



Muffin Monster

Overview

Mini Monster®

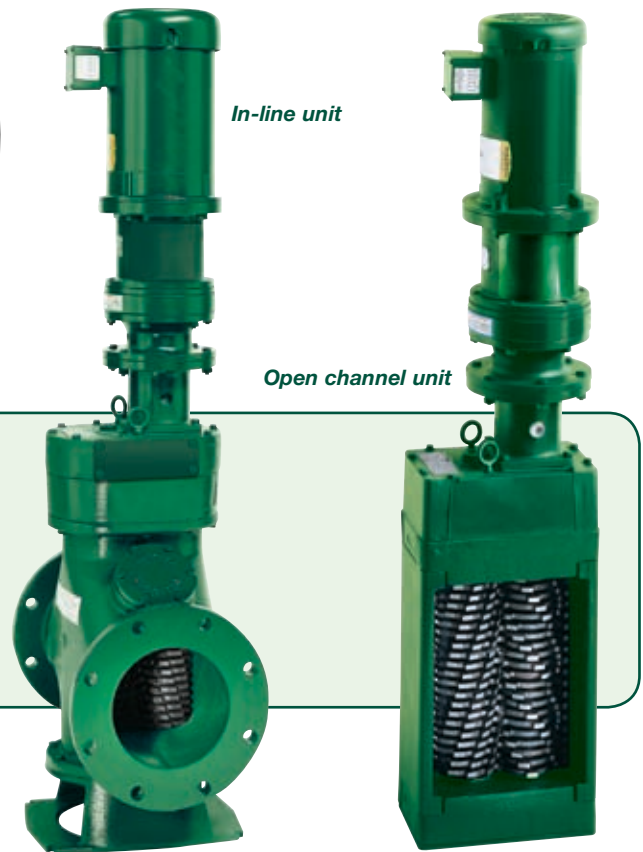
For low flow, buildings and small pump station applications the Mini Monster is a reliable grinder in a small package. It grinds wastewater to eliminate costly pump problems and sewer back-ups.

Muffin Monster®

Troublesome solids are now easier than ever to reduce with the Muffin Monster dual-shafted grinder. Its low speed, high-torque design shreds tough solids that typically cause sewer problems. With over 20,000 installations the Muffin Monster is legendary for protecting pumps and keeping the wastewater flowing.

Macho Monster

For big solids reduction projects the Macho Monster has the power to keep up with huge slugs of material. It utilizes larger cutters, shafts and motors than the Mini or Muffin Monster ranges.



Features & Benefits

Dual Shafted Grinder

- Capable of grinding a wider variety of solids than single shafted machines or macerators
- High torque allows the grinder to handle rocks, sticks, clothing, plastics, bedding and more without jamming

Ease and Flexibility of Installation

- Adapts to existing pipeline or channel applications with little or no modification to piping or channel
- In-line unit incorporates a quick-change cutter cartridge

Cartridge Seal Assembly

- High pressure capability – 6 bar
- No seal flush required and no packing gland to adjust

High-Flow Side Rails

- Increases flow rate and decreases head loss
- Deflects solids into the cutting chamber

Compact, Efficient Design

- Cutter and reducer design allows the use of small, energy efficient motors – 2.2 to 7.5kW
- Compact units fit in small spaces

Automated PLC Monitoring and Controls

- Auto load sensing and reversing reduces motor trips, protects system and eliminates need for manual check-ups

*All units Atex certified Grp11 cat 2



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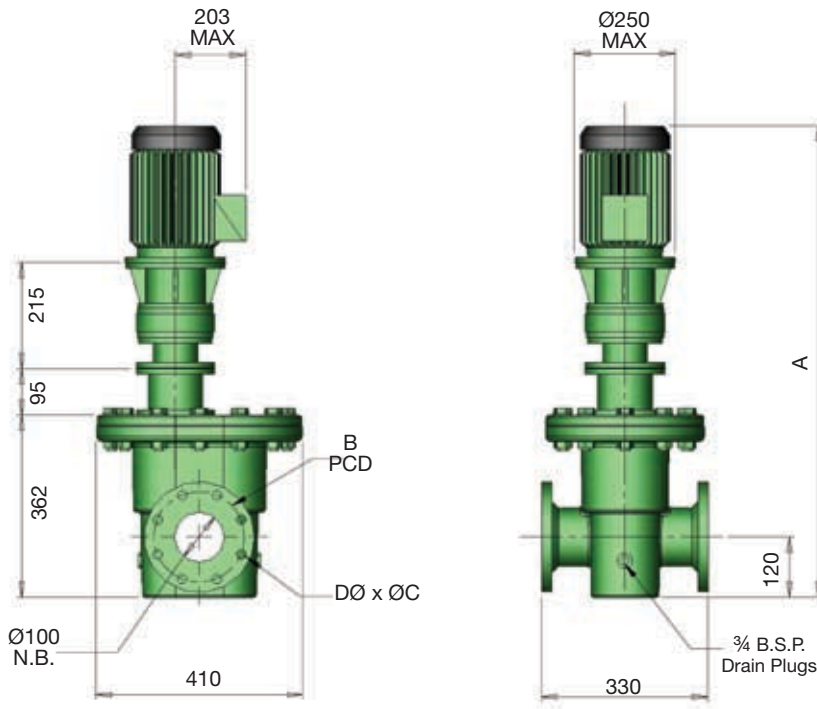
Mini Monster

