SGVFS 硕工阀门
SHUOGONG VALVE

08
低温阀门系列
LOW TEMPERATURE VALVE SERIES

低温阀门使用说明
The instructions on cryogenic valves

低温阀门使用说明

随着现代石油化工、煤化工和制冷工业的快速发展，低温阀门的使用越来越广泛，用量也越来越多。因此正确合理地使用低温阀门引起人们关注。低温阀门的使用除了一般常规阀门的使用要求之外，还有一些特殊要求需要注意。低温阀门一般是指哪些温度-29℃下工作的阀门，有的低温阀门能在温度降至-196℃的情况下输送夜华气体（诸如：氮气、氧气和天然气之类的介质），还能保证正常工作。

随着总做介质温度的降低，低温阀门所使用的材料和结构与常规通用阀门也有区别，特别是超低温阀门（t < -100℃），不仅选材要适当，而且要有特殊的结构。问了减少由外界传向关闭件的热流，操作部件与有绝热装置的阀体要移开一定的距离。所以低温阀门的阀盖颈部都很长。超低温阀是在从外界温度起，直到超低温的复杂条件下工作的。而且要不间断地发挥其功能。关闭件的密封通常靠在密封圈上形成必须的接触压力来保证，但如果传动装置的作用力是固定的，密封圈的强度在工作温度范围内就可能不同，当然密封圈材料的性能，特别是聚合材料的性能也就不同。因此，超低温阀门对密封圈有严格的要求，通常选用硬质合金（STL）材料较好。

超低温阀在关闭件的开启速度方面受到相当的限制。虽然采用了绝热措施，在有限范围内还是有热流，导致系统中的个别地方产生液相。因此，在阀门快速开启时，液体可能获得很大的速度，一旦遇到像阀门这样的障碍或阻力就将产生水击，这是在使用中要注意的。

一半用于制冷技术，介质为氮或氟力昂的冷冻剂，过去常用铸铁阀门，其适用温度为-28~150℃之间，现在采用较少，但阀门用铁素体球墨铸铁的增长趋势。这是因为铁素体球墨铸铁具有较好的冲击韧性、耐磨性和耐磨腐蚀性能。一半碳钢（WCB）材质的阀门，其使用温度为-29~150℃；也有低温碳钢（LCB、LC1、LC2）,其最低使用温度为-46~-73℃，奥氏体不锈钢（304、316）是性能优良的耐低温钢，其最低使用温度为-196℃以下，有的为-254℃。一般低温阀门关闭件，在阀体上的选用金属密封阀座，在阀瓣上选用氟塑料（F4），在结构上没有什么特殊要求与常规通用阀门差不多。根据温度和介质合理选用。

The instructions on cryogenic valves

With modern petrochemical industry, coal chemical industry and the rapid development of refrigeration industry, the use of cryogenic valves is more and more widely, dosage is also more and more. So the correct reasonable use of cryogenic valves attention. The use of cryogenic valves in addition to the use of conventional valve requirements, there are some special requirements need to pay attention to. Cryogenic valves generally refers to work which - 29 ℃ temperature valve, cryogenic valves to the temperature dropped to - 196 ℃ under the condition of gas transmission night China (such as: medium, such as nitrogen, oxygen, and natural gas), can guarantee the normal work.

As always do medium temperature is reduced, the structure and material of cryogenic valves used with conventional common valves also has the difference, especially in the cryogenic valve (t < 100 ?), not only to properly select material, but also have special structure. Asked to reduce by the outside world to shut down a heat flow, operating unit with heat insulation device to remove the body of a certain distance. So the cryogenic valves cover the neck is very long. Cryogenic valve is in from the outside temperature, until the temperature under the complex conditions of work. And if continuously develop its function. Close a seal is usually depend on the sealing ring form must contact pressure to ensure that, but if the drive force is fixed, the strength of the sealing ring in working temperature range may be different, of course, the performance of the sealing ring material, especially the performance of the polymeric material is different also. Therefore, cryogenic valves has strict requirements to the sealing ring, usually choose carbide (STL) material is better.

Cryogenic valve in the closed a open speed is quite limited. Although the heat insulation measures, there are heat flux over a limited range, the liquid that generates individual place in the system. So rapidly in the valve opens, the liquid may gain a lot of speed, once encounter obstacles such as valves or resistance will generate water hammer, it is in use should pay attention to.

Half is used for cooling technology, medium for nitrogen, or fluorine, coolant, used to cast iron valve, the suitable temperature for - 28 ~ 150 ?, using less now, but with the growth trend of ferrite nodular cast iron valves. This is because the ferritic nodular cast iron has good impact toughness, wear resistance and corrosion resistant properties. Half of the carbon steel (WCB) material valve, the temperature for - 29 ~ 150 ?; Also has a low temperature carbon steel (LCB, LC1, LC2), the minimum temperature for - 46 ~ - 73 ?, austenitic stainless steel (304, 316) is the excellent performance of resistance to low temperature steel, its lowest temperature was below 196 ?, to - 254 ?. Common cryogenic valves closed, the selection of the body metal sealing seat, selects the fluorine plastic (F4) on the disc, there is no any special request on the structure and conventional general valve. According to the temperature and the reasonable choice of medium.

