

SHS SERIES

CENTRIFUGAL PUMPS MANUFACTURED IN AISI 316 STAINLESS STEEL IN COMPLIANCE WITH EN 733 - DIN 24255

Laser-technology welded centrifugal pumps.
Designed to handle hot, cold and moderately
aggressive liquids.

APPLICATIONS

- Water circulation and transfer in the civil, industrial and agricultural markets.
- Industrial washing.
- Pressure boosting.
- Hot and cold water circulation for heating and conditioning systems.

AVAILABLE MODELS

- **SHE** close-coupled with special motor shaft extension.
- **SHS** with stub shaft and standard motor.
- **SHF** with flexible coupling, base and standard motor in compliance with EN 733 - DIN 24255.
- **SSH 25-125, 160, 200, 250** upon request.

SPECIFICATIONS

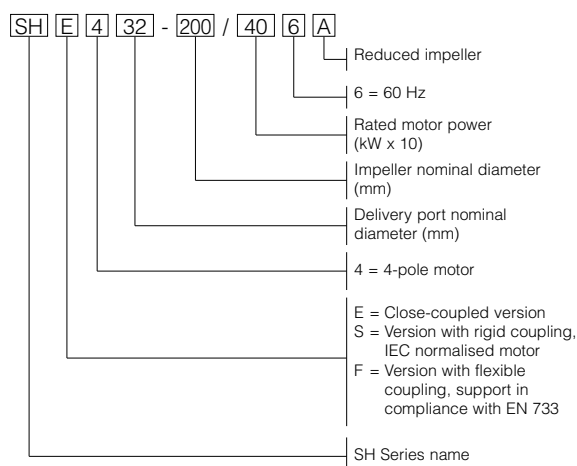
- **Maximum delivery** up to **240 m³/h.**
- **Maximum head** up to **110 m.**
- 316L stainless steel, laser-welded impeller and pump body.
- **AISI 316L** stainless steel wear rings.
- **Port nominal diameter** up to **DN 80.**
- **Impeller nominal diameter** up to **250 mm.**
- 2- and 4-pole three-phase motors.
- 50 and 60 Hz frequencies.
- Counterflanges available on request.
- IP55 protection.
- Class F insulation.
- **Maximum operating pressure: 12 bar (PN12).**
- Pumped **liquid temperature -10°C to +110°C.**
- **Versions with HYDROVAR frequency converter (variable speed) are available on request.**



TABLE OF MATERIALS

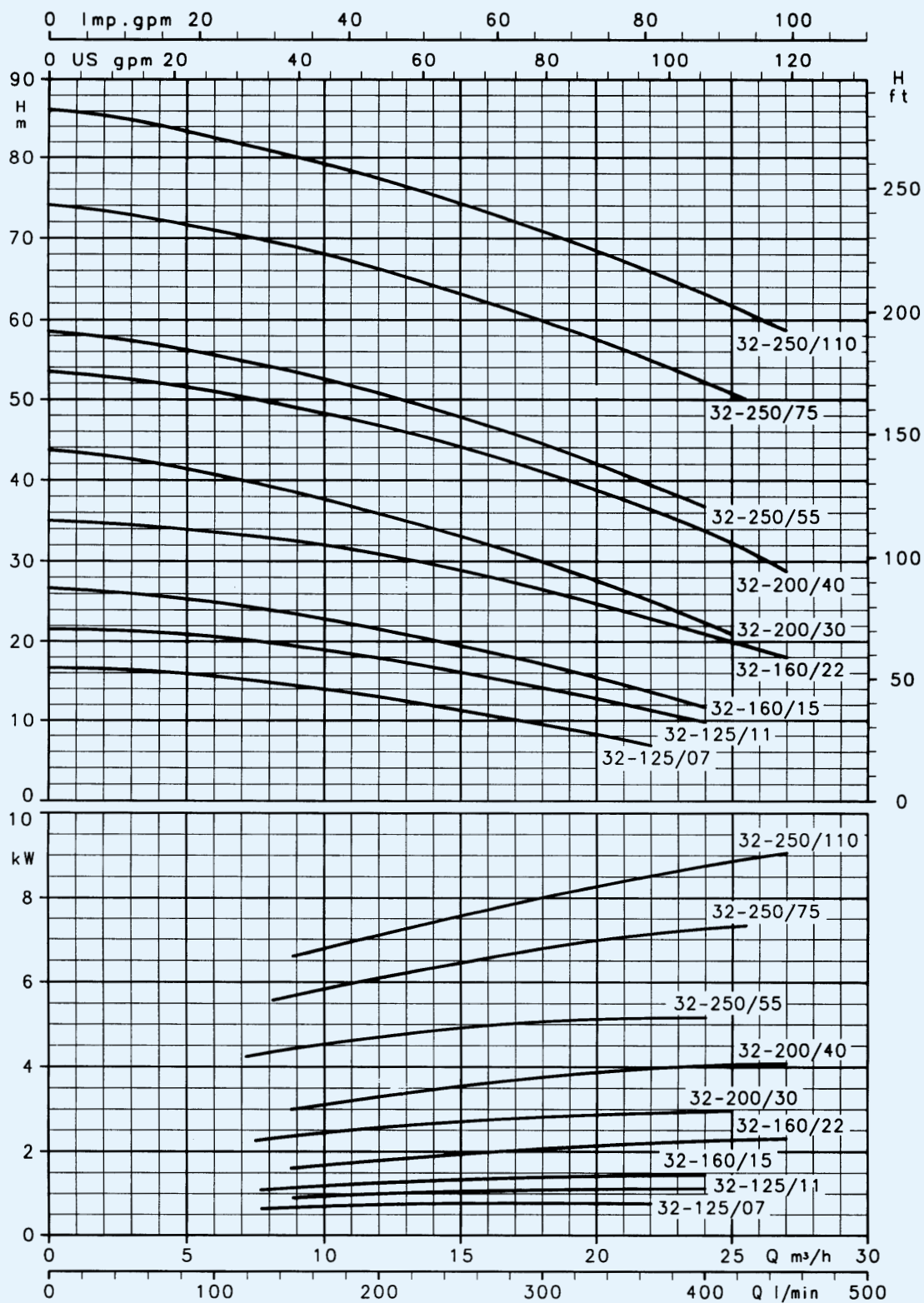
PART	MATERIAL
Pump body, Seal housing, Impeller Wear ring Counterwear ring Adapter	STAINLESS STEEL AISI 316L - DIN 1.4404
Mechanical seal O-Ring	ALUMINIUM OR DIN GG20 CAST IRON CERAMIC/CARBON/FPM FPM
Fill/drain plugs, Shaft (SHE - SHF), Coupling (SHS) Support body (SHF)	STAINLESS STEEL AISI 316 - DIN 1.4571 DIN GG20 CAST IRON

