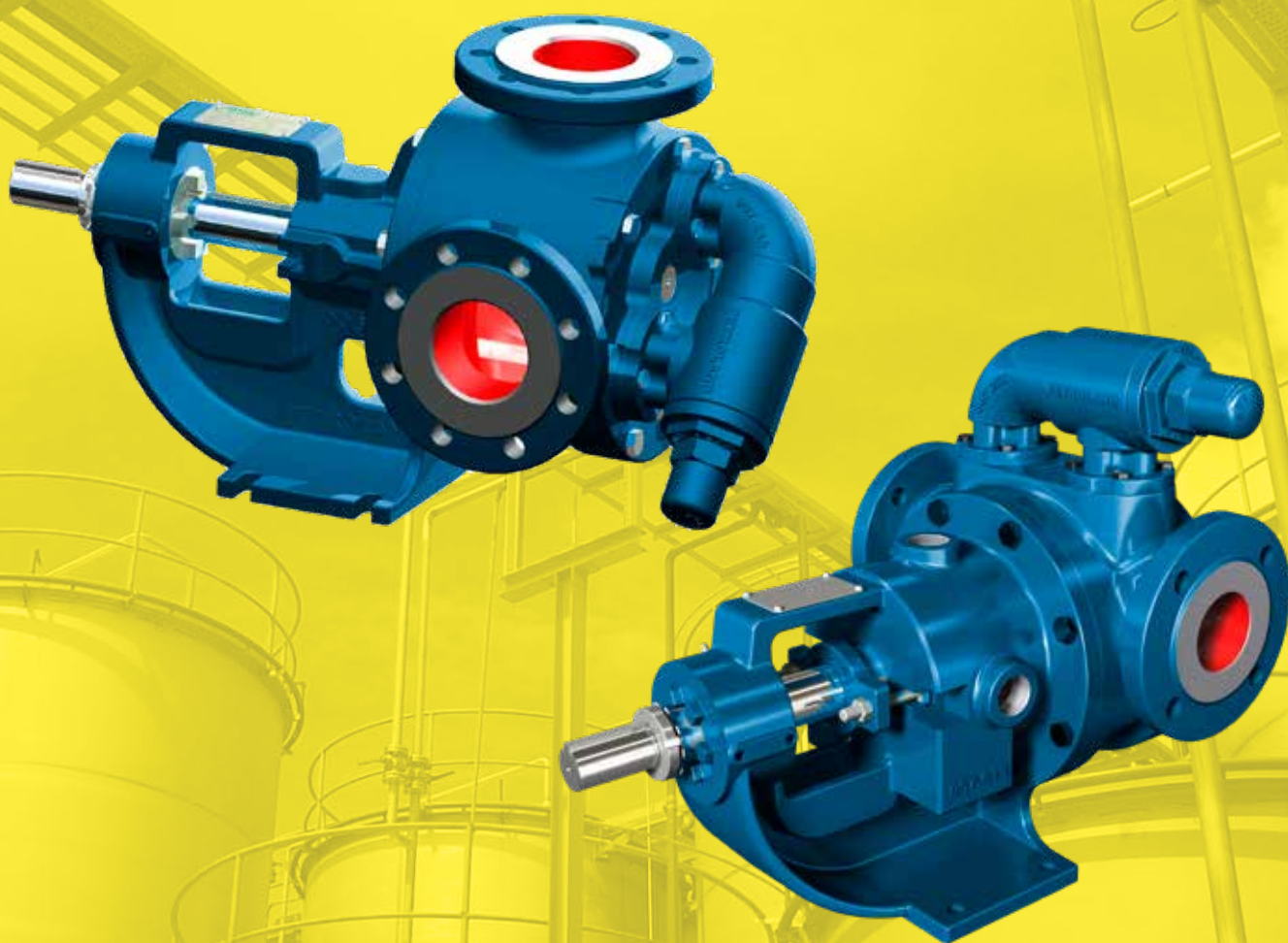


tapflo®

PD/PM GEAR PUMPS

2020| 2



» All about your flow™

www.tapflo.hu

» All about your flow™

We began our journey 40 years ago in Kungälv, a small town on the Swedish west coast, as a family company with an ambition to one day become a global player on the pump market.

