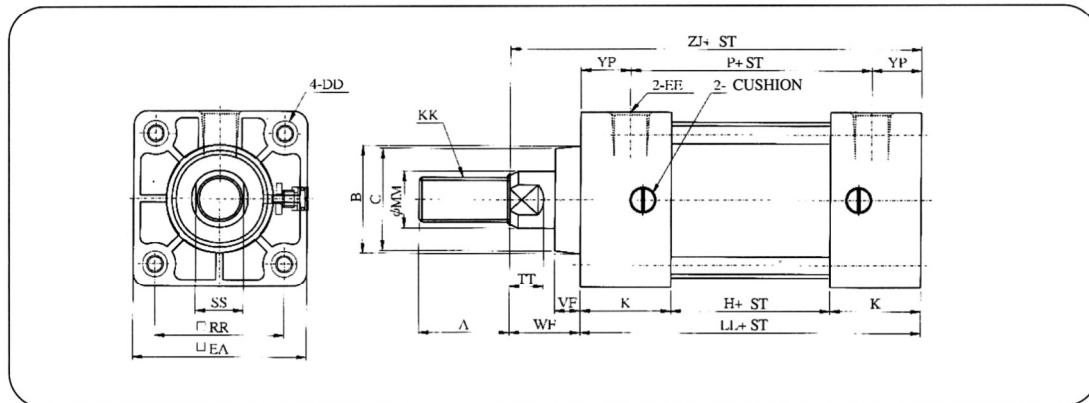


## 10 A-5 (AL Series)

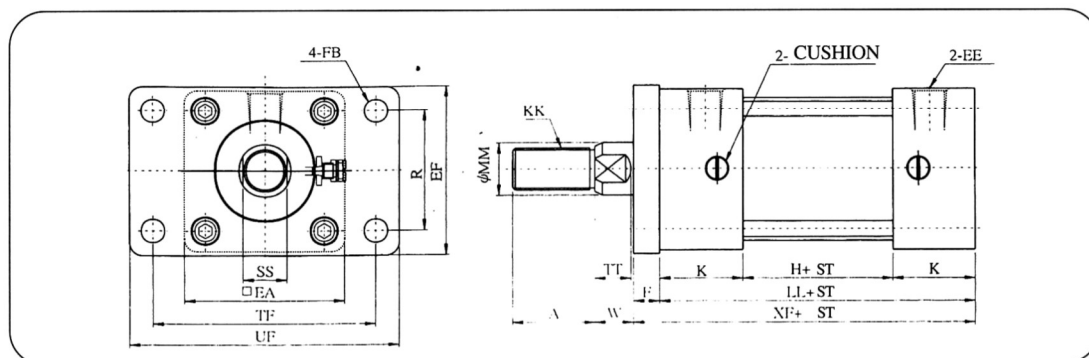
### (Dimensions)

