

# NORM®



## **NSP Serisi Tek Kademeli Santrifüj Pompalar**

## TEK KADEMELİ SANTRİFÜJ POMPALAR

### NSP Serisi Pompalar;

İçinde katı parçacık ve elyaf bulunmayan, aşındırıcı olmayan, temiz veya çok hafif kirli, düşük viskozitesi olan sıvıların pompalanması için tasarlanmıştır.

### İşletme Bilgileri

Emme Flanşı	: DN 50 / DN 300
Basma Flanşı	: DN 32 / DN 250
Q (Debi)	: 1700 m <sup>3</sup> /h' (max)
H (Basma Yüksekliği)	: 100 m (max)
Hız (Motor Devri)	: 1450 d/dk. - 2900 d/dk.'a - 3600 d/dk.'a kadar
t (Çalışma Sıcaklığı) *	: -10 °C (min.)/+140 °C (max.)
Pd (Gövde Basıncı Pmax)	: (10-16 bar)
Dönüş Yönü (Motor)	: Saat Yönünde (Sağ)

(Pmaks : Emme Basıncı + Kapalı Vanadaki Basma Yüksekliği)

(\*) Basılan sıvının cinsine, çalışma sıcaklığı ve basıncına bağlı olarak pompa malzemesi farklılık gösterir.

Ayrıntılı bilgi için firmamıza başvurunuz.



### Teknik Özellikler

- Yatay millî, tek kademeli, uçtan emişli, kapalı çarklı salyangoz santrifüj pompalar.
- Gövde Boyutları TS EN 733 standartlarına uygundur.
- NSP tipi pompalarda bakım gerektirmeyen kapalı tip rulmanlı yataklar kullanılmaktadır.
- Mil sızdırmazlığı yumuşak salmastra ile sağlanmaktadır, isteğe ve basılan sıvının cinsine göre mekanik salmastralı pompalarda imal edilebilir.
- TS EN 733 standartlarına uygun 29 modele ek olarak 25 adet standart dışı model.
- Standart dışı modellerin boyutları diğer üreticilerin modellerinden farklı olabilir.
- Emme ve basma flanşları TS EN 1092-2/PN 16'ya uygundur.
- Arkadan sökülebilir tasarım sayesinde, salyangozu boru tesisatından ayırmadan yatak grubu, salmastra yatağı, pompa mili ve çarkı sökülebilir.
- Bütün çarklar ISO 1940 sınıf 6.3'e uygun dinamik olarak dengelenmiştir.
- Eksenel kuvvet arka aşınma halkası/ dengeleme delikleri sistemi ile dengelenmiştir.

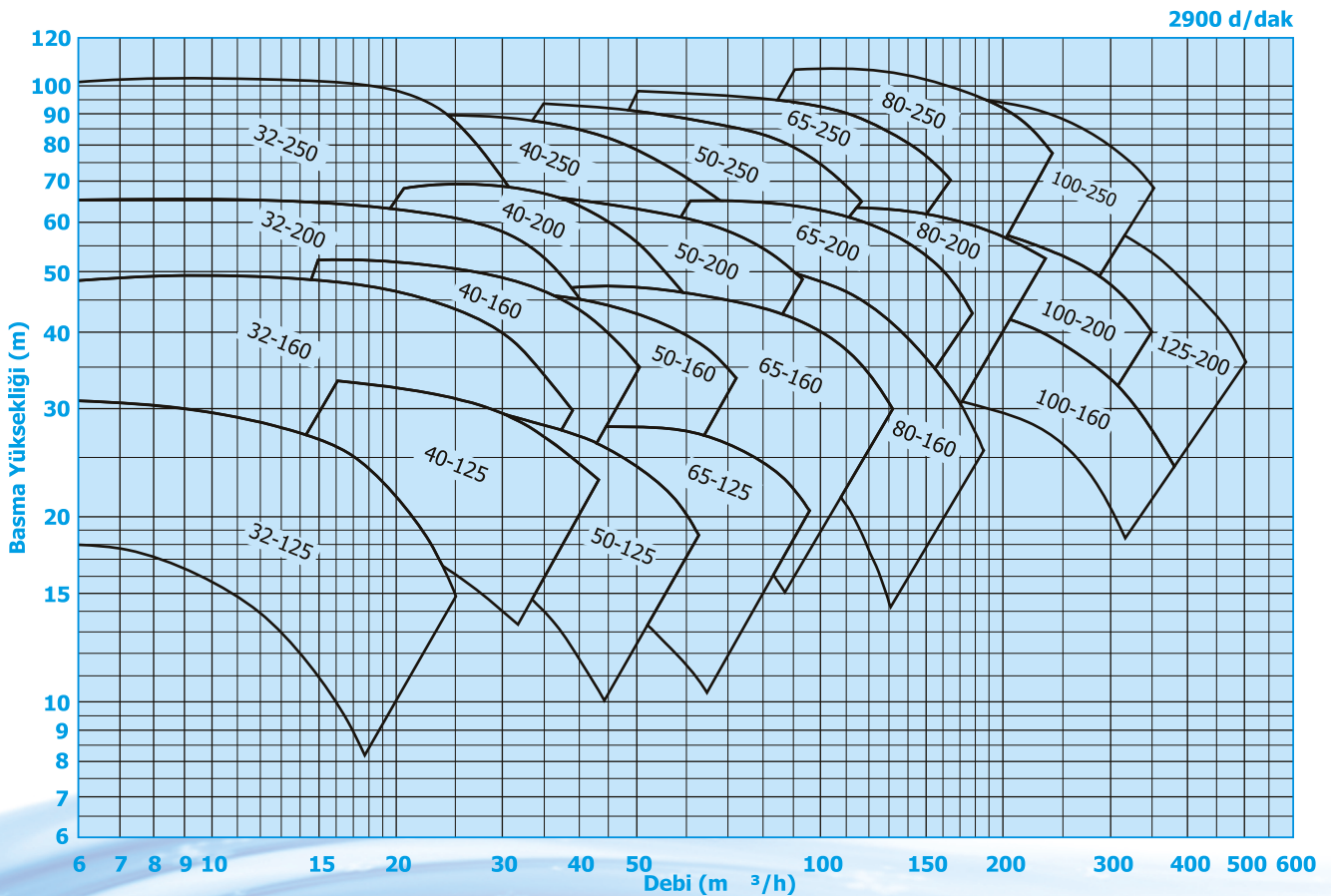
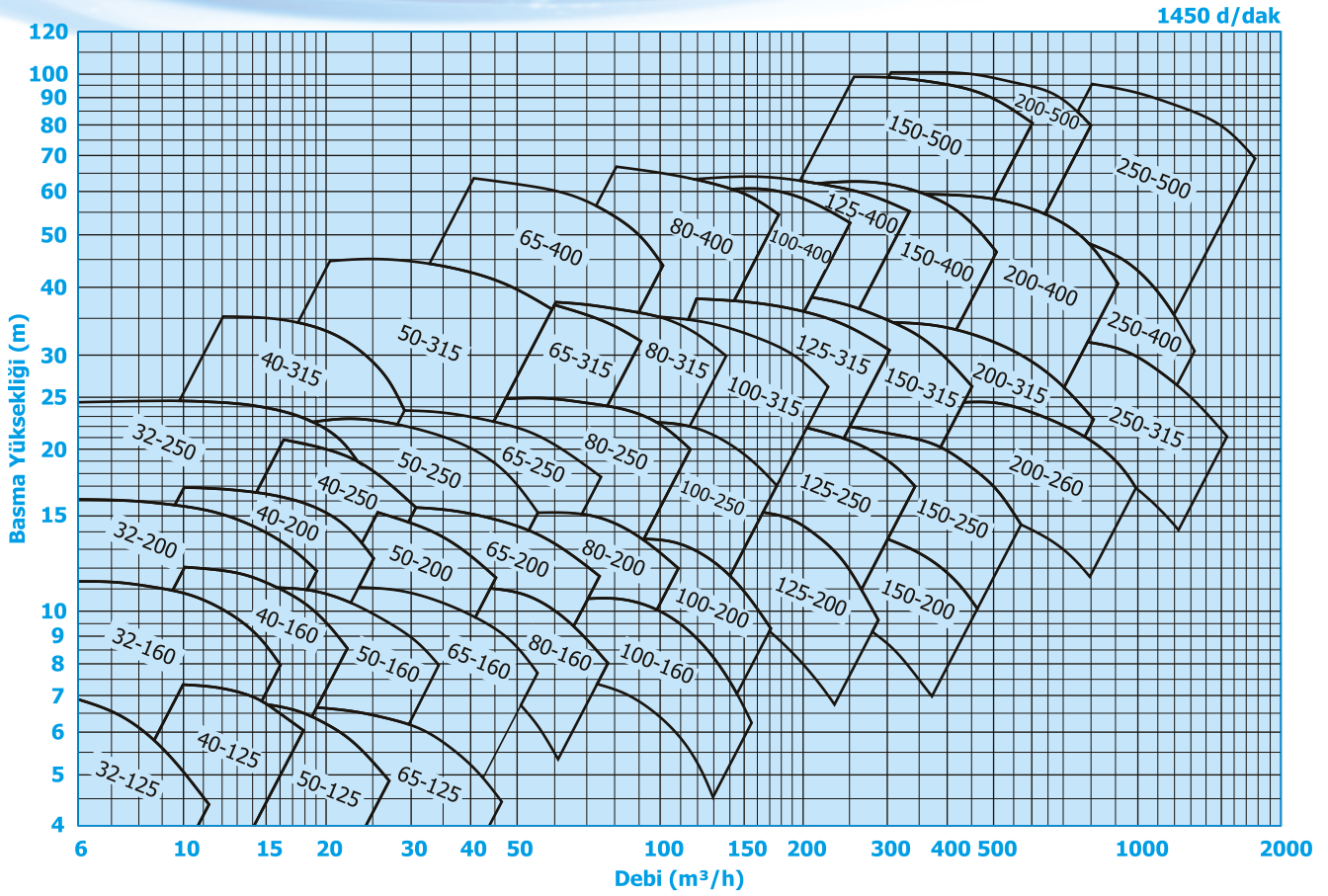
### Pompa Tanımı

Pompa Tipi  
Basma Flanşı DN (mm)  
Çark Anma Çapı (mm)

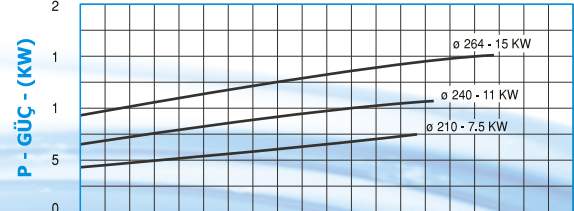
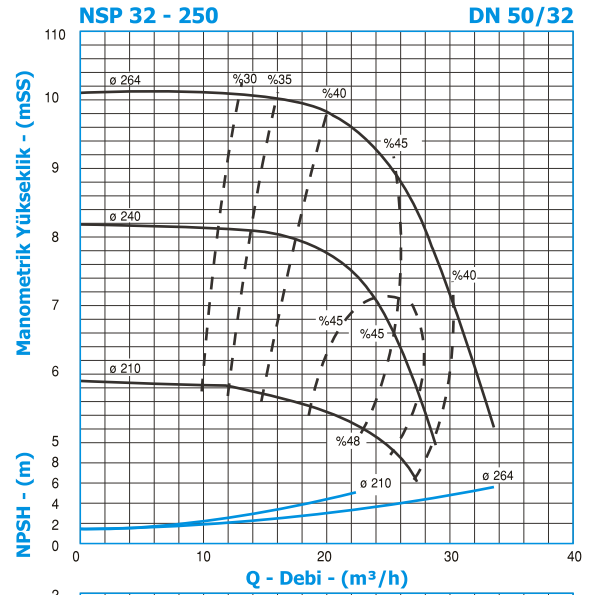
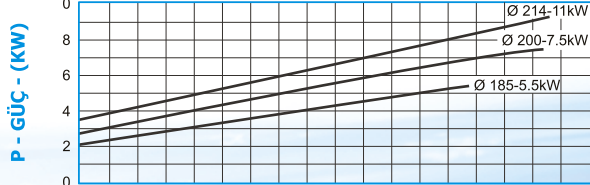
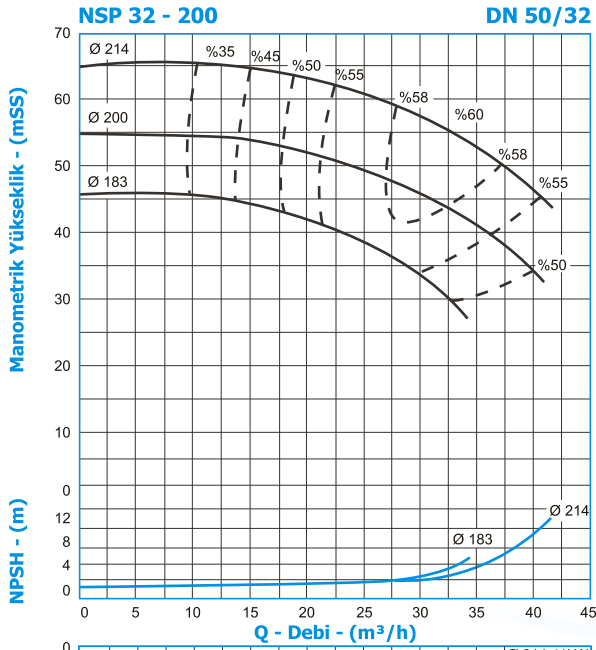
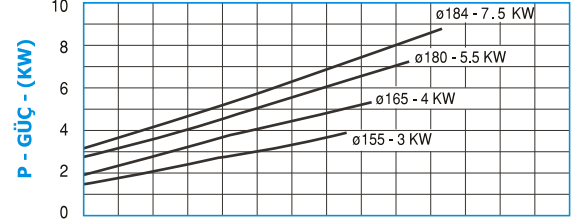
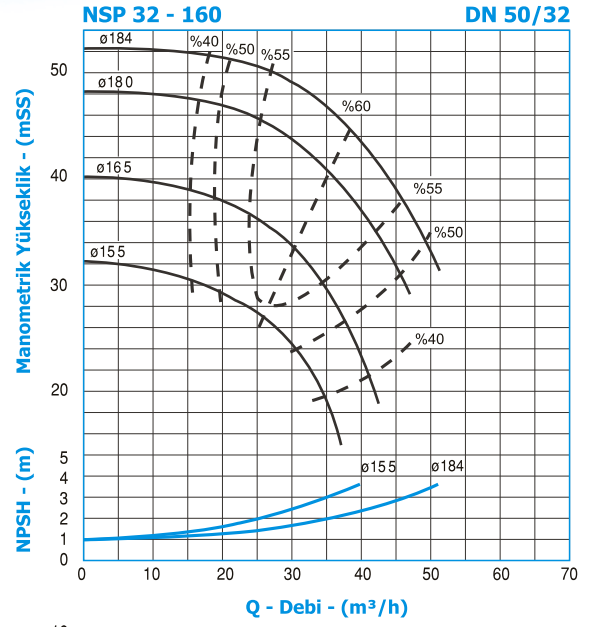
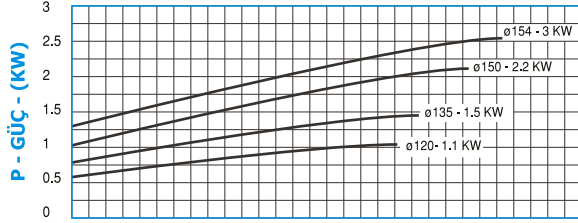
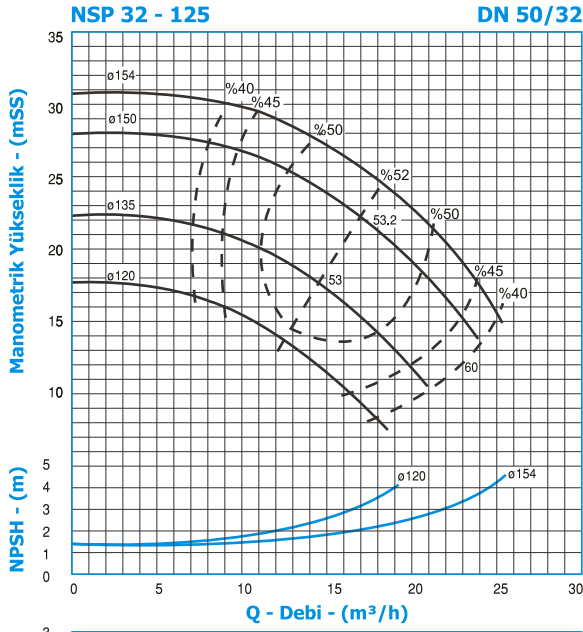
NSP 32 / 160



