

FIBROTOR

ELECTROMECHANICAL UNIVERSAL ROTARY TABLES

DATA SHEET

 **COLLECTION**

Technical data FIBROTOR® EM.10

Switching/hold angles	Division 2 Division 3 - 5 Division 6 - 12 More than division 12	300° / 60° 300° / 60° 300° / 60° 135° / 45°
Voltage	Motor Special voltages on request Brake	230/400 V, 50 Hz, IEC 38 230 V, AC
Motor power	Depending on indexing time and mass moment of inertia	0,09 – 0,18 kW
Centre hole	With side opening in the housing	Ø 10 mm
Working position	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)	
Weight		approx. 12 kg

Indexing times FIBROTOR® EM.10

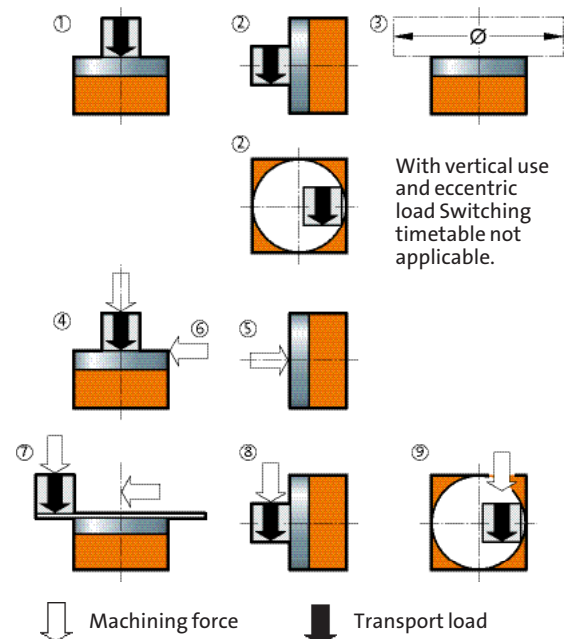
Divisions

in combination with special brake motor

2	t _s in s	2,36	1,96	1,77	1,49	1,18	0,98	0,79	0,59	0,47				
	J in kgm ²	4,68	3,25	2,63	1,88	1,17	0,81	0,52	0,29	0,19				
3	t _s in s	2,14	1,79	1,61	1,36	1,07	0,89	0,71	0,54	0,43	0,36			
	J in kgm ²	6,29	4,61	3,73	2,66	1,71	1,19	0,76	0,43	0,27	0,16			
4	t _s in s	2,14	1,79	1,61	1,36	1,07	0,89	0,71	0,54	0,43	0,36			
	J in kgm ²	9,96	6,92	5,60	4,00	2,49	1,73	1,11	0,62	0,40	0,27			
5	t _s in s	2,14	1,79	1,61	1,36	1,07	0,89	0,71	0,54	0,43	0,36			
	J in kgm ²	11,85	8,69	7,04	5,02	3,22	2,24	1,43	0,80	0,51	0,36			
6	t _s in s	2,14	1,79	1,61	1,36	1,07	0,89	0,71	0,54	0,43	0,36	0,25	0,18	
	J in kgm ²	13,23	9,76	8,37	6,30	4,05	2,81	1,80	1,01	0,65	0,45	0,20	0,10	
8	t _s in s	2,14	1,79	1,61	1,36	1,07	0,89	0,71	0,54	0,43	0,36	0,25	0,18	
	J in kgm ²	18,05	13,32	11,42	8,60	5,53	3,84	2,45	1,38	0,88	0,61	0,30	0,15	
10	t _s in s	2,14	1,79	1,61	1,36	1,07	0,89	0,71	0,54	0,43	0,36	0,25	0,18	
	J in kgm ²	18,29	13,50	11,57	8,71	5,60	3,89	2,49	1,40	0,89	0,62	0,30	0,15	
12	t _s in s	2,14	1,79	1,61	1,36	1,07	0,89	0,71	0,54	0,43	0,36	0,25	0,18	
	J in kgm ²	22,08	16,29	13,97	10,52	6,76	4,70	3,00	1,69	1,08	0,75	0,37	0,19	
16	t _s in s	0,96	0,80	0,72	0,61	0,48	0,40	0,32	0,24	0,19	0,16			
	J in kgm ²	6,93	4,81	4,03	3,04	1,95	1,35	0,87	0,49	0,31	0,22			
20	t _s in s	0,96	0,80	0,72	0,61	0,48	0,40	0,32	0,24	0,19	0,16			
	J in kgm ²	7,83	5,44	4,56	3,43	2,20	1,53	0,98	0,55	0,35	0,24			
24	t _s in s	0,96	0,80	0,72	0,61	0,48	0,40	0,32	0,24	0,19	0,16			
	J in kgm ²	9,67	6,71	5,62	4,23	2,72	1,89	1,21	0,68	0,43	0,30			

Load data FIBROTOR® EM.10

Perm. transport load				
Horizontal table top	kg	100	①	
Vertical table top	kg	50	②	
Table top upside-down	kg	50		
Perm. add-on diameter	mm	520	③	
Perm. axial loading on the table top				
Horizontal	N	4000	④	
Vertical	N	1500	⑤	
Perm. radial loading on table top	N	1000	⑥	
Perm. tilting moment on positioned table top				
Horizontal	Nm	350	⑦	
Vertical	Nm	200	⑧	
Upside-down	Nm	150		
Perm. tilting moment on rotating table top				
Upside-down	Nm	100	⑦+⑧	
Perm. tangential moment on positioned table top, from machining force and in vertical position additionally from eccentric transport load	Nm	25	⑨	

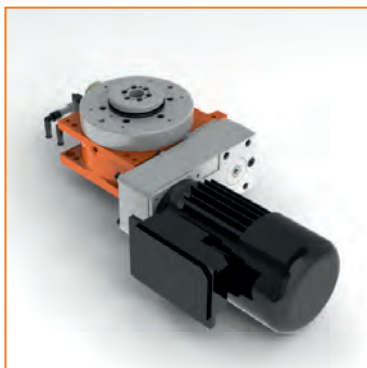


With vertical use and eccentric load Switching timetable not applicable.

CAD files, technical data and planning documentation can be downloaded from www.fibrotor.de.



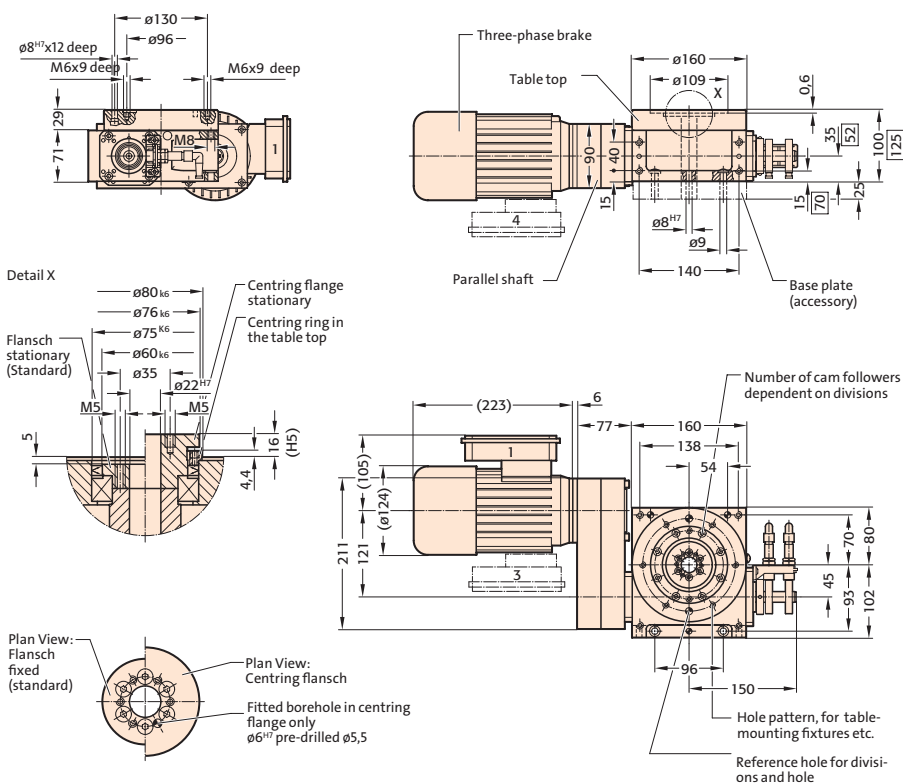
FIBROTOR EM.11.0160.1.111.XX.0.0.3
Drive arrangement 111



FIBROTOR EM.11.0160.1.111.XX.0.0.3
Drive arrangement 111

Installed dimensions FIBROTOR® EM.11

(Drive arrangement 111, for other drive arrangements, drawings or CAD data are available)



Technical data FIBROTOR® EM. 11

Encoding

EM.11

Table top dimensions	Standard dimensions Strengthened table top bearing Table top lock Built-in version	Ø 160 mm Ø 118 mm Ø 155 mm Ø 160 mm	.0160 .0118 .0155 .0160	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Drive motor	Standard brake motor Hydraulic motor Pneumatic motor AC servomotor Special brake motor Special version Without motor		.1 .5 .6 .7 .8 .9 .0	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Drive arrangement	See planing documents under www.fibrotor.de/downloads		.XXX	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Division 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24	Special divisions up to T 96 on request		.XX	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Additional modules	Without additional modules Strengthened table top bearing Hydraulic table top lock Built-in version Built-in version with mounting ring Vertical version Vertical version with base plate Centring ring Centring flange Centring ring and centring flange		.0 .1 .2 .1 .2 .3 .4 .1 .2 .3	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Indexing accuracy in arc seconds (increased indexing accuracy on request)	Division 2 – 12 Division 16 – 24 more than division 24	± 25" ± 40" ± 80"		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Indexing accuracy in arc length (on Ø 160 mm)	Division 2 – 12 Division 16 – 24 More than division 24	± 0,010 mm ± 0,015 mm ± 0,031 mm		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Axial runout of table top	(relates to Ø 160 mm)	0,01 mm		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Concentricity of the centre hole	(relates to Ø 75 mm)	0,01 mm		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Plane parallelism of table top to base on the housing	(relates to Ø 160 mm)	0,02 mm		<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Direction of rotation	Any, limit switch set for cw rotation			<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

Technical data FIBROTOR® EM.11

Switching/ hold angles	Division 2 Division 3 – 5 Division 6 – 14 More than division 14	330° / 30° 300° / 60° 270° / 90° 135° / 45°
Voltage	Motor Special voltages on request Brake	230/400 V, 50 Hz, IEC 38 230 V, AC
Motor power	Depending on indexing time and mass moment of inertia	0,09 – 0,18 kW
Centre hole	With side opening in the housing	Ø 22 mm
Working position	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)	
Weight		approx. 20 kg

Indexing times FIBROTOR® EM. 11

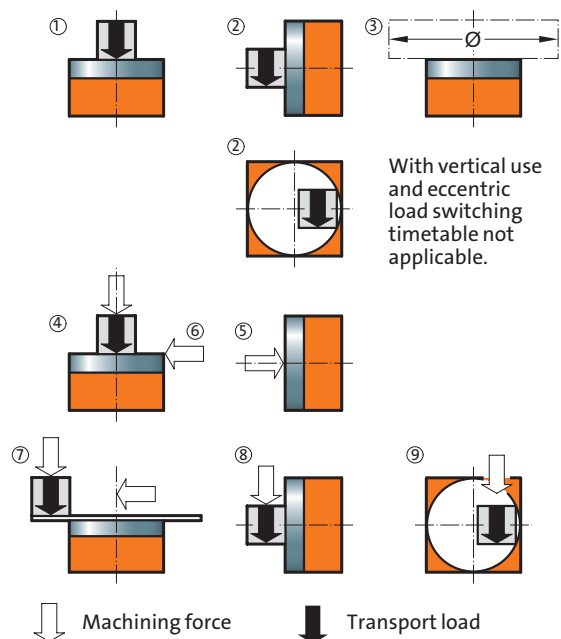
in combination with special brake motor

Divisions

2	t _s in s	5,28	4,60	3,70	3,08	2,69	2,40	2,24	1,74	1,44	1,29	1,04	0,81	0,70	0,59			
	J in kgm ²	34	31	23	18	15,8	13,4	11,9	7,2	4,9	3,9	2,53	1,52	1,12	0,62			
3	t _s in s	4,80	4,18	3,37	2,80	2,45	2,18	2,04	1,58	1,31	1,17	0,95	0,74	0,64	0,53	0,44	0,36	
	J in kgm ²	45	41	31	25	21	17	15,7	9,7	6,6	5,3	3,47	2,08	1,57	1,08	0,59	0,29	
4	t _s in s	4,80	4,18	3,37	2,80	2,45	2,18	2,04	1,58	1,31	1,17	0,95	0,74	0,64	0,53	0,44	0,36	
	J in kgm ²	65	49	38	31	27	24	21	13,2	9,2	7,4	4,8	2,91	2,20	1,52	1,04	0,52	
5	t _s in s	4,80	4,18	3,37	2,80	2,45	2,18	2,04	1,58	1,31	1,17	0,95	0,74	0,64	0,53	0,44	0,36	
	J in kgm ²	86	65	51	41	36	32	28	18	12,2	9,8	6,4	3,9	2,91	2,01	1,39	0,76	
6	t _s in s	4,32	3,76	3,03	2,52	2,20	1,96	1,83	1,43	1,18	1,05	0,85	0,68	0,59	0,49	0,40	0,32	0,26
	J in kgm ²	87	66	51	42	36	32	29	18	12,4	9,9	6,5	4,1	3,10	2,14	1,41	0,85	0,42
8	t _s in s	4,32	3,76	3,03	2,52	2,20	1,96	1,83	1,43	1,18	1,05	0,85	0,66	0,58	0,48	0,40	0,32	0,26
	J in kgm ²	119	90	70	57	49	44	39	24	16,9	13,6	8,9	5,4	4,05	2,80	1,93	1,25	0,67
10	t _s in s	4,32	3,76	3,03	2,52	2,20	1,96	1,83	1,43	1,18	1,05	0,85	0,66	0,58	0,48	0,40	0,32	0,26
	J in kgm ²	151	114	89	72	63	56	50	31	21	17,2	11,3	6,8	5,1	3,55	2,45	1,59	0,85
12	t _s in s	4,32	3,76	3,03	2,52	2,20	1,96	1,83	1,43	1,18	1,05	0,85	0,66	0,58	0,48	0,40	0,32	0,26
	J in kgm ²	154	117	91	73	64	57	51	31	22	18	11,5	6,9	5,2	3,63	2,51	1,62	0,87
16	t _s in s	2,16	1,88	1,52	1,26	1,10	0,98	0,92	0,71	0,59	0,53	0,43	0,33	0,29	0,24	0,20	0,16	0,13
	J in kgm ²	52	39	31	25	22	19,2	17,2	10,6	7,4	5,9	3,88	2,33	1,76	1,21	0,84	0,54	0,28
20	t _s in s	2,16	1,88	1,52	1,26	1,10	0,98	0,92	0,71	0,59	0,53	0,43	0,33	0,29	0,24	0,20	0,16	0,13
	J in kgm ²	62	47	37	30	26	23	21	12,7	8,8	7,1	4,6	2,79	2,10	1,45	1,00	0,65	0,34
24	t _s in s	2,16	1,88	1,52	1,26	1,10	0,98	0,92	0,71	0,59	0,53	0,43	0,33	0,29	0,24	0,20	0,16	0,13
	J in kgm ²	77	58	45	36	32	28	25	15,6	10,9	8,7	5,7	3,44	2,60	1,80	1,24	0,80	0,43

Load data FIBROTOR® EM.11

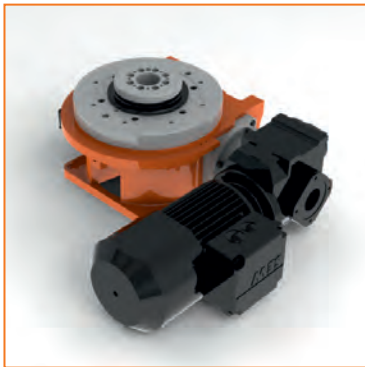
Perm. transport load	kg	500	①
Horizontal table top	kg	200	②
Vertical table top	kg	200	
Table top upside-down	kg	200	
Perm. add-on diameter	mm	800	③
Perm. axial loading on the table top	N	8000	④
Horizontal	N	3500	⑤
Vertical	N	3500	⑥
Perm. radial loading on table top	N	3500	⑥
Perm. tilting moment on positioned table top	Nm	750	⑦
Horizontal	Nm	2250	⑦
With strengthened table top bearing	Nm	450	⑧
Vertical	Nm	1350	⑦
With strengthened table top bearing	Nm	250	
Upside-down	Nm	250	
Perm. tilting moment on rotating table top	Nm	200	⑦
With strengthened table top bearing	Nm	600	⑧
Upside-down	Nm	100	
Perm. tangential moment on positioned table top, from machining force and in vertical position additionally from eccentric transport load	Nm	300	⑨
With hydraulic table top lock	Nm	450	



CAD-files, technical data and planning documentation can be downloaded from www.fibrotor.de.



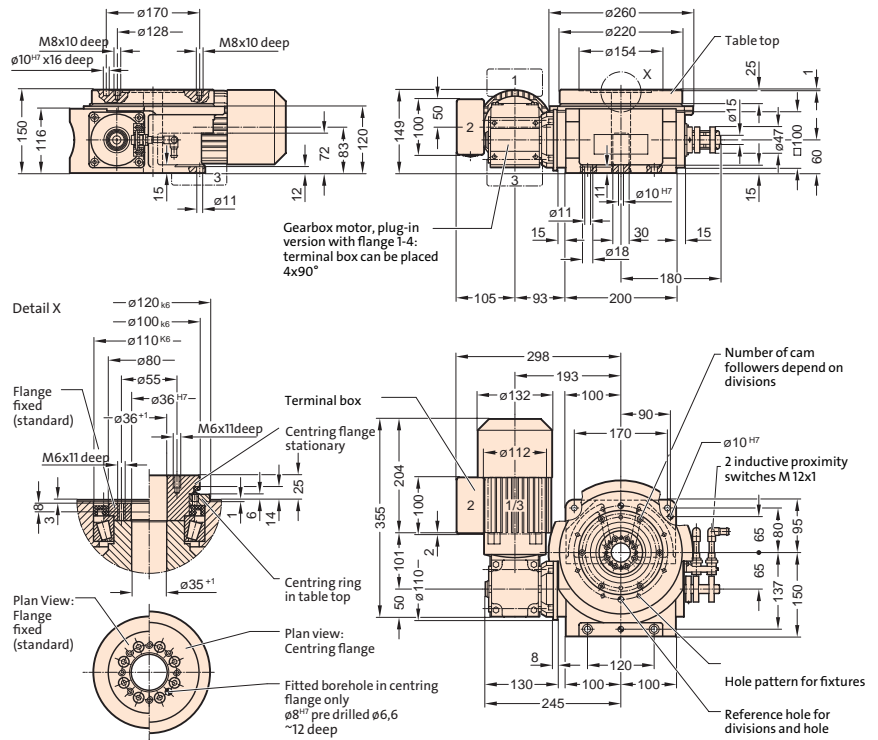
FIBROTOR EM.12.0220.1.142.XX.0.0.3
Drive arrangement 142



FIBROTOR EM.12.0220.1.142.XX.0.0.3
Drive arrangement 142

Installed dimensions FIBROTOR® EM.12

(Drive arrangement 142, for other drive arrangements, drawing or CAD data are available)



Technical data FIBROTOR® EM.12

Encoding

EM.12 . [] [] [] [] [] [] [] []

Table top dimensions	Standard dimensions Strengthened table top bearing Table top lock Built-in version	Ø 0220 mm Ø 0190 mm Ø 0220 mm Ø 0220 mm	.0220 .0190 .0220 .0220	②
Drive motor	Standard brake motor Hydraulic motor Pneumatic motor AC servomotor Special brake motor Special version Without motor		.1 .5 .6 .7 .8 .9 .0	③
Drive arrangement	See planing documents under www.fibrotor.de/downloads		.XXX	④
division 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24	Special divisions up to T 96 on request		.XX	⑤
Additional assemblies	Without additional modules Strengthened table top bearing Hydraulic table top lock Built-in version Built-in version with mounting ring Vertical version Vertical version with base plate Centring ring Centring flange Centring ring and centring flange		.0 .1 .2 .1 .2 .3 .4 .1 .2 .3	⑥ ⑦ ⑧
Indexing accuracy in arc seconds (increased indexing accuracy on request)	Division 2 – 12 Division 16 – 24 More than division 24	± 18" ± 25" ± 40"		
Indexing accuracy in arc length (on Ø 220 mm)	Division 2 – 12 Division 16 – 24 More than division 24	± 0,010 mm ± 0,013 mm ± 0,031 mm		
Axial runout of table top	(relates to Ø 220 mm)	0,01 mm		
Concentricity of the centre hole	(relates to Ø 110 mm)	0,01 mm		
Plane parallelism of table top to base on the housing	(relates to Ø 220 mm)	0,03 mm		
Direction of rotation	Any, limit switch set for cw rotation			
Indexing frequency	Standard brake motor Higher indexing frequencies on request	60 c/min		

Technical data FIBROTOR® EM.12

Switching/ hold angles	Division 2 Division 3 – 5 Division 6 – 12 more than division 12	330° / 30° 300° / 60° 270° / 90° 135° / 45°
Voltage	Motor Special voltages on request Brake	230/400 V, 50 Hz, IEC 38 230 V, AC
Motor power	Depending on indexing time and mass moment for inertia	0,12 – 0,37 kW
Centre hole	With side opening in the housing	Ø 35 mm
Working position	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)	
Weight	approx. 35 kg	

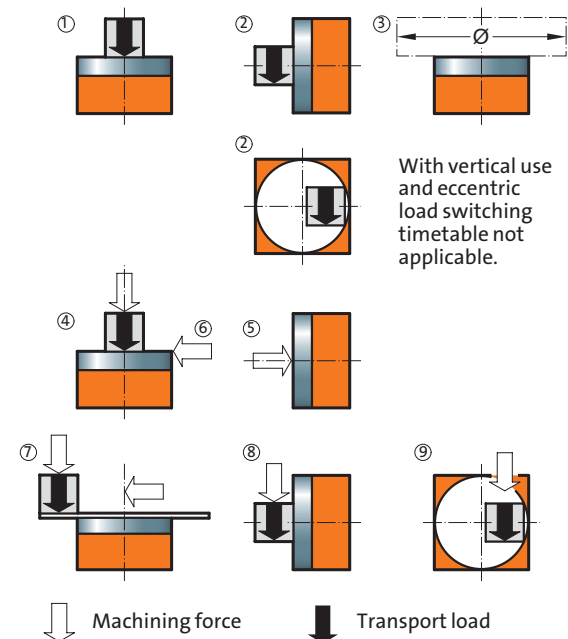
Indexing times FIBROTOR® EM.12

Divisions

2	t _s in s	3,42	2,67	2,30	1,94	1,49	1,30	1,07	0,95	0,83	0,70	0,61	
	J in kgm ²	55	34	25	17,7	10,3	7,9	5,4	4,2	3,0	1,8	0,89	
3	t _s in s	3,11	2,43	2,09	1,76	1,35	1,18	0,98	0,87	0,75	0,63	0,55	
	J in kgm ²	74	48	35	25	15,2	11,6	7,9	6,2	4,6	3,3	2,5	
4	t _s in s	3,11	2,43	2,09	1,76	1,35	1,18	0,98	0,87	0,75	0,63	0,55	
	J in kgm ²	117	72	53	38	22	16,9	11,5	9,0	6,8	4,8	3,6	
5	t _s in s	3,11	2,43	2,09	1,76	1,35	1,18	0,98	0,87	0,75	0,63	0,55	
	J in kgm ²	162	104	77	55	33	25	17,3	13,6	10,2	7,3	5,5	
6	t _s in s	2,18	1,88	1,59	1,22	1,06	0,88	0,78	0,68	0,57	0,50	0,35	0,28
	J in kgm ²	95	75	56	34	26	18	13,8	10,4	7,4	5,6	2,8	1,8
8	t _s in s	2,18	1,88	1,59	1,22	1,06	0,88	0,78	0,68	0,57	0,50	0,35	0,28
	J in kgm ²	129	102	76	46	35	24	18,9	14,2	10,1	7,6	3,9	2,4
10	t _s in s	2,18	1,88	1,59	1,22	1,06	0,88	0,78	0,68	0,57	0,50	0,35	0,28
	J in kgm ²	164	129	97	58	45	30	24	18	12,8	9,7	4,9	3,1
12	t _s in s	2,26	1,95	1,59	1,22	1,06	0,88	0,78	0,68	0,57	0,50	0,35	0,28
	J in kgm ²	198	156	117	70	54	37	29	22	15,5	11,7	5,9	3,8
16	t _s in s	1,09	0,94	0,79	0,61	0,53	0,44	0,39	0,34	0,29	0,25	0,18	0,14
	J in kgm ²	58	44	33	20,1	15,3	10,5	8,2	6,1	4,4	3,3	1,6	1,0
20	t _s in s	1,09	0,94	0,79	0,61	0,53	0,44	0,39	0,34	0,28	0,25	0,18	0,14
	J in kgm ²	81	63	47	28	21,6	14,8	11,6	8,7	6,2	4,7	2,4	1,5
24	t _s in s	1,09	0,94	0,79	0,61	0,53	0,44	0,39	0,34	0,29	0,25	0,18	0,14
	J in kgm ²	100	77	58	35	27	18,3	14,3	10,8	7,7	5,8	2,9	1,8

Load data FIBROTOR® EM.12

Perm. transport load Horizontal table top	kg	800	①
Vertical table top	kg	300	②
Table top upside-down	kg	300	
Perm. add-on diameter	mm	1000	③
Perm. axial loading on the table top Horizontal	N	12000	④
Vertical	N	5000	⑤
Perm. radial loading on table top	N	8000	⑥
Perm. tilting moment on positioned table top Horizontal	Nm	2000	⑦
With strengthened table top bearing	Nm	6000	⑦
Vertical	Nm	1500	⑧
With strengthened table top bearing	Nm	4500	⑦
Upside-down	Nm	600	
Perm. tilting moment on rotating table top With strengthened table top bearing	Nm	600	⑦
Upside-down	Nm	1800	⑧
Perm. tangential moemnt on positioned table top, from machining force and in vertical position additionally from eccentric transport load	Nm	400	⑨
With hydraulic table top lock	Nm	800	



CAD-files, technical data and planning documentation can be downloaded from www.fibrotor.de.



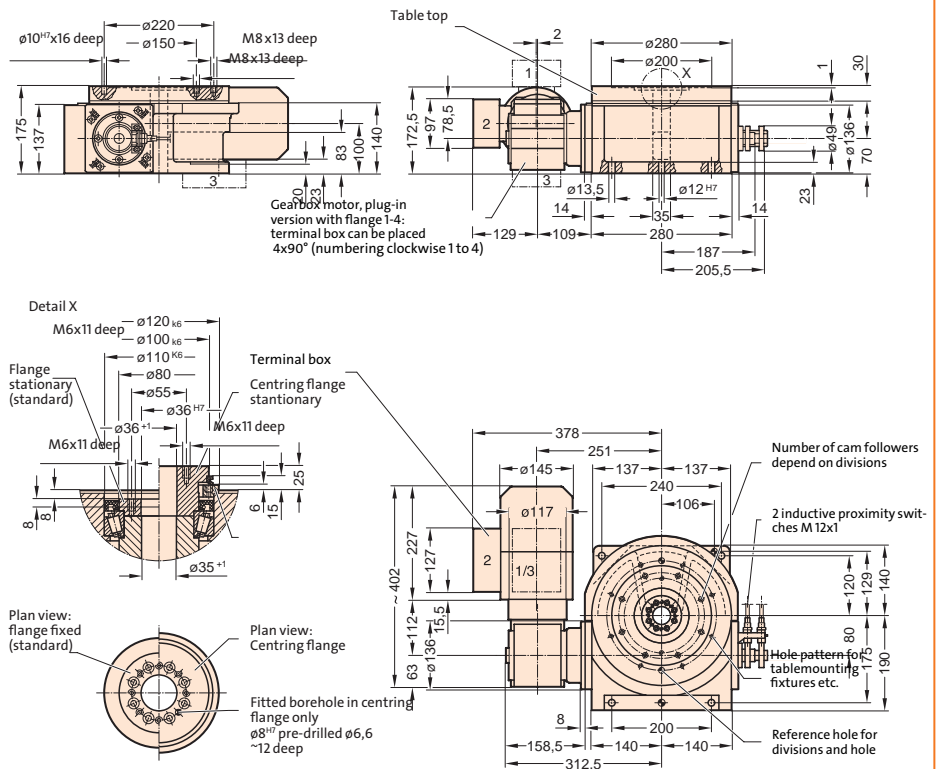
FIBROTOR EM.13.0280.1.142.XX.0.0.3
Drive arrangement 142



FIBROTOR EM.13.0280.1.142.XX.0.0.3
Drive arrangement 142

Installed dimensions FIBROTOR® EM.13

(Drive arrangement 142, for other drive arrangement, drawings or CAD data are available)



Technical data FIBROTOR® EM.13

Encoding



Table top dimensions	Standard dimensions Strengthened table top bearing Table top lock Built-in version	$\phi 280$ mm $\phi 250$ mm $\phi 280$ mm $\phi 280$ mm	.0280 .0250 .0280 .0280	②
Drive motor	Standard brake motor Hydraulic motor Pneumatic motor AC servomotor Special brake motor Special version Without motor		.1 .5 .6 .7 .8 .9 .0	③
Drive arrangement	See planing documents under www.fibrotor.de/downloads		.XXX	④
Division 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24	Special division up to T 96 on request		.XX	⑤
Additional assemblies	No additional modules Strengthened table top bearing Hydraulic table top lock		.0 .1 .2	⑥
	Built-in version Built-in version with mounting ring Vertical version Vertical version with base plate		.1 .2 .3 .4	⑦
	Centring ring Centring flange Centring ring and centring flange		.1 .2 .3	⑧
Indexing accuracy in arc seconds (increased indexing accuracy on request)	Division 2 – 12 Division 16 – 24 More than division 24	$\pm 18''$ $\pm 25''$ $\pm 35''$		
Indexing accuracy in arc length (on $\phi 280$ mm)	Division 2 – 12 Division 16 – 24 More than division 24	$\pm 0,012$ mm $\pm 0,017$ mm $\pm 0,024$ mm		
Axial runout of table top	(relates to $\phi 280$ mm)	0,01 mm		
Concentricity of the centre hole	(relates to $\phi 110$ resp. 150 mm)	0,01 mm		
Plane parallelism of table top to base on the housing	(relates to $\phi 280$ mm)	0,03 mm		
Direction of rotation	Any, limit switch set for cw rotation			
Indexing frequency	Standard brake motor higher indexing frequencies on request	35 c/min max. 80 c/min		

Technical data FIBROTOR® EM.13

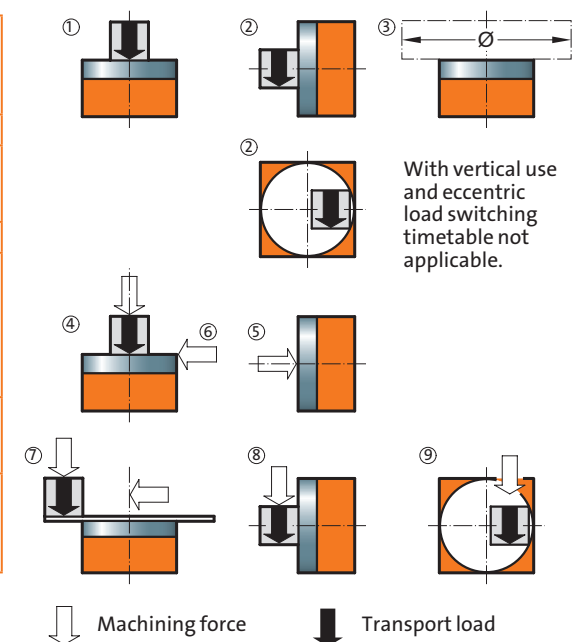
Switching/ hold angles	Division 2 Division 3 – 5 Division 6 – 12 More than division 12	330° / 30° 300° / 60° 270° / 90° 135° / 45°
Voltage	Motor Special voltages on request Brake	230/400 V, 50 Hz, IEC 38 230 V, AC
Motor power	Depending on indexing time and mass moment of inertia	0,12 – 0,75 kW
Centre hole	With side opening in the housing	Ø 35 mm division 2 - 5 Ø 70 mm division 6 - 24
Working position	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)	
Weight	approx. 70 kg	

