

FH SERIES

CENTRIFUGAL ELECTRIC PUMPS IN COMPLIANCE WITH EN 733 - (ex DIN 24255)

Cast iron pump body and AISI 316L stainless steel, laser-technology welded impeller ⁽¹⁾. Suitable for pumping hot and cold, moderately aggressive liquids.

APPLICATIONS

- Water circulation and transfer in civil, industrial and agricultural sectors.
- Pressure boosting.
- Water supply.
- Circulation of hot and cold water in heating and conditioning systems.
- Industrial washing.
- Water display, fountains.

AVAILABLE MODELS

- **FHE** close-coupled with special motor shaft extension.
- **FHS** with stub shaft and standard motor.
- **FHF** with flexible coupling, base and standard motor in compliance with EN 733 - (ex DIN 24255).

SPECIFICATIONS

- **Maximum delivery** up to **500 m³/h**.
- **Maximum head** up to **95 m**.
- Wear ring in stainless steel AISI 316 up to DN80 (except 65-315 and 80-315).
- Mechanical seal lubricated with the pumped liquid through a recirculation channel up to DN 80 (except 65-315 and 80-315).
- **Nominal diameter of ports** up to **150 mm**.
- **Nominal diameter of impeller** up to **315 mm**.
- 2-pole single-phase motors up to 2.2 kW.
- 2 and 4-pole three-phase motors.
- 50 and 60 Hz frequencies.
- Counterflanges available on request.
- IP55 protection.
- Class F insulation.
- **Maximum operating pressure: 12 bar**.
- **Temperature of liquid** from **-10°C to +85°C** for versions up to DN 80 (from **-20°C to +120°C** for versions with EPDM elastomers) from **-10°C to +120°C** for 65-315, 80-315 and for DN 100, 125, 150.
- **Versions with HYDROVAR frequency converter (variable speed) are available on request.**

⁽¹⁾ Impeller in cast iron for some models of DN 65 and DN 80, and DN 100, 125, 150.

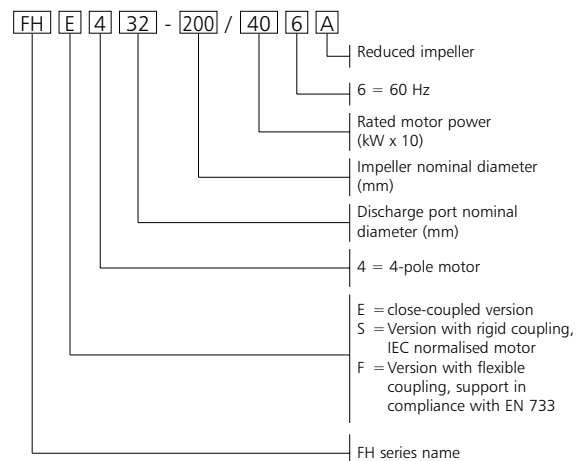


TABLE OF MATERIALS

PART	MATERIAL
Pump body	CAST IRON
Impeller 32, 40, 50, 65-125	STAINLESS STEEL (AISI 316 - DIN 1.4404)
Impeller 65-160, 65-200, 65-250, 80, 100, 125, 150	CAST IRON
Adapter	ALUMINIUM OR CAST IRON
Mechanical seal*	CERAMIC/CARBON/NBR up to DN 80 CARBON/SILICON CARBIDE/EPDM for 65-315, 80-315, 100,125, 150
O-ring seals	NBR
Wear ring, Counterwear ring (only for DN32-80 except for 65-315 and 80-315)	STAINLESS STEEL (AISI 316L - DIN 1.4404)
Shaft	STAINLESS STEEL AISI 316 L for DN 32-80 (except for 65-315 and 80-135) STAINLESS STEEL AISI 420 for 65-315, 80-315, 100, 125, 150
Support body (FHF)	CAST IRON (200 - UNI ISO 185)
Fill and drain plugs	NICKEL-PLATED BRASS

* -20°C a 120°C version: Ceramic / Carbon / EPDM

IDENTIFICATION CODE



ELECTRICAL SPECIFICATIONS OF MOTORS WITH SPECIAL SHAFT EXTENSION, FHE SERIES

SINGLE-PHASE 50 Hz 2-POLES MOTORS

MOTOR TYPE			INPUT CURRENT In (A)	CAPACITOR		DATA FOR 230 V 50 Hz					
kw	IEC SIZE *	CONSTRUCTION DESIGN		220-240 V	μF	V	rpm	Is / In	n %	cosφ	Cn Nm
0.75	90R	B14	5.02-5.39	30	450	2875	5.1	70.6	0.91	2.49	0.71
1.1	90R	B14	7.07-6.81	30	450	2800	3.80	73.8	0.95	3.75	0.47
1.5	90R	B14	9.32-8.63	40	450	2780	3.45	75.5	0.97	5.15	0.47
2.2	90	B14	13.3-12.6	50	450	2785	3.45	76.9	0.97	7.54	0.36

* R = Reduced size of motor casing as compared to shaft extension and flange.

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THREE-PHASE 50 Hz 2-POLES MOTORS

MOTOR TYPE			INPUT CURRENT In (A)				DATA FOR 400 V 50 Hz					
kw	IEC SIZE *	CONSTRUCTION DESIGN	Δ		Y		rpm	Is / In	n %	cosφ	Cn Nm	Cs/Cn
			220-240 V	380-415 V	380-415 V	660-690 V						
0.75	90R	B14	3.72	2.15	-	-	2915	8.23	77.7	0.65	2.45	5.20
1.1	90R	B14	4.52	2.61	-	-	2875	6.78	78.9	0.77	3.65	3.49
1.5	90R	B14	5.98	3.45	-	-	2875	7.04	80.1	0.78	4.98	3.83
2.2	90R	B14	8.71	5.03	-	-	2860	7.32	81.1	0.78	7.34	4.12
3	90	B14	10.8	6.22	-	-	2845	6.81	80.4	0.87	10.1	3.00
4	112R	B14	-	-	8.14	4.70	2900	7.86	83.5	0.85	13.2	2.86
5.5	112	B14	-	-	11.0	6.35	2910	7.71	84.5	0.85	18.0	2.66
7.5	112	B14	-	-	14.6	8.43	2910	7.62	87.2	0.85	24.6	3.03
9.2	132	B14	-	-	17.5	10.1	2925	8.72	86.3	0.88	30.0	3.33
11	132	B14	-	-	21.2	12.2	2925	8.75	88.8	0.84	35.9	3.66
15	160	B34	-	-	28.6	16.5	2940	8.56	85.3	0.89	48.7	3.10
18.5	160	B34	-	-	34.2	19.7	2945	8.80	87.3	0.90	60.0	4.06
22	160	B34	-	-	40.3	23.3	2945	8.61	89.5	0.88	71.2	4.79

* R = Reduced size of motor casing as compared to shaft extension and flange.

fhe-mott-2p50_a_te

THREE-PHASE 50 Hz 4-POLES MOTORS

MOTOR TYPE			INPUT CURRENT In (A)				DATA FOR 400 V 50 Hz					
kw	IEC SIZE *	CONSTRUCTION DESIGN	Δ		Y		rpm	Is / In	n %	cosφ	Cn Nm	Cs/Cn
			220-240 V	380-415 V	380-415 V	660-690 V						
0.25	71	B5	1.71	0.99	-	-	1390	3.58	62.0	0.59	1.71	3.16
0.37	71	B5	2.53	1.46	-	-	1370	3.39	61.4	0.60	2.57	3.40
0.55	90R	B14	3.03	1.75	-	-	1390	3.95	68.2	0.67	3.77	2.45
0.75	90R	B5	4.04	2.33	-	-	1395	4.06	70.1	0.66	5.13	2.73
1.1	90	B5	4.35	2.51	-	-	1415	4.65	78.0	0.81	7.42	2.15
1.5	90	B5	5.85	3.38	-	-	1420	4.99	79.9	0.80	10.1	2.26
2.2	100	B5	8.28	4.78	-	-	1410	5.53	81.4	0.82	14.9	2.52
3	100	B5	11.0	6.37	-	-	1425	6.03	82.5	0.82	20.1	2.53
4	112	B5	-	-	8.38	4.84	1440	5.81	84.8	0.81	26.5	2.50
5.5	132	B14	-	-	11.3	6.52	1445	5.98	85.8	0.82	36.3	2.60
7.5	132	B14	-	-	15.2	8.78	1450	6.70	88.1	0.81	49.3	3.17

* R = Reduced size of motor casing as compared to shaft extension and flange.

fhe-mott-4p50_a_te



STANDARD MOTOR ELECTRICAL SPECIFICATIONS FHS - FHF SERIES

THREE-PHASE 50 Hz 2-POLES MOTORS

MOTOR TYPE				INPUT CURRENT				DATA FOR 400 V 50 Hz					
kW	IEC SIZE *	CONSTRUCTION		In (A)				rpm	Is / In	n %	cosφ	Cn Nm	Cs/Cn
		FHS	FHF	Δ 220-240 V	Y 380-415 V	Δ 380-415 V	Y 660-690 V						
0.75	80R	B5	-	3.50	2.02	-	-	2855	5.81	74.3	0.72	2.51	3.76
0.75	80	-	B3	3.72	2.15	-	-	2915	8.23	77.7	0.65	2.45	5.20
1.1	80	B5	B3	4.52	2.61	-	-	2875	6.78	78.9	0.77	3.65	3.49
1.5	90R	B5	-	5.98	3.45	-	-	2875	7.04	80.1	0.78	4.98	3.83
1.5	90	-	B3	5.66	3.27	-	-	2875	6.40	76.5	0.87	4.98	2.71
2.2	90R	B5	-	8.71	5.03	-	-	2860	7.32	81.1	0.78	7.34	4.12
2.2	90	-	B3	8.02	4.63	-	-	2870	6.94	80.0	0.86	7.32	2.85
3	100R	B5	-	10.8	6.22	-	-	2845	6.81	80.4	0.87	10.1	3.00
3	100	-	B3	10.6	6.10	-	-	2895	6.53	83.6	0.85	9.89	3.34
4	112R	B5	-	-	-	8.14	4.70	2900	7.86	83.5	0.85	13.2	2.86
4	112	-	B3	-	-	8.21	4.74	2915	7.41	82.2	0.86	13.1	2.58
5.5	132R	B5	-	-	-	11.0	6.35	2910	7.71	84.5	0.85	18.0	2.66
5.5	132	-	B3	-	-	10.7	6.18	2905	6.53	84.4	0.88	18.1	2.39
7.5	132R	B5	-	-	-	14.6	8.43	2910	7.62	87.2	0.85	24.6	3.03
7.5	132	-	B3	-	-	14.4	8.31	2915	7.37	85.8	0.88	24.6	2.69
11	160	B35	B3	-	-	21.6	12.5	2925	6.83	82.4	0.89	35.9	2.97
15	160	B35	B3	-	-	28.6	16.5	2940	8.56	85.3	0.89	48.7	3.10
18.5	160	B35	B3	-	-	34.2	19.7	2945	8.80	87.3	0.90	60.0	4.06
22	180R	B35	-	-	-	40.3	23.3	2945	8.61	89.5	0.88	71.2	4.79
22	180	-	B3	-	-	42.0	24.2	2930	7.10	90.0	0.84	71.0	2.50
30	200	B35	B3	-	-	55.0	31.8	2945	6.80	90.5	0.87	97.0	2.40
37	200	B35	B3	-	-	67.0	38.7	2940	7.20	91.5	0.87	120	2.50
45	225	B35	B3	-	-	81.0	46.8	2955	6.70	91.3	0.88	145	2.40
55	250	B35	B3	-	-	98.0	56.6	2960	6.70	92.1	0.88	177	2.40

* R = Reduced size of motor casing as compared to shaft extension and flange.

fhs-fhf-mott-2p50_a_te

THREE-PHASE 50 Hz 4-POLES MOTORS

MOTOR TYPE				INPUT CURRENT				DATA FOR 400 V 50 Hz					
kW	IEC SIZE *	CONSTRUCTION		In (A)				rpm	Is / In	n %	cosφ	Cn Nm	Cs/Cn
		FHS	FHF	Δ 220-240 V	Y 380-415 V	Δ 380-415 V	Y 660-690 V						
0.25	71	-	B3	1.71	0.99	-	-	1390	3.58	62.0	0.59	1.71	3.16
0.37	71	-	B3	2.53	1.46	-	-	1370	3.39	61.4	0.6	2.57	3.40
0.55	80	B5	B3	3.03	1.75	-	-	1390	3.95	68.2	0.67	3.77	2.45
0.75	80	B5	B3	4.04	2.33	-	-	1395	4.06	70.1	0.66	5.13	2.73
1.1	90	B5	B3	4.35	2.51	-	-	1415	4.65	78.0	0.81	7.42	2.15
1.5	90	B5	B3	5.85	3.38	-	-	1420	4.99	79.9	0.8	10.1	2.26
2.2	100	B5	B3	8.28	4.78	-	-	1410	5.53	81.4	0.82	14.9	2.52
3	100	B5	B3	11.0	6.37	-	-	1425	6.03	82.5	0.82	20.1	2.53
4	112	B5	B3	-	-	8.38	4.84	1440	5.81	84.8	0.81	26.5	2.50
5.5	132	B5	B3	-	-	11.3	6.52	1445	5.98	85.8	0.82	36.3	2.60
7.5	132	B5	B3	-	-	15.2	8.78	1450	6.70	88.1	0.81	49.3	3.17
11	160	B5	-	-	-	22.5	13.0	1460	5.20	87.0	0.81	72.0	2.00
15	160	B5	-	-	-	30.4	17.6	1460	5.90	88.0	0.81	96.0	2.30
18.5	180	B5	-	-	-	37.1	21.4	1465	6.20	88.0	0.82	120	2.30
22	180	B5	-	-	-	42.6	24.6	1465	6.30	89.0	0.84	143	2.40
30	200	B5	-	-	-	57.3	33.1	1465	6.60	90.0	0.84	195	2.40

* R = Reduced size of motor casing as compared to shaft extension and flange.

fhs-fhf-mott-4p50_a_te

FHE - FHS - FHF SERIES HYDRAULIC PERFORMANCE TABLE 50 Hz, 4 POLES

PUMP TYPE	POWER		Q = DELIVERY																			
			l/min	0	50	75	100	125	150	175	200	250	300	400	500	600	800	1000	1200	1400	1600	1800
			m ³ /h	0	3	4,5	6	7,5	9	10,5	12	15	18	24	30	36	48	60	72	84	96	108
		H = TOTAL HEAD METERS COLUMN OF WATER																				
		kW	HP																			
32-125/02A	0,25	0,33	4,4	4,2	3,9	3,5	3,1	2,5	1,9													
32-125/02	0,25	0,33	5,5	5,2	5	4,7	4,3	3,8	3,1	2,4												
32-160/02	0,25	0,33	6,5	6,1	5,8	5,4	4,9	4,3	3,6	2,8												
32-160/03	0,37	0,5	8,5	8	7,7	7,3	6,9	6,3	5,7	4,9												
32-200/03	0,37	0,5	9,9	9,2	8,7	8,1	7,4	6,7	5,9	5												
32-200/05	0,55	0,75	12,5	11,9	11,3	10,7	10,1	9,3	8,4	7,5	5,4											
32-250/07	0,75	1	19,4	18,5	17,7	16,7	15,5	13,8	11,7	9												
32-250/11	1,1	1,5	22,5	21,6	20,8	19,9	18,6	17	15	12,5												
40-125/02A	0,25	0,33	4				3,9	3,8	3,6	3,4	2,9	2,2										
40-125/02	0,25	0,33	5,1				4,9	4,7	4,5	4,3	3,8	3,1										
40-125/03	0,37	0,5	6,3				6	5,8	5,6	5,4	4,9	4,2	2,3									
40-160/03	0,37	0,5	7,4				6,9	6,7	6,4	6,1	5,4	4,6										
40-160/05	0,55	0,75	9,1				8,7	8,5	8,2	7,9	7,2	6,3	4,3									
40-200/07	0,75	1	11,6				11	10,8	10,5	10,2	9,4	8,4										
40-200/11	1,1	1,5	14,1				13,4	13,2	12,9	12,6	11,8	10,8	8,3									
40-250/11	1,1	1,5	15				14	13,7	13,3	13	12,2	11,2	8,5									
40-250/15	1,5	2	17,5				16,5	16,2	15,8	15,5	14,6	13,5	10,8									
40-250/22	2,2	3	21				19,7	19,3	19	18,5	17,6	16,6	14	10,6								
40-125/03A	0,37	0,5	4,3							4,2	4,1	3,9	3,4	2,7	1,8							
50-125/03	0,37	0,5	5							4,8	4,6	4,4	3,9	3,3	2,4							
50-125/05	0,55	0,75	5,9							5,8	5,7	5,5	5,1	4,4	3,5							
50-160/07	0,75	1	7,9							7,8	7,6	7,4	6,8	5,8	4,7							
50-160/11	1,1	1,5	9,7							9,5	9,3	9,1	8,5	7,6	6,5							
50-200/11	1,1	1,5	12,1							11,6	11,3	10,9	9,9	8,6	7,1							
50-200/15	1,5	2	13,9							13,3	13	12,6	11,6	10,2	8,6							
50-250/22A	2,2	3	16,5							16,2	16	15,6	14,6	13,2	11,4							
50-250/22	2,2	3	18,6							18	17,8	17,4	16,5	15,2	13,4							
50-250/30	3	4	21							20,5	20,3	20	19	17,8	16,2	11,8						
65-125/05	0,55	0,75	4,6										4,1	3,8	3,4	2,5						
65-125/07	0,75	1	5,6										5,1	4,9	4,5	3,7	2,6					
65-125/11	1,1	1,5	6,6										6,3	6,1	5,9	5,2	4,2					
65-160/11	1,1	1,5	8										7,6	7,3	7	6	4,8	3,4				
65-160/15	1,5	2	8,8										8,5	8,3	8	7,1	6	4,6				
65-160/22	2,2	3	10,3										10,1	9,8	9,5	8,8	7,8	6,5	5			
65-200/15	1,5	2	10										10	9,6	9,1	7,9	6,4	4,6				
65-200/22	2,2	3	12,4										12,5	12,2	11,8	10,7	9,3	7,6				
65-200/30	3	4	14,4										14,5	14,3	13,8	12,7	11,3	9,6	7,5			
65-250/30	3	4	15,4										15	14,6	13,9	12	9,7	6,7				
65-250/40	4	5,5	19										18,8	18,3	17,8	15,7	14,4	11,7				
65-250/50	5,5	7,5	22,3										21,7	21,3	20,9	19,5	17,7	15,1	12			
65-315/75	7,5	10	30,8												30	29,8	28,8	27,6	25,8	23,3	19,7	
65-315/110	11	15	36,2												35,7	35,5	34,7	33,5	31,8	29,8	31,8	23

