

4-SPEED CIRCULATOR PUMPS



4-speed circulator pumps with motor mounted directly into the pump body. The switch allows to obtain different performance curves guaranteeing greater flexibility and harmoniously satisfying the system's hydraulic requisites.

APPLICATIONS

- Circulation of hot and cold water in general
- Air conditioning plants
- Centralised heating plants
- Domestic/industrial heating plants
- Industrial plants in general

TECHNICAL DETAILS

- Silent
- Easy installation
- Available in single and twin version
- Large range available
- Available with bronze body (ETHERMA B)

TECHNICAL DATA

- Flow rate up to 120 m³/h
- Head up to 16 m
- Maximum functioning pressure: PN 10
- Temperature of the liquid: from -15°C to +120°C
- Maximum glycol content: 50%
- For the distribution of domestic hot water or similar applications, the temperature of the water must not exceed 60°C and the hardness of the water must be lower than 12 dH
- 230V, 50Hz single phase motor
400V +6% -10%, 50 Hz three phase
- Class of insulation F
- Protection rating IP42 (3 speed), IP44 (4 speed)
- Flanges:
 - DN 40, 50, 65, PN 6/10 double hole (DIN 2533)
 - DN 80, 100, 125, PN 16 (DIN 2533)
- Available with bronze body (yellow)
- Available with 2 or 4 poles

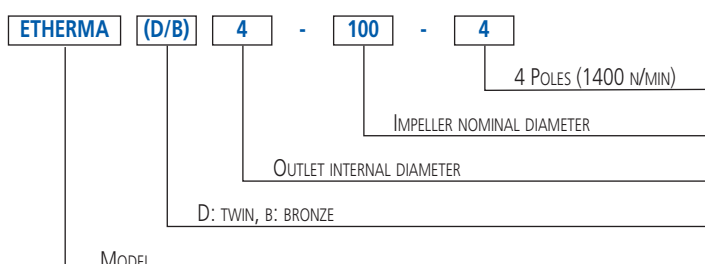
MATERIALS

- Cast iron or bronze pump body
- Shaft and cap in stainless steel
- Impeller in cast iron, technopolymer or bronze
- O-Rings in EPDM

ACCESSORIES (on request)

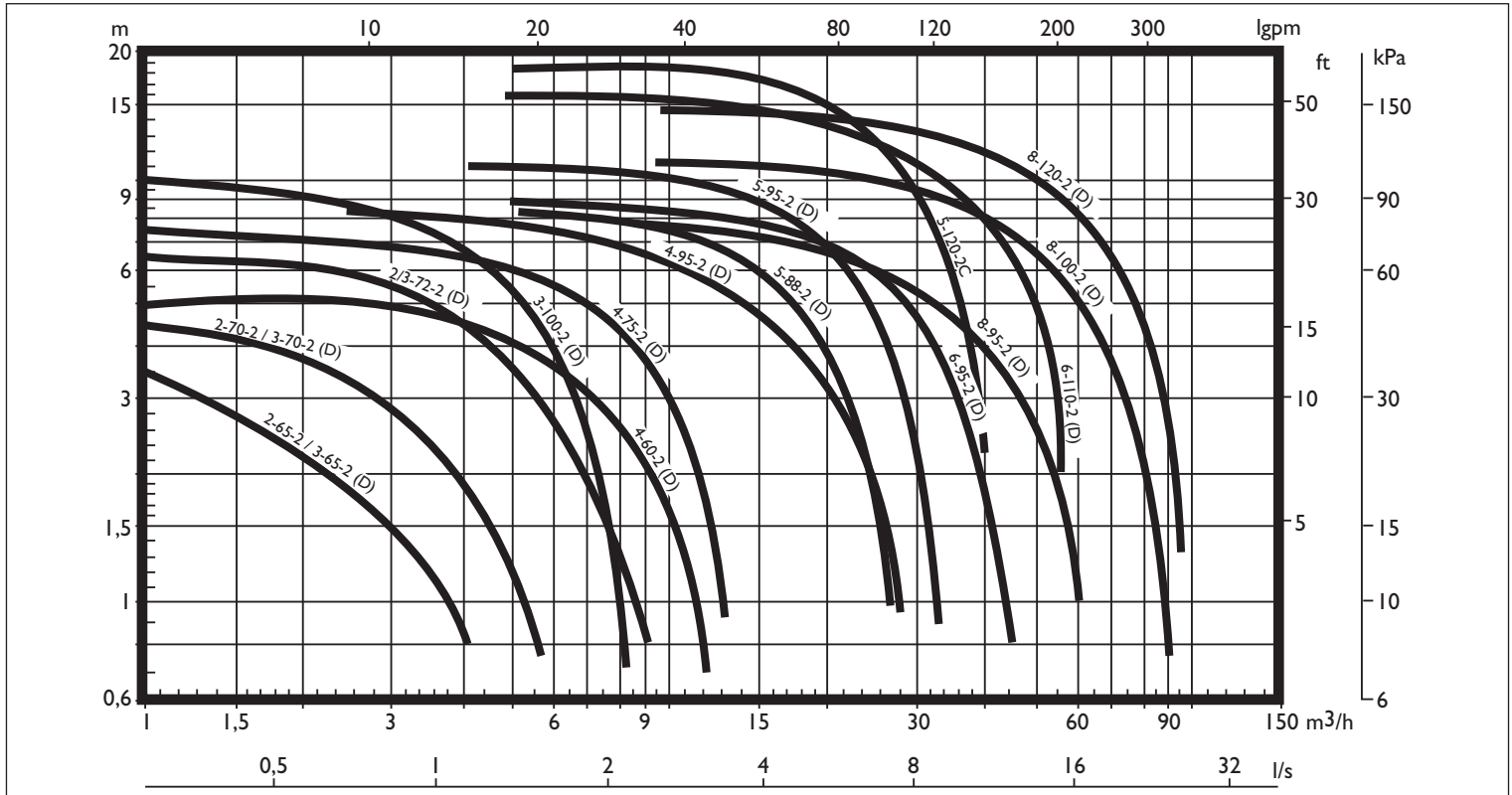
- Galvanised counter-flanges kit
- Blind flange for ETHERMA D

IDENTIFICATION CODE



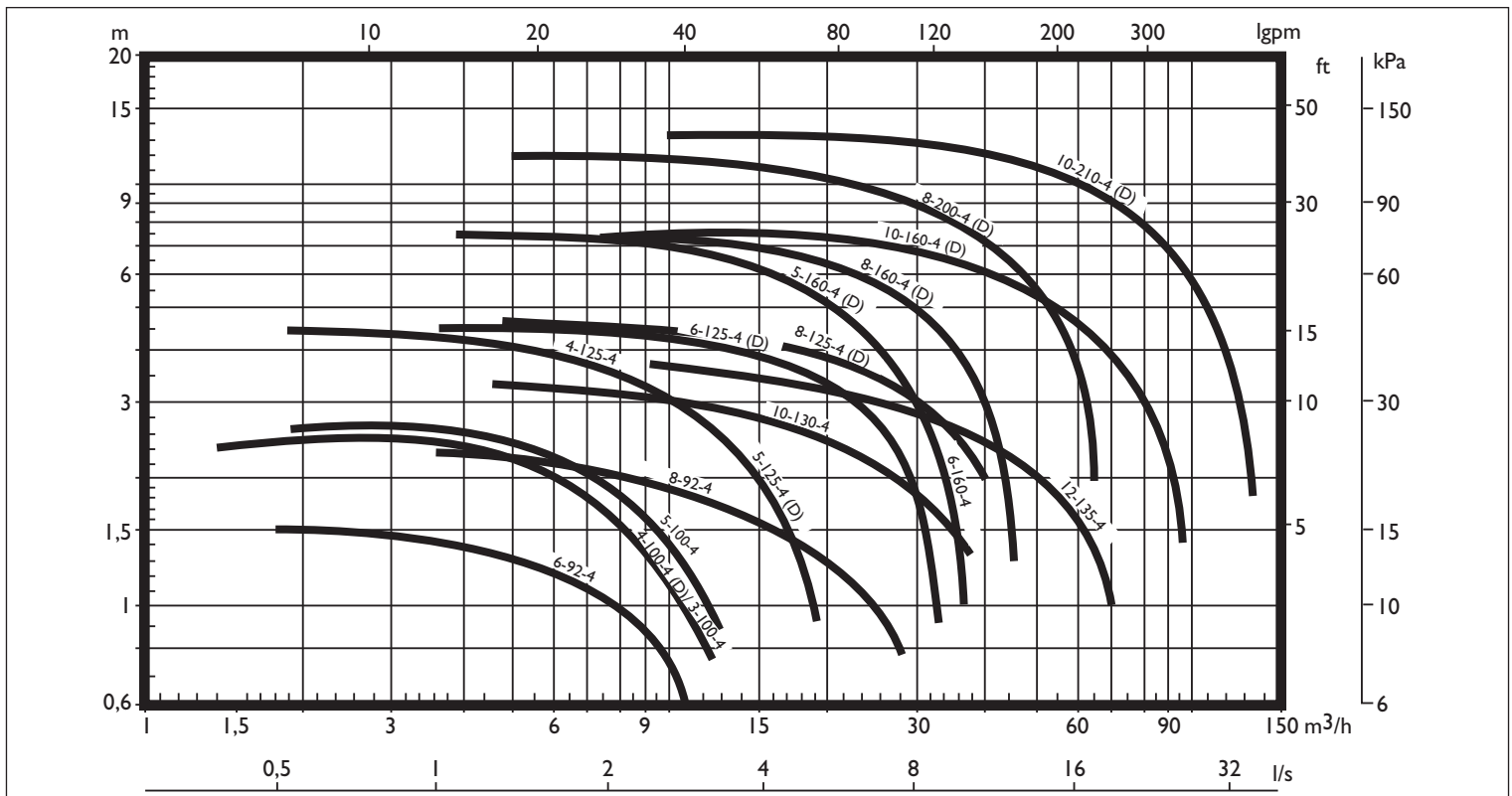
PERFORMANCE RANGE at 2900 min⁻¹ (according to ISO 9906 Attachment A)

2 Poles



PERFORMANCE RANGE at 1400 min⁻¹ (according to ISO 9906 Attachment A)