#### AL - SD



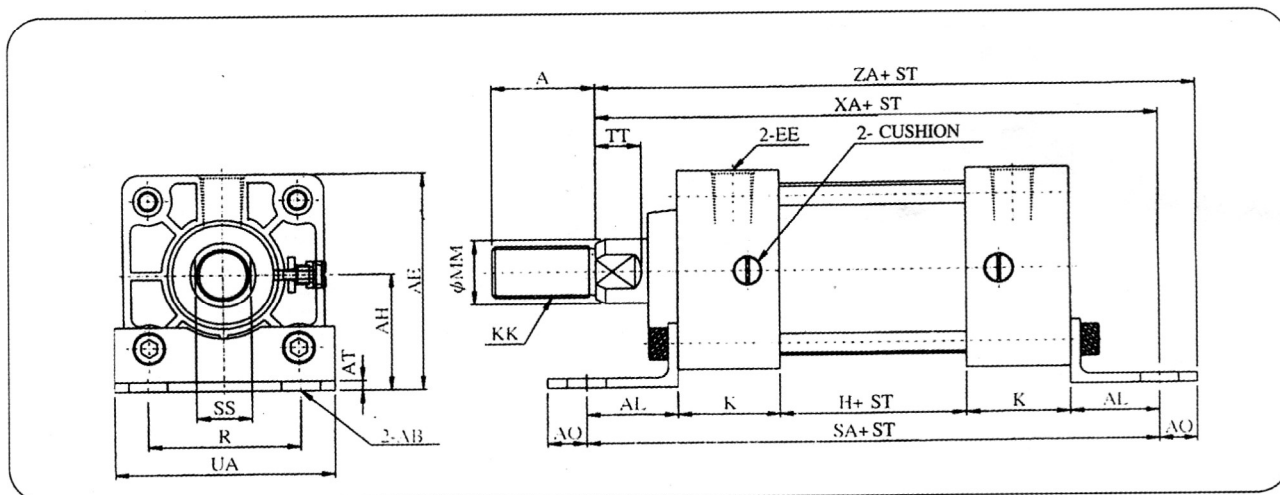
| Size Bore | A  | MM | KK        | B  | C  | DD       | EA  | EE    | H  | K  | LL  | P  | RR | SS | TT | VF | WF | YP   | ZJ  |
|-----------|----|----|-----------|----|----|----------|-----|-------|----|----|-----|----|----|----|----|----|----|------|-----|
| 32        | 22 | 12 | M10XP1.25 | 28 | 28 | M6XP1.0  | 45  | RC1/8 | 29 | 32 | 93  | 58 | 33 | 10 | 7  | 15 | 25 | 17.5 | 118 |
| 40        | 24 | 16 | M12XP1.25 | 32 | 30 | M6XP1.0  | 52  | RC1/4 | 28 | 32 | 92  | 57 | 37 | 14 | 12 | 9  | 25 | 17.5 | 117 |
| 50        | 32 | 20 | M16XP1.5  | 38 | 36 | M6XP1.0  | 62  | RC1/4 | 28 | 32 | 92  | 57 | 46 | 17 | 12 | 9  | 25 | 17.5 | 117 |
| 63        | 32 | 20 | M16XP1.5  | 38 | 36 | M8XP1.25 | 75  | RC3/8 | 31 | 32 | 95  | 60 | 56 | 17 | 12 | 9  | 25 | 17.5 | 120 |
| 80        | 40 | 25 | M20XP1.5  | 47 | 43 | M10XP1.5 | 94  | RC3/8 | 31 | 38 | 107 | 64 | 70 | 21 | 14 | 14 | 35 | 21.5 | 142 |
| 100       | 40 | 25 | M20XP1.5  | 47 | 43 | M10XP1.5 | 114 | RC1/2 | 39 | 38 | 115 | 72 | 84 | 21 | 14 | 14 | 35 | 21.5 | 150 |

