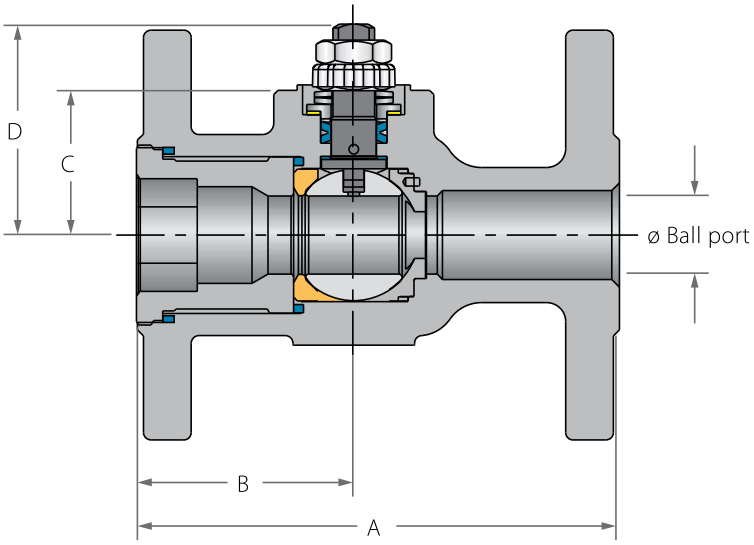
N31 N32 ½"-2" | DN15-DN50 | ANSI CLASS 150/300

