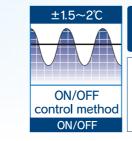


## Series MLSA/MLHA/MLSB

Circulation (closed) type

For main spindle, operating oil and lubricant oil





Options

implemented



Cools linear

Cools ball





% For other special specifications please contact our sales



## Circuit diagram For model MLSB with tank OIL MATIC Pressure switch OUT Service valve Drier Drier Fan motor Capillary tube(%1) Cooler Main spindle head $\Box$ of machine tools Service valve DRAIN Cools built-in motor jacket, etc. Pump motor Sensor Oil filler port Liquid level gauge DRAINX

 $\rm \%OILMATIC$  models larger than ML\*\*-15 have an expansion valve instead of a capillary tube.

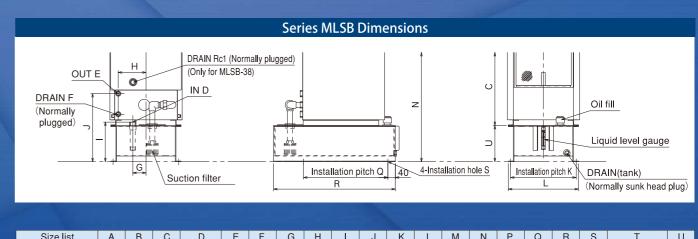
Mod	el	MLHA-03 MLSA-03 MLSB-03	MLHA-05 MLSA-05 MLSB-05	MLHA-07 MLSA-07 MLSB-07	MLHA-11 MLSA-11 MLSB-11	MLHA-15 MLSA-15 MLSB-15	MLHA-22 MLSA-22 MLSB-22	MLHA-38 MLSA-38 MLSB-38						
Effective	e cooling capacity (50/60Hz)[W] * 1	1160/1390	1450/1740	2900/3480	3720/4460	4830/5810	7260/8720	12200/14650						
Nomi	nal chiller capacity[W]	400	500	750	1100	1500	2200	3750						
Refrigerant used		R-407C												
Refri	gerant capacity[g]	530	620	880	1300	1670	2700	4200						
Solution		12/1	4.4	24/2	28.8	30/36	39/46.8	58.5/70.2						
sending pump	Total relief pressure[MPa]	0.5 0.2 0.3												
Power source		AC200V 50/60Hz AC220V 60Hz 3Ph												
	Maximum operating current[A]	4	4 5 8 12 15				22 34							
Temperature setting range		Follow-up type ···reference temperature-9.9∼9.9°C												
		Constant type⋯5~45°C												
Range of ambient temperature[°C]		F 45												
Range of liquid temperature[℃]		5~45												
Fluid to use		Mineral operation oil, lubricant oil, heat medium oil, etc.												
Tank	capacity[L] *2	15	5	24	32	37	70	105						
Heating capacity(kW) *3			1		2	2	3	4						
Weigh	nt[kg](MLHA,MLSA type)	50	7	0	110	120	185	300						
Weig	ht[kg](MLSB type)	70	9	0	135	150	275	400						

## \*1 Effective cooling capacity indicates the maximum values within the range of use when oil ISO VG2 or equivalent is used. \*2 Only for MLSB-type specification (with tank).

- \*\*3 Only for specifications with heater.

  \*\* Specifications may be improved and are subject to change without notice.

## Series MLSA·MLHA Dimensions Front side Rear Left side Control panel view Control box Room temp. sensor A Hole for signal \$\phi 22\$ DRAIN Rc1 (Normally plugged) Intake vent Intake air (with filter) (Only for MLSA-38 and MLHA-38) OUT E IN D Ø DRAIN F Installation pitch Q Installation pitch K 4-Installation hole S (Normally plugged)



Size iist	А	В	U	D	=	<u> </u>	G	п		J	n	L	IVI	IN	٢	Q	ĸ	S		U	
MLSA-03 MLHA-03			815				130		100	160			30	625		350	382			_	
MLSB-03	360	420		Rc1/2		60	130	180	325	320	320 344	-	790	105	400	580	φ10	2-M10 Eye bolt	165		
MLSA-05 MLHA-05			915			130		100	160	020		30	725		350	382			_		
MLSB-05							60		180	325			_	890		400	580		Lye bon	165	
MLSA-07 MLHA-07	390	440	974	Rc3/4	Rc1/2	143	148	110	170	350	374	30	785	85	380	403	_				
MLSB-07						70		210	370			-	985		450	650	200				
MLSA-11 MLHA-11	435 505	520	1215 1250		Rc3/4	160	110	125	190	380	418	40	1025	95	440	470	$\phi$ 12 2-M12 Eye bolt	2-M12	_		
MLSB-11						100		215	390	390	416	-	1225		550	726			200		
MLSA-15 MLHA-15		550				195		130	190	448	486	40	1060		470	500		_			
MLSB-15						100		210	390	460		_	1260		550	756			200		
MLSA-22 MLHA-22		575	1480	Rc1 1/4	Rc1	215	200	130	225	546	584	40	1265		500	530	φ14	4-M12 Eye bolt	_		
MLSB-22						150		260	470	560	586	-	1515		575	800			250		
MLSA-38 MLHA-38		725	1740			280	190	150	225	676	714	40	1525		650	680			_		
MLSB-38						150		260	470	690	716		1770		765	950			245		