



Pedido

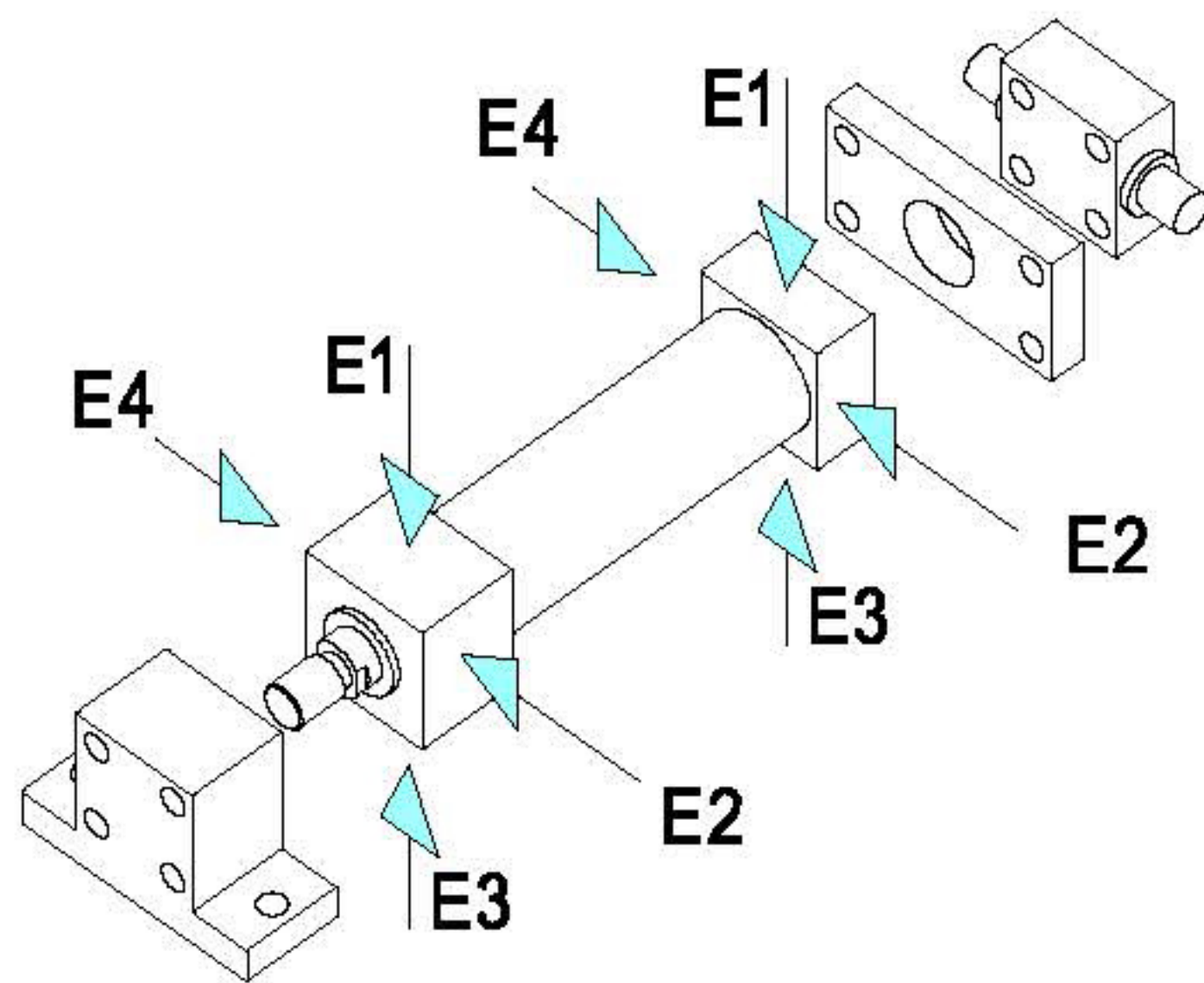
Ordering

Commande

| Amortecimento |                            | Cuchioning       | Amortissement         |
|---------------|----------------------------|------------------|-----------------------|
| SA            | sem amortecimento          | no cushioning    | sans amortissement    |
| AF            | amortecimento à frente     | front cushioning | amortissement avant   |
| AR            | amortecimento à rearguarda | rear cushioning  | amortissement arrière |
| AFR           | à frente e à rearguarda    | rear and front   | avant et arrière      |
| Posição       | E0 , E0                    | Location E0 , E0 | Position E0 , E0      |

| Roscas p/ entradas |  | Thread       | Raccordement |
|--------------------|--|--------------|--------------|
|                    |  | BSP BSPT NPT |              |

| Posição das entradas de óleo | E0 , E0             | Port location | Position orifices huile |
|------------------------------|---------------------|---------------|-------------------------|
|                              | frente , rearguarda | front , rear  | tête , fond             |



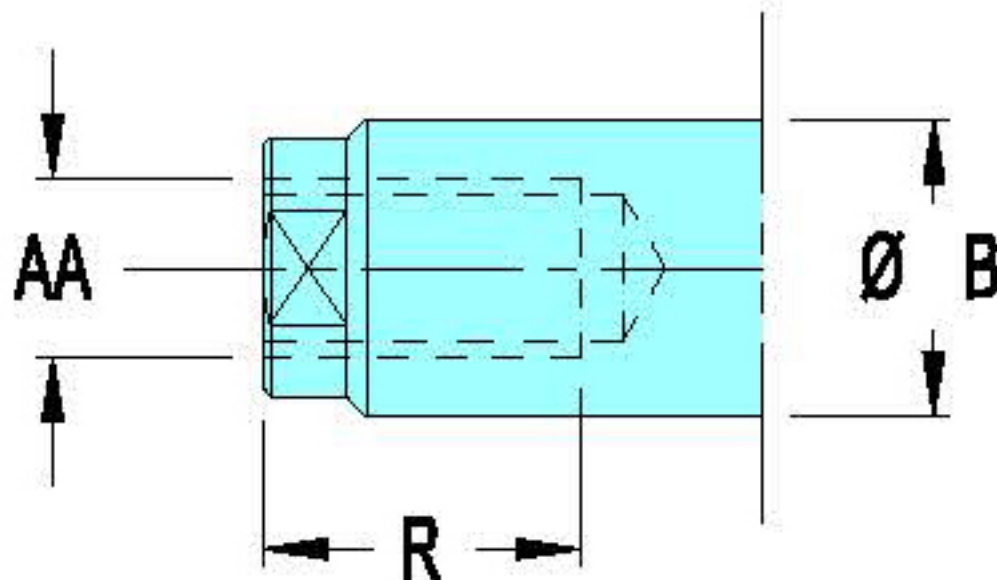
| exemplo de como pedir |                   | Ordering example        | Exemple de commande |
|-----------------------|-------------------|-------------------------|---------------------|
| modelo                | CD2               | curso                   | 100 mm              |
| Ø Interior            | Ø 63              | roscas p/ entradas óleo | BSP                 |
| haste                 | haste simples     | posição entradas óleo   | E1 , E2             |
| extremidade haste     | Ø 30 RE M24 x 1,5 | amortecimento           | AFR E4 , E4         |



