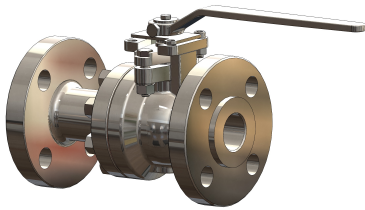
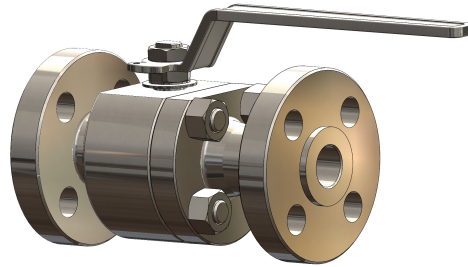


NAC-NUTEK®

# FB/B2 FLOATING BALL VALVES



*Heavy duty forged  
and cast steel  
floating ball valves  
for installation in  
upstream,  
midstream and  
downstream  
applications*



**NAC-NUTEK® MODEL FB/B2  
FLOATING BALL VALVES**

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**Sizes, Pressures and End Connections**

- FB: [Forged] 1"600 RP through 3"1500 RP .  
(20mm though 80mm) (PN 20 through PN 320)
- B2: [Cast] 1"150 FP through 4" 600 FP; 6" 150 FP through 8" 300 FP  
(25mm through 200mm) (PN 20 through PN 240)
- End Connections: Flanged

**Materials and Actuation**

- Materials: Carbon steel, stainless steel (NACE)
- Operator: Manual lever handle
- Actuation: Consult NAM for information on various types of actuators

**Compliance to Standards and Specifications**

- Registered Quality System [ISO 9002]
- ASME B16.34 / B16.25 / B16.11 / B16.10 / B16.5
- API 598 Testing
- API 607 (Fire-Safe)
- ASME Section VIII, Division 1 Boiler and Pressure Vessel Code
- CSA Z245.15 Steel Valves & API 608
- NACE MR 0175 & MR 0103 compliant
- MSS SP-25 marking
- Canadian Registration Number (CRN)

# MODEL FB (Forged) Standard Features

## BODY CONSTRUCTION

Forged steel, two-piece bolted construction.

## PACKING

Self-adjusting (live loaded) by means of Belleville washers, allow for long service life. Stem packing adjustment without handle removal.

## BALL

The floating ball design provides for positive shutoff in either flow direction. Includes pressure equalization hole to prevent trapping of pressure in the body cavity.

## SEATS

Materials available are Teflon™, Delrin, Devlon™ and PEEK.

## THRUST WASHER

Acts as a bearing between the body and stem.

## HANDLE

Rugged cast handle. Handle position indicates flow position. When the handle is positioned inline with the pipe, the valve is open. When the handle is perpendicular to the pipe, the valve is closed. Locking handle / handle hub is standard for all valves.

## STEM

Blowout-proof stem is back-seated through the valve body. Redundant sealing suitable for fire conditions, high cycle applications and fugitive emissions compliance.

## REDUNDANT STEM SEAL.

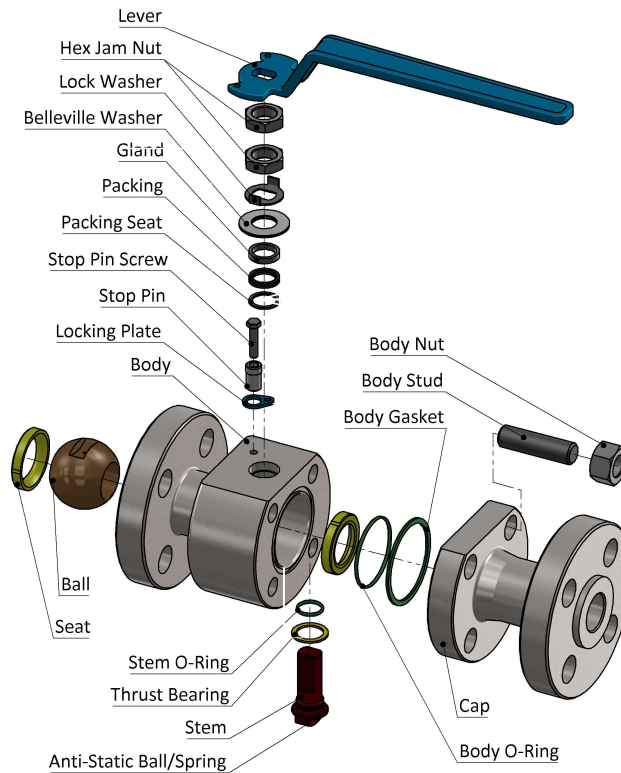
Stem O-ring installed on all valves.