DJ41F-16/40P低温截止阀
DJ41F-16/40P Cryogenic valve

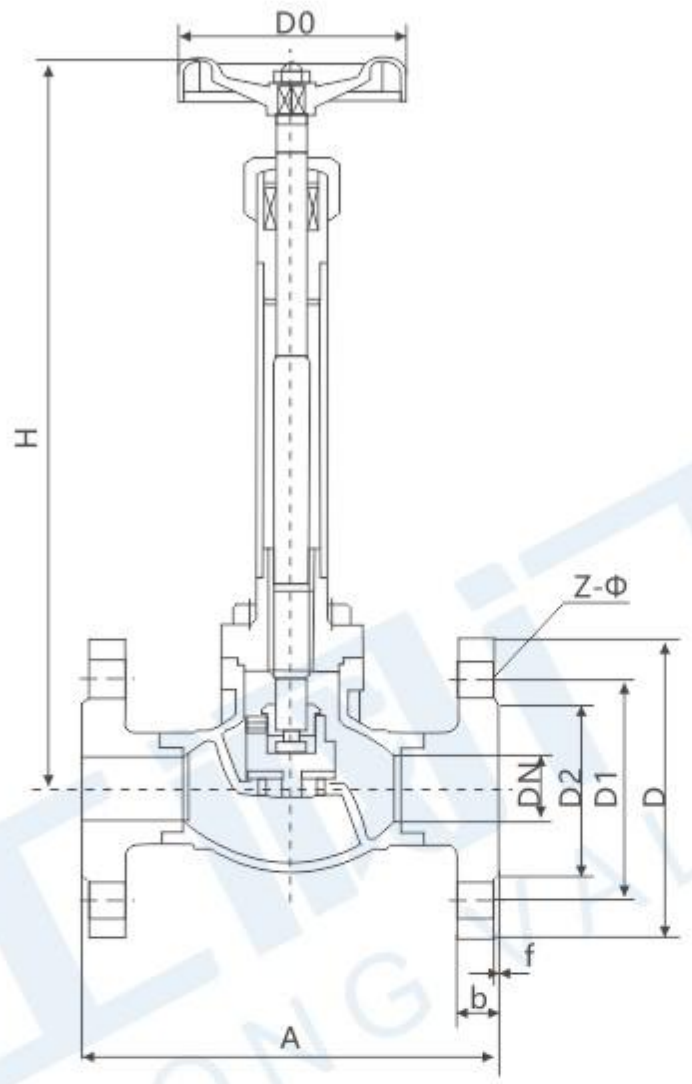
DJ41F-16/40P

产品规范

公称压力：1.6MPa
公称通径：10mm~200mm
适用介质：L02、LN2、LAr、LNG、LC2H4等
适用温度：-196~+80℃
连接方式：法兰
介质流向：由阀瓣下面向上流

Product specification

Nominal pressure: 1.6 MPa
Nominal size: 10 mm to 200 mm
Applicable medium: L02, LN2, LAr, LNG, LC2H4, etc
Applicable temperature: 196 ~ + 80 ℃
Connection mode: flange
Under the medium flow direction: the disc for high



主要外形和连接尺寸 Main external and connection dimension

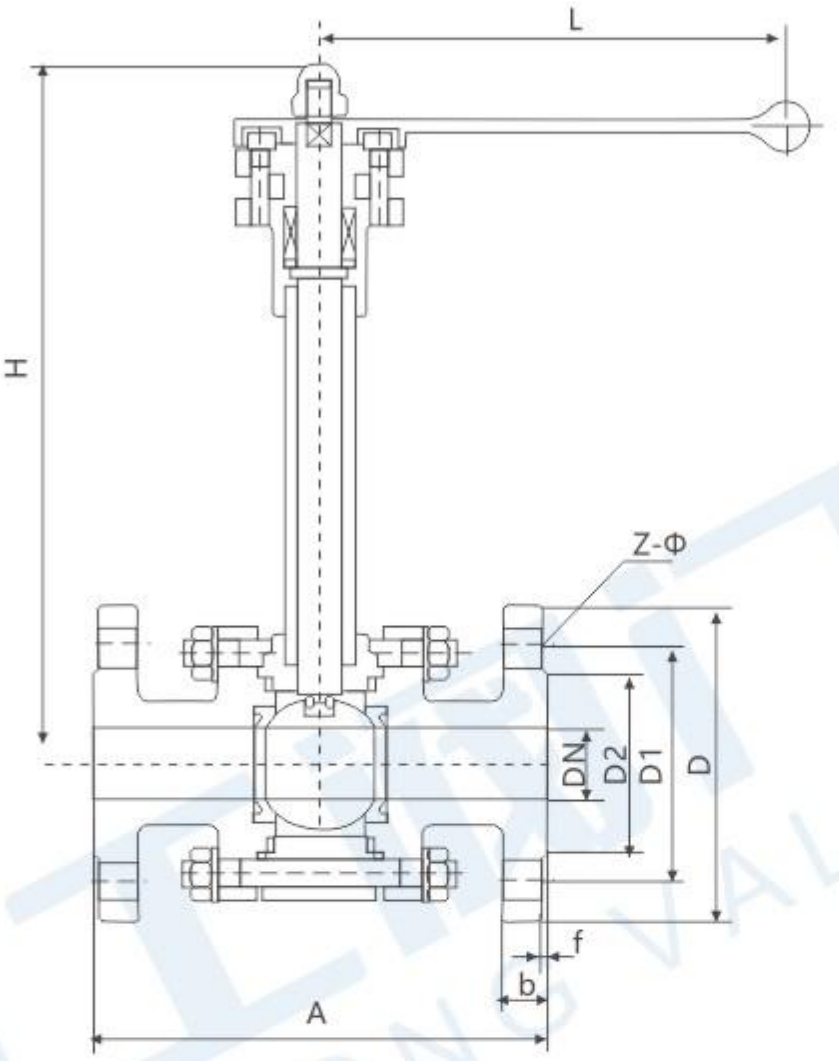
通径 DN (mm)	主要连接尺寸Main connecting dimensions										重量 (kg)
	A	H1	H2	D	D1	D2	Z-Φd	b	f	Do	
10	130	253	247	90	60	40	4-14	16	2	75	3.2
15	130	268	260	95	65	45	4-14	16	2	75	3.8
20	150	307	297	105	75	55	4-14	16	2	100	5.5
25	160	323	310	115	85	65	4-14	16	2	100	5.9
32	180	362	346	135	100	78	4-18	18	2	120	7.1
40	200	380	360	145	110	85	4-18	18	2	120	11.2
50	230	445	420	160	125	100	4-18	20	3	160	17.5
65	290	473	440	180	145	120	8-18	20	3	200	18.4
80	310	510	470	195	160	135	8-18	22	3	240	30.1
100	350	589	539	215	180	155	8-18	22	3	280	40.2
125	400	665	602	245	210	185	8-18	24	3	300	53.9
150	480	713	638	280	240	210	8-23	26	3	350	68.3
200	600	805	705	375	295	265	12-23	30	3	400	134.2
250	650	985	860	405	355	320	12-25	32	3	550	248.7
300	750	1080	930	460	410	370	12-25	34	4	650	334.5

DQ41F-16/40P低温球阀
DO41F-16/40 Cryogenic ball valve

DQ41F-16/40P

产品规范
公称压力：1.6MPa
公称通径：10mm~200mm
适用介质：L02、LN2、LAr、LNG、LC2H4等
适用温度：-196~+80℃
连接方式：法兰
介质流向：由阀门从左向右流动

Product specification
Nominal pressure: 1.6 MPa
Nominal size: 10 mm to 200 mm
Applicable medium: L02, LN2, LAr, LNG, LC2H4, etc
Applicable temperature: 196 ~ + 80 °C
Connection mode: flange
Medium flow: the valve flow from left to right