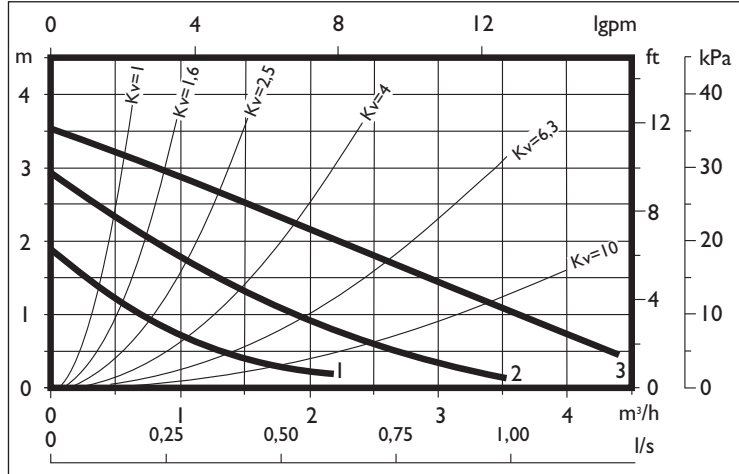
4 Poles



4-SPEED CIRCULATOR PUMPS

ETHERMA 2-65-2 / 3-65-2 range PERFORMANCE CURVES

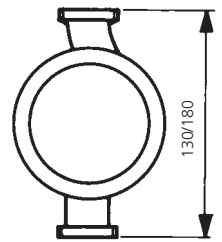
(according to ISO 9906 Attachment A)



ETHERMA 2-65-2 / 3-65-2 Single pump
 ETHERMA D 3-65-2 Twin pump
 ETHERMA B 2-65-2 / 3-65-2 Bronze

2 Poles

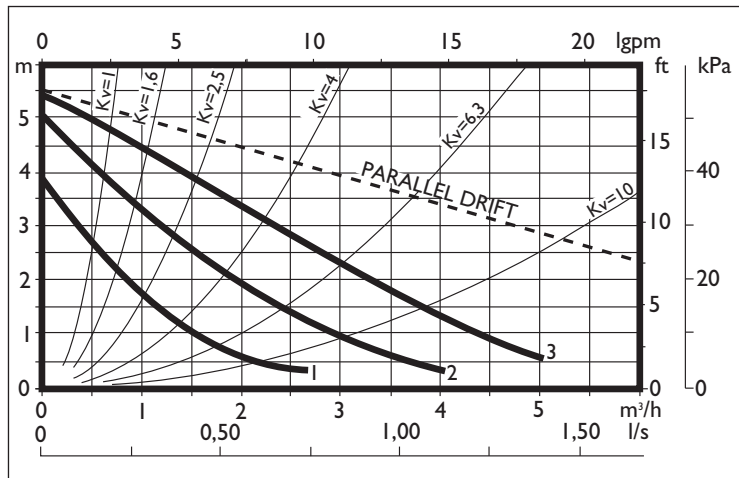
Connection
 $\frac{3}{4}$ "-1" $\frac{1}{4}$ "



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
3	2350	50-65	0,30	0,20
2	1850	40-50	0,23	-
1	1200	30-35	0,16	-

ETHERMA 2-70-2 / 3-70-2 range PERFORMANCE CURVES

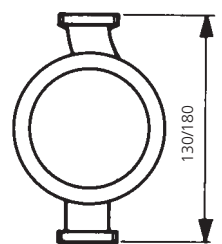
(according to ISO 9906 Attachment A)



ETHERMA 2-70-2 / 3-70-2 Single pump
 ETHERMA D 3-70-2 Twin pump
 ETHERMA B 2-70-2 / 3-70-2 Bronze

2 Poles

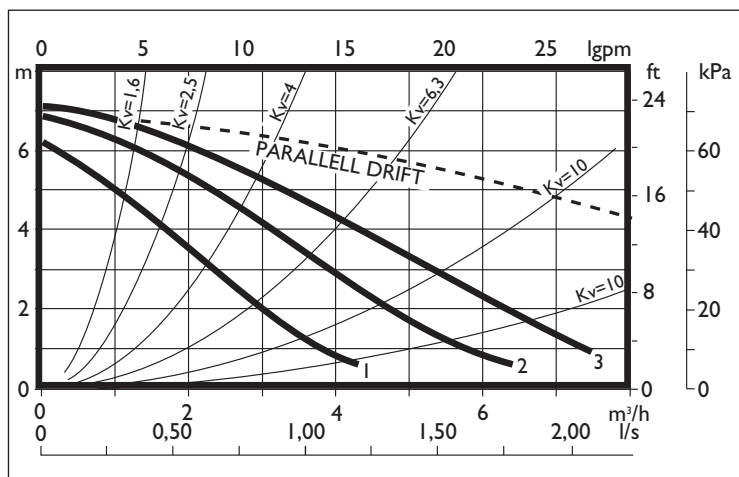
Connection
 $\frac{3}{4}$ "-1" $\frac{1}{4}$ "



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
3	2350	90-115	0,55	0,25
2	1850	65-85	0,40	-
1	1200	45-55	0,25	-

ETHERMA 2-72-2 / 3-72-2 range PERFORMANCE CURVES

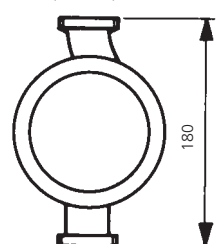
(according to ISO 9906 Attachment A)



ETHERMA 2-72-2 / 3-72-2 Single pump
 ETHERMA D 2-72-2 / 3-72-2 Twin pump
 ETHERMA B 2-72-2 / 3-72-2 Bronze

2 Poles

Connection
 $\frac{3}{4}$ "-1" $\frac{1}{4}$ "

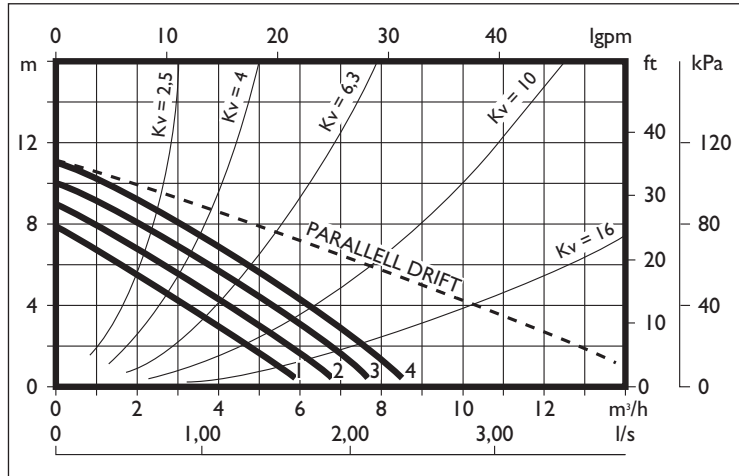


Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	2750	130-210	-	0,42
3	2700	130-200	0,95	0,33
2	2640	100-170	0,85	0,25
1	2340	85-115	0,60	0,20

4-SPEED CIRCULATOR PUMPS

ETHERMA 3-100-2 range PERFORMANCE CURVES

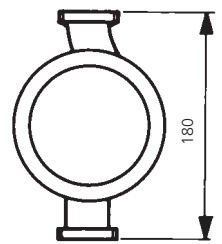
(according to ISO 9906 Attachment A)



ETHERMA 3-100-2 Single pump
 ETHERMA D 3-100-2 Twin pump
 ETHERMA B 3-100-2 Bronze

2 Poles

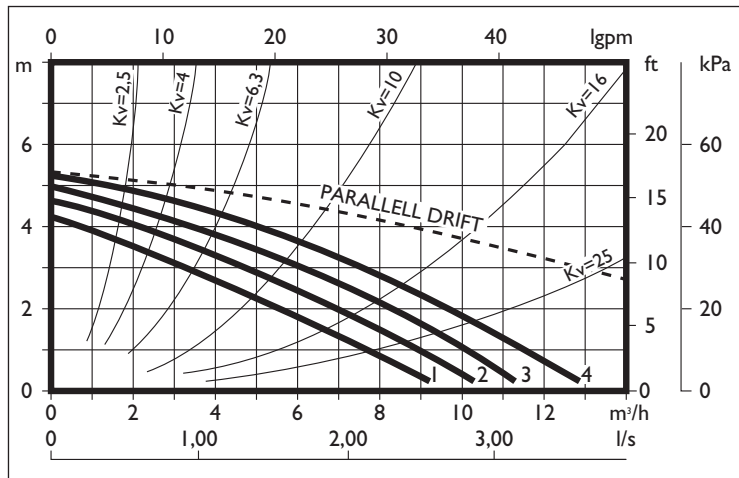
Connection
1" 1/4



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	2750	200-290	1,40	0,55
3	2640	180-250	1,30	0,45
2	2480	150-210	1,20	0,37
1	2340	130-170	1,10	0,28

ETHERMA 4-60-2 range PERFORMANCE CURVES

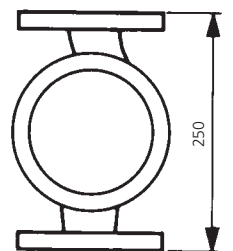
(according to ISO 9906 Attachment A)



ETHERMA 4-60-2 Single pump
 ETHERMA D 4-60-2 Twin pump
 ETHERMA B 4-60-2 Bronze

2 Poles

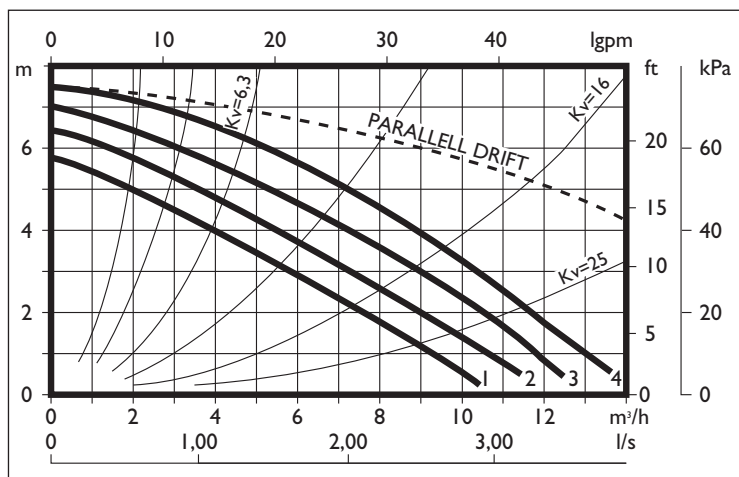
Connection
1" 1/2 - 40 mm



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	2750	130-225	-	0,50
3	2640	95-188	1,00	0,36
2	2480	73-156	1,00	0,28
1	2340	64-128	0,88	0,23

