

data sheet

77F-100 series

full port threaded end brass ball valve 1/4" - 2"



description

The "Apollo"® 77F-100 series is a full port forged brass ball valve suitable for a wide range of flow control applications including HVAC, fuel gas, fire protection, irrigation etc. These NPT threaded, 2-piece valves combine reliable operation with maximum economy. Valves include most pertinent agency approvals. Proudly manufactured in our South Carolina facilities.

size range connections configurations

- 1/4" - 2"
- threaded
- 77F-100 series - standard
- 77F-140 series - ss ball & stem

approvals

- MSS SP-110
- IAPMO/ANSI Z1157
- Buy American Act (BAA)
- Build America Buy America (BABA) Act

CSA listed approvals

- CGA CR91-002 (5 psig)
- FM 1140 (<175 psig) (1/4" - 2")
- ANSI Z21.15/CSA 9.1 (1/2 psig)
- ASME B16.44 (5 psig)
- ASME B16.33 (125 psig) (1/2" - 2") *gas approvals apply to NPT models only

FM listed approvals

- FM 1140 (<175 psig) (1/4" - 2")

UL listed approvals

- UL 125 - flow control valves for LP-gas, guide YSDT to 250 psig max
- UL 258 - fire protection trim & drain, guide VQGU to 175 psig max (1/4" - 2")
- UL 842 - valves for flammable fluids, guides YRBX, YRPV, and MHKZ to 250 psig max (1/4" - 4" NPT only)
- UL 1477 - compressed gas shut off valves, guide YQNZ to 250 psig max (1/4" - 4" NPT only)



this specification is provided for reference only. we reserve the right to change any portion of this specification without notice and without incurring obligation to make such changes to Aalberts integrated piping systems products previously or subsequently sold.

Aalberts integrated piping systems

10715 Sikes Place / suite 200 / Charlotte / NC / 28277
aalberts-ips.us

features

- heavy pattern forged design
- corrosion resistant materials
- full-port flow
- premium RPTFE seats and packing
- adjustable stem packing
- blowout-proof stem
- silicone free assembly
- 100% factory tested
- manufactured in the USA - BAA and BABA compliant

component	material
body	brass, ASTM B283-C37700
retainer	brass ASTM B16, C36000 or B283, C37700
ball	stainless steel, ASTM A276-316
seat (2)	RPTFE
stem	brass ASTM B16, C36000
gland	stainless steel, ASTM A276-316 (2 1/2" - 4")
stem packing	brass, ASTM B16, C36000
handle	RPTFE
nut	plated steel/insulated polyvinyl
	corrosion resistant plated steel

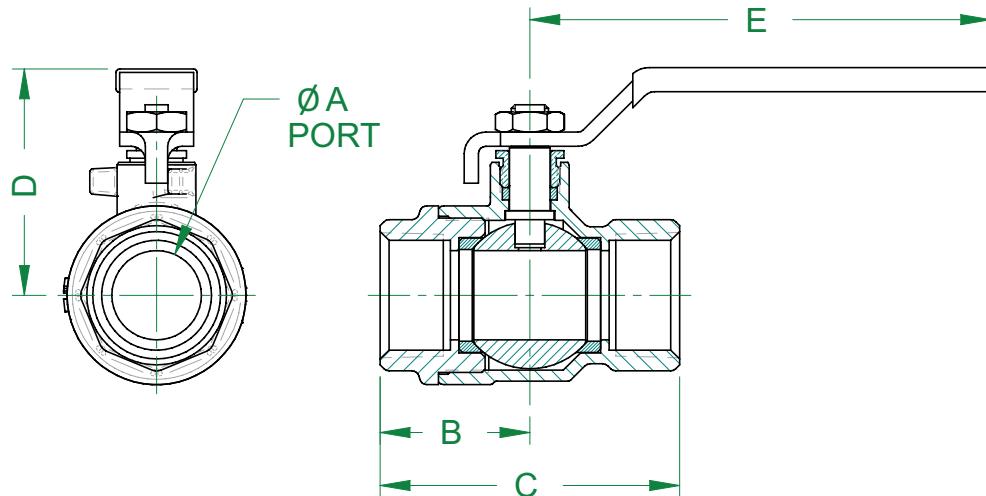
performance rating

CWP	SWP	temperature	vacuum service
600 psig	150 psig	400°F (maximum temperature)	29 in. Hg

**not intended for potable water in USA

job name	
job location	
engineer	
contractor	
tag	
PO#	
rep	
wholesaler dist	

data sheet



dimensions

part number	size	a	b	c	d	e	weight
77F-101-01	1/4"	0.38"	0.81"	1.62"	1.61"	2.85"	0.30 lbs
77F-102-01	5/8"	0.38"	0.85"	1.70"	1.61"	2.85"	0.30 lbs
77F-103-01	1/2"	0.50"	1.14"	2.25"	1.66"	2.85"	0.50 lbs
77F-104-01	3/4"	0.75"	1.29"	2.57"	1.91"	3.86"	0.80 lbs
77F-105-01	1"	1.00"	1.81"	3.20"	2.11"	3.86"	1.30 lbs
77F-106-01	1 1/4"	1.25"	1.73"	3.46"	2.44"	4.75"	2.10 lbs
77F-107-01	1 1/2"	1.50"	2.00"	4.00"	2.91"	5.42"	3.20 lbs
77F-108-01	2"	2.00"	2.37"	4.74"	3.69"	7.77"	5.60 lbs

