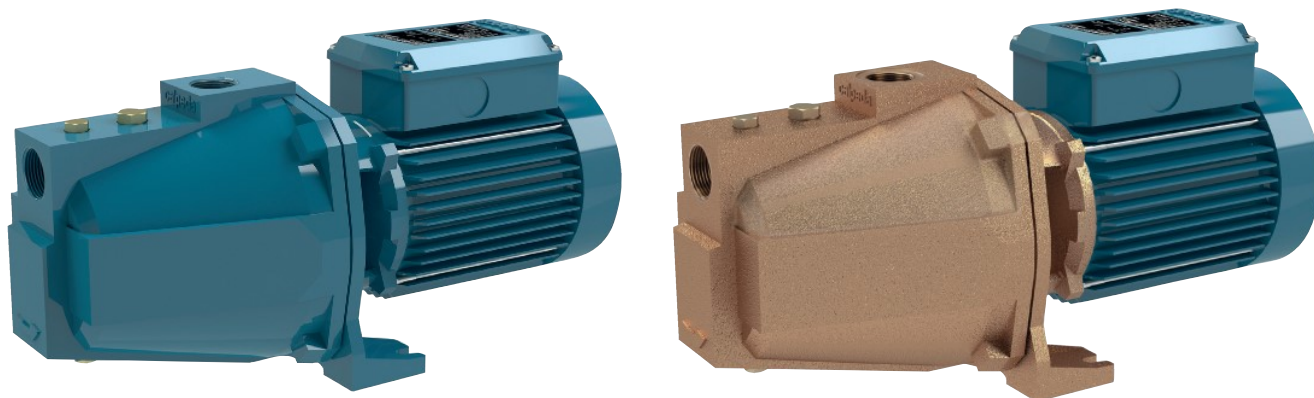
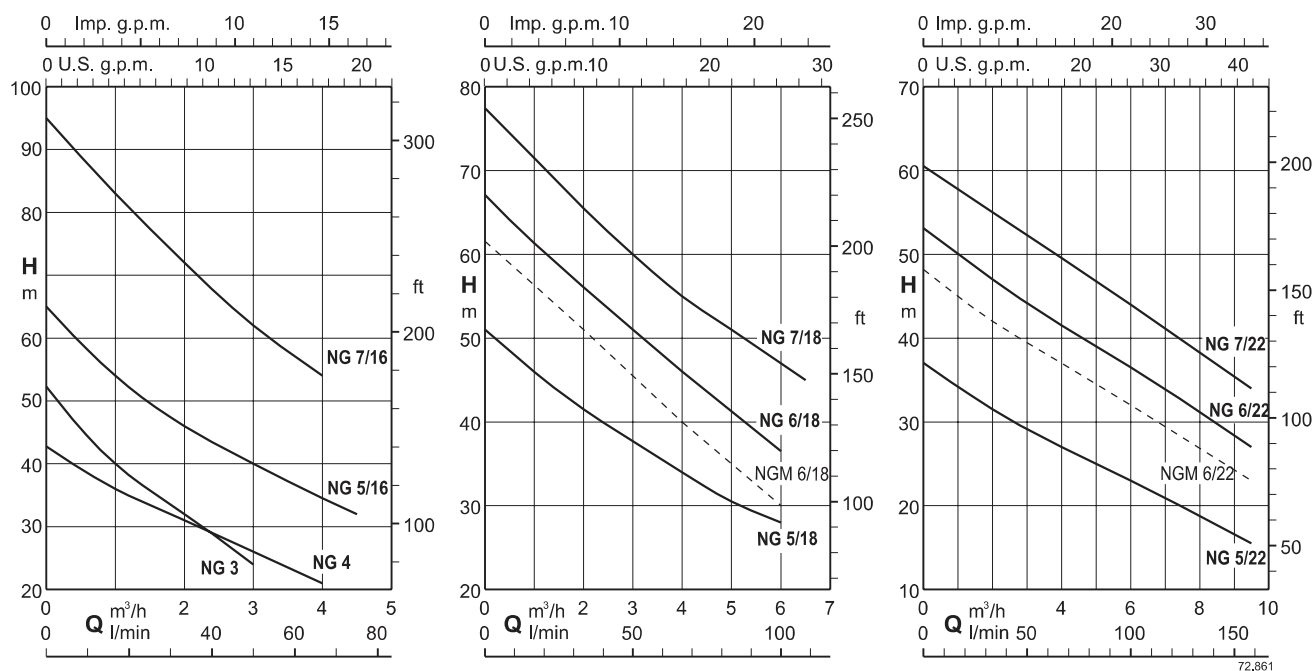


Coverage chart $n \approx 2900$ rpm

Self-priming jet pumps

Construction

Close-coupled self-priming shallow well jet pumps with built-in ejector.
 NG: version with pump casing and lantern bracket in cast iron.
 BNG: version with pump casing and lantern bracket in bronze.
 The pumps are supplied fully painted.