## PERFORMANS ALANLARI

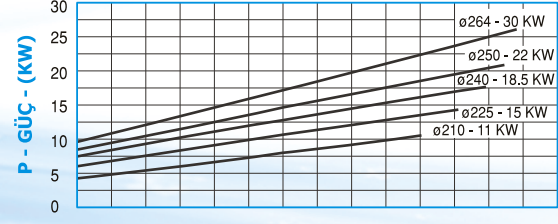
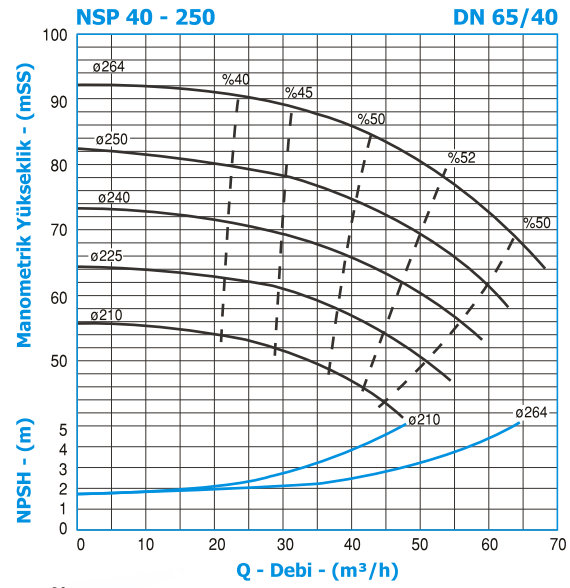
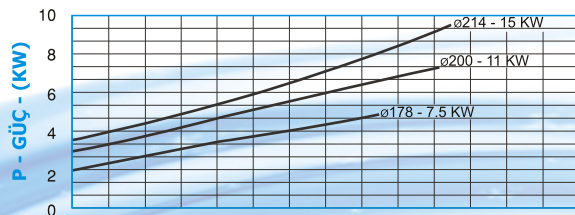
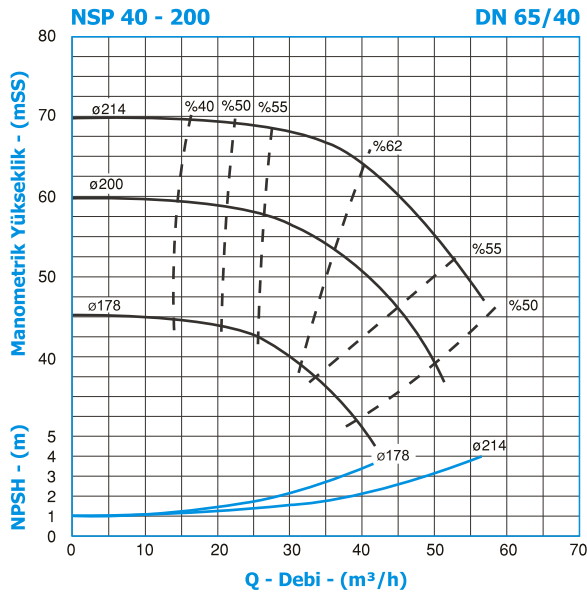
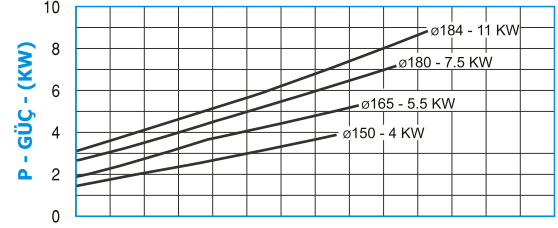
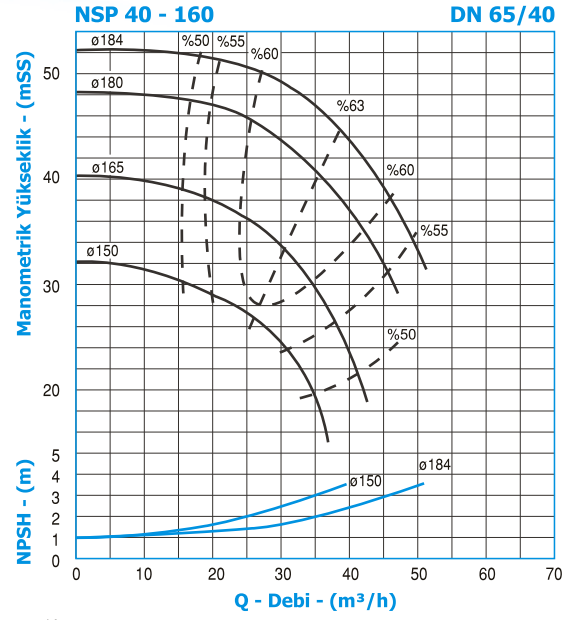
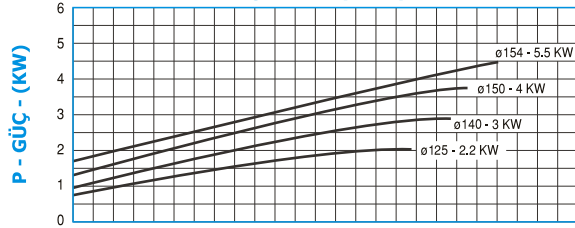
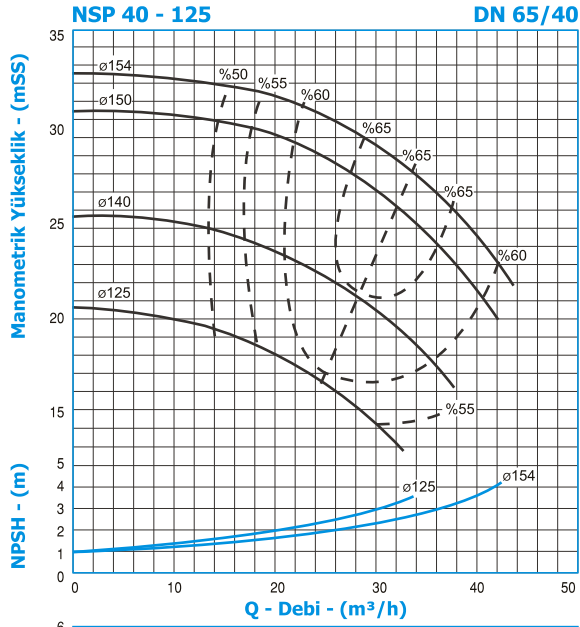


## Karakteristik Eğriler (2900 d/dk.)

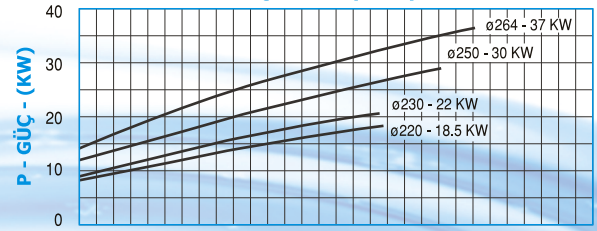
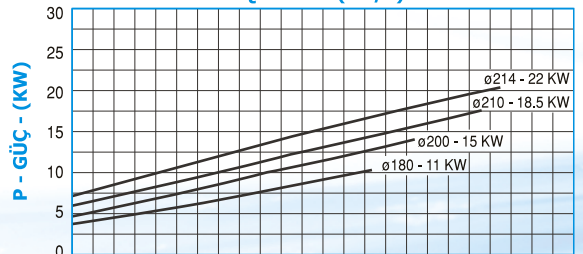
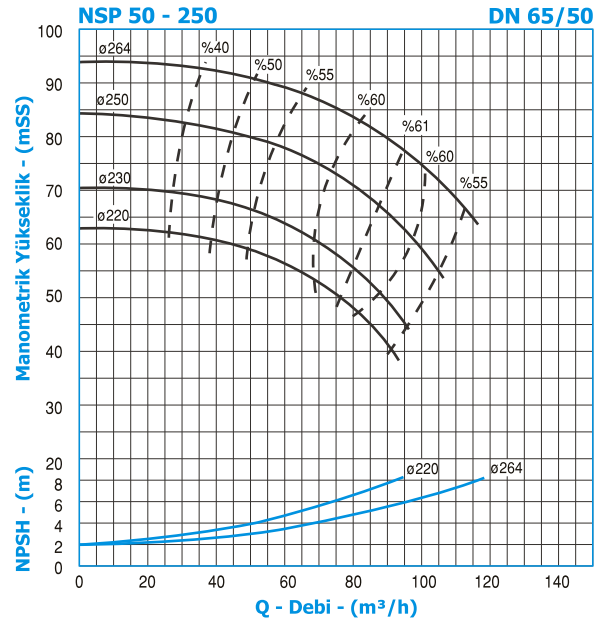
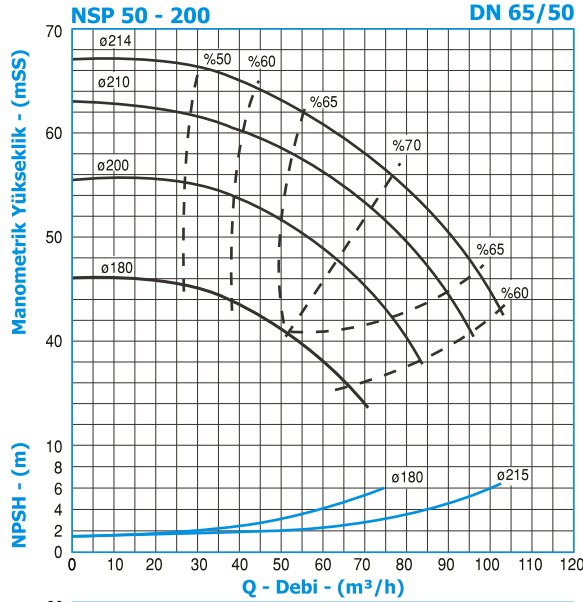
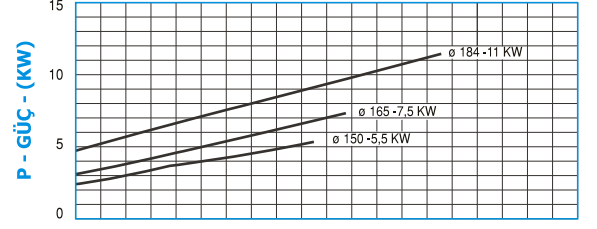
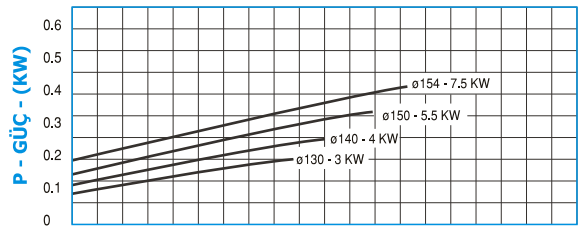
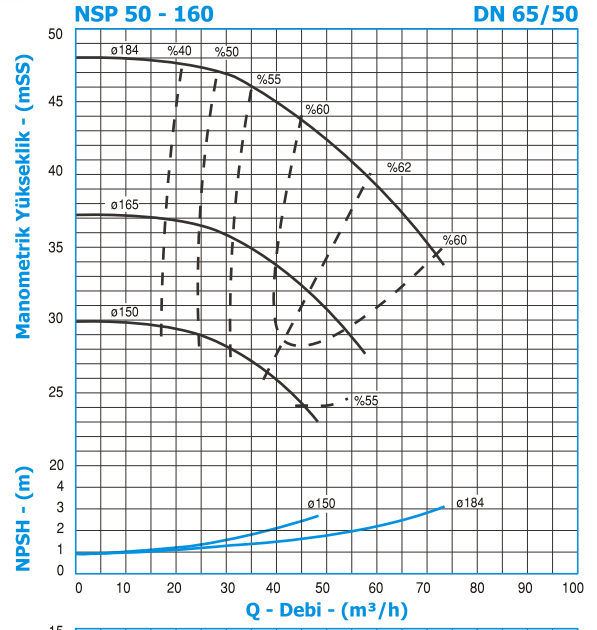
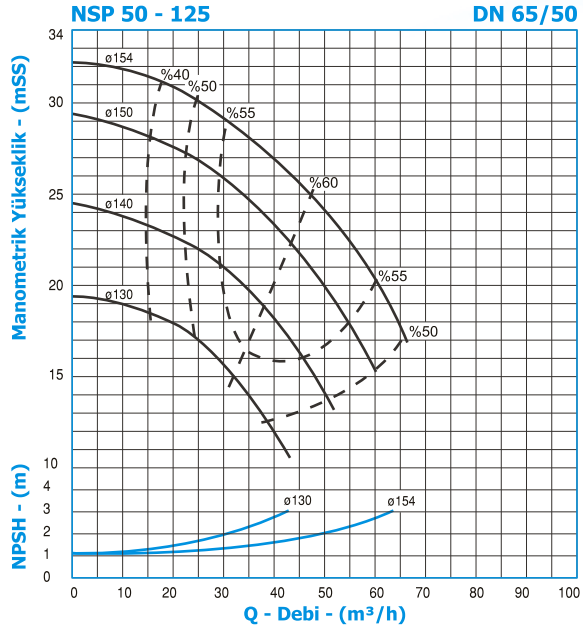




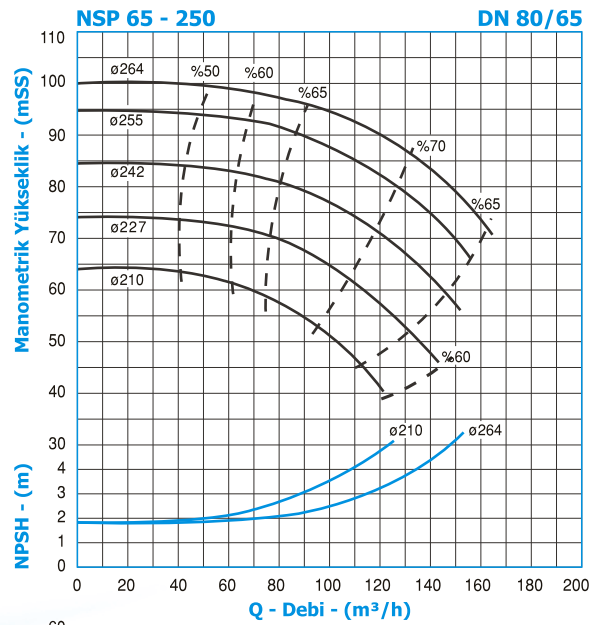
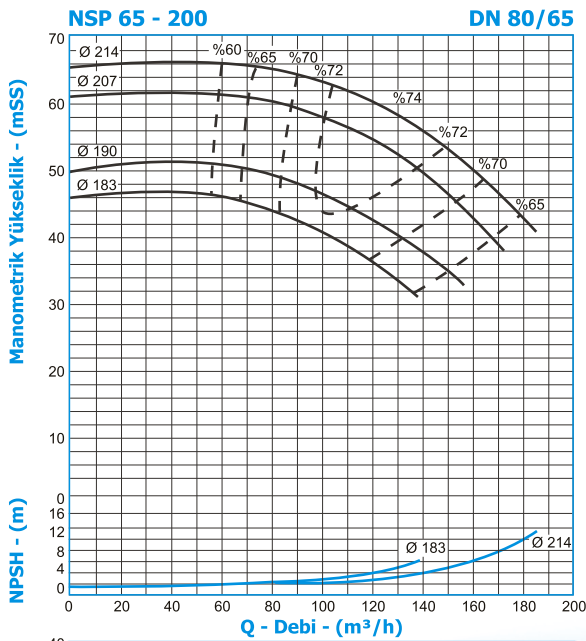
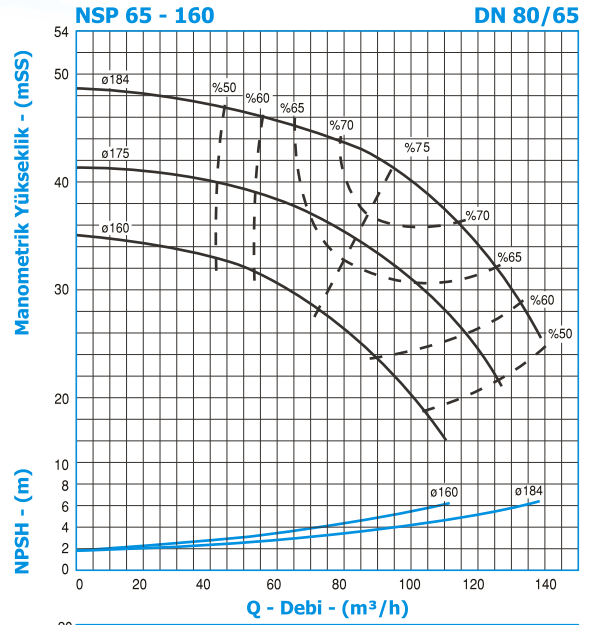
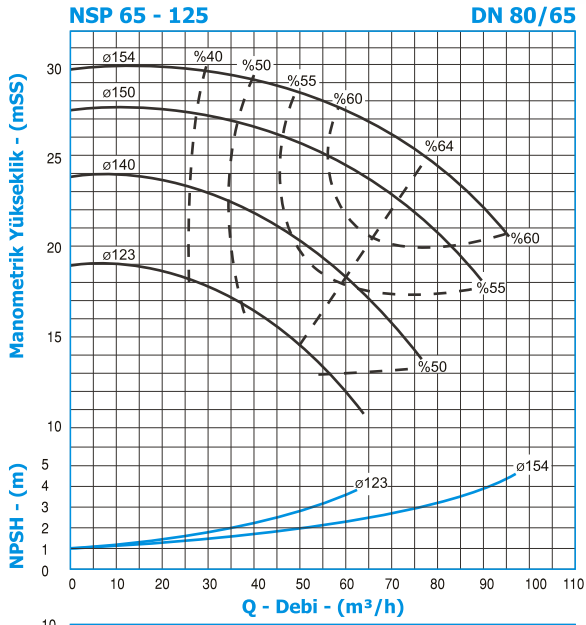
## Karakteristik Eğriler (2900 d/dk.)



## Karakteristik Eğriler (2900 d/dk.)

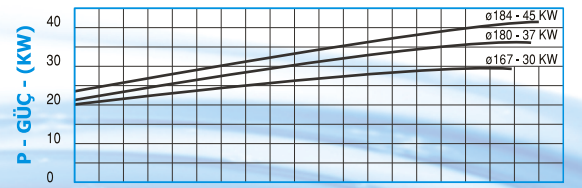
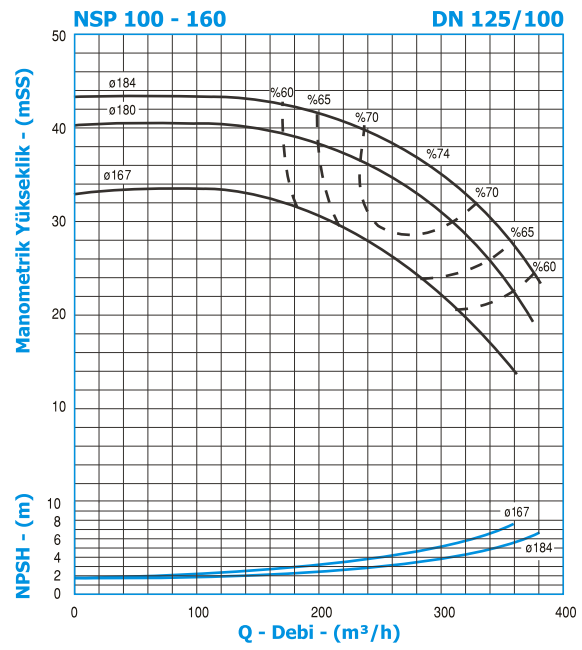
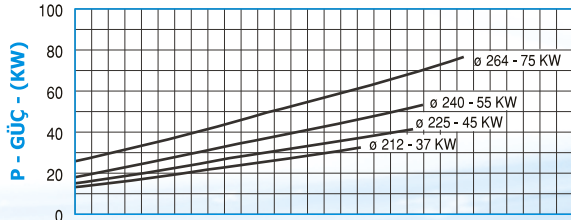
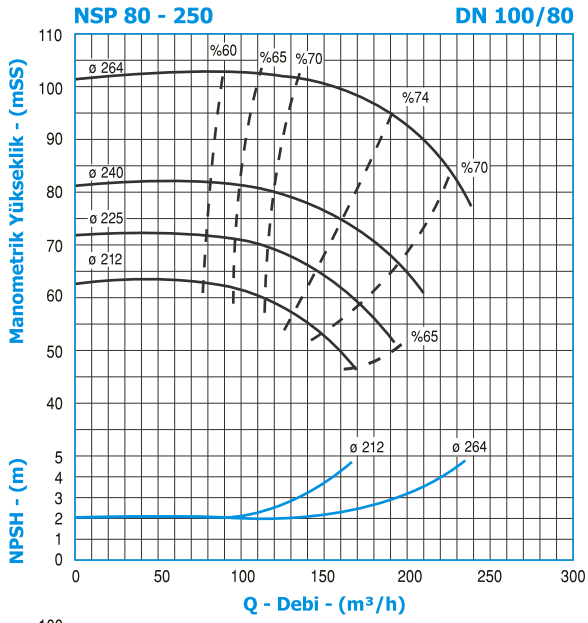
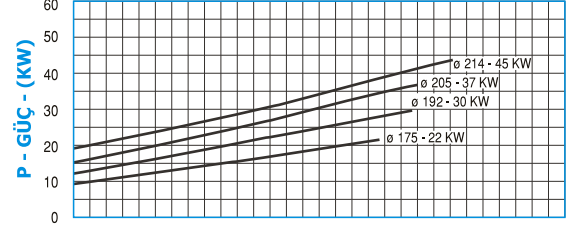
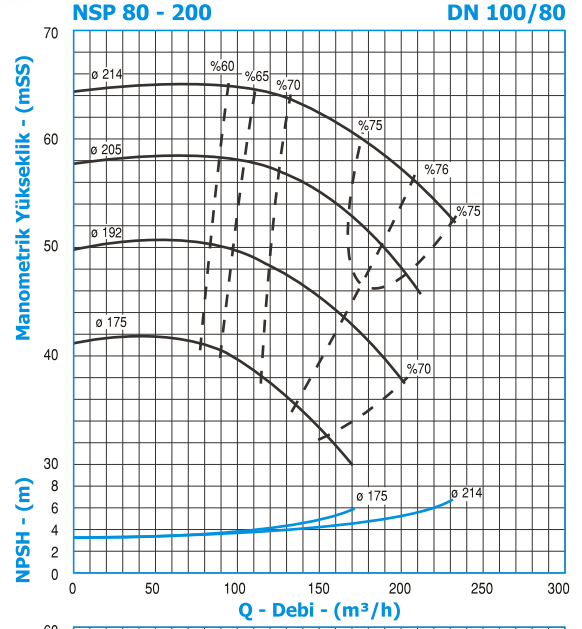
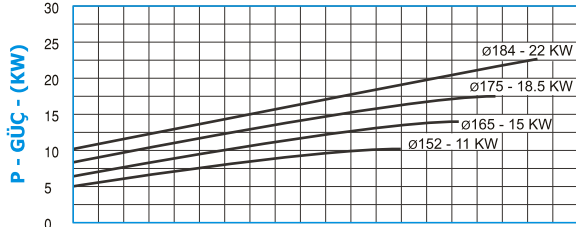
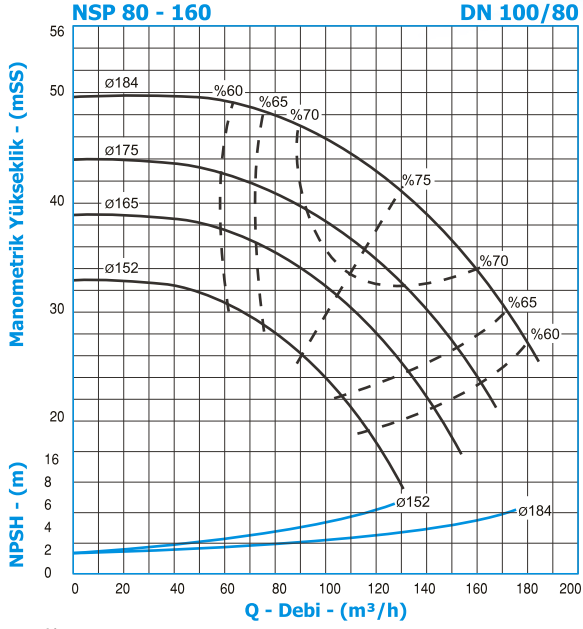


