

# TRACK 250 - ISO 11414

## PARÁMETROS DE FUSIÓN A TOPE PARA TUBOS Y ACCESORIOS DE PE100 - SDR 7.4/SDR 9/SDR 11/SDR 13.6 BUTT FUSION PARAMETERS FOR POLYETHYLENE (PE) PIPES AND FITTINGS - SDR 7.4/SDR 9/SDR 11/SDR 13.6

| FASE PHASE | DN   | 63   |       |       |       | 75    |       |       |       | 90    |       |       |       | 110   |       |       |       | 125   |       |       |       | 140                             |       |       |       | 160   |       |       |       | 180   |       |       |       | 200   |       |       |       | 225   |       |       |       | 250   |       |       |       |
|------------|--|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            | SDR  | 7.4  | 9     | 11    | 13.6  | 7.4   | 9     | 11    | 13.6  | 7.4   | 9     | 11    | 13.6  | 7.4   | 9     | 11    | 13.6  | 7.4   | 9     | 11    | 13.6  | 7.4                             | 9     | 11    | 13.6  | 7.4   | 9     | 11    | 13.6  | 7.4   | 9     | 11    | 13.6  | 7.4   | 9     | 11    | 13.6  | 7.4   | 9     | 11    | 13.6  |       |       |       |       |
|            | ESPOSOR/WALL THICKNESS   | 8.6  | 7.1   | 5.8   | 4.7   | 10.3  | 8.4   | 6.8   | 5.5   | 12.3  | 10.1  | 8.2   | 6.6   | 15.1  | 12.3  | 10    | 8.1   | 17.1  | 14    | 11.4  | 9.2   | 19.2                            | 15.7  | 12.7  | 10.3  | 21.9  | 17.9  | 14.6  | 11.8  | 24.6  | 20.1  | 16.4  | 13.3  | 27.4  | 22.4  | 18.2  | 14.7  | 30.8  | 25.1  | 20.5  | 16.6  | 34.2  | 27.9  | 22.7  | 18.4  |
|            | PN   | 25   | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  | 25                              | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  |
|            | PRESIÓN DE REFRENTADO TRIMMING PRESSURE  | PRESIÓN DE ARRASTRE + la presión necesaria para que se produzca el corte de viruta<br>DRAG PRESSURE + the necessary pressure to produce the trimming operation   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | TEMPERATURA PLACA HEATING PLATE TEMPERATURE  | 210°C ±10°C  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | PRESIÓN PRE-CALENTAMIENTO (bar) Superficie pistón 9.8 cm <sup>2</sup> HEAT SOAK PRESSURE (bar) Piston area 9.8 cm <sup>2</sup> | AÑADIR PRESIÓN DE ARRASTRE / ADD DRAG PRESSURE   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1          | TIEMPO DE PRE-CALENTAMIENTO HEATING TIME   | 2.7  | 2.3   | 2     | 1.5   | 4     | 3.2   | 2.7   | 2.2   | 5.5   | 4.7   | 4     | 3.2   | 8.2   | 7     | 6     | 5     | 10.5  | 9     | 7.5   | 6.2   | 13.5                            | 11.5  | 9.5   | 7.5   | 17.5  | 14.5  | 12    | 10    | 22    | 18.5  | 15.5  | 13    | 27.5  | 23    | 19    | 16    | 34.5  | 29    | 24    | 20    | 42.5  | 36    | 30    | 24.5  |
|            | CORDÓN B1 (anchura del reborde) / BEAD B1 (mm)   | De 1 a 2 mm / From 1 up to 2 mm  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | De 2 a 3 mm / From 2 up to 3 mm |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 2          | CALENTAMIENTO HEAT SOAK PRESSURE   | INMOVILIZACIÓN (DESPRESURIZAR LA PRESIÓN DE LAFASE ● DE PRE-CALENTAMIENTO BAJANDO LA VÁLVULA DE DESCARGA) / IMMOBILIZATION (RELEASE THE PHASE ● HEAT SOAK PRESSURE MOVING DOWNWARDS THE DRAIN VALVE LEVER)<br>¡ ATENCIÓN ! REDUCIR LA PRESIÓN A LA MÍNIMA NECESARIA (NO POR DEBAJO DEL ARRASTRE) PARA MANTENER EL CONTACTO DE LA PLACA CON LOS TUBOS Y SUBIR LA PALANCA DE LA VÁLVULA DE DESCARGA<br>ATTENTION ! REDUCE THE PRESSURE TO A MINIMUM NECESSARY TO KEEP THE CONTACT BETWEEN HEATING PLATE AND PIPE ENDS; THEN MOVE UPWARDS THE DRAIN VALVE LEVER |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | TIEMPO DE CALENTAMIENTO HEAT SOAK TIME (min:s ±10s)  | 01:02  |       |       |       | 01:08 |       |       |       | 01:15 |       |       |       | 01:25 |       |       |       | 01:33 |       |       |       | 01:40                           |       |       |       | 01:50 |       |       |       | 02:00 |       |       |       | 02:10 |       |       |       | 02:23 |       |       |       | 02:35 |       |       |       |
| 3          | EXTRACCIÓN PLACA (s) HEATER WITHDRAWAL (s)   | 3.5  |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       | 4.5   |       |       |       |                                 |       |       |       | 5     |       |       |       |       |       |       |       | 5.5   |       |       |       |       |       |       |       |       |       |       |       |
| 4          | TIEMPO DE RAMPA (s) CHANGEOVER TIME (s)  | 3.5  |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       | 4.5   |       |       |       |                                 |       |       |       | 5     |       |       |       |       |       |       |       | 5.5   |       |       |       |       |       |       |       |       |       |       |       |
| 5          | PRESIÓN DE FUSIÓN (bar) FUSION PRESSURE (bar)  | AÑADIR PRESIÓN DE ARRASTRE / ADD DRAG PRESSURE   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | TIEMPO DE FUSIÓN (min) FUSION TIME (min)   | Mínimo/ Minimum 10   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 6          | INMOVILIZACIÓN SIN PRESIÓN COOLING TIME (min:s)  | 12:54  | 10:39 | 08:42 | 07:03 | 15:27 | 12:36 | 10:12 | 08:15 | 18:27 | 15:09 | 12:18 | 10:03 | 20:00 | 18:27 | 15:00 | 12:09 | 20:00 | 20:00 | 17:06 | 13:48 | 20:00                           | 20:00 | 19:03 | 15:27 | 20:00 | 20:00 | 20:00 | 17:42 | 20:00 | 20:00 | 20:00 | 19:57 | 20:00 | 20:00 | 20:00 | 20:00 | 20:00 | 20:00 | 20:00 | 20:00 | 20:00 | 20:00 | 20:00 | 20:00 |