ETHERMA 4-75-2 range PERFORMANCE CURVES

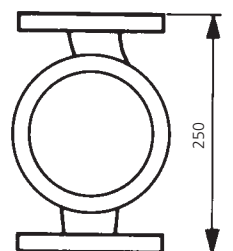
(according to ISO 9906 Attachment A)



ETHERMA 4-75-2 Single pump
 ETHERMA D 4-75-2 Twin pump
 ETHERMA B 4-75-2 Bronze

2 Poles

Connection
1" 1/2 - 40 mm

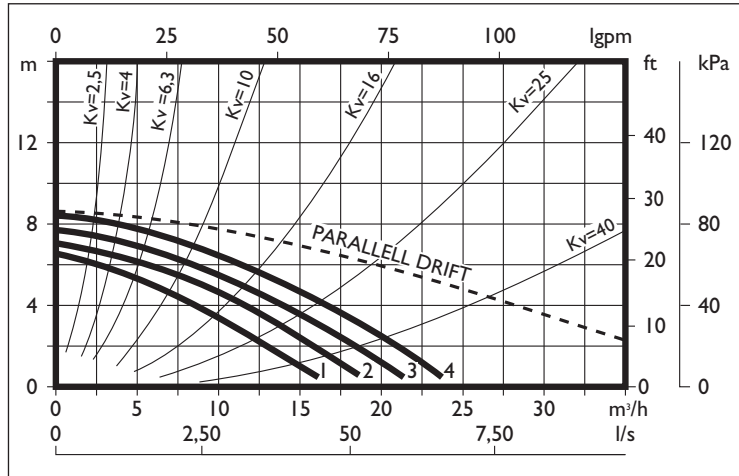


Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	2750	130-300	1,35	0,55
3	2640	120-260	1,25	0,45
2	2480	100-220	1,15	0,37
1	2340	90-175	1,00	0,30

4-SPEED CIRCULATOR PUMPS

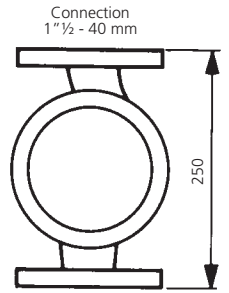
ETHERMA 4-95-2 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



ETHERMA 4-95-2 Single pump
 ETHERMA D 4-95-2 Twin pump
 ETHERMA B 4-95-2 Bronze

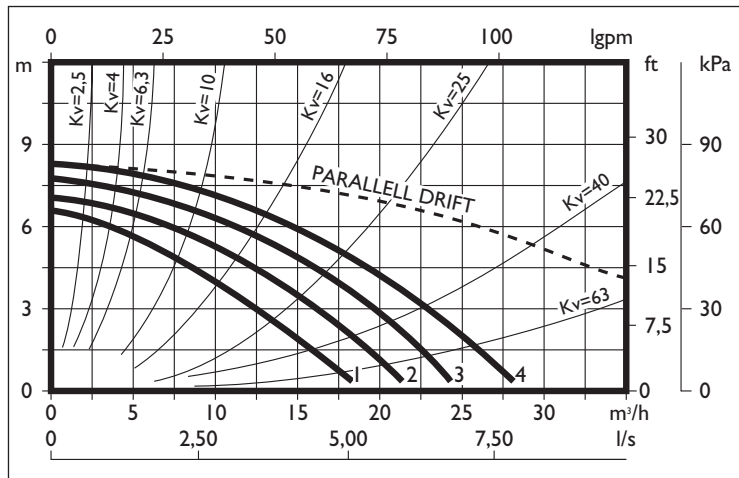
2 Poles



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	2650	330-580	2,50	1,10
3	2450	300-550	2,50	0,90
2	2270	280-500	2,40	0,80
1	1930	250-425	2,10	0,70

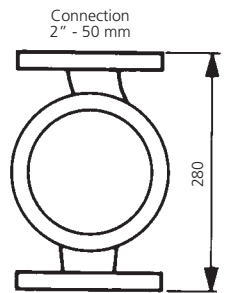
ETHERMA 5-88-2 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



ETHERMA 5-88-2 Single pump
 ETHERMA D 5-88-2 Twin pump
 ETHERMA B 5-88-2 Bronze

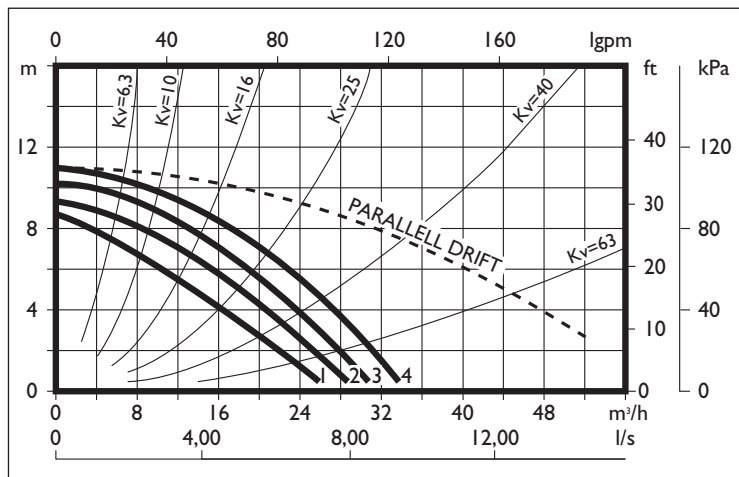
2 Poles



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	2650	350-650	2,70	1,20
3	2450	300-600	2,70	1,00
2	2270	280-500	2,50	0,90
1	1930	250-450	2,20	0,75

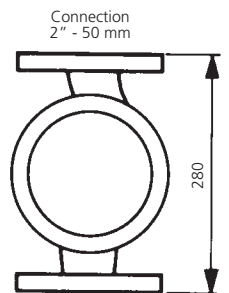
ETHERMA 5-95-2 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



ETHERMA 5-95-2 Single pump
 ETHERMA D 5-95-2 Twin pump
 ETHERMA B 5-95-2 Bronze

2 Poles

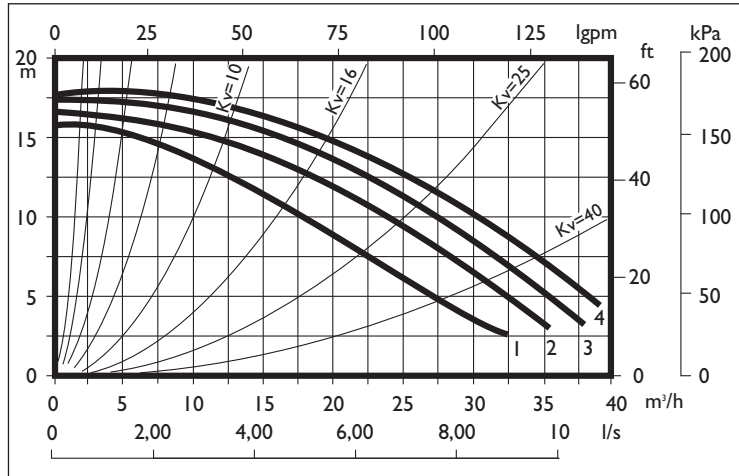


Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	2650	600-980	4,70	2,00
3	2450	460-820	4,10	1,45
2	2270	400-710	3,85	1,20
1	1930	350-600	3,30	1,00

4-SPEED CIRCULATOR PUMPS

ETHERMA 5-120-2 range PERFORMANCE CURVES

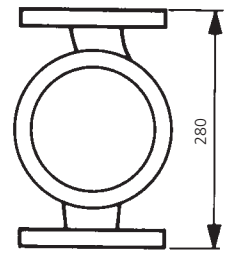
(according to ISO 9906 Attachment A)



2 Poles

ETHERMA 5-120-2 Single pump

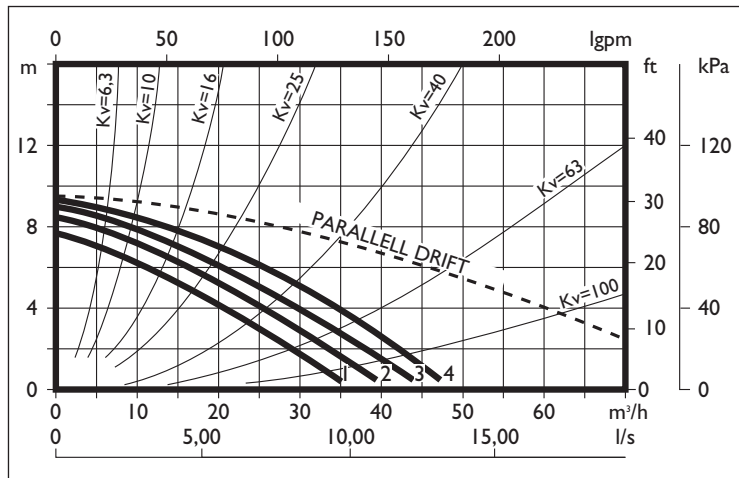
Connection
2" - 50 mm



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	2800	1300-2050	9,20	3,50
3	2660	1200-1850	8,40	3,20
2	2490	1000-1700	7,60	2,90
1	2280	900-1500	6,70	2,60

ETHERMA 6-95-2 range PERFORMANCE CURVES

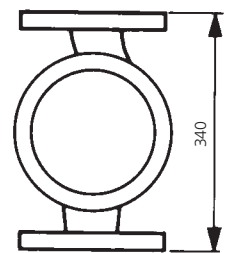
(according to ISO 9906 Attachment A)



