

The diagram shows a vertical rectangular frame. The total height is 90, divided into a top section of 50 and a bottom section of 40. The width is 30. A horizontal dashed line labeled 'V' passes through the center of the top section. A vertical dashed line labeled 'H' passes through the center of the frame. At the top center, there is a circle containing the number 6. At the bottom, there are two upward-pointing arrows labeled 'B'.

Figure 1 shows a schematic diagram of the proposed 2D MIM resonator. The resonator is a cross-shaped structure. The horizontal arms have a width of 15 and a length of 45. The vertical arm has a width of 15 and a height of 24. The resonator is connected to a feed line with a width of 18 and a length of 13. The resonator is made of a material with a permittivity of  $\epsilon_r = 0.0$  and a permeability of  $\mu_r = 1.25$ . The feed line is made of a material with a permittivity of  $\epsilon_r = 0.0$  and a permeability of  $\mu_r = 1.25$ . The resonator is connected to a feed line with a width of 18 and a length of 13. The resonator is made of a material with a permittivity of  $\epsilon_r = 0.0$  and a permeability of  $\mu_r = 1.25$ . The feed line is made of a material with a permittivity of  $\epsilon_r = 0.0$  and a permeability of  $\mu_r = 1.25$ .

Technical drawings of a cross-shaped part and its four rectangular flanges. The central part is a cross with a central square hole. The four flanges are rectangular with rounded corners. Dimensions are given in millimeters.

**Central Part Dimensions:**

- Overall width: 24.5
- Overall height: 24.5
- Inner square hole side: 16.0
- Flange thickness: 3
- Flange width: 16.0
- Flange height: 16.0
- Flange corner radius: R5

**Flange Dimensions:**

- Top Flange:** 2x N4 ø6.3 x 10 C=172, 65
- Bottom Flange:** 2x N5 ø6.3 x 10 C=82, 15
- Left Flange:** 3 N16 ø10.0 C=160, 13, 18, 24, 19, 46, 46
- Right Flange:** 3 N17 ø10.0 C=56, 18, 24, 19

Technical drawing of a cross-section of a 4-way pipe fitting. The main view shows a cross-section with four ports. Dimensions include: outer diameter 19, inner diameter 12, wall thickness 4, and port diameter 6.4. Material is 3 N18 a16.0 C=166. A detail view shows a cross-section of a port with dimensions 18, 15, and 12. Material is 2x2 N7 a6.3 r10 C=VAR.

DET-4  
ESC 1.25

N8  
N9

30  
40

18  
15  
84  
63  
59  
25

3 N20 ø16.0 C=285

4 N9 ø6.3 c9 C=VAR

8 N8 ø6.3 c9 C=VAR

VAR

| AÇO  | N  | DIAM<br>(mm) | QUANT | C.UNIT<br>(cm) | C.TOTAL<br>(cm) |
|------|----|--------------|-------|----------------|-----------------|
| CA50 | 1  | 6.3          | 88    | 152            | 13376           |
|      | 2  | 6.3          | 176   | 43             | 7568            |
|      | 3  | 6.3          | 2     | 74             | 148             |
|      | 4  | 6.3          | 4     | 172            | 688             |
|      | 5  | 6.3          | 4     | 82             | 328             |
|      | 6  | 6.3          | 4     | VAR            | VAR             |
|      | 7  | 6.3          | 4     | VAR            | VAR             |
|      | 8  | 6.3          | 8     | VAR            | VAR             |
|      | 9  | 6.3          | 4     | VAR            | VAR             |
|      | 10 | 6.3          | 2     | 70             | 140             |
|      | 11 | 8.0          | 4     | 132            | 528             |
|      | 12 | 8.0          | 2     | 80             | 160             |
|      | 13 | 10.0         | 6     | 122            | 732             |
|      | 14 | 10.0         | 3     | 55             | 165             |
|      | 15 | 10.0         | 3     | 52             | 156             |
|      | 16 | 10.0         | 3     | 160            | 480             |
|      | 17 | 10.0         | 6     | 56             | 336             |
|      | 18 | 16.0         | 3     | 166            | 498             |
|      | 19 | 16.0         | 6     | 59             | 354             |
|      | 20 | 16.0         | 3     | 285            | 855             |
|      | 21 | 16.0         | 4     | 98             | 392             |
|      | 22 | 16.0         | 3     | 153            | 459             |
|      | 23 | 16.0         | 3     | 48             | 144             |
|      | 24 | 20.0         | 8     | 1200           | 9600            |
|      | 25 | 20.0         | 8     | 180            | 1440            |

| AÇO  | DIAM<br>(mm) | C.TOTAL<br>(m) | PESO + 10%<br>(kg) |
|------|--------------|----------------|--------------------|
| CA50 | 6.3          | 257.3          | 69.3               |
|      | 8.0          | 6.9            | 3                  |
|      | 10.0         | 18.7           | 12.7               |
|      | 16.0         | 27             | 46.9               |
|      | 20.0         | 110.4          | 299.5              |

|      |       |
|------|-------|
| CA50 | 431.3 |
|------|-------|

| Relação das alças de içamento |          |        |              |               |
|-------------------------------|----------|--------|--------------|---------------|
| Qtde.                         | Aço      | ø (mm) | C. Anc. (cm) | C. Unit. (cm) |
| 2                             | ASTM A36 | 16     | 47           | 138           |

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**Assinatura:**

**Assinatura:**

**Prancha:**

### DETALHAMENTO DO PILAR P36

**E** Pran

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