



# **camitec**

**Cañellas y Micolau S.A.**

**Catálogo/Catàleg/Catalogue/Catalogue**

- Arandelas de caucho**
- Volanderes de catxú**
- Rubber Washers**
- Rondelles caoutchouc**

# ARANDELAS



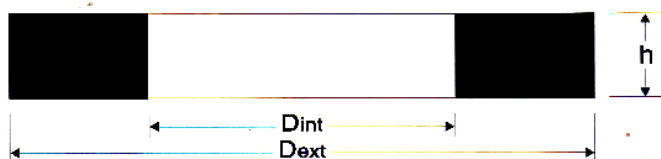
## Medidas:

D<sub>ext</sub> ..... diámetro exterior  
D<sub>int</sub> ..... diámetro interior  
h ..... altura  
ag ..... número de agujeros

| Referencia   | D <sub>ext</sub> | D <sub>int</sub> | h    | ag | Referencia  | D <sub>ext</sub> | D <sub>int</sub> | h     | ag | Referencia  | D <sub>ext</sub> | D <sub>int</sub> | h    | ag |
|--------------|------------------|------------------|------|----|-------------|------------------|------------------|-------|----|-------------|------------------|------------------|------|----|
| SAR00200040  | 4.0              | 2.0              | 5.5  |    | SAR00400120 | 12.0             | 4.0              | 2.0   |    | SAR00800150 | 15.0             | 8.0              | 3.0  |    |
| SAR00200050  | 5.0              | 2.0              | 2.0  |    | SAR00500120 | 12.0             | 5.0              | 1.0   |    | SAR00830150 | 15.0             | 8.3              | 6.5  |    |
| SAR00000059  | 5.9              | 0.0              | 2.5  |    | SAR00550120 | 12.0             | 5.5              | 1.0   |    | SAR00830151 | 15.0             | 8.3              | 15.0 |    |
| SAR00300060  | 6.0              | 3.0              | 1.5  |    | SAR00800120 | 12.0             | 8.0              | 1.8   |    | SAR00850150 | 15.0             | 8.5              | 2.5  |    |
| SAR00250070  | 7.0              | 2.5              | 2.0  |    | SAR00800121 | 12.0             | 8.0              | 2.0   |    | SAR00900150 | 15.0             | 9.0              | 64.0 |    |
| SAR00400070  | 7.0              | 4.0              | 8.5  |    | SAR00650125 | 12.5             | 6.5              | 10.5  |    | SAR01000150 | 15.0             | 10.0             | 8.0  |    |
| SAR00180075  | 7.5              | 1.8              | 3.0  |    | SAR00800125 | 12.5             | 8.0              | 2.0   |    | SAR00650155 | 15.5             | 6.5              | 25.0 |    |
| SAR00500080  | 8.0              | 5.0              | 1.5  |    | SAR00800126 | 12.5             | 8.0              | 11.0  |    | SAR00880156 | 15.6             | 8.8              | 4.0  |    |
| SAR00600080  | 8.0              | 6.0              | 3.0  |    | SAR00620127 | 12.7             | 6.2              | 3.2   |    | SAR01300158 | 15.8             | 13.0             | 1.5  |    |
| SAR00500083  | 8.3              | 5.0              | 22.0 |    | SAR00000130 | 13.0             | 0.0              | 5.0   |    | SAR00550160 | 16.0             | 5.5              | 4.0  |    |
| SAR00400084  | 8.4              | 4.0              | 2.0  |    | SAR00500130 | 13.0             | 5.0              | 50.0  |    | SAR00600160 | 16.0             | 6.0              | 2.0  |    |
| SAR00420085  | 8.5              | 4.2              | 2.0  |    | SAR00700130 | 13.0             | 7.0              | 5.0   |    | SAR00780160 | 16.0             | 7.8              | 4.0  |    |
| SAR00430089  | 8.9              | 4.3              | 1.2  |    | SAR00800130 | 13.0             | 8.0              | 2.0   |    | SAR00800160 | 16.0             | 8.0              | 2.0  |    |
| SAR00000090  | 9.0              | 0.0              | 3.5  |    | SAR00800131 | 13.0             | 8.0              | 5.0   |    | SAR00830160 | 16.0             | 8.3              | 2.1  |    |
| SAR00500090  | 9.0              | 5.0              | 25.0 |    | SAR00560131 | 13.1             | 5.6              | 2.1   |    | SAR01200160 | 16.0             | 12.0             | 1.5  |    |
| SAR00380095  | 9.5              | 3.8              | 14.0 |    | SAR00600135 | 13.5             | 6.0              | 7.0   |    | SAR00900165 | 16.5             | 9.0              | 5.5  |    |
| SAR00000100  | 10.0             | 0.0              | 6.5  |    | SAR00700135 | 13.5             | 7.0              | 5.5   |    | SAR00900166 | 16.5             | 9.0              | 6.0  |    |
| SAR000001002 | 10.0             | 0.0              | 18.0 |    | SAR00700136 | 13.5             | 7.0              | 6.0   |    | SAR00900170 | 17.0             | 9.0              | 11.0 |    |
| SAR00400100  | 10.0             | 4.0              | 3.0  |    | SAR00950135 | 13.5             | 9.5              | 1.2   |    | SAR00900171 | 17.0             | 9.0              | 14.0 |    |
| SAR00500100  | 10.0             | 5.0              | 1.0  |    | SAR00610137 | 13.7             | 6.1              | 4.7   |    | SAR01000170 | 17.0             | 10.0             | 4.5  |    |
| SAR00500101  | 10.0             | 5.0              | 2.2  |    | SAR00650137 | 13.7             | 6.5              | 2.5   |    | SAR01000171 | 17.0             | 10.0             | 15.0 |    |
| SAR00500102  | 10.0             | 5.0              | 6.0  |    | SAR00250140 | 14.0             | 2.5              | 1.6   |    | SAR01200170 | 17.0             | 12.0             | 3.5  |    |
| SAR00450105  | 10.5             | 4.5              | 4.5  |    | SAR00640140 | 14.0             | 6.4              | 1.6   |    | SAR01300170 | 17.0             | 13.0             | 12.0 |    |
| SAR00500105  | 10.5             | 5.0              | 5.0  |    | SAR00680140 | 14.0             | 6.8              | 4.5   |    | SAR01400170 | 17.0             | 14.0             | 6.0  |    |
| SAR00750105  | 10.5             | 7.5              | 5.0  |    | SAR00800140 | 14.0             | 8.0              | 3.0   |    | SAR01000175 | 17.5             | 10.0             | 8.0  |    |
| SAR00490108  | 10.8             | 4.9              | 5.0  |    | SAR01000140 | 14.0             | 10.0             | 2.6   |    | SAR01250175 | 17.5             | 12.5             | 70.0 |    |
| SAR00450110  | 11.0             | 4.5              | 1.0  |    | SAR01100140 | 14.0             | 11.0             | 12.4  |    | SAR01300175 | 17.5             | 13.0             | 51.5 |    |
| SAR00450111  | 11.0             | 4.5              | 2.0  |    | SAR00920143 | 14.3             | 9.2              | 2.3   |    | SAR00000180 | 18.0             | 0.0              | 10.0 |    |
| SAR00500110  | 11.0             | 5.0              | 1.0  |    | SAR00820146 | 14.6             | 8.2              | 109.0 |    | SAR00550180 | 18.0             | 5.5              | 4.0  |    |
| SAR00570110  | 11.0             | 5.7              | 7.5  |    | SAR00870147 | 14.7             | 8.7              | 5.0   |    | SAR00800180 | 18.0             | 8.0              | 4.5  |    |
| SAR00600110  | 11.0             | 6.0              | 1.2  |    | SAR00990149 | 14.9             | 9.9              | 7.4   |    | SAR01150180 | 18.0             | 11.5             | 13.0 |    |
| SAR00700111  | 11.0             | 7.0              | 85.0 |    | SAR00000150 | 15.0             | 0.0              | 4.0   |    | SAR01200180 | 18.0             | 12.0             | 10.0 |    |
| SAR00750110  | 11.0             | 7.5              | 21.0 |    | SAR00000151 | 15.0             | 0.0              | 5.0   |    | SAR01300180 | 18.0             | 13.0             | 3.5  |    |
| SAR00550116  | 11.5             | 5.5              | 9.0  |    | SAR00000152 | 15.0             | 0.0              | 25.0  |    | SAR01400180 | 18.0             | 14.0             | 2.0  |    |
| SAR00600115  | 11.5             | 6.0              | 6.5  |    | SAR00300150 | 15.0             | 3.0              | 3.0   |    | SAR01600180 | 18.0             | 16.0             | 30.0 |    |
| SAR00800115  | 11.5             | 8.0              | 2.0  |    | SAR00440150 | 15.0             | 4.4              | 5.0   |    | SAR01070183 | 18.3             | 10.7             | 4.0  |    |
| SAR00850115  | 11.5             | 8.5              | 1.0  |    | SAR00550150 | 15.0             | 5.5              | 4.5   |    | SAR00000190 | 19.0             | 0.0              | 20.0 |    |
| SAR00850116  | 11.5             | 8.5              | 21.5 |    | SAR00600150 | 15.0             | 6.0              | 4.0   |    | SAR00400190 | 19.0             | 4.0              | 1.0  |    |
| SAR00000120  | 12.0             | 0.0              | 4.0  |    | SAR00600152 | 15.0             | 6.0              | 15.0  |    | SAR00400191 | 19.0             | 4.0              | 2.0  |    |
| SAR00000121  | 12.0             | 0.0              | 4.5  |    | SAR00600153 | 15.0             | 6.0              | 20.0  |    | SAR00450190 | 19.0             | 4.5              | 2.0  |    |
| SAR00000123  | 12.0             | 0.0              | 7.0  |    | SAR00600154 | 15.0             | 6.0              | 24.0  |    | SAR00550190 | 19.0             | 5.5              | 2.1  |    |
| SAR00000124  | 12.0             | 0.0              | 15.0 |    | SAR00700150 | 15.0             | 7.0              | 14.0  |    | SAR00850190 | 19.0             | 8.5              | 2.0  |    |