Applications

For drawing water out of a well.
 For increasing network pressure (follow local specifications).
 For clean liquids or slightly dirty surface water.
 For garden use.
 For washing with a jet of water.

Operating conditions

Liquid temperature up to 40°C.
 Ambient temperature up to 40° C.
 Maximum permissible working pressure up to 10 bar.
 Continuous duty (S3 60% for single-phase pump to 1,5 kW).

Motor

2-pole induction motor, 50 Hz ($n \approx 2900$ rpm).
NG: three-phase 230/400 V $\pm 10\%$.
NGM: single-phase 230 V $\pm 10\%$, with thermal protector.
 Capacitor inside the terminal box.
 Insulation class F.
 Protection IP54
IE2 efficiency class for single-phase motors up to 1,1 kW.
IE3 efficiency class for three-phase motors (IE2 up to 0,65 kW).
 Constructed in accordance with EN 60034-1.
 EN 60335-1, EN 60335-2-41.

Special features on request

Other voltages.
 Frequency 60 Hz (as per 60 Hz data sheet).
 Protection IP 55.
 Special mechanical seal

Designation

BNGM 5/16/A
 B = Bronze version (no indication: the pump is in the Cast Iron version)
 NG = Series
 M = Single-phase version (no indication: three-phase)
 5 = Progressive type number
 16 = Diameter of Venturi body
 /A = It refers to a revision

Materials

Components	NG	BNG
Pump casing	Cast iron GJL 200 EN 1561	Bronze CC480K EN 1982
Casing cover	Cast iron GJL 200 EN 1561	Bronze CC480K EN 1982
Diffuser plate	Cast iron GJL 200 EN 1561	Bronze CC480K EN 1982
Impeller	Brass CW617N EN 12167	Brass CW617N EN 12167
Shaft	Steel 1.4104 EN 10088 (AISI 430F). NG 3-4	Stainless Steel 1.4401 EN 10088 (AISI 316)
Shaft	Steel 1.4305 EN 10088 (AISI 303). NG 5-6-7	Stainless Steel 1.4401 EN 10088 (AISI 316)
Diffuser	Noryl PPO-GF20	Noryl PPO-GF20
Nozzle	Noryl PPO-GF20	Noryl PPO-GF20
Mechanical seal	Carbon - Ceramic - NBR	Carbon - Ceramic - NBR

Coverage chart n ≈ 2900 rpm
Three-phase

						Q = Flow																				
						m³/h	0	0,25	0,5	1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7	8	9	9,5	
								4,16	8,33	16,6	25	33,3	41,6	50	58,3	66,6	75	83,3	91,6	100	108	117	133	150	158	
Model		230V	400V	P2		l/min	H (m) = Total head																			
		A		kW	HP																					
BNG	NG 3/A	3	1,7	0,55	0,75		52,1	49	45,5	40	36	32	28	24	-	-	-	-	-	-	-	-	-	-	-	
BNG	NG 4/B	3,7	2,2	0,75	1		45,8	41	39	36	33	31	29	26	24	21	-	-	-	-	-	-	-	-	-	
BNG	NG 5/16/A	4,6	2,7	1,1	1,5		64	-	59	54	50	46	43	40	37	34,5	32	-	-	-	-	-	-	-	-	
BNG	NG 5/18/A	4,6	2,7	1,1	1,5		53	-	48,5	46	43,5	41,5	39,5	38	35,5	34	32	30,5	29	28	-	-	-	-	-	
BNG	NG 5/22/A	4,6	2,7	1,1	1,5		36,5	-	35,5	34,5	33	31,5	30,5	29,5	28	27	26	25	23,5	23	21,5	20,5	18,5	16,5	15,5	
BNG	NG 6/18/A	7,5	4,3	1,5	2		67,3	-	64,5	62	59	56	54	51	48,5	46	43,5	41,5	39	36,5	-	-	-	-	-	
BNG	NG 6/22/A	7,5	4,3	1,5	2		53	-	51,5	50	48,5	47	46	44,5	43	41,5	40	39	37,5	36,5	35	33,5	31	28,5	27	
BNG	NG 7/16/B	9,2	5,3	2,2	3		95	-	89	83	77	72	67	62	58	54	-	-	-	-	-	-	-	-	-	
BNG	NG 7/18/B	9,2	5,3	2,2	3		77	-	74,5	71,5	68,5	65,5	63	60	57,5	55	53	51	49	47	45	-	-	-	-	
BNG	NG 7/22/B	9,2	5,3	2,2	3		60	-	59	57,5	56,5	55	54	52,5	51	50	48,5	47	45,5	44	42,5	41,5	38	35	34	

