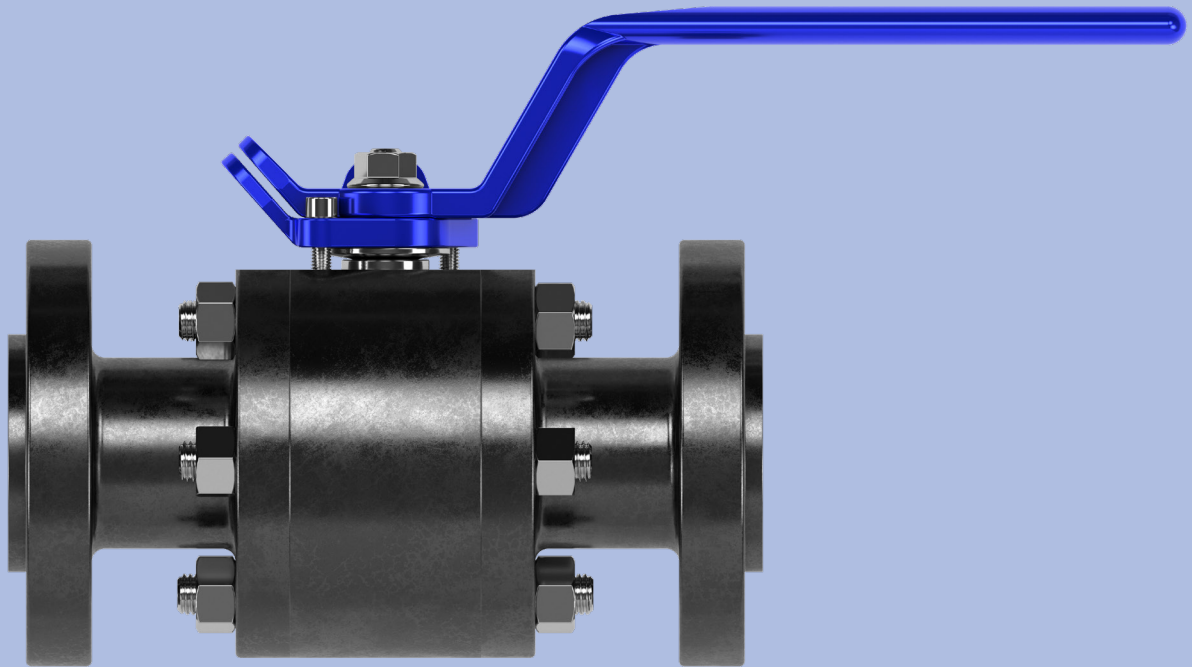


# Nutron T3N floating ball valves

Forged steel construction for heavy-duty  
performance and reduced maintenance

Nutron™ T3N floating ball valves are used in the oil and gas industry for offshore and onshore production, unconventional, transmission and storage, topside processing, petrochemical and chemical, gas processing, and LNG applications. They can also be used in a range of other industries and are low emissions certified to ISO 15848-1.



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# Available sizes

	ASME Class 600	ASME Class 900	ASME Class 1500	ASME Class 2500
Full port, threaded and socket weld ends	na*	na	1/2–2 in	1/2–1 1/2 in
Reduced port, threaded and socket weld ends	na	na	3/4–3 in	3/4–2 in
Full port, flanged ends	1/2–4 in	1/2–2 in	1/2–2 in	1/2–1 1/2 in
Reduced port, flanged ends	3/4–6 in	3/4–3 in	3/4–3 in	3/4–2 in

\* Not applicable

# How to order

Example

**5N-T3N F 05 S 15 L Z U**

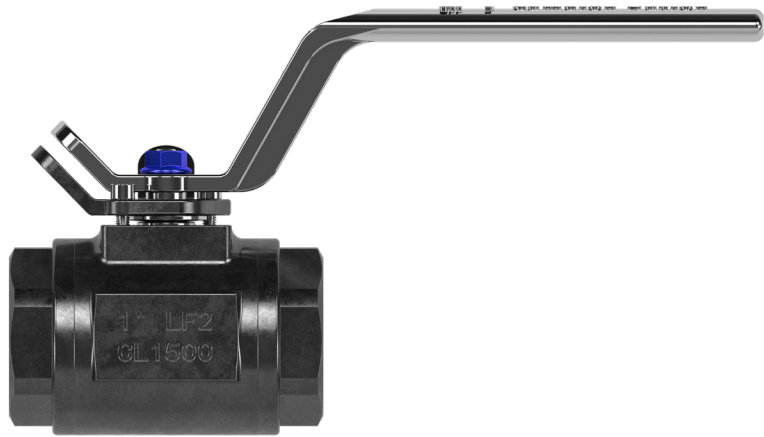
Base Designation	Model	Port	Size in [mm]	End Connection	Pressure Class	Style	Temperature Rating, degF [degC]	Fire Safe	Body Construction
5N	T3N	F = Full port	05 1/2 [12.7]	S = FNPT	06 = 600 ASME			Z	
		R = Reduced port	07 3/4 [19]	WS = Socket weld	09 = 900 ASME	L = Low-temp. sour	-50 [-46]		U = Seal weld
			10 1 [25]	TS = FNPT x socket weld	15 = 1500 ASME	A = Stainless steel	-50 [-46]		
			15 1 1/2 [38]	R = Raised face	25 = 2500 ASME	S* = Sour	-20 [-29]		
			20 2 [51]	J = RTJ*					
			30 3 [76]						

\* Canada only

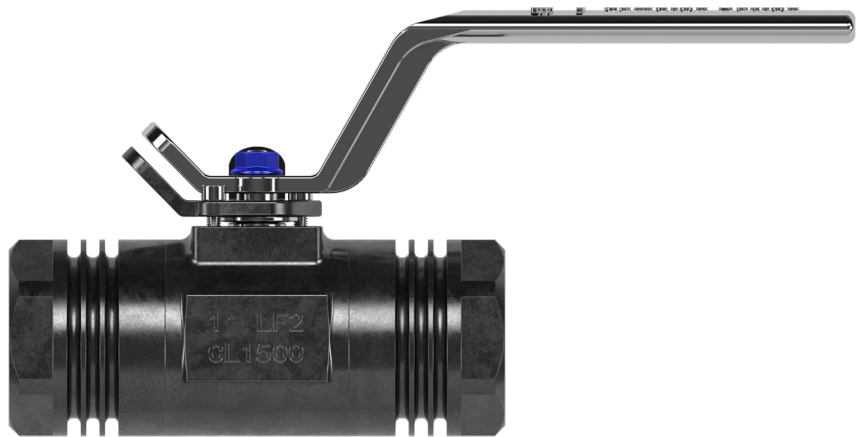
\* Ring-type joint

# Features

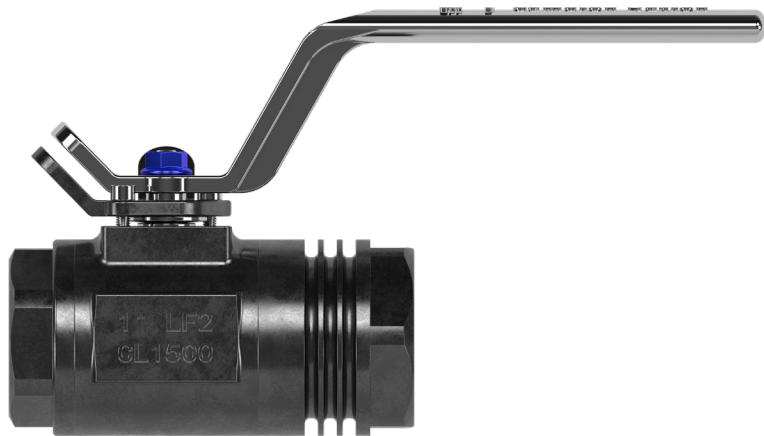
- Forged body and end closures
- 3-piece construction
- Inline weldable
- Full or reduced port
- ASME B16.34 design
- NACE MR0175-compliant
- Positively retained stem
- Antistatic design
- API Std 607 fire-test certified
- Low emissions certified to ISO 15848-1
- Valve inspection and testing per API Std 598



Nutron T3N valve with threaded body and FNPT x FNPT end.



Nutron T3N valve with threaded body and SW x SW end.

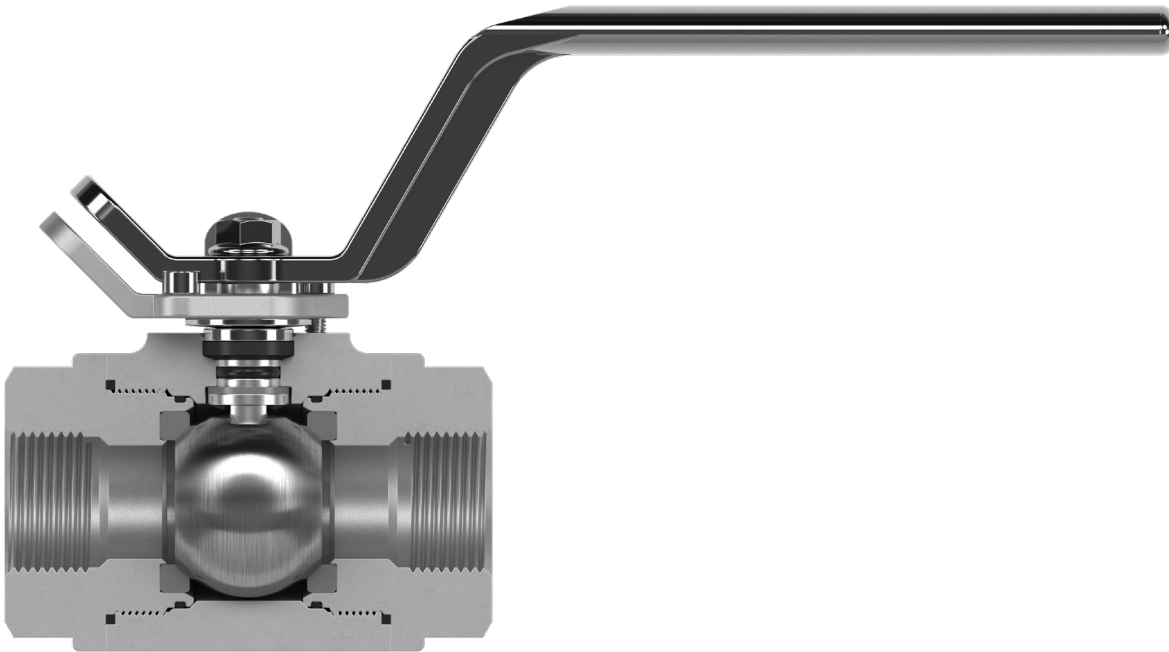


Nutron T3N valve with threaded body and FNPT x SW end.

