

Z93W

Z94W

Z93P

Z94P

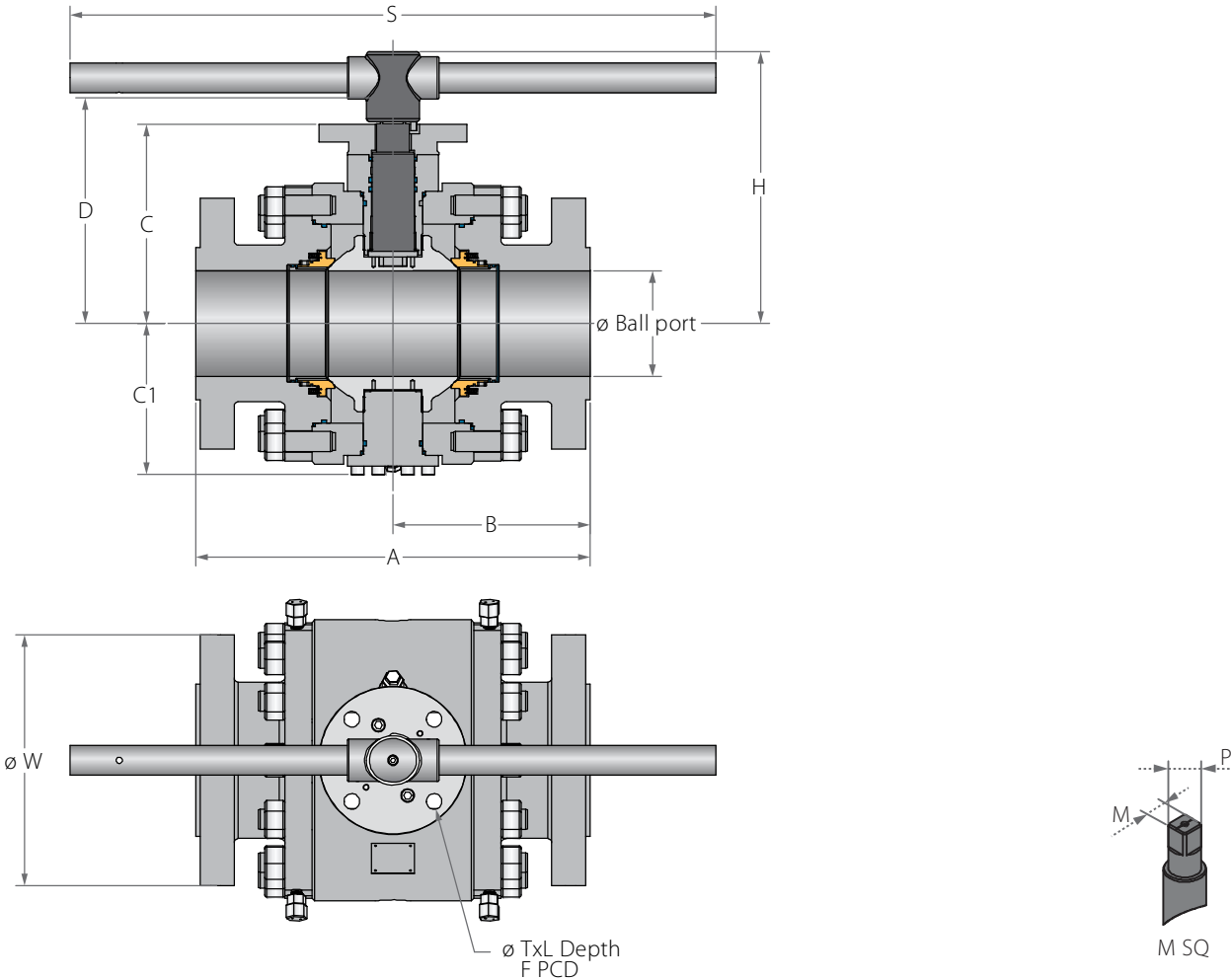
2"-6" | DN50-DN150

CLASS 600/900

High Temperature Trunnion Ball 3 Piece Up to

W 200°C (400°F) | **P** 327°C (620°F)