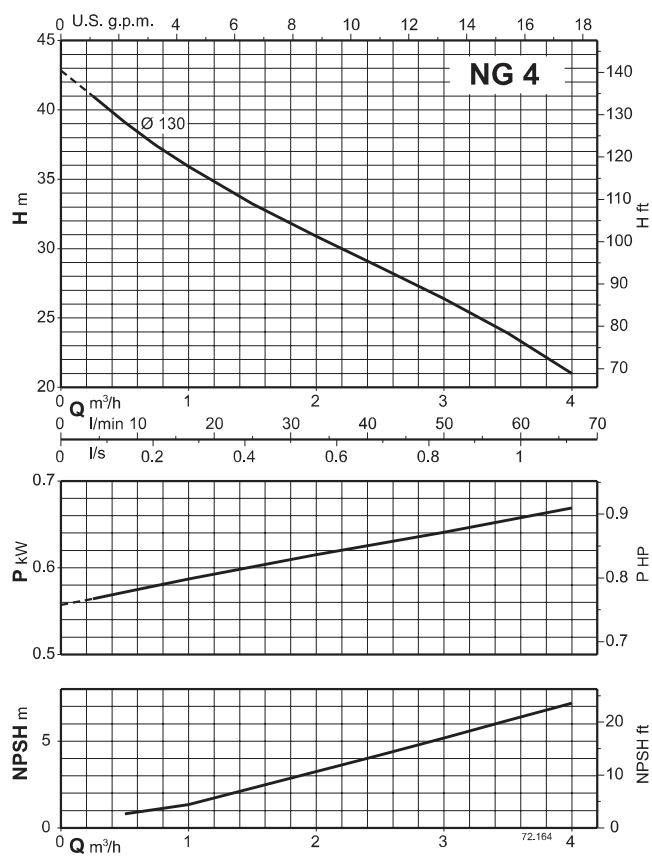
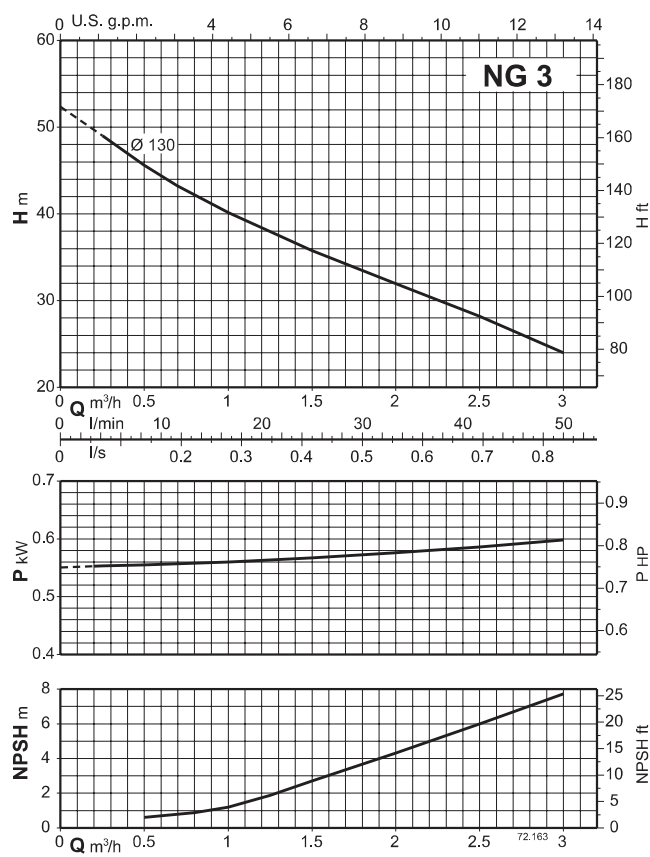
Single-phase

