

**SERIES 215.10**

SELF-PRIMING SUBMERSIBLE SCREW PUMP FOR LUBRICATING LIQUIDS

**CIRCOR** | HOUTTUIN™

**PRODUCTS**

LUBE OILS

HYDRAULIC OILS

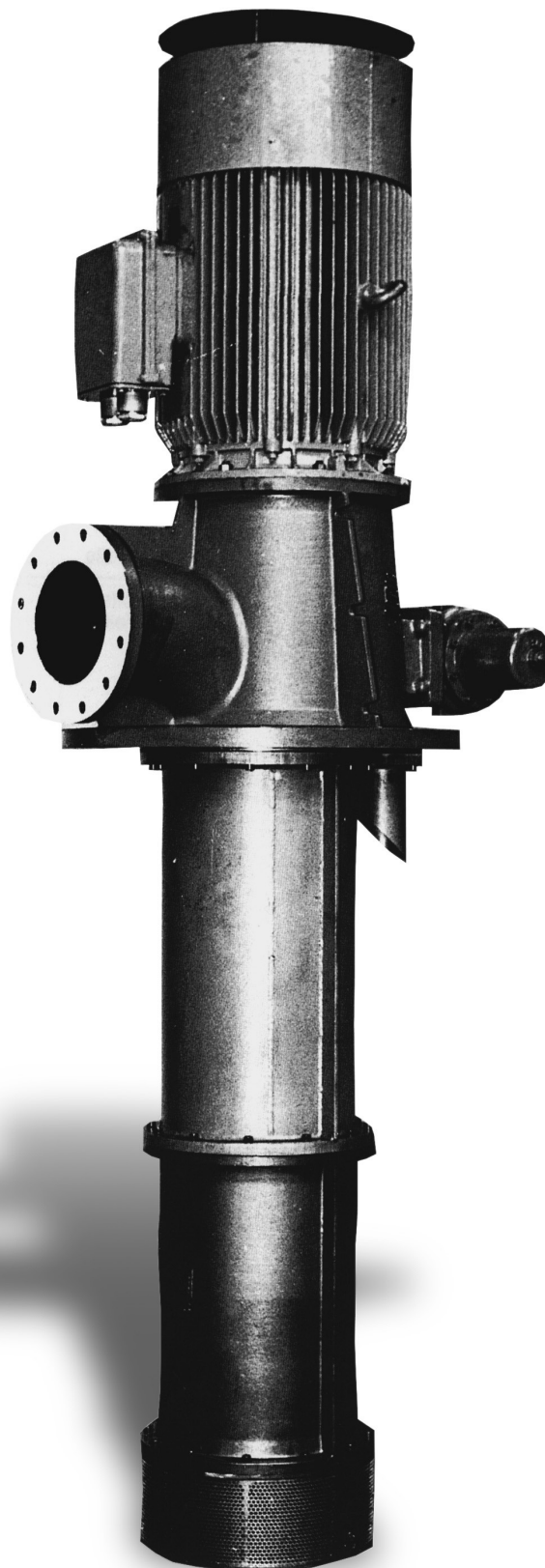
CLEAN FUEL OILS

**LABELLING**

LUBE OIL PUMPS

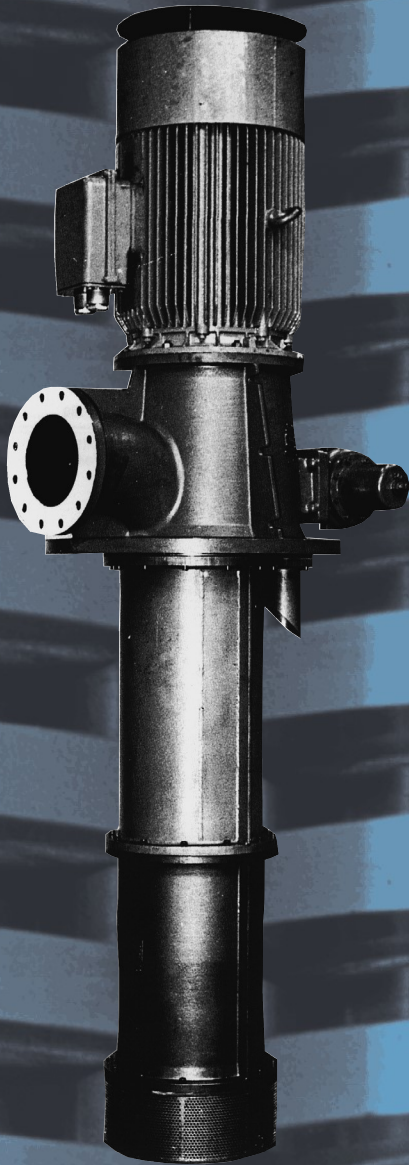
HYDRAULIC SYSTEMS

FUEL OIL TRANSFER PUMPS



**HOUTTUIN B.V.**





**Principle**

The Houttuin double entry screw pumps series 215 are rotating self-priming positive displacement pumps. The pump is constructed for submersible application and has therefore a very good NPSH-value.

Two inter-meshing 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 transmission of torque from the driven spindle to the idler spindle is effected by product lubricated timing gears 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**

Product lubricated single unbalanced mechanical seal.

**Overload protection**

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

**Applications**

For pumping lubricating oils, hydraulic oils or other lubricating liquids which do not contain abrasive substances nor chemically attack the pump materials.

As lub oil pumps in ship and offshore engineering, as filling pumps in tank farms and in hydraulic systems.

**Products**

- Lubricating oils
- Hydraulic oils
- Clean fuel oils

**Labelling**

- Main lub oil pumps
- Auxiliary lub oil pumps
- Hydraulic systems
- Fuel oil transfer systems

