

HXM SERIES

SERVO ENERGY-SAVING INJECTION MOLDING MACHINE



T-Slot mold platen



Linear guide rail for injection unit



SUPER ENERGY SAVING

Output power varies with the load, and no energy is wasted. In the holding pressure phase, the servo motor will reduce speed, with low energy consumption; during the cool-down period, the motor does not work, with zero power consumption. Compared with the ordinary injection molding machines, it can save 20%-80% of the power.



HIGH PRECISION AND HIGH STABILITY

Equipped with the precise pressure sensor and rotary encoder, it can respectively monitor and feed back on flow and pressure. Based on the feedback, the high performance synchronous servo motor will adjust flow and pressure accordingly by changing the speed and torque. The closed-loop control can ensure the stability of product quality.



HIGH RESPONSE AND HIGH EFFICIENCY

The driving system responds with high sensitivity. It takes only 0.05 seconds to reach maximum value. The response speed is much faster than the ordinary injection molding machines. In that way, it significantly shortens the cycle time and increases the production efficiency.



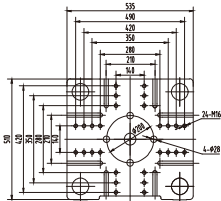
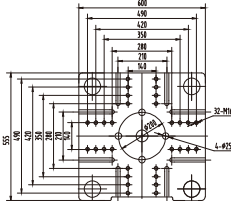
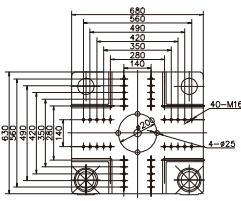
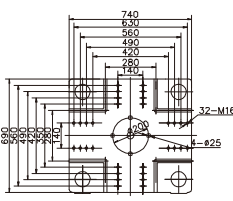
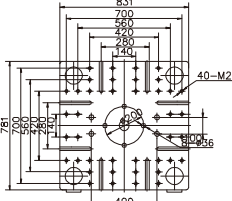
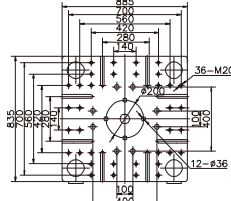
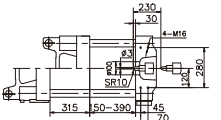
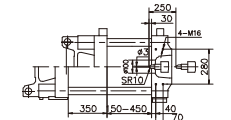
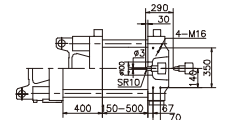
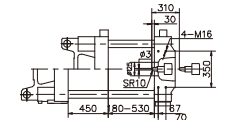
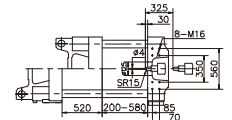
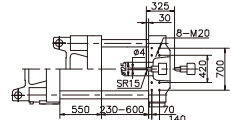
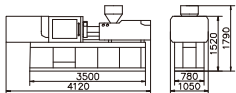
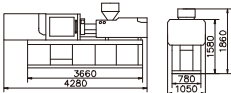
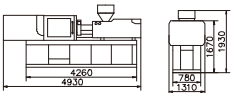
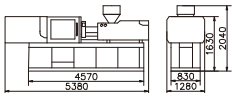
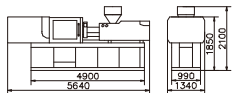
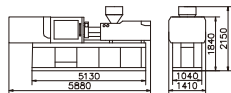
Vickers/Rexroth hydraulic valves