| Referencia  | D <sub>ext</sub> | D <sub>int</sub> | h ag  | Referencia  | D <sub>ext</sub> | D <sub>int</sub> | h ag | Referencia  | D <sub>ext</sub> | D <sub>int</sub> | h ag  |
|-------------|------------------|------------------|-------|-------------|------------------|------------------|------|-------------|------------------|------------------|-------|
| SAR00950190 | 19.0             | 9.5              | 8.0   | SAR01800220 | 22.0             | 18.0             | 5.0  | SAR02100265 | 26.5             | 21.0             | 3.0   |
| SAR01000190 | 19.0             | 10.0             | 2.0   | SAR01270222 | 22.2             | 12.7             | 3.2  | SAR00750270 | 27.0             | 7.5              | 2.3   |
| SAR01300190 | 19.0             | 13.0             | 1.5   | SAR01320222 | 22.2             | 13.2             | 7.0  | SAR01300270 | 27.0             | 13.0             | 10.0  |
| SAR01400190 | 19.0             | 14.0             | 2.0   | SAR01550225 | 22.5             | 15.5             | 11.0 | SAR01600270 | 27.0             | 16.0             | 20.0  |
| SAR00800192 | 19.2             | 8.0              | 2.0   | SAR01850225 | 22.5             | 18.5             | 5.0  | SAR01800270 | 27.0             | 18.0             | 15.0  |
| SAR01000195 | 19.5             | 10.0             | 4.5   | SAR01000230 | 23.0             | 10.0             | 21.0 | SAR01900270 | 27.0             | 19.0             | 5.0   |
| SAR00000200 | 20.0             | 0.0              | 28.0  | SAR01200230 | 23.0             | 12.0             | 2.5  | SAR02000270 | 27.0             | 20.0             | 13.0  |
| SAR00350200 | 20.0             | 3.5              | 10.0  | SAR01250230 | 23.0             | 12.5             | 27.5 | SAR02080270 | 27.0             | 20.8             | 2.0   |
| SAR00600200 | 20.0             | 6.0              | 4.0   | SAR01500230 | 23.0             | 15.0             | 2.0  | SAR02120272 | 27.2             | 21.2             | 3.0   |
| SAR00700200 | 20.0             | 7.0              | 2.0   | SAR01590230 | 23.0             | 15.9             | 30.0 | SAR00500278 | 27.8             | 5.0              | 5.0   |
| SAR00850200 | 20.0             | 8.5              | 70.0  | SAR01200232 | 23.2             | 12.0             | 5.7  | SAR01200280 | 28.0             | 12.0             | 2.0   |
| SAR01000200 | 20.0             | 10.0             | 3.0   | SAR01200233 | 23.3             | 12.0             | 22.0 | SAR01200281 | 28.0             | 12.0             | 34.0  |
| SAR01000201 | 20.0             | 10.0             | 4.0   | SAR00550235 | 23.5             | 5.5              | 2.0  | SAR01300280 | 28.0             | 13.0             | 3.0   |
| SAR01000202 | 20.0             | 10.0             | 50.0  | SAR01800235 | 23.5             | 18.0             | 3.0  | SAR01350280 | 28.0             | 13.5             | 10.0  |
| SAR01000203 | 20.0             | 10.0             | 100.0 | SAR00000240 | 24.0             | 0.0              | 7.0  | SAR01500280 | 28.0             | 15.0             | 3.0   |
| SAR01100200 | 20.0             | 11.0             | 2.0   | SAR00720240 | 24.0             | 7.2              | 3.5  | SAR01500281 | 28.0             | 15.0             | 10.0  |
| SAR01100201 | 20.0             | 11.0             | 3.0   | SAR00800240 | 24.0             | 8.0              | 20.0 | SAR01550280 | 28.0             | 15.5             | 2.7   |
| SAR01100202 | 20.0             | 11.0             | 20.0  | SAR01200240 | 24.0             | 12.0             | 0.5  | SAR01600280 | 28.0             | 16.0             | 12.0  |
| SAR01100203 | 20.0             | 11.0             | 22.0  | SAR01200242 | 24.0             | 12.0             | 10.0 | SAR01600281 | 28.0             | 16.0             | 32.0  |
| SAR01150200 | 20.0             | 11.5             | 6.5   | SAR01400240 | 24.0             | 14.0             | 2.5  | SAR01800280 | 28.0             | 18.0             | 3.0   |
| SAR01200200 | 20.0             | 12.0             | 3.0   | SAR01600240 | 24.0             | 16.0             | 2.0  | SAR01900280 | 28.0             | 19.0             | 1.5   |
| SAR01200202 | 20.0             | 12.0             | 15.0  | SAR01700240 | 24.0             | 17.0             | 2.0  | SAR02000280 | 28.0             | 20.0             | 4.0   |
| SAR01250200 | 20.0             | 12.5             | 20.0  | SAR00900242 | 24.2             | 9.0              | 5.0  | SAR02700280 | 28.0             | 27.0             | 7.0   |
| SAR01260200 | 20.0             | 12.6             | 4.6   | SAR01870224 | 24.4             | 18.7             | 4.1  | SAR01200282 | 28.2             | 12.0             | 14.5  |
| SAR01300200 | 20.0             | 13.0             | 4.5   | SAR01250245 | 24.5             | 12.5             | 22.8 | SAR02320282 | 28.2             | 23.2             | 3.0   |
| SAR01300202 | 20.0             | 13.0             | 7.0   | SAR01400245 | 24.5             | 14.0             | 3.0  | SAR02160286 | 28.6             | 21.6             | 2.8   |
| SAR01400200 | 20.0             | 14.0             | 4.0   | SAR01400246 | 24.5             | 14.0             | 4.0  | SAR01600290 | 29.0             | 16.0             | 18.0  |
| SAR01400201 | 20.0             | 14.0             | 7.0   | SAR00000250 | 25.0             | 0.0              | 7.0  | SAR01750290 | 29.0             | 17.5             | 14.0  |
| SAR01580200 | 20.0             | 15.8             | 1.0   | SAR00800250 | 25.0             | 8.0              | 3.0  | SAR02400290 | 29.0             | 24.0             | 1.4   |
| SAR01650200 | 20.0             | 16.5             | 15.5  | SAR00900252 | 25.0             | 9.0              | 2.0  | SAR00630293 | 29.3             | 6.3              | 1.5   |
| SAR00000205 | 20.5             | 0.0              | 18.0  | SAR01000250 | 25.0             | 10.0             | 6.5  | SAR01400295 | 29.5             | 14.0             | 10.5  |
| SAR00400205 | 20.5             | 4.0              | 10.0  | SAR01050250 | 25.0             | 10.5             | 50.0 | SAR00000300 | 30.0             | 0.0              | 105.0 |
| SAR00620208 | 20.8             | 6.2              | 5.5   | SAR01100250 | 25.0             | 11.0             | 3.0  | SAR00700300 | 30.0             | 7.0              | 5.0   |
| SAR00520210 | 21.0             | 5.2              | 3.0   | SAR01500250 | 25.0             | 15.0             | 4.0  | SAR00700302 | 30.0             | 7.0              | 30.0  |
| SAR00900210 | 21.0             | 9.0              | 1.5   | SAR01500251 | 25.0             | 15.0             | 15.0 | SAR00750300 | 30.0             | 7.5              | 30.0  |
| SAR01000210 | 21.0             | 10.0             | 5.0   | SAR01600250 | 25.0             | 16.0             | 3.0  | SAR00800300 | 30.0             | 8.0              | 15.0  |
| SAR01800210 | 21.0             | 18.0             | 70.0  | SAR01700250 | 25.0             | 17.0             | 1.0  | SAR00800303 | 30.0             | 8.0              | 30.0  |
| SAR01900210 | 21.0             | 19.0             | 10.0  | SAR01800251 | 25.0             | 18.0             | 4.0  | SAR00850300 | 30.0             | 8.5              | 3.0   |
| SAR01050215 | 21.5             | 10.5             | 10.0  | SAR01200255 | 25.5             | 12.0             | 10.0 | SAR01000300 | 30.0             | 10.0             | 5.0   |
| SAR01550215 | 21.5             | 15.5             | 10.5  | SAR00900256 | 25.6             | 9.0              | 2.0  | SAR01100300 | 30.0             | 11.0             | 5.5   |
| SAR01600215 | 21.5             | 16.0             | 8.0   | SAR01100260 | 26.0             | 11.0             | 4.0  | SAR01100302 | 30.0             | 11.0             | 16.0  |
| SAR00600220 | 22.0             | 6.0              | 2.0   | SAR01100263 | 26.0             | 11.0             | 26.0 | SAR01300300 | 30.0             | 13.0             | 13.0  |
| SAR00900220 | 22.0             | 9.0              | 10.0  | SAR01200260 | 26.0             | 12.0             | 20.0 | SAR01400300 | 30.0             | 14.0             | 3.5   |
| SAR01000220 | 22.0             | 10.0             | 6.0   | SAR01300260 | 26.0             | 13.0             | 26.0 | SAR01400301 | 30.0             | 14.0             | 10.0  |
| SAR01020220 | 22.0             | 10.2             | 20.0  | SAR01500260 | 26.0             | 15.0             | 4.0  | SAR01500300 | 30.0             | 15.0             | 4.0   |
| SAR01100220 | 22.0             | 11.0             | 6.0   | SAR01500261 | 26.0             | 15.0             | 5.0  | SAR01600300 | 30.0             | 16.0             | 30.0  |
| SAR01200220 | 22.0             | 12.0             | 15.0  | SAR01800260 | 26.0             | 18.0             | 7.0  | SAR01600303 | 30.0             | 16.0             | 45.0  |
| SAR01400220 | 22.0             | 14.0             | 4.0   | SAR02000260 | 26.0             | 20.0             | 8.0  | SAR01650300 | 30.0             | 16.5             | 31.0  |
| SAR01400223 | 22.0             | 14.0             | 25.0  | SAR02150260 | 26.0             | 21.5             | 15.2 | SAR01800300 | 30.0             | 18.0             | 31.0  |
| SAR01600221 | 22.0             | 16.0             | 4.5   | SAR02150261 | 26.0             | 21.5             | 15.5 | SAR02000300 | 30.0             | 20.0             | 3.0   |
| SAR01600222 | 22.0             | 16.0             | 10.0  | SAR01400265 | 26.5             | 14.0             | 4.3  | SAR02000301 | 30.0             | 20.0             | 5.0   |

