



Flow Drilling Joining Systems

# RSF25

For Flow Drilling Screws

## RSF25

Model RSF25 - for installation of flow drilling screws

### Flow Drilling Technology

- + For single sided accessibility
- + For assembling different materials with various thicknesses
- + More than two layers can be joined
- + Joining process with a low influence of heat
- + Metric thread formation
- + High loosening torque and excellent vibration resistance
- + Able to take high shearing and peeling loads
- + Suitable for hybrid joints (adhesives)

### WEBER RSF Flow Drilling Joining System

- + Freely configurable process parameters
- + Automatic pre-hole floating head compensation
- + Controlled jaws to prevent screw tipping
- + Fast tool changing by hand
- + Over 1,000 systems in worldwide use
- + Flexible spindle design
- + Patented WEBER depth gradient and innovative boost function

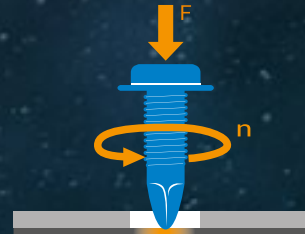
### Technical data

Torque [Nm]	up to 15
EC-Drive [RPM]	up to 8,000
Max. axial force at 6 bar [N]	up to 3,600
Holding down force at 6 bar [N]	up to 1,400
Cycle time (Joining process) [s]	from 1,6
Usable Screws [mm]	M4 - M6   18 - 25

### Versions

- + Compact spindle  
555 x 250 x 380 mm (L x W x H)
- + Straight spindle  
745 x 230x 380 mm (LxBxH)

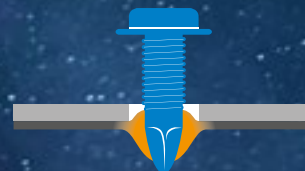
**Step 1**  
Flow drilling screw contacts the surface at low pressure & RPM



**Step 2**  
High RPM and force brings the material to plasticize and „flow“



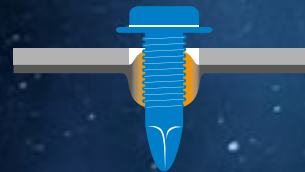
**Step 3**  
Formation of cylindrical passage



**Step 4**  
End of „flow“-phase, beginning of thread rolling process (reduced RPM & thrust)



**Step 5**  
Normal screwdriving



**Step 6**  
Material cools & constricts around the fastener, forming an air & water tight joint

