

CECO Dean Pump

BULLETIN C -1.2.22.1

SERIES CNV

VERTICAL INLINE PUMPS

TEMPERATURES TO 220°F (105°C)

WORKING PRESSURES TO

275 P.S.I.G. (1,900 kPa)



Dean Pump Series CNV Vertical Inline Pumps

Heavy Duty Close Coupled Design

NEMA standard JM
electric
able in
from s

Close coupled design. No alignment
required.

ts

e shaft
teets

anical

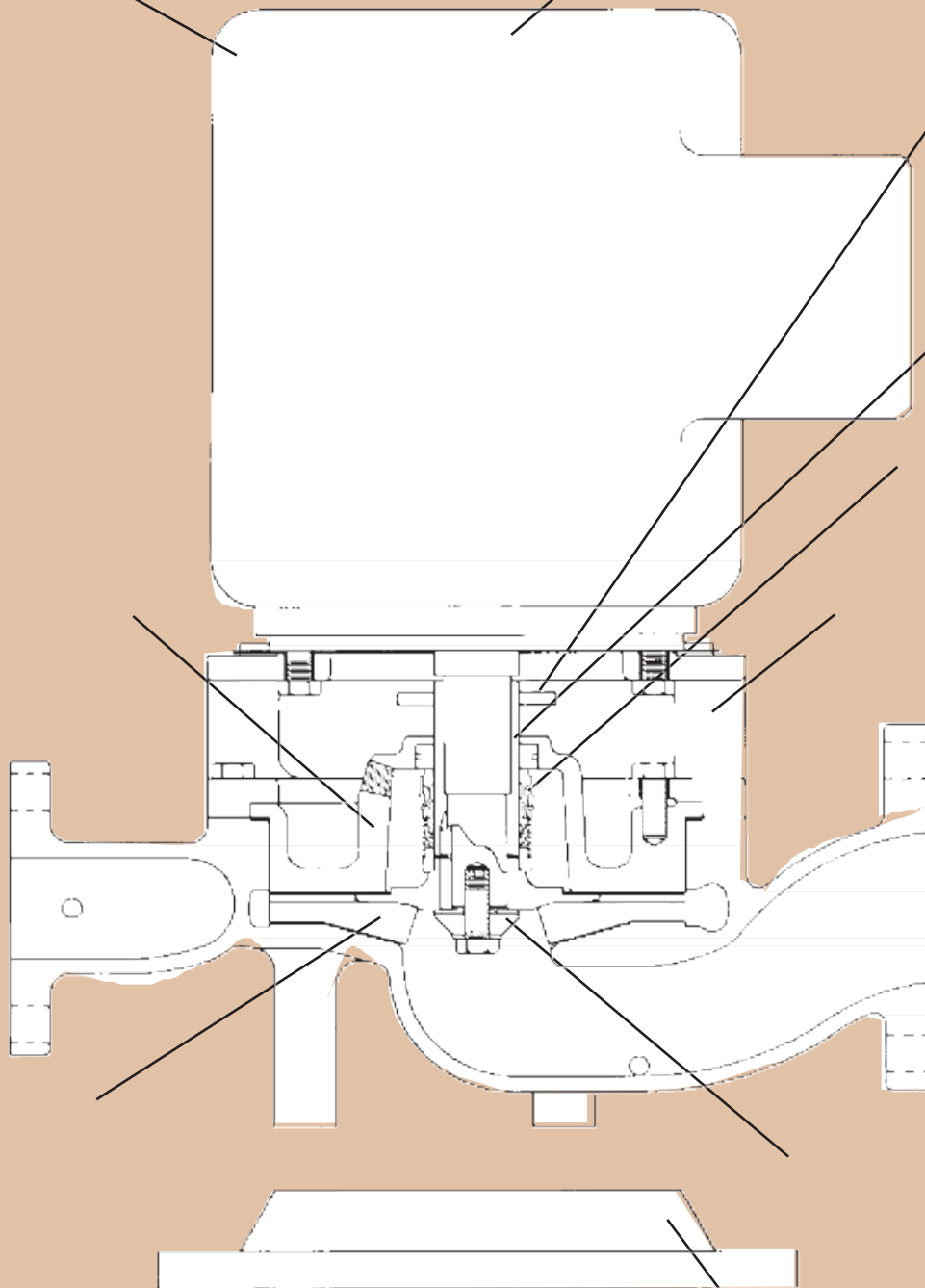
La
ber
cir
m

adapter
ng to
seal life.

