



艾坦姆

G110/G150 系列控制阀

Utmost G110 and G150 Series Control Valve

Utmost®

 **三千控制阀网**
www.CV3000.com



目录 Index

04	艾坦姆产品范围及型号编码 UTMOST Products Range & Type code
05	G110 / G150 系列控制阀阀芯形式及特点 G110 / G150 Series Control Valve Trim
11	G110 / G150 系列控制阀上阀盖及填料函形式 G110 / G150 Series Control Valve Bonnets model and stuffing Box Type
14	G110 系列控制阀技术数据 G110 Series Control Valve Technical Data
33	G150 系列控制阀技术数据 G150 Series Control Valve Technical Data
51	阀门材质牌号对照表 Material Comparable

产品范围及型号编码 Products Range and Type code

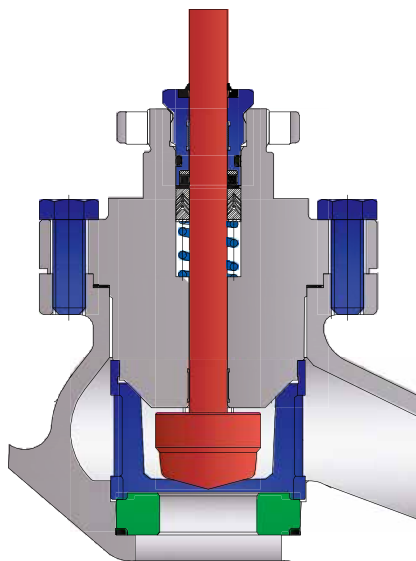
型号编码 Code-No.	阀门形式 Valve type	压力等级 PN	型号编码 Code-No.	阀芯形式 Trim (...XX)
G110	直通阀 Globe valve 1/2"~24"	PN 16-40 ANSI 150/300	C1-C5	抛物线型 Contoured plug (1 - 5 step)
			H1-H3	多孔型 Perforated plug (1 - 3 step)
G150	直通阀 Globe valve 1/2"~16"	PN 63-250 ANSI 600-2500	LU 1-4	低噪音下部阀笼 Bottom Low-noise cage (1 - 4 step)
			LD 1-3	降噪板 Low-noise disc (1 - 3 step)
A120	角阀 Angle valve 1/2"~10"	PN 16-40 ANSI 150/300	O	开关型 ON/OFF plug
			LC1-2	低噪音上部阀笼 Up Low-noise cage (1 - 2 step)
A160	角阀 Angle valve 1/2"~10"	PN 63-250 ANSI 600-1500	S	软密封 Soft sealing
			BG	底部双导向 Bottom Guiding
			型号编码 Code-No.	执行机构 Actuator
A180	锻造角阀 Forged angle valve 1/2"~10"	PN 63-400 ANSI600~2500	UT I	气动薄膜多弹簧执行机构 20 行程 Multi-spring actuator(stroke 20mm)
T220	三通阀 Three-way valve 1"-16"	PN 16-40 ANSI 150-300	UT II	气动薄膜多弹簧执行机构 30 行程 Multi-spring actuator(stroke 30mm)
T260	三通阀 Three-way valve 1"-12"	PN 63-160 ANSI 600-900	UT III	气动薄膜多弹簧执行机构 60 行程 Multi-spring actuator(stroke 60mm)
			UTV	气动薄膜执行机构 60-100 行程 Multi-spring actuator(stroke 60-100mm)
			UTA	大推力气动薄膜多弹簧执行机构 60-120 行程 Heavy-duty multi-spring actuator(stroke 60-120mm)
型号编码 Code-No.	上阀盖形式及特殊设计 Bonnet flange and special design (-X)			
1	标准型 Standard design			
2	带双填料型 Double stuffing box with sealing connection			
3	带散热片型 Cooling fins			
4	波纹管密封型 (同时带标准填料) Bellows sealing and safety stuffing box			
5	超低温延长型 Insulation column			
6	紧凑型上阀盖设计 Compact type			
7	压力平衡式阀芯 Pressure balanced type			
8	压力平衡式并带散热片 Pressure balanced type with cooling fins			

型号说明举例 Examples:

- G111-C1 单座调节阀, 压力等级 ANSI 150/300, 标准型上阀盖, 1 级抛物线型阀芯,
Single seat Globe valve ANSI 150/300 with 1step contoured plug,
- G158-H1-LC2 单座调节阀, 压力等级 ANSI 600 到 ANSI 2500, 压力平衡式阀芯, 带散热片型上阀盖, 1 级多孔阀芯,
2 级阀降噪笼
Single seat valve ANSI 600 到 ANSI 2500, 3-flange body, pressure balanced type with cooling fins, 1step Perforated plug,
2 stages low-noise cage.

G110 和 G150 系列控制阀阀芯形式及特点

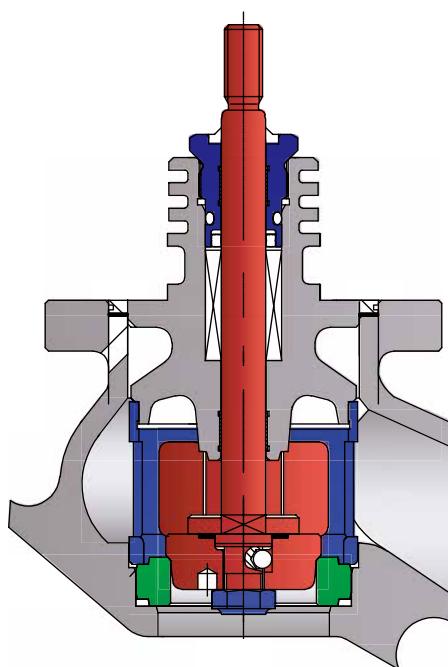
General structures and features of G110 and G150 Series Control Valve Trim



标准型 1 级抛物线型阀芯 C1 Standard Trim , contoured C1

一体式阀芯、阀杆，具有坚固、防转等特点。

One-piece valve trim and stem have strong, anti-rotation features.

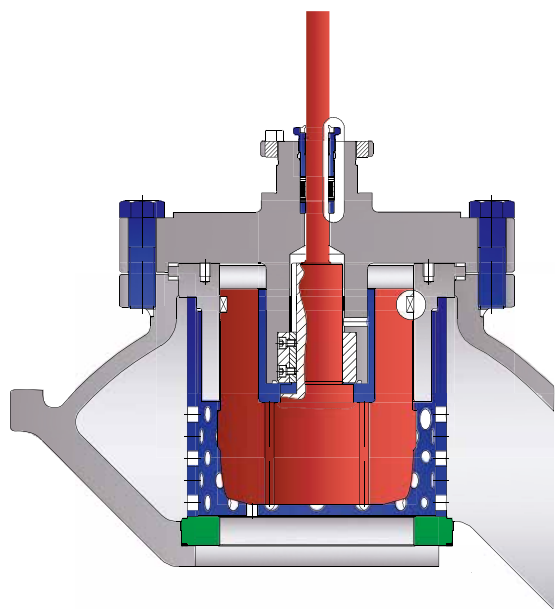


可快速更换阀芯 1 级抛物线型 C1 Quick Changeable Trim ,contoured C1

该种阀芯形式具有阀芯可快速更换、防转、防松脱圆螺母等革新设计。阀芯材质标准为不锈钢，可选整体 stellite 或整体碳化钨等特殊耐磨材质。

This kind of trim can be quickly replaced, and has anti-rotation, anti-loose nuts and other innovative designs. The standard trim material is stainless steel. The optional material is overall stellite or overall tungsten carbide and other special wear-resistant material.

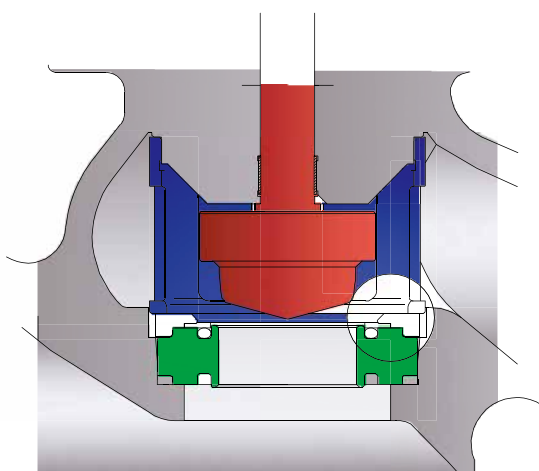
G110 和 G150 系列控制阀阀芯形式及特点 General structures and features of G110 and G150 Series Control Valve Trim



压力平衡式阀芯 Pressure-balanced valve plug

压力平衡式阀内件可减少所需的执行机构的输出力，根据操作工况的不同，平衡密封圈可选择为金属活塞环或内衬支撑弹簧的 PTFE 或橡胶密封圈。

Pressure-balanced valve trims are optimized for minimal actuating forces. Depending on different process conditions, the plug relief device is sealed by metal piston, elastomer rings or rubber rings.



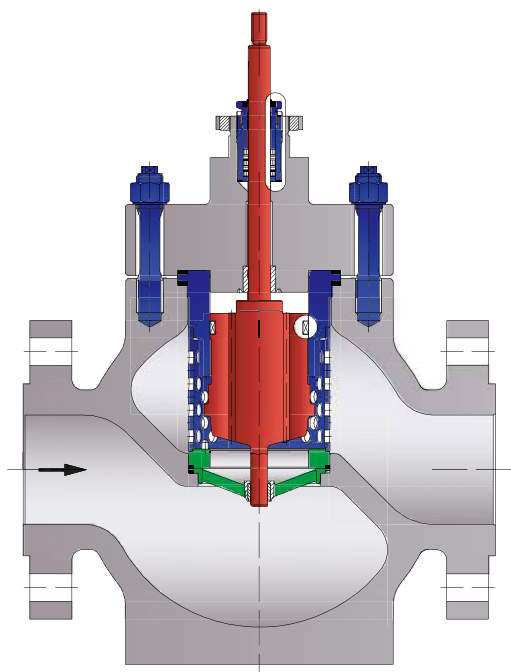
软密封阀内件 Soft seat with metal support

Utmost® 带金属支撑边保护的软密封阀座不仅可防止阀芯关闭时对软密封部位的过度压迫还可以避免介质对软密封部位的冲刷，在整个使用过程中（最高可达 100 万次全程）可始终保证达到 ANSI VI 级的泄漏等级。

Soft seal valve seat with metal edge protection can prevent excessive pressure and erosion from soft seal part. In the whole process of using (up to 1 million operating cycles), the Utmost® valve can always guarantee to achieve ANSI VI leakage level.

G110 和 G150 系列控制阀阀芯形式及特点

General structures and features of G110 and G150 Series Control Valve Trim

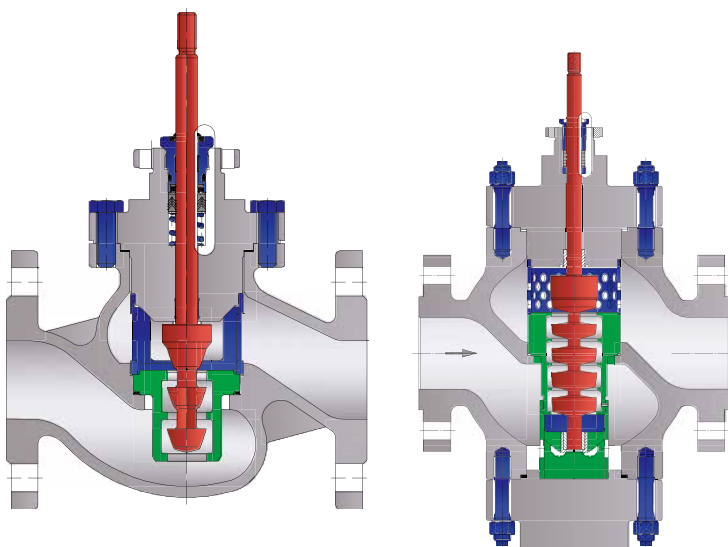


带双导向的阀内件

Double Guided Contoured Plug

高速流体尤其是在阀门小开度情况下的介质冲刷会引起阀芯震动并降低阀芯使用寿命。特殊设计的安装在阀座下部的下导向和阀杆顶部导向可起到双导向作用。由于自清洁的结构特点，下导向处不会有介质积存。在保证阀芯稳定的同时不会影响阀门的调节及流通特性。

The high velocity fluid, especially small opening in the valve, media erosion could results trim vibrations and will reduce valve trim life span. The guides installed under the seat and at the top of the plug can play a dual role in guiding. Because of the self-cleaning function, there will be no media accumulated at the lower guide.



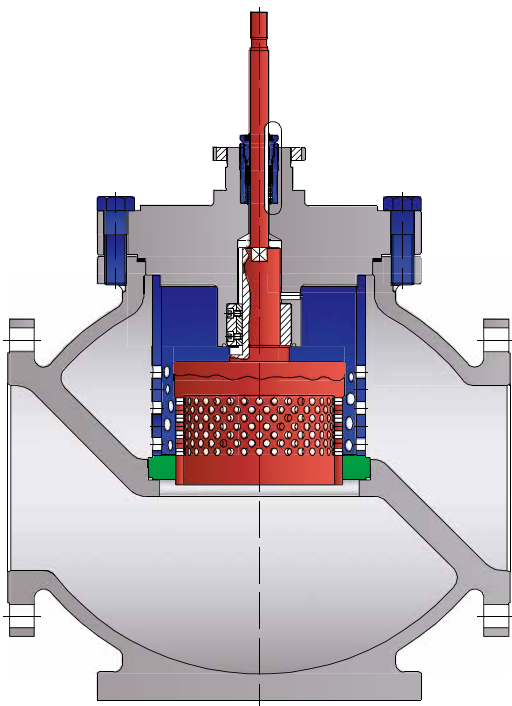
3-5 级抗气蚀阀内件

Multi-stages Anti-cavitation Trim

液体介质在高压差的工况下，当阀后压力接近该介质的饱和蒸汽压时，由于空化现象会对阀内件造成气蚀损害。艾坦姆提供的多级抗气蚀阀内件可有效避免气蚀损害，宽阔的流道防止介质中的固体颗粒的堵塞。抛物线型阀芯可进行堆焊 stellite 硬化处理。

In the conditions of large pressure difference, when the liquid media pressure of rear valve near to the saturation vapor pressure of the media, the media would result cavitation damage to the trim. Utmost® multistage anti-cavitation trim can effectively prevent cavitation damage, and wide flow channel can prevent clogging of solid particles in the media. Contoured trim can be hardened by welding stellite.

G110 和 G150 系列控制阀阀芯形式及特点 General structures and features of G110 and G150 Series Control Valve Trim



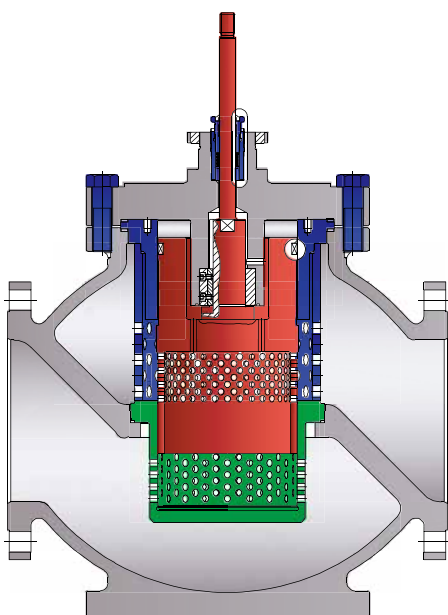
1 级多孔阀芯 1 Stage Perforated plug

多孔阀芯 Perforated plug

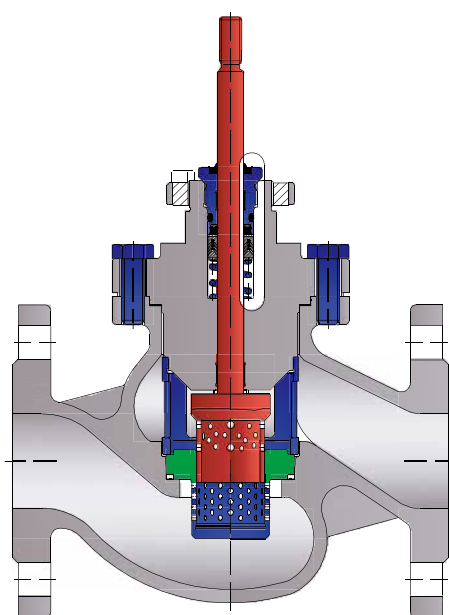
多孔阀内件的阀座可以起到导向作用，防震动性更好。多孔的阀芯（可选 1 级，2 级或 3 级）具有更好的降压、降噪效果，尤其适用于气体介质。

在阀后压力低于液体介质的饱和蒸汽压的情况下，会发生闪蒸，多孔阀芯可以将流体分散为若干小股射流。阀门采用流关形式时，各射流的能量被相互抵消，减少对阀内件的冲蚀损害。这是艾坦姆对闪蒸工况提出的独具匠心的合理解决方案。

Perforated valve trim can play a guiding and better anti-vibration role. Porous plug (optional 1, 2 or 3) have better pressure reduction, noise reduction, especially for gaseous media. When the rear valve pressure is below the saturated vapor pressure of the liquid media, there will be flash evaporation, perforated trim fluid dispersion can be a number of small jets. Utmost recommend flow close type to reduce the jets flow force, therefore, reduce the damage to trim.



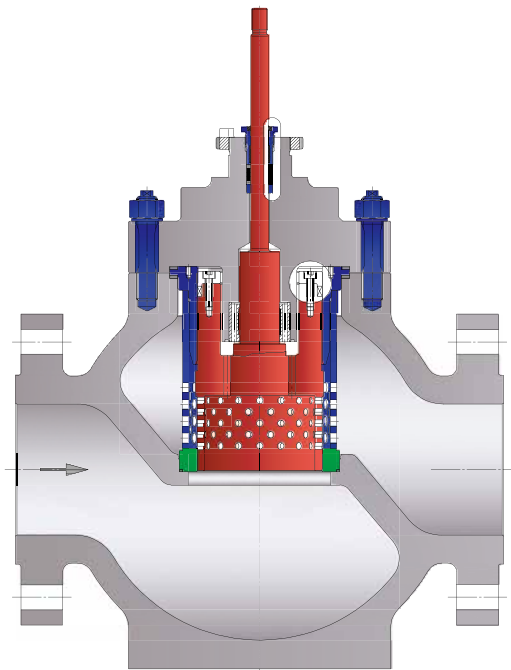
3 级多孔阀芯 3 Stage Perforated plug



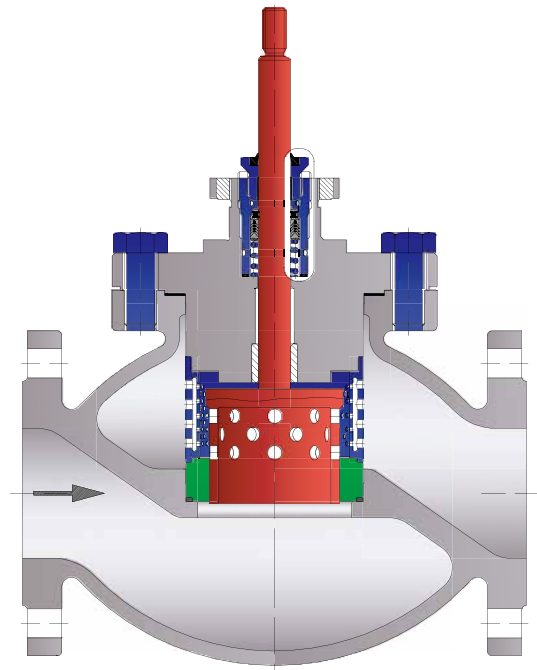
2 级多孔阀芯 2 Stage Perforated plug

G110 和 G150 系列控制阀阀芯形式及特点

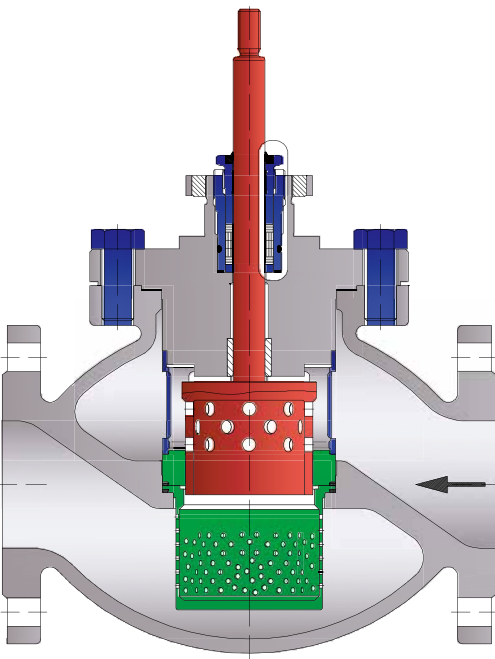
General structures and features of G110 and G150 Series Control Valve Trim



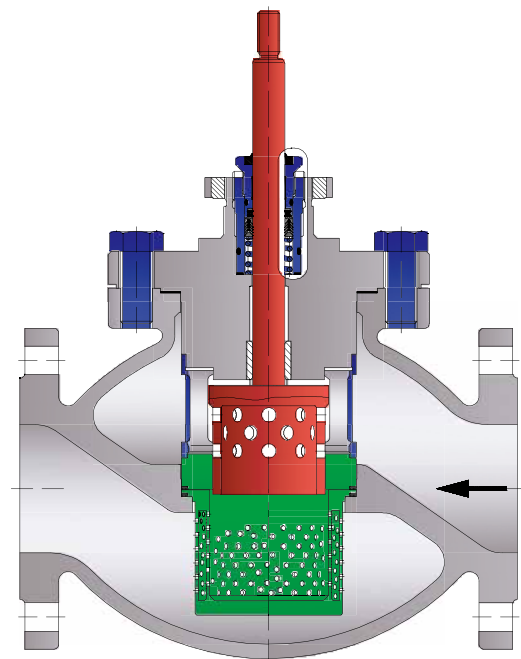
1 级降噪阀笼 LC1 1 Stage low noise cage



2 级降噪阀笼 LC2 2 Stages low noise cage



1 级阀座下部降噪笼 LU1 1 Stage Bottom low noise cage



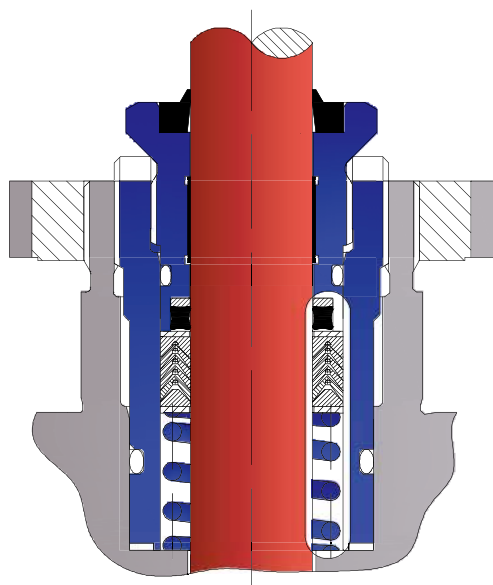
2 级阀座下部降噪笼 LU2 2 Stages Bottom low noise cage

