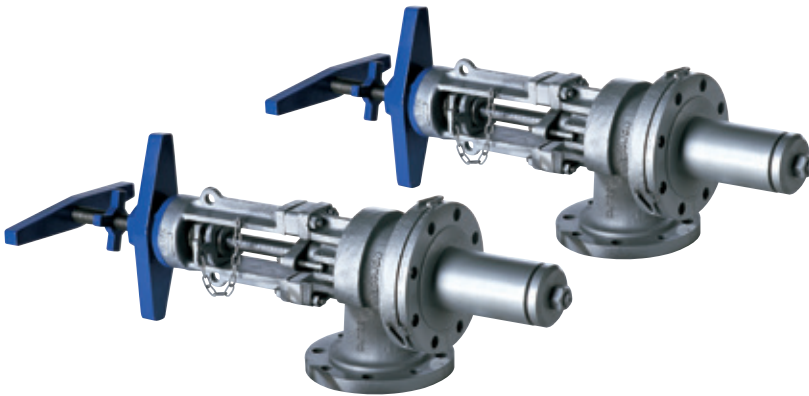




## LUNKENHEIMER FIGURE 604 BAYONET ISOLATION VALVE

DN 50 - 600 (NPS 2 - 24) ASME CLASS 150, 300 AND 600

The F604 is a bayonet isolation valve specifically designed for severe service in alumina and mining applications where scale and erosion are present



### GENERAL APPLICATION

Designed and engineered specifically for the mining and mineral processing industry, or other applications where scale or settled slurries need to be cleared to allow flow of media.

### TECHNICAL DATA

Size range: DN 50 - 600 (NPS 2 - 24)  
Temperature rating: Up to 345°C (650°F)  
Pressure rating: ASME Class 150 to 600

### FEATURES

- Valves can be reground in-line.
- Designed to ASME B16.34
- Heavy duty wall and flange thickness well in excess of ASME B16.34 and ASME B16.5
- Pads for fitting drain ports.
- Tested to API 598.
- Large stem diameters for strength and stiffness.
- Stellite 6 hardfacing as standard on disc and seat surfaces.
- Hard facing available on stem.
- Roller or plain bearings fitted to yoke bush - depending upon size.
- Manufactured under quality system ISO 9001:2008, Certificate No. MEL 0929678/A
- Documentation to EN 10424 1999 Type 3.1B (DIN 50409). Material certification for pressure containing components.

### Options

- Range of internal linings available to combat the effects of erosion or corrosion.
- High performance erosion resistant discs and seats.
- Custom face to face dimensions.
- Custom designs for specific applications.

### Actuation options

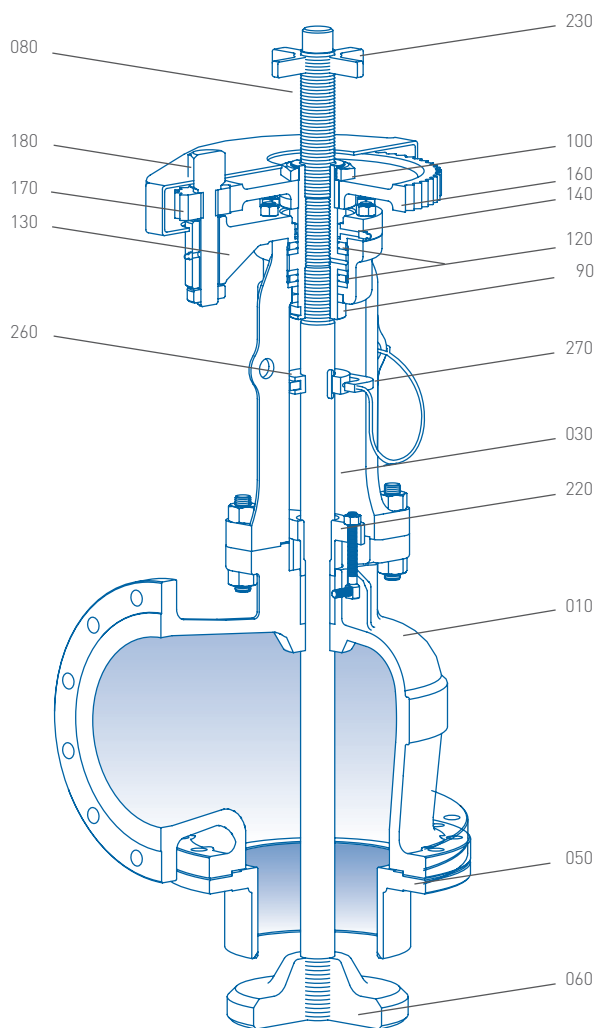
- Spur gear operation standard on larger sizes.
- Bevel gear operators.
- Patented stem clutch design for easy grind set-up.
- Drive adaptations for pneumatic guns.
- Customized actuation design.
- Range of standard or custom actuation available including:
  - Electric
  - Pneumatic
  - Hydraulic
  - All with regrinding where required





# LUNKENHEIMER FIGURE 604 BAYONET ISOLATION VALVE

DN 150 - 600 (NPS 6 - 24) ASME CLASS 150



## PARTS LIST

No.	Description	Material standards
010	Body	ASTM A216-WCB
030	Yoke	ASTM A216-WCB
050	Seat	ASTM A29 - 1020, 1518 or ASTM A105 - Stellite coated
060	Disc	ASTM A29 - 1020, 1518 or ASTM A105 - Stellite coated
080	Stem	ASTM A29 - 1020
090	Yoke bush	ASTM A29 - 1020
100	Yoke bush locknut	ASTM A29 - 1020
120	Bearing - yoke bush	Steel roller
130	Retaining cap	ASTM A29 - 1020
140	Bearing - retaining cap	Bronze
160	Gear	ASTM A29 - 1020
170	Pinion gear	ASTM A29 - 1020
180	Pinion shaft	AISI 4140
220	Gland follower	ASTM A29 - 1020 or ASTM A216 WCB
230	Stem jam nut	ASTM A29 - 1020 or ASTM A216 WCB
260	Torque reactor hub	ASTM A29 - 1020
270	Torque reactor pin	ASTM A29 - 1020