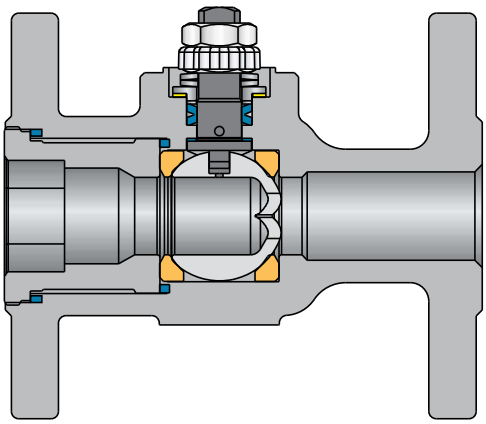
Control Flanged Floating Ball

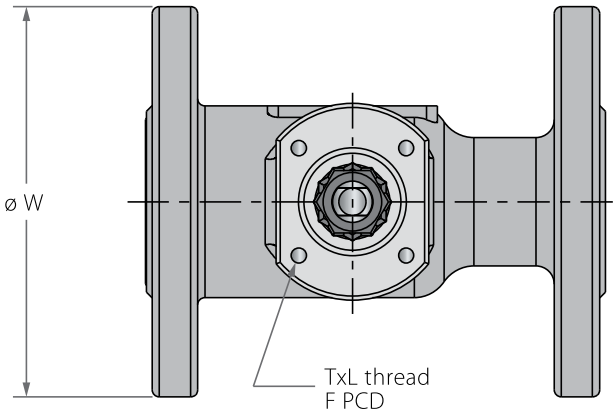
Valve dimensions

V Port

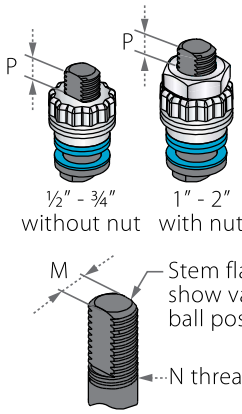


V Ball





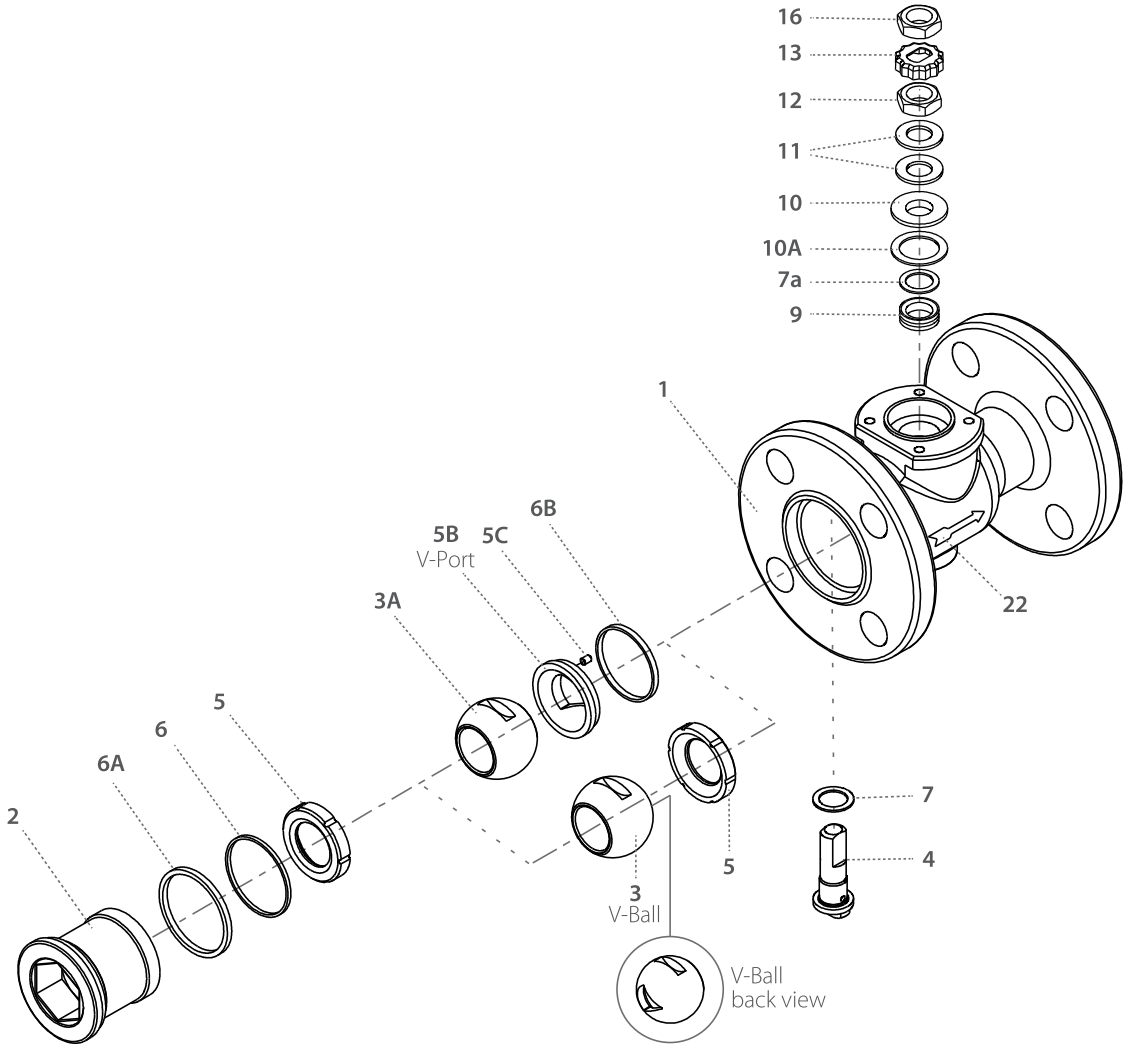
Preparation for actuation



Std. port	Unit	Ball port	A		B	C	D	W		M	N	P	F		TxL	Weight kg/lb	
			150	300				150	300							150	300
DN15	mm	11.15	108.00	140.00	46.00	29.00	38.00	88.90	95.25	5.54	⅜" UNF	6.65	(F03)	36.00	M5x10	1.70	2.40
½"	inch	0.44	4.25	5.50	1.81	1.14	1.50	3.50	3.75	0.22		0.26		1.42		3.80	5.30
DN20	mm	14.30	117.00	152.00	49.00	31.40	40.30	98.55	163.07	5.54	⅜" UNF	6.65	(F03)	36.00	M5x10	2.30	3.30
¾"	inch	0.56	4.61	6.00	1.93	1.24	1.59	3.88	6.42	0.22		0.26		1.42		5.10	7.30
DN25	mm	20.60	127.00	165.00	57.00	38.20	55.60	107.95	123.95	7.54	7⁄16" - UNF	7.40	(F04)	42.00	M5x10	3.10	4.60
1"	inch	0.81	5.00	6.50	2.25	1.50	2.19	4.25	4.88	0.30		0.29		1.65		7.30	10.20
DN40	mm	31.80	165.00	190.00	62.00	43.60	73.10	127.00	155.52	8.71	9⁄16" - UNF	8.50	(F05)	50.00	M6x12	5.50	8.70
1½"	inch	1.25	6.50	7.50	2.44	1.72	2.88	5.00	6.10	0.34		0.33		1.97		12.20	19.30
DN50	mm	38.20	178.00	216.00	68.00	48.30	77.80	152.40	165.10	8.71	9⁄16" - UNF	8.50	(F05)	50.00	M6x12	8.10	10.80
2"	inch	1.50	7.00	8.50	2.67	1.90	3.06	6.00	6.50	0.34		0.33		1.97		18.00	24.00

