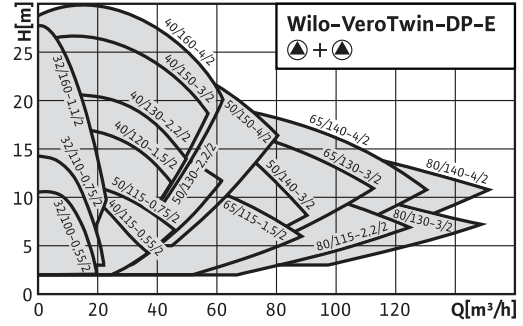


# Isıtma, Soğutma, İklimlendirme, Endüstri

Enerji Tasarruflu Pompalar (Kuru Rotorlu, İkiz)

## Wilo-VeroTwin-DP-E



### Dizayn

Elektronik kontrollü, flanş bağlantılı, kuru rotorlu (salmastralı), yekpare milli, inline tip ikiz pompa

### Uygulama

Isıtma, soğutma ve iklimlendirme tesisatları

### Pompa Kodlaması

Örnek : **DP-E 40/160-4/2 R1**

**DP-E** Elektronik kontrollü inline ikiz pompa

**40/** Nominal bağlantı çapı DN

**160** Nominal çark çapı

**4** Nominal motor gücü  $P_2$ , kW

**2** Kutup sayısı

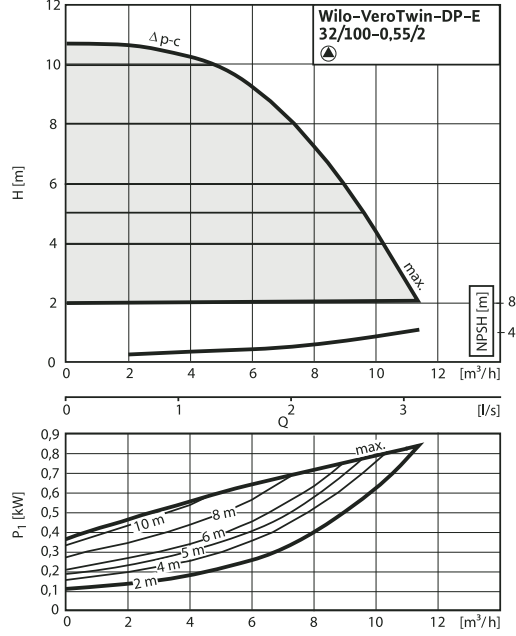
**R1** Basınç sensörsüz versiyon

### Ürün Özellikleri / Faydalar

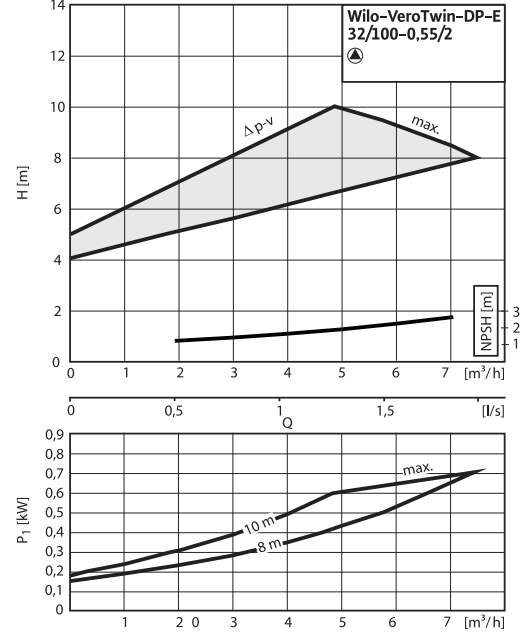
- Geliştirilmiş işlevsellik
- Entegre elektronik güç kontrolü ile enerji tasarrufu
- Pompada  $\Delta p-c$  ve  $\Delta p-v$  kontrol modları
- Debi indikatörü
- Devre kesicili dahili tam motor koruması (PTC termistör sensörlü)
- "Kırmızı buton" ile kolay kullanım, ekran, kızılötesi arayüz
- BUS iletişimi için, sonradan takılabilir IF-Modüller (LON, PLR)
- Entegre İkiz Pompa İşletimi
- Kataforez kaplama ile yüksek korozyon dayanımı
- Yön değiştirme klapesi

## Wilo-VeroTwin-DP-E Karakteristik Eğriler

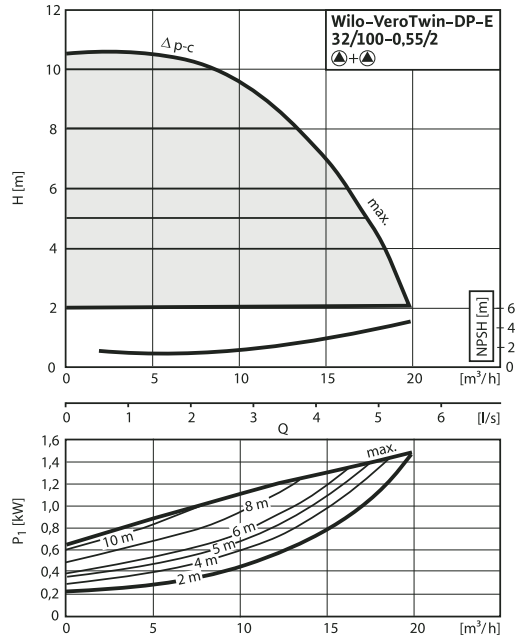
Wilo-VeroTwin-DP-E 32/100-0,55/2

 $\Delta p-c$  (sabit) tekli işletim

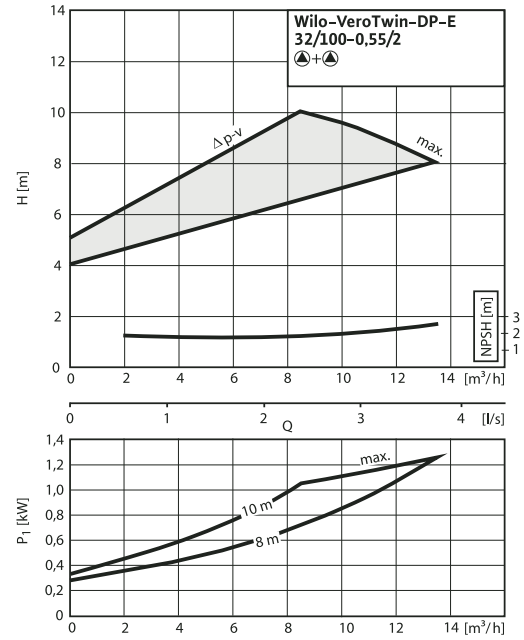
Wilo-VeroTwin-DP-E 32/100-0,55/2

 $\Delta p-v$  (değişken) tekli işletim

Wilo-VeroTwin-DP-E 32/100-0,55/2

 $\Delta p-c$  (sabit) paralel işletim

Wilo-VeroTwin-DP-E 32/100-0,55/2

 $\Delta p-v$  (değişken) paralel işletim

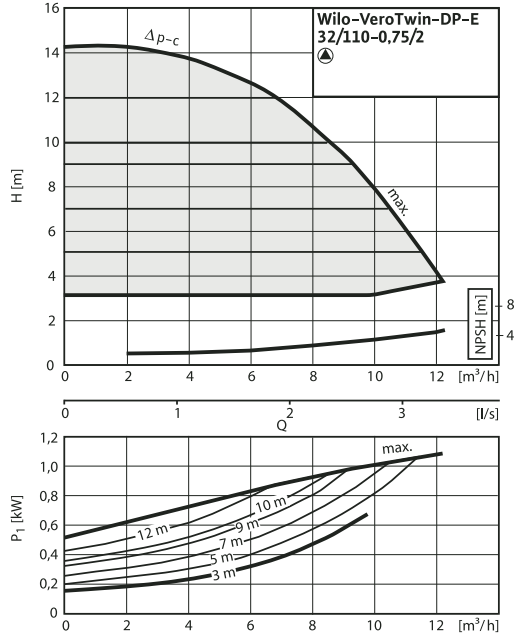
# Isıtma, Soğutma, İklimlendirme, Endüstri

Enerji Tasarruflu Pompalar (Kuru Rotorlu, İkiiz)

## Wilo-VeroTwin-DP-E Karakteristik Eğriler

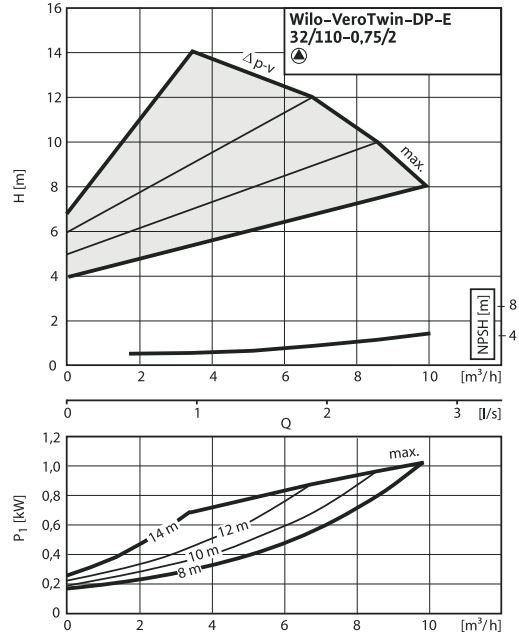
### Wilo-VeroTwin-DP-E 32/110-0,75/2

$\Delta p-c$  (sabit) tekli işletim



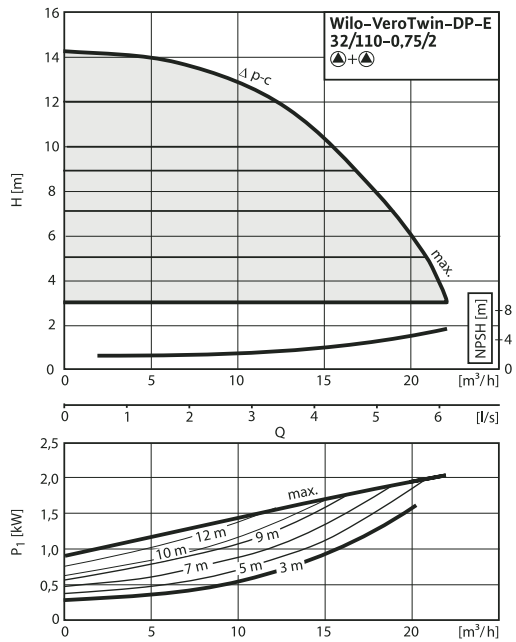
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$\Delta p-v$  (değişken) tekli işletim



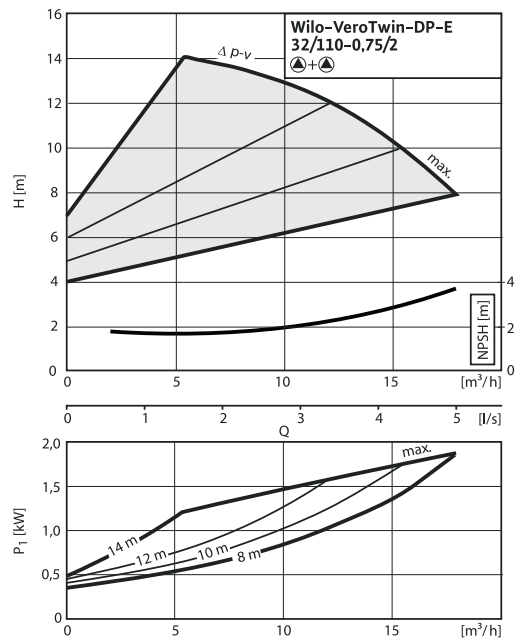
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$\Delta p-c$  (sabit) paralel işletim



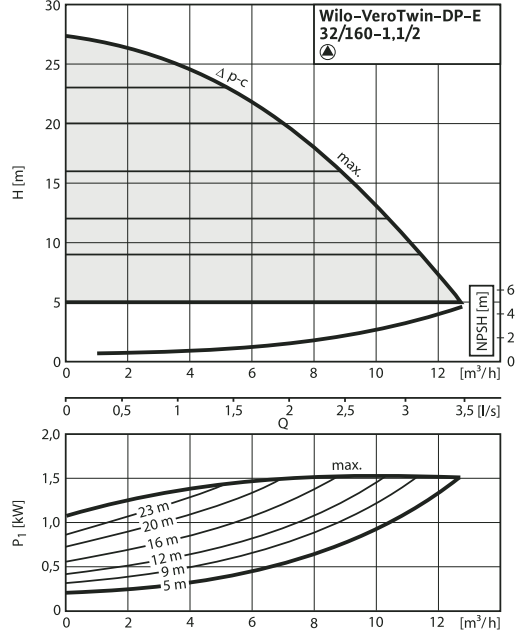
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$\Delta p-v$  (değişken) paralel işletim