Since 1980, we have taken pride in delivering a wealth of knowledge and passion for pumps to the industry, whilst supplying a wide range of premium products for various industrial applications.

Over the years, the company has developed into a global Tapflo Group with branches and distributors present in nearly every region of the world.

One thing did not change - we are still a family company.

Our solutions are designed and manufactured in Europe and distributed globally to offer the best service and flow solutions to our customers for a variety of applications.

Our values, Commitment, Quality and Simplicity are reflected both in our product and business approach.



For fast and flexible service and high-quality products readily available worldwide, choose Tapflo.

Quality commitment

At Tapflo we are simply committed to quality. As a result, our production standards, as well as products quality, comply with various globally recognised certification and quality control standards. The Tapflo manufacturing process is certified according to ISO 9001:2015, confirming that our processes are appropriate, effective, customer-focused and continuously improved.



Tapflo values

Our culture is concluded in Our values

Commitment

We are different from our competitors because of our willingness to exceed the customers' expectations, move fast and be flexible. Our culture is based on the spirit of togetherness, enthusiasm and integrity. We come from all over the world but we share the same values and we respect each other. We are committed.

Quality

We understand that the quality in our work is never better than the weakest link, that's why we focus on every small detail. We share a common passion for continuously finding more efficient and effective ways to provide value to our customers. As a manufacturer we have control of the complete process both in terms of our products and the way we operate internally. That is why we manufacture the highest quality pumps in our segment.

Simplicity

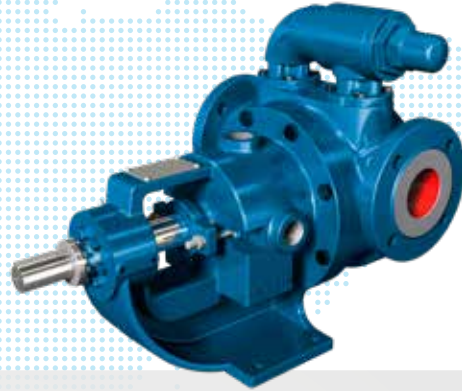
We have a saying, "Simple is art" which means we try to find smooth and uncomplicated solutions in everything. By keeping it simple we can focus on the essential, like designing uncomplicated pumps with few components. For us it is a key to success; strive to simplify what is complex.

PD series - Internal Gear Pumps

Low and high viscosity mediums.

Internal Gear Pumps are self-priming positive displacement pumps and they have reliable design with only two moving parts. Because of both direction properties, they are suitable for filling and discharge.

Internal gear pumps are used for low viscosity mediums and high viscosity mediums with adjustable clearance. They can transfer the fluids, which viscosity is between 1 cSt- 450.000 cSt



Features & Benefits

- ✓ Applications variety with 60 different casing size
- ✓ Easy of usage and maintenance with only two moving parts
- ✓ Operating wide range of viscosity
- ✓ Can be used same pump for filling and discharge with both direction properties
- ✓ Cavitation possibility is less because of low NPSHr
- ✓ Can be apply many different material option (cast iron, ductile iron, steel or stainless steel)
- ✓ The pump design is suitable for every type of seal (Special design, lip seal, packing gland, single mechanical seal, double mechanical seal)
- ✓ The design is suitable for many applications
- ✓ The pump isn't effected any pressure drops in order to positive displacement feature
- ✓ Suitable for all kind of coupling (with motor, gearbox, v-belt)
- ✓ Connection type options, ANSI&DIN Flanged connection or BSP&NPT threaded connection
- ✓ They are more economical than rotary lobe pumps and screw pumps because can be applied only one seal
- ✓ Heating / Cooling jackets can be applied to cover, casing or bracket
- ✓ The rotor casing can rotate 360°
- ✓ Not required special tools for maintenance
- ✓ Connection design is adjustable 90° or 180°
- ✓ Self-priming is up to 950 mbar
- ✓ Relief Valve can be applied to pump cover or case

Working principle



Inlet Side – Outlet Up



Inlet and Outlet Side (In-Line)

1. Liquid enters the suction port between the rotor (large exterior gear) and idler (small interior gear) teeth. The orange arrows indicate the direction of the pump and liquid.
2. Liquid travels through the pump between the teeth of the "gear-within-a-gear" principle. The crescent shape divides the liquid and acts as a seal between the suction and discharge ports.
3. Rotor and idler teeth mesh completely to form a seal equidistant from the discharge and suction ports. This seal forces the liquid out of the discharge port.

