

FIELD OF APPLICATION

Lockstitch and chainstitch machines of the following series:

Brand	Series
Juki	D..(e. g. DDL5550, LG., LZH., PLW., LH1.../LH3... but not with automatic corner sewing

With connections and/or outputs for:

Thread trimmer	(max. 3.0A)
Thread wiper	(max. 3.0A)
Sewing foot lift	(max. 6.5A/3A)
Backtacking	(max. 6.5A/3A)
Adapter cord for Molex sockets see Special Accessories!	

The total power of the outputs is to be limited to 96VA!
Power supply 24V=, max. 0.5A for further additional devices.

CHARACTERISTICS

The control has a digital touch panel for programming all parameters (functions, times, speeds, etc.). When a Variocontrol V820 control panel is connected, additional functions are possible, e. g. 8 seam patterns with a total of 40 seams (order nos. of the V810/V820 control panels see Special Accessories).

By means of the incorporated actuator, 12 speed stages can be activated. Stage 1 (positioning speed) and stage 12 (maximum speed) can be set. The maximum speed of the set value can be reduced by stages. The basic setting of the maximum speed is not affected. Stages 2...11 (intermediate speeds) adapt automatically to the respective maximum speed.

THE FOLLOWING FUNCTIONS ARE AVAILABLE AND CAN BE ADAPTED TO THE MACHINE:

- **SOFTSTART:** On / off; number of stitches and speed at the start of the seam can be selected (3 stitches / factory setting: 500 RPM).
- **BASIC POSITION:** Needle position at stop in the seam up/down.
- **BRAKING POWER AT MACHINE STANDSTILL:** Braking effect can be set.
- **SEWING FOOT LIFT:** At stop in the seam automatic / by pedal, after thread trimming automatic / by pedal, start delay from lifted sewing foot can be set.
- **START AND END BACKTACK:** Can be set separately, single / double / off, possibility of compensation between forward and backward section, length of each backtacking section and speed selectable.
- **START AND END ORNAMENTAL BACKTACK:** Stop time can be set.
- **THREAD TRIMMER:** On / off.
- **THREAD WIPER:** On / off.
- **STITCH COUNTING:** On / off.
- **SPEED RANGE:** 70 RPM up to 9900 RPM (depending on machine).
- **SPEED LIMITATION:** Can be varied during machine run and at intermediate stop.

SWITCHING FUNCTIONS WHEN USING A VARIOCONTROL V810/V820:

V810

- Start backtack single / double / off
- End backtack single / double / off
- Automatic sewing foot lift at stop in the seam / after thread trimming.
- Basic position of the needle at stop in the seam up / down.
- 2 pushbuttons which can be set with different input functions.

V820

- Start backtack single / double / off
- End backtack single / double / off
- Automatic sewing foot lift at stop in the seam / after thread trimming.
- Basic position of the needle at stop in the seam up / down.
- Stitch counting seam forward / backward / off.
- Light barrier function uncovered-covered / covered-uncovered / off.
- Thread trimmer and thread wiper.
- Function key programmable.
- Programming seams TEACH IN; a maximum of 8 patterns with a total of 40 seams is possible, feeding direction can be inverted.
- 2 pushbuttons which can be set with different input functions.

PUSHBUTTONS AND SWITCHES FOR THE FOLLOWING FUNCTIONS CAN BE CONNECTED:

- **NEEDLE POSITION UP/DOWN:** Needle up / needle up-down / single stitch / full stitch
- **INTERMEDIATE BACKTACK**
- **BACKTACK SUPPRESSION/RECALL**

IF THE LIGHT BARRIER MODULE IS NOT CONNECTED, THE LIGHT BARRIER INPUT CAN BE USED FOR THE FOLLOWING TOUCH AND/OR SWITCHING FUNCTIONS:

- **NEEDLE POSITION UP and/or DOWN**
- **NEEDLE POSITION UP**
- **SINGLE STITCH:** Basting stitch
- **FULL STITCH**
- **NEEDLE TO POSITION 2**
- **SEWING FOOT UP WITH PEDAL IN POS. 0 (neutral)**
- **RESET STITCH COUNTER**
- **MACHINE RUN BLOCKAGE:** Positioned stop; break contact [N.C.] / make contact [N.O.] selectable
- **MACHINE RUN BLOCKAGE:** Unpositioned stop; break contact [N.C.] / make contact [N.O.] selectable
- **AUTOMATIC SPEED**
- **LIMITED SPEED WHEN USING THE PEDAL**
- **INTERMEDIATE BACKTACK**
- **BACKTACK SUPPRESSION / RECALL**

▪ **UNIT CONSISTING OF:**

- | | |
|--|--|
| <ul style="list-style-type: none"> 1 induction motor with electromagnetic clutch type V....*1) 1 control box type 4E82AV2307 with power pack N30 1 position transmitter type P5-2 | <ul style="list-style-type: none"> 1 set of standard accessories B10 consisting of: <ul style="list-style-type: none"> 1 belt guard, complete (for pulleys up to 132 mm\varnothing) 1 set of hardware 1 motor mounting foot 1 bracket 1 and 2, short 1 documentation 1 set of accessories Z11 consisting of: <ul style="list-style-type: none"> 1 pitman rod, complete 1 retention pin with hexagon nut 1 3-pin plug with locking screw (MAS 3100) 1 10-pin plug (MES 100) |
| | <ul style="list-style-type: none"> 1 pulley DIN42692-L (size according to request) *2) |

