

CENTRIFUGAL PROCESS PUMPS - API 610 Series : CCP



Suction / Delivery Size	Upto 250 MM / 200 MM
Capacity	Upto 900 M3 / HR
Head	Upto 225 Mtr.
Working Pressure	16 to 30 KG / Cm2
Temperature	- 50° C to + 350° C.
Direction Of Rotation	- 50° C to + 350° C.
Drive / Prime Mover	- 50° C to + 350° C.
Flanges	ANSI B16.1, CL125 Flat Face : For MOC : C.I / Bronze ANSI B16.5, CL 150 Raised Face : For Special Metals Viz. St. Steel, Cast Steel etc. Drilling as per DIN ASA, BS etc. (Optional)

APPLICATION :

- 🌀 Petro - Chemical Industries & Refinery.
- 🌀 Thermic Fluids / Liquefied Gases. Condensate And Viscous Liquids.
- 🌀 Oil & Food Industries, Fertilizers / Salt / Glass Plants.
- 🌀 Power Projects / Steel Plants / Paper Industries.
- 🌀 For Hand. Corrosive Acids, Alkalies Caustic & Hydro Carbons.

VERSATILITY OF "CCP" SERIES PUMP :

- 🌀 Multiple Configuration, Optimum Spare - Parts Interchangeability
- 🌀 Reliable Performance In Various Application.
- 🌀 Easy Installation / Dis-mentaling Of Pump Assembly.

BENEFITS :

- 🌀 Excellent Performance Of "CCP" Series Pumps.
- 🌀 Efficient Operation, Low NPSH®, Tough Design.
- 🌀 Vibration Free Performance, Low Noise.

VERSATILITY OF "CCP" SERIES PUMP :

- 🌀 Sturdy Construction, Back Pull Out Design shaft designed for Higher Loads
- 🌀 Minimizes Deflections.
- 🌀 Prolong Lift Span, Longer Bearing Life.

MATERIAL OF CONSTRUCTION :

Pump Casing / Casing Cover	Cast Iron / Cast Steel / Stainless Steel / Duplex Steel & Others as per Req.
Impellers / Wear Ring / Wear Plate	Cast Iron/ Bronze/ Cast Steel/ Stainless Steel/ Chrome Steel / Duplex
Shaft / Sleeve	Carbon Steel / Stainless Steel / Duplex Steel / S.S. / Bronze
Bearing Housing / Bearing Cover	C.I FG 260
Packing Details	Asbestos Or Teflong /graph oil Gland Packing as Std. Supply
Mechanical Seal	Carbon vs Ceramic or Tc vs Tc or Any Other On Request

CONSTRUCTION / FEATURES :

“CCP” series pumps are single stage single suction horizontal shaft type process pumps. They are made in accordance with DIN – 24256 & ISO – 2858 & generally conforms to API 610 (7th edition). The design of back pull out type & large variety of models are available at 1450 RPM & 2900 RPM at 50 Hz & 1750 RPM & 3500 RPM at 60 Hz.

IMPELLER :

The impellers are of enclosed type and semi - open type impellers can also be supplied hydraulic balancing of impellers. Is achieved either by back vanes or balancing holes reliable fixing of the impellers on shaft is achieved by using helicoil insert under impeller nut to improve NPSH performance, inducer can be supplied.

CASING :

The casing has axial suction & top center line delivery. Smooth hydraulic pressure ensures high efficiency. Normal designs are for foot mounted pumps & center line mounted for special applications are also available.

PUMP SHAFT :

The shaft is supported by two antifriction bearings to take residual axial thrust & prevent axial float or radial runout is fully protected from the liquid handled by means of a shaft sleeve and gaskets between impeller nut, impeller hub & shaft sleeve.

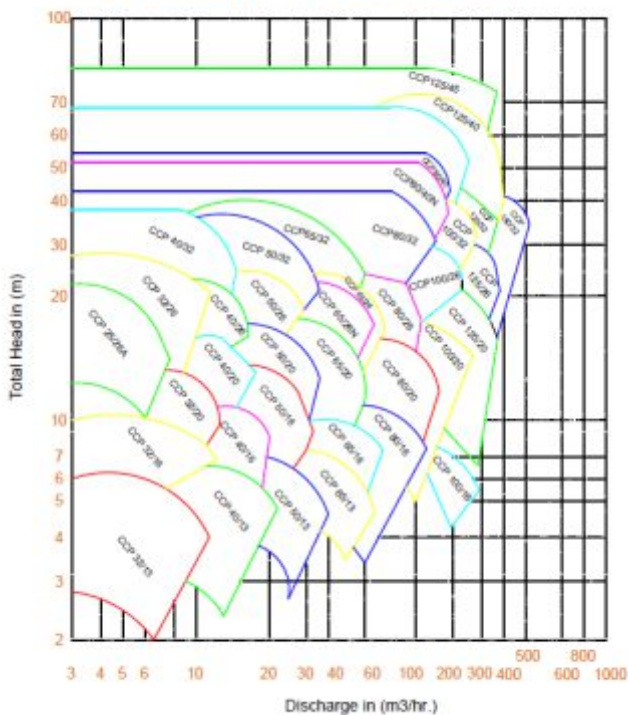
STUFFING BOX :

The stuffing box is sealed by gland packing or by mechanical seal. Conversion from gland packing to mechanical seal is achieved by changing some standardized parts. Re- machining of stuffing box is not necessary. Stuffing box cooling is provided for operating temperature 105° Cent for gland packing & 140° Cent. for mechanical seal fitted pumps.

