



## Pressure Relief Valve Overflow Valve

## 安全阀

Type DHV 715

Type DHV 716

Type DHV 725

High repeating accuracy  
with union sockets or  
spigot ends

复现性好  
配有由令承口  
或插口接头



### The optimal monitoring valves 最佳控制阀

- Sizes DN 10 up to DN 50/尺寸DN10到DN50
- Operating pressure up to 10 bar (PN 10)/工作压力最大10bar
- Wide setting range/设置范围宽:
  - DHV 715: 0.2 - 4.0 bar
  - DHV 716: 0.5 - 10.0 bar
  - DHV 725: 0.2 - 10.0 bar
- Low pressure increase up to fully opened valve /从开启到阀全开压力增加很小
- Low hysteresis of only approx. 0.3 bar/滞后低, 约0.3 bar
- Opening pressure difference/开启压力:
  - DHV 715: appr. /约 0.2 bar
  - DHV 716: appr. /约 0.4 bar
  - DHV 725: appr. /约 0.2 bar

### Great operating security and long service life 操作安全、长寿命

- vibration-free controlling/压力控制无任何震动
- hermetically sealed by diaphragm with crimped O-rings  
通过带有环状突起的隔膜实现全密封
- low maintenance/无需保养
- easiest installation acc. ASV modular design system  
模块化设计, 易安装
- variable installation independent of flow direction  
安装方向不限
- pressure settings at any time, also during operation  
压力设定可在任何时间, 包括工作期间

### High-quality materials 高品质材料

- uPVC, PP or PVDF body, natural PP on request  
阀体材质为: uPVC, PP 或 PVDF, PP-n请咨询
- PTFE-coated diaphragm on fluid side  
介质侧衬PTFE膜
- safe mounting with stainless steel bolts  
不锈钢螺栓连接

### Simple connection to the pipeline 简便的管道安装

- threaded necks acc. DIN 8063 completed with union nuts, O-ring sealings and inserts  
螺纹接头配由令帽、O形密封和承插端子, 依照DIN 8063
- radial demountability even after mounting  
安装后也可径向拆卸
- spigot ends for solvent or fusion welding acc. ISO/DIN  
粘接或热熔焊接插口接头依照 ISO/DIN

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### Constructional features

#### DHV 715/716/725 阀有如下特点:

- High reproducibility.
- Short face-to-face dimension.
- Injection moulded threaded necks acc. to DIN 8063.
- Direct mounting on any valve support by metal inserts in the body. The movability of the union nuts is not effected.

- 复现性好
- 尺寸紧凑
- 由 令连接方式 (DIN8063)
- 通过阀体下面的螺纹孔, 可直接安装到支座上

#### Range of application/应用范围:

Directly controlled by the operating fluid the DHV is used in all technical processes where a constant working and system pressure is required on the primary side and for avoiding any undesired pressure increase.

The DHV can also be used as overflow valve. For this purpose the DHV is to be mounted at the place where a T-piece is installed in the pipeline.

本产品可应用于所有要求工作和系统压力稳定、避免产生过压的场合。

第11 页显示了典型的应用场合。

本品也可在旁路上用作溢流阀。

#### Valve functions and design

##### 阀的功能和设计特点:

Normally the valve is closed and the piston respectively the valve seat is only admitted to the secondary pressure. Any rise of working or inlet pressure (primary side) above the pre-set pressure value activates the diaphragm and lifts the piston against the spring force. The valve opens and the pressure drops down in the secondary pipeline.

The moulded diaphragm constructed for full opening of the valve separates the fluid in the lower body from the bonnet respectively the atmosphere. The sealed tightness especially at higher temperature is secured by crimped seal O-rings at the diaphragm.

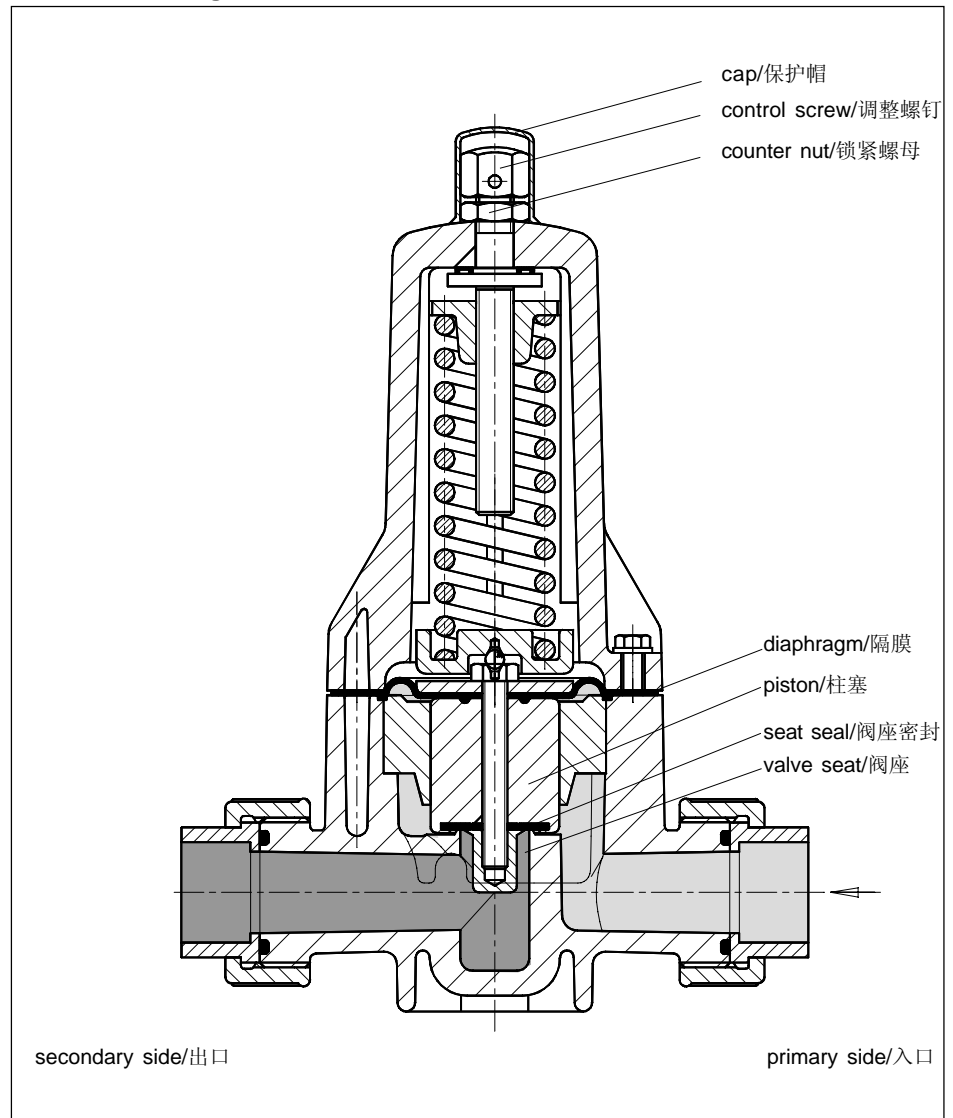
阀通常处于关闭状态。柱塞与阀座配合处只与出口相通。一旦入口压力高于某设定值, 隔膜(5) 就顶起弹簧(8), 阀打开, 压力向出口侧释放。

由于出口压力也作用在隔膜上, 这样就保证了平缓开启, 也就是说阀开启很大时, 压力只有很小的增加量。

柱塞处的阻尼结构可消除震动。

隔膜可允许阀完全打开, 将下部介质与上盖完全分开。由于隔膜上有凸起的密封环, 使得阀即使在高温时也有很好的密封性能。

### Sectional drawing DHV 725/DHV 725 的剖面图



#### Valve setting and adjustment

##### 压力设定和调整

The presetting or readjustment is made by removing the protection cap at setting control screw with a counternut and by reading the set pressure from the ASV diaphragm pressure gauge guard type 901 in the pipe system. The counternut can be leaded.