#### AL - FA



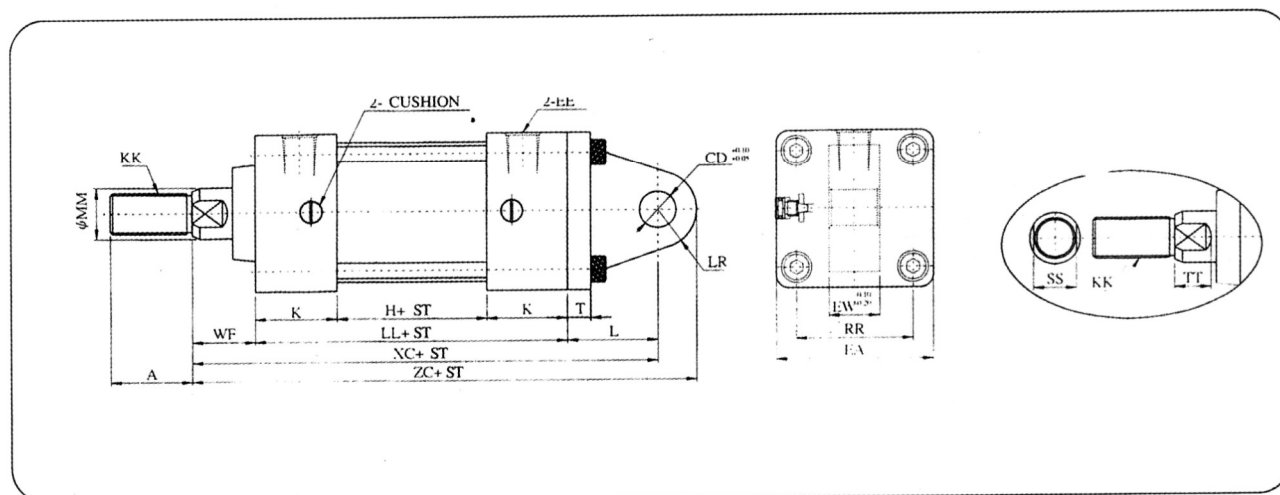
| Size Bore | A  | MM | KK        | DE       | EA  | EE    | EF  | F  | FB  | H  | K  | LL  | R  | SS | TF  | TT | UF  | W  | XF  |
|-----------|----|----|-----------|----------|-----|-------|-----|----|-----|----|----|-----|----|----|-----|----|-----|----|-----|
| 32        | 22 | 12 | M10XP1.25 | M6xP1.0  | 45  | RC1/8 | 47  | 10 | φ7  | 29 | 32 | 93  | 33 | 10 | 58  | 7  | 72  | 15 | 103 |
| 40        | 24 | 16 | M12XP1.25 | M6xP1.0  | 52  | RC1/4 | 52  | 10 | φ7  | 28 | 32 | 92  | 36 | 14 | 70  | 12 | 91  | 15 | 103 |
| 50        | 32 | 20 | M16XP1.5  | M6xP1.0  | 62  | RC1/4 | 65  | 10 | φ9  | 28 | 32 | 92  | 46 | 17 | 86  | 12 | 104 | 15 | 102 |
| 63        | 32 | 20 | M16XP1.5  | M8xP1.25 | 75  | RC3/8 | 76  | 10 | φ9  | 31 | 32 | 95  | 56 | 17 | 98  | 12 | 116 | 15 | 105 |
| 80        | 40 | 25 | M20XP1.5  | M10xP1.5 | 94  | RC3/8 | 95  | 16 | φ12 | 31 | 38 | 107 | 70 | 21 | 119 | 14 | 146 | 19 | 123 |
| 100       | 40 | 25 | M20XP1.5  | M10xP1.5 | 114 | RC1/2 | 115 | 16 | φ12 | 39 | 38 | 115 | 84 | 21 | 138 | 14 | 165 | 19 | 131 |

AL - LB



| Size Bore | A  | MM | KK        | AB  | AE   | AH   | AL   | AO   | AT | DE       | EE    | K  | H  | R  | SA  | SS | TT | UA  | XA   | ZA  |
|-----------|----|----|-----------|-----|------|------|------|------|----|----------|-------|----|----|----|-----|----|----|-----|------|-----|
| 40        | 24 | 16 | M12XP1.25 | Φ12 | 56   | 30   | 23.5 | 12.5 | 3  | M6XP1.0  | RC1/4 | 32 | 28 | 36 | 139 | 14 | 12 | 57  | 1405 | 153 |
| 50        | 32 | 20 | M16XP1.5  | Φ12 | 67.5 | 36.5 | 28   | 12   | 3  | M6XP1.0  | RC1/4 | 32 | 28 | 47 | 148 | 17 | 12 | 68  | 145  | 157 |
| 63        | 32 | 20 | M16XP1.5  | Φ12 | 79   | 41.5 | 31   | 13   | 3  | M8XP1.25 | RC3/8 | 32 | 31 | 56 | 157 | 17 | 12 | 80  | 151  | 164 |
| 80        | 40 | 25 | M20XP1.5  | Φ14 | 96   | 49   | 30   | 16   | 4  | M10XP1.5 | RC3/8 | 38 | 31 | 70 | 167 | 21 | 14 | 97  | 172  | 188 |
| 100       | 40 | 25 | M20XP1.5  | Φ12 | 114  | 57   | 30   | 16   | 4  | M10XP1.5 | RC1/2 | 38 | 39 | 84 | 175 | 21 | 14 | 112 | 180  | 196 |

