

# Encoder Selection Chart

**LIGHT MILL DUTY** – For use in dry commercial and industrial environments with temperature controlled spaces.

**MILL DUTY** – For use in typical industrial environments. More mechanically robust than light mill duty. Not recommended for environments with frequent temperature changes and chronically wet conditions.

**HEAVY MILL DUTY** – For more rugged environments with frequent temperature fluctuations and increased levels of contaminations and moisture.

**SEVERE DUTY** – For use in very wet or dusty environments with large and frequent temperature extremes including outdoor applications.

**OPTICAL** sensors are offered in light and mill duty encoders. Optical sensing technology works best when used in environments without frequent temperature changes and/or chronically wet conditions.

**MAGNETIC** sensors are offered in light, mill, heavy and severe duty encoders. Because they are not affected by dust or moisture, they are suited to rough service in modular style encoders.

Recommended Type	Typical Applications*								
	Conveying	Converting	Films	Food	Paper	Steel	Hoist	Marine	Oil Drilling
Light									
Standard/Mill									
Heavy					S			S	E
Severe					S			S	E

\* Darker=better suited for application  
<sup>S</sup>Stainless Option Recommended  
<sup>E</sup>Explosion Protected Recommended

\* Nidec Motor Corporation makes no warranty as to suitability of purpose; recommendations are based on industry standard applications and are subject to warranty terms and conditions of sale.

See the quick pick chart on page 60 for more details of the encoders below:

	TYPE OF ENCODER	MOUNTING	MODEL
  <b>Heavier Duty</b>	Optical Commercial Duty	Hollow Shaft	Dynapar <sup>®†</sup> HS20R
			Encoder Products Co. <sup>®†</sup> 260
	Optical Light Duty	Hollow Shaft	AVTRON <sup>®†</sup> HS25A
			Avtron <sup>®†</sup> HS35A
			Dynapar <sup>®†</sup> HS35R
			Encoder Products Co. <sup>®†</sup> 775
			Encoder Products Co. <sup>®†</sup> 776
	Optical Mill Duty	Hollow Shaft	Encoder Products Co. <sup>®†</sup> 25T
			Encoder Products Co. <sup>®†</sup> 770
			Encoder Products Co. <sup>®†</sup> 771
	Magnetic Mill Duty	No Bearing	Avtron <sup>®†</sup> AV32
		Hollow Shaft	Avtron <sup>®†</sup> HS35M
	Magnetic Heavy Duty	Hollow Shaft	Avtron <sup>®†</sup> HS45
		Modular C-Face	Dynapar <sup>®†</sup> ST56
Avtron <sup>®†</sup> AV56A			
Magnetic Severe Duty	Hollow Shaft	Avtron <sup>®†</sup> AV850	
	Solid Shaft	Avtron <sup>®†</sup> AV685	

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