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

APPLICATION LIMITS

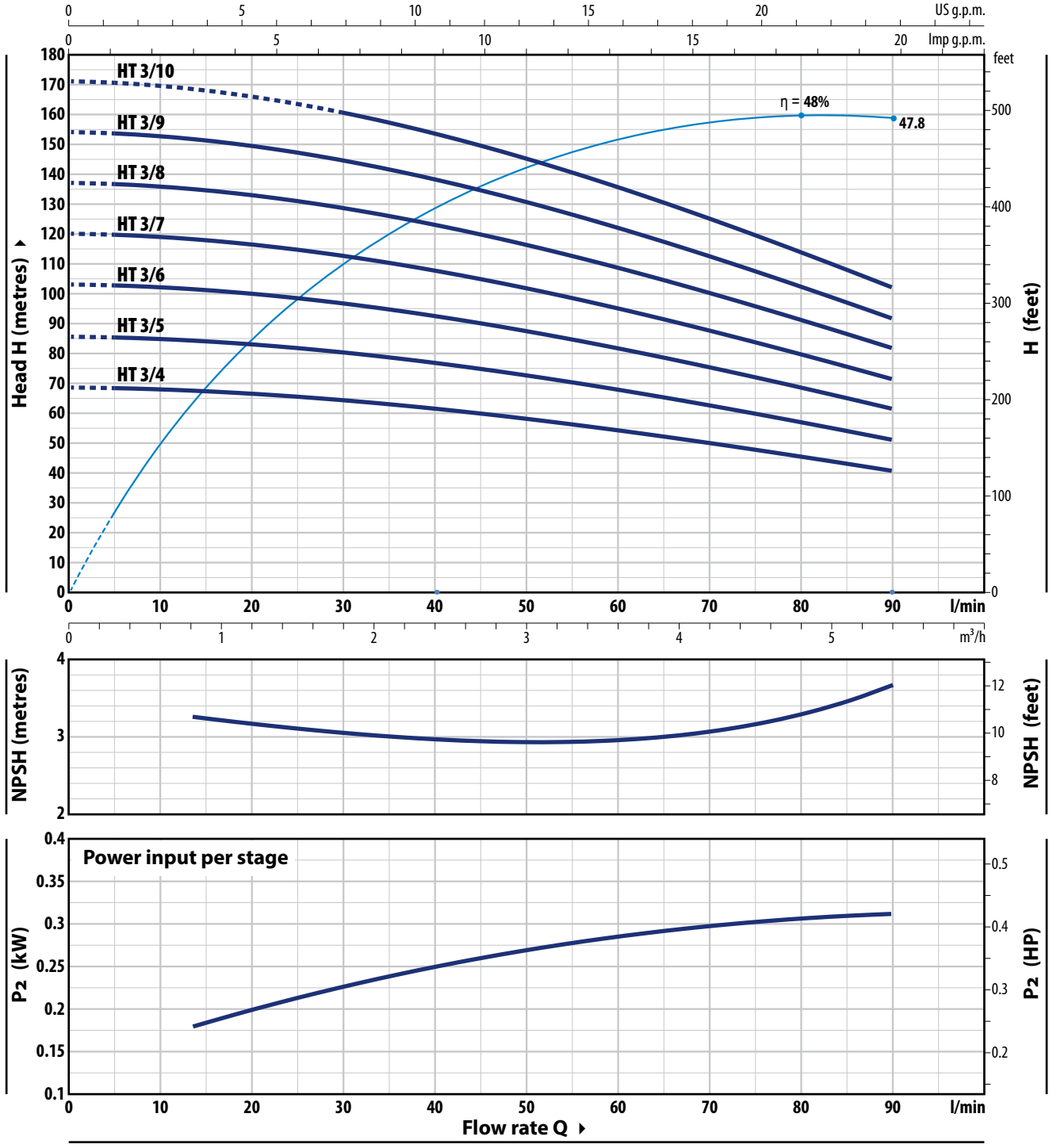
- Manometric suction head up to **7 m**
- Liquid temperature between **-15 °C** and **+90 °C**
- Ambient temperature up to **+40 °C**
- Maximum working pressure **16 bar**

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 or frequency

CURVES AND PERFORMANCE DATA – HS=0 m

60 Hz



TYPE		POWER (P2)			Q	m³/h	0	0.3	0.6	1.2	1.8	2.4	3.6	5.4
Single-phase	**Three-phase**	**kW**	**HP**	**3~**		l/min	**0**	**5**	**10**	**20**	**30**	**40**	**60**	**90**
HTm 3/4	**HT 3/4**	0.75	1				68.5	68.5	68	66.5	65	61.5	54.5	41
HTm 3/5	**HT 3/5**	1.1	1.5				86	86	85	83	80	77	68	51
HTm 3/6	**HT 3/6**	1.5	2				103	103	102	100	96	92	82	61.5
HTm 3/7	**HT 3/7**	1.8	2.5	**IE3**	**H**	m	120	120	119	116	112	108	95	72
HTm 3/8	**HT 3/8**	2.2	3				137	137	136	133	128	123	109	82
HTm 3/9	**HT 3/9**	3	4				154	154	153	150	145	138	122	92
HTm 3/10	**HT 3/10**	3	4				–	–	–	–	160	154	136	102