Valve dimensions



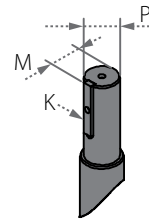
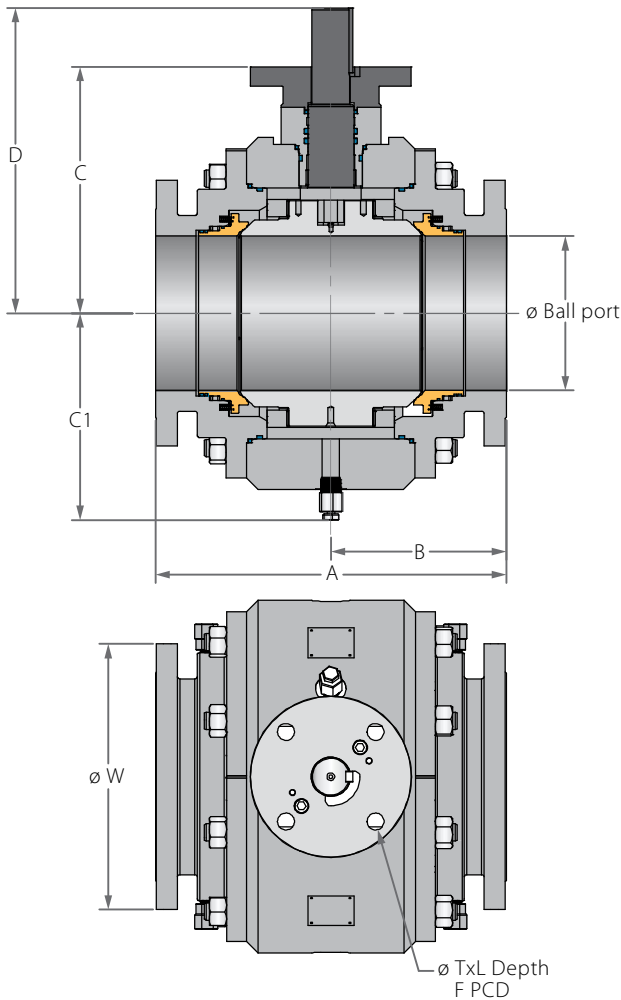
Full port	Unit	Ball port	A		B		C		C1		D		W		M SQ	P SQ	H	S	F	TxL	Weight kg/lb		Kv/Cv		
			600	900	600	900	600	900	600	900	600	900	600	900							600	900	600	900	
DN50	mm	49.00	292.00	368.00	131.00	184.00	144.00	148.50	119.00	263.00	168.50	182.50	165.00	215.00	22.00	28.00	219.50	401.00	(F12)	125.00	13X15	49	67	329	294
2"	inch	1.93	11.50	14.49	5.16	7.24	5.67	5.85	4.69	10.35	6.63	7.19	6.50	8.46	0.87	1.10	8.64	15.79		4.92	(4 holes)	108	148	380	340
DN80	mm	74.00	356.00	381.00	161.00	190.50	191.00	214.00	160.00	312.70	215.00	237.50	210.00	240.00	22.00	28.00	266.00	610.00	(F14)	140.00	18X24	103	114	874	822
3"	inch	2.91	14.02	15.00	6.34	7.50	7.52	8.43	6.30	6.01	8.46	9.35	8.27	9.45	0.87	1.10	10.47	24.02		5.51	(4 holes)	227	251	1010	950
DN100	mm	100.00	432.00	457.00	216.00	228.50	217.00	193.00	184.00	318.40	246.50	259.00	275.00	290.00	27.00	36.00	316.50	916.00	(F16)	165.00	22X25	166	186	1557	1471
4"	inch	3.94	17.01	17.99	8.50	9.00	8.54	7.60	7.24	7.24	9.70	10.20	10.83	11.42	1.06	1.42	12.46	36.06		6.50	(4 holes)	366	410	1800	1700
DN150	mm	150.00	559.00	610.00	278.00	305.00	282.50	368.00	214.50	424.00	320.50	463.00	355.00	380.00	36.00	48.20	385.00	916.00	(F16)	165.00	22X25	342	418	3893	3823
6"	inch	5.91	22.01	24.02	10.94	12.01	11.12	14.49	8.44	8.82	12.62	18.23	13.98	14.96	1.42	1.90	15.16	36.06		6.50	(4 holes)	754	922	4500	4420

Z93W**Z94W****Z93P****Z94P**8"-12" | DN200-DN300
CLASS 600/900

High Temperature Trunnion Ball 3 Piece Up to

W 200°C (400°F) | **P** 327°C (620°F)

