

Goulds JC

Slurry Pump



JC

Designed for Handling a Wide Range of Corrosive / Abrasive Slurries

- Capacities to 7,000 GPM (1,600 m³/h)
- Heads to 240 feet (73 m)
- Temperatures to 250° F (121° C)
- Pressures to 127 psig (876 kPa)
- Sperical solids to 2½ inches (57 mm)

Design Features

- Extra-Thick Wet End Components For extended wear life.
- Replaceable Wear Liner Low maintenance cost.
- Heavy-Duty Power End Increased mean time between failures.
- External Impeller Adjustment Maintains original efficiency; simple and fast.
- Maximum Parts Interchangeability Entire line uses just five power ends.
- Sealing Flexibility Choice of packing, mechanical seals or Dynamic Seal.



Applications

- Wet scrubber systems
- Waste sludge
- Fracking slurries
- Paper mill wastes and liquors
- Clay and sand slurries
- · Dirty water
- Kaolin clay
- Carbon slurry
- · Lime mud
- Precipitated CaCO₃



Thousands of installations attest to the remarkable versatility of the Model JC Slurry pump. Sixteen sizes are available in a wide range of materials and configurations, making the JC ideal for most medium-duty abrasive and / or corrosive slurry services. Plus, it's designed for extreme ease of maintenance and long hours of reliable operation.

Designed for Long Life, Reliable Operation

Pump End

Wet-end components feature extra metal thickness for extended wear. Replaceable suction cover liner takes all wear on suction side of casing; simplifies maintenance. Efficient slurry design impeller for long life, optimum performance. Components are fully-machined for positive alignment.







Impeller





Stuffing Box Cover

Casing

Suction Cover Liner

Suction Cover

Power End

HEAVY-DUTY BEARING FRAME

Rugged one-piece design with integral drip basin. Five frames accommodate sixteen pump sizes. Grease or oil lube.



RUGGED SHAFT ASSEMBLY

Designed for continuous service under the most severe operating conditions. Shaft designed for minimum deflection at maximum loads.



EXTERNAL IMPELLER ADJUSTMENT

Original performance easily maintained by adjustable jacking screws without disassembly of pump.



REPLACEABLE SHAFT SLEEVE

Hook-type sleeve protects shaft from pumpage.



Sealing Flexibility

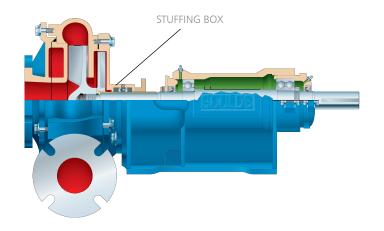
Dynamic Seal for Elimination of Mechanical Seal Problems; Reduced Maintenance

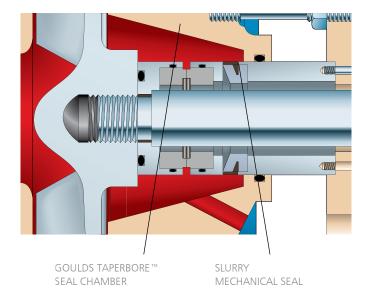
Goulds Dynamic Seal option is ideally suited to handle the tough applications where mechanical seals or packing require outside flush and constant/costly attention. An expeller between the stuffing box cover and impeller pumps liquid from the stuffing box.

For most applications, external seal water is not required – eliminating leakage, pumpage contamination, product dilution and problems associated with piping from a remote source.

Mechanical Seal

Goulds offers a variety of mechanical seals for applications flexibility including special slurry seals for tough services. In addition, a special enlarged seal chamber is offered for improved lubrication and cooling of the mechanical seal. The tapered throat keeps solids away from seal faces and from building up in the chamber. Seal life is remarkably extended.





Application Flexibility

The Model JC is extremely versatile. A variety of drive arrangements can be supplied for application flexibility.

