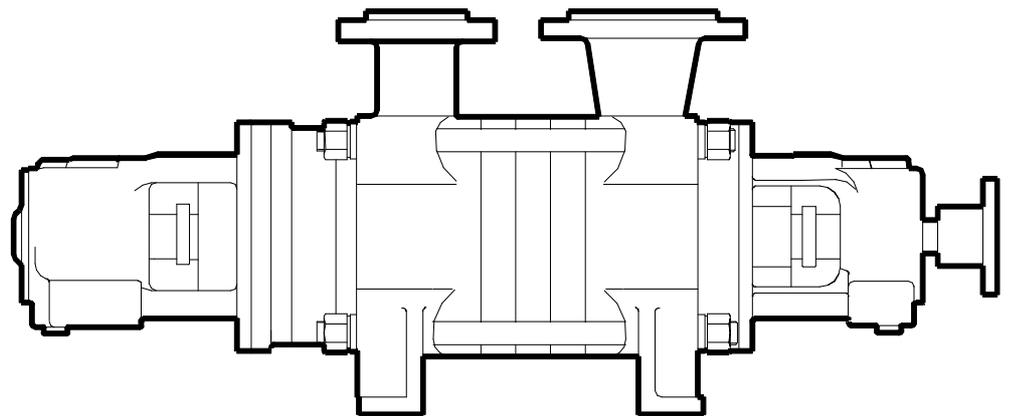
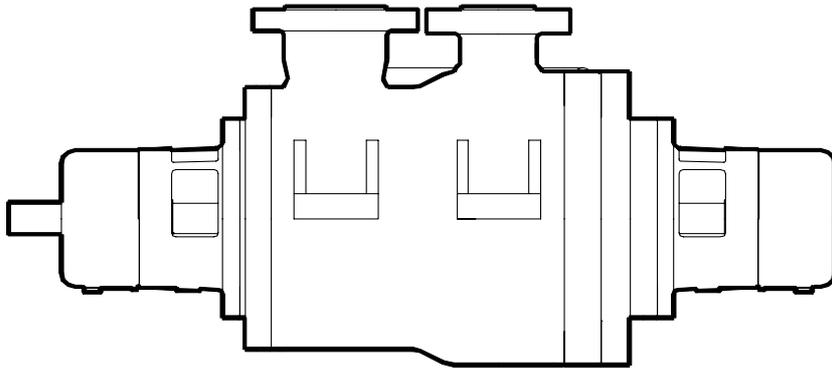




APIFLO-M series Series

Horizontal Multistage Pump

According to API610



Capacity: up to 650m³/h (50Hz) up to 780 m³/h (60Hz)

Head: up to 1200m (50Hz) up to 1728 m (60Hz)

Pressure: APIFLO-M: up to 25 MPa; APIFLO-M2: up to 25 MPa

Temperature: APIFLO-M: -80~+180 °C; APIFLO-M2: -80~+450 °C

Application:

For various pure as well as slightly contaminated, flammable, explosive, nature and high corrosive media. Applied in refineries, petrochemical plants, coal processing/gasification, power plants, general process, etc.



1 General

APIFLO-M

Horizontal ring-section multistage centrifugal pump.

Two mounting types, foot supported and centerline supported, are available depending on operating temperature.

Various positions of the suction and discharge nozzles are available depending on the requirements of customers.

Easy to maintain due to construction.

APIFLO-M2

Horizontal double-casing radially-split, between-bearings, multistage pumps with single entry, centerline supported, impellers individually fixed along the shaft.

Cylindrical barrel and casing cover are firmly fixed and sealed at the discharge end. When operation, it is reliable under high pressure.

The design of double-casing can solve the problem of thermal shock and distortion because of thermal gradients

The symmetrical design makes the repair and maintenance easier and more conveniently.

Discharge and suction nozzle are both upward.

Both APIFLO-M and APIFLO-M2

According to the operating conditions, various types of mechanical seals can be employed.

To meet the requirements of API610, the seal chamber is designed as standard big chamber that can accommodate cartridge type seals, seal chamber jacket and cooling and quench opening are also available.

The auxiliary piping system can be arranged according to the requirements of API 610 and API 682

Each pump size has two groups of hydraulic patterns (marked as impeller groups) to obtain wider high-efficiency region and higher anti-cavitations performance

Thrust is balanced by the configuration of balancing drum together with balancing disc.

Residual thrust is absorbed by angular thrust bearings and radial bearings.

