

# Worm and wheel set



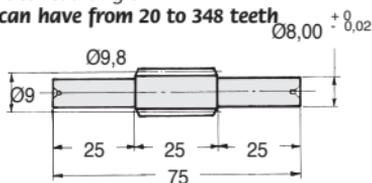
## Module 0.4 Worm in steel or machined plastic

- Pitch 1.257mm
- **Machined parts**
- Pressure angle 20°
- Right handed lead angle
- Materials:  
Worm: Steel 20NCD2 or Delrin plastic  
Wheel: Bronze CuAl10NiFe4 or Delrin plastic
- Delrin: Working temp. -50°C to +80°C

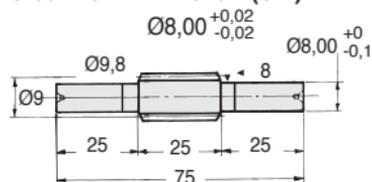


### Options

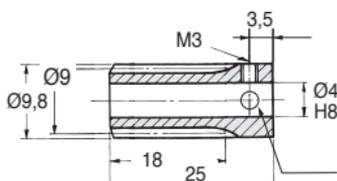
- Left handed lead angle
- **Wheel can have from 20 to 348 teeth**



Steel worm with shaft (SW)



Plastic worm with shaft (ZSW)



Steel (W) or plastic (ZW) worm with bore

### DISCOUNT STEEL

|       |      |      |      |            |
|-------|------|------|------|------------|
| Qty   | 1+   | 6+   | 20+  | 50+        |
| Disc. | List | -12% | -25% | On request |

### DISCOUNT DELRIN

|       |      |      |            |
|-------|------|------|------------|
| Qty   | 1+   | 6+   | 30+        |
| Disc. | List | -22% | On request |

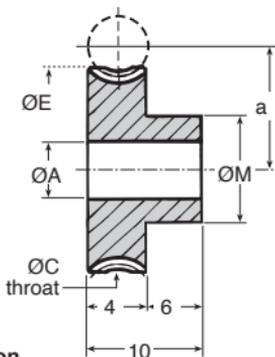
| Part number               |            | No. of starts | Lead angle | Price each 1 to 5 |            |
|---------------------------|------------|---------------|------------|-------------------|------------|
| Bored type                | Shaft type |               |            | Bored type        | Shaft type |
| <b>Non hardened steel</b> |            |               |            |                   |            |
| W0.4-1                    | SW0.4-1    | 1             | 2°32'      | 38,02 €           | 69,59 €    |
| W0.4-2                    | SW0.4-2    | 2             | 5°04'      | 38,57 €           | 74,51 €    |
| W0.4-3                    | SW0.4-3    | 3             | 7°35'      | 40,52 €           | 78,73 €    |
| W0.4-4                    | SW0.4-4    | 4             | 10°40'     | 43,63 €           | 81,15 €    |
| <b>Hardened steel</b>     |            |               |            |                   |            |
| WH0.4-1                   | SWH0.4-1   | 1             | 2°32'      | 52,89 €           | 98,98 €    |
| WH0.4-2                   | SWH0.4-2   | 2             | 5°04'      | 54,84 €           | 105,92 €   |
| WH0.4-3                   | SWH0.4-3   | 3             | 7°35'      | 56,73 €           | 111,81 €   |
| WH0.4-4                   | SWH0.4-4   | 4             | 10°40'     | 61,97 €           | 115,39 €   |
| <b>Plastic</b>            |            |               |            |                   |            |
| ZW0.4-1                   | ZSW0.4-1   | 1             | 2°32'      | 26,12 €           | 49,16 €    |
| ZW0.4-2                   | ZSW0.4-2   | 2             | 5°04'      | 27,25 €           | 52,53 €    |
| ZW0.4-3                   | ZSW0.4-3   | 3             | 7°35'      | 28,49 €           | 55,55 €    |
| ZW0.4-4                   | ZSW0.4-4   | 4             | 10°40'     | 30,67 €           | 57,30 €    |

Dimensions in mm

## Wheel in bronze or machined plastic Module 0.4

### Info.

- Pitch 1.257mm
- To order, add the number of starts on the worm to the wheel's part number.  
E.g: worm **W0.4-1**, wheel **M0.4-20/1**
- The use of a delrin worm with a delrin wheel is only recommended for occasional use. The use of a delrin worm with a steel wheel is preferred.



**Torque and power indication**  
for 50 teeth at 1000 rpm (input)

| WHEEL material | Bronze        | Delrin         |
|----------------|---------------|----------------|
| WORM material  | Nm (kW)       | Nm (kW)        |
| Steel          | 0.57 (0.0012) | 0.36 (0.00075) |
| Hardened steel | 1.00 (0.0021) | -              |
| Delrin         | -             | 0.14 (0.00030) |

### DISCOUNT Bronze

| Qty   | 1+   | 6+   | 20+  | 50+        |
|-------|------|------|------|------------|
| Disc. | List | -12% | -25% | On request |

### DISCOUNT Delrin

| Qty   | 1+   | 6+   | 30+        |
|-------|------|------|------------|
| Disc. | List | -22% | On request |

| Part number | Z           | Centres | ØP     | a     | ØC     | ØE     | ØM    | ØA | Price each 1 to 5 |          |
|-------------|-------------|---------|--------|-------|--------|--------|-------|----|-------------------|----------|
|             |             |         |        |       |        |        |       |    | Bronze            | Plastic  |
| M0.4-28/1   | ZM0.4-28/1  | 28      | 11,20  | 10,10 | 12,00  | 12,40  | 10,40 | 3  | 34,23 €           | 17,15 €  |
| M0.4-30/1   | ZM0.4-30/1  | 30      | 12,00  | 10,50 | 12,80  | 13,20  | 8,00  | 3  | 34,95 €           | 17,49 €  |
| M0.4-34/1   | ZM0.4-34/1  | 34      | 13,60  | 11,30 | 14,40  | 14,80  | 8,00  | 3  | 35,68 €           | 17,94 €  |
| M0.4-36/1   | ZM0.4-36/1  | 36      | 14,40  | 11,70 | 15,20  | 15,60  | 8,00  | 3  | 37,21 €           | 18,50 €  |
| M0.4-40/1   | ZM0.4-40/1  | 40      | 16,00  | 12,50 | 16,80  | 17,20  | 12,00 | 4  | 38,49 €           | 19,28 €  |
| M0.4-45/1   | ZM0.4-45/1  | 45      | 18,00  | 13,50 | 18,80  | 19,20  | 12,00 | 4  | 38,97 €           | 19,57 €  |
| M0.4-48/1   | ZM0.4-48/1  | 48      | 19,20  | 14,10 | 20,00  | 20,40  | 12,00 | 4  | 38,97 €           | 19,72 €  |
| M0.4-50/1   | ZM0.4-50/1  | 50      | 20,00  | 14,50 | 20,80  | 21,20  | 12,00 | 4  | 38,97 €           | 19,89 €  |
| M0.4-62/1   | ZM0.4-62/1  | 62      | 24,80  | 16,90 | 25,60  | 26,00  | 12,00 | 4  | 39,23 €           | 20,67 €  |
| M0.4-72/1   | ZM0.4-72/1  | 72      | 28,80  | 18,90 | 29,60  | 30,00  | 12,00 | 5  | 42,25 €           | 21,15 €  |
| M0.4-75/1   | ZM0.4-75/1  | 75      | 30,00  | 19,50 | 30,80  | 31,20  | 12,00 | 5  | 42,45 €           | 23,46 €  |
| M0.4-84/1   | ZM0.4-84/1  | 84      | 33,60  | 21,30 | 34,40  | 34,80  | 12,00 | 5  | 44,67 €           | 24,80 €  |
| M0.4-100/1  | ZM0.4-100/1 | 100     | 40,00  | 24,50 | 40,80  | 41,20  | 12,00 | 5  | 54,98 €           | 29,39 €  |
| M0.4-120/1  | ZM0.4-120/1 | 120     | 48,00  | 28,50 | 48,80  | 49,20  | 12,00 | 5  | 61,99 €           | 34,05 €  |
| M0.4-130/1  | ZM0.4-130/1 | 130     | 52,00  | 30,50 | 52,80  | 53,20  | 12,00 | 5  | 71,19 €           | 37,15 €  |
| M0.4-140/1  | ZM0.4-140/1 | 140     | 56,00  | 32,50 | 56,80  | 57,20  | 12,00 | 5  | 81,15 €           | 40,86 €  |
| M0.4-200/1  | ZM0.4-200/1 | 200     | 80,00  | 44,50 | 80,80  | 81,20  | 20,00 | 6  | 153,51 €          | 77,23 €  |
| M0.4-300/1  | ZM0.4-300/1 | 300     | 120,00 | 64,50 | 120,80 | 121,20 | 20,00 | 6  | 357,71 €          | 130,30 € |

| Wheels available up to this size |           | Dimensions : contact us |            |
|----------------------------------|-----------|-------------------------|------------|
| M0.4-348                         | ZM0.4-348 | 348                     | On request |
|                                  |           |                         | On request |

Dimensions in mm

# Worm and wheel set



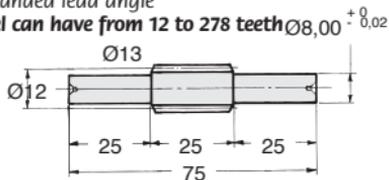
## Module 0.5 Worm in steel or machined plastic

- Pitch 1.571mm
- Machined parts
- Pressure angle 20°
- Right handed lead angle
- Materials:  
Worm: Steel 20NCD2 or Delrin plastic  
Wheel: bronze CuAl10NiFe4 or Delrin plastic
- Delrin: Working temp. -50°C to +80°C