DIRECT DRIVE UNIT



OVERHEAD BELT DRIVE



Side-by-side also available

For Sump Pumping Applications

When the Model JC's performance and features are required for sump services, you can choose either a Model JCU submersible or Model VJC cantilever for extended service in abrasive slurry applications.

Model JCU Submersible Slurry Pump

- Capacities to 4,000 GPM (910 m³/h)
- Heads to 210 feet (65 m)
- Temperatures to 194° F (90° C)
- Solids to 2 inches (50 mm)

Features

- Adjustable impeller clearance
- Permanently lubricated bearings
- Automatic reset thermostats
- Tandem mechanical seals
- Optional slide rail assembly

Model VJC Vertical Cantilever Slurry Pump

- Capacities to 7,500 GPM (1,703 m³/h)
- Heads to 240 feet (73 m)
- Temperatures to 200° F (93° C)
- Pit depths to 11 feet (3.4 m)
- Solids to 2 1/4 inches (57 mm)

Features

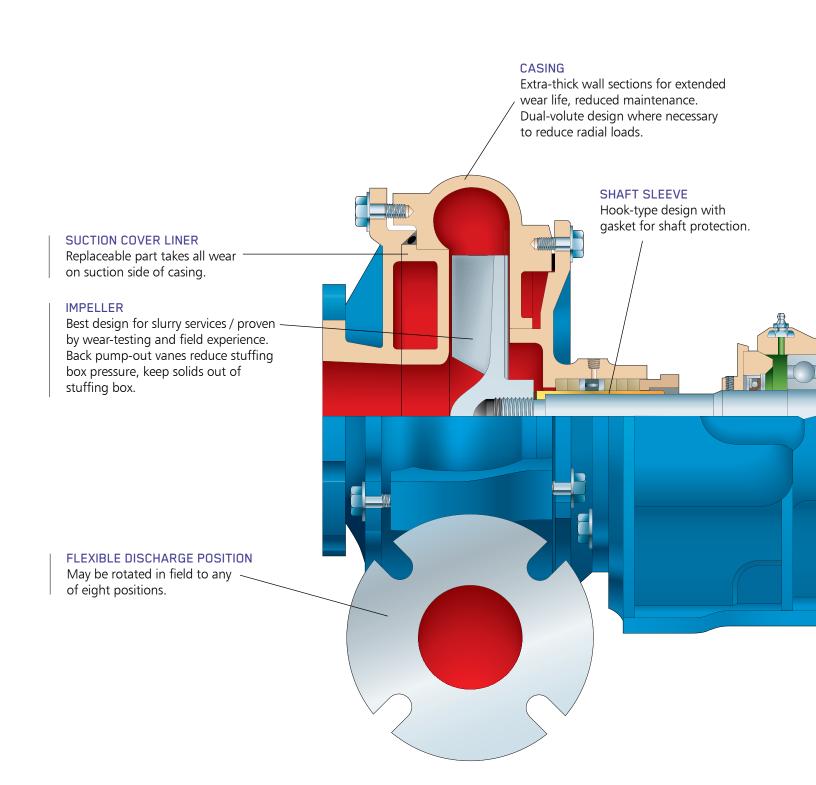
- Cantilever design
- External impeller adjustment
- Heavy-duty bearings
- **Bottom suction**
- Removable suction liner

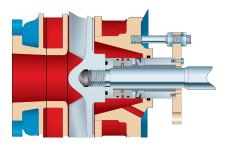


Model JCU

Model JC Medium-Duty Slurry Pump

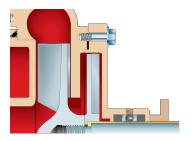
Design Features for Wide-Range of Corrosive / Abrasive Services





