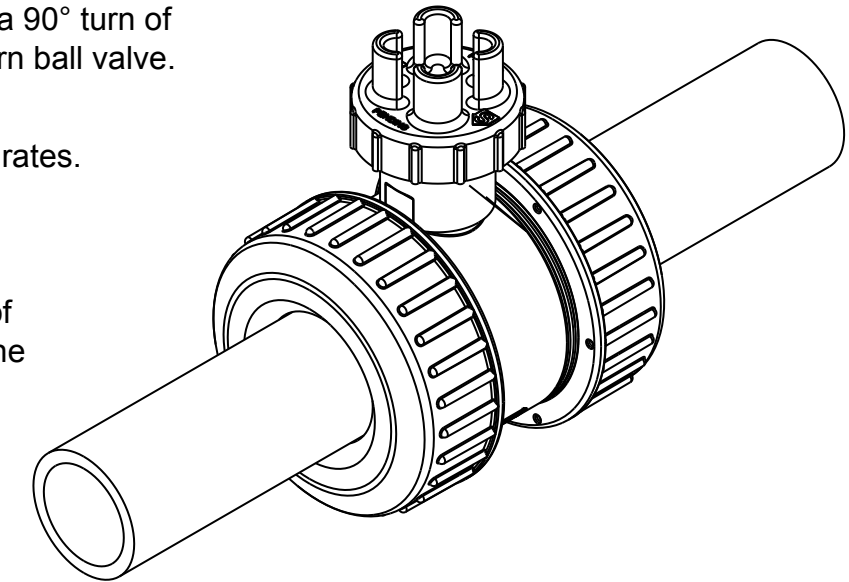


Submittal Drawing: Metric HD-SC Series Thermoplastic True Union Ball Valve with HDPE End Connectors

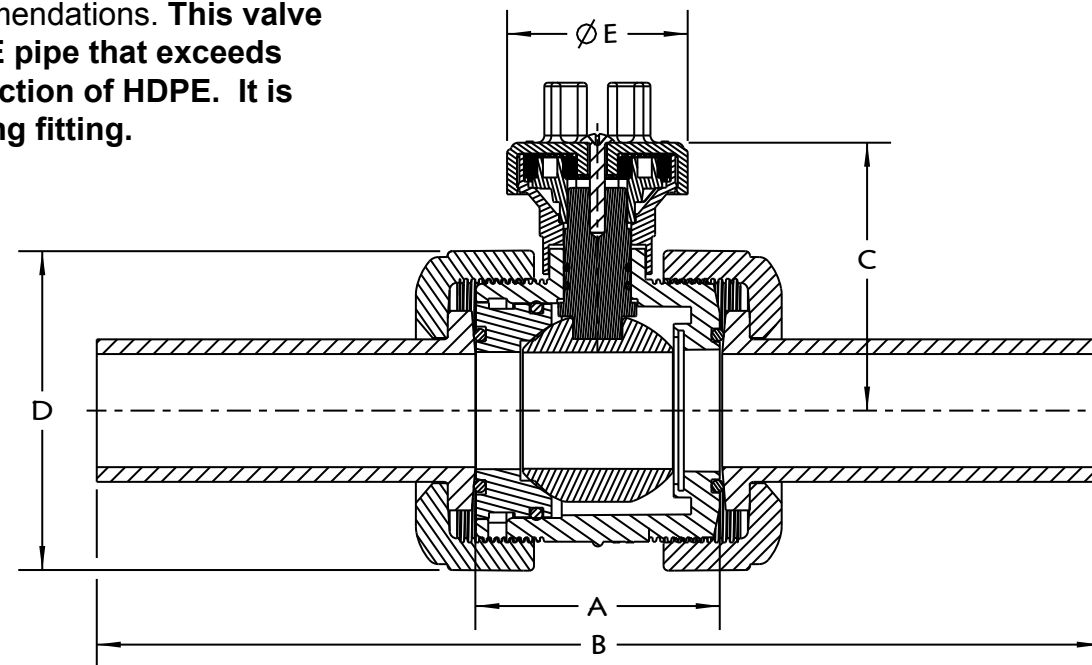
Designed for turf irrigation, and many other applications. Patented gear drive thermoplastic handle mechanism allows for a 360° rotation of the handle to achieve a 90° turn of the ball. This gradual open/close actuation greatly reduces the opportunity for shock or hammer experienced by the sudden open/closure of a standard quarter-turn ball valve.

