

NG 60 Hz Self-Priming Jet Pumps



Construction

Close-coupled self-priming shallow well jet pumps with built-in ejector.

The pumps in bronze are supplied fully painted.

Applications

For drawing water out of a well.

As pressure boosting pump for central water systems with low pressure (follow local specifications if increasing network pressure).

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.

Motor

2-pole induction motor, 60 Hz ($n \approx 3450$ rpm).

NG: three-phase 220/380 V.

NGM: single-phase 220 V, with thermal protector up to 1.1 kW.

Insulation class F.

Protection IP 54.

Classification scheme IE2 for three-phase motors from 0,75 kW.

Constructed in accordance with: EN 60034-1; EN 60034-30.

EN 60335-1, EN 60335-2-41.

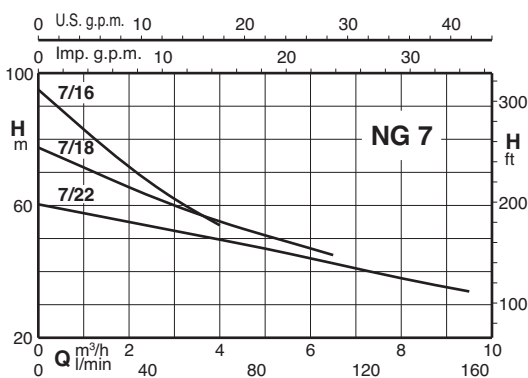
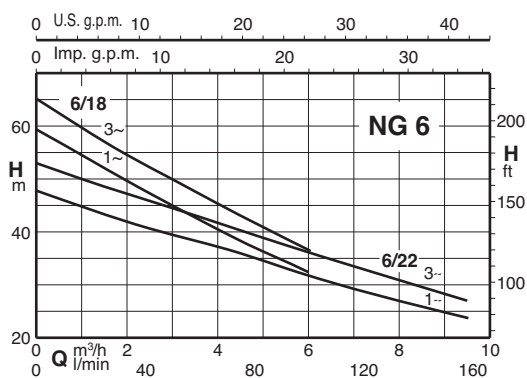
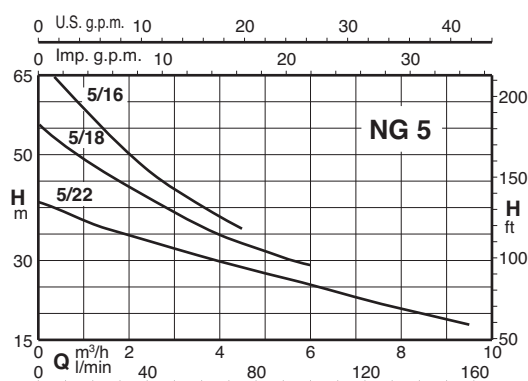
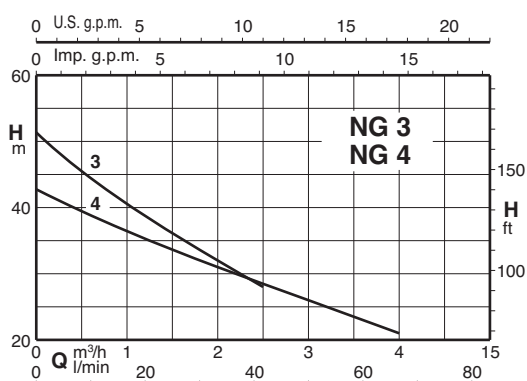
Materials

Components	NG	B-NG
Pump casing	Cast iron	Bronze
Cover with lantern bracket	GJL 200 EN 1561	G-Cu Sn 10 EN 1982
Diffuser plate		
Impeller	Brass P- Cu Zn 40 Pb 2 UNI 5705	
Shaft	Chrome steel AISI 430 for NG 3-4	Cr-Ni-Mo steel AISI 316
	Chrome-nickel steel AISI 303 for NG 5-6-7	
Diffuser - Ejector	PPO-GF20 (Noryl)	
Mechanical seal	Carbon - Ceramic - NBR	