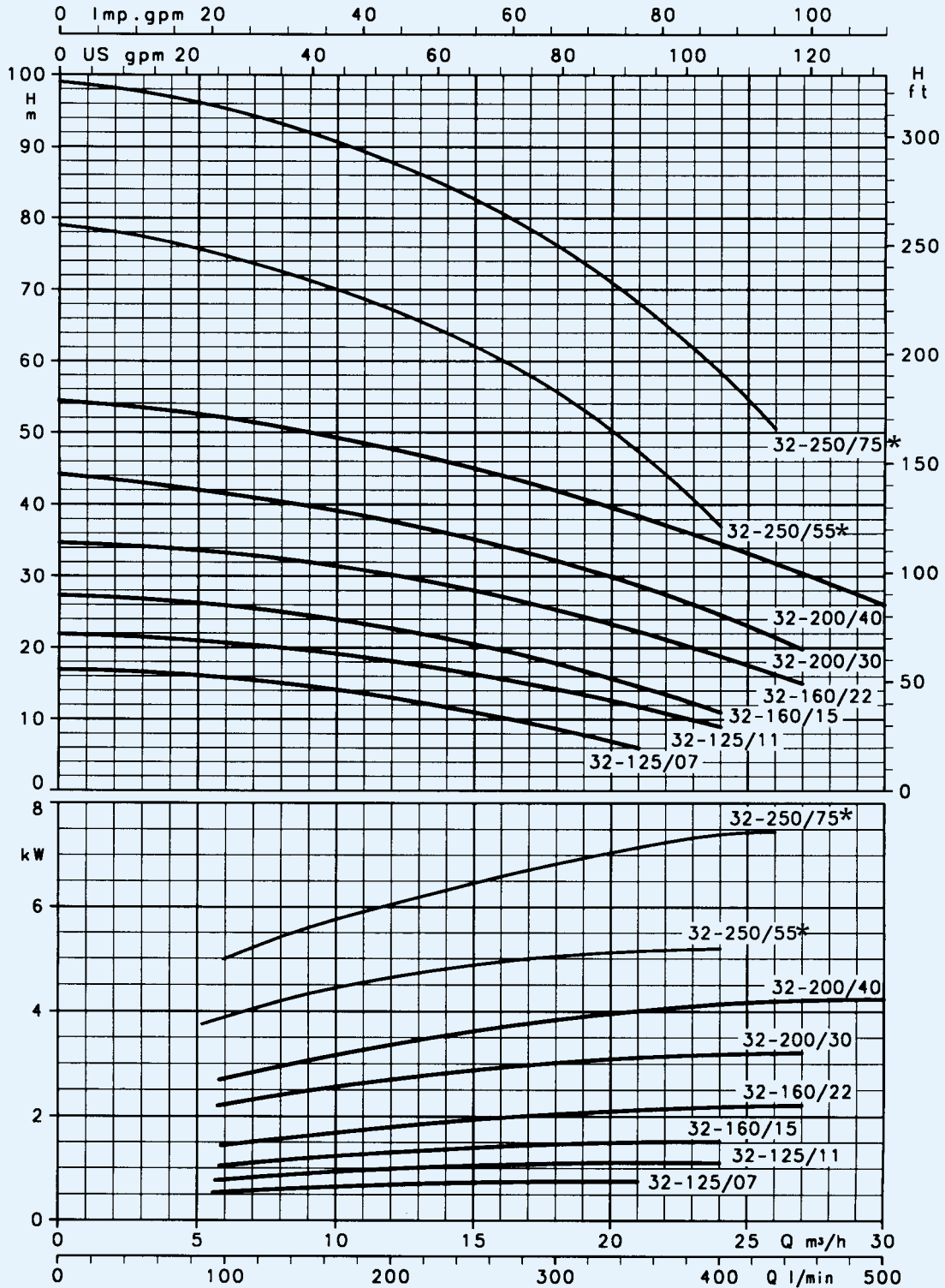
FHE - FHS - FHF SERIES

HYDRAULIC PERFORMANCE TABLE 50 Hz, 4 POLES

PUMP TYPE	POWER		Q = DELIVERY																				
			H = TOTAL HEAD METERS COLUMN OF WATER																				
			l/min	600	800	1000	1200	1600	1800	2200	2500	2900	3400	2900	4400	5200	6000	6800	7800	8900	10000		
		m ³ /h	0	36	48	60	72	96	108	132	150	174	204	234	264	312	360	408	468	534	600		
		kW	HP																				
80-160/15	1,5	2	7,2	7,4	7	6,4	5,5	3,5	2,3														
80-160/22	2,2	3	8,5	8,8	8,5	8	7,4	5,7	4,5														
80-200/30	3	4	11,2	11,3	10,8	10,1	9,2	6,6	5														
80-200/40	4	5,5	13,8	14,3	14	13,3	12,4	10	8,5														
80-250/40	4	5,5	16,5	16,4	15,8	14,8	13,2	9	6,3														
80-250/55	5,5	7,5	19,8	19,9	19,3	18,4	17,2	13,5	11,1														
80-250/75	7,5	10	23,6	24,8	23,3	22,5	21,3	18,1	16	11,3													
80-315/110	11	15	31,5		30,7	30	29	26,3	24,7	19,8	14,2												
80-315/150	15	20	38,3		37,8	37,2	36,4	33,8	32,2	27,8	23,8	16,3											
100-160/30	3	4	9				8,2	7,5	7,1	5,8	4,9												
100-200/40	4	5,5	12,4				11,5	10,4	9,8	7,8	6,2												
100-200/55	5,5	7,5	15				14,3	13,5	13	11,3	10	7,7											
100-250/75	7,5	10	21				20	18,8	18	15,7	13,8	10											
100-250/110	11	15	27				26,2	25,3	24,5	22,5	20,7	17,8	13										
100-315/150	15	20	31,2				30,2	29	28,2	26	24,3	21,2	16,2										
100-315/185	18,5	25	34,8				34	33	32,3	30,5	29	26,2	21,7	16									
100-315/220	22	30	38,8				37,8	37	36,3	34,6	33,3	30,8	26,8	21,5	15,3								
125-200/55	5,5	7,5	11							8,8	8,2	7,5	6,3	5,2	3,7								
125-200/75	7,5	10	15							12,8	12,3	11,6	10,3	9	7,3								
125-250/110	11	15	19,4							18	17,3	16	14,2	12,2	9,7	5,4							
125-250/150	15	20	23,4							22,4	22	21	19,3	17,3	15	10,8							
125-250/185	18,5	25	26							25,2	24,8	24,2	22,8	21,3	19,2	15,3	11						
125-315/220	22	30	30,6							29,3	28,8	27,8	26,3	24,3	21,8	17,2	11						
125-315/300	30	40	36,3							35,5	35	34,3	32,8	31,3	29,2	25	19,3	12,5					
150-250/150	15	20	18,3									17,3	16,7	16	15	13,3	11,6	9,5	6,6				
150-250/185	18,5	25	21,5									20,7	20	19,5	18,7	17,2	15,3	13,3	10,4	6,5			
150-250/220	22	30	24									23,3	22,7	22,2	21,4	20	18,3	16,4	13,5	9,8			
150-250/300	30	40	25,5									24,8	24,4	23,8	23	21,7	20,3	18,3	15,4	11,7			
150-315/300	30	40	30,4									29,5	28,8	28,3	27,4	25,8	28,8	21,4	18	14	8,5		



FH 32 SERIES OPERATING CHARACTERISTICS at 2900 rpm 50 Hz, 2 POLES

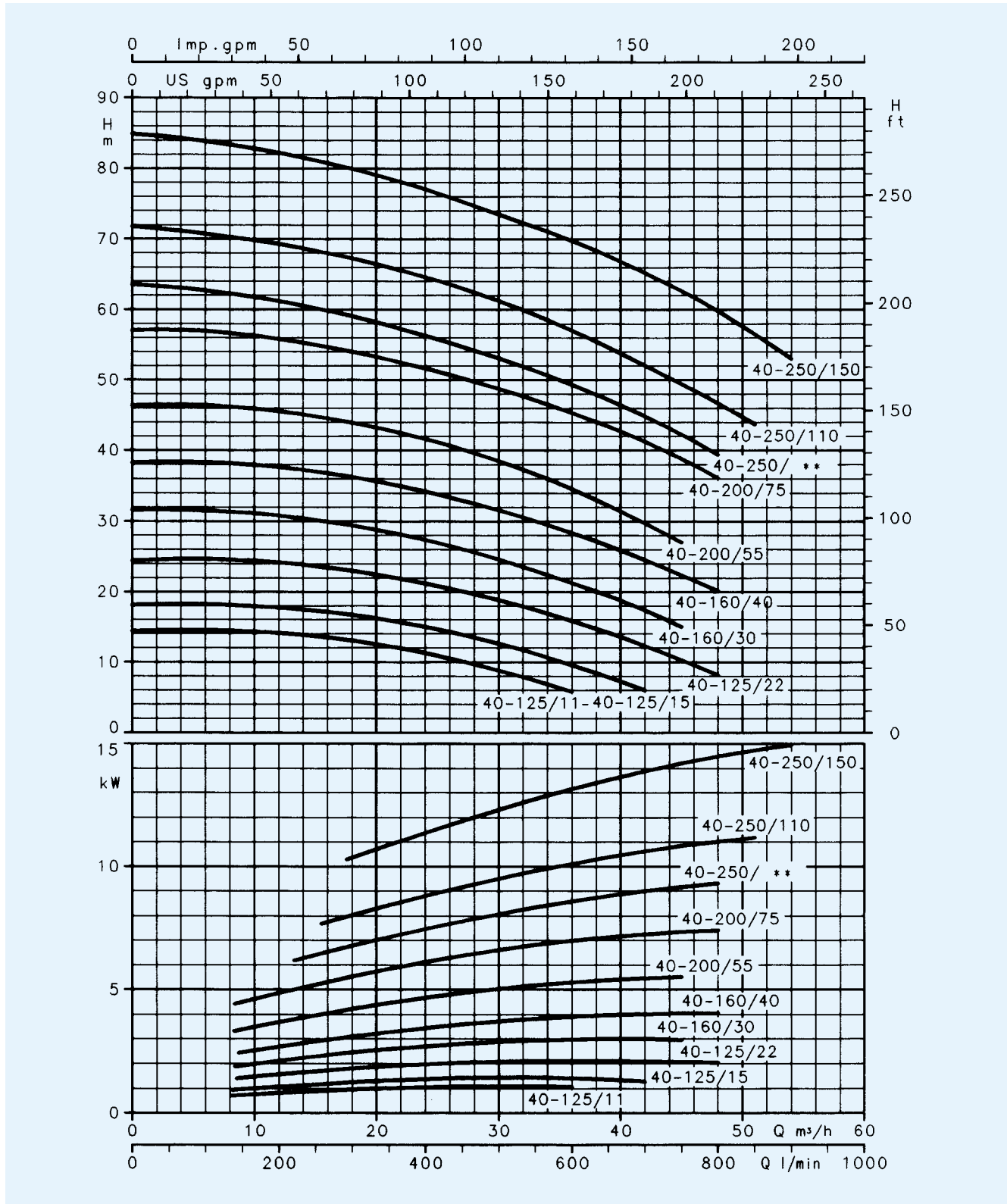


* 2FHE Version

Please verify with the price list the availability of model type FHE-FHS-FHF
These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

FH

FH 40 SERIES OPERATING CHARACTERISTICS at 2900 rpm 50 Hz, 2 POLES

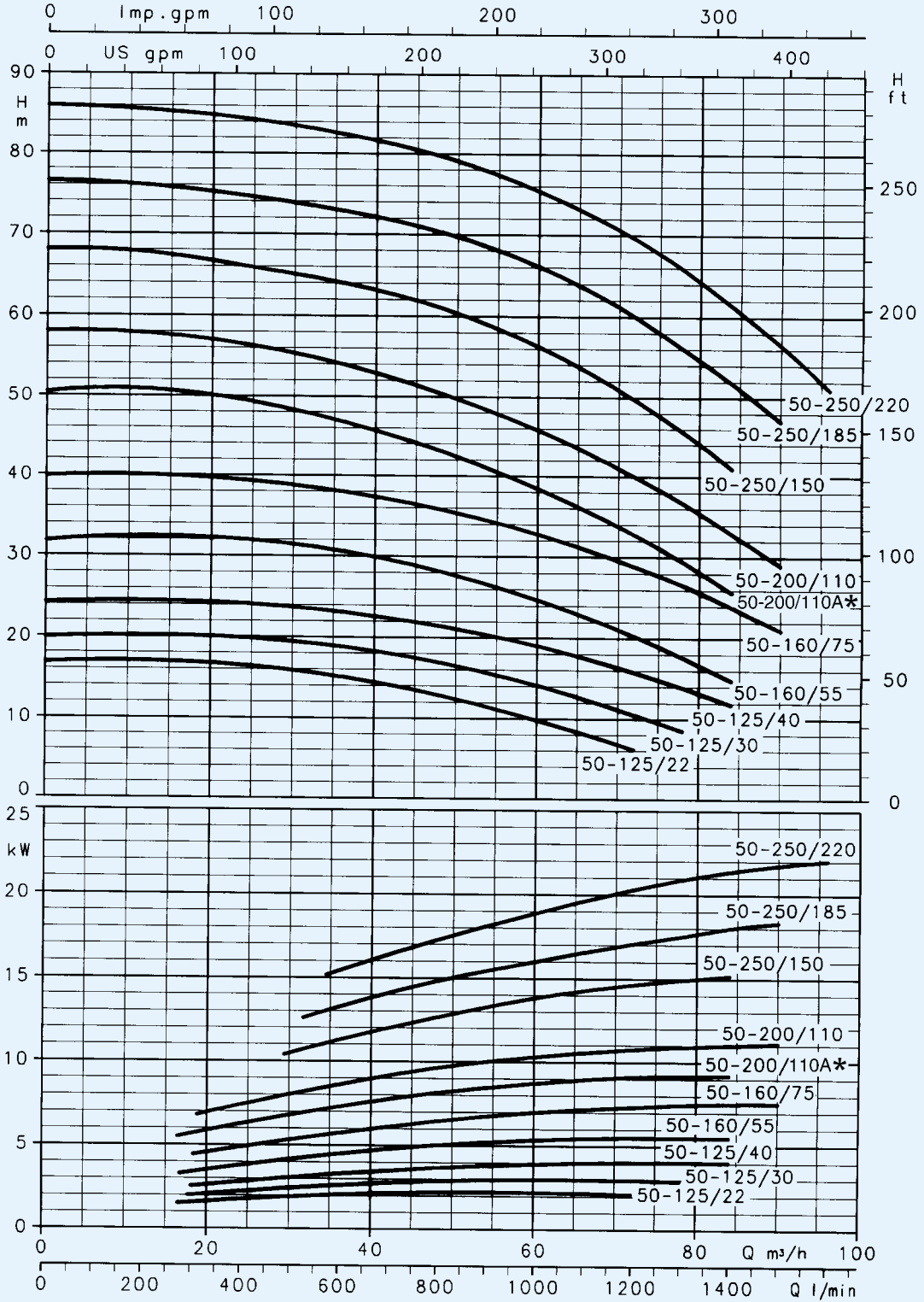


** /92 - 9,2 - 12,5HP for version FHE - /110A - 11kW - 15HP for version FHS-FHF

Please verify with the price list the availability of model type FHE-FHS-FHF
 These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.



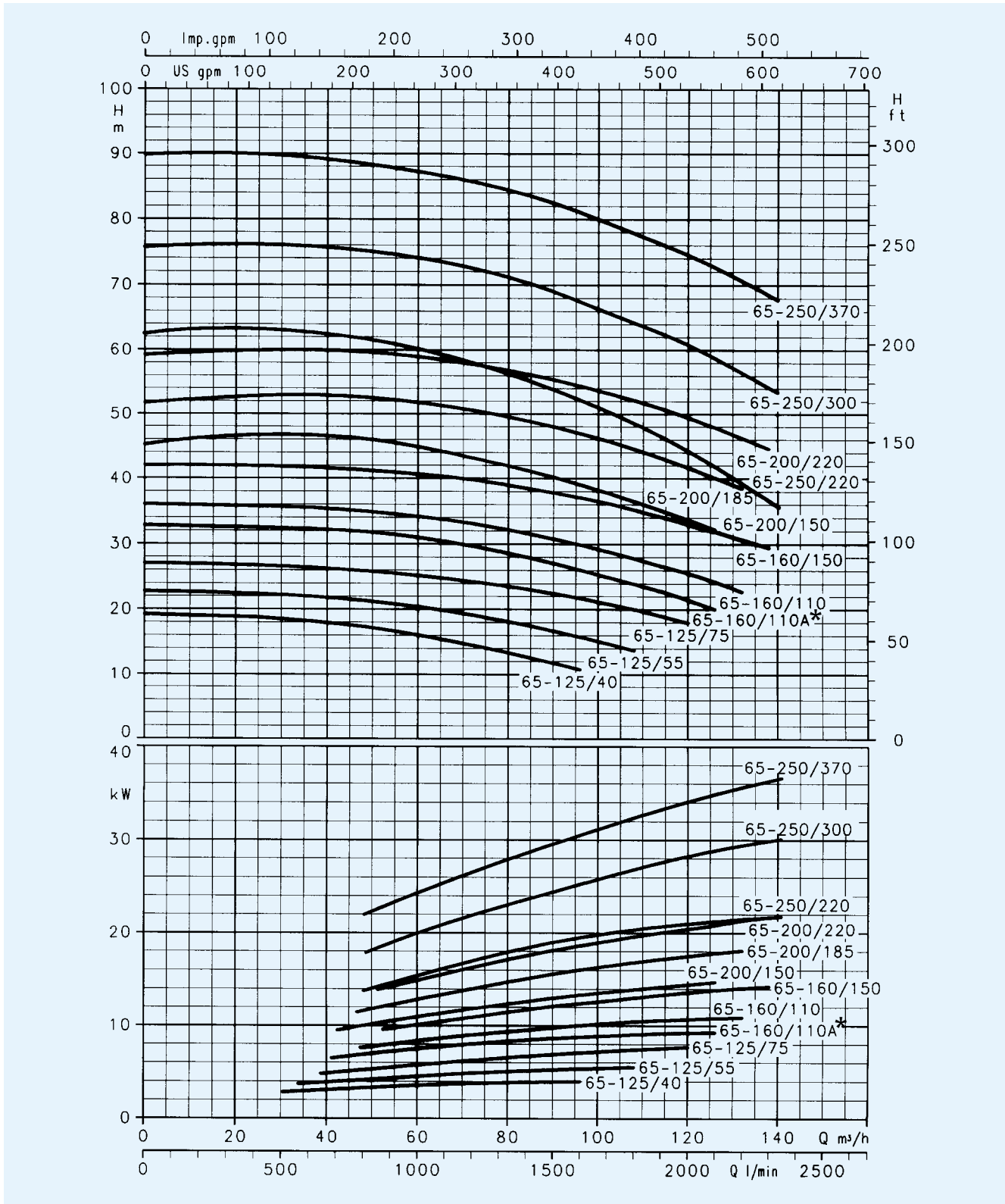
FH 50 SERIES OPERATING CHARACTERISTICS at 2900 rpm 50 Hz, 2 POLES