取下调整螺钉(15) 上的保护帽(18), 松开锁紧螺母(16), 旋转调整螺钉(15), 借助管路中的压力表可调至所需压力, 锁紧螺母可加铅封。

#### Pressure relief valve with pressure gauge/带有压力表的安全阀

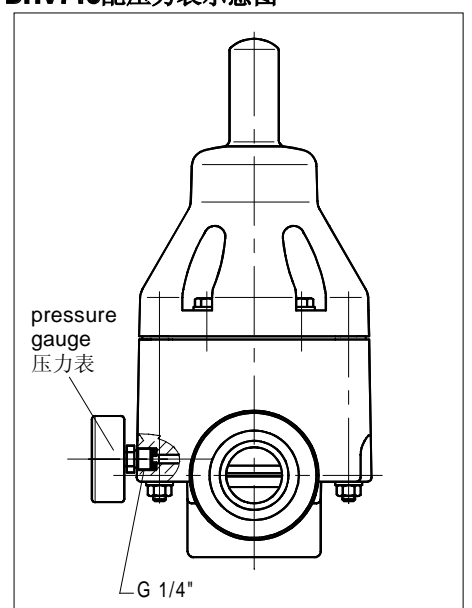
For neutral fluids the valve can be equipped with a gauge, normally at the primary side.

输送中性介质时可配有压力表, 可安装在入口或出口端。

#### DIBt-approval/DIBT 认准

- uPVC Z-40.23-193
- PP Z-40.23-194
- PVDF Z-40.23-195

#### DHV 715 with pressure gauge DHV715配压力表示意图



## Material /材料

**Only thermoplastic material with high impact strength and high creep strength is used by ASV.**  
产品材料为具有高冲击强度和持久强度的热塑塑料。

### Valve body, piston, separation disc 阀体, 柱塞, 隔离盘

- uPVC (Polyvinyl chloride)
- PP (Polypropylene)
- PVDF (Polyvinylidene fluoride)

### Valve bonnet/阀盖:

PP glass-fiber reinforced  
玻纤增强PP

### Moulded diaphragm/隔膜:

EPDM, PTFE-coated on fluid side  
EPDM, 介质侧衬PTFE

### Valve seat seal/阀座密封:

- EPDM
- FPM
- PTFE-coated version on request  
需衬PTFE请咨询

### O-Rings at union ends/由令端O形密封:

- EPDM
- FPM

### Connecting screws/连接螺丝:

Stainless steel 1.4301 (AISI 304 /  
BS 304 S 15)

## Technical data/技术参数

### Fluids/介质类型:

Technically clean, neutral or aggressive liquids provided that the selected materials are resistant at operating temperature.

Refer to the ASV resistance guide.  
在工作温度且阀的材料能耐腐蚀的情况下, 输送清洁、中性和腐蚀性介质。  
请参见ASV 材料耐腐蚀一览表。

### Installation/安装方向

Variable, independent of flow direction.  
随意, 与流体方向无关

### Direction of flow/介质流向:

Direction of flow always in direction of arrow.  
箭头指向为介质流动方向。

### Pressure range/额定压力:

PN 10 at +20 °C

### Operating pressure/操作压力:

See material pressure/temperature diagram.  
视材料、温度和压力关系而定。  
请参见压力/温度曲线图。

### Working pressure/工作压力:

Set pressure plus flow dependent pressure increase (see characteristic curves):  
appr. 0.3 up to 10.0 bar  
等于设定压力加上随流量增加而增加的压力值, 见特性曲线图: 0.3 至10 bar。

### Opening pressure difference/开启压力:

DHV 715 approx./大约 0.2 bar  
DHV 716 approx./大约 0.4 bar  
DHV 725 approx./大约 0.2 bar

### Hysteresis/压力滞后:

Difference between opening and closing pressure: appr. 0.3 bar  
开启压力与关闭压力之间的压差:约 0.3 bar。

### Pressure/temperature diagram 压力/温度曲线图

The values are a guide for harmless fluids (DIN 2403) the material of the valve is resistant against.

The pressure/temperature limits are applicable for a computed operating life factor of 25 years at PN 10.

Durability of wear and tear parts is depending on the operating conditions of the application.

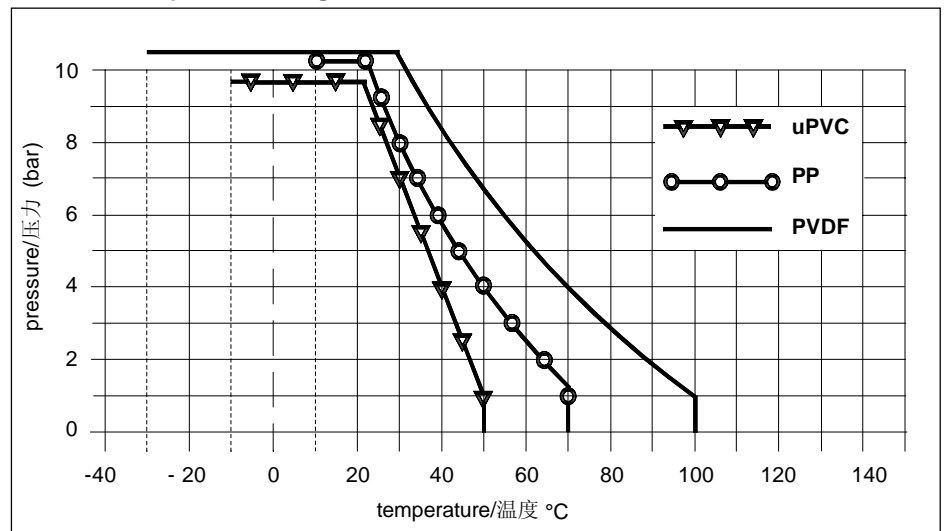
Values < 0 °C (PP < +10 °C) on request with exact data of operation.

图中的数值是在输送对材料无害介质 (DIN 2403) 情况下给出的。

该曲线是估计寿命为25年PN10时的压力、温度极限值。

易损件的使用寿命视工作条件而定。  
温度小于0°C (PP < +10°C) 时, 客户需提供具体工作情况的数据。

### Pressure-temperature diagram/压力-温度曲线图



### Media temperature/介质温度:

Depends on the operating conditions (system pressure, load etc.). Taking creep strength into account, the following approximate temperatures apply:

依赖于工况(系统压力, 负载等). 考虑到抗蠕变强度, 以下为大致的温度应用范围:

- uPVC: + 50 °C
- PP: + 70 °C
- PVDF: +100 °C

### Colour/颜色:

#### Body/阀体:

- uPVC grey/深灰, RAL 7011
- PP grey/浅灰, RAL 7032
- PVDF opaque (yellowish white) /不透明, 白色微黄

#### Bonnet/上盖:

- PP-GFR orange/桔黄色, RAL 2005

### Connection/连接方式

#### 1. Body with threaded necks acc. to DIN 8063 completed with:

阀体螺纹连接的, 依照DIN8063标准, 包括:

- union nuts made of uPVC, PP or PVDF  
由令帽材质为: uPVC, PP或PVDF
- union socket ends made of uPVC, PP or PVDF  
由令承口接头材质为: uPVC, PP或PVDF
- O-ring sealings made of EPDM or FPM  
O形密封圈材质为 EPDM 或 FPM