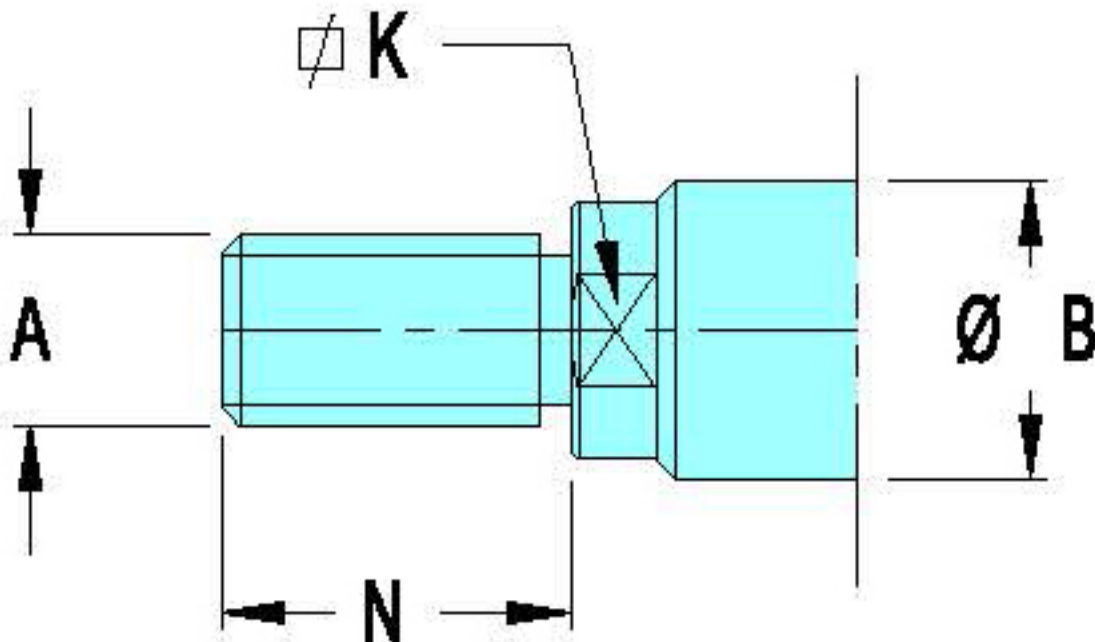
Extremidade da haste

Rod end

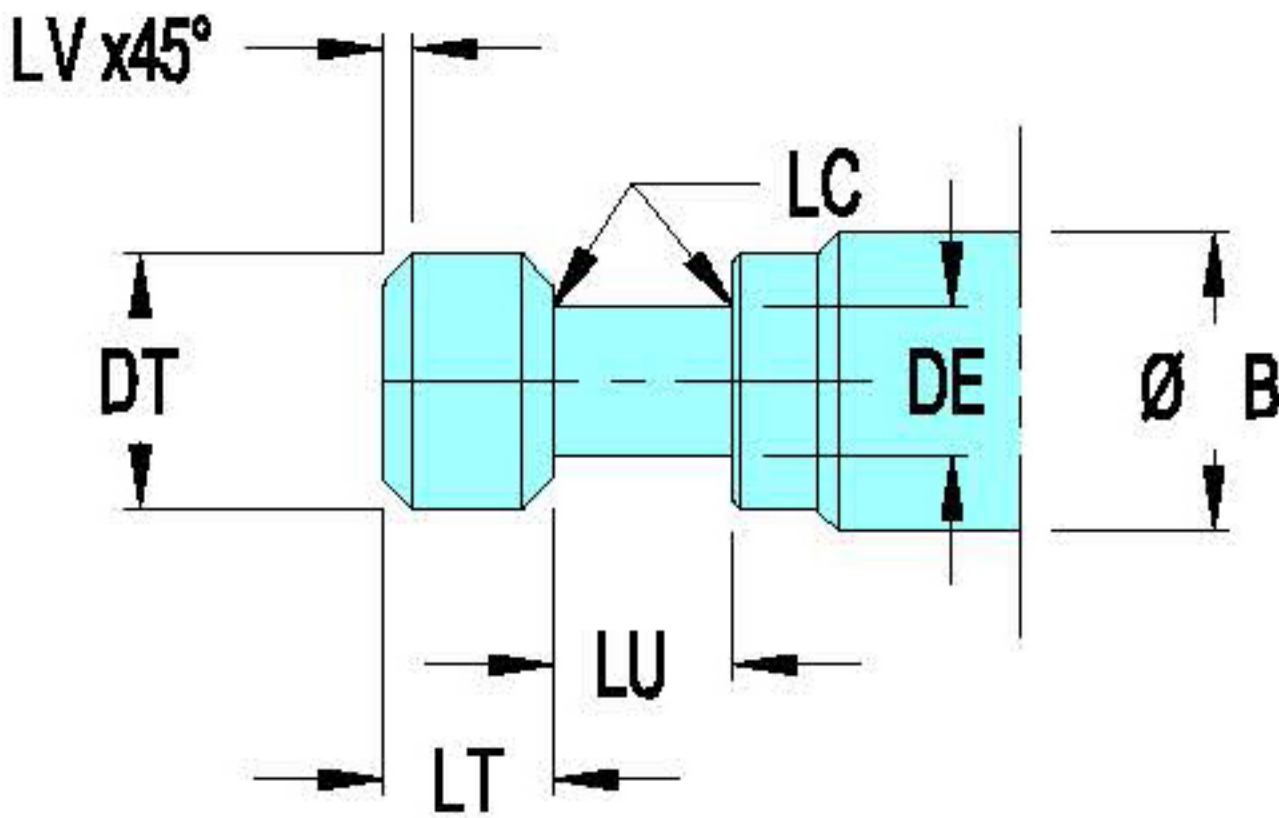
Extremite de tige



rosca interior RI  
female thread  
filetage intérieur



rosca exterior RE  
male thread  
filetage extérieur

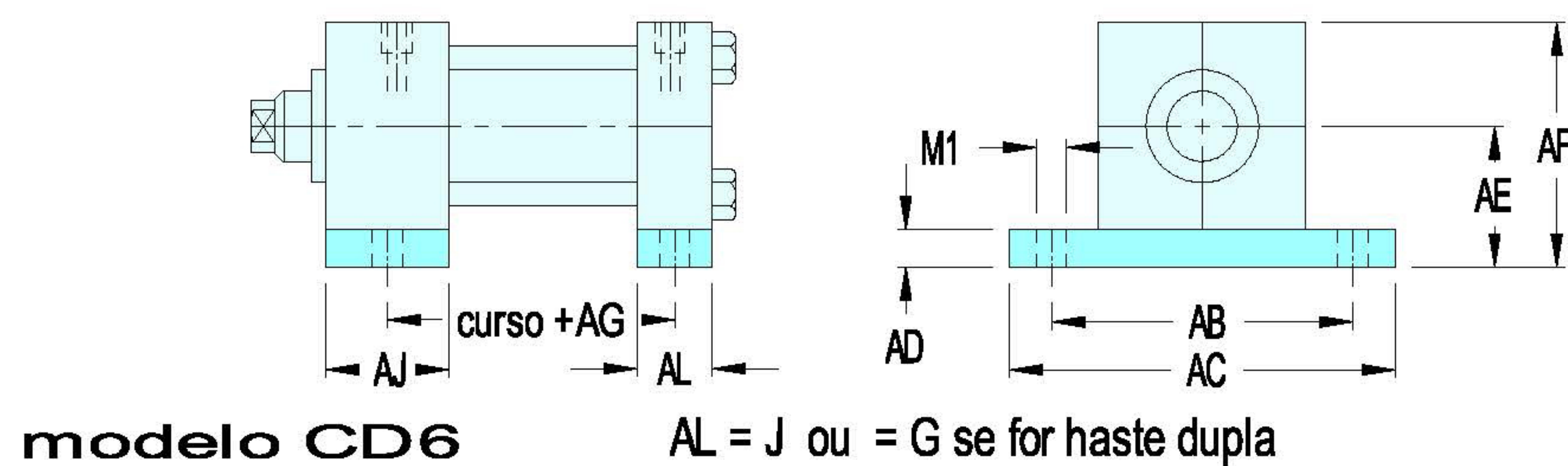
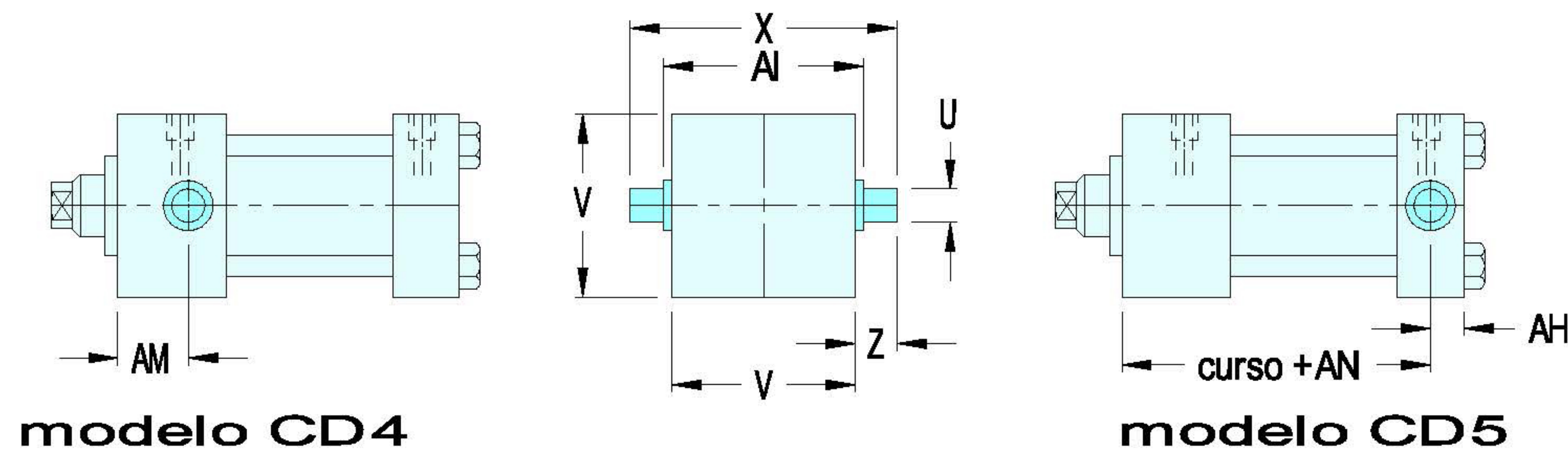
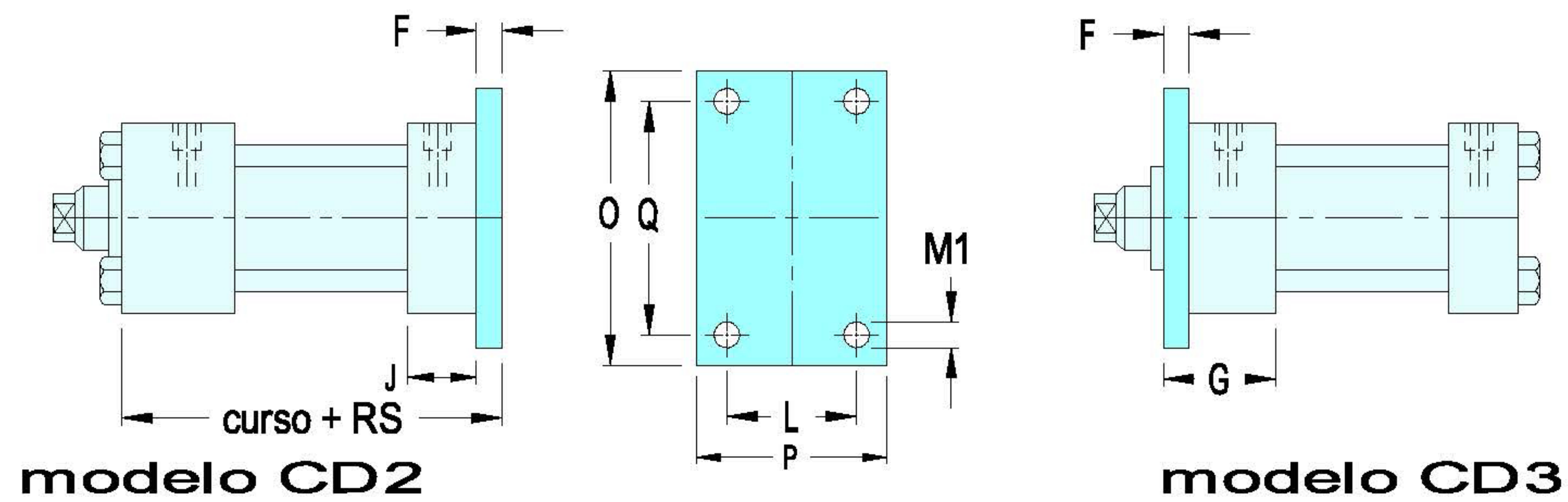
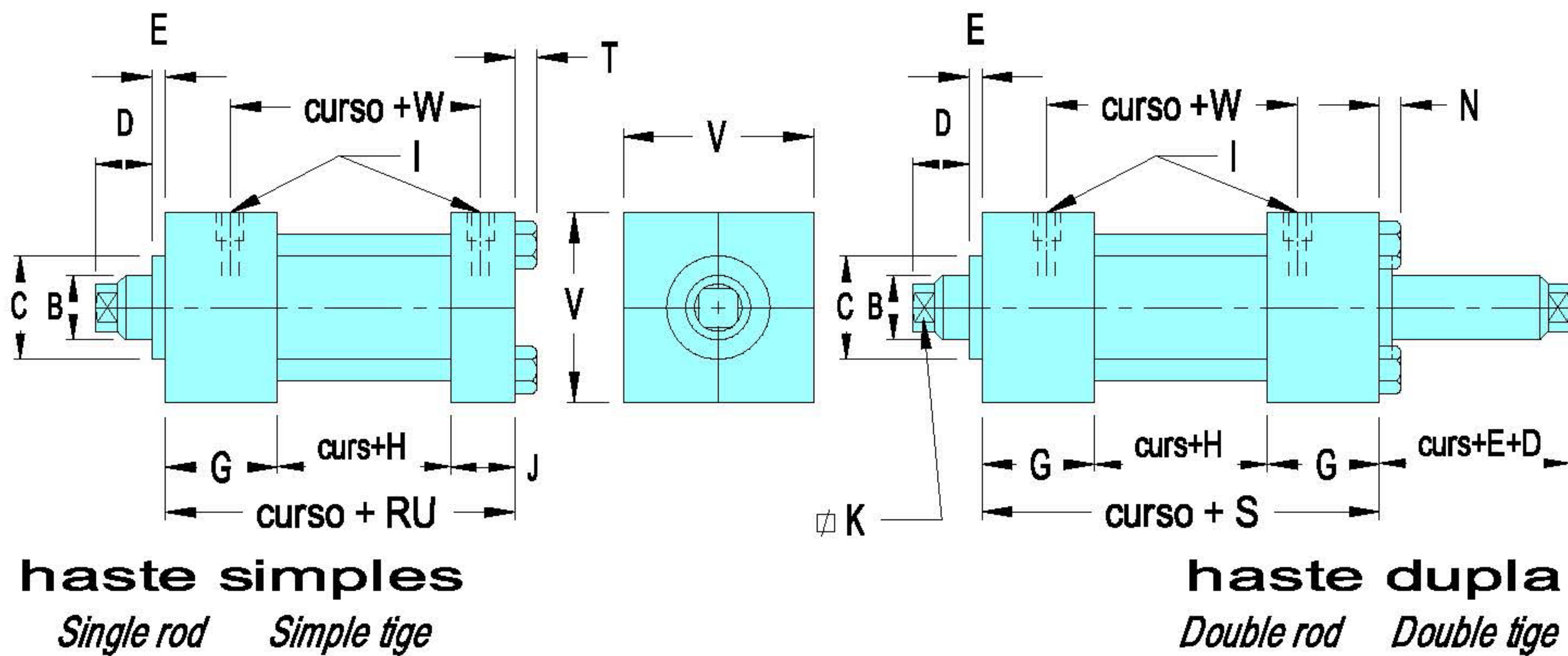


Tenon T

| Ø B  | A        | N  | K  | AA       | R  | DT | DE | LC  | LT | LU | LV   |
|------|----------|----|----|----------|----|----|----|-----|----|----|------|
| Ø 14 | M10x1,25 | 18 | 12 | M8x1,25  | 20 | 13 | 8  | 0,5 | 5  | 5  | 0,25 |
| Ø 16 | M12x1,25 | 20 | 14 | M10x1,5  | 22 | 15 | 9  | 0,5 | 6  | 6  | 0,25 |
| Ø 18 | M14x1,25 | 22 | 16 | M12x1,75 | 24 | 17 | 10 | 0,5 | 7  | 7  | 0,25 |
| Ø 20 | M16x1,5  | 24 | 17 | M12x1,75 | 26 | 19 | 12 | 0,5 | 8  | 8  | 0,25 |
| Ø 25 | M16x1,5  | 26 | 22 | M16x1,5  | 28 | 23 | 14 | 0,5 | 10 | 10 | 0,3  |
| Ø 28 | M20x1,5  | 28 | 25 | M16x1,5  | 34 | 26 | 16 | 0,8 | 10 | 10 | 0,3  |
| Ø 30 | M24x1,5  | 32 | 27 | M20x1,5  | 35 | 28 | 18 | 0,8 | 12 | 12 | 0,3  |
| Ø 36 | M27x2    | 34 | 32 | M27x2    | 44 | 34 | 20 | 1,0 | 13 | 13 | 0,3  |
| Ø 40 | M33x2    | 38 | 36 | M33x2    | 46 | 38 | 22 | 1,0 | 14 | 14 | 0,3  |
| Ø 45 | M33x2    | 42 | 41 | M33x2    | 50 | 40 | 24 | 1,0 | 16 | 16 | 0,6  |
| Ø 50 | M40x2    | 45 | 45 | M35x2    | 52 | 45 | 26 | 1,0 | 18 | 18 | 0,6  |
| Ø 56 | M42x2    | 50 | 51 | M42x2    | 55 | 50 | 30 | 1,5 | 20 | 20 | 0,6  |
| Ø 60 | M48x2    | 54 | 55 | M42x2    | 58 | 52 | 35 | 1,5 | 24 | 24 | 0,6  |
| Ø 65 | M52x2    | 58 | 60 | M52x2    | 60 | 56 | 38 | 1,5 | 26 | 26 | 0,6  |

A pedido do cliente altera-se qualquer cota .  
We can change any dimension specified by the customer .  
Nous changerons quelqu'une dimension à demande du client .





