



软密封结构

软密封结构的柱塞阀的密封副是由上下两个软密封圈和柱塞组成。当柱塞塞入密封圈内孔时，通过由阀盖螺母施加在阀盖上的载荷把柱塞周围的密封圈压牢，从而保证了密封，当阀门开启抽出柱塞时，密封圈的材梁在弹性的作用下恢复原始状态。柱塞经精密磨削及抛光处理后与阀杆相连接。密封圈采用新型无毒非金属材料，具有耐压、耐磨及自润滑的功能，密封性能好，使用寿命长。

Soft Seal Structure

The seal of soft-seal plunger valve is composed of an upper and lower soft seal rings, and a plunger. When the plunger is laid into the sealing groove, the seal ring around the plunger will be closely pressed by the load applied on the bonnet by bonnet nut, thus to ensure good seal. When valve is opened and plunger is drawn out, seal ring will resume original under elastic force. After precision grinding and polishing, plunger is connected to valve stem. Seal ring is made of the new-type nontoxic nonmetal material for pressure and abrasion resistance, self-lubrication, outstanding sealing performance and long service life.

硬密封结构

硬密封结构的柱塞阀的密封副是由精密磨削及抛光处理后的柱塞和在堆焊后的硬阀座面组成。柱塞经粗加工后分别进行渗碳、高频淬火及渗氮等化学处理，硬度可高达HRC58~64。柱塞阀达到上密封圈采用新型无毒非金属材料，具有耐压、耐磨及自润滑的功能，密封可靠、经久耐用。

Hard Seal Structure

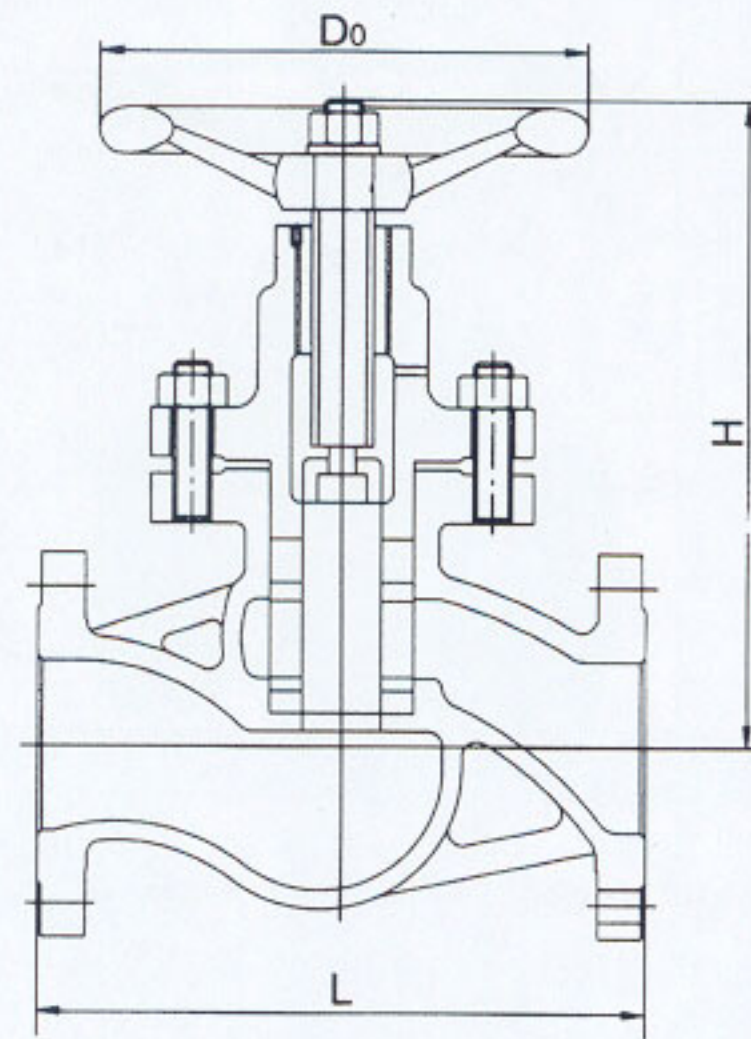
The seal of hard-seal plunger valve is composed of the precisely ground and polished plunger and built-up welded hard valve seat. After rough machining, plunger is subject to the chemical processing of carburizing, high frequency hardening and nitriding etc, with hardness up to HRC58~64. The upper seal ring of plunger valve is made of new-type nontoxic nonmetal material for pressure and abrasion resistance, self-lubrication, dependable seal and long durability.

