

SINGLE IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304



Single impeller centrifugal electric pumps constructed entirely in AISI 304 stainless steel.

APPLICATIONS

- Domestic pressure boosting
- Small-scale garden irrigation
- Washing
- Treating water
- Cooling towers
- Moving clean water in general

TECHNICAL DETAILS

- Solid hydraulic structure
- Small dimensions

TECHNICAL DATA

- Maximum working pressure: 8 bar
- Maximum temperature of the liquid:
 - 10°C ÷ +60°C for CD 70/05-70/07-90/10
 - 10°C ÷ +90°C for the rest of the range
 - 10°C ÷ +110°C in the H-HS version
- 2 pole self-ventilated closed asynchronous motor with internal ventilation
- Class of insulation F
- IP55 Protection rating
- 230V ±10%, 50Hz single phase voltage
- 230/400V ±10%, 50Hz three phase voltage
- Permanent capacitor inserted and thermo-amperometric protection with automatic rearm incorporated for the single phase motor
- Protection under user's responsibility for the three phase version
- G1½ suction connection for CD 200, G1¼ for the rest of the range
- G1 discharge connection

MATERIALS

- Pump body, impeller, nozzle, seal housing disc, support, motor case and fan cover in AISI 304
- Mechanical sealing in:
 - Ceramic/Carbon/NBR (standard)
 - Ceramic/Carbon/FPM (H version)
 - SiC/SiC/FPM (HS version)
 - Tungsten carbide/Tungsten carbide/FPM (HW version - seal with reduced slide face)
 - SiC/Tungsten carbide/FPM (HSW version)
 - Ceramic/Graphite/EPDM (E version)
- Shaft in AISI 303

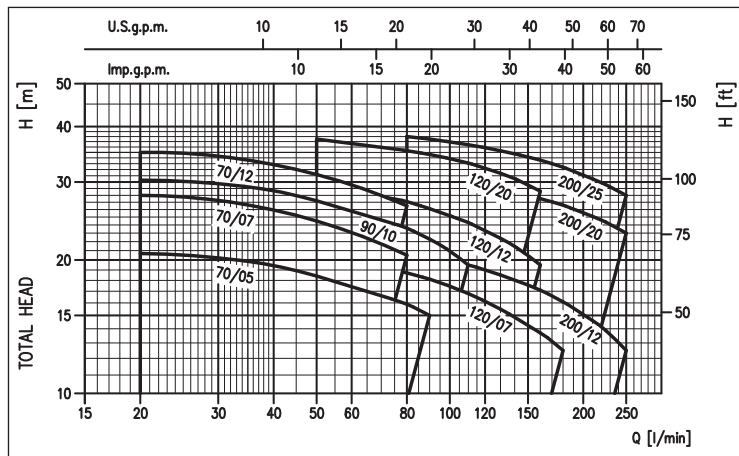
CONTROL PANELS

- 1EPBH (see page 207)

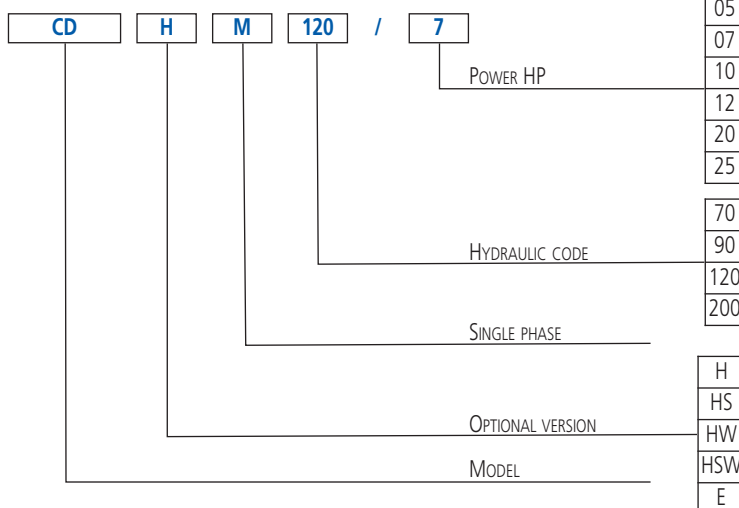
ACCESSORIES (on request)