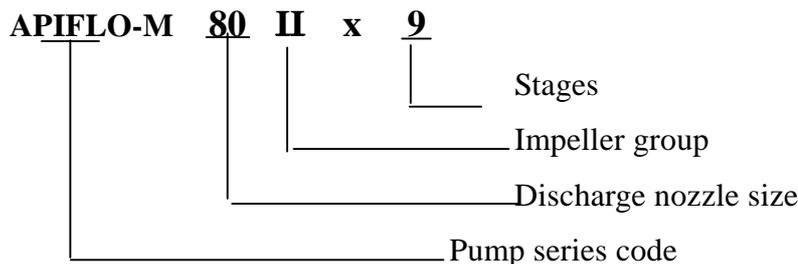
The flanges can be finished per the code of ANSI, DIN, GB and so on, matching flanges also available if required.



2 Rotation direction

Clockwise viewed from drive-end.

3 Designation



Construction features

Matched angular contact thrust ball bearings (3) and the roller bearing (2) ensure the large load capacity to prevent the bearings from heating.

Bearing cover (1) is screwed to the bearing frame, so the axial position of rotors can be easily adjusted.

Bearings are not fixed directly on the shaft by the design of the bearing sleeve (5), so the matched ball bearings can be easily removed when maintenance.

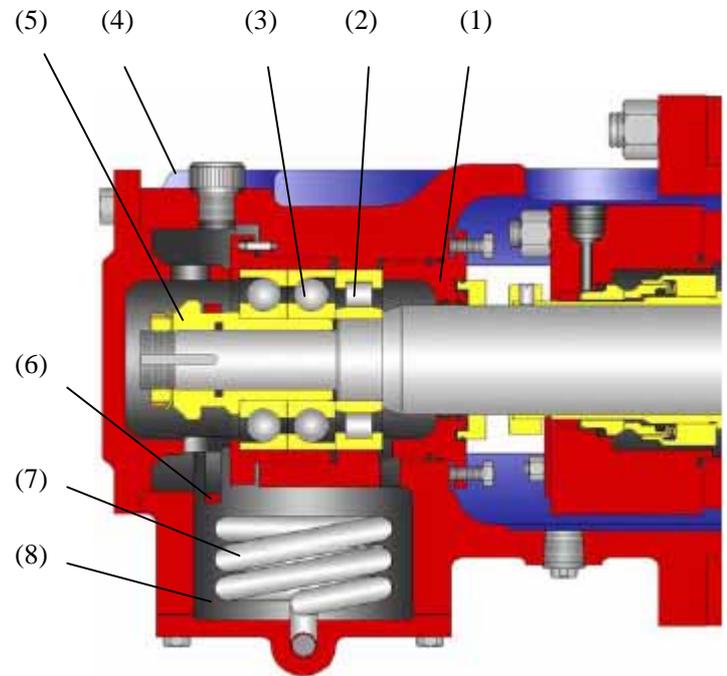
Enlarged oil chamber (8) ensure the timely purge of heat from rotating bearings.

Bearings can be lubricated well by the design of flinger (6).

Finned cooling ribs (4) on the outside wall will enhance the purge of heat.

Cooling coil (7) can be arranged in the oil chamber, the oil can be directly cooled which differ from the conventional bearing cooling method.

The bearing assembly is designed to avoid the influence of seal sleeve, which is more convenient to maintenance.



Non-drive end bearing assembly

1 General

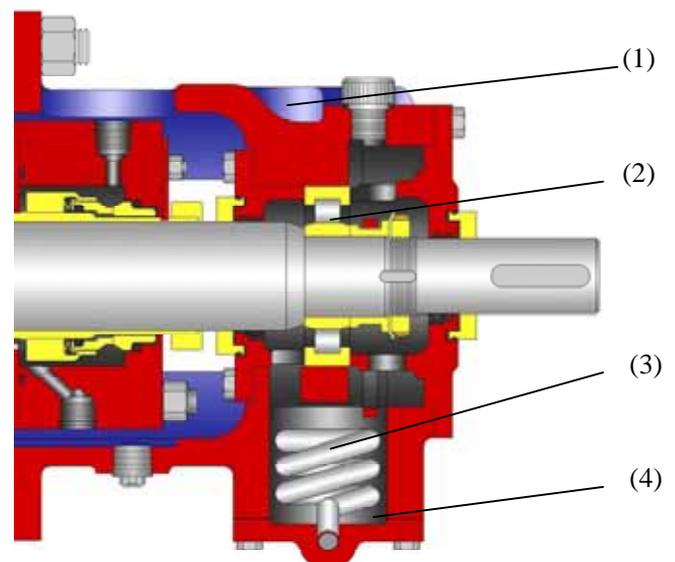
Roller bearing (2) only carries the radial thrust.