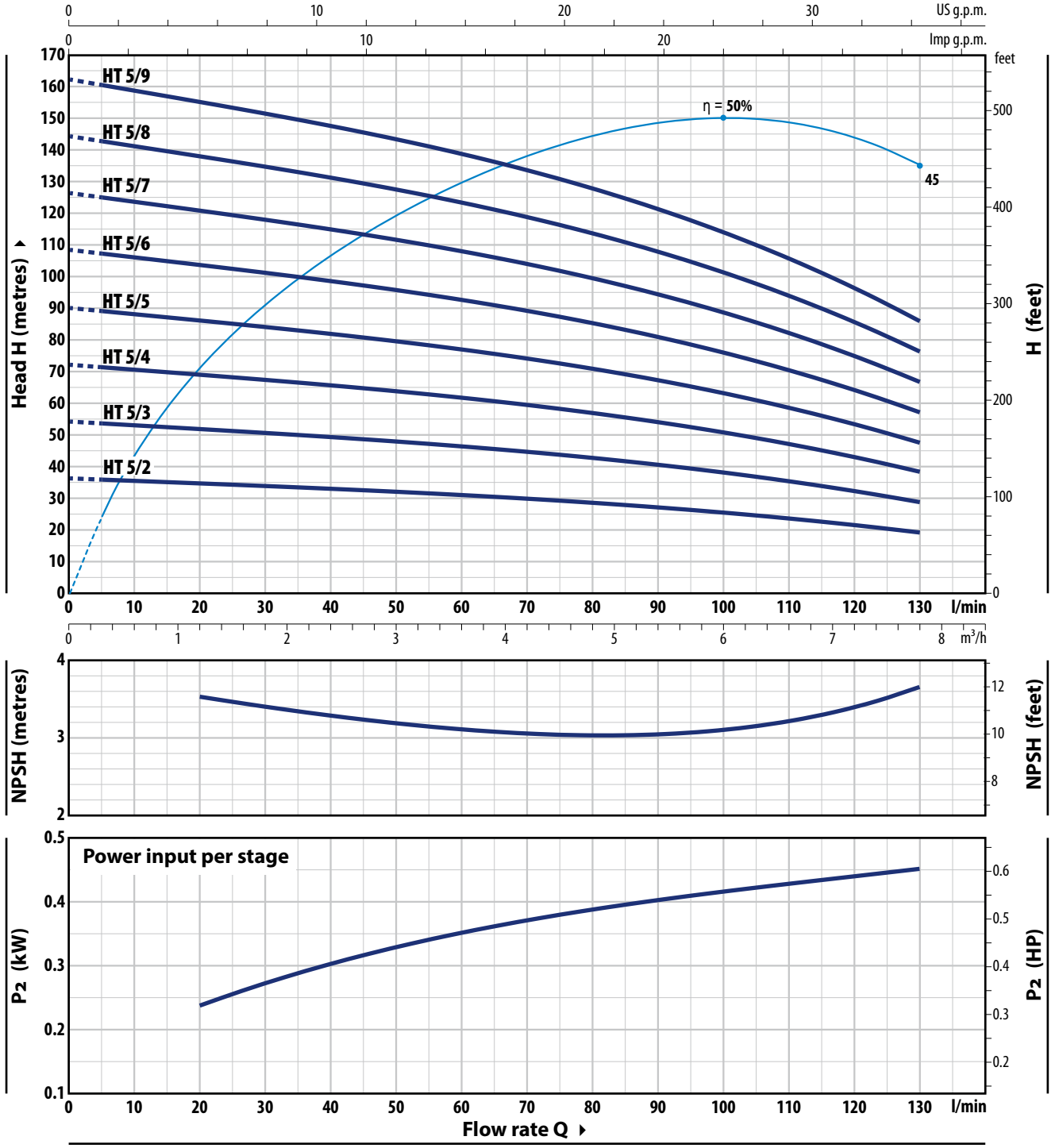
Q = Flow rate **H** = Total manometric head **HS** = Suction height