- 5 litre 10 bar ¾ EPDM vessel
- 24 litre 8 bar 1" EPDM vessel
- 24 litre 10 bar 1" EPDM vessel
- PVC 5m key float with counter-weight
- PVC 10m key float with counter-weight
- SQUARE-D FSG-2 1.4÷4.6 bar G¼ F pressure switch
- FYG-22 2.8÷7 bar G¼ F pressure switch
- Presscomfort - Pressure regulator (see page 208)
- Press•o•Matic - Variable speed control system (single phase 230V±10% power supply - three phase 220V output - maximum motor power 2.2 kW - 3 HP - see page 209)

PERFORMANCE RANGE (according to ISO 9906 Attachment A)



IDENTIFICATION CODE

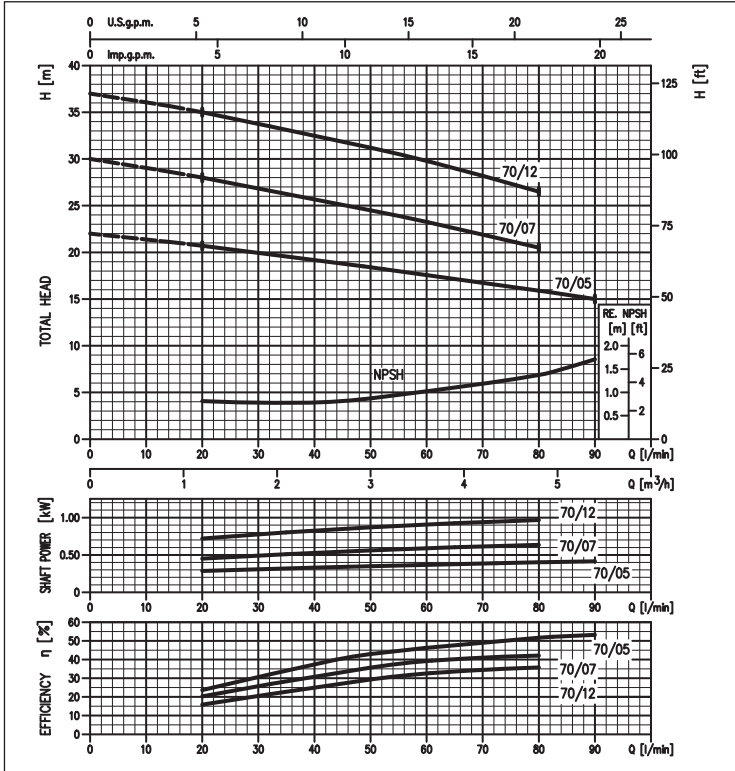


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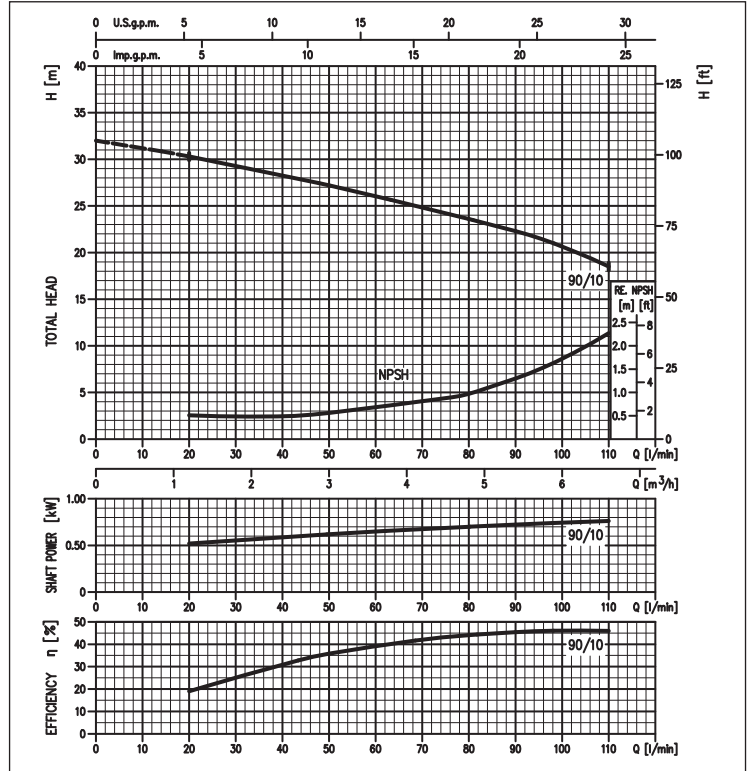
CD 70 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



