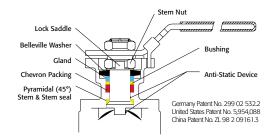


Triac 8R Series 3-Piece Ball Valves are the finest quality 3-piece valves on the market. The high quality investment castings feature a fully machined bore. The superior live-loaded packing system is accomplished with Belleville washers, "V" ring packing and a unique primary pyramidal stem seal. This advanced sealing system provides protection against stem leaks experienced by ordinary ball valves.



VALVE SIZE	VALVE Cv
1/4"	7
3/8"	8
1/2"	9
3/4"	15
1"	42
1-1/4"	45
1-1/2"	125
2"	165
2-1/2"	245

RTFE seats are standard, but various options are available for seat materials. The 50/50 STFE seat option is excellent for services that call for higher temperatures and more difficult applications including steam.

Call us for details.

Easy to Automate!

See automated data sheets for pre-sized assemblies





Pneumatic

Electric



Series 8R HIGH PERFORMANCE 3-Piece Design

Sizes 1/4"- 2-1/2"
Regular Port Design
1500/2000 psi WOG (by size)
316SST or WCB

Threaded, Socket Weld, or Butt Weld Ends

Superior Live Loaded Packing System

ISO 5211 Actuator Mounting Pad

Blowout Proof Stem w/ Dual Anti-Static Devices

RTFE Seats Standard
Pyramidal Stem Seal Design
Lockable Manual Handle

STANDARDS

 Design
 ANSI/ASME B16.34

 END CONNECTIONS
 ASME B16.25, B1.20.1, B16.11

 ASME B16.25
 ASME B16.25

PRESSURE TESTING API 598
MOUNTING ISO 5211

MARKING SYSTEM FOR VALVES MSS SP-25, MSS SP-110, ISO 5209

SAFETY INTEGRITY IEC 61508:2010; SIL 3
MATERIAL CERTIFICATION EN 10204-3.1 MTR
QUALITY ASSURANCE ISO 9001:2008

HOW TO ORDER MANUAL VALVES SAMPLE PART # 8RC-TH-0200-XXX

Valve Series

Carbon Steel

End Connection

Additional Special Designation

Seat Material

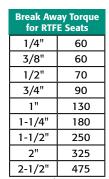
Valve Size

See part number matrix for itemized options

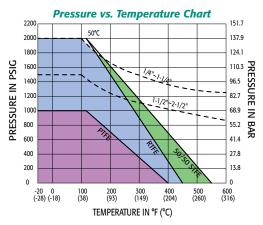


High Performance, Regular Port 3-Piece Ball Valve ISO 5211 Mounting Pad

1500 & 2000 psi WOG by size 1/4" to 2-1/2"



NOTE: For other seat material, consult factory



NOTE: Dotted line shows the rating for valve body. Solid line shows the rating for valve seat. Both ratings need to be considered when determining the limitation of the valve for specific application. Consult factory for other seat materials.

Z THREAD X 4 PLCS 14) øAC (12) (13) <u></u> 9 (5) A VIEW ۷ 4 3 2 1) B-VIEW C -VIEW MØ HØ g φb -L2 BUTT WELD END THREADED END SOCKET WELD **END**

MATERIALS LIST

NO.	PART NAME	QTY	STAINLESS STEEL	CARBON STEEL
1	BODY	1	ASTM A351 GRADE CF8M	ASTM A216 GRADE WCB
2	TH END CAP	2	ASTM A351 GRADE CF8M	ASTM A216 GRADE WCB
2	SW/BW END CAP	2	ASTM A351 GRADE CF3M	ASTM A216 GRADE WCB
3	BALL	1	1/4" THRU 3/8" ASTM A276 SS 316	1/4" THRU 3/8" ASTM A276 SS 316
3	BALL	1	1/2" THRU 2-1/2" ASTM A351 GRADE CF8M	1/2" THRU 2-1/2" ASTM A351 GRADE CF8M
4	SEAT	2	RTFE	RTFE
5	JOINT GASKET	2	PTFE	PTFE
6	STEM	1	ASTM A276 SS 316	ASTM A276 SS 316
7	STEM SEAL	1	RTFE	RTFE
8	STEM PACKING	1	MG1241	MG1241
9	GLAND BUSHING	1	AISI 304	AISI 304
10	BELLEVILLE WASHER	2	AISI 301	AISI 301
11	LOCK SADDLE	1	AISI 304	AISI 304
12	STEM NUT	2	AISI 304	AISI 304
13	HANDLE	1	AISI 304	AISI 304
14	HANDLE SLEEVE	1	VINYL	VINYL
15	STOP BOLT	1	AISI 304	AISI 304
16	BODY BOLT	*	ASTM A193 GRADE B8	ASTM A193 GRADE B8
17	BODY NUT	*	ASTM A194 GRADE 8	ASTM A194 GRADE 8
18	HANDLE LOCK	1	AISI 304	AISI 304
19	ANTI-STATIC DEVICE	2	AISI 316	AISI 316

