GP2A Druckerhöhungsanlagen mit Frequenzumrichtern

Sauberes Wasser

Häusliche Anwendung

Gewerbliche Nutzung



ANWENDUNGEN UND INSTALLATIONEN

GP2A ein vormontiertes System zum Anschluss an das Wassernetz oder an einen Hauptsammelbehälter für die Wasserversorgung und Druckerhöhung in Wohn-, Geschäfts- und öffentlichen Gebäuden, in Hotels, für die Bewässerung von Gärten, Parks und Sportplätzen.
GP2A sich zum Fördern von sauberem Wasser und wässrigen Lösungen, die die verwendeten Materialien weder chemisch noch mechanisch beschädigen und keine abrasiven oder faserigen Stoffe enthalten.

PRODUKTBESCHREIBUNG

GP2A ist ein Drucksteigerungssystem mit variabler Drehzahl, das aus **zwei parallel geschalteten und in einer Einheit** zusammengebauten elektrischen Pumpen besteht. Diese werden elektronisch von zwei untereinander verbundenen **PRO-DG**-Geräten gesteuert, die den Betrieb der Pumpen entsprechend dem unterschiedlichen Wasserbedarf der Anlage automatisch modulieren und den Druck konstant halten..

Wenn der Druck im System aufgrund der Wasserentnahme sinkt, startet die erste elektrische Pumpe, um die erforderliche Wassermenge zu decken und den Druck auf dem Sollwert zu halten; wenn die maximale Drehzahl erreicht ist, werden auch die anderen Pumpen in Kaskade gestartet, um den Wasserbedarf des Systems zu gewährleisten.

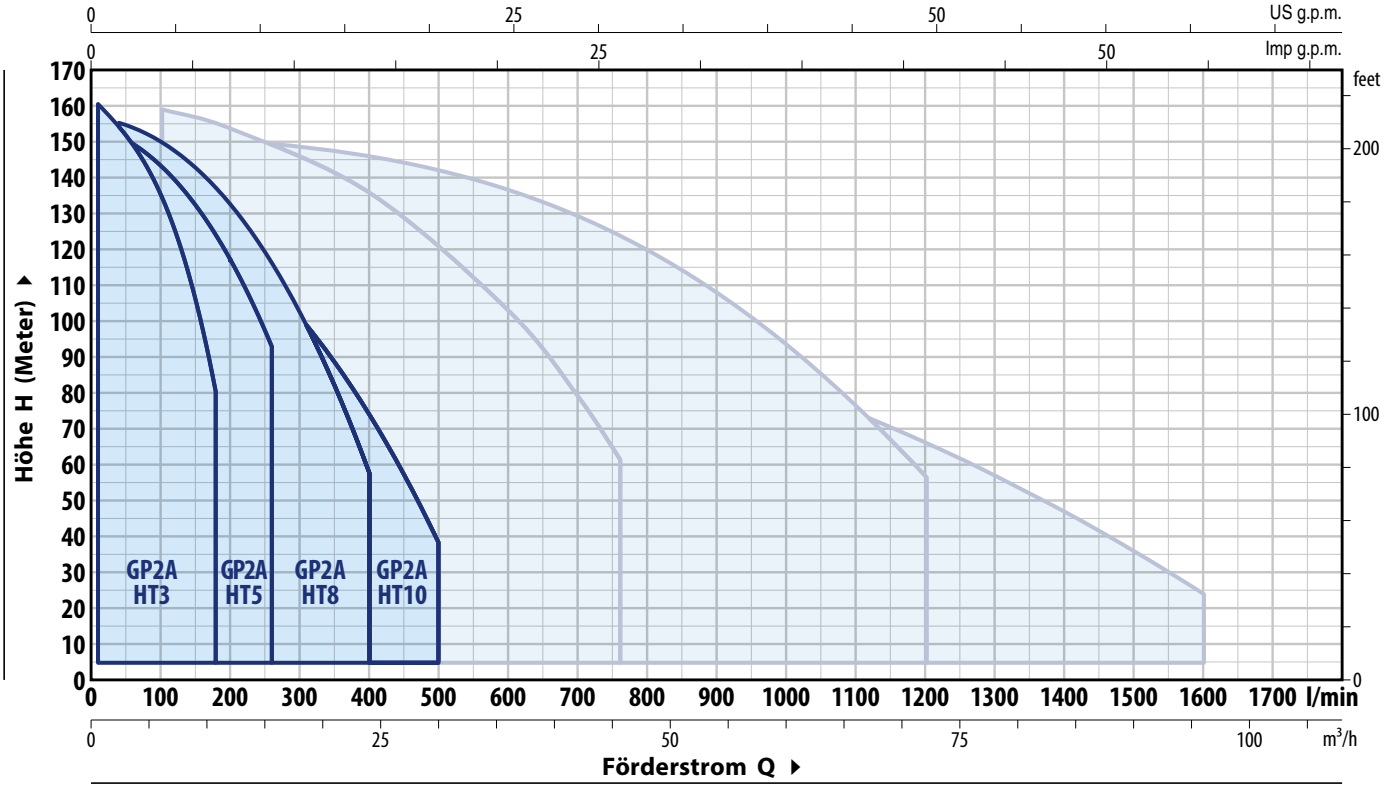
KONSTRUKTIONSMERKMALE

ELEKTROPUMPEN, die über Saug- und Druckverteiler parallel geschaltet sind.
Jede Einheit ist saugseitig mit einem Kugelhahn sowie druckseitig mit einem Kugelhahn und einem Rückschlagventil ausgestattet.

- **GRUNDRAHMEN** aus Metallprofil, ausgestattet mit verstellbaren Schwingungsdämpfer-Stellfüßen.
- **GP2A** nutzt die Inverter-Technologie, um einen konstanten Anlagen-Druck zu gewährleisten. Dank eines Drucksensors, der den Druck in Echtzeit erfasst, regelt das System die Motordrehzahl kontinuierlich entsprechend dem tatsächlichen Bedarf der Verbraucher. Der Inverter steuert zudem den wechselweisen Betrieb der Elektropumpen.

  GP2A wurde entwickelt, um das System zu schützen vor:
  – Trockenlauf
  – Überspannung und Unterspannung
- **STEUERUNG** mit thermisch-magnetischen Motorschutzschaltern für dreiphasige Ausführungen und thermisch-magnetischen Schutzschaltern für einphasige Ausführungen.
- **EINSATZBEREICH**
  – Temperatur der zu fördernden Flüssigkeit **0 °C** bis **+60 °C**
  – Umgebungstemperatur **-10 °C** bis **+40 °C**
  – Maximaler Druck im Pumpengehäuse **16 bar**
  – Dauerbetrieb **S1**
- **STROMVERSORGUNG**
  – **GP2Am**: einphasig 230V ±10% 50/60Hz
  – **GP2A** : dreiphasig 400V ±10% 50/60Hz

KENNLINIEN UND LEISTUNGSDATEN (GP2A-HT 3, HT 5, HT 8, HT 10)



MODELL		LEISTUNG (P2)		Q	m³/h	0	0.3	0.6	1.2	2.4	4.8	7.2	9.6	10.8
Einphasig	Dreiphasig	kW	HP		l/min	**0**	**5**	**10**	**20**	**40**	**80**	**120**	**160**	**180**
GP2A-HTm 3/5	GP2A-HT 3/5	2×1.1	2×1.5	H	m	81	80	80	79	77	71	63	49.5	41
GP2A-HTm 3/6	GP2A-HT 3/6	2×1.5	2×2			97	96	96	95	92	86	75	59	48
GP2A-HTm 3/7	GP2A-HT 3/7	2×1.8	2×2.5			113	112	112	111	108	100	88	69	56
–	GP2A-HT 3/8	2×2.2	2×3			130	128	128	126	123	114	100	79	64
–	GP2A-HT 3/9	2×3	2×4			146	144	144	142	138	129	113	89	72
–	GP2A-HT 3/10	2×3	2×4			–	160	160	158	154	143	126	99	80

MODELL		LEISTUNG (P2)		Q	m³/h	0	0.3	0.6	1.2	2.4	4.8	7.2	9.6	10.8	12	15.6
Einphasig	Dreiphasig	kW	HP		l/min	**0**	**5**	**10**	**20**	**40**	**80**	**120**	**160**	**180**	**200**	**260**
GP2A-HTm 5/3	GP2A-HT 5/3	2×1.1	2×1.5	H	m	51.5	51.5	51.5	51	50.5	49	46.5	43	41	39	31
GP2A-HTm 5/4	GP2A-HT 5/4	2×1.5	2×2			68.5	68.5	68.5	68	67	65	62	57.5	55	52	41
GP2A-HTm 5/5	GP2A-HT 5/5	2×1.8	2×2.5			86	85	85	85	84	81	77	72	68.5	65	51.5
GP2A-HTm 5/6	GP2A-HT 5/6	2×2.2	2×3			103	103	103	102	101	98	93	86	82	78	62
–	GP2A-HT 5/7	2×3	2×4			120	120	120	119	118	114	108	101	96	91	72
–	GP2A-HT 5/8	2×3	2×4			137	137	137	136	134	130	124	115	110	104	82
–	GP2A-HT 5/9	2×4	2×5.5			154	154	154	153	151	146	139	129	124	117	93

