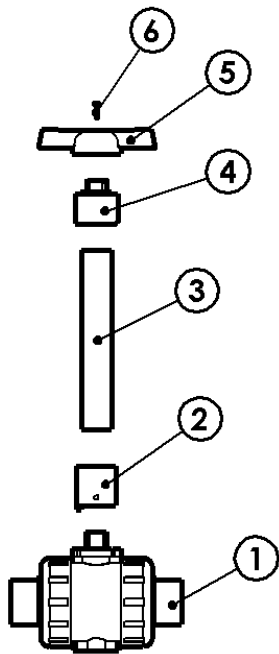


Type-21/21a Ball Valve Stem Extension Kit Installation Instructions

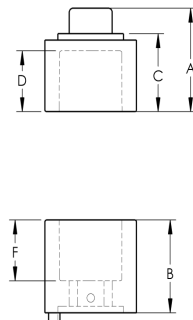
Figure 1



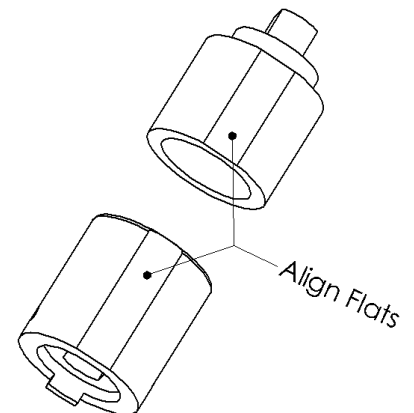
Parts List

1	Type-21/21a Ball Valve
2	Lower Coupling
3	Schedule 40/80 PVC pipe
4	Upper Coupling
5	Type-21 Handle
6	SS Cap Screw

Couplings Top (4) Bottom (2)



Locating Flats



Part numbers and dimensional information

Valve Size		Part Number	Description	Pipe Size*	A	B	C	D	F
Inch	MM								
1/2	15	1000205	1/2" extension kit	1" Sch 40/80	1.895	1.760	1.330	1.125	1.125
3/4 - 1	20 - 25	1000210	3/4" - 1" extension kit	1" Sch 40/80	1.970	1.760	1.330	1.125	1.125
1-1/4	32	1000212	1-1/4" extension kit	1" Sch 40/80	2.010	1.760	1.330	1.125	1.125
1-1/2 - 2	40 - 50	1000220	1-1/2" - 2" extension kit	1" Sch 40/80	2.150	1.760	1.330	1.125	1.125

*Schedule 40 or 80 PVC pipe can be used, for maximum strength schedule 80 is recommended.

- Reference Figure 1. Remove Handle from Ball Valve. Using a 3/16" drill bit, drill a clearance hole in top center of valve handle to accept 8/32 SS cap screw.
- Determine overall length of extension and cut PVC pipe.
- Each coupling has a locating flat machined onto the Outside Diameter for proper orientation of parts when assembling.
- Apply PVC primer to ID of couplings (2 & 4) and OD of Pipe (3), then apply PVC cement same.
- Insert pipe into bottom coupling (2), push in until pipe stops. Hold for 30 seconds. Wipe away excess.
- Lay coupling (2) with pipe on flat surface with locating flat face down. Insert pipe into top coupling (4) ensuring locating flat aligns with bottom coupling locating flat. This can be done on a flat surface for accuracy. Hold for 30 seconds. Wipe away excess cement.
- Take care to wipe away any excess cement from inside and outside of extension couplings (2 & 4). Make sure cement is fully cured prior to installing onto valve stem.
- Install extension assembly onto valve stem and tighten 2 set-screws located 180° apart.
- Install handle on top of extension assembly and tighten SS cap screw (8/32 X.750" for 1/2" - 2" valves)
- Operate valve. Valve handle should rotate smoothly and have a positive stop for open and closed positions