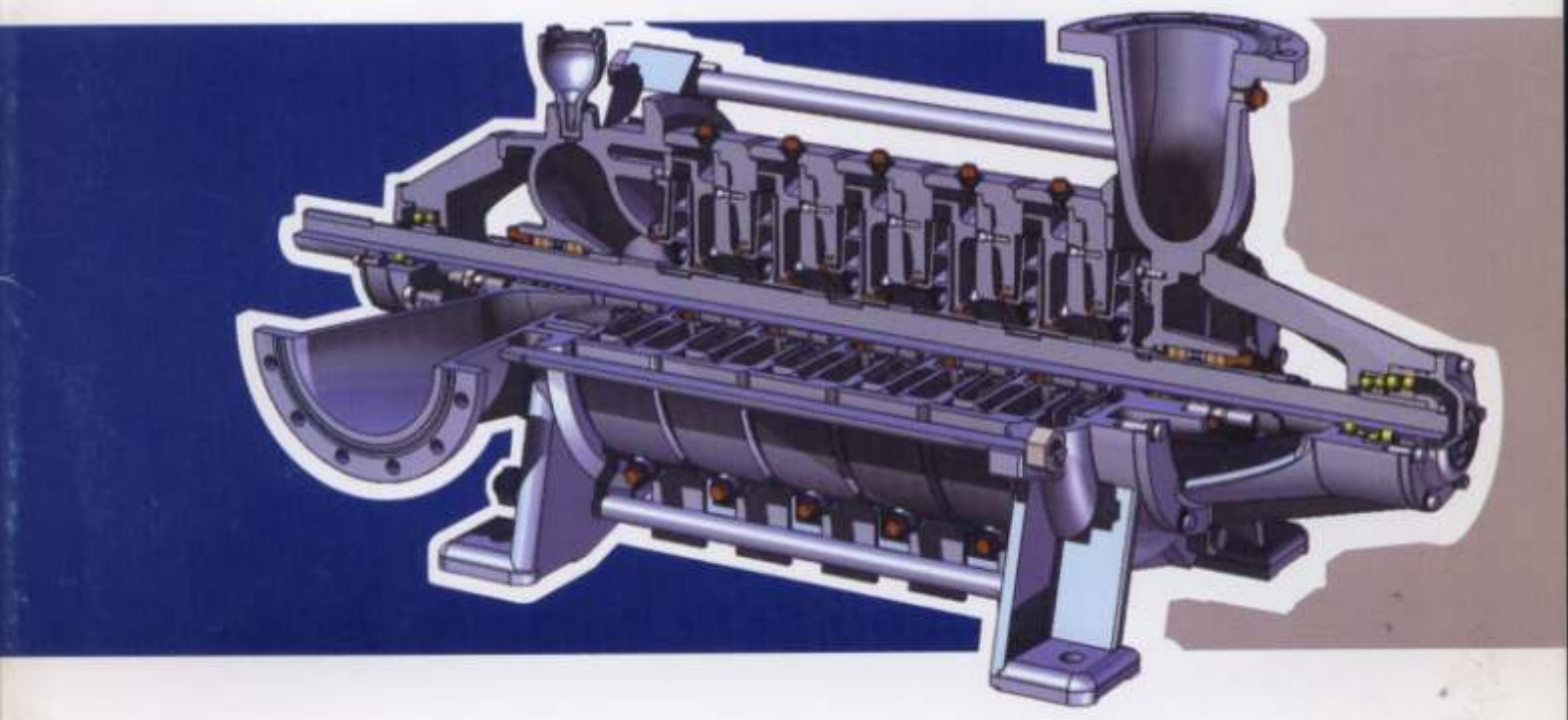
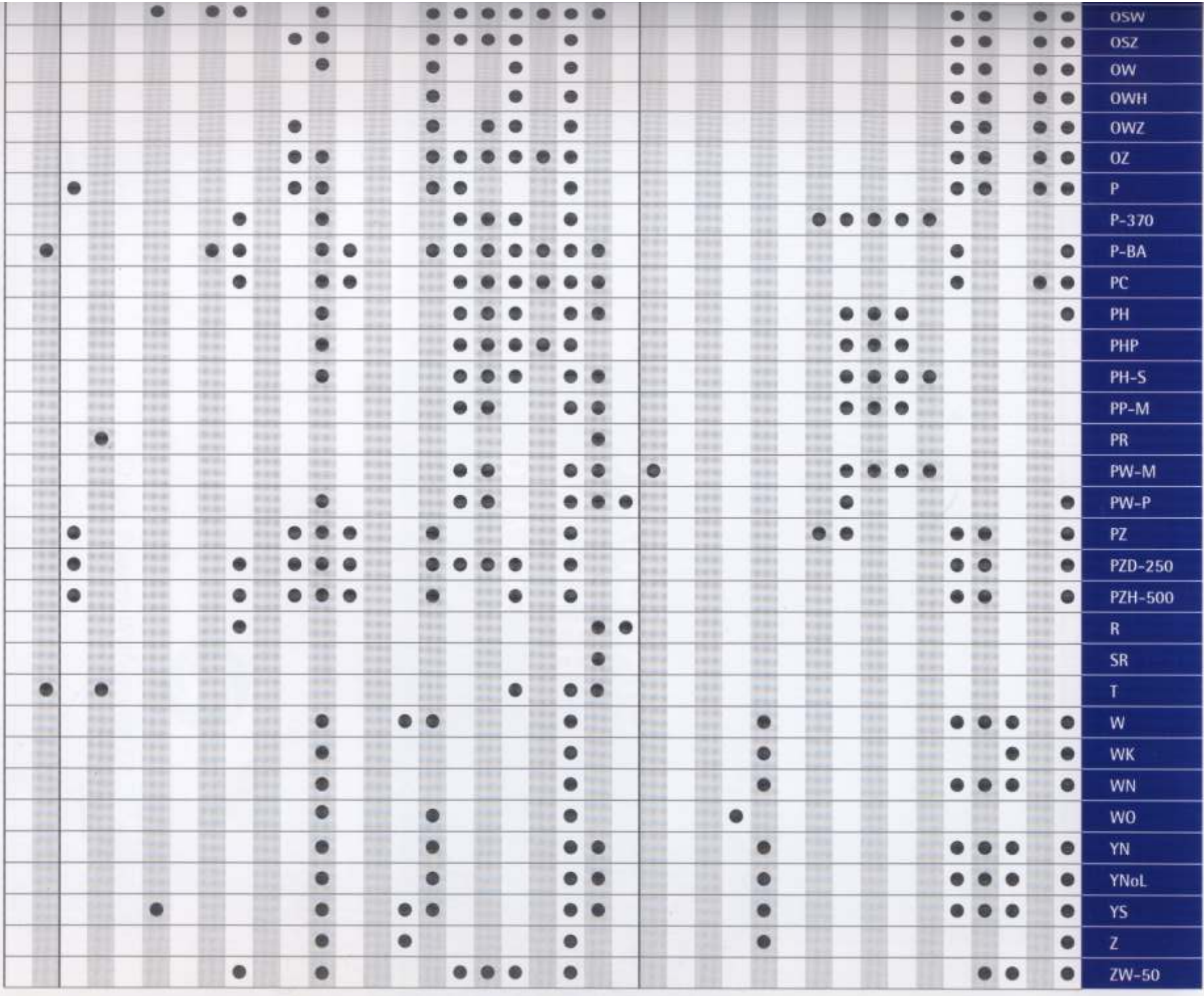
Grupa Powen-Wafapomp SA

Pumps Catalogue



APPLICATION \ SERIES OF PUMP TYPES		A	AP	AP-7	B	BV	C	D	DZ	F,FK	FY	FZ	HC	HCR	HZ	K	MF	MPA	OG
clean water	BY TYPE OF FLUID	●	●	●	●	●	●	●	●							●			●
sea water		●	●	●	●	●		●			●								
condensate		●	●	●	●	●	●									●			
cooling water		●	●	●	●	●	●	●	●		●								●
polluted water		●	●	●	●	●	●	●	●		●								●
fluids containing large solids														●					
lime milk											●		●	●	●		●		
hydraulic transport (slurries)													●	●	●		●		
sewage					●	●			●	●	●	●							
chemicals		●	●	●															
cooling media		●									●								
hot water		●	●	●	●		●												
oil			●	●															
fuel			●	●															
viscous liqiuds											●								
sugar juices		●									●								
agricultural products hydraulic transport	BY INDUSTRY																		
sugar and food processing industry		●	●	●	●	●					●						●		
general industry		●	●	●	●	●	●	●	●		●	●	●	●	●	●			●
construction industry												●	●	●	●		●		
coal mines					●	●						●	●	●	●				●
sand and gravel mines									●			●	●	●	●		●		
metallurgy		●	●	●			●					●	●	●	●				
water supply systems		●			●	●		●	●									●	
power boilers feeding		●																	
dredgers		●												●					
construction site drainage																			
heat engineering and power industry		●	●	●	●	●	●	●	●				●	●	●	●	●		
riverside intakes								●	●										
fire-fighting		●	●		●													●	
flood protection									●			●						●	
chemical and petrochemical industry			●	●															
marine					●														
paper industry											●								
washing stands		●																	
high pressure hydraulics																			
melioration								●	●										
ATEX CERTIFICATES			●	●															
API 610 CERTIFICATES				●															

REMARK:
This table shows most applications for particular pump types.
After consultation with the manufacturer it is possible to select pumps for other applications than shown in the table.


OSW
OSZ
OW
OWH
OWZ
OZ
P
P-370
P-BA
PC
PH
PHP
PH-S
PP-M
PR
PW-M
PW-P
PZ
PZD-250
PZH-500
R
SR
T
W
WK
WN
WO
YN
YNoL
YS
Z
ZW-50

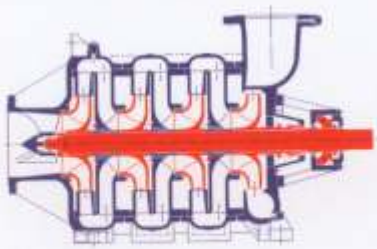
1

STATIONARY IMPELLER PUMPS

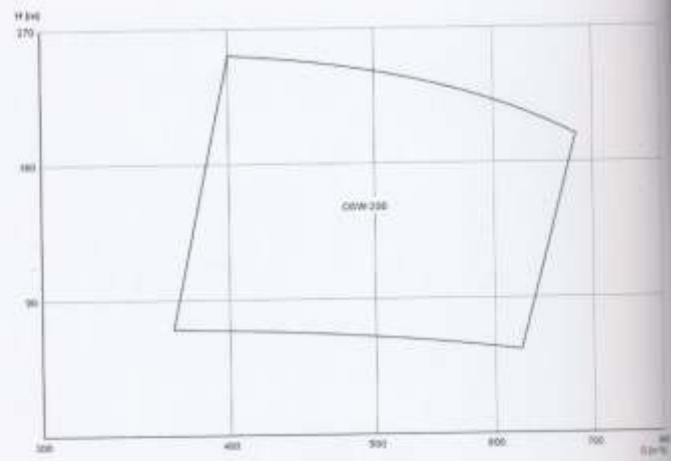
Grupa Powen-Wafapomp SA

1.1. Multistage - horizontal

Pumps OSW



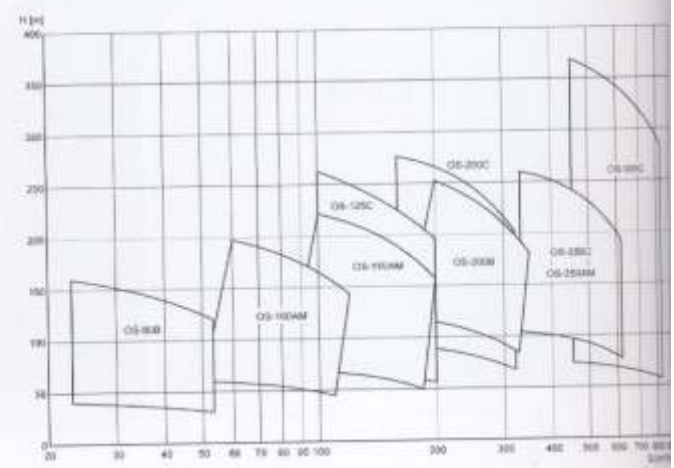
- Q = 370 ÷ 680 m³/h
- H = 55 ÷ 252 m
- n = 1500 min⁻¹
- D_o = 200 mm
- t_{max} = 40°C



Applicable for pumping industrial and rain water containing limited amount of solids not greater than 2 mm in size, and of temperature equal or slightly higher than ambient. Mainly used as general application industrial water pumps.

