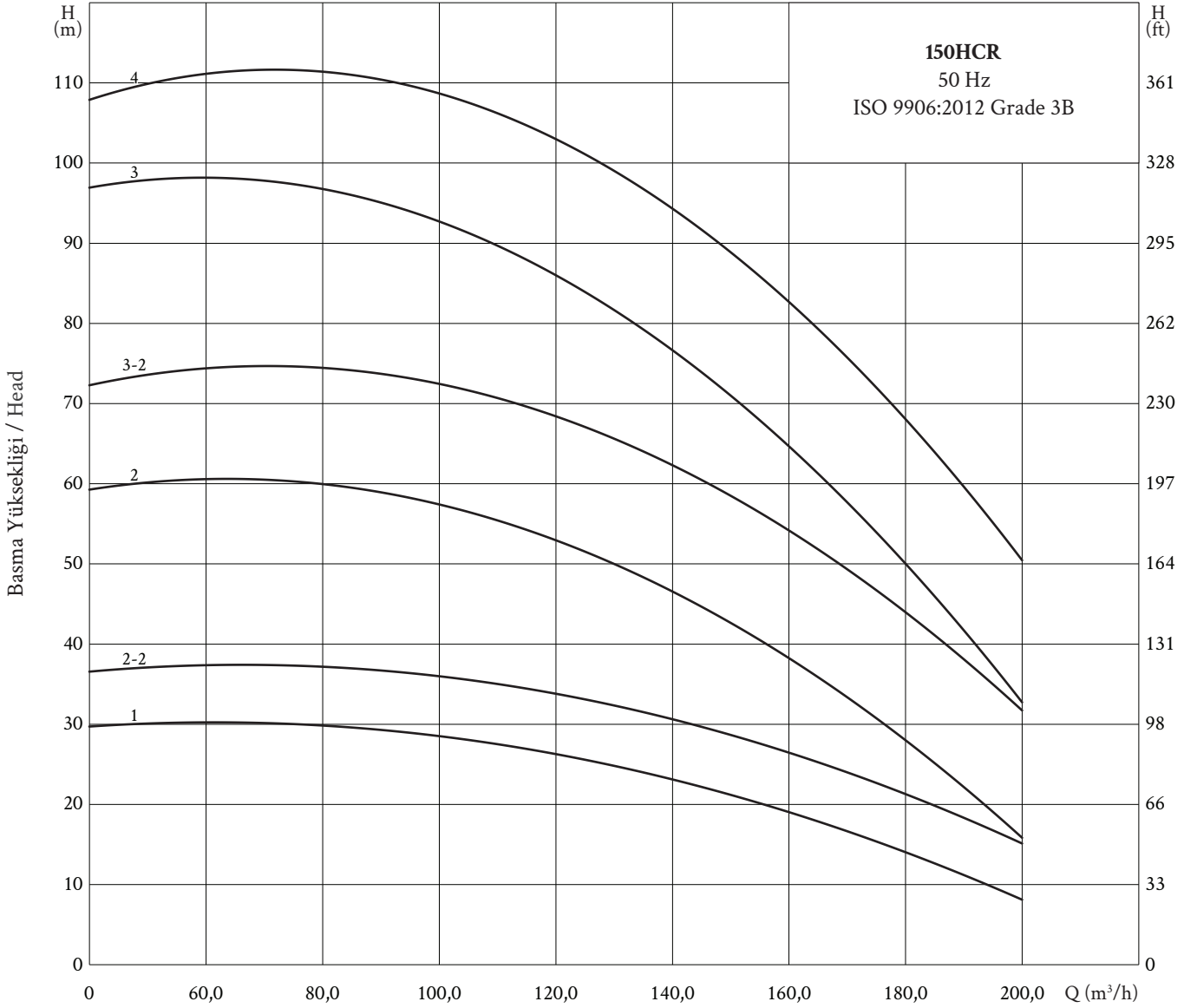
Emiş - Çıkış / Suction - Outlet

Tekli / Single: 5" - 5"