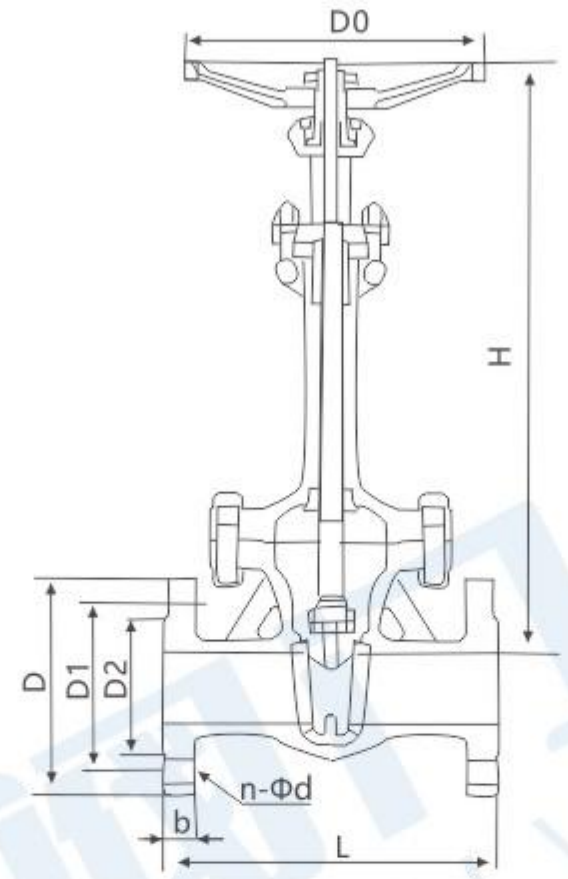


主要外形和连接尺寸 Main external and connection dimension

通径 DN (mm)	主要连接尺寸Main connecting dimensions									重量 (kg)
	A	H	D	D1	D2	Z-Φd	b	f	L	
15	130	207	95	65	45	4-14	16	2	140	4.2
20	140	239	105	75	55	4-14	16	2	160	5.6
25	150	254	115	85	65	4-14	16	2	180	7.2
32	165	280	135	100	78	4-18	18	2	200	11.3
40	180	292	145	110	85	4-18	18	2	200	13.8
50	200	322	160	125	100	4-18	18	3	250	18.6
65	220	354	180	145	120	4-18	18	3	320	32.8
80	250	375	195	160	135	8-18	20	3	320	46.2
100	280	420	215	180	155	8-18	20	3	360	60.3
125	320	452	245	210	185	8-18	22	3	500	101.6
150	360	491	280	240	210	8-23	24	3	700	166.2
200	400	544	335	295	265	12-23	26	3	900	274.6

DZ41Y低温闸阀
DZ41Y Low Temperature Valve

DZ41Y -16P



产品特点Product features

1、为防止中腔异常升压，在闸板的进口侧设置了泄压孔
2、根据阀门的工作温度确定阀盖的顶部长度，确保阀杆填料的可靠密封
3、根据工作温度合理选用填料，垫片等零件的材料
4、严格控制材料的化学成份及低温冲击韧性等力学性能指标
5、采用多种配管法兰标准及密封面型式，适用于各种工程需要6低温闸阀适用于甲烷、液态天然气、已烯、二氧化碳、液氨、液氧、液氮、液氢等低温介质

产品优点Product advantages

1、流体阻力小，密封面受介质的忡刷和侵蚀小。
2、开闭较省力。
3、介质流向不受限制，不扰流、不降低压力。
4、形体简单，结构长度短，制造工艺性好，适用范围广。

执行标准Execution standard

设计与制造	结构长度	法兰尺寸	压力-温度	试验-检验
JB/T7749	GB12221	JB79	GB9131	JB/T9092

压力试验Pressure test

公称压力PN	1.6	2.5	4.0	6.4	10.0
强度试验	2.4	3.8	6.0	9.6	15.0
水密封试验	1.8	2.8	4.4	7.0	11.0
上密封试验	1.8	2.8	4.4	7.0	11.0
气密封试验	0.4-0.7				

主要零件材料及性能Major parts material and the performance

体盖板	阀杆	密封面	垫片	填料	工作温度	适用介质
ZGoCrMNVAl低温高压铸钢	1Cr7Ni12	STL/STL	PTFE/柔性石墨 PTFE/金属缠绕垫	PTFE	-46	丙烷/炳烯 甲醇/乙烷 煤气/液氨
LCB						
ZGoCrMNVAl低温高压铸钢					-60	
LC1						
ZGoCrMNVAl低温高压铸钢					-73	
LC2						
ZGoCrMNVAl低温高压铸钢	1Cr18Ni9Ti				-101	
LC3						
ZGoCrMNVAl低温高压铸钢					-115	
LC4						
ZGoCrMNVAl低温高压铸钢					-196	
CF8						

DZ41H/Y/F低温闸阀
DZ41H/Y/F Low Temperature Valve

主要外形尺寸及连接尺寸Main external and connection dimension

PN16(MPa)

DN	L	D	D1	D2	b	n-Φd	H	DO
20	150	105	75	55	14	4-Φ14	320	140
25	160	115	85	65	14	4-Φ14	350	160
32	180	135	100	78	16	4-Φ18	385	180
40	200	145	110	85	16	4-Φ18	420	220
50	250	160	125	100	16	4-Φ18	540	240
65	265	180	145	120	18	4-Φ18	610	240
80	280	195	160	135	20	8-Φ18	690	280
100	300	215	180	155	20	8-Φ18	780	300
125	325	245	210	185	22	8-Φ18	930	320
150	350	280	240	210	24	8-Φ23	980	350
200	400	335	295	265	26	12-Φ26	1180	400
250	450	105	355	320	30	12-Φ30	1390	450
300	500	460	410	375	30	12-Φ30	1620	500
350	550	520	470	435	34	16-Φ34	1810	500
400	600	580	525	485	36	16-Φ36	1970	550

PN25(MPa)