Valve dimensions



Full port	Unit	Ball port	A		B		C		C1		D		W		P	M	K	F	TxL	Weight kg/lb		Kv/Cv	
			600	900	600	900	600	900	600	900	600	900	600	900						600	900	600	900
DN200 8"	mm	201.00	660.00	737.00	330.00	368.50	312.00	307.00	263.00	263.00	409.00	403.00	420.00	470.00	72.00	76.50	20.00	(F25) 254.00	18x25 (8 holes)	577	836	7742	7344
	inch	7.91	25.98	29.02	12.99	14.51	12.28	12.09	10.35	10.35	16.10	15.87	16.54	18.50	2.83	3.01	0.79			10.00	1272	1843	8950
DN250 10"	mm	252.00	787.00	838.00	400.00	419.00	374.00	393.00	310.00	347.00	471.00	490.00	510.00	545.00	72.00	76.50	20.00	(F25) 254.00	18x25 (8 holes)	931	1301	12543	12110
	inch	9.92	30.98	32.99	15.75	16.50	14.72	15.47	12.20	13.66	18.54	19.29	20.08	21.46	2.83	3.01	0.79			10.00	2052	2868	14500
DN300 12"	mm	303.00	838.00	965.00	419.00	482.50	402.00	419.00	344.00	361.00	499.00	544.00	560.00	610.00	72.00	76.50	20.00	(F25) 254.00	18x35 (8 holes)	1126	1576	19809	18598
	inch	11.93	32.99	37.99	16.50	19.00	15.83	16.50	13.54	14.21	19.65	21.42	22.05	24.02	2.83	3.01	0.79			10.00	2482	3474	22900

Z91W

Z92W

Z93W

Z94W

Z95W

Z96W

Z91P

Z92P

Z93P

Z94P

Z95P

Z96P

2"-6"

