



金属密封球阀

Metal seated Ball valve



ANSI

- 设计标准 /Construction: BS5351 and EN ISO 17292
- 法兰尺寸标准 / Flanges : ASME B16.5
- 结构长度标准 /Face to Face: ANSI B16.10 and API 6D
- 顶部法兰标准 / Top flange: ISO 5211
- 额定压力等级 / Rating: 150, 300 and 600 lbs

DIN

- 设计标准/Construction: DIN 3357 and ISO 17292
- 法兰尺寸标准/Flanges: EN 1092
- 结构长度标准/Face to Face as per EN 558-1 and DIN 3202
- 顶部法兰标准/Top flange: ISO 5211
- 额定压力值/Rating: PN 16, 40 and 100

应用 / Applications

- 适用于高温介质, 最高达500°C /Media with high temperature, up too 500°C .
- 适用于对软密封阀门产生腐蚀或损坏作用的含有悬浮固体颗粒的介质/ Media with solids in suspension which produce erosion or damage on valve with soft seats.
- 适用于高腐蚀性的工况 /Adapted for highly corrosive products.



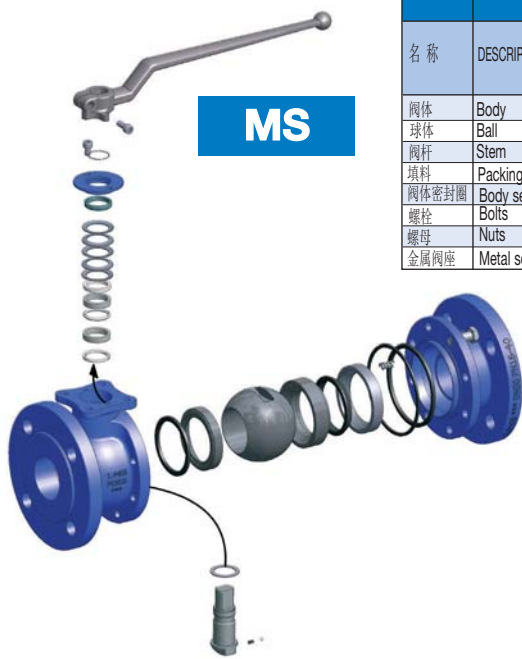
阀座和球体 / Seats and balls

- 碳化铬保护层 / (Cr-Carbide)

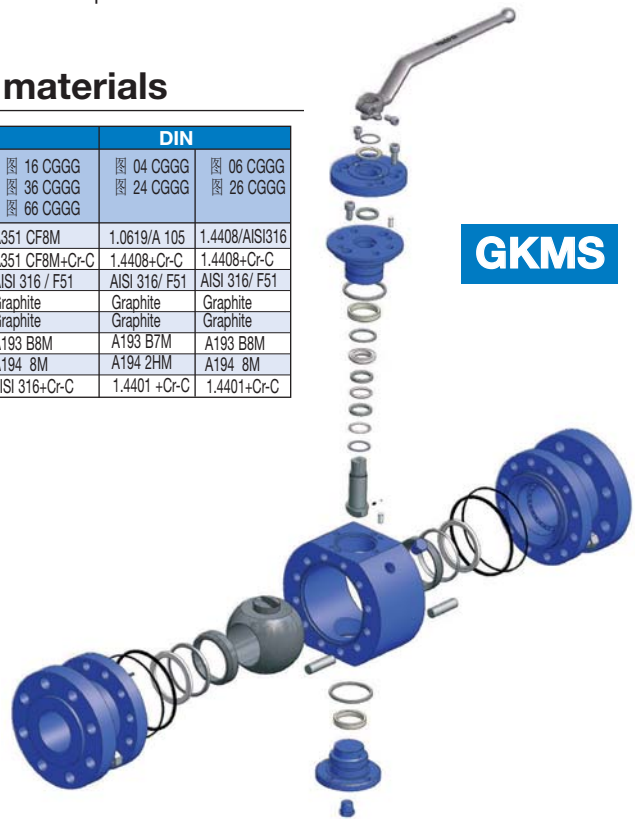
在金属阀座和球体的材料表面上有一层碳化铬保护层, 该保护层具有良好的抗流体腐蚀、气穴和侵蚀作用, 其表面硬度可达到950-1100HV_{N300}, 最高使用温度可达到600°C.

