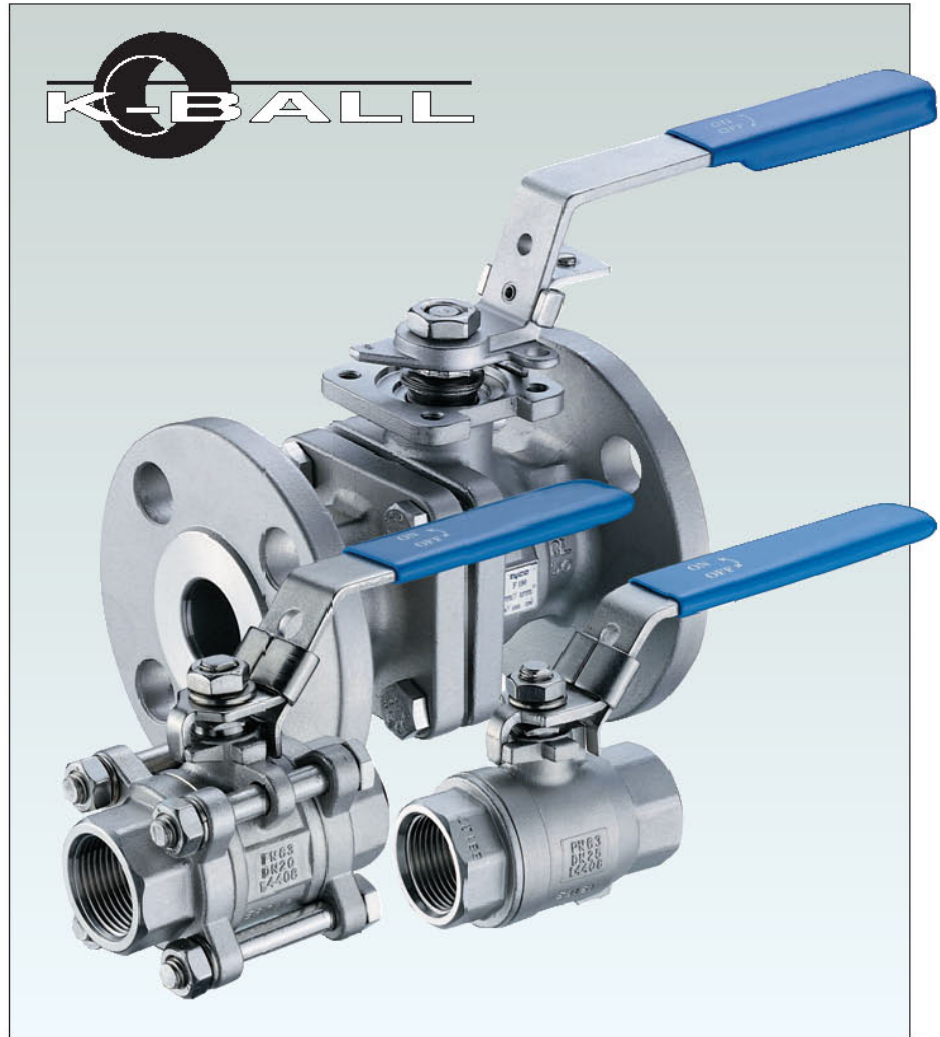


A comprehensive range of ball valves to suit a wide variety of industrial applications.

Features

- The range includes one, two and three piece ball valve designs with screwed, weld or flanged end connections.
- 3/4-way multi-port designs available.
- ISO 5211 top mounting plate available, for easy actuation, on selected models.
- Body construction either investment or sand cast according to model.
- Carbon steel or stainless steel body materials.
- Wide range of pressure ratings available.
- Reduced and full bore models.
- Locking devices standard on all valves.
- Seat material options available.



Top Work Dimensions (inches)

Flange Type	ØP	W
F03	1.42	M5
F04	1.65	M5
F05	1.97	M6
F07	2.76	M8
F10	4.02	M10
F12	4.92	M12
F14	5.51	M16

Application

The range includes valves ideal for general industrial and service applications including water, oil, gas and chemical processes. Certain models also offer designs suitable for more hazardous services such as fuel and inflammable substances.