2 Poles

ETHERMA 6-95-2 Single pump
ETHERMA D 6-95-2 Twin pump
ETHERMA B 6-95-2 Bronze

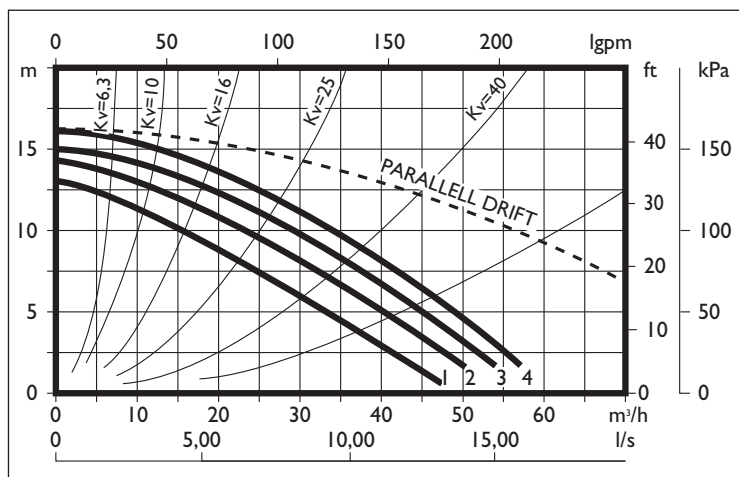
Connection
2 1/2" - 65 mm



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	2800	680-1070	4,50	2,10
3	2680	560-920	2,45	1,58
2	2560	500-790	2,00	1,35
1	2380	425-660	1,65	1,15

ETHERMA 6-110-2 range PERFORMANCE CURVES

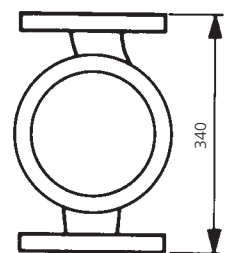
(according to ISO 9906 Attachment A)



2 Poles

ETHERMA 6-110-2 Single pump
ETHERMA D 6-110-2 Twin pump

Connection
2 1/2" - 65 mm

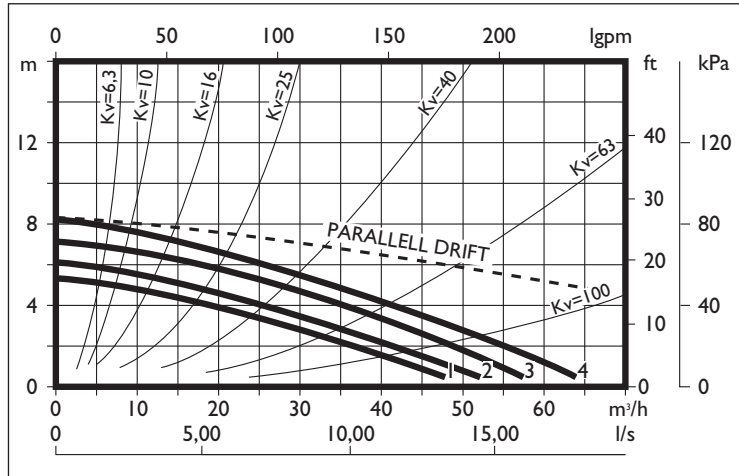


Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	2800	1200-2180	9,20	3,80
3	2660	1100-2050	8,40	3,50
2	2490	1000-1850	7,80	3,10
1	2280	900-1550	6,80	2,70

4-SPEED CIRCULATOR PUMPS

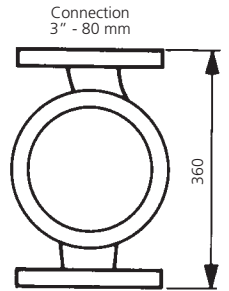
ETHERMA 8-95-2 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



ETHERMA 8-95-2 Single pump
ETHERMA D 8-95-2 Twin pump

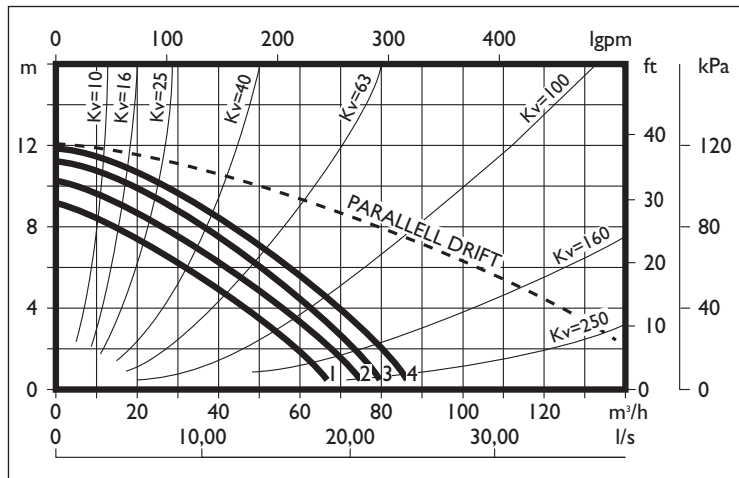
2 Poles



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	2800	1060-1187	6,20	2,20
3	2680	963-1087	5,80	2,00
2	2560	875-992	4,60	1,72
1	2380	750-827	3,80	1,50

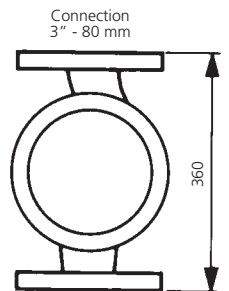
ETHERMA 8-100-2 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



ETHERMA 8-100-2 Single pump
ETHERMA D 8-100-2 Twin pump

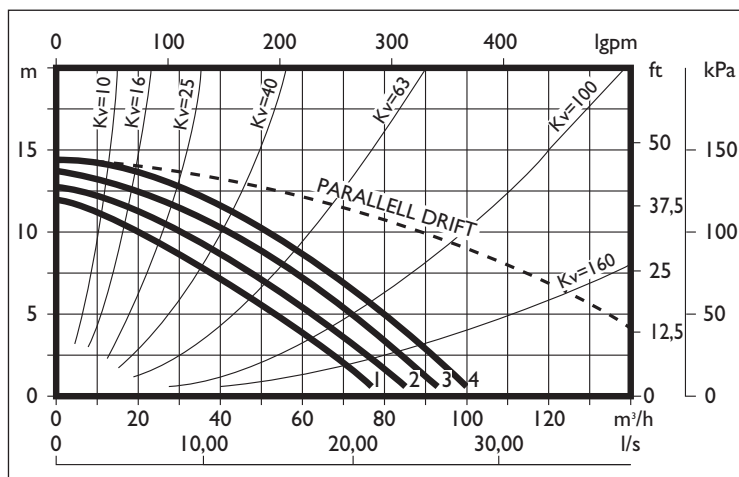
2 Poles



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	2800	1500-2100	10,00	3,70
3	2660	1400-1900	9,50	3,30
2	2490	1250-1700	8,70	3,00
1	2280	1150-1500	7,60	2,60

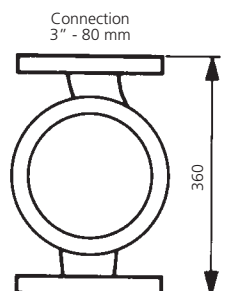
ETHERMA 8-120-2 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



ETHERMA 8-120-2 Single pump
ETHERMA D 8-120-2 Twin pump

2 Poles

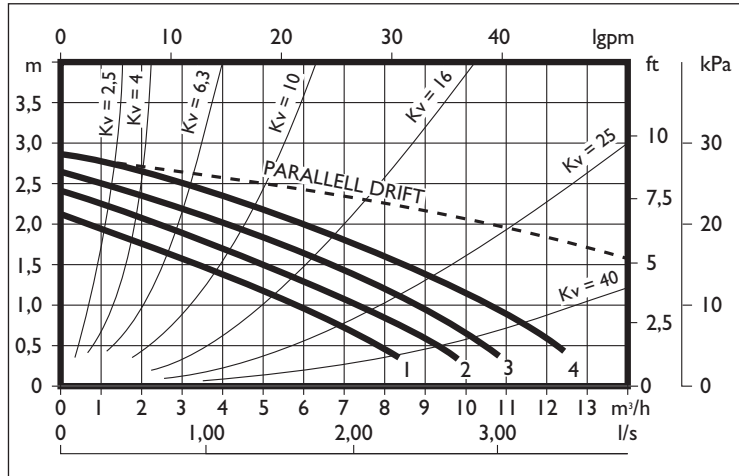


Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	2800	1850-2800	-	4,80
3	2660	1700-2550	-	4,40
2	2490	1550-2250	-	3,90
1	2280	1400-1850	-	3,30

4-SPEED CIRCULATOR PUMPS

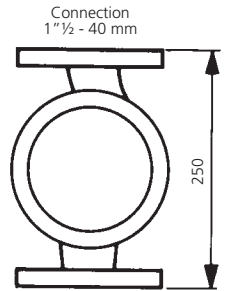
ETHERMA 4-100-4 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



ETHERMA 4-100-4 Single pump
 ETHERMA D 4-100-4 Twin pump
 ETHERMA B 4-100-4 Bronze

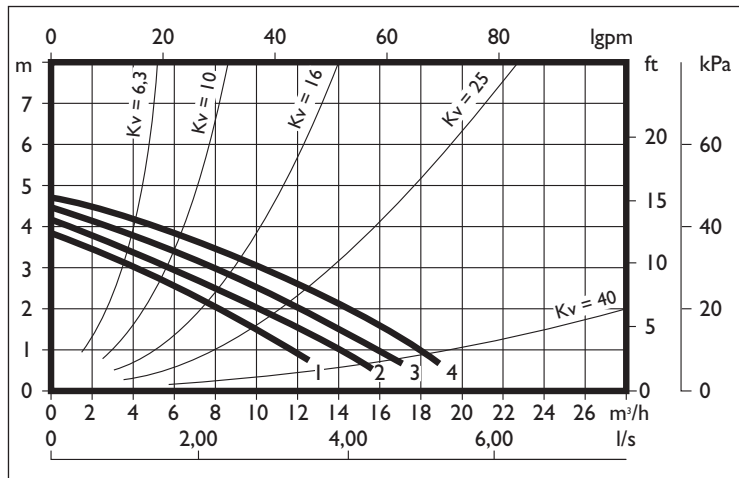
4 Poles



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	1200	140-190	0,85	0,48
3	1080	115-160	0,73	0,34
2	960	85-130	0,65	0,25
1	850	70-105	0,57	0,20

