
**FIELD OF APPLICATION**

Lockstitch machines of various manufacturers.

**With connections and/or outputs for:**

Thread trimmer position 1...1A	(max. 3.0A)
Thread trimmer position 1A...2	(max. 3.0A)
Thread tension release	(max. 3.0A)
Thread wiper	(max. 3.0A)
Sewing foot lift	(max. 6.5A/3A)
Backtacking	(max. 6.5A/3A)

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 (2 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; signals for various manufacturers.
- **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:**

- |  |                                      |
|--|--------------------------------------|
| - <b>NEEDLE POSITION UP/DOWN:</b> Needle up / needle up-down / single stitch / full stitch | - <b>INTERMEDIATE BACKTACK</b>       |
|  | - <b>BACKTACK SUPPRESSION/RECALL</b> |

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

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

▪ **UNIT CONSISTING OF:**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>1 <b>induction motor with electromagnetic clutch</b> type V....*1)</li> <li>1 <b>control box</b> type 1F82AV2306 with power pack N30</li> <li>1 <b>position transmitter</b> type P5-2</li> </ul> | <ul style="list-style-type: none"> <li>1 <b>set of standard accessories B10</b> consisting of:               <ul style="list-style-type: none"> <li>1 belt guard, complete (for pulleys up to 132 mmØ)</li> <li>1 set of hardware</li> <li>1 motor mounting foot</li> <li>1 bracket 1 and 2, short</li> <li>1 documentation</li> </ul> </li> <li>1 <b>set of accessories Z1</b> consisting of:               <ul style="list-style-type: none"> <li>1 pitman rod, complete</li> <li>1 10-pin plug (MES 100)</li> </ul> </li> </ul> |
|   | <ul style="list-style-type: none"> <li>1 <b>pulley DIN42692-L</b> (size according to request) *2)</li> </ul>   |

▪ **SPECIAL ACCESSORIES:**

SPECIAL ACCESSORIES, AGAINST EXTRA CHARGE:	Part No.
<b>Control panel</b> Variocontrol V810 with 9-pole/25-pole adapter	5970153
<b>Control panel</b> Variocontrol V820 with 9-pole/25-pole adapter	5970154
<b>Reflection light barrier module</b> LSM001A	6100028
<b>Belt guard</b> for pulleys up to 180 mm ø	7960012
<b>Solenoid</b> type EM1...(for e. g. sewing foot lift, backtacking)	available versions see specification "solenoids"
<b>Adapter cord</b> for the connection to JUKI high-speed seamers with index -1...-6 (large Molex plugs)	1112298
<b>Adapter cord</b> for the connection to JUKI high-speed seamers with index -7 (Molex Minifit)	1112367
<b>Adapter cord</b> for the connection to BROTHER cl. 737-913 without sewing foot lift	1100182
<b>Adapter cord</b> for the connection to BROTHER cl. 737 (setting as with Brother Mark II)	1112310
<b>Adapter cord</b> for the connection to DAEWOO	1112311
<b>Adapter cord</b> for the connection to MITSUBISHI DY-359	1112306
<b>Adapter cord</b> for the connection to AISIN high-speed seamers AD320, 340, 345; 3310 and overlock EK1 and TOYOTA LS2-AD158-203	1112476
<b>Extension cable</b> for external actuator, approx. 750 mm long, complete with plug and socket connector	1111845
<b>Extension cable</b> for external actuator, approx. 1500 mm long, complete with plug and socket connector	1111787
<b>5-pin plug</b> with locking screw for the connection of another external actuator	0501278
<b>External actuator</b> type EB301 with approx. 250 mm connecting cable and 5-pin plug with locking screw	4170011
<b>External actuator</b> type EB302 (softer spring) with approx. 250 mm connecting cable and 5-pin plug with locking screw	4170012
<b>Foot control</b> type FB301 (one pedal) for standing operation with approx. 1400 mm connecting cable and plug	4170013
<b>Foot control</b> type FB302 (three pedals) for standing operation with approx. 1400 mm connecting cable and plug	4170018
<b>Potential equalization cord</b> 700 mm long, LIY 2.5 mm <sup>2</sup> , grey with forked cable brackets on both sides	1100313
<b>Fitting piece</b> for position transmitter	0300019
<b>Extension cable</b> for position transmitter P5-..., approx. 1100 mm long, complete with plug and socket connector	1111584
<b>Extension cable</b> for position transmitter P5-..., approx. 315 mm long, complete with plug and socket connector	1111229
<b>Knee switch</b> type KN3 (pushbutton) with cord of approx. 950 mm length without plug for activating the functions mentioned overleaf	5870013
<b>Sewing light transformer</b>	please indicate line voltage and sewing light voltage (6.3V or 12V)
<b>3-pin plug</b> with locking screw (MAS 3100)	0500402
<b>10-pin plug</b> (MES 100)	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!



