

CNC Rotary Table

High Power Clamp, Motor at Left

G X A - 1 7 0 S L

new
optimization
mode |

table size	1000	2000	4000	8000	16000	32000	64000	128000	256000	512000	1024000	2048000	4096000	8192000	16384000	32768000	65536000	131072000	262144000	524288000	1048576000	2097152000	4194304000	8388608000	16777216000	33554432000	67108864000	134217728000	268435456000	536870912000	1073741824000	2147483648000	4294967296000	8589934592000	17179869184000	34359738368000	68719476736000	137438953472000	274877906944000	549755813888000	1099511627776000	2199023255552000	4398046511104000	8796093022208000	17592186044416000	35184372088832000	70368744177664000	140737488355328000	281474976710656000	562949953421312000	1125899906842624000	2251799813685248000	4503599627370496000	9007199254740992000	18014398509481984000	36028797018963968000	72057594037927936000	144115188075855872000	288230376151711744000	576460752303423488000	1152921504606846976000	2305843009213693952000	4611686018427387904000	9223372036854775808000	18446744073709551616000	36893488147419103232000	73786976294838206464000	147573952589676412928000	295147905179352825856000	590295810358705651712000	1180591620717411303424000	2361183241434822606848000	4722366482869645213696000	9444732965739290427392000	18889465931478580854784000	37778931862957161709568000	75557863725914323419136000	151115727451828646838272000	302231454903657293676544000	604462909807314587353088000	1208925819614629174706176000	2417851639229258349412352000	4835703278458516698824704000	9671406556917033397649408000	19342813113834066795298816000	38685626227668133590597632000	77371252455336267181195264000	154742504910672534362390528000	309485009821345068724781056000	618970019642690137449562112000	1237940039285380274899124224000	2475880078570760549798248448000	4951760157141521099596496896000	9903520314283042199192993792000	19807040628566084398385987584000	39614081257132168796771975168000	79228162514264337593543950336000	158456325028528675187087900672000	316912650057057350374175801344000	633825300114114700748351602688000	1267650600228229401496703205376000	2535301200456458802993406410752000	5070602400912917605986812821504000	10141204801825835211973625643008000	20282409603651670423947251286016000	40564819207303340847894502572032000	81129638414606681695789005144064000	162259276829213363391578010288128000	324518553658426726783156020576256000	649037107316853453566312041152512000	1298074214633706907132624082305024000	2596148429267413814265248164610048000	5192296858534827628530496329220096000	10384593717069655257060992658440192000	20769187434139310514121985316880384000	41538374868278621028243970633760768000	83076749736557242056487941267521536000	166153499473114484112975882535043072000	332306998946228968225951765070086144000	664613997892457936451903530140172288000	1329227995784915872903807060280344576000	2658455991569831745807614120560689152000	5316911983139663491615228241121378304000	10633823966279326983230456482242756608000	21267647932558653966460912964485513216000	42535295865117307932921825928971026432000	85070591730234615865843651857942052864000	170141183460469231731687303715884105728000	340282366920938463463374607431768211456000	680564733841876926926749214863536422912000	1361129467683753853853498429727072845824000	2722258935367507707706996859454145691648000	5444517870735015415413993718908291383296000	10889035741470030830827987437816582766592000	21778071482940061661655974875633165533184000	43556142965880123323311949751266331066368000	87112285931760246
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motor mounted at
left side of table

S superior pneumatic clamp
H hydraulic clamp

- ☒ vertical & horizontal application
- ☒ vertical application

worm gear transmission

SPECIFICATIONS

MODEL		Unit	GXA-170SL/HL	GVA-210SL/HL	GXA-255HL
Worktable diameter	mm / inch		Ø170 / Ø 6.69	Ø210 / Ø 8.27	Ø255 / Ø10.04
Center bore diameter	mm / inch		Ø40H7 / Ø 1.57H7	Ø65H7 / Ø 2.56H7	Ø140H7 / Ø 5.51H7
Through-bor diameter	mm / inch		Ø40 / Ø 1.57H7	Ø65 / Ø 2.56H7	Ø100 / Ø 3.94
Height of table (horizontal)	mm / inch		175 / 6.89	—	210 / 8.27
Height of center (vertical)	mm / inch		135 / 5.31	160 / 6.3	190 / 7.48
Width of T-slot	mm / inch		12H7 / 0.47H7	12H7 / 0.47H7	12H7 / 0.47H7
Width of guide block	mm / inch		18 / 0.71	18 / 0.71	18 / 0.71
Clamping method / pressure	Mpa / psi		P:0.55 ~ 0.7 / 79.8-101.5 H:2.5 / 363	P:0.55 ~ 0.7 / 79.8-101.5 H:2.5 / 363	Hydraulic 5 / 725
Clamping torque	N.m / ft. lbs.		300 / 221.1 450 / 332	300 / 221.1 450 / 332	900 / 663.3
Servo motor spec		refer to page 77			
Transmission ratio			1 / 60	1 / 72	1 / 120
Max. table speed / at specified servo motor speed	min ⁻¹		53.3 / 3200	53.3 / 3840	22.2 / 2000
Allowable loading inertia	$\left(\frac{W.D^2}{8}\right)$	kg.m ²	0.72	1.38	2.43
Resolution	deg.		0.001	0.001	0.001
Indexing accuracy	sec.		20	20	15
Repeatability (ISO 230-2/JIS B6192)	sec.		6	6	6
Repeatability (JIS B6330)	sec.		4	4	4
Net weight (servo motor excluded)	kg / lb		51.5 / 113.3	60 / 132	114 / 251
Allowable loading capacity	Vertical	kg / lb	100 / 220	125 / 275	150 / 330
	Horizontal	kg / lb	200 / 440	—	300 / 660
	Rotary Tailstock applied	kg / lb	200 / 440	250 / 550	300 / 660
FxL When table clamped		N / lbs	14000 / 3141.6	17000 / 3814.8	20000 / 4488
		N.m / ft. lbs.	1020 / 751.74	1265 / 932	1700 / 1252.9
		N.m / ft. lbs.	300 / 221.1	400 / 294.8	900 / 663.3
Allowable cutting torque		N.m / ft. lbs.	200 / 147.41	260 / 191.62	550 / 405.35
Allowable Max. rotary joint quantity			4	4	6