IDENTIFICATION CODE



SHE - SHS - SHF 32 SERIES

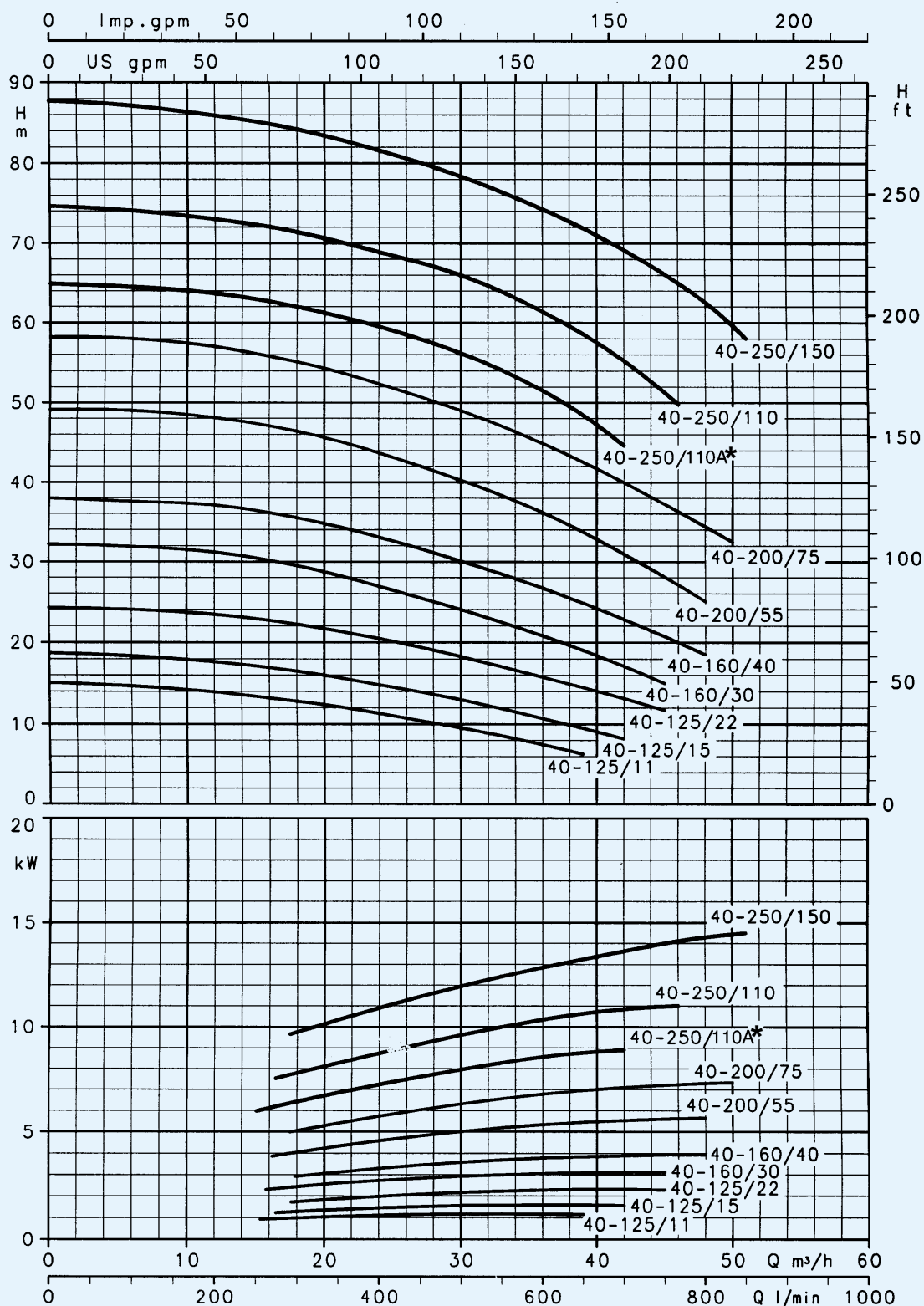
OPERATING CHARACTERISTICS at 2900 rpm 50 Hz, 2 POLES



