

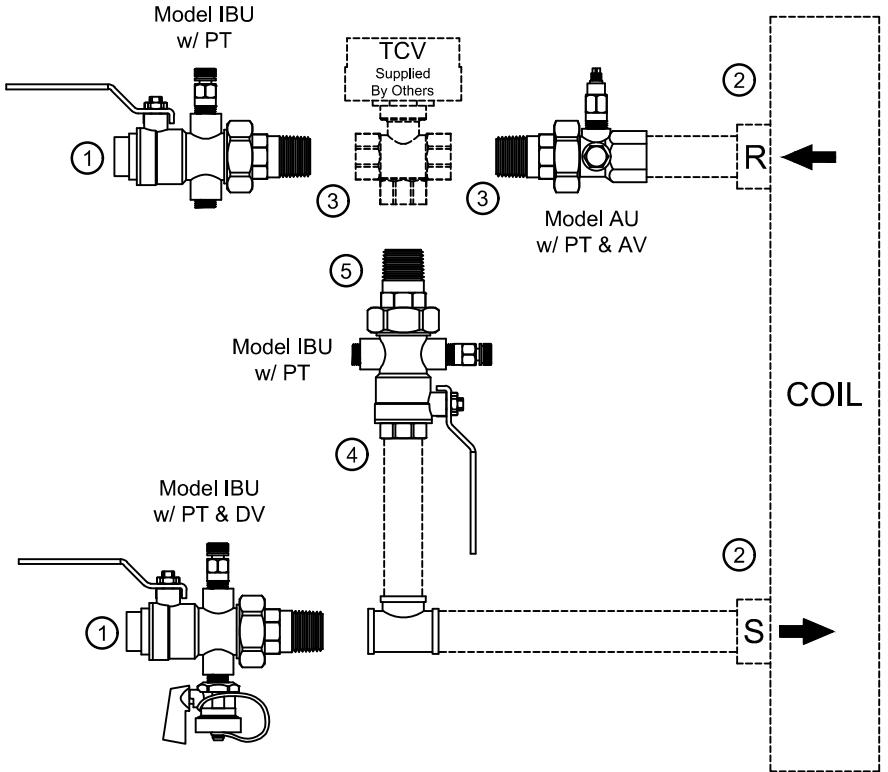
# PRO *Hydronic Specialties*

## Manual Balancing 3-Way Kit - B3BB Submittal

	#	Size	Connection Type
Runout	1		
Coil	2		
TCV	3		MPT
Bypass Out	4		
Bypass In	5		
<i>Services provided for additional fee:</i>			
Extended Components	<input type="checkbox"/>	Yes	<input type="checkbox"/> No
Factory Mounted TCV	<input type="checkbox"/>	Yes	<input type="checkbox"/> No
Stainless Steel Trim	<input type="checkbox"/>	Yes	<input type="checkbox"/> No
Bag N Tag	<input type="checkbox"/>	Yes	<input type="checkbox"/> No

\* 3/8" Coil Size available in SWT ONLY.

\*\* ProPress fittings supplied for additional fee.