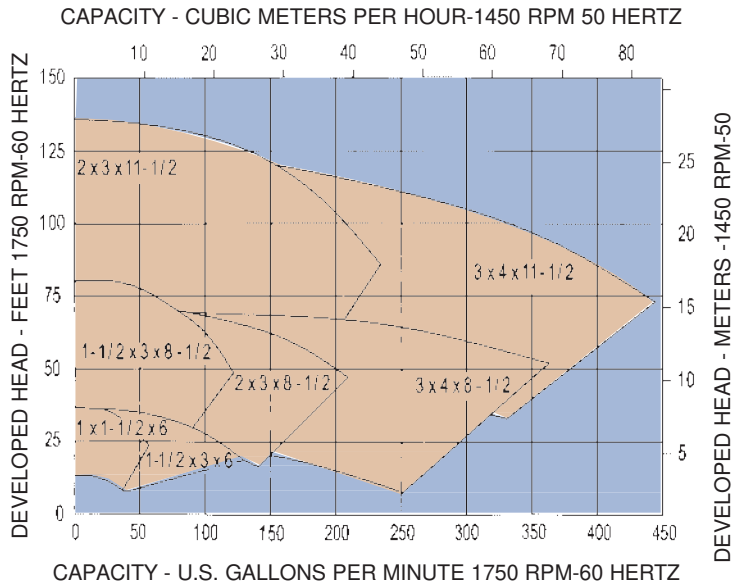
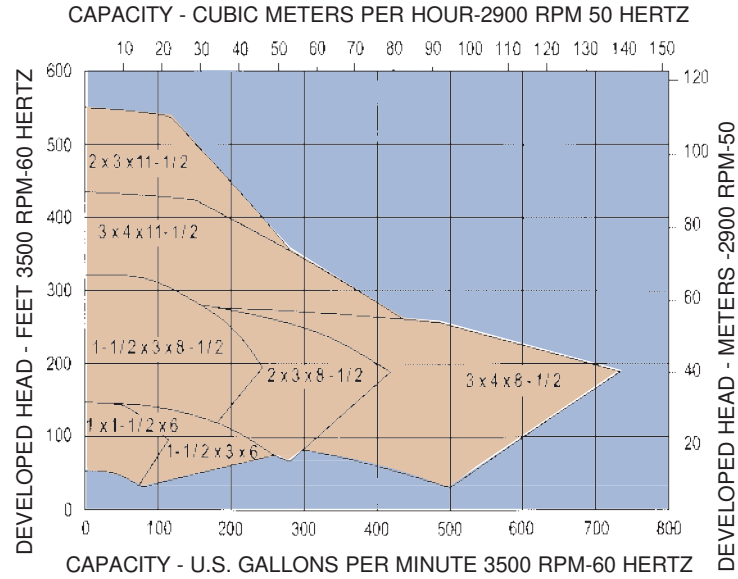
O
c
s

with
is

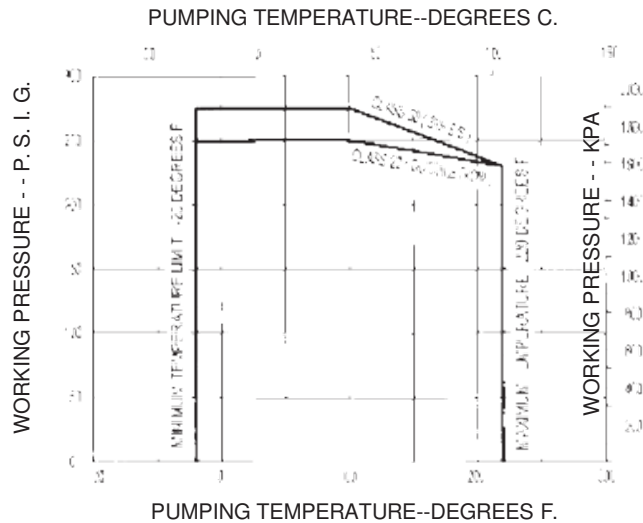
Optional mounting base
required for motors over 10HP
or thin-wall pipe systems.