* /92 - 9,2 kW - 12,5 HP for version FHE - /110A - 11 kW - 15 HP for version FHS-FHF

Please verify with the price list the availability of model type FHE-FHS-FHF
 These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

FH 65 SERIES OPERATING CHARACTERISTICS at 2900 rpm 50 Hz, 2 POLES

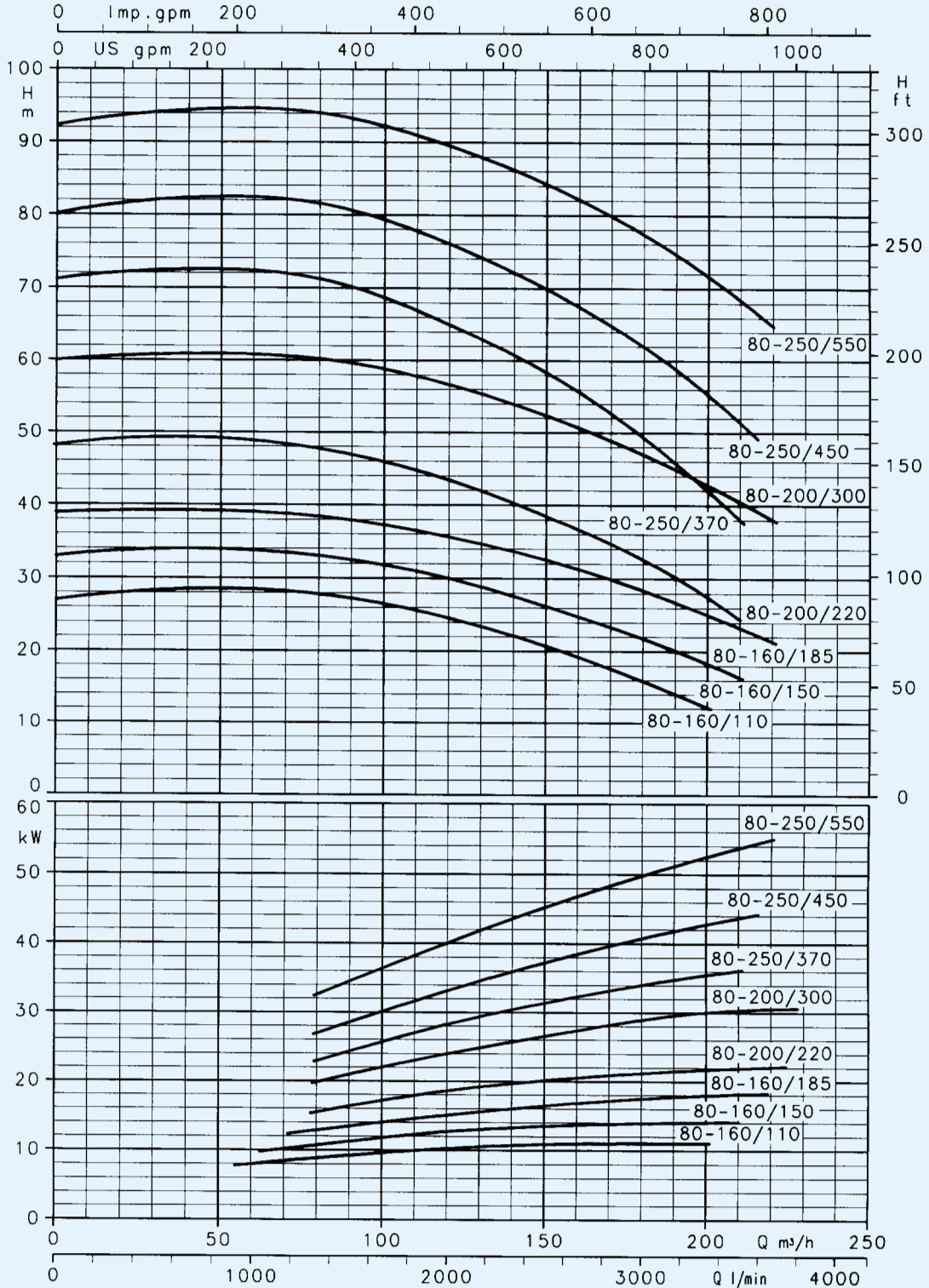


* /92 - 9,2 kW - 12,5 HP for version FHE - /110A - 11 kW - 15 HP for version FHS-FHF

Please verify with the price list the availability of model type FHE-FHS-FHF
 These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.



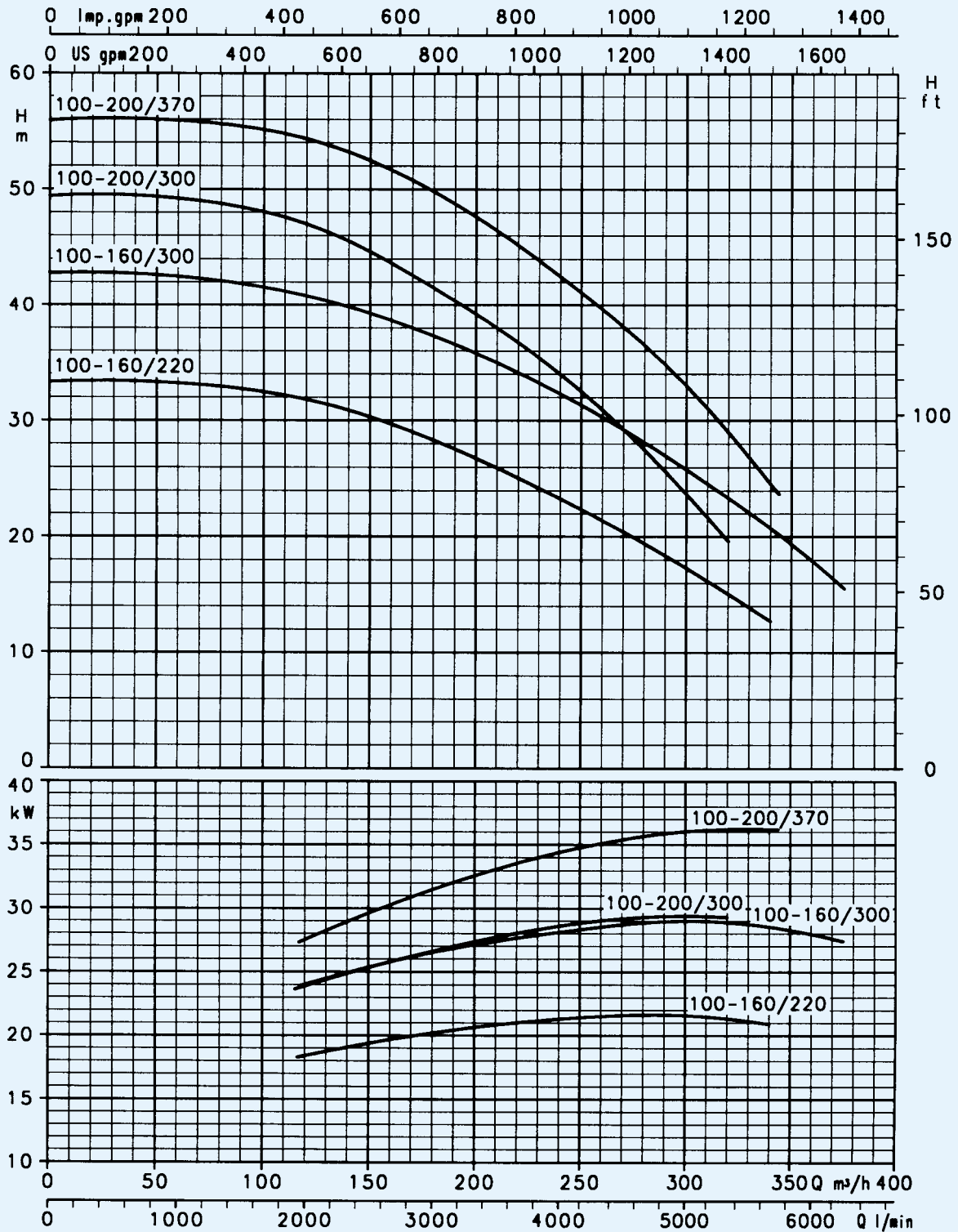
FH 80 SERIES OPERATING CHARACTERISTICS at 2900 rpm 50 Hz, 2 POLES



FH

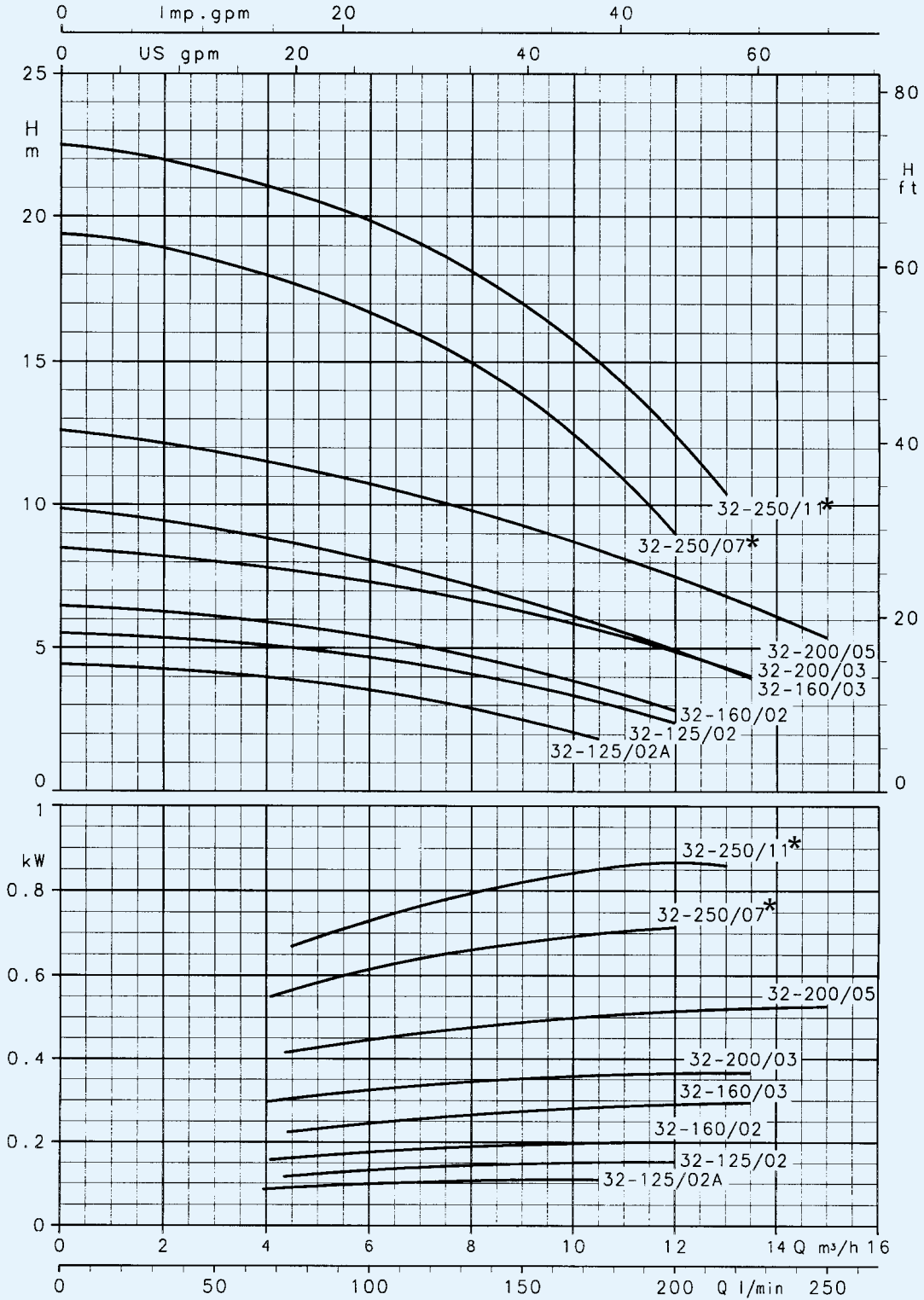
Please verify with the price list the availability of model type FHE-FHS-FHF
 These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

FH 100 SERIES OPERATING CHARACTERISTICS at 2900 rpm 50 Hz, 2 POLES



Please verify with the price list the availability of model type FHE-FHS-FHH
 These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

FH4 32 SERIES OPERATING CHARACTERISTICS at 1450 rpm 50 Hz, 4 POLES

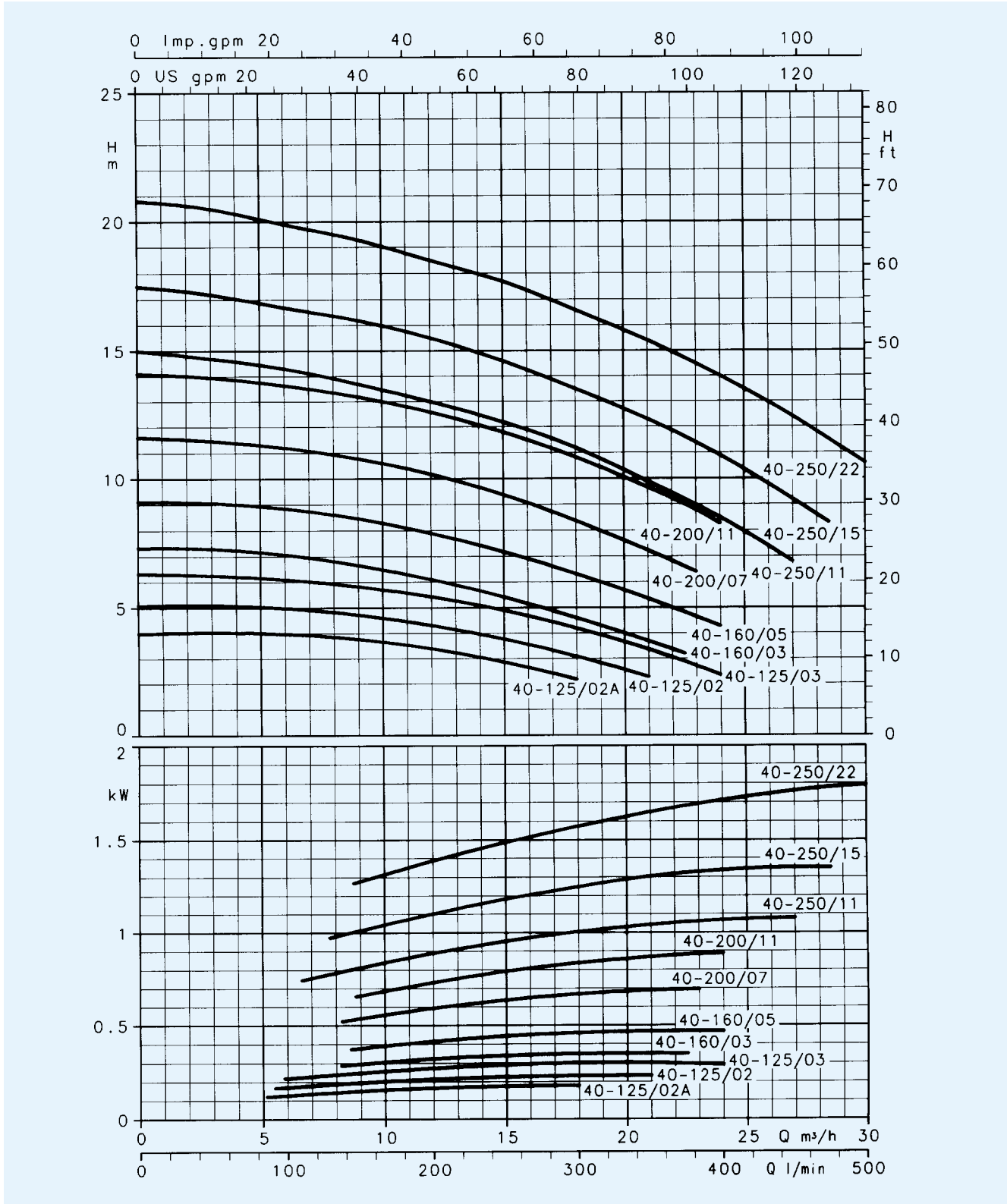


* Version 2FHE4

Please verify with the price list the availability of model type FHE-FHS-FHF
 These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

FH

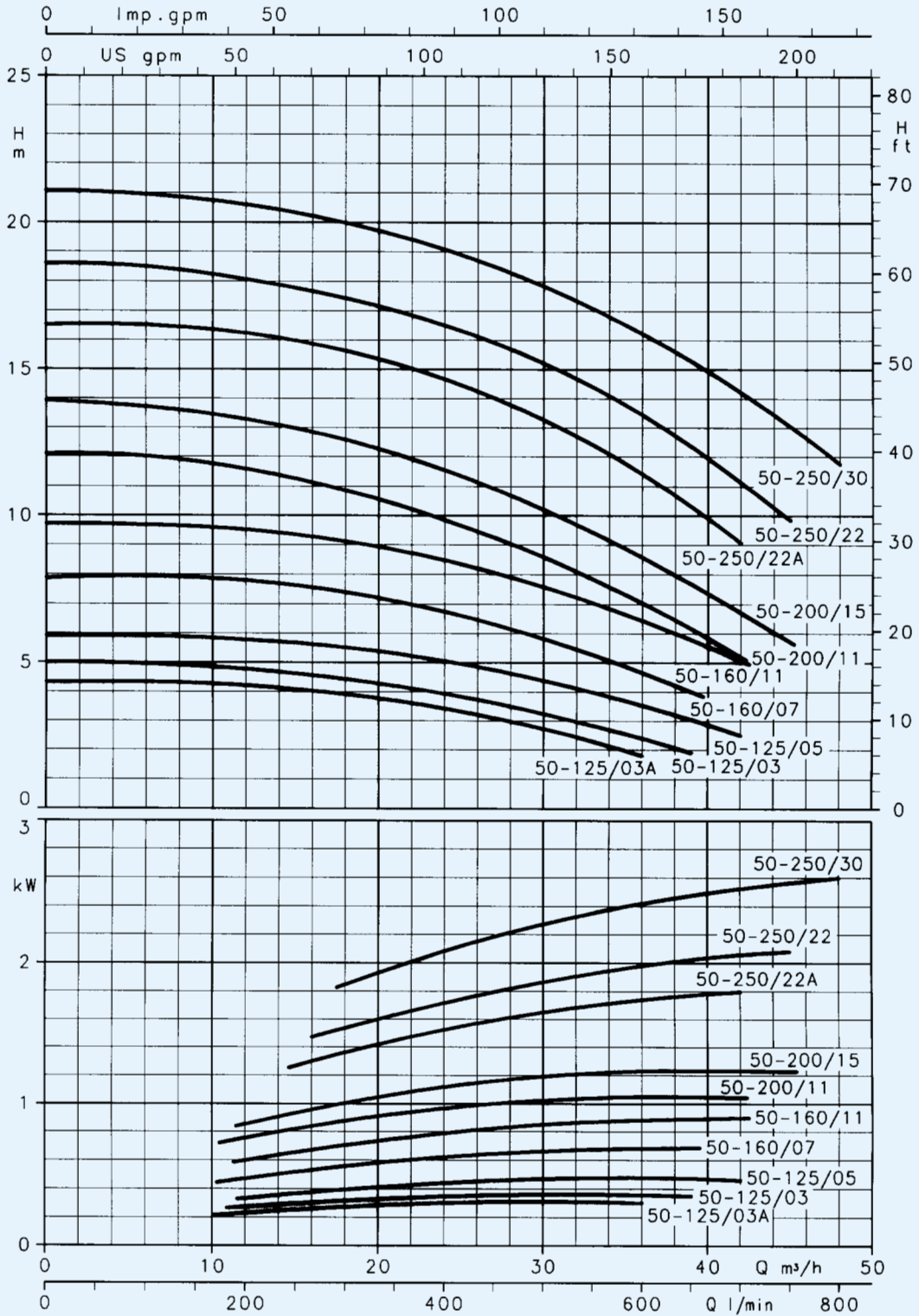
FH4 40 SERIES OPERATING CHARACTERISTICS at 1450 rpm 50 Hz, 4 POLES



Please verify with the price list the availability of model type FHE-FHS-FHF
 These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.