The metallic seat and ball have a projection of Chromium Carbide on construction materials with good resistance to the erosion, cavitation and corrosion with a superficial hardness of 950-1100 HVN, it can support temperatures up to 600°C.

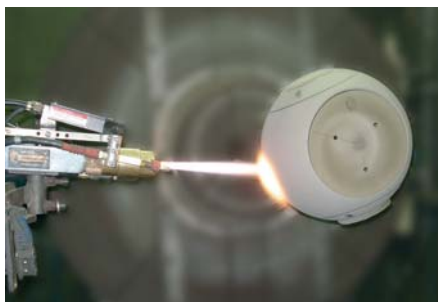
标准结构材料 / Standard construction materials



名称	DESCRIPTION	ANSI		DIN	
		图 14 CGGG 图 34 CGGG 图 64 CGGG	图 16 CGGG 图 36 CGGG 图 66 CGGG	图 04 CGGG 图 24 CGGG	图 06 CGGG 图 26 CGGG
阀体	Body	A216 WCC/A10M	A351 CF8M	1.0619/A 105	1.4408/AISI316
球体	Ball	A351 CF8M+Cr-C	A351 CF8M+Cr-C	1.4408+Cr-C	1.4408+Cr-C
阀杆	Stem	AISI 316 / F51	AISI 316 / F51	AISI 316/ F51	AISI 316/ F51
填料	Packing ring	Graphite	Graphite	Graphite	Graphite
阀体密封圈	Body seal	Graphite	Graphite	Graphite	Graphite
螺栓	Bolts	A193 B7M	A193 B8M	A193 B7M	A193 B8M
螺母	Nuts	A194 2H	A194 8M	A194 2HM	A194 8M
金属阀座	Metal seats	AISI 316+Cr-C	AISI 316+Cr-C	1.4401 +Cr-C	1.4401+Cr-C



镀层和研磨 / Coating and grinding

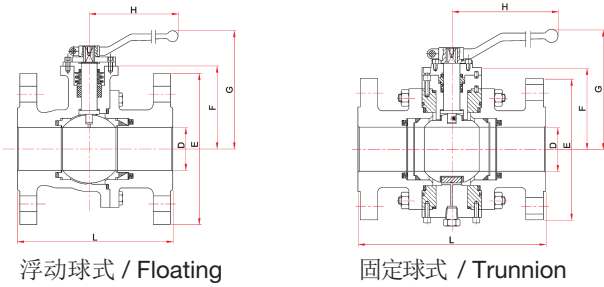


镀层使用碳化铬 / Cr-Carbide Application

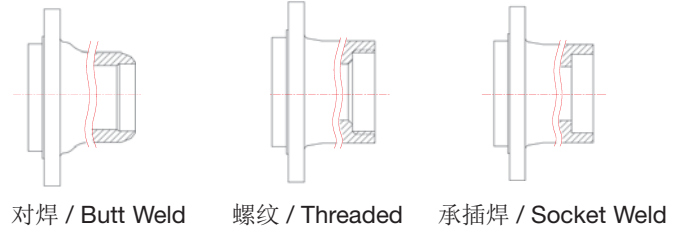


研磨 / Grinding

■ 结构尺寸 / Dimensions



■ 端头选择 / Optional ends



DN-D	DIN										H
	F1	F4	F5 (*)	PN16	PN40	PN100	PN16/40	PN100	PN16/40	PN100	
15	130	115	-	95	95	-	52	-	100	-	185
20	150	120	-	105	105	-	54	-	102	-	185
25	160	125	-	115	115	140	60	61	111	112	185
32	180	130	-	140	140	-	65	-	115	-	185
40	200	140	-	150	150	170	75	76	130	130	300
50	230	150	-	165	165	195	83	83	138	137	300
65	290	170	-	185	185	220	96	98	150	176	300
80	310	180	-	200	200	230	114	116	187	215	350
100	350	190	-	220	235	265	128	141	201	240	350
125	-	-	325/400	250	270	315	158	189	247	274	680
150	-	-	350/480	285	300	355	175	237	264	308	680
200	-	-	400/600	340	375	430	245	281	334	-	750
250	-	-	450/730	405	450	505	316	316	-	-	-
300	-	-	500/850	460	515	585	367	370	-	-	-

