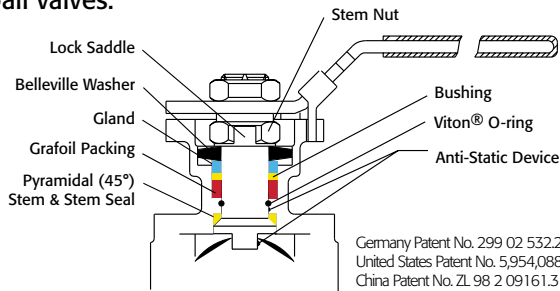




Triac C8/CR Series 3-Piece Ball Valves feature a direct mount automation pad. The high quality investment castings feature a fully machined bore. The superior live loaded packing system is accomplished with Belleville washers, "V" ring packing and a unique primary pyramidal stem seal. This advanced sealing system provides protection against stem leaks experienced by ordinary ball valves.



VALVE SIZE	VALVE Cv	
	FULL PORT	REG. PORT
1/4"	7	N/A
3/8"	8	N/A
1/2"	15	12
3/4"	40	15
1"	70	34
1-1/4"	110	56
1-1/2"	250	95
2"	430	200

PCTFE seats are standard and are excellent for services that call for low temperatures, as well as more demanding ones such as using liquid nitrogen for freezer applications. Call us for details.

### **Easy to Automate!**

See automated data sheets for pre-sized assemblies



**Pneumatic**



**Electric**



# Series C8/CR Cryogenic

## HIGH PERFORMANCE 3-Piece Design

**Sizes 1/4"-2", Full Port (C8)  
Sizes 1/2"-2", Regular Port (CR)**

**Stainless Steel Body**

**Threaded, Socket Weld  
or Butt Weld**

**1000 psi WOG**

**ISO 5211 Direct Mounting Pad**

**Superior Live Loaded Packing System**

**Blowout Proof Stem w/ Dual  
Anti-Static Devices**

**PCTFE Seats**

**17-4 PH Stem**

**Lockable Manual Handle**

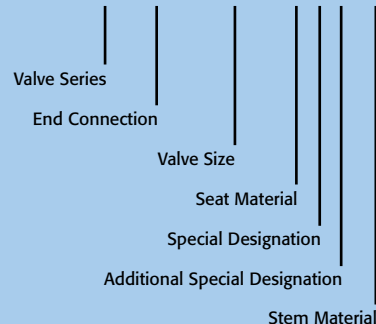
#### STANDARDS

DESIGN	ANSI/ASME B16.34, BS 6364
END CONNECTIONS	ASME B16.25, B1.20.1, B16.11
PRESSURE TESTING	API 598
MOUNTING	ISO 5211
MARKING SYSTEM FOR VALVES	ISO 5209
CRYOGENIC SERVICE TEST	BS 6364
MATERIAL CERTIFICATION	EN 10204-3.1 MTR
QUALITY ASSURANCE	ISO 9001:2008

