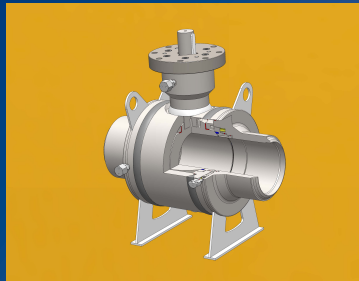
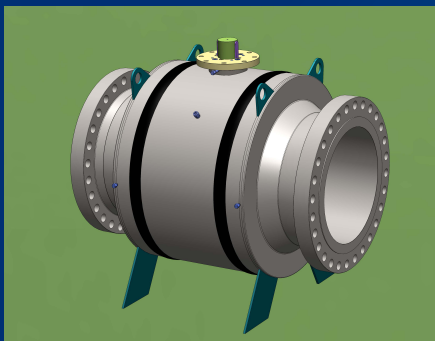
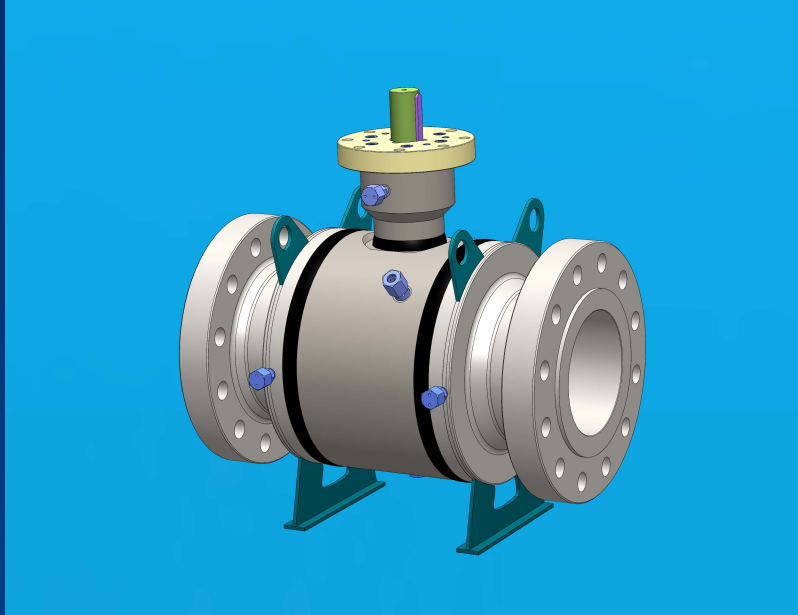


KJS-NUTEK

TW - All Welded TRUNNION BALL VALVES



API-6D All-Welded forged steel trunnion mounted ball valves for use in Midstream applications with features and options for Carbon Capture service.



KJS-NUTEK MODEL TW

All-Welded Forged Trunnion Ball Valve

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Sizes, Pressures and End Connections

- TW: Sizes: FP: 2" through 36" (50mm through 900mm),
- TW: ASME Classes: 150 through 900 (PN 20 through 150)
- End Connections: Butt-weld (*schedule to be confirmed*) (others available)

Advantages

- SEALING: Redundant Stem Seals, Seal Compatibility with Service and Media, Isolation Configurable, Replaceable Stem Seals (blowout proof stem)
- OPERATION: Low Torque Values, Avoid External Relief, Minimum Maintenance, ISO Mounting for Actuation
- SERVICE: Service Assistance, Field Assistance, Application Assistance, Commissioning Assistance

Compliance to Standards and Specifications

- Quality Management System [API Q1 / ISO-9001]
- ASME B16.34 / B16.25 / B16.11 / B16.10 / B16.5
- ASME B31.3: Process Piping
- API-6D / CSA Z245.15
- API-607 / API-6FA (Fire-Safe)
- ASME Section II / IX: Boiler and Pressure Vessel Code
- ASME Section VIII, Division 1: Boiler and Pressure Vessel Code
- ISO-5211, API-608
- NACE MR 0175 & MR 0103
- EPA Method 21 (Fugitive Emissions) [*optional test - alternative screening*]
- MSS SP-25 / CSA marking
- Canadian Registration Number (CRN)

Standard Features

BODY CONSTRUCTION

Forged steel, all-welded body construction

(bolted bonnet option available)

ISO mounting pad for actuation

Grease Injection standard: 6" 150 and above

FIRE-SAFE, ANTI-STATIC

All valves are Fire-Safe Certified and have mechanical anti-static devices as standard