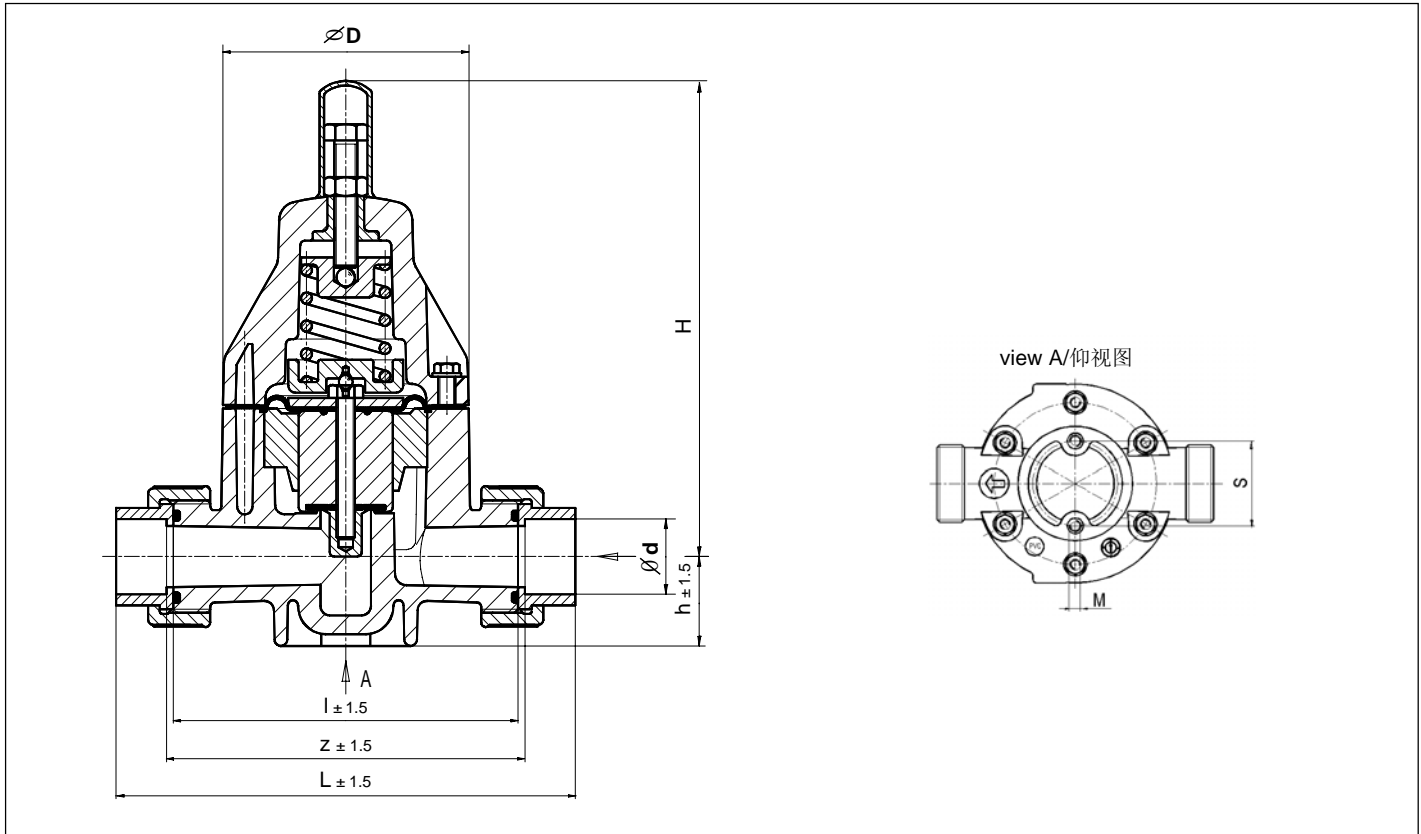
#### On request we deliver/下述情况请咨询:

- union spigot ends for fusion welding made of PP or PE  
PP或PE材料的热熔焊由令插口接头
- dimensions acc. BS, ANSI and JIS on request  
尺寸需依照BS, ANSI和JIS标准的

#### 2. Body with spigot ends for solvent or fusion welding acc. ISO/DIN on request.

阀体配粘接或热熔焊的插口的, 依照ISO/DIN标准, 请咨询

Dimensions/尺寸: DHV 715, DHV 716 and DHV 725 with union sockets/DHV 715, DHV716和DHV725 配有由令承口接头



DHV 715 and DHV 716 with union sockets/DHV 715 和DHV 716配有由令承口接头

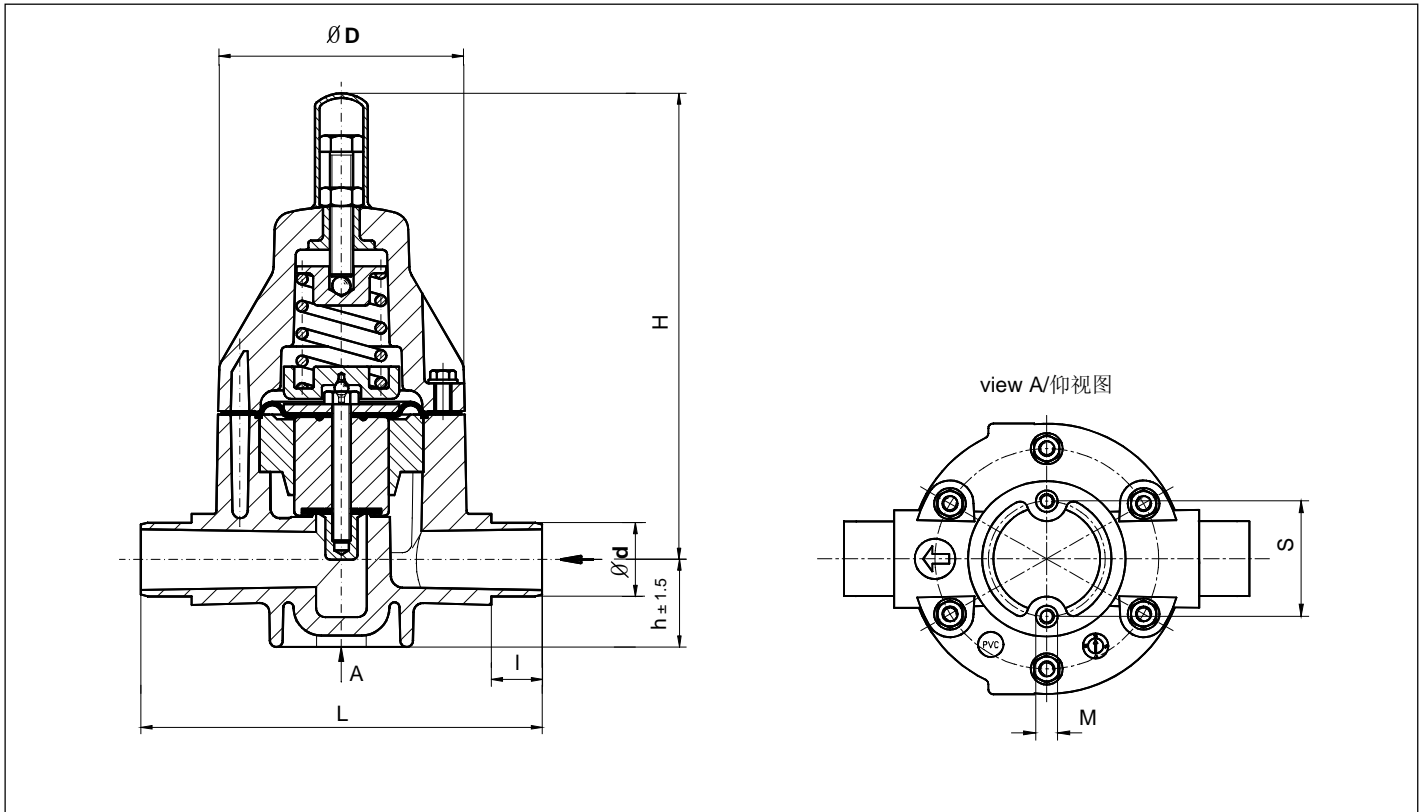
Size/规格			Dimensions/尺寸 mm													Weight/重量 kg (standard value/近似值)		
d	DN	DN	L			l		z		h		H	D	M	s	uPVC	PP	PVDF
mm	mm	inch	uPVC	PP	PVDF	uPVC*	PVDF	uPVC*	PVDF	uPVC*	PVDF							
16	10	3/8	154	155	154	120	118	126	124	25	24	174	81	M 6	40	0.80	0.67	1.02
20	15	1/2	159	154	156	120	118	126	124	25	24	174	81	M 6	40	0.85	0.72	1.07
25	20	3/4	195	188	189	150	147	156	153	37	36	202	107	M 6	46	1.86	1.57	2.11
32	25	1	201	192	193	150	147	156	153	37	36	202	107	M 6	46	1.90	1.61	2.15
40	32	1 1/4	263	251	250	205	200	211	207	57	54	262	147	M 8	65	5.00	4.10	5.45
50	40	1 1/2	273	257	256	205	200	211	207	57	54	262	147	M 8	65	5.10	4.18	5.55
63	50	2	287	265	264	205	200	211	207	57	54	262	147	M 8	65	5.20	4.28	5.65

