

अटूट जोड़ का विश्वास

COLUMN PIPES FOR SUBMERSIBLE PUMPS

Best alternative to G.I. pipes



Suitable up to 350 meters (1150ft.) depth

- ADVANTAGES : Long Life | Light in Weight | Easy and Fast Installation | Strong and Durable
| Excellent Corrosion and Chemical Resistance | High Flow Rates | No Deposition | Watertight Joints
| Wide range in 1" to 4" to suit different pump delivery heads | Cost Effective

Thousands of successful installation across the country and overseas

Unique Features



Special Compound :

Supreme column pipes are manufactured from especially designed uPVC compound to make it sufficiently strong against loads and pressure that will encounter while installation and in use.



Square threads :

Unique square threads made on CNC machines provide sufficient grip and additional strength against tensile load. Thus the joint become fairly strong with sufficient factor of safety to take care of load of entire assembly with pump weight.

These specially designed threads also make it suitable for easy fitment and refitment.

Features and Benefits

Light weight : PVC pipes are light in weight hence transportation and installation becomes much easier.

Hygienic : As uPVC is immune to galvanic and electrolytic erosion, both pipe and water passing through it is not affected and hence water is not contaminated.

High flow rate : Mirror smooth inside surface of pipe and corrosion resistance property prevents scale formation which ensures high flow rate resulting in substantial power saving. They can be installed in all types of acidic or alkaline medium which badly affect metal pipes.

Longer life : Supreme pipes are manufactured with latest technology under stringent quality control. Specially imported additives are used for higher strength and trouble free long service life.

High Tensile Load Capacity : Specially designed square threads (male and female) are manufactured on SPM's to provide smooth fitment/refitment. The design of threads along with the pipe material makes it strong enough to take high tensile loads.

Leak proof joints : The sealing rings are made from best quality rubber which ensures long service life, absorption of pump vibration and leak proof joints.

Overall economy : In addition to the above benefits Supreme column pipes for submersible pumps are much economical to G.I. pipes.

Accessories

Loop bail : This loop bail can be used along with tripod and chain pulley block for lowering Column pipes instead of M. S. clamps. This installation device is available for 1", 1¼", 1½", 2" and 2½" pipes and its use will avoid damage to pipes.



O, Ring Sealing :

Specially designed "O" rings provided on the threads makes the joints watertight and absorb pump vibrations.

Wide Range :

Supreme offers wide range of column pipes in 1" to 4" in rajat, medium duty, standard duty, heavy duty and premium class. These five varieties of pipes designed for different installation depths cater all the pump delivery head requirements. Beside pipes, Supreme offers required accessories and fixtures

like adopters, pump guards, jigs, loop bails, strap wrench etc. for installation, reinstallation and pump safety.



Bottom adaptor : This C.I. adapter is used for connecting submersible pump directly to column pipe or pump guard connector.

Top adaptor : This M. S. adaptor is used for connecting topmost column pipe to the discharge fitting / discharge bend. The collar provided on this adaptor along with M. S. clamps is used for holding entire pump and pipe assembly on the top of the borewell.

Pump guard : This is used for protecting pump from falling in the bore well.

Strap wrench : Strap wrench can be use to assemble and disassemble column pipes as an alternative to conventional pipe wrench. This avoids dent marks / damage on the pipes this can be used for 1½", 2" and 2½" pipes.

Design and Testing

Supreme Column pipes have been specially designed and manufactured under stringent quality standards. They are tested to withstand system load comprising of pump, water and pipe weight with adequate factor of safety, they can withstand considerable shocks and jerk load during operation due to unique design of square threads.

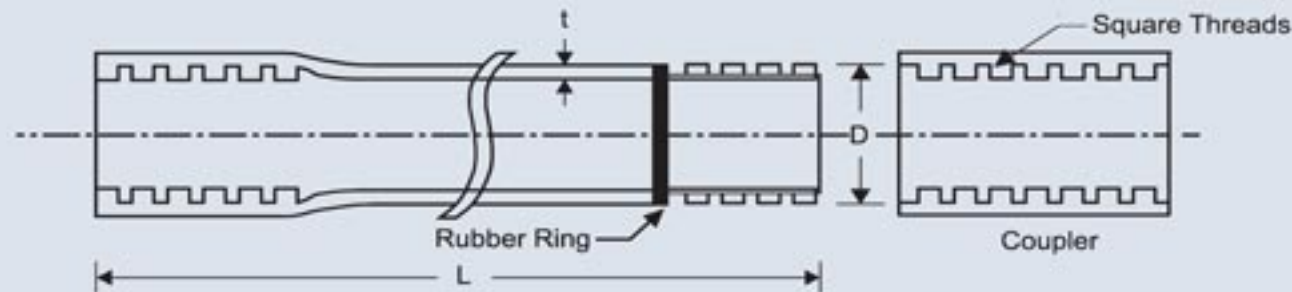
Available Range

Pipes: The column pipes are available in 1" 1¼", 1½", 2", 2½", 3" and 4" in different classes. Pipes have female belled threads at one end and male threads on the other end and/or with separate coupler as per the details given in the table. Pipes are available in 3 meter length with square threads fitted with rubber sealing ring at male threaded end.