MODELL		LEISTUNG (P2)		Q	m³/h	0	1.2	2.4	4.8	7.2	9.6	12	14.4	16.8	19.2	21.6	24
Einphasig	Dreiphasig	kW	HP		l/min	**0**	**20**	**40**	**80**	**120**	**160**	**200**	**240**	**280**	**320**	**360**	**400**
GP2A-HTm 8/3	GP2A-HT 8/3	2×1.1	2×1.5	H	m	47	46.5	46.5	45.5	44	42	39.5	36.5	32.5	28	23.1	17
GP2A-HTm 8/4	GP2A-HT 8/4	2×1.5	2×2			62.5	62	62	60.5	58.5	56	53	48.5	43.5	37.5	31	23
GP2A-HTm 8/5	GP2A-HT 8/5	2×1.8	2×2.5			78	77.5	77.5	76	73	70	66	61	54.5	47	38.5	28.5
GP2A-HTm 8/6	GP2A-HT 8/6	2×2.2	2×3			94	93	93	91	88	84	79	73	65.5	56.5	46	34.5
–	GP2A-HT 8/7	2×3	2×4			109	108	108	106	103	98	92	85	76	66	54	40
–	GP2A-HT 8/8	2×4	2×5.5			125	124	124	121	117	112	106	97	87	75	61.5	45.5
–	GP2A-HT 8/9	2×4	2×5.5			141	139	139	136	132	126	119	109	98	85	69	51.5
–	GP2A-HT 8/10	2×5.5	2×7.5			156	155	155	152	147	140	132	122	109	94	77	57

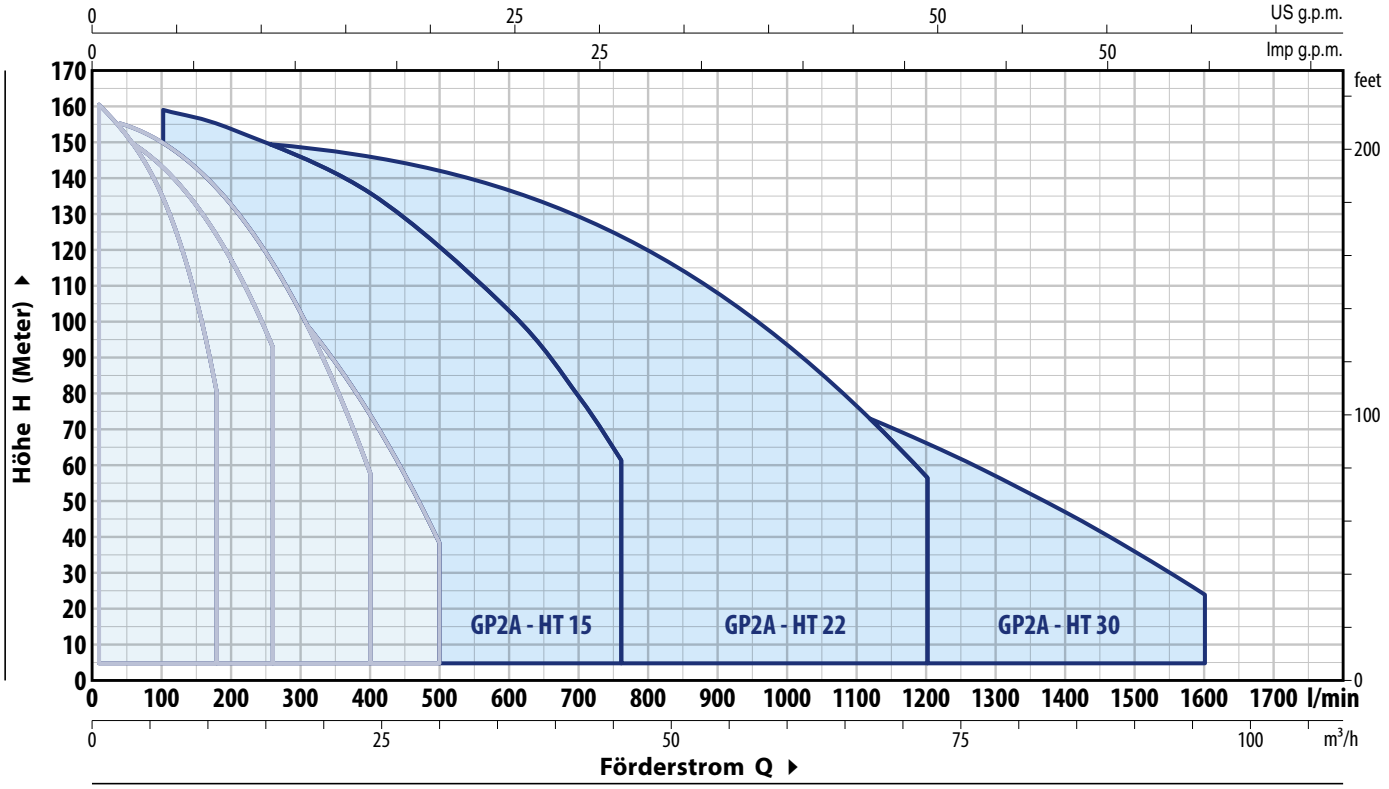
MODELL		LEISTUNG (P2)		Q	m³/h	0	1.8	3.6	6	7.2	9.6	14.4	18	20.4	24	26.4	30
Einphasig	Dreiphasig	kW	HP		l/min	**0**	**30**	**60**	**100**	**120**	**160**	**240**	**300**	**340**	**400**	**440**	**500**
GP2A-HTm 10/3	GP2A-HT 10/3	2×1.5	2×2	H	m	47	45.5	45.5	44	43.5	42	38	33.5	30.5	24.7	20.3	13
GP2A-HTm 10/4	GP2A-HT 10/4	2×1.8	2×2.5			62	61	61	59	58	56	50.5	45	40.5	33	27	18
GP2A-HTm 10/5	GP2A-HT 10/5	2×2.2	2×3			77	75.5	75.5	74	73	70	63	56	50.5	41	34	21.5
–	GP2A-HT 10/6	2×3	2×4			93	91	91	88	87	84	76	67.5	61	49.5	40.5	26
–	GP2A-HT 10/7	2×3	2×4			108	106	106	103	102	98	88	79	71	57.5	47.5	30
–	GP2A-HT 10/8	2×4	2×5.5			124	121	121	118	116	112	101	90	81	66	54.5	34.5
–	GP2A-HT 10/9	2×4	2×5.5			139	136	136	133	131	126	113	101	91	74	61	38.5

Q = Förderstrom **H** = Manometrische Förderhöhe

※ Die im Diagramm und in den Tabellen angegebenen Daten beziehen sich auf die Leistung mit 2 Pumpen in Betrieb

GP2A - HT

KENNLINIEN UND LEISTUNGSDATEN (GP2A-HT 15, HT 22, HT 30)



MODELL	LEISTUNG (P2)		Q	m³/h	0	3	6	9	12	18	24	36	42	45.6
Dreiphasig	kW	HP		l/min	**0**	**50**	**100**	**150**	**200**	**300**	**400**	**600**	**700**	**760**
GP2A-HT 15/2R	2×2.2	2×3			44	43	43	42.5	41.5	39.5	36.5	27.5	20.5	
GP2A-HT 15/3R	2×3	2×4			64.5	62.5	62.5	61.5	60.5	57	52	37.5	27	
GP2A-HT 15/3	2×4	2×5.5			72	70	70	69	67.5	64.5	59.5	45	34.5	27
GP2A-HT 15/4	2×5.5	2×7.5	**H**	m	96	93	93	92	90.5	86	79.5	60.5	46	36
GP2A-HT 15/5	2×7.5	2×10			120	117	117	115	113	107.5	99.5	75.5	58	45
GP2A-HT 15/6	2×9.2	2×12.5			140	137	137	134.5	132	125.5	116.5	88	67.5	53
GP2A-HT 15/7	2×9.2	2×12.5			–	160	160	157	154	146.5	136	103	79	61.5

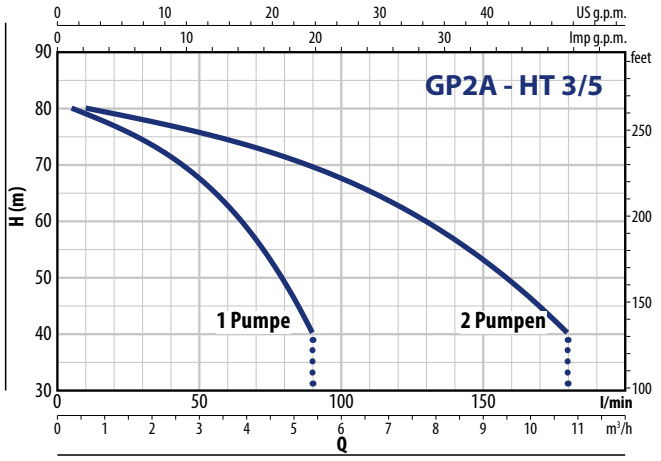
MODELL	LEISTUNG (P2)		Q	m³/h	0	6	12	24	36	42	48	60	72
Dreiphasig	kW	HP		l/min	**0**	**100**	**200**	**400**	**600**	**700**	**800**	**1000**	**1200**
GP2A-HT 22/2	2×3	2×4			39	39	39	38	35.5	33.5	31.5	25.4	17.5
GP2A-HT 22/3	2×4	2×5.5			59	58.5	58.5	56.5	53	50.5	47	38	26
GP2A-HT 22/4	2×5.5	2×7.5			78	78	78	76	71	67	62.5	51	34.5
GP2A-HT 22/5	2×7.5	2×10	**H**	m	98	97	97	95	88	84	78	63.5	43
GP2A-HT 22/6	2×9.2	2×12.5			118	117	117	113	106	101	94	76	52
GP2A-HT 22/7	2×11	2×15			137	136	136	132	124	118	110	89	60.5
GP2A-HT 22/8	2×15	2×20			157	156	156	151	142	134	125	102	69

