



## THE TORMAC STABLE OF THROUGHBREDS



PRODUCT CATALOGUE | **50 & 60 Hz**

The power to surge ahead.  
Break barriers. Take on challenges.  
Do the impossible. To put it succinctly,  
give you the winning edge.  
**THAT'S THE TORMAC PROMISE.**

### THE RACE TO THE TOP

Tormac, since inception, has always had its sights on the world at large. Fact is, when you have a good thing going, the world is for the taking. And with quality by our side, we took the world in our stride. Tormac has been in the forefront in taking the revolutionary, innovative pump technology the world over and has made it a household name in some of the toughest markets worldwide.

After successfully making its presence felt in diverse markets worldwide, Tormac has since its launch in India, made its mark as one of the finest pumps in the market today. Tormac in fact has established its presence in diverse markets across the globe. The Middle East, Africa, Europe and South East Asia, apart from India.

In India, Tormac has made major inroads into the market. With branches across the length and breadth of the country, Tormac is fast emerging as the benchmark by which pump quality would be evaluated.



Going that extra mile. Exploring newer  
and innovative ways of doing things.  
Staying open to change.  
Staying on the cutting edge.  
**THAT'S THE TORMAC WAY.**

#### ON A WINNING COURSE

Tormac pumps are manufactured at ISO 9001 facilities, located in the industrial city of Coimbatore, in the South of India and the facilities showcase the very latest in the field. Highly sophisticated machinery is employed in the manufacture of the pumps. Innovative fabrication and original welding technology combine well with proven processes to ensure fast efficient production capabilities.

Design and manufacture are carried out under digital environment for zero defect product turn out. The central focus being on Research it is easy to see why R&D takes pride of place. State of the art equipment and testing parameters ensure that all aspects of manufacture from design to function are tested and certified for optimum performance. The R&D department is always on its toes incorporating innovative ideas and processes in design and tooling to meet any challenge that the market may throw up.

Everything from the raw material employed and flawless manufacturing parameters to innovative technology to quality control standards contribute to the standing of Tormac as a pump that will stand the test of time. But the real strength lies in the fact the manufacturing facilities and the work culture contribute to the ability to respond to any demand at short notice.





Going forth boldly into the future.  
Building bridges of understanding.  
Setting benchmarks for quality.  
Winning accolades.  
THAT'S THE **TORMAC ROUTE MAP.**



#### TAKING ON THE CHALLENGE

As a company that has stayed on the cutting edge of pump design and manufacture, the inputs that go into the manufacture are quite ingenious and incorporate engineering skills of the highest order. Couple that with the innovations that are integral to Tormac and you'll know why Tormac holds such an awesome reputation for quality in the world today.

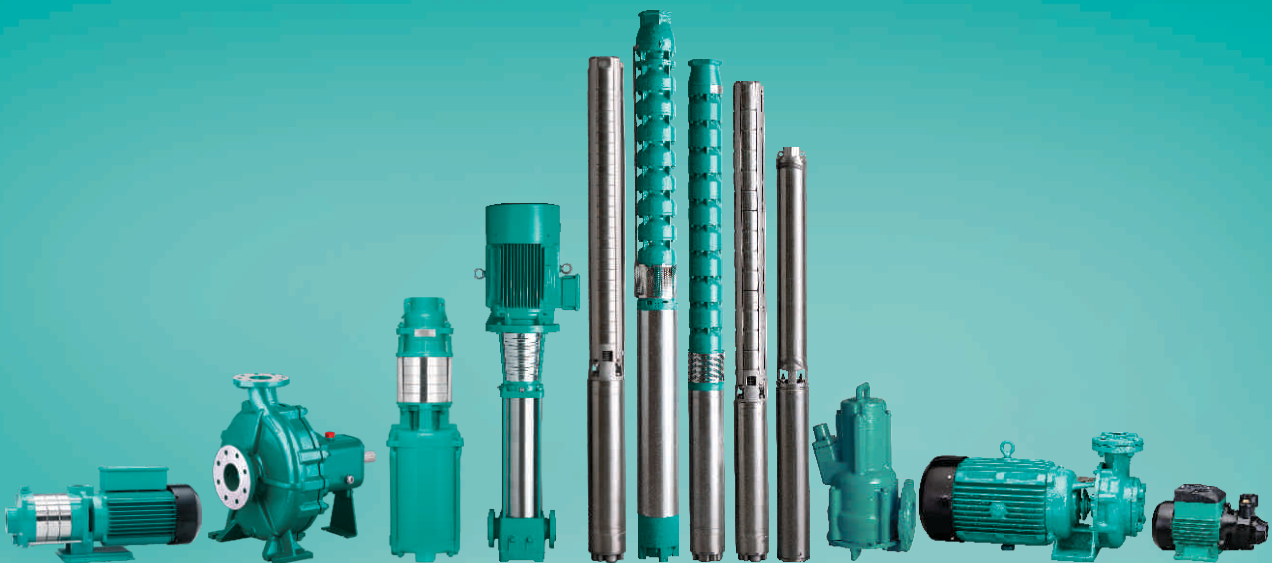
And behind all the success lies the dedication and commitment of Team Tormac. Every single person who constitutes the team is ready to respond and work in unison to ensure that the customer gets the very best. Nothing is left to chance. Everything from comprehensive training programs for distributors to well thought out advertising and promotional support programs are in place to maximize reach and impact.



Innovative technology.  
Inspired design. Powerful performance.  
Uncompromising quality.  
**THAT'S WHAT SETS EVERY  
TORMAC PRODUCT APART.**

#### FRONTRUNNERS THAT SET THE WINNING PACE

The Tormac range of products is quite comprehensive and caters to a wide range of applications. They include : Stainless Steel Submersible Pumps, 4" Thermoplastic Submersible Pumps, 6" & 8" Cast Iron Submersible Pumps, Submersible Motors and Controls, Centrifugal Pumps, Inline Booster Pumps, Jet Self-priming Pumps and Peripheral Pumps.





## SEGMENTS COVERED

AGRICULTURE



MINING



INDUSTRY





**FIRE FIGHTING &  
DEWATERING**



**CONSTRUCTION &  
BUILDING SERVICES**



**RESIDENTIAL**





## **50 Hz PRODUCTS**

# I N D E X

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## PLASTIC SUBMERSIBLE PUMPS > 4" > TP - SERIES

Thermoplastic submersible pumps are ingeniously designed and developed employing latest engineering softwares, high-tech machinery, tools and cutting edge of pumping technology to deliver the best possible hydraulic efficiency. The integrated and most modern quality assurance systems used at every stage of the production and flawless workmanship ensure sustained and consistent operation.

All these submersible pumps are multistage single suction centrifugal type and provided with integral check- valve and NEMA standard coupling. These pumps are available with impeller & diffuser made up of corrosive resistant thermoplastic and the shaft is made of AISI 304. The integral check valve prevents back flow, and reduces the risk of water hammer which paves the way for trouble free performance. The suction screen is designed with utmost care so as not to reduce the inflow of water and at the same time to prevent damage to the pump and clogging due to the entry of sand and other foreign particles.

### Pumped Liquids

Non-Aggressive, non explosive, Pure, Cold, Fresh water without abrasive particles having following characteristics.

pH	6.5 to 8.5
Turbidity	50 ppm silica scale (max.)
Viscosity	$1.75 \times 10^6 \text{ m}^2/\text{sec}$ (max.)
Hardness (Drinking Water)	300 (max.)
Specific gravity	1.004 (max.)
Allowable Solids	3000 ppm (max.)
Chlorine ion density	500 ppm (max.)
Permissible amount of sand	50 g/m <sup>3</sup> (max.)
Temperature	38°C (max.) NBR / 90°C VITON



### GENERAL INFORMATION ON ELECTRO MECHANICAL UNIT

Power Range (kW) 1 PH	Power Range (kW) 3 PH	Speed In RPM	Flow Range lpm	Flow Range m <sup>3</sup> /h	Recommended head (ft)	Recommended head (m)	Delivery size in mm
Upto 2.2 kW	Upto 7.5 kW	2900	12.5 - 400	0.75 - 24	13 - 885	4 - 270	32,40 & 50
M.O.C	Impeller	Diffuser	Valve Housing	Valve	Cable Guard	Coupling	Suction Inter connector
Type P	Noryl	Noryl	AISI 304	AISI 304	AISI 304	AISI 329	AISI 304

### Applications



Agriculture



Industries



Construction & Building Services

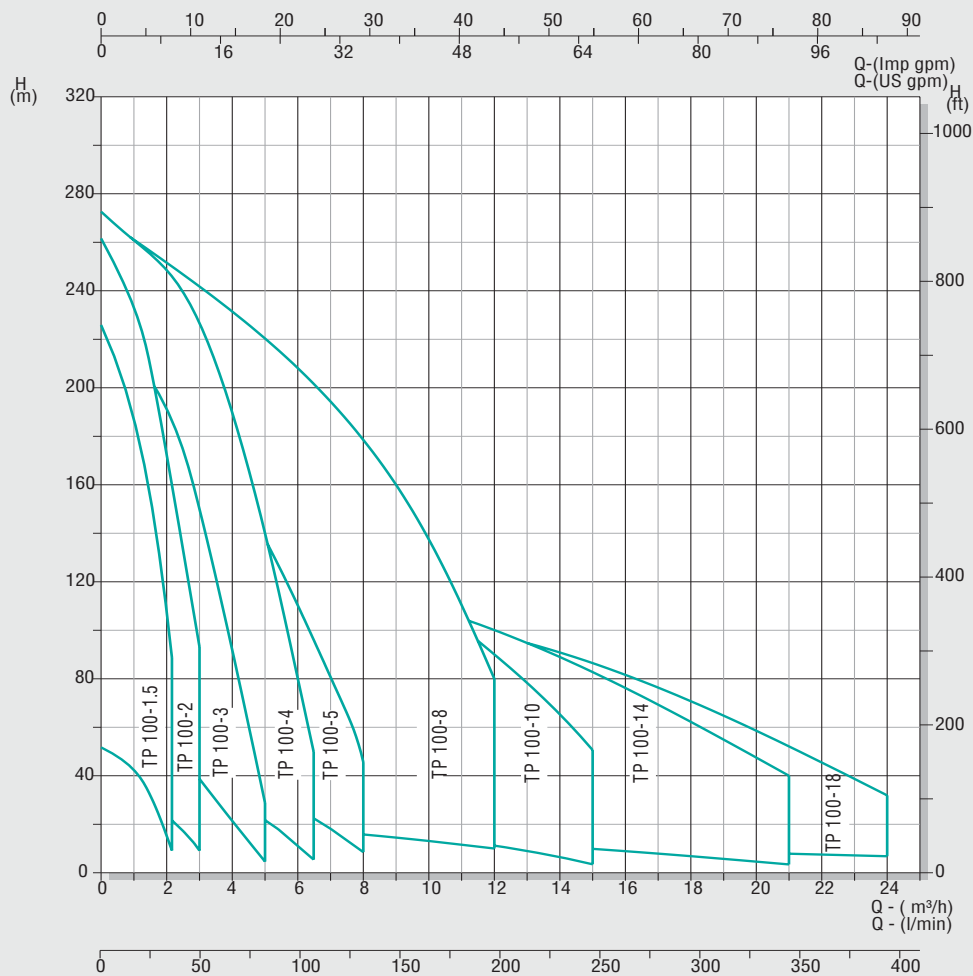


Residential

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## PERFORMANCE CURVE > 4" > TP - SERIES



Curve tolerance according to ISO 9906:2012, Grade 3B

### Performance Curve Conditions

a.	The Performance curves shows pump performance of the pump at rated speed and voltage. (2900 rpm)	e.	The head and discharge are inclusive of check valve and suction inter-connector losses at the actual speed.
b.	The measurements were made with airless water at 20°C. For pumping liquids with a density higher than that of water, motors with correspondingly higher outputs must be used.	f.	Curve tolerance according to ISO : 9906, Annex-A.
c.	Pipe friction losses have not been included in the performance curves and performance data.	g.	The performance are at rated voltage and are only Indicative. Actual discharge depends on availability of water in well, based on strength of water source, height of water column, submergence of pump, etc.,
d.	The bold curves indicate the recommended performance range.	h.	The given performance are for a specific materials of construction of pumps.

## STAINLESS STEEL SUBMERSIBLE PUMPS > 4" > TS / TN - SERIES

Tormac stainless steel submersible pumps are ingeniously designed and developed employing latest engineering softwares, high-tech machinery, tools and cutting edge of pumping technology to deliver the best possible hydraulic efficiency. The complete stainless steel construction not only prevents the pumps from corrosion but also exceptionally increases the life- span. The integrated and most modern quality assurance systems used at every stage of the production and flawless workmanship ensure sustained and consistent operation.

All these submersible pumps are multistage single suction centrifugal type, provided with integral check-valve and NEMA standard coupling. These pumps are available with fabricated impellers and diffusers made of AISI 304/316 and the shaft is made of AISI 304/431. The integral check valve prevents back flow and reduces the risk of water hammer which paves the way for trouble free performance. The suction screen is designed with utmost care so as not to reduce the inflow of water and at the same time to prevent damage to the pump and clogging due to the entry of sand and other foreign particles.

### Pumped Liquids

Non-Aggressive, non explosive, Pure, Cold, Fresh water without abrasive particles having following characteristics.

pH	6.5 to 8.5
Turbidity	50 ppm silica scale (max.)
Viscosity	$1.75 \times 10^6 \text{ m}^2/\text{sec}$ (max.)
Hardness (Drinking Water)	300 (max.)
Specific gravity	1.004 (max.)
Allowable Solids	3000 ppm (max.)
Chlorine ion density	500 ppm (max.)
Permissible amount of sand	50 g/m <sup>3</sup> (max.)
Temperature	38°C (max.) NBR / 90°C VITON



### GENERAL INFORMATION ON ELECTRO MECHANICAL UNIT

Power Range (kW) 1 PH	Power Range (kW) 3 PH	Speed In RPM	Flow Range lpm	Flow Range m <sup>3</sup> /h	Recommended head (ft)	Recommended head (m)	Delivery size in mm
Upto 2.2 kW	Upto 7.5 kW	2900	7.2 - 317	0.40 - 19	13 - 1754	4 - 535	32,40 & 50
M.O.C	Impeller	Diffuser	Valve Housing	Valve	Cable Guard	Coupling	Suction Inter connector
Type S & N	AISI 304/316	AISI 304/316	AISI 304/316	AISI 304/316	AISI 304/316	AISI 329	AISI 304/316

### Applications



Agriculture



Mining



Industries



Fire Fighting and  
Dewatering



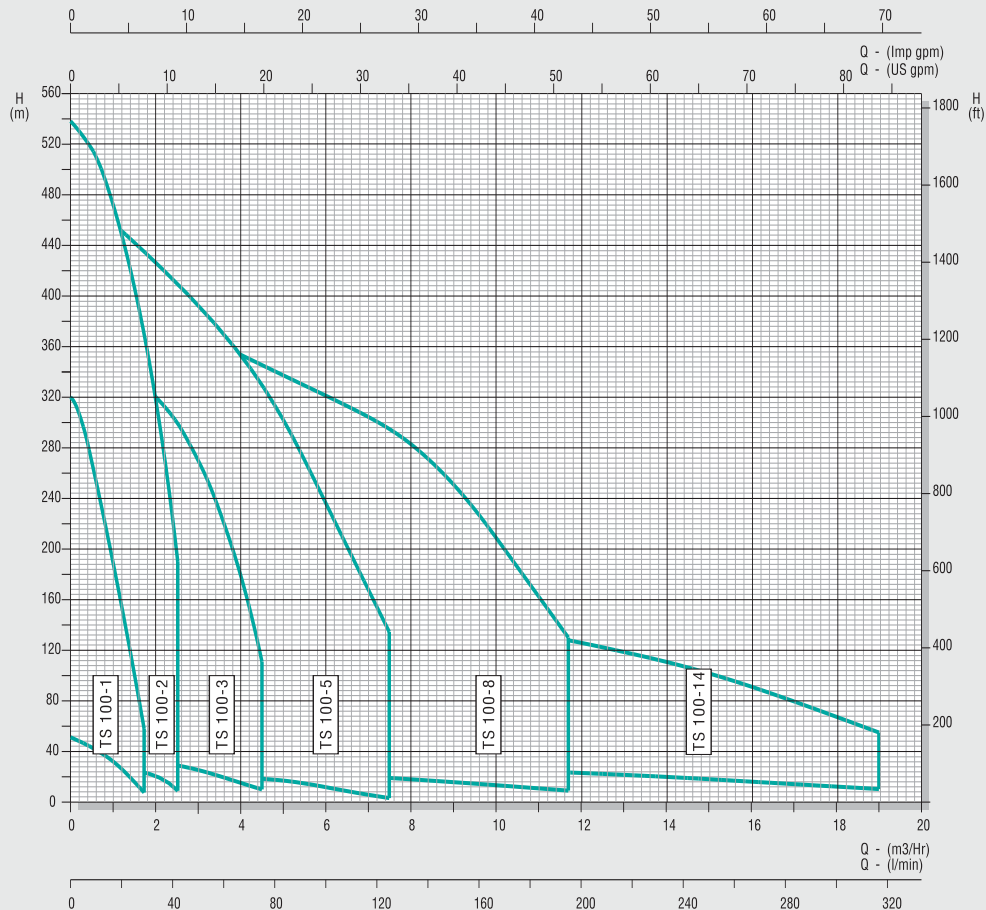
Construction &  
Building Services



Residential

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## PERFORMANCE CURVE > 4" > TS / TN - SERIES



Curve tolerance according to ISO 9906:2012, Grade 3B

### Performance Curve Conditions

a.	The Performance curves shows pump performance of the pump at rated speed and voltage. (2900 rpm)	e.	The head and discharge are inclusive of check valve and suction inter-connector losses at the actual speed.
b.	The measurements were made with airless water at 20°C. For pumping liquids with a density higher than that of water, motors with correspondingly higher outputs must be used.	f.	Curve tolerance according to ISO : 9906, Annex-A.
c.	Pipe friction losses have not been included in the performance curves and performance data.	g.	The performance are at rated voltage and are only Indicative. Actual discharge depends on availability of water in well, based on strength of water source, height of water column, submergence of pump, etc.,
d.	The bold curves indicate the recommended performance range.	h.	The given performance are for a specific materials of construction of pumps.

Available types of materials of construction : TS (AISI - 304) and TN (AISI - 316). In case of M.I.C. version - TN the second digit of the pump model "S" will be replaced with "N". The given performance ranges are same for version - TS & TN.



## STAINLESS STEEL SUBMERSIBLE PUMPS > 6" > TS / TN / 904L - SERIES

Tormac stainless steel submersible pumps are ingeniously designed and developed employing latest engineering softwares, high-tech machinery, tools and cutting edge of pumping technology to deliver the best possible hydraulic efficiency. The complete stainless steel construction not only prevents the pumps from corrosion but also exceptionally increases the life- span. The integrated and most modern quality assurance systems used at every stage of the production and flawless workmanship ensure sustained and consistent operation.

All these submersible pumps are multistage single suction centrifugal type, provided with integral check-valve and NEMA standard coupling. These pumps are available with fabricated impellers and diffusers made of AISI 304/316/904L and the shaft is made of AISI 304/431. The integral check valve prevents back flow and reduces the risk of water hammer which paves the way for trouble free performance. The suction screen is designed with utmost care so as not to reduce the inflow of water and at the same time to prevent damage to the pump and clogging due to the entry of sand and other foreign particles.

### Pumped Liquids

Non-Aggressive, non explosive, Pure, Cold, Fresh water without abrasive particles having following characteristics.

pH	6.5 to 8.5
Turbidity	50 ppm silica scale (max.)
Viscosity	$1.75 \times 10^6 \text{ m}^2/\text{sec}$ (max.)
Hardness (Drinking Water)	300 (max.)
Specific gravity	1.004 (max.)
Allowable Solids	3000 ppm (max.)
Chlorine ion density	500 ppm (max.)
Permissible amount of sand	50 g/m <sup>3</sup> (max.)
Temperature	38°C (max.) NBR / 90°C VITON



### GENERAL INFORMATION ON ELECTRO MECHANICAL UNIT

Power Range (kW)	Speed In RPM	Flow Range lpm	Flow Range m <sup>3</sup> /h	Recommended head (ft)	Recommended head (m)	Delivery size in mm	
From 3 - 63 kW	2900	116.4 - 1333	7 - 80	14.76 - 2690	4.5 - 820	50,65, 80 & 100	
M.O.C	Impeller	Diffuser	Valve Housing	Valve	Cable Guard	Coupling	Suction Inter connector
Type S & N	AISI 304/316 /904L	AISI 304/316 /904L	AISI 304/316 /904L	AISI 304/316 /904L	AISI 304/316 /904L	AISI 329/904L	AISI 304/316 /904L

### Applications



Agriculture



Mining



Industries



Fire Fighting and Dewatering



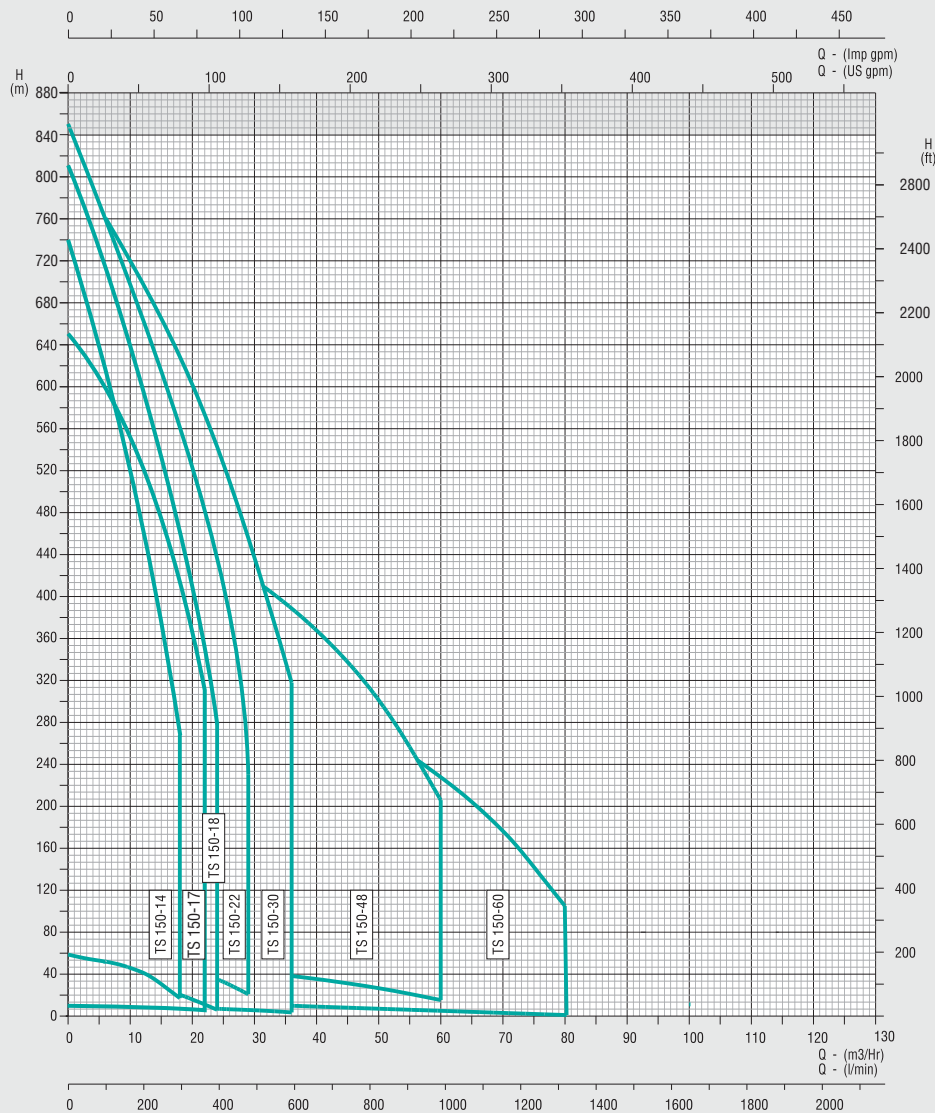
Construction & Building Services



Residential

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## PERFORMANCE CURVE > 6" > TS / TN / 904L - SERIES



Curve tolerance according to ISO 9906:2012, Grade 3B

### Performance Curve Conditions

a.	The Performance curves shows pump performance of the pump at rated speed and voltage. (2900 rpm)	e.	The head and discharge are inclusive of check valve and suction inter-connector losses at the actual speed.
b.	The measurements were made with airless water at 20°C. For pumping liquids with a density higher than that of water, motors with correspondingly higher outputs must be used.	f.	Curve tolerance according to ISO : 9906, Annex-A.
c.	Pipe friction losses have not been included in the performance curves and performance data.	g.	The performance are at rated voltage and are only Indicative. Actual discharge depends on availability of water in well, based on strength of water source, height of water column, submergence of pump, etc.,
d.	The bold curves indicate the recommended performance range.	h.	The given performance are for a specific materials of construction of pumps.

Available types of materials of construction : TS (AISI - 304) and TN (AISI - 316). In case of M.I.C. version - TN the second digit of the pump model "S" will be replaced with "N". The given performance ranges are same for version - TS & TN.

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## STAINLESS STEEL SUBMERSIBLE PUMPS > 8" > TS / TN / 904L - SERIES

Tormac stainless steel submersible pumps are ingeniously designed and developed employing latest engineering softwares, high-tech machinery, tools and cutting edge of pumping technology to deliver the best possible hydraulic efficiency. The complete stainless steel construction not only prevents the pumps from corrosion but also exceptionally increases the life- span. The integrated and most modern quality assurance systems used at every stage of the production and flawless workmanship ensure sustained and consistent operation.

All these submersible pumps are multistage single suction centrifugal type, provided with integral check-valve and NEMA standard coupling. These pumps are available with fabricated impellers and diffusers made of AISI 304/316/904L and the shaft is made of AISI 304/431. The integral check valve prevents back flow and reduces the risk of water hammer which paves the way for trouble free performance. The suction screen is designed with utmost care so as not to reduce the inflow of water and at the same time to prevent damage to the pump and clogging due to the entry of sand and other foreign particles.

### Pumped Liquids

Non-Aggressive, non explosive, Pure, Cold, Fresh water without abrasive particles having following characteristics.

pH	6.5 to 8.5
Turbidity	50 ppm silica scale (max.)
Viscosity	$1.75 \times 10^6 \text{ m}^2/\text{sec}$ (max.)
Hardness (Drinking Water)	300 (max.)
Specific gravity	1.004 (max.)
Allowable Solids	3000 ppm (max.)
Chlorine ion density	500 ppm (max.)
Permissible amount of sand	50 g/m <sup>3</sup> (max.)
Temperature	38°C (max.) NBR / 90°C VITON



### GENERAL INFORMATION ON ELECTRO MECHANICAL UNIT

Power Range (kW)	Speed In RPM	Flow Range lpm	Flow Range m <sup>3</sup> /h	Recommended head (ft)	Recommended head (m)	Delivery size in mm	
From 5.5 - 110 kW	2900	330 - 2100	20 - 126	26.24 - 1561	8 - 437	100 & 125	
M.O.C	Impeller	Diffuser	Valve Housing	Valve	Cable Guard	Coupling	Suction Inter connector
Type S & N	AISI 304/316 /904L	AISI 304/316 /904L	AISI 304/316 /904L	AISI 304/316 /904L	AISI 304/316 /904L	AISI 329/904L	AISI 304/316 /904L

### Applications



Agriculture



Mining



Industries



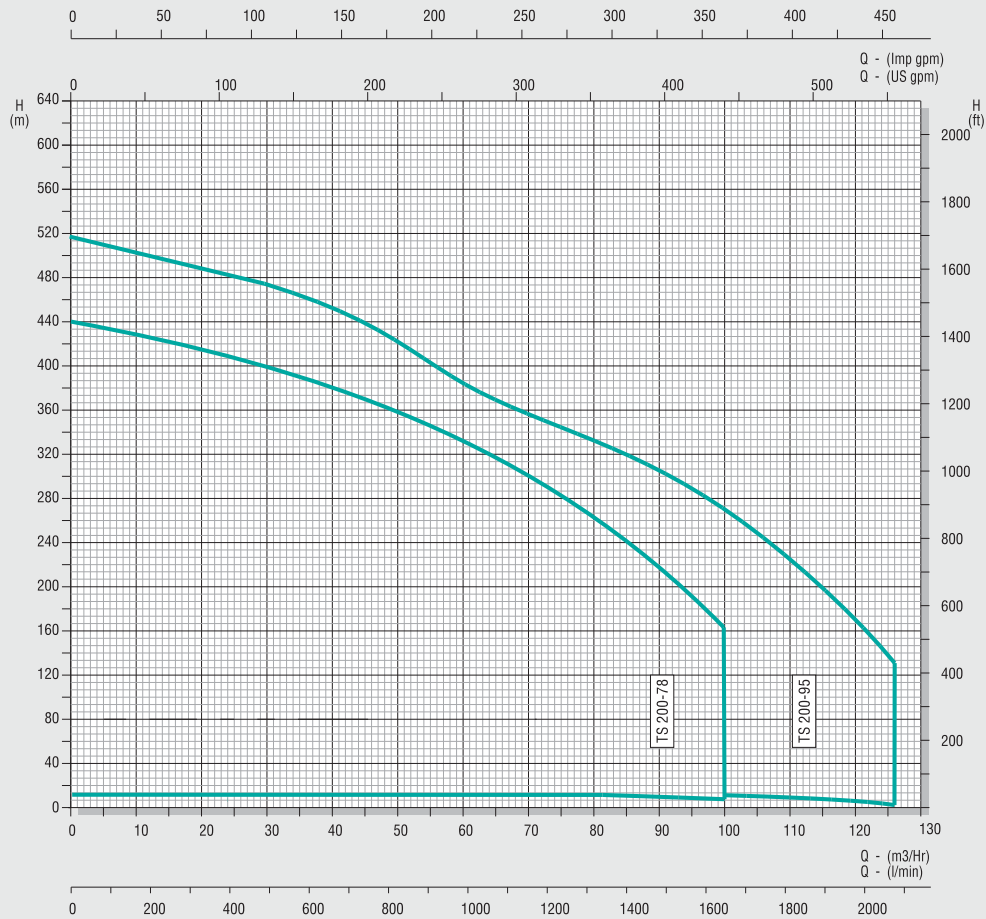
Fire Fighting and Dewatering



Construction & Building Services

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## PERFORMANCE CURVE > 8" > TS / TN / 904L - SERIES



Curve tolerance according to ISO 9906:2012, Grade 3B

### Performance Curve Conditions

a.	The Performance curves shows pump performance of the pump at rated speed and voltage. (2900 rpm)	e.	The head and discharge are inclusive of check valve and suction inter-connector losses at the actual speed.
b.	The measurements were made with airless water at 20°C. For pumping liquids with a density higher than that of water, motors with correspondingly higher outputs must be used.	f.	Curve tolerance according to ISO : 9906, Annex-A.
c.	Pipe friction losses have not been included in the performance curves and performance data.	g.	The performance are at rated voltage and are only Indicative. Actual discharge depends on availability of water in well, based on strength of water source, height of water column, submergence of pump, etc.,
d.	The bold curves indicate the recommended performance range.	h.	The given performance are for a specific materials of construction of pumps.

