

Motor Parameters		Symbols	Units	HoSM-220-AL		HoSM-220-BL		HoSM-220-CL	
PERFORMANCE	DC Bus Voltage	$V_{DC}$	V	24	48	24	48	24	48
	Rated Torque	$T_r$	Nm	19.7		34.8		51.7	
	Peak Torque	$T_p$	Nm	31.3		62.9		94.5	
	Rated Speed	$N_r$	rpm	115	275	70	175	55	140
	No-Load Speed	$N_{no-load}$	rpm	170	350	105	220	90	185
	Torque Constant	$K_t$	Nm/A	1.58		2.49		2.97	
	Voltage Constant	$K_v$	V/rpm	0.135		0.213		0.256	
	Max. Cogging Torque	$T_{cog}$	%			<1			
	Torque Ripple	$T_{ripple}$	%			<1			
	Number of Pole	2p	--			24			
ELECTRICAL	Rated Current	$I_r$	$A_{rms}$	12.5		14		17.4	
	Peak Current	$I_p$	$A_{rms}$	20		25.4		31.8	
	Line Resistance	$R_{Ll}@25^{\circ}C$	Ohm	0.42 ( $\pm 20\%$ )		0.42 ( $\pm 20\%$ )		0.39 ( $\pm 20\%$ )	
	Line Inductance	$L_{Ll}@60Hz$	mH	2.30 ( $\pm 30\%$ )		2.4 ( $\pm 30\%$ )		2.4 ( $\pm 30\%$ )	
	MECHANICAL & THERMAL	Total Weight (+Face)	$W_s$	kg	17.1		22.3		26.6
Total Weight (+Flange)		$W_r$	kg	17.6		22.7		27.1	
Mech. Time Constant		$K_{mech}$	ms	3.4		1.97		1.78	
Thermal Resistance (2)		$R_{th}$	$^{\circ}C/W$	--		--		--	
Inertia		J	kg.m <sup>2</sup>	0.01578		0.02489		0.03399	
Friction Torque		$T_f$	Nm			3.1			
Motor Constant		$K_m$	Nm/ $\sqrt{W}$	1.28	0.83	2.18	1.38	3	1.88
Rotor ID			mm			63.5			

Motor Parameters		Symbols	Units	HoSM-220-AH		HoSM-220-BH		HoSM-220-CH	
PERFORMANCE	DC Bus Voltage	$V_{DC}$	V	310	560	310	560	310	560
	Rated Torque	$T_r$	Nm	19.2		35.2		51	
	Peak Torque	$T_p$	Nm	59.5		121.9		182.6	
	Rated Speed	$N_r$	rpm	295	570	255	490	240	455
	No-Load Speed	$N_{no-load}$	rpm	370	675	315	575	285	520
	Torque Constant	$K_t$	Nm/A	9.63		11.36		12.44	
	Voltage Constant	$K_v$	V/rpm	0.823		0.965		1.065	
	Max. Cogging Torque	$T_{cog}$	%			<1			
	Torque Ripple	$T_{ripple}$	%			<1			
	Number of Pole	2p	--			24			
ELECTRICAL	Rated Current	$I_r$	$A_{rms}$	2		3.1		4.1	
	Peak Current	$I_p$	$A_{rms}$	6.4		11.2		15.2	
	Line Resistance	$R_{Ll}@25^{\circ}C$	Ohm	16.2 ( $\pm 20\%$ )		10.1 ( $\pm 20\%$ )		6.2 ( $\pm 20\%$ )	
	Line Inductance	$L_{Ll}@60Hz$	mH	80.2 ( $\pm 30\%$ )		60.4 ( $\pm 30\%$ )		40.6 ( $\pm 30\%$ )	
	MECHANICAL & THERMAL	Total Weight (+Face)	$W_s$	kg	17.1		22.3		26.6
Total Weight (+Flange)		$W_r$	kg	17.6		22.7		27.1	
Mech. Time Constant		$K_{mech}$	ms	3.4		2.4		1.66	
Thermal Resistance (2)		$R_{th}$	$^{\circ}C/W$	--		--		--	
Inertia		J	kg.m <sup>2</sup>	0.01578		0.02489		0.03399	
Friction Torque		$T_f$	Nm			3.1			
Motor Constant		$K_m$	Nm/ $\sqrt{W}$	0.79	0.57	1.15	0.83	1.42	1.03
Rotor ID			mm			63.5			