CONFIGURATION per API-6D

All valves DB&B, with specified isolation: SR, DiB-1, DiB-2

STEM

Blowout-proof stem with redundant seals and sealant injection

SEAT

Insert materials available are Teflon™, Devlon™, LF PEEK or Viton Delta-Seal

Sizes Available

ASME CLASS (PN)	150 / 300 (20 / 50)	600 (100)	900 (150)
FULL PORT inch (mm)	6 through 16 (150 through 400)	2 through 36 (50 through 900)	2 through 20 (50 through 500)

How to Order

How to develop typical figure numbers without options:

EG - 16" Full Port Butt-weld Sch.80 Class 600 TW for Sour-Low-Temp (above ground) service c/w CS/ENP trim, Viton seat insert, DiB-2 and Bare-stem

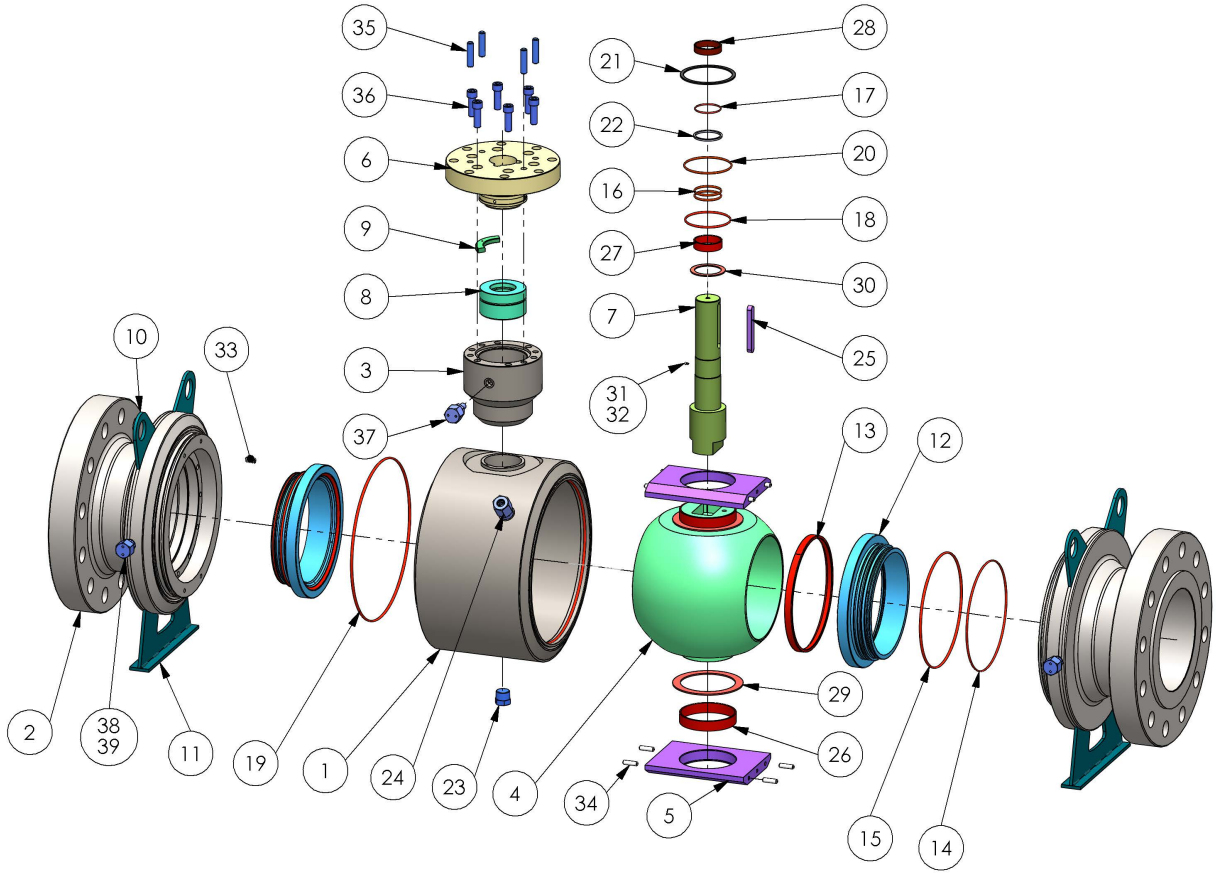
FIGURE NUMBER MATRIX - TRUNNIONS

SERIES (XX)		BORE (X)		SIZE (XX)		CONNECTION (X)		CLASS (XX)		SERVICE (X)		TRIM (XX)		SEAT (X)		ISOLATION (X)		OPERATOR (X)	
TW		F		16		B		06		L		01		V		2		B	
TW	TRUNNION	F	FULL	02	2"	B	BUTT-WELD (80)	01	150	B	BURIED*	01	CS/ENP*	R	RTFE	1	DiB-1	L	LEVER