Model 20000

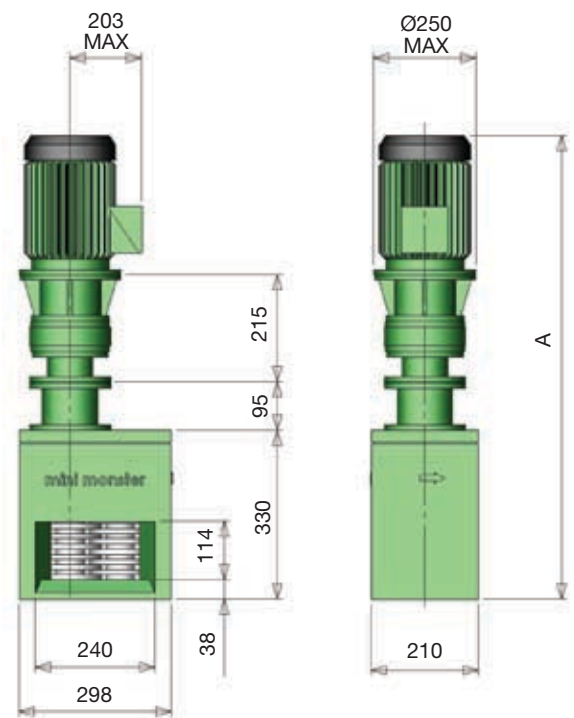
Motor: Standard 1.5 kW; 0.75kW optional
 Flow rate: In-line: 60 m³/h
 Open Channel: 18 m³/h
 Pressure: 6 bar (working)
 Weight: In-line: 125 kg
 Open Channel: 102kg
 Cutter size: 120mm diameter



In-Line Configuration



Open Channel Configuration



Performance Capability – Open Channel Configuration

Model	Flow Rate m ³ /h	Head Drop mm	Net Weight Approx. kg	Maximum Dimensions - mm	
				A (IP55)	A (IP68)
20002-DI	18	80	102	912	1215

Flow based on optimum channel conditions • Consult factory for final analysis of application • Drive dimensions are a maximum based on a unit with a 1.5 kW drive • Extended drive shafts are available on request.

Performance Capability – In-Line Configuration

Model	Flow Rate m ³ /hr	Pipeline Size-mm	Pressure Drop (Bar)	Net Wt. kg	Maximum Dimensions - mm		Flange Dimensions - BS EN 1092		
					A (IP55)	A (IP68)	B	C	D
20000-D100	60	100	0.07	125	944	1236	180	19 (M16)	8

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 1.5 kW drive.



