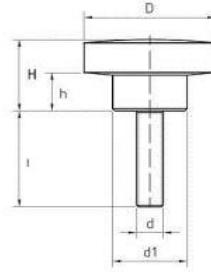
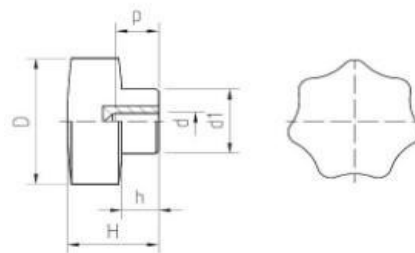


**Manipulo 7 Pontas Macho**  
**Baquelite com parafuso aço Zincado**



| Referencia | D  | d   | l  | H | h | d1 |
|------------|----|-----|----|---|---|----|
|            | 32 | M 6 | 15 |   |   |    |
|            | 32 | M 6 | 20 |   |   |    |
| 520509987  | 32 | M 6 | 30 |   |   |    |
| 520508886  | 40 | M 8 | 20 |   |   |    |
| 520511989  | 40 | M 8 | 30 |   |   |    |
| 520509988  | 50 | M 6 | 20 |   |   |    |
| 520509855  | 50 | M 8 | 25 |   |   |    |
| 520508878  | 50 | M 8 | 30 |   |   |    |
| 520512210  | 50 | M 8 | 40 |   |   |    |
| 520509856  | 50 | M10 | 30 |   |   |    |
| 520512211  | 50 | M10 | 45 |   |   |    |
|            | 63 | M 8 | 20 |   |   |    |
|            | 63 | M10 | 30 |   |   |    |
|            | 63 | M12 | 25 |   |   |    |

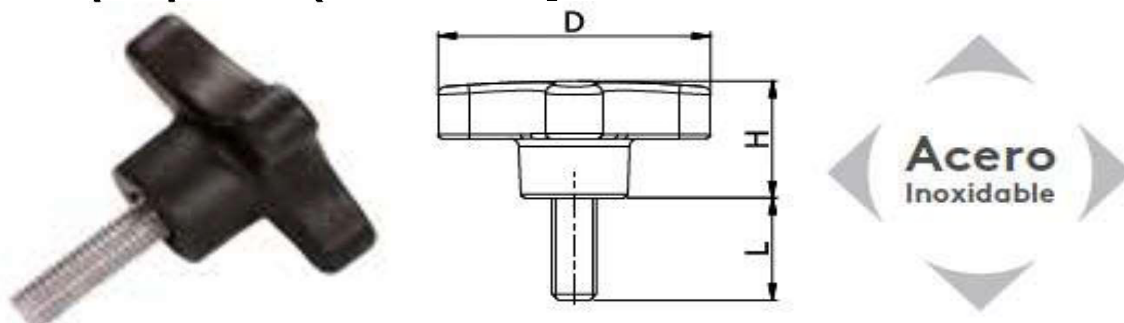
**Manipulo 7 Pontas Fêmea**  
**Baquelite com parafuso aço Zincado**



| Referencia | D  | d   | l | H | h | d1 |
|------------|----|-----|---|---|---|----|
|            | 32 | M 5 |   |   |   |    |
| 520510583  | 32 | M 6 |   |   |   |    |
| 520510193  | 40 | M 6 |   |   |   |    |
| 520509986  | 40 | M 8 |   |   |   |    |
| 520508879  | 50 | M 8 |   |   |   |    |
| 520508885  | 50 | M10 |   |   |   |    |
|            | 50 | M12 |   |   |   |    |
|            | 63 | M 8 |   |   |   |    |
|            | 63 | M10 |   |   |   |    |
|            | 63 | M12 |   |   |   |    |
|            | 80 | M10 |   |   |   |    |
|            | 80 | M12 |   |   |   |    |
|            | 80 | M16 |   |   |   |    |

