

ONE PIECE REDUCED PORT

<p>ONE PIECE BALL VALVE</p> <p>01 Threaded End 02 Blow-out-proof Stem Design 03 Temperature Range : -4 to 356 °F (-20 to 180 °C) 04 BODY : ASTM A351 Gr.CF8M (1.4408) 05 BALL : SS316 / CF8M 06 STEM : SS316 07 SEAT : PTFE</p>	 <p>V-83 800 psi (PN40) • 1/4" - 2"</p>	 <p>V-103H 800 psi (PN40) • 1/4" - 2"</p>
 <p>V-110H 800 psi (PN40) • 1/4" - 2"</p>	 <p>V-103P 800 psi (PN40) • 1/4" - 2" Option : Locking device</p>	 <p>V-104H 2000 psi (PN140) • 1/4" - 1" 1500 psi (PN100) • 1-1/4" - 2"</p>

TWO PIECES FULL PORT

<p>TWO PIECES BALL VALVE</p> <p>01 Threaded End 02 Blow-out-proof Stem Design 03 Temperature Range : -4 to 356 °F (-20 to 180 °C) 04 BODY : ASTM A351 Gr.CF8M (1.4408) 05 BALL : CF8M 06 STEM : SS316 07 SEAT : PTFE / RTFE</p>	 <p>V-168 1000 psi (PN63) • 1/4" - 2"</p>	 <p>V-109 • M3 LENGTH 1000 psi (PN63) • 1/4" - 3"</p>
 <p>V-166 • M3 LENGTH 2000 psi (PN140) • 1/4" - 1" 1500 psi (PN100) • 1-1/4" - 2"</p>	 <p>V-204 1000 psi (PN63) • 1/4" - 2"</p>	 <p>V-106 1000 psi (PN63) • 1/4" - 2", 800 psi (PN40) • 2-1/2" - 3" Option : Locking device</p>

TWO PIECES REDUCED PORT

<p>TWO PIECES BALL VALVE</p> <p>01 Threaded End 02 Blow-out-proof Stem Design 03 Temperature Range : -4 to 356 °F (-20 to 180 °C) 04 BODY : ASTM A351 Gr.CF8M (1.4408) 05 BALL : CF8M 06 STEM : SS316 07 SEAT : PTFE / RTFE</p>	 <p>V-108 2000 psi (PN140) • 1/4" - 1" 1500 psi (PN100) • 1-1/4" - 2"</p>	 <p>V-011 800 psi (PN40) • 1/4" - 1"</p>
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THREE PIECES BALL VALVES

V-105



Design Feature

- Full Bore
- 1/4" – 4" (DN8 - DN100)
- Blow-out proof stem
- End connections : Threaded end
Socket Weld end / Butt Weld end
3A Tube end / Tri-Clamp end
- Options :
 1. Locking device
 2. Face to Face : DIN 3202 M3/S13

Body	ASTM A351 Gr.CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	PTFE
Temperature Range	-4 to 356 °F (-20 to 180 °C)
Working Pressure	1/4" - 2" 1000 psi (PN63) 2-1/2" - 4" 800 psi (PN40)

V-105M



Design Feature

- Full Bore
- 1/4" – 4" (DN8 - DN100)
- Blow-out proof stem
- ISO 5211 mounting flange
- Locking handle
- End connections : Threaded end
Socket Weld end / Butt Weld end
- Options :
 - Face to Face : DIN 3202 M3/S13

Body	ASTM A351 Gr.CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	PTFE
Temperature Range	-4 to 356 °F (-20 to 180 °C)
Working Pressure	1/4" - 2" 1000 psi (PN63) 2-1/2" - 4" 800 psi (PN40)

V-105F



Design Feature

- Full Bore
- 1/2" – 4" (DN15 - DN100)
- Blow-out proof stem
- End connections : Flanged
- Face to Face : EN558-1 F1
- Flange dia. :
EN1092-1 PN40/PN16 RF
- Option : Locking device

Body	ASTM A351 Gr.CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	PTFE
Temperature Range	-4 to 356 °F (-20 to 180 °C)
Working Pressure	800 psi (PN40)

V-105W



Design Feature

- Full Bore
- 1/2" – 4" (DN15 - DN100)
- Blow-out proof stem
- End connections :
Ext. Butt Weld
- Option : Locking device

Body	ASTM A351 Gr.CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	PTFE
Temperature Range	-4 to 356 °F (-20 to 180 °C)
Working Pressure	1/2" - 2" 1000 psi (PN63) 2-1/2" - 4" 800 psi (PN40)

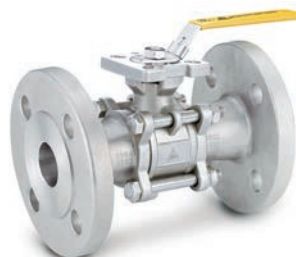
V-158 SERIES

- Full Bore • Blow-out proof stem • Anti-static design • Direct mounting type • Locking device handle
- Temperature Range : -4 to 356 °F (-20 to 180 °C)
- BODY **CF8M** • BALL **CF8M** • STEM **SS316** • SEAT **RTFE**
- Working Pressure 1/4" – 2" 1000psi (PN63) 2-1/2" – 4" 800psi (PN40)



