

Technical Data

Pump Name

3DS 50-160/5.5

Customer	Date	09.06.2024	Company
Contact	Item no.		Issued by
Phone	Project		Phone
E-mail	Project ID		E-mail

Requested data

1	Pump type	CENTRIFUGAL PUMPS	Fluid	Water
2	Number of pumps / Reserve	1 / 0	Liquid temperature	°C
3	Flow	m³/h	Kin. viscosity	cSt
4	Head	m	Vapour pressure	kPa
5	Geodetic head	m	PH value	
6	Inlet pressure (pin)	kPa	Density	kg/m³
7	Available system NPSH		Solids	Weight %
8	Ambient temperature	°C		

Pump

9	Pump Name	3DS 50-160/5.5	Frequency	Hz	50	
10	Design	CENTRIFUGAL PUMPS	Installation type		STANDARD	
11	Manufacturer	EBARA	Impeller Diameter	Max.	mm	
12	Speed	rpm		2900	Designed	mm
13	No. of Stage	1		Min.	mm	154
14	Connection	Suction side	EN 1092-2	Flow	Operating	m³/h
15	Connection	Discharge side	EN 1092-2		Max-	m³/h
16	Max Working Pressure	kPa	1000		Min-	m³/h
17	Shut-off head	kPa	323.14	Head	Operating	m
18	Total weight	kg	See the table of "Dimensions".		- (Qmax.)	m
19	Shaft power	kW			- (Qmin.)	m
20			Max. Shaft Power at max. impeller	kW	5.47	
21	Required pump NPSH	m	Efficiency	%		

Materials

22	Impeller	AISI 304	
23	Casing	Cast iron	
24	Shaft	AISI 304 (wet extension)	
25			
26			
27			

Motor

28	Manufacturer	LAFERT	Insulation class	F	
29	Type	TEFC_3DS 50-160/5.5_400_Three Phase	Phases	3~	
30	Specific design	IE3 / 50 Hz / Pole pairs 1	Frame size	132 S	
31	Rated power	kW	5.5	Weight	kg
32	Number of poles	2	Electric voltage	V	400
33	Speed	rpm	2900	Electric current	A
34	Degree of protection	IP 55			
35					

Remarks

Performance Curve

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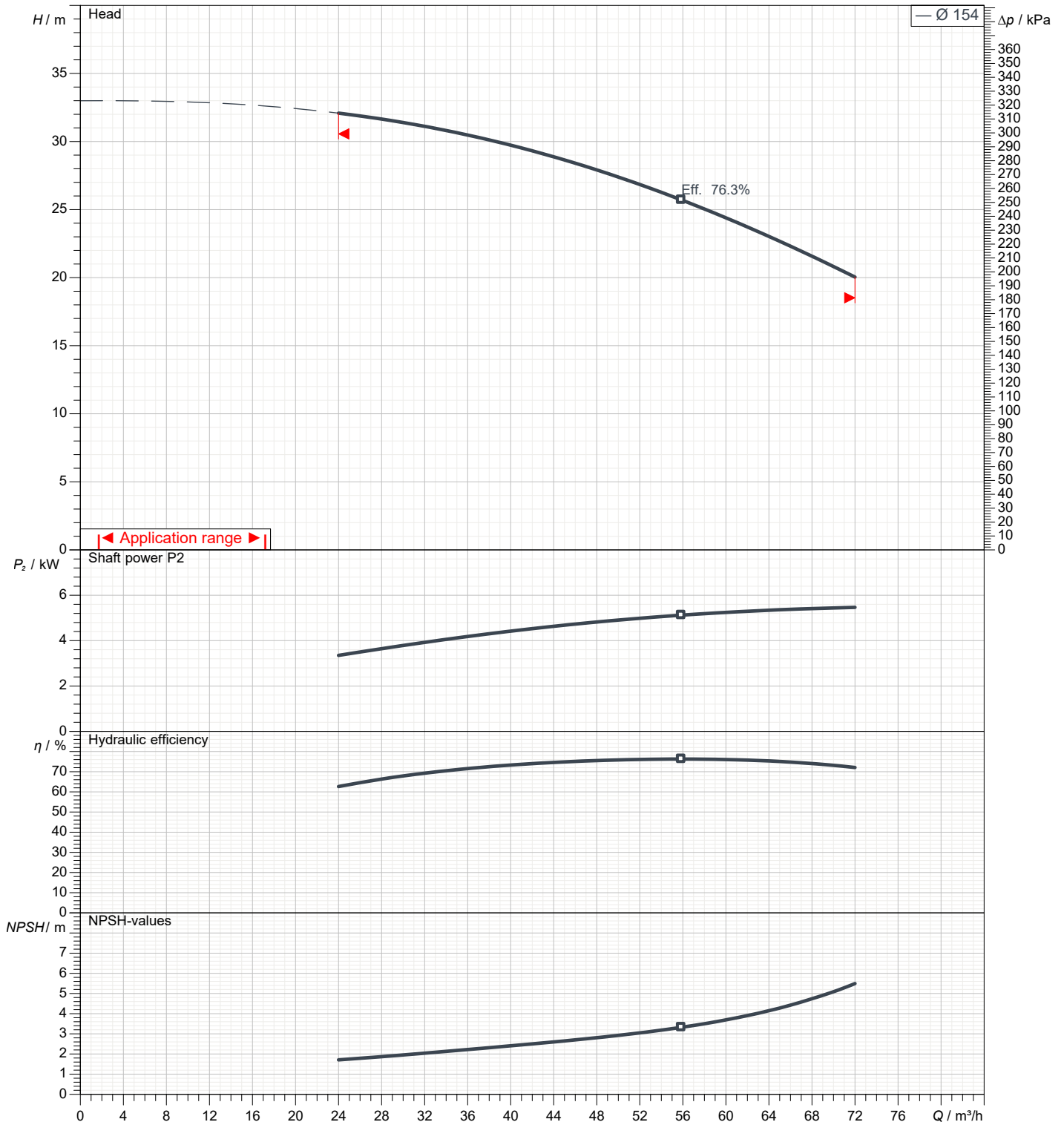
1	Flow	m³/h	
2	Head	m	
3	Geodetic head	m	