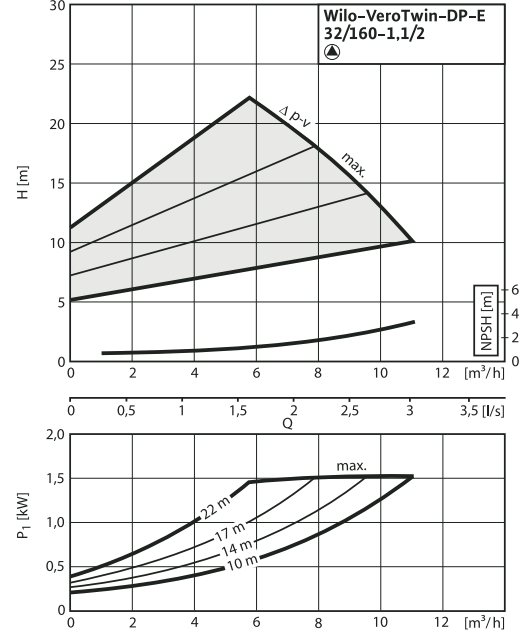


## Wilo-VeroTwin-DP-E Karakteristik Eğriler

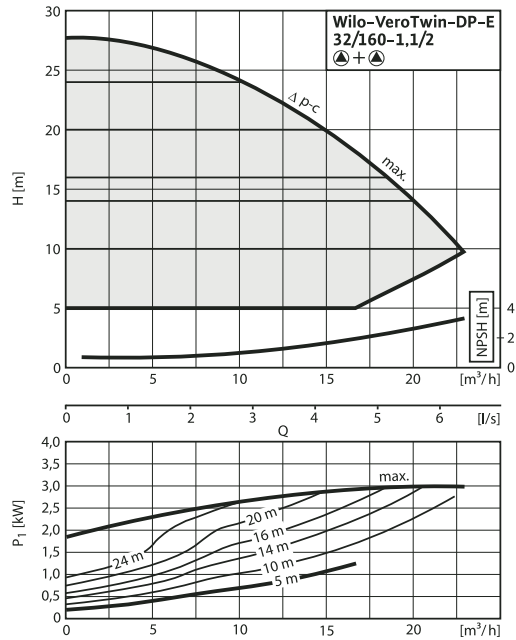
Wilo-VeroTwin-DP-E 32/160-1,1/2

 $\Delta p$ -c (sabit) tekli işletim

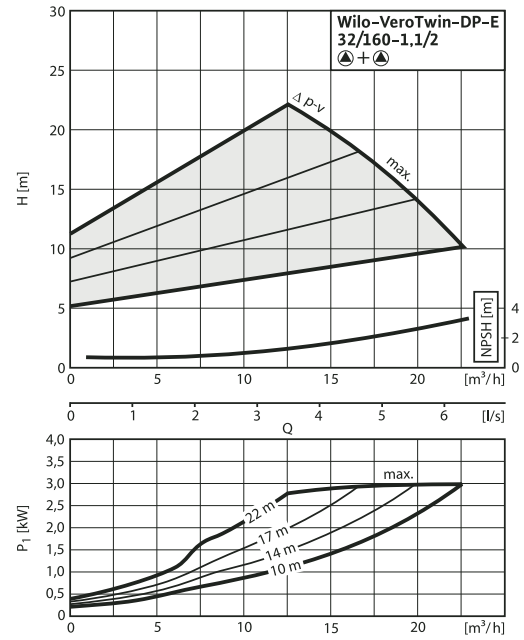
Wilo-VeroTwin-DP-E 32/160-1,1/2

 $\Delta p$ -v (değişken) tekli işletim

Wilo-VeroTwin-DP-E 32/160-1,1/2

 $\Delta p$ -c (sabit) paralel işletim

Wilo-VeroTwin-DP-E 32/160-1,1/2

 $\Delta p$ -v (değişken) paralel işletim

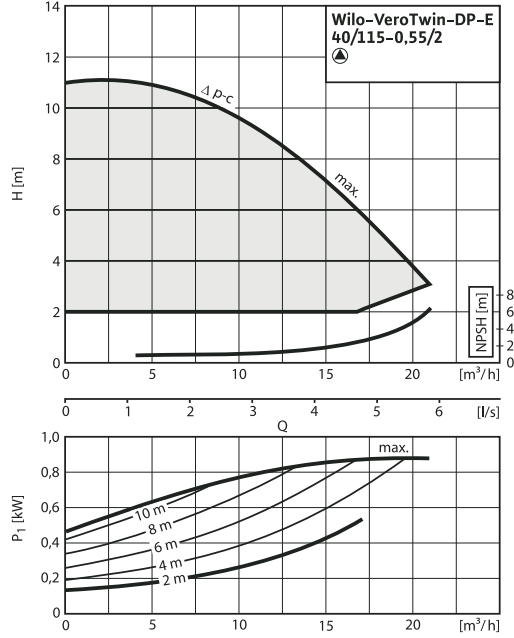
# Isıtma, Soğutma, İklimlendirme, Endüstri

Enerji Tasarruflu Pompalar (Kuru Rotorlu, İkiiz)

## Wilo-VeroTwin-DP-E Karakteristik Eğriler

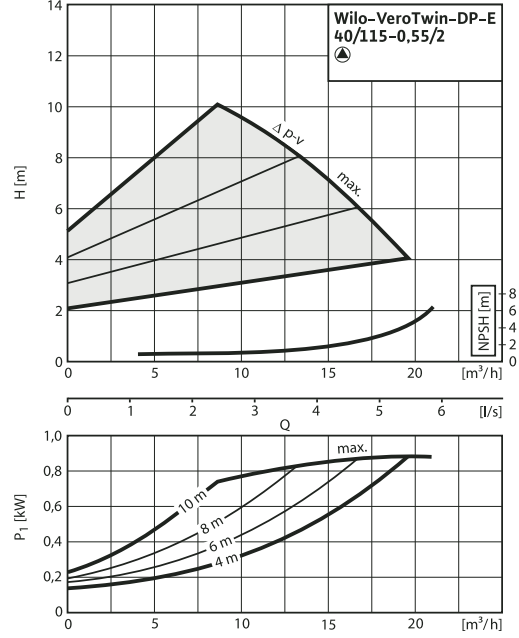
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$\Delta p-c$  (sabit) tekli işletim



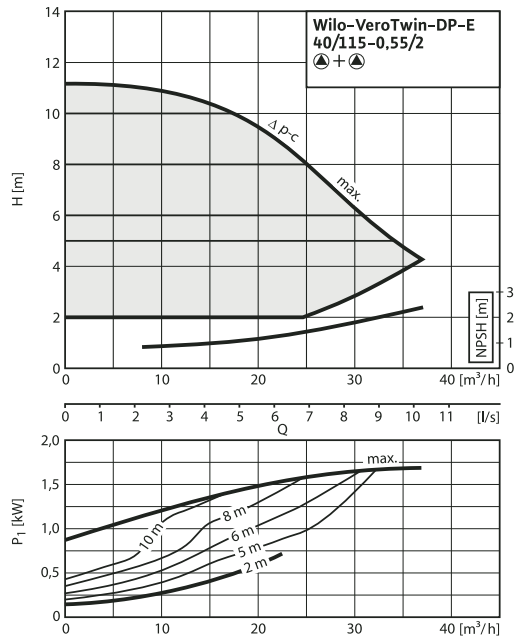
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$\Delta p-v$  (değişken) tekli işletim



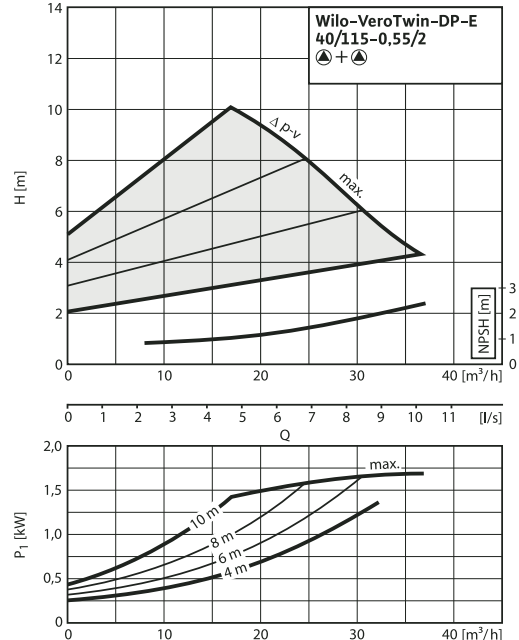
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$\Delta p-c$  (sabit) paralel işletim



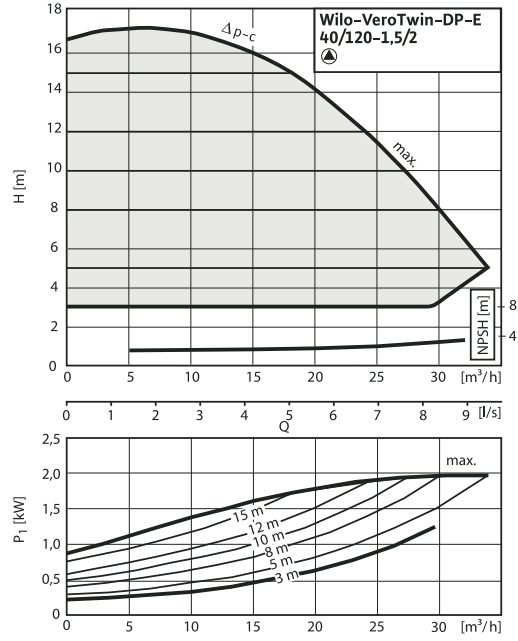
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$\Delta p-v$  (değişken) paralel işletim

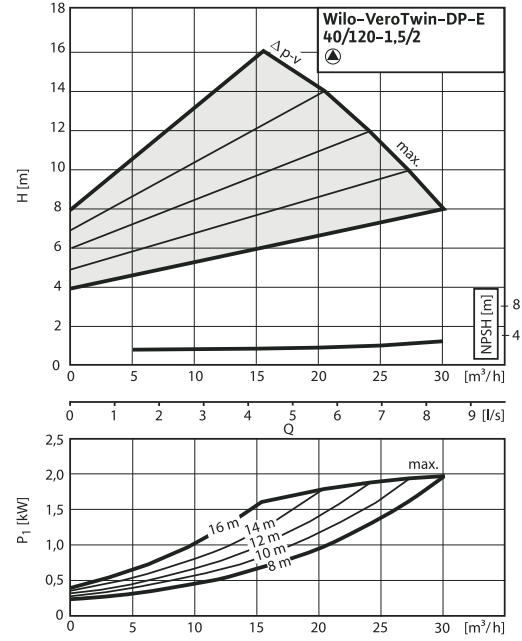


## Wilo-VeroTwin-DP-E Karakteristik Eğriler

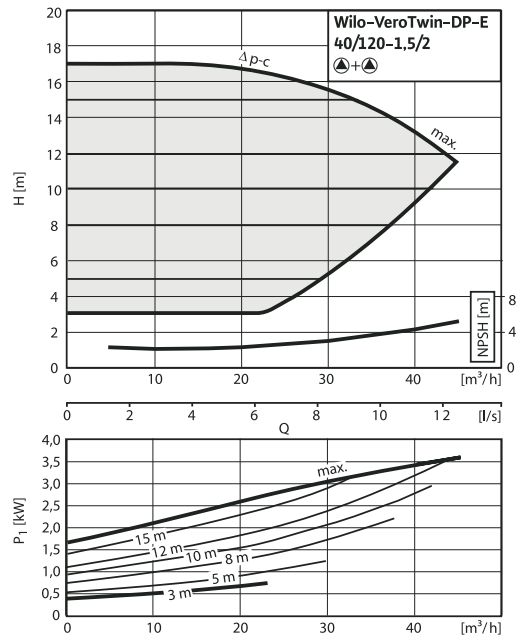
Wilo-VeroTwin-DP-E 40/120-1,5/2

 $\Delta p-c$  (sabit) tekli işletim

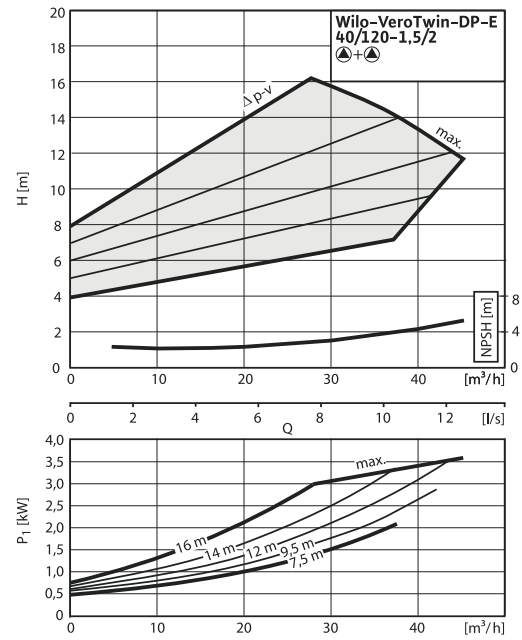
Wilo-VeroTwin-DP-E 40/120-1,5/2

 $\Delta p-v$  (değişken) tekli işletim

Wilo-VeroTwin-DP-E 40/120-1,5/2

 $\Delta p-c$  (sabit) paralel işletim

Wilo-VeroTwin-DP-E 40/120-1,5/2

 $\Delta p-v$  (değişken) paralel işletim

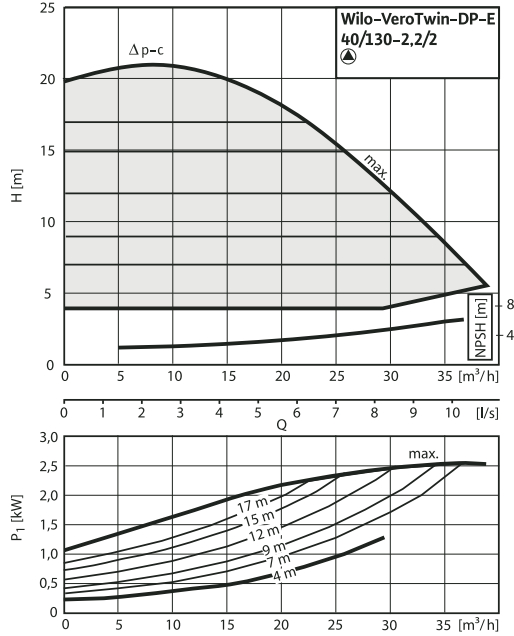
# Isıtma, Soğutma, İklimlendirme, Endüstri

