

MUFFIN MONSTER

In-line/Open Channel Grinders





10K series Muffin Monster®

The 10K Series Muffin Monster is a compact grinder, tough on solids in sludge and sewage applications. It fits into areas with limited space requirements while still providing the necessary power for downstream protection. The 10K Series is an ideal, low-cost solution that goes beyond sludge grinding at resource recovery facilities, and fits perfectly into office buildings, apartment complexes, resorts, retail centres and package treatment plants.

30K series Muffin Monster®

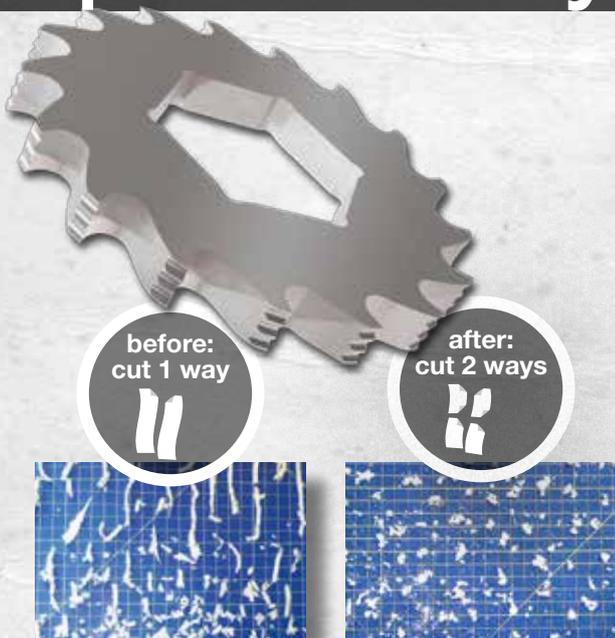
Troublesome solids are now easier than ever to reduce with the Muffin Monster dual-shafted grinder. Its slow speed, high-torque design shreds tough solids that typically cause sewer problems. With over 35,000 installations, the proven capabilities of the Muffin Monster is legendary in providing solutions for the ever more stringent operational needs arising throughout the industry.

40K series Muffin Monster®

The 40K Series Muffin Monster excels in wet and dry grinding applications. It's a powerful shredder for large sludge processing systems. It also serves in many industrial applications including fish and beef processing, petroleum, pulp and paper mills, chemical plants, and recycling plants. The proven capabilities of the Muffin Monster are now providing solutions for the ever more stringent operational needs arising throughout the industry.

Muffin Monster sewage grinders are designed to protect pumps and other equipment by grinding down the toughest wastewater solids. Applications including:
lift station, sludge lines;
septage receiving stations;
headworks screenings reduction, prisons and more.

wipes ready™ technology



Wipes Ready™ Cutters*

Achieve the desired 2-Dimensional cutting capabilities to control both the width and length of output, preventing materials from forming long strips and reweaving in the waste stream.

- Cut wipes in 2 directions
- Smaller particle size
- No reweaving



* Patent Pending

Features

Dual Shafted Grinder

- Slow-speed, high torque grinders handle rags, rocks, wood, wipes, clothing, plastics and other debris.
- Capable of grinding a wider variety of solids than single shafted machines, macerators, or chopper pumps.

Compact and Efficient Design

- Adapts to pipelines or channels with little or no modification.
- Custom stainless steel frames allow easy installation in channels, wet wells and pump stations.
- In-line 30K Muffin Monster incorporate an easy to remove cutter cartridge.

Automated Monitoring and Controls

- Auto load sensing and reversals reduce interrupts and optimize the grinder's performance.



Benefits

Equipment Protection

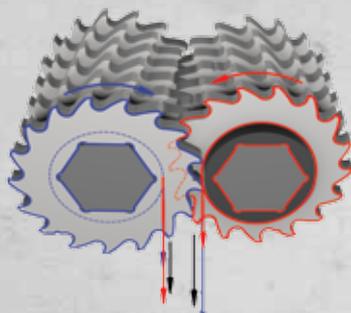
- Protect pumps and other critical equipment from costly clogs and damage from tough solids.

Efficient Treatment Operations

- Grinding separates organic from inorganic materials in the waste stream.
- Organics stay in treatment process and screening are cleaner.