DN	L	D1	D1	D2	b	N-Φd	H	DO
20	150	105	75	55	16	4-Φ16	320	140
25	160	115	85	65	16	4-Φ16	350	160
32	180	135	100	78	18	4-Φ18	385	180
40	200	145	110	85	18	4-Φ18	420	200
50	250	160	125	100	20	4-Φ20	540	240
65	265	180	145	125	22	8-Φ22	510	240
80	280	195	160	135	22	8-Φ22	690	280
100	300	230	190	160	24	8-Φ24	780	300
125	325	270	220	188	28	8-Φ28	930	300
150	350	300	250	218	30	8-Φ30	980	320
200	400	360	310	278	34	12-Φ34	1180	360
250	450	425	370	332	36	12-Φ36	1390	400
300	500	485	430	390	40	16-Φ40	1620	450
350	550	550	490	448	44	16-Φ44	1810	500
400	600	610	550	505	48	16-Φ48	1990	560

DZ41H/Y/F低温闸阀
DZ41H/Y/F Low Temperature Valve

主要外形尺寸及连接尺寸Main external and connection dimension

PN40(MPa)

DN	L	D	D1	D2	D6	b	N-Φd	H	Do
20	150	105	75	55	51	16	4-Φ14	330	140
25	160	115	85	65	58	16	4-Φ14	360	160
32	180	135	100	78	66	18	4-Φ18	440	180
40	200	145	110	85	76	18	4-Φ18	455	200
50	250	160	125	100	88	20	4-Φ18	575	240
65	380	180	145	120	110	22	4-Φ20	635	240
80	3103	195	160	135	121	22	8-Φ22	715	280
100	50	230	190	160	150	24	8-Φ22	815	300
125	400	270	220	188	176	28	8-Φ24	965	360
150	450	300	250	218	204	30	8-Φ28	1025	400
200	550	375	320	282	160	38	8-Φ30	1225	450
250	650	445	385	345	313	42	12-Φ34	1440	560
300	750	510	450	408	364	46	16-Φ34	1665	5470
350	850	570	510	465	422	52	16-Φ41	1880	720
400	950	655	585	535	474	58	16-Φ18	2050	800

PN64(MPa)

DN	L	D	D1	D2	D6	b	N-Φd	H	Do
20	190	125	90	68	51	20	4-Φ18	330	180
25	210	135	100	78	58	22	4-Φ23	360	180
32	230	150	110	82	66	24	4-Φ23	410	180
40	240	165	125	95	76	24	4-Φ23	480	220
50	250	175	135	105	88	26	4-Φ23	585	240
65	280	200	160	130	110	28	8-Φ23	690	240
80	310	210	170	140	121	30	8-Φ23	745	280
100	350	250	200	168	150	32	8-Φ25	885	300
125	400	295	240	202	176	36	8-Φ30	985	360
150	450	340	280	240	204	38	8-Φ34	1050	400
200	550	405	345	300	260	44	12-Φ34	1240	450
250	650	470	400	352	313	48	12-Φ41	1460	560
300	750	530	160	412	364	54	16-Φ41	1670	5640

DH41F-40P低温止回阀
Low temperature check valve

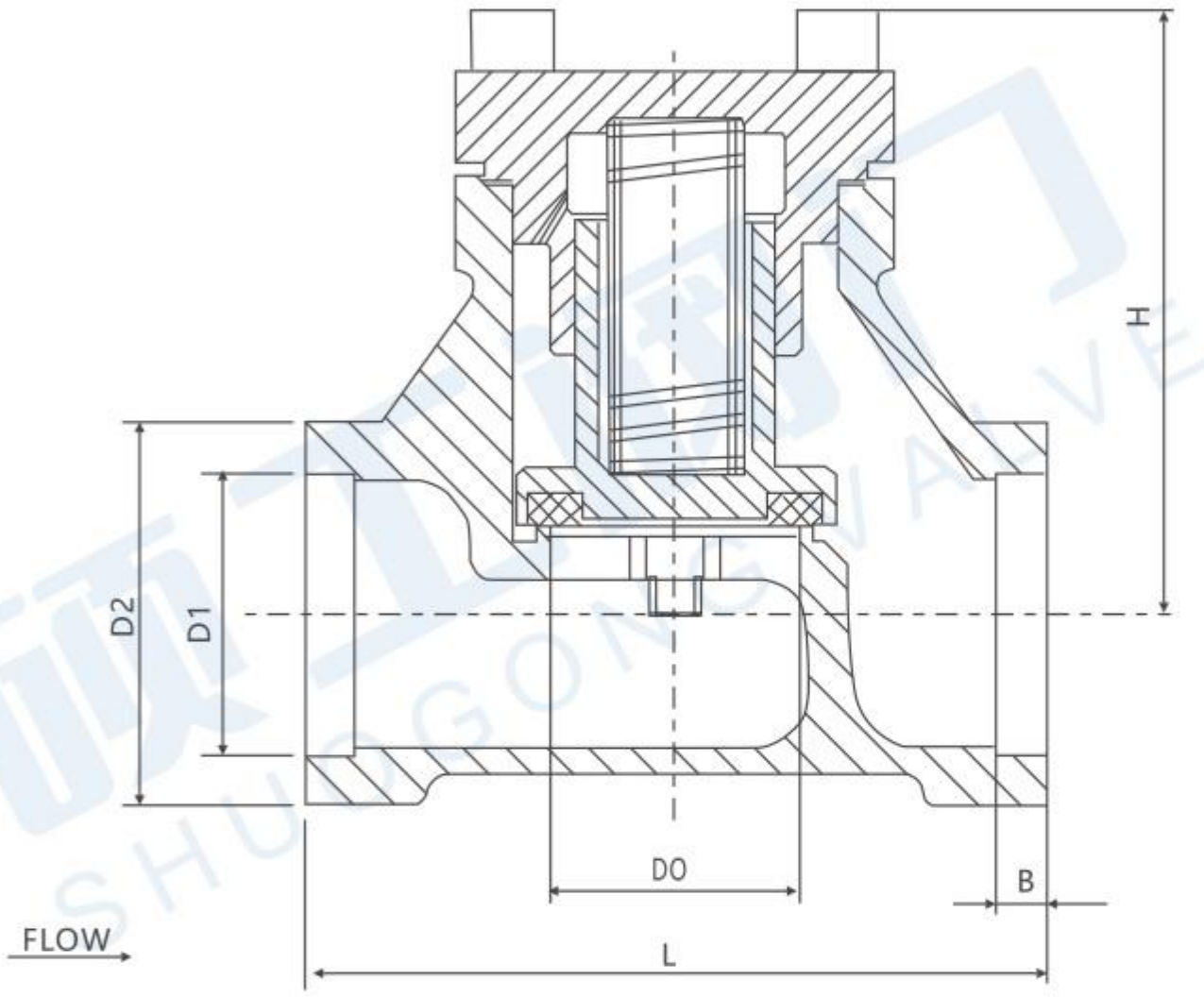
DH41F-40P

产品规范

公称压力: 4.0Mpa
设计温度: -196℃ ~ +80℃
适用介质: LNG、LO2、LN2、LAr、CO2
连接方式: 承插焊

Product specification

Nominal pressure: 4.0 Mpa
Design temperature: 196 ℃ ~ + 80 ℃
Applicable medium: LNG, LO2, LN2, LAr, CO2
Connection mode: socket welding



