

# Technical Data

Pump Name

3LM 50-125/5.56 IE3

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
3	Flow	m³/h	Kin. viscosity	mm²/s
4	Head	m	Vapour pressure	bar
5	Geodetic head	m	PH value	
6	Inlet pressure (pin)	bar	Density	kg/m³
7	Available system NPSH		Solids	Weight %
8	Ambient temperature	°C		

## Pump

9	Pump Name	3LM 50-125/5.56 IE3	Frequency	Hz	60	
10	Design	CENTRIFUGAL PUMPS	Installation type		STANDARD	
11	Manufacturer	EBARA	Impeller Diameter	Max.	mm	
12	Speed	rpm		3480	Designed	mm
13	No. of Stage	1		Min.	mm	131
14	Connection	Suction side	DIN 2532	Flow	Operating	m³/h
15	Connection	Discharge side	DIN 2532		Max-	m³/h
16	Max Working Pressure	bar	10		Min-	m³/h
17	Shut-off head	bar	3.11	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	5.20
21	Required pump NPSH	m		Efficiency	%	

## Materials

22	Impeller	AISI 316L		
23	Casing	AISI 316L		
24	Shaft	AISI 316L		
25				
26				
27				

## Motor

28	Manufacturer	EPE Standard	Insulation class	F	
29	Type	TEFC_3M 50-125/5.56_460_Three Phase	Phases	3~	
30	Specific design	IE3 / 60 Hz / Pole pairs 1	Frame size		
31	Rated power	kW	5.5	Weight	kg
32	Number of poles	2	Electric voltage	V	460
33	Speed	rpm	3500	Electric current	A
34	Degree of protection	IP 55			
35					

## Remarks

# Performance Curve

Pump Name

3LM 50-125/5.56 IE3

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**

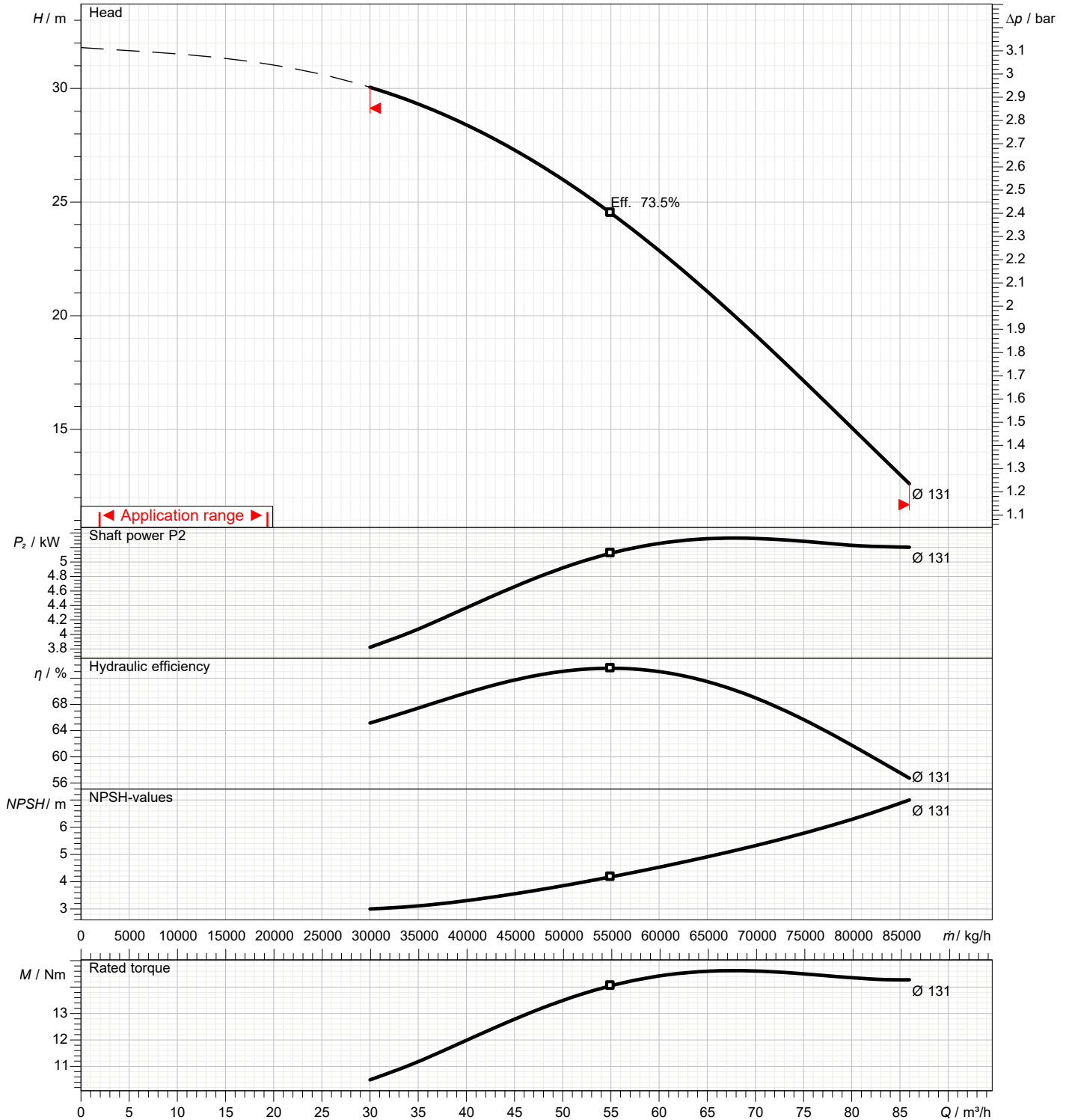
1	Flow	m³/h	
2	Head	m	
3	Geodetic head	m	