## PARÁMETROS DE FUSIÓN A TOPE PARA TUBOS Y ACCESORIOS DE PE100 - SDR 17/SDR 21/SDR 26/SDR 33 BUTT FUSION PARAMETERS FOR POLYETHYLENE (PE) PIPES AND FITTINGS - SDR 17/SDR 21/SDR 26/SDR 33

| FASE PHASE | DN   | 63   |       |       |       | 75    |       |       |       | 90    |       |       |       | 110   |       |       |       | 125   |       |       |       | 140                             |       |       |       | 160   |       |       |       | 180   |       |       |       | 200   |       |       |       | 225   |       |       |       | 250   |       |       |       |
|------------|--|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            | SDR  | 17   | 21    | 26    | 33    | 17    | 21    | 26    | 33    | 17    | 21    | 26    | 33    | 17    | 21    | 26    | 33    | 17    | 21    | 26    | 33    | 17                              | 21    | 26    | 33    | 17    | 21    | 26    | 33    | 17    | 21    | 26    | 33    | 17    | 21    | 26    | 33    | 17    | 21    | 26    | 33    |       |       |       |       |
|            | ESPOSOR/WALL THICKNESS   | 3.8  | 3     | 2.4   | 2.3   | 4.5   | 3.6   | 2.9   | 2.3   | 5.4   | 4.3   | 3.5   | 2.8   | 6.6   | 5.3   | 4.2   | 3.4   | 7.4   | 6     | 4.8   | 3.9   | 8.3                             | 6.7   | 5.4   | 4.3   | 9.5   | 7.7   | 6.2   | 4.9   | 10.7  | 8.6   | 6.9   | 5.5   | 11.9  | 9.6   | 7.7   | 6.2   | 13.4  | 10.8  | 8.6   | 6.9   | 14.8  | 11.9  | 9.6   | 7.7   |
|            | PN   | 10   | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     | 10                              | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     |
|            | PRESIÓN DE REFRENTADO TRIMMING PRESSURE  | PRESIÓN DE ARRASTRE + la presión necesaria para que se produzca el corte de viruta<br>DRAG PRESSURE + the necessary pressure to produce the trimming operation   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | TEMPERATURA PLACA HEATING PLATE TEMPERATURE  | 210°C ±10°C  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | PRESIÓN PRE-CALENTAMIENTO (bar) Superficie pistón 9.8 cm <sup>2</sup> HEAT SOAK PRESSURE (bar) Piston area 9.8 cm <sup>2</sup> | AÑADIR PRESIÓN DE ARRASTRE / ADD DRAG PRESSURE   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1          | TIEMPO DE PRE-CALENTAMIENTO HEATING TIME   | 1.3  | 1     | 0.8   | 0.8   | 2     | 1.5   | 1.2   | 1     | 2.5   | 2     | 1.7   | 1.5   | 4     | 3.2   | 2.5   | 2     | 5     | 4     | 3.3   | 2.7   | 6.5                             | 5     | 4.2   | 3.5   | 8.5   | 7     | 5.5   | 4.5   | 10.5  | 8.5   | 7     | 5.5   | 13    | 10.5  | 8.5   | 7     | 16.5  | 13.5  | 11    | 8.5   | 20    | 16.5  | 13.5  | 11    |
|            | CORDÓN B1 (anchura del reborde)/BEAD B1 (mm)   | De 1 a 2 mm / From 1 up to 2 mm  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | De 2 a 3 mm / From 2 up to 3 mm |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 2          | CALENTAMIENTO HEAT SOAK PRESSURE   | INMOVILIZACIÓN (DESPRESURIZAR LA PRESIÓN DE LAFASE ● DE PRE-CALENTAMIENTO BAJANDO LA VÁLVULA DE DESCARGA) / IMMOBILIZATION (RELEASE THE PHASE ● HEAT SOAK PRESSURE MOVING DOWNWARDS THE DRAIN VALVE LEVER)<br>¡ ATENCIÓN ! REDUCIR LA PRESIÓN A LA MÍNIMA NECESARIA (NO POR DEBAJO DEL ARRASTRE) PARA MANTENER EL CONTACTO DE LA PLACA CON LOS TUBOS Y SUBIR LA PALANCA DE LA VÁLVULA DE DESCARGA<br>ATTENTION ! REDUCE THE PRESSURE TO A MINIMUM NECESSARY TO KEEP THE CONTACT BETWEEN HEATING PLATE AND PIPE ENDS; THEN MOVE UPWARDS THE DRAIN VALVE LEVER |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | TIEMPO DE CALENTAMIENTO HEAT SOAK TIME (min:s ±10s)  | 01:02  |       |       |       | 01:08 |       |       |       | 01:15 |       |       |       | 01:25 |       |       |       | 01:33 |       |       |       | 01:40                           |       |       |       | 01:50 |       |       |       | 02:00 |       |       |       | 02:10 |       |       |       | 02:23 |       |       |       | 02:35 |       |       |       |
| 3          | EXTRACCIÓN PLACA (s) HEATER WITHDRAWAL (s)   | 3.5  |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       | 4.5   |       |       |       |                                 |       |       |       | 5     |       |       |       |       |       |       |       | 5.5   |       |       |       |       |       |       |       |       |       |       |       |
| 4          | TIEMPO DE RAMPA (s) CHANGEOVER TIME (s)  | 3.5  |       |       |       |       |       |       |       | 4     |       |       |       |       |       |       |       | 4.5   |       |       |       |                                 |       |       |       | 5     |       |       |       |       |       |       |       | 5.5   |       |       |       |       |       |       |       |       |       |       |       |
| 5          | PRESIÓN DE FUSIÓN (bar) FUSION PRESSURE (bar)  | AÑADIR PRESIÓN DE ARRASTRE / ADD DRAG PRESSURE   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | TIEMPO DE FUSIÓN (min) FUSION TIME (min)   | Mínimo/ Minimum 10   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 6          | INMOVILIZACIÓN SIN PRESIÓN COOLING TIME (min:s)  | 05:42  | 04:30 | 03:36 | 03:27 | 06:45 | 05:24 | 04:21 | 03:27 | 08:06 | 06:27 | 05:15 | 04:12 | 09:54 | 07:57 | 06:18 | 05:06 | 11:06 | 09:00 | 07:12 | 05:51 | 12:27                           | 10:03 | 08:06 | 06:27 | 14:15 | 11:33 | 09:18 | 07:21 | 16:03 | 12:54 | 10:21 | 08:15 | 17:51 | 14:24 | 11:33 | 09:18 | 20:00 | 16:12 | 12:54 | 10:21 | 20:00 | 17:51 | 14:24 | 11:33 |

