

Technical Data

Pump Name

3D 65-160/156

Customer	Date	2024-06-20	Company
Contact	Item no.		Issued by
Phone	Project		Phone
E-mail	Project ID	Proiect redenumit 2024-06-20 10:03:09	E-mail

Requested data

1	Pump type	CENTRIFUGAL PUMPS	Fluid	Water	
2	Number of pumps / Reserve	1 / 0	Liquid temperature	°C	20
3	Flow	m³/h	Kin. viscosity	mm²/s	1.005
4	Head	m	Vapour pressure	bar	0.0234
5	Geodetic head	m	PH value		
6	Inlet pressure (pin)	bar	Density	kg/m³	998.3
7	Available system NPSH		Solids	Weight %	0
8	Ambient temperature	°C	20		

Pump

9	Pump Name	3D 65-160/156	Frequency	Hz	60		
10	Design	CENTRIFUGAL PUMPS	Installation type		STANDARD		
11	Manufacturer	EBARA	Impeller Diameter	Max.	mm	157	
12	Speed	rpm		3480	Designed	mm	157
13	No. of Stage	1		Min.	mm	157	
14	Connection	Suction side	UNI 2236-67	Flow	Operating	m³/h	
15	Connection	Discharge side	EN 1092-2		Max-	m³/h	132
16	Max Working Pressure	bar	10		Min-	m³/h	42
17	Shut-off head	bar	4.75	Head	Operating	m	