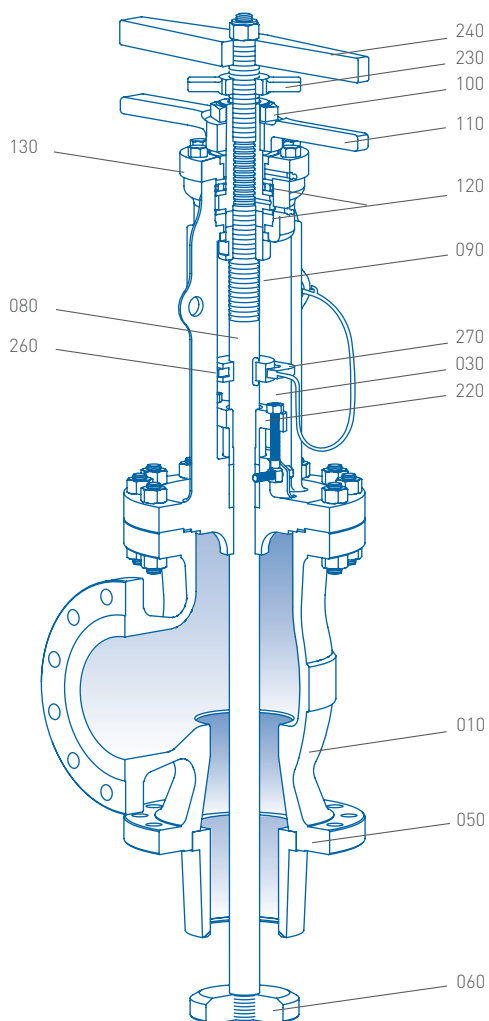
## NOTES

No bolts, washers, gaskets or pins included in parts list.

Bevel gear operation option available.

# LUNKENHEIMER FIGURE 604 BAYONET ISOLATION VALVE

DN 50 - 150 (NPS 2 - 6) ASME CLASS 300 AND 600



## PARTS LIST

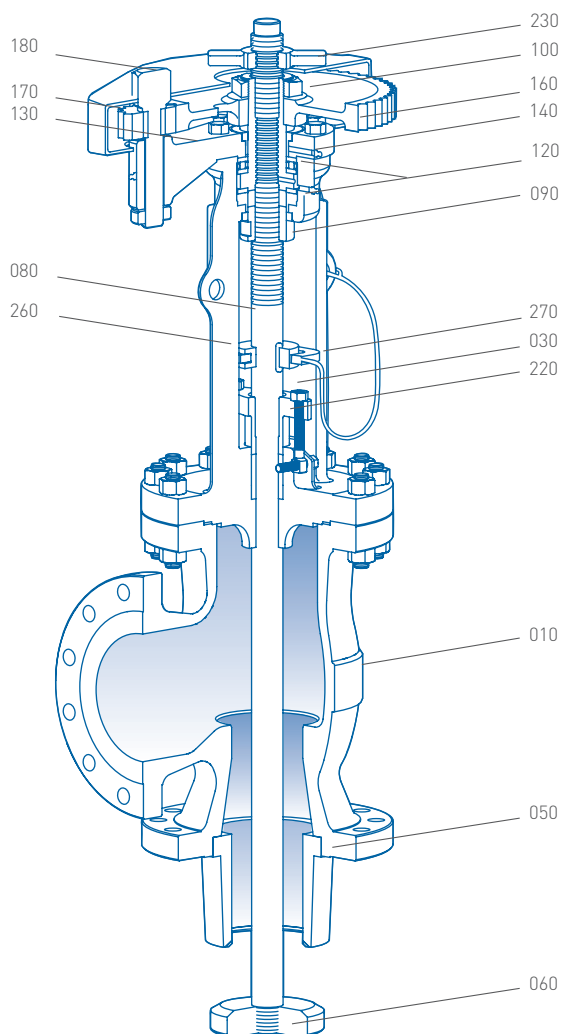
No.	Description	Material standards
010	Body	ASTM A216-WCB
030	Yoke	ASTM A216-WCB
050	Seat	ASTM A29 - 1020, 1518 or ASTM A105 - Stellite coated
060	Disc	ASTM A29 - 1020, 1518 or ASTM A105 - Stellite coated
080	Stem	ASTM A29 - 4140
090	Yoke bush	ASTM A29 - 1020
100	Yoke bush locknut	ASTM A29 - 1020
110	Yoke bush handle	ASTM A29 - 1020
120	Bearing - yoke bush	Bronze
130	Retaining cap	ASTM A29 - 1020
220	Gland follower	AISI C1020 or ASTM A216 - WCB
230	Stem jam nut	ASTM A29 - 1020 or ASTM A216 WCB
240	Stem handle	ASTM A29 - 1020 or ASTM A216 WCB
260	Torque reactor hub	ASTM A29 - 1020
270	Torque reactor pin	ASTM A29 - 1020

## NOTE

No bolts, washers, gaskets or pins included in parts list.

# LUNKENHEIMER FIGURE 604 BAYONET ISOLATION VALVE

DN 150 - 500 (NPS 6 - 20) ASME CLASS 300 AND 600



## PARTS LIST

No.	Description	Material standards
010	Body	ASTM A216 - WCB
030	Yoke	ASTM A216 - WCB
050	Seat	AISI C1020 - Stellite coated on seat face
060	Disc	AISI C1020 - Stellite coated on seat face
080	Stem	AISI - 4140
090	Yoke bush	Carbon steel
100	Yoke bush locknut	Carbon steel
120	Bearing - yoke bush	Steel roller
130	Retaining cap	Carbon steel
140	Bearing - retaining cap	Bronze
160	Gear	Carbon steel
170	Pinion gear	Carbon steel
180	Pinion shaft	AISI - 4140
220	Gland follower	AISI C1020 - ASTM A216 - WCB
230	Stem jam nut	AISI C1020
260	Torque reactor hub	Carbon steel
270	Torque reactor pin	Carbon steel