# TRACK 250 - DVS 2207-1:2016

## PARÁMETROS DE FUSIÓN A TOPE PARA TUBOS Y ACCESORIOS DE PE100 - SDR 7.4/SDR 9/SDR 11/SDR 13.6

### BUTT FUSION PARAMETERS FOR POLYETHYLENE (PE) PIPES AND FITTINGS - SDR 7.4/SDR 9/SDR 11/SDR 13.6

| FASE PHASE | DN   | 63   |       |       |       | 75    |       |       |       | 90    |       |       |       | 110   |       |       |       | 125   |       |       |       | 140   |       |       |       | 160   |       |       |       | 180   |       |       |       | 200   |       |       |       | 225   |       |       |       | 250   |       |       |       |
|------------|--|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            |  | SDR  | 7.4   | 9     | 11    | 13.6  | 7.4   | 9     | 11    | 13.6  | 7.4   | 9     | 11    | 13.6  | 7.4   | 9     | 11    | 13.6  | 7.4   | 9     | 11    | 13.6  | 7.4   | 9     | 11    | 13.6  | 7.4   | 9     | 11    | 13.6  | 7.4   | 9     | 11    | 13.6  | 7.4   | 9     | 11    | 13.6  |       |       |       |       |       |       |       |
|            | ESPOSOR/WALL THICKNESS   | 8.6  | 7.1   | 5.8   | 4.7   | 10.3  | 8.4   | 6.8   | 5.5   | 12.3  | 10.1  | 8.2   | 6.6   | 15.1  | 12.3  | 10    | 8.1   | 17.1  | 14    | 11.4  | 9.2   | 19.2  | 15.7  | 12.7  | 10.3  | 21.9  | 17.9  | 14.6  | 11.8  | 24.6  | 20.1  | 16.4  | 13.3  | 27.4  | 22.4  | 18.2  | 14.7  | 30.8  | 25.1  | 20.5  | 16.6  | 34.2  | 27.9  | 22.7  | 18.4  |
|            | PN   | 25   | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  | 25    | 20    | 16    | 12.5  |
|            | PRESIÓN DE REFRENTADO TRIMMING PRESSURE  | PRESIÓN DE ARRASTRE + la presión necesaria para que se produzca el corte de viruta<br>DRAG PRESSURE + the necessary pressure to produce the trimming operation   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | TEMPERATURA PLACA HEATING PLATE TEMPERATURE  | 220°C ±10°C  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1          | PRESIÓN PRE-CALENTAMIENTO (bar) Superficie pistón 9.80 cm <sup>2</sup> HEAT SOAK PRESSURE (bar) Piston area 9.80 cm <sup>2</sup> | AÑADIR PRESIÓN DE ARRASTRE / ADD DRAG PRESSURE   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | TIEMPO PRE-CALENTAMIENTO HEATING TIME  | HASTA LA FORMACIÓN DEL CORDÓN / AS BEAD IS FORMED  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | ALTURA CORDÓN (mm) BEAD HEIGHT (mm)  |  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            |  |  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 2          | CALENTAMIENTO HEAT SOAK PRESSURE   | INMOVILIZACIÓN (DESPRESURIZAR LA PRESIÓN DE LA FASE 1 DE PRE-CALENTAMIENTO BAJANDO LA VÁLVULA DE DESCARGA) / IMMOBILIZATION (RELEASE THE PHASE 1 HEAT SOAK PRESSURE MOVING DOWNWARDS THE DRAIN VALVE LEVER)  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            |  | ¡ ATENCIÓN ! REDUCIR LA PRESIÓN A LA MÍNIMA NECESARIA (NO POR DEBAJO DEL ARRASTRE) PARA MANTENER EL CONTACTO DE LA PLACA CON LOS TUBOS Y SUBIR LA PALANCA DE LA VÁLVULA DE DESCARGA<br>ATTENTION ! REDUCE THE PRESSURE TO A MINIMUM NECESSARY TO KEEP THE CONTACT BETWEEN HEATING PLATE AND PIPE ENDS; THEN MOVE UPWARDS THE DRAIN VALVE LEVER |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | TIEMPO DE CALENTAMIENTO HEAT SOAK TIME (min:s)   | 01:26  | 01:11 | 00:58 | 00:47 | 01:43 | 01:24 | 01:08 | 00:55 | 02:03 | 01:41 | 01:22 | 01:06 | 02:31 | 02:03 | 01:40 | 01:21 | 02:51 | 02:20 | 01:54 | 01:32 | 03:12 | 02:37 | 02:07 | 01:43 | 03:39 | 02:59 | 02:26 | 01:58 | 04:06 | 03:21 | 02:44 | 02:13 | 04:34 | 03:44 | 03:02 | 02:27 | 05:08 | 04:11 | 03:25 | 02:46 | 05:42 | 04:39 | 03:47 | 03:04 |
| 3          | EXTRACCIÓN PLACA (s) HEATER WITHDRAWAL (s)   | 6  | 6     | 5     | 5     | 7     | 7     | 6     | 5     | 8     | 7     | 7     | 6     | 9     | 8     | 9     | 7     | 9     | 9     | 8     | 7     | 10    | 9     | 8     | 7     | 11    | 10    | 9     | 8     | 11    | 10    | 9     | 9     | 12    | 10    | 10    | 9     | 14    | 12    | 10    | 9     | 15    | 15    | 11    | 10    |
| 4          | TIEMPO DE RAMPA (s) CHANGEOVER TIME (s)  | 6  | 6     | 5     | 5     | 7     | 7     | 6     | 5     | 8     | 7     | 7     | 6     | 9     | 8     | 9     | 7     | 10    | 9     | 8     | 7     | 11    | 9     | 8     | 7     | 12    | 11    | 9     | 8     | 13    | 11    | 9     | 9     | 14    | 12    | 11    | 9     | 16    | 14    | 11    | 10    | 17    | 18    | 12    | 11    |
| 5          | PRESIÓN DE FUSIÓN (bar) FUSION PRESSURE (bar)  | AÑADIR PRESIÓN DE ARRASTRE / ADD DRAG PRESSURE   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | TIEMPO DE FUSIÓN (min:s) De 150°C a 250°C From 150°C to 250°C  |  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | TIEMPO DE FUSIÓN (min:s) Desde 250°C From 250°C  |  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            |  |  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |

## PARÁMETROS DE FUSIÓN A TOPE PARA TUBOS Y ACCESORIOS DE PE100 - SDR 17/SDR 21/SDR 26/SDR 33

### BUTT FUSION PARAMETERS FOR POLYETHYLENE (PE) PIPES AND FITTINGS - SDR 17/SDR 21/SDR 26/SDR 33

| FASE PHASE | DN   | 63   |       |       |       | 75    |       |       |       | 90    |       |       |       | 110   |       |       |       | 125   |       |       |       | 140   |       |       |       | 160   |       |       |       | 180   |       |       |       | 200   |       |       |       | 225   |       |       |       | 250   |       |       |       |
|------------|--|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            |  | SDR  | 17    | 21    | 26    | 33    | 17    | 21    | 26    | 33    | 17    | 21    | 26    | 33    | 17    | 21    | 26    | 33    | 17    | 21    | 26    | 33    | 17    | 21    | 26    | 33    | 17    | 21    | 26    | 33    | 17    | 21    | 26    | 33    | 17    | 21    | 26    | 33    |       |       |       |       |       |       |       |
|            | ESPOSOR/WALL THICKNESS   | 3.8  | 3     | 2.4   | 2.3   | 4.5   | 3.6   | 2.9   | 2.3   | 5.4   | 4.3   | 3.5   | 2.8   | 6.6   | 5.3   | 4.2   | 3.4   | 7.4   | 6     | 4.8   | 3.9   | 8.3   | 6.7   | 5.4   | 4.3   | 9.5   | 7.7   | 6.2   | 4.9   | 10.7  | 8.6   | 6.9   | 5.5   | 11.9  | 9.6   | 7.7   | 6.2   | 13.4  | 10.8  | 8.6   | 6.9   | 14.8  | 11.9  | 9.6   | 7.7   |
|            | PN   | 10   | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     | 10    | 8     | 6.3   | 4     |
|            | PRESIÓN DE REFRENTADO TRIMMING PRESSURE  | PRESIÓN DE ARRASTRE + la presión necesaria para que se produzca el corte de viruta<br>DRAG PRESSURE + the necessary pressure to produce the trimming operation   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | TEMPERATURA PLACA HEATING PLATE TEMPERATURE  | 220°C ±10°C  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1          | PRESIÓN PRE-CALENTAMIENTO (bar) Superficie pistón 9.80 cm <sup>2</sup> HEAT SOAK PRESSURE (bar) Piston area 9.80 cm <sup>2</sup> | AÑADIR PRESIÓN DE ARRASTRE / ADD DRAG PRESSURE   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | TIEMPO PRE-CALENTAMIENTO HEATING TIME  | HASTA LA FORMACIÓN DEL CORDÓN / AS BEAD IS FORMED  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | ALTURA CORDÓN (mm) BEAD HEIGHT (mm)  |  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            |  |  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 2          | CALENTAMIENTO HEAT SOAK PRESSURE   | INMOVILIZACIÓN (DESPRESURIZAR LA PRESIÓN DE LA FASE 1 DE PRE-CALENTAMIENTO BAJANDO LA VÁLVULA DE DESCARGA) / IMMOBILIZATION (RELEASE THE PHASE 1 HEAT SOAK PRESSURE MOVING DOWNWARDS THE DRAIN VALVE LEVER)  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            |  | ¡ ATENCIÓN ! REDUCIR LA PRESIÓN A LA MÍNIMA NECESARIA (NO POR DEBAJO DEL ARRASTRE) PARA MANTENER EL CONTACTO DE LA PLACA CON LOS TUBOS Y SUBIR LA PALANCA DE LA VÁLVULA DE DESCARGA<br>ATTENTION ! REDUCE THE PRESSURE TO A MINIMUM NECESSARY TO KEEP THE CONTACT BETWEEN HEATING PLATE AND PIPE ENDS; THEN MOVE UPWARDS THE DRAIN VALVE LEVER |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | TIEMPO DE CALENTAMIENTO HEAT SOAK TIME (min:s)   | 00:38  | 00:30 | 00:24 | 00:23 | 00:45 | 00:36 | 00:29 | 00:23 | 00:54 | 00:43 | 00:35 | 00:28 | 01:06 | 00:53 | 00:42 | 00:34 | 01:14 | 01:00 | 00:48 | 00:39 | 01:23 | 01:07 | 00:54 | 00:43 | 01:35 | 01:17 | 01:02 | 00:49 | 01:47 | 01:26 | 01:09 | 00:55 | 01:59 | 01:36 | 01:17 | 01:02 | 02:14 | 01:48 | 01:26 | 01:09 | 02:28 | 01:59 | 01:36 | 01:17 |
| 3          | EXTRACCIÓN PLACA (s) HEATER WITHDRAWAL (s)   | 5  | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 6     | 5     | 5     | 6     | 6     | 5     | 5     | 6     | 6     | 5     | 5     | 7     | 6     | 6     | 5     | 7     | 7     | 6     | 5     | 8     | 7     | 6     | 6     | 8     | 8     | 7     | 6     | 9     | 8     | 7     | 6     |
| 4          | TIEMPO DE RAMPA (s) CHANGEOVER TIME (s)  | 5  | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 5     | 6     | 5     | 5     | 6     | 6     | 5     | 5     | 6     | 6     | 5     | 5     | 7     | 6     | 6     | 5     | 7     | 7     | 6     | 5     | 8     | 7     | 6     | 6     | 9     | 8     | 7     | 6     | 9     | 8     | 7     | 6     |
| 5          | PRESIÓN DE FUSIÓN (bar) FUSION PRESSURE (bar)  | AÑADIR PRESIÓN DE ARRASTRE / ADD DRAG PRESSURE   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | TIEMPO DE FUSIÓN (min:s) De 150°C a 250°C From 150°C to 250°C  |  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            | TIEMPO DE FUSIÓN (min:s) Desde 250°C From 250°C  |  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|            |  |  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |

# TRACK 250 - DVS 2207-11: 2017

## PARÁMETROS DE FUSIÓN A TOPE PARA TUBOS Y ACCESORIOS DE POLIPROPILENO (PP) - SDR 7.4/SDR 11/SDR 17.6 BUTT FUSION PARAMETERS FOR POLYPROPYLENE (PP) PIPES AND FITTINGS - SDR 7.4/SDR 11/SDR 17.6

| FASE<br>PHASE                                 | DN   | 63   |       |       | 75    |       |       | 90    |       |       | 110   |       |       | 125   |       |       | 140   |       |       | 160   |       |       | 180   |       |       | 200   |       |       | 225   |       |      | 250 |  |  |
|---|--|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-----|--|--|
|   | SDR  | 7.4  | 11    | 17.6  | 7.4   | 11    | 17.6  | 7.4   | 11    | 17.6  | 7.4   | 11    | 17.6  | 7.4   | 11    | 17.6  | 7.4   | 11    | 17.6  | 7.4   | 11    | 17.6  | 7.4   | 11    | 17.6  | 7.4   | 11    | 17.6  | 7.4   | 11    | 17.6 |     |  |  |
|   | ESPOSOR/WALL THICKNESS   | 8.6  | 5.8   | 3.6   | 10.3  | 6.8   | 4.3   | 12.3  | 8.2   | 5.1   | 15.1  | 10    | 6.3   | 17.1  | 11.4  | 7.1   | 19.2  | 12.7  | 8     | 21.9  | 14.6  | 9.1   | 16.4  | 10.2  | 18.2  | 11.4  | 20.5  | 12.8  | 22.7  | 14.2  |      |     |  |  |
| PN  | 16   | 10   | 6     | 16    | 10    | 6     | 16    | 10    | 6     | 16    | 10    | 6     | 16    | 10    | 6     | 16    | 10    | 6     | 16    | 10    | 6     | 16    | 10    | 6     | 16    | 10    | 6     | 16    | 10    | 6     |      |     |  |  |
|   | PRESIÓN DE REFRENTADO TRIMMING PRESSURE  | PRESIÓN DE ARRASTRE + la presión necesaria para que se produzca el corte de viruta<br>DRAG PRESSURE + the necessary pressure to produce the trimming operation   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |     |  |  |
|   | TEMPERATURA PLACA HEATER TEMPERATURE   | 210°C ±10°C  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |     |  |  |
| 1   | PRESIÓN PRE-CALENTAMIENTO (bar) Superficie pistón 9.8 cm <sup>2</sup> HEAT SOAK PRESSURE (bar) Piston area 9.8 cm <sup>2</sup> | AÑADIR PRESIÓN DE ARRASTRE / ADD DRAG PRESSURE   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |     |  |  |
|   | TIEMPO PRE-CALENTAMIENTO HEATING TIME  | HASTA LA FORMACIÓN DEL CORDÓN / AS BEAD IS FORMED  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |     |  |  |
|   | ALTURA CORDÓN (mm) BEAD HEIGHT (mm)  | 1  | 0.5   | 0.5   | 1     | 0.5   | 0.5   | 1     | 1     | 0.5   | 1     | 1     | 0.5   | 1     | 1     | 1     | 1.5   | 1     | 1     | 1.5   | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1    |     |  |  |