## Karakteristik Eğriler (2900 d/dk.)

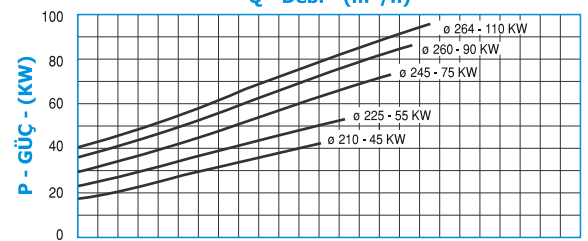
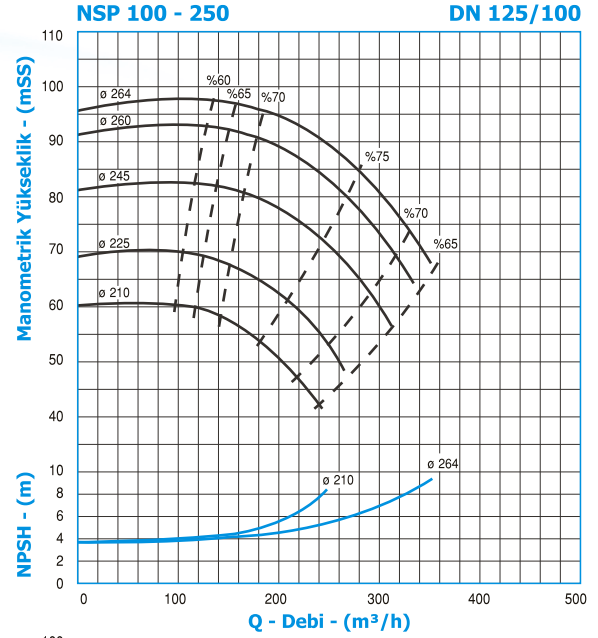
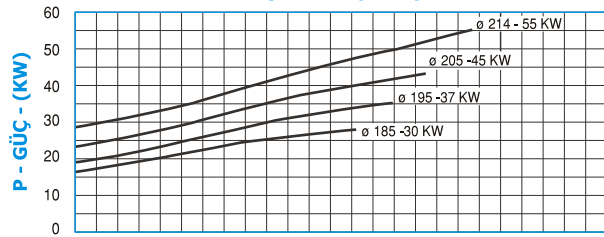
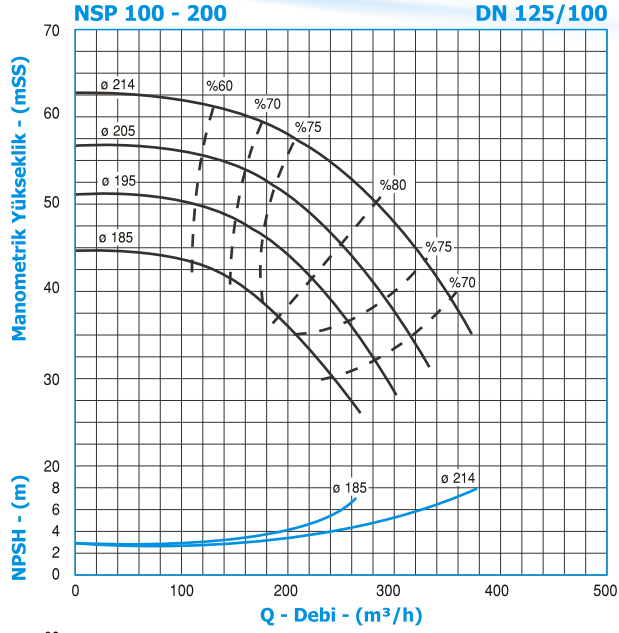




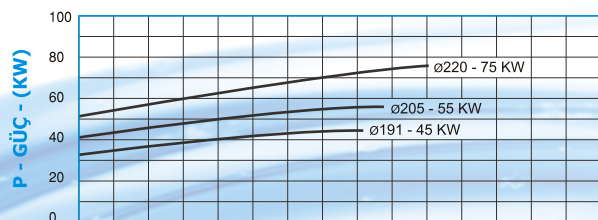
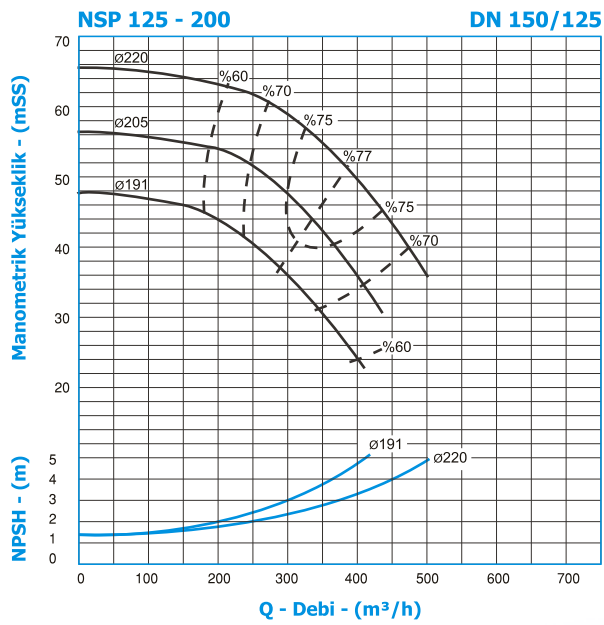
## Karakteristik Eğriler (2900 d/dk.)



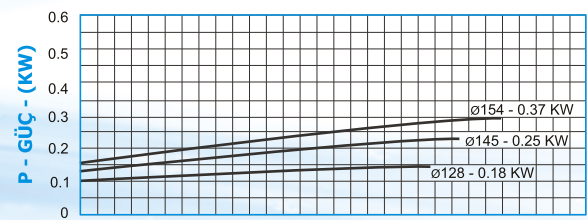
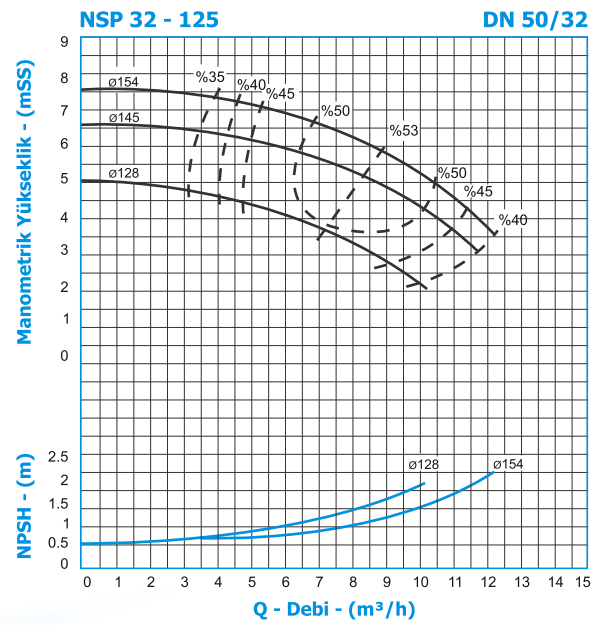
## Karakteristik Eğriler (2900 d/dk.)



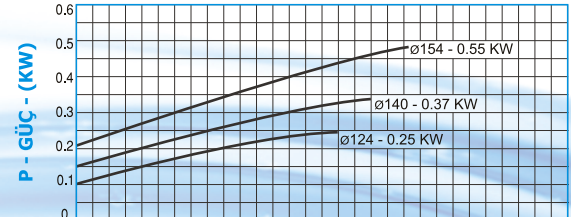
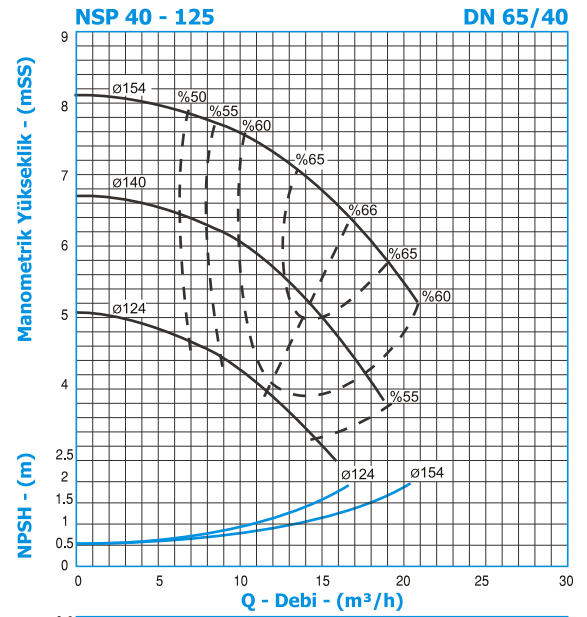
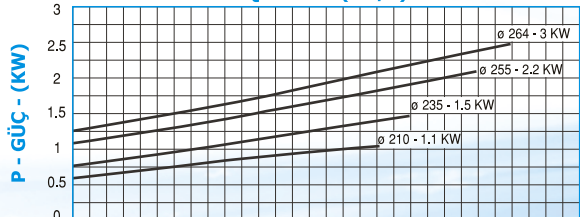
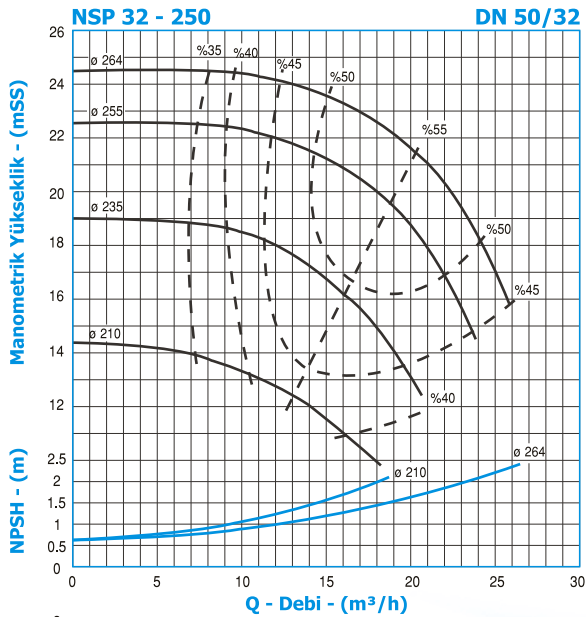
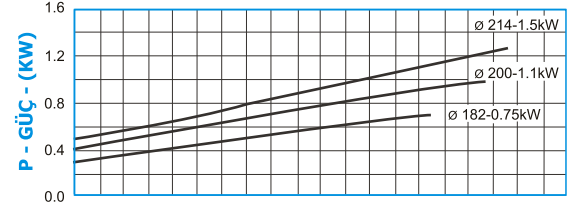
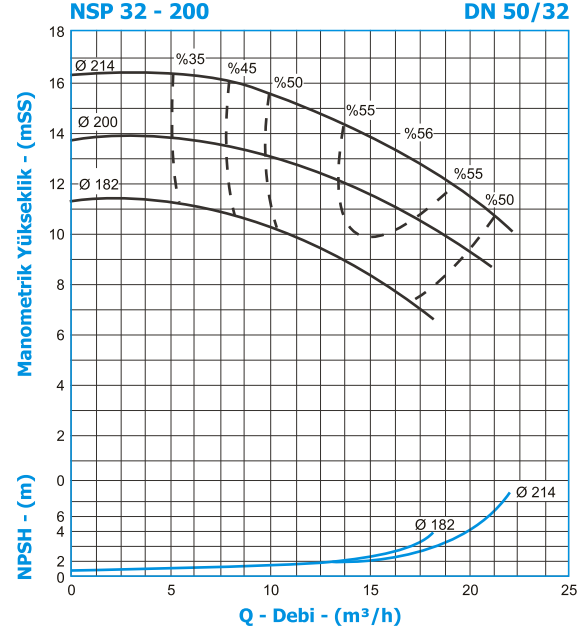
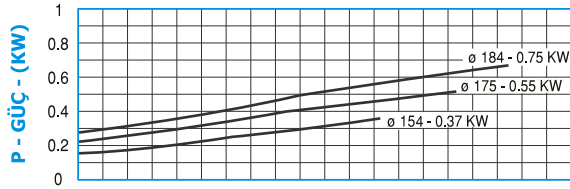
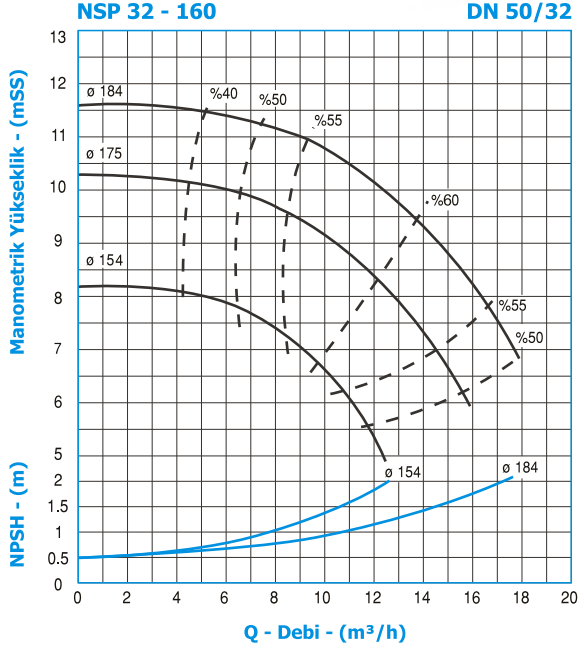
## Karakteristik Eğriler (2900 d/dk.)



## Karakteristik Eğriler (1450 d/dk.)

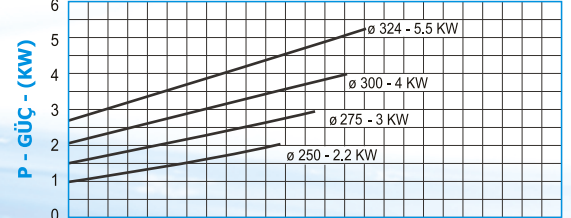
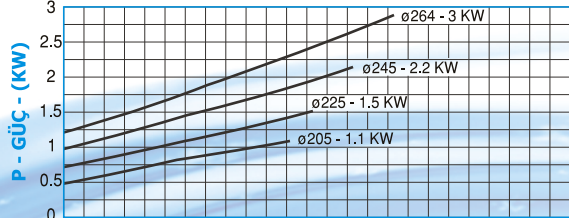
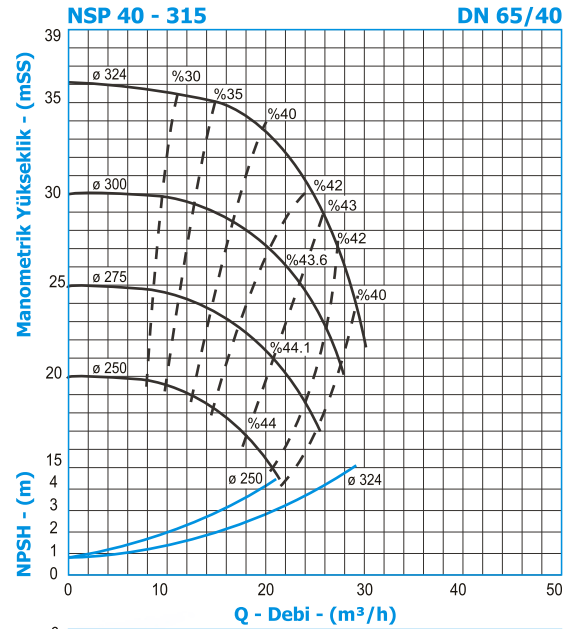
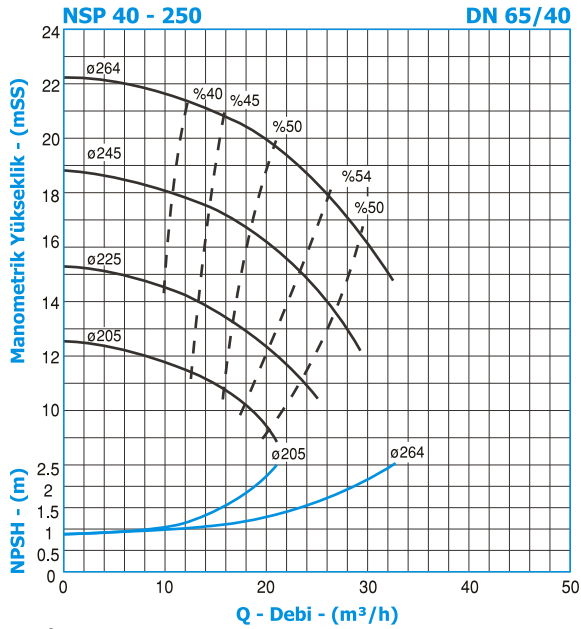
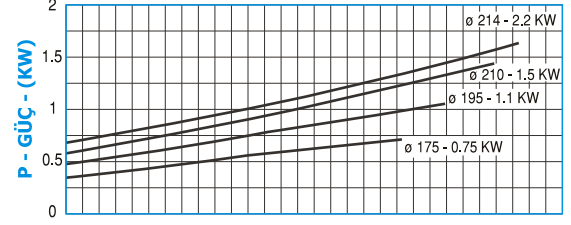
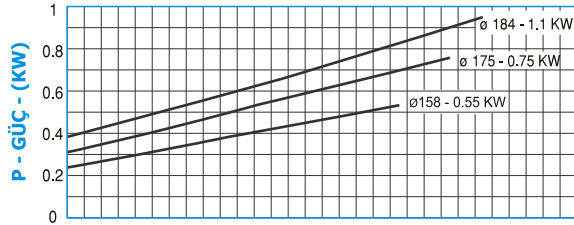
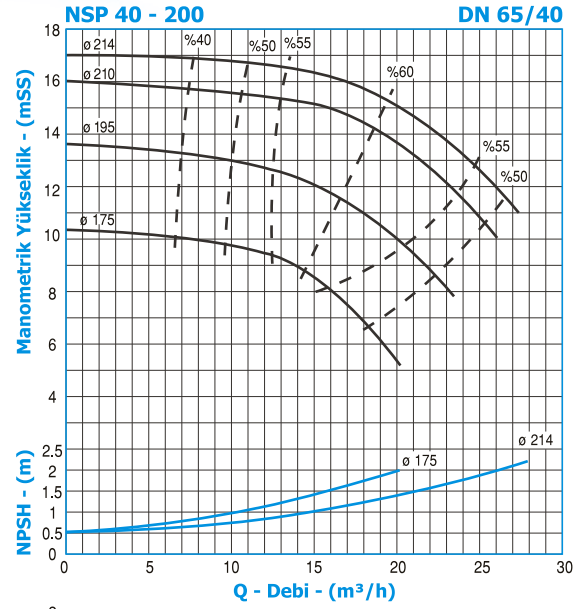
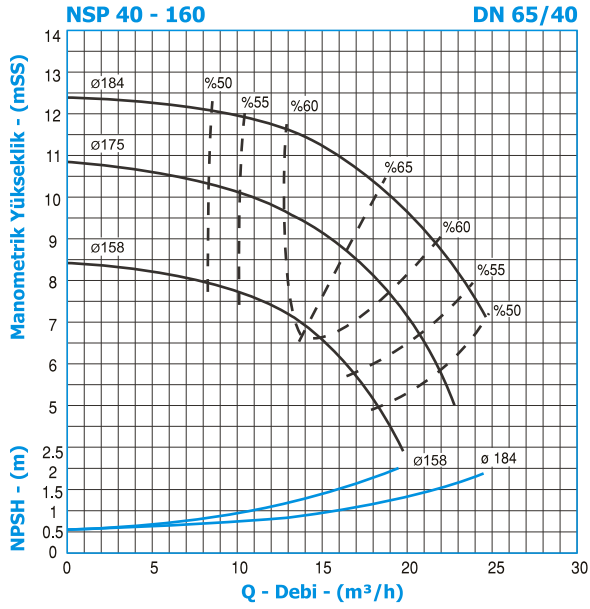


