

Vtek

Controls™

SERIES 21

2 PC 800 / 1000 WP



Series 21 - 2 Pc 1000 WP

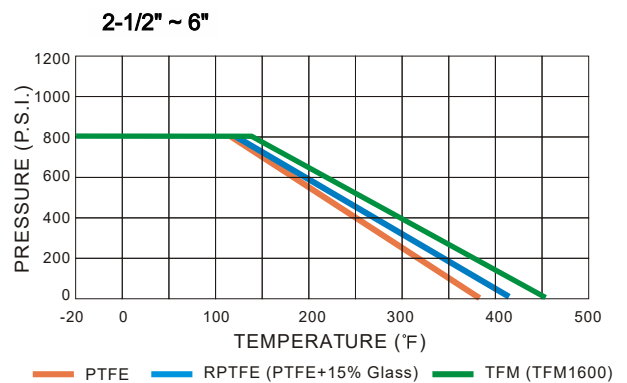
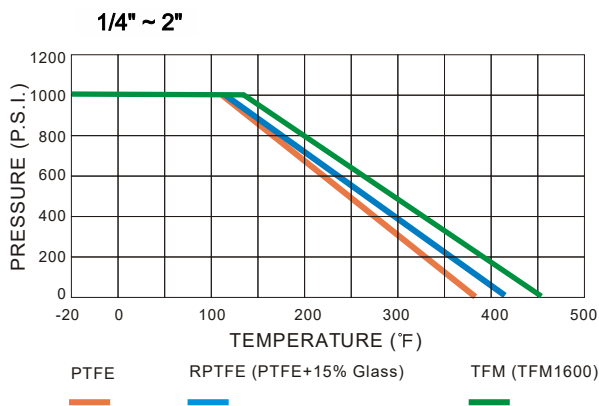
Design Specifications

- **Full Port Sizes :** (1/4" – 3" / DN 8 – DN 80)
- **Body Materials:** CF8M / WCB / CF3M / Duplex / Hastelloy C
- **Seats:** RTFE, PEEK, TFM1600, UHMWPE, CTFE (25%Carbon / 75%PTFE)
- **ISO 5211 Direct Mount**
- **Full Port Pressure rating :** 1/4" – 3" 1000psi,
- **Blow-out Proof Stem**
- **General & Industrial Applications**

Standards

- **ASME NPT ASME B1.20.1, BSPP ISO 228-1, BSPT ISO 7-1, DIN 2999, ISO 5211, ISO 5209, EN10204-3.1**
- **Quality Assurance:** ISO 9001, 5209
- **Inspection and Test:** API 598

Pressure Vs. Temperature Chart



- TFM 1600
- RPTFE (PTFE + 15% Glass)
- PTFE

Breakaway Torque (RTFE) & Cv Value

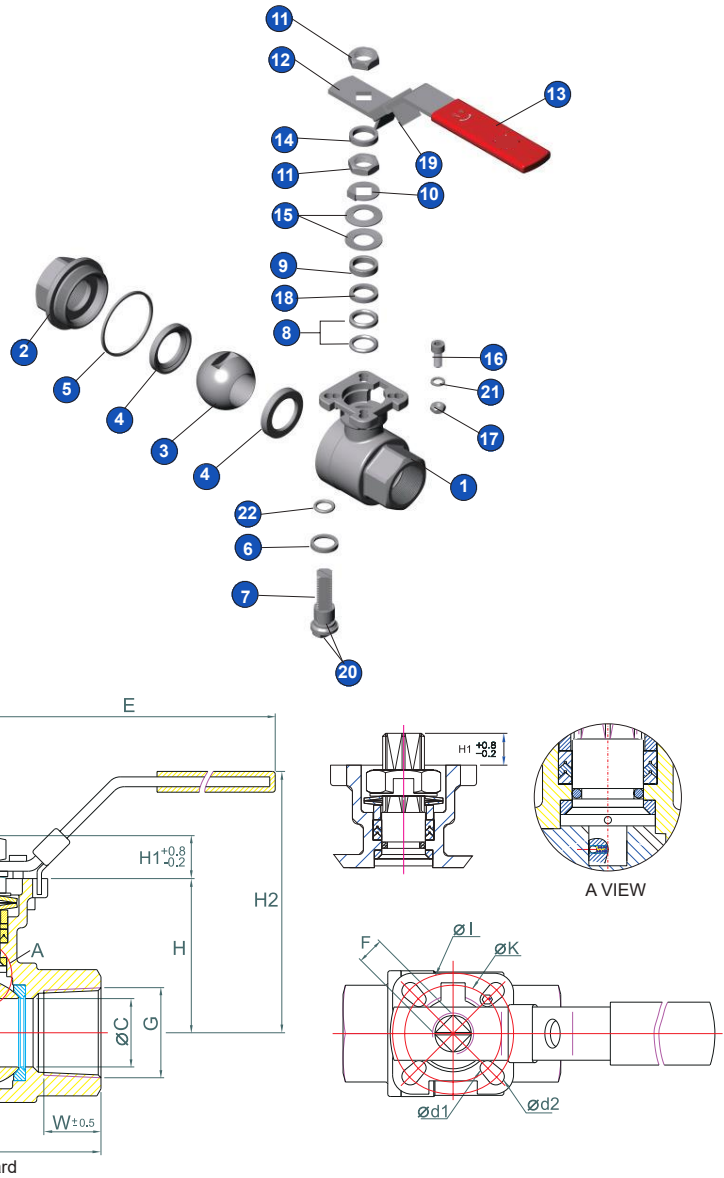
SIZE.	Nm		Inch-Lb		Cv	
	Full port	Red. port	Full port	Red. port	Full port	Red. port
1/4"	7	-	58	-	7	-
3/8"	7	-	58	-	8	-
1/2"	7	-	58	-	15	-
3/4"	8	-	69	-	40	-
1"	14	-	127	-	70	-
1-1/4"	18	-	161	-	110	-
1-1/2"	26	-	230	-	250	-
2"	36	-	323	-	430	-
2-1/2"	55	-	484	-	700	-
3"	87	-	772	-	1100	-

Break Away Torque 30% safety factor included. Standard valves are assembled with silicon-free based lubricant.
Torque for dry gas applications, please consult factory.