TECHMATION SERVO SYSTEM AND PLC SYSTEM
ensuring more stable and durable

HXM SERIES SERVO ENERGY-SAVING INJECTION MOLDING MACHINE SPECIFICATIONS



PARAMETER	UNIT	HX(*)98/370				HX(*)128/460			HX (*)158/580				HX(*)188/660			HX(*)228/800				HX(*)268/1000			
INJECTION UNIT		A	B	C	D	A	B	C	A	B	C	D	A	B	C	A	B	C	D	A	B	C	D
Screw diameter	mm	32	35	38	40	35	38	42	38	42	45	48	40	45	48	45	50	55	60	50	55	60	65
Screw L/D ratio	L/D	24	22	21	20	23	22	20	24	22	21	20	24	22	21	22	20	19	19	22	20	19	19
Injection capacity in theory	cm³	128	154	181	200	192	226	277	226	277	318	361	282	358	407	349	431	522	622	451	546	650	763
Injection weight(ps)	g	116	140	164	182	175	206	252	206	252	289	328	262	330	378	324	400	485	566	420	508	605	694
	oz	4.0	4.9	5.7	6.4	6.1	7.2	8.8	7.2	8.8	10.1	11.5	9.24	11.6	13.3	11.4	14.1	17.1	19.9	14.8	17.9	21.3	24.4
Injection pressure	MPa	287	240	203	183	240	203	166	260	212	185	163	234	185	163	229	186	153	129	224	185	155	132
Injection rate	g/s	68	81	95	109	101	119	146	117	143	164	187	130	164	187	167	206	219	297	204	247	294	345
Plasticizing capacity	g/s	10	12	15	17	12	15	15	13	15	20	23	17	20	23	20	26	33	40	26	33	40	45
Screw speed	rpm	240				265			220				190			200				200			
CLAMPING UNIT																							
Clamping force	kN	980				1280			1580				1880			2280				2680			
Moving mould-plate stroke	mm	315				350			400				450			520				550			
Max.Mould height	mm	390				450			500				530			580				600			
Min.Mould height	mm	150				150			150				180			200				230			
Space between tie-bars	mm	360 x 340				410 x 370			460 x 410				510 x 460			570 x 520				620 x 570			
Hydraulic ejector force	kN	56				56			56				56			86				86			
Hydraulic ejector stroke	mm	100				120			130				130			150				170			
Ejector number	n	5				5			5				5			9				13			
OTHER																							
Pump pressure	MPa	17.5				17.5			17.5				17.5			17.5				17.5			
Motor power	kW	16				16			21				21			30				30			
Heating capacity	kW	8.2				10.5			10.95				12.95			13.55				16.83			
Machine dimension	m	4.12 x 1.05 x 1.79				4.28 x 1.05 x 1.86			4.93 x 1.31 x 1.93				5.38 x 1.28 x 2.04			5.64 x 1.34 x 2.10				5.88 x 1.41 x 2.15			
Machine weight	t	2.7				3.2			4.3				5.2			7.0				8.0			
Oil tank capacity	L	203				235			253				272			281				311			
Platen Dimensions(movable)																							
Platen Dimensions(flank)																							
Machine Dimensions																							

Due to continual improvement, specifications are subject to change without notification

Example: HX(*)98/370



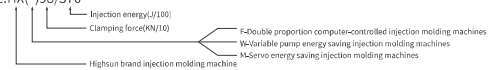
HXM SERIES SERVO ENERGY-SAVING INJECTION MOLDING MACHINE SPECIFICATIONS



PARAMETER	UNIT	HX(*)318/1500				HX(*)368-I/1900			HX(*)368-II/2200			HX(*)428-I/2200		HX(*)428-II/3100		
INJECTION UNIT		A	B	C	D	A	B	C	A	B	C	A	B	A	B	C
Screw diameter	mm	55	60	65	70	60	65	70	65	70	75	65	70	70	75	80
Screw L/D ratio	L/D	22	21	19	19	22	21	20	22	21	20	22	21	21	20	19
Injection capacity in theory	cm ³	689	820	962	1116	905	1062	1232	1128	1308	1502	1128	1308	1423	1634	1859
Injection weight(ps)	g	627	750	876	1015	841	1000	1145	1026	1200	1357	1026	1200	1295	1500	1692
	oz	21.7	25.8	30.3	35.8	29.6	34.8	40.4	36.1	41.9	48.2	36.1	41.9	45.6	52.4	59.6
Injection pressure	MPa	218	183	156	135	239	204	176	198	171	149	198	171	217	189	166
Injection rate	g/s	251	299	350	406	229	268	311	307	356	408	307	356	387	444	505
Plasticizing capacity	g/s	33	40	45	50	40	42	47	42	47	52	42	47	50	55	65
Screw speed	rpm	190				160			160			160		190		
CLAMPING UNIT																
Clamping force	kN	3180				3680			3680			4280		4280		
Moving mould-plate stroke	mm	600				710			710			770		770		
Max.Mould height	mm	690				750			750			800		800		
Min.Mould height	mm	230				250			250			280		280		
Space between tie-bars	mm	660 x 590				720 x 690			720 x 690			770 x 740		770 x 740		
Hydraulic ejector force	kN	86				134			134			134		134		
Hydraulic ejector stroke	mm	170				180			180			210		210		
Ejector number	n	13				13			13			13		13		
OTHER																
Pump pressure	MPa	17.5				17.5			17.5			17.5		17.5		
Motor power	kW	38				38			38			38		30+30		
Heating capacity	kW	18.15				20.35			23.15			23.15		23.15		
Machine dimension	m	6.31 x 1.42 x 2.20				6.87 x 1.99 x 2.16			7.4 x 1.99 x 2.24			7.43 x 1.93 x 2.25		7.63 x 2.02 x 2.32		
Machine weight	t	8.8				11			11.5			13.7		14		
Oil tank capacity	L	415				680			680			680		687		
Platen Dimensions(movable)																
Platen Dimensions(flank)																
Machine Dimensions																