Mini Monster installed in a pump station



In-line Mini Monster



In-line Mini Monster



Easy to remove cutter cartridge

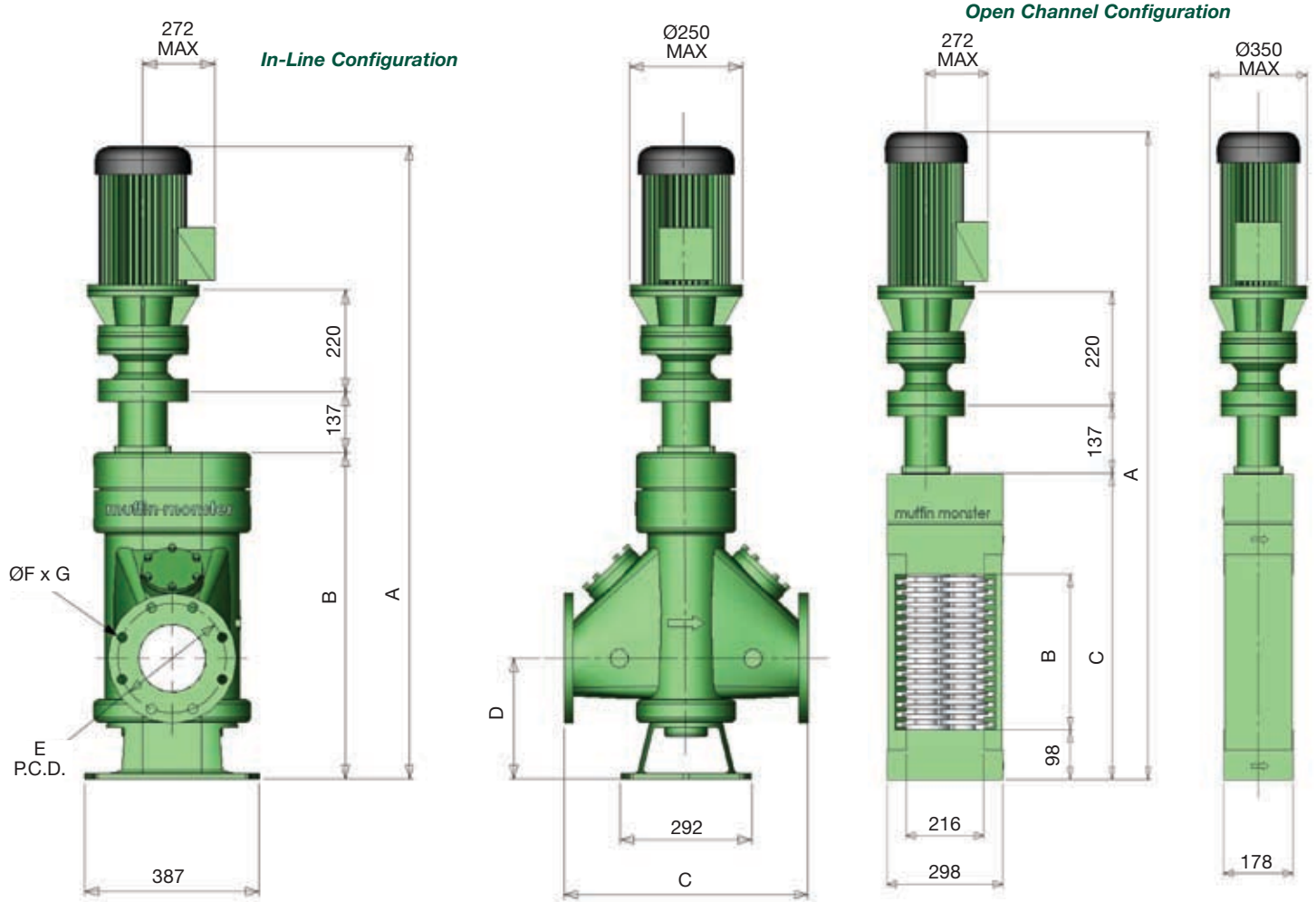


Muffin Monster

Model 30000

Specifications: 50mm hex shafts; 2.2 kW motor standard; 25:1 reducer; tungsten carbide face seal cartridges

Cutter size: 120mm diameter cutters
Seal max working pressure - 6.0 bar



Performance Capability – Open Channel Configuration

Model	Flow Rate m ³ /h	Head Drop mm	Net Weight Approx. kg	Maximum Dimensions - mm			
				A (IP55)	A (IP68)	B	C
30005-0008	76	241	168	1202	1306	203	495
30005-0012	111	343	186	1307	1411	305	600
30005-0018	168	444	211	1456	1560	457	749
30005-0024	228	495	236	1602	1706	609	895
30005-0032	334	546	263	1799	1903	813	1092
30005-0040	454	597	295	2002	2106	1016	1295

Flow based on optimum channel conditions • Consult factory for analysis of application • Drive dimensions are a maximum based on a unit with a 4 kW drive • Extended drive shafts are available on request

Performance Capability – In-Line Configuration

Model	Flow Rate m ³ /hr	Pipeline Size-mm	Pressure Drop (Bar)	Net Wt. kg	Maximum Dimensions - mm					Flange Dimensions - BS EN 1092		
					A (IP55)	A (IP68)	B	C	D	E	F	G
30004T-B100	102	100	0.04	250	1425	1529	718	489	238	180	19 (M16)	8
30004T-B150	159	150	0.08	254	1425	1529	718	540	264	240	23 (M20)	8
30004T-B200	216	200	0.15	258	1425	1529	718	591	289	295	23 (M20)	12
30004T-B250	352	250	0.08	256	1717	1821	1010	692	313	355	28 (M24)	12
30004T-B300	512	300	0.11	367	1717	1821	1010	794	336	410	28 (M24)	12

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 kW drive.