Lower Operating Cost

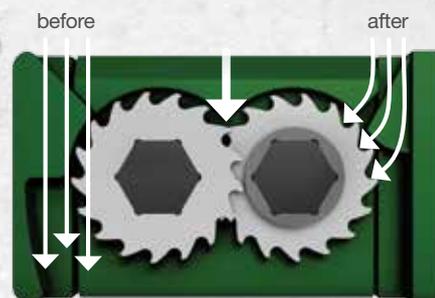
- Clear pipes and pumps means shorter pump run cycles and lower electrical costs.



Optimized Cut Control*

Improve cutting by tailoring the speed of the new wipes-ready cutter rotation with optimized cut control.

- **Cutters Stay Clean**
- **Prevents Long Strips**



DELTA P* Side Rails

Ensure the capture of all items in the waste stream and drive debris into the cutter stack.

- **Drives Debris into Cutters**
- **Prevents Build Up**
- **Enhances High Flow**



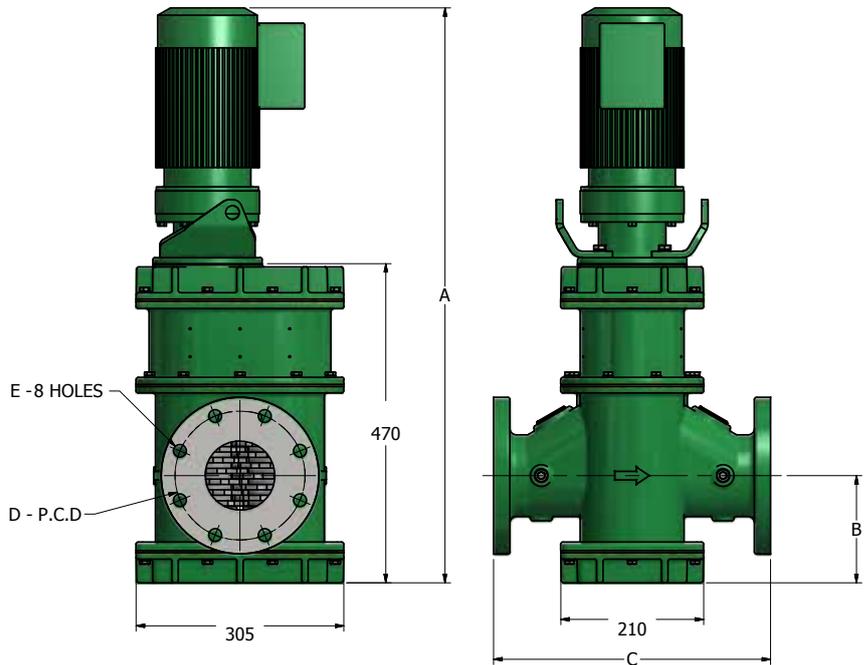
10K Muffin series Monster®

Materials of Construction

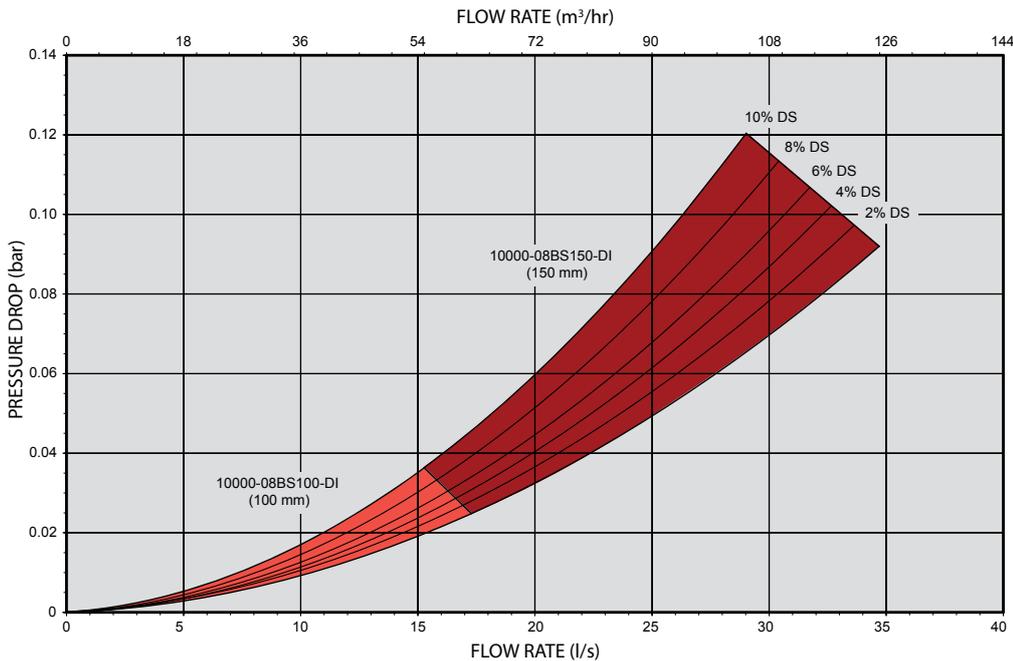
- Housings:** Ductile iron
- Cutters:** Hardened alloy steel
- Shafts:** Hardened alloy steel
- Mechanical Seals:** Tungsten carbide faces