Enerji Tasarruflu Pompalar (Kuru Rotorlu, İkiiz)

## Wilo-VeroTwin-DP-E Karakteristik Eğriler

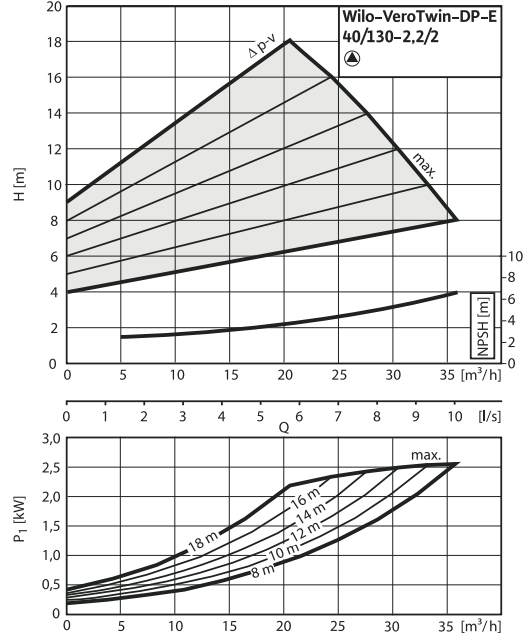
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$\Delta p-c$  (sabit) tekli işletim



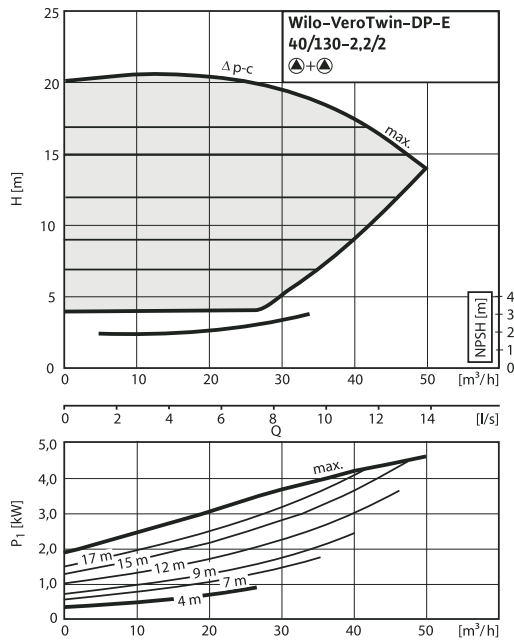
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$\Delta p-v$  (değişken) tekli işletim



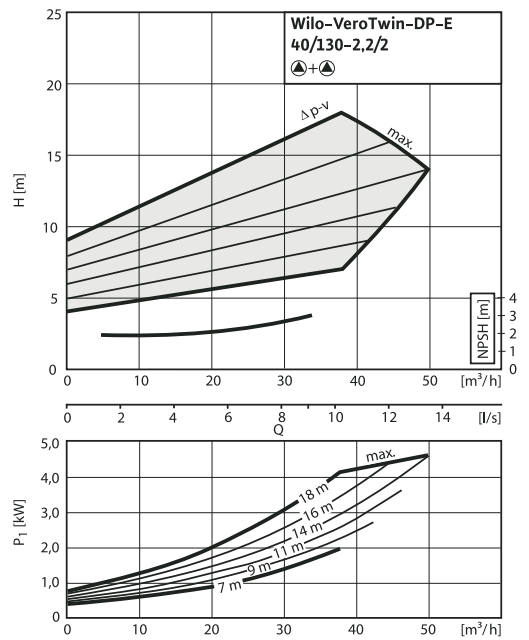
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$\Delta p-c$  (sabit) paralel işletim



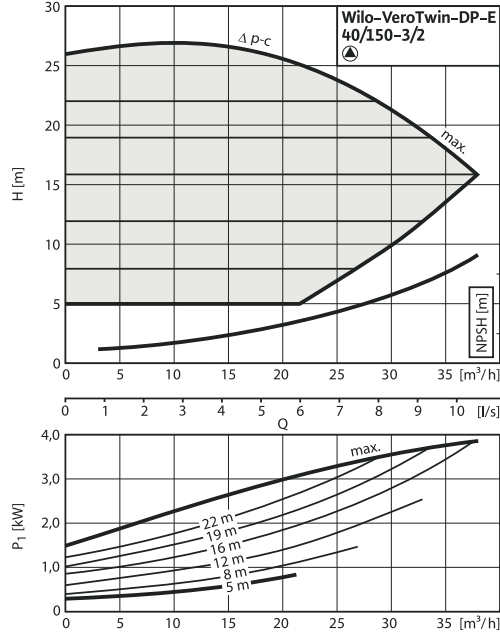
### Wilo-VeroTwin-DP-E 40/130-2,2/2

$\Delta p-v$  (değişken) paralel işletim

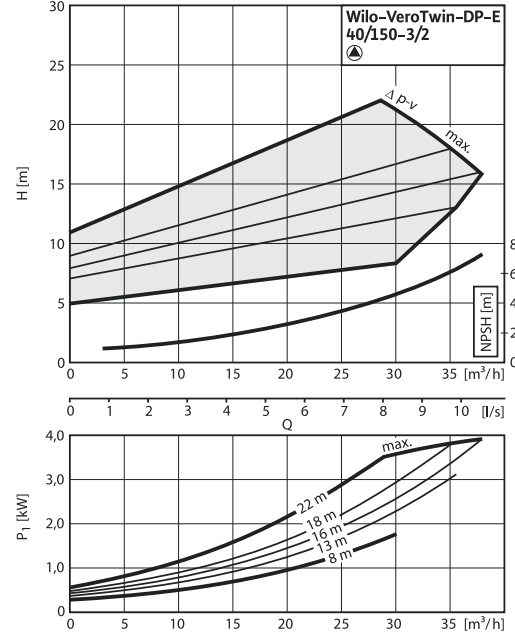


## Wilo-VeroTwin-DP-E Karakteristik Eğriler

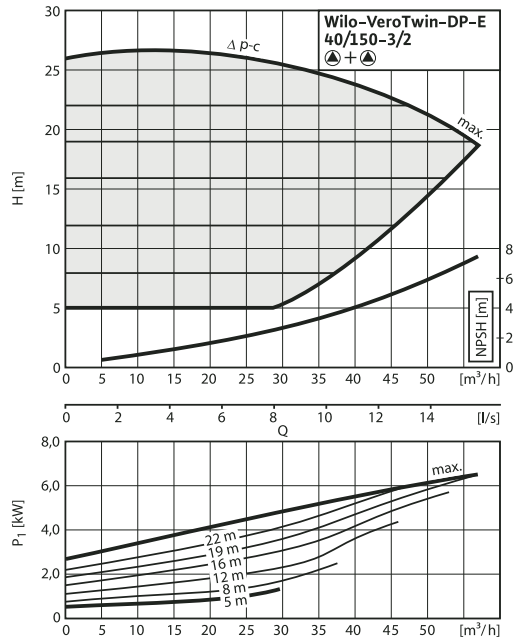
Wilo-VeroTwin-DP-E 40/150-3/2

 $\Delta p$ -c (sabit) tekli işletim

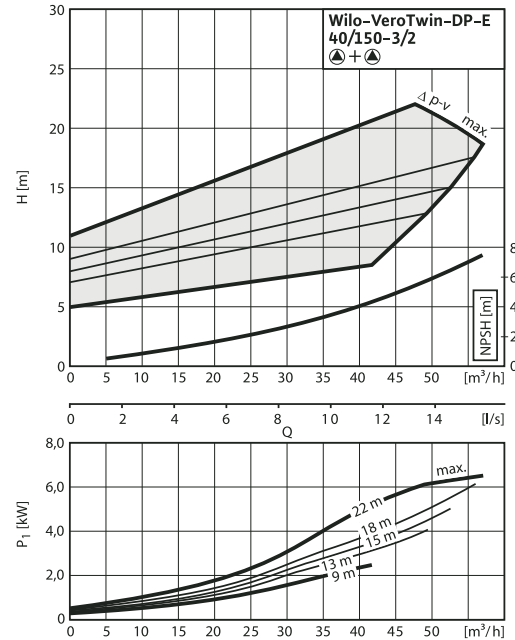
Wilo-VeroTwin-DP-E 40/150-3/2

 $\Delta p$ -v (değişken) tekli işletim

Wilo-VeroTwin-DP-E 40/150-3/2

 $\Delta p$ -c (sabit) paralel işletim

Wilo-VeroTwin-DP-E 40/150-3/2

 $\Delta p$ -v (değişken) paralel işletim



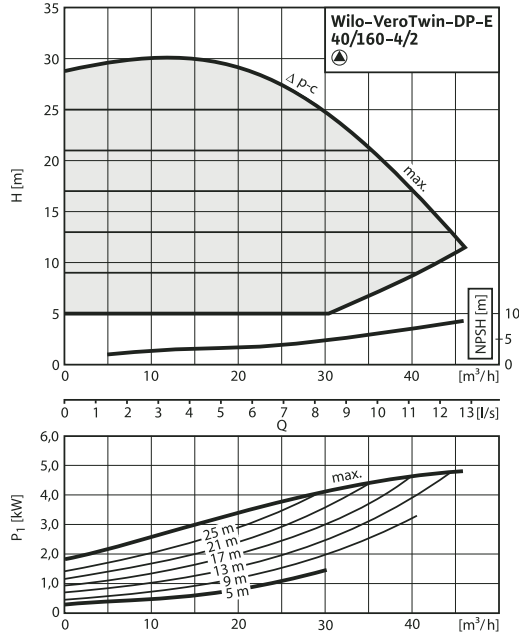
# Isıtma, Soğutma, İklimlendirme, Endüstri

Enerji Tasarruflu Pompalar (Kuru Rotorlu, İkiz)