G110 和 G150 系列控制阀阀芯形式及特点 General structures and features of G110 and G150 Series Control Valve Trim

降噪阀笼 LC 及 LU 的 Cv 值 Cv value of low noise cages and baskets

Series	Size	LC	LU1	LU2
		low noise cage above seat, FTO	low noise basket below seat, FTC	2-step low noise basket below seat, FTC
G110	1/2"-1 1/4"	53	-	-
	1 1/2"-2 1/2"	141	-	-
	3"	197	-	-
	4"	319	-	-
	1"	19	-	-
	1 1/2'	47	-	-
	2"	47	152	111
	3"	165	292	210
	4"	500	362	257
	6"	354	806	572
	8"	1036	1402	1004
	10"	1460	-	-
	12"	2030	-	-
	14"	3247	-	-
	16"	4026	-	-
	20"	6225	-	-
	24"	11680	-	-
G150	1"	37	-	-
	1 1/2'	47	-	-
	2"	74	152	111
	3"	165	292	210
	4"	500	362	257
	6"	604	806	572
	8"	1036	1402	1004
	10"	1205	-	-
	12"	1624	-	-
	14"	3221	-	-

G110 和 G150 系列控制阀上阀盖及填料函形式 Bonnet model and stuffing box type of G110 and G150 Series Control Valve

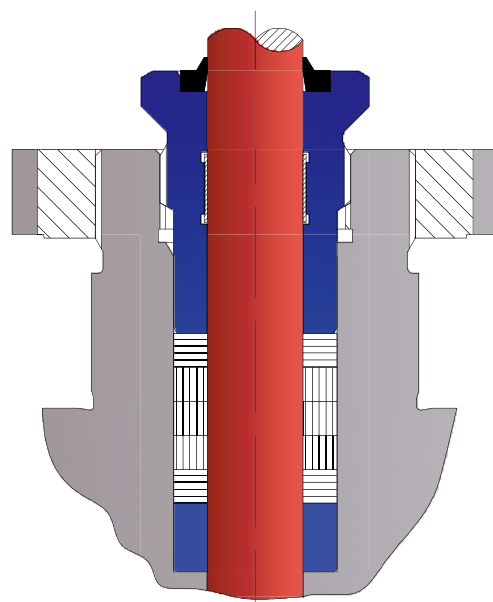


带微型密封单元的免维护 PTFE V 型填料 Maintenance-free PTFE V-ring packing with precision sealing element

这种上阀盖形式适用于 G110 系列控制阀。填料形式为 PTFE V 型环，填料下部带预紧弹簧。填料压盖长度等于阀门行程并且填料函带微型密封单元以更好地保护填料不受外界环境污染，延长填料的使用寿命并能在整个使用周期内保证密封的可靠性。

The bonnet type is used for Utmost® G110 series, packing is PTFE V type with below tight spring design. Packing bonnets size is equal with valve traveling and stuffing box with mini sealing unit to protect the pollution from outside environment. Then enlarge the life span in the whole life circle and guarantee the reliability.

上阀盖及填料函
Valve Bonnet&stuffing Box

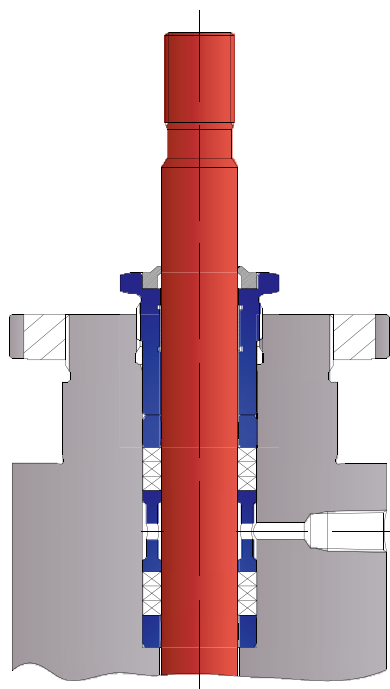


可调整填料函 Adjustable stuffing box with packing rings

这种可调整的填料能够保证每个单独的填料环都有均匀的密封力，这样不仅可以保证密封的可靠性也可以延长填料的使用寿命。加长的填料压盖和顶部的刮垢环使填料避免受外界环境的污染，多种填料材质可选。

Adjustable packing guarantee the average sealing force to each sealing ring, by this way, enlarge the life span as well as the reliability. The extension packing cover and top wipe ring protect the packing itself from the outside pollution. Various packing material is available.

G110 和 G150 系列控制阀上阀盖及填料函形式 Bonnet model and stuffing box type of G110 and G150 Series Control Valve

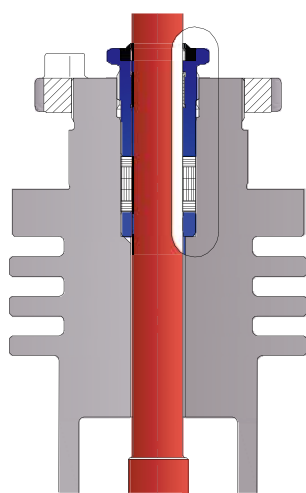


双填料密封型上阀盖 Double packing

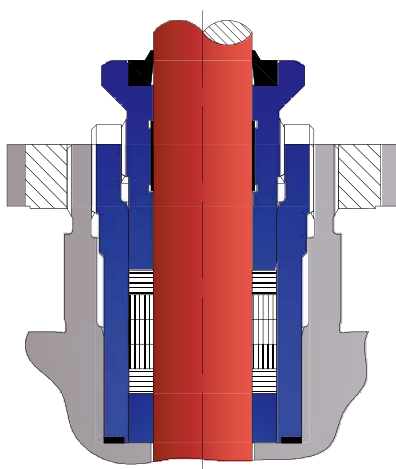
双填料常用于氢气介质工况，Utmost® 控制阀的双填料可提供更好的密封性。加长的填料压盖和顶部的刮垢环使填料避免受外界环境的污染，延长使用寿命并保证可靠性。

Double packing is more often be used in Hydrogen fluid application, Utmost® control valve double packing is able to supply a better sealing force. The extension cover and top wipe ring protect the packing from outside pollution and guarantee the reliability.

散热片型上阀盖 Bonnet with Air-cooling fins



带散热片型填料函
Air-cooling fin packing

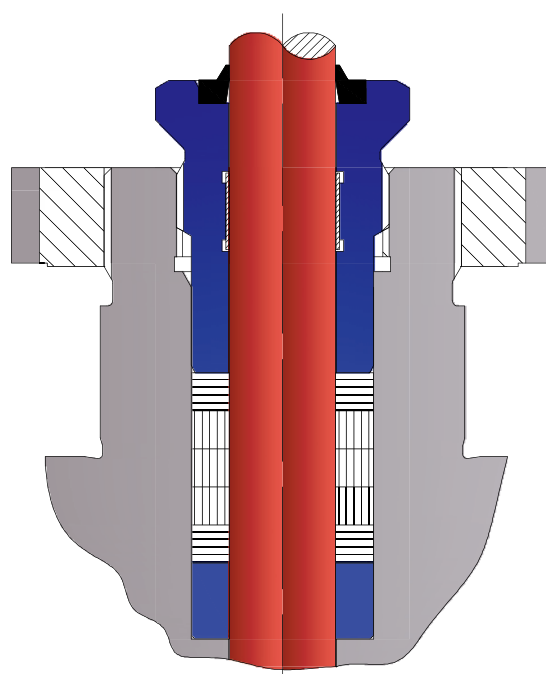
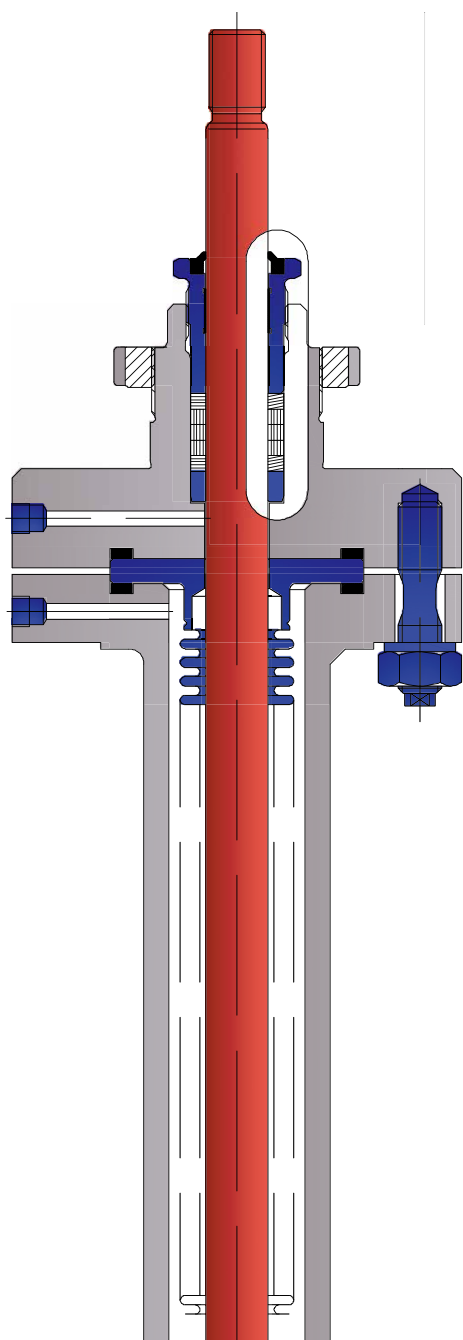


带填料衬套的填料函
Lining stuffing box

一般在高于 230℃ 的工况下就需要使用散热片型的上阀盖以防止高温对填料的损害。对于碳钢阀体选用石墨填料的情况，电化学腐蚀往往会随着外界的空气、水汽及内部介质的影响而加剧，这将影响填料的密封性能并腐蚀填料函。Utmost® 提供了带衬套的填料函，衬套可以避免电化学腐蚀的发生延长填料函及填料的使用寿命。

In case of high temperature damage the packing, the bonnet air-cooling fins will be applied for the operation temperature higher than 230 degree. Due to the carbon steel valve housing normally use graphite packings, electrochemical corrosion intensify due to outside air, steam as well as internal medium, this will affect the sealing force and result corrosion of stuffing box. Utmost® valve supply with lining stuffing box, the lining is able to prevent the electrochemical corrosion occurring therefore guarantee the application and extend the packing and stuffing box's life span.

G110 和 G150 系列控制阀上阀盖及填料函形式
Bonnet model and stuffing box type of G110 and G150 Series Control Valve



上阀盖及填料函
Valve Bonnet&stuffing Box

波纹管密封型上阀盖
Bonnet with Bellows Sealing

波纹管密封用于不允许介质向外泄漏的场合，Utmost® 的一体成型的双壁波纹管使用寿命长并且更具安全性。除波纹管密封之外，我们还同时配有标准的填料密封，提供双重的安全保证。

波纹管密封型上阀盖适用于低温及深冷工况，最低操作温度可达 -196°C 。低温工况的波纹管密封型上阀盖的延伸段长度可按用户要求设计。

In the condition of strictly request tight sealing and zero leakage, specially when the medium contain some dangerous integrates or gas. Utmost® integrated form double bellows sealing has longer life span with safety design. Utmost also supplies standard packing sealing as double safetywarranty.

Bonnets with Bellows sealing also apply for low temperature or cryogenic condition, the lowest operation temperature could reach to minus 196 degree. The low temperature below sealing extension bonnets is able to supply by request.

G110 系列控制阀技术数据 Technical Data Sheet of G110 Series Control Valve

基本规格 General Data

公称尺寸 Nominal Size DN /NPS	DN15-600 / 1/2" – 24"
压力等级 Nominal Pressure PN / ANSI	PN10-40 / Class 150-300lbs
流量特性 Characteristics	等百分比或线性 Equal percentage or Linear 快开 Quickopen
可调比 Rangeability	50:1
阀芯导向 Plug Guide	阀杆导向 Stem guided, 可选双导向 Option: double guiding
泄漏等级 Seat Leakage	金属硬密封 IV 级 Metal sealing: leakage class IV ; 金属硬密封 V 级 Metal sealing: leakage class V ; 软密封: VI 级 Soft sealing: leakage class VI
波纹管密封 Bellows Sealing (Option)	多层波纹管, 标准材质 316Ti, 可选材质: 哈氏合金、Monel、Inconel 等其他材料 Seamless, double walled, made of 316Ti, Option: Hastelloy, Monel, Inconel and other materials
保温夹套 Heating Jacket (Option)	热媒进出口连接方式: 法兰 1/2" 或 1" Connections 1/2" or 1" flange type
低温设计 Low Temperature Design (Option)	最低到 -196°C Low to -196°C

材质 Material

阀体材质 Body material	GB 标准	ASTM 标准	温度范围 Temperature range	
	ZG280-520	A 216 WCB	-29°C to 425°C	
	ZG240-450B	A 216 WCC	-29°C to 425°C	
		A 352 LCB	-46°C to 345°C	
	06Cr19Ni10	A351CF8	-196°C to 538°C	
	06Cr17Ni12Mo2	A 351 CF8M	-196°C to 538°C	
	022Cr19Ni10	A351CF3	-196°C to 425°C	
	022Cr17Ni12Mo2	A 351 CF3M	-196°C to 455°C	
	ZG15Cr1MoG	A 217 WC6	最高到 595°C	up to 595°C
	ZG12Cr2Mo1G	A 217 WC9	最高到 595°C	up to 595°C
		A 217 C12A		
		A494-CW-2M		
		Inconel 600		
		Inconel 625		
		Monel 400		
		A351 CD3MN		
		A351 CN7M	最高到 316°C	up toto 316°C
上阀盖材质 Bonnet material	≤DN65: 上阀盖最低配置奥氏体不锈钢 ≤ DN65: the minimum configuration of upper valve cover is austenitic stainless steel			

G110 系列控制阀技术数据 Technical Data Sheet of G110 Series Control Valve

阀内件材质 Trim material

序号 Material No.	抛物线型阀芯 Contoured Plug	多孔阀芯 Perforated plug H1	阀座 Seat	阀座密封 Seat sealing
1	440C*	440B 渗氮 440B nitrided	420SS*	金属 metallic/ 或软密封 soft sealing
2	316SS*	316SS 渗氮 316SS nitrided	316SS*	金属 metallic/ 或软密封 soft sealing
3	420SS 硬化处理 420SS hardened	420SS 硬化处理 420SS hardened	420SS 硬化处理 420SS hardened	金属 metallic/ 或软密封 soft sealing
4	440B*	440B 渗氮 440B nitrided	420SS *	金属 metallic/ 或软密封 soft sealing
5	440B*	440B 渗氮 440B nitrided	440B	金属 metallic/ 或软密封 soft sealing
6	316SS 堆焊 stellite 316SS+stellite	316SS 渗氮 316SS nitrided	316SS*	金属 metallic/ 或软密封 soft sealing
7	Hasterlloy C-276	Hasterlloy C-276	Hasterlloy C-276	金属 metallic/ 或软密封 soft sealing
8	Inconel 625	Inconel 625	Inconel 625	金属 metallic/ 或软密封 soft sealing
9	Inconel 625 硬化 Inconel 625 hardened	Inconel 625 硬化 Inconel 625 hardened	Inconel 625	金属 metallic/ 或软密封 soft sealing
10	Monel 400	Monel 400	Monel 400	金属 metallic/ 或软密封 soft sealing
11	Monel K -500	Monel K -500	Monel 400	金属 metallic/ 或软密封 soft sealing
12	Alloy 20	Alloy 20	Alloy 20	金属 metallic/ 或软密封 soft sealing

* 标准配置 Standard configuration
如需其它材质请与艾坦姆公司联系。For other materials request please contact with Utmost.

G110 系列控制阀技术数据 Technical Data Sheet of G110 Series Control Valve

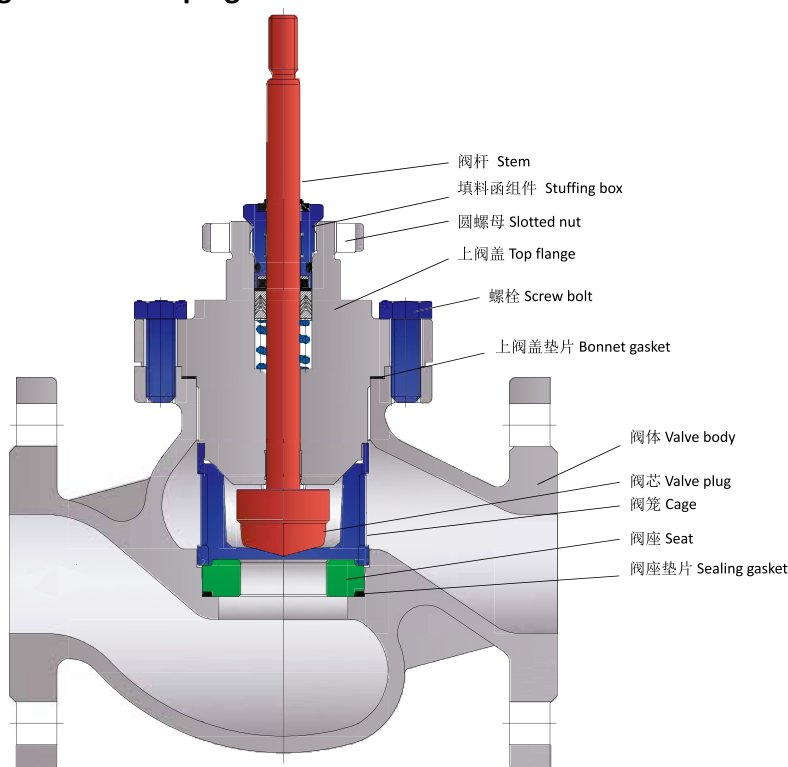
阀杆密封形式及耐温范围

Stem sealing types and Temperature ranges

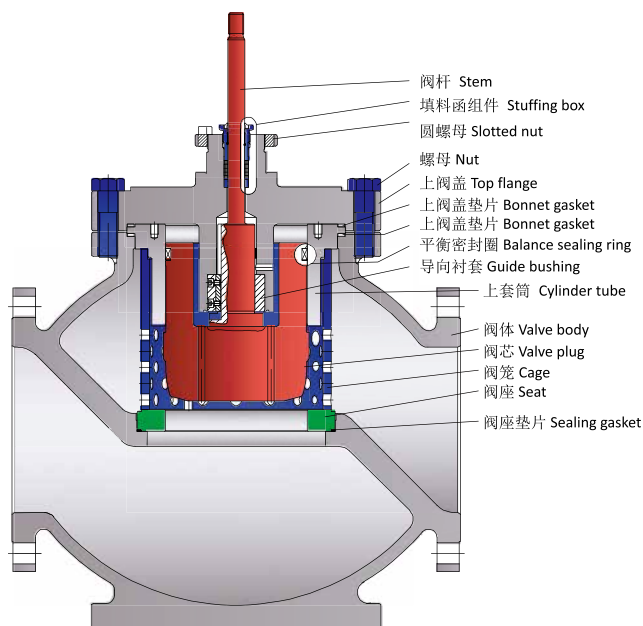
密封形式 Sealing type	填料 Packing	微型密封单元 Micro sealing	O 型圈 O-Ring	刮垢环 Wiper ring	温度范围 Temp.Range	上阀盖设计 Top flange design	备注 Remarks
带微型密封单元的免维护填料 Maintenance free double sealing	聚四氟乙烯 V 型环 PTFE V-Ring	三元乙丙橡胶 EPDM (FKM)	三元乙丙橡胶 EPDM	丁腈橡胶 NBR	-25 ~ 180 (200)°C	标准型 Standard	不锈钢预紧弹簧 Preloaded stainless steel spring
可调整填料 Adjustable Packing	加强石墨 /Inconel reinforced Graphite/ Inconel	-	-	丁腈橡胶 NBR (FKM)	-29 ~ 400°C	标准 / 带散热片型 Standard/ Cooling fins	标准型 Standard operation
可调整填料 Adjustable Packing	纯石墨 Pure Graphite	-	-	VITON	-29 ~ 530°C	标准 / 带散热片型 Standard/ Cooling fins	高温型 High temperature
可调整填料 Adjustable Packing	编织石墨 /PTFE Braided Graphite/ PTFE	-	-	丁腈橡胶 NBR	-196 ~ 200°C	延伸型 Extended bonnet	低温型 Low temperature
波纹管密封 (带标准填料) Bellows sealing c/ w double safety sealing	聚四氟乙烯 V 型环 / 波纹管 (1.4571 或哈氏 C 合金材质) PTFE V-Ring/ bellows (1.4571 or Hastelloy C)	EPDM (FKM)	三元乙丙橡胶 EPDM	丁腈橡胶 NBR (FKM)	-100 ~ 200°C	波纹管密封型 Bellows sealing	不锈钢预紧弹簧 Preloaded stainless steel spring

G110 系列控制阀技术数据 Technical Data Sheet of G110 Series Control Valve

G110-C1 型结构图及部件图 (Sectional drawing of G110-C1) 一级抛物线型阀芯 1 stage Contoured plug



非平衡式 Unbalanced



压力平衡式 Balanced

G110 系列控制阀技术数据
Technical Data Sheet of G110 Series Control Valve

Cv 值与开度
Cv value and travel

1 级抛物线型阀芯 C1 1 stage Contoured trim (C1)
流开 Flow to open (FTO)
等百分比流量特性 Equal percentage flow characteristic

阀门尺寸 Valve size	阀座尺寸 Seat diameter mm	行程 Stroke mm	额定 Cv	阀门开度 Travel									
				10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1/2" 3/4"	5	16	Rated Cv	0.006	0.011	0.016	0.024	0.035	0.053	0.078	0.116	0.172	0.250
			Rated Cv	0.008	0.013	0.019	0.028	0.041	0.062	0.089	0.132	0.195	0.290
			Rated Cv	0.012	0.018	0.039	0.026	0.057	0.084	0.125	0.186	0.275	0.400
			Rated Cv	0.014	0.021	0.030	0.044	0.065	0.098	0.145	0.213	0.315	0.470
			Rated Cv	0.019	0.028	0.041	0.061	0.090	0.133	0.198	0.294	0.434	0.630
			Rated Cv	0.022	0.033	0.047	0.070	0.105	0.153	0.225	0.335	0.488	0.730
			Rated Cv	0.029	0.044	0.066	0.097	0.144	0.213	0.315	0.466	0.689	1.000
			Rated Cv	0.035	0.051	0.076	0.110	0.166	0.245	0.362	0.543	0.794	1.170
	10	16	Rated Cv	0.055	0.082	0.117	0.182	0.269	0.397	0.578	0.870	1.285	1.900
	15	16	Rated Cv	0.085	0.128	0.192	0.280	0.420	0.619	0.920	1.358	2.014	2.900
			Rated Cv	0.140	0.208	0.307	0.456	0.673	0.996	1.472	2.177	3.221	4.700
1"	20	16	Rated Cv	0.222	0.327	0.485	0.717	1.063	1.566	2.320	3.428	5.069	7.400
	25		Rated Cv	0.350	0.520	0.771	1.139	1.684	2.488	3.683	5.443	8.055	11.500
1 1/4"	30	16	Rated Cv	0.561	0.832	1.232	1.822	2.695	3.985	5.890	8.699	12.86	19.000
1 1/2"	36	16	Rated Cv	0.878	1.299	1.923	2.848	4.209	6.225	9.204	13.619	20.113	29.000
2"	46	16	Rated Cv	1.409	2.083	3.081	4.555	6.735	9.963	14.728	21.783	32.213	46.000
2 1/2"	50	16	Rated Cv	2.219	3.281	4.851	7.175	10.608	15.698	23.208	34.281	50.703	73.000
3"	80	30	Rated Cv	3.522	5.207	7.702	11.389	16.843	24.913	36.827	54.440	80.534	116.000
4"	100	30	Rated Cv	5.636	8.334	12.322	18.221	26.946	39.852	58.926	87.144	128.83	186.000
6"	113	60	Rated Cv	11.181	16.177	23.383	33.814	48.904	70.722	102.282	147.869	213.861	304.000
	143	60	Rated Cv	16.340	23.640	34.176	49.430	71.482	103.380	149.504	216.197	312.674	445.000
8"	172	60	Rated Cv	27.950	40.424	58.470	84.552	122.290	176.835	255.675	369.789	534.710	753.000
10"	220	100	Rated Cv	38.708	55.982	80.954	117.034	169.360	244.813	354.021	512.051	740.395	1051.000
12"	282	100	Rated Cv	55.912	80.861	116.917	169.126	244.579	353.670	511.467	739.578	1069.538	1518.000
14"	313	100	Rated Cv	77.427	111.970	161.885	234.184	338.603	489.626	708.158	1023.986	1481.024	2102.000
16"	400	120	Rated Cv	107.526	155.460	224.840	325.171	470.237	680.126	983.456	1422.624	2056.848	2920.000

*: 如需了解更多数据, 请与艾坦姆公司联系。 For more other specifications request please contact with Utmost.