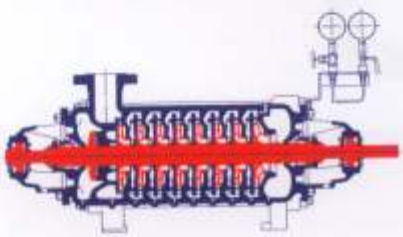
Pumps OS

- Q = 23 ÷ 830 m³/h
- H = 30 ÷ 370 m
- n = 1500 min⁻¹
- D_o = 80 ÷ 300 mm
- t_{max} = 40°C

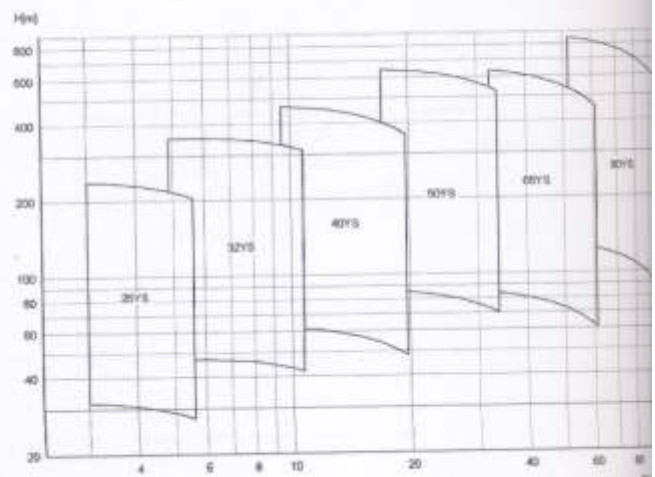


Applicable for pumping industrial water, mine water and rain water containing a limited amount of solids not greater than 2 mm in size, and of temperature equal or slightly higher than ambient. Mainly used as pumps for underground and open cast mines dewatering and for industrial water pumping.

Pumps 25-80YS



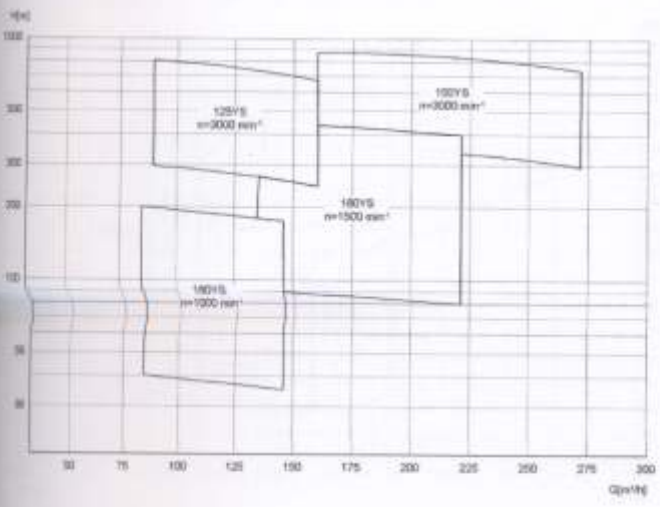
- Q = 3 ÷ 95 m³/h
- H = 28 ÷ 850 m
- n = 3000 min⁻¹
- D_o = 25 ÷ 80 mm
- t_{max} = 150°C



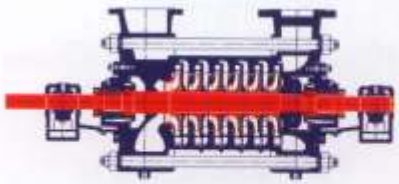
Applicable for pumping clean industrial water and boiler water, of temperature up to 150°C. Mainly used for pumping industrial water in all kinds of high-pressure industrial installations where good suction properties are required, also as boiler feed water pumps, condensate pumps and in high-pressure washing stands.

1.1. Multistage - horizontal

Pumps 125-200 YS

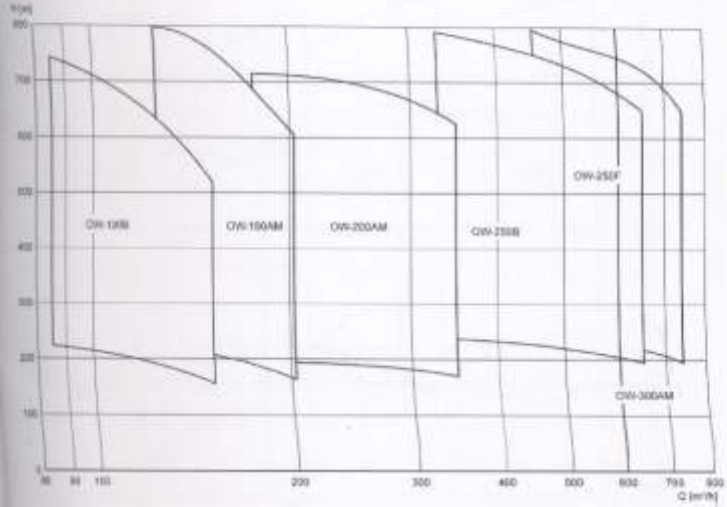


- Q = 80 ÷ 270 m^3/h
- H = 36 ÷ 870 m
- n = 1000 ÷ 3000 min^{-1}
- D_s = 125 ÷ 150 mm
- t_{max} = 150°C

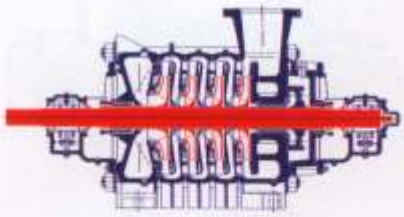


Applicable for pumping clean industrial water and boiler water, of temperature up to 150°C. Mainly used for pumping industrial water in all kinds of high-pressure industrial installations where good suction properties are required, also as boiler feed pumps, condensate pumps and in high-pressure washing stands.

Pumps OW

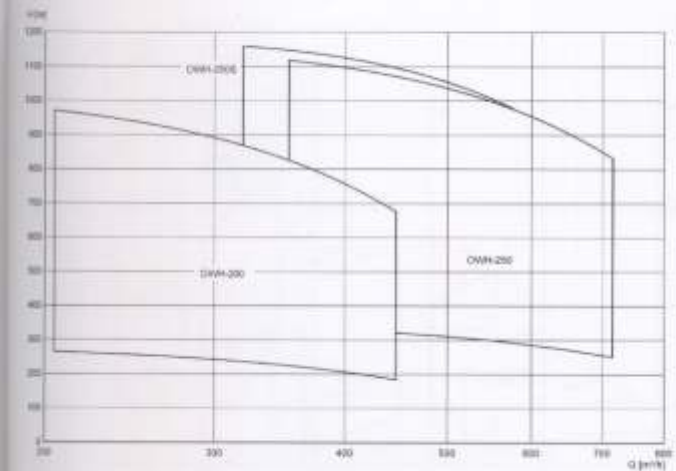


- Q = 85 ÷ 740 m^3/h
- H = 160 ÷ 790 m
- n = 1500 ÷ 3000 min^{-1}
- D_n = 100 ÷ 300 mm
- t_{max} = 40°C

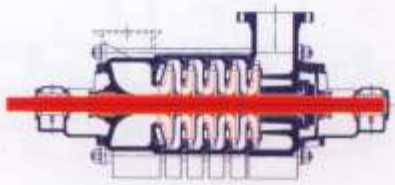


Applicable for pumping industrial water and mine water containing limited amount of solids not greater than 2 mm in size, and of temperature equal or slightly higher than ambient. Mainly used for deep mines dewatering.

Pumps OWH



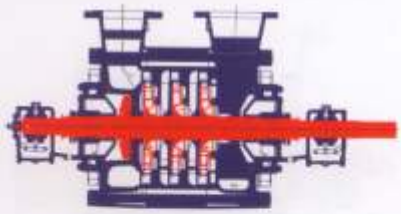
- Q = 205 ÷ 715 m^3/h
- H = 184 ÷ 1160 m
- n = 1500 min^{-1}
- D_n = 200 ÷ 250 mm
- t_{max} = 40°C



Applicable for pumping mine water containing limited amount of solids not greater than 2 mm in size, and of temperature equal or slightly higher than ambient. Mainly used for deep mines dewatering.

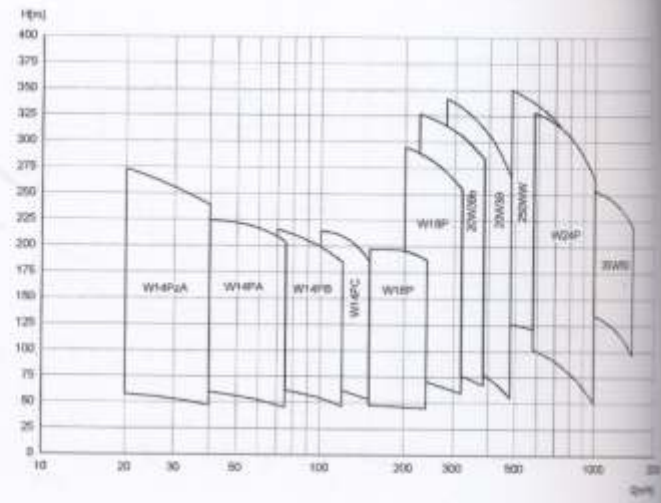
1.1. Multistage - horizontal

Pumps W

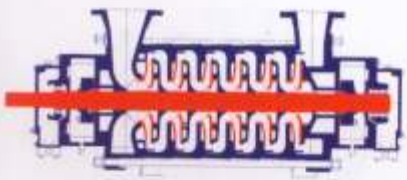


- Q = 20 ÷ 1500 m³/h
- H = 46 ÷ 350 m
- n = 1000 ÷ 1500 min⁻¹
- D_n = 100 ÷ 350 mm
- t_{max} = 150°C

Applicable for pumping clean industrial water, of temperature up to 150°C. Mainly used for pumping industrial water in all kinds of medium-pressure industrial installations where good suction properties are required, also in circulation water systems for heating installations.

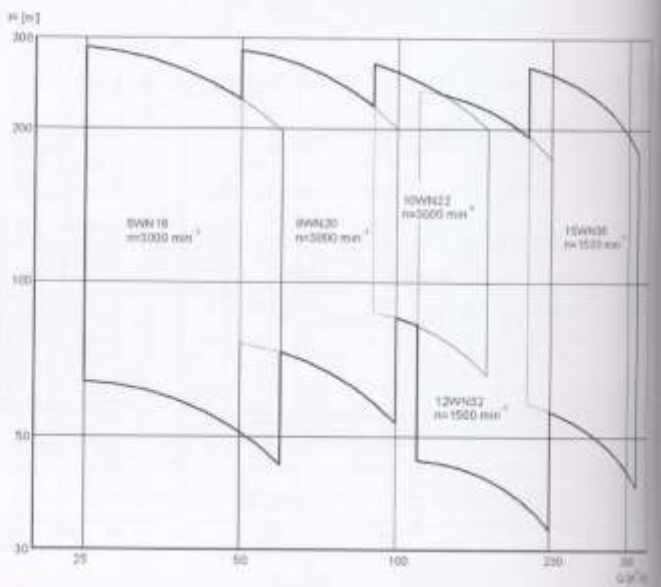


Pumps WN

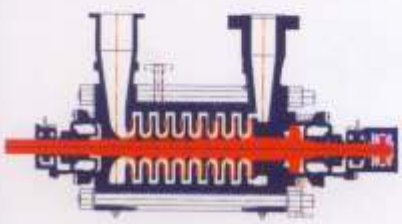


- Q = 25 ÷ 320 m³/h
- H = 35 ÷ 290 m
- n = 1500 ÷ 3000 min⁻¹
- D_n = 65 ÷ 150 mm
- t_{max} = 150°C

Applicable for pumping clean water of temperature up to 150°C. Mainly used as pump for condensate and drips, in regeneration systems and in feeding systems for medium-pressure water boilers in power stations and in heat-generating stations.

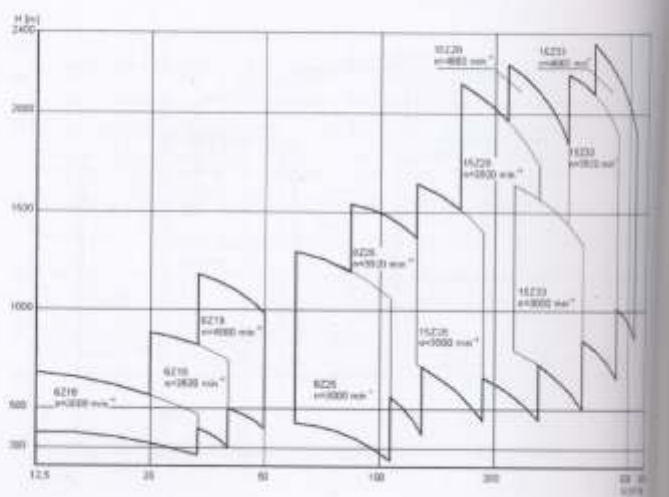


Pumps Z



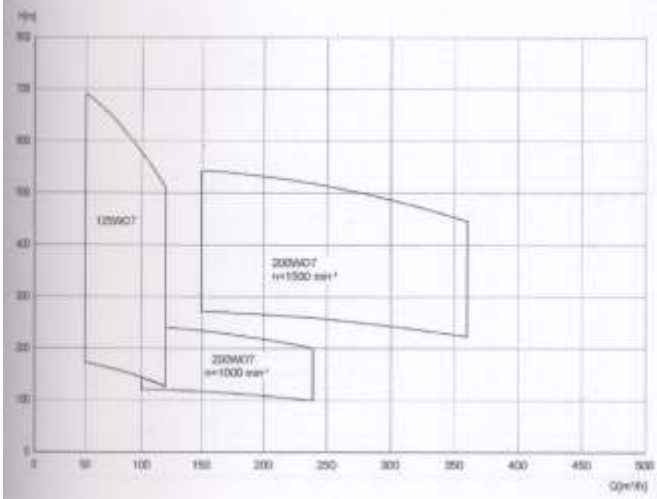
- Q = 12 ÷ 530 m³/h
- H = 300 ÷ 2350 m
- n = 3000 ÷ 4660 min⁻¹
- D_n = 65 ÷ 150 mm
- t_{max} = 230°C

Applicable for pumping clean hot water. Maximum allowable temperature for standard version is 165°C, for special version is 230°C. Mainly used as steam boiler feeding pumps in power stations and in heat-generating stations.

