

HAA 单座角型调节阀

HAA 单座调节阀阀芯采用上导结构，阀体结构紧凑，流体通道呈 S 型，具有压降损失小，流量大，可调节范围广，流量特性精度高，符合 IEC60534-2-1-2011 标准。调节阀泄漏量符合 ANSI FCI 70-2-2006 标准。调节阀配用多弹簧薄膜或气缸执行机构，其结构紧凑，输出力大。

产品符合 GB/T4213-2008 标准

Single Seated Angle Valve

HAA Single seated Angle Valve with a top-guided valve plug, a compact valve body and an S-shape flow passage which features low pressure loss, large flow capacity, wide rangeability and high accuracy flow characteristics. The design of valve complies with the IEC60534-2-1-2011 standards. The seat leakage complies with the ANSI FCI 70-2-2006 standards. The compact size and large output force can be available when the control valve is combined with multi-spring diaphragm actuator or cylinder actuator.

This product complies with the GB/T4213-2008 standards.

标准规格 STANDARD SPECIFICATION

阀体 BODY

| | |
|------------------------------------|--|
| 形式 Type | 角型单座铸造球型阀 Angle, single seated, cast globe valve |
| 公称通径 Normal size | 40、50、65、80、100、150、200mm |
| 公称压力 Pressure rating | ANSI Class 125, 150, 300, 600; JIS 10K, 20K, 30K, 40K; PN 1.6, 4.0, 6.4 MPa * |
| 连接型式 End connections | 法兰型 Flanged: FF、RF、RJ、TG、MFM 焊接型 Welded end: SW (40~50mm); BW (65~200mm) |
| 尺寸 Dimensions | 请参见表 5 See Table 5 |
| 阀体及上阀盖材质 Body & Bonnet Material | SCPH2/WCB, SCPH21/WC6, SCS13A/CF8, SCS14A/CF8M, SCS16A/CF3M, Ti and other alloy steels. 各种材质的使用温度·压力范围，请参见表 1 和表 2 As to the operating pressure-temperature limitation for each material, see Table 1& 2 |
| 上阀盖型式 Bonnet type | 常温型 (P) Plain type : -17~+230℃ 伸长 I 型 (EI) Extension Type I: -45~-17℃ and +230~+566℃ 伸长 II 型 (EII) Extension Type II: -100~-45℃ |
| 压盖型式 Gland type | 螺栓压紧式 Bolted gland |
| 填料 Packing | V 型聚四氟乙烯填料、石墨填料请参见图 2 Teflon V-ring, Graphite, etc. See Fig.2. |
| 垫片 Gasket | 平型、锯齿型 (碳钢、不锈钢 (SUS304、SUS316、SUS316L)、其它合金) Flat type, Saw-tooth type (Carbon steel, Stainless steel or other alloy steels) |

| | |
|-------------------------|--|
| 表面涂层 Surface coating | 银灰色（环氧树脂）。但是阀体材质为不锈钢时，本体部不加涂层。 SLV (Epoxy resin group) is standard. In the case of stainless steel body, no painting is standard. |
|-------------------------|--|

* 法兰标准 Standard: JIS B2201-1984、JB/T79.1-94(PN1.6MPa);JB/T79.2-94(PN4.0、6.4MPa);
ANSI B16.5-2009;HG20592-2009、HG20615-2009

阀内组件 TRIM

| | |
|---------------------------|---|
| 阀芯型式 Valve plug type | 单座柱塞型 Single seated, Contoured type |
| 阀内件材质 Trim materials | 标准材质组合及使用温度·压力范围，请参见表 1 及图 1 |
| 阀内件处理 Trim materials | See Table 1&Fig.1 for hardening treatment and operating pressure-temperature |
| 流量特性 Flow characteristics | <p>高容量流量特性，参见图 4</p> <ul style="list-style-type: none"> ● 金属阀座 等百分比特性 (%C) 和线性特性 (LC) ● 软阀座 等百分比特性 (%T) 和线性特性 (LT) <p>High-capacity flow characteristics, see Fig.4</p> <ul style="list-style-type: none"> ● Metal seat: Equal percentage (%C) and Linear (LC) ● Soft seat: Equal percentage (%T) and Linear (LT) <p>高精度流量特性，参见图 4</p> <ul style="list-style-type: none"> ● 金属阀座 等百分比特性 (%CF) 和线性特性 (LCF) ● 软阀座 等百分比特性 (%TF) 和线性特性 (LTF) <p>High-precision flow characteristics, see Fig.4</p> <ul style="list-style-type: none"> ● Metal seat: Equal percentage (%CF) and Linear (LCF) ● Soft seat: Equal percentage (%TF) and Linear (LTF) <p>注：关于聚四氟乙烯阀座的工作温度和压差，请参见图 1-2</p> <p>Note: For the operating temperature and pressure drops for soft seat, see Fig.1-2</p> |

执行机构 ACTUATOR

| 型号 Type | 气动薄膜式 Pneumatic Diaphragm type | 气缸活塞式 Cylinder piston type | | 电子式 Electronic type | 智能式 Intelligent type |
|--|---|------------------------------------|----------------------|--|---|
| | HA | VA6 | VP | | |
| 规格 Specification | 多弹簧型 Multi-Spring type | 单作用 Single acting | 双作用 Double acting | EIL | M8 系列 |
| 用途 Purpose | 调节 Modulation | 调节 Modulation | | 调节 Modulation | 调节 Modulation |
| 供气压力或 供给电压 Air supply or Power supply | 供气压力（弹簧范围） Air supply (Spring range) 140 (20~100) kPa 160 (20~100) kPa 280 (80~240) kPa 400 (80~240) kPa | 供气压力 Air supply 400~700kPa | | 电压: 220/380V 50HZ Power supply:220 /380V 50Hz 输入信号 Input signal: 4~20mA DC | 电压: 220 /380V 50HZ Power supply:220 /380V 50Hz 输入信号 Input signal: 4~20mA DC |
| 接口 Connection | 空气配管: Rc1/4 Air piping: Rc1/4 | 空气配管 Air piping: G3/8 (VA6、VP5、 | | 配线:2-PF3/4 Wiring: 2-PF3/4 | 配线: PG13.5 Wiring:PG13.5 |

| | | | | |
|--|---|---|---|---|
| | | VP6) ; G1/2 (VP7) | | |
| 正作用 Direct action | 气压增加阀闭 Air to valve close | 气压增加阀闭 Air to valve close | 输入信号阀闭 Signal increase to valve shut | 输入信号阀闭 Signal increase to valve shut |
| 反作用 Reverse action | 气压增加阀开 Air to valve open | 气压增加阀开 Air to valve open | 输入信号阀开 Signal increase to valve open | 输入信号阀开 Signal increase to valve open |
| 回差 Hysteresis error | ≤1%FS (带定位器) ≤3%FS (不带定位器) ≤ 1%FS (With positioner) ≤ 3%FS (No positioner) | ≤1%FS (带定位器) ≤3%FS (不带定位器) ≤ 1%FS (With positioner) ≤ 3%FS (No positioner) | ≤1%FS | ≤1%FS |
| 基本误差 Limit of intrinsic error | ≤±1%FS (带定位器) ≤±5%FS (不带定位器) ≤ ±1%FS (With positioner) ≤ ±5%FS (No positioner) | ≤±1%FS (带定位器) ≤±5%FS (不带定位器) ≤ ±1%FS (With positioner) ≤±5%FS (No positioner) | ≤±1%FS | ≤±1%FS |
| 环境温度 Ambient temperature | 标准型 Standard type-30~+70℃ 高温型 High Temp.service 0~+100℃ 低温型 Low Temp.service -40~+40℃ | 标准型 Standard type-20~+60℃ 高温型 High Temp.service 0~+100℃ 低温型 Low Temp.service -50 ~+60℃ | -20~+70℃ | -25~+70℃ |
| 油漆颜色 Painting | 蓝色 Munsell 色标 10B5/10 Blue (Munsell color 10B5/10) | 蓝色 Munsell 色标 10B5/10 Blue (Munsell color 10B5/10) | | |
| 附件 Accessories | 定位器、空气过滤减压阀、保位阀、阀传送器、手轮机构等 Positioner, Air-set, Lock-up valve, Position transmitter, Hand wheel and others | 定位器、空气过滤减压阀、保位阀、阀传送器、手轮机构等 Positioner, Air-set, Lock-up valve, Position transmitter, Hand wheel and others | EIL 执行机构手轮 Handwheel | M8 执行机构手轮 Handwheel |

性能 PERFORMANCE

| | |
|--------------------------------------|--------------------|
| CV 值及行程 Rated CV value and Travel | 请参见表 3 See Table 3 |
| 阀座泄漏量 Seat Leakage | 请参见表 1 See Table 1 |
| 可调范围 Rangeability | 50 : 1 |
| 允许压差 Allowable pressure drops | 请参见表 4 See Table 4 |
| 产品重量 Weight | 请参见表 5 See Table 5 |

表 1 阀体、阀内件材质组合及使用温度范围· 阀座允许泄漏量

Table 1 BODY/TRIM STANDARD MATERIAL COMBINATION, OPERATING TEMPERATURE AND SEAT LEAKAGE

- R.TFE: 强化聚四氟乙烯 Reinforced Teflon
- HT : 热处理 Heat treatment
- ST : 堆焊司太莱合金 Partial stellite
- SS : 部分堆焊司太莱合金 Stellite seat surface
- SF : 全部堆焊司太莱合金 Stellite full surface