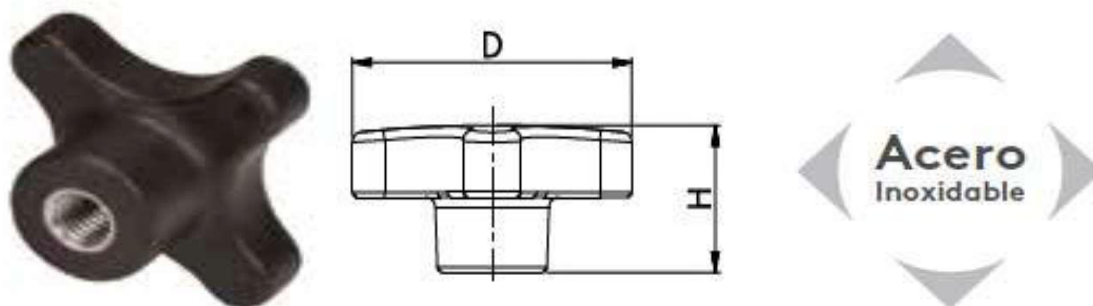


**Manipulo em estrela macho**  
**Polipropileno parafuso aço inox**



| Referencia | Rosca | D  | H  | L  |
|------------|-------|----|----|----|
|            | m6    | 38 | 23 | 25 |
|            | M8    | 38 | 23 | 20 |
|            | M8    | 38 | 23 | 30 |
|            | M8    | 50 | 26 | 25 |
|            | M10   | 60 | 29 | 25 |

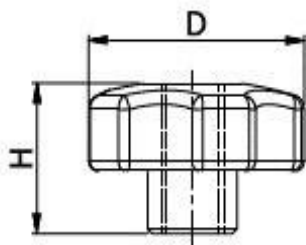
**Manipulo em estrela fêmea**  
**Polipropileno parafuso aço inox**



| Referencia | Rosca | D  | H  |
|------------|-------|----|----|
|            | M8    | 50 | 26 |
|            | M10   | 50 | 26 |
|            | M12   | 60 | 26 |

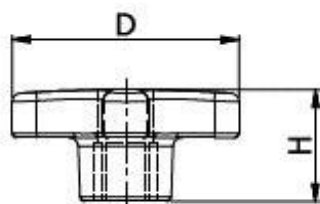


**Manipulo 5 Pontas fêmea todo roscado  
Polipropileno parafuso aço inox**



| Referencia | Rosca | D  | H  |
|------------|-------|----|----|
|            | M6    | 28 | 25 |
|            | M8    | 40 | 29 |
|            | M8    | 50 | 30 |
|            | M10   | 50 | 30 |
|            | M12   | 60 | 35 |

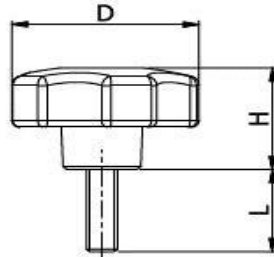
**Manipulo estrela fêmea todo roscado  
Polipropileno parafuso aço inox**



| Referencia | Rosca | D  | H  |
|------------|-------|----|----|
|            | M8    | 38 | 23 |
|            | M10   | 50 | 26 |

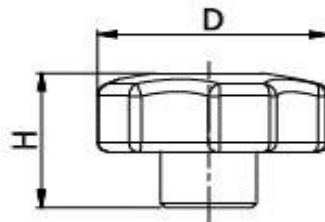


**Manipulo 5 Pontas macho**  
**Polipropileno parafuso aço inox**



| Referencia | Rosca | D  | H  | L  |
|------------|-------|----|----|----|
|            | M6    | 28 | 25 | 15 |
|            | M6    | 28 | 25 | 20 |
|            | M6    | 40 | 29 | 25 |
|            | M8    | 40 | 29 | 20 |
|            | M8    | 40 | 29 | 30 |
|            | M8    | 50 | 30 | 25 |
|            | M10   | 60 | 35 | 25 |
|            | M12   | 60 | 35 | 30 |