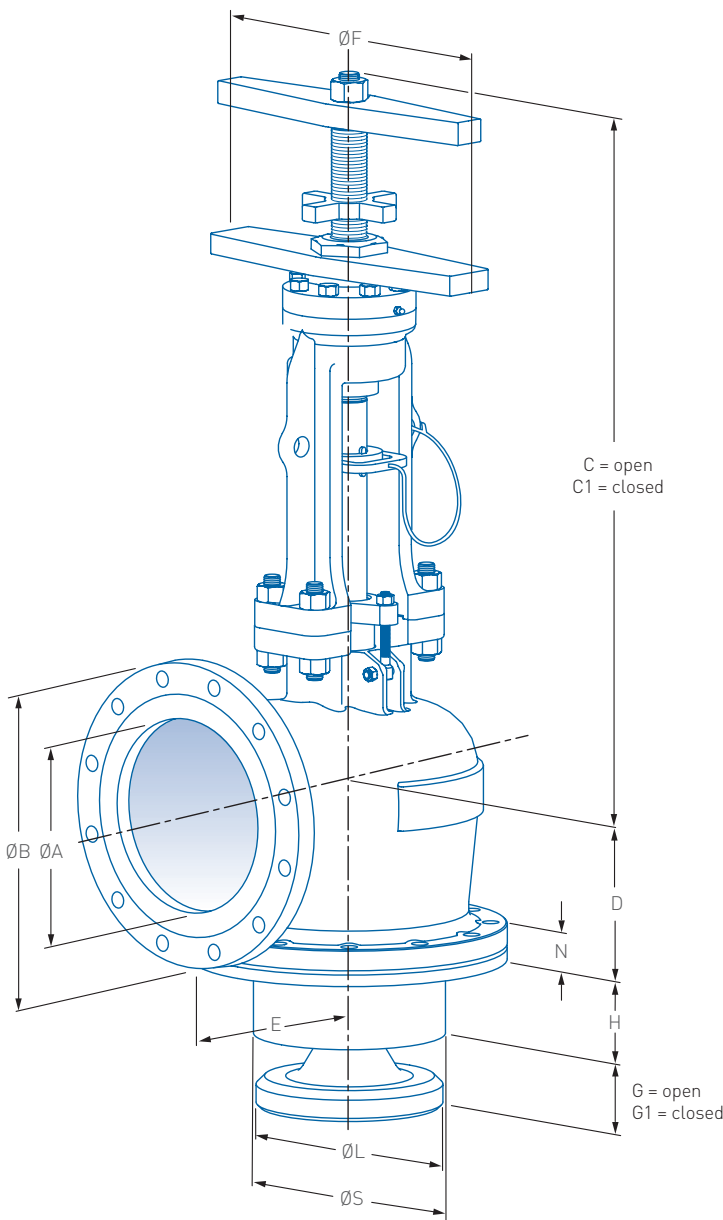
## NOTES

No bolts, washers, gaskets or pins included in parts list.

Bevel gear operation option available.

# LUNKENHEIMER FIGURE 604 BAYONET ISOLATION VALVE

DN 50 - 300 (NPS 2 - 12) ASME CLASS 150



## DIMENSIONS mm (inches)

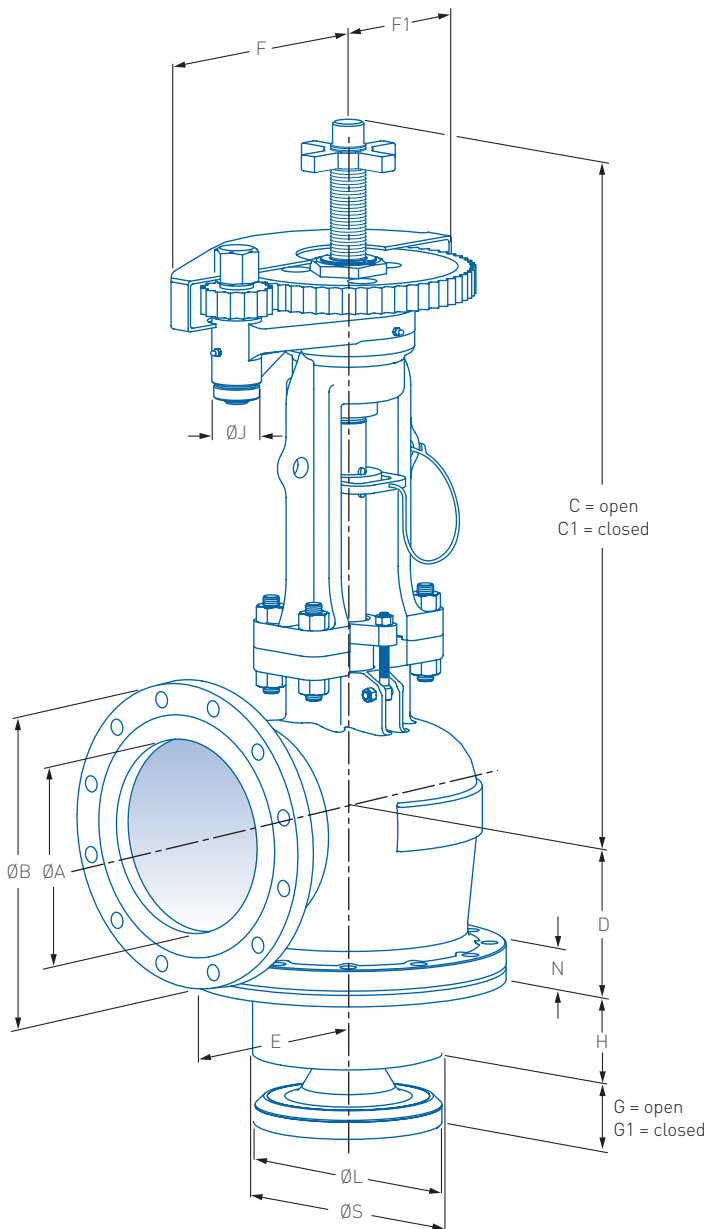
Valve size			C	C1			G	G1						
DN (NPS)	$\varnothing A$ bore	$\varnothing B$	open	closed	D	E	$\varnothing F$	open	closed	H	$\varnothing L$	N min	$\varnothing S$	
50 (2)	51 (2.00)	152 (6.00)	355 (13.98)	393 (15.47)	60 (2.36)	114 (4.49)	205 (8.07)	57 (2.24)	19 (0.75)	95 (3.74)	43 (1.69)	33.5 (1.32)	45 (1.77)	
80 (3)	76 (3.00)	191 (7.50)	364 (14.33)	412 (16.22)	79 (3.11)	140 (5.51)	205 (8.07)	72 (2.83)	24 (0.94)	102 (4.02)	67 (2.64)	43.0 (1.69)	70 (2.76)	
100 (4)	102 (4.00)	229 (9.00)	530 (20.87)	657 (25.87)	125 (4.92)	165 (6.50)	305 (12.01)	150 (5.91)	23 (0.91)	102 (4.02)	92 (3.62)	46.5 (1.83)	95 (3.74)	
150 (6)	152 (6.00)	279 (11.00)	676 (26.61)	828 (32.60)	159 (6.26)	203 (7.99)	410 (16.14)	182 (7.17)	30 (1.18)	114 (4.49)	135 (5.31)	50.0 (1.97)	142 (5.59)	
200 (8)	203 (8.00)	343 (13.50)	735 (28.94)	913 (35.94)	197 (7.76)	248 (9.76)	410 (16.14)	214 (8.43)	36 (1.42)	114 (4.49)	181 (7.13)	53.5 (2.11)	187 (7.36)	
250 (10)	254 (10.00)	406 (16.00)	914 (35.98)	1118 (44.02)	241 (9.49)	292 (11.50)	520 (20.47)	245 (9.65)	42 (1.65)	114 (4.49)	235 (9.25)	57.5 (2.26)	248 (9.76)	
300 (12)	305 (12.00)	483 (19.00)	972 (38.27)	1213 (47.76)	276 (10.87)	349 (13.74)	520 (20.47)	270 (10.63)	41 (1.61)	114 (4.49)	286 (11.26)	59.5 (2.34)	299 (11.77)	

