

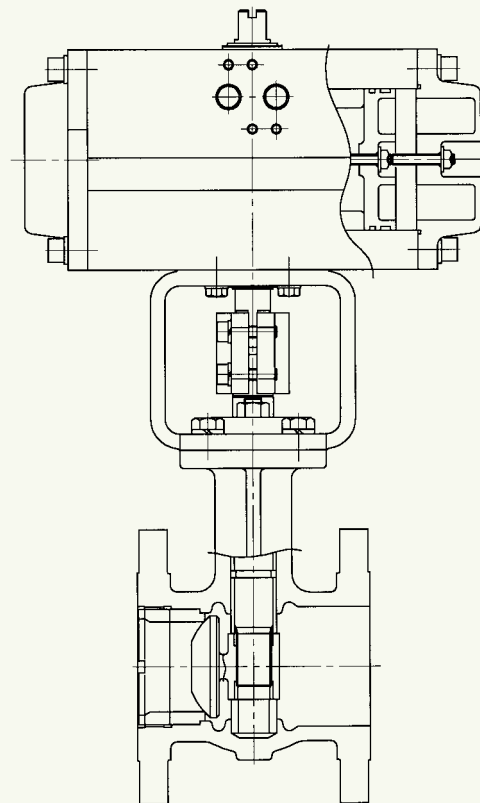
*STANDARD SPECIFICATION*

エキセントリック形  
セグメンタルボールバルブ

*ECCENTRIC TYPE*

***SEGMENTAL BALL VALVES***

*220E SERIES*



**KOSO**

## **KOSO** の自動調節弁と計装システム

**KOSO**は、自動調節弁(コントロールバルブ)のトップメーカーとして高水準にある独自の技術開発力で時代の要請に応え、新世紀へ対応する幅広い製品を揃えるとともに、ISO 9001による品質保証体制のもとで製作した高品質、高信頼のコントロールバルブとそのシステムを提供してまいります。ここに紹介する資料は、**KOSO**コントロールバルブの技術カタログであります。**KOSO**コントロールバルブの選定に御利用下さい。更に詳細な資料が御必要な場合又は、本技術カタログについて不明な点がございましたら最寄りの弊社営業までお問い合わせ下さい。

## **KOSO** 's Control Valves and Instrumentation Systems

**KOSO**, the leading industrial control valve manufacturer with strong research and development capability of its own, has been meeting requirements of the time. Always making available a wide range of product lines that can satisfy the needs of the coming century, **KOSO** is committed to providing control valves, and the systems thereof, of highest quality and reliability, produced under its quality assurance system complying with ISO 9001 standard.

Here **KOSO** presents its technological catalog, introducing various types of **KOSO** control valves, hoping to be of service as you select valves for your specific applications.

If you have questions on this technological catalog or require additional printed materials, please contact our sales representative nearest you.

## 220E Eccentric Type Segmental Ball Valves

**概要**

このシリーズは、自動調芯形の二重偏心部分球面ディスクを回転させて流体を制御する調節弁です。グローブ形に比較すると小形軽量で、弁容量が大きく、レンジアビリティも大きい特長を持っています。

**GENERAL**

This series provides eccentric segmental ball valves for modulating application. Comparing to globe valves, the body is compact, light weight, and yet it has large Cv value and large rangeability.

**標準仕様 STANDARD SPECIFICATIONS**

**弁本体部 BODY**

|  |   |
|--|---|
| シリーズ Series                                  | 220E  |
| 弁サイズ Body size                               | 1 ~ 12 ( 25A ~ 300A )   |
| ディスク形状 Disc form                             | 部分球面ディスク Segmental ball disc  |
| 流量特性 Characteristics                         | 近似リニア Approximate Linear  |
| トリム材質 Trim materials<br>トリム処理 Trim treatment | 標準材質組合せ及び使用温度・圧力範囲は、表 1 を御参照下さい。<br>See Table 1 for hardening treatment and operating pressure-temperature.   |
| 弁本体定格 Body ratings                           | Valve size 3 inch : JIS 10K, 20K ANSI Class 150, 300<br>Valve size 4 inch : JIS 10K, 20K ANSI Class 150, 300  |
| 弁本体接続 Body connections                       | フランジ形 Flanged type  |
| 寸法 Dimension                                 | 16 ~ 28頁を御参照下さい。 See pages 16 ~ 28.   |
| ボデー及びボネット材質 Body & Bonnet Material           | SCPH2/WCB, SCS13A/CF8, SCS14A/CF8M and other alloy steels.<br>各材料の使用温度・圧力範囲は、表 1、表 2 を御参照下さい。<br>As to the operating pressure-temperature limitation for each material, see Tables 1 and 2. |
| ボネット形式 Bonnet type                           | 標準形 Standard type : -45 ~ +400<br>但し、各材料の使用温度・圧力範囲に注意して下さい。<br>Note : The allowable operating pressure-temperature limitation for each material.  |
| パッキン Packing                                 | 図 2 を御参照下さい。 See Fig. 2 for selection.  |
| 塗装色 Painting color                           | マンセルN - 6 (エポキシ樹脂系) 但し、ステンレス鋼には、塗装しません。<br>Munsell N-6 (Epoxy resin group) is standard. In the case of stainless steel body, no painting is standard.                                       |

**駆動部 ACTUATOR**

|   |  |
|---|--|
| 仕様 Specification                          | 5200RA : マルチスプリング・ダイヤフラム式 Multi-spring-Diaphragm type  |
| 用途 Purpose                                | モジュレーション Modulation  |
| 供給空気圧 Air supply<br>スプリングレンジ Spring range | 300 340 340<br>80 ~ 200 80 ~ 200 120 ~ 300 kPa [ gaug ]  |
| 接続口 Connection                            | 空気配管 : 16 ~ 19頁を御参照下さい。 Air piping : See pages 16 ~ 19.  |
| 出力軸回転角 Angle rotation                     | 60 deg   |
| 作動 Action                                 | 正作動 : 空気圧増加で弁閉 Direct action : Air to valve shut<br>逆作動 : 空気圧増加で弁開 Reverse action : Air to valve open  |
| ヒステリシス Hysteresis                         | 1% FS (ポジションナ付) 1% of Full stroke with positioner  |
| 直線性 Linearity                             | ±2% FS (ポジションナ付) ±2% of Full stroke with positioner  |
| 許容周囲温度 Ambient Temp.                      | - 10 ~ +70   |
| 標準塗装色 Painting                            | マンセルN - 6 Munsell N-6  |
| オプション Option                              | E/P、P/Pポジションナ、エアセット、電磁弁、リミットスイッチ、スピード調整器、ロック弁、ロックアップ弁、手動操作機構<br>E/P, P/P Positioner, Air-set, Solenoid valve, Limit switch, Speed controller, Lock valve, Lock-up valve, Manual handle, etc. |

|  |                        |   |  |   |
|--|------------------------|---|--|---|
| 仕 様<br>Specification                             | 駆動部形式<br>Actuator type | 6300RA, 7300RA : シリンダ式<br>Pneumatic Cylinder Type   |  | 3600RA : 全電子式<br>Solid State Electronic Type  |
|  |                        | 単動形<br>Spring return type   | 複動形<br>Double acting type                        | ACモータ / 分解能 : 0.4%<br>AC Motor / Resolution : 0.4%  |
| 用 途<br>Purpose                                   |                        | モジュレーション Modulation   |  | モジュレーション Modulation   |
| 供給空気圧<br>又は供給電源<br>Air supply or<br>Power supply |                        | 供給空気圧 Air supply<br>300, 400, 500 kPa[ gaug ]   | 供給空気圧 Air supply<br>300 ~ 500 kPa[ gaug ]        | 電源 Power SUP : AC100V 50/60 Hz<br>入力信号 Input SIG : 4 ~ 20 mA DC   |
| 接 続 口<br>Connection                              |                        | 空気配管 : 20 ~ 25頁を御参照下さい。<br>Air piping : See pages 20 ~ 25.  |  | 配線 : 26 ~ 28頁を御参照下さい。<br>Wiring : See pages 26 ~ 28.  |
| 出力軸回転角<br>Angle rotation                         |                        | 60 deg  |  | 60 deg with torque switch   |
| 正 作 動<br>Direct action                           |                        | 空気圧増加で弁閉<br>Air to valve shut   | 空気又は電気信号によ<br>り弁閉又は弁閉                            | 入力信号増加で弁閉<br>Signal increase to Valve shut  |
| 逆 作 動<br>Reverse action                          |                        | 空気圧増加で弁開<br>Air to valve open   | Valve open or shut by<br>air or electric signal. | 入力信号増加で弁開<br>Signal increase to Valve open  |
| ヒステリシス<br>Hysteresis                             |                        | 1.5% × フルストローク ( ポジショナ付 )<br>1.5% of full stroke with positioner  |  | 0.8% × フルストローク<br>0.8% of full stroke   |
| 直 線 性<br>Linearity                               |                        | ±2.0% × フルストローク ( ポジショナ付 )<br>±2.0% of full stroke with positioner  |  | 1.0% × フルストローク<br>1.0% of full stroke   |
| 許容周囲温度<br>Ambient Temp.                          |                        | - 20 ~ + 60   |  | - 10 ~ + 60   |
| 標準塗装色<br>Painting                                |                        | 7300RA : マンセルN-6 ( エポキシ樹脂系 )<br>Munsell N-6 (Epoxy resin group)<br>6300RA : シリンダ.....硬質アルマイト処理<br>エンドキャップ... ブルー<br>Cylinder..... Hard anodic coating<br>End cap..... Blue  |  | メタリックブルー<br>Metallic blue   |
| オプション<br>Option                                  |                        | E/P・P/Pポジショナ、エアセット、電磁弁、<br>リミットスイッチ、開度発信器、ロック弁、スピー<br>ド調整器、開度制限機構、手動操作機構、他<br>E/P・P/P Positioner, Air-set, Solenoid valve,<br>Limit switch, Position transmitter,<br>Lock valve, Speed controller,<br>Rotation stopper, Manual handle, etc. |  | トルクスイッチ、過負荷保護、端子箱、<br>スペースヒータ、手動操作機構、他<br>Torque switch, Overload protection,<br>Junction box, Space heater, Manual<br>handle, etc. |

## 性能 PERFORMANCE

|                                  |   |
|----------------------------------|---|
| 定 格 Cv Rated Cv                  | 表 3 を御参照下さい。 See Table 3.                                 |
| 流 量 特 性 Flow characteristics     | 固有特性 : 図 4 を御参照下さい。 Inherent characteristic : See Fig. 4. |
| レンジアビリティ Rangeability            | 図 4 を御参照下さい。 See Fig. 4.                                  |
| 弁座許容漏洩量 Seat leakage             | 表 1 を御参照下さい。 See Table 1.                                 |
| 許 容 差 圧 Allowable pressure drops | 表 4 を御参照下さい。 See Table 4.                                 |

## 付加仕様 (有償) OPTIONAL SPECIAL SPECIFICATIONS (Additional cost is required)

|   |  |
|---|--|
| 弁本体部特殊検査<br>Special testing for body                            | 材料検査( ミルシート、液体浸透探傷検査( PT )、放射線透過検査( RT ) )<br>Material certificate, Liquid penetrant testing, Radiographic testing.  |
| 弁本体部特殊洗浄<br>Special cleaning for body                           | 酸素禁油処理、禁油処理、禁水処理<br>Oxygen clean, Oil-free, Water-free.  |
| 弁本体部及び駆動部特殊仕様<br>Special specification for<br>body and actuator | 防砂・防塵仕様、塩害仕様、寒冷仕様、熱帯仕様、禁銅仕様、真空サービス、特殊空気<br>配管及び特殊ジョイント、外気露出部SUSボルトナット、指定塗装色<br>Sand and Dust proof, Salty environment proof, Cold area proof, Tropical area proof,<br>Copper-free alloy, Vacuum service proof, Special piping and fitting, SUS bolt and nut<br>for exposed parts, Non-standard painting. |

**表1 弁本体とトリムの標準材質組合せ並びに使用温度範囲**

**Table 1 BODY/TRIM STANDARD MATERIAL COMBINATION, OPERATING TEMPERATURE**

R. TFE (F) : 二硫化モリブデン入り強化テフロン MoS<sub>2</sub> filled Reinforced Teflon  
 R. TFE (C) : カーボンファイバー入り強化テフロン Carbonfiber filled Reinforced Teflon  
 Hcr : ハードクロムメッキ Hard chrome plated  
 S.S : ステライト部分盛 Stellite seat surface  
 PH : 析出硬化 Precipitation hardening

シールリングの材質・処理の違いによる使用温度・圧力範囲は、図1を御参照下さい。

Seal ring material/treatment vs operating temperature-pressure limitation ; See Fig. 1.

**表1-1 弁本体材質 : SCPH2/WCB、SCS13A/CF8**

**Table 1-1 BODY MATERIALS : SCPH2/WCB, SCS13A/CF8**

|                         |                  |                                 |              |              |              |              |
|-------------------------|------------------|---------------------------------|--------------|--------------|--------------|--------------|
| 弁本体材質                   | Body material    | SCPH2/A216-WCB, SCS13A/A351-CF8 |              |              |              |              |
| ディスク<br>Disc            | 材質 Material      | SCS14A                          |              |              | SCS14A       |              |
|                         | 処理 Treatment     | Hcr                             |              |              | S.S          |              |
| ステム<br>Stem             | 材質 Material      | SUS630                          |              |              | SUS630       |              |
|                         | 処理 Treatment     | PH                              |              |              | PH           |              |
| ベアリング<br>Bearing        | 材質 Material      | SUS316                          |              |              | SUS316       |              |
|                         | 処理 Treatment     | Hcr                             |              |              | Hcr          |              |
| リテーナ<br>Retainer        | 材質 Material      | SUS316                          |              |              | SUS316       |              |
| シールリング<br>Seal ring     | 形式 Type          | FN                              | FV           | CS           | H            | HS           |
|                         | 材質 Material      | R. TFE (F)                      | R. TFE (F)   | R. TFE (C)   | SUS630       | SUS316       |
|                         | 処理 Treatment     |                                 |              |              | PH           | S.S          |
| バックリング<br>Back ring     | 材質 Material      | NBR O ring                      | VITON O ring | SUS316       |              |              |
| 使用温度<br>Operating Temp. | SCPH2 /WCB Body  | - 5 ~ + 60                      | - 5 ~ + 180  | - 5 ~ + 250  | - 5 ~ + 400  | - 5 ~ + 400  |
|                         | SCS13A /CF8 Body | - 45 ~ + 60                     | - 10 ~ + 180 | - 45 ~ + 250 | - 45 ~ + 400 | - 45 ~ + 400 |
| 弁座漏洩量<br>Seat leakage   |                  | 図1を御参照下さい。 See Fig. 1.          |              |              |              |              |

**表1-2 弁本体材質 : SCS14A/CF8M**

**Table 1-2 BODY MATERIAL : SCS14A/CF8M**

|                         |               |                        |              |              |              |  |
|-------------------------|---------------|------------------------|--------------|--------------|--------------|--|
| 弁本体材質                   | Body material | SCS14A/A351-CF8M       |              |              |              |  |
| ディスク<br>Disc            | 材質 Material   | SCS14A                 |              |              | SCS14A       |  |
|                         | 処理 Treatment  | Hcr                    |              |              | S.S          |  |
| ステム<br>Stem             | 材質 Material   | SUS316                 |              |              | SUS316       |  |
| ベアリング<br>Bearing        | 材質 Material   | SUS316                 |              |              | SUS316       |  |
|                         | 処理 Treatment  | Hcr                    |              |              | Hcr          |  |
| リテーナ<br>Retainer        | 材質 Material   | SUS316                 |              |              | SUS316       |  |
| シールリング<br>Seal ring     | 形式 Type       | FN                     | FV           | CS           | HS           |  |
|                         | 材質 Material   | R. TFE (F)             | R. TFE (F)   | R. TFE (C)   | SUS316       |  |
|                         | 処理 Treatment  |                        |              |              | S.S          |  |
| バックリング<br>Back ring     | 材質 Material   | NBR O ring             | VITON O ring | SUS316       |              |  |
| 使用温度<br>Operating Temp. |               | - 5 ~ + 60             | - 10 ~ + 180 | - 45 ~ + 250 | - 45 ~ + 400 |  |
| 弁座漏洩量<br>Seat leakage   |               | 図1を御参照下さい。 See Fig. 1. |              |              |              |  |

表2 弁本体材質の使用温度・圧力範囲

Table 2 BODY MATERIAL/OPERATING PRESSURE-TEMPERATURE RATING

表2-1 ANSI

Table 2-1 ANSI UNIT : MPa

| 温度<br>Temp. | Class 150    |               |                | Class 300    |               |                | Class 600    |               |                |
|-------------|--------------|---------------|----------------|--------------|---------------|----------------|--------------|---------------|----------------|
|             | SCPH2<br>WCB | SCS13A<br>CF8 | SCS14A<br>CF8M | SCPH2<br>WCB | SCS13A<br>CF8 | SCS14A<br>CF8M | SCPH2<br>WCB | SCS13A<br>CF8 | SCS14A<br>CF8M |
| -45 ~ -5    |              | 1.90          | 1.90           |              | 4.95          | 4.95           |              | 9.91          | 9.92           |
| 38          | 1.96         | 1.90          | 1.90           | 5.10         | 4.95          | 4.95           | 10.20        | 9.91          | 9.92           |
| 50          | 1.92         | 1.84          | 1.84           | 5.00         | 4.77          | 4.80           | 10.01        | 9.56          | 9.62           |
| 100         | 1.76         | 1.56          | 1.61           | 4.63         | 4.08          | 4.21           | 9.27         | 8.17          | 8.43           |
| 150         | 1.57         | 1.39          | 1.47           | 4.51         | 3.62          | 3.85           | 9.04         | 7.26          | 7.69           |
| 200         | 1.40         | 1.25          | 1.37           | 4.38         | 3.27          | 3.56           | 8.75         | 6.54          | 7.12           |
| 250         | 1.20         | 1.16          | 1.20           | 4.16         | 3.04          | 3.34           | 8.33         | 6.10          | 6.67           |
| 300         | 1.01         | 1.01          | 1.01           | 3.87         | 2.91          | 3.15           | 7.74         | 5.80          | 6.32           |
| 350         | 0.84         | 0.84          | 0.84           | 3.69         | 2.81          | 3.03           | 7.38         | 5.60          | 6.07           |
| 375         | 0.73         | 0.73          | 0.73           | 3.64         | 2.77          | 2.96           | 7.28         | 5.54          | 5.93           |
| 400         | 0.64         | 0.64          | 0.64           | 3.44         | 2.74          | 2.91           | 6.89         | 5.48          | 5.81           |

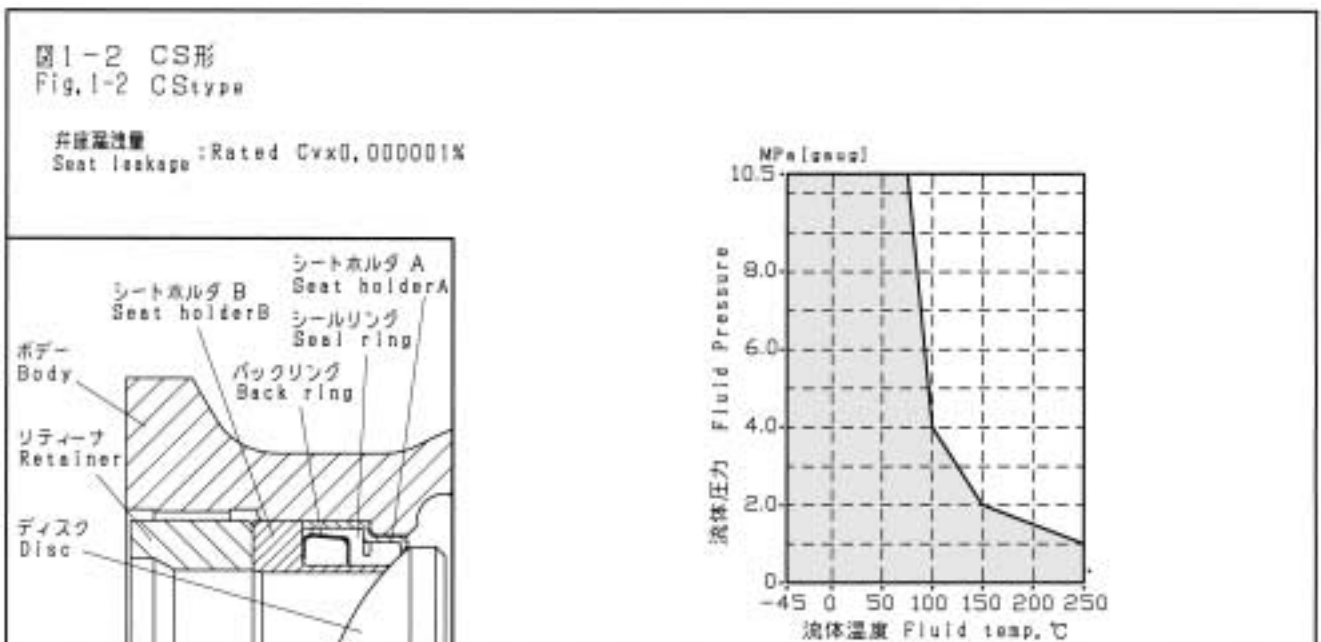
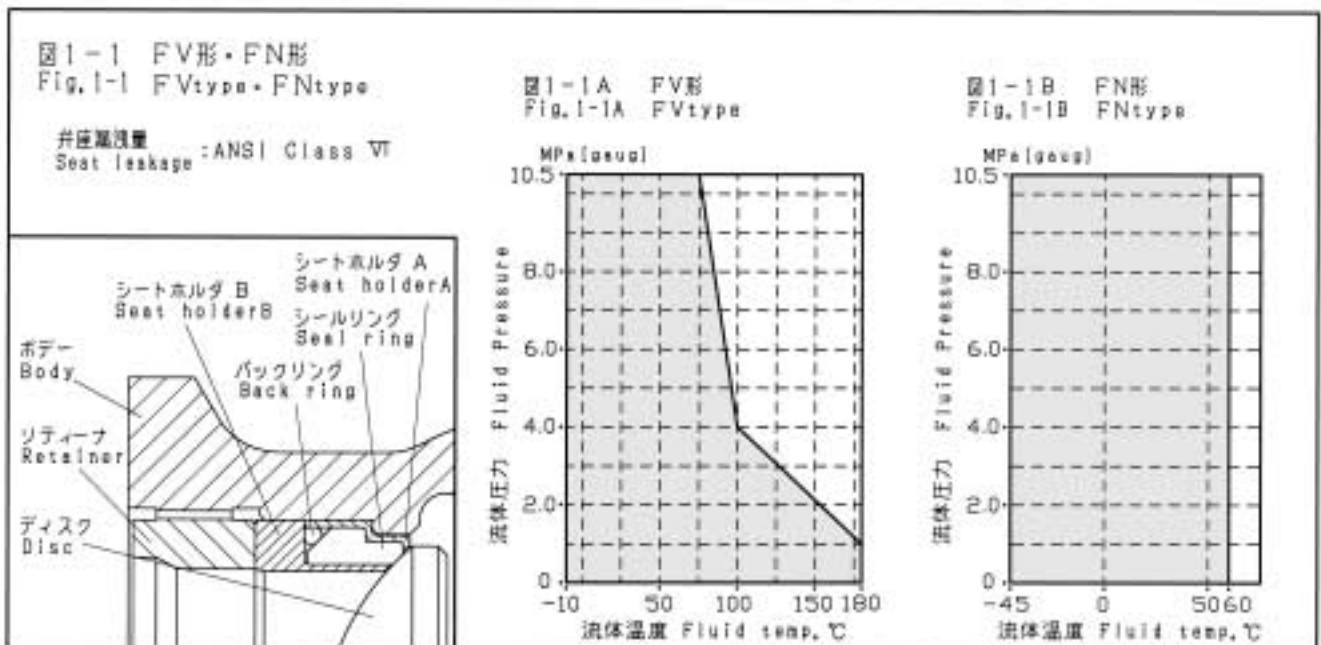
表2-2 JIS

