

Technical data

Pump name

MATRIX 10-5T/2.2

Customer	Date 12-July-2017	Company
Contact	Item no. 1.1	Issued by
Phone	Project	Phone
E-mail	Project ID EBARA Pump Selector-2094616	E-mail

Requested data

1	Pump type	HORIZONTAL MULTISTAGE PUMPS	Fluid	Water, clean
2	Number of pumps / Reserve	1 / 0	Liquid temperature °C	20
3	Flow m³/h	0	Kin. viscosity mm²/s	1
4	Head m	0	Vapour pressure bar	0.022
5	Static head m	0	PH value	7
6	Inlet pressure bar	0.1	Density kg/dm³	1
7	Available system NPSH	0	Solids Weight %	0
8	Environmental temperature °C	20	Altitude m	1000

Pump

9	Pump name	MATRIX 10-5T/2.2	Frequency Hz	50
10	Design	HORIZONTAL MULTISTAGE PUMPS	Installation type	STANDARD
11	Manufacturer	EPE	Impeller Diameter	Max. mm 101
12	Speed 1/min	2850		Designed mm 101
13	No. of Stage	5		Min. mm 101
14	Connection Suction side	UNI ISO 228	Flow	Operating m³/h
15	Connection Discharge side	UNI ISO 228		Max- m³/h 15
16	Max Working Pressure bar	10		Min- m³/h 3.6
17	Shut-off head bar	5.89	Head	Operating m
18	Total weight kg	See the table of "Dimensions".		- (Qmax.) m 14.3
19	Shaft power kW			- (Qmin.) m 55.5
20			Max. Shaft Power at max. impeller kW	1.90
21	Required NPSH m		Efficiency %	

Materials

22	Impeller	AISI 304		
23	Casing	AISI 304		
24	Shaft	AISI 304		
25				
26				
27				

Motor

28	Manufacturer	EPE Standard	Insulation class	F
29	Type	TEFC_MATRIX 10-5T/2.2_400_Three Phase	Phases	3~
30	Specific design	IE3 / 50 Hz / Pole pairs 1	Frame size	
31	Rated power kW	2.2	Weight kg	0
32	Number of poles	2	Electric voltage V	400
33	Speed 1/min	2850	Electric current A	4.7
34	Degree of protection	IP 55		
35				

