

Słupy i maszty wielokątne

Polygonal posts and masts

8 kątne, grubość ścianki 3 i 4 mm
Octagonal, wall thickness 3 & 4mm

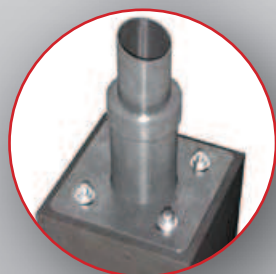
- SO, SX



Słupy i maszty stożkowe

Conical posts and masts

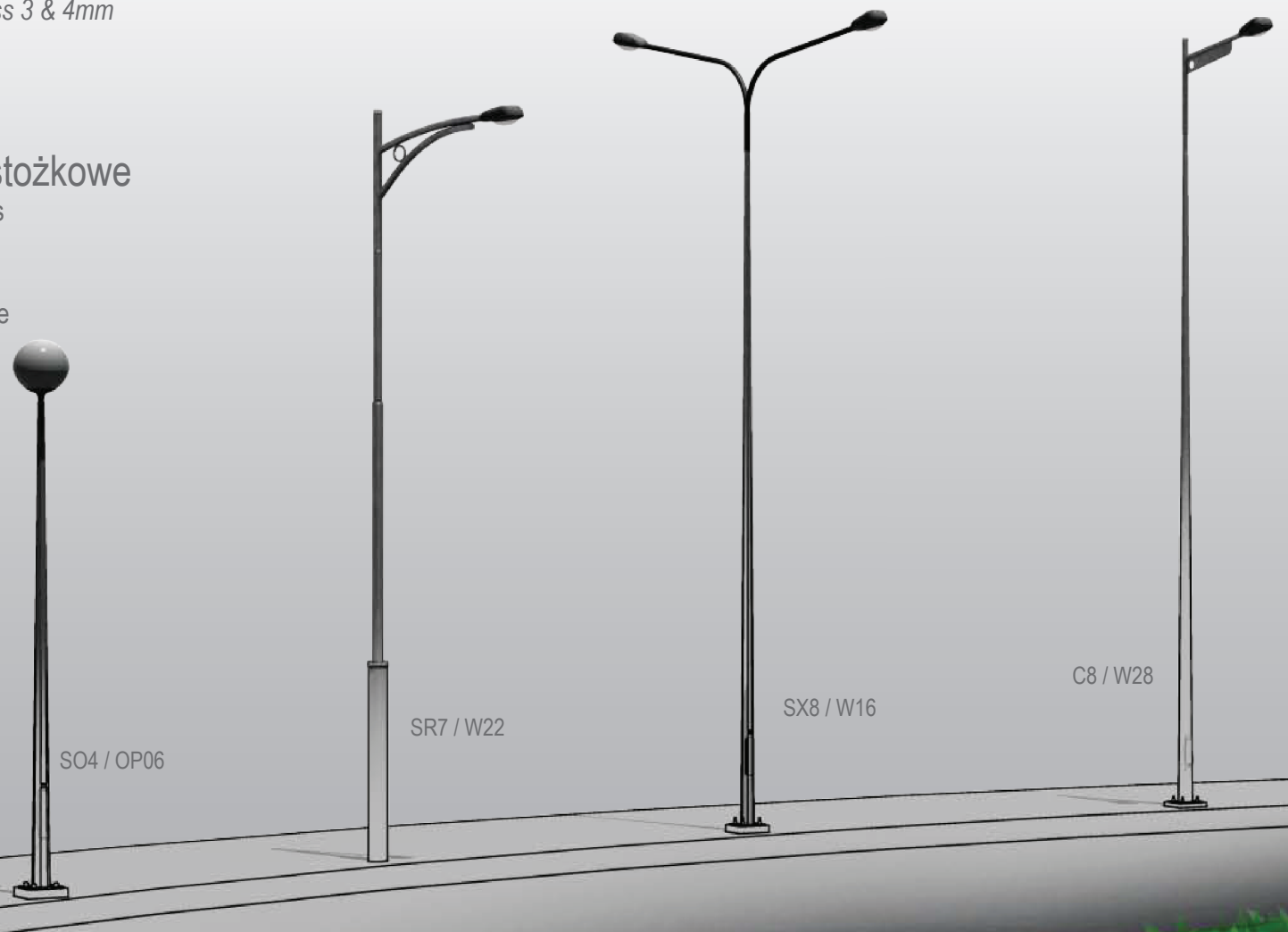
- C, GAMMA
- Słupy sygnalizacyjne



Słupy rurowe

Tubular posts

- SR



SO4 / OP06











SR7 / W22

SX8 / W16

C8 / W28











Słupy oświetleniowe 5-7 m

Lighting columns

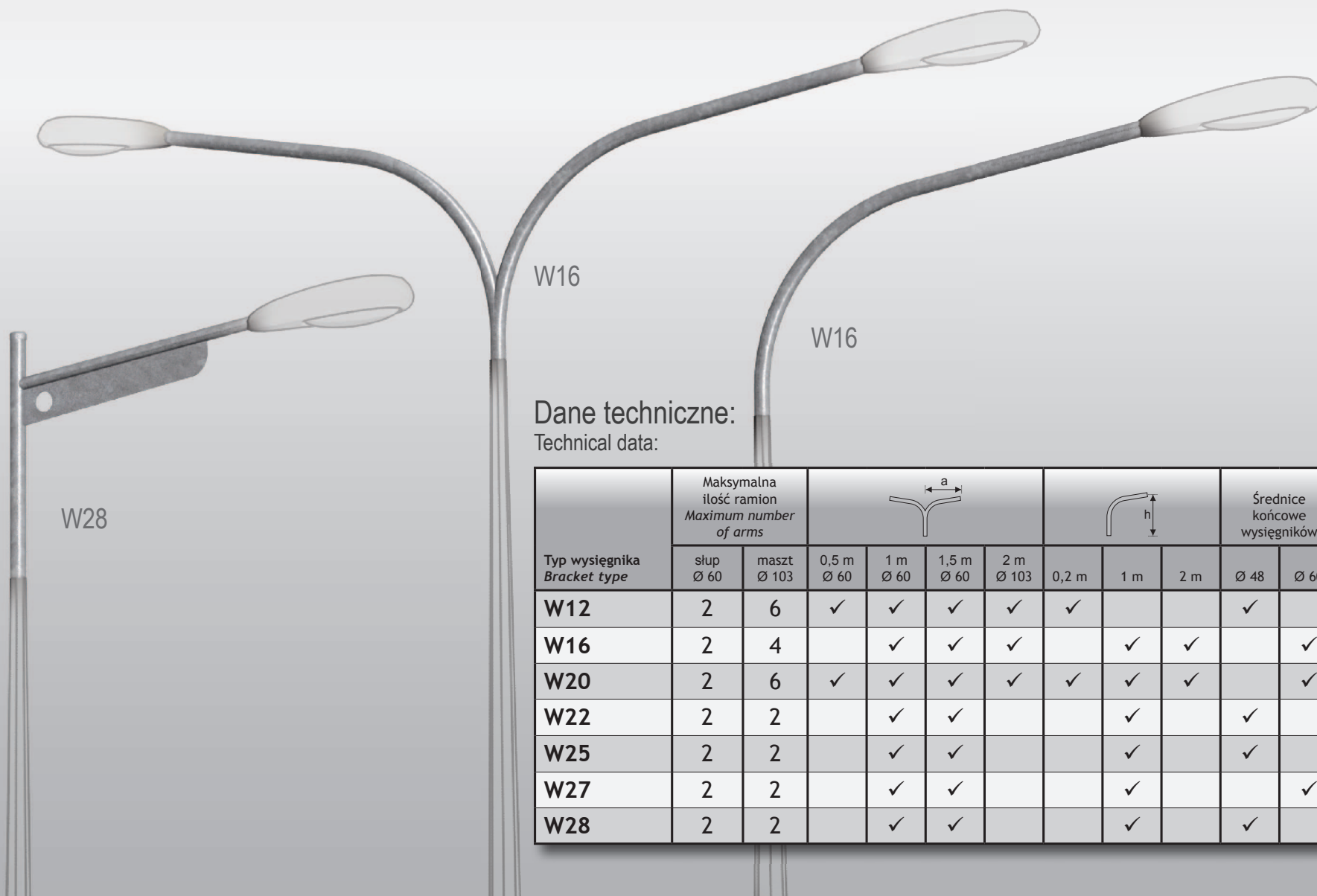
| | Typ Type | Przekrój Profile |  [m] |  [mm] |  a/b [mm] |  a/b [mm] |  [mm] |  |  | | |  [kg] |  | | | M | T |  [kg] |
|------|-------------|---------------------|--|---|---|---|--|---|---|------|------------------------|---|---|------|------------------------|-------|-------|---|
| | | | | | | | | | I | II | III do 400 m n.p.m. | | I | II | III do 400 m n.p.m. | | | |
| ...5 | SR 5-F | ○ | 5 | 4 | 60/133 | 100/400 | 400 | B-80 | 0,60 | 0,40 | 0,49 | 20 | 0,88 | 0,59 | 0,72 | 14,90 | 11,70 | 47 |