G110 系列控制阀技术数据 Technical Data Sheet of G110 Series Control Valve

Cv 值与开度 Cv value and travel

1 级抛物线型阀芯 1 stage Contoured trim (C1)

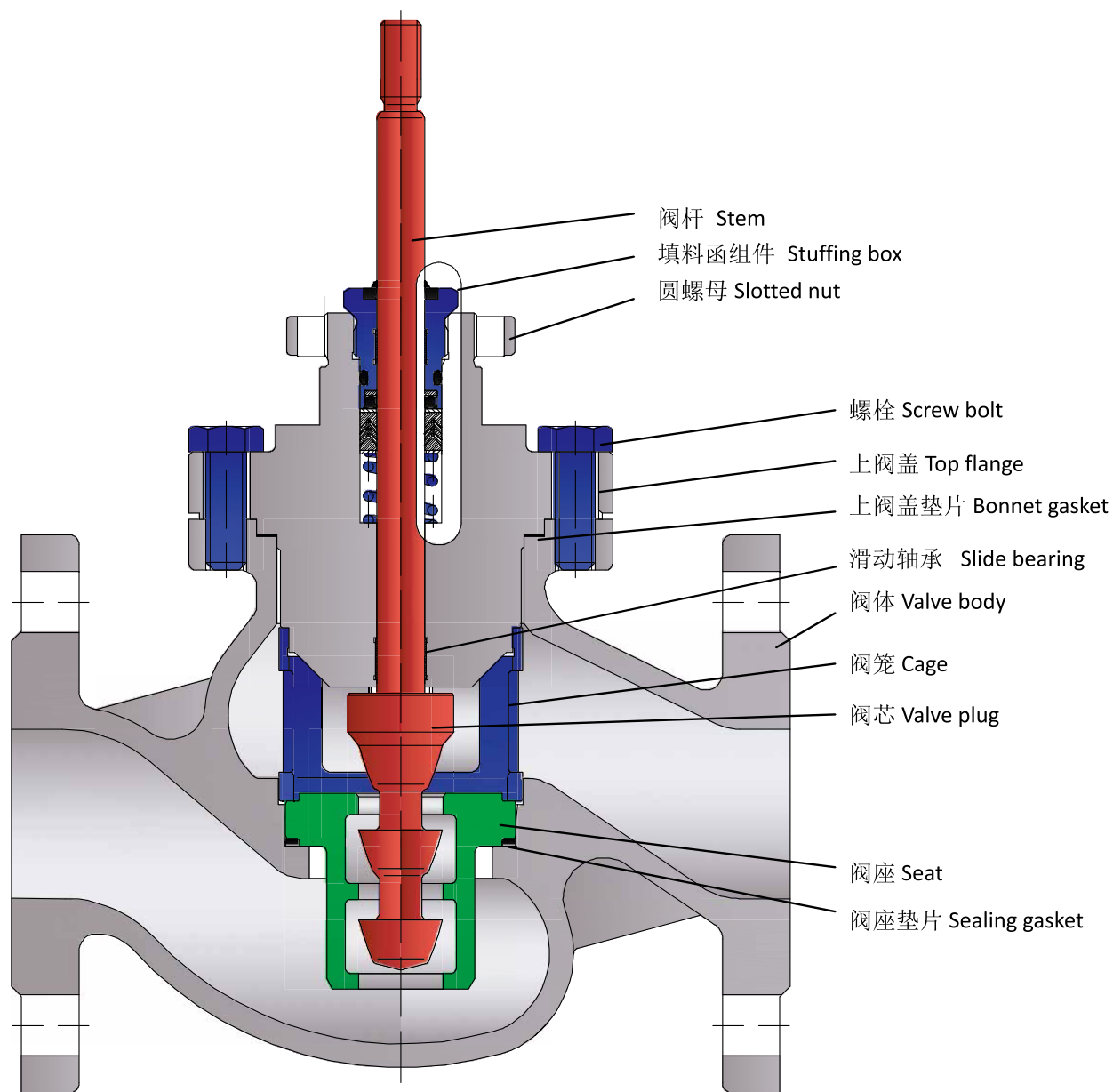
流开 Flow to open (FTO)

线性流量特性 Linear flow characteristic

阀门尺寸 Valve size	阀座尺寸 Seat diameter mm	行程 Stroke mm	额定 Cv	阀门开度 Travel									
				10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1/2" 3/4"	3	16	Rated Cv	0.005	0.009	0.013	0.017	0.021	0.025	0.028	0.032	0.036	0.04
			Rated Cv	0.008	0.015	0.022	0.029	0.036	0.042	0.049	0.056	0.063	0.07
			Rated Cv	0.012	0.022	0.032	0.042	0.051	0.061	0.071	0.081	0.090	0.1
	5	16	Rated Cv	0.014	0.026	0.037	0.048	0.060	0.071	0.083	0.093	0.105	0.12
			Rated Cv	0.020	0.035	0.051	0.067	0.082	0.098	0.113	0.129	0.145	0.16
			Rated Cv	0.023	0.041	0.06	0.078	0.096	0.114	0.132	0.151	0.168	0.19
			Rated Cv	0.032	0.056	0.080	0.104	0.129	0.153	0.178	0.202	0.226	0.25
			Rated Cv	0.036	0.063	0.093	0.121	0.151	0.179	0.208	0.236	0.264	0.29
			Rated Cv	0.050	0.089	0.129	0.167	0.206	0.246	0.284	0.323	0.363	0.40
			Rated Cv	0.056	0.104	0.150	0.195	0.241	0.286	0.332	0.377	0.423	0.47
			Rated Cv	0.080	0.142	0.202	0.264	0.325	0.387	0.448	0.510	0.571	0.63
			Rated Cv	0.093	0.165	0.237	0.308	0.380	0.452	0.523	0.596	0.667	0.73
			Rated Cv	0.148	0.262	0.376	0.489	0.604	0.717	0.832	0.945	0.945	1.17
	10	16	Rated Cv	0.237	0.419	0.602	0.784	0.964	1.148	1.330	1.513	1.695	1.9
			Rated Cv	0.371	0.656	0.940	1.225	1.510	1.795	2.079	2.364	2.649	2.9
	15	16	Rated Cv	0.595	1.050	1.506	1.961	2.414	2.872	3.328	3.783	4.239	4.7
1"	20	16	Rated Cv	0.933	1.654	2.371	3.089	3.807	4.524	5.241	5.958	6.675	7.36
	25	16	Rated Cv	1.487	2.626	3.763	4.903	6.042	7.180	8.320	9.458	10.597	11.5
1 1/4"	30	16	Rated Cv	2.376	4.201	6.021	7.845	9.666	11.486	13.315	15.137	16.959	19
1 1/2"	36	16	Rated Cv	3.719	6.564	9.412	12.264	15.102	17.952	20.802	23.652	26.490	29
2"	46	16	Rated Cv	5.949	10.501	15.056	19.611	24.166	28.721	33.276	37.832	42.387	46
2 1/2"	50	16	Rated Cv	9.369	16.551	23.722	30.894	38.065	45.237	52.420	59.591	66.763	73
3"	80	30	Rated Cv	14.880	26.268	37.656	49.044	60.432	71.82	83.197	94.596	105.984	116
4"	100	30	Rated Cv	23.804	42.025	60.245	78.466	96.687	114.908	133.152	151.373	169.594	186
6"	113	60	Rated Cv	38.684	68.293	97.902	127.546	157.096	186.763	216.314	245.981	275.531	304
	143	60	Rated Cv	56.531	99.806	143.080	186.413	229.629	272.962	316.178	359.394	402.726	445
8"	172	60	Rated Cv	96.699	170.762	244.696	318.747	392.798	466.733	540.784	614.835	688.886	761
10"	220	100	Rated Cv	133.853	236.403	338.837	441.387	543.821	646.371	748.805	851.355	953.789	1051
12"	282	100	Rated Cv	193.421	341.406	489.509	637.494	785.597	933.582	1081.685	1229.904	1378.240	1518
14"	313	100	Rated Cv	267.822	472.806	677.790	882.774	1087.758	1292.976	1497.376	1702.944	1907.344	2102
16"	400	120	Rated Cv	371.891	656.650	941.291	1226.400	1510.224	1795.216	2080.208	2365.200	2649.024	2920

G110 系列控制阀技术数据 Technical Data Sheet of G110 Series Control Valve

G110-C3 型结构图及部件图 (Sectional drawing of G110-C3) 多级抗气蚀阀内件 Multi stages trim for Anti-cavitation valve



G110 系列控制阀技术数据 Technical Data Sheet of G110 Series Control Valve

G110 系列多级抗气蚀阀 (C3) 的 Cv 值与开度 G110 Multi stages trim for Anti-cavitation valve Cv value and travel

流开 Flow to open (FTO)
等百分比流量特性 Equal percentage flow characteristic

阀门尺寸 Valve size	阀座尺寸 Seat diameter mm	行程 Stroke mm	额定 Cv	阀门开度 Travel									
				10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1/2" 3/4"	11	10	Rated Cv	0.040	0.006	0.009	0.013	0.019	0.027	0.039	0.056	0.082	0.12
	16	10	Rated Cv	0.007	0.009	0.014	0.021	0.029	0.043	0.062	0.090	0.131	0.19
			Rated Cv	0.011	0.015	0.022	0.032	0.047	0.068	0.098	0.141	0.206	0.29
			Rated Cv	0.018	0.025	0.035	0.051	0.075	0.109	0.157	0.227	0.328	0.47
			Rated Cv	0.027	0.039	0.056	0.082	0.118	0.171	0.248	0.357	0.517	0.74
			Rated Cv	0.042	0.062	0.090	0.130	0.188	0.271	0.392	0.569	0.822	1.17
1"	24	20	Rated Cv	0.068	0.099	0.144	0.208	0.300	0.434	0.628	0.910	1.316	1.9
			Rated Cv	0.107	0.155	0.224	0.325	0.470	0.680	0.983	1.421	2.056	2.9
			Rated Cv	0.172	0.249	0.360	0.520	0.752	1.087	1.573	2.275	3.290	4.7
1 1/2"	32	20	Rated Cv	0.300	0.434	0.630	0.910	1.316	1.904	2.753	3.982	5.758	8.2
	37		Rated Cv	0.430	0.621	0.899	1.300	1.880	2.720	3.934	5.688	8.226	11.7
2"	48	30	Rated Cv	0.645	0.932	1.349	1.951	2.821	4.080	5.901	8.533	12.346	17.5
2 1/2"	62	30	Rated Cv	1.031	1.493	2.158	3.121	4.514	6.528	9.441	13.654	19.751	28
			Rated Cv	1.376	1.99	2.878	4.162	6.019	8.705	12.591	18.209	26.327	37
3"	62	30	Rated Cv	1.031	1.493	2.158	3.121	4.514	6.528	9.441	13.654	19.751	28
			Rated Cv	1.376	1.990	2.878	4.162	6.019	8.705	12.591	18.209	26.327	37
4"	90	30	Rated Cv	1.849	2.674	3.867	5.592	8.088	11.703	16.913	24.458	35.379	50

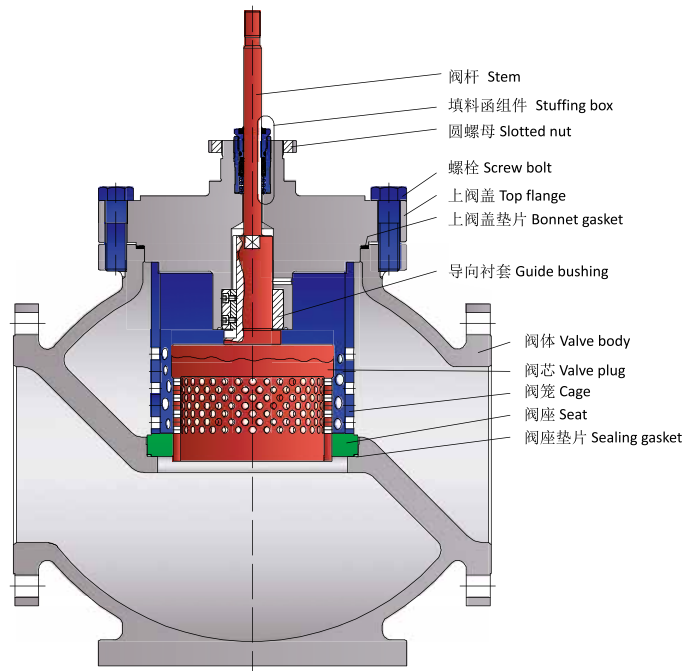
*: 如需了解更多数据, 请与艾坦姆公司联系。 For more other specifications request please contact with Utmost.

流开 Flow to open (FTO) 线性流量特性 Linear flow characteristic

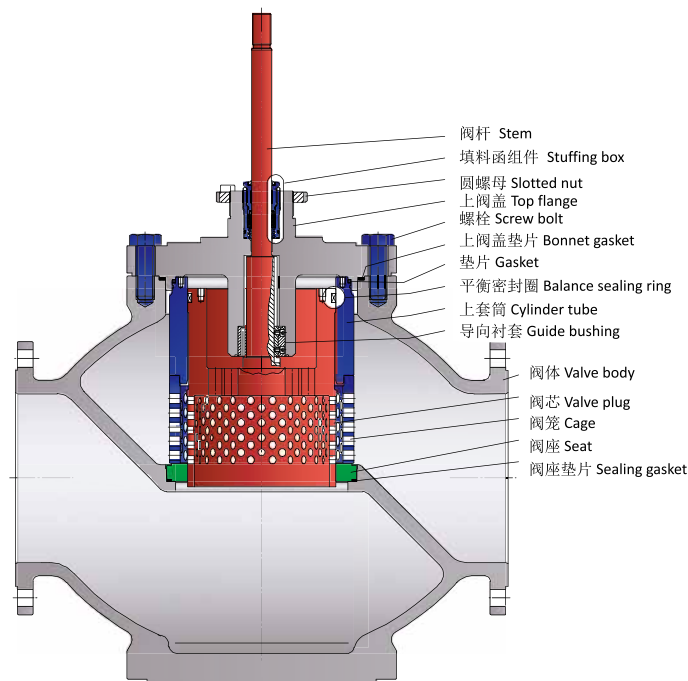
阀门尺寸 Valve size	阀座尺寸 Seat diameter mm	行程 Stroke mm	额定 Cv	阀门开度 Travel									
				10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1/2" 3/4"	16	10	Rated Cv	0.148	0.262	0.376	0.489	0.604	0.717	0.832	0.945	1.059	1.17
1"	24	20	Rated Cv	0.237	0.419	0.602	0.784	0.966	1.148	1.330	1.513	1.695	1.9
			Rated Cv	0.369	0.652	0.935	1.217	1.500	1.783	2.065	2.348	2.631	2.9
			Rated Cv	0.595	1.050	1.506	1.961	2.417	2.872	3.328	3.783	4.239	4.7
1 1/2"	32	20	Rated Cv	1.041	1.838	2.635	3.433	4.229	5.027	5.824	6.621	7.418	8.2
	37		Rated Cv	1.487	2.626	3.764	4.903	6.042	7.181	8.320	9.458	10.597	11.7
2"	48	20	Rated Cv	2.231	3.940	5.647	7.356	9.064	10.772	12.486	14.191	15.896	17.5
2 1/2"	62	20	Rated Cv	3.569	6.303	9.036	11.773	14.507	17.240	19.973	22.706	25.439	28
			Rated Cv	4.760	8.404	12.054	15.698	19.342	22.986	26.630	30.275	33.919	37
3"	62	20	Rated Cv	3.569	6.303	9.036	11.773	14.507	17.240	19.973	22.706	25.439	28
			Rated Cv	4.760	8.404	12.054	15.698	19.342	22.986	26.630	30.275	33.919	37
4"	90	20	Rated Cv	6.397	11.293	16.188	21.082	25.988	30.882	35.776	40.670	45.575	50

G110 系列控制阀技术数据
Technical Data Sheet of G110 Series Control Valve

G110-H1 型结构图及部件图 (Sectional drawing of G110-H1)
一级多孔型阀芯 1 stage Perforated trim



非平衡式 Unbalanced



压力平衡式 Balanced

G110 系列控制阀技术数据 Technical Data Sheet of G110 Series Control Valve

Cv 值与开度

Cv value and travel

1 级多孔阀芯 1 stage Perforated trim (H1)

流开 Flow to open (FTO)

等百分比流量特性 Equal percentage flow characteristic

阀门尺寸 Valve size	阀座尺寸 Seat diameter mm	行程 Stroke mm	额定 Cv	阀门开度 Travel									
				10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1/2" 3/4"	15	20	Rated Cv	0.042	0.062	0.090	0.130	0.188	0.271	0.392	0.569	0.822	1.17
			Rated Cv	0.068	0.099	0.144	0.208	0.300	0.434	0.628	0.910	1.316	1.9
1" 1 1/4"	20	20	Rated Cv	0.107	0.155	0.224	0.325	0.470	0.680	0.983	1.421	2.056	2.9
	25		Rated Cv	0.172	0.249	0.360	0.520	0.752	1.087	1.573	2.275	3.290	4.7
			Rated Cv	0.271	0.391	0.566	0.819	1.184	1.713	2.477	3.583	5.182	7.3
1 1/2"	36	20	Rated Cv	0.430	0.621	0.899	1.300	1.880	2.720	3.934	5.688	8.226	11.5
			Rated Cv	0.688	0.995	1.439	2.080	3.009	4.352	6.294	9.102	13.163	19
2 1/2"	46	20	Rated Cv	1.075	1.555	2.248	3.252	4.702	6.800	9.835	14.215	20.568	29
3"	46	30	Rated Cv	1.075	1.555	2.248	3.252	4.702	6.800	9.835	14.215	20.568	29
	62		Rated Cv	1.720	2.488	3.597	5.202	7.524	10.881	15.733	22.753	32.914	46
	90		Rated Cv	2.365	3.421	4.946	7.154	10.346	14.962	21.631	31.291	45.248	65
4"	100	30	Rated Cv	2.710	3.919	5.666	8.195	11.855	17.135	24.785	35.846	51.836	73
	90		Rated Cv	2.925	4.229	6.116	8.845	12.790	18.501	26.747	38.684	55.947	80
			Rated Cv	3.441	4.973	7.196	10.405	15.044	21.760	31.478	45.517	65.817	93
6"	113	60	Rated Cv	6.451	9.330	13.490	19.517	28.219	40.810	59.007	85.334	123.458	176
			Rated Cv	6.882	9.951	14.390	20.814	30.099	43.531	62.944	91.022	131.634	187
	143		Rated Cv	8.602	12.439	17.987	26.011	37.621	54.405	78.676	113.787	164.571	234
			Rated Cv	9.032	13.058	18.887	27.320	39.502	57.127	82.613	119.486	172.747	246
			Rated Cv	10.753	15.546	22.484	32.517	47.024	68.013	98.346	142.262	205.685	292
			Rated Cv	11.181	16.177	23.383	33.814	48.904	70.734	102.282	147.869	213.861	304
8"	172	100	Rated Cv	13.759	19.903	28.780	41.628	60.199	87.051	125.910	182.091	263.267	374
			Rated Cv	17.205	24.878	35.974	52.034	75.243	108.811	157.330	227.526	329.026	467
			Rated Cv	21.503	31.104	44.968	65.034	94.059	136.072	196.691	284.408	411.370	584
10"	220	100	Rated Cv	27.098	39.186	56.671	81.947	118.552	171.346	247.850	358.459	518.358	736
			Rated Cv	27.962	40.436	58.470	84.552	122.290	176.835	255.675	369.789	534.710	759
			Rated Cv	30.964	44.781	64.766	93.662	135.488	195.874	283.240	409.618	592.410	841