### HOW TO ORDER MANUAL VALVES

SAMPLE PART #

**C8-TH-0200-KXX-A**



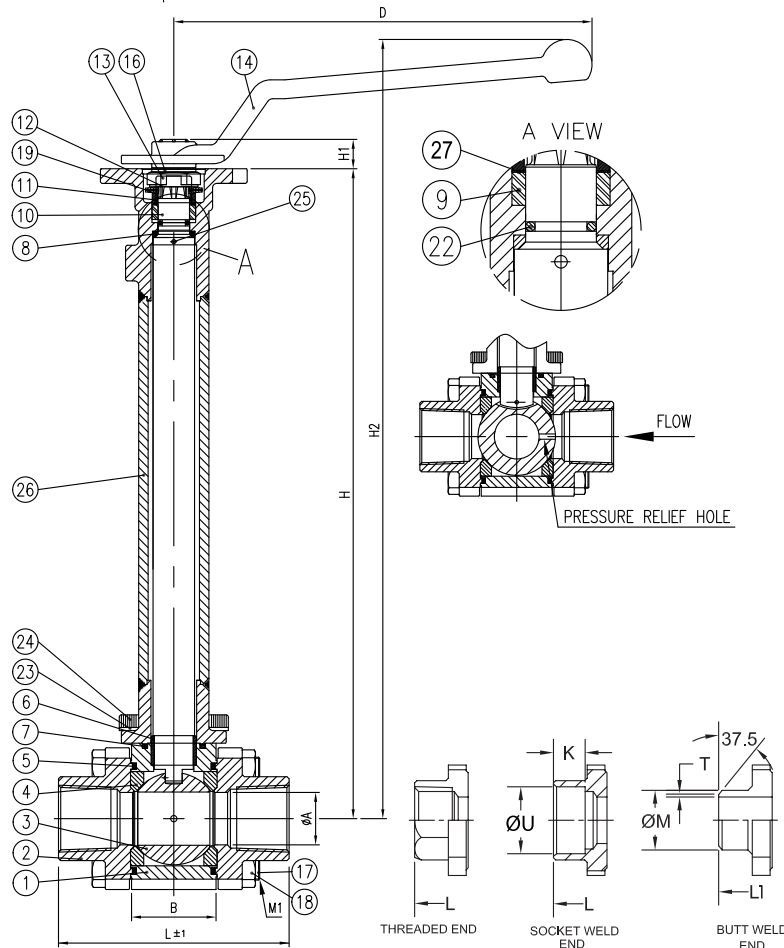
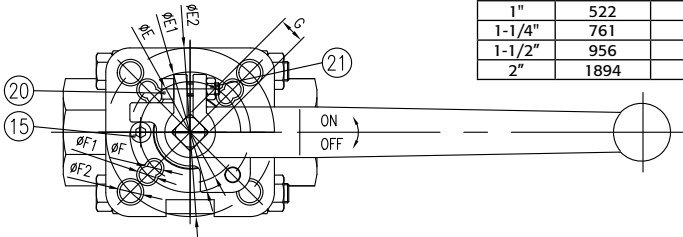
See part number matrix for itemized options

# Series C8/CR

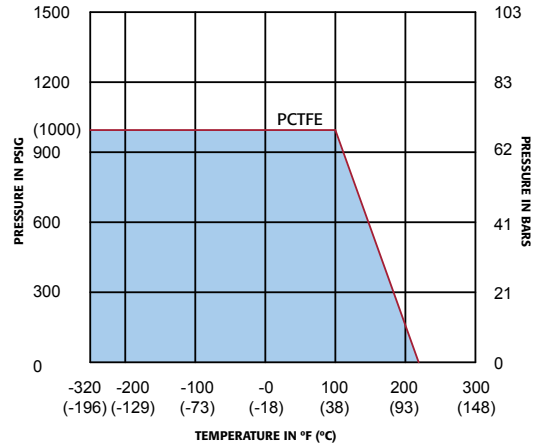
High Performance  
Full Port or Regular Port  
3-Piece Ball Valve  
ISO 5211 Direct Mount

Threaded, Socket Weld  
or Butt Weld  
1000 psi WOG  
1/4" - 2"

Valve Torque (In-Lbs) with PCTFE Seats @ 1000 psi		
Size	Full Port	Regular Port
1/4"	186	-
3/8"	186	-
1/2"	186	186
3/4"	416	186
1"	522	416
1-1/4"	761	522
1-1/2"	956	761
2"	1894	956



Pressure vs. Temperature Chart  
for Valve 1/4" to 2"



## MATERIALS LIST

NO.	PART NAME	QTY	MATERIAL
1	BODY	1	ASTM A351 GRADE CF8M*
2	END CAP	2	ASTM A351 GRADE CF8M*
3	BALL	1	1/4" THRU 3/8" ASTM A276 SS316*
3	BALL	1	1/2" THRU 2" ASTM A351 GRADE CF8M*
4	SEAT	2	PCTFE
5	JOINT GASKET	2	GRAFOIL
6	STEM BEARING	1	PTFE
7	JOINT GASKET	1	GRAFOIL
8	STEM SEAL	1	TFM-1600
9	STEM PACKING	1	GRAFOIL
10	STEM	1	17-4 PH*
11	GLAND BUSHING	1	AISI 304
12	LOCK SADDLE	1	AISI 304
13	STEM NUT	1	AISI 304
14	HANDLE	1	ASTM A351 GRADE CF8
15	STOP BOLT	1	AISI 304
16	STEM WASHER	1	AISI 304
17	BODY BOLT	4	ASTM A193 GRADE B8*
18	BODY BOLT NUT	4	ASTM A194 GRADE 8*
19	BELLEVILLE WASHER	2	AISI 301
20	HANDLE SCREW	1	AISI 304
21	HANDLE SCREW NUT	1	AISI 304
22	O-RING	1	VITON®
23	SCREW WASHER	4	AISI 304*
24	SCREW	4	AISI 304*
25	ANTI-STATIC DEVICE	2	AISI 316*
26	EXTENDED BONNET	1	ASTM A351 GRADE CF8M*
27	GLAND WASHER	1	RTFE

\*Cryogenic Treatment before Assembly.