| | C 5/3/60 | ◎ | 5 | 3 | 60/124 | 70/400 | 500 | B-80 | 1,00 | 0,66 | 0,81 | 20 | 1,46 | 0,99 | 1,20 | 9,83 | 7,72 | 39 |
| | C 5/3/60/W | ◎ | 5 | 3 | 60/124 | 70/400 | 500 | - | 1,00 | 0,66 | 0,81 | 20 | 1,46 | 0,99 | 1,20 | 9,83 | 7,72 | 44 |
| | C 5/4/60 | ◎ | 5 | 4 | 60/124 | 70/400 | 500 | B-120 | 1,52 | 1,04 | 1,25 | 20 | 2,19 | 1,51 | 1,81 | 12,89 | 10,12 | 71 |
| | C 5/4/60/W | ◎ | 5 | 4 | 60/124 | 70/400 | 500 | - | 1,52 | 1,04 | 1,25 | 20 | 2,19 | 1,51 | 1,81 | 12,89 | 10,12 | 59 |
| 6 | SO 6/3 | ○ | 6 | 3 | 60/156 | 100/400 | 500 | B-80 | 0,80 | 0,48 | 0,62 | 20 | 1,38 | 0,90 | 1,12 | 14,51 | 10,50 | 57 |
| | SO 6/4 | ○ | 6 | 4 | 60/156 | 100/400 | 500 | B-80 | 1,27 | 0,83 | 1,03 | 20 | 2,15 | 1,15 | 1,76 | 19,07 | 13,81 | 72 |
| | SX 6/3 | ○ | 6 | 3 | 60/191 | 100/400 | 500 | B-120 | 1,60 | 1,05 | 1,28 | 20 | 2,35 | 1,58 | 1,91 | 20,51 | 15,87 | 68 |
| | SX 6/4 | ○ | 6 | 4 | 60/191 | 100/400 | 500 | B-120 | 2,51 | 1,70 | 2,05 | 20 | 3,67 | 2,53 | 3,04 | 28,89 | 20,91 | 88 |