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

HT 5

CURVES AND PERFORMANCE DATA – HS=0 m

60 Hz



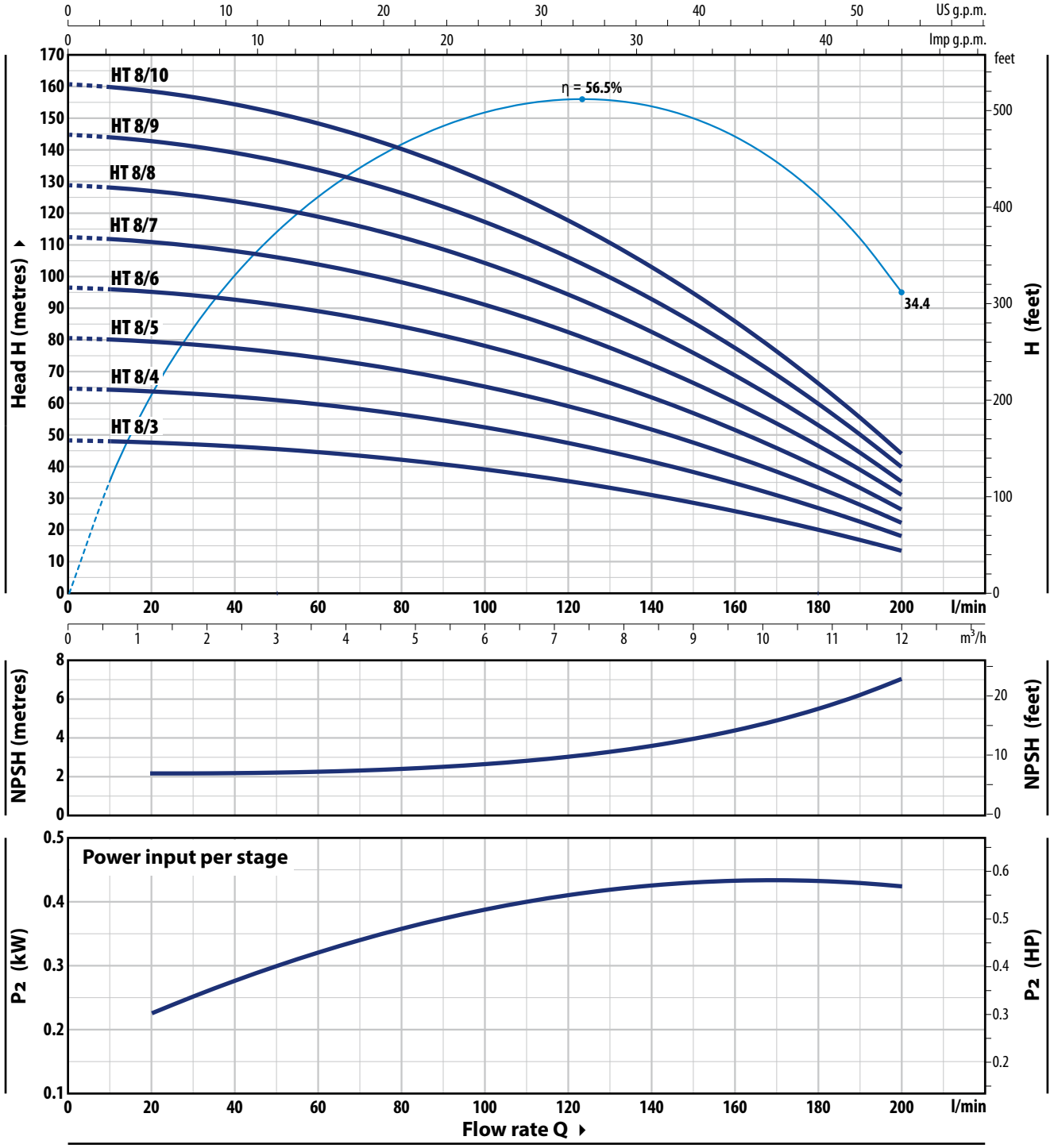
TYPE		POWER (P2)			Q	m³/h	0	0.3	0.6	1.2	2.4	3.6	4.8	5.4	6	7.8
Single-phase	Three-phase	kW	HP	3~		l/min	**0**	**5**	**10**	**20**	**40**	**60**	**80**	**90**	**100**	**130**
HTm 5/2	**HT 5/2**	0.75	1				36	35.5	35.5	34.5	33	31	28.5	27	25.3	19
HTm 5/3	**HT 5/3**	1.1	1.5				54	53.5	53	51.5	49	46.5	42.5	40.5	38	28.5
HTm 5/4	**HT 5/4**	1.5	2				72	71	71	69	65.5	61.5	57	54	50.5	38
HTm 5/5	**HT 5/5**	1.8	2.5	**IE3**	**H**	m	90	89	88	86	82	77	71	67.5	63.5	47.5
HTm 5/6	**HT 5/6**	2.2	3				108	107	106	103	98	93	85	81	76	57
HTm 5/7	**HT 5/7**	3	4				126	125	124	121	115	108	99	94	89	66.5
HTm 5/8	**HT 5/8**	3	4				144	143	141	138	131	123	114	108	101	76
HTm 5/9	**HT 5/9**	4	5.5				162	161	159	155	148	139	128	121	114	86

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

60 Hz



TYPE		POWER (P2)			Q m³/h	0	1.2	2.4	3.6	6.0	8.4	10.8	12.0
Single-phase	**Three-phase**	**kW**	**HP**	**3~**	Q l/min	**0**	**20**	**40**	**60**	**100**	**140**	**180**	**200**
HTm 8/3	**HT 8/3**	1.1	1.5			48.5	48	46.5	45	39.5	31	20.1	13.5
HTm 8/4	**HT 8/4**	1.5	2			64.5	64	62	59.5	52.5	41.5	26.8	18
HTm 8/5	**HT 8/5**	1.8	2.5			81	80	78	75	65.5	52	33.5	22.5
HTm 8/6	**HT 8/6**	2.2	3			97	95	93	89	78	62	40	27
HTm 8/7	**HT 8/7**	3	4	**IE3**	**H** m	113	111	108	104	91	72	47	31.5
HTm 8/8	**HT 8/8**	4	5.5			129	127	124	119	104	83	53.5	35.5
HTm 8/9	**HT 8/9**	4	5.5			145	143	139	134	117	93	60	40
–	**HT 8/10**	5.5	7.5			161	159	155	149	131	103	67	44.5