L	DIMENS	SIONS	(IN)											*2-1	/2"- 6	PCS.								
	SIZE	Α	AC	AD	В	С	D	DD	Е	F	G	Н	K	L	L1	L2	M	N	Р	Т	Υ	Z	ISO 5211	LBS
	1/4"	0.39	0.98	0.37	0.256	5.28	1.17	1.417	0.29	2.53	0.02	0.56	0.39	2.55	0.81	2.55	0.54	0.36	0.39	0.06	0.24	M5	F03	1.5
	3/8"	0.39	0.98	0.37	0.256	5.28	1.17	1.417	0.29	2.53	0.02	0.69	0.39	2.55	0.81	2.55	0.69	0.49	0.39	0.06	0.24	M5	F03	1.5
	1/2"	0.39	0.98	0.37	0.256	5.28	1.17	1.417	0.29	2.53	0.02	0.86	0.39	2.55	0.81	2.55	0.85	0.62	0.39	0.06	0.24	M5	F03	1.5
	3/4"	0.59	0.98	0.37	0.256	5.28	1.14	1.417	0.63	2.81	0.08	1.07	0.51	2.85	0.96	2.94	1.07	0.83	0.59	0.06	0.29	M5	F03	1.9
	1"	0.79	0.98	0.37	0.256	5.28	1.30	1.417	0.71	2.99	0.08	1.33	0.51	3.36	1.24	3.54	1.34	1.05	0.79	0.06	0.35	M5	F03	3.2
	1-1/4"	0.98	1.18	0.44	0.315	6.69	1.42	1.654	0.97	3.24	0.08	1.69	0.51	4.15	1.63	4.31	1.68	1.38	0.98	0.06	0.43	M5	F04	4.0
	1-1/2"	1.26	1.18	0.44	0.315	6.69	1.57	1.654	0.96	3.44	0.08	1.93	0.51	4.37	1.91	4.5	1.91	1.61	1.26	0.06	0.38	M5	F04	5.7
	2"	1.50	1.38	0.56	0.382	8.15	1.86	1.969	1.19	4.08	0.09	2.41	0.63	5.01	2.22	5.12	2.38	2.07	1.50	0.06	0.48	М6	F05	8.1
	2-1/2"	1.97	1.38	0.56	0.382	8.15	2.74	1.969	1.02	4.79	0.06	2.91	0.63	5.71	2.81	5.71	3.00	2.59	1.97	0.08	0.50	М6	F05	12.0

*1/4" THRU 2"- 4 PCS.



Pneumatic Double Acting Automated Ball Valve Package **Series 8R 3-Piece Ball Valve**

Sizes 1/4"- 2-1/2" **Regular Port Design** 1500/2000 psi WOG (by size) 316SST or WCB TH, SW, or BW Ends **Superior Live Loaded Packing** System Blowout Proof Stem w/ Dual **Anti-Static Devices** RTFE Seats Standard Pyramidal Stem Seal Design

STANDARDS

DESIGN **END CONNECTIONS** PRESSURE TESTING

MARKING SYSTEM FOR VALVES MSS SP-25, MSS SP-110,

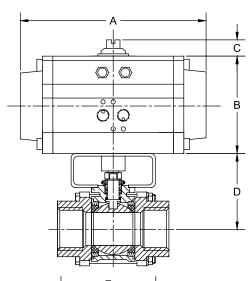
SAFETY INTEGRITY MATERIAL CERTIFICATION **QUALITY ASSURANCE**

ANSI/ASME B16.34 ASME B16.25, B1.20.1, B16.11 ISO 5211

ISO 5209

IEC 61508:2010; SIL 3 EN 10204-3.1 MTR ISO 9001:2008

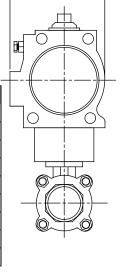




DIMENSIONS (IN)