## DIMENSIONS (IN)

SIZE	ØA		B		D		ØE		ØE1		ØE2		ØF		ØF1		ØF2		G		H		H1		H2		K		L		ØM		M1		T		ØU		(LBS)		ISO 5211	
	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R		
1/4"	0.45	-	0.96	-	6.30	-	1.417	-	1.654	-	1.969	-	0.26	-	-	-	0.28	-	0.354	-	11.81	-	0.35	-	13.60	-	0.39	-	2.95	-	0.54	-	M6	-	-	0.54	-	5	-	F03/F04/F05	-	
3/8"	0.50	-	0.96	-	6.30	-	1.417	-	1.654	-	1.969	-	0.26	-	-	-	0.28	-	0.354	-	11.97	-	0.35	-	13.60	-	0.39	-	2.95	-	0.69	-	M6	-	-	0.69	-	5	-	F03/F04/F05	-	
1/2"	0.59	0.50	0.96	0.96	6.30	6.30	1.417	1.417	1.654	1.654	1.969	1.969	0.26	0.26	-	-	0.28	0.28	0.354	0.354	11.81	11.97	0.35	0.35	13.60	13.60	0.39	0.39	2.85	2.95	0.85	0.85	M6	M7	0.06	0.06	0.85	0.85	5	5	F03/F04/F05	F03/F04/F05
3/4"	0.79	0.59	1.24	0.96	6.30	6.30	1.417	1.417	1.654	1.654	1.969	1.969	0.26	0.26	-	-	0.28	0.28	0.354	0.354	11.97	11.81	0.35	0.35	13.76	13.60	0.51	0.51	3.36	2.85	1.07	1.07	M8	M6	0.06	0.06	1.07	1.07	6	5	F03/F04/F05	F03/F04/F05
1"	0.98	0.79	1.63	1.24	7.87	6.30	1.654	1.417	1.969	1.654	2.756	2.756	0.24	0.26	0.28	-	0.35	0.28	0.433	0.354	12.20	11.97	0.43	0.35	14.57	13.76	0.51	0.51	4.15	3.36	1.34	1.34	M8	M8	0.06	0.06	1.34	1.34	9	6	F04/F05/F07	F03/F04/F05
1-1/4"	1.26	0.98	1.91	1.63	7.87	7.87	1.654	1.654	1.969	1.969	2.756	2.756	0.24	0.24	0.28	0.28	0.35	0.35	0.433	0.433	12.36	12.20	0.43	0.43	14.72	14.57	0.51	0.51	4.37	4.15	1.68	1.68	M10	M8	0.06	0.06	1.68	1.68	11	9	F04/F05/F07	F04/F05/F07
1-1/2"	1.50	1.26	2.22	1.91	9.84	7.87	1.969	1.654	2.756	1.969	-	2.756	0.30	0.24	0.35	0.28	-	0.35	0.551	0.433	12.94	12.36	0.55	0.43	15.66	14.72	0.51	0.51	5.01	4.37	1.91	1.91	M10	M10	0.06	0.06	1.91	1.91	16	10	F05/F07	F04/F05/F07
2"	1.97	1.50	2.81	2.22	9.84	9.84	1.969	1.969	2.756	2.756	-	-	0.30	0.30	0.35	0.35	-	-	0.551	0.551	13.91	12.94	0.55	0.55	16.63	15.66	0.63	0.63	5.71	5.01	2.38	2.38	M12	M10	0.06	0.06	2.38	2.38	22	16	F05/F07	F05/F07

F denotes Full Port Dimensions

R denotes Regular Port Dimensions

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A-T Controls reserves the right to change product designs and technical/dimensional specifications without notice.

For Oxygen Service, call for details.



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