

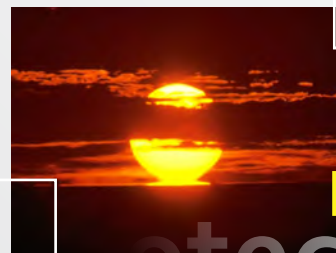
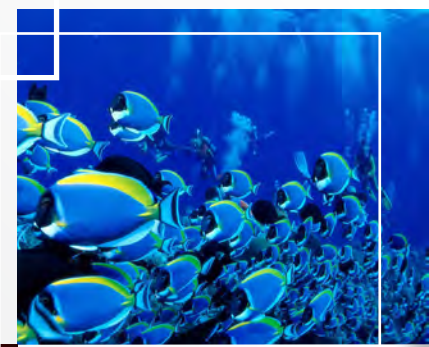
# valstroke®

CHOKE VALVE CATALOGUE



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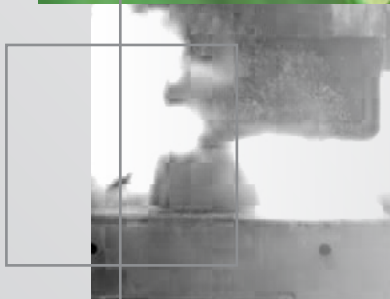
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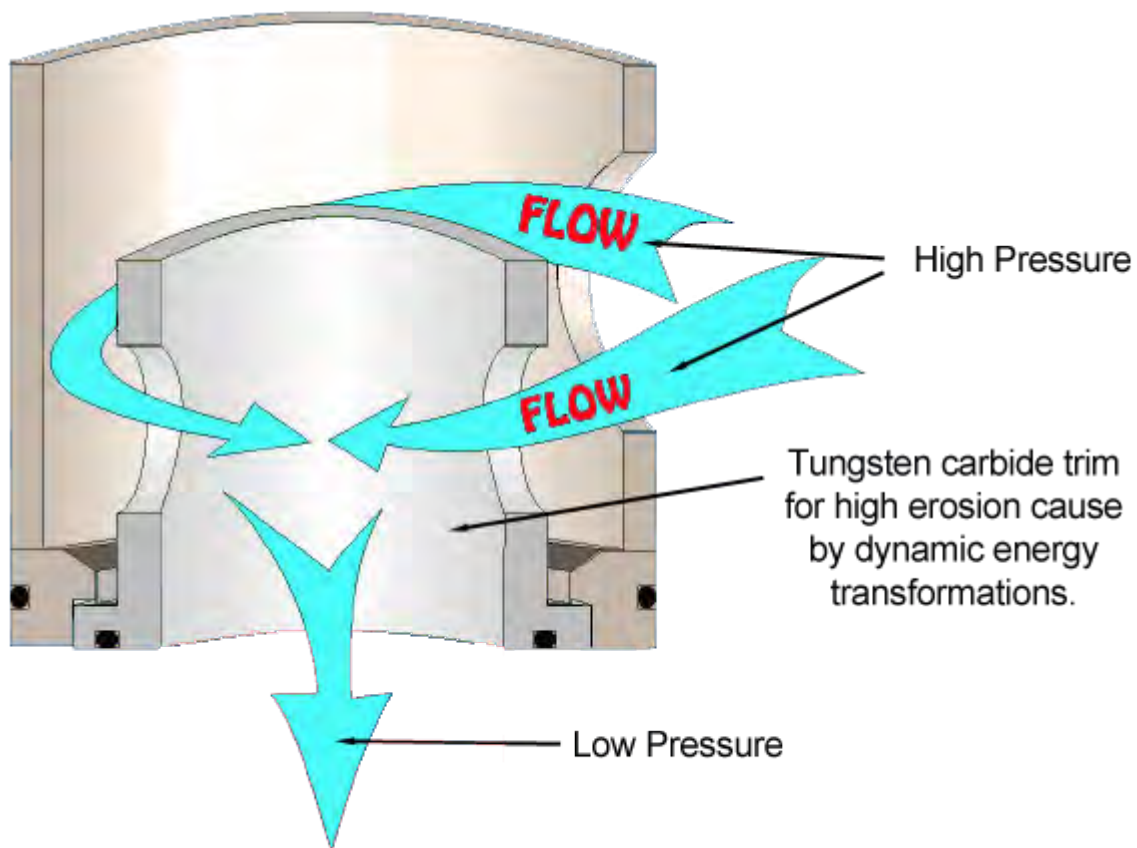
## CM SERIES