Enlarged oil chamber (4) ensure the timely purge of heat from rotating bearings.

Finned cooling ribs on the outside wall will enhance the purge of heat.

Cooling coil (3) can be arranged in the oil chamber, the oil can be directly cooled which differ from the conventional bearing cooling method

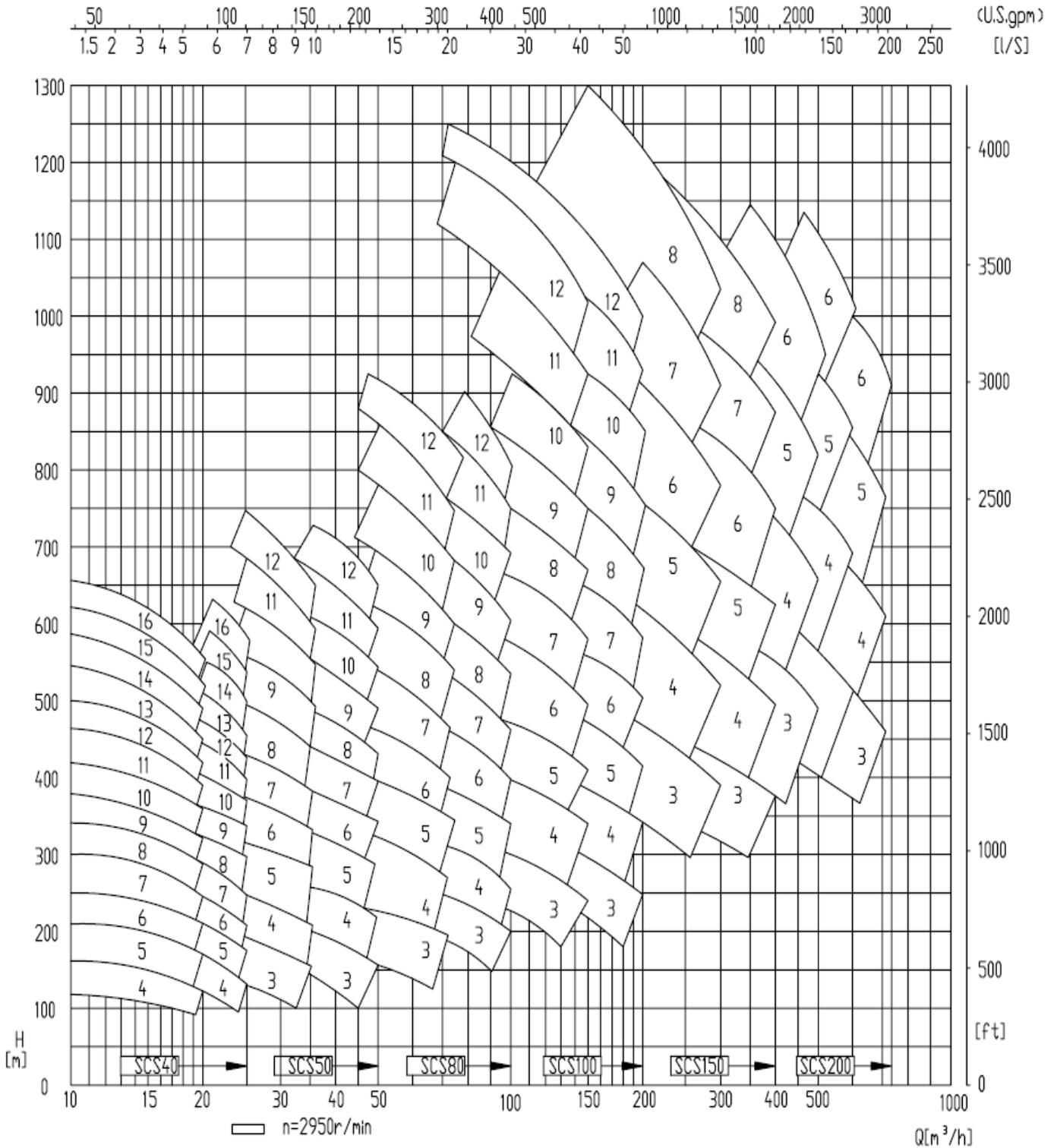
The bearing assembly is designed to avoid the influence of seal sleeve, which is more convenient to maintenance.



