

SCORE BT200

双偏芯蝶阀 Double-offset Butterfly Valve

应用 Application

SCORE 的 BT200 系列双偏芯蝶阀具有阀板面偏离轴平面（Offset1）、阀体和阀板的几何中心偏离阀板回转中心（Offset2）的双重偏芯。阀板与阀座独特的动态密封设计，具有优良的切断性能和耐久性，适用于低压、常温流体的可靠切断和调节。

BT200 是软密封、对夹式高性能蝶阀，如需要金属密封、双法兰式阀体、更高的压力等级时请选择 SCORE 的三偏芯蝶阀 BT300/BT320。

SCORE the type BT200 double-offset butterfly valve, shaft offsets are created by designing the valve with the shaft located behind the centerline of the sealing surface and slightly to one side of the pipe centerline. Disc and seat are dynamic seals that provides excellent shutoff and high durability, it can be used for a variety of throttling and on-off applications in low pressure (ANSI 150#) and normal temperature.

BT200 is a high-performance butterfly valve with soft seal seat and wafer type body, if metal seal seat, double flanged body and more high pressure rating are demanded, pls choose BT300/BT320 triple-offset butterfly valve.

特点 Features

- **经济严密的切断**——流体压力辅助密封的双偏芯设计，提供了全公称压力下的可靠切断。
- **卓越的流体控制性能**——固有特性为近似等百分比，BT200 在 70 度或者 90 度额定开度下均可用于节流调节。
- **维护方便**——安装于阀体上的阀座易于装拆，维护性能更好。
- **定制的软阀座**——圣戈班（Saint-Gobain）设计、定制的 SG 型软阀座适用温度、压力范围广泛。
- 阀体结构允许材质符合 NACE0175-2003, 详情请与 SCORE 联系。
- 可选高性能的 Saint-Gobain GF TFE 填料、Pillar 编织型填料或 Garlock 柔性石墨填料（EVSP9000），加上动态补偿碟簧（Live-loading），大大降低了阀门填料函逸散泄漏的可能，可符合 API-622 低逸散规范。
- **Economical Tight Shutoff**—The pressure-assisted seal and double-offset design provides tight shutoff against the full pressure rating of the specified valve.



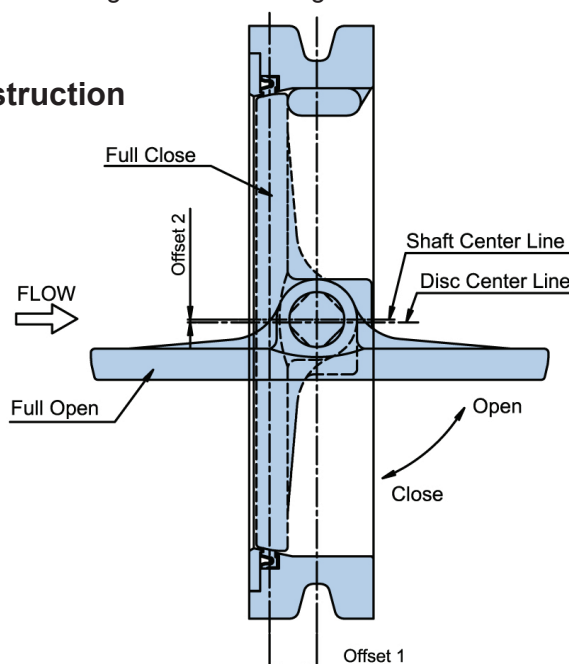
BT200 带 ASR 执行机构
BT200 With ASR Pneumatic Piston Actuator



- **Excellent Flow Control**—With approximate equal percentage flow characteristic, BT200 can be used for throttling applications through 70 or 90 degrees of disc rotation.
- **Easy of Maintenance**—Interchangeability of all parts especially the seat installed in the body simplifies service and reduces maintenance costs.
- **Customized Seat Ring**—SG type seat ring is customized by Saint-Gobain, cover a wide range of application for pressure and temperature.
- Valve constructions allow material compatibility with NACE MR0175-2003, please contact with SCORE for details.
- High performance GF TFE V-Packing of Saint-Gobain, Pillar braided packing and Garlock graphite packing (EVSP9000) with live-loading to fit with low fugitive emissions API-622.