VALVE SIZE	A	В	С	D	E		VALVE C
1/4"	5.98	2.76	0.79	2.65	2.58		7
3/8"	5.98	2.76	0.79	2.65	2.58		8
1/2"	5.98	2.76	0.79	2.65	2.58		9
3/4"	7.95	3.43	0.79	2.65	3.29		15
1"	7.95	3.43	0.79	2.78	3.29		42
1-1/4"	7.95	3.43	0.79	2.90	3.29		45
1-1/2"	9.29	4.49	0.79	3.13	4.41		125
2"	9.29	4.49	0.79	3.42	4.41		165
2-1/2"	10.87	4.88	0.79	4.30	4.82		245
DIMENSIONS	HOWN AR	F FOR A	SSEMBI	IES SIZEI	D FOR 8	n	DCI CI IDDI

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY



SIZED FOR 80 psi AIR SUPPLY							
SIZE	MODEL						
1/4"	8R-TX-025/TR1D-XX						
3/8"	8R-TX-038/TR1D-XX						
1/2"	8R-TX-050/TR1D-XX						
3/4"	8R-TX-075/2R2D-XX						
1"	8R-TX-100/2R2D-XX						
1-1/4"	8R-TX-125/2R2D-XX						
1-1/2"	8R-TX-150/2R3D-XX						
2"	8R-TX-200/2R3D-XX						
2-1/2"	8R-TX-250/2R4D-XX						

60 psi AIR SUPPLY						
SIZE	MODEL					
1/4"	8R-TX-025/TR1D-XX					
3/8"	8R-TX-038/TR1D-XX					
1/2"	8R-TX-050/TR1D-XX					
3/4"	8R-TX-075/2R2D-XX					
1"	8R-TX-100/2R2D-XX					
1-1/4"	8R-TX-125/2R2D-XX					
1-1/2"	8R-TX-150/2R3D-XX					
2"	8R-TX-200/2R3D-XX					
2-1/2"	8R-TX-250/2R4D-XX					

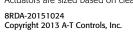
SIZED FOR

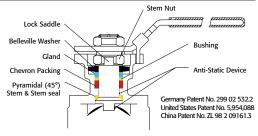
Gland	MODEL	SIZE
Chevron Packing Pyramidal (45°)	8R-TX-025/TR1D-XX	1/4"
Stem & Stem seal	8R-TX-038/TR1D-XX	3/8"
	8R-TX-050/TR1D-XX	1/2"
SAMPLE PART #	8R-TX-075/2R2D-XX	3/4"
8RC-TX-100	8R-TX-100/2R2D-XX	1"
	8R-TX-125/2R2D-XX	1-1/4"
Valve Series Carbon Steel	8R-TX-150/2R3D-XX	1-1/2"
End Connection	8R-TX-200/2R3D-XX	2"
Seat Material	8R-TX-250/2R4D-XX	2-1/2"

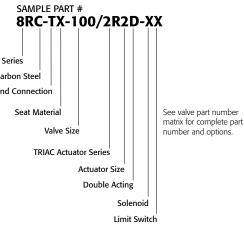
OPTIONS

DESCRIPTION	PART NO. SUFFIX	DESCRIPTION	PART NO. SUFFIX
NEMA 4 Solenoid	(A)	NEMA 4 Limit Switch (2) spdt	(A)
NEMA 7 Solenoid	(B)	NEMA 7 Limit Switch (2) spdt	(B)
Intrinsically Safe Solenoid	(C)	Instrinsically Safe Limit Switch	(C)

Other options available - call for details Actuators are sized based on clean/clear fluid.











Pneumatic Spring Return

Automated **Ball Valve Package Series 8R 3-Piece Ball Valve**

Sizes 1/4"- 2-1/2" **Regular Port Design** 1500/2000 psi WOG (by size) 316SST or WCB TH, SW, or BW Ends **Superior Live Loaded Packing** System Blowout Proof Stem w/ Dual **Anti-Static Devices RTFE Seats Standard** Pyramidal Stem Seal Design