表 1-1 阀体材质: 碳钢

Table 1-1 BODY MATERIAL: CARBON STEEL

| 阀体材质 Body material | | SCPH2/A216-WCB,SCPH21/A217-WC6,SCPL1/A352-LCB | | |
|---------------------------|-----------------|---|--------------|------------|
| 阀芯 Plug | 材质 material | SUS304/316 | SUS304/316 | SUS304/316 |
| | 处理 treatment | — | R.TFE | SS/SF |
| 阀座 Seat ring | 材质 material | SUS304/316 | SUS304/316 | SUS304/316 |
| | 处理 treatment | — | — | SS/SF |
| 导向套 Guide | 材质 material | SUS420 | SUS420 | SUS420 |
| | 处理 treatment | HT | HT | HT |
| 垫圈 Gasket | 材质 material | SUS316L | SUS316L | SUS316L |
| 阀座允许泄漏量 Seat Leakage | ANSI | Class IV | Class VI | Class IV |
| | Rated Cv× | 0.01% | Bubble-tight | 0.01% |
| 使用温度 Operating Tep. °C | SCPH2/WCB Body | -17~+425 | -17~+230 | -17~+425 |
| | SCPH21/WC6 Body | -17~+566 | -17~+230 | -17~+566 |
| | SCPL1/LCB Body | -45~+350 | -45~+230 | -45~+350 |

表 1-2 阀体材质：不锈钢

Table 1-2 BODY MATERIAL: STAINLESS STEEL

| 阀体材质 Body material | | SCS13A/CF8,SCS14A/CF8M,SCS16A/CF3M | | |
|-------------------------|--------------|------------------------------------|-----------------|-----------------|
| 阀芯 Plug | 材质 material | SUS304/316/316L | SUS304/316 | SUS304/316/316L |
| | 处理 treatment | —— | R.TFE | SS/SF |
| 阀座 Seat ring | 材质 material | SUS304/316/316L | SUS304/316/316L | SUS304/316/316L |
| | 处理 treatment | —— | —— | SS/SF |
| 导向套 Guide | 材质 material | SUS304/316/316L | SUS304/316/316L | SUS304/316/316L |
| | 处理 treatment | — | R.TFE | ST |
| 垫圈 Gasket | 材质 material | SUS316L | SUS316L | SUS316L |
| 阀座允许泄漏量 Seat Leakage | ANSI | Class IV | Class VI | Class IV |
| | Rated Cv× | 0.01% | Bubble-tight | 0.01% |
| 使用温度 Operating Temp.℃ | | -196~+566 | -45~+230 | -196~+566 |

表 2 阀体材质使用温度· 压力范围

Table 2 BODY MATERIAL/OPERATING PRESSURE-TEMPERATURE RATIO

表 2-1 Table 2-1 ANSI

UNIT:MPa

| 温度 Temp.℃ | ANSI150 | | | | | ANSI300 | | | | | ANSI600 | | | | |
|--------------|---------|------|------|--------|--------|---------|------|------|--------|--------|---------|------|-------|--------|--------|
| | LCB | WCB | WC6 | SCS13A | SCS14A | LCB | WCB | WC6 | SCS13A | SCS14A | LCB | WCB | WC6 | SCS13A | SCS14A |
| | | | | CF8 | CF8M | | | | CF8 | CF8M | | | | CF8 | CF8M |
| -196~38 | — | — | — | 1.90 | 1.90 | — | — | — | 4.95 | 4.95 | — | — | — | 9.91 | 9.92 |
| -45~38 | 1.84 | — | — | 1.90 | 1.90 | 4.78 | — | — | 4.95 | 4.95 | 9.57 | — | — | 9.91 | 9.92 |
| -5~38 | 1.84 | 1.96 | 1.99 | 1.90 | 1.90 | 4.78 | 5.10 | 5.16 | 4.95 | 4.95 | 9.57 | 10.2 | 10.32 | 9.91 | 9.92 |
| 50 | 1.81 | 1.92 | 1.92 | 1.84 | 1.84 | 4.72 | 5.00 | 5.16 | 4.77 | 4.80 | 9.46 | 10.1 | 10.32 | 9.56 | 9.62 |
| 100 | 1.72 | 1.76 | 1.76 | 1.56 | 1.61 | 4.51 | 4.63 | 5.14 | 4.08 | 4.21 | 9.02 | 9.27 | 10.29 | 8.17 | 8.43 |
| 150 | 1.57 | 1.57 | 1.57 | 1.39 | 1.47 | 4.40 | 4.51 | 5.01 | 3.62 | 3.85 | 8.78 | 9.04 | 10.03 | 7.26 | 7.69 |
| 200 | 1.40 | 1.40 | 1.40 | 1.25 | 1.37 | 4.26 | 4.38 | 4.88 | 3.27 | 3.56 | 8.54 | 8.75 | 9.75 | 6.54 | 7.12 |
| 250 | 1.20 | 1.20 | 1.20 | 1.16 | 1.20 | 4.05 | 4.16 | 4.62 | 3.04 | 3.34 | 8.11 | 8.33 | 9.26 | 6.10 | 6.67 |
| 300 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 3.76 | 3.87 | 4.23 | 2.91 | 3.15 | 7.54 | 7.74 | 8.48 | 5.80 | 6.32 |
| 350 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 3.59 | 3.69 | 4.01 | 2.81 | 3.03 | 7.18 | 7.38 | 8.04 | 5.60 | 6.07 |
| 375 | | 0.73 | 0.73 | 0.73 | 0.73 | | 3.64 | 3.88 | 2.77 | 2.96 | | 7.28 | 7.75 | 5.54 | 5.93 |
| 400 | | 0.64 | 0.64 | 0.64 | 0.64 | | 3.44 | 3.65 | 2.74 | 2.91 | | 6.89 | 7.31 | 5.48 | 5.81 |
| 425 | | 0.55 | 0.55 | 0.55 | 0.55 | | 2.88 | 3.44 | 2.71 | 2.87 | | 5.74 | 6.91 | 5.42 | 5.72 |
| 450 | | 0.47 | 0.47 | 0.47 | 0.47 | | 1.99 | 3.08 | 2.68 | 2.81 | | 4.00 | 6.17 | 5.37 | 5.61 |
| 475 | | 0.37 | 0.37 | 0.37 | 0.37 | | 1.35 | 2.58 | 2.65 | 2.73 | | 2.70 | 5.17 | 5.30 | 5.46 |
| 500 | | 0.28 | 0.28 | 0.28 | 0.28 | | 0.88 | 2.02 | 2.60 | 2.67 | | 1.75 | 4.04 | 5.20 | 5.37 |
| 525 | | 0.18 | 0.18 | 0.18 | 0.18 | | 0.51 | 1.53 | 2.19 | 2.57 | | 1.03 | 3.07 | 4.77 | 5.15 |
| 550 | | — | | | | | | 1.20 | 2.00 | 2.40 | | | 2.40 | 4.00 | 4.60 |
| 566 | | | | | | | | 1.00 | 1.90 | 2.20 | | | 2.00 | 3.80 | 4.50 |

表 2-2 Table 2-2 JB/T79-94 或 HG20592-2009

UNIT:MPa

| 温度 Temp. °C | PN16 | PN40 | PN63 | PN100 | 温度 Temp. °C | PN16 | PN40 | PN63 | PN100 |
|----------------|-----------|------|------|-------|----------------|------------|------|------|-------|
| | ZG230-450 | | | | | ZG0Cr18Ni9 | | | |
| -5~200 | 1.60 | 4.00 | 6.30 | 10.0 | -45~200 | 1.60 | 4.00 | 6.30 | 10.0 |
| ~250 | 1.40 | 3.50 | 5.40 | 9.00 | ~300 | 1.40 | 3.50 | 5.40 | 9.00 |
| ~300 | 1.20 | 3.00 | 4.80 | 7.50 | ~400 | 1.20 | 3.00 | 4.80 | 7.50 |
| ~350 | 1.10 | 2.60 | 4.00 | 6.60 | ~480 | 1.10 | 2.60 | 4.00 | 6.60 |
| ~400 | 0.90 | 2.30 | 3.70 | 5.80 | ~520 | 0.90 | 2.30 | 3.70 | 5.80 |
| ~425 | 0.80 | 2.00 | 3.20 | 5.00 | ~560 | 0.80 | 2.00 | 3.20 | 5.00 |
| ~435 | 0.70 | 1.80 | 2.80 | 4.50 | | | | | |
| ~445 | 0.62 | 1.60 | 2.50 | 4.20 | | | | | |
| ~455 | 0.57 | 1.40 | 2.30 | 3.60 | | | | | |

图 1 阀内件材质·处理

Fig.1 TRIM MATERIAL/TREATMENT

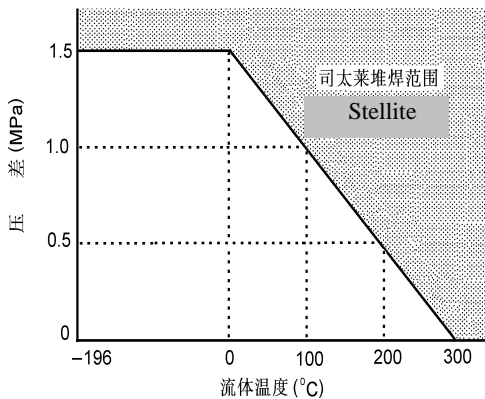


图 1-1 司太莱的工作范围
Fig.1-1 Temperature/normal pressure drops ranges requiring Stellite

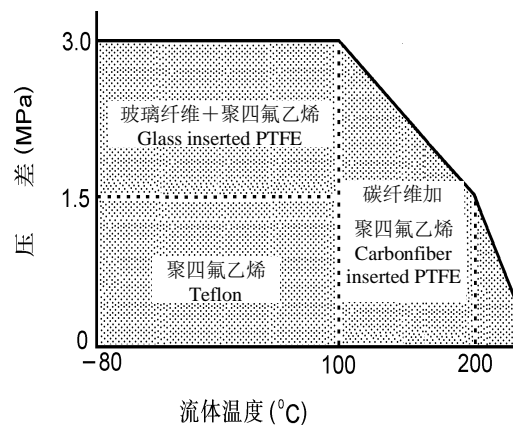


图 1-2 软阀座的工作温度和压差的范围
Fig.1-2 Temperature and maximum pressure drops range for soft seat

- 注: 1. 空化和闪蒸或者水的温度超过 100 ℃热场合, 建议用 9Cr18 硬化不锈钢。
2. 空化、闪蒸、禁油及常处于关闭状态
3. 如 $C_v \leq 0.16$, 阀芯全部堆焊司太莱合金或用 9Cr18 硬化不锈钢。

Note: 1.9Cr18 hardened stainless steel is recommended for valves in cavitation/flashing situation or superheated service of water higher than 100°C.