型号 Type	主要外形连接尺寸(mm) Major Overall & Connection Dimensions					
	H	L	D0	D1	D2	B
DH-10	55	60	Φ13	Φ14.5	Φ24	6
DH-15	62	65	Φ15	Φ18.5	Φ29.5	6
DH-20	70	80	Φ20	Φ25.5	Φ36	8
DH-25	77	90	Φ25	Φ32.5	Φ43.5	8
DH-32	89	105	Φ32	Φ38.5	Φ53	8
DH-40	98	120	Φ40	Φ45.5	Φ62	8
DH-50	111	140	Φ50	Φ57.5	Φ72	10

DJ61F-40P低温截止阀DJ(G/P)

Low temperature cut-off valve DJ (G / P)

DJ61F-40P

产品规范

公称压力: 4.0Mpa

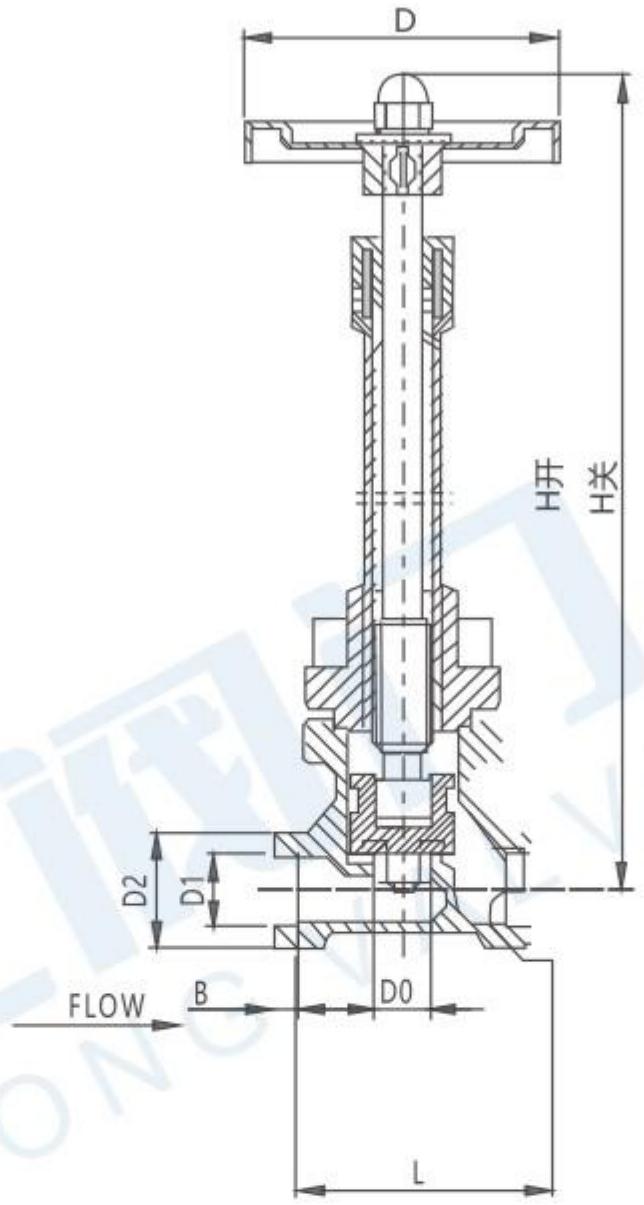
设计温度: -196℃ ~ +80℃

适用介质: LNG、LO2、LN2、LAr、CO2

连接方式: 承插焊

Product specification

Nominal pressure: 4.0 Mpa
Design temperature: 196 ℃ ~ + 80 ℃
Applicable medium: LNG, LO2, LN2, LAr, CO2
Connection mode: socket welding



型号 Type	主要外形连接尺寸(mm) Major Overall & Connection Dimensions							
	H开	H关	L	D	D0	D1	D2	B
DJ-10	210	210	60	Φ65	Φ13	Φ15.5	Φ24	6
DJ-15	253	253	65	Φ80	Φ15	Φ18.5	Φ29.5	6
DJ-20	254	254	80	Φ80	Φ20	Φ25.5	Φ36	8
DJ-25	288	288	90	Φ100	Φ25	Φ32.5	Φ43.5	8
DJ-32	298	298	105	Φ100	Φ32	Φ38.5	Φ53	8
DJ-40	365.5	365.5	120	Φ125	Φ40	Φ45.5	Φ62	8
DJ-50	374.5	374.5	140	Φ140	Φ50	Φ57.5	Φ72	10
DJ-10(G)	210	210	60	Φ65	Φ13	Φ17.8	Φ24	6
DJ-15(G)	253	253	65	Φ80	Φ15	Φ22.2	Φ29.5	6
DJ-20(G)	257	257	80	Φ80	Φ20	Φ27.7	Φ36	8
DJ-25(G)	288	288	90	Φ100	Φ25	Φ34.5	Φ43.5	8
DJ-32(G)	298	298	105	Φ100	Φ32	Φ43.2	Φ53	8
DJ-40(G)	365.5	365.5	120	Φ125	Φ40	Φ49	Φ62	8
DJ-50(G)	374.5	374.5	140	Φ140	Φ50	Φ61.1	Φ72	10