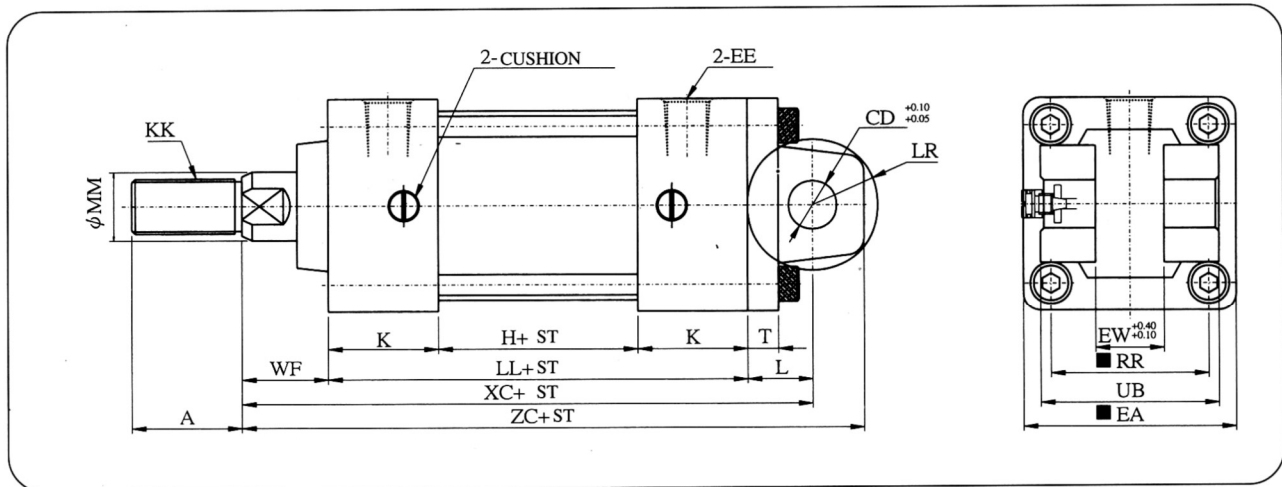
AL - CA



| Size Bore | A  | MM | KK        | CD  | DE       | EA  | EE    | EW | H  | K  | L  | LL  | LR  | RR | SS | T  | TT | WF | XC  | ZC  |
|-----------|----|----|-----------|-----|----------|-----|-------|----|----|----|----|-----|-----|----|----|----|----|----|-----|-----|
| 40        | 24 | 16 | M12XP1.25 | Φ14 | M6XP1.0  | 52  | RC1/4 | 20 | 28 | 32 | 35 | 92  | R16 | 37 | 14 | 9  | 12 | 25 | 152 | 168 |
| 50        | 32 | 20 | M16XP1.5  | Φ14 | M6XP1.0  | 62  | RC1/4 | 20 | 28 | 32 | 35 | 92  | R16 | 46 | 17 | 9  | 12 | 25 | 152 | 168 |
| 63        | 32 | 20 | M16XP1.5  | Φ14 | M8XP1.25 | 75  | RC3/8 | 20 | 31 | 32 | 35 | 95  | R16 | 56 | 17 | 9  | 12 | 25 | 155 | 171 |
| 80        | 40 | 25 | M20XP1.5  | Φ20 | M10XP1.5 | 94  | RC3/8 | 30 | 31 | 38 | 50 | 107 | R24 | 70 | 21 | 14 | 14 | 35 | 192 | 216 |
| 100       | 40 | 25 | M20XP1.5  | Φ20 | M10XP1.5 | 114 | RC1/2 | 30 | 39 | 38 | 50 | 115 | R24 | 84 | 21 | 14 | 14 | 35 | 200 | 224 |

