# GF8, GF12 (AVM/MVM)

## Pipe cutting and beveling machines

**Cost-effective pipe processing with cutting-edge technology from Orbitalum Tools!**

**Cut and bevel pipes made of high-alloyed steel (stainless steel), low-alloyed and unalloyed steel, cast materials, plastics, and non-ferrous metals in seconds using the "planetary cutting" method.**




**Increased safety thanks to "stationary pipe – rotating tool." The proven "planetary cutting" process is an important feature that characterizes Orbitalum pipe saws.** The saw blade plunges into the cut and is guided orbitally around the pipe. The advantage of this is that a small saw blade can be used to cut a large tube diameter without heating the pipe.

**Innovative clamping principle through multi-point clamping of the pipe:** Deformation-free**clamping** makes it possible to cut pipes with a wall thickness of 2 to 10 mm (0.079" - 0.394") quickly and easily, depending on the material. All high-alloyed, unalloyed, and low-alloyed steels, aluminum, copper, brass, annealed cast iron pipes, general structural steel, black and galvanized steel pipes, and plastic can be processed.
In addition to purely manual operation, the user has the option of choosing between a manual (MVM) and automatic (AVM) feeding module.

The latter optimizes the cutting result, increases the service life of the tool, and reduces the physical strain on the operator. The result: maximum safety and productivity.

**Further advantages:**

- Optional with AVM/MVM feeding module for automatic or mechanized cutting, resulting in less physical strain on the user
- Optimized tool engagement at only one point on the pipe
- Optimized speed range (40-215 rpm), ideal for cutting high-performance materials (Hastelloy®, P91, etc.)
- Ergonomically optimized motor handle for a safer operator position
- Cutting process takes only seconds
- Beveling of pipe ends parallel or separate from the cutting process
- Increased productivity
- Increased tool service life
- More corrosion protection thanks to stainless steel clamping jaw attachments (included)
- Cable incl. plug connection and quick-disconnect coupler for easy and convenient replacement of the flexible rotary cable

**Feed variants:**
Pipe cutting and beveling machine with **automatic feeding module AVM***: The intelligent control system of the AVM continuously monitors the feed force depending on the required power. Once the cutting process is complete, the AVM switches off automatically. An unintentional restart is prevented by a restart lock. Pipe cutting and beveling machines **with manual feed module MVM***: The additional module on the machine facilitates the machining of pipes by means of a manually operated handwheel. This allows the rotating body to be guided around the pipe in a user-friendly manner with little effort and constant feed.

# Technical specification



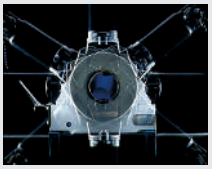
Optionally available with AVM/MVM feed module



MVM feed module



Optimized speed range thanks to new motor



Planetary cutting principle

| APPLICATION AREA | | GF 8 | GF 8 AVM* | GF 8 MVM* | GF 12 | GF 12 AVM* | GF 12 MVM* |
|---|---|---|---|---|---|---|---|
| Code | [230 V] | 790045095 | 790045001 | 790045069 | 790047095 | 790047001 | 790047069 |
| | [120 V] | 790045096 | 790045007 | 790045082 | 790047096 | 790047007 | 790047082 |
| Pipe OD | [mm] | 114 - 230 | 114 - 230 | 114 - 230 | 157 - 325 | 157 - 325 | 157 - 325 |
| | [inch] | 4,488 - 9,055 | 4,488 - 9,055 | 4,488 - 9,055 | 6,181 - 12,795 | 6,181 - 12,795 | 6,181 - 12,795 |
| Wall thickness Depends on material | [mm] | 2 - 10 | 2 - 10 | 2 - 10 | 2 - 10 | 2 - 10 | 2 - 10 |
| | [inch] | 0.079 - 0.394 | 0.079 - 0.394 | 0.079 - 0.394 | 0.079 - 0.394 | 0.079 - 0.394 | 0.079 - 0.394 |
| Pipe ID min. (saw blade Ø 63 mm) Pipe ID min. (saw blade Ø 2.480") | [mm] | 137 | 137 | 137 | 190 | 190 | 190 |
| | [inch] | 5.394 | 5,394 | 5,394 | 7,480 | 7,480 | 7,480 |
| Pipe ID min. (saw blade Ø 68 mm) Pipe ID min (saw blade Ø 2.677") | [mm] | 132 | 132 | 132 | 185 | 185 | 185 |
| | [inch] | 5.197 | 5.197 | 5,197 | 7,283 | 7,283 | 7,283 |
| Pipe ID min (saw blade Ø 80 mm) Pipe ID min (saw blade Ø 3,150") | [mm] | 120 | 120 | 120 | 173 | 173 | 173 |
| | [inch] | 4,724 | 4,724 | 4,724 | 6,811 | 6,811 | 6,811 |
| Pipe ID min (saw blade Ø 100 mm) Pipe ID min (saw blade Ø 3.937") | [mm] | 100 | 100 | 100 | 153 | 153 | 153 |
| | [inch] | 3.937 | 3.937 | 3,937 | 6,024 | 6,024 | 6,024 |
| Materials | | Stainless steel (Cr and Mo content as required); stainless steel (Cr and Mo content as required); stainless steel (Cr < 12% and Mo < 2.5%; Cr < 20% and Mo = 0%): case-hardened steels, high-speed steels, heat-treatable steels, roller bearing steels, tool steels; black and galvanized steel pipe; general structural steel; annealed cast iron pipe (GGG); aluminum; brass; copper; plastic (PE, PP, PVDE, PVC) | | | | | |