## NOTE

Dimension E is from the valve center to the flange raised face.

# LUNKENHEIMER FIGURE 604 BAYONET ISOLATION VALVE

DN 150 - 600 (NPS 6 - 24) ASME CLASS 150



## DIMENSIONS mm (inches)

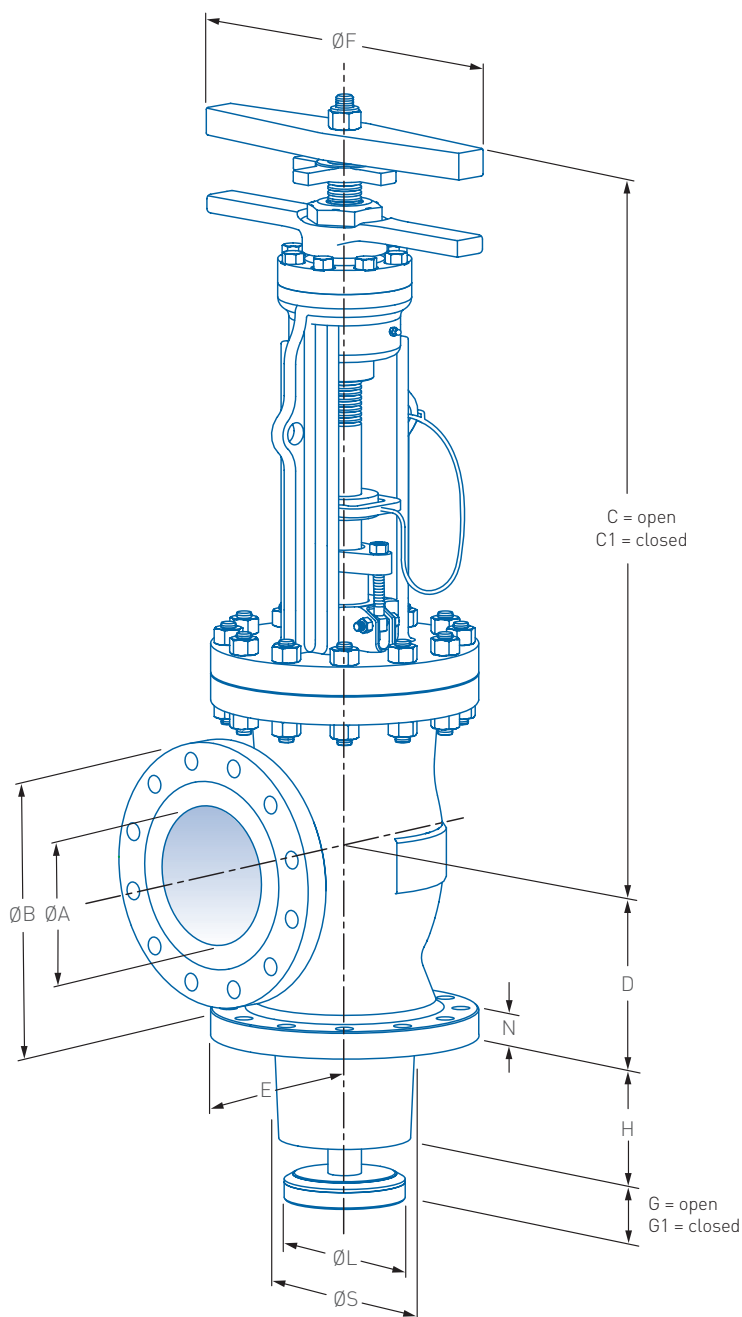
Valve size	ØA		C	C1					G	G1						
DN (NPS)	bore	ØB	open	closed	D	E	F	F1	open	closed	H	ØJ	ØL	N min	ØS	
150 (6)	152 (6.00)	279 (11.00)	667 (26.26)	819 (32.24)	159 (6.26)	203 (7.99)	295 (11.61)	195 (7.68)	185 (7.28)	33 (1.30)	114 (4.49)	60 (2.36)	137 (5.39)	50.0 (1.97)	141 (5.55)	
200 (8)	203 (8.00)	343 (13.50)	735 (28.94)	913 (35.94)	197 (7.76)	248 (9.76)	295 (11.61)	195 (7.68)	215 (8.46)	37 (1.46)	114 (4.49)	60 (2.36)	181 (7.13)	53.5 (2.11)	187 (7.36)	
250 (10)	254 (10.00)	406 (16.00)	922 (36.30)	1125 (44.29)	241 (9.49)	292 (11.50)	295 (11.61)	195 (7.68)	245 (9.65)	42 (1.65)	114 (4.49)	60 (2.36)	235 (9.25)	57.5 (2.26)	248 (9.76)	
300 (12)	305 (12.00)	483 (19.00)	946 (37.24)	1175 (46.26)	276 (10.87)	349 (13.74)	330 (12.99)	230 (9.06)	270 (10.63)	41 (1.61)	114 (4.49)	60 (2.36)	286 (11.26)	59.5 (2.34)	299 (11.77)	
350 (14)	349 (13.75)	533 (21.00)	1216 (47.87)	1470 (57.87)	305 (12.01)	368 (14.49)	330 (12.99)	230 (9.06)	300 (11.81)	46 (1.81)	127 (5.00)	60 (2.36)	318 (12.52)	67.5 (2.66)	324 (12.76)	
400 (16)	387 (15.25)	597 (23.50)	1284 (50.55)	1564 (61.57)	340 (13.39)	381 (15.00)	330 (12.99)	230 (9.06)	347 (13.66)	67 (2.64)	127 (5.00)	60 (2.36)	365 (14.37)	71.0 (2.80)	375 (14.76)	
450 (18)	438 (17.25)	635 (25.00)	1345 (52.95)	1650 (64.96)	356 (14.02)	406 (15.98)	330 (12.99)	230 (9.06)	381 (15.00)	76 (2.99)	127 (5.00)	60 (2.36)	413 (16.26)	77.2 (3.04)	425 (16.73)	
500 (20)	489 (19.25)	699 (27.50)	1468 (57.80)	1773 (69.80)	394 (15.51)	457 (17.99)	395 (15.55)	305 (12.01)	381 (15.00)	76 (2.99)	140 (5.51)	60 (2.36)	443 (17.44)	82.5 (3.25)	476 (18.74)	
600 (24)	590 (23.25)	813 (32.00)	1567 (61.69)	1948 (76.69)	451 (17.76)	508 (20.00)	395 (15.55)	305 (12.01)	472 (18.58)	91 (3.58)	140 (5.51)	60 (2.36)	546 (21.50)	92.7 (3.65)	578 (22.76)	