Table 2-2 JIS UNIT : MPa

| 温度<br>Temp. | JIS10K | JIS20K | JIS30K | JIS40K |
|-------------|--------|--------|--------|--------|
|             | SCPH2  | SCPH2  | SCPH2  | SCPH2  |
| ~120        | 1.37   | 3.33   | 4.99   | 6.66   |
| ~220        | 1.17   | 3.03   | 4.50   | 6.07   |
| ~300        | 0.98   | 2.84   | 4.21   | 5.58   |
| ~350        |        | 2.54   | 3.82   | 5.09   |
| ~400        |        | 2.25   | 3.72   | 4.50   |

図1 シールリングの使用温度・圧力範囲及び弁座許容漏洩量

Fig. 1 SEAL RING OPERATING PRESSURE-TEMPERATURE RATINGS AND ALLOWABLE SEAT LEAKAGE



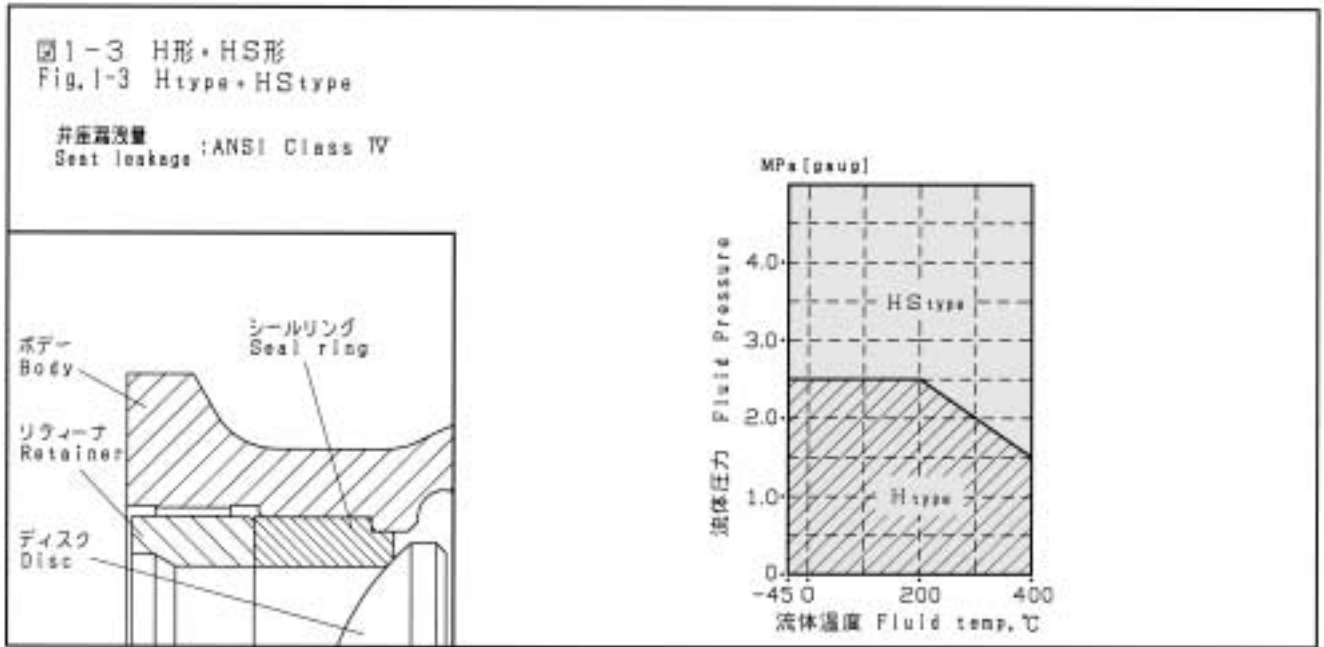


図2 パッキンの使用温度・圧力範囲

Fig. 2 GLAND PACKING OPERATING PRESSURE-TEMPERATURE RATINGS

図2-1 低トルク形:テフロンファイバー/テフロンアスベスト 図2-2 グラフォイル

Fig. 2-1 LOW TORQUE TYPE : TFE FIBER/TFE ASBEST Fig. 2-2 GRAFOIL

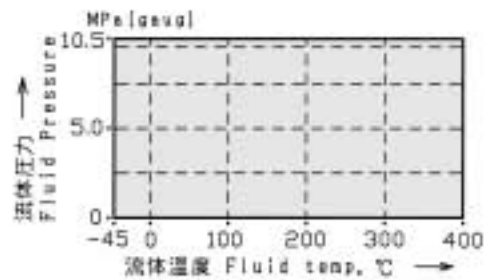
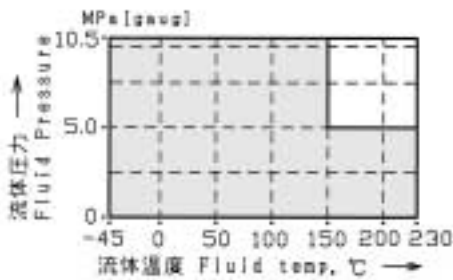


表3 定格Cv値

Table 3 Cv VALUE

| 弁サイズ<br>Valve size<br>inch ( mm ) | メタルシート Metal seat |                              |                              | ソフト Soft seat     |
|-----------------------------------|-------------------|------------------------------|------------------------------|-------------------|
|                                   | フルボア<br>Full bore | 40% レジューズドボア<br>Reduced bore | 60% レジューズドボア<br>Reduced bore | フルボア<br>Full bore |
| 1 ( 25 )                          | 14                | 6                            |                              | 14                |
| 1½ ( 40 )                         | 30                | 12                           |                              | 30                |
| 2 ( 50 )                          | 50                | 20                           |                              | 50                |
| 2½ ( 65 )                         | 100               | 40                           |                              | 85                |
| 3 ( 80 )                          | 135               | 54                           |                              | 120               |
| 4 ( 100 )                         | 230               | 92                           |                              | 195               |
| 5 ( 125 )                         | 320               | 128                          |                              | 290               |
| 6 ( 150 )                         | 500               | 200                          | 300                          | 480               |
| 8 ( 200 )                         | 850               | 340                          | 510                          | 800               |
| 10 ( 250 )                        | 1300              | 520                          | 780                          | 1150              |
| 12 ( 300 )                        | 1750              | 700                          | 1050                         | 1550              |

図3 弁本体部構造

Fig. 3 BODY SECTION VIEW

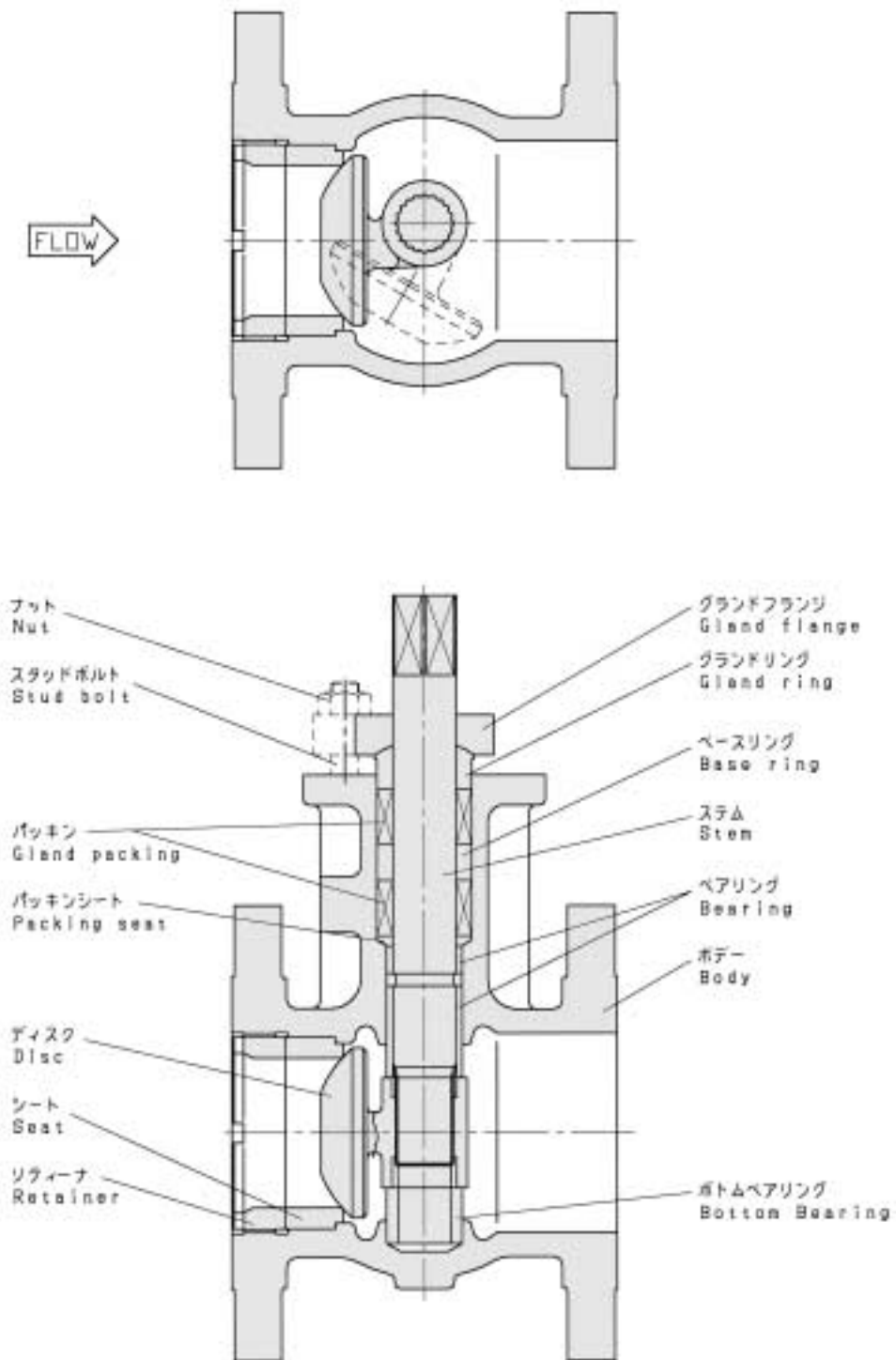




図4 流量特性

Fig. 4 FLOW CHARACTERISTIC

図4-1 メタルシート：フルボア

Fig. 4-1 METAL SEAT : FULL BORE

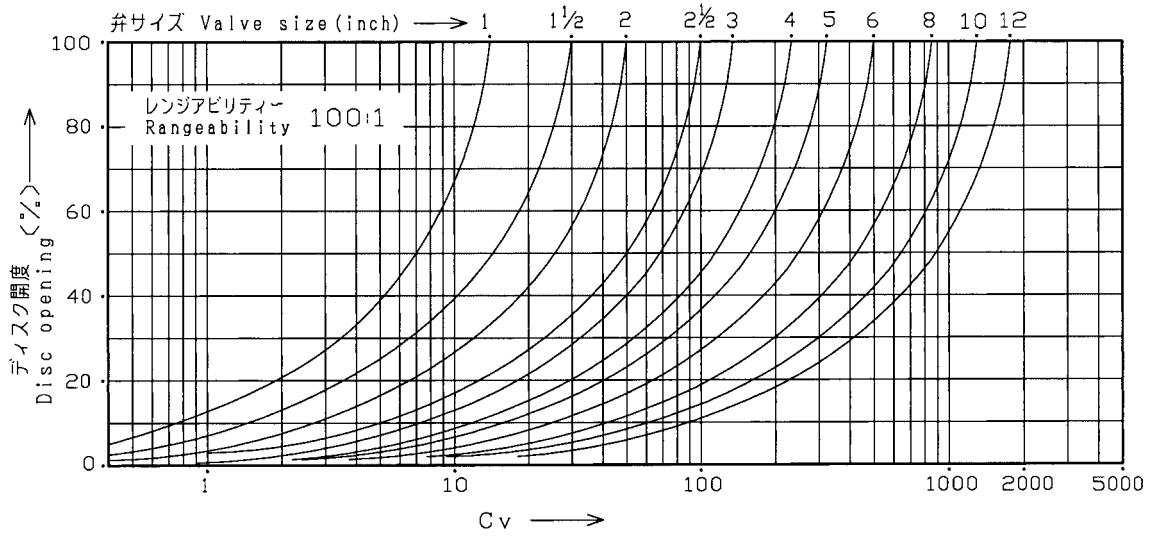


図4-2 メタルシート：40%レジュースドボア

Fig. 4-2 METAL SEAT : 40% REDUCED BORE

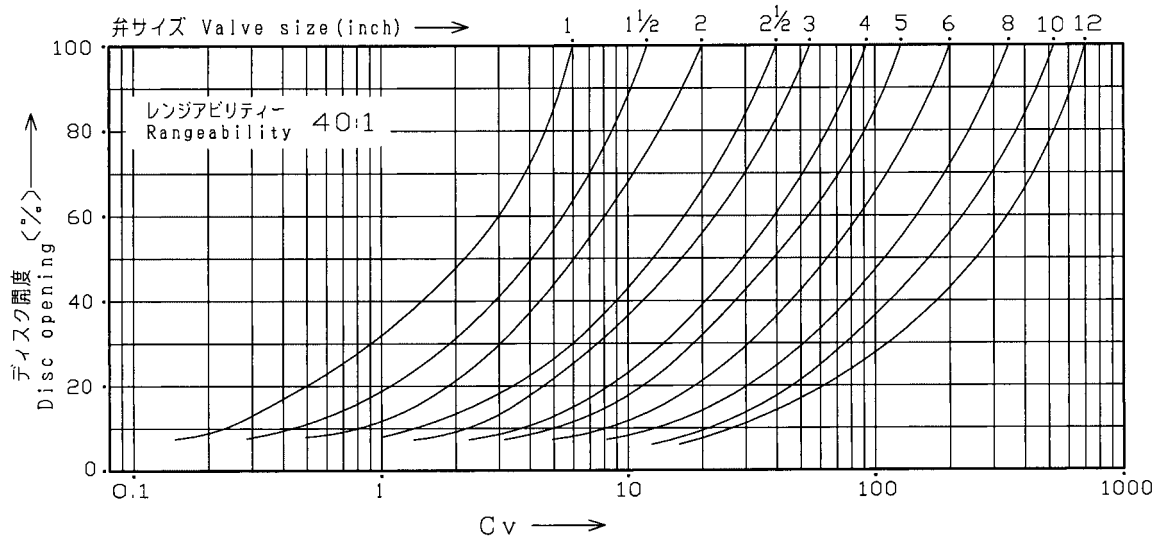
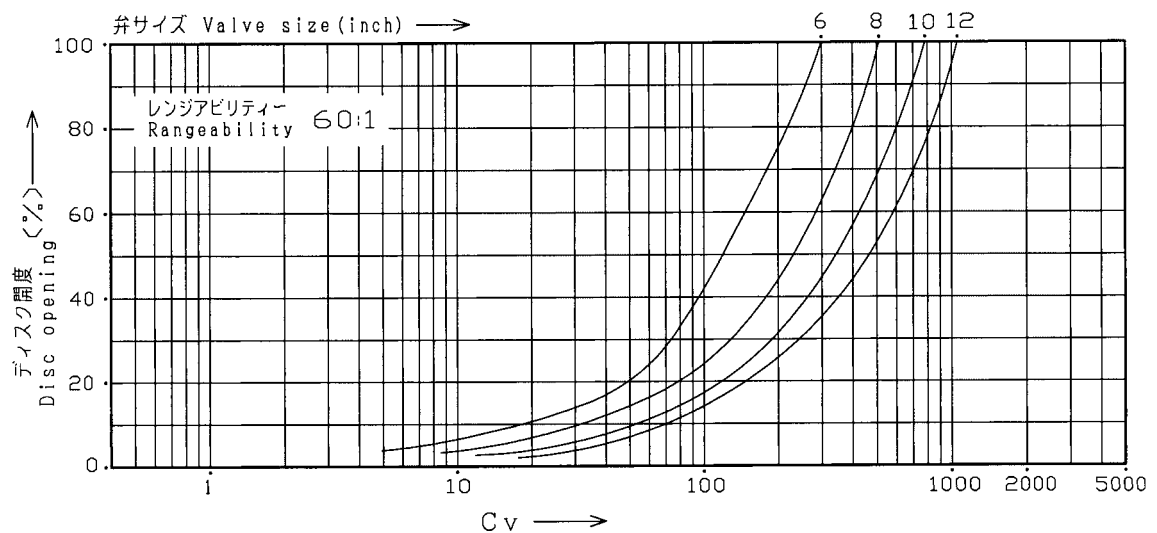


図4-3 メタルシート：60%レジュースドボア

Fig. 4-3 METAL SEAT : 60% REDUCED BORE



**表4 許容差圧 (単位: MPa) Table 4 ALLOWABLE PRESSURE DROPS (UNIT: MPa)**

弁サイズと駆動部サイズとの標準組合わせは、16~28頁を御参照下さい。

See pages 16~28 for valve size-actuator size combinations.

Shut: 弁締切許容差圧 Allowable pressure drops at shut off

P: 60°ディスク開時の許容差圧 Allowable pressure drops at disc 60 deg opening

**表4-1 ダイアフラム式駆動部 (5200RA) Table 4-1 DIAPHRAGM ACTUATOR (5200RA)**

DA: 正作動 (空気圧増加で弁閉) Direct action (Air to valve shut)

RA: 逆作動 (空気圧増加で弁開) Reverse action (Air to valve open)

**表4-1A パッキン: 低トルク形 Table 4-1A PACKING: LOW TORQUE TYPE**

| 駆動部<br>サイズ<br>Actuator<br>size | 供給空気圧<br>(オフバランス)<br>Air supply<br>(Off balance)<br>kPa[ gaug ] | スプリング<br>レンジ<br>Spring<br>range<br>kPa[ gaug ] | ステム<br>材質<br>Stem<br>materials | 用途<br>Purpose | 弁サイズ Valve size ( inch ) |      |      |      |      |      |   |   |   |    |    |  |
|--------------------------------|---|--|--------------------------------|---------------|--------------------------|------|------|------|------|------|---|---|---|----|----|--|
|                                |   |  |                                |               | 1                        | 1½   | 2    | 2½   | 3    | 4    | 5 | 6 | 8 | 10 | 12 |  |
| 218                            | 300( 80 )   | 80 ~ 200                                       | SUS630                         | Shut          | 4.99                     | 2.74 | 1.22 |      |      |      |   |   |   |    |    |  |
|                                |   |  |                                | P             | 1.56                     | 0.58 | 0.09 |      |      |      |   |   |   |    |    |  |
|                                | 340( 120 )  | RA<br>120 ~ 300<br>DA<br>80 ~ 200              | SUS630                         | Shut          | 4.99                     | 4.99 | 2.45 | 0.65 | 0.29 |      |   |   |   |    |    |  |
|                                |   |  |                                | P             | 1.81                     | 1.27 | 0.62 | 0.12 | 0.07 |      |   |   |   |    |    |  |
| 270                            | 300( 80 )   | 80 ~ 200                                       | SUS630                         | Shut          |                          |      | 4.70 | 1.79 | 1.07 |      |   |   |   |    |    |  |
|                                |   |  |                                | P             |                          |      | 1.22 | 0.41 | 0.25 |      |   |   |   |    |    |  |
|                                | 340( 120 )  | RA<br>120 ~ 300<br>DA<br>80 ~ 200              | SUS630                         | Shut          |                          |      | 3.33 | 1.79 | 1.07 |      |   |   |   |    |    |  |
|                                |   |  |                                | P             |                          |      | 1.22 | 0.41 | 0.25 |      |   |   |   |    |    |  |
| 350                            | 300( 80 )   | 80 ~ 200                                       | SUS630                         | Shut          |                          |      | 4.99 | 3.53 | 1.51 | 0.88 |   |   |   |    |    |  |
|                                |   |  |                                | P             |                          |      | 1.39 | 0.87 | 0.38 | 0.19 |   |   |   |    |    |  |
|                                | 340( 120 )  | RA<br>120 ~ 300<br>DA<br>80 ~ 200              | SUS630                         | Shut          |                          |      | 3.18 | 1.99 | 0.68 | 0.29 |   |   |   |    |    |  |
|                                |   |  |                                | P             |                          |      | 0.78 | 0.48 | 0.14 | 0.04 |   |   |   |    |    |  |
| 450                            | 300( 80 )   | 80 ~ 200                                       | SUS630                         | Shut          |                          |      | 4.99 | 3.53 | 1.51 | 0.88 |   |   |   |    |    |  |
|                                |   |  |                                | P             |                          |      | 1.39 | 0.87 | 0.38 | 0.19 |   |   |   |    |    |  |
|                                | 340( 120 )  | RA<br>120 ~ 300<br>DA<br>80 ~ 200              | SUS630                         | Shut          |                          |      | 4.99 | 3.53 | 1.51 | 0.88 |   |   |   |    |    |  |
|                                |   |  |                                | P             |                          |      | 1.39 | 0.87 | 0.38 | 0.19 |   |   |   |    |    |  |