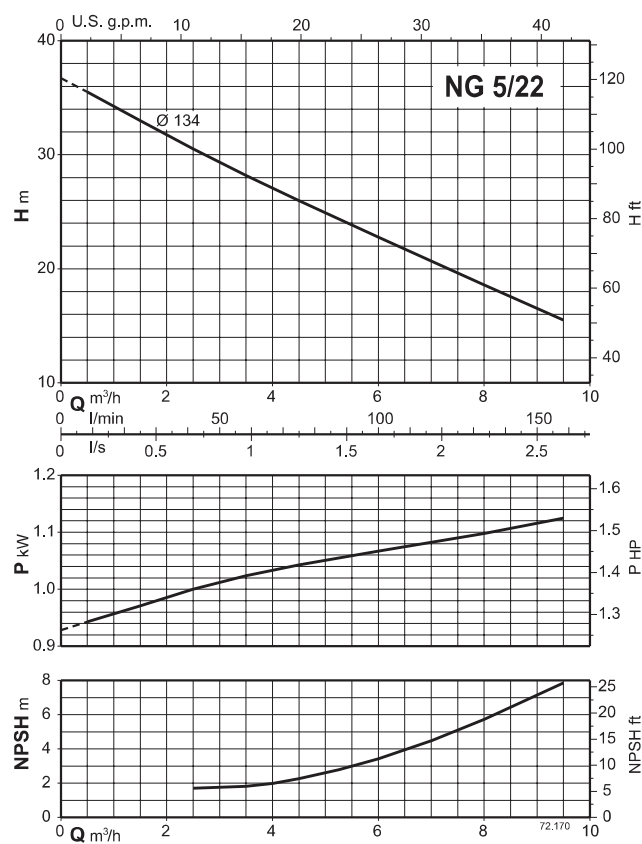
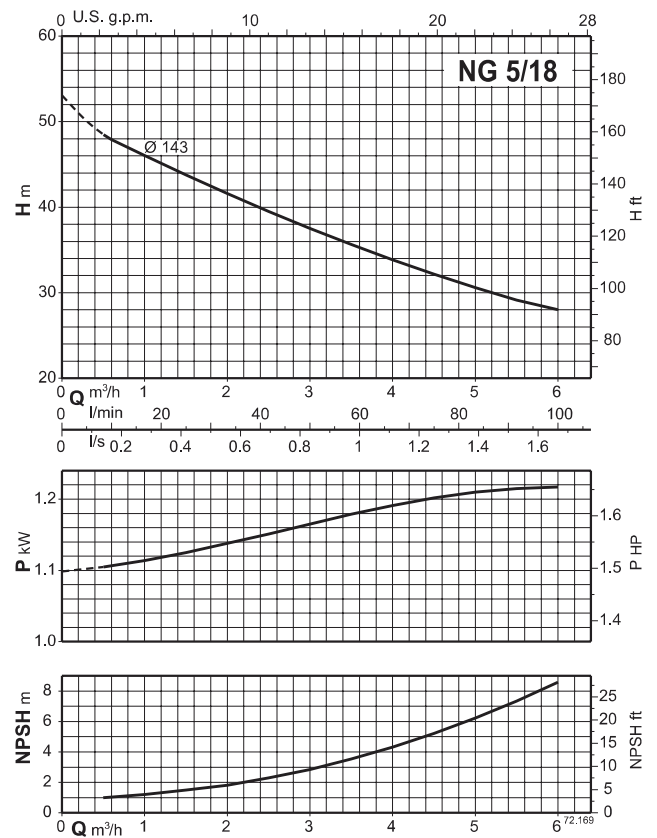
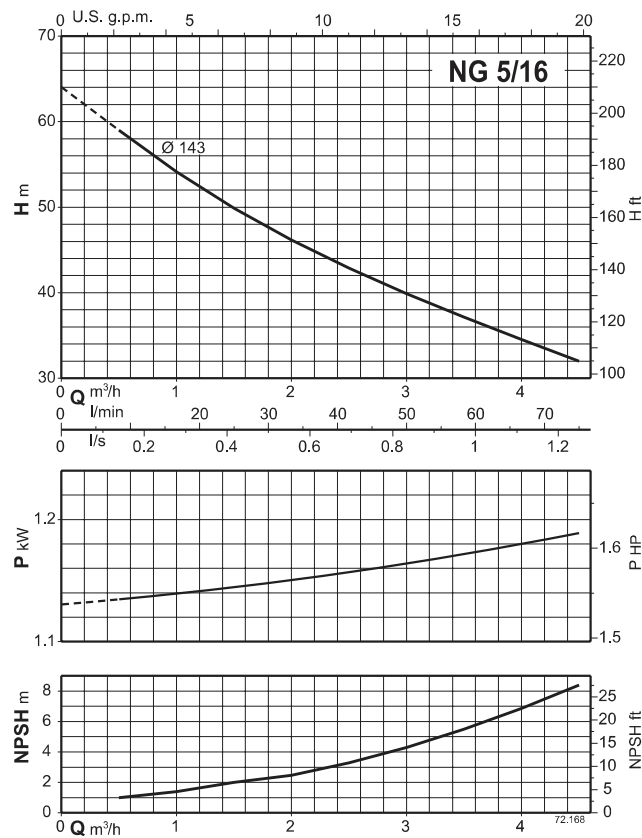
						Q = Flow																			
						m³/h	0	0,25	0,5	1	1,5	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7	8	9	9,5
						l/min		4,16	8,33	16,6	25	33,3	41,6	50	58,3	66,6	75	83,3	91,6	100	108	117	133	150	158
Model		230V	P2		P1	H (m) = Total head																			
		A	kW	HP	kW																				
BNGM	NGM 3/A	4,5	0,55	0,75	0,78		52,1	49	45,5	40	36	32	28	24	-	-	-	-	-	-	-	-	-	-	-
BNGM	NGM 4/A	5,7	0,75	1	1,01		45,8	41	39	36	33	31	29	26	24	21	-	-	-	-	-	-	-	-	-
BNGM	NGM 5/16E	7,4	1,1	1,5	1,44		64	-	59	54	50	46	43	40	37	34,5	32	-	-	-	-	-	-	-	-
BNGM	NGM 5/18E	7,4	1,1	1,5	1,44		53	-	48,5	46	43,5	41,5	39,5	38	35,5	34	32	30,5	29	28	-	-	-	-	-
BNGM	NGM 5/22E	7,4	1,1	1,5	1,44		36,5	-	35,5	34,5	33	31,5	30,5	29,5	28	27	26	25	23,5	23	21,5	20,5	18,5	16,5	15,5
BNGM	NGM 6/18E	9,2	1,5	2	2		61,8	-	59	57	54	51	48	45	43	40	37,5	35	33	30	-	-	-	-	-
BNGM	NGM 6/22E	9,2	1,5	2	2		48,5	-	47	45	43,5	42	41	40	38	37	36	35	33	32	31	30	27	24	23