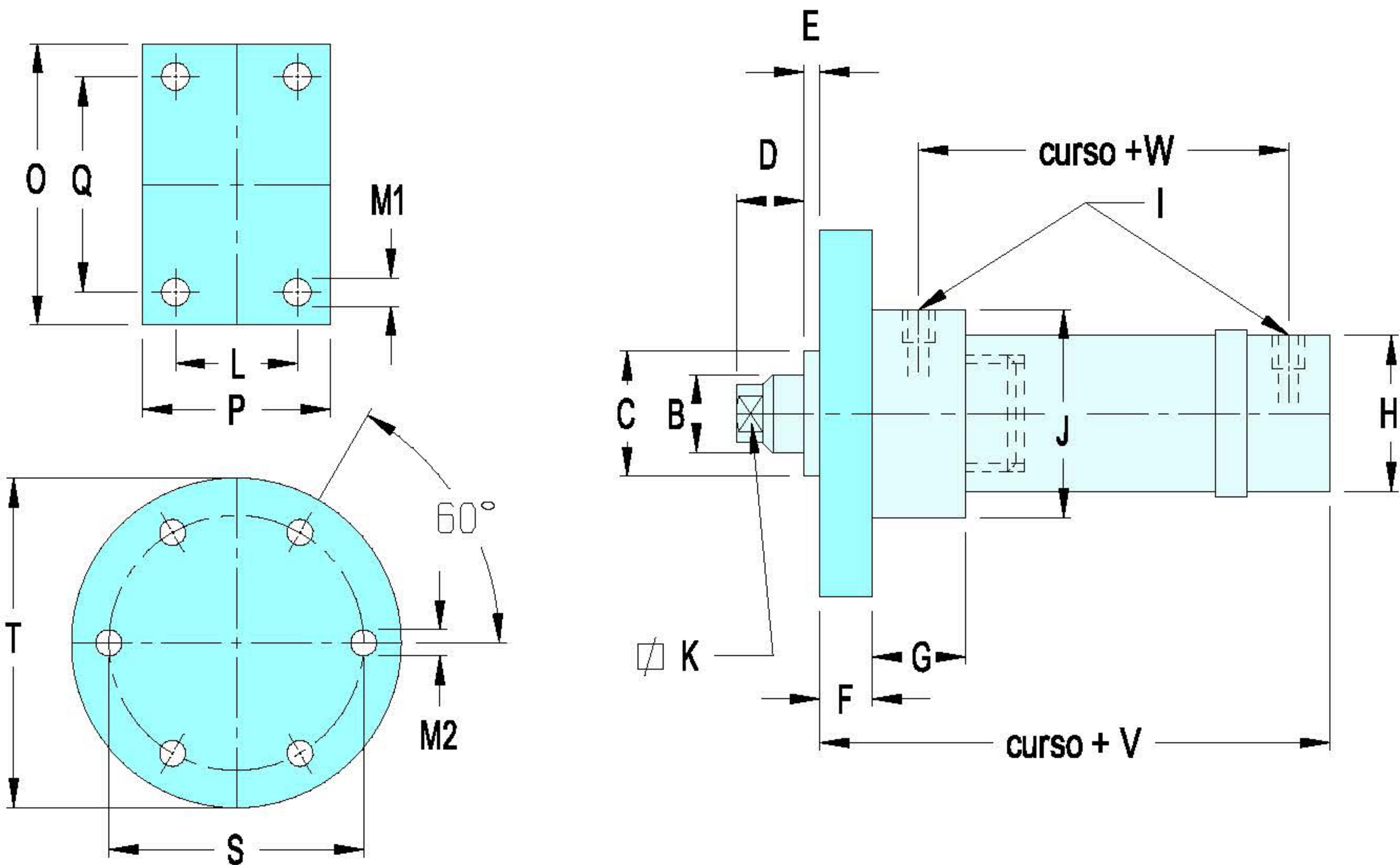
| Ø interior<br>Bore Ø<br>Ø Alesage | Ø 25  | Ø 32  | Ø 40  | Ø 50  | Ø 63  | Ø 80  | Ø 100 | Ø 125 |
|-----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| B                                 | 14    | 16    | 20    | 28    | 30    | 40    | 50    | 60    |
|                                   | 16    | 18    | 25    | 30    | 36    | 45    | 56    | 65    |
| C                                 | 30    | 32    | 38    | 45    | 50    | 65    | 70    | 85    |
|                                   | 32    | 35    | 42    | 50    | 55    | 65    | 75    | 95    |
| D                                 | 18    | 18    | 20    | 20    | 20    | 25    | 30    | 32    |
| E                                 | 3     | 3     | 4     | 4     | 4     | 4     | 5     | 5     |
| F                                 | 10    | 12    | 16    | 20    | 20    | 25    | 30    | 35    |
| G                                 | 42    | 46    | 52    | 64    | 64    | 69    | 80    | 85    |
| H                                 | 34,5  | 34,5  | 34,5  | 41,5  | 41,5  | 45,5  | 45,5  | 52,5  |
| I                                 | 1/8"  | 1/4"  | 1/4"  | 3/8"  | 3/8"  | 3/8"  | 1/2"  | 1/2"  |
| J                                 | 20    | 23    | 25    | 38    | 38    | 44    | 44    | 44    |
| K                                 | 12    | 14    | 17    | 25    | 27    | 36    | 46    | 56    |
|                                   | 14    | 16    | 22    | 27    | 32    | 41    | 52    | 61    |
| L                                 | 26    | 34    | 40    | 50    | 65    | 80    | 95    | 120   |
| M1                                | 7     | 9     | 11    | 13    | 13    | 17    | 21    | 21    |
| N                                 | 8     | 10    | 12    | 15    | 15    | 18    | 22    | 22    |
| O                                 | 70    | 84    | 106   | 130   | 145   | 170   | 200   | 240   |
| P                                 | 40    | 50    | 60    | 75    | 90    | 110   | 130   | 160   |
| Q                                 | 56    | 68    | 83    | 105   | 120   | 140   | 165   | 200   |
| S                                 | 118,5 | 126,5 | 138,5 | 169,5 | 169,5 | 189,5 | 205,5 | 220,5 |
| T                                 | 6     | 7     | 8     | 9,5   | 9,5   | 13    | 13    | 16    |
| U                                 | Ø 16  | Ø 18  | Ø 22  | Ø 28  | Ø 30  | Ø 35  | Ø 38  | Ø 40  |
| V                                 | 40    | 50    | 60    | 75    | 90    | 110   | 130   | 160   |
| X                                 | 70    | 82    | 94    | 119   | 144   | 174   | 204   | 244   |
| Z                                 | 15    | 16    | 17    | 22    | 27    | 32    | 37    | 42    |
| W                                 | 54,5  | 58,5  | 59,5  | 78    | 78    | 85    | 88    | 95,5  |
| AB                                | 56    | 68    | 83    | 105   | 120   | 140   | 165   | 200   |
| AC                                | 70    | 84    | 106   | 130   | 145   | 170   | 200   | 240   |
| AD                                | 10    | 10    | 12    | 16    | 16    | 20    | 22    | 22    |
| AE                                | 30    | 35    | 42    | 53,5  | 61    | 75    | 87    | 102   |
| AF                                | 50    | 60    | 72    | 91    | 106   | 130   | 152   | 182   |
| AG                                | 65,5  | 69    | 73    | 92,5  | 92,5  | 102   | 107,5 | 117   |
| AH                                | 10    | 11,5  | 12,5  | 19    | 19    | 22    | 22    | 22    |
| AI                                | 44    | 54    | 64    | 79    | 94    | 114   | 134   | 164   |
| AJ                                | 42    | 46    | 52    | 64    | 64    | 69    | 80    | 85    |
| AL                                | 20    | 23    | 25    | 38    | 38    | 44    | 44    | 44    |
| AM                                | 26    | 29    | 33    | 42    | 42    | 47    | 55    | 60    |
| AN                                | 86,5  | 92    | 99    | 124,5 | 124,5 | 136,5 | 147,5 | 159,5 |
| RS                                | 106,5 | 115,5 | 127,5 | 163,5 | 163,5 | 183,5 | 199,5 | 215,5 |
| RU                                | 96,5  | 103,5 | 111,5 | 143,5 | 143,5 | 158,5 | 169,5 | 181,5 |