**表4-1B パッキン: グラフォイル Table 4-1B PACKING: GRAFOIL**

| 駆動部<br>サイズ<br>Actuator<br>size | 供給空気圧<br>(オフバランス)<br>Air supply<br>(Off balance)<br>kPa[ gaug ] | スプリング<br>レンジ<br>Spring<br>range<br>kPa[ gaug ] | ステム<br>材質<br>Stem<br>materials | 用途<br>Purpose | 弁サイズ Valve size ( inch ) |      |      |      |      |      |   |   |   |    |    |  |
|--------------------------------|---|--|--------------------------------|---------------|--------------------------|------|------|------|------|------|---|---|---|----|----|--|
|                                |   |  |                                |               | 1                        | 1½   | 2    | 2½   | 3    | 4    | 5 | 6 | 8 | 10 | 12 |  |
| 218                            | 300( 80 )   | 80 ~ 200                                       | SUS630                         | Shut          | 4.99                     | 1.66 | 0.61 |      |      |      |   |   |   |    |    |  |
|                                |   |  |                                | P             | 0.06                     | 0.02 |      |      |      |      |   |   |   |    |    |  |
|                                | 340( 120 )  | RA<br>120 ~ 300<br>DA<br>80 ~ 200              | SUS630                         | Shut          | 4.99                     | 3.92 | 1.76 |      |      |      |   |   |   |    |    |  |
|                                |   |  |                                | P             | 1.37                     | 0.58 | 0.29 |      |      |      |   |   |   |    |    |  |
| 270                            | 300( 80 )   | 80 ~ 200                                       | SUS630                         | Shut          |                          |      | 4.02 | 0.67 | 0.41 |      |   |   |   |    |    |  |
|                                |   |  |                                | P             |                          |      | 0.85 |      |      |      |   |   |   |    |    |  |
|                                | 340( 120 )  | RA<br>120 ~ 300<br>DA<br>80 ~ 200              | SUS630                         | Shut          |                          |      | 2.84 | 0.67 | 0.41 |      |   |   |   |    |    |  |
|                                |   |  |                                | P             |                          |      | 0.85 |      |      |      |   |   |   |    |    |  |
| 350                            | 300( 80 )   | 80 ~ 200                                       | SUS630                         | Shut          |                          |      | 2.15 | 1.32 |      |      |   |   |   |    |    |  |
|                                |   |  |                                | P             |                          |      | 0.21 | 0.14 |      |      |   |   |   |    |    |  |
|                                | 340( 120 )  | RA<br>120 ~ 300<br>DA<br>80 ~ 200              | SUS630                         | Shut          |                          |      | 2.15 | 1.32 |      |      |   |   |   |    |    |  |
|                                |   |  |                                | P             |                          |      | 0.21 | 0.14 |      |      |   |   |   |    |    |  |
| 450                            | 300( 80 )   | 80 ~ 200                                       | SUS630                         | Shut          |                          |      | 4.41 | 2.89 | 0.98 | 0.58 |   |   |   |    |    |  |
|                                |   |  |                                | P             |                          |      | 0.83 | 0.52 | 0.05 | 0.02 |   |   |   |    |    |  |
|                                | 340( 120 )  | RA<br>120 ~ 300<br>DA<br>80 ~ 200              | SUS630                         | Shut          |                          |      | 3.52 | 2.89 | 0.98 | 0.58 |   |   |   |    |    |  |
|                                |   |  |                                | P             |                          |      | 0.83 | 0.52 | 0.05 | 0.02 |   |   |   |    |    |  |

表4-2 複動形シリンダ式駆動部

Table 4-2 DOUBLE ACTING CYLINDER ACTUATOR

表4-2A 駆動部サイズ：AT10～AT40

Table 4-2A ACTUATOR SIZE : AT10 ~ AT40

| 駆動部<br>サイズ・コード<br>Actuator<br>size & code | ステム<br>材 質<br>Stem<br>materials | 供 給<br>空気圧<br>Air SUP.<br>kPa | 用 途<br>Purpose | パッキン：低トルク形<br>PACKING : LOW TORQUE TYPE |              |              |              |              |              |              |   | パッキン：グラフォイル<br>PACKING : GRAFOIL |              |              |              |              |              |              |              |  |  |  |  |
|---|---------------------------------|-------------------------------|----------------|---|--------------|--------------|--------------|--------------|--------------|--------------|---|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--|--|--|--|
|   |                                 |                               |                | 弁サイズ Valve size ( inch )                |              |              |              |              |              |              |   | 弁サイズ Valve size ( inch )         |              |              |              |              |              |              |              |  |  |  |  |
|   |                                 |                               |                | 1                                       | 1½           | 2            | 2½           | 3            | 4            | 5            | 6 | 1                                | 1½           | 2            | 2½           | 3            | 4            | 5            | 6            |  |  |  |  |
| AT10<br>63A1RA                            | SUS630                          | 300                           | Shut<br>P      | 2.40<br>0.78                            | 0.60<br>0.32 |              |              |              |              |              |   |                                  |              |              |              |              |              |              |              |  |  |  |  |
|   |                                 | 400                           | Shut<br>P      | 4.21<br>1.34                            | 1.47<br>0.24 |              |              |              |              |              |   |                                  | 1.07         | 0.10         |              |              |              |              |              |  |  |  |  |
|   |                                 | 500                           | Shut<br>P      | 5.01<br>1.91                            | 2.20<br>0.78 |              |              |              |              |              |   |                                  | 2.74<br>0.15 | 0.83         |              |              |              |              |              |  |  |  |  |
|   | SUS316                          | 300                           | Shut<br>P      | 2.40<br>0.78                            | 0.60<br>0.32 |              |              |              |              |              |   |                                  |              |              |              |              |              |              |              |  |  |  |  |
|   |                                 | 400                           | Shut<br>P      | 4.21<br>1.34                            | 1.47<br>0.24 |              |              |              |              |              |   |                                  | 1.07         | 0.10         |              |              |              |              |              |  |  |  |  |
|   |                                 | 500                           | Shut<br>P      | 5.01<br>1.91                            | 2.20<br>0.78 |              |              |              |              |              |   |                                  | 2.74<br>0.15 | 0.83         |              |              |              |              |              |  |  |  |  |
| AT20<br>63A2RA                            | SUS630                          | 300                           | Shut<br>P      | 5.01<br>2.64                            | 3.70<br>1.12 | 1.61<br>0.53 | 0.24<br>0.09 |              |              |              |   |                                  | 5.01<br>1.03 | 2.28<br>0.01 | 0.93         |              |              |              |              |  |  |  |  |
|   |                                 | 400                           | Shut<br>P      | 5.01<br>5.01                            | 5.01<br>1.61 | 2.45<br>0.83 | 0.65<br>0.20 | 0.34<br>0.12 |              |              |   |                                  | 5.01<br>2.20 | 3.92<br>0.96 | 1.76<br>0.34 |              |              |              |              |  |  |  |  |
|   |                                 | 500                           | Shut<br>P      | 5.01<br>5.01                            | 5.01<br>2.15 | 3.33<br>1.07 | 1.12<br>0.34 | 0.63<br>0.21 |              |              |   |                                  | 5.01<br>3.53 | 5.01<br>1.42 | 2.69<br>0.73 |              |              |              |              |  |  |  |  |
|   | SUS316                          | 300                           | Shut<br>P      | 5.01<br>2.64                            | 3.70<br>1.12 | 1.61<br>0.53 | 0.24<br>0.09 |              |              |              |   |                                  | 5.01<br>1.03 | 2.28<br>0.01 | 0.93         |              |              |              |              |  |  |  |  |
|   |                                 | 400                           | Shut<br>P      | 5.01<br>5.01                            | 5.01<br>1.61 | 2.45<br>0.83 | 0.65<br>0.20 | 0.34<br>0.12 |              |              |   |                                  | 5.01<br>2.20 | 3.92<br>0.96 | 1.76<br>0.34 |              |              |              |              |  |  |  |  |
|   |                                 | 500                           | Shut<br>P      | 5.01<br>5.01                            | 5.01<br>2.15 | 3.33<br>1.07 | 1.12<br>0.34 | 0.63<br>0.21 |              |              |   |                                  | 5.01<br>3.53 | 5.01<br>1.42 | 2.69<br>0.73 |              |              |              |              |  |  |  |  |
| AT25<br>63AARA                            | SUS630                          | 300                           | Shut<br>P      |   |              | 3.09<br>0.98 | 0.97<br>0.29 | 0.53<br>0.18 |              |              |   |                                  |              |              | 2.35<br>0.63 |              |              |              |              |  |  |  |  |
|   |                                 | 400                           | Shut<br>P      |   |              | 4.20<br>1.32 | 1.60<br>0.48 | 0.94<br>0.29 |              |              |   |                                  |              | 3.62<br>0.98 | 0.55<br>0.27 |              |              |              |              |  |  |  |  |
|   |                                 | 500                           | Shut<br>P      |   |              | 5.01<br>1.71 | 2.01<br>0.68 | 1.22<br>0.42 |              |              |   |                                  |              | 4.51<br>1.37 | 1.01<br>0.13 | 0.55<br>0.09 |              |              |              |  |  |  |  |
|   | SUS316                          | 300                           | Shut<br>P      |   |              | 3.09<br>0.98 | 0.97<br>0.29 | 0.53<br>0.18 |              |              |   |                                  |              | 2.35<br>0.63 |              |              |              |              |              |  |  |  |  |
|   |                                 | 400                           | Shut<br>P      |   |              | 3.40<br>1.32 | 1.60<br>0.48 | 0.94<br>0.29 |              |              |   |                                  |              | 2.90<br>0.98 | 0.55<br>0.27 |              |              |              |              |  |  |  |  |
|   |                                 | 500                           | Shut<br>P      |   |              | 3.40<br>1.71 | 2.01<br>0.68 | 1.22<br>0.42 |              |              |   |                                  |              | 2.90<br>1.37 | 1.01<br>0.13 | 0.55<br>0.09 |              |              |              |  |  |  |  |
| AT30<br>63A3RA                            | SUS630                          | 300                           | Shut<br>P      |   |              | 5.01<br>1.61 | 1.83<br>0.61 | 1.10<br>0.37 | 0.32<br>0.11 | 0.13         |   |                                  |              | 4.16<br>1.22 | 0.83<br>0.08 | 0.45<br>0.04 |              |              |              |  |  |  |  |
|   |                                 | 400                           | Shut<br>P      |   |              | 5.01<br>2.20 | 2.79<br>0.93 | 1.71<br>0.56 | 0.68<br>0.21 | 0.36<br>0.09 |   |                                  |              | 5.01<br>1.86 | 1.80<br>0.37 | 1.07<br>0.23 |              |              |              |  |  |  |  |
|   |                                 | 500                           | Shut<br>P      |   |              | 5.01<br>2.79 | 3.77<br>1.24 | 2.35<br>0.77 | 1.00<br>0.32 | 0.60<br>0.12 |   |                                  |              | 5.01<br>2.47 | 2.74<br>0.68 | 1.42<br>0.42 | 0.34<br>0.14 | 0.14         |              |  |  |  |  |
|   | SUS316                          | 300                           | Shut<br>P      |   |              | 1.83<br>0.61 | 1.10<br>0.37 | 0.32<br>0.11 | 0.13         |              |   |                                  |              | 0.83<br>0.08 | 0.45<br>0.04 |              |              |              |              |  |  |  |  |
|   |                                 | 400                           | Shut<br>P      |   |              | 2.79<br>0.93 | 1.71<br>0.56 | 0.68<br>0.21 | 0.36<br>0.09 |              |   |                                  |              | 1.08<br>0.37 | 1.07<br>0.23 |              |              |              |              |  |  |  |  |
|   |                                 | 500                           | Shut<br>P      |   |              | 3.77<br>1.24 | 2.35<br>0.77 | 1.00<br>0.32 | 0.60<br>0.12 |              |   |                                  |              | 2.74<br>0.68 | 1.42<br>0.42 | 0.34<br>0.14 | 0.14         |              |              |  |  |  |  |
| AT40<br>63A4RA                            | SUS630                          | 300                           | Shut<br>P      |   |              | 5.01<br>1.71 | 3.33<br>1.05 | 1.47<br>0.48 | 0.96<br>0.29 | 0.36<br>0.12 |   |                                  |              |              |              | 2.66<br>0.71 | 0.86<br>0.12 | 0.49         |              |  |  |  |  |
|   |                                 | 400                           | Shut<br>P      |   |              | 5.01<br>2.25 | 4.65<br>1.49 | 2.25<br>0.70 | 1.43<br>0.47 | 0.61<br>0.19 |   |                                  |              |              |              | 4.03<br>1.13 | 1.59<br>0.35 | 0.98<br>0.22 | 0.29<br>0.04 |  |  |  |  |
|   |                                 | 500                           | Shut<br>P      |   |              | 5.01<br>3.04 | 5.01<br>1.89 | 2.94<br>0.93 | 1.91<br>0.63 | 0.87<br>0.26 |   |                                  |              |              |              | 5.01<br>2.55 | 2.31<br>0.57 | 1.47<br>0.37 | 0.53<br>0.10 |  |  |  |  |
|   | SUS316                          | 300                           | Shut<br>P      |   |              | 3.33<br>1.05 | 1.47<br>0.48 | 0.96<br>0.29 | 0.36<br>0.12 |              |   |                                  |              |              | 2.66<br>0.71 | 0.86<br>0.12 | 0.49         |              |              |  |  |  |  |
|   |                                 | 400                           | Shut<br>P      |   |              | 3.33<br>1.49 | 2.25<br>0.70 | 1.43<br>0.47 | 0.61<br>0.19 |              |   |                                  |              |              | 2.94<br>1.13 | 1.59<br>0.35 | 0.98<br>0.22 | 0.29<br>0.04 |              |  |  |  |  |
|   |                                 | 500                           | Shut<br>P      |   |              | 2.94<br>0.93 | 1.91<br>0.63 | 0.87<br>0.26 |              |              |   |                                  |              | 2.94<br>1.13 | 2.31<br>0.57 | 1.47<br>0.37 | 0.53<br>0.10 |              |              |  |  |  |  |

表4-2B 駆動部サイズ：AT50～375

Table 4-2B ACTUATOR SIZE : AT50 ~ 375

| 駆動部<br>サイズ・コード<br>Actuator<br>size & code | ステム<br>材 質<br>Stem<br>materials | 供 給<br>空気圧<br>Air SUP.<br>kPa | 用 途<br>Purpose | パッキン：低トルク形<br>PACKING : LOW TORQUE TYPE |      |      |      |      |      |      | パッキン：グラフォイル<br>PACKING : GRAFOIL |      |      |      |      |      |      |
|---|---------------------------------|-------------------------------|----------------|---|------|------|------|------|------|------|----------------------------------|------|------|------|------|------|------|
|   |                                 |                               |                | 弁サイズ Valve size ( inch )                |      |      |      |      |      |      | 弁サイズ Valve size ( inch )         |      |      |      |      |      |      |
|   |                                 |                               |                | 3                                       | 4    | 5    | 6    | 8    | 10   | 12   | 3                                | 4    | 5    | 6    | 8    | 10   | 12   |
| AT50<br>63A5RA                            | SUS630                          | 300                           | Shut           | 3.62                                    | 2.35 | 1.09 | 0.55 | 0.23 | 0.11 | 2.99 | 1.92                             | 0.77 | 0.37 | 0.08 |      |      |      |
|   |                                 |                               | P              | 1.13                                    | 0.80 | 0.33 | 0.17 | 0.09 | 0.04 | 0.78 | 0.51                             | 0.17 | 0.09 | 0.02 |      |      |      |
|   |                                 | 400                           | Shut           | 5.01                                    | 3.33 | 1.61 | 0.86 | 0.41 | 0.23 | 4.41 | 2.89                             | 1.29 | 0.66 | 0.26 | 0.15 |      |      |
|   | P                               | 1.57                          | 1.12           | 0.48                                    | 0.25 | 0.13 | 0.07 | 1.22 | 0.80 | 0.32 | 0.16                             | 0.06 | 0.04 |      |      |      |      |
|   | 500                             | Shut                          | 5.01           | 4.31                                    | 2.10 | 1.14 | 0.62 | 0.34 | 5.01 | 3.87 | 1.79                             | 0.96 | 0.44 | 0.27 |      |      |      |
|   | P                               | 2.01                          | 1.47           | 0.61                                    | 0.32 | 0.18 | 0.11 | 1.66 | 1.07 | 0.46 | 0.24                             | 0.10 | 0.07 |      |      |      |      |
| SUS316                                    | 300                             | Shut                          | 3.62           | 2.35                                    | 1.09 | 0.55 | 0.23 | 0.11 | 2.99 | 1.92 | 0.77                             | 0.37 | 0.08 |      |      |      |      |
|   |                                 | P                             | 1.13           | 0.80                                    | 0.33 | 0.17 | 0.09 | 0.04 | 0.78 | 0.51 | 0.17                             | 0.09 | 0.02 |      |      |      |      |
|   | 400                             | Shut                          | 4.31           | 3.33                                    | 1.61 | 0.86 | 0.41 | 0.23 | 4.20 | 2.65 | 1.29                             | 0.66 | 0.26 | 0.15 |      |      |      |
|   | P                               | 1.57                          | 1.12           | 0.48                                    | 0.25 | 0.13 | 0.07 | 1.22 | 0.80 | 0.32 | 0.16                             | 0.06 | 0.04 |      |      |      |      |
|   | 500                             | Shut                          | 4.31           | 4.31                                    | 2.10 | 1.14 | 0.62 | 0.34 | 4.20 | 2.65 | 1.79                             | 0.96 | 0.44 | 0.27 |      |      |      |
|   | P                               | 2.01                          | 1.47           | 0.61                                    | 0.32 | 0.18 | 0.11 | 1.66 | 1.07 | 0.46 | 0.24                             | 0.10 | 0.07 |      |      |      |      |
| 170<br>7317RA                             | SUS630                          | 300                           | Shut           | 5.01                                    | 4.12 | 2.69 | 1.29 | 0.66 | 0.29 | 0.15 | 5.01                             | 3.53 | 2.27 | 0.96 | 0.49 | 0.15 |      |
|   |                                 |                               | P              | 2.25                                    | 1.29 | 0.93 | 0.38 | 0.20 | 0.10 | 0.06 | 1.91                             | 0.93 | 0.60 | 0.22 | 0.11 | 0.03 |      |
|   |                                 | 400                           | Shut           | 5.01                                    | 5.01 | 3.82 | 1.87 | 1.01 | 0.49 | 0.29 | 5.01                             | 5.01 | 3.18 | 1.54 | 0.82 | 0.34 | 0.21 |
|   | P                               | 3.09                          | 1.79           | 1.32                                    | 0.54 | 0.28 | 0.15 | 0.09 | 2.74 | 1.45 | 0.95                             | 0.39 | 0.20 | 0.09 | 0.06 |      |      |
|   | 500                             | Shut                          | 5.01           | 5.01                                    | 4.41 | 2.40 | 1.33 | 0.74 | 0.42 | 5.01 | 5.01                             | 3.53 | 2.10 | 1.14 | 0.53 | 0.34 |      |
|   | P                               | 3.92                          | 2.28           | 1.70                                    | 0.70 | 0.37 | 0.21 | 0.12 | 3.53 | 1.93 | 1.27                             | 0.54 | 0.28 | 0.13 | 0.09 |      |      |
| SUS316                                    | 300                             | Shut                          | 3.33           | 4.12                                    | 2.69 | 1.29 | 0.66 | 0.29 | 0.15 | 2.94 | 4.20                             | 2.60 | 0.96 | 0.49 | 0.15 |      |      |
|   |                                 | P                             | 2.25           | 1.29                                    | 0.93 | 0.38 | 0.20 | 0.10 | 0.06 | 1.91 | 0.93                             | 0.60 | 0.22 | 0.11 | 0.03 |      |      |
|   | 400                             | Shut                          | 3.33           | 4.31                                    | 2.79 | 1.87 | 1.01 | 0.49 | 0.29 | 2.94 | 4.20                             | 2.60 | 1.54 | 0.82 | 0.34 | 0.21 |      |
|   | P                               | 2.55                          | 1.79           | 1.32                                    | 0.54 | 0.28 | 0.15 | 0.09 | 2.35 | 1.45 | 0.95                             | 0.39 | 0.20 | 0.09 | 0.06 |      |      |
|   | 500                             | Shut                          | 3.33           | 4.31                                    | 2.79 | 2.40 | 1.33 | 0.74 | 0.42 | 2.94 | 4.20                             | 2.60 | 2.10 | 1.14 | 0.53 | 0.34 |      |
|   | P                               | 2.55                          | 2.28           | 1.70                                    | 0.70 | 0.37 | 0.21 | 0.12 | 2.35 | 1.93 | 1.27                             | 0.54 | 0.28 | 0.13 | 0.09 |      |      |
| 235<br>7323RA                             | SUS630                          | 300                           | Shut           |   |      | 4.41 | 4.16 | 2.35 | 1.32 | 0.82 |                                  |      | 5.01 | 3.82 | 2.15 | 1.12 | 0.73 |
|   |                                 |                               | P              |   |      | 2.89 | 1.19 | 0.62 | 0.37 | 0.23 |                                  |      | 2.25 | 1.03 | 0.54 | 0.30 | 0.20 |
|   |                                 | 400                           | Shut           |   |      | 5.01 | 5.01 | 3.04 | 1.76 | 1.12 |                                  |      | 5.01 | 5.01 | 2.84 | 1.61 | 1.07 |
|   | P                               |                               |                | 3.92                                    | 1.61 | 0.85 | 0.50 | 0.32 |      |      | 3.09                             | 1.45 | 0.77 | 0.43 | 0.28 |      |      |
|   | 500                             | Shut                          |                |   | 5.01 | 5.01 | 3.04 | 2.35 | 1.52 |      |                                  | 5.01 | 5.01 | 2.84 | 2.20 | 1.37 |      |
|   | P                               |                               |                | 3.92                                    | 2.04 | 1.07 | 0.64 | 0.41 |      |      | 3.53                             | 1.86 | 1.00 | 0.56 | 0.38 |      |      |
| SUS316                                    | 300                             | Shut                          |                |   | 2.79 | 2.05 | 1.37 | 1.32 | 0.82 |      |                                  | 2.60 | 2.25 | 1.23 | 1.12 | 0.73 |      |
|   |                                 | P                             |                |   | 2.01 | 1.19 | 0.95 | 0.37 | 0.23 |      |                                  | 1.56 | 1.03 | 0.54 | 0.30 | 0.20 |      |
|   | 400                             | Shut                          |                |   | 2.79 | 2.05 | 1.37 | 1.47 | 1.12 |      |                                  | 2.60 | 2.25 | 1.23 | 1.37 | 1.07 |      |
|   | P                               |                               |                | 2.01                                    | 1.61 | 0.95 | 0.50 | 0.32 |      |      | 1.56                             | 1.45 | 0.77 | 0.43 | 0.28 |      |      |
|   | 500                             | Shut                          |                |   | 2.79 | 2.05 | 1.37 | 1.47 | 1.18 |      |                                  | 2.60 | 2.25 | 1.23 | 1.37 | 1.07 |      |
|   | P                               |                               |                | 2.01                                    | 1.61 | 0.95 | 0.64 | 0.41 |      |      | 1.56                             | 1.86 | 0.88 | 0.56 | 0.38 |      |      |
| 280<br>7328RA                             | SUS630                          | 300                           | Shut           |   |      |      |      | 3.04 | 2.45 | 1.56 |                                  |      |      |      | 2.84 | 2.30 | 1.52 |
|   |                                 |                               | P              |   |      |      |      | 1.12 | 0.67 | 0.41 |                                  |      |      |      | 1.86 | 0.59 | 0.40 |
|   |                                 | 400                           | Shut           |   |      |      |      | 3.04 | 3.43 | 2.15 |                                  |      |      |      | 2.84 | 3.33 | 2.06 |
|   | P                               |                               |                |   |      | 1.42 | 0.91 | 0.58 |      |      |                                  |      | 1.86 | 0.83 | 0.54 |      |      |
|   | 500                             | Shut                          |                |   |      |      | 3.04 | 3.43 | 2.78 |      |                                  |      |      | 2.84 | 3.33 | 2.69 |      |
|   | P                               |                               |                |   |      | 1.76 | 1.12 | 0.75 |      |      |                                  |      | 1.86 | 1.07 | 0.71 |      |      |
| SUS316                                    | 300                             | Shut                          |                |   |      |      |      | 1.47 | 1.18 |      |                                  |      |      |      | 1.37 | 1.07 |      |
|   |                                 | P                             |                |   |      |      |      |      | 0.67 | 0.41 |                                  |      |      |      |      | 0.59 | 0.40 |
|   | 400                             | Shut                          |                |   |      |      |      | 1.47 | 1.18 |      |                                  |      |      |      | 1.37 | 1.07 |      |
|   | P                               |                               |                |   |      |      |      | 0.73 | 0.58 |      |                                  |      |      |      | 0.68 | 0.54 |      |
|   | 500                             | Shut                          |                |   |      |      |      | 1.47 | 1.18 |      |                                  |      |      |      | 1.37 | 1.07 |      |
|   | P                               |                               |                |   |      |      |      | 0.73 | 0.73 |      |                                  |      |      |      | 0.68 | 0.68 |      |
| 375<br>7337RA                             | SUS630                          | 300                           | Shut           |   |      |      |      |      | 3.43 | 2.84 |                                  |      |      |      |      | 3.33 | 2.69 |
|   |                                 |                               | P              |   |      |      |      |      | 1.61 | 1.05 |                                  |      |      |      |      | 1.56 | 1.03 |
|   |                                 | 400                           | Shut           |   |      |      |      |      | 3.43 | 2.84 |                                  |      |      |      |      | 3.33 | 2.69 |
|   | P                               |                               |                |   |      |      |      | 1.61 | 1.42 |      |                                  |      |      |      | 1.56 | 1.41 |      |
|   | 500                             | Shut                          |                |   |      |      |      | 3.43 | 2.84 |      |                                  |      |      |      | 3.33 | 2.69 |      |
|   | P                               |                               |                |   |      |      |      | 1.61 | 1.56 |      |                                  |      |      |      | 1.56 | 1.47 |      |
| SUS316                                    | 300                             | Shut                          |                |   |      |      |      |      |      |      |                                  |      |      |      |      |      |      |
|   | P                               |                               |                |   |      |      |      |      |      |      |                                  |      |      |      |      |      |      |
|   | 400                             | Shut                          |                |   |      |      |      |      |      |      |                                  |      |      |      |      |      |      |
| P   |                                 |                               |                |   |      |      |      |      |      |      |                                  |      |      |      |      |      |      |
| 500                                       | Shut                            |                               |                |   |      |      |      |      |      |      |                                  |      |      |      |      |      |      |
| P   |                                 |                               |                |   |      |      |      |      |      |      |                                  |      |      |      |      |      |      |