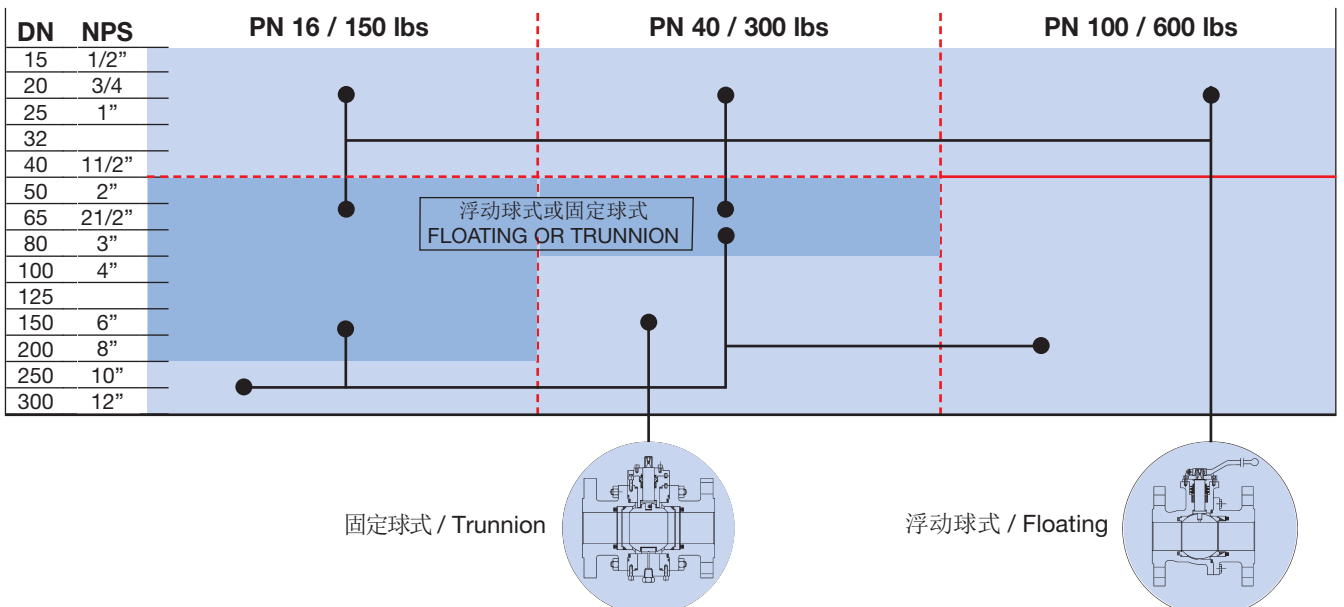
NPS	D	ANSI						H				
		L		E		F			G			
		150 lbs	300 lbs	600 lbs	150 lbs	300 lbs	600 lbs	150/300lbs	600 lbs	150/300lbs	600 lbs	
1/2"	15	108	140	-	89	95	-	52	-	100	-	185
3/4"	20	117	152	-	98	117	-	54	-	102	-	185
1"	25	127	165	216	108	124	124	60	61	111	112	185
1 1/2"	40	165	190	241	127	155	155	75	76	130	130	300
2"	50	178	216	292	152	165	165	84	83	138	137	300
2 1/2"	65	190	241	330	178	190	190	96	98	150	176	300
3"	80	203	283	356	190	209	209	114	116	187	215	350
4"	100	229	304	432	228	254	273	128	141	201	240	350
6"	150	394	403	559	279	317	356	175	237	268	308	680
8"	200	457	502	660	343	381	419	281	281	-	-	-
10"	250	568	568	787	406	444	508	316	316	-	-	-
12"	300	610	648	838	482	520	558	380	370	-	-	-