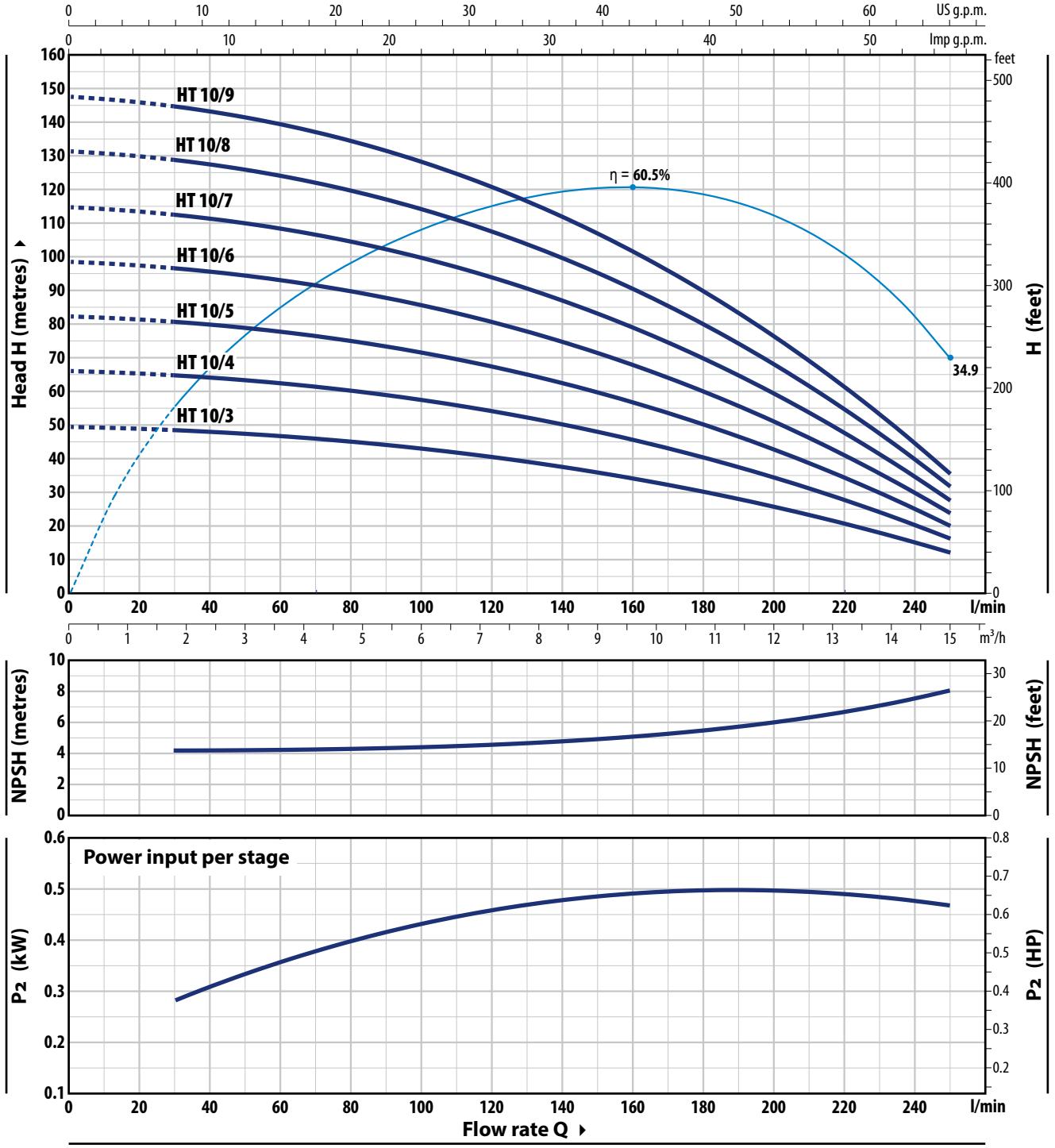
Q = Flow rate **H** = Total manometric head **HS** = Suction height