表4-3 単動形シリンダ式駆動部

Table 4-3 SPRING RETURN PNEUMATIC CYLINDER ACTUATOR

表4-3A 駆動部サイズ：AT20～AT50

Table 4-3A ACTUATOR SIZE : AT20 ~ AT50

| 駆動部<br>サイズ・コード<br>Actuator<br>size & code | ステム<br>材 質<br>Stem<br>materials | 供 給<br>空気圧<br>Air SUP.<br>kPa | 用 途<br>Purpose | パッキン：低トルク形<br>PACKING : LOW TORQUE TYPE |              |              |              |              |              |              | パッキン：グラフオイル<br>PACKING : GRAFOIL |              |              |              |      |      |      |      |
|---|---------------------------------|-------------------------------|----------------|---|--------------|--------------|--------------|--------------|--------------|--------------|----------------------------------|--------------|--------------|--------------|------|------|------|------|
|   |                                 |                               |                | 弁サイズ Valve size ( inch )                |              |              |              |              |              |              | 弁サイズ Valve size ( inch )         |              |              |              |      |      |      |      |
|   |                                 |                               |                | 1                                       | 1½           | 2            | 2½           | 3            | 4            | 5            | 1                                | 1½           | 2            | 2½           | 3    | 4    | 5    |      |
| AT20<br>63A2RA                            | SUS630                          | 300                           | Shut<br>P      | 0.34                                    |              |              |              |              |              |              |                                  |              |              |              |      |      |      |      |
|   |                                 | 400                           | Shut<br>P      | 1.07<br>0.48                            |              |              |              |              |              |              |                                  |              |              |              |      |      |      |      |
|   |                                 | 500                           | Shut<br>P      | 2.25<br>0.83                            |              |              |              |              |              |              |                                  |              |              |              |      |      |      |      |
|   | SUS316                          | 300                           | Shut<br>P      | 0.34                                    |              |              |              |              |              |              |                                  |              |              |              |      |      |      |      |
|   |                                 | 400                           | Shut<br>P      | 1.07<br>0.48                            |              |              |              |              |              |              |                                  |              |              |              |      |      |      |      |
|   |                                 | 500                           | Shut<br>P      | 2.25<br>0.83                            |              |              |              |              |              |              |                                  |              |              |              |      |      |      |      |
| AT25<br>63AARA                            | SUS630                          | 300                           | Shut<br>P      | 1.56<br>0.63                            | 0.39<br>0.25 |              |              |              |              |              |                                  |              |              |              |      |      |      |      |
|   |                                 | 400                           | Shut<br>P      | 3.13<br>1.12                            | 1.12<br>0.44 |              |              |              |              | 0.29         |                                  |              |              |              |      |      |      |      |
|   |                                 | 500                           | Shut<br>P      | 5.01<br>1.71                            | 1.76<br>0.69 |              |              |              |              | 1.86         | 0.46                             |              |              |              |      |      |      |      |
|   | SUS316                          | 300                           | Shut<br>P      | 1.56<br>0.63                            | 0.39<br>0.25 |              |              |              |              |              |                                  |              |              |              |      |      |      |      |
|   |                                 | 400                           | Shut<br>P      | 3.13<br>1.12                            | 1.12<br>0.44 |              |              |              |              | 0.29         |                                  |              |              |              |      |      |      |      |
|   |                                 | 500                           | Shut<br>P      | 5.01<br>1.71                            | 1.76<br>0.69 |              |              |              |              | 1.86         | 0.46                             |              |              |              |      |      |      |      |
| AT30<br>63A3RA                            | SUS630                          | 300                           | Shut<br>P      | 4.70<br>1.66                            | 1.66<br>0.66 | 0.63<br>0.32 |              |              |              |              | 1.61                             | 0.35         |              |              |      |      |      |      |
|   |                                 | 400                           | Shut<br>P      | 5.01<br>3.33                            | 2.74<br>1.03 | 1.19<br>0.51 |              |              |              | 4.12<br>0.73 | 1.45<br>0.30                     | 0.49<br>0.14 |              |              |      |      |      |      |
|   |                                 | 500                           | Shut<br>P      | 5.01<br>5.01                            | 3.82<br>1.37 | 1.71<br>0.68 | 0.31<br>0.14 |              |              | 5.01<br>1.71 | 2.54<br>0.63                     | 1.05<br>0.32 |              |              |      |      |      |      |
|   | SUS316                          | 300                           | Shut<br>P      | 4.70<br>1.66                            | 1.66<br>0.66 | 0.63<br>0.32 |              |              |              |              | 1.61                             | 0.35         |              |              |      |      |      |      |
|   |                                 | 400                           | Shut<br>P      | 5.01<br>3.33                            | 2.74<br>1.03 | 1.19<br>0.51 |              |              |              | 4.12<br>0.73 | 1.45<br>0.36                     | 0.49<br>0.14 |              |              |      |      |      |      |
|   |                                 | 500                           | Shut<br>P      | 5.01<br>5.01                            | 3.82<br>1.37 | 1.71<br>0.68 | 0.31<br>0.14 |              |              | 5.01<br>1.61 | 2.54<br>0.63                     | 1.05<br>0.32 |              |              |      |      |      |      |
| AT40<br>63A4RA                            | SUS630                          | 300                           | Shut<br>P      |   |              | 2.55<br>0.95 | 0.70<br>0.27 | 0.37<br>0.16 |              |              | 4.12<br>1.18                     | 1.86<br>0.58 |              |              |      |      |      |      |
|   |                                 | 400                           | Shut<br>P      |   |              | 3.72<br>1.33 | 1.28<br>0.47 | 0.74<br>0.29 |              |              | 5.01<br>1.94                     | 3.04<br>0.96 | 0.27<br>0.09 |              |      |      |      |      |
|   |                                 | 500                           | Shut<br>P      |   |              | 5.01<br>1.70 | 1.85<br>0.66 | 1.11<br>0.41 |              |              | 5.01<br>2.70                     | 4.16<br>1.34 | 0.83<br>0.10 | 0.46<br>0.07 |      |      |      |      |
|   | SUS316                          | 300                           | Shut<br>P      |   |              | 2.55<br>0.95 | 0.70<br>0.27 | 0.37<br>0.16 |              |              | 3.72<br>1.18                     | 1.86<br>0.58 |              |              |      |      |      |      |
|   |                                 | 400                           | Shut<br>P      |   |              | 3.40<br>1.33 | 1.28<br>0.47 | 0.74<br>0.29 |              |              | 3.72<br>1.94                     | 2.84<br>0.96 | 0.27<br>0.09 |              |      |      |      |      |
|   |                                 | 500                           | Shut<br>P      |   |              | 3.40<br>1.70 | 1.85<br>0.66 | 1.11<br>0.41 |              |              | 3.72<br>2.70                     | 2.84<br>1.34 | 0.83<br>0.10 | 0.46<br>0.07 |      |      |      |      |
| AT50<br>63A5RA                            | SUS630                          | 300                           | Shut<br>P      |   |              | 2.43<br>0.83 | 1.49<br>0.52 | 0.53<br>0.19 | 0.27<br>0.06 |              |                                  | 5.01<br>1.71 | 1.41<br>0.29 | 0.82<br>0.18 |      |      |      |      |
|   |                                 | 400                           | Shut<br>P      |   |              | 3.58<br>1.24 | 2.25<br>0.77 | 0.95<br>0.32 | 0.53<br>0.17 |              |                                  | 5.01<br>2.50 | 2.55<br>0.68 | 1.58<br>0.43 | 0.28 | 0.09 |      |      |
|   |                                 | 500                           | Shut<br>P      |   |              | 4.75<br>1.64 | 3.02<br>1.03 | 1.35<br>0.46 | 0.82<br>0.27 |              |                                  | 5.01<br>3.26 | 3.72<br>1.07 | 2.35<br>0.66 | 0.68 | 0.37 | 0.10 | 0.06 |
|   | SUS316                          | 300                           | Shut<br>P      |   |              | 2.43<br>0.83 | 1.49<br>0.52 | 0.53<br>0.19 | 0.27<br>0.06 |              |                                  |              | 1.41<br>0.29 | 0.82<br>0.18 |      |      |      |      |
|   |                                 | 400                           | Shut<br>P      |   |              | 3.58<br>1.24 | 2.25<br>0.77 | 0.95<br>0.32 | 0.53<br>0.17 |              |                                  |              | 2.55<br>0.68 | 1.58<br>0.43 | 0.28 | 0.09 |      |      |
|   |                                 | 500                           | Shut<br>P      |   |              | 4.20<br>1.64 | 3.02<br>1.03 | 1.35<br>0.46 | 0.82<br>0.27 |              |                                  |              | 3.53<br>1.07 | 2.35<br>0.66 | 0.68 | 0.37 | 0.10 | 0.06 |

表4-3B 駆動部サイズ：170～375

Table 4-3B ACTUATOR SIZE : 170 ~ 375

| 駆動部<br>サイズ・コード<br>Actuator<br>size & code | ステム<br>材 質<br>Stem<br>materials | 供 給<br>空気圧<br>Air SUP.<br>kPa | 用 途<br>Purpose | パッキン：低トルク形<br>PACKING : LOW TORQUE TYPE |      |      |      |      |      |      |   | パッキン：グラフォイル<br>PACKING : GRAFOIL |      |      |      |      |      |      |      |
|---|---------------------------------|-------------------------------|----------------|---|------|------|------|------|------|------|---|----------------------------------|------|------|------|------|------|------|------|
|   |                                 |                               |                | 弁サイズ Valve size ( inch )                |      |      |      |      |      |      |   | 弁サイズ Valve size ( inch )         |      |      |      |      |      |      |      |
|   |                                 |                               |                | 3                                       | 4    | 5    | 6    | 8    | 10   | 12   | 3 | 4                                | 5    | 6    | 8    | 10   | 12   |      |      |
| 170<br>7317RA                             | SUS630                          | 300                           | Shut           | 1.52                                    | 0.55 | 0.28 |      |      |      |      |   |                                  | 0.86 |      |      |      |      |      |      |
|   |                                 |                               | P              | 0.53                                    | 0.19 | 0.08 |      |      |      |      |   |                                  |      |      | 0.18 |      |      |      |      |
|   |                                 | 400                           | Shut           | 2.30                                    | 0.98 | 0.56 |      |      |      |      |   |                                  |      | 1.64 | 0.31 | 0.11 |      |      |      |
|   |                                 | P                             | 0.79           | 0.33                                    | 0.17 |      |      |      |      |      |   |                                  | 0.45 |      |      |      |      |      |      |
|   | SUS316                          | 500                           | Shut           | 3.08                                    | 1.39 | 0.84 |      |      |      |      |   |                                  |      | 2.41 | 0.72 | 0.40 |      |      |      |
|   |                                 |                               | P              | 1.03                                    | 0.47 | 0.28 |      |      |      |      |   |                                  |      | 0.69 | 0.11 | 0.08 |      |      |      |
| 300                                       |                                 | Shut                          | 1.52           | 0.55                                    | 0.28 |      |      |      |      |      |   |                                  | 0.86 |      |      |      |      |      |      |
|   | P                               | 0.53                          | 0.19           | 0.08                                    |      |      |      |      |      |      |   | 0.18                             |      |      |      |      |      |      |      |
| 235<br>7323RA                             | SUS630                          | 300                           | Shut           |   | 2.64 | 1.68 | 0.75 | 0.36 | 0.13 |      |   |                                  |      | 1.98 | 1.24 | 0.42 | 0.17 |      |      |
|   |                                 |                               | P              |   | 0.86 | 0.59 | 0.24 | 0.17 | 0.07 |      |   |                                  |      | 0.69 | 0.33 | 0.09 | 0.05 |      |      |
|   |                                 | 400                           | Shut           |   | 3.75 | 2.44 | 1.14 | 0.58 | 0.27 | 0.12 |   |                                  |      | 3.09 | 1.99 | 0.81 | 0.40 | 0.10 | 0.05 |
|   |                                 | P                             |                | 1.22                                    | 0.88 | 0.36 | 0.18 | 0.09 | 0.06 |      |   |                                  | 0.88 | 0.56 | 0.20 | 0.10 | 0.03 | 0.02 |      |
|   | SUS316                          | 500                           | Shut           |   | 4.80 | 3.19 | 1.54 | 0.81 | 0.41 | 0.21 |   |                                  |      | 4.20 | 2.74 | 1.20 | 0.62 | 0.23 | 0.13 |
|   |                                 |                               | P              |   | 1.58 | 1.15 | 0.48 | 0.25 | 0.13 | 0.08 |   |                                  |      | 1.23 | 0.80 | 0.32 | 0.16 | 0.07 | 0.05 |
| 300                                       |                                 | Shut                          |                | 2.64                                    | 1.68 | 0.75 | 0.36 | 0.13 |      |      |   |                                  | 1.98 | 1.24 | 0.42 | 0.17 |      |      |      |
|   | P                               |                               | 0.86           | 0.59                                    | 0.24 | 0.17 | 0.07 |      |      |      |   | 0.69                             | 0.33 | 0.09 | 0.05 |      |      |      |      |
| 280<br>7328RA                             | SUS630                          | 300                           | Shut           |   |      | 3.37 | 1.62 | 0.87 | 0.44 | 0.23 |   |                                  |      | 2.92 | 1.30 | 0.67 | 0.25 | 0.14 |      |
|   |                                 |                               | P              |   |      | 1.22 | 0.51 | 0.26 | 0.14 | 0.09 |   |                                  |      | 0.86 | 0.35 | 0.18 | 0.08 | 0.06 |      |
|   |                                 | 400                           | Shut           |   |      | 4.65 | 2.31 | 1.26 | 0.67 | 0.39 |   |                                  |      | 4.23 | 1.98 | 1.06 | 0.51 | 0.31 |      |
|   |                                 | P                             |                |   | 1.66 | 0.70 | 0.37 | 0.21 | 0.15 |      |   |                                  | 1.26 | 0.54 | 0.28 | 0.13 | 0.09 |      |      |
|   | SUS316                          | 500                           | Shut           |   |      | 5.01 | 2.98 | 1.64 | 0.91 | 0.54 |   |                                  |      | 5.01 | 2.64 | 1.46 | 0.73 | 0.47 |      |
|   |                                 |                               | P              |   |      | 2.15 | 0.90 | 0.47 | 0.27 | 0.17 |   |                                  |      | 1.66 | 0.74 | 0.39 | 0.20 | 0.13 |      |
| 300                                       |                                 | Shut                          |                |   | 2.79 | 1.62 | 0.87 | 0.44 | 0.23 |      |   |                                  | 2.60 | 2.25 | 1.23 | 0.25 | 0.14 |      |      |
|   | P                               |                               |                | 1.22                                    | 0.51 | 0.26 | 0.14 | 0.09 |      |      |   | 0.86                             | 0.35 | 0.18 | 0.08 | 0.06 |      |      |      |
| 375<br>7337RA                             | SUS630                          | 300                           | Shut           |   |      |      | 4.35 | 2.43 | 1.38 | 0.86 |   |                                  |      |      | 4.02 | 2.25 | 1.21 | 0.78 |      |
|   |                                 |                               | P              |   |      |      | 1.03 | 0.68 | 0.40 | 0.25 |   |                                  |      |      | 1.14 | 0.60 | 0.33 | 0.22 |      |
|   |                                 | 400                           | Shut           |   |      |      | 5.01 | 3.04 | 1.95 | 1.23 |   |                                  |      |      | 5.01 | 2.84 | 1.78 | 1.15 |      |
|   |                                 | P                             |                |   |      | 1.77 | 0.94 | 0.55 | 0.35 |      |   |                                  |      | 1.61 | 0.78 | 0.48 | 0.32 |      |      |
|   | SUS316                          | 500                           | Shut           |   |      |      | 5.01 | 3.04 | 2.50 | 1.59 |   |                                  |      |      | 5.01 | 2.84 | 2.30 | 1.52 |      |
|   |                                 |                               | P              |   |      |      | 2.22 | 1.18 | 0.70 | 0.45 |   |                                  |      |      | 2.07 | 1.09 | 0.63 | 0.42 |      |
| 300                                       |                                 | Shut                          |                |   |      | 2.50 | 1.37 | 1.47 | 0.86 |      |   |                                  |      | 2.25 |      | 1.21 | 0.78 |      |      |
|   | P                               |                               |                |   | 1.03 | 0.68 | 0.40 | 0.25 |      |      |   |                                  | 1.47 |      | 0.33 | 0.32 |      |      |      |
| SUS316                                    | 400                             | Shut                          |                |   |      | 2.50 | 1.37 | 1.47 | 1.18 |      |   |                                  |      | 2.25 |      | 1.37 | 1.08 |      |      |
|   |                                 | P                             |                |   |      | 1.61 | 0.86 | 0.55 | 0.35 |      |   |                                  |      | 1.47 |      | 0.48 | 0.30 |      |      |
|   | 500                             | Shut                          |                |   |      | 2.50 | 1.37 | 1.47 | 1.18 |      |   |                                  |      | 2.25 |      | 1.37 | 1.08 |      |      |
|   | P                               |                               |                |   | 1.61 | 0.86 | 0.70 | 0.45 |      |      |   |                                  | 1.47 |      | 0.63 | 0.39 |      |      |      |

表4-4 全電子式駆動部 (3600RA : トルクスイッチ付)

Table 4-4 SOLID STATE ELECTRONIC ACTUATOR (3600RA : WITH TORQUE SWITCH)