Wide range of applications



Cosmetics & pharmaceutical industry



Chemical industry

Transfer of sodium silicates, acids, plastics, mixtures of different chemicals, isocyanates.



Paint and printing industry

Transfer of paints, inks, polyurethane varnishes, polymers, solutions, emulsions, adhesives, resins.



Food industry

Pouring chocolate, cocoa butter, various fillings, sugar syrup, vegetable fats and oils, molasses, animal feed.



Pulp and paper industry

Transfusion of acids, sulfate soap, solid basic solutions, kaolin, lime, latex, starch.



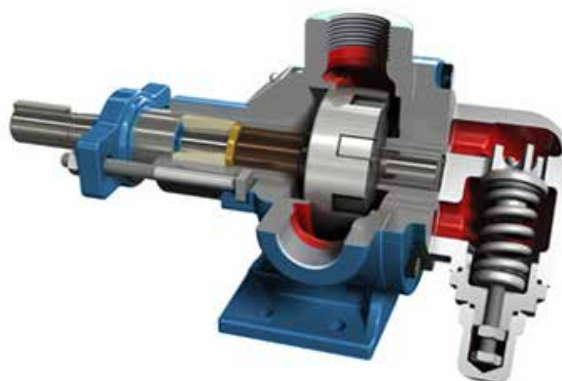
Petrochemical industry

Pouring of pure bitumen, bituminous emulsions, resins, diesel fuels, crude oil, lubricating oils.

Without bracket design

Fast facts

| | |
|-----------------------------|-----------------------------|
| Max. Capacity | 2.5 - 125 m ³ /h |
| Max. Differential Pressure: | 7 bar (100 PSI) |
| Max. Viscosity: | 2.500 cSt |
| Temperature Range: | -20 °C to +180 °C |



Features & Benefits

- ✓ Applications variety with 9 different casing size
- ✓ Can be apply many different material option (cast iron, ductile iron, steel or stainless steel)
- ✓ Operating low and medium viscosity
- ✓ Self-priming is up to 950 mbar
- ✓ No need gearbox for low viscosity applications
- ✓ The pump design is suitable for lip seal, packing gland and mechanical seal
- ✓ It is economical solution with direct coupling

OPTIONS:

- » Heating / Cooling jacket can be applied to cover
- » Relief Valve can be applied to pump cover
- » Connection type options BSP & NPT threaded-connection

| Model | Inlet / Outlet Size | | Capacity (at Max. Speed) | | Max. Speed |
|-------|---------------------|----|--------------------------|------|------------|
| | Inch | mm | m ³ /h | GPM | rpm |
| AS | ½" | 15 | 0.7 | 3 | 1750 |
| A | ¾" | 20 | 1.5 | 6.5 | |
| GL | 1" | 25 | 3 | 13 | 1450 |
| FL | 1 ½" | 40 | 6 | 26 | |
| JS | 2" | 50 | 7 | 30 | 950 |
| J | 2" | 50 | 10 | 44 | |
| JL | 2" | 50 | 13 | 57 | |
| K | 2" | 50 | 12 | 52.5 | 500 |
| KL | 2" | 50 | 15 | 66 | |

Note: The connection ports are available only BSP / NPT threaded connections.