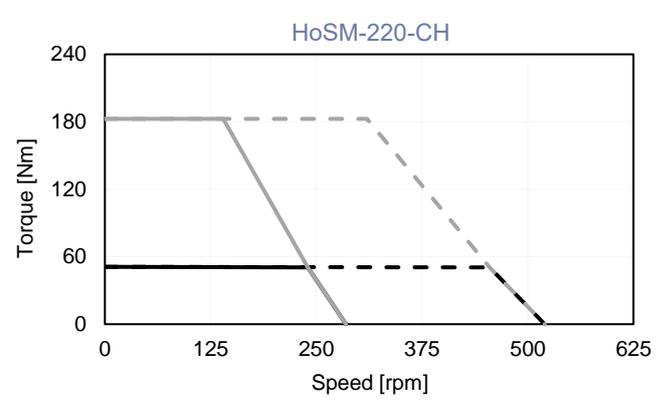
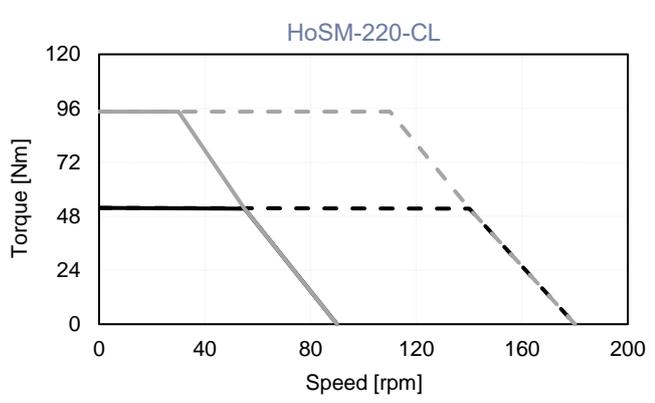
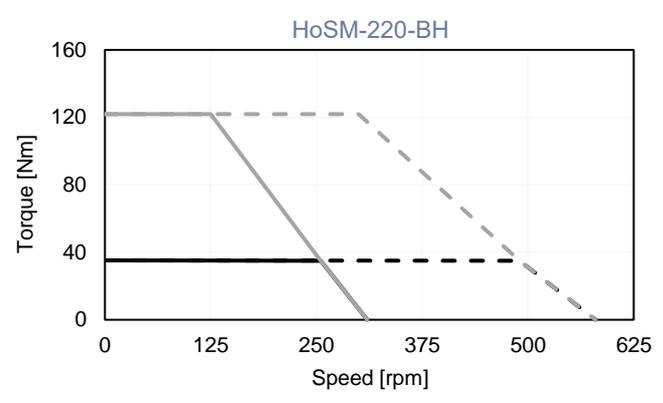
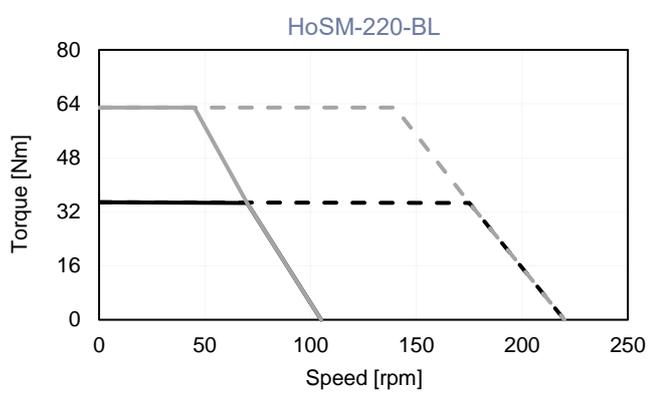
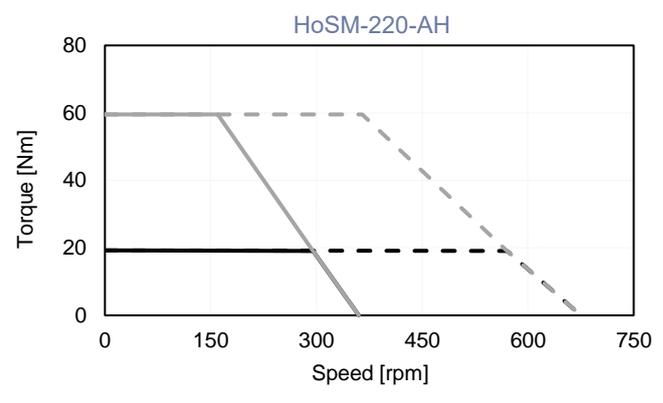
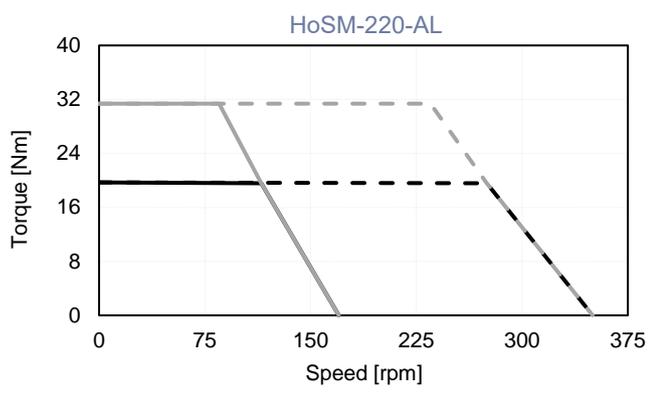
1. All performance and electrical specifications are obtained at 25°C ambient and may change  $\pm 10\%$ .

