

- Full port design - same I.D. as Sch 80 pipe minimizes turbulence at high flow rates.
- PVC with EPDM O-rings and PTFE or POM seats.
- HDPE Spigot ends are to be joined to HDPE socket-fusion or electro-fusion fittings, compression adapters, or butt-fused to HDPE pipe, following equipment manufacturers' recommendations.
- For butt fusion, the system must be designed/installed to allow for thermal expansion and contraction by use of directional changing fittings (Tees, Elbows) both upstream and downstream from the valve. The distance from the valve to a directional-changing fitting should not exceed eight (8) feet.
- End connectors are HDPE spigot ends meeting DR11 dimensions and PVC Sch 80 socket.
- **Alternative to 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.
- Dual Stem o-rings for extra protection against leaks.
- Repairable: A complete inventory of repair parts is readily available.
- Assembled in USA.
- 3 – Year Limited Warranty
- Handle features a cross to accept standard sprinkler key wrench (or Lasco plastic key Valve Key-1) for buried service actuation.



Part Number:
Valve Key-1



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.



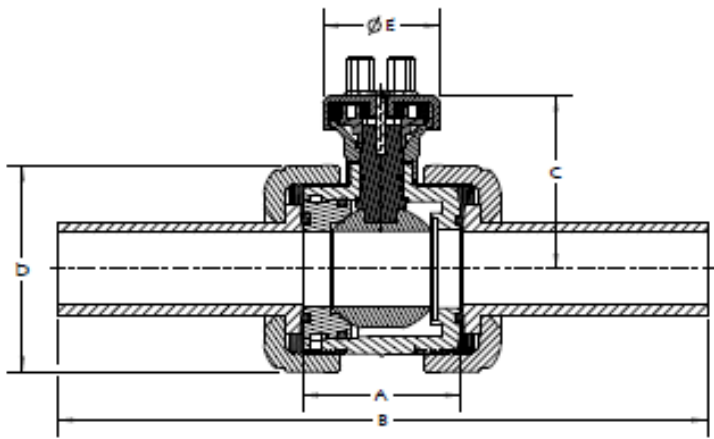
R-Series also available with purple operating-nut / handle for use with Reclaimed Water (see part numbers on opposite page)



Available through:

LASCO[®]
Fittings, Inc.

Revised 1/7/21



GPM of water at 1 psi pressure drop, calculated from Hazen-Williams equation.

Size	Cv
2"	480
3"	1348

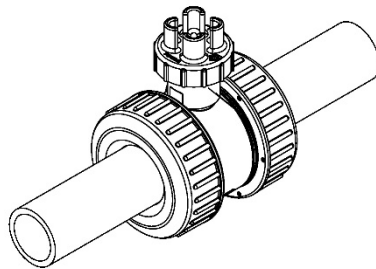
De-rate pressure for elevated process temps per the chart below:

Temp (°F)	PVC
73	1.00
80	0.88
90	0.75
100	0.62
110	0.50
120	0.40
130	0.30
140	0.22
150	NR

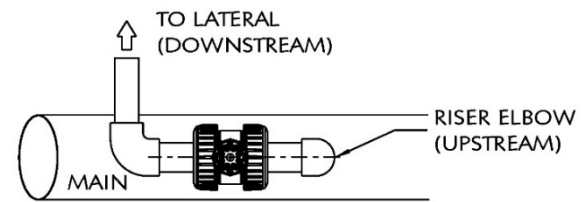
Pressure Rating	
2"	160 psi, non-shock water at 73° F
3"	150 psi, non-shock water at 73° F

Dimensions (in.)

	2"	3"
A	4.20	5.85
B	11.64	12.42
C	5.54	7.00
D	5.30	7.25
E	2.88	2.88
F	1.78	1.94



Recommended Installation Layout



PART NUMBERS FOR VALVES

	Material	Part Number	"R" Series with Purple operating nut for Reclaimed water
2"	HDPE x HDPE	V20101HD-SC	V20101HD-SC-R
3"	HDPE x HDPE	V30101HD-SC	V30101HD-SC-R

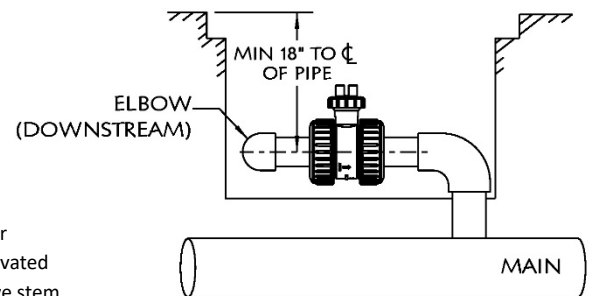
Sample Engineering Specifications:

True Union Ball Valves shall be produced of PVC Type 1, cell class 12454. 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 an approved key wrench. O-rings shall be made of EPDM material. Valve stem shall have two O-rings. Valve seats shall be made of PTFE and POM material. End connectors shall be of ASTM 3408 material and DR 11 dimensions. Valves shall have a pressure rating of 160 psi (2") and 150 psi (3"), non-shock water at 73° F. **LASCO / Colonial HD-SC Series TUBV.**

Installation precautions:

- Colonial recommends a minimum installation distance of 10 x the pipe diameter from a pump or other source of turbulence.
- Slo-Close Valves are designed for use in the Open or Closed position. Moderate throttling has been successful in systems with LOW flow rates (< 3 ft per second) such as in geexchange systems. Throttling is not recommended for Heavy-turf irrigation or other systems with high flow rates.
- The maximum recommended flow rate for any Colonial Valve product is 5 feet per second.
- Follow published guidelines to re-rate pressure for elevated process temperature. Avoid prolonged exposure to direct sunlight during and after installation.
- Proper pipe alignment must be maintained. Union nuts should be hand-tightened for proper O-ring sealing.
- In buried applications, valves should be installed such that the centerline of the pipe is a minimum of 18" below grade. We recommend a double valve box allowing access to the union nuts to facilitate simple future maintenance or repair.

Recommended Burial Depth



Do not use with compressed air or gas.

CUSTOMER SERVICE: 6400 Corporate Ave., Portage, MI 49002

Toll-free (800)374 0234, Phone (269)323 2495, Fax (269) 323 0630 www.colonialengineering.com