Macho Monster

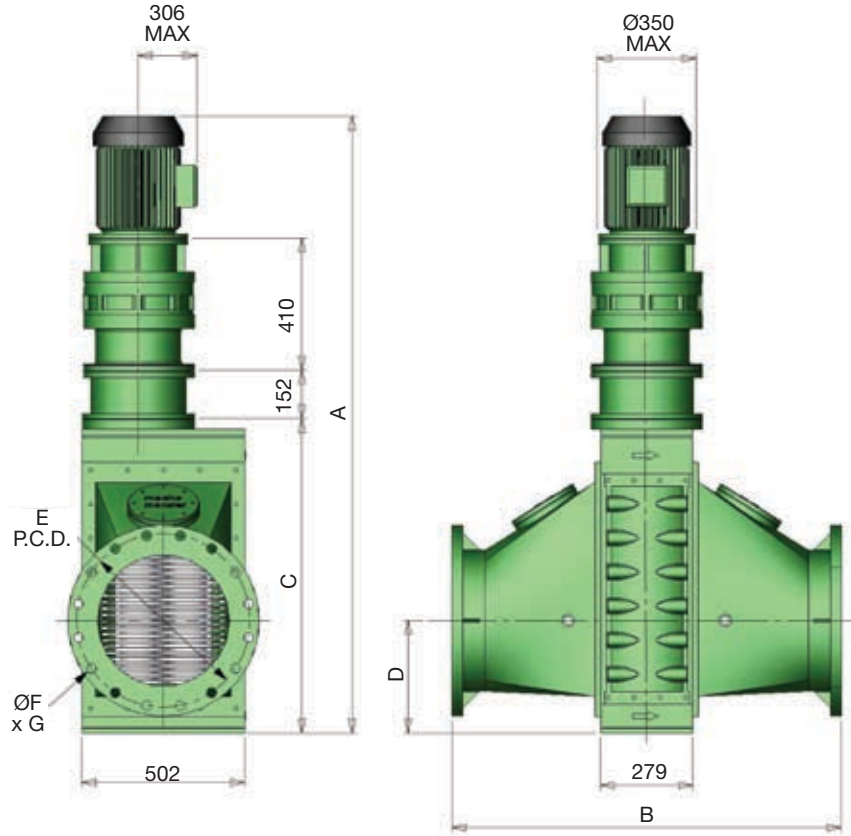
Model 40000

Specifications: 64mm hex shafts; 7.5 kW motor standard with 5.5 kW optional; 35:1 reducer; tungsten carbide face seal cartridges

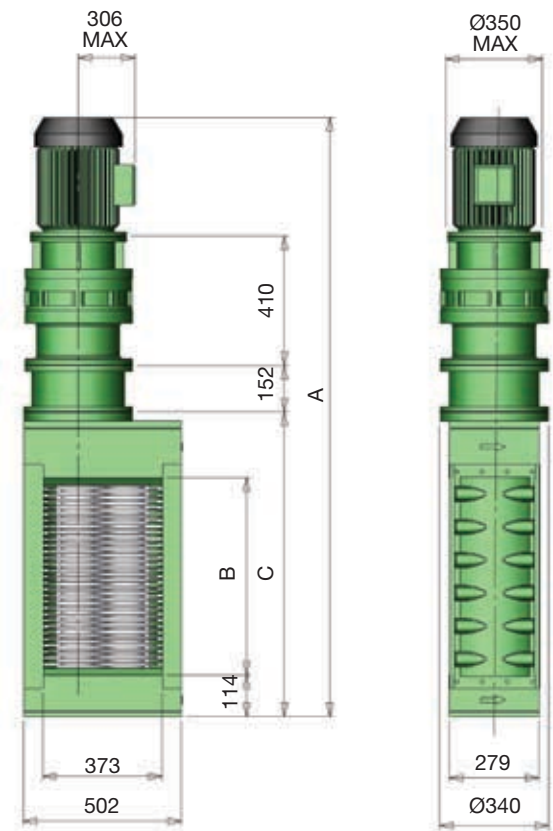
Cutter size: 190mm diameter

Seals-Max. working pressure: up to 6.0 Bar

In-Line Configuration



Open Channel Configuration



Performance Capability – Open Channel Configuration

Model	Flow Rate m ³ /h	Head Drop mm	Net Weight Approx. kg	Maximum Dimensions - mm			
				A (IP55)	A (IP68)	B	C
40000-0018	204	203	533	1704	1816	457	768
40000-0024	341	406	619	1882	1994	610	946
40000-0032	477	457	708	2050	2162	813	1114