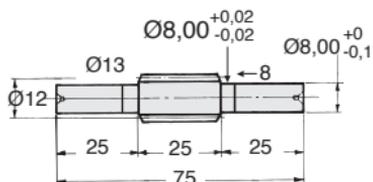


### Options

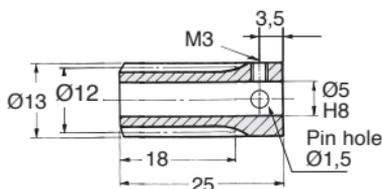
- Left handed lead angle
- Wheel can have from 12 to 278 teeth  $\varnothing 8,00^{+0,02}$



Steel worm with shaft (SW)



Plastic worm with shaft (ZSW)



Steel (W) or plastic (ZW) worm with bore

### DISCOUNT Steel

|       |           |      |            |     |
|-------|-----------|------|------------|-----|
| Qty   | 1+        | 6+   | 20+        | 50+ |
| Disc. | List -12% | -25% | On request |     |

### DISCOUNT Delrin

|       |           |            |     |
|-------|-----------|------------|-----|
| Qty   | 1+        | 6+         | 30+ |
| Disc. | List -22% | On request |     |

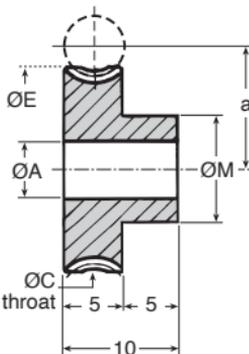
| Part number               |            | No. of starts | Lead angle | Price each 1 to 5 |            |
|---------------------------|------------|---------------|------------|-------------------|------------|
| Bored type                | Shaft type |               |            | Bored type        | Shaft type |
| <b>Non hardened steel</b> |            |               |            |                   |            |
| W0.5-1                    | SW0.5-1    | 1             | 2°23'      | 37,21 €           | 73,28 €    |
| W0.5-2                    | SW0.5-2    | 2             | 4°45'      | 38,57 €           | 76,52 €    |
| W0.5-3                    | SW0.5-3    | 3             | 7°07'      | 40,52 €           | 80,74 €    |
| W0.5-4                    | SW0.5-4    | 4             | 9°27'      | 43,63 €           | 84,43 €    |
| <b>Hardened steel</b>     |            |               |            |                   |            |
| WH0.5-1                   | SWH0.5-1   | 1             | 2°23'      | 52,89 €           | 104,16 €   |
| WH0.5-2                   | SWH0.5-2   | 2             | 4°45'      | 54,84 €           | 108,68 €   |
| WH0.5-3                   | SWH0.5-3   | 3             | 7°07'      | 57,64 €           | 114,72 €   |
| WH0.5-4                   | SWH0.5-4   | 4             | 9°27'      | 61,97 €           | 120,17 €   |
| <b>Delrin</b>             |            |               |            |                   |            |
| ZW0.5-1                   | ZSW0.5-1   | 1             | 2°23'      | 26,12 €           | 51,70 €    |
| ZW0.5-2                   | ZSW0.5-2   | 2             | 4°45'      | 27,25 €           | 53,94 €    |
| ZW0.5-3                   | ZSW0.5-3   | 3             | 7°07'      | 28,49 €           | 56,88 €    |
| ZW0.5-4                   | ZSW0.5-4   | 4             | 9°27'      | 30,67 €           | 59,71 €    |

Dimensions in mm

## Wheel in bronze or machined plastic Module 0.5

### Info.

- Pitch 1.571mm
- To order, add the number of starts on the worm to the wheel's part number.  
E.g: worm **W0.5-1**, wheel **M0.5-20/1**
- The use of a delrin worm with a delrin wheel is only recommended for occasional use. The use of a delrin worm with a steel wheel is preferred.



**Torque and power indication**  
for 50 teeth at 1000 rpm (input)

| WHEEL material | Bronze Nm (kW) | Delrin Nm (kW) |
|----------------|----------------|----------------|
| WORM material  |                |                |
| Steel          | 1.01 (0.0060)  | 0.65 (0.0040)  |
| Hardened steel | 1.86 (0.0039)  | -              |
| Delrin         | -              | 0.25 (0.0005)  |

### DISCOUNT Steel

| Qty   | 1+   | 6+   | 20+  | 50+        |
|-------|------|------|------|------------|
| Disc. | List | -12% | -25% | On request |

### DISCOUNT Delrin

| Qty   | 1+   | 6+   | 30+        |
|-------|------|------|------------|
| Disc. | List | -22% | On request |

| Part number |           | Z     | Centres |       |        |        |       |    | Price each 1 to 5 |          |
|-------------|-----------|-------|---------|-------|--------|--------|-------|----|-------------------|----------|
| Bronze      | Plastic   | Teeth | ØP      | a     | ØC     | ØE     | ØM    | ØA | Bronze            | Plastic  |
| M0.5-20     | ZM0.5-20  | 20    | 10,00   | 11,00 | 11,00  | 11,50  | 8,50  | 4  | 33,77 €           | 16,95 €  |
| M0.5-25     | ZM0.5-25  | 25    | 12,50   | 12,25 | 13,50  | 14,00  | 10,00 | 4  | 36,07 €           | 18,12 €  |
| M0.5-28     | ZM0.5-28  | 28    | 14,00   | 13,00 | 15,00  | 15,50  | 10,00 | 4  | 36,70 €           | 18,38 €  |
| M0.5-30     | ZM0.5-30  | 30    | 15,00   | 13,50 | 16,00  | 16,50  | 13,00 | 6  | 36,84 €           | 18,42 €  |
| M0.5-32     | ZM0.5-32  | 32    | 16,00   | 14,00 | 17,00  | 17,50  | 13,00 | 6  | 38,45 €           | 19,28 €  |
| M0.5-40     | ZM0.5-40  | 40    | 20,00   | 16,00 | 21,00  | 21,50  | 13,00 | 6  | 44,85 €           | 22,56 €  |
| M0.5-42     | ZM0.5-42  | 42    | 21,00   | 16,50 | 22,00  | 22,50  | 13,00 | 6  | 45,54 €           | 22,80 €  |
| M0.5-48     | ZM0.5-48  | 48    | 24,00   | 18,00 | 25,00  | 25,50  | 13,00 | 6  | 47,84 €           | 23,97 €  |
| M0.5-50     | ZM0.5-50  | 50    | 25,00   | 18,50 | 26,00  | 26,50  | 13,00 | 6  | 48,50 €           | 24,33 €  |
| M0.5-60     | ZM0.5-60  | 60    | 30,00   | 21,00 | 31,00  | 31,50  | 13,00 | 6  | 57,18 €           | 31,63 €  |
| M0.5-78     | ZM0.5-78  | 78    | 39,00   | 25,50 | 40,00  | 40,50  | 13,00 | 6  | 72,61 €           | 40,21 €  |
| M0.5-80     | ZM0.5-80  | 80    | 40,00   | 26,00 | 41,00  | 41,50  | 13,00 | 6  | 74,93 €           | 41,17 €  |
| M0.5-90     | ZM0.5-90  | 90    | 45,00   | 28,50 | 46,00  | 46,50  | 13,00 | 6  | 100,57 €          | 63,27 €  |
| M0.5-100    | ZM0.5-100 | 100   | 50,00   | 31,00 | 51,00  | 51,50  | 13,00 | 6  | 119,53 €          | 75,33 €  |
| M0.5-110    | ZM0.5-110 | 110   | 55,00   | 33,50 | 56,00  | 56,50  | 13,00 | 6  | 124,45 €          | 78,38 €  |
| M0.5-150    | ZM0.5-150 | 150   | 75,00   | 43,50 | 76,00  | 76,50  | 13,00 | 6  | 134,14 €          | 84,31 €  |
| M0.5-160    | ZM0.5-160 | 160   | 80,00   | 46,00 | 81,00  | 81,50  | 13,00 | 6  | 153,01 €          | 96,42 €  |
| M0.5-200    | ZM0.5-200 | 200   | 100,00  | 56,00 | 101,00 | 101,50 | 13,00 | 6  | 290,42 €          | 105,84 € |

↓
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↓
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**Wheels available up to this size**

**M0.5-278 ZM0.5-278 278**
Dimensions : contact us
On request
On request

*Dimensions in mm*

# Worm and wheel set



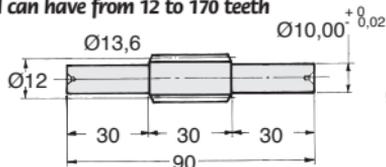
## Module 0.8 Worm in steel or machined plastic

- Pitch 2.513mm
- Machined parts
- Pressure angle 20°
- Right handed lead angle
- Materials:  
Worm: Steel 20NCD2 or Delrin plastic  
Wheel: bronze CuAl10NiFe4 or Delrin plastic
- Delrin: Working temp. -50°C to +80°C

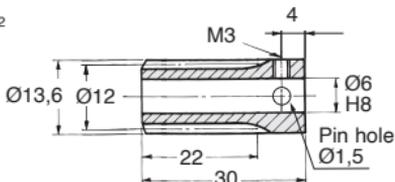


### Options

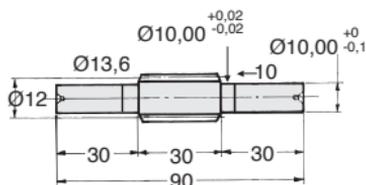
- Left handed lead angle
- Wheel can have from 12 to 170 teeth



Steel worm with shaft (SW)



Steel (W) or plastic (ZW) worm with bore



Plastic worm with shaft (ZSW)

### DISCOUNT Steel

|       |           |      |            |     |
|-------|-----------|------|------------|-----|
| Qty   | 1+        | 6+   | 20+        | 50+ |
| Disc. | List -12% | -25% | On request |     |

### DISCOUNT Delrin

|       |           |            |     |
|-------|-----------|------------|-----|
| Qty   | 1+        | 6+         | 30+ |
| Disc. | List -22% | On request |     |