## Karakteristik Eğriler (1450 d/dk.)

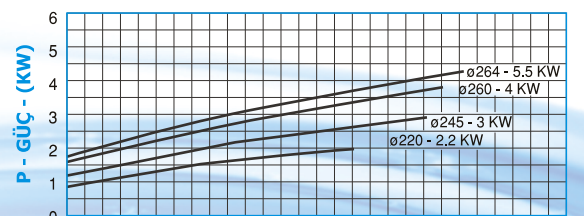
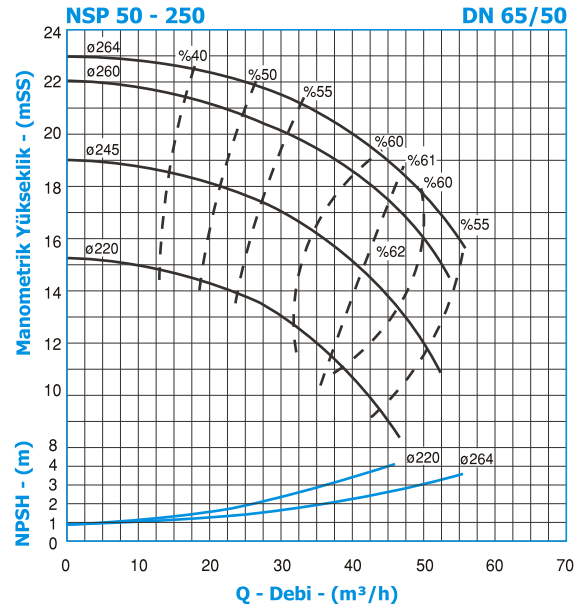
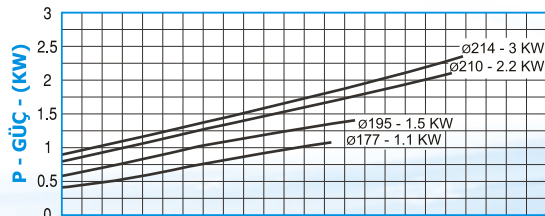
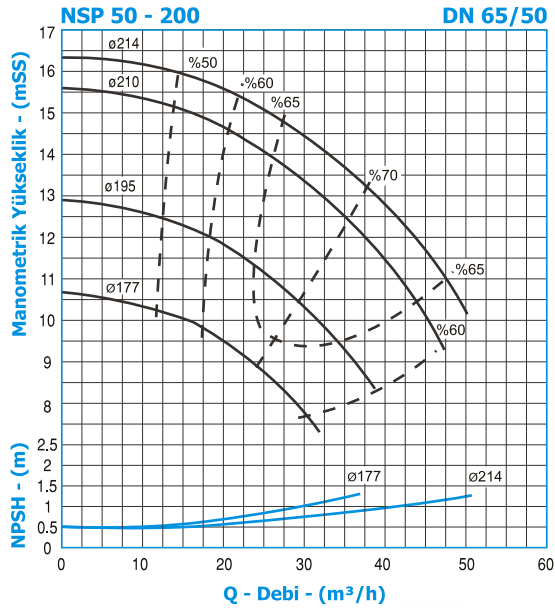
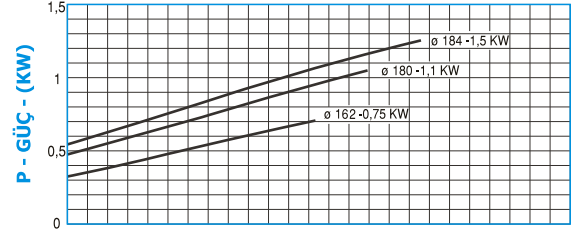
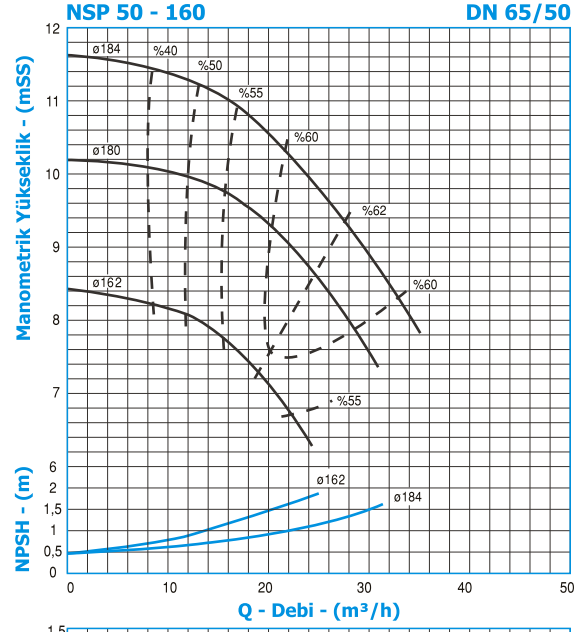
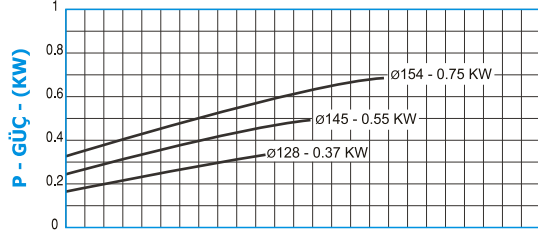
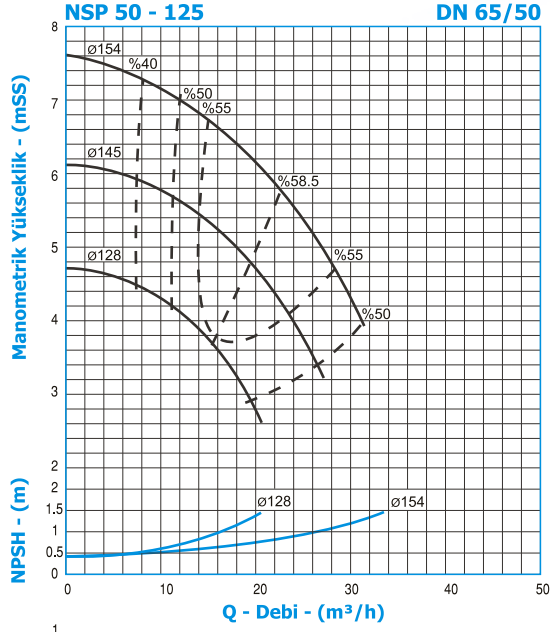




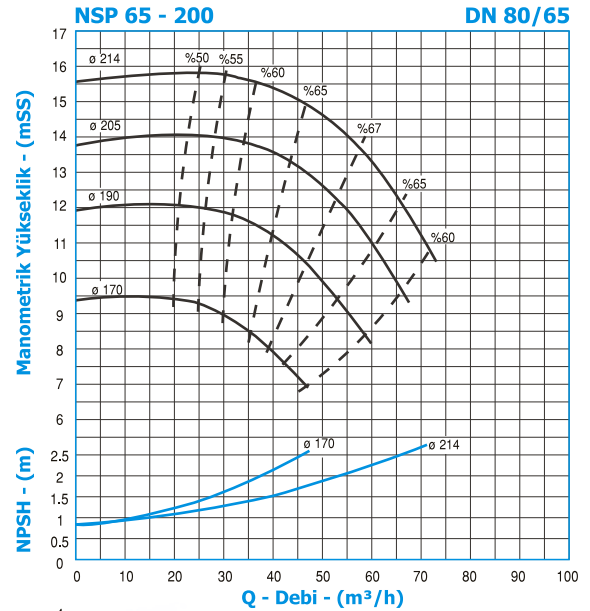
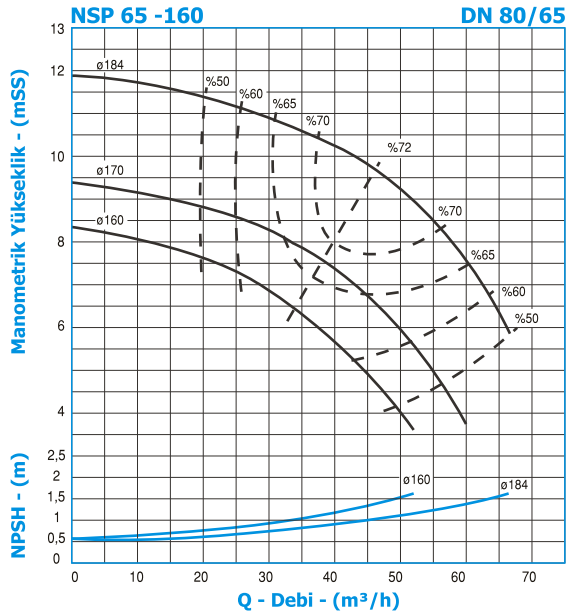
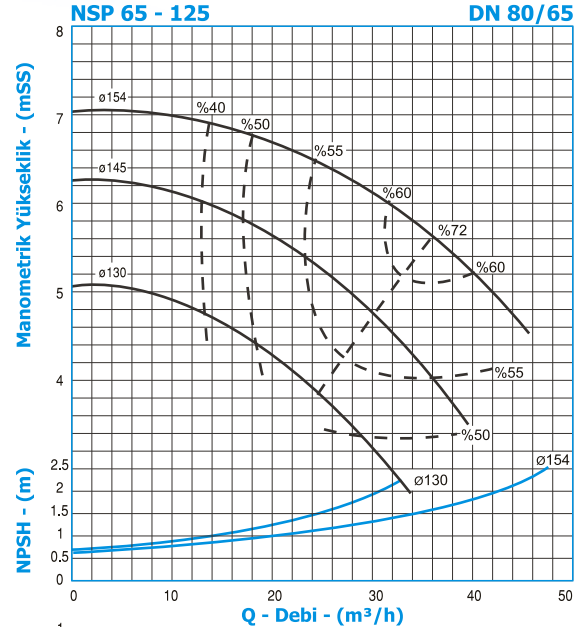
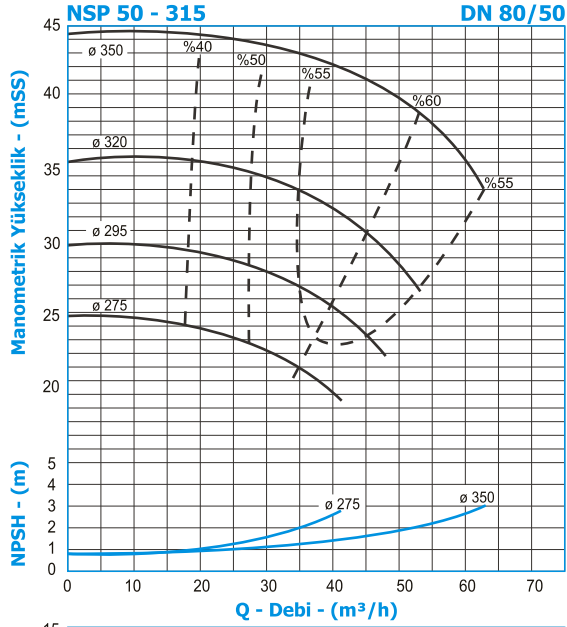
## Karakteristik Eğriler (1450 d/dk.)



## Karakteristik Eğriler (1450 d/dk.)

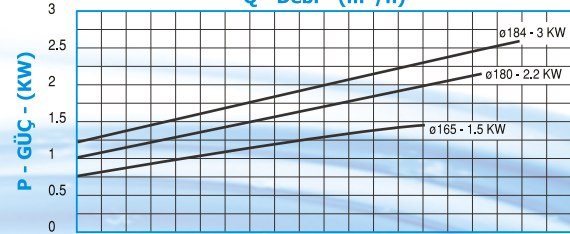
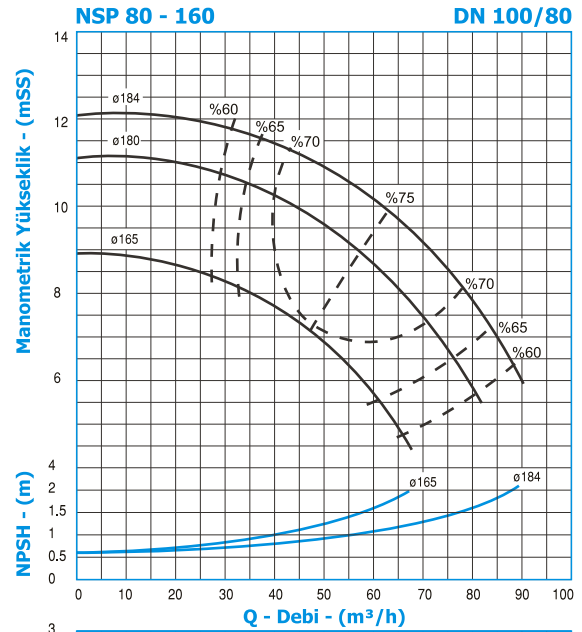
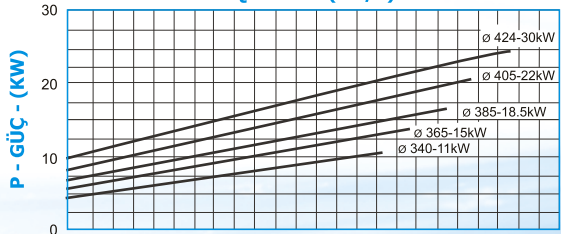
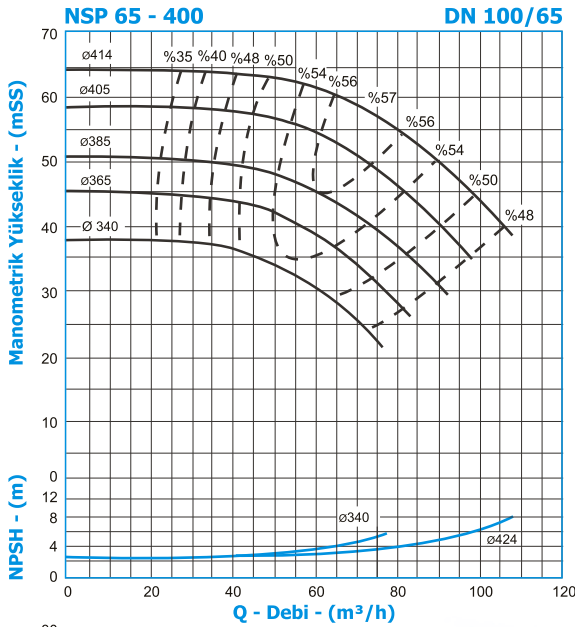
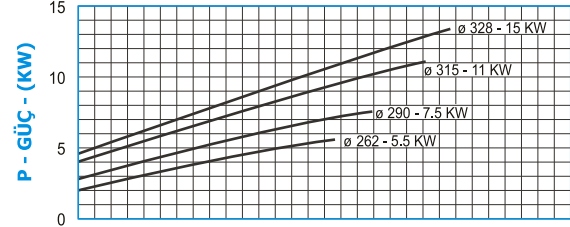
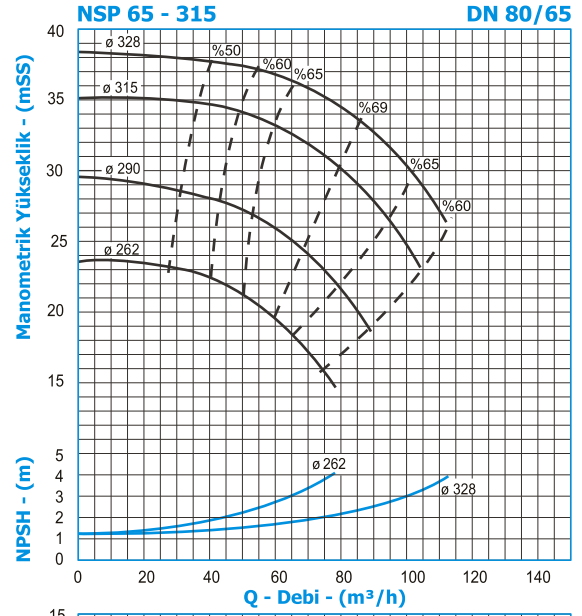
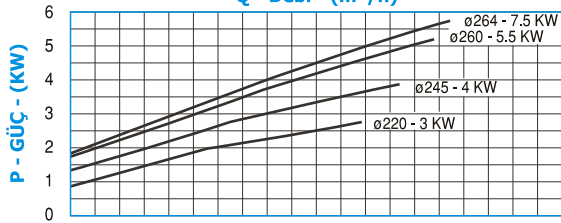
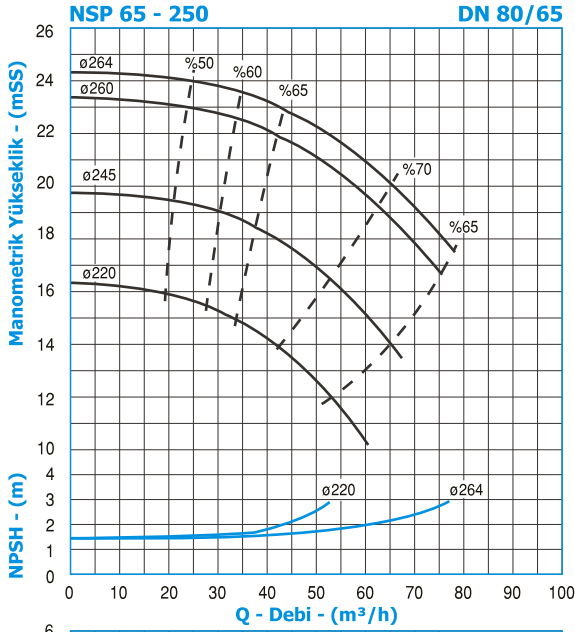