Special features on request

- Other voltages.
- Protection IP 55.
- Special mechanical seal

Coverage chart $n \approx 3450$ rpm



Performance for suction lift $H_s = 1$ m $n \approx 3450$ rpm

3 ~				1 ~			P ₂		Q m³/h l/min																		
220V		380V		220V		kW		HP		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
A	A	IA/IN		A	IA/IN				H m	4,1	8,3	16,6	25	33,3	41,6	50	58,3	66,6	75	83,3	91,6	100	108	116	133	150	158
NG 3-60/A B-NG 3-60/A	3,6	2,1	3,7	NGM 3-60/A B-NGM 3-60/A	5,2	3,1	0,55	0,75		49	45	40	35	32	27												
NG 4-60/A B-NG 4-60/A	4,5	2,6	6,8	NGM 4-60/A B-NGM 4-60/A	6,9	3,1	0,75	1		42	41	37,5	35	32	30	27	24	22									
B-NG 5/16E-60	5,7	3,3	5,5	B-NGM 5/16E-60	8,5	3	1,1	1,5				58	54	50	46	42,5	40	37,5	36								
B-NG 5/18E-60	5,7	3,3	5,5	B-NGM 5/18E-60	8,5	3	1,1	1,5				49	47	44	41,5	39	37,5	35	33	31,5	30	29					
B-NG 5/22E-60	5,7	3,3	5,5	B-NGM 5/22E-60	8,5	3	1,1	1,5				37	36	35	34	33	31,5	30	29	28	26,5	25,5	24	23	20,5	18	17
B-NG 6/18E-60	9	5,2	5,4				1,5	2				60	58	56	53	50	48	45	43	41	39	36					
				B-NGM 6/18E-60	10,6	3,8	1,5	2				54	51	49	46	44	41	39	38	35	34	32					
B-NG 6/22E-60	9	5,2	5,4				1,5	2				50	48	47	45	44	42,5	41	40	39	37	36	35	33	31	28	27
				B-NGM 6/22E-60	10,6	3,8	1,5	2				44	42,5	41	40	39	37,5	36	35	34	32,5	31,5	30	29	27	25	24
B-NG 7/16-60/A	11,1	6,4	7,3				2,2	3				82	77	72	67	62	57,5	54									
B-NG 7/18-60/A	11,1	6,4	7,3				2,2	3				71	68	65	63	60	57	55	52,5	51	49	47	45				
B-NG 7/22-60/A	11,1	6,4	7,3				2,2	3				57	56	55	54	52	51	49,5	48	47	45	44	42	41	38	35	33

IA/IN = D.O.L. starting current / Rated current

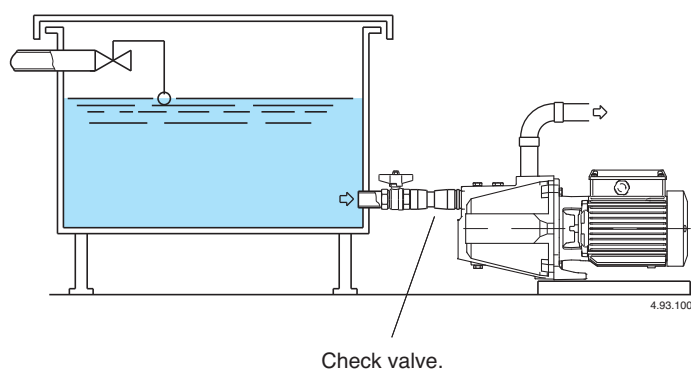
B-NG, B-NGM = Bronze construction.

Tolerances according to UNI EN ISO 9906:2012.

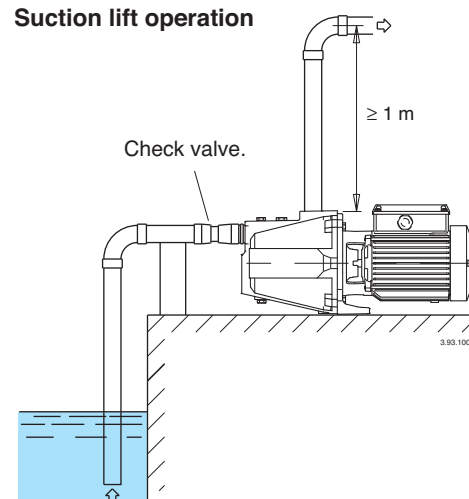
P₂ Rated motor power output.

