



eMpulse Test Systems – seaPLUS 4-Poster Specifications

SPECIFICATIONS	SYMBOL	UNITS	sea ⁺ 13	sea ⁺ 26		sea ⁺ 41		sea ⁺ 53		sea ⁺ 107	
Typical Applications			Body Coupled*	NVH 4-Post		4-Post Durability		4-Post Durability		4-Post Durability	
xxx= A Stroke M working Stroke, peak - peak	S	m (in)	330* (13)*	160 (6.3)	260 (10.2)	160 (6.3)	260 (10.2)	160 (6.3)	260 (10.2)	160 (6.3)	260 (10.2)
Motor Dynamic Peak Force Motor Peak Force	Fpk, mot	N (lbF)	13486 (3028)	26910 (6050)		40326 (9066)		53820 (12100)		107640 (24200)	
Motor Continuous Dynamic Force** Motor Continuous or rms Force	Fn, mot	N (lbF)	5018 (1128)	10530 (2367)		21060 (4735)		21060 (4735)		42120 (9469)	
Static Load Support Max Air Spring Capacity at Prated	Fpk, air	N (lbF)	8900 (2000)	17800 (4000)		17800 (4000)		17800 (4000)		35600 (8000)	
Total Peak Force Fpk, mot + Fpk, air	Fpk, total	N (lbF)	13918 (3129)	28330 (6369)		38860 (8737)		38860 (8737)		77720 (17473)	
Total Continuous Force Fn,mot + Fpk,air	Fcont, tot	N (lbF)	22368 (5029)	44710 (10052)		58126 (13068)		71620 (16102)		143240 (32203)	
Velocity max at Fn,mot	Vmax, fn	ms/ (in/s)	4.6 (181)	4.2 (165)		4.2 (165)		4.2 (165)		4.2 (165)	
Velocity max at Fpk,mot	Vmax, fpk	m/s (in/s)	2.0 (78.7)	1.9 (74.8)		1.9 (74.8)		1.9 (74.8)		1.9 (74.8)	
Acceleration max (unloaded)	gmax	G	26	30	24	30	24	36	30	36	30
Absolute Digital Encoder Resolution	Enc res	Nm	10.0 for playback and monitoring								
Noise Level – Typical (NVH Mode)	SPL(A)	dbA	<55								
Safety Rating, DIN EN 61508***	SIL		2								
Safety Rating, DN EN ISO 13849-1***	Cat		3								
Performance, DIN EN ISO 13849-1***	PL		D								
Bearing Materials			Qty 4 - Prelubricated, preloaded t-rail caged roller bearings. Replacement interval: 15 years under designed usage.								
Facility Requirements		V A	380-480Vac, 3φ, 50-60 Hz Current Rating based on motor sizing and system performance requirements.								
Air Supply, Rated	Prated	Psi (bar)	100 (6.9), higher Static Load Support possible at higher supply pressures.								
Recommend Liquid Cooling Flow, approximately 20deg delta C	Q	Lpm gpm	20 5.3	22 5.8	22 5.8	26 6.9	26 6.9	26 6.9	52 13.7	52 13.7	
Max Motor Heat Removal @100% duty cycle, full durability rating	Qp	kW Btu/hr ton	15.5 52832 4.4	29.4 100205 8.4	29.4 100205 8.4	53.8 183713 15.3	53.8 183713 15.3	53.8 183713 15.3	53.8 183713 15.3	107.7 367426 30.6	



Notes:

1. *All performance parameters are estimates based on design considerations and are subject to change at any time. As such, eMpulse cannot be held liable for any incidental or consequential damages or losses arising from the use of this information.*
2. *Interpretation and use of the data are the sole responsibility of the user.*