Available types of materials of construction : TS (AISI - 304) and TN (AISI - 316). In case of M.I.C. version - TN the second digit of the pump model "S" will be replaced with "N". The given performance ranges are same for version - TS & TN.

## STAINLESS STEEL SUBMERSIBLE PUMPS > 10" > TS / TN / 904L - SERIES

Tormac stainless steel submersible pumps are ingeniously designed and developed employing latest engineering softwares, high-tech machinery, tools and cutting edge of pumping technology to deliver the best possible hydraulic efficiency. The complete stainless steel construction not only prevents the pumps from corrosion but also exceptionally increases the life- span. The integrated and most modern quality assurance systems used at every stage of the production and flawless workmanship ensure sustained and consistent operation.

All these submersible pumps are multistage single suction centrifugal type, provided with integral check-valve and NEMA standard coupling. These pumps are available with fabricated impellers and diffusers made of AISI 304/316/904L and the shaft is made of AISI 304/431. The integral check valve prevents back flow and reduces the risk of water hammer which paves the way for trouble free performance. The suction screen is designed with utmost care so as not to reduce the inflow of water and at the same time to prevent damage to the pump and clogging due to the entry of sand and other foreign particles.

### Pumped Liquids

Non-Aggressive, non explosive, Pure, Cold, Fresh water without abrasive particles having following characteristics.

pH	6.5 to 8.5
Turbidity	50 ppm silica scale (max.)
Viscosity	$1.75 \times 10^6 \text{ m}^2/\text{sec}$ (max.)
Hardness (Drinking Water)	300 (max.)
Specific gravity	1.004 (max.)
Allowable Solids	3000 ppm (max.)
Chlorine ion density	500 ppm (max.)
Permissible amount of sand	50 g/m <sup>3</sup> (max.)
Temperature	38°C (max.) NBR / 90°C VITON



### GENERAL INFORMATION ON ELECTRO MECHANICAL UNIT

Power Range (kW)	Speed In RPM	Flow Range lpm	Flow Range m <sup>3</sup> /h	Recommended head (ft)	Recommended head (m)	Delivery size in mm	
From 9.3 - 220 kW	2900	300 - 4667	18 - 280	19.68 - 1600	6 - 488	125 & 150	
M.O.C	Impeller	Diffuser	Valve Housing	Valve	Cable Guard	Coupling	Section Interconnector
Type S & N	AISI 304/316 /904L	AISI 304/316 /904L	AISI 304/316 /904L	AISI 304/316 /904L	AISI 304/316 /904L	AISI 329/904L	AISI 304/316 /904L

### Applications



Agriculture



Mining



Industries



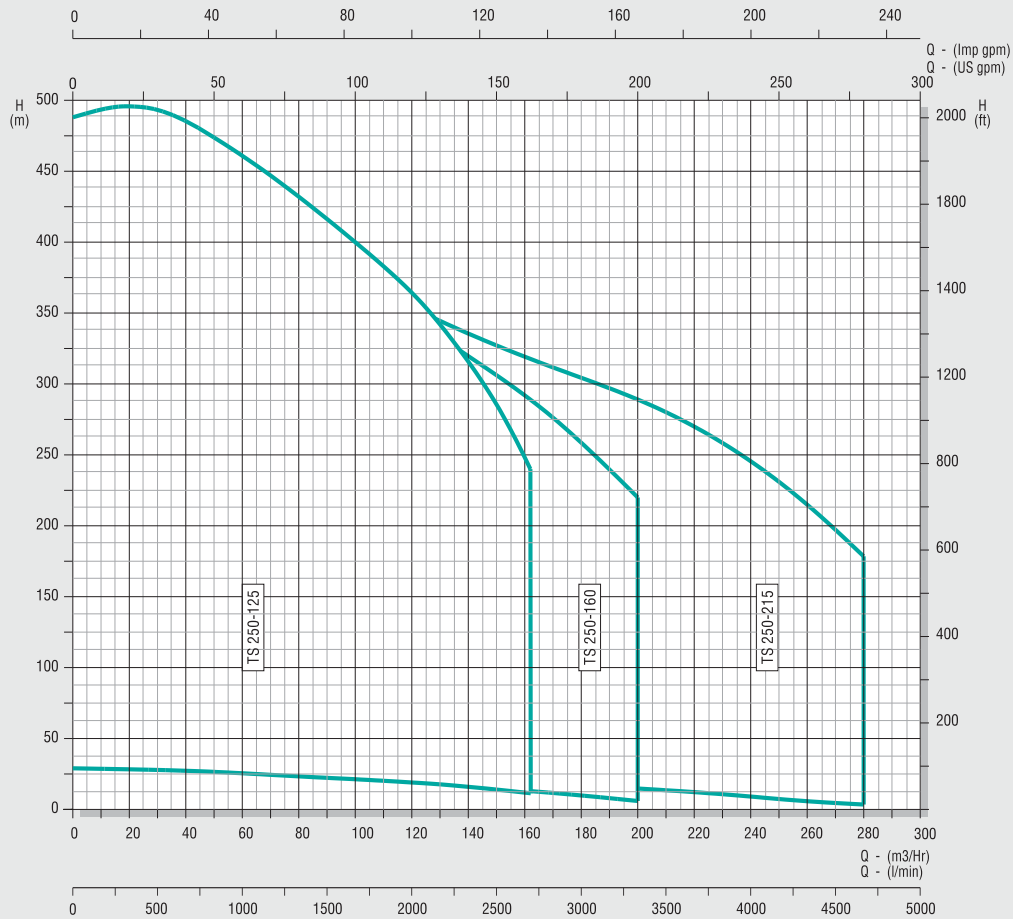
Fire Fighting and Dewatering



Construction & Building Services

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## PERFORMANCE CURVE > 10" > TS / TN / 904L - SERIES



Curve tolerance according to ISO 9906:2012, Grade 3B

### Performance Curve Conditions

a.	The Performance curves shows pump performance of the pump at rated speed and voltage. (2900 rpm)	e.	The head and discharge are inclusive of check valve and suction inter-connector losses at the actual speed.
b.	The measurements were made with airless water at 20°C. For pumping liquids with a density higher than that of water, motors with correspondingly higher outputs must be used.	f.	Curve tolerance according to ISO : 9906, Annex-A.
c.	Pipe friction losses have not been included in the performance curves and performance data.	g.	The performance are at rated voltage and are only Indicative. Actual discharge depends on availability of water in well, based on strength of water source, height of water column, submergence of pump, etc.,
d.	The bold curves indicate the recommended performance range.	h.	The given performance are for a specific materials of construction of pumps.

Available types of materials of construction : TS (AISI - 304) and TN (AISI - 316). In case of M.I.C. version - TN the second digit of the pump model "S" will be replaced with "N". The given performance ranges are same for version - TS & TN.



## CAST IRON PUMPS > 6" > TC / TB - SERIES

Tormac cast iron submersible pumps are ingeniously designed and developed employing latest engineering softwares, high-tech machinery, tools and cutting edge of pumping technology to deliver the best possible hydraulic efficiency. The integrated and most modern quality assurance systems used at every stage of the production and flawless workmanship ensure sustained and consistent operation.

All these submersible pumps are multistage single suction centrifugal type and provided with integral check-valve and NEMA standard coupling. These pumps are available with impellers made of bronze, diffusers made up of cast iron and the shaft is made of AISI 410/431. The integral check valve prevents back flow, up thrust and reduces the risk of water hammer which paves the way for trouble free performance. The suction screen is designed with utmost care so as not to reduce the inflow of water and at the same time to prevent damage to the pump and clogging due to the entry of sand and other foreign particles.

### Pumped Liquids

Non-Aggressive, non explosive, Pure, Cold, Fresh water without abrasive particles having following characteristics.

pH	6.5 to 8.5
Turbidity	50 ppm silica scale (max.)
Viscosity	$1.75 \times 10^6 \text{ m}^2/\text{sec}$ (max.)
Hardness (Drinking Water)	300 (max.)
Specific gravity	1.004 (max.)
Allowable Solids	3000 ppm (max.)
Chlorine ion density	500 ppm (max.)
Permissible amount of sand	50 g/m <sup>3</sup> (max.)
Temperature	38°C (max.) NBR / 90°C VITON



### GENERAL INFORMATION ON ELECTRO MECHANICAL UNIT

Power Range (kW)		Speed In RPM	Flow Range lpm	Flow Range m <sup>3</sup> /h	Recommended head (ft)	Recommended head (m)	Delivery size in mm	
From 3.7 - 26 kW		2900	133 - 1333	8 - 80	6.5 - 902	2 - 275	62,75 & 100	
M.O.C	Impeller	Diffuser	Valve Housing	Valve	Pump Shaft	Cable Guard	Coupling	Suction Inter connector
Type C	C.I./Bronze /AISI 304	C.I	C.I	AISI 304	AISI 410 / 431	AISI 304	AISI 329	C.I

### Applications



Agriculture



Mining



Industries



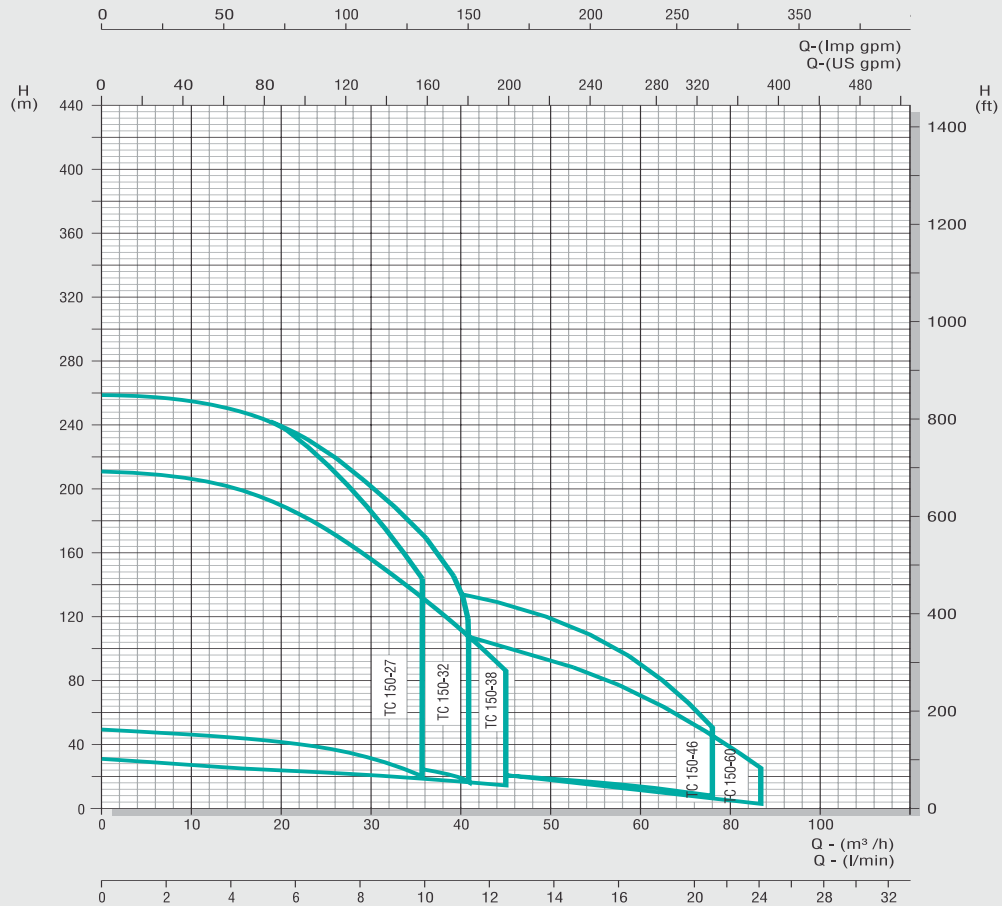
Fire Fighting and Dewatering



Construction & Building Services

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## PERFORMANCE CURVE > 6" > TC / TB - SERIES



### Performance Curve Conditions

a.	The Performance curves shows pump performance of the pump at rated speed and voltage. (2900 rpm)	e.	The head and discharge are inclusive of check valve and suction inter-connector losses at the actual speed.
b.	The measurements were made with airless water at 20°C. For pumping liquids with a density higher than that of water, motors with correspondingly higher outputs must be used.	f.	Curve tolerance according to ISO : 9906, Annex-A.
c.	Pipe friction losses have not been included in the performance curves and performance data.	g.	The performance are at rated voltage and are only Indicative. Actual discharge depends on availability of water in well, based on strength of water source, height of water column, submergence of pump, etc.,
d.	The bold curves indicate the recommended performance range.	h.	The given performance are for a specific materials of construction of pumps.

Available types of materials of construction : TC

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## CAST IRON PUMPS > 8" > TC / TB - SERIES

Tormac cast iron submersible pumps are ingeniously designed and developed employing latest engineering softwares, high-tech machinery, tools and cutting edge of pumping technology to deliver the best possible hydraulic efficiency. The integrated and most modern quality assurance systems used at every stage of the production and flawless workmanship ensure sustained and consistent operation.

All these submersible pumps are multistage single suction centrifugal type and provided with integral check-valve and NEMA standard coupling. These pumps are available with impellers made of bronze, diffusers made up of cast iron and the shaft is made of AISI 410/431. The integral check valve prevents back flow, up thrust and reduces the risk of water hammer which paves the way for trouble free performance. The suction screen is designed with utmost care so as not to reduce the inflow of water and at the same time to prevent damage to the pump and clogging due to the entry of sand and other foreign particles.

### Pumped Liquids

Non-Aggressive, non explosive, Pure, Cold, Fresh water without abrasive particles having following characteristics.

pH	6.5 to 8.5
Turbidity	50 ppm silica scale (max.)
Viscosity	$1.75 \times 10^6 \text{ m}^2/\text{sec}$ (max.)
Hardness (Drinking Water)	300 (max.)
Specific gravity	1.004 (max.)
Allowable Solids	3000 ppm (max.)
Chlorine ion density	500 ppm (max.)
Permissible amount of sand	50 g/m <sup>3</sup> (max.)
Temperature	38°C (max.) NBR / 90°C VITON



### GENERAL INFORMATION ON ELECTRO MECHANICAL UNIT

Power Range (kW)		Speed In RPM	Flow Range lpm	Flow Range m <sup>3</sup> /h	Recommended head (ft)	Recommended head (m)	Delivery size in mm	
From 7.5 - 93 kW		2900	500 - 3000	20 - 180	6.5 - 1214	2 - 370	80, 100, 125 & 150	
M.O.C	Impeller	Diffuser	Valve Housing	Valve	Pump Shaft	Cable Guard	Coupling	Suction Inter connector
Type C	C.I./Bronze /AISI 304	C.I	C.I	AISI 304	AISI 410 / 431	AISI 304	AISI 329	C.I

### Applications



Agriculture



Mining



Industries



Fire Fighting and Dewatering



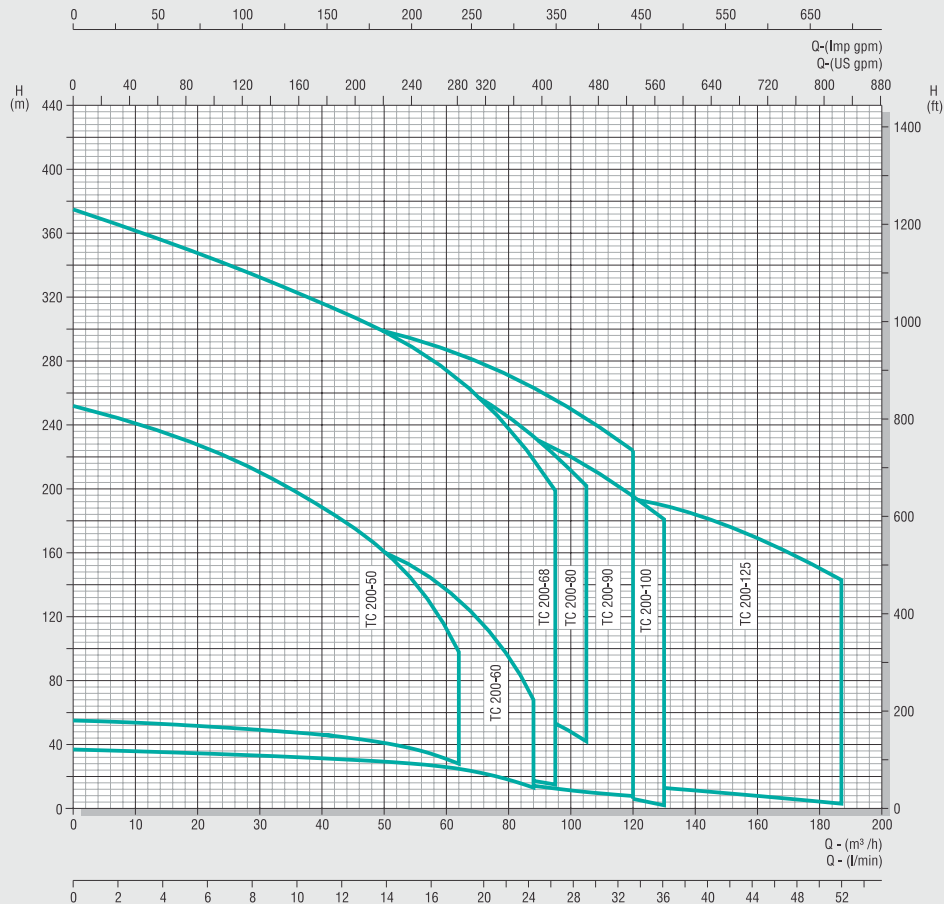
Construction & Building Services



Residential

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## PERFORMANCE CURVE > 8" > TC / TB - SERIES



### Performance Curve Conditions

a.	The Performance curves shows pump performance of the pump at rated speed and voltage. (2900 rpm)	e.	The head and discharge are inclusive of check valve and suction inter-connector losses at the actual speed.
b.	The measurements were made with airless water at 20°C. For pumping liquids with a density higher than that of water, motors with correspondingly higher outputs must be used.	f.	Curve tolerance according to ISO : 9906, Annex-A.
c.	Pipe friction losses have not been included in the performance curves and performance data.	g.	The performance are at rated voltage and are only Indicative. Actual discharge depends on availability of water in well, based on strength of water source, height of water column, submergence of pump, etc.,
d.	The bold curves indicate the recommended performance range.	h.	The given performance are for a specific materials of construction of pumps.

Available types of materials of construction : TC

## SOLAR SUBMERSIBLE PUMPS > TS SERIES

Our world is full of energy. Tormac is passionate about meeting the most challenging technical demands and environmental conditions of the world's energy users with efficient solutions. With pioneering technology, tormac offers innovative systems that improve performance and return on investment while reducing operational and maintenance cost.

Tormac solar submersible pumps are ingeniously designed and developed employing latest engineering software's, high-tech machineries, tools and cutting edge of pump technology to deliver the best possible hydraulic efficiency. The integrated and most modern quality assurance systems used at every stage of the production and flawless workmanship ensure sustained and consistent operation.



### General Information on Electro Mechanical Unit

Series	TS75-SH	TS75-SP	TS100-SH	TS100-SP	TS100-SS
Power Range (watts)	80, 120, 230 & 500	80, 120, 230 & 500	500-1000W	500-1000W	80-500W
Max. Flow Range (m <sup>3</sup> /h)	1.4	3.5	2.5	16.5	18
Max. Head in (m)	100	85	145	200	128
Delivery size in mm	19.05 mm	19.05 mm	25 mm	32, 38 & 50mm	32, 38 & 50mm
<b>M.O.C</b>	SS 304	SS 304	SS 304	SS 304	SS 304
Impeller	Screw Type (AISI 304)	Noryl	Screw Type (AISI 304)	Noryl	AISI 304
Motor Type	Oil Filled DC Motor	Oil Filled DC Motor	Oil Filled DC Motor	Oil Filled DC Motor	Oil Filled DC Motor
Bearing	Ball Bearing	Ball Bearing	Ball Bearing	Ball Bearing	Ball Bearing

### Applications



Agriculture



Live Stock



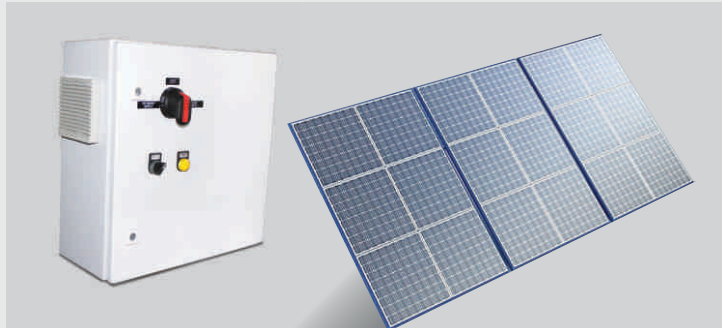
Residential



Recreational

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## SOLAR INVERTER CONTROL PANELS (SIP)



SIP Solar Inverter Control Panels are designed to operate AC pumpsets with energy drawn from photovoltaic cells (PV) or grid supply / DG sets.. The inverter is customized to operate in dual supply mode, so the grid connected supply is used in the absence of energy from PV cells. A manual changeover switch enables switching between the two supply modes.

It's a fully electronic type of control panel fitted with ABB / Equivalent make inverter which starts automatically if DC bus voltage is more than the start DC voltage set in parameter. The inverter functions with the latest in technology maximum power point tracking (MPPT) algorithm to derive maximum power from the PV cells at any instant. The working principle is closely related with the VSD panels.

### Features of Solar Inverter Control Panels:

It's an automatic design functions based on the DC input voltage from the solar modules.

Customised to operate in dual power mode, Solar / Grid supply.

DC Power Input	AC Power input
180 - 400 V DC	1 Phase 220V
400 - 800 V DC	3 Phase 220 V
(Output - 3 Phase 220 V)	3 phase 400V (Output 3 Phase - 400 V)

Complete motor protections in both the modes against supply faults.

Modular design of the power circuits for simpler maintenance routines.

Support for standard communication protocols (Modbus, Profibus, Device Net, TCP/IP etc.)

All components are equipped in a powder coated sheet steel enclosures with proper cooling arrangements.

### Range

- DC / AC input → 3 Phase 220 V AC output  
0.37 kW - 11 kW
- DC / AC input → 3 Phase 400 V AC out put  
0.37 kW - 45 kW



## SUBMERSIBLE MOTOR ECO SERIES > 4" > D - SERIES > WATER FILLED

Tormac ECO series submersible motors are ingeniously designed and developed employing latest engineering softwares, high-tech machinery & tools with the complement of cutting edge technology for hardwearing and maintenance free operations and to ensure relentless performance.

The electrical conditions such as voltage, frequency and the operating conditions are taken into account in designing the winding and cooling system. Tried and trusted indigenously improved design, combined with the most optimized efficiency in electromagnetic design exceptionally ensures trouble free performance. The integrated and most modern quality assurance systems used at every stage of production and flawless workmanship lead to sustained and consistent operation.

Tormac ECO series motors are squirrel cage, water filled and water cooled rewindable type. The winding of these two pole motors are made of a special water proof wire of pure electrolytic copper insulated with synthetic film or thermoplastic material. The stator shell, housings shell & motor base are made of fabricated AISI 304/316 which prevents the motor from corrosion.

These motors are pre-filled with environmentally safe deionised water which acts as a lubricant & coolant. The prefilled water level to be ensured at the time of installation. A uniquely designed thrust bearing with high thrust capacity and good quality shaft seals are used to enhance the strength & durability. All single phase motors are supplied with suitable control boxes. The main advantage of rewindable motor construction is making the repair and rewinding easier and hassle free at field levels. All Tormac motors are produced in accordance with ISO 9001 standards and mounting dimensions with NEMA standard.

Technical Data	
Specifications	Nominal Diameter (4")
Rated Output & Voltage	0.37 to 2.2kW - 230V, 1Ph, 3Wire 0.37 to 7.5kW - 380/415V, 3Ph, (Δ)
Rated Speed	2900 rpm
Voltage Tolerance	-15% + 6%
Protection	IP 58
Rotation Sequence	CCW - 1Ph CW, CCW - 3Ph
Outer Diameter	98mm
Duty	S1 (Continuous)
Linear flow	0.15m/sec
Liquid Temperature	38°C max.
Switching Frequency	20 Times / hour
Thrust load	0.37 to 1.5kW - 3000N/650lbs 2.2 to 7.5kW - 6500N/1500lbs
Mounting Dimensions	NEMA Standard
Starting Method	1 Ph - CSCR 3 Ph - DOL
Motor Lead out type	3/4 core Rubber Insulated Flat Cable leads, internally connected with the windings.
Class of Insulation	Y

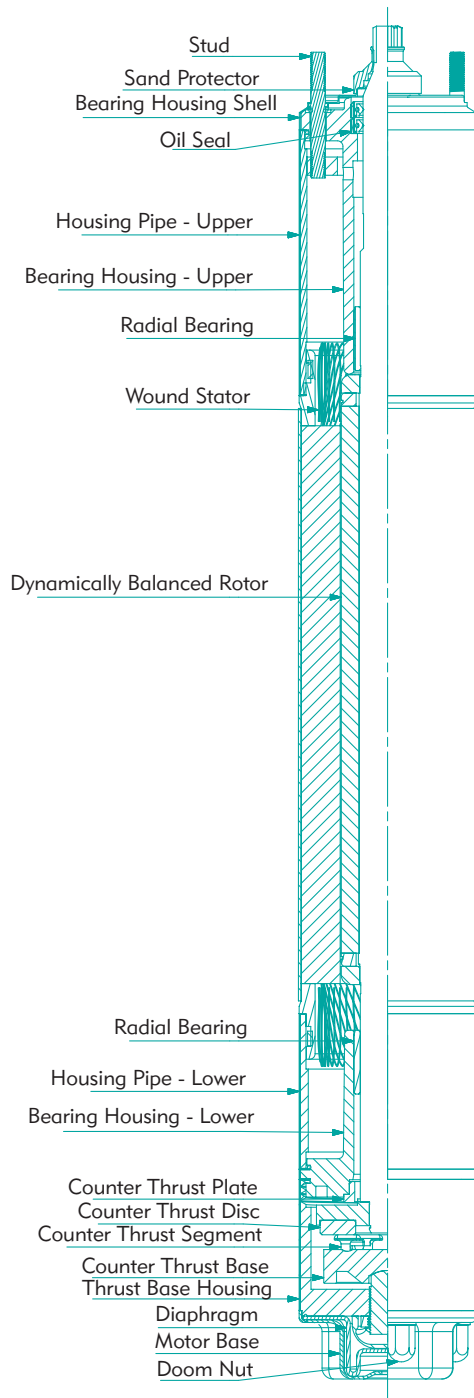


### Applications

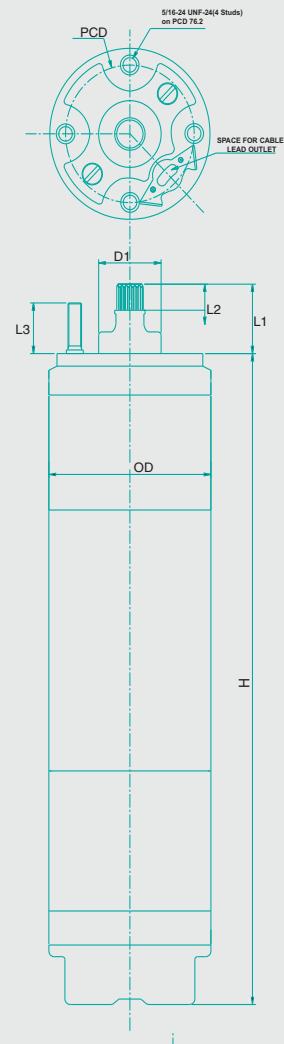
-  Agriculture
-  Mining
-  Industries
-  Fire Fighting and Dewatering
-  Construction & Building Services
-  Residential

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

### CROSS SECTIONAL DRAWING



### MOUNTING DIMENSIONS



Spline Data-14 teeth, 24/48 Pitch, 30 Degree pressure angle,  
 Hator fillet root, Side fit, tolerance Class-5,  
 In accordance with ANSI B92-1

	Dimensions in inches						
	L1	L2	L3	L4	OD	OD1	OD2
<b>4"</b>	1.50	0.5	1.0	-	3.8	1.45	-

All the Mounting dimensions are in accordance with NEMA standards.

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

# SUBMERSIBLE MOTOR ECO SERIES > 6" > D - SERIES > WATER FILLED

Tormac ECO series submersible motors are ingeniously designed and developed employing latest engineering softwares, high-tech machinery & tools with the complement of cutting edge technology for hardwearing and maintenance free operations and to ensure relentless performance.