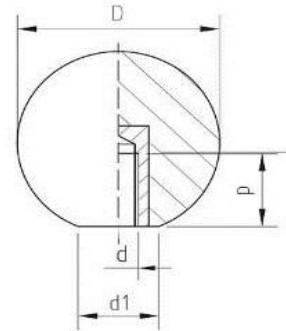
**Manipulo 5 Pontas fêmea**  
**Polipropileno parafuso aço inox**



| Referencia | Rosca | D  | H  |
|------------|-------|----|----|
|            | M6    | 28 | 25 |
|            | M8    | 40 | 29 |
|            | M8    | 50 | 30 |
|            | M10   | 50 | 30 |
|            | M10   | 60 | 35 |
|            | M12   | 60 | 35 |

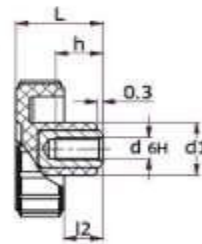


**Manipulo esférico  
Baquelite**



| Referencia | D  | d   | P | d1 |
|------------|----|-----|---|----|
| 520502487  | 20 | M 5 |   |    |
| 520511621  | 20 | M 8 |   |    |
| 520508952  | 32 | M10 |   |    |
| 520510553  | 40 | M10 |   |    |
| 520511620  | 40 | M12 |   |    |
|            | 25 | M10 |   |    |
| 520510507  | 32 | M 6 |   |    |
|            | 32 | M12 |   |    |

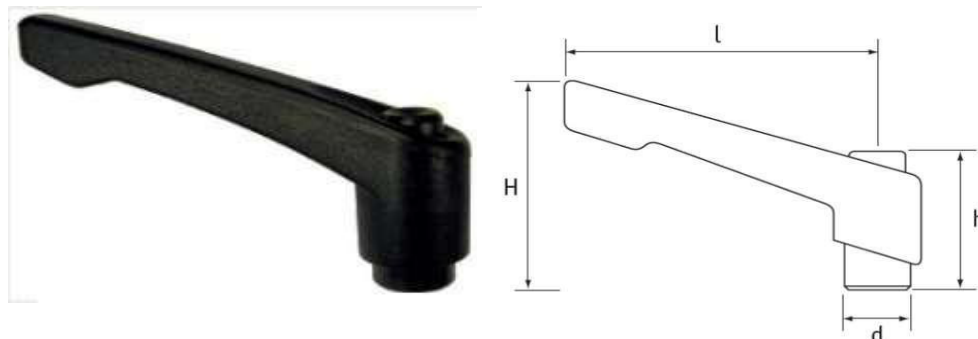
**Manipulo Redondo  
Baquelite**



| Referencia | D  | L  | d1 | I2   | Rosca |
|------------|----|----|----|------|-------|
|            | 44 | 24 | 17 | 10   | M 6   |
| 520503370  | 44 | 24 | 17 | 10   | M 8   |
| 520504548  | 54 | 30 | 20 | 12,5 | M10   |



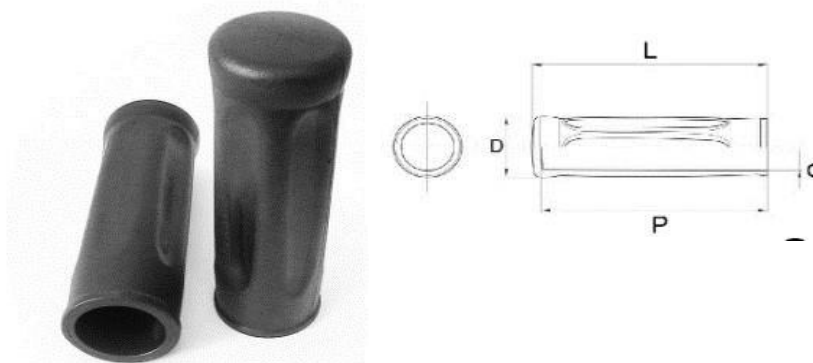
**Asa fabricada em zinco fundido**  
**Asa coberta com plástico**