## Karakteristik Eğriler (1450 d/dk.)

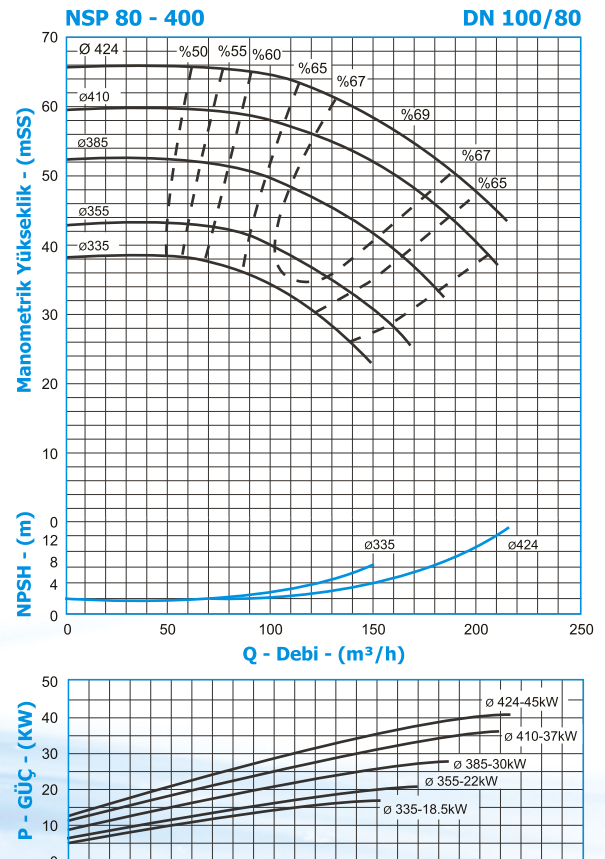
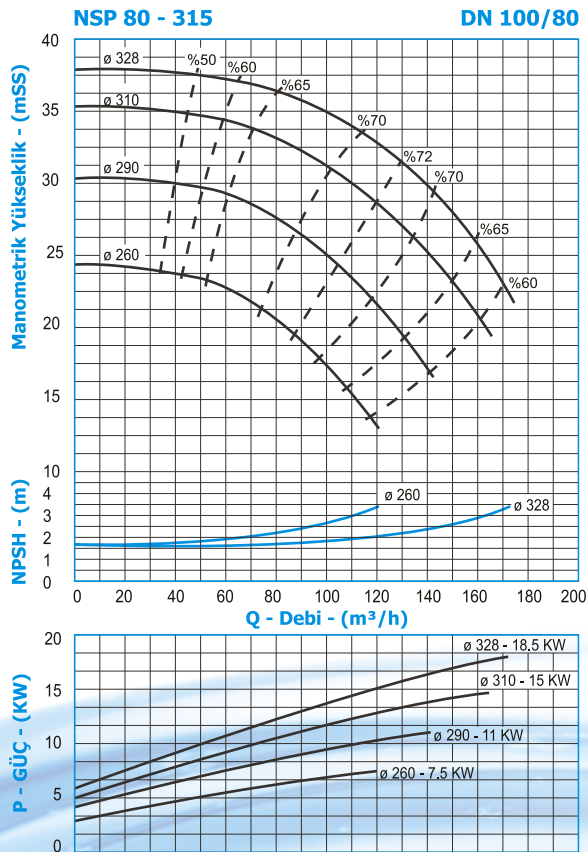
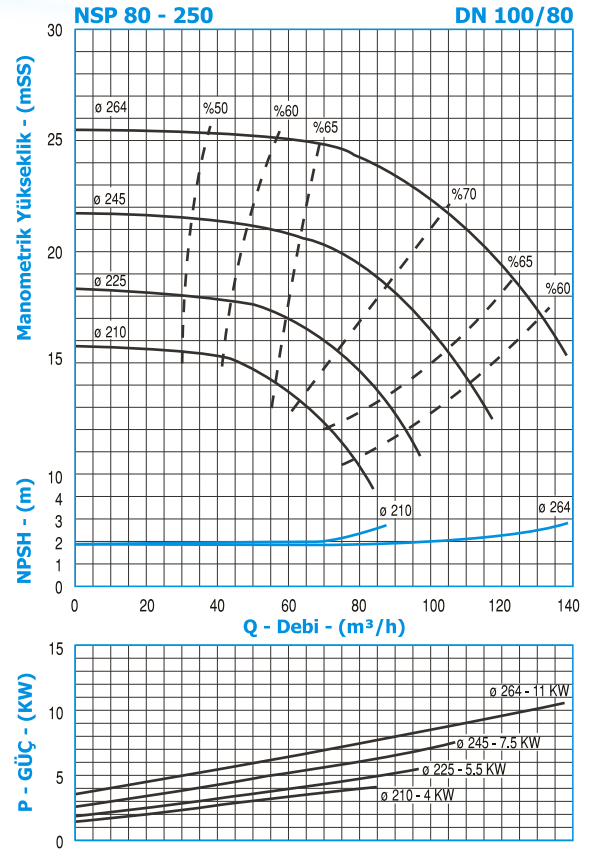
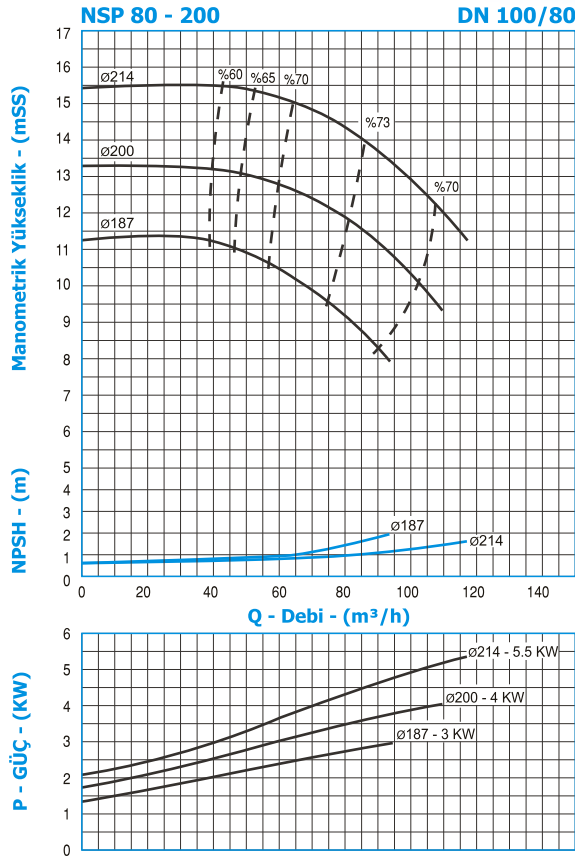




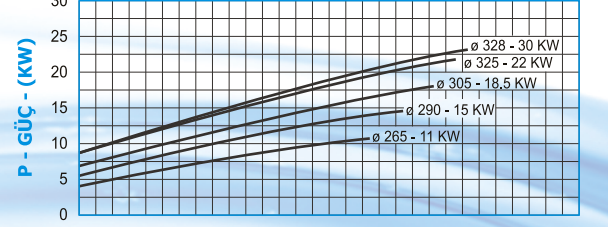
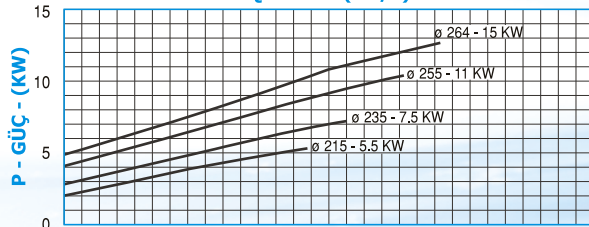
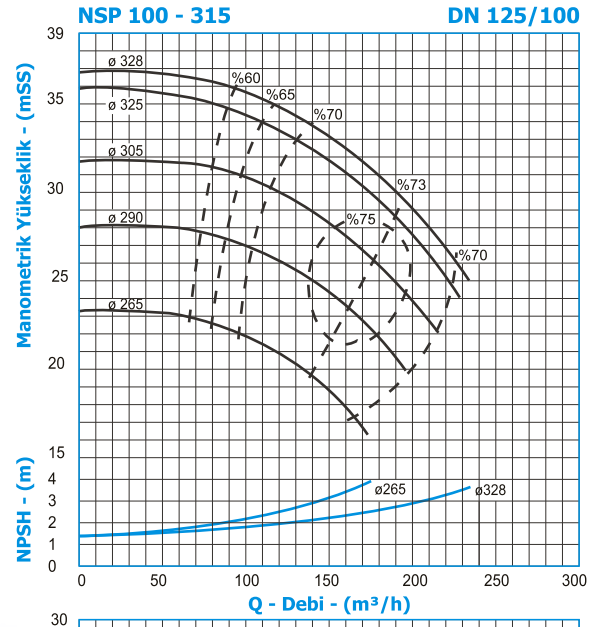
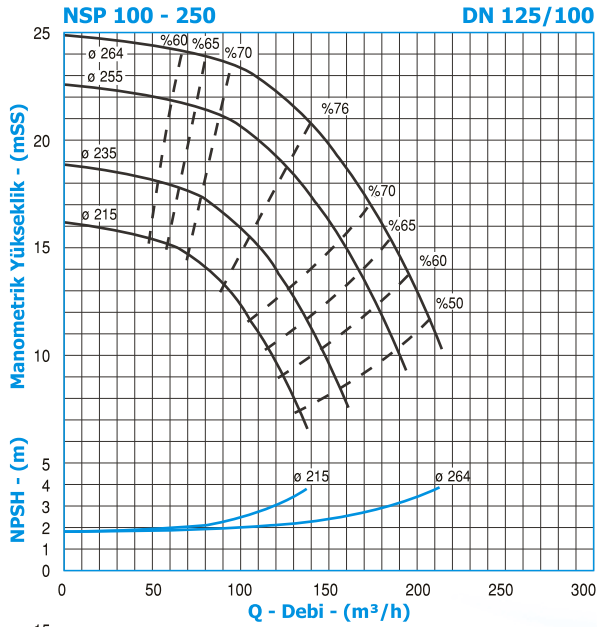
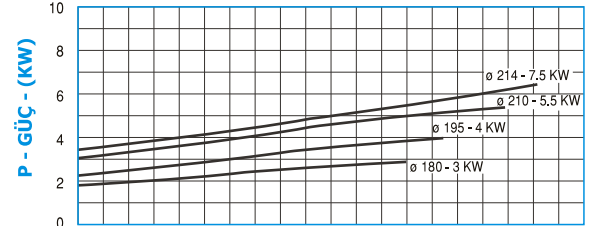
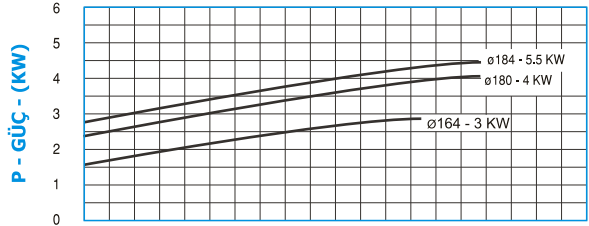
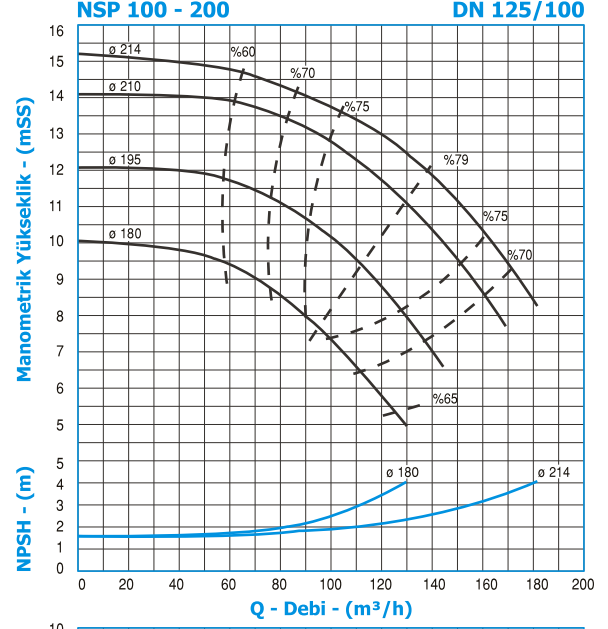
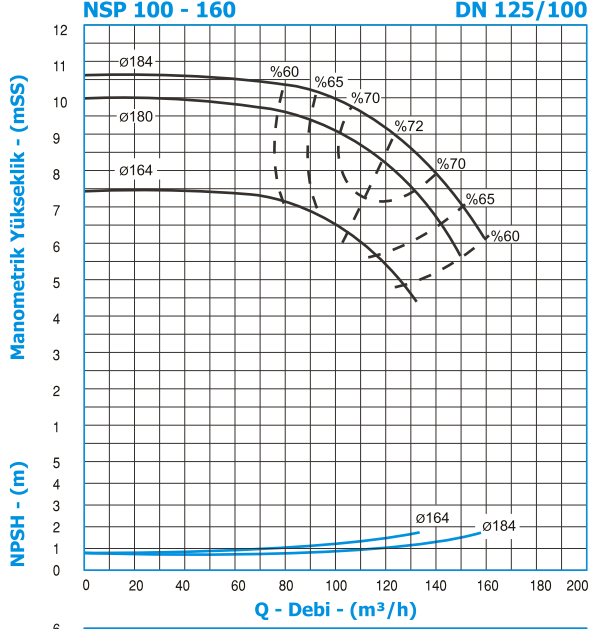
## Karakteristik Eğriler (1450 d/dk.)



## Karakteristik Eğriler (1450 d/dk.)

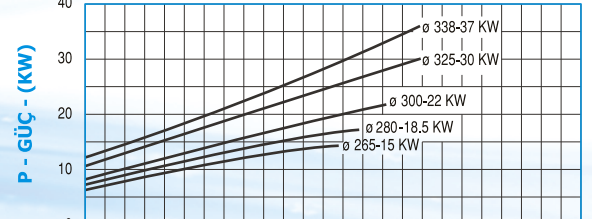
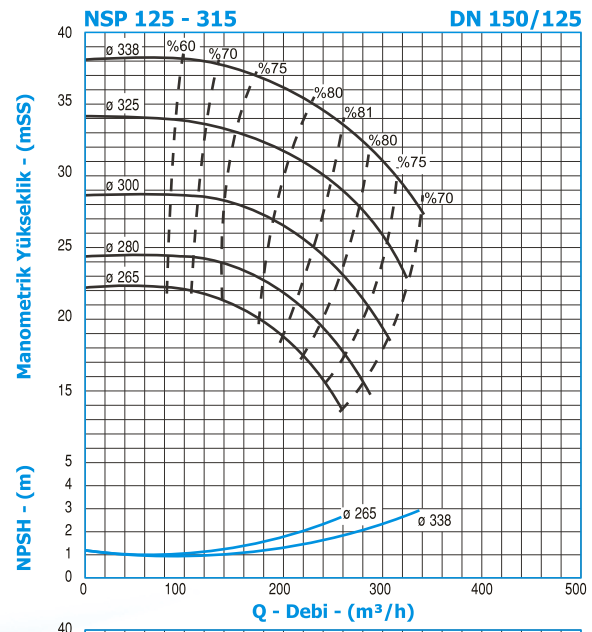
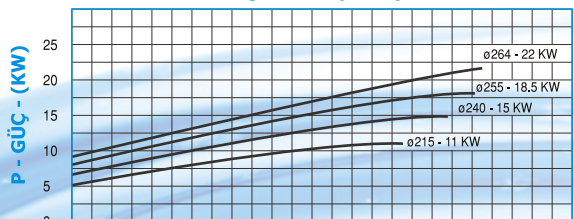
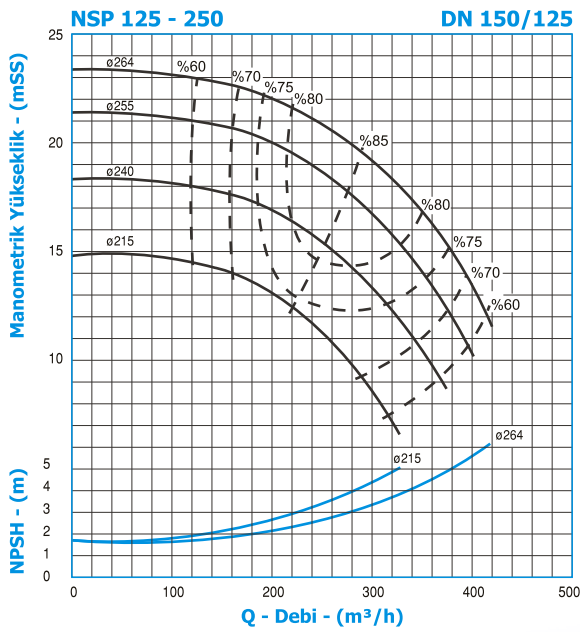
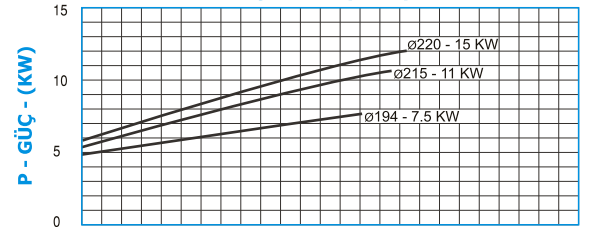
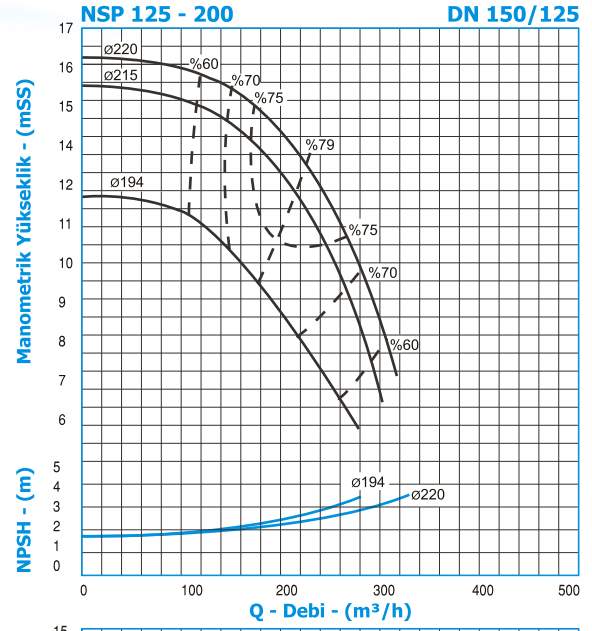
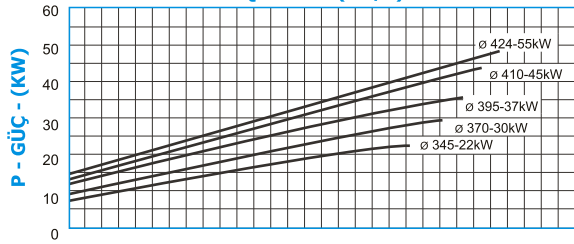
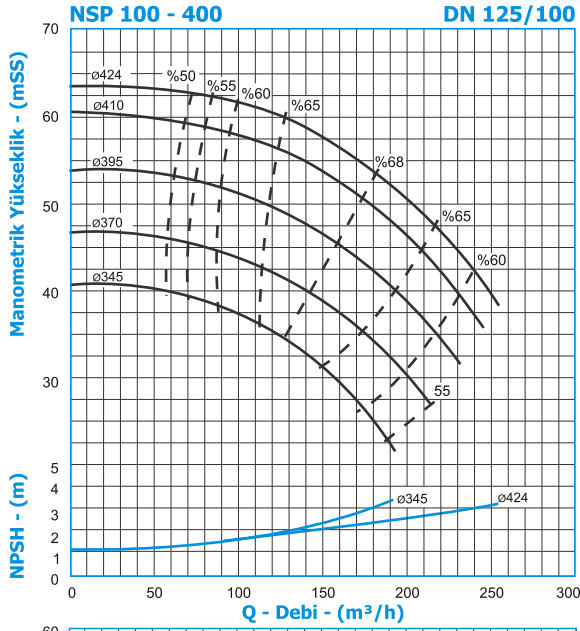