Note: 1. Allowable cutting torque at table speed of 1 min⁻¹.

2. FxL When table clamped is a reference data, the users should consider proper safety factor or contact detron for details.



- Worktable diameter Ø170, Ø210, Ø255.
- Motor mounted at left side of table
- Full gear depth transmitted by dual lead worm drive, resulting in higher efficiency and lower backlash. (P.20)

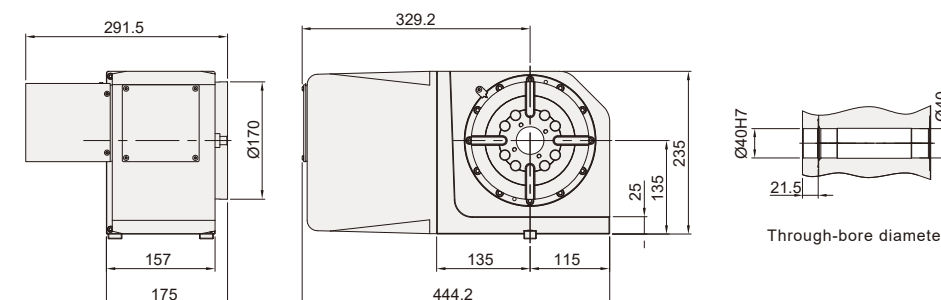
DIMENSIONAL DRAWINGS

Unit : mm

GXA-170SL/HL



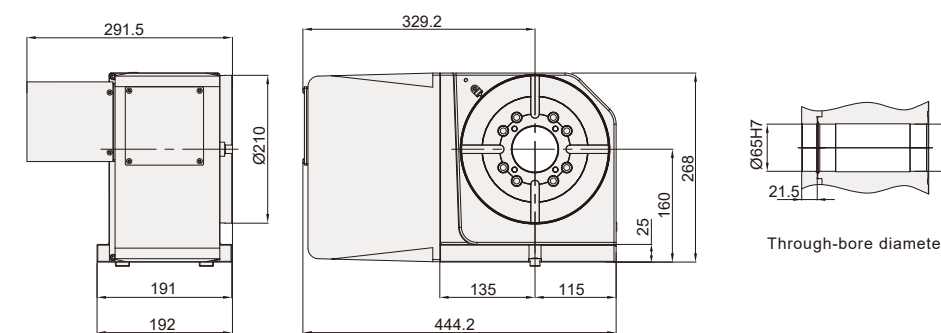
Equipped with upgraded high precision cross roller bearing.



GVA-210SL/HL



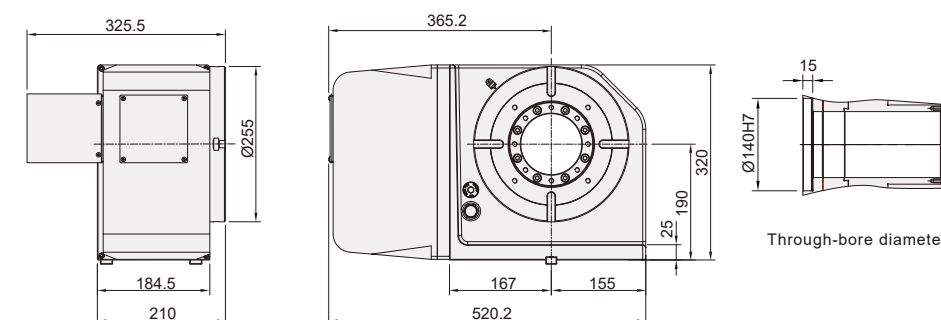
Equipped with upgraded high precision cross roller bearing.



GXA-255HL



Consolidated spindle with YRT bearing built-in.



Note: The length of servo guard may vary with servo motor type.
(metal sheet dimensions shown above are based on Fanuc motor)

for VMC_Worm Wheel Transmission