DHV 725 with union sockets/DHV 725 配有由令承口接头

Size/规格			Dimensions/尺寸 mm													Weight/重量 kg (standard value/近似值)		
d	DN	DN	L			l		z		h		H	D	M	s	uPVC	PP	PVDF
mm	mm	inch	uPVC	PP	PVDF	uPVC*	PVDF	uPVC*	PVDF	uPVC*	PVDF							
16	10	3/8	154	155	154	120	118	126	124	25	24	207	81	M 6	40	0,98	0.82	1.20
20	15	1/2	159	154	156	120	118	126	124	25	24	207	81	M 6	40	1,00	0.84	1.24
25	20	3/4	195	188	189	150	147	156	153	37	36	243	107	M 6	46	2,20	1.90	2.45
32	25	1	201	192	193	150	147	156	153	37	36	243	107	M 6	46	2,25	1.95	2.52
40	32	1 1/4	263	251	250	205	200	211	207	57	54	348	147	M 8	65	6,00	5.20	6.45
50	40	1 1/2	273	257	256	205	200	211	207	57	54	348	147	M 8	65	6,21	5.41	6.66
63	50	2	287	265	264	205	200	211	207	57	54	348	147	M 8	65	6,40	5.60	6.87

\* also valid for PP/也适用于PP

Dimensions/尺寸: DHV 715, DHV 716 and DHV 725 with spigot ends/DHV715, DHV716 和 DHV 725 配有插口接头



DHV 715 and DHV 716 with spigot ends/DHV 715和DHV 716 配有插口接头

Size/规格			Dimensions/尺寸 mm										Weight/重量 kg (standard value/近似值)		
d	DN	DN	L			I	h		H	D	M	s	uPVC	PP	PVDF
mm	mm	inch	uPVC	PP	PVDF		uPVC*	PVDF							
16	10	3/8	144±1.0	144±2.1	144±2.1	14	25	24	174	81	M 6	40	0.80	0.67	1.02
20	15	1/2	144±1.0	144±2.1	144±2.1	16	25	24	174	81	M 6	40	0.85	0.72	1.07
25	20	3/4	174±1.0	174±2.6	174±2.6	19	37	36	202	107	M 6	46	1.86	1.57	2.11
32	25	1	174±1.0	174±2.6	174±2.6	22	37	36	202	107	M 6	46	1.90	1.61	2.15
40	32	1 1/4	224±1.1	224±3.3	224±3.3	26	57	54	262	147	M 8	65	5.00	4.10	5.45
50	40	1 1/2	224±1.1	224±3.3	224±3.3	31	57	54	262	147	M 8	65	5.10	4.18	5.55
63	50	2	244±1.2	244±3.6	244±3.6	38	57	54	262	147	M 8	65	5.20	4.28	5.65

DHV 725 with spigot ends/DHV 725 配有插口接头

Size/规格			Dimensions/尺寸 mm										Weight/重量 kg (standard value/近似值)		
d	DN	DN	L			I	h		H	D	M	s	uPVC	PP	PVDF
mm	mm	inch	uPVC	PP	PVDF		uPVC*	PVDF							
16	10	3/8	144±1.0	144±2.1	144±2.1	14	25	24	207	81	M 6	40	0.80	0.67	1.02
20	15	1/2	144±1.0	144±2.1	144±2.1	16	25	24	207	81	M 6	40	0.85	0.72	1.07
25	20	3/4	174±1.0	174±2.6	174±2.6	19	37	36	243	107	M 6	46	1.86	1.57	2.11
32	25	1	174±1.0	174±2.6	174±2.6	22	37	36	243	107	M 6	46	1.90	1.61	2.15
40	32	1 1/4	224±1.1	224±3.3	224±3.3	26	57	54	348	147	M 8	65	5.00	4.10	5.45
50	40	1 1/2	224±1.1	224±3.3	224±3.3	31	57	54	348	147	M 8	65	5.10	4.18	5.55
63	50	2	244±1.2	244±3.6	244±3.6	38	57	54	348	147	M 8	65	5.20	4.28	5.65

\* valid also for PP/也适用于PP

**Ident No./订货编号: DHV 715 with union sockets/DHV715配有由令承口接头**

Body/阀体			uPVC	uPVC	PP	PP	PVDF	PVDF
Diaphragm/隔膜			PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
Sealing/密封件			EPDM	FPM	EPDM	FPM	EPDM	FPM
Setting range/设定范围 (bar)			0.2 - 4.0	0.2 - 4.0	0.2 - 4.0	0.2 - 4.0	0.2 - 4.0	0.2 - 4.0
d mm	DN mm	DN inch	Id.-No.	Id.-No.	Id.-No.	Id.-No.	Id.-No.	Id.-No.
16	10	3/8	119000	119007	119014	119021	119028	119035
20	15	1/2	119001	119008	119015	119022	119029	119036
25	20	3/4	119002	119009	119016	119023	119030	119037
32	25	1	119003	119010	119017	119024	119031	119038
40	32	1 1/4	119004	119011	119018	119025	119032	119039
50	40	1 1/2	119005	119012	119019	119026	119033	119040
63	50	2	119006	119013	119020	119027	119034	119041

**Ident No./订货编号: DHV 716 with union sockets/DHV716配有由令承口接头**

Body/阀体			uPVC	uPVC	PP	PP	PVDF	PVDF
Diaphragm/隔膜			PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
Sealing/密封件			EPDM	FPM	EPDM	FPM	EPDM	FPM
Setting range/设定范围 (bar)			0.5 - 10	0.5 - 10	0.5 - 10	0.5 - 10	0.5 - 10	0.5 - 10
d mm	DN mm	DN inch	Id.-No.	Id.-No.	Id.-No.	Id.-No.	Id.-No.	Id.-No.
16	10	3/8	119042	119049	119056	119063	119070	119077
20	15	1/2	119043	119050	119057	119064	119071	119078
25	20	3/4	119044	119051	119058	119065	119072	119079
32	25	1	119045	119052	119059	119066	119073	119080
40	32	1 1/4	119046	119053	119060	119067	119074	119081
50	40	1 1/2	119047	119054	119061	119068	119075	119082
63	50	2	119048	119055	119062	119069	119076	119083

**Ident No./订货编号: DHV 725 with union sockets/DHV725配有由令承口接头**

Body/阀体			uPVC	uPVC	PP	PP	PVDF	PVDF
Diaphragm/隔膜			PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
Sealing/密封件			EPDM	FPM	EPDM	FPM	EPDM	FPM
Setting range/设定范围 (bar)			0.2 - 10	0.2 - 10	0.2 - 10	0.2 - 10	0.2 - 10	0.2 - 10
d mm	DN mm	DN inch	Id.-No.	Id.-No.	Id.-No.	Id.-No.	Id.-No.	Id.-No.
16	10	3/8	119084	119091	119098	119105	119112	119119
20	15	1/2	119085	119092	119099	119106	119113	119120
25	20	3/4	119086	119093	119100	119107	119114	119121
32	25	1	119087	119094	119101	119108	119115	119122
40	32	1 1/4	119088	119095	119102	119109	119116	119123
50	40	1 1/2	119089	119096	119103	119110	119117	119124
63	50	2	119090	119097	119104	119111	119118	119125