Indexing times FIBROTOR® EM.13

Divisions Version with right-angled gearing											Divisions Version with parallel shaft gearing											in combination with special brake motor							
2	t _s in s	4,37	3,42	2,67	1,87	1,60	1,30	1,22	1,07	0,90	0,78	0,67		2	t _s in s	5,17	4,33	3,61	3,32	2,63	2,08	1,57	1,39	1,11	1,04	0,85	0,71	0,60	0,52
	J in kgm ²	128	78,3	47,7	23,4	17,1	11,1	9,75	7,55	5,21	3,86	2,79			J in kgm ²	140	105	77,7	69,8	48,9	30,4	17,2	13,4	8,60	7,62	5,02	3,41	2,37	1,50
3	t _s in s	3,97	3,11	2,43	1,70	1,46	1,18	1,11	0,98	0,82	0,71	0,61		3	t _s in s	4,70	4,15	3,28	3,02	2,39	1,89	1,42	1,26	0,95	0,78	0,65	0,55	0,47	0,36
	J in kgm ²	172	111	67,7	33,3	25,1	16,4	14,4	11,1	7,70	5,74	4,18			J in kgm ²	255	198	124	105	65,7	40,9	23,2	19,0	10,7	7,11	4,85	3,47	2,48	1,33
4	t _s in s	3,97	3,11	2,43	1,70	1,46	1,18	1,11	0,98	0,82	0,71	0,61		4	t _s in s	4,70	4,15	3,28	3,02	2,39	1,89	1,42	1,26	0,95	0,78	0,65	0,55	0,47	0,36
	J in kgm ²	245	159	96,6	47,6	35,9	23,4	20,5	16,0	11,1	8,26	6,04			J in kgm ²	363	282	177	150	93,8	58,4	33,1	27,2	15,4	10,2	7,00	5,03	3,63	1,98
5	t _s in s	3,97	3,11	2,43	1,70	1,46	1,18	1,11	0,98	0,82	0,71	0,61		5	t _s in s	4,70	4,15	3,28	3,02	2,39	1,89	1,42	1,26	0,95	0,78	0,65	0,55	0,47	0,36
	J in kgm ²	324	210	128	62,9	47,5	31,0	27,2	21,2	14,7	11,0	8,05			J in kgm ²	480	373	234	198	124	77,3	43,9	36,1	20,4	13,6	9,32	6,71	4,86	2,68
6	t _s in s	2,57	1,88	1,53	1,31	1,06	1,00	0,88	0,73	0,64	0,55	0,47	0,34	6	t _s in s	3,54	3,08	2,72	2,15	1,70	1,28	1,05	0,91	0,70	0,58	0,49	0,42	0,33	0,26
	J in kgm ²	235	134	93,9	70,9	46,3	40,7	31,6	22,0	16,5	12,1	9,08	4,54		J in kgm ²	316	279	248	165	109	63,4	43,2	33,0	19,5	13,4	9,69	7,04	3,33	1,83
8	t _s in s	2,57	1,88	1,53	1,31	1,06	1,00	0,88	0,73	0,64	0,55	0,47	0,34	8	t _s in s	3,54	3,08	2,72	2,15	1,70	1,28	1,05	0,91	0,70	0,58	0,49	0,42	0,33	0,26
	J in kgm ²	321	183	128	96,7	63,2	55,6	43,2	30,1	22,5	16,6	12,5	6,27		J in kgm ²	432	381	339	226	149	86,6	59,0	45,1	26,7	18,4	13,3	9,67	4,62	2,57
10	t _s in s	2,57	1,88	1,53	1,31	1,06	1,00	0,88	0,73	0,64	0,55	0,47	0,34	10	t _s in s	3,54	3,08	2,72	2,15	1,70	1,28	1,05	0,91	0,70	0,58	0,49	0,42	0,33	0,26
	J in kgm ²	406	232	162	119	77,7	68,3	53,1	37,0	27,7	20,4	15,3	7,75		J in kgm ²	547	483	429	286	189	110	74,8	57,2	33,8	23,3	16,9	12,3	5,91	3,31
12	t _s in s	2,57	1,88	1,53	1,31	1,06	1,00	0,88	0,73	0,64	0,55	0,47	0,34	12	t _s in s	3,54	3,08	2,72	2,15	1,70	1,28	1,05	0,91	0,70	0,58	0,49	0,42	0,33	0,26
	J in kgm ²	491	280	196	144	93,9	82,5	64,2	44,7	33,5	24,7	18,6	9,39		J in kgm ²	660	583	519	345	228	133	90,4	69,1	40,9	28,2	20,4	14,9	8,76	4,28
16	t _s in s	1,40	1,28	0,94	0,79	0,61	0,50	0,37	0,32	0,27	0,24	0,17		16	t _s in s	1,77	1,54	1,36	1,08	0,85	0,64	0,52	0,45	0,35	0,29	0,25	0,21	0,16	0,13
	J in kgm ²	166	148	84,2	59,7	34,9	23,4	12,6	9,42	6,89	5,15	2,54			J in kgm ²	157	142	129	92,6	64,9	37,7	25,6	19,6	11,5	7,91	5,68	4,11	2,36	1,44
20	t _s in s	1,40	1,28	0,94	0,79	0,61	0,50	0,37	0,32	0,27	0,24	0,17		20	t _s in s	1,77	1,54	1,36	1,08	0,85	0,64	0,52	0,45	0,35	0,29	0,25	0,21	0,16	0,13
	J in kgm ²	235	209	119	84,4	49,4	33,1	17,9	13,4	9,81	7,35	3,66			J in kgm ²	221	201	183	131	91,7	53,2	36,3	27,7	16,3	11,2	8,11	5,88	3,41	2,11
24	t _s in s	1,40	1,28	0,94	0,79	0,61	0,50	0,37	0,32	0,27	0,24	0,17		24	t _s in s	1,77	1,54	1,36	1,08	0,85	0,64	0,52	0,45	0,35	0,29	0,25	0,21	0,16	0,13
	J in kgm ²	290	258	147	104	61,0	40,9	22,1	16,6	12,2	9,12	4,57			J in kgm ²	273	248	225	161	113	65,7	44,8	34,2	20,2	13,9	10,1	7,31	4,25	2,65

Load data FIBROTOR® EM.13

Perm. transport load	kg	1500	①
Horizontal table top	kg	400	②
Vertical table top	kg	400	
Table top upside-down	kg	400	
Perm. add-on diameter	mm	1400	③
Perm. axial loading on the table top	N	16000	④
Horizontal	N	6000	⑤
Vertical	N	10000	⑥
Perm. radial loading on table top	N	10000	⑥
Perm. tilting moment on positioned table top	Nm	3000	⑦
Horizontal	Nm	9000	⑦
With strenghtened table top bearing	Nm	1500	⑧
Vertical	Nm	4500	⑦
With strenghtened table top bearing	Nm	800	
Unside-down	Nm	800	
Perm. tilting moment on rotating table top	Nm	1000	⑦
With strenghtened table top bearing	Nm	3000	⑥
Upside-down	Nm	400	
Perm. tangential moment on positioned table top, from machining force and in vertical position additionally from eccentric transport load	Nm	600	⑨
With hydraulic table top lock	Nm	900	

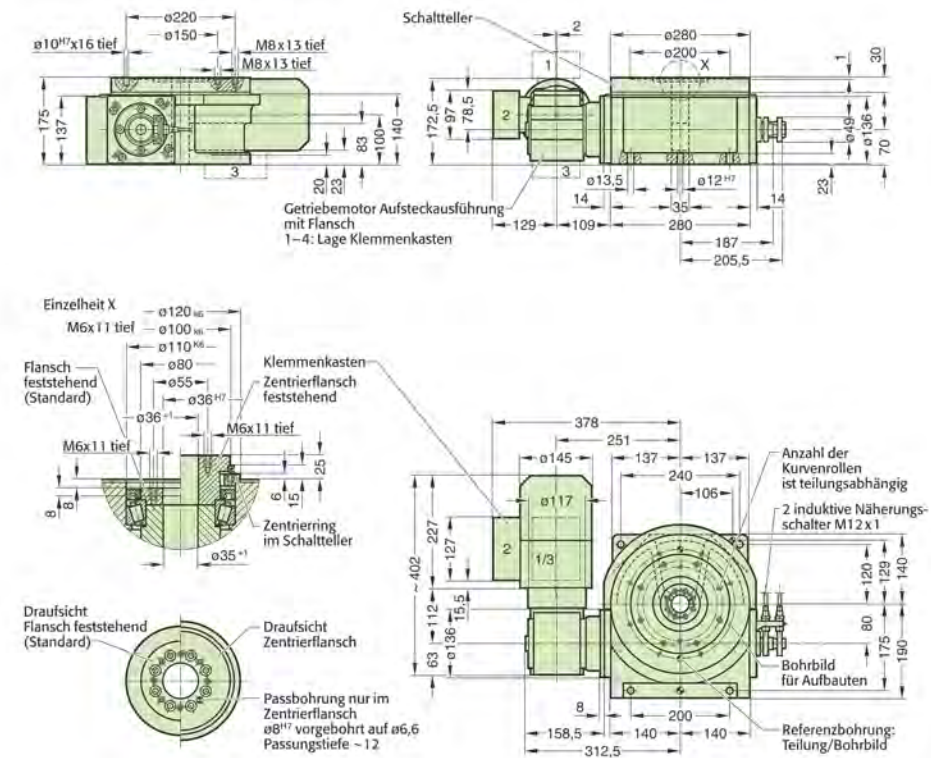


CAD data, technical data and planning documentstion can be downloaded from www.fibrotor.de.

Installed dimensions FIBROTOR EM.13 division 02 - 05

Version with right-angled gearing

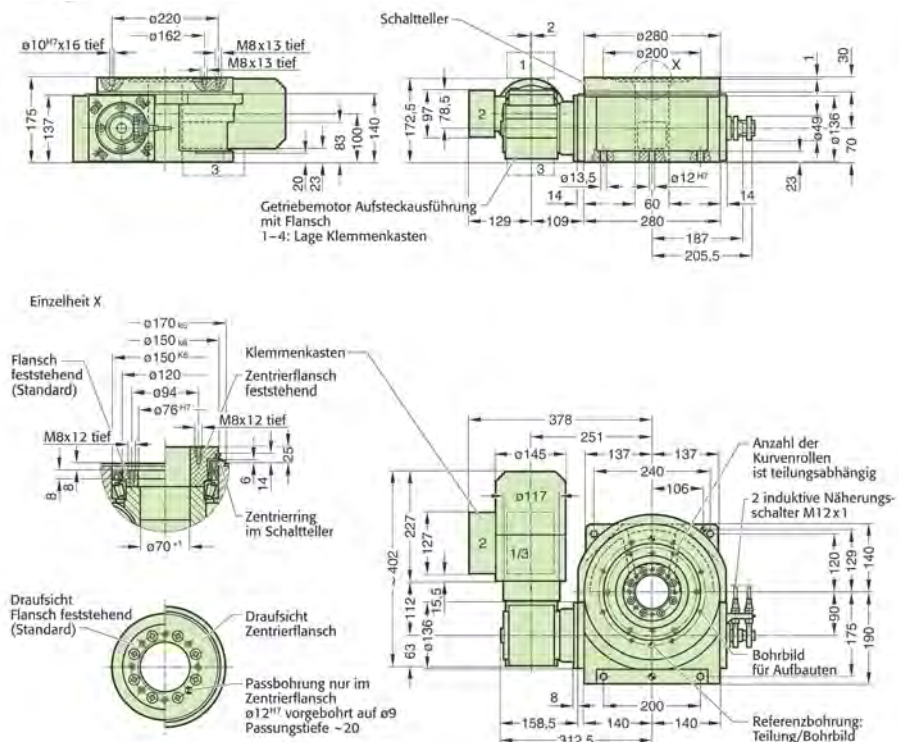
Drive arrangement 142, for other drive arrangements drawings or DXF-files are available on request



Installed dimensions FIBROTOR EM.13 division 06 - 24

Version with right-angled gearing

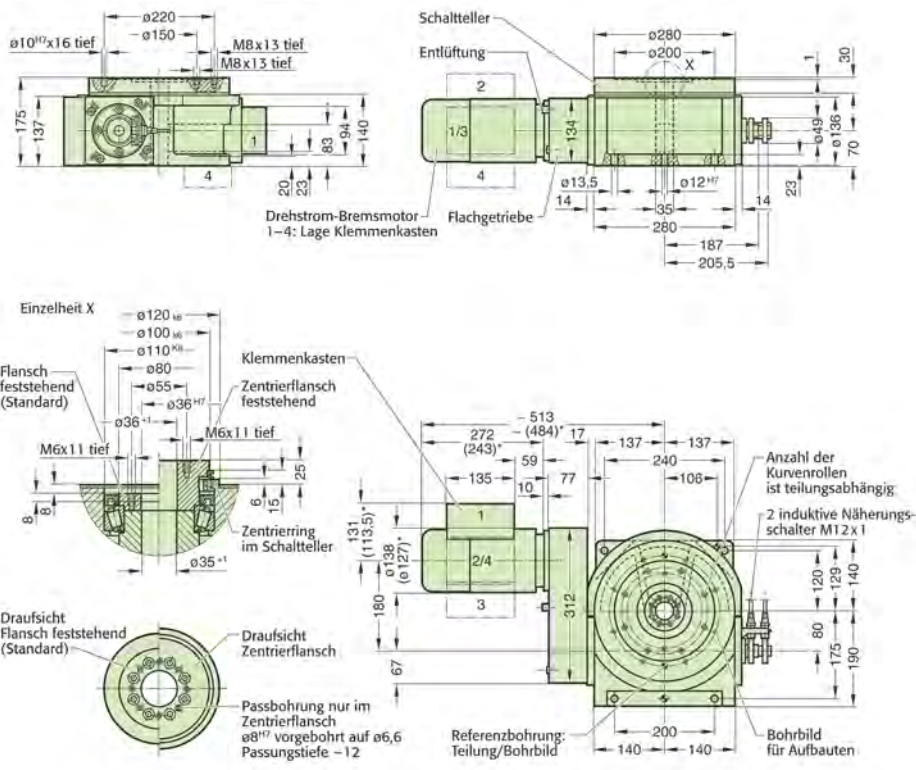
Drive arrangement 142, for other drive arrangements drawings or DXF-files are available on request



Installed dimensions FIBROTOR EM.13 division 02 - 05

Version with parallel shaft gearing

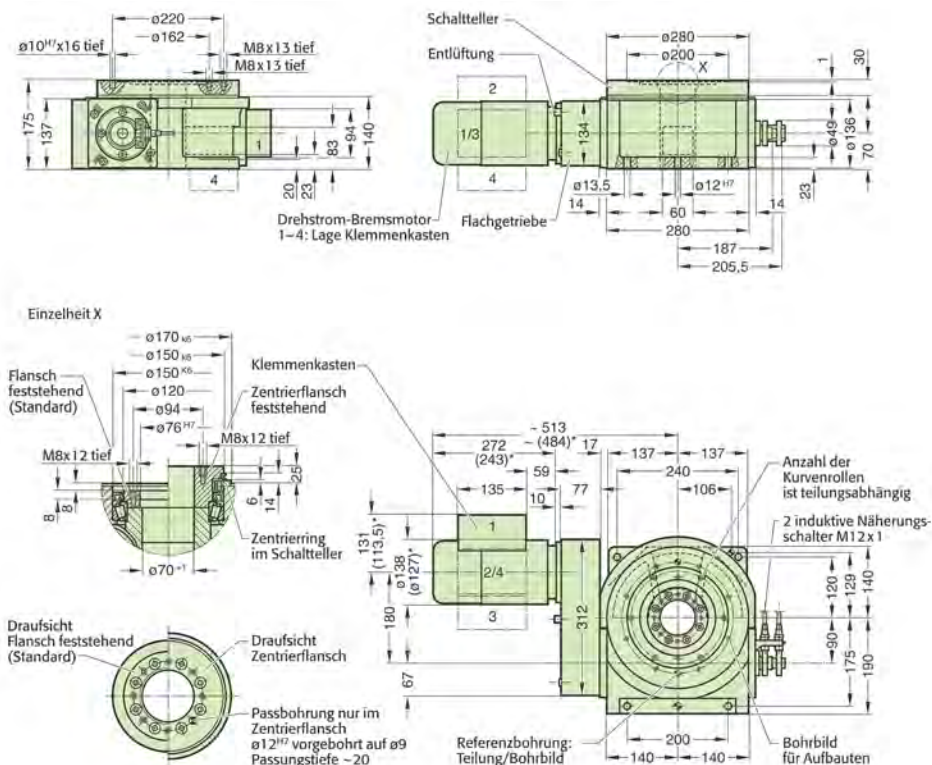
Drive arrangement 111, for other drive arrangements drawings or DXF-files are available on request



Installed dimensions FIBROTOR EM.13 division 06 - 24

Version with parallel shaft gearing

Drive arrangement 111, for other drive arrangements drawings or DXF-files are available on request

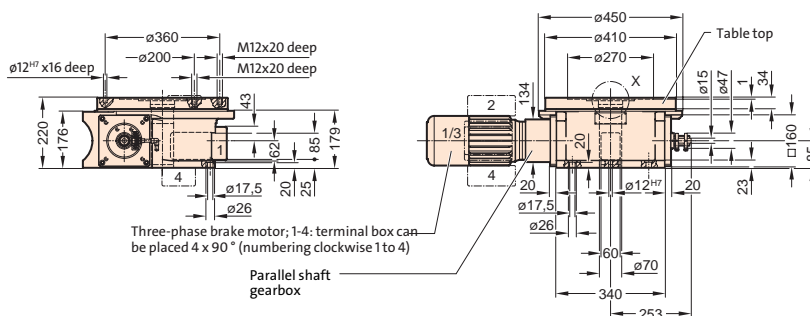




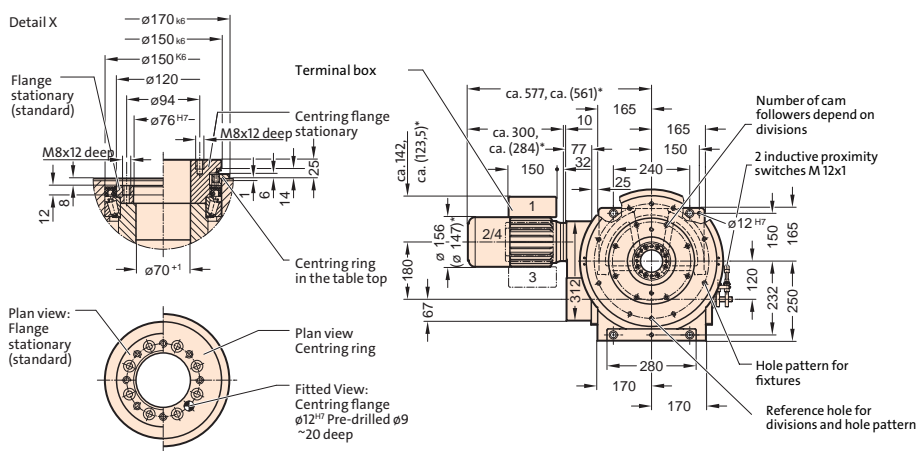
FIBROTOR EM.15.0410.1.111.XX.0.0.3
Drive arrangement 111

Installed dimensions FIBROTOR® EM.15

(Drive arrangement 111, for other drive arrangement, drawings or CAD data are available)



FIBROTOR EM.15.0410.1.111.XX.0.0.3
Drive arrangement 111



Technical data FIBROTOR® EM.15

Encoding

EM.15 . [] [] [] [] [] [] [] []

Table top dimensions	Standard dimensions Strengthened table top bearing Table top lock Built-in version	Ø 410 mm Ø 380 mm Ø 410 mm Ø 410 mm	.0410 .0380 .0410 .0410	(2)
Drive motor	Standard brake motor Hydraulic motor Pneumatic motor AC servomotor Special brake motor Special version Without motor		.1 .5 .6 .7 .8 .9 .0	(3)
Drive arrangement	See planing documents under www.fibrotor.de/downloads		.XXX	(4)
Division 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24	Special divisions up to T 96 on request		.XX	(5)
Additional assemblies	Without additional modules Strengthened table top bearing Hydraulic table top lock		.0 .1 .2	(6)
	Built-in version Built-in version with mounting ring Vertical version Vertical version with base plate		.1 .2 .3 .4	(7)
	Centring ring Centring flange Centring ring and centring flange		.1 .2 .3	(8)
Indexing accuracy in arc seconds (increased indexing accuracy on request)	Division 2 – 12 Division 16 – 24 More than division 24	± 12" ± 20" ± 35"		
Indexing accuracy in arc length (on Ø 410 mm)	Division 2 – 12 Division 16 – 24 More than division 24	± 0,012 mm ± 0,020 mm ± 0,035 mm		
Axial runout of table top	(relates to Ø 410 mm)	0,015 mm		
Concentricity of the centre hole	(relates to Ø 150 mm)	0,015 mm		
Plane parallelism of table top to base on the housing	(relates to Ø 410 mm)	0,040 mm		
Direction of rotation	Any, limit switch set for cw rotation			
Indexing frequency	Standard brake motor higher indexing frequencies on request	35 c/min		

Technical data FIBROTOR® EM.15

Switching/ hold angles	Division 2 Division 3 – 5 Division 6 – 12 More than division 12	330° / 30° 300° / 60° 270° / 90° 135° / 45°
Voltage	Motor Special voltages on request Brake	230/400 V, 50 Hz, IEC 38 230 V, AC
Motor power	Depending on indexing time and mass moment of inertia	0,18 – 1,5 kW
Centre hole	With side opening in the housing	Ø 70 mm
Working position	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)	
Weight	ca. 150 kg	

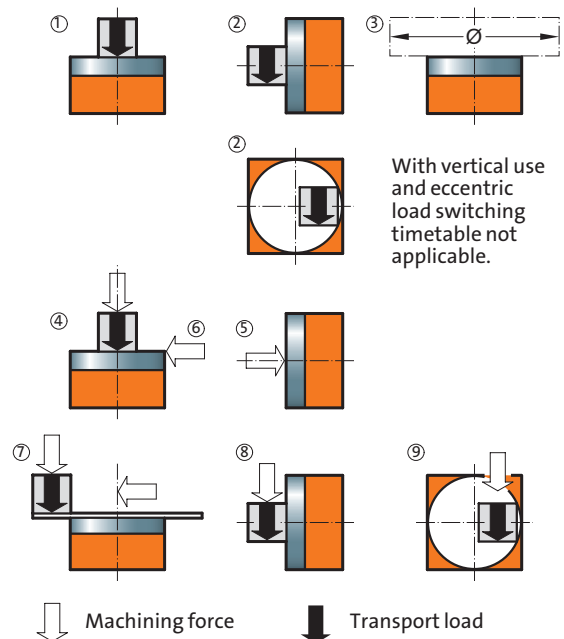
Indexing times FIBROTOR® EM.15

Divisions

		in combination with special brake motor																		
2	t _i in s	5,77	4,99	4,33	3,51	3,32	2,80	2,44	2,08	1,70	1,35	1,08	0,84	0,68						
	J in kgm ²	767	581	442	290	263	187	143	99	69	43	27,4	16,3	8,7						
3	t _i in s	5,25	4,64	4,02	3,42	3,02	2,39	2,28	1,89	1,55	1,22	0,92	0,75	0,64	0,50					
	J in kgm ²	1159	907	696	520	409	259	238	164	111	69	38	20,3	16,2	7,3					
4	t _i in s	5,25	4,64	4,02	3,50	3,02	2,39	2,27	1,89	1,59	1,22	0,92	0,75	0,62	0,50					
	J in kgm ²	1487	1221	863	751	577	362	325	225	160	94	53	35,1	24,7	14,6					
5	t _i in s	5,25	4,64	4,02	3,50	3,02	2,39	2,27	1,89	1,59	1,26	0,92	0,75	0,64	0,50					
	J in kgm ²	1966	1614	1141	993	763	478	429	298	212	132	70	47	33	19,7					
6	t _i in s	4,65	4,18	3,62	3,08	2,72	2,15	2,05	1,70	1,39	1,10	0,88	0,83	0,68	0,57	0,45				
	J in kgm ²	2472	2133	1709	1393	1144	717	653	447	300	187	121	107	71	50	30				
8	t _i in s	4,65	4,18	3,62	3,15	2,78	2,15	2,04	1,70	1,43	1,10	0,88	0,83	0,68	0,57	0,45				
	J in kgm ²	3372	2910	2331	1875	1545	978	878	610	434	255	165	145	96	68	41				
10	t _i in s	4,65	4,18	3,62	3,15	2,78	2,15	2,04	1,70	1,43	1,13	0,88	0,83	0,68	0,56	0,48	0,41			
	J in kgm ²	4273	3687	2954	2376	1957	1240	1113	773	550	343	209	184	122	80	58	42			
12	t _i in s	4,65	4,18	3,62	3,15	2,78	2,15	2,04	1,70	1,42	1,13	0,91	0,85	0,70	0,58	0,49	0,41	0,32		
	J in kgm ²	3504	3024	2423	1948	1605	1017	912	634	445	277	181	159	106	69	39	27	15,5		
16	t _i in s	2,68	2,33	2,02	1,79	1,41	1,17	1,02	0,87	0,72	0,57	0,44	0,34	0,28	0,24	0,21				
	J in kgm ²	1679	1471	1193	990	659	479	370	275	191	119	71	42	29	20,5	14,8				
20	t _i in s	2,68	2,33	2,02	1,79	1,41	1,17	1,02	0,87	0,72	0,57	0,44	0,34	0,28	0,24	0,21				
	J in kgm ²	2370	2076	1684	1398	931	676	523	388	270	168	101	60	41	29	21,3				
24	t _i in s	2,68	2,33	2,02	1,79	1,41	1,17	1,02	0,87	0,72	0,57	0,44	0,34	0,28	0,24	0,21				
	J in kgm ²	1987	1741	1412	1172	781	567	439	325	226	141	85	50	34	25	17,7				

Load data FIBROTOR® EM.15

Perm. transport load	kg	2500	①
Horizontal table top	kg	600	②
Vertical table top	kg	600	
Table top upside-down	kg	600	
Perm. add-on diameter	mm	2000	③
Perm. axial loading on the table top	N	25000	④
Horizontal	N	9000	⑤
Vertical	N	15000	⑥
Perm. radial loading on table top	N	15000	⑥
Perm. tilting moment on positioned table top	Nm	6000	⑦
Horizontal	Nm	18000	⑦
With strenghtened table top bearing	Nm	3000	⑧
Vertical	Nm	10000	⑦
With strenghtened table top bearing	Nm	1500	
Upside-down	Nm	1500	
Perm. tilting moment on rotating table top	Nm	2000	⑦
With strenghtened table top bearing	Nm	6000	⑧
Upside-down	Nm	700	
Perm. tangential moment on positioned table top, from machining force and in vertical position additionally from eccentric transport load	Nm	1200	⑨
With hydraulic table top lock	Nm	1800	



CAD-files, technical data and planning documentation can be downloaded from www.fibrotor.de.

Technical data FIBROTOR® EM.16

Switching/ hold angles	Division 2 Division 3 – 5 Division 6 – 12 More than division 12	330° / 30° 300° / 60° 270° / 90° 135° / 45°
Voltage	Motor Special voltages on request Brake	230/400 V, 50 Hz, IEC 38 230 V, AC
Motor power	Depending on indexing time and mass moment of inertia	0,18 – 2,2 kW
Centre hole	With side opening in the housing	Ø 110 mm
Working position	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)	
Weight		ca. 220 kg

Indexing times FIBROTOR® EM.16

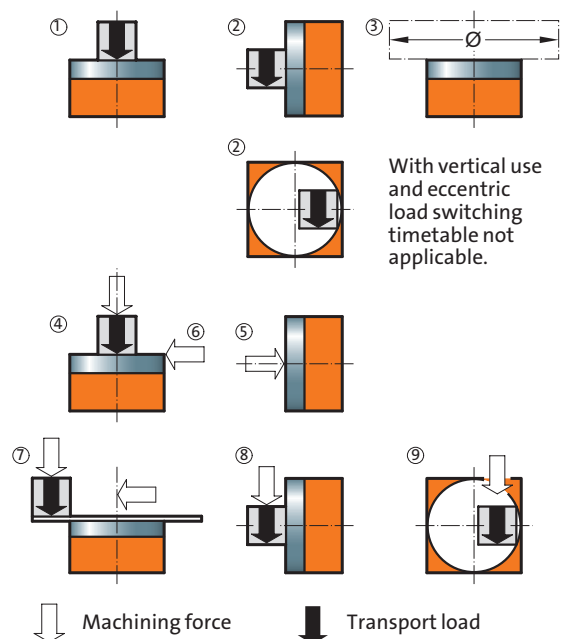
Divisions

in combination with special brake motor

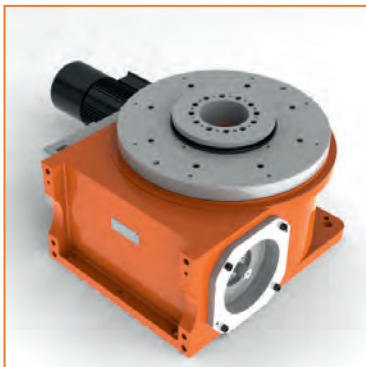
2	t _i in s	6,85	6,17	4,96	4,47	3,69	3,30	2,97	2,45	1,94	1,70	1,39	1,10	1,03	0,82		
	J in kgm ²	2404	1947	1260	1020	695	557	451	307	191	146	97	60	52	33		
3	t _i in s	6,23	5,61	4,51	4,06	3,35	3,00	2,70	2,23	1,76	1,54	1,26	1,00	0,92	0,74	0,66	0,60
	J in kgm ²	3228	2615	1693	1371	934	479	606	413	257	196	131	81	69	43	35	28
4	t _i in s	6,23	5,61	4,51	4,06	3,35	3,00	2,70	2,23	1,77	1,55	1,26	1,01	0,93	0,75	0,66	0,60
	J in kgm ²	4859	3936	2549	2064	1406	1128	913	622	393	300	198	127	107	68	54	43
5	t _i in s	6,23	5,61	4,51	4,06	3,35	3,00	2,70	2,23	1,77	1,55	1,28	1,01	0,93	0,75	0,66	0,60
	J in kgm ²	6084	5202	3369	2728	1858	1491	1207	822	519	398	270	168	142	91	72	58
6	t _i in s	5,61	5,05	4,06	3,65	3,2	2,70	2,43	2,01	1,60	1,40	1,15	0,91	0,84	0,67	0,59	0,54
	J in kgm ²	6189	5291	3427	2775	1890	1517	1228	836	528	404	275	171	145	92	71	59
8	t _i in s	5,61	5,05	4,06	3,65	3,02	2,70	2,43	2,01	1,60	1,40	1,15	0,92	0,85	0,67	0,60	0,54
	J in kgm ²	8443	7218	4675	3786	2579	2069	1676	1141	721	552	376	241	204	126	100	81
10	t _i in s	5,61	5,05	4,06	3,65	3,02	2,70	2,43	2,01	1,60	1,40	1,15	0,92	0,85	0,67	0,60	0,54
	J in kgm ²	10969	9145	5923	4797	3268	2622	2123	1446	914	700	476	306	259	161	127	103
12	t _i in s	5,61	5,05	4,06	3,65	3,02	2,70	2,43	2,01	1,60	1,40	1,15	0,92	0,85	0,67	0,60	0,54
	J in kgm ²	12915	11042	7152	5792	3946	3166	2564	1746	1104	846	576	369	313	194	154	124
16	t _i in s	2,80	2,52	2,03	1,83	1,51	1,35	1,22	1,00	0,80	0,70	0,58	0,46	0,43	0,34	0,30	0,27
	J in kgm ²	3682	3148	2039	1651	1124	902	730	497	314	240	163	104	88	55	43	35
20	t _i in s	2,80	2,52	2,03	1,83	1,51	1,35	1,22	1,00	0,80	0,70	0,58	0,46	0,43	0,34	0,30	0,27
	J in kgm ²	5198	4444	2878	2331	1588	1274	1031	702	443	340	231	148	125	78	62	50
24	t _i in s	2,80	2,52	2,03	1,83	1,51	1,35	1,22	1,00	0,80	0,70	0,58	0,46	0,43	0,34	0,30	0,27
	J in kgm ²	6417	5486	3553	2878	1960	1573	1273	867	548	419	285	183	155	97	77	62

Load data FIBROTOR® EM.16

Perm. transport load	kg	4000	①
Horizontal table top	kg	800	②
Vertical table top	kg	800	
Table top upside-down	kg	800	
Perm. add-on diameter	mm	2400	③
Perm. axial loading on the table top	N	32000	④
Horizontal	N	11000	⑤
Vertical	N	20000	⑥
Perm. radial loading on table top	N	20000	⑥
Perm. tilting moment on positioned table top	Nm	9000	⑦
Horizontal	Nm	27000	⑦
With strengthened table top bearing	Nm	4200	⑧
Vertical	Nm	12600	⑦
With strengthened table top bearing	Nm	2300	
Upside-down	Nm	2300	
Perm. tilting moment on rotating table top	Nm	3000	⑦
With strengthened table top bearing	Nm	9000	⑧
Upside-down	Nm	900	
Perm. tangential moment on positioned table top, from machining force and in vertical position additionally from eccentric transport load	Nm	1400	⑨
With hydraulic table top lock	Nm	1900	



CAD-files, technical data and planning documentation can be downloaded from www.fibrotor.de.