| | SR 6 | ○ | 6 | 4 | 60/133 | 100/400 | 400 | - | 0,77 | 0,47 | 0,60 | 20 | 1,36 | 0,91 | 1,10 | 14,90 | 11,70 | 65 |
| | SR 6-F | ○ | 6 | 4 | 60/133 | 100/400 | 400 | B-80 | 0,77 | 0,47 | 0,60 | 20 | 1,36 | 0,91 | 1,10 | 14,90 | 11,70 | 54 |
| | C 6/3/60 | ◎ | 6 | 3 | 60/138 | 100/400 | 500 | B-80 | 0,67 | 0,41 | 0,52 | 20 | 1,18 | 0,79 | 0,96 | 12,24 | 9,61 | 53 |
| | C 6/3/60/W | ◎ | 6 | 3 | 60/138 | 100/400 | 500 | - | 0,67 | 0,41 | 0,52 | 20 | 1,18 | 0,79 | 0,96 | 12,24 | 9,61 | 57 |
| | C 6/3/76 | ◎ | 6 | 3 | 76/151 | 100/400 | 500 | B-120 | 0,95 | 0,61 | 0,75 | 20 | 1,54 | 1,04 | 1,26 | 14,55 | 11,55 | 66 |
| | C 6/4/60 | ◎ | 6 | 4 | 60/138 | 100/400 | 500 | B-120 | 1,05 | 0,70 | 0,85 | 20 | 1,82 | 1,24 | 1,50 | 16,07 | 12,63 | 72 |
| | C 6/4/60/W | ◎ | 6 | 4 | 60/138 | 100/400 | 500 | - | 1,04 | 0,70 | 0,85 | 20 | 1,82 | 1,24 | 1,50 | 16,07 | 12,63 | 75 |
| | C 6/4/76 | ◎ | 6 | 4 | 76/151 | 100/400 | 500 | B-120 | 1,51 | 1,02 | 1,23 | 20 | 2,38 | 1,64 | 1,95 | 19,35 | 15,19 | 83 |