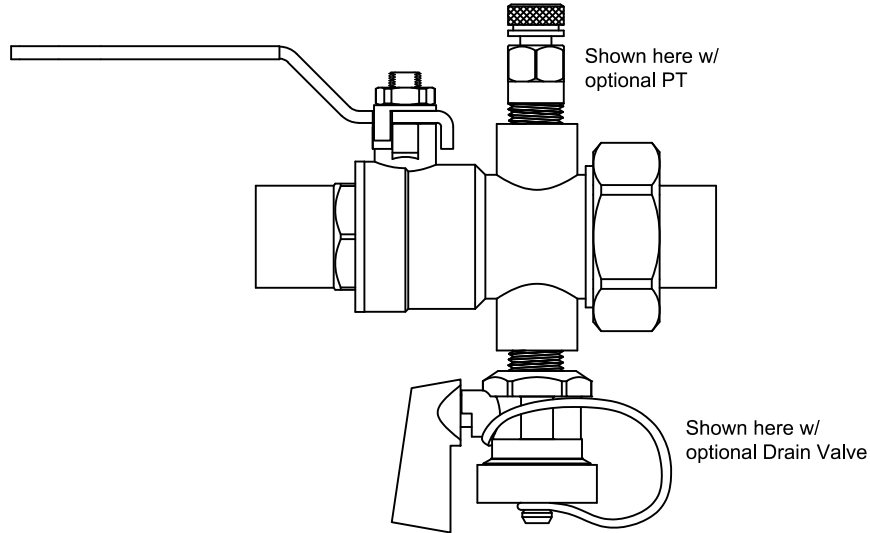


**PRODUCT DESCRIPTION:** The Manual Balancing Valve Kit is a packaged and partially preassembled grouping of components required to complete installation of a terminal unit. Temperature control valves, piping, and coils are supplied "by others". Mounting and testing of the customer supplied TCV is available at an additional charge.

QUANTITY	GPM	TAGGING INFORMATION	
JOB NAME			REPRESENTATIVE
ENGINEER			REF/PO#
CONTRACTOR			DATE
	SUBMITTED BY		DATE



## IBU Series Specifications Integral Ball Valve/Union



**PRODUCT DESCRIPTION:** The IBU is an integral ball valve and union. The IBU uses a full-port ball valve with a union ended brass body that provides two (2) 1/4" taps for accessories to be installed. All taps are plugged unless otherwise specified. Memory stops are available upon request. Fixed end connections may be SWT or FNPT. Union side connections available include MNPT, FNPT, and SWT, and a variety of reductions.

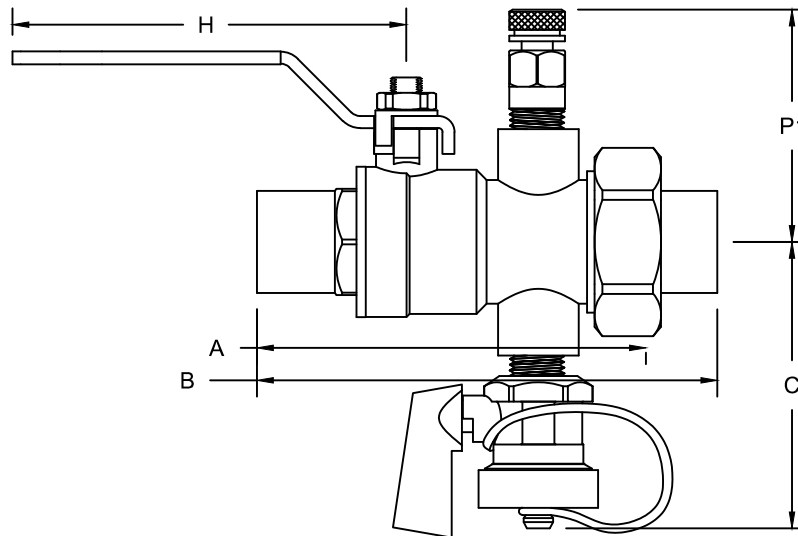
STANDARD MATERIAL SPECIFICATIONS	
Body	Forged Brass ASTM B283-06 or ASTM B763-08A
O-Ring	EPDM
Tail Piece	Brass ASTM B124-09, B228-06, or B763-08A
Union Nut	Brass ASTM B455
Handle	Chrome Plated Steel
Stem	Brass ASTM B124-09 - Blow-Out Proof
Ball	Chrome Plated Brass - Full Port
Ball Seat	Teflon
STANDARD OPERATING SPECIFICATIONS	
Maximum Working Pressure:	600 WOG / CWP
Maximum Operating Temperature:	250° F
<p>Specification information is provided to assist and is given without obligation or warranty. The Company reserves the right to make changes in design, materials, and/or specifications without notice or liability.</p>	

**PRODUCT SPECIFICATIONS:**

- Devices shall have a full port isolation valve to provide unrestricted flow
- Devices shall be designed to accept a memory stop
- Devices shall have a union end which allows for quick and convenient connection