Pump

Operating flow	m³/h	Frequency	Hz	50	
Operating head	m	Number of poles		2	
Impeller diameter designed	mm	154	Speed	rpm	2900

Test standard: ISO 9906:2012 - Grade3B

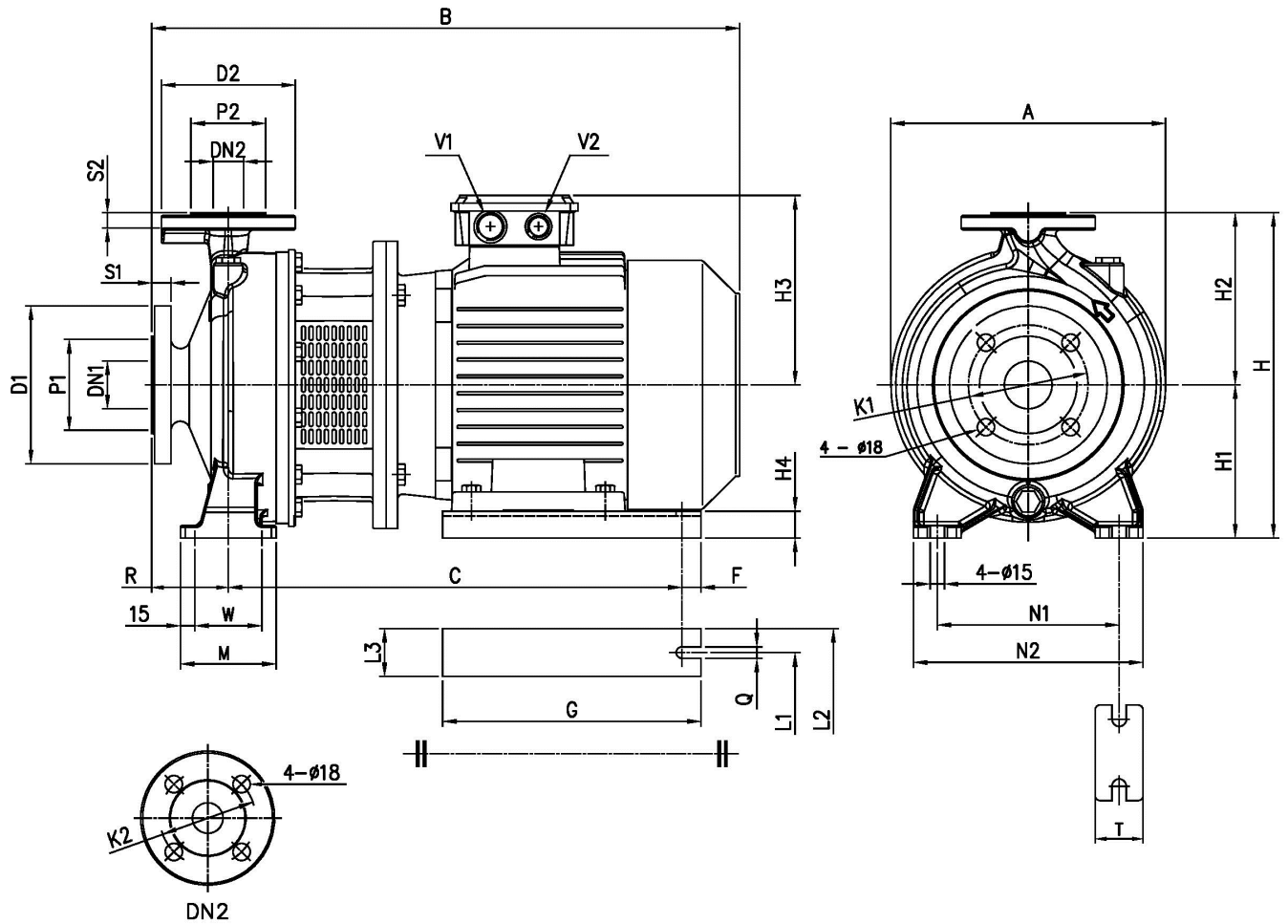
Water; 20°C; 998.3kg/m³; 1cSt



Dimensions