Specifications

- 50 mm hex shafts;
- Standard: 25:1 reducer
- Cutter Size:** 120 mm diameter cutters
- Seal Max Working Pressure:** 6 bar



MODEL 10000



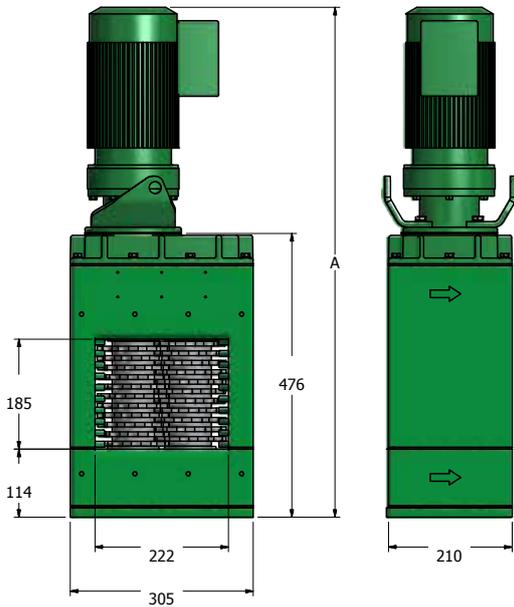
IN-LINE Model	Flow Rate* - m³/hr	Pipeline Size - mm	Pressure Drop - bar	Standard Dimensions - mm				Flange Dimensions - mm		Approximate Net Weight - kg
				A (IP55)	A (IP68)	B	C	D	E	
10000-B100-DI	62	100	0.03	1010	1160	158	406	180	19 (M16)	137
10000-B150-DI	125	150	0.09	1010	1160	184	483	240	23 (M20)	147

* 0-2% solids • In-Line unit typically installed prior to suction side of pump • Consult factory for analysis of application.

• Drive dimensions are a maximum based on a unit with a 2.2kW drive.



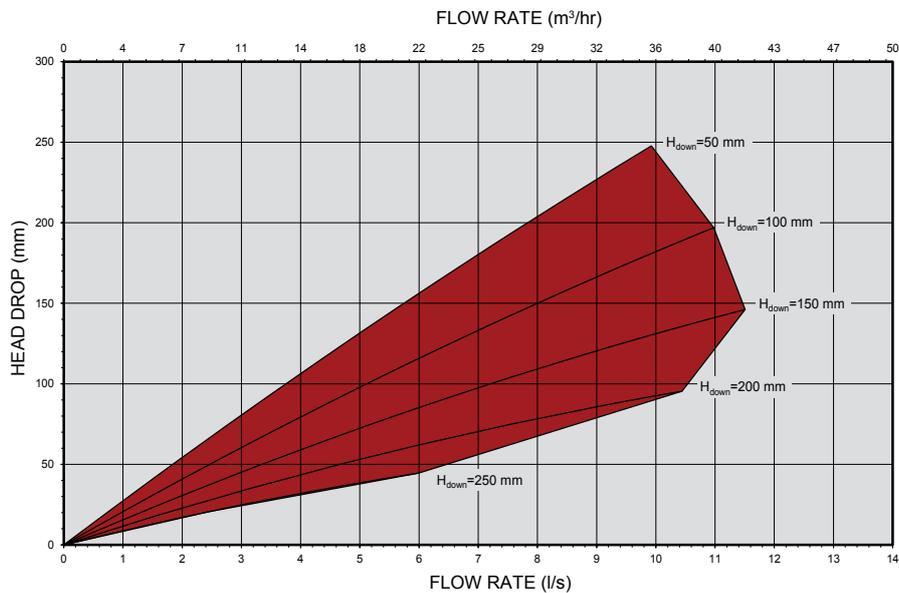
+44 1260 277047 | jwce.com | jwci@jwce.com



OPTIONS AVAILABLE

	In-Line	Open Channel
1.5kW or 2.2kW Motors	■	■
7, 11, 13 Tooth Cutters	■	■
17 Tooth Wipes Ready Cutter	■	■
Custom Mounting Frames		■
IP65 Control enclosures	■	■
Alternate Voltage & kW Motors	■	■
Explosion Proof Motors	■	■
Submersible Motors	■	■
Extended Motor Shafts	■	■

MODEL 10002



OPEN CHANNEL Model	Flow Rate* - m³/hr	Head Drop - mm	Standard Dimensions - mm		Approximate Net Weight - kg
			A (IP55)	A (IP68)	
10002-0008-DI	41.4	146	1016	1166	153

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

• Drive dimensions are a maximum based on a unit with a 2.2kW drive.