## IBU Series Dimensions Integral Ball Valve/Union



MODEL	SIZE	A	TAIL PIECE	B	Lbs	C	H	P1	* Cv
IBU1	½" - SWT	3.5	- M	5.1	1.2	2.5	3.8	2.0	19
			- F	4.2	1.2				
			- S	4.2	1.1				
	½" - FPT	3.2	- M	4.7	1.2				
IBU2	¾" - SWT	3.8	- M	5.3	1.5	2.7	3.8	2.2	35
			- F	4.9	1.6				
			- S	4.5	1.4				
			¾" - F	4.6	1.5				
			- M	5.5	1.5				
			- S	4.6	1.4				
	¾" - FPT	3.3	- M	4.8	1.5				
			- F	4.4	1.6				
			- S	4.1	1.4				
			- M	5.0	1.6				
			- F	4.1	1.5				
			- S	4.1	1.4				
IBU3	1" - SWT	4.1	½" - M	6.5	2.1	2.7	5.0	2.2	49
			¾" - M	6.5	2.1				
			- S	5.2	1.9				
			- M	6.5	2.2				
			1" - F	5.3	2.0				
			- S	5.4	1.9				
	1" - FPT	3.7	½" - M	5.7	2.1				
			¾" - M	5.7	2.1				
			- S	4.5	1.9				
			- M	5.7	2.2				
			1" - F	4.6	2.0				
			- S	4.7	1.9				

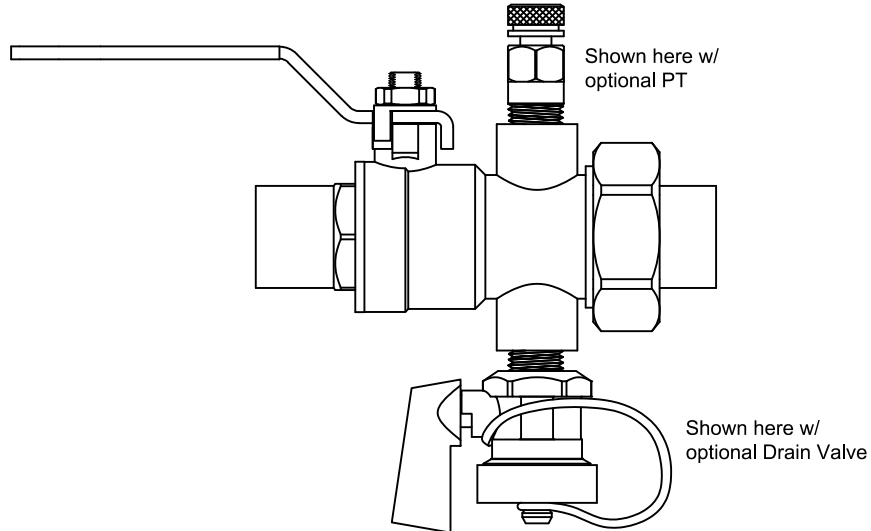
MODEL	SIZE	A	TAIL PIECE	B	Lbs	C	H	P1	* Cv
IBU4	1¼" - SWT	5.2	½" - M	7.0	3.6	3.2	4.6	2.5	102
			¾" - M	7.0	3.8				
			1" - M	7.0	3.8				
			- M	7.0	3.9				
			1¼" - F	6.0	3.6				
			- S	6.2	3.4				
	1¼" - FPT	4.5	½" - M	6.2	3.2				
			¾" - M	6.5	3.3				
			1" - M	6.5	3.4				
			- M	6.5	3.4				
			1¼" - F	5.6	3.1				
			- S	5.7	3.0				
IBU5	1½" - SWT	5.8	¾" - M	7.5	4.6	3.5	5.5	2.7	266
			1" - M	8.0	4.9				
			1¼" - M	8.1	5.0				
			- M	8.1	4.9				
			1½" - F	7.0	4.6				
			- S	7.0	4.4				
	1½" - FPT	5.2	¾" - M	7.1	4.4				
			1" - M	7.5	4.8				
			1¼" - M	7.5	4.8				
			- M	7.5	4.7				
			1½" - F	6.5	4.4				
			- S	6.3	4.2				
IBU6	2" - SWT	7.1	1" - M	10.1	8.0	3.5	6.3	3.0	297
			1¼" - M	10.0	7.7				
			1½" - M	10.0	7.7				
			- M	10.0	7.7				
			2" - F	8.2	7.1				
			- S	8.5	6.7				
	2" - FPT	6.0	1" - M	8.9	7.8				
			1¼" - M	8.9	7.4				
			1½" - M	8.9	7.4				
			- M	8.9	7.4				
			2" - F	7.0	6.8				
			- S	7.2	6.4				

Note: Dimensions listed do not include ProPress or any other special fittings or adapters. All dimensions and materials are subject to minor variations. Consult with factory for confirmation of dimensions and material specifications at the time of order. Sweat size listed is nominal and will differ from the actual, measurable size.