A pedido do cliente altera-se qualquer cota .  
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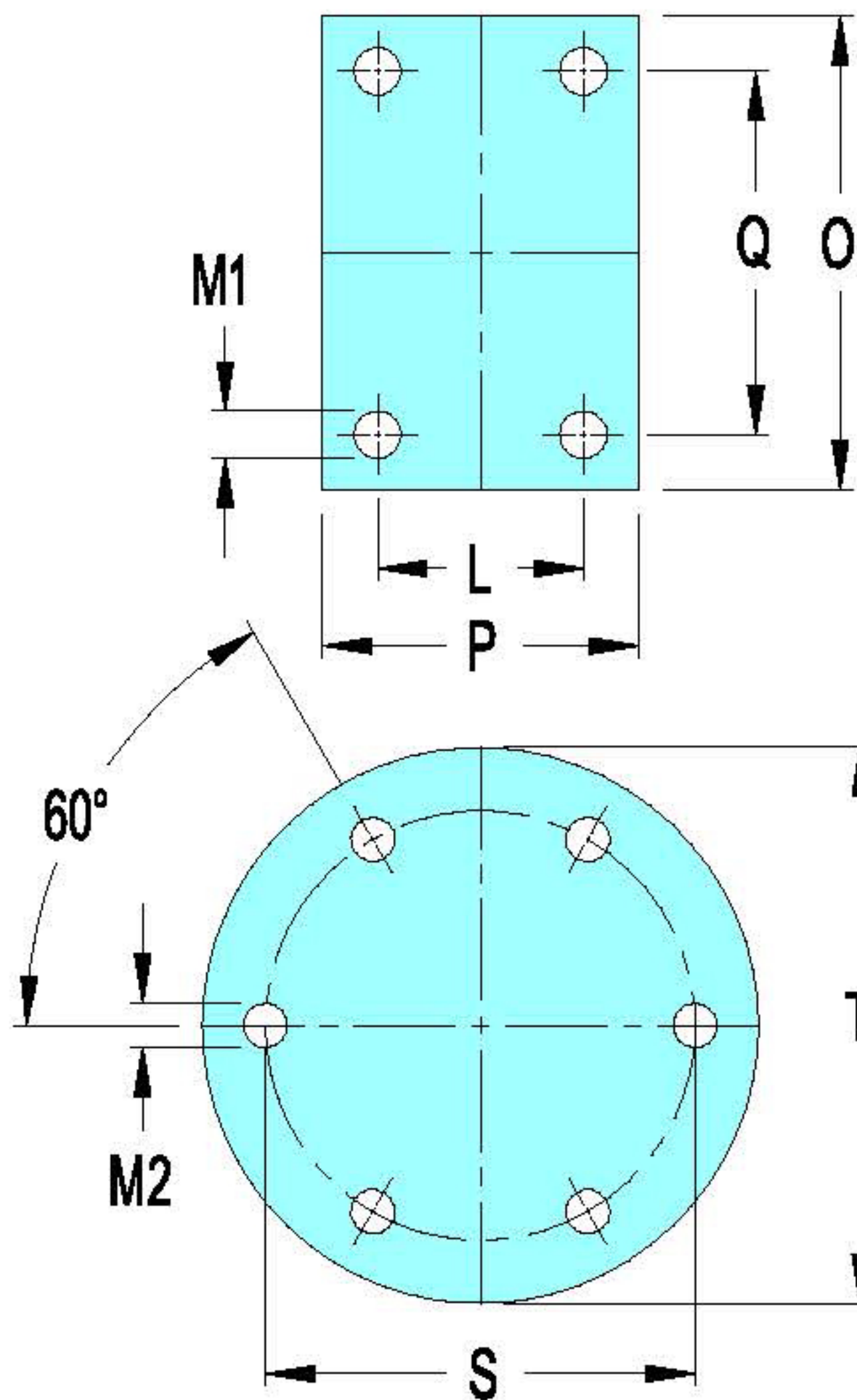
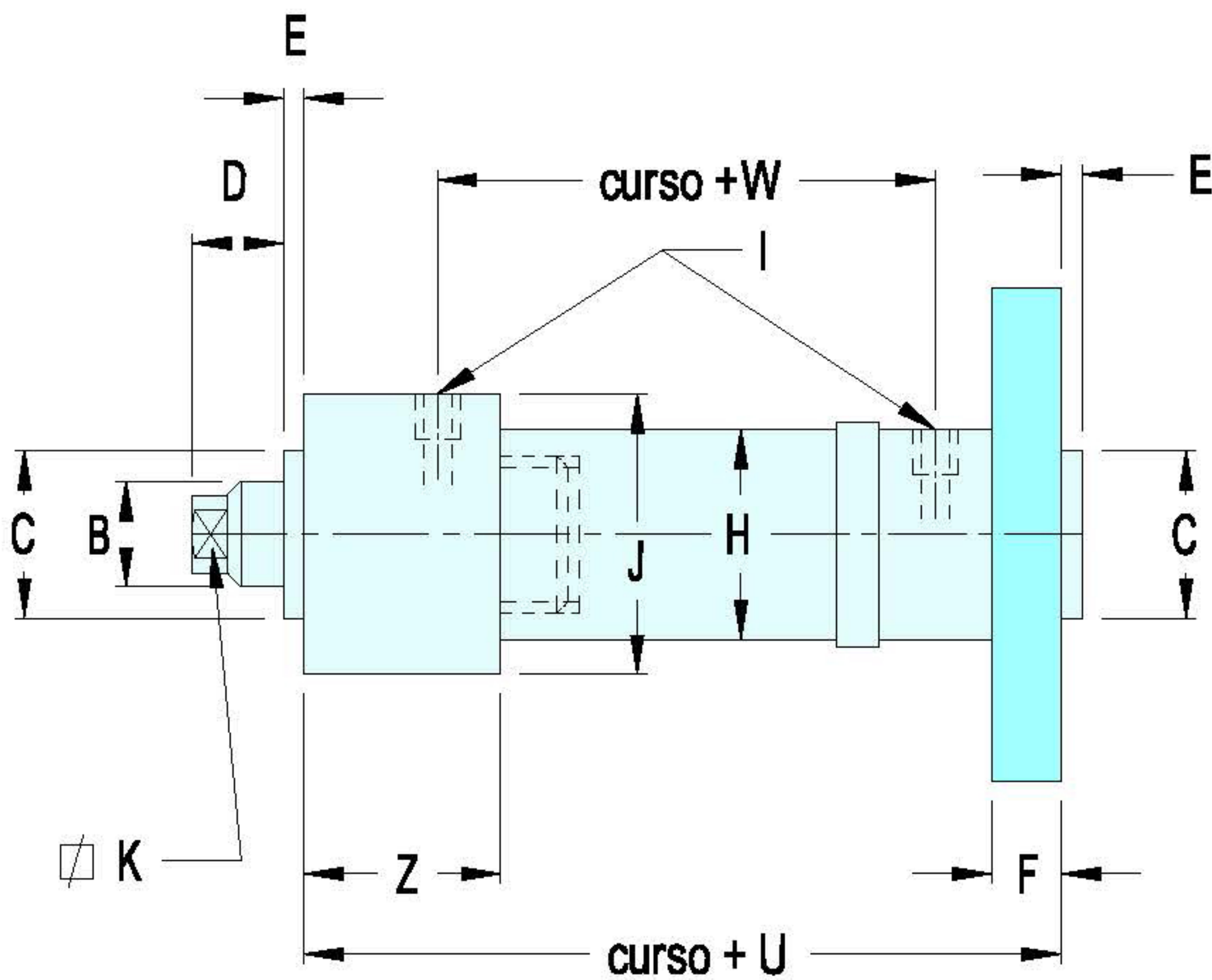


modelo JG1



modelo JG2

modelo JG3



modelo JG4



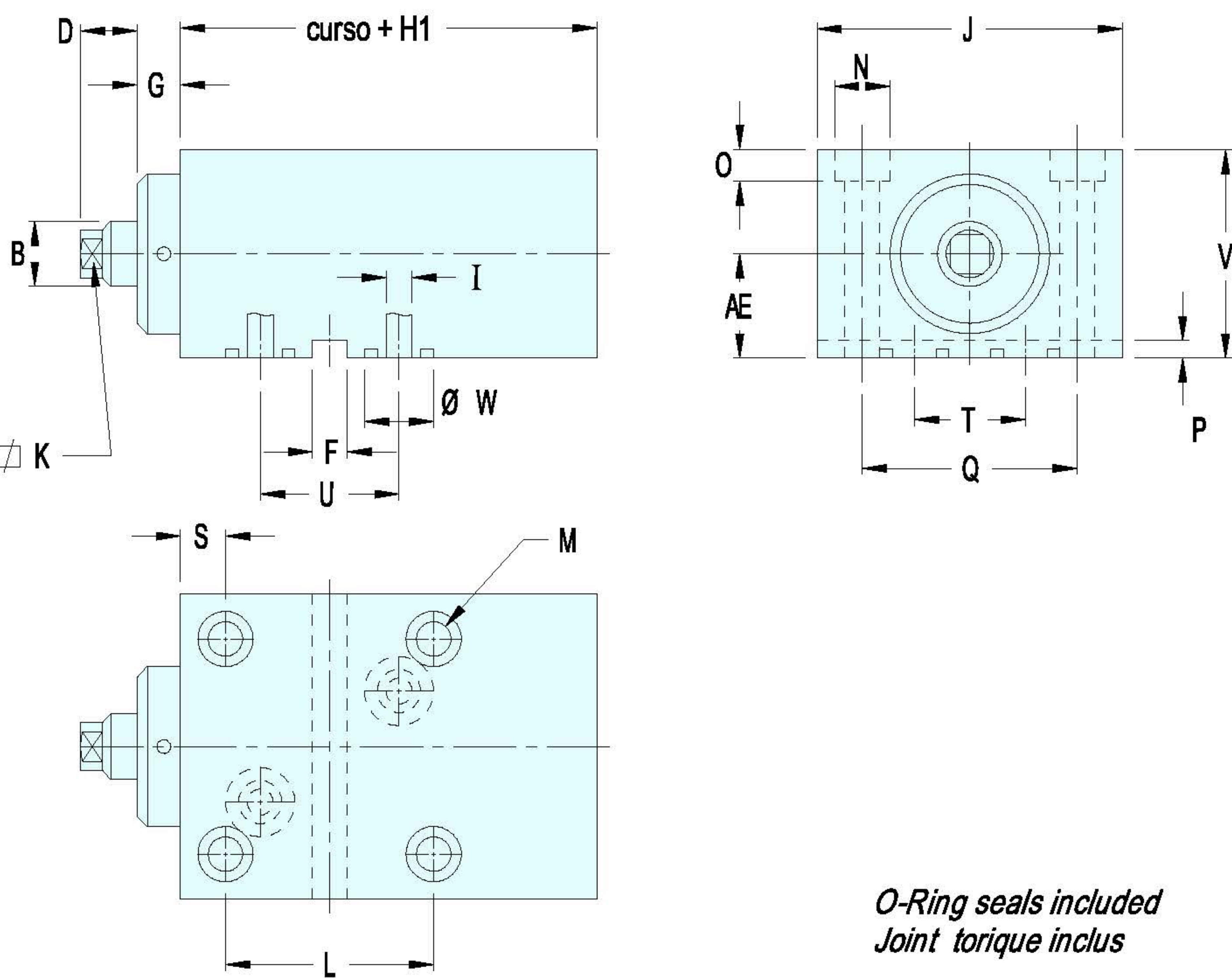
| Ø interior<br>Bore Ø<br>Ø Alesage | Ø 25 | Ø 32 | Ø 40 | Ø 50 | Ø 63 | Ø 80  | Ø 100 | Ø 125 |
|-----------------------------------|------|------|------|------|------|-------|-------|-------|
| B                                 | 14   | 16   | 20   | 28   | 30   | 40    | 50    | 60    |
|                                   | 16   | 18   | 25   | 30   | 36   | 45    | 56    | 65    |
| C                                 | 30   | 32   | 38   | 45   | 50   | 65    | 70    | 85    |
|                                   | 32   | 35   | 42   | 50   | 55   | 65    | 75    | 95    |
| D                                 | 18   | 18   | 20   | 20   | 20   | 25    | 28    | 30    |
| E                                 | 3    | 3    | 4    | 4    | 4    | 4     | 5     | 5     |
| F                                 | 10   | 12   | 15   | 20   | 23   | 28    | 30    | 34    |
| G                                 | 32   | 36   | 38   | 42   | 42   | 50    | 50    | 55    |
| H                                 | 35   | 42   | 50   | 60   | 75   | 95    | 115   | 140   |
| I                                 | 1/8" | 1/4" | 1/4" | 3/8" | 3/8" | 3/8"  | 1/2"  | 1/2"  |
| J                                 | 45   | 50   | 60   | 68   | 80   | 100   | 120   | 145   |
| K                                 | 12   | 14   | 17   | 25   | 27   | 36    | 45    | 55    |
|                                   | 14   | 16   | 22   | 27   | 32   | 41    | 51    | 60    |
| L                                 | 26   | 34   | 40   | 50   | 65   | 80    | 90    | 110   |
| M1                                | 7    | 9    | 11   | 13   | 13   | 17    | 21    | 21    |
| M2                                | 7    | 9    | 11   | 13   | 13   | 17    | 17    | 21    |
| O                                 | 70   | 75   | 106  | 130  | 145  | 170   | 200   | 220   |
| P                                 | 40   | 50   | 60   | 75   | 90   | 110   | 130   | 160   |
| Q                                 | 55   | 55   | 83   | 105  | 120  | 130   | 165   | 170   |
| S                                 | 60   | 70   | 95   | 108  | 120  | 150   | 170   | 204   |
| T                                 | 75   | 85   | 115  | 130  | 142  | 180   | 200   | 240   |
| U                                 | 133  | 148  | 158  | 188  | 199  | 228   | 243   | 269   |
| V                                 | 123  | 136  | 143  | 168  | 176  | 200   | 214   | 235   |
| Z                                 | 42   | 48   | 53   | 62   | 65   | 78    | 80    | 89    |
| W                                 | 79   | 86   | 87,5 | 106  | 110  | 120,5 | 128,5 | 140,5 |

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Nous changerons quelque `une dimension à demande du client .