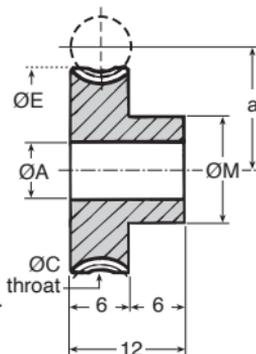
| Part number               |            | No. of starts | Lead angle | Price each 1 to 5 |            |
|---------------------------|------------|---------------|------------|-------------------|------------|
| Bored type                | Shaft type |               |            | Bored type        | Shaft type |
| <b>Non hardened steel</b> |            |               |            |                   |            |
| W0.8-1                    | SW0.8-1    | 1             | 3°48'      | 42,54 €           | 73,27 €    |
| W0.8-2                    | SW0.8-2    | 2             | 7°35'      | 44,41 €           | 77,05 €    |
| W0.8-3                    | SW0.8-3    | 3             | 11°18'     | 48,13 €           | 80,74 €    |
| W0.8-4                    | SW0.8-4    | 4             | 14°55'     | 52,16 €           | 84,43 €    |
| <b>Hardened steel</b>     |            |               |            |                   |            |
| WH0.8-1                   | SWH0.8-1   | 1             | 3°48'      | 60,52 €           | 104,15 €   |
| WH0.8-2                   | SWH0.8-2   | 2             | 7°35'      | 63,13 €           | 109,51 €   |
| WH0.8-3                   | SWH0.8-3   | 3             | 11°18'     | 68,62 €           | 114,73 €   |
| WH0.8-4                   | SWH0.8-4   | 4             | 14°55'     | 75,59 €           | 120,17 €   |
| <b>Delrin</b>             |            |               |            |                   |            |
| ZW0.8-1                   | ZSW0.8-1   | 1             | 3°48'      | 29,98 €           | On request |
| ZW0.8-2                   | ZSW0.8-2   | 2             | 7°35'      | 31,23 €           | 54,16 €    |
| ZW0.8-3                   | ZSW0.8-3   | 3             | 11°18'     | 33,86 €           | 56,73 €    |
| ZW0.8-4                   | ZSW0.8-4   | 4             | 14°55'     | 36,70 €           | 59,42 €    |

Dimensions in mm

## Wheel in bronze or **machined** plastic **Module 0.8**

### Info.

- Pitch 2.513mm
- To order, add the number of starts on the worm to the wheel's part number.  
E.g: worm **WO.8-1**, wheel **MO.8-20/1**
- The use of a delrin worm with a delrin wheel is only recommended for occasional use. The use of a delrin worm with a steel wheel is preferred.



**Torque and power indication**  
for 50 teeth at 1000 rpm (input)

| WHEEL material | Bronze       | Delrin        |
|----------------|--------------|---------------|
| WORM material  | Nm (kW)      | Nm (kW)       |
| Steel          | 2.82 (0.006) | 1.84 (0.0039) |
| Hardened steel | 5.26 (0.011) | -             |
| Delrin         | -            | 0.70 (0.0015) |

### DISCOUNT Bronze

| Qty   | 1+   | 6+   | 20+  | 50+        |
|-------|------|------|------|------------|
| Disc. | List | -12% | -25% | On request |

### DISCOUNT Delrin

| Qty   | 1+   | 6+   | 30+        |
|-------|------|------|------------|
| Disc. | List | -22% | On request |

| Part number |           | Z     | Centres |       |        |        |    | Price each 1 to 5 |          |          |
|-------------|-----------|-------|---------|-------|--------|--------|----|-------------------|----------|----------|
| Bronze      | Plastic   | Teeth | ØP      | a     | ØC     | ØE     | ØM | ØA                | Bronze   | Plastic  |
| M0.8-15     | ZM0.8-15  | 15    | 12,00   | 12,00 | 13,60  | 14,40  | 10 | 5                 | 34,03 €  | 17,01 €  |
| M0.8-18     | ZM0.8-18  | 18    | 14,40   | 13,20 | 16,00  | 16,80  | 10 | 5                 | 38,02 €  | 19,09 €  |
| M0.8-20     | ZM0.8-20  | 20    | 16,00   | 14,00 | 17,60  | 18,40  | 12 | 5                 | 38,72 €  | 19,39 €  |
| M0.8-24     | ZM0.8-24  | 24    | 19,20   | 15,60 | 20,80  | 21,60  | 12 | 5                 | 41,95 €  | 20,98 €  |
| M0.8-25     | ZM0.8-25  | 25    | 20,00   | 16,00 | 21,60  | 22,40  | 16 | 8                 | 44,15 €  | 22,16 €  |
| M0.8-28     | ZM0.8-28  | 28    | 22,40   | 17,20 | 24,00  | 24,80  | 16 | 8                 | 45,77 €  | 22,96 €  |
| M0.8-30     | ZM0.8-30  | 30    | 24,00   | 18,00 | 25,60  | 26,40  | 16 | 8                 | 47,60 €  | 23,91 €  |
| M0.8-32     | ZM0.8-32  | 32    | 25,60   | 18,80 | 27,20  | 28,00  | 16 | 8                 | 49,30 €  | 24,80 €  |
| M0.8-40     | ZM0.8-40  | 40    | 32,00   | 22,00 | 33,60  | 34,40  | 20 | 8                 | 58,88 €  | 49,89 €  |
| M0.8-42     | ZM0.8-42  | 42    | 33,60   | 22,80 | 35,20  | 36,00  | 20 | 8                 | 63,11 €  | 34,92 €  |
| M0.8-48     | ZM0.8-48  | 48    | 38,40   | 25,20 | 40,00  | 40,80  | 20 | 8                 | 73,54 €  | 40,59 €  |
| M0.8-50     | ZM0.8-50  | 50    | 40,00   | 26,00 | 41,60  | 42,40  | 20 | 8                 | 79,32 €  | 49,90 €  |
| M0.8-60     | ZM0.8-60  | 60    | 48,00   | 30,00 | 49,60  | 50,40  | 20 | 8                 | 121,40 € | 76,43 €  |
| M0.8-78     | ZM0.8-78  | 78    | 62,40   | 37,20 | 64,00  | 64,80  | 20 | 8                 | 130,53 € | 82,20 €  |
| M0.8-80     | ZM0.8-80  | 80    | 64,00   | 38,00 | 65,60  | 66,40  | 20 | 8                 | 131,69 € | 82,98 €  |
| M0.8-90     | ZM0.8-90  | 90    | 72,00   | 42,00 | 73,60  | 74,40  | 20 | 8                 | 150,02 € | 94,46 €  |
| M0.8-100    | ZM0.8-100 | 100   | 80,00   | 46,00 | 81,60  | 82,40  | 20 | 8                 | 164,65 € | 103,64 € |
| M0.8-110    | ZM0.8-110 | 110   | 88,00   | 50,00 | 89,60  | 90,40  | 20 | 8                 | 202,68 € | 127,71 € |
| M0.8-150    | ZM0.8-150 | 150   | 120,00  | 66,00 | 121,60 | 122,40 | 20 | 8                 | 402,45 € | 146,60 € |

| Wheels available up to this size |           | Dimensions : contact us |                       |
|----------------------------------|-----------|-------------------------|-----------------------|
| M0.8-170                         | ZM0.8-170 | 170                     | On request On request |

Dimensions in mm

# Worm and wheel set



## Module Worm in steel or **machined** plastic

# 1.0

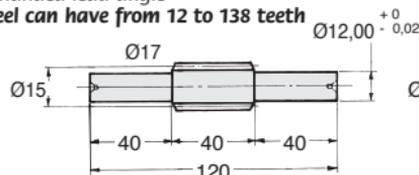


- Pitch 3.142mm
- **Machined parts**
- Pressure angle 20°
- Right handed lead angle
- Materials:  
Worm: Steel 20NCD2 or Delrin plastic  
Wheel: bronze CuAl10NiFe4  
or delrin plastic
- Delrin: Working temp. -50°C to +80°C

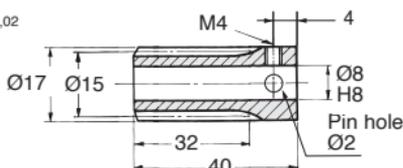


### Options

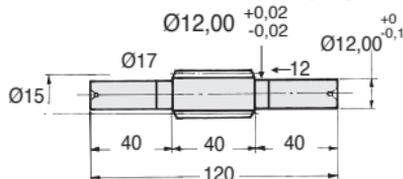
- Left handed lead angle
- **Wheel can have from 12 to 138 teeth**



Steel worm with shaft (SW)



Steel (W) or plastic (ZW) worm with bore



Plastic worm with shaft (ZSW)

### DISCOUNT Bronze

|       |           |      |            |     |
|-------|-----------|------|------------|-----|
| Qty   | 1+        | 6+   | 20+        | 50+ |
| Disc. | List -12% | -25% | On request |     |

### DISCOUNT Delrin

|       |           |            |     |
|-------|-----------|------------|-----|
| Qty   | 1+        | 6+         | 30+ |
| Disc. | List -22% | On request |     |