# ARANDELAS



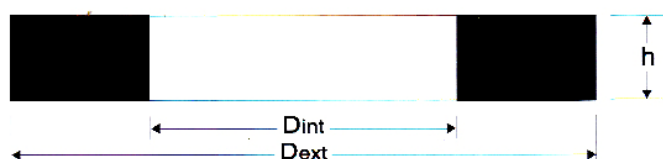
## Medidas:

$D_{ext}$  ..... diámetro exterior  
 $D_{int}$  ..... diámetro interior  
 $h$  ..... altura  
 $ag$  ..... número de agujeros

| Referencia  | $D_{ext}$ | $D_{int}$ | $h$  | $ag$ | Referencia  | $D_{ext}$ | $D_{int}$ | $h$  | $ag$ | Referencia  | $D_{ext}$ | $D_{int}$ | $h$  | $ag$ |
|-------------|-----------|-----------|------|------|-------------|-----------|-----------|------|------|-------------|-----------|-----------|------|------|
| SAR02200300 | 30.0      | 22.0      | 4.0  |      | SAR02800350 | 35.0      | 28.0      | 4.5  |      | SAR02300388 | 38.8      | 23.0      | 6.8  |      |
| SAR02400300 | 30.0      | 24.0      | 2.5  |      | SAR02800350 | 35.0      | 28.0      | 6.0  |      | SAR01300390 | 39.0      | 13.0      | 25.0 |      |
| SAR02350305 | 30.5      | 23.5      | 2.4  |      | SAR02900350 | 35.0      | 29.0      | 70.0 |      | SAR02100390 | 39.0      | 21.0      | 8.0  |      |
| SAR00000306 | 30.6      | 0.0       | 2.5  |      | SAR02450356 | 35.5      | 24.5      | 10.0 |      | SAR02700390 | 39.0      | 27.0      | 3.0  |      |
| SAR00000310 | 31.0      | 0.0       | 16.0 |      | SAR02450355 | 35.5      | 24.5      | 2.0  |      | SAR03000390 | 39.0      | 30.0      | 30.0 |      |
| SAR01400310 | 31.0      | 14.0      | 3.0  |      | SAR02550355 | 35.5      | 25.5      | 2.5  |      | SAR02900394 | 39.4      | 29.0      | 13.5 |      |
| SAR01740315 | 31.5      | 17.4      | 40.0 |      | SAR02500358 | 35.8      | 25.0      | 10.0 |      | SAR02680397 | 39.7      | 26.8      | 6.5  |      |
| SAR02680318 | 31.8      | 26.8      | 3.5  |      | SAR01220360 | 36.0      | 12.2      | 46.0 |      | SAR00000400 | 40.0      | 0.0       | 40.0 |      |
| SAR00700320 | 32.0      | 7.0       | 34.0 |      | SAR02200360 | 36.0      | 22.0      | 4.0  |      | SAR00000401 | 40.0      | 0.0       | 60.0 |      |
| SAR01500320 | 32.0      | 15.0      | 32.0 |      | SAR02200361 | 36.0      | 22.0      | 5.0  |      | SAR00900400 | 40.0      | 9.0       | 12.0 |      |
| SAR01900320 | 32.0      | 19.0      | 2.0  |      | SAR02300360 | 36.0      | 23.0      | 6.5  |      | SAR01200400 | 40.0      | 12.0      | 3.5  |      |
| SAR02100320 | 32.0      | 21.0      | 20.0 |      | SAR02300361 | 36.0      | 23.0      | 7.0  |      | SAR01650400 | 40.0      | 16.5      | 6.0  |      |
| SAR02200320 | 32.0      | 22.0      | 6.5  |      | SAR02500360 | 36.0      | 25.0      | 15.0 |      | SAR01700400 | 40.0      | 17.0      | 9.8  |      |
| SAR02200321 | 32.0      | 22.0      | 8.0  |      | SAR02600360 | 36.0      | 26.0      | 6.2  |      | SAR02000400 | 40.0      | 20.0      | 13.0 |      |
| SAR02600320 | 32.0      | 26.0      | 20.0 |      | SAR03000360 | 36.0      | 30.0      | 4.0  |      | SAR02000403 | 40.0      | 20.0      | 15.0 |      |
| SAR01920327 | 32.7      | 19.2      | 2.0  |      | SAR03000361 | 36.0      | 30.0      | 7.0  |      | SAR02100400 | 40.0      | 21.0      | 4.0  |      |
| SAR02850328 | 32.8      | 28.5      | 3.0  |      | SAR03000362 | 36.0      | 30.0      | 8.0  |      | SAR02170400 | 40.0      | 21.7      | 10.0 |      |
| SAR01700330 | 33.0      | 17.0      | 3.5  |      | SAR01900365 | 36.5      | 19.0      | 24.0 |      | SAR02200400 | 40.0      | 22.0      | 34.0 |      |
| SAR01700331 | 33.0      | 17.0      | 22.0 |      | SAR02100365 | 36.5      | 21.0      | 30.0 |      | SAR02350400 | 40.0      | 23.5      | 10.0 |      |
| SAR02400330 | 33.0      | 24.0      | 4.0  |      | SAR01600370 | 37.0      | 16.0      | 10.0 |      | SAR02700400 | 40.0      | 27.0      | 3.0  |      |
| SAR02500330 | 33.0      | 25.0      | 10.0 |      | SAR01900370 | 37.0      | 19.0      | 8.0  |      | SAR02700401 | 40.0      | 27.0      | 4.0  |      |
| SAR02600330 | 33.0      | 26.0      | 3.0  |      | SAR02100370 | 37.0      | 21.0      | 6.0  |      | SAR02700402 | 40.0      | 27.0      | 5.0  |      |
| SAR01400335 | 33.5      | 14.0      | 3.0  |      | SAR02800370 | 37.0      | 28.0      | 4.0  |      | SAR02800400 | 40.0      | 28.0      | 8.0  |      |
| SAR01400340 | 34.0      | 14.0      | 30.0 |      | SAR02900370 | 37.0      | 29.0      | 6.5  |      | SAR02950400 | 40.0      | 29.5      | 5.0  |      |
| SAR01800340 | 34.0      | 18.0      | 35.0 |      | SAR03100370 | 37.0      | 31.0      | 20.0 |      | SAR03000400 | 40.0      | 30.0      | 6.0  |      |
| SAR01800342 | 34.0      | 18.0      | 41.0 |      | SAR03500370 | 37.0      | 35.0      | 1.1  |      | SAR03000402 | 40.0      | 30.0      | 14.0 |      |
| SAR02000340 | 34.0      | 20.0      | 35.0 |      | SAR03500372 | 37.0      | 35.0      | 35.0 |      | SAR03000403 | 40.0      | 30.0      | 20.0 |      |
| SAR02350340 | 34.0      | 23.5      | 3.0  |      | SAR02620373 | 37.3      | 26.2      | 5.7  |      | SAR03450403 | 40.3      | 34.5      | 3.5  |      |
| SAR02600340 | 34.0      | 26.0      | 5.0  |      | SAR03430377 | 37.7      | 34.3      | 0.5  |      | SAR02400405 | 40.5      | 24.0      | 8.0  |      |
| SAR02430343 | 34.3      | 24.3      | 2.6  |      | SAR01350380 | 38.0      | 13.5      | 39.0 |      | SAR01500410 | 41.0      | 15.0      | 10.0 |      |
| SAR02600348 | 34.8      | 26.0      | 3.0  |      | SAR01850380 | 38.0      | 18.5      | 4.0  |      | SAR01980410 | 41.0      | 19.8      | 7.2  |      |
| SAR00000350 | 35.0      | 0.0       | 32.0 |      | SAR02000380 | 38.0      | 20.0      | 5.0  |      | SAR03100410 | 41.0      | 31.0      | 11.0 |      |
| SAR00800350 | 35.0      | 8.0       | 3.0  |      | SAR02000381 | 38.0      | 20.0      | 9.0  |      | SAR02000420 | 42.0      | 20.0      | 5.0  |      |
| SAR01600350 | 35.0      | 16.0      | 4.0  |      | SAR02200380 | 38.0      | 22.0      | 2.0  |      | SAR02500420 | 42.0      | 25.0      | 8.0  |      |
| SAR01650350 | 35.0      | 16.5      | 9.0  |      | SAR02550380 | 38.0      | 25.5      | 3.0  |      | SAR02800420 | 42.0      | 28.0      | 6.0  |      |
| SAR01700350 | 35.0      | 17.0      | 20.0 |      | SAR02700380 | 38.0      | 27.0      | 5.5  |      | SAR03000420 | 42.0      | 30.0      | 4.0  |      |
| SAR01800351 | 35.0      | 18.0      | 6.0  |      | SAR02900380 | 38.0      | 29.0      | 3.0  |      | SAR03000421 | 42.0      | 30.0      | 2.5  |      |
| SAR02000350 | 35.0      | 20.0      | 8.0  |      | SAR02900383 | 38.0      | 29.0      | 65.0 |      | SAR03500420 | 42.0      | 35.0      | 2.7  |      |
| SAR02150350 | 35.0      | 21.5      | 36.0 |      | SAR02950380 | 38.0      | 29.5      | 2.0  |      | SAR03600420 | 42.0      | 36.0      | 4.0  |      |
| SAR02400350 | 35.0      | 24.0      | 6.0  |      | SAR03200380 | 38.0      | 32.0      | 1.0  |      | SAR04000420 | 42.0      | 40.0      | 2.5  |      |
| SAR02500350 | 35.0      | 25.0      | 2.0  |      | SAR02800384 | 38.4      | 28.0      | 4.0  |      | SAR03250425 | 42.5      | 32.5      | 4.0  |      |
| SAR02700350 | 35.0      | 27.0      | 2.5  |      | SAR03560387 | 38.7      | 35.6      | 1.6  |      | SAR01800430 | 43.0      | 18.0      | 9.5  |      |