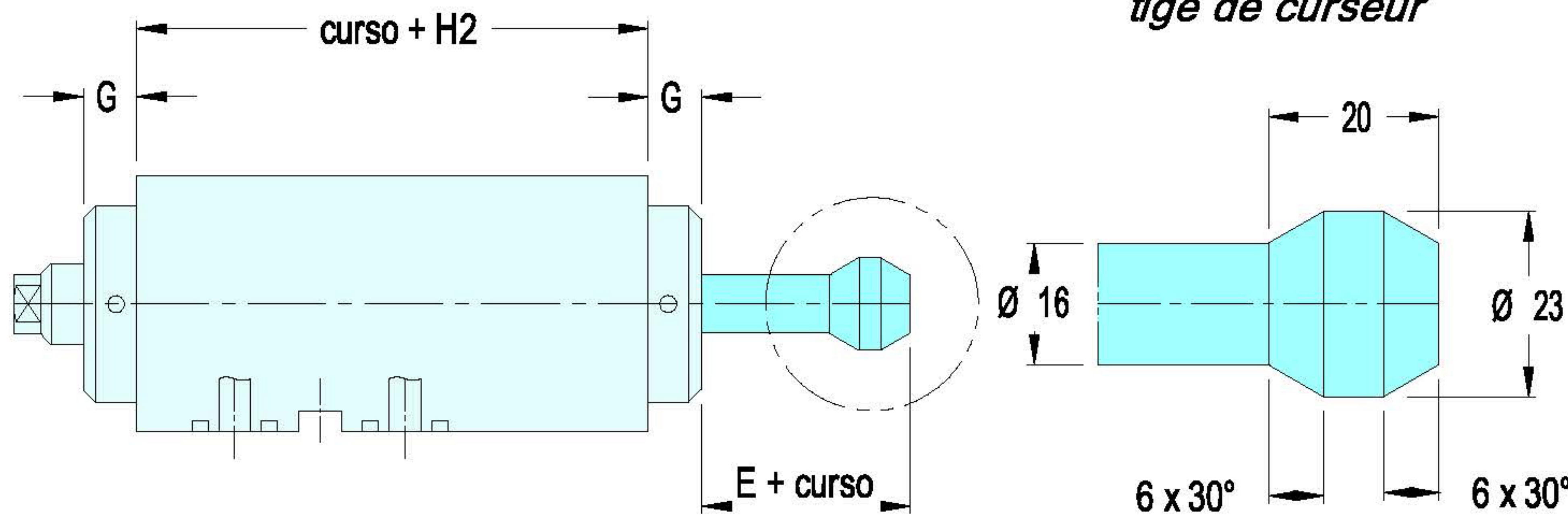


modelo GA1



O-Ring seals included  
Joint torique inclus

modelo GA2



haste com cursor  
cursor rod  
tige de curseur

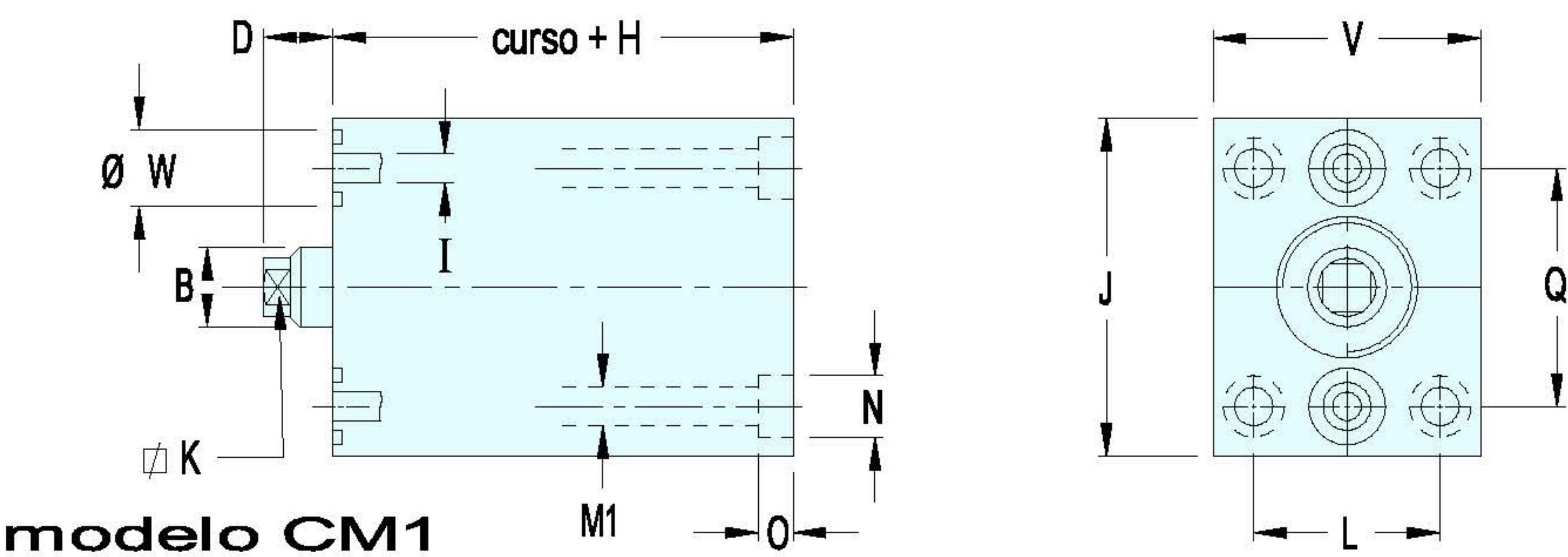


| Ø interior<br>Bore Ø<br>Ø Alesage | Ø 25 | Ø 32 | Ø 40 | Ø 50 | Ø 63 | Ø 80 | Ø 100 | Ø 125 |
|-----------------------------------|------|------|------|------|------|------|-------|-------|
| B                                 | 16   | 18   | 20   | 28   | 36   | 45   | 56    | 65    |
| D                                 | 18   | 18   | 20   | 20   | 20   | 25   | 28    | 30    |
| E                                 | 33   | 33   | 33   | 33   | 33   | 33   | 33    | 33    |
| F                                 | 8    | 10   | 12   | 16   | 16   | 20   | 20    | 20    |
| G                                 | 10   | 10   | 15   | 15   | 15   | 15   | 15    | 20    |
| H1                                | 58   | 53   | 71   | 80   | 90   | 104  | 107   | 121   |
| H2                                | 63   | 78   | 90   | 93   | 130  | 130  | 133   | 146   |
| I                                 | 5    | 6    | 6    | 7    | 8    | 9    | 11    | 12    |
| J                                 | 65   | 80   | 90   | 100  | 120  | 140  | 160   | 190   |
| K                                 | 14   | 16   | 17   | 25   | 32   | 41   | 51    | 60    |
| L                                 | 48   | 52   | 60   | 70   | 70   | 80   | 80    | 90    |
| M                                 | 7    | 9    | 11   | 13   | 13   | 13   | 17    | 17    |
| N                                 | 11   | 14   | 17   | 19   | 19   | 19   | 25    | 25    |
| O                                 | 7    | 9    | 11   | 13   | 13   | 13   | 17    | 17    |
| P                                 | 3    | 4    | 4    | 4    | 5    | 5    | 5     | 5     |
| Q                                 | 52   | 58   | 65   | 75   | 90   | 110  | 130   | 160   |
| S                                 | 8    | 12   | 14   | 12   | 24   | 24   | 24    | 25    |
| T                                 | 34   | 36   | 40   | 46   | 50   | 70   | 80    | 100   |
| U                                 | 30   | 32   | 36   | 40   | 40   | 46   | 46    | 50    |
| V                                 | 55   | 68   | 78   | 92   | 112  | 122  | 144   | 176   |
| Ø W                               | 14   | 16   | 18   | 18   | 18   | 20   | 20    | 22    |
| AE                                | 27,5 | 34   | 39   | 46   | 56   | 61   | 72    | 88    |

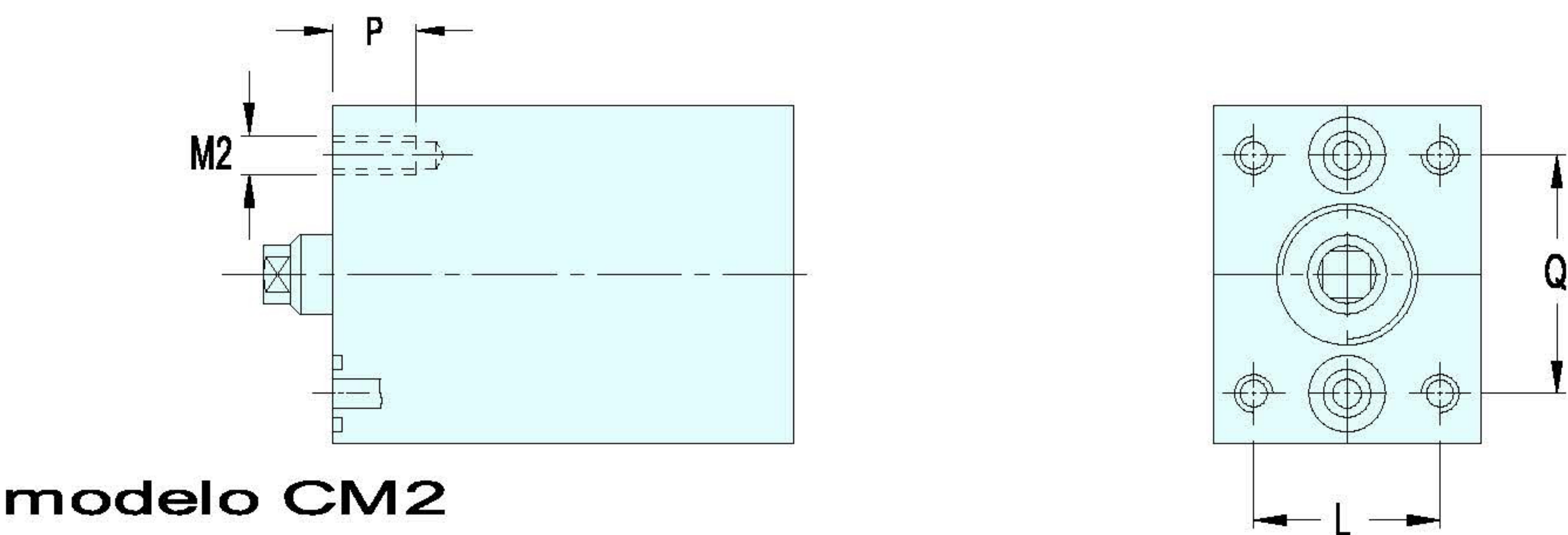
Nos cilindros GA com amortecimento, o comprimento total será indicado pela JOGUI.  
For GA cylinders with cushioning, the total length shall be given by JOGUI.  
Sur les vérins GA avec amortissement, la longueur totale sera indiquée par JOGUI.

A pedido do cliente altera-se qualquer cota .  
We can change any dimension specified by the customer .  
Nous changerons quelque`une dimension à demande du client .

