

# TAB self-priming "JET" pumps

## PERFORMANCE RANGE

Flow rate up to 80 l/min(4.8 m<sup>3</sup>/h)  
Dynamic head up to 70 m

### OPERATING LIMITS

Suction lift up to 9 m  
Fluid temperature up to +40°C  
Maximum ambient temperature +40°C

**A new and improved self-priming pump design, increased hydraulic efficiency, to current standards**



### WORKING PRINCIPLE

The **TAB** series are SELF-PRIMING CENTRIFUGAL PUMPS. Self-priming is achieved using an ejector, housed in the pump body. The total delivery produced by the closed centrifugal impeller is sent only partly to the delivery opening. The remaining water is recirculated through the ejector, which is connected to the suction chamber and generates the necessary vacuum of self-prime the pump. When first starting the pump fill the pump body with water, without bothering to fill the suction piping and eliminate any air pockets. When the pump is started up the water in the pump body circulates through the ejector and transfers any air from the suction to delivery chamber, expelling it through the delivery piping. At the same time the vacuum thus generated causes water to rise in the suction piping, thus self-priming the pump. Since the self-priming system operates continuously, these pumps are practically unaffected even by the presence of large amounts of entrained air in the fluid being pumped. The **TAB** series, based on past **TOP** experience, is designed with particular attention to hydraulic efficiency and choice of materials. The result is a compact, quiet high performance pump.

### PUMP INSTALLATION AND APPLICATIONS

These pumps are suitable for pumping clean water and fluids which are not chemically aggressive to pump components. **THEY ARE EXTREMELY RELIABLE, ECONOMICAL AND SIMPLE TO USE, BEING PARTICULARLY SUITABLE FOR DOMESTIC APPLICATIONS SUCH AS THE AUTOMATIC DISTRIBUTION OF WATER FROM SMALL AND MEDIUM-SIZE TANKS, WATERING GARDENS, ECT.** These pumps should be installed in a covered area, protected against the weather.

### PERFORMANCE

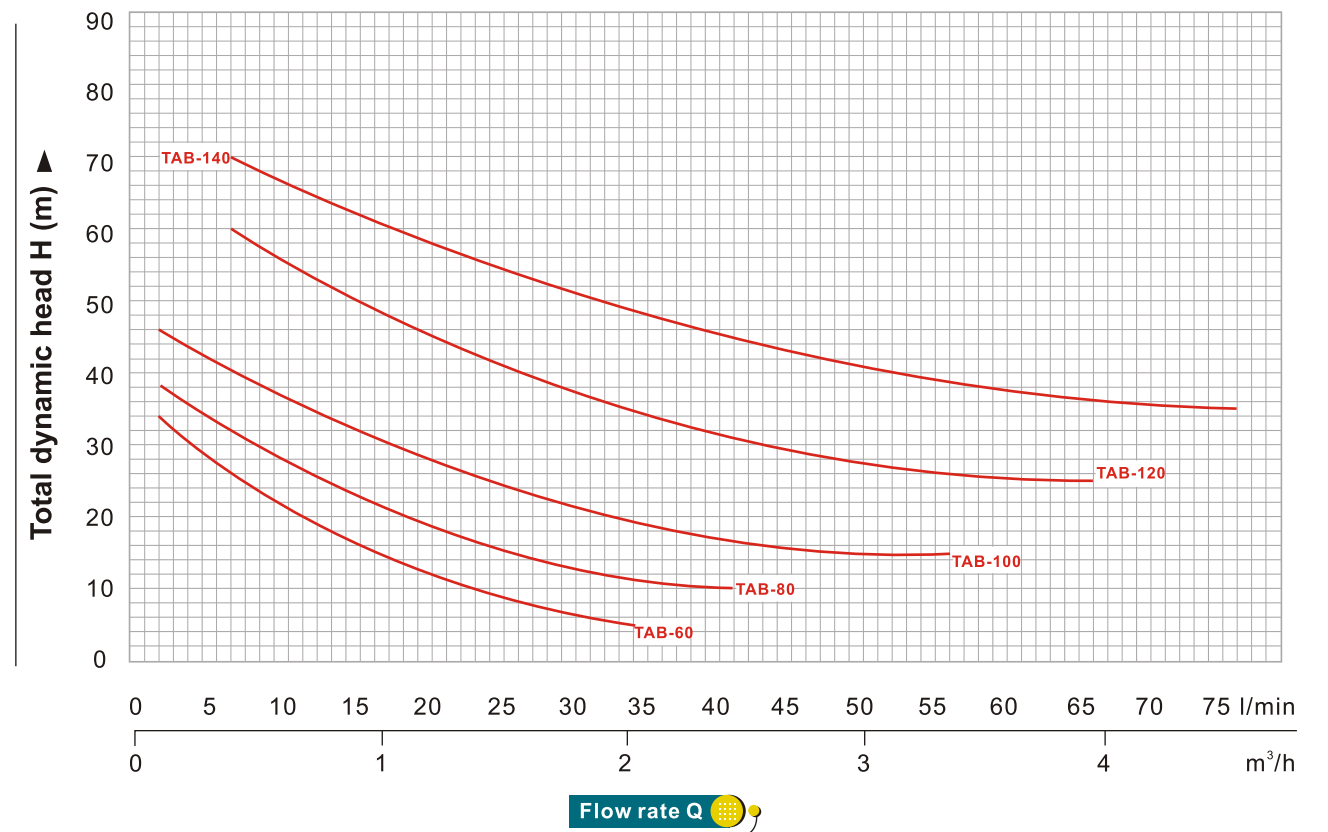
The wide range of pump in the **TAB** series satisfied the most varied requirements with features such as:

