

CHANNEL MONSTER®

FLEX



Overview

The patent pending Channel Monster FLEX consists of a FLEX grinder and a solids diverter with perforated screen connected by a FLEX frame. This modular design allows for the flexibility of servicing the FLEX grinder and solids diverter separately while maintaining the best-in-class technology for wastewater solids reduction. An exacta-lock adjuster mechanism allows for fine-distance adjustment between the grinder and screen to minimize solids bypass. The Channel Monster FLEX continues the Channel Monster legacy of high flow capacity while capturing and shredding rags, rocks, wood, and other solids into small pieces to pass harmlessly through pumps, pipes, and processing equipment.

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 keeping organics in the treatment process, and removed screenings are cleaner

Lower operating cost

- Grinding solids into smaller pieces keeps pipes and pumps clear, resulting in shorter pump run cycles and lower electrical costs
- Reduced unit maintenance expense with modular FLEX grinder and solids diverter

Features

1 FLEX grinder

- Dual-shafted, slow-speed, high-torque to grind a wide variety of solids
- Modular for easy field replacement
- Optional 10 hp motor for the highest cutting force for grinder in its size class

2 Solids diverter with perforated screen

- Allows higher flow while capturing solids and directing them into the grinder

3

- 304 stainless steel 1/2-inch (12.7 mm) perforated drum
- Modular assembly for easy field replacement

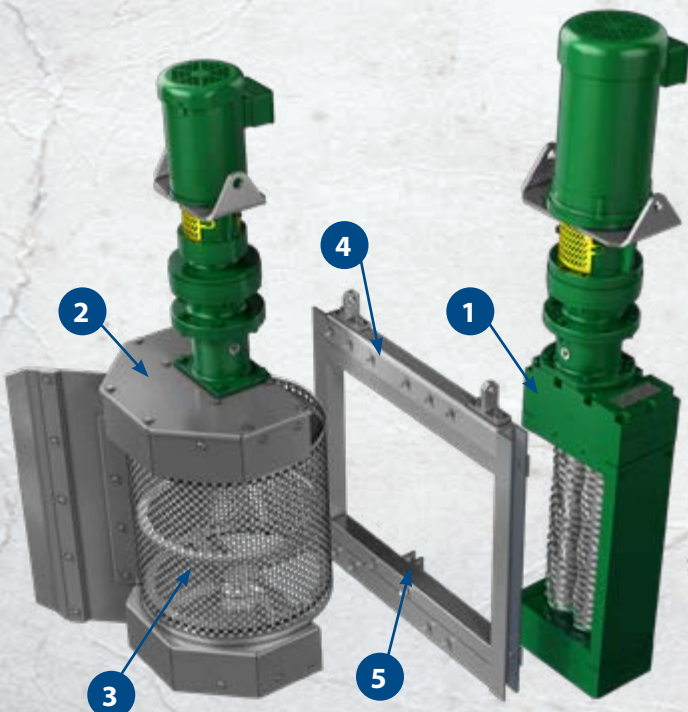
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FLEX frame

