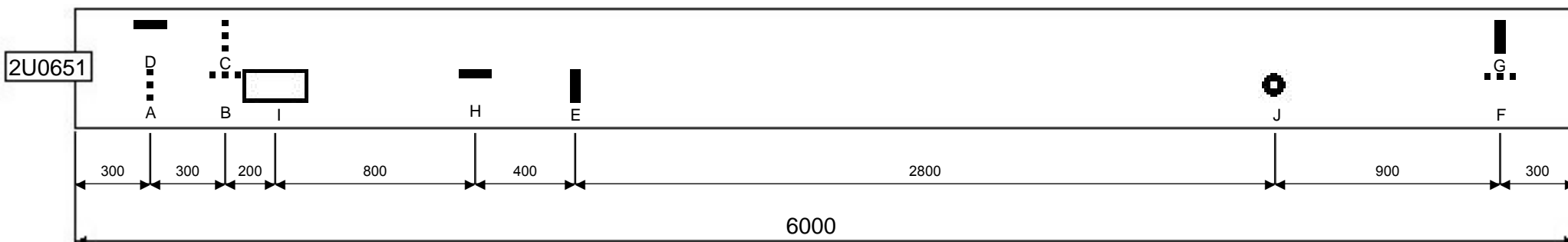


Tubo patrón número  
Reference standard #

**2U0651**

### Datos del Producto Product Information

|                                |       |                                       |                    |                                   |           |
|--------------------------------|-------|---------------------------------------|--------------------|-----------------------------------|-----------|
| Diametro [mm]<br>Diameter      | 168,3 | Cliente<br>Client                     | TENGIZCHE<br>VROIL | Ciclo<br>Product                  | 60917     |
| Espesor [mm]<br>Wall Thickness | 8,74  | Tratamiento Termico<br>Heat Treatment | SI                 | Colada<br>Heat                    | 85997     |
| Trazabilidad<br>Traceability   | 132   |                                       |                    | Expediente<br>Manufacturing Order | 5/2869.01 |



Valores Pedidos / Requested Values

Valores Medidos / Measured Values

| Posicion<br>Position | Tipo de Notch<br>Notch Type             | Ancho / Diam<br>Max [mm]<br>Max Width / Diam | Profundidad<br>Nominal [%]<br>Depth | Tolerancia<br>[%]<br>Tolerance | Profundidad<br>Maxima [mm]<br>Max Depth | Profundidad<br>Minima [mm]<br>Min Depth | Profundidad<br>Nominal [mm]<br>Nom Depth | Longitud<br>Maxima [mm]<br>Max Length | Longitud<br>[mm]<br>Length | Profundidad<br>A [mm]<br>Depth A | Profundidad<br>B [mm]<br>Depth B | Ancho / Diam<br>[mm]<br>Width / Diam | Responsable<br>Responsible | Fecha<br>Date |
|----------------------|---|--|-------------------------------------|--------------------------------|---|---|--|---------------------------------------|----------------------------|----------------------------------|----------------------------------|--------------------------------------|----------------------------|---------------|
| A                    | Transversal Interno<br>Transverse ID    | 1,00   | 5                                   | ±15                            | 0,503                                   | 0,371                                   | 0,437                                    | 25,40                                 | 25,40                      | 0,502                            | 0,497                            | 0,83                                 | Agustin Torres             | 30/12/17      |
| B                    | Longitudinal Interno<br>Longitudinal ID | 1,00   | 5                                   | ±15                            | 0,503                                   | 0,371                                   | 0,437                                    | 25,40                                 | 25,40                      | 0,491                            | 0,496                            | 0,85                                 | Agustin Torres             | 30/12/17      |
| C                    | Transversal Interno<br>Transverse ID    | 1,00   | 5                                   | ±15                            | 0,503                                   | 0,371                                   | 0,437                                    | 25,40                                 | 25,40                      | 0,461                            | 0,502                            | 0,83                                 | Agustin Torres             | 30/12/17      |
| D                    | Longitudinal Externo<br>longitudinal OD | 1,00   | 5                                   | ±15                            | 0,503                                   | 0,371                                   | 0,437                                    | 25,40                                 | 25,40                      | 0,490                            | 0,499                            | 0,87                                 | Default Default            | 30/12/17      |
| E                    | Transversal Externo<br>Transverse OD    | 1,00   | 5                                   | ±15                            | 0,503                                   | 0,371                                   | 0,437                                    | 25,40                                 | 24,20                      | 0,487                            | 0,481                            | 0,85                                 | Carlos Aguilar             | 28/12/17      |
| F                    | Longitudinal Interno<br>Longitudinal ID | 1,00   | 5                                   | ±15                            | 0,503                                   | 0,371                                   | 0,437                                    | 25,40                                 | 25,40                      | 0,498                            | 0,496                            | 0,81                                 | Agustin Torres             | 30/12/17      |
| G                    | Transversal Externo<br>Transverse OD    | 1,00   | 5                                   | ±15                            | 0,503                                   | 0,371                                   | 0,437                                    | 25,40                                 | 24,30                      | 0,493                            | 0,491                            | 0,86                                 | Carlos Aguilar             | 28/12/17      |
| H                    | Longitudinal Externo<br>longitudinal OD | 1,00   | 5                                   | ±15                            | 0,503                                   | 0,371                                   | 0,437                                    | 25,40                                 | 25,30                      | 0,501                            | 0,494                            | 0,87                                 | Carlos Aguilar             | 28/12/17      |