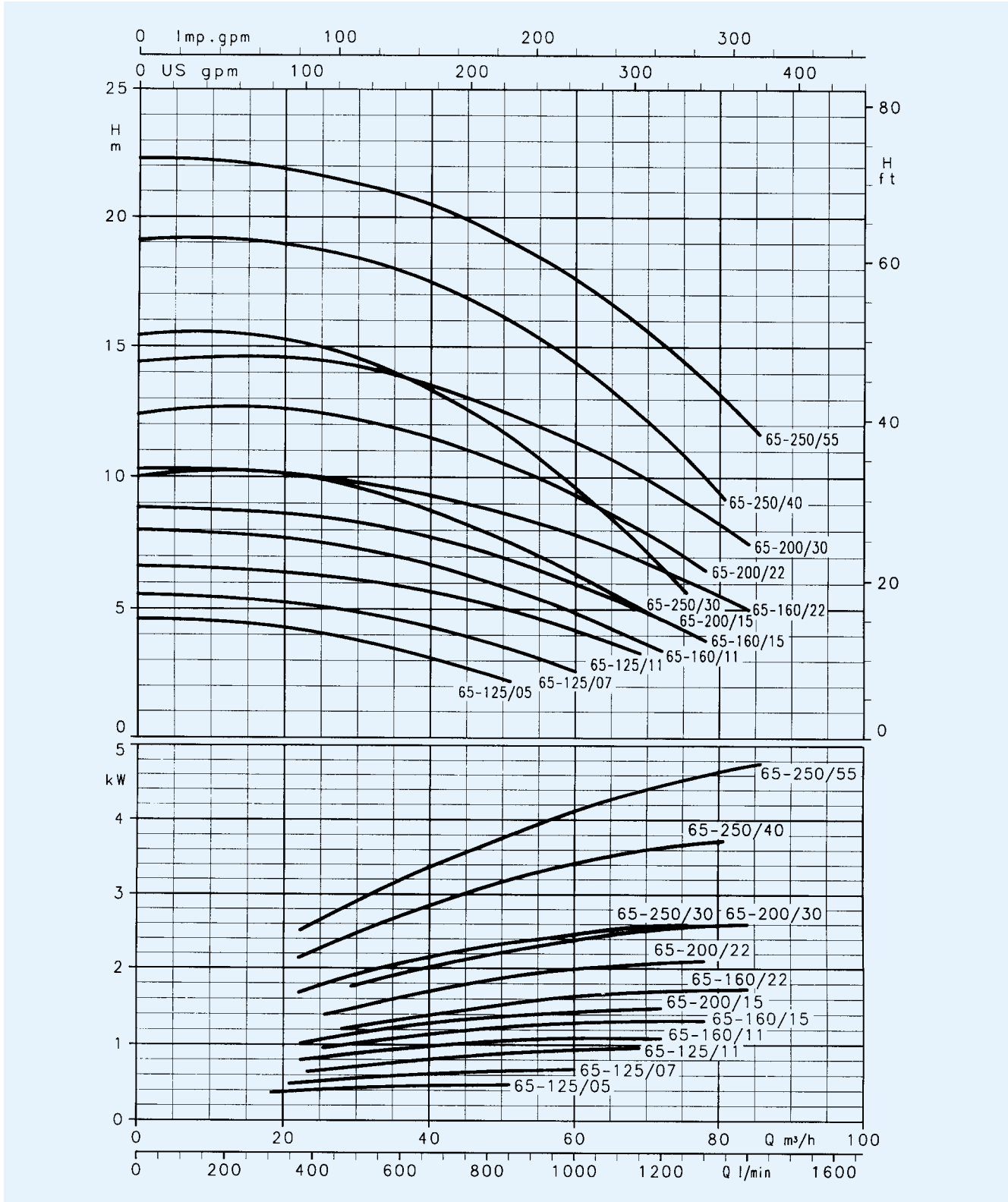
FH4 50 SERIES OPERATING CHARACTERISTICS at 1450 rpm 50 Hz, 4 POLES



FH

Please verify with the price list the availability of model type FHE-FHS-FHF
 These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

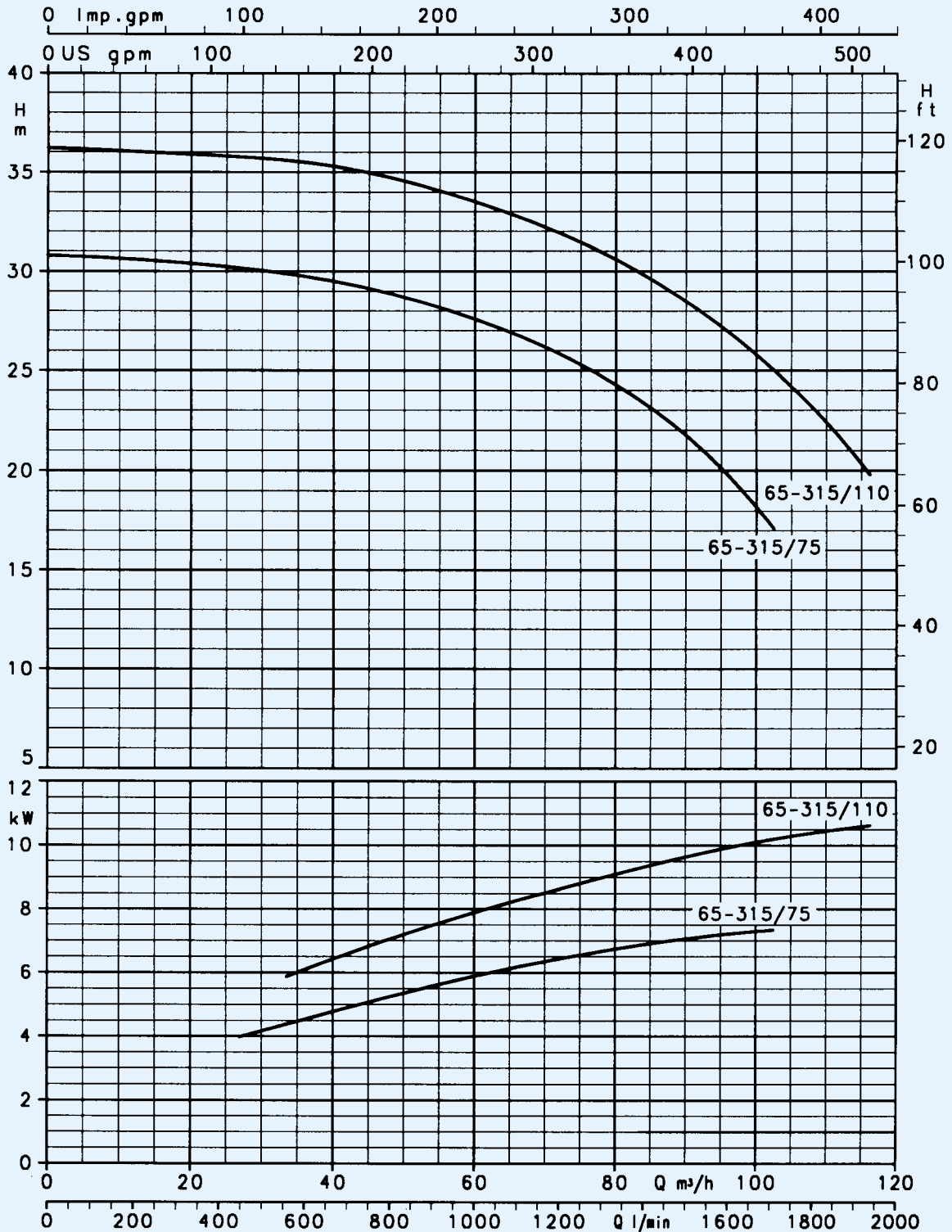
FH4 65 SERIES OPERATING CHARACTERISTICS at 1450 rpm 50 Hz, 4 POLES



Please verify with the price list the availability of model type FHE-FHS-FHF
 These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.



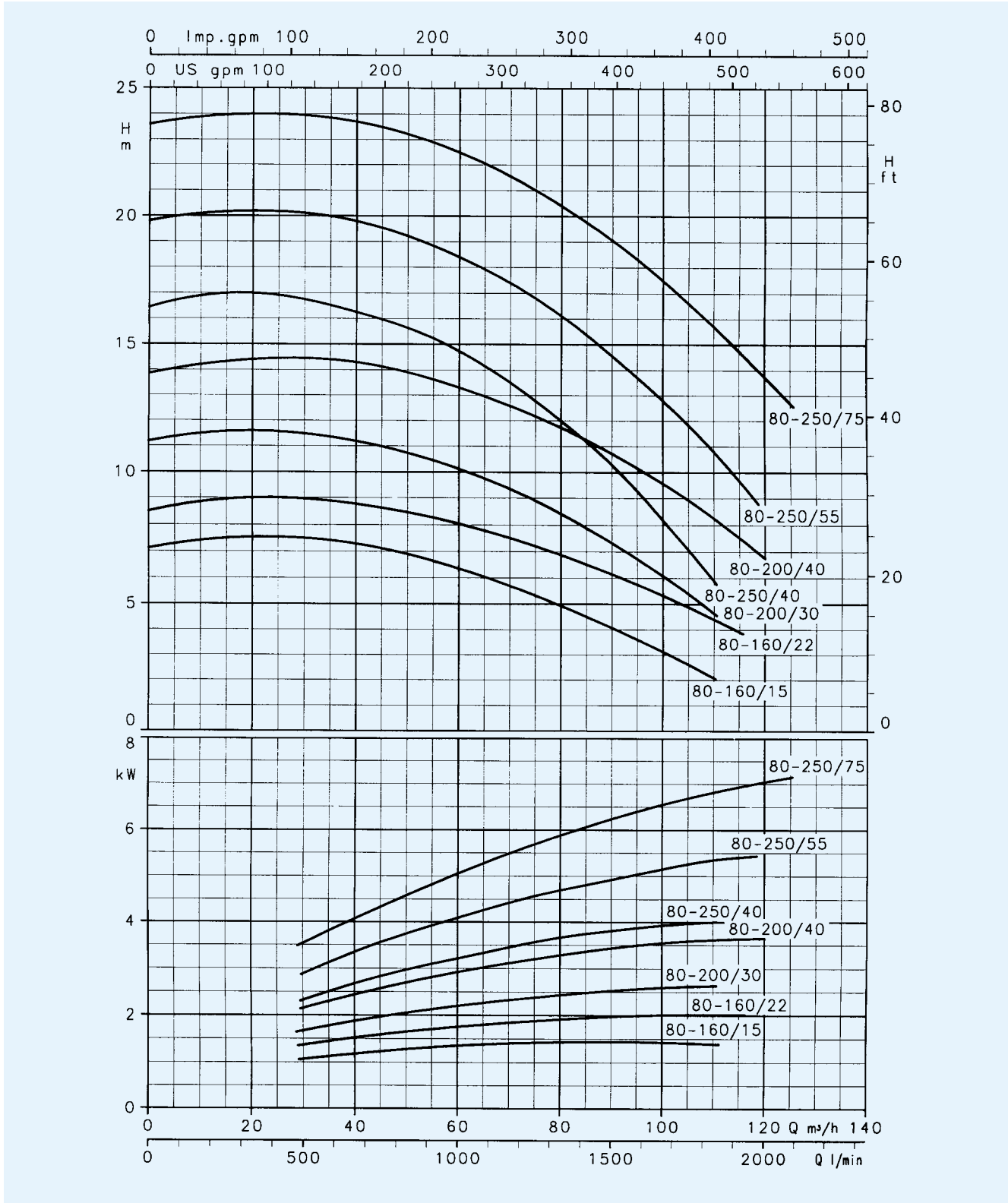
**FH4 65 - 315 SERIES
OPERATING CHARACTERISTICS at 1450 rpm 50 Hz, 4 POLES**



Please verify with the price list the availability of model type FHE-FHS-FHF
These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

FH

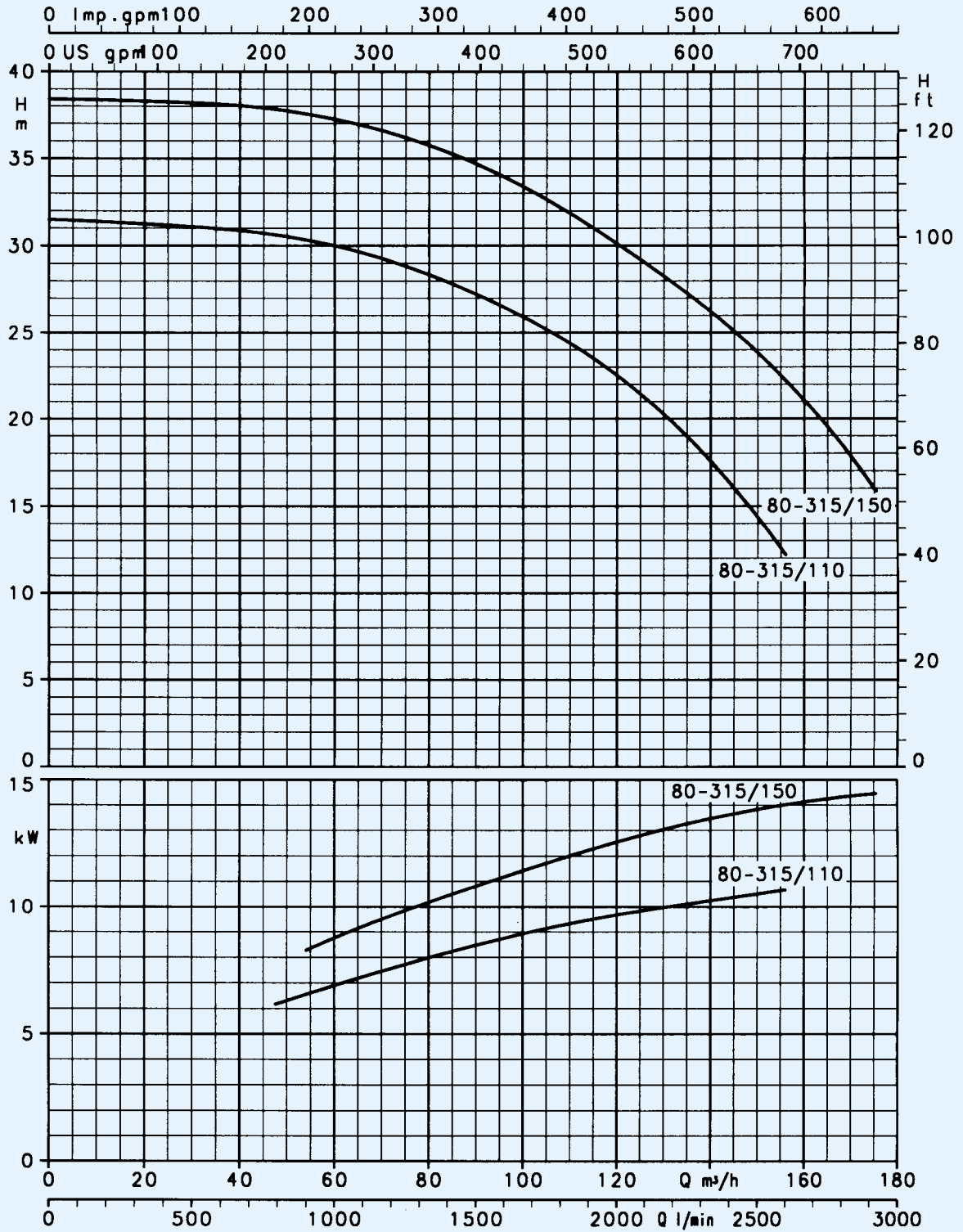
FH4 80 SERIES OPERATING CHARACTERISTICS at 1450 rpm 50 Hz, 4 POLES



Please verify with the price list the availability of model type FHE-FHS-FHF
 These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