表4-4A パッキン : 低トルク形 Table 4-4A PACKING : LOW TORQUE TYPE

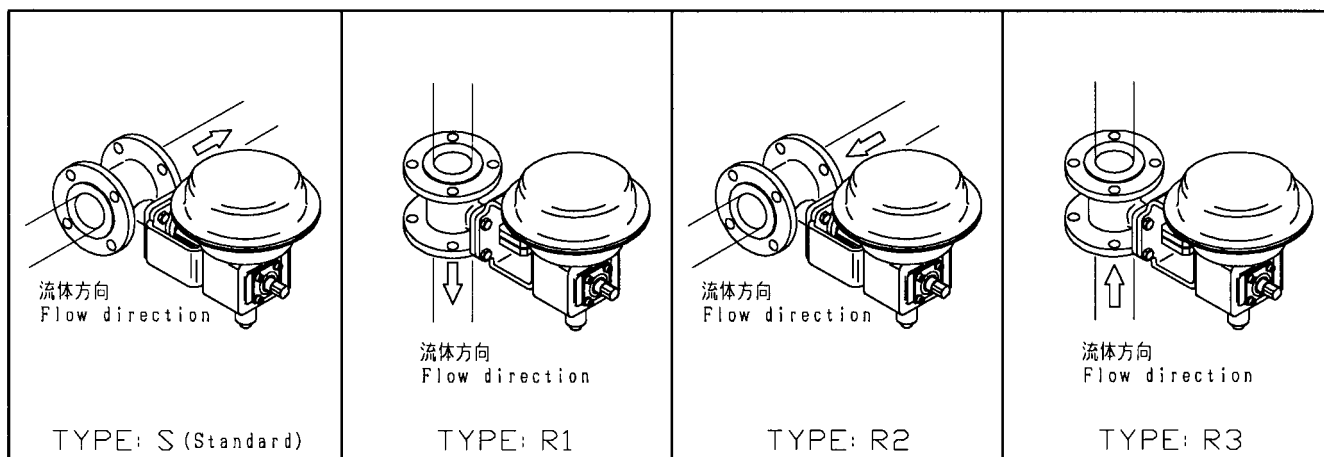
| 駆動部<br>サイズ・コード<br>size code | Actuator<br>トルク Torque<br>N-m | ステム材質<br>Stem<br>materials | 用途<br>Purpose | 弁サイズ Valve size ( inch ) |              |              |              |              |              |              |              |              |              |              |  |  |  |
|-----------------------------|-------------------------------|----------------------------|---------------|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--|--|--|
|                             |                               |                            |               | 1                        | 1½           | 2            | 2½           | 3            | 4            | 5            | 6            | 8            | 10           | 12           |  |  |  |
| 36A1RA                      | 19.6                          | SUS630                     | Shut<br>P     | 4.31<br>2.94             | 1.52<br>1.22 | 0.54<br>0.54 |              |              |              |              |              |              |              |              |  |  |  |
|                             |                               | SUS316                     | Shut<br>P     | 4.31<br>2.74             | 1.52<br>1.22 | 0.54<br>0.54 |              |              |              |              |              |              |              |              |  |  |  |
| 36A2RA                      | 49                            | SUS630                     | Shut<br>P     |                          | 5.01<br>3.67 | 2.84<br>0.72 | 0.85<br>0.72 | 0.47<br>0.47 |              |              |              |              |              |              |  |  |  |
|                             |                               | SUS316                     | Shut<br>P     |                          | 5.01<br>3.67 | 2.84<br>0.72 | 0.85<br>0.72 | 0.47<br>0.47 |              |              |              |              |              |              |  |  |  |
| 36B1RA                      | 98                            | SUS630                     | Shut<br>P     |                          |              | 5.01<br>3.85 | 2.74<br>1.74 | 1.69<br>1.09 | 0.64<br>0.50 | 0.35<br>0.30 |              |              |              |              |  |  |  |
|                             |                               | SUS316                     | Shut<br>P     |                          |              | 3.33<br>2.22 | 2.74<br>1.74 | 1.69<br>1.09 | 0.64<br>0.50 | 0.35<br>0.30 |              |              |              |              |  |  |  |
| 36B2RA                      | 196                           | SUS630                     | Shut<br>P     |                          |              |              | 5.01<br>3.82 | 4.15<br>2.38 | 1.98<br>1.18 | 1.24<br>0.85 | 0.51<br>0.29 |              |              |              |  |  |  |
|                             |                               | SUS316                     | Shut<br>P     |                          |              |              | 3.58<br>3.04 | 3.53<br>2.22 | 1.48<br>1.18 | 1.24<br>0.85 | 0.51<br>0.29 |              |              |              |  |  |  |
| 36C1RA                      | 294                           | SUS630                     | Shut<br>P     |                          |              |              |              |              | 3.30<br>1.86 | 2.10<br>1.39 | 0.98<br>0.57 | 0.50<br>0.30 |              |              |  |  |  |
|                             |                               | SUS316                     | Shut<br>P     |                          |              |              |              |              | 3.30<br>1.86 | 2.10<br>1.39 | 0.98<br>0.57 | 0.50<br>0.30 |              |              |  |  |  |
| 36C2RA                      | 490                           | SUS630                     | Shut<br>P     |                          |              |              |              |              | 5.01<br>3.23 | 3.92<br>2.45 | 1.91<br>1.02 | 1.03<br>0.53 |              |              |  |  |  |
|                             |                               | SUS316                     | Shut<br>P     |                          |              |              |              |              | 4.31<br>2.74 | 2.79<br>2.01 | 1.91<br>1.02 | 1.03<br>0.53 |              |              |  |  |  |
| 36C3RA                      | 588                           | SUS630                     | Shut<br>P     |                          |              |              |              |              |              |              | 2.38<br>1.23 | 1.30<br>0.65 | 0.70<br>0.38 | 0.41<br>0.24 |  |  |  |
|                             |                               | SUS316                     | Shut<br>P     |                          |              |              |              |              |              |              | 2.38<br>1.23 | 1.30<br>0.65 | 0.70<br>0.38 | 0.41<br>0.24 |  |  |  |
| 36D1RA                      | 980                           | SUS630                     | Shut<br>P     |                          |              |              |              |              |              |              | 4.21<br>2.12 | 2.38<br>1.12 | 1.35<br>0.67 | 0.96<br>0.49 |  |  |  |
|                             |                               | SUS316                     | Shut<br>P     |                          |              |              |              |              |              |              | 2.50<br>1.61 | 1.37<br>0.93 | 1.35<br>0.67 | 0.96<br>0.49 |  |  |  |

表4-4B パッキン : グラフォイル Table 4-4B PACKING : GRAFOIL

| 駆動部<br>サイズ・コード<br>size code | Actuator<br>トルク Torque<br>N-m | ステム材質<br>Stem<br>materials | 用途<br>Purpose | 弁サイズ Valve size ( inch ) |              |              |              |              |              |              |              |              |              |              |  |  |  |  |
|-----------------------------|-------------------------------|----------------------------|---------------|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--|--|--|--|
|                             |                               |                            |               | 1                        | 1½           | 2            | 2½           | 3            | 4            | 5            | 6            | 8            | 10           | 12           |  |  |  |  |
| 36A1RA                      | 19.6                          | SUS630                     | Shut<br>P     | 1.17<br>1.17             | 0.15<br>0.15 |              |              |              |              |              |              |              |              |              |  |  |  |  |
|                             |                               | SUS316                     | Shut<br>P     | 1.17<br>1.17             | 0.15<br>0.15 |              |              |              |              |              |              |              |              |              |  |  |  |  |
| 36A2RA                      | 49                            | SUS630                     | Shut<br>P     |                          | 4.70<br>2.94 | 2.15<br>1.46 |              |              |              |              |              |              |              |              |  |  |  |  |
|                             |                               | SUS316                     | Shut<br>P     |                          | 4.70<br>2.94 | 2.15<br>1.46 |              |              |              |              |              |              |              |              |  |  |  |  |
| 36B1RA                      | 98                            | SUS630                     | Shut<br>P     |                          |              | 4.51<br>4.41 | 1.71<br>1.18 | 1.03<br>0.73 |              |              |              |              |              |              |  |  |  |  |
|                             |                               | SUS316                     | Shut<br>P     |                          |              | 2.84<br>1.91 | 1.71<br>1.18 | 1.03<br>0.73 |              |              |              |              |              |              |  |  |  |  |
| 36B2RA                      | 196                           | SUS630                     | Shut<br>P     |                          |              |              | 5.01<br>3.27 | 3.48<br>2.01 | 1.31<br>0.91 | 0.78<br>0.55 | 1.96<br>1.96 |              |              |              |  |  |  |  |
|                             |                               | SUS316                     | Shut<br>P     |                          |              |              | 3.53<br>2.65 | 3.16<br>1.91 | 1.31<br>0.91 | 0.78<br>0.55 | 1.96<br>1.96 |              |              |              |  |  |  |  |
| 36C1RA                      | 294                           | SUS630                     | Shut<br>P     |                          |              |              |              |              | 2.63<br>1.53 | 1.66<br>1.00 | 0.65<br>0.42 | 0.30<br>0.21 |              |              |  |  |  |  |
|                             |                               | SUS316                     | Shut<br>P     |                          |              |              |              |              | 2.63<br>1.53 | 1.66<br>1.00 | 0.65<br>0.42 | 0.30<br>0.21 |              |              |  |  |  |  |
| 36C2RA                      | 490                           | SUS630                     | Shut<br>P     |                          |              |              |              |              | 5.01<br>2.91 | 3.48<br>1.90 | 1.58<br>0.86 | 0.84<br>0.45 |              |              |  |  |  |  |
|                             |                               | SUS316                     | Shut<br>P     |                          |              |              |              |              | 4.12<br>2.40 | 2.55<br>1.81 | 1.58<br>0.86 | 0.84<br>0.45 |              |              |  |  |  |  |
| 36C3RA                      | 588                           | SUS630                     | Shut<br>P     |                          |              |              |              |              |              |              | 2.06<br>1.08 | 1.11<br>0.56 | 0.53<br>0.31 | 0.33<br>0.20 |  |  |  |  |
|                             |                               | SUS316                     | Shut<br>P     |                          |              |              |              |              |              |              | 2.06<br>1.06 | 1.11<br>0.56 | 0.53<br>0.31 | 0.33<br>0.20 |  |  |  |  |
| 36D1RA                      | 980                           | SUS630                     | Shut<br>P     |                          |              |              |              |              |              |              | 3.92<br>1.96 | 2.18<br>1.03 | 1.17<br>0.59 | 0.75<br>0.40 |  |  |  |  |
|                             |                               | SUS316                     | Shut<br>P     |                          |              |              |              |              |              |              | 2.30<br>1.47 | 1.23<br>0.70 | 1.17<br>0.59 | 0.75<br>0.40 |  |  |  |  |

図5 5200RA駆動部取付姿勢

Fig. 5 ACTUATOR MOUNTING FORMS FOR 5200RA

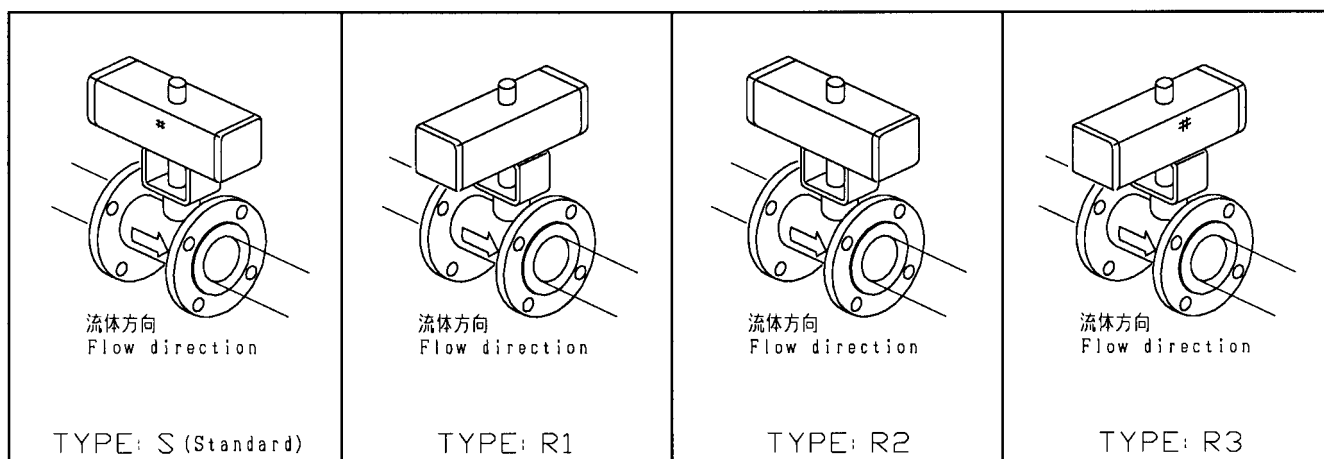


注：標準取付姿勢Type : S以外の場合は、取付姿勢を御指定下さい。

Note : Type S is automatically applied, unless otherwise specified.

図6 6300RA駆動部取付姿勢

Fig. 6 ACTUATOR MOUNTING FORMS FOR 6300RA

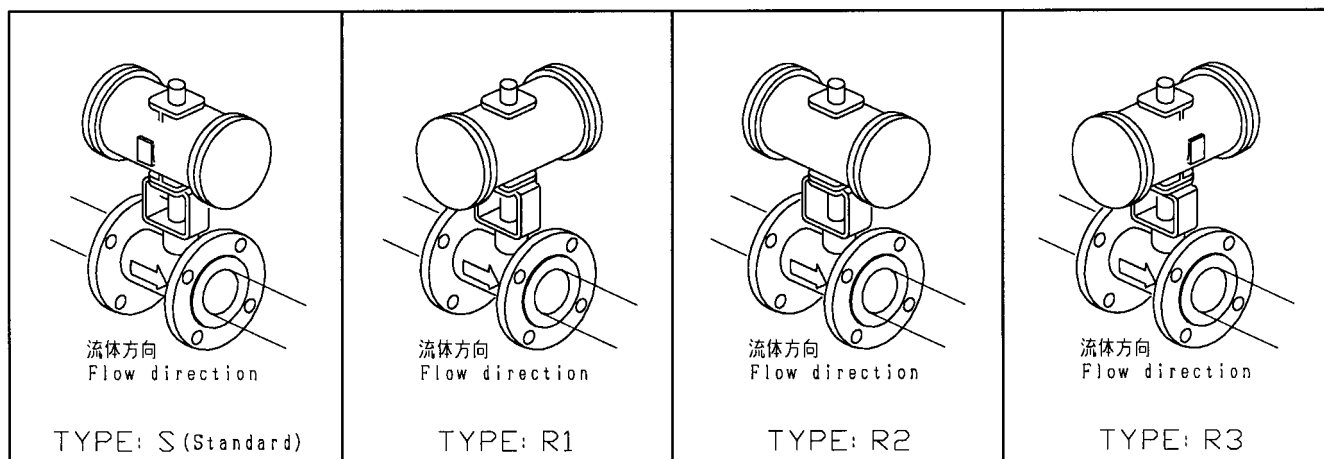


注：標準取付姿勢Type : S以外の場合は、取付姿勢を御指定下さい。

Note : Type S is automatically applied, unless otherwise specified.

図7 7300RA駆動部取付姿勢

Fig. 7 ACTUATOR MOUNTING FORMS FOR 7300RA



注：標準取付姿勢Type : S以外の場合は、取付姿勢を御指定下さい。

Note : Type S is automatically applied, unless otherwise specified.



表5 標準駆動部との組合せ概算製品重量 (単位: kg)

Table 5 NET WEIGHT OF STANDARD VALVE AND ACTUATOR COMBINED (UNIT : kg)

弁本体部及び駆動部は標準品の重量で、付属品並びに手動操作機構などの重量を含んでいません。

Only standard types are represented. Weights of accessories, a handwheel and the like are not included.

表5-1 弁本体部定格 : JIS10K、ANSI Class 150

Table 5-1 BODY RATING : JIS10K, Class 150

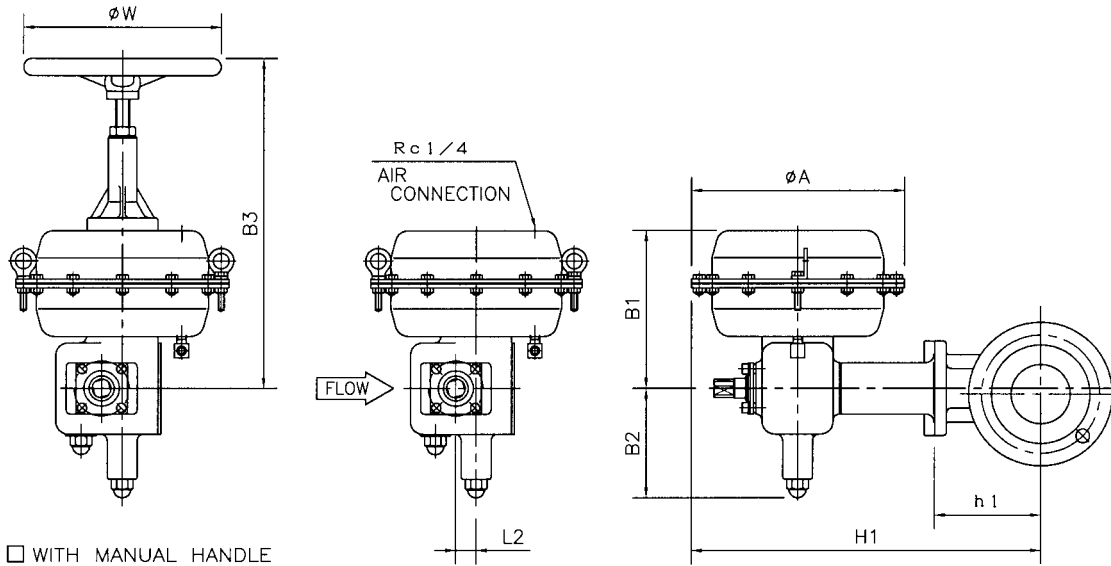
| 駆動部 Actuator |                        |                  | 弁サイズ Valve size ( inch ) |    |    |    |    |     |     |     |     |     |     |
|--------------|------------------------|------------------|--------------------------|----|----|----|----|-----|-----|-----|-----|-----|-----|
| シリーズ Series  | 駆動方式 Function          | サイズコード Size code | 1                        | 1½ | 2  | 2½ | 3  | 4   | 5   | 6   | 8   | 10  | 12  |
| 5200RA       | DA, RA                 | 5221RA           | 27                       | 29 | 31 | 39 | 44 |     |     |     |     |     |     |
|              |                        | 5227RA           |                          |    | 41 | 48 | 53 | 59  | 70  |     |     |     |     |
|              |                        | 5235RA           |                          |    |    | 74 | 79 | 85  | 95  |     |     |     |     |
|              |                        | 524LRA           |                          |    |    |    |    | 150 | 160 | 171 | 198 | 250 | 310 |
| 6300RA       | 複動形 Double acting type | 63A1RA           | 14                       | 16 |    |    |    |     |     |     |     |     |     |
|              |                        | 63A2RA           | 16                       | 18 | 20 | 27 | 32 |     |     |     |     |     |     |
|              |                        | 63AARA           |                          |    | 21 | 29 | 33 |     |     |     |     |     |     |
|              |                        | 63A3RA           |                          |    | 23 | 30 | 35 | 42  | 52  |     |     |     |     |
|              |                        | 63A4RA           |                          |    |    | 39 | 44 | 52  | 62  | 73  |     |     |     |
|              | 63A5RA                 |                  |                          |    |    |    | 65 | 75  | 88  | 115 | 166 | 225 |     |
|              | 単動形 Spring return type | 63A2RA           | 24                       |    |    |    |    |     |     |     |     |     |     |
|              |                        | 63AARA           | 25                       | 27 |    |    |    |     |     |     |     |     |     |
|              |                        | 63A3RA           | 27                       | 29 | 31 | 38 |    |     |     |     |     |     |     |
|              |                        | 63A4RA           |                          | 40 | 41 | 48 | 53 |     |     |     |     |     |     |
| 63A5RA       |                        |                  |                          | 56 | 69 | 75 | 81 | 91  |     |     |     |     |     |
| 7300RA       | 複動形 Double acting type | 7317RA           |                          |    |    |    | 70 | 76  | 86  | 100 | 130 | 180 | 240 |
|              |                        | 7323RA           |                          |    |    |    |    |     | 140 | 150 | 180 | 230 | 290 |
|              |                        | 7328RA           |                          |    |    |    |    |     |     |     | 245 | 300 | 360 |
|              |                        | 7337RA           |                          |    |    |    |    |     |     |     |     | 445 | 505 |
|              | 単動形 Spring return type | 7317RA           |                          |    |    |    | 85 | 91  | 105 |     |     |     |     |
|              |                        | 7323RA           |                          |    |    |    |    | 160 | 170 | 180 | 205 | 255 | 315 |
|              |                        | 7328RA           |                          |    |    |    |    |     | 265 | 275 | 305 | 357 | 415 |
|              |                        | 7337RA           |                          |    |    |    |    |     |     | 500 | 525 | 580 | 640 |
| 3600RA       | 36A1RA, 36A2RA         |                  | 19                       | 21 | 23 | 30 | 35 |     |     |     |     |     |     |
|              | 36B1RA, 36B2RA         |                  |                          |    | 29 | 36 | 41 | 50  | 60  | 75  |     |     |     |
|              | 36C1RA, 36C2RA, 36C3RA |                  |                          |    |    |    |    | 80  | 90  | 105 | 130 | 180 | 240 |
|              | 36D1RA                 |                  |                          |    |    |    |    |     |     | 200 | 225 | 275 | 335 |

表5-2 弁本体部定格 : JIS20K、ANSI Class 300

Table 5-2 BODY RATING : JIS20K, Class 300

| 駆動部 Actuator |                        |                  | 弁サイズ Valve size ( inch ) |    |    |    |    |     |     |     |     |     |     |
|--------------|------------------------|------------------|--------------------------|----|----|----|----|-----|-----|-----|-----|-----|-----|
| シリーズ Series  | 駆動方式 Function          | サイズコード Size code | 1                        | 1½ | 2  | 2½ | 3  | 4   | 5   | 6   | 8   | 10  | 12  |
| 5200RA       | DA, RA                 | 5221RA           | 28                       | 31 | 34 | 42 | 48 |     |     |     |     |     |     |
|              |                        | 5227RA           |                          |    | 43 | 51 | 57 | 64  | 77  |     |     |     |     |
|              |                        | 5235RA           |                          |    |    | 77 | 83 | 90  | 102 |     |     |     |     |
|              |                        | 524LRA           |                          |    |    |    |    | 155 | 166 | 180 | 212 | 270 | 340 |
| 6300RA       | 複動形 Double acting type | 63A1RA           | 15                       | 18 |    |    |    |     |     |     |     |     |     |
|              |                        | 63A2RA           | 17                       | 20 | 22 | 30 | 36 |     |     |     |     |     |     |
|              |                        | 63AARA           |                          |    | 24 | 32 | 37 |     |     |     |     |     |     |
|              |                        | 63A3RA           |                          |    | 26 | 33 | 39 | 47  | 60  |     |     |     |     |
|              |                        | 63A4RA           |                          |    |    | 42 | 48 | 56  | 70  | 82  |     |     |     |
|              | 63A5RA                 |                  |                          |    |    |    | 70 | 82  | 97  | 129 | 188 | 258 |     |
|              | 単動形 Spring return type | 63A2RA           | 25                       |    |    |    |    |     |     |     |     |     |     |
|              |                        | 63AARA           | 26                       | 29 |    |    |    |     |     |     |     |     |     |
|              |                        | 63A3RA           | 28                       | 31 | 34 | 41 |    |     |     |     |     |     |     |
|              |                        | 63A4RA           |                          | 42 | 44 | 51 | 67 |     |     |     |     |     |     |
| 63A5RA       |                        |                  |                          | 59 | 72 | 79 | 86 | 98  |     |     |     |     |     |
| 7300RA       | 複動形 Double acting type | 7317RA           |                          |    |    |    | 74 | 81  | 93  | 110 | 145 | 200 | 270 |
|              |                        | 7323RA           |                          |    |    |    |    |     | 147 | 160 | 195 | 250 | 320 |
|              |                        | 7328RA           |                          |    |    |    |    |     |     |     | 259 | 325 | 395 |
|              |                        | 7337RA           |                          |    |    |    |    |     |     |     |     | 465 | 535 |
|              | 単動形 Spring return type | 7317RA           |                          |    |    |    | 90 | 96  | 110 |     |     |     |     |
|              |                        | 7323RA           |                          |    |    |    |    | 165 | 175 | 190 | 220 | 280 | 350 |
|              |                        | 7328RA           |                          |    |    |    |    |     | 275 | 285 | 315 | 380 | 450 |
|              |                        | 7337RA           |                          |    |    |    |    |     |     | 510 | 540 | 600 | 670 |
| 3600RA       | 36A1RA, 36A2RA         |                  | 20                       | 23 | 26 | 33 | 40 |     |     |     |     |     |     |
|              | 36B1RA, 36B2RA         |                  |                          |    | 31 | 40 | 45 | 55  | 70  | 85  |     |     |     |
|              | 36C1RA, 36C2RA, 36C3RA |                  |                          |    |    |    |    | 85  | 98  | 110 | 145 | 200 | 275 |
|              | 36D1RA                 |                  |                          |    |    |    |    |     |     | 208 | 240 | 300 | 367 |

# SEGMENTAL BALL VALVE DIRECT ACTION



## DIMENSIONS

UNIT: mm

| VALVE SIZE<br>CODE No. | FACE TO FACE (L)<br>JIS 10k RF<br>JIS 20k RF<br>ANSI class150 RF<br>ANSI class300 RF | h1  | H1  | ACTUATOR |     |     |     |    |                    |     |        | CODE No. |
|------------------------|--|-----|-----|----------|-----|-----|-----|----|--------------------|-----|--------|----------|
|                        |  |     |     | size     | A   | B1  | B2  | L2 | WITH MANUAL HANDLE |     |        |          |
|                        |  |     |     |          |     |     |     |    |                    | B3  | W      |          |
| 01 □ 1" (25A)          | 127  | 100 | 365 | □ 218    | 218 | 145 | 110 | 18 | 325                | 200 | 5221RA |          |
| 93 □ 1½" (40A)         | 165  | 110 | 375 | □ 218    | 218 | 145 | 110 | 18 | 325                | 200 | 5221RA |          |
| 02 □ 2" (50A)          | 178  | 125 | 390 | □ 218    | 218 | 145 | 110 | 18 | 325                | 200 | 5221RA |          |
|                        |  |     | 430 | □ 270    | 270 | 205 | 140 | 26 | 420                | 250 | 5227RA |          |
| 94 □ 2½" (65A)         | 190  | 135 | 405 | □ 218    | 218 | 145 | 110 | 18 | 325                | 200 | 5221RA |          |
|                        |  |     | 445 | □ 270    | 270 | 205 | 140 | 26 | 420                | 250 | 5227RA |          |
|                        |  |     | 495 | □ 350    | 350 | 235 | 155 | 35 | 495                | 320 | 5235RA |          |
| 03 □ 3" (80A)          | 203  | 145 | 415 | □ 218    | 218 | 145 | 110 | 18 | 325                | 200 | 5221RA |          |
|                        |  |     | 455 | □ 270    | 270 | 205 | 140 | 26 | 420                | 250 | 5227RA |          |
|                        |  |     | 505 | □ 350    | 350 | 235 | 155 | 35 | 495                | 320 | 5235RA |          |
| 04 □ 4" (100A)         | 229  | 180 | 520 | □ 270    | 270 | 205 | 140 | 26 | 420                | 250 | 5227RA |          |
|                        |  |     | 570 | □ 350    | 350 | 235 | 155 | 35 | 495                | 320 | 5235RA |          |
| 05 □ 5" (125A)         | 254  | 215 | 555 | □ 270    | 270 | 205 | 140 | 26 | 420                | 250 | 5227RA |          |
|                        |  |     | 605 | □ 350    | 350 | 235 | 155 | 35 | 495                | 320 | 5235RA |          |

\*FLANGE IS ACCORDING TO THE STANDARD WHICH IS DESCRIBED ON SPECIFICATION SHEET.

