

Grinder - 40002 Muffin Monster™ - Open channel series

SULZER

The 40002 Muffin Monster excels in wet and dry grinding applications. It protects pumps and other sensitive equipment by grinding down the toughest wastewater solids. Its powerful, dual-shafted, slow-speed, high-torque design shreds the toughest solids.

Construction

- Open channel configuration
- Grinder cutter stack heights from 450 mm to 800 mm
- Hardened alloy steel cutters (standard), 191 mm diameter
- Ductile iron housings
- Hardened alloy steel shafts, 64 mm hex
- Mechanical seals with tungsten carbide faces, 10.3 bar maximum working pressure
- Available with channel or wall mounted frame options for easy installation

Performance

- Flow rates up to 477 m³/hr

Applications

- Pump stations
- Collection systems
- Headworks at wastewater treatment
- Private facility discharge to municipal sewer system
- Prison sewage system protection
- Industrial wet waste grinding and maceration

Monster Renew grinder

In place of repairing a worn grinder, choose a Monster Renew unit. Sulzer provides a new, factory-built grinder cartridge to replace the worn grinder cartridge. Remove the motor and reducer from the worn unit, install the motor and reducer on the Monster Renew unit, and install the new assembly in place of the worn unit. Benefits include:

- Minimizes operational downtime
- Quick turnaround
- All new parts
- Great time to upgrade unit
- Full factory warranty on the Monster Renew grinder cartridge



Muffin Monster motor assembly

- 7.5 kW power
- Optional explosion proof and immersible motors available
- 35:1 reducer, cycloidal design

Muffin Monster frame options

- Adapt grinders for easy installation
- Channel frames to fit most channel types
- Wall frames to mount on flat or round walls
- Type 304 or 316 stainless steel construction
- Guide rails for easy installation and maintenance

Muffin Monster controller

- Ensures maximum grinding ability with minimum stoppage
- Designed and programmed for specified motor

Muffin Monster grinder cutters

| Tooth count | Thickness | Material |
|-------------|-----------|----------------------|
| 7-tooth | 22 mm | Hardened alloy steel |
| 11-tooth | 11 mm | Hardened alloy steel |

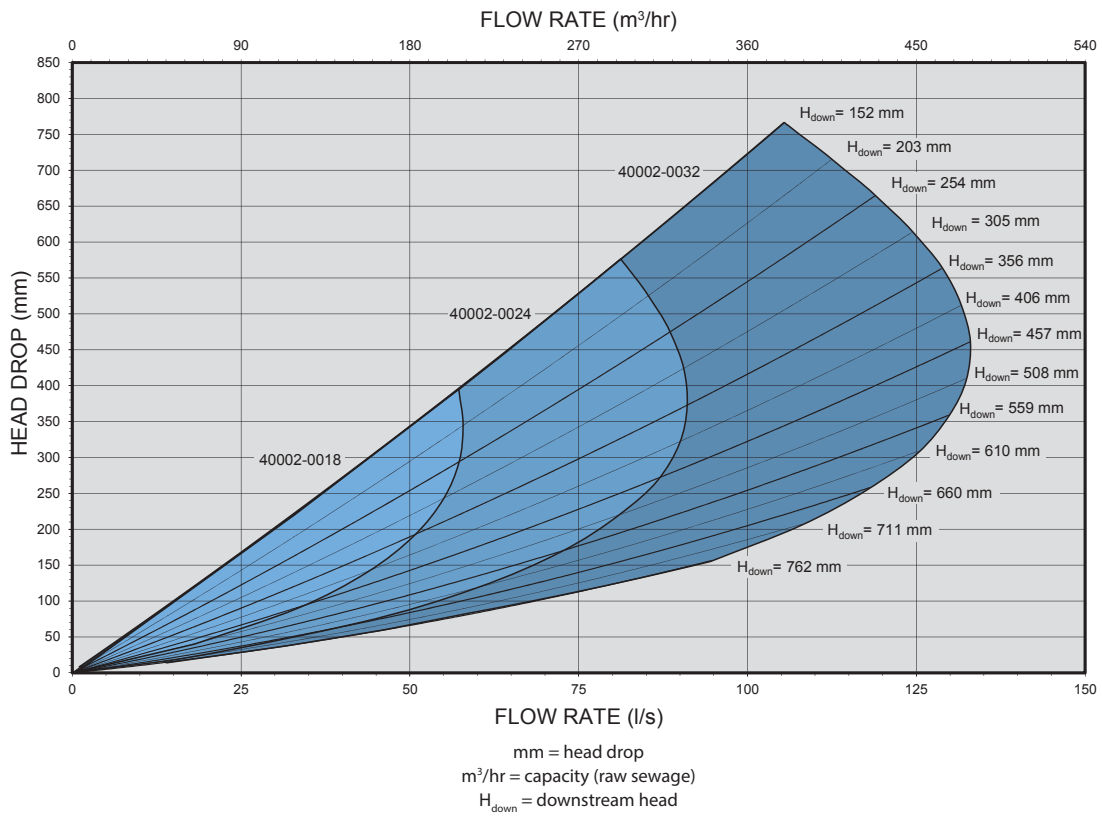
Muffin Monster grinder materials

| Part | Standard |
|------------------|------------------------|
| Housings | Ductile iron |
| Cutters | Hardened alloy steel |
| Shafts | Hardened alloy steel |
| Mechanical seals | Tungsten carbide faces |
| Gaskets | Viton™ |

