

A **tyco** INTERNATIONAL LTD. COMPANY

# **ENERGY/PROCESS VALVE**

## Proven leak-tight in steam and thermal fluid services.

KTM's high-temperature, Gratite seat valves are available with various end-connection options — butt weld, socket weld, screwed end and flanged end; and have a multitude of applications in process and energy services:

#### **PROCESS**

- Vacuum Service
- Refinery Products
- Slurry Service
- Viscous Materials
- Air
- Water

ENERGY

- Steam
- Hot Liquids
- Hot Gases
- BTU Conservation



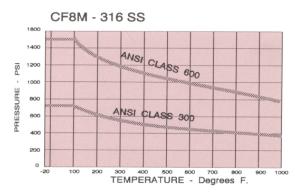
KTM's Energy/Process Valves operate in ON-OFF service up to +932°F and are available in sizes 1/2" through 2" full bore, ANSI Class 300 and 600. They incorporate

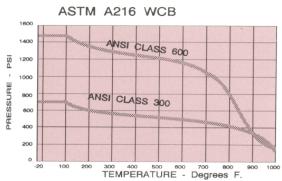
valve seats of "Gratite" (a bonded composite of hard graphite) which forms the seat along with soft carbon used for the cushion seal. The result is a seat with physical properties that are far superior to conventional ball valve seats of carbon graphite construction. This patented seat design has proven performance in both energy and process applications.

- Features:

  Reduces energy costs
- □ Full bore
- ☐ Higher C<sub>v</sub> than gate or globe valves
- Quarter-turn operation
- □ Easy parts replacement
- Zero leakage
- Blowout-proof stem
- Inherently fire safe
- ☐ Full ANSI rating to +932° F
  - +932 1
- Two-piece body
- Seats and seals virtually chemically inert
- Resists thermal and pressure shock
- Can be welded in line without disassembly

### PRESSURE-TEMPERATURE RATING FOR KTM GRATITE-SEATED VALVES





NOTE: ANSI B16.34 temperature limitation is 800°F on WCB materials.

### KTM ENERGY/PROCESS VALVE



DETAIL A

	Material and Model Numbers					
No.	Part Name	E0162-31/39FU-30	E0132-32/39FU-30			
1	Body	A216 GR. WCB or A105	A351 GR. CF8M or 316 S.S.			
2	Body Cap	A216 GR. WCB or A105	A351 GR. CF8M or 316 S.S.			
3	Ball	304 S.S.	316 S.S.			
*4	Gasket	Soft Carbon	Soft Carbon			
5	Stem	329 S.S.	329 S.S.			
*6	Seat	Carbon	Carbon			
7	Gland Flange	Carbon Steel	304 S.S.			
*8	Gland Packing	Grafoil	Grafoil			
9	Gland	304 S.S.	304 S.S.			
* 10	Thrust Bearing	316 S.S.	316 S.S.			
11	Stopper	Carbon Steel	304 S.S.			
12	Handle	Ductile Iron	Ductile Iron			
13	Stud	A193 GR. B7	304 S.S.			
14	Nut	A194 GR. 2H	304 S.S.			

*21	S	tem	Bearing	Soft Carbon
NOT	E:	1. '	Denotes	Spare Parts.

16 Thrust Washer 316 S.S.

15 Snap Ring

17 Gland Bolt

19 Inner Ring

\*18 Holder

- Item 21 (Stem Bearing) required on 1½" and 2" only.
   After Model No. add "S.E." for Screw Ends or "S.W." for Socket Weld.

304 S.S.

316 S.S.

304 S.S.

316 S.S.

316 S.S.

Soft Carbon

Soft Carbon

\*U.S. PAT. 4269391

#### Other Hi-Temp Gratite seated **KTM Ball Valves**

Steel

316 S.S.

316 S.S

Soft Carbon



Flanged ANSI 150/300: Full bore 1/2" thru 8", reduced bore 3" thru 10" Flanged ANSI 600: Full bore 1/2" thru 4", reduced bore 2" thru 6"



3-way, two seat. ANSI 150 and 300. Full bore, "L" port, sizes 1<sup>1</sup>/<sub>2</sub>" thru 8"

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(15) (1) (7) (9)	w —	
8 16 5	SEE DETAIL A	I
(10) (4) (6) (3)		1
(1)	19 20 18	
(13)		

	DIMENSIONS MILLIMETERS							
SIZE	BORE (d)			Н	H1	W	S	Cv
	.50	5.51	2.76	2.32	1.30	7.87	.236	26
1/2	13	140	70	59	33	200	6	
3/4	.75	5.98	3.00	2.48	1.46	7.87	.236	50
-7/4	19	152	76	63	37	200	6	
	1.00	6.50	3.25	2.95	1.73	9.45	.315	94
-	25	165	82.5	75	44	240	8	
11/2	1.50	7.48	3.86	3.82	2.28	13.78	.472	260
1 72	38	190	95	97	58	350	12	
2	2.00	8.50	4.25	4.21	2.68	13.78	.472	480
2	51	216	108	107	68	350	12	

INCHES

#### **KTM Products**

A tyco INTERNATIONAL LTD. COMPANY

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KTM WARRANTY — All KTM products are guaranteed against defects in material and workmanship for a period of one year from shipping date. All metals and resilient synthetics are guaranteed to be of the material specified. This warranty is limited to the furnishing of replacements found defective by KTM and does not extend to claims for any labor, consequential damages, downtime or any other loss, damage or expense of any kind arising out of the defect. We do not allow claims for unauthorized repairs, labor or material. Purchasers are expected to make their own judgment to determine suitability of these products for their particular purposes. This warranty does not apply to products manufactured by others. The foregoing is the only warranty and no other is expressed or implied. Change of Design: We reserve the right to discontinue the manufacture of, or change or modify the design and construction of any KTM product, in due course of our manufacturing procedure, without incurring any obligation to accept for credit, to replace or furnish or install such changes or modifications on products previously or subsequently sold.