

Changing  
**lives**  
for **better**



**DARLING**  
**PUMPS**

*Designing SMART pumping solutions...*

# Slurry Pumps

Engineered to perfection...



CL Series



# CL Series : Features & Dimensions

## Features

**Impeller** - Abrasive resistant Semi open type impeller with hydraulically balanced axial thrust.

**Shaft** - Fully covered heavy duty shaft not exposed to pumpage liquid.

**Motor** - Choice of direct drive and belt driven motors.

**Bearing** - Anti-friction, grease lubricated bearings totally protected against contamination.

No submerged bearings, stuffing box or shaft seal

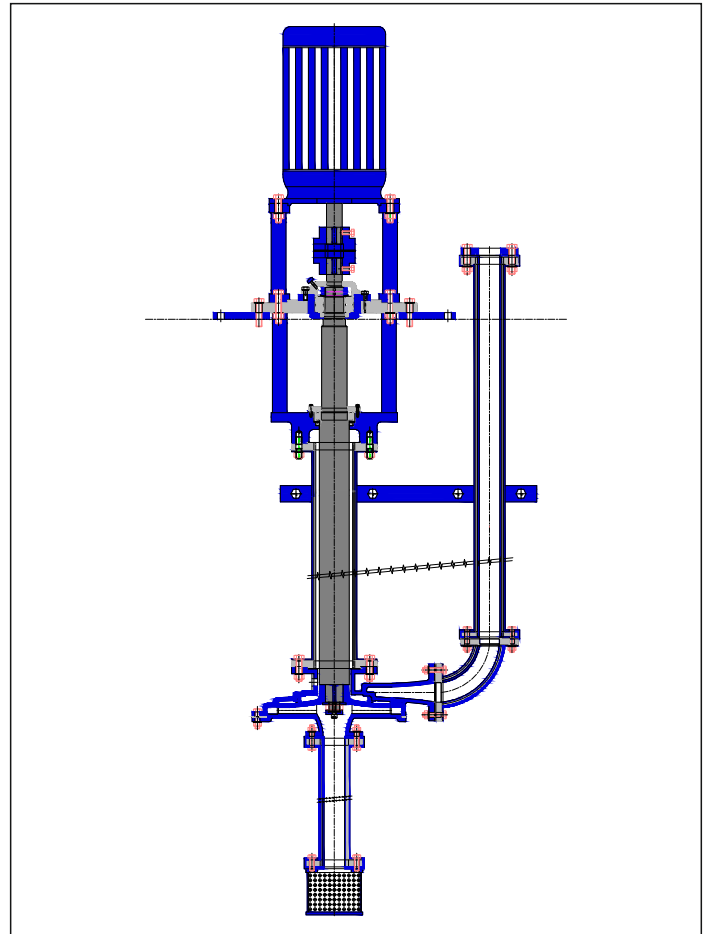
No flushing required through service water pump.

**Wearplate** - Abrasive resistant adjustable wear plate to restore clearances for optimum efficiency.

**Agitator** - Abrasive resistant agitator comes in as a optional arrangement.

**Replaceable Wear Parts** - All wear parts are independently replaceable bringing down the running/maintenance cost drastically.

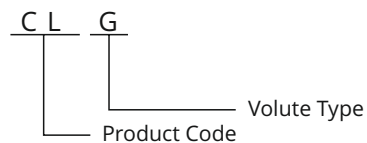
## Cross Sectional View



## Denominations

|                         |                    |
|-------------------------|--------------------|
| Product Code            | CL                 |
| Installation            | Vertical / Mounted |
| Impeller Characteristic | Radial             |
| Discharge Connection    | 50/80/100/150 mm   |