- Handle features a cross to accept standard sprinkler key wrench (or Lasco plastic key VKey-1) for buried service actuation.
- Replaces brass or bronze gate valves for irrigation uses.
- Thermoplastic construction eliminates process and atmospheric corrosion.
- True Union End Connectors allow for easy and quick removal from line.
- Follow published guidelines to de-rate pressure for elevated process temperature. Avoid prolonged exposure to direct sunlight during installation.
- Slo-Close valves are for Open or Closed operation. Do not attempt to meter or throttle by leaving valve in partially open/closed position. Cycle time: 5-10 seconds to open. 3-5 seconds to close.
- Spigot ends are to be joined to HDPE electro-fusion fittings, or compression adapters, following equipment manufacturers' recommendations. **This valve is not suitable for butt fusion in a section of HDPE pipe that exceeds 61cm length due to thermal expansion and contraction of HDPE. It is designed to be connected to a directional-changing fitting.**

- End connectors are HDPE spigot ends meeting DR11 dimensions.
- Full port design - same I.D. as Sch 80 pipe minimizes turbulence at high flow rates.
- Floating ball design for positive seal.
- Dual Stem o-rings for extra protection against leaks.
- Repairable: A complete inventory of repair parts is readily available.
- Valves should be installed such that the center-line of the pipe is a minimum of 46cm below grade. We recommend a double valve box allowing access to the union nuts to facilitate simple future maintenance or repair.



Dimensions (mm):		
	63mm	90mm
A	106.38	148.59
B	409	416.05
C	140.7	177.80
D	134.6	184.15
E	73.1	73.1

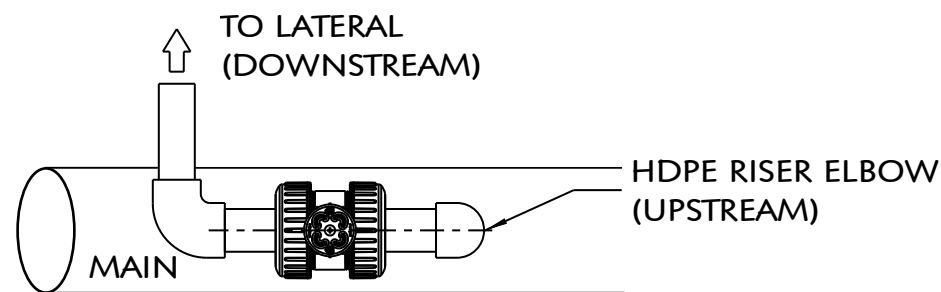


❖ 360° turn clockwise to close.

Size	Model	Material	Pressure Rating
63	V63101HD-SC	PVC/EPDM	160 psi, non-shock water at 73 Deg F.
90	V90101HD-SC	PVC/EPDM	150 psi, non-shock water at 73 Deg F.

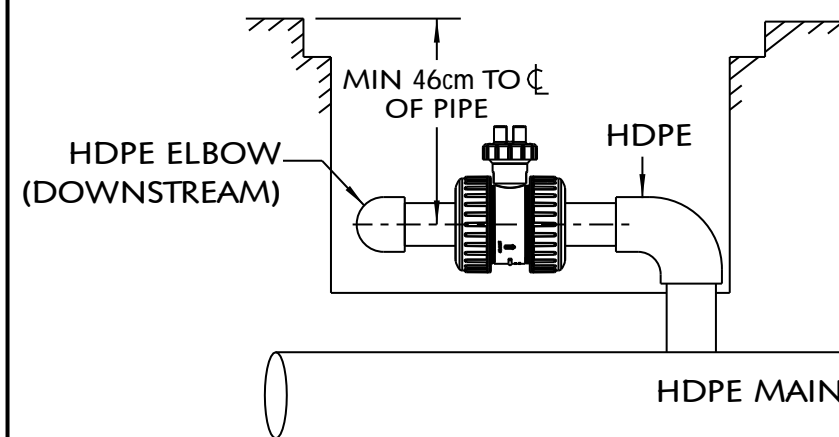
[Also see Colonial Full Block® True Union Ball Valve 101N Series for a complete size range of standard quarter-turn valves, manual or automated.]

Recommended Installation Layout



TOP VIEW

Recommended Burial Depth



SIDE VIEW

Sample Engineering Specifications:

True Union Ball Valves shall be produced of PVC Type I, cell classification 12454 material. Valve handle shall have a gear-mechanism allowing for a 360° rotation of the handle to achieve a 90° turn of the ball and shall be activated manually by hand or by use of a standard sprinkler key wrench. Valve o-rings shall be made of EPDM material. Valve stem shall have two o-rings. Valve seats shall be produced of Teflon® and POM material. End connectors shall be of ASTM 3408 material and DR11 dimensions. **Colonial HD-SC Series® TUBV.**

TITLE		SLO-CLOSE TRUE UNION BALL VALVE (METRIC HDPE ENDS)			
DESIGNED BY	MB	DWG SIZE	B		COLONIAL ENGINEERING, INC 6400 Corporate Ave Portage, MI 49002 <small>This drawing is the property of Colonial Engineering. It is furnished to you for confidential information purposes only and is not to be disclosed to anyone else or reproduced or used for manufacturing purposes without the express written permission of Colonial Engineering.</small>
DRAWN BY	EJL	SHEET NO	1 OF 1		
REVIEWED BY	MB	SCALE	-		
DATE	10-25-10	LENGTH UNITS	INCH		
				DRAWING NO	K29003M