30K Muffin series Monster®

Materials of Construction

Housings: Ductile iron

Cutters: Hardened alloy steel

Shafts: Hardened alloy steel

Mechanical Seals: Tungsten carbide faces

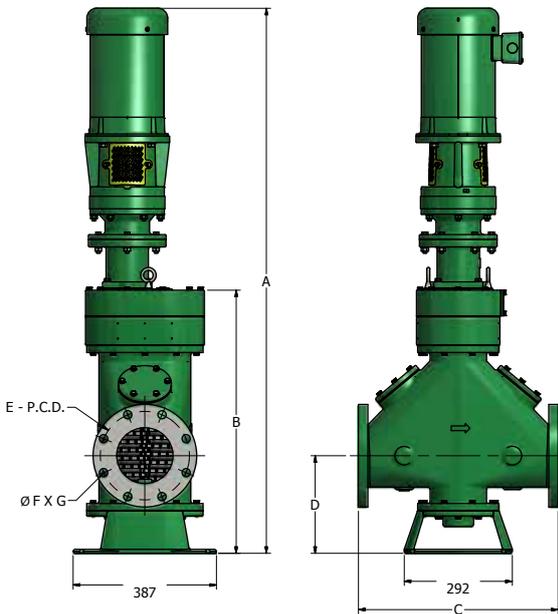
Specifications

50 mm hex shafts;

Standard: 25:1 reducer

Cutter Size: 120 mm diameter cutters

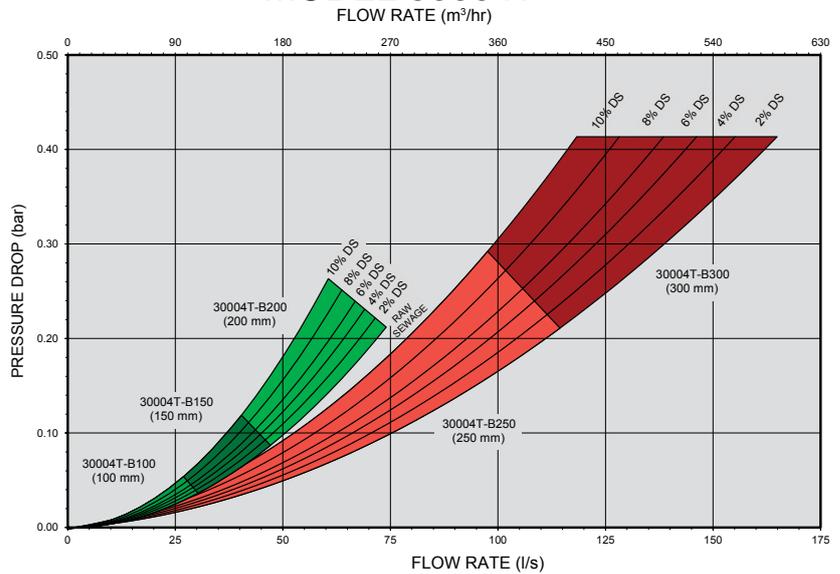
Seal Max Working Pressure: 6 bar



OPTIONS AVAILABLE

	In-Line	Open Channel
2.2kW or 4kW Motors	■	■
7, 11, 13 Tooth Cutters	■	■
17 Tooth Wipes Ready Cutter	■	■
Custom Mounting Frames		■
IP65 Control enclosures	■	■
Solids Scrapers		■
Stainless Steel Feed Hopper		■
Alternate Voltage & kW Motors	■	■
Explosion Proof Motors	■	■
Submersible Motors	■	■
Hydraulic Power Pack	■	■
Extended Motor Shafts	■	■