## Wilo-VeroTwin-DP-E Karakteristik Eğriler

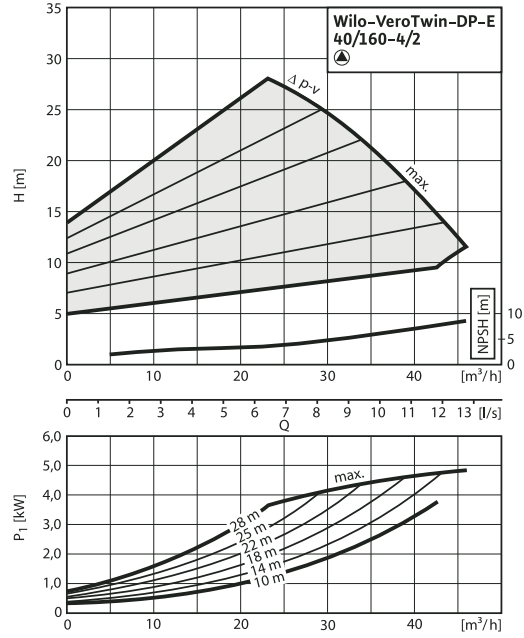
### Wilo-VeroTwin-DP-E 40/160-4/2

$\Delta p-c$  (sabit) tekli işletim



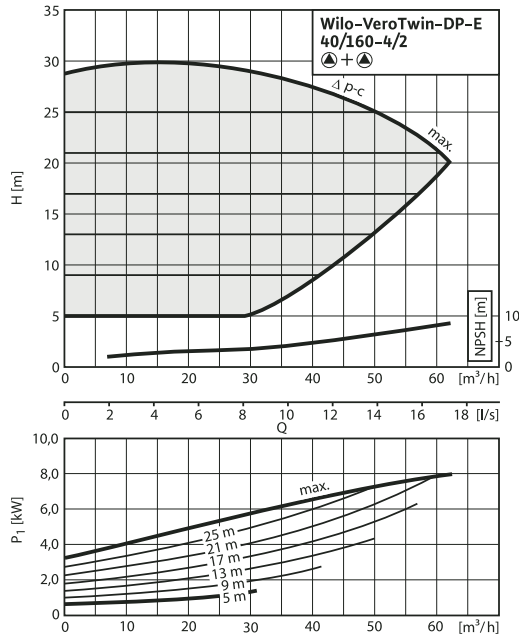
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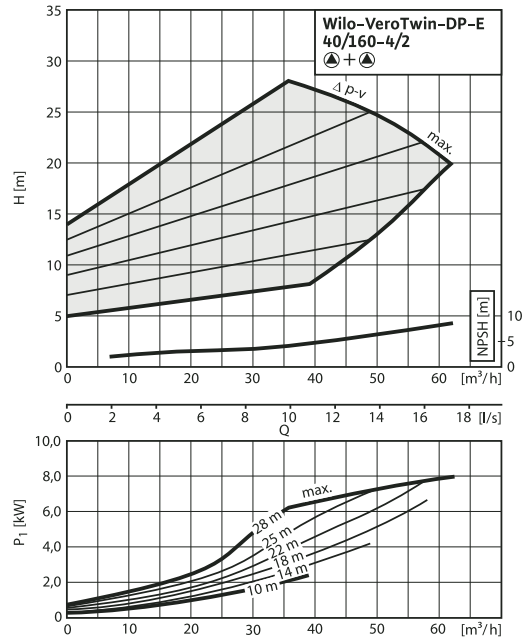
### Wilo-VeroTwin-DP-E 40/160-4/2

$\Delta p-c$  (sabit) paralel işletim



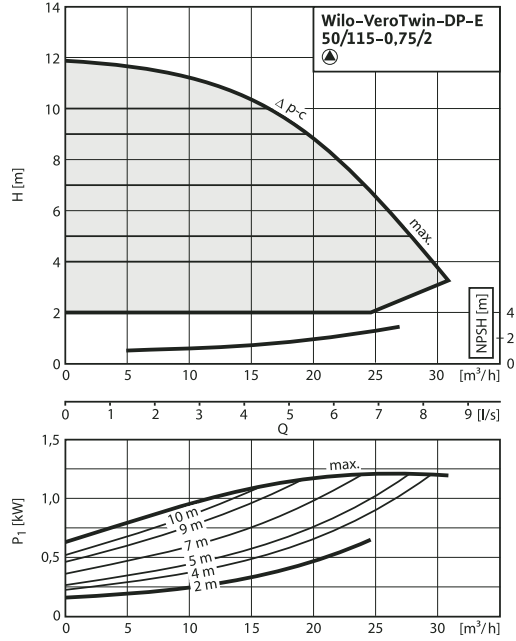
### Wilo-VeroTwin-DP-E 40/160-4/2

$\Delta p-v$  (değişken) paralel işletim

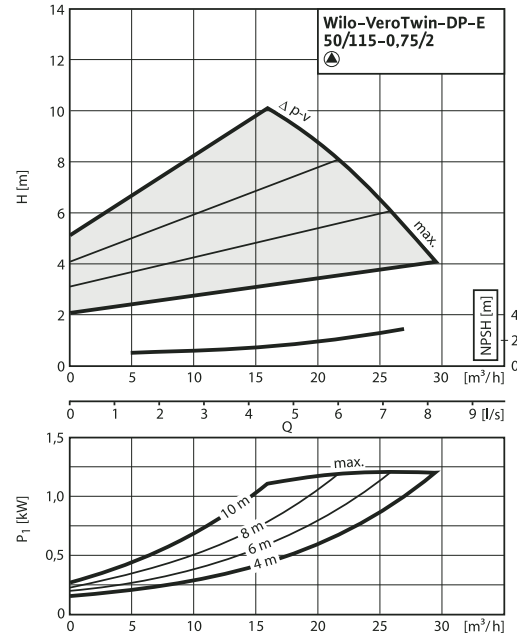


## Wilo-VeroTwin-DP-E Karakteristik Eğriler

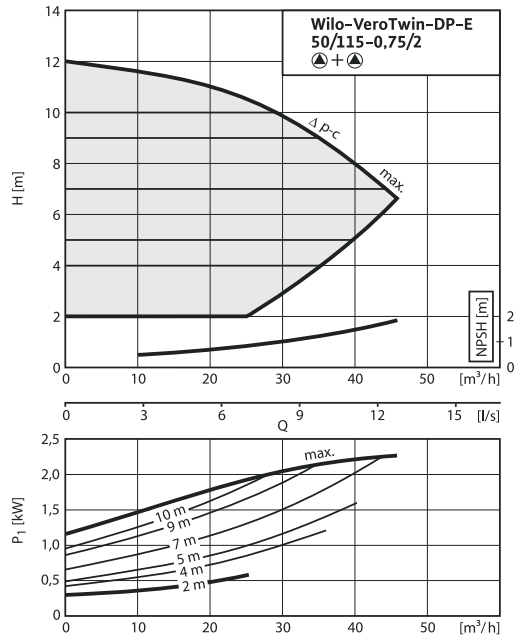
Wilo-VeroTwin-DP-E 50/115-0,75/2

 $\Delta p$ -c (sabit) tekli işletim

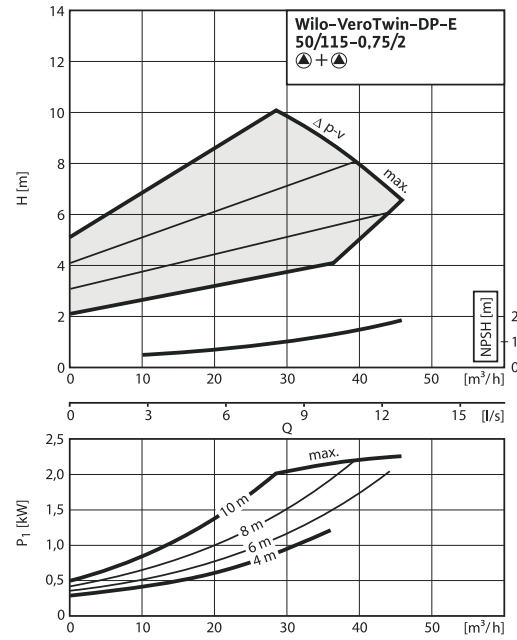
Wilo-VeroTwin-DP-E 50/115-0,75/2

 $\Delta p$ -v (değişken) tekli işletim

Wilo-VeroTwin-DP-E 50/115-0,75/2

 $\Delta p$ -c (sabit) paralel işletim

Wilo-VeroTwin-DP-E 50/115-0,75/2

 $\Delta p$ -v (değişken) paralel işletim

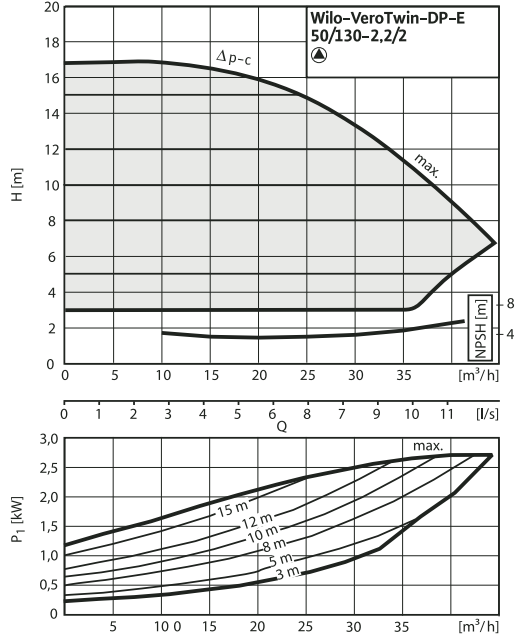
# Isıtma, Soğutma, İklimlendirme, Endüstri

Enerji Tasarruflu Pompalar (Kuru Rotorlu, İkiiz)

## Wilo-VeroTwin-DP-E Karakteristik Eğriler

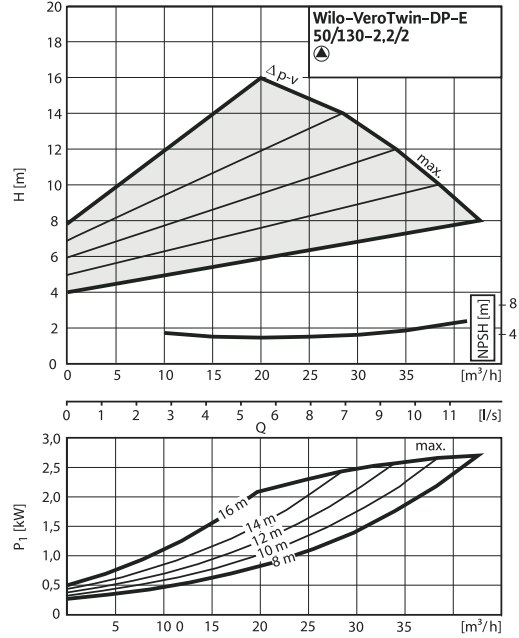
### Wilo-VeroTwin-DP-E 50/130-2,2/2

$\Delta p-c$  (sabit) tekli işletim



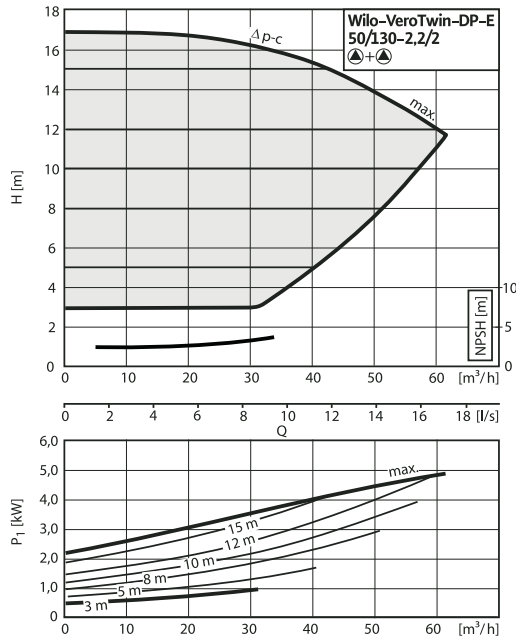
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$\Delta p-v$  (değişken) tekli işletim



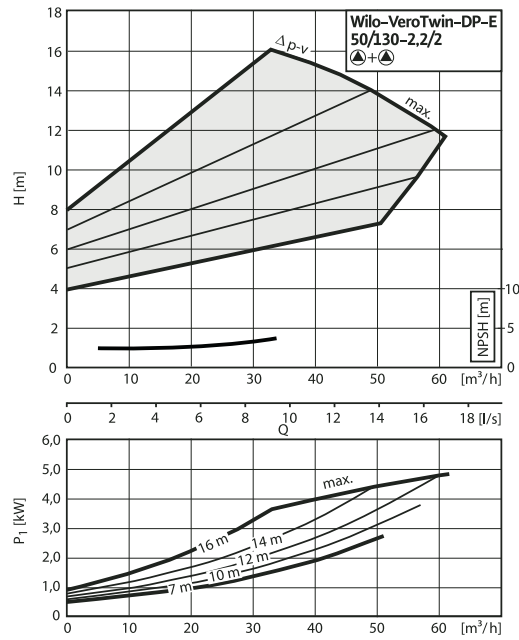
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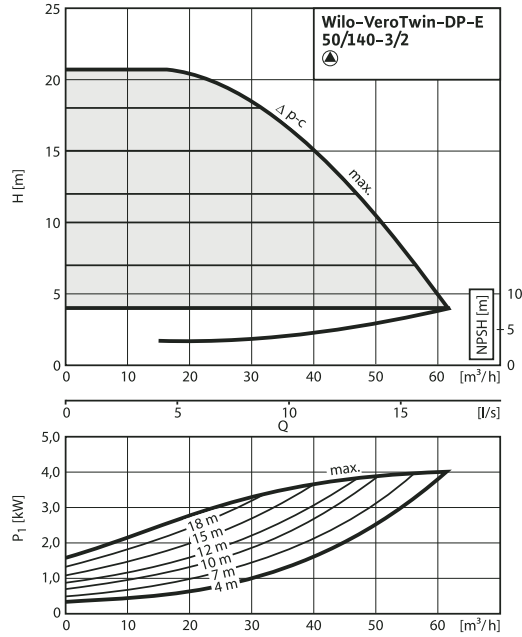
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$\Delta p-v$  (değişken) paralel işletim