#### Notas:

1.-Todas las dimensiones son en milímetros excepto que se indique lo contrario.  
2.-Minima Profundidad Nominal de las ranuras 0.3 mm.  
CERTIFICADO CON REPLICA SI

#### Notes:

1.-All dimensions in milimeters unless stated.  
2.-Minimum notch nominal depth 0.3 mm.  
CERTIFIED WITH PLASTIC REPLICA YES

Tubo patrón número  
Reference standard #

**2U0651**

### Datos del Producto Product Information

|                                |       |                                       |                    |                                   |           |
|--------------------------------|-------|---------------------------------------|--------------------|-----------------------------------|-----------|
| Diametro [mm]<br>Diameter      | 168,3 | Cliente<br>Client                     | TENGIZCHE<br>VROIL | Ciclo<br>Product                  | 60917     |
| Espesor [mm]<br>Wall Thickness | 8,74  | Tratamiento Termico<br>Heat Treatment | SI                 | Colada<br>Heat                    | 85997     |
| Trazabilidad<br>Traceability   | 132   |                                       |                    | Expediente<br>Manufacturing Order | 5/2869.01 |

| Posicion<br>Position | Tipo de Notch<br>Notch Type     | Ancho / Diam<br>Max [mm]<br>Max Width / Diam | Profundidad<br>Nominal [%]<br>Depth | Tolerancia<br>[%]<br>Tolerance | Profundidad<br>Maxima [mm]<br>Max Depth | Profundidad<br>Minima [mm]<br>Min Depth | Profundidad<br>Nominal [mm]<br>Nom Depth | Longitud<br>Maxima [mm]<br>Max Length | Longitud<br>[mm]<br>Length | Profundida<br>d A [mm]<br>Depth A | Profundida<br>d B [mm]<br>Depth B | Ancho / Diam<br>[mm]<br>Width / Diam | Responsable<br>Responsible | Fecha<br>Date |
|----------------------|---------------------------------|--|-------------------------------------|--------------------------------|---|---|--|---------------------------------------|----------------------------|-----------------------------------|-----------------------------------|--------------------------------------|----------------------------|---------------|
| I                    | Chavetero<br>Grove              | 6,00   | 50                                  | +40-0                          | 6,118                                   | 4,370                                   | 4,370                                    | 17,00                                 | 15,80                      | 4,000                             | 4,000                             | 5,00                                 | Agustin Torres             | 29/12/17      |
| J                    | Agujero Pasante<br>Drilled hole | 1,60   | -                                   | -                              | -                                       | -                                       | -  | -                                     | -                          | -                                 | -                                 | 1,60                                 | Agustin Torres             | 30/12/17      |

### Instrumentos de Medicion Utilizados:

Proyector de Perfiles Mitutoyo PJ-A3000   Codigo: 302-711A

Calibre Pie de Rey   Codigo:

#### Notas:

- 1.-Todas las dimensiones son en milímetros excepto que se indique lo contrario.
- 2.-Minima Profundidad Nominal de las ranuras 0.3 mm.

CERTIFICADO CON REPLICA SI

#### Notes:

- 1.-All dimensions in milimeters unless stated.
- 2.-Minimum notch nominal depth 0.3 mm.

CERTIFIED WITH PLASTIC REPLICA YES

OT-PMANT

Fecha  
Date

30/12/2017  
08:41:26 a.m.

Hoja  
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Documento  
Vigencia

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17/04/2006