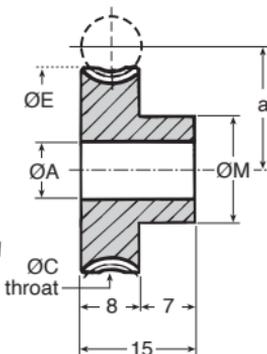
| Part number               |            | No. of starts | Lead angle | Price each 1 to 5 |            |
|---------------------------|------------|---------------|------------|-------------------|------------|
| Bored type                | Shaft type |               |            | Bored type        | Shaft type |
| <b>Non hardened steel</b> |            |               |            |                   |            |
| W1-1                      | SW1-1      | 1             | 3°48'      | 48,99 €           | 90,48 €    |
| W1-2                      | SW1-2      | 2             | 7°35'      | 51,86 €           | 92,95 €    |
| W1-3                      | SW1-3      | 3             | 11°18'     | 56,88 €           | 99,22 €    |
| W1-4                      | SW1-4      | 4             | 14°56'     | 59,40 €           | 100,68 €   |
| <b>Hardened steel</b>     |            |               |            |                   |            |
| WH1-1                     | SWH1-1     | 1             | 3°48'      | 69,81 €           | 128,58 €   |
| WH1-2                     | SWH1-2     | 2             | 7°35'      | 73,67 €           | 132,12 €   |
| WH1-3                     | SWH1-3     | 3             | 11°18'     | 80,78 €           | 140,90 €   |
| WH1-4                     | SWH1-4     | 4             | 14°56'     | 84,43 €           | 143,03 €   |
| <b>Delrin</b>             |            |               |            |                   |            |
| ZW1-1                     | ZSW1-1     | 1             | 3°48'      | 34,61 €           | 63,87 €    |
| ZW1-2                     | ZSW1-2     | 2             | 7°35'      | 36,53 €           | 65,51 €    |
| ZW1-3                     | ZSW1-3     | 3             | 11°18'     | 40,11 €           | 69,93 €    |
| ZW1-4                     | ZSW1-4     | 4             | 14°56'     | 41,81 €           | 71,02 €    |

Dimensions in mm

## Wheel in bronze or machined plastic Module 1.0

### Info.

- Pitch 3.142mm
- To order, add the number of starts on the worm to the wheel's part number.  
E.g: worm **W1-1**, wheel **M1-20/1**
- The use of a delrin worm with a delrin wheel is only recommended for occasional use. The use of a delrin worm with a steel wheel is preferred.



**Torque and power indication**  
for 50 teeth at 1000 rpm (input)

| WHEEL material | Bronze Nm (kW) | Delrin Nm (kW) |
|----------------|----------------|----------------|
| WORM material  |                |                |
| Steel          | 5.87 (0.012)   | 3.42 (0.0072)  |
| Hardened steel | 10.06 (0.021)  | -              |
| Delrin         | -              | 1.32 (0.0027)  |

### DISCOUNT Steel

| Qty   | 1+   | 6+   | 20+  | 50+        |
|-------|------|------|------|------------|
| Disc. | List | -12% | -25% | On request |

### DISCOUNT Delrin

| Qty   | 1+   | 6+   | 30+        |
|-------|------|------|------------|
| Disc. | List | -22% | On request |

| Part number |         | Z     | Centres |       |     |     | Price each 1 to 5 |        |          |          |
|-------------|---------|-------|---------|-------|-----|-----|-------------------|--------|----------|----------|
| Bronze      | Plastic | Teeth | ØP      | ØC    | ØE  | ØM  | ØA                | Bronze | Plastic  |          |
| M1-12       | ZM1-12  | 12    | 12      | 13,50 | 14  | 15  | 14                | 6      | 49,30 €  | 24,80 €  |
| M1-15       | ZM1-15  | 15    | 15      | 15,00 | 17  | 18  | 15                | 6      | 51,03 €  | 25,59 €  |
| M1-18       | ZM1-18  | 18    | 18      | 16,50 | 20  | 21  | 15                | 6      | 53,16 €  | 26,64 €  |
| M1-20       | ZM1-20  | 20    | 20      | 17,50 | 22  | 23  | 15                | 6      | 53,68 €  | 26,93 €  |
| M1-24       | ZM1-24  | 24    | 24      | 19,50 | 26  | 27  | 20                | 8      | 56,48 €  | 28,49 €  |
| M1-25       | ZM1-25  | 25    | 25      | 20,00 | 27  | 28  | 20                | 8      | 59,00 €  | 29,57 €  |
| M1-28       | ZM1-28  | 28    | 28      | 21,50 | 30  | 31  | 20                | 8      | 61,18 €  | 30,67 €  |
| M1-30       | ZM1-30  | 30    | 30      | 22,50 | 32  | 33  | 25                | 8      | 63,13 €  | 34,97 €  |
| M1-32       | ZM1-32  | 32    | 32      | 23,50 | 34  | 35  | 25                | 8      | 66,36 €  | 36,81 €  |
| M1-40       | ZM1-40  | 40    | 40      | 27,50 | 42  | 43  | 25                | 8      | 89,63 €  | 56,38 €  |
| M1-42       | ZM1-42  | 42    | 42      | 28,50 | 44  | 45  | 25                | 8      | 91,63 €  | 57,64 €  |
| M1-48       | ZM1-48  | 48    | 48      | 31,50 | 50  | 51  | 25                | 10     | 111,11 € | 69,93 €  |
| M1-50       | ZM1-50  | 50    | 50      | 32,50 | 52  | 53  | 25                | 10     | 119,60 € | 75,33 €  |
| M1-60       | ZM1-60  | 60    | 60      | 37,50 | 62  | 63  | 25                | 10     | 131,76 € | 82,98 €  |
| M1-78       | ZM1-78  | 78    | 78      | 46,50 | 80  | 81  | 25                | 10     | 171,89 € | 108,26 € |
| M1-80       | ZM1-80  | 80    | 80      | 47,50 | 82  | 83  | 25                | 10     | 195,56 € | 123,16 € |
| M1-90       | ZM1-90  | 90    | 90      | 52,50 | 92  | 93  | 25                | 10     | 243,10 € | 153,14 € |
| M1-100      | ZM1-100 | 100   | 100     | 57,50 | 102 | 103 | 25                | 10     | 381,21 € | 138,97 € |
| M1-110      | ZM1-110 | 110   | 110     | 62,50 | 112 | 113 | 30                | 10     | 381,21 € | 138,97 € |

**Wheels available up to this size**

|        |        |     |                         |            |            |
|--------|--------|-----|-------------------------|------------|------------|
| M1-138 | M1-138 | 138 | Dimensions : contact us | On request | On request |
|--------|--------|-----|-------------------------|------------|------------|

Dimensions in mm

# Worm and wheel set



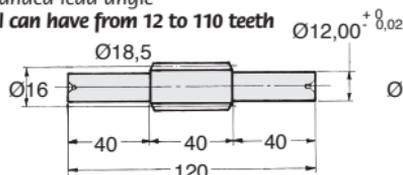
## Module 1.25 Worm in steel or machined plastic

- Pitch 3.927mm
- Machined parts
- Pressure angle 20°
- Right handed lead angle
- Materials:  
Worm: Steel 20NCD2 or Delrin plastic  
Wheel: bronze CuAl10NiFe4 or Delrin plastic
- Delrin: Working temp. -50°C to +80°C

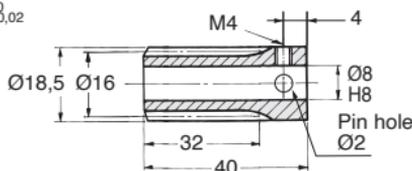


### Options

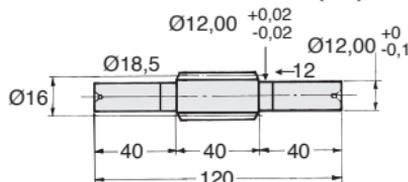
- Left handed lead angle
- Wheel can have from 12 to 110 teeth



Steel worm with shaft (SW)



Steel (W) or plastic (ZW) worm with bore



Plastic worm with shaft (ZSW)

### DISCOUNT Steel

|       |           |      |            |     |
|-------|-----------|------|------------|-----|
| Qty   | 1+        | 6+   | 20+        | 50+ |
| Disc. | List -12% | -25% | On request |     |

### DISCOUNT Delrin

|       |           |            |     |
|-------|-----------|------------|-----|
| Qty   | 1+        | 6+         | 30+ |
| Disc. | List -22% | On request |     |

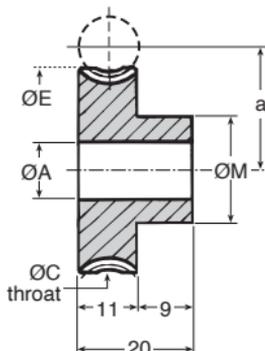
| Part number               |            | No. of starts | Lead angle | Price each 1 to 5 |            |
|---------------------------|------------|---------------|------------|-------------------|------------|
| Bored type                | Shaft type |               |            | Bored type        | Shaft type |
| <b>Non hardened steel</b> |            |               |            |                   |            |
| W1.25-1                   | SW1.25-1   | 1             | 4°28'      | 48,99 €           | 90,48 €    |
| W1.25-2                   | SW1.25-2   | 2             | 8°53'      | 51,85 €           | 92,95 €    |
| W1.25-3                   | SW1.25-3   | 3             | 13°11'     | 56,88 €           | 99,22 €    |
| W1.25-4                   | SW1.25-4   | 4             | 17°21'     | 59,40 €           | 100,68 €   |
| <b>Hardened steel</b>     |            |               |            |                   |            |
| WH1.25-1                  | SWH1.25-1  | 1             | 4°28'      | 69,81 €           | 128,58 €   |
| WH1.25-2                  | SWH1.25-2  | 2             | 8°53'      | 73,67 €           | 132,12 €   |
| WH1.25-3                  | SWH1.25-3  | 3             | 13°11'     | 80,79 €           | 140,90 €   |
| WH1.25-4                  | SWH1.25-4  | 4             | 17°21'     | 84,43 €           | 143,03 €   |
| <b>Delrin</b>             |            |               |            |                   |            |
| ZW1.25-1                  | ZSW1.25-1  | 1             | 4°28'      | 34,61 €           | 63,71 €    |
| ZW1.25-2                  | ZSW1.25-2  | 2             | 8°53'      | 36,41 €           | 65,36 €    |
| ZW1.25-3                  | ZSW1.25-3  | 3             | 13°11'     | 40,01 €           | 69,84 €    |
| ZW1.25-4                  | ZSW1.25-4  | 4             | 17°21'     | 41,77 €           | 64,43 €    |

Dimensions in mm

## Wheel in bronze or machined plastic Module 1.25

### Info.

- Pitch 3.927mm
- To order, add the number of starts on the worm to the wheel's part number.  
E.g: worm **W1.25-1**, wheel **M1.25-20/1**
- The use of a delrin worm with a delrin wheel is only recommended for occasional use. The use of a delrin worm with a steel wheel is preferred.