**Performance data**

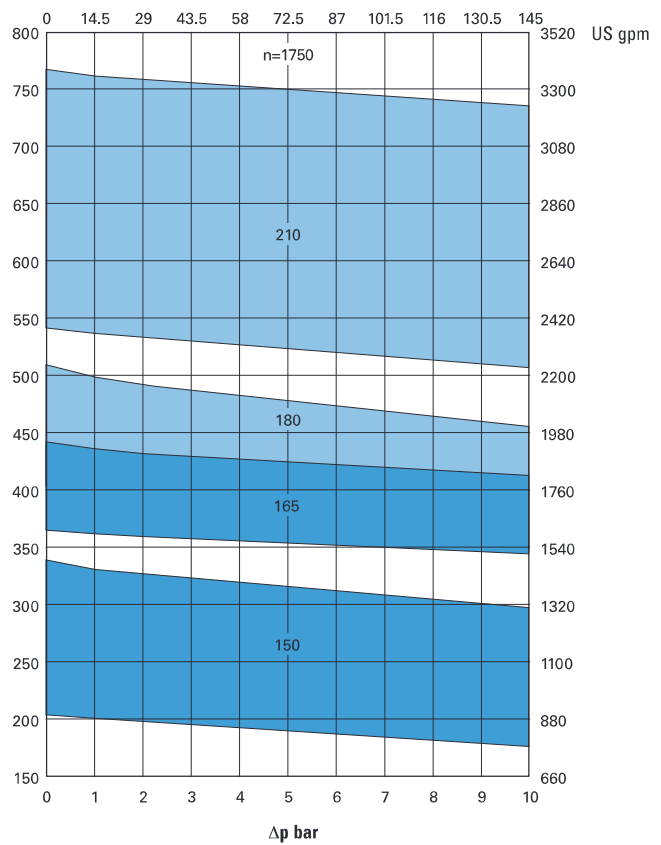
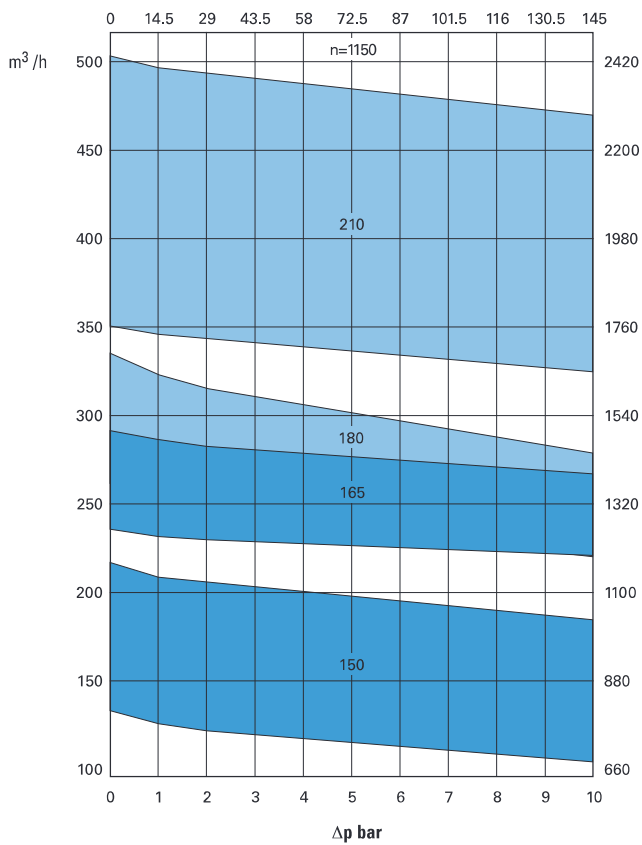
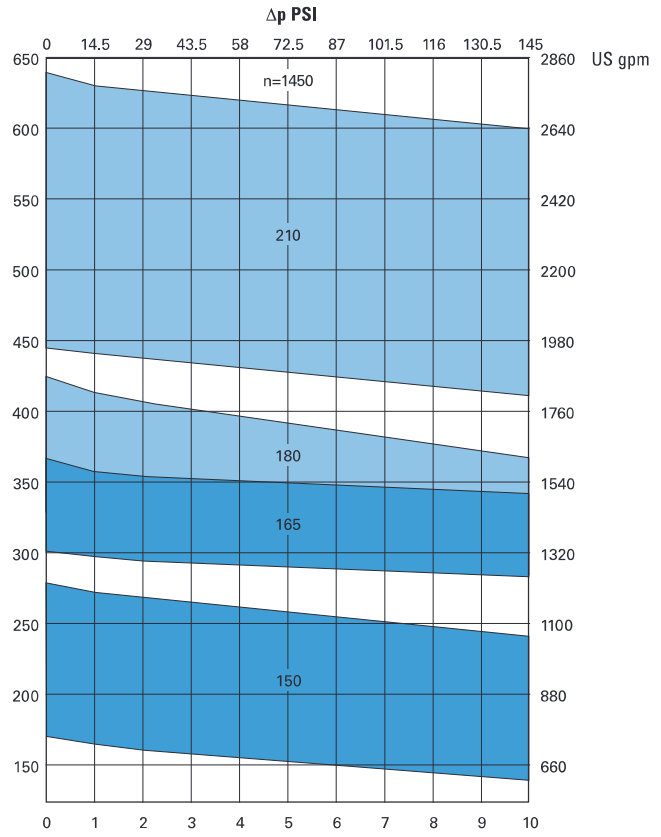
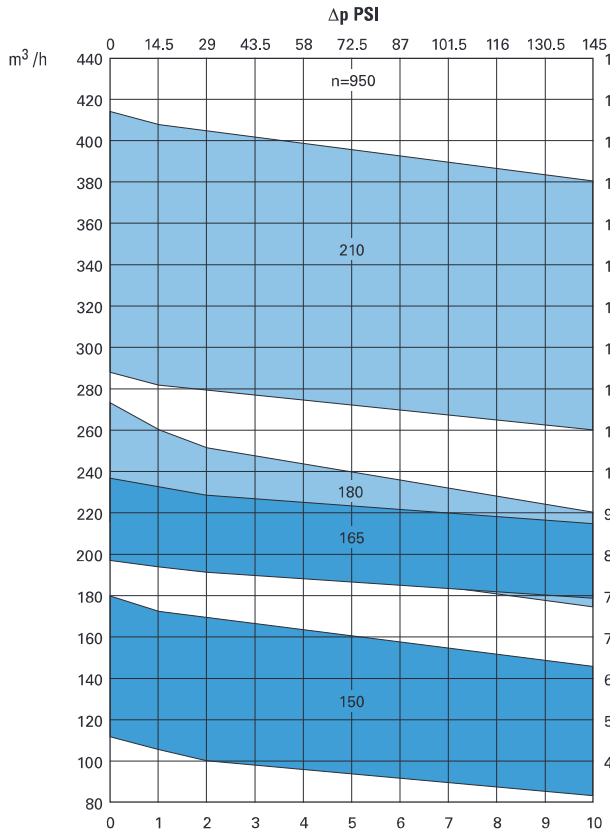
Capacity	Q	up to 490 m <sup>3</sup> /h
Viscosity range	V	20 to 760 cSt
Temperature of pumped liquid	t	up to 80 °C
Inlet pressure		not applicable
Outlet pressure	p <sub>d</sub>	up to 10 bar
Difference pressure	Δp	up to 10 bar
Speed	n	up to 2900 rpm
Flanges		according to DIN or ANSI