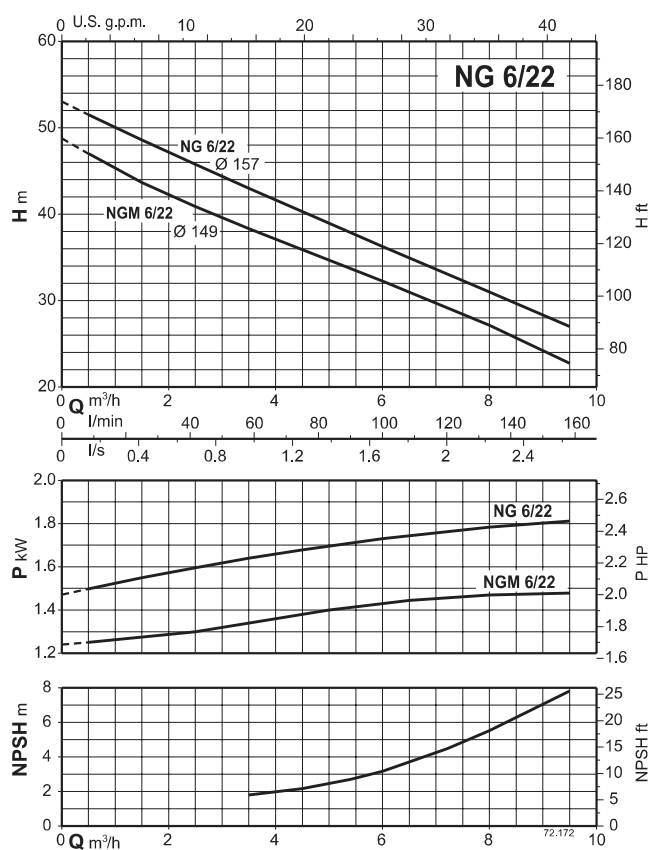
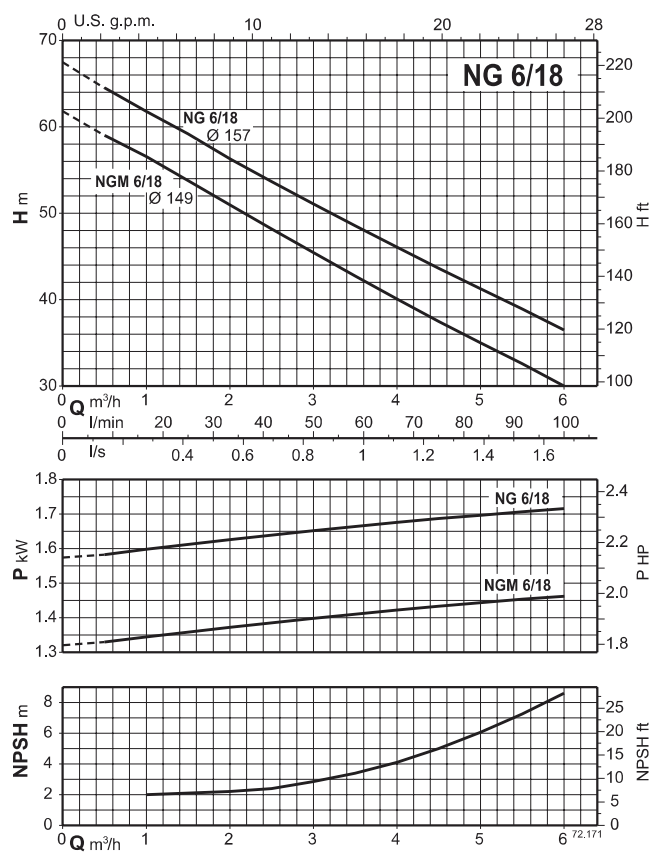
P1: Maximum power input.

