



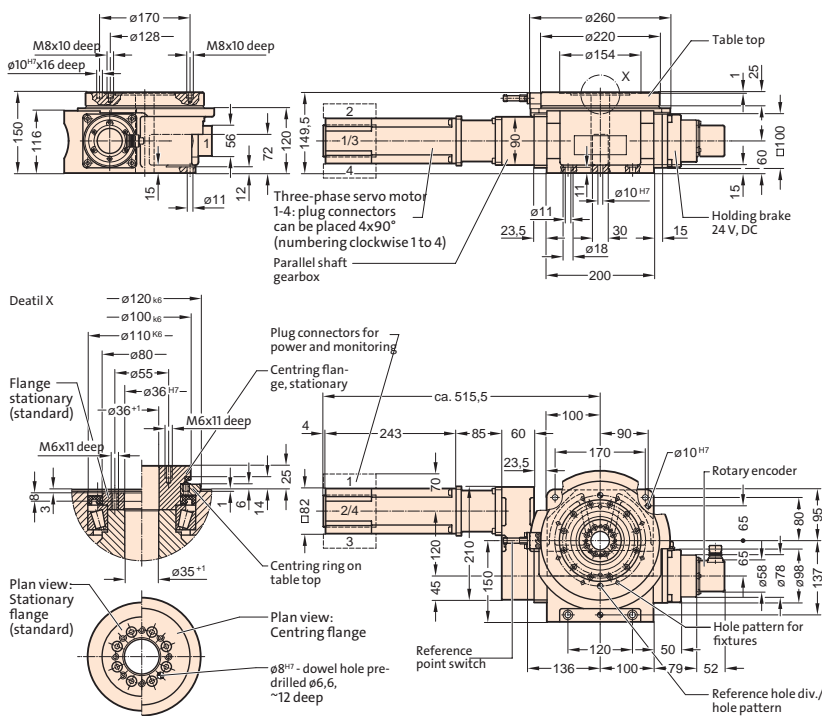
FIBROTOR EM.NC.12.0220.7.111.00.0.0.3



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## 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 . [ ] . [ ] . [ ] . [ ] . [ ] . [ ] . [ ]

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

## Technical data FIBROTOR® EM.NC.12

<b>RPM at table top</b>		$n_{max.} = 30^1/min$
<b>Centre hole</b>	with lateral opening in the housing	$\varnothing 35\text{ mm}$
<b>Working position</b>	Any, standard: Horizontal table top, (please specify other mounting positions when ordering)	
<b>Weight</b>		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 $360^\circ$	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