18	Total weight	kg	See the table of "Dimensions".		- (Qmax.)	m	30.5
19	Shaft power	kW			- (Qmin.)	m	48.0
20				Max. Shaft Power at max. impeller	kW	14.79	
21	Required pump NPSH	m		Efficiency	%		

Materials

22	Impeller	AISI 316		
23	Casing	Cast iron		
24	Shaft	AISI 304 (wet extension)		
25				
26				
27				

Motor

28	Manufacturer	EPE Standard	Insulation class	F		
29	Type	TEFC_3D 65-160/156_380_Three Phase	Phases	3~		
30	Specific design	IE3 / 60 Hz / Pole pairs 1	Frame size			
31	Rated power	kW	15	Weight	kg	
32	Number of poles	2	Electric voltage	V	380	
33	Speed	rpm	3500	Electric current	A	27.1
34	Degree of protection	IP 55				
35						

Remarks

--

Performance Curve

Pump Name

3D 65-160/156

Customer	Date	2024-06-20	Company
Contact	Item no.		Issued by
Phone	Project		Phone
E-mail	Project ID	Project redenumit 2024-06-20 10:03:09	E-mail

Requested data

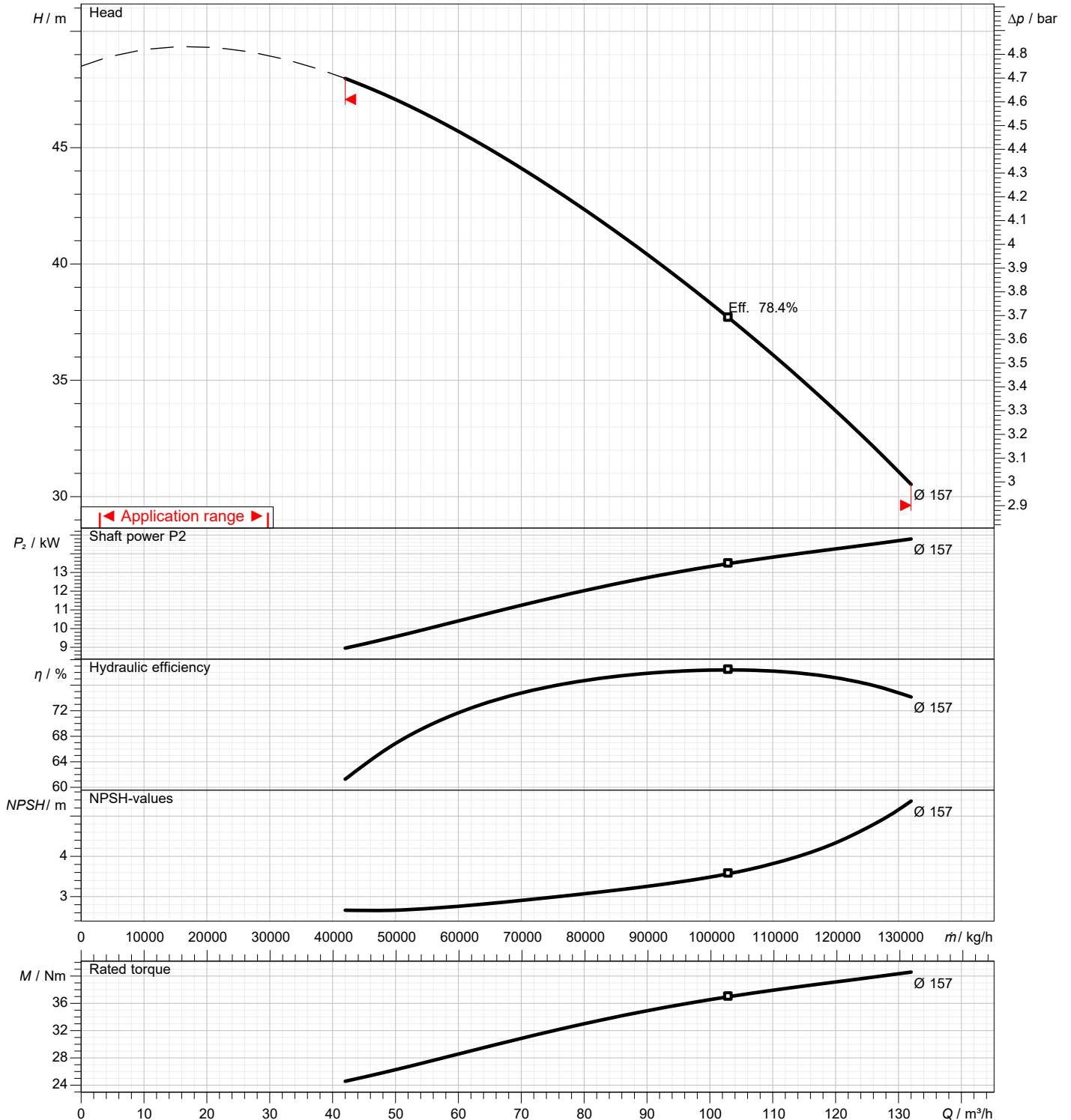
1	Flow	m³/h	
2	Head	m	
3	Geodetic head	m	