2. Stellite is recommended for the cavitation/flashing, oil prohibitive and valve-close situation.
3. When C_v value is 0.16 or lower, Stellite faced valve plug or 9Cr18 hardened stainless steel valve plug are standard.

图 2 软阀座材质及填料使用温度·压力范围

Fig.2 SOFT SEAT MATERIAL & PACKING PRESSURE · TEMPERATURE RATINGS

图 2-1 软密封(增强聚四氟乙烯)
Fig. 2-1 Soft seal (R. TFE V-RING)

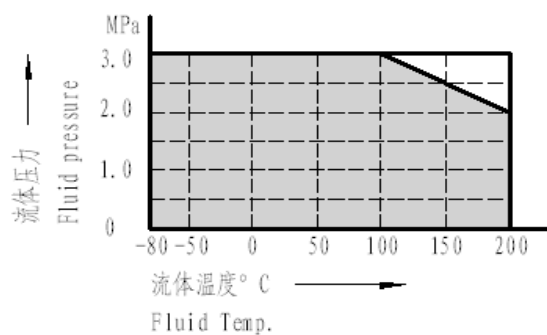


图 2-2 聚四氟乙烯碳纤维/聚四氟乙烯石棉
Fig. 2-1 TFE FIBER/TFE-ASBESTOS

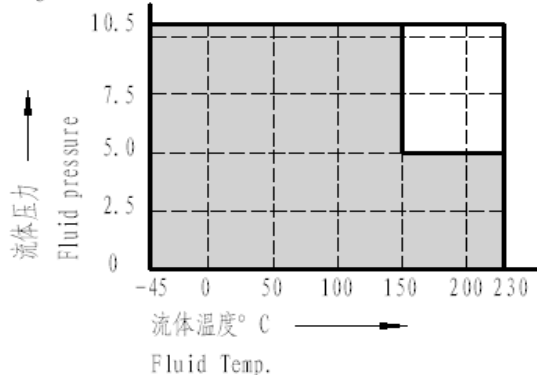


图 2-3 柔性石墨
Fig. 2-3 GRAFOIL

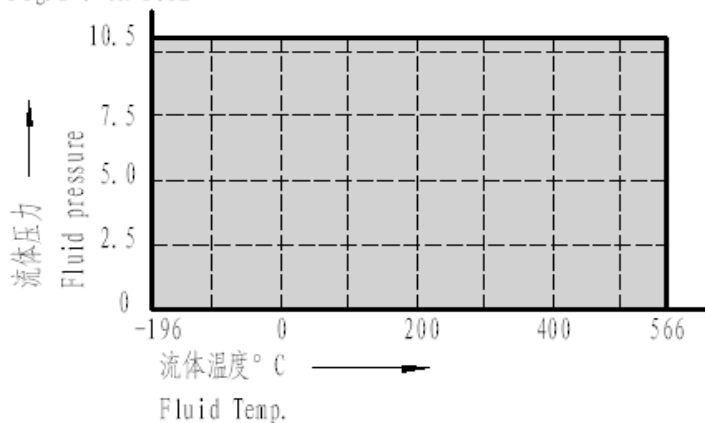


图 2-4 V型聚四氟乙烯填料
Fig. 2-4 PTFE V-RING

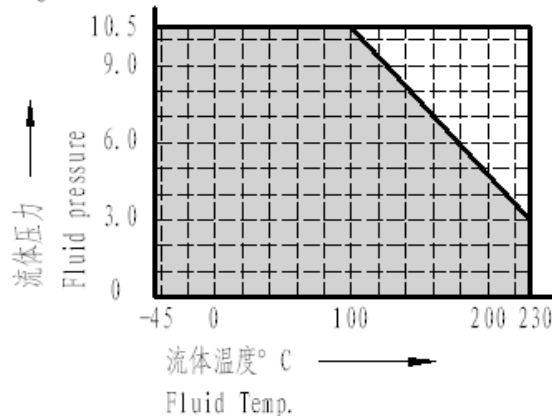


图 3 阀体部件结构 Fig.3 BODY SECTION

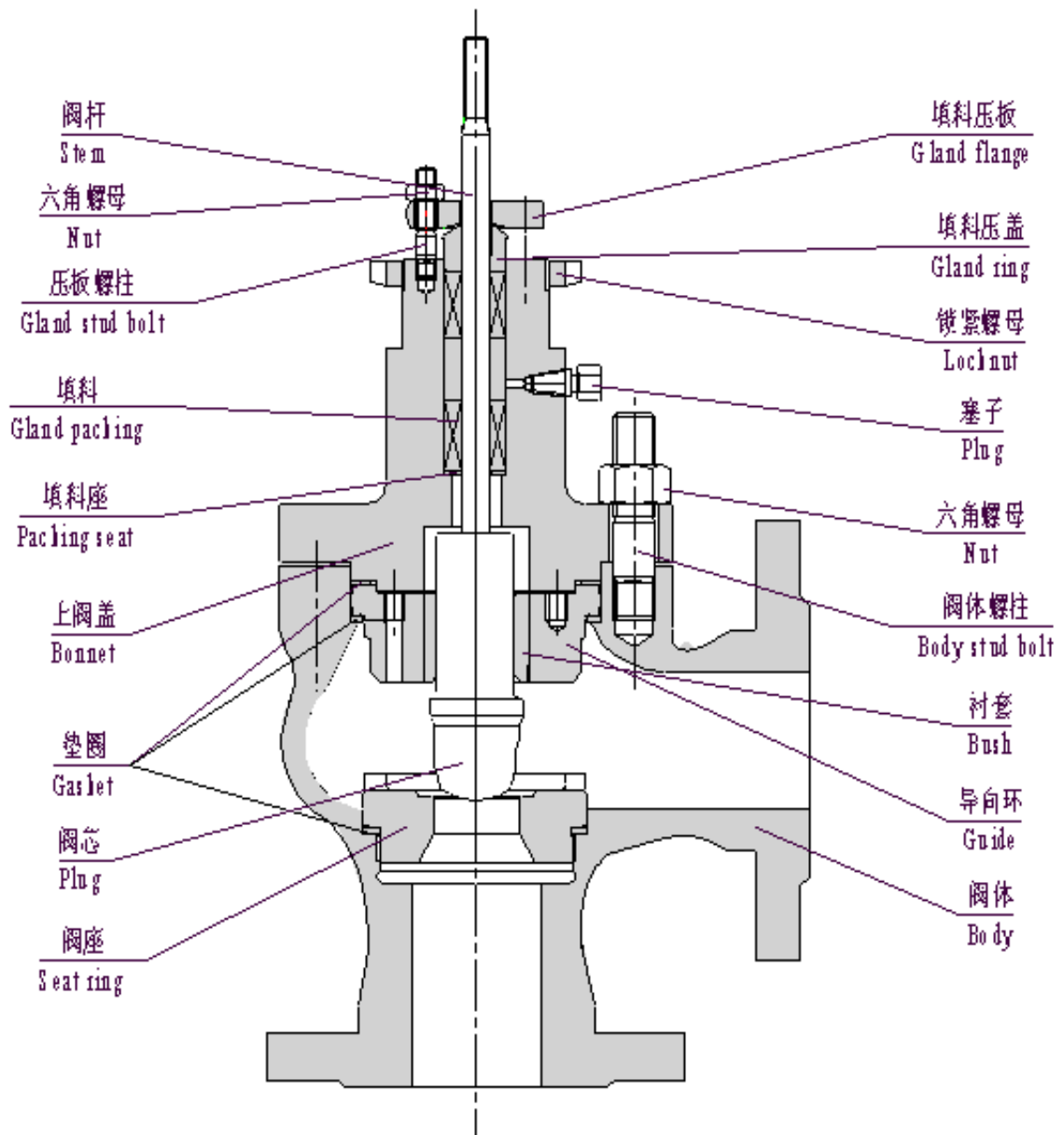


表 3 CV 值和行程

Table 3 Rated Cv value and travel

表 3-1 高容量阀芯 (%C,LC,%T,LT)

Table 3-1 High-capacity flow characteristics valve plug (%C,LC,%T,LT)

| | | | | | | | |
|---------------------------|----|----|----|-----|-----|-----|-----|
| 公称通径 Nominal size | 40 | 50 | 65 | 80 | 100 | 150 | 200 |
| 阀座直径 Seat size | 40 | 50 | 65 | 80 | 100 | 150 | 200 |
| 额定 Cv 值 Rated Cv value | 30 | 50 | 85 | 125 | 200 | 420 | 700 |
| 额定行程 Rated travel | 25 | | 38 | | | 50 | 75 |

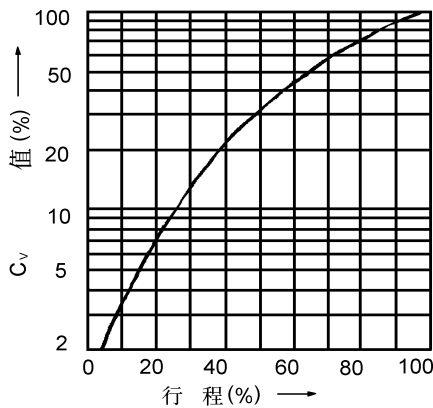
表 3-2 高精度阀芯 (%C,LC,%T,LT)

Table 3-2 High-precision flow characteristics valve plug (%C,LC,%T,LT)

