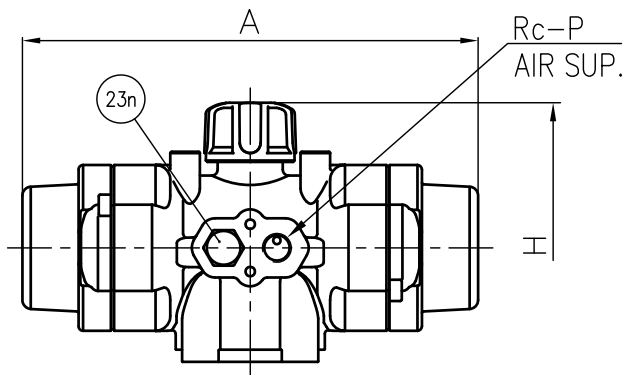


Actuator Shape (AR040)



DIMENSIONS TABLE

| Nominal Size | FLANGE END |    |     |     |   |    |     |    | SOCKET END |    |     |          |      |      | THREADED END |          |           |         | SPIGOT END |     |          |      |    |      |      |     |     |
|--------------|------------|----|-----|-----|---|----|-----|----|------------|----|-----|----------|------|------|--------------|----------|-----------|---------|------------|-----|----------|------|----|------|------|-----|-----|
|              | DIN PN10   |    |     |     |   |    |     |    | PVC, C-PVC |    |     | PP, PVDF |      |      |              |          | L         |         | PVC        |     | PP, PVDF |      |    |      |      |     |     |
|              | d          | D  | C   | n   | h | L  | t   | d1 | l          | L  | d1  | d1'      | l    | L    | d2           | l        | PVC C-PVC | PP PVDF | d3         | d3' | l        | d3   | l  | PP   | PVDF | L   |     |
| 15mm         | 1/2"       | 15 | 95  | 65  | 4 | 14 | 130 | 12 | 20         | 16 | 102 | 19.5     | 19.3 | 14.5 | 99           | Rp 1/2   | 15        | 102     | 100        | 20  | 15       | 18.5 | 20 | 18.5 | 2.5  | 1.9 | 124 |
| 20           | 3/4"       | 20 | 105 | 75  | 4 | 14 | 150 | 14 | 25         | 19 | 119 | 24.5     | 24.3 | 16   | 113          | Rp 3/4   | 17        | 120     | 119        | 25  | 20       | 24   | 25 | 22   | 2.7  | 1.9 | 144 |
| 25           | 1"         | 25 | 115 | 85  | 4 | 14 | 160 | 14 | 32         | 22 | 131 | 31.5     | 31.3 | 18   | 123          | Rp 1     | 20        | 131     | 130        | 32  | 25       | 24.5 | 32 | 22.5 | 3.0  | 2.4 | 154 |
| 32           | 1 1/4"     | 32 | 140 | 100 | 4 | 18 | 180 | 16 | 40         | 26 | 150 | 39.45    | 39.2 | 20.5 | 139          | Rp 1 1/4 | 22        | 150     | 146        | 40  | 31       | 28   | 40 | 26   | 3.7  | 2.4 | 174 |
| 40           | 1 1/2"     | 40 | 150 | 110 | 4 | 18 | 200 | 16 | 50         | 31 | 164 | 49.45    | 49.2 | 23.5 | 149          | Rp 1 1/2 | 25        | 163     | 160        | 50  | 40       | 34   | 50 | 32   | 4.6  | 3.0 | 194 |
| 50           | 2"         | 51 | 165 | 125 | 4 | 18 | 230 | 16 | 63         | 38 | 197 | 62.5     | 62.1 | 27.5 | 176          | Rp 2     | 28        | 197     | 194        | 63  | 51       | 38   | 63 | 36   | 5.8  | 3.0 | 224 |

MODEL CLASSIFICATION TABLE

| TYPE    | MATERIAL  |
|---------|-----------|
| 21ALPHA | PVC C-PVC |
| 21      | PP PVDF   |

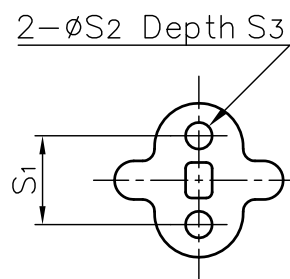
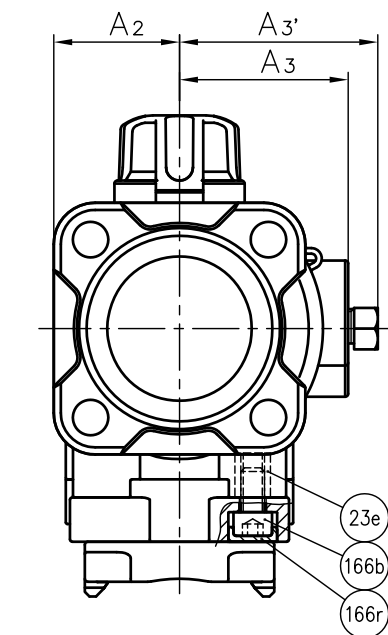
Unit: mm

