SERIES 136.20

SELF-PRIMING HORIZONTAL SCREW PUMP FOR NON LUBRICATING LIQUIDS

PRODUCTS

POLLUTED WATERS

SOAP AND FAT

PAINT AND LACQUER

FOOD AND BEVERAGE

LABELLING

SLURRY PUMPS

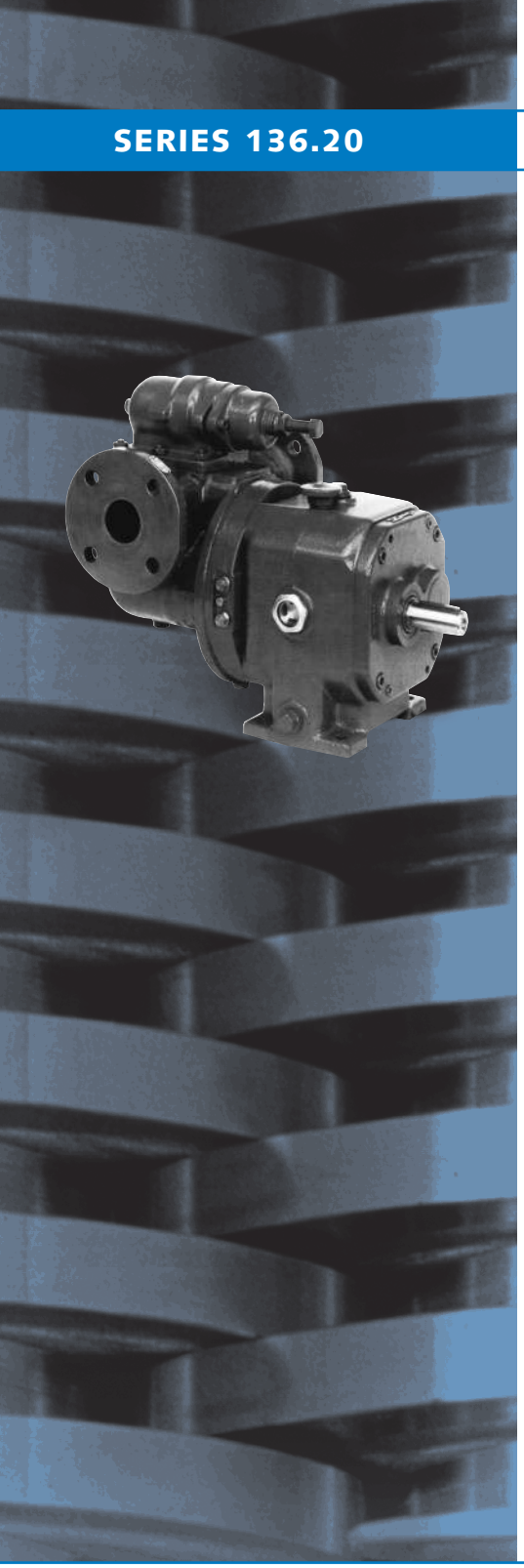
METERING PUMPS

TRANSFER PUMPS

A COLFAX BUSINESS UNIT Colfax Corporation

HOUTTUIN B.V.

GENERAL INFORMATION



Principle
The Houttuin single entry twin screw pumps series 136 are horizontal rotating self priming positive displacement pumps. Two intermeshing screws rotating in a pump casing ensure high pumping efficiency with constant axial flow and unequalled suction power.

Construction
The spindles are supported and axially held in position by ball bearings. The axial thrust incurred is absorbed by the amply sized axial shaft bearings. The transmission of torque from the driven spindle to the idler spindle is effected by oil-lubricated timing gears located outside of the pumping area in an attached gearbox. The ball bearings and timing gears maintain a small clearance between the screws, thus preventing metal to metal contact.

Shaft sealing
Single unbalanced mechanical seals keep the liquid to be pumped isolated from the bearings and the gearbox.

Overload protection
For protection against overload a built-on spring loaded relief valve can be supplied.

Applications
For pumping contaminated or slightly abrasive, lubricating and non-lubricating liquids of low or high viscosity which do not chemically attack the pump materials (corrosion proof materials can be offered).
In the chemical and petrochemical industry, soap- and fat industry, paint and lacquer industry, food and beverage industry, plastics industry, sugar industry, shipbuilding, environmental engineering (e.g. for removal of wast oils, solvents and chemicals) etc.