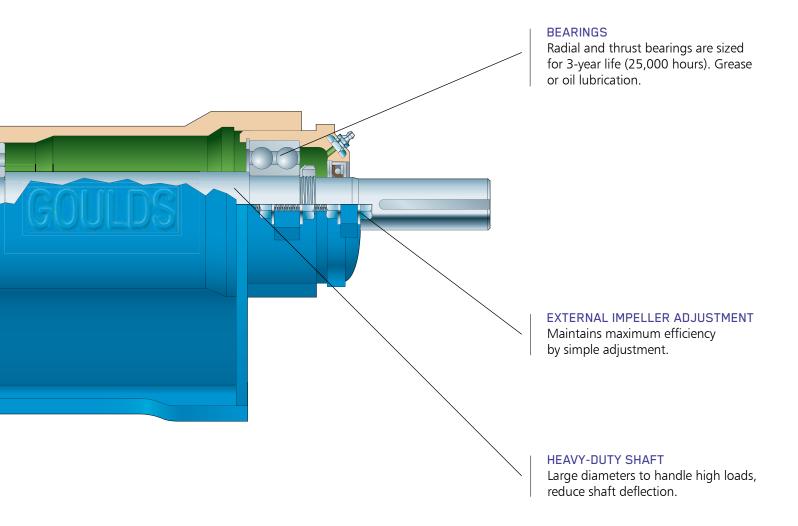
MECHANICAL SEAL

Expeller option for absolute dry box sealing. No outside flush required.



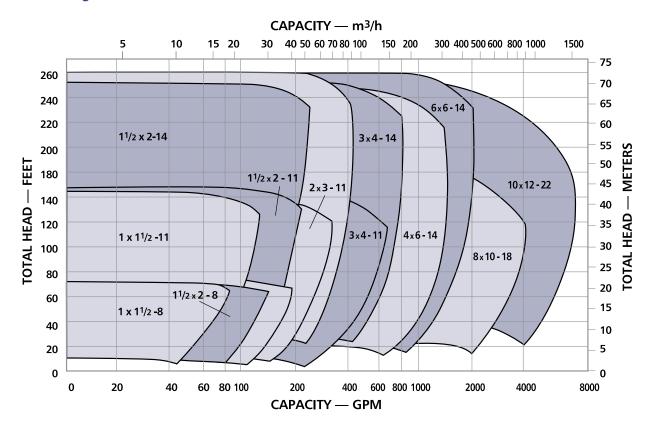
DYNAMIC SEAL

Expeller option for absolute dry box sealing. Often eliminates flush requirements.



JC

Hydraulic Coverage



Proven Performance

Goulds Model JC is used in many industries on the most demanding slurry pump applications. The versatility of the product combined with rugged design and ease of maintenance have satisfied thousands of users' requirements for a pump that has it all.