### Torque and power indication for 50 teeth at 1000 rpm (input)

| WHEEL material | Bronze Nm (kW) | Delrin Nm (kW) |
|----------------|----------------|----------------|
| Steel          | 11.41 (0.024)  | 7.02 (0.015)   |
| Hardened steel | 20.25 (0.042)  | -              |
| Delrin         | -              | 2.75 (0.006)   |

### DISCOUNT Bronze

|       |           |      |            |     |
|-------|-----------|------|------------|-----|
| Qty   | 1+        | 6+   | 20+        | 50+ |
| Disc. | List -12% | -25% | On request |     |

### DISCOUNT Delrin

|       |           |            |     |
|-------|-----------|------------|-----|
| Qty   | 1+        | 6+         | 30+ |
| Disc. | List -22% | On request |     |

| Part number |           | Z     | Centres |       |       |       |       | Price each 1 to 5 |          |          |
|-------------|-----------|-------|---------|-------|-------|-------|-------|-------------------|----------|----------|
| Bronze      | Plastic   | Teeth | ØP      | a     | ØC    | ØE    | ØM    | ØA                | Bronze   | Plastic  |
| M1.25-12    | ZM1.25-12 | 12    | 15,00   | 15,50 | 17,50 | 18,75 | 14,00 | 8                 | 53,58 €  | 26,93 €  |
| M1.25-15    | ZM1.25-15 | 15    | 18,75   | 17,38 | 21,25 | 22,50 | 14,00 | 8                 | 56,33 €  | 28,26 €  |
| M1.25-20    | ZM1.25-20 | 20    | 25,00   | 20,50 | 27,50 | 28,75 | 20,00 | 10                | 54,67 €  | 31,63 €  |
| M1.25-38    | ZM1.25-38 | 38    | 47,50   | 31,75 | 50,00 | 51,25 | 25,00 | 10                | 99,87 €  | 62,83 €  |
| M1.25-45    | ZM1.25-45 | 45    | 56,25   | 36,13 | 58,75 | 60,00 | 25,00 | 10                | 127,92 € | 80,64 €  |
| M1.25-60    | ZM1.25-60 | 60    | 75,00   | 45,50 | 77,50 | 78,75 | 32,00 | 12                | 212,57 € | 133,83 € |

|   |                   |     |            |
|---|-------------------|-----|------------|
| <b>Wheels available up to this size</b> |                   |     |            |
| <b>M1.25-110</b>                        | <b>ZM1.25-110</b> | 110 | On request |
| Dimensions : contact us                 |                   |     | On request |

Dimensions in mm

# Worm and wheel set



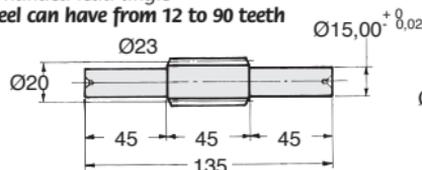
## Module 1.5 Worm in steel or machined plastic

- Pitch 4.712mm
- Machined parts
- Pressure angle 20°
- Right handed lead angle
- Materials:  
Worm: Steel 20NCD2 or Delrin plastic  
Wheel: bronze CuAl10NiFe4 or Delrin plastic
- Delrin: Working temp. -50°C to +80°C

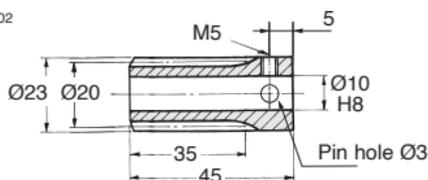


### Options

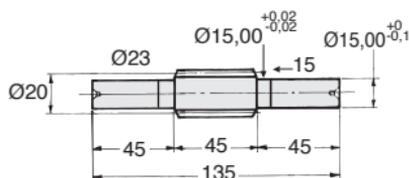
- Left handed lead angle
- Wheel can have from 12 to 90 teeth



Steel worm with shaft (SW)



Steel (W) or plastic (ZW) worm with bore



Plastic worm with shaft (ZSW)

### DISCOUNT Steel

|       |      |      |      |            |
|-------|------|------|------|------------|
| Qty   | 1+   | 6+   | 20+  | 50+        |
| Disc. | List | -12% | -25% | On request |

### DISCOUNT Delrin

|       |      |      |            |
|-------|------|------|------------|
| Qty   | 1+   | 6+   | 30+        |
| Disc. | List | -22% | On request |

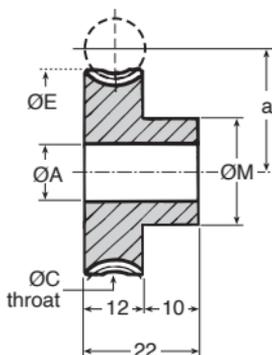
| Part number               |            | No. of starts | Lead angle | Price each 1 to 5 |            |
|---------------------------|------------|---------------|------------|-------------------|------------|
| Bored type                | Shaft type |               |            | Bored type        | Shaft type |
| <b>Non hardened steel</b> |            |               |            |                   |            |
| W1.5-1                    | SW1.5-1    | 1             | 4°17'      | 56,78 €           | 106,40 €   |
| W1.5-2                    | SW1.5-2    | 2             | 8°31'      | 65,99 €           | 112,06 €   |
| W1.5-3                    | SW1.5-3    | 3             | 12°40'     | 69,25 €           | 115,60 €   |
| W1.5-4                    | SW1.5-4    | 4             | 16°42'     | 75,09 €           | 116,85 €   |
| <b>Hardened steel</b>     |            |               |            |                   |            |
| WH1.5-1                   | SWH1.5-1   | 1             | 4°17'      | 80,74 €           | 151,19 €   |
| WH1.5-2                   | SWH1.5-2   | 2             | 8°31'      | 93,68 €           | 159,18 €   |
| WH1.5-3                   | SWH1.5-3   | 3             | 12°40'     | 98,37 €           | 164,06 €   |
| WH1.5-4                   | SWH1.5-4   | 4             | 16°42'     | 106,61 €          | 166,01 €   |
| <b>Delrin</b>             |            |               |            |                   |            |
| ZW1.5-1                   | ZSW1.5-1   | 1             | 4°17'      | 39,99 €           | 75,20 €    |
| ZW1.5-2                   | ZSW1.5-2   | 2             | 8°31'      | 46,30 €           | 79,18 €    |
| ZW1.5-3                   | ZSW1.5-3   | 3             | 12°40'     | 48,68 €           | 81,57 €    |
| ZW1.5-4                   | ZSW1.5-4   | 4             | 16°42'     | 52,79 €           | 82,45 €    |

Dimensions in mm

## Wheel in bronze or machined plastic Module 1.5

### Info.

- Pitch 4.712mm
- To order, add the number of starts on the worm to the wheel's part number.  
E.g: worm **W1.5-1**.  
wheel **M1.5-20/1**
- The use of a delrin worm with a delrin wheel is only recommended for occasional use. The use of a delrin worm with a steel wheel is preferred.



### Torque and power indication for 50 teeth at 1000 rpm (input)

| WHEEL material | Bronze Nm (kW) | Delrin Nm (kW) |
|----------------|----------------|----------------|
| Steel          | 16.80 (0.035)  | 10.05 (0.021)  |
| Hardened steel | 30.00 (0.063)  | -              |
| Delrin         | -              | 3.97 (0.008)   |

### DISCOUNT Bronze

| Qty   | 1+        | 6+        | 20+        | 50+        |
|-------|-----------|-----------|------------|------------|
| Disc. | List -12% | List -25% | On request | On request |

### DISCOUNT Delrin

| Qty   | 1+        | 6+         | 30+        |
|-------|-----------|------------|------------|
| Disc. | List -22% | On request | On request |

