

CL 8mm Pneumatic Feeder

8mm carrier tape • 8×2mm and 8×4mm pitch variants • pneumatic-mechanical indexing
Part No.: KW1-M1xxx series (CL “Compact Loader” platform)

Overview

The Yamaha CL 8mm feeder is the core small-component feeder of the Yamaha CL (“Compact Loader”) platform, supplying the bulk of small SMD passives on populated Yamaha YV- and YG-class machines. It accepts 8mm-wide carrier tape and comes in two pitch variants matched to the tape drive-hole spacing.

Mechanically it is a purely pneumatic unit: a ratcheted sprocket engages the tape drive-holes, a pneumatic cylinder fed by the host machine's compressed air actuates the indexing pawl on each pick cycle, and the spent cover tape is peeled and wound onto an integrated take-up reel. There is no motor, no electronics, and no comms cable — only the mechanical mount and the standard CL pneumatic interface. This simplicity keeps the CL 8mm in heavy service: low cost per slot, easy maintenance, and immunity to electrical or firmware faults. It occupies a single feeder-bank slot, the densest format Yamaha CL offers.

Pitch Variants

Variant	Pitch	Typical Components
CL 8×2mm	2 mm / cycle	0201, 0402 chip R/C, small diodes, 2mm-pitch LEDs
CL 8×4mm	4 mm / cycle	0603, 0805, 1206, SOT-23, SOT-323, MELF, LED 3014/3528

Note: the two variants are not interchangeable — the sprocket teeth and indexing pawl are physically matched to the tape drive-hole spacing. A populated machine normally carries a mix of both.

Specifications

Parameter	Specification
Platform	Yamaha CL (Compact Loader)
Tape width	8 mm
Drive type	Pneumatic — mechanical ratchet indexing, pneumatically actuated
Pitch options	8×2mm (2 mm) and 8×4mm (4 mm)
Max reel diameter	15" / 382 mm
Slots occupied	One (densest CL format)
Electronics / comms	None — no motor, no cable, pneumatic interface only
Cover-tape handling	Peeled and wound onto integrated take-up reel
Compatible – YV	YV100II, YV100X, YV100XG, YV180XG, YV88XG, etc.
Compatible – YG	YG100, YG200, YG300, YG12, YG12F
Also compatible	Philips / Assembleon CL-platform equivalents
0201 identifier	Green handle (8×2mm 0201 variant)

Part Number Reference

Feeder	Component	Part No.
CL 8x2mm	0201	KW1-M1500-030
CL 8x2mm	0201	KW1-M1500-110
CL 8x2mm	0402	KW1-M1400-00X
CL 8x2mm	0402	KW1-M1300-00X
CL 8x4mm	0603 / 0805 / 1206 / SOT	KW1-M1100-000
CL 8x4mm	0603 / 0805 / 1206 / SOT	KW1-M1100-030
CL 8x4mm	0603 / 0805 / 1206 / SOT	KW1-M1200-00X

Common Wear Items & Spare Parts

Press cover assembly (8mm) • stop claw / pawl (bird-beak) assembly • feeder head assembly • sprocket gear (2mm and 4mm pitch variants) • take-up reel / winder drum • one-way wheel • tape guide cover • tension spring • pneumatic cylinder • reel holder (15" / 382 mm) • mounting / locating pin set • green handle (0201 variant identifier)

The most common wear items are the press cover, the bird-beak / pawl assembly, the sprocket gear, and the take-up reel mechanism. Original Yamaha and high-quality compatible units are widely stocked and generally interchangeable in service.

Datasheet compiled from publicly available distributor specifications (SMT Equipment Store). Part numbers and compatibility vary by machine model and revision — confirm against Yamaha official documentation before ordering. "Yamaha" and model names are trademarks of their respective owners. Generated May 2026.