Drive end bearing assembly

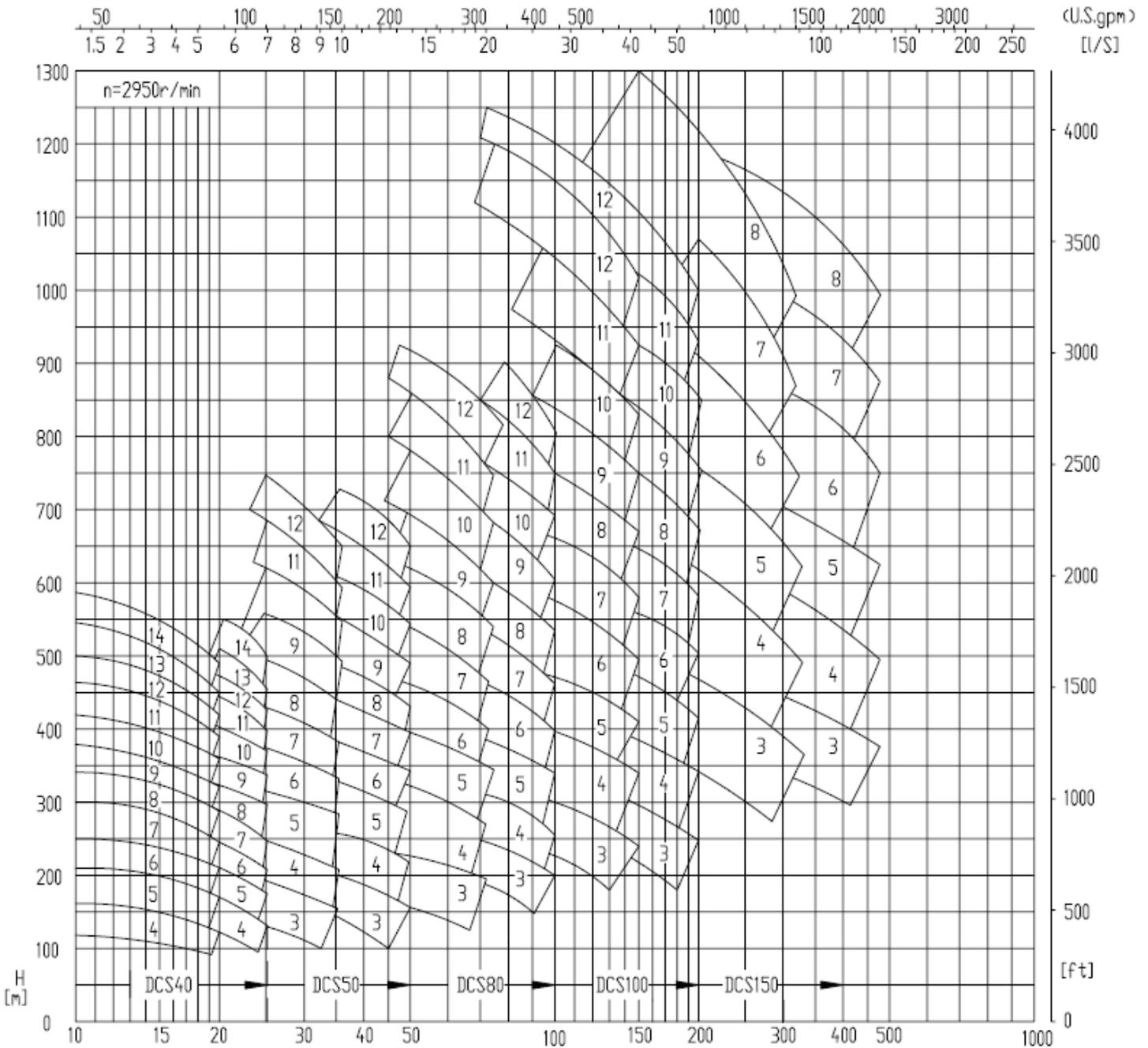


APIFLO M-series performance curve (50Hz)





APIFLO-M2-series performance curve (50Hz)





CROSS SECTIONAL DRAWING