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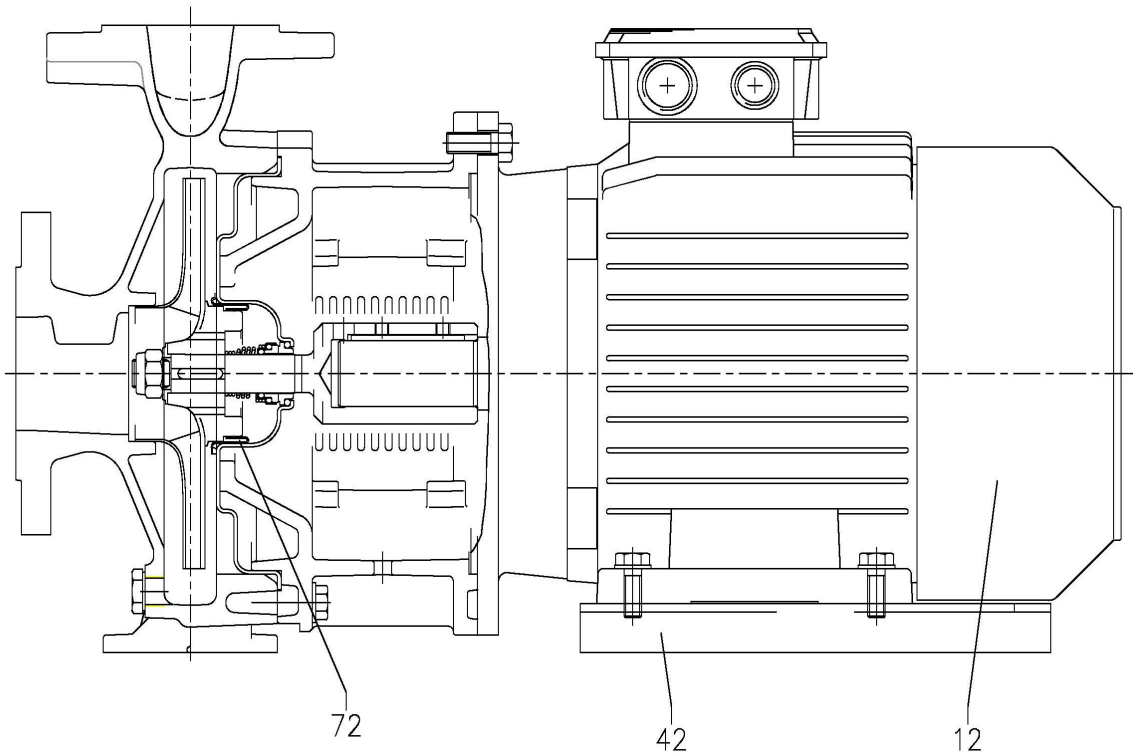
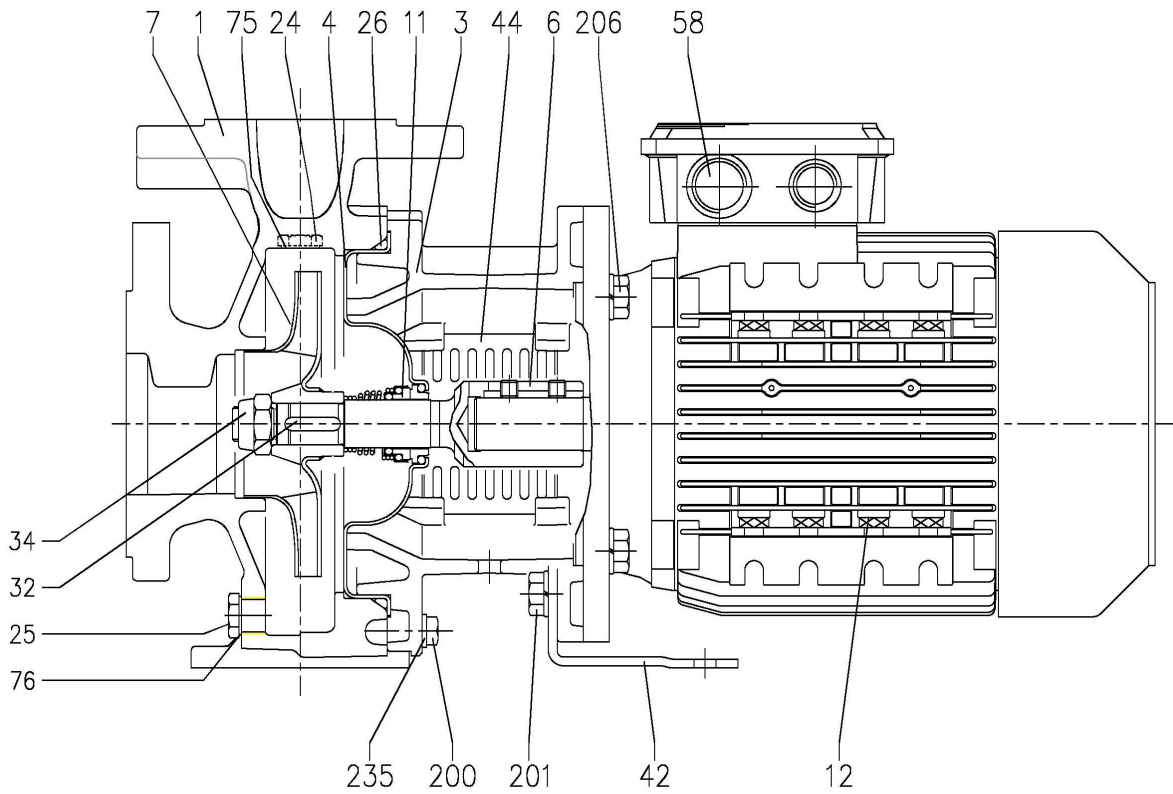
Dimensions in		mm					
1	A	296	H2	180	V2	M32x1,5	
2	B	630	H3	198	W	70	
3	C	479	H4	28	Weight P&M	77.3 kg	
4	Dia D1	185	L1	216			
5	Dia D2	165	L2	266			
6	Dia DN1	65	L3	50			
7	Dia DN2	50	M	100			
8	Dia K1	145	N1	212			
9	Dia K2	125	N2	265			
10	Dia P1	122	Q	12			
11	Dia P2	102	R	100			
12	F	15	S1	20			
13	G	270	S2	20			
14	H	340	T	50			
15	H1	160	V1	M32x1,5			

(1/3)

Construction

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(2/3)