| Part number |          | Z     | Centres |       |        |        |    | Price each 1 to 5 |          |          |
|-------------|----------|-------|---------|-------|--------|--------|----|-------------------|----------|----------|
| Bronze      | Plastic  | Teeth | ØP      | a     | ØC     | ØE     | ØM | ØA                | Bronze   | Plastic  |
| M1.5-12     | ZM1.5-12 | 12    | 18,00   | 19,00 | 21,00  | 22,50  | 15 | 8                 | 59,13 €  | 29,71 €  |
| M1.5-15     | ZM1.5-15 | 15    | 22,50   | 21,25 | 25,50  | 27,00  | 18 | 8                 | 72,96 €  | 36,60 €  |
| M1.5-18     | ZM1.5-18 | 18    | 27,00   | 23,50 | 30,00  | 31,50  | 18 | 8                 | 77,97 €  | 39,23 €  |
| M1.5-20     | ZM1.5-20 | 20    | 30,00   | 25,00 | 33,00  | 34,50  | 20 | 10                | 80,44 €  | 44,42 €  |
| M1.5-22     | ZM1.5-22 | 22    | 33,00   | 26,50 | 36,00  | 37,50  | 20 | 10                | 82,98 €  | 45,98 €  |
| M1.5-24     | ZM1.5-24 | 24    | 36,00   | 28,00 | 39,00  | 40,50  | 20 | 10                | 85,74 €  | 47,41 €  |
| M1.5-25     | ZM1.5-25 | 25    | 37,50   | 28,75 | 40,50  | 42,00  | 25 | 10                | 88,30 €  | 48,94 €  |
| M1.5-28     | ZM1.5-28 | 28    | 42,00   | 31,00 | 45,00  | 46,50  | 25 | 10                | 92,75 €  | 58,33 €  |
| M1.5-30     | ZM1.5-30 | 30    | 45,00   | 32,50 | 48,00  | 49,50  | 30 | 15                | 97,18 €  | 61,25 €  |
| M1.5-32     | ZM1.5-32 | 32    | 48,00   | 34,00 | 51,00  | 52,50  | 30 | 15                | 100,48 € | 63,27 €  |
| M1.5-34     | ZM1.5-34 | 34    | 51,00   | 35,50 | 54,00  | 55,50  | 30 | 15                | 112,05 € | 70,57 €  |
| M1.5-40     | ZM1.5-40 | 40    | 60,00   | 40,00 | 63,00  | 64,50  | 30 | 15                | 150,67 € | 94,93 €  |
| M1.5-42     | ZM1.5-42 | 42    | 63,00   | 41,50 | 66,00  | 67,50  | 30 | 15                | 166,50 € | 104,87 € |
| M1.5-48     | ZM1.5-48 | 48    | 72,00   | 46,00 | 75,00  | 76,50  | 30 | 15                | 211,60 € | 133,28 € |
| M1.5-50     | ZM1.5-50 | 50    | 75,00   | 47,50 | 78,00  | 79,50  | 30 | 15                | 227,69 € | 143,43 € |
| M1.5-60     | ZM1.5-60 | 60    | 90,00   | 55,00 | 93,00  | 94,50  | 30 | 15                | 317,62 € | 200,02 € |
| M1.5-78     | ZM1.5-78 | 78    | 117,00  | 68,50 | 120,00 | 121,50 | 30 | 15                | 626,08 € | 228,06 € |
| M1.5-80     | ZM1.5-80 | 80    | 120,00  | 70,00 | 123,00 | 124,50 | 30 | 15                | 626,08 € | 228,06 € |

| ↓ Wheels available up to this size |          | ↓ ↓                    |                   |
|------------------------------------|----------|------------------------|-------------------|
| M1.5-90                            | ZM1.5-90 | Dimensions: contact us | 805,90 € 270,87 € |

Dimensions in mm

# Worm and wheel set



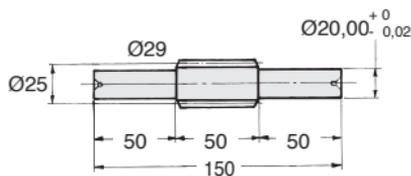
## Module 2.0 Worm in steel or machined plastic

- Pitch 6.283mm
- Machined parts
- Pressure angle 20°
- Right handed lead angle
- Materials:  
Worm: Steel 20NCD2 or Delrin plastic  
Wheel: bronze CuAl10NiFe4 or Delrin plastic
- Delrin: Working temp. -50°C to +80°C

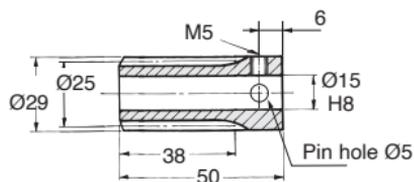


### Options

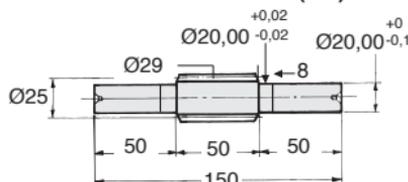
- Left handed lead angle
- Wheel can have from 12 to 285 teeth



Steel worm with shaft (SW)



Steel (W) or plastic (ZW) worm with bore



Plastic worm with shaft (ZSW)

### DISCOUNT Steel

|       |      |      |      |            |
|-------|------|------|------|------------|
| Qty   | 1+   | 6+   | 20+  | 50+        |
| Disc. | List | -12% | -25% | On request |

### DISCOUNT Delrin

|       |      |      |            |
|-------|------|------|------------|
| Qty   | 1+   | 6+   | 30+        |
| Disc. | List | -22% | On request |

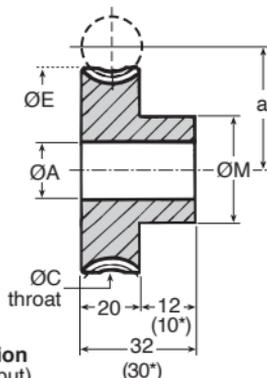
| Part number               |            | No. of starts | Lead angle | Price each 1 to 5 |            |
|---------------------------|------------|---------------|------------|-------------------|------------|
| Bored type                | Shaft type |               |            | Bored type        | Shaft type |
| <b>Non hardened steel</b> |            |               |            |                   |            |
| W2-1                      | SW2-1      | 1             | 4°34'      | 98,91 €           | 149,96 €   |
| W2-2                      | SW2-2      | 2             | 9°05'      | 106,02 €          | 159,13 €   |
| W2-3                      | SW2-3      | 3             | 13°29'     | 113,80 €          | 162,50 €   |
| W2-4                      | SW2-4      | 4             | 17°45'     | 125,44 €          | 170,72 €   |
| <b>Hardened steel</b>     |            |               |            |                   |            |
| WH2-1                     | SWH2-1     | 1             | 4°34'      | 140,53 €          | 213,18 €   |
| WH2-2                     | SWH2-2     | 2             | 9°05'      | 150,67 €          | 226,08 €   |
| WH2-3                     | SWH2-3     | 3             | 13°29'     | 161,62 €          | 231,04 €   |
| WH2-4                     | SWH2-4     | 4             | 17°45'     | 178,16 €          | 242,44 €   |
| <b>Delrin</b>             |            |               |            |                   |            |
| ZW2-1                     | ZSW2-1     | 1             | 4°34'      | 69,49 €           | 105,58 €   |
| ZW2-2                     | ZSW2-2     | 2             | 9°05'      | 74,57 €           | 112,06 €   |
| ZW2-3                     | ZSW2-3     | 3             | 13°29'     | 80,02 €           | 114,47 €   |
| ZW2-4                     | ZSW2-4     | 4             | 17°45'     | 88,22 €           | 120,06 €   |

Dimensions in mm

## Wheel in bronze or machined plastic Module 2.0

### Info.

- Pitch **6.283mm**
- To order, add the number of starts on the worm to the wheel's part number.  
E.g: worm **W2-1**, wheel **M2-20/1**
- The use of a delrin worm with a delrin wheel is only recommended for occasional use. The use of a delrin worm with a steel wheel is preferred.



**Torque and power indication**  
for 50 teeth at 1000 rpm (input)

| WHEEL material | Bronze     | Delrin       |
|----------------|------------|--------------|
| Steel          | 45 (0.094) | 28.3 (0.059) |
| Hardened steel | 79 (0.166) | -            |
| Delrin         | -          | 11.0 (0.023) |

### DISCOUNT Bronze

| Qty   | 1+   | 6+   | 20+  | 50+        |
|-------|------|------|------|------------|
| Disc. | List | -12% | -25% | On request |

### DISCOUNT Delrin

| Qty   | 1+   | 6+   | 30+        |
|-------|------|------|------------|
| Disc. | List | -22% | On request |

| Part number |         | Z     | Centres |       |     |     | Price each 1 to 5 |    |            |          |
|-------------|---------|-------|---------|-------|-----|-----|-------------------|----|------------|----------|
| Bronze      | Plastic | Teeth | ØP      | a     | ØC  | ØE  | ØM                | ØA | Bronze     | Plastic  |
| M2-12       | ZM2-12  | 12    | 24      | 24,50 | 28  | 30  | 20                | 12 | 121,97 €   | 61,31 €  |
| M2-15       | ZM2-15  | 15    | 30      | 27,50 | 34  | 36  | 25                | 15 | 148,78 €   | 82,40 €  |
| M2-18       | ZM2-18  | 18    | 36      | 30,50 | 40  | 42  | 30                | 15 | 163,19 €   | 89,23 €  |
| M2-20       | ZM2-20  | 20    | 40      | 32,50 | 44  | 46  | 30                | 15 | 169,31 €   | 106,52 € |
| M2-22       | ZM2-22  | 22    | 44      | 34,50 | 48  | 50  | 30                | 15 | 189,50 €   | 112,95 € |
| M2-24       | ZM2-24  | 24    | 48      | 36,50 | 52  | 54  | 30                | 15 | 199,64 €   | 119,31 € |
| M2-25       | ZM2-25  | 25    | 50      | 37,50 | 54  | 56  | 40                | 20 | 204,82 €   | 125,72 € |
| M2-28       | ZM2-28  | 28    | 56      | 40,50 | 60  | 62  | 40                | 20 | 214,98 €   | 137,21 € |
| M2-30       | ZM2-30  | 30    | 60      | 42,50 | 64  | 66  | 50                | 20 | 220,07 €   | 138,52 € |
| M2-32       | ZM2-32  | 32    | 64      | 44,50 | 68  | 70  | 50                | 20 | 228,59 €   | 142,60 € |
| M2-34       | ZM2-34  | 34    | 68      | 46,50 | 72  | 74  | 50                | 20 | 254,63 €   | 160,45 € |
| M2-40       | ZM2-40  | 40    | 80      | 52,50 | 84  | 86  | 50                | 20 | 341,43 €   | 215,16 € |
| M2-42       | ZM2-42  | 42    | 84      | 54,50 | 88  | 90  | 50                | 20 | 373,17 €   | 235,03 € |
| M2-45       | ZM2-45  | 45    | 90      | 57,50 | 94  | 96  | 50                | 20 | 423,44 €   | 266,88 € |
| M2-48       | ZM2-48  | 48    | 96      | 60,50 | 100 | 102 | 50                | 20 | 689,85 €   | 238,22 € |
| M2-50       | ZM2-50  | 50    | 100     | 62,50 | 104 | 106 | 50                | 20 | 689,85 €   | 238,22 € |
| M2-60       | ZM2-60  | 60    | 120     | 72,50 | 124 | 126 | 50                | 20 | 849,72 €   | 293,28 € |
| M2-65       | ZM2-65  | 65    | 130     | 77,50 | 134 | 136 | 50                | 20 | 1 093,71 € | 348,23 € |