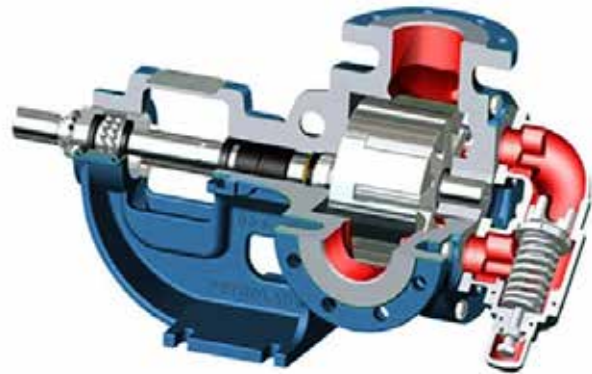
Pump code

| I. | II. | III. | IV. | V. | VI. | VII. |
|------------------|-------------------------|---------------------------|------------------------|----------------------------|---------------------|---------------------------|
| AS | 6 | 122 | G | 1 | B | V |
| I. Model: | II. Sealing: | III. Construction: | IV. Connection: | V. Casing material: | VI. Bushing: | VII. By-Pass: |
| AS | - = Packing Gland | 122 = Standard | G = BSP | 1 = Cast Iron | B = Bronze | - = No Relief Valve |
| A | 6 = External Mechanical | 132 = Cover Jacketed | N = NPT | 2 = Ductile Iron | K = carbon | V = Relief Valve on Cover |
| GL | 9 = Lip | | | 3 = Steel | Graphite | |
| FL | | | | 4 = 304 Stainless Steel | T = Tungstes | |
| JS | | | | 5 = 316 Stainless Steel | | |
| I | | | | | | |
| JL | | | | | | |
| K | | | | | | |
| KL | | | | | | |

With bracket design

Fast facts

| | |
|-----------------------------|--|
| Max. Capacity | 390 m ³ /h |
| Max. Differential Pressure: | 14 bar (200 PSI) ZL - 8.5bar (125 PS) |
| Max. Viscosity: | 450.000 cSt |
| Temperature Range: | -50 °C to +350 °C |



Features & Benefits

- ✓ Applications variety with 19 different casing size
- ✓ Can be apply many different material option (cast iron, ductile iron, steel or stainless steel)
- ✓ Operating wide range of viscosity
- ✓ Self-priming is up to 950 mbar
- ✓ The pump design is suitable for every type of seal (Special design, lip seal, packing gland, single mechanical seal, double mechanical seal)

OPTIONS:

- » Heating / Cooling jackets can be applied to cover, casing and bracket
- » Relief Valve can be applied to pump cover
- » Connection type options, ANSI&DIN
- » Flanged connection or BSP&NPT threaded connection

| Model | Inlet / Outlet Size | | Capacity (at Max. Speed) | | Max. Speed |
|-----------|---------------------|----------|--------------------------|------------|------------|
| | Inch | mm | m ³ /h | GPM | rpm |
| B; CL | 1" | 25 | 2.4; 3.5 | 10; 15 | 1750 |
| H; HM; HL | 1 1/2" | 40 | 3.5; 5; 7 | 15; 22; 30 | |
| J; JL | 2" | 50 | 11; 17 | 50; 75 | 1150 |
| K; KL | 2" | 50 | 19; 26 | 85; 115 | 900 |
| S; SL | 2 1/2" | 65 | 36; 52 | 160; 230 | 750 |
| M; ML | 3" | 80 | 52; 65 | 230; 290 | 500 |
| N; NL | 4" | 100 | 65; 113 | 290; 495 | 500 |
| P | 5" | 125 | 120 | 525 | 400 |
| R | 6" | 150 | 157 | 695 | |
| Z; ZL | 8"; 10" | 200; 250 | 267; 390 | 1180; 1720 | 300 |

Note: B and CL model pumps are with only threaded connection. Between H and M models are with threaded or flange connection. Between ML and ZL models are with only flange connection.

