HT Vertical multi-stage centrifugal pumps



Clean water
Civil use
Agricultural use
Industrial use

※ HT pumps are designed for high hydraulic performance featuring a robust, compact, and reliable mechanical construction..

※ Jacket **Stainless steel AISI 304**
※ Impellers: **Stainless steel AISI 304**
※ Diffusers: **Stainless steel AISI 304**
※ Shaft **Stainless steel AISI 431**

PERFORMANCE RANGE

- Flow rate up to **800 l/min** (48 m³/h)
- Head up to **160 m**

INSTALLATION AND USE

Designed to transfer clean water free from abrasive particles and liquids that will not damage the pump's components. Their high efficiency and adaptability to a wide variety of applications make them an ideal choice in the domestic, civil, agricultural, and industrial sectors, particularly for water distribution along pressure tanks to increase overall network pressure. Suggested uses include fire-fighting systems, heavy-duty cleaning applications, industrial power washers, and irrigation.

KEY FEATURES

※ **Stainless steel components** extend service life and enhance efficiency.
※ Multi-stage design results in exceptionally quiet operation

ELECTRIC MOTOR

The three-phase pumps are equipped with newly developed electric motors designed to work with inverters, which guarantee stable and quiet operation.

Efficiency class **IE3** for three-phase motors and **IE2** for single-phase motors, with class F insulation and IPX4 protection.

APPLICATION LIMITS

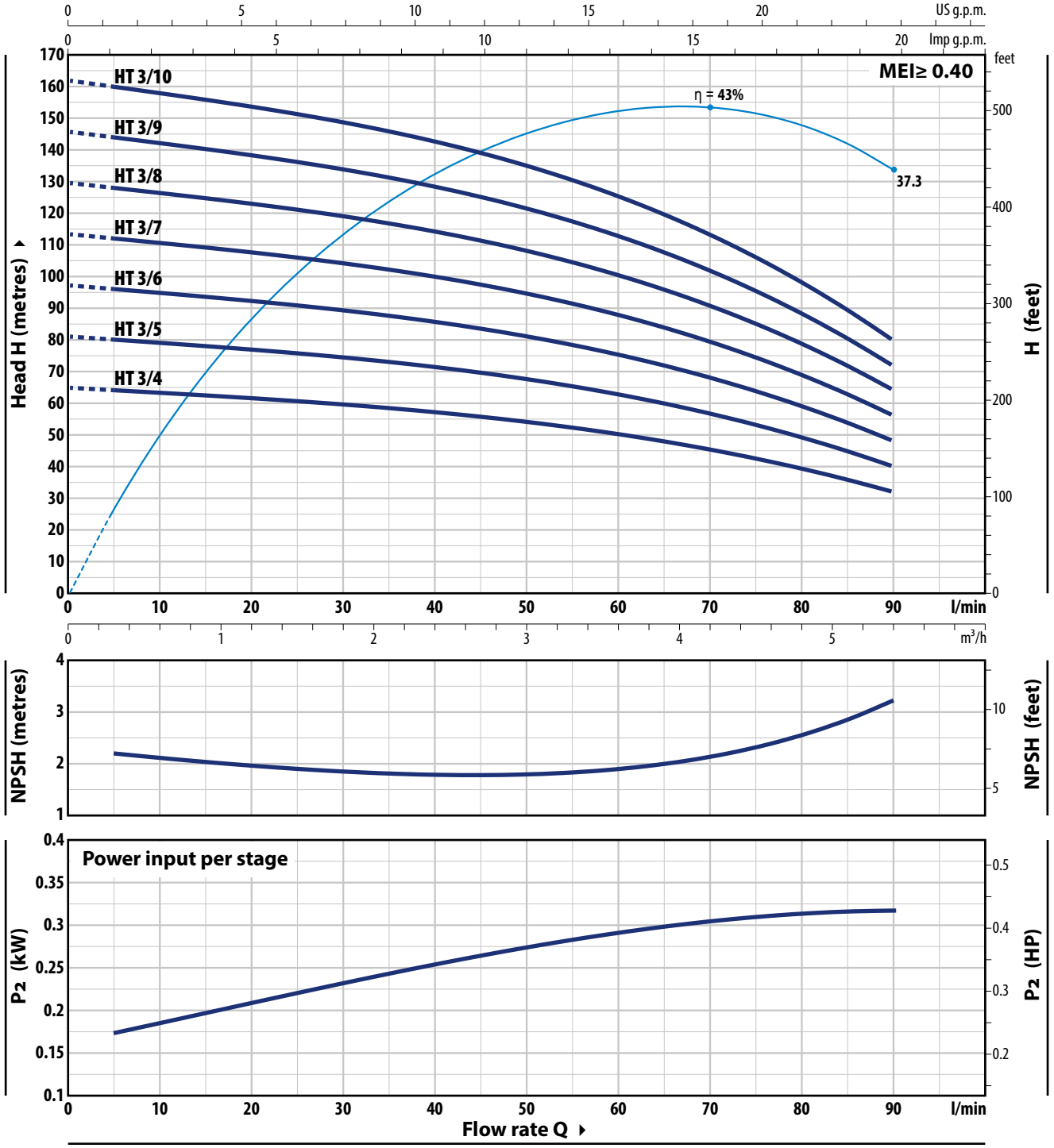
- Manometric suction head up to **7 m**
- Liquid temperature between **-15 °C** and **+90 °C**
- Ambient temperature up to **+40 °C**
- Maximum working pressure **16 bar**

AVAILABLE UPON REQUEST

※ Handling of liquids with higher or lower temperatures.
※ Pump body with NPT threaded ports ANSI B 1.20.1
※ Counter-flange
※ Pump protection kit to prevent dry running
※ O-rings in EPDM or VITON (standard version in NBR)
※ Different voltage requirements 60 Hz frequency

CURVES AND PERFORMANCE DATA – HS=0 m

50 Hz



MODEL		POWER (P2)				Q	m³/h	0	0.3	0.6	1.2	2.4	3.6	4.8	5.4
Single-phase	**Three-phase**	**kW**	**HP**	**1~**	**3~**		l/min	**0**	**5**	**10**	**20**	**40**	**60**	**80**	**90**
HTm 3/4	**HT 3/4**	0.75	1					65	65	63	61.5	57	50	39.5	33
HTm 3/5	**HT 3/5**	1.1	1.5					81	80	79	77	71	63	49.5	41
HTm 3/6	**HT 3/6**	1.5	2					97	96	95	92	86	75	59	48
HTm 3/7	**HT 3/7**	1.8	2.5	**IE2**	**IE3**	**H**	m	113	112	111	108	100	88	69	56
–	**HT 3/8**	2.2	3					130	128	126	123	114	100	79	64
–	**HT 3/9**	3	4					146	144	142	138	129	113	89	72
–	**HT 3/10**	3	4					–	160	158	154	143	126	99	80