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

HT 10

CURVES AND PERFORMANCE DATA – HS=0 m

60 Hz



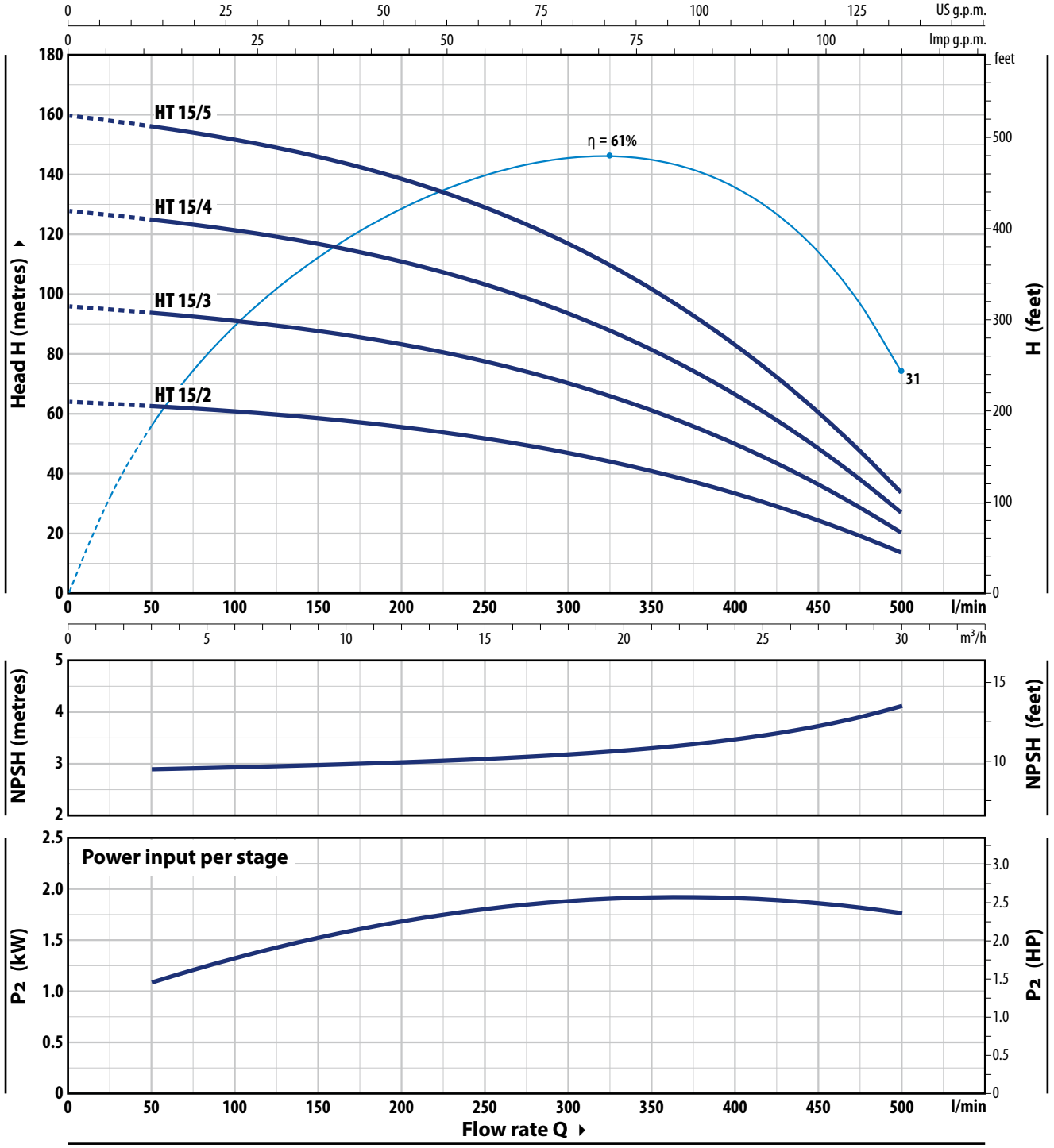
TYPE		POWER (P2)			Q											
					m³/h	0	1.8	3	4.2	5.4	6.6	7.8	9	10.8	13.2	15
Single-phase	**Three-phase**	**kW**	**HP**	**3~**	l/min	**0**	**30**	**50**	**70**	**90**	**110**	**130**	**150**	**180**	**220**	**250**
HTm 10/3	**HT 10/3**	1.5	2			49.5	48.5	47.5	46	44	42	39	36	30	20.6	12
HTm 10/4	**HT 10/4**	1.8	2.5			66	64.5	63	61.5	59	55.5	52	48	40	27.5	16
HTm 10/5	**HT 10/5**	2.2	3			82	81	79	77	73	69.5	65	59.5	50	34.5	20
HTm 10/6	**HT 10/6**	3	4	**IE3**	**H** m	99	97	94	92	88	83	78	71	60	41	24
HTm 10/7	**HT 10/7**	3	4			115	113	110	107	102	97	91	83	70	48	28
HTm 10/8	**HT 10/8**	4	5.5			131	129	126	122	117	111	104	95	80	54.5	32
HTm 10/9	**HT 10/9**	4	5.5			148	145	142	137	132	125	117	107	90	61.5	36

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

60 Hz



TYPE	POWER (P2)			Q m³/h	0	3	6	12	18	24	30
Three-phase	kW	HP	3~	l/min	**0**	**50**	**100**	**200**	**300**	**400**	**500**
HT 15/2	4	5.5			64	62.5	60.5	55.5	47	33	13.5
HT 15/3	5.5	7.5			96	94	91	83	70	50	20
HT 15/4	7.5	10	**IE3**	**H** m	128	125	121	111	94	66.5	27
HT 15/5	9.2	12.5			160	156	152	139	117	83	33.5

