

Known for durability. Trusted for quality.

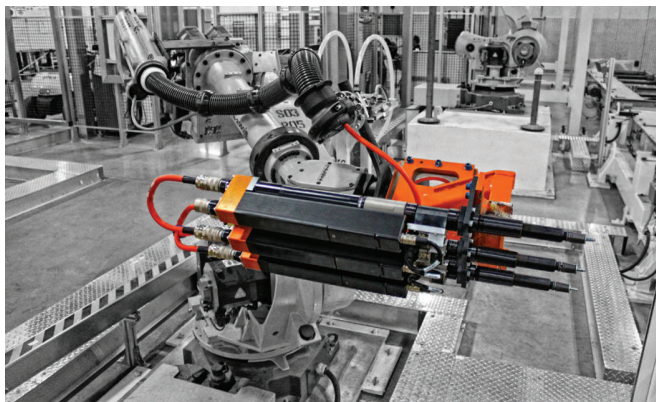
The ultimate **automated** tightening solutions.

Cleco DGD™ Intelligent Spindles are the exclusive fixtured assembly solution, combining reduced floor space, fewer cables and high-speed uptime availability for automated fastening applications. Intelligent spindles provide a wide range of torque capability and industry-leading free speeds.



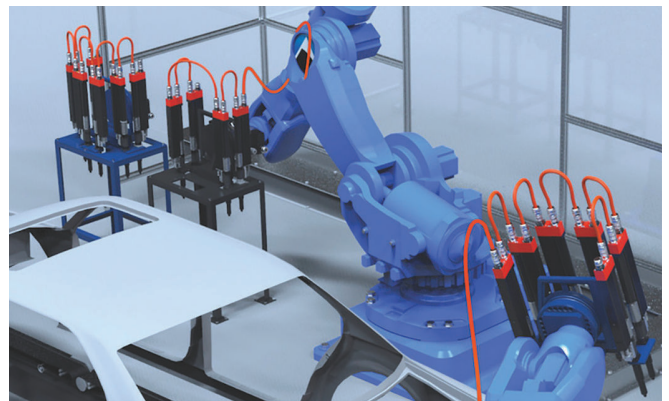
Reduce your **footprint and total cost of ownership** via our exclusive intelligent spindle cabling technology.

When you're looking to run robotic tightening applications, look to Cleco DGD intelligent spindle solutions. By utilizing our exclusive daisy-chain connectors, we offer the only solution in the industry that enables you to run multiple spindles using a daisy-chained cable solution. This results in reduced system complexity, simple cable management and smaller pay-load capacity.



Same cell, same robot: **Intelli-Swap**, an industry first.

Combining Cleco DGD Intelligent Spindles and daisy-chain connectors with our patented Intelli-Swap system technology, plus an automatic, intelligent tool changer enables your system to rapidly switch from one group of spindles to another using the same controller. Cleco DGD solutions enable you to effortlessly manage multiple applications in a single cell.



Intelligent Spindle - BUTS size 1-4 (2-750 Nm) - Offset Drive - Reversible Gears - Single Torque Transducer - Angle Encoder

- The transducer can be rotated for crowded multiple spindle arrangements (DGD 15° radial toothing).
- Floating adapter not included with spindle



MODEL	TORQUE RANGE				FREE SPEED R/MIN	FLOAT MM	DRIVE TYPE	MIN CENTER TO CENTER MM	WEIGHT		LENGTH	
	MIN NM	MAX NM	MIN FT LB	MAX FT LB					LB	KG	IN	MM
1BUTS-1B012A-1VK3B	2	12	1.48	8.9	1825	50	3/8" SQUARE DRIVE	35	12.8	5.8	15.0	382
1BUTS-1B035A-1VK1B	5	35	3.69	25.8	690	50	3/8" SQUARE DRIVE	35	12.8	5.8	15.0	382
1BUTS-1B060A-1VK2B	15	53	11.1	39.1	405	50	3/8" SQUARE DRIVE	35	12.8	5.8	15.0	382
2BUTS-2B110A-2VK1B	25	110	18.5	81	831	50	1/2" SQUARE DRIVE	44	22.5	10.2	15.4	390
2BUTS-2B200A-2VK3B	40	200	29.5	148	468	50	3/4" SQUARE DRIVE	44	22.5	10.2	15.4	390
3BUTS-3B300A-3VK2B	50	300	36.9	221	421	50	3/4" SQUARE DRIVE	59	37.9	17.2	16.2	412
4BUTS-4B500A-4VK2B	100	500	74	369	238	50	3/4" SQUARE DRIVE	76	53	24	20.2	512
4BUTS-4B660A-4VK3B	130	660	96	487	163	50	1" SQUARE DRIVE	76	53	24	20.2	512
4BUTS-4B660A-4VK4B	160	750	118	554	135	50	1" SQUARE DRIVE	76	54	24.5	20.2	512

Intelligent Spindle - BUTSE Size 1-4 (2-750 Nm) - Offset Drive - Reversible Gears - Single Torque Transducer - Single Angle Encoder

On board servo module, Patented daisy chain, Torque transducer, , modular consutuction

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- Floating adapter not included with spindle



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Fixtured Spindles