Eltex weft break sensor 16470

with logic current output



General description

Designed for use mainly on weaving machines. The 16470 weft break sensor is working on the piezoelectrical principle. The yarn movement is transferred into an electrical signal, which is amplified and evaluated within the sensor. The signal giver has a logic current output.

A green light emitting diode indicates when a yarn is moving.

Function and description

Eyelet diameter Power supply Current consumption see table 24 V DC (16–28 V DC) max 30 mA



Output: The sensor will send one current unit as output, if a yarn is moving in the eyelet.

Sensitivity setting either through a DC voltage 0-6.5 V from the central control unit, or through a potentiometer on the sensor.

To set the sensitivity, turn the potentiometer clockwise to the end position (maximum sensitivity). Let the machine run and turn the potentiometer slowly anti-clockwise until the weft stop motion stops the machine with the weft yarn present. Then turn the potentiometer approx. 45° clockwise. If there are still false stops, increase the setting by another 20°.

The weft (yarn) movement is best detected, if the weft (yarn) deflection is $10-15^{\circ}$ through the eyelet.

For monitoring more wefts, it is possible to connect two or more sensors of this type in parallel to one central control unit.

Dimensions (mm)







Connection

Colour	Function		
Red	Power supply: 24 V DC.		

Colour

Grey Output: one current unit when the yarn is moving.

Blue Sensitivity (Gain): DC voltage supplied by the central control unit. 0 V for minimum sensitivity, 6.5 V for maximum sensitivity. The blue wire is not used, if the weft sensor has a gain potentiometer.

Black Ground connection.

Models

Art. no.	Eyelet	Cable	Potentiometer	Other characteristics
16470	Normal, Ø6 mm	0.75 m	No	
16471	Normal, Ø6 mm	0.50 m	No	The cover has no DC connection to ground.
16474	Interchangeable eyelet ∅6 mm	0.75 m	Yes	
16475	Normal, Ø6 mm	0.75 m	Yes	
16476	Normal, Ø6 mm	0.50 m	No	The cover has no DC connection to ground. 5-pole DIN male connector. Anti-vibration pad.
16477	Normal, Ø6 mm	5.50 m	No	The cover has no DC connection to ground. Anti-vibration pad.
16478	Normal, Ø6 mm	0.75 m	No	Anti-vibration pad.
16576	Ø 9 mm	I.50 m	No	Anti-vibration pad.
16578	Ø 9 mm	0.75 m	No	Anti-vibration pad.



Box 608 • SE-343 24 ELMHULT • Sweden • Tel. +46 476 488 00 • Fax +46 476 134 00 E-mail: info@eltex.se • Web: www.eltex.se

ELTEX U.S. INC. P.O. Box 868 Greer, S C 29652-0868 USA Tel: 864-879-2131 In U.S. toll free 1-800-421-1156 Fax: 864-879-3734 Email: sales@eltexus.com ELTEX MFG LTD Railway Road Templemore, Co. Tipperary Ireland Tel: 504-314 33 Fax: 504-310 02 Email: info@eltex.ie

ELTEX OF SWEDEN GMBH c/o Frank Widmann e.K. Murgstrasse 13 DE-76337 WALDBRONN Germany Tel: 07243-767268 Fax: 07243-61216 Email: a.f.widmann@t-online.de

POLSA-ELTEX S.L. Zamora, 103 - entlo 3 ES-08018 Barcelona Spain Tel: 093-309 00 17 Fax: 093-309 59 45 Email: polsa@infonegocio.com

2004.08.300/EN/B-16470.p65/TH-0105-05