Pump

Operating flow	m³/h		Frequency	Hz	60
Operating head	m		Number of poles		2
Impeller diameter designed	mm	157	Speed	rpm	3480

Test standard: ISO 9906:2012 - Grade3B

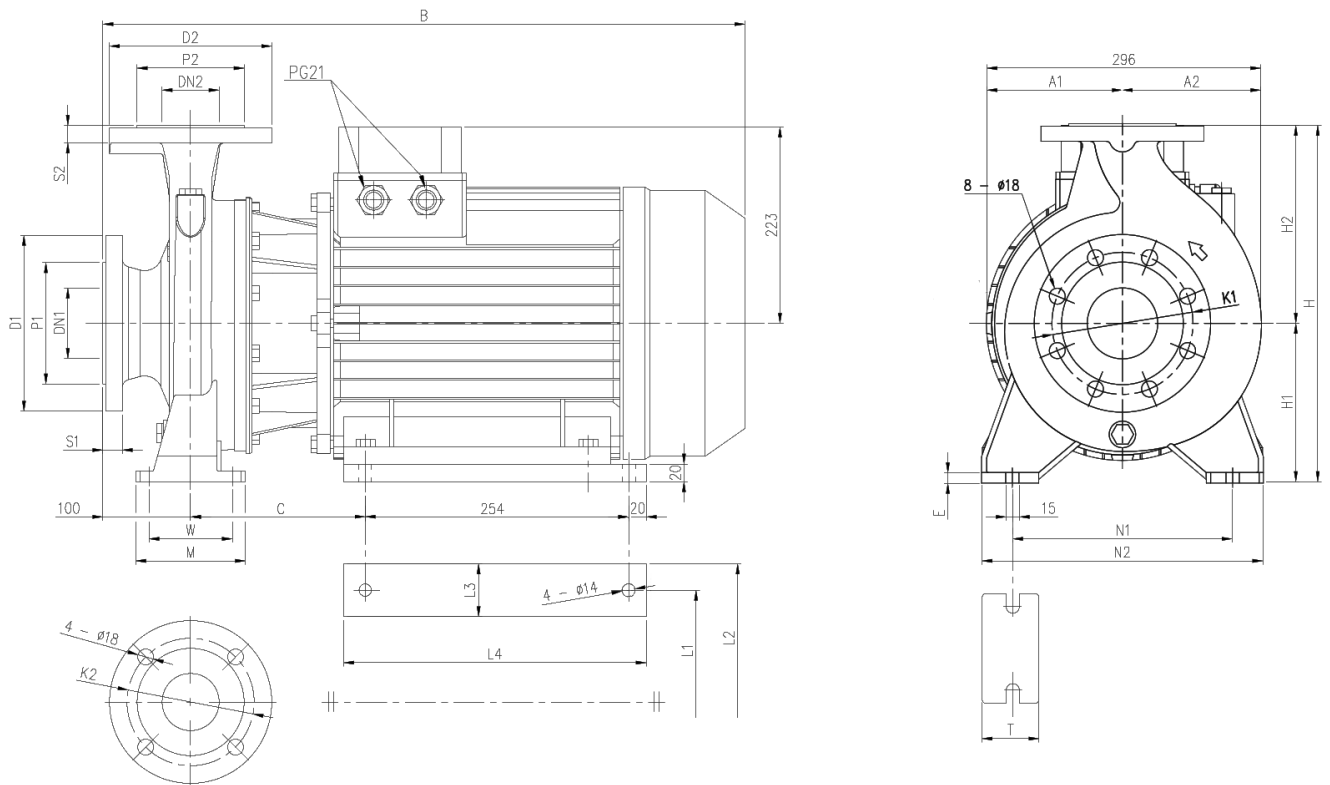
Water; 20°C; 998.3kg/m³; 1mm²/s



Dimensions

Pump Name 3D 65-160/156

Customer	Date 2024-06-20	Company
Contact	Item no.	Issued by
Phone	Project	Phone
E-mail	Project ID Proiect redenumit 2024-06-20 10:03:09	E-mail