## NOTE

Dimension E is from the valve center to the flange raised face.

# LUNKENHEIMER FIGURE 604 BAYONET ISOLATION VALVE

DN 50 - 150 (NPS 2 - 6) ASME CLASS 300



## DIMENSIONS mm (inches)

Valve size	C		C1		G		G1		H	$\varnothing L$	N min	$\varnothing S$	
DN (NPS)	$\varnothing A$ bore	$\varnothing B$	open	closed	D	E	$\varnothing F$	open					closed
50 (2)	51 (2.00)	165 (6.50)	445 (17.52)	502 (19.76)	127 (5.00)	165 (6.50)	203 (7.99)	78 (3.07)	21 (0.83)	81 (3.19)	46 (1.81)	22.7 (0.89)	48 (1.89)
80 (3)	76 (3.00)	210 (8.25)	445 (17.52)	502 (19.76)	152 (5.98)	165 (6.50)	203 (7.99)	76 (2.99)	19 (0.75)	102 (4.02)	71 (2.80)	29.0 (1.14)	73 (2.87)
100 (4)	102 (4.00)	254 (10.00)	765 (30.12)	889 (35.00)	178 (7.01)	178 (7.01)	406 (15.98)	156 (6.14)	32 (1.26)	121 (4.76)	84 (3.31)	34.0 (1.34)	95 (3.74)
150 (6)	152 (6.00)	318 (12.50)	857 (33.74)	1010 (39.76)	216 (8.50)	216 (8.50)	406 (15.98)	185 (7.28)	32 (1.26)	114 (4.49)	147 (5.79)	39.0 (1.54)	141 (5.55)

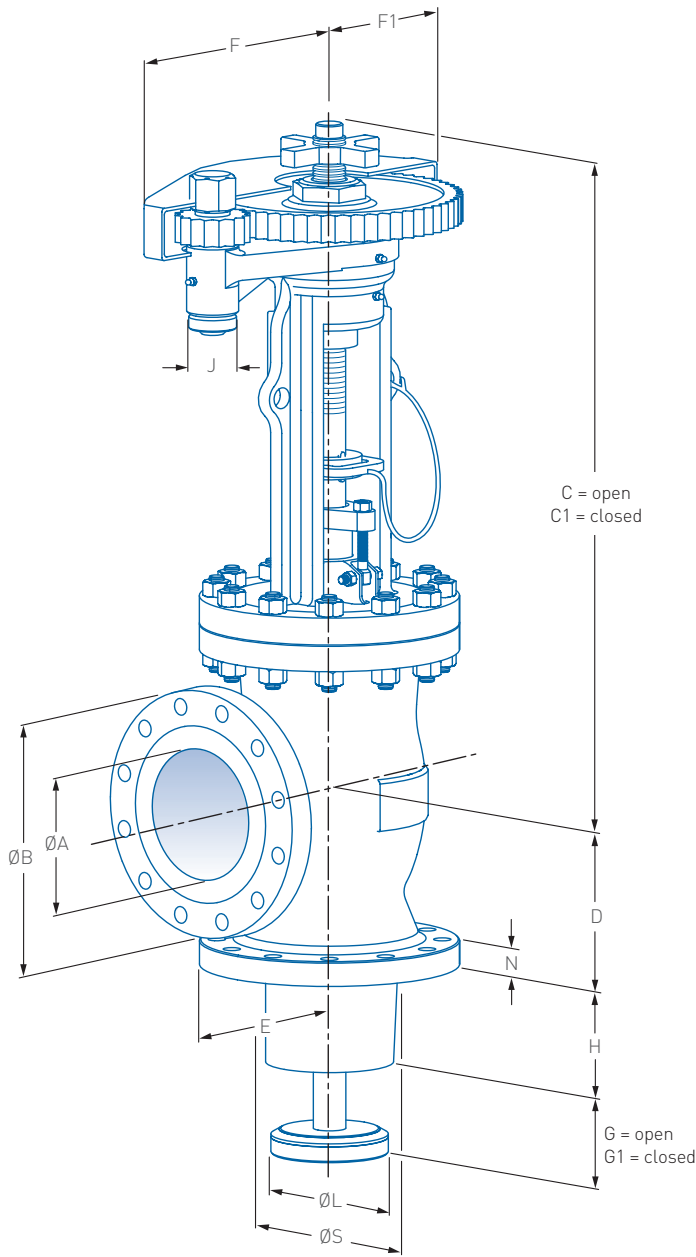
## NOTE

Dimension E is from the valve center to the flange raised face.