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Example:HX(*)98/370



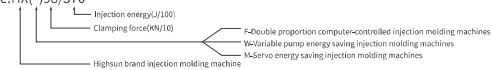
HXM SERIES SERVO ENERGY-SAVING INJECTION MOLDING MACHINE SPECIFICATIONS



PARAMETER	UNIT	HX(*)488-I/3100		HX(*)488-II/3400			HX(*)558-I/3400		HX(*)558-II/4300			HX(*)658-I/4300	
INJECTION UNIT		A	B	A	B	C	A	B	A	B	C	A	B
Screw diameter	mm	70	75	75	80	85	75	80	80	85	90	75	80
Screw L/D ratio	L/D	21	20	21	20	19	21	20	21	20	19	22	21
Injection capacity in theory	cm³	1423	1634	1634	1860	2099	1634	1860	2110	2382	2670	1855	2110
Injection weight(ps)	g	1295	1500	1495	1701	1921	1495	1701	1920	2168	2430	1688	1920
	oz	45.6	52.4	52.7	60.0	67.7	52.7	60.0	67.7	76.4	85.7	59.5	67.7
Injection pressure	MPa	217	189	209	183	162	209	183	206	182	162	234	206
Injection rate	g/s	387	444	437	498	562	437	498	488	551	618	429	488
Plasticizing capacity	g/s	50	55	55	65	70	55	65	65	70	80	55	65
Screw speed	rpm	190		150			150		150			150	
CLAMPING UNIT													
Clamping force	kN	4880		4880			5580		5580			6580	
Moving mould-plate stroke	mm	830		830			870		870			970	
Max.Mould height	mm	820		820			830		830			950	
Min.Mould height	mm	300		300			330		330			350	
Space between tie-bars	mm	820 x 800		820 x 800			870 x 840		870 x 840			970 x 920	
Hydraulic ejector force	kN	134		134			193		193			227	
Hydraulic ejector stroke	mm	210		210			230		230			260	
Ejector number	n	13		13			17		17			17	
OTHER													
Pump pressure	MPa	17.5		17.5			17.5		17.5			17.5	
Motor power	kW	30+30		30+30			30+30		30+38			30+38	
Heating capacity	kW	23.15		26.45			26.45		28.85			28.85	
Machine dimension	m	7.77 x 2.02 x 2.36		8.05 x 2.07 x 2.41			8.08 x 2.07 x 2.47		8.35 x 2.19 x 2.47			9.37 x 2.19 x 2.48	
Machine weight	t	16.2		16.5			19.7		20.5			30	
Oil tank capacity	L	687		969			969		1156			1156	
Platen Dimensions(movable)													
Platen Dimensions(flank)													
Machine Dimensions													