| TECHNICAL SPECIFICATION | | GF 8 | GF 8 AVM* | GF 8 MVM* | GF 12 | GF 12 AVM* | GF 12 MVM* |
|---|---|---|---|---|---|---|---|
| Power | [kW] | 1.8 | 1.9 | 1.8 | 1.8 | 1.9 | 1.8 |
| | [hp] | 2.41 | 2.54 | 2.41 | 2.41 | 2.54 | 2.41 |
| Power AVM | [kW] | – | 0.05 | – | – | 0.05 | – |
| | [hp] | | 0.07 | | | 0.07 | |
| Stepless electric speed control with restart lock | [rpm] | 40 - 215 | 40 - 215 | 40 - 215 | 40 - 215 | 40 - 215 | 40 - 215 |
| Speed Machine head with AVM | [rpm] | – | 0.1 - 2.3 | – | – | 0.1 - 1.8 | – |
| Torque Machine head max. with AVM | [Nm] | – | 165 | – | – | 210 | – |
| Protection class | [Class] | II (DIN EN 60745-1) | I (DIN EN 60204-1) | II (DIN EN 60745-1) | II (DIN EN 60745-1) | I (DIN EN 60204-1) | II (DIN EN 60745-1) |
| Sound pressure level at the work-place approx. | [dB (A)] | 79 | 79 | 79 | 79 | 79 | 79 |
| Vibration level (according to DIN EN 28662, Part 1) | [m/s2] | < 2.5 | < 2.5 | < 2.5 | < 2.5 | < 2.5 | < 2.5 |
| Mains fuse provided by customer | [A] | 16 | 16 | 16 | 16 | 16 | 16 |
| Dimensions (LxWxH) | [mm] | 778 x 430 x 485 | 918 x 430 x 485 | 788 x 430 x 485 | 940 x 374 x 592 | 1,070 x 374 x 592 | 1,090 x 374 x 592 |
| | [inch] | 30.6 x 16.9 x 19.1 | 36.1 x 16.9 x 19.1 | 31.0 x 16.1 x 19.1 | 37.0 x 14.7 x 23.3 | 42.1 x 14.7 x 23.3 | 42.9 x 14.7 x 23.3 |
| Machine weight approx.** | [kg] | 102.5 | 110.0 | 104.6 | 138.6 | 146.1 | 140.7 |
| | [lbs] | 225.9 | 242.5 | 230.6 | 305.6 | 322.1 | 310.2 |

| SCOPE OF DELIVERY | | GF 8 | GF 8 AVM* | GF 8 MVM* | GF 12 | GF 12 AVM* | GF 12 MVM* |
|---|---|---|---|---|---|---|---|
| Pipe cutting and beveling machine | PCS | 1 | 1 | 1 | 1 | 1 | 1 |
| Transport Box | PCS | 1 | 1 | 1 | 1 | 1 | 1 |
| Saw blade (code 790043018) | PCS | 1 | 1 | 1 | 1 | 1 | 1 |
| Mounting plate | ST | 1 | 1 | 1 | 1 | 1 | 1 |
| Line laser with fastening screws and 10 button cells 1.5 V (code 790142124) | PCS | 1 | 1 | 1 | 1 | 1 | 1 |
| Tool Key Set | PCS | 1 | 1 | 1 | 1 | 1 | 1 |
| Saw Blade Lubricant GF TOP (Code 790060228) | Tube | 1 | 1 | 1 | 1 | 1 | 1 |
| Special Gear Oil (Code 790041030) | Bottle | 1 | 1 | 1 | 1 | 1 | 1 |
| General safety instructions Pipe cutting and beveling machines | PCS | 1 | 1 | 1 | 1 | 1 | 1 |
| Operating instructions & Spare parts list Download link PDF: https://www.orbitalum.com/DE/download.html | PDF | 1 | 1 | 1 | 1 | 1 | 1 |

*The technical specification is non-binding. It does not constitute a guarantee of properties. Subject to change without notice.*
** The automatic or manual feeding module AVM/MVM is already mounted on the pipe saw upon delivery.*
*** Weight without packaging and accessories.*

| ITEM | VERSION | CODE | KG | SHIPPING WEIGHT KG |
|---|---|---|---|---|
| GF 8 | 230 V, 50/60 Hz EU | 790045095 | 102,50 | 149,00 |
| GF 8 | 120 V, 50/60 Hz EU/ US | 790045096 | 102,50 | 149,00 |
| GF 8 AVM | 230 V, 50/60 Hz EU | 790045001 | 110,00 | 165,00 |
| GF 8 AVM | 120 V, 50/60 Hz EU/ US | 790045007 | 110,00 | 165,00 |
| GF 8 MVM | 230 V, 50/60 Hz EU | 790045069 | 103,00 | 153,00 |
| GF 8 MVM | GF 8 MVM | 790045082 | 103,00 | 153,00 |
| GF 12 | 230 V, 50/60 Hz EU | 790047095 | 138,60 | 177,00 |
| GF 12 | 120 V, 50/60 Hz EU/ US | 790047096 | 138,60 | 177,00 |
| GF 12 AVM | 230 V, 50/60 Hz EU | 790047001 | 146,00 | 205,00 |
| GF 12 AVM | 120 V, 50/60 Hz EU/ US | 790047007 | 146,00 | 205,00 |
| GF 12 MVM | 230 V, 50/60 Hz EU | 790047069 | 140,70 | 200,00 |
| GF 12 MVM | 120 V, 50/60 Hz EU/ US | 790047082 | 140,70 | 200,00 |



*Illustration: GF 8, GF 12*



*Illustration: GF 8 MVM, GF 12 MVM*



*Illustration: GF 8 AVM, GF 12 AVM*

**Suitable accessories:**

Saw blades and bevel cutters

Accessories for GF, GFX and PS machines