## ANTI-STATIC DEVICE

All valves have mechanical anti-static devices as standard.

## BODY SEALS

Body seals include pressure retaining and fire-safe.



## How to Order

How to develop typical figure numbers [ **FB-F20R09N03P1** ]

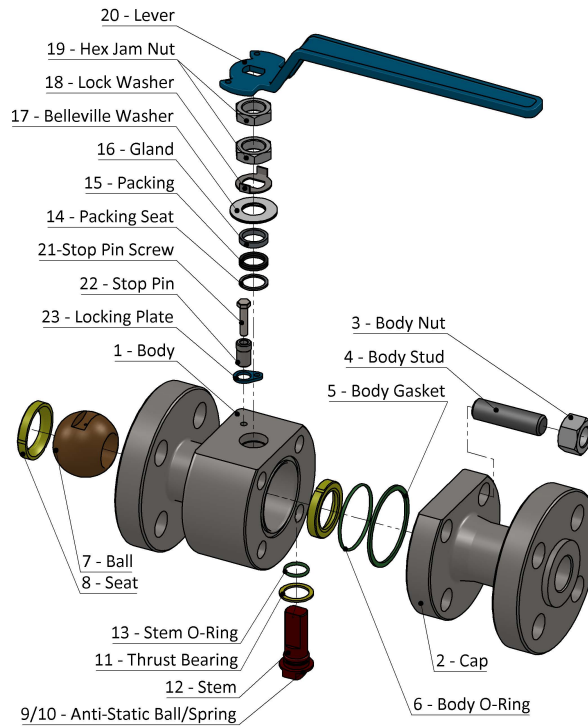
eg: 2" forged carbon steel (NACE), 900 Class Full-Port RF for Sour Service c/w SS trim, PEEK Seats and locking lever

FIGURE NUMBER MATRIX - FLOATERS

SERIES (XX)		BORE (X)		SIZE (XX)		CONNECTION (X)		CLASS (XX)		SERVICE (X)		TRIM (XX)		SEAT (X)		OPERATOR (X)	
<b>FB-B2</b>		<b>F</b>		<b>20</b>		<b>R</b>		<b>09</b>		<b>N</b>		<b>03</b>		<b>P</b>		<b>1</b>	
FB	2 pc Forged	F	FULL	10	1"	R	RAISED FACE	01	150	S	STD	01	CS-ENP	R	RTFE	1	LOCKING LEVER
B2	2 pc Cast	R	REDUCED	15	1.5"	J	RTD	03	300	L	SLT	03	SS 316	T	MOD TFE	2	GEAR-OP
				20	2"			06	600	N	SOUR	05	SS-Nitride	P	PEEK	3	BARE-STEM
				30	3"			09	900	A	FULL SS	06	17-4PH	L	LF-PEEK	4	SPRING RETURN
				40	4"			15	1500			07	17-4-Nitride	D	DELTRIN		
				60	6"							08	SS/17-4PH	N	NYLON		
				80	8"												

Note 1. See tables below for size / class configurations per series  
2. Lever only for FB series