# Parts and materials

For threaded body design

Part Name	Low-Temperature Carbon NACE, -50 degF [-46 degC]	Stainless Steel NACE, -50 degF [-46 degC]	Quantity
Antistatic spring	SS316	SS316	1
Gasket	Graphite	Graphite	2
Stem O-ring	FKM GLT	FKM GLT	2
Bolt	ASTM A320 L7M	A2-70 (SS304)	2
Handle	ASTM A216 WCB	ASTM A216 WCB + Zn	1
Tailpiece O-ring	FKM GLT	FKM GLT	1
Body	ASTM A350 LF2	ASTM A182 F316	1
Lockhole flange	ASTM A352 LCC	ASTM A352 LCC + Zn	1
Stem	ASTM A564 17-4PH	ASTM A564 17-4PH	1
Handle nut	SS304	SS304	1
Belleville washer	ASTM A240 304	ASTM A240 304	1
Gland	ASTM A276 316	ASTM A276 316	1
Packing	Graphite	Graphite	1
Thrust washer	PEEK	PEEK	1
Ball	ASTM A182 F316	ASTM A182 F316	1
Seat	PEEK	PEEK	2
End cap	ASTM A350 LF2	ASTM A182 F316	2

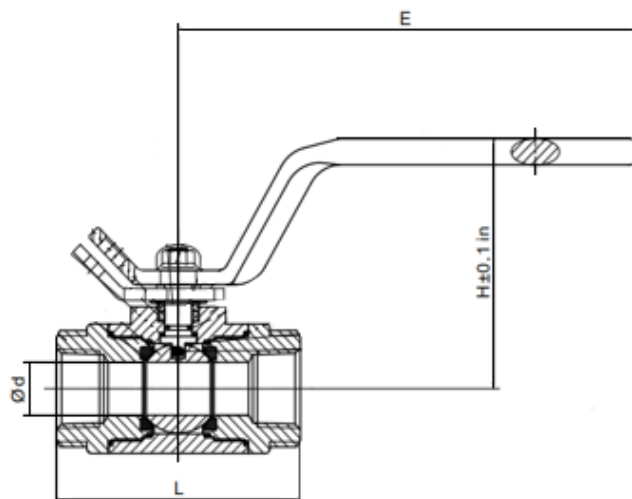
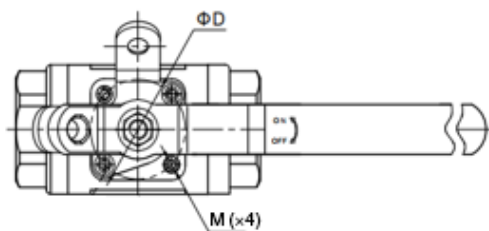


Cutaway view of Nutron T3N valve with threaded body and FNPT x FNPT end.

# Valve assemblies and dimensions

Threaded body, FNPT × FNPT end, Class 1500

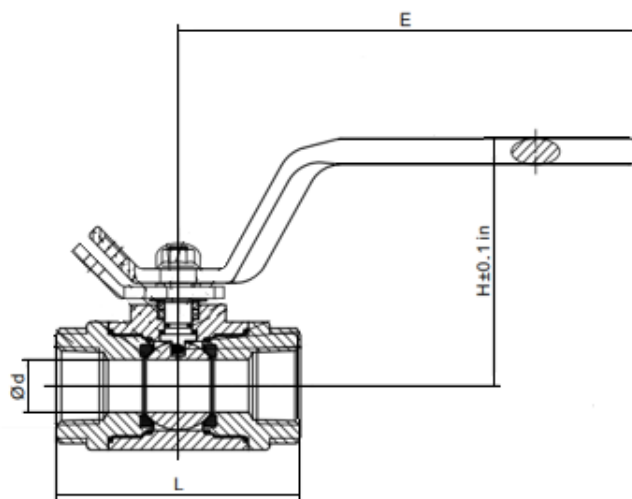
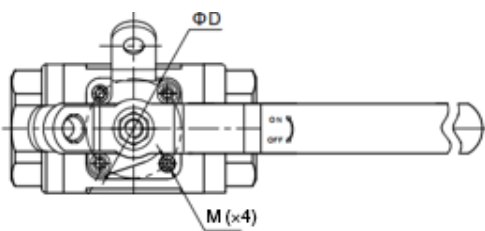
## Full port



### Dimensions

Size, in [mm]	d, in [mm]	L, in [mm]	E, in [mm]	D, in [mm]	M	H, in [mm]
½ [12.7]	0.50 [12.7]	3.86 [98]	6.50 [165]	1.42 [36]	M5	3.74 [95]
¾ [19]	0.75 [19]	4.25 [108]	8.07 [205]	1.65 [42]	M5	4.31 [109.5]
1 [25]	1.00 [25]	4.25 [108]	8.07 [205]	1.65 [42]	M5	4.45 [113]
1½ [38]	1.50 [38]	6.26 [159]	12.20 [310]	2.76 [70]	M8	6.06 [154]
2 [51]	2.00 [51]	6.30 [160]	12.20 [310]	2.76 [70]	M8	6.81 [173]

## Reduced port

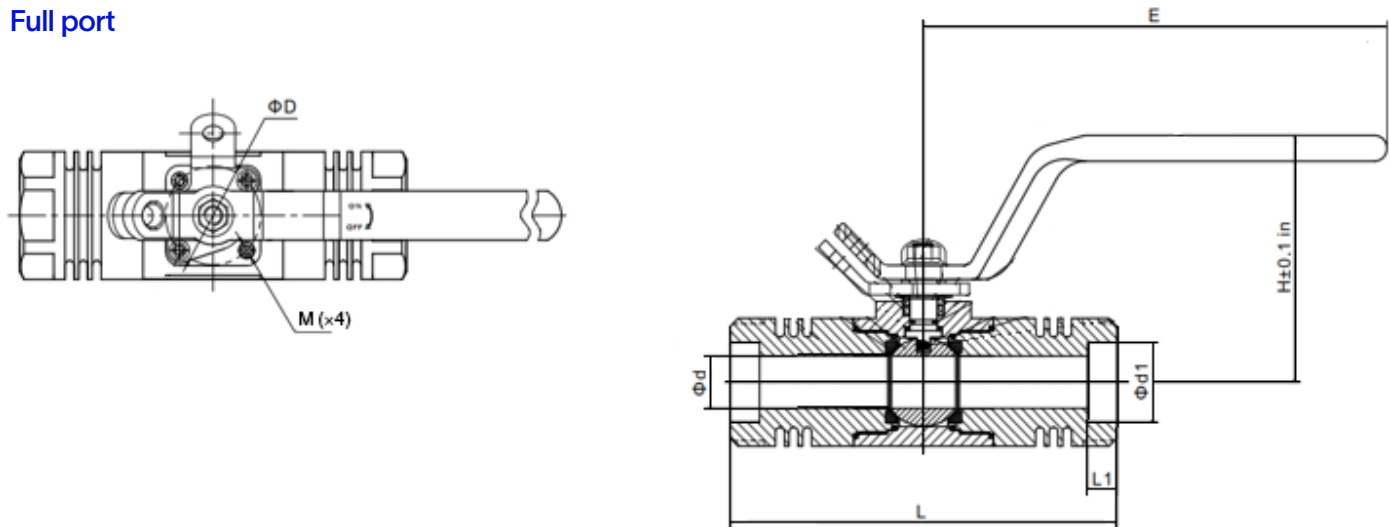


### Dimensions

Size, in	d, in [mm]	L, in [mm]	E, in [mm]	D, in [mm]	M	H, in [mm]
¾ × 0.69 [19 × 17.5]	0.69 [17.5]	4.25 [108]	8.07 [205]	1.65 [42]	M5	4.14 [105.2]
¾ × ½ [19 × 12.7]	0.50 [12.7]	4.25 [108]	8.07 [205]	1.65 [42]	M5	4.14 [105.2]
1 × 0.88 [25 × 22]	0.88 [22.0]	4.25 [108]	8.07 [205]	1.65 [42]	M5	4.31 [109.5]
1 × ¾ [25 × 19]	0.75 [19]	4.25 [108]	8.07 [205]	1.65 [42]	M5	4.31 [109.5]
2 × 1½ [51 × 38]	1.50 [38]	6.26 [159]	12.20 [310]	2.76 [70]	M8	6.06 [154]
3 × 2 [76 × 51]	2.00 [51]	10.00 [254]	12.20 [310]	2.76 [70]	M8	6.81 [173]