## Karakteristik Eğriler (1450 d/dk.)

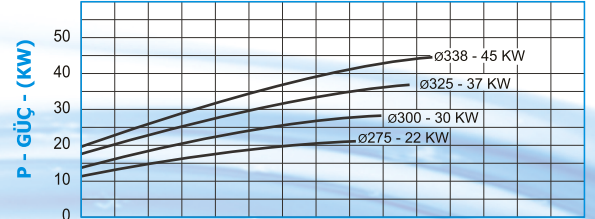
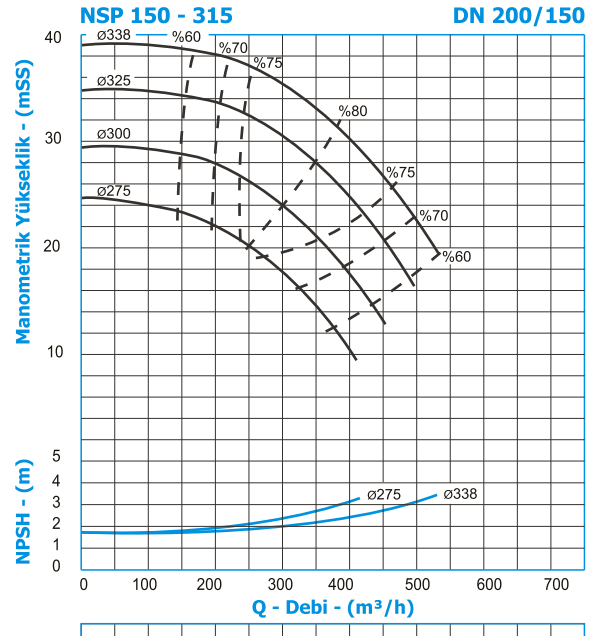
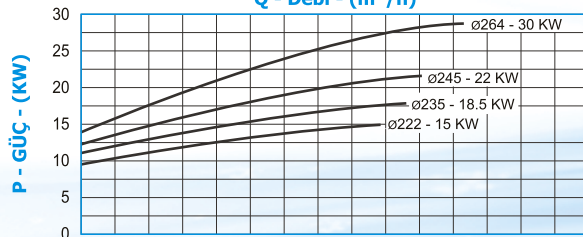
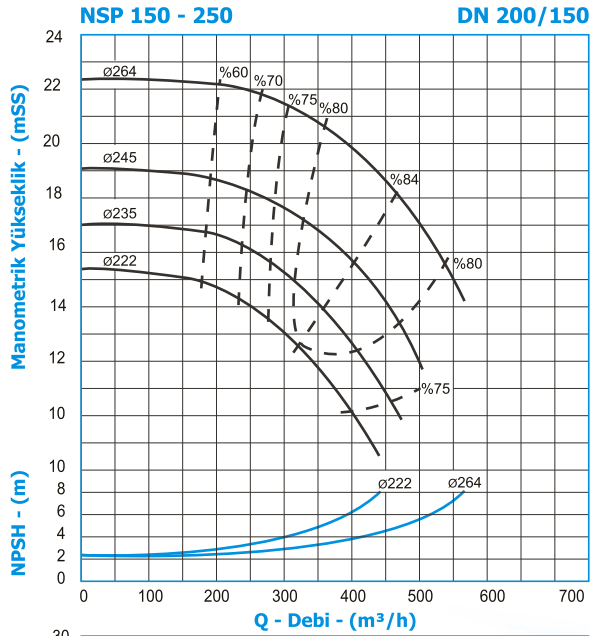
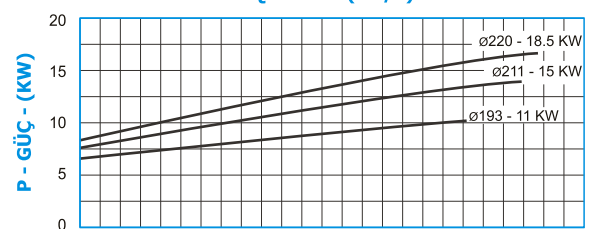
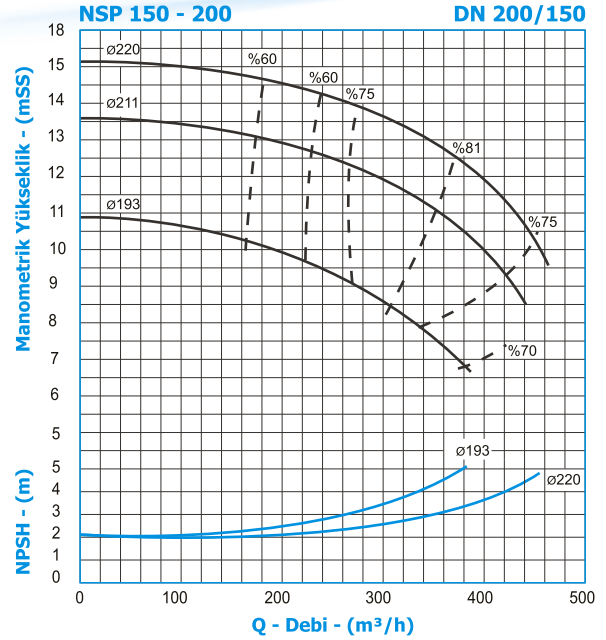
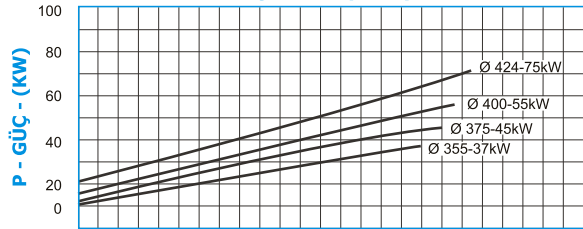
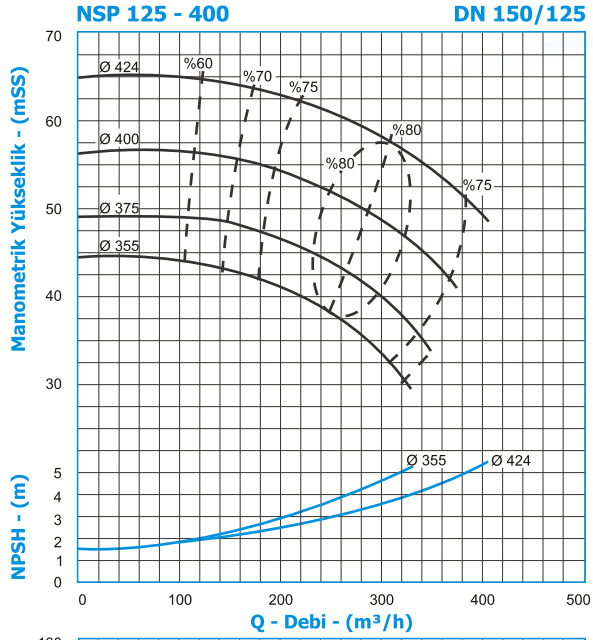




## Karakteristik Eğriler (1450 d/dk.)

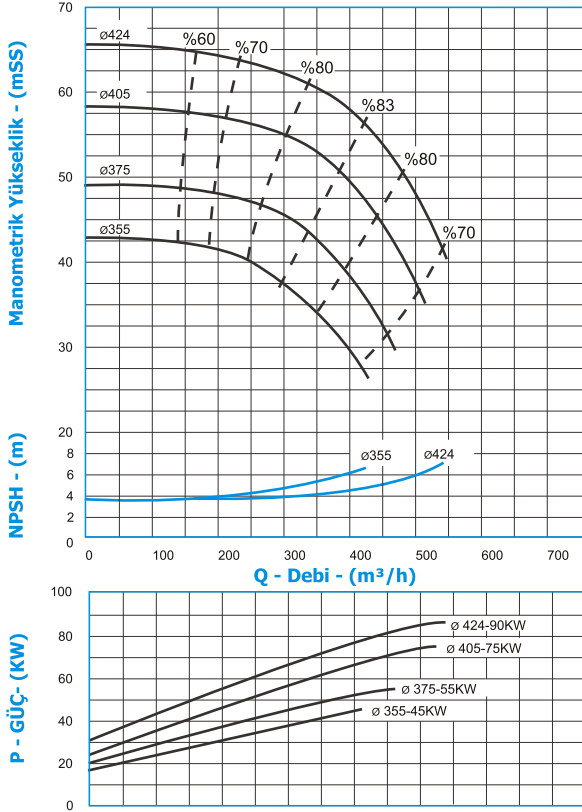


## Karakteristik Eğriler (1450 d/dk.)

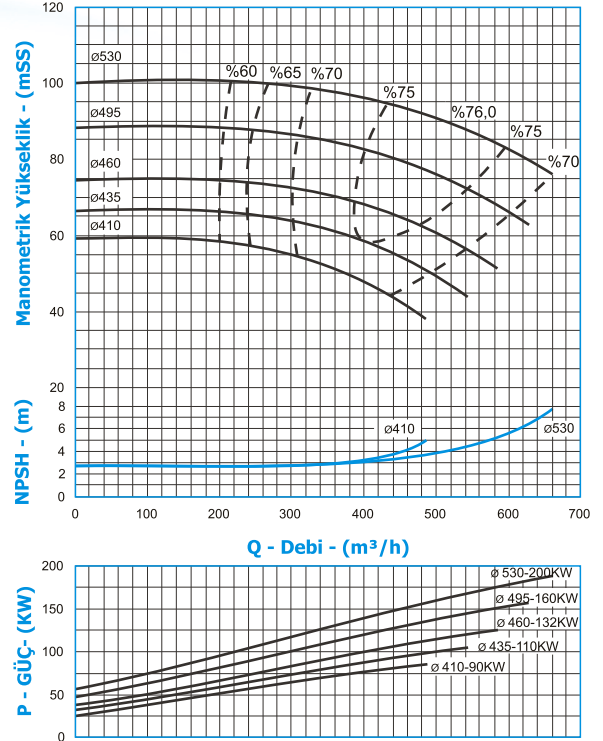


## Karakteristik Eğriler (1450 d/dk.)

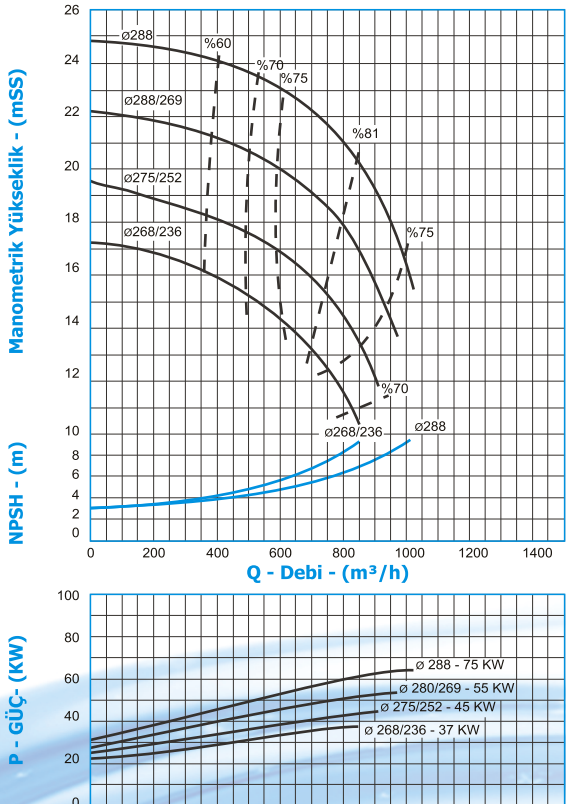
**NSP 150 - 400 DN 200/150**



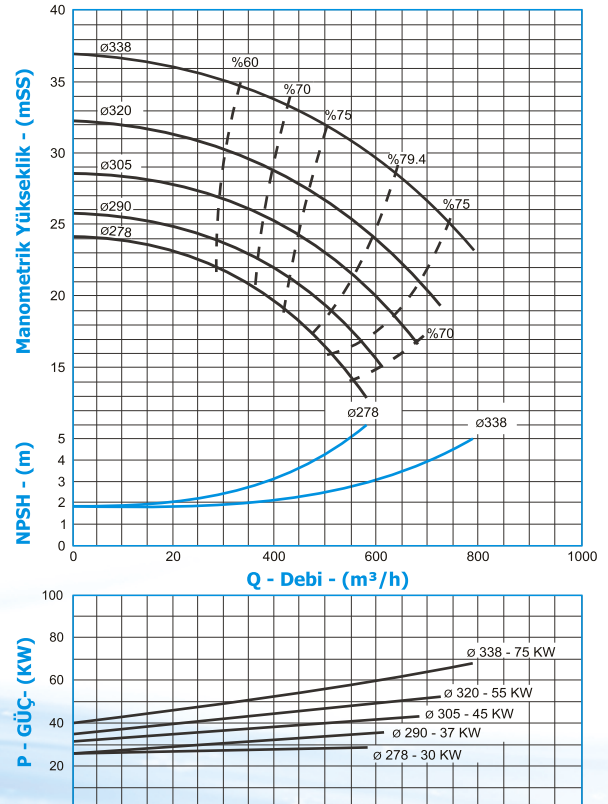
**NSP 150 - 500 DN 200/150**



**NSP 200 - 260 DN 250/200**

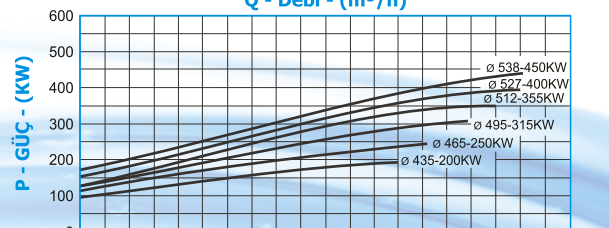
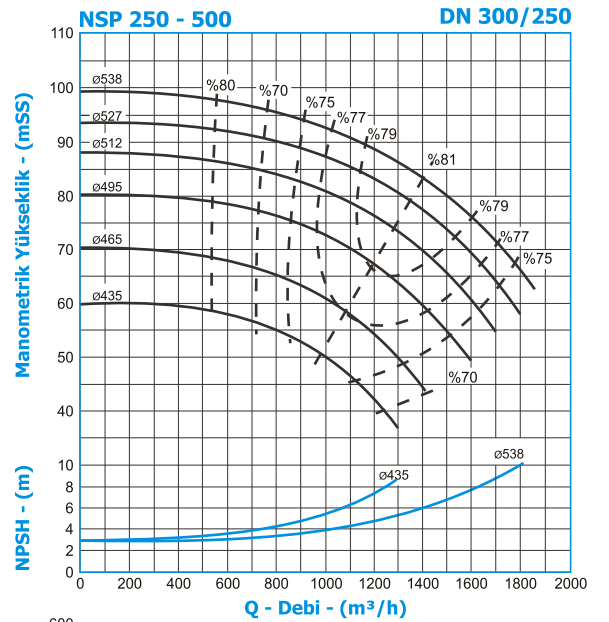
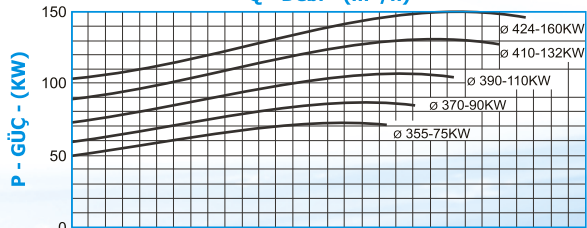
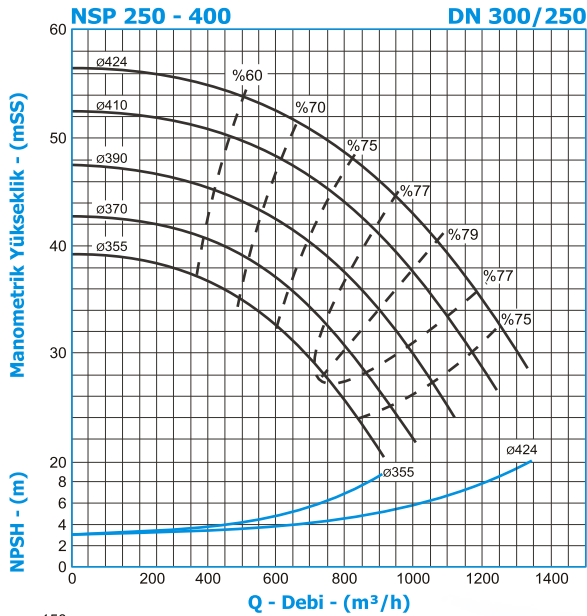
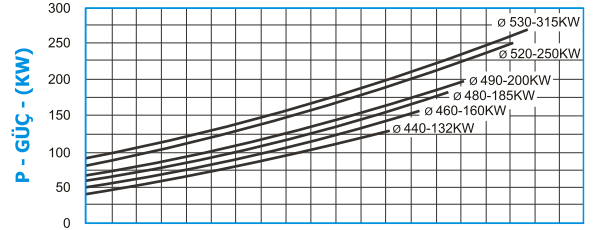
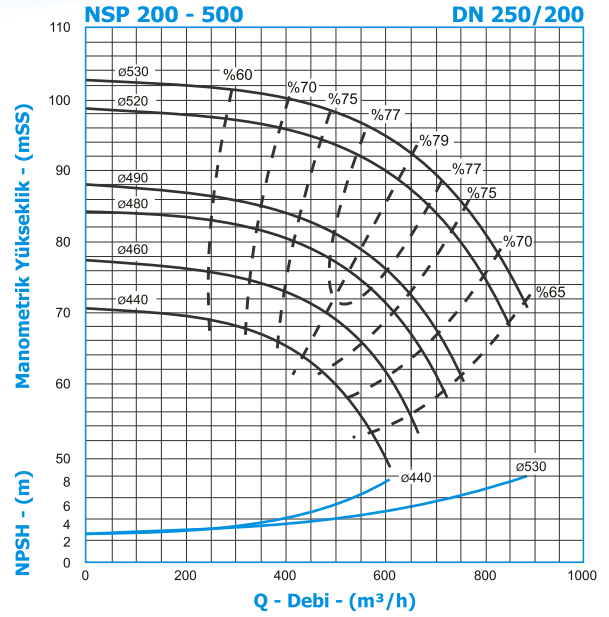
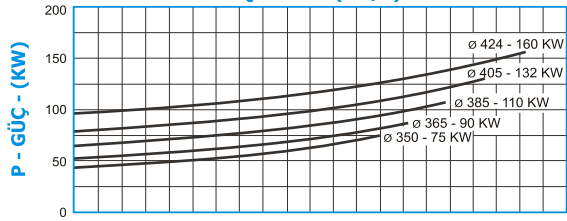
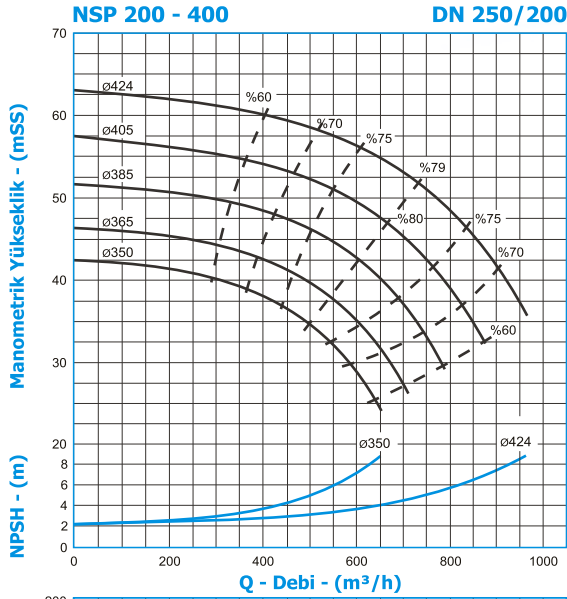