# LUNKENHEIMER FIGURE 604 BAYONET ISOLATION VALVE

DN 150 - 500 (NPS 6 - 20) ASME CLASS 300



## DIMENSIONS mm (inches)

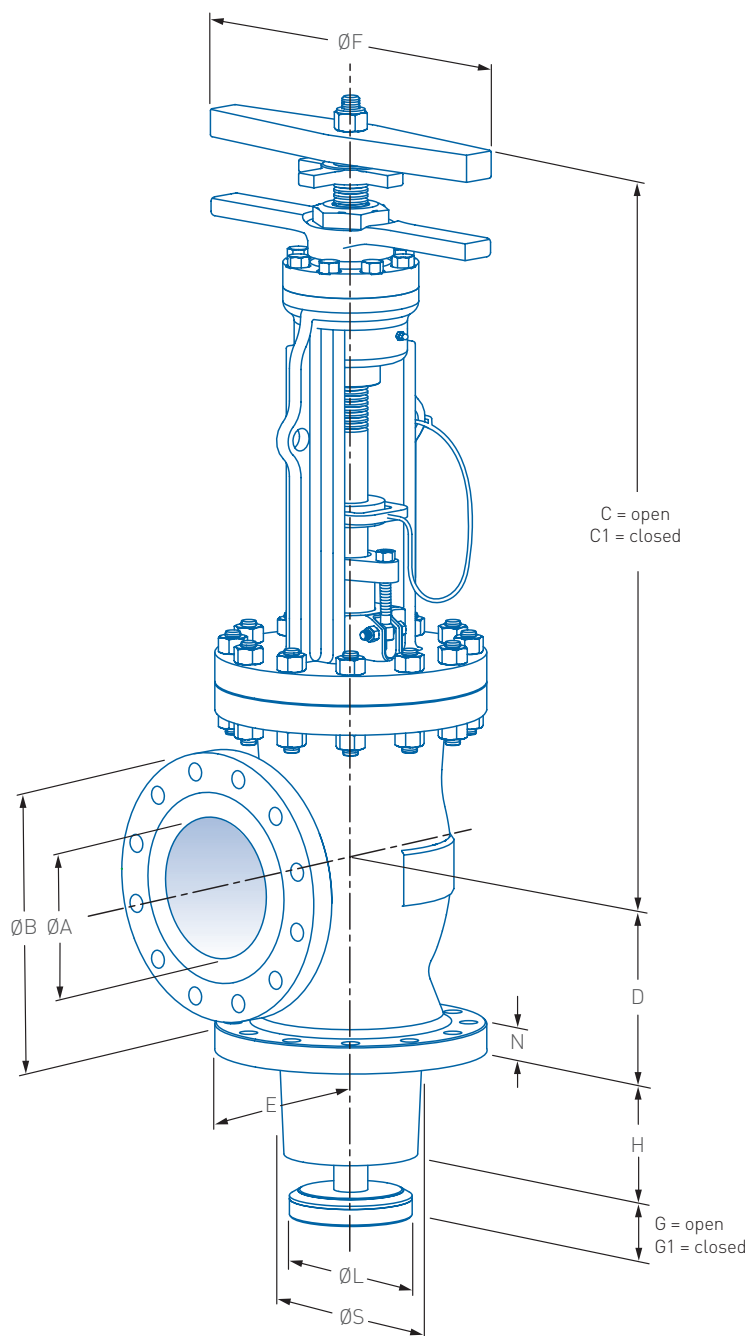
Valve size	C		C1		D		E		F		G		G1		H		J		ØL		N min		ØS		
DN (NPS)	ØA bore	ØB	open	closed							open	closed					(A/F)								
150 (6)	152 (6.00)	318 (12.50)	1010 (39.76)	1857 (73.11)	216 (8.50)	216 (8.50)	285 (11.22)	180 (7.09)	185 (7.28)	32 (1.26)	114 (4.49)	60 (2.36)	147 (5.79)	39.0 (1.54)	149 (5.87)										
200 (8)	200 (7.85)	381 (15.00)	1294 (50.94)	1144 (45.04)	267 (10.51)	267 (10.51)	285 (11.22)	180 (7.09)	215 (8.46)	37 (1.46)	114 (4.49)	60 (2.36)	180 (7.09)	42.0 (1.65)	187 (7.36)										
250 (10)	254 (10.00)	445 (17.50)	1378 (54.25)	1175 (46.26)	305 (12.01)	305 (12.01)	335 (13.19)	225 (8.86)	246 (9.69)	43 (1.69)	127 (5.00)	60 (2.36)	241 (9.49)	48.6 (1.91)	246 (9.69)										
300 (12)	302 (11.90)	521 (20.50)	1715 (67.52)	1448 (57.01)	343 (13.50)	343 (13.50)	335 (13.19)	225 (8.86)	310 (12.20)	43 (1.69)	127 (5.00)	60 (2.36)	293 (11.54)	52.0 (2.05)	299 (11.77)										
350 (14)	336 (13.25)	584 (23.00)	1854 (72.99)	1588 (62.52)	381 (15.00)	381 (15.00)	335 (13.19)	225 (8.86)	309 (12.17)	43 (1.69)	127 (5.00)	60 (2.36)	319 (12.56)	58.0 (2.28)	324 (12.76)										
400 (16)	387 (15.25)	648 (25.50)	1664 (65.51)	1943 (76.50)	419 (16.50)	432 (17.01)	415 (16.34)	315 (12.40)	335 (13.19)	56 (2.20)	127 (5.00)	60 (2.36)	370 (14.57)	61.0 (2.40)	375 (14.76)										
450 (18)	419 (16.50)	711 (28.00)	1689 (66.50)	1669 (65.71)	457 (17.99)	457 (17.99)	415 (16.34)	315 (12.40)	336 (13.23)	56 (2.20)	127 (5.00)	60 (2.36)	421 (16.57)	63.0 (2.48)	425 (16.73)										
500 (20)	483 (19.00)	775 (30.50)	1816 (71.50)	2108 (82.99)	495 (19.49)	495 (19.49)	480 (18.90)	385 (15.16)	363 (14.29)	71 (2.80)	140 (5.51)	60 (2.36)	463 (18.23)	66.0 (2.60)	476 (18.74)										