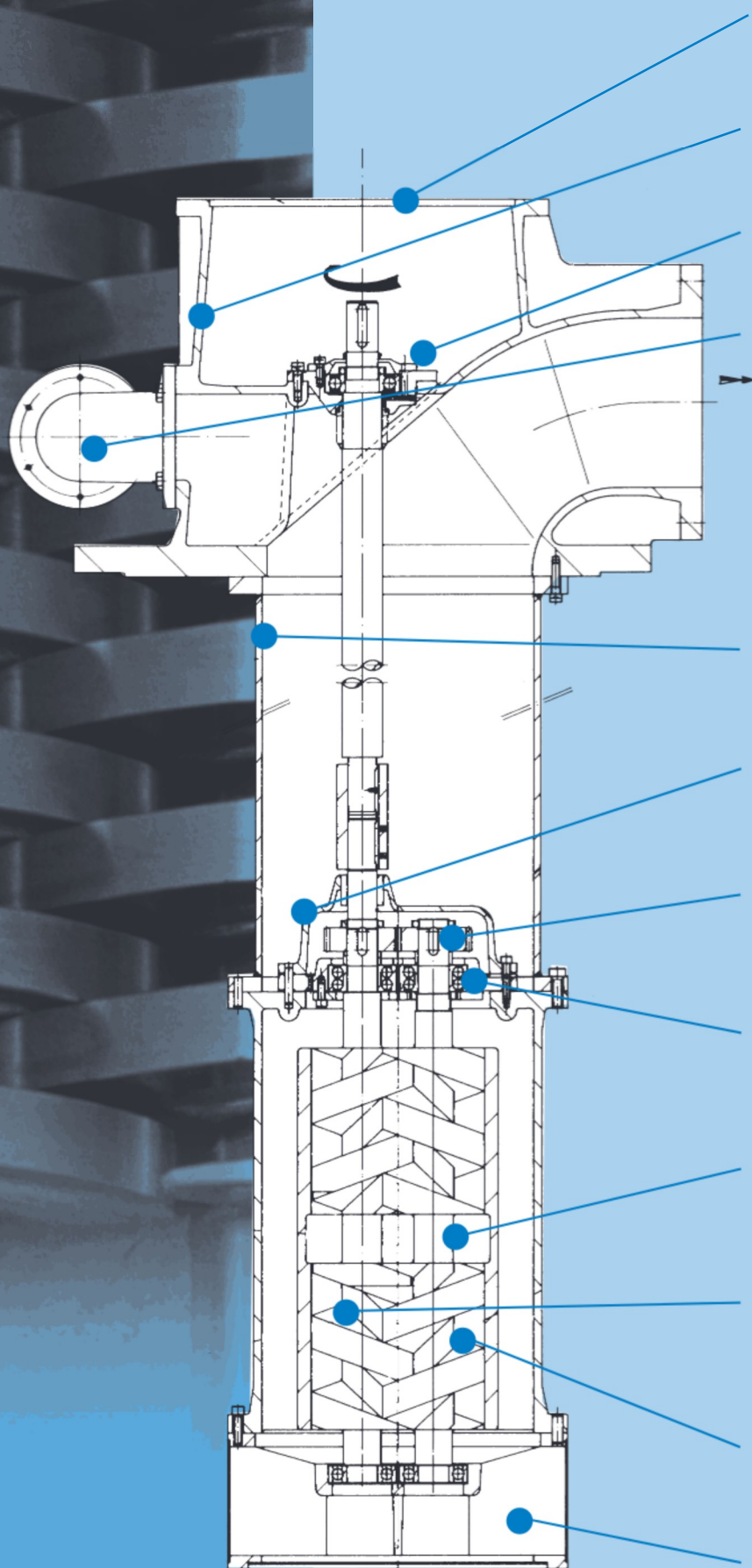
**AVAILABLE MATERIALS**

**FOR PUMP AND MECHANICAL SEAL:**

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

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





Drive by **commercial standard motors**, construction V1, all types of enclosure possible.