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

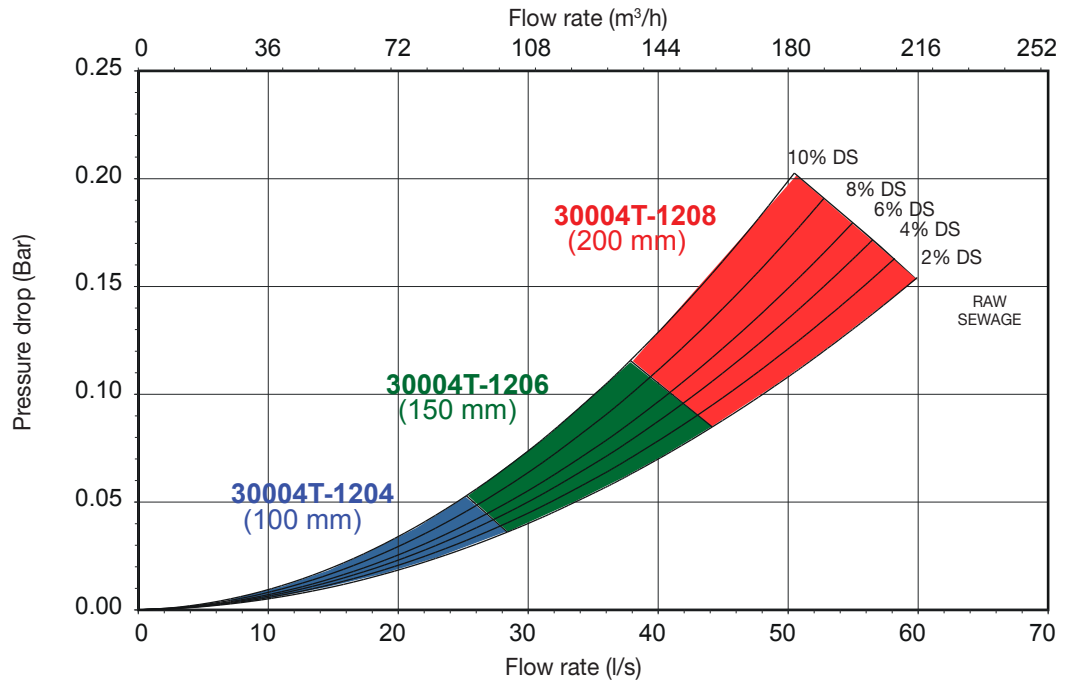
Performance Capability – In-Line Configuration

Model	Flow Rate m ³ /hr	Pipeline Size-mm	Pressure Drop (Bar)	Net Wt. kg	Maximum Dimensions - mm					Flange Dim. - BS EN 1092		
					A (IP55)	A (IP68)	B	C	D	E	F	G
40002-18B300	316	300	0.24	690	1704	1815	895	768	273	410	28 (M24)	12
40002-24B300	727	300	0.08	805	1882	1994	895	946	273	410	28 (M24)	12
40002-24B400	909	400	0.12	860	1882	1994	1099	946	321	525	31 (M27)	16
40002-24B450	1152	450	0.20	950	1882	1994	1200	946	346	585	28 (M24)	20
40002-32B500	1431	500	0.25	1184	5080	2162	1302	1114	381	650	34 (M30)	20

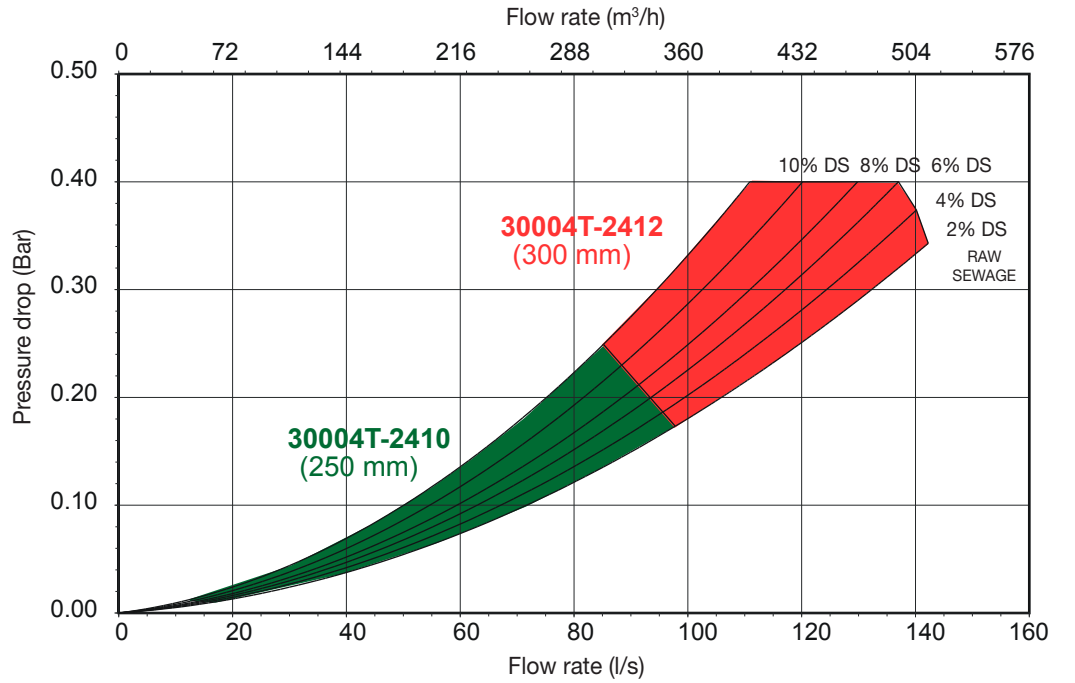
In-Line unit typically installed prior to suction side of pump • Consult factory for analysis of application • Drive dimensions are a maximum based on a unit with a 7.5 kW drive.