# Threaded body, SW × SW end, Class 1500

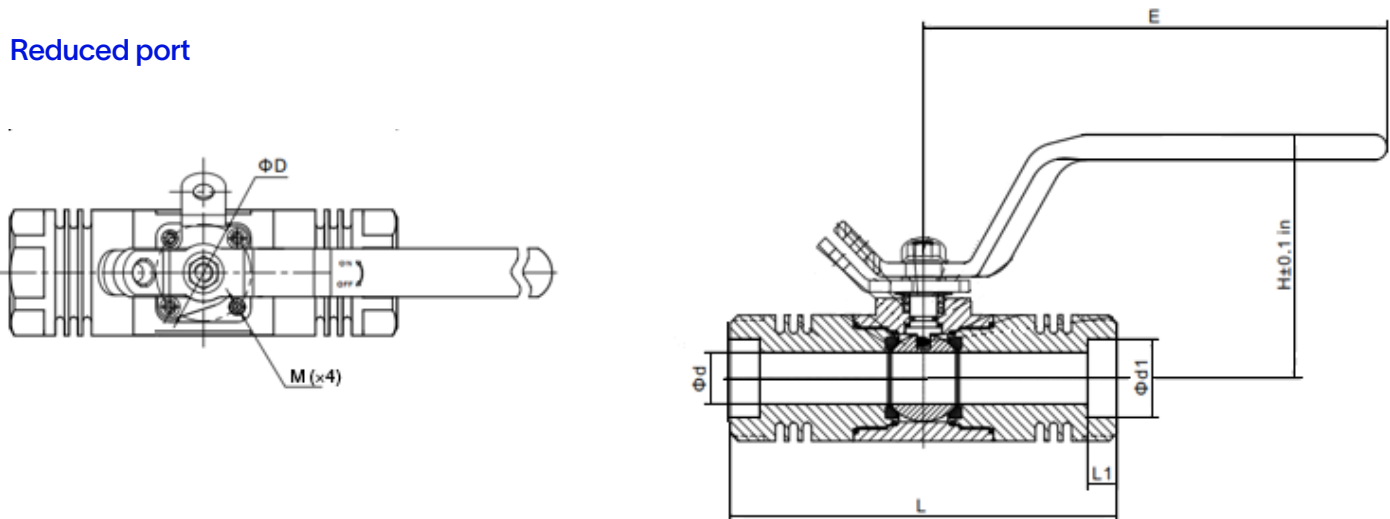
## Full port



### Dimensions

Size, in [mm]	d, in [mm]	L, in [mm]	E, in [mm]	d1, in [mm]	L1, in [mm]	D, in [mm]	M	H, in [mm]
½ [12.7]	0.50 [12.7]	5.00 [127]	6.50 [165]	0.86 [21.8]	0.39 [10]	1.42 [36]	M5	3.74 [95]
¾ [19]	0.75 [19]	6.69 [170]	8.07 [205]	1.07 [27.2]	0.51 [13]	1.65 [42]	M5	4.31 [109.5]
1 [25]	1.00 [25]	6.69 [170]	8.07 [205]	1.33 [33.9]	0.51 [13]	1.65 [42]	M5	4.45 [113]
1½ [38]	1.50 [38]	8.54 [217]	12.20 [310]	1.92 [48.8]	0.51 [13]	2.76 [70]	M8	6.06 [154]
2 [51]	2.00 [51]	12.75 [324]	12.20 [310]	2.41 [61.2]	0.63 [16]	2.76 [70]	M8	6.81 [173]

## Reduced port

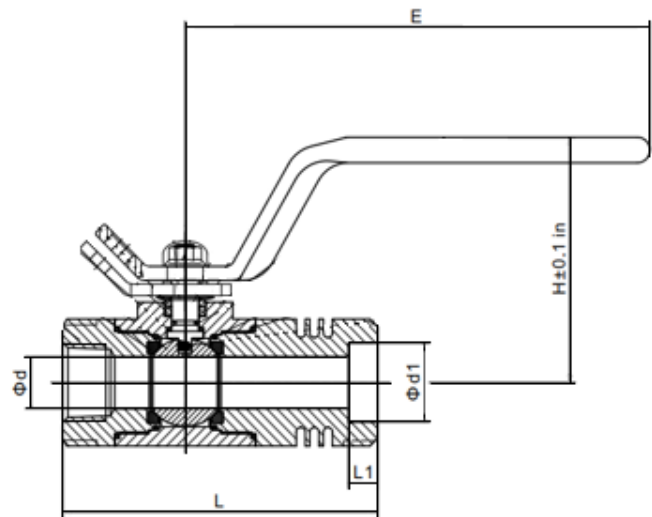
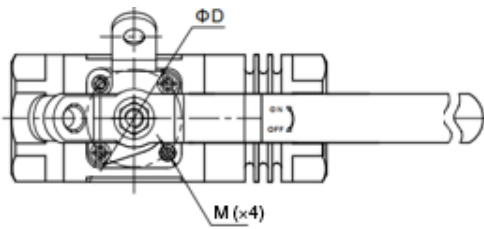


### Dimensions

Size, in	d, in [mm]	L, in [mm]	E, in [mm]	d1, in [mm]	L1, in [mm]	D, in [mm]	M	H, in [mm]
¾ × 0.69 [19 × 17.5]	0.69 [17.5]	6.69 [170]	8.07 [205]	1.07 [27.2]	0.51 [13]	1.65 [42]	M5	4.14 [105.2]
¾ × ½ [19 × 12.7]	0.50 [12.7]	6.69 [170]	8.07 [205]	1.07 [27.2]	0.51 [13]	1.65 [42]	M5	4.14 [105.2]
1 × 0.88 [25 × 22]	0.88 [22.0]	6.69 [170]	8.07 [205]	1.33 [33.9]	0.51 [13]	1.65 [42]	M5	4.31 [109.5]
1 × ¾ [25 × 19]	0.75 [19]	6.69 [170]	8.07 [205]	1.33 [33.9]	0.51 [13]	1.65 [42]	M5	4.31 [109.5]
2 × 1½ [51 × 38]	1.50 [38]	8.54 [217]	12.20 [310]	2.41 [61.2]	0.63 [16]	2.76 [70]	M8	6.06 [154]
3 × 2 [76 × 51]	2.00 [51]	12.75 [324]	12.20 [310]	3.53 [89.8]	0.63 [16]	2.76 [70]	M8	6.81 [173]

# Threaded body, FNPT × SW end, Class 1500

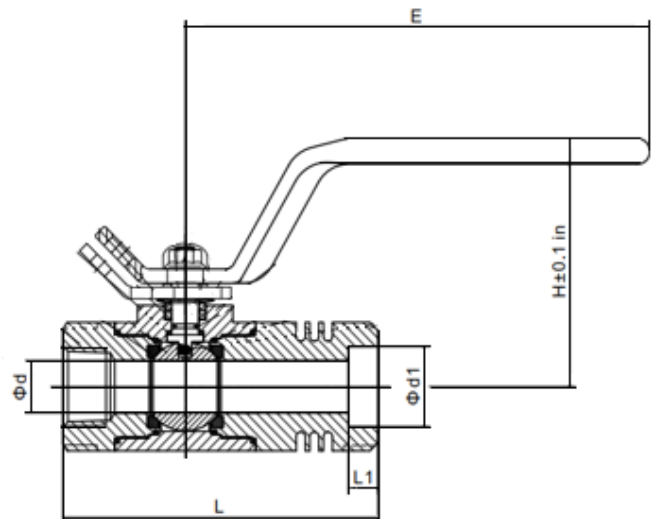
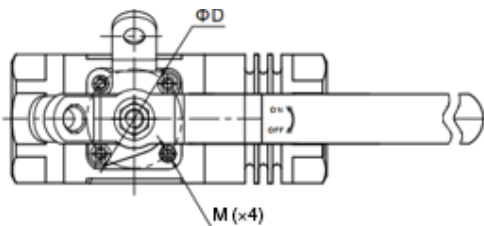
## Full port



### Dimensions

Size, in [mm]	d, in [mm]	L, in [mm]	E, in [mm]	d1, in [mm]	L1, in [mm]	D, in [mm]	M	H, in [mm]
½ [12.7]	0.50 [12.7]	4.43 [112.5]	6.50 [165]	0.86 [21.8]	0.39 [10]	1.42 [36]	M5	3.74 [95]
¾ [19]	0.75 [19]	5.47 [139]	8.07 [205]	1.07 [27.2]	0.51 [13]	1.65 [42]	M5	4.31 [109.5]
1 [25]	1.00 [25]	5.47 [139]	8.07 [205]	1.33 [33.9]	0.51 [13]	1.65 [42]	M5	4.45 [113]
1½ [38]	1.50 [38]	7.40 [188]	12.20 [310]	1.92 [48.8]	0.51 [13]	2.76 [70]	M8	6.06 [154]
2 [51]	2.00 [51]	9.53 [242]	12.20 [310]	2.41 [61.2]	0.63 [16]	2.76 [70]	M8	6.81 [173]

## Reduced port

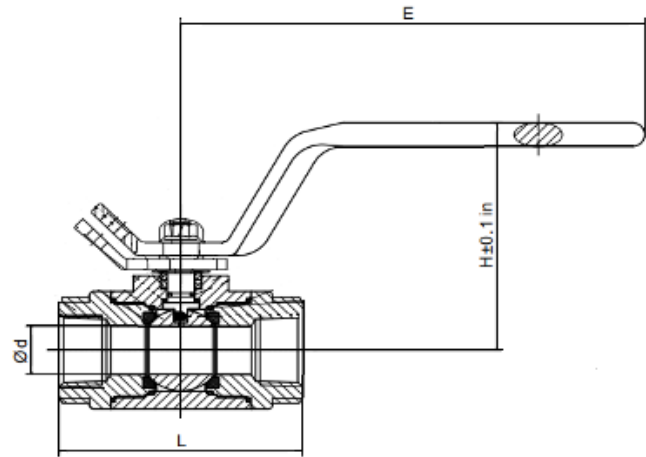
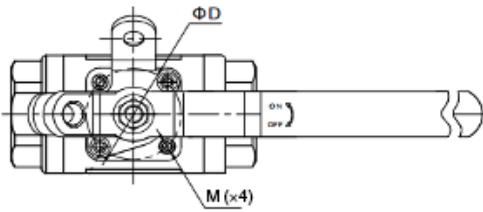


### Dimensions

Size, in	d, in [mm]	L, in [mm]	E, in [mm]	d1, in [mm]	L1, in [mm]	D, in [mm]	M	H, in [mm]
¾ × 0.69 [19 × 17.5]	0.69 [17.5]	5.47 [139]	8.07 [205]	1.07 [27.2]	0.51 [13]	1.65 [42]	M5	4.14 [105.2]
¾ × ½ [19 × 12.7]	0.50 [12.7]	5.47 [139]	8.07 [205]	1.07 [27.2]	0.51 [13]	1.65 [42]	M5	4.14 [105.2]
1 × 0.88 [25 × 22]	0.88 [22.0]	5.47 [139]	8.07 [205]	1.33 [33.9]	0.51 [13]	1.65 [42]	M5	4.31 [109.5]
1 × ¾ [25 × 19]	0.75 [19]	5.47 [139]	8.07 [205]	1.33 [33.9]	0.51 [13]	1.65 [42]	M5	4.31 [109.5]
2 × 1½ [51 × 38]	1.50 [38]	7.40 [188]	12.20 [310]	2.41 [61.2]	0.63 [16]	2.76 [70]	M8	6.06 [154]
3 × 2 [76 × 51]	2.00 [51]	11.38 [289]	12.20 [310]	3.53 [89.8]	0.63 [16]	2.76 [70]	M8	6.81 [173]