# MODEL FB (Forged) 1" – 3" RP (DN 25 – 80)

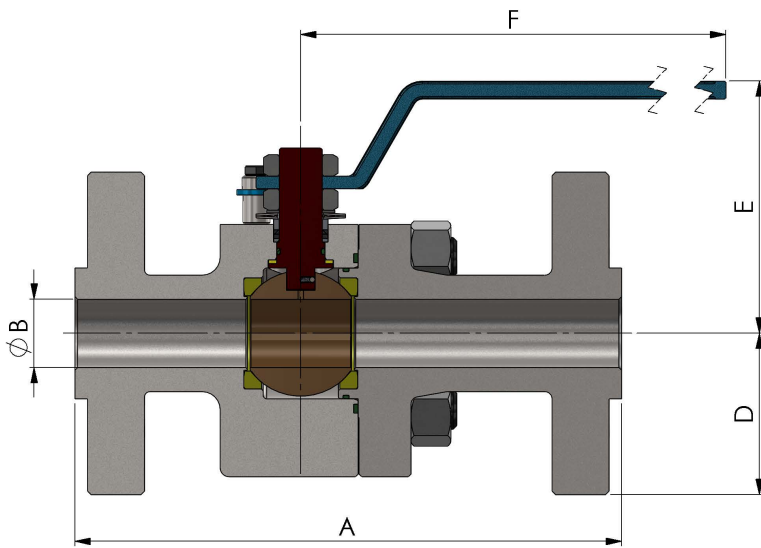


ITEM	PART	CLASS	STANDARD	SOUR	SLT	SS
			-20°F (-29°C)	-20°F (-29°C)	-50°F (-46°C)	-50°F (-46°C)
1	BODY	All	ASTM A105N	ASTM A105N	ASTM A350 LF2	ASTM A479 316SS
2	CAP	All	ASTM A105N	ASTM A105N	ASTM A350 LF2	ASTM A479 316SS
7	BALL	All	ASTM A182 F316	ASTM A182 F316	ASTM A182 F316	ASTM A182 F316
12	STEM	All	ASTM A564 17-4	ASTM A564 17-4	ASTM A564 17-4	ASTM A564 17-4 / Nitride
8	SEAT	All	PEEK	PEEK	PEEK	PEEK
5	BODY GASKET	All	Graphite	Graphite	Graphite	Graphite
3	HH NUT	All	ASTM A194 2H	ASTM A194 2HM	ASTM A194 7M	ASTM A194 GR.8
4	BODY STUD	All	ASTM A193 B7	ASTM A193 B7M	ASTM A320 L7M	ASTM A193 GR.8
11	THRUST BEARING	All	RPTFE	RPTFE	RPTFE	RPTFE
13	STEM O-RING	All	HSN	VITON	VITON GLT	VITON GFLT
6	BODY O-RING	All	HSN	VITON	VITON GLT	VITON GFLT
14	PACKING SEAT	All	SS	SS	SS	SS
15	STEM PACKING	All	Graphite	Graphite	Graphite	Graphite
16	GLAND	All	SS	SS	SS	SS
17	BELLEVILLE WASHER	All	N07750	N07750	N07750	N07750
18	LOCK WASHER	All	SS	SS	SS	SS
19	HEX JAM NUT	All	ASTM A194 GR.8	ASTM A194 GR.8	ASTM A194 GR.8	ASTM A194 GR.8
20	LEVER	All	CS	CS	CS	CS
21	STOP PIN SCREW	All	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7	ASTM A193 B8
22	STOP PIN	All	CS / ZINC	CS / ZINC	CS / ZINC	CS / ZINC
23	LOCKING PLATE	All	CS / ZINC	CS / ZINC	CS / ZINC	CS / ZINC
9/10	ANTI STATIC Spring / Ball	All	SS	SS	SS	SS

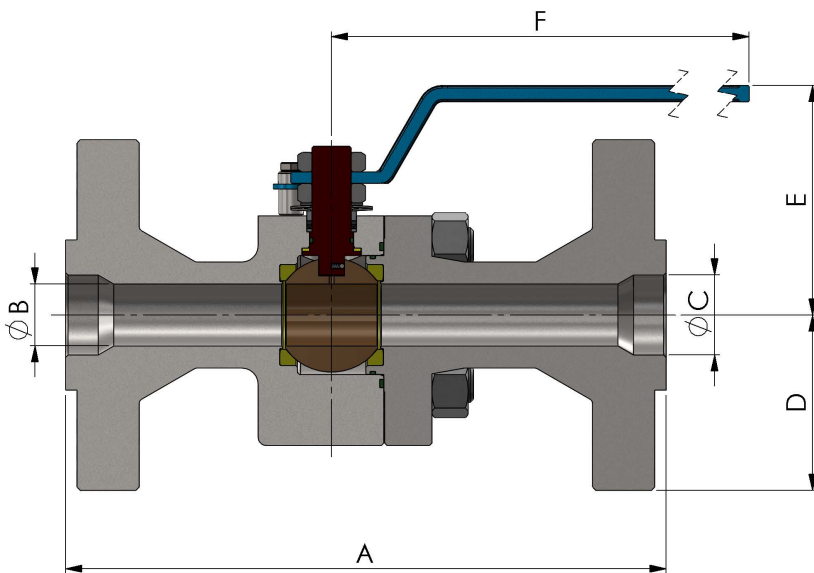
NOTE: SLT is primary offering. All other configurations are optional.