Flow Curves

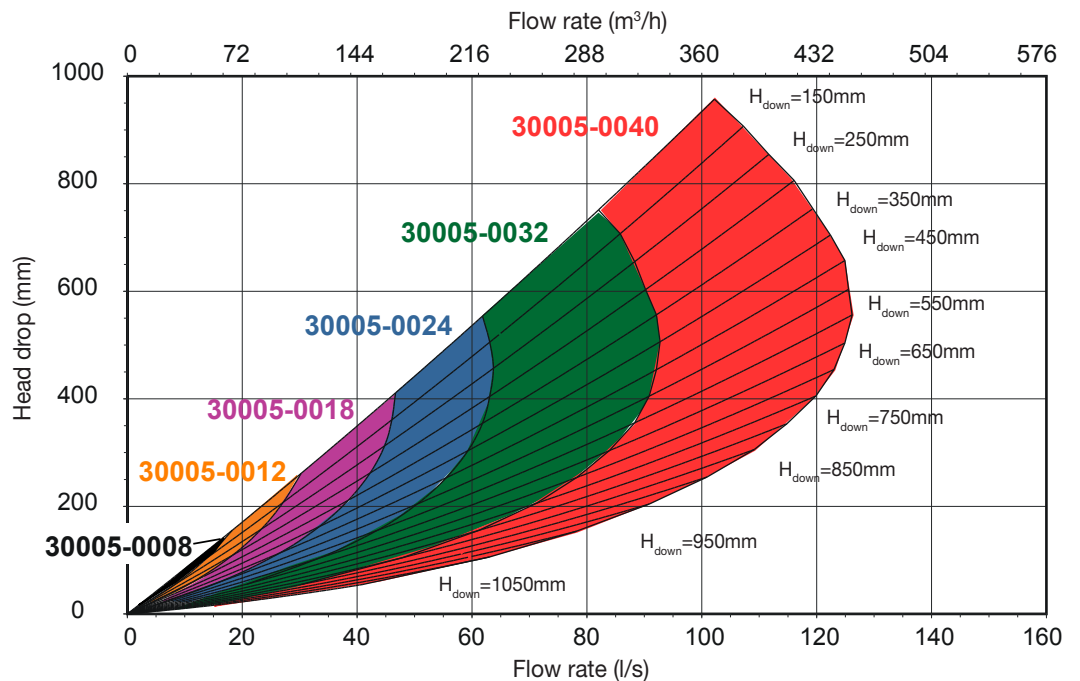
Model 30004T-12



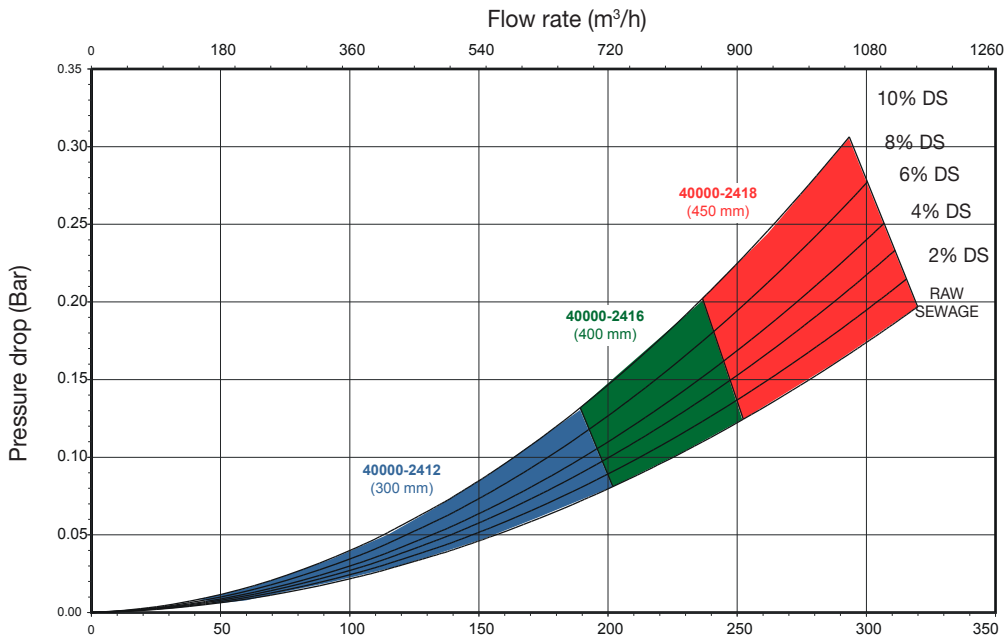
Model 30004T-24



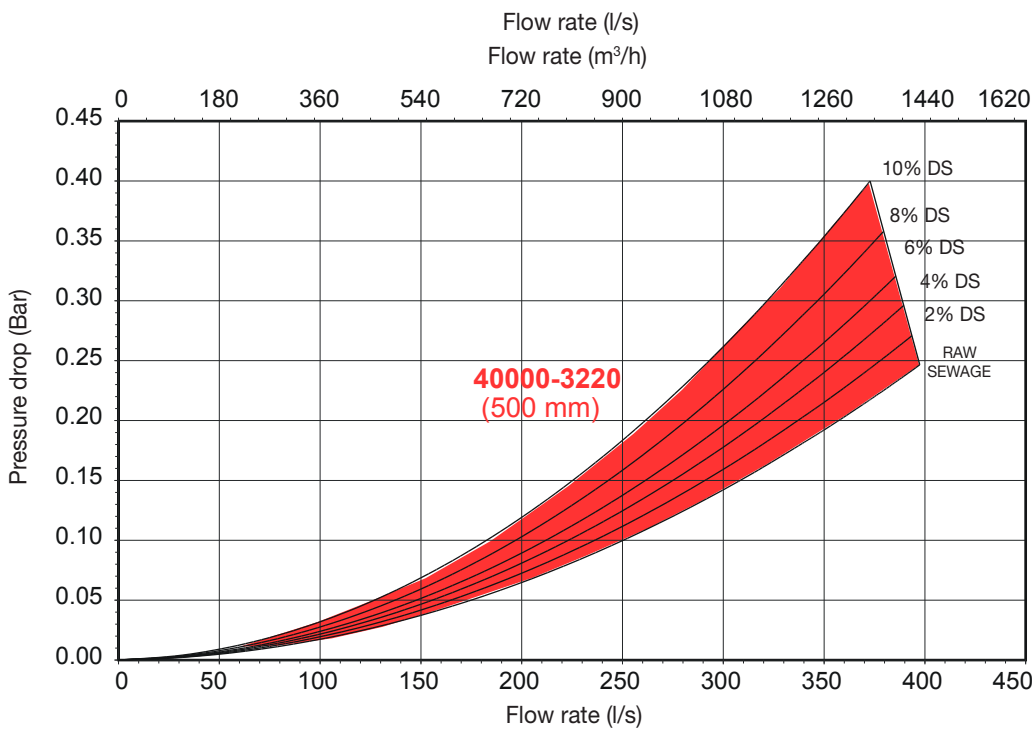
Model 30005



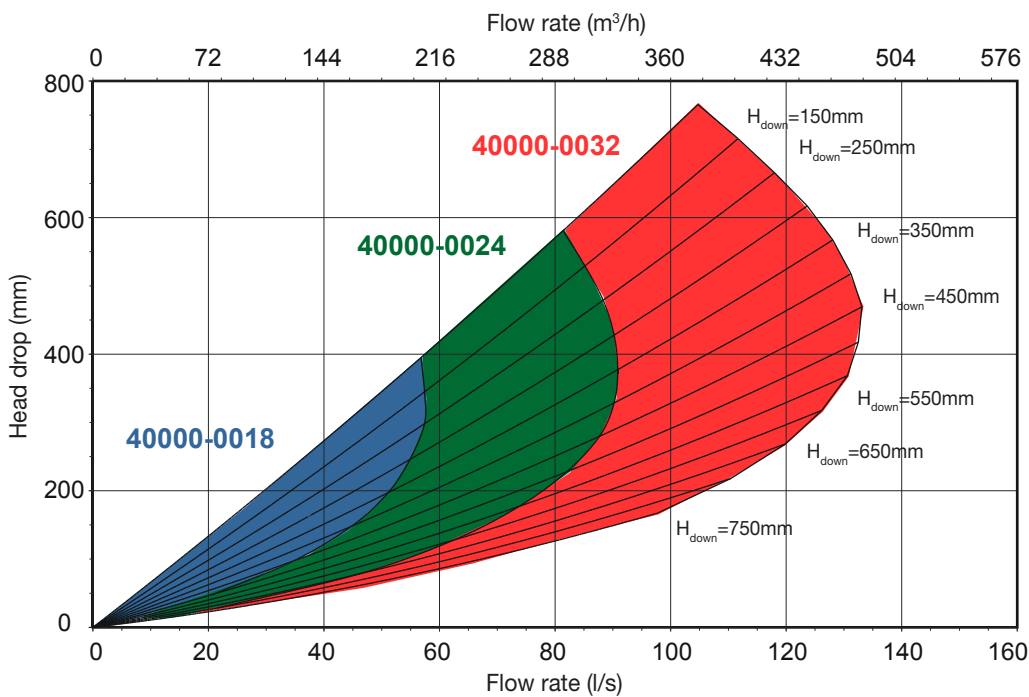
Flow Curves



Model 40000-18



Model 40000-32



Model 40000



Applications

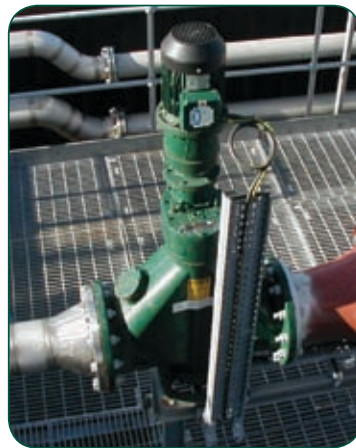
Industry	Mini Monster	Muffin Monster	Macho Monster	Application Notes
Buildings / Resorts				More powerful than grinder pumps. Prevents sewer overflows and messy pump rebuilds
Pump Stations				Stainless steel guide rails make installation and retrieval easy
Screenings				Improves washing and compacting of screened solids
Sludge / Scum				Cleaner, stronger and longer lasting than macerators
Belt Press / Centrifuge				Grinds a wide variety of solids, including rocks and rags, to protect dewatering equipment
Jails / Prisons				Over 2,000 grinders installed in correctional facilities worldwide
Hospitals / Nursing Homes				Shreds large solids including rags, pads, clothing and dangerous medical waste