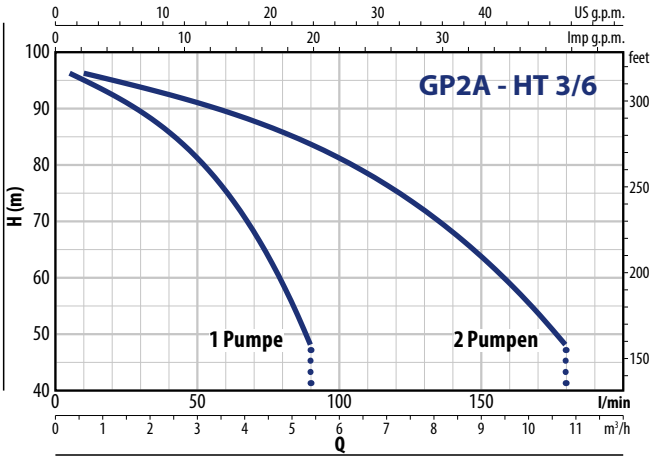
MODELL	LEISTUNG (P2)		Q	m³/h	0	6	12	24	36	48	60	72	84	90
Dreiphasig	kW	HP		l/min	**0**	**100**	**200**	**400**	**600**	**800**	**1000**	**1200**	**1400**	**1500**
GP2A-HT 30/2R	2×3	2×4			35	34	34	33	31	28	23.5	17.5	10	
GP2A-HT 30/2	2×4	2×5.5			40	38.5	38.5	37	35.5	32.5	28	22	13.5	8
GP2A-HT 30/3	2×5.5	2×7.5			60	58	58	56	53	48.5	42	33	20	12
GP2A-HT 30/4	2×7.5	2×10	**H**	m	80	77	77	74.5	70.5	64.5	56	44	26.5	16
GP2A-HT 30/5	2×9.2	2×12.5			100	96.5	96.5	93	88	81	70	54.5	33.5	20
GP2A-HT 30/6	2×11	2×15			120	116	116	111.5	106	97	84	65.5	40	24.5

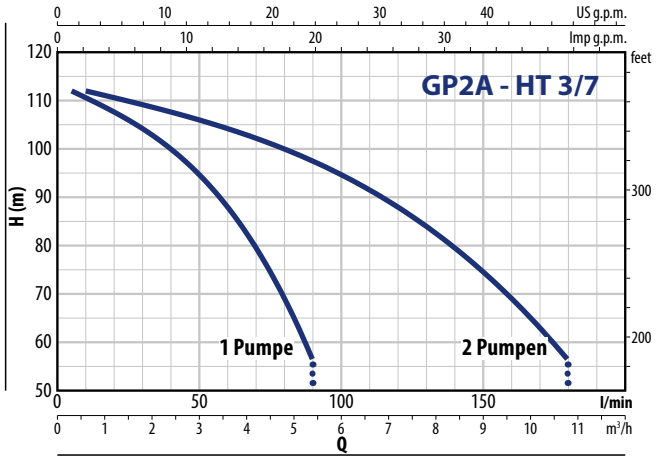
Q = Förderstrom **H** = Manometrische Förderhöhe

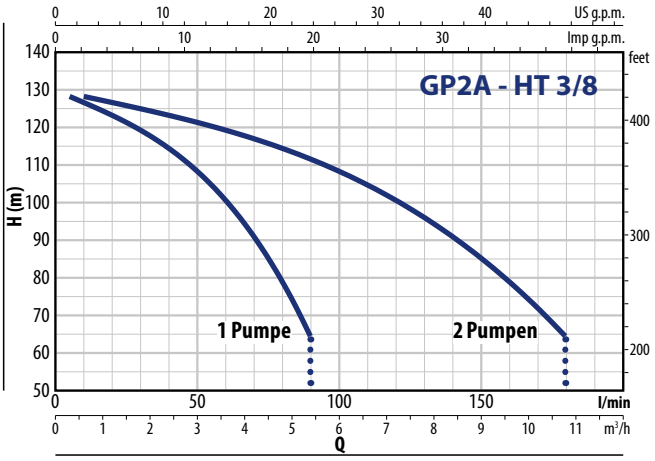
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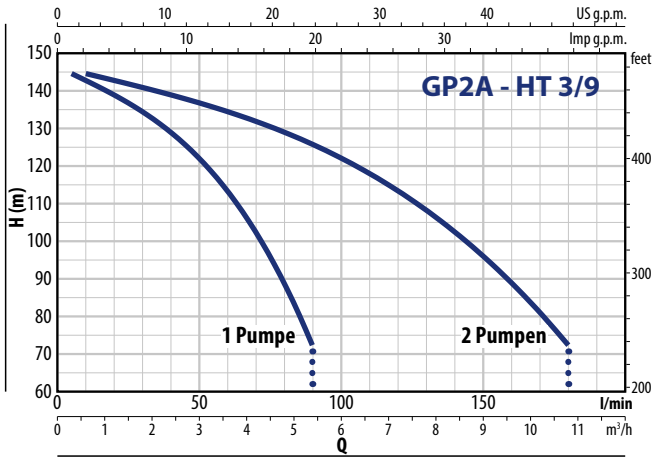
LEISTUNGSKURVE