Control Flanged Floating Ball

Valve dimensions



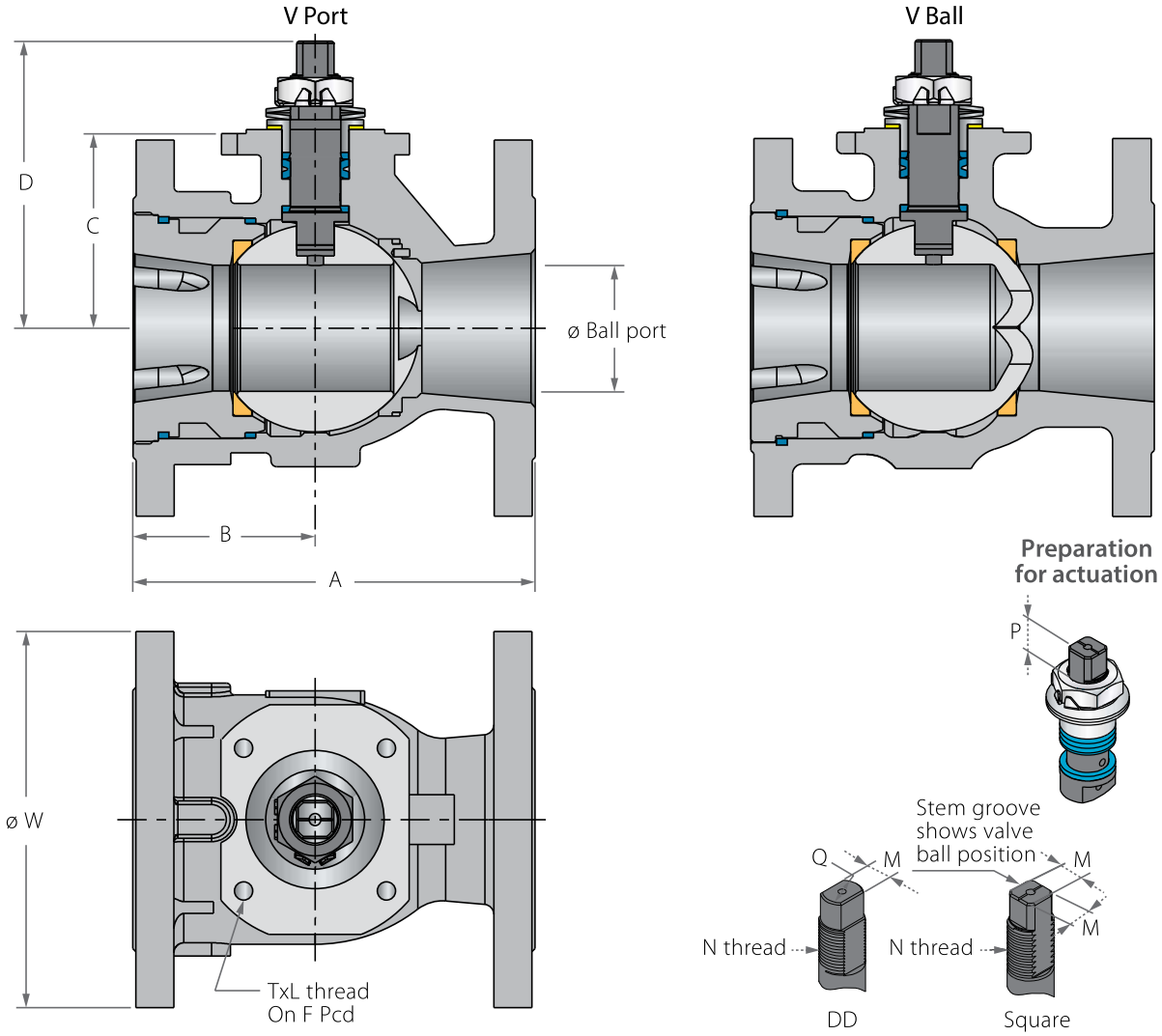
Item	Description	Material specification	Qty.
1	Body	Acc. Ordering Code	1
2	Plug	Acc. Ordering Code	1
3	V ball	Acc. Ordering Code	1
3A	Ball	Acc. Ordering Code	1
4	Stem	Acc. Ordering Code	1
5*	Seat	Acc. Ordering Code	1-2
5B	V seat	Acc. Ordering Code	1
5C	Dowel Pin	S. Steel	1
6*	Body seal	PTFE	1
6a*	Outer Seal	Acc. Ordering Code	1
6B*	Seat seal	Acc. Ordering Code	1
7*	Stem thrust seal	PEEK, CF PEEK, PCTFE	1