SUBMERSIBLE PUMPS



Dimension details of column pipes for submersible pumps

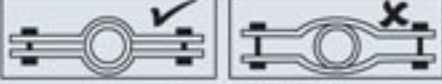


Size	Outer diameter (D) in mm		Wall thickness (t) in mm		Length (L) in meter	End type
	Min	Max	Min	Max		
Rajat (Blue coloured marking)						
1"	33.0	33.3	2.0	2.3	3	Male / Female or with Coupler
1 ¼"	42.0	42.3	2.4	2.9	3	Male / Female or with Coupler
1 ½"	48.0	48.3	2.5	3.2	3	Male / Female or with Coupler
2"	60.0	60.3	3.0	3.7	3	Coupler
Medium Duty (Orange coloured marking)						
1 ¼"	42.0	42.3	2.7	3.2	3	Male / Female or with Coupler
1 ½"	48.0	48.3	2.7	3.2	3	Male / Female or with Coupler
2"	60.0	60.3	2.7	3.2	3	Coupler
2 ½"	75.0	75.3	2.9	3.4	3	Coupler
3"	88.0	88.3	3.3	3.7	3	Coupler
4"	113.0	113.3	3.7	4.2	3	Coupler
Standard Duty (Red coloured marking)						
1"	33.0	33.3	4.2	4.7	3	Male / Female or with coupler
1 ¼"	42.0	42.3	3.9	4.4	3	Male / Female or with coupler
1 ½"	48.0	48.3	4.0	4.4	3	Male / Female or with coupler
2"	60.0	60.3	4.0	4.4	3	Coupler
2 ½"	75.0	75.3	4.2	4.8	3	Coupler
3"	88.0	88.3	5.0	5.7	3	Coupler
4"	113.0	113.3	5.7	6.2	3	Coupler
Heavy Duty (Green coloured marking)						
2"	60.0	60.3	5.4	6.0	3	Coupler
2 ½"	75.0	75.3	6.4	7.0	3	Coupler
3"	88.0	88.3	7.3	7.9	3	Coupler
4"	113.0	113.3	8.4	9.4	3	Coupler
Premium Class (Violet coloured marking)						
2"	60.0	60.3	6.5	7.0	3	Coupler
3"	88.0	88.3	9.8	10.6	3	Coupler

Recommended installation depths - safe total pump delivery head in m /pressure

Size	Rajat	Medium duty	Standard duty	Heavy Duty	Premium
1"	100 (10kgf/cm ²)	–	300 (30kgf/cm ²)	--	--
1 ¼"	100 (10kgf/cm ²)	200 (20kgf/cm ²)	250 (25kgf/cm ²)	–	--
1 ½"	150 (15kgf/cm ²)	200 (20kgf/cm ²)	250 (25kgf/cm ²)	–	--
2"	150 (15kgf/cm ²)	175 (17kgf/cm ²)	200 (20kgf/cm ²)	300 (30kgf/cm ²)	350 (35kgf/cm ²)
2 ½"	--	120 (12kgf/cm ²)	200 (20kgf/cm ²)	250 (25kgf/cm ²)	--
3"	--	120 (12kgf/cm ²)	170 (17kgf/cm ²)	250 (25kgf/cm ²)	350 (35kgf/cm ²)
4"	--	100 (10kgf/cm ²)	150 (15kgf/cm ²)	250 (25kgf/cm ²)	--

Installation Procedure

- Take 3 meter long pipe, remove the protection cap from male end. Wipe both male and female threads, clean using piece of cloth.
- Ensure that rubber gasket supplied with the pipe is properly placed in the groove on the male threads of pipe.
- In case seal is found damaged, replace it with extra sealing rings supplied in each bag.
- Tighten the C.I. bottom adapter on the pump with the help of strap wrench or pipe wrench. Lower the pump in the well using loop bail or M. S. clamps.
- While lowering or extracting the pump set, pipes should be clamped at "CLAMP HERE" location marked on the pipes. Rubber sheet/cushioning between pipe surface and clamp may be used to avoid scratches / damages to the pipe.
- Clamps to be used with pipe for installation should be of correct size (as shown) to avoid damage to the threads. 
- Use of Supreme column pipes for submersible pump in combination with G.I. pipes in the same bore well/tube well is not recommended.
- Assemble pipe one after the other. Tighten pipes by strap wrench or jerk of a pipe wrench so that 50% of rubber-sealing ring on male thread end gets into the seat of belled/coupler female square threads. Use plain water or soapy water as a thread lubricant. Do not use any oil or grease on threads.
- When the pump is lowered to desired depth, fit top adapter to the last pipe. Connect required fittings like nipple/bend to the delivery side of top adapter.
- Use Supreme installation tool i.e. loop bail for lowering the pipes in the bore well while using tripod and chain pulley block instead of M. S. clamps.
- We recommend use of Supreme pump guard system to make your installation full proof against falling of pump due to excessive vibration/Jerks or during pump withdrawal.

Precautions

- Do not over tighten the pipes as it will result in crushing of rubber sealing leading to leakage/pipe failure.
- Use new rubber seals for every reinstallation of submersible pump.
- If lubrication is needed to ease the joint assembly, plain water or soapy water can be applied to the threads prior to assembly.
- Do not apply grease, oil or any other oily substance on the threads.
- It is advisable to use safety device such as pump protection relay to prevent dry running of pump or pump shut-off head condition.
- A safety cable or rope should be used to prevent dropping of pump in the well either during operation or withdrawal. The rope can be of steel or nylon or polypropylene.
- In bore wells with loose boulders, casing pipes are recommended for entire depth.
- In bore wells, without full casing pipes, it is advised that at the time of removal of pumps from bore wells, if the pump gets stuck up due to silt/sticky mud or entrapped stone, proper flushing of the bore well should be done and only then pulling load should be applied to the pipes for pump removal.
- Use of good quality reflux valves on the delivery side is recommended for preventing water hammer, upthrust and back spin in the pumping system.

- Any specification can change without prior notice.
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