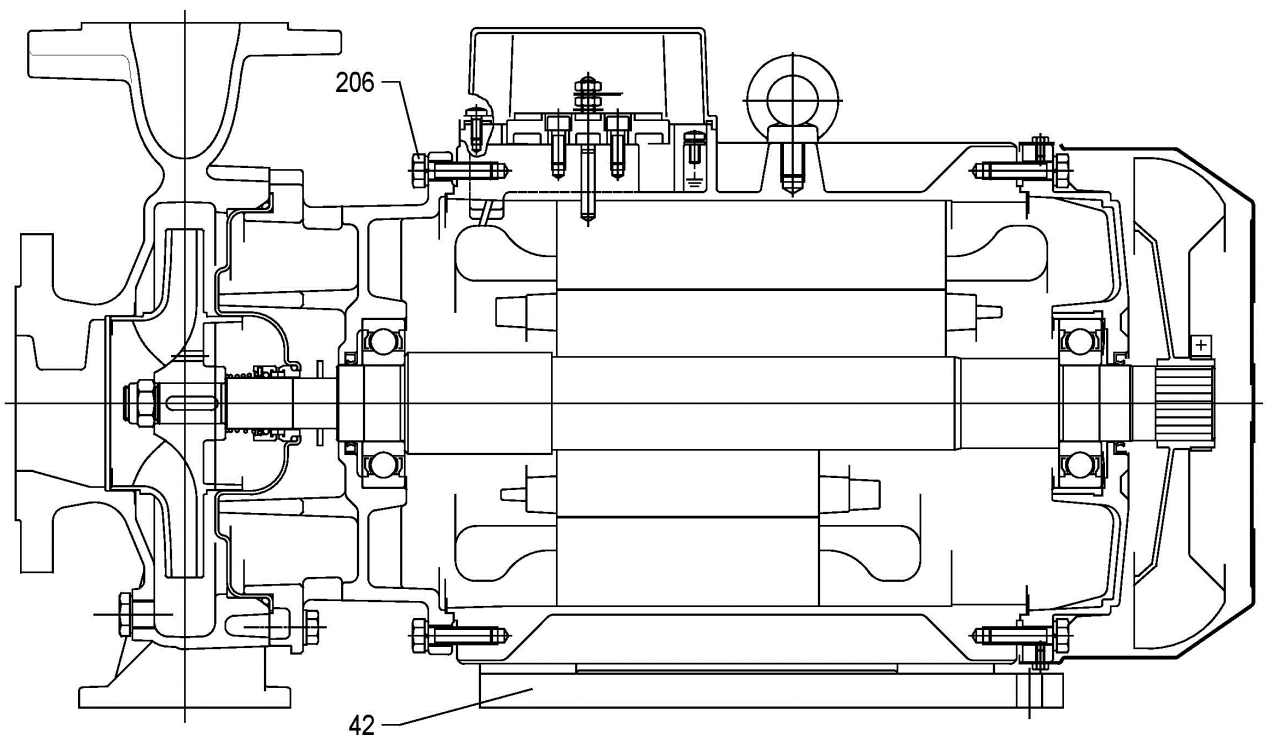
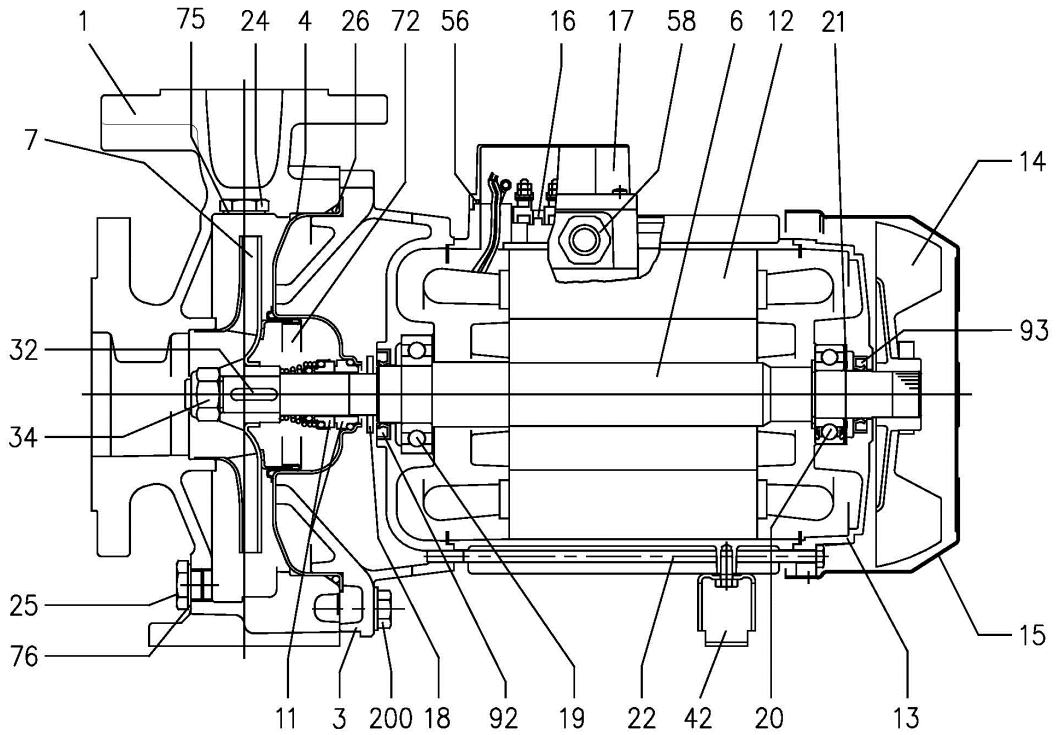
Dimensions in		mm						
1	A1	148	H2	200				
2	A2	148	L1	254				
3	B	732	L2	318				
4	C	199.5	L3	64				
5	Dia D1	200	L4	304				
6	Dia D2	185	M	125				
7	Dia DN1	80	N1	212				
8	Dia DN2	65	N2	280				
9	Dia K1	160	S1	22				
10	Dia K2	145	S2	20				
11	Dia P1	138	T	65				
12	Dia P2	122	W	95				
13	E	12	Weight P&M	119 kg				
14	H	360						
15	H1	160						

