Technical Details

F-TYPE PRINTHEADS

Technology
HP TJ 2.5

Printhead frequency
15 kHz

Print height
12.7-50.8 mm / ½” - 2”

1 to 4 pens

Printhead distance
0.5-2.0 mm
(nozzle to print surface)

Interface
SUB D25

Signals
Switch signal

Complies to
CE directives

Housings
Stainless steel

Environmental conditions
Operating temperature: 10-40ºC
Humidity: 10-90%
Non-condensing

Weight
see details below

WEIGHT

<table>
<thead>
<tr>
<th>in Kg / lbs</th>
<th>Top</th>
<th>Side</th>
<th>Side-Low</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>kg</td>
<td>kg</td>
<td>kg</td>
</tr>
<tr>
<td>1-pen (½”)</td>
<td>0.37 (0.81)</td>
<td>0.36 (0.79)</td>
<td>0.48 (1.05)</td>
</tr>
<tr>
<td>2-pen (1”)</td>
<td>0.62 (1.37)</td>
<td>0.60 (1.32)</td>
<td>0.73 (1.60)</td>
</tr>
<tr>
<td>3-pen (1½”)</td>
<td>0.82 (1.81)</td>
<td>0.99 (2.20)</td>
<td>0.91 (2.02)</td>
</tr>
<tr>
<td>4-pen (2”)</td>
<td>1.04 (2.29)</td>
<td>1.07 (2.35)</td>
<td>1.28 (2.83)</td>
</tr>
</tbody>
</table>

Accessories:
• Bridges in two standard lengths, special length available on request.
• Printhead mounts (for bridge) for downprint mounting.
• Foot plates/soles for left or right travel.
• HSAJET HP printheads with 1 to 4 pens can be combined and mounted on a common footplate.

This enables printheads of 7, 8 or 9 pens.

HSAJET® and HP TJ 2.5 technology

The HSAJET® printers use HP thermal inkjet technology TJ 2.5, providing high-resolution printing up to 600 dpi for sharp text, crisp barcodes and intense spot colours.

Versatile and affordable, HP’s advanced inkjet technology powers a wide range of industrial and commercial printing applications - from simple text documents to vivid, complex print jobs on many types and sizes of media.

HSAJET® printheads

The HSAJET® printheads are available in three different versions: Top - Side - Side/Low

The physical dimensions of each version along with cable connector directions provide advantages to each printhead. This facilitates the installation.

The robust stainless steel design meets the demands for production environments.

HSAJET® F-type printheads

Every stall in our new printheads has a switch. This has been added to avoid damage to the printhead if the ink cartridge is being taken out of the stall during print mode. If a cartridge is taken out, the power to the printhead is cut off.

All our new controllers use the F-type printheads.

HP key-features

• Cost-effective: No warm-up cycle and no down time
• Easy to use: No special training required to operate and maintain thermal inkjet printers
• Fast: Hundreds of tiny nozzles firing at high frequency allow high-quality printing at high speeds
• Reliable: TJ is less sensitive to air bubbles in the firing chamber than other printing technologies, avoiding print quality problems and delays caused by trapped air
• Flexible: Supports a wide variety of media
• High quality: TJ places smaller drops more accurately, producing consistently superb image and text quality
• Environmentally safe: With thermal inkjet, there is no need for service technicians qualified to handle volatile solvents, and no noxious fumes
• Lower cost of ownership: A thermal inkjet printer can cost much less than other printing equipment, reducing the market entry cost
Technical Details