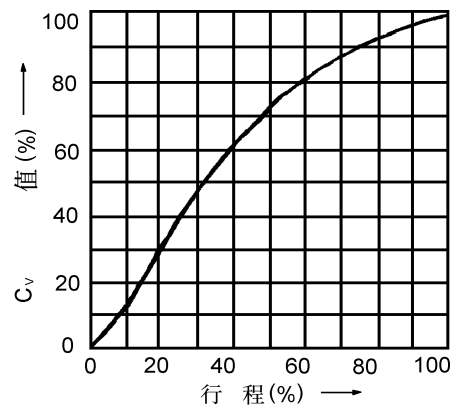
| | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|----|----|----|----|----|----|----|----|----|----|----|----|-----|----|-----|-----|-----|-----|-----|-----|-----|
| 公称通径 Nominal size | 40 | | | 50 | | | 65 | | | 80 | | | 100 | | | 150 | | | 200 | | |
| 阀座直径 Seat size | 25 | 32 | 40 | 32 | 40 | 50 | 40 | 50 | 65 | 50 | 65 | 80 | 65 | 80 | 100 | 100 | 125 | 150 | 125 | 150 | 200 |
| 额定 Cv 值 Rated Cv value | 10 | 17 | 24 | 17 | 24 | 44 | 24 | 44 | 68 | 44 | 68 | 99 | 68 | 99 | 175 | 175 | 275 | 360 | 275 | 360 | 640 |
| 额定行程 Rated travel | 25 | | | | | | 38 | | | | | | 50 | | | 75 | | | | | |

图 4 典型流量特性曲线

Fig.4 TYPICAL FLOW CHARACTERISTICS

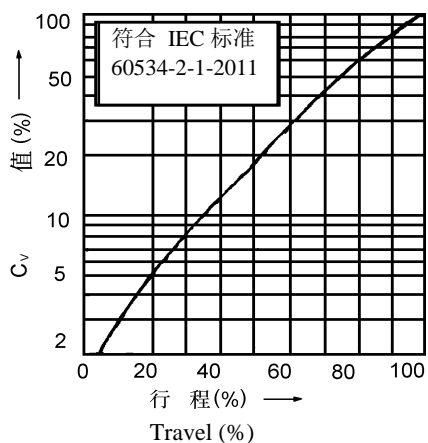


等百分比特性 (%C 金属阀座、%T 软阀座)
Equal percentage characteristics (%C metal seat, %T soft seat)

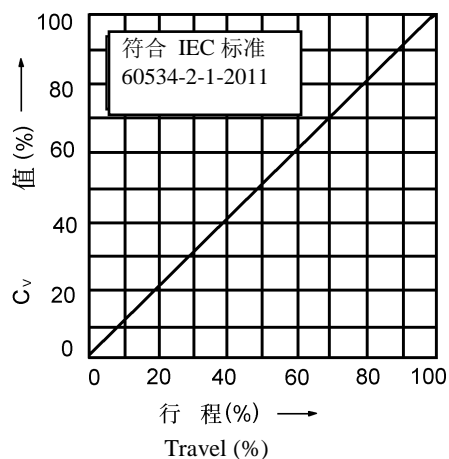


线性特性 (LC 金属阀座、LT 软阀座)
Linear characteristics (LC metal seat, LT soft seat)

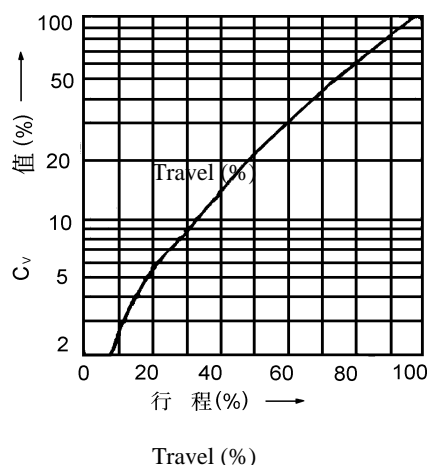
图 4-1 高容量流量特性曲线
Fig.4-1 High-capacity flow characteristics



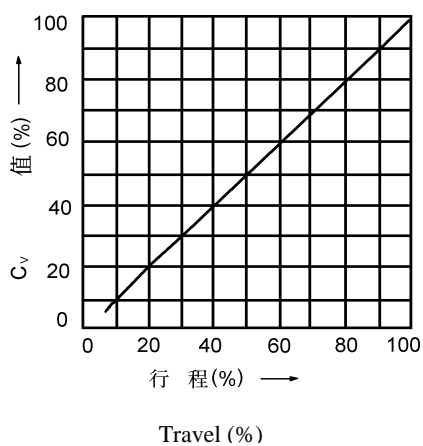
等百分比特性 (%CF 金属阀座)
 Equal characteristics (%CF metal seat)



线性特性 (LCF 金属阀座)
 Linear characteristics (LCF metal seat)



等百分比特性 (%TF 软阀座)
 Equal percentage characteristics (%TF soft seat)



线性特性 (LTF 金属阀座)
 Linear characteristics (LTF soft seat)

图 4-3 高精度流量特性曲线
 Fig.4-3 High-precision flow characteristics

表 4 允许压差

Table 4 ALLOWABLE PRESSURE DROPS

表 4-1 薄膜式执行机构 (HA)

Table 4-1 DIAPHRAGM ACTUATOR (HA)

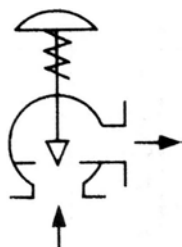
I. 柱塞阀芯、金属阀座 (%CF,LCF)

I. Contoured-type plug and metal seat (%CF,LCF)

表 4-1-1 气—关式阀

Table 4-1-1 Air-to-close

100kPa

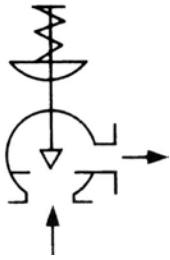


| 执行机构 Actuator | 供气压力 Air supply | 弹簧范围 Spring range | 定位器 Positioner | 允许压差 Allowable pressure drops | | | | | | | | | | |
|------------------|--------------------|----------------------|-------------------|----------------------------------|-----------|-----------|----------|----------|------|------|------|-----|-----|--|
| | | | | 阀座直径 Valve seat size | | | | | | | | | | |
| | | | | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | |
| HA2D | 1.4 | 0.2~1.0 | 有或无 With or no | 6.3 | 3.8 | 2.7 | 1.6 | 1.0 | 0.7 | 0.5 | — | — | — | |
| | 1.6 | 0.2~1.0 | 有 With | 31.6 | 19.3 | 13.7 | 7.8 | 5.1 | 3.5 | 2.0 | — | — | — | |
| | 4.0 | 0.8~2.4 | 有 With | 40 94 | 40 57 | 40 41 | 21.7 | 14.9 | 10.5 | 5.9 | — | — | — | |
| HA3D | 1.4 | 0.2~1.0 | 有或无 With or no | 11.2 | 6.8 | 4.8 | 2.8 | 1.7 | 1.2 | 0.7 | 0.4 | 0.3 | — | |
| | 1.6 | 0.2~1.0 | 有 With | 40 56 | 34.2 | 24.2 | 14 | 8.8 | 6.2 | 3.5 | 2.2 | 1.4 | — | |
| | 4.0 | 0.8~2.4 | 有 With | 40 100 | 40 100 | 40 72 | 40 42 | 26.5 | 18.7 | 10.5 | 6.7 | 4.1 | — | |
| HA4D | 1.4 | 0.2~1.0 | 有或无 With or no | — | — | 8.3 | 4.8 | 3.0 | 2.2 | 1.2 | 0.7 | 0.5 | 0.3 | |
| | 1.6 | 0.2~1.0 | 有 With | — | — | 40 | 24.2 | 15.2 | 10.7 | 6.1 | 3.9 | 2.4 | 1.5 | |
| | 4.0 | 0.8~2.4 | 有 With | — | — | 40 100 | 40 72 | 40 45 | 32.2 | 18.2 | 11.6 | 7.1 | 4.5 | |

表 4-1-2 气—开式阀

Table 4-1-2 Air-to-open

100kPa



| 执行机构 Actuator | 供气压力 Air supply | 弹簧范围 Spring range | 定位器 Positioner | 允许压差 Allowable pressure drops | | | | | | | | | |
|------------------|--------------------|----------------------|-------------------|----------------------------------|----------|----------|------|----------|----------|------|------|-----|-----|
| | | | | 阀座直径 Valve seat size | | | | | | | | | |
| | | | | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 |
| HA2R | 1.4 | 0.2~1.0 | 有或无 With or no | 6.3 | 3.8 | 2.7 | 1.6 | 1.0 | 0.7 | 0.5 | — | — | — |
| | 2.8 | 0.8~2.4 | 有 With | 40 44 | 27 | 14.1 | 11.1 | 6.9 | 4.9 | 2.8 | — | — | — |
| HA3R | 1.4 | 0.2~1.0 | 有或无 With or no | 11.2 | 6.8 | 4.8 | 2.8 | 1.7 | 1.2 | 0.7 | 0.4 | 0.3 | — |
| | 2.8 | 0.8~2.4 | 有 With | 40 78 | 40 47 | 34 | 19.6 | 12.3 | 8.7 | 4.9 | 3.1 | 1.9 | — |
| HA4R | 1.4 | 0.2~1.0 | 有或无 With or no | — | — | 8.3 | 4.8 | 3.0 | 2.2 | 1.2 | 0.7 | 0.5 | 0.3 |
| | 2.8 | 0.8~2.4 | 有 With | — | — | 40 58 | 31.5 | 21.3 | 15 | 8.5 | 5.4 | 3.3 | 2.1 |
| VA6R | 4(1*) | 1.9~3.5 | 有 With | — | — | — | — | 40 61 | 40 43 | 24.2 | — | — | — |
| | 5(2*) | 1.9~4.0 | 有 With | — | — | — | — | — | — | 24.2 | 15.5 | 9.5 | — |

- 注：1. 最大允许压差不准超过 ANSI B16.34—1981 或 JIS B2201—1984 标准规定的最大工作压力。
2. 同一格内的上方数字表示阀常开允许压差，下方数字表示阀全关时的允许压差。
3. 黑线框内数字表示阀配用标准规格执行机构。
4. 1*适用于 65、80、100mm 的阀，2*适用于 150mm 的阀。

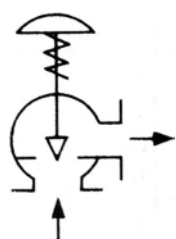
- Note: 1. Take care not to cause the allowable maximum pressure drops to exceed the maximum operating pressure designated by ANSI B16.34—1981 or JIS B2201—1984.
2. The upper figures denote the operating allowable pressure drops; the lower denote the allowable pressure drops at full closure.
3. The figures in gray denote the standard actuator specifications.
4. 1* is applicable to the valve size DN65,80,100, and 2* is applicable to the valve size DN150.