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Example: HX(*)98/370



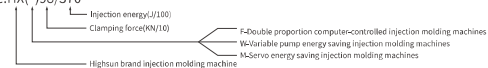
HXM SERIES SERVO ENERGY-SAVING INJECTION MOLDING MACHINE SPECIFICATIONS



PARAMETER	UNIT	HX(*)658-II/5600				HX(*)730-I/5600		HX(*)730-II/6100				HX(*)788/7300			HX(*)1100/10000		
INJECTION UNIT		A	B	C	D	A	B	A	B	C	D	A	B	C	A	B	C
Screw diameter	mm	85	90	95	100	85	90	90	95	100	105	95	100	105	110	120	130
Screw L/D ratio	L/D	22	21	20	19	22	21	23	22	21	20	22	21	20	22	21	19
Injection capacity in theory	cm ³	2496	2799	3118	3455	2496	2799	2861	3188	3534	3894	3849	4264	4701	5321	6333	7433
Injection weight(ps)	g	2272	2547	2838	3144	2272	2547	2603	2901	3216	3543	3502	3880	4278	4842	5763	6764
	oz	80.1	89.9	100.1	110.8	80.1	89.9	91.8	102.3	113.4	124.9	123.5	136.8	150.8	170.7	203.2	238.5
Injection pressure	MPa	221	197	177	159	225	200	213	191	173	157	191	173	157	194	163	139
Injection rate	g/s	496	556	620	687	496	556	546	608	674	743	608	674	743	858	1021	1198
Plasticizing capacity	g/s	70	80	85	90	70	80	76	85	90	98	85	90	98	101	112	125
Screw speed	rpm	145				145		110				110			110		
CLAMPING UNIT																	
Clamping force	kN	6580				7300		7300				7880			11000		
Moving mould-plate stroke	mm	970				950		950				1120			1220		
Max.Mould height	mm	950				960		960				1050			1170		
Min.Mould height	mm	350				400		400				400			450		
Space between tie-bars	mm	970 x 920				1000 x 950		1000 x 950				1070 x 1020			1160 x 1160		
Hydraulic ejector force	kN	227				227		227				227			260		
Hydraulic ejector stroke	mm	260				280		280				300			320		
Ejector number	n	17				21		21				21			21		
OTHER																	
Pump pressure	MPa	17.5				17.5		17.5				17.5			17.5		
Motor power	kW	38+38				38+38		38+38				38+38			38+38+38		
Heating capacity	kW	42				42		48.8				48.8			68.85		
Machine dimension	m	9.52 x 2.27 x 2.65				9.67 x 2.45 x 2.95		11.60 x 2.28 x 2.74				12.18 x 2.40 x 2.74			12.18 x 2.65 x 3.50		
Machine weight	t	31				33		34				42			56		
Oil tank capacity	L	1136				1136		1315				1315			1390		
Platen Dimensions(movable)																	
Platen Dimensions(flank)																	
Machine Dimensions																	

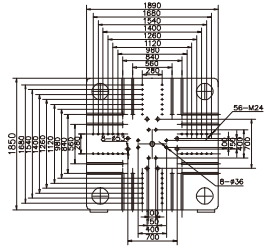
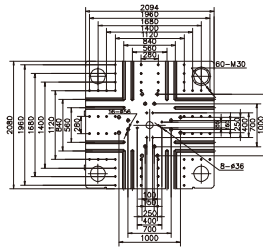
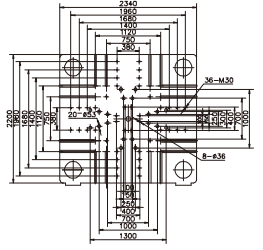
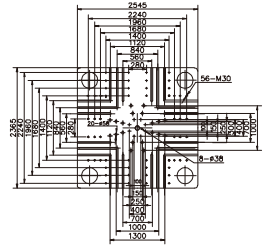
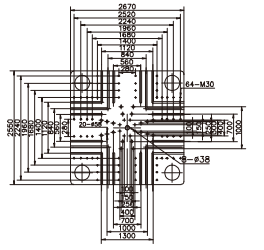
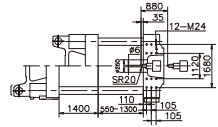
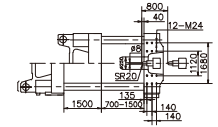
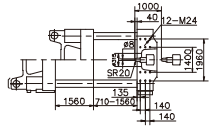
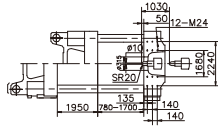
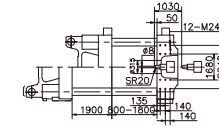
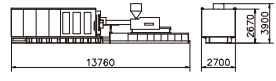
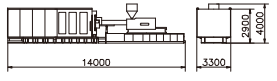
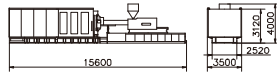
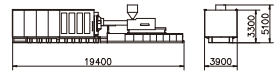
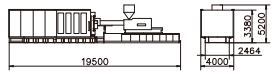
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Example: HX(*)98/370