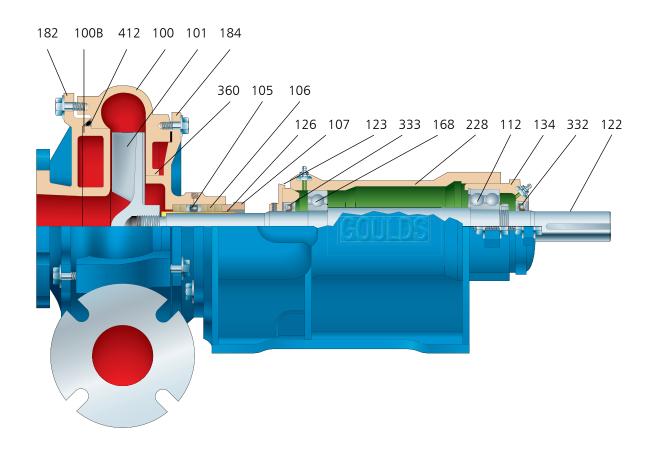
Materials of Construction

Item	Description	Material							
Number	·	Cast Iron	HC600	316SS	CD4MCuN				
100	Casing	Cast Iron	HC600	316SS	CD4MCuN				
100B	Suction Cover Liner	Cast Iron	HC600	316SS	CD4MCuN				
101	Impeller	Cast Iron	HC600	316SS	CD4MCuN				
105	Lantern Ring	PTFE							
106	Packing		Graphitized Po	olymer Fiber					
107	Gland		316	SS					
112	Thrust Bearing		Stee	el					
122	Shaft		Steel 1	144					
123	Deflector	Cast Iron							
126	Shaft Sleeve	41	6SS	316SS	C-20				
134	Bearing Housing	Cast Iron							
168	Radial Bearing	Steel							
182	Suction Cover	Cast	t Iron	316SS	CD4MCu				
184	Stuffing Box Cover	Cast	t Iron	316SS	CD4MCu				
184	Stuffing Box Cover (Expeller)	HC	600	316SS	CD4MCu				
184A	TaperBore Seal Chamber	Cast	t Iron	316SS	CD4MCu				
332	Grease Seal (Outboard)	Buna-N							
333	Grease Seal (Inboard)	Buna-N							
228	Bearing Frame	Cast Iron							
262	Expeller	HC	600	316SS	CD4MCu				
353	Mechanical Seal	As Required							
412	O-ring, Suction Cover to Casing	Buna-N							

Construction Details All dimensions in inches and (mm).

		Pump				Stuffing Box								
Pump Size	Frame	Max. Casing Thickness	Max. Solids Size	Working Pressure Cast Iron	Working Pressure HC600 &316SS	Max. HP (kW)	Shaft Dia. at Coupling	Bore	Depth	Sleeve OD	Shaft Dia. under Seal	Packing Size	No. of Rings	Seal Water Req'd
$1 \times 1\frac{1}{2} - 8$ $1 \times 1\frac{1}{2} - 11$		275 (40)	.5 (12)											
1½ × 2 - 8 1½ × 2 - 11	1J	375 (10)	.75 (19)			25 (19)	1.375 (35)	2.625 (67)	2.938 (75)	1.875 (48)	1.437 (37)	3/8 (9.5)	5	.5 GPH
2 × 3 - 8 2 × 3 - 11		.56 (15)	.875 (22)											
1½ × 2 - 14		.375 (10)	.75 (19)			60	1.625	2.94	2 020	2 125	1.75	2/0		
2 × 3 - 14	2J	.56 (15)	.875 (22)	110 PSIG	127 PSIG	(45)	(41)	(75)	2.938 (75)	(54)	(45)	3/8 (9.5)	5	.5 GPH
3 × 4 - 11			1.125	(758 kPa)	(876 kPa)	(43)	(+1)	(73)	(73)	(34)	(43)	(3.3)		
$3 \times 4 - 14$ $4 \times 6 - 14$ $6 \times 6 - 14$ (LS)	3J	.62 (16)	(28) 1.38 (35)	(, 50 a,	(0,01.1.4)	125 (93)	2.125 (54)	3.5 (89)	2.938 (75)	2.75 (70)	2.25 (57)	3/8 (9.5)	5	.75 GPH
6 × 6 - 14 (HS) 3 × 6 - 18	4)		1.5 (38) .62 (16)			200 (150)	2.625 (67)	4.375 (111)	3.75 (95)	3.375 (86)	2.875 (75)	1/2 (13)	5	1 GPH
8 × 10 - 18	4)	.75 (19)	2.25 (57)			400 (300)	300 (76)	5.375 (137)	4.5 (245)	4.125 (105)	3.44 (88)	5/8 (16)	5	1.5 GPH
10 × 12 - 22	5J					(300)		(137)	(245)	(105)	(00)	(10)		GPH

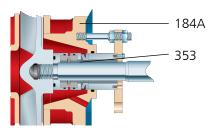
Sectional View



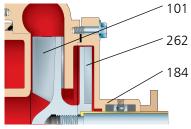
Materials of Construction

Description	Specification
Cast Iron	ASTM A48
HC600	ASTM A532-Class A Hardened
316SS	AISI 316 or ASTM A743 CF8M
416SS	AISI 416