| 7 | SO 7/3 | ○ | 7 | 3 | 60/156 | 100/400 | 500 | B-120 | 0,86 | 0,51 | 0,66 | 20 | 1,51 | 0,97 | 1,21 | 20,51 | 15,87 | 70 |
| | SO 7/4 | ○ | 7 | 4 | 60/156 | 100/400 | 500 | B-120 | 1,47 | 0,95 | 1,18 | 20 | 2,45 | 1,66 | 1,99 | 28,81 | 20,86 | 87 |
| | SX 7/3 | ○ | 7 | 3 | 60/191 | 100/400 | 500 | B-120 | 1,70 | 1,10 | 1,36 | 20 | 2,49 | 1,68 | 2,04 | 28,83 | 23,97 | 79 |
| | SX 7/4 | ○ | 7 | 4 | 60/191 | 100/400 | 500 | B-120 | 2,81 | 1,91 | 2,31 | 20 | 4,10 | 2,84 | 3,38 | 42,10 | 31,59 | 99 |
| | SR 7 | ○ | 7 | 4 | 60/133 | 100/400 | 400 | - | 0,97 | 0,62 | 0,77 | 20 | 1,57 | 1,05 | 1,27 | 22,50 | 17,68 | 84 |
| | SR 7-F | ○ | 7 | 4 | 60/133 | 100/400 | 400 | B-120 | 0,97 | 0,62 | 0,77 | 20 | 1,57 | 1,05 | 1,27 | 22,50 | 17,68 | 66 |
| | C 7/3/60 | ◎ | 7 | 3 | 60/151 | 100/400 | 500 | B-120 | 1,02 | 0,65 | 0,81 | 20 | 1,65 | 1,11 | 1,34 | 20,45 | 17,45 | 68 |
| | C 7/3/60/W | ◎ | 7 | 3 | 60/151 | 100/400 | 500 | - | 1,02 | 0,65 | 0,81 | 20 | 1,65 | 1,11 | 1,34 | 20,45 | 17,45 | 72 |