MODEL 30004T



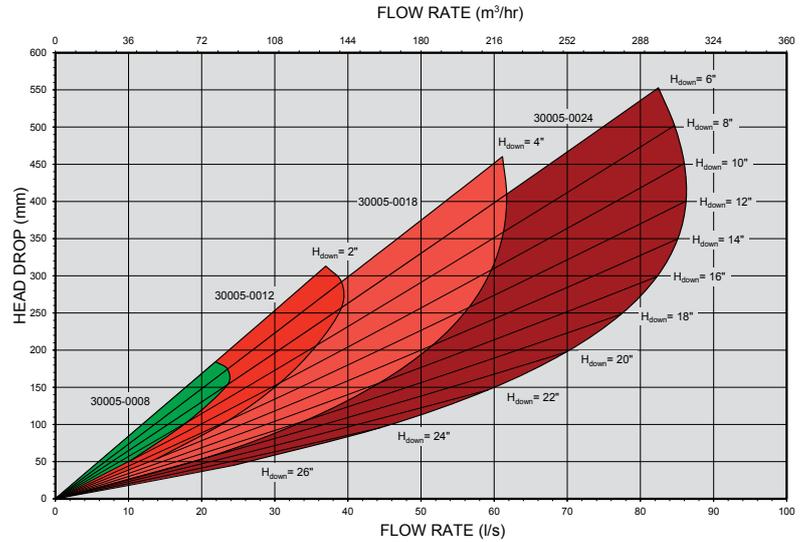
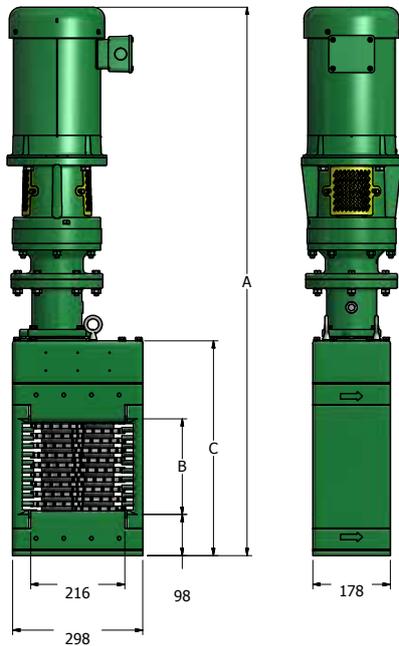
IN-LINE Model	Flow Rate - m³/hr	Pipeline Size - mm	Pressure Drop - bar	Standard Dimensions - mm					Flange Dimensions - mm			Approximate Net Weight - kg
				A (IP55)	A (IP68)	B	C	D	E	F	G	
30004T-B100	102	100	0.04	1425	1529	718	483	238	180	19 (M16)	8	255
30004T-B150	159	150	0.08	1425	1529	718	534	264	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

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

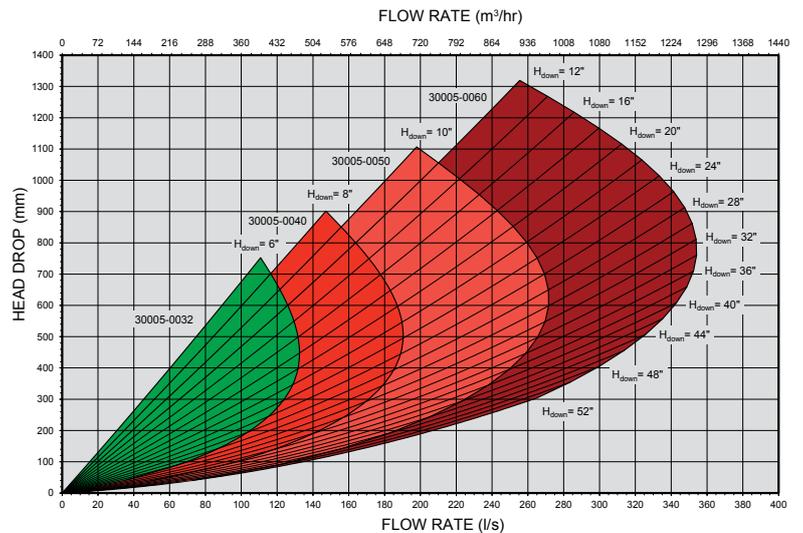
• Drive dimensions are a maximum based on a unit with a 4.0kW drive.