II. 柱塞阀芯、软阀座 (%TF、LTF)

II. Contoured-type plug and metal seat (%TF、LTF)

表 4-1-3 气—关式阀

100kPa

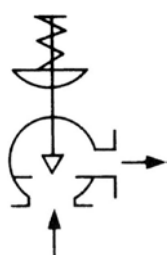


| 执行机构 Actuator | 供气压力 Air supply | 弹簧范围 Spring range | 定位器 Positioner | 允许压差 Allowable pressure drops | | | | | | | | | |
|------------------|--------------------|----------------------|-------------------|----------------------------------|------|-----|-----|------|-----|------|-----|-----|-----|
| | | | | 阀座直径 Valve seat size | | | | | | | | | |
| | | | | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 |
| HA2D | 1.4 | 0.2~1.0 | 有或无 With or no | 4.4 | 2.9 | 1.7 | 1.1 | 0.7 | 0.5 | 0.3 | — | — | — |
| | 1.6 | 0.2~1.0 | 有 With | 22 | 13.5 | 9.6 | 5.5 | 3.6 | 2.5 | 1.4 | — | — | — |
| | 4.0 | 0.8~2.4 | 有 With | 30 | 30 | 28 | 15 | 10.4 | 7.4 | 4.1 | — | — | — |
| HA3D | 1.4 | 0.2~1.0 | 有或无 With or no | 7.8 | 4.8 | 3.4 | 2.0 | 1.2 | 0.8 | 0.5 | 0.3 | 0.2 | — |
| | 1.6 | 0.2~1.0 | 有 With | 30 | 24 | 17 | 9.8 | 6.2 | 4.3 | 2.5 | 1.5 | 0.9 | — |
| | 4.0 | 0.8~2.4 | 有 With | 30 | 30 | 30 | 28 | 18 | 13 | 7.4 | 4.7 | 2.9 | — |
| HA4D | 1.4 | 0.2~1.0 | 有或无 With or no | — | — | 5.8 | 3.4 | 2.1 | 1.5 | 0.8 | 0.5 | 0.3 | 0.2 |
| | 1.6 | 0.2~1.0 | 有 With | — | — | 28 | 17 | 10.6 | 7.5 | 4.3 | 2.7 | 1.7 | 1.0 |
| | 4.0 | 0.8~2.4 | 有 With | — | — | 30 | 30 | 30 | 22 | 12.7 | 8.1 | 5.0 | 3.0 |

表 4-1-4 气—开式阀

Table 4-1-4 Air-to-open

100kPa



| 执行机构 Actuator | 供气压力 Air supply | 弹簧范围 Spring range | 定位器 Positioner | 允许压差 Allowable pressure drops | | | | | | | | | |
|------------------|--------------------|----------------------|-------------------|----------------------------------|-----|------|------|------|------|------|------|-----|-----|
| | | | | 阀座直径 Valve seat size | | | | | | | | | |
| | | | | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 |
| HA2R | 1.4 | 0.2~1.0 | 有或无 With or no | 4.4 | 2.7 | 1.9 | 1.1 | 0.7 | 0.5 | 0.3 | — | — | — |
| | 2.8 | 0.8~2.4 | 有 With | 30 | 19 | 9.9 | 7.8 | 4.8 | 3.4 | 2.0 | — | — | — |
| HA3R | 1.4 | 0.2~1.0 | 有或无 With or no | 7.8 | 4.8 | 3.4 | 2.0 | 1.2 | 0.8 | 0.5 | 0.3 | 0.2 | — |
| | 2.8 | 0.8~2.4 | 有 With | 30 | 30 | 23.8 | 13.7 | 8.6 | 6.1 | 3.4 | 2.1 | 1.3 | — |
| HA4R | 1.4 | 0.2~1.0 | 有或无 With or no | — | — | 5.8 | 3.4 | 2.1 | 1.5 | 0.8 | 0.5 | 0.3 | 0.2 |
| | 2.8 | 0.8~2.4 | 有 With | — | — | 30 | 22 | 14.9 | 10.5 | 5.9 | 3.7 | 2.3 | 1.4 |
| VA6R | 4(1*) | 1.9~3.5 | 有 With | — | — | — | — | 30 | 30 | 16.9 | — | — | — |
| | 5(2*) | 1.9~4.0 | 有 With | — | — | — | — | — | — | 16.9 | 10.8 | 6.7 | — |

- 注：1. 最大允许压差不准超过 ANSI B16.34—1981 或 JIS B2201—1984 标准规定的最大工作压力。
2. 1*适用于 65、80、100mm 的阀，2*适用于 150mm 的阀。
3. 黑线框内数字表示阀配用标准规格执行机构。

- Note: 1. Take care not to cause the allowable maximum pressure drops to exceed the maximum operating pressure designated by ANSI B16.34—1981 or JIS B2201—1984.
2. 1* is applicable to the valve size DN65,80,100, and 2* is applicable to the valve size DN150.
3. The figures in gray denote the standard actuator specifications.

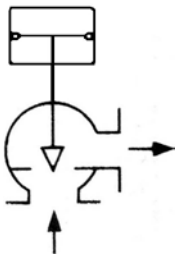
表 4-2 气缸式执行机构 (VP)

Table 4-2 CYLINDER ACTUATOR (HA)

表 4-2-1 柱塞阀芯、金属阀座 (%CF,LCF)

Table 4-2-1 Contoured-type plug and metal seat

100kPa



| 执行机构 Actuator | 供气压力 Air supply | 定位器 Positioner | 允许压差 Allowable pressure drops | | | | | |
|------------------|--------------------|-------------------|----------------------------------|-----------|------|------|------|------|
| | | | 阀座直径 Valve seat size | | | | | |
| | | | 65 | 80 | 100 | 125 | 150 | 200 |
| VP5 | 3 | 有 With | 40 | 36.8 | 20.7 | 13.2 | 8 | — |
| | | | 52 | | | | | |
| | | | 4 | 有 With | | | | |
| | 70 | 49 | | | | | | |
| | 5 | 有 With | 40 | 40 | 34.9 | 22.4 | 13.6 | — |
| | | | 88 | 62 | | | | |
| VP6 | 3 | 有 With | 40 | 40 | 36.9 | 23.6 | 14.4 | 9.2 |
| | | | 93 | 65 | | | | |
| | 4 | 有 With | 40 | 40 | 40 | 31.8 | 19.3 | 12.4 |
| | | | 100 | 88 | 49 | | | |
| | 5 | 有 With | 40 | 40 | 40 | 40 | 24.3 | 15.6 |
| | | | 100 | 100 | 62 | | | |
| VP7 | 3 | 有 With | — | — | — | 35.5 | 21.6 | 13.8 |
| | 4 | 有 With | — | — | — | 40 | 29 | 18.6 |
| | | | | | | 47 | | |
| | 5 | 有 With | — | — | — | 40 | 36.4 | 23.4 |
| | | | | | | 60 | | |

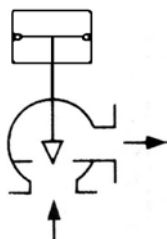
- 注：1. 如果执行机构带有辅助气源，应选二者中较小一个供气压力作为计算允许压差的基础。
2. 最大允许压差不超过 ANSI B16.34-1981 或 JIS B2201-1984 标准规定的最大工作压力。
3. 同一方格内上方数字为阀常开允许压差，下方数字为阀关时的允许压差。

- Note: 1. In case a back-up system is used for the actuator, select the pressure drops whichever is lower-the operating supply air pressure or the back-up system set pressure.
2. Take care not to cause the allowable maximum pressure drops to exceed the maximum operating pressure designated by ANSI B16.34—1981 或 JIS B2201—1984.
3. The upper figures denote the operating allowable pressure drops; the lower denote the allowable pressure drops at full closure.

表 4-2-2 柱塞阀芯、软阀座 (%TF、LTF)

Table 4-2-2 Contoured-type plug and metal seat

100kPa



| 执行机构 Actuator | 供气压力 Air supply | 定位器 Positioner | 允许压差 Allowable pressure drops | | | | | |
|------------------|--------------------|-------------------|----------------------------------|------|------|------|------|------|
| | | | 阀座直径 Valve seat size | | | | | |
| | | | 65 | 80 | 100 | 125 | 150 | 200 |
| VP5 | 3 | 有 With | 30 | 25.8 | 14.5 | 9.2 | 5.6 | — |
| | 4 | 有 With | 30 | 30 | 19.5 | 12.5 | 7.6 | — |
| | 5 | 有 With | 30 | 30 | 24.4 | 15.7 | 9.5 | — |
| VP6 | 3 | 有 With | 30 | 30 | 25.8 | 16.5 | 10.1 | 6.4 |
| | 4 | 有 With | 30 | 30 | 30 | 22.3 | 13.5 | 8.7 |
| | 5 | 有 With | 30 | 30 | 30 | 28 | 17 | 10.9 |
| VP7 | 3 | 有 With | — | — | — | 24.9 | 15.1 | 9.7 |
| | 4 | 有 With | — | — | — | 30 | 20.3 | 13 |
| | 5 | 有 With | — | — | — | 30 | 25.5 | 16.4 |

- 注：1. 如果执行机构带有辅助气源，应选二者中较小一个供气压力作为计算允许压差的基础。
2. 最大允许压差不准超过 ANSI B16.34-1981 或 JIS B2201-1984 标准规定的最大工作压力。
- Note: 1. When the actuator with the added air supply, the lower one should be the base of calculating the allowable pressure drops.
2. Take care not to cause the allowable maximum pressure drops to exceed the maximum operating pressure designated by ANSI B16.34—1981 或 JIS B2201—1984.