Products
Polluted water
Soap and fat
Paint and lacquer
Food and Beverage

Labelling
Slurry pumps
Metering pumps
Transfer pumps

Performance data

Capacity	Q	up to 20 m^3/h
Viscosity range	V	0,6 to 1500 cSt
Temperature of pumped liquid	t	up to 120 °C
Inlet pressure	p_s	up to 1 bar
Outlet pressure	p_d	up to 10 bar
Difference pressure	Δp	up to 11 bar
Speed	n	up to 3500 rpm
Flanges		according to DIN or ANSI

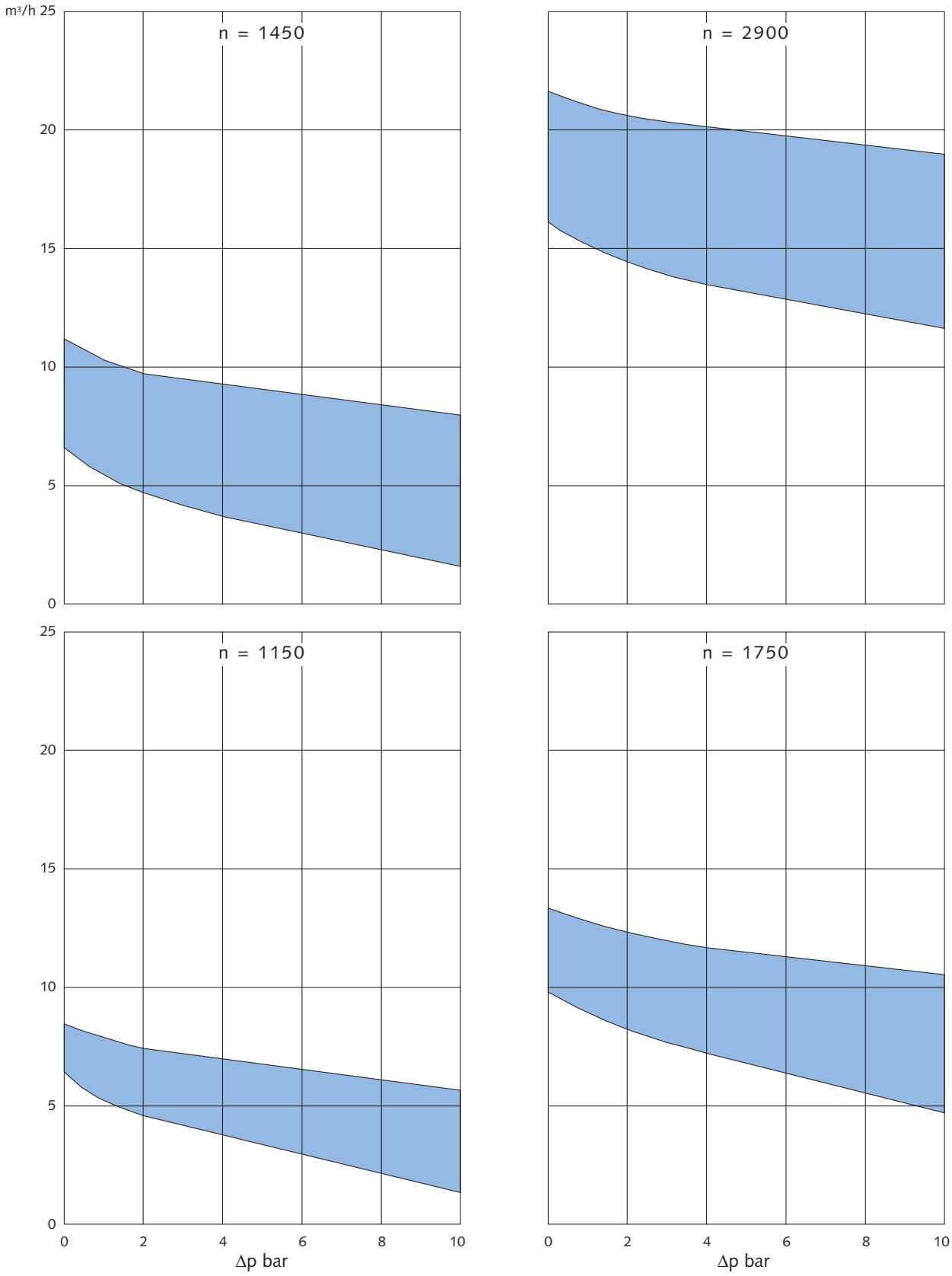
A preliminary pump selection can be effected by means of the performance graphs. For the exact performance data as function of the viscosity of the fluid to be pumped and the pump speed, please refer to the individual characteristics.