The electrical conditions such as voltage, frequency and the operating conditions are taken into account in designing the winding and cooling system. Tried and trusted indigenously improved design, combined with the most optimized efficiency in electromagnetic design exceptionally ensures trouble free performance. The integrated and most modern quality assurance systems used at every stage of production and flawless workmanship lead to sustained and consistent operation.

Tormac ECO series motors are squirrel cage, water filled and water cooled rewindable type. The winding of these two pole motors are made of a special water proof wire of pure electrolytic copper insulated with synthetic film or thermoplastic material. The stator shell, housings shell & motor base are made of fabricated AISI 304/316/904L which prevents the motor from corrosion.

These motors are pre-filled with environmentally safe deionised water which acts as a lubricant & coolant. The prefilled water level to be ensured at the time of installation. A uniquely designed thrust bearing with high thrust capacity and good quality shaft seals are used to enhance the strength & durability. All single phase motors are supplied with suitable control boxes. The main advantage of rewindable motor construction is making the repair and rewinding easier and hassle free at field levels. All Tormac motors are produced in accordance with ISO 9001 standards and mounting dimensions with NEMA standard.

Technical Data	
Specifications	Nominal Diameter (6")
Rated Output & Voltage	4 to 45kW - 380/415V, 3Ph
Rated Speed	2900 rpm
Voltage Tolerance	-15% + 6%
Protection	IP 58 / IP 68
Rotation Sequence	CW, CCW - 3Ph
Outer Diameter	143mm
Duty	S1 (Continuous)
Linear flow	0.15m/sec
Liquid Temperature	38°C max.
Switching Frequency	20 Times / hour
Thrust load	4 to 22kW - 15500N/3000lbs 26 to 45kW - 27500N/6000lbs
Mounting Dimensions	NEMA Standard
Starting Method	4 to 45kW - DOL 5.5 to 45kW - SD
Motor Lead out type	3/4 core Rubber Insulated Flat Cable leads, internally Connected with the windings
Class of Insulation	Y
Thermal Protection	High Temperature motors for 70°C/90°C Can be supplied with PT sensor and XLPE/PA winding

TA/TN/904L

TB

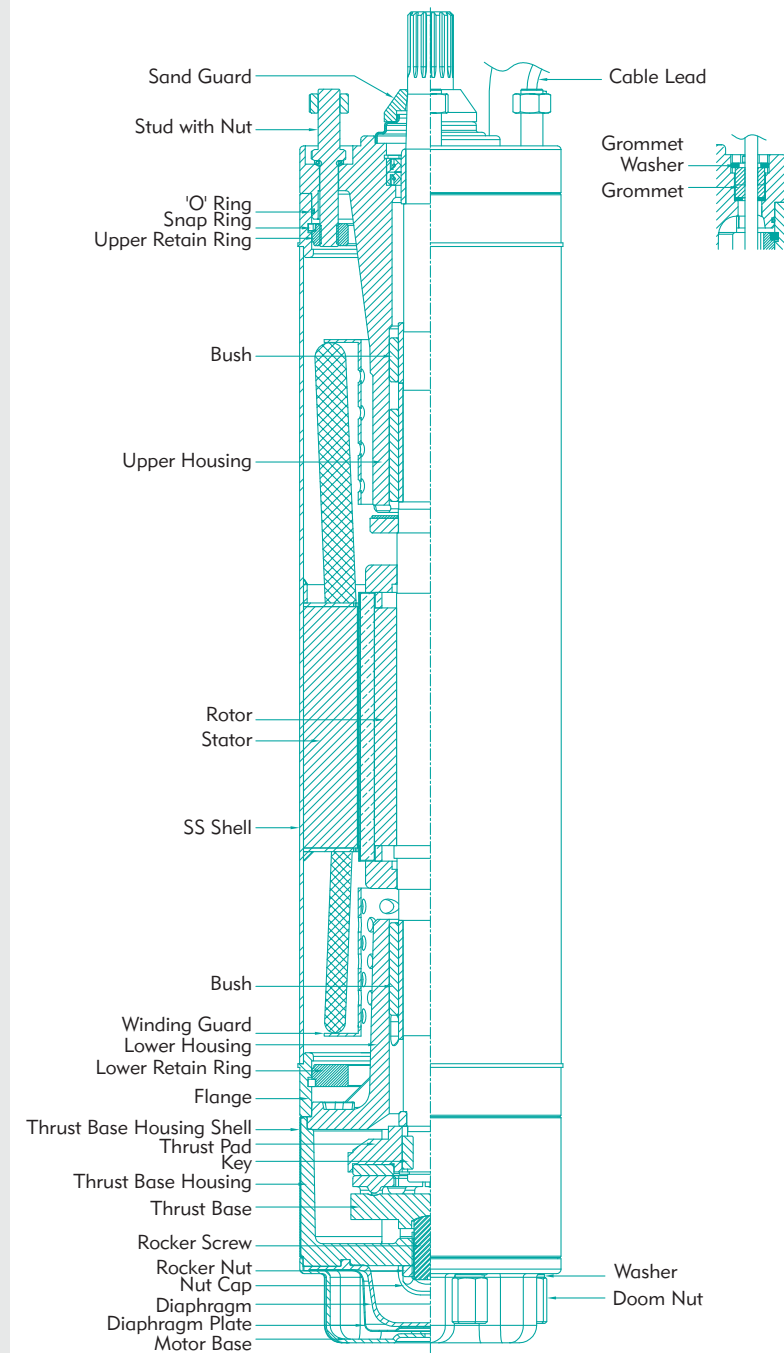


## Applications

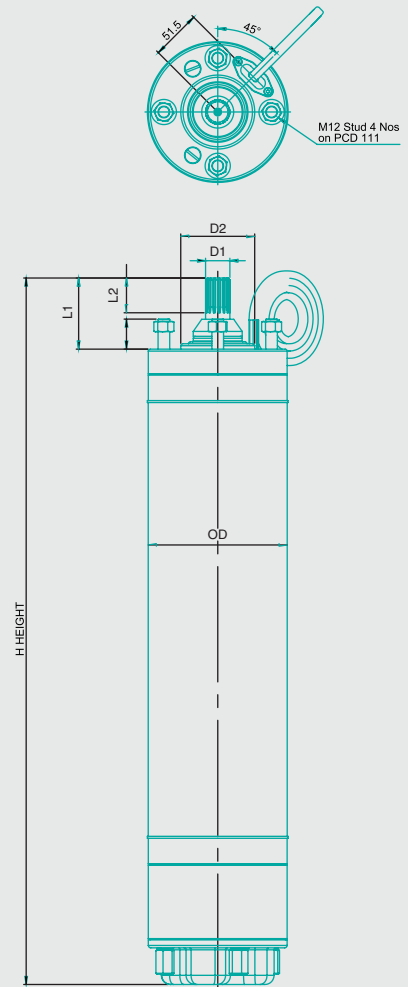
-  Agriculture
-  Mining
-  Industries
-  Fire Fighting and Dewatering
-  Construction & Building Services
-  Residential

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

### CROSS SECTIONAL DRAWING



### MOUNTING DIMENSIONS



Spline Data-15 teeth, 16/32 Pitch, 30 Degree pressure angle,  
 Hator fillet root, Side fit, tolerance Class-5,  
 In accordance with ANSI B92-1 1970

Dimensions in inches					
	L1	L2	OD	D1	D2
<b>6"</b>	2.87	1.45	5.6	0.99	30

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## SUBMERSIBLE MOTOR ECO SERIES > 8" > D - SERIES > WATER FILLED

Tormac ECO series submersible motors are ingeniously designed and developed employing latest engineering softwares, high-tech machinery & tools with the complement of cutting edge technology for hardwearing and maintenance free operations and to ensure relentless performance.

The electrical conditions such as voltage, frequency and the operating conditions are taken into account in designing the winding and cooling system. Tried and trusted indigenously improved design, combined with the most optimized efficiency in electromagnetic design exceptionally ensures trouble free performance. The integrated and most modern quality assurance systems used at every stage of production and flawless workmanship lead to sustained and consistent operation.

Tormac ECO series motors are squirrel cage, water filled and water cooled rewindable type. The winding of these two pole motors are made of a special water proof wire of pure electrolytic copper insulated with synthetic film or thermoplastic material. The stator shell, housings shell & motor base are made of fabricated AISI 304/316/904L which prevents the motor from corrosion.

These motors are pre-filled with environmentally safe deionised water which acts as a lubricant & coolant. The prefilled water level to be ensured at the time of installation. A uniquely designed thrust bearing with high thrust capacity and good quality shaft seals are used to enhance the strength & durability. All single phase motors are supplied with suitable control boxes. The main advantage of rewindable motor construction is making the repair and rewinding easier and hassle free at field levels. All Tormac motors are produced in accordance with ISO 9001 standards and mounting dimensions with NEMA standard.

Technical Data	
Specifications	Nominal Diameter (8")
Rated Output & Voltage	37 to 110kW - 380/415V, 3Ph, (WYE-DELTA)
Rated Speed	2900 rpm
Voltage Tolerance	-15% + 6%
Protection	IP 58 / IP 68
Rotation Sequence	CW, CCW - 3Ph
Outer Diameter	196 mm
Duty	S1 (Continuous)
Linear flow	0.16m/sec
Liquid Temperature	38°C max.
Switching Frequency	15 Times / hour
Thrust load	45500N/10000lbs
Mounting Dimensions	NEMA Standard
Starting Method	15 to 110kW - DOL & SD
Motor Lead out type	3/4 core Rubber Insulated Flat Cable leads, internally Connected with the windings
Class of Insulation	Y
Thermal Protection	High Temperature motors for 70°C/90°C Can be supplied with PT sensor and XLPE/PA winding

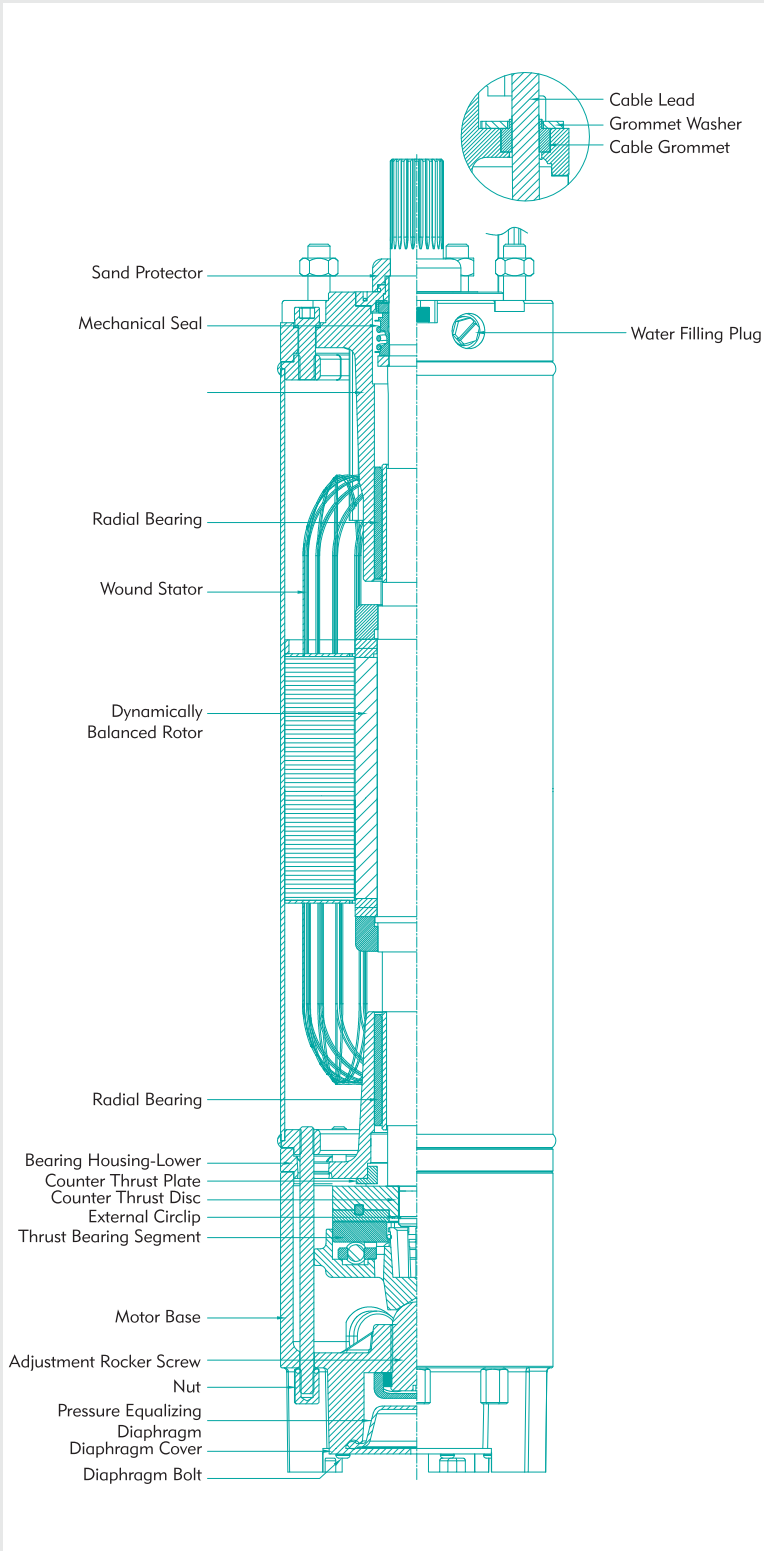


### Applications

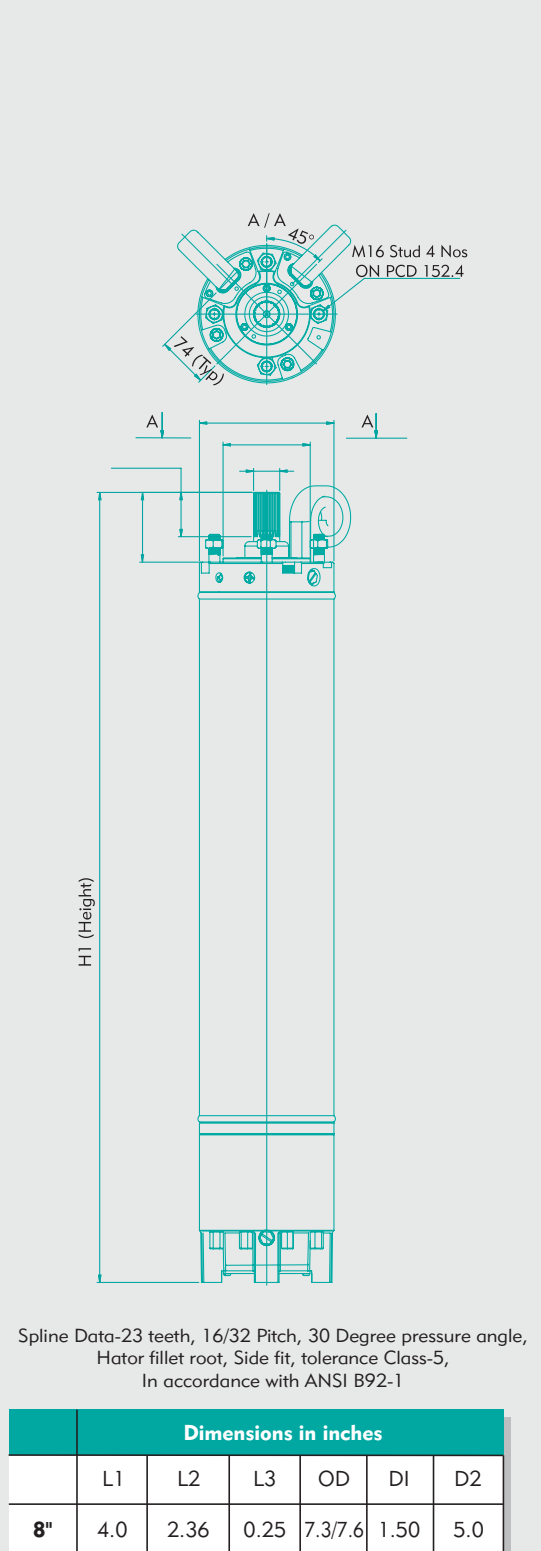
-  Agriculture
-  Mining
-  Industries
-  Fire Fighting and Dewatering
-  Construction & Building Services
-  Residential

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## CROSS SECTIONAL DRAWING



## MOUNTING DIMENSIONS



\* The company reserves the right to modify the technical specifications and illustrations without prior notice.



## SUBMERSIBLE MOTOR ECO SERIES > 10" > D - SERIES > WATER FILLED

Tormac ECO series submersible motors are ingeniously designed and developed employing latest engineering softwares, high-tech machinery & tools with the complement of cutting edge technology for hardwearing and maintenance free operations and to ensure relentless performance.

The electrical conditions such as voltage, frequency and the operating conditions are taken into account in designing the winding and cooling system. Tried and trusted indigenously improved design, combined with the most optimized efficiency in electromagnetic design exceptionally ensures trouble free performance. The integrated and most modern quality assurance systems used at every stage of production and flawless workmanship lead to sustained and consistent operation.

Tormac ECO series motors are squirrel cage, water filled and water cooled rewindable type. The winding of these two pole motors are made of a special water proof wire of pure electrolytic copper insulated with synthetic film or thermoplastic material. The stator shell, housings shell & motor base are made of fabricated AISI 304/316/904L which prevents the motor from corrosion.

These motors are pre-filled with environmentally safe deionised water which acts as a lubricant & coolant. The prefilled water level to be ensured at the time of installation. A uniquely designed thrust bearing with high thrust capacity and good quality shaft seals are used to enhance the strength & durability. All single phase motors are supplied with suitable control boxes. The main advantage of rewindable motor construction is making the repair and rewinding easier and hassle free at field levels. All Tormac motors are produced in accordance with ISO 9001 standards and mounting dimensions with NEMA standard.

Technical Data	
Specifications	Nominal Diameter (10")
Rated Output & Voltage	81 to 220kW - 380/415V, 3Ph, (WYE-DELTA)
Rated Speed	2900 rpm
Voltage Tolerance	-15% + 6%
Protection	IP 68
Rotation Sequence	CW, CCW - 3Ph
Outer Diameter	81 - 185 kW - 236 mm 220 kW - 240 mm
Duty	S1 (Continuous)
Linear flow	0.16m/sec
Liquid Temperature	38°C max.
Switching Frequency	10 Times / hour
Thrust load	60000 N / 13500 LBS
Mounting Dimensions	NEMA Standard / International
Starting Method	81 - 220 kW
Motor Lead out type	3/4 core Rubber Insulated Flat Cable leads, internally Connected with the windings
Class of Insulation	Y
Thermal Protection	High Temperature motors for 70°C/90°C Can be supplied with PT sensor and XLPE/PA winding

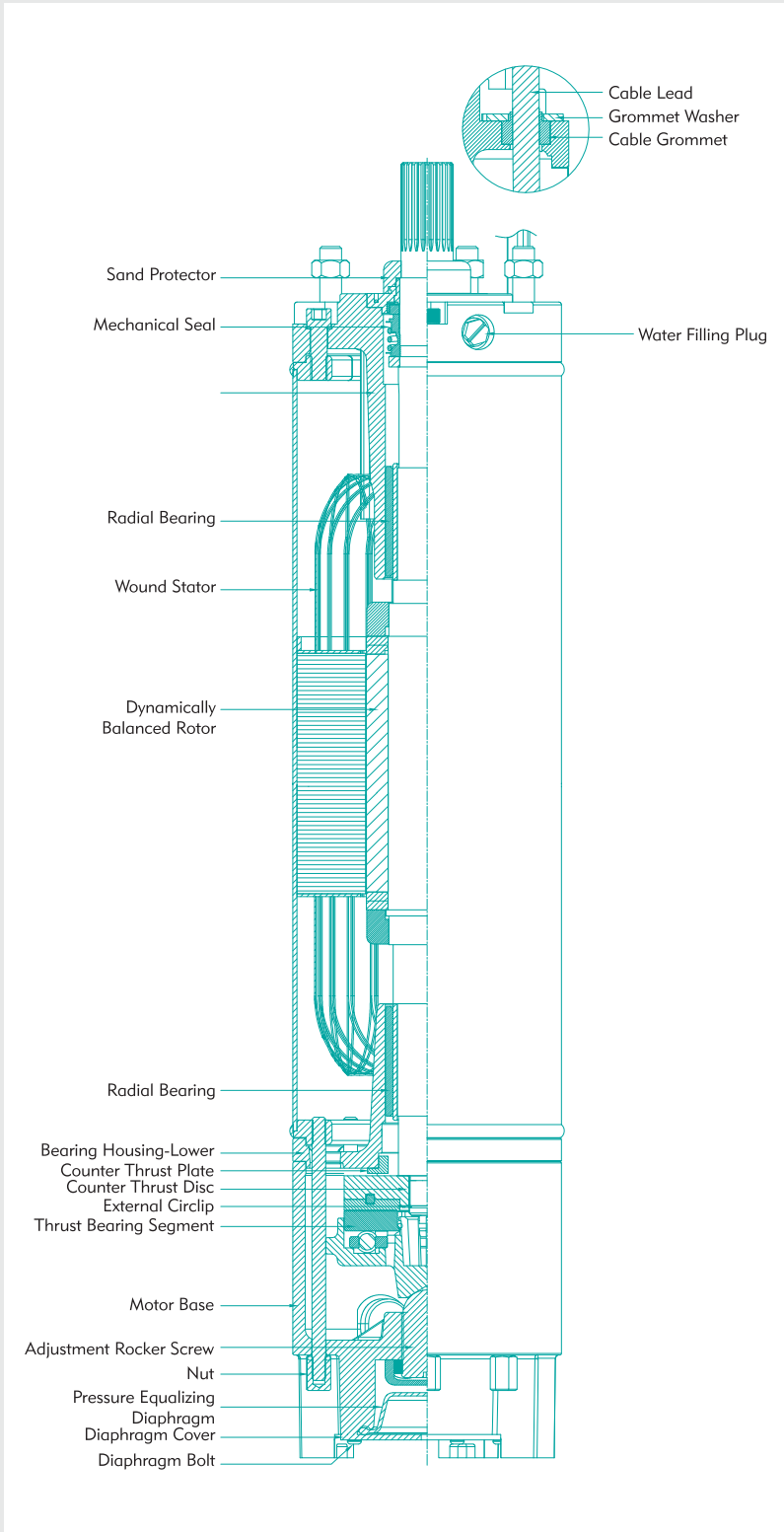


### Applications

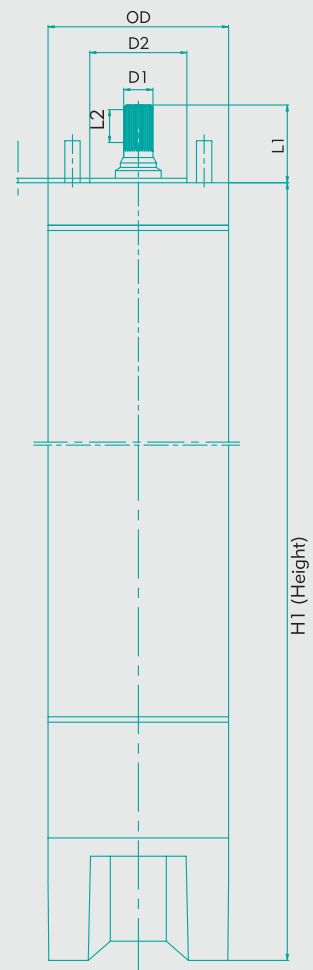
-  Agriculture
-  Mining
-  Industries
-  Fire Fighting and Dewatering
-  Construction & Building Services
-  Residential

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

### CROSS SECTIONAL DRAWING



### MOUNTING DIMENSIONS



Dimensions in inches						
	L1	L2	L3	OD	D1	D2
<b>10"</b>	4.0	1.68 (Min)	0.25	9.3	1.50	5.0

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## SUBMERSIBLE MOTOR ELEGANT SERIES > 4" > N - SERIES > OIL FILLED

Tormac Elegant series submersible motors are ingeniously designed and developed employing latest engineering softwares, high-tech machinery & tools with the complement of cutting edge technology for hardwearing and maintenance free operations and to ensure relentless performance.

The electrical conditions such as voltage, frequency and the operating conditions are taken into account in designing the winding and cooling system. Tried and trusted indigenously improved design, combined with the most optimized efficiency in electromagnetic design exceptionally ensures trouble free performance. The integrated and most modern quality assurance systems used at every stage of production and flawless workmanship lead to sustained and consistent operation.

Tormac Elegant series motors are squirrel cage, Non toxic liquid filled and liquid cooled non rewindable type. The winding of these two pole motors are made of high quality enameled copper wire. The stator shell, housings shell & motor base are made of fabricated S.S 304/316 which prevents the motor from corrosion.

These motors are pre-filled with environmentally safe edible grade oil which acts as a lubricant. A uniquely designed angular contact ball bearing to with stand high thrust capacity and good quality shaft seals are used to enhance the strength & durability. All single phase motors are supplied with suitable control boxes. All Tormac motors are produced in accordance with ISO 9001 standards and mounting dimensions with NEMA standard.

Technical Data	
Specifications	Nominal Diameter (4")
Rated Output & Voltage	0.37kW to 1.5 kW - 1Ph, 230V, 0.37kW to 7.5kW - 3 Ph, 380V
Rated Speed	2900 rpm
Voltage Tolerance	+ 6%
Protection	IP 68
Rotation Sequence	1Ph - CCW, 3Ph - Electrically reversible
Outer Diameter	96 mm
Duty	S1 (Continuous)
Linear flow	0.15 m/sec
Liquid Temperature	38°C max.
Switching Frequency	30 Starts / hour
Thrust load	0.37kW to 0.75kW - 1500N 1.1kW to 4kW - 2500N 5.5kW to 7.5kW - 4500N
Mounting Dimensions	NEMA Standard
Starting Method	1 Ph - CSR / CSCR, 3 Ph - DOL
Motor Lead out type	Removable type - 4 core
Class of Insulation	F

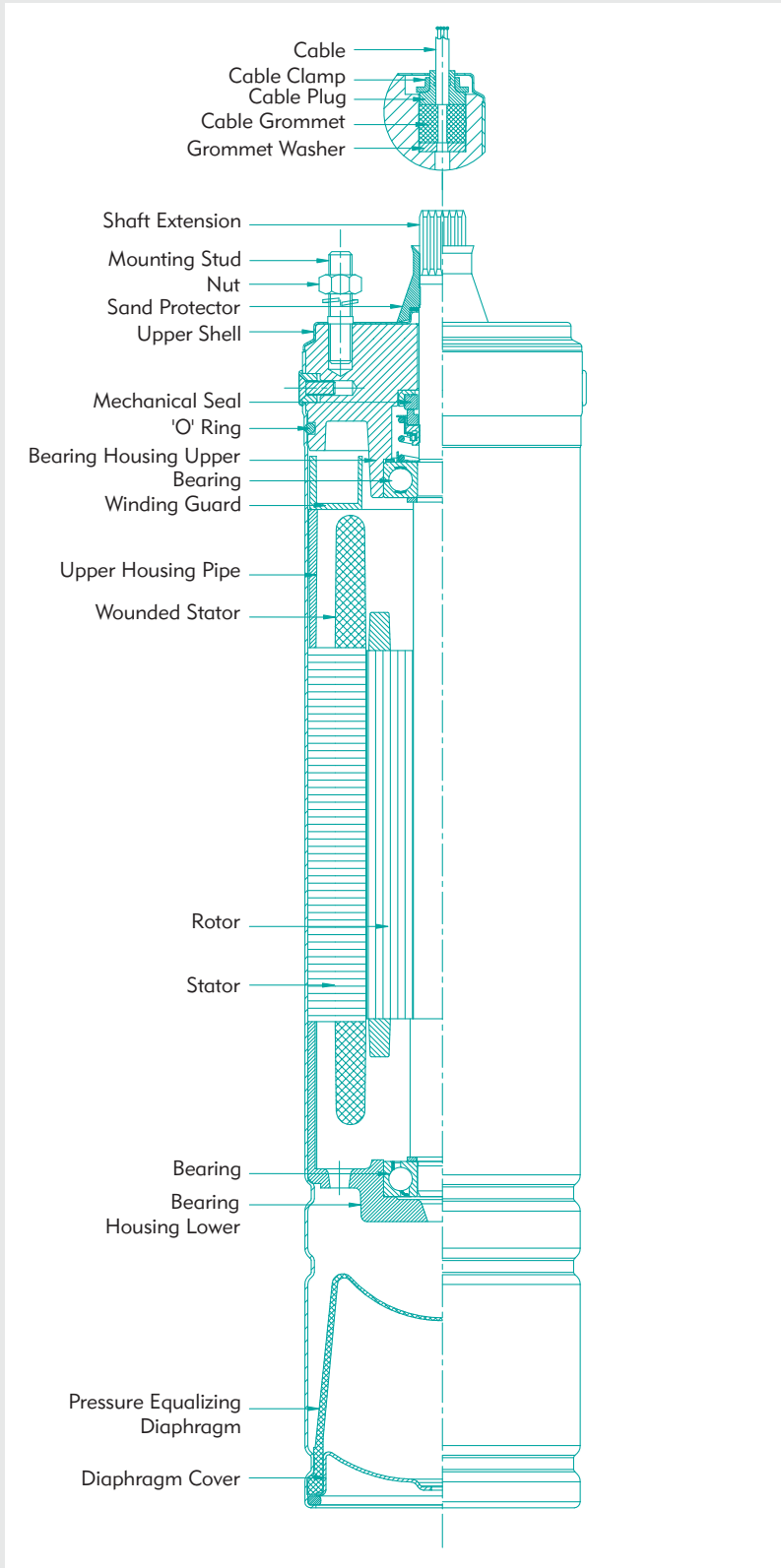


### Applications

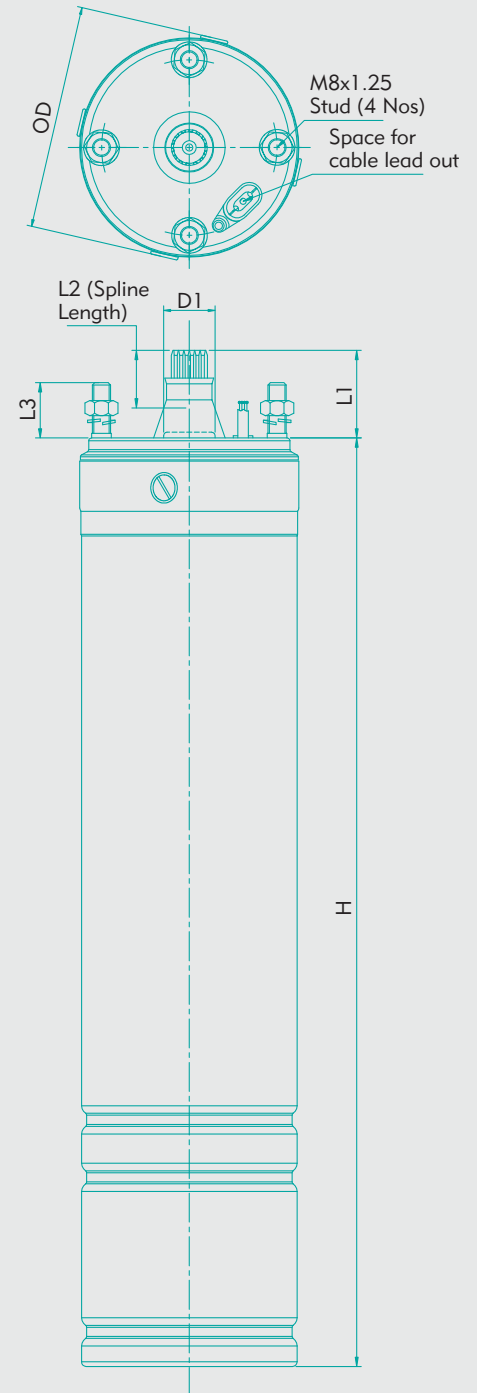
-  Agriculture
-  Industries
-  Construction & Building Services
-  Residential

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## CROSS SECTIONAL DRAWING



## MOUNTING DIMENSIONS



Dimensions are in Inches

	L1	L2	L3	D1	OD	PCD
4"	1.49	0.5	0.96	0.87	3.83	3

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## SUBMERSIBLE PUMP KIT > TSPK - SERIES > JUMBO PACK

In view of satisfying customer's demand Tormac has designed & introduced the compact Submersible Pump Kit with a complete package of pumpset & accessories. The purpose is to simplify the domestic customer's pump purchase selections. This series consists of selected pump models suitable mainly for low head applications upto 365 feet with a maximum flow upto 7m<sup>3</sup>/h. This Tormac submersible pump kit comprises the following items and supplied all in one pack.