## NOTE

Dimension E is from the valve center to the flange raised face.

# LUNKENHEIMER FIGURE 604 BAYONET ISOLATION VALVE

DN 50 - 150 (NPS 2 - 6) ASME CLASS 600



## DIMENSIONS mm (inches)

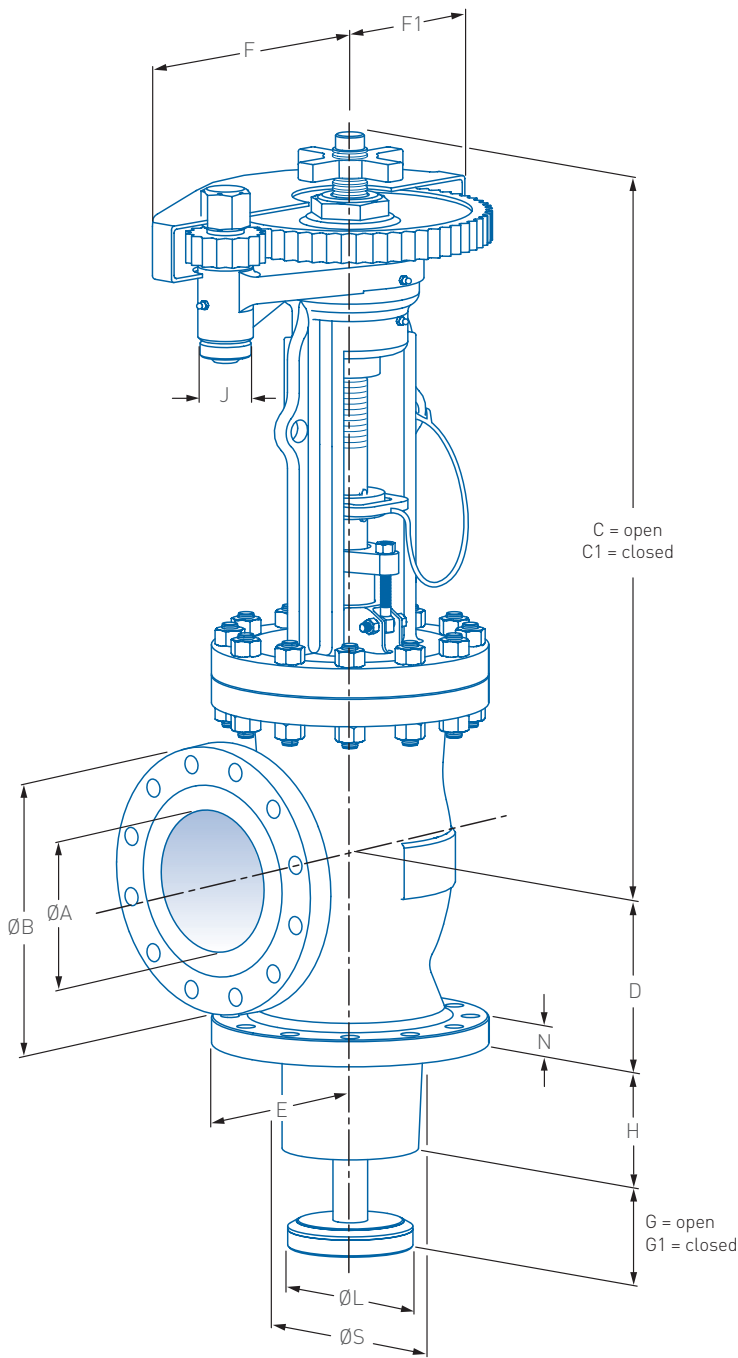
Valve size	C		C1		G		G1		H	$\varnothing L$	N min	$\varnothing S$	
DN (NPS)	$\varnothing A$ bore	$\varnothing B$	open	closed	open	closed	open	closed					
50 (2)	51 (2.00)	165 (6.50)	556 (21.89)	600 (23.62)	133 (5.24)	133 (5.24)	305 (12.01)	63 (2.48)	19 (0.75)	127 (5.00)	43 (1.69)	27.4 (1.08)	34 (1.34)
80 (3)	76 (3.00)	210 (8.25)	556 (21.89)	600 (23.62)	184 (7.24)	184 (7.24)	305 (12.01)	63 (2.48)	19 (0.75)	105 (4.13)	70 (2.76)	33.8 (1.33)	49 (1.93)
100 (4)	102 (4.00)	273 (10.75)	699 (27.52)	762 (30.00)	216 (8.50)	216 (8.50)	406 (15.98)	95 (3.74)	32 (1.26)	127 (5.00)	90 (3.54)	41.0 (1.61)	46 (1.81)
150 (6)	152 (6.00)	355 (14.00)	900 (35.43)	1050 (41.34)	251 (9.88)	264 (10.39)	406 (15.98)	195 (7.68)	45 (1.77)	155 (6.10)	141 (5.55)	49.7 (1.96)	56 (2.20)

## NOTE

Dimension E is from the valve center to the flange raised face.