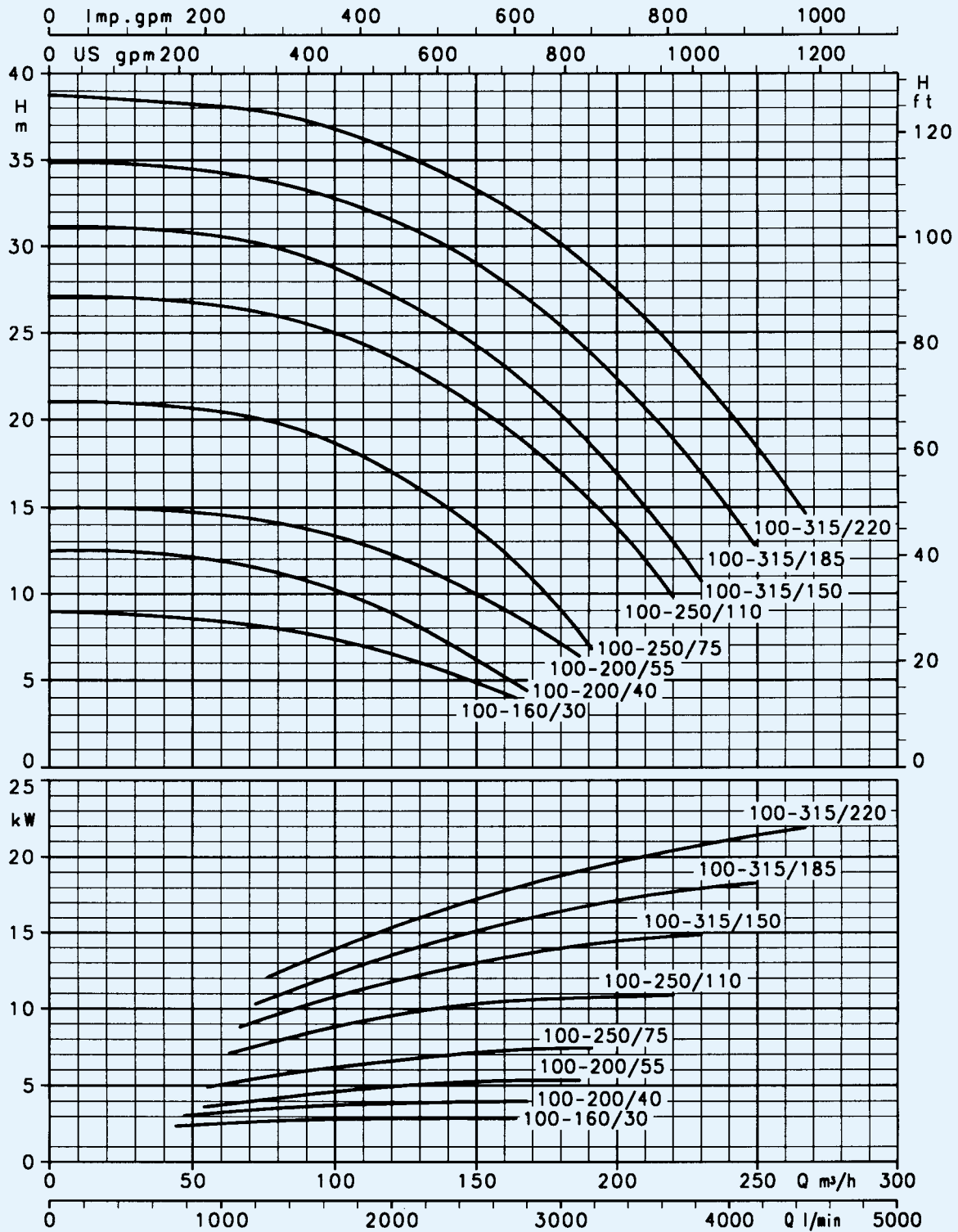


**FH4 80 - 315 SERIES
OPERATING CHARACTERISTICS at 1450 rpm 50 Hz, 4 POLES**



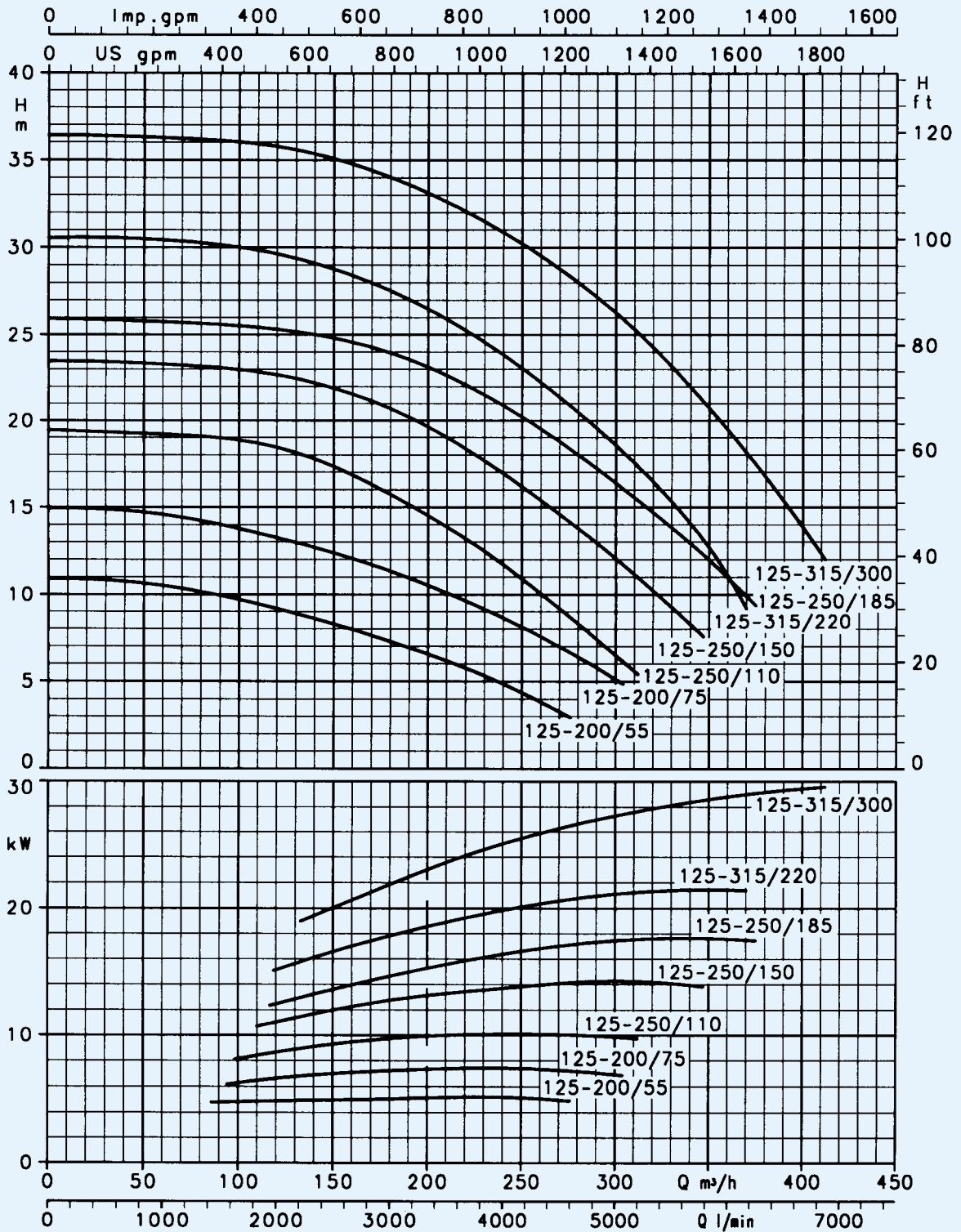
Please verify with the price list the availability of model type FHE-FHS-FHF
These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

FH4 100 SERIES OPERATING CHARACTERISTICS at 1450 rpm 50 Hz, 4 POLES



Please verify with the price list the availability of model type FHE-FHS-FHF
 These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\nu = 1 \text{ mm}^2/\text{sec}$.

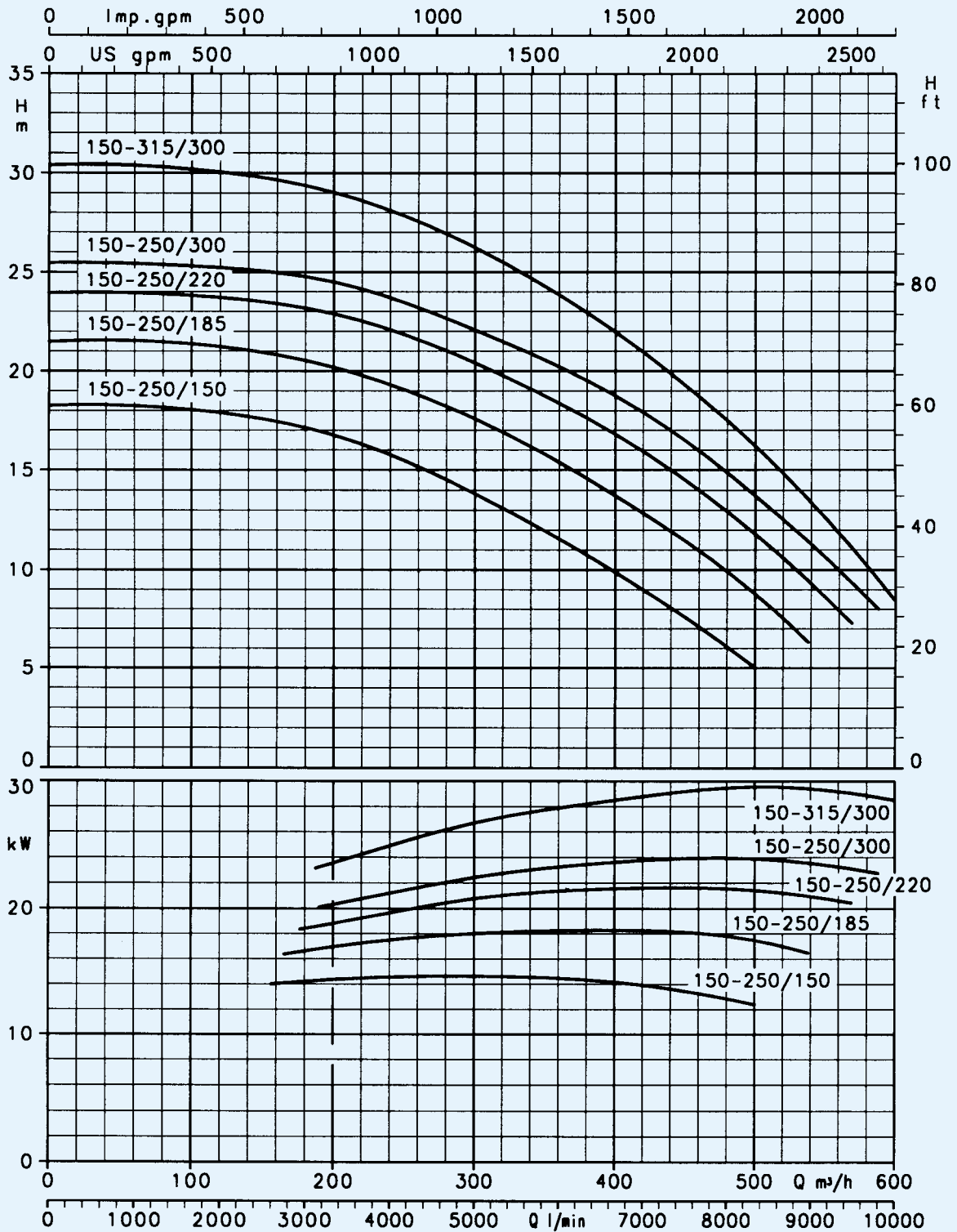
**FH4 125 SERIES
OPERATING CHARACTERISTICS at 1450 rpm 50 Hz, 4 POLES**



Please verify with the price list the availability of model type FHE-FHS-FHF
 These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

FH

**FH4 150 SERIES
OPERATING CHARACTERISTICS at 1450 rpm 50 Hz, 4 POLES**



Please verify with the price list the availability of model type FHE-FHS-FHF
These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.



DIMENSIONS AND WEIGHTS, FHE 2 POLES SERIES

FHE WITH SUPPORT FOOT ON PUMP MOTORS UP TO 11 kW

FHE WITH SUPPORT UNDER MOTOR 15 TO 22 kW MOTORS

FLANGES

DN	D	M	G	HOLES		MAX. THICKNESS
				N°	Ø	
32	140	100	78	4	18	18
40	150	110	88	4	18	18
50	165	125	102	4	18	20
65	185	145	122	4	18	20

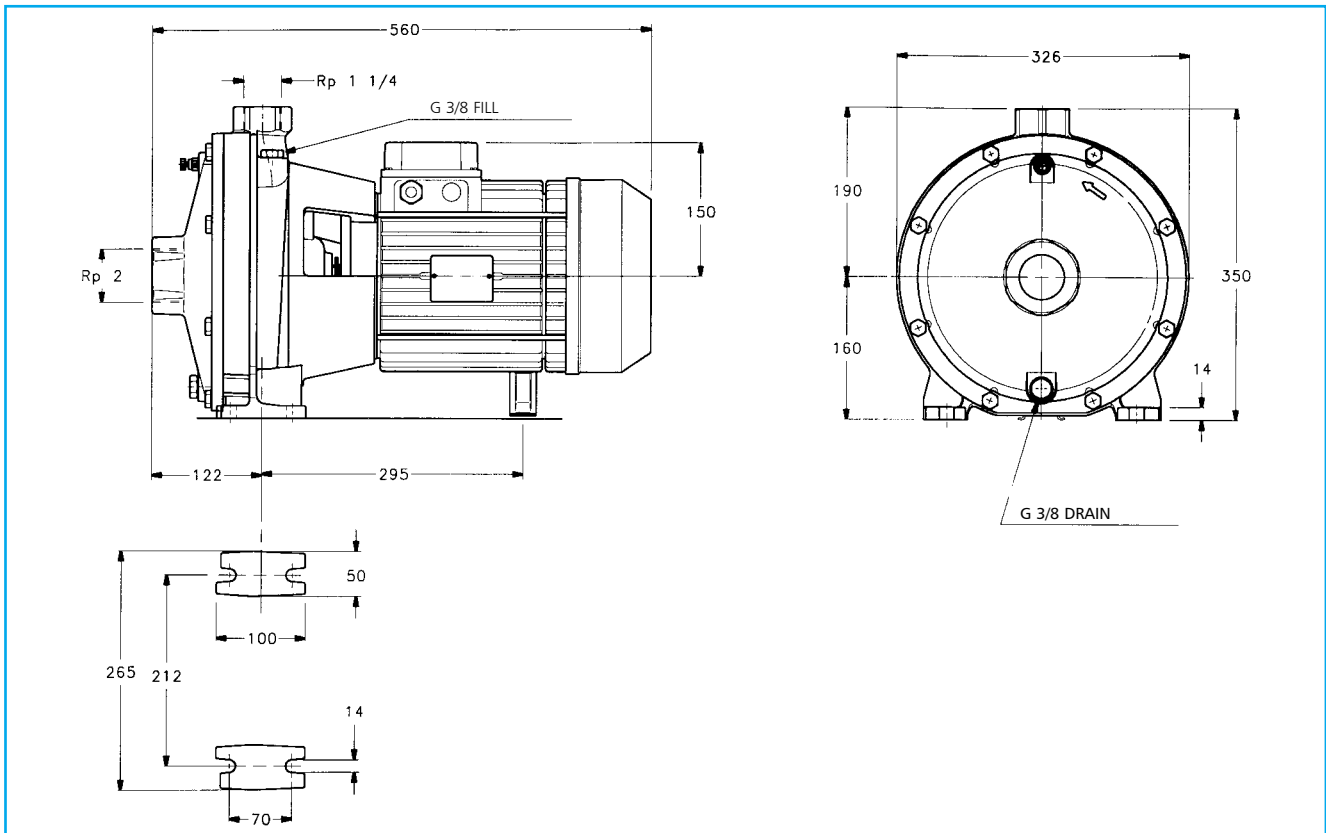
FLANGES

DN	D	M	G	HOLES		MAX. THICKNESS
				N°	Ø	
80	200	160	138	8	18	22
100	220	180	158	8	18	22

PUMP TYPE	PUMP						SUPPORT										B	H max.	L	k	WEIGHT kg
	DNM	DNA	a	h2	w	x	b	c	c1	h1	m	m1	n	n1	s	s1					
FHE 32-125/07	32	50	80	140	235	129	50	12	-	112	100	70	190	140	14	-	233	252	443	86	27
FHE 32-125/11	32	50	80	140	235	129	50	12	-	112	100	70	190	140	14	-	233	252	443	86	28
FHE 32-160/15	32	50	80	160	235	129	50	12	-	132	100	70	240	190	14	-	235	292	443	86	31
FHE 32-160/22	32	50	80	160	235	129	50	12	-	132	100	70	240	190	14	-	235	292	443	86	34
FHE 32-200/30	32	50	80	180	283	121	50	12	-	160	100	70	240	190	14	-	285	340	461	86	43
FHE 32-200/40	32	50	80	180	290	133	50	12	-	160	100	70	240	190	14	-	285	340	487	86	49
FHE 40-125/11	40	65	80	140	235	129	50	12	-	112	100	70	210	160	14	-	233	252	443	88	30
FHE 40-125/15	40	65	80	140	235	129	50	12	-	112	100	70	210	160	14	-	233	252	443	88	31
FHE 40-125/22	40	65	80	140	235	129	50	12	-	112	100	70	210	160	14	-	233	252	443	88	33
FHE 40-160/30	40	65	80	160	283	121	50	12	-	132	100	70	240	190	14	-	250	292	461	88	36
FHE 40-160/40	40	65	80	160	290	133	50	12	-	132	100	70	240	190	14	-	250	292	487	88	42
FHE 40-200/55	40	65	100	180	311	150	50	12	-	160	100	70	265	212	14	-	285	340	553	88	59
FHE 40-200/75	40	65	100	180	311	150	50	12	-	160	100	70	265	212	14	-	285	340	553	88	64
FHE 40-250/92	40	65	100	225	278	191	65	14	-	180	125	95	320	250	14	-	335	405	604	107	91
FHE 40-250/110	40	65	100	225	278	191	65	14	-	180	125	95	320	250	14	-	335	405	604	107	99
FHE 40-250/150	40	65	100	225	208	232	50	22	20	180	260	210	318	254	13	23	335	412	688	107	123
FHE 50-125/22	50	65	100	160	235	129	50	12	-	132	100	70	240	190	14	-	255	292	463	92	37
FHE 50-125/30	50	65	100	160	285	121	50	12	-	132	100	70	240	190	14	-	255	292	481	92	39
FHE 50-125/40	50	65	100	160	292	133	50	12	-	132	100	70	240	190	14	-	255	292	507	92	45
FHE 50-160/55	50	65	100	180	313	150	50	12	-	160	100	70	265	212	14	-	285	340	553	92	68
FHE 50-160/75	50	65	100	180	313	150	50	12	-	160	100	70	265	212	14	-	285	340	553	92	72
FHE 50-200/92	50	65	100	200	280	191	50	12	-	160	100	70	265	212	14	-	305	360	604	92	81
FHE 50-200/110	50	65	100	200	280	191	50	12	-	160	100	70	265	212	14	-	305	360	604	92	86
FHE 50-250/150	50	65	100	225	208	232	50	22	20	180	260	210	318	254	13	23	340	412	688	107	123
FHE 50-250/185	50	65	100	225	208	232	50	22	20	180	304	254	318	254	13	23	340	412	732	107	135
FHE 50-250/220	50	65	100	225	208	232	50	22	20	180	304	254	318	254	13	23	340	412	732	107	149
FHE 65-125/40	65	80	100	180	292	133	65	14	-	160	125	95	280	212	14	-	285	340	507	105	64
FHE 65-125/55	65	80	100	180	313	150	65	14	-	160	125	95	280	212	14	-	285	340	553	105	72
FHE 65-125/75	65	80	100	180	313	150	65	14	-	160	125	95	280	212	14	-	285	340	553	105	76
FHE 65-160/92	65	80	100	200	278	191	65	14	-	160	125	95	280	212	14	-	331	360	604	112	95
FHE 65-160/110	65	80	100	200	278	191	65	14	-	160	125	95	280	212	14	-	331	360	604	112	103
FHE 65-160/150	65	80	100	200	208	232	50	22	-	160	260	210	318	254	13	23	331	392	688	112	127
FHE 65-200/150	65	80	100	225	208	232	50	22	20	180	260	210	318	254	13	23	335	412	688	112	127
FHE 65-200/185	65	80	100	225	208	232	50	22	20	180	304	254	318	254	13	23	335	412	732	112	139
FHE 65-200/220	65	80	100	225	208	232	50	22	20	180	304	254	318	254	13	23	335	412	732	112	153
FHE 65-250/220	65	80	100	250	208	232	50	22	40	200	304	254	318	254	13	23	332	450	732	112	159
FHE 80-160/110	80	100	125	225	278	191	65	14	-	180	125	95	320	250	14	-	332	405	629	129	109
FHE 80-160/150	80	100	125	225	208	232	50	22	20	180	260	210	318	254	13	23	332	412	713	129	133
FHE 80-160/185	80	100	125	225	208	232	50	22	20	180	304	254	318	254	13	23	332	412	757	129	145
FHE 80-200/220	80	100	125	250	208	232	50	22	20	180	304	254	318	254	13	23	332	430	757	129	159

