

Grinder - 30004T Muffin Monster® - Inline series

SULZER

The 30004T Muffin Monster sewage grinder is designed to protect pumps and other equipment by grinding down the toughest wastewater solids. Its dual-shafted, slow speed, high-torque design shreds tough solids that typically cause problems in the wastewater treatment process system.

Construction

- Inline pipe configuration
- Pipe flange diameters from 100 mm to 300 mm
- Hardened alloy steel cutters (standard), 120 mm diameter
- Ductile iron unibody housings
- Hardened alloy steel shafts, 50 mm hex
- Mechanical seals with tungsten carbide faces, 10.3 bar maximum dry working pressure
- Easy removable cutter cartridge while inline

Performance

- Flow rates up to 556 m³/hr

Applications

- Sludge lines
- Pump stations
- 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

- 2.2 kW standard, 4.0 kW optional
- Optional explosion proof and immersible motors available
- 25:1 reducer, cycloidal design

Muffin Monster controller

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

Muffin Monster grinder cutters

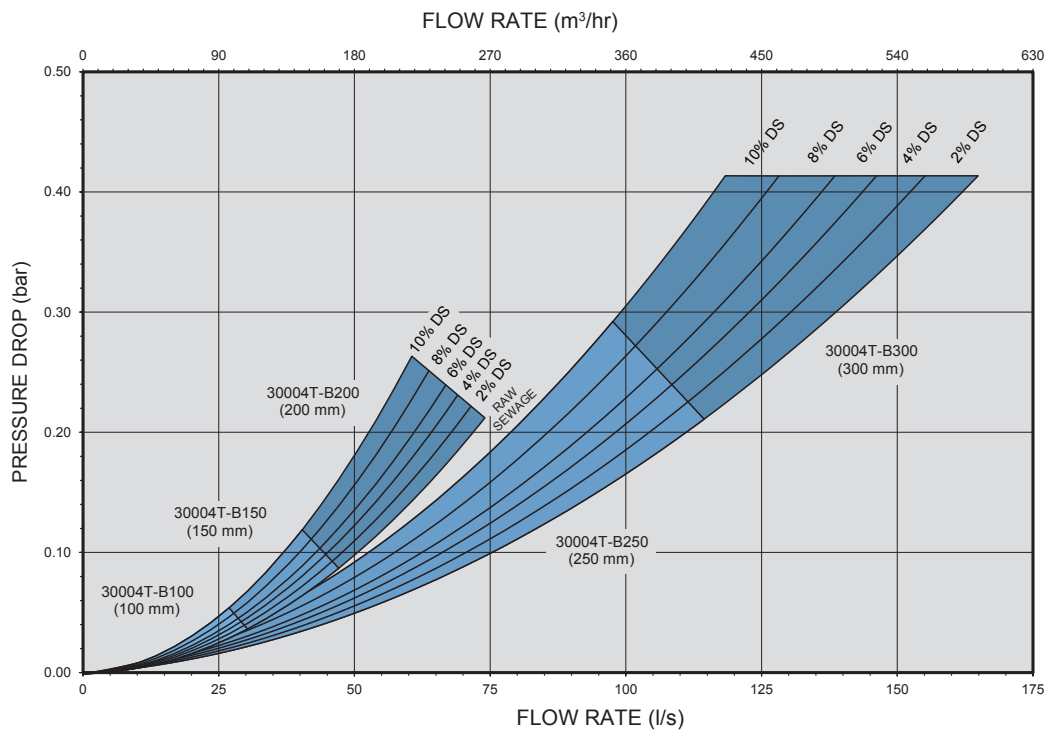
Tooth count	Thickness	Material
11-tooth	8 mm	Hardened alloy steel
13-tooth	5.5 mm	Hardened alloy steel
17-tooth Wipes Ready®	11 mm	Hardened alloy steel

