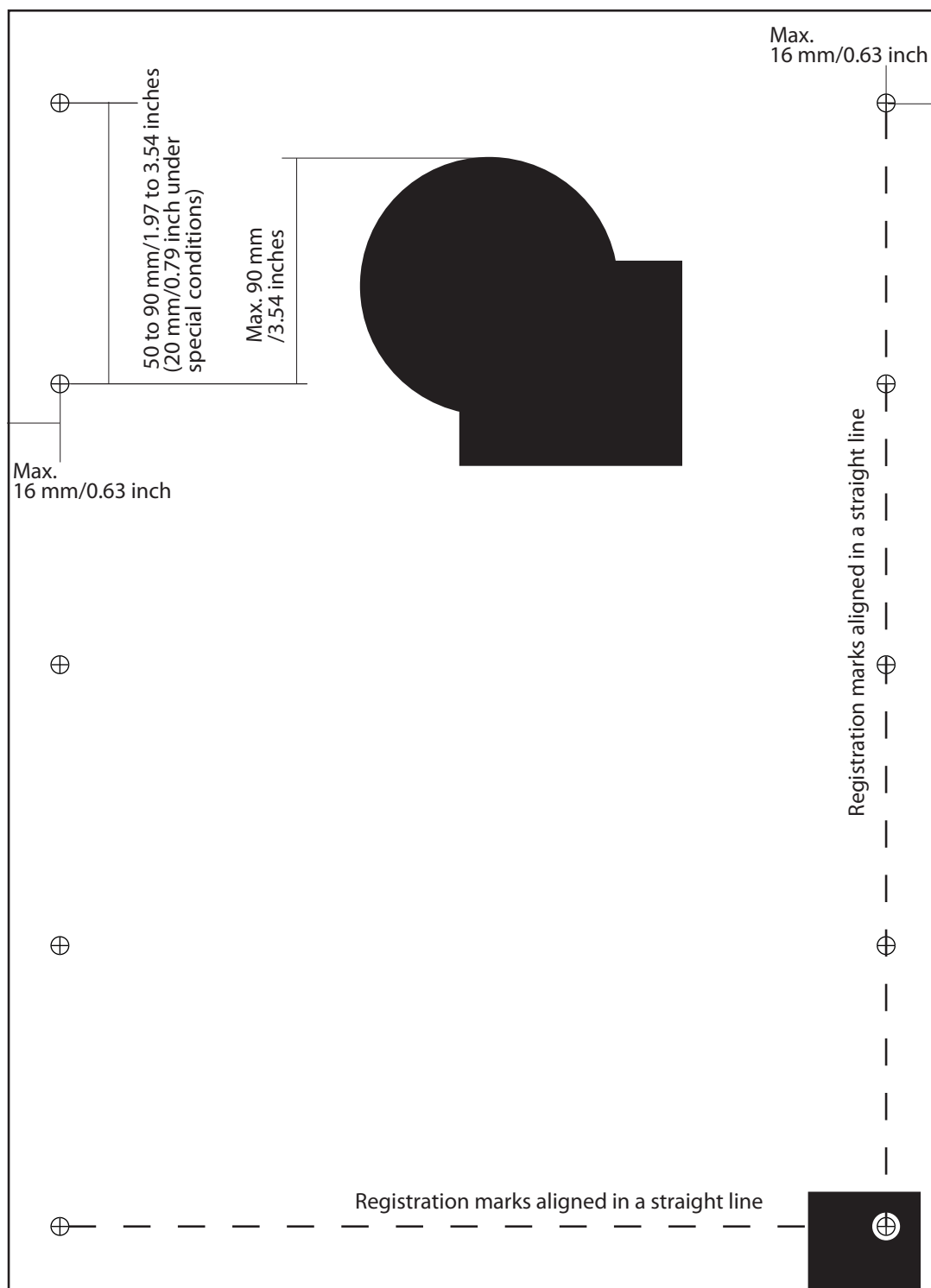


## 4. Information on Registration Marks



## Details of registration marks

Registration marks on image data need to satisfy the following conditions.

- The mark is within 16 mm/0.63 inch from the edge of paper.
- The distance between each registration mark is 50 to 90 mm/1.97 to 3.54 inches.
- The second pair of registration marks is within 90 mm/3.54 inches from the beginning of the image.
- The registration marks are a cross shape. The line width is about 0.176 mm (0.5 pt) and the length is 4 mm (11.34 pt). 1 pt is equal to 72 dpi.
- The maximum number of registration marks is 20 pairs.
- The distance from the edge of paper is the same for each pair and the pair is arranged on the same line.
- If there is an image on a mark, 1 mm/0.04 inch or more from the outer circumference must be a reverse type (outline characters on a colored background).

## Notes related to XML file

- Convert the registration mark of X and Y positions (X=position from the left edge of paper, Y=position from the lead edge of paper) to 600 dpi using the following calculation formula:

$$\text{Position (mm)} \times 600/25.4$$

- When the distance between a registration mark and the next one exceeds 90 mm/3.54 inches, you can shorten the distance between the next registration mark and the one after the next up to 20 mm/0.79 inch.

## Sample XML file

The shown next is a sample of an XML file.

```
<?xml version="1.0"?>
<RegistrationMarks>
  <Position X="283" Y="520"/>
  <Position X="4677" Y="520"/>
  <Position X="283" Y="2014"/>
  <Position X="4677" Y="2014"/>
  <Position X="283" Y="3508"/>
  <Position X="4677" Y="3508"/>
  <Position X="283" Y="5002"/>
  <Position X="4677" Y="5002"/>
  <Position X="283" Y="6496"/>
  <Position X="4677" Y="6496"/>
</RegistrationMarks>
```