**Pump**

Operating flow	m³/h		Frequency	Hz	60
Operating head	m		Number of poles		2
Impeller diameter designed	mm	131	Speed	rpm	3480

Test standard: ISO 9906:2012 - Grade3B

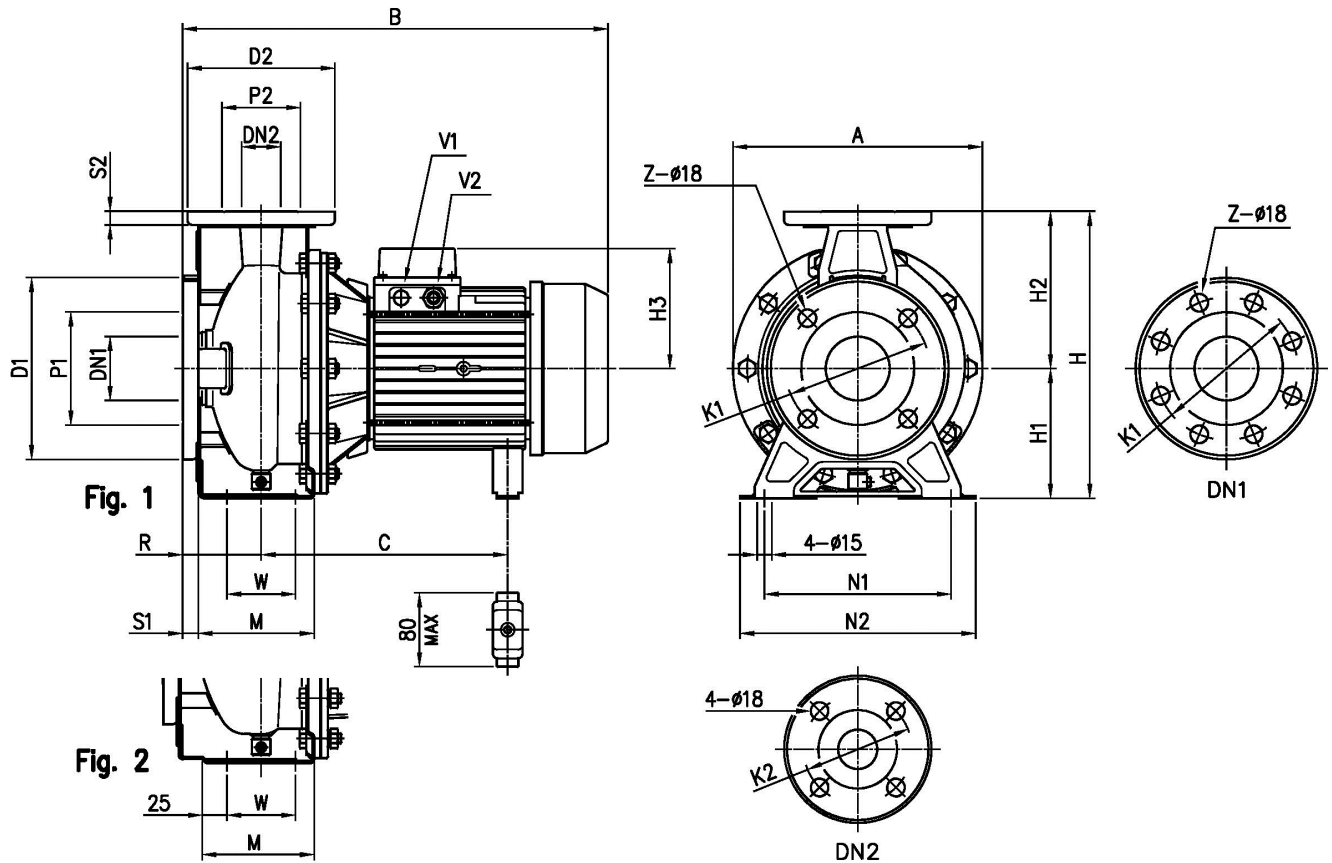
Water; 20°C; 998.3kg/m³; 1mm²/s