F-TYPE PRINTHEADS  CONFIGURATIONS

TOP/DOWN

1-PEN

2-PEN

3-PEN

4-PEN

SIDE

SIDE/LOW

Technical Details

F-TYPE PRINTHEADS  DIMENSIONS

Dimension in mm (inches)  A1  A2  A3  B1  B2  C1  C2
1. PEN  150 (6.0)  84 (3.2)  106 (4.1)  25 (0.9)  45 (1.8)  32 (1.2)
2. PEN  171 (6.7)  81 (3.2)  106 (4.1)  25 (0.9)  45 (1.8)  32 (1.2)
3. PEN  187 (7.4)  89 (3.5)  106 (4.1)  25 (0.9)  54 (2.1)  32 (1.2)
4. PEN  186 (7.3)  122 (4.8)  106 (4.1)  25 (0.9)  119 (4.7)  107 (4.2)

Areal Kvmm:

09-07-2003
341998.05
2

Last save:
02-09-2010
1:1
Side:
Papir:
A2
1/1

Control Dimension

Tolerancer DS/ISO 2768-1 midt
0.5-6= 0.1  6-30= 0.2  30-120= 0.3  120-400= 0.5  400-1000= 0.8  1000-2000= 1.2  2000-4000= 2
**Technical Details**

**F-TYPE PRINTHEADS**

**CONFIGURATIONS**

**TOP/DOWN**

1-PEN

2-PEN

3-PEN

4-PEN

**SIDE**

**SIDE/LOW**

**Dimensions in mm (inches)**

<table>
<thead>
<tr>
<th>Configuration</th>
<th>A1</th>
<th>A2</th>
<th>B1</th>
<th>C1</th>
<th>C2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-PEN</td>
<td>515 (20.3)</td>
<td>188 (7.4)</td>
<td>106 (4.1)</td>
<td>43 (1.7)</td>
<td>32 (1.3)</td>
</tr>
<tr>
<td>2-PEN</td>
<td>72 (2.8)</td>
<td>121 (4.8)</td>
<td>188 (7.4)</td>
<td>106 (4.1)</td>
<td>43 (1.7)</td>
</tr>
<tr>
<td>3-PEN</td>
<td>140 (5.5)</td>
<td>146 (5.7)</td>
<td>188 (7.4)</td>
<td>106 (4.1)</td>
<td>43 (1.7)</td>
</tr>
<tr>
<td>4-PEN</td>
<td>183 (7.2)</td>
<td>183 (7.2)</td>
<td>188 (7.4)</td>
<td>106 (4.1)</td>
<td>43 (1.7)</td>
</tr>
</tbody>
</table>

**CONTROL DIMENSION**

Tolerances DS/ISO 2768-1 midt

| 400-1000 = 0.8 | 1000-2000 = 1.2 | 2000-4000 = 2 |

**DIMENSIONS**

**F-TYPE PRINTHEADS**

**DIMENSIONS**

**TOP/DOWN**

<table>
<thead>
<tr>
<th>Configuration</th>
<th>A1</th>
<th>A2</th>
<th>B1</th>
<th>C1</th>
<th>C2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-PEN</td>
<td>150 (6.1)</td>
<td>84 (3.3)</td>
<td>106 (4.1)</td>
<td>25 (1.0)</td>
<td>45 (1.8)</td>
</tr>
<tr>
<td>2-PEN</td>
<td>171 (6.6)</td>
<td>81 (3.2)</td>
<td>106 (4.1)</td>
<td>25 (1.0)</td>
<td>45 (1.8)</td>
</tr>
<tr>
<td>3-PEN</td>
<td>187 (7.3)</td>
<td>80 (3.1)</td>
<td>138 (5.4)</td>
<td>45 (1.8)</td>
<td>32 (1.3)</td>
</tr>
<tr>
<td>4-PEN</td>
<td>186 (7.3)</td>
<td>122 (4.8)</td>
<td>138 (5.4)</td>
<td>45 (1.8)</td>
<td>32 (1.3)</td>
</tr>
</tbody>
</table>