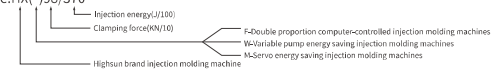
HXM SERIES SERVO ENERGY-SAVING INJECTION MOLDING MACHINE SPECIFICATIONS



PARAMETER	UNIT	HX(*)1300/13000			HX(*)1500/15500			HX(*)2000/19000				HX(*)2200/32000			HX(*)2500/44000		
INJECTION UNIT		A	B	C	A	B	C	A	B	C	D	A	B	C	A	B	C
Screw diameter	mm	120	130	140	130	140	150	130	140	150	160	155	165	175	170	185	200
Screw L/D ratio	L/D	24	23	21	23	22	21	23	22	21	20	23	22	21	23	22	21
Injection capacity in theory	cm ³	7012	8229	9544	8627	10005	11486	9291	10775	12370	14074	17737	20099	22609	24059	28493	33300
Injection weight(ps)	g	6380	7488	8685	7851	9105	10452	8455	9805	11256	12807	16140	18290	20574	21894	25928	30303
	oz	225.0	264.1	306.3	276.9	321.1	368.8	276.9	321.1	368.6	419.4	569.3	645.1	725.7	772.2	914.5	1068.8
Injection pressure	MPa	188	160	138	180	155	135	204	176	153	135	181	160	142	186	157	134
Injection rate	g/s	930	1092	1266	1240	1438	1651	1194	1385	1590	1809	1342	1521	1711	1424	1686	1970
Plasticizing capacity	g/s	101	115	135	120	140	160	109	130	150	162	100	115	135	127	170	220
Screw speed	rpm	95			100			90				66			65		
CLAMPING UNIT																	
Clamping force	kN	13000			15000			20000				22000			25000		
Moving mould-plate stroke	mm	1400			1500			1600				1950			1900		
Max.Mould height	mm	1300			1500			1560				1700			1800		
Min.Mould height	mm	550			700			710				780			800		
Space between tie-bars	mm	1320 x 1280			1450 x 1350			1620 x 1480				1800 x 1620			1850 x 1700		
Hydraulic ejector force	kN	300			380			520				520			520		
Hydraulic ejector stroke	mm	400			400			400				450			450		
Ejector number	n	21			25			33				33			33		
OTHER																	
Pump pressure	MPa	17.5			17.5			17.5				17.5			17.5		
Motor power	kW	38+38+38			38+38+38+38			38+38+47+47				38+38+47+47			47+47+47+47		
Heating capacity	kW	87.95			103.5			103.5				110			170		
Machine dimension	m	13.76 x 2.70 x 3.90			14.00 x 3.30 x 4.00			15.60 x 3.50 x 4.00				19.40 x 3.90 x 5.10			19.50 x 4.00 x 5.20		
Machine weight	t	65			87.5			128				155			175		
Oil tank capacity	L	1672			2000			3500				2270			3700		
Platen Dimensions(movable)																	
Platen Dimensions(flank)																	
Machine Dimensions																	

Due to continual improvement, specifications are subject to change without notification