STANDARDS

DESIGN **END CONNECTIONS** PRESSURE TESTING MOUNTING

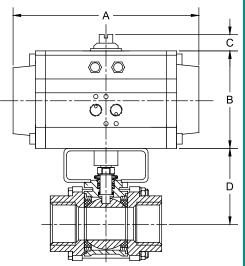
SAFETY INTEGRITY MATERIAL CERTIFICATION **OUALITY ASSURANCE**

ANSI/ASME B16.34 ASME B16.25, B1.20.1, B16.11 API 598

ISO 5211 MARKING SYSTEM FOR VALVES MSS SP-25, MSS SP-110, ISO 5209

IEC 61508:2010; SIL 3 EN 10204-3.1 MTR ISO 9001:2008





DIV

VALVE SIZE	A	В	С	D	E	VALVE Cv	
1/4"	7.95	3.43	0.79	2.65	3.29	7	
3/8"	7.95	3.43	0.79	2.65	3.29	8	
1/2"	7.95	3.43	0.79	2.65	3.29	9	
3/4"	7.95	3.43	0.79	2.62	3.29	15	
1"	9.29	4.49	0.79	2.78	4.41	42	
1-1/4"	9.29	4.49	0.79	2.90	4.41	45	
1-1/2"	9.29	4.49	0.79	3.13	4.41	125	
2"	10.87	4.88	0.79	3.42	4.82	165	
2-1/2"	11.46	5.28	0.79	4.30	5.20	245	
DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SLIPPIV							

DIMENSIONS SHOWN ARE FOR ASSEMBLIES SIZED FOR 80 PSI SUPPLY

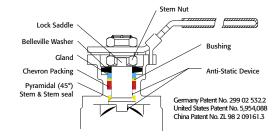
MENSIONS (IN)									
LVE SIZE	А	В	С	D	E		VALVE Cv		
1/4"	7.95	3.43	0.79	2.65	3.29		7		
3/8"	7.95	3.43	0.79	2.65	3.29		8		
1/2"	7.95	3.43	0.79	2.65	3.29		9		
3/4"	7.95	3.43	0.79	2.62	3.29		15		
1"	9.29	4.49	0.79	2.78	4.41		42		
1-1/4"	9.29	4.49	0.79	2.90	4.41		45	—(- ((
1-1/2"	9.29	4.49	0.79	3.13	4.41		125		
2"	10.87	4.88	0.79	3.42	4.82		165		
2-1/2"	11.46	5.28	0.79	4.30	5.20		245		

SIZED FOR
80 psi AIR SUPPLY

00 psi / iii. 00 i i 2i							
SIZE	MODEL						
1/4"	8R-TX-025/2R2S-XX						
3/8"	8R-TX-038/2R2S-XX						
1/2"	8R-TX-050/2R2S-XX						
3/4"	8R-TX-075/2R2S-XX						
1"	8R-TX-100/2R3S-XX						
1-1/4"	8R-TX-125/2R3S-XX						
1-1/2"	8R-TX-150/2R3S-XX						
2"	8R-TX-200/2R4S-XX						
2-1/2"	8R-TX-250/2R5S-XX						

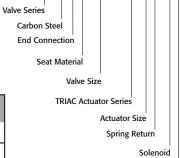
SIZED FOR
60 psi AIR SUPPLY

00 ps://iik 0011 21		
SIZE	MODEL	
1/4"	8R-TX-025/2R2S-XX	
3/8"	8R-TX-038/2R2S-XX	
1/2"	8R-TX-050/2R2S-XX	
3/4"	8R-TX-075/2R2S-XX	
1"	8R-TX-100/2R3S-XX	
1-1/4"	8R-TX-125/2R3S-XX	
1-1/2"	8R-TX-150/2R4S-XX	
2"	8R-TX-200/2R4S-XX	
2-1/2"	8R-TX-250/2R6S-XX	



8RC-TX-050/2R2S-XX

SAMPLE PART #



See valve part number matrix for complete part number and options.

OPTIONS

DESCRIPTION	PART NO. SUFFIX	DESCRIPTION	PART NO. SUFFIX
NEMA 4 Solenoid	(A)	NEMA 4 Limit Switch (2) spdt	(A)
NEMA 7 Solenoid	(B)	NEMA 7 Limit Switch (2) spdt	(B)
Intrinsically Safe Solenoid	(C)	Instrinsically Safe Limit Switch	(C)

Other options available - call for details Actuators are sized based on clean/clear fluid. Limit Switch



Electric **Automated Ball Valve Package**

Series 8R **3-Piece Ball Valve**

Sizes 1/4"- 2-1/2" **Regular Port Design** 1500/2000 psi WOG (by size) 316SST or WCB TH, SW, or BW Ends **Superior Live Loaded Packing** System Blowout Proof Stem w/ Dual **Anti-Static Devices RTFE Seats Standard**