Technical Data

Sizes : DN8 to DN300
 1/4" to 12"
 Pressure ratings : PN10/16,
 PN25/40,
 PN63
 ANSI 150/300
 JIS 10K/20K

End Connections

Screwed : BSPP, BSPT, NPT
 Welded : Socket & Butt Weld
 Flanged : ANSI 150/300
 PN10/16, PN25/40
 JIS 10K/20K



R110 : One-piece body ball valve

see page 6

- An economical, investment cast, one-piece body ball valve in stainless steel

Size range

DN8 (1/4") to DN50 (2")
- Reduced Bore



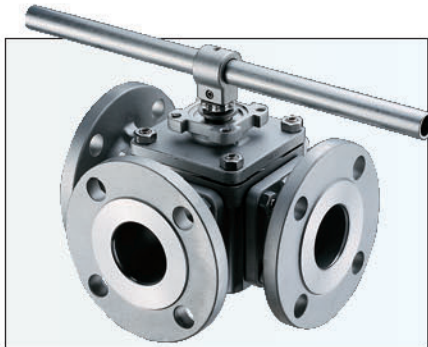
F120 : Two-piece body ball valve

see page 7

- General purpose, 1,000 psi (PN63) ball valve, in stainless steel

Size range

DN8 (1/4") to DN50 (2")
- Full Bore



F130M, R130M : Three-way split-body ball valve

see page 8-9

- With ISO 5211 top mounting plate and fully enclosed bolting
- Flanged ANSI 150, 300 or DIN PN 10/16, 25/40 or JIS 10K
- L, T or LL port options, 90° operation
- Carbon steel or stainless steel bodies

Size range

DN50 (2") to DN150 (6")
- Full Bore
DN200 (8")
- Reduced Bore



F133M/F133MT, R133M : Three and four-way split-body ball valve

see page 10-12

- With ISO 5211 top mounting plate and fully enclosed bolting
- End connections screwed, socket weld, butt weld or flanged
- Flanged ANSI 150, 300 or DIN PN 10/16, 25/40 or JIS 10K
- L, T or LL port options, 90° operation
- Carbon steel or stainless steel bodies

Size range

DN10 (3/8") to DN50 (2")
- Full and Reduced Bore



R138 : Three-way multi-port ball valve

see page 13

- With ISO 5211 top mounting plate
- Investment stainless steel cast body
- Screwed ends, NPT, BSPP, BSPT reduced bore
- L or T port options, 90° operation

Size range

DN8 (1/4") to DN50 (2")
- Reduced Bore



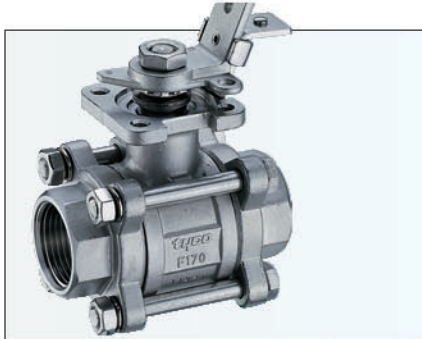
F151 : Three-piece economical ball valve

see page 14

- Three-piece, swing-out design
- End connections screwed, butt weld or socket weld
- Carbon steel or stainless steel bodies

Size range

DN8 (1/4") to DN100 (4")
- Full Bore



F171 : Three-piece ball valve to ISO 5211

see page 15-16

- With ISO 5211 top mounting plate
- End connections flanged, screwed, butt weld or socket weld
- Carbon steel or stainless steel bodies

Size range

DN8 (1/4") to DN100 (4")
- Full Bore



F171T : Three-piece high purity clean ball valve

see page 17-18

- With ISO 5211 mounting plate
- End connections butt weld, tubing and Tri-Clamp
- High purity cleaning (oil free)
- Helium leak detection calibrated to 1×10^{-5} std cc/sec

Size range

DN15 (1/2") to DN300 (12")
- Full Bore/True Bore



F180/F180F, R180/R180F : Three-piece heavy duty ball valve

see page 19-22

- With ISO 5211 top mounting plate and fully enclosed bolting
- End connections screwed, butt weld or socket weld
- Carbon steel or stainless steel bodies
- F180F Fire safe tested to API 607

Size range

F180 - DN8 (1/4") to DN100 (4")
F180F - DN8 (1/4") to DN100 (4")
- Full Bore and Reduced Bore



F190/F190F : Split-body flanged ball valve

see page 23-26

- With ISO 5211 top mounting pad
- Flanged ANSI 150, 300 or DIN PN10/16, 25/40 or JIS 10K, 20K
- Investment casting for 4" and under carbon steel or stainless steel bodies
- F190F Fire safe tested to API 607

Size range

DN15 (1/2") to DN300 (12")
- Full Bore



F129 : Two-piece direct mounting ball valve

see page 27

- Investment casting body and cap
- Blow-out proof stem
- ISO 5211 direct mount pad

Size range

DN15 (1/2") to DN80 (3")
- Full Bore



R139 : Three-way multi-port direct mounting ball valve

see page 28-29

- An economical, investment casting body and cap in stainless steel
- Variety of thread standards available
- Blow-out proof stem
- L or T port options
- ISO 5211 mounting pad
- 4 seats for rigid ball supporting

Size range

DN8 (1/4") to DN50 (2")
- Reduced Bore