Remarks

Performance curve

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Requested data

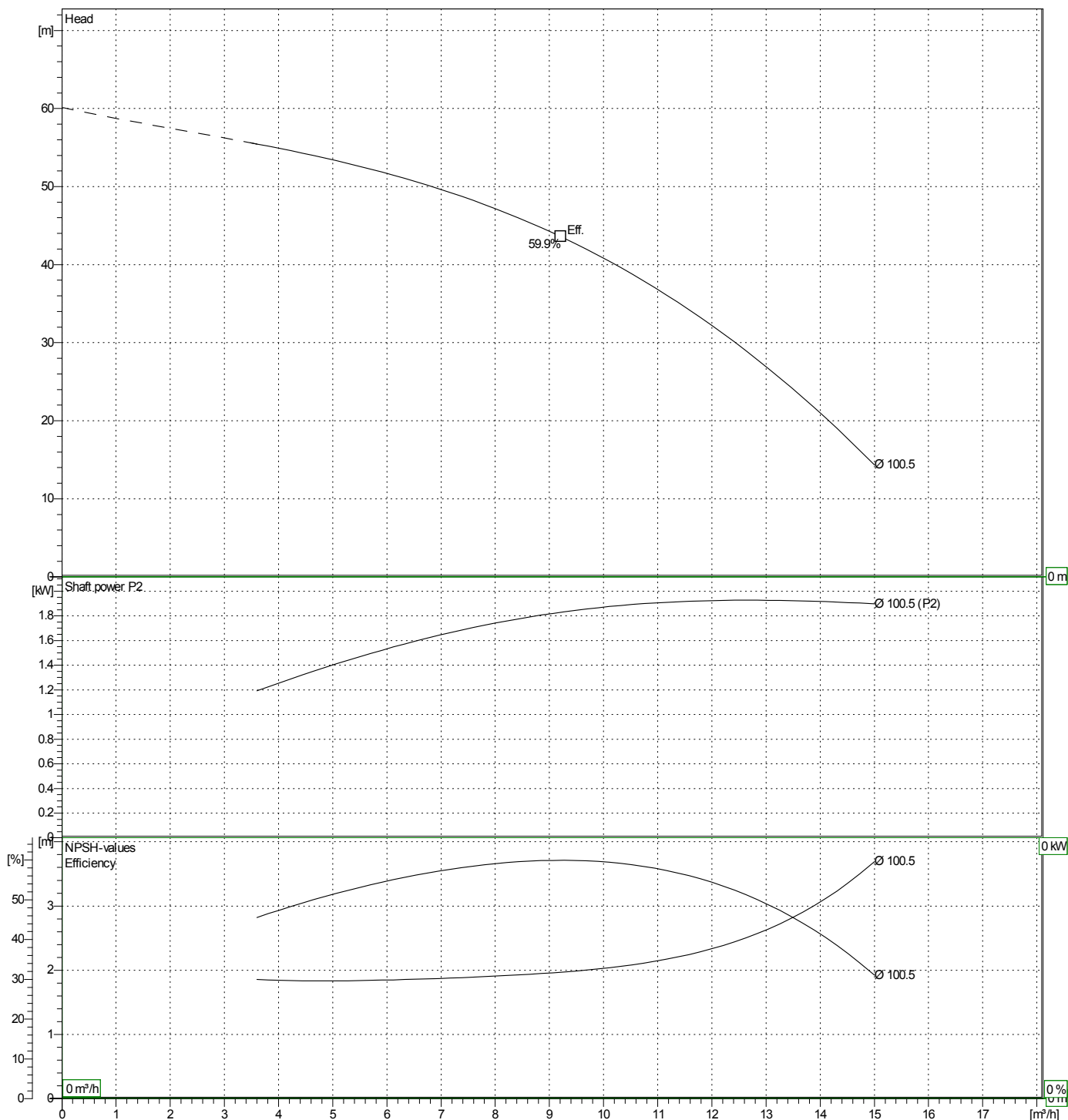
1	Flow	m³/h	0
2	Head	m	0
3	Static head	m	0

Pump

Operating Flow	m³/h		Frequency	Hz	50
Operating Head	m		Number of poles		2
Impeller Diameter	Designed mm	101	Speed	1/min	