↓
↓
**Wheels available up to this size**
↓
↓

|       |        |    |                        |            |            |
|-------|--------|----|------------------------|------------|------------|
| M2-72 | ZM2-72 | 72 | Dimensions: contact us | On request | On request |
|-------|--------|----|------------------------|------------|------------|

Dimensions in mm

# Worm and wheel set



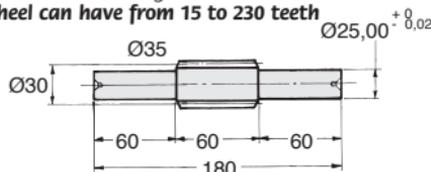
## Module 2.5 Worm in steel or machined plastic

- Pitch 7.854mm
- Machined parts
- Pressure angle 20°
- Right handed lead angle
- Materials:  
Worm: Steel 20NCD2 or Delrin plastic  
Wheel: bronze CuAl10NiFe4 or Delrin plastic
- Delrin: Working temp. -50°C to +80°C

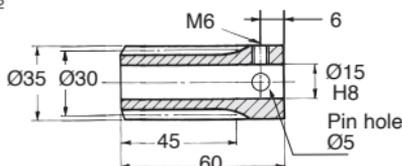


### Options

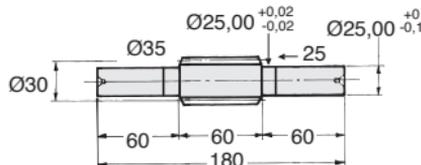
- Left handed lead angle
- Wheel can have from 15 to 230 teeth



Steel worm with shaft (SW)



Steel (W) or plastic (ZW) shaft with bore



Plastic worm with shaft (ZSW)

### DISCOUNT Steel

|       |      |      |      |            |
|-------|------|------|------|------------|
| Qty   | 1+   | 6+   | 20+  | 50+        |
| Disc. | List | -12% | -25% | On request |

### DISCOUNT Delrin

|       |      |      |            |
|-------|------|------|------------|
| Qty   | 1+   | 6+   | 30+        |
| Disc. | List | -22% | On request |

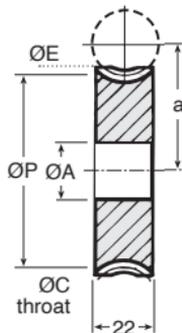
| Part number               |            | No. of starts | Lead angle | Price each 1 to 5 |            |
|---------------------------|------------|---------------|------------|-------------------|------------|
| Bored type                | Shaft type |               |            | Bored type        | Shaft type |
| <b>Non hardened steel</b> |            |               |            |                   |            |
| W2.5-1                    | SW2.5-1    | 1             | 4°34'      | 149,11 €          | 219,23 €   |
| W2.5-2                    | SW2.5-2    | 2             | 9°50'      | 159,18 €          | 228,46 €   |
| W2.5-3                    | SW2.5-3    | 3             | 13°29'     | 165,63 €          | 237,42 €   |
| W2.5-4                    | SW2.5-4    | 4             | 17°45'     | 171,27 €          | 248,36 €   |
| <b>Hardened steel</b>     |            |               |            |                   |            |
| WH2.5-1                   | SWH2.5-1   | 1             | 4°34'      | 201,61 €          | 316,40 €   |
| WH2.5-2                   | SWH2.5-2   | 2             | 9°50'      | 213,37 €          | 327,53 €   |
| WH2.5-3                   | SWH2.5-3   | 3             | 13°29'     | 216,64 €          | 334,56 €   |
| WH2.5-4                   | SWH2.5-4   | 4             | 17°45'     | 222,34 €          | 342,71 €   |
| <b>Delrin</b>             |            |               |            |                   |            |
| ZW2.5-1                   | ZSW2.5-1   | 1             | 4°34'      | 98,47 €           | 148,78 €   |
| ZW2.5-2                   | ZSW2.5-2   | 2             | 9°50'      | 105,58 €          | 155,33 €   |
| ZW2.5-3                   | ZSW2.5-3   | 3             | 13°29'     | 110,27 €          | 161,73 €   |
| ZW2.5-4                   | ZSW2.5-4   | 4             | 17°45'     | 114,25 €          | 169,60 €   |

Dimensions in mm

## Wheel in bronze or machined plastic Module 2.5

### Info.

- Pitch 7.854mm
- To order, add the number of starts on the worm to the wheel's part number.  
E.g: worm W2.5-1. wheel M2.5-20/1
- The use of a delrin worm with a delrin wheel is only recommended for occasional use. The use of a delrin worm with a steel wheel is preferred.



### Torque and power indication for 50 teeth at 1000 rpm (input)

| WHEEL material \ WORM material | Bronze<br>Nm (kW) | Delrin<br>Nm (kW) |
|--------------------------------|-------------------|-------------------|
| Steel                          | 81 (0.169)        | 40 (0.085)        |
| Hardened steel                 | 124 (0.258)       | -                 |
| Delrin                         | -                 | 18 (0.034)        |

### DISCOUNT Bronze

| Qty   | 1+   | 6+   | 20+  | 40+        |
|-------|------|------|------|------------|
| Disc. | List | -12% | -25% | On request |

### DISCOUNT Delrin

| Qty   | 1+   | 6+   | 30+        |
|-------|------|------|------------|
| Disc. | List | -22% | On request |

| Part number                             |           | Z     | Centres |       |        |        |    | Price each 1 to 5 |          |
|---|-----------|-------|---------|-------|--------|--------|----|-------------------|----------|
| Bronze                                  | Plastic   | Teeth | ØP      | a     | ØC     | ØE     | ØA | Bronze            | Plastic  |
| PM2.5-15                                | ZPM2.5-15 | 15    | 37,50   | 33,75 | 42,50  | 45,00  | 15 | 115,01 €          | 82,73 €  |
| PM2.5-20                                | ZPM2.5-20 | 20    | 50,00   | 40,00 | 55,00  | 57,50  | 20 | 140,99 €          | 101,43 € |
| PM2.5-25                                | ZPM2.5-25 | 25    | 62,50   | 46,25 | 67,50  | 70,00  | 20 | 157,03 €          | 112,95 € |
| PM2.5-30                                | ZPM2.5-30 | 30    | 75,00   | 52,50 | 80,00  | 82,50  | 20 | 164,01 €          | 117,96 € |
| PM2.5-40                                | ZPM2.5-40 | 40    | 100,00  | 65,00 | 105,00 | 107,50 | 20 | 508,30 €          | 185,27 € |
| PM2.5-50                                | ZPM2.5-50 | 50    | 125,00  | 77,50 | 130,00 | 132,50 | 20 | 805,90 €          | 270,87 € |
| <b>↓ ↓ ↓ ↓ ↓</b>                        |           |       |         |       |        |        |    |                   |          |
| <b>Wheels available up to this size</b> |           |       |         |       |        |        |    |                   |          |
| PM2.5-55                                | ZPM2.5-55 | 55    | 137,50  | 83,75 | 142,50 | 145,00 | 20 | 967,08 €          | 333,58 € |

Dimensions in mm

# Worm and wheel set



## Module 3.0 Worm in steel or machined plastic

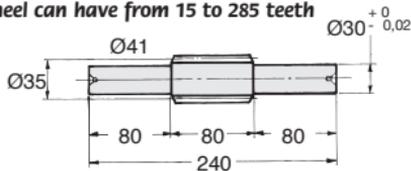


- Pitch 9.425mm
- Machined parts
- Pressure angle 20°
- Right handed lead angle
- Materials:  
Worm: Steel 20NCD2 or Delrin plastic  
Wheel: bronze CuAl10NiFe4 or Delrin plastic
- Delrin: Working temp. -50°C to +80°C

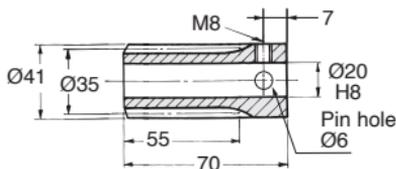


### Options

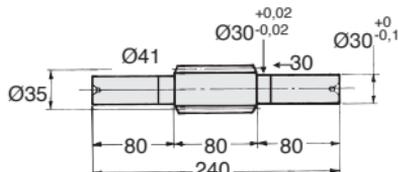
- Left handed lead angle
- **Wheel can have from 15 to 285 teeth**



Steel worm with shaft (SW)



Steel (W) or plastic (ZW) worm with bore



Plastic worm with shaft (ZSW)

### DISCOUNT Steel

|       |      |      |      |            |
|-------|------|------|------|------------|
| Qty   | 1+   | 6+   | 20+  | 50+        |
| Disc. | List | -12% | -25% | On request |

### DISCOUNT Delrin

|       |      |      |            |
|-------|------|------|------------|
| Qty   | 1+   | 6+   | 30+        |
| Disc. | List | -22% | On request |