# Threaded body, FNPT × FNPT end, Class 2500

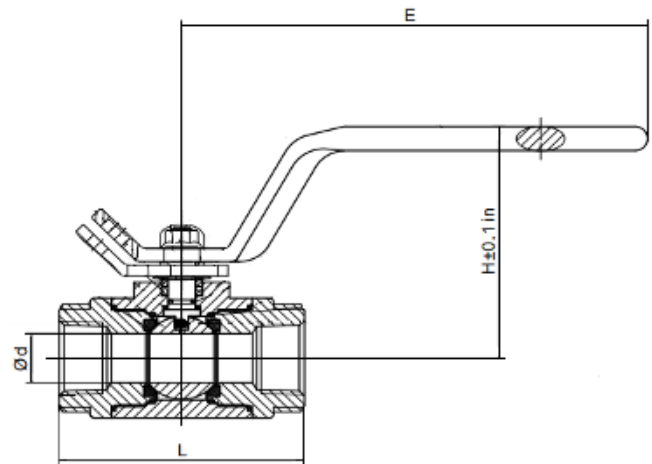
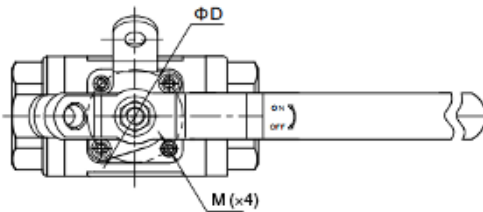
## Full port



### Dimensions

Size, in [mm]	d, in [mm]	L, in [mm]	E, in [mm]	D, in [mm]	M	H, in [mm]
½ [12.7]	0.50 [12.7]	4.37 [111]	6.50 [165]	1.42 [36]	M5	3.76 [95.5]
¾ [19]	0.75 [19]	4.37 [111]	8.07 [205]	1.65 [42]	M5	4.29 [109]
1 [25]	1.00 [25]	5.51 [140]	8.07 [205]	1.65 [42]	M5	4.61 [117]
1½ [38]	1.50 [38]	6.26 [159]	12.20 [310]	2.76 [70]	M8	6.32 [160.5]
2 [51]	2.00 [51]	7.99 [203]	12.20 [310]	2.76 [70]	M8	7.07 [179.5]

## Reduced port

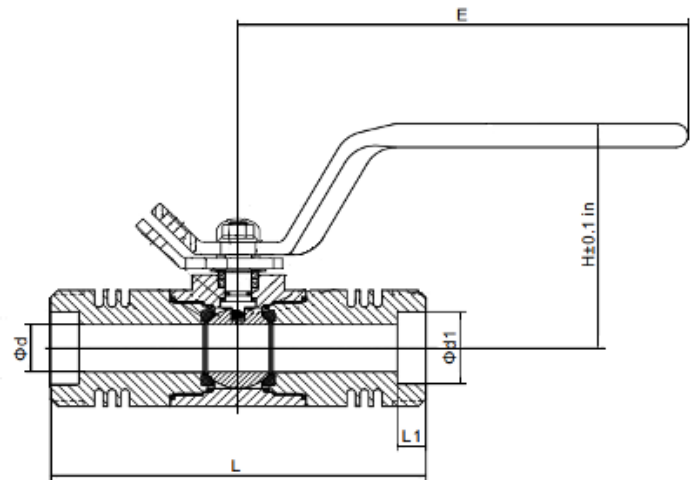
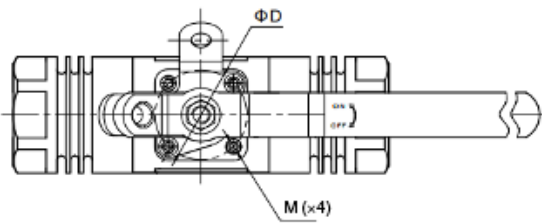


### Dimensions

Size, in	d, in [mm]	L, in [mm]	E, in [mm]	D, in [mm]	M	H, in [mm]
¾ × ½ [19 × 12.7]	0.50 [12.7]	4.37 [111]	6.50 [165]	1.42 [36]	M5	3.78 [96]
1 × ¾ [25 × 19]	0.75 [19]	5.24 [133]	8.07 [205]	1.65 [42]	M5	4.27 [108.5]
2 × 1½ [51 × 38]	1.50 [38]	7.40 [188]	12.20 [310]	2.76 [70]	M8	6.32 [160.5]

# Threaded body, SW × SW end, Class 2500

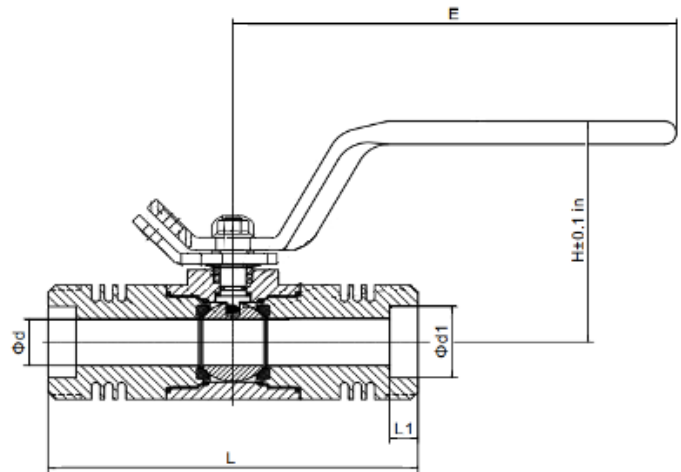
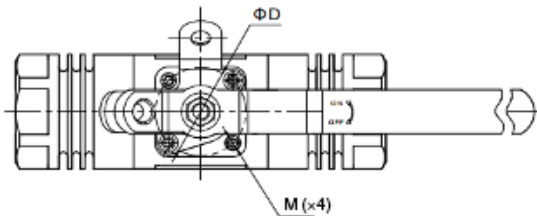
## Full port



### Dimensions

Size, in [mm]	d, in [mm]	L, in [mm]	E, in [mm]	d1, in [mm]	L1, in [mm]	D, in [mm]	M	H, in [mm]
½ [12.7]	0.50 [12.7]	5.67 [144]	6.50 [165]	0.86 [21.8]	0.39 [10]	1.42 [36]	M5	3.76 [95.5]
¾ [19]	0.75 [19]	6.73 [171]	8.07 [205]	1.07 [27.2]	0.51 [13]	1.65 [42]	M5	4.29 [109]
1 [25]	1.00 [25]	6.73 [171]	8.07 [205]	1.33 [33.9]	0.51 [13]	1.65 [42]	M5	4.61 [117]
1½ [38]	1.50 [38]	8.54 [217]	12.20 [310]	1.92 [48.8]	0.51 [13]	2.76 [70]	M8	6.32 [160.5]

## Reduced port

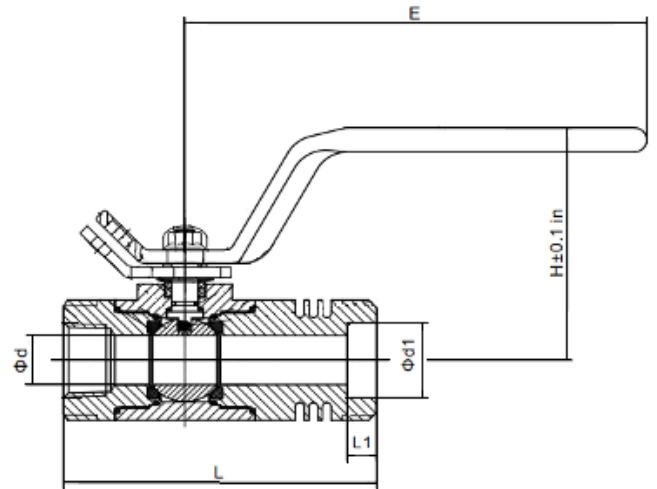
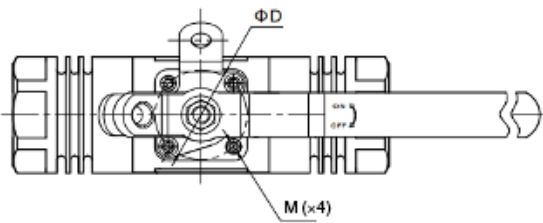


### Dimensions

Size, in [mm]	d, in [mm]	L, in [mm]	E, in [mm]	d1, in [mm]	L1, in [mm]	D, in [mm]	M	H, in [mm]
¾ × ½ [19 × 12.7]	0.50 [12.7]	6.73 [171]	6.50 [165]	1.07 [27.2]	0.51 [13]	1.42 [36]	M5	3.78 [96]
1 × ¾ [25 × 19]	0.75 [19]	6.73 [171]	8.07 [205]	1.33 [33.9]	0.51 [13]	1.65 [42]	M5	4.27 [108.5]
2 × 1½ [51 × 38]	1.50 [38]	9.68 [217]	12.20 [310]	2.41 [61.2]	0.63 [16]	1.65 [42]	M8	6.32 [160.5]