FHE

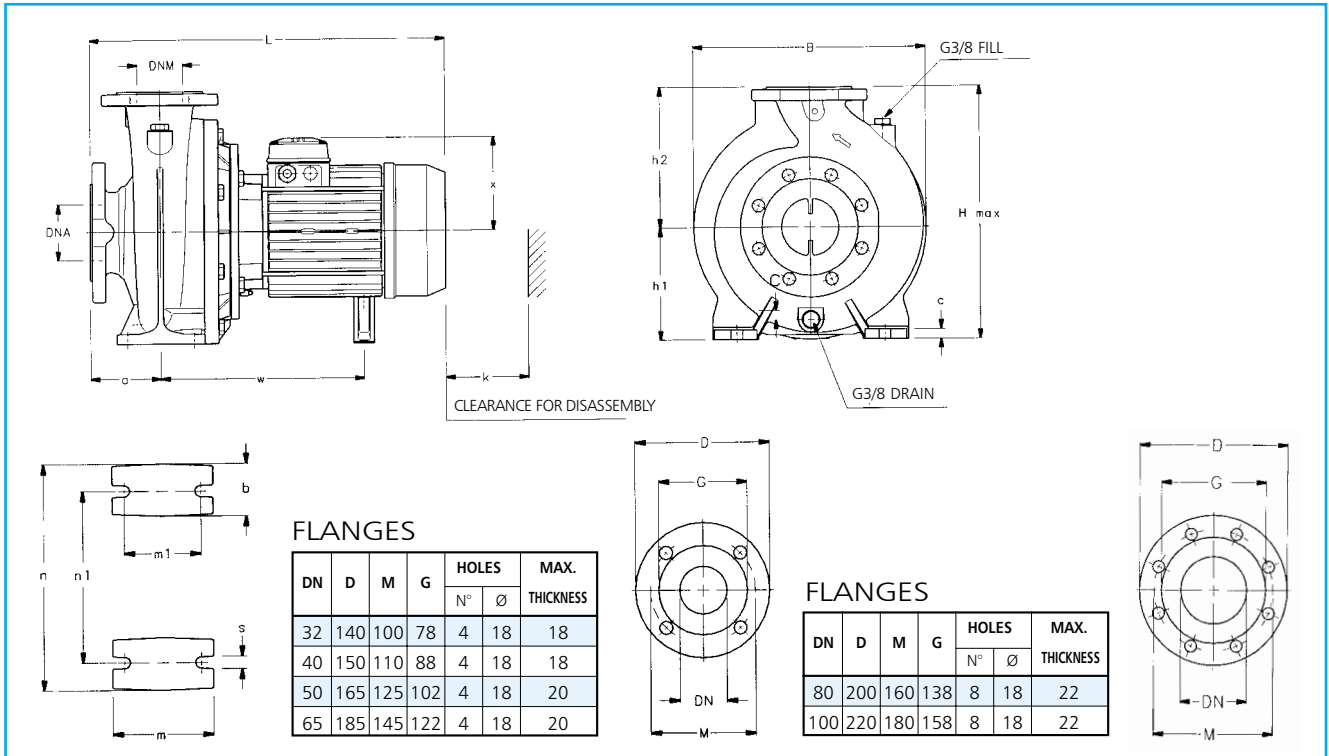
DIMENSIONS AND WEIGHTS, 2FHE 2 POLES SERIES



PUMP TYPE	WEIGHT kg
2FHE 32-250/55	71
2FHE 32-250/75	75



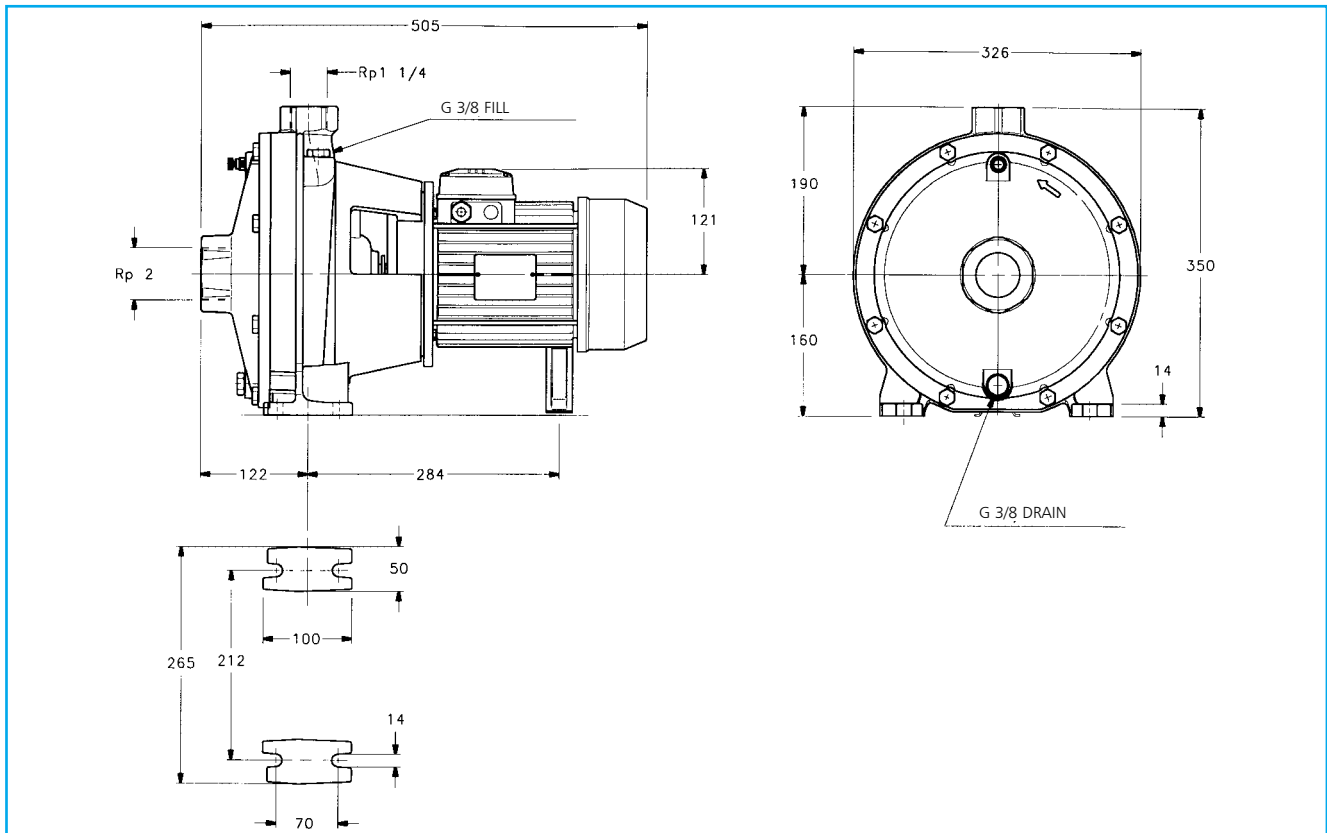
DIMENSIONS AND WEIGHTS, FHE4 4 POLES SERIES



FH

PUMP TYPE	PUMP						SUPPORT								B	H max.	L	k	WEIGHT kg
	DNM	DNA	a	h2	w	x	b	c	h1	m	m1	n	n1	s					
FHE4 32-125/02A	32	50	80	140	215	121	50	12	112	100	70	190	140	14	233	252	411	92	25
FHE4 32-125/02	32	50	80	140	215	121	50	12	112	100	70	190	140	14	233	252	411	92	25
FHE4 32-160/02	32	50	80	160	215	121	50	12	132	100	70	240	190	14	235	292	411	92	26
FHE4 32-160/03	32	50	80	160	215	121	50	12	132	100	70	240	190	14	235	292	411	92	26
FHE4 32-200/03	32	50	80	180	215	121	50	12	160	100	70	240	190	14	285	340	411	92	35
FHE4 32-200/05	32	50	80	180	235	129	50	12	160	100	70	240	190	14	285	340	443	92	37
FHE4 40-125/02A	40	65	80	140	215	121	50	12	112	100	70	210	160	14	233	252	411	94	25
FHE4 40-125/02	40	65	80	140	215	121	50	12	112	100	70	210	160	14	233	252	411	94	25
FHE4 40-125/03	40	65	80	140	215	121	50	12	112	100	70	210	160	14	233	252	411	94	25
FHE4 40-160/03	40	65	80	160	215	121	50	12	132	100	70	240	190	14	250	292	411	94	27
FHE4 40-160/05	40	65	80	160	235	129	50	12	132	100	70	240	190	14	250	292	443	94	29
FHE4 40-200/07	40	65	100	180	235	129	50	12	160	100	70	265	212	14	285	340	463	94	38
FHE4 40-200/11	40	65	100	180	283	121	50	12	160	100	70	265	212	14	285	340	481	94	42
FHE4 40-250/11	40	65	100	225	283	121	65	14	180	125	95	320	250	14	335	405	481	113	52
FHE4 40-250/15	40	65	100	225	283	121	65	14	180	125	95	320	250	14	335	405	481	113	55
FHE4 40-250/22	40	65	100	225	290	133	65	14	180	125	95	320	250	14	335	405	507	113	59
FHE4 50-125/03A	50	65	100	160	217	121	50	12	132	100	70	240	190	14	255	292	433	98	29
FHE4 50-125/03	50	65	100	160	217	121	50	12	132	100	70	240	190	14	255	292	433	98	29
FHE4 50-125/05	50	65	100	160	237	129	50	12	132	100	70	240	190	14	255	292	465	98	32
FHE4 50-160/07	50	65	100	180	237	129	50	12	160	100	70	265	212	14	285	340	465	98	41
FHE4 50-160/11	50	65	100	180	285	121	50	12	160	100	70	265	212	14	285	340	483	98	45
FHE4 50-200/11	50	65	100	200	285	121	50	12	160	100	70	265	212	14	305	360	483	98	44
FHE4 50-200/15	50	65	100	200	285	121	50	12	160	100	70	265	212	14	305	360	483	98	47
FHE4 50-250/22A	50	65	100	225	290	133	65	14	180	125	95	320	250	14	340	405	507	113	59
FHE4 50-250/22	50	65	100	225	290	133	65	14	180	125	95	320	250	14	340	405	507	113	59
FHE4 50-250/30	50	65	100	225	290	133	65	14	180	125	95	320	250	14	340	405	507	113	62
FHE4 65-125/05	65	80	100	180	237	129	65	14	160	125	95	280	212	14	285	340	465	108	45
FHE4 65-125/07	65	80	100	180	237	129	65	14	160	125	95	280	212	14	285	340	465	108	45
FHE4 65-125/11	65	80	100	180	265	121	65	14	160	125	95	280	212	14	285	340	483	108	49
FHE4 65-160/11	65	80	100	200	283	121	65	14	160	125	95	280	212	14	331	360	481	117	56
FHE4 65-160/15	65	80	100	200	283	121	65	14	160	125	95	280	212	14	331	360	481	117	59
FHE4 65-160/22	65	80	100	200	290	133	65	14	160	125	95	280	212	14	331	360	507	117	63
FHE4 65-200/15	65	80	100	225	283	121	65	14	180	125	95	320	250	14	335	405	481	117	59
FHE4 65-200/22	65	80	100	225	290	133	65	14	180	125	95	320	250	14	335	405	507	117	63
FHE4 65-200/30	65	80	100	225	290	133	65	14	180	125	95	320	250	14	335	405	507	117	65
FHE4 65-250/30	65	80	100	250	290	133	80	16	200	160	120	360	280	18	360	450	507	125	75
FHE4 65-250/40	65	80	100	250	311	151	80	16	200	160	120	360	280	18	360	450	530	125	105
FHE4 65-250/55	65	80	100	250	259	191	80	16	200	160	120	360	280	18	360	450	566	125	111
FHE4 80-160/15	80	100	125	225	283	121	65	14	180	125	95	320	250	14	332	405	506	132	64
FHE4 80-160/22	80	100	125	225	290	133	65	14	180	125	95	320	250	14	332	405	532	132	69
FHE4 80-200/30	80	100	125	250	290	133	65	14	180	125	95	345	280	14	345	430	532	132	80
FHE4 80-200/40	80	100	125	250	311	151	65	14	180	125	95	345	280	14	345	430	555	132	103
FHE4 80-250/40	80	100	125	280	311	151	80	16	200	160	120	400	315	18	400	480	555	132	100
FHE4 80-250/55	80	100	125	280	259	191	80	16	200	160	120	400	315	18	400	480	591	132	106
FHE4 80-250/75	80	100	125	280	278	191	80	16	200	160	120	400	315	18	400	480	629	132	116

DIMENSIONS AND WEIGHTS, 2FHE4 4 POLES SERIES



PUMP TYPE	WEIGHT kg
2FHE4 32-250/07	47
2FHE4 32-250/11	49



DIMENSIONS AND WEIGHTS, FHS 2 POLES SERIES

FHS WITH SUPPORT FOOT ON PUMP MOTORS UP TO 7,5 kW

FHS WITH SUPPORT UNDER MOTOR 11 TO 55 kW MOTORS

FLANGES

DN	D	M	G	HOLES		MAX. THICKNESS
				N°	Ø	
32	140	100	78	4	18	18
40	150	110	88	4	18	18
50	165	125	102	4	18	20
65	185	145	122	4	18	20