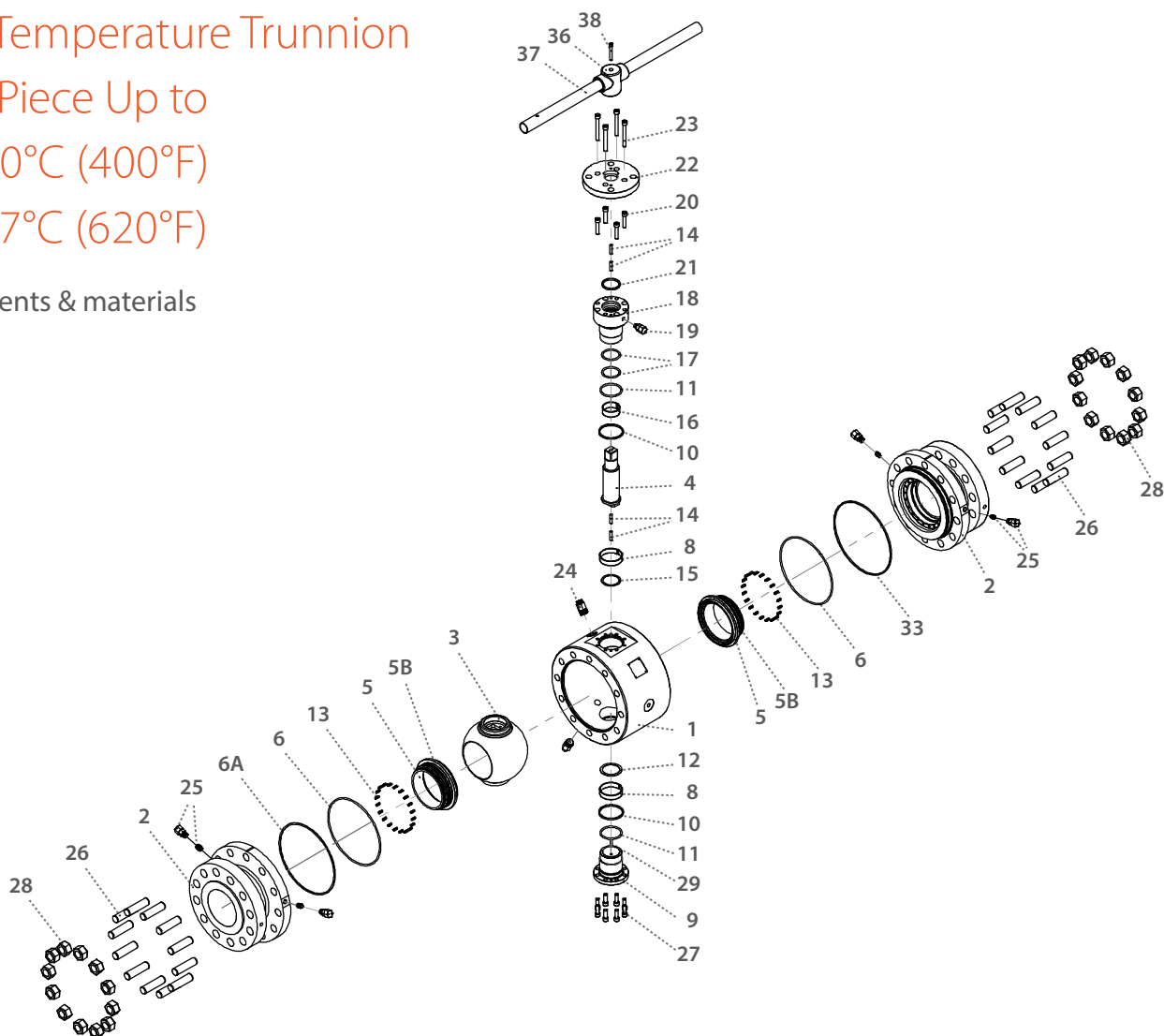
High Temperature Trunnion

Ball 3 Piece Up to

W 200°C (400°F)

P 327°C (620°F)

Components & materials



Item	Description	Material Spec. ASTM	Qty.
1	Body	Acc. Ordering code	1
2	Ends	Acc. Ordering code	2
3	Ball	Acc. Ordering code	1
4	Stem	Acc. Ordering code	1
5*	Seat	Acc. Ordering code	2
5B*	Seat seal	Viton / HNBR	2-4
6*	Body inner seal	Viton / HNBR	2
6A*	Body outer seal	Graphite	2
8*	Ball Bearing	S.steel 316 + PTFE	2
9	External Trunnion	S.steel / C.steel	1
10*	Gland Plate & External trunnion Fire Safe Seal	Graphite	2
11*	Gland Plate & External trunnion Seal	Viton / HNBR	2
12*	Lower thrust washer	S.steel 316 + PTFE	1
13	Seat Spring	Inconel X750	28-40
14	Gland pin	S.steel / C.steel	4
15*	Stem Thrust Washer	S.steel 316 + PTFE	1
16*	Gland plate bearing	S.steel 316 + PTFE	1

Item	Description	Material Spec. ASTM	Qty.
17*	Stem seal	Viton / HNBR	2
18	Gland Plate	S.steel / C.steel	1
19	Stem grease fitting	S.steel	1
20	Lower gland bolts	A193-B8M / A320 L7	4
21*	Stem fire safe seal	Graphite	1
22	Iso plate	S.steel / C.steel	1
23	Upper gland bolts	A193-B8M / A320 L7	4
24	Plug valve	S.steel	2
25**	Seat grease fitting + check valve	S.steel	4
26	Body studs	A193-B8M / A320 L7	16-24
27	External trunnion bolts	A193-B8M / A320 L7	4
28	Body nuts	A194-8M / A194 L7	16-24
29	Antistatic spring	Inconel X750	1
30	Wrench head	S.steel / C.steel	1
31	Wrench bolt	S.steel / C.steel	1
32	Pipe handle	S.steel / C.steel Zink plate	1

* Repair kit components

** Available from 6" size only

Z91W

Z92W

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Z95W

Z96W



Z91P

Z92P

Z93P

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Z95P

Z96P

2"-6"