Example: HX(*)98/370



120



24



7012



6380



225.0



188



930



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DEVICE CONFIGURATION 设备配置

注射部分	INJECTION UNIT	标配 Stsndard	选配 Optional
低速大扭矩液压马达	Low-speed high-torque hydraulic motor	●	
氮化合金钢螺杆料筒	Nitrided alloy steel screw & barrel	●	
射嘴及料管多段PID温度控制	Multipoint PID temperature control for nozzle and barrel	●	
全封闭式保温罩/射嘴防护罩	Totally enclosed heater shield/nozzle protection cover	●	
螺杆防冷启动功能	Screw anti-cold start function	●	
自动清料功能	Auto-purging function for cleaning the barrel	●	
熔胶前、后松退可选	Screw backwards before or after charging	●	
移动料斗装置	Movable hopper holder	●	
螺杆转速检测	Screw rotation speed detection	●	
加长射嘴	Extended nozzle	●	
专用螺杆料筒(合金、电镀等)	Special screw barrel (bimetal, electroplating, etc.)		○
料筒风冷装置	Air-cooling device for barrel		○
气动、液压、弹簧自锁射嘴	Pneumatic, hydraulic, spring self-locking nozzle		○
红外线加热	Infrared heater		○
锁模部分	CLAMPING UNIT		
T型槽模板	T-slot platen	●	
锁模三大板球墨铸铁	Nodular cast iron of clamping platen	●	
精密电子尺控制锁模/顶出/射胶	Precise transducer control clamping/ejection/injection	●	
液压驱动齿轮调模装置	Mold height adjustment by hydraulic motor	●	
机械/电气双重保护装置	Hydraulic/electrical safety protection	●	
移动模板耐磨锰钢带轨道	Wear-resistant manganese steel belt track for moving platen	●	
自动集中润滑系统	Automatic centralized lubrication system	●	
低压模具保护功能	Low pressure mold protection	●	
多种顶针控制功能可选	Multiple ejector model	●	
多组冷却水装置并配快速插头	Multiple sets of water manifolds with fast-inserting joint	●	
加大(减小)容模量	Increase (decrease) the mould height		○
顶出强制复位功能	Ejector forced reset		○
模板加装隔热板	Heat shield for mold platen.		○
增加冷却水装置	Increasing cooling water device		○
玻璃管冷却水计量计	Glass tube water manifolds		○
钣金门罩加宽	Widened security door		○
欧规机械手安装接口	Euromap interface		○
液压系统	HYDRAULIC SYSTEM		
高精密实时旁路滤油器装置	High-precision bypass filter	●	
低噪音节能型液压回路	Low-noise energy-saving hydraulic circuit	●	
进口名牌液压控制阀	Imported high-quality hydraulic control valve	●	
进口名牌液压密封件	Imported high-quality hydraulic seals	●	
差动快速合模装置	Differential fast clamping device	●	
开模刹车油路设计	Hydraulic circuit for braking of mold opening	●	
油温检测及高低温报警	Oil temperature monitoring automatic alarm	●	
一组中子气和气阀装置	A set of core pulling valve and pneumatic alve	●	

液压系统	HYDRAULIC SYSTEM	标配 Stsndard	选配 Optional
加大多级油泵、电机	Enlarged pump and motor system		○
加大(减小)熔胶马达	Enlarged (diminished) charging motor		○
增加液压顺序阀控制	Increase hydraulic sequence valve		○
增加针阀控制	Increase pin valve		○
同步顶出、熔胶、抽芯	Synchronized ejection, charging, core pulling		○
多组抽芯、气阀装置	Multiple core pulling, pneumatic valve		○
液压、电动旋转脱模装置(绞牙功能)	Hydraulic and electric rotary demoulding device (threading function)		○
控制系统	CONTROL SYSTEM		
多种电脑操作语音	Multiple languages	●	
输出、输入检视画面	Output and input view screen	●	
自动保温和自动加热设定功能	automatic heating and automatic insulation setting	●	
射胶转保压方式:时间/位置/时间+位置	Injection transfer to pressure holding by time /position /time+position	●	
三色报警灯	Three colour of alarm light	●	
前、后安全门急停开关保护	Emergency stop switch protection for front and rear safety door	●	
可设置多级密码保护,操作面板带锁按键钥匙	Multi-level password protection setting, operation panel with lock button key	●	
2组380V+1组220V电源插座	2 set of 380V + 1set of 220V power sockets	●	
加热固态继电器控制	SSR control heating		○
增加电源插座	Increased power plug		○
预留吹气、抽芯、顶退回保护等多种接口	More interface for pneumatic valve, core pulling, ejector backwards protection etc		○
热流道接口	Hot runner connection		○
气动顺序阀	Pneumatic sequence valve		○
更改电源电压、频率	Power voltages and frequencies changed		○
电动熔胶	Electric charging		○
气辅注射装置	Gas-assisted injection device		○
电脑整机能耗显示	Energy consumption display		○

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