V-158

Threaded • Socket Weld • Butt Weld end
3A Tube end • Tri-Clamp end
Option - Face to Face : DIN3202 M3/S13



V-158F

Face to Face : EN558-1 F1
Flanged end PN40 / 16 RF
Size : 1/2" – 4"



V-158W

Extended Butt Weld end
Size : 1/2" – 4"



THREE PIECES BALL VALVES

V-155



Design Feature

- Full port : 1/4" – 2-1/2" (DN8-DN65)
- Reduced port : 3/8" – 2-1/2" (DN10-DN65)
- Blow-out proof stem , Anti-static design
- ISO 5211 mounting flange
- Handle with locking device
- End connection :Thread end, Socket weld, Butt weld end

Body	ASTM A351 Gr.CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	RTFE
Working Pressure	1/4"- 1" 2000 psi (PN 140)
	1-1/4" – 2" 1500 psi (PN100)
	2-1/2" 1000 psi (PN 63)

V-255



Design Feature

- Full port : 1/4" – 2" (DN8-DN50)
- Reduced port : 1/2" – 2-1/2" (DN15-DN65)
- Blow-out proof stem, Anti-static design
- ISO 5211 mounting flange
- Handle with locking device
- End connection :Thread end, Socket weld, Butt weld end

Body	ASTM A351 Gr.CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	RTFE
Working Pressure	1/4"- 1" 2000 psi (PN 140)
	1-1/4"- 2" 1500 psi (PN100)

V-355



Design Feature

- Blow-out proof stem, Anti-static design
- Direct mounting type
- End connection :Thread end, Socket weld, Butt weld end
- Handle with locking device

Full Port • 1/4" – 4" (DN8 - DN100)
Reduced Port • 1/2" – 4" (DN15 - DN100)

Body	ASTM A351 Gr. CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	RTFE
Working Pressure	1/4"- 1" 2000psi (PN 140)
	1-1/4" – 2" 1500 psi (PN 100)
	2-1/2" – 4" 1000 psi (PN 63)



FORGED BALL VALVES

V-114H



Design Feature

- Reduced Bore / 1 PIECE design
- 1/4" - 2" (DN8-DN50)
- Blow-out proof stem
- Design per ANSI B16.34
- End connection : Threaded end

Body / Stem	ASTM A105N
Ball / Stem	CF8M / SS316
Seat	PTFE
Temperature Range	-4 to 356 °F (-20 to 180 °C)
Working Pressure (CWP)	2000 psi (PN140) for 1/4"-1"
	1500 psi (PN100) for 1-1/4"-2"

V-755



Design Feature

- Reduced Bore / 3 PIECES design
- 1/4"-2" (DN 8-DN 50)
- Blow-out-proof stem design
- Forged Steel components
- Four Point ISO 5211 mounting Pad Bolt Circle
- Available carbon and Stainless Steel construction
- End Connection: Threaded, Socket weld, Butt weld

Body	ASTM A105 / F316
Ball / Stem	CF8M / SS 316
Seat	RTFE (15% glass fiber filled)
Working pressure	1500 psi
Temperature Range	-4 to 356 °F (-20 to 480 °C)

V-616



Design Feature

- 2 PIECES design
- Blow-out proof stem
- End connection : Threaded end

Full Bore • 1/4" – 3/8" (DN8 - DN10)
Reduced Bore • 1/2" – 2" (DN15 - DN50)

Body	ASTM A105N
Ball	SS316 / CF8M
Stem / Seat	SS316 / MG241
End Connections	-4 to 356 °F (-20 to 180 °C)
Working Pressure (CWP)	2000 psi (PN140) for 1/4" - 1"
	1500 psi (PN100) for 1-1/4" - 2"

MULTI WAY BALL VALVES

K-301 3 Way L / T port



Design Feature

- Standard Bore
- 1/4" – 2" (DN8 - DN50)
- Blow-out proof stem
- 2 seats design for L port
- 3 seats design for T port

Body	ASTM A351 Gr.CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	PTFE
End Connection	Threaded end
Temperature Range	-4 to 356 °F (-20 to 180 °C)
Working Pressure	1/4" – 2" 1000 psi (PN 63)

K-302 3 Way L / T port



Design Feature

- Standard Bore
- 1/4" – 2" (DN8 - DN50)
- Blow-out proof stem
- 3 seats design

Body	ASTM A351 Gr.CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	PTFE
End Connection	Threaded end
Temperature Range	-4 to 356 °F (-20 to 180 °C)
Working Pressure	1/4" – 2" 1000 psi (PN 63)

K-303 3 Way L / T port



Design Feature

- Standard Bore
- 1/4" – 3" (DN8 - DN80)
- Blow-out proof stem
- 3 seats design
- ISO 5211 mounting flange

Body	ASTM A351 Gr.CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	PTFE
End Connection	Threaded end
Temperature Range	-4 to 356 °F (-20 to 180 °C)
Working Pressure	1/4" – 3" 1000 psi (PN 63)