MODEL 30005



MODEL 30005



OPEN CHANNEL Model	Flow Rate - m³/hr	Head Drop - mm	Standard Dimensions - mm				Approximate Net Weight - kg
			A (IP55)	A (IP68)	B	C	
30005-0008	84	178	1202	1306	203	495	168
30005-0012	141	290	1307	1411	305	600	186
30005-0018	223	405	1456	1560	457	749	211
30005-0024	311	405	1602	1706	609	895	236
30005-0032	477	445	1799	1903	813	1092	263
30005-0040	686	495	2002	2106	1016	1295	295
30005-0050	979	595	2220	2466	1270	1546	336
30005-0060	1277	760	2474	2720	1524	1813	383

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

• Drive dimensions are a maximum based on a unit with a 4.0kW motor. • Extended drive shafts are available on request.

40K Muffin series Monster®

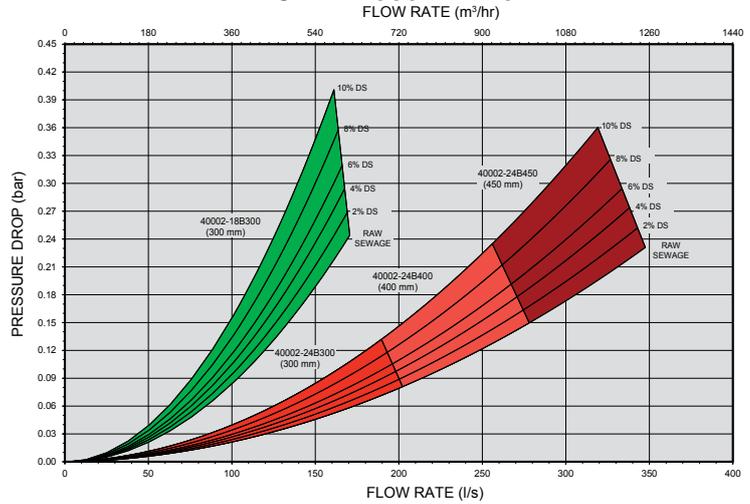
Materials of Construction

- Housings:** Ductile iron
- Cutters:** Hardened alloy steel
- Shafts:** Hardened alloy steel
- Mechanical Seals:** Tungsten carbide faces

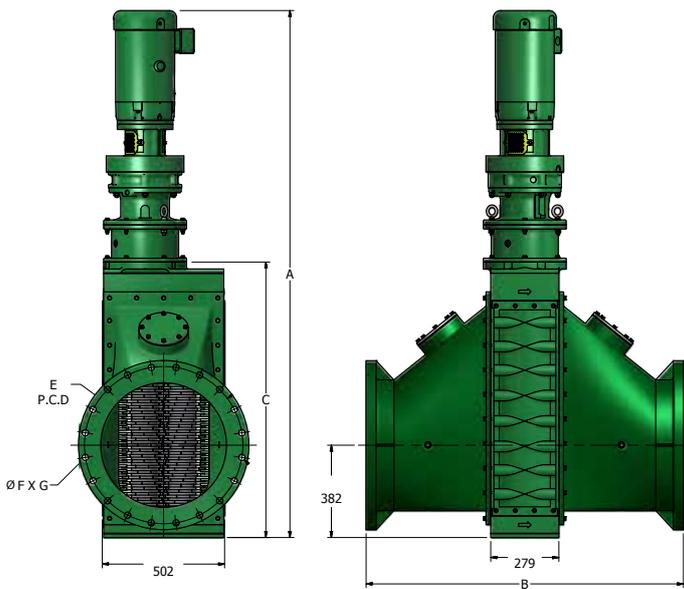
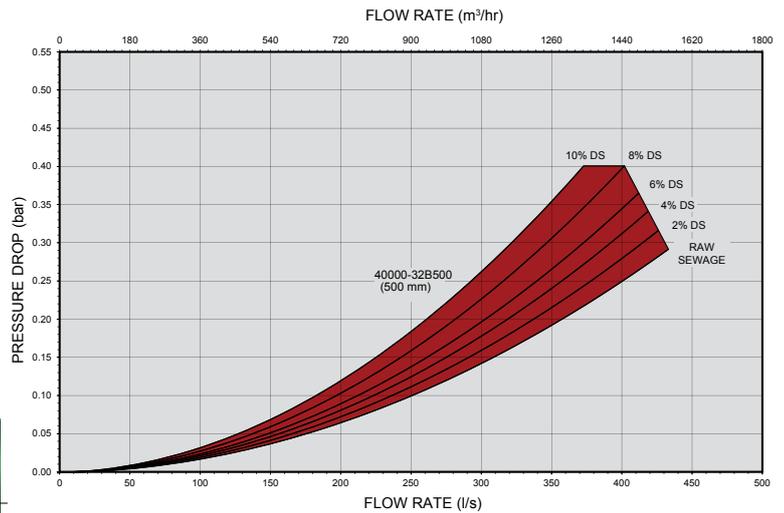
Specifications

