# Item 01 PROGRESSIVE CAVITY PUMP mod.: DN 4L1 DIAMOND SERIES

#### Flanged Industrial Series

The Flanged Industrial Series is the basis of the Diamond series.

The robust cast casings, also in the stainless steel model, with large inspection ports included, make this an ideal product for the toughest applications. The Diamond DN and JN series are the best solution for a wide range of fluid pumping industries. They are synonymous with sturdiness, reliability, performance and application flexibility. Available with UNI, DIN and ANSI flanged and GAS BSP threaded connections.

#### **DN SERIES**



### MONOBLOC VERSION

The drive system is coupled directly to the pump by means of a flange. This solution is extremely economical and compact, considerably reduces installation costs and simplifies maintenance. The stress generated by the hydraulic part is supported by the drive system itself.

### PROGRESSIVE CAVITY PUMP mod.: DN 4L1 DIAMOND SERIES

### Classification: Series ID - Industrial sector

# Wetted casing and rotating parts material:

Casing in G25 - S275JR / W. 1.0044 and rotating parts in AISI 420B / W. 1.4028 - S275JR / W. 1.0044

### FLUID CHARACTERISTICS

Pumped fluid:	MUD
Viscosity:	- cps
Solids concentration:	2-3 %
Solids size:	- mm
Specific gravity:	- kg/dm³
Abrasiveness:	Not abrasive
PH:	NEUTRO
Working temperature:	AMBIENTE °C

### **OPERATING CONDITIONS**

Service:	8 h/gg			
Rotation:	Counter	rclockwise viewed fr	rom the motor	
Differential pressure:	2 bar(g)	)		
Suction pressure:	Flooded	1		
Design pressure:	6 bar			
Max. power absorbed:	1.3 KW	1		
Torque:	43 Nm			
Solid passage:	18 soft	9 hard mm		
Sound power level:	Not exc machine	eed 85 dB(A) meas e	ured at 1 m distanc	e at the complete
	Nom.	Min.	Max.	
Rotation speed:	510			rpm

Notation speed.	510		ipin
Frequency:	60		Hz
Flow:	7		m³/h

### CONSTRUCTION AND PUMP MATERIALS

Installation:	Horizontal
Pump body:	UNI 2278 - PN 16 DN050
	Standard execution with drain plug G3/8" and with inspection port
	Cast Iron G25
Outlet connection:	UNI 2278 - PN 16 DN050
	Standard connection
	Cast Iron G25
Stator:	NBR
Rotor:	Standard execution
	AISI 420B / W. 1.4028 induction hardened 55-59 HRC
Joint:	Standard execution
	Rubber sleeve NBR black food grade
Transmission shaft:	Standard execution
	AISI 420B / W. 1.4028
Drive shaft:	Standard execution Ø24 with plug-in shaft
	AISI 420B / W. 1.4028
Seal housing:	Standard execution for single mechanical seal - G0K9
	Cast iron G25

Seal:	Model 52 Ø35 elastomer bellows, single cylindrical springs/not balance		
	bidirectional SIC/SIC/FPM/304		
Coupling:	Standard execution block construction with shaft se	al protections	
	Cast iron G25		
Painting:	Antirust and anti-oil immersion primer ≥20µm Two coats finishing bicomponent acrylic based ≥ 80µm Black +silver (std) RAL 9005+9006		
OTORIZATION			
Туре:	Coaxial gearbox IEC with electric motor IEC		
	Model	<u>Brand</u>	
Group:	RCV 281NF P100 F200 Ø24 B5	Varmec	
	IEC i=3,38 - 428 rpm (4P)		
Motor:	Delphi 100LA 2,2KW 4P 3Ph IE2 B5 IP55 (STD)		
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	1435 rpm 230V / 400V 50Hz		
	1435 rpm 230V / 400V 50Hz 1722 rpm 260V / 440V 60Hz	Motive	

## ACCESSORIES

Accessories:

Carbon steel S235JR / W. 1.0037 baseplate