G110 系列控制阀技术数据
Technical Data Sheet of G110 Series Control Valve

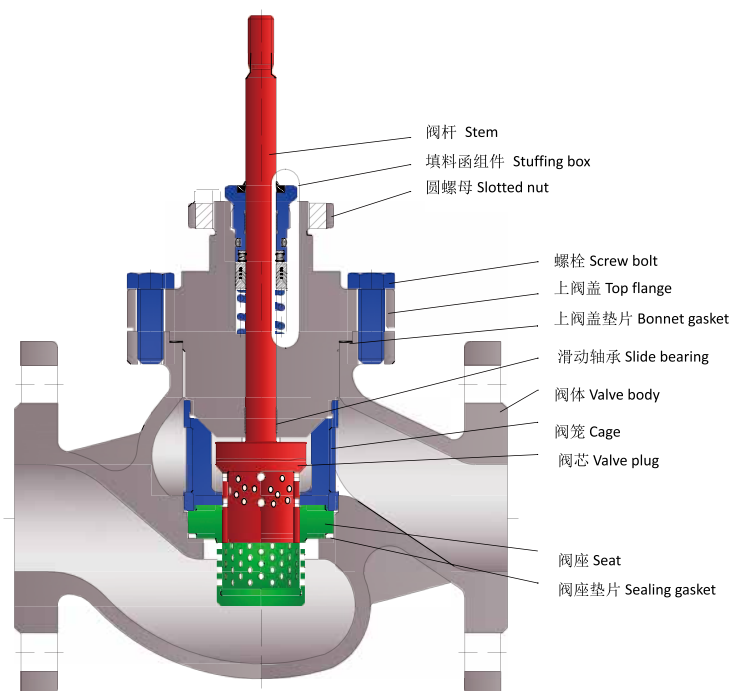
Cv 值与开度
Cv value and travel

1 级多孔阀芯 1 stage Perforated trim (H1)
流开 Flow to open (FTO)
线性流量特性 Linear flow characteristic

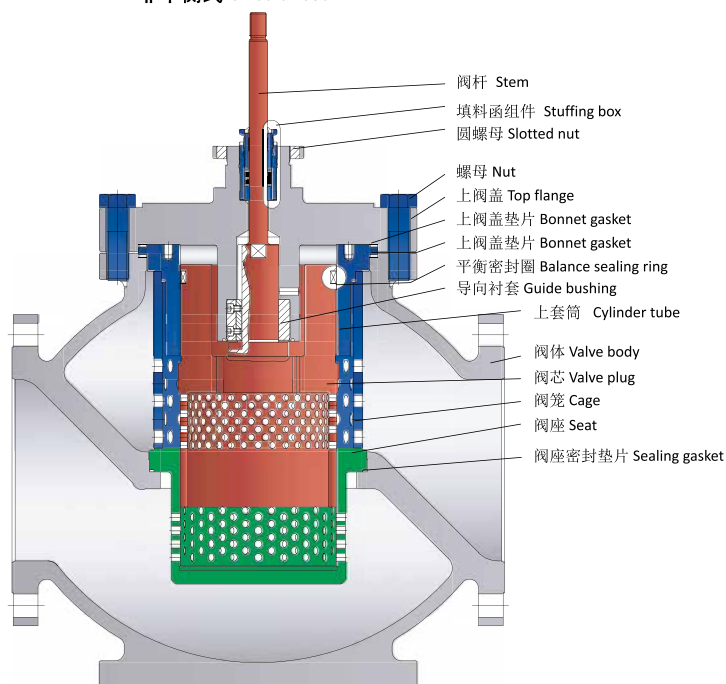
阀门尺寸 Valve size	阀座尺寸 Seat diameter mm	行程 Stroke mm	额定 Cv	阀门开度 Travel										
				10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	
1/2"	15	20	Rated Cv	0.148	0.262	0.376	0.489	0.604	0.717	0.832	0.945	1.059	1.17	
			Rated Cv	0.237	0.419	0.602	0.784	0.966	1.148	1.330	1.513	1.695	1.9	
1" 1 1/4"	25	20	Rated Cv	0.371	0.656	0.940	1.225	1.510	1.795	2.079	2.364	2.649	2.9	
			Rated Cv	0.595	1.050	1.506	1.961	2.417	2.872	3.328	3.783	4.239	4.7	
			Rated Cv	0.937	1.654	2.371	3.089	3.807	4.524	5.241	5.959	6.676	7.3	
1 1/2"	36	20	Rated Cv	1.487	2.626	3.764	4.903	6.042	7.181	8.320	9.458	10.597	11.5	
			Rated Cv	2.379	4.201	6.023	7.845	9.668	11.490	13.315	15.137	16.959	19	
2"	46	20	Rated Cv	3.719	6.565	9.413	12.264	15.102	17.952	20.802	23.652	26.490	29	
2 1/2"	50	20	Rated Cv	5.950	10.505	15.056	19.611	24.166	28.721	33.276	37.832	42.387	46	
3"	50	30	Rated Cv	5.950	10.505	15.056	19.611	24.166	28.721	33.276	37.832	42.387	46	
			Rated Cv	8.182	14.448	20.709	26.969	33.241	39.502	45.762	52.023	58.295	65	
	62		Rated Cv	9.335	16.130	23.722	30.894	38.065	45.248	52.420	59.591	66.763	73	
			80	Rated Cv	11.902	21.012	30.123	39.233	48.344	57.454	66.564	75.675	84.785	94
				Rated Cv	14.880	26.268	37.656	49.044	60.432	71.820	83.208	94.596	105.984	116
4"	90		30	Rated Cv	16.364	28.896	41.417	53.950	66.471	79.004	91.524	104.057	116.578	129
	100	30	Rated Cv	18.595	32.832	47.070	61.297	75.535	89.772	104.010	118.202	132.451	146	
			Rated Cv	20.825	36.769	52.712	68.655	84.598	100.541	116.485	132.451	148.336	163	
6"	143	60	Rated Cv	47.608	84.049	120.538	156.979	193.421	229.862	266.304	302.746	339.187	374	
			Rated Cv	56.531	99.806	143.080	186.413	229.629	272.962	316.178	359.510	402.726	445	
8"	172	60	Rated Cv	74.390	131.283	188.282	245.163	302.162	359.043	416.042	472.923	529.922	584	
10"	220	100	Rated Cv	93.732	165.506	237.221	308.936	380.651	452.483	524.082	595.914	667.629	736	
			Rated Cv	119.019	210.123	301.227	392.331	483.435	574.539	665.293	756.514	847.851	934	
			Rated Cv	133.853	236.403	338.837	441.387	543.821	646.371	748.805	851.355	953.789	1051	
12"	282	100	Rated Cv	185.946	328.325	470.704	612.966	755.346	897.725	1040.104	1182.016	1324.512	1460	
			Rated Cv	193.421	341.406	489.509	637.494	785.597	933.582	1081.685	1229.904	1378.24	1518	
14"	313	100	Rated Cv	208.254	367.686	527.118	686.55	845.982	1005.414	1164.846	1324.512	1483.36	1635	
			Rated Cv	223.205	393.966	564.845	735.606	906.485	1077.246	1248.592	1419.12	1589.648	1752	
			Rated Cv	238.038	420.246	602.338	784.662	966.870	1149.078	1331.52	1513.728	1695.936	1869	
			Rated Cv	267.822	472.806	677.790	882.774	1087.758	1292.976	1497.376	1702.944	1907.344	2102	
			16"	400	100	Rated Cv	371.891	656.650	941.291	1226.4	1510.224	1795.216	2080.208	2365.200
20"	500	120	Rated Cv	476.077	840.493	1205.376	1569.792	1934.208	2298.624	2663.040	3027.456	3391.872	3738	
			Rated Cv	595.096	1050.616	1505.552	1961.072	2416.592	2872.112	3327.632	3783.152	4238.672	4672	
24"	600	120	Rated Cv	751.258	1326.848	1901.504	2476.160	3051.984	3626.640	4201.296	4777.120	5351.776	5898	
			Rated Cv	900.061	1588.480	2277.600	2966.720	3655.840	4344.960	5034.080	5723.200	6412.320	7066	

G110 系列控制阀技术数据 Technical Data Sheet of G110 Series Control Valve

G110-H2 型结构图及部件图 (Sectional drawing of G110-H2) 2 级多孔阀芯 2 stages Perforated trim



非平衡式 Unbalanced



压力平衡式 Balanced

G110 系列控制阀技术数据
Technical Data Sheet of G110 Series Control Valve

Cv 值与开度
Cv value and travel

2 级多孔阀芯 2 stages Perforated trim (H2)
流开 Flow to open (FTO)
等百分比流量特性 Equal percentage flow characteristic

阀门尺寸 Valve size	阀座尺寸 mm Seat diameter	行程 mm Stroke	额定 Cv	阀门开度 Travel									
				10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1/2"	15	20	Rated Cv	0.042	0.062	0.090	0.130	0.188	0.271	0.392	0.569	0.822	1.17
1"	20	20	Rated Cv	0.085	0.124	0.180	0.259	0.376	0.543	0.786	1.138	1.645	2.3
	25		Rated Cv	0.128	0.186	0.270	0.390	0.564	0.815	1.180	1.706	2.468	3.5
			Rated Cv	0.172	0.249	0.360	0.520	0.752	1.087	1.573	2.275	3.290	4.7
1 1/4"	30	20	Rated Cv	0.215	0.311	0.450	0.649	0.940	1.360	1.967	2.844	4.113	5.8
			Rated Cv	0.257	0.373	0.540	0.780	1.128	1.632	2.359	3.413	4.936	7
			Rated Cv	0.300	0.434	0.630	0.910	1.316	1.904	2.753	3.982	5.758	8.2
1 1/2"	36	20	Rated Cv	0.343	0.498	0.719	1.040	1.504	2.176	3.147	4.551	6.582	9.3
			Rated Cv	0.387	0.559	0.809	1.170	1.692	2.448	3.540	5.119	7.404	10.5
			Rated Cv	0.430	0.621	0.899	1.300	1.880	2.720	3.934	5.688	8.226	11.7
			Rated Cv	0.473	0.683	0.989	1.431	2.069	2.991	4.326	6.257	9.050	12.8
			Rated Cv	0.515	0.746	1.079	1.560	2.257	3.263	4.720	6.826	9.872	14
2"	46	20	Rated Cv	0.558	0.808	1.169	1.690	2.445	3.536	5.114	7.396	10.694	15
			Rated Cv	0.602	0.870	1.259	1.821	2.633	3.808	5.507	7.965	11.518	16
			Rated Cv	0.645	0.932	1.349	1.951	2.821	4.080	5.901	8.533	12.346	17.5
			Rated Cv	0.688	0.995	1.439	2.080	3.009	4.352	6.294	9.102	13.163	18.7
3"	80	30	Rated Cv	0.773	1.119	1.619	2.341	3.386	4.896	7.080	10.240	14.810	21
			Rated Cv	0.816	1.181	1.709	2.471	3.574	5.168	7.474	10.809	15.628	22
			Rated Cv	*									
4"	100	30	Rated Cv	1.634	2.363	3.418	4.943	7.148	10.337	14.950	21.620	31.267	44.4
			Rated Cv	1.677	2.425	3.508	5.073	7.336	10.609	15.348	22.192	32.085	45.5
			Rated Cv	*									
6"	113	60	Rated Cv	2.408	3.483	5.036	7.284	10.534	15.231	22.028	31.863	46.078	65.4
			Rated Cv	2.452	3.545	5.126	7.414	10.722	15.511	22.426	32.424	46.895	66.6
			Rated Cv	*									
	143		Rated Cv	4.860	7.028	10.164	14.693	21.258	30.742	44.454	64.287	92.961	132
			Rated Cv	4.903	7.091	10.254	14.834	21.444	31.010	44.851	64.859	93.790	133
			Rated Cv	*									
			Rated Cv	7.871	11.382	16.457	23.804	34.421	49.780	71.996	104.120	150.555	214
8"	172	60	Rated Cv	7.956	11.507	16.644	24.061	34.806	50.329	72.778	105.250	152.190	216
			Rated Cv	*									
			Rated Cv	8.473	12.252	17.719	25.626	37.061	53.588	77.497	112.070	162.118	230
10"	220	100	Rated Cv	8.559	12.381	17.905	25.883	37.434	54.137	78.291	113.210	163.754	232
			Rated Cv	*									
			Rated Cv	15.184	21.958	31.758	45.914	66.401	96.021	138.875	200.780	290.365	412
12"	282	100	Rated Cv	15.231	22.017	31.84	46.054	66.588	96.302	139.230	201.360	291.182	413
			Rated Cv	*									
			Rated Cv	21.888	31.664	45.786	66.214	95.753	138.525	200.200	289.547	418.728	595
14"	313	100	Rated Cv	21.935	31.723	45.879	66.342	95.940	138.760	200.662	290.130	419.546	596
			Rated Cv	*									
			Rated Cv	27.355	39.560	57.209	82.729	119.603	172.981	250.186	361.846	523.264	743

*: 如需了解更多数据, 请与艾坦姆公司联系。 For more other specifications request please contact with Utmost.

G110 系列控制阀技术数据

Technical Data Sheet of G110 Series Control Valve

Cv 值与开度 Cv value and travel

2 级多孔阀芯 2 stages Perforated trim (H2)

流开 Flow to open (FTO)

线性流量特性 Linear flow characteristic

阀门尺寸 Valve size	阀座尺寸 mm Seat diameter	行程 Stroke mm	额定 Cv	阀门开度 Travel									
				10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1/2"	15	20	Rated Cv	0.148	0.262	0.376	0.489	0.604	0.717	0.832	0.945	1.059	1.17
1"	15	20	Rated Cv	0.297	0.524	0.752	0.980	1.208	1.435	1.663	1.891	2.119	2.3
			Rated Cv	0.446	0.787	1.129	1.471	1.813	2.154	2.496	2.837	3.179	3.5
			Rated Cv	0.595	1.050	1.506	1.961	2.417	2.872	3.328	3.783	4.239	4.7
			Rated Cv	0.743	1.313	1.882	2.452	3.020	3.590	4.159	4.729	5.298	5.8
			Rated Cv	0.892	1.576	2.259	2.942	3.625	4.309	4.992	5.675	6.359	7
			Rated Cv	1.041	1.838	2.635	3.433	4.229	5.027	5.824	6.621	7.418	8
1 1/2"	36	20	Rated Cv	1.189	2.100	3.011	3.922	4.833	5.744	6.655	7.566	8.477	9.3
			Rated Cv	1.339	2.363	3.388	4.413	5.438	6.463	7.488	8.512	9.538	10.5
			Rated Cv	1.487	2.626	3.764	4.903	6.042	7.181	8.320	9.458	10.597	11.7
			Rated Cv	1.636	2.888	4.142	5.394	6.647	7.899	9.152	10.405	11.658	12.8
2"	46	20	Rated Cv	1.785	3.151	4.518	5.884	7.250	8.618	9.984	11.351	12.720	14
			Rated Cv	1.933	3.414	4.894	6.375	7.855	9.336	10.816	12.299	13.782	15
			Rated Cv	2.083	3.677	5.271	6.866	8.460	10.054	11.648	13.245	14.834	16
			Rated Cv	2.231	3.940	5.647	7.356	9.064	10.772	12.486	14.191	15.896	17.5
			Rated Cv	2.379	4.201	6.019	7.845	9.668	11.490	13.315	15.137	16.959	18.7
			Rated Cv	2.529	4.464	6.401	8.336	10.273	12.206	14.144	16.083	18.011	20
2 1/2"	50	20	Rated Cv	2.677	4.727	6.777	8.827	10.876	12.930	14.974	17.029	19.073	21
			Rated Cv	2.827	4.990	7.154	9.317	11.481	13.642	15.815	17.976	20.136	22
			Rated Cv	2.975	5.252	7.530	9.808	12.089	14.366	16.644	18.922	21.199	23
			Rated Cv	3.123	5.515	7.906	10.298	12.684	15.079	17.473	19.868	22.250	24.5
			Rated Cv	3.273	5.778	8.283	10.789	13.292	15.803	18.303	20.814	23.313	25.7
			Rated Cv	3.421	6.037	8.660	11.279	13.899	16.516	19.132	21.760	24.376	27
			Rated Cv	3.569	6.303	9.036	11.773	14.507	17.240	19.973	22.706	25.439	28
			Rated Cv	*									
			Rated Cv	4.165	7.354	10.542	13.736	16.924	20.113	23.302	26.490	29.679	33
			Rated Cv	4.313	7.617	10.918	14.226	17.520	20.825	24.131	27.436	30.730	34
3"	80	30	Rated Cv	*									
			Rated Cv	10.414	18.384	26.362	34.328	42.305	50.271	58.248	66.214	74.191	82
			Rated Cv	10.562	18.653	26.736	34.818	42.901	50.995	59.077	67.160	75.243	83
4"	100	30	Rated Cv	14.577	25.743	36.897	48.063	59.218	70.384	81.538	92.704	103.859	114
			Rated Cv	14.728	26.000	37.283	48.554	59.825	71.096	82.379	93.650	104.921	116
			Rated Cv	*									
6"	143	60	Rated Cv	27.226	48.063	68.900	89.749	110.586	131.400	152.307	173.098	193.888	214
			Rated Cv	27.518	48.589	69.660	90.730	111.789	132.918	153.942	174.966	196.107	216
			Rated Cv	*									
			Rated Cv	39.876	70.395	100.915	131.400	162.002	192.486	222.971	253.456	284.058	313
			Rated Cv	40.016	70.652	101.289	131.867	162.586	193.187	223.789	254.507	285.109	314
			Rated Cv	*									
8"	172	60	Rated Cv	52.513	92.716	132.918	173.098	213.277	253.573	293.752	333.931	374.11	412
			Rated Cv	52.665	92.984	133.269	173.565	213.978	254.274	294.57	334.866	375.162	413
			Rated Cv	*									
10"	220	100	Rated Cv	94.620	167.024	239.44	311.856	384.389	456.805	529.221	601.637	674.053	743
			Rated Cv	94.923	167.608	240.258	312.907	385.557	458.206	530.856	603.506	676.155	745
			Rated Cv	*									
12"	282	100	Rated Cv	136.773	241.426	346.078	450.731	555.384	660.037	764.690	869.342	973.995	1073
			Rated Cv	137.006	241.893	346.779	451.666	556.552	661.438	766.325	871.211	976.098	1076
			Rated Cv	*									
14"	313	100	Rated Cv	189.216	334.048	478.997	623.829	768.661	913.493	1058.325	1203.040	1347.872	1486
			Rated Cv	189.683	334.866	480.048	625.230	770.530	915.712	1060.894	1206.544	1351.376	1489
			Rated Cv	*									
16"	400	120	Rated Cv	262.917	464.163	665.293	866.539	1067.786	1268.448	1470.512	1671.408	1872.304	2064
			Rated Cv	263.384	464.864	666.461	868.058	1069.654	1270.784	1472.848	1673.744	1875.808	2067
			Rated Cv	*									
20"	500	180	Rated Cv	420.714	742.731	1064.866	1386.416	1708.784	2031.152	2353.52	2674.72	2997.088	3303
			Rated Cv	421.298	743.782	1066.384	1388.752	1711.120	2033.488	2355.856	2679.392	3001.760	3308
			Rated Cv	*									
24"	600	200	Rated Cv	636.326	1123.382	1610.672	2097.728	2584.784	3071.840	3558.896	4045.952	4533.008	4996
			Rated Cv	*									
			Rated Cv	*									

*: 如需了解更多数据, 请与艾坦姆公司联系。 For more other specifications request please contact with Utmost.