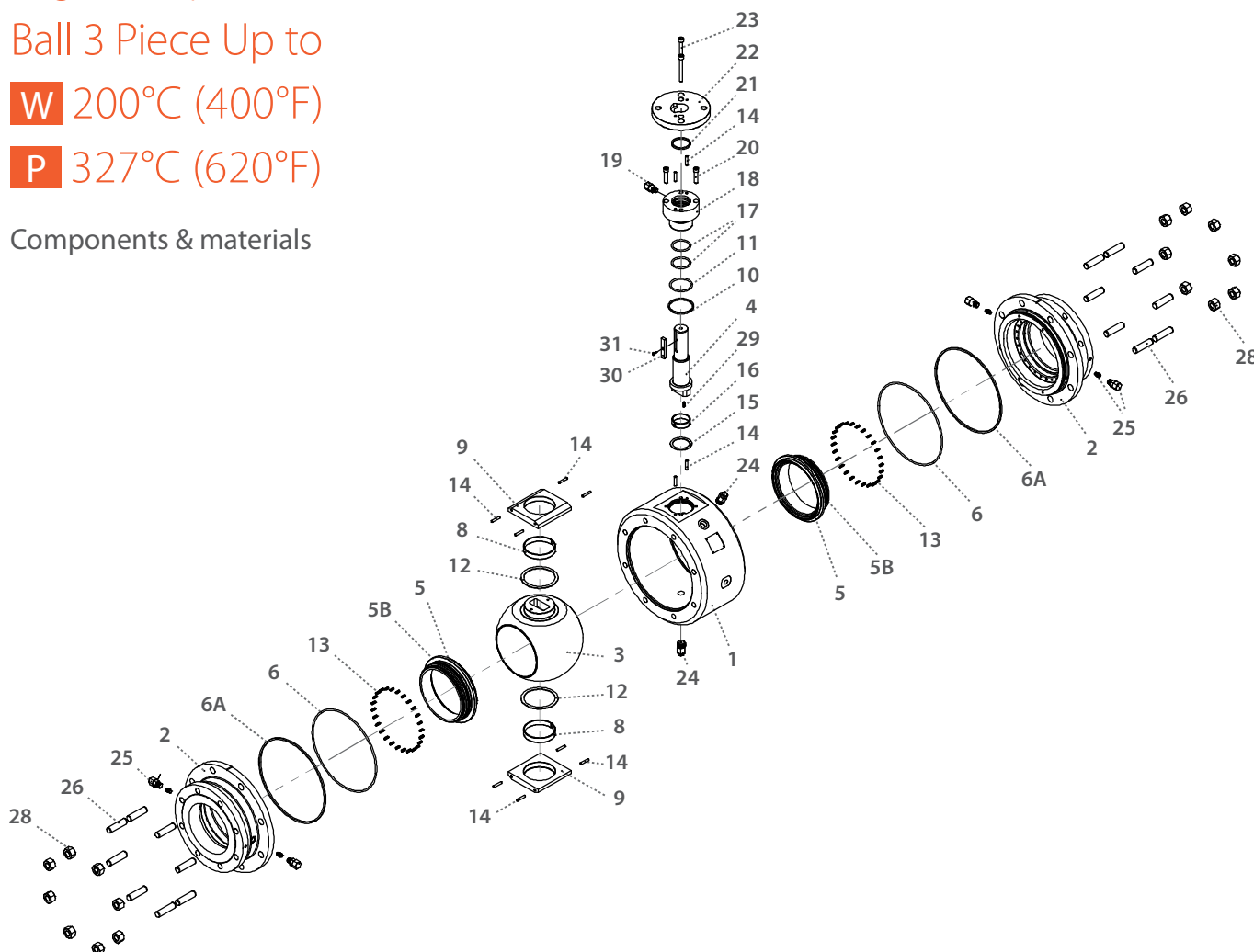
High Temperature Trunnion

Ball 3 Piece Up to

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P 327°C (620°F)

Components & materials



Item	Description	Material Spec. ASTM	Qty.
1	Body	Acc. Ordering code	1
2	Ends	Acc. Ordering code	2
3	Ball	Acc. Ordering code	1
4	Stem	Acc. Ordering code	1
5*	Seat	Acc. Ordering code	2
5B*	Seat seal	Viton, HNBR	2-4
6*	Body inner seal	Viton, HNBR	2
6A*	Body outer seal	Graphite	2
8*	Ball bearing	S.steel 316 + PTFE	2
9	Trunnion plate	S.steel / C.steel	2
10*	Gland plate & External Trunnion Fire Safe Seal	Graphite	1
11*	Gland Plate & External Trunnion Seal	Viton, HNBR	1
12*	Ball thrust washer	S.steel 316 + PTFE	2
13	Seat Spring	Inconel X750	52-60
14	Gland pin	S.steel / C.steel	12
15*	Stem Thrust Washer	S.steel 316 + PTFE	1
16*	Stem Bearing	S.steel 316 + PTFE	1

Item	Description	Material Spec. ASTM	Qty.
17*	Stem seal	Viton, HNBR	2
18	Gland Plate	S.steel / C.steel	1
19	Stem grease fitting	S.steel	1
20	Lower gland bolts	A193-B8M / A320 L7	2-6
21*	Stem fire safe seal	Graphite	1
22	Iso plate	S.steel / C.steel	1
23	Upper gland bolts	A193-B8M / A320 L7	2-6
24	Plug valve	S.steel	2
25**	Seat grease fitting + check valve	S.steel	4
26	Body studs	A193-B8M / A320 L7	16-32
28	Body nuts	A194-8M / A194 L7	16-32
29	Antistatic spring	Inconel X750	1
30	Stem key	S.steel / C.steel	1
31	Stem key bolt	S.steel / C.steel	1

* Repair kit components