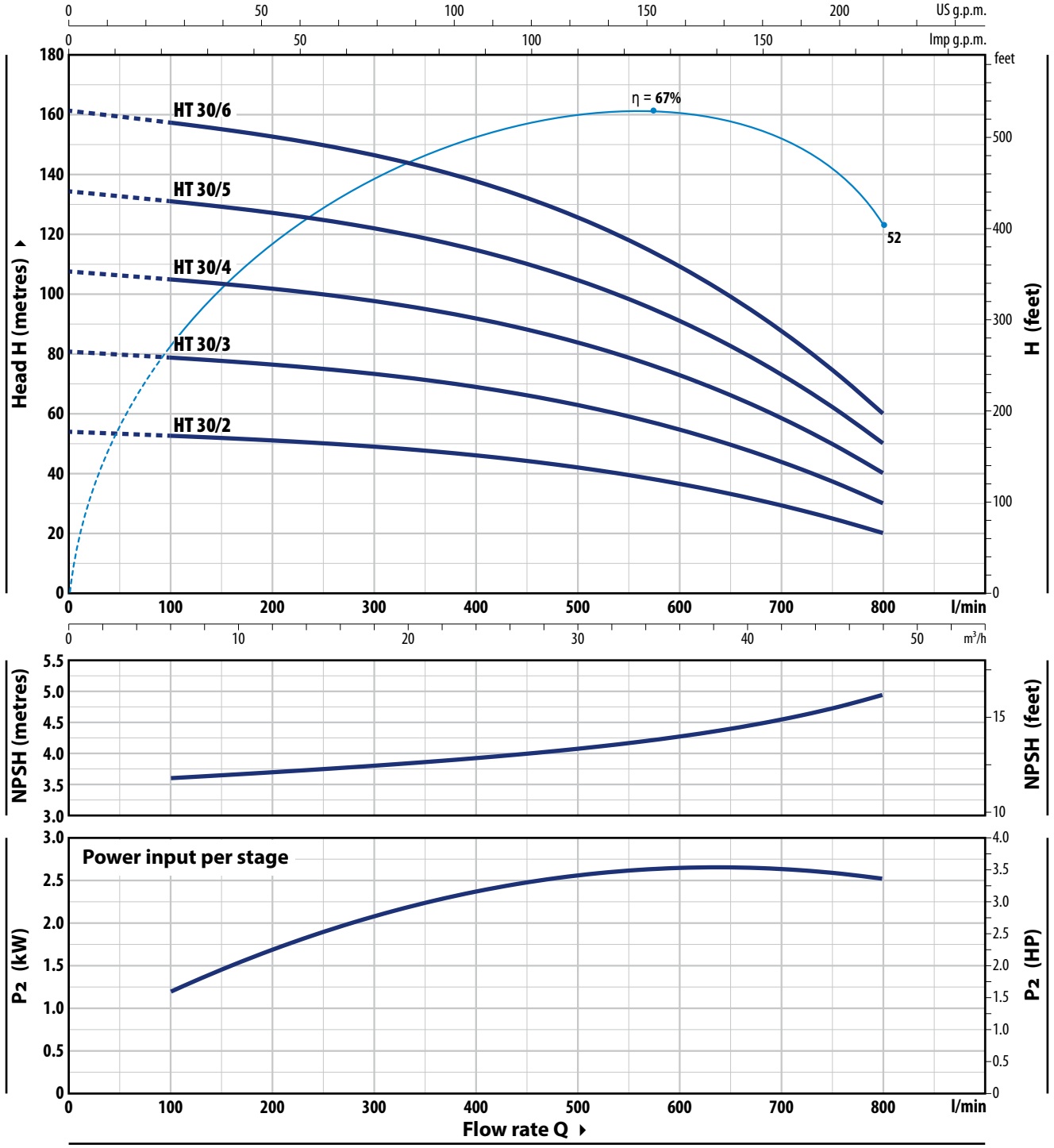
Q = Flow rate **H** = Total manometric head **HS** = Suction height

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

HT 30

CURVES AND PERFORMANCE DATA – HS=0 m

60 Hz



TYPE	POWER (P2)			Q m³/h	0	6	12	18	24	30	36	48
Three-phase	kW	HP	3~	l/min	**0**	**100**	**200**	**300**	**400**	**500**	**600**	**800**
HT 30/2	5.5	7.5			54	52.5	51	49	46	42	36.5	20
HT 30/3	7.5	10			81	79	76	73	69	63	54.5	30
HT 30/4	11	15	**IE3**	**H** m	108	105	102	98	92	84	73	40
HT 30/5	15	20			134	131	127	122	115	105	91	50
HT 30/6	15	20			161	157	153	146	138	126	109	60

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

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

ABSORPTION

TYPE	VOLTAGE
Single-ph.	220 V
HTm 3/4	7.5 A
HTm 3/5	9.5 A
HTm 3/6	10.5 A
HTm 3/7	13.0 A
HTm 3/8	19.0 A
HTm 3/9	20.0 A
HTm 3/10	21.0 A
HTm 5/2	5.5 A
HTm 5/3	7.5 A
HTm 5/4	10.0 A
HTm 5/5	11.8 A
HTm 5/6	13.5 A
HTm 5/7	20.0 A
HTm 5/8	21.0 A
HTm 5/9	24.0 A
HTm 8/3	8.0 A
HTm 8/4	10.5 A
HTm 8/5	12.5 A
HTm 8/6	15.2 A
HTm 8/7	21.0 A
HTm 8/8	23.5 A
HTm 8/9	25.0 A
HTm 10/3	10.5 A
HTm 10/4	12.5 A
HTm 10/5	15.2 A
HTm 10/6	20.0 A
HTm 10/7	21.0 A
HTm 10/8	23.5 A
HTm 10/9	25.0 A