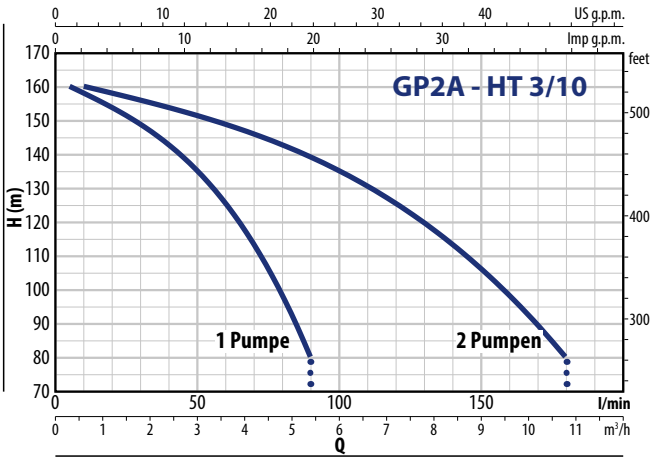


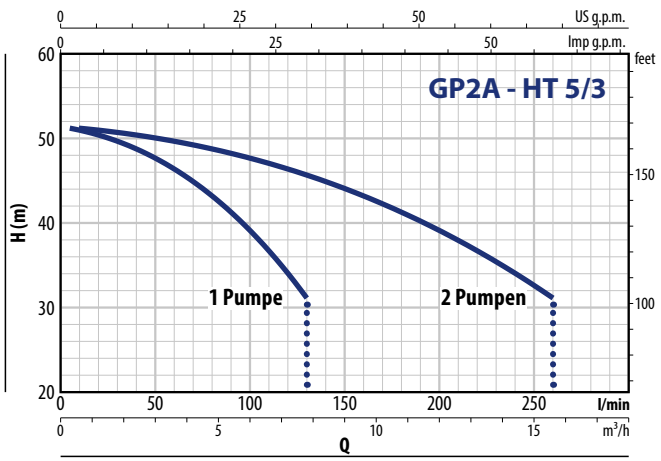


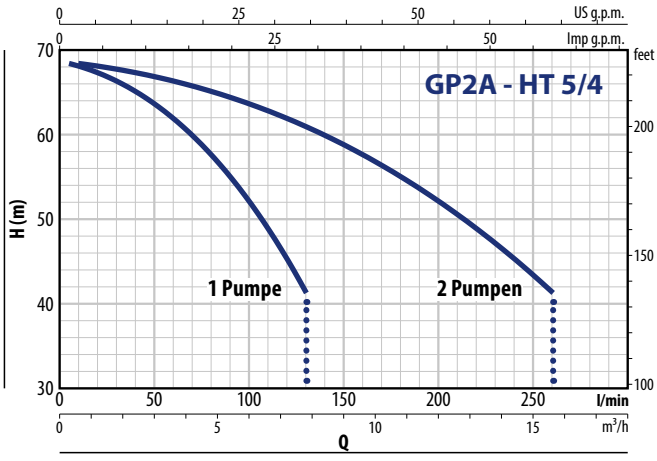






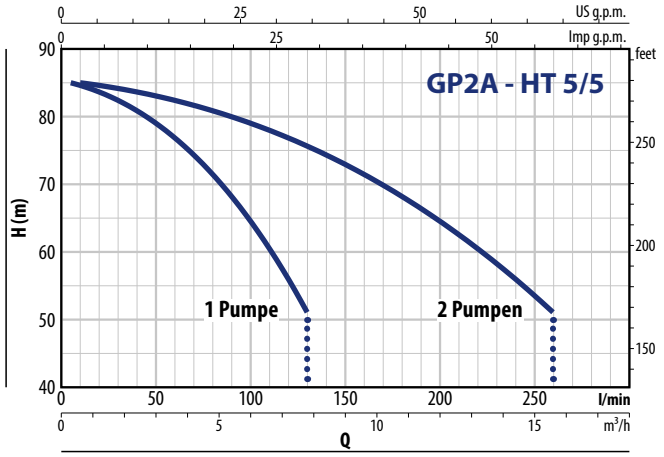


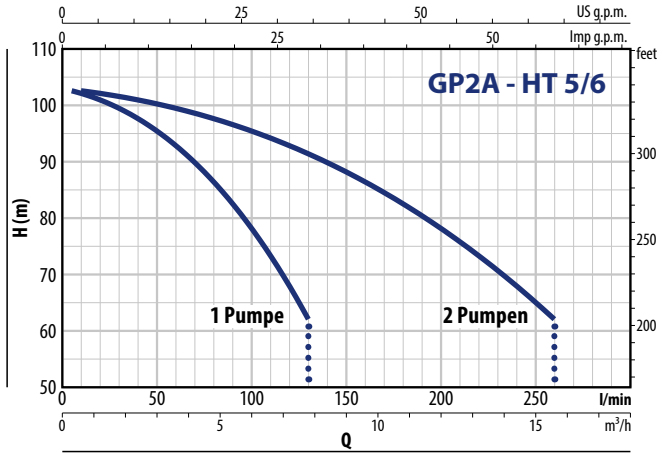


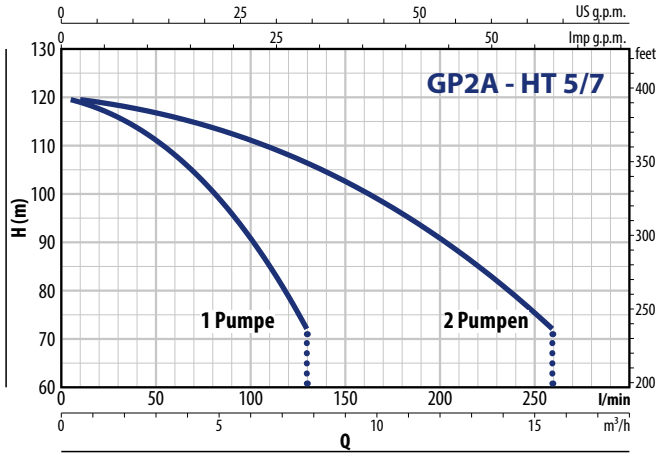


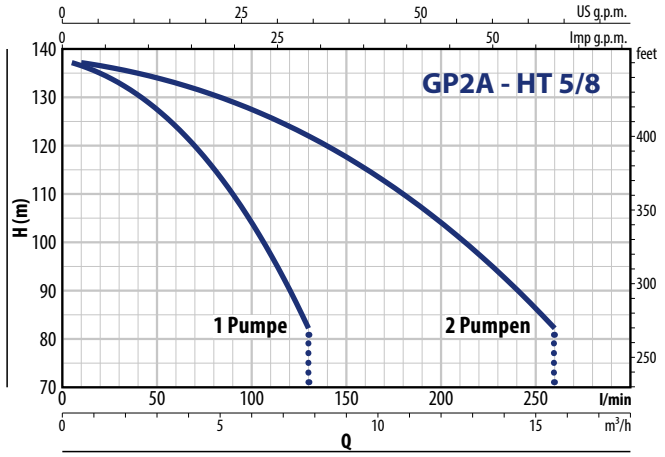
GP2A - HT

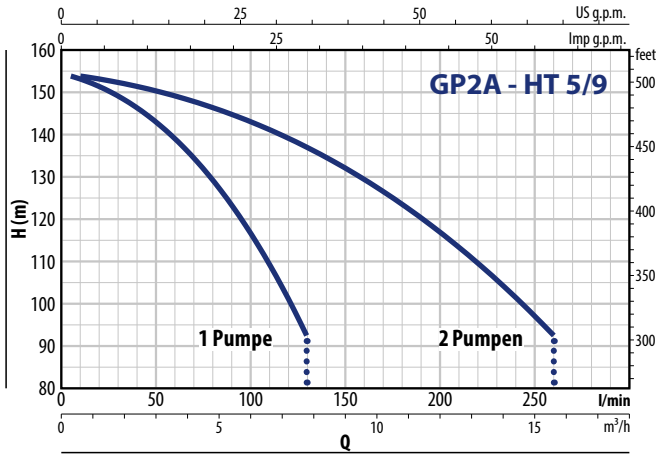
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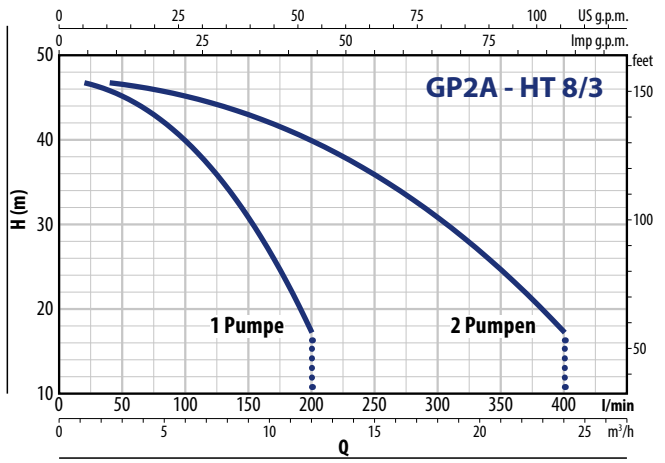