Test standard: ISO 9906:2012 - Grade3B

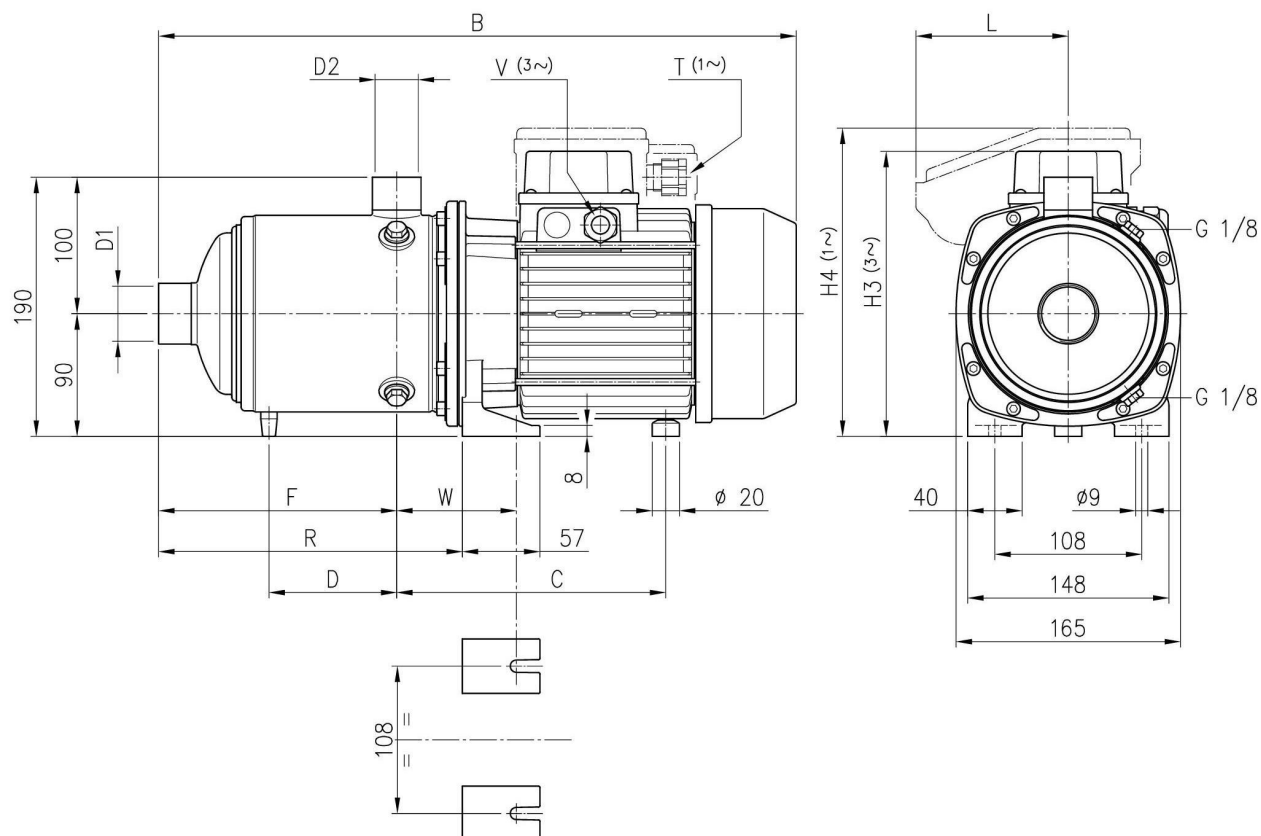
Water, clean [100%] ; 20°C; 0.9983kg/dm³; 1mm²/s