- Connects FLEX grinder and solids diverter

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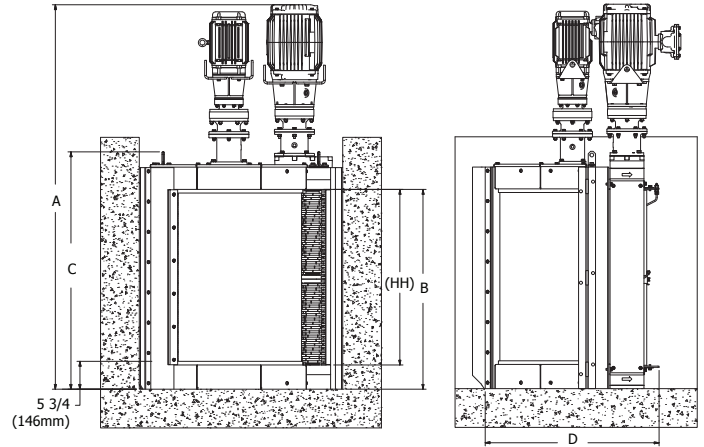
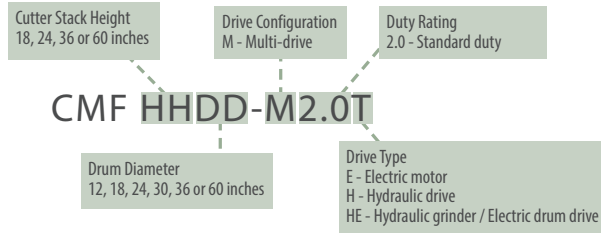
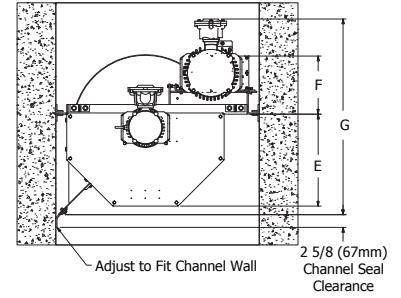
- Exacta-lock adjuster precisely locks distance between grinder and drum to optimize solids capture and shredding of solids



Channel Monster® FLEX

Materials of construction

- Solids diverter perforated screen:** 304 stainless steel
- Solids diverter cover:** 304 stainless steel
- Solids diverter end housings:** Gray iron
- FLEX grinder cutter and spacers:** Hardened alloy steel standard, other metals optional
- FLEX grinder shafts:** Hardened alloy steel
- FLEX grinder end housings, covers and side rails:** Gray iron
- Mechanical seal faces:** Tungsten carbide
- FLEX and channel frames:** 304 stainless steel