		R	REDUCED	03	3"	C	BUTT-WELD (40)	03	300	L	SLT	02	SS	L	LF PEEK	2	DiB-2	G	GEAR-OP
				04	4"	D	BUTT-WELD (20)	06	600	C	CCS			P	PEEK	3	SR	B	BARE-STEM
				06	6"	S	SMOOTH FACE	08	800	H	HYDROGEN			D	DEVLON				
				08	8"	R	RAISED FACE	09	900					V	VITON				
				10	10"	J	RTJ	15	1500										
				12	12"		(Schedule)												
				16	16"														
TW	TRUNNION	F	FULL	20	20"			06	600										
				24	24"			09	900										
				30	30"														
				32	32"														
				36	36"														

* Standard configuration

Note: Additional sizes / pressures / features available, including;
 reduced port, factory transition pups, extensions, bolted bonnet
Contact KJS - Chromatic

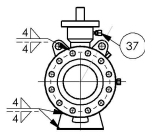
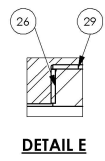
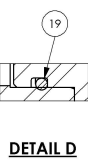
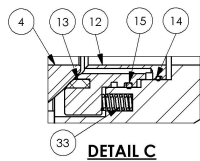
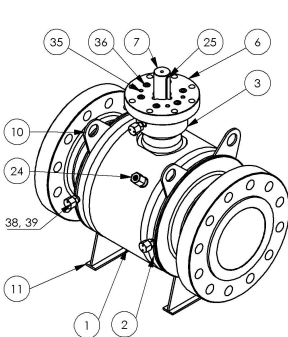
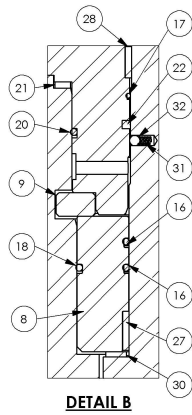
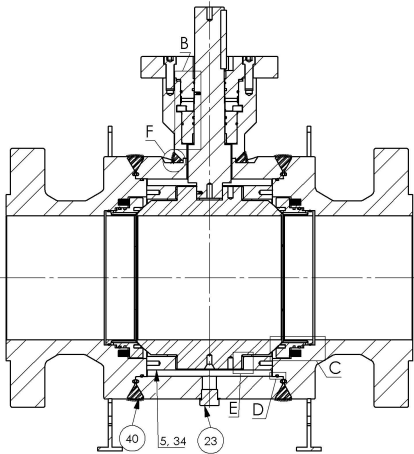
Model TW: 6" through 36"