Dimensions

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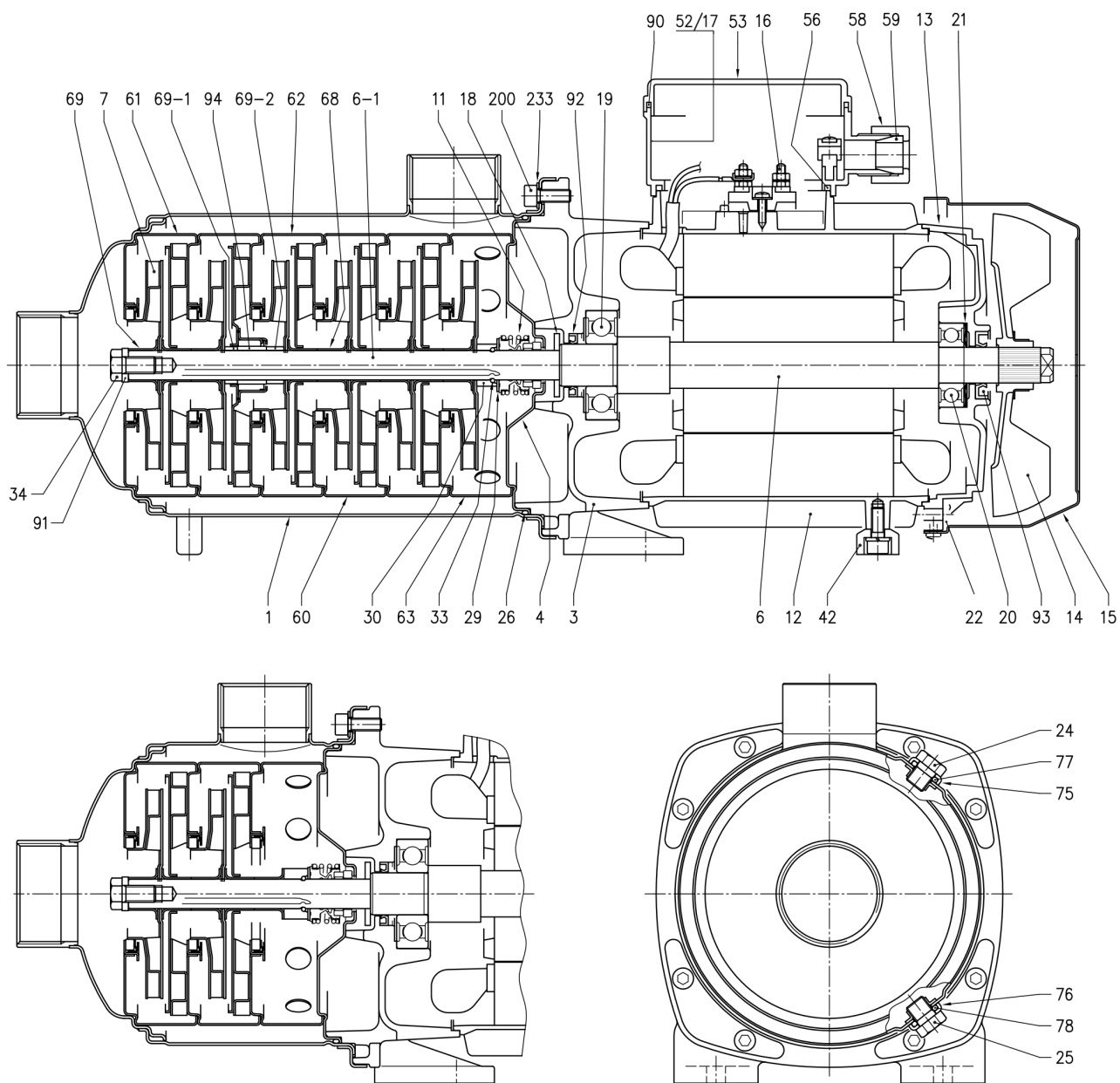