These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

SHE - SHS - SHF 40 SERIES

OPERATING CHARACTERISTICS at 1450 rpm 50 Hz, 2 POLES

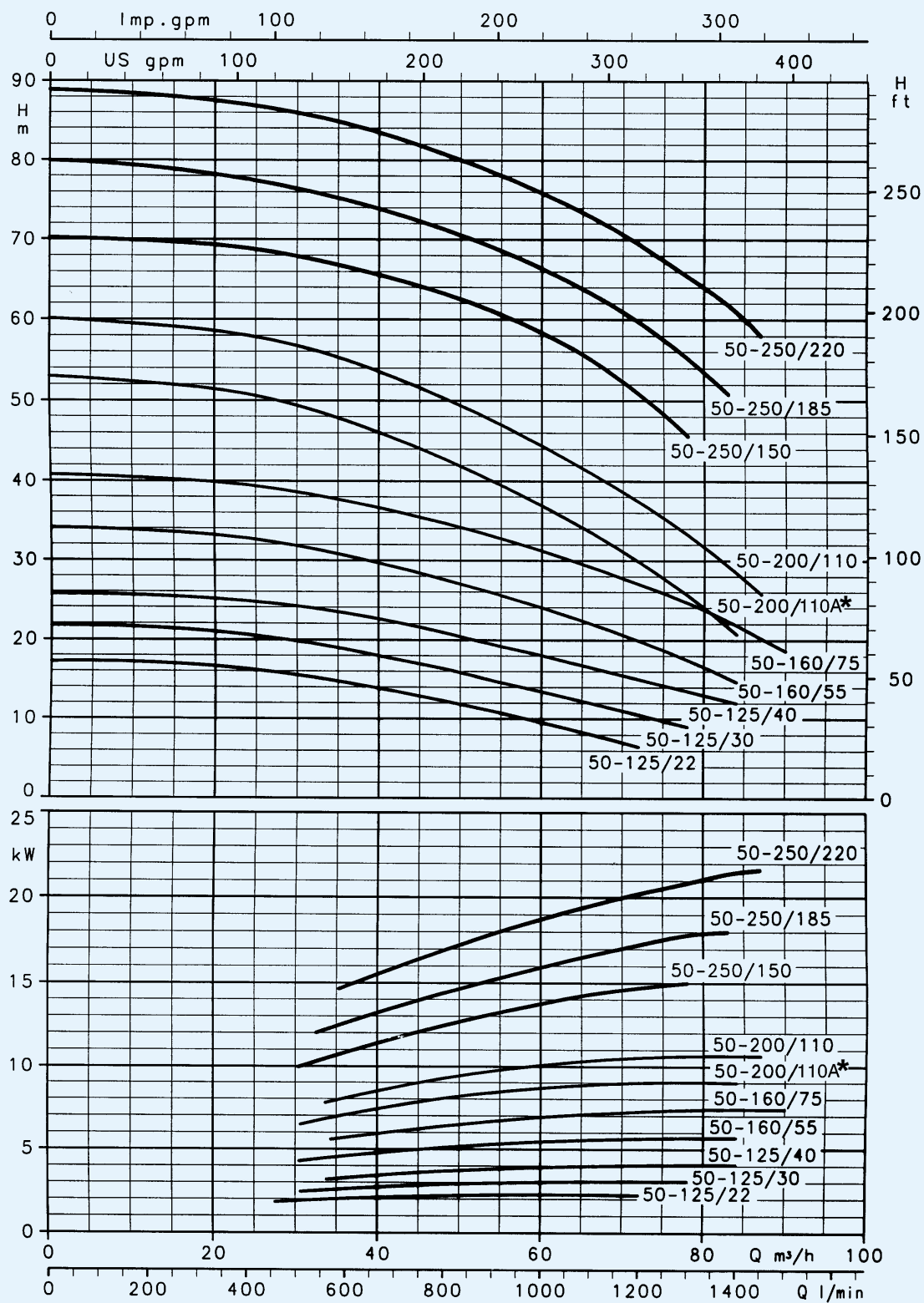


* /92 version SHE

These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

SHE - SHS - SHF 50 SERIES

OPERATING CHARACTERISTICS at 2900 rpm 50 Hz, 2 POLES

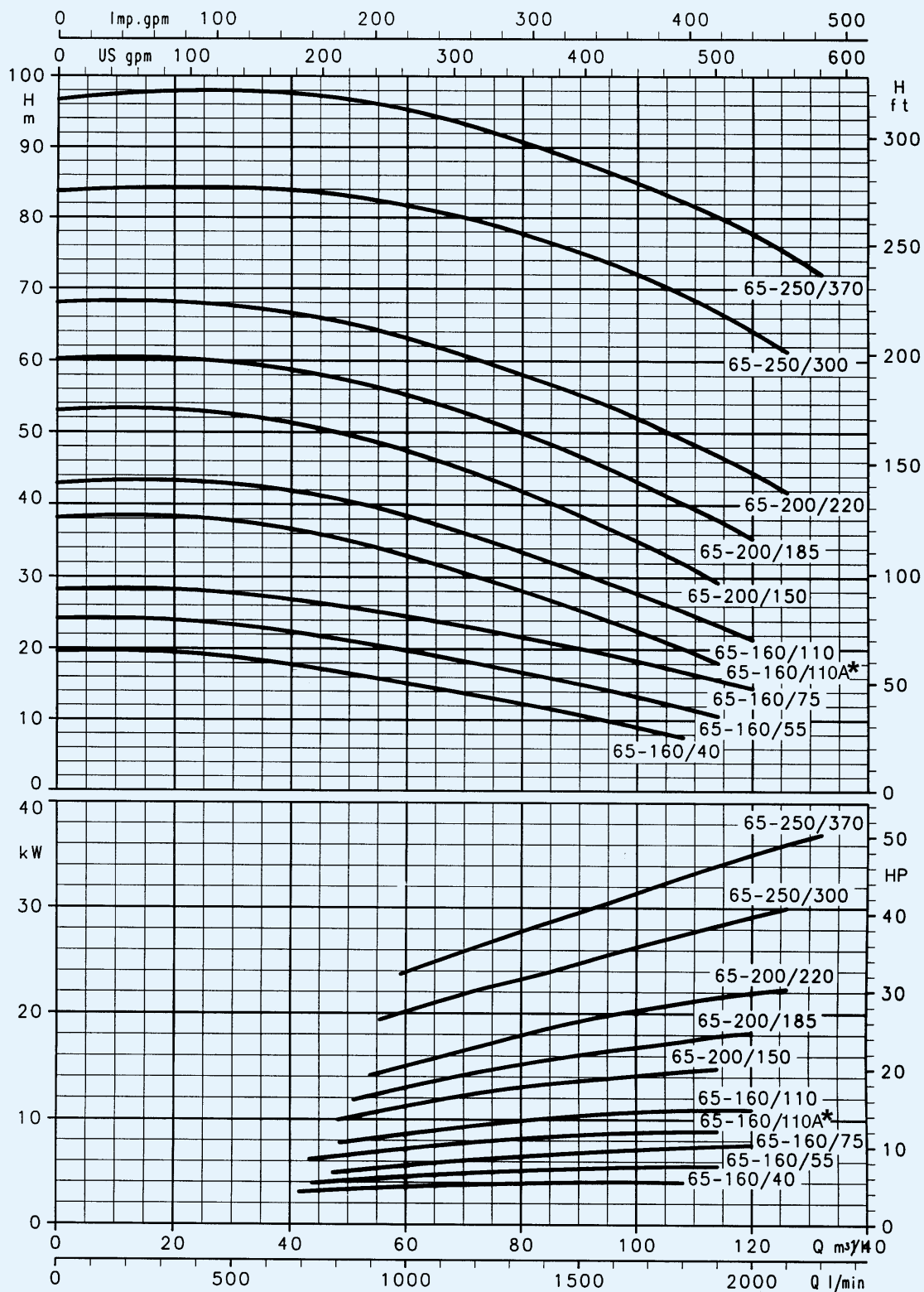