| Referencia   | D <sub>ext</sub> | D <sub>int</sub> | h ag | Referencia  | D <sub>ext</sub> | D <sub>int</sub> | h ag | Referencia  | D <sub>ext</sub> | D <sub>int</sub> | h ag |
|--------------|------------------|------------------|------|-------------|------------------|------------------|------|-------------|------------------|------------------|------|
| SAR03200430  | 43.0             | 32.0             | 1.0  | SAR03900490 | 49.0             | 39.0             | 1.0  | SAR03200550 | 55.0             | 32.0             | 8.0  |
| SAR03300431  | 43.0             | 33.0             | 5.0  | SAR03700492 | 49.2             | 37.0             | 6.0  | SAR04150550 | 55.0             | 41.5             | 4.5  |
| SAR03320432  | 43.2             | 33.2             | 4.0  | SAR02750495 | 49.5             | 27.5             | 8.0  | SAR05200550 | 55.0             | 52.0             | 5.0  |
| SAR03600435  | 43.5             | 36.0             | 2.2  | SAR01000500 | 50.0             | 10.0             | 8.0  | SAR05030551 | 55.1             | 50.3             | 2.4  |
| SAR02000440  | 44.0             | 20.0             | 26.5 | SAR01000503 | 50.0             | 10.0             | 45.0 | SAR04050555 | 55.5             | 40.5             | 3.0  |
| SAR02100440  | 44.0             | 21.0             | 36.0 | SAR01200502 | 50.0             | 12.0             | 41.0 | SAR01200560 | 56.0             | 12.0             | 4.0  |
| SAR02600440  | 44.0             | 26.0             | 36.0 | SAR01500500 | 50.0             | 15.0             | 3.0  | SAR03000560 | 56.0             | 30.0             | 10.0 |
| SAR03200440  | 44.0             | 32.0             | 3.0  | SAR02000500 | 50.0             | 20.0             | 2.0  | SAR03500560 | 56.0             | 35.0             | 6.0  |
| SAR03200443  | 44.0             | 32.0             | 47.0 | SAR02500500 | 50.0             | 25.0             | 5.0  | SAR03600560 | 56.0             | 36.0             | 6.0  |
| SAR03300440  | 44.0             | 33.0             | 3.0  | SAR02500501 | 50.0             | 25.0             | 25.0 | SAR05000560 | 56.0             | 50.0             | 3.5  |
| SAR03600440  | 44.0             | 36.0             | 2.5  | SAR02800500 | 50.0             | 28.0             | 8.0  | SAR04000562 | 56.2             | 40.0             | 50.0 |
| SAR03700440  | 44.0             | 37.0             | 2.0  | SAR03000500 | 50.0             | 30.0             | 6.0  | SAR00800565 | 56.5             | 8.0              | 3.0  |
| SAR03800440  | 44.0             | 38.0             | 2.0  | SAR03000501 | 50.0             | 30.0             | 12.0 | SAR04800570 | 57.0             | 48.0             | 9.0  |
| SAR00000451  | 45.0             | 0.0              | 22.0 | SAR03000502 | 50.0             | 30.0             | 15.0 | SAR04000580 | 58.0             | 40.0             | 3.0  |
| SAR00850450  | 45.0             | 8.5              | 2.2  | SAR03000503 | 50.0             | 30.0             | 40.0 | SAR04600580 | 58.0             | 46.0             | 7.0  |
| SAR02000450  | 45.0             | 20.0             | 3.0  | SAR03000504 | 50.0             | 30.0             | 41.0 | SAR04750580 | 58.0             | 47.5             | 4.9  |
| SAR020004502 | 45.0             | 20.0             | 5.3  | SAR03100500 | 50.0             | 31.0             | 6.0  | SAR04800580 | 58.0             | 48.0             | 10.0 |
| SAR02300450  | 45.0             | 23.0             | 3.5  | SAR03100501 | 50.0             | 31.0             | 12.0 | SAR04850585 | 58.5             | 48.5             | 3.0  |
| SAR02300451  | 45.0             | 23.0             | 6.0  | SAR03300500 | 50.0             | 33.0             | 8.0  | SAR01780590 | 59.0             | 17.8             | 13.5 |
| SAR02450450  | 45.0             | 24.5             | 5.0  | SAR03400500 | 50.0             | 34.0             | 17.0 | SAR04600590 | 59.0             | 46.0             | 2.5  |
| SAR02450451  | 45.0             | 24.5             | 15.0 | SAR03500500 | 50.0             | 35.0             | 17.5 | SAR04850595 | 59.5             | 48.5             | 4.0  |
| SAR02500450  | 45.0             | 25.0             | 5.0  | SAR03670500 | 50.0             | 36.7             | 1.9  | SAR01300600 | 60.0             | 13.0             | 15.0 |
| SAR02500451  | 45.0             | 25.0             | 15.0 | SAR03670501 | 50.0             | 36.7             | 3.0  | SAR01300601 | 60.0             | 13.0             | 20.0 |
| SAR02800450  | 45.0             | 28.0             | 6.0  | SAR04000500 | 50.0             | 40.0             | 2.5  | SAR02300600 | 60.0             | 23.0             | 15.0 |
| SAR03000450  | 45.0             | 30.0             | 4.5  | SAR04100500 | 50.0             | 41.0             | 10.0 | SAR02500600 | 60.0             | 25.0             | 2.0  |
| SAR03300450  | 45.0             | 33.0             | 2.5  | SAR04200500 | 50.0             | 42.0             | 2.5  | SAR04000600 | 60.0             | 40.0             | 4.0  |
| SAR03400450  | 45.0             | 34.0             | 2.0  | SAR04640500 | 50.0             | 46.4             | 1.7  | SAR04200600 | 60.0             | 42.0             | 3.0  |
| SAR03500450  | 45.0             | 35.0             | 4.5  | SAR04100505 | 50.5             | 41.0             | 1.3  | SAR04480600 | 60.0             | 44.8             | 14.6 |
| SAR03500451  | 45.0             | 35.0             | 6.5  | SAR02480506 | 50.6             | 24.8             | 7.8  | SAR04800600 | 60.0             | 48.0             | 3.0  |
| SAR03500452  | 45.0             | 35.0             | 10.0 | SAR02650510 | 51.0             | 26.5             | 3.5  | SAR04900600 | 60.0             | 49.0             | 5.5  |
| SAR03700450  | 45.0             | 37.0             | 4.0  | SAR02700510 | 51.0             | 27.0             | 46.0 | SAR05300600 | 60.0             | 53.0             | 3.5  |
| SAR04000450  | 45.0             | 40.0             | 60.0 | SAR04440510 | 51.0             | 44.4             | 2.0  | SAR05400600 | 60.0             | 54.0             | 2.0  |
| SAR02350452  | 45.2             | 23.5             | 8.8  | SAR03400515 | 51.5             | 34.0             | 5.0  | SAR05650605 | 60.5             | 56.5             | 22.0 |
| SAR04100455  | 45.5             | 41.0             | 2.3  | SAR02500520 | 52.0             | 25.0             | 45.0 | SAR02500610 | 61.0             | 25.0             | 3.0  |
| SAR01860458  | 45.8             | 18.6             | 13.6 | SAR03000520 | 52.0             | 30.0             | 3.0  | SAR03400610 | 61.0             | 34.0             | 9.0  |
| SAR01800460  | 46.0             | 18.0             | 8.0  | SAR04100520 | 52.0             | 41.0             | 1.6  | SAR04000610 | 61.0             | 40.0             | 1.5  |
| SAR02300460  | 46.0             | 23.0             | 12.0 | SAR04500520 | 52.0             | 45.0             | 3.0  | SAR04600610 | 61.0             | 46.0             | 8.5  |
| SAR03440460  | 46.0             | 34.4             | 3.3  | SAR03200525 | 52.5             | 32.0             | 40.0 | SAR04700610 | 61.0             | 47.0             | 4.3  |
| SAR04000460  | 46.0             | 40.0             | 3.0  | SAR02600530 | 53.0             | 26.0             | 4.0  | SAR04900610 | 61.0             | 49.0             | 6.0  |
| SAR03000470  | 47.0             | 30.0             | 4.0  | SAR02600531 | 53.0             | 26.0             | 5.0  | SAR05200610 | 61.0             | 52.0             | 4.0  |
| SAR03500470  | 47.0             | 35.0             | 10.0 | SAR03000530 | 53.0             | 30.0             | 4.0  | SAR03400615 | 61.5             | 34.0             | 2.6  |
| SAR03600472  | 47.2             | 36.0             | 5.8  | SAR03800530 | 53.0             | 38.0             | 21.5 | SAR04850615 | 61.5             | 48.5             | 5.5  |
| SAR00850480  | 48.0             | 8.5              | 1.5  | SAR04300530 | 53.0             | 43.0             | 4.0  | SAR05500616 | 61.6             | 55.0             | 8.0  |
| SAR01600480  | 48.0             | 16.0             | 10.0 | SAR04400530 | 53.0             | 44.0             | 6.6  | SAR03200620 | 62.0             | 32.0             | 60.0 |
| SAR03400480  | 48.0             | 34.0             | 6.0  | SAR04430530 | 53.0             | 44.3             | 6.0  | SAR03600620 | 62.0             | 36.0             | 25.5 |
| SAR03600480  | 48.0             | 36.0             | 3.0  | SAR02200540 | 54.0             | 22.0             | 25.0 | SAR04500620 | 62.0             | 45.0             | 3.0  |
| SAR04000480  | 48.0             | 40.0             | 2.0  | SAR02500540 | 54.0             | 25.0             | 55.0 | SAR04700620 | 62.0             | 47.0             | 20.0 |
| SAR03100485  | 48.5             | 31.0             | 10.0 | SAR04200540 | 54.0             | 42.0             | 3.6  | SAR05100620 | 62.0             | 51.0             | 6.0  |
| SAR02050490  | 49.0             | 20.5             | 3.3  | SAR04650540 | 54.0             | 46.5             | 4.0  | SAR05400620 | 62.0             | 54.0             | 2.0  |
| SAR03000490  | 49.0             | 30.0             | 30.0 | SAR04670540 | 54.0             | 46.7             | 5.0  | SAR05200630 | 63.0             | 52.0             | 3.0  |
| SAR03600490  | 49.0             | 36.0             | 6.5  | SAR03500545 | 54.5             | 35.0             | 3.5  | SAR05840634 | 63.4             | 58.4             | 35.0 |

