

WSW-12 Self-drilling screw with EPDM washer for fixing sandwich panels in steel construction - 12mm



ETA-16/0444



Description

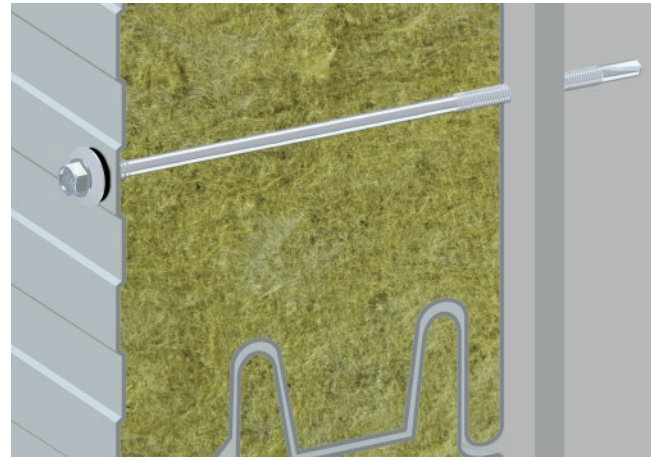
Self-drilling screw with EPDM washer for fixing sandwich panels in steel construction of 4-12mm in thickness

Protective coating / Material



Technical parameters

| | | |
|--------------------|----------------|----------------------------|
| Screw diameter | d_w [mm] | 5.5 |
| Drilling capacity | t_{max} [mm] | 12.0 |
| Spanner size (S) | - | SW 8 |
| Head height | k [mm] | 5.4 |
| Head diameter | F [mm] | 10.5 |
| Tip length | [mm] | 20.0 |
| Washer (D)** | [-] | Z16/Z19; A16/A19; S16/S19* |
| Screw material | [-] | heat-treated carbon steel |
| Protective coating | [-] | ceramic coating SQ |
| Paint coating | RAL | powder min. 60 μ m |
| Substrate material | steel | min. S235JR |
| Technical approval | [-] | ETA-16/0444 |

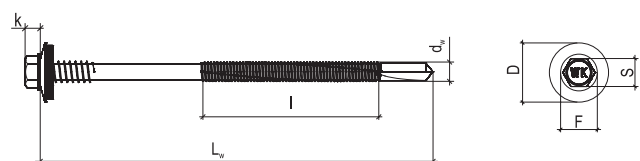


Features and advantages

| | |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Self-drilling tip | Ability of drilling plates of thickness up to 12 mm |
| EPDM washer | It seals and secures the connection from corrosion |
| Possibility of painting according to RAL Palette | Permanent colour adjusted to laminated panels, resistant to UV radiation and atmospheric conditions |
| Branding of head of screw | WK feature at head of the screw facilitates the identification of our company as the producer and easy recognition of the product |
| Length up to 285 mm | Possibility of fixing laminated panels to thickness of 250 mm |
| Threading under head of screw | Threading of increased diameter (6.3mm) ensures the correct distribution of EPDM washers and fixing of tiles without damaging the surface |
| Anti-corrosion coating - ceramic coating | Very high level of anti-corrosion protection (several times higher than the traditional galvanization) |





Installation parameters





| | | |
|-----------------------------|----------------|---------------------------|
| Screw diameter | d_w [mm] | 5.5 |
| Min. construction thickness | h_{min} [mm] | 4.0 |
| Fastener anchorage depth | h_{eff} [mm] | push-through installation |
| Min. spacing | S_{min} [mm] | 50 |
| Min. edge distance | C_{min} [mm] | 25 |



* - made to order ** Washers: Z-steel/EPDM, A-aluminum/EPDM, S-stainless steel/EPDM

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| | Code | | | $d_w \times L_w$ [mm] | Panel thickness [mm] | Steel washer diameter D [mm] | Thread length l [mm] | Drilling capacity t_{max} [mm] |  |
|---------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------|-------------------------|---------------------------------|-------------------------|-------------------------------------|-------------------------------------------------------------------------------------|
| |  |  |  | | | | | | |
| ø5.5 | WSW-12-55095-Z16 | WSW-12-55095-Z16-RAL | | 5.5x95 | 30-60 | 16 | 50 | 12 | 100 |
| | WSW-12-55115-Z16 | WSW-12-55115-Z16-RAL | | 5.5x115 | 50-80 | 16 | 50 | 12 | 100 |
| | WSW-12-55135-Z16 | WSW-12-55135-Z16-RAL | | 5.5x135 | 50-100 | 16 | 70 | 12 | 100 |
| | WSW-12-55155-Z16 | WSW-12-55155-Z16-RAL | | 5.5x155 | 70-120 | 16 | 70 | 12 | 100 |
| | WSW-12-55175-Z16 | WSW-12-55175-Z16-RAL | | 5.5x175 | 90-140 | 16 | 70 | 12 | 100 |
| | WSW-12-55195-Z16 | WSW-12-55195-Z16-RAL | | 5.5x195 | 110-160 | 16 | 70 | 12 | 100 |
| | WSW-12-55235-Z16 | WSW-12-55235-Z16-RAL | | 5.5x235 | 150-200 | 16 | 70 | 12 | 100 |
| | WSW-12-55285-Z16 | WSW-12-55285-Z16-RAL | | 5.5x285 | 200-250 | 16 | 70 | 12 | 100 |
| made to order | | | | | | | | | |