**Motor bracket** for direct mounting on the tanktop.

**Single unbalanced mechanical seal** lubricated by the liquid pumped.

For **overload protection** a direct mounted pressure relief valve is optional.

The length of the intermediate pipe is on request.

**Safe lubricating/cooling** of ball bearing, timing gears by internal circulation of liquid pumped.

**Safe transmission of torque** through the hardened and ground timing gears lubricated by the liquid pumped.

**Amplly dimensioned and maintenance free ball bearings** lubricated by the liquid pumped, which additionally serve for the axial thrust of the spindles.

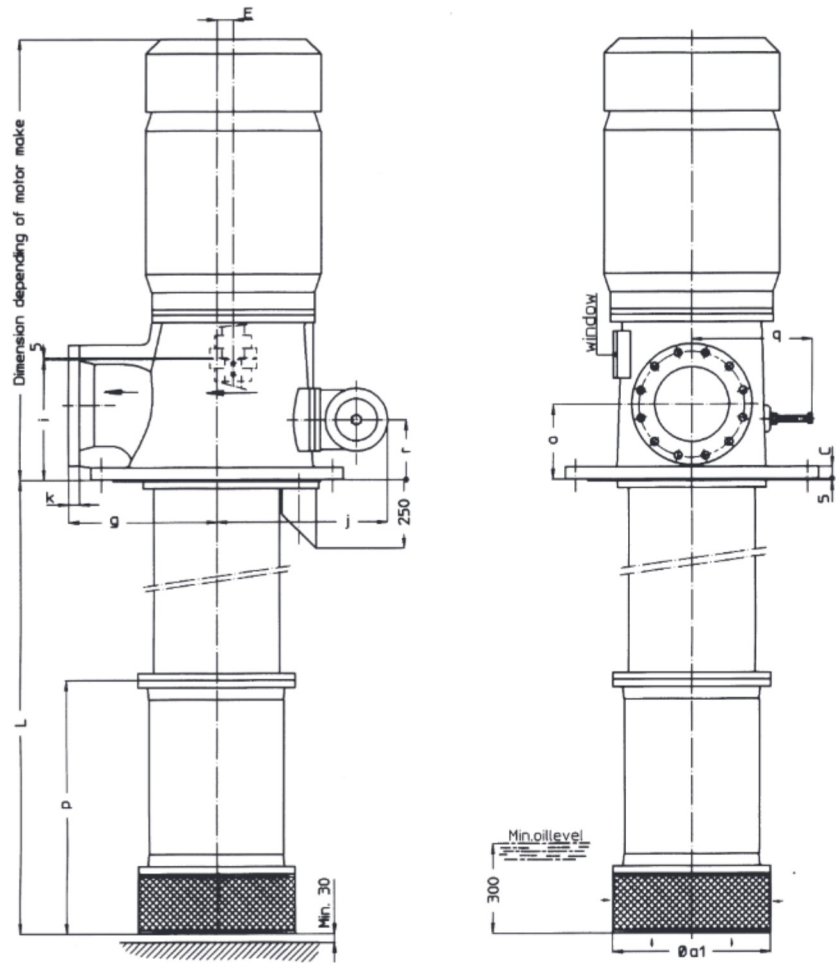
**Axial forced balanced** through double entry spindles.

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

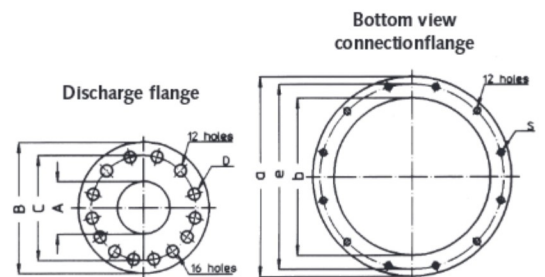
Rigid spindles of solid material therefore **contact-free running** and compared with multi-part spindles **no crevice corrosion.**

Strainer as an integrated part of the pump.