MODEL TW

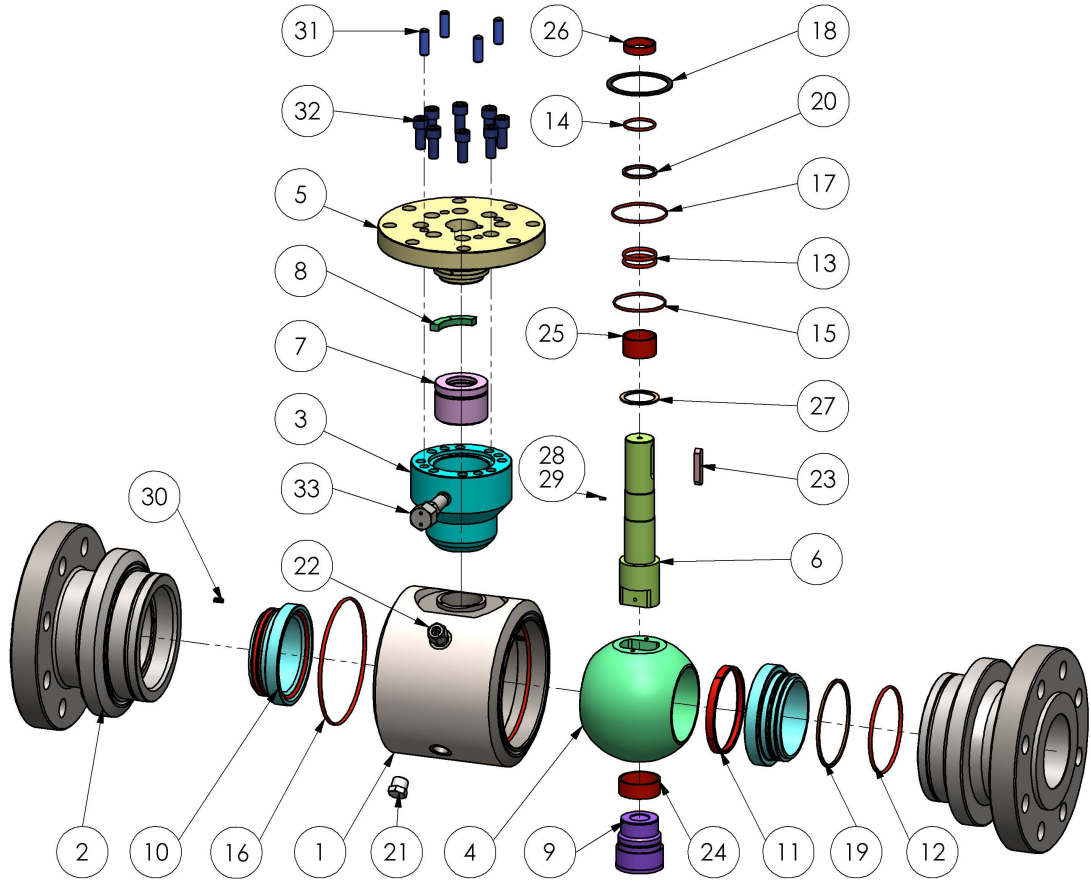
GA: 6" - 36"

Self-Relieving / Insert Style



ITEM	PART	MATERIAL
1	BODY	ASTM A350 LF2
2	CAP	ASTM A350 LF2
3	BONNET	ASTM A350 LF2
4	BALL	ASTM A350 LF2
5	BEARING PLATE	ASTM A350 LF2
6	GLAND PLATE	ASTM A350 LF2
7	STEM	AISI 4140 + ENP
8	SEAL RING	ASTM A350 LF2
9	LOCK RING	AISI 4140 + ENP
10	LIFTING LUG	ASTM A36
11	LEG	ASTM A36
12	SEAT RING, SPE, RS	ASTM A350 LF2 + ENP
13	SEAT INSERT	DEVLON V-API
14	SEAT SEAL	VITON GLT 90D
15	SEAT SEAL	VITON GLT 90D
16	STEM SEAL	VITON GLT 90D
17	RAIN SEAL	EPDM
18	BONNET SEAL	VITON GLT 90D
19	BODY SEAL	NITRILE
20	GLAND SEAL	VITON GLT 90D
21	FIRE SAFE GASKET	GRAFOIL SHEET
22	ROPE	BRAIDED GRAPHITE
23	DRAIN	ASTM A350 LF2
24	VENT	ASTM A182 F316
25	KEY	AISI 4130
26	BALL DU BEARING	AISI 304 + PTFE
27	STEM DU BEARING	AISI 304 + PTFE
28	STEM DU BEARING	AISI 304 + PTFE
29	BALL THRUST WASHER	AISI 304 + PTFE
30	STEM THRUST WASHER	AISI 304 + PTFE
31	ANTI-STATIC SPRING	ASTM A276 Gr. 316
32	ANTI-STATIC BALL	ASTM A276 Gr. 316
33	SEAT SPRING	INCONEL 750
34	BEARING PLATE DOWEL PIN (not shown)	AISI 4130
35	GLAND PLATE DOWEL PIN	AISI 4130
36	SOCKET HEAD SCREW	ASTM A320 GR. L7M
37	STEM INJECTION	ASTM A182 F316
38	SEAT INJECTION	ASTM A182 F316
39	BURIED CHECK	ASTM A350 LF2
40	BODY JOINT WELD BEAD	AWS A5.17, F7AG-EM2K
41	BONNET JOINT WELD	E7018