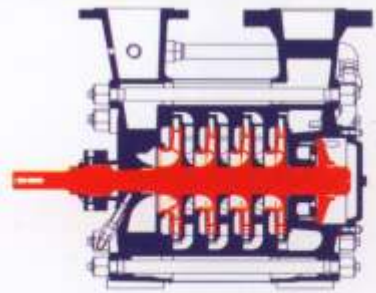


1.1. Multistage - horizontal

Pumps WO

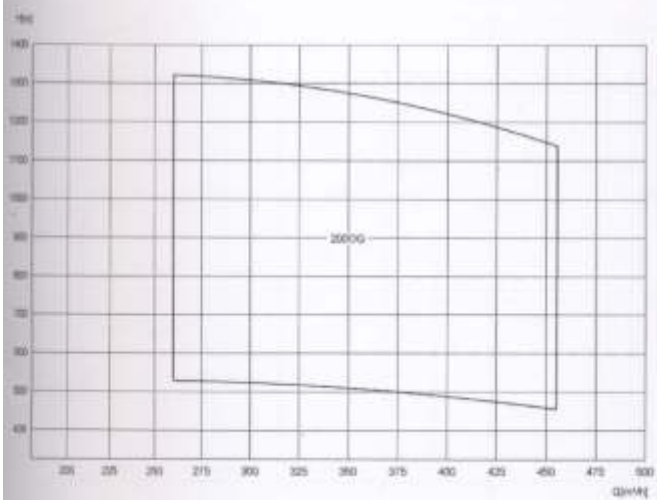


- Q = 50 ÷ 360 m³/h
- H = 100 ÷ 690 m
- n = 1000 ÷ 1500 min⁻¹
- D_n = 125 ÷ 200 mm
- t_{max} = 60°C

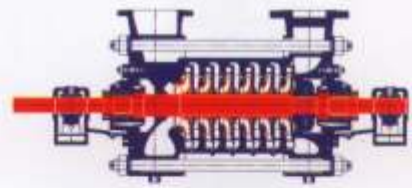


Applicable for oil handling in oil boilers, as start-up pumps for lubrication systems and as pumps for leak proof tests in lubrication systems.

Pumps OG

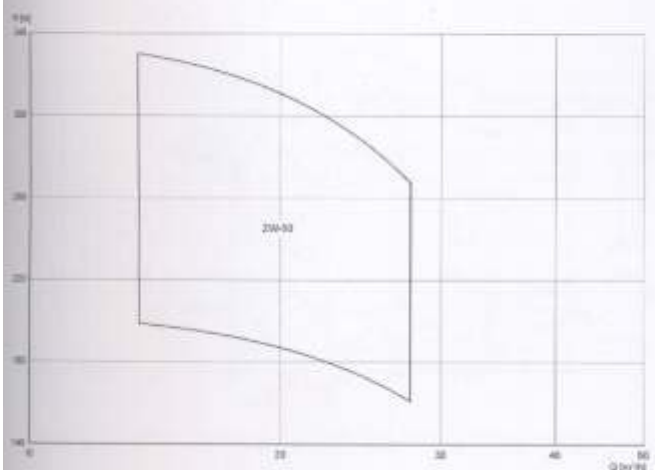


- Q = 260 ÷ 455 m³/h
- H = 460 ÷ 1310 m
- n = 3000 min⁻¹
- D_n = 200 mm
- t_{max} = 60°C

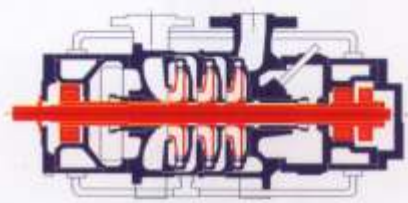


Applicable for pumping slightly contaminated mine water, mainly for operation in single-stage deep mine dewatering systems. Due to the special material execution of austenitic cast steel the pump can handle waters with high-saline content (5 to 30 g/l)

Pumps ZW-50



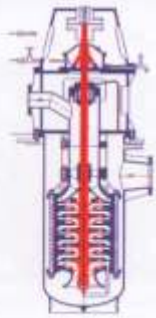
- Q = 14 ÷ 28 m³/h
- H = 160 ÷ 331 m
- n = 3000 min⁻¹
- D_n = 50 mm
- t_{max} = 40°C



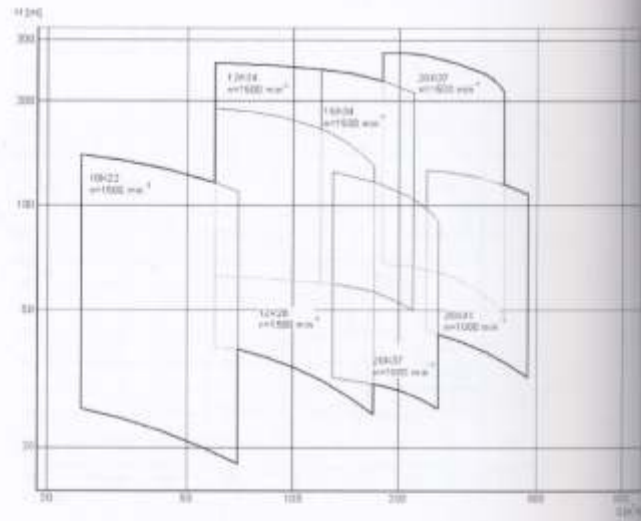
Applicable for pumping industrial water. Mainly used in spraying systems for mining longwall shearers.

1.2. Multistage - vertical

Pumps K

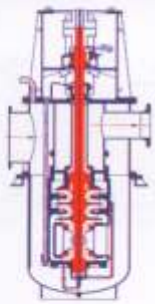


- Q = 25 ÷ 480 m^3/h
- H = 18 ÷ 280 m
- n = 1000 ÷ 1500 min^{-1}
- D_n = 100 ÷ 250 mm
- t_{max} = 165°C

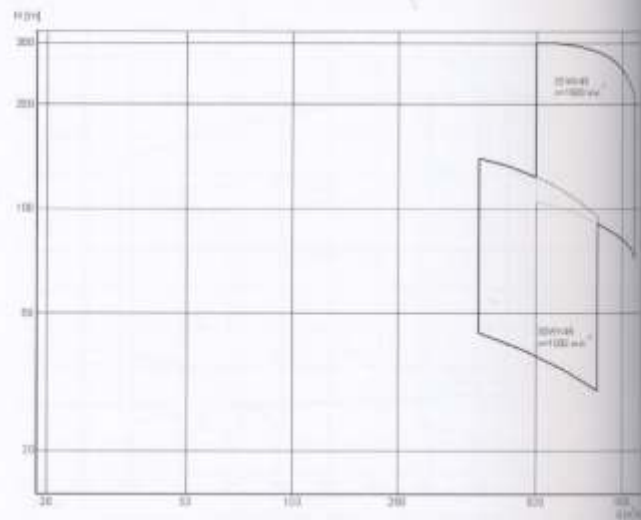


Applicable for pumping clean water and condensate, of high temperature and under severe suction conditions. Mainly used as condensate and hot water pumps in power stations and heat -generating stations.

Pumps WK



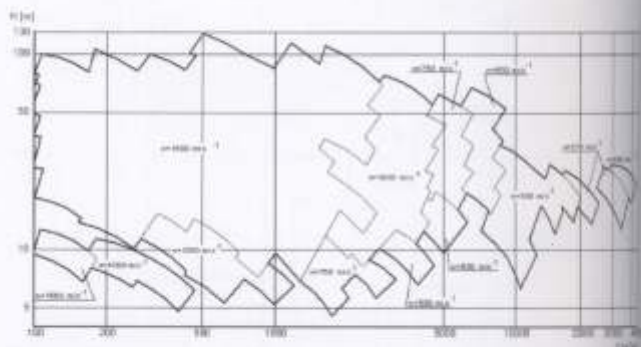
- Q = 350 ÷1100 m^3/h
- H = 30 ÷ 300 m
- n = 1000 ÷ 1500 min^{-1}
- D_n = 300 mm
- t_{max} = 165°C



Applicable for pumping clean water and condensate, of high temperature and under severe suction conditions. Mainly used as condensate and hot water pumps in power stations and heat -generating stations.

Pumps D

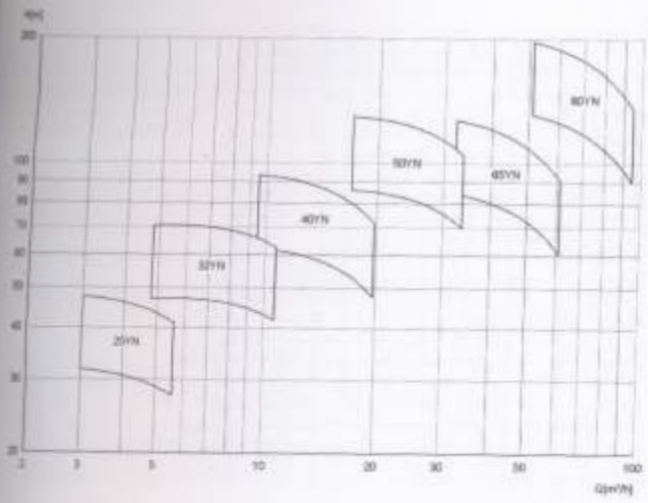
- Q = 100 ÷ 43000 m^3/h
- H = 4,7÷130 m
- n = 375 ÷ 1500 min^{-1}
- D_n = 150 ÷ 1800 mm
- t_{max} = 60°C



Applicable for pumping clean water, industrial water and rain water, slightly contaminated, of temperature up to 60°C. Mainly used in drinking water supply systems, industrial water pumping stations and as cooling water pumps in power industry.

1.2. Multistage - vertical

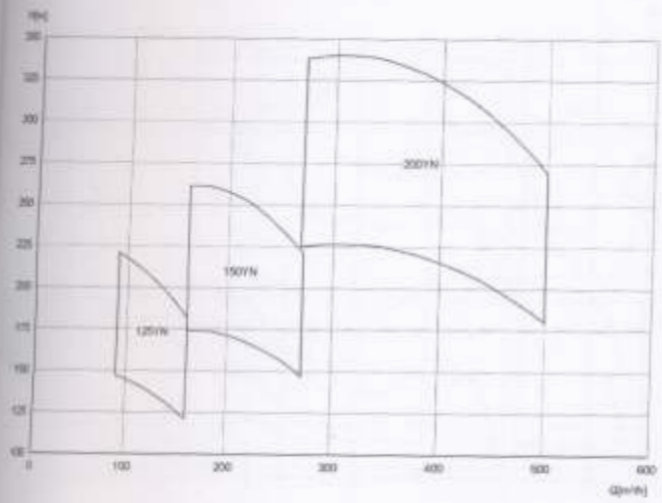
Pumps 25-80 YN



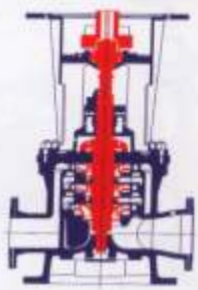
- Q = 3 ÷ 93 m³/h
- H = 28 ÷ 200 m
- n = 3000 min⁻¹
- D_n = 25 ÷ 80 mm
- t_{max} = 150°C

Applicable for pumping industrial water in all kinds of industrial installations where good suction properties are required. Mainly used as small boilers feed pumps, as condensate and booster pumps and in irrigation systems.