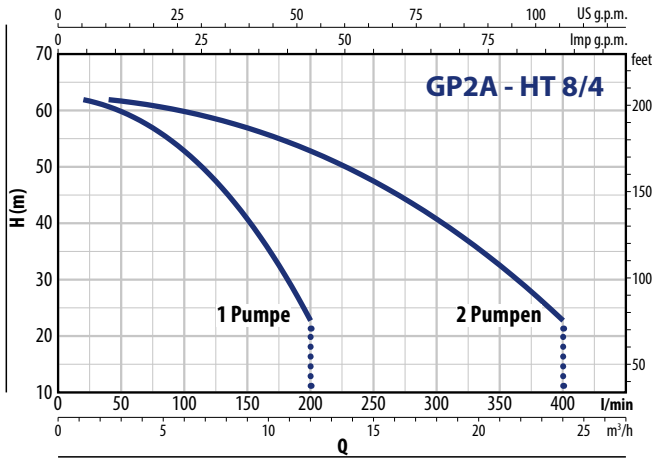


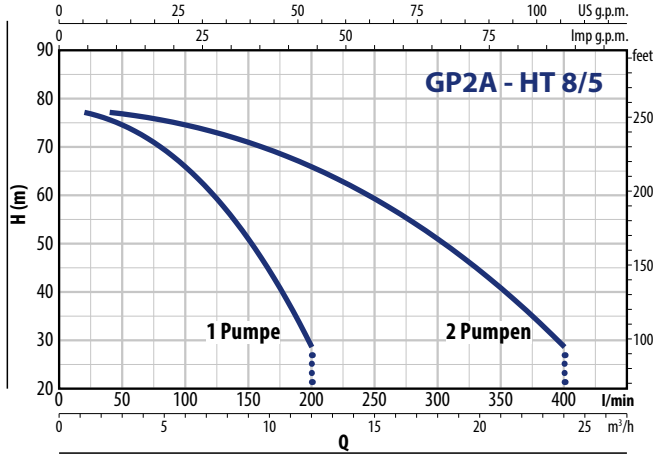




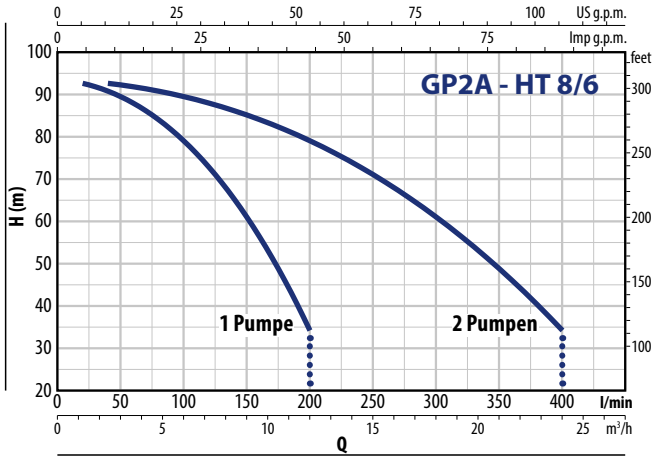


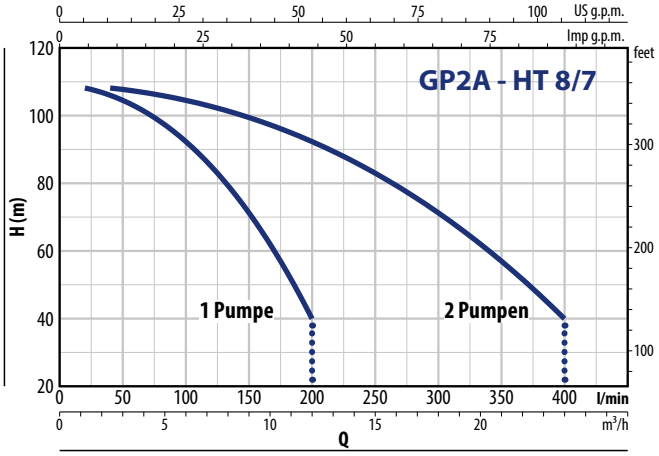


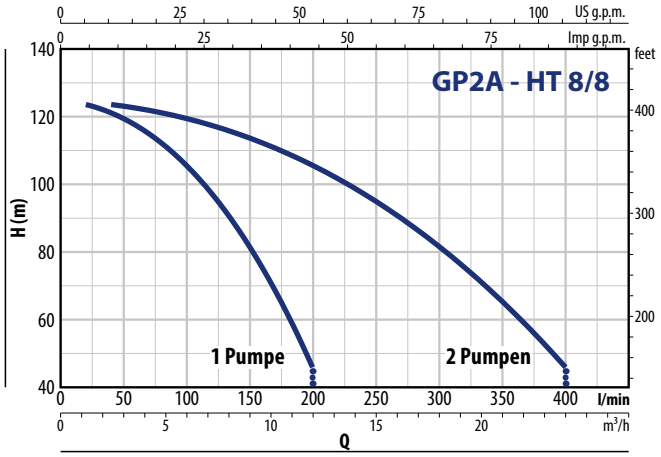


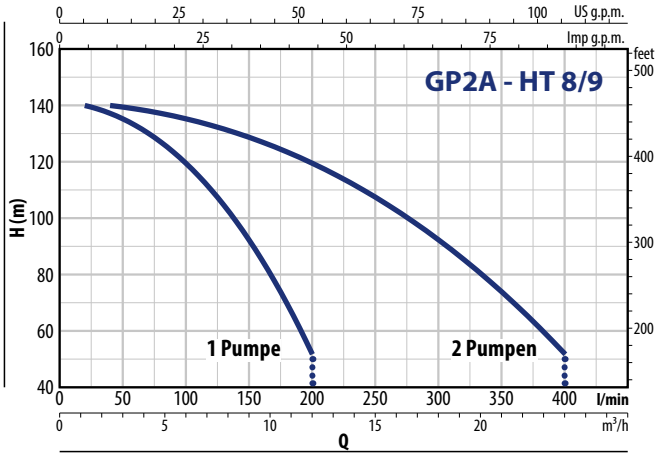


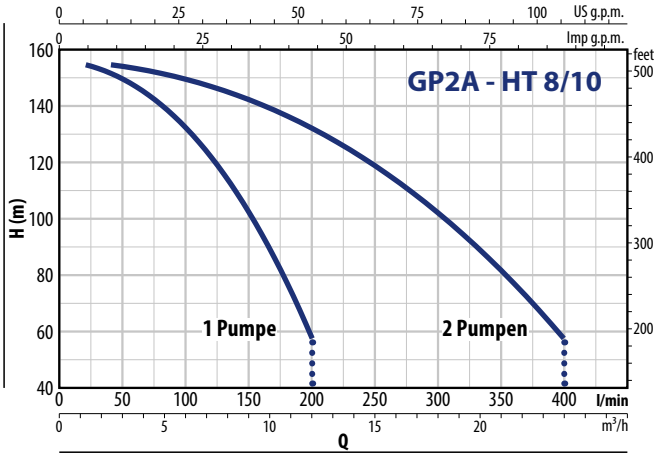
LEISTUNGSKURVE

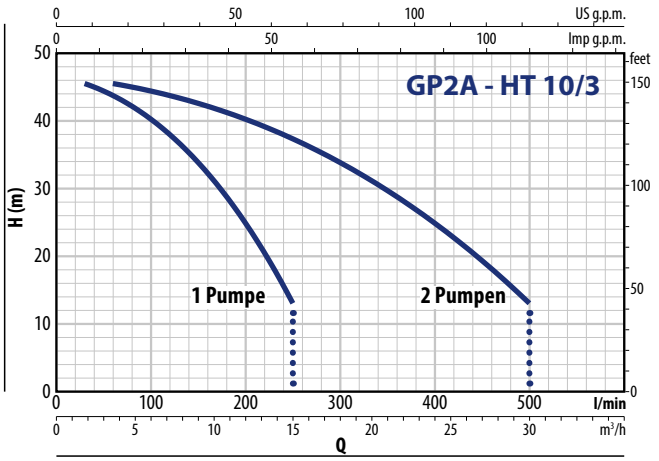


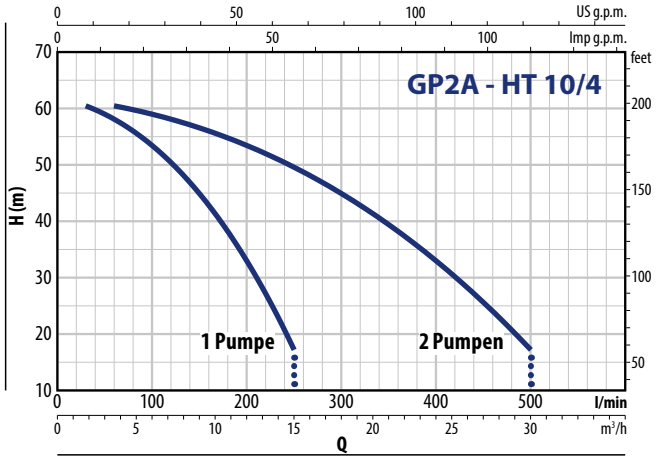


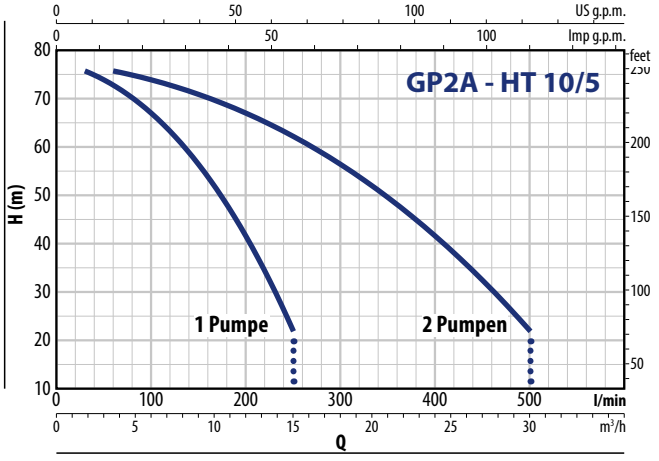






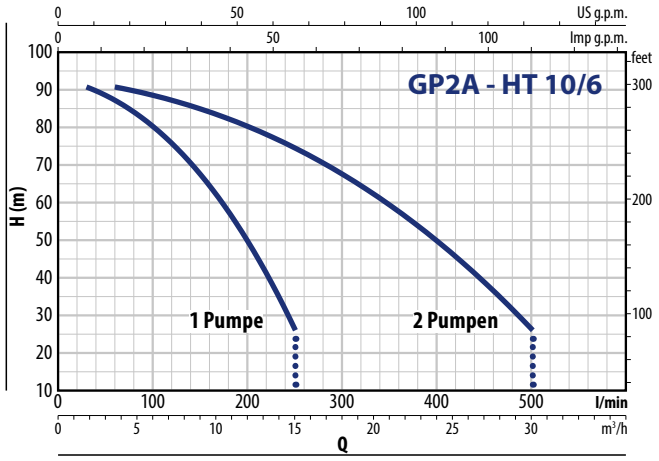


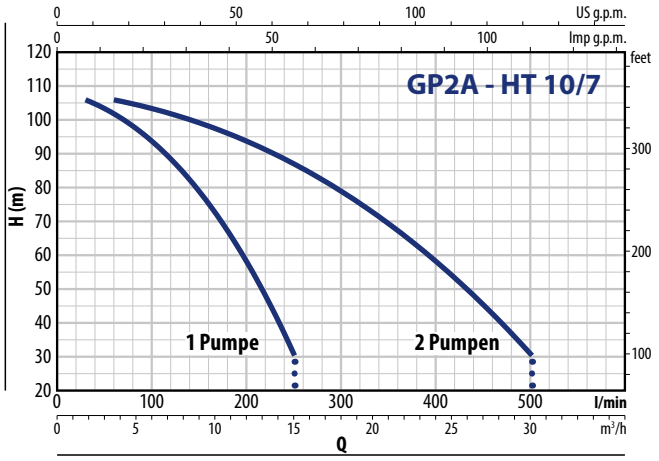


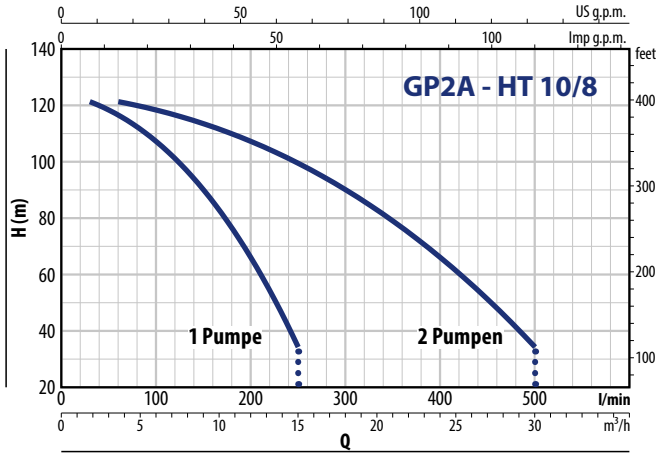


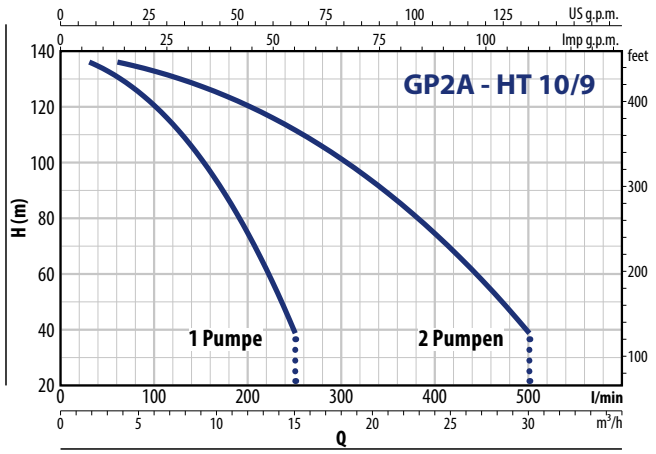
GP2A - HT

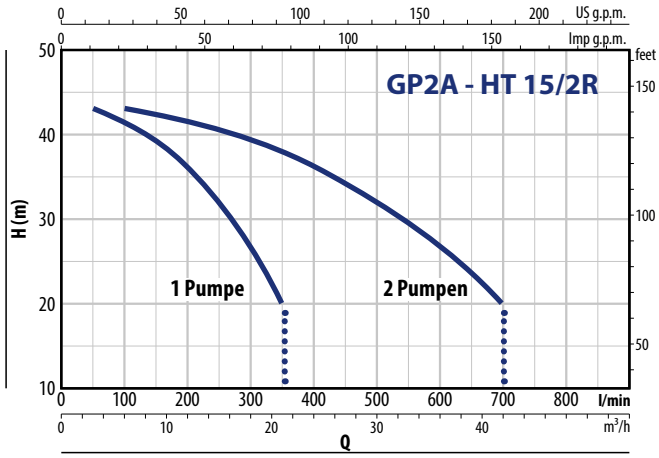
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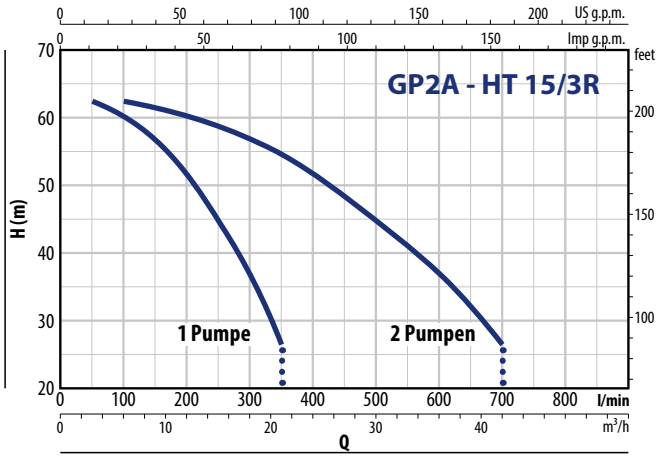