**SIDE**

<table>
<thead>
<tr>
<th>Configuration</th>
<th>A1</th>
<th>A2</th>
<th>B1</th>
<th>B2</th>
<th>C1</th>
<th>C2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-PEN</td>
<td>86 (3.4)</td>
<td>84 (3.3)</td>
<td>28 (1.1)</td>
<td>218 (8.6)</td>
<td>46 (1.8)</td>
<td>32 (1.3)</td>
</tr>
<tr>
<td>2-PEN</td>
<td>112 (4.4)</td>
<td>81 (3.2)</td>
<td>28 (1.1)</td>
<td>218 (8.6)</td>
<td>46 (1.8)</td>
<td>32 (1.3)</td>
</tr>
<tr>
<td>3-PEN</td>
<td>124 (4.8)</td>
<td>80 (3.1)</td>
<td>28 (1.1)</td>
<td>218 (8.6)</td>
<td>46 (1.8)</td>
<td>32 (1.3)</td>
</tr>
<tr>
<td>4-PEN</td>
<td>136 (5.3)</td>
<td>122 (4.8)</td>
<td>28 (1.1)</td>
<td>218 (8.6)</td>
<td>46 (1.8)</td>
<td>32 (1.3)</td>
</tr>
</tbody>
</table>

**SIDE/LOW**

<table>
<thead>
<tr>
<th>Configuration</th>
<th>A1</th>
<th>A2</th>
<th>A3</th>
<th>B1</th>
<th>B2</th>
<th>C1</th>
<th>C2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-PEN</td>
<td>86 (3.4)</td>
<td>84 (3.3)</td>
<td>28 (1.1)</td>
<td>218 (8.6)</td>
<td>46 (1.8)</td>
<td>32 (1.3)</td>
<td></td>
</tr>
<tr>
<td>2-PEN</td>
<td>112 (4.4)</td>
<td>81 (3.2)</td>
<td>28 (1.1)</td>
<td>218 (8.6)</td>
<td>46 (1.8)</td>
<td>32 (1.3)</td>
<td></td>
</tr>
<tr>
<td>3-PEN</td>
<td>124 (4.8)</td>
<td>80 (3.1)</td>
<td>28 (1.1)</td>
<td>218 (8.6)</td>
<td>46 (1.8)</td>
<td>32 (1.3)</td>
<td></td>
</tr>
<tr>
<td>4-PEN</td>
<td>136 (5.3)</td>
<td>122 (4.8)</td>
<td>28 (1.1)</td>
<td>218 (8.6)</td>
<td>46 (1.8)</td>
<td>32 (1.3)</td>
<td></td>
</tr>
</tbody>
</table>

**Tlf:** +45 44 94 02 22

**hsa@hsautomatic.com**

**www.hsautomatic.com**

**HS Automatic**

**Date:**

- 09-07-2003
- 02-09-2010

**Scale:**

- 1:1

**Units:**

- gram:
  - 06-10-2010
  - 06-10-2010
Technical Details

**F-TYPE PRINTHEADS**

<table>
<thead>
<tr>
<th>Technology</th>
<th>HP TIJ 2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printhead frequency</td>
<td>15 KHz</td>
</tr>
<tr>
<td>Print height</td>
<td>12.7–50.8 mm / ½” – 2”</td>
</tr>
<tr>
<td>1 to 4 pens</td>
<td></td>
</tr>
<tr>
<td>Printhead distance</td>
<td>0.5–2.0 mm (nose to print surface)</td>
</tr>
<tr>
<td>Interface</td>
<td>SUB D25</td>
</tr>
</tbody>
</table>

**Signals**
- Switch signal

**Complies to**
- CE directives

**Housings**
- Stainless steel

**Environmental conditions**
- Operating temperature: 10–40°C
- Humidity: 10–90%
- Non-condensing

**Weight**
- see details below

---

**ACCESSORIES:**
- Bridges in two standard lengths, special length available on request.
- Printhead mounts (for bridge) for downprint mounting.
- Foot plates/soles for left or right travel.
- HSAJET HP printheads with 1 to 4 pens can be combined and mounted on a common footplate. This enables printheads of 7, 8 or 9 pens.