双偏芯结构

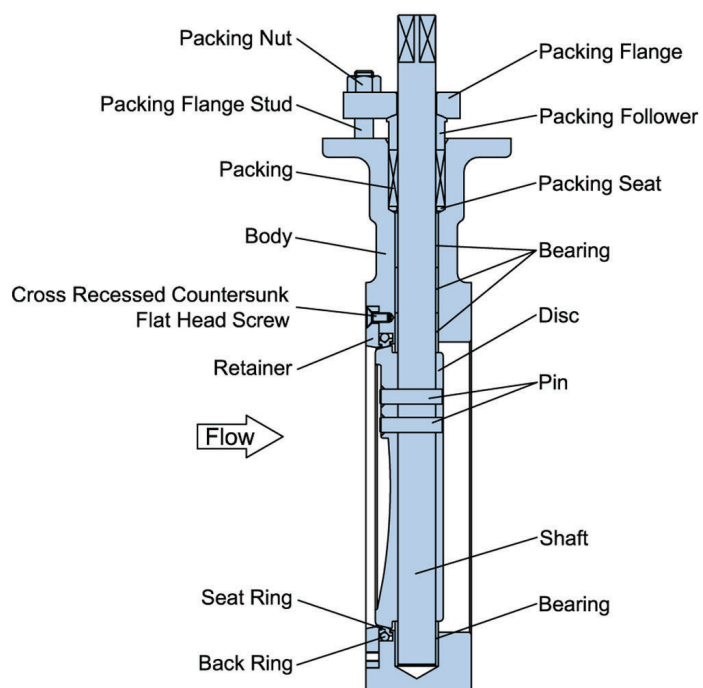
Double-Offset Construction



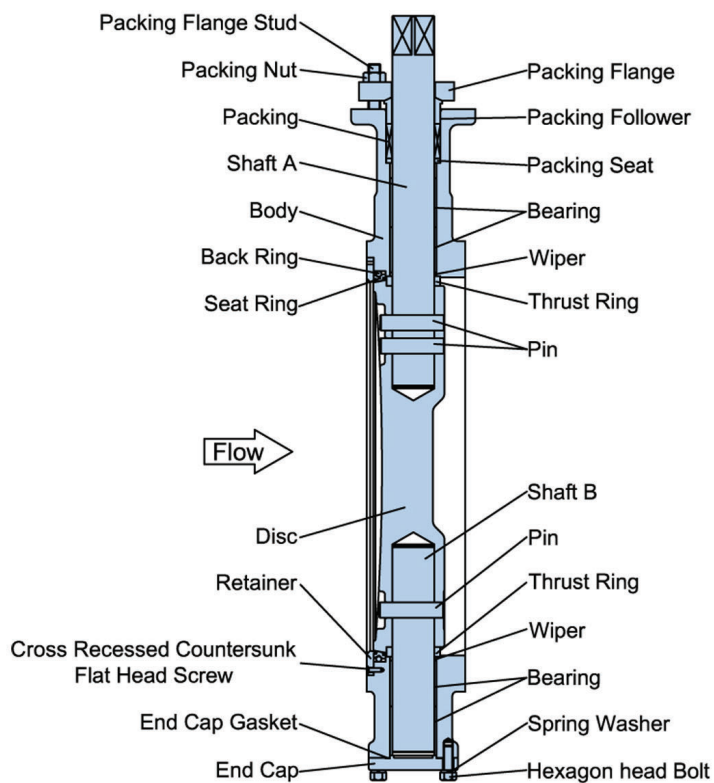
BT200 阀门工程参数 Engineering Data of SCORE BT200

公称通径	End Connection Sizes	3"~60" (DN80~DN1500)
公称压力	Valve Body Ratings	ANSI 150#, GB/T9113-2010 & HG20592-2009 PN1.0, PN1.6MPa
连接方式	End Connection Styles	对夹式 Wafer type
设计标准	Design Standards	ANSI B16.34-2009, ASME SEC VIII-2-2013, GB/T9113-2010, HG20592-2009
阀内件形式	Trim Form	双偏芯 Double-offset
流量特性	Characteristics	近似等百分比 Approximate EQ%
可调比 R	Rangeability	70° 开度/50:1, 90° 开度/100:1 70° Opening/50:1, 90° Opening/100:1
阀座泄漏量	Seat Leakage	ANSI/FCI 70.2 and IEC 60534-4: Class VI
上阀盖形式	Bonnet Styles	标准型 Standard Type: -45~+250℃
上阀盖填料	Bonnet Packing	强化聚四氟乙烯 V 型填料、聚四氟乙烯纤维、柔性石墨填料等。 Reinforced Teflon V-ring, Teflon Fiber, Graphite Packing (EVSP9000), etc...
垫圈	Gasket	聚四氟乙烯 Teflon 强化聚四氟乙烯 Reinforced Teflon 柔性石墨平垫圈 Graphite with metal core inserted (316LSS+Graphite)
表面涂层色	Paint	艳蓝（聚氨酯）和其他环氧树脂处理均可，不锈钢阀体材质时不需油漆。 Gorgeous blue RAL5018 (polyurethanes group) and other epoxy finishes is available. NO painting is standard for stainless steel body.