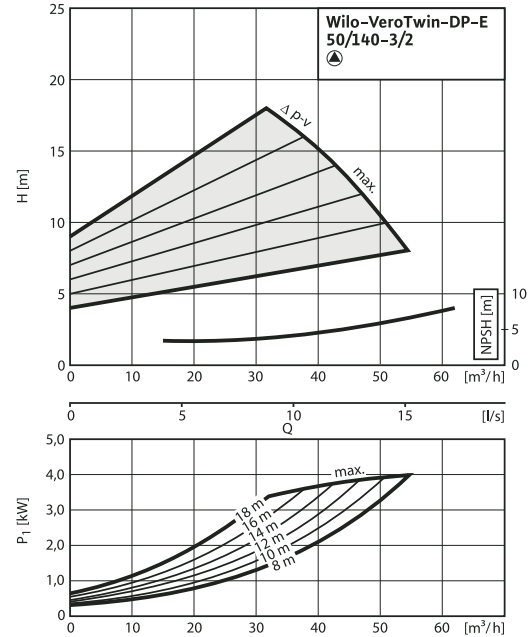


## Wilo-VeroTwin-DP-E Karakteristik Eğriler

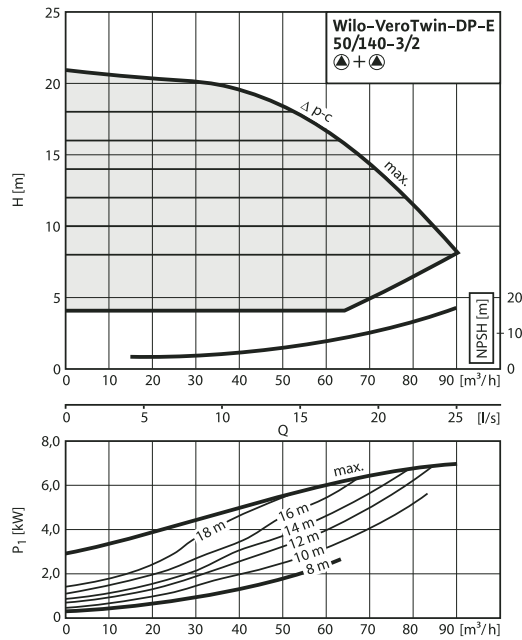
Wilo-VeroTwin-DP-E 50/140-3/2

 $\Delta p$ -c (sabit) tekli işletim

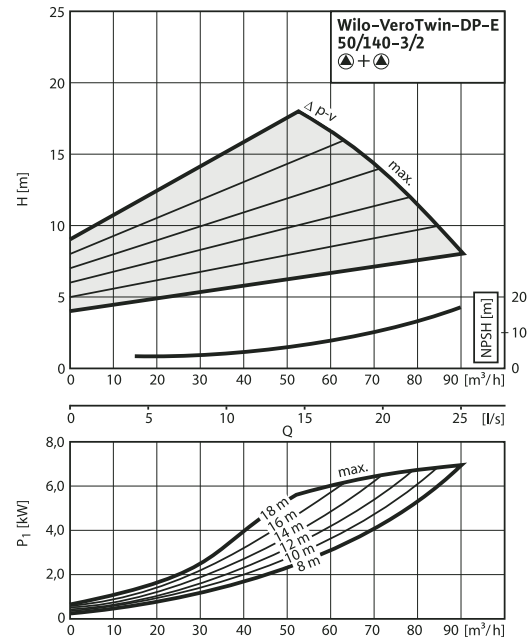
Wilo-VeroTwin-DP-E 50/140-3/2

 $\Delta p$ -v (değişken) tekli işletim

Wilo-VeroTwin-DP-E 50/140-3/2

 $\Delta p$ -c (sabit) paralel işletim

Wilo-VeroTwin-DP-E 50/140-3/2

 $\Delta p$ -v (değişken) paralel işletim

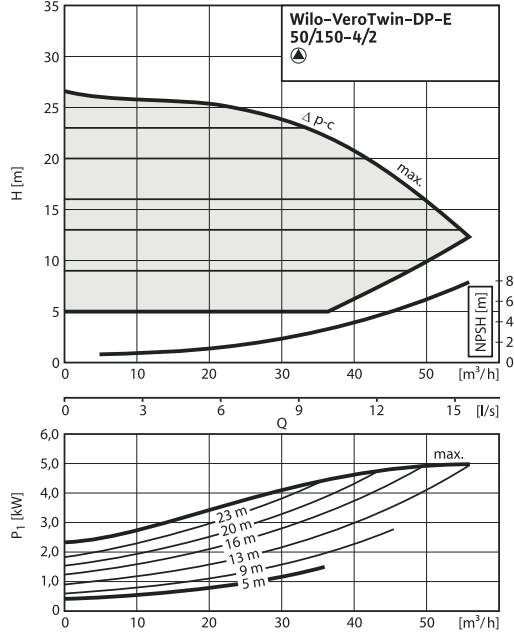
# Isıtma, Soğutma, İklimlendirme, Endüstri

Enerji Tasarruflu Pompalar (Kuru Rotorlu, İkiz)