Materials & Dimensions:

Materials

No.	PART	QTY	STAINLESS STEEL
1	BODY	1	ASTM A351 GRADE CF8M
2	TH END CAP	2	ASTM A351 GRADE CF8M
3	BALL	1	ASTM A351
4	SEAT	2	RTFE
5	JOINT GASKET	2	TFM™-1600
6	STEM SEAL	1	RPTFE
7	STEM	1	SS 316
8	STEM PACKING	1	PTFE
9	GLAND	1	SS 304
10	LOCK SADDLE	1	SS 304
11	STEM NUT	1	SS 304
12	HANDLE	1	SS 304
13	HANDLE SLEEVE	1	SS 304
14	STEM WASHER	1	SS 301
15	BELLEVILLE WASHER	1	SS 301
16	STOP PIN	1	SS 304
17	PIN NUT	1	SS 304
18	STEM PACKING	1	25% GLASS FILLED +PTFE
19	LOCKING DEVICE	1	SS 304
20	ANTI-STATIC DEVICE	1	SS 316
21	WASHER	1	SS 304
22	O-RING	1	VITON



Dimensions (mm)

SIZESIZE	ØC	Ød1	Ød2	E	F	G	H	H1	H2	ØL	ØK	L	W	Wt(kg)	ISO5211
1/4"	11.5	6	6	139	9	1/4" NPT or BSP	38.6	6.6	74	42	36	65.0	15	0.53	F03/F04 **F03/F04/F05
3/8"	12.5	6	6	139	9	3/8" NPT or BSP	38.6	6.6	74	42	36	65.0	15	0.51	F03/F04 **F03/F04/F05
1/2"	15.0	6	6	139	9	1/2" NPT or BSP	38.6	6.6	74	42	36	65.0	16	0.46	F03/F04 **F03/F04/F05
3/4"	20.0	6	6	139	9	3/4" NPT or BSP	46.1	7.1	82	42	36	74.6	17	0.60	F03/F04 **F03/F04/F05
1"	25.0	6.5	7	165	11	1" NPT or BSP	56.6	10.9	96	50	42	88	21	1.09	F04/F05
1 1/4"	32.0	6.5	7	165	11	1 1/4" NPT or BSP	61.0	10.9	100	50	42	102.0	22	1.50	F04/F05
1 1/2"	38.0	7.5	9	215	14	1 1/2" NPT or BSP	77.5	13.9	127	70	50	110.0	22.5	2.55	F05/F07
2"	50.0	7.5	9	215	14	2" NPT or BSP	85.2	13.9	134	70	50	125.0	26	3.60	F05/F07
2 1/2"	65.0	10	12	263	17	2 1/2" NPT or BSP	108.7	16.8	167	102	70	160.6	31	7.43	F07/F10
3"	80.0	10	12	313	17	3" NPT or BSP	117.4	18.1	175	102	70	178.0	34	10.35	F07/F10

Vtek Controls reserves the right to change product designs and dimensional specifications without notice.

** Size 1/4" to 3/4" ISO 5211 standard configuration is F03/F04, F03/F04/F05 as option.

V-Ball Control & Options:

Series 21 V-Port Control Ball Valves

V-Port ball valves are used to control the flow. It delivers a precise flow control while retaining the durability and tight shutoff characteristics of a ball valve, excellent for regulating service. It is a compact and economical solution compared to traditional systems.

Available in 15°, 30°, 60°, and 90° V-notch configurations. V-Port ball valves feature an integrated V-notch machined directly into the ball, not a seat insert, this design not only improves flow characteristics but also eliminates the need for frequent seat replacement.

Options:

Spring Handle



Fugitive Emissions



V-Ball



Ordering:

Series	Port	Body Material	Ball	Stem	End Connection	Size
21	FP - Full Port V1 - V-port 15 Deg V3 - V-port 30 Deg V6 - V-port 60 Deg V9 - V-port 90 Deg	S - Stainless Steel C - Carbon Steel	S - 316 SS	S - 316 SS	TN - Threaded SW - Socket Weld	0025 - 1/4" 0038 - 3/8" 0050 - 1/2" 0075 - 3/4" 0100 - 1" 0125 - 1-1/4" 0150 - 1-1/2" 0200 - 2" 0250 - 2-1/2" 0300 - 3"
Seats	Packing	Body Seal	Operator	Options	Stem O-ring	
R - RTFE U - UHMWPE T - TFM™-1600	P - PTFE U - UHMWPE T - TFM™-1600	T - TFM™-1600 U - UHMWPE	Blank - Bare Stem L - Locking Handle G - Gear Operated O - Oval Handle S - Spring Return Handle	Blank - No Options V - Vented Ball O - Oxygen Cleaned F - Fugitive Emissions Bonnet	Blank - Viton Standard 4 - Kalrez E - EPDM S - Silicone	

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