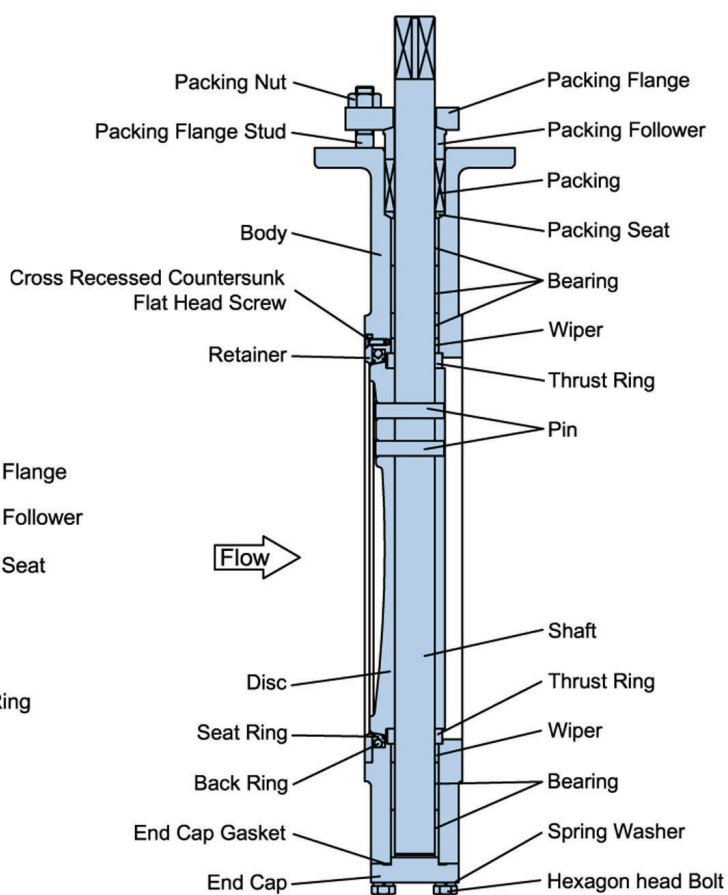
BT200 本体部结构 Body Assembly Construction



Valve Size: 3"~8"

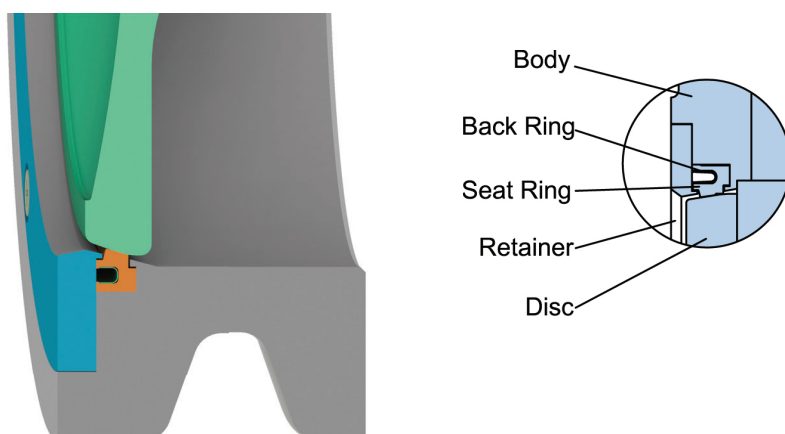


Valve Size: 18"~60"



Valve Size: 10"~16"

BT200 阀座结构图 Seat Ring Construction



SG 型软阀座
SG Type Soft Seat

BT200 材料组合 Material Combinations:

阀体材质 Body Material	A216-WCB/ZG230-450		
阀板材质 Disc Material	A216-WCB/HCR	A351-CF8/Buffering A351-CF8/HCR	A351-CF8M/Buffering A351-CF8M/HCR
轴材质 Shaft Material	A564-630/PH, A276-316		
轴承材质 Bearing Material	A276-440C/HT, A276-316/HCR		
密封环材质 Seal Ring Material	强化聚四氟乙烯 RTFE		
垫环材质 Back Ring Material	A276-316		
使用温度 Fluid Temperature (°C)	-29~+250		