**Ident No./订货编号: DHV 715 with spigot ends/DHV715 配有插口接头**

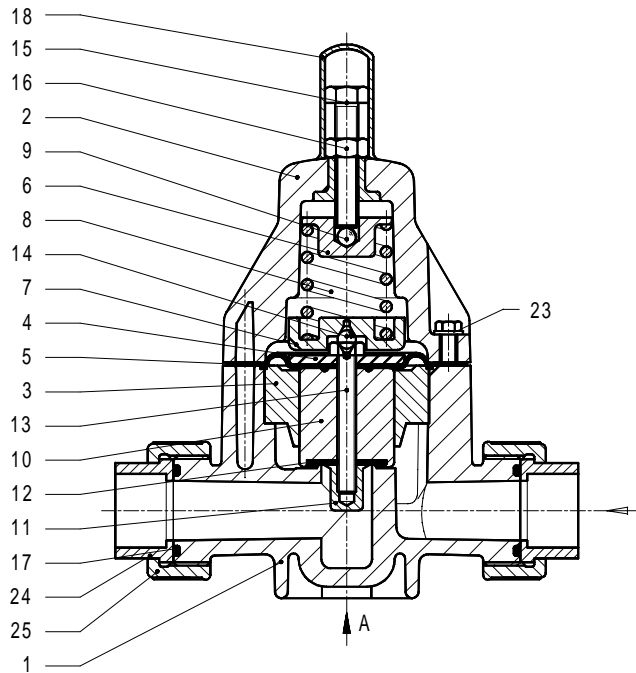
Body/阀体			uPVC	uPVC	PP	PP	PVDF	PVDF
Diaphragm/隔膜			PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
Sealing/密封件			EPDM	FPM	EPDM	FPM	EPDM	FPM
Setting range/设定范围 (bar)			0.2 - 4.0	0.2 - 4.0	0.2 - 4.0	0.2 - 4.0	0.2 - 4.0	0.2 - 4.0
d mm	DN mm	DN inch	Id.-No.	Id.-No.	Id.-No.	Id.-No.	Id.-No.	Id.-No.
16	10	3/8	121922	121929	121936	121943	121950	121957
20	15	1/2	121923	121930	121937	121944	121951	121958
25	20	3/4	121924	121931	121938	121945	121952	121959
32	25	1	121925	121932	121939	121946	121953	121960
40	32	1 1/4	121926	121933	121940	121947	121954	121961
50	40	1 1/2	121927	121934	121941	121948	121955	121962
63	50	2	121928	121935	121942	121949	121956	121963

**Ident No./订货编号: DHV 716 with spigot ends/DHV716 配有插口接头**

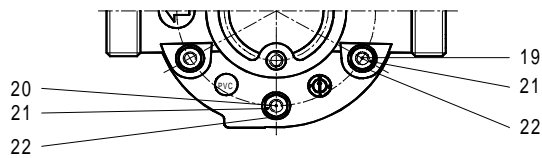
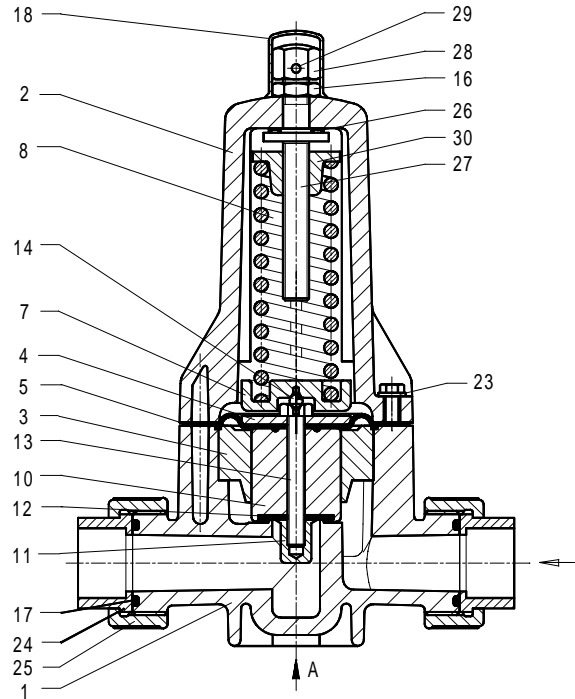
Body/阀体			uPVC	uPVC	PP	PP	PVDF	PVDF
Diaphragm/隔膜			PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
Sealing/密封件			EPDM	FPM	EPDM	FPM	EPDM	FPM
Setting range/设定范围 (bar)			0.5 - 10	0.5 - 10	0.5 - 10	0.5 - 10	0.5 - 10	0.5 - 10
d mm	DN mm	DN inch	Id.-No.	Id.-No.	Id.-No.	Id.-No.	Id.-No.	Id.-No.
16	10	3/8	121964	121971	121978	121985	121992	121999
20	15	1/2	121965	121972	121979	121986	121993	122000
25	20	3/4	121966	121973	121980	121987	121994	122001
32	25	1	121967	121974	121981	121988	121995	122002
40	32	1 1/4	121968	121975	121982	121989	121996	122003
50	40	1 1/2	121969	121976	121983	121990	121997	122004
63	50	2	121970	121977	121984	121991	121998	122005

**Ident No./订货编号: DHV 725 with spigot ends/DHV725 配有插口接头**

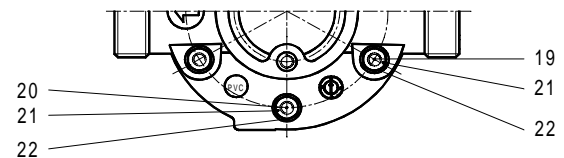
Body/阀体			uPVC	uPVC	PP	PP	PVDF	PVDF
Diaphragm/隔膜			PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
Sealing/密封件			EPDM	FPM	EPDM	FPM	EPDM	FPM
Setting range/设定范围 (bar)			0.2 - 10	0.2 - 10	0.2 - 10	0.2 - 10	0.2 - 10	0.2 - 10
d mm	DN mm	DN inch	Id.-No.	Id.-No.	Id.-No.	Id.-No.	Id.-No.	Id.-No.
16	10	3/8	122006	122013	122020	122027	122034	122041
20	15	1/2	122007	122014	122021	122028	122035	122042
25	20	3/4	122008	122015	122022	122029	122036	122043
32	25	1	122009	122016	122023	122030	122037	122044
40	32	1 1/4	122010	122017	122024	122031	122038	122045
50	40	1 1/2	122011	122018	122025	122032	122039	122046
63	50	2	122012	122019	122026	122033	122040	122047

**Spare part list/备件清单**
**DHV 715 and/和 DHV 716**


view A/仰视图


**DHV 725**


view A/仰视图



Pos./序号	Description/名称	Qty./数量	Pos./序号	Description/名称	Qty./数量
1	body/阀体	1	16	counter nut/锁紧螺母	1
2	bonnet/上盖	1	17	O-ring/O 形圈 *	2
3	separation disc/隔离盘	1	18	protection cap/保护帽	1
4	pressure disc/压环	1	19	hexagonal screw/六角螺栓	4
5	diaphragm/隔膜 *	1	20	hexagonal screw/六角螺栓	2
6	pressure plate/压盖	1	21	hexagonal nut/六角螺母	4/6
7	spring plate/弹簧座	1	22	U-washer/垫圈	4/6
8	spring/弹簧	1	23	U-washer/垫圈	4/6
9	steel ball/钢球	1	24	insert/由令接头	2
10	piston/柱塞 *	1	25	union nut/由令螺母	2
11	piston top/柱塞头 *	1	26	bearing/推力轴承 *	1
12	flat disc/阀垫 *	1	27	spindle/调整螺钉	1
13	hexagonal screw/连接螺钉 *	1	28	cap nut/螺帽	1
14	steel ball/centering ball/钢球	1	29	spring dowel sleeve/弹性销	1
15	hexagonal screw/调整螺钉	1	30	pressure plate/压盖	1

All parts marked with \* are included in the respective wear and tear part set.  
In case of spare part order please state complete valve ident No. and serial No.

标注"\*"的为易损件;  
若有备件订购, 请说明清楚系列号和识别号。

### Characteristic curves/特性曲线图

The valve curves show the primary pressure or working pressure  $p_A$  in bar in relation to the flow  $Q$  in l/h.

The parameter is the set pressure  $p_E$  at  $Q = 0$  l/h.

The curve shows the progression of the opening pressure. The curves are valid for water at 20 °C.

特性曲线图表明入口压力或工作压力 $p_A$ (bar)与流量 $Q$ (l/h)的关系。图中设定压力 $p_E$ 是在 $Q = 0$  l/h 时设定的。该曲线表明压力随流量上升的情形。本曲线是在介质为水, 20°C 时测定的。

#### Example/例如:

DHV 716, size DN 10. The valve is set closed at 5 bar. At a pressure increase of 1 bar the flow of about 630 l/h is reached.