* /92 version SHE

These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

SHE - SHS - SHF 65 SERIES

OPERATING CHARACTERISTICS at 2900 rpm 50 Hz, 2 POLES

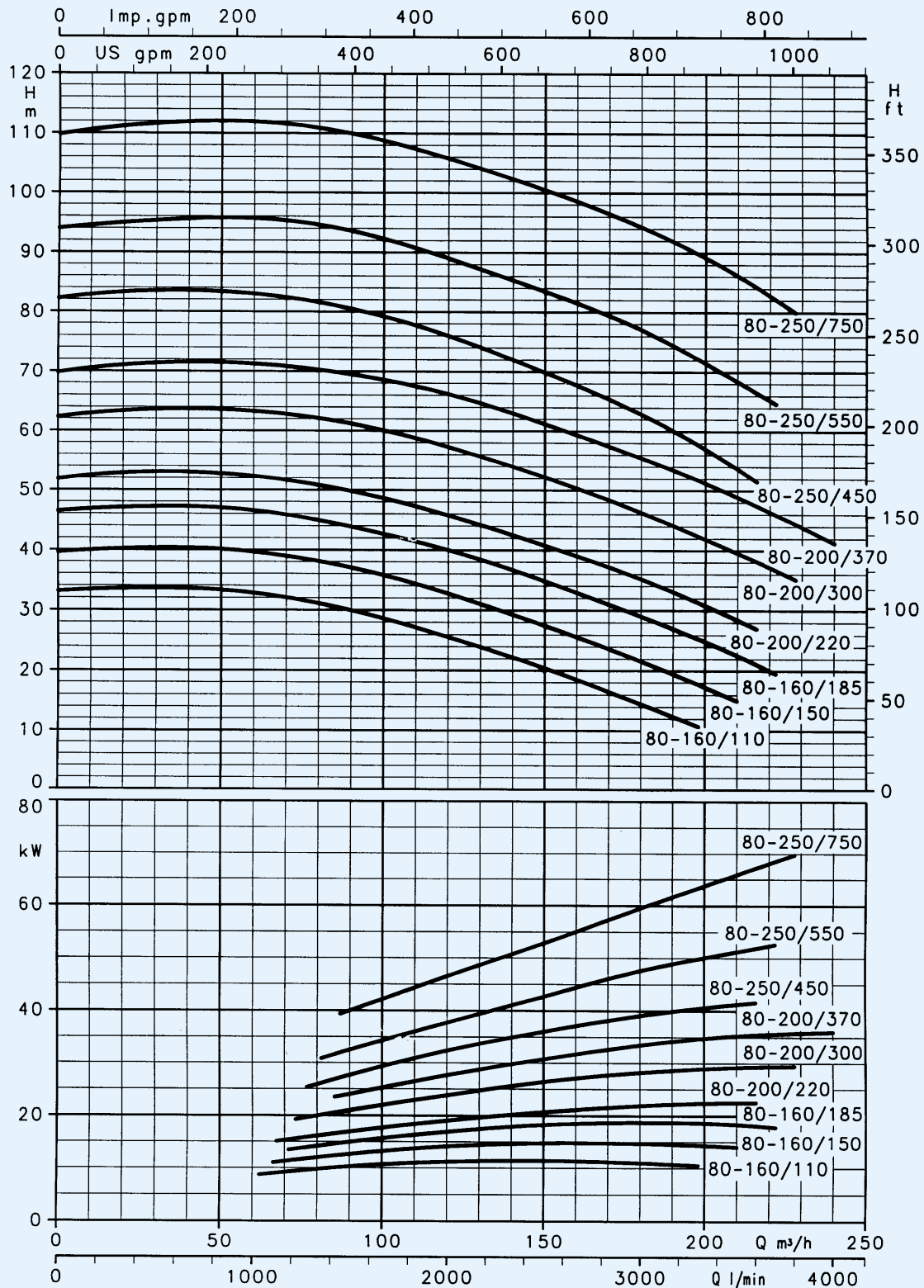


* /92 version SHE

These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

SHE - SHS - SHF 80 SERIES

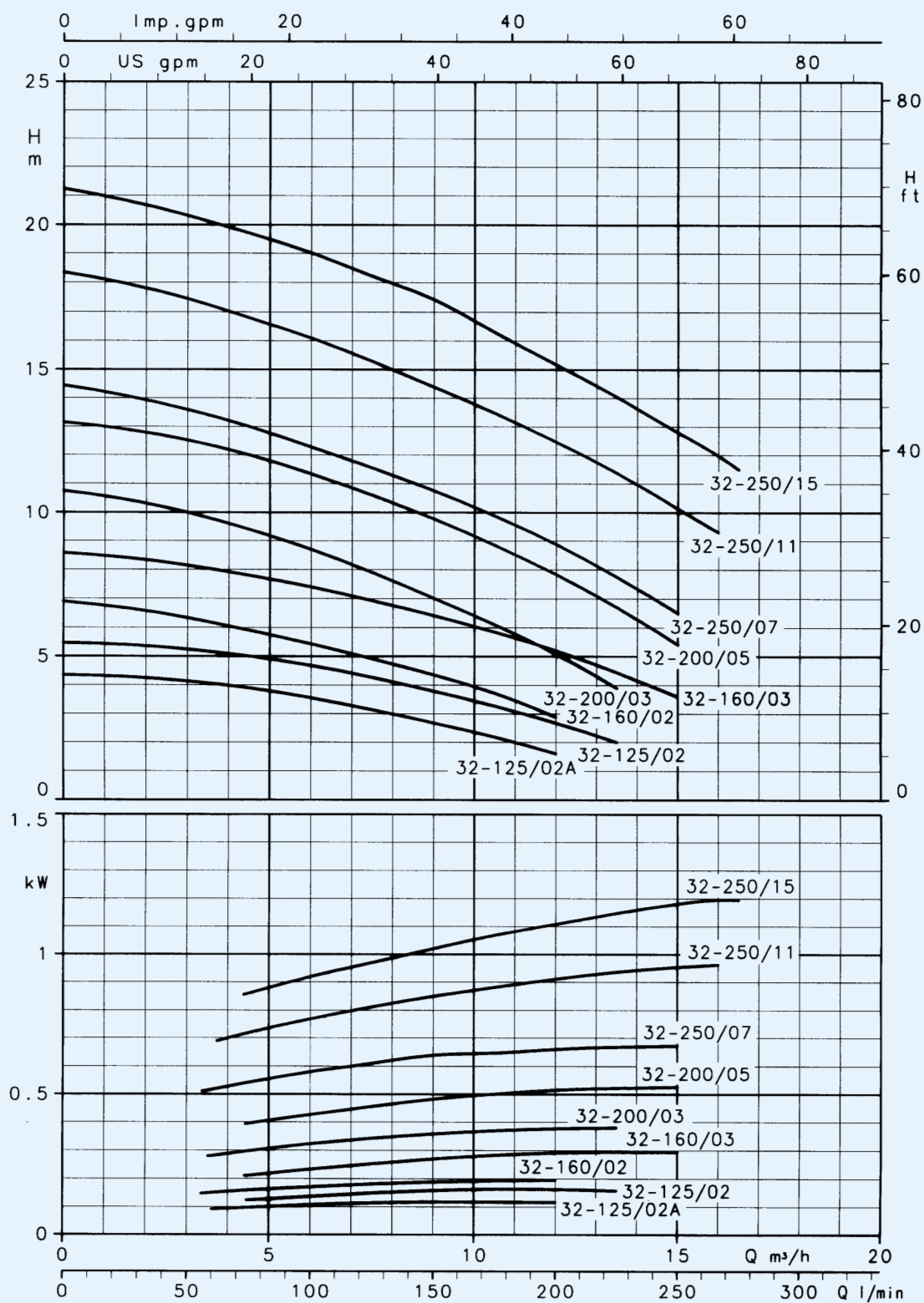
OPERATING CHARACTERISTICS at 2900 rpm 50 Hz, 2 POLES