## Nomenclature



## Dimensions

\* without motor

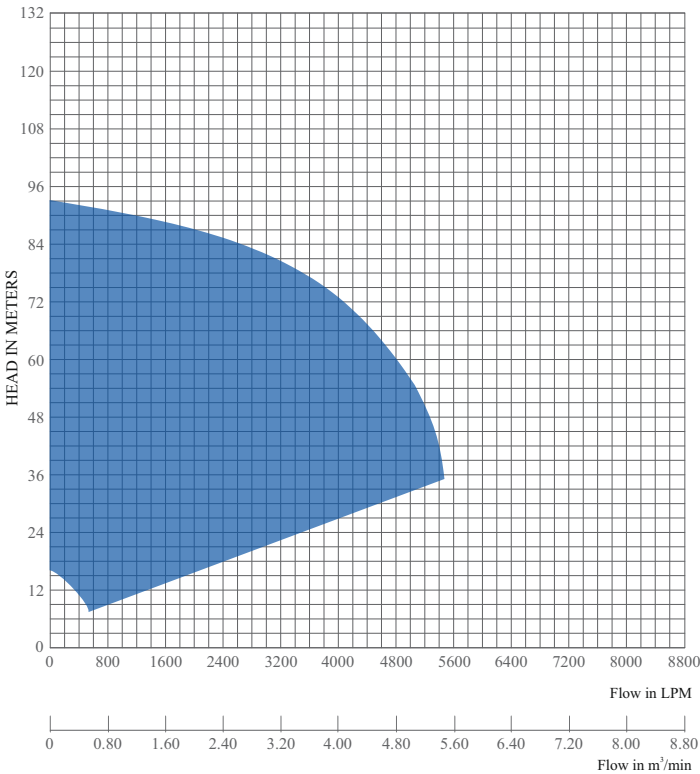
| PUMP MODEL | HP/KW   | OUTLET/DN SIZE<br>(mm) | MIN. SUB.<br>(mm)                 | SOLID PASSAGE<br>(mm) | WIDTH OF THE<br>PUMP (Approx.) | WIDTH OF THE<br>CASING (Approx.) | COLUMN<br>LENGTH** (mm) | NET WT.<br>(kg)*                  |
|------------|---------|------------------------|-----------------------------------|-----------------------|--------------------------------|----------------------------------|-------------------------|-----------------------------------|
| CL-B       | 7.5/5.5 | 50                     | SHALL VARY AS PER SITE CONDITIONS | 5                     | 720                            | 490                              | 1500                    | SHALL VARY AS PER SITE CONDITIONS |
| CL-B       | 10/7.5  | 50                     |                                   | 5                     | 720                            | 490                              | 1500                    |                                   |
| CL-B       | 15/11   | 50                     |                                   | 5                     | 800                            | 565                              | 1500                    |                                   |
| CL-B       | 20/15   | 50                     |                                   | 5                     | 800                            | 565                              | 1500                    |                                   |
| CL-H       | 10/7.5  | 80                     |                                   | 8                     | 650                            | 470                              | 1500                    |                                   |
| CL-H       | 15/11   | 80                     |                                   | 8                     | 650                            | 470                              | 1500                    |                                   |
| CL-H       | 20/15   | 80                     |                                   | 8                     | 650                            | 470                              | 1500                    |                                   |
| CL-J       | 20/15   | 100                    |                                   | 16                    | 840                            | 580                              | 1500                    |                                   |
| CL-J       | 25/18.5 | 100                    |                                   | 16                    | 840                            | 580                              | 1500                    |                                   |
| CL-J       | 30/22   | 100                    |                                   | 16                    | 840                            | 580                              | 1500                    |                                   |
| CL-J       | 40/30   | 100                    |                                   | 16                    | 840                            | 580                              | 1500                    |                                   |
| CL-J       | 50/37   | 100                    |                                   | 16                    | 840                            | 580                              | 1500                    |                                   |
| CL-M       | 50/37   | 150                    |                                   | 25                    | 1035                           | 640                              | 1500                    |                                   |
| CL-M       | 60/45   | 150                    |                                   | 25                    | 1110                           | 715                              | 1500                    |                                   |
| CL-M       | 75/55   | 150                    |                                   | 25                    | 1110                           | 715                              | 1500                    |                                   |
| CL-M       | 100/75  | 150                    |                                   | 25                    | 1110                           | 740                              | 1500                    |                                   |
| CL-M       | 120/90  | 150                    |                                   | 25                    | 1110                           | 740                              | 1500                    |                                   |

\*\* Based on site conditions option of additional tail pipe is also available.

# CL Series : Technical Specifications & Performance

## Performance (Range)\*

(Upto 120 HP / 90M Head / 5350LPM Flow)



**\* We offer fully customised pumps for your specific needs and applications**

## Tech. Specifications\*

|           |                                 |
|-----------|---------------------------------|
| Rating    | : Up to 120HP                   |
| RPM       | : 1450/960 (nominal)            |
| Frequency | : 50Hz                          |
| Supply    | : Three Phase - 415 V           |
| Motor     | : Flange Mounted / Foot Mounted |

## Process Data

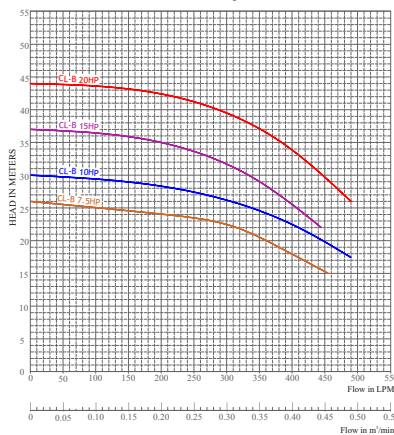
|                     |               |
|---------------------|---------------|
| Liquid Temperature  | Max 90°C      |
| Liquid Density      | 2.8 gm/cc     |
| Solid Passage       | Up to 25 mm   |
| Solid Concentration | 65% by weight |