# ARANDELAS



## Medidas:

$D_{ext}$  ..... diámetro exterior  
 $D_{int}$  ..... diámetro interior  
 $h$  ..... altura  
 $ag$  ..... número de agujeros

**Referencia**    $D_{ext}$     $D_{int}$     $h$     $ag$

SAR04700640   64.0   47.0   10.0  
 SAR04700641   64.0   47.0   11.0  
 SAR05600640   64.0   56.0   2.0  
 SAR01300650   65.0   13.0   20.0  
 SAR02800650   65.0   28.0   65.0  
 SAR04200650   65.0   42.0   3.0  
 SAR04500650   65.0   45.0   3.0  
 SAR05000650   65.0   50.0   10.0  
 SAR05200650   65.0   52.0   3.5  
 SAR05700650   65.0   57.0   20.0

SAR04000660   66.0   40.0   4.0  
 SAR04200660   66.0   42.0   8.0  
 SAR04500660   66.0   45.0   6.0  
 SAR04500661   66.0   45.0   33.0  
 SAR04800660   66.0   48.0   3.0  
 SAR04800661   66.0   48.0   11.0  
 SAR05000660   66.0   50.0   1.0  
 SAR05000661   66.0   50.0   3.0  
 SAR05000662   66.0   50.0   4.0  
 SAR05400660   66.0   54.0   1.5

SAR05900660   66.0   59.0   24.0  
 SAR05050665   66.5   50.5   10.0  
 SAR04100670   67.0   41.0   12.0  
 SAR04300670   67.0   43.0   12.0  
 SAR04500670   67.0   45.0   25.0  
 SAR04900670   67.0   49.0   4.0  
 SAR04900671   67.0   49.0   12.0  
 SAR05170670   67.0   51.7   12.0  
 SAR04900672   67.2   49.0   12.0  
 SAR05370674   67.4   53.7   1.2

SAR06140674   67.4   61.4   5.0  
 SAR05650675   67.5   56.5   2.0  
 SAR00000680   68.0   0.0   25.0  
 SAR04000680   68.0   40.0   5.5  
 SAR06200680   68.0   62.0   23.0  
 SAR06030683   68.3   60.3   4.1  
 SAR05630685   68.5   56.3   2.5  
 SAR06330685   68.5   63.3   5.0  
 SAR03200690   69.0   32.0   5.0  
 SAR05200690   69.0   52.0   5.0  
 SAR05500690   69.0   55.0   5.1  
 SAR05700690   69.0   57.0   5.0

**Referencia**    $D_{ext}$     $D_{int}$     $h$     $ag$

SAR05700691   69.0   57.0   9.0  
 SAR00000700   70.0   0.0   10.0  
 SAR00000701   70.0   0.0   8.0  
 SAR01900700   70.0   19.0   5.0  
 SAR02650700   70.0   26.5   2.0  
 SAR03000700   70.0   30.0   22.0  
 SAR03800700   70.0   38.0   75.0  
 SAR04200700   70.0   42.0   4.0  
 SAR04200701   70.0   42.0   5.0  
 SAR04200702   70.0   42.0   15.0

SAR04500700   70.0   45.0   16.0  
 SAR04800700   70.0   48.0   10.0  
 SAR05000701   70.0   50.0   14.0  
 SAR05350700   70.0   53.5   5.6  
 SAR06000700   70.0   60.0   3.0  
 SAR06380702   70.2   63.8   3.0  
 SAR05970705   70.5   59.7   2.3  
 SAR03700720   72.0   37.0   5.0  
 SAR03700721   72.0   37.0   8.0  
 SAR04000720   72.0   40.0   3.0

SAR06200720   72.0   62.0   7.0  
 SAR06600722   72.2   66.0   1.3  
 SAR06750725   72.5   67.5   2.7  
 SAR06600730   73.0   66.0   4.0  
 SAR06800730   73.0   68.0   4.0  
 SAR05770733   73.3   57.7   9.0  
 SAR00000735   73.5   0.0   45.0  
 SAR06500735   73.5   65.0   14.5  
 SAR06850735   73.5   68.5   1.0  
 SAR03000740   74.0   30.0   20.0

SAR05000740   74.0   50.0   10.0  
 SAR05300740   74.0   53.0   15.0  
 SAR05300743   74.0   53.0   30.0  
 SAR06880748   74.8   68.8   3.5  
 SAR01000750   75.0   10.0   50.0  
 SAR04400750   75.0   44.0   20.0  
 SAR05800750   75.0   58.0   9.0  
 SAR05900750   75.0   59.0   4.0  
 SAR06000750   75.0   60.0   5.0  
 SAR06500750   75.0   65.0   1.0  
 SAR06800750   75.0   68.0   4.0  
 SAR07070753   75.3   70.7   2.5

**Referencia**    $D_{ext}$     $D_{int}$     $h$     $ag$

SAR06100754   75.4   61.0   7.2  
 SAR04000760   76.0   40.0   22.0  
 SAR05000760   76.0   50.0   8.0  
 SAR05200760   76.0   52.0   6.0  
 SAR05800760   76.0   58.0   9.0  
 SAR06400760   76.0   64.0   8.0  
 SAR06400761   76.0   64.0   12.0  
 SAR06580762   76.2   65.8   5.2  
 SAR06600764   76.4   66.0   2.0  
 SAR05050770   77.0   50.5   14.0

SAR05900770   77.0   59.0   3.0  
 SAR06400770   77.0   64.0   12.0  
 SAR06350775   77.5   63.5   1.8  
 SAR00700780   78.0   7.0   12.0  
 SAR03000780   78.0   30.0   20.0  
 SAR05500780   78.0   55.0   2.0  
 SAR07450785   78.5   74.5   15.0  
 SAR01000790   79.0   10.0   9.2  
 SAR05100790   79.0   51.0   1.0  
 SAR05400790   79.0   54.0   4.0

SAR06300790   79.0   63.0   5.0  
 SAR06550790   79.0   65.5   4.5  
 SAR06350795   79.5   63.5   0.8  
 SAR06400795   79.5   64.0   10.0  
 SAR00000800   80.0   0.0   100.0  
 SAR000008001   80.0   0.0   320.0  
 SAR03500800   80.0   35.0   3.0  
 SAR04300800   80.0   43.0   35.0  
 SAR05000800   80.0   50.0   20.0  
 SAR05200800   80.0   52.0   24.0

SAR05600800   80.0   56.0   24.0  
 SAR06000800   80.0   60.0   3.0  
 SAR06000801   80.0   60.0   6.0  
 SAR06000802   80.0   60.0   10.0  
 SAR06000803   80.0   60.0   13.6  
 SAR06000804   80.0   60.0   15.0  
 SAR06100800   80.0   61.0   5.5  
 SAR06300800   80.0   63.0   4.5  
 SAR06300801   80.0   63.0   10.0  
 SAR06400800   80.0   64.0   10.5  
 SAR06400801   80.0   64.0   15.0  
 SAR06500800   80.0   65.0   2.0