DHV 716, 规格DN 10。设定压力为5 bar。

压力增加1 bar 时, 流量为630 l/h。

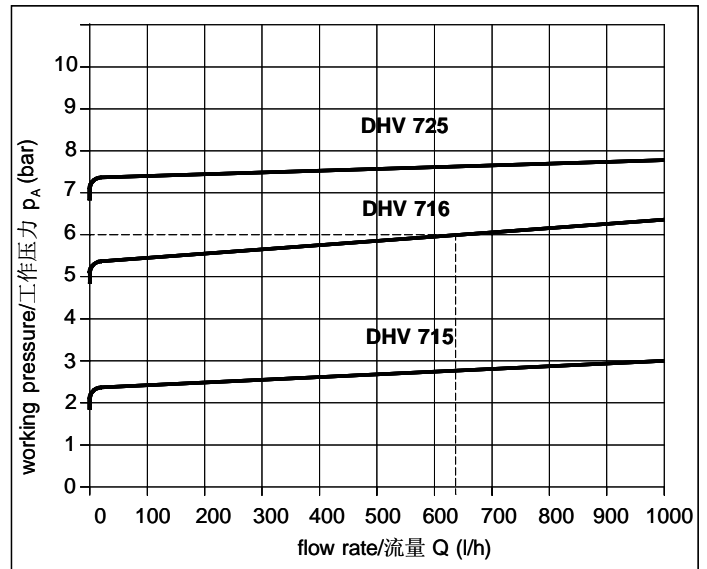
Working pressure / 工作压力:  $p_A \cong 6.0$  bar

Closing pressure / 关闭压力:  $p_S \cong 4.8$  bar

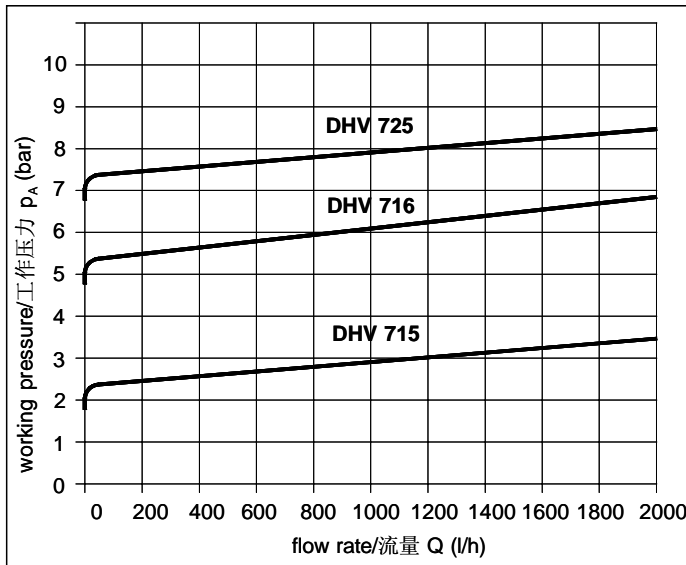
Opening pressure / 开启压力:  $p_O \cong 5.4$  bar