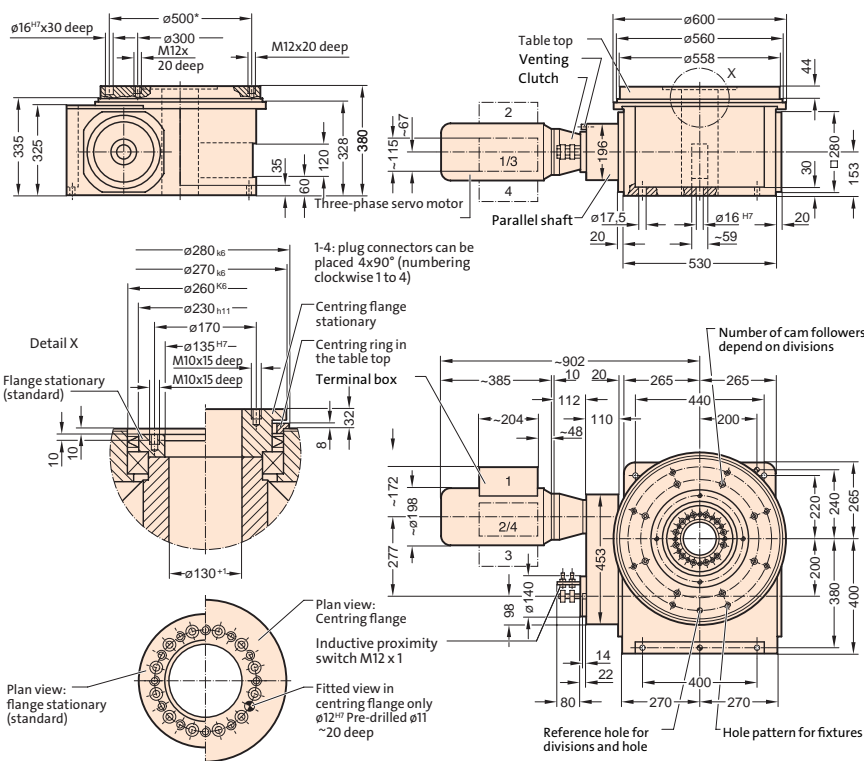
FIBROTOR EM.17.0558.1.111.XX.0.0.3
Drive arrangement 111



FIBROTOR EM.17.0558.1.111.XX.0.0.3
Drive arrangement 111

Installed dimensions FIBROTOR® EM.17

(Drive arrangement 111, for other drive arrangements drawings or CAD data are available)



Technical data FIBROTOR® EM.17

Encoding



Table top dimensions	Standard dimensions Strengthened table top bearing Table top lock Built-in version	Ø 558 mm Ø 480 mm Ø 548 mm Ø 558 mm	.0558 .0480 .0548 .0558	②
Drive motor	Standard brake motor Hydraulic motor Pneumatic motor AC servomotor Special brake motor Special version Without motor		.1 .5 .6 .7 .8 .9 .0	③
Drive arrangement	See planing documents under www.fibrotor.de/downloads		.XXX	④
Division 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24	Special divisions up to T 130 on request		.XX	⑤
Additional modules	Without additional modules Strengthened table top bearing Hydraulic table top lock Built-in version Built-in version with mounting ring Vertical version Vertical version with base plate Centring ring Centring flange Centring ring and centring flange		.0 .1 .2 .1 .2 .3 .4 .1 .2 .3	⑥ ⑦ ⑧
Indexing accuracy in arc seconds (increased indexing accuracy on request)	Division 2 – 12 Division 16 – 24 More than division 24	± 10" ± 15" ± 25"		
Indexing accuracy in arc length (on Ø 558 mm)	Division 2 – 12 Division 16 – 24 More than division 24	± 0,014 mm ± 0,020 mm ± 0,034 mm		
Axial runout of table top	(relates to Ø 558 mm)	0,02 mm		
Concentricity of the centre hole	(relates to Ø 260 mm)	0,02 mm		
Plane parallelism of table top to base on the housing	(relates to Ø 558 mm)	0,04 mm		
Direction of rotation	Any, limit switch set for cw rotation			

Technical data FIBROTOR® EM.17

Switching/ hold angles	Division 2 Division 3 – 5 Division 6 – 12 More than division 12	330° / 30° 300° / 60° 270° / 90° 135° / 45°
Voltage	Motor Special voltages on request Brake	230/400 V, 50 Hz, IEC 38 230 V, AC
Motor power	Depending on indexing time and mass moment of inertia	0,18 – 1,5 kW
Centre hole	With side opening in the housing	Ø 130 mm
Working position	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)	
Weight		ca. 450 kg

Indexing times FIBROTOR® EM.17

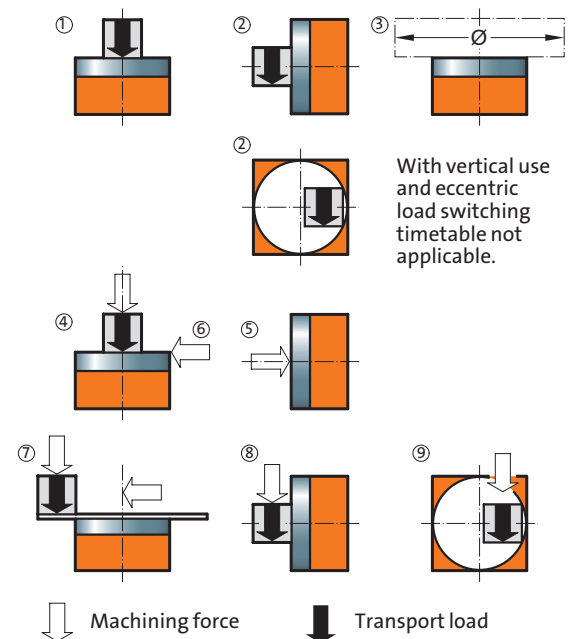
Divisions

in combination with special brake motor

2	t _s in s	6,85	6,08	4,99	4,59	3,79	3,23	2,93	2,42	1,90	1,66	1,38	1,11	1,03	0,82		
	J in kgm ²	4190	3294	2221	1879	1279	930	764	519	318	243	167	106	91	57		
3	t _s in s	6,23	5,61	4,54	4,08	3,37	2,94	2,65	2,20	1,75	1,51	1,25	1,01	0,93	0,75		
	J in kgm ²	5628	4558	2984	2416	1645	1250	1012	698	440	327	222	144	121	78		
4	t _s in s	6,23	5,61	4,51	4,06	3,37	3,00	2,65	2,18	1,75	1,53	1,25	1,00	0,93	0,74		
	J in kgm ²	8472	6862	4443	3599	2477	1966	1525	1038	664	509	336	215	184	117		
5	t _s in s	6,23	5,61	4,51	4,06	3,37	3,00	2,70	2,18	1,74	1,53	1,26	1,00	0,92	0,74		
	J in kgm ²	10608	9069	5873	4757	3275	2599	2105	1373	867	673	458	285	241	155		
6	t _s in s	5,61	5,05	4,06	3,65	3,03	2,70	2,43	1,96	1,56	1,38	1,14	0,90	0,83	0,67	0,59	0,53
	J in kgm ²	10790	9225	5974	4838	3331	2644	2141	1396	882	685	465	290	245	158	125	100
8	t _s in s	5,61	5,05	4,06	3,65	2,01	2,70	2,43	1,96	1,56	1,37	1,14	0,91	0,83	0,66	0,59	0,53
	J in kgm ²	14720	12585	8150	6601	1989	3607	2921	1906	1204	922	636	408	335	214	171	138
10	t _s in s	5,61	5,05	4,06	3,65	2,01	2,70	2,43	2,01	1,60	1,37	1,14	0,91	0,83	0,66	0,59	0,53
	J in kgm ²	18649	15944	10326	8363	2521	4571	3702	2521	1593	1169	807	517	426	272	215	173
12	t _s in s	5,61	5,05	4,06	3,65	2,01	2,70	2,43	2,01	1,60	1,37	1,13	0,91	0,84	0,67	0,59	0,53
	J in kgm ²	22518	19252	12469	10099	3045	5520	4471	3045	1924	1412	961	617	529	338	260	210
16	t _s in s	2,80	2,52	2,03	1,83	1,00	1,35	1,22	1,00	0,78	0,68	0,57	0,46	0,41	0,33	0,30	0,27
	J in kgm ²	6420	5489	3554	2878	866	1572	1273	866	523	400	276	176	144	91	72	58
20	t _s in s	2,80	2,52	2,03	1,83	1,00	1,35	1,22	1,00	0,78	0,68	0,57	0,46	0,41	0,33	0,30	0,27
	J in kgm ²	9063	7749	5018	4064	1224	2220	1798	1224	740	567	390	250	205	130	103	83
24	t _s in s	2,80	2,52	2,80	2,52	1,00	1,35	1,22	1,00	0,80	0,68	0,56	0,45	0,42	0,34	0,30	0,27
	J in kgm ²	11188	9565	11810	9565	1511	2741	2220	1511	954	700	476	305	261	166	128	103

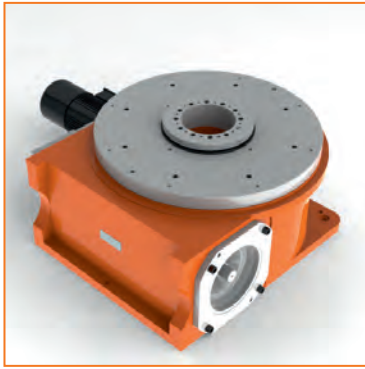
Belastungsdaten FIBROTOR® EM.17

Perm. transport load Horizontal table top	kg	5500	①
Vertical table top	kg	1000	②
Table top upside-down	kg	1000	
Perm. add-on diameter	mm	2800	③
Perm. axial loading on the table top Horizontal	N	70000	④
Vertical	N	12000	⑤
Perm. radial loading on table top	N	25000	⑥
Perm. tilting moment on positioned table top Horizontal	Nm	12000	⑦
With strengthened table top bearing	Nm	36000	⑦
Vertical	Nm	5000	⑧
With strengthened table top bearing	Nm	15000	⑦
Upside-down	Nm	3000	
Perm. tilting moment on rotating table top With strengthened table top bearing	Nm	4000	⑦
Upside-down	Nm	12000	⑧
Perm. tangential moment on positioned table top, from machining force and in vertical position additionally from eccentric transport load	Nm	1600	⑨
With hydraulic table top lock	Nm	2500	



With vertical use and eccentric load switching timetable not applicable.

CAD-files, technical data and planning documentation can be downloaded from www.fibrotor.de.



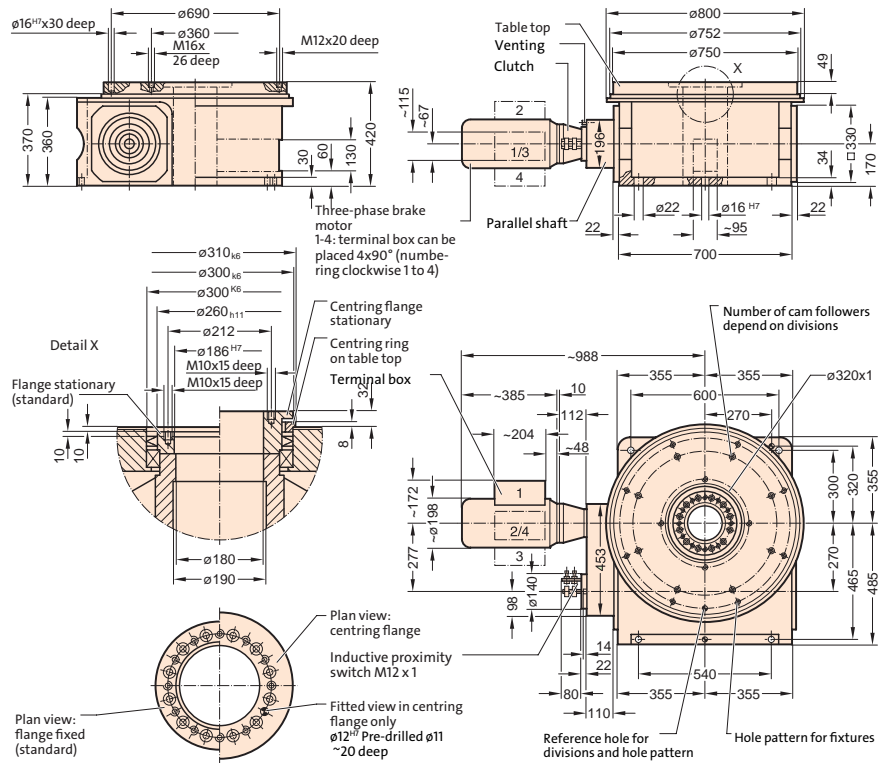
FIBROTOR EM.18.0750.1.111.XX.0.0.3
Drive arrangement 111



FIBROTOR EM.18.0750.1.111.XX.0.0.3
Drive arrangement 111

Installed dimensions FIBROTOR® EM.18

(Drive arrangement 111, for other drive arrangements, drawings or CAD data are available)



Technical data FIBROTOR® EM.18

Encoding



Table top dimensions	Standard dimensions	$\varnothing 750$ mm	.0750	
	Strengthened table top bearing	$\varnothing 660$ mm	.0660	②
	Table top lock	$\varnothing 735$ mm	.0735	
	Built-in version	$\varnothing 750$ mm	.0750	
Drive motor	Standard brake motor		.1	
	Hydraulic motor		.5	
	Pneumatic motor		.6	
	AC servomotor		.7	
	Special brake motor		.8	③
	Special version		.9	
	Without motor		.0	
Drive arrangement	See planing documents under www.fibrotor.de/downloads		.XXX	④
Division 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24	Special divisions up to T 96 on request		.XX	⑤
Additional assemblies	Without additional modules		.0	
	Strengthened table top bearing		.1	⑥
	Hydraulic table top lock		.2	
	Built-in version		.1	
	Built-in version with mounting ring		.2	⑦
	Vertical version		.3	
	Vertical version with base plate		.4	
	Centring ring		.1	
	Centring flange		.2	⑧
	Centring ring and centring flange		.3	
Indexing accuracy in arc seconds (increased indexing accuracy on request)	Division 2 – 12	$\pm 10''$		
	Division 16 – 24	$\pm 15''$		
	More than division 24	$\pm 25''$		
Indexing accuracy in arc length (on $\varnothing 750$ mm)	Division 2 – 12	$\pm 0,018$ mm		
	Division 16 – 24	$\pm 0,027$ mm		
	More than division 24	$\pm 0,045$ mm		
Axial runout of table top	(relates to $\varnothing 750$ mm)	0,02 mm		
Concentricity of the centre hole	(relates to $\varnothing 300$ mm)	0,02 mm		
Plane parallelism of table top to base on the housing	(relates to $\varnothing 750$ mm)	0,04 mm		
Direction of rotation	Any, limit switch set for cw rotation			

Technical data FIBROTOR® EM.18

Switching/ hold angles	Division 2 Division 3 – 5 Division 6 – 12 More than division 12	330° / 30° 300° / 60° 270° / 90° 135° / 45°
Voltage	Motor Special voltages on request Brake	230/400 V, 50 Hz, IEC 38 230 V, AC
Motor power	Depending on indexing time and mass moment of inertia	0,37 – 3,0 kW
Centre hole	With side opening in the housing	Ø 180 mm
Working position	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)	
Weight		ca. 850 kg

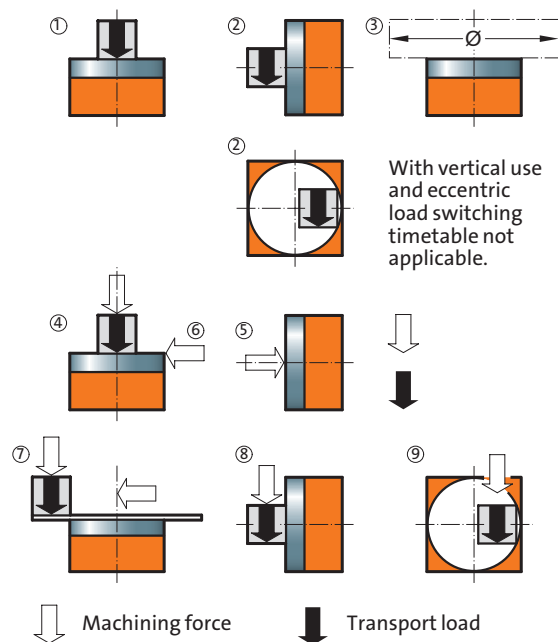
Indexing times FIBROTOR® EM.18

Divisions in combination with special brake motor

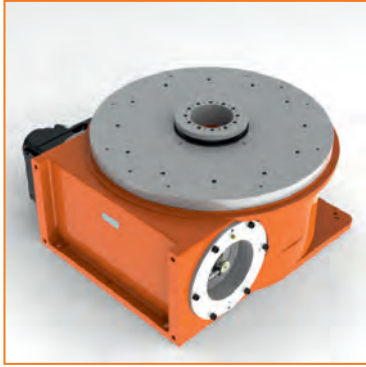
2	t _s in s	6,65	5,99	4,94	4,44	2,38	3,21	2,91	2,40	1,92	1,68	1,39						
	J in kgm ²	7589	6144	4170	3374	959	1753	1437	973	618	469	270						
3	t _s in s	6,05	5,44	4,49	4,04	3,33	2,94	2,66	2,20	1,72	1,51							
	J in kgm ²	10199	8257	5606	4720	3210	2716	2228	1422	812	533							
4	t _s in s	6,05	5,44	4,49	4,04	2,92	2,63	2,17	1,74	1,53	1,26	1,01	0,93	0,75				
	J in kgm ²	17462	14927	10139	8209	4278	3462	2353	1502	1164	787	440	296	165				
5	t _s in s	6,05	5,44	4,64	4,17	2,96	2,63	2,17	1,74	1,52	1,26	1,01	0,93	0,75				
	J in kgm ²	23082	19732	14314	11591	5821	4580	3115	1991	1522	1046	630	470	263				
6	t _s in s	5,44	4,90	4,17	3,76	2,66	2,36	1,95	1,56	1,37	1,14	0,91	0,84	0,67	0,60			
	J in kgm ²	23479	20072	14560	11790	5922	4659	3169	2025	1548	1064	678	478	268	171			
8	t _s in s	5,52	4,97	4,08	3,76	2,66	2,40	1,98	1,55	1,36	1,13	0,91	0,84	0,67	0,60			
	J in kgm ²	32982	28197	19012	16089	8084	6544	4453	2731	2089	1438	918	786	497	313			
10	t _s in s	5,52	4,97	4,08	3,76	2,66	2,40	1,98	1,55	1,36	1,13	0,91	0,84	0,67	0,60			
	J in kgm ²	41789	35727	24091	20388	10246	8296	5646	3464	2651	1826	1167	1001	635	500			
12	t _s in s	5,61	5,05	4,08	3,67	2,68	2,41	1,99	1,57	1,38	1,12	0,90	0,83	0,67	0,59			
	J in kgm ²	51979	44440	29092	23561	12553	10164	6919	4306	3297	2178	1393	1178	759	599			
16	t _s in s	2,80	2,52	2,04	1,84	1,34	1,21	0,99	0,79	0,68	0,56	0,46	0,42	0,34	0,30			
	J in kgm ²	14813	12662	8285	6707	3567	2886	1933	1215	901	608	396	333	207	151			
20	t _s in s	2,80	2,52	2,04	1,84	1,34	1,21	0,99	0,79	0,68	0,56	0,46	0,42	0,34	0,30			
	J in kgm ²	20915	17880	11701	9474	5043	4081	2735	1723	1279	866	566	477	299	234			
24	t _s in s	2,80	2,52	2,03	1,83	1,35	1,21	1,00	0,79	0,69	0,56	0,46	0,42	0,34	0,30			
	J in kgm ²	25821	22074	14291	11572	6319	5042	3429	2131	1629	1073	703	593	374	293			

Belastungsdaten FIBROTOR® EM.18

Perm. transport load Horizontal table top	kg	6400	①
Vertical table top	kg	1200	②
Table top upside-down	kg	1200	
Perm. add-on diameter	mm	3500	③
Perm. axial loading on the table top Horizontal	N	100000	④
Vertical	N	16000	⑤
Perm. radial loading on table top	N	36000	⑥
Perm. tilting moment on positioned table top Horizontal	Nm	18000	⑦
With strengthened table top bearing	Nm	54000	⑦
Vertical	Nm	7000	⑧
With strengthened table top bearing	Nm	21000	⑦
Upside-down	Nm	4000	
Perm. tilting moment on rotating table top With strengthened table top bearing	Nm	6000	⑦
Upside-down	Nm	18000	⑧
Perm. tangential moment on positioned table top, from machining force and in vertical position additionally from eccentric transport load	Nm	2500	⑨
With hydraulic table top lock	Nm	4000	



CAD-files, technical data and planning documentation can be downloaded from www.fibrotor.de.



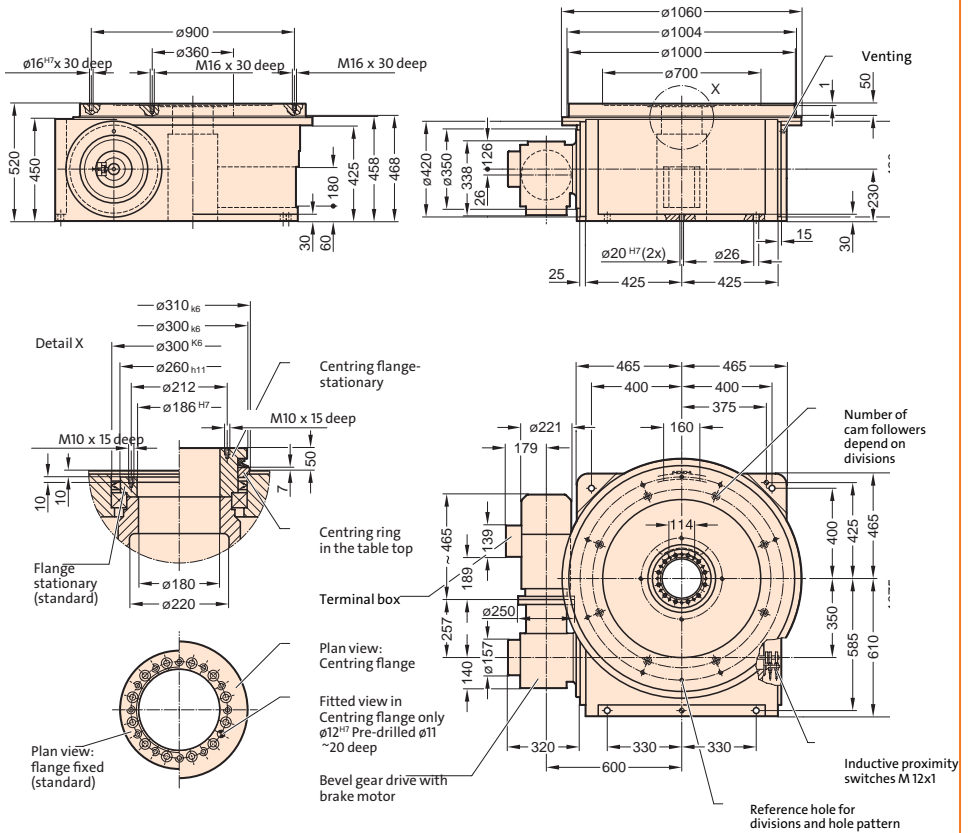
FIBROTOR EM.19.1000.1.152.XX.0.0.3
Drive arrangement 152



FIBROTOR EM.19.1000.1.152.XX.0.0.3
Drive arrangement 152

Installed dimensions FIBROTOR® EM.19

(Drive arrangement 152, for other drive arrangements, drawing or CAD data are available)



Technical data FIBROTOR® EM.19

Encoding

EM.19

Table top dimensions	Standard dimensions	\varnothing 1000 mm	.1000	
	Strengthened table top bearing	\varnothing 930 mm	.0930	②
	Table top lock	\varnothing 1000 mm	.1000	
	Built-in version	\varnothing 1000 mm	.1000	
Drive motor	Standard brake motor		.1	③
	Hydraulic motor		.5	
	Pneumatic motor		.6	
	AC servomotor		.7	
	Special version		.9	
	Without motor		.0	
Drive arrangement	See planning documents under www.fibrotor.de/downloads		.XXX	④
Division 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24	Special deviations up to T 120 on request		.XX	⑤
Additional assemblies	No additional modules		.0	⑥
	Strengthened table top bearing		.1	
	Hydraulic table top lock		.2	
	Built-in version		.1	
	Built-in version with mounting ring		.2	
	Vertical version		.3	
	Vertical version with base plate		.4	
	Centring ring		.1	
Centring flange		.2		
	Centring ring and centring flange		.3	⑧
Indexing accuracy in arc seconds (increased indexing accuracy on request)	Division 2 – 12	$\pm 10''$		
	Division 16 – 24	$\pm 15''$		
	More than division 24	$\pm 25''$		
Indexing accuracy in arc length (on \varnothing 1000 mm)	Division 2 – 12	$\pm 0,024$ mm		
	Division 16 – 24	$\pm 0,036$ mm		
	More than division 24	$\pm 0,061$ mm		
Axial runout of table top	(relates to \varnothing 1000 mm)	0,02 mm		
Concentricity of the centre hole	(relates to \varnothing 300 mm)	0,02 mm		
Plane parallelism of table top to base on the housing	(relates to \varnothing 1000 mm)	0,04 mm		
Direction of rotation	Any, limit switch set for cw rotation			

Technical data FIBROTOR® EM.19

Switching/hold angles	Division 2 Division 3 – 5 Division 6 – 12 More than division 12	330° / 30° 300° / 60° 270° / 90° 135° / 45°
Volage	Motor Special voltage on request Brake	230/400 V, 50 Hz, IEC 38 230 V, AC
Motor output	Depending in indexing time and mass moment of inertia	0,55 – 4,0 kW
Centre hole	With side opening in the housing	Ø 180 mm
Working position	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)	
Weight		approx. 1500 kg

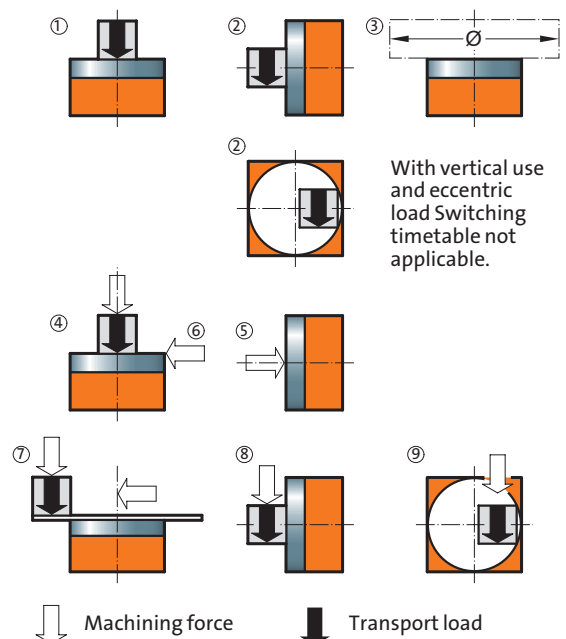
Indexing times FIBROTOR® EM.19

Division

2	t _i in s	7,70	6,79	6,41	5,75	4,95	4,52	4,04	3,39	3,07	2,73	2,44	2,18			
	J in kgm ²	13581	10564	9396	7537	5577	4634	3683	2584	2109	1650	1306	1028			
3	t _i in s	7,00	6,18	5,83	5,22	4,53	4,14	3,67	3,04	2,79	2,46	2,20	1,98			
	J in kgm ²	22447	17470	15543	12477	9376	7798	6119	4183	3522	2724	2165	1737			
4	t _i in s	7,00	6,18	5,83	5,22	4,50	4,11	3,64	3,08	2,83	2,52	2,22	1,99	1,73	1,54	
	J in kgm ²	36044	28061	24970	20053	14865	12369	9714	6944	5854	4603	3562	2867	2144	1681	
5	t _i in s	7,00	6,18	5,83	5,22	4,50	4,11	3,64	3,08	2,83	2,52	2,22	1,99	1,73	1,54	
	J in kgm ²	47654	39168	34857	27998	20761	17280	13576	9712	8191	6446	4995	3379	2270	1474	
6	t _i in s	6,34	5,60	5,28	4,70	4,05	3,70	3,28	2,76	2,53	2,26	2,03	1,82	1,56	1,40	
	J in kgm ²	49171	38285	34070	26978	20004	16650	13080	9224	7779	6210	4951	3990	2904	2316	
8	t _i in s	6,34	5,60	5,28	4,70	4,05	3,70	3,28	2,76	2,53	2,25	2,01	1,82	1,58	1,41	
	J in kgm ²	67094	52246	46497	36823	27310	22735	17865	12605	10634	8373	6681	5466	4101	3276	
10	t _i in s	6,44	5,68	5,36	4,74	4,08	3,72	3,30	2,76	2,53	2,25	2,01	1,81	1,57	1,41	1,17
	J in kgm ²	87501	68140	60645	47337	35113	29233	22976	15986	13489	10625	8481	6843	5139	4167	2751
12	t _i in s	6,44	5,68	5,36	4,80	4,14	3,72	3,30	2,78	2,53	2,25	2,01	1,81	1,57	1,40	1,17
	J in kgm ²	105665	82289	73238	58841	43650	35311	27755	19594	16301	12842	10254	8276	6218	4973	3648
16	t _i in s	6,44	5,68	5,36	4,80	4,14	3,78	3,35	2,78	2,55	2,26	2,03	1,81	1,57	1,40	1,17
	J in kgm ²	143951	112109	99782	80171	59479	49527	38936	26713	22547	17768	14192	11296	8493	6797	4658
20	t _i in s	3,22	2,84	2,68	2,40	2,04	1,86	1,65	1,38	1,27	1,12	1,01	0,90	0,78	0,71	
	J in kgm ²	42500	33089	29445	23649	17034	14177	11135	7737	6524	5131	4089	3293	2464	1992	
24	t _i in s	3,22	2,84	2,68	2,40	2,07	1,89	1,65	1,39	1,28	1,12	1,01	0,90	0,78	0,70	
	J in kgm ²	52474	40858	36361	29207	21658	18027	13760	9704	8184	6349	5063	4080	3057	2438	

Load data FIBROTOR® EM.19

Perm. transport load			
Horizontal table top	kg	8000	①
Vertical table top	kg	1250	②
Table top, upside-down	kg	1000	
Perm. add-on diameter	mm	4500	③
Perm. axial loading on the table top			
Horizontal	N	125000	④
Vertical	N	20000	⑤
Perm. radial loading on table top	N	50000	⑥
Perm. tilting moment on positioned table top			
Horizontal	Nm	24000	⑦
With strenghtened table top bearing	Nm	72000	⑦
Vertical	Nm	9000	⑧
With strenghtened table top bearing	Nm	24000	⑦
Upside-down	Nm	7000	
Perm. tilting moment on rotating table top			
With strenghtened table top bearing	Nm	8000	⑦
Upside-down	Nm	24000	⑧
Upside-down	Nm	1500	
Perm. tangential moment on positioned table top, from machining force and in vertical position additionally from eccentric transport load	Nm	5000	⑨
With hydraulic table top lock	Nm	9000	



CAD files, technical data and planning documentation can be downloaded from www.fibrotor.de.