**NSP 200 - 315 DN 250/200**

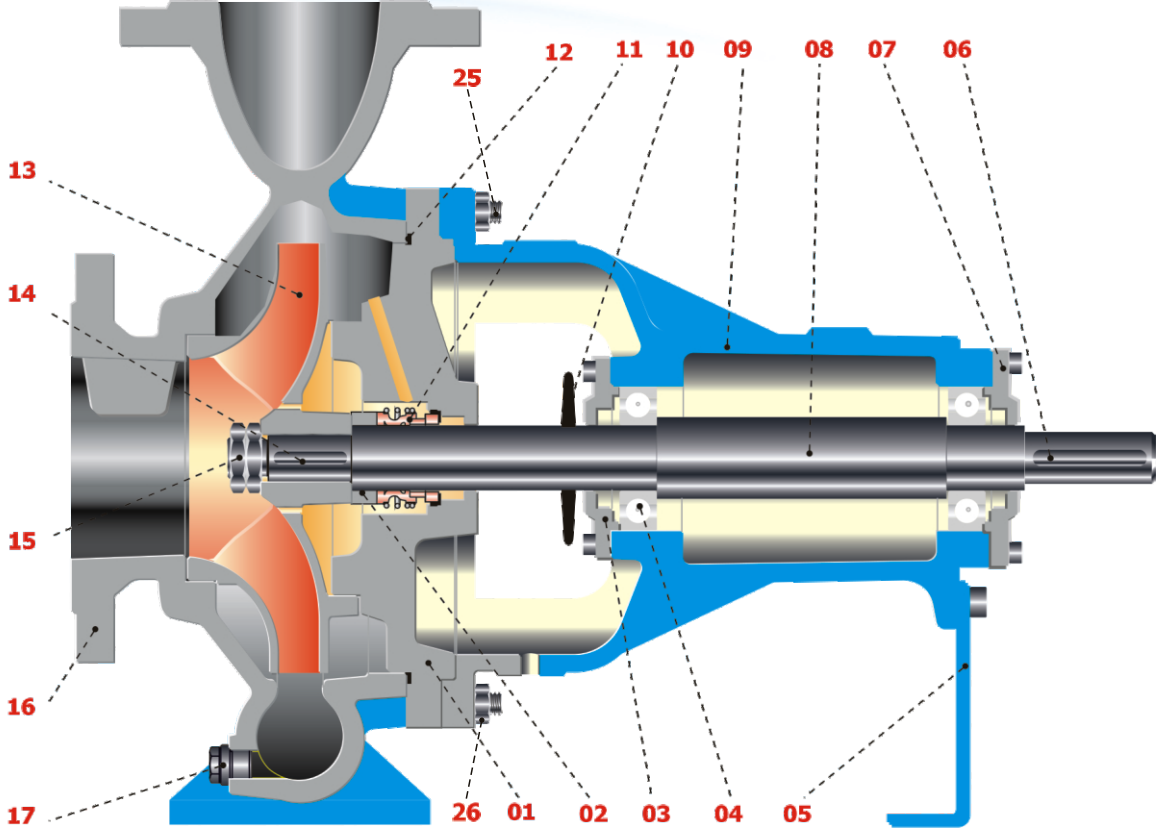




## Karakteristik Eğriler (1450 d/dk.)

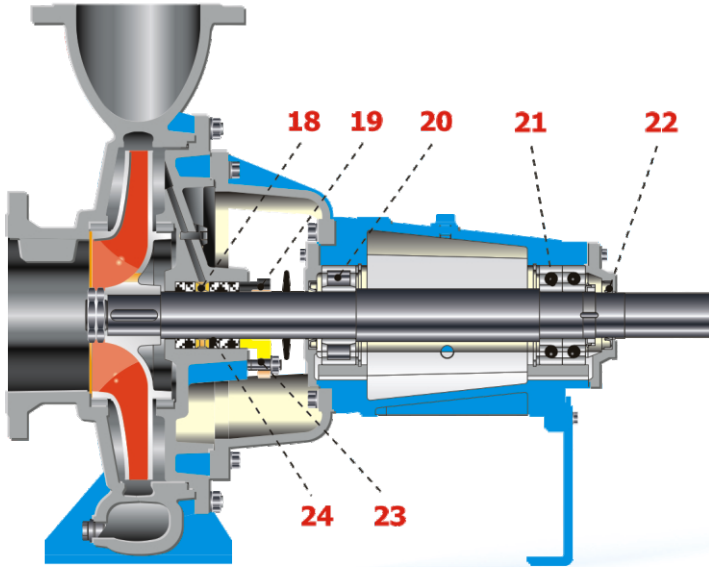


## KESİT RESMİ

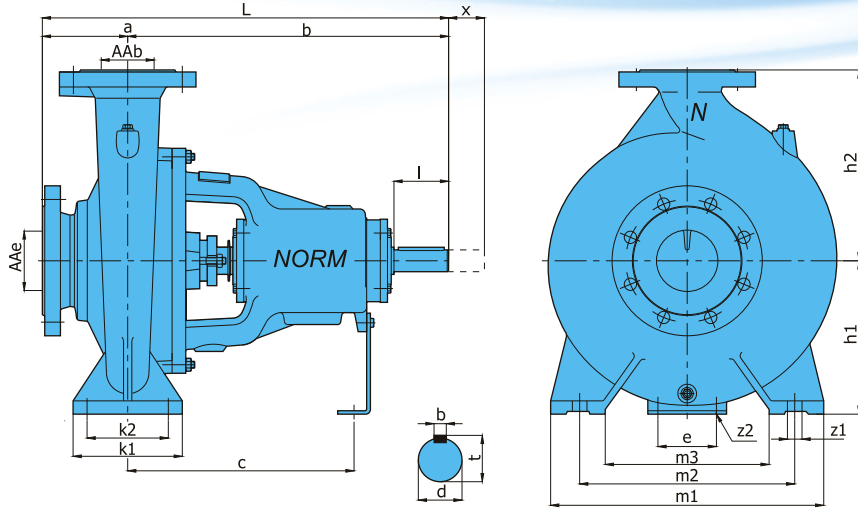


### Parça Listesi

- 01 Gövde Kapağı
- 02 Ara Burç
- 03 Rulman Kapağı
- 04 Bilyalı Rulman
- 05 Destek Ayak
- 06 Kaplin Kaması
- 07 Rulman Kapağı
- 08 Pompa Mili
- 09 Rulman Yatağı
- 10 Su Sıçratma Diski
- 11 Mekanik Salmastra
- 12 O-Ring
- 13 Çark
- 14 Çark Kaması
- 15 Çark Somunu
- 16 Salyangoz Gövde
- 17 Boşaltma Tapası
- 18 Sulama Halkası
- 19 Salmastra Baskısı (Glen)
- 20 Silindirik Makaralı Rulman
- 21 Eğik Bilyalı Rulman
- 22 Yağ Keçesi
- 23 Glen Saplama ve Somunu
- 24 Yumuşak Salmastra
- 25 Gövde Rulman Yatağı Saplaması
- 26 Somun



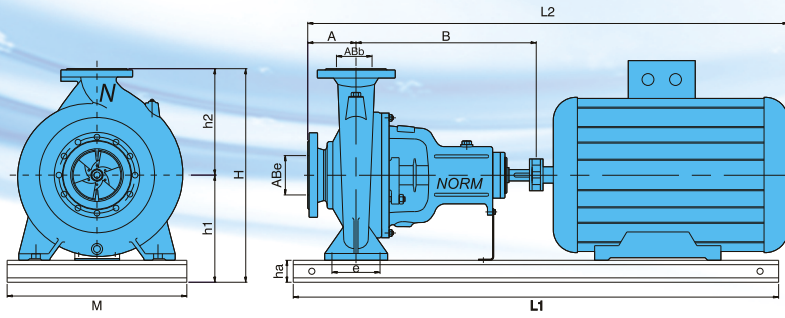
## TEKNİK BİLGİLER



## BOYUTLAR

Pompa Tipi	Dış Boyutlar						Ayak Bağlantı Ölçüleri						Mil Ucu				Aralık				
	AAe	AAb	a	b	L	h1	h2	k1	k2	m1	m2	m3	z1	e	z2	c	d	l	t	b	X
32-125	50	32	80	360	440	112	140	100	70	190	140	90	14	110	14	260	25	57	28	8	100
32-160			80	360	440	132	160	100	70	240	190	140	14	110	14	260	25	57	28	8	100
32-200			80	360	440	160	180	100	70	240	190	140	14	110	14	260	25	57	28	8	100
32-250			100	360	460	180	225	125	95	320	250	190	14	110	14	260	25	57	28	8	100
40-125	65	40	80	360	440	112	140	100	70	210	160	110	14	110	14	260	25	57	28	8	100
40-160			80	360	440	132	160	100	70	240	190	140	14	110	14	260	25	57	28	8	100
40-200			100	360	460	160	180	100	70	264	212	165	14	110	14	260	25	57	28	8	100
40-250			100	360	460	180	225	125	95	320	250	190	14	110	14	260	25	57	28	8	100
40-315			100	360	460	200	250	125	95	345	280	190	14	110	14	260	25	57	28	8	100
50-125	65	50	100	360	460	132	160	100	70	240	190	140	14	110	14	260	25	57	28	8	100
50-160			100	360	460	160	180	100	70	265	212	165	14	110	14	260	25	57	28	8	100
50-200			100	360	460	160	200	100	70	265	212	165	14	110	14	260	25	57	28	8	100
50-250			100	360	460	180	225	125	95	320	250	190	14	110	14	260	25	57	28	8	100
50-315	80	125	470	595	225	280	125	95	345	280	190	19	110	14	330	35	80	38	10	100	
65-125	80	65	100	360	460	160	180	125	95	280	212	150	14	110	14	260	25	57	28	8	100
65-160			100	360	460	160	200	125	95	280	212	150	14	110	14	260	25	57	28	8	100
65-200			100	360	460	180	225	125	95	320	250	190	14	110	14	260	25	57	28	8	140
65-250			100	360	570	200	250	160	120	360	280	200	19	110	14	330	35	80	38	10	140
65-315			125	470	595	225	280	160	120	400	315	240	19	110	14	330	35	80	38	10	140
65-400	100	125	470	595	260	355	160	120	435	355	275	19	110	14	330	45	110	45	12	140	
80-160	100	80	125	360	485	180	225	125	95	320	250	190	14	110	14	260	25	57	28	8	140
80-200			125	470	595	180	250	125	95	345	280	215	14	110	14	330	35	80	38	10	140
80-250			125	470	595	200	280	160	120	400	315	240	19	110	14	330	35	80	38	10	140
80-315			125	470	595	250	315	160	120	400	315	240	19	110	14	360	40	100	45	12	140
80-400	125	530	655	280	355	160	120	435	355	275	19	110	14	360	45	110	48	12	140		
100-160	125	100	125	470	595	200	280	160	120	360	280	200	19	110	14	330	35	80	38	10	140
100-200			125	470	595	200	280	160	120	360	280	200	19	110	14	330	35	80	38	10	140
100-250			140	470	610	225	280	160	120	400	315	240	19	110	14	330	35	80	38	10	140
100-315			140	470	610	250	315	160	120	400	315	240	19	110	14	330	35	80	38	10	140
100-400	140	530	670	280	355	200	150	500	400	300	23	110	14	360	45	110	48	12	140		
125-200	150	125	140	470	610	250	315	160	120	400	315	240	19	110	14	330	35	80	38	10	140
125-250			140	470	610	250	355	160	120	400	315	240	19	110	14	330	35	80	38	10	140
125-315			140	530	670	280	355	160	120	400	315	300	19	110	14	330	40	100	45	10	140
125-400			140	530	670	315	400	200	150	500	400	300	23	110	14	360	45	110	48	12	140
150-200	200	150	160	470	630	280	355	200	150	500	300	240	19	110	14	330	35	80	38	10	140
150-250			160	470	630	280	375	200	150	500	300	240	19	110	14	330	35	80	38	10	140
150-315			160	530	690	280	400	200	150	500	450	350	23	110	14	360	40	100	45	10	140
150-400			160	530	690	315	450	200	150	550	450	350	23	110	14	360	45	110	60	12	140
150-500			200	730	930	400	525	250	200	720	600	435	27	140	20	495	55	110	60	16	140
200-260	250	200	200	610	810	355	450	250	200	600	500	360	23	140	20	410	42	110	45	12	200
200-315			200	610	810	355	450	250	200	600	500	360	23	140	20	410	42	110	45	12	180
200-400			180	725	905	400	500	250	200	600	500	360	23	140	20	490	55	110	59	16	180
200-500			210	925	1135	400	525	300	240	720	600	435	27	140	20	640	70	140	75	20	180
250-400	300	250	230	750	980	400	525	300	240	720	600	435	27	140	20	515	55	110	59	16	200
250-500			225	940	1165	450	630	300	240	720	600	435	27	140	20	670	70	140	74,5	20	200





2900 d/dk.

POMPA TİPİ	MOTOR		YATAY MONTAJ ÖLÇÜLERİ											
	KW	IEC	AAe	AAb	A	B	L2	M	L1	e	ha	h1	h2	H
32-125	1.1	80				360	720	215	650	60	65	177	140	317
	1.5	90S				360	760	215	680	60	65	177	140	317
	2.2	90L				360	760	215	680	60	65	197	160	357
	3	100L				360	810	215	720	60	65	197	160	357
32-160	3	110L	50	32	80	360	810	245	720	60	65	197	160	357
	4	112M				360	840	245	720	60	65	197	160	357
	5.5	132S				360	890	270	770	60	65	197	160	357
	7.5	132S				360	890	270	770	60	65	197	160	357
32-200	5.5	132S				360	835	245	720	60	65	225	180	405
	7.5	132S				360	890	270	770	60	65	225	180	405
	11	160M				360	890	270	770	60	80	240	180	420
32-250	7.5	132S			100	360	980	325	790	75	80	260	225	485
	11	160M				360	1060	325	950	75	80	260	225	485
	15	160M				360	1060	325	950	75	80	260	225	485
40-125	2.2	90L	65	40	80	360	760	215	680	60	65	177	140	317
	3	100L				360	810	215	720	60	65	177	140	317
	4	112M				360	840	245	720	60	65	177	140	317
	5.5	132S				360	890	270	770	60	80	197	140	337
40-160	4	112M				360	840	270	720	60	65	197	160	357
	5.5	132S				360	890	270	770	60	65	197	160	357
	7.5	132S				360	890	270	770	60	65	197	160	357
	11	160M				360	1040	270	950	60	80	240	160	400
40-200	7.5	132S				360	910	295	770	60	65	225	180	405
	11	160M				360	1056	295	950	60	65	240	180	420
	15	160M				360	1056	295	950	60	80	240	180	420
	11	160M				360	1060	350	950	75	80	260	225	485
40-250	15	160M			100	360	1060	350	950	75	80	260	225	485
	18.5	160L				360	1060	350	950	75	80	260	225	485
	22	180M				360	1060	350	950	75	80	260	225	485
	30	180M				360	1100	350	1030	75	100	280	225	505
	30	200L				360	1140	350	1170	75	100	300	225	525
50-125	3	100L	65	50	100	360	830	245	720	60	65	197	160	357
	4	112M				360	860	245	720	60	65	197	160	357
	5.5	132S				360	910	270	770	60	65	197	160	357
	7.5	132S				360	910	270	770	60	65	197	160	357
50-160	5.5	132S				360	910	270	770	60	65	225	180	405
	7.5	132S				360	910	270	770	60	65	225	180	405
	11	160M				360	1060	325	950	60	80	240	180	420
50-200	11	160M				360	1060	295	950	60	80	240	200	440
	15	160M				360	1060	295	950	60	80	240	200	440
	18.5	160L				360	1060	295	950	60	80	240	200	440
	22	180M				360	1100	295	1030	60	100	280	200	480
50-250	18.5	160L				360	1056	350	950	75	80	260	225	485
	22	180M				360	1099	350	1030	75	100	280	225	505
	30	200L				360	1135	350	1170	75	100	300	225	525
	37	200L				360	1135	350	1170	75	100	300	225	525
65-125	4	112M	80	65	100	360	855	285	750	75	80	240	180	420
	5.5	132S				360	908	285	800	75	80	240	180	420
	7.5	132S				360	908	285	800	75	80	240	180	420
	11	160M				360	1056	325	950	75	80	240	180	420
65-160	11	160M				360	1056	325	950	75	80	240	200	440
	15	160M				360	1056	325	950	75	80	240	200	440
	18.5	160L				360	1056	325	950	75	80	240	200	440
65-200	18.5	160L				360	1056	325	950	75	100	260	225	485
	22	180M				360	1099	365	1030	75	100	280	225	505
	30	200L				360	1135	405	1070	75	100	300	225	525
	37	200L				360	1135	405	1070	75	100	300	225	525
65-250	22	180M				470	1209	390	1120	90	100	300	250	550
	30	200L				470	1245	390	1180	90	100	300	250	550
	37	200L				470	1245	390	1180	90	100	300	250	550
	45	225M				470	1315	390	1220	90	100	325	250	575
	55	250M				470	1470	390	1290	90	120	370	250	620
80-160	11	160M	100	80	125	360	1081	325	950	75	80	260	225	485
	15	160M				360	1081	325	950	75	80	260	225	485
	18.5	160L				360	1081	325	950	75	80	260	225	485
	22	180M				360	1124	365	1080	75	100	280	225	505
80-200	22	180M				470	1234	356	1120	75	100	280	250	530
	30	200L				470	1270	405	1180	75	100	300	250	550
	37	200L				470	1270	405	1180	75	100	300	250	550
	45	225M				470	1340	445	1220	75	100	325	250	575
80-250	37	200L				470	1270	430	1180	90	100	300	280	580
	45	225M				470	1340	430	1220	90	100	325	280	605
	55	250M				470	1495	430	1390	90	120	370	280	650
	75	280S				470	1536	430	1350	90	140	420	280	700
100-160	30	200L	125	100	125	470	1270	405	1180	90	100	300	280	580
	37	200L				470	1270	405	1180	90	100	300	280	580
	45	225M				470	1340	445	1320	90	100	325	280	605
100-200	30	200L				470	1270	405	1180	90	100	300	280	580
	37	200L				470	1270	405	1180	90	100	300	280	580
	45	225M				470	1340	445	1220	90	100	325	280	605
	55	250M				470	1495	510	1290	90	120	370	280	650
100-250	45	225M				470	1355	445	1290	90	100	325	280	605
	55	250M				470	1510	510	1290	90	120	370	280	650
	75	280S				470	1578	565	1350	90	140	420	280	700
	90	280M				470	1630	565	1400	90	140	420	280	700
	110	315S				470	1698	640	1400	90	160	475	280	755
125-200	45	225M	150	125		470	1355	445	1220	90	100	350	315	665
	55	250M				470	1510	510	1290	90	120	370	315	685
	75	280S				470	1578	565	1350	90	140	420	315	735