## Wilo-VeroTwin-DP-E Karakteristik Eğriler

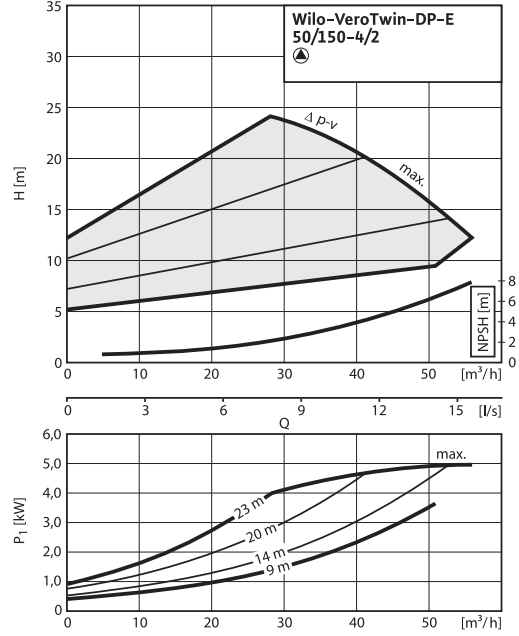
Wilo-VeroTwin-DP-E 50/150-4/2

$\Delta p-c$  (sabit) tekli işletim



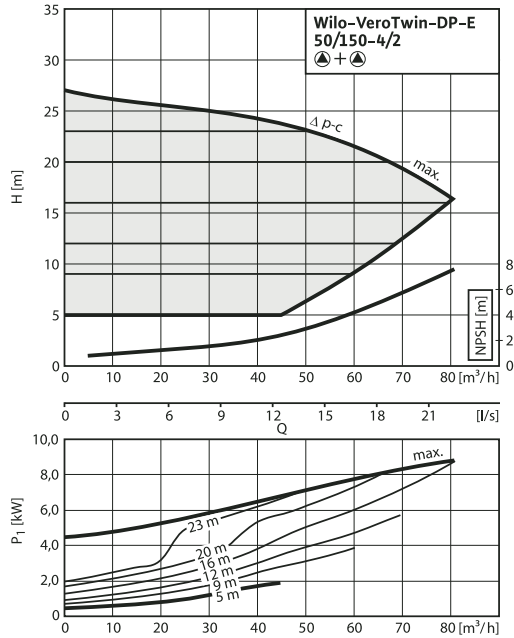
Wilo-VeroTwin-DP-E 50/150-4/2

$\Delta p-v$  (değişken) tekli işletim



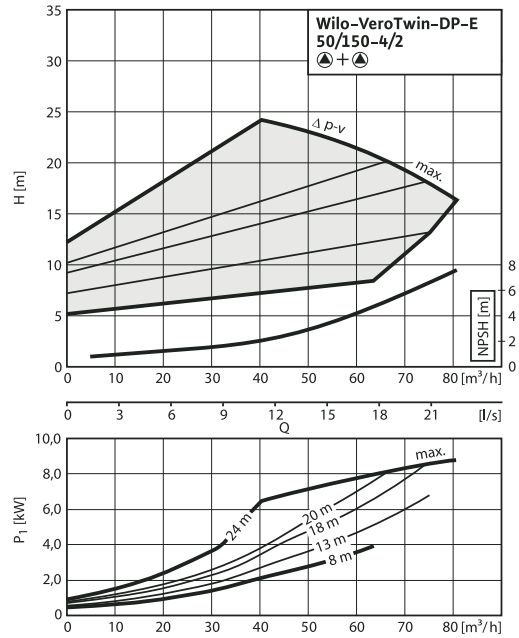
Wilo-VeroTwin-DP-E 50/150-4/2

$\Delta p-c$  (sabit) paralel işletim



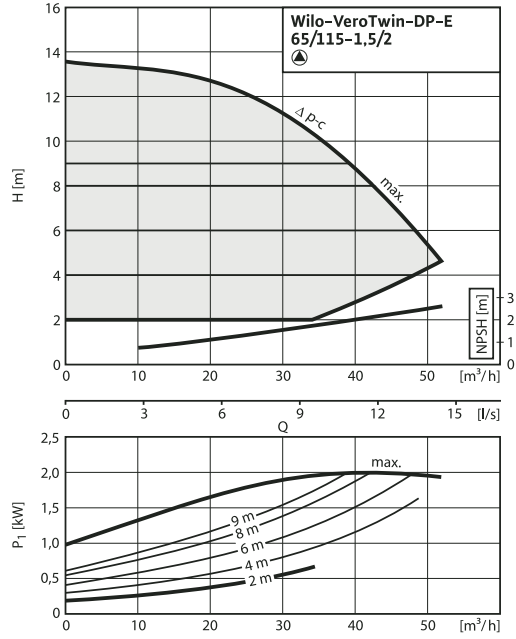
Wilo-VeroTwin-DP-E 50/150-4/2

$\Delta p-v$  (değişken) paralel işletim

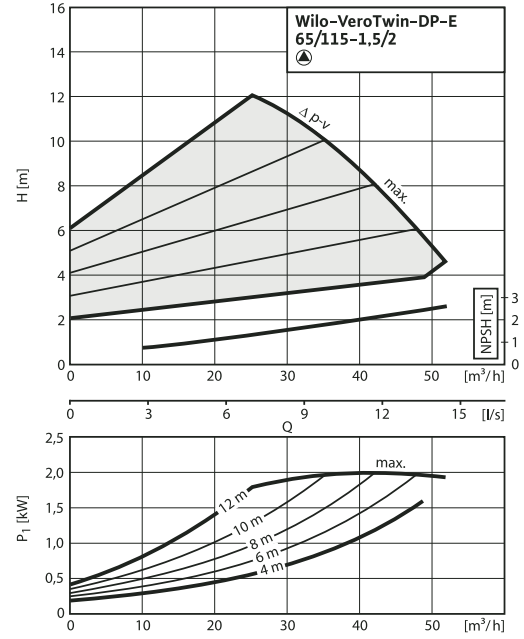


## Wilo-VeroTwin-DP-E Karakteristik Eğriler

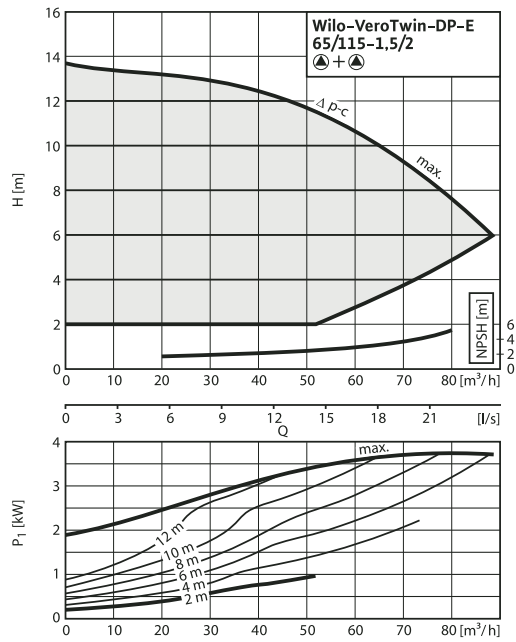
Wilo-VeroTwin-DP-E 65/115-1,5/2

 $\Delta p$ -c (sabit) tekli işletim

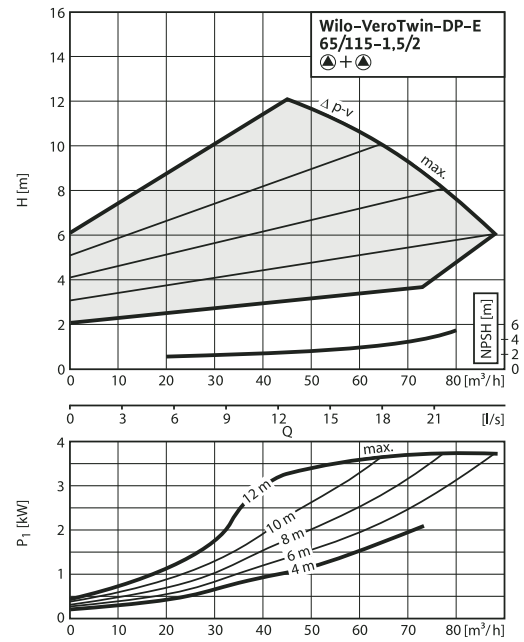
Wilo-VeroTwin-DP-E 65/115-1,5/2

 $\Delta p$ -v (değişken) tekli işletim

Wilo-VeroTwin-DP-E 65/115-1,5/2

 $\Delta p$ -c (sabit) paralel işletim

Wilo-VeroTwin-DP-E 65/115-1,5/2

 $\Delta p$ -v (değişken) paralel işletim

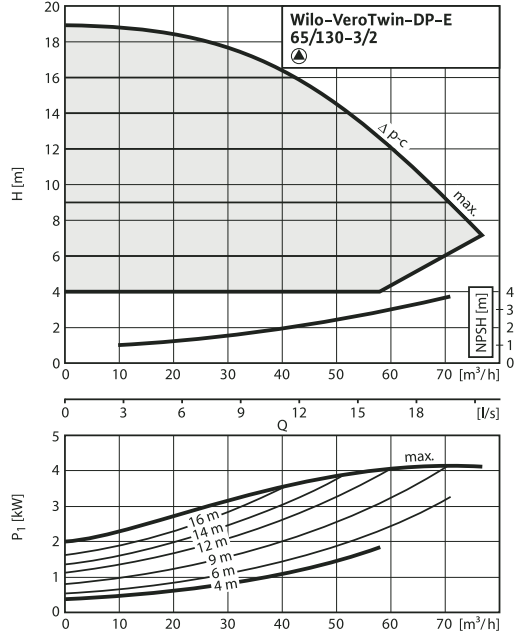
# Isıtma, Soğutma, İklimlendirme, Endüstri

Enerji Tasarruflu Pompalar (Kuru Rotorlu, İkiiz)

## Wilo-VeroTwin-DP-E Karakteristik Eğriler

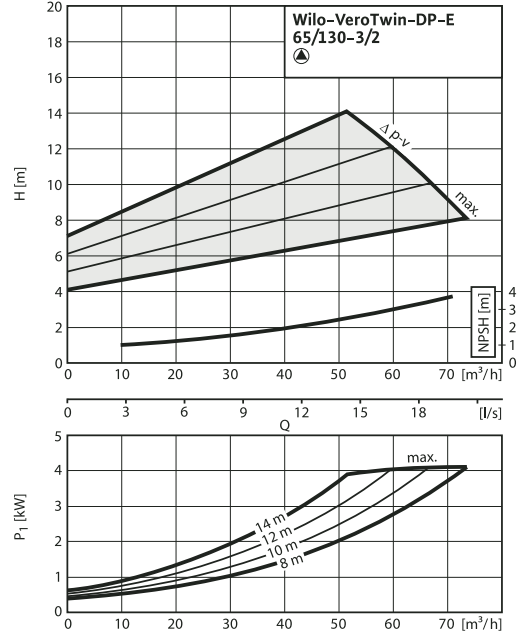
### Wilo-VeroTwin-DP-E 65/130-3/2

$\Delta p$ -c (sabit) tekli işletim



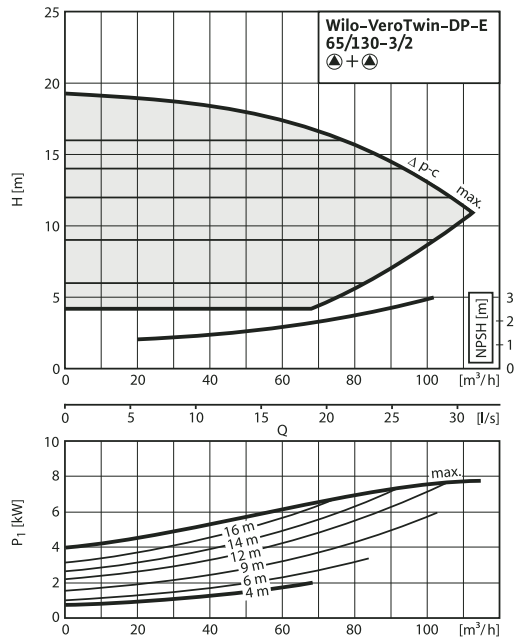
### Wilo-VeroTwin-DP-E 65/130-3/2

$\Delta p$ -v (değişken) tekli işletim



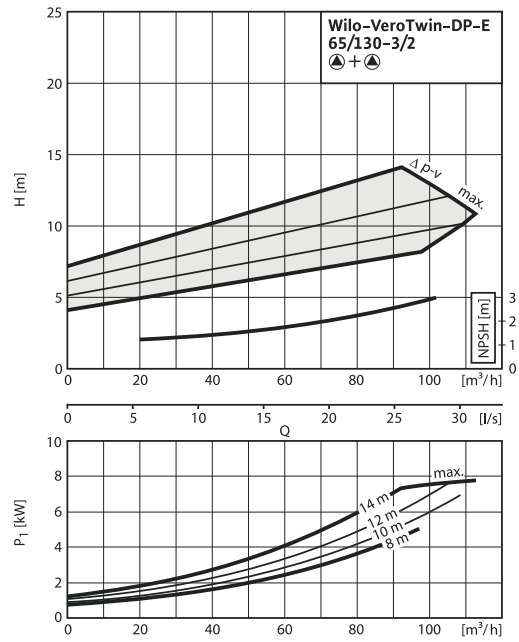
### Wilo-VeroTwin-DP-E 65/130-3/2

$\Delta p$ -c (sabit) paralel işletim



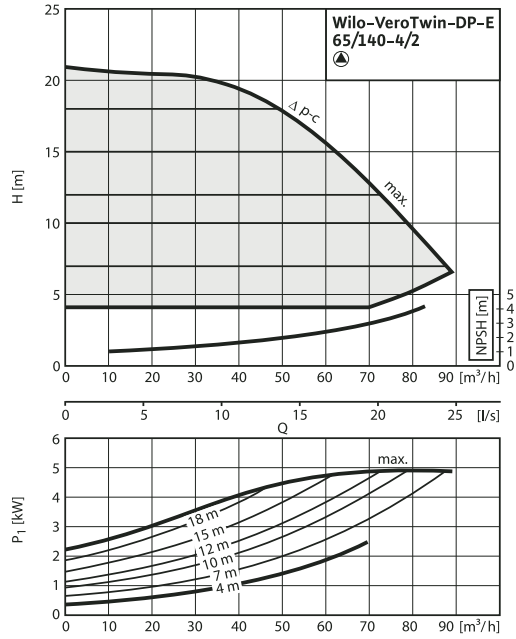
### Wilo-VeroTwin-DP-E 65/130-3/2

$\Delta p$ -v (değişken) paralel işletim

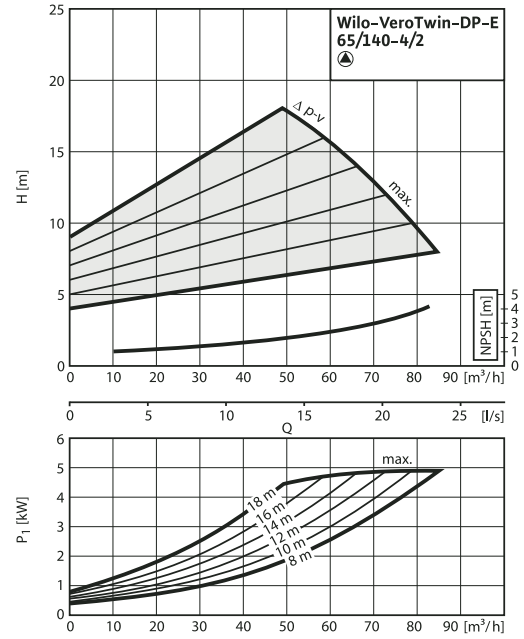


## Wilo-VeroTwin-DP-E Karakteristik Eğriler

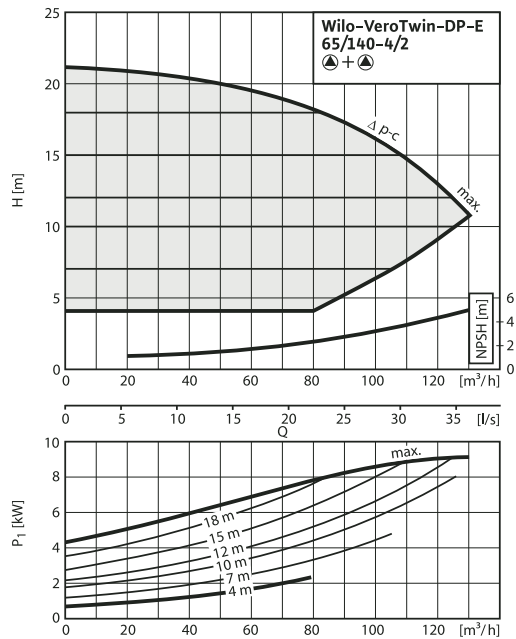
Wilo-VeroTwin-DP-E 65/140-4/2

 $\Delta p$ -c (sabit) tekli işletim

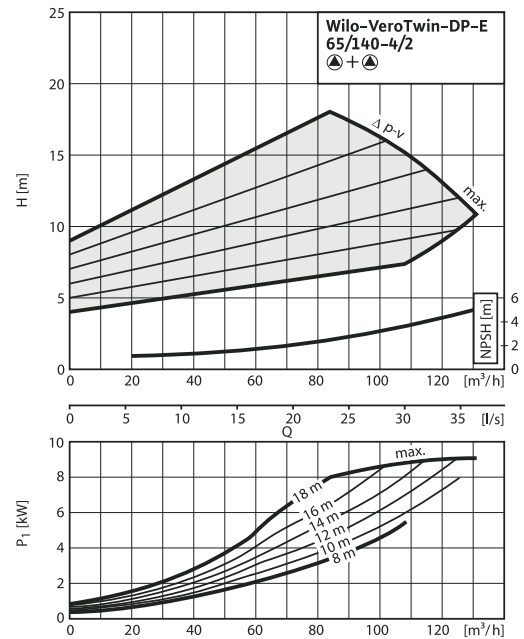
Wilo-VeroTwin-DP-E 65/140-4/2

 $\Delta p$ -v (değişken) tekli işletim

Wilo-VeroTwin-DP-E 65/140-4/2

 $\Delta p$ -c (sabit) paralel işletim

Wilo-VeroTwin-DP-E 65/140-4/2

 $\Delta p$ -v (değişken) paralel işletim



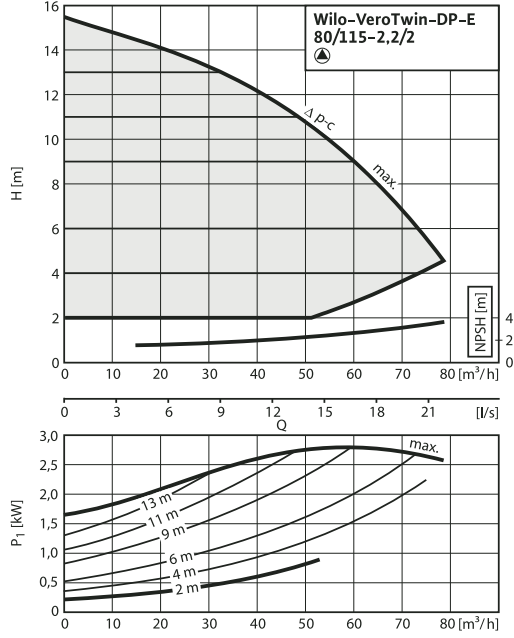
# Isıtma, Soğutma, İklimlendirme, Endüstri

Enerji Tasarruflu Pompalar (Kuru Rotorlu, İkiiz)