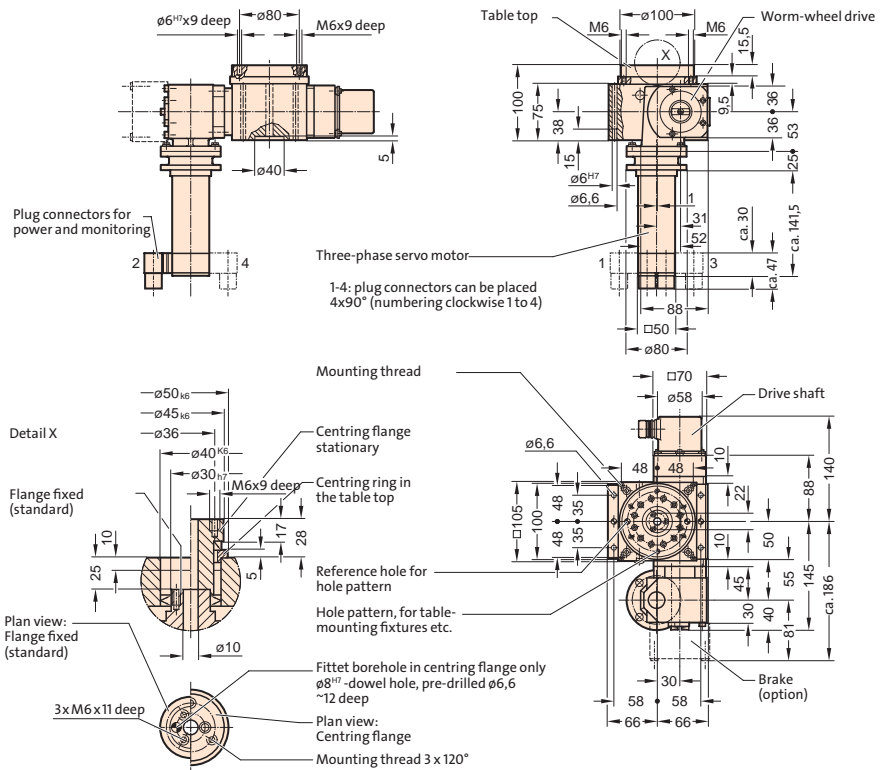
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Installed dimensions FIBROTOR® EM.NC.10

(Drive arrangement 162, for other drive arrangements, drawings or CAD data are available)



Technical data FIBROTOR® EM.NC.10

Encoding

EM.NC.10

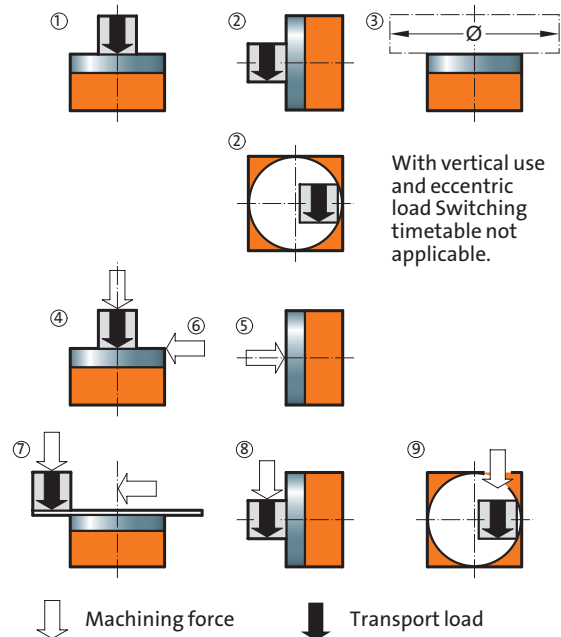
Table top dimensions	Standard dimensions Built-in version	$\phi 100 \text{ mm}$ $\phi 100 \text{ mm}$.0100 .0100	②
Drive motor	Standard brake motor AC servomotor Special version Without motor		.1 .7 .9 .0	③
Drive arrangement	See planning documents under www.fibrotor.de/downloads		.XXX	④
Division	NC - can be positioned arbitrarily		.00	⑤
Additional assemblies	Without additional modules Built-in version Built-in version with mounting ring Vertical version Vertical version with base plate Centring ring Centring flange Centring ring and centring flange		.0 .1 .2 .3 .4 .1 .2 .3	⑥ ⑦ ⑧
Indexing accuracy in arc seconds	Indirect measuring system Measuring system at motor	$\pm 120''$ $\pm 300''$		
Indexing accuracy in arc length (on $\phi 100 \text{ mm}$)	Indirect measuring system Measuring system at motor	$\pm 0,029 \text{ mm}$ $\pm 0,073 \text{ mm}$		
Axial runout of table top	(relates to $\phi 100 \text{ mm}$)	0,02 mm		
Concentricity of the centre hole	(relates to $\phi 40 \text{ mm}$)	0,02 mm		
Plane parallelism of table top to base on the housing	(relates to $\phi 100 \text{ mm}$)	0,04 mm		
Direction of rotation	CW - CCW rotation			
Reduction ratio worm/ roller gearing		$i = 12$		
RPM at table top		$n_{\text{max}} = 50 / \text{min}$		
Centre hole		$\phi 10 \text{ mm}$		
Working position	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)			
Weight		approx. 12 kg		

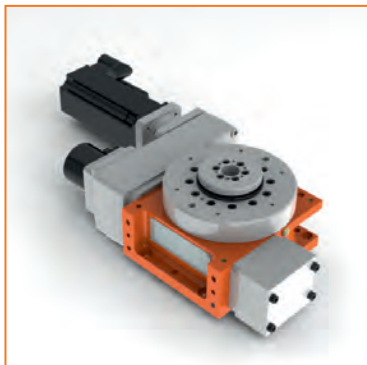
Indexing times FIBROTOR® EM.NC.10

Mass moment of inertia J in kgm ²	0,5	1,0	1,5	4,0
Max. perm. table top speed 1'/min	40	27	20	8
Acceleration time t _a in s	0,2	0,2	0,3	0,3
Overall gear ratio reduction i	60	84	120	360
Motor speed n in 1'/min	2400	2268	2400	2880
Motor torque required in Nm	0,9	0,9	0,8	0,8
Swivel time t _s in s for				
360°	1,9	2,6	3,4	7,9
180°	1,1	1,5	1,9	4,2
120°	0,9	1,1	1,5	2,9
90°	0,75	0,9	1,1	2,3
60°	0,6	0,75	0,9	1,65
45°	0,55	0,65	0,8	1,35
30°	0,5	0,55	0,5	1,05
20°	0,45	0,5	0,55	0,85
10°	0,4	0,45	0,45	0,65
5°	0,4	0,4	0,4	0,5
2°	0,35	0,4	0,4	0,45

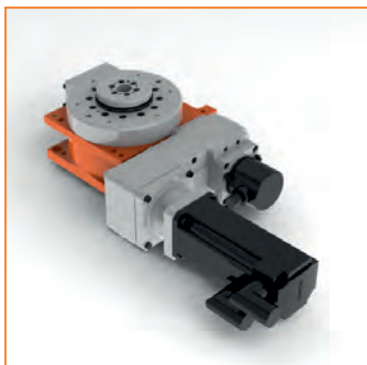
Load data FIBROTOR® EM.NC.10

Perm. transport load	kg	100	①
Horizontal table top	kg	50	②
Vertical table top	kg	50	
Table top, upside down	kg	50	
Perm. add-on diameter	mm	520	③
Perm. axial loading on the table top			
Horizontal	N	4000	④
Vertical	N	1500	⑤
Perm. radiale loading on table top	N	1000	⑥
Perm. tilting moment on positioned table top			
Horizontal	Nm	350	⑦
Vertical	Nm	200	⑧
Upside-down	Nm	150	
Perm. tilting moment on rotating table top			
Upside-down	Nm	100	⑦+⑧
Perm. tangential moment on positioned table top, from machining force and in vertical position additionally from eccentric transport load	Nm	25	⑨





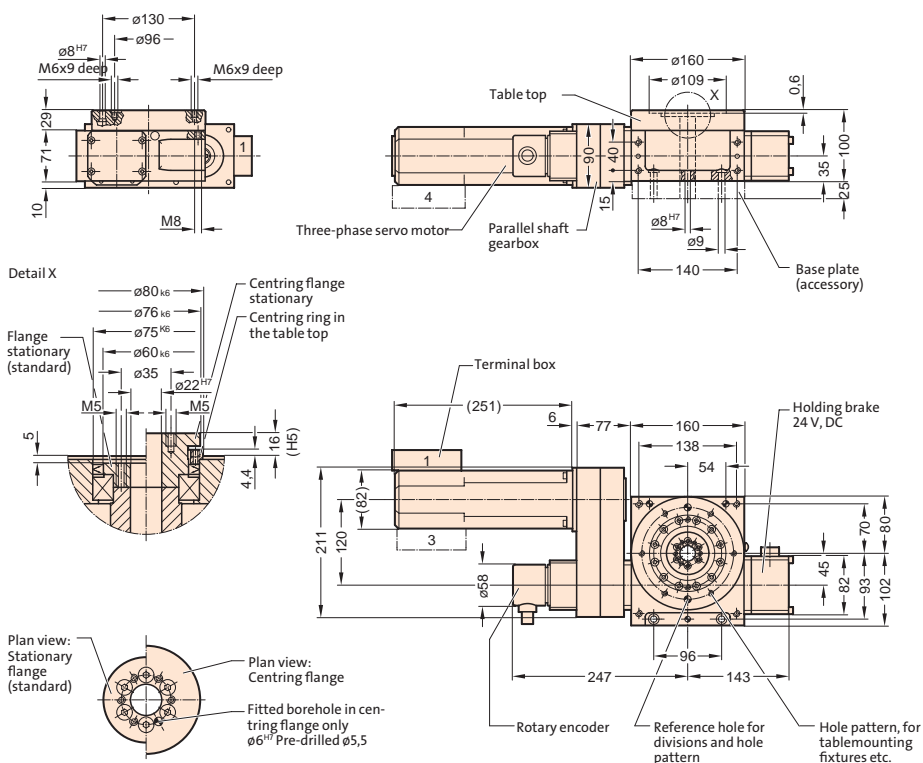
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FIBROTOR EM.NC.11.0160.7.111.00.0.0.3

Installed dimensions FIBROTOR® EM.NC.11

(Drive arrangement 111, for other drive arrangement, drawings or CAD-datas are available)



Technical data FIBROTOR® EM.NC.11 **Encoding** EM.NC.11 . [] [] [] [] [] [] [] []

Table top dimensions	Standard dimensions Strengthened table top bearing Table top lock Built-in version	$\phi 160$ mm $\phi 118$ mm $\phi 155$ mm $\phi 160$ mm	.0160 .0118 .0155 .0160	②
Drive motor	Standard braking motor AC servomotor Special version Without motor		.1 .7 .9 .0	③
Drive arrangement	See planning documents under www.fibrotor.de/downloads		.XXX	④
Division	NC - can be positioned arbitrarily		.00	⑤
Additional assemblies	Without additional modules		.0	⑥
	Strengthened table top bearing		.1	
	Hydraulic table top lock		.2	
	Built-in version Built-in version with mounting ring Vertical version Vertical version with base plate		.1 .2 .3 .4	⑦
Indexing accuracy in arc seconds	Centring ring		.1	⑧
	Centring flange		.2	
	Centring ring and centring flange		.3	
Indexing accuracy in arc length (on $\phi 160$ mm)	Direct measuring system Indirect measuring system Measuring system at motor	$\pm 30''$ $\pm 60''$ $\pm 210''$		
Axial runout of Table top	(relates to $\phi 160$ mm)	0,01 mm		
Concentricity of the centre hole	(relates to $\phi 75$ mm)	0,01 mm		
Plane parallelism of table top to base on the housing	(relates to $\phi 160$ mm)	0,02 mm		
Direction of rotation	CW - CCW rotation			
Reduction ratio worm /roller gearing		$i = 12$		

Technical Data FIBROTOR® EM.NC.11

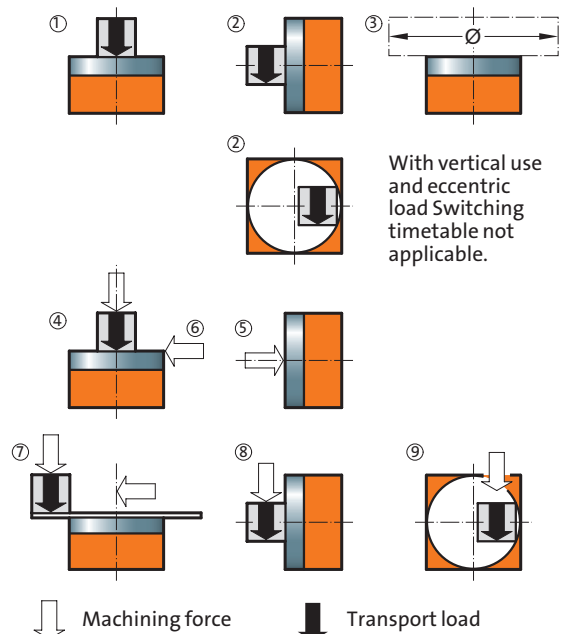
RPM at table top		$n_{max.} = 30' / \text{min}$
Centre hole		$\varnothing 22 \text{ mm}$
Working position	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)	
Weight		approx. 20 kg

Indexing times FIBROTOR® EM.NC.11

Mass moment of inertia J in kgm^2	1	2	4	8	12
Max. perm. table top speed $' / \text{min}$	30	25	15	10	6
Acceleration time t_a in s	0,2	0,2	0,2	0,2	0,2
Overall gear ratio reduction i	96,000	120,000	179,052	215,208	312,000
Motor speed n in $' / \text{min}$	2880	3000	2686	2152	1872
Motor torque required in Nm	1,0	1,0	1,0	1,0	1,0
Swivel time t_s in s for					
360°	2,30	2,70	4,30	6,30	10,30
180°	1,30	1,50	2,30	3,30	5,30
90°	0,80	0,90	1,30	1,80	2,80
60°	0,63	0,70	0,97	1,30	1,97
45°	0,55	0,60	0,80	1,05	1,55
30°	0,47	0,50	0,63	0,80	1,13
20°	0,41	0,43	0,52	0,63	0,86
10°	0,36	0,37	0,41	0,47	0,58
5°	0,33	0,33	0,36	0,38	0,44
2°	0,31	0,31	0,32	0,33	0,36

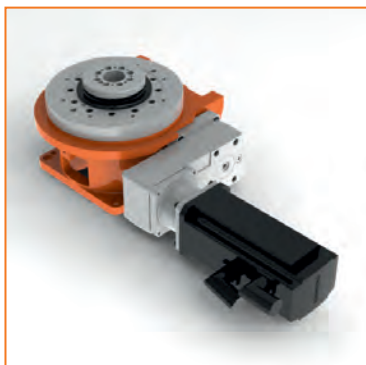
Load data FIBROTOR® EM.NC.11

Perm. transport load			
Horizontal table top	kg	500	①
Vertical table top	kg	200	②
Table top, upside down	kg	200	
Perm. add-on diameter	mm	800	③
Perm. axial loading on the table top			
Horizontal	N	8000	④
Vertical	N	3500	⑤
Perm. radial loading on table top	N	3500	⑥
Perm. tilting moment on positioned table top			
Horizontal	Nm	750	⑦
With strenghtened table top bearing	Nm	2250	⑦
Vertical	Nm	450	⑧
With strenghtened table top bearing	Nm	1350	⑧
Upside-down	Nm	250	⑧
Perm. tilting moment on rotating table top			
With strenghtened table top bearing	Nm	200	⑦+⑧
Upside-down	Nm	600	
Upside-down	Nm	100	
Perm. tangential moment on positioned table top, from machining force and in vertical position additionally from eccentric transport load			
With hydraulic table top lock	Nm	125	⑨
	Nm	450	⑨





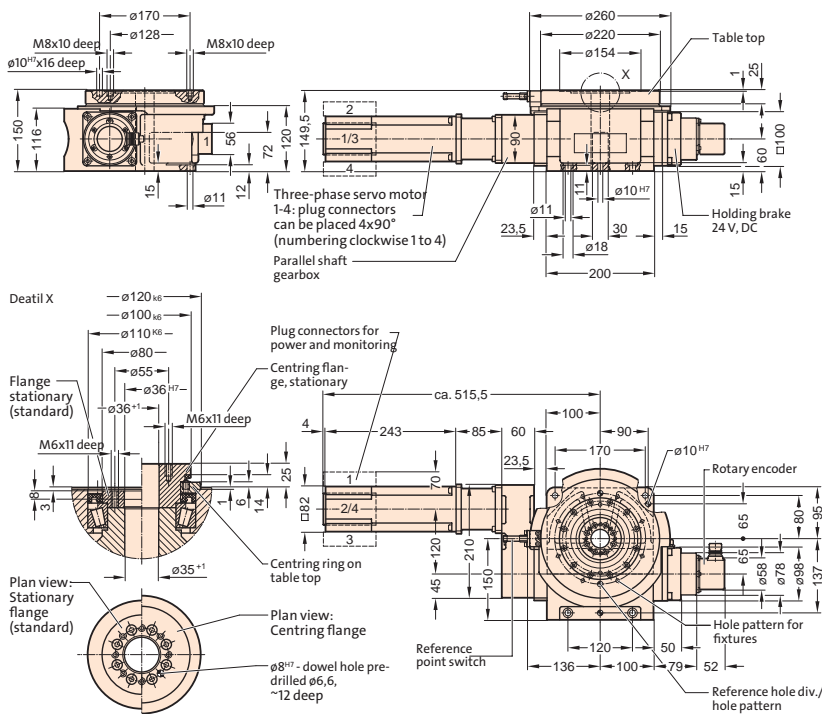
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FIBROTOR EM.NC.12.0220.7.111.00.0.0.3

Installed dimensions FIBROTOR® EM.NC.12

(Drive arrangement 111, for other drive arrangement, drawings or CAD-datas are available)



Technical data FIBROTOR® EM.NC.12 **Encoding** EM.NC.12 . [] . [] . [] . [] . [] . [] . []

Table top dimensions	Standard dimensions Strengthened table top bearing Table top lock Built-in version	$\phi 220$ mm $\phi 190$ mm $\phi 220$ mm $\phi 220$ mm	.0220 .0190 .0220 .0220	②
Drive motor	Standard braking motor AC servomotor Special version Without motor		.1 .7 .9 .0	③
Drive arrangement	See planning documents under www.fibrotor.de/downloads		.XXX	④
Division	NC - can be positioned arbitrarily		.00	⑤
Additional assemblies	Without additional modules		.0	⑥
	Strengthened table top bearing		.1	
	Hydraulic table top lock		.2	
	Built-in version		.1	⑦
	Built-in version with mounting ring		.2	
	Vertical version		.3	
Vertical version with base plate		.4		
	Centring ring		.1	⑧
	Centring flange		.2	
	Centring ring and centring flange		.3	
Indexing accuracy in arc seconds	Indirect measuring system Direct measuring system Measuring system at motor	$\pm 45''$ $\pm 10''$ $\pm 150''$		
Indexing accuracy in arc length (on $\phi 220$ mm)	Indirect measuring system Direct measuring system Measuring system at motor	$\pm 0,024$ mm $\pm 0,006$ mm $\pm 0,080$ mm		
Axial runout of Table top	(relates to $\phi 220$ mm)		0,01 mm	
Concentricity of the centre hole	(relates to $\phi 110$ mm)		0,01 mm	
Plane parallelism of table top to base on the housing	(relates to $\phi 220$ mm)		0,03 mm	
Direction of rotation	CW - CCW rotation			
Reduction ratio worm /roller gearing			$i = 12$	

Technical data FIBROTOR® EM.NC.12

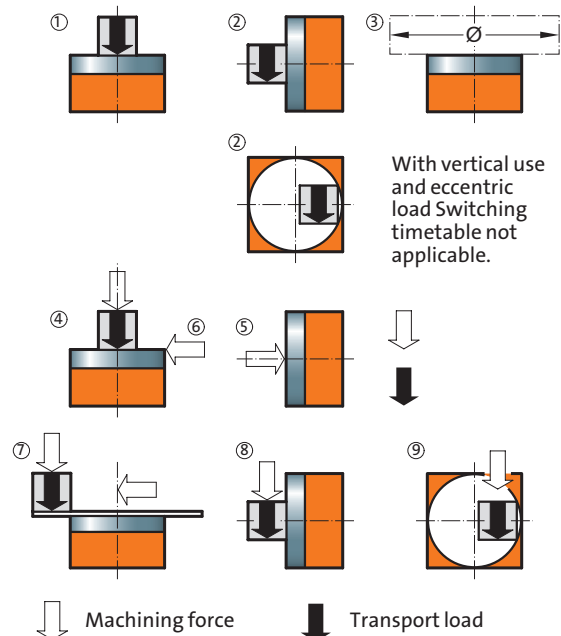
RPM at table top		$n_{max.} = 30^1/min$
Centre hole	with lateral opening in the housing	$\varnothing 35\text{ mm}$
Working position	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)	
Weight		approx. 35 kg

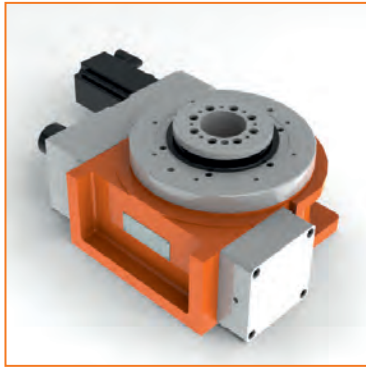
Indexing times FIBROTOR® EM.NC.12

Mass moment of inertia J in kgm^2	2	6	8	12	16	20	24
Max. perm. table top speed $^1/min$	30	25	23	18	15	12	9
Acceleration time t_a in s	0,1	0,2	0,2	0,2	0,3	0,3	0,3
Overall gear ratio reduction i	96,000	120,000	120,000	148,908	179,052	215,208	312,000
Motor speed n in $^1/min$	2880	3000	2760	2680	2686	2582	2808
Motor torque required in Nm	2,5	2,2	2,2	2,2	2,2	2,2	2,2
Swivel time t_s in s for 360°	2,20	2,70	2,91	3,63	4,40	5,40	7,07
180°	1,20	1,50	1,60	1,97	2,40	2,90	3,73
90°	0,70	0,90	0,95	1,13	1,40	1,65	2,07
60°	0,53	0,70	0,73	0,86	1,07	1,23	1,51
45°	0,45	0,60	0,63	0,72	0,90	1,03	1,23
30°	0,37	0,50	0,52	0,58	0,73	0,82	0,96
20°	0,31	0,43	0,44	0,49	0,62	0,68	0,77
10°	0,26	0,37	0,37	0,39	0,51	0,54	0,59
5°	0,23	0,33	0,34	0,35	0,46	0,47	0,49
2°	0,21	0,31	0,31	0,32	0,42	0,43	0,44

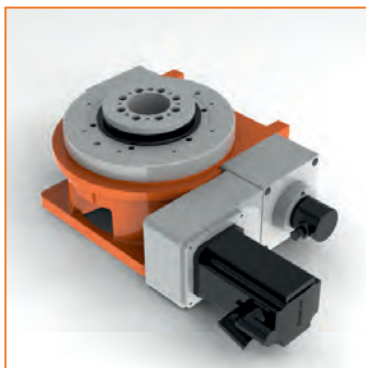
Load data FIBROTOR® EM.NC.12

Perm. transport load	kg	800	①
Horizontal table top	kg	300	②
Vertical table top	kg	300	
Table top, upside down	kg	300	
Perm. add-on diameter	mm	1000	③
Perm. axial loading on the table top			
Horizontal	N	12000	④
Vertical	N	5000	⑤
Perm. radial loading on table top	N	8000	⑥
Perm. tilting moment on positioned table top			
Vertical	Nm	2000	⑦
With strenghtened table top bearing	Nm	6000	⑦
Vertical	Nm	1500	⑧
With strenghtened table top bearing	Nm	4500	⑦
Upside-down	Nm	600	
Perm. tilting moment on rotating table top			
With strenghtened table top bearing	Nm	600	⑦+⑧
Upside-down	Nm	1800	
Perm. tangential moment on positioned table top, from machining force and in vertical position additionally from eccentric transport load			
With hydraulic table top lock	Nm	200	⑨
	Nm	800	⑨





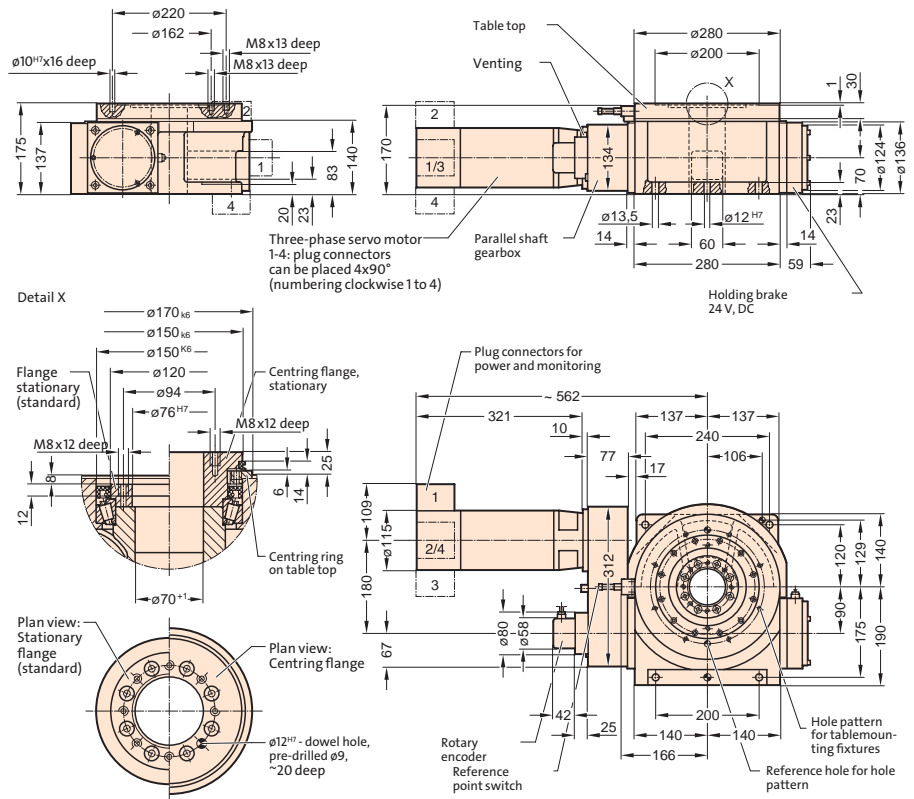
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FIBROTOR EM.NC.13.0280.7.111.00.0.0.3

Installed dimensions FIBROTOR® EM.NC.13

(Drive arrangement 111, for other drive arrangement, drawings or CAD-datas are available)



Technical data FIBROTOR® EM.NC.13 **Encoding** EM.NC.13 . [] . [] . [] . [] . [] . []

Table top dimensions	Standard dimensions Strengthened table top bearing Table top lock Built-in version	$\phi 280$ mm $\phi 250$ mm $\phi 280$ mm $\phi 280$ mm	.0280 .0250 .0280 .0280	②
Drive motor	Standard brake motor AC servomotor Special version Without motor		.1 .7 .9 .0	③
Drive arrangement	See planning documents under www.fibrotor.de/downloads		.XXX	④
Division	NC - can be positioned arbitrarily		.00	⑤
Additional assemblies	Without additional modules Strengthened table top bearing Hydraulic table top lock		.0 .1 .2	⑥
	Built-in version Built-in version with mounting ring Vertical version Vertical version with base plate		.1 .2 .3 .4	
	Centring ring Centring flange Centring ring and centring flange		.1 .2 .3	⑧
Indexing accuracy in arc seconds	Indirect measuring system Direct measuring system Measuring system at motor		$\pm 45''$ $\pm 10''$ $\pm 120''$	
Indexing accuracy in arc length (on $\phi 280$ mm)	Indirect measuring system Direct measuring system Measuring system at motor		$\pm 0,031$ mm $\pm 0,007$ mm $\pm 0,082$ mm	
Axial runout of Table top	(relates to $\phi 280$ mm)		0,01 mm	
Concentricity of the centre hole	(relates to $\phi 150$ mm)		0,01 mm	
Plane parallelism of table top to base on the housing	(relates to $\phi 280$ mm)		0,03 mm	
Direction of rotation	CW - CCW rotation			
Reduction ratio worm /roller gearing			$i = 12$	

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Technical data FIBROTOR® EM.NC.13

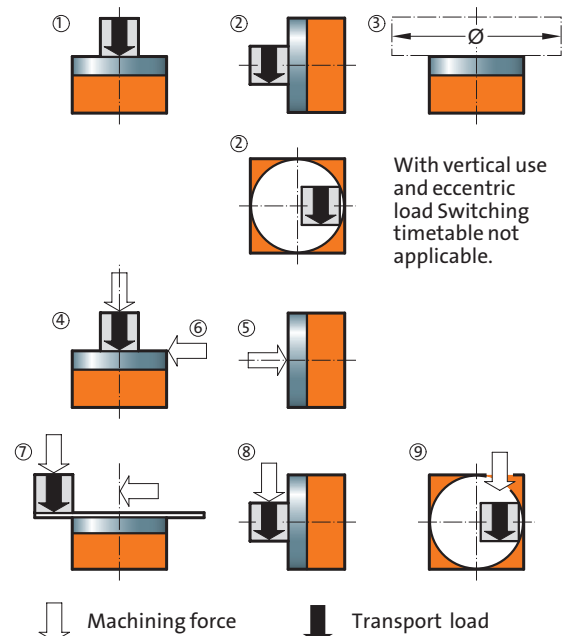
RPM at table top		$n_{max.} = 30^1/min$
Centre hole	With lateral opening in the housing	$\varnothing 35\text{ mm}$
Working position	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)	
Weight		approx. 70 kg

Indexing times FIBROTOR® EM.NC.13

Mass moment of inertia J in kgm^2	4	8	16	24	32
Max. perm. table top speed $^1/min$	30	25	23	18	15
Acceleration time t_a in s	0,2	0,2	0,3	0,4	0,5
Overall gear ratio reduction i	96,000	120,000	120,000	155,784	182,064
Motor speed n in $^1/min$	2880	3000	2760	2804	2731
Motor torque required in Nm	3,4	3,4	3,4	3,4	3,4
Swivel time t_s in s for 360°	2,30	2,70	3,01	3,83	4,60
180°	1,30	1,50	1,70	2,17	2,60
90°	0,80	0,90	1,05	1,33	1,60
60°	0,63	0,70	0,83	1,06	1,27
45°	0,55	0,60	0,73	0,92	1,10
30°	0,47	0,50	0,62	0,78	0,93
20°	0,41	0,43	0,54	0,69	0,82
10°	0,36	0,37	0,47	0,59	0,71
5°	0,33	0,33	0,44	0,55	0,66
2°	0,31	0,31	0,41	0,52	0,62

Load data FIBROTOR® EM.NC.13

Perm. transport load	kg	1500	①
Horizontal table top	kg	400	②
Vertical table top	kg	400	
Table top, upside down	kg	400	
Perm. add-on diameter	mm	1400	③
Perm. axial loading on the table top	N	16000	④
Horizontal	N	6000	⑤
Vertical	N	10000	⑥
Perm. radial loading on table top	N	10000	⑥
Perm. tilting moment on positioned table top	Nm	3000	⑦
Horizontal	Nm	9000	⑦
With strenghtened table top bearing	Nm	1500	⑧
Vertical	Nm	4500	⑦
With strenghtened table top bearing	Nm	800	
Upside-down	Nm	800	
Perm. tilting moment on rotating table top	Nm	1000	⑦+⑥
With strenghtened table top bearing	Nm	3000	
Upside-down	Nm	400	
Perm. tangential moment on positioned table top, from machining force and in vertical position additionally from eccentric trabsport load	Nm	250	⑨
With hydraulic table top lock	Nm	900	⑨