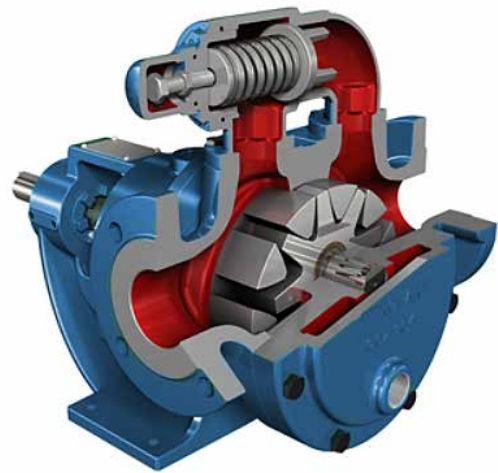
Pump code

| I. | | II. | | III. | | IV. | | V. | | VI. | | VII. | |
|------------------|----|---------------------|---------------------|---------------------------|--------------------------|------------------------|-------------|----------------------------|-------------|---------------------|-----------------|----------------------|--------------------------------|
| H | | 5 | | 222 | | F | | 1 | | B | | V | |
| I. Model: | | II. Sealing: | | III. Construction: | | IV. Connection: | | V. Casing material: | | VI. Bushing: | | VII. By-Pass: | |
| B | SL | - | Packing Gland | 222 | Standard | G | BSP | 1 | Cast Iron | B | Bronze | - | No Relief Valve |
| CL | M | 4 | Special Design | 232 | Cover Jacketed | N | NPT | F | DIN Flange | K | Carbon Graphite | V | Relief Valve on Cover |
| H | ML | 5 | Internal Mechanical | 242 | Casing Jacketed | F | DIN Flange | A | ANGI Flange | T | Tungstes | W | Relief Valve Jacketed on Cover |
| HM | N | 6 | External Mechanical | 252 | Bracket Jacketed | A | ANGI Flange | | | | | | |
| HL | NL | | | 262 | Cover & Bracket Jacketed | | | | | | | | |
| J | P | | | | | | | | | | | | |
| JL | R | | | | | | | | | | | | |
| K | Z | | | | | | | | | | | | |
| KL | ZL | | | | | | | | | | | | |
| S | | | | | | | | | | | | | |

In-line design

Fast facts

| | |
|-----------------------------|-----------------------|
| Max. Capacity | 390 m ³ /h |
| Max. Differential Pressure: | 14 bar (200 PSI) |
| | ZL - 8.5bar (125 PS) |
| Max. Viscosity: | 450.000 cSt |
| Temperature Range: | -50 °C to +350 °C |



Features & Benefits

- ✓ Applications variety with 17 different casing size
- ✓ Can be apply many different material option (cast iron, ductile iron, steel or stainless steel)
- ✓ Operating wide range of viscosity
- ✓ Self-priming is up to 950 mbar
- ✓ The pump design is suitable for every type of seal (Special design, lip seal, packing gland, single mechanical seal, double mechanical seal)

OPTIONS:

- » Heating / Cooling jackets can be applied to cover and bracket
- » Relief Valve can be applied pump cover and casing
- » Connection type options ANSI&DIN Flanged connection

| Model | Inlet / Outlet Size | | Capacity (at Max. Speed) | | Max. Speed |
|-----------|---------------------|-----|--------------------------|------------|------------|
| | Inch | mm | m ³ /h | GPM | rpm |
| H; HM; HL | 1 ½" | 40 | 3.5; 5; 7 | 15; 22; 30 | 1750 |
| J; JL | 2" | 50 | 11; 17 | 50; 75 | 1150 |
| K; KL | 2" | 50 | 19; 26 | 85; 115 | 900 |
| S; SL | 2 ½" | 65 | 36; 52 | 160; 230 | 750 |
| M; ML | 3" | 80 | 52; 65 | 230; 290 | 500 |
| N; NL | 4" | 100 | 65; 113 | 290; 495 | 500 |
| P | 5" | 125 | 120 | 525 | 400 |
| R | 6" | 150 | 157 | 695 | |
| Z | 8" | 200 | 267 | 1180 | 300 |
| ZL | 10" | 250 | 390 | 1720 | |