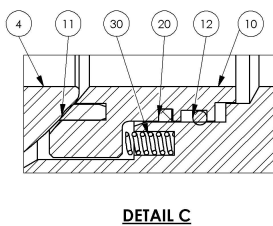
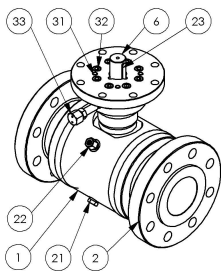
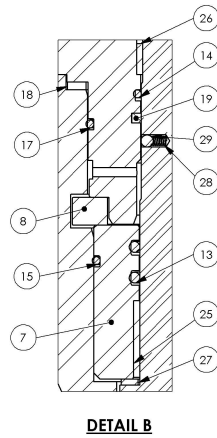
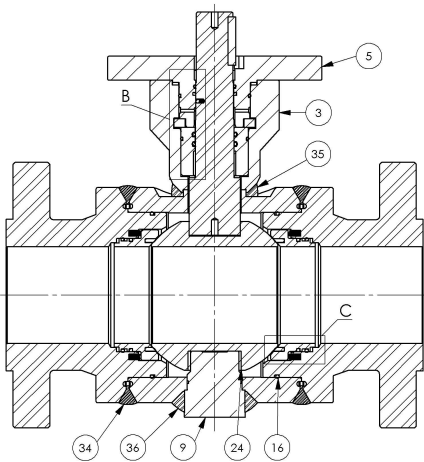
Model TW: 2" FP through 6"RP



MODEL TW

GA: 2" - 4"

Self-Relieving / Delta-Seal

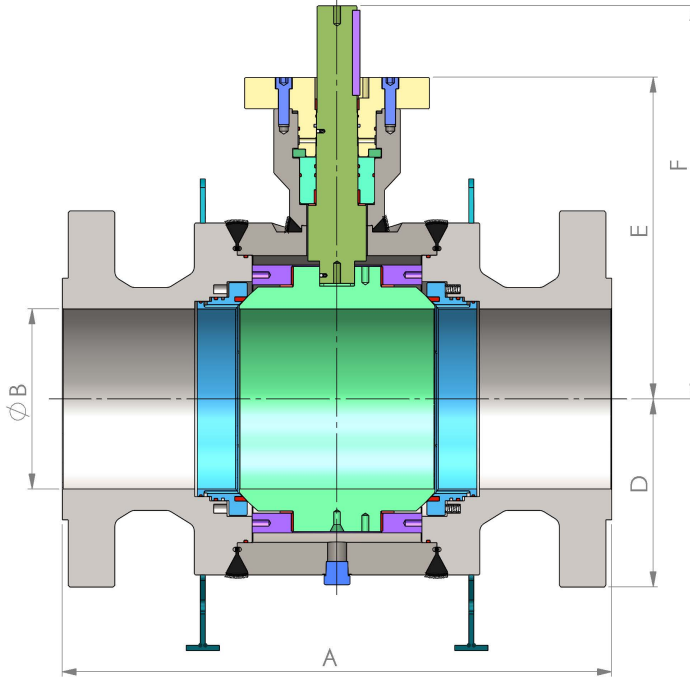


ITEM	PART	MATERIAL
1	BODY	ASTM A350 LF2
2	CAP	ASTM A350 LF2
3	BONNET	ASTM A350 LF2
4	BALL	ASTM A350 LF2 w/ENP
5	GLAND PLATE	ASTM A350 LF2
6	STEM	ASTM A350 LF2 w/ENP
7	SEAL RING	ASTM A350 LF2
8	LOCK RING	AISI 4140 + ENP
9	TRUNNION	ASTM A350 LF2
10	SEAT RING, SPE, RS	ASTM A350 LF2 w/ENP
11	SEAT INSERT	DEVLON V-API
12	SEAT SEAL	VITON GLT 90D
13	STEM SEAL	VITON GLT 90D
14	RAIN SEAL	EPDM
15	BONNET SEAL	VITON GLT 90D
16	BODY SEAL	VITON GLT 90D
17	GLAND SEAL	VITON GLT 90D
18	FIRE SAFE GASKET	GRAFOIL SHEET
19	ROPE	BRAIDED GRAPHITE
20	ROPE	BRAIDED GRAPHITE
21	DRAIN	ASTM A182 F316
22	VENT	ASTM A182 F316
23	KEY	AISI 4130
24	BALL DU BEARING	AISI 304 + PTFE
25	STEM DU BEARING	AISI 304 + PTFE
26	STEM DU BEARING	AISI 304 + PTFE
27	STEM THRUST WASHER	AISI 304 + PTFE
28	ANTI-STATIC SPRING	ASTM A276 Gr. 316
29	ANTI-STATIC BALL	ASTM A276 Gr. 316
30	SEAT SPRING	INCONEL 750
31	DOWEL PIN	AISI 4130
32	SOCKET HEAD SCREW	ASTM A320 GR. L7M
33	STEM INJECTION	ASTM A182 F316
34	BODY JOINT WELD BEAD	AWS A5.17, F7A6-EM2K
35	BONNET JOINT WELD BEAD	E7018
36	TRUNNION WELD BEAD	E7018