# Threaded body, FNPT × SW end, Class 2500

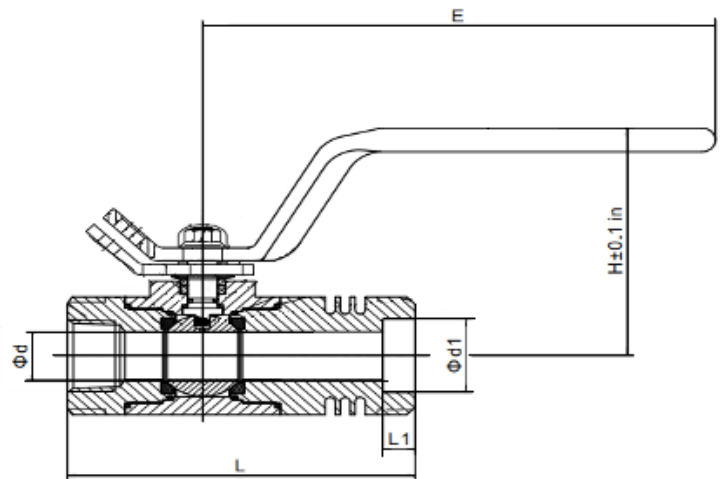
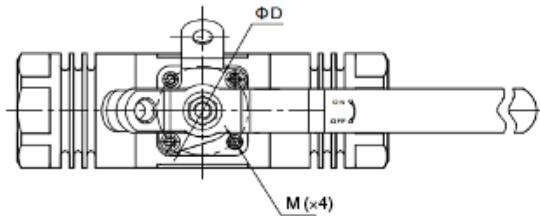
## Full port



### Dimensions

Size, in [mm]	d, in [mm]	L, in [mm]	E, in [mm]	d1, in [mm]	L1, in [mm]	D, in [mm]	M	H, in [mm]
½ [12.7]	0.50 [12.7]	5.02 [127.5]	6.50 [165]	0.86 [21.8]	0.39 [10]	1.42 [36]	M5	3.76 [95.5]
¾ [19]	0.75 [19]	5.55 [141]	8.07 [205]	1.07 [27.2]	0.51 [13]	1.65 [42]	M5	4.29 [109]
1 [25]	1.00 [25]	6.12 [155.5]	8.07 [205]	1.33 [33.9]	0.51 [13]	1.65 [42]	M5	4.61 [117]
1½ [38]	1.50 [38]	7.40 [188]	12.20 [310]	1.92 [48.8]	0.51 [13]	2.76 [70]	M8	6.32 [160.5]

## Reduced port

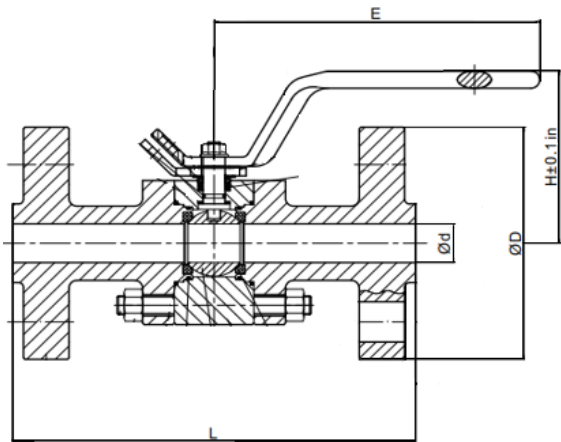


### Dimensions

Size, in [mm]	d, in [mm]	L, in [mm]	E, in [mm]	d1, in [mm]	L1, in [mm]	D, in [mm]	M	H, in [mm]
¾ × ½ [19 × 12.7]	0.50 [12.7]	5.55 [141]	6.50 [165]	1.07 [27.2]	0.51 [13]	1.42 [36]	M5	3.78 [96]
1 × ¾ [25 × 19]	0.75 [19]	5.98 [152]	8.07 [205]	1.33 [33.9]	0.51 [13]	1.65 [42]	M5	4.27 [108.5]
2 × 1½ [51 × 38]	1.50 [38]	8.54 [217]	12.20 [310]	2.41 [61.2]	0.63 [16]	2.76 [70]	M8	6.32 [160.5]

# Bolted body, flanged end, Class 600

## Full port

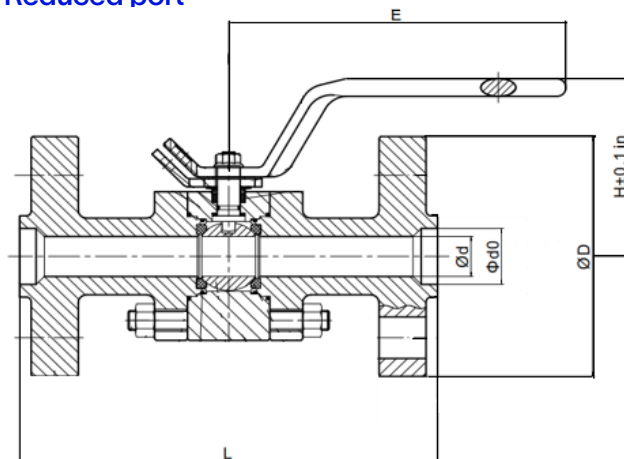


### Dimensions

Size, in [mm]	d, in [mm]	L (RF*), in [mm]	D, in [mm]	E, in [mm]	H, in [mm]
½ [12.7]	0.50 [12.7]	6.50 [165]	3.75 [95]	6.50 [165]	3.97 [101]
¾ [19]	0.75 [19]	7.50 [190]	4.62 [117]	8.07 [205]	4.25 [108]
1 [25]	0.98 [25]	8.50 [216]	4.88 [124]	8.07 [205]	4.50 [114]
1½ [38]	1.50 [38]	9.50 [241]	6.12 [155]	12.2 [310]	6.38 [162]
2 [51]	1.97 [50]	11.50 [292]	6.50 [165]	12.2 [310]	6.85 [174]

\* Raised face

## Reduced port



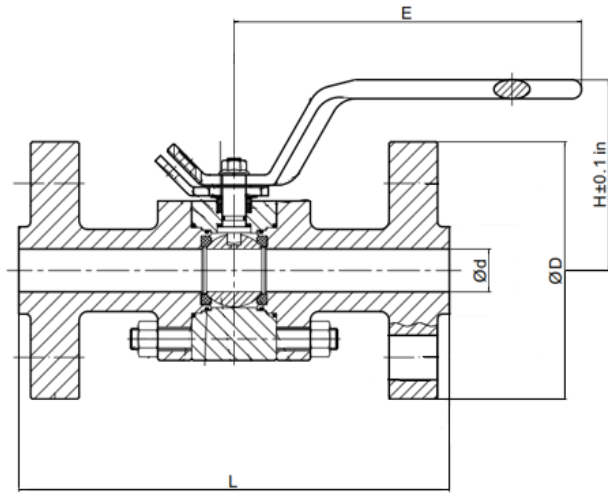
### Dimensions

Size, in [mm]	d0, in [mm]	d, in [mm]	L (RF*), in [mm]	D, in [mm]	E, in [mm]	H, in [mm]
¾ × ½ [19 × 12.7]	0.75 [19]	0.50 [12.7]	7.50 [190]	4.62 [117]	6.50 [165]	3.97 [101]
1 × ¾ [25 × 19]	0.98 [25]	0.75 [19]	8.50 [216]	4.88 [124]	8.07 [205]	4.25 [108]
2 × 1½ [51 × 38]	1.97 [50]	1.50 [38]	11.50 [292]	6.50 [165]	12.2 [310]	6.38 [162]
3 × 2 [76 × 51]	3.00 [76]	1.97 [50]	14.00 [356]	8.25 [210]	12.2 [310]	6.85 [174]

\* Raised face

# Bolted body, flanged end, Class 900

## Full port



### Dimensions

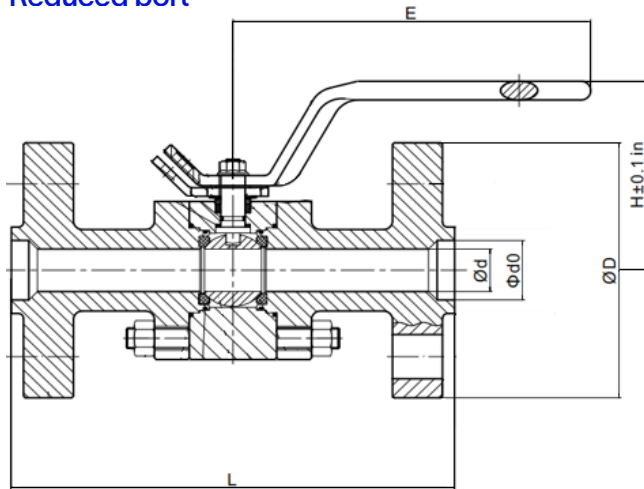
Size, in [mm]	d, in [mm]	L, in [mm]		D, in [mm]	E, in [mm]	H, in [mm]
		RF*	RTJ**			
½ [12.7]	0.50 [12.7]	8.50 [216]†	8.50 [216]†	4.75 [121]	6.50 [165]	3.97 [101]
¾ [19]	0.75 [19]	9.00 [229]†	9.00 [229]†	5.12 [130]	8.07 [205]	4.50 [114]
1 [25]	0.98 [25]	10.00 [254]	10.00 [254]	5.88 [149]	8.07 [205]	4.72 [120]
1½ [38]	1.50 [38]	12.00 [305]	12.00 [305]	7.00 [178]	12.2 [310]	6.77 [172]
2 [51]	1.97 [50]	14.50 [368]	14.62 [371]	8.50 [216]	12.2 [310]	7.24 [184]

\* Raised face

\*\* Ring-type joint

† ½-in and ¾-in valves do not have industry-designated end-to-end lengths per ASME B16.10. The lengths shown are SLB standard lengths.