- | 4" Submersible Pump | 4" Submersible motor
- | Single phase control box | 60 Mtr Cable | 60 Mtr safety rope
- | Borehole cap | Adaptor



### General Information on Electro Mechanical Unit

Series	TSPK
Nominal Diameter	4"
Rated Output & Voltage	0.37 kW to 1.1 kW 1-Phase, 230V, 50Hz A.C Supply 3-Phase, 380V, 50Hz A.C Supply
Rated Speed	2900
Class of insulation	" F / Y "
Duty	S1 Continuous
Protection	IP68
Liquid Temperature	38°C
Linear Flow	0.15m/sec
Switching Frequency	20 starts / hour
Max. Recommended Head	15 to 110 m
Max. Flow Range	1 to 7m <sup>3</sup> /h
Delivery size in mm	32 & 40

### Applications



Residential



Agriculture



Construction &  
Building Services



Industries



Hotels

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## PRESSURE BOOSTING SYSTEM > TH & TV - SERIES



General Information on Electro Mechanical Unit

Series	TH	TV
Power range ( kW)	0.4 to 3.5kW (0.53 - 4.70 HP)	0.37 to 45kW (0.5 - 60 HP)
Speed in RPM	2900	2900
Power versions	A.C. Single Phase -230V -50Hz Permanent Split Capacitor (PSC) incorporated with thermal Overload protector. A.C. Three Phase 380 - 415 V 50Hz Direct Online (D.O.L.)	A.C. Single Phase -230V -50Hz Permanent Split Capacitor (PSC) incorporated with thermal Overload protector. A.C. Three Phase 380 - 415 V 50Hz Direct Online (D.O.L.)
Flow Range m <sup>3</sup> /hr	2.5 , 5, 8 & 12	1, 2, 3, 4, 5, 8, 16, 32, 44, 66 & 90
Type of duty	S1 Continuous	S1 Continuous
Delivery size in inches	1"x1", 1 1/2"x1 1/2", 1 1/2"x1 1/4"	1"x1", 1 1/4"x1 1/4", 1 1/2"x1 1/2", 2"x2" 2 1/2"x2 1/2", 3"x3" Available in Round/Oval/PJE
Head Range	55m / 180 ft	330m / 1082 ft
Rotation	Counter Clock wise viewed from Driving end	Clock wise viewed from Driving end
Degree of protection	IP 54	IP 55 (Optional 44 & 54)
Class of Insulation	' B' / ' F '	' B' / ' F '
Suction Lift	7m / 23 ft	7m / 23 ft
Maximum Liquid temperature	90°C / 194°F	-15 to +120°C (5°F to 248°F)
Maximum ambient temperature	40°C / 104°F	40°C / 104°F

### Applications



Apartments



Industries



Fire Fighting Equipments



Pressure boosting systems



Hotels



R.O.S ( Reverse Osmosis Process systems), HVAC

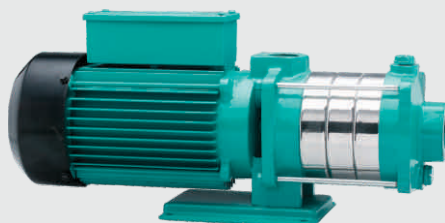


Laboratories

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## HORIZONTAL MULTISTAGE PUMPS > TH - SERIES

Tormac TH Horizontal Multistage Centrifugal pumps are specially designed to facilitate pressure boosting and are best suited for a wide range of applications. The vital components viz. impellers, diffusers, and shaft used in these pumps are made of corrosion resistance high quality Stainless Steel which ensure a smooth and trouble free performance helps to pump safe and hygienic drinking water system. The prime mover of this product is robust in construction and built with thermal overload protection (only in single phase motors). High quality mechanical seals are used to ensure less friction / power loss.



General Information on Electro Mechanical Unit	
Series	TH
Power range ( kW)	0.4 to 3.5kW (0.53 - 4.70 HP)
Speed in RPM	2900
Power versions	A.C. Single Phase -230V -50Hz Permanent Split Capacitor (PSC) incorporated with thermal Overload protector. A.C. Three Phase 380 - 415 V 50Hz Direct Online (D.O.L.)
Flow Range m <sup>3</sup> /hr	2.5 , 5, 8 & 12
Type of duty	S1 Continuous
Delivery size in inches	1"x1", 1 1/2"x1 1/2", 1 1/2"x1 1/4"
Head Range	55m / 180 ft
Rotation	Counter Clock wise viewed from Driving end
Degree of protection	IP 54
Class of Insulation	' B' / ' F '
Suction Lift	7m / 23 ft
Maximum Liquid temperature	90°C / 194°F
Maximum ambient temperature	40°C / 104°F

### Applications



Apartments



Hotels



Industries



R.O.S ( Reverse Osmosis Process systems), HVAC



Pressure boosting systems



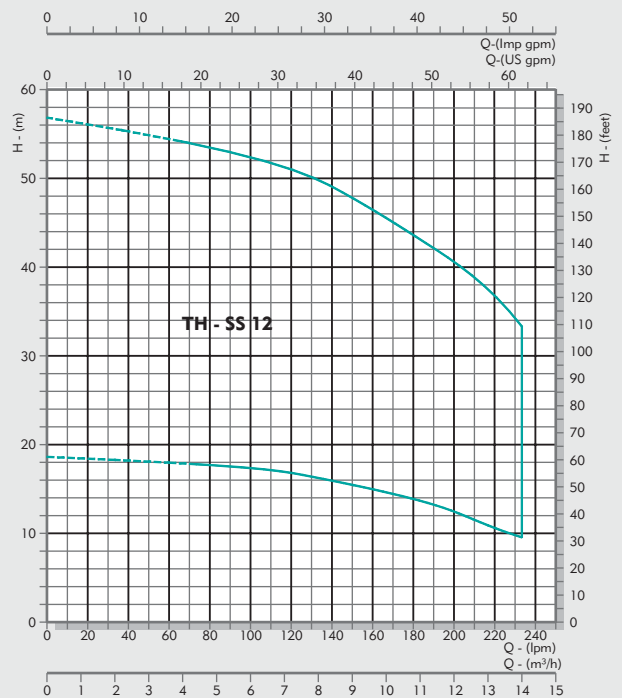
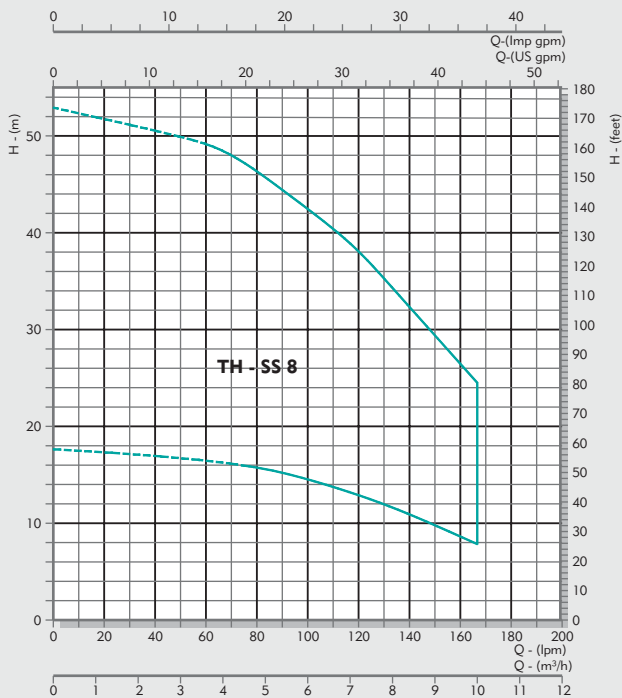
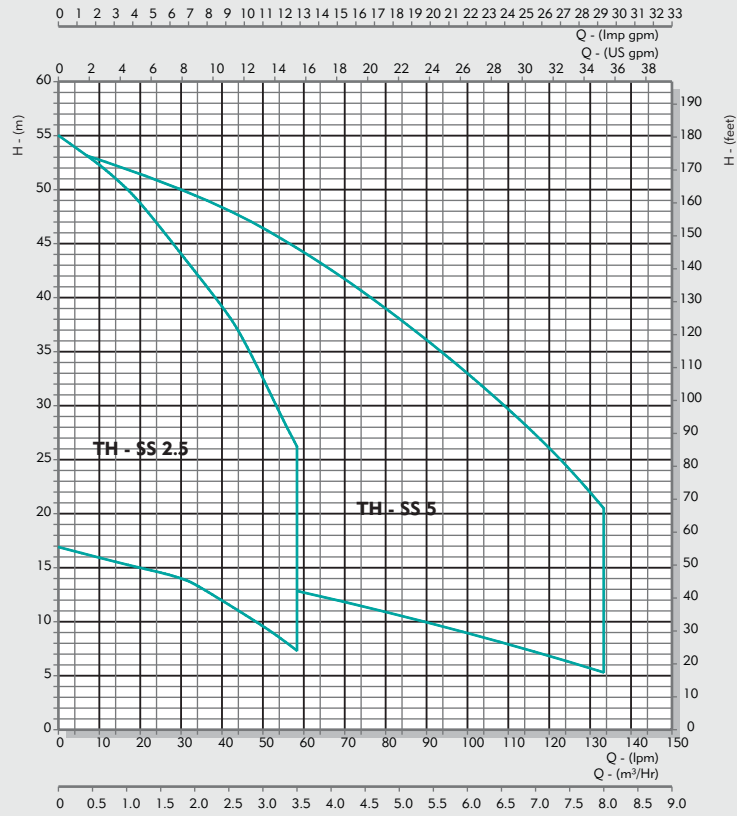
Laboratories



Fire Fighting Equipments



# GROUP PERFORMANCE CURVES > TH - SERIES



\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## VERTICAL MULTISTAGE PUMPS > TV - SERIES



Tormac TV series Vertical Multistage Pumps are highly reliable and technologically advanced multipurpose pump capable of satisfying the need of a wide variety of users. The in-line design enables the pump to be installed in vertical position and does not interrupt the horizontal pipe line system. All the wet parts like impellers, diffusers, shaft of these pumps are constructed by corrosion resistance AISI stainless steel and designed to deliver the best possible hydraulic efficiency. The integrated and most modern quality assurance systems used at every stage of the production and flawless workmanship ensure sustained and consist operation. These pumps are equipped with replacement mechanical seal.

### General Information on Electro Mechanical Unit

Series	TV
Power range ( kW)	0.37 to 45kW (0.5 - 60 HP)
Speed in RPM	2900
Power versions	A.C. Single Phase -230V -50Hz Permanent Split Capacitor (PSC) incorporated with thermal Overload protector. A.C. Three Phase 380 - 415 V 50Hz Direct Online (D.O.L.)
Flow Range m <sup>3</sup> /hr	1, 2, 3, 4, 5, 8, 16, 32, 44, 66 & 90
Type of duty	S1 Continuous
Delivery size in inches	1"x1", 1 ¼ x1 ¼", 1 ½"x1 ½", 2"x2" 2½"x2½", 3"x3" Available in Round/Oval/PJE
Head Range	330m / 1082 ft
Rotation	Clock wise viewed from Driving end
Degree of protection	IP 55 (Optional 44 & 54)
Class of Insulation	' B' / ' F '
Suction Lift	7m / 23 ft
Maximum Liquid temperature	-15 to +120°C (5°F to 248°F)
Maximum ambient temperature	40°C / 104°F

### Applications



Apartments



Hotels



Industries



R.O.S ( Reverse Osmosis Process systems), HVAC



Pressure boosting systems

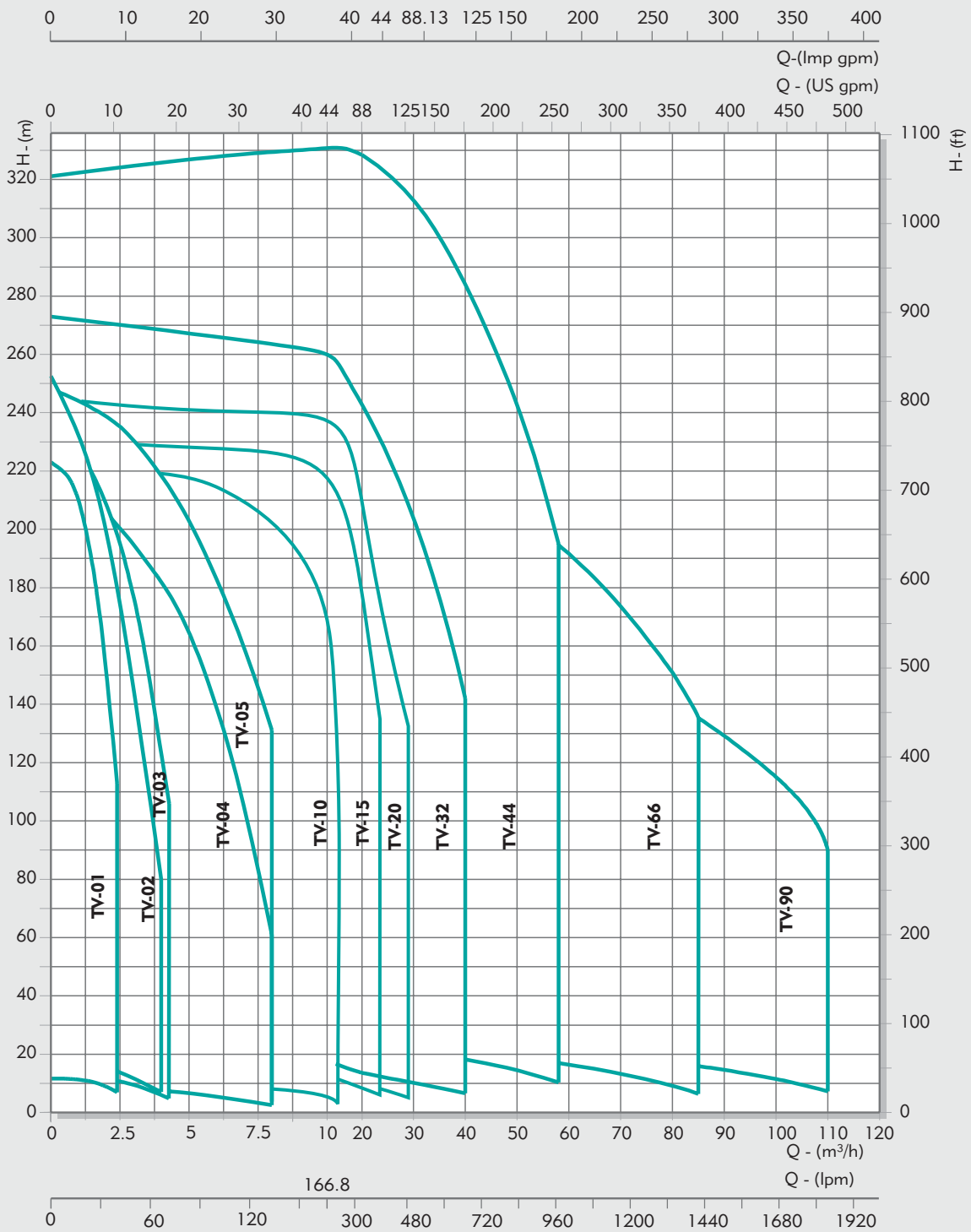


Laboratories



Fire Fighting Equipments

## GROUP PERFORMANCE CURVES > TV - SERIES



\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## END SUCTION CENTRIFUGAL PUMPS > TE SERIES

Tormac End suction pumps with volute casing DIN 16 DIN 2532/2533 single stage end suction with bearing housing, Dimension in accordance with DIN 24255. End suction pumps are single stage centrifugal, non-self-priming, volute pumps. These pumps feature horizontal shaft components with axial suction and impellers and radial discharge ports. Pumps volute chamber and impellers are carefully designed to give the best possible and suction lift characteristics.

Most modern and highly sophisticated machinery and technology are employed in the manufacture of these pumps using quality raw material, dynamically balanced impellers, seal and bearings to ensure long life.

### Operating Limits

Outlet size range	DN32 to DN150mm
Flow range	Upto 550 m <sup>3</sup> /h
Total Head range	Upto 100m
Operating temperature with soft packed stuffing box	90°C
Operating temperature with mechanical seal	90°C
Maximum working pressure	16bar
RPM	1450 / 2900



### Material of Construction

Pump Parts	Type - C	Type - B	Type - S
Pump casing	Cast Iron	Cast Iron	AISI 304
Impeller	Cast Iron	Zinc free Bronze	AISI 304
Shaft	EN - 8	EN - 8	AISI 304 / AISI 316
Sleeve	AISI 410	AISI 410	AISI 410

### Applications



Heating and Air conditioning Systems



De-watering



Public water supply



Laboratories



Irrigation



Fire Fighting Equipments

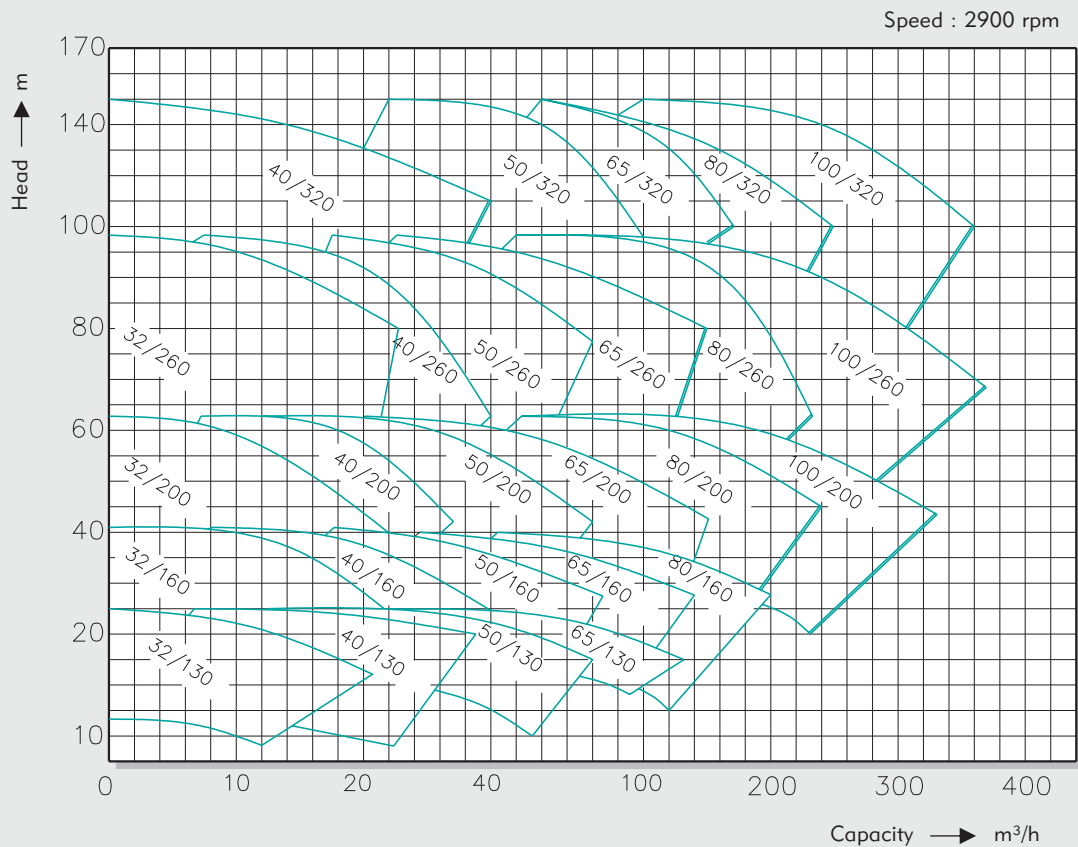
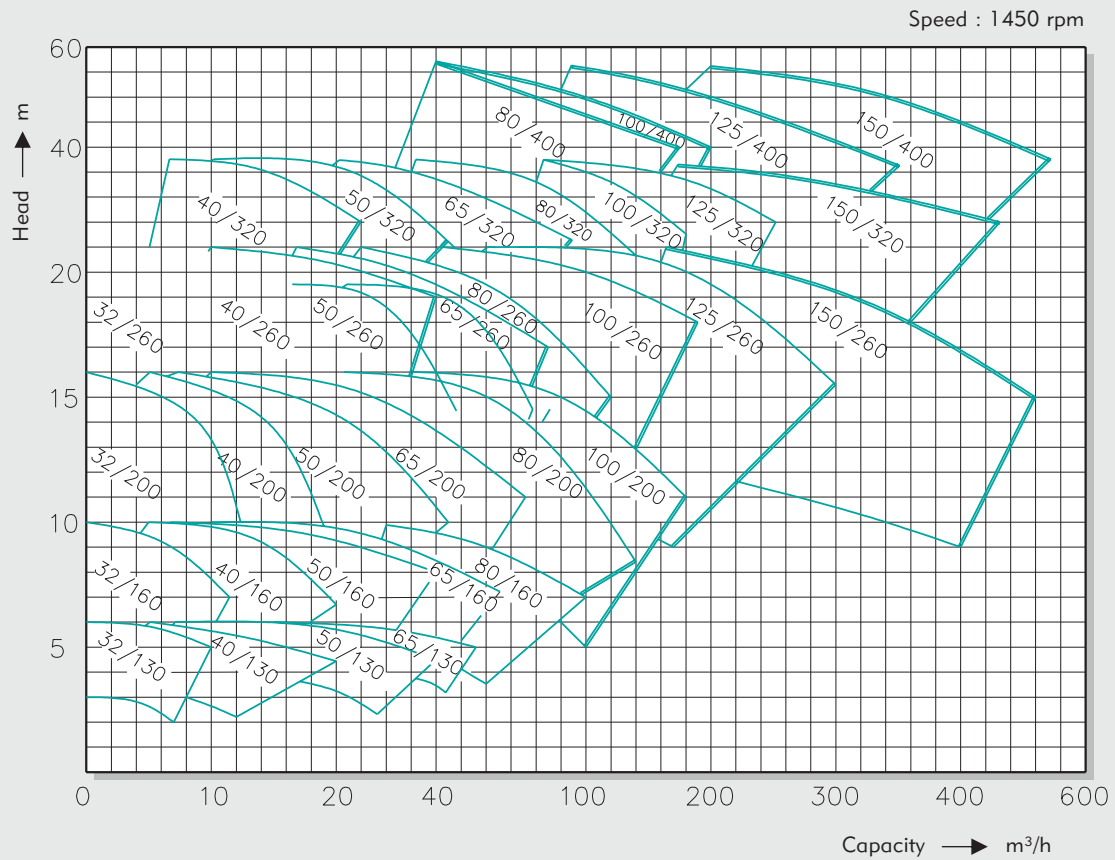


Circulation and transfer of clean, chemically non-aggressive water & liquids



Fountains and Swimming pool

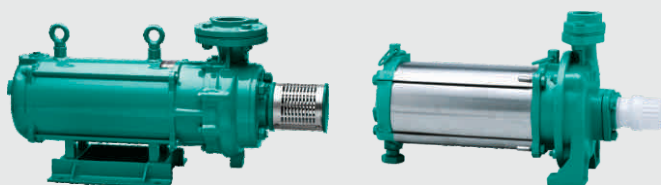
## GROUP PERFORMANCE CURVES > TE SERIES



\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## HORIZONTAL OPEN WELL SUBMERSIBLE PUMPS > TOH - SERIES

Tormac centrifugal openwell pump's volute chamber and impellers are carefully designed to give the best possible hydraulic efficiency and suction lift characteristic. State of the art machinery, technology and expertise gained over the years are employed in the manufacture of these pumps using quality raw material, journal bushes and dynamically balanced rotating components to ensure long life. Tormac openwell submersible prime movers are squirrel cage water filled and water-cooled rewindable type made of a special waterproof pure electrolytic copper insulated with synthetic film material. A uniquely designed thrust bearings with high thrust capacity and good quality shaft seals are used to enhance the strength and durability. All single-phase motors are incorporated with thermal overload protector. All Tormac openwell submersible pumps are produced in accordance with ISO 9001 standards.



### General Information on Electro Mechanical Unit

Series	TOH
Power Range	0.37 - 1.5 kW (1Ph) 0.75 - 18.5 kW (3Ph)
Speed	2900
Frequency	50Hz
Power Version	Single Phase 200 - 220V Three Phase 380 - 415V
Degree of Protection	IP - 58
Duty type	S1 Continuous
Max. Start per hour	6 times
Head Range	76 m / 250 ft
Outlet Size	1, 1½, 2, 2½, 3, 4 & 6
Liquid Temperature	33°C
Class of Insulation	"Y"
Flow Range	160 m <sup>3</sup> /h

### Applications



Domestic Usage



Drip and Sprinkler irrigation



Agriculture



Washing systems



Farms and Gardens



Fire Fighting Equipments



Mining

## VERTICAL OPEN WELL SUBMERSIBLE PUMPS > TOV - SERIES



Tormac centrifugal openwell pump's volute chamber and impellers are carefully designed to give the best possible hydraulic efficiency and suction lift characteristic. State of the art machinery, technology and expertise gained over the years are employed in the manufacture of these pumps using quality raw material, journal bushes and dynamically balanced rotating components to ensure long life. Tormac openwell submersible prime movers are squirrel cage water filled and water-cooled rewindable type made of a special waterproof pure electrolytic copper insulated with synthetic film material. A uniquely designed thrust bearings with high thrust capacity and good quality shaft seals are used to enhance the strength and durability. All single-phase motors are incorporated with thermal overload protector. All Tormac openwell submersible pumps are produced in accordance with ISO 9001 standards.

### General Information on Electro Mechanical Unit

Series	TOV
Power Range	0.55 - 2.2 kW (1Ph) 0.75 - 45 kW (3Ph)
Speed	2900
Frequency	50Hz
Power Version	Single Phase 200 - 220V Three Phase 380 - 415V
Degree of Protection	IP - 58
Duty type	S1 Continuous
Max. Start per hour	6 times
Head Range	320 m / 1050 ft
Outlet Size	1, 1¼, 2 & 2½
Liquid Temperature	33°C
Class of Insulation	"Y"
Flow range	215 m <sup>3</sup> /h

### Applications



Domestic Usage



Drip and Sprinkler irrigation



Agriculture



Washing systems



Farms and Gardens



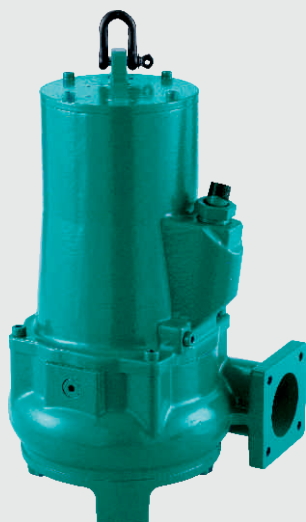
Fire Fighting Equipments



Mining



## SEWAGE & DRINAGE PUMPS > TSM - SERIES



Tormac waste water pumps are built to exacting specifications to ensure durability and ease maintenance. TSM series is an extremely versatile submersible pumps for stationary and portable uses. Waste water submersible pumps are built with vortex impellers and semi open impellers.