DJ61F-40P低温短轴截止阀DJ-G/GY

Low temperature short axis cut-off valve DJ-G/GY

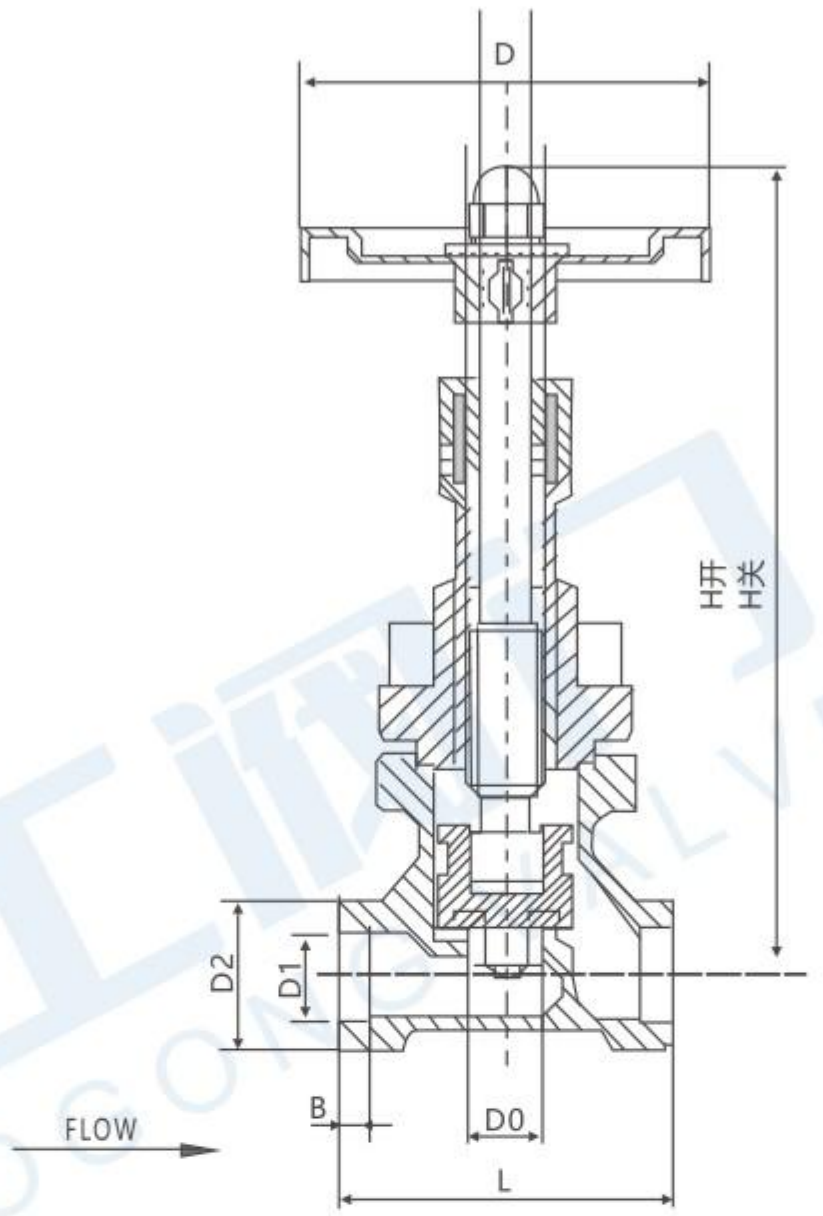
DJ61F-40P

产品规范

公称压力: 4.0MPa
设计温度: -196℃~+80℃
适用介质: O2、N2、Ar、NG、CO2
连接方式: 承插焊

Product specification

Nominal pressure: 4.0 MPa
Design temperature: - 40 ℃ ~ + 80 ℃
Applicable medium: O2, N2, Ar, NG, CO2
Connection mode: Socket welding



型号 Type	主要外形连接尺寸(mm) Major Overall & Connection Dimensions							
	H开	H关	L	D	D0	D1	D2	B
DJ-10G	120	114	60	Φ65	Φ13	Φ14.5	Φ24	6
DJ-15G	146	137	65	Φ80	Φ15	Φ18.5	Φ29.5	6
DJ-20G	150	139	80	Φ80	Φ20	Φ25.5	Φ36	8
DJ-25G	173	159.5	90	Φ100	Φ25	Φ32.5	Φ43.5	8
DJ-32G	183	168.5	105	Φ100	Φ32	Φ38.5	Φ53	8
DJ-40G	222.5	205	120	Φ125	Φ40	Φ45.5	Φ62	8
DJ-50G	231.5	210.5	140	Φ140	Φ50	Φ57.5	Φ72	10
DJ-10GY	120	114	60	Φ65	Φ13	Φ17.8	Φ24	6
DJ-15GY	146	137	65	Φ80	Φ15	Φ22.2	Φ29.5	6
DJ-20GY	150	139	80	Φ80	Φ20	Φ27.7	Φ36	8
DJ-25GY	173	159.5	90	Φ100	Φ25	Φ34.5	Φ43.5	8
DJ-32GY	183	168.5	105	Φ100	Φ32	Φ43.2	Φ53	8
DJ-40GY	222.5	205	120	Φ125	Φ40	Φ49	Φ62	8
DJ-50GY	231.5	210.5	140	Φ140	Φ50	Φ61.1	Φ72	10