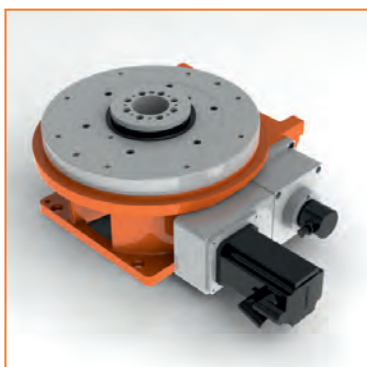
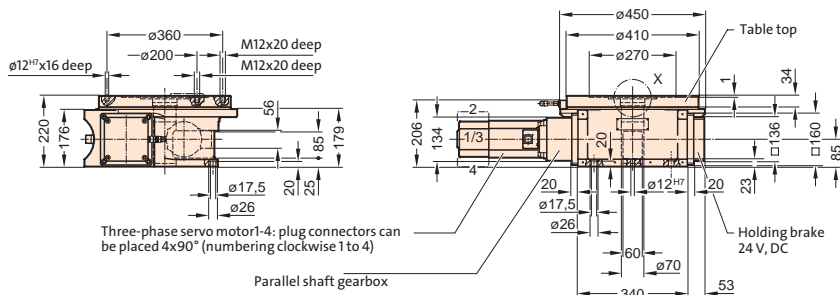




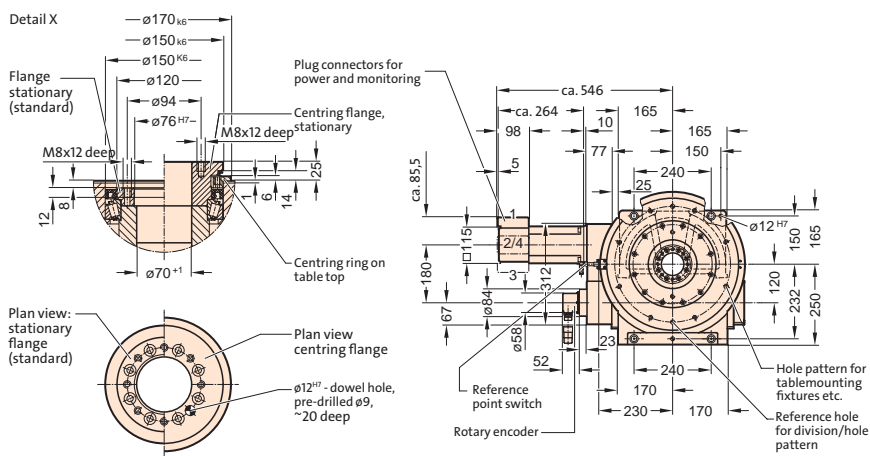
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Installed dimensions FIBROTOR® EM.NC.15

(Drive arrangement 111, for other drive arrangement, drawings or CAD-datas are available)



FIBROTOR EM.NC.15.0410.7.111.00.0.0.3



Technical data FIBROTOR® EM.NC.15

Encoding

EM.NC.15

Table top dimensions	Standard dimensions Strengthened table top bearing Table top lock Built-in version	Ø 0410 mm Ø 0380 mm Ø 0410 mm Ø 0410 mm	.0410 .0380 .0410 .0410	②
Drive motor	Standard brake motor AC servomotor Special version Without motor		.1 .7 .9 .0	③
Drive arrangement	See planning documents under www.fibrotor.de/downloads		.XXX	④
Division	NC - can be positioned arbitrarily		.00	⑤
Additional assemblies	Without additional modules		.0	⑥
	Strengthened table top bearing Hydraulic table top lock		.1 .2	
	Built-in version Built-in version with mounting ring Vertical version Vertical version with base plate		.1 .2 .3 .4	⑦
	Centring ring Centring flange Centring ring and centring flange		.1 .2 .3	⑧
Indexing accuracy in arc seconds	Indirect measuring system Direct measuring system Measuring system at motor		± 45" ± 10" ± 80"	
Indexing accuracy in arc length (on Ø 410 mm)	Indirect measuring system Direct measuring system Measuring system at motor		± 0,045 mm ± 0,010 mm ± 0,080 mm	
Axial runout of Table top	(relates to Ø 410 mm)		0,015 mm	
Concentricity of the centre hole	(relates to Ø 150 mm)		0,015 mm	
Plane parallelism of table top to base on the housing	(relates to Ø 410 mm)		0,040 mm	
Direction of rotation	CW - CCW rotation			
Reduction ratio worm /roller gearing			i = 12	

Technical data FIBROTOR® EM.NC.15

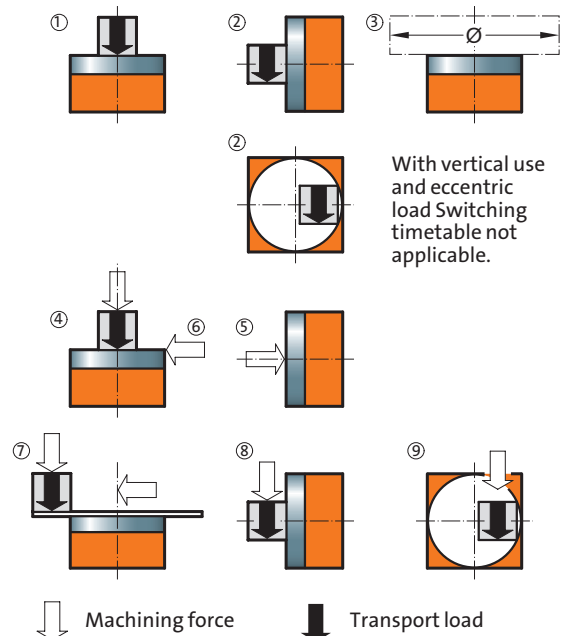
RPM at table top		$n_{max.} = 30^1/min$
Centre hole	With lateral opening in the housing	$\varnothing 70\text{ mm}$
Working position	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)	
Weight		approx. 150 kg

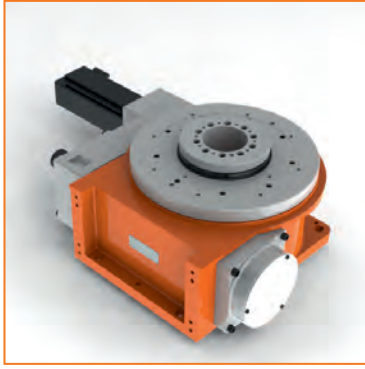
Indexing times FIBROTOR® EM.NC.15

Mass moment of inertia J in kgm^2	4	25	50	100	150	200	300	400
Max. perm. table top speed $^1/min$	30	30	20	15	12	10	8	6
Acceleration time t_a in s	0,1	0,2	0,2	0,3	0,4	0,4	0,5	0,5
Overall gear ratio reduction i	96,000	96,000	120,000	120,000	213,684	213,684	213,684	256,980
Motor speed n in $^1/min$	2880	2880	2400	1800	2564	2137	1710	1542
Motor torque required in Nm	8	8	8	8	6	5	5	4
Swivel time t_s in s for								
360°	2,20	2,30	3,30	4,40	5,50	6,50	8,10	10,6
180°	1,20	1,30	1,80	2,40	3,00	3,50	4,35	5,60
90°	0,70	0,80	1,05	1,40	1,75	2,00	2,48	3,10
60°	0,53	0,63	0,80	1,07	1,33	1,50	1,85	2,27
45°	0,45	0,55	0,68	0,90	1,13	1,25	1,54	1,85
30°	0,37	0,47	0,55	0,73	0,92	1,00	1,23	1,43
20°	0,31	0,41	0,47	0,62	0,78	0,83	1,02	1,16
10°	0,26	0,36	0,38	0,51	0,64	0,70	0,85	0,88
5°	0,23	0,33	0,34	0,46	0,57	0,58	0,70	0,74

Load data FIBROTOR® EM.NC.15

Perm. transport load	kg	2500	①
Horizontal table top	kg	600	②
Vertical table top	kg	600	
Table top, upside down	kg	600	
Perm. add-on diameter	mm	2000	③
Perm. axial loading on the table top			
Horizontal	N	25000	④
Vertical	N	9000	⑤
Perm. radial loading on table top	N	15000	⑥
Perm. tilting moment on positioned table top			
Horizontal	Nm	6000	⑦
With strenghtened table top bearing	Nm	18000	⑦
Vertical	Nm	3000	⑧
With strenghtened table top bearing	Nm	10000	⑦
Upside-down	Nm	1500	
Perm. tilting moment on rotating table top			
With strenghtened table top bearing	Nm	2000	⑦+⑧
Upside-down	Nm	6000	
Perm. tangential moment on positioned table top, from Machining force and in vertical position additionally from eccentric transport load			
With hydraulic table top lock	Nm	320	⑨
	Nm	1800	⑨

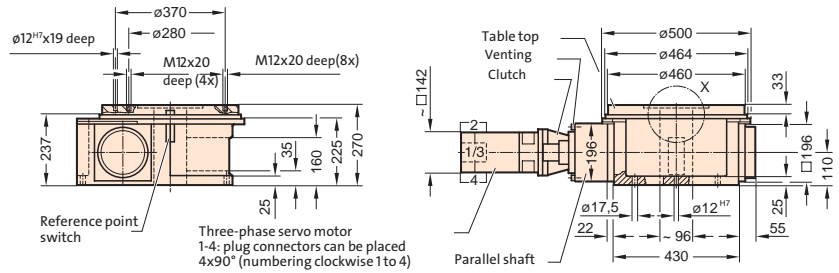




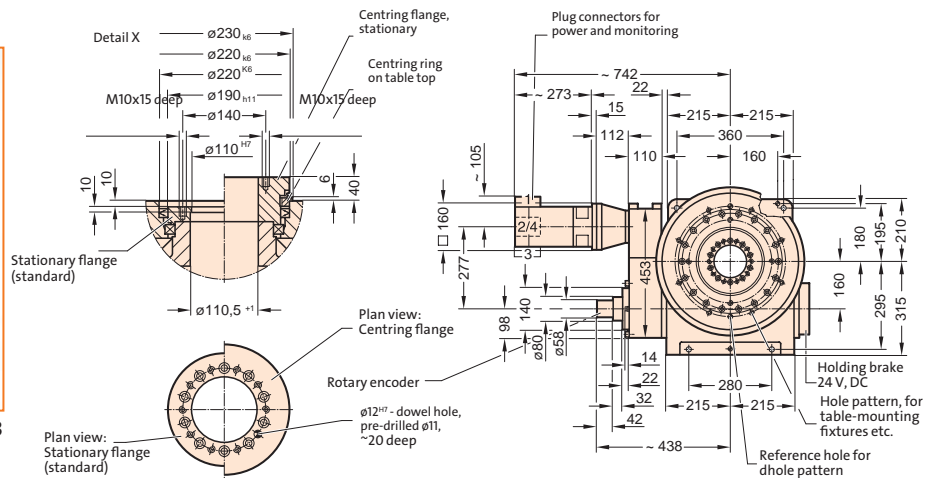
FIBROTOR EM.NC.16.0460.7.111.00.0.0.3

Installed dimensions FIBROTOR® EM.NC.16

(Drive arrangement 111, for other drive arrangement, drawings or CAD-datas are available)



FIBROTOR EM.NC.16.0460.7.111.00.0.0.3



Technical data FIBROTOR® EM.NC.16

Encoding

EM.NC.16

Table top dimensions	Standard dimensions Strengthened table top bearing Table top lock Built-in version	Ø 460 mm Ø 394 mm Ø 440 mm Ø 460 mm	.0460 .0394 .0440 .0460	②
Drive motor	Standard brake motor AC servomotor Special version Without motor		.1 .7 .9 .0	③
Drive arrangement	See planning documents under www.fibrotor.de/downloads		.XXX	④
Division	NC - can be positioned arbitrarily		.00	⑤
Additional assemblies	Without additional modules Strengthened table top bearing Hydraulic table top lock		.0 .1 .2	⑥
	Built-in version Built-in version with mounting ring Vertical version Vertical version with base plate		.1 .2 .3 .4	⑦
	Centring ring Centring flange Centring ring and centring flange		.1 .2 .3	⑧
Indexing accuracy in arc seconds	Indirect measuring system Direct measuring system Measuring system at motor	± 30" ± 10" ± 60"		
Indexing accuracy in arc length (on Ø 460 mm)	Indirect measuring system Direct measuring system Measuring system at motor	± 0,033 mm ± 0,011 mm ± 0,067 mm		
Axial runout of Table top	(relates to Ø 460 mm)	0,015 mm		
Concentricity of the centre hole	(relates to Ø 220 mm)	0,015 mm		
Plane parallelism of table top to base on the housing	(relates to Ø 460 mm)	0,040 mm		
Direction of rotation	CW - CCW rotation			
Reduction ratio worm / roller gearing		i = 12		

Technical data FIBROTOR® EM.NC.16

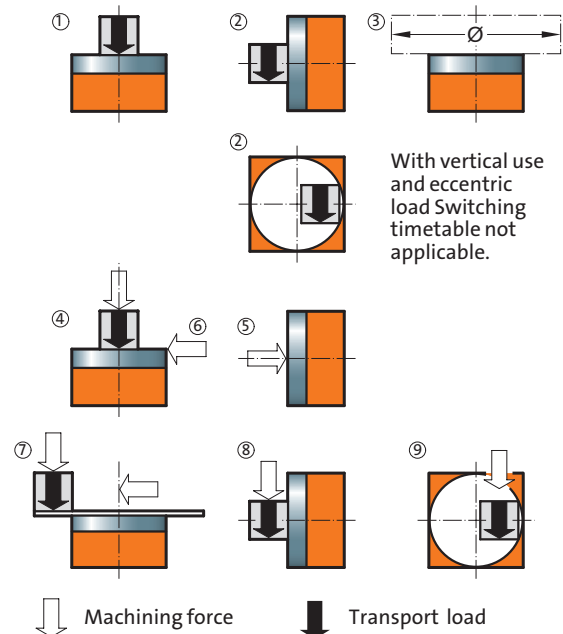
RPM at table top		$n_{max.} = 20'/min$
Centre hole	With lateral opening in the housing	Ø 110 mm
Working position	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)	
Weight		approx. 220 kg

Indexing times FIBROTOR® EM.NC.16

Mass moment of inertia J in kgm ²	60	100	150	225	300	600
Max. perm. table top speed ¹ /min	20	16	12	10	9	8
Acceleration time t _a in s	0,2	0,2	0,3	0,4	0,5	0,6
Overall gear ratio reduction i	120,000	120,000	162,000	252,571	315,556	342,804
Motor speed n in ¹ /min	2400	1920	1944	2526	2840	2742
Motor torque required in Nm	20	20	12	10	8	6
Swivel time t _s in s for						
360°	3,30	4,05	5,40	6,50	7,27	8,20
180°	1,80	2,18	2,90	3,50	3,93	4,45
90°	1,05	1,24	1,65	2,00	2,27	2,58
60°	0,80	0,93	1,23	1,50	1,71	1,95
45°	0,68	0,77	1,03	1,25	1,43	1,64
30°	0,55	0,61	0,82	1,00	1,16	1,33
20°	0,47	0,51	0,68	0,83	0,97	1,12
10°	0,38	0,40	0,54	0,67	0,79	0,91
5°	0,34	0,35	0,47	0,58	0,69	0,80

Load data FIBROTOR® EM.NC.16

Perm. transport load			
Horizontal table top	kg	4000	①
Vertical table top	kg	800	②
Table top, upside down	kg	800	
Perm. add-on diameter	mm	2400	③
Perm. axial loading on the table top			
Horizontal	N	32000	④
Vertical	N	11000	⑤
Perm. radial loading on table top	N	20000	⑥
Perm. tilting moment on positioned table top			
Horizontal	Nm	9000	⑦
With strenghtened table top bearing	Nm	27000	⑦
Vertical	Nm	4200	⑧
With strenghtened table top bearing	Nm	12600	⑦
Upside-down	Nm	2300	
Perm. tilting moment on rotating table top			
With strenghtened table top bearing	Nm	3000	⑦+⑧
Upside-down	Nm	9000	
Perm. tangential moment on positioned table top, from machining force and in vertical position additionally from eccentric transport load			
With hydraulic table top lock	Nm	500	⑨
	Nm	1900	⑨





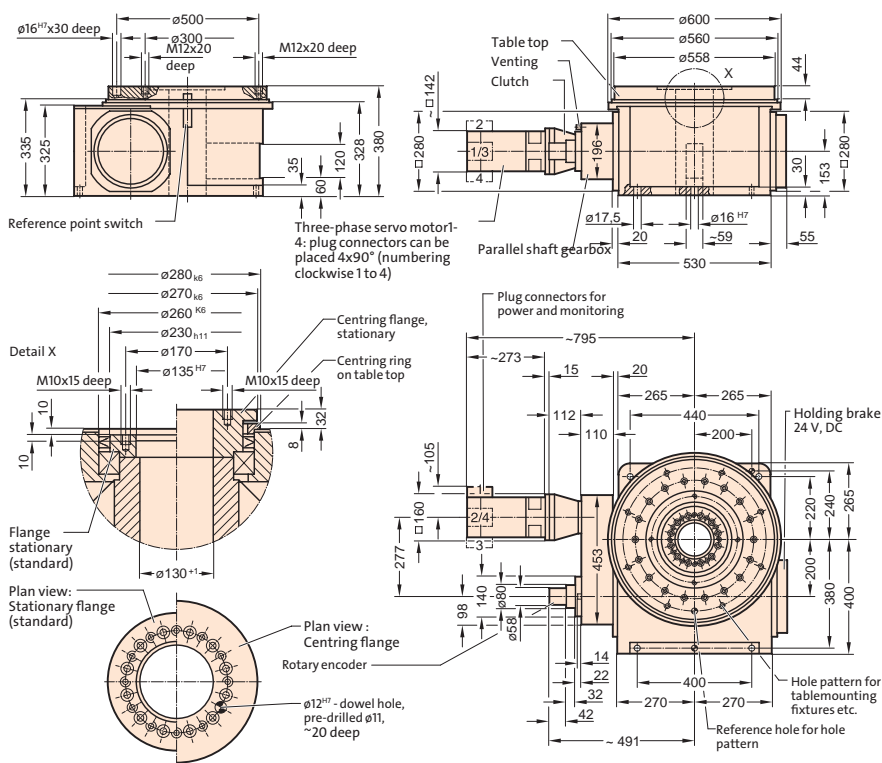
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FIBROTOR EM.NC.17.0558.7.111.00.0.0.3

Installed dimensions FIBROTOR® EM.NC.17

(Drive arrangement 111, for other drive arrangement, drawings or CAD-datas are available)



Technical data FIBROTOR® EM.NC.17 **Encoding** EM.NC.17 . [] . [] . [] . [] . [] . [] . []

Table top dimensions	Standard dimensions Strengthened table top bearing Table top lock Built-in version	Ø 558 mm Ø 480 mm Ø 548 mm Ø 558 mm	.0558 .0480 .0548 .0558	②
Drive motor	Standard brake motor AC servomotor Special version Without motor		.1 .7 .9 .0	③
Drive arrangement	See planning documents under www.fibrotor.de/downloads		.XXX	④
Division	NC - can be positioned arbitrarily		.00	⑤
Additional assemblies	Without additional modules		.0	⑥
	Strengthened table top bearing		.1	
	Hydraulic table top lock		.2	
	Built-in version Built-in version with mounting ring Vertical version Vertical version with base plate		.1 .2 .3 .4	⑦
Indexing accuracy in arc seconds	Centring ring Centring flange Centring ring and centring flange		.1 .2 .3	⑧
	Indirect measuring system Direct measuring system Measuring system at motor		± 30" ± 10" ± 50"	
	Indirect measuring system Direct measuring system Measuring system at motor		± 0,040 mm ± 0,014 mm ± 0,067 mm	
Axial runout of Table top	(relates to Ø 558 mm)		0,02 mm	
Concentricity of the centre hole	(relates to Ø 260 mm)		0,02 mm	
Plane parallelism of table top to base on the housing	(relates to Ø 558 mm)		0,04 mm	
Direction of rotation	CW - CCW rotation			
Reduction ratio worm /roller gearing			i = 12	

Technical data FIBROTOR® EM.NC.17

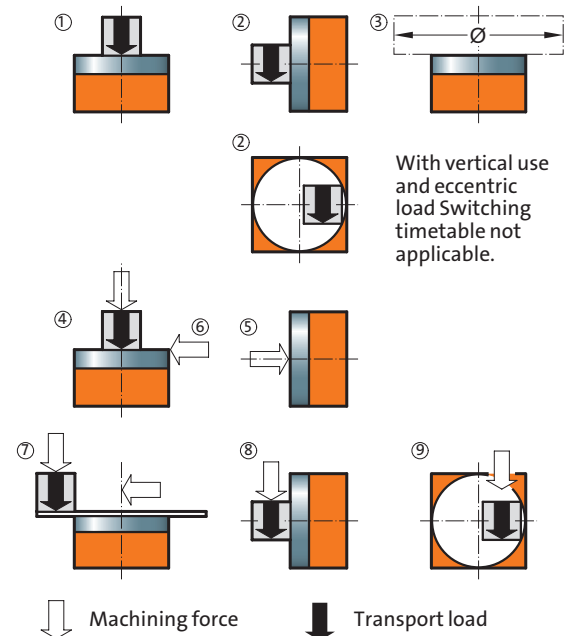
RPM at table top		$n_{max.} = 15'/min$
Centre hole	With lateral opening in the housing	Ø 130 mm
Working position	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)	
Weight		approx. 450 kg

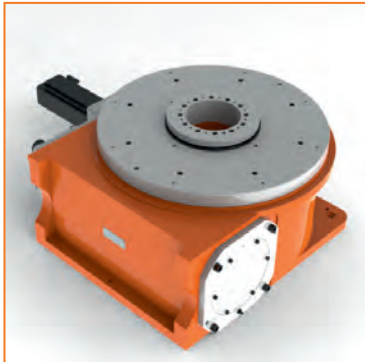
Indexing times FIBROTOR® EM.NC.17

Mass moment of inertia J in kgm ²	150	225	300	600	1000	1500
Max. perm. table top speed n'/min	16	14	12	10	9	8
Acceleration time t_a in s	0,3	0,3	0,4	0,4	0,5	0,6
Overall gear ratio reduction i	120,000	120,000	162,000	252,571	315,556	342,804
Motor speed n in n'/min	1920	1680	1944	2526	2840	2742
Motor torque required in Nm	22	22	18	18	14	12
Swivel time t_s in s for						
360°	4,15	4,69	5,50	6,50	7,27	8,20
180°	2,28	2,54	3,00	3,50	3,93	4,45
90°	1,34	1,47	1,75	2,00	2,27	2,58
60°	1,03	1,11	1,33	1,50	1,71	1,95
45°	0,87	0,94	1,13	1,25	1,43	1,64
30°	0,71	0,76	0,92	1,00	1,16	1,33
20°	0,61	0,64	0,78	0,83	0,97	1,12
10°	0,50	0,52	0,64	0,67	0,79	0,91
5°	0,45	0,46	0,57	0,58	0,69	0,80

Load data FIBROTOR® EM.NC.17

Perm. transport load	kg	5500	①
Horizontal table top	kg	1000	②
Vertical table top	kg	1000	
Table top, upside down	kg	1000	
Perm. add-on diameter	mm	2800	③
Perm. axial loading on the table top	N	70000	④
Horizontal	N	12000	⑤
Vertical	N	25000	⑥
Perm. radial loading on table top	N	25000	⑥
Perm. tilting moment on positioned table top	Nm	12000	⑦
Horizontal	Nm	36000	⑦
With strenghtened table top bearing	Nm	5000	⑧
Vertical	Nm	15000	⑦
With strenghtened table top bearing	Nm	3000	⑦
Upside-down	Nm	3000	
Perm. tilting moment on rotating table top	Nm	4000	⑦+⑧
With strenghtened table top bearing	Nm	12000	
Upside-down	Nm	1100	
Perm. tangential moment on positioned table top, from machining force and in vertical position additionally from eccentric transport load	Nm	700	⑨
With hydraulic table top lock	Nm	2500	⑨





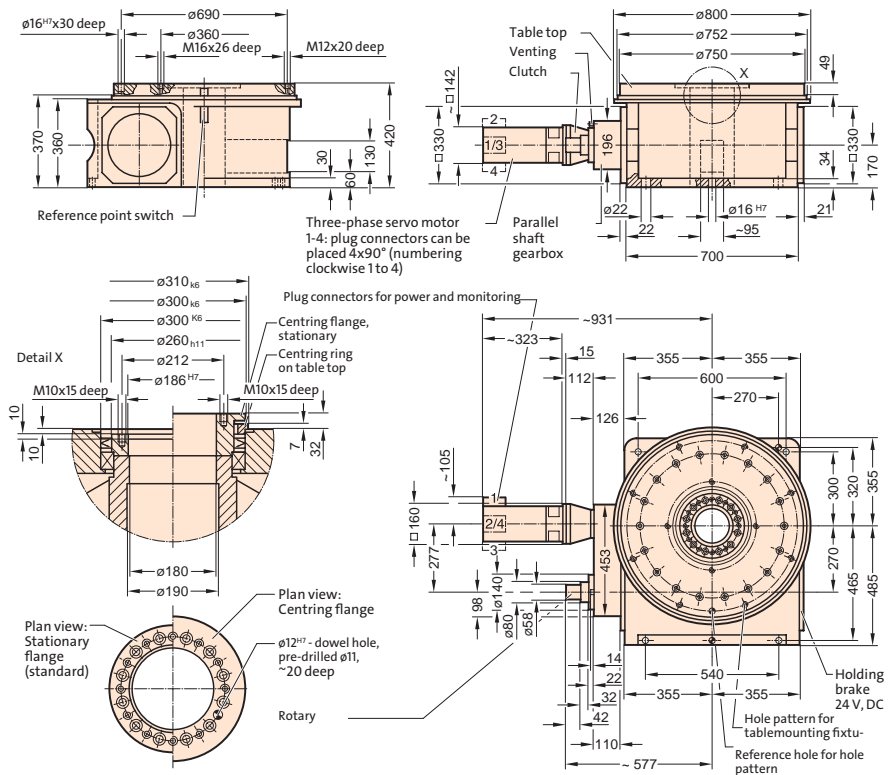
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FIBROTOR EM.NC.18.0750.7.111.00.0.0.3

Installed dimensions FIBROTOR® EM.NC.18

(Drive arrangement 111, for other drive arrangement, drawings or CAD-datas are available)



Technical data FIBROTOR® EM.NC.18 **Encoding** EM.NC.18 . [] [] [] [] [] [] [] []

Table top dimensions	Standard dimensions Strengthened table top bearing Table top lock Built-in version	Ø 750 mm Ø 660 mm Ø 735 mm Ø 750 mm	.0750 .0660 .0735 .0750	②
Drive motor	Standard brake motor AC servomotor Special version Without motor		.1 .7 .9 .0	③
Drive arrangement	See planning documents under www.fibrotor.de/downloads		.XXX	④
Division	NC - can be positioned arbitrarily		.00	⑤
Additional assemblies	Without additional modules		.0	⑥
	Strengthened table top bearing		.1	
	Hydraulic table top lock		.2	
	Built-in version		.1	
Additional assemblies	Built-in version with mounting ring		.2	⑦
	Vertical version		.3	
	Vertical version with base plate		.4	
	Centring ring		.1	
Additional assemblies	Centring flange		.2	⑧
	Centring ring and centring flange		.3	
Indexing accuracy in arc seconds	Indirect measuring system Direct measuring system Measuring system at motor	± 30" ± 10" ± 40"		
Indexing accuracy in arc length (on Ø 750 mm)	Indirect measuring system Direct measuring system Measuring system at motor	± 0,055 mm ± 0,018 mm ± 0,073 mm		
Axial runout of Table top	(relates to Ø 750 mm)	0,02 mm		
Concentricity of the centre hole	(relates to Ø 300 mm)	0,02 mm		
Plane parallelism of table top to base on the housing	(relates to Ø 750 mm)	0,04 mm		
Direction of rotation	CW - CCW rotation			
Reduction ratio worm /roller gearing		i = 12		

Technical data FIBROTOR® EM.NC.18

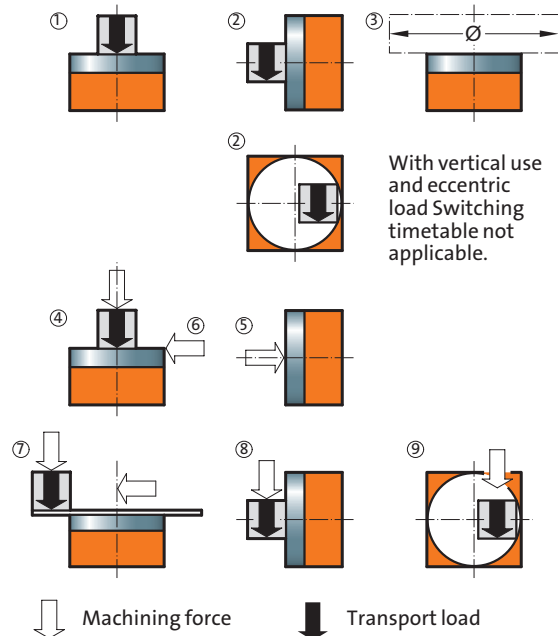
RPM at table top		$n_{max.} = 15'/min$
Centre hole	With lateral opening in the housing	Ø 180 mm
Working position	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)	
Weight		approx. 850 kg

Indexing times FIBROTOR® EM.NC.18

Mass moment of inertia J in kgm ²	200	300	500	800	1200	2000
Max. perm. table top speed ν' /min	16	14	12	10	9	8
Acceleration time t_a in s	0,3	0,3	0,4	0,4	0,5	0,6
Overall gear ratio reduction i	120,000	120,000	162,000	252,571	315,556	342,804
Motor speed n in ν' /min	1920	1680	1944	2526	2840	2742
Motor torque required in Nm	30	30	25	28	25	22
Swivel time t_s in s for						
360°	4,15	4,69	5,50	6,50	7,27	8,20
180°	2,28	2,54	3,00	3,50	3,93	4,45
90°	1,34	1,47	1,75	2,00	2,27	2,58
60°	1,03	1,11	1,33	1,50	1,71	1,95
45°	0,87	0,94	1,13	1,25	1,43	1,64
30°	0,71	0,76	0,92	1,00	1,16	1,33
20°	0,61	0,64	0,78	0,83	0,97	1,12
10°	0,50	0,52	0,64	0,67	0,79	0,91
5°	0,45	0,46	0,57	0,58	0,69	0,80

Load data FIBROTOR® EM.NC.18

Perm. transport load			
Horizontal table top	kg	6400	①
Vertical table top	kg	1200	②
Table top, upside down	kg	1200	
Perm. add-on diameter	mm	3500	③
Perm. axial loading on the table top			
Horizontal	N	100000	④
Vertical	N	16000	⑤
Perm. radial loading on table top	N	36000	⑥
Perm. tilting moment on positioned table top			
Horizontal	Nm	18000	⑦
With strenghtened table top bearing	Nm	54000	⑦
Vertical	Nm	7000	⑧
With strenghtened table top bearing	Nm	21000	⑦
Upside-down	Nm	4000	
Perm. tilting moment on rotating table top			
With strenghtened table top bearing	Nm	6000	⑦+⑧
Upside-down	Nm	18000	
Perm. tangential moment on positioned table top, from machining force and in vertical position additionally from eccentric transport load			
With hydraulic table top lock	Nm	800	⑨
	Nm	4000	⑨