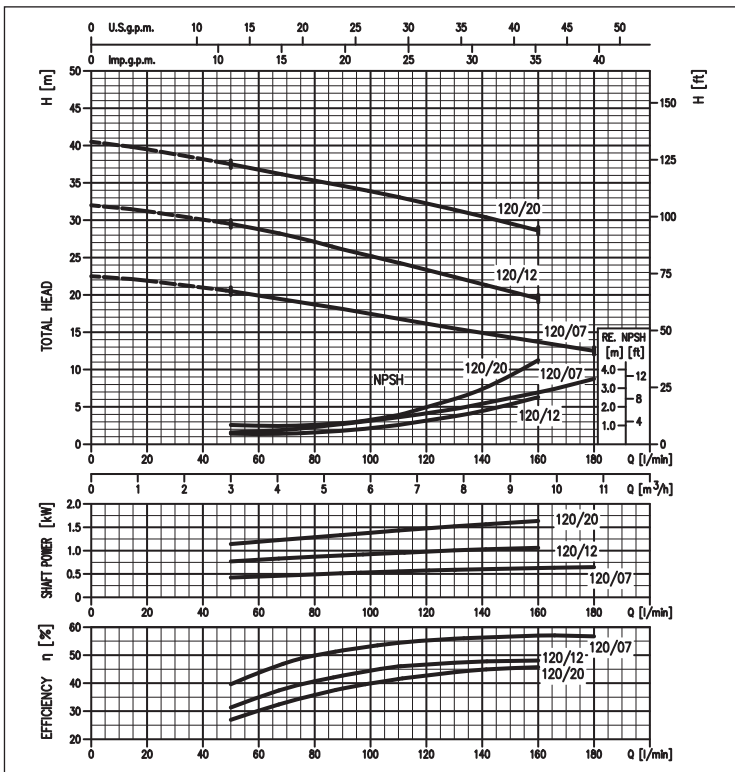
CD 90 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



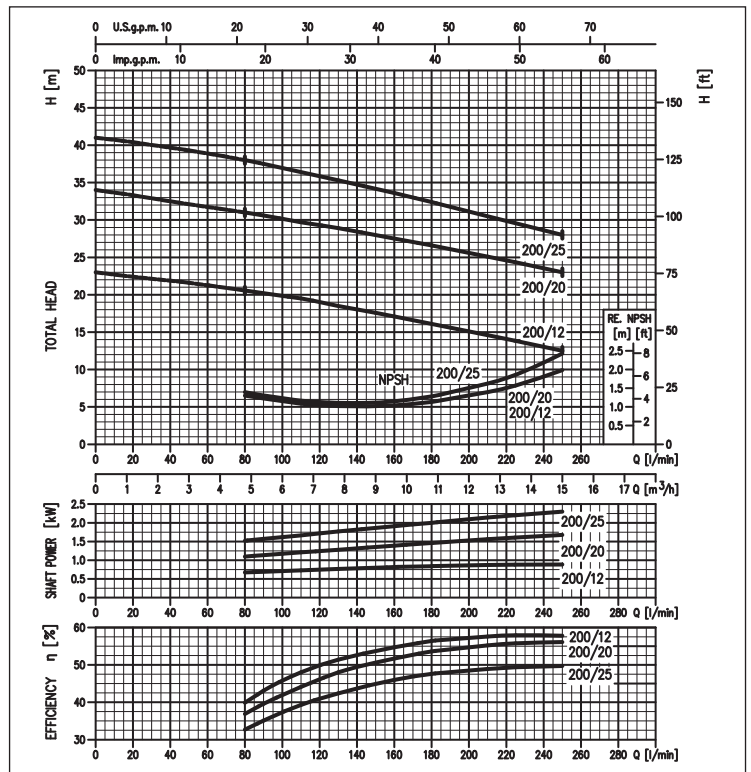
CD 120 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