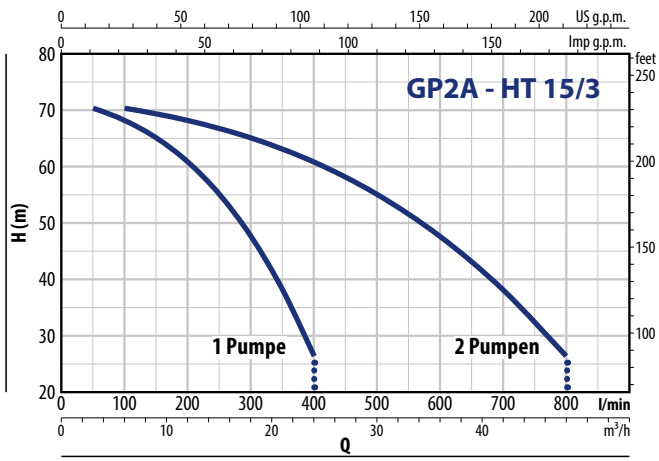


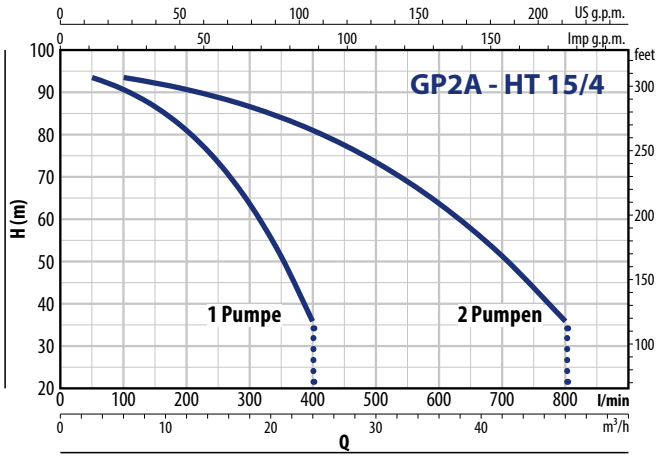




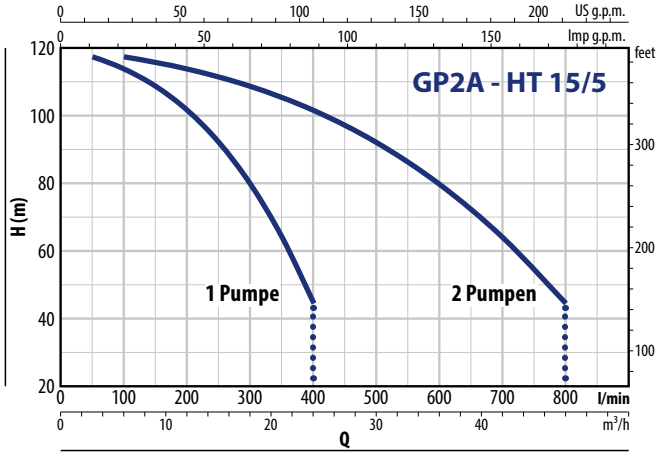


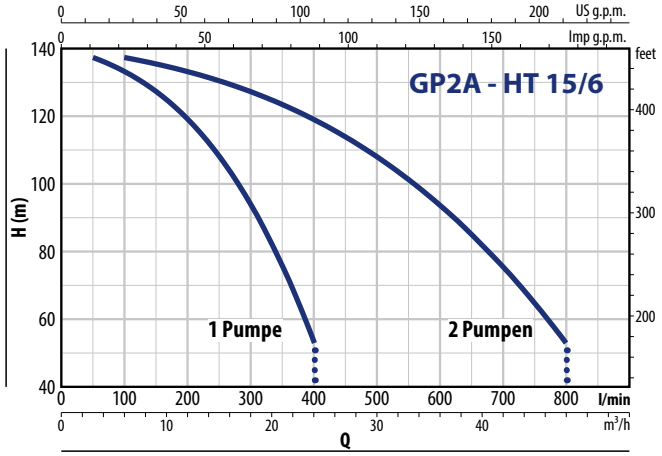


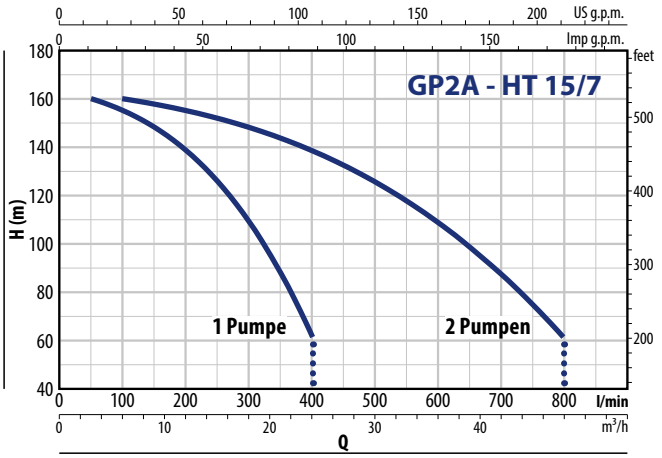


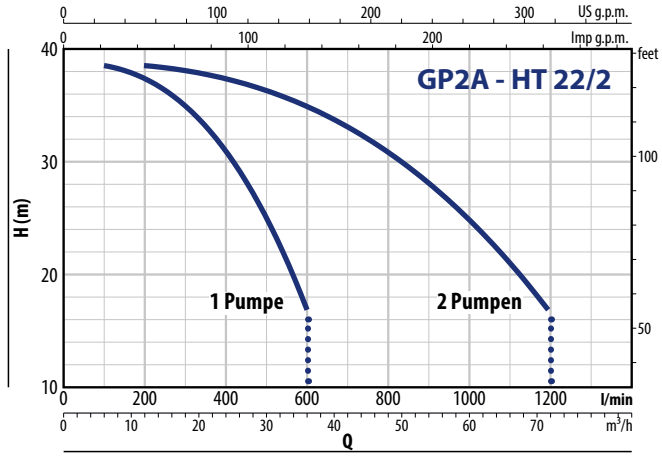


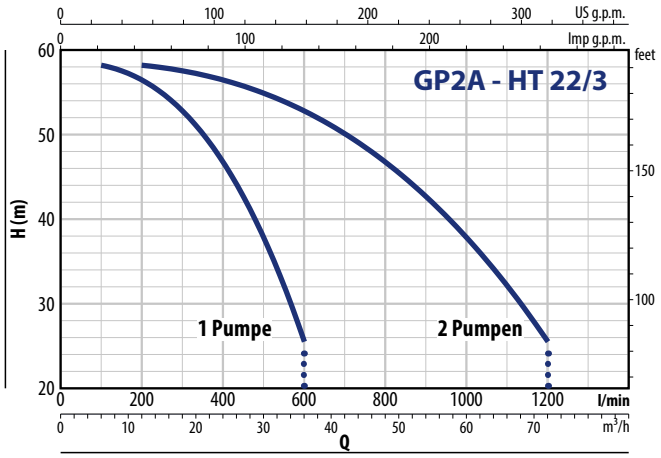
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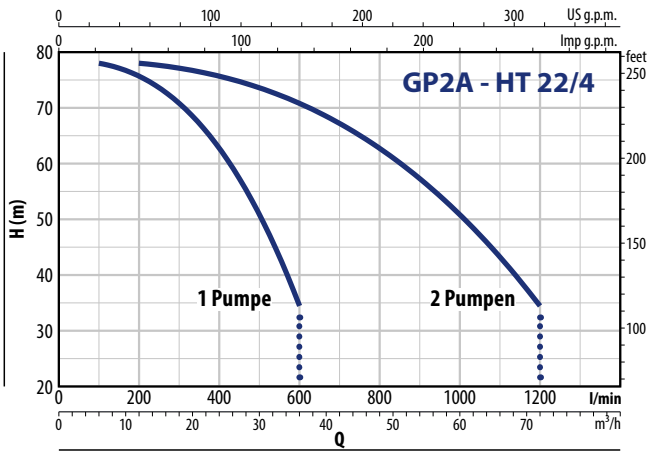