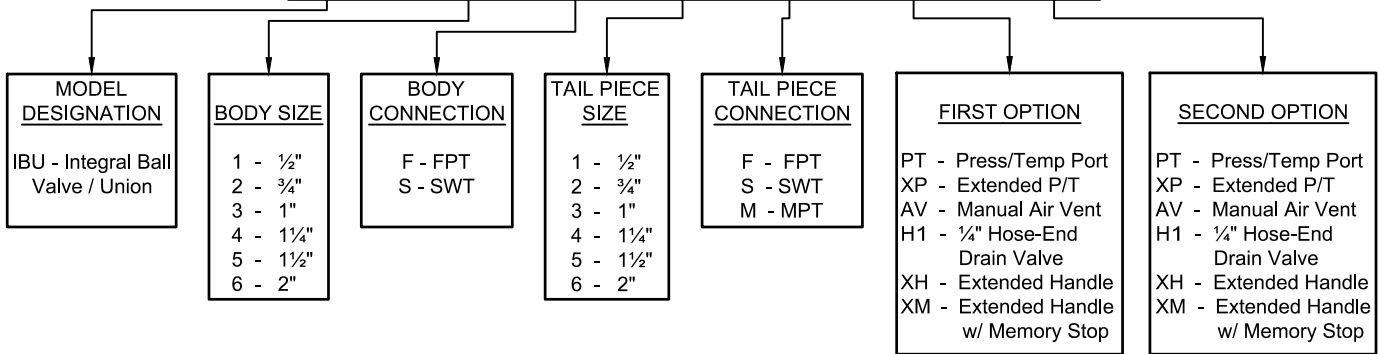
\* Cv = Estimated with union connection same as inlet, no reductions.



**IBU Series Submittal**  
**Integral Ball Valve/Union**



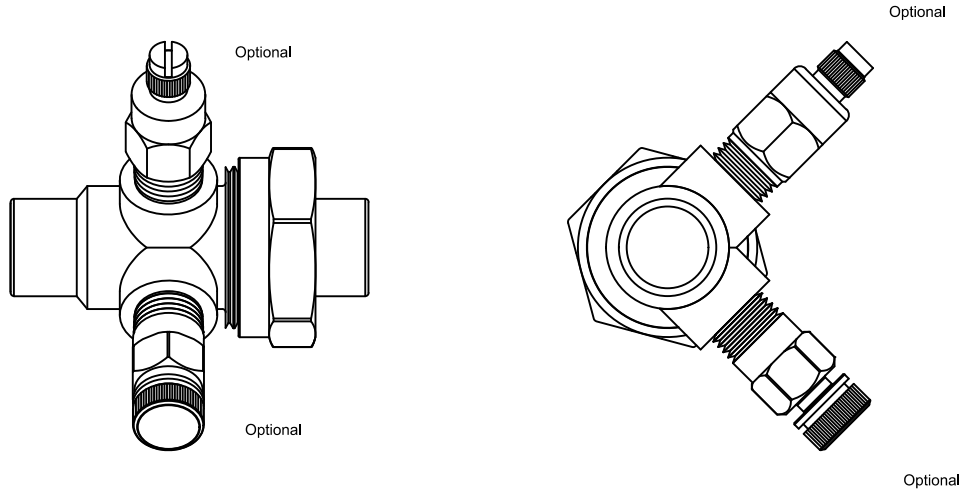
**IBU - X - X - X - X - XX - XX**



JOB NAME:	CUSTOMER:	DATE:
ENGINEER:	REF/PO#:	DATE:
CONTRACTOR:	SUBMITTED BY:	DATE:
PART # (See table above)	TAGGING/JOB INFORMATION	QUANTITY



## AU Series Specifications Accessory Union



Product Description: The AU brass accessory union provides for component isolation. Port section contains two 1/4" ports that come predrilled from the factory and are positioned 90° apart. The union side incorporates an o-ring for maximum sealing protection. Accessory union comes standard with 1/4" plugs installed in the ports. Union side and port side connections available in NPTM, NPTF, and SWT. Rated at 600 WOG @ -22°F to 325°F.