These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

SHE4 - SHS4 - SHF4 32 SERIES

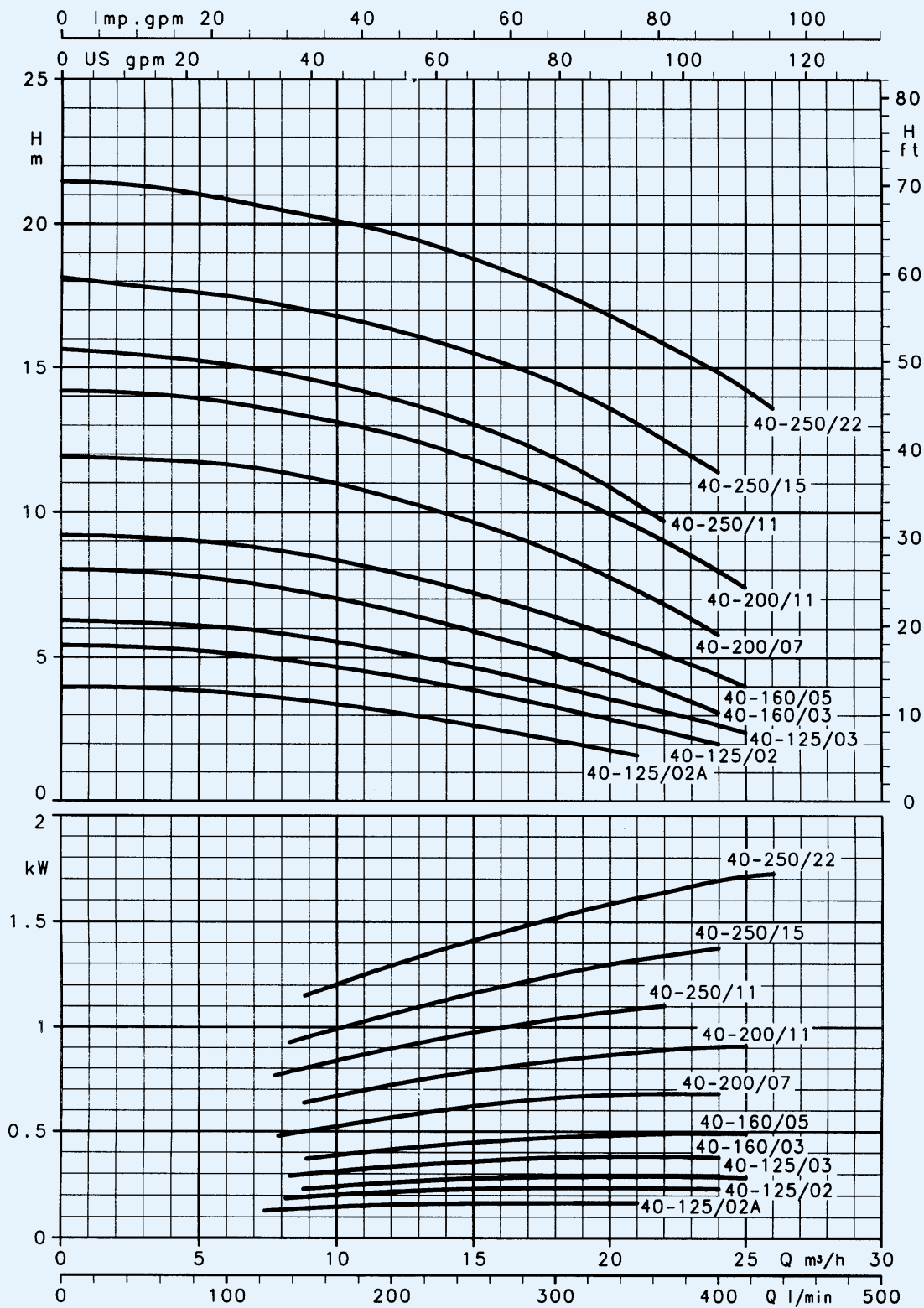
OPERATING CHARACTERISTICS at 1450 rpm 50 Hz, 4 POLES