Installation examples

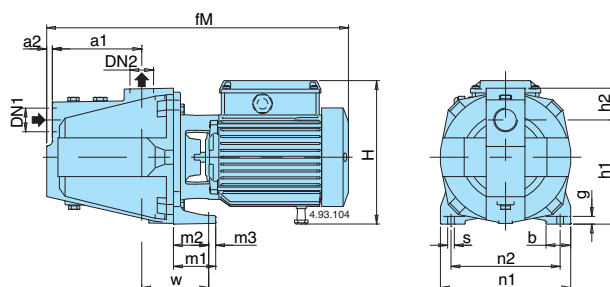
Positive suction head operation



Suction lift operation

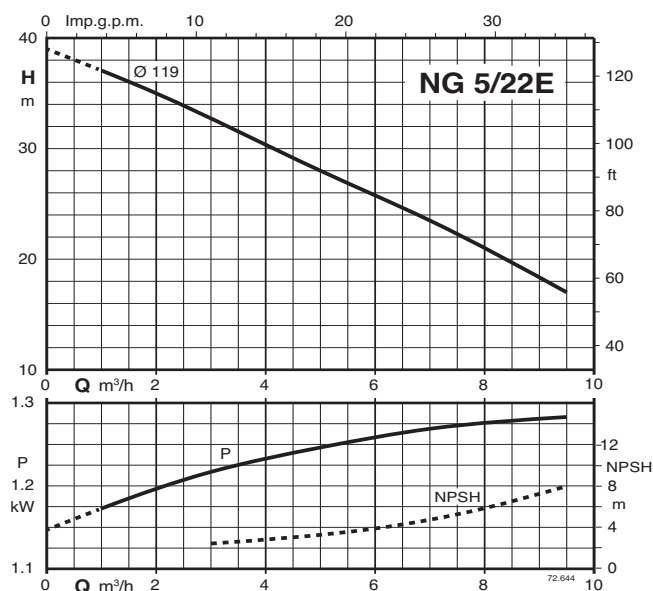