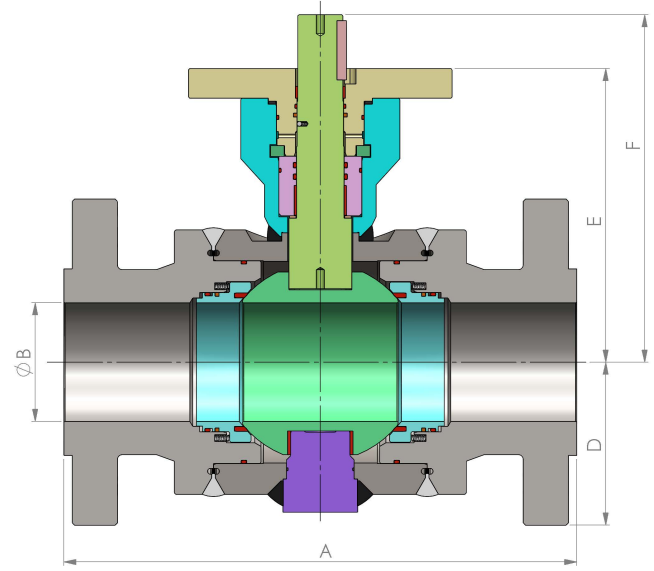
MODEL TW

DIMENSIONS

FP 6"-36"



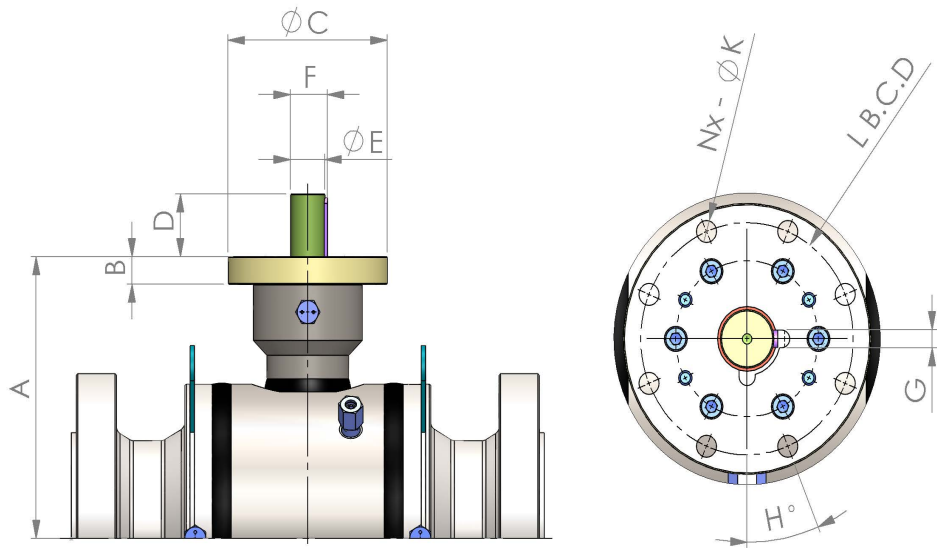
FP 2"-4"



Size	Class	A	B	D	E	F
6	150	394	150	140	306	375
	300	403	150	160	310	375
	600	559	150	177.5	318	382
	900	610	150	190	335	415
8	150	457	201	172.5	347	427
	300	502	201	190	352	432
	600	660	201	210	359	439
	900	737	201	235	383	470
10	150	533	252	202.5	386	476
	300	568	252	222.5	393	483
	600	787	252	255	402	489
	900	838	252	272.5	423	521
12	150	610	303	242.5	422	512
	300	648	303	260	427	517
	600	838	303	280	443	530
	900	965	303	305	471	570
16	150	762	385	297.5	486	575
	300	838	385	325	495	584
	600	991	385	342.5	528	642
	900	1194	487	407.5	618	730
20	600	1194	487	407.5	628	741
	900	1321	471	442.5	666	774
24	600	1397	589	470	716	826
30	600	1651	736	565	853	978
32	600	1778	780	597	888	1012
36	600	2083	875	657.5	978	1111