表 4-3 电子式执行机构 (EIL) 及智能式执行机构 (M8)

Table 4-3 ELECTRONIC ACTUATOR (EIL) & INTELLIGENT ACTUATOR (M8)

100kPa

| 执行机构 Actuator | 阀座形式 Valve seat | 阀座直径 (mm) Valve seat size | | | | | | | | | |
|----------------------|--------------------|------------------------------|-----|------|------|------|------|------|------|-----|-----|
| | | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 |
| EIL04 | 金属阀座 Metal seat | 64 | 42 | 27 | 17.3 | 12.3 | 8.1 | 5.2 | — | — | — |
| | 软阀座 Soft seat | 30 | 30 | 23.8 | 13.7 | 8.6 | 6.1 | 3.4 | — | — | — |
| EIL08 M8610+L8210 | 金属阀座 Metal seat | 100 | 100 | 72 | 43 | 29.9 | 21.1 | 11.8 | 7.5 | 4.8 | 2.8 |
| | 软阀座 Soft seat | — | — | 30 | 30 | 19.8 | 14.3 | 8.1 | 5.2 | 3.2 | 1.8 |
| M8620+L8220 | 金属阀座 Metal seat | — | — | — | — | 45 | 32.2 | 18.2 | 11.6 | 7.1 | 3.1 |
| | 软阀座 Soft seat | — | — | — | — | 30 | 22 | 12.7 | 8.1 | 5.0 | 3.1 |
| EIL25 M8620+L8230 | 金属阀座 Metal seat | — | — | — | — | — | — | — | 14.6 | 9.4 | 5.7 |
| | 软阀座 Soft seat | — | — | — | — | — | — | — | 10.1 | 6.3 | 3.8 |

表 5 尺寸

Table 5 DIMENSIONS

表 5-1 法兰距尺寸

Table 5-1 Fact-to-Face dimensions

mm

| 公称 通径 Nominal size | A/A1 | | | | | | | |
|-----------------------------|---|------------|--|--|---------------|---------------|---------------|---------------|
| | ANSI 125 FF ANSI 150 RF JIS 10K FF RF PN1.6 RF | JIS 16K RF | ANSI 300 RF JIS 20K RF JIS 30K RF PN4.0 MFM | ANSI 600 RF JIS 40K RF PN6.4 MFF | JIS 16K TG | JIS 20K TG | JIS 30K TG | JIS 40K TG |
| 40 | 111 | 116 | 118 | 126 | 118 | 118 | 124 | 126 |
| 50 | 127 | 132 | 134 | 143 | 133 | 134 | 138 | 143 |
| 65 | 138 | 144 | 146 | 156 | 145 | 146 | 152 | 156 |
| 80 | 149 | 157 | 159 | 169 | 155 | 159 | 163 | 169 |
| 100 | 176 | 182 | 184 | 197 | 180 | 184 | 190 | 197 |
| 150 | 226 | 233 | 237 | 254 | 238 | 237 | 243 | 254 |
| 200 | 272 | 280 | 284 | 305 | 285 | 284 | 290 | 305 |

| 公称 通径 Nominal size | A/A1 | | | | | | |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|-------------------|-----------------------|
| | ANSI 150 RJ | ANSI 300 RJ | ANSI 600 RJ | ANSI 300 LG | ANSI 600 LG | ANSI 150 SW、BW | ANSI 150、600 SW、BW |
| 40 | 118 | 124 | 126 | 122 | 124 | 126 | 126 |
| 50 | 134 | 142 | 145 | 138 | 142 | 143 | 143 |
| 65 | 145 | 154 | 157 | 151 | 154 | 156 | 156 |
| 80 | 156 | 167 | 170 | 164 | 167 | 169 | 169 |
| 100 | 183 | 192 | 199 | 189 | 196 | 197 | 197 |
| 150 | 232 | 245 | 256 | 242 | 253 | 237 | 254 |
| 200 | 278 | 292 | 307 | 289 | 303 | 284 | 305 |

注：法兰距符合 IEC 534-3-1976 标准。

Note: Face-to-face dimensions conform to IEC 534-3-1976 Standard.

表 5-2 外形尺寸

Table 5-2 Other dimensions

表 5-2-1 外形尺寸

Table 5-2-1 Other dimensions

mm

| 公称 通径 Nominal size | 执行机构 Actuator | H | | | ΦB/B | B1 | B2 | B3 | B4 |
|-----------------------------|------------------|------------------------|---|--|------|-----|-----|-----|-----|
| | | 常温型(P) Plain bonnet | 伸长 I 型(E I) Extension bonnet Type I | 伸长 II 型(E II) Extension bonnet Type II | | | | | |
| 40 | HA2D、R | 555 | 725 | 835 | 281 | — | — | — | — |
| | HA3D、R | 680 | 850 | 1000 | 363 | — | — | — | — |
| | EIL04 | 770 | 940 | 1050 | 172 | — | 258 | — | — |
| 50 | HA2D、R | 550 | 720 | 830 | 281 | — | — | — | — |
| | HA3D、R | 675 | 845 | 955 | 363 | — | — | — | — |
| | EIL04 | 765 | 940 | 1045 | 172 | — | 258 | — | — |
| 65 | HA2D、R | 625 | 7805 | 930 | 281 | — | — | — | — |
| | HA3D、R | 705 | 895 | 1005 | 363 | — | — | — | — |
| | HA4D、R | 890 | 1080 | 1185 | 520 | — | — | — | — |
| | EIL08 | 890 | 1070 | 1195 | 229 | — | 338 | — | — |
| | M8610+L8210 | 945 | 1125 | 1245 | — | 285 | 346 | 353 | 230 |
| 80 | HA2D、R | 660 | 845 | 980 | 281 | — | — | — | — |
| | HA3D、R | 715 | 910 | 1035 | 363 | — | — | — | — |
| | HA4D、R | 900 | 1095 | 1215 | 520 | — | — | — | — |
| | EIL08 | 905 | 1085 | 1205 | 229 | — | 338 | — | — |
| | M8610+L8210 | 955 | 1140 | 1275 | — | 285 | 346 | 253 | 230 |
| 100 | HA2D、R | 700 | 970 | 1040 | 281 | — | — | — | — |
| | HA3D、R | 755 | 1005 | 1090 | 363 | — | — | — | — |
| | HA4D、R | 930 | 1160 | 1290 | 520 | — | — | — | — |
| | VA6R | 1470 | 1690 | 1830 | 480 | — | — | — | — |
| | VP5 | 1175 | 1395 | 1535 | 382 | — | — | — | — |
| | EIL08 | 940 | 1150 | 1275 | 229 | — | 338 | — | — |
| | M8610+L8210 | 995 | 1205 | 1330 | — | 285 | 346 | 253 | 230 |
| 125 | HA3D、R | 825 | 1105 | 1285 | 363 | — | — | — | — |
| | HA4D、R | 995 | 1290 | 1465 | 520 | — | — | — | — |
| | VA6R | 1535 | 1795 | 2010 | 480 | — | — | — | — |
| | VP5 | 1240 | 1500 | 1715 | 382 | — | — | — | — |
| | VP6 | 1355 | 1615 | 1830 | 480 | — | — | — | — |
| | VP7 | 1355 | 1615 | 1830 | 580 | — | — | — | — |
| | EIL08 | 1035 | 1295 | 1495 | 229 | — | 338 | — | — |
| | M8620+L8220 | 1155 | 1415 | 1630 | — | 313 | 350 | 253 | 230 |
| 150 | HA3D、R | 825 | 1105 | 1285 | 363 | — | — | — | — |
| | HA4D、R | 995 | 1290 | 1465 | 520 | — | — | — | — |
| | VA6R | 1535 | 1795 | 2010 | 480 | — | — | — | — |
| | VP5 | 1240 | 1500 | 1715 | 382 | — | — | — | — |
| | VP6 | 1355 | 1615 | 1830 | 480 | — | — | — | — |
| | VP7 | 1355 | 1615 | 1830 | 580 | — | — | — | — |
| | EIL08 | 1035 | 1295 | 1495 | 229 | — | 338 | — | — |
| | M8620+L8220 | 1155 | 1415 | 1630 | — | 313 | 350 | 253 | 230 |
| 200 | HA4D、R | 1135 | 1395 | 1640 | 520 | — | — | — | — |
| | VP5 | 1405 | 1670 | 2035 | 382 | — | — | — | — |
| | VP6 | 1515 | 1780 | 2150 | 480 | — | — | — | — |
| | VP7 | 1515 | 1780 | 2150 | 580 | — | — | — | — |
| | M8620+L8230 | 1485 | 1745 | 1990 | — | 313 | 350 | 253 | 230 |