## Reduced port



### Dimensions

Size, in [mm]	d0, in [mm]	d, in [mm]	L, in [mm]		D, in [mm]	E, in [mm]	H, in [mm]
			RF*	RTJ**			
¾ × ½ [19 × 12.7]	0.75 [19]	0.50 [12.7]	9.00 [229]†	9.00 [229]†	5.12 [130]	6.50 [165]	3.97 [101]
1 × ¾ [25 × 19]	0.98 [25]	0.75 [20]	10.00 [254]	10.00 [254]	5.88 [149]	8.07 [205]	4.50 [114]
2 × 1½ [51 × 38]	1.97 [50]	1.50 [38]	14.50 [368]	14.62 [371]	8.50 [216]	12.2 [310]	6.77 [172]
3 × 2 [76 × 51]	3.00 [76]	1.97 [50]	15.00 [381]	15.13 [384]	9.50 [241]	12.2 [310]	7.24 [184]

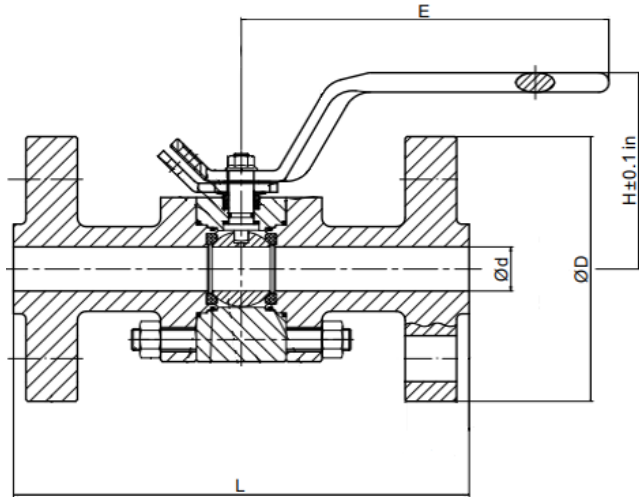
\* Raised face

\*\* Ring-type joint

† ¾ × ½-in valves do not have industry-designated end-to-end lengths per ASME B16.10. The lengths shown are SLB standard lengths.

# Bolted body, flanged end, Class 1500

## Full port



### Dimensions

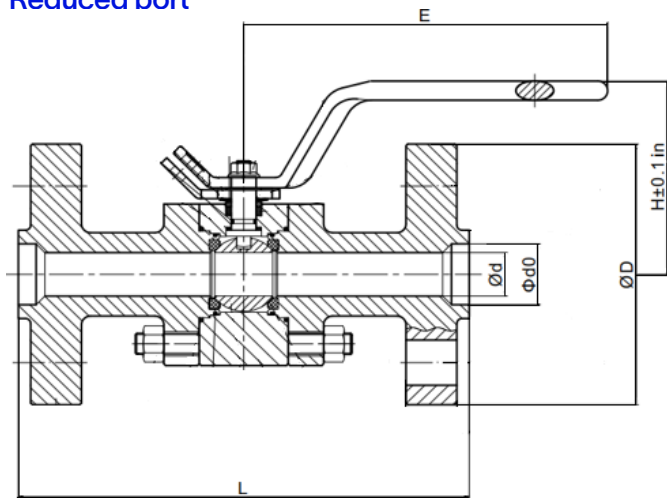
Size, in [mm]	d, in [mm]	L, in [mm]		D, in [mm]	E, in [mm]	H, in [mm]
		RF*	RTJ**			
½ [12.7]	0.50 [12.7]	8.50 [216]†	8.50 [216]†	4.75 [121]	6.50 [165]	3.97 [101]
¾ [19]	0.75 [19]	9.00 [229]†	9.00 [229]†	5.12 [130]	8.07 [205]	4.50 [114]
1 [25]	0.98 [25]	10.00 [254]	10.00 [254]	5.88 [149]	8.07 [205]	4.72 [120]
1½ [38]	1.50 [38]	12.00 [305]	12.00 [305]	7.00 [178]	12.2 [310]	6.77 [172]
2 [51]	1.97 [50]	14.50 [368]	14.62 [371]	8.50 [216]	12.2 [310]	7.24 [184]

\* Raised face

\*\* Ring-type joint

† ½-in and ¾-in valves do not have industry-designated end-to-end lengths per ASME B16.10. The lengths shown are SLB standard lengths.

## Reduced port



### Dimensions

Size, in [mm]	d0, in [mm]	d, in [mm]	L, in [mm]		D, in [mm]	E, in [mm]	H, in [mm]
			RF*	RTJ**			
¾ × ½ [19 × 12.7]	0.75 [19]	0.50 [12.7]	9.00 [229]†	9.00 [229]†	5.12 [130]	6.50 [165]	3.97 [101]
1 × ¾ [25 × 19]	0.98 [25]	0.75 [19.0]	10.00 [254]	10.00 [254]	5.88 [149]	8.07 [205]	4.50 [114]
2 × 1½ [51 × 38]	1.97 [50]	1.50 [38.0]	14.50 [368]	14.62 [371]	8.50 [216]	12.2 [310]	6.77 [172]
3 × 2 [76 × 51]	3.00 [76]	1.97 [50.0]	18.50 [470]	18.62 [473]	10.50 [267]	12.2 [310]	7.24 [184]

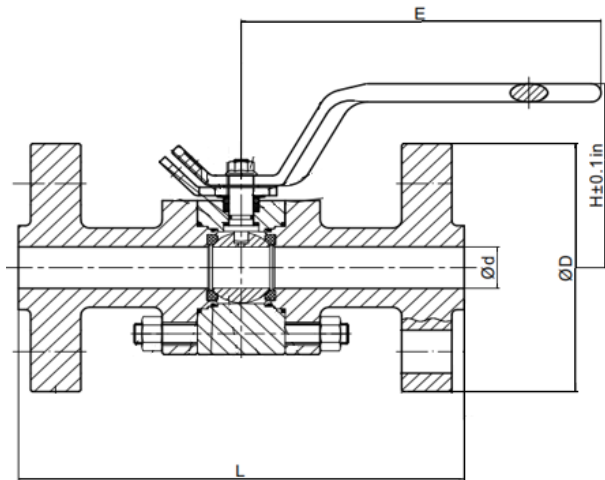
\* Raised face

\*\* Ring-type joint

† ¾ × ½-in valves do not have industry-designated end-to-end lengths per ASME B16.10. The lengths shown are SLB standard lengths.

# Bolted body, flanged end, Class 2500

## Full port

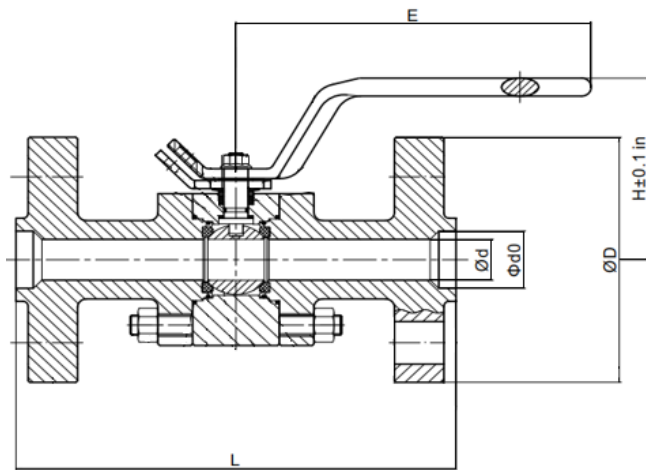


### Dimensions

Size, in [mm]	d, in [mm]	L (RTJ*), in [mm]	D, in [mm]	E, in [mm]	H, in [mm]
½ [12.7]	0.50 [12.7]	10.38 [264]	5.25 [133]	6.50 [165]	4.50 [114]
¾ [19]	0.75 [19]	10.75 [273]	5.50 [140]	8.07 [205]	4.76 [121]
1 [25]	0.98 [25]	12.13 [308]	6.25 [159]	10.04 [255]	4.76 [121]
1½ [38]	1.50 [38]	15.12 [384]	8.00 [203]	16.14 [410]	7.24 [184]

\*Ring-type joint

## Reduced port



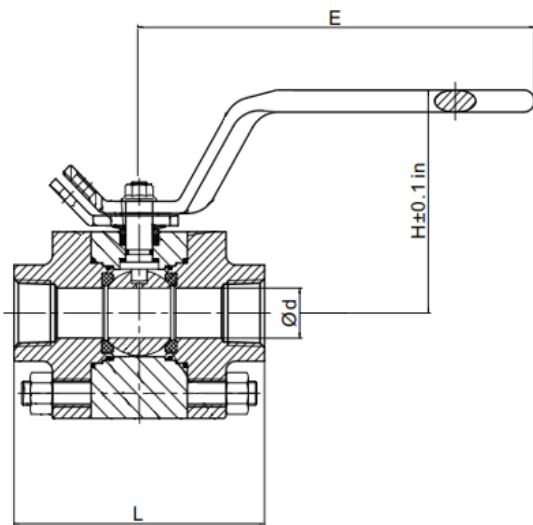
### Dimensions

Size, in [mm]	d0, in [mm]	d, in [mm]	L (RTJ*), in [mm]	D, in [mm]	E, in [mm]	H, in [mm]
¾ × ½ [19 × 12.7]	0.75 [19]	0.50 [12.7]	10.75 [273]	5.50 [140]	6.50 [165]	4.50 [114]
1 × ¾ [25 × 19]	0.98 [25]	0.75 [19.0]	12.13 [308]	6.25 [159]	8.07 [205]	4.76 [121]
2 × 1½ [51 × 38]	1.97 [50]	1.50 [38.0]	17.87 [454]	9.25 [235]	16.14 [410]	7.24 [184]

\* Ring-type joint

## Bolted body, FNPT × FNPT end, Class 1500

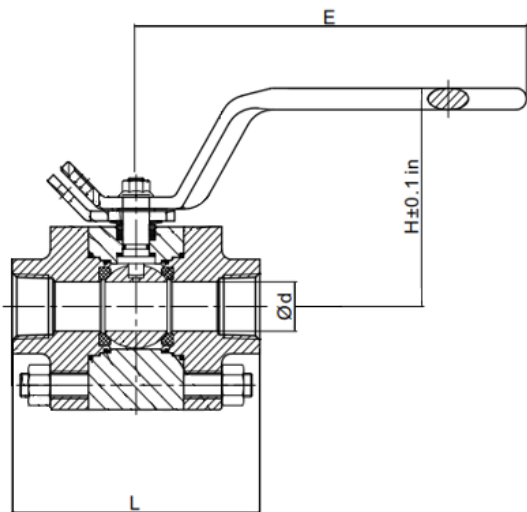
### Full port



#### Dimensions

Size, in [mm]	d, in [mm]	L, in [mm]	H, in [mm]	E, in [mm]
½ [12.7]	0.50 [12.7]	4.65 [118]	3.97 [101]	6.50 [165]
¾ [19]	0.75 [19]	5.00 [127]	4.50 [114]	8.07 [205]
1 [25]	0.98 [25]	6.10 [154]	4.72 [120]	8.07 [205]
1½ [38]	1.50 [38]	7.30 [185]	6.77 [172]	12.20 [310]
2 [51]	1.97 [50]	8.50 [216]	7.24 [184]	12.20 [310]