The pump and motor are connected with a single drive shaft to eliminate any transmission loss. Wear resistant ball bearings ensure better hydraulic efficiency and noiseless operation, whereas pump casing and brackets are made of high quality cast iron. All pumps and motors of these series are provided with dual mechanical seals with silicon carbide and carbon ceramic.

Shaft of high tensile stainless steel is used for transmitting the rated horsepower. All waste water pumps are powered by a dry type asynchronous motor housed in water tight housing with an insulation of B/F.

Construction of motor frames and usage of quality raw materials result in high performance and low temperature rise thereby increasing the life cycle of the motor. Thermal overload protected (Motor Protector) & float switches are incorporated in single phase motors.

General Information on Electro Mechanical Unit	
Series	TSM
Power range ( kW)	0.37 - 2.2kW
Speed in RPM	2900
Power Versions	A.C. Single Phase -230V -50Hz Permanent Split Capacitor (PSC) incorporated with thermal Overload protector. A.C. Three Phase 380 - 415 V 50Hz Direct Online (D.O.L.)
Type of duty	S1 Continuous
Delivery size in inches	1½", 2, 2½" & 3"
Head Range	75m
Degree of protection	IP 68
Motor Type	Dry
Class of Insulation	" H "
Direction of Rotation	Clock wise
pH Value	6 - 12
Maximum Liquid temperature	40° C
Maximum operating pressure	1.8kg/cm <sup>2</sup>
Flow Range	72 m <sup>3</sup> /h

### Applications



Waste water



Sump Drainage



Food Control



Aquaculture water supply and drainage



Landscape



Extraction of water from rivers, lakes and reservoirs.

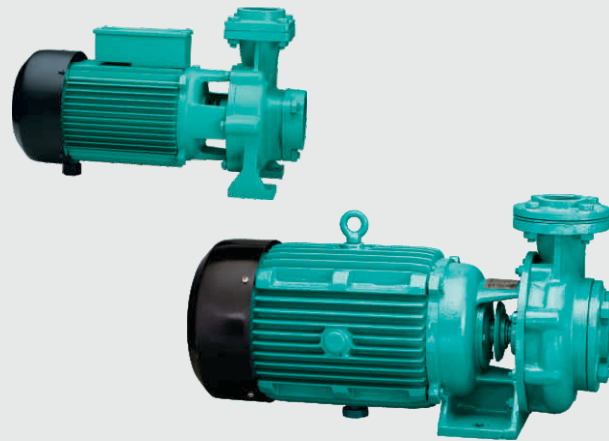


De-watering

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## CENTRIFUGAL MONOBLOCK PUMPS > TM - SERIES

Tormac single stage centrifugal pumps are providing with axial suction port and radial discharge port. The pump has back pull-out design. State of the art machinery, most advanced pumping technology and expertise gained over the years and employed in the, manufacture of these pumps. Quality raw material, seals, ball bearings and dynamically balanced rotating components are used to ensure long life.



General Information on Electro Mechanical Unit		
Series	TM	
Power Range ( kW)	1 Ph	0.37 to 2.2 kW
	3Ph	0.37 to 15.0 kW
Speed in RPM	2900	
Versions	A.C. Single Phase -230V -50Hz Permanent Split Capacitor (PSC) incorporated with thermal Overload protector. A.C. Three Phase 380 - 415 V 50Hz Direct Online (D.O.L.) / S.D.	
Type of duty	S1 Continuous	
Delivery Size in inches	1 X 1, 1 1/4" X 1, 1 1/2" X 1 1/4", 1 1/2" X 1 1/2", 2 X 1 1/2", 2" X 2", 2 1/2" X 2", 3" X 2 1/2", 3" X 3", 4" X 4", 4" x 3"	
Degree of Protection	IP 54	
Impeller	Bronze / Cast Iron / AISI 304 / 316	
Class of Insulation	" B " / ' F '	
Suction Lift	7 m / 23 Ft	
Maximum Liquid Temperature	50°C (122°F)	
Maximum Ambient Temperature	40°C (104°F)	
Flow Range	Upto 120 m <sup>3</sup> /h	
Head Range	Upto 70 m / 230 ft	

### Applications



Fountains



De-watering



Public water supply



Live stock farms



Landscape



Irrigation



Industrial and Private water supply



Sprinkler



Laboratories

## PERIPHERAL PUMPS > TSP / TEP - SERIES

Tormac single stage centrifugal pumps are providing with axial suction port and radial discharge port. The pump has back pull-out design. State of the art machinery, most advanced pumping technology and expertise gained over the years and employed in the, manufacture of these pumps. Quality raw material, seals, ball bearings and dynamically balanced rotating components are used to ensure long life.



**TSP**



**TEP**

### General Information on Electro Mechanical Unit

Series	TSP / TEP
Power Range ( kW)	1Ph - 0.37 & 0.75 kW
Speed in RPM	2900
Versions	A.C. Single Phase -230V -50Hz Permanent Split Capacitor (PSC) incorporated with thermal Overload protector.
Type of duty	S1 Continuous
Delivery Size in inches	1" X 1"
Degree of Protection	IP 54
Class of Insulation	"F"
Suction Lift	7 m / 23 ft
Maximum Liquid Temperature	50°C (122°F)
Maximum Ambient Temperature	40°C (104°F)
Impeller	Bronze

### Applications



Domestic, Public, Industrial & private water supply



Washing systems



Gardening



Drip and Sprinkler irrigation

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## uPVC RISER PIPES > Class A, Class A+, Class B, Class C & Class C+

uPVC riser pipes are yet-another quality product from Tormac. To overcome the disadvantages of traditional galvanized iron pipes we at Tormac introduce new version of riser pipes in PVC specially designed for borehole submersible pumps. Besides making the installations hassle free the smooth surface of these pipes help greatly to reduce the friction loss. The locking system used while fixing couples with pipes and the square threads at both the ends ensure better load withstand capacity and rigidity.

Using suitable adopters, these pipes can be fixed with pumps having both BSP & NPT standard outlets. These pipes are available in different classes which can be selected based on the installation depth and recommend head and load withstanding capacities. As these pipes are anti-corrosive in nature and formulated with editable grade materials, highly recommend for installations, where the interest of hygiene is more.



### General Information on Physical & Mechanical Properties

Property	Standard	Unit
Specific gravity	-	1.4 gms/cm <sup>3</sup>
Tensile Strength	As per ASTM D 1785	627 kg/cm <sup>2</sup>
Flexural strength	As per ASTM D 1785	647 kg/cm <sup>2</sup>
Izod Impact Strength	As per ASTM D 1785	15 kg cm/cm <sup>2</sup>
Charpy Impact Strength	As per ASTM D 1785	17 kg cm/cm <sup>2</sup>
Impact Strength	-	No fracture
Vicat Softening Temperature	As per ASTM D 1525	87.3 °C
Installation depth in Meter	Class SPL - 75-125, Class A - 90-150, Class A+ - 100-210, Class B - 160 - 300, Class B+ - 160 - 210, Class C - 260 - 350, Class C+ - up to 400	
Nominal Diameter in mm	25, 32, 40, 50, 65, 80, 100, 125 & 150	

### Applications



Agriculture



Narrow Bore wells, Rain water Harvesting,  
Sanitation, Industrial effluent disposal.

## uPVC WELL CASING & SCREEN PIPES

Tormac is privileged to introduce uPVC Well Casing and Screen pipes which are manufactured as per IS 12818:2010 standard available in 40mm to 300mm sizes in different types. These pipes are an ideal products for protection of domestic, irrigation, industrial and mining borewells, keeping out the gravel pack and foreign particles providing clean and clear water from the borewells.



**SCREEN PIPE**

**CASING PIPES**

General Information on Electro Mechanical Unit	
<b>Series</b>	<b>CASING PIPES (NCP, MCP &amp; DCP)</b>
Models	Narrow well, Medium well, Deep well
Available Size in mm	DN40 to DN300
Installation well depth in metre	NCP - upto 80m MCP - Well Depth between 80 to 250m DCP - Well Depth between 250 to 400m
<b>Series</b>	<b>SCREEN PIPES (NSP, MSP &amp; DSP)</b>
Models	Narrow well, Medium well, Deep well
Available Size in mm	DN40 to DN300
Installation well depth in metre	NSP - upto 80m MSP - Well Depth between 80 to 250m DSP - Well Depth between 250 to 400m

### Applications



Agriculture



Narrow Bore wells,  
Rain water Harvesting

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## CONTROL BOXES / PANELS

Tormac control panels are widely used to start, monitor, control & protect the pumpsets which are used to pump the water from underground & surface. During start up motors develop currents of up to approximately 6-8 times the rated current and high torque linked to this. The high starting currents often lead to voltage drop in the supply network and high starting torque put the mechanical elements under considerable strain. Therefore it is must to limiting values for the motor starting currents in relation to the rated operational currents. The permissible values vary from network to network and depend on its load bearing capacity. With regards to mechanics, methods are required which reduce starting high currents. At the same time motor functioning to be monitored & protected against supply faults and application failures. Considering above criteria Tormac control panels are specially designed to facilitate complete protection for pumpsets against faulty current & voltage.



Panel Types	Protections Assured
Direct On Line starter panel (DOL) 1-Phase (220 / 230 V) 3- Phase (380 - 415 V)	Overloading Under current Over voltage / Under voltage Phase failure / Phase unbalance / Phase Reversal Dry Running Short circuit Surge current
Star Delta starter panel (SD)	
Auto Transformer starter Panel (ATS) / Impedance Starter Panel (ISP)	
Electronic Soft starter Panel (SSP)	
Variable Speed Drive starter Panel (VSDP) In addition to the above control panels Tormac is supporting solar control panel which operates the Ac pumpsets on solar power.	
Solar Inverter Control panels (SIP)	

General Information on Electrical Properties		
Specifications	1Ph	3Ph
Power range	0.37 - 2.2kW	0.37 - 185 kW
Method of Connection	CSR / CSCR	D.O.L / S.D. / Auto transformer / Impedance starter / Soft starter Variable speed drive starter
Degree of protection	IP 55	IP 55

### Applications



Domestic Usage



Industrial



Agriculture



Projects and Mining

## SOLAR MODULES

Tormac Solar Pumping Systems are supplied with Highly Durable, high quality photovoltaic modules made up of Polycrystalline & Monocrystalline cells. These modules are available in the range of 3 Wp to 340 Wp and are certified in accordance with IEC 61215, IEC61730-II, IEC61701 (SALT MIST).



General Information on Electro Mechanical Unit	
<b>Series</b>	<b>SOLAR PV MODULES</b>
Type	Polycrystalline & Monocrystalline
Power Range	10 to 340 Wp
Voltage Max. Power (Vmp)	17.7 to 37.5
Current Max. Power (Imp)	0.57 to 9.07
Power Tolerance	-0% - 3%
No. of Cells	60 / 62

### Applications



Domestic Usage



Irrigation



Industries



Mining

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.



## SUBMERSIBLE CABLES > TC SERIES

### 3 CORE / 4 CORE - PVC / RUBBER / FLAT / ROUND

Tormac cables are used as power supply cables for submersible pump sets. This multi stand, multicore cables are in 3 / 4 core versions with flat or Round type. These cables are suitable for installations in dry, moist & wet environments but however not suitable for explosive areas.



General Information on Electrical Properties		
Specifications	Flat type	Round type
Sizes in Sq mm	1.5, 2.5, 4, 6, 10, 16, 25, 35, 50, 70 & 95	1.5, 2.5, 4, 6, 10, 16, 25, 35, 50, 70 & 95
Voltage Rating	1100V	1100V
Temperature Range	-10° C to + 70° C	-10° C to + 70° C
Insulated material	Flexible water proof PVC / Rubber	Flexible water proof PVC / Rubber
Sheath Material	Flexible water proof PVC / Rubber	Flexible water proof PVC / Rubber
Sheath color	Black / Blue	Black / Blue

COLOUR COADING FLAT / ROUND - PVC / RUBBER - 3 / 4 CORE		
Color Coding	As per IEC 60227	As per IS 694
3 Core	Black, Blue & Brown	Red, Yellow & Blue
4 Core	Black, Blue, Brown, Yellow with Green line / Green with Yellow line	Red, Yellow, Blue Green / Black

#### Applications



Irrigation



Industries



Borehole



Mining & Dewatering



# CABLE SELECTION CHART

For Three Phase 6 wire (S.D.) Motor Maximum Length of Copper Cable

Motor Rating			CABLE SIZE IN SQUARE MILLIMETRES																		MAXIMUM LENGTH IN METRES			
VOLTS	kW	HP	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400	500		630		
380 - 415 VOLT 50Hz	5.5	7.5	91	143	234	351	572	896	1377	1884														
	7.5	10	65	104	169	260	403	650	974	1338														
	9.3	12.5		91	143	221	364	572	870	1182	1624													
	11	15		78	130	182	299	481	714	974	1377	1832												
	13	17.5			104	143	260	403	611	844	1156	1533												
	15	20			91	130	221	351	533	740	1026	1364	1741											
	18.5	25				104	182	273	429	585	799	1065	1364	1624										
	22	30					156	234	364	494	688	922	1169	1403	1650									
	26	35						130	195	299	403	572	792	1000	1221	1429	1650							
	30	40						117	169	273	364	520	675	870	1013	1208	1390	1624						
	37	50							143	221	299	416	546	701	831	974	1117	1312	1494					
	45	60								182	247	338	468	598	727	870	1013	1208	1377					
	55	75									208	286	377	494	611	714	831	987	1137					
	63	85										188	260	299	442	546	637	740	870	1000				
	75	100											208	286	377	455	533	611	727	831	974			
	93	125												234	299	364	429	494	585	662	779			
	110	150													260	312	377	429	520	598	701	786		
	130	175														221	266	325	377	442	520	598	688	760
	150	200															234	279	325	390	455	539	604	669
	166	225																234	286	338	390	455	520	578
	185	250																	260	312	364	429	481	539
	220	300																		247	286	331	372	410
	260	350																			247	286	325	357
	300	400																				214	247	273

**60 Hz PRODUCTS**

## PLASTIC SUBMERSIBLE PUMPS > 4" > TP - SERIES

Thermoplastic submersible pumps are ingeniously designed and developed employing latest engineering softwares, high-tech machinery, tools and cutting edge of pumping technology to deliver the best possible hydraulic efficiency. The integrated and most modern quality assurance systems used at every stage of the production and flawless workmanship ensure sustained and consistent operation.

All these submersible pumps are multistage single suction centrifugal type and provided with integral check- valve and NEMA standard coupling. These pumps are available with impeller & diffuser made up of corrosive resistant thermoplastic and the shaft is made of AISI 304. The integral check valve prevents back flow, and reduces the risk of water hammer which paves the way for trouble free performance. The suction screen is designed with utmost care so as not to reduce the inflow of water and at the same time to prevent damage to the pump and clogging due to the entry of sand and other foreign particles.

### Pumped Liquids

Non-Aggressive, non explosive, Pure, Cold, Fresh water without abrasive particles having following characteristics.

pH	6.5 to 8.5
Turbidity	50 ppm silica scale (max.)
Viscosity	$1.75 \times 10^6 \text{ m}^2/\text{sec}$ (max.)
Hardness (Drinking Water)	300 (max.)
Specific gravity	1.004 (max.)
Allowable Solids	3000 ppm (max.)
Chlorine ion density	500 ppm (max.)
Permissible amount of sand	50 g/m <sup>3</sup> (max.)
Temperature	38°C (max.) NBR / 90°C VITON



### GENERAL INFORMATION ON ELECTRO MECHANICAL UNIT

Power Range (HP) 1 PH	Power Range (HP) 3 PH	Speed In RPM	Flow Range m <sup>3</sup> /h	Flow Range USGPM	Recommended head (ft)	Recommended head (m)	Delivery size in Inches
Upto 3.0 HP	Upto 10 HP	3450	0.45 - 28	2 - 125	18 - 998	5.4 - 300	1, 1 1/4, 1 1/2 & 2
M.O.C	Impeller	Diffuser	Valve Housing	Valve	Cable Guard	Coupling	Suction Inter connector
Type P	Noryl	Noryl	AISI 304	AISI 304	AISI 304	AISI 329	AISI 304

### Applications



Agriculture



Industries

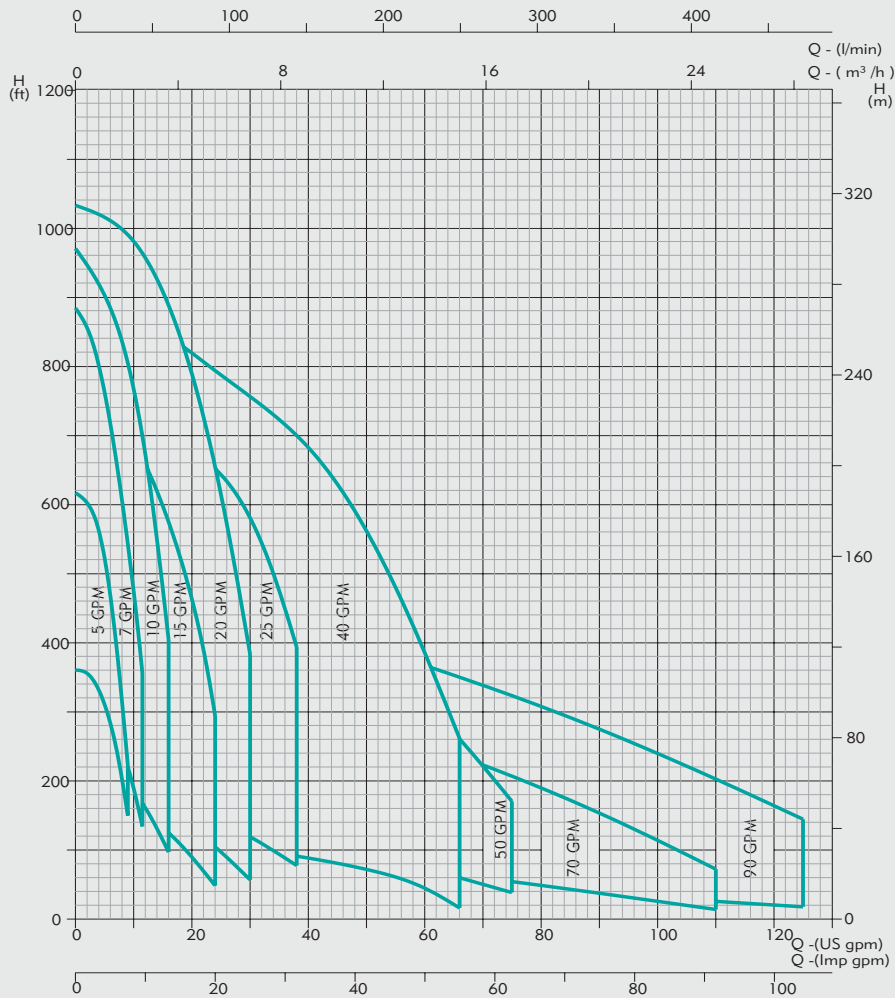


Construction &  
Building Services



Residential

## PERFORMANCE CURVE > 4" > TP - SERIES



Curve tolerance according to ISO 9906:2012, Grade 3B

### Performance Curve Conditions

a.	The Performance curves shows pump performance of the pump at rated speed and voltage. (2900 rpm)	e.	The head and discharge are inclusive of check valve and suction inter-connector losses at the actual speed.
b.	The measurements were made with airless water at 20°C. For pumping liquids with a density higher than that of water, motors with correspondingly higher outputs must be used.	f.	Curve tolerance according to ISO : 9906, Annex-A.
c.	Pipe friction losses have not been included in the performance curves and performance data.	g.	The performance are at rated voltage and are only Indicative. Actual discharge depends on availability of water in well, based on strength of water source, height of water column, submergence of pump, etc.,
d.	The bold curves indicate the recommended performance range.	h.	The given performance are for a specific materials of construction of pumps.

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## STAINLESS STEEL SUBMERSIBLE PUMPS > 4" > TS / TN - SERIES

Tormac stainless steel submersible pumps are ingeniously designed and developed employing latest engineering softwares, high-tech machinery, tools and cutting edge of pumping technology to deliver the best possible hydraulic efficiency. The complete stainless steel construction not only prevents the pumps from corrosion but also exceptionally increases the life- span. The integrated and most modern quality assurance systems used at every stage of the production and flawless workmanship ensure sustained and consistent operation.

All these submersible pumps are multistage single suction centrifugal type, provided with integral check-valve and NEMA standard coupling. These pumps are available with fabricated impellers and diffusers made of AISI 304/316 and the shaft is made of AISI 304/431. The integral check valve prevents back flow and reduces the risk of water hammer which paves the way for trouble free performance. The suction screen is designed with utmost care so as not to reduce the inflow of water and at the same time to prevent damage to the pump and clogging due to the entry of sand and other foreign particles.

### Pumped Liquids

Non-Aggressive, non explosive, Pure, Cold, Fresh water without abrasive particles having following characteristics.

pH	6.5 to 8.5
Turbidity	50 ppm silica scale (max.)
Viscosity	1.75 x 10 <sup>6</sup> m <sup>2</sup> /sec (max.)
Hardness (Drinking Water)	300 (max.)
Specific gravity	1.004 (max.)
Allowable Solids	3000 ppm (max.)
Chlorine ion density	500 ppm (max.)
Permissible amount of sand	50 g/m <sup>3</sup> (max.)
Temperature	38°C (max.) NBR / 90°C VITON



### GENERAL INFORMATION ON ELECTRO MECHANICAL UNIT

Power Range (HP) 1 PH	Power Range (HP) 3 PH	Speed In RPM	Flow Range m <sup>3</sup> /h	Flow Range USGPM	Recommended head (ft)	Recommended head (m)	Delivery size in Inches
Upto 3.0 HP	Upto 10.0 HP	3450	0.32 - 20	1.5 - 90	20 - 2220	6 - 677	1, 1¼, 1½&2
M.O.C	Impeller	Diffuser	Valve Housing	Valve	Cable Guard	Coupling	Suction Inter connector
Type S & N	AISI 304/316	AISI 304/316	AISI 304/316	AISI 304/316	AISI 304/316	AISI 329	AISI 304/316

### Applications



Agriculture



Mining



Industries



Fire Fighting and  
Dewatering



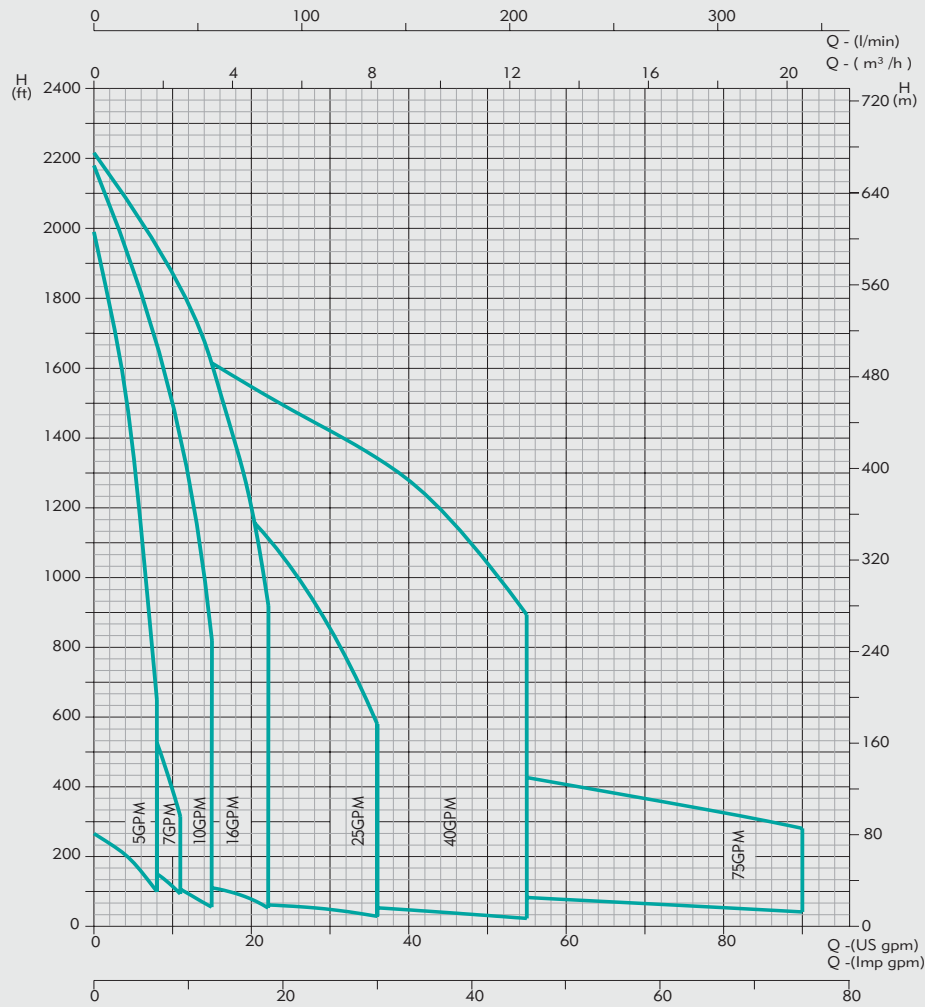
Construction &  
Building Services



Residential



## PERFORMANCE CURVE > 4" > TS / TN - SERIES



Curve tolerance according to ISO 9906:2012, Grade 3B

### Performance Curve Conditions

a.	The Performance curves shows pump performance of the pump at rated speed and voltage. (2900 rpm)	e.	The head and discharge are inclusive of check valve and suction inter-connector losses at the actual speed.
b.	The measurements were made with airless water at 20°C. For pumping liquids with a density higher than that of water, motors with correspondingly higher outputs must be used.	f.	Curve tolerance according to ISO : 9906, Annex-A.
c.	Pipe friction losses have not been included in the performance curves and performance data.	g.	The performance are at rated voltage and are only Indicative. Actual discharge depends on availability of water in well, based on strength of water source, height of water column, submergence of pump, etc.,
d.	The bold curves indicate the recommended performance range.	h.	The given performance are for a specific materials of construction of pumps.

Available types of materials of construction : TS (AISI - 304) and TN (AISI - 316). In case of M.I.C. version - TN the second digit of the pump model "S" will be replaced with "N". The given performance ranges are same for version - TS & TN.

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## STAINLESS STEEL SUBMERSIBLE PUMPS > 6" > TS / TN / 904L - SERIES

Tormac stainless steel submersible pumps are ingeniously designed and developed employing latest engineering softwares, high-tech machinery, tools and cutting edge of pumping technology to deliver the best possible hydraulic efficiency. The complete stainless steel construction not only prevents the pumps from corrosion but also exceptionally increases the life- span. The integrated and most modern quality assurance systems used at every stage of the production and flawless workmanship ensure sustained and consistent operation.

All these submersible pumps are multistage single suction centrifugal type, provided with integral check-valve and NEMA standard coupling. These pumps are available with fabricated impellers and diffusers made of AISI 304/316/904L and the shaft is made of AISI 304/431. The integral check valve prevents back flow and reduces the risk of water hammer which paves the way for trouble free performance. The suction screen is designed with utmost care so as not to reduce the inflow of water and at the same time to prevent damage to the pump and clogging due to the entry of sand and other foreign particles.

### Pumped Liquids

Non-Aggressive, non explosive, Pure, Cold, Fresh water without abrasive particles having following characteristics.

pH	6.5 to 8.5
Turbidity	50 ppm silica scale (max.)
Viscosity	1.75 x 10 <sup>6</sup> m <sup>2</sup> /sec (max.)
Hardness (Drinking Water)	300 (max.)
Specific gravity	1.004 (max.)
Allowable Solids	3000 ppm (max.)
Chlorine ion density	500 ppm (max.)
Permissible amount of sand	50 g/m <sup>3</sup> (max.)
Temperature	38°C (max.) NBR / 90°C VITON



### GENERAL INFORMATION ON ELECTRO MECHANICAL UNIT

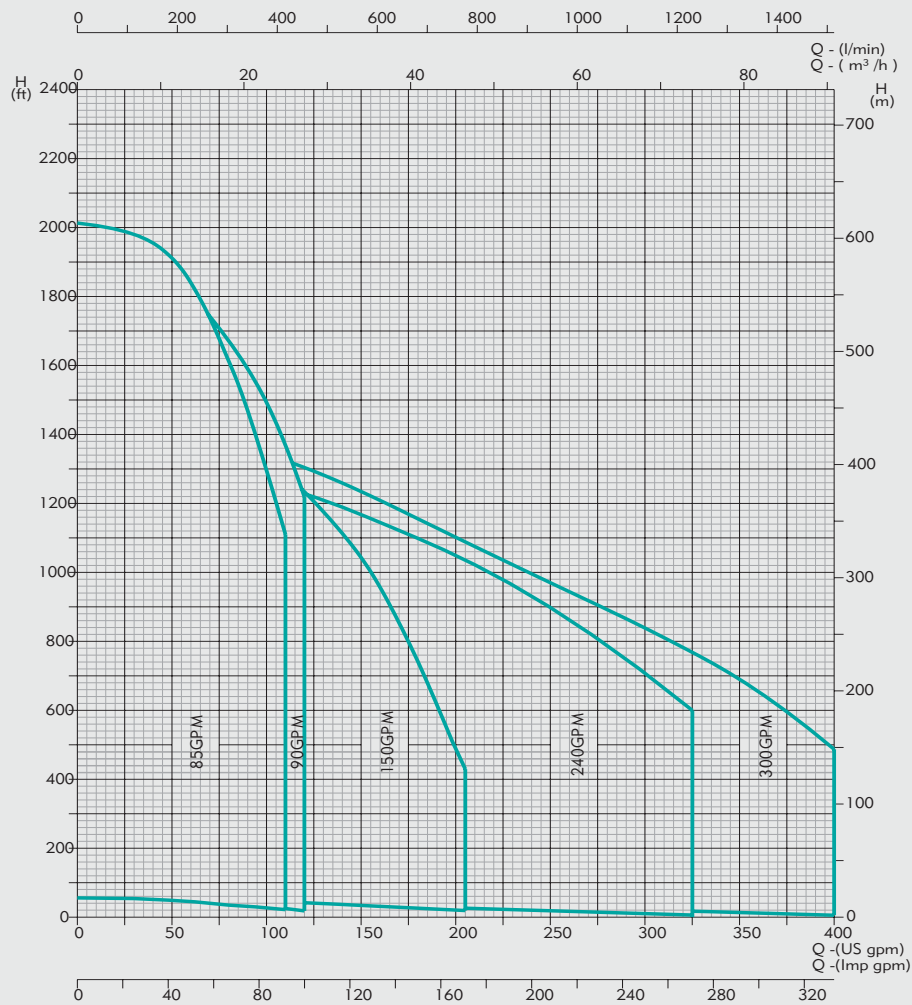
Power Range (HP)	Speed In RPM	Flow Range m <sup>3</sup> /h	Flow Range USGPM	Recommended head (ft)	Recommended head (m)	Delivery size in Inches	
From 3 - 60 HP	3450	4.54 - 90	20 - 400	7 - 1960	2 - 588	2,2½,3&4	
M.O.C	Impeller	Diffuser	Valve Housing	Valve	Cable Guard	Coupling	Suction Inter connector
Type S & N	AISI 304/316 /904L	AISI 304/316 /904L	AISI 304/316 /904L	AISI 304/316 /904L	AISI 304/316 /904L	AISI 329/904L	AISI 304/316 /904L

### Applications



\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## PERFORMANCE CURVE > 6" > TS / TN / 904L - SERIES



Curve tolerance according to ISO 9906:2012, Grade 3B

### Performance Curve Conditions

a.	The Performance curves shows pump performance of the pump at rated speed and voltage. (2900 rpm)	e.	The head and discharge are inclusive of check valve and suction inter-connector losses at the actual speed.
b.	The measurements were made with airless water at 20°C. For pumping liquids with a density higher than that of water, motors with correspondingly higher outputs must be used.	f.	Curve tolerance according to ISO : 9906, Annex-A.
c.	Pipe friction losses have not been included in the performance curves and performance data.	g.	The performance are at rated voltage and are only Indicative. Actual discharge depends on availability of water in well, based on strength of water source, height of water column, submergence of pump, etc.,
d.	The bold curves indicate the recommended performance range.	h.	The given performance are for a specific materials of construction of pumps.