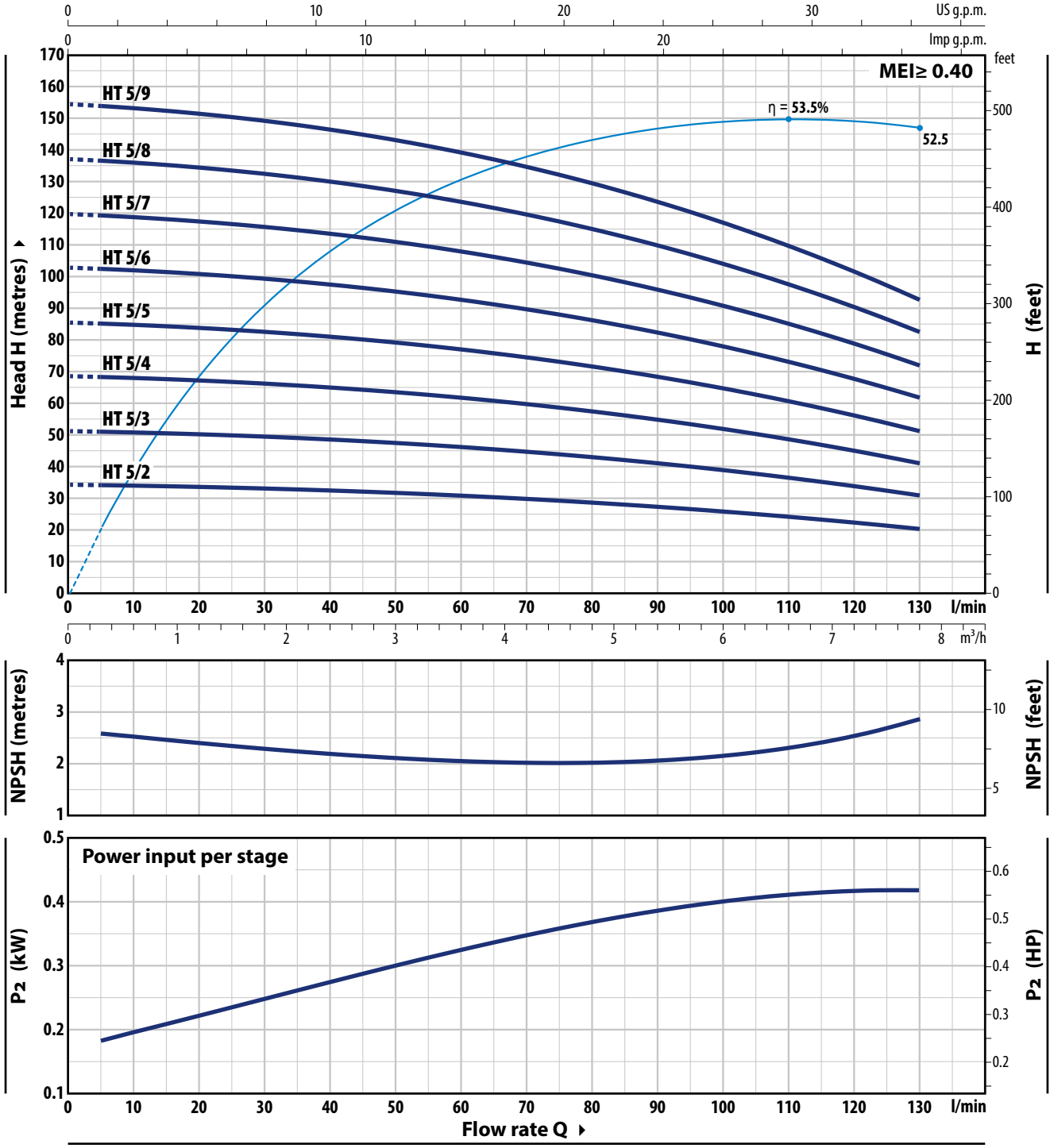
Q = Flow rate **H** = Total manometric head **HS** = Suction height

Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

HT 5

CURVES AND PERFORMANCE DATA – HS=0 m

50 Hz



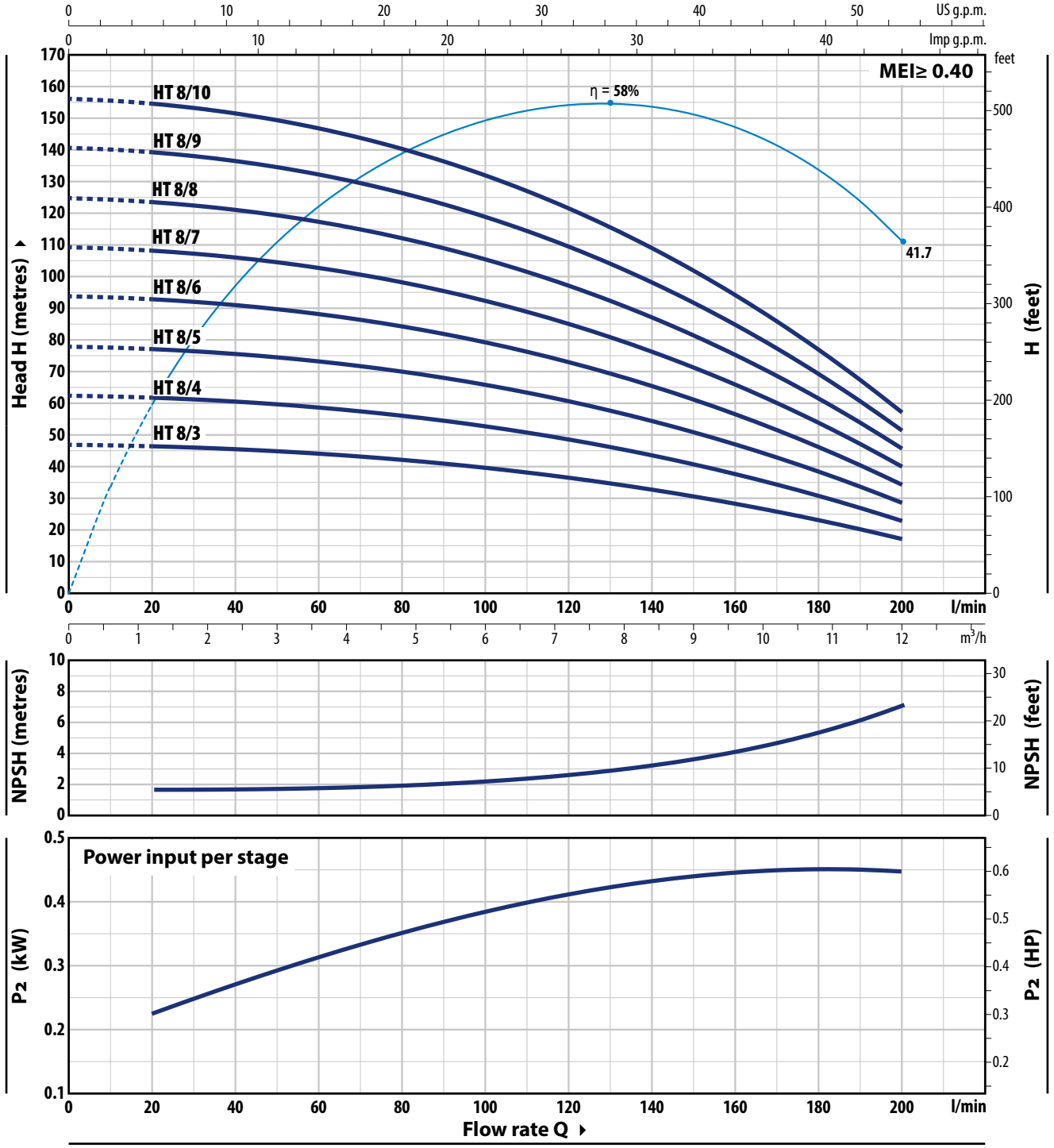
MODEL		POWER (P2)				Q	m³/h	0	0.3	0.6	1.2	2.4	3.6	4.8	5.4	6	7.8
Single-phase	**Three-phase**	**kW**	**HP**	**1~**	**3~**		l/min	**0**	**5**	**10**	**20**	**40**	**60**	**80**	**90**	**100**	**130**
HTm 5/2	**HT 5/2**	0.75	1					35	35	34	33.5	32.5	31	28.5	27.5	26	20.5
HTm 5/3	**HT 5/3**	1.1	1.5					51.5	51.5	51	50.5	49	46.5	43	41	39	31
HTm 5/4	**HT 5/4**	1.5	2					68.5	68.5	68	67	65	62	57.5	55	52	41
HTm 5/5	**HT 5/5**	1.8	2.5	**IE2**	**IE3**	**H**	m	86	85	85	84	81	77	72	68.5	65	51.5
HTm 5/6	**HT 5/6**	2.2	3					103	103	102	101	98	93	86	82	78	62
–	**HT 5/7**	3	4					120	120	119	118	114	108	101	96	91	72
–	**HT 5/8**	3	4					137	137	136	134	130	124	115	110	104	82
–	**HT 5/9**	4	5.5					154	154	153	151	146	139	129	124	117	93

Q = Flow rate **H** = Total manometric head **HS** = Suction height

Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

CURVES AND PERFORMANCE DATA – HS=0 m

50 Hz



MODEL		POWER (P2)				Q	m³/h	0	1.2	2.4	3.6	4.8	6.0	7.2	8.4	9.6	10.8	12.0
Single-phase	**Three-phase**	**kW**	**HP**	**1~**	**3~**		l/min	**0**	**20**	**40**	**60**	**80**	**100**	**120**	**140**	**160**	**180**	**200**
HTm 8/3	**HT 8/3**	1.1	1.5					47	46.5	45.5	44	42	39.5	36.5	32.5	28	23.1	17
HTm 8/4	**HT 8/4**	1.5	2					62.5	62	60.5	58.5	56	53	48.5	43.5	37.5	31	23
HTm 8/5	**HT 8/5**	1.8	2.5					78	77.5	76	73	70	66	61	54.5	47	38.5	28.5
HTm 8/6	**HT 8/6**	2.2	3					94	93	91	88	84	79	73	65.5	56.5	46	34.5
–	**HT 8/7**	3	4	**IE2**	**IE3**	**H**	m	109	108	106	103	98	92	85	76	66	54	40
–	**HT 8/8**	4	5.5					125	124	121	117	112	106	97	87	75	61.5	45.5
–	**HT 8/9**	4	5.5					141	139	136	132	126	119	109	98	85	69	51.5
–	**HT 8/10**	5.5	7.5					156	155	152	147	140	132	122	109	94	77	57

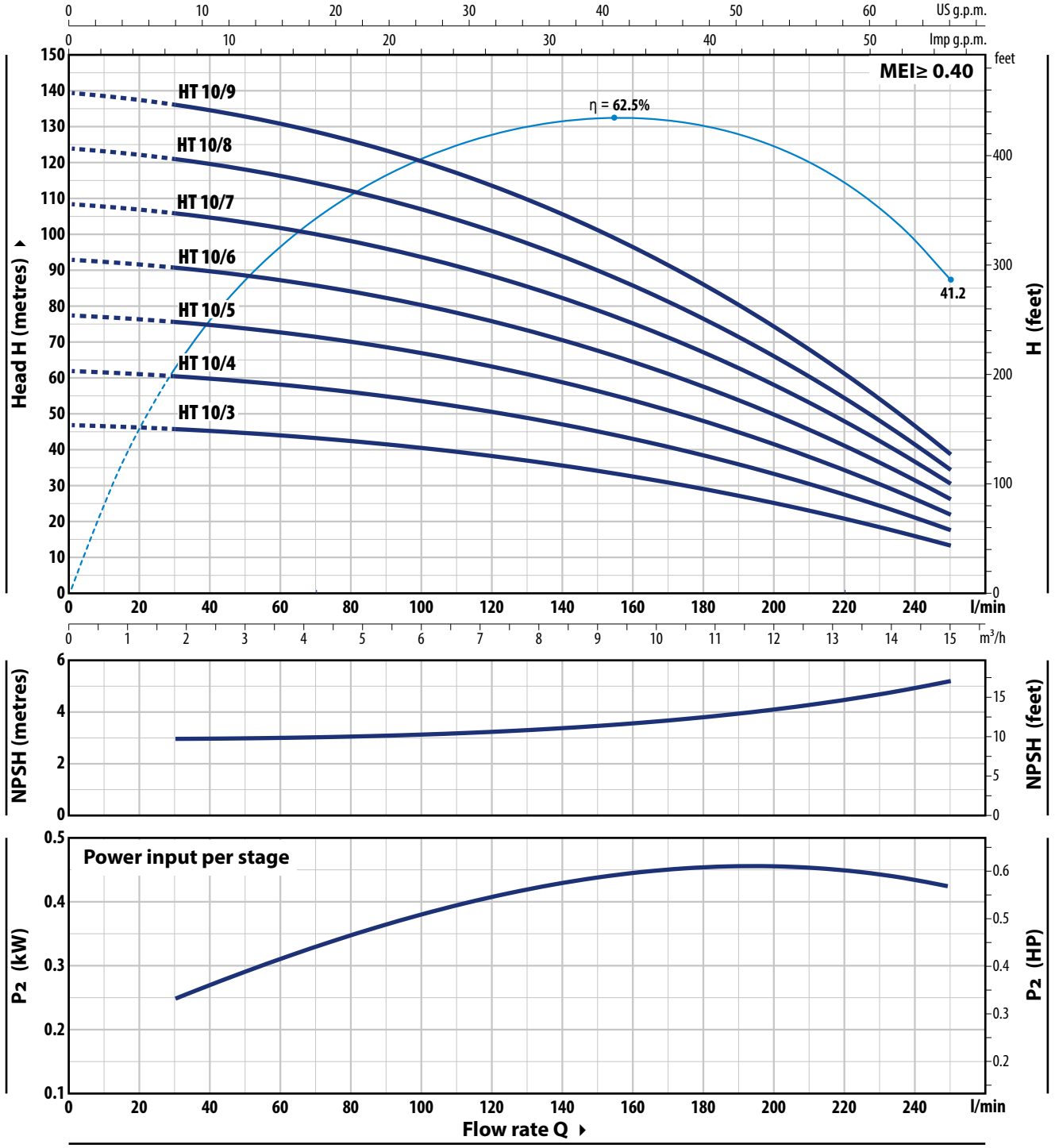
Q = Flow rate **H** = Total manometric head **HS** = Suction height

Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

HT 10

CURVES AND PERFORMANCE DATA – HS=0 m

50 Hz



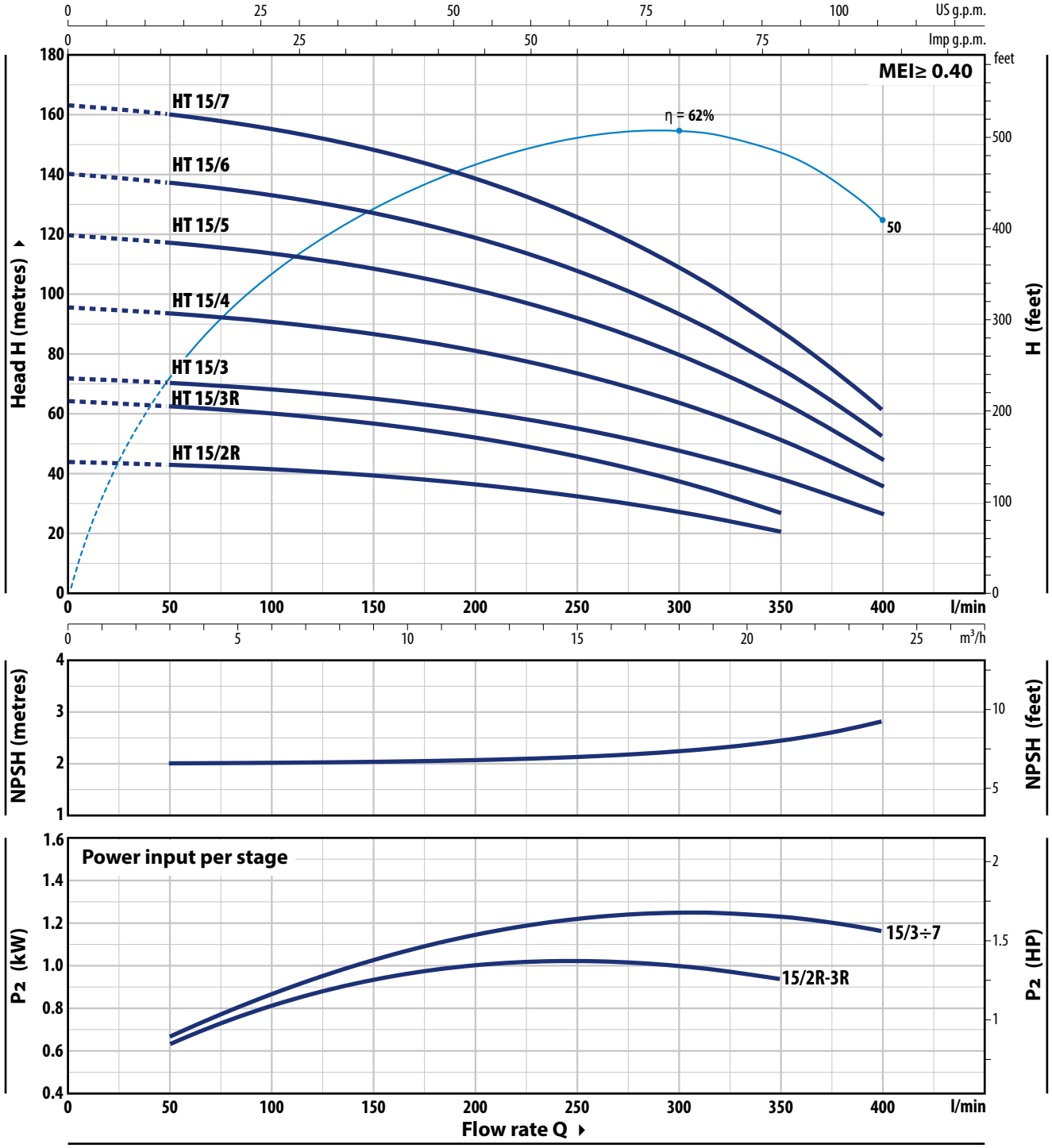
MODEL		POWER (P2)				Q	m³/h	0	1.8	3	3.6	4.8	7.2	9	10.2	12	13.2	15
Single-phase	**Three-phase**	**kW**	**HP**	**1~**	**3~**		l/min	**0**	**30**	**50**	**60**	**80**	**120**	**150**	**170**	**200**	**220**	**250**
HTm 10/3	**HT 10/3**	1.5	2					47	45.5	44	43.5	42	38	33.5	30.5	24.7	20.3	13
HTm 10/4	**HT 10/4**	1.8	2.5					62	61	59	58	56	50.5	45	40.5	33	27	18
HTm 10/5	**HT 10/5**	2.2	3					77	75.5	74	73	70	63	56	50.5	41	34	21.5
–	**HT 10/6**	3	4	**IE2**	**IE3**	**H**	m	93	91	88	87	84	76	67.5	61	49.5	40.5	26
–	**HT 10/7**	3	4					108	106	103	102	98	88	79	71	57.5	47.5	30
–	**HT 10/8**	4	5.5					124	121	118	116	112	101	90	81	66	54.5	34.5
–	**HT 10/9**	4	5.5					139	136	133	131	126	113	101	91	74	61	38.5