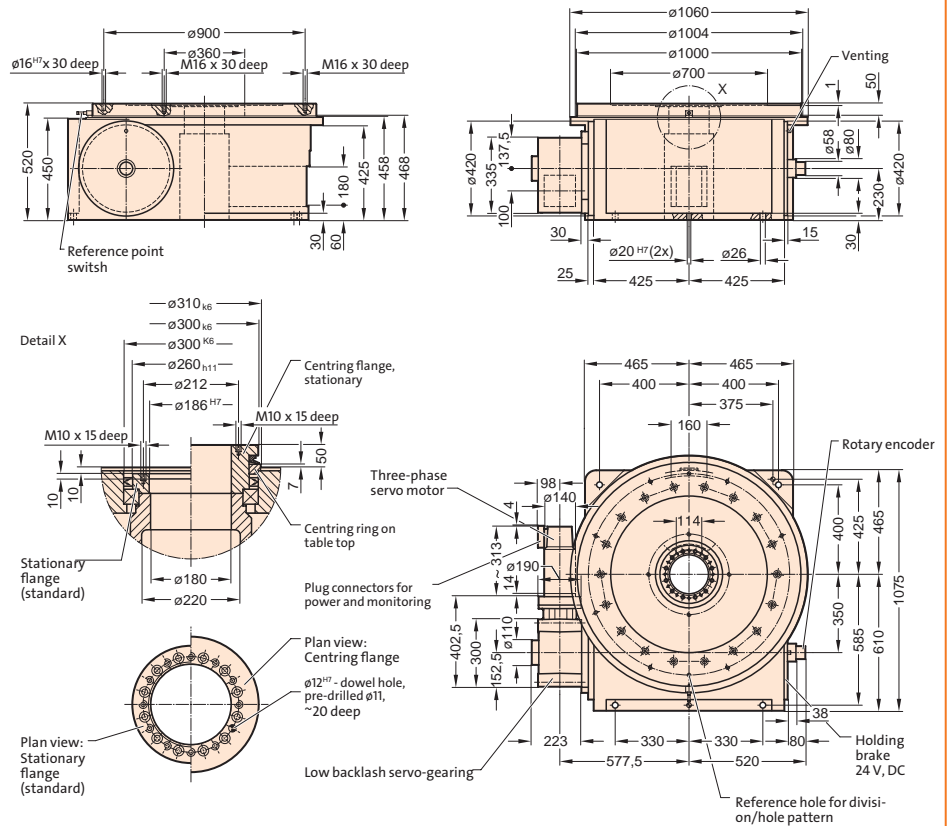
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FIBROTOR EM.NC.19.1000.7.152.00.0.0.3

Installed dimensions FIBROTOR® EM.NC.19

(Drive arrangement 152, for other drive arrangement, drawings or CAD-datas are available)



Technical data FIBROTOR® EM.NC.19

Encoding

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Table top dimensions	Standard dimensions Strengthened table top bearing Table top lock Built-in version	$\phi 1000 \text{ mm}$ $\phi 930 \text{ mm}$ $\phi 1000 \text{ mm}$ $\phi 1000 \text{ mm}$.1000 .0930 .1000 .1000	(2)
Drive motor	Standard brake motor AC servomotor Special version Without motor		.1 .7 .9 .0	(3)
Drive arrangement	See planning documents under www.fibrotor.de/downloads		.XXX	(4)
Division	NC - can be positioned arbitrarily		.00	(5)
Additional assemblies	Without additional modules Strengthened table top bearing Hydraulic table top lock Built-in version Built-in version with mounting ring vertical version vertical version with base plate Centring ring Centring flange Centring ring and centring flange		.0 .1 .2 .1 .2 .3 .4 .1 .2 .3	(6) (7) (8)
Indexing accuracy in arc seconds	Indirect measuring system Direct measuring system Measuring system at motor		$\pm 30''$ $\pm 10''$ $\pm 30''$	
Indexing accuracy in arc length (on $\phi 1000 \text{ mm}$)	Indirect measuring system Direct measuring system Measuring system at motor		$\pm 0,073 \text{ mm}$ $\pm 0,024 \text{ mm}$ $\pm 0,073 \text{ mm}$	
Axial runout of Table top	(relates to $\phi 1000 \text{ mm}$)		0,02 mm	
Concentricity of the centre hole	(relates to $\phi 300 \text{ mm}$)		0,02 mm	
Plane parallelism of table top to base on the housing	(relates to $\phi 1000 \text{ mm}$)		0,04 mm	
Direction of rotation	CW - CCW rotation			
Reduction ratio worm /roller gearing			$i = 18$	

Technical data FIBROTOR® EM.NC.19

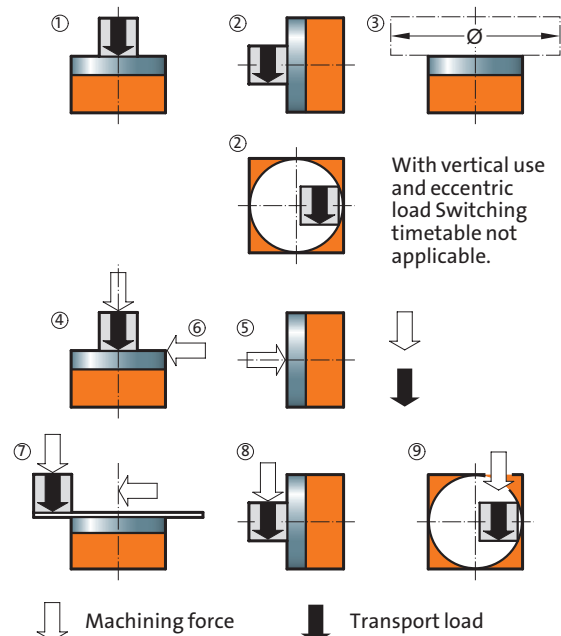
RPM at table top		$n_{max.} = 12^1/min$
Centre hole	With lateral opening in the housing	Ø 180 mm
Working position	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)	
Weight		approx. 1500 kg

Indexing times FIBROTOR® EM.NC.19

Mass moment of inertia J in kgm ²	300	600	1000	1600	2400
Max. perm. table top speed ¹ /min	12	10	8	6	4
Acceleration time t _a in s	0,2	0,3	0,4	0,5	0,6
Overall gear ratio reduction i	180	288	288	504	720
Motor speed n in ¹ /min	2160	2880	2304	3024	2880
Motor torque required in Nm	60	40	22	12	10
Swivel time t _s in s for					
360°	5,30	6,40	8,00	10,60	15,70
180°	2,80	3,40	4,25	5,60	8,20
90°	1,55	1,90	2,38	3,10	4,45
60°	1,13	1,40	1,75	2,27	3,20
45°	0,93	1,15	1,44	1,85	2,58
30°	0,72	0,90	1,13	1,43	1,95
20°	0,58	0,73	0,92	1,16	1,53
10°	0,44	0,57	0,71	0,88	1,12
5°	0,37	0,48	0,60	0,74	0,91
2°	0,33	0,43	0,54	0,66	0,78

Load data FIBROTOR® EM.NC.19

Perm. transport load			
Horizontal table top	kg	8000	①
Vertical table top	kg	1250	②
Table top, upside down	kg	1000	
Perm. add-on diameter	mm	4500	③
Perm. axial loading on the table top			
Horizontal	N	125000	④
Vertical	N	20000	⑤
Perm. radial loading on table top	N	50000	⑥
Perm. tilting moment on positioned table top			
Horizontal	Nm	24000	⑦
With strenghtened table top bearing	Nm	72000	⑦
Vertical	Nm	9000	⑧
With strenghtened table top bearing	Nm	24000	⑦
Upside-down	Nm	7000	
Perm. tilting moment on rotating table top			
With strenghtened table top bearing	Nm	8000	⑦+⑥
Upside-down	Nm	24000	
Perm. tangential moment on positioned table top, from machining force and in vertical position additionally from eccentric transport load			
With hydraulic table top lock	Nm	1000	⑨
	Nm	9000	⑨





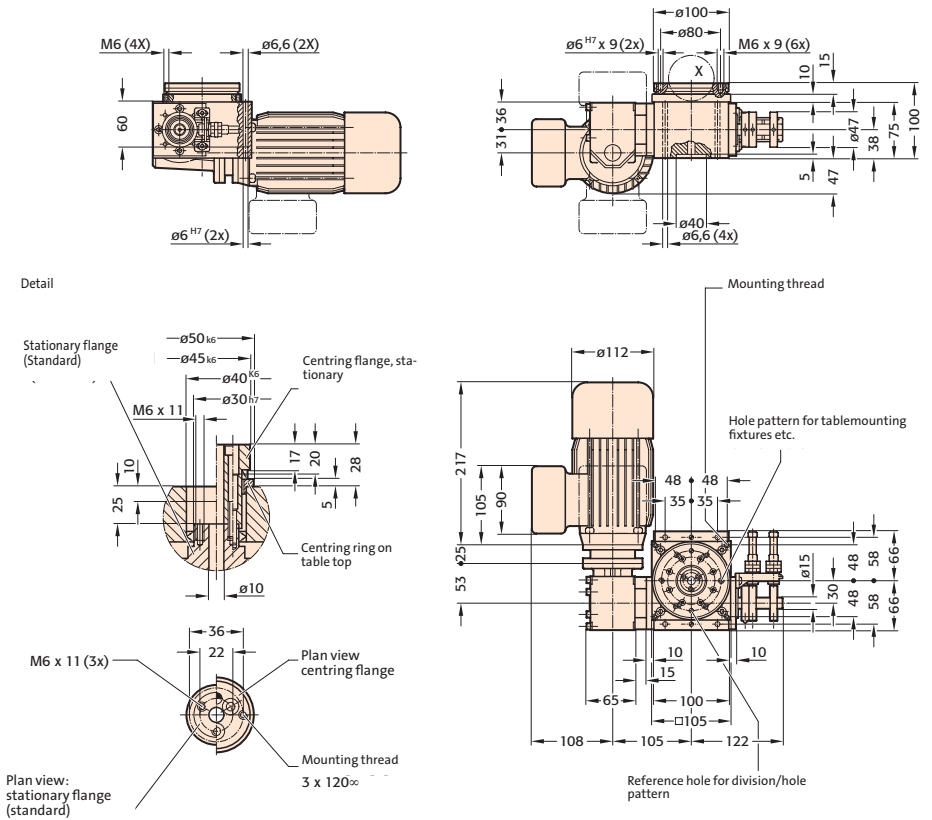
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Drive arrangement 152



FIBROTOR ER.10.0100.1.152.XX.0.0.3
Drive arrangement 152

Installed dimensions FIBROTOR® ER.10

(Drive arrangement 152, for other drive arrangements, drawings of CAD data are available)



Technical data FIBROTOR® ER.10		Encoding	
		ER.10	. 0 1 0 0 . 1 0 . . .
Table top dimensions	Standard dimensions	Ø 100 mm	.0100 ②
Drive motor	Standard braking motor		.1 ③
Drive arrangement	See planning documents under www.fibrotor.de/downloads		.XXX ④
Divisions 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24			.XX ⑤
Additional modules	Without additional modules		.0 ⑥
	Vertical version		.3 ⑦
	Vertical version with ground plate		.4 ⑦
	Centring ring Centring flange Centring ring and centring flange		.1 .2 .3 ⑧
Precisions	Division 2 – 12 Division 16 – 24	± 60" ± 70"	
In arc length (on Ø 100 mm)	Division 2 – 12 Division 16 – 24	± 0,015 mm ± 0,017 mm	
Axial runout		0,02 mm	
Concentricity of the centre hole		0,02 mm	
Plane parallelism		0,04 mm	
Direction of rotation	Any, limit switch set for cw rotation		
Indexing frequency		40 c/min	
Indexing-dwell angle	Division 2 Division 3 – 5 Division 6 – 12 Division 16 – 24	300° / 60° 300° / 60° 300° / 60° 135° / 45°	
Voltage	Motor and brake	400 - 460 VAC, 50/60 Hz	
Motor output	Depending on indexing time and mass moment of inertia	0,09 – 0,18 kW	
Centre hole		Ø 10 mm	
Working position	Any, standard: Horizontal table top, (please specify other mounting positions on ordering)		
Weight		approx. 12 kg	

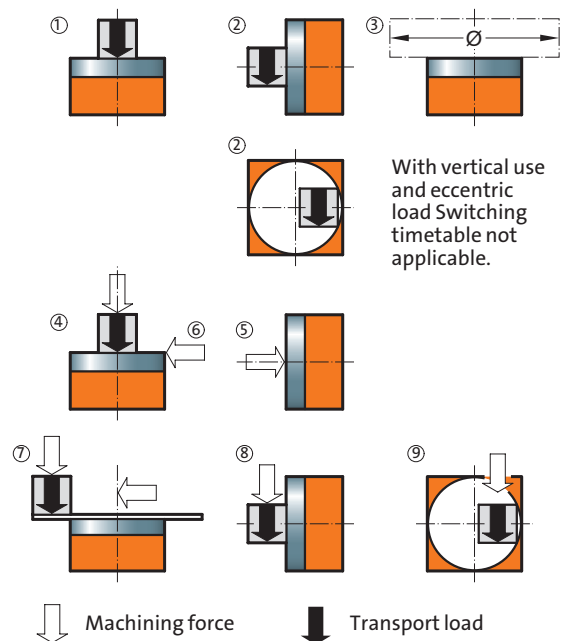
Indexing times FIBROTOR® ER.10

Divisions

2	t _i in s	2,41	2,01	1,81	1,53	1,20	1,00	0,80			
	J in kgm ²	5,22	3,62	2,93	2,09	1,30	0,90	0,58			
3	t _i in s	2,19	1,82	1,64	1,39	1,09	0,91	0,73	0,55		
	J in kgm ²	6,86	4,86	3,94	2,81	1,75	1,21	0,78	0,44		
4	t _i in s	2,19	1,82	1,64	1,39	1,09	0,91	0,73	0,55		
	J in kgm ²	9,47	6,72	5,56	3,96	2,47	1,71	1,10	0,62		
5	t _i in s	2,19	1,82	1,64	1,39	1,09	0,91	0,73	0,55		
	J in kgm ²	12,38	9,07	7,35	5,24	3,26	2,27	1,45	0,81		
6	t _i in s	2,19	1,82	1,64	1,39	1,09	0,91	0,73	0,55	0,44	
	J in kgm ²	15,54	11,03	9,23	6,58	4,14	2,91	1,86	1,05	0,66	
8	t _i in s	2,19	1,82	1,64	1,39	1,09	0,91	0,73	0,55	0,44	0,36
	J in kgm ²	21,20	14,72	12,19	8,69	5,59	3,92	2,54	1,43	0,89	0,62
10	t _i in s	2,19	1,82	1,64	1,39	1,09	0,91	0,73	0,55	0,44	0,36
	J in kgm ²	21,49	14,92	12,09	9,10	5,67	3,94	2,52	1,42	0,91	0,63
12	t _i in s	2,19	1,82	1,64	1,39	1,09	0,91	0,73	0,55	0,44	0,36
	J in kgm ²	23,64	16,82	13,95	10,64	6,85	4,75	3,04	1,71	1,09	0,76
16	t _i in s	0,99	0,82	0,74	0,62	0,49	0,41	0,33	0,25		
	J in kgm ²	7,08	5,03	4,21	3,17	1,98	1,37	0,88	0,49		
20	t _i in s	0,99	0,82	0,74	0,62	0,49	0,41	0,33	0,25		
	J in kgm ²	7,99	5,68	4,76	3,58	2,23	1,55	0,99	0,56		
24	t _i in s	0,99	0,82	0,74	0,62	0,49	0,41	0,33	0,25		
	J in kgm ²	9,86	7,01	5,87	4,42	2,75	1,91	1,22	0,69		

Load data FIBROTOR® ER.10

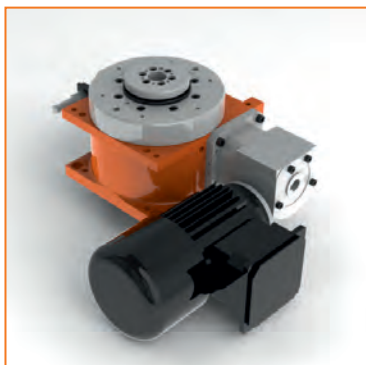
Perm. transport load				
Horizontal table top	kg	100	①+②	
Vertical table top	kg	50		
Table top, upside-down	kg	50		
Perm. add-on diameter				
Horizontal	mm	520	③	
Vertical	mm	520		
Upside-down	mm	520		
Perm. axial loading on the table top				
Horizontal	N	4000	④+⑤	
Vertical	N	1500		
Upside-down	N	1500		
Perm. radial loading on table top				
Horizontal	N	1000	⑥	
Vertical	N	1000		
Upside down	N	1000		
Perm. tilting moment on positioned table top				
Horizontal	Nm	350	⑦+⑧	
Vertical	Nm	200		
Upside-down	Nm	150		
Perm. tilting moment on rotating table top				
Horizontal	Nm	100	⑦+⑧	
Vertical	Nm	100		
Upside-down	Nm	50		
Perm. tangential moment on positioned table top				
Horizontal	Nm	25	⑨	
Vertical	Nm	25		
Upside-down	Nm	25		



CAD files, technical data and planning documentation can be downloaded from www.fibrotor.de



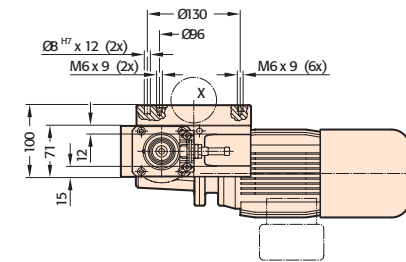
FIBROTOR ER.11.0160.1.152.XX.0.0.3
Drive arrangement 152



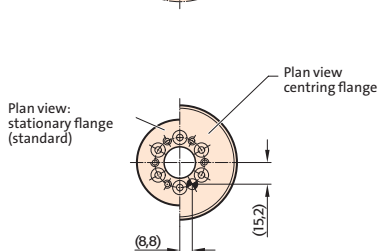
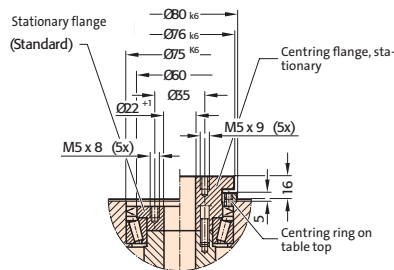
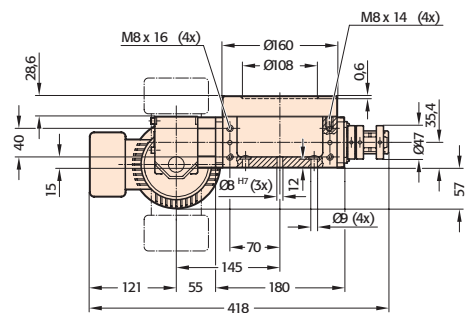
FIBROTOR ER.11.0160.1.152.XX.0.0.3
Drive arrangement 152

Installed dimensions FIBROTOR® ER.11

(Drive arrangement 152, for other drive arrangements, drawings of CAD data are available)



Detail



Technical data FIBROTOR® ER.11

Encoding

ER.11 . 0 1 6 0 . 1 0

Table top dimensions	Standard dimensions	Ø 160 mm	.0160	②
Drive motor	Standard braking motor		.1	③
Drive arrangement	See planning documents under www.fibrotor.de/downloads		.XXX	④
Divisions 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24			.XX	⑤
Additional modules	Without additional modules		.0	⑥
	Vertical version		.3	⑦
	Vertical version with ground plate		.4	⑦
	Centring ring Centring flange Centring ring and centring flange		.1 .2 .3	⑧
Precisions	Division 2 – 12 Division 16 – 24	± 40" ± 50"		
In arc length (on Ø 160 mm)	Division 2 – 12 Division 16 – 24	± 0,015 mm ± 0,019 mm		
Axial runout		0,015 mm		
Concentricity of the centre hole		0,015 mm		
Plane parallelism		0,03 mm		
Direction of rotation	Any, limit switch set for cw rotation			
Indexing frequency		40 c/min		
Indexing-dwell angle	Division 2 Division 3 – 5 Division 6 – 12 Division 16 – 24	330° / 30° 300° / 60° 270° / 90° 135° / 45°		
Voltage	Motor and brake	400 - 460 VAC, 50/60 Hz		
Motor output	Depending on indexing time and mass moment of inertia	0,09 – 0,18 kW		
Centre hole		Ø 22 mm		
Working position	Any, standard: Horizontal table top, (please specify other mounting positions on ordering)			
Weight		approx. 20 kg		

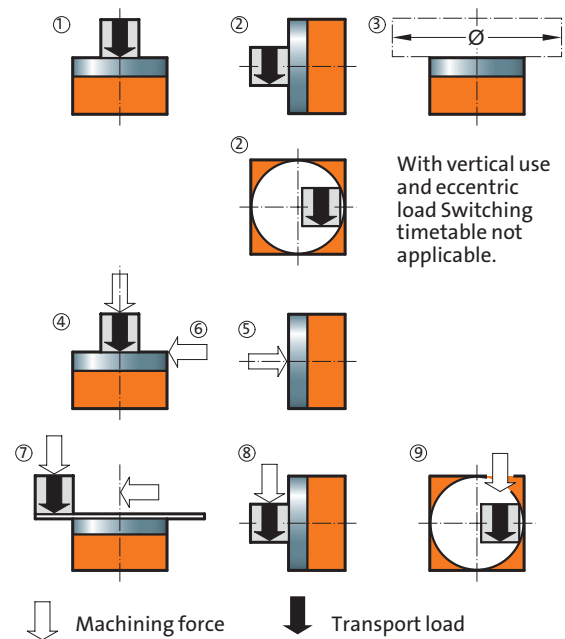
Indexing times FIBROTOR® ER.11

Division

2	t_s in s	3,06	2,32	1,83	1,47	1,10	0,92	0,71	0,59	0,47		
	J in kgm ²	20,38	11,77	7,33	4,69	2,63	1,82	1,08	0,75	0,47		
3	t_s in s	2,78	2,50	2,11	1,79	1,67	1,36	1,07	0,89	0,71	0,54	
	J in kgm ²	27,37	23,40	16,68	11,93	10,39	6,89	4,29	2,97	1,90	0,92	
4	t_s in s	2,78	2,50	2,11	1,79	1,67	1,36	1,07	0,89	0,71	0,54	
	J in kgm ²	39,03	33,37	23,79	17,38	15,14	10,03	6,25	4,33	2,77	1,55	
5	t_s in s	2,78	2,50	2,11	1,79	1,67	1,36	1,07	0,89	0,71	0,54	
	J in kgm ²	51,59	44,10	31,45	22,97	20,01	13,26	8,26	5,73	3,66	2,06	
6	t_s in s	2,50	2,25	1,90	1,61	1,50	1,22	0,96	0,80	0,64	0,48	0,39
	J in kgm ²	51,31	42,50	30,98	22,64	19,93	13,35	8,32	5,77	3,69	2,07	1,32
8	t_s in s	2,50	2,25	1,90	1,61	1,50	1,22	0,96	0,80	0,64	0,48	0,39
	J in kgm ²	69,99	57,98	42,26	30,89	27,19	18,22	11,35	7,88	5,04	2,83	1,80
10	t_s in s	2,50	2,25	1,90	1,61	1,50	1,22	0,96	0,80	0,64	0,48	0,39
	J in kgm ²	88,67	73,45	53,54	39,14	34,45	23,08	14,38	9,98	6,38	3,59	2,29
12	t_s in s	2,50	2,25	1,90	1,61	1,50	1,22	0,96	0,80	0,64	0,48	0,39
	J in kgm ²	90,69	75,13	54,76	40,03	35,24	23,61	14,71	10,21	6,53	3,67	2,34
16	t_s in s	1,25	1,13	0,95	0,80	0,75	0,61	0,48	0,40	0,32		
	J in kgm ²	30,53	25,29	18,43	13,47	11,86	7,94	4,94	3,43	2,19		
20	t_s in s	1,25	1,13	0,95	0,80	0,75	0,61	0,48	0,40	0,32		
	J in kgm ²	36,50	30,24	22,04	16,11	14,18	9,50	5,91	4,10	2,62		
24	t_s in s	1,25	1,13	0,95	0,80	0,75	0,61	0,48	0,40	0,32		
	J in kgm ²	45,06	37,33	27,20	19,88	17,50	11,72	7,30	5,07	3,24		

Load data FIBROTOR® ER.11

Perm. transport load				
Horizontal table top	kg	500	①+②	
Vertical table top	kg	200		
Table top, upside-down	kg	200		
Perm. add-on diameter				
Horizontal	mm	800	③	
Vertical	mm	800		
Upside-down	mm	800		
Perm. axial loading on the table top				
Horizontal	N	8000	④+⑤	
Vertical	N	3500		
Upside-down	N	3500		
Perm. radial loading on table top				
Horizontal	N	3500	⑥	
Vertical	N	3500		
Upside down	N	3500		
Perm. tilting moment on positioned table top				
Horizontal	Nm	750	⑦+⑧	
Vertical	Nm	450		
Upside-down	Nm	250		
Perm. tilting moment on rotating table top				
Horizontal	Nm	200	⑦+⑧	
Vertical	Nm	200		
Upside-down	Nm	100		
Perm. tangential moment on positioned table top				
Horizontal	Nm	300	⑨	
Vertical	Nm	300		
Upside-down	Nm	300		



CAD files, technical data and planning documentation can be downloaded from www.fibrotor.de

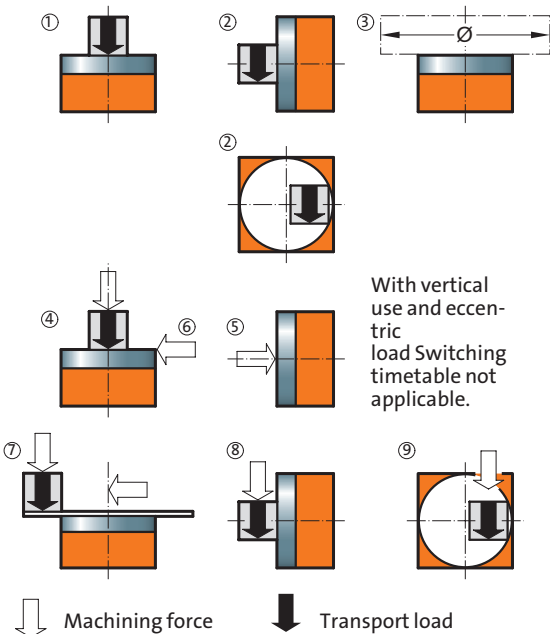
Indexing times FIBROTOR® ER.12

Divisions

2	t _i in s	3,06	2,44	1,83	1,57	1,18	0,98						
	J in kgm ²	44,01	28,77	16,51	12,37	6,93	4,79						
3	t _i in s	2,78	2,22	1,67	1,43	1,07	0,89	0,71	0,54				
	J in kgm ²	59,13	39,50	22,43	16,63	9,32	6,45	4,19	2,33				
4	t _i in s	2,78	2,22	1,67	1,43	1,07	0,89	0,71	0,54				
	J in kgm ²	84,34	56,35	32,00	23,74	13,32	9,23	6,01	3,35				
5	t _i in s	2,78	2,22	1,67	1,43	1,07	0,89	0,71	0,54				
	J in kgm ²	129	86,33	49,05	36,39	20,44	14,17	9,24	5,16				
6	t _i in s	2,50	2,00	1,50	1,29	0,96	0,80	0,64	0,48	0,39			
	J in kgm ²	128	84,07	48,31	36,25	20,58	14,42	9,20	5,15	3,27			
8	t _i in s	2,50	2,00	1,50	1,29	0,96	0,80	0,64	0,48	0,39			
	J in kgm ²	175	114	65,93	49,47	28,09	19,69	12,58	7,04	4,48			
10	t _i in s	2,50	2,00	1,50	1,29	0,96	0,80	0,64	0,48	0,39			
	J in kgm ²	222,08	145	83,54	62,69	35,61	24,97	15,95	8,94	5,70			
12	t _i in s	2,50	2,00	1,50	1,29	0,96	0,80	0,64	0,48	0,39			
	J in kgm ²	268	175	100	75,71	43,01	30,16	19,28	10,81	6,90			
16	t _i in s	1,25	1,00	0,75	0,64	0,48	0,40	0,32	0,24	0,19	0,63	0,50	0,38
	J in kgm ²	73,83	48,34	28,10	21,77	12,61	8,73	5,56	3,10	1,96	21,23	13,56	7,60
20	t _i in s	1,25	1,00	0,75	0,64	0,48	0,40	0,32	0,24	0,19	0,64	0,48	0,40
	J in kgm ²	104	68,25	39,69	30,76	17,82	12,35	7,88	4,40	2,79	31,74	17,82	12,35
24	t _i in s	1,25	1,00	0,75	0,64	0,48	0,40	0,32	0,24	0,19	0,63	0,50	0,38
	J in kgm ²	128	84,26	49,00	37,99	22,01	15,27	9,74	5,45	3,46	37,04	23,68	13,29

Load data FIBROTOR® ER.12

Perm. transport load				
Horizontal table top	kg	800	①+②	
Vertical table top	kg	300		
Table top, upside-down	kg	300		
Perm. add-on diameter				
Horizontal	mm	1000	③	
Vertical	mm	1000		
Upside-down	mm	1000		
Perm. axial loading on the table top				
Horizontal	N	12000	④+⑤	
Vertical	N	5000		
Upside-down	N	5000		
Perm. radial loading on table top				
Horizontal	N	8000	⑥	
Vertical	N	8000		
Upside down	N	8000		
Perm. tilting moment on positioned table top				
Horizontal	Nm	2000	⑦+⑧	
Vertical	Nm	1500		
Upside-down	Nm	600		
Perm. tilting moment on rotating table top				
Horizontal	Nm	600	⑦+⑧	
Vertical	Nm	600		
Upside-down	Nm	300		
Perm. tangential moment on positioned table top				
Horizontal	Nm	400	⑨	
Vertical	Nm	400		
Upside-down	Nm	400		



CAD files, technical data and planning documentation can be downloaded from www.fibrotor.de



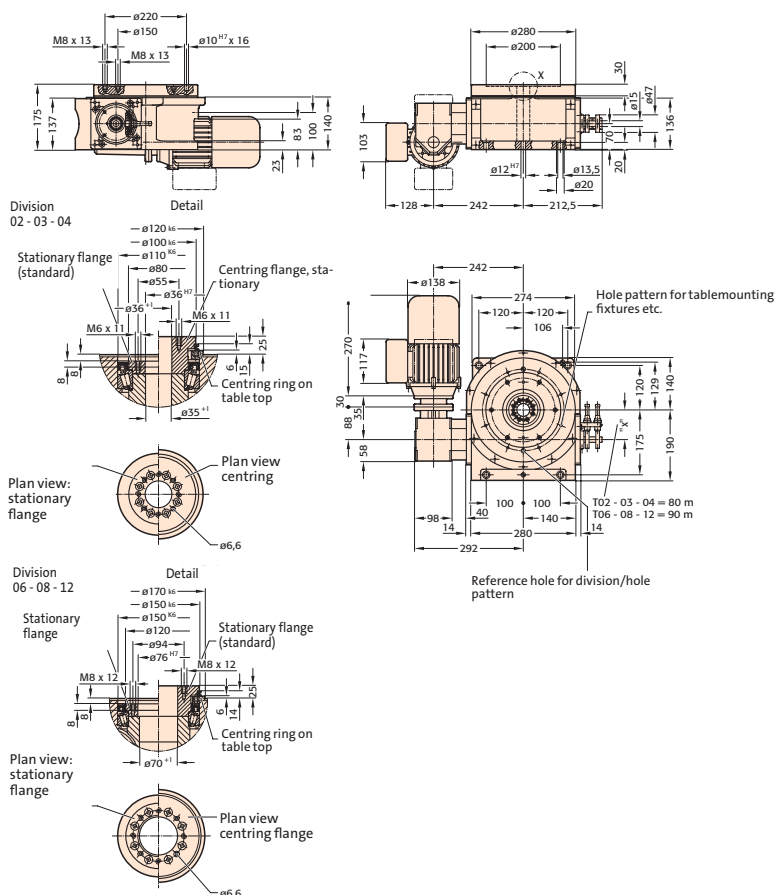
FIBROTOR ER.13.0280.1.152.XX.0.0.3
Drive arrangement 152



FIBROTOR ER.13.0280.1.152.XX.0.0.3
Drive arrangement 152

Installed dimensions FIBROTOR® ER.13

(Drive arrangement 152, for other drive arrangements, drawings of CAD data are available)