Sense of rotation:  
clockwise seen from  
drive side



PUMP SIZE	FLANGES PN16 DIN 2533					PUMP FOOT					
	A	B	C	D	E	a	b	c	e	s	a1
150	250	405	355	12x26	55	850	700	40	780	12x27	505
165	250	405	355	12x26	55	850	700	40	780	12x27	540
180	250	405	355	12x26	55	850	700	40	780	12x27	690
210	350	520	470	16x26	73.5	990	850	45	920	12x27	725

PUMP SIZE	PUMP DIMENSIONS									RELIEF VALVE SIZE
	g	i	j	k	o	p	q	r	L	
150	500	405	575	32	250	850	405	200	on request	100
165	500	405	575	32	250	870	405	200	on request	100
180	500	405	575	32	250	880	405	200	on request	100

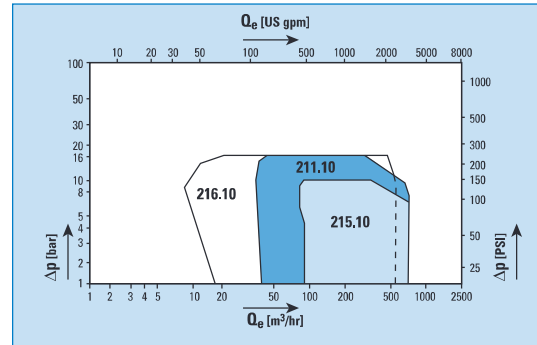
\*) The diagrams show the performance range of the different pump series in our pump program and are for information only.

**STANDARD PUMPS**

**With Internal Bearings**

for lubricating liquids

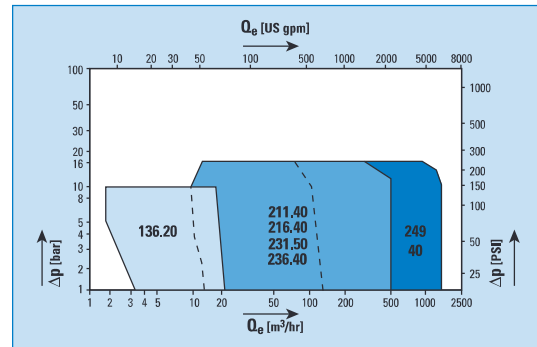
viscosity range : 20 - 760 cSt  
: 98 - 3500 SSU



**With External Bearings**

for non-lubricating liquids

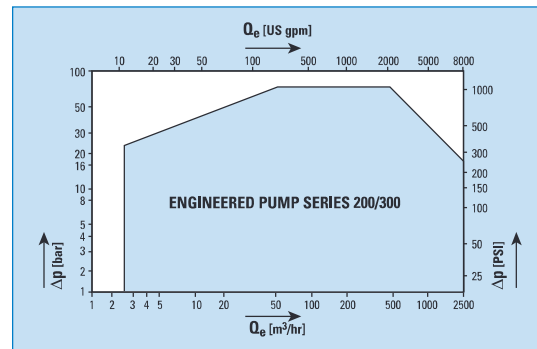
viscosity range : 0,6 - 1500 cSt  
: 32 - 7000 SSU



**With External Bearings**

for lubricating and non-lubricating liquids

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

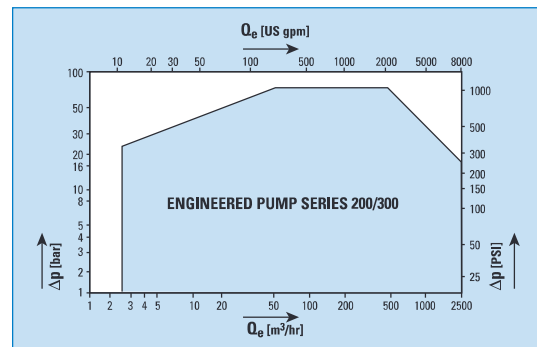


**ENGINEERED PUMPS**

**With External Bearings**

for lubricating and non-lubricating liquids

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



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