



Comparing the M3 and HS45:

The M3 is a proven workhorse with a great reliability record. And Nidec Avtron is committed to always improving our products. So we've created the HS45, an improved model which offers even higher durability plus many new features customers have asked for including onboard predictive diagnostics.

The HS45 fits the same shafts as the M3 and offers 100% electrical compatibility so you can quickly install HS45 with no motor or mounting modifications.

Product	 M3	 HS45
Feature	M3 Feature	HS45 Improvement
Voltage Range	5-24V model or 5-18V model or 12-24V model	One voltage range: <i>5-24V reduces spare parts</i>
Overvoltage Protection	18-28V depending on model	<i>Up to 50V</i>
Output Power for Long Cable Runs	250ft @ 24V maximum 1000ft @ 5V maximum	<i>1000ft @ 5-24V, longer distances possible</i>
Short Circuit Protection of Outputs	5-15V, depended on model	All units protected to <i>28V dead short circuit</i>
Protection Against Wiring Errors	Some models, up to 15V errors ok	<i>All units protected from 28V wiring power or ground to any pin</i>
Protection from Shaft Currents	Tether arm washers	<i>Full shaft sleeve inserts</i>
Environmental Protection	IP65	<i>IP65 and fully potted electronics</i>
Durability	Large bearings	<i>40% higher load rated bearings</i>
Predictive Diagnostics	None	<i>LED and remote alarm contact</i>
Sensor System	Optical	Magnetic
Maximum PPR	2500	<i>5000</i>
Bore Size Range	5/8" - 2 3/8" [16-60mm] Non-resizable in field	5/8" – 1 1/8" [16-30mm] Can be resized in field
Mounting Styles	End of shaft model through shaft model	One style: <i>Universal through and end of shaft mount</i>
Additional Options	Safety Finger Guard Wide range of tethers Dual outputs	Safety Finger Guard Wider range of tethers Dual outputs (mix and match PPR) <i>Mechanical Overspeed Switch</i>

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