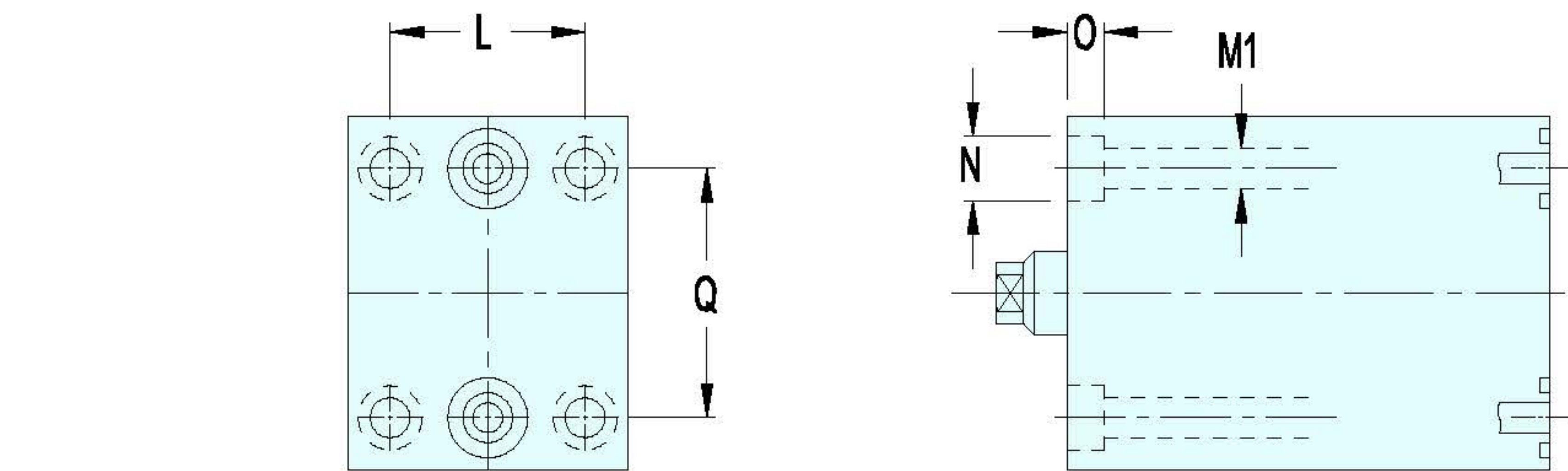




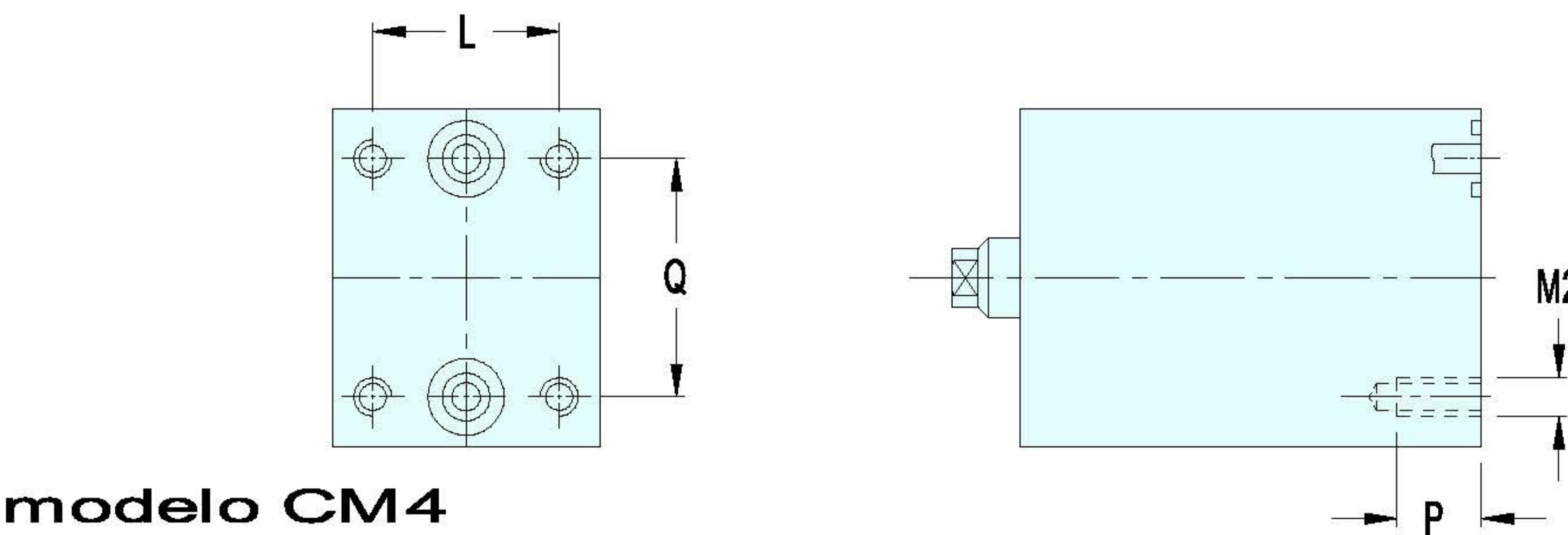
modelo CM1



modelo CM2



modelo CM3



modelo CM4



| Ø interior<br>Bore Ø<br>Ø Alesage | Ø 25 | Ø 32 | Ø 40 | Ø 50 | Ø 63 | Ø 80 | Ø 100 | Ø 125 |
|-----------------------------------|------|------|------|------|------|------|-------|-------|
| B                                 | 16   | 18   | 20   | 28   | 36   | 45   | 56    | 65    |
| D                                 | 18   | 18   | 20   | 20   | 20   | 25   | 28    | 30    |
| H                                 | 68   | 68   | 86   | 95   | 105  | 119  | 122   | 141   |
| I                                 | 5    | 6    | 6    | 7    | 8    | 9    | 11    | 12    |
| J                                 | 70   | 82   | 102  | 115  | 126  | 152  | 185   | 215   |
| K                                 | 14   | 16   | 17   | 25   | 32   | 41   | 51    | 60    |
| L                                 | 29   | 34   | 41   | 47   | 61   | 80   | 98    | 128   |
| M1                                | 9    | 9    | 11   | 13   | 17   | 21   | 25    | 25    |
| M2                                | M8   | M8   | M10  | M12  | M16  | M20  | M24   | M24   |
| N                                 | 14   | 14   | 17   | 19   | 25   | 31   | 37    | 37    |
| O                                 | 9    | 9    | 11   | 13   | 17   | 21   | 25    | 25    |
| P                                 | 16   | 16   | 20   | 30   | 35   | 40   | 50    | 50    |
| Q                                 | 48   | 58   | 72   | 84   | 96   | 117  | 144   | 172   |
| V                                 | 46   | 52   | 62   | 70   | 90   | 115  | 140   | 170   |
| Ø W                               | 14   | 16   | 18   | 18   | 18   | 20   | 20    | 22    |

O-Rings incluidos  
O-Ring seals included  
Joint torique inclus

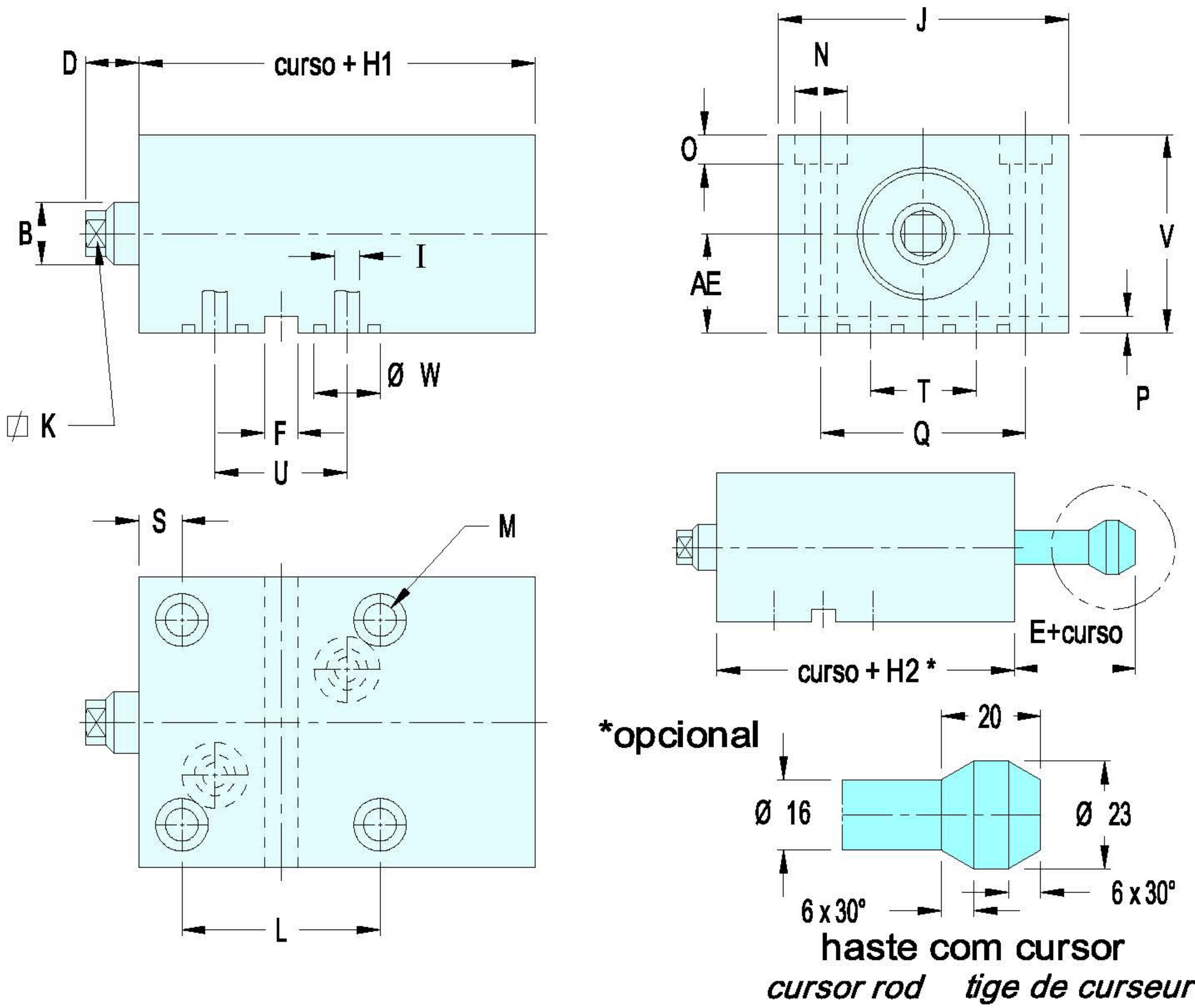
Nos cilindros CM com amortecimento, o comprimento total será indicado pela JOGUI.  
For CM cylinders with cushioning, the total length shall be given by JOGUI.  
Sur les vérins CM avec amortissement, la longueur totale sera indiquée par JOGUI.

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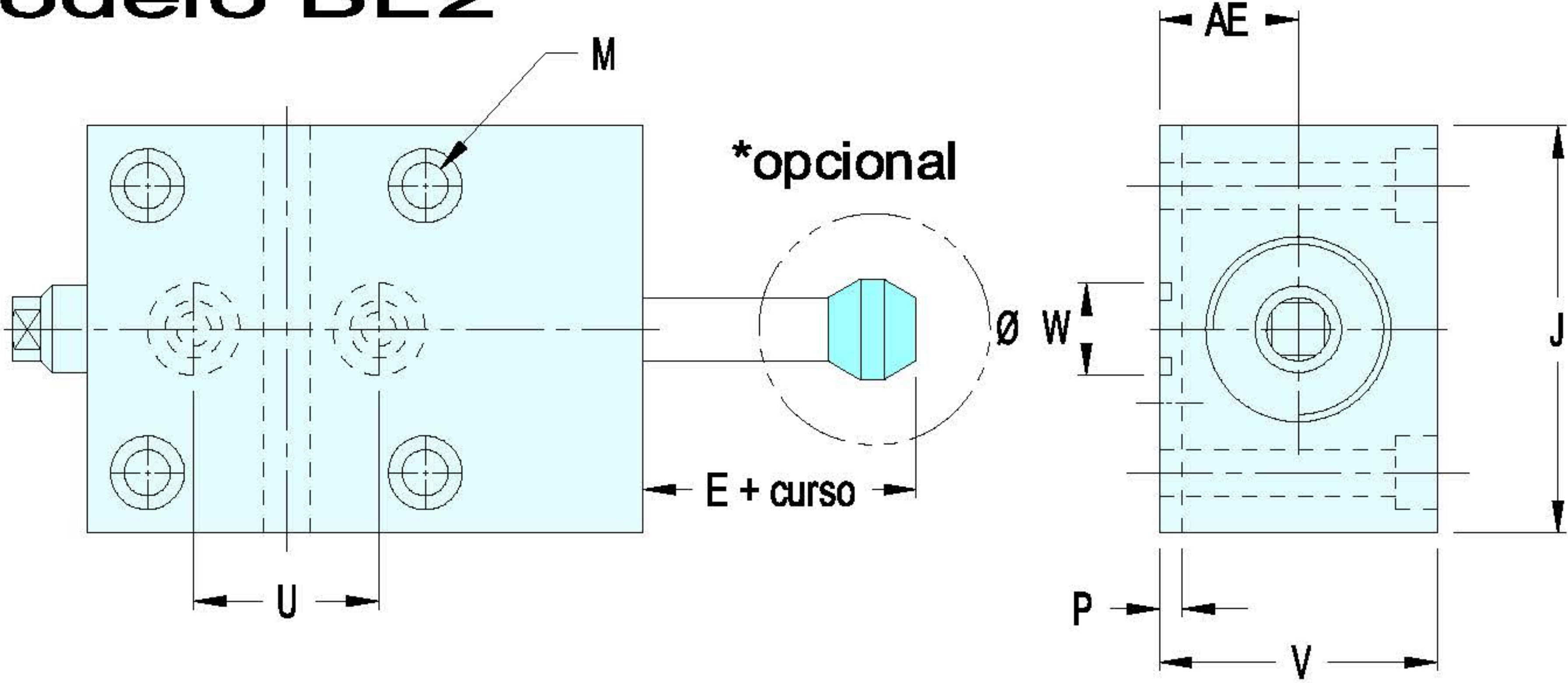




modelo BL1



modelo BL2



| Ø interior<br>Bore Ø<br>Ø Alesage | Ø 25 | Ø 32 | Ø 40 | Ø 50 | Ø 63 | Ø 80 | Ø 100 | Ø 125 |
|-----------------------------------|------|------|------|------|------|------|-------|-------|
| B                                 | 16   | 18   | 20   | 28   | 36   | 45   | 56    | 65    |
| D                                 | 18   | 18   | 20   | 20   | 20   | 25   | 28    | 30    |
| E                                 | 35   | 35   | 35   | 35   | 35   | 35   | 35    | 35    |
| F                                 | 8    | 10   | 12   | 16   | 16   | 20   | 20    | 20    |
| H1                                | 68   | 68   | 86   | 95   | 105  | 119  | 122   | 141   |
| H2*                               | 73   | 88   | 105  | 108  | 145  | 145  | 148   | 166   |
| I                                 | 5    | 6    | 6    | 7    | 8    | 9    | 11    | 12    |
| J                                 | 65   | 80   | 90   | 100  | 120  | 140  | 160   | 190   |
| K                                 | 14   | 16   | 17   | 25   | 32   | 41   | 51    | 60    |
| L                                 | 48   | 52   | 60   | 70   | 70   | 80   | 80    | 90    |
| M                                 | 7    | 9    | 9    | 13   | 13   | 13   | 17    | 17    |
| N                                 | 11   | 14   | 14   | 19   | 19   | 19   | 25    | 25    |
| O                                 | 7    | 9    | 9    | 13   | 13   | 13   | 17    | 17    |
| P                                 | 3    | 4    | 4    | 4    | 5    | 5    | 5     | 5     |
| Q                                 | 52   | 58   | 65   | 75   | 90   | 110  | 130   | 160   |
| S                                 | 18   | 22   | 29   | 27   | 39   | 39   | 39    | 45    |
| T                                 | 34   | 36   | 40   | 46   | 50   | 70   | 80    | 100   |
| U                                 | 30   | 32   | 36   | 40   | 40   | 46   | 46    | 50    |
| V                                 | 55   | 66   | 78   | 90   | 106  | 126  | 150   | 180   |
| Ø W                               | 14   | 16   | 18   | 18   | 18   | 20   | 20    | 22    |
| AE                                | 27,5 | 33   | 39   | 45   | 53   | 63   | 75    | 90    |

O-Rings incluidos  
O-Ring seals included  
Joint torique inclus

Nos cilindros BL com amortecimento, o comprimento total será indicado pela JOGUI.  
For BL cylinders with cushioning, the total length shall be given by JOGUI.  
Sur les vérins BL avec amortissement, la longueur totale sera indiquée par JOGUI.