## Wilo-VeroTwin-DP-E Karakteristik Eğriler

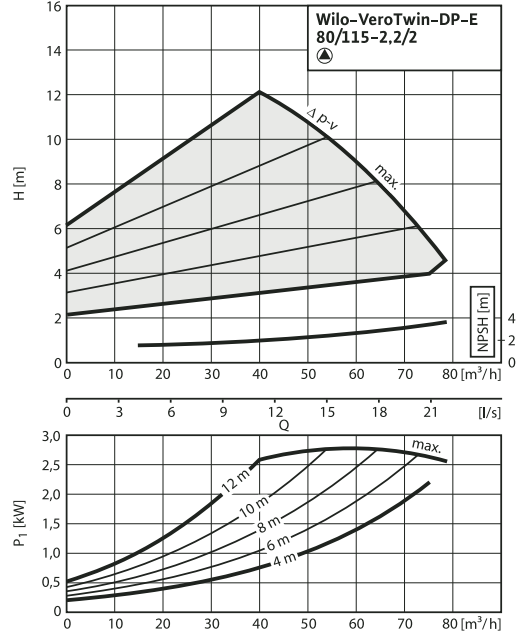
### Wilo-VeroTwin-DP-E 80/115-2,2/2

$\Delta p$ -c (sabit) tekli işletim



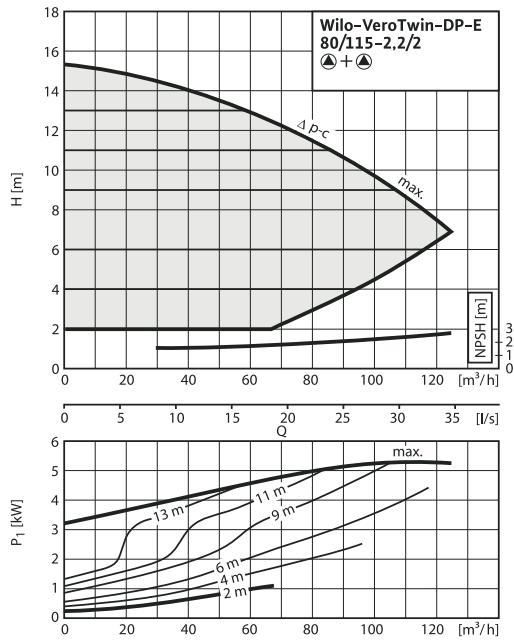
### Wilo-VeroTwin-DP-E 80/115-2,2/2

$\Delta p$ -v (değişken) tekli işletim



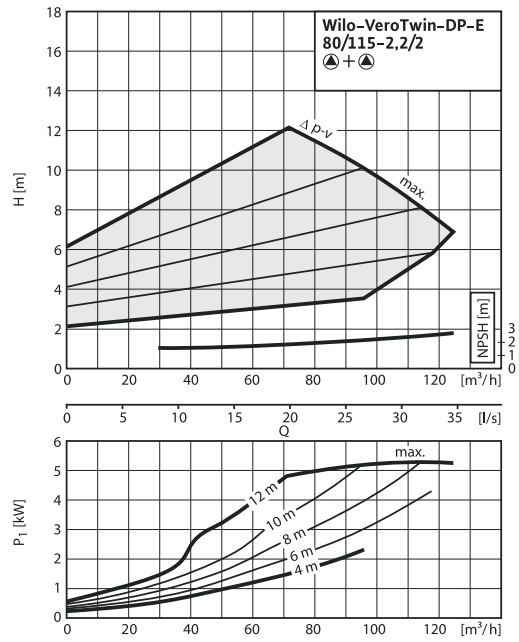
### Wilo-VeroTwin-DP-E 80/115-2,2/2

$\Delta p$ -c (sabit) paralel işletim



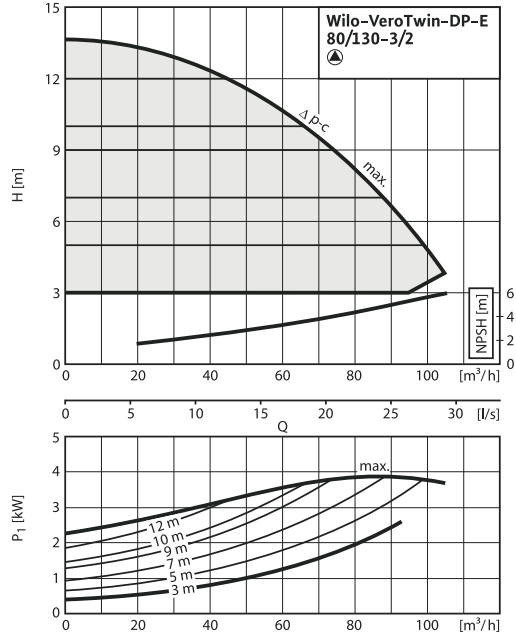
### Wilo-VeroTwin-DP-E 80/115-2,2/2

$\Delta p$ -v (değişken) paralel işletim

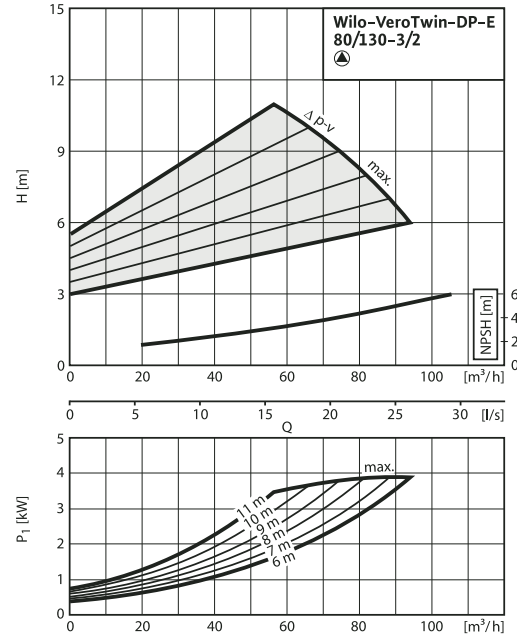


## Wilo-VeroTwin-DP-E Karakteristik Eğriler

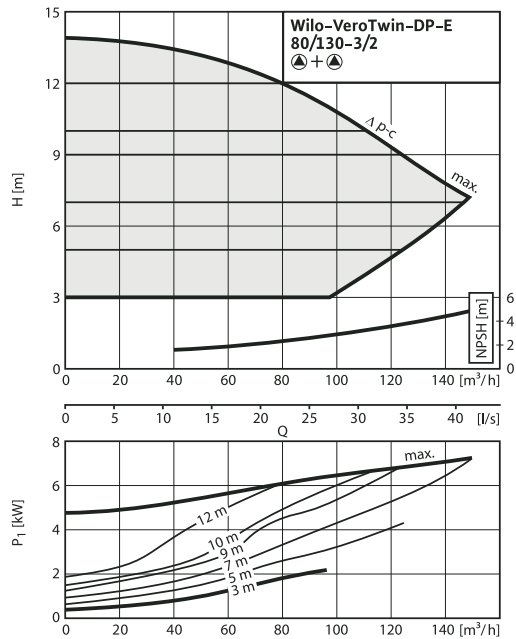
Wilo-VeroTwin-DP-E 80/130-3/2

 $\Delta p$ -c (sabit) tekli işletim

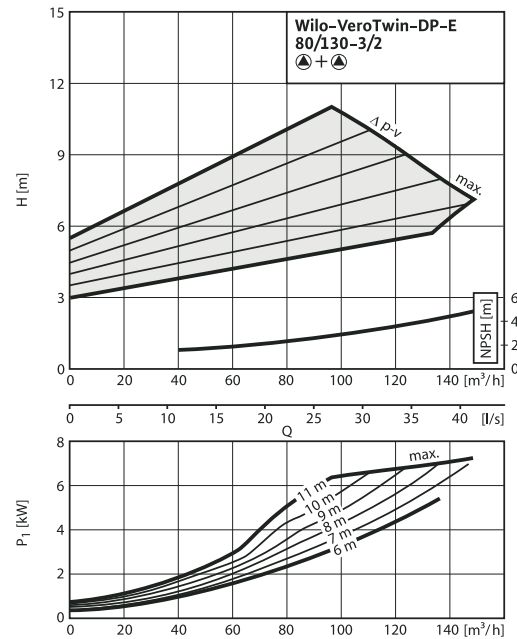
Wilo-VeroTwin-DP-E 80/130-3/2

 $\Delta p$ -v (değişken) tekli işletim

Wilo-VeroTwin-DP-E 80/130-3/2

 $\Delta p$ -c (sabit) paralel işletim

Wilo-VeroTwin-DP-E 80/130-3/2

 $\Delta p$ -v (değişken) paralel işletim

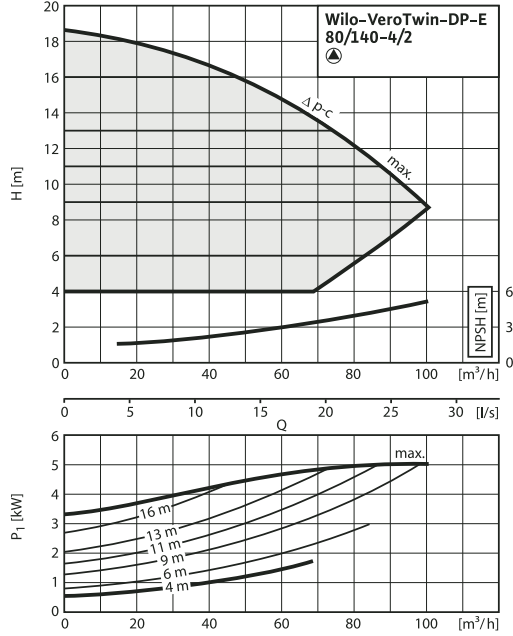
# Isıtma, Soğutma, İklimlendirme, Endüstri

Enerji Tasarruflu Pompalar (Kuru Rotorlu, İkiiz)