Set pressure / 设定压力:  $p_E \cong 5.0$  bar

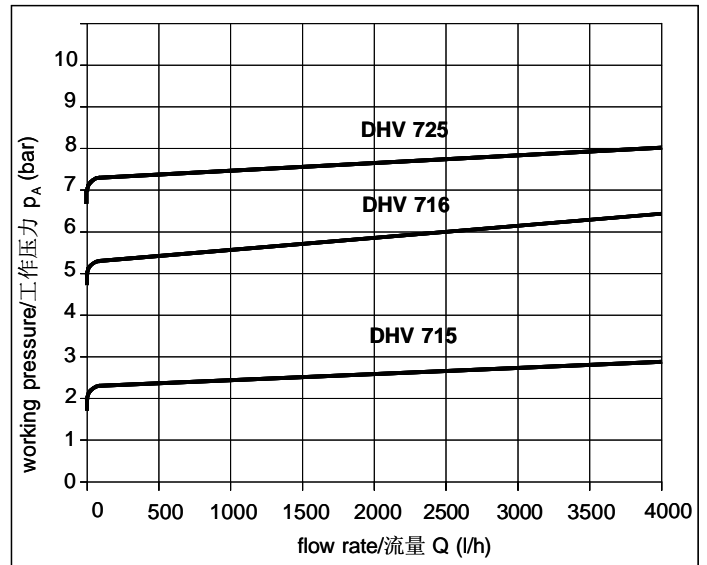
DN 10



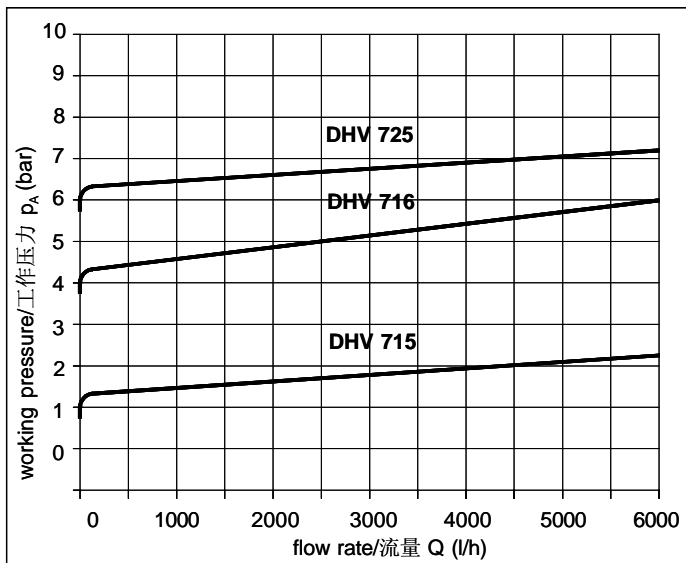
DN 15



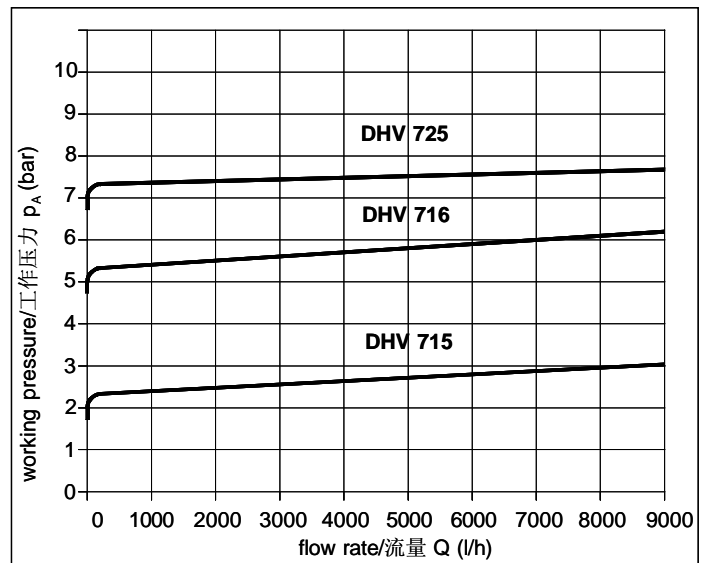
DN 20

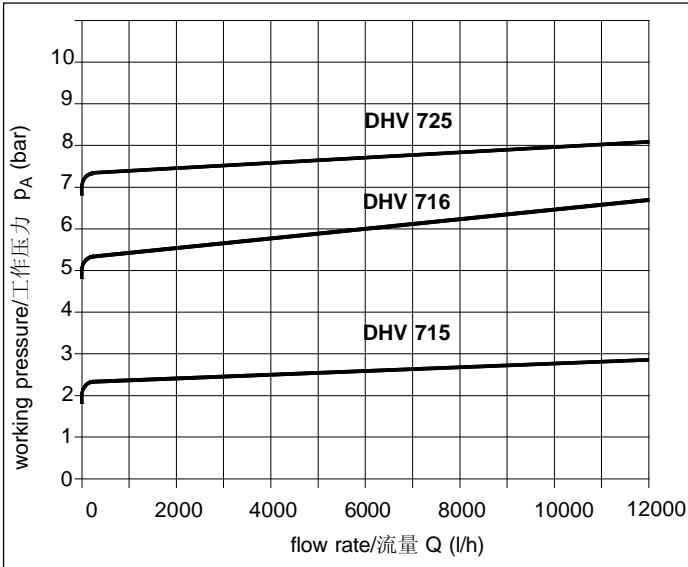
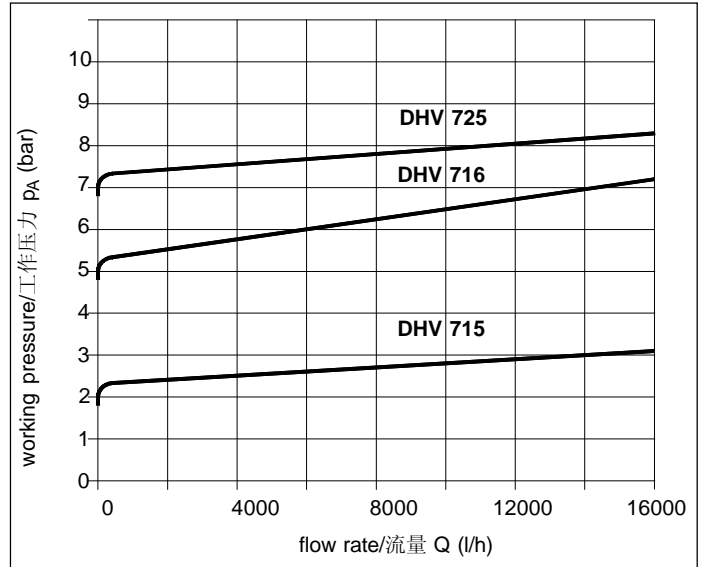
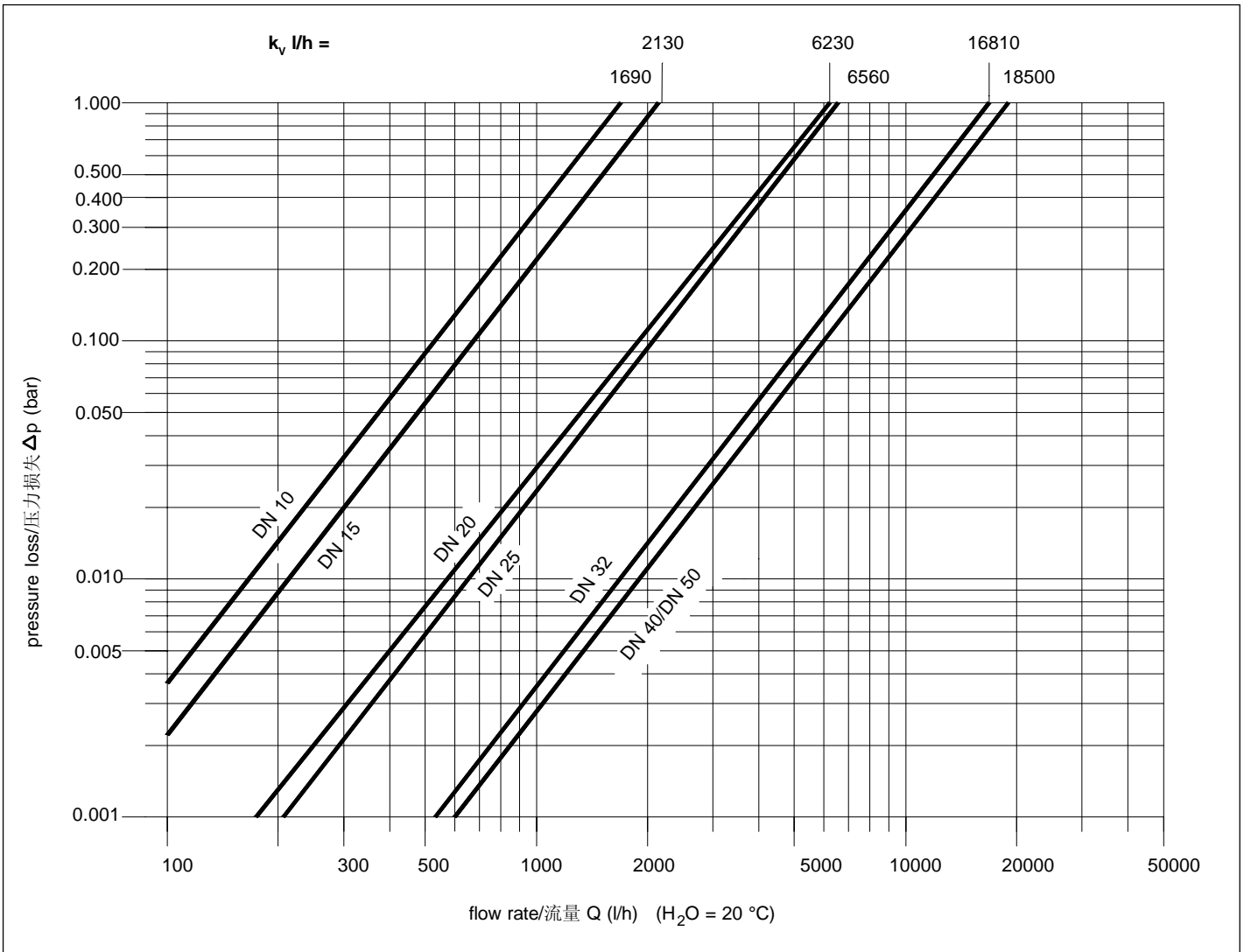


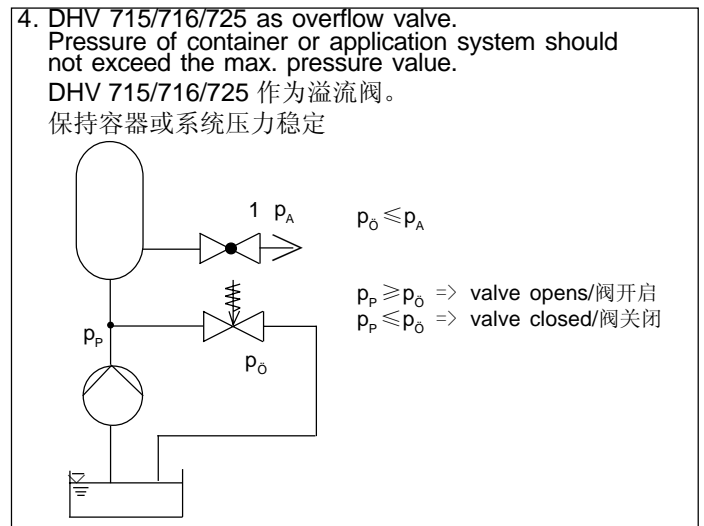
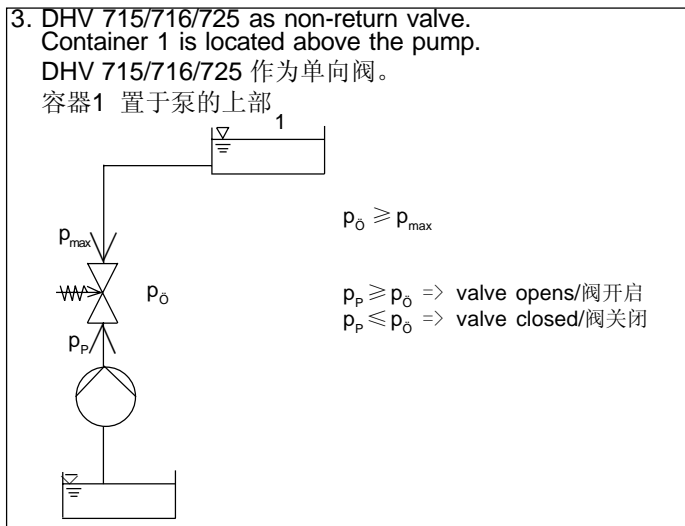
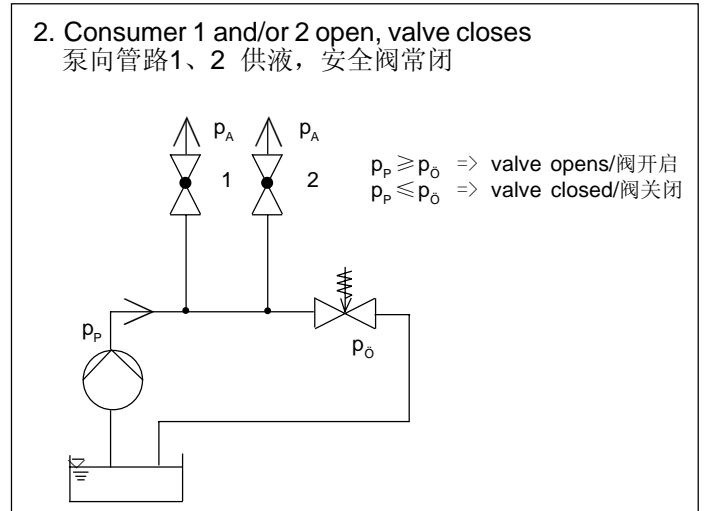
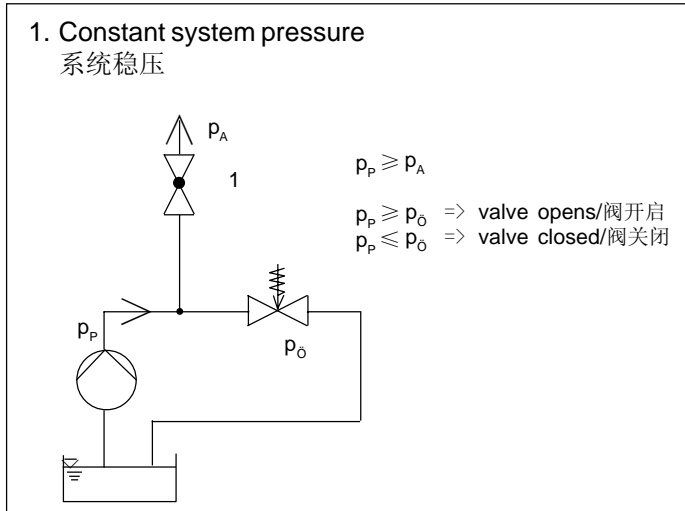
DN 25