G110 系列控制阀技术数据
Technical Data Sheet of G110 Series Control Valve

Cv 值与开度
Cv value and travel

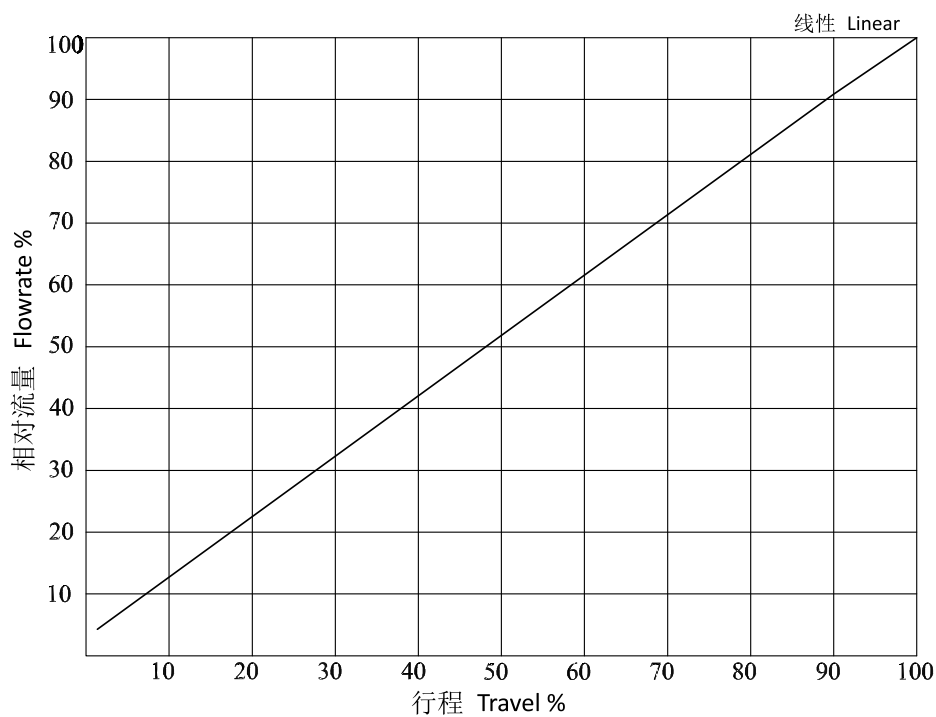
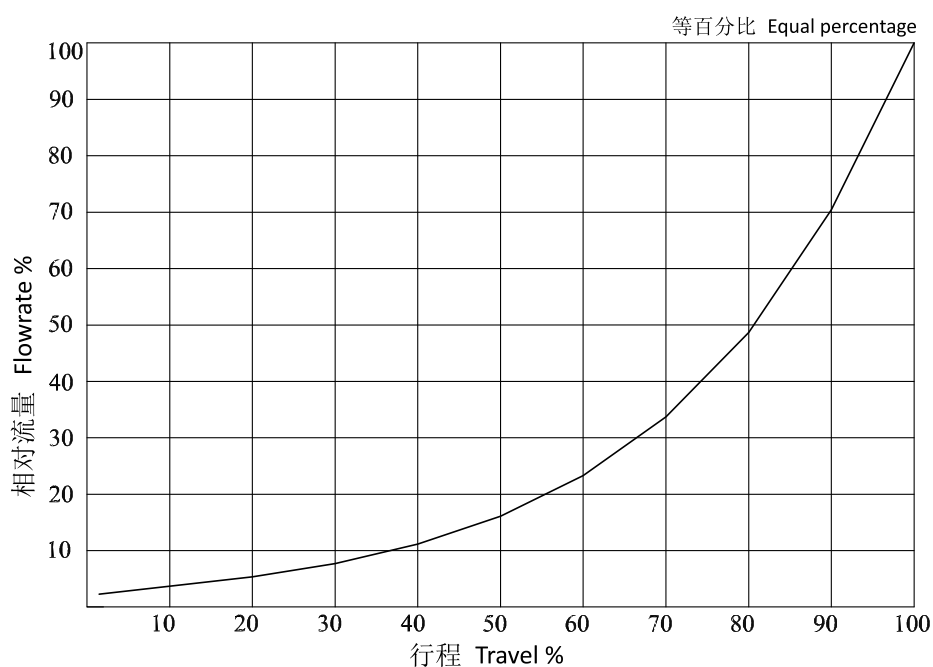
3 级多孔阀芯 3 stages Perforated trim (H3)
流开 Flow to open (FTO)
线性流量特性 Linear flow characteristic

阀门尺寸 Valve size	阀座尺寸 Seat diameter mm	行程 Stroke mm	额定 Cv	阀门开度 Travel									
				10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
3"	80	30	Rated Cv	3.569	6.303	9.036	11.773	14.507	17.240	19.973	22.706	25.439	28
			Rated Cv	*									
			Rated Cv	8.480	14.974	21.468	27.950	34.444	40.938	47.432	53.915	60.409	67
4"	100	30	Rated Cv	8.628	15.231	21.842	28.441	35.052	41.651	48.262	54.861	61.472	68
			Rated Cv	*									
			Rated Cv	11.902	21.012	30.123	39.233	48.344	57.454	66.564	75.675	84.785	93
6"	113	60	Rated Cv	12.054	21.269	30.496	39.724	48.951	58.166	67.394	76.621	85.848	95
			Rated Cv	12.194	21.538	30.870	40.214	49.547	58.891	68.223	77.567	86.899	96
			Rated Cv	*									
	143	60	Rated Cv	22.320	39.397	56.484	73.561	90.648	107.725	124.859	141.912	158.965	175
			Rated Cv	22.461	39.665	56.858	74.051	91.244	108.449	125.677	142.846	160.016	176
			Rated Cv	*									
8"	172	60	Rated Cv	32.587	57.524	82.461	107.398	132.334	157.330	182.208	207.203	232.082	256
			Rated Cv	32.727	57.781	82.835	107.888	132.918	158.030	183.026	208.138	233.133	257
			Rated Cv	*									
10"	220	100	Rated Cv	42.842	75.640	108.437	141.211	174.032	206.853	239.674	272.378	305.198	336
			Rated Cv	42.994	75.908	108.823	141.678	174.616	207.554	240.491	273.429	306.250	338
			Rated Cv	*									
12"	282	100	Rated Cv	77.216	136.306	195.406	254.507	313.608	372.709	431.810	490.910	550.011	606
			Rated Cv	77.508	136.890	196.224	255.558	314.893	374.110	433.445	492.779	552.114	609
			Rated Cv	*									
14"	313	100	Rated Cv	111.579	197.042	282.422	367.803	453.184	538.682	624.062	709.443	794.824	876
			Rated Cv	111.883	197.509	283.123	368.738	454.469	540.083	625.698	711.312	796.926	878
			Rated Cv	*									
16"	400	120	Rated Cv	154.526	272.845	391.163	509.598	627.917	746.235	864.554	982.872	1101.190	1214
			Rated Cv	154.877	273.429	391.981	510.533	629.085	747.637	866.189	984.741	1103.290	1216
			Rated Cv	*									
20"	500	180	Rated Cv	214.678	379.016	543.354	707.691	872.029	1036.366	1200.704	1365.392	1528.912	1685
			Rated Cv	215.029	379.483	544.054	708.626	873.197	1037.768	1201.872	1366.560	1531.248	1688
			Rated Cv	*									
24"	600	200	Rated Cv	343.509	606.426	869.459	1132.376	1395.760	1658.560	1921.360	2184.160	2446.960	2697
			Rated Cv	343.976	607.243	870.510	1133.890	1396.928	1660.900	1923.696	2186.560	2450.460	2700
			Rated Cv	*									
			Rated Cv	519.526	917.230	1315.168	1712.290	2110.576	2507.696	2905.980	3303.100	3701.390	4079

*: 如需了解更多数据, 请与艾坦姆公司联系。 For more other specifications request please contact with Utmost.

G110 系列控制阀技术数据 Technical Data Sheet of G110 Series Control Valve

G110 系列控制阀流量特性曲线（等百分比、线性） G110 Series Control Valve Flow Characteristic Flow Chart(Equal percentage/Linear)



G110 系列控制阀技术数据
Technical Data Sheet of G110 Series Control Valve

G110 系列控制阀最大关闭压差 bar
Max. shut off differential pressure (valve closed)

PTFE V 型填料 PTFE packing (V-rings), 泄漏等级 IV 级 Leakage class IV,
非压力平衡阀芯 Unbalancing plug1), 流开 Flow-to open)

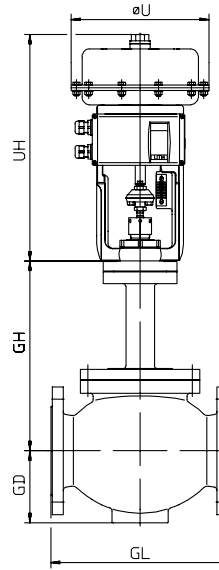
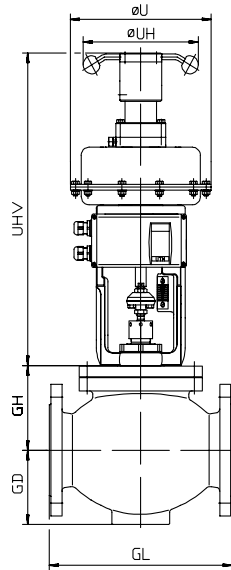
UT 型执行机构 Actuator Type UT (多弹簧执行机构 Multi-spring actuator)				气开 Air to open / 弹簧关 Spring to close 弹簧数量 No. of springs				气关 Air to close / 弹簧开 Spring to open 弹簧数量 No. of springs				
				3	6	9	12	3	3	3	6	6
公称尺寸 DN	最大行程 Max. stroke (mm)	执行机构尺寸 Actuator size	阀座尺寸 Seat-Ø (mm)	bar				最小仪表气源 [bar] Instrument air min. [bar]				
DN15 1/2"	20	UT I-20 320 cm2	15	50.0				3.0	4.5	6.0	4.5	6.0
			10	50.0				50.0	50.0	50.0	50.0	50.0
			5	50.0				50.0	50.0	50.0	50.0	50.0
DN25 1"	20	UT I-20 320 cm2	25	32.7	50.0			50.0	50.0	50.0	50.0	50.0
			15	50.0	50.0			50.0	50.0	50.0	50.0	50.0
			10	50.0	50.0			50.0	50.0	50.0	50.0	50.0
DN40 1 1/2"	20	UT I-20 320 cm2	36	14.1	37.7			37.7	50.0	50.0	37.7	50.0
			30	21.6	50.0			50.0	50.0	50.0	50.0	50.0
			25	32.7	50.0			50.0	50.0	50.0	50.0	50.0
DN50 2"	20	UT I-20 320 cm2	46	7.1	21.5			21.5	50.0	50.0	21.5	50.0
			36	13.1	36.7			36.7	50.0	50.0	36.7	50.0
			30	20.2	50.0			50.0	50.0	50.0	50.0	50.0
DN65 2-1/2"	20	UT I-20 320 cm2	50	5.7	17.9			17.9	42.3	50.0	17.9	42.3
			46	7.1	21.5			21.5	50.0	50.0	21.5	50.0
			36	13.1	36.7			36.7	50.0	50.0	36.7	50.0
DN80 3"	30	UT II-30 720 cm2	80	6.5	16.4	22.4	28.3	18.8	40.3	50.0	20.0	41.5
			50	18.9	44.4	50.0	50.0	50.0	50.0	50.0	50.0	50.0
			46	22.7	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
DN100 4"	30	UT II-30 720 cm2	100	3.7	10.1	13.9	17.7	11.6	25.4	39.1	12.4	26.1
			80	6.5	16.4	22.4	28.3	18.8	40.3	50.0	20.0	41.5
			50	18.9	44.4	50.0	50.0	50.0	50.0	50.0	50.0	50.0
DN150 6"	60	UT III-60 720 cm2	90	4.9	12.7	17.4	22.2	14.0	31.0	47.9	14.0	31.0
			113	2.7	7.7	10.7	13.7	8.5	19.3	30.1	8.5	19.3
			143	1.4	4.5	6.4	8.3	5.0	11.7	18.5	5.0	11.7
DN200 8"	60	UT III-60 720 cm2	113	2.7	7.7	10.7	13.7	8.5	19.3	30.1	8.5	19.3
			143	1.4	7.7	6.4	8.3	5.0	11.7	18.5	5.0	11.7
			172	0.8	2.9	4.2	5.5	3.3	7.9	12.6	3.3	7.9

UTA 型气动多弹簧执行机构 Actuator series UTA (multi-spring actuator)		气开 Air to open / 弹簧关 Spring to close 弹簧数量 No. of springs				气关 Air to close / 弹簧开 Spring to open 弹簧数量 No. of springs				
		2	4	6	8	2	2	2	4	4
公称尺寸 DN	阀座尺寸 Seat-Ø(mm)	bar				最小仪表气源 [bar] p Instrument air min. [bar]				
DN150 6"	90	12.7	28.4	44.2	50.0	50.0	50.0	50.0	-	-
	113	7.7	17.7	27.7	37.6	47.6	50.0	50.0	-	-
	143	4.5	10.7	17.0	23.2	29.4	41.9	50.0	-	-
DN200 8"	113	7.7	17.7	27.7	37.6	47.6	50.0	50.0	-	-
	143	4.5	10.7	17.0	23.2	29.4	41.9	50.0	-	-
	172	2.9	7.2	11.5	15.8	20.2	28.8	37.4	-	-
DN250 10"	143	4.5	10.7	17.0	23.2	29.4	41.9	50.0	-	-
	172	2.9	7.2	11.5	15.8	20.2	28.8	37.4	-	-
	220	1.4	3.9	6.4	8.7	11.8	18.6	25.4	-	-
DN300 12"	172	2.9	7.2	11.5	15.8	20.2	28.8	37.4	-	-
	220	1.4	3.9	6.4	8.7	11.8	18.6	25.4	-	-
	282	0.7	2.2	3.7	5.2	7.0	11.2	15.3	-	-
DN350 14"	220	1.4	3.9	6.4	8.7	11.8	18.6	25.4	-	-
	282	0.7	2.2	3.7	5.2	7.0	11.2	15.3	-	-
	313	0.5	1.7	2.9	4.1	5.6	9.0	12.4	-	-
DN400 16"	282	0.7	2.2	3.7	5.2	7.0	11.2	15.3	-	-
	313	0.5	1.7	2.9	4.1	5.6	9.0	12.4	-	-
	400	-	0.4	0.9	1.3	3.3	5.4	7.5	-	-

注：其他更高压差或压力平衡式阀芯的最大关闭压差请与艾坦姆公司联系。
Remark: For higher differential pressures, balanced trim demand, please contract with Utmost.

G110 系列控制阀技术数据 Technical Data Sheet of G110 Series Control Valve

G110 系列控制阀重量及尺寸 Weights and Dimensions of G110



重量和尺寸 Weights and dimensions

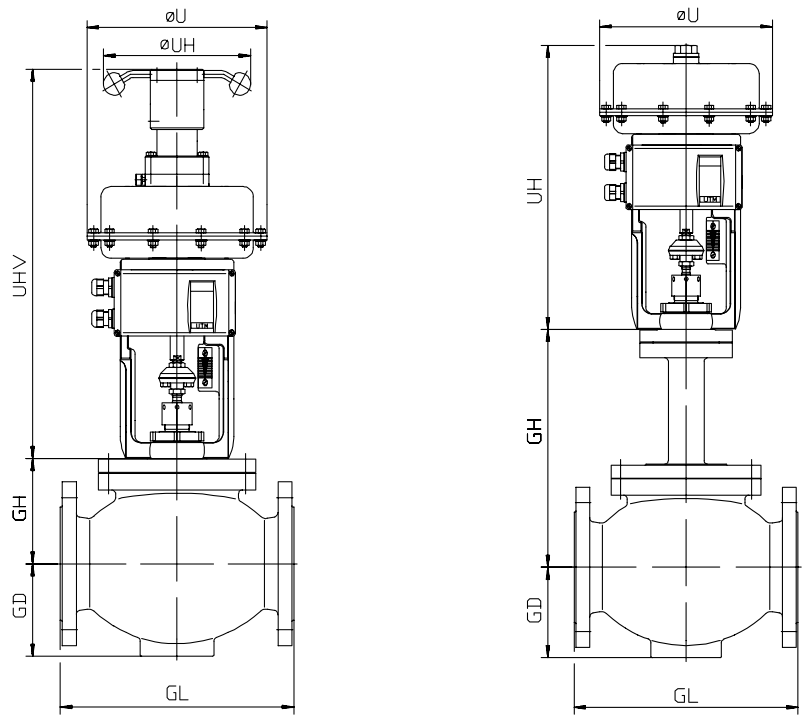
G110 系列 G110 series	公称尺寸 DN		15	20	25	32	40	50	65	80	100	
	压力等级 ANSI NPS		1/2"	3/4"	1"	-	1-1/2"	2"	-	3"	4"	
	GL PN10-PN40		130	150	160	180	200	230	290	310	350	
	GL Class 150 RF		178	181	184	-	222	254	-	298	352	
	GL Class 150 RTJ		-	-	197	-	235	267	-	311	365	
	GL Class 300 RF		190	194	197	-	235	267	-	317	368	
	GL Class 300 RTJ		202	206	210	-	248	282	-	333	384	
	GH	DEK1	114				115			156	181	
		DEK2	203				167			248	267	
		DEK3	203				167			248	267	
		DEK4	228				233			390	389	
		DEK5	** 按需提供 On request									
DEK7		-				-			196	221		
	DEK8	-				-			261	286		
GD		48	59	62	70	78	83	93	106	136		
UT 型执行机构 Actuator Type UT	ØU	UT I	270									
		UT II	400									
		UT III								400		
	UH	UT I	361									
		UT II	489									
		UT III								625		
	UHV	UT I	508									
		UT II	651									
		UT III								888		
	Weight* ca. kg	UT I	20	22	23	24	31	33	41	70	93	
		UT II	45	47	48	49	56	58	66	95	118	
		UT III	50	52	53	54	61	63	71	100	123	

*) 重量 Weight: 执行机构不含手轮的重量 Actuator weight without hand wheel

**) 按需提供 On request

G110 系列控制阀技术数据
Technical Data Sheet of G110 Series Control Valve

G110 系列控制阀重量及尺寸
Weights and dimensions of G110



重量和尺寸 Weights and dimensions

G110 系列 G110 series	公称尺寸 DN		150	200	250	300	350	400	500
	压力等级 ANSI NPS		6"	8"	10"	12"	14"	16"	20"
	GL PN10-PN40		480	600	730	850	980	1100	1250
	GL Class 150 RF		451	543	673	737	889	1016	1250
	GL Class 150 RTJ		464	555.7	-	-	-	-	-
	GL Class 300 RF		473	568	708	775	927	1057	1250
	GL Class 300 RTJ		489	584					
	GH	DEK1	260	295	360	395	465	520	600
		DEK2	355	410	510	545	615	670	
		DEK3	355	410	510	545	615	670	
		DEK4	575	605	850	850	880		
DEK5		** 按需提供 On request							
DEK7		260	295	360	395	465	520	600	
	DEK8	355	410	510	545	615	670		
GD		190	240	305	335	395	445	540	
UT 型 /UTA 型执行机构 Actuator Type UT/UTA	øU	UT III	400						
		UTA	598						
	UH	UT III	625						
		UTA	840		990			1580	
	UHV	UT III	888						
	Weight* ca. kg	UT III	200	260					
		UTA	340	400	460	760	850	1500	1800

*) 重量 Weight: 执行机构不含手轮的重量 Actuator weight without hand wheel

**) 按需提供 On request

G150 系列控制阀技术数据 Technical Data Sheet of G150 Series Control Valve

基本规格 General Data

阀门系列	Series	G150
公称尺寸	Nominal Size DN /NPS	DN(15) 25-400 / (1/2") 1"-16"
压力等级	Nominal Pressure PN / ANSI	PN 63-400 / Class 600-2500lbs
流量特性	Characteristics	等百分比或线性 equal perc. or linear
可调比	Rangeability	50:1
阀芯导向	Plug guide	阀杆导向 stem guided, 可选双导向 option: double guided
泄漏等级	Seat leakage	金属硬密封 IV 级 Metal sealing: IEC 60534-4 leakage class IV ; 金属硬密封 V 级 Metal sealing: IEC 60534-4 leakage class V ; 软密封: VI 级 Soft sealing: IEC 60534-4 leakage class VI
波纹管密封	Bellows sealing (option)	双层波纹管, 标准材质 316Ti, 可选材质: 哈氏合金、Monel、Inconel 等其他材料 Seamless, double walled, made of 316SS, Option: Hastelloy, Monel, Inconel and other materials
保温夹套	Heating jacket (option)	进出口连接方式: 法兰 1/2" 或 1" Connections 1/2" or 1" flange type
低温设计	Low temperature design (option)	最低到 -196°C Low to -196°C

材质 Material

阀体材质 Body Material	GB 标准	ASTM 标准	温度范围 Temperature range	
	ZG280-520	A 216 WCB	-29°C to 425°C	
	ZG240-450B	A 216 WCC	-29°C to 425°C	
		A 352 LCB	-46°C to 345°C	
	06Cr19Ni10	A351CF8	-196°C to 538°C	
	06Cr17Ni12Mo2	A 351 CF8M	-196°C to 538°C	
	022Cr19Ni10	A351CF3	-196°C to 425°C	
	022Cr17Ni12Mo2	A 351 CF3M	-196°C to 455°C	
	ZG15Cr1MoG	A 217 WC6	最高到 595°C	up 595°C
	ZG12Cr2Mo1G	A 217 WC9	最高到 595°C	up 595°C
		A 217 C12A		
		A494-CW-2M		
		Inconel 600		
		Inconel 625		
		Monel 400		
		A351 CD3MN		
		A351 CN7M	最高到 316°C	up to 316°C
上阀盖材质 Bonnet Material	≤DN65 : 上阀盖最低配置为奥氏体不锈钢 ≤ DN65: the minimum configuration of upper valve is austenitic stainless steel			

G150 系列控制阀技术数据 Technical Data Sheet of G150 Series Control Valve

阀内件材质 Trim material				
序号 Material No.	抛物线型阀芯 Contoured Plug	多孔阀芯 Perforated plug H1	阀座 Seat	阀座密封 Seat sealing
1	440C*	440B 渗氮 440B nitrided	420SS*	金属 metallic/ 或软密封 soft sealing
2	316SS*	316SS 渗氮 316SS nitrided	316SS*	金属 metallic/ 或软密封 soft sealing
3	420SS 硬化处理 420SS hardened	420SS 硬化处理 420SS hardened	420SS 硬化处理 420SS hardened	金属 metallic/ 或软密封 soft sealing
4	440B*	440B 渗氮 440B nitrided	420SS *	金属 metallic/ 或软密封 soft sealing
5	440B*	440B 渗氮 440B nitrided	440B	金属 metallic/ 或软密封 soft sealing
6	316SS 堆焊 stellite 316SS+stellite	316SS 渗氮 316SS nitrided	316SS*	金属 metallic/ 或软密封 soft sealing
7	Hasterlloy C-276	Hasterlloy C-276	Hasterlloy C-276	金属 metallic/ 或软密封 soft sealing
8	Inconel 625	Inconel 625	Inconel 625	金属 metallic/ 或软密封 soft sealing
9	Inconel 625 硬化 Inconel 625 hardened	Inconel 625 硬化 Inconel 625 hardened	Inconel 625	金属 metallic/ 或软密封 soft sealing
10	Monel 400	Monel 400	Monel 400	金属 metallic/ 或软密封 soft sealing
11	Monel K -500	Monel K -500	Monel 400	金属 metallic/ 或软密封 soft sealing
12	Alloy 20	Alloy 20	Alloy 20	金属 metallic/ 或软密封 soft sealing

* 标准配置 Standard configuration

如需其他材质要求, 请与艾坦姆公司联系。For other materials request please contact with Utmost.