## TEKNİK BİLGİLER

### 1450 d/dk.

POMPA TİPİ	MOTOR		YATAY MONTAJ ÖLÇÜLERİ													
	KW	IEC	AAe	AAb	A	B	L2	M	L1	e	ha	h1	h2	H		
32-125	0.18	63	50	32	80	360	660	215	610	60	65	177	140	317		
	0.25	71				360	700	215	610	60	65	177	140	317		
	0.37	71				360	700	2215	610	60	65	177	140	317		
32-160	0.37	71				360	700	245	620	60	65	197	160	357		
	0.55	80				360	725	245	650	60	65	197	160	357		
	0.75	80				360	725	245	650	60	65	197	160	357		
32-200	0.75	80			65	40	100	360	725	245	650	60	65	225	180	405
	1.1	90S						360	725	245	650	60	65	225	180	405
	1.5	90L						360	750	245	680	60	65	225	180	405
32-250	1.1	90S					360	775	325	700	75	80	260	225	485	
	1.5	90L					360	800	325	700	75	80	260	225	485	
	2.2	100L					360	840	325	750	75	80	260	225	485	
40-125	0.25	71	65	40	80	360	700	215	610	60	65	177	140	317		
	0.37	71				360	700	215	610	60	65	177	140	317		
	0.55	80				360	730	215	650	60	65	177	140	317		
40-160	0.55	80				360	730	245	650	60	65	197	160	357		
	0.75	80				360	730	245	650	60	65	197	160	357		
	1.1	90S				360	750	245	680	60	65	197	160	357		
40-200	0.75	80			65	40	100	360	735	270	680	60	65	225	180	410
	1.1	90S						360	775	270	680	60	65	225	180	410
	1.5	90L						360	800	270	680	60	65	225	180	410
40-250	2.2	100L					360	840	270	720	60	65	225	180	410	
	1.1	90S					360	775	325	700	75	80	260	225	485	
	1.5	90L					360	800	325	700	75	80	260	225	485	
40-315	2.2	100L	360	840	325	750	75	80	260	225	485					
	3	100L	360	840	325	750	75	80	260	225	485					
	4	112M	360	840	325	750	75	80	260	225	485					
50-125	0.37	71	65	50	100	360	715	245	620	60	65	197	160	357		
	0.55	80				360	745	245	650	60	65	197	160	357		
	0.75	80				360	745	245	650	60	65	197	160	357		
50-160	0.75	80				360	745	270	680	60	65	225	180	405		
	1.1	80S				360	745	270	680	60	65	225	180	405		
	1.5	90L				360	745	270	680	60	65	225	180	405		
50-200	1.1	90S			360	775	270	680	60	65	225	200	425			
	1.5	90L			360	800	270	680	60	65	225	200	425			
	2.2	100L			360	775	270	720	60	65	225	200	425			
50-250	3	100L			360	800	270	720	60	65	225	200	425			
	2.2	100L			360	840	325	780	75	80	260	225	485			
	3	100L			360	840	325	780	75	80	260	225	485			
50-315	4	112M	360	840	325	780	75	80	260	225	485					
	5.5	132S	360	840	325	780	75	80	260	225	485					
	7.5	132M	360	855	325	780	75	80	260	225	485					
65-125	11	160M	360	920	325	790	75	80	260	225	485					
	4	112M	470	990	365	880	75	100	325	280	605					
	5.5	132S	470	1055	365	930	75	100	325	280	605					
65-160	7.5	132M	470	1100	365	930	75	100	325	280	605					
	11	160M	470	1200	365	1030	75	100	325	280	605					
	0.55	80	360	743	285	700	75	80	240	180	420					
65-200	0.75	80	360	743	285	700	75	80	240	180	420					
	1.1	90S	360	770	285	750	75	80	240	180	420					
	1.1	90S	360	770	285	700	75	80	240	200	440					
65-250	1.5	90L	360	795	285	700	75	80	240	200	440					
	2.2	100L	360	795	285	700	75	80	240	200	440					
	3	100L	360	835	285	750	75	80	240	200	440					
65-315	4	112M	360	795	325	700	75	80	260	225	485					
	5.5	132S	360	835	325	750	75	80	260	225	485					
	7.5	132M	360	835	325	750	75	80	260	225	485					
65-400	11	160M	360	854	325	750	75	80	260	225	485					
	15	160L	470	945	365	880	90	100	300	250	550					
	22	180M	470	964	365	880	90	100	300	250	550					
65-400	30	200L	470	1027	365	930	90	100	300	250	550					
	11	160M	470	1065	365	970	90	100	300	250	550					
	15	160L	470	1065	365	970	90	100	300	250	550					
65-400	5.5	132S	470	1052	405	930	90	100	325	280	605					
	7.5	132M	470	1090	405	970	90	100	325	280	605					
	11	160M	470	1197	405	1030	90	100	325	280	605					
65-400	15	160L	470	1241	405	1070	90	100	325	280	605					
	22	180M	470	1200	445	1050	90	100	350	355	705					
	30	200L	470	1240	445	1120	90	100	350	355	705					
65-400	18.5	180M	470	1260	445	1120	90	100	350	355	705					
	22	180M	470	1300	445	1120	90	100	350	355	705					
	30	200L	470	1355	445	1180	90	100	350	355	705					

Pompa boyutları elektrik motoruna ve motor tipine göre farklılık gösterebilir. Belirtilen ölçüler takribidir.

## TEKNİK BİLGİLER

### 1450 d/dk.

POMPA TİPİ	MOTOR		YATAY MONTAJ ÖLÇÜLERİ											
	KW	IEC	AAe	AAb	A	B	L2	M	L1	e	ha	h1	h2	H
80-160	1.5	90L	100	80	125	360	830	325	700	75	80	260	225	485
	2.2	100L				360	860	325	750	75	80	260	225	485
	3	100L				360	860	325	750	75	80	260	225	485
80-200	3	100L	100	80	125	470	970	365	880	75	100	280	250	530
	4	112M				470	990	365	880	75	100	280	250	530
	5.5	132S				470	1060	365	930	75	100	280	250	530
80-250	4	112L	100	80	125	470	995	405	880	90	100	300	280	580
	5.5	132S				470	1060	405	930	90	100	300	280	580
	7.5	132M				470	1095	405	970	90	100	300	280	580
	11	160M				470	1200	405	1030	90	100	300	280	580
80-315	7.5	132M	100	80	125	470	1095	405	970	90	100	350	315	665
	11	160M				470	1200	405	1030	90	100	350	315	665
	15	160L				470	1240	405	1070	90	100	350	315	665
	18.5	180M				470	1260	405	1070	90	100	350	315	665
80-400	18.5	180M	100	80	125	530	1320	445	1180	90	100	380	355	735
	22	180M				530	1360	445	1180	90	100	380	355	735
	30	200L				530	1420	445	1220	90	100	380	355	735
	37	225S				530	1450	445	1290	90	100	380	355	735
	45	225M				530	1560	445	1325	90	100	380	355	735
100-160	3	100L	125	100	125	470	970	365	880	90	100	300	280	580
	4	112M				470	990	365	880	90	100	300	280	580
	5.5	132S				470	1055	365	930	90	100	300	280	580
100-200	3	100L	125	100	125	470	970	365	880	90	100	300	280	580
	4	112M				470	990	365	880	90	100	300	280	580
	5.5	132S				470	1055	365	930	90	100	300	280	580
	7.5	132M				470	1090	365	970	90	100	300	280	580
100-250	5.5	132S	125	100	140	470	1070	405	930	90	100	325	280	605
	7.5	132M				470	1110	405	970	90	100	325	280	605
	11	160M				470	1220	405	1030	90	100	325	280	605
	15	160L				470	1260	405	1070	90	100	325	280	605
100-315	11	160M	125	100	140	470	1220	405	1030	90	100	350	315	665
	15	160L				470	1260	405	1075	90	100	350	315	665
	18.5	180M				470	1280	405	1075	90	100	350	315	665
	22	180M				470	1320	405	1125	90	100	350	315	665
	30	200L				470	1375	405	1185	90	100	350	315	665
100-400	22	180M	125	100	140	530	1375	510	1235	110	120	400	355	755
	30	200L				530	1430	510	1235	110	120	400	355	755
	37	225S				530	1470	510	1300	110	120	400	355	755
	45	225M				530	1500	510	1300	110	120	400	355	755
	55	250M				530	1575	510	1350	110	120	400	355	755
125-200	7.5	132M	150	125	140	470	1110	405	970	90	100	350	315	665
	11	160M				470	1220	405	1030	90	100	350	315	665
	15	160L				470	1260	405	1070	90	100	350	315	665
125-250	11	160M	150	125	140	470	1220	405	1030	90	100	350	355	705
	15	160L				470	1260	405	1070	90	100	350	355	705
	18.5	180M				470	1275	405	1070	90	100	350	355	705
	22	180M				470	1320	405	1120	90	100	350	355	705
125-315	15	160L	150	125	140	530	1320	510	1180	110	120	400	355	755
	18.5	180M				530	1330	510	1180	110	120	400	355	755
	22	180M				530	1375	510	1230	110	120	400	355	755
	30	200L				530	1430	510	1230	110	120	400	355	755
	37	225S				530	1470	510	1290	110	120	400	355	755
125-400	37	225S	150	125	140	530	1470	510	1295	110	120	435	400	835
	45	225M				530	1500	510	1295	110	120	435	400	835
	55	250M				530	1575	510	1345	110	120	435	400	835
	75	280S				530	1640	510	1400	110	120	435	400	835
150-200	11	160M	200	150	160	470	1235	510	1050	110	120	400	355	755
	15	160L				470	1280	510	1100	110	120	400	355	755
	18.5	180M				470	1300	510	1100	110	120	400	355	755
150-250	15	160L	200	150	160	470	1290	510	1100	110	120	400	375	775
	18.5	180M				470	1310	510	1100	110	120	400	375	775
	22	180M				470	1345	510	1180	110	120	400	375	775
	30	200L				470	1400	510	1180	110	140	400	375	775
150-315	22	180M	200	150	160	530	1400	510	1230	110	120	400	400	800
	30	200L				530	1450	510	1230	110	120	400	400	800
	37	225S				530	1490	510	1290	110	120	400	400	800
	45	225M				530	1515	510	1290	110	120	400	400	800
150-400	45	225M	200	150	160	530	1515	510	1300	110	120	435	450	885
	55	250M				530	1600	510	1350	110	120	435	450	885
	75	280S				530	1660	565	1400	110	140	435	450	905
	90	280M				530	1715	565	1465	110	140	435	450	905



## TEKNİK BİLGİLER

### 1450 d/dk.

POMPA TİPİ	MOTOR		YATAY MONTAJ ÖLÇÜLERİ											
	KW	IEC	AAe	AAb	A	B	L2	M	L1	e	ha	h1	h2	H
150-500	90	280M	200	150	200	730	1950	840	1170	135	120	520	525	1045
	110	315S					2050		1180					
	132	315M					2100							
	160	315M					2100							
	185	315L					2130							
200	315L	2130	1820											
200-260	37	225S	250	200	180	725	1605	610	1450	135	140	495	450	945
	45	225M					1630							
	55	250M					1710							
	75	280S					1778							
200-315	30	200L	250	200	210	955	1570	610	1350	135	100	455	450	905
	37	225S					1610							
	45	225M					1640							
	55	250M					1720							
	75	280S					1780							
200-400	75	280S	300	250	225	970	1875	610	1650	135	120	520	500	1020
	90	280M					1930							
	110	315S					2030							
	132	315M					2090							
	160	315M					2090							
200-500	132	315M	300	250	225	970	2335	760	2050	160	120	520	525	1045
	160	315M					2335							
	185	315L					2425							
	200	315L					2425							
	250	355M					2545							
315	355M	2545	2300											
250-400	75	280S	300	250	225	970	1948	760	1700	160	120	520	525	1045
	90	280M					200							
	110	315S					2098							
	132	315M					2150							
	160	315M					2150							
250-500	200	315L	300	250	225	970	2455	760	2100	160	120	570	630	1200
	250	355M					2575							
	315	355M					2575							
	355	355M					2575							
	400	355L					2575							
450	400L	2678	2390											

### Malzeme Seçenekleri

Parçanın Adı	MALZEME					
	Standart Malzeme	Bronz Malzeme	Komple Bronz	Stero Döküm	Çelik Döküm	Paslanmaz Çelik
Salyangoz gövde	GG 25	GG 25	Bronz	GGG 40	GS-C25	SS 304-316
Arka kapak	GG 25	GG 25	Bronz	GGG 40	GS-C25	SS 304-316
Çark	GG 25	Bronz	Bronz	GGG 40	GS-C25	SS 304-316
Glen	Bronz	Bronz	Bronz	Bronz	Bronz	SS 304-316
Aşınma Halkası (*)	Bronz (*)	GG 25 (*)	GG 25	Bronz	Bronz	X20Cr13
Pompa Mili	X20Cr13	X20Cr13	X20Cr13	X20Cr13	SS 304-316	SS 304-316
Mil kovani (**)	X20Cr13 (**)	X20Cr13 (**)	X20Cr13 (**)	X20Cr13 (**)	X20Cr13 (**)	X20Cr13 (**)
Rulman yatağı	GG 25	GG 25	GG 25	GGG 40	GS-C25	SS 304-316
Rulman kapağı	GG 25	GG 25	Bronz	GGG 40	GS-C25	SS 304-316

(\*) Aşınma halkası isteğe bağlıdır.  
Seçenekler; Alıcının isteğine veya çalışma şartlarına bağlı olarak değişik tip ve markalarla mekanik salmastra kullanılabilir.

## TEKNİK BİLGİLER

### Malzeme Seçim Tablosu

Parça Listesi	0.6025	0.7040	1.0619	1.4308	1.4408	1.4409	1.4517	1.4469	2.1050.01	1.0503	1.4021	1.4301	1.4306	1.4401	1.4404	1.4462
Salyangoz gövde	●	○	○	○	○	○	○	○	○							
Gövde kapağı	●	○	○	○	○	○	○	○	○							
Çark	●	○	○	○	○	○	○	○	○							
Mil										●	○	○	○	○	○	○
Rulman yatağı	●															
Aşınma bileziği (Gövde)	○	○	○	○	○	○	○	○	○							
Mil koruma burcu										○	○	○	○	○	○	○
<b>Mekanik salmastra (*)</b>										<b>EN 12756 / DIN 24960</b>						

(\*) seçenekler : Alıcının isteğine veya çalışma şartlarına bağlı olarak değişik tip ve markalarda mekanik salmastra kullanılabilir.

● Standart imalat  
○ İsteğe bağlı

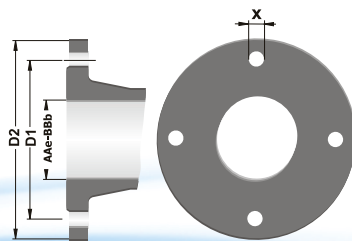
### Malzeme Seçenekleri

Tanım	DIN 17007	EN-DIN	ASTM
Pik döküm	0.6025	GJL-250 (GG 25)	A 48 Class 40-B
Sfero döküm	0.7040	GJS-400-15 (GGG 40)	A 536 Gr. 60-40-18
Çelik döküm	1.0619	GP240GH (GS-C 25)	A 216 Gr. WCB
Krom nikelli çelik döküm	1.4308	G-X5 Cr Ni 19-10	A 351/743/744 Gr. CF8
Krom nikel molibdenli çelik döküm	1.4408	G-X5 Cr Ni Mo 19-11-2	A 351/743/744 Gr. CF8M
Krom nikel molibdenli çelik döküm (düşük karbon)	1.4409	G-X2 Cr Ni Mo 19-11-2	A 351/743/744 CF3M
Östenitik-ferritik çelik döküm (dubleks)	1.4517	G-X2 Cr Ni Mo Cu N 25-6-3-3	A 890 Gr. 1B (CD4MCuN)
Östenitik-ferritik çelik döküm (süper dubleks)	1.4469	G-X2 Cr Ni Mo N 26-7-4	A 890 Gr. 5A (CE3MN)
Bronz döküm	2.1050.01	G-Cu Sn 10	B 584 C 90700
Karbonlu çelik	1.0503	C 45	A 29/108/576 1045
Kromlu çelik	1.4021	X20 Cr 13	A 276 Type 420
Krom nikel çelik	1.4301	X5 Cr Ni 18-10	A 276 Type 304
Krom nikel çelik (düşük karbon)	1.4306	X2 Cr Ni 19-11	A 276 Type 304L
Krom nikel molibdenli çelik	1.4401	X5 Cr Ni Mo 17-12-2	A 276 Type 316
Krom nikel molibdenli çelik (düşük karbon)	1.4404	X2 Cr Ni Mo 17-12-2	A 276 Type 316 L
Dubleks (östenitik-ferritik) çelik	1.4462	X2 Cr Ni Mo N 22-5-3	A 276 (32205)

### Flanş Ölçüleri

Pompa Tipi	Emme & Basma (PN16)			
	D2	D1	x	z
32	140	100	18	4
40	150	110	18	4
50	165	125	18	4
65	185	145	18	4
80	200	160	18	8
100	220	180	18	8
125	250	210	18	8
150	285	240	23	8
200	340	295	23	12
250	405	355	23	12
300	460	410	28	12

" z " delik sayısı



# NORM®



## NORM®

NORM HİDROFOR POMPA SAN. TİC. LTD. ŞTİ.

Uzundere Mevkii, Mecidiye Mah. Ağrı Cad. İkbal Sok.

No: 46/A 34930 Sultanbeyli - İSTANBUL - TURKEY

Tel : +90 216 496 71 05 (4 hat) Fax: +90 216 496 71 09

Tel : +90 216 398 54 33-36 Fax: +90 216 496 70 27

[www.normpumps.com.tr](http://www.normpumps.com.tr) • [info@normpumps.com.tr](mailto:info@normpumps.com.tr)

[www.normpompa.com.tr](http://www.normpompa.com.tr)