Technical data FIBROTOR® ER.13

Encoding

ER.13 . 0 2 8 0 . 1 0

Table top dimensions	Standard dimensions	$\phi 280$ mm	.0280	②
Drive motor	Standard braking motor		.1	③
Drive arrangement	See planning documents under www.fibrotor.de/downloads		.XXX	④
Divisions 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24			.XX	⑤
Additional modules	Without additional modules		.0	⑥
	Vertical version		.3	⑦
	Vertical version with ground plate		.4	⑦
	Centring ring Centring flange Centring ring and centring flange		.1 .2 .3	⑧
Precisions	Division 2 – 12 Division 16 – 24	$\pm 30''$ $\pm 35''$		
In arc length (on $\phi 280$ mm)	Division 2 – 12 Division 16 – 24	$\pm 0,020$ mm $\pm 0,024$ mm		
Axial runout		0,02 mm		
Concentricity of the centre hole		0,02 mm		
Plane parallelism		0,04 mm		
Direction of rotation	Any, limit switch set for cw rotation			
Indexing frequency		40 c/min		
Indexing-dwell angle	Division 2 Division 3 – 5 Division 6 – 12 Division 16 – 24	330° / 30° 300° / 60° 270° / 90° 135° / 45°		
Voltage	Motor and brake	400 - 460 VAC, 50/60 Hz		
Motor output	Depending on indexing time and mass moment of inertia	0,25 – 0,55 kW		
Centre hole	Division 2 – 5 Division 6 – 12	$\phi 35$ mm $\phi 70$ mm		
Working position	Any, standard: Horizontal table top, (please specify other mounting positions on ordering)			
Weight		approx. 70 kg		

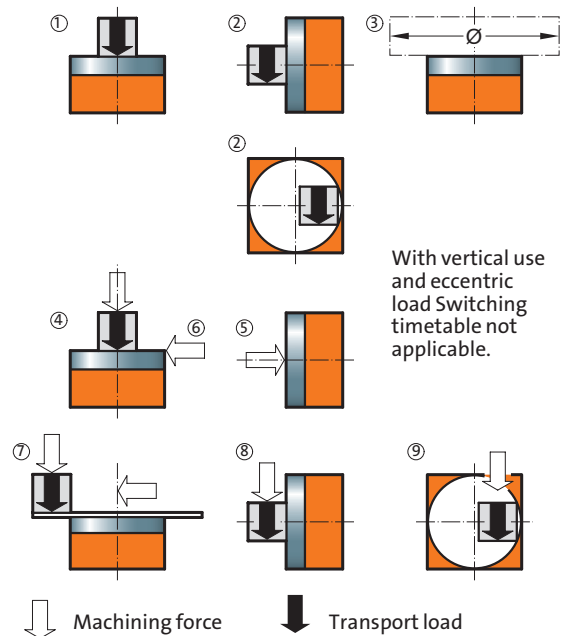
Indexing times FIBROTOR® ER.13

Divisions

2	t _s in s	3,36	2,81	2,14	1,81	1,38	1,06	0,90				
	J in kgm ²	75,73	54,10	33,28	23,21	13,36	7,87	5,65				
3	t _s in s	3,06	2,56	1,94	1,64	1,50	1,25	0,96	0,82			
	J in kgm ²	101	74,30	44,31	31,24	26,01	18,00	10,63	7,66			
4	t _s in s	3,06	2,56	1,94	1,64	1,50	1,25	0,96	0,82	0,68	0,48	
	J in kgm ²	145	103	61,30	44,63	37,17	25,75	15,25	11,01	7,45	3,66	
5	t _s in s	3,06	2,56	1,94	1,64	1,50	1,25	0,96	0,82	0,68	0,48	
	J in kgm ²	191	137	81,07	59,05	49,19	34,10	20,21	14,61	9,91	4,90	
6	t _s in s	2,75	2,30	1,75	1,48	1,35	1,13	0,87	0,74	0,61	0,43	0,39
	J in kgm ²	286	204	120	88,12	73,42	50,93	30,23	21,88	14,87	7,41	5,94
8	t _s in s	2,75	2,30	1,75	1,48	1,35	1,13	0,87	0,74	0,61	0,43	0,39
	J in kgm ²	373	267	159	115	100	69,54	41,30	29,92	20,35	10,18	8,00
10	t _s in s	2,75	2,30	1,75	1,48	1,35	1,13	0,87	0,74	0,61	0,43	0,39
	J in kgm ²	472	338	202	146	127	88,15	52,38	37,95	25,84	12,94	10,19
12	t _s in s	2,75	2,30	1,75	1,48	1,35	1,13	0,87	0,74	0,61	0,43	0,39
	J in kgm ²	570	408	244	176	153	106	63,29	45,87	31,24	15,67	12,34
16	t _s in s	1,38	1,15	0,88	0,74	0,68	0,56	0,43	0,37	0,31		
	J in kgm ²	160	115	68,82	51,81	44,53	30,86	18,28	13,21	8,95		
20	t _s in s	1,38	1,15	0,88	0,74	0,68	0,56	0,43	0,37	0,31		
	J in kgm ²	227	162	97,23	73,21	62,93	43,64	25,89	18,73	12,72		
24	t _s in s	1,38	1,15	0,88	0,74	0,68	0,56	0,43	0,37	0,31		
	J in kgm ²	280	200	120	90,42	77,73	53,92	32,00	23,17	15,75		

Load data FIBROTOR® ER.13

Perm. transport load	kg	1500	①+②
Horizontal table top	kg	400	
Vertical table top	kg	400	
Table top, upside-down	kg	400	
Perm. add-on diameter	mm	1400	③
Horizontal	mm	1400	
Vertical	mm	1400	
Upside-down	mm	1400	
Perm. axial loading on the table top	N	16000	④+⑤
Horizontal	N	6000	
Vertical	N	6000	
Upside-down	N	6000	
Perm. radial loading on table top	N	10000	⑥
Horizontal	N	10000	
Vertical	N	10000	
Upside down	N	10000	
Perm. tilting moment on positioned table top	Nm	3000	⑦+⑧
Horizontal	Nm	1500	
Vertical	Nm	800	
Upside-down	Nm	800	
Perm. tilting moment on rotating table top	Nm	1000	⑦+⑧
Horizontal	Nm	800	
Vertical	Nm	400	
Upside-down	Nm	400	
Perm. tangential moment on positioned table top	Nm	600	⑨
Horizontal	Nm	600	
Vertical	Nm	600	
Upside-down	Nm	600	



CAD files, technical data and planning documentation can be downloaded from www.fibrotor.de



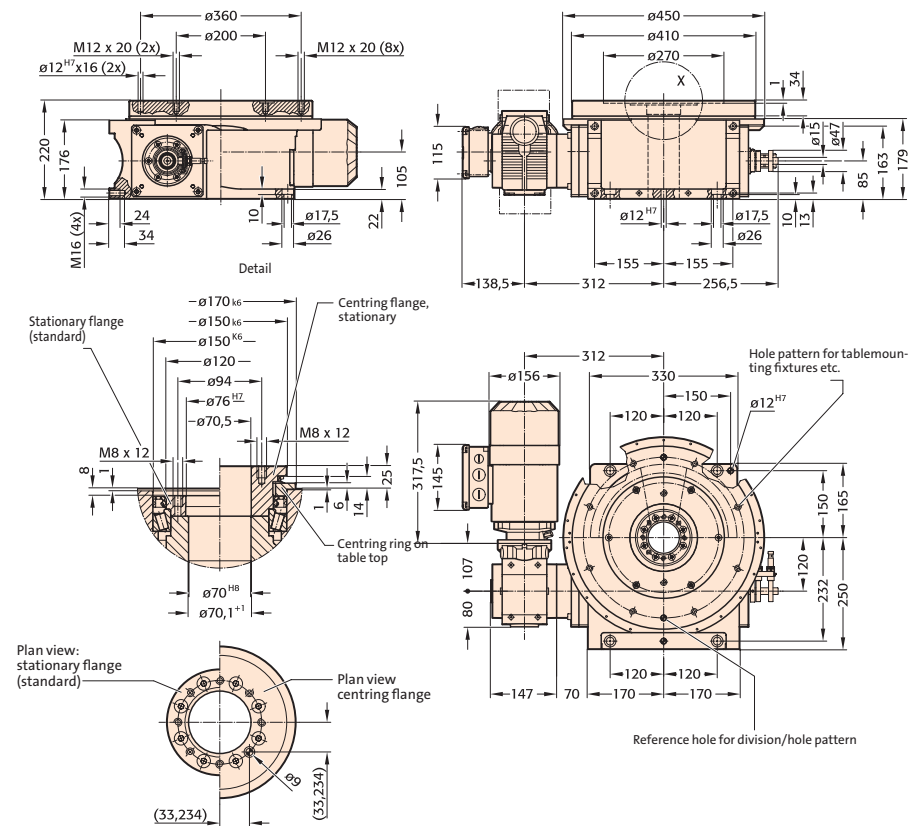
FIBROTOR ER.15.0410.1.142.XX.0.0.3
Drive arrangement 142



FIBROTOR ER.15.0410.1.142.XX.0.0.3
Drive arrangement 142

Installed dimensions FIBROTOR® ER.15

(Drive arrangement 152, for other drive arrangements, drawings of CAD data are available)



Technical data FIBROTOR® ER.15

Encoding

ER.15 . 0 4 1 0 . 1 0

Table top dimensions	Standard dimensions	Ø 410 mm	.0410	
Drive motor	Standard braking motor		.1	
Drive arrangement	See planning documents under www.fibrotor.de/downloads		.XXX	
Divisions 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24			.XX	
Additional modules	Without additional modules		.0	
	Vertical version		.3	⑦
	Vertical version with ground plate		.4	
	Centring ring		.1	
	Centring flange		.2	
	Centring ring and centring flange		.3	⑧
Precisions	Division 2 – 12	± 20"		
	Division 16 – 24	± 25"		
In arc length (on Ø 410 mm)	Division 2 – 12	± 0,020 mm		
	Division 16 – 24	± 0,025 mm		
Axial runout		0,03 mm		
Concentricity of the centre hole		0,03 mm		
Plane parallelism		0,06 mm		
Direction of rotation	Any, limit switch set for cw rotation			
Indexing frequency		40 c/min		
Indexing-dwell angle	Division 2	330° / 30°		
	Division 3 – 5	300° / 60°		
	Division 6 – 12	270° / 90°		
	Division 16 – 24	135° / 45°		
Voltage	Motor and brake	400 - 460 V 3 AC, 50/60 Hz		
Motor output	Depending on indexing time and mass moment of inertia	0,25 – 1,5 kW		
Centre hole		Ø 70 mm		
Working position	Any, standard: Horizontal table top, (please specify other mounting positions on ordering)			
Weight		approx. 150 kg		

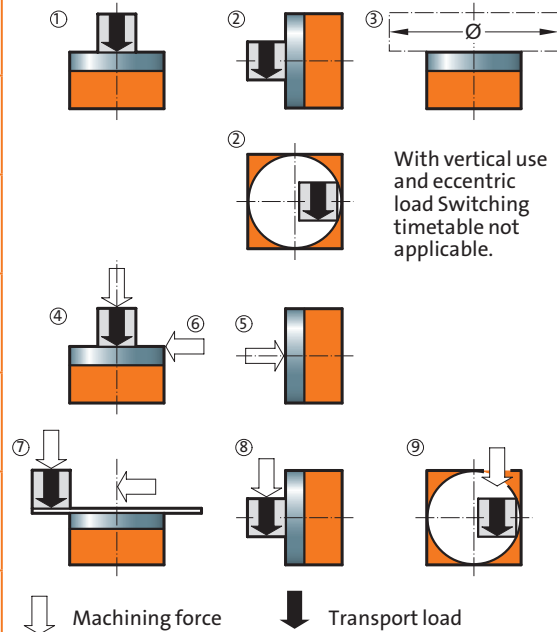
Indexing times FIBROTOR® ER.15

Divisions

2	t _s in s	5,13	4,38	3,90	3,35	2,82	2,51	2,22	2,14	1,86	1,49	1,27	1,13				
	J in kgm ²	680	496	392	304	215	170	134	124	93,34	59,71	42,82	31,36				
3	t _s in s	4,67	3,99	3,54	3,04	2,60	2,31	2,05	1,98	1,68	1,36	1,15	1,03	0,88			
	J in kgm ²	914	703	556	409	308	243	191	178	127	83,11	59,71	47,40	32,87			
4	t _s in s	4,67	3,99	3,54	3,09	2,64	2,35	2,05	1,98	1,71	1,37	1,16	1,04	0,88			
	J in kgm ²	1303	1003	793	602	453	357	273	254	190	120	86,80	68,99	49,34			
5	t _s in s	4,67	3,99	3,54	3,09	2,64	2,35	2,08	2,01	1,71	1,39	1,16	1,04	0,88			
	J in kgm ²	1723	1327	1049	796	598	473	372	346	252	164	115	91,49	66,48			
6	t _s in s	4,20	3,19	2,78	2,34	2,08	1,85	1,78	1,52	1,23	1,04	0,93	0,79	0,74	0,65	0,62	0,56
	J in kgm ²	2294	1488	1192	871	688	542	504	367	239	172	135	98,62	81,04	53,78	49,60	36,55
8	t _s in s	4,20	3,19	2,78	2,37	2,11	1,87	1,81	1,54	1,25	1,04	0,93	0,80	0,74	0,65	0,63	0,56
	J in kgm ²	2347	1918	1541	1186	967	761	708	516	336	235	187	136	118	90,53	84,77	67,76
10	t _s in s	4,20	3,19	2,74	2,37	2,11	1,87	1,81	1,57	1,25	1,06	0,93	0,80	0,75	0,65	0,63	0,56
	J in kgm ²	3965	2573	2002	1551	1226	965	897	674	427	307	238	173	152	116	107	86,10
12	t _s in s	4,22	3,21	2,91	2,48	2,21	1,96	1,78	1,54	1,25	1,07	0,96	0,82	0,76	0,66	0,64	0,57
	J in kgm ²	3288	2134	1850	1392	1100	866	714	536	350	259	207	150	128	98,29	90,73	73,59
16	t _s in s	2,11	1,60	1,37	1,19	1,06	0,94	0,90	0,78	0,62	0,52	0,47	0,40	0,37			
	J in kgm ²	1466	885	688	533	421	331	308	231	146	102	81,42	59,13	51,75			
20	t _s in s	2,11	1,60	1,37	1,19	1,06	0,94	0,90	0,78	0,62	0,53	0,47	0,40	0,37			
	J in kgm ²	2070	1264	972	753	595	468	435	327	207	149	115	83,88	73,46			
24	t _s in s	2,11	1,60	1,37	1,17	1,04	0,92	0,89	0,77	0,62	0,54	0,48	0,40	0,38			
	J in kgm ²	1735	1059	815	613	484	381	354	266	173	128	102	72,25	63,25			

Load data FIBROTOR® ER.15

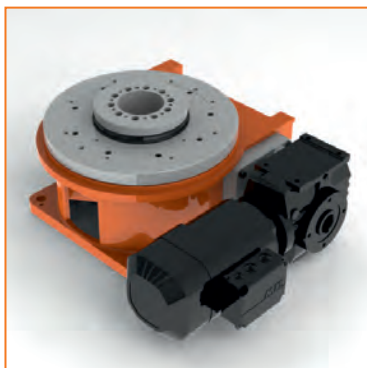
Perm. transport load				
Horizontal table top	kg	2500	①+②	
Vertical table top	kg	600		
Table top, upside-down	kg	600		
Perm. add-on diameter				
Horizontal	mm	2000	③	
Vertical	mm	2000		
Upside-down	mm	2000		
Perm. axial loading on the table top				
Horizontal	N	25000	④+⑤	
Vertical	N	9000		
Upside-down	N	9000		
Perm. radial loading on table top				
Horizontal	N	15000	⑥	
Vertical	N	15000		
Upside down	N	15000		
Perm. tilting moment on positioned table top				
Horizontal	Nm	6000	⑦+⑧	
Vertical	Nm	3000		
Upside-down	Nm	1500		
Perm. tilting moment on rotating table top				
Horizontal	Nm	2000	⑦+⑧	
Vertical	Nm	2000		
Upside-down	Nm	700		
Perm. tangential moment on positioned table top				
Horizontal	Nm	1200	⑨	
Vertical	Nm	1200		
Upside-down	Nm	1200		



CAD files, technical data and planning documentation can be downloaded from www.fibrotor.de



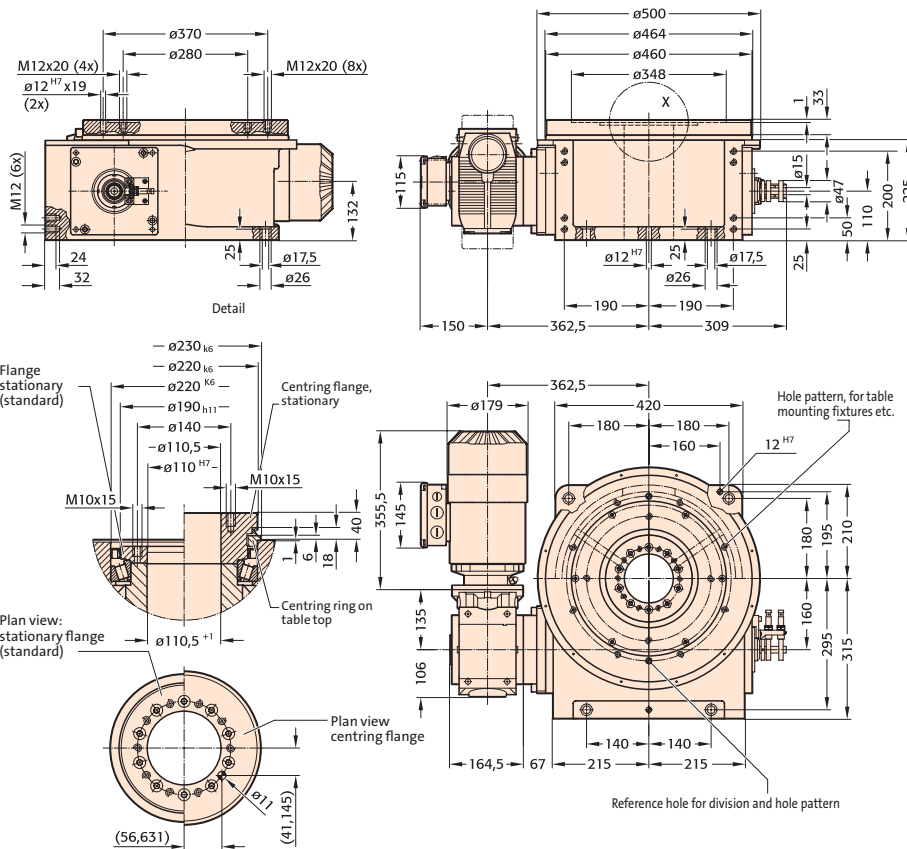
FIBROTOR ER.16.0460.1.142.XX.0.0.3
Drive arrangement 142



FIBROTOR ER.16.0460.1.142.XX.0.0.3
Drive arrangement 142

Installed dimensions FIBROTOR® ER.16

(Drive arrangement 152, for other drive arrangements, drawings of CAD data are available)



Technical data FIBROTOR® ER.16

Encoding

ER.16 . 0 4 6 0 . 1 0

Table top dimensions	Standard dimensions	Ø 460 mm	.0460	②
Drive motor	Standard braking motor		.1	③
Drive arrangement	See planning documents under www.fibrotor.de/downloads		.XXX	④
Divisions 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24			.XX	⑤
Additional modules	Without additional modules		.0	⑥
	Vertical version		.3	⑦
	Vertical version with ground plate		.4	⑦
	Centring ring Centring flange Centring ring and centring flange		.1 .2 .3	⑧
Precisions	Division 2 – 12 Division 16 – 24	± 20" ± 25"		
In arc length (on Ø 460 mm)	Division 2 – 12 Division 16 – 24	± 0,022 mm ± 0,028 mm		
Axial runout		0,03 mm		
Concentricity of the centre hole		0,03 mm		
Plane parallelism		0,06 mm		
Direction of rotation	Any, limit switch set for cw rotation			
Indexing frequency		40 c/min		
Indexing-dwell angle	Division 2 Division 3 – 5 Division 6 – 12 Division 16 – 24	330° / 30° 300° / 60° 270° / 90° 135° / 45°		
Voltage	Motor and brake	400 - 460 VAC, 50/60 Hz		
Motor output	Depending on indexing time and mass moment of inertia	0,37 – 3,0 kW		
Centre hole		Ø 110 mm		
Working position	Any, standard: Horizontal table top, (please specify other mounting positions on ordering)			
Weight		approx. 220 kg		

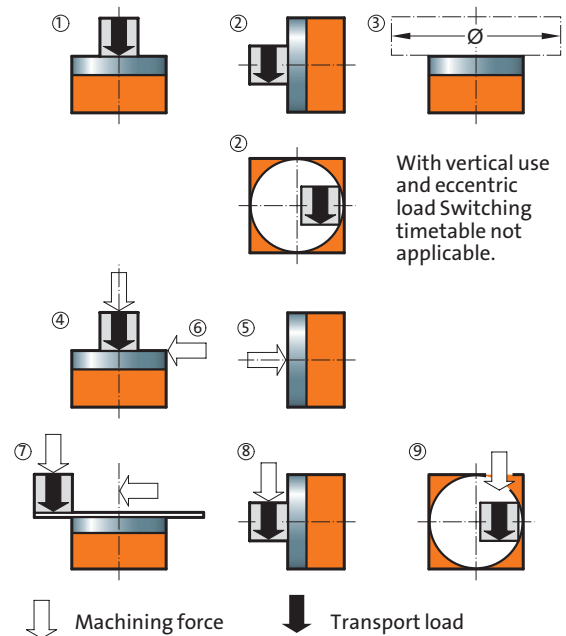
Indexing times FIBROTOR® ER.16

Division

2	t _s in s	5,25	4,77	3,81	3,37	3,04	2,43	2,13	1,81	1,63	1,44	1,36	1,16	1,06			
	J in kgm ²	1408	1162	742	613	499	318	245	176	143	110,1	98	71,7	58,9			
3	t _s in s	4,77	4,33	3,46	3,07	2,79	2,23	1,95	1,65	1,49	1,31	1,23	1,05	0,95			
	J in kgm ²	1891	1648	1053	824	702	448	344	244	198	153	136	98	81			
4	t _s in s	4,77	4,33	3,46	3,11	2,83	2,23	1,95	1,66	1,49	1,31	1,23	1,05	0,95			
	J in kgm ²	2997	2475	1581	1274	1052	652	502	361	289	224	199	144	118,7			
5	t _s in s	4,77	4,33	3,46	3,11	2,83	2,26	1,98	1,66	1,50	1,32	1,23	1,05	0,95			
	J in kgm ²	3565	3107	1985	1600	1363	870	669	467	381	294	259	187	154			
6	t _s in s	4,29	3,90	3,12	2,80	2,54	2,03	1,78	1,49	1,35	1,18	1,12	0,95	0,86	0,78	0,65	0,55
	J in kgm ²	3223	2828	1913	1627	1386	885	681	476	387	299	267	190	157	129	89,1	63,6
8	t _s in s	4,29	3,90	3,12	2,84	2,58	2,06	1,78	1,51	1,37	1,18	1,12	0,95	0,87	0,78	0,65	0,55
	J in kgm ²	3297	3177	2465	2165	1888	1244	929	668	544	409	364	264	218	176	122,1	87,4
10	t _s in s	4,29	3,90	3,12	2,84	2,58	2,06	1,81	1,51	1,37	1,20	1,13	0,95	0,87	0,79	0,65	0,55
	J in kgm ²	5571	4888	3307	2896	2467	1576	1213	847	690	534	476	335	276	227	155	111,1
12	t _s in s	4,29	3,90	3,12	2,84	2,58	2,06	1,81	1,54	1,39	1,20	1,13	0,97	0,87	0,79	0,65	0,56
	J in kgm ²	6727	5902	3993	3497	2979	1903	1464	1053	858	645	575	416	334	275	190	136
16	t _s in s	2,15	1,95	1,56	1,42	1,29	1,03	0,90	0,76	0,68	0,60	0,56	0,48	0,43			
	J in kgm ²	2037	1722	1138	996	849	542	417	291	237	183	158	114,2	94			
20	t _s in s	2,15	1,95	1,56	1,42	1,29	1,03	0,90	0,77	0,68	0,60	0,57	0,48	0,43			
	J in kgm ²	2876	2431	1606	1407	1198	765	589	423	335	259	230	162	133			
24	t _s in s	2,15	1,95	1,56	1,42	1,29	1,03	0,90	0,77	0,69	0,60	0,57	0,48	0,43			
	J in kgm ²	3551	3001	1983	1737	1480	945	727	523	426	320	285	206	165			

Load data FIBROTOR® ER.16

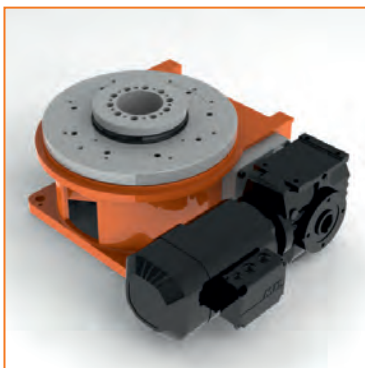
Perm. transport load				
Horizontal table top	kg	4000	①+②	
Vertical table top	kg	800		
Table top, upside-down	kg	800		
Perm. add-on diameter				
Horizontal	mm	2400	③	
Vertical	mm	2400		
Upside-down	mm	2400		
Perm. axial loading on the table top				
Horizontal	N	32000	④+⑤	
Vertical	N	11000		
Upside-down	N	11000		
Perm. radial loading on table top				
Horizontal	N	20000	⑥	
Vertical	N	20000		
Upside down	N	20000		
Perm. tilting moment on positioned table top				
Horizontal	Nm	9000	⑦+⑧	
Vertical	Nm	4200		
Upside-down	Nm	2300		
Perm. tilting moment on rotating table top				
Horizontal	Nm	3000	⑦+⑧	
Vertical	Nm	3000		
Upside-down	Nm	900		
Perm. tangential moment on positioned table top				
Horizontal	Nm	1400	⑨	
Vertical	Nm	1400		
Upside-down	Nm	1400		



CAD files, technical data and planning documentation can be downloaded from www.fibrotor.de



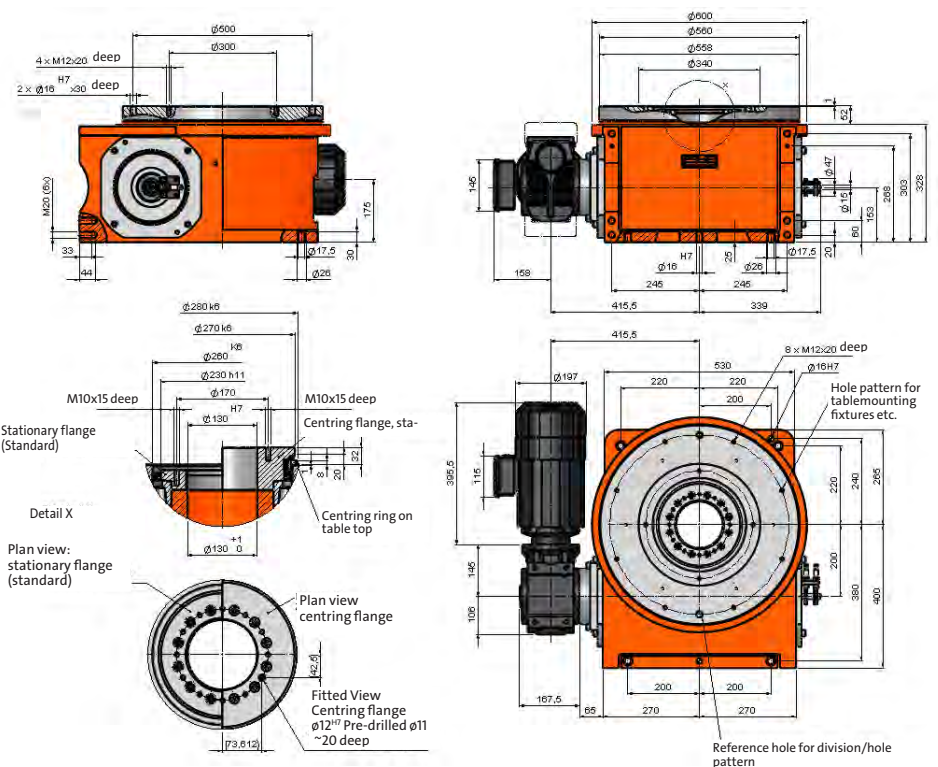
FIBROTOR ER.17.0558.1.142.XX.0.0.3
Drive arrangement 142



FIBROTOR ER.17.0558.1.142.XX.0.0.3
Drive arrangement 142

Installed dimensions FIBROTOR® ER.17

(Drive arrangement 142, for other drive arrangements, drawings of CAD data are available)



Technical data FIBROTOR® ER.17

Encoding

ER.17 . 0 5 5 8 . 1 0 . . .