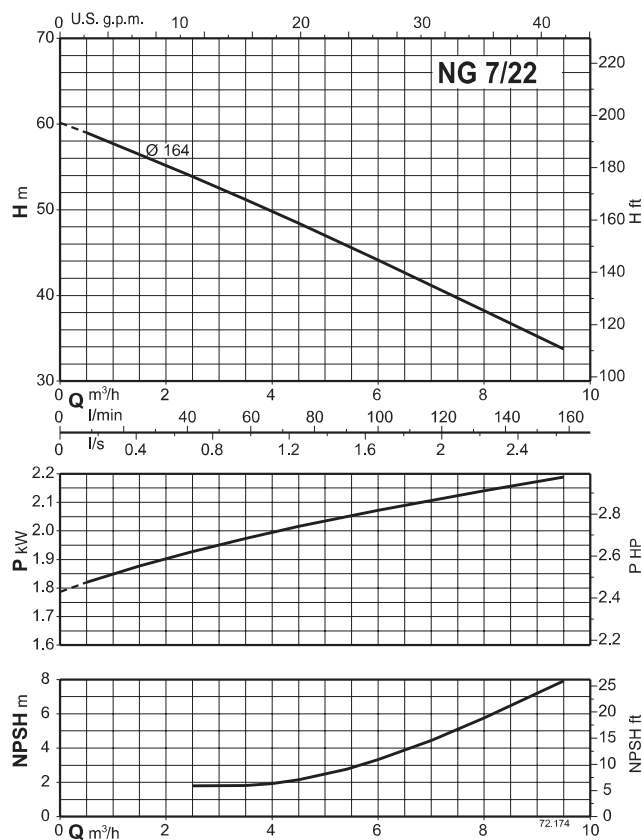
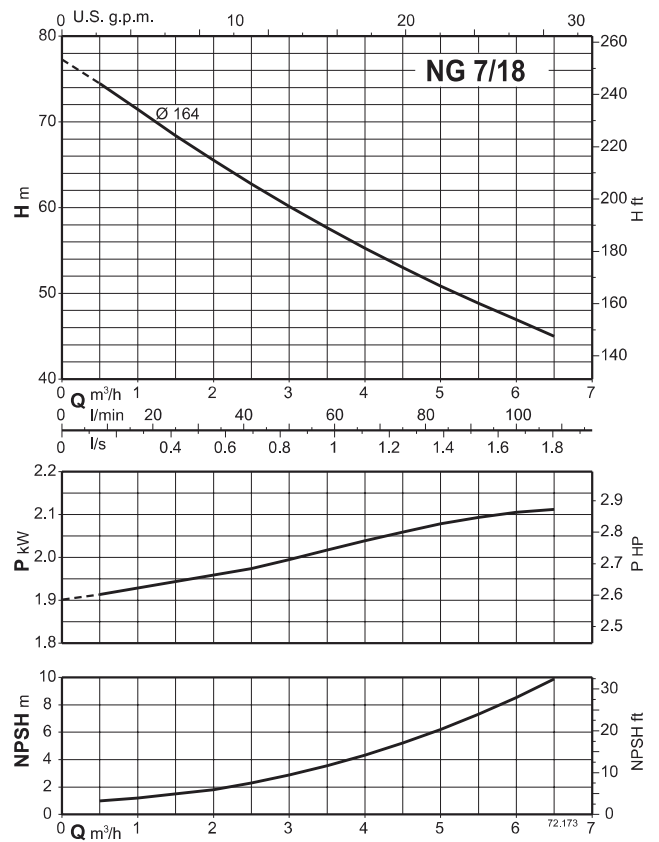
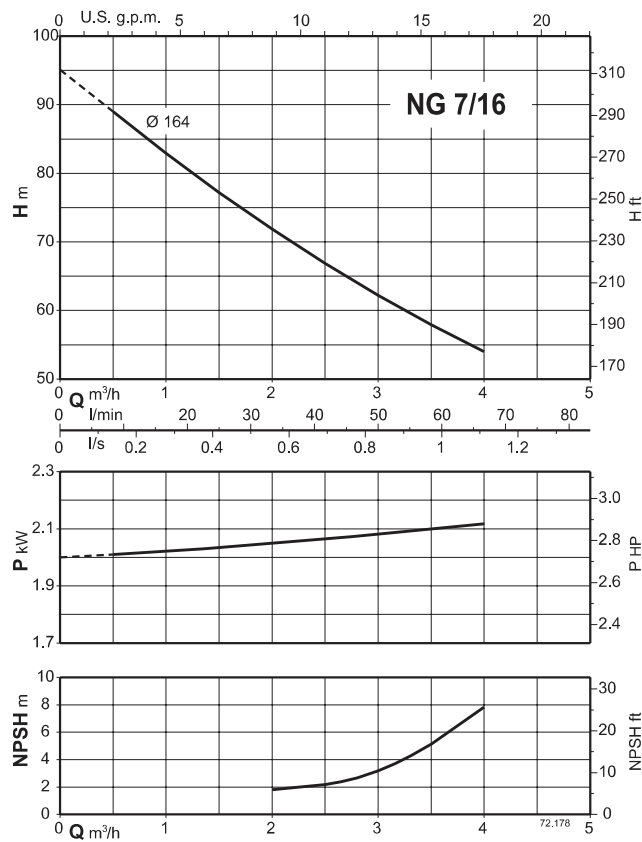
P2: Rated motor power output.