**Referencia**    **D<sub>ext</sub>**    **D<sub>int</sub>**    **h ag**

SAR06500801    80.0    65.0    3.0  
 SAR07400800    80.0    74.0    3.5  
 SAR07500800    80.0    75.0    3.5  
 SAR07580808    80.8    75.8    2.5  
 SAR01900810    81.0    19.0    10.0  
 SAR02750810    81.0    27.5    34.0  
 SAR07350811    81.1    73.5    3.2  
 SAR03800820    82.0    38.0    2.0  
 SAR07280823    82.3    72.8    3.5  
 SAR06000830    83.0    60.0    12.0

SAR07240830    83.0    72.4    2.8  
 SAR07710831    83.1    77.1    3.6  
 SAR07300835    83.5    73.0    2.0  
 SAR04000840    84.0    40.0    3.0  
 SAR05200840    84.0    52.0    4.0  
 SAR05200841    84.0    52.0    5.0  
 SAR05800840    84.0    58.0    13.0  
 SAR07240840    84.0    72.4    4.0  
 SAR07300840    84.0    73.0    3.0  
 SAR02000850    85.0    20.0    90.0

SAR04500850    85.0    45.0    15.0  
 SAR05000850    85.0    50.0    5.0  
 SAR05550850    85.0    55.5    10.0  
 SAR06000850    85.0    60.0    20.0  
 SAR06700850    85.0    67.0    15.0  
 SAR06900850    85.0    69.0    2.0  
 SAR07500850    85.0    75.0    3.0  
 SAR06870859    85.9    68.7    3.2  
 SAR08000860    86.0    80.0    2.0  
 SAR00000870    87.0    0.0    15.0

SAR04000871    87.0    40.0    40.0  
 SAR04600870    87.0    46.0    40.0  
 SAR04600870    87.0    73.0    5.0  
 SAR08000870    87.0    80.0    1.0  
 SAR04500880    88.0    45.0    15.0  
 SAR05050880    88.0    50.5    14.0  
 SAR06200880    88.0    62.0    8.0  
 SAR06680880    88.0    66.8    6.0  
 SAR07500890    89.0    75.0    5.5  
 SAR07900890    89.0    79.0    4.0

SAR08100890    89.0    81.0    2.0  
 SAR07340894    89.4    73.4    10.0  
 SAR03000900    90.0    30.0    15.0  
 SAR04000900    90.0    40.0    3.0  
 SAR05100900    90.0    51.0    10.0  
 SAR06000900    90.0    60.0    6.0  
 SAR06000901    90.0    60.0    21.0  
 SAR07400900    90.0    74.0    7.0  
 SAR07500900    90.0    75.0    10.0  
 SAR07940900    90.0    79.4    5.3  
 SAR07980900    90.0    79.8    5.3

**Referencia**    **D<sub>ext</sub>**    **D<sub>int</sub>**    **h ag**

SAR08700900    90.0    87.0    2.0  
 SAR04500920    92.0    45.0    2.0  
 SAR07800920    92.0    78.0    4.0  
 SAR07800921    92.0    78.0    6.0  
 SAR08200920    92.0    82.0    5.0  
 SAR08200921    92.0    82.0    6.0  
 SAR08440920    92.0    84.4    3.8  
 SAR08600920    92.0    86.0    85.0  
 SAR07300930    93.0    73.0    29.0  
 SAR01850940    94.0    18.5    9.0

SAR07000940    94.0    70.0    10.0  
 SAR08400940    94.0    84.0    5.0  
 SAR08400941    94.0    84.0    7.0  
 SAR08600940    94.0    86.0    4.5  
 SAR07530948    94.8    75.3    10.0  
 SAR06500950    95.0    65.0    15.0  
 SAR07500950    95.0    75.0    3.0  
 SAR07540950    95.0    75.4    10.0  
 SAR07550950    95.0    75.5    10.0  
 SAR07600950    95.0    76.0    10.0

SAR04550955    95.5    45.5    1.5  
 SAR04600955    95.5    46.0    10.0  
 SAR07700956    95.6    77.0    20.0  
 SAR08900958    95.8    89.0    3.3  
 SAR06950960    96.0    69.5    2.0  
 SAR07600960    96.0    76.0    5.0  
 SAR07600961    96.0    76.0    10.0  
 SAR09000960    96.0    90.0    3.0  
 SAR08770967    96.7    87.7    20.0  
 SAR07500970    97.0    75.0    7.0

SAR03100980    98.0    31.0    9.0  
 SAR08200980    98.0    82.0    3.0  
 SAR09000980    98.0    90.0    4.5  
 SAR09300994    99.4    93.0    4.5  
 SAR08750995    99.5    87.5    12.0  
 SAR00801000    100.0    8.0    3.0  
 SAR03001000    100.0    30.0    15.0  
 SAR05001000    100.0    50.0    3.0  
 SAR05001001    100.0    50.0    6.0  
 SAR06001001    100.0    60.0    20.0

SAR06501000    100.0    65.0    4.0  
 SAR07501000    100.0    75.0    20.0  
 SAR08001000    100.0    80.0    2.0  
 SAR09151000    100.0    91.5    2.0  
 SAR09431003    100.3    94.3    3.0  
 SAR01201005    100.5    12.0    7.0  
 SAR09201005    100.5    92.0    1.0  
 SAR09421008    100.8    94.2    3.3  
 SAR00901010    101.0    9.0    5.0  
 SAR09541014    101.4    95.4    1.0  
 SAR01001020    102.0    10.0    13.0

**Referencia**    **D<sub>ext</sub>**    **D<sub>int</sub>**    **h ag**

SAR01801020    102.0    18.0    15.0  
 SAR02501030    103.0    25.0    50.0  
 SAR09501030    103.0    95.0    2.8  
 SAR09551035    103.5    95.5    3.0  
 SAR00001040    104.0    0.0    20.5  
 SAR07401040    104.0    74.0    17.0  
 SAR09001040    104.0    90.0    10.0  
 SAR09401040    104.0    94.0    3.0  
 SAR05501050    105.0    55.0    3.0  
 SAR07401050    105.0    74.0    10.0

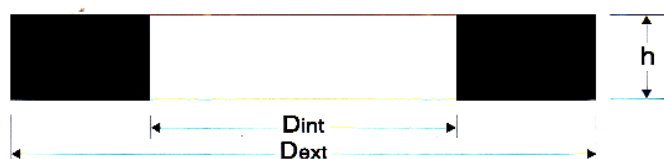
SAR09501050    105.0    95.0    6.4  
 SAR09701050    105.0    97.0    2.0  
 SAR05701070    107.0    57.0    2.0  
 SAR09751070    107.0    97.5    4.5  
 SAR10151071    107.1    101.5    1.2  
 SAR06801080    108.0    68.0    25.0  
 SAR07601080    108.0    76.0    4.0  
 SAR09401080    108.0    94.0    6.0  
 SAR10101083    108.3    101.0    2.7  
 SAR07401090    109.0    74.0    5.0

SAR08001090    109.0    80.0    8.0  
 SAR08301090    109.0    83.0    6.0  
 SAR10101090    109.0    101.0    1.5  
 SAR01851100    110.0    18.5    8.0  
 SAR03901100    110.0    39.0    15.0  
 SAR06651100    110.0    66.5    0.7  
 SAR07301100    110.0    73.0    6.0  
 SAR07301101    110.0    73.0    12.0  
 SAR07401100    110.0    74.0    5.0  
 SAR08251100    110.0    82.5    16.0

SAR09001100    110.0    90.0    12.0  
 SAR10001100    110.0    100.0    3.0  
 SAR09301110    111.0    93.0    4.0  
 SAR10351110    111.0    103.5    1.5  
 SAR10351111    111.0    103.5    2.5  
 SAR09401115    111.5    94.0    6.0  
 SAR10401118    111.8    104.0    5.1  
 SAR01001120    112.0    10.0    12.5  
 SAR05651132    113.2    56.5    3.2  
 SAR04001140    114.0    40.0    24.5

SAR04001141    114.0    40.0    26.0  
 SAR09531143    114.3    95.3    20.0  
 SAR02701150    115.0    27.0    50.0  
 SAR07501150    115.0    75.0    30.0  
 SAR10701150    115.0    107.0    2.0  
 SAR10701152    115.0    107.0    25.0  
 SAR03601160    116.0    36.0    5.0  
 SAR10001161    116.0    100.0    11.0  
 SAR10001160    116.0    100.0    3.0  
 SAR07701180    118.0    77.0    25.0  
 SAR08501180    118.0    85.0    2.0

# ARANDELAS



## Medidas:

D<sub>ext</sub> ..... diámetro exterior  
D<sub>int</sub> ..... diámetro interior  
h ..... altura  
ag ..... número de agujeros

**Referencia**    **D<sub>ext</sub>**    **D<sub>int</sub>**    **h**    **ag**

SAR10461180    118.0    104.6    6.7  
SAR08351190    119.0    83.5    3.0  
SAR09001190    119.0    90.0    8.0  
SAR10921192    119.2    109.2    6.6  
SAR00701200    120.0    7.0    1.5  
SAR02401200    120.0    24.0    20.0  
SAR03051200    120.0    30.5    20.0  
SAR03301200    120.0    33.0    20.0  
SAR05501200    120.0    55.0    4.0  
SAR07001200    120.0    70.0    6.0