Q = Flow rate **H** = Total manometric head **HS** = Suction height

Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

CURVES AND PERFORMANCE DATA – HS=0 m

50 Hz



MODEL	POWER (P2)			Q m³/h	0	3	6	12	18	21	24
Three-phase	kW	HP	3~	l/min	**0**	**50**	**100**	**200**	**300**	**350**	**400**
HT 15/2R	2.2	3			44	43	41.5	36.5	27.5	20.5	
HT 15/3R	3	4			64.5	62.5	60.5	52.0	37.5	27	
HT 15/3	4	5.5			72	70	68.5	61	48	38.5	27
HT 15/4	5.5	7.5	IE3	H m	96	94	91	81	64	51.5	36
HT 15/5	7.5	10			120	117	114	102	80	64.5	45
HT 15/6	9.2	12.5			140	137	133	119	94	75.5	52.5
HT 15/7	9.2	12.5			–	160	155	139	109	88	61.5

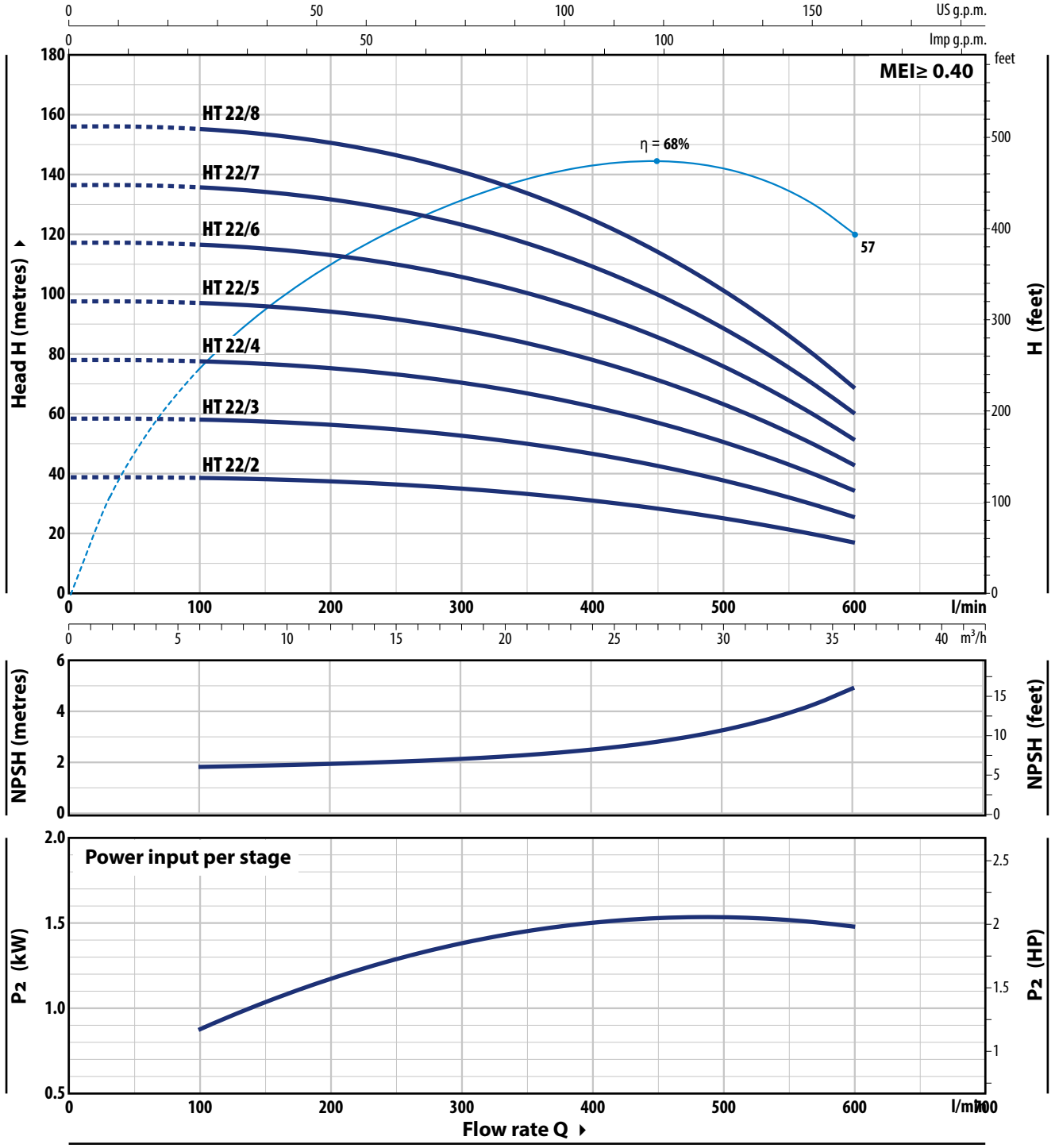
Q = Flow rate **H** = Total manometric head **HS** = Suction height

Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

HT 22

CURVES AND PERFORMANCE DATA – HS=0 m

50 Hz



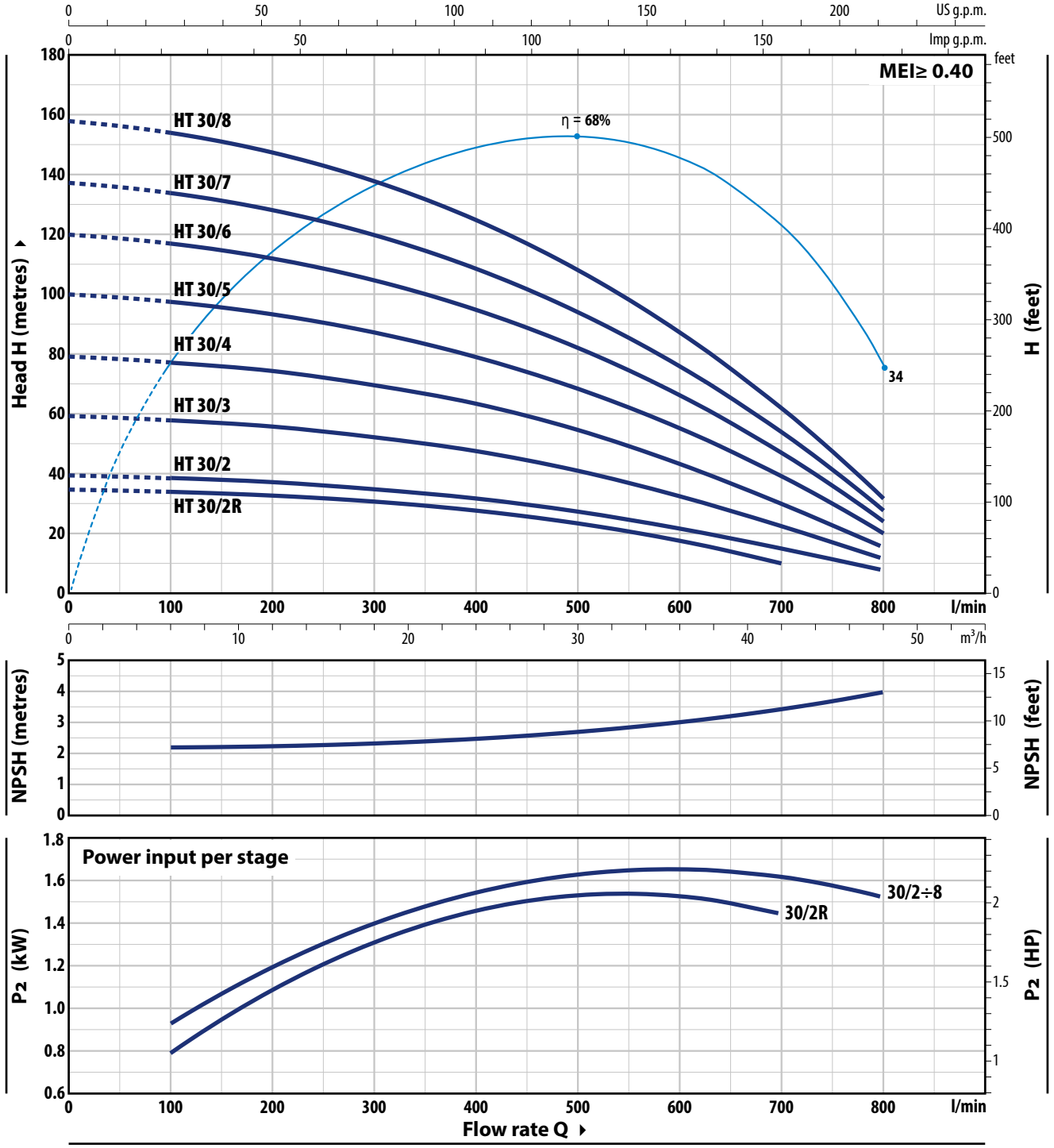
MODEL	POWER (P2)			Q	m³/h	0	6	12	18	21	24	30	36
Three-phase	kW	HP	3~		l/min	**0**	**100**	**200**	**300**	**350**	**400**	**500**	**600**
HT 22/2	3	4				39	39	38	35.5	33.5	31.5	25.4	17.5
HT 22/3	4	5.5				59	58.5	56.5	53	50.5	47	38	26
HT 22/4	5.5	7.5				78	78	76	71	67	62.5	51	34.5
HT 22/5	7.5	10	IE3	H	m	98	97	95	88	84	78	63.5	43
HT 22/6	9.2	12.5				118	117	113	106	101	94	76	52
HT 22/7	11	15				137	136	132	124	118	110	89	60.5
HT 22/8	15	20				157	156	151	142	134	125	102	69

Q = Flow rate **H** = Total manometric head **HS** = Suction height

Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

CURVES AND PERFORMANCE DATA – HS=0 m

50 Hz



MODEL	POWER (P2)			Q m³/h	0	6	12	18	24	36	42	48
Three-phase	kW	HP	3~	l/min	**0**	**100**	**200**	**300**	**400**	**600**	**700**	**800**
HT 30/2R	3	4			35	34	33	31	28	17.6	10	
HT 30/2	4	5.5			40	39	37.5	35	31.5	22	15.7	8
HT 30/3	5.5	7.5			60	58.5	56	52.5	47.5	33	23.5	12
HT 30/4	7.5	10			80	78	75	70	63	44	31.3	16
HT 30/5	9.2	12.5	IE3	H m	100	98	93	87	79	55	39	20
HT 30/6	11	15			120	117	112	105	95	66.5	47	24
HT 30/7	15	20			137	134	128	120	108	76	53.5	27.5
HT 30/8	15	20			158	154	147	138	125	87	62	31.5

Q = Flow rate **H** = Total manometric head **HS** = Suction height

Performance curves comply with EN ISO 9906 Grade 3B tolerance limits.

ABSORPTION

MODEL	VOLTAGE
Single-phase	**230 V**
HTm 3/4	7.5 A
HTm 3/5	9.0 A
HTm 3/6	10.5 A
HTm 3/7	12.5 A
HTm 5/2	6.1 A
HTm 5/3	8.0 A
HTm 5/4	10.3 A
HTm 5/5	12.5 A
HTm 5/6	13.5 A
HTm 8/3	8.7 A
HTm 8/4	10.5 A
HTm 8/5	12.5 A
HTm 8/6	13.8 A
HTm 10/3	9.5 A
HTm 10/4	11.0 A
HTm 10/5	13.5 A