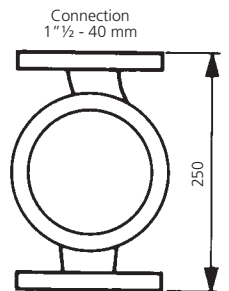
ETHERMA 4-125-4 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



ETHERMA 4-125-4 Single pump

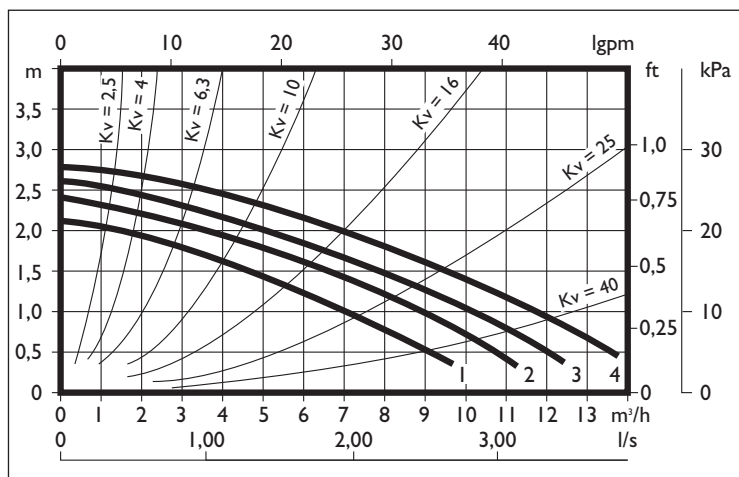
4 Poles



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	1340	190-325	1,75	0,85
3	1250	160-300	1,40	0,65
2	1100	135-250	1,30	0,53
1	980	115-215	1,15	0,43

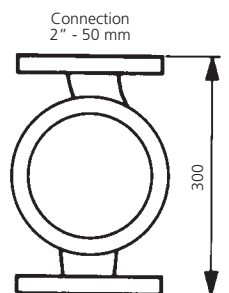
ETHERMA 5-100-4 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



ETHERMA 5-100-4 Single pump

4 Poles

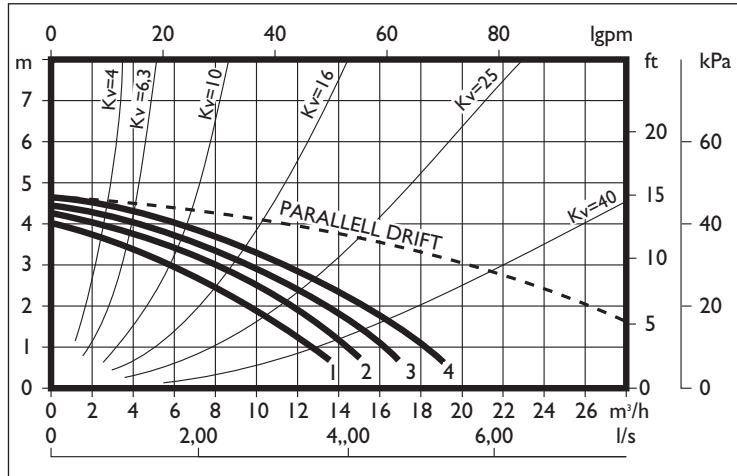


Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	1200	140-200	0,85	0,48
3	1080	115-170	0,75	0,34
2	960	85-135	0,65	0,26
1	850	70-110	0,58	0,21

4-SPEED CIRCULATOR PUMPS

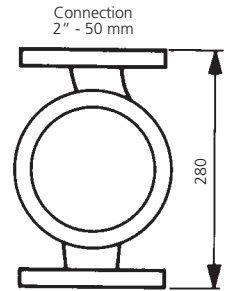
ETHERMA 5-125-4 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



ETHERMA 5-125-4 Single pump
 ETHERMA D 5-125-4 Twin pump
 ETHERMA B 5-125-4 Bronze

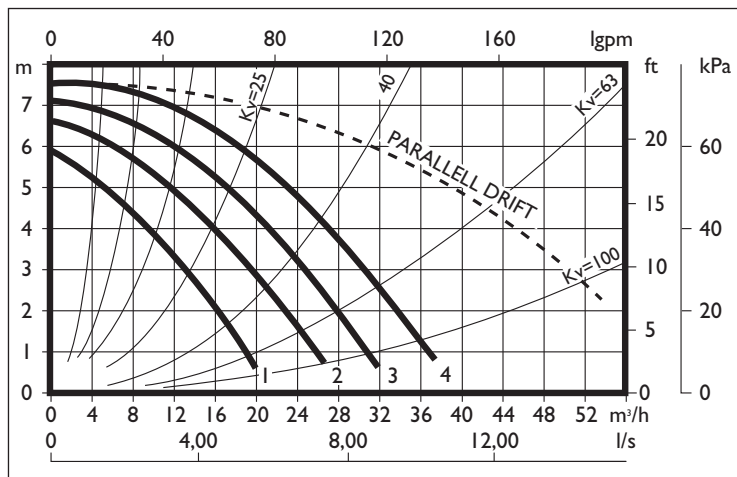
4 Poles



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	1340	190-330	1,80	0,88
3	1250	160-300	1,40	0,67
2	1100	130-260	1,30	0,55
1	980	120-220	1,20	0,45

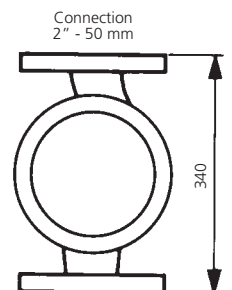
ETHERMA 5-160-4 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



ETHERMA 5-160-4 Single pump
 ETHERMA D 5-160-4 Twin pump

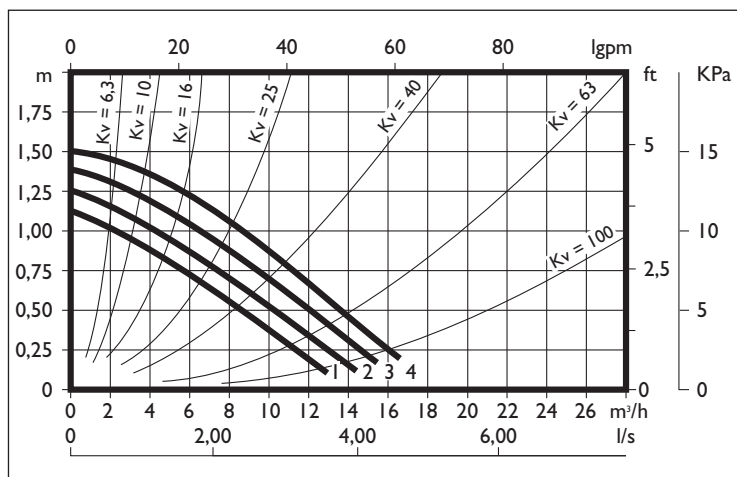
4 Poles



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	1360	428-900	5,20	2,00
3	1290	396-820	4,00	1,71
2	1210	344-680	3,00	1,45
1	1110	311-530	2,58	1,19

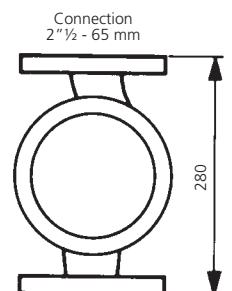
ETHERMA 6-92-4 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



ETHERMA 6-92-4 Single pump

4 Poles

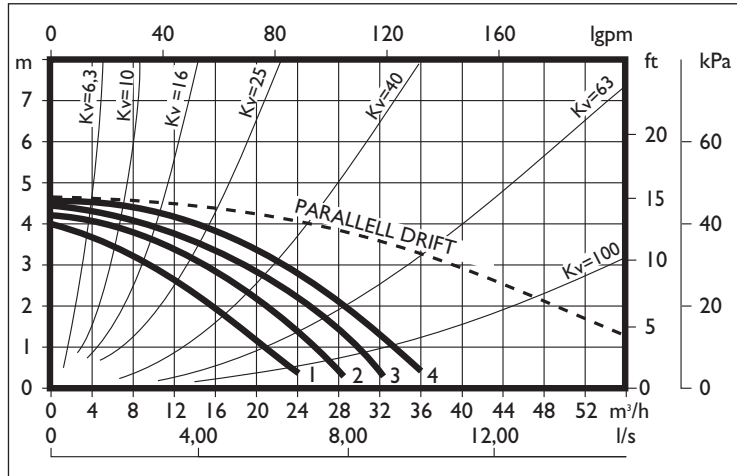


Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	1200	158-173	0,97	0,62
3	1080	126-142	0,94	0,42
2	960	96-109	0,88	0,30
1	850	75-85	0,81	0,23

4-SPEED CIRCULATOR PUMPS

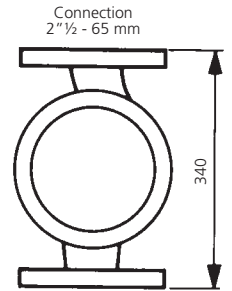
ETHERMA 6-125-4 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



ETHERMA 6-125-4 Single pump
 ETHERMA D 6-125-4 Twin pump
 ETHERMA B 6-125-4 Bronze

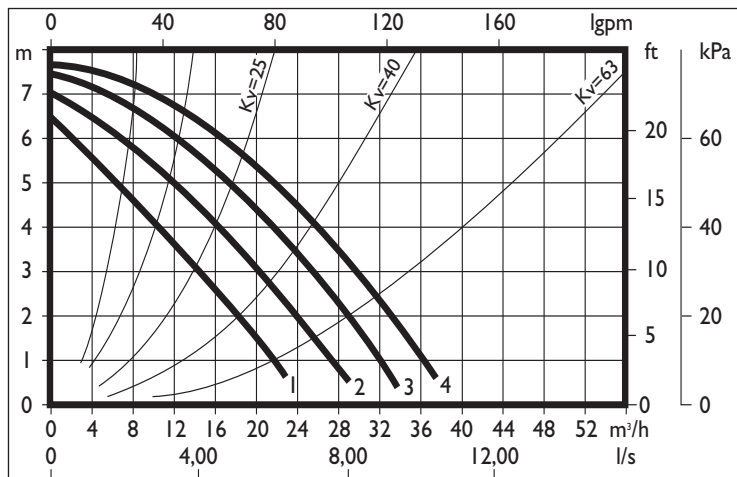
4 Poles



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	1380	250-490	2,50	1,15
3	1330	210-450	2,20	0,95
2	1260	180-390	2,00	0,80
1	1180	160-340	1,80	0,65