CD 200 range PERFORMANCE CURVES

(according to ISO 9906 Attachment A)



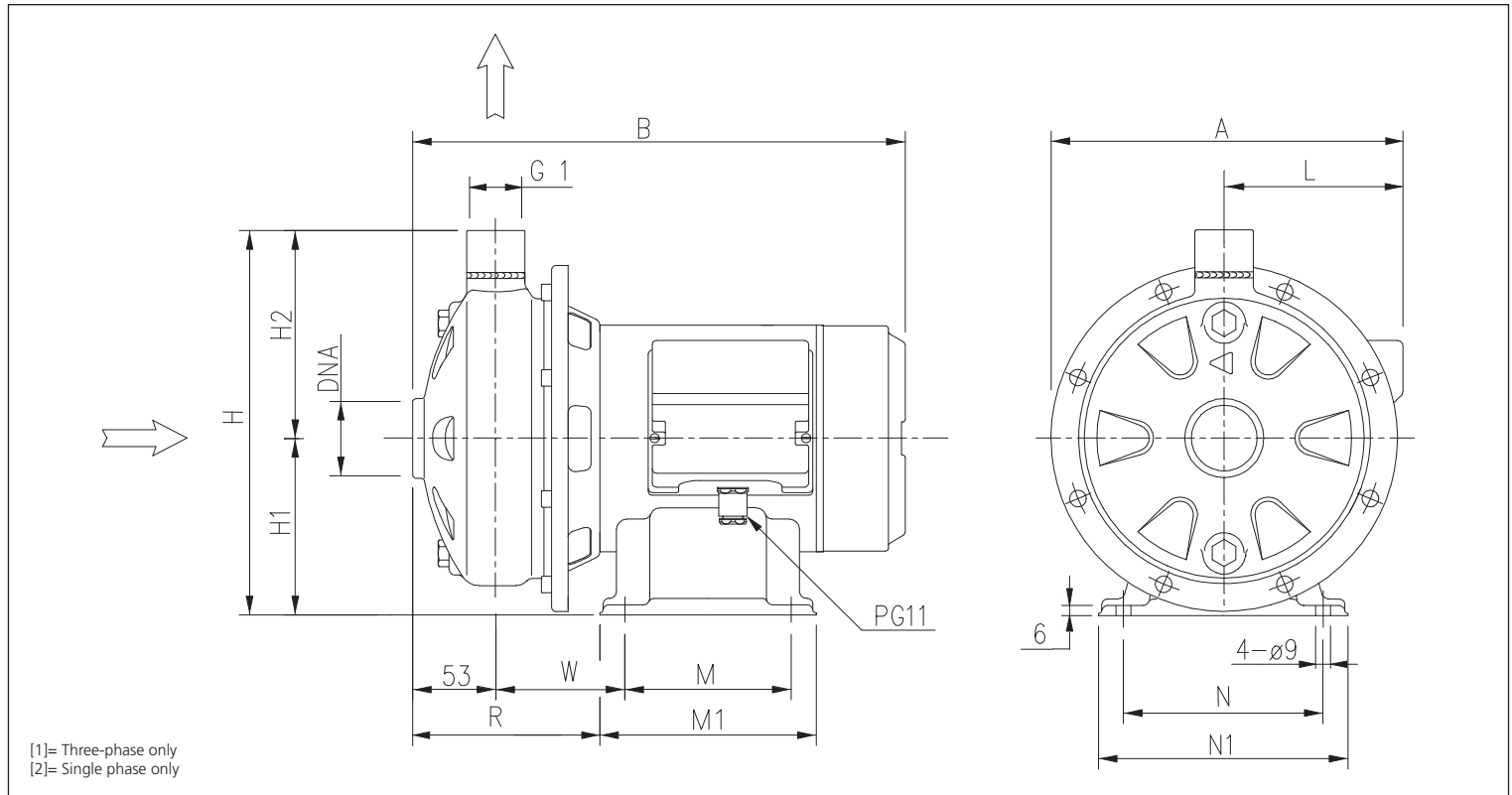
SINGLE IMPELLER CENTRIFUGAL ELECTRIC PUMPS

in AISI 304

PERFORMANCE TABLE

Model		P ₂		Q=Flow rate																		
230V single phase	230/400V three-phase	[HP]	[kW]	H=Head [m]																		
				l/min m ³ /h	20 1,2	50 3	80 4,8	90 5,4	110 6,6	130 7,8	160 9,6	180 10,8	210 12,6	250 15,0								
CDM 70/05	CD 70/05	0,5	0,37	20,7	18,4	15,9	15,0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CDM 70/07	CD 70/07	0,8	0,55	28,0	24,5	20,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CDM 70/12	CD 70/12	1,2	0,9	35,0	31,2	26,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CDM 90/10	CD 90/10	1	0,75	30,3	27,2	23,6	22,3	19,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CDM 120/07	CD 120/07	0,8	0,55	-	20,5	18,7	18,1	16,8	15,5	13,7	12,5	-	-	-	-	-	-	-	-	-	-	-
CDM 120/12	CD 120/12	1,2	0,9	-	29,5	27,1	26,1	24,3	22,4	19,5	-	-	-	-	-	-	-	-	-	-	-	-
CDM 120/20	CD 120/20	2	1,5	-	37,5	35,3	34,6	33,1	31,4	28,6	-	-	-	-	-	-	-	-	-	-	-	-
CDM 200/12	CD 200/12	1,2	0,9	-	-	20,6	20,2	19,5	18,5	17,1	16,1	14,6	12,5	-	-	-	-	-	-	-	-	-
CDM 200/20	CD 200/20	2	1,5	-	-	31,0	30,6	29,7	28,9	27,5	26,6	25,1	23,0	-	-	-	-	-	-	-	-	-
-	CD 200/25	2,5	1,8	-	-	38,0	37,5	36,4	35,3	33,6	32,4	30,5	28,0	-	-	-	-	-	-	-	-	-