NOTE:

DRAWING No.

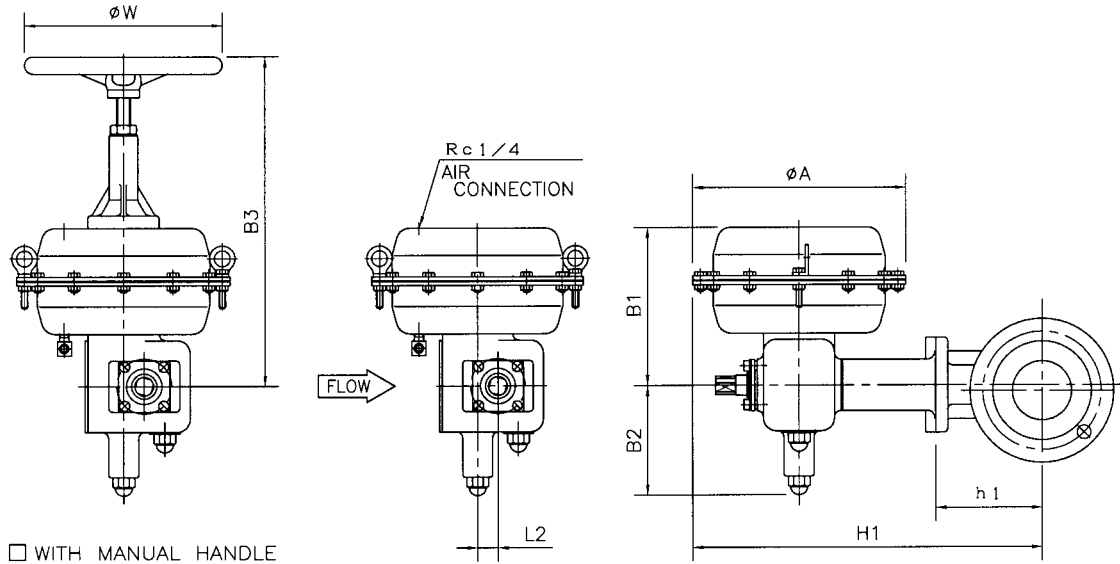
E-220E-5200RA-D-N  
T

REV.

A

**KOSO**

# SEGMENTAL BALL VALVE REVERSE ACTION



DIMENSIONS

UNIT : mm

| VALVE SIZE<br>CODE No.                | FACE TO FACE (L)<br>JIS 10k RF<br>JIS 20k RF<br>ANSI class150 RF<br>ANSI class300 RF | h1  | H1  | ACTUATOR                     |     |     |     |    |                    |     |     | CODE No. |
|---------------------------------------|--|-----|-----|------------------------------|-----|-----|-----|----|--------------------|-----|-----|----------|
|                                       |  |     |     | size                         | A   | B1  | B2  | L2 | WITH MANUAL HANDLE |     |     |          |
|                                       |  |     |     |                              |     |     |     |    |                    | B3  | W   |          |
| 01 <input type="checkbox"/> 1" (25A)  | 127  | 100 | 365 | <input type="checkbox"/> 218 | 218 | 145 | 110 | 18 | 18                 | 325 | 200 | 5221RA   |
| 93 <input type="checkbox"/> 1½" (40A) | 165  | 110 | 375 | <input type="checkbox"/> 218 | 218 | 145 | 110 | 18 | 18                 | 325 | 200 | 5221RA   |
| 02 <input type="checkbox"/> 2" (50A)  | 178  | 125 | 390 | <input type="checkbox"/> 218 | 218 | 145 | 110 | 18 | 18                 | 325 | 200 | 5221RA   |
|                                       |  |     | 430 | <input type="checkbox"/> 270 | 270 | 205 | 140 | 26 | 26                 | 420 | 250 | 5227RA   |
| 94 <input type="checkbox"/> 2½" (65A) | 190  | 135 | 405 | <input type="checkbox"/> 218 | 218 | 145 | 110 | 18 | 18                 | 325 | 200 | 5221RA   |
|                                       |  |     | 445 | <input type="checkbox"/> 270 | 270 | 205 | 140 | 26 | 26                 | 420 | 250 | 5227RA   |
|                                       |  |     | 495 | <input type="checkbox"/> 350 | 350 | 235 | 155 | 35 | 35                 | 495 | 320 | 5235RA   |
| 03 <input type="checkbox"/> 3" (80A)  | 203  | 145 | 415 | <input type="checkbox"/> 218 | 218 | 145 | 110 | 18 | 18                 | 325 | 200 | 5221RA   |
|                                       |  |     | 455 | <input type="checkbox"/> 270 | 270 | 205 | 140 | 26 | 26                 | 420 | 250 | 5227RA   |
|                                       |  |     | 505 | <input type="checkbox"/> 350 | 350 | 235 | 155 | 35 | 35                 | 495 | 320 | 5235RA   |
| 04 <input type="checkbox"/> 4" (100A) | 229  | 180 | 520 | <input type="checkbox"/> 270 | 270 | 205 | 140 | 26 | 26                 | 420 | 250 | 5227RA   |
|                                       |  |     | 570 | <input type="checkbox"/> 350 | 350 | 235 | 155 | 35 | 35                 | 495 | 320 | 5235RA   |
| 05 <input type="checkbox"/> 5" (125A) | 254  | 215 | 555 | <input type="checkbox"/> 270 | 270 | 205 | 140 | 26 | 26                 | 420 | 250 | 5227RA   |
|                                       |  |     | 605 | <input type="checkbox"/> 350 | 350 | 235 | 155 | 35 | 35                 | 495 | 320 | 5235RA   |

\*FLANGE IS ACCORDING TO THE STANDARD WHICH IS DESCRIBED ON SPECIFICATION SHEET.

NOTE:

DRAWING No.

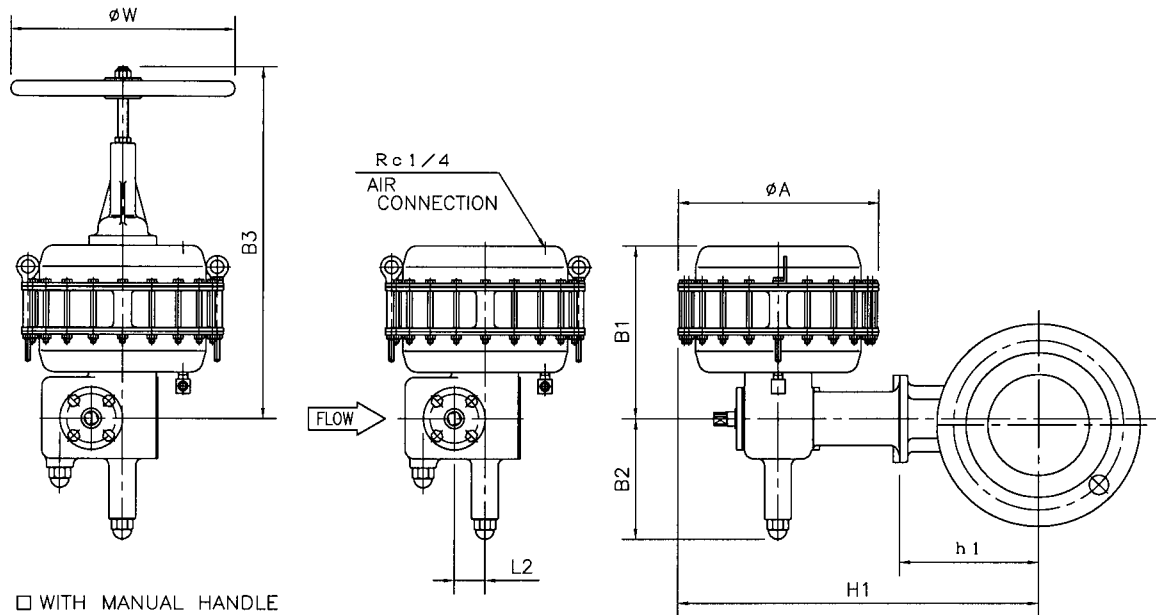
E-220E-5200RA-R-N  
T

REV.

A

**KOSO**

# SEGMENTAL BALL VALVE DIRECT ACTION



## DIMENSIONS

UNIT: mm

| VALVE SIZE<br>CODE<br>No.              | FACE TO FACE (L)<br>JIS 10k RF<br>JIS 20k RF<br>ANSI class150 RF<br>ANSI class300 RF | h1  | H1  | ACTUATOR                     |     |     |     |    |                    |     |        | CODE No. |
|--|--|-----|-----|------------------------------|-----|-----|-----|----|--------------------|-----|--------|----------|
|  |  |     |     | size                         | A   | B1  | B2  | L2 | WITH MANUAL HANDLE |     |        |          |
|  |  |     |     |                              |     |     |     |    |                    | B3  | W      |          |
| 04 <input type="checkbox"/> 4" (100A)  | 229  | 180 | 670 | <input type="checkbox"/> 450 | 450 | 390 | 270 | 70 | 790                | 500 | 524LRA |          |
| 05 <input type="checkbox"/> 5" (125A)  | 254  | 215 | 705 | <input type="checkbox"/> 450 | 450 | 390 | 270 | 70 | 790                | 500 | 524LRA |          |
| 06 <input type="checkbox"/> 6" (150A)  | 267  | 230 | 730 | <input type="checkbox"/> 450 | 450 | 390 | 270 | 70 | 790                | 500 | 524LRA |          |
| 08 <input type="checkbox"/> 8" (200A)  | 292  | 275 | 775 | <input type="checkbox"/> 450 | 450 | 390 | 270 | 70 | 790                | 500 | 524LRA |          |
| 10 <input type="checkbox"/> 10" (250A) | 330  | 310 | 825 | <input type="checkbox"/> 450 | 450 | 390 | 270 | 70 | 790                | 500 | 524LRA |          |
| 12 <input type="checkbox"/> 12" (300A) | 356  | 345 | 860 | <input type="checkbox"/> 450 | 450 | 390 | 270 | 70 | 790                | 500 | 524LRA |          |

\*FLANGE IS ACCORDING TO THE STANDARD WHICH IS DESCRIBED ON SPECIFICATION SHEET.

NOTE:

DRAWING No.

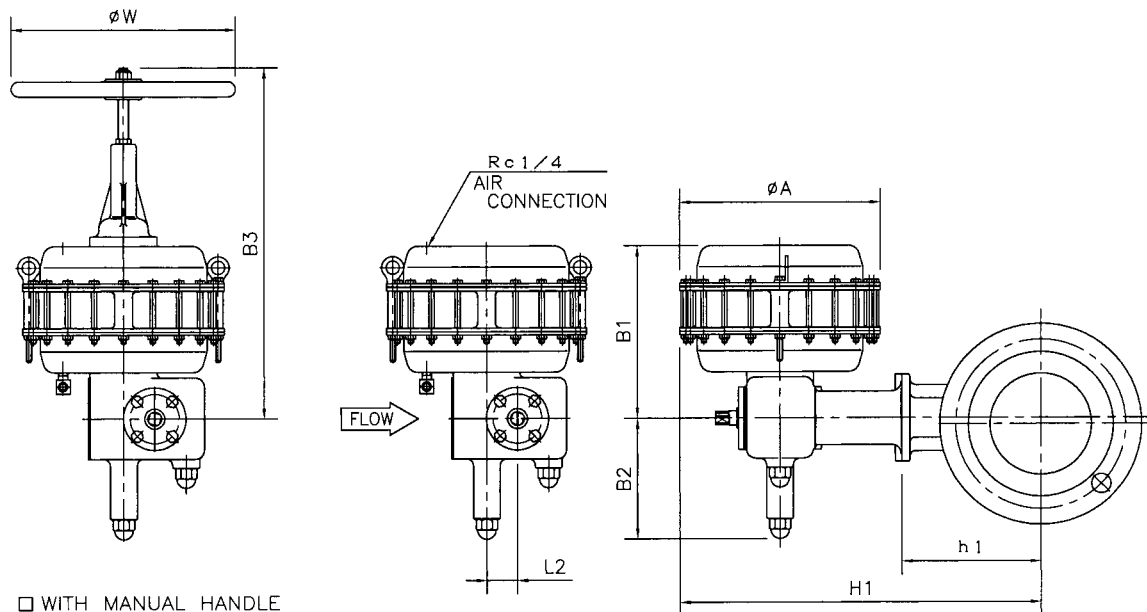
E-220E-524LRA-D-N  
T

REV.

A

**KOSO**

# SEGMENTAL BALL VALVE REVERSE ACTION



## DIMENSIONS

UNIT: mm

| VALVE SIZE<br>CODE<br>No.              | FACE TO FACE (L)<br>JIS 10k RF<br>JIS 20k RF<br>ANSI class150 RF<br>ANSI class300 RF | h1  | H1  | ACTUATOR                     |     |     |     |    |                    |     |        | CODE No. |
|--|--|-----|-----|------------------------------|-----|-----|-----|----|--------------------|-----|--------|----------|
|  |  |     |     | size                         | A   | B1  | B2  | L2 | WITH MANUAL HANDLE |     |        |          |
|  |  |     |     |                              |     |     |     |    |                    | B3  | W      |          |
| 04 <input type="checkbox"/> 4" (100A)  | 229  | 180 | 670 | <input type="checkbox"/> 450 | 450 | 390 | 270 | 70 | 790                | 500 | 524LRA |          |
| 05 <input type="checkbox"/> 5" (125A)  | 254  | 215 | 705 | <input type="checkbox"/> 450 | 450 | 390 | 270 | 70 | 790                | 500 | 524LRA |          |
| 06 <input type="checkbox"/> 6" (150A)  | 267  | 230 | 730 | <input type="checkbox"/> 450 | 450 | 390 | 270 | 70 | 790                | 500 | 524LRA |          |
| 08 <input type="checkbox"/> 8" (200A)  | 292  | 275 | 775 | <input type="checkbox"/> 450 | 450 | 390 | 270 | 70 | 790                | 500 | 524LRA |          |
| 10 <input type="checkbox"/> 10" (250A) | 330  | 310 | 825 | <input type="checkbox"/> 450 | 450 | 390 | 270 | 70 | 790                | 500 | 524LRA |          |
| 12 <input type="checkbox"/> 12" (300A) | 356  | 345 | 860 | <input type="checkbox"/> 450 | 450 | 390 | 270 | 70 | 790                | 500 | 524LRA |          |

\*FLANGE IS ACCORDING TO THE STANDARD WHICH IS DESCRIBED ON SPECIFICATION SHEET.

NOTE:

DRAWING No.

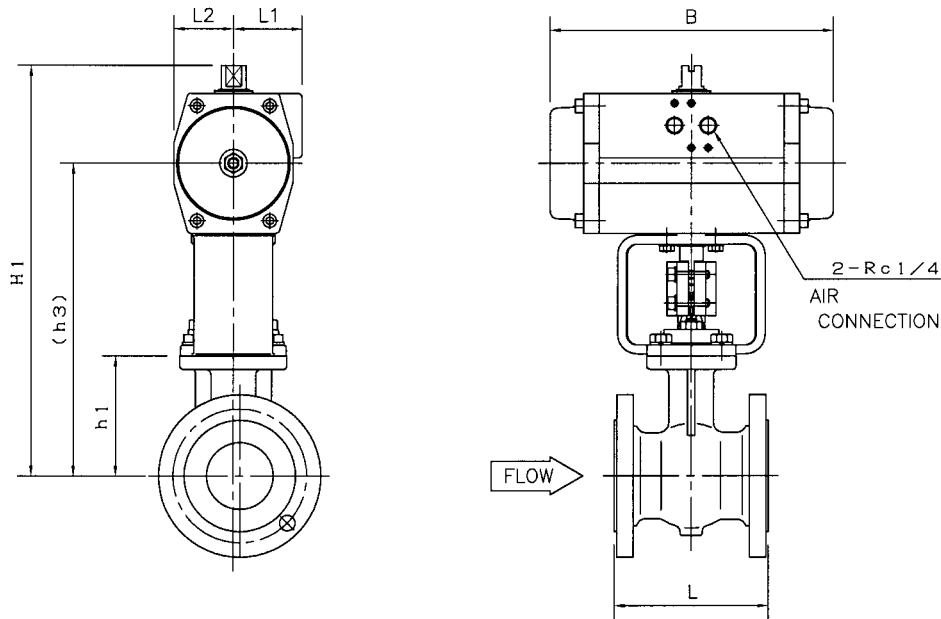
E-220E-524LRA-R-N  
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REV.

A

**KOSO**

# SEGMENTAL BALL VALVE *Double acting cylinder*



DIMENSIONS

UNIT : mm

| VALVE SIZE<br>CODE No. | FACE TO FACE (L)<br>JIS 10k RF<br>JIS 20k RF<br>ANSI class150 RF<br>ANSI class300 RF | h1  | h3    | H1  | ACTUATOR      |     |    |    |          |
|------------------------|--|-----|-------|-----|---------------|-----|----|----|----------|
|                        |  |     |       |     | Cylinder Size | B   | L1 | L2 | CODE No. |
| 01 □ 1" (25A)          | 127  | 100 | (270) | 330 | □ AT10        | 152 | 44 | 37 | 63A1RA   |
|                        |  |     | (265) | 335 | □ AT20        | 202 | 49 | 43 | 63A2RA   |
| 93 □ 1½" (40A)         | 165  | 110 | (280) | 340 | □ AT10        | 152 | 44 | 37 | 63A1RA   |
|                        |  |     | (275) | 345 | □ AT20        | 202 | 49 | 43 | 63A2RA   |
| 02 □ 2" (50A)          | 178  | 125 | (290) | 360 | □ AT20        | 202 | 49 | 43 | 63A2RA   |
|                        |  |     | (295) | 370 | □ AT25        | 230 | 53 | 49 | 63AARA   |
|                        |  |     | (305) | 385 | □ AT30        | 271 | 63 | 55 | 63A3RA   |
|                        |  |     | (305) | 375 | □ AT20        | 202 | 49 | 43 | 63A2RA   |
| 94 □ 2½" (65A)         | 190  | 135 | (310) | 385 | □ AT25        | 230 | 53 | 49 | 63AARA   |
|                        |  |     | (320) | 400 | □ AT30        | 271 | 63 | 55 | 63A3RA   |
|                        |  |     | (355) | 460 | □ AT40        | 360 | 73 | 70 | 63A4RA   |
|                        |  |     | (315) | 385 | □ AT20        | 202 | 49 | 43 | 63A2RA   |
|                        |  |     | (320) | 395 | □ AT25        | 230 | 53 | 49 | 63AARA   |
| 03 □ 3" (80A)          | 203  | 145 | (330) | 410 | □ AT30        | 271 | 63 | 55 | 63A3RA   |
|                        |  |     | (365) | 470 | □ AT40        | 360 | 73 | 70 | 63A4RA   |
|                        |  |     | (395) | 475 | □ AT30        | 271 | 63 | 55 | 63A3RA   |
| 04 □ 4" (100A)         | 229  | 180 | (425) | 530 | □ AT40        | 360 | 73 | 70 | 63A4RA   |
|                        |  |     | (470) | 620 | □ AT50        | 464 | 91 | 88 | 63A5RA   |
|                        |  |     | (430) | 510 | □ AT30        | 271 | 63 | 55 | 63A3RA   |
|                        |  |     | (460) | 565 | □ AT40        | 360 | 73 | 70 | 63A4RA   |
| 05 □ 5" (125A)         | 254  | 215 | (505) | 655 | □ AT50        | 464 | 91 | 88 | 63A5RA   |
|                        |  |     | (490) | 595 | □ AT40        | 360 | 73 | 70 | 63A4RA   |
| 06 □ 6" (150A)         | 267  | 230 | (530) | 680 | □ AT50        | 464 | 91 | 88 | 63A5RA   |
| 08 □ 8" (200A)         | 292  | 275 | (575) | 725 | □ AT50        | 464 | 91 | 88 | 63A5RA   |
| 10 □ 10" (250A)        | 330  | 310 | (620) | 770 | □ AT50        | 464 | 91 | 88 | 63A5RA   |
| 12 □ 12" (300A)        | 356  | 345 | (655) | 805 | □ AT50        | 464 | 91 | 88 | 63A5RA   |

\*FLANGE IS ACCORDING TO THE STANDARD WHICH IS DESCRIBED ON SPECIFICATION SHEET.

NOTE:

DRAWING No.