These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

SHE4 - SHS4 - SHF4 40 SERIES

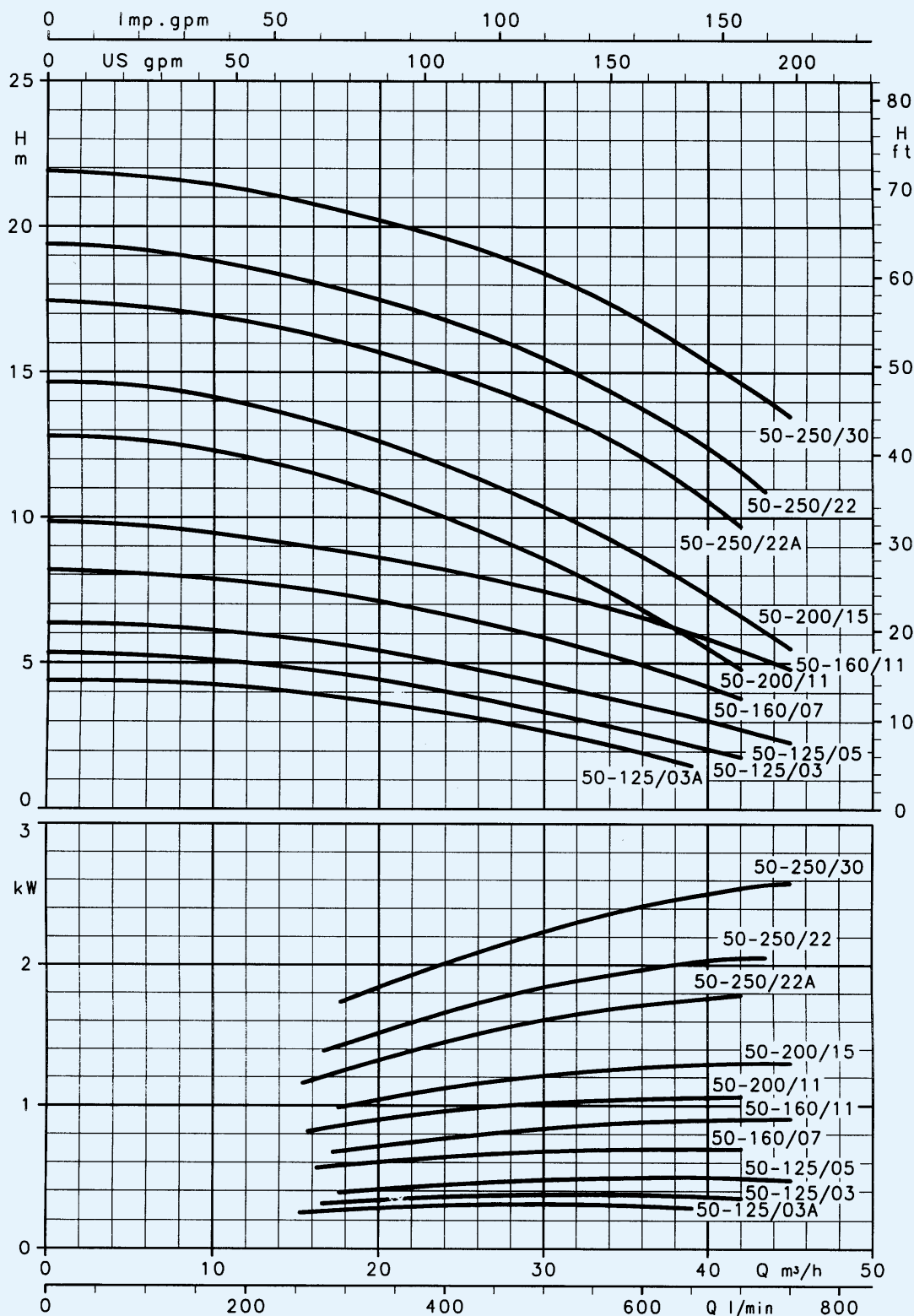
OPERATING CHARACTERISTICS at 1450 rpm 50 Hz, 4 POLES



These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

SHE4 - SHS4 - SHF4 50 SERIES

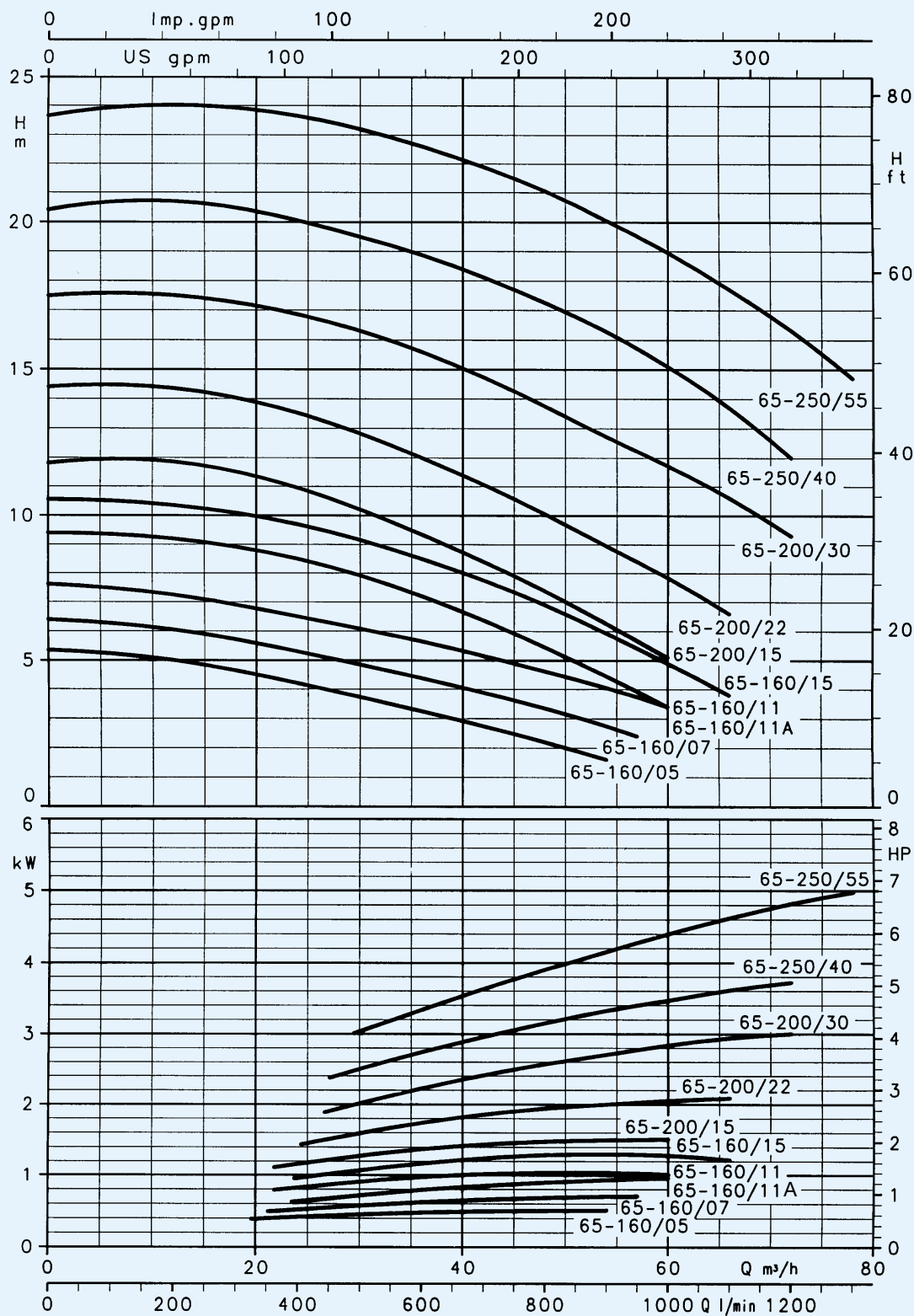
OPERATING CHARACTERISTICS at 1450 rpm 50 Hz, 4 POLES