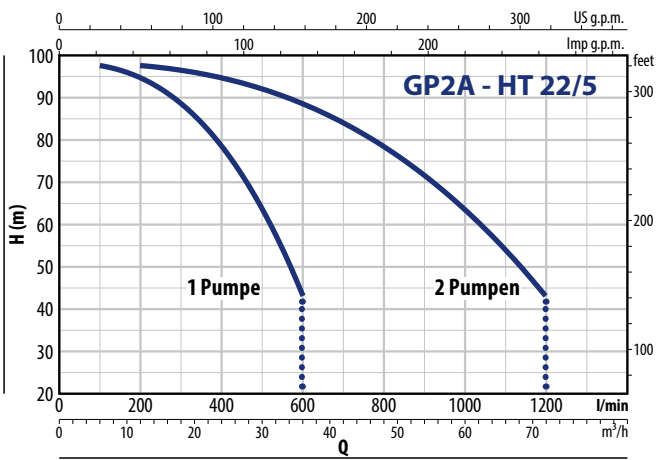


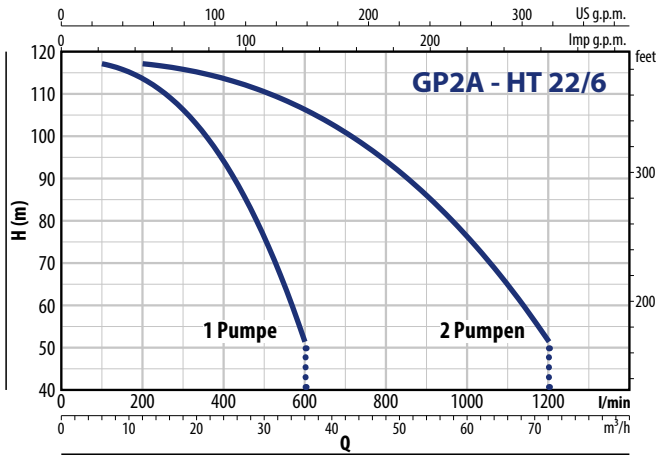






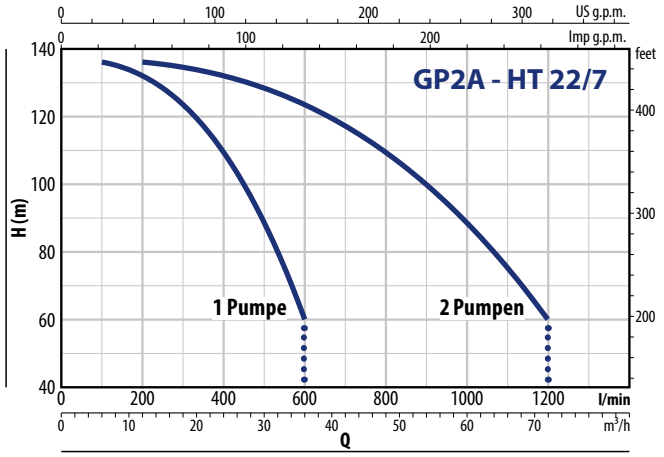


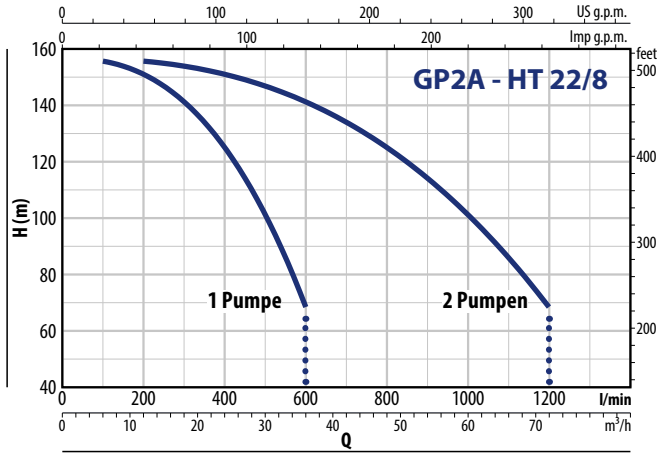


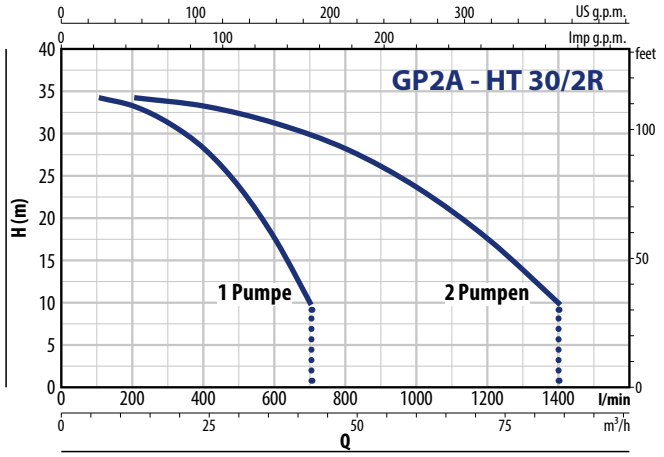


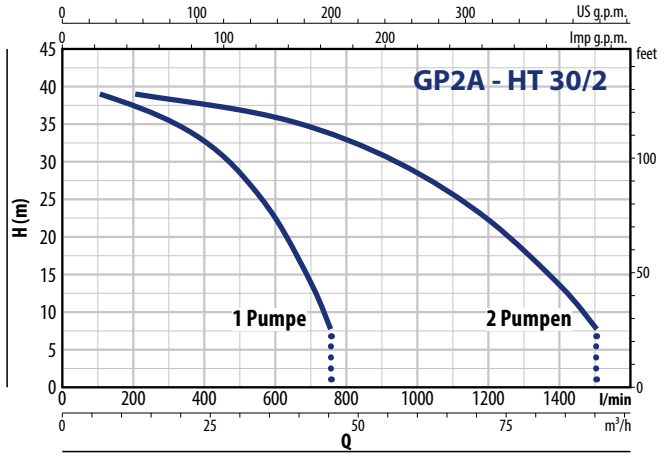
GP2A - HT

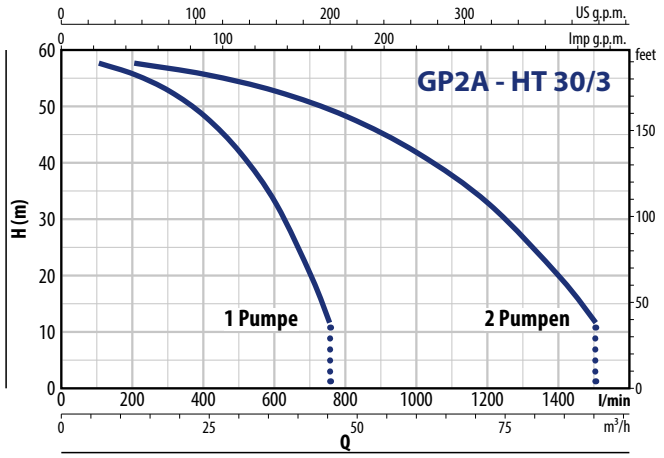
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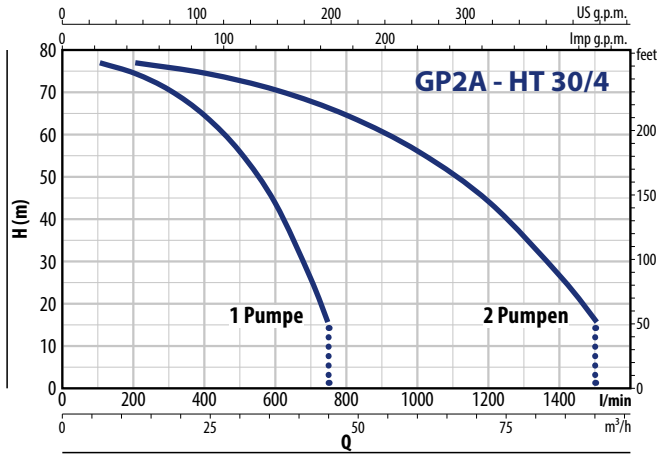


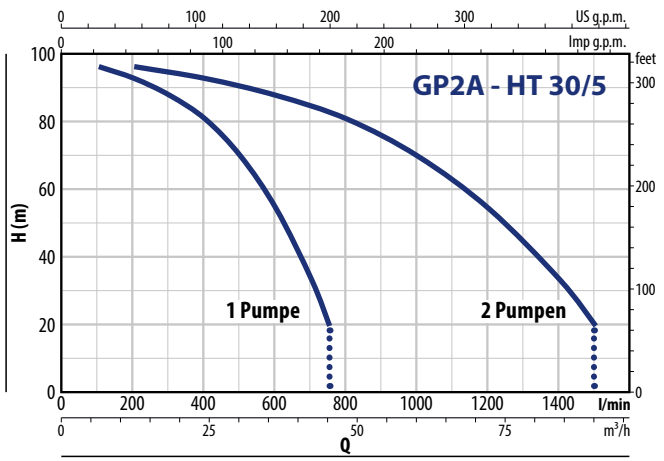


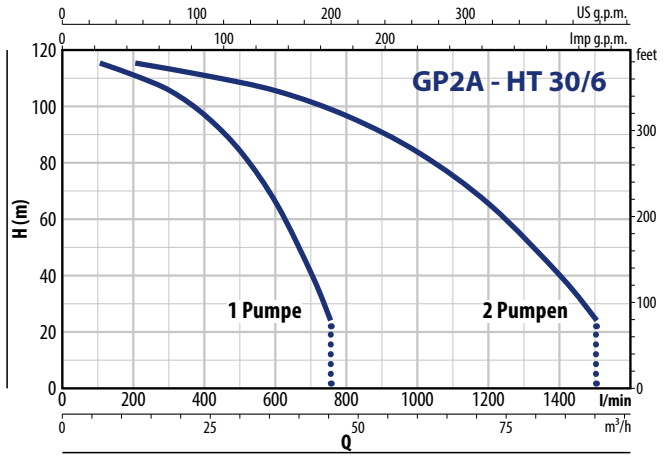












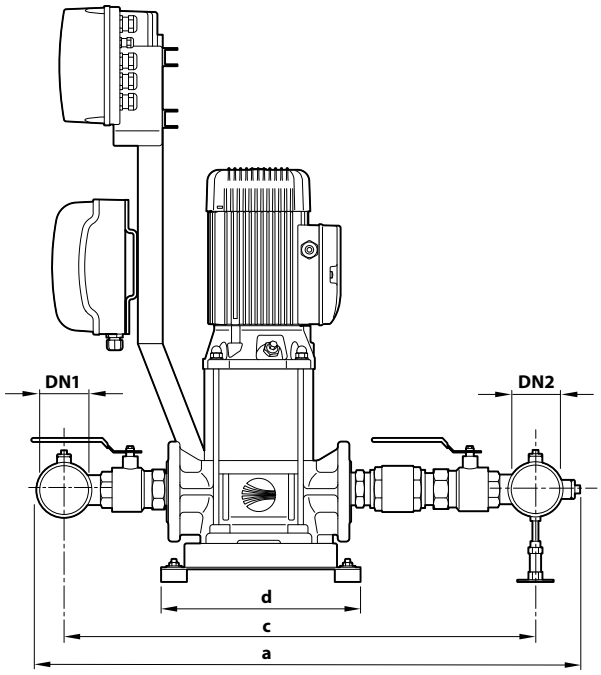
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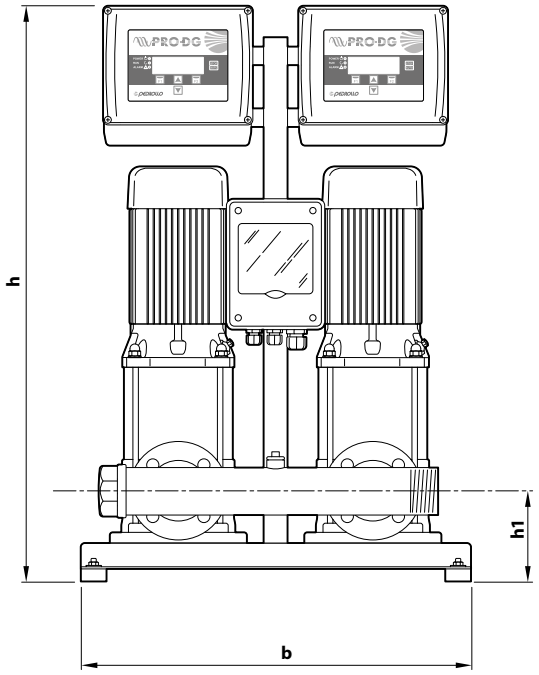
MODELL **Einphasig**	SPANNUNG **230 V**
GP2Am - HT 3/5	–
GP2Am - HT 3/6	–
GP2Am - HT 3/7	–
GP2Am - HT 5/3	–
GP2Am - HT 5/4	–
GP2Am - HT 5/5	–
GP2Am - HT 5/6	–
GP2Am - HT 8/3	–
GP2Am - HT 8/4	–
GP2Am - HT 8/5	–
GP2Am - HT 8/6	2×19.5 A
GP2Am - HT 10/3	2×12.2 A
GP2Am - HT 10/4	–
GP2Am - HT 10/5	2×18.0 A