Head /Capacity Range Charts



Working Pressure vs. Pumping Temperature

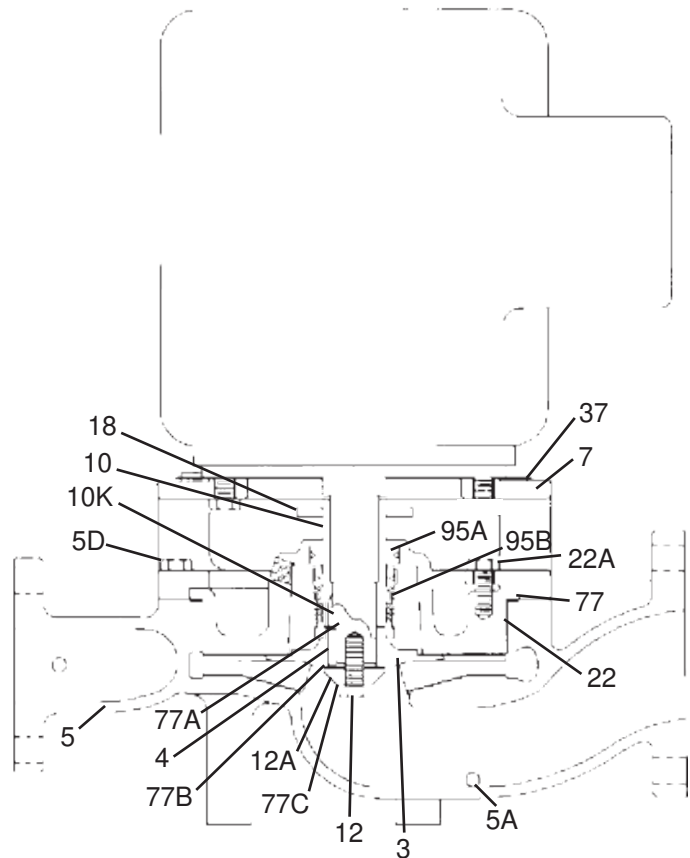


Parts List and Materials of Construction

PART NO.	PART NAME	Ductile Iron (CLASS 22)	316SS (CLASS 50)
3	Impeller	Cast Iron (1)	316 S/S (11)
4	Impeller Key	Steel (4)	Steel (4)
5	Casing	Ductile Iron (5)	316 S/S (11)
5A	Casing Drain Plug	Steel (4)	316 S/S (2)
5D	Casing Capscrew	Steel (12)	Steel (12)
7	Adapter Cradle	Cast Iron (1)	Cast Iron (1)
10	Shaft Sleeve	316 S/S (2)	316 S/S (2)
10K	Shaft Sleeve Key	Steel (4)	Steel (4)
12	Impeller Bolt	Steel (12)	316 S/S (2)
12A	Impeller Washer	Steel (4)	316 S/S (2)
18	Splash Collar	Rubber (7)	Rubber (7)
22	Casing Back Cover	Cast Iron (1)	316 S/S (11)
22A	Casing Back Cover Screw	Steel (4)	Steel (4)
37	Clearance Shim	Steel	Steel
56	Casing Foot-Optional	Cast Iron (1)	Cast Iron (1)
77	Casing Gasket	Fiber (10)	Fiber (10)
77A	Gasket-Impeller/Sleeve	Fiber (10)	Fiber (10)
77B	Gasket-Impeller/Washer	Fiber (10)	Fiber (10)
77C	Gasket-Impeller/Bolt	Teflon (9)	Teflon (9)
95A	Mechanical Seal Stationary	Optional	Optional
95B	Mechanical Seal Rotary	Optional	Optional

Material Specifications (refer to numbers in parenthesis)

(1) Cast Iron	(9) Glass Filled Teflon™ of E.I. DuPont Co
(2) AISI 316 S/S	(10) Aramid Fiber Sheet
(4) AISI 1020 Steel	(11) 316 S/S - ASTM A744 Grade CF-8M
(5) Ductile Iron - ASTM A395	(12) ASTM A449
(7) Buna "N" Rubber	



Mechanical Design Specification



Direction of Rotation from Motor End	CW
Bearings in Motor	Ball Type
Bearing Lubrication	Grease
Casing Thickness, Minimum	5/16"
Flanges - A.N.S.I., Class:	
Ductile Iron (CL 22), 316 S/S (CL 50)	150
Facing	FF
Finish	125 Ra
Impeller Balance	Single Plane Dynamic Balance
Allowable Pump Suction Pressure	100 psig
(2 year minimum thrust bearing life)	

	CNV206	CNV236
Horsepower Rating - max. rated		
Driver HP not to exceed @ 1750 rpm	5 HP	25 HP
@ 3500 rpm	10 HP	50 HP
Max. Hydrostatic Test Pressure		
Ductile Iron (CL 22), and 316 S/S (CL 50)	430 psig	430 psig

Specifications are subject to change without notice.