阀体材质 Body Material	A351-CF8	A351-CF8M
阀板材质 Disc Material	A351-CF8/Buffering, A351-CF8/HCR A351-CF8M/Buffering, A351-CF8M/HCR	A351-CF8M/Buffering, A351-CF8M/HCR
轴材质 Shaft Material	A564-630/PH, A276-316	A276-316, Nitronic 50
轴承材质 Bearing Material	A276-440C/HT, A276-316/HCR	
密封环材质 Seal Ring Material	强化聚四氟乙烯 RTFE	
垫环材质 Back Ring Material	A276-316	
使用温度 Fluid Temperature (°C)	-46~+250	

备注 Note:

- PH: 析出硬化热处理
- Buffering: 抛光
- HT: 热处理

Precipitation Hardening
Heat Treatment

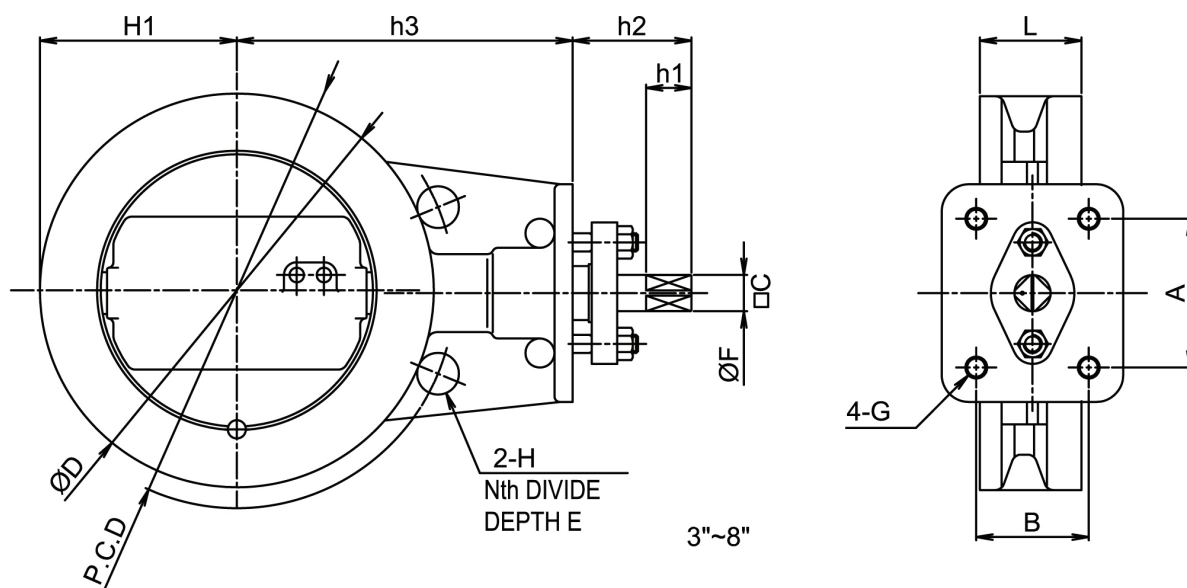
- HCR: 镀硬铬
- RTFE: 强化聚四氟乙烯

Hard Chrome plated
Reinforced Teflon

BT200 额定 Cv 值 BT200 Rated Cv Values

公称通径 Valve Size		阀门额定开度 Valve Reated Open	
Inch	mm	70°	90°
3	80	170	260
4	100	300	470
5	125	490	760
6	150	880	1,300
8	200	1,410	2,250
10	250	2,260	3,600
12	300	3,270	5,000
14	350	4,330	6,700
16	400	5,620	8,700
18	450	7,040	11,000
20	500	9,200	14,400
24	600	13,600	21,000
28	700	18,200	27,440
32	800	22,500	35,840
36	900	28,900	45,360
40	1000	37,700	56,000
44	1100	43,600	67,700
48	1200	53,200	80,600
54	1350	67,200	102,000
60	1500	80,800	126,000

BT200 系列阀门尺寸 Valve Dimensions: SCORE Series BT200 (3"~8")