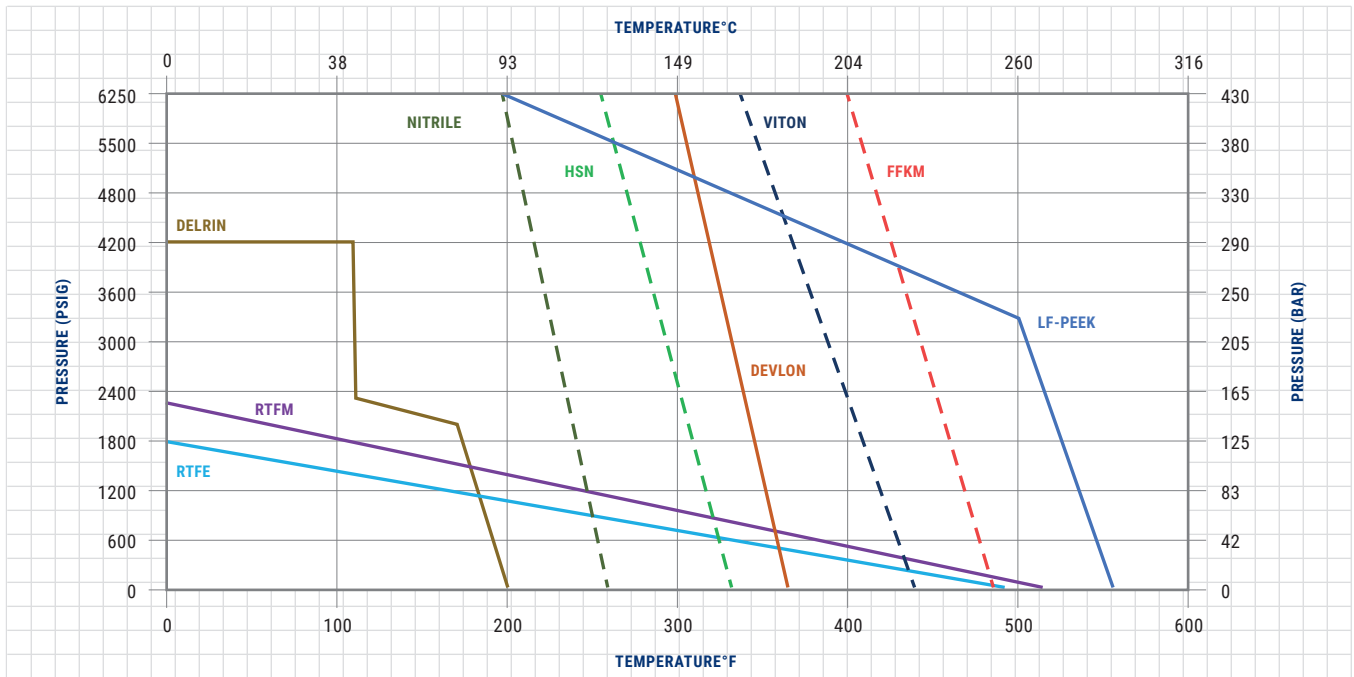
Size	Class	A	ØB	D	E	F
2	600	292	49	82.5	185	229
	900	368	49	107.5	189	244
3	600	356	74	105	226	271
	900	381	74	120	231	276
4	600	432	100	137.5	248	293
	900	457	100	145	256	301

MODEL TW
TOP-WORKS
6" - 36"



