

HANTEMP Controls

Recommended Fastener Torque Guideline

MCBV & SSBV BALL VALVES

Port Size		Fastener Size	Description/ Location	Torque	
Inch	mm			ft-lb	Nm
3/4" - 2"	20 - 50	1/2" - 13	Main Body Bolts	35	47
		3/4" NPT	Lower Plug	Secure to Seal	Secure to Seal
2 1/2" - 3"	65 - 75	3/4" - 10	Main Body Bolts	90	122
		3/4" NPT	Lower Plug	Secure to Seal	Secure to Seal

QSV QUARTER-TURN SERVICE VALVES

Port Size		Fastener Size	Description/ Location	Torque	
Inch	mm			ft-lb	Nm
3/4" - 1 1/4"	20 - 32	5/8" - 11	Body to Flange Bolts/Nuts	70	95
		3/8" NPT	Lower Plug	Secure to Seal	Secure to Seal
1 1/2" - 2"	40 - 50	5/8" - 11	Body to Flange Bolts/Nuts	70	95
		3/8" NPT	Lower Plug	Secure to Seal	Secure to Seal

A4t PRESSURE REGULATORS

Port Size		Fastener Size	Description/ Location	Torque	
Inch	mm			ft-lb	Nm
--	--	1/4" - 20	Pressure Pilot Screws	10	14
3/4" - 1 1/4"	20 - 32	1/2" - 13	Top Adapter Bolts	55	74
		3/8" - 16	Bottom Cover Bolts	30	40
		1/4" - NPT	Drain Port	Secure to Seal	Secure to Seal
1 1/2" - 2 1/2"	40 - 65	5/8" - 11	Top Adapter Bolts	100	135
		1/2" - 13	Bottom Cover Bolts	45	61
		1/4" - NPT	Drain Port	Secure to Seal	Secure to Seal

S4t, S7t, and S8t SOLENOID VALVES

Port Size		Fastener Size	Description/ Location	Torque	
Inch	mm			ft-lb	Nm
--	--	#8 - 32	Solenoid Tube Screws	20 in-lb	2
1/2"	13	1/4" - 20	Strainer Cover Screws	10	14
3/4" - 1 1/4"	20 - 32	1/2" - 13	Top Adapter Bolts	55	74
		3/8" - 16	Bottom Cover Bolts	30	40
		1/4" - NPT	Drain Port	Secure to Seal	Secure to Seal
1 1/2" - 2 1/2"	40 - 65	5/8" - 11	Top Adapter Bolts	100	135
		1/2" - 13	Bottom Cover Bolts	45	61
		1/4" - NPT	Drain Port	Secure to Seal	Secure to Seal

CK5Dt GAS POWERED CHECK VALVES

Port Size		Fastener Size	Description/ Location	Torque	
Inch	mm			ft-lb	Nm
		5/8" - 11	Top Adapter Bolts	100	135
1 1/2" - 2 1/2"	40 - 65	1/2" - 13	Bottom Cover Bolts	45	61
		1/4" - NPT	Drain Port	Secure to Seal	Secure to Seal

RECOMMENDED PROCEDURE FOR FLANGE BOLT TIGHTENING

Use fresh gaskets. Ensure all sealing surfaces are clean and free of damage and debris. A light coating of refrigerant oil may be used on gaskets. Verify flanges are parallel and pipes are in alignment. Use proper and approved bolting materials. Tighten fasteners gradually and in an opposing pattern. Reference the latest edition of IIAR Standards for further guidance.

Anti-seize lubricant recommended for all stainless steel fasteners.

HANTEMP Controls reserves the right to alter product specifications, materials, and pricing without notice.