- 64 mm hex shafts;
- Standard: 35:1 reducer
- Cutter Size:** 190 mm diameter cutters
- Seal Max Working Pressure:** 6 bar

MODEL 40002-Inline



MODEL 40002-Inline

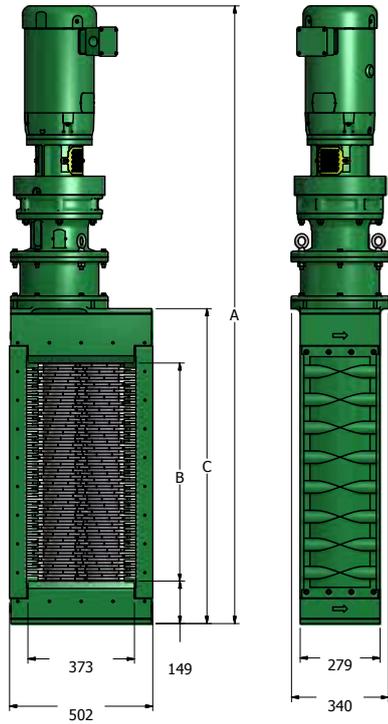


IN-LINE Model	Flow Rate - m³/hr	Pipeline Size - mm	Pressure Drop - bar	Standard Dimensions - mm				Flange Dimensions - mm			Approximate Net Weight - kg
				A (IP55)	A (IP68)	B	C	E	F	G	
40002-18B300	612	300	0.24	1704	1848	895	768	410	28 (M24)	12	690
40002-24B300	727	300	0.08	1882	2027	895	946	410	28 (M24)	12	805
40002-24B400	999	400	0.15	1882	2027	1099	946	525	31 (M27)	16	860
40002-24B450	1249	450	0.23	1882	2027	1200	946	585	28 (M24)	20	950
40002-32B500	1558	500	0.29	2080	2117	1301	1114	650	32 (M30)	20	1184

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

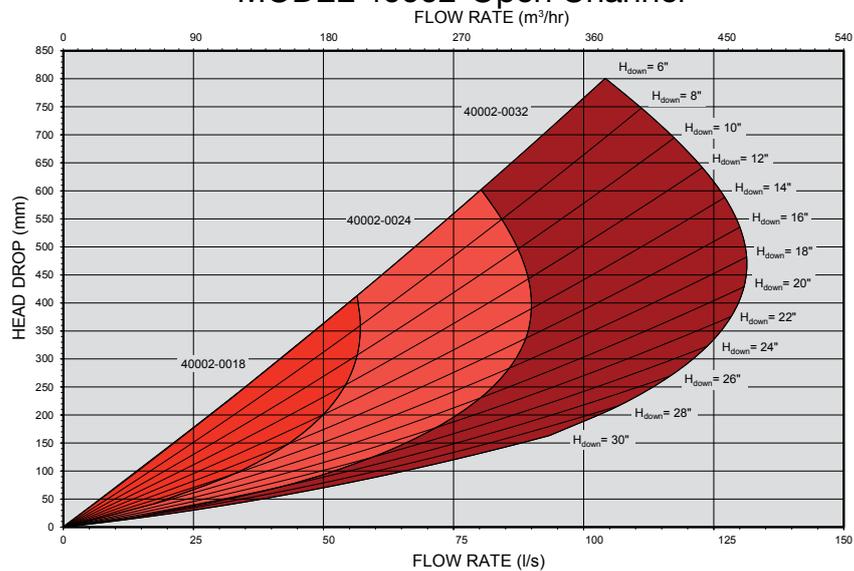
• Drive dimensions are a maximum based on a unit with a 7.5kW drive.





OPTIONS AVAILABLE		
	In-Line	Open Channel
7.5kW Motors	■	■
7, 11, 23 Tooth Cutters	■	■
Stainless Steel Cutters	■	■
Custom Mounting Frames		■
IP65 Control Enclosures	■	■
Solids Scrapers		■
Nickel Plated Housing		■
Stainless Steel Feed Hopper		■
Alternate Voltage & kW Motors	■	■
Explosion Proof Motors	■	■
Submersible Motors	■	■
Hydraulic Power Pack	■	■
Extended Motor Shafts	■	■

MODEL 40002-Open Channel



OPEN CHANNEL Model	Flow Rate - m³/hr	Head Drop - mm	Standard Dimensions - mm				Approximate Net Weight - kg
			A (IP55)	A (IP68)	B	C	
40002-0018	207	203	1704	1816	457	768	533
40002-0024	327	406	1882	1994	610	946	619
40002-0032	477	457	2050	2162	813	1114	708

- * Flow based on optimum channel conditions. • Consult factory for analysis of application.
- Drive dimensions are a maximum based on a unit with a 7.5kW drive. • Extended drive shafts are available on request.