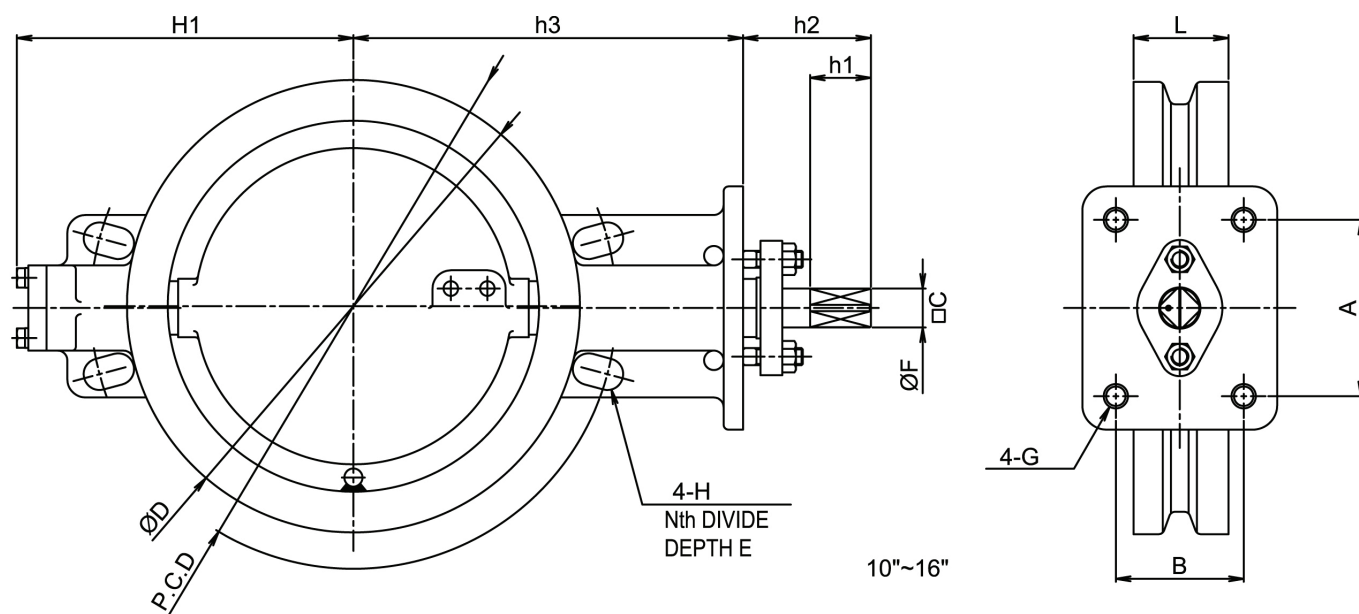


Valve Size	A	B	G	h1	h2	h3	H1	D	C	F	M	L
3"	70	52	M12	25	60	137	66	132	12	15	81.2	46
4"	70	52	M12	25	60	160	78	156	16	20	101.7	52
5"	82	62	M12	25	65.5	170	93.5	187	16	20	121.6	56
6"	82	62	M12	25	65.5	185	108.5	217	16	20	151.4	56
8"	102	78	M12	40	90	220	133	266	21	28	201.8	60

*: minimum inner diameter of valve body is "M"

Valve Size	ANSI 150#				HG20615 PN20				JB/HG PN1.0MPa				JB/HG PN1.6MPa			
	P.C.D	N	H	E	P.C.D	N	H	E	P.C.D	N	H	E	P.C.D	N	H	E
3"	152.4	4	Ø18	-	152.4	4	Ø18	-	160	8	Ø18	-	160	8	Ø18	-
4"	190.5	8	Ø18	-	190.5	8	Ø18	-	180	8	Ø18	-	180	8	Ø18	-
5"	215.9	8	Ø22	-	215.9	8	Ø22	-	210	8	Ø18	-	210	8	Ø18	-
6"	241.3	8	Ø22	-	241.3	8	Ø22	-	240	8	Ø22	-	240	8	Ø22	-
8"	298.5	8	Ø22	-	298.5	8	Ø22	-	295	8	Ø22	-	295	12	Ø22	-

BT200 (10"~16")

