





# PD SERIES Internal Gear Pumps





# WITHOUT BRACKET DESIGN

Max. Capacity: 26 m<sup>3</sup>/h

Max. Differential Pressure: 7 bar (



Max. Viscosity: 2.500 cSt

Temperature Range: -20 °C to +180 °C

### **FEATURES:**

- > Applications variety with 8 different case 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 720mbar
- > 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





> The Cutted Way with Relief Valve

### **CODE SYSTEM**



Model	Inlet / Outlet Size		Capacity (at Max. Speed)		Max. Speed	Max. Differential Pressure		
	Inch	mm	m³/h	GPM	(rpm)	PSI	Bar	
AS	1⁄2 "	15	0.7	3				
А	3⁄4 "	20	1.5	6.5				
GL	1"	25	3.5	15	1750	- 100	7	
FL	1 1⁄2"	40	7	30				
J	2"	50	11	50	1150			
JL	2"	50	17	75	1150			
К	2"	50	19	85		1		
KL	2"	50	26	115	900			

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







> The Cover Jacketed

## WITH BRACKET DESIGN

Max. Capacity: 390 m<sup>3</sup>/h

Max. Differential Pressure: 14 bar



 $\approx$ 

Max. Viscosity: 450.000 cSt

Temperature Range: -50 ℃ to +350 ℃

**OPTIONS** 

connection

cover, case or bracket

#### **FEATURES**

- > Applications variety with 19 different case 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 720mbar
- > The pump design is suitable for every type of seal (Special design, lip seal, packing gland, single mechanical seal, double mechanical seal)



> Food Series (With Jacketed)



> Heating / Cooling jackets can be applied to

> Relief Valve can be applied to pump cover

Flanged connection or BSP&NPT threaded

> Connection type options, ANSI&DIN

### **CODE SYSTEM**

	Н	5 222		F	1	В	V
L				<u>                                    </u>			
Des	sign	Sealing	Construction	Connection	Casing Mat.	Bushing	By-Pass
B CL H HL HM	M ML N NL P	- : Packing Gland 4 : Special Design 5 : Internal Mechanical 6 : External Mechanical	<ul><li>222 : Standard</li><li>232 : Cover Jacketed</li><li>242 : Casing Jacketed</li><li>252 : Bracket Jacketed</li><li>262 : Cover &amp; Bracket Jacketed</li></ul>	G : BSP N : NPT F : DIN Flange A : ANSI Flange	1 : Cast Iron 2 : Ductile Iron 3 : Steel 4 : Stainless Steel	B: Bronze K: Carbon Graphite T: Tungsten	<ul> <li>No Relief Valve</li> <li>Relief Valve on Cover</li> <li>Relief Valve Jacketed on Cover</li> </ul>
J JL	z Z		272 : Bracket & Cover Jacketed 282 : Bracket & Casing Jacketed 292 : Cover & Bracket & Casing Ja	cketed			



> The Cover & Bracket Jacketed Cutted Way

Model	Inlet / O	Inlet / Outlet Size		Capacity (at Max. Speed)		Max. Differential Pressure		
	Inch	mm	m³/h	GPM	(ipiii)	PSI	Bar	
В	1"	25	2.4	10				
CL	1"	25	3.5	15				
н	1 1⁄2"	40	3.5	15	1750			
НМ	1 1⁄2"	40	5	22				
HL	1 1⁄2"	40	7	30				
J	2"	50	11	50	1150			
JL	2"	50	17	75	1150			
К	2"	50	19	85	000			
KL	2"	50	26	115	900	200		
S	2 1⁄2"	65	36	160			200	14
SL	2 1⁄2"	65	52	230	750			
М	3"	80	52	230				
ML	3"	80	65	290				
N	4"	100	65	290	500			
NL	4"	100	113	495				
Р	5"	125	120	525	100			
R	6"	150	157	695	400			
Z	8"	200	267	1180	200			
ZL	10"	250	390	1720	300	125	8.5	

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.



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With Relief Valve Threaded Connection Ports

### **IN-LINE DESIGN**

Max. Capacity: 390 m<sup>3</sup>/h

Max. Differential Pressure: 14 bar  $\langle \circ \rangle$ 



 $\approx$ 

Max. Viscosity: 450.000 cSt

Temperature Range: -50 ℃ to +350 ℃

#### FEATURES:

- > Applications variety with 17 different case 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 720mbar
- > The pump design is suitable for every type of seal (Special design, lip seal, packing gland, single mechanical seal, double mechanical seal)



- > Heating / Cooling jackets can be applied to cover, case or bracket
- > Relief Valve can be applied to pump cover
- > Connection type options ANSI&DIN Flanged connection





> Food Series (With Jacketed)