Table top dimensions	Standard dimensions	Ø 558 mm	.0558	②
Drive motor	Standard braking motor		.1	③
Drive arrangement	See planning documents under www.fibrotor.de/downloads		.XXX	④
Divisions 2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24			.XX	⑤
Additional modules	Without additional modules		.0	⑥
	Vertical version		.3	⑦
	Vertical version with ground plate		.4	
	Centring ring		.1	
	Centring flange		.2	⑧
	Centring ring and centring flange		.3	
Precisions	Division 2 – 12	± 20"		
	Division 16 – 24	± 25"		
In arc length (on Ø 558 mm)	Division 2 – 12	± 0,027 mm		
	Division 16 – 24	± 0,034 mm		
Axial runout		0,04 mm		
Concentricity of the centre hole		0,04 mm		
Plane parallelism		0,08 mm		
Direction of rotation	Any, limit switch set for cw rotation			
Indexing frequency		30 c/min		
Indexing- dwell angle	Division 2	330° / 30°		
	Division 3 – 5	300° / 60°		
	Division 6 – 12	270° / 90°		
	Division 16 – 24	135° / 45°		
Voltage	Motor and brake	400 - 460 V 3 AC, 50/60 Hz		
Motor output	Depending on indexing time and mass moment of inertia	0,37 – 4,0 kW		
Centre hole		Ø 130 mm		
Working position	Any, standard: Horizontal table top, (please specify other mounting positions on ordering)			
Weight		approx. 450 kg		

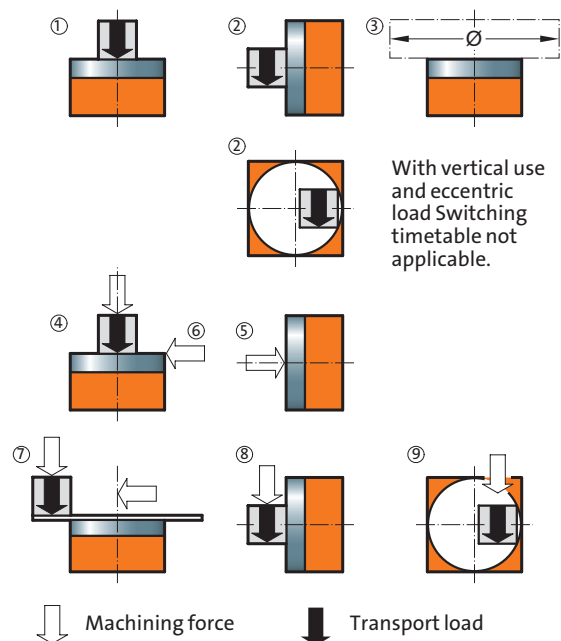
Indexing times FIBROTOR® ER.17

Division

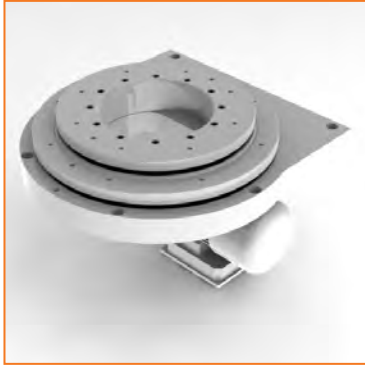
2	t _s in s	5,08	4,61	3,69	3,35	3,04	2,43	2,13	1,81	1,63	1,45	1,37	1,16	1,06			
	J in kgm ²	1991	1644	1049	864	713	455	349	250	203	159	141	102	83,3			
3	t _s in s	4,77	4,19	3,35	3,07	2,77	2,21	1,94	1,65	1,49	1,31	1,24	1,06	0,96			
	J in kgm ²	3297	2691	1718	1436	1206	769	591	425	345	267	241	174	143			
4	t _s in s	4,77	4,33	3,46	3,07	2,79	2,23	1,94	1,65	1,49	1,31	1,23	1,05	0,96			
	J in kgm ²	5225	4315	2756	2157	1781	1137	862	619	504	389	347	251	209			
5	t _s in s	4,77	4,33	3,46	3,07	2,79	2,23	1,95	1,65	1,49	1,31	1,23	1,05	0,95			
	J in kgm ²	6215	5418	3460	2709	2308	1473	1133	803	654	505	450	325	268			
6	t _s in s	4,29	3,90	3,12	2,80	2,51	2,00	1,76	1,48	1,34	1,18	1,11	0,95	0,86	0,78	0,65	0,56
	J in kgm ²	5619	4930	3335	2837	2347	1499	1153	817	665	514	458	331	273	224	157	112
8	t _s in s	4,29	3,90	3,12	2,80	2,54	2,03	1,76	1,49	1,35	1,18	1,11	0,95	0,86	0,78	0,65	0,55
	J in kgm ²	5749	5539	4297	3666	3196	2105	1574	1131	922	702	626	453	374	307	212	152
10	t _s in s	4,29	3,90	3,12	2,84	2,54	2,03	1,78	1,49	1,35	1,18	1,12	0,95	0,86	0,78	0,65	0,55
	J in kgm ²	9713	8522	5765	5049	4177	2668	2053	1434	1168	903	805	575	474	390	270	193
12	t _s in s	4,29	3,90	3,12	2,84	2,58	2,06	1,81	1,54	1,37	1,20	1,13	0,95	0,87	0,79	0,65	0,55
	J in kgm ²	11728	10291	6961	6098	5194	3318	2553	1836	1453	1123	1002	704	581	478	331	234
16	t _s in s	2,15	1,95	1,56	1,40	1,27	1,02	0,89	0,75	0,67	0,59	0,56	0,47	0,43			
	J in kgm ²	3552	3002	1983	1687	1436	917	705	492	400	309	275	196	161			
20	t _s in s	2,15	1,95	1,56	1,42	1,29	1,03	0,89	0,76	0,67	0,59	0,56	0,48	0,43			
	J in kgm ²	5015	4238	2801	2453	2089	1334	996	716	566	437	390	282	229			
24	t _s in s	2,15	1,95	1,56	1,42	1,29	1,03	0,90	0,76	0,68	0,60	0,56	0,48	0,43			
	J in kgm ²	6191	5232	3458	3028	2579	1647	1267	884	720	557	482	348	287			

Load data FIBROTOR® ER.17

Perm. transport load				
Horizontal table top	kg	5500		①+②
Vertical table top	kg	1000		
Table top, upside-down	kg	1000		
Perm. add-on diameter				
Horizontal	mm	2800		③
Vertical	mm	2800		
Upside-down	mm	2800		
Perm. axial loading on the table top				
Horizontal	N	70000		
Vertical	N	12000		④+⑤
Upside-down	N	25000		
Perm. radial loading on table top				
Horizontal	N	25000		⑥
Vertical	N	25000		
Upside down	N	25000		
Perm. tilting moment on positioned table top				
Horizontal	Nm	12000		⑦+⑧
Vertical	Nm	6000		
Upside-down	Nm	3000		
Perm. tilting moment on rotating table top				
Horizontal	Nm	4000		⑦+⑧
Vertical	Nm	4000		
Upside-down	Nm	1200		
Perm. tangential moment on positioned table top				
Horizontal	Nm	1600		⑨
Vertical	Nm	1600		
Upside-down	Nm	1600		



CAD files, technical data and planning documentation can be downloaded from www.fibrotor.de



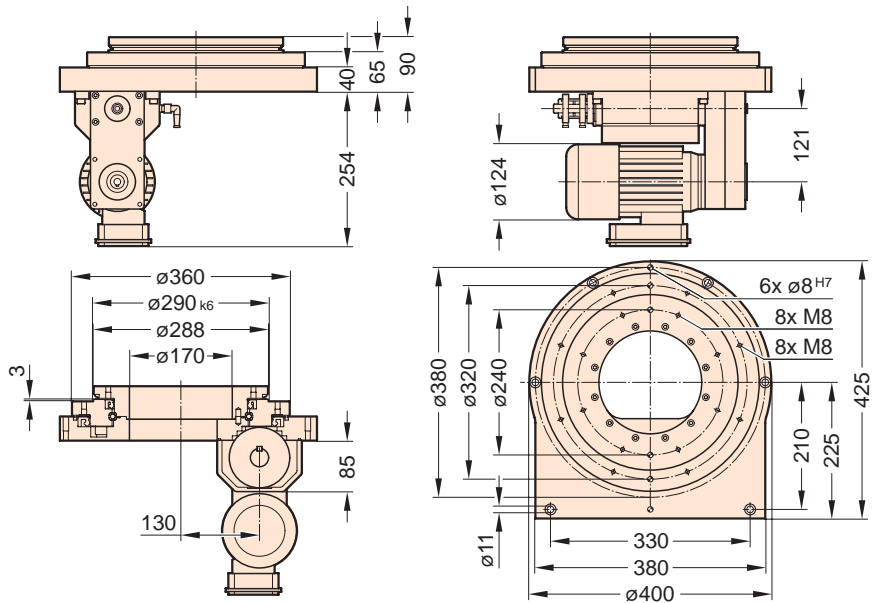
FIBROTOR RT.12.0360.1.222.XX.0.0.3
Drive arrangement 222



FIBROTOR RT.12.0360.1.222.XX.0.0.3
Drive arrangement 222

Installed dimensions FIBROTOR® RT.12

(Drive arrangement 222, for other drive arrangements, drawing or CAD data are available)



Technical data FIBROTOR® RT.12

Encoding

RT.12 0 3 6 0 0 . .

Table top dimensions	Standard dimensions	Ø 360 mm	.0360	②
Drive motor	Standard braking motor Hydraulic motor Pneumatic motor AC servomotor Special brake motor Special version Without motor		.1 .5 .6 .7 .8 .9 .0	③
Drive arrangement	See planing documents under www.fibrotor.de/downloads		.XXX	④
Divisions 6, 8, 10, 12, 16, 20, 24, 30, 36	Special divisions up to T96 on request		.XX	⑤
Additional assemblies	Without additional assemblies		.0	⑥
	Built-in version		.1	⑦
	Built-in version with mounting ring		.2	⑦
	Centring ring (included in basis price) Centring ring and centring flange		.1 .3	⑧
Indexing accuracy in arc seconds (increased indexing accuracy on request)	Division 6 – 20 Division 22 – 36 More than division 36	± 12" ± 18" ± 30"		
Precision in arc length (am Ø 360 mm)	Division 6 – 20 Division 16 – 36 More than division 36	± 0,010 mm ± 0,014 mm ± 0,023 mm		
Axial runout of table top	(relates to Ø 360 mm)	0,02 mm		
Concentricity of the centre hole	(relates to Ø 290 mm)	0,02 mm		
Plane parallelism of table top tp base on the housing	(relates to Ø 360 mm)	0,04 mm		
Direction of rotation	Any, limit switch set for cw rotation			
Indexing frequency	Standard brake motor Special braking motor higher indexing frequencies on request	40 c/min max. 90 c/min		

Technical data FIBROTOR® RT.12

Switching/ hold angles	Division 6 – 20 Division 22 – 36	270° / 90° 135° / 45°
Voltage	Motor and brake Special voltages on request	400 - 460 V, 3AC, 50/60 Hz
Motor output	Depending on indexing time and mass moment for inertia	0,12 – 0,37 kW
Centre hole	Flattened	Ø 170 mm
Working position	Any, standard: Horizontal table top, (please specify other mounting positions on ordering)	
Weight		approx. 50 kg

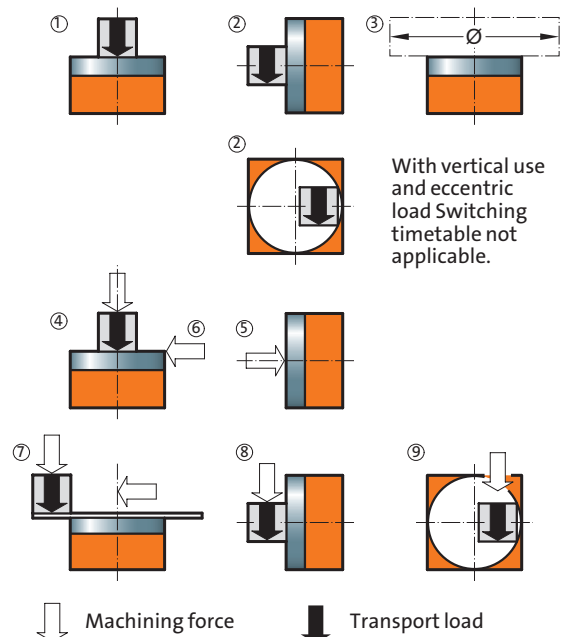
Indexing times FIBROTOR® RT. 12

Division

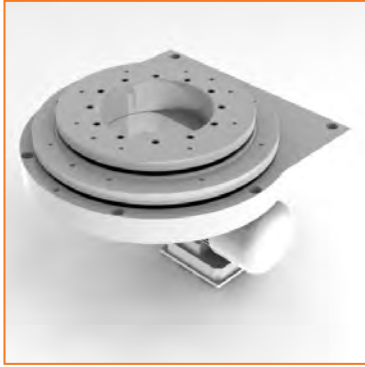
4	t _i in s	3,49	3,04	2,45	2,04	1,94	1,56	1,30	1,00	0,93	0,74	0,64	0,53	0,44			
	J in kgm ²	181	160	119	87,2	83,5	55,3	39,0	18,1	14,9	7,36	4,58	2,52	1,31			
5	t _i in s	3,49	3,04	2,45	2,04	1,94	1,56	1,30	1,00	0,93	0,74	0,64	0,53	0,44			
	J in kgm ²	233	206	153	112	107	71	50	28,1	23,9	11,8	7,41	4,04	2,20			
6	t _i in s	3,14	2,74	2,20	1,83	1,74	1,41	1,17	0,90	0,84	0,66	0,58	0,48	0,40	0,32		
	J in kgm ²	231	203	151	111	106	70,4	49,7	29,7	25,8	13,7	9,01	4,89	2,67	1,23		
8	t _i in s	3,14	2,74	2,20	1,83	1,74	1,41	1,17	0,91	0,85	0,66	0,58	0,48	0,40	0,32	0,26	
	J in kgm ²	315	278	206	151	145	96,2	67,9	41,8	36,3	22,1	15,9	8,85	4,77	2,28	1,00	
10	t _i in s	3,14	2,74	2,20	1,83	1,74	1,41	1,17	0,91	0,85	0,66	0,58	0,48	0,40	0,32	0,26	0,21
	J in kgm ²	399	352	261	192	184	122	86,1	53,0	46,1	28,0	21,1	14,2	7,83	3,87	1,70	0,81
12	t _i in s	3,14	2,74	2,20	1,83	1,74	1,41	1,17	0,91	0,85	0,67	0,58	0,48	0,40	0,32	0,26	0,21
	J in kgm ²	481	425	315	232	222	147	104	64,1	55,7	34,9	26,3	17,3	11,3	5,65	2,65	1,33
16	t _i in s	3,14	2,74	2,20	1,83	1,74	1,41	1,17	0,91	0,85	0,67	0,58	0,49	0,40	0,32	0,26	0,21
	J in kgm ²	549	485	360	265	253	168	119	73,1	63,6	39,9	30,1	20,3	14,0	8,69	4,97	2,58
20	t _i in s	3,14	2,74	2,20	1,83	1,74	1,41	1,17	0,91	0,85	0,67	0,58	0,49	0,40	0,32	0,26	0,21
	J in kgm ²	775	684	508	373	358	237	168	103	89,9	56,4	42,6	28,8	19,8	12,4	7,82	4,31
24	t _i in s	3,14	2,74	2,20	1,83	1,74	1,41	1,17	0,91	0,85	0,67	0,58	0,48	0,40	0,32	0,26	0,21
	J in kgm ²	957	845	627	461	442	293	207	128	111	69,7	52,7	34,6	22,8	11,7	7,38	5,02
30	t _i in s	1,57	1,37	1,10	0,92	0,87	0,70	0,58	0,45	0,42	0,34	0,29	0,24	0,20	0,16		
	J in kgm ²	299	264	196	144	138	91,4	64,5	39,7	34,5	21,6	16,3	10,9	7,24	4,39		
36	t _i in s	1,57	1,37	1,10	0,92	0,87	0,70	0,58	0,45	0,42	0,34	0,29	0,24	0,20	0,16		
	J in kgm ²	359	317	235	173	165	110	77,5	47,7	41,4	25,9	19,6	13,2	9,01	5,58		

Load data FIBROTOR® RT.12

Perm. transport load	kg	400	①
Horizontal table top	kg	200	②
Vertical table top	kg	400	
Table top, upside-down	kg	400	
Perm. add-on diameter			③
Horizontal	mm	2000	
Vertical	mm	2000	
Upside-down	mm	2000	
Permissible axial loading on the table top			④
Horizontal	N	12000	
Vertical	N	5000	⑤
Upside-down	N	12000	
Perm. radial loading on table top			⑥
Horizontal	N	8000	
Vertical	N	8000	
Upside-down	N	8000	
Perm. tilting moment on positioned table top			⑦
Horizontal	Nm	2000	
Vertical	Nm	1500	⑧
Upside-down	Nm	2000	
Perm. tilting moment on rotating table top			⑦+⑧
Horizontal	Nm	600	
Vertical	Nm	600	
Upside-down	Nm	600	
Perm. tangential moment on positioned table top			⑨
Horizontal	Nm	400	
Vertical	Nm	400	
Upside-down	Nm	400	



CAD-files, technical data and planning documentation can be downloaded from www.fibrotor.de



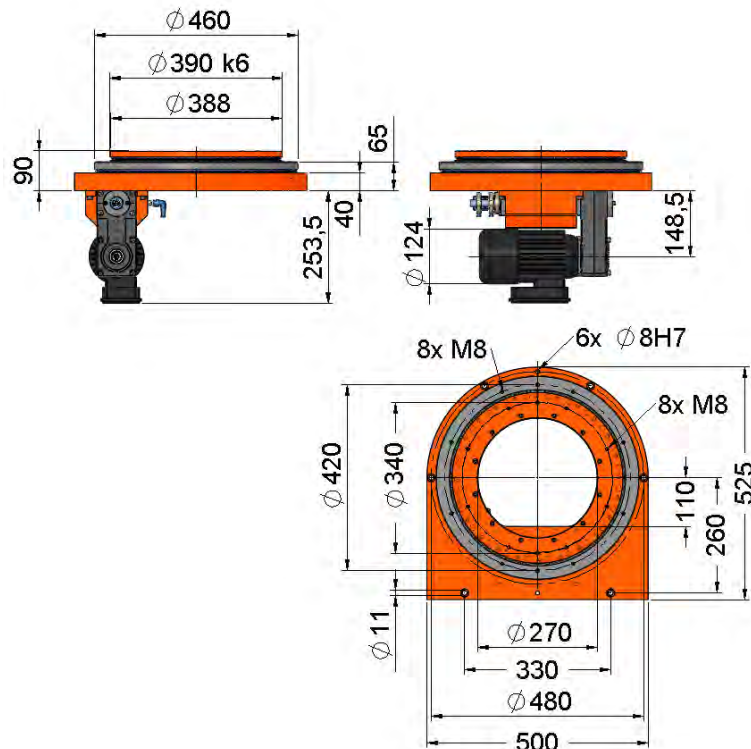
FIBROTOR RT.13.0460.1.222.XX.0.0.3
Drive arrangement 222



FIBROTOR RT.13.0460.1.222.XX.0.0.3
Drive arrangement 222

Installed dimensions FIBROTOR® RT.13

(Drive arrangement 222, for other drive arrangements, drawing or CAD data are available)



Technical data FIBROTOR® RT.13

Encoding

RT.13 . 0 4 6 0 0

Table top dimensions	Standard dimension	Ø 460 mm	.0460	②
Drive motor	Standard braking motor		.1	③
	Hydraulic motor		.5	
	Pneumatic motor		.6	
	AC servomotor		.7	
	Special brake motor		.8	
	Special version		.9	
	Without motor		.0	
Drive arrangement	See planing documents under www.fibrotor.de/downloads		.XXX	④
Divisions 6, 8, 10, 12, 16, 20, 24, 30, 36	Special divisions up to T96 on request		.XX	⑤
Additional assemblies	Without additional assemblies		.0	⑥
	Built-in version		.1	⑦
	Built-in version with mounting ring		.2	
	Centring ring (included in basis price)		.1	⑧
Centring ring and centring flange		.3		
Indexing accuracy in arc seconds (increased indexing accuracy on request)	Division 6 – 24	± 12"		
	Division 30 – 36	± 18"		
	More than division 36	± 30"		
Precision in arc length (am Ø 460 mm)	Division 6 – 24	± 0,013 mm		
	Division 30 – 36	± 0,020 mm		
	More than division 36	± 0,033 mm		
Axial runout of table top	(relates to Ø 460 mm)	0,04 mm		
Concentricity of the centre hole	(relates to Ø 390 mm)	0,04 mm		
Plane parallelism of table top tp base on the housing	(relates to Ø 460 mm)	0,08 mm		
Direction of rotation	CW-CCW rotation			
Indexing frequency	Standard brake motor	40 c/min		
	Special braking motior	max. 90 c/min		
	Higher indexing frequencies on request			

Technical data FIBROTOR® RT.13

Switching/ hold angles	Division 6 – 24 Division 30 – 36	270° / 90° 135° / 45°
Voltage	Motor and brake Special voltages on request	400 - 460 V, 3AC, 50/60 Hz
Motor output	Depending on indexing time and mass moment for inertia	0,12 – 0,37 kW
Centre hole	Flattened	Ø 270 mm
Working position	Any, standard: Horizontal table top, (please specify other mounting positions on ordering)	
Weight		approx. 80 kg

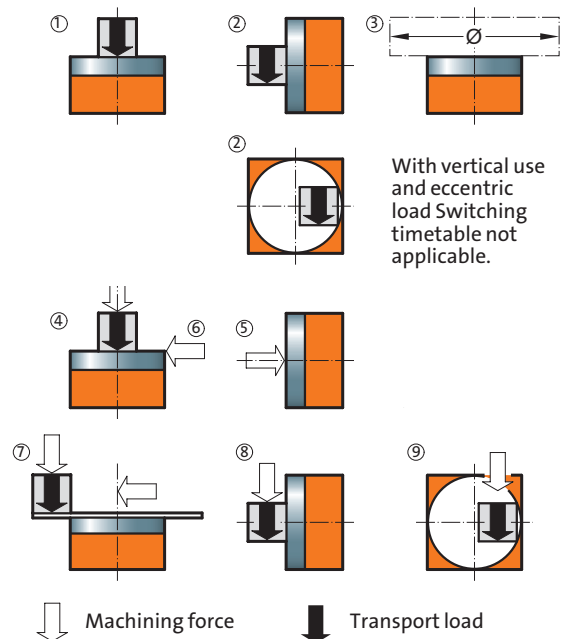
Indexing times FIBROTOR® RT.13

Division

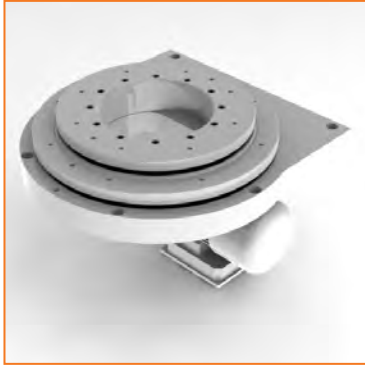
6	t _s in s	3,14	2,74	2,20	1,83	1,74	1,41	1,17	0,90	0,84	0,66	0,58	0,48	0,40	0,32		
	J in kgm ²	256	226	168	123	118	78,0	55,0	32,7	28,3	14,9	9,64	5,06	2,59	0,98		
8	t _s in s	3,14	2,74	2,20	1,83	1,74	1,41	1,17	0,91	0,85	0,66	0,58	0,48	0,40	0,32	0,26	
	J in kgm ²	350	309	229	168	161	107	75,3	46,1	40,1	24,2	17,3	9,47	4,92	2,15	0,73	
10	t _s in s	3,14	2,74	2,20	1,83	1,74	1,41	1,17	0,91	0,85	0,66	0,58	0,48	0,40	0,32	0,26	0,21
	J in kgm ²	443	391	290	213	204	135	95,5	58,6	50,9	30,8	23,2	15,5	8,33	3,92	1,51	0,51
12	t _s in s	3,14	2,74	2,20	1,83	1,74	1,41	1,17	0,91	0,85	0,67	0,58	0,48	0,40	0,32	0,26	0,21
	J in kgm ²	535	473	351	258	247	164	115	70,9	61,6	38,5	29,0	18,8	12,2	5,91	2,57	1,10
16	t _s in s	3,14	2,74	2,20	1,83	1,74	1,41	1,17	0,91	0,85	0,67	0,58	0,49	0,40	0,32	0,26	0,21
	J in kgm ²	611	539	400	294	282	187	132	81,0	70,4	44,0	33,1	22,2	15,1	9,29	5,14	2,49
20	t _s in s	3,14	2,74	2,20	1,83	1,74	1,41	1,17	0,91	0,85	0,67	0,58	0,49	0,40	0,32	0,26	0,21
	J in kgm ²	863	762	565	415	398	264	186	115	100	62,4	47,1	31,7	21,7	13,4	8,33	4,41
24	t _s in s	3,14	2,74	2,20	1,83	1,74	1,41	1,17	0,91	0,85	0,67	0,58	0,48	0,40	0,32	0,26	0,21
	J in kgm ²	1065	940	698	513	491	326	230	142	123	77,2	58,3	38,1	25,0	12,6	7,83	5,20
30	t _s in s	1,57	1,37	1,10	0,92	0,87	0,70	0,58	0,45	0,42	0,34	0,29	0,24	0,20	0,16		
	J in kgm ²	332	293	218	160	153	101	71,5	43,8	38,0	23,6	17,7	11,8	7,68	4,50		
36	t _s in s	1,57	1,37	1,10	0,92	0,87	0,70	0,58	0,45	0,42	0,34	0,29	0,24	0,20	0,16		
	J in kgm ²	399	352	261	192	184	122	85,9	52,7	45,8	28,5	21,4	14,3	9,65	5,82		

Load data FIBROTOR® RT.13

Perm. transport load			
Horizontal table top	kg	500	①
Vertical table top	kg	250	②
Table top, upside-down	kg	500	
Perm. add-on diameter			③
Horizontal	mm	2200	
Vertical	mm	2200	
Upside-down	mm	2200	
Permissible axial loading on the table top			④
Horizontal	N	15000	
Vertical	N	6000	⑤
Upside-down	N	15000	
Perm. radial loading on table top			⑥
Horizontal	N	10000	
Vertical	N	10000	
Upside-down	N	10000	
Perm. tilting moment on positioned table top			⑦
Horizontal	Nm	2200	
Vertical	Nm	1600	⑧
Upside-down	Nm	2200	
Perm. tilting moment on rotating table top			⑦+⑧
Horizontal	Nm	660	
Vertical	Nm	660	
Upside-down	Nm	660	
Perm. tangential moment on positioned table top			⑨
Horizontal	Nm	500	
Vertical	Nm	500	
Upside-down	Nm	500	



CAD-files, technical data and planning documentation can be downloaded from www.fibrotor.de



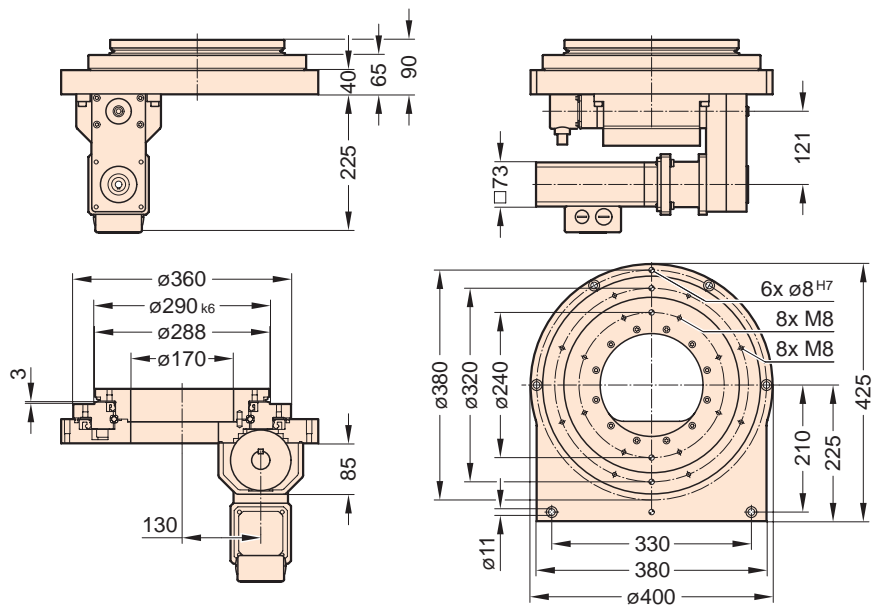
FIBROTOR RT.NC.12.0360.1.222.00.0.0.3
Drive arrangement 222



FIBROTOR RT.NC.12.0360.1.222.00.0.0.3
Drive arrangement 222

Installed dimensions FIBROTOR® RT.NC.12

(Drive arrangement 222, for other drive arrangements, drawing or CAD data are available)



Technical data FIBROTOR® RT.NC.12

Encoding

RT.NC.12 . 0 3 6 0 0

Table top dimensions	Standard dimension	$\varnothing 360$ mm	.0360	②
Drive motor	Standard braking motor		.1	③
	Hydraulic motor		.5	
	Pneumatic motor		.6	
	AC servomotor		.7	
	Special brake motor		.8	
	Special version		.9	
	Without motor		.0	
Drive arrangement	See planing documents under www.fibrotor.de/downloads		.XXX	④
Divisions	Can be positioned arbitrarily		.XX	⑤
Additional assemblies	Without additional assemblies		.0	⑥
	Built-in version		.1	⑦
	Built-in version with mounting ring		.2	
	Centring ring (included in basis price)		.1	⑧
Centring ring and centring flange		.3		
Indexing accuracy in arc seconds (increased indexing accuracy on)	Indirect reading	$\pm 30''$		
	Motor reading	$\pm 120''$		
Precision in arc length (am $\varnothing 460$ mm)	Indirect reading	$\pm 0,026$ mm		
	Motor reading	$\pm 0,104$ mm		
Axial runout of table top	(relates to $\varnothing 360$ mm)	0,02 mm		
Concentricity of the centre hole	(relates to $\varnothing 290$ mm)	0,02 mm		
Plane parallelism of table top tp base on the housing	(relates to $\varnothing 360$ mm)	0,04 mm		
Direction of rotation	CW-CCW rotation			

Technical data FIBROTOR® RT.NC.12

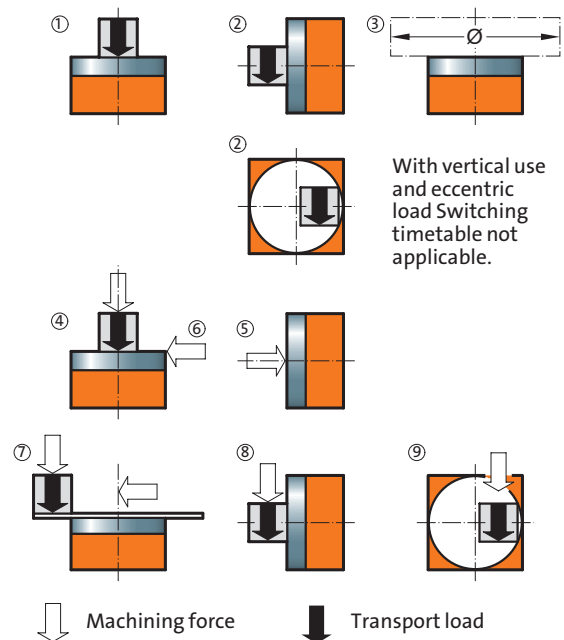
Switching/ hold angles		i = 16
Voltage	i = 106,496; i = 128; i = 160; i = 286,944; i = 416	i = 128,000
Motor output		n _{max} = 28 U/min
Centre hole	Flattened	Ø 170 mm
Working position	Any, standard: Horizontal table top, (please specify other mounting positions on ordering)	
Weight		approx. 50 kg

Indexing times FIBROTOR® RT.NC.12

Mass moment of inertia J in kgm ²	6	9	12	20	30
Max. perm. table top speed ¹ /min	28	23	18	10	7
Acceleration time t _a in s	0,2	0,2	0,2	0,2	0,2
Overall gear ratio reduction i	106,496	128,000	160,000	286,944	416,000
Motor speed n in ¹ /min	2982	2944	2880	2869	2912
Motor torque required in Nm	1,6	1,6	1,6	1,2	1,0
Swivel time t _s in s for					
360°	2,44	2,91	3,63	6,30	8,87
180°	1,37	1,60	1,97	3,30	4,59
90°	0,84	0,95	1,13	1,80	2,44
60°	0,66	0,73	0,86	1,30	1,73
45°	0,57	0,63	0,72	1,05	1,37
30°	0,48	0,52	0,58	0,80	1,01
20°	0,42	0,44	0,49	0,63	0,78
10°	0,36	0,37	0,39	0,47	0,54

Load data FIBROTOR® RT.NC.12

Perm. transport load			
Horizontal table top	kg	400	①
Vertical table top	kg	200	②
Table top, upside-down	kg	400	
Perm. add-on diameter			③
Horizontal	mm	2000	
Vertical	mm	2000	
Upside-down	mm	2000	
Permissible axial loading on the table top			
Horizontal	N	12000	④
Vertical	N	5000	⑤
Upside-down	N	12000	
Perm. radial loading on table top			⑥
Horizontal	N	8000	
Vertical	N	8000	
Upside-down	N	8000	
Perm. tilting moment on positioned table top			
Horizontal	Nm	2000	⑦
Vertical	Nm	1500	⑧
Upside-down	Nm	2000	
Perm. tilting moment on rotating table top			⑦+⑧
Horizontal	Nm	600	
Vertical	Nm	600	
Upside-down	Nm	600	
Perm. tangential moment on positioned table top			
Horizontal	Nm	200	
Vertical	Nm	200	⑨
Upside-down	Nm	200	



Technical data FIBROTOR® RT.NC.13

Switching/ hold angles		i = 24
Voltage		i = 192,000
Motor output		n _{max} = 18 U/min
Centre hole	Flattened	Ø 270 mm
Working position	Any, standard: Horizontal table top, (please specify other mounting positions on ordering)	
Weight		approx. 80 kg

Indexing times FIBROTOR® RT.NC.13

Mass moment of inertia J in kgm ²	6	9	12	20	30
Max. perm. table top speed ¹ /min	28	23	18	10	7
Acceleration time t _a in s	0,2	0,2	0,2	0,2	0,2
Overall gear ratio reduction i	106,496	128,000	160,000	286,944	416,000
Motor speed n in ¹ /min	2982	2944	2880	2869	2912
Motor torque required in Nm	1,6	1,6	1,6	1,2	1,0
Swivel time t _s in s for					
360°	2,44	2,91	3,63	6,30	8,87
180°	1,37	1,60	1,97	3,30	4,59
90°	0,84	0,95	1,13	1,80	2,44
60°	0,66	0,73	0,86	1,30	1,73
45°	0,57	0,63	0,72	1,05	1,37
30°	0,48	0,52	0,58	0,80	1,01
20°	0,42	0,44	0,49	0,63	0,78
10°	0,36	0,37	0,39	0,47	0,54
5°	0,33	0,34	0,35	0,38	0,42
2°	0,31	0,31	0,32	0,33	0,35

Load data FIBROTOR® RT.NC.13

Perm. transport load			
Horizontal table top	kg	500	①
Vertical table top	kg	250	②
Table top, upside-down	kg	500	
Perm. add-on diameter			③
Horizontal	mm	2200	
Vertical	mm	2200	
Upside-down	mm	2200	
Permissible axial loading on the table top			
Horizontal	N	15000	④
Vertical	N	6000	⑤
Upside-down	N	15000	
Perm. radial loading on table top			⑥
Horizontal	N	10000	
Vertical	N	10000	
Upside-down	N	10000	
Perm. tilting moment on positioned table top			
Horizontal	Nm	2200	⑦
Vertical	Nm	1600	⑧
Upside-down	Nm	2200	
Perm. tilting moment on rotating table top			⑦+⑧
Horizontal	Nm	660	
Vertical	Nm	660	
Upside-down	Nm	660	
Perm. tangential moment on positioned table top			
Horizontal	Nm	240	
Vertical	Nm	240	⑨
Upside-down	Nm	240	