NAM reserves the right to upgrade materials without notice.

## MODEL FB (Forged) Dimensions

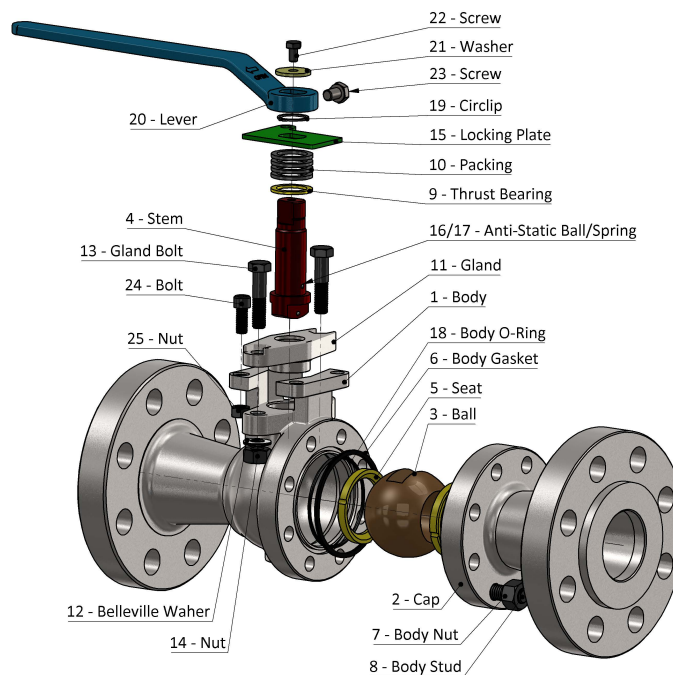


Size	Class	A	B	D	E	F
1"	600	216	25	62.5	104	200
	900/1500	254	25	75	119	250
1.5"	600	241	38	77.5	122	250
	900/1500	305	38	90	141	340
2"	900/1500	368	49	107.5	162	400



Size	Class	A	B	C	D	E	F
1"	600	216	19	25	62.5	112	340
	900/1500	254	19	25	75	116	340
2"	600	292	38	49	82.5	122	250
	900/1500	368	38	49	107.5	141	340
3"	900	381	49	74	120	162	400
	1500	470	49	74	132.5	162	400

