

# MEDIA CONTAINMENT UNIT

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FLOW-TEK.COM

**Flow-Tek**<sup>®</sup>  
Subsidiary of BRAY INTERNATIONAL, Inc.

Flow-Tek's Media Containment Unit (MCU) is engineered to provide increased environmental protection and plant safety by offering a secondary seal which can be monitored for early detection of stem leaks. The investment cast Stainless Steel unit is highly corrosion resistant and ideal for harsh environments.

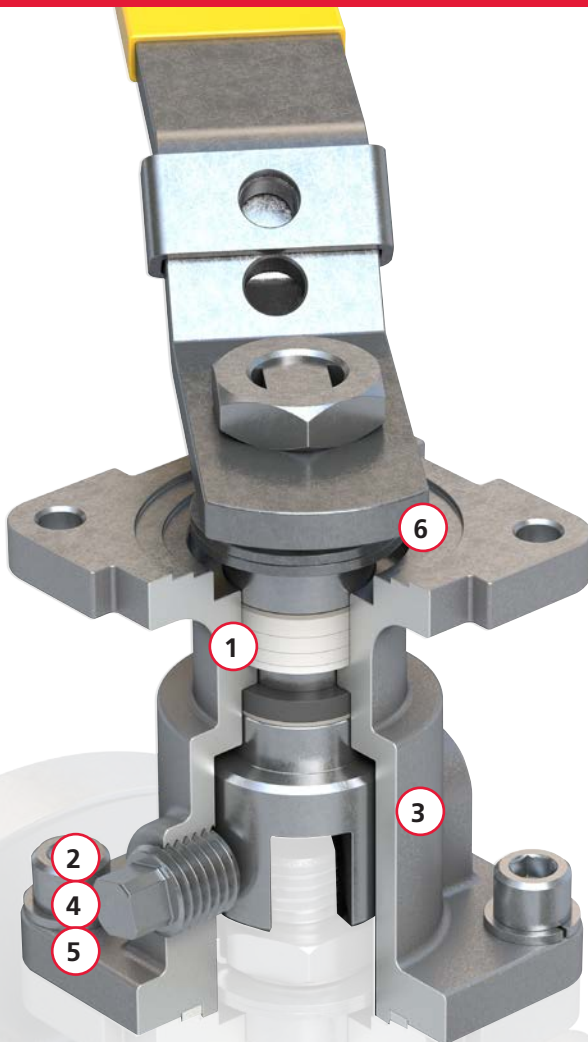
Designed for both automated and manual service, the MCU is easily installed in the field onto existing Flow-Tek ball valves. The MCU lowers operating costs by reducing lost production time due to fugitive emissions and unscheduled maintenance.

## APPLICATIONS

- Emission Control
- Severe Media
- High Cycle
- Low & High Temperature
- Monitoring
- Stem Sealant Devices
- Positive Pressure Seal
- Stem Extension

## FEATURES AND BENEFITS

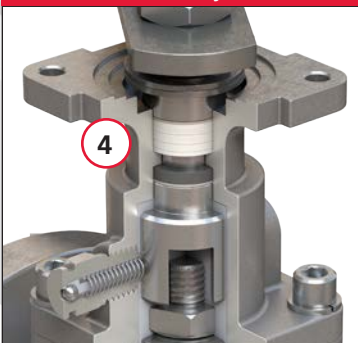
- 1 - TIGHT SEALING:** Flow-Tek's MCU features live-loaded stem sealing with Belleville springs that automatically compensate for temperature and pressure fluctuations, maintaining a leak-tight seal for extended cycle life. Multiple TFM V-ring stem packing provides the rigid secondary stem seal. A TFM gasket seals against possible leaks between the unit and valve.
- 2 - LEAK DETECTION:** A strategically placed monitoring connection allows the customer/operator to use a pressure gauge or sniffer sensor for early detection of primary stem seal leaks.
- 3 - EXTENDED TEMPERATURE RANGE:** The additional height of the MCU elevates the packing further away from the valve's service media and potential temperature extremes. This allows for tight sealing in both high and low temperature applications.
- 4 - SEALANT INJECTION:** The MCU can be adapted with a button head check valve to inject sealant for a third seal or for emergency shut-off. An optional second port allows for a combination of monitors, check valve injection or pressure displacement line.
- 5 - POSITIVE PRESSURE SEAL:** A positive pressure seal can be accomplished by permanently connecting a pneumatic line to the unit to provide a positive pressure supply that barely exceeds the valve line operating pressure. This ensures against any possible valve stem leaks to the atmosphere.
- 6 - MOUNTING EASE:** The housing top pad and stem slot meet Flow-Tek's Secure Mount standards for easy installation of handle or actuator. Installation and maintenance procedures (such as monitoring) can be performed while valve is under full pressure.