### Multiple Orifice Nozzle Angle Choke Valve

The valve is designed based on Hydrodynamic Energy Transformation

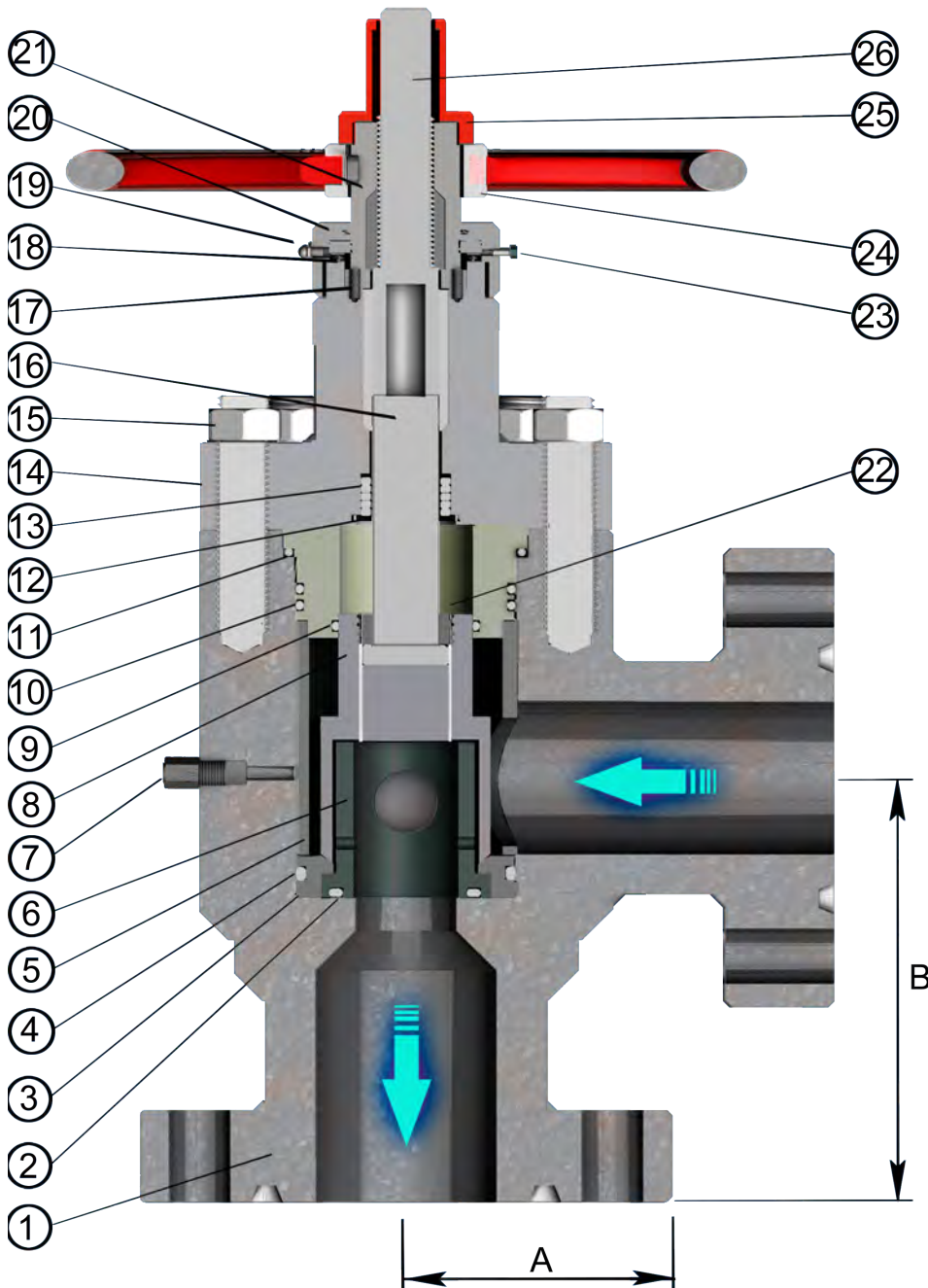
The high velocity fluid, created during high pressure drops, travels through the nozzle colliding with each other and dissipate most of the energy that it carries. The nozzle and trims in the valve allows the diversion of high pressured fluid to symmetrically distribute itself in order to create maximum impact with each other. These complex energy conversion happens within the hard surface nozzle and erosion is contained in which protects the downstream of the valve.

Benefits are reduced erosion of the valve and high velocity impingement.



## CM SERIES

## Multiple Orifice Nozzle Angle Choke Valve



Item	Parts Name
1	Body
2	O Ring
3	Seat Ring
4	O Ring
5	Cage
6	Choke Bean
7	Vent Valve
8	External Sleeve
9	O Ring
10	O Ring
11	Gasket
12	Retainer
13	Packing
14	Bonnet
15	Stud/Nut
16	Stem
17	Stem Fixer
18	Bearing
19	Injection Fittings
20	Wing Nut
21	Stem Nut
22	Gland
23	Stem Lock
24	Handwheel
25	Cap
26	Indicator



Figure 1.