### Reduced port

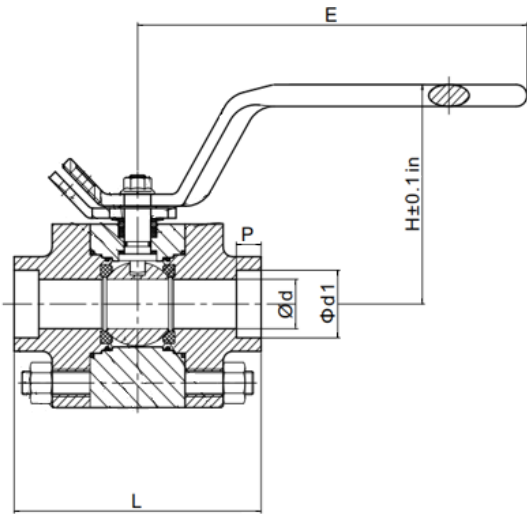


#### Dimensions

Size, in [mm]	d, in [mm]	L, in [mm]	H, in [mm]	E, in [mm]
¾ × ½ [19 × 12.7]	0.5 [12.7]	4.65 [118]	3.97 [101]	8.07 [205]
1 × ¾ [25 × 19]	0.75 [19]	5.00 [127]	4.50 [114]	8.07 [205]
2 × 1½ [51 × 38]	1.50 [38]	7.30 [185]	6.77 [172]	12.20 [310]

## Bolted body, SW × SW end, Class 1500

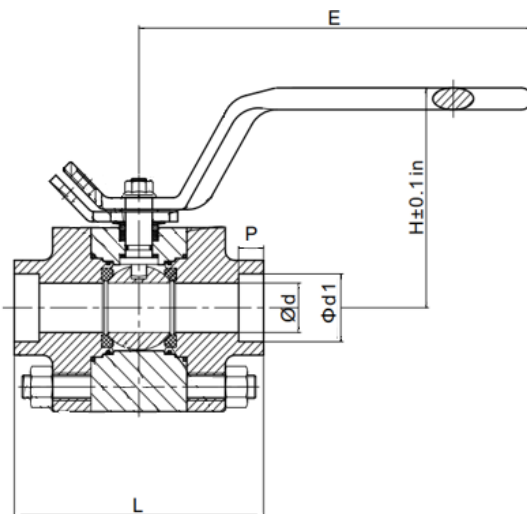
### Full port



#### Dimensions

Size, in [mm]	d, in [mm]	d1, in [mm]	P, in [mm]	L, in [mm]	H, in [mm]	E, in [mm]
½ [12.7]	0.50 [12.7]	0.86 [21.8]	0.39 [10]	4.65 [118]	3.97 [101]	6.50 [165]
¾ [19]	0.75 [19]	1.07 [27.2]	0.51 [13]	5.00 [127]	4.50 [114]	8.07 [205]
1 [25]	0.98 [25]	1.33 [33.9]	0.51 [13]	6.10 [154]	4.72 [120]	8.07 [205]
1½ [38]	1.50 [38]	1.92 [48.8]	0.51 [13]	7.30 [185]	6.77 [172]	12.20 [310]
2 [51]	1.97 [50]	2.41 [61.2]	0.63 [16]	8.50 [216]	7.24 [184]	12.20 [310]

### Reduced port

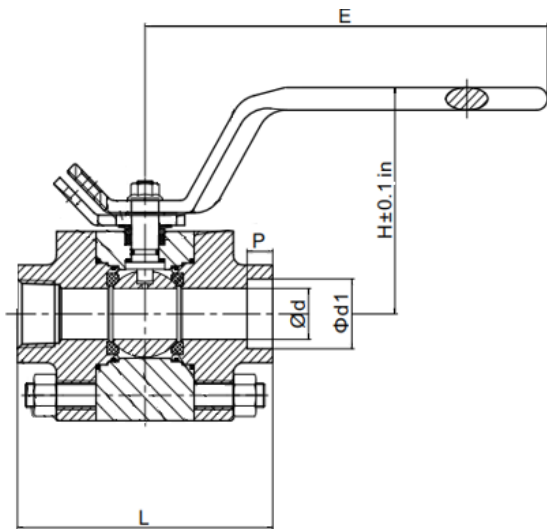


#### Dimensions

Size, in [mm]	d, in [mm]	d1, in [mm]	P, in [mm]	L, in [mm]	H, in [mm]	E, in [mm]
¾ × ½ [19 × 12.7]	0.50 [12.7]	1.07 [27.2]	0.51 [13]	4.65 [118]	3.97 [101]	8.07 [205]
1 × ¾ [25 × 19]	0.75 [19]	1.33 [33.9]	0.51 [13]	5.00 [127]	4.50 [114]	8.07 [205]
2 × 1½ [51 × 38]	1.50 [38]	2.41 [61.2]	0.63 [16]	7.30 [185]	6.77 [172]	12.20 [310]

## Bolted body, FNPT × SW end, Class 1500

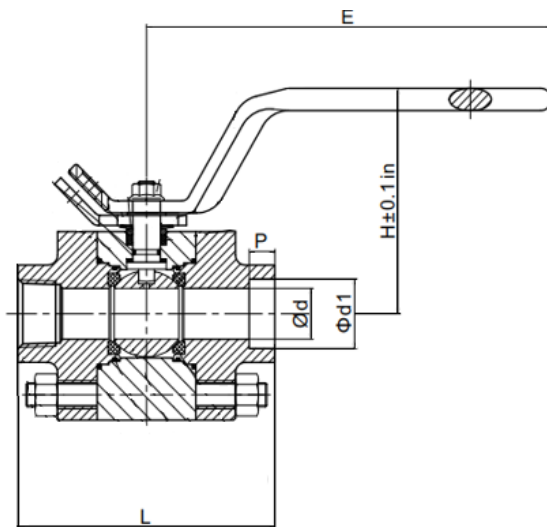
### Full port



#### Dimensions

Size, in [mm]	d, in [mm]	d1, in [mm]	P, in [mm]	L, in [mm]	H, in [mm]	E, in [mm]
½ [12.7]	0.50 [12.7]	0.86 [21.8]	0.39 [10]	4.65 [118]	3.97 [101]	6.50 [165]
¾ [19]	0.75 [19]	1.07 [27.2]	0.51 [13]	5.00 [127]	4.50 [114]	8.07 [205]
1 [25]	0.98 [25]	1.33 [33.9]	0.51 [13]	6.10 [154]	4.72 [120]	8.07 [205]
1½ [38]	1.50 [38]	1.92 [48.8]	0.51 [13]	7.30 [185]	6.77 [172]	12.20 [310]
2 [51]	1.97 [50]	2.41 [61.2]	0.63 [16]	8.50 [216]	7.24 [184]	12.20 [310]

### Reduced port

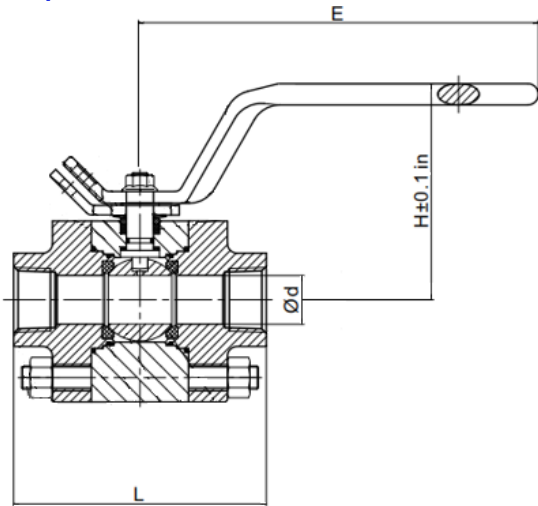


#### Dimensions

Size, in [mm]	d, in [mm]	d1, in [mm]	P, in [mm]	L, in [mm]	H, in [mm]	E, in [mm]
¾ × ½ [19 × 12.7]	0.50 [12.7]	1.07 [27.2]	0.51 [13]	4.65 [118]	3.97 [101]	8.07 [205]
1 × ¾ [25 × 19]	0.75 [19]	1.33 [33.9]	0.51 [13]	5.00 [127]	4.50 [114]	8.07 [205]
2 × 1½ [51 × 38]	1.50 [38]	2.41 [61.2]	0.63 [16]	7.30 [185]	6.77 [172]	12.20 [310]

# Bolted body, FNPT × FNPT end, Class 2500

## Full port

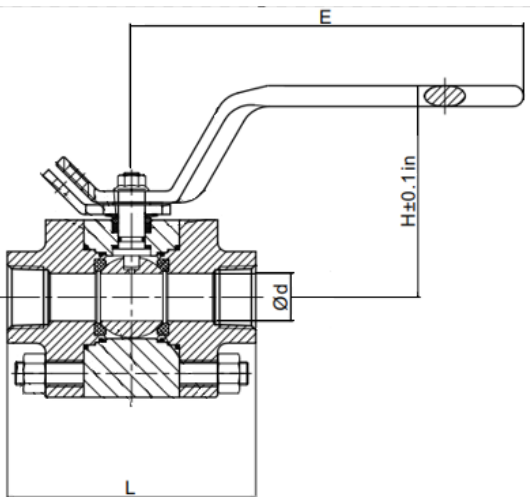


### Dimensions

Size, in [mm]	d, in [mm]	L, in [mm]	H, in [mm]	E, in [mm]
½ [12.7]	0.50 [12.7]	5.51 [140]	4.50 [114]	6.50 [165]
¾ [19]	0.75 [19]	5.90 [150]	4.76 [121]	8.07 [205]
1 [25]	0.98 [25]	6.70 [170]	4.76 [121]	8.07 [205]
1½ [38]	1.50 [38]	8.25 [210]	7.24 [184]	12.20 [310]
2 [51]	1.97 [50]	11.00 [280]	7.60 [193]	12.20 [310]