DJ61F-40P低温截止阀DJ-A/K

Low temperature cut-off valve DJ-A/ K

DJ61F-40P

产品规范

公称压力: 4.0MPa

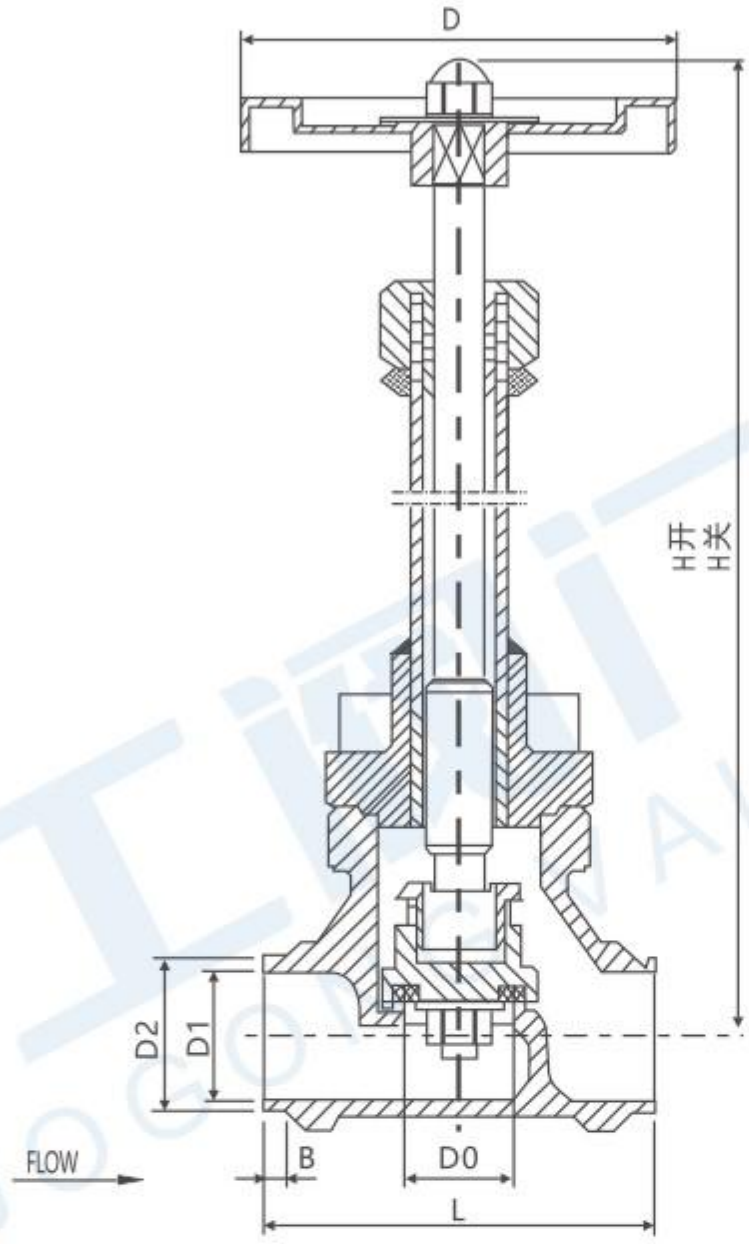
设计温度: -196℃~ +80℃

适用介质: LNG、LO2、LN2、LAr、CO2

连接方式: 对焊

Product specification

Nominal pressure: 4.0 MPa
Design temperature: 196 ℃ ~ + 80 ℃
Applicable medium: LNG, LO2, LN2, LAr, CO2
Connection mode: butt welding



型号 Type	主要外形连接尺寸(mm) Major Overall & Connection Dimensions							
	H开	H关	L	D	D0	D1	D2	B
DJ-10A	210	204	60	Φ65	Φ13	Φ13	Φ17	4
DJ-15A	253	244	65	Φ80	Φ15	Φ17.08	Φ21.3	5
DJ-20A	257	246	80	Φ80	Φ20	Φ22.48	Φ26.7	5
DJ-25A	288	274.5	90	Φ100	Φ25	Φ27.9	Φ33.4	5
DJ-32A	298	283.5	105	Φ100	Φ32	Φ36	Φ42.2	5
DJ-40A	365.5	348	120	Φ125	Φ40	Φ43	Φ48.3	5
DJ-50A	374.5	353.5	140	Φ140	Φ50	Φ55	Φ60.3	5
DJ-15K	253	244	60	Φ80	Φ15	Φ14	Φ18	5
DJ-20K	257	246	80	Φ80	Φ20	Φ20	Φ25	5
DJ-25K	288	274.5	90	Φ100	Φ25	Φ27	Φ32	5
DJ-32K	298	283.5	105	Φ100	Φ32	Φ32	Φ38	5
DJ-40K	365.5	348	120	Φ125	Φ40	Φ39	Φ45	5
DJ-50K	374.5	353.5	140	Φ140	Φ50	Φ51	Φ57	5

DJ61F-40P低温短轴截止阀DJ-GA/GK

Low temperature short axis cut-off valve DJ-GA/GK

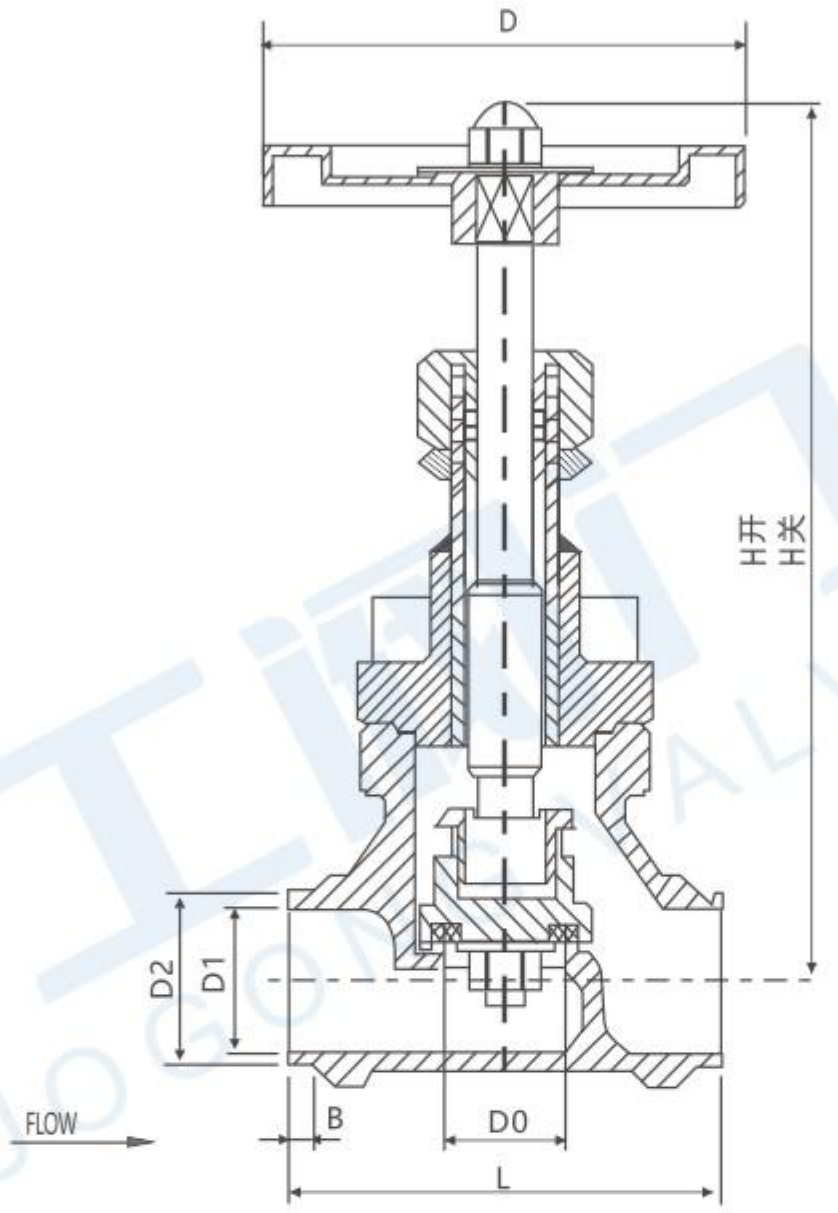
DJ61F-40P

产品规范

公称压力: 4.0MPa
设计温度: -40℃~ +80℃
适用介质: O2、N2、Ar、NG、CO2
连接方式: 对焊

Product specification

Nominal pressure: 4.0 MPa
Design temperature: - 40 ℃ ~ + 80 ℃
Applicable medium: O2, N2, Ar, NG, CO2
Connection mode: butt welding