Słupy oświetleniowe 7-9 m

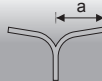

Lighting columns

| | Typ Type | Przekrój Profile |  |  |  |  |  |  |  | | |  |  | | | M | T |  [kg] |
|------|-------------|---------------------|---|---|---|---|--|---|---|---------------------|------|---|---|---------------------|------|-------|-------|---|
| | | | [m] | [mm] | [mm] | [mm] | [mm] | I | II | III do 400 m n.p.m. | [kg] | I | II | III do 400 m n.p.m. | | | | |
| ...7 | C 7/3/76 | ⊙ | 7 | 3 | 76/161 | 100/400 | 500 | B-120 | 1,26 | 0,84 | 1,02 | 20 | 1,96 | 1,34 | 1,60 | 22,78 | 19,89 | 77 |
| | C 7/4/60 | ⊙ | 7 | 4 | 60/151 | 100/400 | 500 | B-120 | 1,68 | 1,13 | 1,36 | 20 | 2,64 | 1,83 | 2,19 | 29,22 | 22,95 | 91 |
| | C 7/4/60/W | ⊙ | 7 | 4 | 60/151 | 100/400 | 500 | - | 1,68 | 1,13 | 1,36 | 20 | 2,64 | 1,83 | 2,19 | 29,22 | 22,95 | 94 |
| | C 7/4/76 | ⊙ | 7 | 4 | 76/161 | 100/400 | 500 | B-120 | 2,12 | 1,45 | 1,75 | 20 | 3,21 | 2,24 | 2,65 | 33,23 | 26,18 | 98 |
| 8 | SO 8/3 | ○ | 8 | 3 | 60/156 | 100/400 | 500 | B-120 | 0,58 | 0,3 | 0,42 | 20 | 1,10 | 0,67 | 0,86 | 20,51 | 15,87 | 77 |
| | SO 8/4 | ○ | 8 | 4 | 60/156 | 100/400 | 500 | B-120 | 1,10 | 0,67 | 0,86 | 20 | 1,90 | 1,24 | 1,52 | 28,81 | 20,86 | 98 |
| | SX 8/3 | ○ | 8 | 3 | 60/191 | 100/400 | 500 | B-120 | 1,24 | 0,76 | 0,97 | 20 | 1,88 | 1,22 | 1,50 | 28,83 | 23,97 | 89 |
| | SX 8/4 | ○ | 8 | 4 | 60/191 | 100/400 | 500 | B-120 | 2,23 | 1,48 | 1,79 | 20 | 3,28 | 2,22 | 2,67 | 42,10 | 31,59 | 113 |
| | SR 8 | ○ | 8 | 4 | 60/159 | 100/400 | 500 | - | 0,89 | 0,56 | 0,70 | 20 | 1,43 | 0,94 | 1,15 | 32,49 | 25,52 | 114 |
| | SR 8-F | ○ | 8 | 4 | 60/159 | 100/400 | 500 | B-120 | 0,89 | 0,56 | 0,70 | 20 | 1,43 | 0,94 | 1,15 | 32,49 | 25,52 | 88 |