DIMENSIONS



DIMENSIONS TABLE

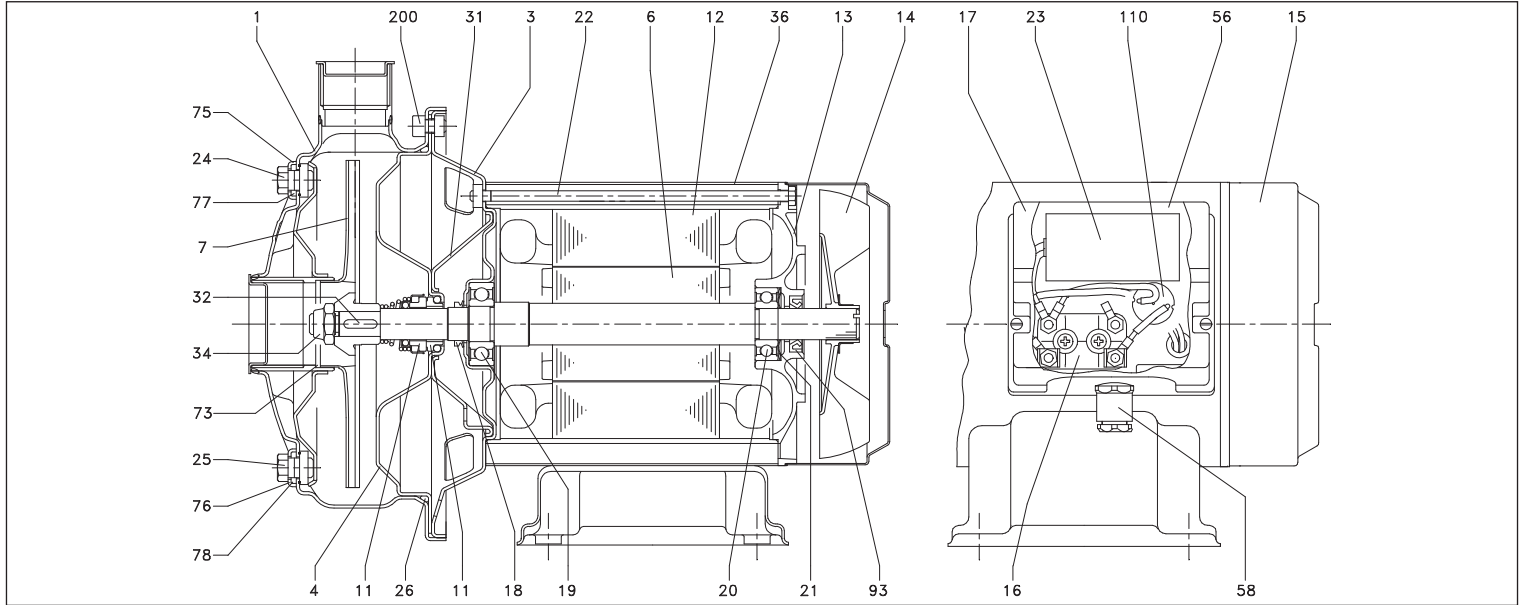
Model	Dimensions [mm]																Weight [kg]		
	A [1]	A [2]	B	H	H1	H2	L [1]	L [2]	M [1]	M [2]	M1 [1]	M1 [2]	N	N1	R	W	DNA	[1]	[2]
CD(M) 70/05	208	209	298	229	106	123	104	105	100	100	130	130	120	150	116	78	G1¼	9,4	9,4
CD(M) 70/07	208	209	298	229	106	123	104	105	100	100	130	130	120	150	131	93	G1¼	10,8	10,8
CD(M) 70/12	208	208	328	229	106	123	104	105	100	100	130	130	120	150	131	93	G1¼	14,1	14,1
CD(M) 90/10	208	209	328	229	106	123	104	105	100	100	130	130	120	150	131	93	G1¼	12,4	12,4
CD(M) 120/07	208	209	298	229	106	123	104	105	100	100	130	130	120	150	116	78	G1¼	10,7	10,7
CD(M) 120/12	208	208	328	229	106	123	104	104	100	100	130	130	120	150	131	93	G1¼	13,3	13,3
CD(M) 120/20	232	232	356	250	118	132	116	116	120	120	150	150	140	170	133	95	G1¼	17,3	17,3
CD(M) 200/12	208	208	328	229	106	123	104	104	100	100	130	130	120	150	131	93	G1½	12,7	12,8
CD(M) 200/20	213	213	356	229	106	123	109	109	120	120	150	150	140	170	133	95	G1½	16,7	16,7
CD 200/25	232	-	366	250	118	132	116	-	120	-	150	-	140	170	138	100	G1½	17,4	-