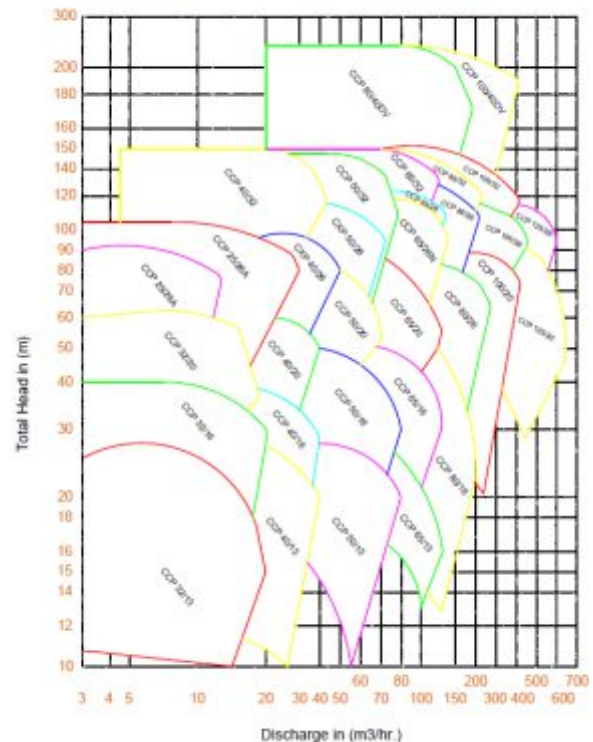
BEARINGS :

The bearings are oil lubricated for high temperature (above 180° Cent.) application, bearing oil cooling arrangement is provided. All pumps are provided with reinforced bearing arrangement as standard supply.

Family Curves of CCP Pump at 1450 rpm-50Hz



Family Curves of CCP Process Pump at 2900 rpm-50Hz



PROSERVE
PUMPS & ENGINEERING
Manufacturer of Industrial Pumps & Spares

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- ☎ 98258 48669 / 7777 904218
- ✉ info@proservepumps.com, proserve.pumps@yahoo.in
- 🌐 www.proservepumps.com

PERFORMANCE FAMILY FOR CCP TYPE PUMPS

DESCRIPTION	QTY	PART DESCRIPTION	MATERIAL SPECIFICATION
BSP 1/4" 1/2"			
C - CIRCULATION LINE CONN. D - CASING DRAIN			
A - PRESSURE GAUGE CONNECTION B - SUC GAUGE /VACUUM EQUALISING CONNECTION			
INTERNAL CIRCLIP	4805		SPRING STEEL
LOCK WASHER FOR BEARING NUT	4115	02	CS IS 1570 - 10 C 4
SAKRET FOR IMF - NUT	6620	01	IS 2713 IM1 (CHAMP 54)
SAKRET - SLEEVE & IMP	5195	01	IS 2713 IM1 (CHAMP 54)
SAKRET - RING COVER O.S	5140	01	IS 2713 IM1 (CHAMP 54)
SAKRET FOR CASING COVER	5110	02	IS 2713 IM1 (CHAMP 54)
FELT RING	6620	01	FELT
HELICOL INSERT	4795	02	BT STEEL
BREAKE NUTS	4415	01	IS 1977 CLS - COP
SLAND PACKING	4300	02	CHAMPION 1002 OR EQ.
LOCK NUT	3360	01	IS 1977 CL - E
KEY FOR COUPLING	3210	01	CS IS 1570 GR P3 40 C8
BEARING COVER P.S	2715	01	CI 18-215 OR P3 260
BEARING COVER O.S	2705	01	CI 18-215 OR P3 260
CYLINDRICAL ROLLER BEARING 507 IM1 TYPE OR EQ.	2640	01	STEEL
SHIM FOR IMF AND CONTACT BALL BEARING 507 OR EQ.	2630	01	STEEL
SUPPORT FOOTRACE	2515	01	MS IS 1075 GR BT 34
BEARING HOUSING	2400	01	CI 18-215 OR P3 260
STUFFING BOX BUSH	3500	01	BT ST ASTM A216 TYPE 316
IMPELLER NUT	3300	01	BT ST ASTM A216 TYPE 316
KEY FOR IMPELLER	3300	01	BT ST ASTM A216 TYPE 316
SHAFT SLEEVE	3110	01	BT ST ASTM A216 TYPE 316
LIQUID DEFLECTOR	2945	01	RUBBER
MESH SEAL COVER	2315	01	BT ST ASTM A216 TYPE 316
MESH SEAL	2305	01	C VS TO
CASING COVER	2200	01	CI 18-215 OR P3 260 N 2 %
IMPELLER RING SUC	1920	01	BT ST ASTM A216 GR CF 8M
CASING RING SUC	1800	01	BT ST ASTM A216 GR CF 8M
PUMP IMPT	1800	01	BT ST ASTM A216 TYPE 316
ENCLOSED IMPELLER	1510	01	BT ST ASTM A216 GR CF 8M
PUMP CASING	0500	01	CI 18-215 OR P3 260 N 2 %

PART NO.	QTY	PART DESCRIPTION	MATERIAL SPECIFICATION
PO. NO. :-			
CLIENT :-			
DRAWN BY	D.B. GAJJAR		
CHECKED BY			
APPROVED BY			
DATE	2010		
SCALE	1:1		
FILE NO			
DIMENSION ARE IN MM	REF DRG	REV. NO	DRAWING NO
		0	R0

PART NO.	QTY	PART DESCRIPTION	MATERIAL SPECIFICATION
E 403	01	SPACER	RUBBER
E 205	02	SPACER	CI
E 206	01	M COUPLING	CI
E 207	01	P COUPLING	CI

PART NO.	QTY	PART DESCRIPTION	MATERIAL SPECIFICATION
SPACER TYPE LOVE JOY COUPLING SIZE:-			
E 403			
E 205			
E 206			
E 207			

STUFFING BOX SEALING : SELF INTERNAL