| | C 8/3/60 | ⊙ | 8 | 3 | 60/161 | 100/400 | 500 | B-120 | 0,94 | 0,59 | 0,74 | 20 | 1,50 | 0,99 | 1,21 | 22,78 | 19,89 | 79 |
| | C 8/3/60/W | ⊙ | 8 | 3 | 60/161 | 100/400 | 500 | - | 0,94 | 0,59 | 0,74 | 20 | 1,50 | 0,99 | 1,21 | 22,78 | 19,89 | 82 |
| | C 8/3/76 | ⊙ | 8 | 3 | 76/172 | 100/400 | 500 | B-120 | 1,17 | 0,77 | 0,94 | 20 | 1,79 | 1,21 | 1,45 | 25,45 | 22,75 | 88 |
| | C 8/4/60 | ⊙ | 8 | 4 | 60/161 | 100/400 | 500 | B-120 | 1,61 | 1,07 | 1,31 | 20 | 2,47 | 1,68 | 2,03 | 33,23 | 26,18 | 103 |
| | C 8/4/60/W | ⊙ | 8 | 4 | 60/161 | 100/400 | 500 | - | 1,61 | 1,07 | 1,31 | 20 | 2,47 | 1,68 | 2,03 | 33,23 | 26,18 | 82 |
| | C 8/4/76 | ⊙ | 8 | 4 | 76/172 | 100/400 | 500 | B-120 | 2,01 | 1,36 | 1,65 | 20 | 2,95 | 2,05 | 2,43 | 37,16 | 29,98 | 113 |
| 9 | SO 9/3 | ○ | 9 | 3 | 60/156 | 100/400 | 500 | B-120 | 0,36 | 0,13 | 0,23 | 20 | 0,80 | 0,44 | 0,59 | 20,51 | 15,87 | 88 |
| | SO 9/4 | ○ | 9 | 4 | 60/156 | 100/400 | 500 | B-120 | 0,79 | 0,43 | 0,59 | 20 | 1,45 | 0,90 | 1,14 | 28,81 | 20,86 | 110 |
| | SX 9/3 | ○ | 9 | 3 | 60/191 | 100/400 | 500 | B-120 | 0,90 | 0,50 | 0,68 | 20 | 1,43 | 0,89 | 1,12 | 28,83 | 23,97 | 98 |
| | SX 9/4 | ○ | 9 | 4 | 60/191 | 100/400 | 500 | B-120 | 1,77 | 1,13 | 1,41 | 20 | 2,63 | 1,74 | 2,13 | 42,10 | 31,59 | 124 |
| | SR 9 | ○ | 9 | 4 | 60/159 | 100/400 | 500 | - | 0,86 | 0,48 | 0,65 | 20 | 1,36 | 0,85 | 1,06 | 32,49 | 25,52 | 117 |
| | SR 9-F | ○ | 9 | 4 | 60/159 | 100/400 | 500 | B-120 | 0,86 | 0,48 | 0,65 | 20 | 1,36 | 0,85 | 1,06 | 32,49 | 25,52 | 91 |
| | C 9/3/60 | ⊙ | 9 | 3 | 60/172 | 100/400 | 500 | B-120 | 0,89 | 0,55 | 0,69 | 20 | 1,39 | 0,91 | 1,12 | 25,45 | 22,75 | 90 |
| | C 9/3/76 | ⊙ | 9 | 3 | 76/181 | 100/400 | 500 | B-120 | 1,05 | 0,67 | 0,83 | 20 | 1,59 | 1,06 | 1,29 | 27,73 | 25,24 | 102 |