Food / Fish Processing				Sample grinder installations: fish, slaughterhouse scraps, spoiled food destruction, wash water channels, manure tanks
Pulp / Paper				Installed in sludge systems, pulp lines and wastewater plants
Heavy Industrial				Refineries, hazardous waste processing, obsolete inventory destruction, recycling

Consult factory for additional application assistance and approval.

Photo Gallery



In-line Muffin Monster



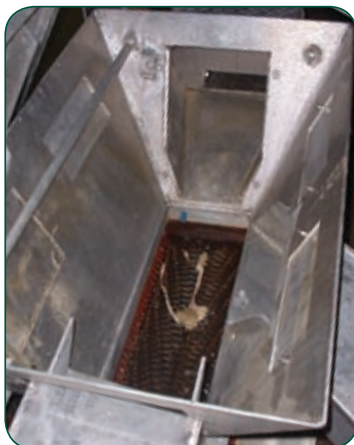
In-line Muffin Monster



Muffin Monster



In-line Macho Monster



Muffin Monster in fish processing plant



Muffin Monster in prison



Muffin Monster in pump station



Muffin Monster in pump station

Features and Options



Hardened steel cutters

Cutters

- Range of cutter options maximize grinding efficiency
- Special: 3-tooth fish grinding cutter
- Custom: extra-hard carburized cutters, stainless steel

Custom Frames

- Frames attached to pump sump wall
- Grinder support base, subchannel, overflow bar racks and other frame configurations available



Custom frame

Scrapers*

- Fixed steel scrapers increase material throughput and help cutters clean-out faster.

High Flow Side Rails

- Slotted side frames to increase flow capability and reduce headloss
- Helps keep sand and grit in suspension
- Increased component serviceability

* Open channel units. Not available on Mini Monster Units.

High-tech Controllers

- PLC based controllers to 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 JWCI controller or similar approved is not used

Motors

- Electric motor: 1.5, 2.2, 4, 5.5, 7.5 kW
- ATEX explosion proof electric motor: 2.2, 3.7, 7.5 kW

Extended Motor Shaft

- Longer drive shaft puts motor above the highest water level. Available in 150mm up to a maximum of 3.0m.



Extended motor shaft

Hex Seal Cartridges

- High pressure capability – 6 bar
- No seal flush required and no gland packing to adjust



Hex seal cartridge



Optional Scrapers



Exclusive: high-flow side rails



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