Pumps 125-200 YN

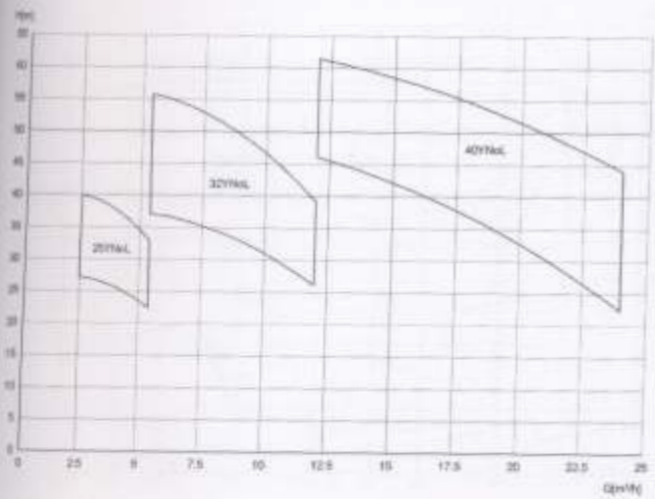


- Q = 90 ÷ 340 m³/h
- H = 122 ÷ 350 m
- n = 3000 min⁻¹
- D_n = 125 ÷ 200 mm
- t_{max} = 150°C

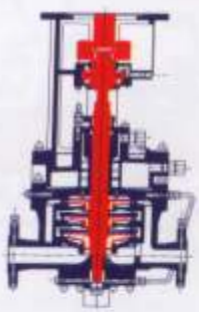


Applicable for pumping industrial water in all kinds of industrial installations where good suction properties are required. Mainly used as small boilers feed pumps, as condensate and booster pumps and in irrigation systems.

Pumps 25-40 YNoL



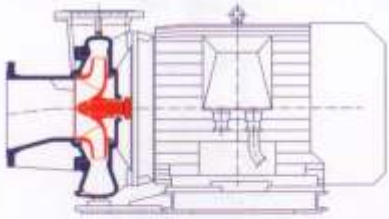
- Q = 2,5 ÷ 24 m³/h
- H = 23 ÷ 61 m
- n = 3000 min⁻¹
- D_n = 25 ÷ 40 mm
- t_{max} = 210°C



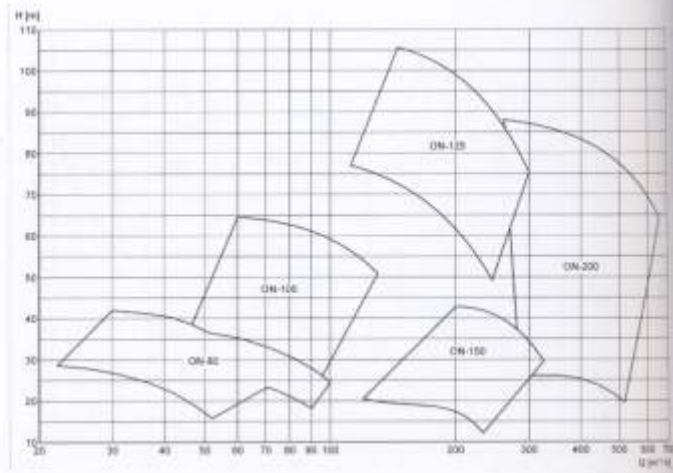
Applicable for pumping clean and slightly contaminated hot water. Mainly used at ship's utilization boilers. Certified for marine applications.

1.3. Single-stage - horizontal

Pumps ON

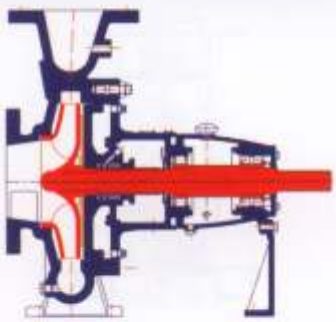


- Q = 22 ÷ 630 m^3/h
- H = 12 ÷ 105 m
- n = 1500 ÷ 3000 min^{-1}
- D_s = 80 ÷ 200 mm
- t_{max} = 40°C

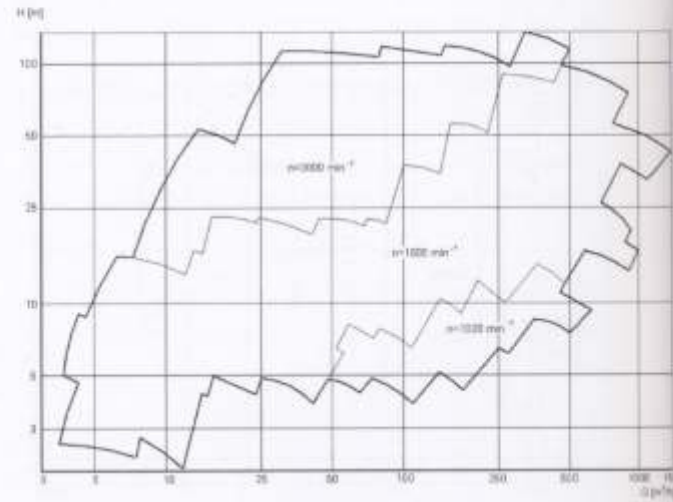


Applicable for pumping industrial water and rain water, containing limited amount of solids, not greater than 2 mm in size and of temperature up to 40°C. Mainly used for pumping washing water in gravel mines, for feeding ripping heads and for open cast mines dewatering.

Pumps A

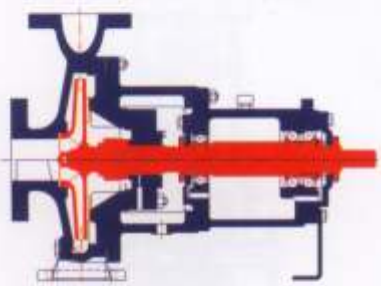


- Q = 4 ÷ 1500 m^3/h
- H = 2 ÷ 110 m
- n = 1000 ÷ 3000 min^{-1}
- D_s = 32 ÷ 300 mm
- t_{max} = 150°C

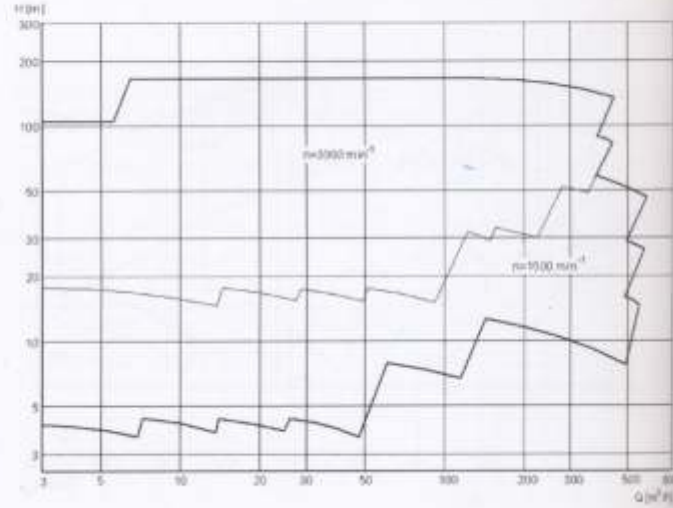


Applicable for pumping clean or slightly contaminated water, sea water, sugar juices and other technological liquids of temperature up to 150°C. Mainly used for water pumping in power industry, for industrial water and drinking water pumping in water supply systems, in heat-generating stations and in sugar industry.

Pumps AP



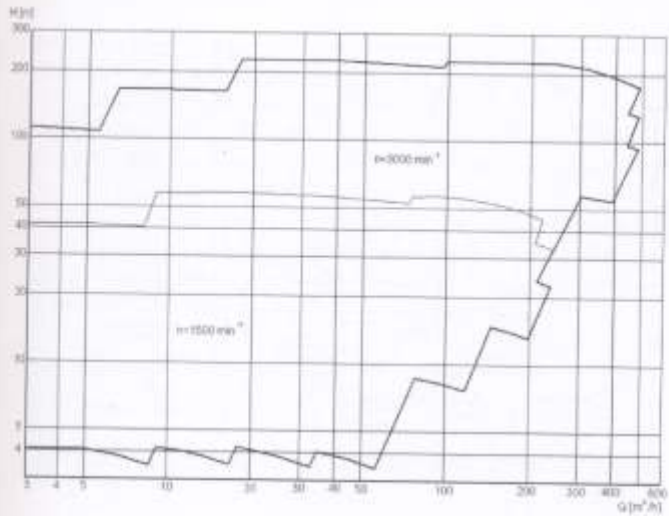
- Q = 3÷550 m^3/h
- H = 4 ÷ 170 m
- n = 1500÷3000 min^{-1}
- D_s = 32 ÷ 200 mm
- t_{max} = 250°C



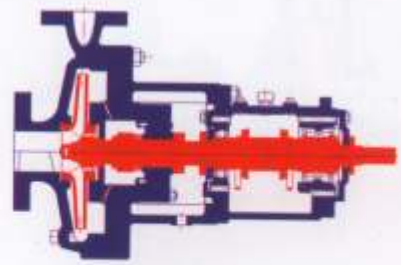
Applicable for pumping chemicals, carbohydrates, hot water and sugar juices, of temperature up to 250°C. Mainly used in chemical and petrochemical industry and in explosion hazardous areas.

1.3. Single-stage - horizontal

Pumps AP-7

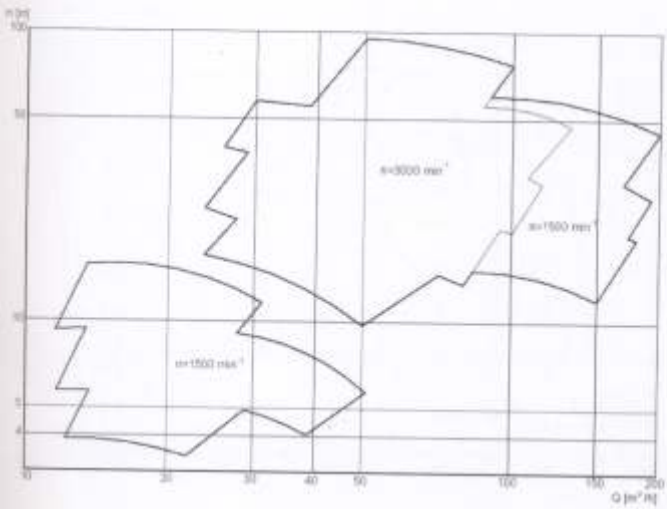


- Q = 3 ÷ 480 m³/h
- H = 2 ÷ 230 m
- n = 1500 ÷ 3000 min⁻¹
- D_s = 32 ÷ 150 mm
- t_{max} = 400°C

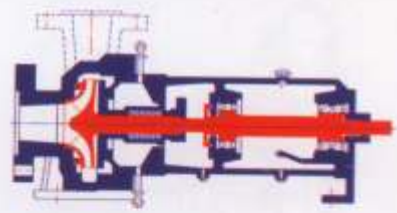


Applicable for pumping petrochemical products, chemicals and hot water, of temperature up to 400°C. Mainly used in oil refineries, chemical industry and in explosion hazardous areas.

Pumps C

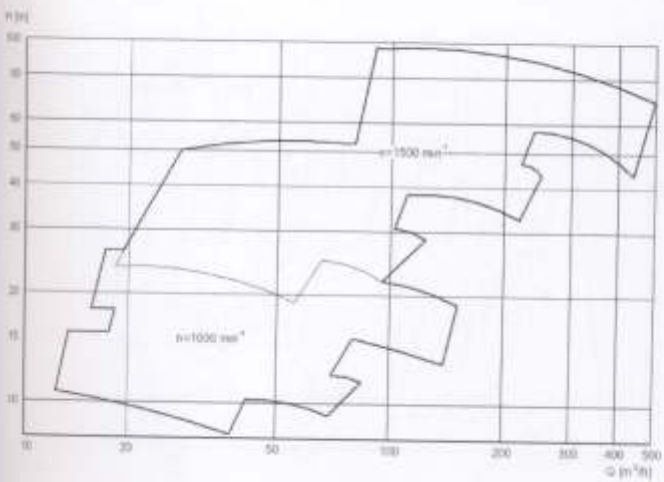


- Q = 12 ÷ 200 m³/h
- H = 3 ÷ 95 m
- n = 1500 ÷ 3000 min⁻¹
- D_s = 65 ÷ 125 mm
- t_{max} = 250°C

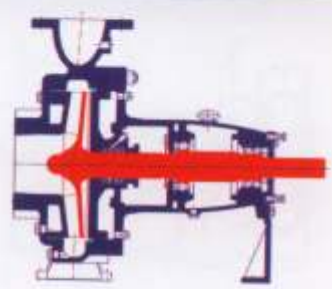


Applicable for pumping hot water of temperature up to 250°C and other liquids not strongly corrosive with respect to carbon cast steel. Mainly used in power industry for hot water pumping. Allowable discharge pressure is 50 bar.