Note: In-Line design pumps are only with flange connection

Pump code

| I. | II. | III. | IV. | V. | VI. | VII. |
|------------------|-------------------------|--------------------------------|------------------------|----------------------------|---------------------|-------------------------------------|
| H | 5 | 422 | F | 1 | B | V |
| I. Model: | II. Sealing: | III. Construction: | IV. Connection: | V. Casing material: | VI. Bushing: | VII. By-Pass: |
| H | - = Packing Gland | 422 = Standard | F = DIN Flange | 1 = Cast Iron | B = Bronze | - = No Relief Valve |
| HM | 4 = Special Design | 432 = Cover Jacketed | A = ANSI Flange | 2 = Ductile Iron | K = Carbon Graphite | V = Relief Valve on Cover |
| HL | 5 = Internal Mechanical | 452 = Bracket Jacketed | | 3 = Steel | T = Tungsten | W = Relief Valve Jacketed on Cover |
| J | 6 = External Mechanical | 462 = Cover & Bracket Jacketed | | 4 = 304 Stainless Steel | | X = Relief Valve on Casing |
| JL | | | | 5 = 316 Stainless Steel | | Y = Relief Valve Jacketed on Casing |
| K | | | | | | |
| KL | | | | | | |
| S | | | | | | |
| SL | | | | | | |

Monoblock design

Fast facts

| | |
|-----------------------------|----------------------|
| Max. Capacity | 17 m ³ /h |
| Max. Differential Pressure: | 10 bar (140 PSI) |
| Max. Viscosity: | 5.500 cSt |
| Temperature Range: | -20 °C to +180 °C |



Features & Benefits

- ✓ Applications variety with 7 different casing size
- ✓ Can be apply many different material option (cast iron, ductile iron, steel or stainless steel)
- ✓ Operating low and medium viscosity
- ✓ Self-priming is up to 950 mbar
- ✓ It requires less space in order to design
- ✓ The pump design is suitable for lip seal and mechanical seal
- ✓ It is economical solution with direct coupling

OPTIONS:

- » Heating / Cooling jacket can be applied to cover
- » Relief Valve can be applied to pump cover or casing
- » Connection type options, ANSI&DIN Flanged connection or BSP&NPT threaded connection.

| Model | Inlet / Outlet Size | | Capacity (at Max. Speed) | | Max. Speed |
|-----------|---------------------|----|--------------------------|-----|------------|
| | Inch | mm | m ³ /h | GPM | rpm |
| B | 1" | 25 | 2.4 | 10 | 1750 |
| H | 1 ½" | 40 | 3.5 | 15 | |
| HM | 1 ½" | 40 | 5 | 22 | |
| HL | 1 ½" | 40 | 7 | 30 | |
| JS | 2" | 50 | 8.5 | 37 | 1150 |
| J | 2" | 50 | 11 | 50 | |
| JL | 2" | 50 | 17 | 75 | |

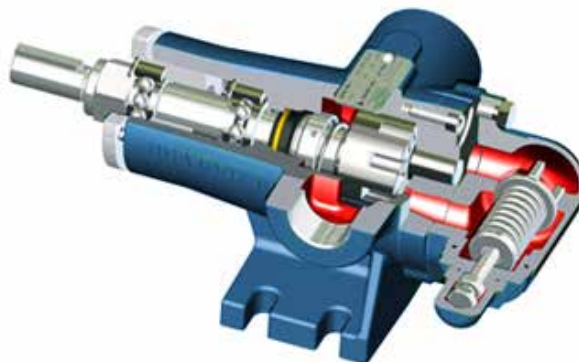
Pump code

| I. | II. | III. | IV. | V. | VI. | VII. |
|------------------|-------------------------|---------------------------|------------------------|----------------------------|---------------------|----------------------------|
| H | 5 | 722 | F | 1 | B | V |
| I. Model: | II. Sealing: | III. Construction: | IV. Connection: | V. Casing material: | VI. Bushing: | VII. By-Pass: |
| B | 5 = Internal Mechanical | 722 = Standard | G = BSP | 1 = Cast Iron | B = Bronze | - = No Relief Valve |
| H | 6 = External Mechanical | 732 = Cover Jacketed | N = NPT | 2 = Ductile Iron | K = Carbon Graphite | V = Relief Valve on Cover |
| HM | | | F = DIN Flange | 3 = Steel | T = Tungsten | X = Relief Valve on Casing |
| HL | | | A = ANSI Flange | 4 = 304 Stainless Steel | | |
| JS | | | | 5 = 316 Stainless Steel | | |
| J | | | | | | |
| JL | | | | | | |