# MODEL B2 (Cast) 1" – 8" FP (DN 25 – 200)

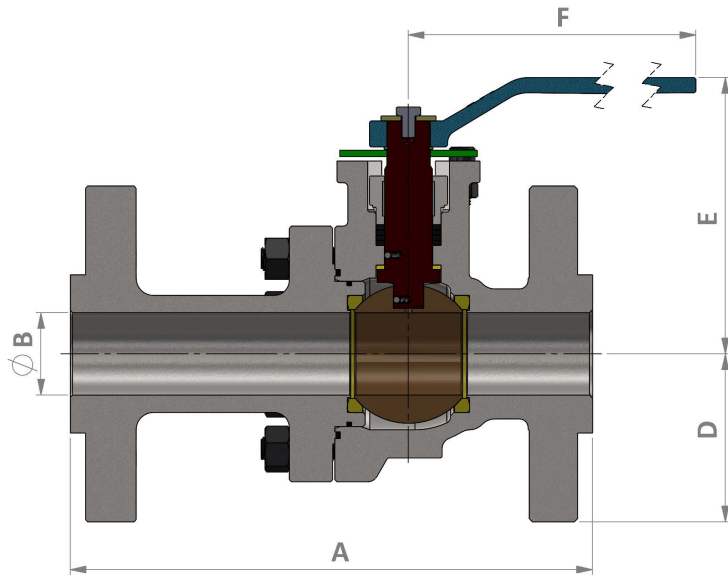


ITEM	PART	CLASS	STANDARD	SOUR	SLT	SS
			-20°F (-29°C)	-20°F (-29°C)	-50°F (-46°C)	-50°F (-46°C)
1	BODY	All	ASTM A216 WCB	ASTM A216 WCB	ASTM A352 LCC	ASTM A479 316SS
2	CAP	All	ASTM A216 WCB	ASTM A216 WCB	ASTM A352 LCC	ASTM A479 316SS
3	BALL	All	ASTM A182 F304	ASTM A182 F304	ASTM A182 F304	ASTM A182 F304
4	STEM	All	ASTM A564 17-4	ASTM A564 17-4	ASTM A564 17-4	ASTM A564 17-4 / Nitride
5	SEAT	All	RPTFE	RPTFE	RPTFE	RPTFE
6	BODY GASKET	All	304+Graphite	304+Graphite	304+Graphite	304+Graphite
7	HH NUT	All	ASTM A194 2H	ASTM A194 7M	ASTM A194 7M	ASTM A194 B8
8	BODY STUD	All	ASTM A193 B7	ASTM A193 B7M	ASTM A320 L7M	ASTM A193 B8
9	THRUST BEARING	All	PTFE	PTFE	PTFE	PTFE
10	STEM PACKING	All	Graphite	Graphite	Graphite	Graphite
11	GLAND FLANGE	All	ASTM A216 WCB	ASTM A216 WCB	ASTM A352 LCC	ASTM A351 CF8M
12	BELLEVILLE WASHER	All	N07750	N07750	N07750	N07750
13	GLAND BOLT	All	ASTM A193 B7	ASTM A193 B7	ASTM A320 L7M	ASTM A193 B8
14	GLAND NUT	All	ASTM A194 7M	ASTM A194 7M	ASTM A194 7M	ASTM A194 7M
15	LOCKING PLATE	All	CS-Zinc	CS-Zinc	CS-Zinc	SS
16/17	ANTI STATIC Spring / Ball	All	SS	SS	SS	SS
18	BODY O-RING	All	HSN	HSN	VITON	VITON
19	CIR-CLIP	All	CS	CS	CS	CS
20	LEVER	All	CS	CS	CS	CS
21	WASHER	All	SS	SS	SS	SS
22	LEVER-SCREW	All	CS-Zinc	CS-Zinc	CS-Zinc	ASTM A193 B8
23	SCREW	All	CS-Zinc	CS-Zinc	CS-Zinc	ASTM A193 B8
24	BOLT	All	ASTM A193 B7	ASTM A193 B7	ASTM A320 L7M	ASTM A193 B8
25	NUT	All	ASTM A194 2H	ASTM A194 2HM	ASTM A194 7M	ASTM A194 B8

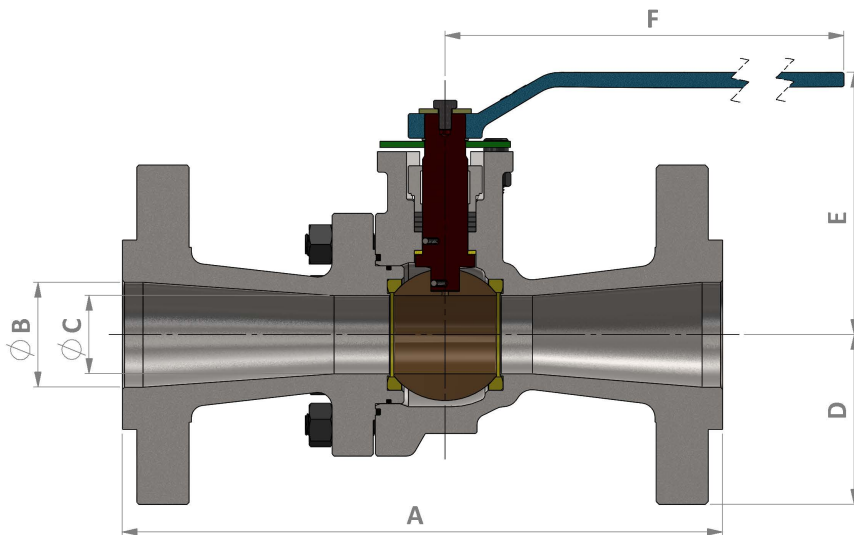
NOTE: STD is primary offering. All other configurations are optional.

NAM reserves the right to upgrade materials without notice.