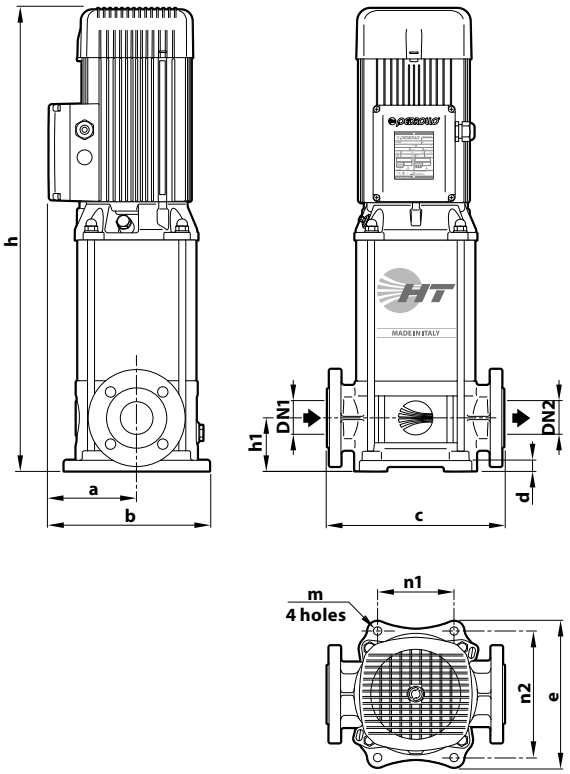
TYPE	VOLTAGE			
Three-phase	220 V - Δ	380 V - Y	220 V - Δ	440 V - Y
HT 3/4	6.1 A	3.5 A	5.2 A	3.0 A
HT 3/5	6.9 A	4.0 A	6.0 A	3.5 A
HT 3/6	7.6 A	4.4 A	6.6 A	3.8 A
HT 3/7	9.0 A	5.2 A	7.9 A	4.6 A
HT 3/8	11.9 A	6.9 A	12.0 A	7.2 A
HT 3/9	12.7 A	7.4 A	12.2 A	7.6 A
HT 3/10	13.4 A	7.7 A	12.4 A	7.8 A
HT 5/2	5.7 A	3.3 A	4.9 A	2.9 A
HT 5/3	6.6 A	3.8 A	5.7 A	3.3 A
HT 5/4	6.9 A	4.0 A	6.4 A	3.7 A
HT 5/5	9.2 A	5.3 A	7.9 A	4.6 A
HT 5/6	10.0 A	5.8 A	8.7 A	5.0 A
HT 5/7	12.7 A	7.4 A	12.2 A	7.6 A
HT 5/8	14.0 A	8.1 A	13.0 A	8.2 A
HT 5/9	17.3 A	10.0 A	15.5 A	10.6 A
HT 8/3	6.6 A	3.8 A	5.7 A	3.3 A
HT 8/4	7.8 A	4.5 A	6.7 A	3.9 A
HT 8/5	9.0 A	5.2 A	8.2 A	4.8 A
HT 8/6	9.5 A	5.5 A	9.0 A	5.2 A
HT 8/7	14.0 A	8.1 A	13.0 A	8.2 A
HT 8/8	14.7 A	8.5 A	15.0 A	10.5 A
HT 8/9	16.0 A	9.3 A	16.0 A	11.0 A
HT 8/10	18.6 A	10.8 A	17.0 A	11.5 A
HT 10/3	7.8 A	4.5 A	6.7 A	3.9 A
HT 10/4	9.0 A	5.2 A	8.2 A	4.8 A
HT 10/5	9.5 A	5.5 A	9.0 A	5.2 A
HT 10/6	13.4 A	7.7 A	12.4 A	7.8 A
HT 10/7	14.0 A	8.1 A	13.0 A	8.2 A
HT 10/8	16.6 A	9.6 A	15.0 A	10.5 A
HT 10/9	17.6 A	10.2 A	16.0 A	11.0 A
HT 15/2	19.0 A	11.0 A	16.0 A	10.5 A
HT 15/3	24.2 A	14.0 A	21.0 A	13.2 A
HT 15/4	31.0 A	18.0 A	28.0 A	17.5 A
HT 15/5	34.5 A	20.0 A	34.0 A	20.0 A
HT 30/2	23.7 A	13.7 A	20.9 A	13.0 A
HT 30/3	31.5 A	18.2 A	29.0 A	18.5 A
HT 30/4	37.2 A	21.5 A	32.8 A	20.5 A
HT 30/5	45.5 A	26.3 A	42.5 A	23.5 A
HT 30/6	52.2 A	30.2 A	46.0 A	28.8 A