表 5-2-2 外形尺寸

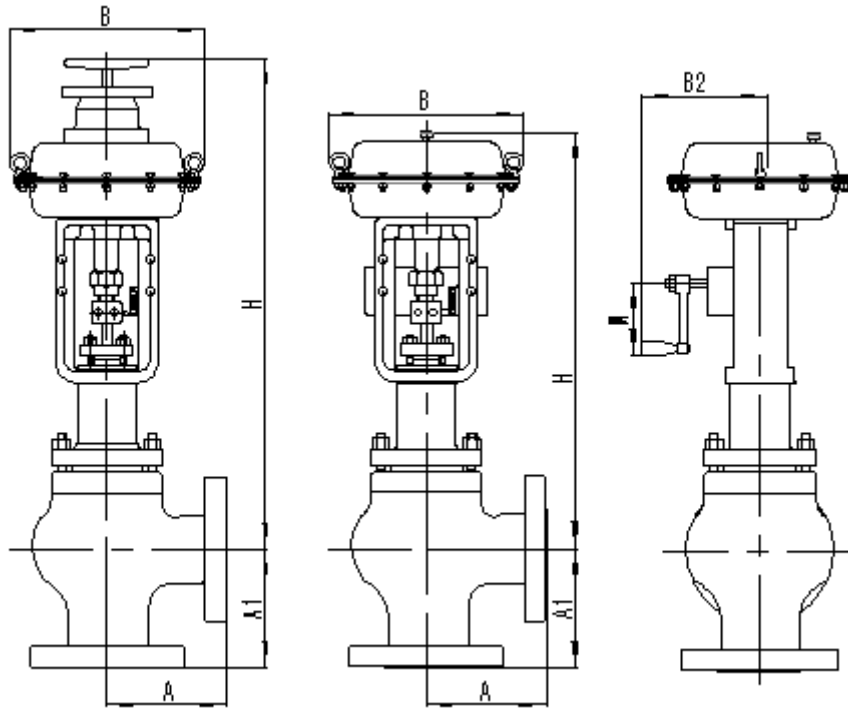
Table 5-2-2 Other dimensions

mm

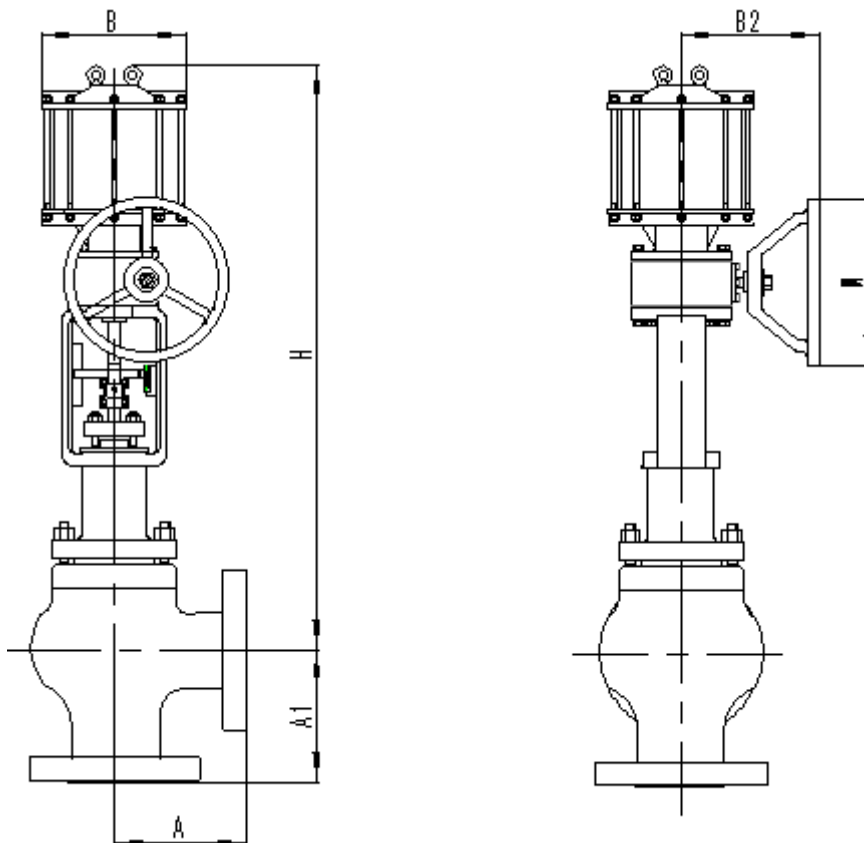
| 公称 通径 Nominal size | 执行机构 Actuator | H | | | | | | B2 | M |
|-----------------------------|------------------|------------------------|--|---|------------------------|--|---|-------|-------|
| | | 侧装手轮 | | | 顶装手轮 | | | | |
| | | 常温型(P) Plain bonnet | 伸长 I 型(E Extension bonnet Type I | 伸长 II 型(E II Extension bonnet Type II | 常温型(P) Plain bonnet | 伸长 I 型 (E I) Extension bonnet Type I | 伸长 II 型 (E II) Extension bonnet Type II | | |
| 40 | HA2D、R | 555 | 725 | 835 | 811 | 986 | 1096 | 273.5 | 175 |
| | HA3D、R | 680 | 850 | 1000 | 967 | 1137 | 1287 | 278.5 | 175 |
| 50 | HA2D、R | 550 | 720 | 830 | 811 | 981 | 1091 | 273.5 | 175 |
| | HA3D、R | 675 | 845 | 955 | 962 | 1132 | 1242 | 278.5 | 175 |
| 65 | HA2D、R | 625 | 805 | 930 | 886 | 1066 | 1191 | 273.5 | 175 |
| | HA3D、R | 705 | 895 | 1005 | 992 | 1182 | 1292 | 278.5 | 175 |
| | HA4D、R | 890 | 1080 | 1185 | 1288 | 1478 | 1583 | 303 | φ 320 |
| 80 | HA2D、R | 660 | 845 | 980 | 921 | 1106 | 1241 | 273.5 | 175 |
| | HA3D、R | 715 | 910 | 1035 | 1002 | 1197 | 1322 | 278.5 | 175 |
| | HA4D、R | 900 | 1095 | 1215 | 1298 | 1493 | 1613 | 303 | φ 320 |
| 100 | HA2D、R | 700 | 970 | 1040 | 961 | 1231 | 1301 | 273.5 | 175 |
| | HA3D、R | 755 | 1005 | 1090 | 1042 | 1292 | 1377 | 278.5 | 175 |
| | HA4D、R | 930 | 1160 | 1290 | 1328 | 1558 | 1688 | 303 | φ 320 |
| 125 | HA3D、R | 825 | 1105 | 1285 | 1112 | 1392 | 1572 | 278.5 | 175 |
| | HA4D、R | 995 | 1290 | 1465 | 1393 | 1688 | 1863 | 303 | φ 320 |
| | VA6R | 1660 | 1920 | 2135 | — | — | — | 384 | φ 380 |
| | VP5 | 1350 | 1610 | 1825 | — | — | — | 324 | φ 380 |
| | VP6 | 1480 | 1740 | 1955 | — | — | — | 384 | φ 380 |
| | VP7 | 1480 | 1740 | 1955 | — | — | — | 384 | φ 380 |
| 150 | HA3D、R | 825 | 1105 | 1285 | 1112 | 1392 | 1572 | 278.5 | 175 |
| | HA4D、R | 995 | 1290 | 1465 | 1393 | 1688 | 1863 | 303 | φ 320 |
| | VA6R | 1660 | 1920 | 2135 | — | — | — | 384 | φ 380 |
| | VP5 | 1350 | 1610 | 1825 | — | — | — | 324 | φ 380 |
| | VP6 | 1480 | 1740 | 1955 | — | — | — | 384 | φ 380 |
| | VP7 | 1480 | 1740 | 1955 | — | — | — | 384 | φ 380 |
| 200 | HA4D、R | 1135 | 1395 | 1640 | 1533 | 1793 | 2038 | 303 | φ 320 |
| | VP5 | 1515 | 1780 | 2145 | — | — | — | 324 | φ 380 |
| | VP6 | 1640 | 1905 | 2275 | — | — | — | 384 | φ 380 |
| | VP7 | 1640 | 1905 | 2275 | — | — | — | 384 | φ 380 |

注：表 5-2-2 上 H 栏尺寸是气动执行机构(带手轮)调节阀高度。

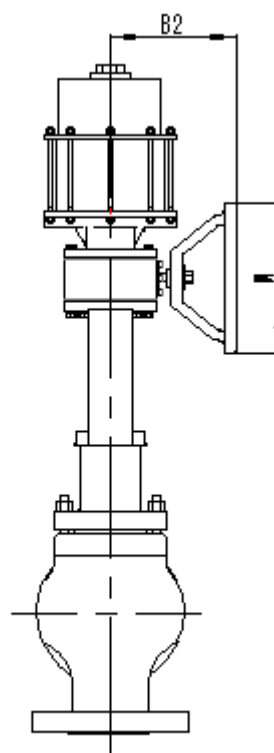
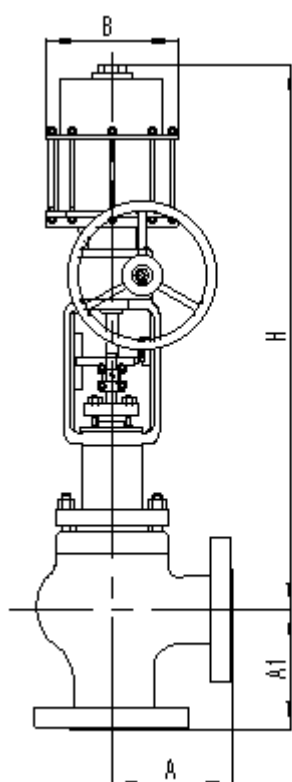
Note: The size of H in Table 5-2-2 shows the height of the valve and pneumatic actuator (with handwheel) combined.



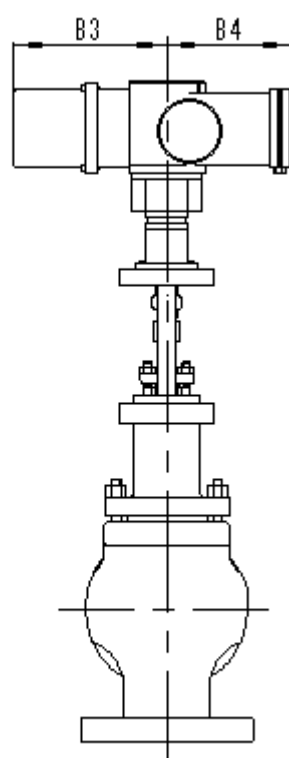
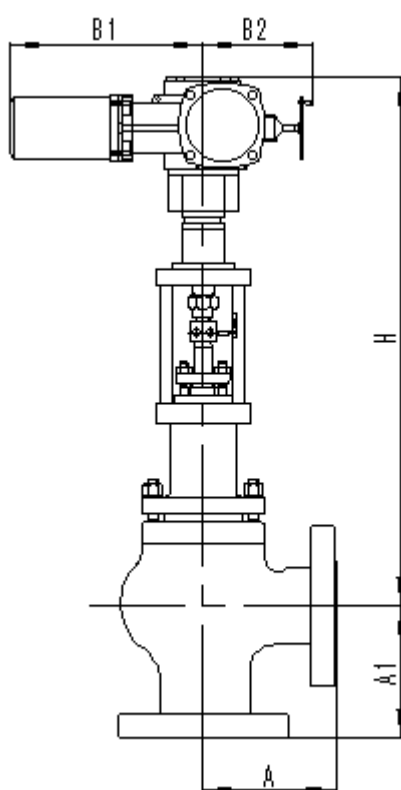
配 HA 执行机构
With type HA