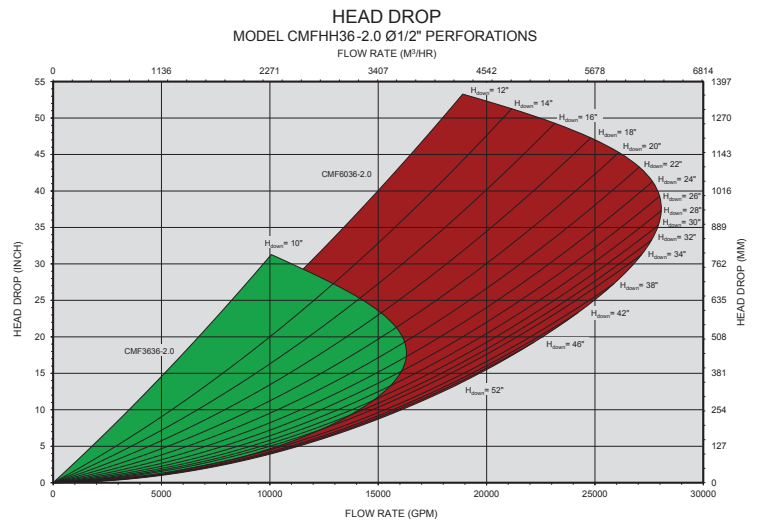
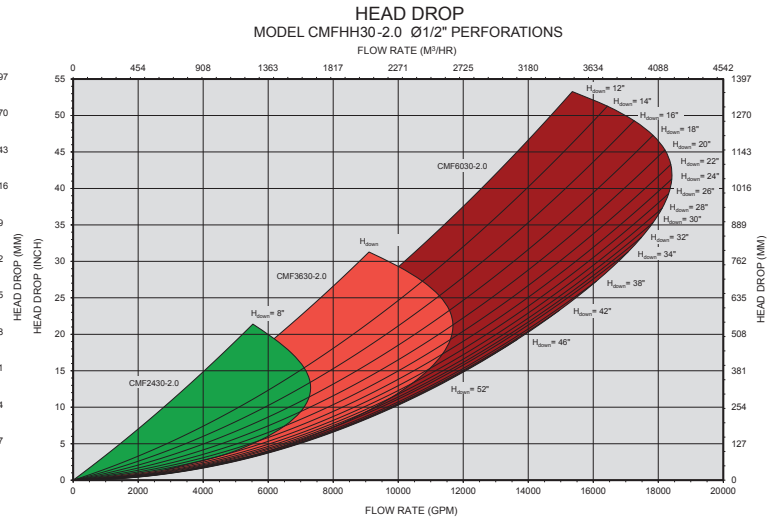
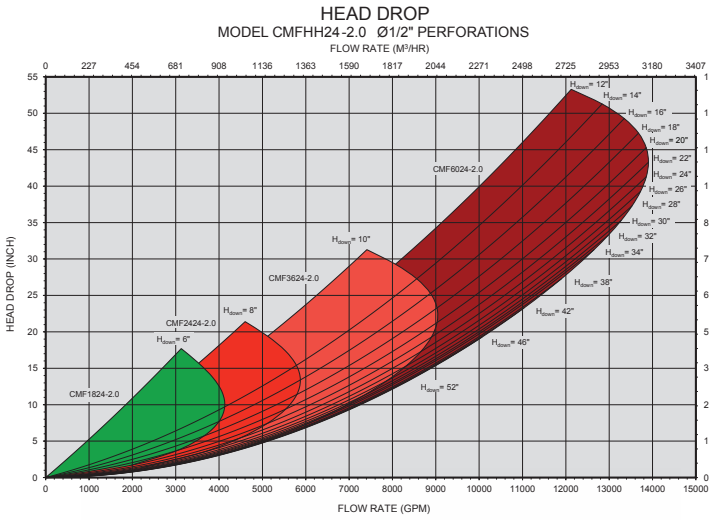
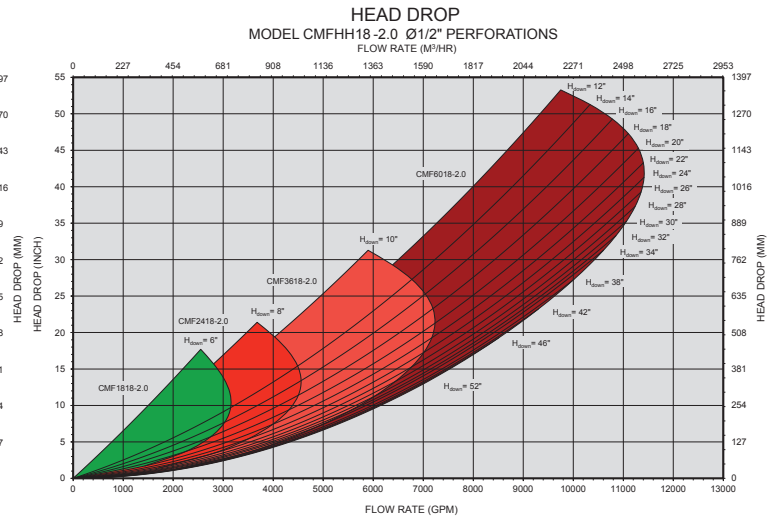
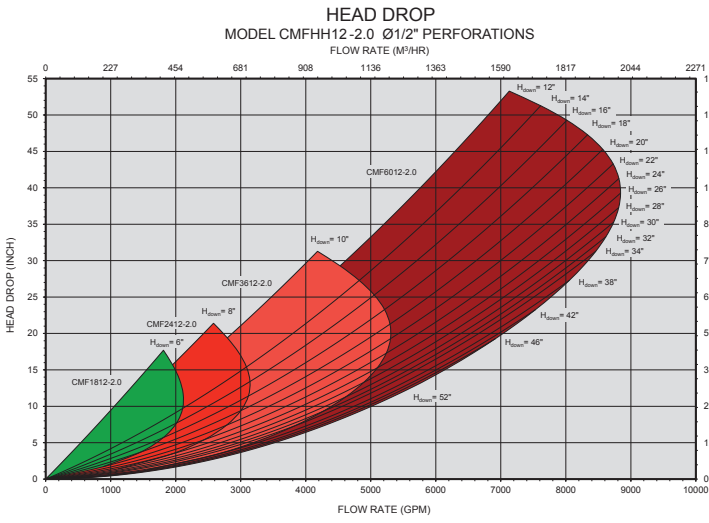
Model	A ¹ - inches (mm)	B - inches (mm)	C - inches (mm)	D - inches (mm)	E - inches (mm)	F - inches (mm)	G - inches (mm)	Min/Max Channel Width - inches (mm)	Max Flow - mgd (m3/hr)	Approximate Net Weight - lbs (kg) ¹
CMF1812-M2.0E ²	90-7/16 (2297)	23-3/4 (603)	31-1/2 (800)	23 (586)	10-1/4 (260)	8-3/4 (222)	27-5/8 (700)	22 / 36 (559) / (914)	3.0 (479)	1085 (492)
CMF2412-M2.0E ²	96-3/16 (2443)	29-1/2 (749)	37-1/8 (943)	23 (586)	10-1/4 (260)	8-3/4 (222)	27-5/8 (700)	22 / 36 (559) / (914)	4.6 (720)	1146 (520)
CMF3612-M2.0E ²	108-1/16 (2745)	41-1/4 (1048)	49 (1245)	23 (586)	10-1/4 (260)	8-3/4 (222)	27-5/8 (700)	22 / 36 (559) / (914)	7.6 (1206)	1311 (595)
CMF6012-M2.0E ²	132-1/16 (3354)	65-1/4 (1657)	73 (1854)	23 (586)	10-1/4 (260)	8-3/4 (222)	27-5/8 (700)	22 / 36 (559) / (914)	12.7 (2008)	1813 (822)
CMF1818-M2.0E	61-13/16 (1570)	23-3/4 (603)	31-1/2 (800)	27-3/4 (706)	13 (330)	9-1/4 (235)	32-3/8 (821)	30 / 44 (762) / (1118)	4.6 (723)	1048 (475)
CMF2418-M2.0E	67-1/2 (1715)	29-1/2 (749)	37-1/8 (943)	27-3/4 (706)	13 (330)	9-1/4 (235)	32-3/8 (821)	30 / 44 (762) / (1118)	6.6 (1036)	1116 (506)
CMF3618-M2.0E	79-3/8 (2016)	41-1/4 (1048)	49 (1245)	27-3/4 (706)	13 (330)	9-1/4 (235)	32-3/8 (821)	30 / 44 (762) / (1118)	10.4 (1647)	1284 (582)