▪ **SPECIAL ACCESSORIES:**

SPECIAL ACCESSORIES, AGAINST EXTRA CHARGE:	Part No.
Control panel Varioccontrol V810 with 9-pole/25-pole adapter	5970153
Control panel Varioccontrol V820 with 9-pole/25-pole adapter	5970154
Reflection light barrier module LSM001A	6100028
Belt guard for pulleys up to 180 mm \varnothing	7960012
Solenoid type EM1...(for e. g. sewing foot lift, backtacking)	available versions see specification "solenoids"
Adapter cord for the connection to JUKI high-speed seamers with index -6 (large Molex plugs)	1112298
Adapter cord for the connection to JUKI high-speed seamers DDL555-7, LZ2286-7 (Molex Minifit)	1112712
Extension cable for external actuator, approx. 750 mm long, complete with plug and socket connector	1111845
Extension cable for external actuator, approx. 1500 mm long, complete with plug and socket connector	1111787
5-pin plug with locking screw for the connection of another external actuator	0501278
External actuator type EB301 with approx. 250 mm connecting cable and 5-pin plug with locking screw	4170011
External actuator type EB302 (softer spring) with approx. 250 mm connecting cable and 5-pin plug with locking screw	4170012
Foot control type FB301 (one pedal) for standing operation with approx. 1400 mm connecting cable and plug	4170013
Foot control type FB302 (three pedals) for standing operation with approx. 1400 mm connecting cable and plug	4170018
Potential equalization cord 700 mm long, LIY 2.5 mm ² , grey with forked cable brackets on both sides	1100313
Fitting bush for position transmitter of JUKI high-speed seamers with index -6, -7	0300954
Extension cable for position transmitter P5-..., approx. 1100 mm long, complete with plug and socket connector	1111584
Extension cable for position transmitter P5-..., approx. 315 mm long, complete with plug and socket connector	1111229
Knee switch type KN3 (pushbutton) with cord of approx. 950 mm length without plug for activating the functions mentioned overleaf	5870013
Sewing light transformer	please indicate line voltage and sewing light voltage (6.3V or 12V)
3-pin plug with locking screw (MAS 3100) B12	0500402
10-pin plug (MES 100) B3	0500357

*1) Available motors see next page

*2) The following sizes are available: B58-L, B63-L, B67-L, B71-L, B75-L, B80-L, B85-L, B90-L, B95-L, B100-L, B106-L, B112-L, B118-L, B125-L, B132-L, B140-L

Note: Select the pulley such that the maximum speed of the machine corresponds to the speed indicated on the motor nameplate!



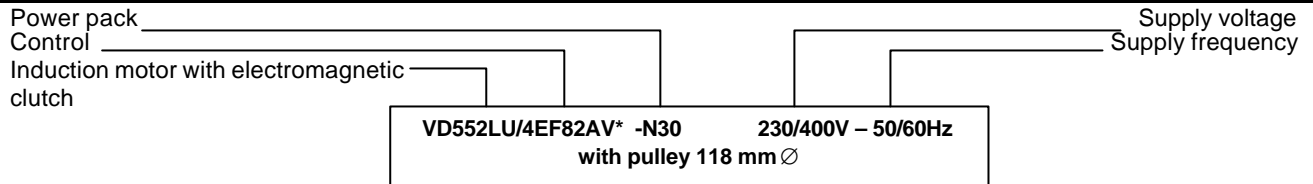
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▪ AVAILABLE MOTORS
Example For Ordering VARIOSTOP Positioning Drives (Series 82)


* Besides the type designation, the control nameplate indicates the respective state of development (e. g. 4E82AV...Y1) and the program number (e. g. 4E82AV2307..). The state of development is only required in the case of technical inquiries or repairs.

Induction Motors With Electromagnetic Clutch

Type	Power rating (W)	Speed (RPM)	Frequency (Hz)	Type	Power rating (W)	Speed (RPM)	Frequency (Hz)	Type	Power rating (W)	Speed (RPM)	Frequency (Hz)
VD374 VD374U VD374LU	370	1400/ 1700	50/60	VD742 VD742U VD742* VD742U* VD742LU*	740	2800/ 3400	50/60	VE374 VE374LU	370	1400/ 1700	50/60
VD552 VD550LU VD552*	550	2800/ 3400	50/60	VD1102* VD1102U*	1100	2800/ 3400	50/60	VE502 VE502LU	500	2900/ 3500	50/60
VD554* VD554U* VD554LU*	550	1400/ 1700	50/60					VE602 VE602LU	600	2900/ 3500	50/60

* in series with reinforced clutch

Type Code For Induction Motors With Electromagnetic Clutch

—	Symbol for VARIOSTOP
—	Reference mark for kind of current D = three-phase current E = single-phase alternating current
—	Reference number for power rating 37 = 370W - available for three-phase current (4 poles) and single-phase alternating current (4 poles) 50 = 500W - available for single-phase alternating current (2 poles) 55 = 550W - available for three-phase current (2 poles or 4 poles) 60 = 600W - available for single-phase alternating current (2 poles) 74 = 740W - available for three-phase current (2 poles) 110 = 1100W - available for three-phase current (2 poles) Non-standard motors above 1100 W on request
—	Reference number for number of motor poles 2 = 2 poles (2800 and/or 2900 RPM with 50Hz, 3400 and/or 3500 RPM with 60Hz) 4 = 4 poles (1400 RPM with 50Hz, 1700 RPM with 60Hz)
—	Reference mark for sewing light connection without reference mark = no sewing light connection L = tapped motor winding: 6.3V or 12V - 20W (restricted use: observe safety regulations!)
—	Country reference mark(s) without reference mark = standard version in compliance with VDE U = CSA approved version (star-delta connected three-phase current motors without sewing light connection, star connected three-phase current motors with sewing light connection for supply voltages up to 230V, all single-phase alternating current motors)

V D 55 2 L U