G150 系列控制阀技术数据 Technical Data Sheet of G150 Series Control Valve

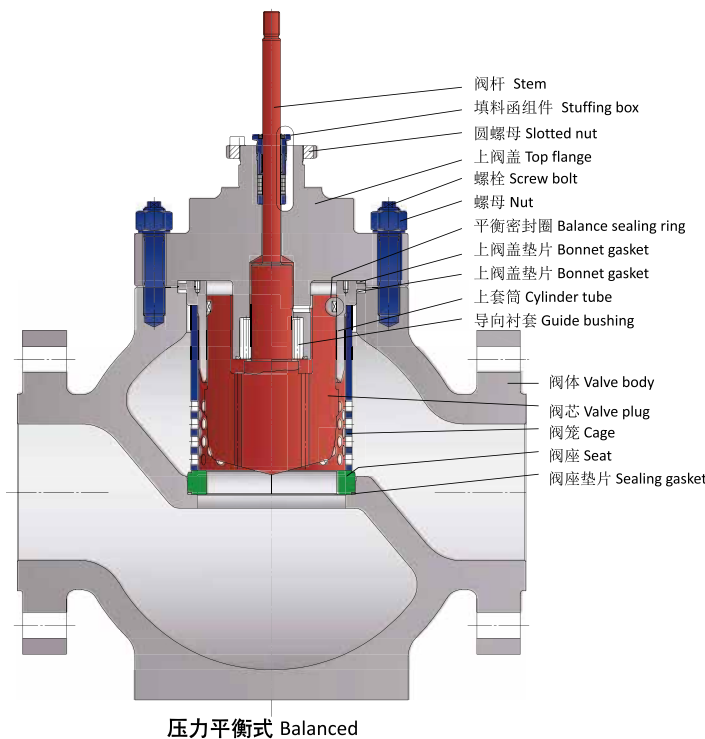
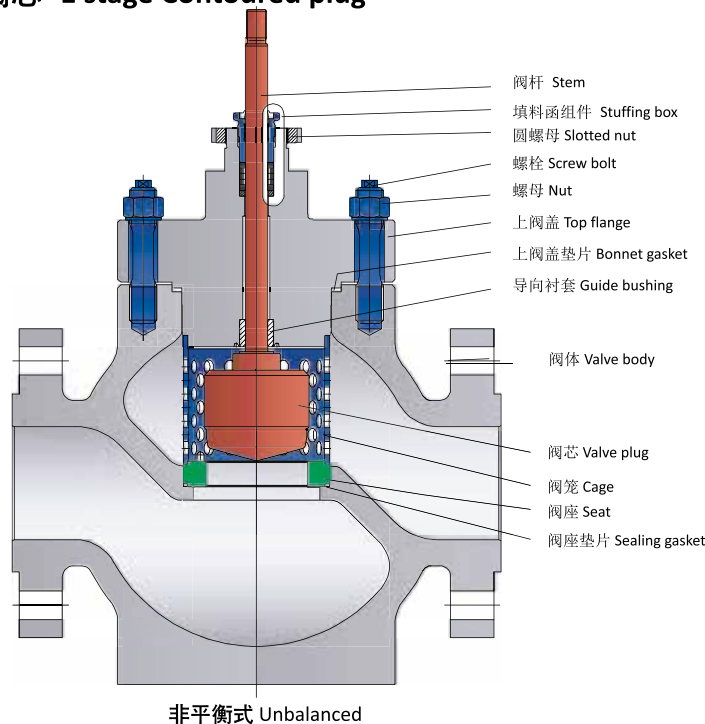
阀杆密封形式及耐温范围

Stem sealing types and Temperature ranges

密封形式 Sealing type	填料 Packing Ring (Item)	刮垢环 Wiper ring	温度范围 Temp.Range	上阀盖设计 Top flange design	备注 Remarks
可调整填料 Adjustable	加强石墨 / Inconel 编织填料 reinforced Graphite/ Inconel	丁腈橡胶 NBR (FKM)	-29 ~ 400°C	标准 / 带散热片型 Standard/cooling fins	标准工况 Standard operation
可调整填料 Adjustable Packing	纯石墨 Pure Graphite	VITON	-29 ~ 530°C	标准 / 带散热片型 Standard/ cooling fins	高温工况 High temperature
可调整填料 Adjustable Packing	石墨 /PTFE 编织填料 Braided Graphite/PTFE	丁腈橡胶 NBR	-196 ~ 200°C	延伸型 Extended bonnet	低温工况 Low temperature
波纹管密封 (带标准填料) Bellows sealing c/ w double safety sealing	PTFE V 型环 / 波纹管 (316SS 或哈氏 C 合金材质) PTFE V-Ring bellows (316SS or Hastelloy C)	丁腈橡胶 NBR (FKM)	-100 ~ 200°C	波纹管密封型 Bellows sealing	不锈钢预紧弹簧 preloaded stainless steel spring

G150 系列控制阀技术数据
Technical Data Sheet of G150 Series Control Valve

G150-C1 型结构图及部件图 (Sectional drawing of G150-C1)
一级抛物线型阀芯 1 stage Contoured plug



G150 系列控制阀技术数据 Technical Data Sheet of G150 Series Control Valve

Cv 值与开度 Cv value and travel

1 级抛物线型阀芯 C1 1 stage Contoured trim (C1)
流开 Flow to open (FTO)
等百分比流量特性 Equal percentage flow characteristic

阀门尺寸 Valve size	阀座尺寸 Seat diameter mm	行程 Stroke mm	额定 Cv	开度 Travel									
				10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1/2"	3	10	Rated Cv	0.008	0.013	0.019	0.027	0.040	0.057	0.083	0.122	0.176	0.25
			Rated Cv	0.011	0.015	0.022	0.032	0.047	0.068	0.098	0.141	0.206	0.29
			Rated Cv	0.013	0.021	0.030	0.044	0.064	0.092	0.135	0.194	0.281	0.4
			Rated Cv	0.018	0.025	0.035	0.051	0.075	0.109	0.157	0.227	0.328	0.47
			Rated Cv	0.021	0.033	0.048	0.069	0.101	0.146	0.212	0.307	0.443	0.63
			Rated Cv	0.027	0.039	0.056	0.082	0.118	0.171	0.248	0.357	0.517	0.73
			Rated Cv	0.036	0.053	0.076	0.111	0.160	0.233	0.336	0.487	0.704	1
			Rated Cv	0.042	0.062	0.090	0.130	0.188	0.271	0.392	0.569	0.822	1.17
1"	10	20	Rated Cv	0.068	0.099	0.144	0.208	0.300	0.434	0.628	0.910	1.316	1.9
			Rated Cv	0.107	0.155	0.224	0.325	0.470	0.680	0.983	1.421	2.056	2.9
			Rated Cv	0.172	0.249	0.360	0.520	0.752	1.087	1.573	2.275	3.290	4.7
1 1/2"	16	20	Rated Cv	0.300	0.434	0.630	0.910	1.316	1.904	2.753	3.982	5.758	8.2
	19		Rated Cv	0.473	0.683	0.989	1.431	2.069	2.991	4.326	6.257	9.050	12.9
	24		Rated Cv	0.773	1.119	1.619	2.341	3.386	4.896	7.080	10.240	14.810	21
2"	32	20	Rated Cv	1.118	1.617	2.338	3.381	4.890	7.072	10.228	14.787	21.386	31
	37	20	Rated Cv	1.849	2.674	3.867	5.592	8.088	11.703	16.913	24.458	35.379	50
2 1/2"	48	30	Rated Cv	2.925	4.229	6.116	8.845	12.790	18.501	26.747	38.684	55.947	80
3"	62	30	Rated Cv	4.301	6.220	8.995	13.012	18.816	27.203	39.338	56.893	82.274	117
4"	73	30	Rated Cv	6.451	9.330	13.490	19.517	28.219	40.810	59.007	85.334	123.458	176
6"	90	60	Rated Cv	11.182	16.177	23.383	33.825	48.904	70.734	102.282	147.869	213.861	304
	143		Rated Cv	16.340	23.640	34.187	49.430	71.482	103.380	149.504	216.197	312.674	445
8"	172	60	Rated Cv	27.962	40.436	58.470	84.552	122.29	176.835	255.675	369.789	534.71	753
10"	220	100	Rated Cv	38.708	55.982	80.954	117.034	169.243	244.813	354.021	512.051	740.395	1051
12"	282	100	Rated Cv	55.912	80.861	116.917	169.126	244.579	353.670	511.467	739.578	1069.538	1518
14"	313	100	Rated Cv	77.427	111.964	161.885	234.184	338.603	489.626	708.042	1023.986	1481.024	2102
16"	400	120	Rated Cv	107.538	155.461	224.84	325.171	470.237	680.126	983.456	1422.624	2056.848	2920

*: 如需了解更多数据, 请与艾坦姆公司联系。 For more other specifications request please contact with Utmost.

G150 系列控制阀技术数据
Technical Data Sheet of G150 Series Control Valve

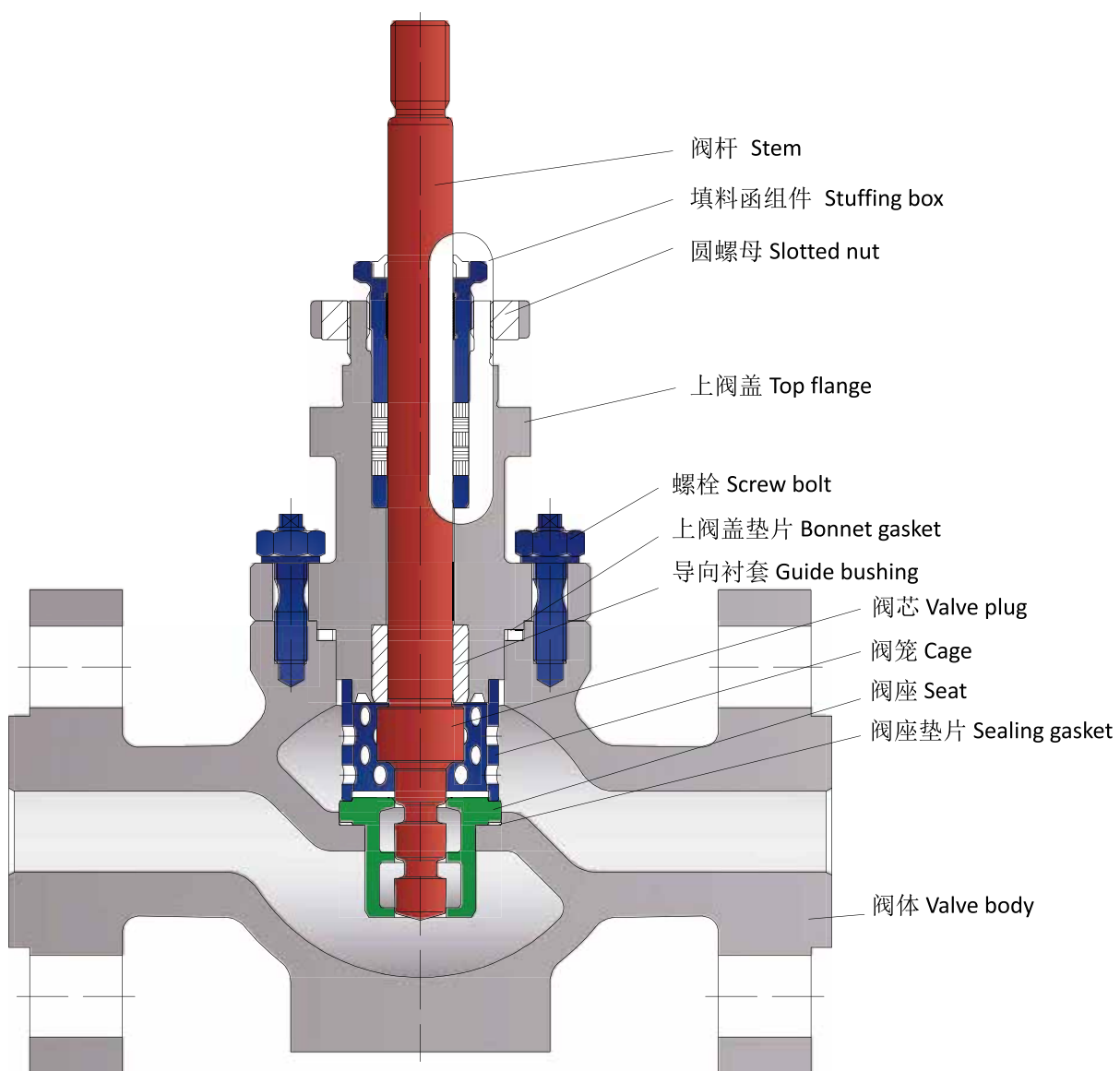
Cv 值与开度
Cv value and travel

1 级抛物线型阀芯 C1 1 stage Contoured trim (C1)
流开 Flow to open (FTO)
线性流量特性 Linear flow characteristic

阀门尺寸 Valve size	阀座尺寸 Seat diameter mm	行程 Stroke mm	额定 Cv	开度 Travel									
				10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1/2"	3	20	Rated Cv	0.005	0.009	0.013	0.017	0.021	0.025	0.028	0.032	0.036	0.04
			Rated Cv	0.008	0.015	0.022	0.029	0.036	0.042	0.049	0.056	0.063	0.07
			Rated Cv	0.012	0.022	0.032	0.042	0.051	0.061	0.071	0.081	0.090	0.1
	5	20	Rated Cv	0.014	0.026	0.037	0.048	0.06	0.071	0.083	0.093	0.105	0.12
			Rated Cv	0.020	0.035	0.051	0.067	0.082	0.098	0.113	0.129	0.145	0.16
			Rated Cv	0.023	0.041	0.060	0.078	0.096	0.114	0.132	0.151	0.169	0.19
			Rated Cv	0.032	0.056	0.080	0.104	0.129	0.153	0.178	0.202	0.226	0.25
			Rated Cv	0.036	0.065	0.093	0.121	0.151	0.179	0.208	0.236	0.264	0.29
			Rated Cv	0.050	0.089	0.129	0.167	0.206	0.246	0.284	0.323	0.363	0.4
			Rated Cv	0.058	0.104	0.150	0.195	0.241	0.286	0.332	0.377	0.423	0.47
			Rated Cv	0.080	0.142	0.202	0.264	0.325	0.387	0.448	0.510	0.571	0.63
			Rated Cv	0.093	0.165	0.237	0.308	0.380	0.452	0.523	0.596	0.667	0.73
			Rated Cv	0.126	0.225	0.322	0.419	0.517	0.614	0.711	0.810	0.907	1
			Rated Cv	0.148	0.262	0.376	0.489	0.604	0.717	0.832	0.945	1.059	1.17
	10	20	Rated Cv	0.237	0.419	0.602	0.784	0.966	1.148	1.330	1.513	1.695	1.9
			Rated Cv	0.371	0.656	0.940	1.225	1.510	1.795	2.079	2.364	2.649	2.9
1"	16	20	Rated Cv	0.595	1.050	1.506	1.961	2.417	2.872	3.315	3.783	4.239	4.7
	24		Rated Cv	1.041	1.838	2.635	3.433	4.229	5.027	5.824	6.621	7.418	8.2
			Rated Cv	1.636	2.888	4.142	5.394	6.647	7.899	9.152	10.405	11.658	12.9
1 1/2"	32	20	Rated Cv	2.677	4.727	6.777	8.827	10.876	12.930	14.974	17.029	19.073	21
2"	37	30	Rated Cv	3.867	6.828	9.789	12.755	15.710	18.676	21.631	24.598	27.553	31
	48		Rated Cv	6.397	11.293	16.188	21.082	25.988	30.882	35.776	40.670	45.575	50
2 1/2"	62	30	Rated Cv	10.116	17.859	25.603	33.346	41.090	48.834	56.578	64.322	72.066	80
3"	73	30	Rated Cv	14.880	26.268	37.656	49.044	60.432	71.820	83.208	94.596	105.984	117
4"	90	30	Rated Cv	22.320	39.397	56.484	73.561	90.648	107.725	124.859	141.912	158.965	176
6"	143	60	Rated Cv	38.684	68.293	97.902	127.546	157.096	186.763	216.314	245.981	275.531	304
			Rated Cv	56.531	99.806	143.080	186.413	229.629	272.962	316.178	359.510	402.726	445
8"	172	60	Rated Cv	96.699	170.762	244.696	318.747	392.798	466.850	540.784	614.835	688.886	761
10"	220	100	Rated Cv	133.853	236.403	338.837	441.387	543.821	646.371	748.805	851.355	953.789	1051
12"	282	100	Rated Cv	193.421	341.406	489.509	637.494	785.597	933.582	1081.685	1229.904	1378.240	1518
16"	313	100	Rated Cv	267.822	472.806	677.79	882.774	1087.758	1292.976	1497.376	1702.944	1907.344	2102
	400	120	Rated Cv	371.891	656.650	941.291	1226.4	1510.224	1795.216	2080.208	2365.200	2649.024	2920

G150 系列控制阀技术数据
Technical Data Sheet of G150 Series Control Valve

G150-C3 型结构图及部件图 (Sectional drawing of G150-C3)
3 级抛物线型抗气蚀阀芯 Multi stages contoured plug for Anti-cavitation valve



G150 系列控制阀技术数据
Technical Data Sheet of G150 Series Control Valve

Cv 值与开度
Cv value and travel

3 级抛物线型抗气蚀阀芯 C3 3 stage Contoured trim (C3)
流开 Flow to open (FTO)
等百分比流量特性 Equal percentage flow characteristic

阀门尺寸 Valve size	阀座尺寸 Seat diameter mm	行程 Stroke mm	额定 Cv	开度 Travel									
				10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1"	24	20	Rated Cv	0.068	0.099	0.144	0.208	0.300	0.434	0.628	0.910	1.316	1.9
			Rated Cv	0.107	0.155	0.224	0.325	0.470	0.681	0.983	1.421	2.056	2.9
			Rated Cv	0.172	0.249	0.360	0.520	0.752	1.087	1.573	2.274	3.290	4.7
1 1/2"	32	20	Rated Cv	0.300	0.434	0.630	0.910	1.316	1.904	2.753	3.982	5.758	8.2
	37		Rated Cv	0.430	0.621	0.899	1.300	1.880	2.720	3.934	5.688	8.226	11.7
2"	48	30	Rated Cv	0.645	0.932	1.349	1.951	2.821	4.080	5.901	8.533	12.346	17.5
2 1/2"	62	30	Rated Cv	1.031	1.493	2.158	3.121	4.514	6.528	9.441	13.654	19.739	28
	62	30	Rated Cv	1.376	1.990	2.878	4.162	6.019	8.705	12.591	18.209	26.327	37.4
3"	62	30	Rated Cv	1.031	1.493	2.158	3.121	4.514	6.528	9.441	13.654	19.739	28
	62	30	Rated Cv	1.376	1.990	2.878	4.162	6.019	8.705	12.591	18.209	26.327	37
4"	90	30	Rated Cv	1.849	2.674	3.867	5.592	8.088	11.703	16.913	24.458	35.379	50

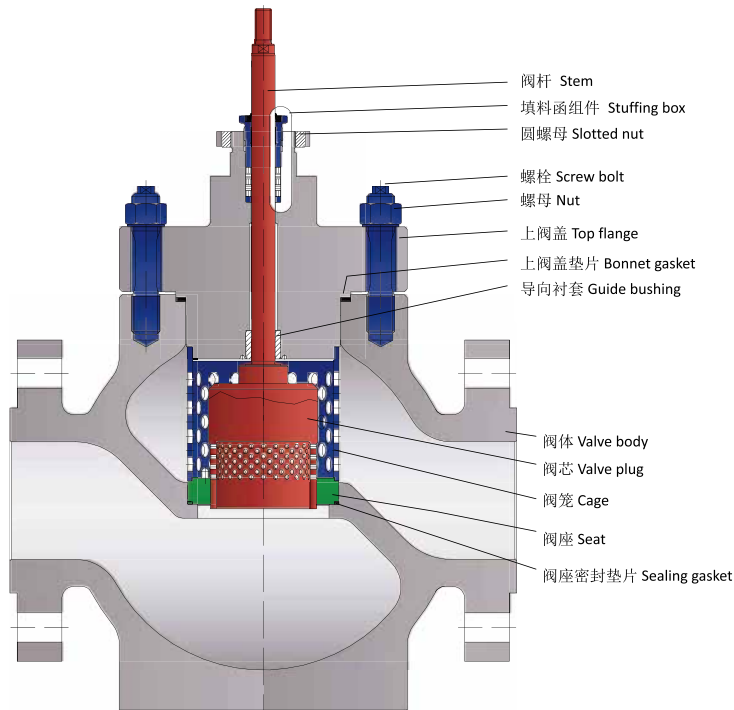
3 级抛物线型抗气蚀阀芯 C3 3 stage Contoured trim (C3)
流开 Flow to open (FTO)
线性流量特性 Linear flow characteristic

阀门尺寸 Valve size	阀座尺寸 Seat diameter mm	行程 Stroke mm	额定 Cv	开度 Travel									
				10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1"	24	20	Rated Cv	0.237	0.419	0.602	0.784	0.966	1.148	1.330	1.513	1.695	1.9
			Rated Cv	0.371	0.656	0.940	1.225	1.510	1.795	2.079	2.364	2.649	2.9
			Rated Cv	0.595	1.050	1.506	1.961	2.417	2.872	3.328	3.783	4.239	4.7
1 1/2"	32	20	Rated Cv	1.041	1.838	2.635	3.433	4.229	5.027	5.824	6.621	7.418	8.2
	37		Rated Cv	1.487	2.626	3.764	4.903	6.042	7.181	8.320	9.458	10.597	11.7
2"	48	30	Rated Cv	2.231	3.940	5.647	7.356	9.064	10.772	12.486	14.191	15.896	17.5
2 1/2"	62	30	Rated Cv	3.560	6.303	9.036	11.773	14.507	17.240	19.973	22.706	25.439	28
	62	30	Rated Cv	8.463	8.404	12.054	15.698	19.342	22.986	26.630	30.275	33.919	37.4
3"	62	30	Rated Cv	3.560	6.303	9.036	11.773	14.507	17.240	19.973	22.706	25.439	28
	62	30	Rated Cv	8.463	8.404	12.054	15.698	19.342	22.986	26.630	30.275	33.919	37.4
4"	90	30	Rated Cv	6.397	11.293	16.188	21.082	25.988	30.882	35.776	40.670	45.575	50

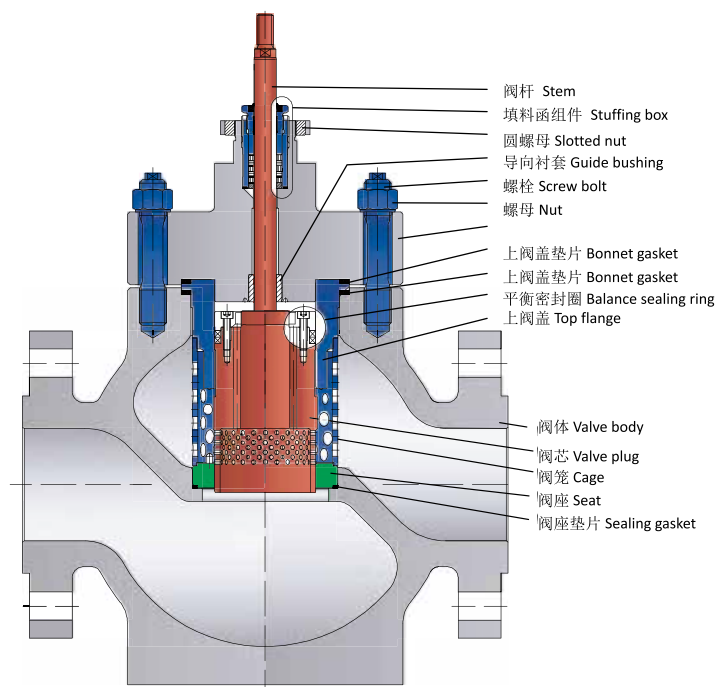
G150 系列控制阀技术数据 Technical Data Sheet of G150 Series Control Valve