Dimensions in mm							
1	B	501.5					
2	C	202					
3	Dia D1	1 1/2"					
4	Dia D2	1 1/4"					
5	F	178					
6	H3	209					
7	R	230.5					
8	V	M20X1.5					
9	W	92 + 101					
10	Weight P&M	18.8 kg					

(1/4) Construction

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VERSION FOR PUMP TYPE: MATRIX 3-2T/0.45(M)
MATRIX 5-2T/0.45(M)
MATRIX 10-2T/0.75(M)

(2/4) Construction

Pump name **MATRIX 10-5T/2.2**

Customer	Date 12-July -2017	Company
Contact	Item no.	Issued by
Phone	Project	Phone
E-mail	Project ID EBARA Pump Selector-2094616	E-mail

N°	PART NAME	MATERIAL	DIMENSION	STANDARD	Q.TY
001	Casing	EN 1.4301 (AISI 304)			1
003	Bracket	EN AB-AISI11Cu2(Fe)			1
004	Casing cover	EN 1.4301 (AISI 304)			1
006	Shaft with rotor	-			1
006-1	Pump Shaft	EN 1.4301 (AISI 304)			1
007	Impeller	EN 1.4301 (AISI 304)			[1]
011	Standard mechanical seal [3]	Ceramic/Carbon/EPDM			1
	High temperature mechanical seal [3]	Ceramic/Carbon/EPDM			
012	Motor frame with stator	-			1
013	Motor cover	Aluminium			1
014	Fan	PA			1
015	Fan cover	Fe P04 Zincate			1
016	Terminal board	-			1
017	Terminal box cover	Aluminium			[1]
018	Splash ring	NBR	30x13.5x2.5		1
019	Bearing	-			1
020	Bearing	-			1
021	Adjusting ring	Steel C70			1
022	Tie rod	Fe 42 Zinc-coated			4
024	Plug	EN 1.4301 (AISI 304)			1
025	Plug	EN 1.4301 (AISI 304)			1
026	O-ring	EPDM			1
029	Washer	EN 1.4301 (AISI 304)	25.1x14x1		1
030	Ring holder	EN 1.4301 (AISI 304)			1
033	Ring	EN 1.4301 (AISI 304)			2
034	Screw	EN 1.4301 (AISI 304)	M 8x16	UNI 5739	1
042	Foot	Aluminium			[1]
052	Capacitor box [2]	ABS class V-0			1
053	Capacitor box cover [2]	ABS class V-0			1
056	Box gasket	NBR			1
058	Ring nut	-			[1]
059	Conic gasket	NBR			[1]
060	Intermediate casing	EN 1.4301 (AISI 304)+PPS			[1]
061	Intermediate casing (suction)	EN 1.4301 (AISI 304)+PPS			1
062	Intermediate casing (bearing)	EN 1.4301 (AISI 304)+PPS + Ceramic			[1]
063	Intermediate casing (discharge)	EN 1.4301 (AISI 304)+PPS			1
068	Shaft sleeve (intermediate)	EN 1.4301 (AISI 304)			[1]
069	Impeller spacer	EN 1.4301 (AISI 304)			1
069-1	Shaft sleeve (adjustment) [1]	EN 1.4301 (AISI 304)			[1]
069-2	Shaft sleeve (adjustment) [1]	EN 1.4301 (AISI 304)			[1]
075	Washer (plug)	EN 1.4301 (AISI 304)			1
076	Washer (plug)	EN 1.4301 (AISI 304)			1
077	O-ring	EPDM	9.19x2.62		1
078	O-ring	EPDM	9.19x2.62		1
090	Terminal box cover gasket [2]	NBR	-		[1]
091	Shaft washer	EN 1.4301 (AISI 304)			1
092	Lip seal	0.45-0.65-0.75-0.9 kW	-	17x32x6	1
		1.3-1.5-2.2 kW		20x30x4	1
		2.2M-3-4 kW		25x40x7	1
093	Lip seal	0.45-0.65-0.75-0.9 kW	-	15x30x5	1
		1.3-1.5-2.2 kW		17x32x7	1
		2.2M-3-4 kW		25x40x7	1
094	Shaft sleeve (bearing)	WC - Tungsten carbide			[1]
200	Screw	EN 1.4301 (AISI 304)	M6x16	UNI 5931	8
233	Plate	EN 1.4301 (AISI 304)			4