| Nominal Size | D1     | H   | H1    | A  | A2  | A3   | A3' | S1 | S2 | S3  | P  | ACTUATOR TYPE |             |             |
|--------------|--------|-----|-------|----|-----|------|-----|----|----|-----|----|---------------|-------------|-------------|
|              |        |     |       |    |     |      |     |    |    |     |    | Air to open   | Air to shut |             |
| 15mm         | 1/2"   | 48  | 131   | 29 | 154 | 28   | 38  | 46 | 19 | 7.3 | 11 | 1/8           | AR040NC20SN | AR040NO20SN |
| 20           | 3/4"   | 60  | 137.5 | 35 | 154 | 28   | 38  | 46 | 19 | 7.3 | 11 | 1/8           | AR040NC20SN | AR040NO20SN |
| 25           | 1"     | 70  | 144.5 | 39 | 154 | 28   | 38  | 46 | 19 | 7.3 | 11 | 1/8           | AR040NC20SN | AR040NO20SN |
| 32           | 1 1/4" | 82  | 178   | 47 | 194 | 35   | 49  | 59 | 30 | 9   | 15 | 1/4           | AR050NC30SN | AR050NO30SN |
| 40           | 1 1/2" | 100 | 208.5 | 55 | 254 | 42.5 | 57  | 67 | 30 | 9   | 15 | 1/4           | AR063NC40SN | AR063NO40SN |
| 50           | 2"     | 126 | 220   | 66 | 254 | 42.5 | 57  | 67 | 30 | 9   | 15 | 1/4           | AR063NC40SN | AR063NO40SN |

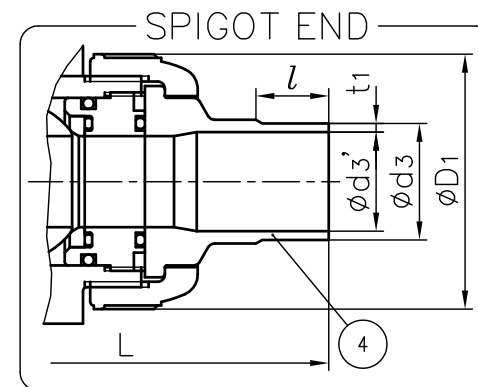
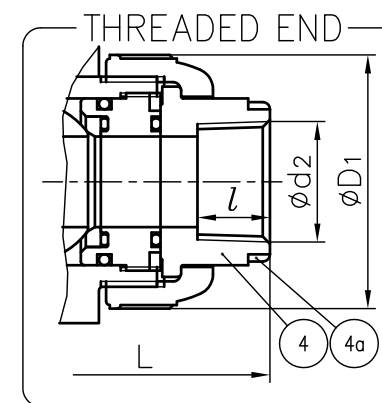
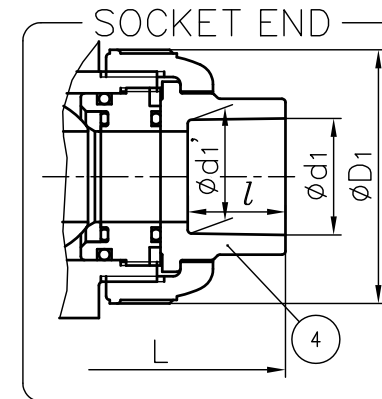
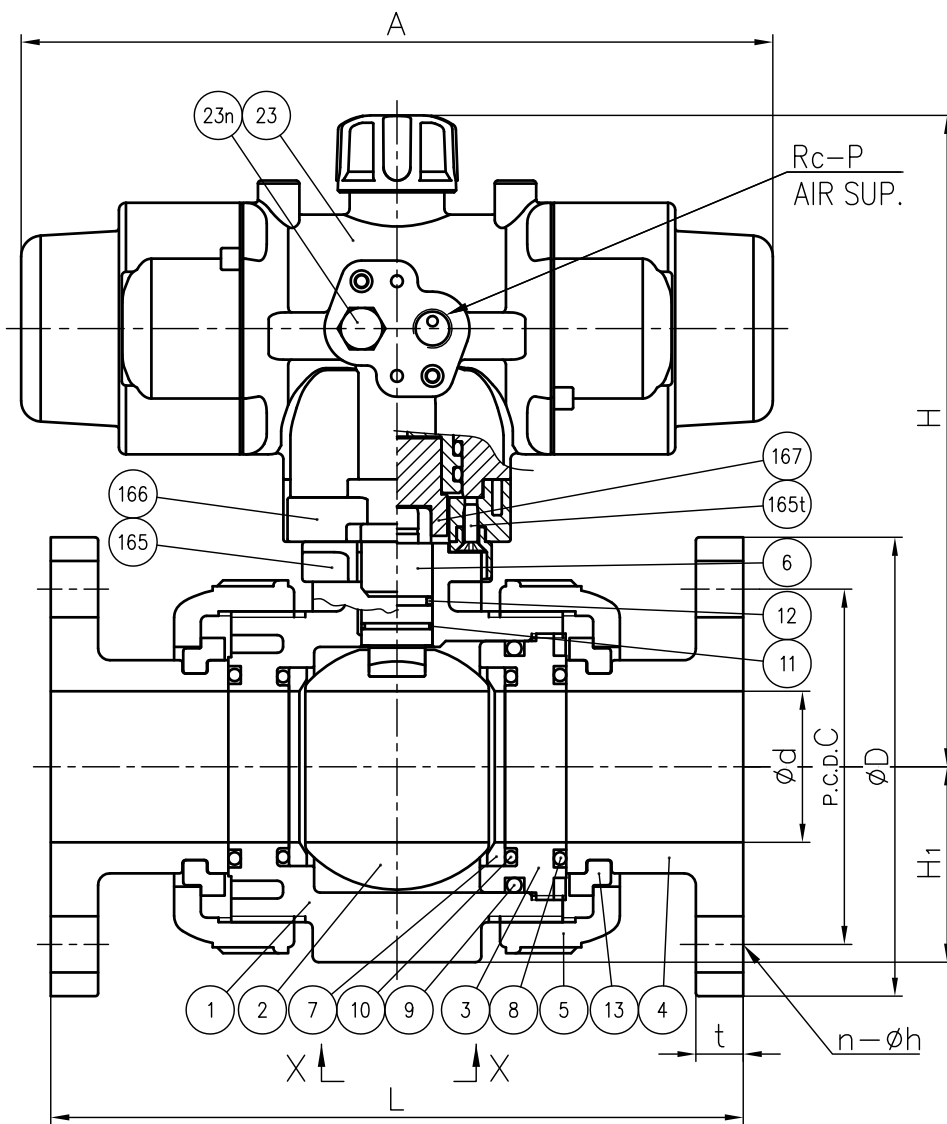
NOTE.