These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

SHE4 - SHS4 - SHF4 65 SERIES

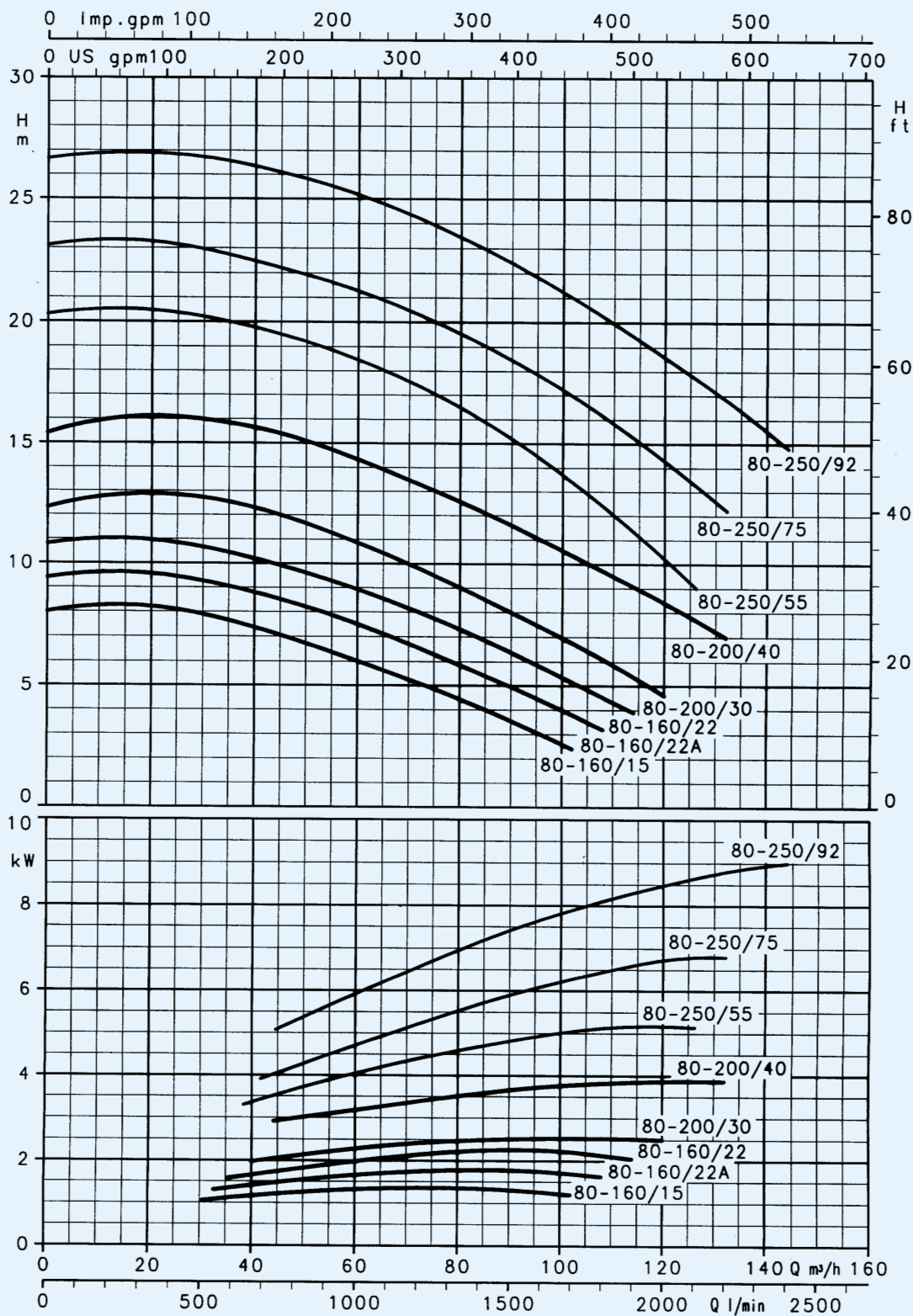
OPERATING CHARACTERISTICS at 1450 rpm 50 Hz, 4 POLES



These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

SHE4 - SHS4 - SHF4 80 SERIES

OPERATING CHARACTERISTICS at 1450 rpm 50 Hz, 4 POLES



These performances are valid for liquids with density $\rho = 1.0 \text{ kg/dm}^3$ and kinematic viscosity $\gamma = 1 \text{ mm}^2/\text{sec}$.

ELECTRICAL SPECIFICATIONS MOTORS WITH EXTENDED SHAFT FOR SHE SERIES

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 220-240 V	Y 380-415 V	Δ 380-415 V	Y 660 V	min ⁻¹	Is / In	n %	cosφ	Cn Nm	Cs/Cn
0,75	90R	B14	3,2-3,3	1,85-1,9	—	—	2835	5,5	72	0,79	2,53	3,6
1,1	90R	B14	4,5-4,5	2,6-2,6	—	—	2845	6,4	75	0,81	3,69	3,85
1,5	90 R	B14	6,2-6	3,6-3,5	—	—	2845	6,6	73	0,83	5	4,2
2,2	90	B14	8,5-8,3	4,9-4,8	—	—	2860	6,9	77	0,85	7,3	2,9
3	90	B14	11,2-10,9	6,5-6,3	—	—	2870	6,8	77	0,89	10	3,5
4	112R	B14	—	—	8,5-8,3	4,9	2885	7,5	81	0,85	13,2	3,15
5,5	112	B14	—	—	11,5-11,2	6,6	2910	7,8	82	0,85	18	3
7,5	112	B14	—	—	15,5-15	8,9	2905	7	82	0,85	24,7	2,6
9,2	132	B14	—	—	18,4-17,8	10,6	2920	7,3	85	0,88	30	3,5
11	132	B14	—	—	22-21	12,7	2910	7,6	85	0,88	36,1	3,7
15	160	B34	—	—	30-28,5	17,3	2945	8,4	88	0,89	49	4,3
18,5	160	B34	—	—	36,4-34,5	21	2940	7,8	89	0,87	60	3,6
22	160	B34	—	—	43-40,5	24,5	2930	7,5	89	0,89	72	4,4