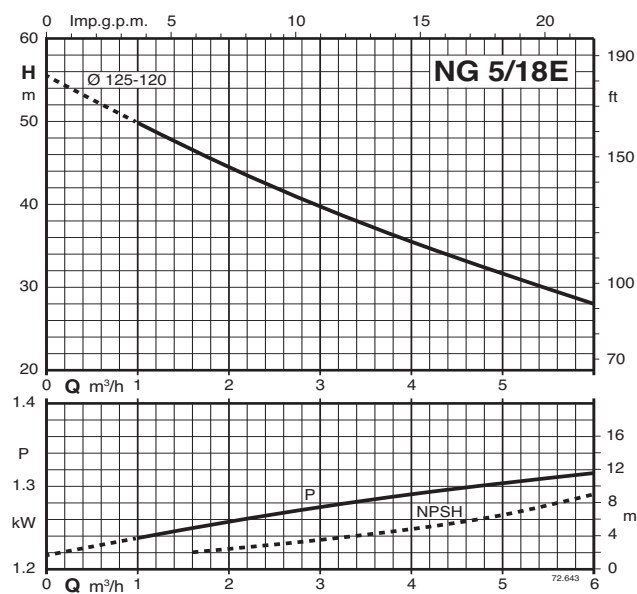
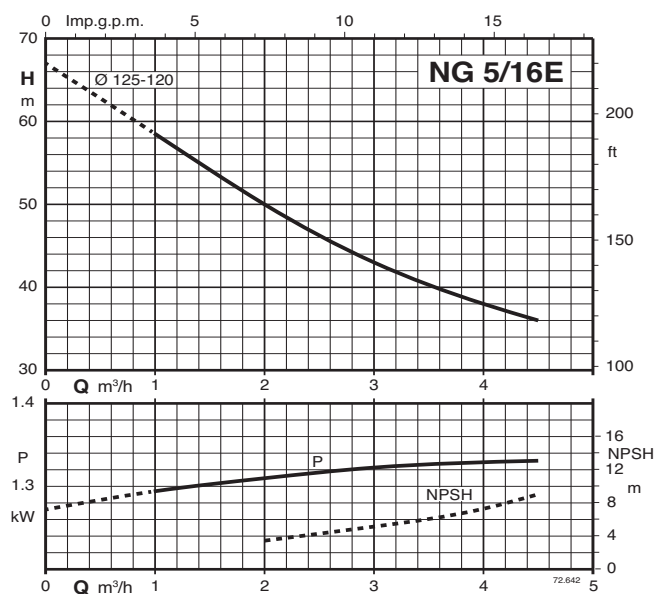
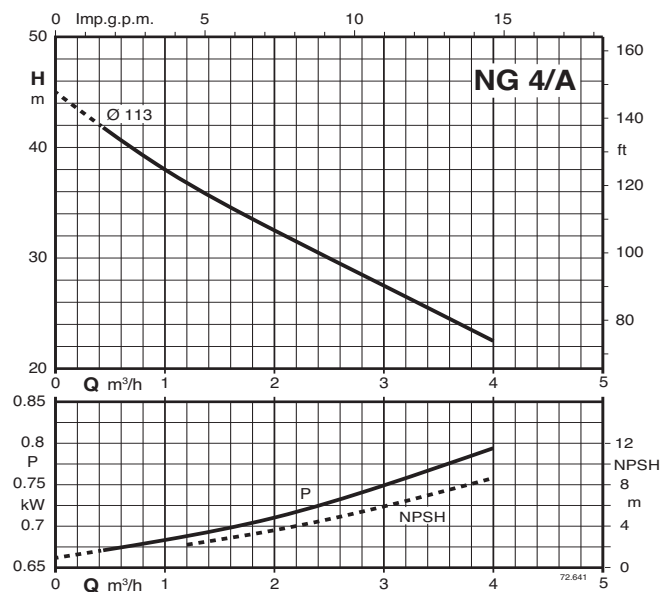
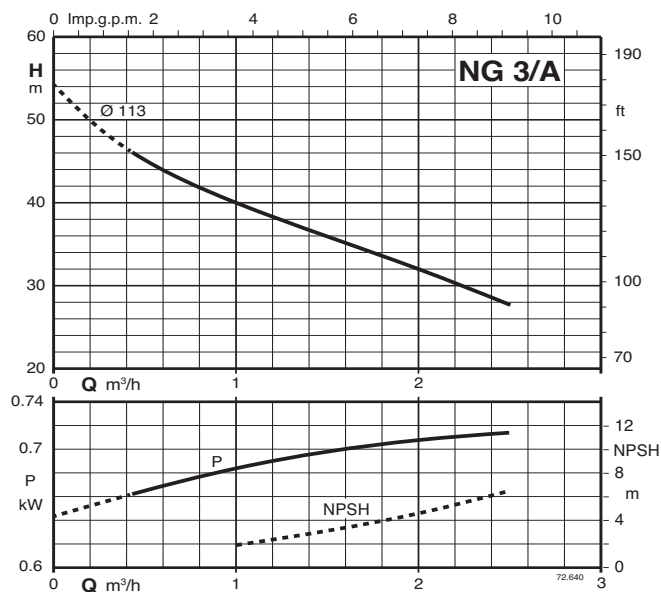