# Dimensions

Pump Name 3LM 50-125/5.56 IE3

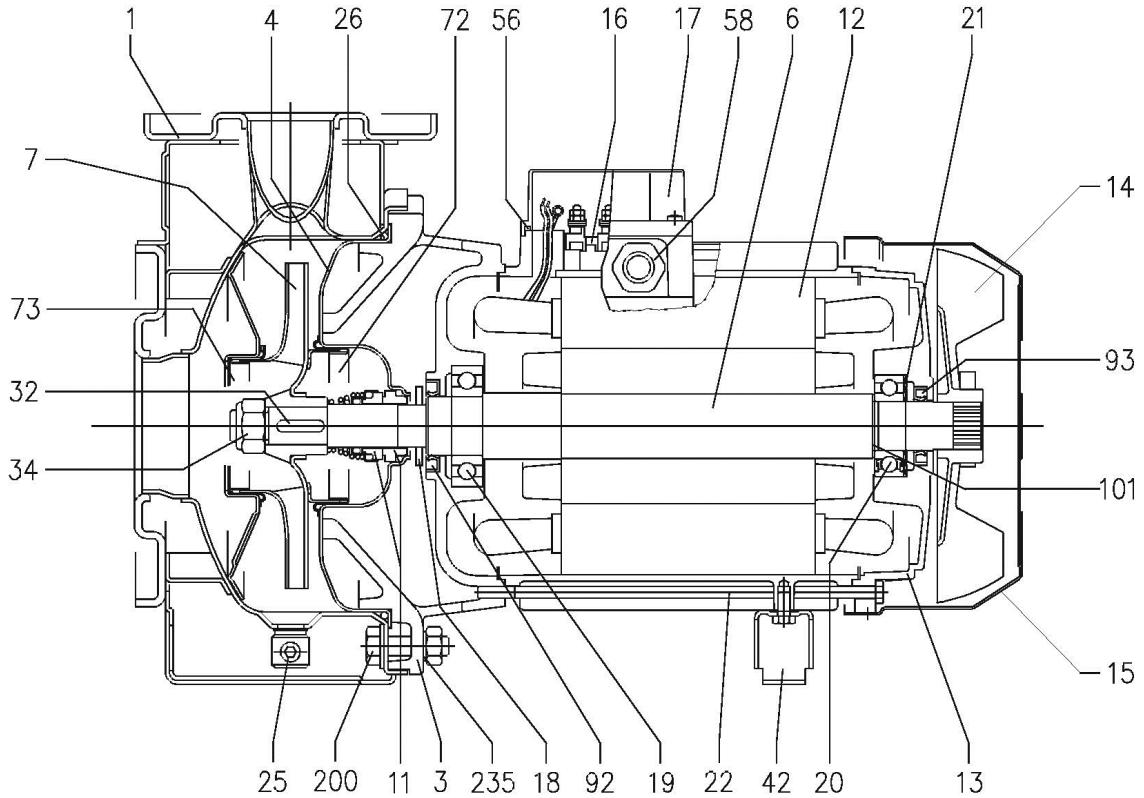
Customer	Date 2024-06-20	Company
Contact	Item no.	Issued by
Phone	Project	Phone
E-mail	Project ID Proiect redenumit 2024-06-20 10:03:09	E-mail