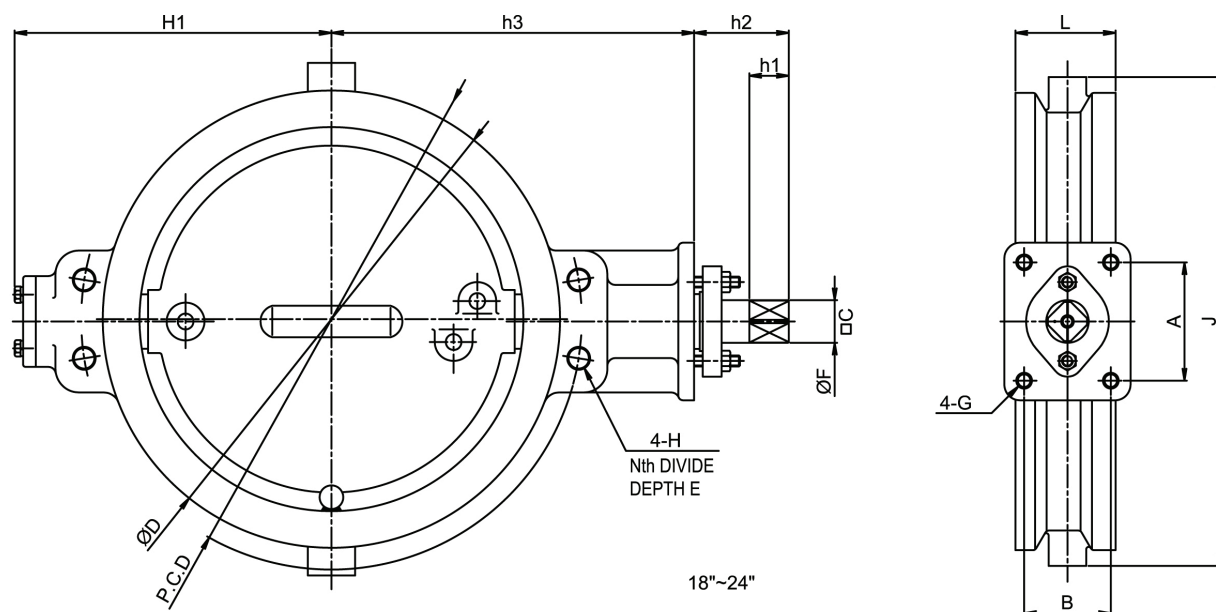


Valve Size	A	B	G	h1	h2	h3	H1	D	C	F	M	L
10"	102	78	M12	40	90	280	235	324	26	30	252	68
12"	145	105	M16	50	105	320	280	372	26	32	300.1	78
14"	145	105	M16	50	105	365	325	416	32	38	336	78
16"	150	110	M20	50	115	395	355	480	36	46	386.8	102

*: minimum inner diameter of valve body is "M"

Valve Size	ANSI 150#				HG20615 PN20				JB/HG PN1.0MPa				JB/HG PN1.6MPa			
	P.C.D	N	H	E	P.C.D	N	H	E	P.C.D	N	H	E	P.C.D	N	H	E
10"	362.0	12	$\varnothing 26$	-	362.0	12	$\varnothing 26$	-	350	12	$\varnothing 22$	-	355	12	$\varnothing 26$	-
12"	431.8	12	$\varnothing 26$	-	431.8	12	$\varnothing 26$	-	400	12	$\varnothing 22$	-	410	12	$\varnothing 26$	-
14"	476.3	12	$\varnothing 29$	-	476.3	12	$\varnothing 29$	-	460	16	$\varnothing 22$	-	470	16	$\varnothing 26$	-
16"	539.8	16	$\varnothing 29$	-	539.8	16	$\varnothing 29$	-	515	16	$\varnothing 26$	-	525	16	$\varnothing 30$	-

BT200 (18"~24")



Valve Size	A	B	G	h1	h2	h3	H1	D	C	F	M	L	J
16"	150	110	M20	50	115	395	355	480	36	36	386.8	102	540
18"	150	110	M20	50	120	425	370	528	41	50	436.8	114	590
20"	150	110	M20	50	120	460	405	580	41	54	481	127	620
24"	290	160	M30x3	65	150	560	490	685	50	64	581	130	740

*: minimum inner diameter of valve body is "M"

Valve Size	ANSI 150#				HG20615 PN20				JB/HG PN1.0MPa				JB/HG PN1.6MPa			
	P.C.D	N	H	E	P.C.D	N	H	E	P.C.D	N	H	E	P.C.D	N	H	E
18"	577.9	16	Ø32	-	577.9	16	Ø32	-	565	20			585	20	M27	30
20"	635.0	20	1-1/8-8UN	30	635.0	20	M30x3	30	620	20	M24	30	650	20	M30x3	33
24"	749.3	20	1-1/4-8UN	32	749.3	20	M33x3	32	725	20			770	20	Ø36	-

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