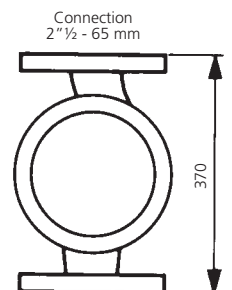
ETHERMA 6-160-4 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



ETHERMA 6-160-4 Single pump

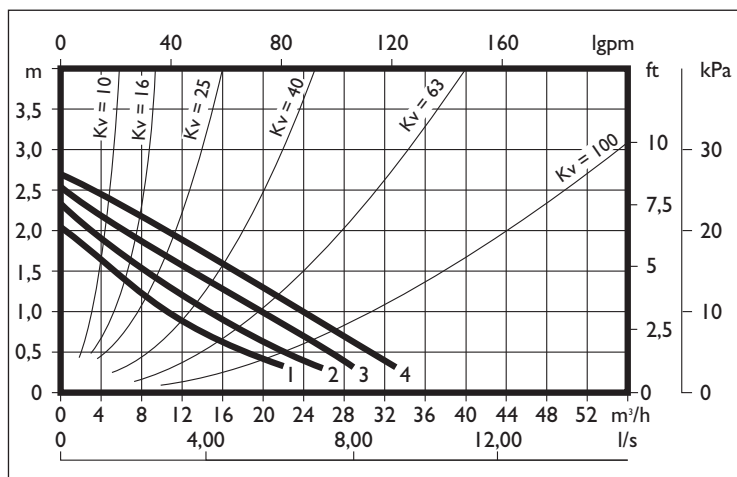
4 Poles



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	1360	380-770	5,10	1,70
3	1290	350-730	3,90	1,40
2	1210	310-630	2,90	1,20
1	1110	270-530	2,40	1,00

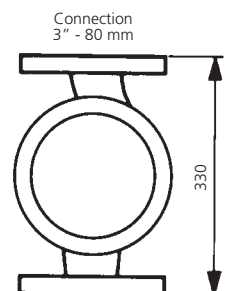
ETHERMA 8-92-4 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



ETHERMA 8-92-4 Single pump

4 Poles

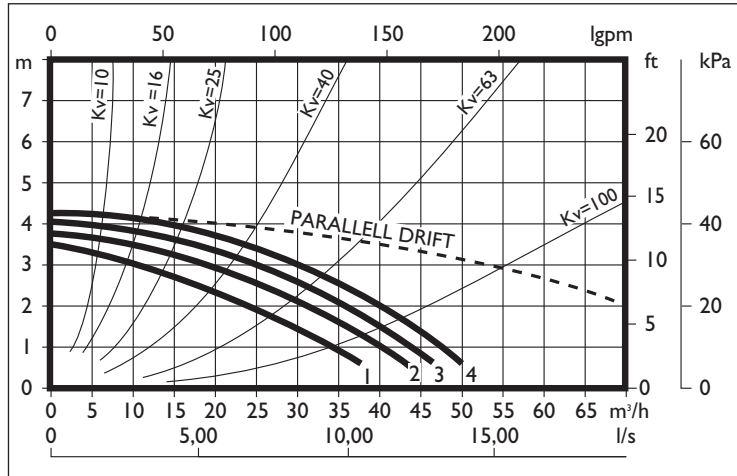


Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	1340	256-346	1,86	1,03
3	1250	211-290	1,70	0,92
2	1100	185-246	1,54	0,83
1	980	156-200	1,41	0,76

4-SPEED CIRCULATOR PUMPS

ETHERMA 8-125-4 range PERFORMANCE CURVES

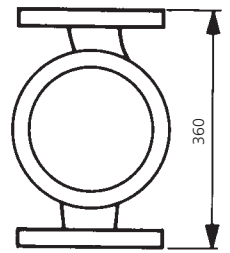
(according to ISO 9906 Attachment A)



ETHERMA 8-125-4 Single pump
ETHERMA D 8-125-4 Twin pump

4 Poles

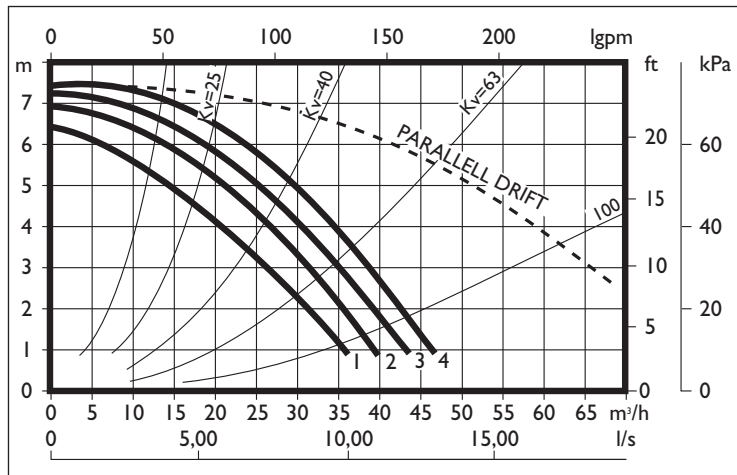
Connection
3" - 80 mm



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	1360	375-574	3,00	1,59
3	1290	342-531	2,75	1,23
2	1210	302-473	2,65	1,03
1	1110	270-416	2,53	0,90

ETHERMA 8-160-4 range PERFORMANCE CURVES

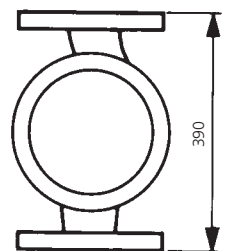
(according to ISO 9906 Attachment A)



ETHERMA 8-160-4 Single pump
ETHERMA D 8-160-4 Twin pump

4 Poles

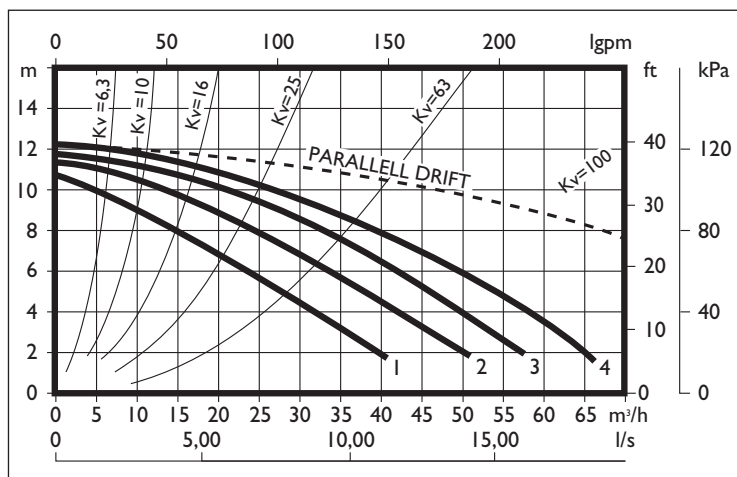
Connection
3" - 80 mm



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	1370	550-1000	-	2,40
3	1280	500-950	-	2,00
2	1190	450-820	-	1,75
1	1080	410-700	-	1,50

ETHERMA 8-200-4 range PERFORMANCE CURVES

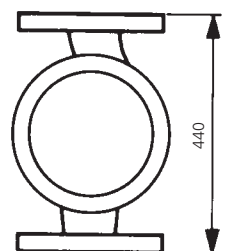
(according to ISO 9906 Attachment A)



ETHERMA 8-200-4 Single pump
ETHERMA D 8-200-4 Twin pump

4 Poles

Connection
3" - 80 mm

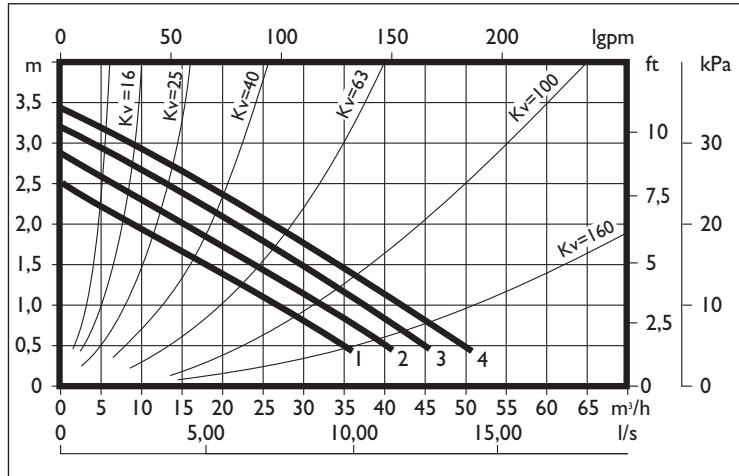


Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	1390	900-1900	-	4,10
3	1310	840-1800	-	3,60
2	1240	770-1600	-	3,20
1	1100	700-1300	-	2,85

4-SPEED CIRCULATOR PUMPS

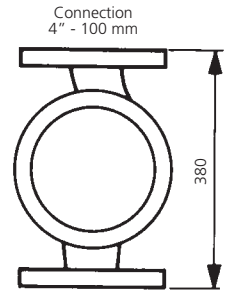
ETHERMA 10-130-4 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



4 Poles

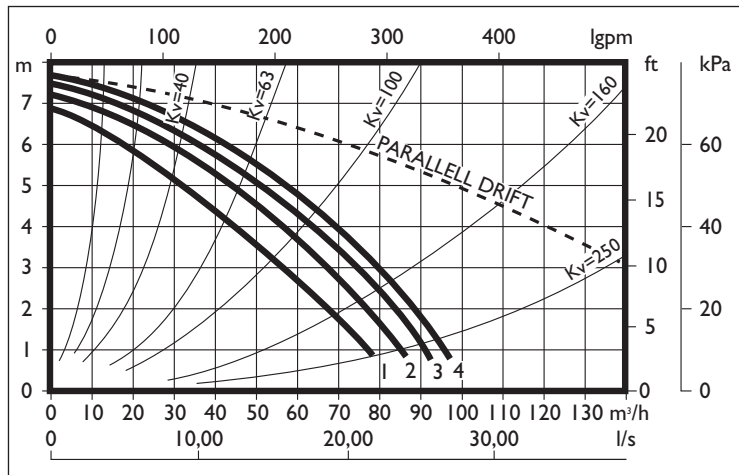
ETHERMA 10-130-4 Single pump



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	1380	442-500	2,60	1,40
3	1330	416-470	2,37	1,29
2	1260	371-418	2,16	1,16
1	1180	323-357	1,93	1,06