G150-H1 型结构图及部件图 (Sectional drawing of G150-H1)

1 级多孔阀芯 1 stage Perforated trim



非平衡式 Unbalanced



压力平衡式 Balanced

G150 系列控制阀技术数据
Technical Data Sheet of G150 Series Control Valve

Cv 值与开度
Cv value and travel

1 级多孔阀芯 H1 1 stage Perforated trim (H1)
流开 Flow to open (FTO)
等百分比流量特性 Equal percentage flow characteristic

阀门尺寸 Valve size	阀座尺寸 Seat diameter mm	行程 Stroke mm	额定 Cv	开度 Travel										
				10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	
1/2"	19	20	Rated Cv	0.042	0.062	0.090	0.130	0.188	0.271	0.392	0.569	0.822	1.17	
			Rated Cv	0.068	0.099	0.144	0.208	0.300	0.434	0.628	0.910	1.316	1.9	
			Rated Cv	0.107	0.155	0.224	0.325	0.470	0.680	0.983	1.421	2.056	2.9	
1"	19	20	Rated Cv	0.172	0.249	0.360	0.520	0.752	1.087	1.573	2.275	3.290	4.7	
	24		Rated Cv	0.300	0.434	0.630	0.910	1.316	1.904	2.753	3.982	5.758	8.2	
1 1/2"	32	20	Rated Cv	0.473	0.683	0.989	1.431	2.069	2.991	4.326	6.257	9.050	12.9	
	37		Rated Cv	0.773	1.119	1.619	2.341	3.386	4.896	7.080	10.240	14.810	21	
2"	46	30	Rated Cv	1.118	1.617	2.338	3.381	4.890	7.072	10.228	14.787	21.386	29	
3"	73	30	Rated Cv	1.849	2.674	3.867	5.592	8.088	11.703	16.913	24.458	35.379	50	
4"	90	30	Rated Cv	2.365	3.421	4.946	7.154	10.346	14.962	21.631	31.291	45.248	65	
			Rated Cv	2.580	3.732	5.396	7.805	11.286	16.317	23.605	34.129	49.360	70	
			Rated Cv	2.925	4.229	6.116	8.845	12.790	18.501	26.747	38.684	55.947	80	
6"	90	60	Rated Cv	3.441	4.976	7.196	10.406	15.044	21.760	31.478	45.517	65.817	93	
			Rated Cv	3.656	5.286	7.646	11.056	15.990	23.126	33.440	48.355	69.928	99	
			Rated Cv	4.301	6.220	8.995	13.012	18.816	27.203	39.338	56.893	82.274	117	
			Rated Cv	4.730	6.842	9.894	14.308	20.697	29.924	43.274	62.581	90.497	128	
	143		Rated Cv	5.376	7.774	11.243	16.259	23.512	34.000	49.173	71.108	102.842	146	
			Rated Cv	6.021	8.707	12.591	18.209	26.338	38.088	55.071	79.646	115.176	164	
			Rated Cv	6.451	9.330	13.490	19.517	28.219	40.810	59.007	85.334	123.458	176	
			Rated Cv	6.882	9.951	14.390	20.814	30.099	43.531	62.944	91.022	131.634	187	
	8"		113	Rated Cv	8.602	12.439	17.987	26.011	37.621	54.405	78.676	113.787	164.571	234
				Rated Cv	9.032	13.058	18.887	27.320	39.502	57.127	82.613	119.486	172.747	246
172			Rated Cv	10.753	15.546	22.484	32.517	47.024	68.013	98.346	142.262	205.685	292	
			Rated Cv	11.182	16.177	23.383	33.825	48.904	70.734	102.282	147.869	213.861	304	
10"	220	100	Rated Cv	13.759	19.903	28.780	41.628	60.199	87.051	125.910	182.091	263.267	374	
			Rated Cv	17.205	24.878	35.986	52.034	75.243	108.811	157.330	227.526	329.142	467	
			Rated Cv	21.503	31.104	44.980	65.046	94.059	136.072	196.691	284.408	411.370	584	
12"	282	100	Rated Cv	27.098	39.186	56.671	81.947	118.552	171.346	247.85	358.459	518.358	736	
			Rated Cv	30.964	44.781	64.766	93.662	135.488	195.874	283.240	409.618	592.410	841	

G150 系列控制阀技术数据 Technical Data Sheet of G150 Series Control Valve

Cv 值与开度 Cv value and travel

1 级多孔阀芯 H1 1 stage Perforated trim (H1)
流开 Flow to open (FTO)
线性流量特性 Linear flow characteristic

阀门尺寸 Valve size	阀座尺寸 Seat diameter mm	行程 Stroke mm	额定 Cv	开度 Travel									
				10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1/2"	19	20	Rated Cv	0.148	0.262	0.376	0.489	0.604	0.717	0.832	0.945	1.059	1.17
			Rated Cv	0.237	0.419	0.602	0.784	0.966	1.148	1.330	1.513	1.695	1.9
			Rated Cv	0.371	0.656	0.940	1.225	1.510	1.795	2.079	2.364	2.649	2.9
1"	19	20	Rated Cv	0.595	1.050	1.506	1.961	2.417	2.872	3.328	3.783	4.239	4.7
	24		Rated Cv	1.041	1.838	2.635	3.433	4.229	5.027	5.824	6.621	7.418	8.2
1 1/2"	32	20	Rated Cv	1.636	2.888	4.142	5.394	6.647	7.899	9.152	10.405	11.658	12.8
	37		Rated Cv	2.677	4.727	6.777	8.827	10.876	12.930	14.974	17.029	19.073	21
2"	46	30	Rated Cv	3.867	6.828	9.789	12.755	15.710	18.676	21.631	24.598	27.553	30
3"	73	30	Rated Cv	6.397	11.293	16.188	21.082	25.988	30.882	35.776	40.670	45.575	50
4"	90	30	Rated Cv	8.182	14.448	20.709	26.969	33.241	39.502	45.762	52.023	58.295	64
			Rated Cv	8.926	15.756	22.589	29.422	36.255	43.088	49.920	56.753	63.586	70
			Rated Cv	11.902	21.012	30.123	39.233	48.344	57.454	66.564	75.675	84.785	93
6"	113	60	Rated Cv	14.880	26.268	37.656	49.044	60.432	71.820	83.208	94.596	105.984	117
			Rated Cv	16.364	28.896	41.417	53.950	66.471	79.004	91.524	104.057	116.578	128
			Rated Cv	18.595	32.832	47.070	61.297	75.535	89.772	104.01	118.202	132.451	146
			Rated Cv	20.825	36.769	52.712	68.655	84.598	100.541	116.485	132.451	148.336	164
			Rated Cv	22.320	39.397	56.484	73.561	90.648	107.725	124.859	141.912	158.965	175
			Rated Cv	23.804	42.025	60.245	78.466	96.687	114.908	133.152	151.373	169.594	187
	143	60	Rated Cv	29.749	52.525	75.301	98.077	120.888	143.664	166.440	189.216	211.992	234
			Rated Cv	37.189	65.665	94.129	122.640	151.022	179.522	208.021	236.520	264.902	292
8"	172	60	Rated Cv	38.684	68.293	97.902	127.546	157.096	186.763	216.314	245.981	275.531	304
10"	220	100	Rated Cv	47.608	84.049	120.538	156.979	193.421	229.862	266.304	302.746	339.187	374
			Rated Cv	56.531	99.806	143.080	186.413	229.629	272.962	316.178	359.510	402.726	444
			Rated Cv	74.390	131.283	188.282	245.163	302.162	359.043	416.042	472.923	529.922	584
12"	282	100	Rated Cv	93.732	165.506	237.221	308.936	380.651	452.483	524.198	595.914	667.629	736
			Rated Cv	119.019	210.123	301.227	392.331	483.435	574.539	665.643	756.747	847.851	934
14"	313	100	Rated Cv	133.853	236.403	338.837	441.387	543.821	646.371	748.805	851.355	953.789	1051
			Rated Cv	185.946	328.325	470.704	612.966	755.346	897.725	1040.104	1182.016	1324.512	1460
			Rated Cv	193.421	341.406	489.509	637.494	785.597	933.582	1081.685	1229.904	1378.240	1518
			Rated Cv	208.254	367.686	527.118	686.550	845.982	1005.414	1164.846	1324.512	1483.360	1635
16"	400	120	Rated Cv	223.205	393.966	564.845	735.606	906.485	1077.246	1248.592	1419.120	1589.648	1752
			Rated Cv	238.038	420.246	602.454	784.662	966.870	1149.078	1331.520	1513.728	1695.936	1869
			Rated Cv	267.822	472.806	677.790	882.774	1087.758	1292.976	1497.376	1702.944	1907.344	2102
			Rated Cv	371.891	656.650	941.291	1226.400	1510.224	1795.216	2080.208	2365.200	2649.024	2920

G150 系列控制阀技术数据
Technical Data Sheet of G150 Series Control Valve

Cv 值与开度
Cv value and travel

2 级多孔阀芯 H2 2 stage Perforated trim (H2)

流开 Flow to open (FTO)

等百分比流量特性 Equal percentage flow characteristic

阀门尺寸 Valve size	阀座尺寸 mm Seat diameter	行程 mm Stroke	额定 Cv	开度 Travel									
				10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1/2"	19	20	Rated Cv	0.042	0.062	0.090	0.130	0.188	0.271	0.392	0.569	0.822	1.17
1"	19		Rated Cv	0.085	0.124	0.180	0.259	0.376	0.543	0.786	1.138	1.645	2.3
	24		Rated Cv	0.128	0.186	0.270	0.390	0.564	0.815	1.180	1.706	2.468	3.5
	24		Rated Cv	0.172	0.249	0.360	0.520	0.752	1.087	1.573	2.275	3.290	4.7
1 1/2"	32	20	Rated Cv	0.215	0.311	0.450	0.649	0.940	1.360	1.967	2.844	4.113	5.8
			Rated Cv	0.257	0.373	0.540	0.780	1.128	1.632	2.359	3.413	4.936	7
			Rated Cv	0.300	0.434	0.630	0.910	1.316	1.904	2.753	3.982	5.758	8.2
	37		Rated Cv	0.343	0.498	0.719	1.040	1.504	2.176	3.147	4.551	6.582	9.3
			Rated Cv	0.387	0.559	0.809	1.170	1.692	2.448	3.540	5.119	7.404	10.5
			Rated Cv	0.430	0.621	0.899	1.300	1.880	2.720	3.934	5.688	8.226	11.7
			Rated Cv	0.473	0.683	0.989	1.431	2.069	2.991	4.326	6.257	9.050	12.8
			Rated Cv	0.515	0.746	1.079	1.560	2.257	3.263	4.720	6.826	9.872	14
2"	48	30	Rated Cv	0.558	0.808	1.169	1.690	2.445	3.536	5.114	7.396	10.694	15.2
			Rated Cv	*									
			Rated Cv	0.773	1.119	1.619	2.341	3.386	4.896	7.080	10.240	14.810	21
3"	73	30	Rated Cv	0.816	1.181	1.709	2.471	3.574	5.168	7.474	10.809	15.628	22
			Rated Cv	*									
			Rated Cv	1.634	2.363	3.418	4.943	7.148	10.337	14.950	21.620	31.267	44
4"	90	30	Rated Cv	1.677	2.425	3.508	5.073	7.336	10.609	15.348	22.192	32.085	46
			Rated Cv	*									
			Rated Cv	2.408	3.483	5.036	7.284	10.534	15.231	22.028	31.863	46.078	65
6"	113	60	Rated Cv	2.452	3.545	5.126	7.414	10.722	15.511	22.426	32.424	46.895	67
			Rated Cv	*									
			Rated Cv	4.860	7.028	10.164	14.693	21.258	30.742	44.454	64.287	92.961	132
	143	60	Rated Cv	4.903	7.091	10.254	14.834	21.444	31.010	44.851	64.859	93.790	133
			Rated Cv	*									
			Rated Cv	7.871	11.382	16.457	23.804	34.421	49.780	71.996	104.116	150.555	214
8"	172	60	Rated Cv	7.956	11.507	16.644	24.061	34.806	50.329	72.778	105.248	152.190	216
			Rated Cv	*									
			Rated Cv	8.473	12.252	17.719	25.626	37.061	53.588	77.497	112.070	162.118	230
10"	220	100	Rated Cv	8.559	12.381	17.905	25.883	37.434	54.137	78.291	113.214	163.754	232
			Rated Cv	*									
			Rated Cv	15.184	21.958	31.758	45.914	66.401	96.033	138.875	200.779	290.365	412
12"	282	100	Rated Cv	15.231	22.017	31.840	46.054	66.588	96.302	139.226	201.363	291.182	413
			Rated Cv	*									
			Rated Cv	21.888	31.664	45.786	66.214	95.753	138.525	200.195	289.547	418.728	595
14"	313	100	Rated Cv	21.935	31.723	45.879	66.342	95.940	138.758	200.662	290.131	419.546	596
			Rated Cv	*									
16"	400	120	Rated Cv	27.355	39.560	57.209	82.729	119.603	172.981	250.186	361.846	523.264	743

*: 如需了解更多数据, 请与艾坦姆公司联系。 For more other specifications request please contact with Utmost.

G150 系列控制阀技术数据

Technical Data Sheet of G150 Series Control Valve

Cv 值与开度

Cv value and travel

2 级多孔阀芯 H2 2 stage Perforated trim (H2)

流开 Flow to open (FTO)

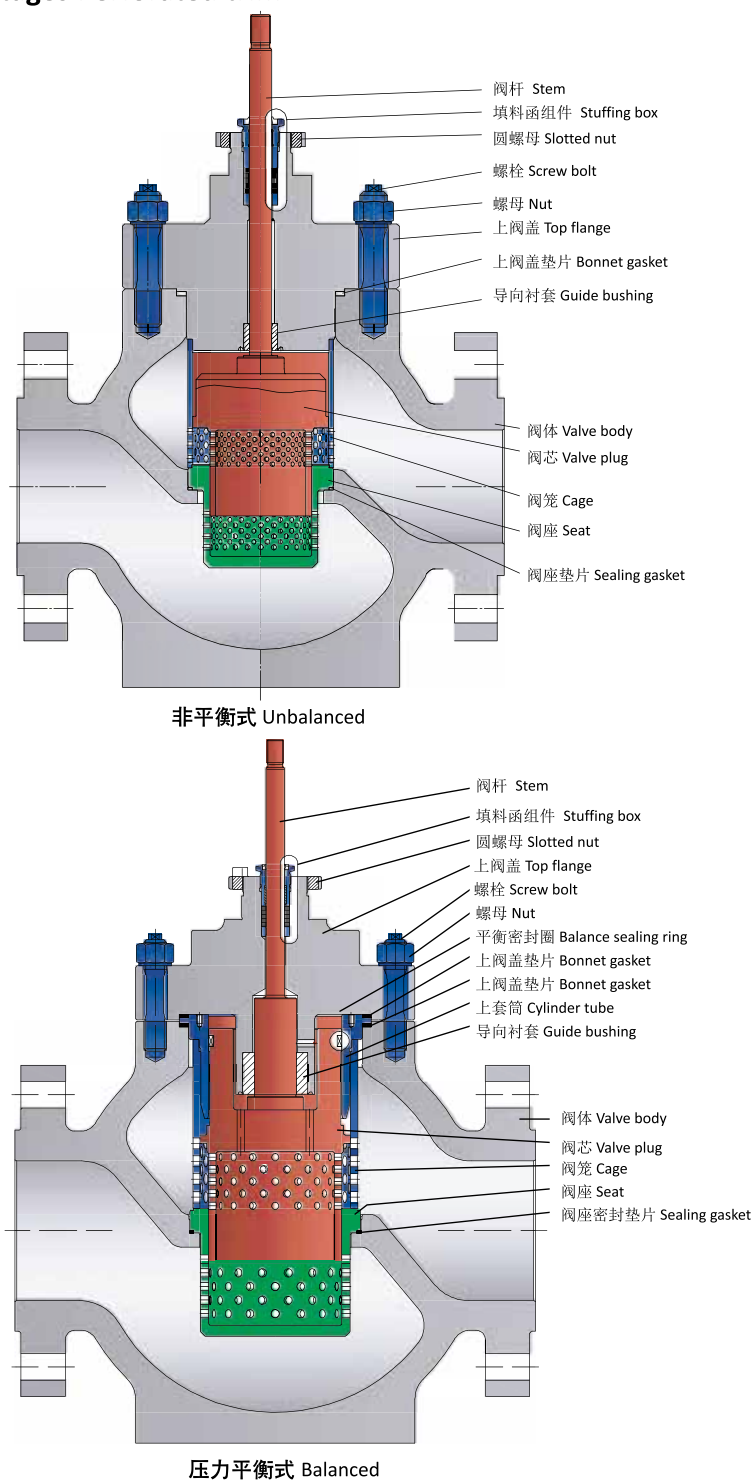
线性流量特性 Linear flow characteristic

阀门尺寸 Valve size	阀座尺寸 mm Seat diameter	行程 mm Stroke	额定 Cv	开度 Travel									
				10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
DN15*	19	20	Rated Cv	0.138	0.262	0.376	0.489	0.604	0.717	0.832	0.945	1.061	1.17
1"	19		Rated Cv	0.297	0.524	0.752	0.980	1.208	1.435	1.663	1.891	2.119	2.3
	24		Rated Cv	0.446	0.787	1.129	1.471	1.813	2.154	2.496	2.837	3.179	3.5
			Rated Cv	0.595	1.050	1.506	1.961	2.417	2.872	3.328	3.783	4.239	4.7
			Rated Cv	0.743	1.313	1.882	2.452	3.020	3.590	4.159	4.729	5.298	5.8
			Rated Cv	0.889	1.576	2.259	2.942	3.625	4.309	4.992	5.675	6.359	7
			Rated Cv	1.041	1.838	2.635	3.433	4.229	5.027	5.824	6.621	7.418	8.2
1 1/4"	32	20	Rated Cv	1.189	2.100	3.011	3.922	4.833	5.744	6.655	7.566	8.477	9.3
			Rated Cv	1.339	2.363	3.388	4.413	5.438	6.463	7.488	8.512	9.538	10.5
			Rated Cv	1.487	2.626	3.764	4.903	6.042	7.181	8.320	9.458	10.597	11.7
			Rated Cv	1.636	2.888	4.142	5.394	6.647	7.899	9.152	10.405	11.658	12.9
1 1/2"	37	20	Rated Cv	1.785	3.151	4.518	5.884	7.251	8.618	9.984	11.351	12.720	14
			Rated Cv	1.933	3.414	4.894	6.375	7.855	9.336	10.816	12.299	13.782	15
			Rated Cv	2.083	3.677	5.271	6.866	8.460	10.054	11.648	13.245	14.834	16
			Rated Cv	2.231	3.940	5.647	7.356	9.064	10.772	12.486	14.191	15.896	17.5
			Rated Cv	2.379	4.201	6.023	7.845	9.668	11.490	13.315	15.137	16.959	18.7
			Rated Cv	2.529	4.464	6.401	8.336	10.273	12.206	14.144	16.083	18.022	20
2"	48	30	Rated Cv	2.677	4.727	6.777	8.827	10.876	12.930	14.974	17.029	19.073	21
			Rated Cv	2.827	4.990	7.154	9.317	11.481	13.642	15.815	17.976	20.136	22
			Rated Cv	*									
2 1/2"	62	30	Rated Cv	4.463	7.879	11.296	14.717	18.127	21.550	24.960	28.382	31.793	35
			Rated Cv	4.611	8.142	11.672	15.207	18.735	22.262	25.789	29.328	32.856	36
3"	73	20	Rated Cv	*									
			Rated Cv	6.248	11.031	15.815	20.592	25.381	30.158	34.947	39.724	44.512	49
		30	Rated Cv	6.397	11.293	16.188	21.082	25.988	30.882	35.776	40.670	45.575	50
			Rated Cv	6.545	11.556	16.562	21.573	26.584	31.594	36.605	41.616	46.627	51
4"	90	30	Rated Cv	*									
			Rated Cv	8.330	14.705	21.082	27.460	33.837	40.214	46.592	52.969	59.346	65
6"	113	30	Rated Cv	8.480	14.974	21.468	27.950	34.444	40.938	47.432	53.915	60.409	67
			Rated Cv	13.093	23.115	33.136	43.158	53.179	63.200	73.222	83.243	93.265	103
	113	60	Rated Cv	13.245	23.372	33.510	43.648	53.786	63.913	74.051	84.189	94.328	104
			Rated Cv	*									
			Rated Cv	25.883	45.704	65.513	85.334	105.143	124.976	144.832	164.571	184.427	203
			Rated Cv	26.035	45.961	65.899	85.825	105.751	125.677	145.650	165.506	185.478	204
			Rated Cv	27.226	48.063	68.900	89.749	110.586	131.400	152.307	173.098	193.888	214
			Rated Cv	27.518	48.589	69.660	90.730	111.789	132.918	153.942	174.966	196.107	216
143	60	Rated Cv	*										
		Rated Cv	39.876	70.395	100.915	131.400	162.002	192.486	222.971	253.456	284.058	313	
8"	172	60	Rated Cv	40.016	70.652	101.289	131.867	162.586	193.187	223.789	254.507	285.109	314
			Rated Cv	*									
10"	220	100	Rated Cv	52.513	92.716	132.918	173.098	213.277	253.573	293.752	333.931	374.110	412
			Rated Cv	52.665	92.984	133.269	173.565	213.978	254.274	294.570	334.866	375.162	413
		100	Rated Cv	*									
			Rated Cv	94.620	167.024	239.440	311.856	384.389	456.805	529.221	601.637	674.053	743
12"	282	100	Rated Cv	94.923	167.608	240.258	312.907	385.557	458.206	530.856	603.506	676.155	745
			Rated Cv	*									
		100	Rated Cv	103.251	182.325	261.282	340.355	419.429	498.386	577.459	656.533	735.490	811
			Rated Cv	103.403	182.558	261.749	340.822	420.013	499.086	578.277	657.467	736.541	812
14"	313	100	Rated Cv	*									
			Rated Cv	136.773	241.426	346.078	450.731	555.384	660.037	764.690	869.342	973.995	1073
			Rated Cv	137.006	241.893	346.779	451.666	556.552	661.438	766.325	871.211	976.098	1076
16"	400	120	Rated Cv	189.216	334.048	478.997	623.829	768.661	913.493	1058.325	1203.040	1347.872	1486
			Rated Cv	189.683	334.866	480.048	625.230	770.530	915.712	1060.894	1206.544	1351.376	1489
			Rated Cv	*									
			Rated Cv	262.917	464.163	665.293	866.539	1067.786	1268.448	1470.512	1671.408	1872.304	2064

*: 如需了解更多数据, 请与艾坦姆公司联系。 For more other specifications request please contact with Utmost.