| 2   | CALENTAMIENTO HEAT SOAK PRESSURE   | INMOVILIZACIÓN (DESPRESURIZAR LA PRESIÓN DE LA FASE 1 DE PRE-CALENTAMIENTO BAJANDO LA VÁLVULA DE DESCARGA) / IMMOBILIZATION (RELEASE THE PHASE 1 HEAT SOAK PRESSURE MOVING DOWNWARDS THE DRAIN VALVE LEVER)  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |     |  |  |
|   | TIEMPO DE CALENTAMIENTO HEAT SOAK TIME (min:s)   | ¡ ATENCIÓN ! REDUCIR LA PRESIÓN A LA MÍNIMA NECESARIA (NO POR DEBAJO DEL ARRASTRE) PARA MANTENER EL CONTACTO DE LA PLACA CON LOS TUBOS Y SUBIR LA PALANCA DE LA VÁLVULA DE DESCARGA<br>ATTENTION ! REDUCE THE PRESSURE TO A MINIMUM NECESSARY TO KEEP THE CONTACT BETWEEN HEATING PLATE AND PIPE ENDS; THEN MOVE UPWARDS THE DRAIN VALVE LEVER |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |     |  |  |
| 3   | EXTRACCIÓN PLACA (s) HEATER WITHDRAWAL (s)   | 6  | 5     | 5     | 6     | 6     | 5     | 7     | 6     | 5     | 8     | 6     | 6     | 9     | 7     | 6     | 9     | 7     | 6     | 10    | 8     | 6     | 8     | 6     | 9     | 7     | 9     | 7     | 10    | 8     |      |     |  |  |
| 4   | TIEMPO DE RAMPA (s) CHANGEOVER TIME (s)  | 8  | 6     | 6     | 8     | 7     | 6     | 11    | 8     | 6     | 13    | 9     | 7     | 16    | 11    | 7     | 17    | 11    | 8     | 19    | 12    | 8     | 16    | 8     | 16    | 11    | 18    | 11    | 18    | 12    |      |     |  |  |
| 5   | PRESIÓN DE FUSIÓN (bar) FUSION PRESSURE (bar)  | AÑADIR PRESIÓN DE ARRASTRE / ADD DRAG PRESSURE   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |     |  |  |
|   | TIEMPO DE FUSIÓN (min:s) Hasta 15°C Up to 15°C   | 07:07  | 05:02 | 03:12 | 08:19 | 05:50 | 03:49 | 09:42 | 06:50 | 04:29 | 11:30 | 08:06 | 05:26 | 12:47 | 09:05 | 06:04 | 14:09 | 09:57 | 06:42 | 16:04 | 11:10 | 07:28 | 12:20 | 08:14 | 13:29 | 09:05 | 15:04 | 10:01 | 16:39 | 10:55 |      |     |  |  |
|   | TIEMPO DE FUSIÓN (min:s) De 15°C a 25°C From 15°C to 25°C  | 08:56  | 06:18 | 04:00 | 10:28 | 07:18 | 04:47 | 12:15 | 08:35 | 05:36 | 14:39 | 10:12 | 06:48 | 16:22 | 11:28 | 07:35 | 18:10 | 12:36 | 08:24 | 20:29 | 14:14 | 09:23 | 15:46 | 10:23 | 17:19 | 11:28 | 19:17 | 12:41 | 21:10 | 13:53 |      |     |  |  |
| TIEMPO DE FUSIÓN (min:s) Desde 25°C From 25°C | 11:25  | 08:04  | 05:12 | 13:28 | 09:16 | 06:13 | 15:52 | 10:56 | 07:13 | 19:16 | 13:06 | 08:40 | 21:42 | 14:47 | 09:37 | 24:14 | 16:21 | 10:42 | 27:19 | 18:39 | 12:01 | 20:51 | 13:20 | 23:02 | 14:47 | 25:43 | 16:28 | 28:14 | 18:10 |       |      |     |  |  |

## PARÁMETROS DE FUSIÓN A TOPE PARA TUBOS Y ACCESORIOS DE POLIPROPILENO (PP) - SDR26/SDR 33/SDR41 BUTT FUSION PARAMETERS FOR POLYPROPYLENE (PP) PIPES AND FITTINGS - SDR26/SDR 33/SDR41