Item	Description	Material specification	Qty.
7a*	Anti-abrasion ring	PEEK, CF PEEK, PCTFE	1
9*	Stem seal	CF PTFE, TFM	1
10	Follower	S. Steel	1
10A*	Slide bearing	S. Steel	1
11	Disc spring	S. Steel	2
12	Stem nut	S. Steel	1
13	Locking clip	S. Steel	1
16	Handle nut	S. Steel	1
22	Arrow flow	S. Steel	1
23	Tag (not shown)	S. Steel	1

* Repair kit components

Control Flanged Floating Ball

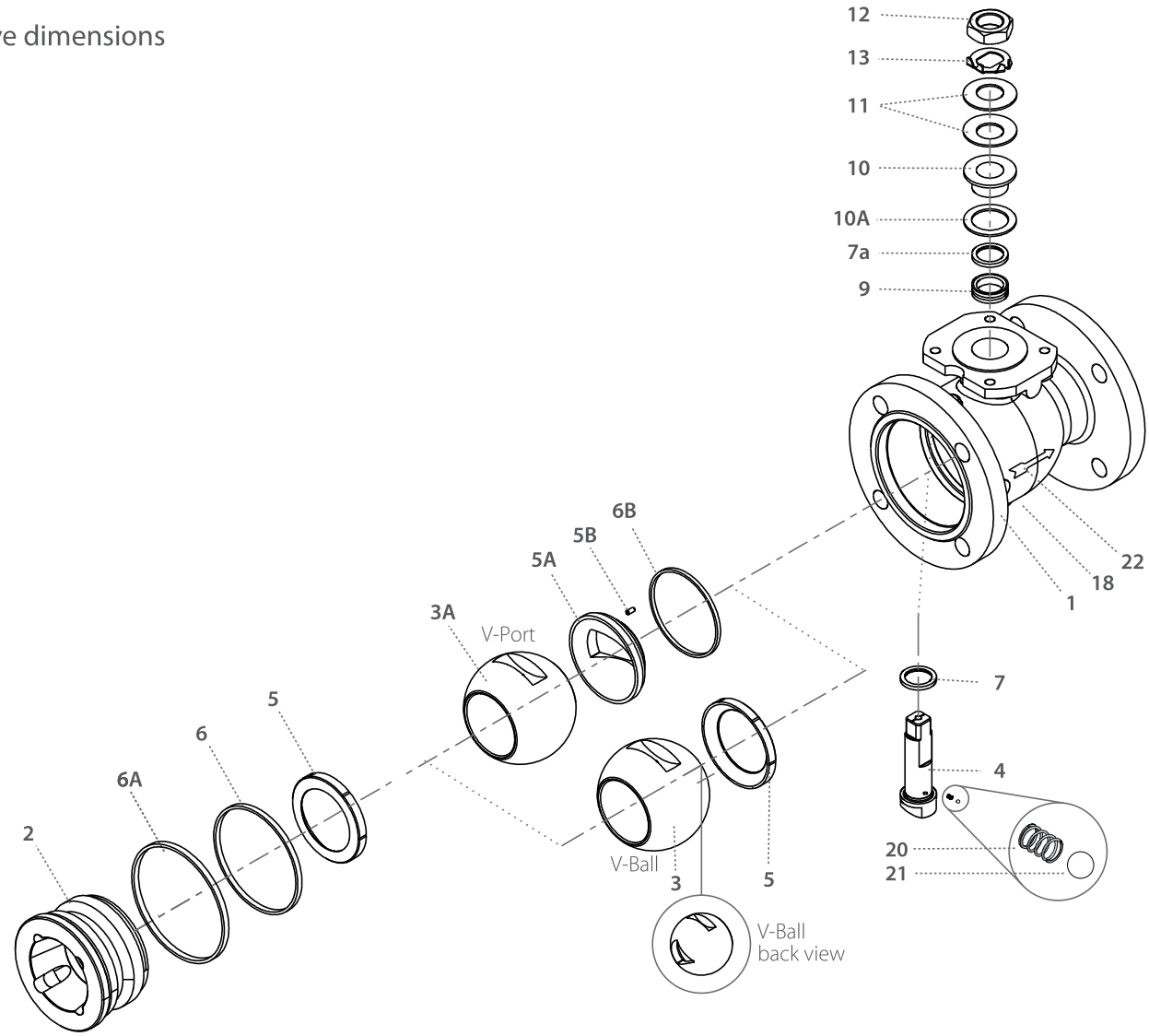
Valve dimensions



Std. port	Unit	Ball port	A		B	C	D	W		M	N	P	Q	F		TxL	Weight kg/lb	
			150	300				150	300								150	300
DN80	mm	63.50	203.00	284.00	92.00	98.40	145.00	190.50	209.55	18.90	1"- 14 UNS-2A	16.70	22.70	(F10)	102.00	M10x20	18.00	22.70
3"	inch	2.50	8.00	11.18	3.62	3.88	5.72	7.50	8.25	0.74		0.66	0.89		4.02		40.00	50.40
DN100	mm	82.60	229.00	305.00	102.00	114.10	161.00	228.60	254.00	18.90	1"- 14 UNS-2A	16.70	22.70	(F10)	102.00	M10x20	28.20	36.30
4"	inch	3.25	9.00	12.00	4.00	4.49	6.34	9.00	10.00	0.74		0.66	0.89		4.02		62.80	80.60
DN150	mm	111.10	267.00	403.20	108.00	157.40	226.00	279.40	317.50	28.45	1½"- 12 UNF-2A	26.20	35.20	(F12)	125.00	M12x20	41.00	69.00
6"	inch	4.38	10.50	15.88	4.25	6.20	8.91	11.00	12.50	1.12		1.03	1.39		4.92		91.00	153.00
DN200	mm	144.40	292.00	419.00	163.50	185.20	254.00	342.90	381.00	28.45	1½"- 12 UNF-2A	26.20	35.20	(F12)	125.00	M12x20	82.00	105.00
8"	inch	5.68	11.50	16.50	5.37	7.30	10.00	13.50	15.00	1.12		1.03	1.39		4.92		182.00	233.00

Control Flanged Floating Ball

Valve dimensions



Item	Description	Material specification	Qty.
1	Body	Acc. Ordering Code	1
2	Plug	Acc. Ordering Code	1
3	V ball	Acc. Ordering Code	1
3A	Ball	Acc. Ordering Code	1
4	Stem	Acc. Ordering Code	1
5*	Seat	Acc. Ordering Code	1-2
5A	V seat	A479 316L	1
5B	Dowel Pin	Acc. Ordering Code	1
6*	Body seal	PTFE	1
6A*	Outer seal	Acc. Ordering Code	1
6B*	Seat seal	Acc. Ordering Code	1