SAR07601200    120.0    76.0    50.0  
SAR09981200    120.0    99.8    7.0  
SAR10501200    120.0    105.0    3.0  
SAR06001220    122.0    60.0    4.0  
SAR11831223    122.3    118.3    3.2  
SAR08401230    123.0    84.0    4.0  
SAR10001230    123.0    100.0    3.0  
SAR03001250    125.0    30.0    15.0  
SAR04001250    125.0    40.0    14.0    8  
SAR07001250    125.0    70.0    3.0

SAR08501250    125.0    85.0    3.0  
SAR08501251    125.0    85.0    4.0  
SAR09001250    125.0    90.0    7.0  
SAR10001250    125.0    100.0    13.0  
SAR11361256    125.6    113.6    5.2  
SAR12101270    127.0    121.0    3.3  
SAR12201277    127.7    122.0    3.3  
SAR10401280    128.0    104.0    6.0  
SAR03601290    129.0    36.0    8.0  
SAR11821292    129.2    118.2    3.5

SAR00801300    130.0    8.0    15.0  
SAR05201300    130.0    52.0    12.0  
SAR10001300    130.0    100.0    20.0  
SAR10201300    130.0    102.0    10.0  
SAR10201301    130.0    102.0    5.0  
SAR11001300    130.0    110.0    10.0  
SAR12031307    130.7    120.3    5.3  
SAR03651310    131.0    36.5    8.2  
SAR06801310    131.0    68.0    20.0  
SAR10501320    132.0    105.0    8.0  
SAR10801320    132.0    108.0    31.5  
SAR04501330    133.0    45.0    25.0

**Referencia**    **D<sub>ext</sub>**    **D<sub>int</sub>**    **h**    **ag**

SAR11431333    133.3    114.3    0.8  
SAR02001340    134.0    20.0    10.0  
SAR11301340    134.0    113.0    17.0  
SAR11951345    134.5    119.5    7.0  
SAR02901350    135.0    29.0    27.0  
SAR11401350    135.0    114.0    2.0  
SAR11201360    136.0    112.0    50.0  
SAR12061365    136.5    120.6    0.8  
SAR12271367    136.7    122.7    8.0  
SAR12501370    137.0    125.0    6.0

SAR11301380    138.0    113.0    15.0  
SAR01851400    140.0    18.5    5.0  
SAR08501400    140.0    85.0    3.0  
SAR08501401    140.0    85.0    8.0  
SAR11451400    140.0    114.5    13.0  
SAR10441406    140.6    104.4    2.0  
SAR12821442    144.2    128.2    70.0  
SAR10501450    145.0    105.0    35.0  
SAR13201450    145.0    132.0    2.0  
SAR13301460    146.0    133.0    6.5

SAR03901470    147.0    39.0    9.0  
SAR11501470    147.0    115.0    16.5  
SAR11501471    147.0    115.0    20.0  
SAR13601470    147.0    136.0    2.1  
SAR12801480    148.0    128.0    8.0  
SAR14001498    149.8    140.0    2.8  
SAR03001500    150.0    30.0    30.0  
SAR08101500    150.0    81.0    15.0  
SAR09701500    150.0    97.0    2.0    4  
SAR11001500    150.0    110.0    4.0

SAR12001500    150.0    120.0    4.0  
SAR120015001    150.0    120.0    6.0  
SAR12201500    150.0    122.0    10.0  
SAR12201501    150.0    122.0    11.0  
SAR14001500    150.0    140.0    4.0  
SAR136015102    151.0    136.0    5.5  
SAR13601510    151.0    136.0    3.5  
SAR136015101    151.0    136.0    5.0  
SAR12801520    152.0    128.0    14.5  
SAR12601522    152.2    126.0    4.5  
SAR14901523    152.3    149.0    1.7  
SAR10501530    153.0    105.0    1.0

**Referencia**    **D<sub>ext</sub>**    **D<sub>int</sub>**    **h**    **ag**

SAR10501531    153.0    105.0    16.0  
SAR12001540    154.0    120.0    9.5  
SAR120015401    154.0    120.0    19.5  
SAR13201540    154.0    132.0    8.0  
SAR14601540    154.0    146.0    3.0  
SAR12201545    154.5    122.0    20.0  
SAR14521547    154.7    145.2    6.4  
SAR03001551    155.0    30.0    35.0  
SAR04501550    155.0    45.0    20.0  
SAR07001550    155.0    70.0    25.0

SAR10501550    155.0    105.0    70.0  
SAR12501550    155.0    125.0    10.0  
SAR13751550    155.0    137.5    9.2  
SAR14351550    155.0    143.5    3.0  
SAR14501550    155.0    145.0    3.0  
SAR14701550    155.0    147.0    4.0  
SAR04601560    156.0    46.0    8.0  
SAR10501560    156.0    105.0    1.0  
SAR10501561    156.0    105.0    15.0  
SAR14281564    156.4    142.8    5.2

SAR12001570    157.0    120.0    40.0  
SAR12001580    158.0    120.0    1.0  
SAR13001580    158.0    130.0    14.0  
SAR14811581    158.1    148.1    5.3  
SAR11001590    159.0    110.0    10.0  
SAR09451600    160.0    94.5    4.0  
SAR09451601    160.0    94.5    7.0  
SAR09451602    160.0    94.5    10.0  
SAR09451603    160.0    94.5    20.0  
SAR11001600    160.0    110.0    3.0

SAR13001600    160.0    130.0    16.0  
SAR14601609    160.9    146.0    1.2  
SAR15001610    161.0    150.0    0.5  
SAR01201620    162.0    12.0    4.0  
SAR09401620    162.0    94.0    4.0  
SAR09401621    162.0    94.0    10.0  
SAR10801620    162.0    108.0    2.0  
SAR15201620    162.0    152.0    3.0  
SAR15131623    162.3    151.3    2.1  
SAR14951648    164.8    149.5    3.5  
SAR00001650    165.0    0.0    10.0  
SAR13001650    165.0    130.0    15.0