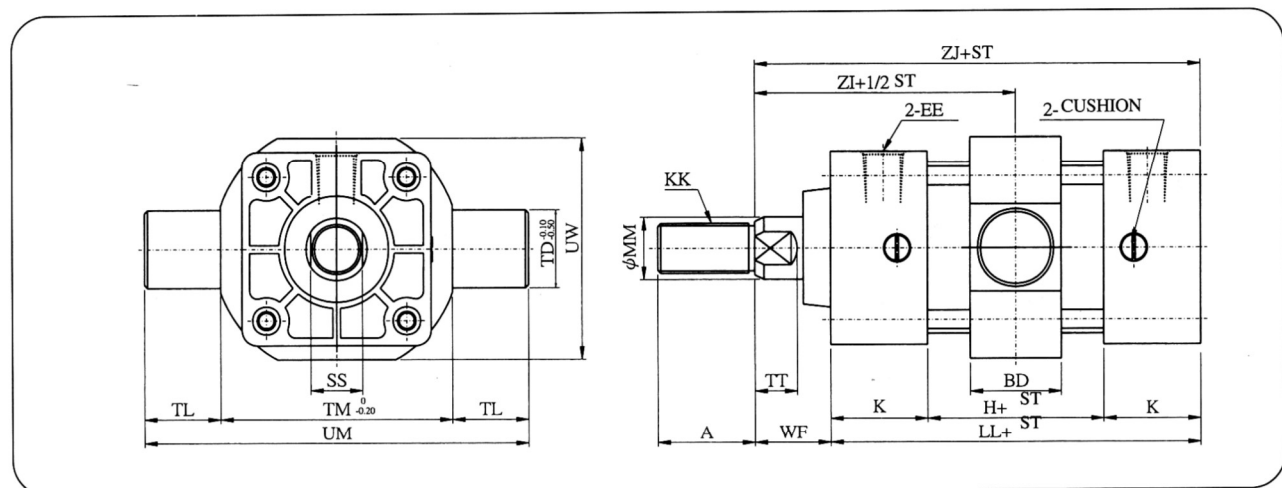


## AL -CB



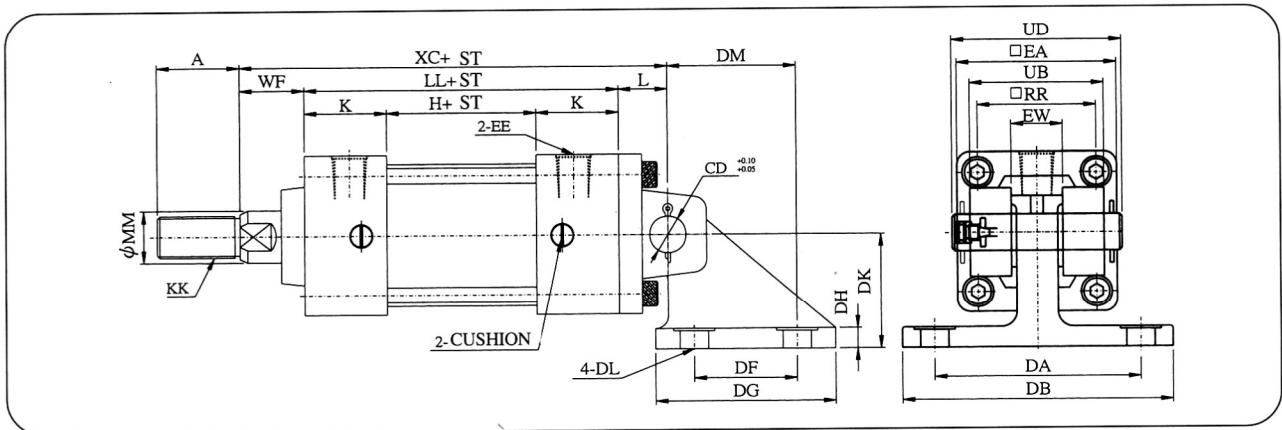
| Size<br>Bore | A  | MM | KK        | CD  | DE       | EA  | EE    | EW | H  | K  | L  | LL  | LR  | RR | SS | T  | TT | UB | WF | XC  | ZC  |
|--------------|----|----|-----------|-----|----------|-----|-------|----|----|----|----|-----|-----|----|----|----|----|----|----|-----|-----|
| 40           | 24 | 16 | M12XP1.25 | Ø14 | M6XP1.0  | 52  | RC1/4 | 20 | 28 | 32 | 35 | 92  | R16 | 37 | 14 | 9  | 12 | 44 | 25 | 136 | 151 |
| 50           | 32 | 20 | M16XP1.5  | Ø14 | M6XP1.0  | 62  | RC1/4 | 20 | 28 | 32 | 35 | 92  | R16 | 46 | 17 | 9  | 12 | 52 | 25 | 136 | 151 |
| 63           | 32 | 20 | M16XP1.5  | Ø14 | M8XP1.25 | 75  | RC3/8 | 20 | 31 | 32 | 35 | 95  | R16 | 56 | 17 | 9  | 12 | 52 | 25 | 139 | 154 |
| 80           | 40 | 25 | M20XP1.5  | Ø20 | M10XP1.5 | 94  | RC3/8 | 30 | 31 | 38 | 50 | 107 | R24 | 70 | 21 | 14 | 14 | 64 | 35 | 174 | 195 |
| 100          | 40 | 25 | M20XP1.5  | Ø20 | M10XP1.5 | 114 | RC1/2 | 30 | 39 | 38 | 50 | 115 | R24 | 84 | 21 | 14 | 14 | 64 | 35 | 182 | 203 |