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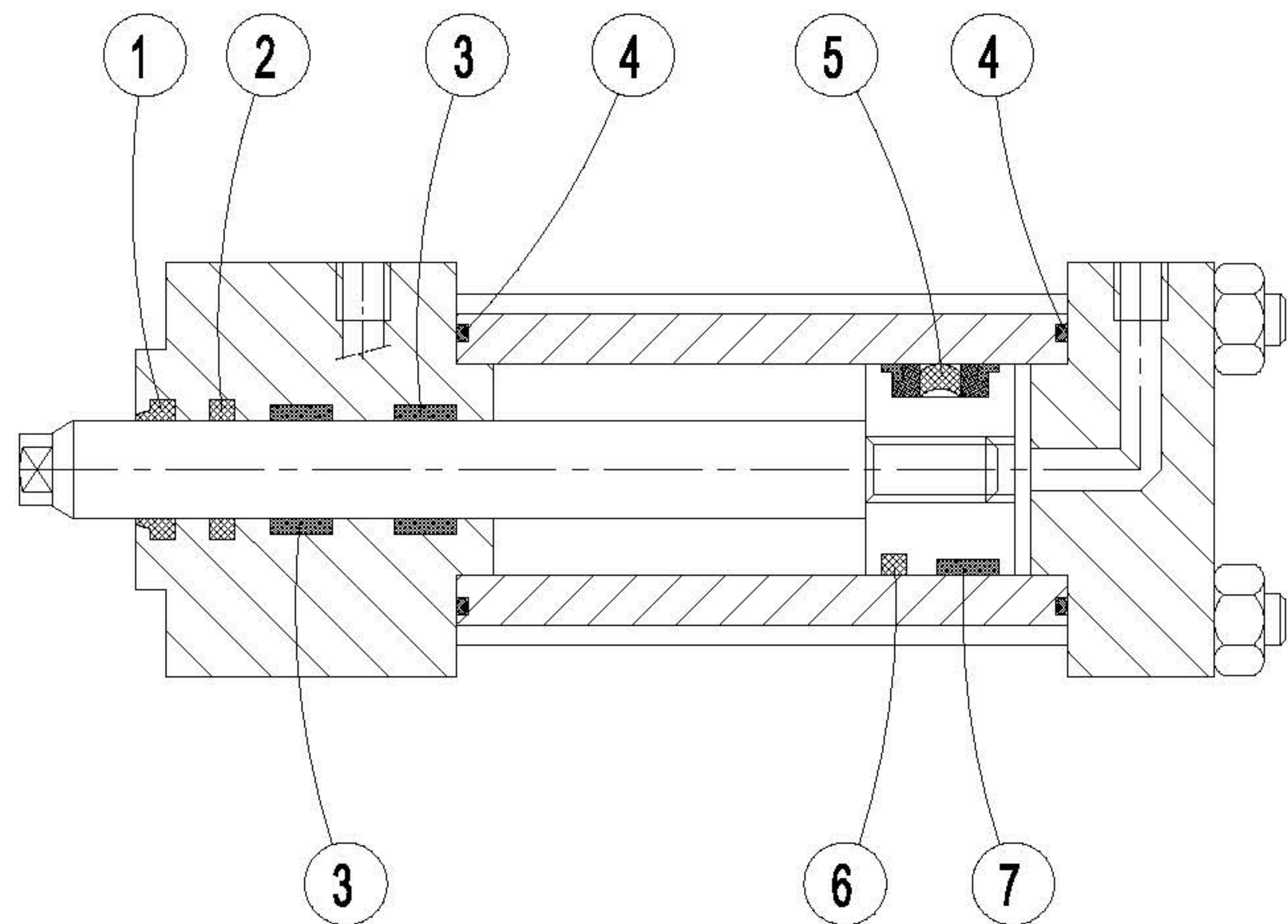




Lista de material

Parts list    Liste de pièces

Modelos CD



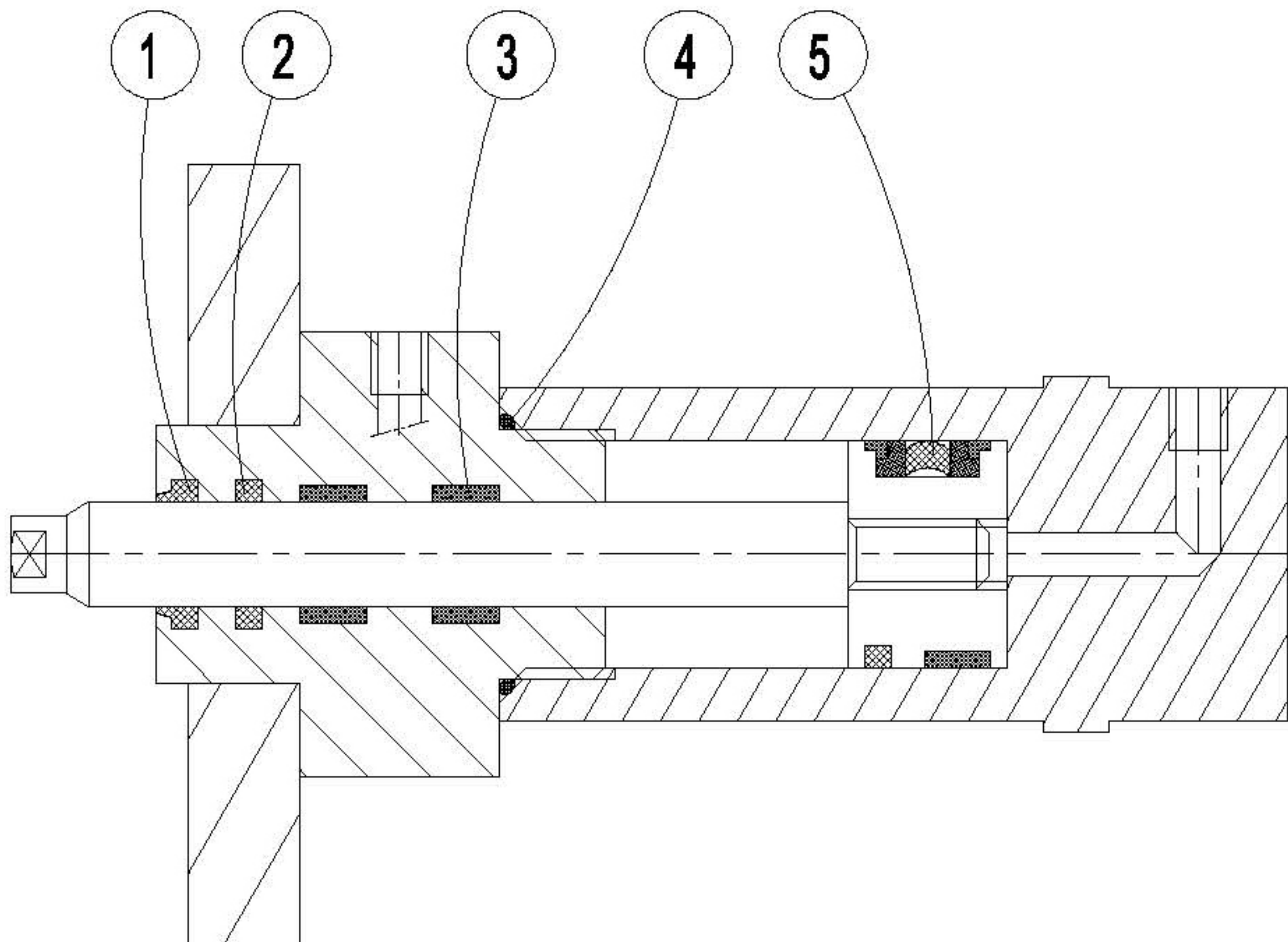
|   |                   |                   |                     |
|---|-------------------|-------------------|---------------------|
| 1 | Raspador          | Wiper             | Joint racleur       |
| 2 | Vedante da Haste  | Rod seal          | Joint de tige       |
| 3 | Anel de guiamento | Low-friction seal | Anneau antifriction |
| 4 | Vedante do tubo   | Sleeve seal       | Joint torique       |
| 5 | Vedante do êmbolo | Piston seal       | Joint de piston     |
| 6 | Vedante do êmbolo | Piston seal       | Joint de piston     |
| 7 | Anel de guiamento | Low-friction seal | Anneau antifriction |