AVAILABLE MATERIALS FOR PUMP AND MECHANICAL SEALS:

Pump		Mechanical seal according to DIN 24960 / API		
Screw shafts	Casing and seal cover	Seal faces	Springs	'O' -rings
- Stainless Steel (Type 400) - Stainless Steel (Type 300)	- Cast Iron - Cast Steel - Cast Stainless Steel (Type 300)	- Chrome Steel or - Silicon Carbide against - Carbon	- Stainless Steel (Type 300)	- Viton - Teflon

PERFORMANCE GRAPHS

Flow rate/pressure at minimum and maximum viscosity according to pump size.
For exact performance data dependant of viscosity and rpm please refer to the individual characteristics per pump size.

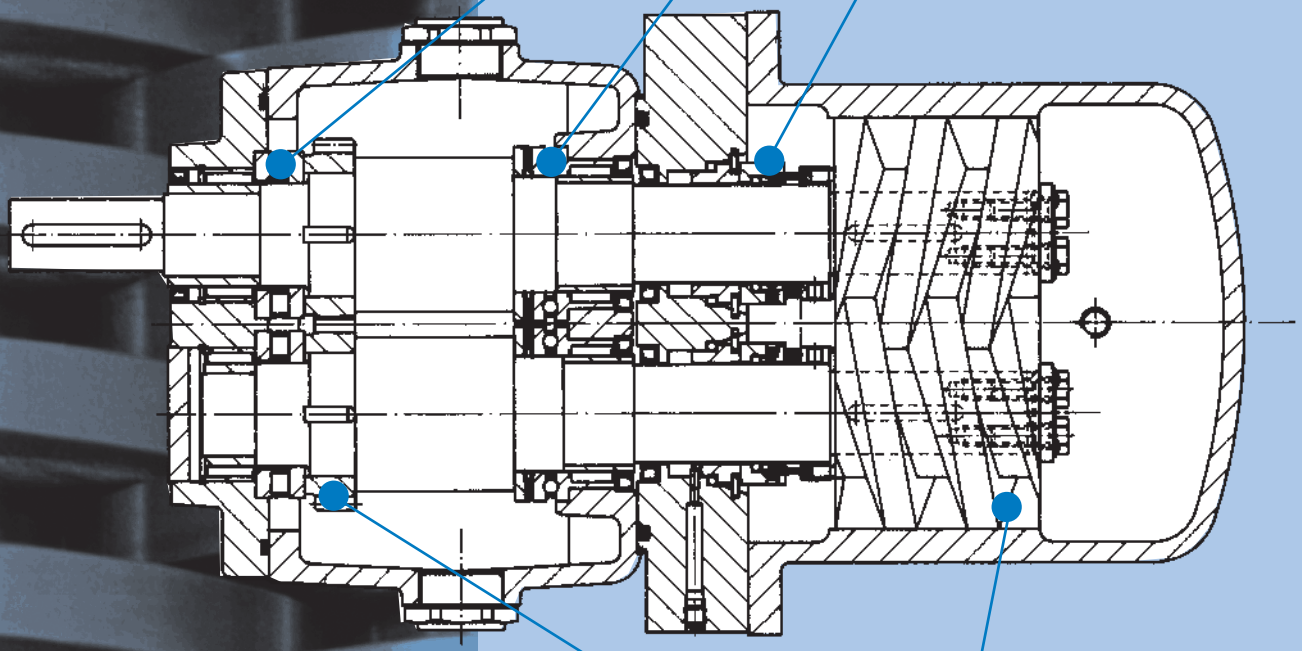


CONSTRUCTION

For **over load protection** a direct mounted pressure relief valve is optional

The **bearing of the driving shaft and the idler shaft** is in the gear box: on the pump side, one combined radial needle bearing/axial grooved ball bearing each and on the drive side an axial cylindrical roller bearing and a needle bearing. **All bearings are oil-lubricated**.