**CM SERIES**
**Multiple Orifice Nozzle Angle Choke Valve**
**Standard Materials of Construction**

Component	Alloy & Low Temp	Carbon Steel	Stainless Steel	Duplex & Super Duplex
BODY	AISI 4130, A352 LCB	A216 WCB, A105N	A182 F316, A182 F304	A182 F51, UNS 32760
STEM	SS410, 17-4PH, SS304	SS410, 17-4PH,	17-4PH, SS304	A182 F51, UNS 31803, Inconel 625, UNS 32760
NOZZLE	SS410+TC, SS316+TC	SS410+TC, SS316+TC	17-4PH,+TC, SS316+TC	UNS 31803+TC, Inconel 625+TC
EXTERNAL SLEEVE	SS410+TC, SS316+TC	SS410+TC, SS316+TC	17-4PH,+TC, SS316+TC	UNS 31803+TC, Inconel 625+TC

**Standard Bean Size and Cv Value**

Cv	25	35	40	50	70	95	130	175	245
Max. Bean	24	34	37	48	52	70	90	110	142

Note: For guidance only as it may vary depending on the application and process conditions. Our engineer will recommend client during order.

## CM SERIES

## Multiple Orifice Nozzle Angle Choke Valve

General Parameters (See Figure 1.)

ANSI STANDARD					
Size	Ratings	Connection	Dimension (mm)		Weight (kg)
			A	B	
2"	600#	RF	195	162	42
3"	600#	RF	222	188	72
4"	600#	RF	243	219	110
6"	600#	RF	325	325	300
2"	900#	RF	211	176	55
2"	900#	RTJ	213	178	55
3"	900#	RF	242	217	75
3"	900#	RTJ	244	227	75
4"	900#	RF	254	225	150
4"	900#	RTJ	255	226	150
6"	900#	RF	335	335	360
6"	900#	RTJ	336	336	360
2"	1500#	RTJ	227	215	85
3"	1500#	RTJ	255	255	98
4"	1500#	RTJ	294	294	220
2"	2500#	RTJ	227	215	110
3"	2500#	RTJ	273	273	98
4"	2500#	RTJ	354	354	280

**CM SERIES**
**Multiple Orifice Nozzle Angle Choke Valve**

General Parameters (See Figure 1.)

API STANDARD					
Size	Ratings	Connection	Dimension (mm)		Weight (kg)
			A	B	
2-1/16"	2,000 psi	RTJ	223	223	60
2-9/16"	2,000 psi	RTJ	225	198	85
3-1/8"	2,000 psi	RTJ	235	219	96
4-1/16"	2,000 psi	RTJ	265	241	110
2-1/16"	3,000 psi	RTJ	223	223	70
2-9/16"	3,000 psi	RTJ	225	198	95
3-1/8"	3,000 psi	RTJ	235	219	120
4-1/16"	3,000 psi	RTJ	265	241	150
2-1/16"	5,000 psi	RTJ	225	198	80
2-9/16"	5,000 psi	RTJ	225	198	110
3-1/8"	5,000 psi	RTJ	235	219	150
4-1/16"	5,000 psi	RTJ	265	241	210
2-1/16"	10,000 psi	RTJ	282	282	120
2-9/16"	10,000 psi	RTJ	296	296	160
3-1/8"	10,000 psi	RTJ	311	311	180
4-1/16"	10,000 psi	RT	335	335	230
2-1/16"	15,000 psi	RTJ	251	251	180
2-9/16"	15,000 psi	RTJ	267	267	260
3-1/8"	15,000 psi	RTJ	282	282	320
4-1/16"	15,000 psi	RTJ	344	344	450

## CM SERIES

## Multiple Orifice Nozzle Angle Choke Valve

Order Number Serial

VCM      A      B      C      D      F      G

A	Inlet Size
01	2"
02	3"
03	4"
04	6"
05	8"
06	9"
07	2-1/16"
08	2-9/16"
09	3-1/8"
10	4-1/16"

B	Inlet Class
L01	ANSI 150
L03	ANSI 300
L06	ANSI 600
L09	ANSI 900
L15	ANSI 1500
L25	ANSI 2500
02K	API 2K PSI
03K	API 3K PSI
05K	API 5K PSI
10K	API 10K PSI
15K	API 15K PSI

C	Body Material
B1	A216 WCB
B2	A105N
B3	A352 LCB
B4	AISI 4130
B5	A182 F316
B6	A182 F51
B7	CUSTOM

D	Trim Material
T1	SS316+TC
T2	SS410+TC
T3	17-4PH+TC
T4	Duplex SS+TC
T5	Inconel+TC

E	Outlet Size
01	2"
02	3"
03	4"
04	6"
05	2-1/16"
06	2-9/16"
07	3-1/8"
08	4-1/16"

F	Outlet Class
L01	ANSI 150
L03	ANSI 300
L06	ANSI 600
L09	ANSI 900
L15	ANSI 1500
L25	ANSI 2500
02K	API 2K PSI
03K	API 3K PSI
05K	API 5K PSI
10K	API 10K PSI
15K	API 15K PSI

G	Operator
H0	Handwheel
W1	Worm Gear
P1	Pneumatic Actuated
H1	Electro-Hydraulic Actuated
M1	Motor Actuated