## MODEL B2 (Cast) Dimensions



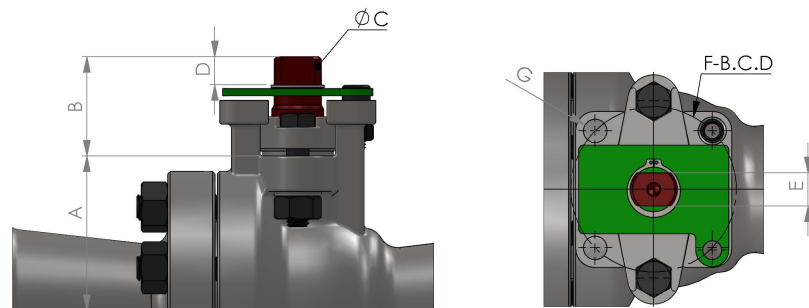
Size	Class	A	B	D	E	F
1"	150	127	25	55	106	180
	300	165	25	62.5	106	180
	600	216	25	62.5	106	180
1.5"	150	165	38	62.5	128	250
	300	190	38	77.5	128	250
	600	241	38	77.5	128	250
2"	150	178	51	75	137	250
	300	216	51	82.5	137	250
	600	292	51	82.5	149	350
3"	150	203	76	95	172	350
	300	283	76	105	172	350
	600	356	76	105	190	460
4"	150	229	102	115	212	460
	300	305	102	127.5	212	460
	600	432	102	137.5	237	900
6"	150	394	152	140	303	1050
	300	403	152	160	217	1050
8"	150	457	203	172.5	275	n/a
	300	502	203	190	275	n/a



Size	Class	A	B	C	D	E	F
2"	150	178	51	38	75	128	250
	300	216	51	38	82.5	128	250
	600	292	51	38	82.5	144	330
3"	150	203	76	51	95	137	250
	300	283	76	51	105	137	250
	600	356	76	51	105	149	350
4"	150	229	102	76	115	172	350
	300	305	102	76	127.5	172	350
	600	432	102	76	137.5	190	460
6"	150	394	152	102	140	212	460
	300	403	152	102	160	212	460
	600	559	152	102	177.5	237	900
8"	150	457	203	152	172.5	303	1050
	300	502	203	152	190	267	1050

## MODEL FB - B2

### TopWorks Detail



Size	Class	A	B	C	D	E	F	G
1"	150/300/600	52	32.5	16	9	11	50	4x - 7.5
1.5"	150/300/600	65.5	42	20	12	14	70	4x - 10
2"	150	75.5	41	20	12	14	71	4x - 10
	300	76.5	40	20	12	14	72	4x - 10
	600	78.5	50	25	18	17	102	4x - 12
3"	150/300	101.5	50	25	18	17	102	4x - 12
	600	106	63.5	30	23	20	125	4x - 14
4"	150/300	128.5	63.5	30	23	20	125	4x - 14
	600	130	73	36	42	n/a	125	4x - 14
6"	150	174.5	92	42	49.5	n/a	140	4x - 18
	300	178.5	88	42	49.5	n/a	140	4x - 18
8"	150/300	223	114	52	62	n/a	165	4x - 22





The NAC-NUTEK<sup>®</sup> valve brand was established in 2017 to address the specific requirements of the oil and gas and process control industries. Every aspect of the brand and its products is supported by a team of valve and actuation experts with literally centuries of combined experience in providing global operators with rugged, field proven products manufactured to the highest levels of quality and performance.



North American Marketing [NAM] and its team have a long and rich history in the energy industry. Founded by William Robbins and Jim Wright, the majority of the team at NAM were part of Nutron Industries which was established by Mr. Robbins in 1989. Up until its sale in 2002 to Cooper Cameron, now a division of Schlumberger; Nutron Industries was an industry leader placing more than a million valves into applications throughout the world. In 2017, Mr. Robbins and Mr. Wright, formerly Senior Vice President of Cooper Cameron and President of its valve and distributed products division, decided to re-enter the valve industry focusing on improved design to create superior valves. The first brand of valves, NAC-NUTEK<sup>®</sup> is designed specifically for the oil and gas and process control industries, with added focus on severe service applications.

## HSE POLICY STATEMENT

At NAM, we are committed ethically, financially and personally to a working environment where no one gets hurt and nothing gets harmed.



[www.nutekvalves.com](http://www.nutekvalves.com)

**CANADA**

P:780-416-1996

C:780-919-9181

E:[info@nutekvalves.com](mailto:info@nutekvalves.com)