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N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD	Q.TY
1	Casing	Cast iron EN-GJL-200-EN 1561			1
3	Motor bracket	Cast iron EN-GJL-200-EN 1561			1
3A	Adapter ring	Cast iron EN-GJL-200-EN 1561			1
4	Casing cover	EN 1.4301 (AISI 304)			1
6	Coupling - Wet extensions	EN 1.4301 (AISI 304)			1
7	Impeller	EN 1.4301 (AISI 304)			1
11	Mechanical seal [1]	-			1
12	Motor	-			1
24	Priming plug	Brass	G 3/8" L=8		1
25	Draing plug	Brass	G 3/8" L=8		1
26	O-ring 32-12540-125 32-160, 40-160, 50-125 [2] 32-200, 40-200, 50-160, 50-200	NBR/FPM/EPDM	158.11x5.34	OR 6625	1
			183.52x5.34	OR 6720	
			227.96x5.34	OR 6895	
32	Key Up to 11kW 50-200/15 15 kW and above	EN 1.4401 (AISI 316)	6x6x25	UNI 6604	1
			8x7x30		
34	Impeller nut Up to 11kW 50-200/15 15 kW and above	EN 1.4301 (AISI 304)	M16x1.5	UNI 7474	1
			M18x1.5		
			M20x1.5		
42	Foot	Galvanized Steel			1
44	Protection	EN 1.4301 (AISI 304)		EBARA DRAWING	1
58	Cable gland	-			
72	Casing ring [3]	EN 1.4301 (AISI 304)			1
75	Washer	Aluminum		EBARA DRAWING	1
76	Washer	Aluminum	22x17x1.5		1
200	Screw 32-125, 40-125 32-160, 40-160, 50-125 32-200, 40-200, 50-160, 50-200	Gv. Steel 8.8 strenght class ISO 898-1	M8x30	UNI 5739	8
			M10x35		10
					12
201	Screw [4]	Gv. Steel 8.8 strenght class ISO 898-1	M10x16	UNI 5739	2
206	Screw for bracket	Gv. Steel 8.8 strenght class ISO 898-1	M10x40	UNI 5739	4
206-2	Screw adapter ring	Gv. Steel 8.8 strenght class ISO 898-1	M12x20	UNI 5931	4
235	Washer 32-125, 40-125 32-160, 40-160, 50-125 32-200, 40-200, 50-160, 50-200	Galvanized Steel	8.4x17	UNI 6592	8
			10.5x21		10
					12

[1] See CONSTRUCTION 3

[2] See CONSTRUCTION 3, "O-ring" column

[3] Only for: 32-200, 40-200, 50-160, 50-200

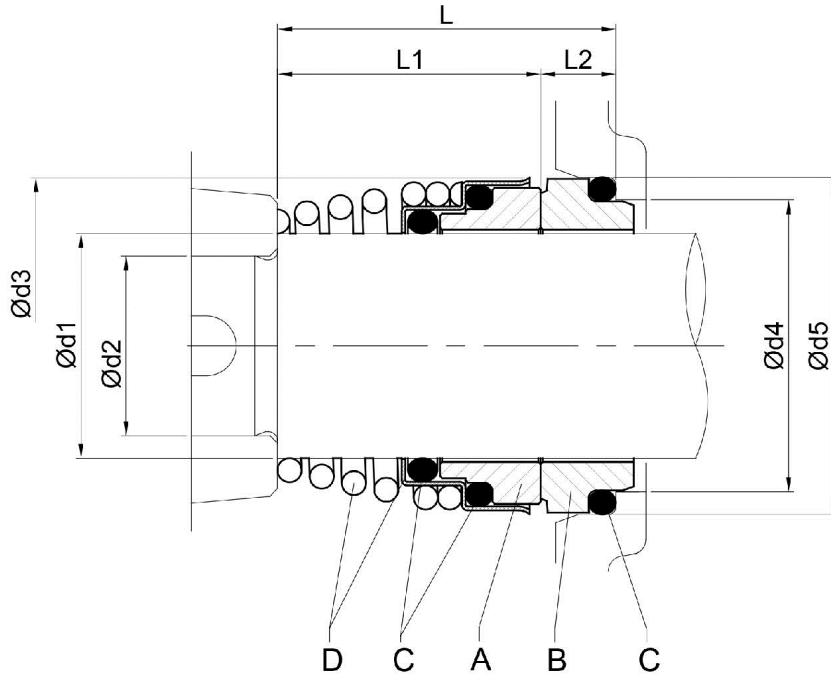
[4] Only for version 32-125/1.1, 32-160/1.5, 32-160/2.2, 40-125/1.5, 40-125/2.2, 50-125/2.2

(3/3)

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Pump type	Dimensions [mm]								Material Standard			
	d1	d2	d3	d4	d5	L	L1	L2	A Rotary seal ring	B Stationary seal ring	C O-ring	D Frame + Spring
32-125/160/200												
40-125/160/200												
50-125/160/200	22	19	38	31	37	37.5	27.5	10	Ceramic	Carbon	NBR	EN 1.4301 (AISI 304)
65-125												
65-160/7.5-9.2-11												