| Referencia | L   | h    | d    | H  | Rosca |
|------------|-----|------|------|----|-------|
|            | 42  | 25   | 9,7  | 37 | M 5   |
|            | 42  | 25   | 9,7  | 37 | M 6   |
|            | 65  | 31,5 | 13,5 | 50 | M 6   |
|            | 65  | 31,5 | 13,5 | 50 | M 8   |
|            | 78  | 36   | 15,7 | 58 | M 8   |
| 520509421  | 78  | 36   | 15,7 | 58 | M10   |
|            | 92  | 43   | 18,5 | 69 | M10   |
|            | 92  | 42   | 18,5 | 69 | M12   |
|            | 108 | 51   | 22,7 | 79 | M12   |
|            | 108 | 51   | 22,7 | 79 | M16   |



## Punho Termoplástico Sem aba



| Referencia | L   | d  | P   | D  |
|------------|-----|----|-----|----|
|            | 115 | 18 | 110 | 31 |
|            | 115 | 20 | 110 | 31 |
|            | 115 | 22 | 110 | 31 |
|            | 125 | 24 | 120 | 36 |
|            | 125 | 26 | 120 | 36 |
|            | 125 | 28 | 120 | 36 |
|            | 125 | 29 | 120 | 36 |
| 520512194  | 130 | 30 | 125 | 42 |
| 520512596  | 130 | 33 | 125 | 42 |

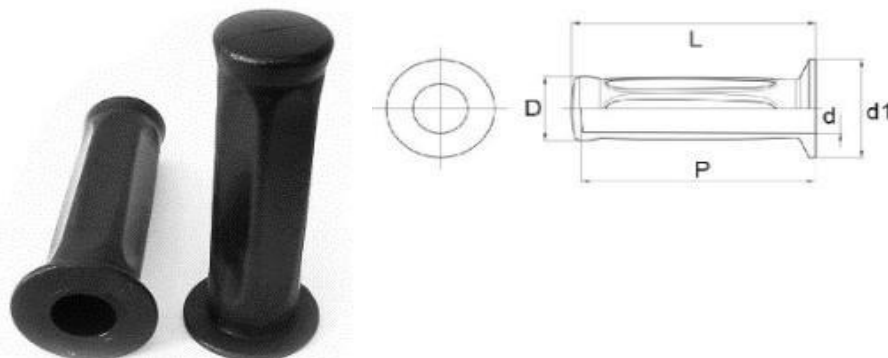
## Punho PVC



| Referencia | Diametro ompriment |     |
|------------|--------------------|-----|
| 520509516  | 13                 | 108 |
|            | 15,9               | 400 |



## Punho Termoplástico Com aba



| Referencia | L   | d  | P   | D  | d1 |
|------------|-----|----|-----|----|----|
|            | 115 | 18 | 110 | 31 | 44 |
|            | 115 | 20 | 110 | 31 | 44 |
| 199911252  | 115 | 22 | 110 | 31 | 44 |
| 520512202  | 125 | 24 | 120 | 36 | 49 |
|            | 125 | 26 | 120 | 36 | 49 |
| 520510663  | 125 | 27 | 120 | 36 | 49 |
|            | 125 | 29 | 120 | 36 | 49 |
|            | 130 | 30 | 125 | 42 | 51 |
|            | 130 | 33 | 125 | 42 | 51 |

## Punho PVC



| Referencia | Diámetro ompriment |     |
|------------|--------------------|-----|
| 520511470  | 19,1               | 110 |
|            | 22,2               | 110 |
|            | 25,4               | 110 |





### Punho PVC



| Referencia | Diametro | Comprimento |
|------------|----------|-------------|
| 520511698  | 15,9     | 75          |
|            | 19,1     | 75          |

### Punho PVC



| Referencia | Diametro | Comprimento |
|------------|----------|-------------|
| 520510133  | 22,2     | 110         |
|            | 25,4     | 110         |

### Punho PVC



| Referencia | Diametro | Comprimento |
|------------|----------|-------------|
| 520511694  | 19,1     | 110         |
|            | 22,2     | 110         |
|            | 25,4     | 110         |