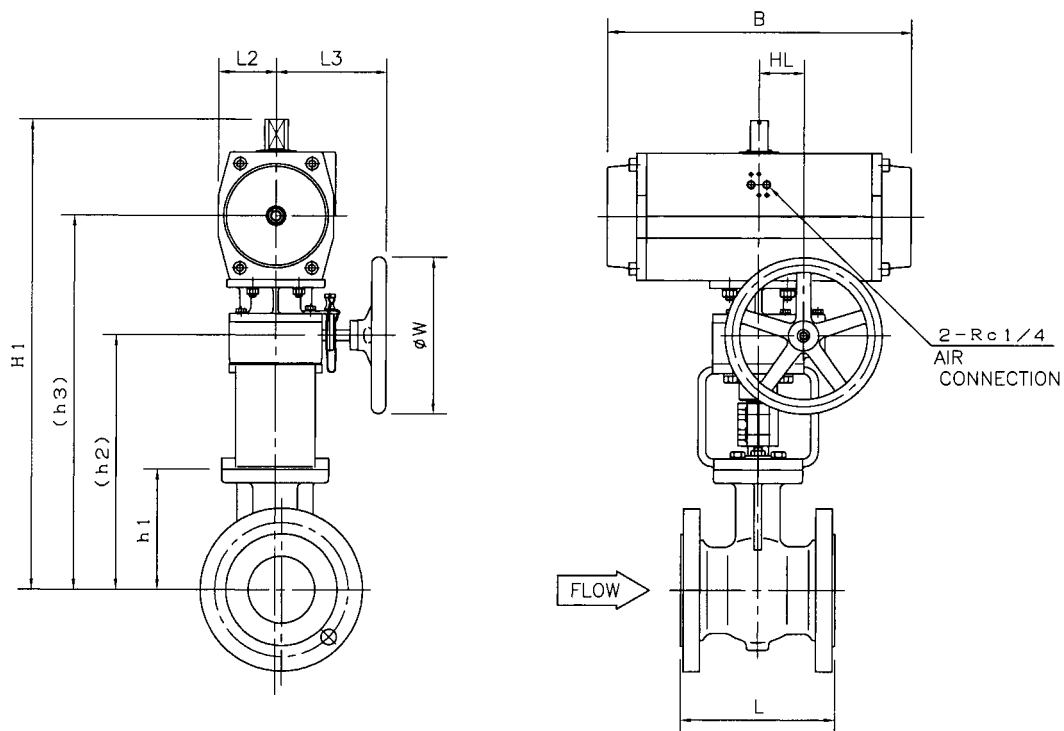
E-220E-6300RA-W-N

REV.

A

**KOSO**

# SEGMENTAL BALL VALVE *Double acting cylinder*



## DIMENSIONS

UNIT : mm

| VALVE SIZE<br>CODE No. | FACE TO FACE (L)<br>JIS 10k RF<br>JIS 20k RF<br>ANSI class150 RF<br>ANSI class300 RF | h1  | h2    | h3    | H1    | ACTUATOR      |        |     |     |     |     |          |        |
|------------------------|--|-----|-------|-------|-------|---------------|--------|-----|-----|-----|-----|----------|--------|
|                        |  |     |       |       |       | Cylinder Size | B      | L2  | L3  | HL  | W   | CODE No. |        |
| 01 □ 1" (25A)          | 127  | 100 | (280) | (410) | 470   | □ AT10        | 152    | 37  | 130 | 56  | 160 | 63A1RA   |        |
|                        |  |     |       | (415) | 485   | □ AT20        | 202    | 43  | 130 | 56  | 160 | 63A2RA   |        |
| 93 □ 1½" (40A)         | 165  | 110 | (290) | (420) | 450   | □ AT10        | 152    | 37  | 130 | 56  | 160 | 63A1RA   |        |
|                        |  |     |       | (425) | 495   | □ AT20        | 202    | 43  | 130 | 56  | 160 | 63A2RA   |        |
| 02 □ 2" (50A)          | 178  | 125 | (305) | (440) | 510   | □ AT20        | 202    | 43  | 130 | 56  | 160 | 63A2RA   |        |
|                        |  |     |       | (445) | 520   | □ AT25        | 230    | 49  | 130 | 56  | 160 | 63AARA   |        |
|                        |  |     |       | (440) | 520   | □ AT30        | 271    | 55  | 130 | 56  | 160 | 63A3RA   |        |
|                        |  |     |       | (455) | 525   | □ AT20        | 202    | 43  | 130 | 56  | 160 | 63A2RA   |        |
| 94 □ 2½" (65A)         | 190  | 135 | (320) | (460) | 535   | □ AT25        | 230    | 49  | 130 | 56  | 160 | 63AARA   |        |
|                        |  |     |       | (455) | 535   | □ AT30        | 271    | 55  | 130 | 56  | 160 | 63A3RA   |        |
|                        |  |     |       | (470) | 575   | □ AT40        | 360    | 70  | 130 | 56  | 160 | 63A4RA   |        |
|                        |  |     |       | (465) | 535   | □ AT20        | 202    | 43  | 130 | 56  | 160 | 63A2RA   |        |
|                        |  |     |       | (470) | 545   | □ AT25        | 230    | 49  | 130 | 56  | 160 | 63AARA   |        |
| 03 □ 3" (80A)          | 203  | 145 | (330) | (465) | 545   | □ AT30        | 271    | 55  | 130 | 56  | 160 | 63A3RA   |        |
|                        |  |     |       | (480) | 585   | □ AT40        | 360    | 70  | 130 | 56  | 160 | 63A4RA   |        |
|                        |  |     |       | (525) | 605   | □ AT30        | 271    | 55  | 130 | 56  | 160 | 63A3RA   |        |
|                        |  |     |       | (540) | 645   | □ AT40        | 360    | 70  | 130 | 56  | 160 | 63A4RA   |        |
| 04 □ 4" (100A)         | 229  | 180 | (390) | (410) | (595) | 740           | □ AT50 | 464 | 88  | 150 | 69  | 200      | 63A5RA |
|                        |  |     |       | (560) | 640   | □ AT30        | 271    | 55  | 130 | 56  | 160 | 63A3RA   |        |
|                        |  |     |       | (575) | 680   | □ AT40        | 360    | 70  | 130 | 56  | 160 | 63A4RA   |        |
| 05 □ 5" (125A)         | 254  | 215 | (425) | (445) | (630) | 775           | □ AT50 | 464 | 88  | 150 | 69  | 200      | 63A5RA |
|                        |  |     |       | (455) | (605) | 710           | □ AT40 | 360 | 70  | 130 | 56  | 160      | 63A4RA |
|                        |  |     |       | (470) | (655) | 800           | □ AT50 | 464 | 88  | 150 | 69  | 200      | 63A5RA |
| 06 □ 6" (150A)         | 267  | 230 | (515) | (700) | 845   | □ AT50        | 464    | 88  | 150 | 69  | 200 | 63A5RA   |        |
| 08 □ 8" (200A)         | 292  | 275 | (515) | (700) | 845   | □ AT50        | 464    | 88  | 150 | 69  | 200 | 63A5RA   |        |
| 10 □ 10" (250A)        | 330  | 310 | (565) | (750) | 895   | □ AT50        | 464    | 88  | 150 | 69  | 200 | 63A5RA   |        |
| 12 □ 12" (300A)        | 356  | 345 | (600) | (785) | 930   | □ AT50        | 464    | 88  | 150 | 69  | 200 | 63A5RA   |        |

\*FLANGE IS ACCORDING TO THE STANDARD WHICH IS DESCRIBED ON SPECIFICATION SHEET.

NOTE:

DRAWING No.

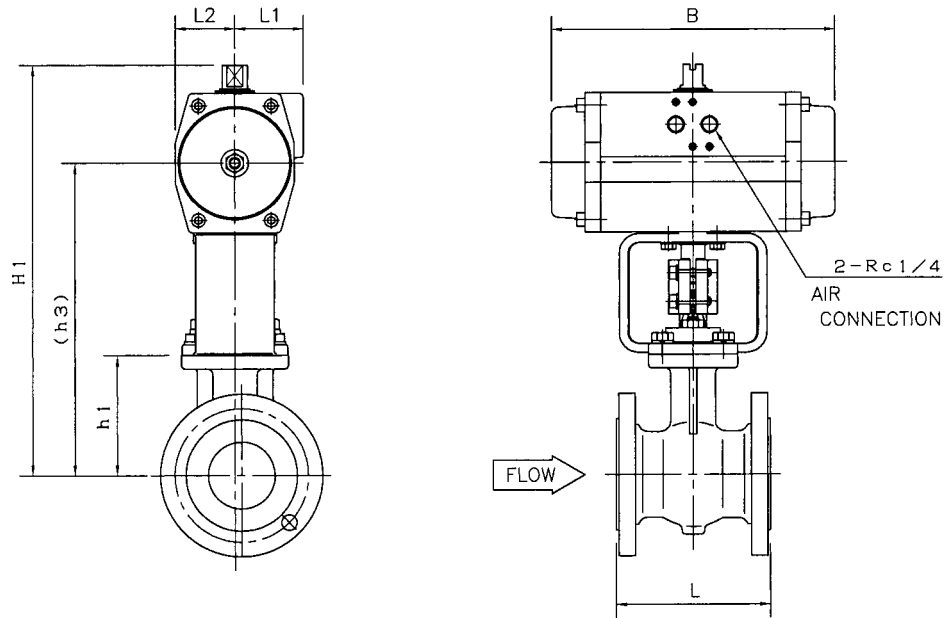
E-220E-6300RA-W-S

REV.

A

**KOSO**

# SEGMENTAL BALL VALVE *Spring return cylinder*



## DIMENSIONS

UNIT : mm

| VALVE SIZE<br>CODE No. | FACE TO FACE (L)<br>JIS 10k RF<br>JIS 20k RF<br>ANSI class150 RF<br>ANSI class300 RF | h1  | h3    | H1  | ACTUATOR      |     |    |    |          |
|------------------------|--|-----|-------|-----|---------------|-----|----|----|----------|
|                        |  |     |       |     | Cylinder Size | B   | L1 | L2 | CODE No. |
| 01 □ 1" (25A)          | 127  | 100 | (265) | 335 | □ AT20        | 202 | 49 | 43 | 63A2RA   |
|                        |  |     | (270) | 345 | □ AT25        | 230 | 53 | 49 | 63AARA   |
|                        |  |     | (280) | 360 | □ AT30        | 271 | 63 | 55 | 63A3RA   |
| 93 □ 1½" (40A)         | 165  | 110 | (280) | 355 | □ AT25        | 230 | 53 | 49 | 63AARA   |
|                        |  |     | (290) | 370 | □ AT30        | 271 | 63 | 55 | 63A3RA   |
|                        |  |     | (325) | 430 | □ AT40        | 360 | 73 | 70 | 63A4RA   |
| 02 □ 2" (50A)          | 178  | 125 | (305) | 385 | □ AT30        | 271 | 63 | 55 | 63A3RA   |
|                        |  |     | (340) | 445 | □ AT40        | 360 | 73 | 70 | 63A4RA   |
|                        |  |     | (375) | 525 | □ AT50        | 464 | 91 | 88 | 63A5RA   |
| 94 □ 2½" (65A)         | 190  | 135 | (320) | 400 | □ AT30        | 271 | 63 | 55 | 63A3RA   |
|                        |  |     | (355) | 460 | □ AT40        | 360 | 73 | 70 | 63A4RA   |
|                        |  |     | (405) | 555 | □ AT50        | 464 | 91 | 88 | 63A5RA   |
| 03 □ 3" (80A)          | 203  | 145 | (365) | 470 | □ AT40        | 360 | 73 | 70 | 63A4RA   |
|                        |  |     | (415) | 565 | □ AT50        | 464 | 91 | 88 | 63A5RA   |
| 04 □ 4" (100A)         | 229  | 180 | (470) | 620 | □ AT50        | 464 | 91 | 88 | 63A5RA   |
| 05 □ 5" (125A)         | 254  | 215 | (505) | 655 | □ AT50        | 464 | 91 | 88 | 63A5RA   |

\*FLANGE IS ACCORDING TO THE STANDARD WHICH IS DESCRIBED ON SPECIFICATION SHEET.

NOTE:

DRAWING No.

E-220E-6300RA-D<sub>R</sub>-N

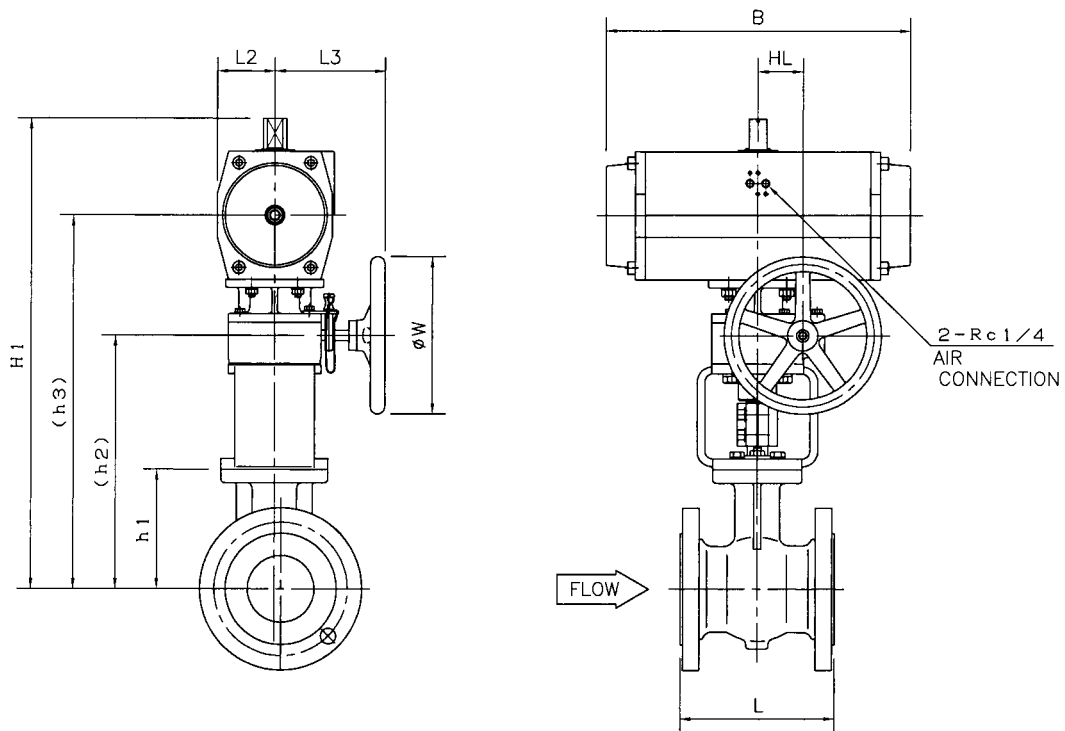
REV.

A

**KOSO**



# SEGMENTAL BALL VALVE *Spring return cylinder*



## DIMENSIONS

UNIT : mm

| VALVE SIZE<br>CODE<br>No. | FACE TO FACE (L)<br>JIS 10k RF<br>JIS 20k RF<br>ANSI class150 RF<br>ANSI class300 RF | h1  | h2    | h3    | H1    | ACTUATOR         |        |     |     |     |     |          |
|---------------------------|--|-----|-------|-------|-------|------------------|--------|-----|-----|-----|-----|----------|
|                           |  |     |       |       |       | Cylinder<br>Size | B      | L2  | L3  | HL  | W   | CODE No. |
| 01 □ 1" (25A)             | 127  | 100 | (280) | (415) | 485   | □ AT20           | 202    | 43  | 130 | 56  | 160 | 63A2RA   |
|                           |  |     |       | (420) | 495   | □ AT25           | 230    | 49  | 130 | 56  | 160 | 63AARA   |
|                           |  |     |       | (415) | 495   | □ AT30           | 271    | 55  | 130 | 56  | 160 | 63A3RA   |
| 93 □ 1½" (40A)            | 165  | 110 | (290) | (430) | 505   | □ AT25           | 230    | 49  | 130 | 56  | 160 | 63AARA   |
|                           |  |     |       | (425) | 505   | □ AT30           | 271    | 55  | 130 | 56  | 160 | 63A3RA   |
|                           |  |     |       | (440) | 545   | □ AT40           | 360    | 70  | 130 | 56  | 160 | 63A4RA   |
| 02 □ 2" (50A)             | 178  | 125 | (305) | (440) | 520   | □ AT30           | 271    | 55  | 130 | 56  | 160 | 63A3RA   |
|                           |  |     |       | (455) | 560   | □ AT40           | 360    | 70  | 130 | 56  | 160 | 63A4RA   |
|                           |  |     |       | (320) | (505) | 650              | □ AT50 | 464 | 88  | 150 | 69  | 300      |
| 94 □ 2½" (65A)            | 190  | 135 | (320) | (455) | 535   | □ AT30           | 271    | 55  | 130 | 56  | 160 | 63A3RA   |
|                           |  |     |       | (470) | 575   | □ AT40           | 360    | 70  | 130 | 56  | 160 | 63A4RA   |
|                           |  |     |       | (335) | (520) | 665              | □ AT50 | 464 | 88  | 150 | 69  | 300      |
| 03 □ 3" (80A)             | 203  | 145 | (330) | (480) | 585   | □ AT40           | 360    | 70  | 130 | 56  | 160 | 63A4RA   |
|                           |  |     |       | (345) | (530) | 675              | □ AT50 | 464 | 88  | 150 | 69  | 300      |
| 04 □ 4" (100A)            | 229  | 180 | (410) | (595) | 740   | □ AT50           | 464    | 88  | 150 | 69  | 300 | 63A5RA   |
| 05 □ 5" (125A)            | 254  | 215 | (445) | (630) | 775   | □ AT50           | 464    | 88  | 150 | 69  | 300 | 63A5RA   |

\*FLANGE IS ACCORDING TO THE STANDARD WHICH IS DESCRIBED ON SPECIFICATION SHEET.

NOTE:

DRAWING No.

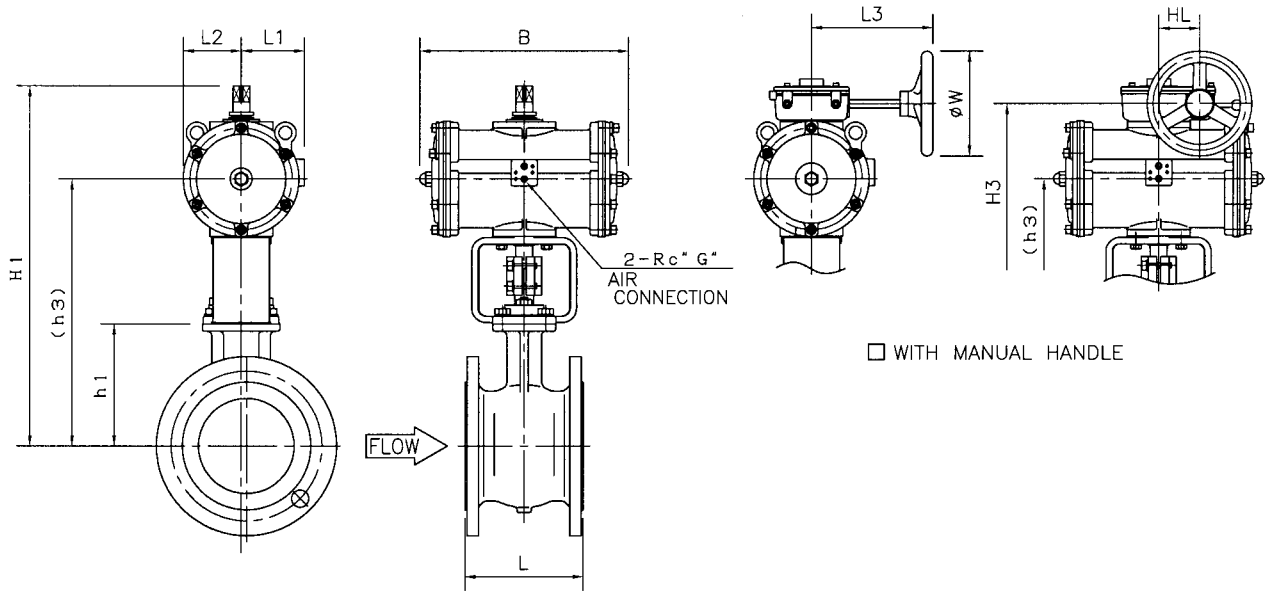
E-220E-6300RA-D-R-S

REV.

A

**KOSO**

# SEGMENTAL BALL VALVE *Double acting cylinder*



□ WITH MANUAL HANDLE

## DIMENSIONS

UNIT : mm

| VALVE SIZE<br>CODE<br>No. | FACE TO FACE (L)<br>JIS 10k RF<br>JIS 20k RF<br>ANSI class150 RF<br>ANSI class300 RF | h1  | h3    | H1   | H3   | ACTUATOR         |     |     |     |     |     |     |     |          |  |
|---------------------------|--|-----|-------|------|------|------------------|-----|-----|-----|-----|-----|-----|-----|----------|--|
|                           |  |     |       |      |      | Cylinder<br>Size | B   | L1  | L2  | L3  | HL  | G   | W   | CODE No. |  |
| 03 □ 3" (80A)             | 203  | 145 | (395) | 575  | 540  | □ 170            | 400 | 120 | 110 | 235 | 75  | 1/4 | 200 | 7317RA   |  |
| 04 □ 4" (100A)            | 229  | 180 | (455) | 635  | 600  | □ 170            | 400 | 120 | 110 | 235 | 75  | 1/4 | 200 | 7317RA   |  |
| 05 □ 5" (125A)            | 254  | 215 | (490) | 670  | 635  | □ 170            | 400 | 120 | 110 | 235 | 75  | 1/4 | 200 | 7317RA   |  |
|                           |  |     | (560) | 790  | 755  | □ 235            | 515 | 160 | 150 | 270 | 93  | 1/4 | 300 | 7323RA   |  |
| 06 □ 6" (150A)            | 267  | 230 | (520) | 700  | 665  | □ 170            | 400 | 120 | 110 | 235 | 75  | 1/4 | 200 | 7317RA   |  |
|                           |  |     | (580) | 815  | 775  | □ 235            | 515 | 160 | 150 | 270 | 93  | 1/4 | 300 | 7323RA   |  |
| 08 □ 8" (200A)            | 292  | 275 | (565) | 745  | 710  | □ 170            | 400 | 120 | 110 | 235 | 75  | 1/4 | 200 | 7317RA   |  |
|                           |  |     | (625) | 860  | 820  | □ 235            | 515 | 160 | 150 | 270 | 93  | 1/4 | 300 | 7323RA   |  |
|                           |  |     | (670) | 955  | 905  | □ 280            | 630 | 185 | 185 | 315 | 108 | 3/8 | 400 | 7328RA   |  |
| 10 □ 10" (250A)           | 330  | 310 | (615) | 795  | 760  | □ 170            | 400 | 120 | 110 | 235 | 75  | 1/4 | 200 | 7317RA   |  |
|                           |  |     | (675) | 905  | 870  | □ 235            | 515 | 160 | 150 | 270 | 93  | 1/4 | 300 | 7323RA   |  |
|                           |  |     | (720) | 1005 | 955  | □ 280            | 630 | 185 | 185 | 315 | 108 | 3/8 | 400 | 7328RA   |  |
|                           |  |     | (810) | 1175 | 1110 | □ 375            | 815 | 240 | 240 | 380 | 165 | 3/8 | 630 | 7337RA   |  |
| 12 □ 12" (300A)           | 356  | 345 | (650) | 830  | 750  | □ 170            | 400 | 120 | 110 | 235 | 75  | 1/4 | 200 | 7317RA   |  |
|                           |  |     | (710) | 940  | 905  | □ 235            | 515 | 160 | 150 | 270 | 93  | 1/4 | 300 | 7323RA   |  |
|                           |  |     | (755) | 1040 | 990  | □ 280            | 630 | 185 | 185 | 315 | 108 | 3/8 | 400 | 7328RA   |  |
|                           |  |     | (845) | 1210 | 1055 | □ 375            | 815 | 240 | 240 | 380 | 165 | 3/8 | 630 | 7337RA   |  |

\*FLANGE IS ACCORDING TO THE STANDARD WHICH IS DESCRIBED ON SPECIFICATION SHEET.