Pumps FY



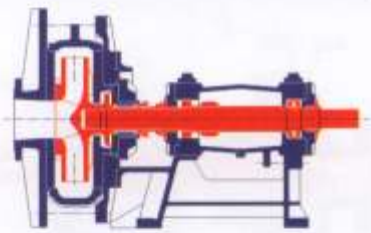
- Q = 12 ÷ 500 m³/h
- H = 6 ÷ 98 m
- n = 1000 ÷ 1500 min⁻¹
- D_s = 50 ÷ 150 mm
- t_{max} = 150°C



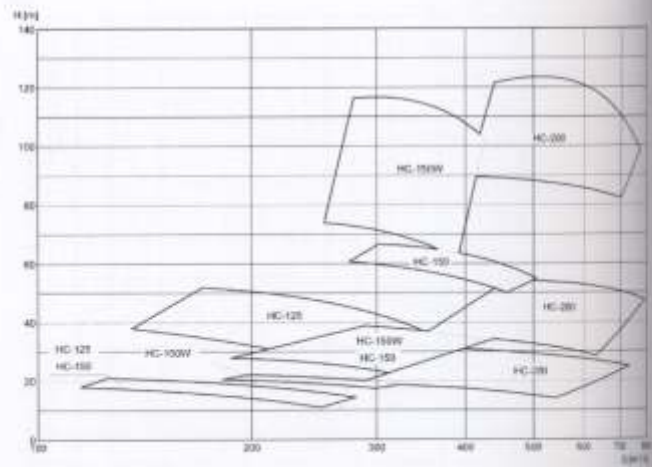
Applicable for pumping technological liquids slightly contaminated with solids (not containing fibers), for mechanically treated waste water and for suspensions of dry mass concentration not exceeding 3%. Able to handle gas evaluating liquids and viscous liquids of temperature up to 150°C. Used in food processing industry, for pumping lime milk, sugar juices and mechanically treated waste water.

1.3. Single-stage - horizontal

Pumps HC

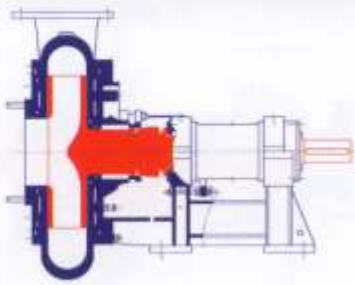


- Q = 120 ÷ 780 m^3/h
- H = 11 ÷ 123 m
- n = 750 ÷ 1500 min^{-1}
- D_s = 125 ÷ 200 mm
- t_{max} = 50°C

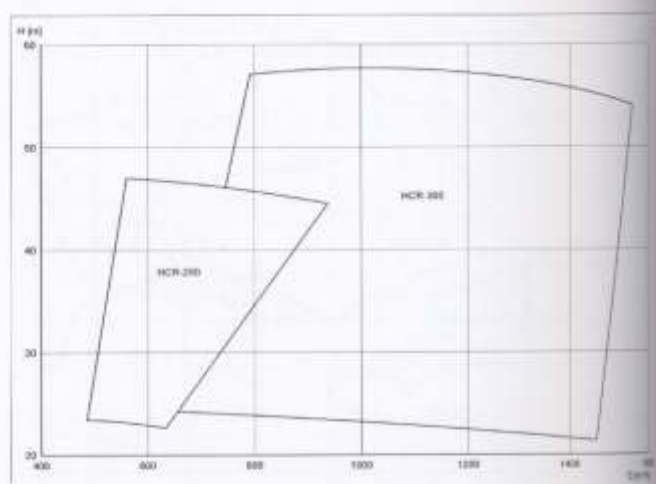


Applicable for hydraulic transport of sand, gravel, stones, coal, slag, ores, ash, clay, lime milk, flotation tailings and for pumping highly abrasive mixtures of water and solids not greater than 60 mm in size. The maximum slurry density is 1700 kg/m^3. Used in coal mines, in minerals and ore mines, power plants, steel works, cement mills, lime mills, sugar plants, solid waste handling systems, etc.

Pumps HCR

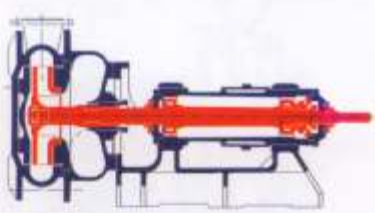


- Q = 485 ÷ 1550 m^3/h
- H = 21 ÷ 58 m
- n = 500 ÷ 750 min^{-1}
- D_s = 250 ÷ 300 mm
- t_{max} = 50°C

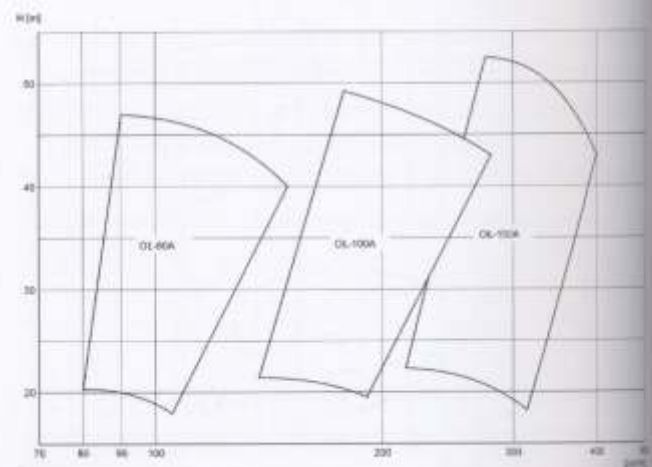


Applicable for hydraulic transport of sand, gravel, stones, coal, slag, ores, ash, clay, lime milk, flotation tailings and for pumping other highly abrasive mixtures of water and solids not greater than 200 mm in size. The maximum slurry density is 1700 kg/m^3. Used in sand and gravel mines, power plants, steel works solid, waste disposal systems, etc.

Pumps OŁ



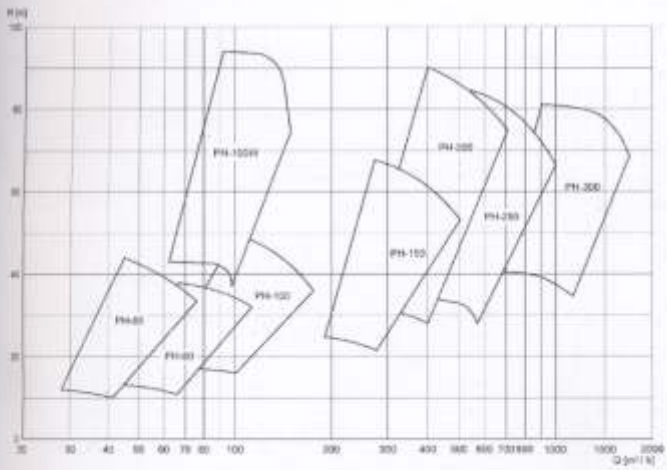
- Q = 80 ÷ 400 m^3/h
- H = 18 ÷ 53 m
- n = 1000 ÷ 1500 min^{-1}
- D_s = 80 ÷ 150 mm
- t_{max} = 50°C



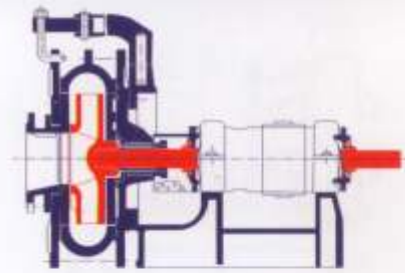
Applicable for hydraulic transport of sand, gravel, stones, coal, slag, ores, ash, clay, lime milk, flotation tailings, for pumping highly abrasive mixtures of water and solids not greater than 38 mm in size. The maximum slurry density is 1700 kg/m^3. Used in coal mines, in steel works, power plants and in coal and ore processing plants as heavy liquid circulators.

1.3. Single-stage - horizontal

Pumps PH

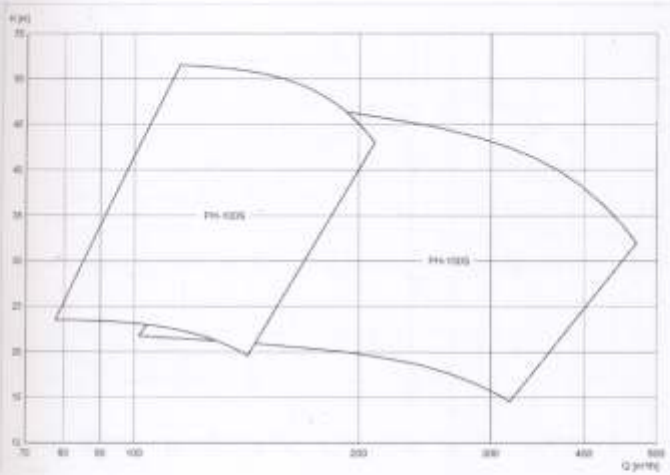


- Q = 28 ÷ 1700 m³/h
- H = 10 ÷ 94 m
- n = 750 ÷ 2200 min⁻¹
- D_n = 65 ÷ 300 mm
- t_{max} = 50°C

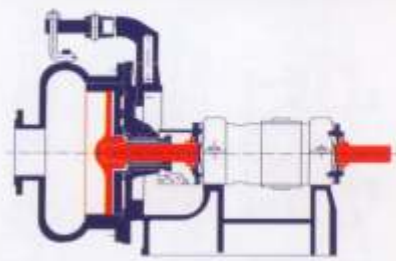


Applicable for hydraulic transport of sand, gravel, stones, coal, slag, ores, ash, clay, lime milk, flotation tailings etc., for pumping highly abrasive mixtures of water and solids not greater than 52 mm in size. The maximum slurry density is 1700 kg/m³. Used in coal mines, in minerals and ore mines, power plants, steel works, cement mills, lime mills, sugar plants, solid waste disposal systems, etc.

Pumps PH-S

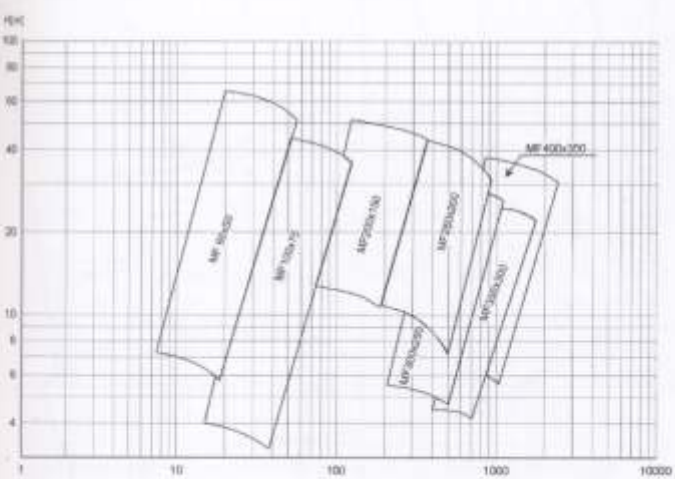


- Q = 78 ÷ 470 m³/h
- H = 15 ÷ 51 m
- n = 750 ÷ 1500 min⁻¹
- D_n = 100 ÷ 150 mm
- t_{max} = 50°C

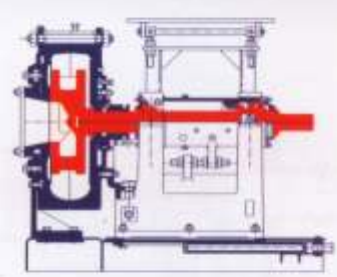


Applicable for pumping mixtures of water and abrasive solids, such as high-silica sand, ores, coal, slag, ash. The maximum solid size is 100 mm and the maximum mixture density is 1700 kg/m³. Mainly used for hydraulic transport in coal mines, ore mines, minerals mines and power stations.

Pumps MF



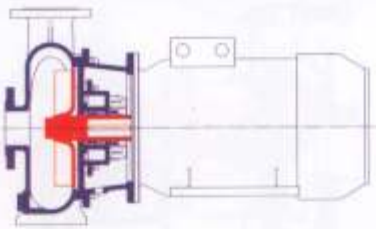
- Q = 8 ÷ 2400 m³/h
- H = 2 ÷ 65 m
- n = 300 ÷ 2000 min⁻¹
- D_n = 50 ÷ 350 mm
- t_{max} = 40°C



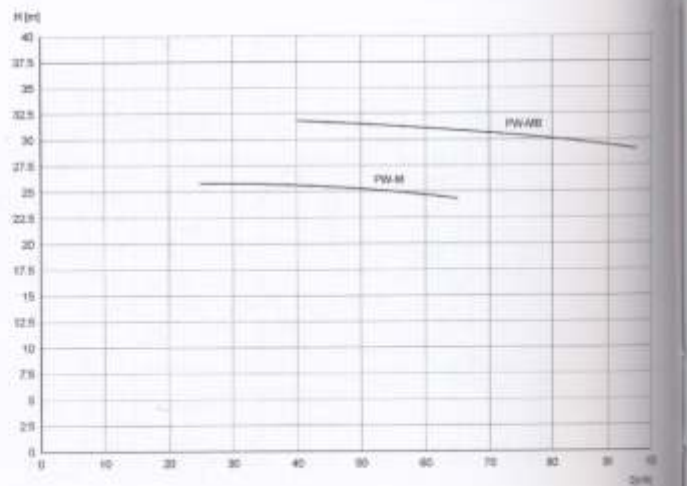
Applicable for hydraulic transport of sand, gravel, non-ferrous metals ores, flotation tailings, ash, coal, lime milk; for pumping highly abrasive mixtures of water and solids not greater than 15 mm in size. The maximum slurry density is 1600 kg/m³. Used for copper ore pumping in flotation process, in mining industry, sugar industry and in other applications, where high pump abrasion and erosion resistance is required.