- Operation of permission pressure: 0.4~0.7MPa G  
 Air to open; Valve open : Supply  
 Valve shut : Exhaust  
 Air to shut; Valve open : Exhaust  
 Valve shut : Supply
- The shape and appearance of assembly differ a little with nominal size compared to this drawing.

FLANGE END



(Detail of Holes for Metallic Insert)



|                   |   |             |                                |  |
|-------------------|---|-------------|--------------------------------|--|
| 4a                | RING  | 2           | STAINLESS STEEL (SUS304)       | Used for C-PVC Body, Threaded End: 1/2"~1" |
| 167               | SHAFT ADAPTER   | 1           | STAINLESS STEEL (SUS304)       |  |
| 166r              | CAP (No.166)  | 4           | EPDM                           |  |
| 166b              | BOLT (No.166)   | 4           | STAINLESS STEEL (SUS304)       |  |
| 166               | CONNECTOR PLATE   | 1           | PPG                            |  |
| 165t              | TAPPING SCREW (No.165)  | 2           | STAINLESS STEEL (SUS304)       |  |
| 165               | BASE PLATE  | 1           | PPG                            |  |
| 23n               | NIPPLE  | 1           | PPG                            |  |
| 23e               | ENSAT (No.23)   | 4           | STAINLESS STEEL (SUS303)       |  |
| 23                | ACTUATOR  | 1           | PPG etc.                       |  |
| 13                | STOP RING   | 2           | PVDF                           | Used for Flanged End                       |
| 12                | O-RING (E)  | 1           | □EPDM<br>□FKM<br>□Others       |  |
| 11                | O-RING (D)  | 1           |                                |  |
| 10                | O-RING (C)  | 2           |                                |  |
| 9                 | O-RING (B)  | 1           |                                |  |
| 8                 | O-RING (A)  | 2           |                                |  |
| 7                 | SEAT  | 2           | PTFE                           |  |
| 6                 | STEM  | 1           | □PVC<br>□C-PVC<br>□PP<br>□PVDF |  |
| 5                 | UNION NUT   | 2           |                                |  |
| 4                 | END CONNECTOR   | 2           |                                |  |
| 3                 | CARRIER   | 1           |                                |  |
| 2                 | BALL  | 1           |                                |  |
| 1                 | BODY  | 1           |                                |  |
| No.               | DESCRIPTION   | QTY.        | MATERIAL                       | REMARKS                                    |
| ITEM              | BALL VALVE (TYPE21-21ALPHA) PNEUMATIC ACTUATED MODEL TYPE AR ASS'Y<br>□ AIR TO OPEN, □ AIR TO SHUT<br>DIN: □ FLANGED END, □ SOCKET END, □ THREADED END, □ SPIGOT END<br>15mm (1/2") ~ 50mm (2") |             |                                |  |
| DRAWN             | S.Shimazaki   | DATE        | SCALE                          |  |
| CHECKED           | H.Kawano  | APR.22.2020 | DRAWING No.                    |  |
| APPROVED          | K.Koushou   | IB-AA260DE  |                                | ⚠  |
| SPECIAL ORDER No. | ASAHI YUKIZAI CORPORATION   |             |                                |  |