MODEL	VOLTAGE			
Three-phase	**230 V - Δ**	**400 V - Y**	**400 V - Δ**	**690 V - Y**
HT 3/4	5.2 A	3.0 A	–	–
HT 3/5	5.7 A	3.3 A	–	–
HT 3/6	6.9 A	4.0 A	–	–
HT 3/7	8.3 A	4.8 A	–	–
HT 3/8	11.2 A	6.5 A	–	–
HT 3/9	11.8 A	6.8 A	–	–
HT 3/10	13.8 A	8.0 A	–	–
HT 5/2	4.3 A	2.5 A	–	–
HT 5/3	5.2 A	3.0 A	–	–
HT 5/4	6.6 A	3.8 A	–	–
HT 5/5	8.0 A	4.6 A	–	–
HT 5/6	9.0 A	5.2 A	–	–
HT 5/7	11.8 A	6.8 A	–	–
HT 5/8	13.0 A	7.5 A	–	–
HT 5/9	14.7 A	8.5 A	–	–
HT 8/3	5.7 A	3.3 A	–	–
HT 8/4	6.9 A	4.0 A	–	–
HT 8/5	8.3 A	4.8 A	–	–
HT 8/6	9.3 A	5.4 A	–	–
HT 8/7	12.1 A	7.0 A	–	–
HT 8/8	14.7 A	8.5 A	–	–
HT 8/9	17.3 A	10.0 A	–	–
HT 8/10	–	–	11.0 A	6.4 A
HT 10/3	5.9 A	3.4 A	–	–
HT 10/4	7.8 A	4.5 A	–	–
HT 10/5	9.0 A	5.2 A	–	–
HT 10/6	11.2 A	6.5 A	–	–
HT 10/7	12.5 A	7.2 A	–	–
HT 10/8	14.4 A	8.3 A	–	–
HT 10/9	15.6 A	9.0 A	–	–
HT 15/2R	10.4 A	6.0 A	–	–
HT 15/3R	12.5 A	7.2 A	–	–
HT 15/3	15.2 A	8.8 A	–	–
HT 15/4	–	–	11.2 A	6.5 A
HT 15/5	–	–	14.2 A	8.2 A
HT 15/6	–	–	15.0 A	8.7 A
HT 15/7	–	–	16.5 A	9.5 A
HT 22/2	12.4 A	7.2 A	–	–
HT 22/3	17.0 A	9.8 A	–	–
HT 22/4	–	–	12.8 A	7.4 A
HT 22/5	–	–	16.0 A	9.2 A
HT 22/6	–	–	17.7 A	10.2 A
HT 22/7	–	–	19.7 A	11.4 A
HT 22/8	–	–	22.6 A	13.1 A
HT 30/2R	12.0 A	7.0 A	–	–
HT 30/2	15.2 A	8.8 A	–	–
HT 30/3	–	–	11.2 A	6.5 A
HT 30/4	–	–	14.1 A	8.2 A
HT 30/5	–	–	16.5 A	9.5 A
HT 30/6	–	–	19.0 A	11.0 A
HT 30/7	–	–	22.0 A	12.7 A
HT 30/8	–	–	24.5 A	14.2 A

PALLET CAPACITY

MODEL	NO. OF PUMPS
Single-phase	n. of pumps
HTm 3/4	12
HTm 3/5	12
HTm 3/6	12
HTm 3/7	12
HTm 5/2	12
HTm 5/3	12
HTm 5/4	12
HTm 5/5	12
HTm 5/6	12
HTm 8/3	12
HTm 8/4	12
HTm 8/5	12
HTm 8/6	12
HTm 10/3	12
HTm 10/4	12
HTm 10/5	12

MODEL	NO. OF PUMPS
Three-phase	n. of pumps
HT 3/4	12
HT 3/5	12
HT 3/6	12
HT 3/7	12
HT 3/8	6
HT 3/9	6
HT 3/10	6
HT 5/2	12
HT 5/3	12
HT 5/4	12
HT 5/5	12
HT 5/6	12
HT 5/7	6
HT 5/8	6
HT 5/9	6
HT 8/3	12
HT 8/4	12
HT 8/5	12
HT 8/6	12
HT 8/7	6
HT 8/8	6
HT 8/9	6
HT 8/10	6
HT 10/3	12
HT 10/4	12
HT 10/5	12
HT 10/6	12
HT 10/7	6
HT 10/8	6
HT 10/9	6
HT 15/2R	6
HT 15/3R	6
HT 15/3	6
HT 15/4	6
HT 15/5	6
HT 15/6	2
HT 15/7	2
HT 22/2	6
HT 22/3	6
HT 22/4	6
HT 22/5	6
HT 22/6	2
HT 22/7	2
HT 22/8	2
HT 30/2R	6
HT 30/2	6
HT 30/3	6
HT 30/4	6
HT 30/5	2
HT 30/6	2
HT 30/7	2
HT 30/8	2

MATERIALS AND COMPONENTS

1	**Pump body**	Cast iron JL250 with cataphoresis treatment, fitted with flanged and threaded ISO 228/1 ports
2	**Cover**	Cast iron JL250 with cataphoresis treatment
3	**External sleeve**	Stainless steel **AISI 304**
4	**Impellers**	Stainless steel **AISI 304**
5	**Diffusers**	Stainless steel **AISI 304**

6 Mechanical seal

Water pump	Seal	Shaft	Materials
HT 3 - 5 - 8 - 10	**FN-18**	Ø 18 mm	Graphite / Ceramic / NBR
HT 15 - 22 - 30	**FN-KU-24** ISO 3069 EN 12756	Ø 24 mm	Graphite / Ceramic / NBR

7	**Shaft**	Stainless steel **AISI 431**

8 Electric motor

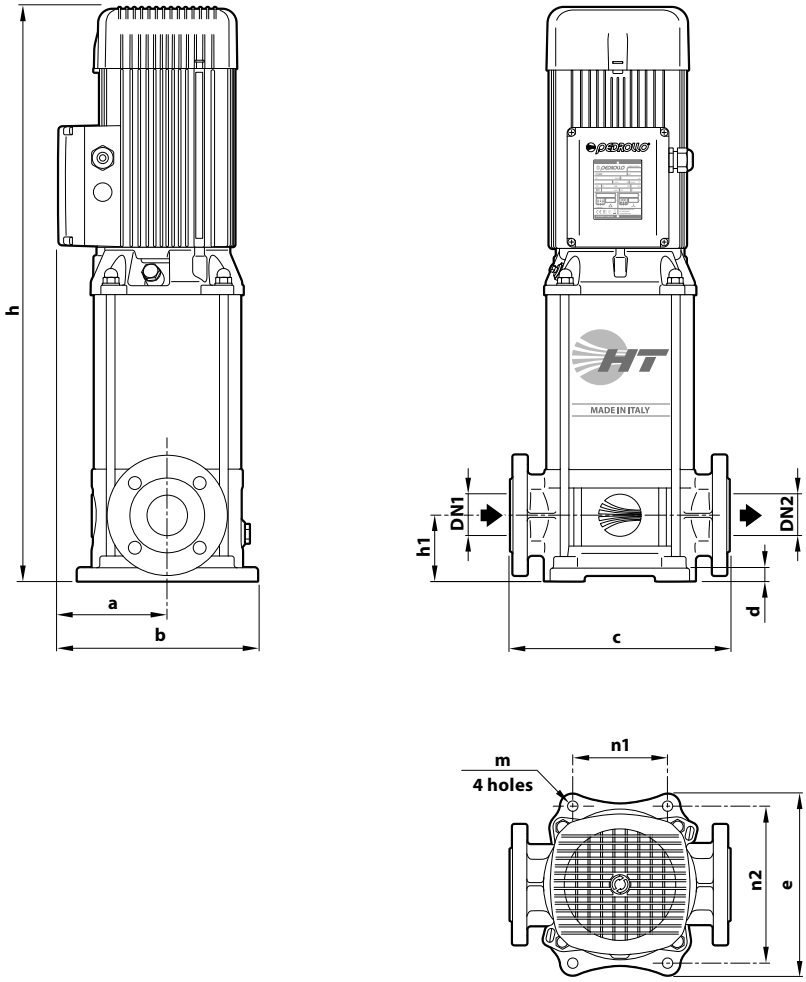
- **HTm**: single-phase 230 V - 50 Hz with capacitor and winding integrated thermal motor protection
- **HT**: three-phase
  230/400 V - 50 Hz up to 4 kW
  400/690 V - 50 Hz 5.5 to 15 kW