CMF6018-M2.0E	103-3/8 (2626)	65-1/4 (1657)	73 (1854)	27-3/4 (706)	13 (330)	9-1/4 (235)	32-3/8 (821)	30 / 44 (762) / (1118)	16.5 (2596)	1587 (720)
CMF1824-M2.0E	61-13/16 (1570)	23-3/4 (603)	31-1/2 (800)	31-5/8 (805)	16 (406)	10-7/8 (276)	36-1/4 (919)	36 / 50 (914) / (1270)	6.0 (945)	1088 (493)
CMF2424-M2.0E	67-1/2 (1715)	29-1/2 (749)	37-1/8 (943)	31-5/8 (805)	16 (406)	10-7/8 (276)	36-1/4 (919)	36 / 50 (914) / (1270)	8.5 (1334)	1160 (526)
CMF3624-M2.0E	79-3/8 (2016)	41-1/4 (1048)	49 (1245)	31-5/8 (805)	16 (406)	10-7/8 (276)	36-1/4 (919)	36 / 50 (914) / (1270)	13.1 (2059)	1344 (609)
CMF6024-M2.0E	103-3/8 (2626)	65-1/4 (1657)	73 (1854)	31-5/8 (805)	16 (406)	10-7/8 (276)	36-1/4 (919)	36 / 50 (914) / (1270)	20.0 (3160)	1674 (759)
CMF2430-M2.0E	67-1/2 (1715)	29-1/2 (749)	37-1/8 (943)	35-7/8 (912)	19 (482)	12 (305)	40-3/8 (1026)	42 / 56 (1067) / (1422)	10.5 (1658)	1287 (584)
CMF3630-M2.0E	79-3/8 (2016)	41-1/4 (1048)	49 (1245)	35-7/8 (912)	19 (482)	12 (305)	40-3/8 (1026)	42 / 56 (1067) / (1422)	16.9 (2660)	1486 (674)
CMF6030-M2.0E	103-3/8 (2626)	65-1/4 (1657)	73 (1854)	35-7/8 (912)	19 (482)	12 (305)	40-3/8 (1026)	42 / 56 (1067) / (1422)	26.6 (4191)	1838 (834)
CMF3636-M2.0E	79-3/8 (2016)	41-1/4 (1048)	49 (1245)	40 (1015)	22 (559)	13 (330)	44-1/2 (1129)	48 / 62 (1219) / (1575)	23.5 (3709)	1601 (726)
CMF6036-M2.0E	103-3/8 (2626)	65-1/4 (1657)	73 (1854)	40 (1015)	22 (559)	13 (330)	44-1/2 (1129)	48 / 62 (1219) / (1575)	40.4 (6378)	1977 (897)