Available types of materials of construction : TS (AISI - 304) and TN (AISI - 316). In case of M.I.C. version - TN the second digit of the pump model "S" will be replaced with "N". The given performance ranges are same for version - TS & TN.

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## STAINLESS STEEL SUBMERSIBLE PUMPS > 8" > TS / TN / 904L - SERIES

Tormac stainless steel submersible pumps are ingeniously designed and developed employing latest engineering softwares, high-tech machinery, tools and cutting edge of pumping technology to deliver the best possible hydraulic efficiency. The complete stainless steel construction not only prevents the pumps from corrosion but also exceptionally increases the life- span. The integrated and most modern quality assurance systems used at every stage of the production and flawless workmanship ensure sustained and consistent operation.

All these submersible pumps are multistage single suction centrifugal type, provided with integral check-valve and NEMA standard coupling. These pumps are available with fabricated impellers and diffusers made of AISI 304/316/904L and the shaft is made of AISI 304/431. The integral check valve prevents back flow and reduces the risk of water hammer which paves the way for trouble free performance. The suction screen is designed with utmost care so as not to reduce the inflow of water and at the same time to prevent damage to the pump and clogging due to the entry of sand and other foreign particles.

### Pumped Liquids

Non-Aggressive, non explosive, Pure, Cold, Fresh water without abrasive particles having following characteristics.

pH	6.5 to 8.5
Turbidity	50 ppm silica scale (max.)
Viscosity	1.75 x 10 <sup>6</sup> m <sup>2</sup> /sec (max.)
Hardness (Drinking Water)	300 (max.)
Specific gravity	1.004 (max.)
Allowable Solids	3000 ppm (max.)
Chlorine ion density	500 ppm (max.)
Permissible amount of sand	50 g/m <sup>3</sup> (max.)
Temperature	38°C (max.) NBR / 90°C VITON



### GENERAL INFORMATION ON ELECTRO MECHANICAL UNIT

Power Range (HP)		Speed In RPM	Flow Range m <sup>3</sup> /h	Flow Range USGPM	Recommended head (ft)	Recommended head (m)	Delivery size in Inches
From 7.5 - 125 HP		3450	34 - 136	150 - 600	76 - 1320	23 - 402	5
M.O.C	Impeller	Diffuser	Valve Housing	Valve	Cable Guard	Coupling	Suction Inter connector
Type S & N	AISI 304/316 /904L	AISI 304/316 /904L	AISI 304/316 /904L	AISI 304/316 /904L	AISI 304/316 /904L	AISI 329/904L	AISI 304/316 /904L

### Applications



Agriculture



Mining



Industries

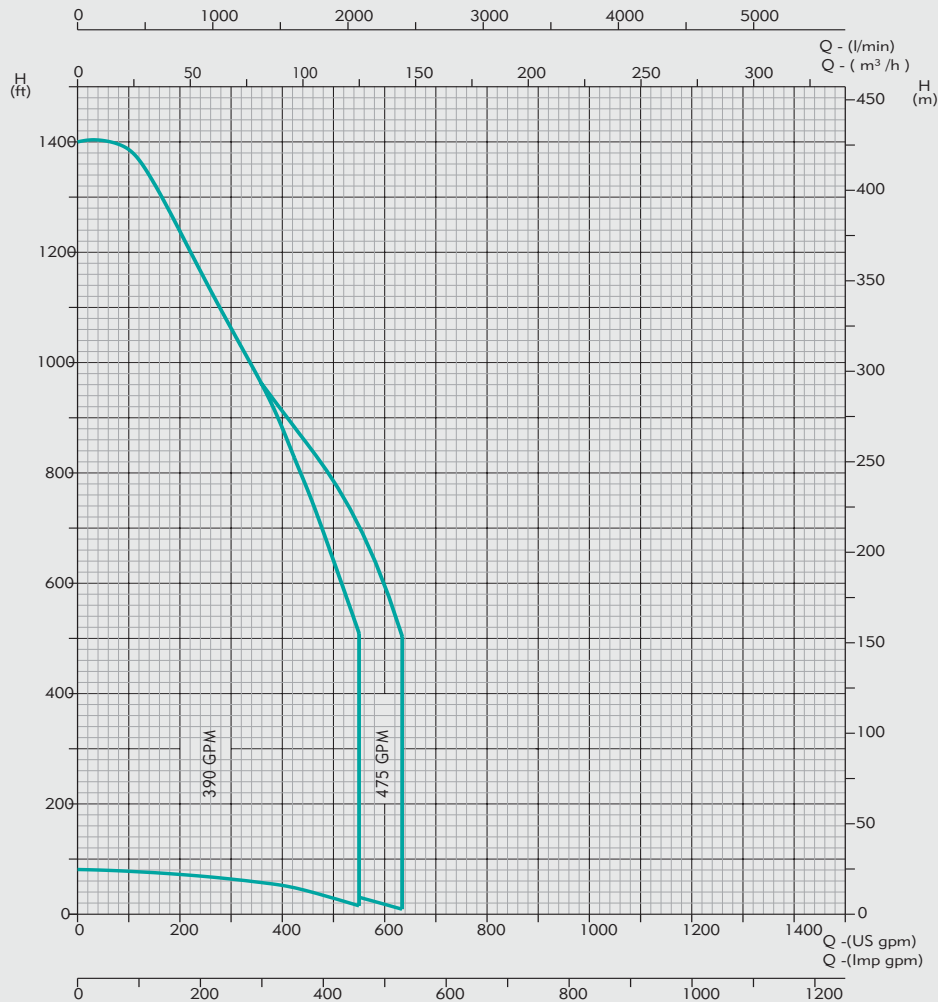


Fire Fighting and Dewatering



Construction & Building Services

## PERFORMANCE CURVE > 8" > TS / TN / 904L - SERIES



Curve tolerance according to ISO 9906:2012, Grade 3B

### Performance Curve Conditions

a.	The Performance curves shows pump performance of the pump at rated speed and voltage. (2900 rpm)	e.	The head and discharge are inclusive of check valve and suction inter-connector losses at the actual speed.
b.	The measurements were made with airless water at 20°C. For pumping liquids with a density higher than that of water, motors with correspondingly higher outputs must be used.	f.	Curve tolerance according to ISO : 9906, Annex-A.
c.	Pipe friction losses have not been included in the performance curves and performance data.	g.	The performance are at rated voltage and are only Indicative. Actual discharge depends on availability of water in well, based on strength of water source, height of water column, submergence of pump, etc.,
d.	The bold curves indicate the recommended performance range.	h.	The given performance are for a specific materials of construction of pumps.

Available types of materials of construction : TS (AISI - 304) and TN (AISI - 316). In case of M.I.C. version - TN the second digit of the pump model "S" will be replaced with "N". The given performance ranges are same for version - TS & TN.

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## STAINLESS STEEL SUBMERSIBLE PUMPS > 10" > TS / TN / 904L - SERIES

Tormac stainless steel submersible pumps are ingeniously designed and developed employing latest engineering softwares, high-tech machinery, tools and cutting edge of pumping technology to deliver the best possible hydraulic efficiency. The complete stainless steel construction not only prevents the pumps from corrosion but also exceptionally increases the life- span. The integrated and most modern quality assurance systems used at every stage of the production and flawless workmanship ensure sustained and consistent operation.

All these submersible pumps are multistage single suction centrifugal type, provided with integral check-valve and NEMA standard coupling. These pumps are available with fabricated impellers and diffusers made of AISI 304/316/904L and the shaft is made of AISI 304/431. The integral check valve prevents back flow and reduces the risk of water hammer which paves the way for trouble free performance. The suction screen is designed with utmost care so as not to reduce the inflow of water and at the same time to prevent damage to the pump and clogging due to the entry of sand and other foreign particles.

### Pumped Liquids

Non-Aggressive, non explosive, Pure, Cold, Fresh water without abrasive particles having following characteristics.

pH	6.5 to 8.5
Turbidity	50 ppm silica scale (max.)
Viscosity	1.75 x 10 <sup>6</sup> m <sup>2</sup> /sec (max.)
Hardness (Drinking Water)	300 (max.)
Specific gravity	1.004 (max.)
Allowable Solids	3000 ppm (max.)
Chlorine ion density	500 ppm (max.)
Permissible amount of sand	50 g/m <sup>3</sup> (max.)
Temperature	38°C (max.) NBR / 90°C VITON



### GENERAL INFORMATION ON ELECTRO MECHANICAL UNIT

Power Range (HP)		Speed In RPM	Flow Range m <sup>3</sup> /h	Flow Range USGPM	Recommended head (ft)	Recommended head (m)	Delivery size in Inches
From 15 - 300 HP		3450	45.4 - 300	200 - 1400	96 - 1425	30 - 434	6
M.O.C	Impeller	Diffuser	Valve Housing	Valve	Cable Guard	Coupling	Section Interconnector
Type S & N	AISI 304/316 /904L	AISI 304/316 /904L	AISI 304/316 /904L	AISI 304/316 /904L	AISI 304/316 /904L	AISI 329/904L	AISI 304/316 /904L

### Applications



Agriculture



Mining



Industries



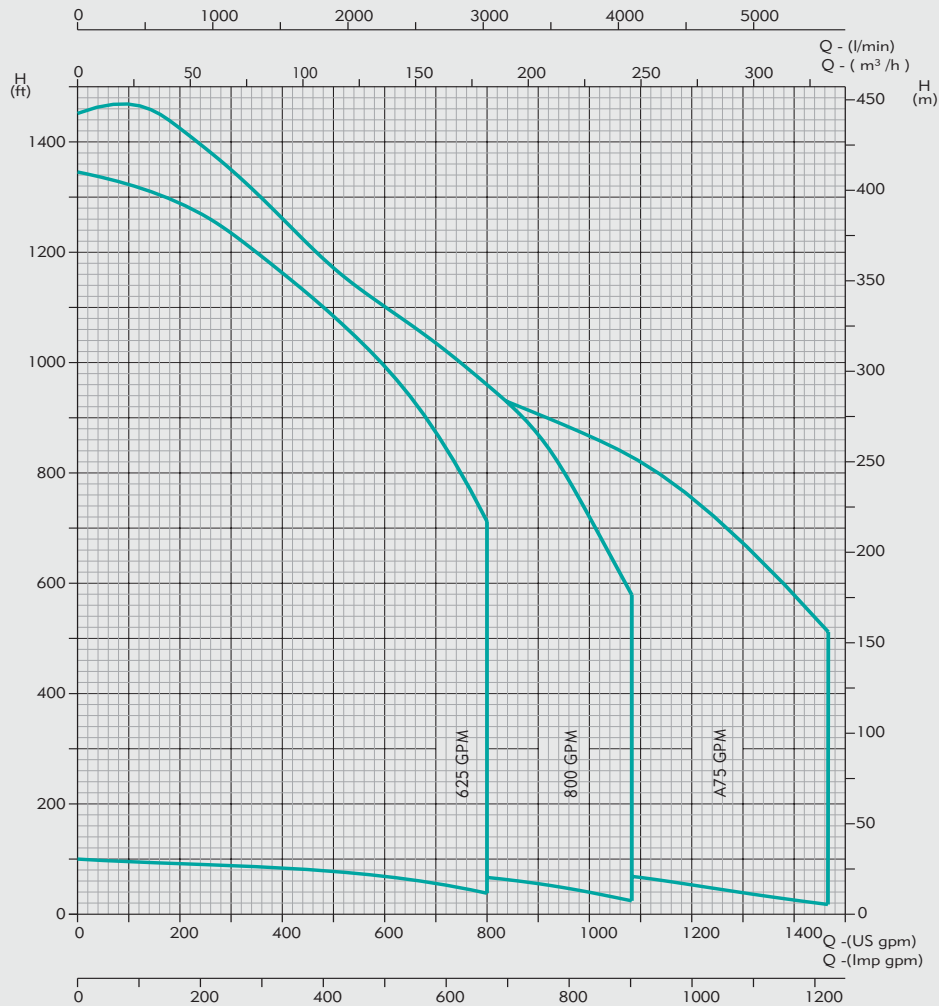
Fire Fighting and Dewatering



Construction & Building Services

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

# PERFORMANCE CURVE > 10" > TS / TN / 904L - SERIES



Curve tolerance according to ISO 9906:2012, Grade 3B

## Performance Curve Conditions

a.	The Performance curves shows pump performance of the pump at rated speed and voltage. (2900 rpm)	e.	The head and discharge are inclusive of check valve and suction inter-connector losses at the actual speed.
b.	The measurements were made with airless water at 20°C. For pumping liquids with a density higher than that of water, motors with correspondingly higher outputs must be used.	f.	Curve tolerance according to ISO : 9906, Annex-A.
c.	Pipe friction losses have not been included in the performance curves and performance data.	g.	The performance are at rated voltage and are only Indicative. Actual discharge depends on availability of water in well, based on strength of water source, height of water column, submergence of pump, etc.,
d.	The bold curves indicate the recommended performance range.	h.	The given performance are for a specific materials of construction of pumps.

Available types of materials of construction : TS (AISI - 304) and TN (AISI - 316). In case of M.I.C. version - TN the second digit of the pump model "S" will be replaced with "N". The given performance ranges are same for version - TS & TN.

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## SOLAR SUBMERSIBLE PUMPS > TS SERIES

Our world is full of energy. Tormac is passionate about meeting the most challenging technical demands and environmental conditions of the world's energy users with efficient solutions. With pioneering technology, tormac offers innovative systems that improve performance and return on investment while reducing operational and maintenance cost.

Tormac solar submersible pumps are ingeniously designed and developed employing latest engineering software's, high-tech machineries, tools and cutting edge of pump technology to deliver the best possible hydraulic efficiency. The integrated and most modern quality assurance systems used at every stage of the production and flawless workmanship ensure sustained and consistent operation.



### General Information on Electro Mechanical Unit

Series	TS75-SH	TS75-SP	TS100-SH	TS100-SP	TS100-SS
Power Range (watts)	80, 120, 230 & 500	80, 120, 230 & 500	500-1000W	500-1000W	80-500W
Max. Flow Range (m <sup>3</sup> /h)	1.4	3.5	2.5	16.5	18
Max. Head in (m)	100	85	145	200	128
Delivery size in mm	19.05 mm	19.05 mm	25 mm	32, 38 & 50mm	32, 38 & 50mm
<b>M.O.C</b>	SS 304	SS 304	SS 304	SS 304	SS 304
Impeller	Screw Type (AISI 304)	Noryl	Screw Type (AISI 304)	Noryl	AISI 304
Motor Type	Oil Filled DC Motor	Oil Filled DC Motor	Oil Filled DC Motor	Oil Filled DC Motor	Oil Filled DC Motor
Bearing	Ball Bearing	Ball Bearing	Ball Bearing	Ball Bearing	Ball Bearing

### Applications



Agriculture



Live Stock



Residential



Recreational



# SUBMERSIBLE MOTOR ECO SERIES > 4" > D - SERIES > WATER FILLED

Tormac ECO series submersible motors are ingeniously designed and developed employing latest engineering softwares, high-tech machinery & tools with the complement of cutting edge technology for hardwearing and maintenance free operations and to ensure relentless performance.

The electrical conditions such as voltage, frequency and the operating conditions are taken into account in designing the winding and cooling system. Tried and trusted indigenously improved design, combined with the most optimized efficiency in electromagnetic design exceptionally ensures trouble free performance. The integrated and most modern quality assurance systems used at every stage of production and flawless workmanship lead to sustained and consistent operation.

Tormac ECO series motors are squirrel cage, water filled and water cooled rewindable type. The winding of these two pole motors are made of a special water proof wire of pure electrolytic copper insulated with synthetic film or thermoplastic material. The stator shell, housings shell & motor base are made of fabricated AISI 304/316 which prevents the motor from corrosion.

These motors are pre-filled with environmentally safe deionised water which acts as a lubricant & coolant. The pre-filled water level to be ensured at the time of installation. A uniquely designed thrust bearing with high thrust capacity and good quality shaft seals are used to enhance the strength & durability. All single phase motors are supplied with suitable control boxes. The main advantage of rewindable motor construction is making the repair and rewinding easier and hassle free at field levels. All Tormac motors are produced in accordance with ISO 9001 standards and mounting dimensions with NEMA standard.

Technical Data	
Specifications	Nominal Diameter (4")
Rated Output & Voltage	0.5 to 10HP - 220, 380 & 460V, 3Ph, (Δ) 60Hz, AC Supply
Rated Speed	3450 rpm
Voltage Tolerance	-15% + 6%
Protection	IP 58
Rotation Sequence	CW, CCW - 3Ph
Outer Diameter	97mm
Duty	S1 (Continuous)
Linear flow	0.25ft/sec
Liquid Temperature	91.4°F max.
Switching Frequency	20 Times / hour
Thrust load	0.5 to 2HP - 800lbs 3 to 10HP - 1500lbs
Mounting Dimensions	NEMA Standard
Starting Method	3 Ph - DOL
Motor Lead out type	3/4 core Rubber Insulated Flat Cable leads, internally connected with the windings.
Class of Insulation	Y

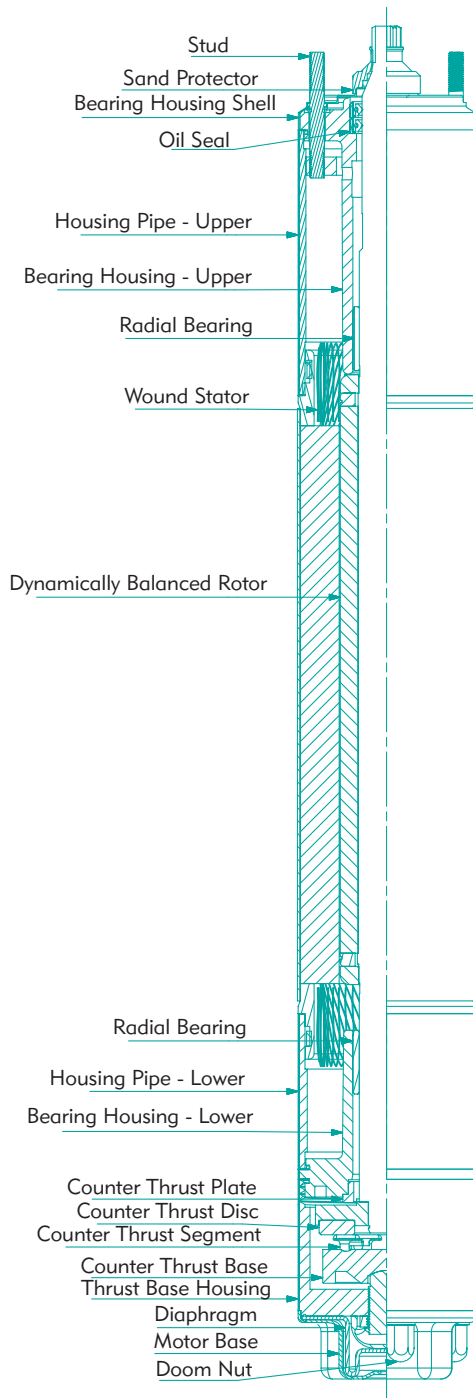


## Applications

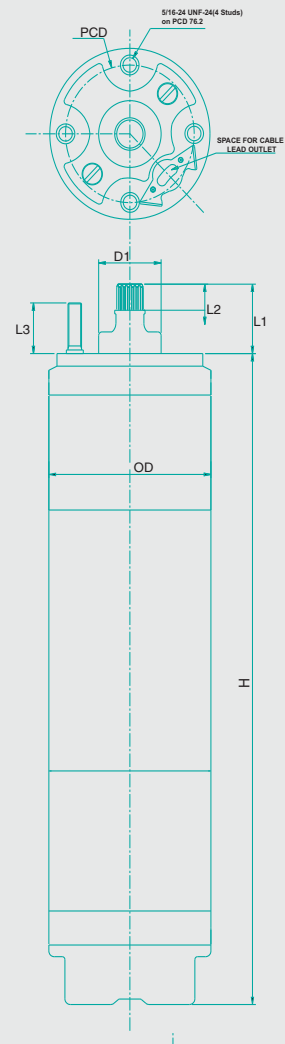
-  Agriculture
-  Mining
-  Industries
-  Fire Fighting and Dewatering
-  Construction & Building Services
-  Residential

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

### CROSS SECTIONAL DRAWING



### MOUNTING DIMENSIONS



Spline Data-14 teeth, 24/48 Pitch, 30 Degree pressure angle,  
 Hator fillet root, Side fit, tolerance Class-5,  
 In accordance with ANSI B92-1

	Dimensions in inches						
	L1	L2	L3	L4	OD	OD1	OD2
<b>4"</b>	1.50	0.5	1.0	-	3.8	1.45	-

All the Mounting dimensions are in accordance with NEMA standards.

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

# SUBMERSIBLE MOTOR ECO SERIES > 6" > D - SERIES > WATER FILLED

Tormac ECO series submersible motors are ingeniously designed and developed employing latest engineering softwares, high-tech machinery & tools with the complement of cutting edge technology for hardwearing and maintenance free operations and to ensure relentless performance.

The electrical conditions such as voltage, frequency and the operating conditions are taken into account in designing the winding and cooling system. Tried and trusted indigenously improved design, combined with the most optimized efficiency in electromagnetic design exceptionally ensures trouble free performance. The integrated and most modern quality assurance systems used at every stage of production and flawless workmanship lead to sustained and consistent operation.

Tormac ECO series motors are squirrel cage, water filled and water cooled rewindable type. The winding of these two pole motors are made of a special water proof wire of pure electrolytic copper insulated with synthetic film or thermoplastic material. The stator shell, housings shell & motor base are made of fabricated AISI 304/316/904L which prevents the motor from corrosion.

These motors are pre-filled with environmentally safe deionised water which acts as a lubricant & coolant. The prefilled water level to be ensured at the time of installation. A uniquely designed thrust bearing with high thrust capacity and good quality shaft seals are used to enhance the strength & durability. All single phase motors are supplied with suitable control boxes. The main advantage of rewindable motor construction is making the repair and rewinding easier and hassle free at field levels. All Tormac motors are produced in accordance with ISO 9001 standards and mounting dimensions with NEMA standard.

Technical Data	
Specifications	Nominal Diameter (6")
Rated Output & Voltage	5 to 60HP - 220, 380 & 460V, 3Ph, 60Hz AC Supply
Rated Speed	3450 rpm
Voltage Tolerance	-15% + 6%
Protection	IP 58 / IP 68
Rotation Sequence	CW, CCW - 3Ph
Outer Diameter	143mm
Duty	S1 (Continuous)
Linear flow	0.5ft/sec
Liquid Temperature	Standard - 86°F High temp. - 122°F Beyond 122°F motor can be supplied by derating
Switching Frequency	20 Times / hour
Thrust load	5 to 30HP - 3500lbs 35 to 60HP - 6000lbs
Mounting Dimensions	NEMA Standard
Starting Method	5 to 60HP - DOL 7.5 to 60HP - SD
Motor Lead out type	3/4 core Rubber Insulated Flat Cable leads, internally Connected with the windings
Class of Insulation	Y
Thermal Protection	Optional - PT Sensor

TA/TN/904L

TB

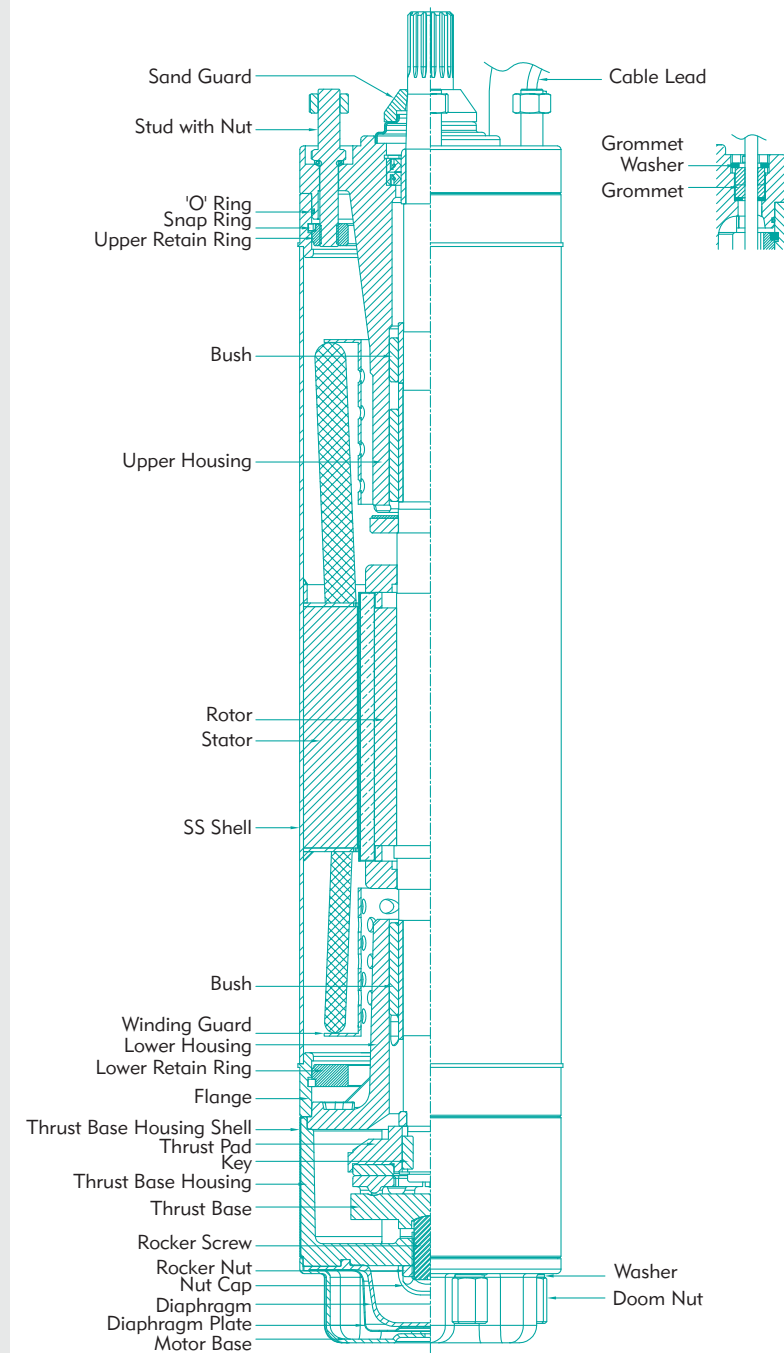


## Applications

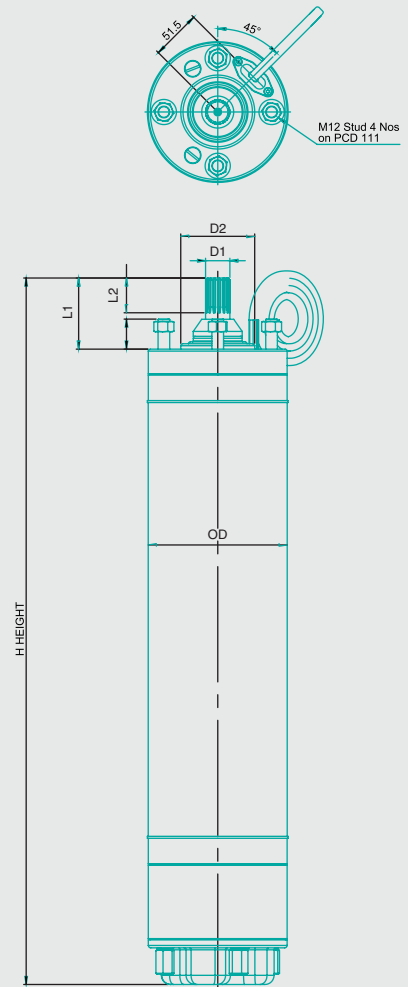
-  Agriculture
-  Mining
-  Industries
-  Fire Fighting and Dewatering
-  Construction & Building Services
-  Residential

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

### CROSS SECTIONAL DRAWING



### MOUNTING DIMENSIONS



Spline Data-15 teeth, 16/32 Pitch, 30 Degree pressure angle,  
 Hator fillet root, Side fit, tolerance Class-5,  
 In accordance with ANSI B92-1 1970

Dimensions in inches					
	L1	L2	OD	D1	D2
<b>6"</b>	2.87	1.45	5.6	0.99	30

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## SUBMERSIBLE MOTOR ECO SERIES > 8" > D - SERIES > WATER FILLED

Tormac ECO series submersible motors are ingeniously designed and developed employing latest engineering softwares, high-tech machinery & tools with the complement of cutting edge technology for hardwearing and maintenance free operations and to ensure relentless performance.