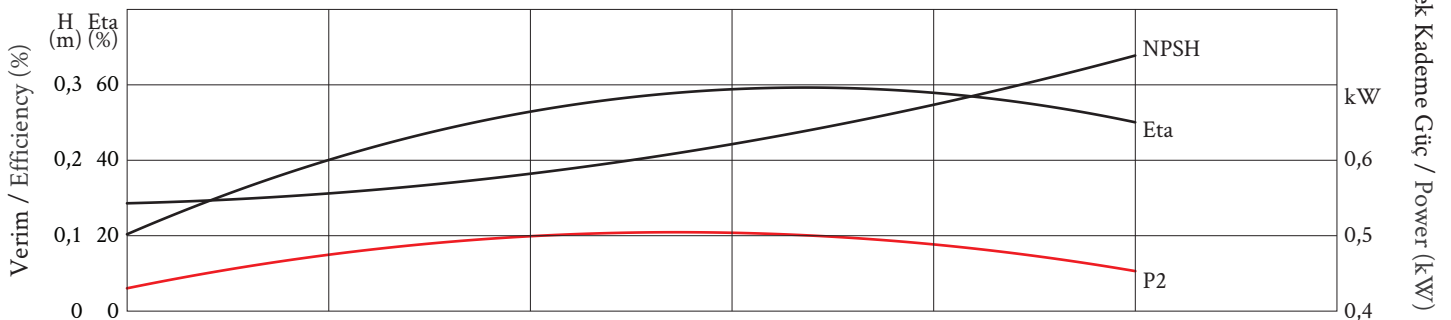
İkili / Double: 6" - 6"

Üçlü / Triple: 8" - 8"

Hidrofor Tipi VMS Pump	Kademe Sayısı Stage No.	HP	kW	V	Basma Yüksekliği / Head (m)									
					I	0 (m ³ /h)	60	80	100	120	140	160	180	200
					II	0 (m ³ /h)	120	160	200	240	280	320	360	400
					III	0 (m ³ /h)	180	240	300	360	420	480	540	600
150HCR 20/01	1	20	15	380	30	29	27	26	24	21	18	13	7	
150HCR 30/02-2	2	30	22	380	37	36	35	33	32	28	25	22	13	
150HCR 40/02	2	40	30	380	60	58	55	53	49	43	35	25	15	
150HCR 50/03-2	3	50	37	380	74	72	69	67	65	60	52	45	27	
150HCR 60/03	3	60	45	380	98	95	89	85	80	71	61	48	30	
150HCR 75/04-1	4	75	55	380	110	108	105	102	98	90	80	67	46	



0	60,0	80,0	100,0	120,0	140,0	160,0	180,0	200,0	Q (m ³ /h)	
0	16,7	22,2	27,8	33,3	38,9	44,4	50,0	55,6	Q (l/s)	I
0	33,3	44,4	55,6	66,7	77,8	88,9	100,0	111,1	Q (l/s)	II
0	50,0	66,7	83,3	100,0	116,7	133,3	150,0	166,7	Q (l/s)	III



Günlük Tüketim	Daily Consumption	Kişi Başı Lt/Gün L/Day per Person
Toplu Konut	Collective Housing	150-200
Villa - Yazlık	Summer House	200-250
Hastane	Hospital	200-400
Otel	Hotel	200-300
Okul	School	5-20
İş Yerleri	Workplaces	30-50
Yatılı Okul	Boarding School	100-150

Eş Zamanlı Su Tüketim Faktörü	Simultaneous Water Consumption Factor	Tip Type	"K" Faktörü "K" Factor
Konutlar (Daire)	Housing (flat)	1-5	0,66
		6-10	0,45
		11-20	0,40
		21-50	0,35
		51-100	0,30
		+100	0,25
Oteller (Yatak)	Hotels (Bed)	1-20	0,40
		21-50	0,40-0,30
		+50	0,30-0,20
Hastaneler (Yatak)	Hospitals (Bed)	50-500	0,30-0,20
		501-1000	0,20-0,15
		1001-2000	0,15-0,10
İş Merkezleri	Working Centers		0,30
Çocuk Yuvaları	Kindergarden		0,40
Kışlalar	Barracks		0,40-0,30
Okullar	Schools		0,30

Basınç ve Debi Hesaplama

$$H_{min} (mSS) = "H" + "H_k" + "H_c"$$

H: Hidroforun yerleştirildiği yer ile binanın su basılacak en üst noktası arasındaki kot farkı 'metre' ("kat sayısı" x "kat yüksekliği")

H_k: Tesisattaki vana, dirsek, su sayacı, boru vs. kayıpları toplamı 'metre' (Genellikle toplam "h" yüksekliğinin % 20'si olarak alınır.)