#### **CODE SYSTEM**

Н	5	422	F	1	В	V
Model	Sealing	Construction	Connection	Casing Mat.	Bushing	By-Pass
H M HM ML HL N J NL JL P K R KL Z S ZL	- : Packing Gland 4 : Special Design 5 : Internal Mechanical 6 : External Mechanical	422 : Standard 432 : Cover Jacketed 452 : Bracket Jacketed 462 : Cover & Bracket Jacket	F : DIN Flange A : ANSI Flange eted	1 : Cast Iron 2 : Ductile Iron 3 : Steel 4 : Stainless Steel	B : Bronze K : Carbon Graphite T : Tungsten	<ul> <li>No Relief Valve</li> <li>Relief Valve on Cover</li> <li>Relief Valve Jacketed on Cover</li> <li>Relief Valve on Casing</li> <li>Relief Valve Jacketed on Casin</li> </ul>



> Cutted Way with Relief Valve on Casing (with Jacketed)

Model	Inlet / Outlet Size		Inlet / Outlet Size Capacity (at Max. Speed)		Max. Speed	Max. Differential Pressure		
	Inch	mm	m³/h	GPM	(ipin)	PSI	Bar	
н	1 1⁄2"	40	3.5	15				
НМ	1 1⁄2"	40	5	22	1750			
HL	1 1⁄2"	40	7	30				
J	2"	50	11	50	1150			
JL	2"	50	17	75	1150			
К	2"	50	19	85	000			
KL	2"	50	26	115	900	200 1	1/	
S	2 1⁄2"	65	36	160			14	
SL	2 1/2 "	65	52	230	750			
М	3"	80	52	230				
ML	3"	80	65	290				
N	4"	100	65	290	500	500		
NL	4"	100	113	495				
Р	5"	125	120	525	400			
R	6"	150	157	695	400			
Z	8"	200	267	1180	300			
ZL	10"	250	390	1720	500	125	8.5	

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







> Relief Valve on Cover

# MONOBLOCK DESIGN

Max. Capacity: 17 m<sup>3</sup>/h

Max. Differential Pressure: 10 bar

Max. Viscosity: 2.500 cSt

Temperature Range: -20 °C to +180 °C

**OPTIONS:** 

cover

or casing

connection.

#### **FEATURES:**

- > Applications variety with 6 different case 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 720mbar
- > 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



> Heating / Cooling jacket can be applied to

> Relief Valve can be applied to pump cover

Flanged connection or BSP&NPT threaded

> Connection type options, ANSI&DIN

> Cover Jacketed, Relief Valve on Casing

#### **CODE SYSTEM**

JL

Н	5	722	F	1	В	V
Model	Sealing	Construction	Connection	Casing Mat.	Bushing	By-Pass
B H HM HL	5 : Internal Mechanical 9 : Lip Seal	722 : Standard 732 : Cover Jacketed	G: BSP N: NPT F : DIN Flange A : ANSI Flange	1 : Cast Iron 2 :Ductile Iron 3 : Steel 4 : Stainless Steel	B : Bronze K : Carbon Graphite T : Tungsten	- : No Relief Valve V : Relief Valve on Cover X : Relief Valve on Casing

Model	Inlet / Outlet Size		Capacity (at Max. Speed)		Max. Speed	Max. Differential Pressure	
	Inch	mm	m³/h	GPM	(rpm)	PSI	Bar
В	1"	25	2.4	10			
Н	1 1⁄2"	40	3.5	15	1750	140	10
НМ	1 ½"	40	5	22	1750		
HL	1 ½"	40	7	30			10
J	2 "	50	11	50	1150		
JL	2 "	50	17	75	1150		

# **HIGH SPEED DESIGN**



Max. Differential Pressure: 14 bar

### FEATURES:

- > Applications variety with 6 different case size
- > Can be apply different material option (cast iron and ductile iron)
- > Operating low and medium viscosity
- > Self-priming is up to 720mbar
- > The pump design is suitable for only mechanical seal
- > It is economical solution with direct coupling



Valve on Cover

### **CODE SYSTEM**

TL	522	G	1	В	V
Model	Construction	Connection	Casing Mat.	Bushing	By-Pass
TL H HM HL I	522 : Standard	G : BSP N : NPT	1 :Cast Iron 2 : Ductile Iron	B : Bronze K : Carbon Graphite T : Tungsten	- : No Relief Valve V : Relief Valve on Cov

Model	Inlet / Outlet Size		Capacity (at Max. Speed)		Max. Speed	Max. Differential Pressure	
	Inch	mm	m³/h	GPM	(rpm)	PSI	Bar
TL	1"	25	2.4	10			
н	1 1⁄2"	40	3.5	15	1750	200	14
НМ	1 ½"	40	5	22	1750		
HL	1 ½"	40	7	30			14
J	2 "	50	11	50	1150		
JL	2 "	50	17	75	1150		



> The Cutted Way with Relief Valve on Casing



Max. Viscosity: 2.500 cSt

Temperature Range: -20 ℃ to +180 ℃

#### **OPTIONS:**

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



> Relief Valve on Cover (Direct Coupling)

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