主要零件材料 Materials For Main Parts

零件名称 Part Name		GB材料			ASTM材料	
		铸铁系列 Cast iron	碳钢系列 Carbon Steel	不锈钢系列 Stainless Steel	碳钢系列 Carbon Steel	不锈钢系列 Stainless Steel
阀体	Body	HT200	WCB	CF8	A216 WCB	A351 CF8
密封圈	Seal Ring	聚四氟乙烯、石墨 PTFE、Graphite				
孔架	Yoke	HT200	WCB	CF8	A216 WCB	A351 CF8
柱塞	Piston	HT200	WCB	CF8	A216 WCB	A351 CF8
阀杆	Stem	1Cr13	1Cr13	0Cr18Ni9(304)	A276 410	A276 304
双头螺母	Stud	35	35CrMoA	0Cr18Ni9(304)	A193 B7	A193 B8
六角螺母	Nut	A3	35	0Cr18Ni9(304)	A194 2H	A194 8
弹簧垫圈	Spring Lock Washers	65Mn	65Mn	0Cr18Ni9(304)	65Mn	A276 304
阀盖	Bonnet	HT200	WCB	CF8	A216 WCB	A351 CF8
阀杆螺母	Stem Nut	ZCuAl10Fe3	ZCuAl10Fe3	ZCuAl10Fe3	B148 UNS C95600	B148 UNS C95600
手枪	Handwheel	QT400-17	QT400-17	QT400-17	A197	A197
手轮螺母	Handwheel Nut	35	35	0Cr18Ni9(F304)	A307	A182 F304