1.3. Single-stage - horizontal

Pumps PW-M

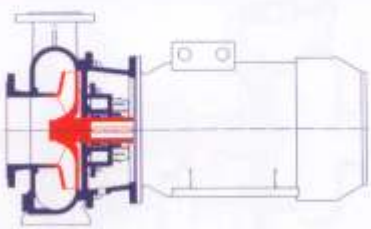


- Q = 25÷95 m^3/h
- H = 24÷32 m
- n = 1500 min^{-1}
- D_n = 80 mm
- t_{max} = 80°C

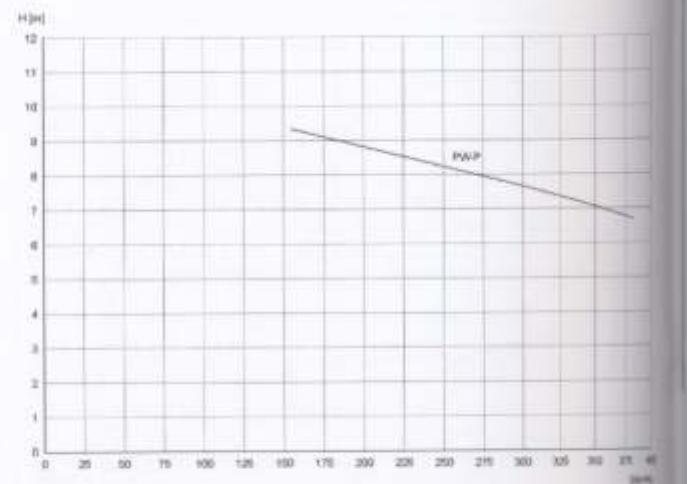


Applicable for pumping liquids contaminated with solids, not greater than 30 mm in size. The maximum density is 1300 kg/m^3. Used in food processing and sugar industry, for sludge and slurry pumping, also for lime milk pumping.

Pumps PW-P

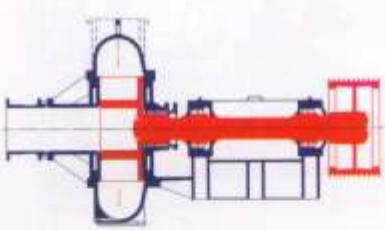


- Q = 155 ÷ 380 m^3/h
- H = 6,8 ÷ 9,2 m
- n = 750 min^{-1}
- D_n = 200 mm
- t_{max} = 80°C

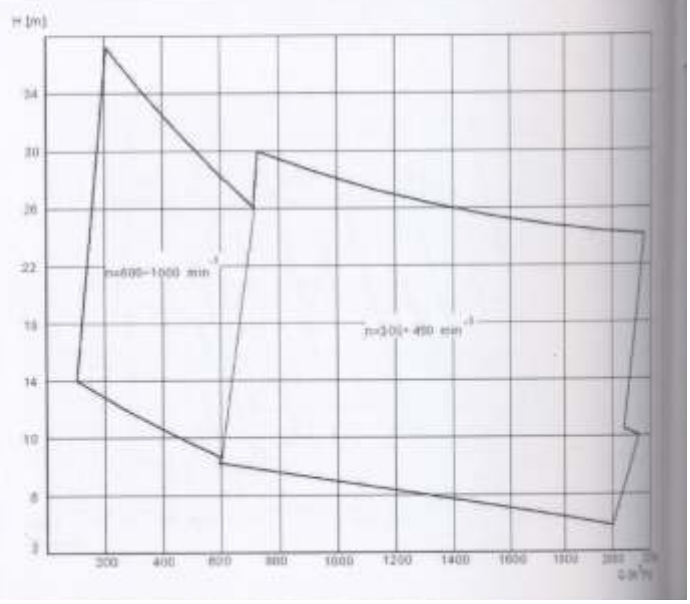


Applicable for pumping liquids contaminated by solids not greater than 15 mm in size. The maximum mixture density is 1100 kg/m^3. Used in food processing and sugar industry, as pumps for washings and as water pumps in beet root washers.

Pumps R



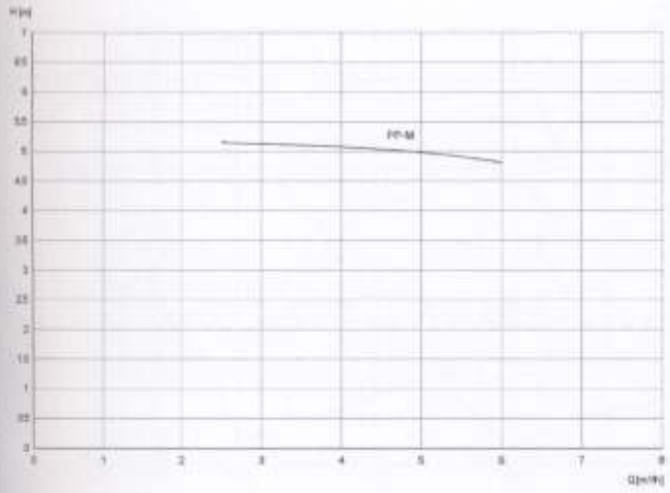
- Q = 120 ÷ 2150 m^3/h
- H = 4 ÷ 37 m
- n = 300 ÷ 1000 min^{-1}
- D_n = 200 ÷ 400 mm
- t_{max} = 50°C



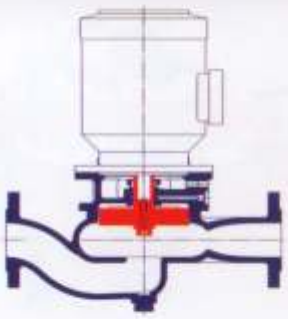
Applicable for hydraulic transport of solids not greater than 250 mm in size. Mainly used for hydraulic transport of beet roots in sugar plants.

1.4. Single-stage - vertical

Pumps PP-M

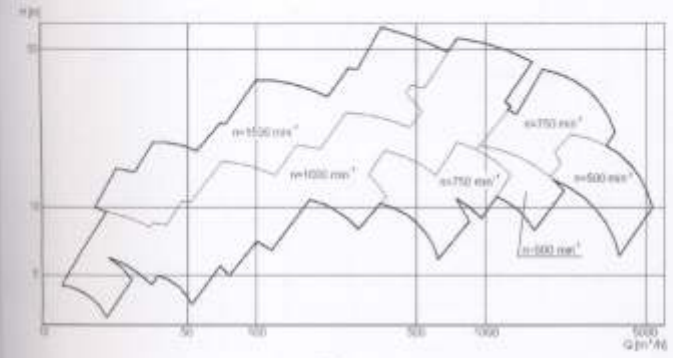


- Q = 2,5 ÷ 6 m³/h
- H = 4,8 ÷ 5,2 m
- n = 1500 min⁻¹
- D_n = 50 mm
- t_{max} = 80°C

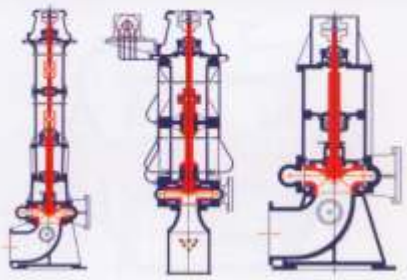


Applicable for pumping liquids contaminated with solids not greater than 15 mm in size. and the maximum medium density is 1300 kg/m³. Used in food processing and sugar industry, chemical industry, for sludge, slurries and washings pumping, also as pump for lime milk and synthetic resin dosage.

Pumps F, FK

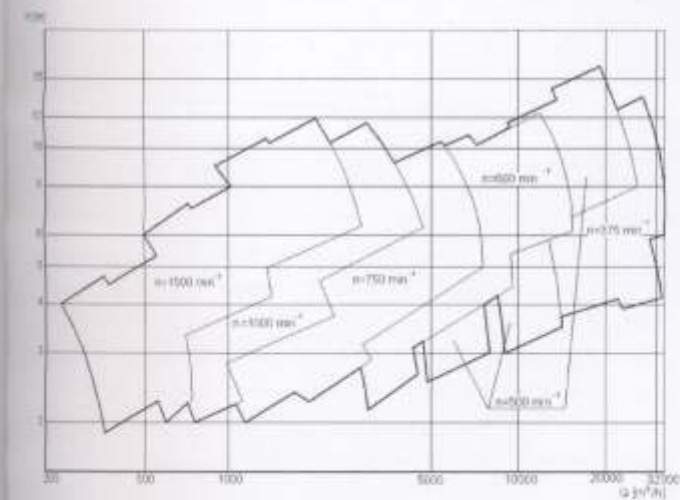


- Q = 12 ÷ 5100 m³/h
- H = 3,5 ÷ 62 m
- n = 500 ÷ 1500 min⁻¹
- D_n = 50 ÷ 600 mm
- t_{max} = 60°C



Applicable for pumping water contaminated with solids, industrial and municipal waste water. The maximum solid size is 100 mm and the maximum medium density is 1100 kg/m³. Mainly used as pumps for industrial and municipal waste water handling systems.

Pumps P

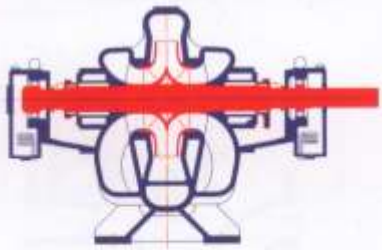


- Q = 240 ÷ 32000 m³/h
- H = 2 ÷ 16 m
- n = 375 ÷ 1500 min⁻¹
- D_n = 250 ÷ 1800 mm
- t_{max} = 50°C

Applicable for pumping clean water, industrial water and rain water, slightly contaminated by solids. Used in melioration and irrigation pumping stations, also as cooling water pumps in power industry.

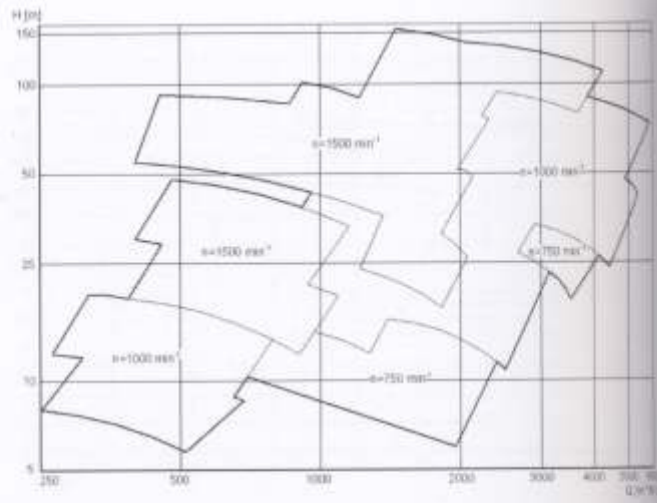
1.5. Double-suction - horizontal

Pumps B

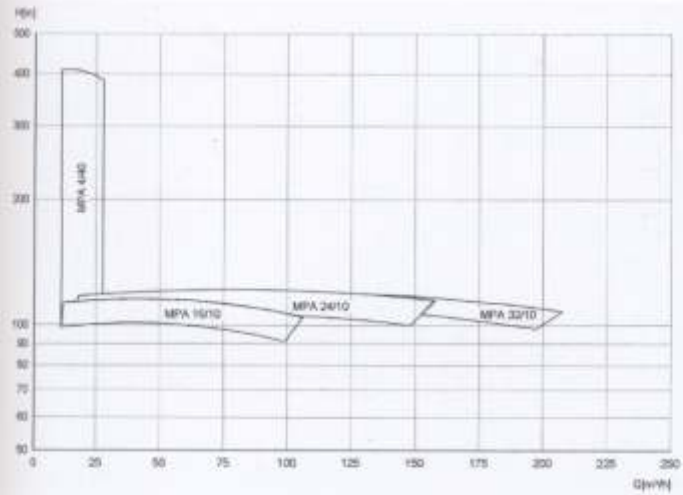


- Q = 250 ÷ 5800 m^3/h
- H = 6 ÷ 150 m
- n = 750 ÷ 1500 min^{-1}
- D_n = 250 ÷ 600 mm
- t_{max} = 150°C

Applicable for pumping clean water or water slightly contaminated by solids not greater than 3 mm in size and of temperature up to 150°C. Used in water supply systems, in heating systems and in power industry.