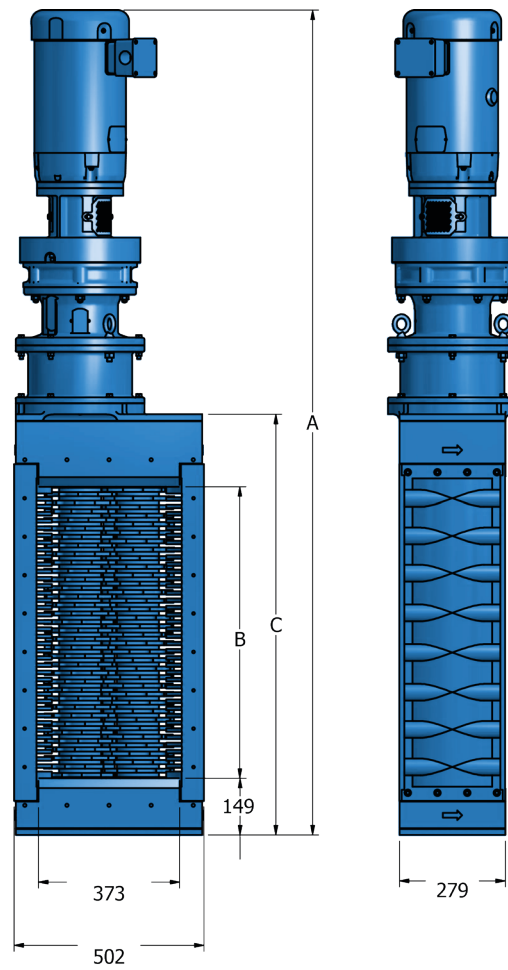
For guidance in selecting a 40002 Muffin Monster, please contact Sulzer.

Performance curves

Model 40002 Open Channel



Dimensions (mm)



| Open channel model | Flow rate ¹ - m ³ /hr | Head drop - mm | Standard dimensions ² - mm | | | | Approximate net weight ³ - kg |
|--------------------|--|-------------------|--|----------|-----|-------|---|
| | | | A (IP55) | A (IP68) | B | C | |
| 40002-0018 | 207 | 203 | 1'671 | 1'881 | 431 | 768 | 740 |
| 40002-0024 | 327 | 406 | 1'850 | 2'060 | 610 | 946 | 860 |
| 40002-0032 | 477 | 457 | 2'038 | 2'250 | 813 | 1'114 | 990 |

1. Flow based on optimum channel conditions. Consult factory for analysis of application.

2. Drive dimensions are a maximum based on a unit with a 7.5 kW motor. Extended drive shafts are available on request.

3. Weight is based on a unit with a 7.5 kW IP68 drive.

40002 Open channel Muffin Monster grinder model coding

| | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------------|--|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|---|---|---|
| Product family | Solids reduction sewage grinder | Q | | | | | | | | | | | | | | | | | | | | |
| Grinder family | 40K Muffin Monster | | 4 | | | | | | | | | | | | | | | | | | | |
| Grinder configuration | New unit with motor (specified separately) | | | | | | | | | | | | | | | | | | | 2 | | |
| | Monster Renew unit | | | | | | | | | | | | | | | | | | | E | | |
| | Monster Renew unit with spool | | | | | | | | | | | | | | | | | | | F | | |
| Cutter stack height | 450 mm (18 inch) | | | | | | | | | | | | | | | | | | | L | | |
| | 600 mm (24 inch) | | | | | | | | | | | | | | | | | | | M | | |
| | 800 mm (32 inch) | | | | | | | | | | | | | | | | | | | N | | |
| Flange information | Not applicable | | | | | | | | | | | | | | | | | X | X | | | |
| Cutter material | Alloy steel | | | | | | | | | | | | | | | | | | | 1 | | |
| Cutter | 7-tooth, 22 mm thick | | | | | | | | | | | | | | | | | | | C | 5 | |
| | 11-tooth, 11 mm thick | | | | | | | | | | | | | | | | | | | F | 4 | |
| Body material & colour | Cast iron blue | | | | | | | | | | | | | | | | | | | | S | |
| Seals & gaskets material | Severe duty seals & Viton gaskets | | | | | | | | | | | | | | | | | | | | V | |
| Drum information | Not applicable | | | | | | | | | | | | | | | | | | | | X | X |
| Drive configuration | Single drive | | | | | | | | | | | | | | | | | | | | | S |

Example: 40002-0032 new unit with 800 mm cutter stack, 11-tooth (11 mm) alloy steel cutters, and severe duty seals & Viton gaskets

Q 4 2 N X X 1 F 4 S V X X S

Muffin Monster motor assembly

| Power | Voltage | Protection type | Motor model code |
|--------|----------------------|------------------------------|------------------|
| 7.5 kW | 400V, 3-phase, 50 Hz | IP55 | QF1435B2R |
| 7.5 kW | 400V, 3-phase, 50 Hz | IP55 for ATEX (Ex d IIC T4) | QF2435B2R |
| 7.5 kW | 400V, 3-phase, 50 Hz | IP68 for ATEX (Ex de IIB T4) | QF3435B1R |

Muffin Monster controller

| Grinder motor type | Model code for IP65 control panel enclosure | |
|--------------------|---|--------------------------|
| | Powder coated mild steel material | Stainless steel material |
| 7.5 kW IP55 | QN1P45XXX | QN1S45XXX |
| 7.5 kW IP68 | QN2P45XXX | QN2S45XXX |