Muffin Monster grinder materials

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

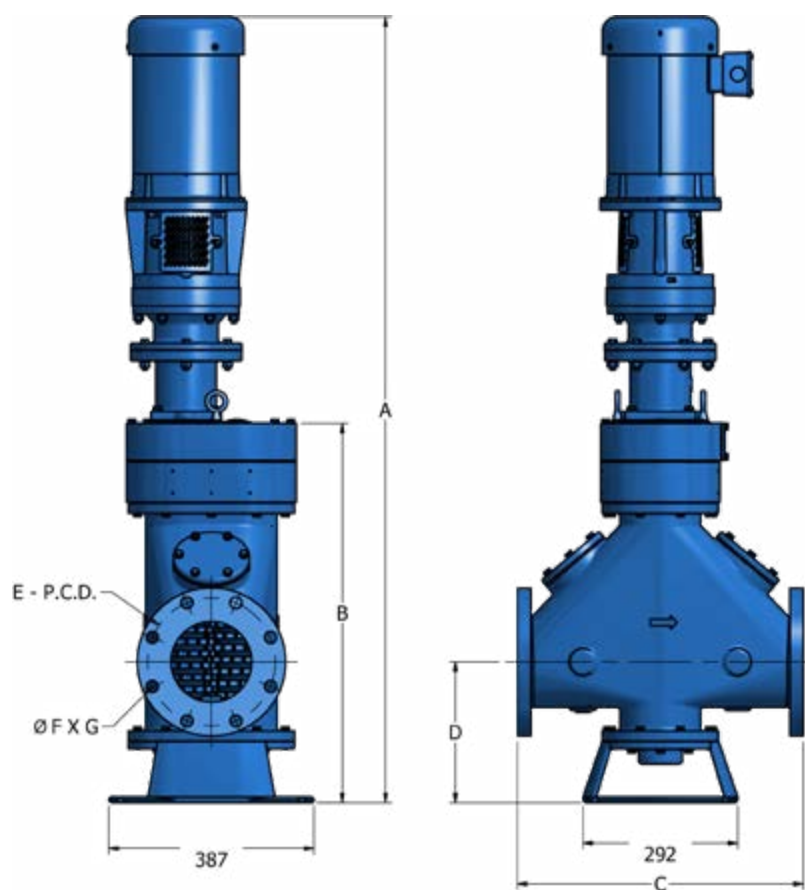
For guidance in selecting a 30004T Muffin Monster, please contact Sulzer.

Performance curves



DS = dissolved solids

Dimensions (mm)



Inline model	Flow rate ¹ - m ³ /hr	Pipeline size - mm	Pressure drop - bar	Standard dimensions ² - mm					Flange dimensions - mm			Approximate net weight - kg
				A (IP55)	A (IP68)	B	C	D	E	F	G	
30004T-B100	102	100	0.04	1425	1529	718	483	238	180	19 (M16)	8	255
30004T-B150	159	150	0.08	1425	1529	718	534	264	240	23 (M20)	8	254
30004T-B200	250	200	0.21	1425	1529	718	584	238	295	23 (M20)	8	258
30004T-B250	386	250	0.20	1717	1821	1010	686	313	355	28 (M24)	12	358
30004T-B300	556	300	0.40	1717	1821	1010	787	337	410	28 (M24)	12	367

1. In-Line unit typically installed prior to suction side of pump. Consult factory for analysis of application.

2. Drive dimensions are a maximum based on a unit with a 4.0 kW drive.

30004T Muffin Monster grinder model coding

Product family	Solids reduction sewage grinder	Q																		
Grinder family	30K Muffin Monster		3																	
Grinder configuration	New unit with motor (specified separately)			1																
	Monster Renew cutter cartridge				A															
	Monster Renew cutter cartridge with spool					B														
	Monster Renew unit with unibody						C													
	Monster Renew unit with unibody & spool							D												
Cutter stack height and flange diameter	300 mm stack, 100 mm flange							K	1											
	300 mm stack, 150 mm flange							K	2											
	300 mm stack, 200 mm flange							K	3											
	600 mm stack, 250 mm flange							M	4											
	600 mm stack, 300 mm flange							M	5											
	Monster Renew cutter cartridge 300 mm							K			Z									
	Monster Renew cutter cartridge 600 mm							M			Z									
Flange type	BS EN 1092, PN16																D			
	Monster Renew cutter cartridge only																	Z		
Cutter material	Alloy steel										1									
Cutter	7-tooth, 11 mm thick												F	3						
	11-tooth, 8 mm thick												H	2						
	17-tooth Wipes Ready®, 11 mm thick												W	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:	30004T-B200 with 17-tooth Wipes Ready cutters	Q	3	1	K	3	D	1	W	4	S	V	X	X	S					

Muffin Monster motor assembly

Power	Voltage	Protection type	Motor model code
2.2 kW TEFC	400V, 3-phase, 50 Hz	IP55 (standard)	QD1435B2M
2.2 kW TEFC	400V, 3-phase, 50 Hz	IP55 for ATEX (Ex d IIC T4)	QD2435B2M
2.2 kW Immersible	400V, 3-phase, 50 Hz	IP68 for ATEX (Ex de IIB T4)	QD3435B1M
4.0 kW TEFC	400V, 3-phase, 50 Hz	IP55 (standard)	QE1435B2M
4.0 kW TEFC	400V, 3-phase, 50 Hz	IP55 for ATEX (Ex d IIC T4)	QE2435B2M
4.0 kW Immersible	400V, 3-phase, 50 Hz	IP68 for ATEX (Ex de IIB T4)	QE3435B1M

Muffin Monster controller

Grinder motor type	Model code for IP65 control panel enclosure	
	Powder coated mild steel material	Stainless steel material
2.2 kW IP55	QL1P45XXX	QL1S45XXX
2.2 kW IP68	QL2P45XXX	QL2S45XXX
4.0 kW IP55	QM1P45XXX	QM1S45XXX
4.0 kW IP68	QM2P45XXX	QM2S45XXX