Tolerances according to UNI EN ISO 9906:2012

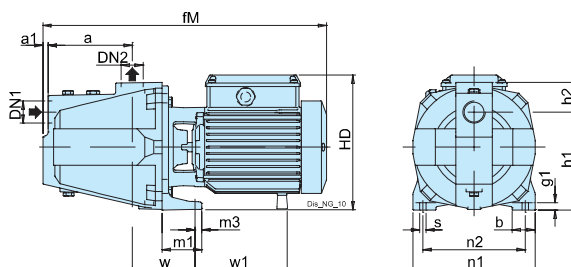
Characteristic curves $n \approx 2900$ rpm


Characteristic curves $n \approx 2900$ rpm


Characteristic curves $n \approx 2900$ rpm


Characteristic curves $n \approx 2900$ rpm


Dimensions and weights



TYPE	ISO 228		mm															kg
	DN1	DN2	a	a1	b	fM	g1	h1	h2	HD	m1	m3	n1	n2	s	w	w1	Weight
NG 3/A	G 1	G 1	127	8	35	430	11	150	43	207	60	8	185	155	9.5	100	-	17.3
NG 4/B	G 1	G 1	127	8	35	430	11	150	43	207	60	8	185	155	9.5	100	-	19.3
NG 5/16/A	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	-	28.1
NG 5/18/A	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	-	28.1
NG 5/22/A	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	-	28.1
NG 6/18/A	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	-	29.7
NG 6/22/A	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	-	29.7
NG 7/16/B	G 1 1/2	G 1	160	10	40	600	11	165	57	240	60	10	215	175	11.5	115	233	32.9
NG 7/18/B	G 1 1/2	G 1	160	10	40	600	11	165	57	240	60	10	215	175	11.5	115	233	32.9
NG 7/22/B	G 1 1/2	G 1	160	10	40	600	11	165	57	240	60	10	215	175	11.5	115	233	32.9