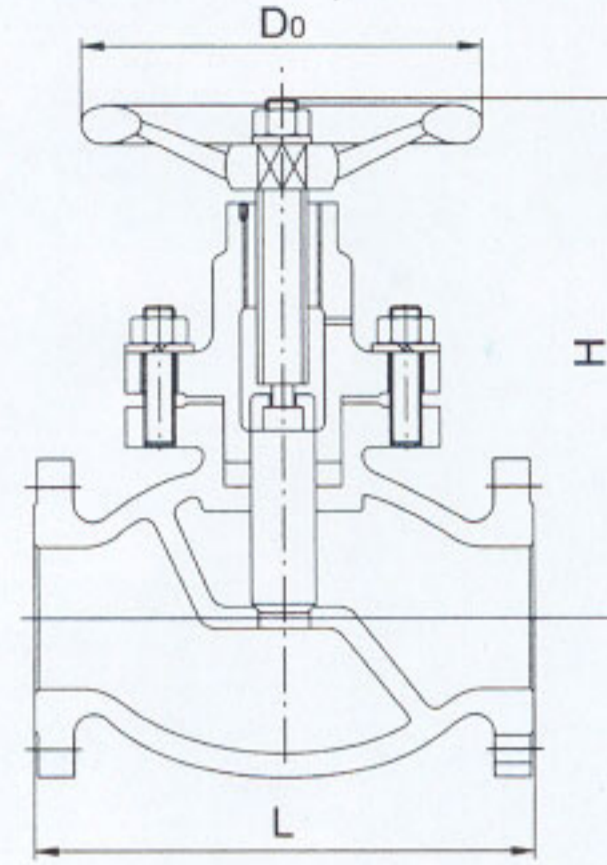
产品性能规范 Chief property And Specification

设计标准 Design Standard	GB/T 12235	ASME B16.34
压力温度等级 Pressure-Temperature Rating	GB/T 12224	ASME B16.34
结构长度 Face-Face	GB/T12221、GB15188	ASME B16.10
法兰型式尺寸 Flange Ends	GB/T9113、JB/T79	ASME B16.50
承插焊端连接 Socket welded Ends	JB/T 1751	ASME B16.11
螺纹连接 Threaded Ends	GB7306	ASME B1.20.1
检验与试验 Inspection & Test	JB/T9092、GB/T13927	API 598
公称压力 Norminal Pressure	PN1.6 PN 2.5 PN 4.0 PN 6.4 PN 10.0 PN 16.0	CLASS150 CLASS300
试验压力(MPa) Test Pressure	壳体试验 Shell Test	2.4 3.75 6.0 9.6 15.0 24.0 2.98 7.58
	高压密封 High Pressure Seal Test	1.76 2.75 4.4 7.04 11.0 17.6 2.07 5.52
	低压密封 Low Pressure Seal Test	0.6
适用温度 Applicable Temperature	-196°C ~ 425°C (不同的工况温度选用不同的材质) Different raw material for different work temperature	
适用介质 Applicable Medium	水、油、气及各类腐蚀性介质 (不同的介质选用不同材质) Water, oil, gas and other causticity medium (Different raw material for different medium)	