DN 32



**Characteristic curves/特性曲线图**
**DN 40**

**DN 50**

**Pressure loss curves DHV 715 / 716 / 725/压力损失DHV 715 / 716 / 725**


**Application of pressure relief valve/安全阀应用实例**


$p_A$  = working pressure       $p_p$  = pressure of pump       $p_o$  = opening pressure  
 $p_A$  = 工作压力                   $p_p$  = 泵压                           $p_o$  = 开启压力

**Failure, possible cause and repair/故障、原因及维修**

Failure/故障	Possible cause/原因	Repair/维修
Valve leaking at diaphragm. 隔膜泄漏	Diaphragm clamping pressure too low. 隔膜压紧力不足	Fasten screws (19 and 20). 紧固螺钉(19 和20)
Pressure drops below set pressure. 压力降到设定压力以下	Pistonguide or valve seat leaking. Diaphragm (5) leaking. 柱塞或阀座处泄漏 隔膜(5)泄漏	Piston or seat seal to be checked. Replace if necessary. Diaphragm to be replaced. 检查柱塞或密封件并进行更换; 更换隔膜
Pressure rises above set pressure. 压力高于设定压力	Pistonguide is jammed or dirty. 柱塞卡住或有脏物	Valve to be cleaned. 对阀进行清洁
Valve is leaking at setting control screw. 调整螺钉处泄漏	Diaphragm damaged. Pressure plate clamping pressure too low. 隔膜受损; 压环的压紧力太小	Replace diaphragm. Fasten screw (13). 更换隔膜; 拧紧连接螺栓(13)

## Operating instructions



Safe operation of the valve can only be ensured if it is properly installed, operated, serviced or repaired by qualified personnel according to its intended use while observing the accident prevention regulations, safety

regulations, standards and technical regulations. The intended use includes adhering to the specified limit values for pressure and temperature as well as the chemical resistance referring to the operating conditions.

For this purpose, ensure that all components getting in contact with the media are "resistant" in accordance with the ASV resistance guide. The owner/user must inform the authorized qualified personnel instructed to perform the assembly, inspection and/or maintenance work of any potential danger emanating from the machine line/medium, and ensure that suitable safety measures are observed including local regulations and laws of the territories of use.

Non-observance of the specified information and safety instructions may lead to injuries and/or property damages.

## Installation

- Depending on the type of connection the pipe ends have to be properly prepared acc. to all technical standards.
- Valve to be radially installed acc. to all technical standards between the pipe ends.  
In case of flange connections the torques of the screws to fasten the flanges have to be observed.
- After proper installation the pipe system with all components has to be tested for leakages.

## Disassembly

### Note

Adhere to the operating instructions

- If required protection clothes must be worn.
- The pipe section is to be shut-off and to be emptied. Ensure a safe pressure release.
- Any fluid rest is to be disposed properly.

### 1. Valve bonnet

- 1.1. Position the valve upright.
- 1.2. Remove cap (18).
- 1.3. Loosen counter nut (16) and setting control screw (15) - for DHV 725 spindle (27) - so far until the spring (8) is totally released.
- 1.4. Remove housing bolts (19, 20) from body (1) and bonnet (2).
- 1.5. Bonnet (2) to be pulled off upwards. Remove spring (8), spring plate (7) and steel ball (14).

### 2. Valve body and diaphragm

- 2.1. Perform the disassembly as already described under point 1.
- 2.2. Pull off piston (10), pressure disc (4) with diaphragm (5), hexagonal screw (13), flat disc (12) and piston top (11) out of the body (1).
- 2.3. Carefully fix the piston, turn off piston top (11).  
Loosen screw (13), pressure disc (4) with diaphragm (5), flat disc (12).

## Assembly

In the reverse order to disassembly.

- Diaphragm, valve seat, O-ring sealings to be checked for damages, dimension deviations, shore hardness etc. Replace if necessary.
- Screw torque (lubricated screws):

DN 10/15	6 Nm
DN 20/25	9 Nm
DN 32/40/50	12 Nm

### Note

Elastomeres, especially the EPDM sealing elements, should not be touched or cleaned with synthetic oils, mineral oils, fats or cleaning agents. Danger of swelling. Only appropriate fats should be used, e.g. silicone greases.

## We recommend:

Installing of filter or strainer (see print 330 034) directly before the valve for avoiding impurities e.g. at valve seat.

## 使用说明:



为保证可靠使用,应根据本阀的用途,由具有相应资格的人员按照安全、技术标准及规范正确安装、使用、维护和修理。

使用中应严格遵守压力、温度极限,并应保证所选阀的各部件材料对介质具有耐蚀性。

设备所有者或使用者必须将安装、检查、维护等工作中可能来自于介质和生产线中的潜在危险告知这些有资格的人员,并确保履行包含使用地法规在内的安全措施。

超出技术参数规定范围的使用以及违反相应的安全规范可能导致人身伤害或财产损失。设备所有者或使用者应对不遵守本使用说明引起的后果承担全部责任。

此外,还应遵守其它配套产品的使用及维护说明。

### 1. 阀的拆卸:

- 关闭管道并排空;

注意:拆卸本阀前应排空阀内余液并妥善处理,如有必要,操作者应穿上防护服。

### 2. 上盖的拆卸

- 2.1 竖放本阀;
- 2.2 取下保护帽(18);
- 2.3 松开锁紧螺母(16)和调整螺钉,对于DHV725型阀,松开调整螺钉(27),直到弹簧(8)完全放松;
- 2.4 取下连接螺栓(19、20)、螺母(21);
- 2.5 抬起上盖(2),取出弹簧(8)、弹簧座(7)和钢球(14)。

### 3. 阀体和隔膜的拆卸

- 3.1 按2.1至2.5的次序拆下上盖;
- 3.2 取出柱塞(10)、压环(4)、隔膜(5)、连接螺栓(13)、阀垫(12)和柱塞头(11);
- 3.3 检查柱塞是否损坏,并注意不要损坏柱塞。旋松连接螺栓(13),即可拆下压环(4)、隔膜(5)、阀垫(12)和柱塞头(11)。

### 4. 组装

依与拆卸相反的次序组装本阀。

隔膜、柱塞、O形圈应检查有无损坏、尺寸是否在允许的偏差范围之内。肖氏硬度也需测量。更换不合格零件。注意使用原厂配件。

注意:螺纹连接的最大紧固力矩为6Nm。

## 注意:

橡胶件,尤其是EPDM(乙丙橡胶)密封件,不应接触合成油、矿物油、脂或清洗剂,更不能用上述介质清洗这些零件,以防溶胀。只有适当的油脂(如硅脂)才可使用。