\* Raised face

## Reduced port

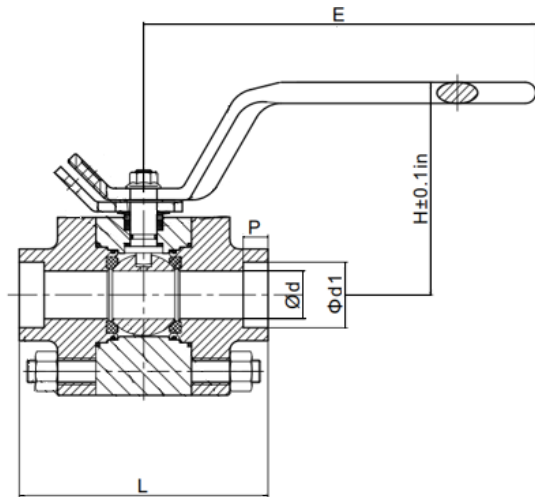


### Dimensions

Size, in [mm]	d, in [mm]	L, in [mm]	H, in [mm]	E, in [mm]
¾ × ½ [19 × 12.7]	0.5 [12.7]	5.51 [140]	4.50 [114]	8.07 [205]
1 × ¾ [25 × 19]	0.75 [19]	5.90 [150]	4.76 [121]	8.07 [205]
2 × 1½ [51 × 38]	1.50 [38]	8.25 [210]	7.24 [184]	12.20 [310]

## Bolted body, SW × SW end, Class 2500

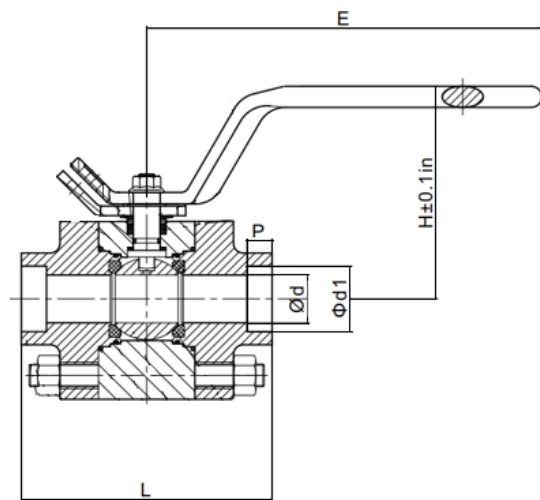
### Full port



#### Dimensions

Size, in [mm]	d, in [mm]	d1, in [mm]	P, in [mm]	L, in [mm]	H, in [mm]	E, in [mm]
½ [12.7]	0.50 [12.7]	0.86 [21.8]	0.39 [10]	5.51 [140]	4.50 [114]	6.50 [165]
¾ [19]	0.75 [19]	1.07 [27.2]	0.51 [13]	5.90 [150]	4.76 [121]	8.07 [205]
1 [25]	0.98 [25]	1.33 [33.9]	0.51 [13]	6.70 [170]	4.76 [121]	8.07 [205]
1½ [38]	1.50 [38]	1.92 [48.8]	0.51 [13]	8.25 [210]	7.24 [184]	12.20 [310]
2 [51]	1.97 [50]	2.41 [61.2]	0.63 [16]	11.00 [280]	7.60 [193]	12.20 [310]

### Reduced port

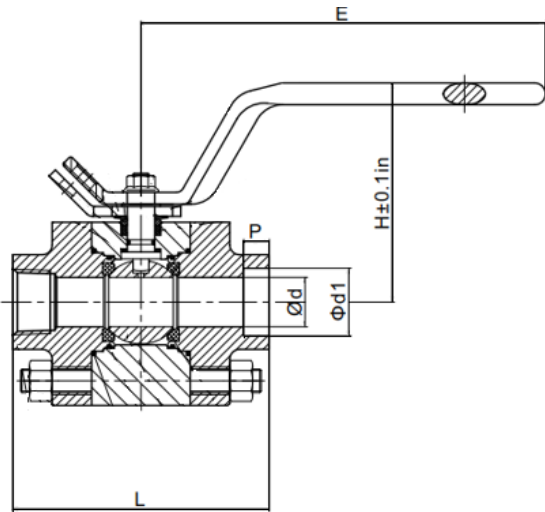


#### Dimensions

Size, in [mm]	d, in [mm]	d1, in [mm]	P, in [mm]	L, in [mm]	H, in [mm]	E, in [mm]
¾ × ½ [19 × 12.7]	0.50 [12.7]	1.07 [27.2]	0.51 [13]	5.51 [140]	4.50 [114]	8.07 [205]
1 × ¾ [25 × 19]	0.75 [19]	1.33 [33.9]	0.51 [13]	5.90 [150]	4.76 [121]	8.07 [205]
2 × 1½ [51 × 38]	1.50 [38]	2.41 [61.2]	0.63 [16]	8.25 [210]	7.24 [184]	12.20 [310]

## Bolted body, FNPT × SW end, Class 2500

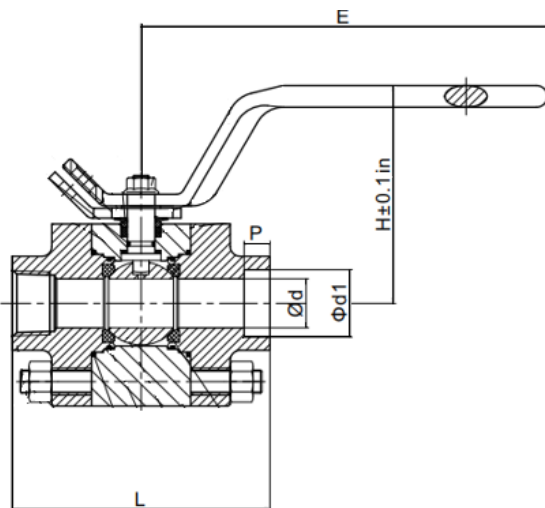
### Full port



#### Dimensions

Size, in [mm]	d, in [mm]	d1, in [mm]	P, in [mm]	L, in [mm]	H, in [mm]	E, in [mm]
½ [12.7]	0.50 [12.7]	0.86 [21.8]	0.39 [10]	5.51 [140]	4.50 [114]	6.50 [165]
¾ [19]	0.75 [19]	1.07 [27.2]	0.51 [13]	5.90 [150]	4.76 [121]	8.07 [205]
1 [25]	0.98 [25]	1.33 [33.9]	0.51 [13]	6.70 [170]	4.76 [121]	8.07 [205]
1½ [38]	1.50 [38]	1.92 [48.8]	0.51 [13]	8.25 [210]	7.24 [184]	12.20 [310]
2 [51]	1.97 [50]	2.41 [61.2]	0.63 [16]	11.00 [280]	7.60 [193]	12.20 [310]

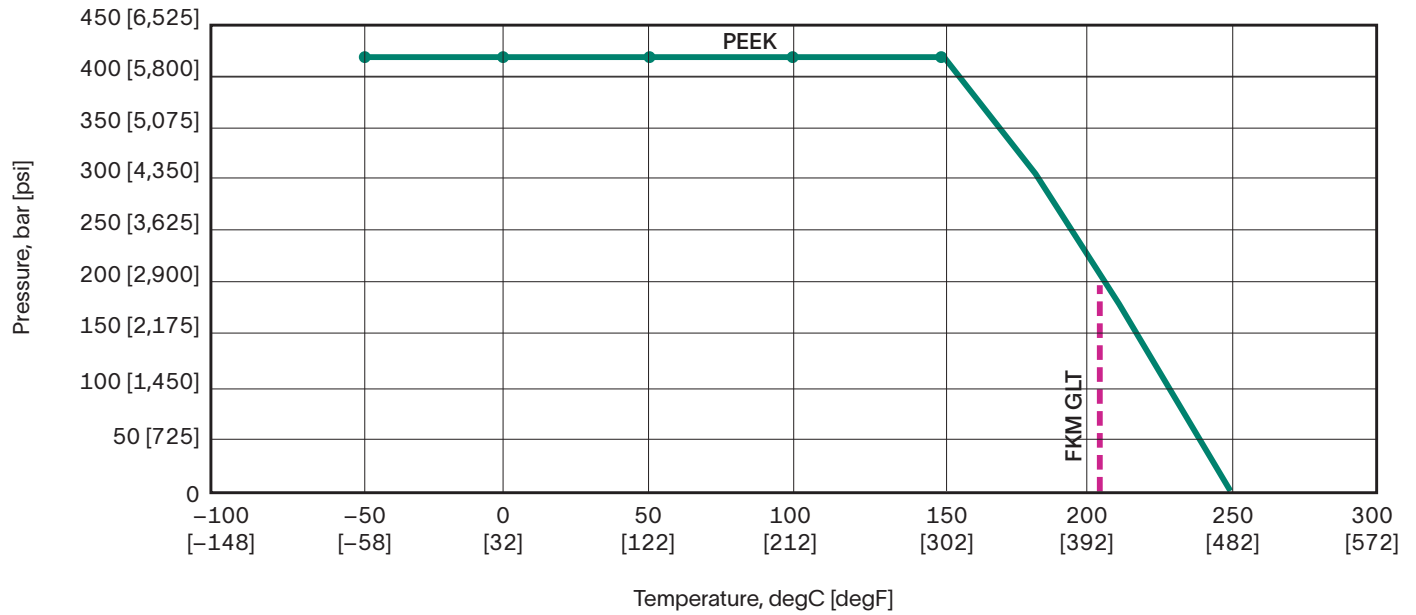
### Reduced port



#### Dimensions

Size, in [mm]	d, in [mm]	d1, in [mm]	P, in [mm]	L, in [mm]	H, in [mm]	E, in [mm]
¾ × ½ [19 × 12.7]	0.50 [12.7]	1.07 [27.2]	0.51 [13]	5.51 [140]	4.50 [114]	8.07 [205]
1 × ¾ [25 × 19]	0.75 [19]	1.33 [33.9]	0.51 [13]	5.90 [150]	4.76 [121]	8.07 [205]
2 × 1½ [51 × 38]	1.50 [38]	2.41 [61.2]	0.63 [16]	8.25 [210]	7.24 [184]	12.20 [310]

# Pressure and temperature ratings (seats and seals)



Consult ASME B16.34 for body and adapter material pressure and temperature ratings.