The electrical conditions such as voltage, frequency and the operating conditions are taken into account in designing the winding and cooling system. Tried and trusted indigenously improved design, combined with the most optimized efficiency in electromagnetic design exceptionally ensures trouble free performance. The integrated and most modern quality assurance systems used at every stage of production and flawless workmanship lead to sustained and consistent operation.

Tormac ECO series motors are squirrel cage, water filled and water cooled rewindable type. The winding of these two pole motors are made of a special water proof wire of pure electrolytic copper insulated with synthetic film or thermoplastic material. The stator shell, housings shell & motor base are made of fabricated AISI 304/316/904L which prevents the motor from corrosion.

These motors are pre-filled with environmentally safe deionised water which acts as a lubricant & coolant. The prefilled water level to be ensured at the time of installation. A uniquely designed thrust bearing with high thrust capacity and good quality shaft seals are used to enhance the strength & durability. All single phase motors are supplied with suitable control boxes. The main advantage of rewindable motor construction is making the repair and rewinding easier and hassle free at field levels. All Tormac motors are produced in accordance with ISO 9001 standards and mounting dimensions with NEMA standard.

Technical Data	
Specifications	Nominal Diameter (8")
Rated Output & Voltage	50 to 150HP - 380 & 460V, 3Ph, (WYE-DELTA), 60Hz, AC Supply
Rated Speed	3450 rpm
Voltage Tolerance	-15% + 6%
Protection	IP 68
Rotation Sequence	CW, CCW - 3Ph
Outer Diameter	196 mm
Duty	S1 (Continuous)
Linear flow	0.5ft/sec
Liquid Temperature	Standard - 86°F High temp. - 122°F Beyond 122°F motor can be supplied by derating
Switching Frequency	10 Times / hour
Thrust load	50 to 60HP - 10000lbs 75 to 150HP - 12500lbs
Mounting Dimensions	NEMA Standard
Starting Method	50 to 150HP - DOL & SD
Motor Lead out type	3/4 core Rubber Insulated Flat Cable leads, internally Connected with the windings
Class of Insulation	Y
Thermal Protection	Optional - PT Sensor

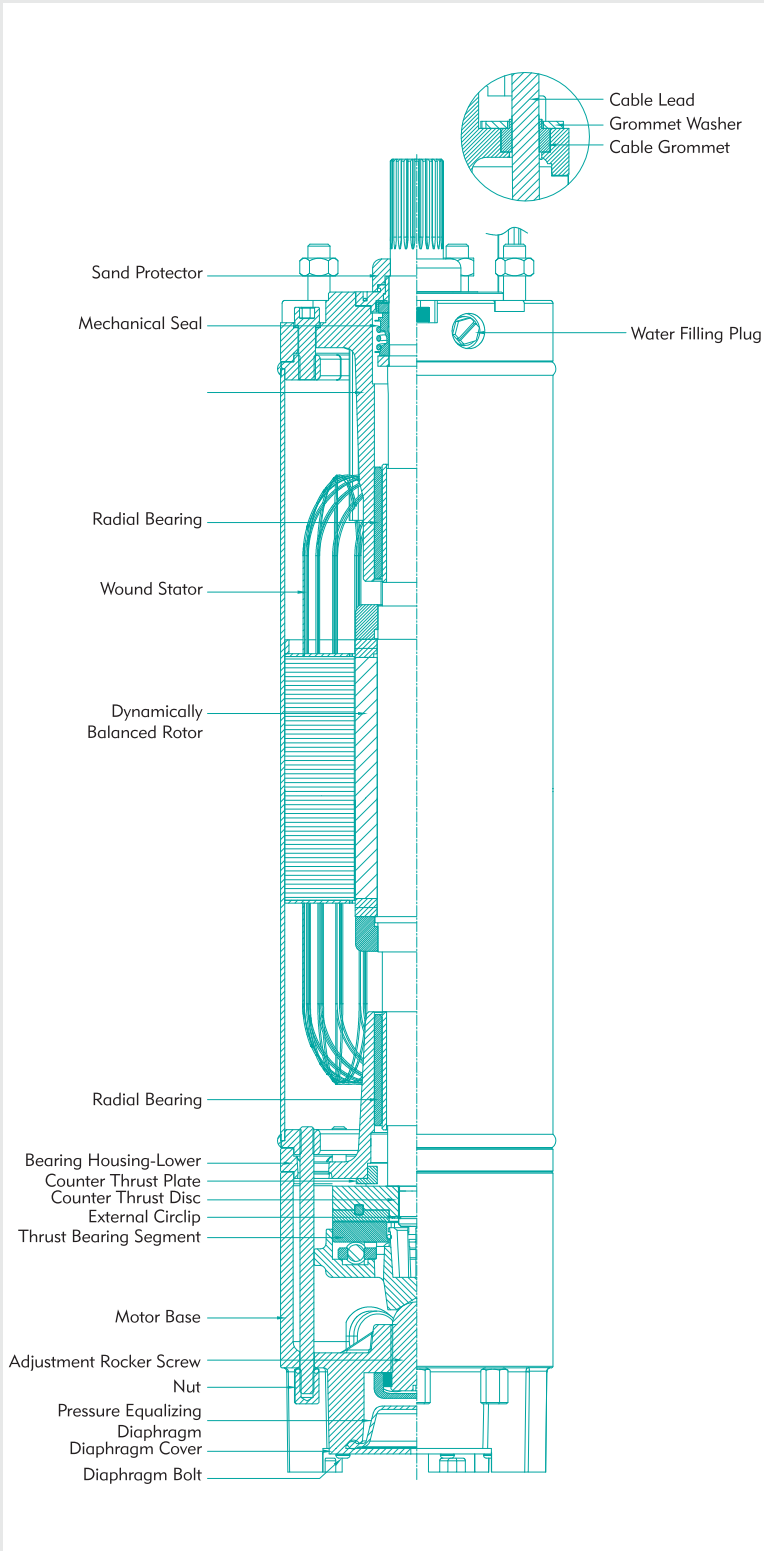


### Applications

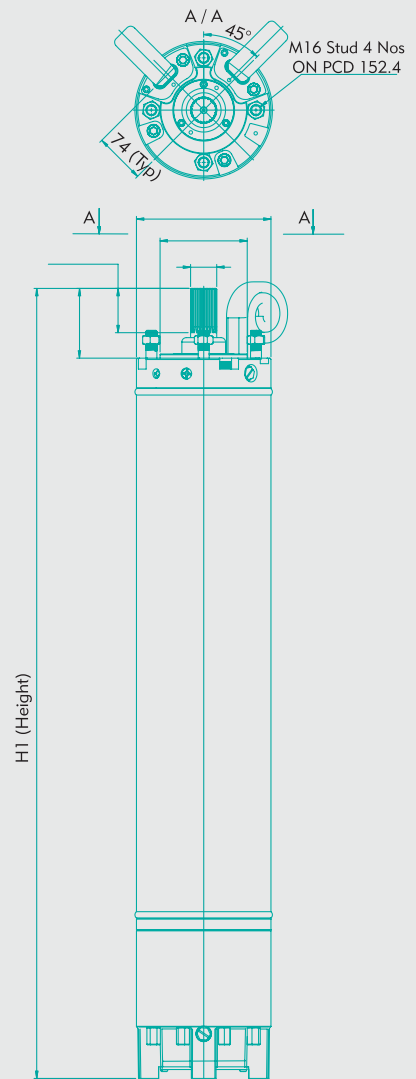
-  Agriculture
-  Mining
-  Industries
-  Fire Fighting and Dewatering
-  Construction & Building Services
-  Residential

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## CROSS SECTIONAL DRAWING



## MOUNTING DIMENSIONS



Spline Data-23 teeth, 16/32 Pitch, 30 Degree pressure angle,  
 Hator fillet root, Side fit, tolerance Class-5,  
 In accordance with ANSI B92-1

	Dimensions in inches					
	L1	L2	L3	OD	DI	D2
<b>8"</b>	4.0	2.36	0.25	7.3/7.6	1.50	5.0

# SUBMERSIBLE MOTOR ECO SERIES > 10" > D - SERIES > WATER FILLED

Tormac ECO series submersible motors are ingeniously designed and developed employing latest engineering softwares, high-tech machinery & tools with the complement of cutting edge technology for hardwearing and maintenance free operations and to ensure relentless performance.

The electrical conditions such as voltage, frequency and the operating conditions are taken into account in designing the winding and cooling system. Tried and trusted indigenously improved design, combined with the most optimized efficiency in electromagnetic design exceptionally ensures trouble free performance. The integrated and most modern quality assurance systems used at every stage of production and flawless workmanship lead to sustained and consistent operation.

Tormac ECO series motors are squirrel cage, water filled and water cooled rewindable type. The winding of these two pole motors are made of a special water proof wire of pure electrolytic copper insulated with synthetic film or thermoplastic material. The stator shell, housings shell & motor base are made of fabricated AISI 304/316/904L which prevents the motor from corrosion.

These motors are pre-filled with environmentally safe deionised water which acts as a lubricant & coolant. The prefilled water level to be ensured at the time of installation. A uniquely designed thrust bearing with high thrust capacity and good quality shaft seals are used to enhance the strength & durability. All single phase motors are supplied with suitable control boxes. The main advantage of rewindable motor construction is making the repair and rewinding easier and hassle free at field levels. All Tormac motors are produced in accordance with ISO 9001 standards and mounting dimensions with NEMA standard.

Technical Data	
Specifications	Nominal Diameter (10")
Rated Output & Voltage	150 to 250HP - 380 & 460V, 3Ph, (WYE-DELTA), 60Hz, AC Supply
Rated Speed	3450 rpm
Voltage Tolerance	-15% + 6%
Protection	IP 68
Rotation Sequence	CW, CCW - 3Ph
Outer Diameter	232 mm
Duty	S1 (Continuous)
Linear flow	0.5ft/sec
Liquid Temperature	Standard - 86°F High temp. - 122°F Beyond 122°F motor can be supplied by derating
Switching Frequency	10 Times / hour
Thrust load	16860 lbs
Mounting Dimensions	NEMA Standard / International
Starting Method	3Ph, (WYE-DELTA)
Motor Lead out type	3/4 core Rubber Insulated Flat Cable leads, internally Connected with the windings
Class of Insulation	Y
Thermal Protection	Optional - PT Sensor

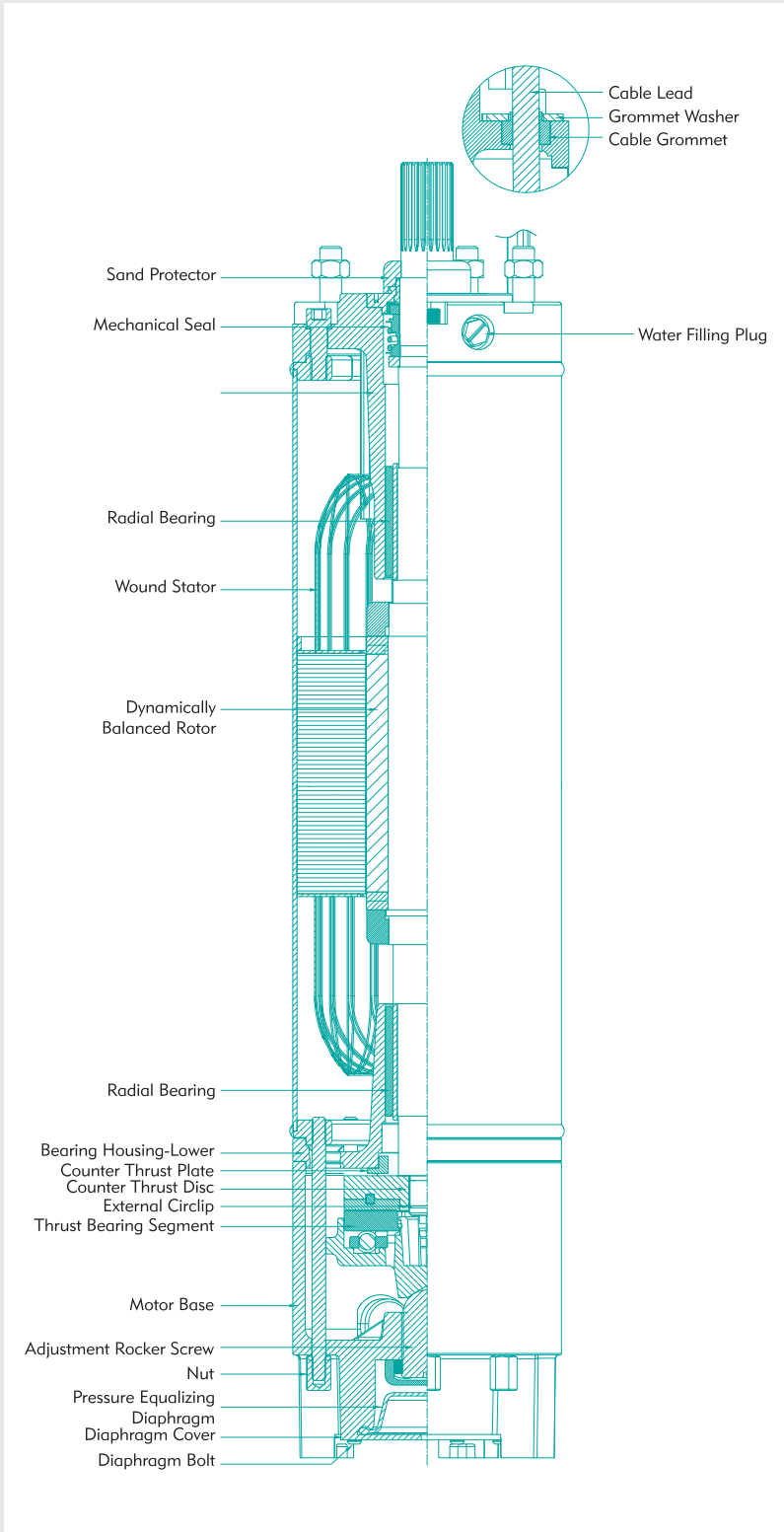


## Applications

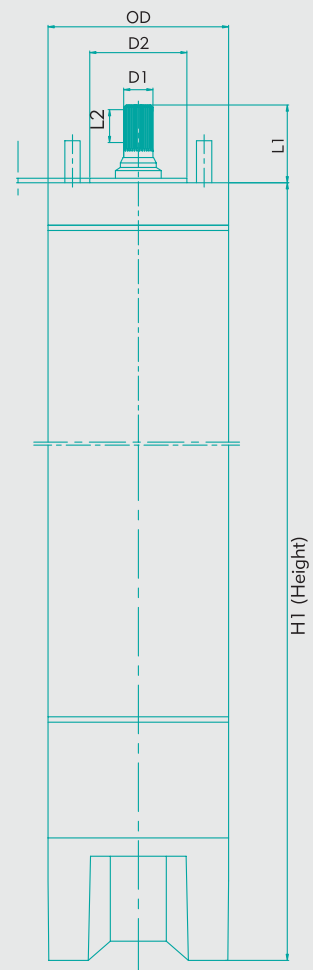
-  Agriculture
-  Mining
-  Industries
-  Fire Fighting and Dewatering
-  Construction & Building Services
-  Residential

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

### CROSS SECTIONAL DRAWING



### MOUNTING DIMENSIONS



Dimensions in inches						
	L1	L2	L3	OD	D1	D2
<b>10"</b>	4.0	1.68 (Min)	0.25	9.3	1.50	5.0

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.



## SUBMERSIBLE MOTOR ELEGANT SERIES > 4" > N - SERIES > OIL FILLED

Tormac Elegant series submersible motors are ingeniously designed and developed employing latest engineering softwares, high-tech machinery & tools with the complement of cutting edge technology for hardwearing and maintenance free operations and to ensure relentless performance.

The electrical conditions such as voltage, frequency and the operating conditions are taken into account in designing the winding and cooling system. Tried and trusted indigenously improved design, combined with the most optimized efficiency in electromagnetic design exceptionally ensures trouble free performance. The integrated and most modern quality assurance systems used at every stage of production and flawless workmanship lead to sustained and consistent operation.

Tormac Elegant series motors are squirrel cage, Non toxic liquid filled and liquid cooled non rewindable type. The winding of these two pole motors are made of high quality enameled copper wire. The stator shell, housings shell & motor base are made of fabricated S.S 304/316 which prevents the motor from corrosion.

These motors are pre-filled with environmentally safe edible grade oil which acts as a lubricant. A uniquely designed angular contact ball bearing to with stand high thrust capacity and good quality shaft seals are used to enhance the strength & durability. All single phase motors are supplied with suitable control boxes. All Tormac motors are produced in accordance with ISO 9001 standards and mounting dimensions with NEMA standard.

Technical Data	
Specifications	Nominal Diameter (4")
Rated Output & Voltage	0.5 to 3HP - 1Ph, 110 & 220V, 60Hz, AC Supply 0.5 to 10HP - 3 Ph, 220, 380 & 460 V, 60Hz, AC Supply
Rated Speed	3450 rpm
Voltage Tolerance	+ 6%
Protection	IP 68
Rotation Sequence	1Ph - CCW, 3Ph - Electrically reversible
Outer Diameter	96 mm
Duty	S1 (Continuous)
Linear flow	0.5 ft/sec
Liquid Temperature	91.4°F max.
Switching Frequency	30 Starts / hour
Thrust load	0.5 to 1HP - 337lbs 1.5 to 5HP - 562lbs 7.5 & 10HP - 1011lbs
Mounting Dimensions	NEMA Standard
Starting Method	1 Ph - CSR, 3 Ph - DOL
Motor Lead out type	3 Wire Permanent type TPE / EPDM Rubber Flat Cable
Class of Insulation	F

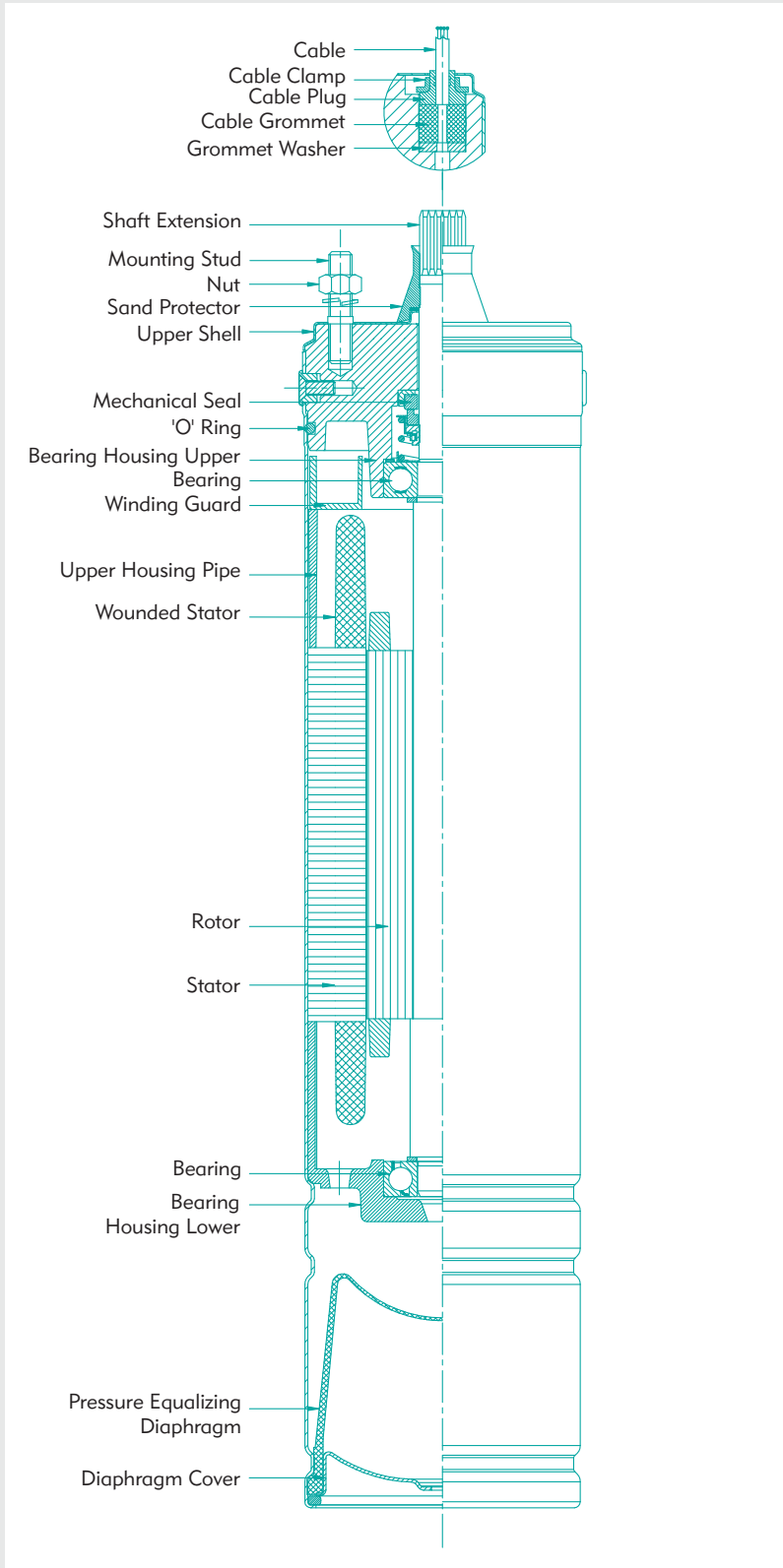


### Applications

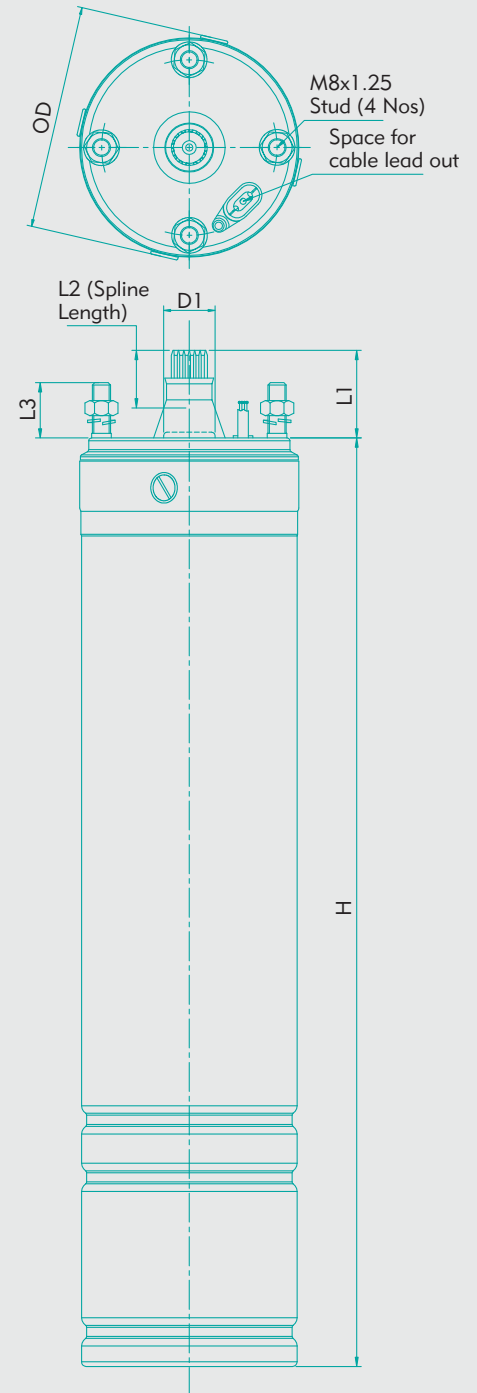
-  Agriculture
-  Industries
-  Construction & Building Services
-  Residential

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## CROSS SECTIONAL DRAWING



## MOUNTING DIMENSIONS



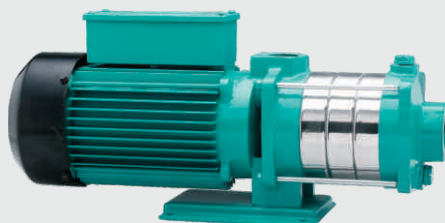
Dimensions are in Inches

	L1	L2	L3	D1	OD	PCD
4"	1.49	0.5	0.96	0.87	3.83	3

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## HORIZONTAL MULTISTAGE PUMPS > TH - SERIES

Tormac TH Horizontal Multistage Centrifugal pumps are specially designed to facilitate pressure boosting and are best suited for a wide range of applications. The vital components viz. impellers, diffusers, and shaft used in these pumps are made of corrosion resistance high quality Stainless Steel which ensure a smooth and trouble free performance helps to pump safe and hygienic drinking water system. The prime mover of this product is robust in construction and built with thermal overload protection (only in single phase motors). High quality mechanical seals are used to ensure less friction / power loss.



General Information on Electro Mechanical Unit	
Series	TH
Power range ( kW)	0.53 to 4.70 HP
Speed in RPM	3450
Power versions	1Ph-220/230V, 60Hz, AC Supply (Permanent Split Capacitor (PSC) 3Ph-220/380/460V, 60Hz AC Supply
Flow Range USGPM	13, 26, 40 & 60
Type of duty	S1 Continuous
Delivery size in inches	1"x1", 1 1/2"x1 1/2", 1 1/2"x1 1/4"
Head Range	53m / 174ft
Rotation	Counter Clock wise viewed from Driving end
Degree of protection	IP 54 / IP 55
Class of Insulation	' B' / ' F '
Suction Lift	7m / 23 ft
Maximum Liquid temperature	90°C / 194°F
Maximum ambient temperature	40°C / 104°F

### Applications



Apartments



Hotels



Industries



R.O.S ( Reverse Osmosis Process systems), HVAC



Pressure boosting systems



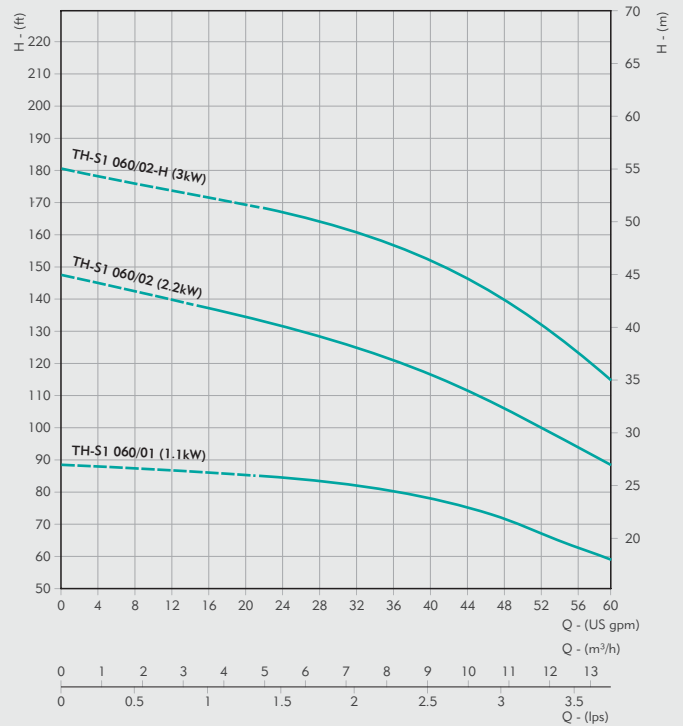
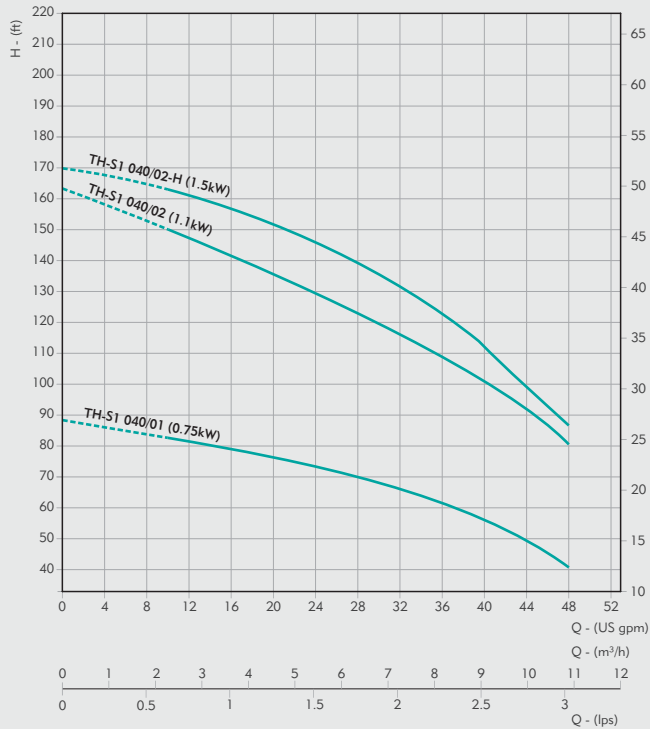
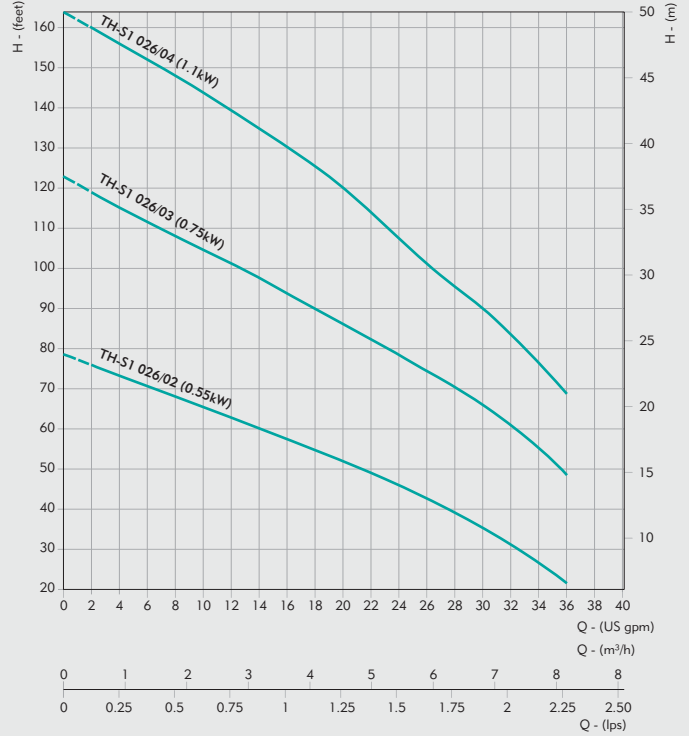
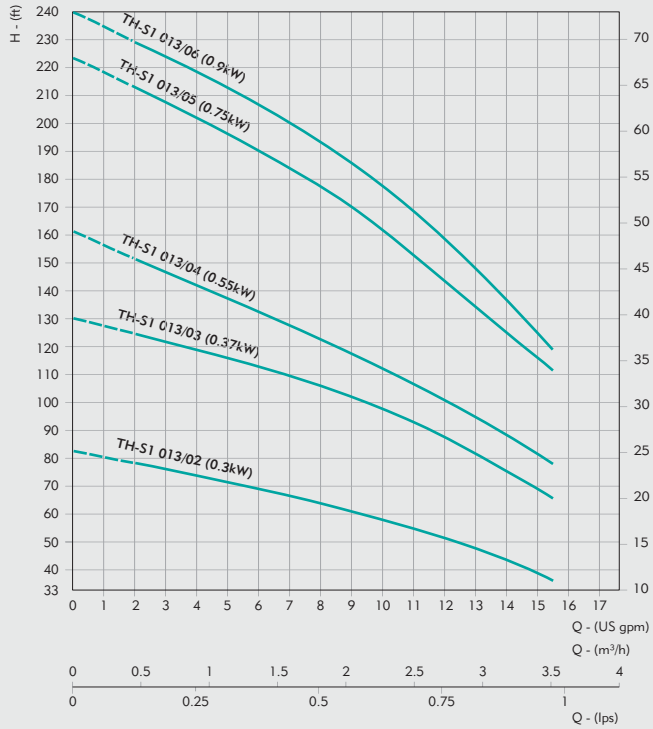
Laboratories



Fire Fighting Equipments

\* The company reserves the right to modify the technical specifications and illustrations without prior notice.