options

option	component	size
(-01)	standard lever	all
(-04)	2 1/4" stem extension (carbon steel, zinc plated)	1/4" - 2 1/2"
(-07)	steel tee handle	1/4 - 2"
(-10)	stainless steel lever & nut	1/4 - 2"
(-11)	Therma-Seal™ insulating tee handle	1/4 - 2"
(-27)	ss latch-lock lever & nut	1/4" - 2 1/2"

data sheet

77F-100 series

full port threaded end brass ball valve 2 1/2" - 4"



description

The "Apollo"® 77F-100 series is a full port forged brass ball valve suitable for a wide range of flow control applications including HVAC, fuel gas, fire protection, irrigation etc. These NPT threaded, 2-piece valves combine reliable operation with maximum economy. Valves include most pertinent agency approvals. Proudly manufactured in our South Carolina facilities.

size range connections configurations

- 2 1/2" - 4"
- threaded
- 77F-100 series - standard
- 77F-140 series - ss ball & stem

approvals

- MSS SP-110
- IAPMO/ANSI Z1157
- Buy American Act (BAA)
- Build America Buy America (BABA) Act

CSA listed approvals

- CGA CR91-002 (5 psig)
- ANSI Z21.15/CSA 9.1 (1/2 psig)
- ASME B16.44 (5 psig)

UL listed approvals

- UL 125 - flow control valves for LP-gas, guide YSDT to 250 psig max
- UL 842 - valves for flammable fluids, guides YRBX, YRPV, and MHKZ to 250 psig max (1/4" - 4" NPT only)
- UL 1477 - compressed gas shut off valves, guide YQNZ to 250 psig max (1/4" - 4" NPT only)

*gas approvals apply to NPT models only



this specification is provided for reference only. we reserve the right to change any portion of this specification without notice and without incurring obligation to make such changes to Aalberts integrated piping systems products previously or subsequently sold.

Aalberts integrated piping systems

10715 Sikes Place / suite 200 / Charlotte / NC / 28277
aalberts-ips.us

features

- heavy pattern forged design
- corrosion resistant materials
- full-port flow
- premium PTFE seats and packing
- adjustable stem packing
- blowout-proof stem
- silicone free assembly
- 100% factory tested
- manufactured in the USA - BAA and BABA compliant

component	material
body	brass, ASTM B283-C37700
retainer	brass ASTM B16, C36000 or B283, C37700
ball	stainless steel, ASTM A276-316
seat (2)	PTFE
stem	stainless steel, ASTM A276-316 (2 1/2" - 4")
gland	brass, ASTM B16, C36000
stem packing	PTFE
handle	plated steel/insulated polyvinyl
nut	corrosion resistant plated steel

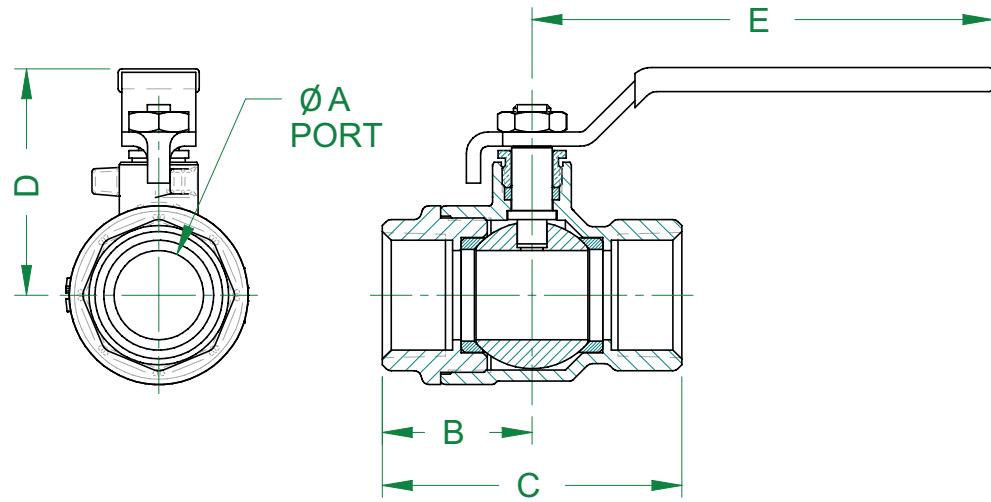
performance rating

CWP	SWP	temperature	vacuum service
400 psig	150 psig	400°F (maximum temperature)	29 in. Hg

**not intended for potable water in USA

job name	
job location	
engineer	
contractor	
tag	
PO#	
rep	
wholesaler dist	

data sheet



dimensions

part number	size	a	b	c	d	e	weight
77F-109-01	2 1/2"	2.50"	2.99"	5.98"	4.14"	7.77"	12.80 lbs
77F-140-01	3"	3.00"	3.52"	7.05"	5.03"	9.92"	19.70 lbs
77F-14A-01	4"	4.00"	3.83"	7.65"	5.70"	14.78"	25.50 lbs

options

option	component	size
(-01)	standard lever	all
(-04)	2 1/4" stem extension (carbon steel, zinc plated)	1/4" - 2 1/2"
(-07)	steel tee handle	1/4 - 2"
(-10)	stainless steel lever & nut	1/4 - 2"
(-11)	Therma-Seal™ insulating tee handle	1/4 - 2"
(-27)	ss latch-lock lever & nut	1/4" - 2 1/2"