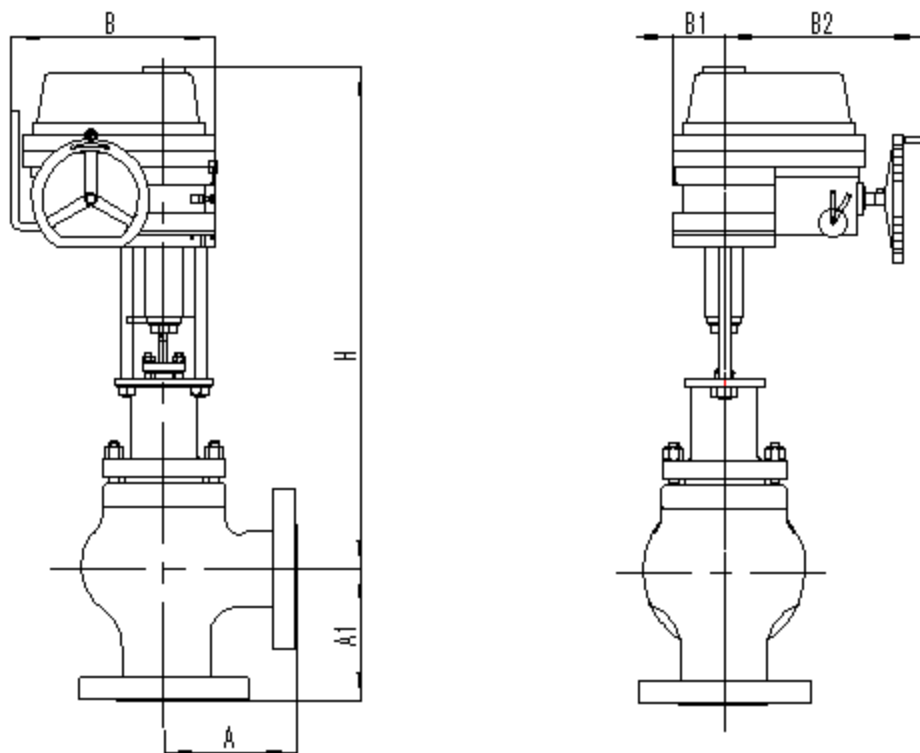
配 VP 执行机构
With type VP



配 VA 执行机构
With type VA



配 M8 执行机构
With type M8



配 EIL 执行机构
With type EIL

图 5 法兰距及外形尺寸
Fig.5 Face-to-Face dimension and Other dimensions

表 6 重量

Table 6 WEIGHT

kg

| 公称 口径 Nominal size | 执行机构 Actuator | 法兰连接 Flanged type | | | | | | | | | 焊接连接 Welded type | | | |
|--------------------------|------------------|-------------------------|----|----|---------------------------|----|----|---------------------|-----|-----|--------------------------------------|----|----|---|
| | | ANSI 125、150 JIS 10K | | | ANSI 300 JIS 16、20、30K | | | ANSI 600 JIS 40K | | | ANSI 150、300、600 JIS 10、16、20、30K | | | |
| | | P | E | I | E | II | P | E | I | E | II | P | E | I |
| 32 | HA2D、R | 31 | 34 | 37 | 36 | 39 | 42 | 44 | 47 | 50 | 36 | 39 | 42 | |
| | HA3D、R | 43 | 46 | 49 | 48 | 51 | 54 | 56 | 59 | 62 | 48 | 51 | 54 | |
| | EIL04 | 23 | 26 | 29 | 27 | 31 | 34 | 36 | 39 | 42 | 28 | 31 | 33 | |
| 40 | HA2D、R | 31 | 34 | 37 | 36 | 39 | 42 | 44 | 47 | 50 | 36 | 39 | 42 | |
| | HA3D、R | 43 | 46 | 49 | 48 | 51 | 54 | 56 | 59 | 62 | 48 | 51 | 54 | |
| | EIL04 | 23 | 26 | 29 | 27 | 31 | 34 | 36 | 39 | 42 | 28 | 31 | 33 | |
| 50 | HA2D、R | 37 | 40 | 43 | 42 | 45 | 48 | 47 | 50 | 43 | 42 | 45 | 48 | |
| | HA3D、R | 49 | 52 | 55 | 54 | 57 | 60 | 59 | 62 | 65 | 54 | 57 | 60 | |
| | EIL04 | 29 | 32 | 35 | 33 | 37 | 40 | 42 | 45 | 48 | 34 | 51 | 54 | |
| 65 | HA2D、R | 43 | 47 | 51 | 48 | 52 | 56 | 65 | 69 | 73 | 48 | 52 | 56 | |
| | HA3D、R | 55 | 59 | 63 | 60 | 64 | 68 | 77 | 81 | 85 | 60 | 64 | 68 | |
| | HA4D、R | 86 | 90 | 94 | 91 | 95 | 99 | 108 | 112 | 116 | 91 | 95 | 99 | |
| | EIL08 | 39 | 43 | 47 | 44 | 48 | 52 | 61 | 65 | 69 | 44 | 48 | 52 | |
| | M8610+L8210 | 61 | 65 | 69 | 66 | 70 | 74 | 83 | 87 | 91 | 66 | 70 | 73 | |

| | | | | | | | | | | | | | |
|-----|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 80 | HA2D、R | 53 | 59 | 65 | 63 | 69 | 75 | 85 | 91 | 97 | 63 | 69 | 75 |
| | HA3D、R | 65 | 71 | 77 | 75 | 81 | 87 | 97 | 103 | 109 | 75 | 81 | 87 |
| | HA4D、R | 96 | 102 | 108 | 106 | 112 | 118 | 128 | 134 | 140 | 106 | 112 | 118 |
| | EIL08 | 49 | 55 | 51 | 59 | 65 | 61 | 81 | 87 | 93 | 59 | 65 | 61 |
| | M8610+L8210 | 71 | 77 | 83 | 81 | 75 | 81 | 103 | 109 | 115 | 81 | 87 | 93 |
| 100 | HA2D、R | 63 | 73 | 78 | 78 | 88 | 93 | 113 | 123 | 128 | 75 | 85 | 90 |
| | HA3D、R | 75 | 85 | 90 | 90 | 100 | 105 | 125 | 135 | 140 | 87 | 97 | 102 |
| | HA4D、R | 106 | 116 | 121 | 121 | 131 | 136 | 156 | 166 | 171 | 118 | 128 | 133 |
| | VA6R | 248 | 258 | 263 | 263 | 273 | 278 | 298 | 308 | 313 | 260 | 270 | 275 |
| | VP5 | 123 | 133 | 138 | 138 | 148 | 153 | 173 | 183 | 188 | 135 | 145 | 150 |
| | EIL08 | 59 | 69 | 74 | 74 | 84 | 89 | 109 | 119 | 124 | 71 | 81 | 86 |
| | M8610+L8210 | 81 | 91 | 96 | 96 | 106 | 111 | 131 | 141 | 146 | 93 | 103 | 108 |
| 125 | HA3D、R | 143 | 172 | 179 | 187 | 202 | 209 | 145 | 252 | 259 | 177 | 192 | 199 |
| | HA4D、R | 175 | 203 | 210 | 218 | 233 | 240 | 181 | 283 | 290 | 208 | 223 | 230 |
| | VA6R | 295 | 345 | 352 | 360 | 375 | 382 | 313 | 425 | 432 | 350 | 365 | 372 |
| | VP5 | 205 | 220 | 227 | 235 | 250 | 257 | 188 | 300 | 307 | 225 | 240 | 247 |
| | VP6 | 280 | 295 | 302 | 310 | 325 | 332 | 263 | 375 | 382 | 300 | 315 | 322 |
| | VP7 | 390 | 405 | 412 | 420 | 435 | 442 | 373 | 485 | 492 | 410 | 425 | 432 |
| | EIL08 | 127 | 156 | 163 | 171 | 186 | 193 | 129 | 236 | 243 | 161 | 176 | 183 |
| | M8620+L8220 | 149 | 178 | 185 | 193 | 208 | 215 | 151 | 258 | 265 | 183 | 198 | 205 |
| 150 | HA3D、R | 157 | 172 | 179 | 187 | 202 | 209 | 237 | 252 | 259 | 177 | 192 | 199 |
| | HA4D、R | 188 | 203 | 210 | 218 | 233 | 240 | 268 | 283 | 290 | 208 | 223 | 230 |
| | VA6R | 330 | 345 | 352 | 360 | 375 | 382 | 410 | 425 | 432 | 350 | 365 | 372 |
| | VP5 | 205 | 220 | 227 | 235 | 250 | 257 | 285 | 300 | 307 | 225 | 240 | 247 |
| | VP6 | 280 | 295 | 302 | 310 | 325 | 332 | 360 | 375 | 382 | 300 | 315 | 322 |
| | VP7 | 390 | 405 | 412 | 420 | 435 | 442 | 470 | 485 | 492 | 410 | 425 | 432 |
| | EIL08 | 141 | 156 | 163 | 171 | 186 | 193 | 221 | 236 | 243 | 161 | 176 | 183 |
| | M8620+L8220 | 163 | 178 | 185 | 193 | 208 | 215 | 243 | 258 | 265 | 183 | 198 | 205 |
| 200 | HA4D、R | 268 | 288 | 298 | 318 | 338 | 348 | 438 | 458 | 468 | 308 | 328 | 338 |
| | VP5 | 285 | 305 | 315 | 335 | 355 | 365 | 455 | 475 | 485 | 325 | 345 | 355 |
| | VP6 | 360 | 380 | 390 | 410 | 430 | 440 | 530 | 550 | 560 | 400 | 420 | 430 |
| | VP7 | 470 | 490 | 500 | 520 | 540 | 550 | 640 | 660 | 670 | 510 | 530 | 540 |
| | M8620+L8220 | 248 | 268 | 279 | 298 | 318 | 328 | 418 | 438 | 448 | 288 | 308 | 318 |