(*) The second value corresponds to PN 100

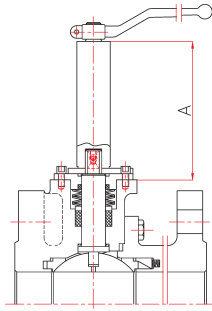
ISO 5211 标准顶部法兰 / Top flange ISO 5211

DN	15	20	25	40	50	65	80	100	150	200	250	300
NPS	1/2"	3/4"	1"	1 1/2"	2"	2 1/2"	3"	4"	6"	8"	10"	12"
PN16-40	F05	F05	F05	F07	F07	F07	F10	F10	F12	F14	F14	F16
PN 100	-	-	F05	F07	F07	F10	F10	F12	F14	F16	F16	F25
150-300 lbs	F05	F05	F05	F07	F07	F07	F10	F10	F12	F14	F14	F16
600 lbs	-	-	F05	F07	F07	F10	F10	F12	F14	F16	F16	F25

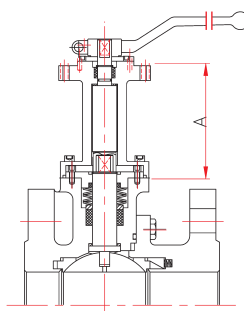
产品范围 / Manufacture range



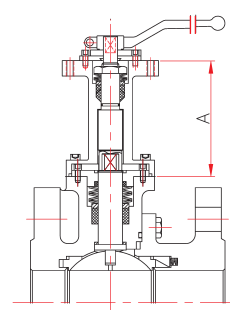
■ 加长阀杆 / Stem extensions*



简易型/Simple



标准型/Standard



安全型/Security

A = 150mm . 其它长度可按客户要求订做 / Other lengths under request.

* 推荐用于温度大于 350°C 的情况 / Recommended temperature above 350°C.

■ 泄漏实验 / Leak tests

依据标准/According: API 598, ISO 5208 Rate C, EN12266 Rate C, ANSI FCI 70 Class V, on request class VI or leakage 0 (按要求可达到VI级或零泄漏)

压力等级 Class	壳体静压实验 Hydraulic shell test	阀座静压实验 Hydraulic seat test	阀座气压实验 Pneumatic seat test
150 Lbs/PN 16	30/24 bar	22/18 bar	6 bars
300 Lbs/PN 40	78/60 bar	57/44 bar	6 bars
600 Lbs/PN 100	156/150 bar	114/110 bar	6 bars

规格 Size	壳体实验 (最小值) Shell test Test duration (min)	阀座实验 / Seat Test	
		持续时间 (最小值) Test duration (min)	最大泄漏值/Maximum Leakage rate class V (ml/min)
1/2" to 1 1/2" (DN15-40)	15 sec	15 sec	0.2-0.3
2" to 6" (DN50-150)	60 sec	60 sec	1.2-3.3
8" (DN 200)	120 sec	120 sec	9
10" to 12" (DN250-300)	180 sec	120 sec	11.3-13.5

■ 开关扭矩 / Breakaway torque in Nm*

DN	15	20	25	40	50	65	80	100	150	200	250	300
NPS	1/2"	3/4"	1"	1 1/2"	2"	2 1/2"	3"	4"	6"	8"	10"	12"
150Lbs	11	14	20	60	70	110	180	280	539	910	1560	2190
300Lbs	18	21	28	70	118	170	310	510	890	1530	2020	2430
600Lbs	-	-	50	92	170	-	440	810	1580	2645	3413	5120
PN16	10	12	18	55	58	105	175	260	520	715	1145	1950
PN40	17	20	25	65	85	130	275	420	700	1230	1950	2250
PN100	-	-	50	92	170	275	440	810	1580	2645	3413	5120

*开关扭矩为在每一额定值下最大 ΔP 值. 实验介质为常温下的水, 不考虑安全系数.

Breakaway to ΔP maximum for for each rating .Test made with water at ambient Temperature, excluding safety factor.

■ 压力-温度表 / P-T Diagram

ANSI		DIN	
碳钢/Carbon steel (A216 WCC)	----	碳钢/Carbon Steel (1.0619)	-----
不锈钢/Stainless steel (A351 CF8M)	—	不锈钢/Stainless steel (1.4408)	—
阀体/Body: 216 WCC / A351 CF8M		阀体/Body: 1.4408/1.0619	
阀座/Seats: AISI 316+Cr-Carbide		阀座/Seats: AISI 316+Cr-Carbide	