H_c: Binanın üst seviyesinde olması istenen çıkış basıncıdır. Genellikle 10-15 m arası alınır.

$$Q_{min} (m^3/h) = "Daire sayısı" \times "Dairedeki kişi sayısı" \times "Kişi basma tüketim" \times "K/100"$$

Head and Flow Calculation

H: Elevator difference between placement of pump and highest pressure point.

H_k: Sum of losses for valves, pipes, elbows, water meters etc. (m). Generally 20 % of total height (h) is taken.

H_c: The needed outlet pressure. Generally takes 10-15 m.

$$Q_{min} (m^3/h) = "Number of Flats" \times "Resident number of flat" \times "per Person" \times "K/100"$$

Kişi Başı Günlük Tüketim**Örnek Hesaplama**

6 katlı, 200 yataklı bir hastane binası için; basınç, debi tayini ve pompa seçimi.

Oda Sayısı:	60
Odadaki Kişi Sayısı:	4
Kişi Başı Günlük Tüketim:	300 lt
Eş Zamanlı Kullanım Faktörü:	0,300 mss

$$H: 6 \text{ kat} \times 3 \text{ m (1 kat yüksekliği)} = 18 \text{ m}$$

$$H_k: h \times 0,20 = 18 \times 0,20 = 3,6 \text{ m}$$

$$\text{Gerekli Minimum Basınç "Hmin (mSS)" = } 18 + 3,6 + 10 = 31,6 \text{ mSS} = 3,16 \text{ bar}$$

$$\text{Gerekli Debi "Q" = } 60 \times 4 \times 200 \times (0,30 / 1000) = 14,4 \text{ m}^3/\text{sa}$$

Seçilen Pompa = - 49HSD 1,5/09 (Üçlü)(Triple)
Selected Pump - 5HCR 1,5/05 (Üçlü)(Triple)

Daily Consumption Per Person**Sample Calculation**

Pump selection, pressure and flow determination for, 6 floors 200 bed hospital building.

Room Number:	60
Nubmer of People in the Room:	4
Daily Consumption Per Person:	300 lt
Simultaneous Water Consumption Factor	0,300 mss

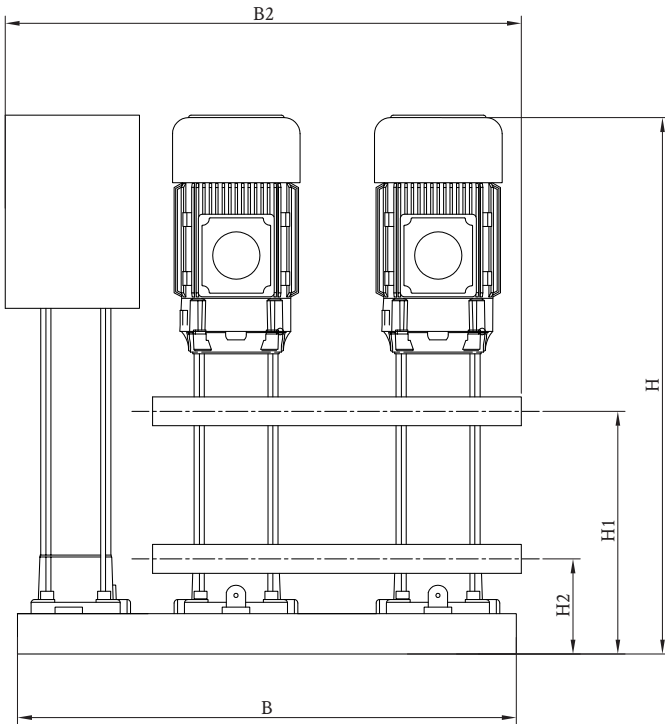
$$H: 6 \text{ floor} \times 3 \text{ m (1 floor height)} = 18 \text{ m}$$

$$H_k: h \times 0,20 = 18 \times 0,20 = 3,6 \text{ m}$$

$$\text{Required Minimum Pressure "Hmin (mSS)" = } 18 + 3,6 + 10 = 31,6 \text{ mSS} = 3,16 \text{ bar}$$

$$\text{Required Flow} = 60 \times 4 \times 200 \times (0,30 / 1000) = 14,4 \text{ m}^3/\text{h}$$

- 624HSM 03/04 (Tekli)(Single)
- 15HCR 04/03 (Tekli)(Single)

Ölçüler / Dimensions**NORİL HİDROFOR POMPA
NORYL VMS PUMPS****IN-LINE PASLANMAZ HİDROFOR POMPA
IN-LINE STAINLESS STEEL VMS PUMPS**