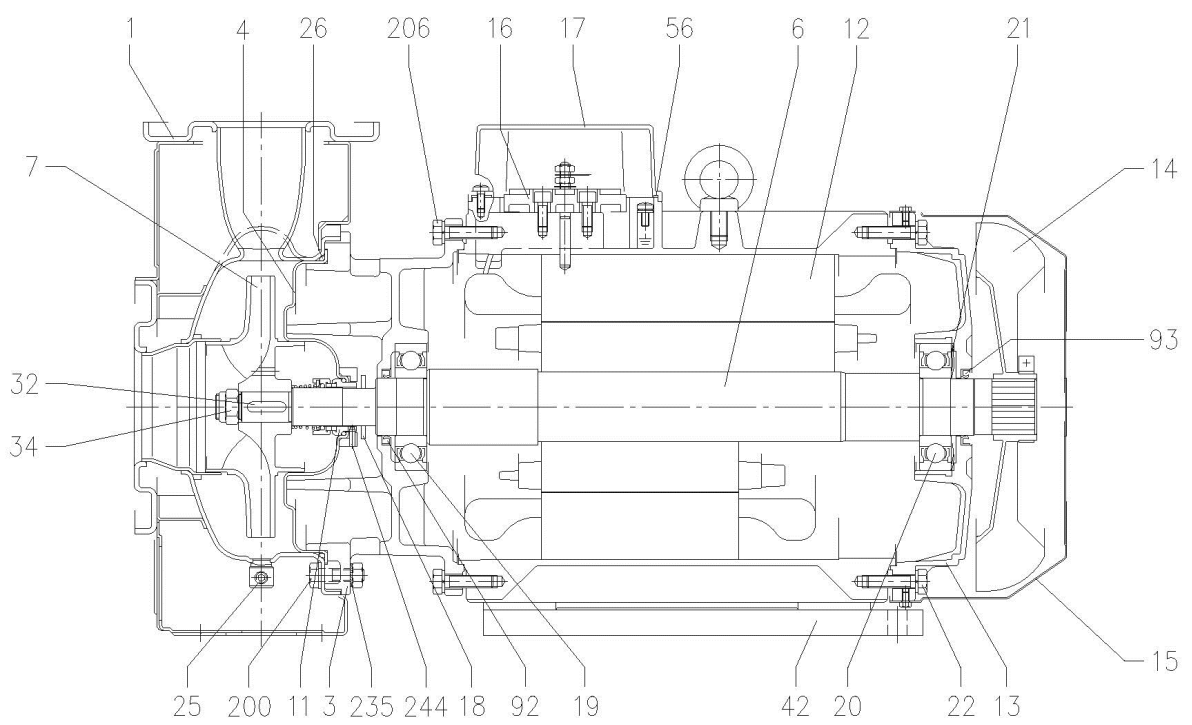
Dimensions in		mm						
1	A	254	H3	150				
2	B	539	M	114				
3	C	275	N1	190				
4	Dia D1	185	N2	240				
5	Dia D2	165	R	100				
6	Dia DN1	65	S1	16				
7	Dia DN2	50	S2	16				
8	Dia K1	145	V1	PG 13,5				
9	Dia K2	125	V2	M25X1,5				
10	Dia P1	115	W	70				
11	Dia P2	95	Weight P&M	43,9 kg				
12	Fig	2	Z	4				
13	H	292						
14	H1	132						
15	H2	160						

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

UP TO 11 kW



15 kW AND ABOVE



(2/3)