- high heads compared to required power levels;
- flat operating and power absorption curves, giving moderate curve variations with respect to large variations in delivery demand;
- high tolerance of the presence of entrained air in the fluid to be pumped;
- suction capacity up to 9 meters

### STRUCTURAL CHARACTERISTICS

- Cast iron **PUMP BODY**
- Stainless steel **PUMP BODY COVER** serving also as mechanical seal housing.
- Technopolymer **EJECTOR UNIT**(approved for drinking water)
- Centrifugal radial flow **IMPELLER** in **BRASS** or technopolymer (approved for drinking water)on request.
- Ceramic and graphite **MECHANICAL SEAL**.
- MOTOR**: the pumps are coupled directly to an asynchronous, high efficient **TOP** induction motor of suitable size, which is quiet running, closed and externally ventilated, suitable for continuous duty, **INSULATION** class B .  
The **thermal cutout relay (motor protector)** is incorporated in all single phase motors.  
Three phase motors require an adequate external motor protector, with connection according to current standards.
- PROTECTION IP 44**
- CONSTRUCTION AND SAFETY STANDARDS** in compliance with IEC.

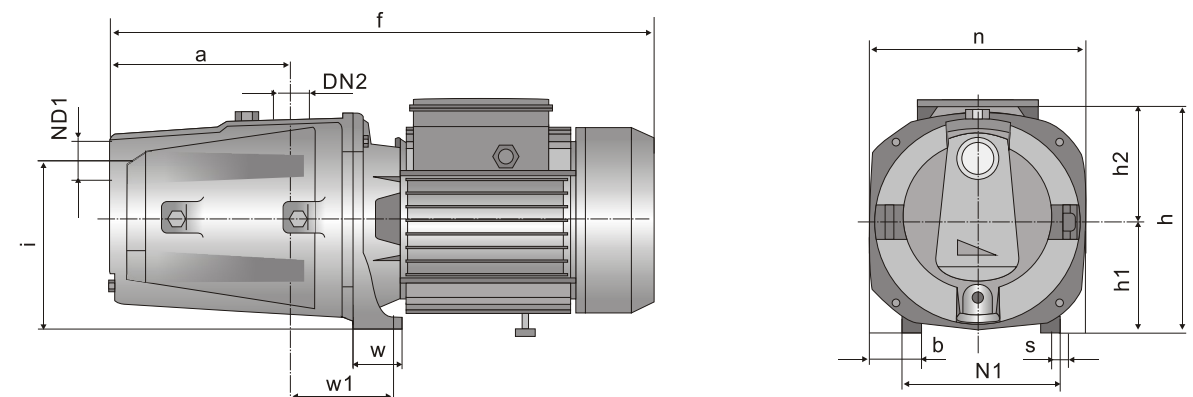
**WARRANTY: 1YEAR**(according to our general sales conditions)



### PERFORMANCE DATA at n=2900 l/min

PUMP MODEL		POWER		Qm <sup>3</sup> /h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.28	2.7	3.6	4.2	4.8	
Single phase	Three phase	kM	HP	l/min	H m													
TABm-60	TAB-60	0.4	0.50		35	34	26.5	20	15	11	8	6	5					
TABm-80	TAB-80	0.55	0.70		40	38	32	28	21.5	18	15	13	11.5	10				
TABm-100	TAB-100	0.75	0.85		50	46	40	35	30.5	27	23.5	21	19	17	15			
TABm-120	TAB-120	1.1	1.5		64	-	60	54	49	44	40	36	34.5	31	26	25		
TABm-140	TAB-140	1.5	2		70	-	70	65	61	57	53	49.5	48	44	38.5	36	35	

H=TOTAL DYNAMIC HEAD IN METERS.Q=FLOW RATE



PUMP MODEL		DN1	DN2	DIMENSIONS mm											
Single phase	Three phase			a	f	h	h1	h2	i	n	n1	w	w1	b	s
TABm-60	TAB-60	1"	1"	90	345	174	82	92	122	160	120	37	95	38	9
TABm-80	TAB-80	1"	1"	90	345	174	82	92	122	160	120	37	95	38	9
TABm-100	TAB-100	1"	1"	90	345	174	82	92	122	160	120	37	95	38	9
TABm-120	TAB-120	1"	1"	90	353	174	82	92	122	160	120	37	95	38	9
TABm-140	TAB-140	1"	1"	90	353	174	82	92	122	160	120	37	95	38	9