2 - Leak Detection



4 - Sealant Injection



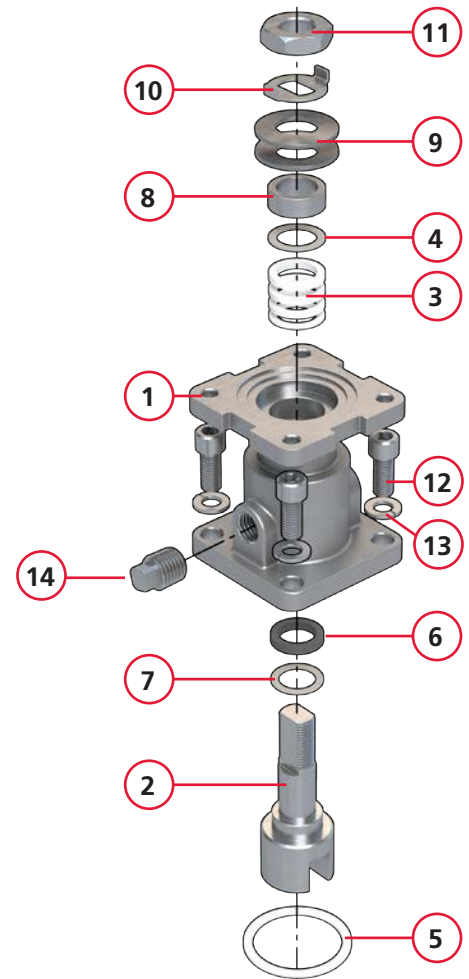
## VALVE COMPATIBILITY

Unit	Triad		7000/8000	F15/F30	RF15/RF30	S7000/S7700	S85	
	SP	FP						
MCU - 1	INCHES	¾" - 1"	¼" - ¾"	¼" - ¾"	½" - ¾"	1"	½" - 1"	½" - ¾"
MCU - 2		—	—	1" - 1¼"	1"	1½"	1½"	1" - 1¼"
MCU - 3		1¼" - 1½"	1" - 1¼"	1½" - 2"	1½" - 2"	2"	2"	1½" - 2"
MCU - 3T		2" - 2½"	1½" - 2"	—	—	—	—	—
MCU - 4		—	3"	3" - 4"	2½" - 4"	3" - 6"	3" - 4"	—
MCU - 5		—	4"	6" - 8"	6" - 8"	8" - 10"	—	—
MCU - 1	MILLIMETERS	20 - 25	8 - 20	8 - 20	15 - 20	25	15 - 25	15 - 20
MCU - 2		—	—	25 - 32	25	40	40	25 - 32
MCU - 3		32 - 40	25 - 32	40 - 50	40 - 50	50	50	40 - 50
MCU - 3T		50 - 65	40 - 50	—	—	—	—	—
MCU - 4		—	80	80 - 100	65 - 100	80 - 150	80 - 100	—
MCU - 5		—	100	150 - 200	150 - 200	200 - 250	—	—

Consult factory for 2½" Series 7000/8000 and 2½", 3" Series S85 MCU sizing. MCU will add additional torque per Tech Bulletin 1005.

## COMPONENTS AND MATERIALS

Item	Description	Material	Qty.
1	Body Housing	A351 Gr CF8M	1
2	Stem	SS316	1
3	Stem Packing	TFM	1 Set
4	Packing Protector	PEEK	1
5	Gasket	TFM	1
6	Thrust Washer	Tek-Fil	1
7	Thrust Washer Protector	PEEK	1
8	Packing Gland Sleeve	SS301	1
9	Belleville Spring	SS301	2
10	Tab Lock Washer	SS304	1
11	Packing Gland Nut	SS304	1
12	Mounting Bolts	Stainless Steel	4
13	Mounting Bolt Spring Washer	Stainless Steel	4
14	Plug	Stainless Steel	1





## DIMENSIONS

Unit		A	G	H	K*	L*	M	øP	U UNC	W
MCU - 1	INCHES	1.97	1.17	1.17	0.24	0.55	0.25	0.374	#10 - 24	1/8" NPT
MCU - 2		2.91	1.39	1.39	0.35	0.71	0.31	0.437	1/2" - 20	1/4" NPT
MCU - 3		2.91	1.95	1.95	0.43	0.91	0.37	0.626	5/16" - 18	1/4" NPT
MCU - 3T		3.11	1.95	1.95	0.61	1.10	0.47	0.748	5/16" - 18	1/4" NPT
MCU - 4		4.53	3.54	1.87	1.73	3.07	0.67	1.102	1/2" - 13	1/4" NPT
MCU - 5		7.20	3.37	3.37	1.65	3.58	1.02	1.713	1/2" - 13	1/4" NPT
MCU - 1	MILLIMETERS	50	29.7	29.7	6	14	6.4	9.5	#10 - 24	1/8" NPT
MCU - 2		74	35.4	35.4	9	18	8	11.1	1/4" - 20	1/4" NPT
MCU - 3		74	49.5	49.5	11	23	9.5	15.9	5/16" - 18	1/4" NPT
MCU - 3T		79	49.5	49.5	15.5	28	12	19	5/16" - 18	1/4" NPT
MCU - 4		115	90	47.6	44	78	17	28	1/2" - 13	1/4" NPT
MCU - 5		183	85.7	85.7	42	91	26	43.5	1/2" - 13	1/4" NPT

\*Actual dimensions may vary.