| | Code | | | $d_w \times L_w$ [mm] | Panel thickness [mm] | Aluminum washer diameter D [mm] | Thread length l [mm] | Drilling capacity t_{max} [mm] |  |
|---------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------|-------------------------|------------------------------------|-------------------------|-------------------------------------|--------------------------------------------------------------------------------------|
| |  |  |  | | | | | | |
| ø5.5 | WSW-12-55095-A19 | WSW-12-55095-A19-RAL | | 5.5x95 | 30-60 | 19 | 50 | 12 | 100 |
| | WSW-12-55115-A19 | WSW-12-55115-A19-RAL | | 5.5x115 | 50-80 | 19 | 50 | 12 | 100 |
| | WSW-12-55135-A19 | WSW-12-55135-A19-RAL | | 5.5x135 | 50-100 | 19 | 70 | 12 | 100 |
| | WSW-12-55155-A19 | WSW-12-55155-A19-RAL | | 5.5x155 | 70-120 | 19 | 70 | 12 | 100 |
| | WSW-12-55175-A19 | WSW-12-55175-A19-RAL | | 5.5x175 | 90-140 | 19 | 70 | 12 | 100 |
| | WSW-12-55195-A19 | WSW-12-55195-A19-RAL | | 5.5x195 | 110-160 | 19 | 70 | 12 | 100 |
| | WSW-12-55235-A19 | WSW-12-55235-A19-RAL | | 5.5x235 | 150-200 | 19 | 70 | 12 | 100 |
| | WSW-12-55285-A19 | WSW-12-55285-A19-RAL | | 5.5x285 | 200-250 | 19 | 70 | 12 | 100 |
| made to order | | | | | | | | | |

How to read the code, e.g. WSW-12-55115-Z16-3011?

Jak czytać kod produktu, np.: WSW-12-55115-A19-3011?

| | | | | | | | | | | | |
|------------|---------------------------|-------------------|-----------------|----------------------|-------------|------------|---------------------------|-------------------|-----------------|-------------------------|-------------|
| WSW | 12 | 55 | 115 | Z16 | 3011 | WSW | 12 | 55 | 115 | A19 | 3011 |
| Type | Drilling capacity 12mm | Diameter 5.5mm | Length 115mm | Steel washer 16mm | RAL 3011 | Type | Drilling capacity 12mm | Diameter 5.5mm | Length 115mm | Aluminum washer 19mm | RAL 3011 |

Characteristic pull-out / shear strength [kN]

| Construction thickness [mm] | Thickness of panel clad steel [mm] | | | | | |
|-----------------------------|------------------------------------|-----------|-----------|-----------|-----------|-----------|
| | 0.40 | 0.50 | 0.63 | 0.75 | 0.88 | 1.00 |
| 4.00 | 1.64/0.83 | 3.02/1.33 | 3.91/1.62 | 4.17/1.91 | 4.17/1.91 | 4.17/1.91 |
| 5.00 | 1.64/0.83 | 3.02/1.33 | 3.91/1.62 | 4.17/1.91 | 4.17/1.91 | 4.17/1.91 |
| 6.00 | 1.64/0.83 | 3.02/1.33 | 3.91/1.62 | 4.17/1.91 | 4.17/1.91 | 4.17/1.91 |
| 8.00 | 1.64/0.83 | 3.02/1.33 | 3.91/1.62 | 4.17/1.91 | 4.17/1.91 | 4.17/1.91 |
| 10.00 | 1.64/0.83 | 3.02/1.33 | 3.91/1.62 | 4.17/1.91 | 4.17/1.91 | 4.17/1.91 |
| 11.00 | 1.64/0.83 | 3.02/1.33 | 3.91/1.62 | 4.17/1.91 | 4.17/1.91 | 4.17/1.91 |

Partial safety factor of 1.33 recommended. Values in table for WSW-12 screw with 16mm washer.