NOTE:

DRAWING No.

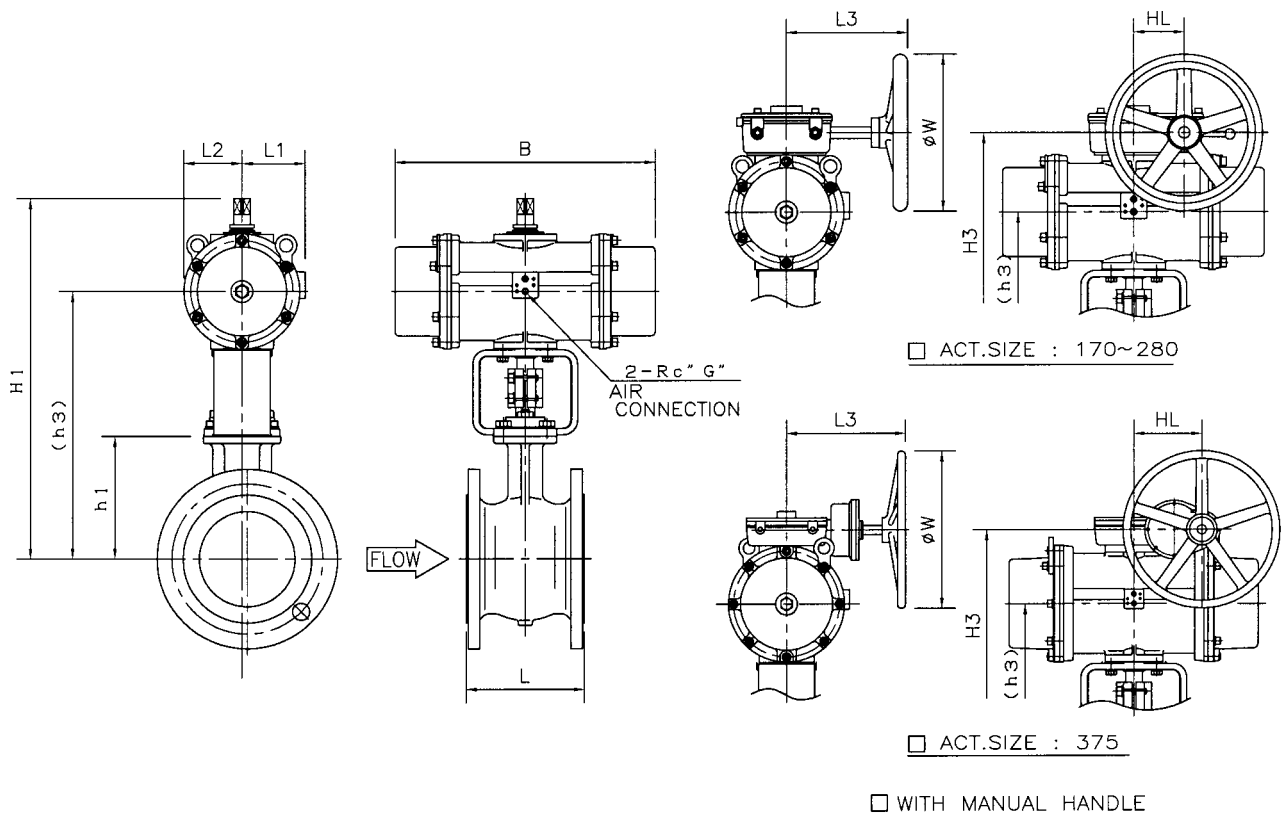
E-220E-7300RA-W-N  
S

REV.

A

**KOSO**

# SEGMENTAL BALL VALVE *Spring return cylinder*



## DIMENSIONS

UNIT : mm

| VALVE SIZE<br>CODE No. | FACE TO FACE (L)<br>JIS 10k RF<br>JIS 20k RF<br>ANSI class150 RF<br>ANSI class300 RF | h1  | h3    | H1   | H3   | ACTUATOR      |     |     |     |     |     |     |     |          |  |
|------------------------|--|-----|-------|------|------|---------------|-----|-----|-----|-----|-----|-----|-----|----------|--|
|                        |  |     |       |      |      | Cylinder Size | B   | L1  | L2  | L3  | HL  | G   | W   | CODE No. |  |
| 03 □ 3" (80A)          | 203  | 145 | (395) | 575  | 550  | □ 170         | 500 | 120 | 110 | 235 | 93  | 1/4 | 300 | 7317RA   |  |
| 04 □ 4" (100A)         | 229  | 180 | (455) | 635  | 610  | □ 170         | 500 | 120 | 110 | 235 | 93  | 1/4 | 300 | 7317RA   |  |
|                        |  |     | (525) | 755  | 725  | □ 235         | 635 | 160 | 150 | 315 | 108 | 1/4 | 400 | 7323RA   |  |
| 05 □ 5" (125A)         | 254  | 215 | (490) | 670  | 645  | □ 170         | 500 | 120 | 110 | 235 | 93  | 1/4 | 300 | 7317RA   |  |
|                        |  |     | (560) | 790  | 760  | □ 235         | 635 | 160 | 150 | 315 | 108 | 1/4 | 400 | 7323RA   |  |
|                        |  |     | (605) | 890  | 850  | □ 280         | 810 | 185 | 185 | 380 | 165 | 3/8 | 630 | 7328RA   |  |
|                        |  |     | (580) | 815  | 780  | □ 235         | 635 | 160 | 150 | 315 | 108 | 1/4 | 400 | 7323RA   |  |
| 06 □ 6" (150A)         | 267  | 230 | (625) | 910  | 870  | □ 280         | 810 | 185 | 185 | 380 | 165 | 3/8 | 630 | 7328RA   |  |
|                        |  |     | (715) | 1080 | 1005 | □ 375         | 990 | 240 | 240 | 467 | 269 | 3/8 | 630 | 7337RA   |  |
|                        |  |     | (625) | 860  | 825  | □ 235         | 635 | 160 | 150 | 315 | 108 | 1/4 | 400 | 7323RA   |  |
| 08 □ 8" (200A)         | 292  | 275 | (670) | 955  | 915  | □ 280         | 810 | 185 | 185 | 380 | 165 | 3/8 | 630 | 7328RA   |  |
|                        |  |     | (760) | 1125 | 1050 | □ 375         | 990 | 240 | 240 | 467 | 269 | 3/8 | 630 | 7337RA   |  |
|                        |  |     | (675) | 905  | 875  | □ 235         | 635 | 160 | 150 | 315 | 108 | 1/4 | 400 | 7323RA   |  |
| 10 □ 10" (250A)        | 330  | 310 | (720) | 1005 | 965  | □ 280         | 810 | 185 | 185 | 380 | 165 | 3/8 | 630 | 7328RA   |  |
|                        |  |     | (810) | 1175 | 1100 | □ 375         | 990 | 240 | 240 | 467 | 269 | 3/8 | 630 | 7337RA   |  |
|                        |  |     | (710) | 940  | 910  | □ 235         | 635 | 160 | 150 | 315 | 108 | 1/4 | 400 | 7323RA   |  |
| 12 □ 12" (300A)        | 356  | 345 | (755) | 1040 | 1000 | □ 280         | 810 | 185 | 185 | 380 | 165 | 3/8 | 630 | 7328RA   |  |
|                        |  |     | (845) | 1210 | 1135 | □ 375         | 990 | 240 | 240 | 467 | 269 | 3/8 | 630 | 7337RA   |  |

\*FLANGE IS ACCORDING TO THE STANDARD WHICH IS DESCRIBED ON SPECIFICATION SHEET.

NOTE:

DRAWING No.

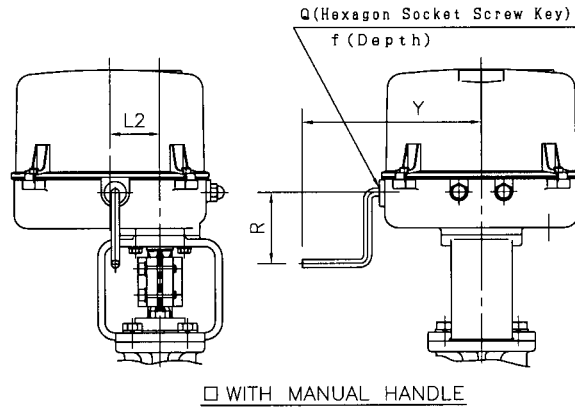
E-220E-7300RA-D-N  
R-S

REV.

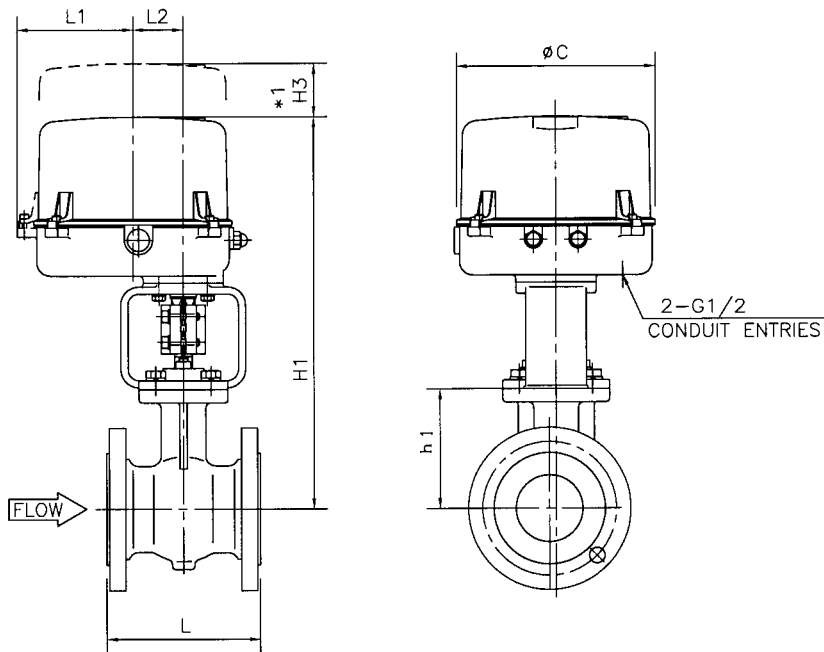
A

**KOSO**

# SEGMENTAL BALL VALVE



\*1 : SPACE FOR COVER REMOVAL



## DIMENSIONS

UNIT : mm

| CODE No. | VALVE SIZE                         | FACE TO FACE (L)   |     | ACTUATOR |     |     |    |     |                    |     |      |   | SIZE CODE No. |
|----------|------------------------------------|--|-----|----------|-----|-----|----|-----|--------------------|-----|------|---|---------------|
|          |                                    | JIS 10k RF<br>JIS 20k RF<br>ANSI class150 RF<br>ANSI class300 RF | h1  | H1       | H3  | L1  | L2 | øC  | WITH MANUAL HANDLE |     |      |   |               |
|          |                                    |  |     |          |     |     |    |     | R                  | Y   | Q-f  |   |               |
| 01       | <input type="checkbox"/> 1" (25A)  | 127  | 100 | 400      | 120 | 130 | 56 | 225 | 80                 | 200 | 6-12 | <input type="checkbox"/> 36A1RA                                 |               |
| 93       | <input type="checkbox"/> 1½" (40A) | 165  | 110 | 410      | 120 | 130 | 56 | 225 | 80                 | 200 | 6-12 | <input type="checkbox"/> 36A1RA <input type="checkbox"/> 36A2RA |               |
| 02       | <input type="checkbox"/> 2" (50A)  | 178  | 125 | 425      | 120 | 130 | 56 | 225 | 80                 | 200 | 6-12 | <input type="checkbox"/> 36A1RA <input type="checkbox"/> 36A2RA |               |
|          |                                    |  |     | 465      | 155 | 145 | 68 | 255 | 160                | 225 | 8-15 | <input type="checkbox"/> 36B1RA                                 |               |
| 94       | <input type="checkbox"/> 2½" (65A) | 190  | 135 | 440      | 120 | 130 | 56 | 225 | 80                 | 200 | 6-12 | <input type="checkbox"/> 36A2RA                                 |               |
|          |                                    |  |     | 480      | 155 | 145 | 68 | 255 | 160                | 225 | 8-15 | <input type="checkbox"/> 36B1RA <input type="checkbox"/> 36B2RA |               |
| 03       | <input type="checkbox"/> 3" (80A)  | 203  | 145 | 450      | 120 | 130 | 56 | 225 | 80                 | 200 | 6-12 | <input type="checkbox"/> 36A2RA                                 |               |
|          |                                    |  |     | 490      | 155 | 145 | 68 | 255 | 160                | 225 | 8-15 | <input type="checkbox"/> 36B1RA <input type="checkbox"/> 36B2RA |               |
| 04       | <input type="checkbox"/> 4" (100A) | 229  | 180 | 555      | 155 | 145 | 68 | 255 | 160                | 225 | 8-15 | <input type="checkbox"/> 36B1RA <input type="checkbox"/> 36B2RA |               |
| 05       | <input type="checkbox"/> 5" (125A) | 254  | 215 | 590      | 155 | 145 | 68 | 255 | 160                | 225 | 8-15 | <input type="checkbox"/> 36B1RA <input type="checkbox"/> 36B2RA |               |
| 06       | <input type="checkbox"/> 6" (150A) | 267  | 230 | 630      | 155 | 145 | 68 | 255 | 160                | 225 | 8-15 | <input type="checkbox"/> 36B2RA                                 |               |

\*FLANGE IS ACCORDING TO THE STANDARD WHICH IS DESCRIBED ON SPECIFICATION SHEET.

NOTE:

DRAWING No.

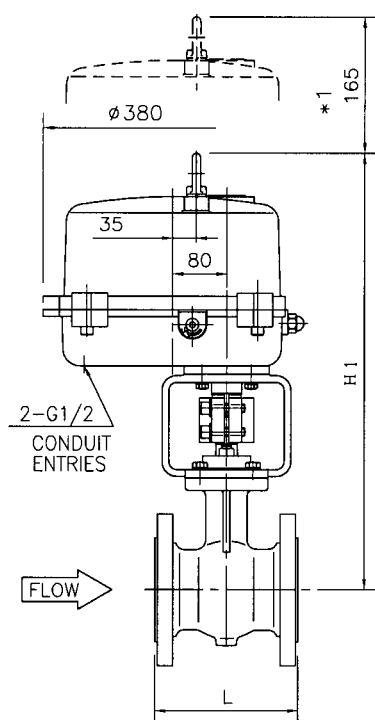
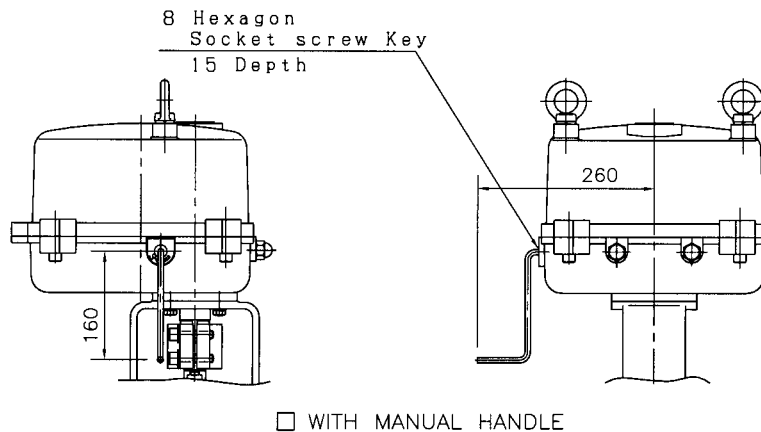
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REV.

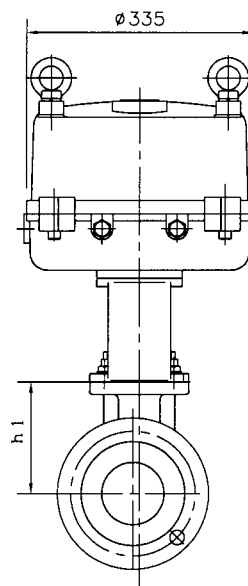
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**KOSO**

# SEGMENTAL BALL VALVE



\*1 SPACE FOR COVER REMOVAL



## DIMENSIONS

UNIT: mm

| CODE No. | VALVE SIZE                          | FACE TO FACE (L)                   | h <sub>1</sub> | H <sub>1</sub> | ACTUATOR SIZE CODE No.          |   |
|----------|-------------------------------------|------------------------------------|----------------|----------------|---------------------------------|---|
|          |                                     | JIS 10k, 20k<br>ANSI class150, 300 |                |                |                                 |   |
| 04       | <input type="checkbox"/> 4" (100A)  | 229                                | 180            | 675            | <input type="checkbox"/> 36C1RA | <input type="checkbox"/> 36C2RA                                 |
| 05       | <input type="checkbox"/> 5" (125A)  | 254                                | 215            | 710            | <input type="checkbox"/> 36C1RA | <input type="checkbox"/> 36C2RA                                 |
| 06       | <input type="checkbox"/> 6" (150A)  | 267                                | 230            | 740            | <input type="checkbox"/> 36C1RA | <input type="checkbox"/> 36C2RA <input type="checkbox"/> 36C3RA |
| 08       | <input type="checkbox"/> 8" (200A)  | 292                                | 275            | 785            | <input type="checkbox"/> 36C1RA | <input type="checkbox"/> 36C2RA <input type="checkbox"/> 36C3RA |
| 10       | <input type="checkbox"/> 10" (250A) | 330                                | 310            | 835            | <input type="checkbox"/> 36C3RA |   |
| 12       | <input type="checkbox"/> 12" (300A) | 356                                | 345            | 870            | <input type="checkbox"/> 36C3RA |   |

\*FLANGE IS ACCORDING TO THE STANDARD WHICH IS DESCRIBED ON SPECIFICATION SHEET.

NOTE:

DRAWING No.

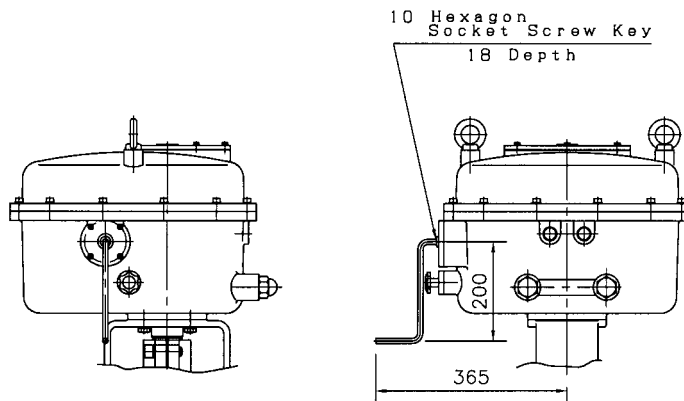
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REV.

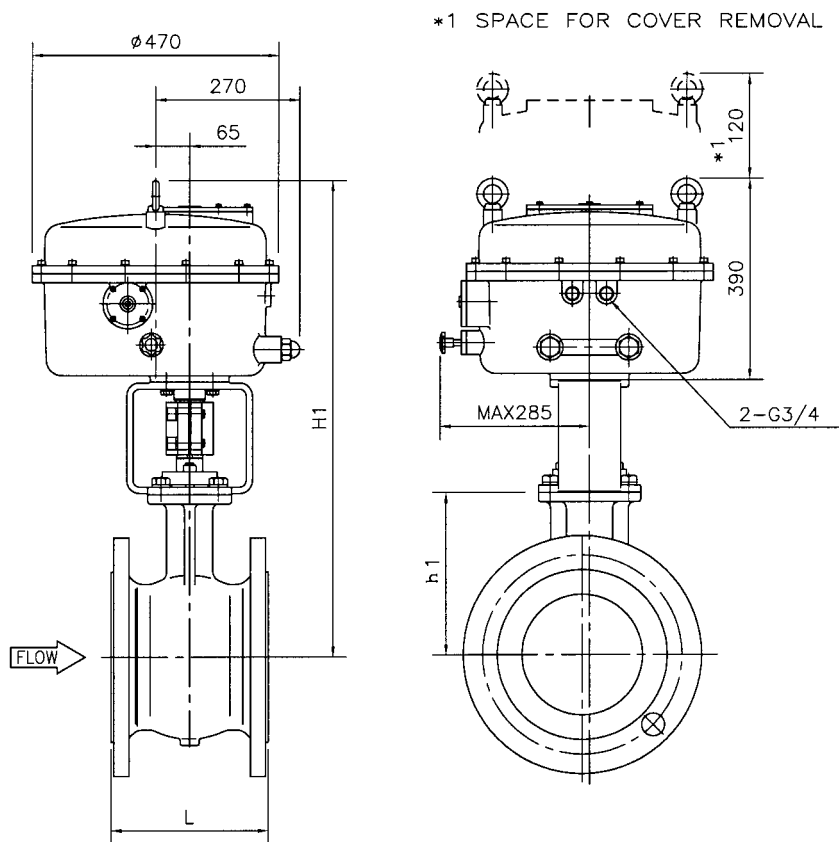
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**KOSO**

# SEGMENTAL BALL VALVE



□ WITH MANUAL HANDLE



DIMENSIONS

UNIT: mm

| CODE No. | VALVE SIZE   | FACE TO FACE (L)                   | h <sub>1</sub> | H <sub>1</sub> | ACTUATOR SIZE CODE No. |
|----------|--------------|------------------------------------|----------------|----------------|------------------------|
|          |              | JIS 10k, 20k<br>ANSI class150, 300 |                |                |                        |
| 06       | □ 6" (150A)  | 267                                | 230            | 820            | □ 36D1RA               |
| 08       | □ 8" (200A)  | 292                                | 275            | 865            | □ 36D1RA               |
| 10       | □ 10" (250A) | 330                                | 310            | 915            | □ 36D1RA               |
| 12       | □ 12" (300A) | 356                                | 345            | 950            | □ 36D1RA               |

\*FLANGE IS ACCORDING TO THE STANDARD WHICH IS DESCRIBED ON SPECIFICATION SHEET.

NOTE:

DRAWING No.

E-220E-36D●RA-B-N  
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