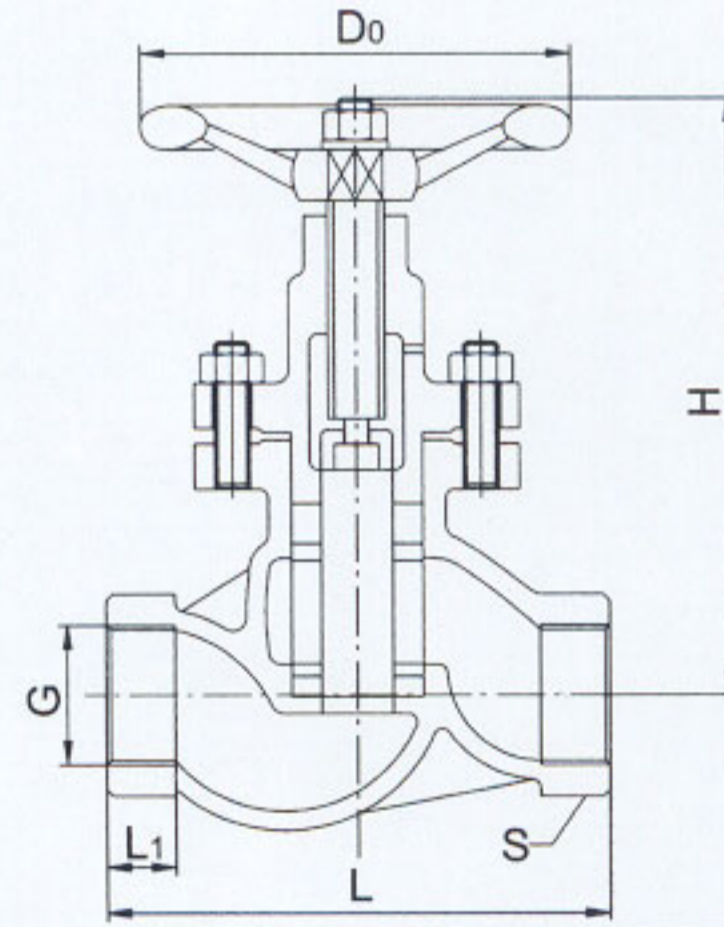
主要外形尺寸和重量 Main Dimensions & Weight

压力 Pressure	规格 Size	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400
		in	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	10	12	14	16
PN1.6 MPA	阀门尺寸 Main Dimension	L	130	150	160	180	200	230	290	310	350	400	480	600	650	750	780	914
		H	115	135	155	185	190	205	245	285	320	340	410	530	560	670	680	820
		D0	100	100	120	140	160	180	200	240	280	320	350	450	500	550	600	700
	重量Weight(kg)	3.3	4.4	5.5	8	11	15	23.5	31.5	43.5	59	85	150	227	308	528	730	
	Cv	-	-	-	-	-	-	-	105	189	381	428	798	1240	1859	2441	3234	
PN2.5 MPA	阀门尺寸 Main Dimension	L	130	150	160	180	200	230	290	310	350	400	480	600	650	750	780	914
		H	125	145	165	195	200	215	255	295	330	350	420	530	560	670	680	820
		D0	100	100	120	140	160	180	200	240	280	320	350	450	500	550	600	700
	重量Weight(kg)	3.5	4.5	5.5	8	11	15	24	32	44	60	93	160	239	318	575	750	
	Cv	-	-	-	-	-	-	-	105	189	381	428	798	1240	1859	2441	3234	
PN4.0 MPA	阀门尺寸 Main Dimension	L	130	150	160	180	200	230	290	310	350	400	480	600	650	750	780	914
		H	125	145	165	195	200	215	255	295	330	350	420	530	560	670	680	820
		D0	100	100	120	140	160	180	200	240	280	320	350	450	500	550	600	700
	重量Weight(kg)	3.7	4.6	6	8.5	11.5	16	24.5	32.5	70	93.5	181	265	-	-	-	-	
	Cv	-	-	-	-	-	-	-	105	189	381	428	798	1240	1859	2441	3234	
PN6.4 MPA	阀门尺寸 Main Dimension	L	170	190	210	230	260	300	340	380	430	-	-	-	-	-	-	-
		H	135	155	175	205	210	225	265	305	340	-	-	-	-	-	-	-
		D0	120	140	160	180	200	240	280	320	350	-	-	-	-	-	-	-
	重量Weight(kg)	9.5	10	13.5	19	21	24	42	52	81	-	-	-	-	-	-	-	
	Cv	-	-	-	-	-	-	-	105	189	-	-	-	-	-	-	-	
PN10.0 MPA	阀门尺寸 Main Dimension	L	170	190	210	230	260	300	-	-	-	-	-	-	-	-	-	-
		H	135	155	175	205	210	225	-	-	-	-	-	-	-	-	-	-
		D0	120	140	160	180	200	240	-	-	-	-	-	-	-	-	-	-
	重量Weight(kg)	10	10.5	14	22	25	43	-	-	-	-	-	-	-	-	-	-	
	Cv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PN16.0 MPA	阀门尺寸 Main Dimension	L	170	190	210	230	260	300	-	-	-	-	-	-	-	-	-	-
		H	145	165	185	215	220	235	-	-	-	-	-	-	-	-	-	-
		D0	120	140	160	180	200	240	-	-	-	-	-	-	-	-	-	-
	重量Weight(kg)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Cv	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	



主要外形尺寸和重量 Main Dimensions & Weight

压力 Pressure	规格 Size	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400
		in	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	5	6	8	10	12	14	16
CLASS 150	阀门尺寸 Main Dimension	L	108	117	127	140	165	203	216	241	292	356	406	495	622	698	787	914
		H	115	135	155	185	190	205	245	285	320	340	410	530	560	670	680	820
		D0	100	100	120	140	160	180	200	240	280	320	350	450	500	550	600	700
	重量Weight(kg)		3.7	4.6	6.0	8.5	11.5	16	34.5	32.5	45	70	93.5	181	265	330	592	800
	Cv		-	-	-	-	-	-	-	100	185	-	440	810	1260	1890	2441	3234
CLASS 300	阀门尺寸 Main Dimension	L	152	178	203	216	229	267	292	318	356	400	444	559	622	711	762	864
		H	125	145	165	195	200	215	255	295	330	350	420	530	560	670	680	820
		D0	120	120	140	160	180	200	240	280	320	350	450	500	550	600	700	750
	重量Weight(kg)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cv		-	-	-	-	-	-	-	100	185	-	440	810	1260	1890	2441	3234



主要外形尺寸和重量 Main Dimensions & Weight

压力 Pressure	规格 Size	管螺纹 (G)	尺寸 Dimensions					重量kg Weight	Cv值
			L	L1	S	H	D0		
PN1.6 ~ 4.0	15	1/2"	90	14	32	125	60	5.2	-
	20	3/4"	100	16	36	145	80	7.1	-
	25	1"	120	18	46	165	100	7.4	-
	32	1-1/4"	140	20	55	195	120	8.5	-
	40	1-1/2"	170	22	65	200	140	12.5	-
	50	2"	200	24	80	215	160	14	-