## AL - TC



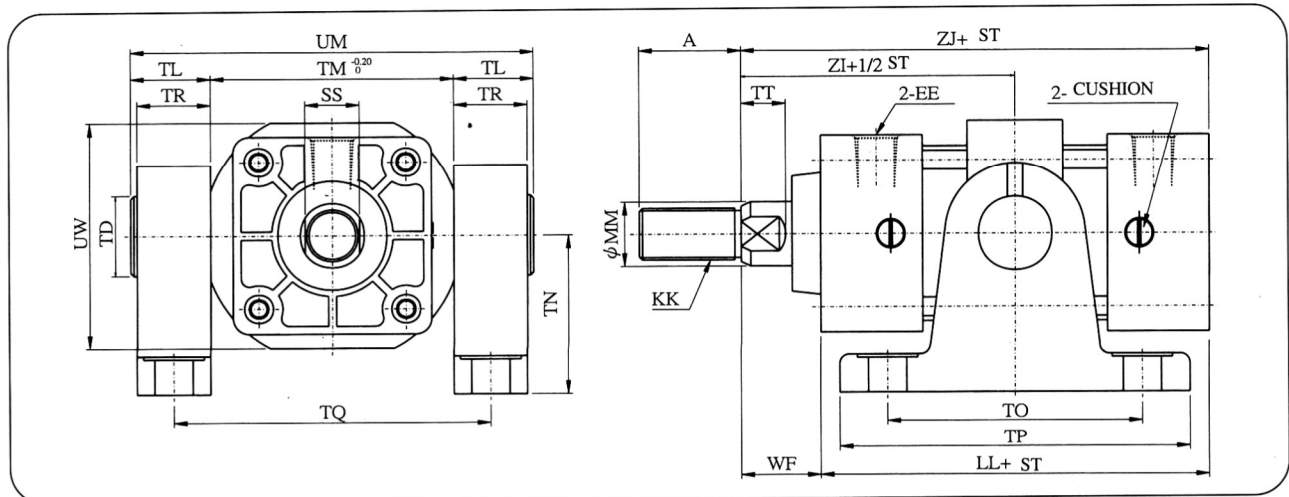
| Size<br>Bore | A  | MM | KK        | BD | EE    | H  | K  | LL  | SS | TD | TL | TM  | TT | UM  | UW  | WF | ZI   | ZJ  |
|--------------|----|----|-----------|----|-------|----|----|-----|----|----|----|-----|----|-----|-----|----|------|-----|
| 40           | 24 | 16 | M12XP1.25 | 30 | RC1/4 | 28 | 32 | 92  | 14 | 25 | 25 | 63  | 12 | 113 | 59  | 25 | 71   | 117 |
| 50           | 32 | 20 | M16XP1.5  | 30 | RC1/4 | 28 | 32 | 92  | 17 | 25 | 25 | 76  | 12 | 126 | 71  | 25 | 71   | 117 |
| 63           | 32 | 20 | M16XP1.5  | 30 | RC3/8 | 31 | 32 | 95  | 17 | 25 | 25 | 88  | 12 | 138 | 86  | 25 | 72.5 | 120 |
| 80           | 40 | 25 | M20XP1.5  | 35 | RC3/8 | 31 | 38 | 107 | 21 | 25 | 25 | 114 | 14 | 164 | 104 | 35 | 88.5 | 142 |
| 100          | 40 | 25 | M20XP1.5  | 40 | RC1/2 | 39 | 38 | 115 | 21 | 25 | 25 | 132 | 14 | 182 | 128 | 35 | 92.5 | 146 |