(1/3)

Construction

Pump Name 3D 65-160/156

Customer	Date 2024-06-20	Company
Contact	Item no.	Issued by
Phone	Project	Phone
E-mail	Project ID Proiect redenumit 2024-06-20 10:03:09	E-mail



(2/3)

Construction

Pump Name 3D 65-160/156

Customer	Date	2024-06-20	Company
Contact	Item no.		Issued by
Phone	Project		Phone
E-mail	Project ID	Proiect redenumit 2024-06-20 10:03:09	E-mail

N°	PART NAME	MATERIAL	DIMENSIONS	STANDARD	Q.TY
1	Casing	Cast iron EN-GJL-250-EN 1561			1
3	Motor bracket	Aluminum AL-EN-1706-AC-46000-D			1
4	Casing cover	EN 1.4301 (AISI 304)			1
6	Shaft with rotor - Wet extension	EN 1.4301 (AISI 304)			1
7	Impeller [1]	-			1
11	Mechanical seal [2]	-			1
12	Motor frame with stator	-			1
13	Motor cover	Aluminium			1
14	Fan	PA			1
15	Fan cover	Fe P04 Galvanized			1
16	Terminal	-			1
17	Terminal box cover	Aluminium (three phase version)			1
18	Splash ring 15 kW and above	NBR	50x29.5x3	EBARA DRAWING	1
19	Bearing	-			1
20	Bearing	-			1
21	Adjusting ring	Steel C70			1
22	Screw 15 kW and above	Gv. Steel 8.8 strenght class ISO 898-1	M10x40	UNI 5739	4
24	Priming plug	Brass	G 3/8" L=8		1
25	Draing plug	Brass	G 3/8" L=8		1
26	O-ring 40-200/156, 50-160/156, 65-160/116, 65-160/156, 65-200/156, 65-200/18.56, 65-200/226 [3]	NBR/FPM/EPDM	227.96x5.34	OR 6895	1
32	Key 15 kW and above	EN 1.4401 (AISI 316)	A 8x7x30	UNI 6604	1
34	Impeller nut 15 kW and above	EN 1.4301 (AISI 304)	M20x1.5	UNI 7474	1
42	Foot	Aluminium / Galvanized steel		EBARA DRAWING	[4]
56	Box gasket	NBR			1
58	Cable gland	-			2
72	Casing ring [5]	EN 1.4301 (AISI 304)			1
75	Washer	Aluminum	22x17x1.5	EBARA DRAWING	1
76	Washer	Aluminum			1
92	Lip seal From 15 kW to 22 kW		45x60x7	DIN 3760 without spring	1
93	Lip seal From 15 kW to 22 kW		45x60x7	DIN 3760 without spring	1
200	Screw 40-200/156, 50-160/156, 65-160/116, 65-160/156, 65-200/156, 65-200/18.56, 65-200/226	Gv. Steel 8.8 strenght class ISO 898-1	M 10x35	UNI 5739	12
206	Screw for bracket [6]	Gv. Steel 8.8 strenght class ISO 898-1	M 10x40	UNI 5739	4
235	Washer 40-200/156, 50-160/156, 65-160/116, 65-160/156, 65-200/156, 65-200/18.56, 65-200/226	Galvanized Steel	10.5x21	UNI 6592	12

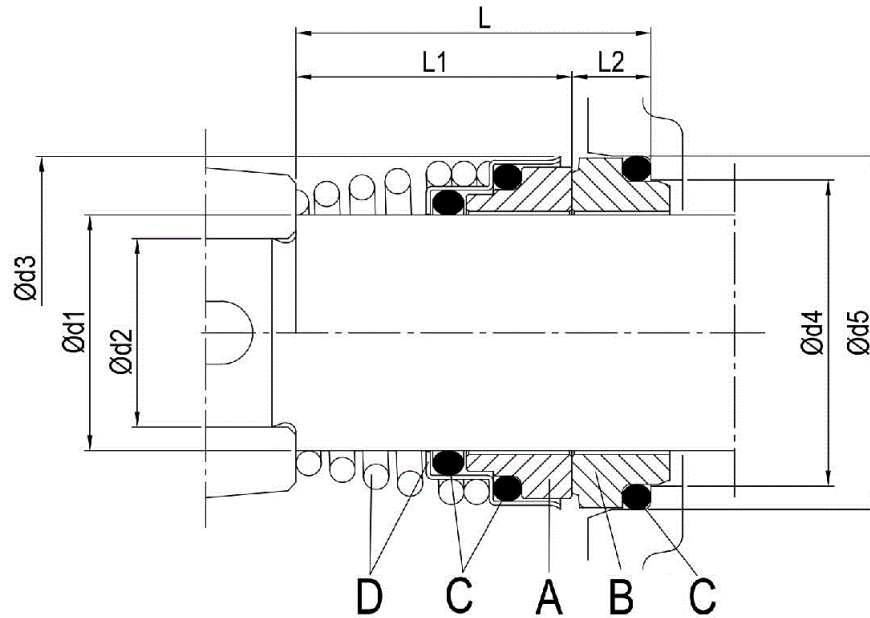
- [1] EN 1.4301 (AISI 304) for 40-200/156 and 50-160/156 models
EN 1.4401 (AISI 316) for 65-160/116, 65-160/156, 65-200/156, 65-200/18.56 and 65-200/226 models
- [2] See **CONSTRUCTION 3**
- [3] See **CONSTRUCTION 3**, "O-ring" column
- [4] 0 for 65-160/15 kW
2 for 65-200/15, 18.5, 22 kW
- [5] Only for: 40-200/156, 50-160/156
- [6] Only for pumps with 15 kW motor and above

(3/3)

Construction

Pump Name 3D 65-160/156

Customer	Date 2024-06-20	Company
Contact	Item no.	Issued by
Phone	Project	Phone
E-mail	Project ID Proiect redenumit 2024-06-20 10:03:09	E-mail



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
65-160/156	30	24	46	39	45	42.5	32.5	10	Ceramic	Carbon	NBR	EN 1.4401
65-200												(AISI 316)