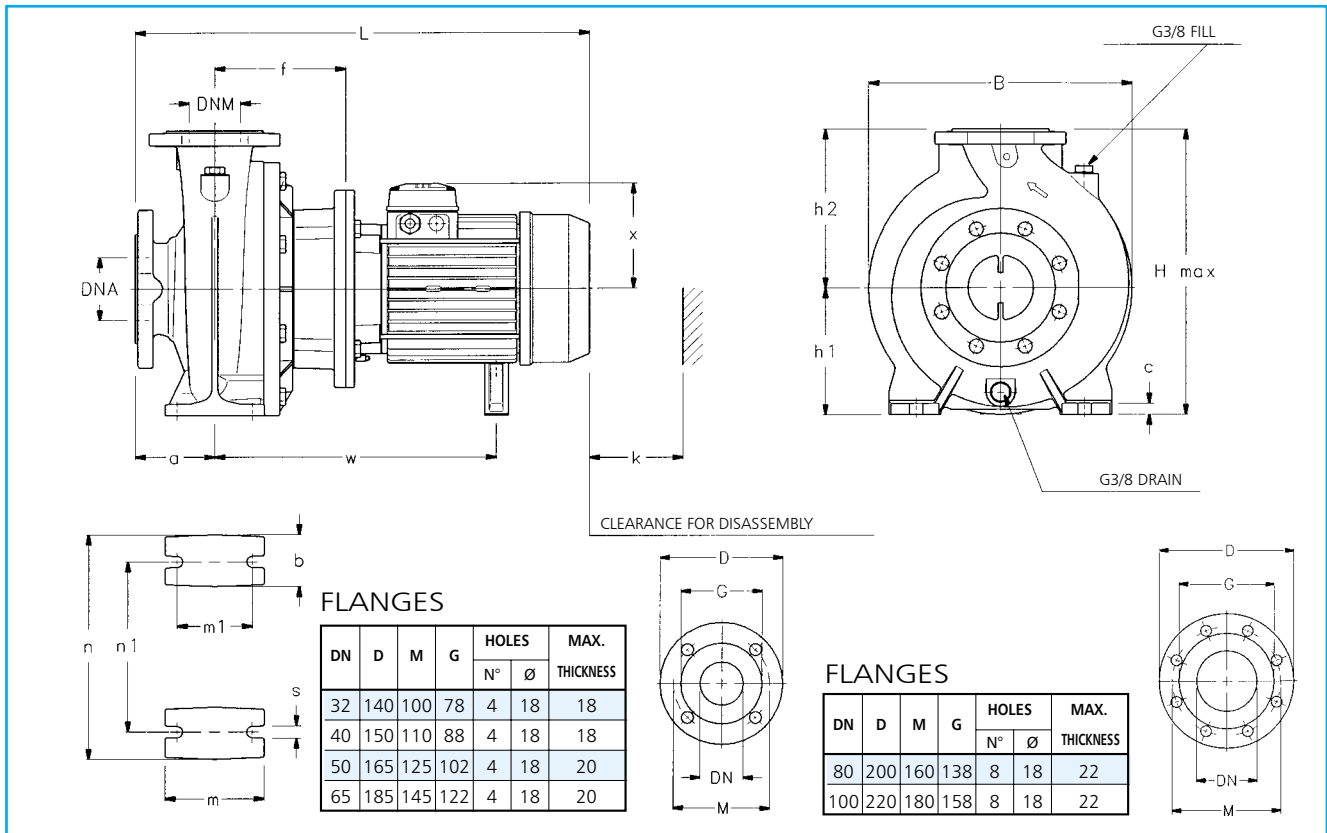
FLANGES

DN	D	M	G	HOLES		MAX. THICKNESS
				N°	Ø	
80	200	160	138	8	18	22
100	220	180	158	8	18	22

PUMP TYPE	PUMP						SUPPORT										B	H max.	L	k	WEIGHT kg	
	DNM	DNA	a	f	h2	w	x	b	c	c1	h1	m	m1	n	n1	s						s1
FHS 32-125/07	32	50	80	155	140	265	121	50	12	-	112	100	70	190	140	14	-	233	252	461	86	32
FHS 32-125/11	32	50	80	155	140	290	129	50	12	-	112	100	70	190	140	14	-	233	252	498	86	34
FHS 32-160/15	32	50	80	155	160	290	129	50	12	-	132	100	70	240	190	14	-	235	292	498	86	35
FHS 32-160/22	32	50	80	155	160	290	129	50	12	-	132	100	70	240	190	14	-	235	292	498	86	37
FHS 32-200/30	32	50	80	165	180	355	121	50	12	-	160	100	70	240	190	14	-	285	340	548	86	51
FHS 32-200/40	32	50	80	165	180	355	133	50	12	-	160	100	70	240	190	14	-	285	340	552	86	62
FHS 40-125/11	40	65	80	155	140	290	129	50	12	-	112	100	70	210	160	14	-	233	252	498	88	34
FHS 40-125/15	40	65	80	155	140	290	129	50	12	-	112	100	70	210	160	14	-	233	252	498	88	36
FHS 40-125/22	40	65	80	155	140	290	129	50	12	-	112	100	70	210	160	14	-	233	252	498	88	39
FHS 40-160/30	40	65	80	165	160	355	121	50	12	-	132	100	70	240	190	14	-	250	292	548	88	44
FHS 40-160/40	40	65	80	165	160	355	133	50	12	-	132	100	70	240	190	14	-	250	292	552	88	45
FHS 40-200/55	40	65	100	192	180	424	150	50	12	-	160	100	70	265	212	14	-	300	340	666	88	73
FHS 40-200/75	40	65	100	192	180	424	150	50	12	-	160	100	70	265	212	14	-	300	340	666	88	77
FHS 40-250/110A	40	65	100	222	225	330	232	50	22	20	180	260	210	318	254	13	23	350	412	801	107	119
FHS 40-250/110	40	65	100	222	225	330	232	50	22	20	180	260	210	318	254	13	23	350	412	801	107	119
FHS 40-250/150	40	65	100	222	225	330	232	50	22	20	180	260	210	318	254	13	23	350	412	801	107	133
FHS 50-125/22	50	65	100	157	160	292	129	50	12	-	132	100	70	240	190	14	-	255	292	520	92	43
FHS 50-125/30	50	65	100	167	160	357	121	50	12	-	132	100	70	240	190	14	-	255	292	570	92	48
FHS 50-125/40	50	65	100	167	160	357	133	50	12	-	132	100	70	240	190	14	-	255	292	574	92	56
FHS 50-160/55	50	65	100	194	180	426	150	50	12	-	160	100	70	265	212	14	-	300	340	668	92	76
FHS 50-160/75	50	65	100	194	180	426	150	50	12	-	160	100	70	265	212	14	-	300	340	668	92	80
FHS 50-200/110A	50	65	100	224	200	332	232	50	22	-	160	260	210	318	254	13	23	350	392	812	92	111
FHS 50-200/110	50	65	100	224	200	332	232	50	22	-	160	260	210	318	254	13	23	350	392	812	92	111
FHS 50-250/150	50	65	100	222	225	330	232	50	22	20	180	260	210	318	254	13	23	350	412	810	107	133
FHS 50-250/185	50	65	100	222	225	330	232	50	22	20	180	304	254	318	254	13	23	350	412	854	107	145
FHS 50-250/220	50	65	100	222	225	330	232	50	22	20	180	304	254	318	254	13	23	350	412	854	107	159
FHS 65-125/40	65	80	100	167	180	357	133	65	14	-	160	125	95	280	212	14	-	285	340	574	105	70
FHS 65-125/55	65	80	100	194	180	426	150	65	14	-	160	125	95	280	212	14	-	300	340	668	105	80
FHS 65-125/75	65	80	100	194	180	426	150	65	14	-	160	125	95	280	212	14	-	300	340	668	105	84
FHS 65-160/110A	65	80	100	222	200	330	232	50	22	20	180	260	210	318	254	13	23	350	412	810	112	123
FHS 65-160/110	65	80	100	222	200	330	232	50	22	20	180	260	210	318	254	13	23	350	412	810	112	123
FHS 65-160/150	65	80	100	222	200	330	232	50	22	20	180	260	210	318	254	13	23	350	412	810	112	137
FHS 65-200/150	65	80	100	222	225	330	232	50	22	20	180	260	210	318	254	13	23	350	412	810	112	137
FHS 65-200/185	65	80	100	222	225	330	232	50	22	20	180	304	254	318	254	13	23	350	412	854	112	149
FHS 65-200/220	65	80	100	222	225	330	232	50	22	20	180	304	254	318	254	13	23	350	412	854	112	163
FHS 65-250/220	65	80	100	222	250	330	232	50	22	40	200	304	254	318	254	13	23	350	450	854	112	157
FHS 65-250/300	65	80	100	228	250	361	257	60	24	-	200	345	305	360	318	18	18	400	457	941	112	200
FHS 65-250/370	65	80	100	228	250	361	257	60	24	-	200	345	305	360	318	18	18	400	457	941	112	218
FHS 80-160/110	80	100	125	222	225	330	232	50	22	20	180	260	210	318	254	13	23	350	412	835	129	124
FHS 80-160/150	80	100	125	222	225	330	232	50	22	20	180	260	210	318	254	13	23	350	412	835	129	138
FHS 80-160/185	80	100	125	222	225	330	232	50	22	20	180	304	254	318	254	13	23	350	412	879	129	156
FHS 80-200/220	80	100	125	222	250	330	232	50	22	20	180	304	254	318	254	13	23	350	430	879	129	163
FHS 80-200/300	80	100	125	228	250	361	257	60	24	-	200	345	305	360	318	18	18	400	457	966	129	199
FHS 80-250/370	80	100	125	228	280	361	257	60	24	-	200	345	305	360	318	18	18	400	480	966	129	213
FHS 80-250/450	80	100	125	228	280	377	280	76	28	-	225	360	311	405	356	18	18	450	505	1043	129	278
FHS 80-250/550	80	100	125	258	280	426	280	90	28	-	250	406	349	465	406	22	22	550	530	1073	129	311

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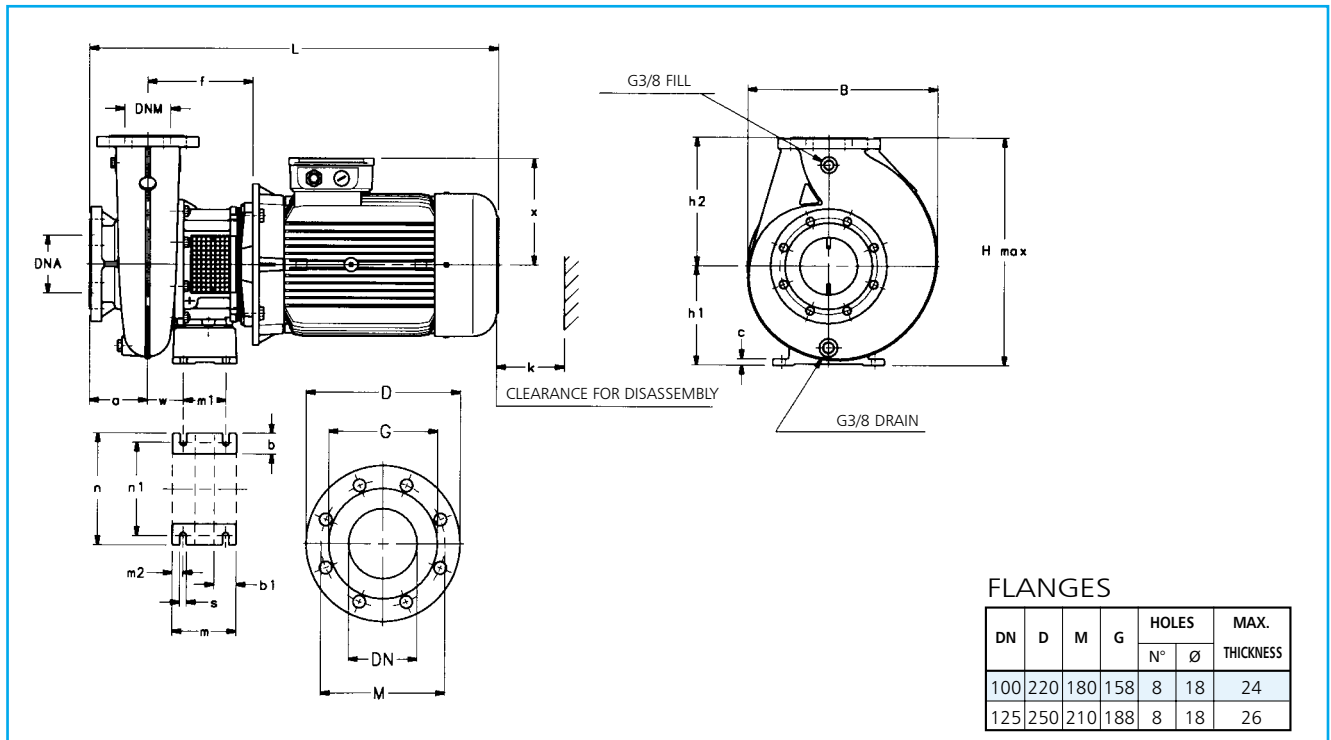
DIMENSIONS AND WEIGHTS, FHS4 4 POLES SERIES



PUMP TYPE	PUMP														SUPPORT					B	H max.	L	k	WEIGHT kg
	DNM	DNA	a	f	h2	w	x	b	c	h1	m	m1	n	n1	s									
FHS4 40-200/07	40	65	100	155	180	290	129	50	12	160	100	70	265	212	14	285	340	518	94	43				
FHS4 40-200/11	40	65	100	155	180	338	121	50	12	160	100	70	265	212	14	285	340	536	94	47				
FHS4 40-250/11	40	65	100	155	225	338	121	65	14	180	125	95	320	250	14	335	405	536	113	57				
FHS4 40-250/15	40	65	100	155	225	338	121	65	14	180	125	95	320	250	14	335	405	536	113	60				
FHS4 40-250/22	40	65	100	165	225	355	133	65	14	180	125	95	320	250	14	335	405	572	113	65				
FHS4 50-160/07	50	65	100	157	180	292	129	50	12	160	100	70	265	212	14	285	340	520	98	46				
FHS4 50-160/11	50	65	100	157	180	340	121	50	12	160	100	70	265	212	14	285	340	536	98	50				
FHS4 50-200/11	50	65	100	157	200	340	121	50	12	160	100	70	265	212	14	305	360	536	98	49				
FHS4 50-200/15	50	65	100	157	200	340	121	50	12	160	100	70	265	212	14	305	360	536	98	52				
FHS4 50-250/22A	50	65	100	165	225	355	133	65	14	180	125	95	320	250	14	340	405	572	113	65				
FHS4 50-250/22	50	65	100	165	225	355	133	65	14	180	125	95	320	250	14	340	405	572	113	65				
FHS4 50-250/30	50	65	100	165	225	355	133	65	14	180	125	95	320	250	14	340	405	572	113	68				
FHS4 65-125/05	65	80	100	157	180	292	129	65	14	160	125	95	280	212	14	285	340	520	108	50				
FHS4 65-125/07	65	80	100	157	180	292	129	65	14	160	125	95	280	212	14	285	340	520	108	52				
FHS4 65-125/11	65	80	100	157	180	340	121	65	14	160	125	95	280	212	14	285	340	536	108	54				
FHS4 65-160/11	65	80	100	155	200	338	121	65	14	160	125	95	280	212	14	331	360	536	117	61				
FHS4 65-160/15	65	80	100	155	200	338	121	65	14	160	125	95	280	212	14	331	360	536	117	64				
FHS4 65-160/22	65	80	100	165	200	345	153	65	14	160	125	95	280	212	14	331	360	572	117	69				
FHS4 65-200/15	65	80	100	155	225	338	121	65	14	180	125	95	320	250	14	335	405	536	117	64				
FHS4 65-200/22	65	80	100	165	225	355	133	65	14	180	125	95	320	250	14	335	405	572	117	69				
FHS4 65-200/30	65	80	100	165	225	355	133	65	14	180	125	95	320	250	14	335	405	572	117	72				
FHS4 65-250/30	65	80	100	165	250	355	133	80	16	200	160	120	360	280	18	360	450	572	125	78				
FHS4 65-250/40	65	80	100	165	250	376	151	80	16	200	160	120	360	280	18	360	450	595	125	101				
FHS4 65-250/55	65	80	100	192	250	351	191	80	16	200	160	120	360	280	18	360	450	658	125	104				
FHS4 80-160/15	80	100	125	155	225	338	121	65	14	180	125	95	320	250	14	332	405	561	132	71				
FHS4 80-160/22	80	100	125	165	225	355	133	65	14	180	125	95	320	250	14	332	405	597	132	75				
FHS4 80-200/30	80	100	125	165	250	355	133	65	14	180	125	95	345	280	14	345	430	597	132	81				
FHS4 80-200/40	80	100	125	165	250	376	151	65	14	180	125	95	345	280	14	345	430	620	132	104				
FHS4 80-250/40	80	100	125	165	280	376	151	80	16	200	160	120	400	315	18	400	480	620	132	110				
FHS4 80-250/55	80	100	125	192	280	351	191	80	16	200	160	120	400	315	18	400	480	683	132	113				
FHS4 80-250/75	80	100	125	192	280	370	191	80	16	200	160	120	400	315	18	400	480	721	132	116				

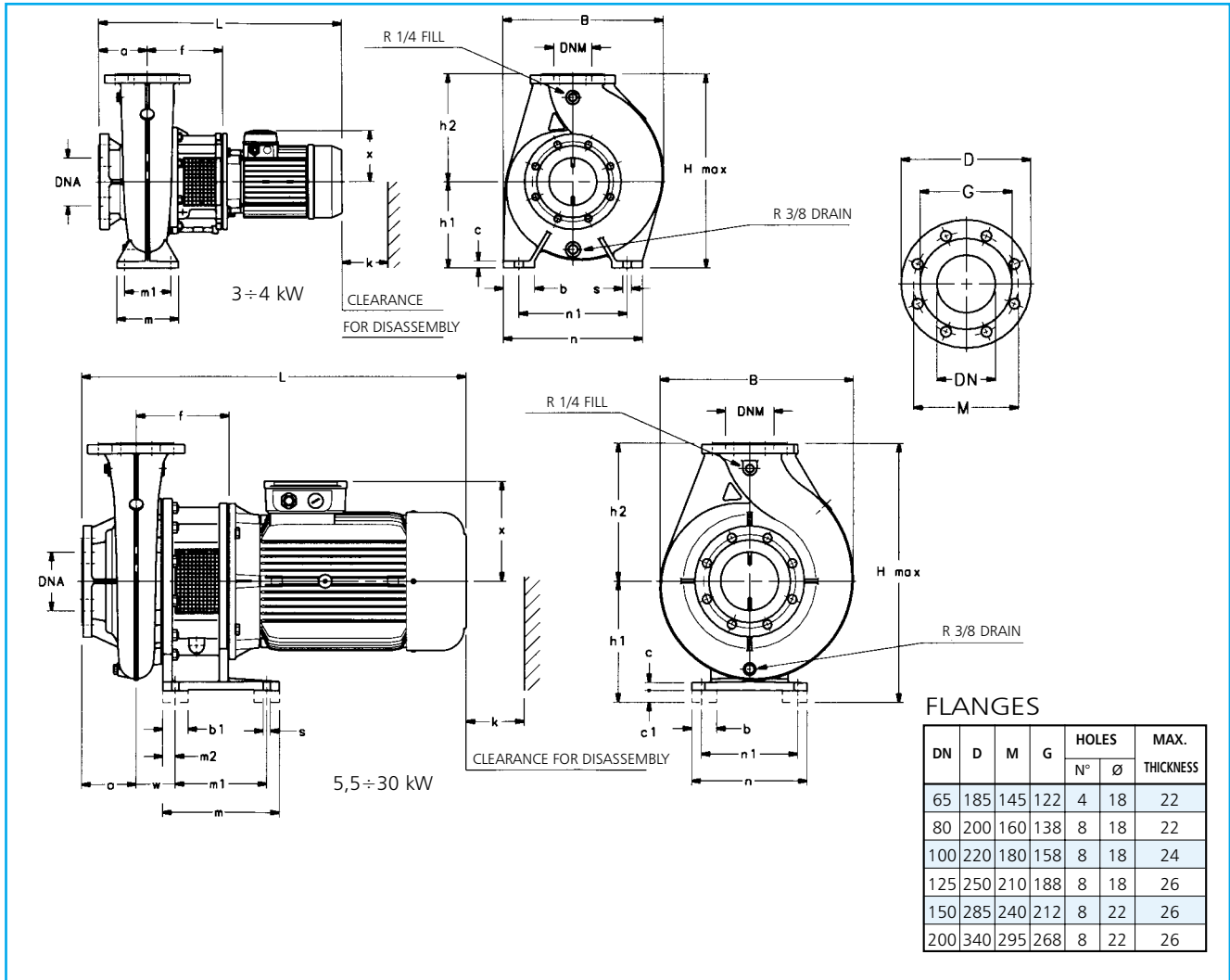


DIMENSIONS AND WEIGHTS, FHS 2 POLES SERIES



PUMP TYPE	PUMP							SUPPORT										B	H max.	L	k	WEIGHT kg
	DNM	DNA	a	f	h2	w	x	b	b1	c	h1	m	m1	m2	n	n1	s					
FHS 100-160/220	100	125	125	226	280	78	232	45	48	14	215	137	91	23	240	200	14	411	495	883	143	236
FHS 100-160/300	100	125	125	231	280	92	257	-	65	20	250	300	235	32,5	300	250	18	435	530	969	143	348
FHS 100-200/300	100	125	125	231	280	92	257	-	65	20	250	300	235	32,5	300	250	18	405	530	969	153	340
FHS 100-200/370	100	125	125	231	280	92	257	-	65	20	250	300	235	32,5	300	250	18	405	530	969	153	360