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

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 220-240 V	Y 380-415 V	Δ 380-415 V	Y 660 V	min ⁻¹	Is / In	n %	cosφ	Cn Nm	Cs/Cn
0,25	71	B5	1,3-1,25	0,75-0,72	—	—	1390	4	64	0,77	1,72	2,35
0,37	71	B5	1,85-1,8	1,07-1,04	—	—	1400	4,2	65	0,78	2,52	2,4
0,55	90R	B14	2,7-2,6	1,55-1,5	—	—	1410	4,4	69	0,77	3,72	1,95
0,75	90R	B5	3,6-3,5	2,1-2	—	—	1410	4,9	69	0,77	5,1	1,9
1,1	90	B5	4,8-4,7	2,8-2,7	—	—	1410	4,5	75	0,77	7,4	2,25
1,5	90	B5	6,2-6	3,6-3,5	—	—	1410	5,1	75	0,81	10,2	2,4
2,2	100	B5	9-8,6	5,2-5	—	—	1410	5	78	0,80	14,8	2,2
3	100	B5	12-11,6	6,9-6,7	—	—	1410	5,8	81	0,81	20,2	2,5
4	112	B5	—	—	8,7-8,5	5	1440	6,7	83	0,82	26,5	2,7
5,5	132	B14	—	—	12,4-12	7,2	1440	6,8	82	0,87	36,8	2,8
7,5	132	B14	—	—	15,8-15,4	9,2	1450	7,7	82	0,81	49,5	2,8

ELECTRICAL SPECIFICATIONS STANDARD MOTORS FOR SHS - SHF SERIES

THREE-PHASE 50 Hz 2 POLES MOTORS

MOTOR TYPE				INPUT CURRENT In (A)				DATA FOR 400 V 50 Hz					
kW	IEC SIZE *	CONSTRUCTION DESIGN		220-240 V	Y 380-415 V	Δ 380-415 V	Y 660 V	min ⁻¹	Is / In	n %	cosÉ	Cn Nm	Cs/Cn
		SHS	SHF										
0,75	80	B5	B3	3,2-3,3	1,85-1,9	—	—	2835	5,5	72	0,79	2,53	3,6
1,1	80	B5	B3	4,5-4,5	2,6-2,6	—	—	2845	6,4	75	0,81	3,69	3,85
1,5	90R	B5	B3	6,2-6	3,6-3,5	—	—	2845	6,6	73	0,83	5	4,2
2,2	90	B5	B3	8,5-8,3	4,9-4,8	—	—	2860	6,9	77	0,85	7,3	2,9
3	100	B5	B3	11,2-10,9	6,5-6,3	—	—	2875	6,3	80	0,85	10	2,6
4	112R	B5	B3	—	—	8,5-8,3	4,9	2885	7,5	81	0,85	13,2	3,15
5,5	132R	B5	B3	—	—	11,5-11,2	6,6	2910	7,8	82	0,85	18	3
7,5	132R	B5	B3	—	—	15,5-15	8,9	2905	7	82	0,85	24,7	2,6
11	160	B35	B3	—	—	22,5-21	13	2930	7,1	86	0,88	36,2	3,4
15	160	B35	B3	—	—	30-28,5	17,3	2945	8,4	88	0,89	49	4,3
18,5	160	B35	B3	—	—	36,4-34,5	21	2940	7,8	89	0,87	60	3,6
22	180R	B35	B3	—	—	43-40,5	24,8	2930	7,5	89	0,89	72	4,4
30	200	B35	B3	—	—	59	34	2940	6,8	90	0,84	97	2,4
37	200	B35	B3	—	—	71,5	41,2	2940	7,2	91	0,84	120	2,5
45	225	—	B3	—	—	88	50,5	2950	6,7	91	0,85	145	2,4
55	250	—	B3	—	—	106	61	2950	6,7	92	0,85	177	2,4
75	280	—	B3	—	—	134	78	2965	6,8	92	0,87	241	2,3

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

THREE-PHASE 50 Hz 4 POLES MOTORS

MOTOR TYPE				INPUT CURRENT In (A)				DATA FOR 400 V 50 Hz					
kW	IEC SIZE *	CONSTRUCTION DESIGN		220-240 V	Y 380-415 V	Δ 380-415 V	Y 660 V	min ⁻¹	Is / In	n %	cosÉ	Cn Nm	Cs/Cn
		SHS	SHF										
0,25	71	—	B3	1,3-1,25	0,75-0,72	—	—	1390	4	64	0,77	1,72	2,35
0,37	71	—	B3	1,85-1,8	1,07-1,04	—	—	1400	4,2	65	0,78	2,52	2,4
0,55	80	B5	B3	2,7-2,6	1,55-1,5	—	—	1410	4,4	69	0,77	3,72	1,95
0,75	80	B5	B3	3,6-3,5	2,1-2	—	—	1410	4,9	69	0,77	5,1	1,9
1,1	90	B5	B3	4,8-4,7	2,8-2,7	—	—	1410	4,5	75	0,77	7,4	2,25
1,5	90	B5	B3	6,2-6	3,6-3,5	—	—	1410	5,1	75	0,81	10,2	2,4
2,2	100	B5	B3	9-8,6	5,2-5	—	—	1410	5	78	0,80	14,8	2,2
3	100	B5	B3	12-11,6	6,9-6,7	—	—	1410	5,8	81	0,81	20,2	2,5
4	112	B5	B3	—	—	8,7-8,5	5	1440	6,7	83	0,82	26,5	2,7
5,5	132	B5	B3	—	—	12,4-12	7,2	1440	6,8	82	0,87	36,8	2,8
7,5	132	B5	B3	—	—	15,8-15,4	9,2	1450	7,7	82	0,81	49,5	2,8
9,2	132	35	B3	—	—	19,6-18,8	11,3	1445	5,6	88	0,80	60,7	2,8