# Construction

Pump Name 3LM 50-125/5.56 IE3

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	
		3M	3LM				
1	Casing	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1	
3	Motor bracket	[3]	-			1	
4	Casing cover	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1	
6	Shaft with rotor-Part in contact with liquid	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1	
7	Impeller	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)			1	
11	Mechanical seal	[5]	-			1	
12	Motor frame with stator		-			1	
13	Motor cover		Aluminium			1	
14	Fan		PA			1	
15	Fan cover		Fe P04 Zincate			1	
16	Terminal		-			1	
17	Terminal box cover		Aluminium (three phase version)			1	
18	Splash ring	NBR	-	40x21.5x3	EBARA DRAWING	[6]	
19	Bearing	[7]	-			1	
20	Bearing		-			1	
21	Adjusting ring		Steel C70			1	
22	Tie rod	For 2.2 - 3 kW For 4 - 5.5 - 7.5 kW For 9.2 - 11 - 15 kW	Fe 42 Zincate	M5 M6 M8	EBARA DRAWING	4	
25	Drain plug		EN 1.4401 (AISI 316) / PTFE	R 1/8" L=8	DIN 906	1	
26	O-ring	32-125, 40-125 40-160, 50-125 32-160, 32-200, 40-200, 50-160	NBR/FPM/EPDM FPM/EPDM	158.11x5.34 183.52x5.34 227.96x5.34	OR 6625 OR 6720 OR 6895	1	
32	Key		EN 1.4401 (AISI 316)	6x6x25	UNI 6604	1	
34	Impeller nut		A 270 EN ISO 35062	M16x1.5	UNI 7474	1	
42	Foot		Aluminium / Zincate steel		EBARA DRAWING	1	
56	Box gasket		NBR			1	
58	Fastening nut		-			1	
72	Casing ring	[1]	EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)		1	
73	Casing ring		EN 1.4301 (AISI 304)	EN 1.4404 (AISI 316L)		1	
92	Lip seal	For 2.2 - 3 kW For 4 - 5.5 - 7.5 kW For 9.2 - 11 - 15 kW	-	-	25x40x7 30x47x7 40x55x7	DIN 3760 without spring	1
93	Lip seal	For 2.2 - 3 kW For 4 - 5.5 - 7.5 kW For 9.2 - 11 - 15 kW	-	-	25x40x7 30x47x7 40x55x7	DIN 3760 without spring	1
101	Snap ring (only for 9.2 - 11 - 15 kW)		Carbon tool steels TC 80	Ø 40	UNI 7435	1	
200	Screw	32-125, 40-125 32-160, 32-200, 40-160, 40-200, 50-125, 50-160	Stainless steel A2 70 class ISO 3506/1	M 8x30 M 10x35	UNI 5739 UNI 5739	8 [2]	
235	Washer	32-125, 40-125 32-160, 32-200, 40-160, 40-200, 50-125, 50-160	EN 1.4301 (AISI 304)	M8.4x17 M10.5x21	UNI 6592	8 [2]	

[1] For versions 32-200/5.56, 32-200/7.56, 40-200/5.5, 40-200/9.26, 40-200/156, 50-160/9.26, 50-160/156

[2] Quantity =10 for 32-160, 40-160, 50-125

Quantity =12 for 32-200, 40-200, 50-160

[3] Aluminium EN 1706 AC 46000 D for version, 40-200/9.26, 40-200/156, 50-160/9.26, 50-160/156

Cast iron EN-GJL-200-EN 1561 for other versions.

[4] See **MECHANICAL SEAL**, "O-ring" column, see CONSTRUCTION 3

[5] See **MECHANICAL SEAL**, see CONSTRUCTION 3

[6] Quantity =1, not for L version

[7] See **BEARINGS**, CONSTRUCTION 3

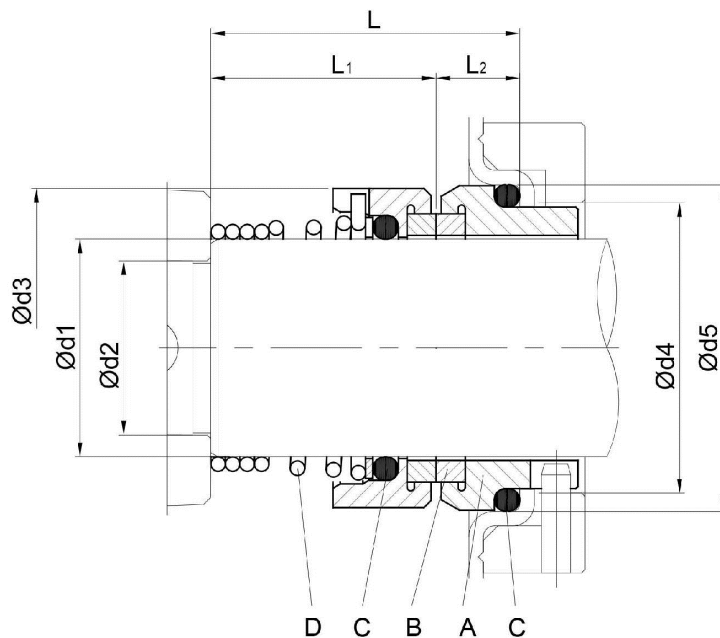
[8] CF8M – EN 1.4408 (AISI316) material for 65-125 up to 65-200

(3/3)

# Construction

Pump Name 3LM 50-125/5.56 IE3

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



Version	Pump type	Dimensions [mm]							Material Standard				
		d1	d2	d3	d4	d5	L	L1	L2	A Stationary seal ring	B Rotary seal ring	C O-ring	D Frame + spring
L	32-125/160/200 40-125/160/200 50-125/160 65-125 65-160/7,56-9,26-116	22	19	36	31	37	37.5	27.5	9.5	SiC	SiC	FPM	EN 1.4401 (AISI 316)