Muffin Monster[®] options



7-Tooth:
Pump Stations or Prisons



11-Tooth:
Wastewater, Sludge
or Scum



13-Tooth:
Heat-exchanger or
Centrifuge Protection



17-Tooth: *
Rags, Stringy Materials

Cutters

- 7, 11, 13, 17 and 23 tooth options.
- Special Cutter designs for unique needs.
- Optional stainless steel cutters.
- * 17-Tooth Serrated Wipes Ready Cutter. (30K Series Only)



Electric Motor



Hydraulic Drive

Motors

- TEFC - Totally enclosed fan cooled electric.
- ATEX - Explosion proof & IP68.
- Hydraulic Drives.
- Available in: 1.5, 2.2, 3.7, 4.0, 7.5 kW.

Hydraulic Power Packs

- Available in 3.7, 7.5, 11 kW.



Standard Enclosure

High Tech Controller

- High-tech Controllers.
- Controllers ensure maximum grinding ability, minimum stoppage and maximum electrical/mechanical component protection.
- Optional enclosures: Eexed Zone 1 (flameproof) available on request.

Note: Warranty invalid if JWC controller or similar approved is not used.





Custom Wall Frames

Custom Wall Frames

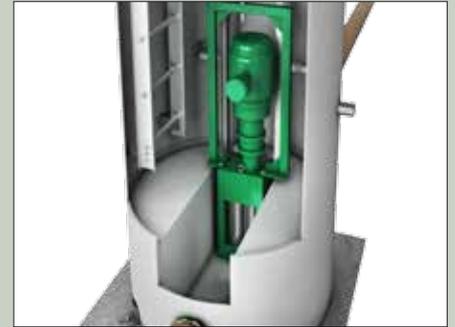
- Stainless steel guide frames attach to pump station to make installation easier.
- Frame is customized to fit each site and includes: guide rails; grinder support base; overflow bar racks and more.



Custom Channel Frame

Custom Channel Frames

- Adapt grinders to fit any channel.
- Guide rails for easy installation and maintenance.
- Stainless Steel construction.



Pre-fab Muffin Monster Manhole

Muffin Monster Manhole

- Pre-fabricated fiberglass reinforced manhole with grinder.
- Custom Depth.
- Hinged cover or BSEN124 GRP 4 Grade D.



Scrapers (optional)

Scrapers

- Integrated steel scrapers increase throughput and help cutters clean-out faster.
- Improves performance of hopper fed applications.



Extended Motor Shaft

Extended Motor Shaft

- Places motor above highest water level.
- Available in 305 mm increments.
Maximum: 4570 mm.



Custom Hoppers

Hoppers

- Custom made to fit application.
- 304 or 316 Stainless Steel.





JWC International
 Unit 15, Daneside Business Park,
 River Dane Road
 Congleton, Cheshire
 CW12 1UN, United Kingdom
 Phone: +44 1260 277047
 Fax: +44 1260 277557
 Email: jwci@jwce.com



www.jwce.com

©2016 JWC International Congleton, UK is registered by QAS to ISO9001:2008 File #A13056. JWC Environmental (JWCE) is a trading name of JWC International registered in England and Wales with UK establishment number 00015349. JWCE's Santa Ana California facility is registered by UL to ISO9001:2008 #10001313 QM8. U.S. patents apply: 6,176,443; 6,332,984; 7,073,433; 7,080,650; 7,081,171; 7,086,405; 7,383,842; 7,771,589; 7,854,859; RE37,349E; RE40,422; RE39,948E. U.S. patents pending: 13/628,725, 14/862,238, 14/862,247, 14/862,226, 62/054,656. Additional patents pending. All rights reserved. JWC International is not liable for damages that may result from any information provided in or omitted from this publication, under any circumstances. JWC International reserves the right to make adjustments to this publication at any time, without notices or obligation. Please check the JWC International website (www.jwce.com) for the most up-to-date information or speak to your local representative.

(MuffinMonster-UK-JWCI-717)