---

**WEIGHT**

<table>
<thead>
<tr>
<th></th>
<th>Top kg / lbs</th>
<th>Side kg / lbs</th>
<th>Side-Low kg / lbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-pen (½&quot;)</td>
<td>0.37 (0.81)</td>
<td>0.36 (0.79)</td>
<td>0.48 (1.05)</td>
</tr>
<tr>
<td>2-pen (1&quot;)</td>
<td>0.62 (1.37)</td>
<td>0.60 (1.32)</td>
<td>0.73 (1.60)</td>
</tr>
<tr>
<td>3-pen (1½&quot;)</td>
<td>0.82 (1.81)</td>
<td>0.99 (2.20)</td>
<td>0.91 (2.02)</td>
</tr>
<tr>
<td>4-pen (2&quot;)</td>
<td>1.04 (2.30)</td>
<td>1.07 (2.35)</td>
<td>1.28 (2.83)</td>
</tr>
</tbody>
</table>

---

**Vertical resolution (DPI)**

<table>
<thead>
<tr>
<th></th>
<th>75</th>
<th>150</th>
<th>300</th>
<th>600</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
|          | 75 | 300 | 600 | 1200

---

**Horizontal resolution 75–2400 DPI (variable) speed examples (mm/min)**

<table>
<thead>
<tr>
<th></th>
<th>75</th>
<th>150</th>
<th>300</th>
<th>600</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPI</td>
<td>75</td>
<td>300</td>
<td>600</td>
<td>1200</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>300</td>
<td>600</td>
<td>1200</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>300</td>
<td>600</td>
<td>1200</td>
</tr>
</tbody>
</table>

---

**HSAJET® and HP TIJ 2.5 technology**

The **HSAJET®** printers use **HP thermal inkjet technology TIJ 2.5**, providing high-resolution printing up to 600 dpi for sharp text, crisp barcodes and intense spot colours.

Versatile and affordable, **HP’s advanced inkjet technology** powers a wide range of industrial and commercial printing applications - from simple text documents to vivid, complex print jobs on many types and sizes of media.

---

**HSAJET® printheads**

The **HSAJET® printheads** are available in three different versions: Top - Side - Side/low.

The physical dimensions of each version along with cable connector directions provide advantages to each printhead. This facilitates the installation.

The robust stainless steel design meets the demands for production environments.

---

**HSAJET® F-type printheads**

Every stall in our new printheads has a switch. This has been added to avoid damage to the printhead if the ink cartridge is being taken out of the stall during print mode.

If a cartridge is taken out, the power to the printhead is cut off.

All our new controllers use the F-type printheads.

---

**HP key-features**

- **Cost-effective:** No warm-up cycle and no down time
- **Easy to use:** No special training required to operate and maintain thermal inkjet printers
- **Fast:** Hundreds of tiny nozzles firing at high frequency allow high-quality printing at high speeds
- **Reliable:** TJ is less sensitive to air bubbles in the firing chamber than other printing technologies, avoiding print quality problems and delays caused by trapped air
- **Flexible:** Supports a wide variety of media
- **High quality:** TJ places smaller drops more accurately, producing consistently superb image and text quality
- **Environmentally safe:** With thermal inkjet, there is no need for service technicians qualified to handle volatile solvents, and no noxious fumes
- **Lower cost of ownership:** A thermal inkjet printer can cost much less than other printing equipment, reducing the market entry cost

---

**Environmental conditions**

- Operating temperature: 10–40°C
- Humidity: 10–90%
- Non-condensing

---

**Weight**

- see details below

---

**Temperature**

- 150 William Street
- Perth Amboy, NJ 08861
- Toll Free: 1-800-298-8936
- Local: 1-732-324-0800
- Fax: 1-732-324-4488
- sales@hsausa.com
- www.hsausa.com