## GROUP PERFORMANCE CURVES > TH - SERIES



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## VERTICAL MULTISTAGE PUMPS > TV - SERIES



Tormac TV series Vertical Multistage Pumps are highly reliable and technologically advanced multipurpose pump capable of satisfying the need of a wide variety of users. The in-line design enables the pump to be installed in vertical position and does not interrupt the horizontal pipe line system. All the wet parts like impellers, diffusers, shaft of these pumps are constructed by corrosion resistance AISI stainless steel and designed to deliver the best possible hydraulic efficiency. The integrated and most modern quality assurance systems used at every stage of the production and flawless workmanship ensure sustained and consist operation. These pumps are equipped with replacement mechanical seal.

### General Information on Electro Mechanical Unit

Series	TV
Power range ( kW)	0.5 - 60 HP
Speed in RPM	3450
Power versions	0.5 - 3HP, 1Ph - 220/230V, 60Hz, AC Supply (Permanent Split Capacitor (PSC))  0.5 - 60HP, 3Ph - 460V, 60Hz AC Supply
Flow Range USGPM	Upto 450
Type of duty	S1 Continuous
Delivery size in inches	1"x1", 1 ¼"x1 ¼", 1 ½"x1 ½", 2"x2" 2½"x2½", 3"x3" & 4"x4"
Head Range	320m / 1050 ft
Rotation	Clock wise viewed from Driving end
Degree of protection	IP 55 (Optional 44 & 54)
Class of Insulation	' B' / ' F'
Suction Lift	7m / 23 ft
Maximum Liquid temperature	-15 to +120°C (5°F to 248°F)
Maximum ambient temperature	40°C / 104°F

### Applications



Apartments



Hotels



Industries



R.O.S ( Reverse Osmosis Process systems), HVAC



Pressure boosting systems

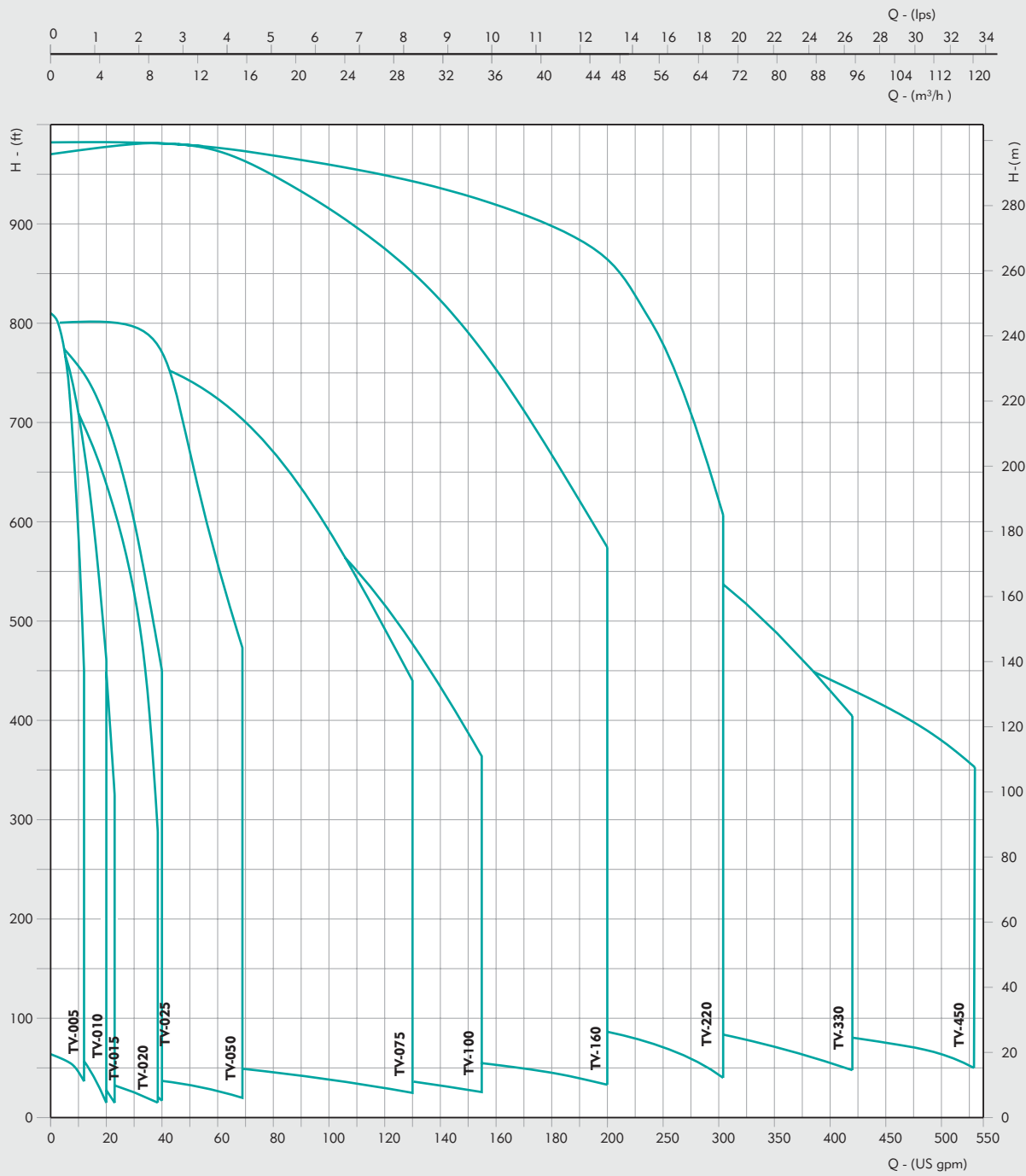


Laboratories



Fire Fighting Equipments

# GROUP PERFORMANCE CURVES > TV - SERIES



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## uPVC RISER PIPES > Class **SPL**, Class **A**, Class **A+**, Class **B**, Class **B+**, Class **C** & Class **C+**

uPVC riser pipes are yet-another quality product from Tormac. To overcome the disadvantages of traditional galvanized iron pipes we at Tormac introduce new version of riser pipes in PVC specially designed for borehole submersible pumps. Besides making the installations hassle free the smooth surface of these pipes help greatly to reduce the friction loss. The locking system used while fixing couples with pipes and the square threads at both the ends ensure better load withstand capacity and rigidity.

Using suitable adopters, these pipes can be fixed with pumps having both BSP & NPT standard outlets. These pipes are available in different classes which can be selected based on the installation depth and recommend head and load withstanding capacities. As these pipes are anti-corrosive in nature and formulated with editable grade materials, highly recommend for installations, where the interest of hygiene is more.



### General Information on Physical & Mechanical Properties

Property	Standard	Unit
Specific gravity	-	1.4 gms/cm <sup>3</sup>
Tensile Strength	As per ASTM D 1785	627 kg/cm <sup>2</sup>
Flexural strength	As per ASTM D 1785	647 kg/cm <sup>2</sup>
Izod Impact Strength	As per ASTM D 1785	15 kg cm/cm <sup>2</sup>
Charpy Impact Strength	As per ASTM D 1785	17 kg cm/cm <sup>2</sup>
Impact Strength	-	No fracture
Vicat Softening Temperature	As per ASTM D 1525	87.3 °C
Installation depth in Meter	Class SPL - 75-125, Class A - 90-150, Class A+ - 100-210, Class B - 160 - 300, Class B+ - 160 - 210, Class C - 260 - 350, Class C+ - up to 400	
Nominal Diameter in mm	25, 32, 40, 50, 65, 80, 100, 125 & 150	

### Applications



Agriculture



Narrow Bore wells, Rain water Harvesting,  
Sanitation, Industrial effluent disposal.

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## uPVC WELL CASING & SCREEN PIPES

Tormac is privileged to introduce uPVC Well Casing and Screen pipes which are manufactured as per IS 12818:2010 standard available in 40mm to 300mm sizes in different types. These pipes are an ideal products for protection of domestic, irrigation, industrial and mining borewells, keeping out the gravel pack and foreign particles providing clean and clear water from the borewells.



**SCREEN PIPE**

**CASING PIPES**

### General Information on Electro Mechanical Unit

Series	CASING PIPES (NCP, MCP & DCP)
Models	Narrow well, Medium well, Deep well
Available Size in mm	DN40 to DN300
Installation well depth in metre	NCP - upto 80m MCP - Well Depth between 80 to 250m DCP - Well Depth between 250 to 400m
Series	SCREEN PIPES (NSP, MSP & DSP)
Models	Narrow well, Medium well, Deep well
Available Size in mm	DN40 to DN300
Installation well depth in metre	NSP - upto 80m MSP - Well Depth between 80 to 250m DSP - Well Depth between 250 to 400m

### Applications



Agriculture



Narrow Bore wells,  
Rain water Harvesting



## SUBMERSIBLE CABLES > TC SERIES

### 3 CORE / 4 CORE - PVC / RUBBER / FLAT / ROUND

Tormac cables are used as power supply cables for submersible pump sets. This multi stand, multicore cables are in 3 / 4 core versions with flat or Round type. These cables are suitable for installations in dry, moist & wet environments but however not suitable for explosive areas.



General Information on Electrical Properties		
Specifications	Flat type	Round type
Sizes in Sq mm	1.5, 2.5, 4, 6, 10, 16, 25, 35, 50, 70 & 95	1.5, 2.5, 4, 6, 10, 16, 25, 35, 50, 70 & 95
Voltage Rating	1100V	1100V
Temperature Range	-10° C to + 70° C	-10° C to + 70° C
Insulated material	Flexible water proof PVC / Rubber	Flexible water proof PVC / Rubber
Sheath Material	Flexible water proof PVC / Rubber	Flexible water proof PVC / Rubber
Sheath color	Black / Blue	Black / Blue

COLOUR CODING FLAT / ROUND - PVC / RUBBER - 3 / 4 CORE		
Color Coding	As per IEC 60227	As per IS 694
3 Core	Black, Blue & Brown	Red, Yellow & Blue
4 Core	Black, Blue, Brown, Yellow with Green line / Green with Yellow line	Red, Yellow, Blue Green / Black

#### Applications



Irrigation



Industries



Borehole



Mining & Dewatering

## CABLE SELECTION CHART

For Single Phase 2/3 wire motors, Maximum Length of Copper Cable

Motor Rating		CABLE SIZE IN AMERICAN WIRE GAGE										MAXIMUM LENGTH IN FEET
VOLTS	HP	14	12	10	8	6	4	3	2	1	1/0	
<b>220 VOLT 60Hz</b>	0.5	345	550	1390	2203	3515	4427	5584	7038	8868	-	
	0.75	262	417	1055	1672	2668	3360	4238	5342	6731	8493	
	1	203	324	819	1297	2069	2607	3288	4144	5221	6588	
	1.5	177	282	712	1129	1800	2268	2860	3605	4542	5731	
	2	165	262	664	1052	1677	2113	2665	3359	4232	5340	
	3	122	195	492	780	1244	1567	1976	2491	3139	3960	
5			313	496	791	996	1256	1583	1995	2518		

For Three Phase 3 wire (D.O.L) Motors, Maximum Length of Copper Cable - Single cable per phase

Motor Rating		CABLE SIZE IN SQUARE MILLIMETRES												MAXIMUM LENGTH IN FEET		
VOLTS	HP	14	12	10	8	6	4	3	2	1	1/0	2/0	3/0		4/0	
<b>220 VOLT 60Hz</b>	0.5	842	1341	2130	3391	5373	-	-	-	-	-	-	-	-	-	
	0.75	607	967	1535	2445	3874	6179	-	-	-	-	-	-	-	-	
	1	475	756	1200	1911	3029	4831	6085	-	-	-	-	-	-	-	
	1.5	358	569	904	1440	2282	3640	4585	5782	-	-	-	-	-	-	
	2	272	433	688	1095	1735	2768	3486	4397	5542	-	-	-	-	-	
	3	218	346	550	876	1388	2214	2789	3518	4434	5587	7049	-	-	-	
	4	155	247	393	626	992	1582	1992	2513	3167	3991	5035	-	-	-	
	5	112	178	282	449	712	1135	1430	1804	2274	2865	3615	4559	5748	-	
	6	95	151	239	381	604	963	1213	1529	1928	2429	3065	3865	4873	-	
	7.5		126	200	319	505	805	1014	1279	1612	2032	2563	3233	4076	-	
	10		99	157	250	397	633	797	1005	1267	1596	2014	2540	3202	-	
	12.5			134	214	339	540	680	858	1081	1363	1719	2168	2734	-	
	15			112	179	283	452	569	718	905	1140	1439	1814	2287	-	
	17			97	154	244	388	489	617	778	980	1237	1560	1966	-	
	20				136	216	344	433	546	688	868	1095	1380	1740	-	
	25				112	178	283	357	450	567	714	901	1137	1433	-	
	30					151	241	303	382	482	607	766	966	1218	-	
35					108	172	217	274	345	435	549	692	873	-		
40						147	185	233	293	370	466	588	742	-		
50						130	164	206	260	328	414	522	658	-		

For Three Phase 3 wire (D.O.L) Motors, Maximum Length of Copper Cable - Single cable per phase

Motor Rating		CABLE SIZE IN SQUARE MILLIMETRES												MAXIMUM LENGTH IN FEET		
VOLTS	HP	14	12	10	8	6	4	3	2	1	1/0	2/0	3/0		4/0	
<b>220 VOLT 60Hz</b>	0.5	1769	2816	4472	7121	11284	-	-	-	-	-	-	-	-	-	
	0.75	1275	2030	3224	5134	8135	12976	-	-	-	-	-	-	-	-	
	1	997	1587	2521	4014	6360	10145	12779	-	-	-	-	-	-	-	
	1.5	751	1196	1899	3024	4792	7643	9628	12143	-	-	-	-	-	-	
	2	571	909	1444	2299	3644	5812	7321	9234	11639	-	-	-	-	-	
	3	457	727	1155	1840	2915	4650	5857	7387	9311	11732	14803	-	-	-	
	4	326	520	825	1314	2082	3321	4184	5276	6651	8380	10574	-	-	-	
	5	234	373	592	943	1495	2384	3004	3788	4775	6017	7591	9573	12071	-	
	6	199	316	502	800	1267	2022	2547	3212	4048	5101	6436	8116	10234	-	
	7.5		264	420	669	1060	1691	2130	2686	3386	4266	5383	6788	8559	-	
	10		208	330	526	833	1329	1673	2111	2660	3352	4229	5334	6725	-	
	12.5			282	449	711	1134	1429	1802	2271	2862	3610	4553	5741	-	
	15			236	375	595	949	1195	1508	1900	2394	3021	3810	4804	-	
	17.5			203	323	511	816	1028	1296	1633	2058	2597	3275	4129	-	
	20				286	453	722	909	1147	1446	1822	2299	2899	3655	-	
	25				235	373	595	749	945	1191	1500	1893	2387	3010	-	
	30					317	505	637	803	1012	1275	1609	2029	2558	-	
35					227	362	456	575	725	914	1153	1454	1833	-		
40						308	388	489	616	776	979	1235	1557	-		
50						273	344	433	546	688	868	1095	1381	-		

The given cable lengths are the maximum one from POWER TO MOTOR, Exceeding the lengths mentioned will void warranty.

# CABLE SELECTION CHART

For Three Phase 3 wire (D.O.L) Motors, Maximum Length of Copper Cable - Single cable per phase

Motor Rating		CABLE SIZE IN SQUARE MILLIMETRES																		
VOLTS	HP	14	12	10	8	6	4	3	2	1	1/0	2/0	3/0	4/0	250	300	350	400	500	
380 VOLT 60Hz	0.5	2374	3779	6002	9556	15143														
	0.75	1879	2991	4751	7565	11988														
	1	1253	1994	3168	5044	7992														
	1.5	940	1496	2376	3783	5994														
	2	778	1238	1966	3131	4961														
	3	626	997	1584	2522	3996														
	4	475	756	1200	1911	3029														
	5		544	864	1376	2180														
	6		460	731	1164	1844	2942													
	7.5		374	594	946	1499	2390													
	10		288	457	727	1153	1839													
	12.5		239	380	605	959	1530													
	15			322	513	813	1296	1633												
	17.5			291	463	733	1170	1587												
	20				362	573	954	1301	1894											
	25				321	509	812	983	1240	1563										
	30					426	680	922	1163	1466	1848									
	35						603	818	1031	1300	1638									
	40						503	634	799	887	1117	1410	1778							
	50						403	507	640	806	894	1128	1293	1630						
	60							477	602	618	779	983	1183	1421						
	75								558	552	696	798	1007	1270						
	85								516	511	643	738	931	1173						
	100									438	551	696	877	974	886					
	125										442	558	704	887	807	1145				
	150											534	673	849	748	1061				
	175													660	661	937	994			
	200														500	709	745			
225															647	754	798	1078		
250															492	574	607	820		
300																552	584	788		
350																	507	685		
400																		434	586	

MAXIMUM LENGTH IN FEET

For Three Phase 3 wire (S.D) Motors, Maximum Length of Copper Cable - Single cable per phase

Motor Rating		CABLE SIZE IN SQUARE MILLIMETRES																	
VOLTS	HP	14	12	10	8	6	4	3	2	1	1/0	2/0	3/0	4/0	250	300	350	400	500
380 VOLT 60Hz	0.5	4985	7935	12604	20068	31800													
	0.8	3946	6282	9978	15887	25175													
	1	2631	4188	6652	10592	16784													
	1.5	1973	3141	4989	7944	12588													
	2	1633	2599	4129	6574	10417													
	3	1315	2094	3326	5296	8392													
	4	997	1587	1814	4014	6360													
	5		1142	1535	2889	4577													
	6		966	1247	2444	3873	6178												
	7.5		785	959	1986	3147	5020												
	10		604	798	1528	2421	3861												
	12.5		503	676	1271	2014	3213												
	15			610	1077	1707	2723	3429											
	17.5				972	1540	2457	3333											
	20				759	1203	2003	2733	3977										
	25				674	1069	1705	2065	2604	3282									
	30					895	1428	1937	2443	3079	3880								
	35						1266	1717	2165	2729	3439								
	40						1057	1331	1679	1862	2346	2961	3734						
	50						845	1065	1343	1693	1877	2368	2715	3424					
	60							1002	1264	1298	1636	2064	2485	2984					
	75								1171	1160	1462	1677	2114	2666					
	85								1083	1072	1351	1550	1954	2464					
	100									919	1158	1461	1843	2044	1860				
	125										929	1172	1478	1863	1695	2405			
	150											1121	1414	1783	1570	2228			
	175													1387	1388	1969	2088		
	200														1050	1489	1564		
225															1358	1584	1677	2264	
250															1033	1205	1275	1722	
300																1158	1226	1655	
350																	1066	1439	
400																		912	1231

MAXIMUM LENGTH IN FEET

The given cable lengths are the maximum one from POWER TO MOTOR, Exceeding the lengths mentioned will void warranty.

## CABLE SELECTION CHART

For Three Phase 3 wire (D.O.L) Motors, Maximum Length of Copper Cable - Single cable per phase

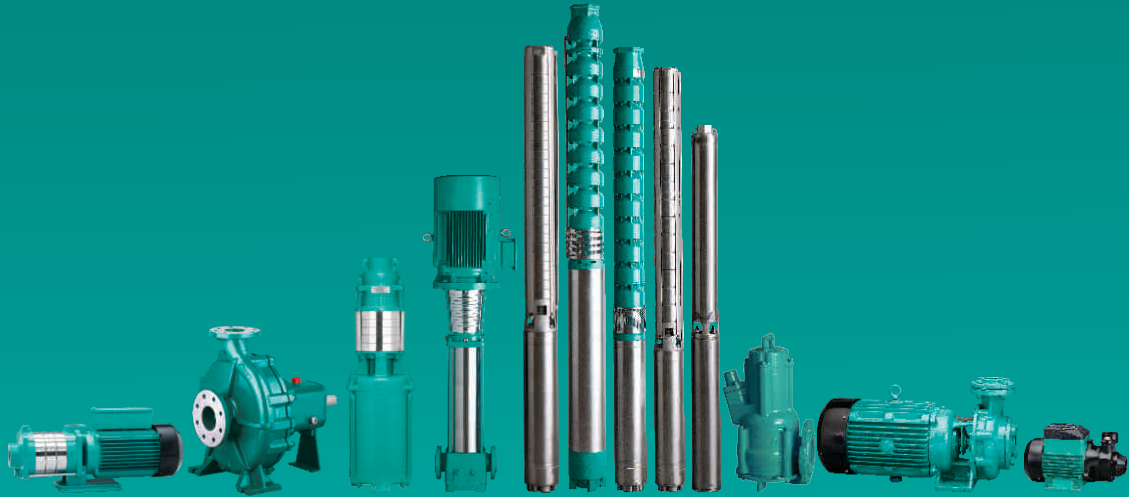
Motor Rating		CABLE SIZE IN SQUARE MILLIMETRES																		
VOLTS	HP	14	12	10	8	6	4	3	2	1	1/0	2/0	3/0	4/0	250	300	350	400	500	
460 VOLT 60Hz	0.5	3770	6020	9460																
	0.75	2730	4350	6850																
	1	2300	3670	5770	9070															
	1.5	1700	3710	4270	6730															
	2	1300	2070	3270	5150	8050														
	3	1000	1600	2520	3970	6200														
	4	748	1190	1891	3011	4771														
	5	590	950	1500	2360	3700	5750													
	5.5	557	887	1409	2243	3554	5669													
	6	510	812	1290	2054	3255	4933													
	7.5	420	680	1070	1690	2640	4100	5100	6260	7180										
	10	310	500	790	1250	1960	3050	3800	4680	5750	7050									
	12.5		410	651	1036	1642	2619	3299	4086	4963	6136	7593								
	15		340	540	850	1340	2090	2600	3200	3930	4810	5900	7110							
	20			410	650	1030	1610	2000	2470	3040	3730	4580	5530							
	25				530	830	1300	1620	1990	2450	3010	3700	4470	5430						
	30				430	680	1070	1330	1640	2030	2490	3060	3700	4500	5128	5850				
	35					580	926	1145	1418	1753	2124	2680	3177	3835	4264	4960				
	40					500	790	980	1210	1490	1830	2250	2710	3192	3720	4242				
	50						640	800	980	1210	1480	1810	2190	2650	2998	3409	3830	4171	4842	
	60						540	670	830	1020	1250	1540	1850	2240	2532	2881	3230	3529	4188	
	75								680	840	1030	1260	1520	1850	2088	2390	2688	2940	3428	
	85									745	919	1136	1371	1652	1884	2127	2291	2491	2909	
	100									620	760	940	1130	1380	1550	1782	2000	2182	2540	
	110											696	877	1048	1107	1364	1447	1531	1860	
	125											740	890	1000	1209	1381	1549	1691	1949	
	150												760	920	1040	1182	1330	1452	1680	
	175													810	921	1052	1181	1292	1501	
	200														802	910	1018	1122	1300	
	225															764	886	984	1132	
250																755	886	984		
300																623	755	837		
350																492	623	689		
400																361	492	525		
450																327	346	467		
500																289	306	403		
550																264	279	377		
600																235	249	336		

MAXIMUM LENGTH IN FEET

For Three Phase 3 wire (SD) Motors, Maximum Length of Copper Cable - Single cable per phase

Motor Rating		CABLE SIZE IN SQUARE MILLIMETRES																		
VOLTS	HP	14	12	10	8	6	4	3	2	1	1/0	2/0	3/0	4/0	250	300	350	400	500	
460 VOLT 60Hz	0.5	880	1420	2250	3450	5550	8620													
	0.75	743	1182	1878	2990	4739	7559													
	1	681	1083	1720	2739	4340	6923													
	1.5	630	1020	1600	2530	3960	6150	7650	9390											
	2	460	750	1180	1870	2940	4570	5700	7020	8620										
	3	368	585	930	1480	2345	3741	4713	5943	7491										
	4	310	510	810	1270	2010	3130	3900	4800	5800	7210	8850								
	5	230	380	610	970	1540	2410	3000	3700	4560	5590	6870	8290							
	5.5	190	310	490	790	1240	1950	2430	2980	3670	4510	5550	6700							
	6		250	410	640	1020	1600	1990	2460	3040	3730	4590	5550							
	7.5			335	533	844	1347	1697	2140	2697	3398	4288	5002							
	10			300	480	750	1180	1470	1810	2230	2740	3370	4080							
	12.5				370	590	960	1200	1470	1810	2220	2710	3280							
	15				320	500	810	1000	1240	1530	1870	2310	2770							
	20					420	660	810	1020	1260	1540	1890	2280							
	25						577	727	916	1155	1341	1691	2133	8140						
	30							500	610	760	930	1140	1410	1690	6750	7690	8730			
	35								507	640	806	1016	1282	1478	5965	6822	7259			
	40								470	590	730	880	1110	1330	4930	5590	6370			
	50									510	630	770	950	1140	3970	4510	5130	5740	6270	7270
	60										550	680	830	1000	3360	3810	4330	4860	5310	6510
	75											590	730	880	2770	3150	3600	4050	4420	5160
	85												623	755	2459	2691	3272	3563	3771	4909
	100													591	2070	2340	2680	3010	3280	3820
	110														1863	2039	2480	2893	3061	3307
	125														1500	1830	2080	2340	2550	2940
	150														1380	1570	1790	2000	2180	2530
	175														1220	1390	1580	1780	1950	2270
	200														1070	1210	1380	1550	1690	1970
	225														919	1050	1247	1411	1558	1837
250														820	951	1116	1280	1427	1706	
300														722	853	984	1116	1296	1575	
350														623	722	853	951	1148	1444	
400															623	722	787	1017	1312	
450															411	584	681	712	973	
500															364	517	603	638	861	
550															332	471	550	582	785	
600															296	420	489	518	699	

MAXIMUM LENGTH IN FEET



## T H E P O W E R B E H I N D T H E F O R C E

Naargo Industries Private Limited, one of the leading manufacturers of latest state of art, large range of pumps and motors, is managed by veterans who are in the pump industry for almost half a century. The products are employed in various applications like irrigation, domestic, civil construction, de-watering etc; The Company has a strong distribution network in India for sales & service and a strong global presence.

Quality is the key factor in Naargo's products. The expansive infrastructure and environment accredited with ISO 9001 quality certification, latest engineering softwares, high-tech machinery, futuristic pumping technology and high caliber workforce facilitate the production of flawless and efficient products on par with international standards under the brand name of "Tormac". The well equipped R & D wing stays alive to the changing global trends and comes out with viable solutions for innovative product development and upgradation.

The Products currently available include Stainless Steel Submersible Pumps, 4" Thermoplastic Submersible Pumps, 6" & 8" Cast Iron Submersible Pumps, Submersible Motors and Controls, Centrifugal Pumps, Inline Booster Pumps, Jet Self-priming Pumps and Peripheral Pumps.

The power, performance and endurance of the products backed by the uncompromising teamwork and value systems will certainly propel the company's growth towards new horizons in the pump industry.

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