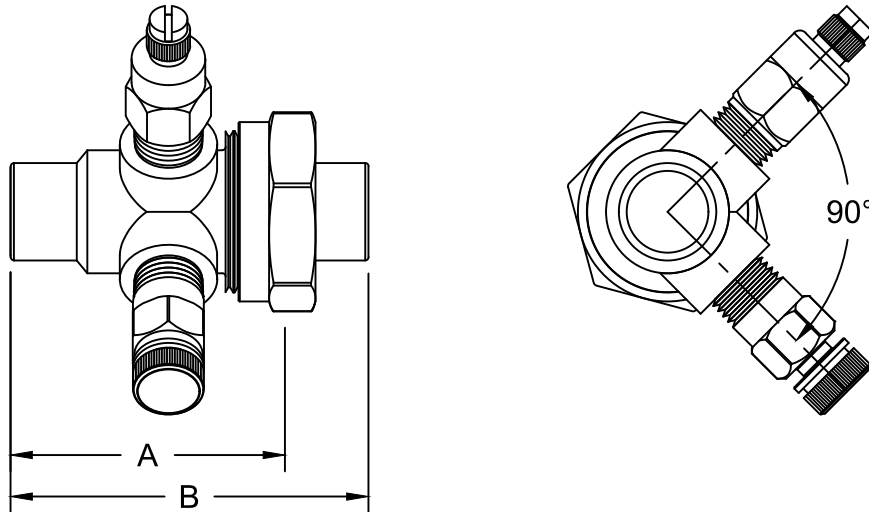
STANDARD MATERIAL SPECIFICATIONS	
Accessory Union	Forged Brass ASTM B283-06
O-Ring	EPDM
Tail Piece	Brass ASTM B124-09, B228-06, or B763-08A
<p>Specification information is provided to assist and is given without obligation or warranty. The Company reserves the right to make changes in design, materials, and/or specifications without notice or liability.</p>	

**PRODUCT SPECIFICATIONS:**

- 1/4" ports shall be located 90° distal on a rotational axis
- Integrated ports shall provide functionality for numerous options