AL - CBBK



| Size Bore | A  | MM | KK        | CD | DA  | DB  | DF | DG | DH | DK | DL        | DME | EA  | EE    | EW | H  | K  | L  | LL  | RR | SS | TT | UB | UD | WF | XC  |
|-----------|----|----|-----------|----|-----|-----|----|----|----|----|-----------|-----|-----|-------|----|----|----|----|-----|----|----|----|----|----|----|-----|
| 40        | 24 | 16 | M12XP1.25 | 14 | 80  | 105 | 40 | 70 | 8  | 45 | $\phi$ 11 | 50  | 52  | RC1/4 | 20 | 28 | 32 | 19 | 92  | 37 | 14 | 12 | 44 | 58 | 25 | 136 |
| 50        | 32 | 20 | M16XP1.5  | 14 | 80  | 105 | 40 | 70 | 8  | 45 | $\phi$ 11 | 50  | 62  | RC1/4 | 20 | 28 | 32 | 19 | 92  | 46 | 17 | 12 | 52 | 66 | 25 | 136 |
| 63        | 32 | 20 | M16XP1.5  | 14 | 80  | 105 | 40 | 70 | 8  | 45 | $\phi$ 11 | 50  | 75  | RC3/8 | 20 | 31 | 32 | 19 | 95  | 56 | 17 | 12 | 52 | 66 | 25 | 139 |
| 80        | 40 | 25 | M20XP1.5  | 20 | 105 | 135 | 65 | 95 | 12 | 60 | $\phi$ 14 | 70  | 94  | RC3/8 | 30 | 31 | 38 | 32 | 107 | 70 | 21 | 14 | 64 | 78 | 35 | 174 |
| 100       | 40 | 25 | M20XP1.5  | 20 | 105 | 135 | 65 | 95 | 12 | 60 | $\phi$ 14 | 70  | 114 | RC1/2 | 30 | 39 | 38 | 32 | 115 | 84 | 21 | 14 | 64 | 78 | 35 | 182 |

AL - TCBK



| Size Bore | A  | MM | KK        | EE    | LL  | SS | TD | TL | TM  | TN | TO | TP  | TQ  | TR | TT | UM  | UW  | WF | ZI   | ZJ  |
|-----------|----|----|-----------|-------|-----|----|----|----|-----|----|----|-----|-----|----|----|-----|-----|----|------|-----|
| 40        | 24 | 16 | M12XP1.25 | RC1/4 | 92  | 14 | 25 | 25 | 63  | 50 | 80 | 110 | 86  | 23 | 12 | 113 | 59  | 25 | 71   | 117 |
| 50        | 32 | 20 | M16XP1.5  | RC1/4 | 92  | 17 | 25 | 25 | 76  | 50 | 80 | 110 | 99  | 23 | 12 | 126 | 71  | 25 | 71   | 117 |
| 63        | 32 | 20 | M16XP1.5  | RC3/8 | 95  | 17 | 25 | 25 | 88  | 50 | 80 | 110 | 111 | 23 | 12 | 138 | 86  | 25 | 72.5 | 120 |
| 80        | 40 | 25 | M20XP1.5  | RC3/8 | 107 | 21 | 25 | 25 | 114 | 70 | 85 | 120 | 137 | 23 | 14 | 164 | 104 | 35 | 88.5 | 142 |
| 100       | 40 | 25 | M20XP1.5  | RC1/2 | 115 | 21 | 25 | 25 | 132 | 70 | 85 | 120 | 155 | 23 | 14 | 182 | 128 | 35 | 92.5 | 146 |