※ Pumps are equipped with high-efficiency motors (IEC 60034-30-1)
class **IE2** for single-phase models
class **IE3** for three-phase models

Continuous running duty **S1**

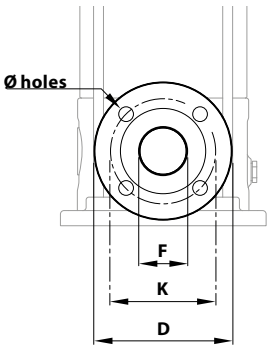


DIMENSIONS AND WEIGHT



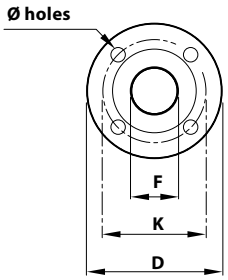
FLANGES

MODEL	DN mm	F mm	D mm	K mm	HOLES N°	HOLES Ø mm
HT 3	**25**	1"	115	85	4	14
HT 5	**32**	1¼"	140	100	4	18
HT 8	**40**	1½"	150	110	4	18
HT 10					4	18
HT 15	**50**	2"	165	125	4	18
HT 22					4	18
HT 30	**65**	2½"	185	145	8	18



COUNTER-FLANGE

MODEL	DN mm	F mm	D mm	K mm	HOLES N°	HOLES Ø mm
HT 3	**25**	1"	115	85	4	14
HT 5	**32**	1¼"	140	100	4	18
HT 8	**40**	1½"	150	110	4	18
HT 10					4	18
HT 15	**50**	2"	165	125	4	18
HT 22					4	18
HT 30	**65**	2½"	185	145	8	18



DIMENSIONS AND WEIGHT

MODEL		PORTS		N°	DIMENSIONS mm										kg	
Single-phase	**Three-phase**	**DN1**	**DN2**	STAGES	a	b	c	d	e	h	h1	n1	n2	m	1~	3~
HTm 3/4	**HT 3/4**			4						509					33.5	33.5
HTm 3/5	**HT 3/5**			5	126	231				535					33.7	33.7
HTm 3/6	**HT 3/6**			6						561					35.0	35.0
HTm 3/7	**HT 3/7**	**1"**	**1"**	7			250	15	210	607	75	100	180	Ø 13	39.9	39.9
–	**HT 3/8**			8						685					–	47.2
–	**HT 3/9**			9	151	257				711					–	48.2
–	**HT 3/10**			10						737					–	49.1
HTm 5/2	**HT 5/2**			2						457					33.0	33.0
HTm 5/3	**HT 5/3**			3						483					33.2	33.2
HTm 5/4	**HT 5/4**			4	126	231				509					35.2	35.2
HTm 5/5	**HT 5/5**			5						555					37.5	37.5
HTm 5/6	**HT 5/6**	**1¼"**	**1¼"**	6			250	15	210	581	75	100	180	Ø 13	38.5	38.5
–	**HT 5/7**			7						659					–	47.3
–	**HT 5/8**			8	151	257				685					–	48.3
–	**HT 5/9**			9						711					–	52.5
HTm 8/3	**HT 8/3**			3						488					34.6	34.6
HTm 8/4	**HT 8/4**			4	126	231				514					36.6	36.6
HTm 8/5	**HT 8/5**			5						560					40.1	40.1
HTm 8/6	**HT 8/6**			6						586					40.9	40.9
–	**HT 8/7**	**1½"**	**1½"**	7			280	15	210	664	80	100	180	Ø 13	–	48.6
–	**HT 8/8**			8	151	257				690					–	52.7
–	**HT 8/9**			9						716					–	53.7
–	**HT 8/10**			10						742					–	58.7
HTm 10/3	**HT 10/3**			3						488					34.7	34.7
HTm 10/4	**HT 10/4**			4	126	231				534					36.7	36.7
HTm 10/5	**HT 10/5**			5						560					40.2	40.2
–	**HT 10/6**	**1½"**	**1½"**	6			280	15	210	638	80	100	180	Ø 13	–	48.5
–	**HT 10/7**			7	151	257				664					–	48.7
–	**HT 10/8**			8						690					–	52.8
–	**HT 10/9**			9						716					–	53.8
–	**HT 15/2R**			2						589					–	53.0
–	**HT 15/3R**			3						633					–	53.5
–	**HT 15/3**			3	151	275				633					–	58.0
–	**HT 15/4**	**2"**	**2"**	4			300	18	247	677	90	130	215	Ø 14	–	64.0
–	**HT 15/5**			5						771					–	72.0
–	**HT 15/6**			6	181	305				900					–	116.5
–	**HT 15/7**			7						944					–	117.0
–	**HT 22/2**			2						589					–	53.0
–	**HT 22/3**			3	151	275				633					–	58.0
–	**HT 22/4**			4						677					–	64.0
–	**HT 22/5**	**2"**	**2"**	5			300	18	247	771	80	100	180	Ø 14	–	72.0
–	**HT 22/6**			6	181	305				900					–	116.5
–	**HT 22/7**			7						944					–	117.5
–	**HT 22/8**			8						988					–	132.0
–	**HT 30/2R**			2						604					–	55.0
–	**HT 30/2**			2	151	275				604					–	58.0
–	**HT 30/3**			3						648					–	63.0
–	**HT 30/4**	**2½"**	**2½"**	4			320	18	247	742	105	130	215	Ø 14	–	71.5
–	**HT 30/5**			5	181	305				871					–	125.0
–	**HT 30/6**			6						915					–	125.5
–	**HT 30/7**			7						959					–	138.0
–	**HT 30/8**			8						1003					–	138.5