| Referencia   | D <sub>ext</sub> | D <sub>int</sub> | h    | ag | Referencia   | D <sub>ext</sub> | D <sub>int</sub> | h    | ag | Referencia  | D <sub>ext</sub> | D <sub>int</sub> | h    | ag |
|--------------|------------------|------------------|------|----|--------------|------------------|------------------|------|----|-------------|------------------|------------------|------|----|
| SAR13401660  | 166.0            | 134.0            | 2.0  |    | SAR17792031  | 203.1            | 177.9            | 1.0  |    | SAR26002920 | 292.0            | 260.0            | 12.0 |    |
| SAR15801680  | 168.0            | 158.0            | 3.0  |    | SAR19202040  | 204.0            | 192.0            | 4.0  |    | SAR28002950 | 295.0            | 280.0            | 25.0 |    |
| SAR12001690  | 169.0            | 120.0            | 5.0  |    | SAR14802050  | 205.0            | 148.0            | 10.0 | 4  | SAR19302970 | 297.0            | 193.0            | 10.0 |    |
| SAR12001691  | 169.0            | 120.0            | 9.0  |    | SAR18902050  | 205.0            | 189.0            | 24.0 |    | SAR20003000 | 300.0            | 200.0            | 3.0  |    |
| SAR12001692  | 169.0            | 120.0            | 14.0 |    | SAR19802060  | 206.0            | 198.0            | 4.0  |    | SAR21503000 | 300.0            | 215.0            | 2.0  |    |
| SAR12001693  | 169.0            | 120.0            | 33.0 |    | SAR18702070  | 207.0            | 187.0            | 8.0  |    | SAR21503001 | 300.0            | 215.0            | 5.0  |    |
| SAR06201700  | 170.0            | 62.0             | 8.0  |    | SAR17502080  | 208.0            | 175.0            | 8.0  |    | SAR21503002 | 300.0            | 215.0            | 7.0  |    |
| SAR09501700  | 170.0            | 95.0             | 3.0  | 8  | SAR20002080  | 208.0            | 200.0            | 5.0  |    | SAR21503003 | 300.0            | 215.0            | 10.0 |    |
| SAR11001700  | 170.0            | 110.0            | 10.0 | 4  | SAR15102100  | 210.0            | 151.0            | 2.0  | 6  | SAR26003000 | 300.0            | 260.0            | 8.0  |    |
| SAR16001700  | 170.0            | 160.0            | 3.0  |    | SAR15502110  | 211.0            | 155.0            | 5.0  |    | SAR29003020 | 302.0            | 290.0            | 7.5  |    |
| SAR160017001 | 170.0            | 160.0            | 6.0  |    | SAR13702150  | 215.0            | 137.0            | 3.0  | 8  | SAR29203020 | 302.0            | 292.0            | 5.0  |    |
| SAR13701710  | 171.0            | 137.0            | 5.0  |    | SAR16502150  | 215.0            | 165.0            | 3.0  |    | SAR27503050 | 305.0            | 275.0            | 11.5 |    |
| SAR13701711  | 171.0            | 137.0            | 6.0  |    | SAR03602160  | 216.0            | 36.0             | 2.5  |    | SAR22003080 | 308.0            | 220.0            | 20.0 |    |
| SAR13701712  | 171.0            | 137.0            | 7.0  |    | SAR19992165  | 216.5            | 199.9            | 4.0  |    | SAR19303130 | 313.0            | 193.0            | 10.0 |    |
| SAR13701713  | 171.0            | 137.0            | 8.0  |    | SAR19452175  | 217.5            | 194.5            | 8.5  |    | SAR29403140 | 314.0            | 294.0            | 15.0 |    |
| SAR15901710  | 171.0            | 159.0            | 8.0  |    | SAR14002200  | 220.0            | 140.0            | 3.0  | 6  | SAR29533153 | 315.3            | 295.3            | 6.0  |    |
| SAR14001720  | 172.0            | 140.0            | 5.0  |    | SAR16002200  | 220.0            | 160.0            | 4.0  | 8  | SAR28803160 | 316.0            | 288.0            | 11.0 |    |
| SAR14001721  | 172.0            | 140.0            | 6.0  |    | SAR19002200  | 220.0            | 190.0            | 4.0  |    | SAR31003170 | 317.0            | 310.0            | 3.5  |    |
| SAR00001725  | 172.5            | 0.0              | 3.5  |    | SAR19602200  | 220.0            | 196.0            | 10.0 |    | SAR20503200 | 320.0            | 205.0            | 2.5  |    |
| SAR13901730  | 173.0            | 139.0            | 11.0 |    | SAR17502230  | 223.0            | 175.0            | 2.0  |    | SAR25403200 | 320.0            | 254.0            | 6.3  |    |
| SAR16351730  | 173.0            | 163.5            | 5.1  |    | SAR15502265  | 226.5            | 155.0            | 5.0  |    | SAR31503200 | 320.0            | 315.0            | 3.0  |    |
| SAR16501730  | 173.0            | 165.0            | 2.0  |    | SAR14202280  | 228.0            | 142.0            | 2.5  |    | SAR30103210 | 321.0            | 301.0            | 9.0  |    |
| SAR13831738  | 173.8            | 138.3            | 14.0 |    | SAR20902290  | 229.0            | 209.0            | 12.0 |    | SAR28703270 | 327.0            | 287.0            | 15.0 |    |
| SAR14601740  | 174.0            | 146.0            | 2.5  |    | SAR10002340  | 234.0            | 100.0            | 3.0  |    | SAR30003400 | 340.0            | 300.0            | 20.0 |    |
| SAR14001750  | 175.0            | 140.0            | 50.0 |    | SAR23002350  | 235.0            | 230.0            | 3.0  |    | SAR32003400 | 340.0            | 320.0            | 10.0 |    |
| SAR14501750  | 175.0            | 145.0            | 4.0  |    | SAR20002360  | 236.0            | 200.0            | 4.0  |    | SAR19243448 | 344.8            | 192.4            | 15.0 |    |
| SAR13901760  | 176.0            | 139.0            | 17.0 |    | SAR11002400  | 240.0            | 110.0            | 3.0  |    | SAR25003500 | 350.0            | 250.0            | 3.0  |    |
| SAR16801780  | 178.0            | 168.0            | 2.0  |    | SAR18102400  | 240.0            | 181.0            | 2.0  | 6  | SAR27003500 | 350.0            | 270.0            | 3.0  |    |
| SAR15481782  | 178.2            | 154.8            | 12.0 |    | SAR20102410  | 241.0            | 201.0            | 4.0  |    | SAR32503550 | 355.0            | 325.0            | 7.0  |    |
| SAR00001800  | 180.0            | 0.0              | 32.0 | 6  | SAR12002450  | 245.0            | 120.0            | 0.5  |    | SAR34703550 | 355.0            | 347.0            | 3.5  |    |
| SAR14001800  | 180.0            | 140.0            | 6.5  |    | SAR17102450  | 245.0            | 171.0            | 3.0  | 8  | SAR33903630 | 363.0            | 339.0            | 4.0  |    |
| SAR16001800  | 180.0            | 160.0            | 2.0  |    | SAR23502450  | 245.0            | 235.0            | 5.0  |    | SAR32703720 | 372.0            | 327.0            | 21.0 |    |
| SAR16001801  | 180.0            | 160.0            | 6.0  |    | SAR16002500  | 250.0            | 160.0            | 2.0  |    | SAR28403750 | 375.0            | 284.0            | 8.0  | 16 |
| SAR16581800  | 180.0            | 165.8            | 5.0  |    | SAR17002500  | 250.0            | 170.0            | 3.0  |    | SAR30003760 | 376.0            | 300.0            | 4.0  | 12 |
| SAR17101810  | 181.0            | 171.0            | 2.0  |    | SAR22002520  | 252.0            | 220.0            | 5.0  |    | SAR35203760 | 376.0            | 352.0            | 10.0 |    |
| SAR13601600  | 185.0            | 136.0            | 2.0  | 6  | SAR21702530  | 253.0            | 217.0            | 6.0  |    | SAR37003770 | 377.0            | 370.0            | 3.6  |    |
| SAR14501850  | 185.0            | 145.0            | 2.0  |    | SAR16002580  | 258.0            | 160.0            | 2.0  |    | SAR33603800 | 380.0            | 336.0            | 10.0 |    |
| SAR15001850  | 185.0            | 150.0            | 8.0  |    | SAR21802580  | 258.0            | 218.0            | 10.0 |    | SAR35003860 | 386.0            | 350.0            | 12.0 |    |
| SAR11001900  | 190.0            | 110.0            | 5.0  | 8  | SAR22202580  | 258.0            | 222.0            | 8.0  |    | SAR37303930 | 393.0            | 373.0            | 10.5 |    |
| SAR13501900  | 190.0            | 135.0            | 3.0  |    | SAR25342620  | 262.0            | 253.4            | 5.1  |    | SAR30004000 | 400.0            | 300.0            | 3.0  |    |
| SAR17001900  | 190.0            | 170.0            | 13.0 |    | SAR21302650  | 265.0            | 213.0            | 15.0 |    | SAR40104050 | 405.0            | 401.0            | 10.0 |    |
| SAR07001950  | 195.0            | 70.0             | 25.0 |    | SAR19002680  | 268.0            | 190.0            | 4.0  | 6  | SAR40404160 | 416.0            | 404.0            | 7.0  |    |
| SAR16001950  | 195.0            | 160.0            | 9.0  |    | SAR23302730  | 273.0            | 233.0            | 15.0 |    | SAR39304230 | 423.0            | 393.0            | 17.0 |    |
| SAR09002000  | 200.0            | 90.0             | 2.0  |    | SAR04402740  | 274.0            | 44.0             | 3.0  | 1  | SAR40904250 | 425.0            | 409.0            | 8.0  |    |
| SAR14802000  | 200.0            | 148.0            | 2.0  | 8  | SAR25002740  | 274.0            | 250.0            | 7.0  |    | SAR39004300 | 430.0            | 390.0            | 17.0 |    |
| SAR18502000  | 200.0            | 185.0            | 1.8  |    | SAR25602740  | 274.0            | 256.0            | 7.0  |    | SAR27004350 | 435.0            | 270.0            | 6.0  |    |
| SAR19002000  | 200.0            | 190.0            | 10.0 |    | SAR25002820  | 282.0            | 250.0            | 8.0  |    | SAR39504480 | 448.0            | 395.0            | 11.0 |    |
| SAR19102010  | 201.0            | 191.0            | 5.0  |    | SAR24002920  | 292.0            | 240.0            | 2.0  |    | SAR43004500 | 450.0            | 430.0            | 10.0 |    |
| SAR16002020  | 202.0            | 160.0            | 40.0 |    | SAR240029201 | 292.0            | 240.0            | 5.0  |    | SAR37004600 | 460.0            | 370.0            | 4.0  | 14 |
| SAR16902020  | 202.0            | 169.0            | 7.0  |    | SAR24002921  | 292.0            | 240.0            | 7.0  |    | SAR45104670 | 467.0            | 451.0            | 9.0  |    |
| SAR18702030  | 203.0            | 187.0            | 8.0  |    | SAR24002922  | 292.0            | 240.0            | 10.0 |    | SAR37104710 | 471.0            | 371.0            | 4.0  | 14 |

# ARANDELAS



## Medidas:

D<sub>ext</sub> ..... diámetro exterior  
 D<sub>int</sub> ..... diámetro interior  
 h ..... altura  
 ag ..... número de agujeros

| Referencia  | D <sub>ext</sub> | D <sub>int</sub> | h    | ag |
|-------------|------------------|------------------|------|----|
| SAR44804810 | 481.0            | 448.0            | 16.0 |    |
| SAR40404840 | 484.0            | 404.0            | 8.0  | 16 |
| SAR46504840 | 484.0            | 465.0            | 9.0  |    |
| SAR41004900 | 490.0            | 410.0            | 3.0  | 14 |
| SAR42504900 | 490.0            | 425.0            | 10.0 |    |
| SAR40005000 | 500.0            | 400.0            | 3.0  |    |
| SAR06555080 | 508.0            | 65.5             | 3.0  |    |

| Referencia  | D <sub>ext</sub> | D <sub>int</sub> | h    | ag |
|-------------|------------------|------------------|------|----|
| SAR40005100 | 510.0            | 400.0            | 3.0  |    |
| SAR49005100 | 510.0            | 490.0            | 10.0 |    |
| SAR50005120 | 512.0            | 500.0            | 8.0  |    |
| SAR47005200 | 520.0            | 470.0            | 10.0 |    |
| SAR45505300 | 530.0            | 455.0            | 4.0  |    |
| SAR45405450 | 545.0            | 454.0            | 10.0 | 16 |
| SAR42405650 | 565.0            | 424.0            | 10.0 | 16 |

| Referencia  | D <sub>ext</sub> | D <sub>int</sub> | h    | ag |
|-------------|------------------|------------------|------|----|
| SAR56005800 | 580.0            | 560.0            | 10.0 |    |
| SAR57705970 | 597.0            | 577.0            | 10.0 |    |
| SAR65006700 | 670.0            | 650.0            | 8.0  |    |
| SAR38007200 | 720.0            | 380.0            | 3.0  |    |
| SAR71207340 | 734.0            | 712.0            | 12.0 |    |
| SAR78408220 | 822.0            | 784.0            | 11.0 |    |