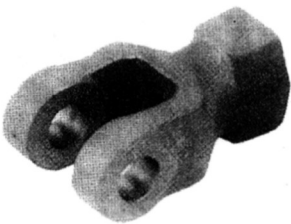
10 A-5 (AL Series)

(Y Connector Order Form)

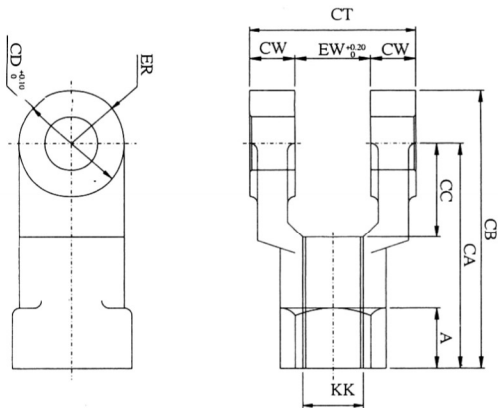
AL-Y —  $\varnothing 63$  X M12X1.5

1 2

|      |               |
|------|---------------|
| AL-Y | (Y Connector) |
| 1    | (Bore)        |
| 2    | (Spec.)       |



(Dimensions)



| Size Bore | KK        | A  | CA | CC | CD | CT | CW | EW | ER |
|-----------|-----------|----|----|----|----|----|----|----|----|
| 32        | M10xP1.25 | 16 | 55 | 20 | 12 | 32 | 8  | 16 | 12 |
| 40        | M12xP1.25 | 16 | 60 | 25 | 14 | 44 | 12 | 20 | 14 |
| 50        | M16xP1.5  | 16 | 60 | 25 | 14 | 44 | 12 | 20 | 14 |
| 63        |           |    |    |    |    |    |    |    |    |
| 80        | M20xP1.5  | 20 | 85 | 35 | 20 | 62 | 16 | 30 | 18 |
| 100       |           |    |    |    |    |    |    |    |    |

(I Connector Order Form)

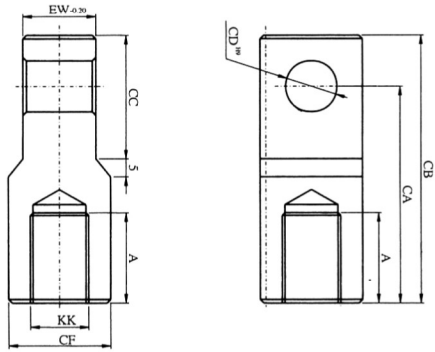
AL-I —  $\varnothing 40$  X M12X2.5

1 2

|      |               |
|------|---------------|
| AL-I | (I Connector) |
| 1    | (Bore)        |
| 2    | (Spec.)       |



(Dimensions)



| Size Bore | KK        | A  | CA | CB  | CC | CD | CF | EW |
|-----------|-----------|----|----|-----|----|----|----|----|
| 32        | M10xP1.25 | 20 | 55 | 67  | 32 | 12 | 25 | 16 |
| 40        | M12xP1.25 | 20 | 60 | 74  | 34 | 14 | 28 | 20 |
| 50        | M16xP1.5  | 25 | 60 | 74  | 34 | 14 | 28 | 20 |
| 63        |           |    |    |     |    |    |    |    |
| 80        | M20xP1.5  | 30 | 85 | 105 | 50 | 20 | 38 | 30 |
| 100       |           |    |    |     |    |    |    |    |