## AU Series Dimensions Accessory Union

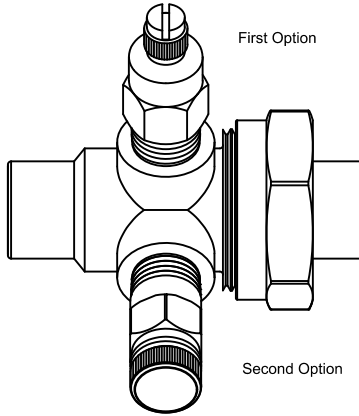


MODEL	SIZE	A	LENGTH "B" / WEIGHT OF PRO-AU AND TAIL PIECE CONNECTION											
			$\frac{1}{2}$ " M	lbs	$\frac{1}{2}$ " S	lbs	$\frac{1}{2}$ " F	lbs	$\frac{3}{4}$ " M	lbs	$\frac{3}{4}$ " S	lbs	$\frac{3}{4}$ " F	lbs
AU1M	$\frac{1}{2}$ "	2.7	4.2	0.6	3.3	0.6	3.3	0.6						
AU1S		2.1	3.7	0.5	2.8	0.4	2.8	0.5						
AU1F		2.0	3.6	0.6	2.7	0.5	2.7	0.5						
AU2M	$\frac{3}{4}$ "	2.5	4.0	0.7	3.2	0.6	3.6	0.8	4.2	0.7	3.2	0.6	3.3	0.7
AU2S		2.1	3.7	0.6	2.9	0.5	3.3	0.6	3.8	0.6	2.9	0.5	2.9	0.6
AU2F		2.1	3.6	0.7	2.8	0.6	3.2	0.8	3.8	0.7	2.8	0.6	2.9	0.7
AU3M	1"	2.6	4.6	1.1	4.6	1.1	3.4	0.9	4.6	1.2	3.6	0.9	3.5	1.0
AU3S		2.4	4.5	1.0	4.5	1.0	3.3	0.7	4.5	1.0	3.5	0.8	3.4	0.8
AU3F		2.1	4.1	1.0	4.1	1.1	3.0	0.8	4.1	1.1	3.3	0.9	3.1	0.9
AU4M	1 $\frac{1}{4}$ "	3.0	4.7	1.7	5.0	1.8	5.0	1.9	5.0	1.9	4.1	1.5	4.0	1.6
AU4S		3.0	4.7	1.5	4.9	1.7	4.9	1.7	5.0	1.8	4.1	1.4	4.0	1.5
AU4F		2.3	4.1	1.6	4.3	1.8	4.3	1.8	4.4	1.9	3.4	1.5	3.3	1.6
AU5M	1 $\frac{1}{2}$ "	3.0	4.9	2.3	5.5	2.6	5.5	2.7	5.5	2.5	4.2	2.1	4.3	2.3
AU5S		3.0	4.9	2.2	5.5	2.6	5.5	2.6	5.5	2.5	4.2	2.0	4.2	2.2
AU5F		2.7	4.6	2.3	5.1	2.7	5.1	2.7	5.1	2.6	3.9	2.2	3.9	2.3
AU6M	2"	3.4	6.2	4.3	6.2	4.0	6.2	4.0	6.2	4.1	4.8	3.1	4.6	3.4
AU6S		2.8	5.8	4.0	5.8	3.6	5.8	3.6	5.8	3.7	4.2	2.7	4.0	3.0
AU6F		2.8	5.8	4.5	5.7	4.2	5.7	4.1	5.8	4.2	4.2	3.2	3.9	3.5

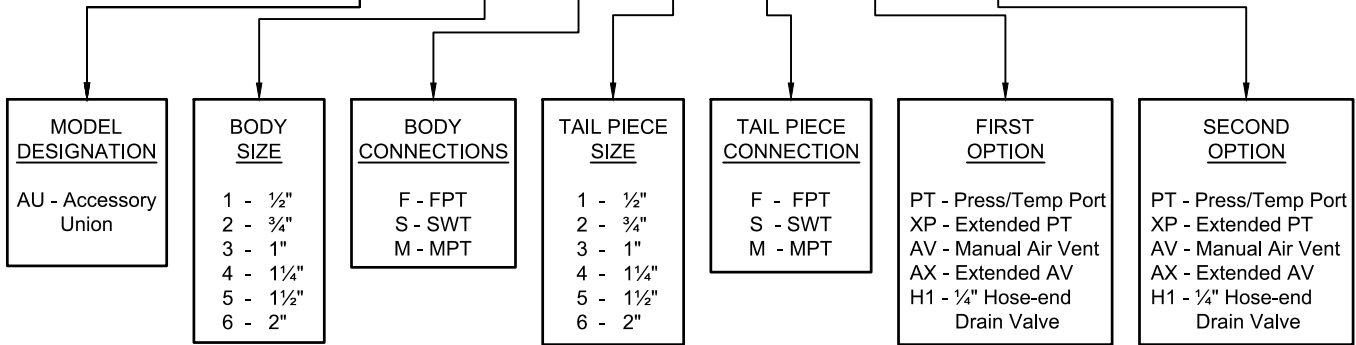
*Note: Dimensions listed above do not include ProPress or any other special fittings or adapters. All dimensions, weights, and materials are subject to minor variations. Consult with factory for confirmation of dimensions, weights, and material specifications. Sweat size listed is nominal and will differ from the actual, measurable size.*



**AU Series Submittal**  
**Accessory Union**



**AU - X - X - X - X - XX - XX**



JOB NAME:		REPRESENTATIVE:	
ENGINEER:		REF/PO#:	DATE:
CONTRACTOR:		SUBMITTED BY:	DATE:
PART # (See table above)	TAGGING/JOB INFORMATION		QUANTITY