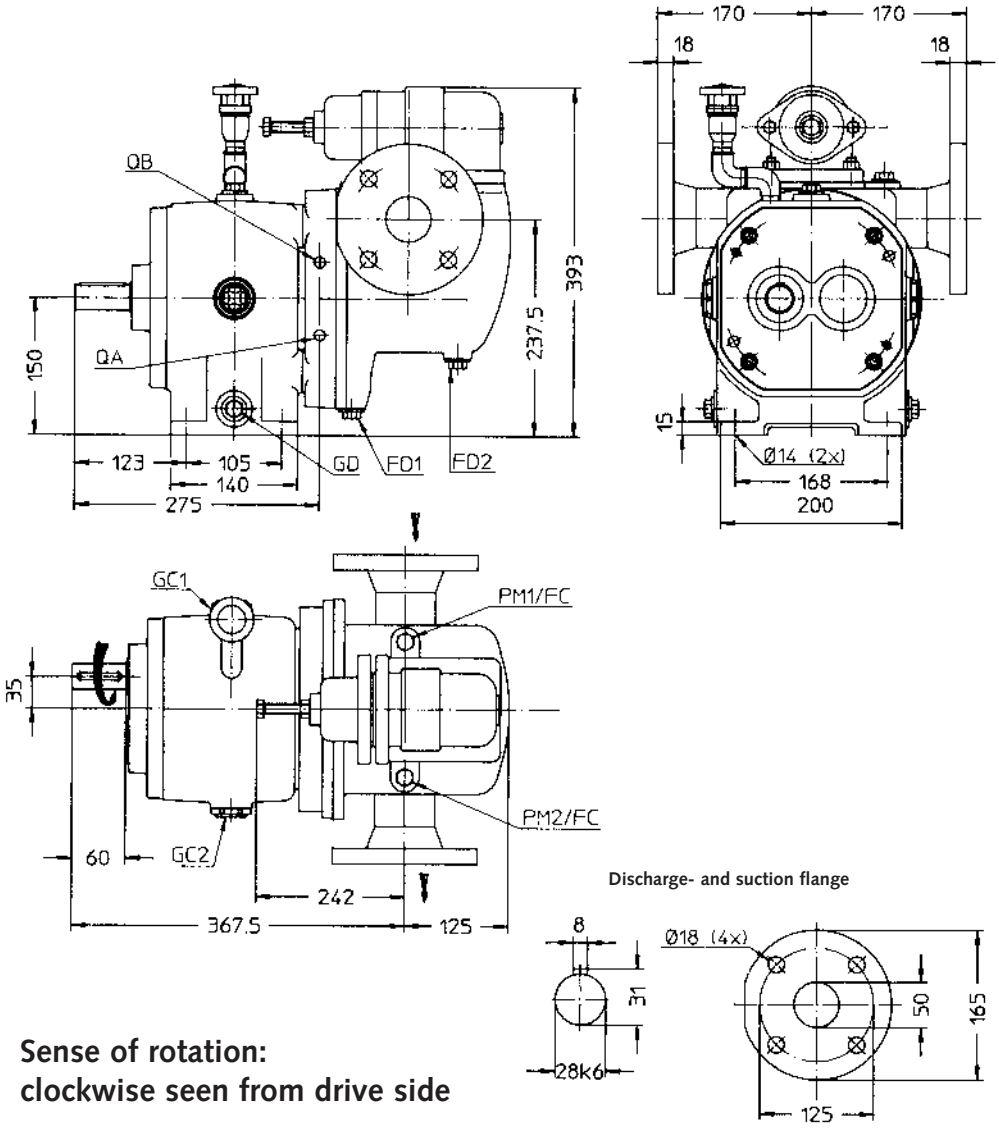
Safe shaft sealing by single unbalanced and product lubricated mechanical seals.



The special profile of the spindle flanks results in **continuously and nearly pulsation-free pumping, high efficiency, good NPSH-values and constant pressure course.**

Safe transmission of torque through the hardened and ground oil lubricated timing gears.