## Wilo-VeroTwin-DP-E Karakteristik Eğriler

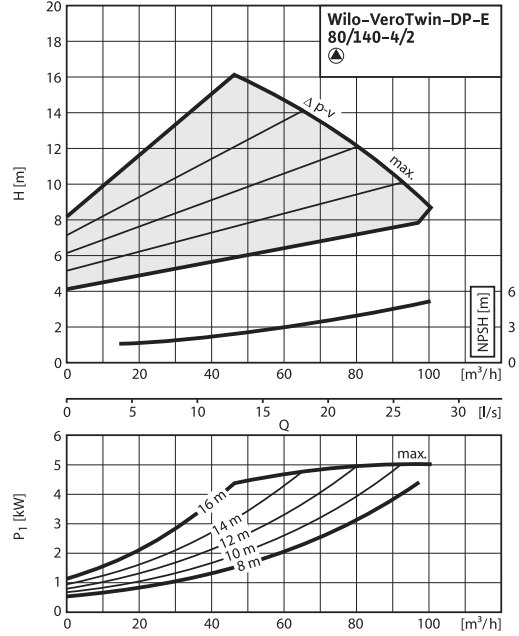
### Wilo-VeroTwin-DP-E 80/140-4/2

$\Delta p-c$  (sabit) tekli işletim



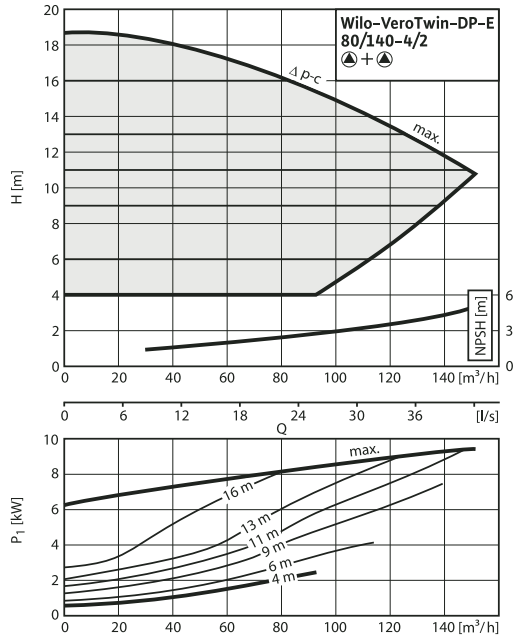
### Wilo-VeroTwin-DP-E 80/140-4/2

$\Delta p-v$  (değişken) tekli işletim



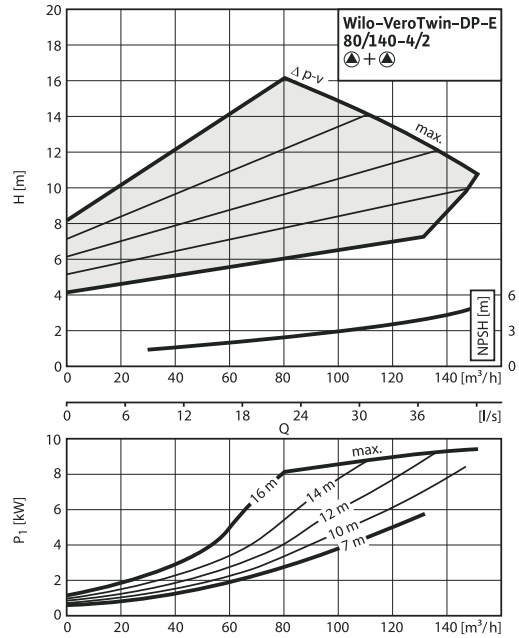
### Wilo-VeroTwin-DP-E 80/140-4/2

$\Delta p-c$  (sabit) paralel işletim



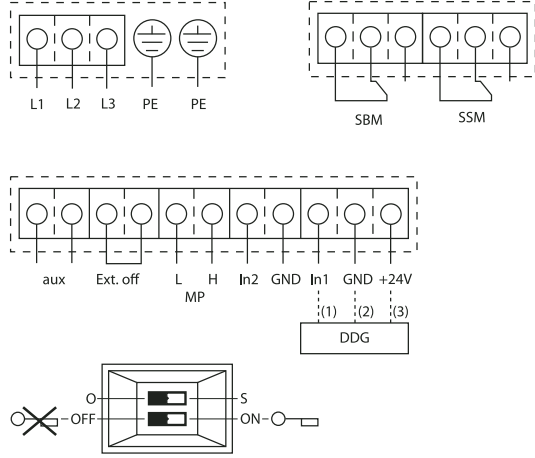
### Wilo-VeroTwin-DP-E 80/140-4/2

$\Delta p-v$  (değişken) paralel işletim



## Wilo-VeroTwin-DP-E Bağlantı Şemaları, Motor Bilgileri

## Bağlantı şeması



- L1, L2, L3: Şebeke bağlantısı: 3~ 400VAC/50 Hz; 3~ 380VAC/60 Hz;  
 PE: Toprak  
 DDG: Fark basınç sensörü bağlantısı  
 In1 (1): Gerçek çalışma değeri girişi 0-10 V/0-20 mA;  
 2-10V/4-20 mA  
 GND (2): In1 ve In2 için toprak bağlantısı  
 + 24 V (3): Harici cihaz/sensör için DC voltaj çıkışı/maksimum yük 60 mA  
 In2: Ayar değeri girişi 0-10 V/0-20 mA; 2-10V/4-20 mA  
 MP: Çoklu pompa, ikiz pompa işletimi için arayüz  
 Ext. off: "Harici durdurma" sinyali girişi. Pompa 24 VDC/10 mA harici sinyal ile çalıştırılıp durdurulabilir.  
 SBM:\* Genel işletim sinyali (VDI3814'e göre değiştirme sinyali)  
 SSM:\* Genel arıza sinyali (VDI3814'e göre değiştirme sinyali)  
 aux: Fonksiyonu yok  
 Sviç: 1: "O" çalışma ve "S" servis modları arası geçiş  
 2: Menüye ulaşımı devreye alma/devreden çıkarma  
 Opsiyon: Bina otomasyonuna bağlantı için IF-Modül (PLR/LON)

\*SBM ve SSM kontaktları için yük kapasitesi  
 Min : 12 VDC / 10 mA  
 Max. 250 VAC/1 A

## Motor bilgileri

Wilo-VeroTwin-DP-E ...	Nominal Motor Gücü	Hız	Güç Tüketimi	Nominal Akım (yaklaşık)
	P <sub>2</sub> [kW]	n [d/d]	P <sub>1</sub> [kW]	I <sub>N</sub> 3~400 V [A]
32/100-0.55/2	0.55	1150 - 2800	0.8	2.4
32/110-0.75/2	0.75	1160 - 2850	1.2	3.2
32/160-1.1/2	1.1	1100 - 2900	1.5	3.5
40/115-0.55/2	0.55	1100 - 2900	0.9	1.8
40/120-1.5/2	1.5	1200 - 2860	2.2	5.4
40/130-2.2/2	2.2	1200 - 2880	2.8	6.4
40/150-3/2	3	1100 - 2900	3.9	8.4
40/160-4/2	4	1200 - 2900	4.5	9.5
50/115-0.75/2	0.75	1200 - 2900	1.2	2.4
50/130-2.2/2	2.2	1160 - 2880	2.9	6.7
50/140-3/2	3	1100 - 2890	4.0	8.5
50/150-4/2	4	1100 - 2900	5.5	11.0
65/115-1.5/2	1.5	1100 - 2900	2.1	4.7
65/130-3/2	3	1200 - 2900	4.0	8.7
65/140-4/2	4	1200 - 2890	5.0	10.2
80/115-2.2/2	2.2	1200 - 2900	2.9	6.7
80/130-3/2	3	1200 - 2890	3.8	8.4
80/140-4/2	4	1100 - 2900	5.3	10.6

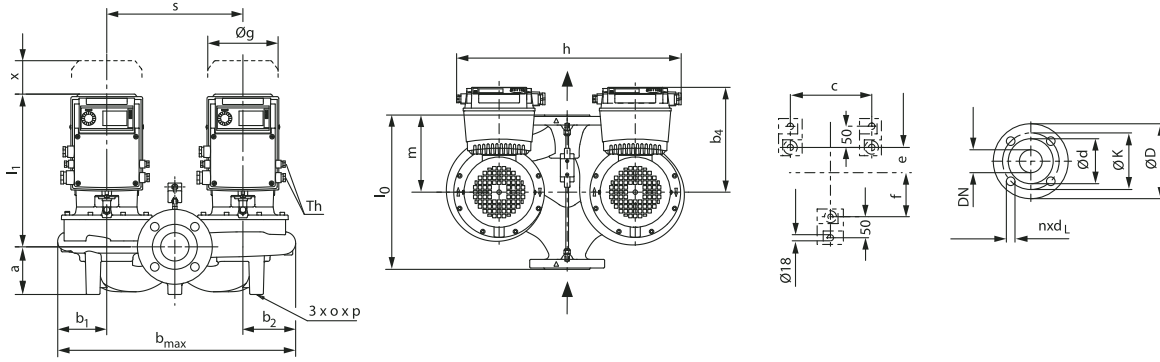
Trifaze motor, 2 kutuplu, 3~400V, 50 Hz / 3~380V, 60 Hz

# Isıtma, Soğutma, İklimlendirme, Endüstri

Enerji Tasarruflu Pompalar (Kuru Rotorlu, İkiz)

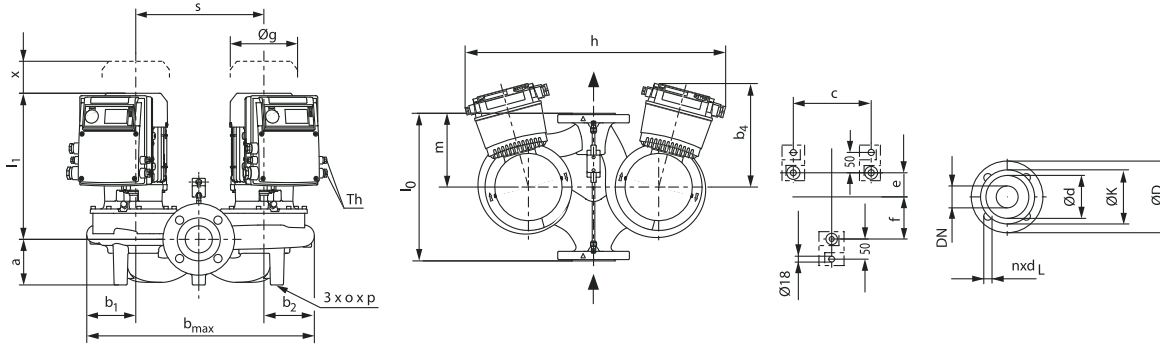
## Wilo-VeroTwin-DP-E Ölçüler, Ağırlıklar

### Pompa Ölçülü Resmi A



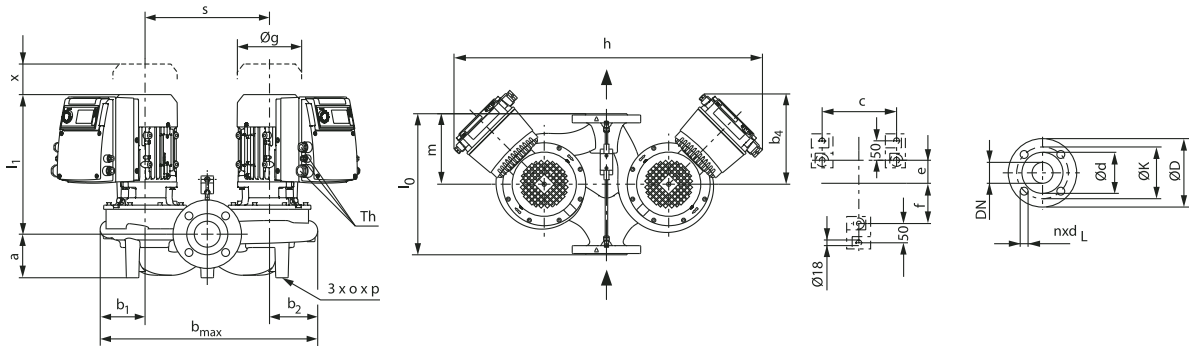
**Not:** Kaideye montaj için ayaklı konsollar opsiyoneldir.

### Pompa Ölçülü Resmi B



**Not:** Kaideye montaj için ayaklı konsollar opsiyoneldir.

### Pompa Ölçülü Resmi C



**Not:** Kaideye montaj için ayaklı konsollar opsiyoneldir.

### Wilo-VeroTwin-DP-E Ölçüler, Ağırlıklar

Ölçüler, Ağırlıklar																					
Wilo-VeroTwin-DP-E ...	Nominal Flanş Çapı	Boy	Ölçüler																Kablo bağlantı rakoru	Ağırlık (yaklaşık)	Pompa Ölçütü Resmi
	DN	l <sub>0</sub>	a	b <sub>1</sub>	b <sub>2</sub>	b <sub>4</sub>	b <sub>ma</sub> <sub>x</sub>	c	e	f	Øg	h	l <sub>1</sub>	m	o	p	s	x	M	Th	-
	-	[mm]																-	[mm]	[kg]	-
32/100-0.55/2	32	260	70	101	105	233	410	225	56	106	145	671	308	136	M10	20	205	150	42		C
32/110-0.75/2	32	260	70	101	105	240	410	225	56	106	163	685	332	136	M10	20	205	150	45		C
32/160-1.1/2	32	260	70	101	105	276	410	225	56	106	163	757	332	136	M10	20	205	150	58		C
40/115-0.55/2	40	250	75	85	91	275	350	225	35	97	145	478	303	135	M10	20	174	150	43		B
40/120-1.5/2	40	320	75	113	119	245	456	240	45	135	180	714	358	167	M10	20	224	150	53		C
40/130-2.2/2	40	320	75	113	119	245	456	240	45	135	180	714	358	167	M10	20	224	150	58		C
40/150-3/2	40	320	75	113	119	312	456	240	45	135	103	848	391	167	M10	20	224	150	79		C
40/160-4/2	40	320	75	113	119	272	456	240	45	135	203	768	411	167	M10	20	224	150	89	2xM12	C
50/115-0.75/2	50	280	83	95	101	225	390	228	50	107	163	506	333	155	M10	20	194	150	48	1xM16	B
50/130-2.2/2	50	340	86	120	130	250	500	240	48	132	180	750	360	190	M10	20	250	150	64	1xM20	C
50/140-3/2	50	340	86	120	130	270	500	240	48	132	227	460	393	190	M10	20	250	150	79	1xM25	A
50/150-4/2	50	340	86	120	130	279	500	240	48	132	227	460	413	190	M10	20	250	150	91		A
65/115-1.5/2	65	340	93	103	117	272	432	225	25	137	180	528	371	185	M10	20	212	150	67		B
65/130-3/2	65	340	93	125	135	255	550	240	43	137	203	500	399	185	M10	20	290	150	89		A
65/140-4/2	65	340	93	125	135	272	550	240	43	137	203	500	419	185	M10	20	290	150	98		A
80/115-2.2/2	80	360	100	113	132	255	480	240	43	137	180	551	373	205	M10	20	235	150	82		B
80/130-3/2	80	360	103	134	147	267	601	240	30	150	227	440	405	192	M10	20	320	150	89		A
80/140-4/2	80	360	103	134	147	279	601	240	30	150	227	530	425	192	M10	20	320	150	101		A

Flanş Ölçüleri					
Wilo-VeroTwin-DP-E ...	Nominal Flanş Çapı	Pompa Flanş Ölçüleri			
	DN	Ø D	Ø d	Ø k	n x Ø d <sub>L</sub>
	-	[mm]			[delik adeti x mm]
32...	32	140	76	100	4 x 19
40...	40	150	84	110	4 x 19
50...	50	165	99	125	4 x 19
65...	65	185	118	145	4 x 19
80...	80	200	132	160	8 x 19

EN 1902-2'ye göre PN16 delikli