ETHERMA 10-160-4 range PERFORMANCE CURVES

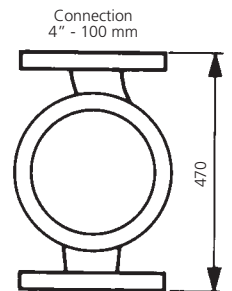
(according to ISO 9906 Attachment A)



4 Poles

ETHERMA 10-160-4 Single pump

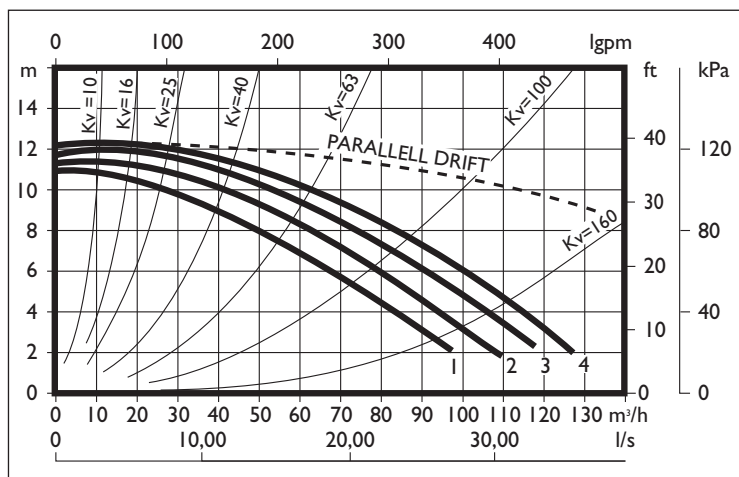
ETHERMA D 10-160-4 Twin pump



Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	1390	1016-1549	-	3,69
3	1310	955-1481	-	3,23
2	1240	876-1385	-	2,88
1	1100	819-1245	-	2,66

ETHERMA 10-210-4 range PERFORMANCE CURVES

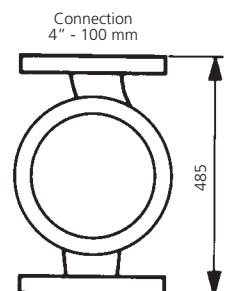
(according to ISO 9906 Attachment A)



4 Poles

ETHERMA 10-210-4 Single pump

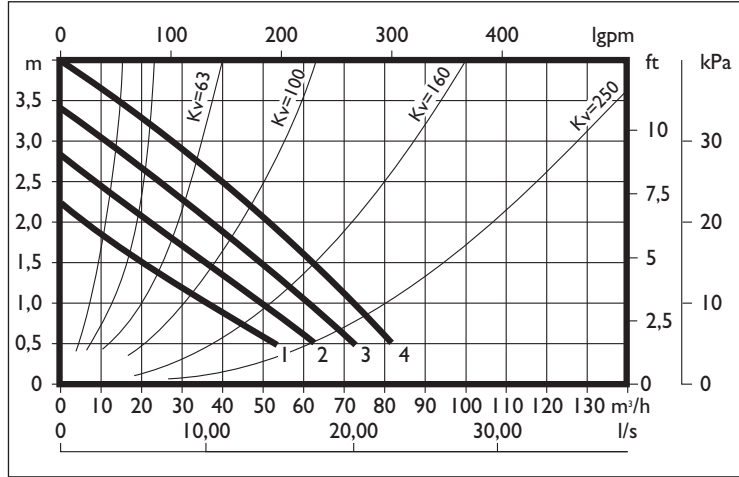
ETHERMA D 10-210-4 Twin pump



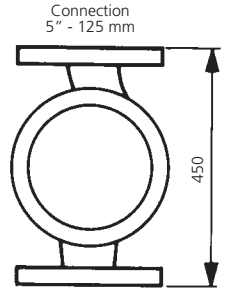
Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	1420	1750-3500	-	7,40
3	1330	1650-3400	-	6,70
2	1220	1500-3000	-	6,15
1	1000	1400-2600	-	5,55

ETHERMA 12-135-4 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)

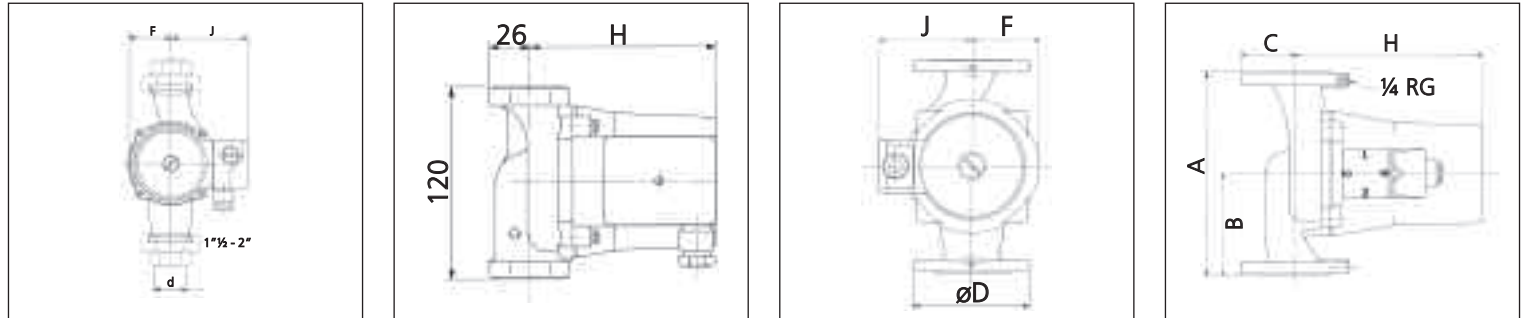


ETHERMA 12-135-4 Single pump

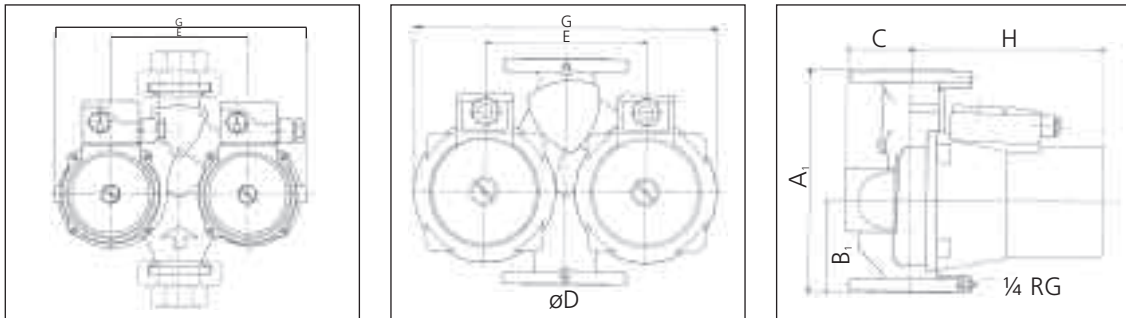


Speed	R.P.M.	P ₁ [W]	I [A]	
			1 x 230	3 x 400
4	1360	734-897	5,20	2,00
3	1290	678-826	4,00	1,71
2	1210	590-695	3,00	1,45
1	1110	492-553	2,58	1,19

