

Known for durability. Trusted for quality.

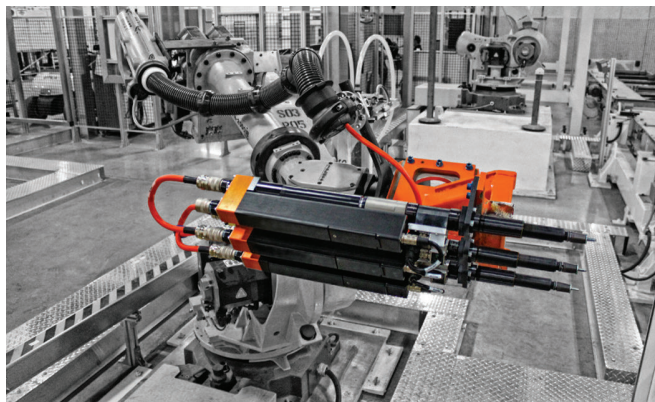
The ultimate **automated** tightening solutions.

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.



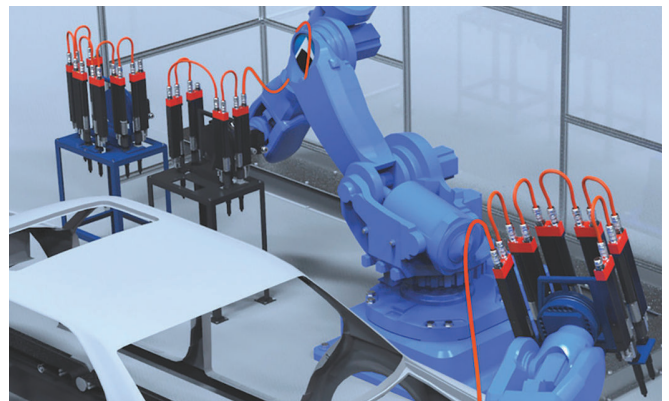
Reduce your **footprint and total cost of ownership** via our exclusive intelligent spindle cabling technology.

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 - BUTSE Size 1-4 (2-660 Nm) - Angle Drive - Reversible Gears - Single Torque Transducer

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



- Long Service Life, Maximum Precision, High Accuracy, World class free speed, On-Board trouble shooting
- 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
1BUTSE-1B012A-1WM3B	2	12	1.48	8.85	1801	25	3/8" SQUARE DRIVE	52	13.7	6.2	14.6	370
1BUTSE-1B035A-1WM1B	5	35	3.69	25.8	681	25	3/8" SQUARE DRIVE	52	13.7	6.2	14.6	370
1BUTSE-1B060A-1WM2B	12	53	8.85	39.1	400	25	3/8" SQUARE DRIVE	52	13.7	6.2	14.6	370
2BUTSE-2B110A-2WM1B	25	110	18.4	81.1	838	25	1/2" SQUARE DRIVE	59	21.4	9.7	16.6	421
2BUTSE-2B200A-2WM3B	40	200	29.5	146	472	25	3/4" SQUARE DRIVE	59	21.4	9.7	16.6	421
3BUTSE-3B300A-3WM2B	50	300	36.9	221	437	25	3/4" SQUARE DRIVE	81	43.7	19.8	19.9	506
4BUTSE-4B500A-4WM2B	100	500	73.8	369	245	25	1" SQUARE DRIVE	112	63	28.6	21.9	556
4BUTSE-4B660A-4WM3B	130	660	95.9	487	167	25	1" SQUARE DRIVE	112	63	28.7	21.9	556

Intelligent Spindle - BUTS Size 1-4 (2-660 Nm) - Angle Drive - Reversible Gears - Twin Torque Transducer - Twin Angle Encoder

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



- Long Service Life, Maximum Precision, High Accuracy, World class free speed, On-Board trouble shooting
- 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-1K3B-1WK3B	2	12	1.48	8.9	1801	25	3/8" SQUARE DRIVE	52	15.0	6.8	17.7	450
1BUTS-1B035A-1K1B-1WK1B	5	35	3.69	25.8	681	25	3/8" SQUARE DRIVE	52	15.0	6.8	17.7	450
1BUTS-1B060A-1K2B-1WK2B	15	53	11.1	39.1	400	25	3/8" SQUARE DRIVE	52	15.0	6.8	17.7	450
2BUTS-2B110A-2K1B-2WK1B	25	110	18.5	81	838	25	1/2" SQUARE DRIVE	59	21.4	9.7	20.4	518
2BUTS-2B200A-2K3B-2WK3B	40	200	29.5	148	472	25	3/4" SQUARE DRIVE	59	21.4	9.7	20.4	518
3BUTS-3B300A-3K2B-3WK2B	50	300	36.9	221	437	25	3/4" SQUARE DRIVE	81	48	21.9	24.3	617
4BUTS-4B500A-4K2B-4WK2B	100	500	74	369	245	25	1" SQUARE DRIVE	112	70	31.6	26.9	684
4BUTS-4B660A-4K3B-4WK3B	130	660	96	487	167	25	1" SQUARE DRIVE	112	70	31.7	26.9	684

Fixtured Spindles

Intelligent Spindle - BTS Size 1-4 (2-660 Nm) - Angle Drive - Twin Torque Transducer - Twin Angle Encoder

On board servo module, Patented daisy chain, Twin Torque transducer, Angle Encoder



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- 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
1BTS-1B012A-1K3B-1WK3B	2	12	1.48	8.9	1801	25	3/8" SQUARE DRIVE	52	13.9	6.3	24.5	622
1BTS-1B035A-1K1B-1WK1B	5	35	3.69	25.8	681	25	3/8" SQUARE DRIVE	52	13.9	6.3	24.5	622
1BTS-1B060A-1K2B-1WK2B	15	53	11.1	39.1	400	25	3/8" SQUARE DRIVE	52	13.9	6.3	24.5	622
2BTS-2B110A-2K1B-2WK1B	25	110	18.5	81	838	25	1/2" SQUARE DRIVE	59	21.6	9.8	26.7	678
2BTS-2B200A-2K3B-2WK3B	40	200	29.5	148	472	25	3/4" SQUARE DRIVE	59	21.6	9.8	26.7	678
3BTS-3B300A-3K2B-3WK2B	50	300	36.9	221	437	25	3/4" SQUARE DRIVE	81	43.9	19.9	31.1	790
4BTS-4B500A-4K2B-4WK2B	100	500	74	369	245	25	1" SQUARE DRIVE	112	66	30.1	33.7	856
4BTS-4B660A-4K3B-4WK3B	130	660	96	487	167	25	1" SQUARE DRIVE	112	66	30.1	33.7	856

Intelligent Spindle - BUTS Size 1-4 (2-660 Nm) - Angle Drive - Reversible Gears - Single Torque Transducer - Angle Encoder

On board servo module, Patented daisy chain, Twin Torque transducer, Angle Encoder



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