## Materials\*

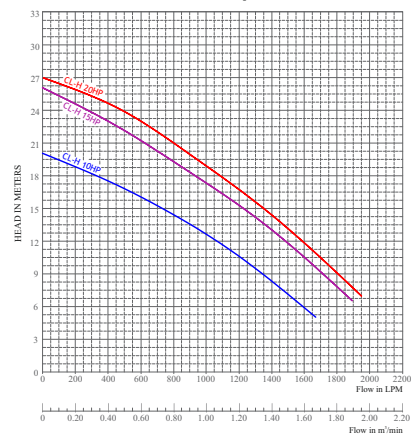
|            |                                    |
|------------|------------------------------------|
| Impeller   | : High Chrome, Ni-Hard, Hardned SS |
| Shaft      | : SS 431                           |
| Casing     | : Hardened SS, High Chrome         |
| Wear Plate | : High Chrome, Ni-Hard             |
| Agitator   | : High Chrome, Ni-Hard             |
| Bearings   | : Grease Lubricated Ball Bearings  |

**\* Option of complete pump in special MoC is also available**

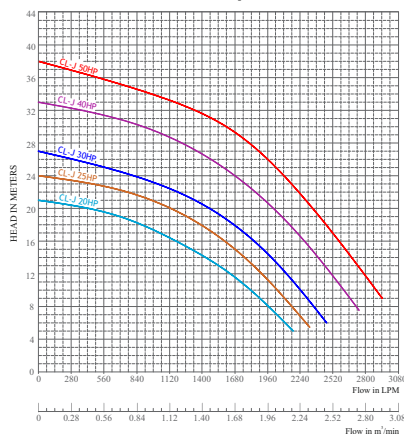
Performance for Pump in DN-50mm



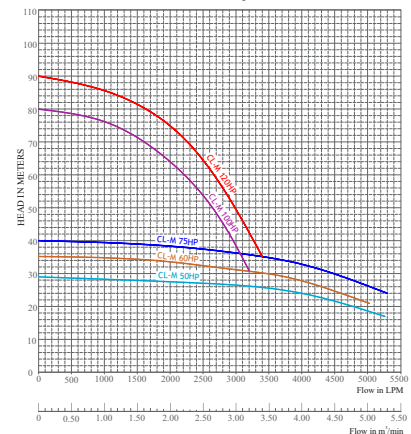
Performance for Pump in DN-80mm



Performance for Pump in DN-100mm



Performance for Pump in DN-150mm



**For pumps above 100HP please consult our application engineer.**

# User Industries and Applications



## Steel Sector

- Beneficiation area • Sintering Plants
- RHMS • Slag slurry in Blast Furnace
- Captive Power Plants
- Wagon Tripler area - CHP
- Jetty area
- Hot water in Blast Furnace
- Coke Oven • HSM • Casters



## Power Sector

- FGD system
- Zero discharge
- Ash handling
- Coal handling
- Cooling Water Ponds cleaning
- Cooling towers
- Utilities slurry pumping



## Mines

- Ore extraction
- Pumping of mines slurry
- Pumping of corrosive & abrasive liquids
- Pumping of highly concentrated liquids
- Stone processing units



## Docks & Marines

- Dry dock cleaning
- Cleaning of Ports and Jetties
- Desalination projects
- River cleaning projects
- Pumping Highly contaminated marine water with muck & sediments

## Options

- We offer complete Slurry pumping solution for all kind of slurries.
- All slurry pumps are customised to cater specific needs of users.
- Specialised range of slurry pumps for pumping deep sea slurries.
- Can be offered for pumping high temp. slurries upto 90°C.
- Option of pontoon mounted slurry pumps also available.
- Option of twin volute casing.
- Customisable jetting arrangement based on weight and concentration of slurry.
- Customisable pump stand for maximum slurry pumping.
- Pumps can be offered in 60Hz on request.

## Recommendations

- Always flush the pump with clean water after use.
- In case of maintenance always use Genuine Spares.
- Use slurry specific slurry hoses for effective slurry handling.
- Ensure use of proper control panel for proper safety & running of Slurry pumps.
- Always ensure that pump is properly earth.

For exclusive range of  
Darling products scan



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