Dean Pump Series CNV Vertical Inline Pumps

Industrial Performance

- Capacities to 700 GPM (125 m³/h)
- Heads to 550 feet (170 m)
- Temperatures to 220°F (105°C)
- Pressures to 275 P.S.I.G. (1,900 kPa)

Industrial Features

- Fully open impeller - first choice for tough chemical services
- Inline mounting - optional mounting base available
- Close coupled motor - no alignment required
- Safety - no exposed rotating parts

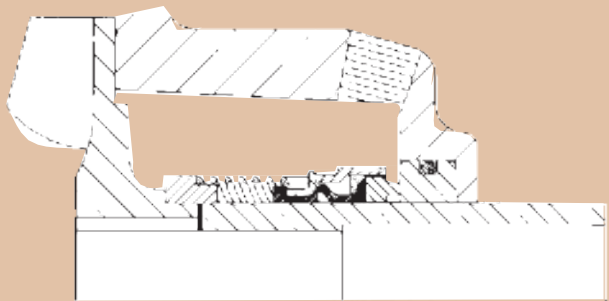
Applications

- Utility Services
- Transfer Services
- Chemical Processing
- Filter Feed

Reasons To Own Series CNV Pumps

- A less expensive alternative to coupled inline pumps
- A less expensive alternative to horizontal pumps
- Easy to install
- Easy to maintain
- Less space than horizontal pumps