Size	Class	A	B	C	D	E	F	G	H	Nx - K	L B.C.D
6	150	306	35	222	69	48	51.5	14	22.5	8x - 18	190.5
	300	310	35	222	65	48	51.5	14	22.5	8x - 18	190.5
	600	318	35	222	64	48	51.5	14	22.5	8x - 18	190.5
	900	335	35	300	80	48	51.5	14	22.5	8x - 18	254
8	150	347	35	222	80	48	51.5	14	22.5	8x - 18	190.5
	300	352	35	222	80	48	51.5	14	22.5	8x - 18	190.5
	600	359	35	222	80	48	51.5	14	22.5	8x - 18	190.5
	900	383	35	300	87	60	68	18	22.5	8x - 18	254
10	150	386	35	300	90	50	54	16	22.5	8x - 18	254
	300	393	35	300	90	50	54	16	22.5	8x - 18	254
	600	402	35	300	88	60	68	18	22.5	8x - 18	254
	900	423	38	300	99	75	84	20	22.5	8x - 18	254
12	150	422	30	300	90	60	64	18	22.5	8x - 18	254
	300	427	30	300	90	60	64	18	22.5	8x - 18	254
	600	443	35	300	87	75	84	20	22.5	8x - 18	254
	900	471	38	350	99	75	84	20	22.5	8x - 22	298
16	150	486	35	300	89	75	84	20	22.5	8x - 18	254
	300	495	35	300	89	75	84	20	22.5	8x - 18	254
	600	528	35	350	114	95	105	25	22.5	8x - 22	298
	900	618	40	350	112	95	105	25	22.5	8x - 22	298
20	600	628	40	415	113	103	115	28	22.5	8x - 32	356
	900	666	50	415	108	122	136	32	22.5	8x - 32	356
24	600	716	45	415	111	115	129	32	22.5	8x - 32	356
30	600	853	50	475	124	130	144	33	22.5	8x - 38	406
32	600	888	50	475	124	130	144	33	22.5	8x - 38	406
36	600	978	50	475	133	150	166	36	22.5	8x - 38	406

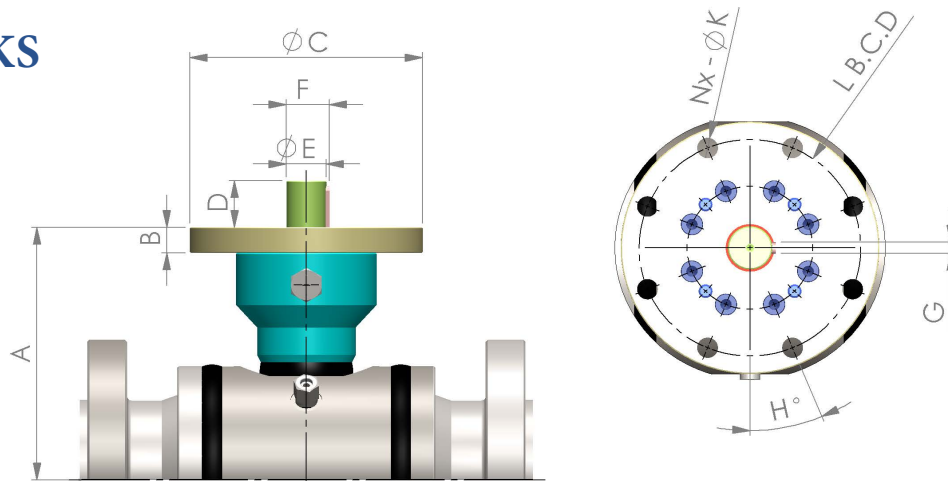
Pressure/Temperature Ratings (Seats and Seals)



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

MODEL TW

TOP-WORKS 2" - 4"



Size	Class	A	B	ØC	D	ØE	F	G	H	Nx - ØK	L B.C.D
2	600	184.5	20	210	44.5	28	31	8	45	4x - 22	165
	900	189	20	210	55	28	31	8	45	4x - 22	165
3	600	225.5	25	210	45.5	32	35	10	45	4x - 22	165
	900	230.5	25	210	45.5	32	35	10	45	4x - 22	165
4	600	247.5	25	222	45.4	38	41	10	22.5	8x - 18	190.5
	900	255.5	25	222	45.5	38	41	10	22.5	8x - 18	190.5



KJS-NUTEK incorporates all the designs, features, quality and benefits of the initial NAC-NUTEK product lines, with only the transfer of ownership to a company with a long history of quality and innovative valve production and sales.



Established in 1974, KJS - Intervolve has been a global provider of premium industrial valves. With our own foundry and painting shop, we may produce all valves in-house for on time delivery. Our production and management are approved by international quality system standards, such as ISO, API and CE. Also, our products include TAT and FE (Fugitive Emission) approval for most classes and sizes. We're specialized in not only Oil & Gas, Power Plant valves, but also Cryogenic (LNG), FPSO, Sub-sea application, high temp. & high class valves.



Chromatic is a premier designer, manufacturer, fabricator and distributor of valve, actuation, and pressure control products and services for the North American energy industry.



The NAC-NUTEK 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 was part of Nutron Industries which was established by Mr. Robbins in 1989.

These valves are designed specifically for the oil and gas and process control industries, with added focus on severe service applications.

HSE POLICY STATEMENT

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



www.nutekvalves.com

CANADA

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