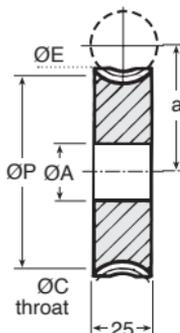
| Part number               |            | No. of starts | Lead angle | Price each 1 to 5 |            |
|---------------------------|------------|---------------|------------|-------------------|------------|
| Bored type                | Shaft type |               |            | Bored type        | Shaft type |
| <b>Non hardened steel</b> |            |               |            |                   |            |
| W3-1                      | SW3-1      | 1             | 4°54'      | 178,00 €          | 254,69 €   |
| W3-2                      | SW3-2      | 2             | 9°44'      | 183,88 €          | 270,37 €   |
| W3-3                      | SW3-3      | 3             | 14°25'     | 189,34 €          | 281,70 €   |
| W3-4                      | SW3-4      | 4             | 18°55'     | 196,81 €          | 292,84 €   |
| <b>Hardened steel</b>     |            |               |            |                   |            |
| WH3-1                     | SWH3-1     | 1             | 4°54'      | 228,47 €          | 348,66 €   |
| WH3-2                     | SWH3-2     | 2             | 9°44'      | 234,53 €          | 338,86 €   |
| WH3-3                     | SWH3-3     | 3             | 14°25'     | 246,33 €          | 344,36 €   |
| WH3-4                     | SWH3-4     | 4             | 18°55'     | 256,19 €          | 361,53 €   |
| <b>Delrin</b>             |            |               |            |                   |            |
| ZW3-1                     | ZSW3-1     | 1             | 4°54'      | 140,99 €          | 195,96 €   |
| ZW3-2                     | ZSW3-2     | 2             | 9°44'      | 145,09 €          | 203,22 €   |
| ZW3-3                     | ZSW3-3     | 3             | 14°25'     | 149,07 €          | 211,47 €   |
| ZW3-4                     | ZSW3-4     | 4             | 18°55'     | 154,41 €          | 219,54 €   |

Dimensions in mm

## Wheel in bronze or **machined** plastic **Module 3.0**

### Info.

- Pitch **9.425mm**
- To order, add the number of starts on the worm to the wheel's part number.  
E.g: worm **W3-1**, wheel **M3-20/1**
- The use of a delrin worm with a delrin wheel is only recommended for occasional use. The use of a delrin worm with a steel wheel is preferred.



### Torque and power indication for 50 teeth at 1000 rpm (input)

| WHEEL material \ WORM material | Bronze<br>Nm (kW) | Delrin<br>Nm (kW) |
|--------------------------------|-------------------|-------------------|
| Steel                          | 139 (0.291)       | 69 (0.145)        |
| Hardened steel                 | 200 (0.422)       | -                 |
| Delrin                         | -                 | 27 (0.058)        |

### DISCOUNT Bronze

| Qty   | 1+   | 6+   | 20+  | 40+        |
|-------|------|------|------|------------|
| Disc. | List | -12% | -25% | On request |

### DISCOUNT Delrin

| Qty   | 1+   | 6+   | 30+        |
|-------|------|------|------------|
| Disc. | List | -22% | On request |

| Part number |         | Z     | Centres |       |     | Price each 1 to 5 |    |          |          |
|-------------|---------|-------|---------|-------|-----|-------------------|----|----------|----------|
| Bronze      | Plastic | Teeth | ØP      | a     | ØC  | ØE                | ØA | Bronze   | Plastic  |
| PM3-15      | ZPM3-15 | 15    | 45      | 40,00 | 51  | 54                | 25 | 123,16 € | 88,57 €  |
| PM3-20      | ZPM3-20 | 20    | 60      | 47,50 | 66  | 69                | 25 | 155,66 € | 111,99 € |
| PM3-25      | ZPM3-25 | 25    | 75      | 55,00 | 81  | 84                | 25 | 187,44 € | 134,82 € |
| PM3-30      | ZPM3-30 | 30    | 90      | 62,50 | 96  | 99                | 25 | 270,01 € | 194,32 € |
| PM3-40      | ZPM3-40 | 40    | 120     | 77,50 | 126 | 129               | 25 | 693,19 € | 252,49 € |

### Wheels available up to this size

|        |         |    |                        |  |  |  |            |            |
|--------|---------|----|------------------------|--|--|--|------------|------------|
| PM3-48 | ZPM3-48 | 48 | Dimensions: contact us |  |  |  | On request | On request |
|--------|---------|----|------------------------|--|--|--|------------|------------|

Dimensions in mm

# Worm and wheel set



## Module 4.0 Worm in steel or machined plastic

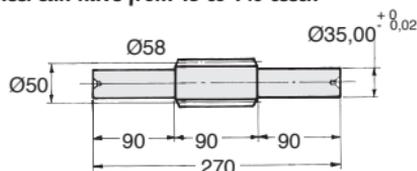
# 4.0

- Pitch 12.566mm
- Machined parts
- Pressure angle 20°
- Right handed lead angle
- Materials:  
Worm: Steel 20NCD2 or Delrin plastic  
Wheel: bronze CuAl10NiFe4 or Delrin plastic
- Delrin: Working temp. -50°C to +80°C

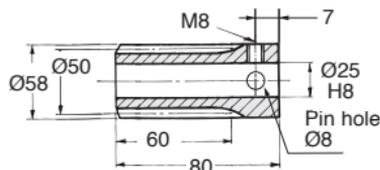


### Options

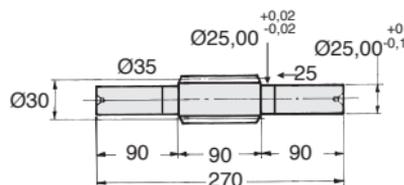
- Left handed lead angle
- Wheel can have from 15 to 140 teeth



Steel worm with shaft (SW)



Steel (W) or plastic\* (ZW) worm with bore



Plastic worm with shaft (ZSW)

### DISCOUNT Steel

|       |      |      |      |            |
|-------|------|------|------|------------|
| Qty   | 1+   | 6+   | 20+  | 50+        |
| Disc. | List | -12% | -25% | On request |

### DISCOUNT Delrin

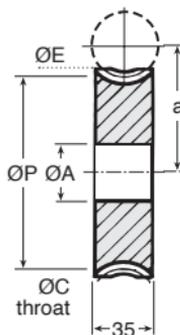
|       |      |      |            |
|-------|------|------|------------|
| Qty   | 1+   | 6+   | 30+        |
| Disc. | List | -22% | On request |

| Part number               |            | No. of starts | Lead angle | Price each 1 to 5 |            |
|---------------------------|------------|---------------|------------|-------------------|------------|
| Bored type                | Shaft type |               |            | Bored type        | Shaft type |
| <b>Non hardened steel</b> |            |               |            |                   |            |
| W4-1                      | SW4-1      | 1             | 4°34'      | 277,31 €          | 372,95 €   |
| W4-2                      | SW4-2      | 2             | 9°50'      | 291,44 €          | 392,56 €   |
| W4-3                      | SW4-3      | 3             | 13°30'     | 306,56 €          | 414,52 €   |
| W4-4                      | SW4-4      | 4             | 17°45'     | 325,69 €          | 442,39 €   |
| <b>Hardened steel</b>     |            |               |            |                   |            |
| WH4-1                     | SWH4-1     | 1             | 4°34'      | 347,17 €          | 517,24 €   |
| WH4-2                     | SWH4-2     | 2             | 9°50'      | 366,35 €          | 527,20 €   |
| WH4-3                     | SWH4-3     | 3             | 13°30'     | 378,88 €          | 548,24 €   |
| WH4-4                     | SWH4-4     | 4             | 17°45'     | 402,79 €          | 563,73 €   |
| <b>Delrin</b>             |            |               |            |                   |            |
| ZW4-1                     | ZSW4-1     | 1             | 4°34'      | 187,99 €          | 263,77 €   |
| ZW4-2                     | ZSW4-2     | 2             | 9°50'      | 197,09 €          | 277,11 €   |
| ZW4-3                     | ZSW4-3     | 3             | 13°30'     | 209,13 €          | 293,77 €   |
| ZW4-4                     | ZSW4-4     | 4             | 17°45'     | 222,57 €          | 309,00 €   |

Dimensions in mm

### Info.

- Pitch 12.566mm
- To order, add the number of starts on the worm to the wheel's part number.  
E.g: **worm W4-1**, wheel **M4-20/1**
- The use of a delrin worm with a delrin wheel is only recommended for occasional use. The use of a delrin worm with a steel wheel is preferred.



### Torque and power indication for 50 teeth at 1000 rpm (input)

| WHEEL material | Bronze Nm (kW) | Delrin Nm (kW) |
|----------------|----------------|----------------|
| Steel          | 309 (0.647)    | 61 (0.129)     |
| Hardened steel | 417 (0.873)    | -              |
| Delrin         | -              | 154 (0.324)    |

### DISCOUNT Bronze

|       |      |      |      |            |
|-------|------|------|------|------------|
| Qty   | 1+   | 6+   | 20+  | 40+        |
| Disc. | List | -12% | -25% | On request |

### DISCOUNT Delrin

|       |      |      |            |
|-------|------|------|------------|
| Qty   | 1+   | 6+   | 30+        |
| Disc. | List | -22% | On request |

| Part number | Z<br>Teeth | Centres<br>a | ØP  | ØC | ØE  | ØA  | Price each 1 to 5 |            |          |
|-------------|------------|--------------|-----|----|-----|-----|-------------------|------------|----------|
|             |            |              |     |    |     |     | Bronze            | Plastic    |          |
| PM4-15      | ZPM4-15    | 15           | 60  | 55 | 68  | 72  | 25                | 293,22 €   | 189,67 € |
| PM4-20      | ZPM4-20    | 20           | 80  | 65 | 88  | 92  | 25                | 341,29 €   | 220,71 € |
| PM4-25      | ZPM4-25    | 25           | 100 | 75 | 108 | 112 | 35                | 744,33 €   | 271,37 € |
| PM4-30      | ZPM4-30    | 30           | 120 | 85 | 128 | 132 | 35                | 1 180,08 € | 396,63 € |

### Wheels available up to this size

|        |         |    |                        |  |  |  |            |            |
|--------|---------|----|------------------------|--|--|--|------------|------------|
| PM4-36 | ZPM4-36 | 36 | Dimensions: contact us |  |  |  | On request | On request |
|--------|---------|----|------------------------|--|--|--|------------|------------|

Dimensions in mm