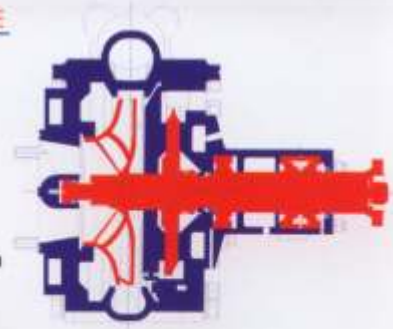


Autopumps MPA



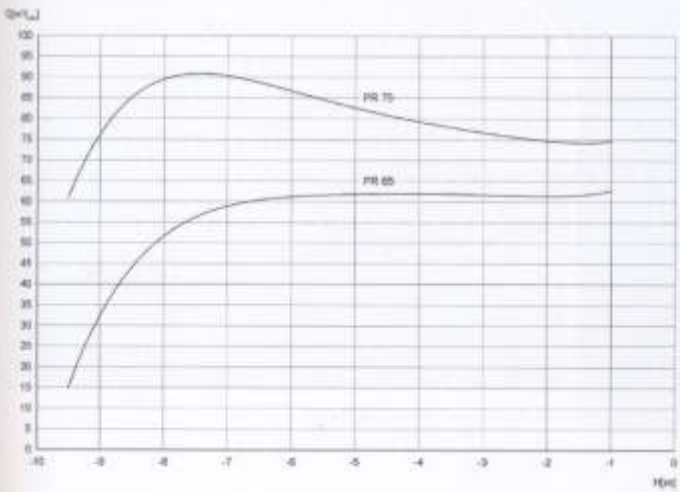
SINGLE RANGE / DOUBLE RANGE

- Q = 10 ÷ 205 m³/h
  Q = 10 ÷ 27 m³/h
- H = 90 ÷ 120 m
  H = 100 ÷ 410 m
- n = 2700 lub 3100 min⁻¹
  n = 3100 lub 4600 min⁻¹
- D_s = 80 ÷100 lub 2 x 100 mm
  D_s = 32 mm lub 1"
- t_{max} = 55°C
  t_{max} = 55°C

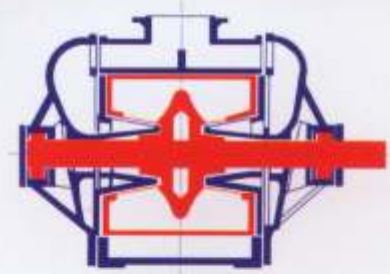


Applicable for pumping clean on slightly contaminated water from hydrant installations or from open water reservoirs. Designed to be assembled on fire-fighting vehicles. Certified by JCW CNBOP.

Vacuum pumps PR

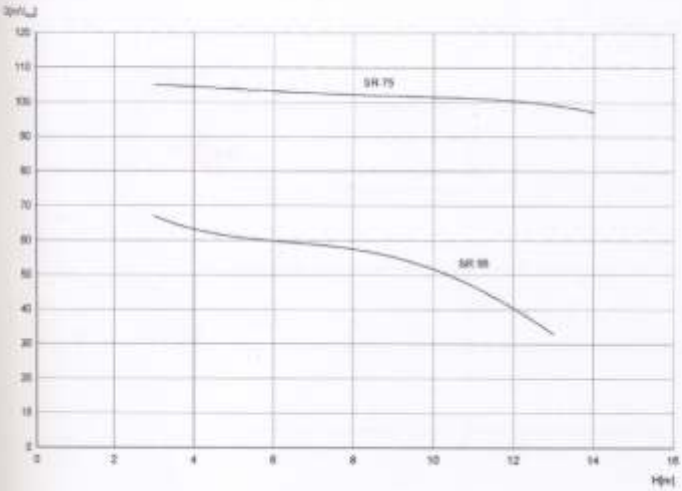


- Q = 15 ÷ 90 m³/h
- H = 1 ÷ 9,5 m
- n = 500 min⁻¹
- D_s = 250 ÷ 300 mm
- t_{max} = 60°C

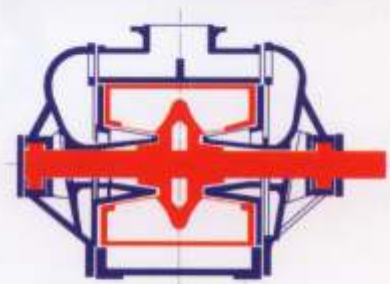


Applicable in food processing industry, paper industry, chemical industry, in filtration and distillation processes and for gas compression. Used also in sugar plants, and to provide the vacuum in evaporation process.

Compressor pumps SR



- Q = 35 ÷ 105 m³/h
- H= 3 ÷ 14 m
- n = 500 min⁻¹
- D_s = 250 ÷ 300 mm
- t_{max} = 60°C



Applicable in food processing industry, paper industry, chemical industry, in filtration and distillation processes and for gas compression. Used also in sugar plants, for gas forcing from lime kiln to saturation.

SUBMERSIBLE PUMPS

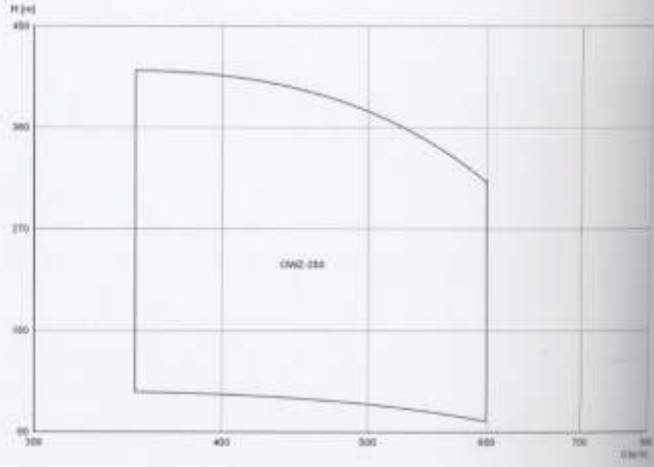
2

Grupa Powen-Wafapomp SA

2.1. Multistage - vertical

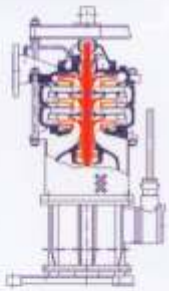
Pumps OWZ

- Q = 350 ÷ 600 m³/h
- H = 100 ÷ 410 m
- n = 1500 min⁻¹
- D_n = 250 mm
- t_{max} = 30°C

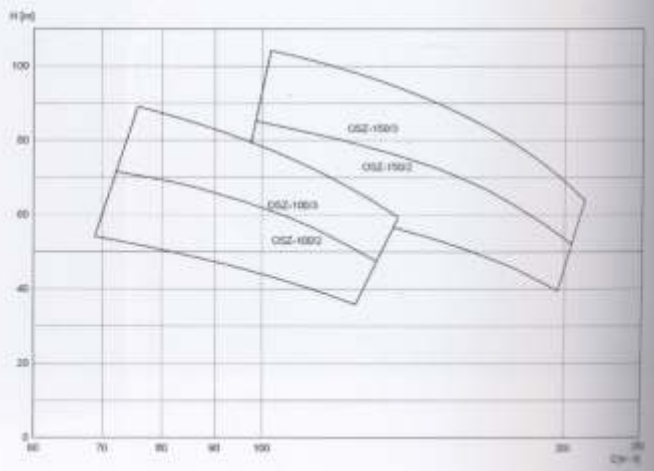


Designed for pumping mine water and rain water contaminated by solids not greater than 2 mm in size. Used for mines dewa tering including the closed mining plants. Possible application for sublevel dewatering.

Pumps OSZ



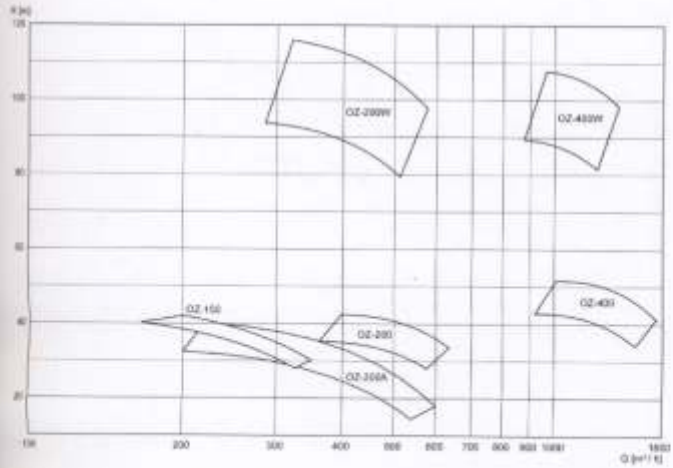
- Q = 69 ÷ 210 m³/h
- H = 36 ÷ 104 m
- n = 1500 min⁻¹
- D_n = 100 ÷ 150 mm
- t_{max} = 30°C



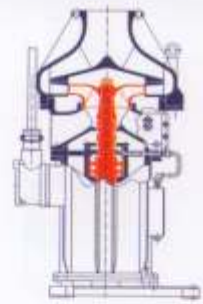
Applicable for pumping mine and industrial water, contaminated by solids not greater than 2 mm in size. Used in mining industry, for mine head and sectional dewatering, in power industry and in water supply systems.

2.2. Single-stage - vertical

Pumps OZ

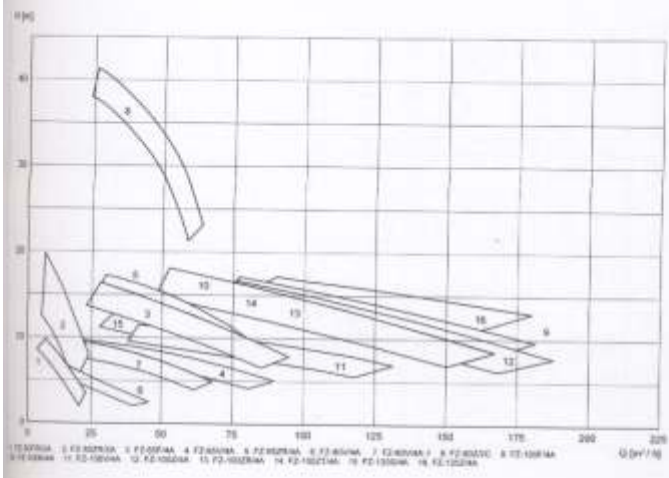


- Q = 167 ÷ 1560 m³/h
- H = 15 ÷ 116 m
- n = 1500 min⁻¹
- D_n = 150 ÷ 400 mm
- t_{max} = 35°C

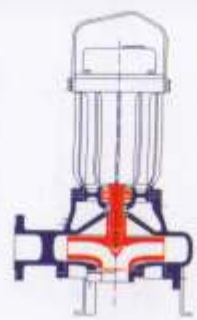


Applicable for pumping clean water, industrial water and rain water containing solids not greater than 12 mm in size. Used for open cast mine dewatering, water intakes and in general industrial applications.

Pumps FZ

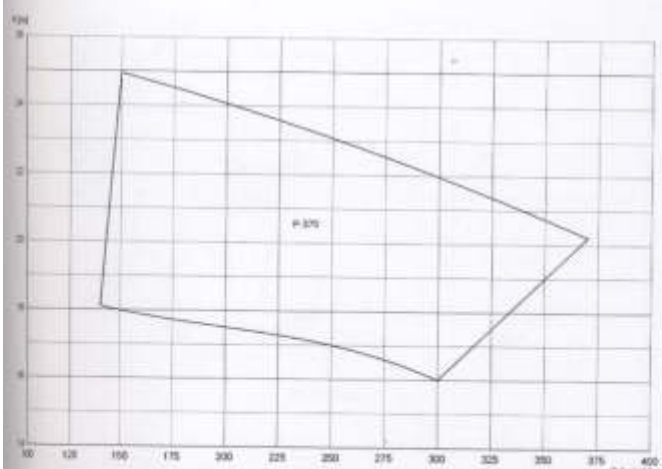


- Q = 4 ÷ 188 m³/h
- H = 2,5 ÷ 41 m
- n = 1500 ÷ 3000 min⁻¹
- D_n = 50 ÷ 125 mm
- t_{max} = 30°C

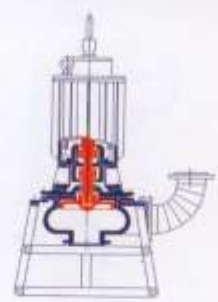


Applicable for pumping waste water or similar liquids, contaminated with solids not greater than 80 mm in size. The maximum mixture density is 1150 kg/m³. Mainly used for industrial and municipal waste water handling systems.

Pumps P-370



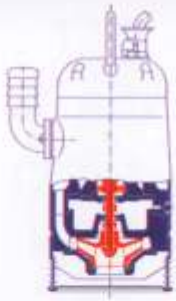
- Q = 140 ÷ 370 m³/h
- H = 16 ÷ 25 m
- n = 1000 min⁻¹
- D_n = 175 mm
- t_{max} = 30°C



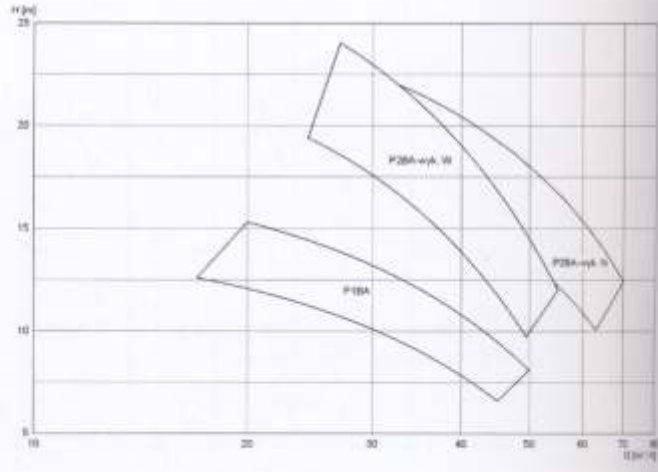
Applicable for hydraulic transport of solids not greater than 100 mm in size. The maximum mixture density is 1700 kg/m³. Used for hydraulic transport processes in power industry, coal, minerals and ore mines.