PALLET CAPACITY

TYPE		GROUPAGE	CONTAINER
Single-phase	Three-phase	n. pumps	n. pumps
HTm 3/4	HT 3/4	12	18
HTm 3/5	HT 3/5	12	18
HTm 3/6	HT 3/6	12	18
HTm 3/7	HT 3/7	12	18
HTm 3/8	HT 3/8	6	9
HTm 3/9	HT 3/9	6	9
HTm 3/10	HT 3/10	6	9
HTm 5/2	HT 5/2	12	18
HTm 5/3	HT 5/3	12	18
HTm 5/4	HT 5/4	12	18
HTm 5/5	HT 5/5	12	18
HTm 5/6	HT 5/6	12	18
HTm 5/7	HT 5/7	6	9
HTm 5/8	HT 5/8	6	9
HTm 5/9	HT 5/9	6	9
HTm 8/3	HT 8/3	12	18
HTm 8/4	HT 8/4	12	18
HTm 8/5	HT 8/5	12	18
HTm 8/6	HT 8/6	12	18
HTm 8/7	HT 8/7	6	9
HTm 8/8	HT 8/8	6	9
HTm 8/9	HT 8/9	6	9
–	HT 8/10	6	9

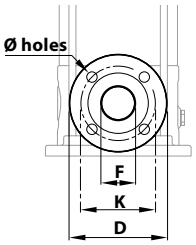
TYPE		GROUPAGE	CONTAINER
Single-phase	Three-phase	n. pumps	n. pumps
HTm 10/3	HT 10/3	12	18
HTm 10/4	HT 10/4	12	18
HTm 10/5	HT 10/5	12	18
HTm 10/6	HT 10/6	12	18
HTm 10/7	HT 10/7	6	9
HTm 10/8	HT 10/8	6	9
HTm 10/9	HT 10/9	6	9
–	HT 15/2	6	9
	HT 15/3	6	9
–	HT 15/4	6	9
–	HT 15/5	6	9
–	HT 30/2	6	9
–	HT 30/3	6	9
–	HT 30/4	6	9
–	HT 30/5	2	2
–	HT 30/6	2	2

DIMENSIONS AND WEIGHT



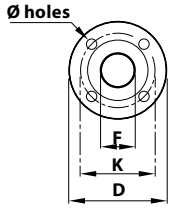
FLANGE

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



COUNTER-FLANGE

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



TYPE		PORTS		N°	DIMENSIONS mm										kg	
Single-ph.	**Three-ph.**	**DN1**	**DN2**	**STAGES**	a	b	c	d	e	h	h1	n1	n2	m	1~	3~
HTm 3/4	**HT 3/4**	**1"**	**1"**	4	126	231	250	15	210	509	75	100	180	Ø 13	33.5	33.5
HTm 3/5	**HT 3/5**			5						535					33.7	33.7
HTm 3/6	**HT 3/6**			6						561					35.0	35.0
HTm 3/7	**HT 3/7**			7						607					39.9	39.9
HTm 3/8	**HT 3/8**			8	151	257				685					47.5	47.2
HTm 3/9	**HT 3/9**			9						711					48.5	48.2
HTm 3/10	**HT 3/10**			10						737					49.4	49.1
HTm 5/2	**HT 5/2**	**1¼"**	**1¼"**	2	126	231				457					33.0	33.0
HTm 5/3	**HT 5/3**			3						483					33.2	33.2
HTm 5/4	**HT 5/4**			4						509					35.2	35.2
HTm 5/5	**HT 5/5**			5						555					37.5	37.5
HTm 5/6	**HT 5/6**			6						581					38.5	38.5
HTm 5/7	**HT 5/7**			7	151	257				659					47.6	47.3
HTm 5/8	**HT 5/8**			8						685					48.6	48.3
HTm 5/9	**HT 5/9**			9						711					52.8	52.5
HTm 8/3	**HT 8/3**	**1½"**	**1½"**	3	126	231	280			488	80				34.6	34.6
HTm 8/4	**HT 8/4**			4						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
HTm 8/7	**HT 8/7**			7	151	257				664					48.9	48.6
HTm 8/8	**HT 8/8**			8						690					53.0	52.7
HTm 8/9	**HT 8/9**			9						716					54.0	53.7
–	**HT 8/10**			10						742					–	58.7
HTm 10/3	**HT 10/3**	**1½"**	**1½"**	3	126	231				488					34.7	34.7
HTm 10/4	**HT 10/4**			4						534					36.7	36.7
HTm 10/5	**HT 10/5**			5						560					40.2	40.2
HTm 10/6	**HT 10/6**			6	151	257				638					48.8	48.5
HTm 10/7	**HT 10/7**			7						664					49.0	48.7
HTm 10/8	**HT 10/8**			8						690					53.1	52.8
HTm 10/9	**HT 10/9**			9						716					54.1	53.8
–	**HT 15/2**	**2"**	**2"**	2	151	275	300	18	247	589	90	130	215	Ø 14	–	52.3
–	**HT 15/3**			3						633					–	69.8
–	**HT 15/4**			4						727					–	78.0
–	**HT 15/5**			5	181	305				856					–	116.0
–	**HT 30/2**	**2½"**	**2½"**	2	151	275	320			604	105				–	61.5
–	**HT 30/3**			3						698					–	69.5
–	**HT 30/4**			4	181	305				827					–	124.5
–	**HT 30/5**			5						871					–	125.0
–	**HT 30/6**			6						915					–	137.5

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 - 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 220 V - 60 Hz with capacitor and winding integrated thermal motor protection
- **HT**: three-phase 220/380 V - 60 Hz or 220/440 V - 60 Hz
- The three-phase pumps are fitted with high performance motors in class IE3 (IEC 60034-30-1)
- Continuous running duty **S1**