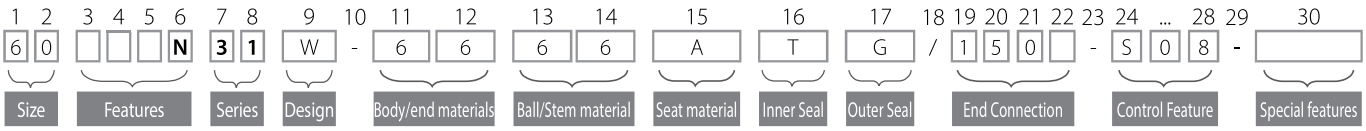
Item	Description	Material specification	Qty.
7*	Stem thrust seal	PEEK, CF PEEK, PCTFE	1
7a*	Anti-abrasion ring	PEEK, CF PEEK, PCTFE	1
9*	Stem seal	CF PTFE, TFM	1
10	Follower	S. Steel	1
10A*	Slide bearing	S. Steel	1
11	Disc spring	S. Steel	2
12	Stem nut	S. Steel	1
13	Tab lock washer	S. Steel	1
22	Arrow flow	S. Steel	1
23	Tag (not shown)	S. Steel	1

* Repair kit components

N31 N32 N73 N74 N77 N78

Control Flanged Floating Ball - Ordering Code System

"Mandatory option" options are marked with green background | "Standard offer" options are marked with light green background



Size (1-2)		
Code	inch	mm
05	½"	8
07	¾"	10
10	1"	15
12	1¼"	20
15	1½"	25
20	2"	32
25	2½"	40
30	3"	50
40	4"	65
60	6"	80
80*	8"	100

* 31/32 series only

Features (3-6)	
N	Control service
F	Fire safe
O	Clean assembly for O2 service
C	Cryogenic [R]
Z	High Temp. (MTM) [R]
H	Hydrogen Service

Series (7-8)	
31	ANSI #150 std. port
32	ANSI #300 std. port
73	ANSI #150 full port
74	ANSI #300 full port
77	DIN PN 16 full port
78	DIN PN 40 full port

Design (9)	
W	Total HermetiX Integrity package
G	Total HermetiX Integrity package - FDA compliant [R]

Body/Ends material (11-12) [R]
Per base series

Ball material (13) [R]	
6	S. SteelCF8M/CF3M
M	High Strength S. Steel
W	Hasteloy-C22
S	254SMO
D	Duplex
K	Super Duplex
7	Monel
A	Alloy-20
C	Hasteloy-C276

Stem material (14)	
M	High Strength S. Steel
6	S. Steel316L
Z	Inconel 718 B637
W	Alloy-C22 B574
S	254SMO A479
A	Alloy-20 A351 CN7M
D	Duplex A479
K	Super Duplex A479
7	Monel
C	Hasteloy-C276

Seat material (15)	
P	CF PTFE
K	CF PEEK
A	TFM

Inner Seal material (16) [R]
Per base series

Outer Seal material (17) [R]
Per base series

End connections (19-22)	
Flanged	
150	ASME B16.5 #150 RF
300	ASME B16.5 #300 RF
PN16	EN1092 PN16 RF
PN40	EN1092 PN40 RF

Control Feature (24-28)	
V-Port	
S08*	0.8mm Slot on downstream seat
S16*	1.6mm Slot on downstream seat
S32*	3.2mm Slot on downstream seat
V30	V30^0 Shape on downstream seat
V60	V60^0 Shape on downstream seat
V90	V90^0 Shape on downstream seat

* Up to 1"

V-Ball	
SB08*	0.8mm Slot on ball
SB16*	1.6mm Slot on ball
SB32*	3.2mm Slot on ball
VB30	V30^0 Shape on ball
VB60	V60^0 Shape on ball
VB90	V90^0 Shape on ball

* Up to 1"

Ball/Down stream Seat Surface hardering	
PN*	Low Temperature Plasma carboNitriding (Standard)

* standard up to 2"

Hardening	
I*	Cr3C2 - Chromium Carbide with Nickel Chrome binder - HVOF technique
O	WC-Co - Tungsten Carbide with Cobalt binder - HVOF technique

* standared from 2-½" and up

Special Features (24-30) [R]
Per base series

[R]:
- For Cryogenic CNxx valve see options in Cryogenic chapter.
- For High Temp. (MTM) ZNxx valve see options in High Tem. (MTM) chapter.