DIMENSIONS



Sense of rotation:
clockwise seen from drive side

Suction and discharge flanges PN 16 DIN 2533

AUXILIARY CONNECTIONS		
FC	Filling	BSP 1/2"
FD1	Drainage pump casing	BSP 1/2"
FD2	Drainage pump casing	BSP 1/2"
GC1	Oil filling and venting	BSP 1/2"
GC2	Oil slight glass	BSP 1/2"
GD	Oil drainage	–
PM1	Pressure gauge	BSP 1/2"
PM2	Pressure gauge	BSP 1/4"
QA 1 (1)	Quenching mechanical seal, inlet	BSP 1/4"
QB 1 (1)	Quenching mechanical seal, outlet	BSP 1/4"

(1) Connections on both sides (per shaft seal)

dimensions in mm, dimensions are subject to alternations.
WEIGHT (CA); INCL. RELIEF VALVE: 80 KG.

PERFORMANCE DIAGRAMS TOTAL PUMP PROGRAM*)

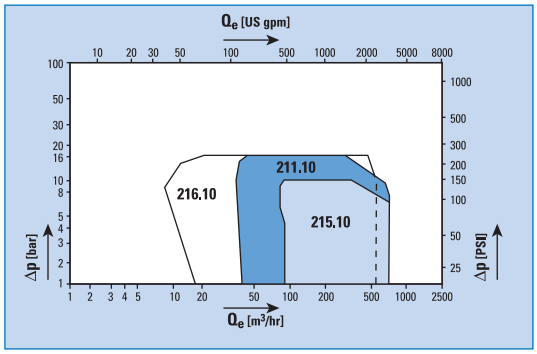
*) The diagrams show the performance range of the different pump series in our pump program and are for information only.

STANDARD PUMPS

With Internal Bearings

for lubricating liquids

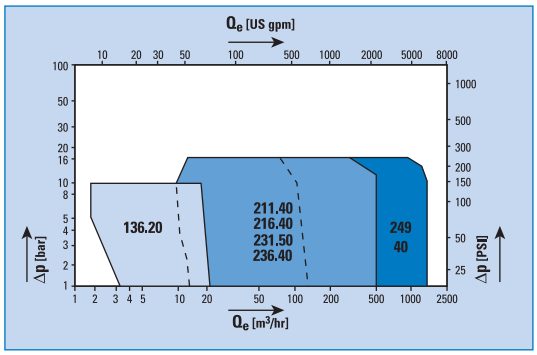
viscosity range : 20 - 760 cSt
: 98 - 3500 SSU



With External Bearings

for non-lubricating liquids

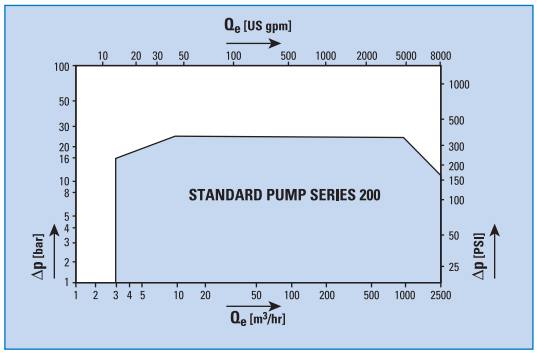
viscosity range : 0,6 - 1500 cSt
: 32 - 7000 SSU



With External Bearings

for lubricating and
non-lubricating liquids

viscosity range : 0,6 - 100.000 cSt
: 32 - 466.000 SSU

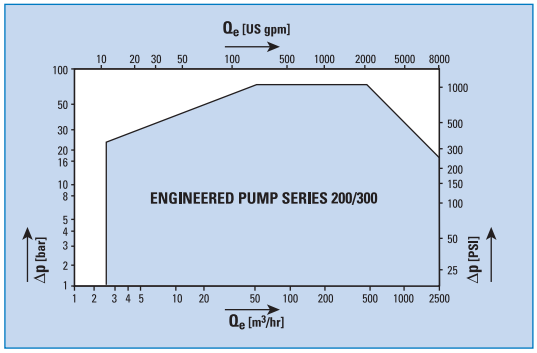


ENGINEERED PUMPS

With External Bearings

for lubricating and
non-lubricating liquids

viscosity range : 0,6 - 100.000 cSt
: 32 - 466.000 SSU



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