[1]= Three-phase only
[2]= Single phase only

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in AISI 304

SECTIONAL VIEW



MATERIALS TABLE

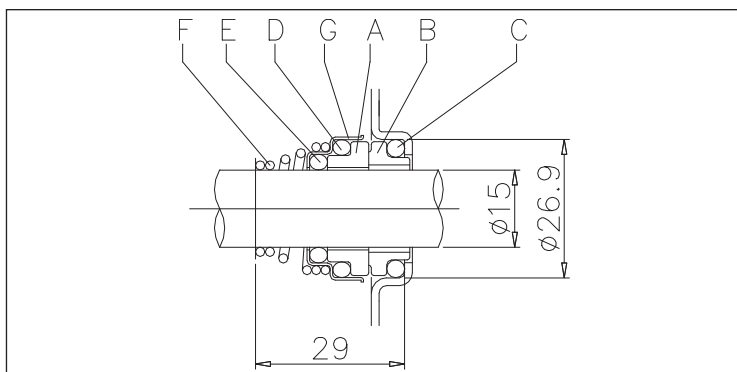
Ref.	Name	Material	Ref.	Name	Material
1	Pump body	EN 1.4301 (AISI 304)	24	Filler cap	AISI 303
3	Motor support	EN 1.4301 (AISI 304)	25	Drain plug	AISI 303
4	Seal housing disc	EN 1.4301 (AISI 304)	26	O-Ring [2]	NBR
6	Rotor shaft	AISI 303 Part in contact with the liquid	31	Sealing disc spacer	EN 1.4301 (AISI 304)
7	Impeller	EN 1.4301 (AISI 304)	32	Key	EN 1.4301 (AISI 304)
11	Mechanical seal [2]	Carbon/Ceramic/NBR	34	Impeller nut	EN 1.4301 (AISI 304)
12	Motor case	-	36	Motor casing	EN 1.4301 (AISI 304)
13	Motor cover	Aluminium	56	Terminal box cover gasket	NBR
14	Fan	Polypropylene	58	Cable gland	-
15	Fan cover	EN 1.4301 (AISI 304)	73	Wear ring [3]	EN 1.4301 (AISI 304)
16	Terminal box	-	75	Washer	EN 1.4301 (AISI 304)
17	Terminal box cover	Polyamide	76	Washer	EN 1.4301 (AISI 304)
18	Sealing ring	NBR	77	O-Ring [2]	NBR
19	Bearing (pump side)	-	78	O-Ring [2]	NBR
20	Bearing (motor side)	-	93	Sealing ring	NBR
21	Adjusting ring	Steel C70	110	Motorprotector [1]	-
22	Tie-rod	Galvanised Fe 42	200	Screw (pump body)	A2 UNI7323 stainless steel
23	Capacitor [1]	-			

[1]= For single phase only

[2]= FPM for CDH and CDHS

[3]= NBR for CD 70/05, 70/07, 90/10, FPM for H and HS 70/05, 70/07, 90/10 versions

MECHANICAL SEAL CD standard



MATERIALS TABLE

Ref.	Name	Material
A	Rotating part	Ceramic
B	Fixed part	Carbon
C	O-Ring	NBR
D	O-Ring	NBR
E	O-Ring	NBR
F	Spring	AISI 316
G	Structure/frame	AISI 304

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SPECIAL MECHANICAL SEALS (on request)

Name	H version	HS version	Material HW version	HSW version	E version
Fixed Part	Carbon	SiC	Tungsten Carbide	Tungsten Carbide	Carbon
Rotating Part	Ceramic	SiC	Tungsten Carbide	SiC	Ceramic
Elastomers	FPM	FPM	FPM	FPM	EPDM
Spring	AISI 316	AISI 316	AISI 316	AISI 316	AISI 316
Structure/Frame	AISI 304	AISI 316	AISI 304	AISI 304	AISI 316

ELECTRIC DATA TABLE

230V single phase	Model 230/400V three-phase	P ₂		Single phase Capacitor		P ₁		Absorbed Current [A]		
		[HP]	[kW]	μF	V _c	Single phase [kW]	Three-phase [kW]	Single phase 230V	Three-phase 230V 400V	
CDM 70/05	CD 70/05	0,5	0,37	12,5	450	0,71	0,68	3,1	2,4	1,4
CDM 70/07	CD 70/07	0,75	0,55	16	450	1,0	1,0	4,6	3,5	2,0
CDM 70/12	CD 70/12	1,2	0,9	31,5	450	1,5	1,4	6,5	5,0	2,9
CDM 90/10	CD 90/10	1	0,75	20	450	1,2	1,1	5,6	4,0	2,3
CDM 120/07	CD 120/07	0,75	0,55	16	450	1,0	1,0	4,6	3,2	1,85
CDM 120/12	CD 120/12	1,2	0,9	31,5	450	1,6	1,4	6,9	4,9	2,8
CDM 120/20	CD 120/20	2	1,5	40	450	2,1	2,1	9,7	7,0	4,0
CDM 200/12	CD 200/12	1,2	0,9	31,5	450	1,4	1,3	6,3	4,7	2,7
CDM 200/20	CD 200/20	2	1,5	40	450	2,3	2,1	9,8	7,0	4,0
-	CD 200/25	2,5	1,85	-	-	-	2,8	-	8,6	5,0