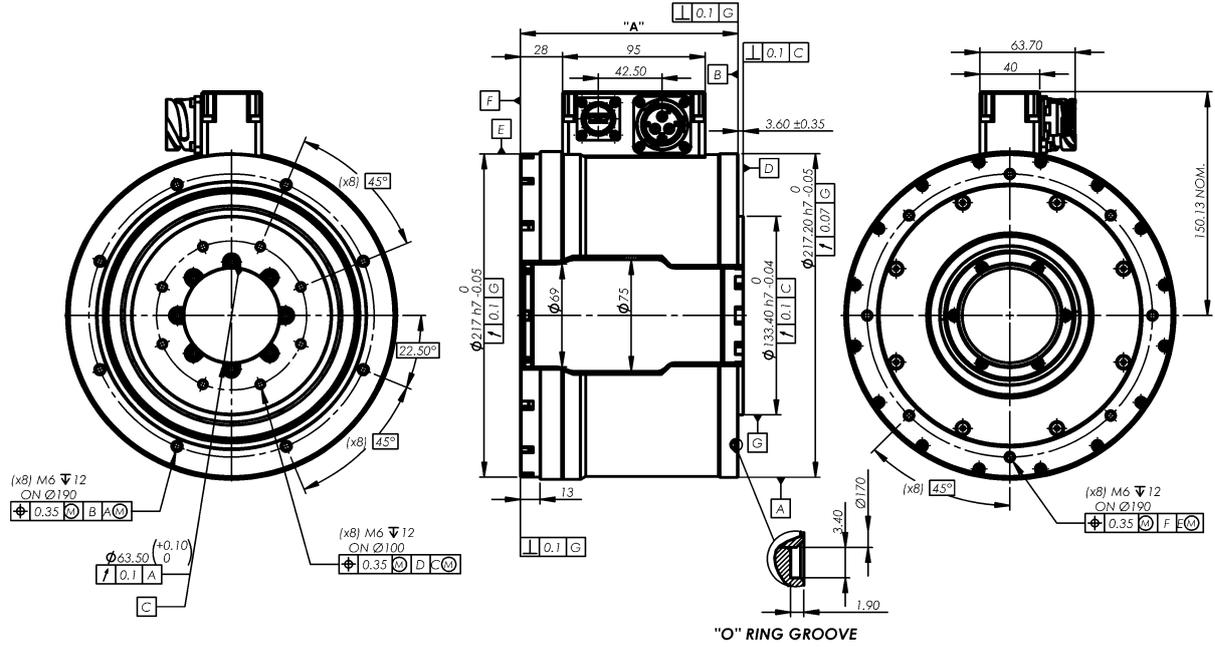
# HoSM-220 Torque-Speed Curves

Tr: Rated Torque  
Tp: Peak Torque

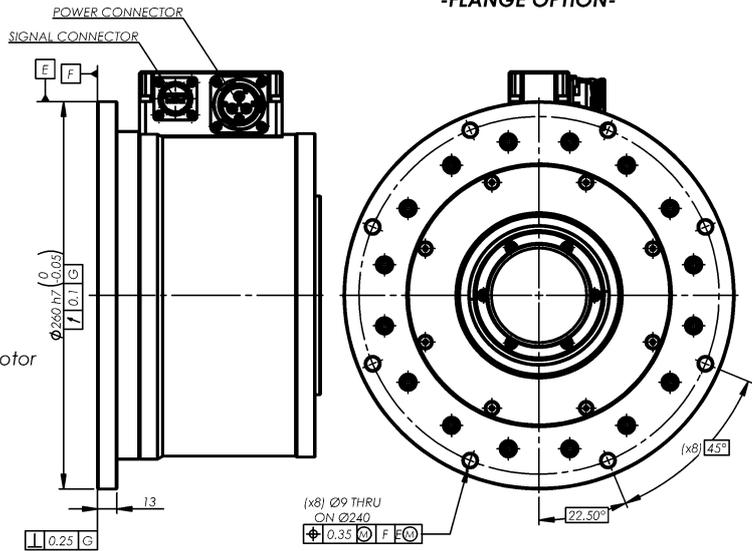
— @Tr 24V    - - - @Tr 48V  
— @Tp 24V    - - - @Tp 48V

— @Tr 310V    - - - @Tr 560V  
— @Tp 310V    - - - @Tp 560V





**-FLANGE OPTION-**



MODEL	"A"
HoSM-220.A	145 (±0,5)
HoSM-220.B	175 (±0,5)
HoSM-220.C	205 (±0,5)

- All dimensions in mm
- For different connector size please contact MDS Motor