[1] See **COSTRUCTION 3**

[2] Only for single phase

[3] See **COSTRUCTION 4**

(3/4) Construction

Pump name **MATRIX 10-5T/2.2**

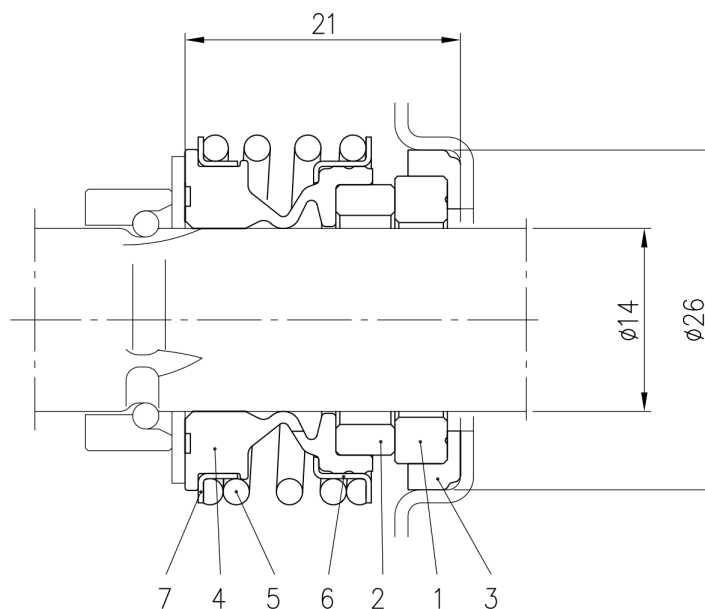
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Pump type	7	17	30-1	30-2	42	58	59	60	62	68	69-1	69-2	90	94
MATRIX 3-2T/0,45M	2	-	-	-	1	1	1	1	-	4	-	-	1	-
MATRIX 3-2T/0,45		1	-	-	1	-	-	1	-	4	-	-	-	-
MATRIX 3-3T/0,65M	3	-	-	-	1	1	1	1	-	4	-	-	1	-
MATRIX 3-3T/0,65		1	-	-	1	-	-	1	-	4	-	-	-	-
MATRIX 3-4T/0,65M	4	-	-	-	1	1	1	2	-	6	-	-	1	-
MATRIX 3-4T/0,65		1	-	-	1	-	-	2	-	6	-	-	-	-
MATRIX 3-5T/0,75M	5	-	-	-	1	1	1	3	-	8	-	-	1	-
MATRIX 3-5T/0,75		1	-	-	1	-	-	3	-	8	-	-	-	-
MATRIX 3-6T/0,9M	6	-	-	-	1	1	1	4	-	10	-	-	1	-
MATRIX 3-6T/0,9		1	-	-	1	-	-	4	-	10	-	-	-	-
MATRIX 3-7T/1,3M	7	-	-	-	1	1	1	4	1	10	1	1	1	1
MATRIX 3-7T/1,3		1	-	-	1	-	-	4	1	10	1	1	-	1
MATRIX 3-8T/1,3M	8	-	-	-	1	1	1	5	1	12	1	1	1	1
MATRIX 3-8T/1,3		1	-	-	1	-	-	5	1	12	1	1	-	1
MATRIX 3-9T/1,5M	9	-	-	-	1	1	1	6	1	14	1	1	1	1
MATRIX 3-9T/1,5		1	-	-	1	-	-	6	1	14	1	1	-	1
MATRIX 5-2T/0,45M	2	-	-	-	1	1	1	1	-	4	-	-	1	-
MATRIX 5-2T/0,45		1	-	-	1	-	-	1	-	4	-	-	-	-
MATRIX 5-3T/0,65M	3	-	-	-	1	1	1	1	-	4	-	-	1	-
MATRIX 5-3T/0,65		1	-	-	1	-	-	1	-	4	-	-	-	-
MATRIX 5-4T/0,9M	4	-	-	-	1	1	1	2	-	6	-	-	1	-
MATRIX 5-4T/0,9		1	-	-	1	-	-	2	-	6	-	-	-	-
MATRIX 5-5T/1,3M	5	-	-	-	1	1	1	3	-	8	-	-	1	-
MATRIX 5-5T/1,3		1	-	-	1	-	-	3	-	8	-	-	-	-
MATRIX 5-6T/1,3M	6	-	-	-	1	1	1	4	-	10	-	-	1	-
MATRIX 5-6T/1,3		1	-	-	1	-	-	4	-	10	-	-	-	-
MATRIX 5-7T/1,5M	7	-	-	-	1	1	1	4	1	10	1	1	1	1
MATRIX 5-7T/1,5		1	-	-	1	-	-	4	1	10	1	1	-	1
MATRIX 5-8T/2,2M	8	-	-	-	-	1	1	5	1	12	1	1	1	1
MATRIX 5-8T/2,2		1	-	-	1	-	-	5	1	12	1	1	-	1
MATRIX 5-9T/2,2M	9	-	-	-	-	1	1	6	1	14	1	1	1	1
MATRIX 5-9T/2,2		1	-	-	1	-	-	6	1	14	1	1	-	1
MATRIX 10-2T/0,75M	2	-	-	-	1	1	1	1	-	4	-	-	1	-
MATRIX 10-2T/0,75		1	-	-	1	-	-	1	-	4	-	-	-	-
MATRIX 10-3T/1,3M	3	-	-	-	1	1	1	1	-	4	-	-	1	-
MATRIX 10-3T/1,3		1	-	-	1	-	-	1	-	4	-	-	-	-
MATRIX 10-4T/1,5M	4	-	-	-	1	1	1	2	-	6	-	-	1	-
MATRIX 10-4T/1,5		1	-	-	1	-	-	2	-	6	-	-	-	-
MATRIX 10-5T/2,2M	5	-	-	-	-	1	1	3	-	8	-	-	1	-
MATRIX 10-5T/2,2		1	-	-	1	-	-	3	-	8	-	-	-	-
MATRIX 10-6T/2,2M	6	-	-	-	-	1	1	3	1	8	1	1	1	1
MATRIX 10-6T/2,2		1	-	-	1	-	-	3	1	8	1	1	-	1

(4/4) Construction

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Version	Material						
	1 Stationary seal ring	2 Rotary seal ring	3 Gasket	4 Bellows	5 Spring	6 Frame	7 Retainer ring
Standard	Ceramic	Carbon	EPDM	EPDM	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)	EN 1.4402 (AISI 316)