○ - ośmiokąt / octagonal-conical ○ - rura / tubular ⊙ - stożek / round-conical

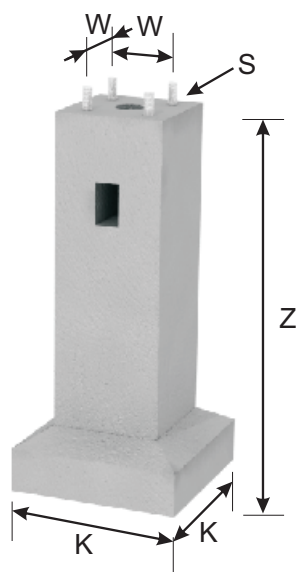
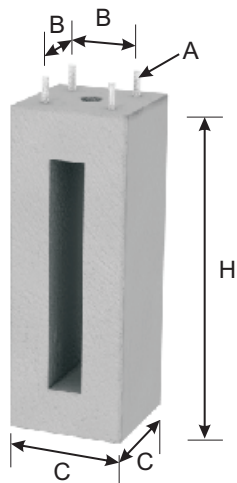


Dane techniczne:
Technical data:

| Typ wysięgnika Bracket type | Maksymalna ilość ramion Maximum number of arms | |  | | | |  | | | Średnice końcowe wysięgników | |
|--------------------------------|---|----------------|---|-------------|---------------|--------------|---|-----|-----|------------------------------------|------|
| | słup Ø 60 | maszt Ø 103 | 0,5 m Ø 60 | 1 m Ø 60 | 1,5 m Ø 60 | 2 m Ø 103 | 0,2 m | 1 m | 2 m | Ø 48 | Ø 60 |
| W12 | 2 | 6 | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | |
| W16 | 2 | 4 | | ✓ | ✓ | ✓ | | ✓ | ✓ | | ✓ |
| W20 | 2 | 6 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ |
| W22 | 2 | 2 | | ✓ | ✓ | | | ✓ | | ✓ | |
| W25 | 2 | 2 | | ✓ | ✓ | | | ✓ | | ✓ | |
| W27 | 2 | 2 | | ✓ | ✓ | | | ✓ | | | ✓ |
| W28 | 2 | 2 | | ✓ | ✓ | | | ✓ | | ✓ | |

Fundamenty

Foundations



Przykład klinowania dla masztów powyżej 18 m



Dane techniczne:

Technical data:

| Typ Type | A | B [mm] | C [mm] | H [mm] | Waga Weight [kg] | Standardowe wysokości słupów [m] |
|--------------|------|-----------|-----------|-----------|------------------------|--|
| B-80 | M-16 | 190 | 310 | 800 | 110 | 3 - 6 |
| B-100 | M-20 | 190 | 320 | 1000 | 170 | 5 - 7 |
| B-120 | M-24 | 250 | 430 | 1200 | 250 | 7 - 10 |
| B-150 | M-24 | 250 | 430 | 1500 | 310 | 10 - 12 |
| B-160 | M-24 | 250 | 430 | 1600 | 450 | 10 - 12 |
| B-200 | M-24 | 250 | 430 | 2000 | 570 | 10 - 12 |

| Typ Type | S | K [mm] | W [mm] | Z [mm] | Waga Weight [kg] |
|-------------|------|-----------|-----------|-----------|------------------------|
| F1 | M-27 | 800 | 450 | 1650 | 920 |
| F2 | M-33 | 820 | 300 | 1700 | 1050 |
| F5/1 | M-33 | 1050 | 400 | 2500 | 2650 |

Elmonter-Oświetlenie posiada w swojej ofercie fundamenty do posadawiania słupów oświetleniowych i masztów, które spełniają wymagania co do warunków wytrzymałościowych (maksymalny moment utwardzenia M_u , który można przyłożyć do głowicy fundamentu). Wartość momentu M_u zależy od wymiarów fundamentu, rodzaju i właściwości gruntu w którym ten fundament jest osadzany.

Obliczenia nośności gruntu dla fundamentów przeprowadzono na podstawie normy PN-80/B-03322. Przedstawione fundamenty są wykonane jako standardowe dla średniej klasy gruntu.

Głębokość posadowienia słupów bezpośrednio wkopywanych w ziemię podana jest w normie PN-EN 40-2 i zależy od wysokości nominalnej słupa z uwzględnieniem warunków gruntowych oraz wyników wykonanych obliczeń lub pomiarów z badań.

Firma Elmonter-Oświetlenie nie ponosi odpowiedzialności za stosowanie fundamentów niezgodnie z ich przeznaczeniem oraz dopuszczalnym obciążeniem (słup + wysięgnik + oprawa) a także w przypadku stosowania innych fundamentów nie spełniających warunków wytrzymałościowych.

Elmonter-Lighting's offerings include foundations for installing lighting columns and masts, which meet all the resistance and strength requirements (the ultimate moment of resistance $[M_u]$ that can be applied to the foundation head). The value of M_u depends on the foundation size and type, and on the soil properties.

Soil bearing capacity has been calculated based on the PN-80/B-03322 norm. The foundations featured on this page are standard foundations for medium-class soil. For columns and masts sunk directly in the ground, the depth of foundation is based on the PN-EN 40-2 norm and depends on the nominal column/mast height, allowing for the soil conditions and the results of specific calculations or measurements.

Elmonter-Lighting shall not be liable for any damages resulting from misapplication of its foundations, from exceeding the maximum permissible load (column + bracket + frame), and from using other foundations that do not meet resistance norms.