High speed design

Fast facts

| | |
|-----------------------------|------------------------|
| Max. Capacity | 25.5 m ³ /h |
| Max. Differential Pressure: | 14 bar (200 PSI) |
| Max. Viscosity: | 2.500 cSt |
| Temperature Range: | -20 °C to +180 °C |



Features & Benefits

- ✓ Applications variety with 8 different casing size
- ✓ Can be apply different material option (cast iron and ductile iron)
- ✓ Operating low and medium viscosity
- ✓ Self-priming is up to 950 mbar
- ✓ The pump design is suitable for only mechanical seal
- ✓ It is economical solution with direct coupling

OPTIONS:

- » Relief Valve can be applied to pump cover
- » Connection type option is with BSP&NPT threaded connection

| Model | Inlet / Outlet Size | | Capacity (at Max. Speed) | | Max. Speed |
|-------|---------------------|----|--------------------------|------|------------|
| | Inch | mm | m ³ /h | GPM | rpm |
| T | 1" | 25 | 2 | 8.8 | 1750 |
| TL | 1" | 25 | 2.5 | 11 | |
| H | 1 ½" | 40 | 3.6 | 15.5 | |
| HM | 1 ½" | 40 | 5.1 | 22 | |
| HL | 1 ½" | 40 | 7.4 | 32 | |
| JS | 2 ½" | 50 | 12.8 | 56 | |
| J | 2 ½" | 50 | 19.2 | 84 | |
| JL | 3" | 50 | 25.5 | 112 | |

Pump code

| I. | II. | III. | IV. | V. | VI. |
|------------------|-----------------------------|---------------------------|-----|----|-----|
| TL | 522 | G | 1 | B | V |
| I. Model: | II. Construction: | V. Bushing: | | | |
| T | 522 = Standard | B = Bronze | | | |
| TL | III. Connection: | K = Carbon Graphite | | | |
| H | G = GSP | T = Tungstes | | | |
| HM | N = NPT | VI. By-Pass: | | | |
| HL | IV. Casing material: | - = No Relief Valve | | | |
| JS | 1 = Cast Iron | V = Relief Valve on Cover | | | |
| J | 2 = Ductile Iron | | | | |
| JL | | | | | |

PM series – External Gear Pumps

Low and high viscosity mediums.

External Gear Pumps are selfpriming positive displacement pumps and they have very good vacuum capability. Can be used for low, medium and high viscosity applications with adjustable clearances. They require less parts in order to compact design and to save space.

Can be used for both direction with suitable seal. Application variety with helical and spur gear options.

Fast facts

| | |
|-----------------------------|----------------------|
| Max. Capacity | 50 m ³ /h |
| Max. Differential Pressure: | 10 bar (140 PSI) |
| Max. Viscosity: | 450.000 cSt |
| Temperature Range: | -30 °C to +250 °C |



Features & Benefits

- ✓ Applications variety with 12 different casing size; Operating wide range of viscosity
- ✓ Easy of usage and maintenance with only two moving parts
- ✓ Can be apply many different material option
- ✓ The pump design is suitable for every type of seal
- ✓ Connection type options, ANSI&DIN Flanged connection or BSP&NPT threaded connection
- ✓ They are more economical than rotary lobe pumps and screw pumps because can be applied only one seal
- ✓ Heating / Cooling jackets can be applied to cover
- ✓ Connection design is adjustable only for 180°
- ✓ Self-priming is up to 950 mbar
- ✓ Relief Valve can be applied to pump cover

OPTIONS:

- » With Cover Jacketed
- » Direct Coupling With Relief Valve
- » With Flanged & Single Mechanical Seal
- » With Cartridge Mechanical Seal

| Model PM | Inlet / Outlet Size | | Capacity (at Max. Speed) | | Max. Speed |
|----------|---------------------|-----|--------------------------|--------|------------|
| | Inch | mm | m ³ /h | GPM | rpm |
| 15; 15L | ½" | 15 | 0.7; 1.5 | 3; 6.5 | 1750 |
| 20 | ¾" | 20 | 2.4 | 10 | |
| 25 | 1" | 25 | 3.5 | 15 | |
| 32; 32L | 1 ¼" | 32 | 4.8; 7 | 21; 31 | |
| 40 | 1 ½" | 40 | 9.5 | 42 | 1450 |
| 50; 50L | 2" | 50 | 10; 18 | 44; 80 | |
| 50L | 2" | 50 | 18 | 80 | 950 |
| 65 | 2 ½" | 65 | 25 | 110 | |
| 80 | 3" | 80 | 35 | 155 | |
| 100 | 4" | 100 | 50 | 220 | |