2.2. Single-stage - vertical

Pumps P-BA

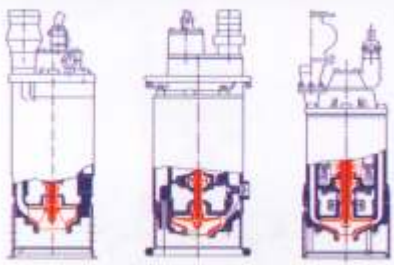


- Q = 17 ÷ 70 m^3/h
- H = 6,5 ÷ 24 m
- n = 3000 min^{-1}
- D_s = 65 mm
- t_{max} = 30°C

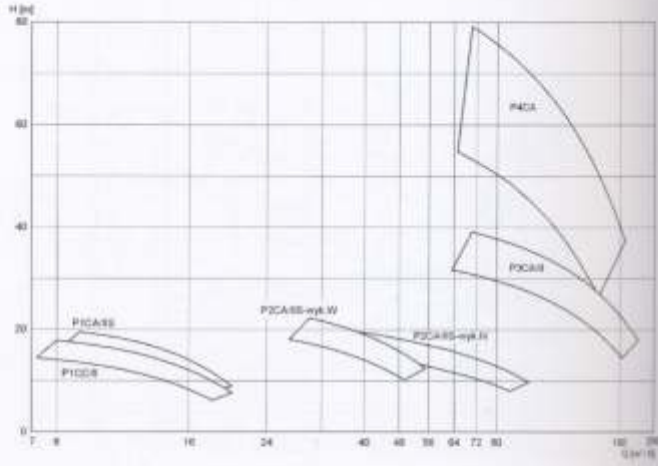


Applicable for pumping mine water and industrial water contaminated by solids not greater than 10 mm in size. Used in underground mines, for mine head and sectional dewatering , in methane and coal dust explosion risk areas; also at construction sites and in agriculture.

Pumps PC



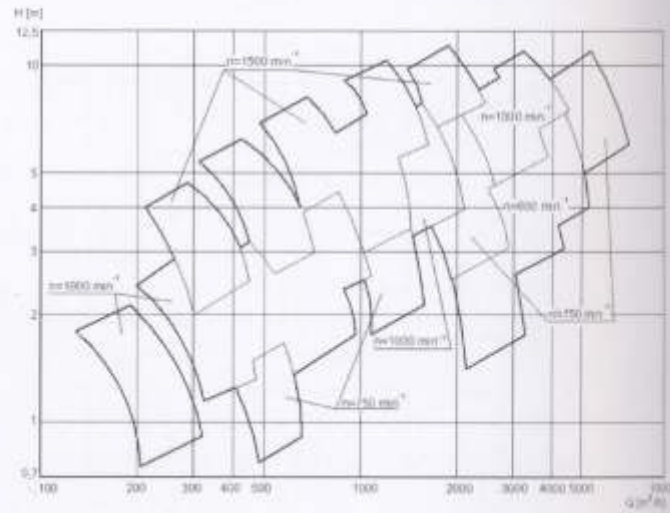
- Q = 7 ÷ 180 m^3/h
- H = 6 ÷ 79 m
- n = 3000 min^{-1}
- D_s = 36 ÷ 100 mm
- t_{max} = 30°C



Applicable for pumping mine water and industrial water contaminated by solids not greater than 10 mm in size. Used in underground mines, for mine head and sectional dewatering , in methane and coal dust explosion risk areas; also at construction sites and in agriculture.

Pumps PZ

- Q = 140 ÷ 7200 m^3/h
- H = 0,75 ÷ 11,5 m
- n = 600 ÷ 1500 min^{-1}
- D_s = 250 ÷ 800 mm
- t_{max} = 40°C



Applicable for pumping clean water, industrial water or mechanically treated waste water, slightly contaminated, by solids not greater than 2 mm in size. Used in melioration, irrigation and industrial pumping stations.

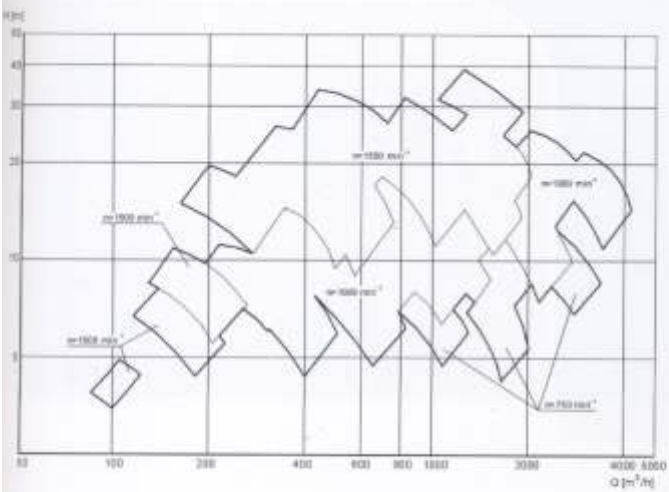
2.2. Single-stage - vertical

Pumps HZ

- Q = 72 ÷ 126 m^3/h
- H = 37 ÷ 49 m
- n = 1500 min^{-1}
- D_n = 80 mm
- t_{max} = 35°C

Applicable for hydraulic transport of mixtures containing solids not greater than 22 mm in size. The maximum slurry density is 1400 kg/m^3. Used for hydraulic transport processes in power industry, coal, minerals and ore mines.

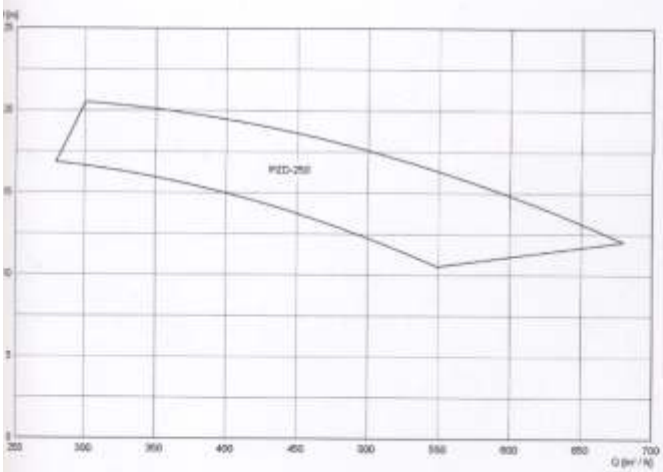
Pumps DZ



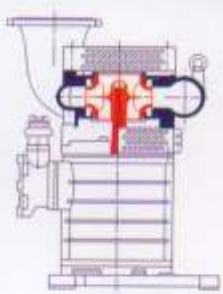
- Q = 80 ÷ 4200 m^3/h
- H = 2,6 ÷ 40 m
- n = 750 ÷ 1500 min^{-1}
- D_n = 150 ÷ 600 mm
- t_{max} = 40°C

Applicable for pumping clean water, industrial water and rain water. Used in water supply pumping, at water intakes and in general industrial applications.

Pumps PZD-250



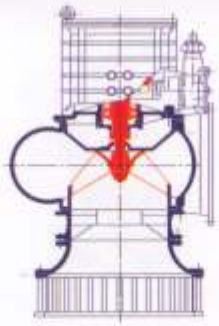
- Q = 280 ÷ 680 m^3/h
- H = 11 ÷ 21 m
- n = 1500 min^{-1}
- D_n = 250 mm
- t_{max} = 30°C



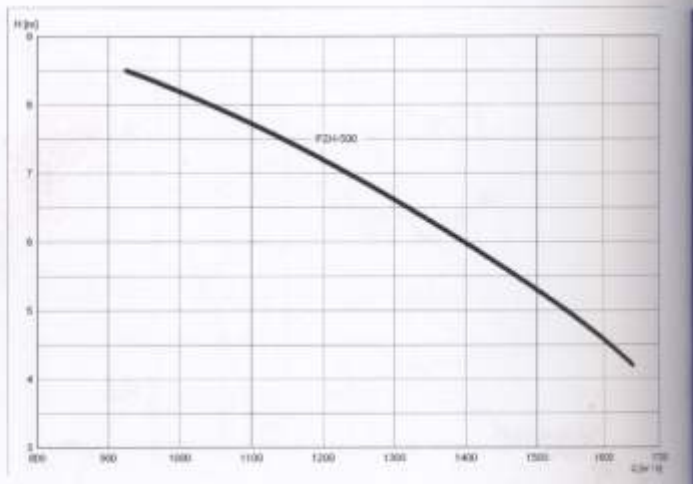
Applicable to pumping clean, industrial and rain water containing solids not greater than 14 mm and mixture density up to 1100 kg/m^3. Mainly used in melioration and communal pumping stations, excavation dewatering and for stationary pumps feeding.

2.2. Single-stage - vertical

Pumps PZH-500



- Q = 930 ÷ 1650 m^3/h
- H = 4,5 ÷ 8,5 m
- n = 750 min^{-1}
- D_n = 500 mm
- t_{max} = 30°C



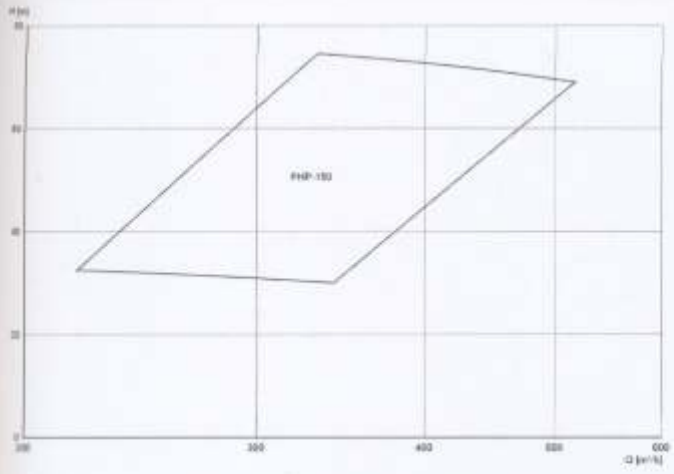
Applicable to pumping clean, industrial and rain water containing solids not greater than 50 mm and mixture density up to 1100 kg/m^3. Mainly used in melioration pumping stations and water intakes.

SUMP PUMPS

3

Grupa Powen-Wafapomp SA

Pumps PHP



- Q = 220 ÷ 510 m^3/h
- H = 30 ÷ 75 m
- n = 1000 ÷ 1500 min^{-1}
- D_o = 150 mm
- t_{max} = 50°C

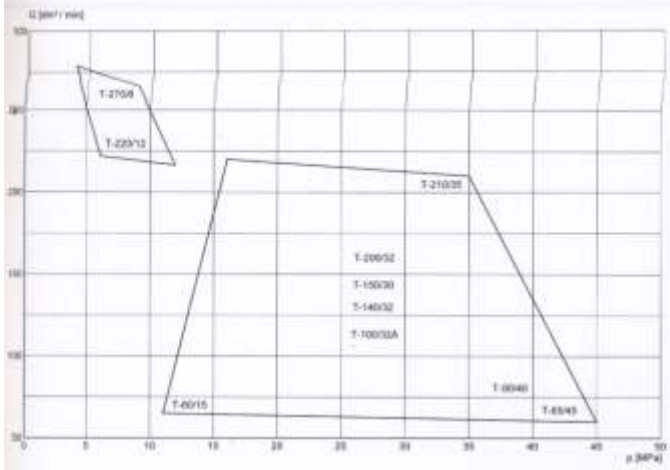
Applicable for hydraulic transport of sand, gravel, stones, coal, slag, ores, ash, clay, lime milk, flotation tailings etc., for pumping highly abrasive mixtures of water and solids not greater than 40 mm in size. The maximum slurry density is 1700 kg/m^3. Used in coal and ore mines, power plants, steel works, solid waste disposal systems, and everywhere if operating conditions require vertical pump installation.

4

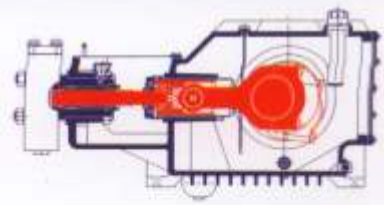
POSITIVE -DISPLACEMENT PUMPS

Grupa Powen-Wafapomp SA

Pumps T



- $Q = 65 \div 270\ dm^3/min$
- $p = 4 \div 45$ MPa
- $n = 1500\ min^{-1}$
- $D_s = 25 \div 32$ mm
- $t_{max} = 70°C$



Applicable to high pressure hydraulic circuits fed by water-oil emulsion with 0,4 - 5 % oil contents and industrial water. Mainly used for:

- self-advancing supports feeding,
- sprayed systems for mechanical coal miners,
- hydraulic press circuits feeding e.g. in millboards manufacturing processes.