Description	Specification				
CD4MCuN	ASTM A743 CD4MCuN				
C-20	ASTM A296 CN7N				
Polymer	Graphitized Polyer Fiber				
PTFE	Glass-filled PTFE				

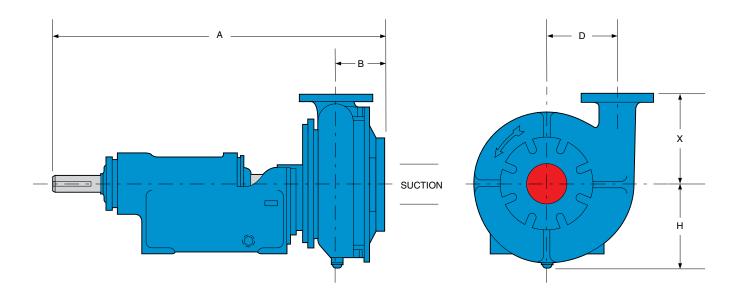


Mechanical Seal with TaperBore™ PLUS Seal Chamber



Dynamic Seal

Dimensions



DIMENSIONS										
Pump Size	Frame	А	В	D	Н	Х	Lbs./(kg)			
1 x 1 ¹ /2 - 8		31.00 (787)	3.00 (76)	4.44 (113)	5.75 (146)	6.25 (159)	190 (87)			
1 x 1 ¹ /2 - 11		31.00 (787)	3.00 (76)	5.88 (149)	6.25 (159)	7.00 (178)	220 (100)			
11/2 x 2 - 8	1)	31.50 (800)	3.50 (89)	5.00 (127)	6.38 (162)	6.50 (165)	195 (89)			
1 ¹ /2 x 2 - 11		31.50 (800)	3.50 (89)	6.44 (164)	7.88 (200)	7.50 (191)	230 (105)			
2 x 3 - 8		32.00 (813)	4.00 (102)	5.13 (130)	6.75 (171)	6.88 (175)	205 (94)			
2 x 3 - 11		32.00 (813)	4.00 (102)	6.56 (167)	8.75 (222)	8.00 (203)	245 (112)			
11/2 x 2 - 14		31.50 (800)	3.50 (89)	7.88 (200)	9.38 (238)	8.25 (210)	315 (144)			
2 x 3 - 14	2J	32.00 (813)	4.00 (102)	8.06 (205)	8.25 (210)	9.00 (229)	330 (150)			
3 x 4 - 11		32.75 (832)	4.75 (121)	6.88 (175)	9.12 (232)	8.63 (219)	300 (137)			
3 x 4 - 14		36.75 (933)	4.75 (121)	8.38 (213)	10.62 (270)	9.25 (235)	440 (200)			
4 x 6 - 14	3J	37.25 (946)	5.25 (133)	9.13 (232)	11.62 (295)	10.50 (267)	475 (216)			
6 x 6 - 14 (LS)		38.38 (975)	5.63 (143)	9.50 (241)	13.62 (346)	12.50 (318)	590 (269)			
3 x 6 - 18		42.26 (1073)	6.00 (152	11.50 (292)	12.19 (310)	12.00 (305)	805 (366)			
6 x 6 - 14 (HS)	4J	42.12 (1070)	5.63 (143)	9.50 (241)	13.62 (346)	12.50 (318)	710 (323)			
8 x 10 - 18		46.38 (1178)	9.63 (245)	13.00 (330)	18.00 (457)	16.50 (419)	1020 (464)			
10 x 12 - 22	5J	50.62 (1286)	9.63 (245)	17.00 (432)	21.88 (556)	20.00 (508)	1800 (819)			

All dimensions in inches and (mm). Not to be used for construction.

Locations



For more information Please Visit: www.gouldspumps.com | www.ittproservices.com



- An ITT Brand

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