MODELL **Dreiphasig**	SPANNUNG **400 V - ⅄**
GP2A - HT 3/5	–
GP2A - HT 3/6	–
GP2A - HT 3/7	–
GP2A - HT 3/8	–
GP2A - HT 3/9	–
GP2A - HT 3/10	–
GP2A - HT 5/3	–
GP2A - HT 5/4	–
GP2A - HT 5/5	–
GP2A - HT 5/6	–
GP2A - HT 5/7	–
GP2A - HT 5/8	–
GP2A - HT 5/9	–
GP2A - HT 8/3	–
GP2A - HT 8/4	–
GP2A - HT 8/5	2×6.8 A
GP2A - HT 8/6	–
GP2A - HT 8/7	–
GP2A - HT 8/8	2×10.5 A
GP2A - HT 8/9	–
GP2A - HT 8/10	–
GP2A - HT 10/3	2×4.5 A
GP2A - HT 10/4	–
GP2A - HT 10/5	2×6.5 A
GP2A - HT 10/6	–
GP2A - HT 10/7	2×9.5 A
GP2A - HT 10/8	–
GP2A - HT 10/9	2×10.5 A
GP2A - HT 15/2R	–
GP2A - HT 15/3R	2×8.8 A
GP2A - HT 15/3	2×10.0 A
GP2A - HT 15/4	2×12.3 A
GP2A - HT 15/5	–
GP2A - HT 15/6	–
GP2A - HT 15/7	–
GP2A - HT 22/2	–
GP2A - HT 22/3	–
GP2A - HT 22/4	–
GP2A - HT 22/5	–
GP2A - HT 22/6	–
GP2A - HT 22/7	2×26.0 A
GP2A - HT 22/8	–
GP2A - HT 30/2R	–
GP2A - HT 30/2	2×10.5 A
GP2A - HT 30/3	–
GP2A - HT 30/4	2×15.5 A
GP2A - HT 30/5	2×22.0 A
GP2A - HT 30/6	2×25.0 A

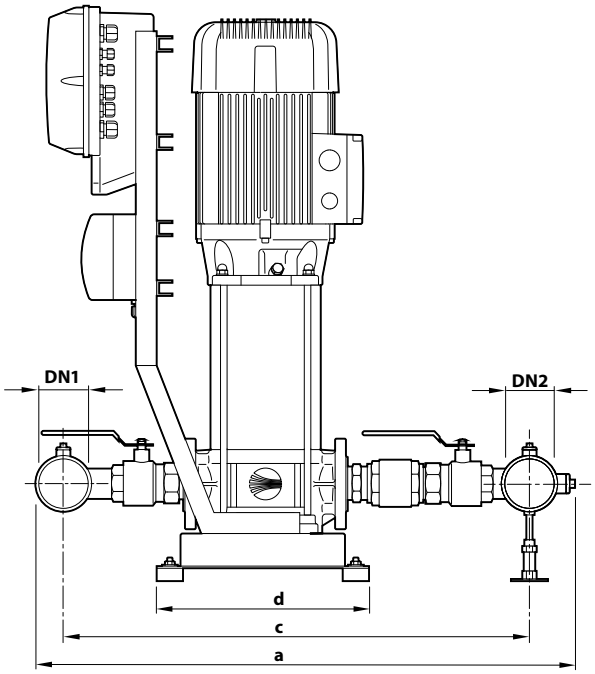
ABMESSUNGEN UND GEWICHTE

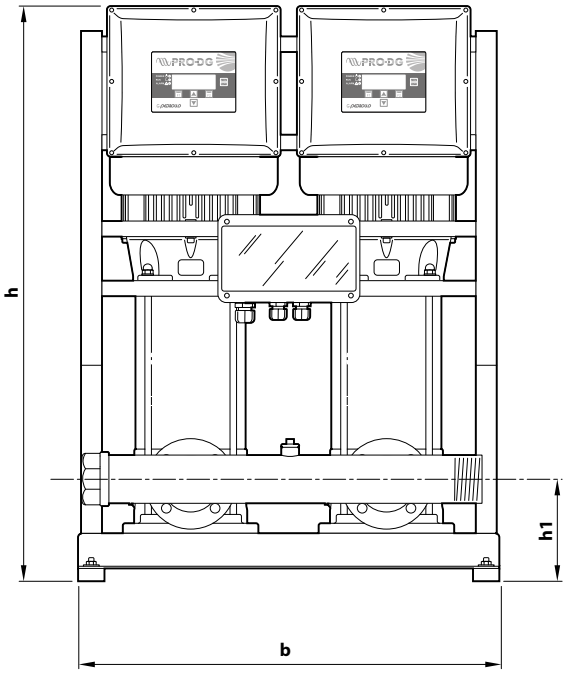
Typologie A





Typologie B





ABMESSUNGEN UND GEWICHTE

MODELL		TYPOLOGIE	STUTZEN		ABMESSUNGEN mm						kg	
Einphasig	**Dreiphasig**		**DN1**	**DN2**	a	b	c	d	h	h1	1~	3~
GP2Am - HT 3/5	**GP2A - HT 3/5**	A	**2"**	**2"**	732	600	614	310	882	138	111.0	111.0
GP2Am - HT 3/6	**GP2A - HT 3/6**	A									113.6	113.6
GP2Am - HT 3/7	**GP2A - HT 3/7**	A									123.4	123.4
–	**GP2A - HT 3/8**	A									–	138.0
–	**GP2A - HT 3/9**	A									–	140.0
–	**GP2A - HT 3/10**	A									–	141.8
GP2Am - HT 5/3	**GP2A - HT 5/3**	A	**2"**	**2"**	777	600	659	310	882	138	112.0	112.0
GP2Am - HT 5/4	**GP2A - HT 5/4**	A									116.0	116.0
GP2Am - HT 5/5	**GP2A - HT 5/5**	A									120.6	120.6
GP2Am - HT 5/6	**GP2A - HT 5/6**	A									122.6	122.6
–	**GP2A - HT 5/7**	A									–	140.2
–	**GP2A - HT 5/8**	A									–	142.2
–	**GP2A - HT 5/9**	A									–	150.6
GP2Am - HT 8/3	**GP2A - HT 8/3**	A	**2½"**	**2½"**	873	600	739	310	882	143	119.0	119.0
GP2Am - HT 8/4	**GP2A - HT 8/4**	A									123.0	123.0
GP2Am - HT 8/5	**GP2A - HT 8/5**	A									130.0	130.0
GP2Am - HT 8/6	**GP2A - HT 8/6**	A									131.6	131.6
–	**GP2A - HT 8/7**	A									–	147.0
–	**GP2A - HT 8/8**	A									–	155.2
–	**GP2A - HT 8/9**	A									–	157.2
–	**GP2A - HT 8/10**	A									–	167.2
GP2Am - HT 10/3	**GP2A - HT 10/3**	A	**2½"**	**2½"**	873	600	739	310	882	143	120.0	120.0
GP2Am - HT 10/4	**GP2A - HT 10/4**	A									124.0	124.0
GP2Am - HT 10/5	**GP2A - HT 10/5**	A									131.0	131.0
–	**GP2A - HT 10/6**	A									–	147.6
–	**GP2A - HT 10/7**	A									–	148.0
–	**GP2A - HT 10/8**	A									–	156.2
–	**GP2A - HT 10/9**	A									–	158.2
–	**GP2A - HT 15/2R**	A	**3"**	**3"**	995	770	847	388	912	183	–	173.0
–	**GP2A - HT 15/3R**	A									–	174.0
–	**GP2A - HT 15/3**	A									–	183.0
–	**GP2A - HT 15/4**	B							1044		–	213.0
–	**GP2A - HT 15/5**	B									–	229.0
–	**GP2A - HT 15/6**	B									–	318.0
–	**GP2A - HT 15/7**	B									–	319.0
–	**GP2A - HT 22/2**	A	**DN100**	**DN100**	1292	770	1068	388	912	183	–	233.0
–	**GP2A - HT 22/3**	A									–	242.0
–	**GP2A - HT 22/4**	B							1044		–	267.0
–	**GP2A - HT 22/5**	B									–	283.0
–	**GP2A - HT 22/6**	B									–	372.0
–	**GP2A - HT 22/7**	B									–	389.0
–	**GP2A - HT 22/8**	B							1083		–	414.0
–	**GP2A - HT 30/2R**	A	**DN100**	**DN100**	1243	770	1019	388	912	198	–	238.0
–	**GP2A - HT 30/2**	A									–	244.0
–	**GP2A - HT 30/3**	B							1044		–	273.0
–	**GP2A - HT 30/4**	B									–	290.0
–	**GP2A - HT 30/5**	B									–	397.0
–	**GP2A - HT 30/6**	B									–	398.0