Dimensions and weights

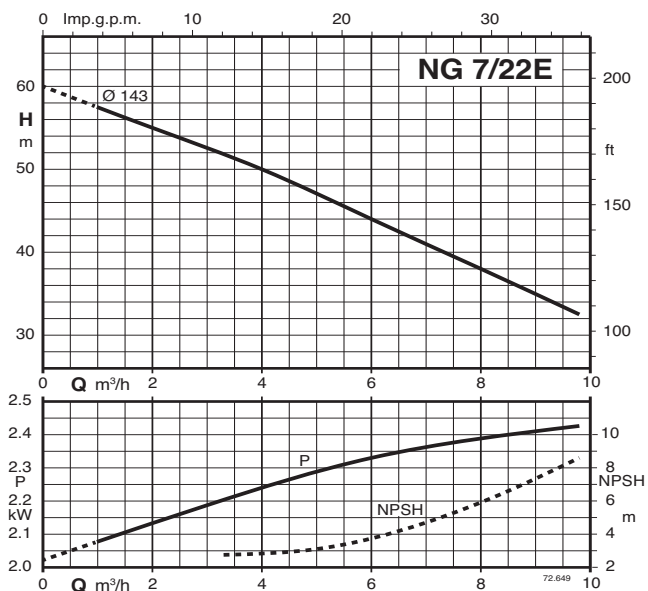
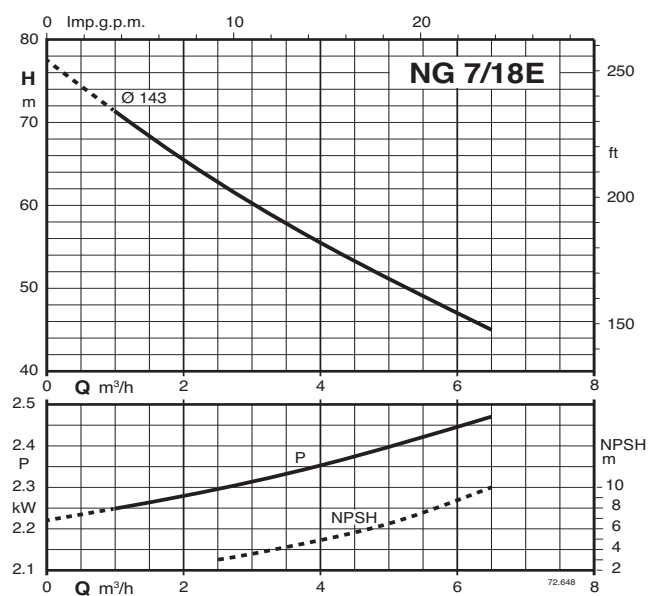
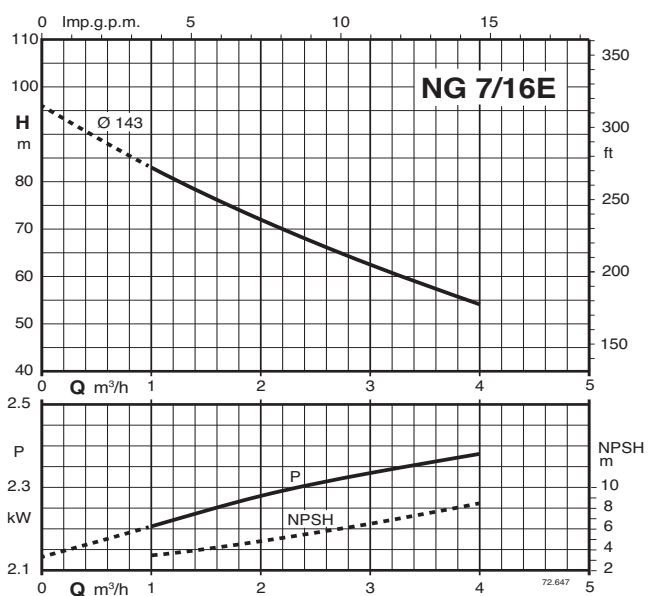
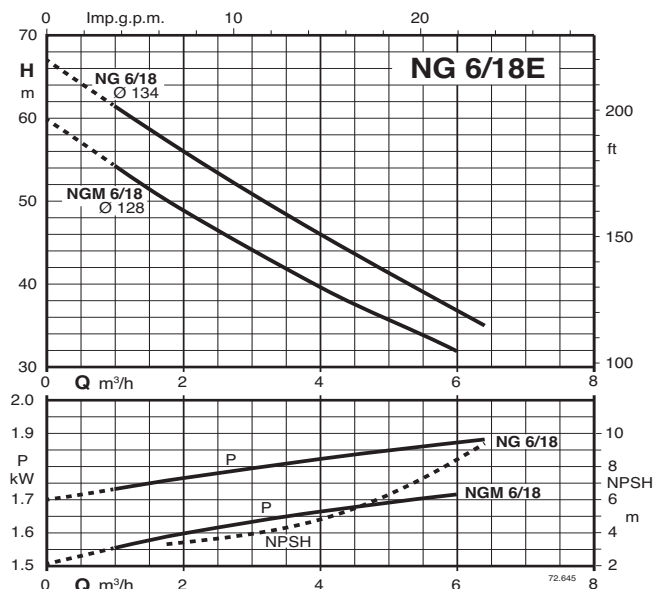
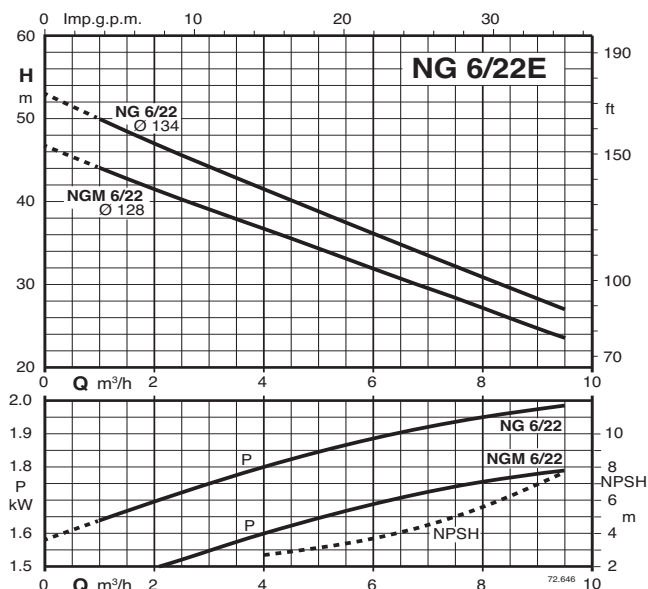