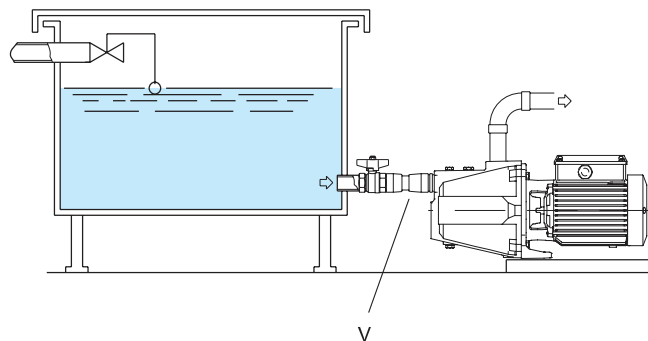
TYPE	ISO 228		mm														kg
	DN1	DN2	a	a1	b	fM	g1	h1	h2	HD	m1	m3	n1	n2	s	w	Weight
NGM 3/A	G 1	G 1	127	8	35	430	11	150	43	207	60	8	185	155	9.5	100	18.5
NGM 4/A	G 1	G 1	127	8	35	430	11	150	43	207	60	8	185	155	9.5	100	19.4
NGM 5/16E	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	29.6
NGM 5/18E	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	29.7
NGM 5/22E	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	29.3
NGM 6/18E	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	29.6
NGM 6/22E	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	29.6

TYPE	ISO 228		mm															kg
	DN1	DN2	a	a1	b	fM	g1	h1	h2	HD	m1	m3	n1	n2	s	w	w1	Weight
BNG 3/A	G 1	G 1	127	8	35	430	11	150	43	207	60	8	185	155	9.5	100	-	20.6
BNG 4/B	G 1	G 1	127	8	35	430	11	150	43	207	60	8	185	155	9.5	100	-	22.3
BNG 5/16/A	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	-	32.1
BNG 5/18/A	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	-	32.1
BNG 5/22/A	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	-	32.1
BNG 6/18/A	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	-	33.4
BNG 6/22/A	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	-	33.4
BNG 7/16/B	G 1 1/2	G 1	160	10	40	600	11	165	57	240	60	10	215	175	11.5	115	233	36.6
BNG 7/18/B	G 1 1/2	G 1	160	10	40	600	11	165	57	240	60	10	215	175	11.5	115	233	36.6
BNG 7/22/B	G 1 1/2	G 1	160	10	40	600	11	165	57	240	60	10	215	175	11.5	115	233	36.6

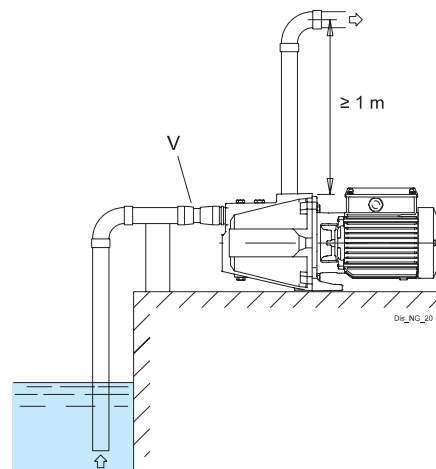
TYPE	ISO 228		mm														kg
	DN1	DN2	a	a1	b	fM	g1	h1	h2	HD	m1	m3	n1	n2	s	w	Weight
BNGM 3/A	G 1	G 1	127	8	35	430	11	150	43	207	60	8	185	155	9.5	100	21.6
BNGM 4/A	G 1	G 1	127	8	35	430	11	150	43	207	60	8	185	155	9.5	100	22.4
BNGM 5/16E	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	34
BNGM 5/18E	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	34
BNGM 5/22E	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	34
BNGM 6/18E	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	34
BNGM 6/22E	G 1 1/2	G 1	160	10	40	560	11	165	57	240	60	10	215	175	11.5	115	34

Examples of installations

Positive suction head operation



Operation with suction lift



Check valve