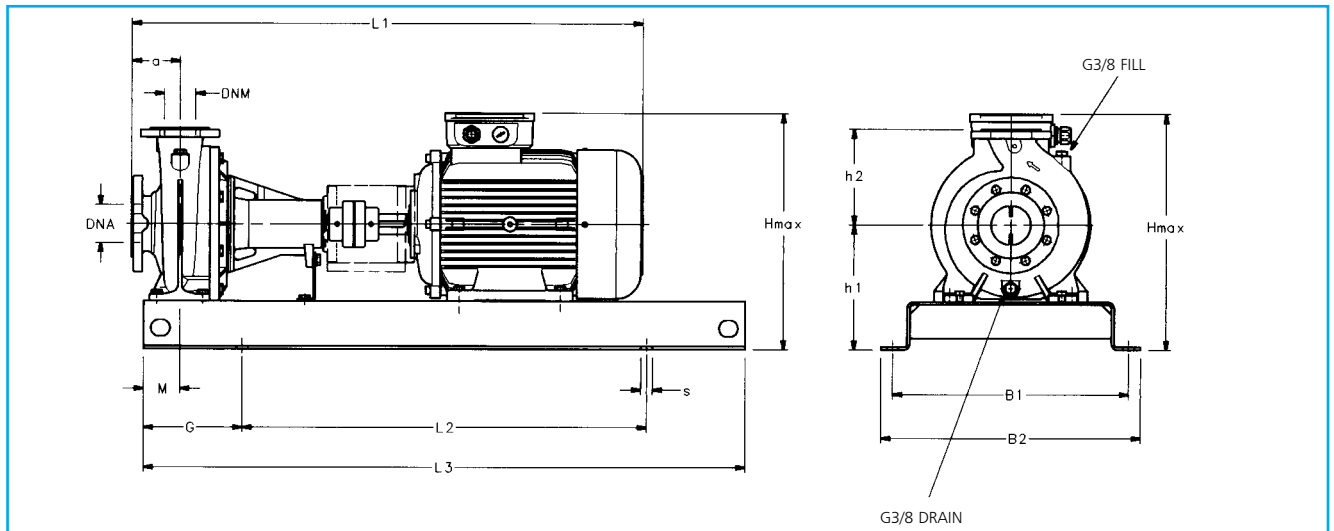
DIMENSIONS AND WEIGHTS, FHS4 4 POLES SERIES



PUMP TYPE	PUMP							SUPPORT										B	H max.	L	k	WEIGHT kg	
	DNM	DNA	a	f	h2	w	x	b	b1	c	c1	h1	m	m1	m2	n	n1						s
FHS4 65-315/75	65	80	125	196	280	83	194	45	48	14	-	250	137	89	24	240	200	14	434	530	725	160	168
FHS4 65-315/110	65	80	125	226	280	83	243	45	48	14	-	250	137	89	24	240	200	14	434	530	889	160	212
FHS4 80-315/110	80	100	125	226	315	83	243	45	48	14	-	250	137	89	24	240	200	14	450	565	889	160	218
FHS4 80-315/150	80	100	125	226	315	83	243	45	48	14	-	250	137	89	24	240	200	14	450	565	889	160	238
FHS4 100-160/30	100	125	125	196	280	-	133	80	-	16	-	225	160	120	-	360	280	19	415	505	628	143	110
FHS4 100-200/40	100	125	125	196	280	-	151	80	-	18	-	200	160	120	-	360	280	19	385	480	651	153	106
FHS4 100-200/55	100	125	125	196	280	77	194	45	48	14	-	215	137	91	23	240	200	14	373	495	687	153	131
FHS4 100-250/75	100	125	140	196	280	78	194	45	42	14	-	220	165	131	15	240	200	14	416	500	740	150	171
FHS4 100-250/110	100	125	140	226	280	78	243	45	42	14	-	220	165	131	15	240	200	14	416	500	904	150	215
FHS4 100-315/150	100	125	140	226	315	78	243	45	48	14	-	250	137	89	24	240	200	14	486	565	904	160	247
FHS4 100-315/185	100	125	140	226	315	83	243	45	48	14	-	250	137	89	24	240	200	14	486	565	904	160	282
FHS4 100-315/220	100	125	140	226	315	83	263	45	48	14	-	250	137	89	24	240	200	14	486	565	979	160	292
FHS4 125-200/55	125	150	140	211	315	91	194	45	48	14	-	235	137	91	23	240	200	14	469	550	717	160	162
FHS4 125-200/75	125	150	140	211	315	91	194	45	48	14	-	235	137	91	23	240	200	14	469	550	755	160	175
FHS4 125-250/110	125	150	140	226	355	78	243	45	48	14	-	250	137	91	23	240	200	14	493	605	904	158	217
FHS4 125-250/150	125	150	140	226	355	78	243	45	48	14	-	250	137	91	23	240	200	14	493	605	904	158	237
FHS4 125-250/185	125	150	140	226	355	78	243	45	48	14	-	250	137	91	23	240	200	14	493	605	904	158	273
FHS4 125-315/220	125	150	140	241	355	101	263	-	65	20	-	280	300	235	32,5	300	250	18	501	635	994	171	344
FHS4 125-315/300	125	150	140	241	355	101	263	-	65	20	-	280	300	235	32,5	300	250	18	501	635	994	171	429
FHS4 150-250/150	150	200	160	241	375	101	243	-	70	20	30	280	305	235	35	305	250	18	543	655	939	181	300
FHS4 150-250/185	150	200	160	241	375	101	243	-	70	20	30	280	305	235	35	305	250	18	543	655	939	181	335
FHS4 150-250/220	150	200	160	241	375	101	263	-	70	20	30	280	305	235	35	305	250	18	543	655	1014	181	345
FHS4 150-250/300	150	200	160	241	375	101	263	-	70	20	30	280	305	235	35	305	250	18	543	655	1014	181	430
FHS4 150-315/300	150	200	160	241	400	101	263	-	65	20	-	280	300	235	32,5	300	250	18	567	680	1014	186	448

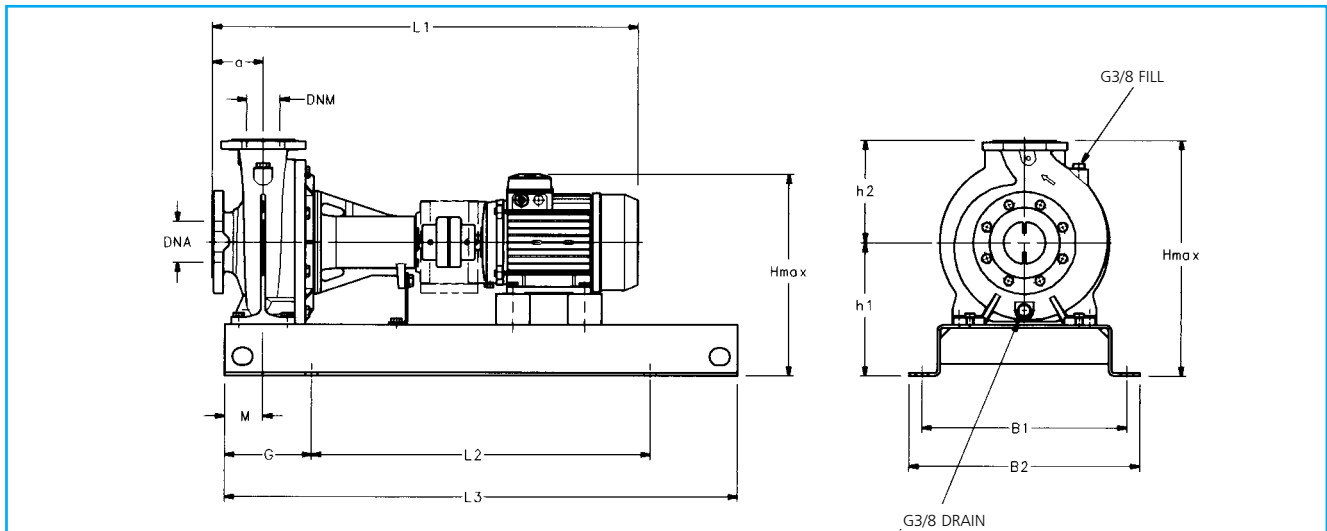


DIMENSIONS AND WEIGHTS, FHF 2 POLES SERIES



PUMP TYPE	DIMENSIONS(mm)													s FOR SCREWS	WEIGHT kg
	DNM	DNA	a	B1	B2	L1	L2	L3	G	M	h1	h2	H max.		
FHF 32-125/07	32	50	80	320	360	744	540	800	130	60	212	140	352	M16	67
FHF 32-125/11	32	50	80	320	360	744	540	800	130	60	212	140	352	M16	69
FHF 32-160/15	32	50	80	350	390	773	600	900	150	60	232	160	392	M16	71
FHF 32-160/22	32	50	80	350	390	773	600	900	150	60	232	160	392	M16	73
FHF 32-200/30	32	50	80	350	390	809	600	900	150	60	260	180	440	M16	92
FHF 32-200/40	32	50	80	350	390	832	600	900	150	60	260	180	440	M16	96
FHF 40-125/11	40	65	80	320	360	744	540	800	130	60	212	140	352	M16	72
FHF 40-125/15	40	65	80	350	390	773	600	900	150	60	212	140	352	M16	74
FHF 40-125/22	40	65	80	350	390	773	600	900	150	60	212	140	352	M16	77
FHF 40-160/30	40	65	80	350	390	809	600	900	150	60	232	160	392	M16	91
FHF 40-160/40	40	65	80	350	390	832	600	900	150	60	232	160	392	M16	97
FHF 40-200/55	40	65	100	400	450	909	660	1000	170	60	260	180	451	M20	112
FHF 40-200/75	40	65	100	400	450	909	660	1000	170	60	260	180	451	M20	120
FHF 40-250/110A	40	65	100	490	540	1061	840	1250	205	75	280	225	512	M20	178
FHF 40-250/110	40	65	100	490	540	1061	840	1250	205	75	280	225	512	M20	178
FHF 40-250/150	40	65	100	490	540	1061	840	1250	205	75	280	225	512	M20	188
FHF 50-125/22	50	65	100	350	390	793	600	900	150	60	232	160	392	M16	85
FHF 50-125/30	50	65	100	350	390	829	600	900	150	60	232	160	392	M16	92
FHF 50-125/40	50	65	100	350	390	852	600	900	150	60	232	160	392	M16	97
FHF 50-160/55	50	65	100	400	450	909	660	1000	170	60	260	180	451	M20	111
FHF 50-160/75	50	65	100	400	450	909	660	1000	170	60	260	180	451	M20	115
FHF 50-200/110A	50	65	100	440	490	1061	740	1120	190	60	260	200	492	M20	173
FHF 50-200/110	50	65	100	440	490	1061	740	1120	190	60	260	200	492	M20	173
FHF 50-250/150	50	65	100	490	540	1061	840	1250	205	75	280	225	512	M20	179
FHF 50-250/185	50	65	100	490	540	1105	840	1250	205	75	280	225	512	M20	199
FHF 50-250/220	50	65	100	490	540	1111	840	1250	205	75	280	225	510	M20	219
FHF 65-125/40	65	80	100	350	390	852	600	900	150	75	260	180	440	M16	135
FHF 65-125/55	65	80	100	400	450	909	660	1000	170	75	260	180	451	M20	141
FHF 65-125/75	65	80	100	400	450	909	660	1000	170	75	260	180	451	M20	147
FHF 65-160/110A	65	80	100	490	540	1061	840	1250	205	75	260	200	492	M20	164
FHF 65-160/110	65	80	100	490	540	1061	840	1250	205	75	260	200	492	M20	164
FHF 65-160/150	65	80	100	490	540	1061	840	1250	205	75	260	200	492	M20	180
FHF 65-200/150	65	80	100	490	540	1061	840	1250	205	75	280	225	512	M20	187
FHF 65-200/185	65	80	100	490	540	1105	840	1250	205	75	280	225	512	M20	197
FHF 65-200/220	65	80	100	490	540	1111	840	1250	205	75	280	225	510	M20	215
FHF 65-250/220	65	80	100	490	540	1221	840	1250	205	90	310	250	550	M20	223
FHF 65-250/300	65	80	100	550	610	1296	940	1400	230	90	310	250	557	M24	300
FHF 65-250/370	65	80	100	550	610	1296	940	1400	230	90	310	250	557	M24	315
FHF 80-160/110	80	100	125	490	540	1086	840	1250	205	75	280	225	512	M20	202
FHF 80-160/150	80	100	125	490	540	1086	840	1250	205	75	280	225	512	M20	212
FHF 80-160/185	80	100	125	490	540	1130	840	1250	205	75	280	225	512	M20	233
FHF 80-200/220	80	100	125	490	540	1246	840	1250	205	75	280	250	530	M20	245
FHF 80-200/300	80	100	125	550	610	1321	940	1400	230	75	310	250	557	M24	285
FHF 80-250/370	80	100	125	550	610	1321	940	1400	230	90	310	280	580	M24	305
FHF 80-250/450	80	100	125	550	610	1398	940	1400	230	90	365	280	605	M24	365
FHF 80-250/550	80	100	125	600	660	1428	1060	1600	270	90	390	280	660	M24	400

DIMENSIONS AND WEIGHTS, FHF4 4 POLES SERIES



PUMP TYPE	DIMENSIONS(mm)													s FOR SCREWS	WEIGHT kg
	DNM	DNA	a	B1	B2	L1	L2	L3	G	M	h1	h2	H max.		
FHF4 32-125/02A	32	50	80	320	360	702	540	800	130	60	212	140	352	M16	74
FHF4 32-125/02	32	50	80	320	360	702	540	800	130	60	212	140	352	M16	74
FHF4 32-160/02	32	50	80	320	360	702	540	800	130	60	232	160	392	M16	76
FHF4 32-160/03	32	50	80	320	360	702	540	800	130	60	232	160	392	M16	78
FHF4 32-200/03	32	50	80	320	360	702	540	800	130	60	260	180	440	M16	80
FHF4 32-200/05	32	50	80	320	360	744	540	800	130	60	260	180	440	M16	82
FHF4 40-125/02A	40	65	80	320	360	702	540	800	130	60	212	140	352	M16	61
FHF4 40-125/02	40	65	80	320	360	702	540	800	130	60	212	140	352	M16	61
FHF4 40-125/03	40	65	80	320	360	702	540	800	130	60	212	140	352	M16	64
FHF4 40-160/03	40	65	80	320	360	702	540	800	130	60	232	160	392	M16	65
FHF4 40-160/05	40	65	80	320	360	744	540	800	130	60	232	160	392	M16	66
FHF4 40-200/07	40	65	100	350	390	764	600	900	150	60	260	180	440	M16	73
FHF4 40-200/11	40	65	100	350	390	793	600	900	150	60	260	180	440	M16	76
FHF4 40-250/11	40	65	100	400	450	793	660	1000	170	75	280	225	505	M20	103
FHF4 40-250/15	40	65	100	400	450	793	660	1000	170	75	280	225	505	M20	106
FHF4 40-250/22	40	65	100	400	450	829	660	1000	170	75	280	225	505	M20	119
FHF4 50-125/03A	50	65	100	320	360	722	540	800	130	60	232	160	392	M16	64
FHF4 50-125/03	50	65	100	320	360	722	540	800	130	60	232	160	392	M16	64
FHF4 50-125/05	50	65	100	320	360	764	540	800	130	60	232	160	392	M16	66
FHF4 50-160/07	50	65	100	350	390	764	600	900	150	60	260	180	440	M16	73
FHF4 50-160/11	50	65	100	350	390	793	600	900	150	60	260	180	440	M16	76
FHF4 50-200/11	50	65	100	350	390	793	600	900	150	60	260	200	460	M16	87
FHF4 50-200/15	50	65	100	350	390	793	600	900	150	60	260	200	460	M16	90
FHF4 50/250/22A	50	65	100	400	450	829	660	1000	170	75	280	225	505	M20	121
FHF4 50-250/22	50	65	100	400	450	829	660	1000	170	75	280	225	505	M20	121
FHF4 50-250/30	50	65	100	400	450	829	660	1000	170	75	280	225	505	M20	125
FHF4 65-125/05	65	80	100	350	390	764	600	900	150	75	260	180	440	M16	90
FHF4 65-125/07	65	80	100	350	390	764	600	900	150	75	260	180	440	M16	91
FHF4 65-125/11	65	80	100	350	390	793	600	900	150	75	260	180	440	M16	95
FHF4 65-160/11	65	80	100	400	450	793	660	1000	170	75	260	200	460	M20	100
FHF4 65-160/15	65	80	100	400	450	793	660	1000	170	75	260	200	460	M20	110
FHF4 65-160/22	65	80	100	400	450	829	660	1000	170	75	260	200	460	M20	119
FHF4 65-200/15	65	80	100	400	450	793	660	1000	170	75	280	225	505	M20	112
FHF4 65-200/22	65	80	100	440	490	829	740	1120	190	75	280	225	505	M20	123
FHF4 65-200/30	65	80	100	440	490	829	740	1120	190	75	280	225	505	M20	126
FHF4 65-250/30	65	80	100	440	490	939	740	1120	190	90	310	250	550	M20	150
FHF4 65-250/40	65	80	100	440	490	962	740	1120	190	90	310	250	550	M20	162
FHF4 65-250/55	65	80	100	440	490	1019	740	1120	190	90	310	250	550	M20	180
FHF4 80-160/15	80	100	125	400	450	818	660	1000	170	75	280	228	505	M20	130
FHF4 80-160/22	80	100	125	440	490	854	740	1120	190	75	280	228	505	M20	136
FHF4 80-200/30	80	100	125	440	490	964	740	1120	190	75	280	250	530	M20	155
FHF4 80-200/40	80	100	125	440	490	987	740	1120	190	75	280	250	530	M20	159
FHF4 80-250/40	80	100	125	490	540	987	840	1250	205	90	310	280	580	M20	165
FHF4 80-250/55	80	100	125	490	540	1044	840	1250	205	90	310	280	580	M20	180
FHF4 80-250/75	80	100	125	490	540	1082	840	1250	205	90	310	280	580	M20	193