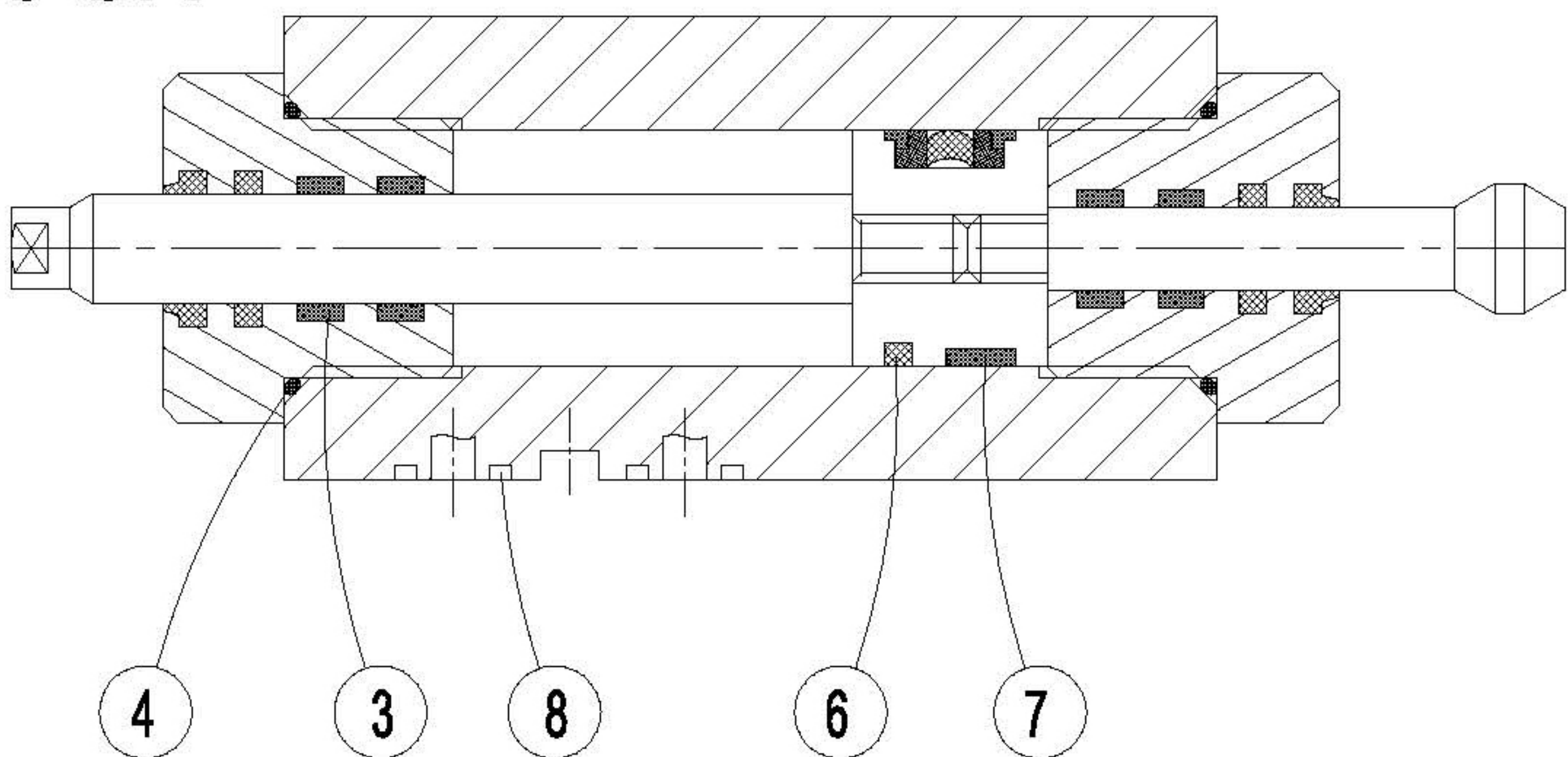
Lista de material

Parts list    Liste de pièces

Modelos JG



Modelos GA



|   |                    |                   |                     |
|---|--------------------|-------------------|---------------------|
| 1 | Raspador           | Wiper             | Joint racleur       |
| 2 | Vedante da Haste   | Rod seal          | Joint de tige       |
| 3 | Anel de guiamento  | Low-friction seal | Anneau antifriction |
| 4 | Vedante do tubo    | Sleeve seal       | Joint torique       |
| 5 | Vedante do êmbolo  | Piston seal       | Joint de piston     |
| 6 | Vedante do êmbolo  | Piston seal       | Joint de piston     |
| 7 | Anel de guiamento  | Low-friction seal | Anneau antifriction |
| 8 | Vedante do entrada | Seal              | Joint               |



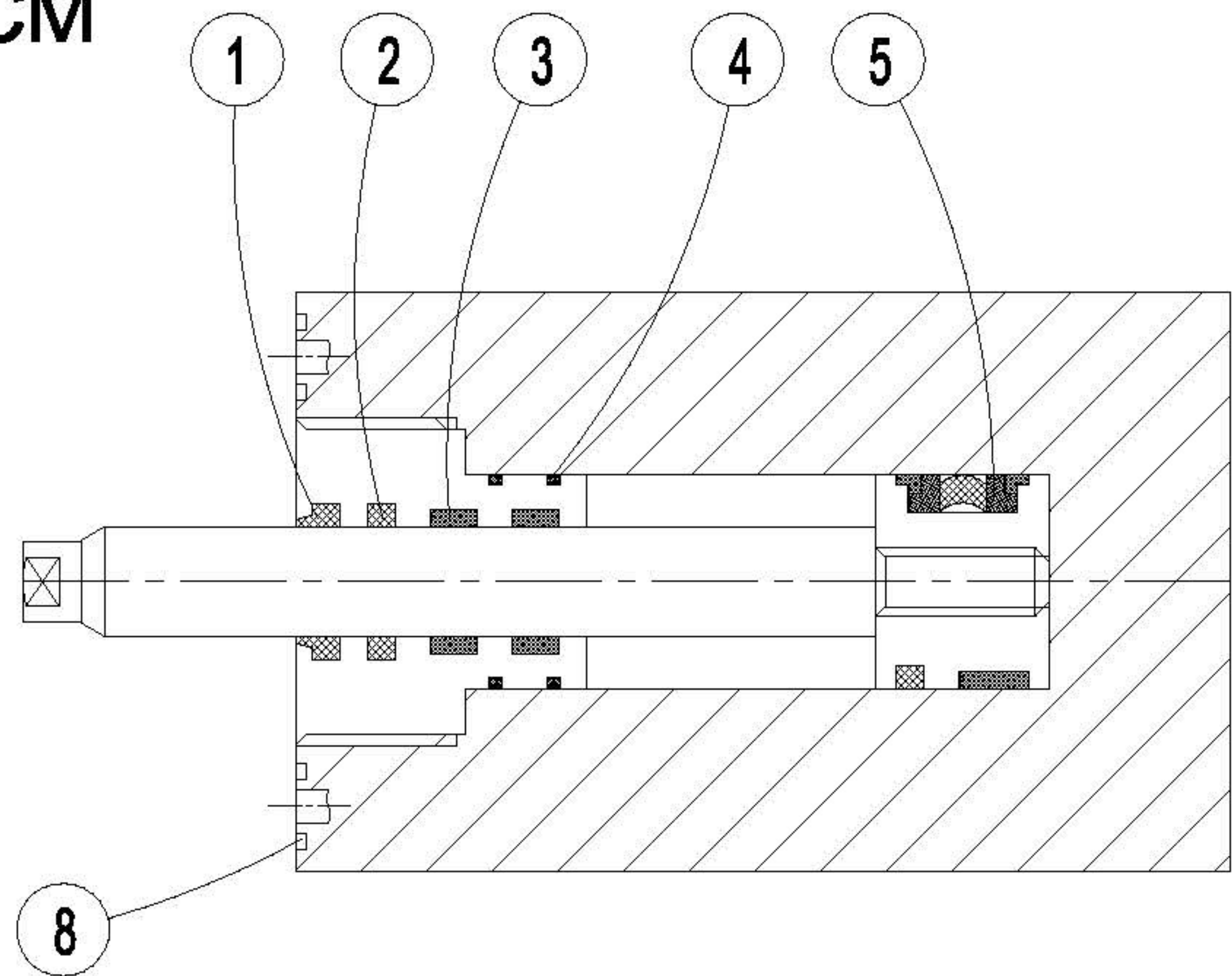


Lista de material

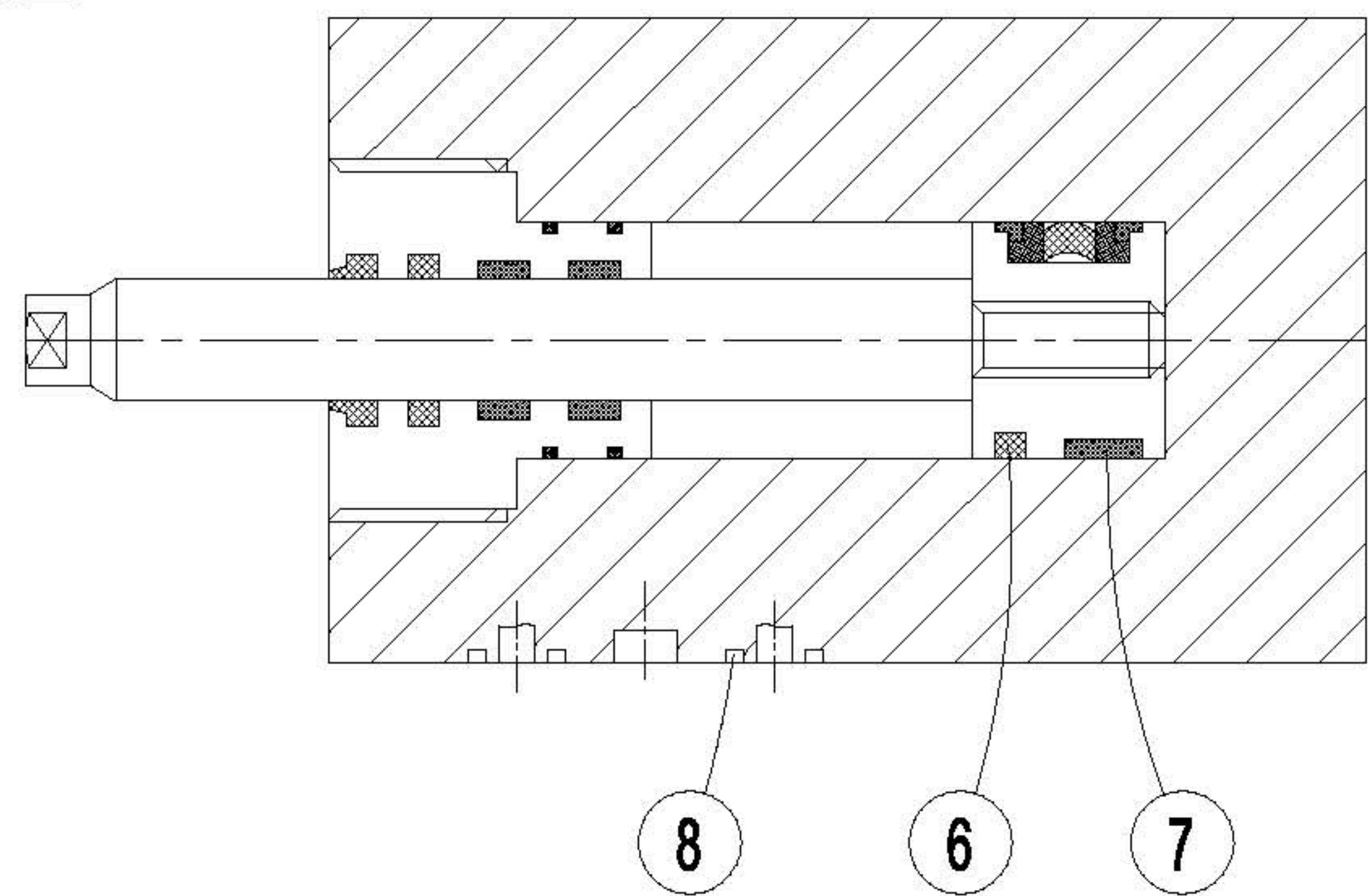
Parts list

Liste de pièces

Modelos CM



Modelos BL



|   |                    |                   |                    |
|---|--------------------|-------------------|--------------------|
| 1 | Raspador           | Wiper             | Joint racleur      |
| 2 | Vedante da Haste   | Rod seal          | Joint de tige      |
| 3 | Anel de guiamento  | Low-friction seal | Anneau antifricção |
| 4 | Vedante do tubo    | Sleeve seal       | Joint torique      |
| 5 | Vedante do êmbolo  | Piston seal       | Joint de piston    |
| 6 | Vedante do êmbolo  | Piston seal       | Joint de piston    |
| 7 | Anel de guiamento  | Low-friction seal | Anneau antifricção |
| 8 | Vedante da entrada | Seal              | Joint              |



Requisição nº

Quantidade

Projecto nº

data / /

|                       |                                                                                                |                   |                                                                |            |                              |            |            |     |      |  |
|-----------------------|------------------------------------------------------------------------------------------------|-------------------|----------------------------------------------------------------|------------|------------------------------|------------|------------|-----|------|--|
| modelo                | CD2<br>JG1<br>GA1                                                                              | CD3<br>JG2<br>GA2 | CD4<br>JG3                                                     | CD5<br>JG4 | CD6                          | CM1<br>BL1 | CM2<br>BL2 | CM3 | CM4  |  |
| Ø Interior            | Ø25 Ø32 Ø40 Ø50 Ø63 Ø80 Ø100 Ø125 (mm)                                                         |                   |                                                                |            |                              |            |            |     |      |  |
| haste                 | haste simples                                                                                  |                   |                                                                |            | haste dupla                  |            |            |     |      |  |
| extremidade da haste  | Ø14 Ø16 Ø18 Ø20 Ø25 Ø28 Ø30<br>Ø36 Ø40 Ø45 Ø50 Ø56 Ø60 Ø65<br>RI RE T<br>indicar rosca (pag.3) |                   |                                                                |            |                              |            |            |     | (mm) |  |
| curso                 | indicar em mm                                                                                  |                   |                                                                |            |                              |            |            |     |      |  |
| entradas óleo         | BSP BSPT NPT                                                                                   |                   |                                                                |            |                              |            |            |     |      |  |
| posição entradas óleo | frente :<br>E1 E2 E3 E4                                                                        |                   |                                                                |            | rectaguarda :<br>E1 E2 E3 E4 |            |            |     |      |  |
| amortecimento         | SA<br>AF<br>AR<br>AFR                                                                          |                   | posição :<br>frente : E1 E2 E3 E4<br>rectaguarda : E1 E2 E3 E4 |            |                              |            |            |     |      |  |

observações :