K-364 3 Way L / T port



Design Feature

- Full Bore
- 1/4" – 1-1/2" (DN8 - DN40)
- Blow-out proof stem
- 3 seats design
- ISO 5211 mounting flange

Body	ASTM A351 Gr.CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	PTFE
End Connection	Threaded end
Temperature Range	-4 to 356 °F (-20 to 180 °C)
Working Pressure	1/4" – 1-1/2" 1000 psi (PN 63)

K-318 3 Way L / T port



Design Feature

- Standard Bore
- 1/4" – 2" (DN8 - DN50)
- Blow-out proof stem
- 3 seats design
- ISO 5211 direct mounting to actuator

Body	ASTM A351 Gr.CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	RTFE
End Connection	Threaded end
Temperature Range	-4 to 356 °F (-20 to 180 °C)
Working Pressure	1/4" – 2" 1000 psi (PN 63)

K-338 3 Way L / T port



Design Feature

- Full Bore
- 1/4" – 2" (DN8 - DN50)
- Blow-out proof stem
- 3 seats design
- ISO 5211 direct mounting to actuator

Body	ASTM A351 Gr.CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	PTFE
End Connection	Threaded end
Temperature Range	-4 to 356 °F (-20 to 180 °C)
Working Pressure	1/4" – 2" 1000 psi (PN 63)



MULTI WAY BALL VALVES

K-306 3 Way L / T port



Design Feature

- Standard Bore
- 1/4" – 2" (DN8 - DN50)
- Blow-out proof stem
- 2 seats design
- ISO 5211 mounting flange

Body	ASTM A351 Gr.CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	PTFE
End Connection	Threaded end
Temperature Range	-4 to 356 °F (-20 to 180 °C)
Working Pressure	1/4" – 2" 1000 psi (PN 63)

K-314 3 Way L / T port

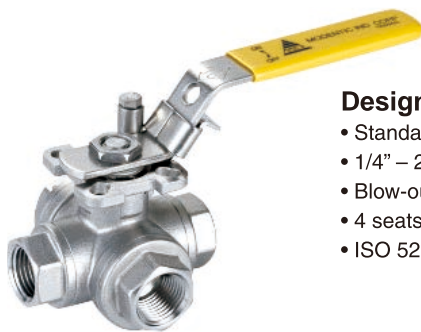


Design Feature

- Full Bore
- 1/2" – 3" (DN8 - DN80)
- Blow-out proof stem
- 4 seats design
- ISO 5211 direct mounting to actuator

Body	ASTM A351 Gr.CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	RTFE
End Connection	Threaded end / Butt welding / Socket welding
Temperature Range	-4 to 356 °F (-20 to 180 °C)
Working Pressure	1/2" – 3" 1000 psi (PN 63)

K-434 4 Way L / T / X port



Design Feature

- Standard Bore
- 1/4" – 2" (DN8 - DN50)
- Blow-out proof stem
- 4 seats design
- ISO 5211 mounting flange

Body	ASTM A351 Gr.CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	PTFE
End Connection	Threaded end
Temperature Range	-4 to 356 °F (-20 to 180 °C)
Working Pressure	1/4" – 2" 1000 psi (PN 63)

K-435 4 Way L / T / X port

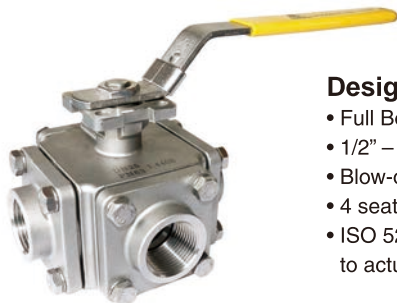


Design Feature

- Full Bore
- 1/4" – 1-1/2" (DN8 - DN40)
- Blow-out proof stem
- 4 seats design
- ISO 5211 direct mounting to actuator

Body	ASTM A351 Gr.CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	RTFE
End Connection	Threaded end / Butt welding / Socket welding
Temperature Range	-4 to 356 °F (-20 to 180 °C)
Working Pressure	1/4" – 1-1/2" 1000 psi (PN 63)

K-315 4 Way L / T / X port



Design Feature

- Full Bore
- 1/2" – 3" (DN15 - DN80)
- Blow-out proof stem
- 4 seats design
- ISO 5211 direct mounting to actuator

Body	ASTM A351 Gr.CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	RTFE
End Connection	Threaded end / Butt welding / Socket welding
Temperature Range	-4 to 356 °F (-20 to 180 °C)
Working Pressure	1/4" – 3" 1000 psi (PN 63)

K-316 5 Way LL / LT / TL port



Design Feature

- Full Bore
- 1/4" – 4" (DN8 - DN100)
- Blow-out proof stem
- 5 seats design
- ISO 5211 direct mounting to actuator

Body	ASTM A351 Gr.CF8M (1.4408)
Ball / Stem	CF8M / SS316
Seat	RTFE
End Connection	Threaded end / Butt welding / Socket welding
Temperature Range	-4 to 356 °F (-20 to 180 °C)
Working Pressure	1/4" – 4" 1000 psi (PN 63)