G150 系列控制阀技术数据
Technical Data Sheet of G150 Series Control Valve

G150-H3 型结构图及部件图 (Sectional Drawing of G150-H3)
3 级多孔阀芯 3 stages Perforated trim



G150 系列控制阀技术数据 Technical Data Sheet of G150 Series Control Valve

Cv 值与开度 Cv value and travel

3 级多孔阀芯 3 stage Perforated trim (H3)

流开 Flow to open (FTO)

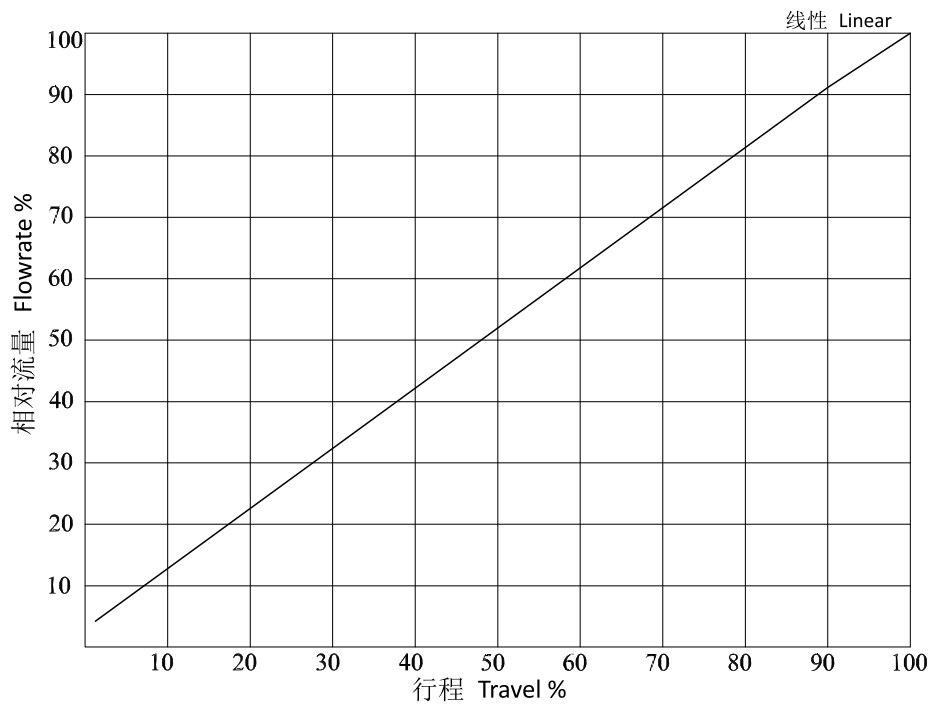
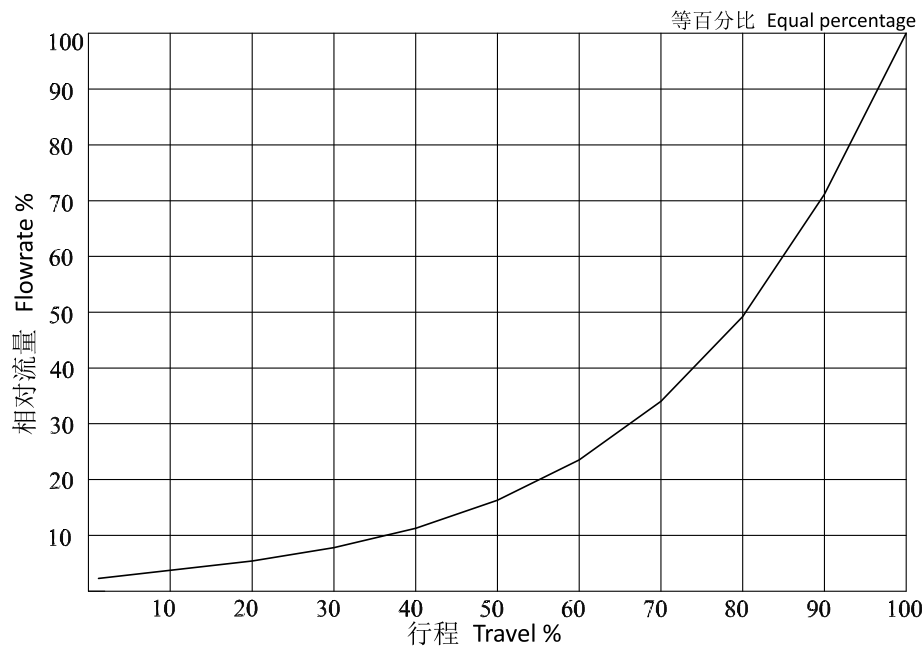
线性流量特性 Linear flow characteristic

阀门尺寸 Valve size	阀座尺寸 Seat diameter mm	行程 Stroke mm	额定 Cv	开度 Travel									
				10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
3"	73	30	Rated Cv	5.207	9.192	13.175	17.170	21.152	25.135	29.118	33.113	37.096	41
			Rated Cv	6.302	11.293	16.188	21.082	25.988	30.882	35.776	40.670	45.575	50
			Rated Cv	6.397	11.293	16.188	21.082	25.988	30.882	35.776	40.670	45.575	50
		30	Rated Cv	6.545	11.556	16.562	21.573	26.584	31.594	36.605	41.616	46.627	51
			Rated Cv	*									
			Rated Cv	6.843	12.077	17.321	22.554	27.798	33.031	38.275	43.508	48.752	54
4"	90	30	Rated Cv	6.992	12.346	17.695	23.045	28.406	33.755	39.105	44.454	49.815	55
			Rated Cv	*									
			Rated Cv	10.711	18.910	27.109	35.309	43.508	51.707	59.907	68.106	76.305	84
6"	143	60	Rated Cv	22.461	39.665	56.858	74.051	91.244	108.449	125.677	142.846	160.016	176
			Rated Cv	*									
			Rated Cv	25.883	45.704	65.513	85.334	105.143	124.976	144.832	164.571	184.427	203
		60	Rated Cv	26.035	45.961	65.899	85.825	105.751	125.677	145.650	165.506	185.478	204
			Rated Cv	*									
			Rated Cv	32.587	57.524	82.461	107.398	132.334	157.330	182.208	207.203	232.082	256
8"	172	60	Rated Cv	32.727	57.781	82.835	107.888	132.918	158.030	183.026	208.138	233.133	257
			Rated Cv	*									
			Rated Cv	42.842	75.640	108.437	141.211	174.032	206.853	239.674	272.378	305.198	336
10"	220	100	Rated Cv	42.994	75.908	108.823	141.678	174.616	207.554	240.491	273.429	306.250	338
			Rated Cv	*									
			Rated Cv	77.216	136.306	195.406	254.507	313.608	372.709	431.81	490.91	550.011	606
12"	282	100	Rated Cv	77.508	136.89	196.224	255.558	314.893	374.11	433.445	492.779	552.114	609
			Rated Cv	*									
			Rated Cv	103.251	182.325	261.282	340.355	419.429	498.386	577.459	656.533	735.490	811
		100	Rated Cv	103.403	182.558	261.749	340.822	420.013	499.086	578.277	657.467	736.541	812
			Rated Cv	*									
			Rated Cv	111.579	197.042	282.422	367.803	453.184	538.682	624.062	709.443	794.824	876
14"	313	100	Rated Cv	111.883	197.509	283.123	368.738	454.469	540.083	625.698	711.312	796.926	878
			Rated Cv	*									
			Rated Cv	154.526	272.845	391.163	509.598	627.917	746.235	864.554	982.872	1101.190	1214
16"	400	120	Rated Cv	154.877	273.429	391.981	510.533	629.085	747.637	866.189	984.741	1103.293	1216
			Rated Cv	*									
			Rated Cv	214.678	379.016	543.354	707.691	872.029	1036.366	1200.704	1365.392	1528.912	1685

*: 如需了解更多数据, 请与艾坦姆公司联系。 For more other specifications request please contact with Utmost.

G150 系列控制阀技术数据
Technical Data Sheet of G150 Series Control Valve

G150 系列控制阀流量特性曲线（等百分比、线性）
G150 Series Control Valve Flow Characteristic Flow chart(Equal percentage/Linear)



G150 系列控制阀技术数据 Technical Data Sheet of G150 Series Control Valve

G150 系列控制阀最大关闭压差 bar Max. shut off differential pressure (valve closed)

PTFE V 型填料 PTFE packing (V-rings), 泄漏等级 IV 级 Leakage class IV,
非压力平衡阀芯 Unbalancing plug1), 流开 Flow-to open)

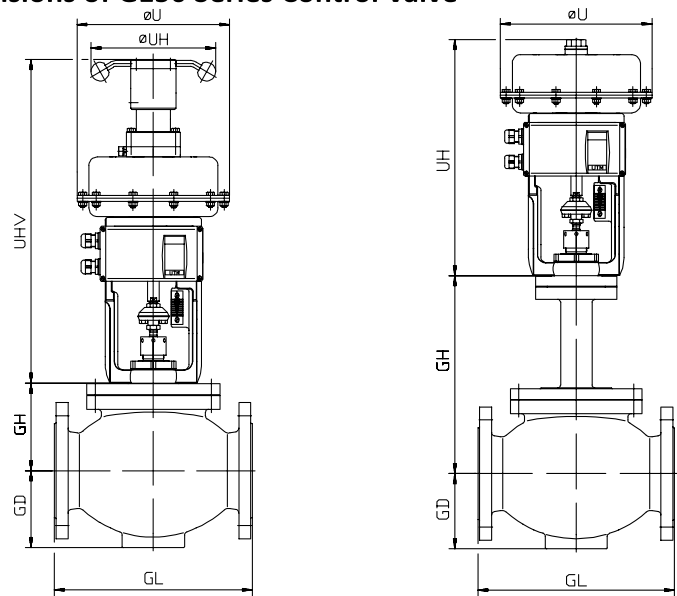
UT 系列执行机构 Actuator Type UT (多弹簧执行机构 Multi-spring actuator)			气开 Air to open / 弹簧关 Spring to close 弹簧数量 No. of springs				气关 Air to close / 弹簧开 Spring to open 弹簧数量 No. of springs				
			3	6	9	12	3	3	3	6	6
公称尺寸 DN	执行机构尺寸 Actuator size	阀座尺寸 Seat-Ø (mm)	bar				最小仪表气源 [bar] instrument air min. [bar]				
							3.0	4.5	6.0	4.5	6.0
DN25 1"	UT I-20 320 cm ² 50 in ²	24	27.0	80.1			80.1	160.0	160.0	80.1	160.0
		19	45.9	130.6			130.6	160.0	160.0	130.6	160.0
		16	67.1	160.0			160.0	160.0	160.0	160.0	160.0
DN40 1-1/2"	UT I-20 320 cm ² 50 in ²	37	9.5	31.8			31.8	76.4	121.1	31.8	76.4
		32	13.6	43.5			43.5	103.2	160.0	43.5	103.2
		24	27.0	80.1			80.1	160.0	160.0	80.1	160.0
DN50 2"	UT II 720 cm ² 111 in ²	48	19.1	46.7	63.3	79.9	51.1	110.8	160.0	51.1	110.8
		37	33.7	80.2	108.1	136.0	87.6	160.0	160.0	87.6	160.0
		32	46.0	108.2	145.5	160.0	118.2	160.0	160.0	118.2	160.0
DN80 3"	UT II 720 cm ² 111 in ²	73	7.3	19.3	26.4	33.6	21.2	47.0	72.8	21.2	47.0
		62	10.7	27.3	37.2	47.1	29.9	65.7	101.5	29.9	65.7
		48	19.1	46.7	63.3	79.9	51.1	110.8	160.0	51.1	110.8
DN100 4"	UT II 720 cm ² 111 in ²	90	4.4	12.2	17.0	21.7	13.5	30.5	47.5	13.5	30.5
		73	7.3	19.3	26.4	33.6	21.2	47.0	72.8	21.2	47.0
		62	10.7	27.3	37.2	47.1	29.9	65.7	101.5	29.9	65.7
DN150 6"	UT III 720 cm ² 111 in ²	143	1.2	4.3	6.2	8.1	4.8	11.6	18.3	4.8	11.6
		113	2.4	7.4	10.4	13.4	8.2	19.0	29.8	8.2	19.0
		90	4.4	12.2	17.0	21.7	13.5	30.5	47.5	13.5	30.5
DN200 8"	UT III 720 cm ² 111 in ²	172	0.6	2.8	4.1	5.4	3.1	7.8	12.4	3.1	7.8
		143	1.2	4.3	6.2	8.1	4.8	11.6	18.3	4.8	11.6
		113	2.4	7.4	10.4	13.4	8.2	19.0	29.8	8.2	19.0

UTA 型气动多弹簧执行机构 Actuator series UTA (multi-spring actuator)			气开 Air to open / 弹簧关 Spring to close 弹簧数量 No. of springs				气关 Air to close / 弹簧开 Spring to open 弹簧数量 No. of springs				
			2	4	6	8	2	2	2	4	4
公称尺寸 DN	执行机构尺寸 Actuator size	阀座尺寸 Seat-Ø(mm)	bar				最小仪表气源 [bar] instrument air min. [bar]				
							3.0	4.5	6.0	4.5	6.0
DN150 6"	UTA3.60A 1510 cm ² 339 in ²	143	4.3	10.6	16.8	23.0	29.3	41.7	54.2	-	-
		113	7.4	17.4	27.4	37.3	47.3	67.3	87.2	-	-
		90	12.2	28.0	43.7	59.4	75.2	106.6	138.1		
DN200 8"	UTA3.60A 1510 cm ² 339 in ²	172	2.8	7.1	11.4	15.7	20.0	28.6	37.2	-	-
		143	4.3	10.6	16.8	23.0	29.3	41.7	54.2	-	-
		113	7.4	17.4	27.4	37.3	47.3	67.3	87.2	-	-

注: 其他更高压差或压力平衡式阀芯的最大关闭压差请与艾坦姆公司联系。
If higher differential pressures balanced trim is required. Please contact with Utmost.

G150 系列控制阀技术数据
Technical Data Sheet of G150 Series Control Valve

G150 系列控制阀重量及尺寸
Weights and dimensions of G150 Series Control Valve



重量和尺寸 Weights and dimensions

根据 DIN EN 1092-1 或 ANSI class 600/900/1500 RF/RTJ 标准的法兰连接的阀门尺寸 (mm) Dimensions (in mm) for valve c/w flanges acc. to DIN EN 1092-1 or ANSI Class 600/900/1500 RF/RTJ										
G150 系列 G150 series	公称尺寸 DN		25	40	50	80	100	150	200	
	压力等级 ANSI NPS		1"	1 ½"	2"	3"	4"	6"	8"	
	GL PN63/100/160		230	260	300	380	430	550	700	
	GL PN250		260	300	350	450	520	700	800	
	GL Class 600 RF		216	251	292	356	432	559	660	
	GL Class 600 RTJ		216	251	295	359	435	562	664	
	GL Class 900 RF		254	305	368	381	457	610	737	
	GL Class 900 RTJ		254	305	372	384	460	613	740	
	GL Class 1500 RF		254	305	368	470	546	705	832	
	GL Class 1500 RTJ		254	305	372	473	549	711	842	
	GH	DEK1	132	159	178	220	255	362	410	
		DEK2	167	234	243	300	328	427	480	
		DEK3	167	234	243	300	328	427	480	
		DEK4	** 按需提供 On request							
DEK5										
DEK7					250	285	335	410		
	DEK8				315	355	490	480		
GD		75	103	113	153	178	238	273		
UT 型 /UTA 型执行机构 Actuator Type UT/UTA	ØU	UT I	270							
		UT II	400							
		UT III	400							
		UTA	598							
	UH	UT I	361							
		UT II	489							
		UT III	625							
		UTA	840							
	UHV	UT I	508							
		UT II	651							
		UT III	888							
	Weight* ca. kg	UT I	34	42						
		UT II	59	67	97	126	161			
		UT III	64	72	102	131	166	322	612	
		UTA	204	212	242	271	306	462	752	

*) 重量 Weight: 执行机构不含手轮的重量 Actuator weight without hand wheel

**) 按需提供 On request

阀门材质牌号对照表

Comparable Table of Valve Materials

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Comparable Table of Valve Materials

Material Group	Common Name	Material Type	Forging Spec	UNS	Casting Spec. Equivalent	DIN	DIN W.No	Application
Carbon Steel	CS	C-Mn-Fe	A105N	K03504	A216-WCB	C22.8DIN 17243	1.0460	General non-corrosive service from -20°F(-29°C)to 800°F(427°C)
Low Temperature Carbon Steel	LTCS	C-MN-Fe	A350-LF2	K03011	A352-LC1	TSTE 355 DIN 18103	1.0566	General non-corrosive service from -50°F(-46°C) to 650°F(340°C),LF2 to 800°F(427°C)
					A352-LCB			
					A352-LCC			
Low Temperature Alloy Steel	Nickel Steel	3.1/2Ni	A350-LF3	K32025	A352-LC3	10Ni14	1.5637	-150°F(-101°C) to 650°F(340°C)
Low Alloy Steel	Moly Steel	C-1/2Mo	A182-F1	K12822	A217-WC1	15Mo3	1.5637	Up to 875°F(468°C)
	Alloy Steel Chrome Moly	1.1/4Cr-1/2Mo	A182-F11 cl2	K11572	A217-WC6	13CrMo44	1.5415	Up to 1100°F(593°C)
		2.1/4Cr-1Mo	A182-F22 cl3	K21590	A217-WC9	10CrMo910	1.7380	Up to 1100°F(593°C),HP steam
		5Cr-1/2Mo	A182-F5a	K41545	A217-C5	12CrMo195	1.7362	High temp. refinery service
		9Cr-1Mo	A182-F9	K90941	A217-C12	X 12CrMo9 1	1.7386	High temp.erosive refinery service
		9Cr-1Mo-v	A182-F91		A217-C12A	X 10 CrMoVNB 9 1	1.4903	High pressure steam
Stainless Steel	Austenitic S. Steel 300 series S. steel	304:18Cr-8Ni	A182-F304	S30400	A351-CF8	DIN X5CrNi 18 9	1.4301	0.04% min.carbon for temp.>1000°F(538°C)
		304L:18Cr-8Ni	A182-F304L	S30403	A351-CF3	X 2 CrNi 19 11	1.4306	Up to 800°F(427°C)
		304H:	A182-F304H	S30409	A351-CF10	n/a	n/a	
		316:16Cr-12Ni-2Mo	A182-F316	S31600	A351-CF8M	DIN X5CrNiMo 18 10	1.4401	0.04% min.carbon for temp.>1000°F(538°C)
		316L:16Cr-12Ni-2Mo	A182-F316L	S31603	A351-CF3M	X % CrNiMo 17 12 2	1.4404	Up to 800°F(427°C)
		316H	A182-F316H	S31609	A351-CF10M	n/a	n/a	
		316Ti	A182-F316 Ti	S31635		X 6 CrNiMoTi 17 12 2	1.4571	Special grade
		321:18Cr-10Ni-Ti	A182-F321	S32100		X 6 CrNiTi 18 10	1.4541	0.04% min.carbon(grade F321H)and heat treat at 2000°F (1000°C)for service temps.>1000°F(538°C)
		321H	A182-F321H	S32109		n/a	n/a	
		347:18Cr-10Ni-Cb(Nb)	A182-F347	S34700	A351-CF8C	DIN 8556	1.4550	0.04% min.carbon(grade F347H)and heat treat at 2000°F (1000°C)for service temps.>1000°F(538°C)
		347H	A182-F347H	S34709		n/a	n/a	
		317L	A182-F317L	S31703	A351-CG3M*	X2CrNiMo 18-16-4	1.4438	
	Alloy 20	28Ni-19Cr-Cu-Mo	A182-F20*	N08020	A351-CN7M+	DIN 1.4500	2.4660	Service to 600°F (316°C)
	Duplex 2205	22Cr-5Ni-3Mo-N	A182-F51	S31803	A351-CD3MN	X2CrNiMoN22-5-3	1.4462	Service to 600°F (316°C)-The original S31803 UNS designation has been supplemented by S32205 which has higher minimum N,CR, and Mo
				S32205	A890-J92205	DIN 10088-1(95)		
	Super Duplex 2507	25Cr-7Ni-4Mo-N	A182-F53	S32750	A351-CD4MCu*	X2CrNiMoN27-7-4	1.4501	Service to 600°F (316°C)
					A890 5A*	DIN 10088-1(95)		
	Super Duplex F55	25Cr-7Ni-3.5Mo-N-Cu-W	A182-F55	S32760	A995-CD3MWCuN			Service to 600°F (316°C)
	Super Austenitic 6Mo	20Cr-18Ni-6Mo	A182-F44	S31254	A351-CK3MCuN	X1CrNiMoCuN20-18-7	1.4547	Service to 600°F (316°C)
Nickel-Irn Alloy	Incoloy 800	33Ni-42Fe-21Cr	B564-N08800	N08800		X 10NiCrAlTi32-20	1.4876	Service to 1000°F (538°C)
	Incoloy825	42Ni-21.5Cr-3Mo-2.3Cu	B564-N08825*	N08825	A494-CU5MCu*	DIN 17744	2.4858	Service to 600°F (316°C)for N02200,1200°F (648°C)for N02201
Nickel	Nickel	99/95Ni	B160-N02200°C bar°C	N02200	A494-CZ-100*	NW2200	1.7740	
Nickel-Copper	Monel 400	67Ni-30Cu	B564-N04400	N04400	A494-M35-1	DIN 17730	2.4360	
	Monel 500		B564-N05500*	N05500			2.4375	
Nickel-Alloy	904L		904L*	N08904	n/a	Z2 NCDU 25-20	1.4539	
Nickel Superalloys	Inconel 600	72Ni-15Cr-8Fe	B564-N06600	N06600	A494-CY40*	DIN 17742	2.4816	
	Inconel 625	60Ni-22Cr-9Mo-3.5Cb	B564-N06625	N06625	A494-CW-6MC*		2.4856	
	Hastelloy C-276	54Ni-15Cr-16Mo	B564-N10276	N10276	A494-CW-2M*	NiMo 16 Cr 15 W	2.4819	
Titanium	Titanium	98Ti	B381-Gr2	R50400	B367-C2*	Ti 2	3.7035	Special grade

表格内容作为通用指南，待续！ Table used as a general guide only,to be continued!