1. Estimated height and weight based on 1 hp XPNV solids diverter motor and 5 hp XPNV FLEX grinder motor.

2. Dimension "A" height is for solids diverter motor height with extended shaft. If extended shaft is required for FLEX grinder drive, solids diverter extended shaft must always exceed by a minimum of 30 inches (752mm).



Channel Monster® FLEX





7-tooth:
Heavy Solids



11-tooth:
Typical Solids Loading



17-tooth*:
Rags & Stringy Materials

FLEX grinder cutters

- 7- and 11-tooth cutters in alloy steel or stainless steel
- 17-tooth serrated Wipes Ready® cutters in alloy steel

Custom wall and channel frames

- Custom-built to meet site requirements: may include guide rails, grinder support base, overflow bar racks and more
- Guide rails for easy installation and maintenance of unit
- Stainless steel construction

Extended motor shaft

- Places motor above highest water level
- Available in 1-foot (305 mm) increments
- Maximum: 15 feet (4570 mm)



Extended Motor Shaft



Model PC2200 Standard Enclosure

Smart controller

- Load-sensing control system automatically reverses to clear jams
- Standard: NEMA 4X FRP enclosure with 3-position switch and status indicators
- Optional: NEMA 4X stainless steel or NEMA 7 enclosures
- Customized control configurations for any installation
- UL registered



Electric Motor



Exclusive: JWC-Designed
Immersible Motor
(NEMA 6P)



Hydraulic Drives for 10 hp
Power Pack



Hydraulic Drives with 15 hp
Power Pack

Electric motors

FLEX grinder 5 hp standard, 10 hp optional
solids diverter 1 hp

- TEFC: Totally enclosed fan-cooled
- XPFC: Explosion-proof fan-cooled
- XPNV: Exclusive immersible

Hydraulic drive motor assembly

- 10 hp hydraulic power pack: 3 hp equivalent on FLEX grinder, 1 hp equivalent on solids diverter
- 15 hp hydraulic power pack: 5 hp equivalent on FLEX grinder, 1 hp equivalent on solids diverter



JWC Service Solutions

Monster Renew: Replace the worn Channel Monster FLEX grinder or solids diverter with a factory-new module. Renew module minimizes downtime and comes with a 1-year factory warranty.



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