Pyramidal Stem Seal Design

STANDARDS

DESIGN **END CONNECTIONS** PRESSURE TESTING

ANSI/ASME B16.34 ASME B16.25, B1.20.1, B16.11 API 598

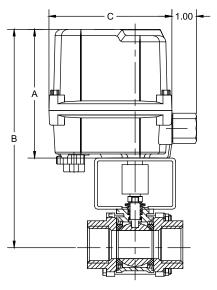
MOUNTING ISO 5211

MARKING SYSTEM FOR VALVES MSS SP-25, MSS SP-110, ISO 5209

SAFETY INTEGRITY MATERIAL CERTIFICATION QUALITY ASSURANCE

IEC 61508:2010; SIL 3 EN 10204-3.1 MTR ISO 9001:2008

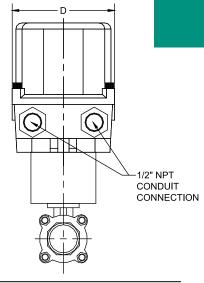




DIMENSIONS (IN)

VALVE SIZE	A	В	С	D	١
1/4"	5.24	7.89	4.94	4.08	
3/8"	5.24	7.89	4.94	4.08	
1/2"	5.24	7.89	4.94	4.08	
3/4"	5.24	7.89	4.94	4.08	
1"	5.24	8.02	4.94	4.08	
1-1/4"	5.24	8.14	4.94	4.08	
1-1/2"	5.24	8.29	4.94	4.08	
2"	5.24	8.66	4.94	4.08	
2-1/2"	5.24	9.54	4.94	4.08	
					_

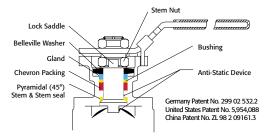
VALVE Cv	ı
7	l
8	
9	
15	
42	
45	
125	
165	
245	

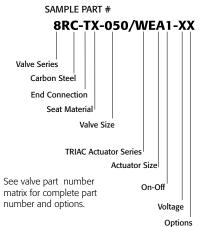


ON-OFF		
SIZE	MODEL	
1/4"	8R-TX-025/WEA1-XX	
3/8"	8R-TX-038/WEA1-XX	
1/2"	8R-TX-050/WEA1-XX	
3/4"	8R-TX-075/WEA1-XX	
1"	8R-TX-100/WEA1-XX	
1-1/4"	8R-TX-125/WEA1-XX	
1-1/2"	8R-TX-150/WEA1-XX	
2"	8R-TX-200/WEA1-XX	
2-1/2"	8R-TX-250/WEB1-XX	

MODULATING		
SIZE	MODEL	
1/4"	8R-TX-025/WEA2-XX	
3/8"	8R-TX-038/WEA2-XX	
1/2"	8R-TX-050/WEA2-XX	
3/4"	8R-TX-075/WEA2-XX	
1"	8R-TX-100/WEA2-XX	
1-1/4"	8R-TX-125/WEA2-XX	
1-1/2"	8R-TX-150/WEA2-XX	
2"	8R-TX-200/WEA2-XX	
2-1/2"	8R-TX-250/WEB2-XX	

SIZE	MODEL
1/4"	8R-TX-025/WEA2-XX
3/8"	8R-TX-038/WEA2-XX
1/2"	8R-TX-050/WEA2-XX
3/4"	8R-TX-075/WEA2-XX
1"	8R-TX-100/WEA2-XX
1-1/4"	8R-TX-125/WEA2-XX
1-1/2"	8R-TX-150/WEA2-XX
2"	8R-TX-200/WEA2-XX
2.1/2"	OD TV OF O MIEDO VV







Cincinnati, Ohio 45246

www.atcontrols.com

NOTE: Heater and thermostat standard (2) auxiliary switches standard Other options available - call for details Actuators are sized based on clean/clear fluid.

OPTIONS

DESCRIPTION

24 VAC/24 VDC/220VAC

Feedback potentiometer

8REL-20151024 Copyright 2013 A-T Controls, Inc.

Valve Options

Various Seat Materials

PTFE, RTFE, 50/50 STFE, 25% CTFE, Delrin, PEEK, UHMWPE, TFM-1600

Operator Options

Quarter-turn Gear Operators
Spring Return "Deadman" Handles
Oval handles, TEE Handles

Specials and Solutions

Steam Jackets
Stem Extensions
V-ported Control Valves
Multi-port Valve Solutions
Fugitive Emissions Bonnets (TSM's)
Oxygen Cleaning
Lockout Brackets
Vented Balls
"No Play" Mounting Kits

FM Approved Valves and Assemblies



Manual and automated valve assemblies for gas burner management applications and safety shutoff

Other Products

Special SeatsBalls and Seal Designs



Floor Mounted Damper Drives



Fusible Link Assemblies



Lockout Mounting Kits



Special Multi-Port Valves



Steam Jacketed Valves



Limit SwitchesMounted on Manual Valves



180° Actuators



Stem Extensions



Dual Valve Assemblies