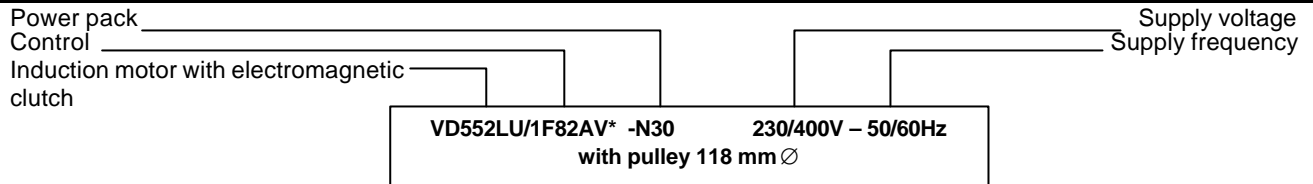
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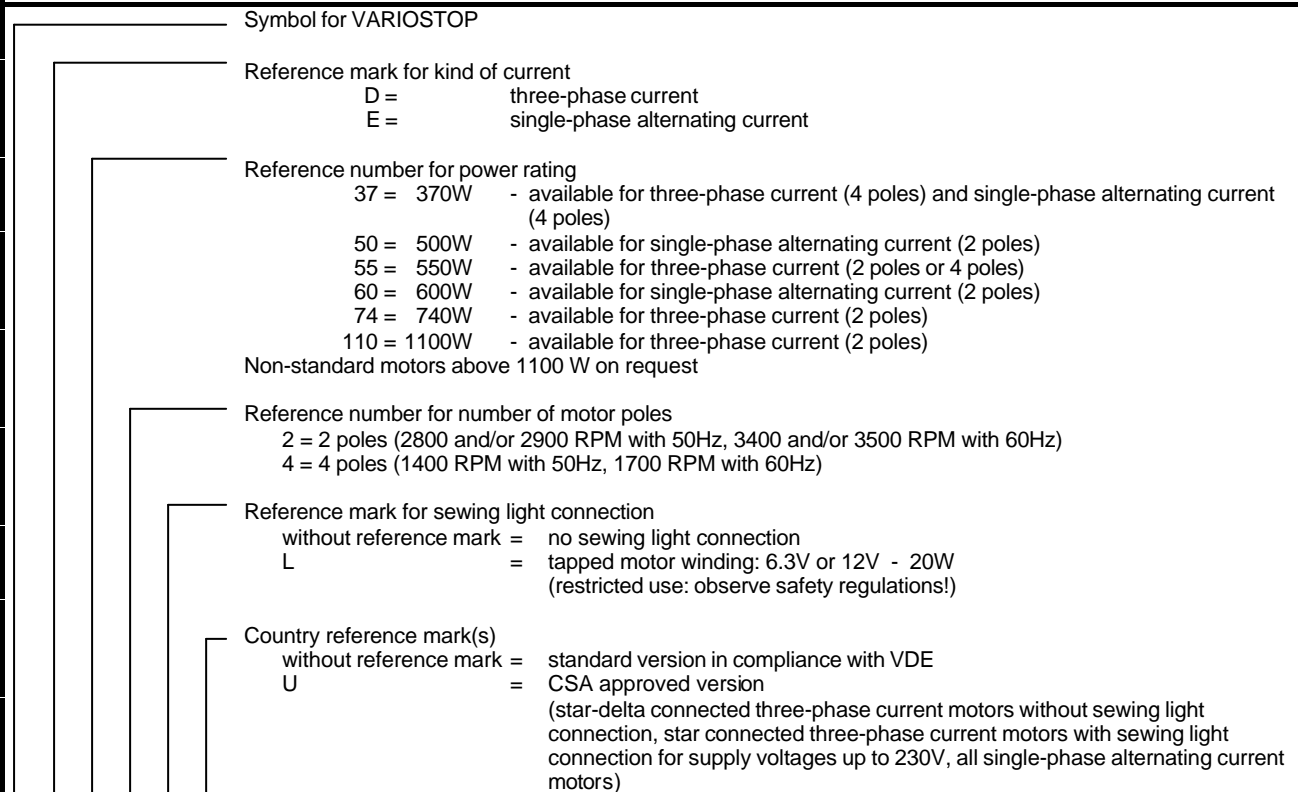
**▪ AVAILABLE MOTORS**
**Example For Ordering VARIOSTOP Positioning Drives (Series 82)**


\* Besides the type designation, the control nameplate indicates the respective state of development (e. g. 1F82AV....Y1) and the program number (e. g. 1F82AV2306..). 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**


V D 55 2 L U