TYPE		DN ₁	DN ₂																kg	
		ISO 228		a1	a2	fM	h1	h2	H	m1	m2	m3	n1	n2	b	s	w	g	NG	B-NG
NG 3-60/A	B-NG 3-60/A	G 1	G 1	127	8	430	150	43	207	60	52	8	185	155	35	9,5	100	11	18,4	20,8
NG 4-60/A	B-NG 4-60/A																		19,2	21,5
NG 5E-60	B-NG 5E-60	G 1½	G 1	160	10	560	165	57	197	60	50	10	215	175	40	11,5	115	11	29,2	31,2
NG 6E-60	B-NG 6E-60					560													30,8	32,8
NG 7-60/A	B-NG 7-60/A					600													31,3	33,3

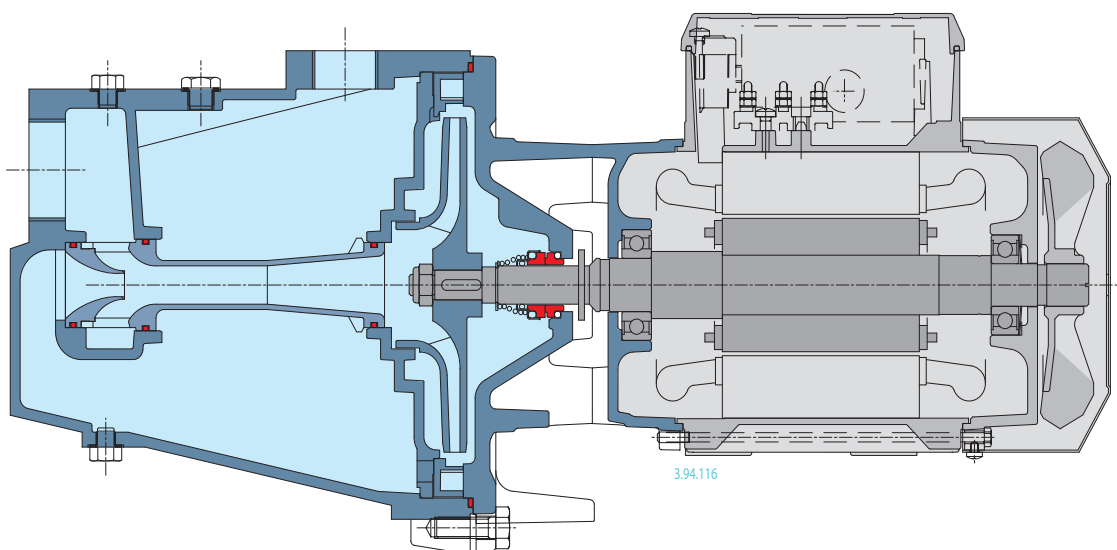
Characteristic curves $n \approx 3450$ rpm



Characteristic curves $n \approx 3450$ rpm



Features



Robustness

The mechanical structure of the hydraulic parts in contact with the pumped liquid are dimensioned to guarantee the maximum resistance to mechanical stress.

SELF PRIMING

The hydraulic design allows the pump to self prime even with the high suction lifts or with long suction pipe runs above the water level.

Flexibility

The option to choose between cast iron and bronze materials for the hydraulic parts in contact with the pumped liquid allows NG series pumps to be selected for use with different types of liquids.

Exclusive design

An innovative, patented guard prevents contact with rotating parts, proving protection to the end user whilst allowing for inspection of the mechanical seal.