型号 Type	主要外形连接尺寸(mm) Major Overall & Connection Dimensions							
	H开	H关	L	D	D0	D1	D2	B
DJ-10GA	120	114	60	Φ65	Φ13	Φ13	Φ17	4
DJ-15GA	146	137	65	Φ80	Φ15	Φ17.08	Φ21.3	5
DJ-20GA	150	139	80	Φ80	Φ20	Φ22.48	Φ26.7	5
DJ-25GA	173	159.5	90	Φ100	Φ25	Φ27.9	Φ33.4	5
DJ-32GA	183	168.5	105	Φ100	Φ32	Φ36	Φ42.2	5
DJ-40GA	222.5	205	120	Φ125	Φ40	Φ43	Φ48.3	5
DJ-50GA	231.5	210	140	Φ140	Φ50	Φ55	Φ60.3	5
DJ-15K	146	137	65	Φ80	Φ15	Φ14	Φ18	5
DJ-20GK	150	139	80	Φ80	Φ20	Φ20	Φ25	5
DJ-25GK	173	159.5	90	Φ100	Φ25	Φ27	Φ32	5
DJ-32GK	183	168.5	105	Φ100	Φ32	Φ32	Φ38	5
DJ-40GK	222.5	205	120	Φ125	Φ40	Φ39	Φ45	5
DJ-50GK	231.5	210	140	Φ140	Φ50	Φ51	Φ57	5

DJ661F-40P低温紧急切断阀DJQ-(B2/Y2)

Low temperature emergency cut-off valve DJQ-(B2/Y2)

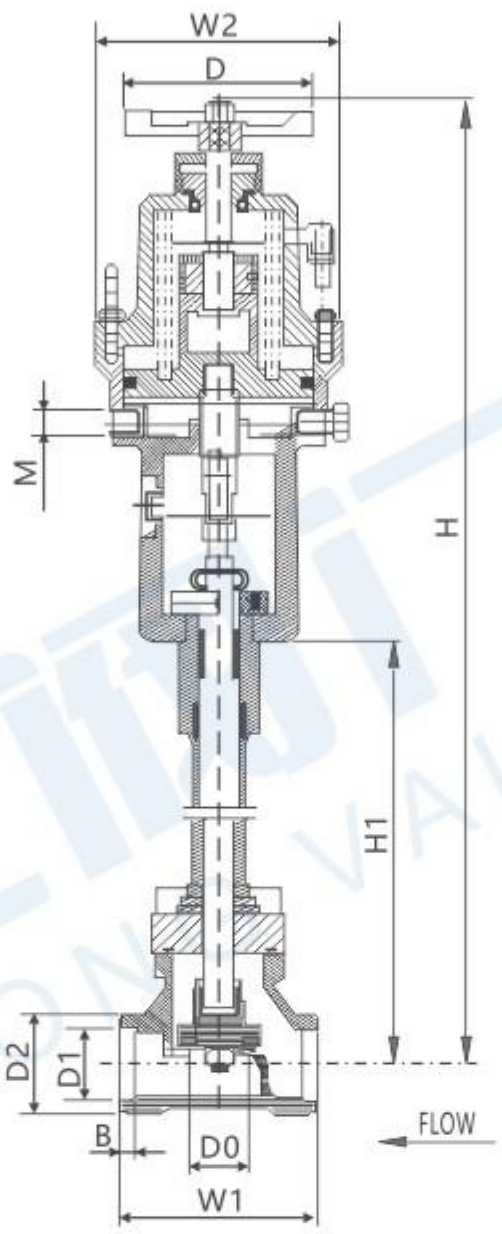
DJ661F-40P

产品规范

公称压力：1.6~4.0MPa
公称通径：10mm~200mm
适用介质：L02,LN2,LAr,LNG,LC2H4等
适用温度：-196~+75℃
连接方式：承插焊
介质流向：由阀瓣上面向下流
气源压力：0.3~0.6MPa
紧急切断温度：70±5℃

Product specification

Nominal pressure: 1.6~4.0 MPa
Nominal size: 10mm to 200 mm
Applicable medium: L02, LN2, LAr, LNG, LC2H4, etc
Applicable temperature: 196 ~ + 75 ℃
Connection mode: socket welding
For low medium flow: the disc
Air pressure: 0.3 ~ 0.6 MPa
Emergency cut-off temperature: 70 + 5 ℃



型号 Type	主要外形连接尺寸(mm) Major Overall & Connection Dimensions										最大工作压力 Max Nominal Pressure(MPa)
	H	H1	D	D0	D1	D2	D0	W1	W2	M	
DJQ-15B2	475	175	Φ100	Φ15	Φ18.5	Φ29.5	6	65	Φ130	Rc1/4	2.5
DJQ-20B2	479	179	Φ100	Φ20	Φ25.5	Φ36	8	80	Φ130	Rc1/4	2.5
DJQ-25B2	486	186	Φ100	Φ25	Φ32.5	Φ43.5	8	90	Φ130	Rc1/4	2.5
DJQ-32B2	500	200	Φ100	Φ32	Φ38.5	Φ53	8	105	Φ130	Rc1/4	2.5
DJQ-40B2	577	223	Φ125	Φ40	Φ45.5	Φ62	8	120	Φ160	Rc1/4	2.5
DJQ-50B2	587	233	Φ125	Φ50	Φ57.5	Φ72	10	140	Φ160	Rc1/4	2.5
DJQ-15Y2	475	175	Φ100	Φ15	Φ22.2	Φ29.5	6	65	Φ130	Rc1/4	2.5
DJQ-20Y2	479	179	Φ100	Φ20	Φ27.7	Φ36	8	80	Φ130	Rc1/4	2.5
DJQ-25Y2	486	186	Φ100	Φ25	Φ34.5	Φ43.5	8	90	Φ130	Rc1/4	2.5
DJQ-32Y2	500	200	Φ100	Φ32	Φ43.2	Φ53	8	105	Φ130	Rc1/4	2.5
DJQ-40Y2	577	223	Φ125	Φ40	Φ49	Φ62	8	120	Φ130	Rc1/4	2.5
DJQ-50Y2	587	233	Φ125	Φ50	Φ61.1	Φ72	10	140	Φ160	Rc1/4	2.5