Positive Displacement Pumps



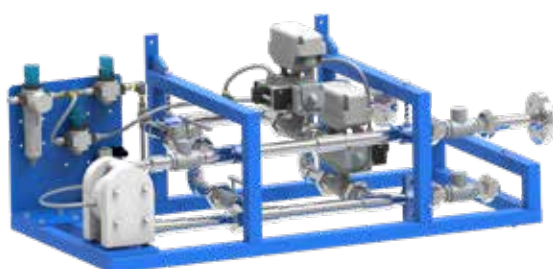
Centrifugal Pumps



Accessories



Unique constructions at a high level



Custom design aims to adapt standard solutions for non-standard needs in industrial processes. This is often achieved by making small modifications to standard products and thus becoming applicable to specific process requirements.

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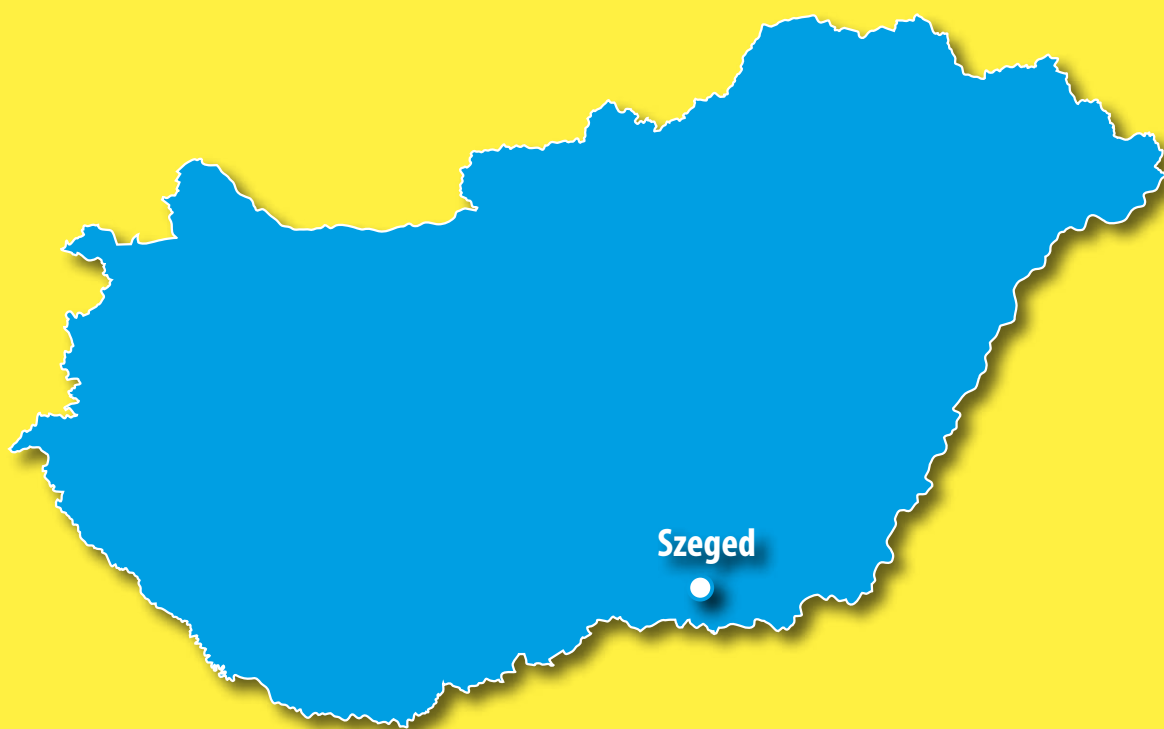
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