| FASE<br>PHASE                                 | DN   | 63   |       |       | 75    |       |       | 90    |       |       | 110   |       |       | 125   |       |       | 140   |       |       | 160   |       |       | 180   |       |       | 200   |       |       | 225   |       |       | 250   |       |       |       |       |
|---|--|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|   | SDR  | 26   | 33    |       | 26    | 33    |       | 26    | 33    | 41    | 26    | 33    | 41    | 26    | 33    | 41    | 26    | 33    | 41    | 26    | 33    | 41    | 26    | 33    | 41    | 26    | 33    | 41    | 26    | 33    | 41    |       |       |       |       |       |
|   | ESPOSOR/WALL THICKNESS   | 2.5  | 2     |       | 2.9   | 2.3   |       | 3.5   | 2.8   |       | 4.2   | 3.4   | 2.7   | 4.8   | 3.9   | 3.1   | 5.4   | 4.3   | 3.5   | 6.2   | 4.9   | 4     | 6.9   | 5.5   | 4.4   | 7.7   | 6.2   | 4.9   | 3     | 8.6   | 6.9   | 5.5   | 9.6   | 7.7   | 6.2   | 3.5   |
| PN  | 4  | 3.2  |       | 4     | 3.2   |       | 4     | 3.2   |       | 4     | 3.2   | 2.5   | 4     | 3.2   | 2.5   | 4     | 3.2   | 2.5   | 4     | 3.2   | 2.5   | 4     | 3.2   | 2.5   | 4     | 3.2   | 2.5   | 4     | 3.2   | 2.5   | 4     | 3.2   | 2.5   |       |       |       |
|   | PRESIÓN DE REFRENTADO TRIMMING PRESSURE  | PRESIÓN DE ARRASTRE + la presión necesaria para que se produzca el corte de viruta<br>DRAG PRESSURE + the necessary pressure to produce the trimming operation   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|   | TEMPERATURA PLACA HEATER TEMPERATURE   | 210°C ±10°C  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 1   | PRESIÓN PRE-CALENTAMIENTO (bar) Superficie pistón 9.8 cm <sup>2</sup> HEAT SOAK PRESSURE (bar) Piston area 9.8 cm <sup>2</sup> | AÑADIR PRESIÓN DE ARRASTRE / ADD DRAG PRESSURE   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|   | TIEMPO PRE-CALENTAMIENTO HEATING TIME  | HASTA LA FORMACIÓN DEL CORDÓN / AS BEAD IS FORMED  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|   | ALTURA CORDÓN (mm) BEAD HEIGHT (mm)  | 0.5  | 0.5   |       | 0.5   | 0.5   |       | 0.5   | 0.5   |       | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   |       |       |
| 2   | CALENTAMIENTO HEAT SOAK PRESSURE   | INMOVILIZACIÓN (DESPRESURIZAR LA PRESIÓN DE LA FASE 1 DE PRE-CALENTAMIENTO BAJANDO LA VÁLVULA DE DESCARGA) / IMMOBILIZATION (RELEASE THE PHASE 1 HEAT SOAK PRESSURE MOVING DOWNWARDS THE DRAIN VALVE LEVER)  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|   | TIEMPO DE CALENTAMIENTO HEAT SOAK TIME (min:s)   | ¡ ATENCIÓN ! REDUCIR LA PRESIÓN A LA MÍNIMA NECESARIA (NO POR DEBAJO DEL ARRASTRE) PARA MANTENER EL CONTACTO DE LA PLACA CON LOS TUBOS Y SUBIR LA PALANCA DE LA VÁLVULA DE DESCARGA<br>ATTENTION ! REDUCE THE PRESSURE TO A MINIMUM NECESSARY TO KEEP THE CONTACT BETWEEN HEATING PLATE AND PIPE ENDS; THEN MOVE UPWARDS THE DRAIN VALVE LEVER |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| 3   | EXTRACCIÓN PLACA (s) HEATER WITHDRAWAL (s)   | 5  | 5     |       | 5     | 5     |       | 5     | 5     |       | 5     | 5     | 5     | 5     | 5     | 6     | 5     | 5     | 6     | 5     | 5     | 6     | 5     | 5     | 6     | 5     | 5     | 6     | 5     | 6     | 5     | 6     | 5     | 5     |       |       |
| 4   | TIEMPO DE RAMPA (s) CHANGEOVER TIME (s)  | 6  | 6     |       | 6     | 6     |       | 6     | 6     |       | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 6     | 7     | 6     | 6     | 7     | 6     | 6     | 7     | 6     | 6     | 7     | 6     | 7     | 6     | 8     | 7     | 6     | 6     |       |
| 5   | PRESIÓN DE FUSIÓN (bar) FUSION PRESSURE (bar)  | AÑADIR PRESIÓN DE ARRASTRE / ADD DRAG PRESSURE   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|   | TIEMPO DE FUSIÓN (min:s) Hasta 15°C Up to 15°C   | 02:13  | 01:47 |       | 02:35 | 02:03 |       | 03:07 | 02:29 |       | 03:44 | 03:01 | 02:24 | 04:14 | 03:28 | 02:45 | 04:43 | 03:49 | 03:07 | 05:22 | 04:19 | 03:33 | 05:55 | 04:48 | 03:55 | 06:29 | 05:22 | 04:19 | 02:40 | 07:07 | 05:55 | 04:48 | 07:49 | 06:29 | 05:22 | 03:07 |
|   | TIEMPO DE FUSIÓN (min:s) De 15°C a 25°C From 15°C to 25°C  | 02:47  | 02:13 |       | 03:13 | 02:33 |       | 03:53 | 03:07 |       | 04:40 | 03:47 | 03:00 | 05:18 | 04:20 | 03:27 | 05:54 | 04:47 | 03:53 | 06:42 | 05:24 | 04:27 | 07:24 | 06:00 | 04:53 | 08:08 | 06:42 | 05:24 | 03:20 | 08:56 | 07:24 | 06:00 | 09:50 | 08:08 | 06:42 | 03:53 |
| TIEMPO DE FUSIÓN (min:s) Desde 25°C From 25°C | 03:37  | 02:53  |       | 04:11 | 03:19 |       | 05:03 | 04:03 |       | 06:04 | 04:55 | 03:54 | 06:52 | 05:38 | 04:29 | 07:35 | 06:13 | 05:03 | 08:32 | 06:59 | 05:47 | 09:23 | 07:42 | 06:21 | 10:20 | 08:32 | 06:59 | 04:20 | 11:25 | 09:23 | 07:42 | 12:37 | 10:20 | 08:32 | 05:03 |       |