# LUNKENHEIMER FIGURE 604 BAYONET ISOLATION VALVE

DN 150 - 250 (NPS 6 - 10) ASME CLASS 600



## DIMENSIONS mm (inches)

Valve size		C		C1		G		G1		H	J [A/F]	ØL	N min	ØS	
DN (NPS)	ØA bore	ØB	open	closed	D	E	F	F1	open						closed
150 (6)	152 (6.00)	355 (14.00)	900 (35.43)	1050 (41.34)	251 (9.88)	264 (10.39)	285 (11.22)	180 (7.09)	178 (7.01)	27 (1.06)	155 (6.10)	60 (2.36)	114 (4.49)	49.7 (1.96)	141 (5.55)
200 (8)	200 (7.85)	419 (16.50)	1099 (43.27)	1213 (47.76)	330 (12.99)	324 (12.76)	345 (13.58)	225 (8.86)	178 (7.01)	37 (1.46)	178 (7.01)	60 (2.36)	180 (7.09)	58.1 (2.29)	187 (7.36)
250 (10)	254 (10.00)	508 (20.00)	1449 (57.05)	1635 (64.37)	394 (15.51)	394 (15.51)	415 (16.34)	315 (12.40)	229 (9.02)	43 (1.69)	142 (5.59)	60 (2.36)	235 (9.25)	68.0 (2.68)	239 (9.41)

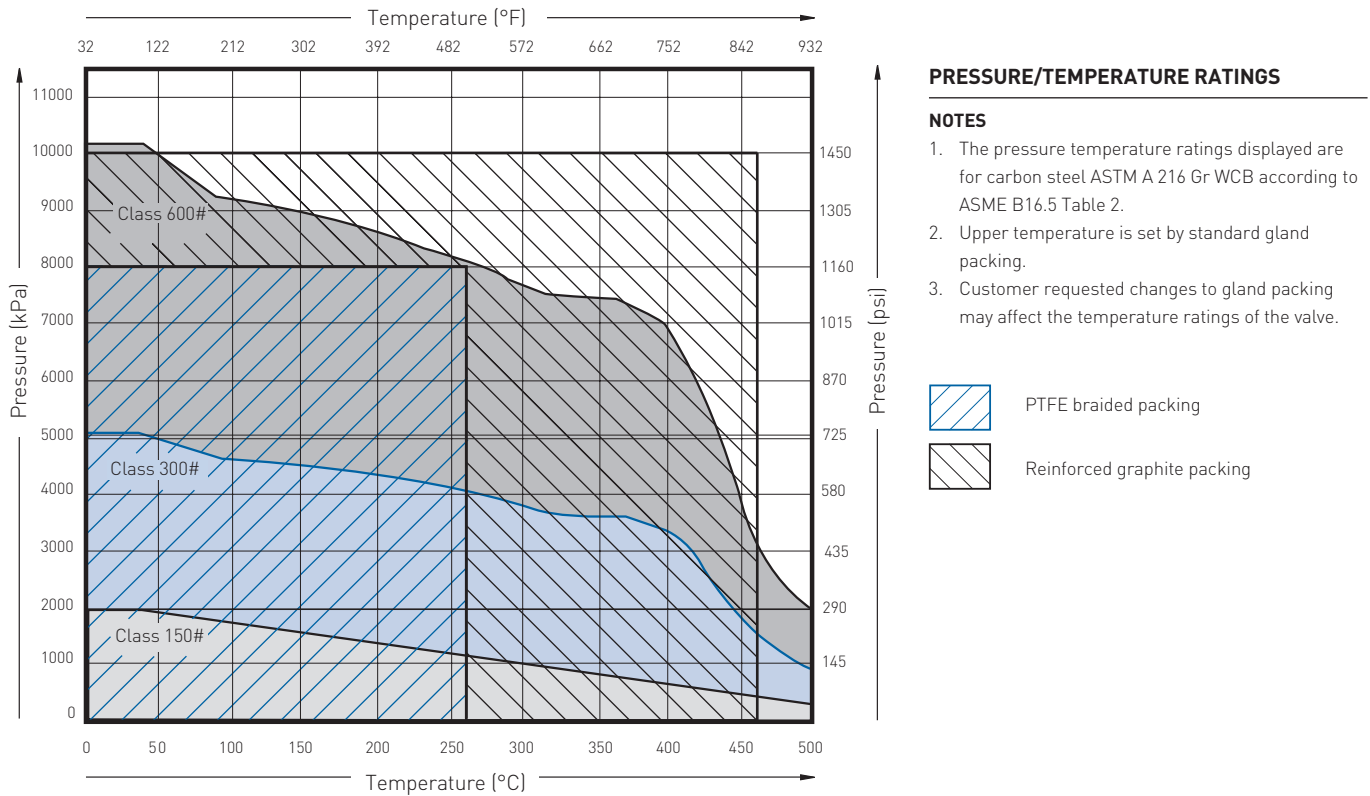
## NOTE

Dimension E is from the valve center to the flange raised face.

# LUNKENHEIMER FIGURE 604 BAYONET ISOLATION VALVE

DN 50 - 600 (NPS 2 - 24) ASME CLASS 150, 300 AND 600

## PRESSURE/TEMPERATURE GRAPH



## TYPICAL SPECIFYING SEQUENCE - CLASS 150, 300 AND 600

<b>100 (4)</b>	<b>F604</b>	<b>3</b>	<b>3</b>	<b>C</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>/</b>	<b>00</b>
Valve size	Figure no.	Flange rating	Flange rating	Body material	Seat trim	Disc trim	Stem trim	Certification code	Valve variant	Standard option

Size range: DN 50 - 600 (NPS 2 - 24)

Figure no: F604 - Bayonet isolation valve Class 150, 300 and 600

Trim code	Flange rating	Flange rating	Body material	Seat trim	Disc trim	Stem trim
11C224	Class 150	Class 150	A 216 Gr WCB	Steel - stellite	Steel - stellite	Grade ASTM A29 - 4140 - Stellite coated
11C253	Class 150	Class 150	A 216 Gr WCB	Steel - stellite	Steel	Grade ASTM A29 - 4140
33C223	Class 300	Class 300	A 216 Gr WCB	Steel - stellite	Steel - stellite	Grade ASTM A29 - 4140
66C224	Class 600	Class 600	A 216 Gr WCB	Steel - stellite	Steel - stellite	Grade ASTM A29 - 4140 - Stellite coated

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