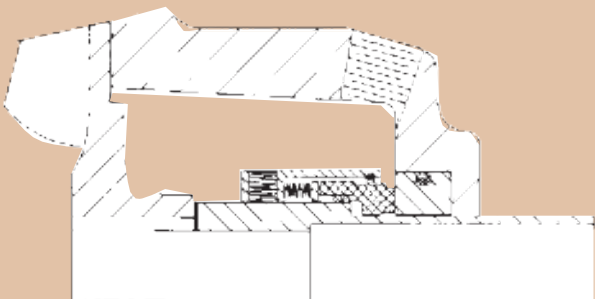
Mechanical Seal Alternatives



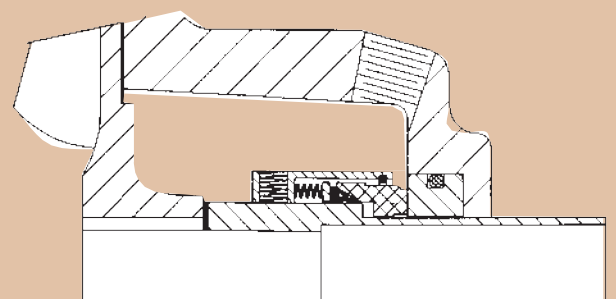
Type 1



Type 9

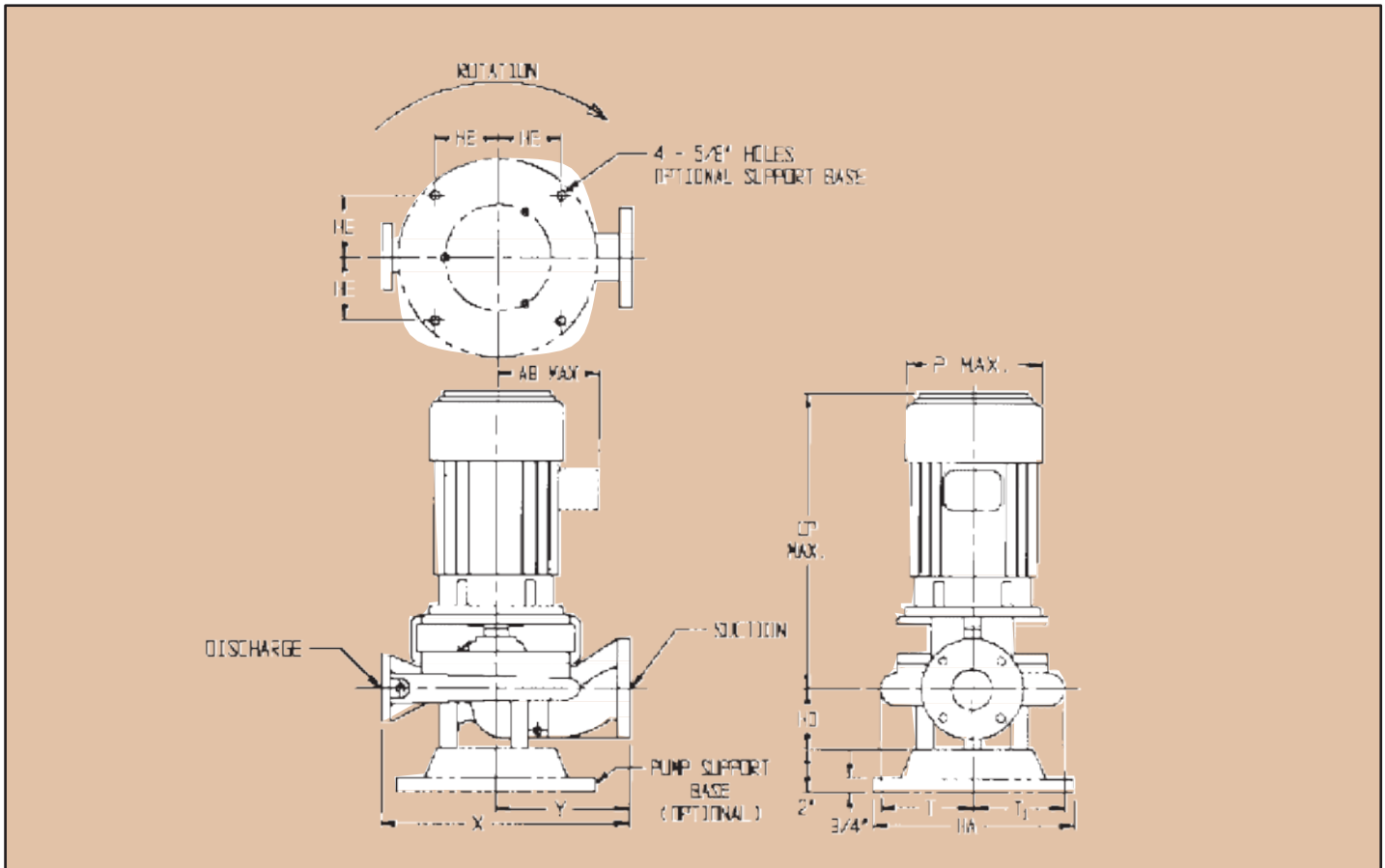


Type 8B1



Type 9B

Dimensions Series CNV



Dimensions Determined by Pump

Series	Pump Size	Discharge			Suction			HA	HD	HE	T	T1	X	Y
		Size	Class	Face	Size	Class	Face							
CNV200	1X1.5X6	1	150	FF	1.5	150	FF	11	2.37	3.5	4.37	4.37	12.5	6.5
	1.5X3X6	1.5			3			11	2.87	3.5	4.62	4.37	14.5	8
CNV230	1.5X3X8.5	1.5	150	RF	3	150	RF	13	4.5	4.12	5.75	5.5	18.5	10
	2X3X8.5	2			3			13	4.5	4.12	6.62	5.75	20.5	11
	3X4X8.5	3			4			13	5.5	4.12	7.75	5.5	24	13
	2X3X11.5	2			3			17	4.5	5.5	7.62	6.5	22.5	12

Dimensions Determined by Electric Motor

Frame Size	CP (MAX)	P (MAX)	AB (MAX)
140JM	21.5	9	9.25
180JM	22.5	10.5	10.75
210JM	26.25	12.75	11.37
250JM	29.75	29.75	12.5
280JM	32	32	14.5
320JM	33.75	33.75	17.5

All dimensions are in inches.

CECO Dean Pump

6040 Guion Road • Indianapolis, IN 46254
 P: 317.293.2930 • TOLL-FREE: 800.801.9265 • F: 317.297.7028
 infoFHS@onececo.com • <https://www.cecoenviro.com/dean-pump>