# TRACK 250 - DVS 2207-15

## PARÁMETROS DE FUSIÓN A TOPE PARA TUBOS Y ACCESORIOS DE PVDF NATURAL - SDR 21 / SDR 33 / VENTILACIÓN

### BUTT FUSION PARAMETERS FOR NATURAL PVDF PIPES AND FITTINGS - SDR 21 / SDR 33 / VENTILATION

| FASE<br>PHASE | DN  | 63   |       | 75    |       | 90    |       | 110   |       | 125   |       | 140   |       | 160   |       | 180   |       | 200   |       | 225   |       | 250   |       |       |       |       |       |
|---------------|---|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|               | SDR   | 21   |       | 21    | 21    | 33    | 21    | 33    |       | 21    | 33    | 21    | 33    |       | 21    | 33    |       | 21    | 33    |       | 21    | 33    | 21    | 33    |       |       |       |
|               | ESPOSOR/WALL THICKNESS  | 3  | 2     | 3.6   | 4.3   | 2.8   | 5.3   | 3.4   | 3     | 6     | 3.9   | 6.7   | 4.3   | 3     | 7.7   | 4.9   | 3     | 8.6   | 5.5   | 9.6   | 6.2   | 3     | 10.8  | 6.9   | 11.9  | 7.7   | 3     |
|               | ISO   | S-10   | V     | S-10  | S-10  | S-16  | S-10  | S-16  | V     | S-10  | S-16  | S-10  | S-16  | V     | S-10  | S-16  | V     | S-10  | S-16  | S-10  | S-16  | V     | S-10  | S-16  | S-10  | S-16  | V     |
|               | PRESIÓN DE REFRENTADO<br>TRIMMING PRESSURE  | <b>PRESIÓN DE ARRASTRE + la presión necesaria para que se produzca el corte de viruta</b><br><b>DRAG PRESSURE + the necessary pressure to produce the trimming operation</b>   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|               | TEMPERATURA PLACA<br>HEATER TEMPERATURE   | <b>240°C ±8°C</b>  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| ❶             | PRESIÓN PRE-CALENTAMIENTO<br>(bar) Superficie pistón 6.92 cm <sup>2</sup><br>HEAT SOAK PRESSURE (bar)<br>Piston area 6.92 cm <sup>2</sup> | <b>AÑADIR PRESIÓN DE ARRASTRE / ADD DRAG PRESSURE</b>  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|               | TIEMPO PRE-CALENTAMIENTO<br>HEATING TIME  | HASTA LA FORMACIÓN DEL CORDÓN / AS BEAD IS FORMED  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|               | ALTURA CORDÓN (mm)<br>BEAD HEIGHT (mm)  | 0.8  | 0.5   | 1.2   | 1.7   | 1.1   | 2.5   | 1.6   | 1.5   | 3.2   | 2.1   | 4.1   | 2.6   | 1.9   | 5.3   | 3.4   | 2.1   | 6.7   | 4.4   | 8.3   | 5.4   | 2.7   | 10.5  | 6.8   | 12.9  | 8.5   | 3.4   |
| ❷             | CALENTAMIENTO<br>HEAT SOAK PRESSURE   | <b>INMOVILIZACIÓN (DESPRESURIZAR LA PRESIÓN DE LA FASE ❶ DE PRE-CALENTAMIENTO BAJANDO LA VÁLVULA DE DESCARGA)</b><br><b>IMMOBILIZATION (RELEASE THE PHASE ❶ HEAT SOAK PRESSURE MOVING DOWNWARDS THE DRAIN VALVE LEVER)</b>   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|               | TIEMPO DE CALENTAMIENTO<br>HEAT SOAK TIME (min:s)   | <b>¡ ATENCIÓN ! REDUCIR LA PRESIÓN A LA MÍNIMA NECESARIA (NO POR DEBAJO DEL ARRASTRE) PARA MANTENER EL CONTACTO DE LA PLACA CON LOS TUBOS Y SUBIR LA PALANCA DE LA VÁLVULA DE DESCARGA</b><br><b>ATTENTION ! REDUCE THE PRESSURE TO A MINIMUM NECESSARY TO KEEP THE CONTACT BETWEEN HEATING PLATE AND PIPE ENDS; THEN MOVE UPWARDS THE DRAIN VALVE LEVER</b> |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| ❸             | EXTRACCIÓN PLACA (s) HEATER<br>WITHDRAWAL (s)   | 01:10  | 01:00 | 01:16 | 01:23 | 01:08 | 01:33 | 01:14 | 01:10 | 01:40 | 01:19 | 02:47 | 01:23 | 01:10 | 03:06 | 01:29 | 01:10 | 02:06 | 01:35 | 02:16 | 01:42 | 01:10 | 02:28 | 01:49 | 02:39 | 01:57 | 01:10 |
| ❹             | TIEMPO DE RAMPA (s)<br>CHANGEVER TIME (s)   | 3  | 3     | 4     | 4     | 3     | 4     | 4     | 4     | 4     | 4     | 5     | 4     | 4     | 6     | 4     | 4     | 6     | 5     | 7     | 6     | 6     | 7     | 6     | 6     | 6     |       |
| ❺             | PRESIÓN DE FUSIÓN (bar)<br>FUSION PRESSURE (bar)  | <b>AÑADIR PRESIÓN DE ARRASTRE / ADD DRAG PRESSURE</b>  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|               | TIEMPO DE FUSIÓN (min:s)<br>FUSION TIME (min:s)   | 0.8  | 0.5   | 1.2   | 1.7   | 1.1   | 2.5   | 1.6   | 1.5   | 3.2   | 2.1   | 4.1   | 2.6   | 1.9   | 5.3   | 3.4   | 2.1   | 6.7   | 4.4   | 8.3   | 5.4   | 2.7   | 10.5  | 6.8   | 12.9  | 8.5   | 3.4   |
|               |   | 05:41  | 05:04 | 06:08 | 07:00 | 05:34 | 08:15 | 05:56 | 05:41 | 09:07 | 06:30 | 09:58 | 07:00 | 05:23 | 11:11 | 07:45 | 05:23 | 12:17 | 08:30 | 13:31 | 09:21 | 05:27 | 14:48 | 10:13 | 15:54 | 11:11 | 05:27 |