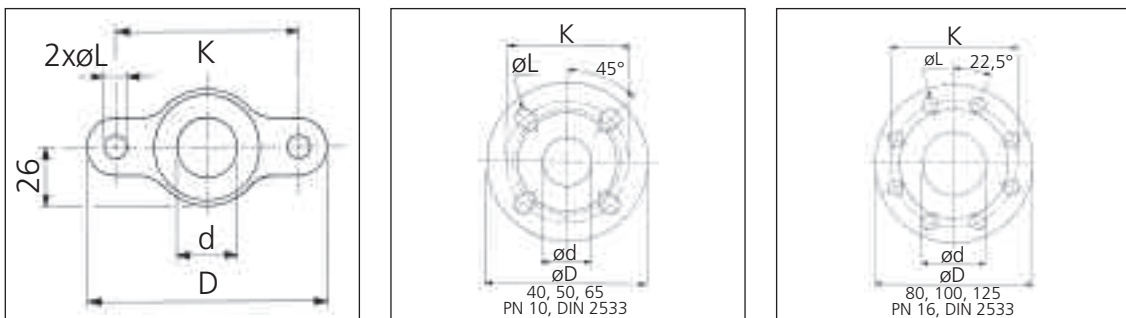
SINGLE PUMP DIMENSIONS



TWIN PUMP DIMENSIONS



FLANGE DIMENSIONS



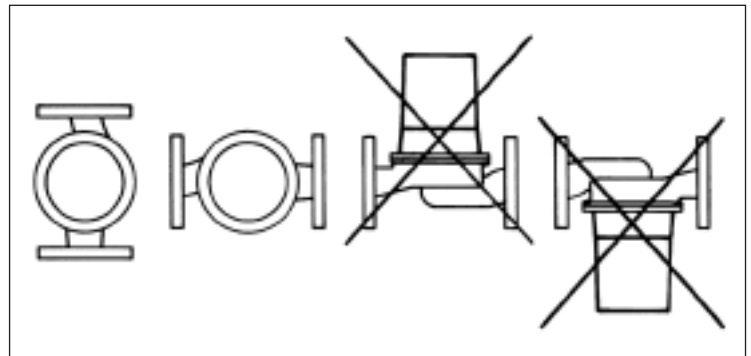
4-SPEED CIRCULATOR PUMPS

DIMENSIONS TABLE

Model	A	A1	B	B1	C	C1	D	d	E	F	G	H	J	PN 6		PN 10		Weight [kg]	
														K	L	K	L	Single	Twin
ETHERMA 2/3-65-2 (D)	130/180	180	90	75	40	40	-	1"-1"¼	130	50	245	110	85	80	M 10	-	-	3,0	6,4
ETHERMA 2/3-70-2 (D)	130/180	180	90	75	40	40	-	1"-1"¼	130	50	245	110	85	80	M 10	-	-	3,2	6,8
ETHERMA 2/3-72-2 (D)	180	180	90	75	40	40	-	1"-1"¼	130	50	245	145	85	-	-	-	-	4,5	8,5
ETHERMA 3-100-2 (D)	180	180	90	75	32	50	-	1"¼	160	65	305	180	95	-	-	-	-	6,3	13,3
ETHERMA 4-60-2 (D)	250	250	125	90	75	75	150	40	200	75	350	160	90	100	14	110	19	10,0	18,2
ETHERMA 4-75-2 (D)	250	250	125	90	75	75	150	40	200	75	350	165	95	100	14	110	19	11,3	19,0
ETHERMA 4-95-2 (D)	250	250	125	90	75	75	150	40	200	75	350	200	105	100	14	110	19	14,2	25,0
ETHERMA 4-100-4 (D)	250	250	125	90	75	75	150	40	200	65	350	160	95	100	14	110	19	11,7	20,2
ETHERMA 4-125-4	250	-	125	-	75	-	150	40	-	95	-	205	100	100	14	110	19	11,7	-
ETHERMA 5-88-2 (D)	280	280	140	120	83	83	165	50	200	85	390	200	105	110	14	125	19	17,5	29,5
ETHERMA 5-95-2 (D)	280	280	140	120	83	83	165	50	200	95	390	230	125	110	14	125	19	28,6	52,0
ETHERMA 5-120-2	280	-	140	-	83	-	165	50	-	105	-	280	125	110	14	125	19	14,4	-
ETHERMA 5-100-4	300	-	150	-	83	-	165	50	-	75	-	155	90	110	14	125	19	14,4	-
ETHERMA 5-125-4 (D)	280	280	140	120	83	83	165	50	200	85	390	200	105	110	14	125	19	17,6	33,0
ETHERMA 5-160-4 (D)	340	340	170	145	85	85	165	50	250	105	480	250	125	110	14	125	19	38,0	73,5
ETHERMA 6-95-2 (D)	340	340	170	140	93	93	185	65	240	105	455	235	125	130	14	145	19	35,0	60,5
ETHERMA 6-110-2 (D)	340	340	170	140	93	93	185	65	240	105	455	280	125	130	14	145	19	41,5	72,0
ETHERMA 6-92-4	280	-	140	-	93	-	185	65	-	80	-	170	90	130	14	145	19	15,5	-
ETHERMA 6-125-4 (D)	340	340	170	140	93	93	185	65	240	105	455	235	125	130	14	145	19	34,5	58,5
ETHERMA 6-160-4	370	-	190	-	93	-	185	65	-	105	-	235	125	130	14	145	19	40,0	-
ETHERMA 8-95-2 (D)	360	360	185	160	100	102	200	80	270	105	505	240	125	-	-	160	19	42,0	72,5
ETHERMA 8-100-2 (D)	360	360	185	160	100	100	200	80	270	105	510	290	125	-	-	160	19	49,5	85,5
ETHERMA 8-120-2 (D)	360	360	185	160	100	100	200	80	270	105	510	290	125	-	-	160	19	50,0	84,5
ETHERMA 8-92-4	330	-	170	-	100	-	200	80	-	100	-	230	100	-	-	160	19	26,0	-
ETHERMA 8-125-4 (D)	360	360	185	160	100	102	200	80	270	105	510	240	130	-	-	160	19	42,0	72,5
ETHERMA 8-160-4 (D)	390	360	200	160	100	100	200	80	270	110	520	290	135	-	-	160	19	46,5	79,8
ETHERMA 8-200-4 (D)	440	440	220	180	105	100	200	80	270	105	510	290	130	-	-	160	19	72,5	123,0
ETHERMA 10-130-4	380	-	200	-	110	-	220	100	-	125	-	270	125	-	-	180	19	41,0	-
ETHERMA 10-160-4 (D)	470	485	260	210	130	150	220	100	378	135	740	292	200	-	-	180	19	79,0	152,0
ETHERMA 10-210-4 (D)	485	485	250	210	150	150	220	100	378	135	740	355	200	-	-	180	19	90,5	170,5
ETHERMA 12-135-4	450	-	225	-	150	-	250	125	-	160	-	300	160	-	-	210	19	60,0	-

INSTALLATION

The pumps must always be installed with the shaft placed horizontally and the motor terminal box must not be overturned. The pump motor must not be insulated because it is very important that the drain holes (especially for condensate) in the motor flange are free, i.e. not blocked.



TWIN PUMP

Parallel operation is possible using twin pumps with unique body. This is useful when high flow rates and low heads are necessary or when high flow rate is necessary for a brief period of time.

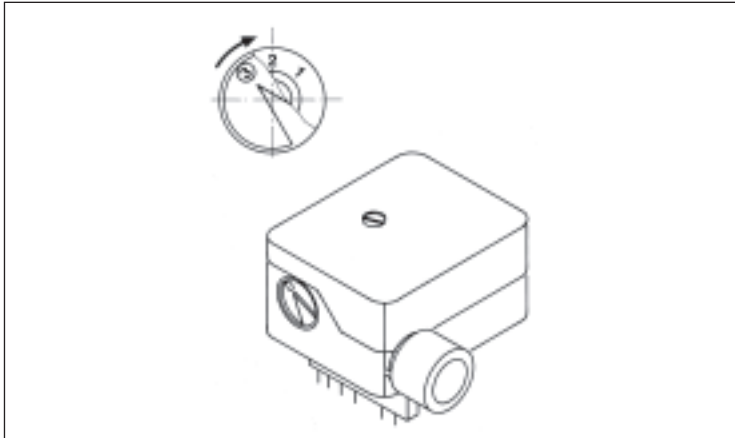
Parallel operation means smaller motor dimension and high flexibility in saving electricity. The performance curves given in this catalogue also show parallel functioning of the twin pumps.



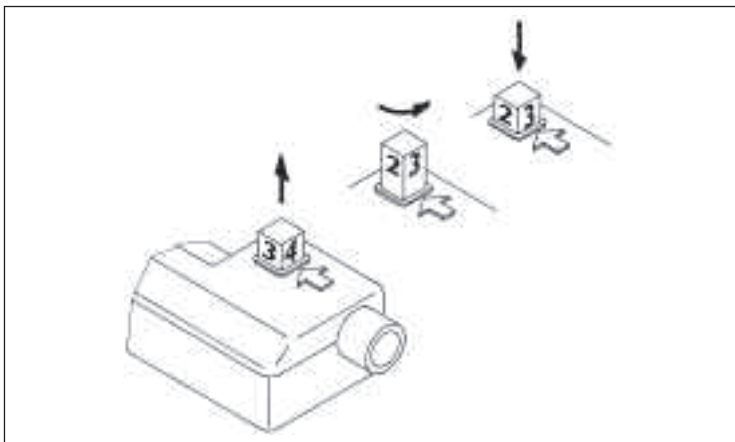
4-SPEED CIRCULATOR PUMPS

SPEED REGULATION

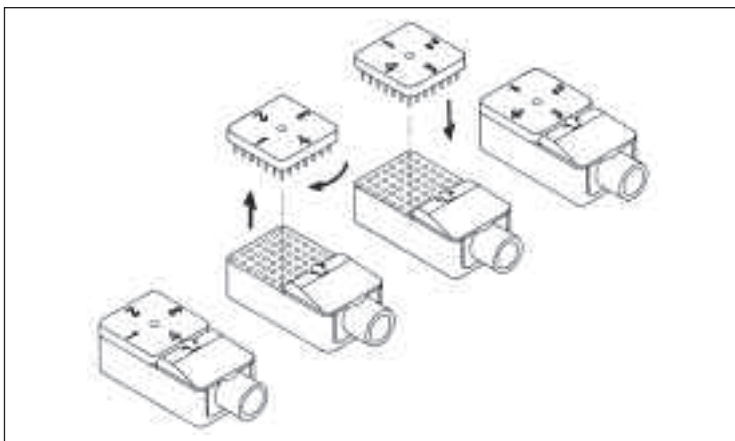
1. 3 speed single phase



2. 4 speed single phase



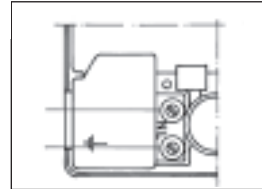
3. 4 three phase speed



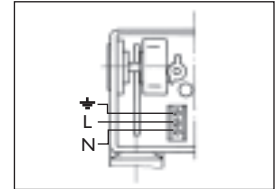
ELECTRIC CONNECTIONS

DIAG. A

N Phase

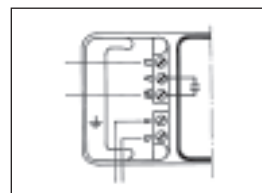


DIAG. K



DIAG. C

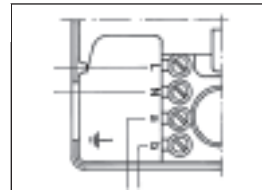
N Phase, L



Overload circuit breaker protection

DIAG. B

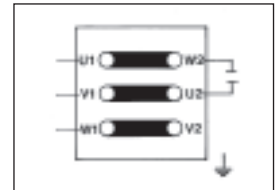
N Phase



Overload circuit breaker protection

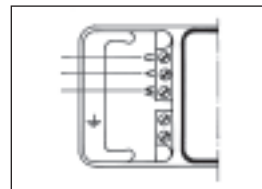
DIAG. D

N Phase, L



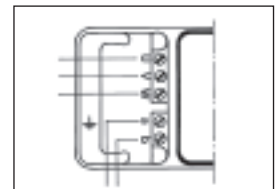
DIAG. E

Phase, L1
Phase, L2
Phase, L3



DIAG. F

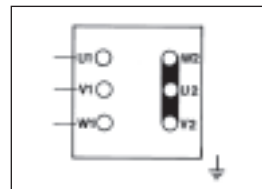
Phase, L1
Phase, L2
Phase, L3



Overload circuit breaker protection

DIAG. G

Phase, L1
Phase, L2
Phase, L3



Overload circuit breaker protection

DIAG. H

Phase, L1
Phase, L2
Phase, L3

