

Eltex weft sensor SA2090/S2090

with individual NPN output



General description

The SA2090 weft break sensor operates on the piezoelectric principle. The weft movement is transferred into an electric signal, which is amplified and evaluated within the weft sensor. Each eyelet of the sensor has a separate NPN output.

The SA2090 is manufactured with 4 or 8 eyelets.

A green light emitting diode for each eyelet indicates when a weft is moving.

Function and description

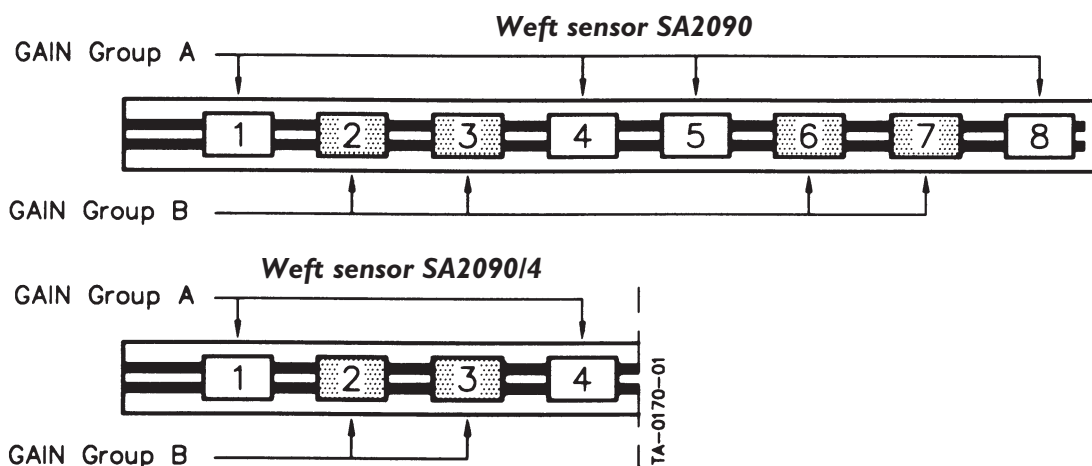
Eyelet diameter	6/7 mm
Power supply	+16 — +24 V DC
Current consumption	max 135 mA

Sensitivity setting through a DC voltage 0–6.5 V from the central control unit. The eyelets in the SA2090 weft sensor are divided into two groups (A and B) with different sensitivity (GAIN) settings.

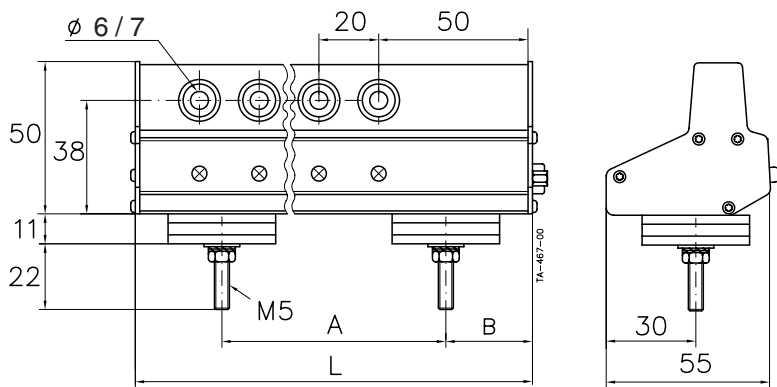
group A and the other yarns through group B. On the weft sensor S2090 the sensitivity setting is made with one potentiometer on the weft sensor. The potentiometer adjusts the gain on all the eight eyelets.

If yarns with different thickness and surface structure are used, they can be detected better if one type of yarn is running through eyelets of

The movement of the yarn is best detected if the yarn deviation is 10–15° through the eyelet.



Dimensions (mm)

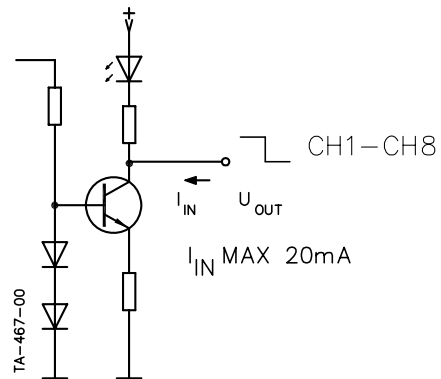


N	L	A	B	Type
4	133	75	29.0	2090/4
8	213	130	41.5	2090

N = number of eyelets

Output

NPN OUTPUT



Yarn not moving

$$U_{OUT} = +16 \text{ — } +24 \text{ V DC}$$

Yarn moving

$$U_{OUT} = 0.1 \text{ V DC}$$

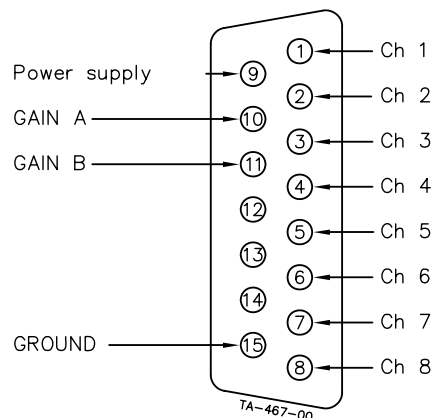
$$I_{IN} = \text{maximum } 20 \text{ mA}$$

Connection via Cable

Function	Colour
Ch 1	Brown
Ch 2	Red
Ch 3	Pink
Ch 4	Yellow
Ch 5	Green
Ch 6	Blue
Ch 7	Violet
Ch 8	Grey
+16 — +24 V	White
Ground	Black
Gain A	Grey/Pink
Gain B	Blue/Red

The weft sensor S2090 does not have the wires for Gain A and Gain B.

Connection via DB15 M



The weft sensor S2090 does not have the connection of Gain A and Gain B.

54941	Weft sensor S2090/4	4.5 m cable	Ø7 mm eyelet	
54951	Weft sensor SA2090/4	4.5 m cable	Ø7 mm eyelet	Replaced by 54957 + 63542
54981	Weft sensor S2090	4.5 m cable	Ø7 mm eyelet	
54991	Weft sensor SA2090	4.5 m cable	Ø7 mm eyelet	Replaced by 54997 + 63542
54956	Weft sensor SA2090/4	DB15 M	Ø7 mm eyelet	
54996	Weft sensor SA2090	DB15 M	Ø7 mm eyelet	
54957	Weft sensor SA2090/4	DB15 M	Ø6 mm tube eyelet	
54997	Weft sensor SA2090	DB15 M	Ø6 mm tube eyelet	
63542	Cable 12 leaders 4.5 m	DB15 F		



Box 24 • SE-283 21 OSBY • Sweden • Tel. +46 479 53 63 00 • Fax +46 479 53 63 99
E-mail: info@eltex.se • Web: www.eltex.se

ELTEX U.S. INC.
13031 E. Wade Hampton Blvd
Greer, SC 29651
USA
Tel: 864-879-2131
In U.S. tollfree: 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

POLSA-ELTEX S.L.
Zamora, 103 - entlo 3
ES-08018 Barcelona
Spain
Tel: 093-30900 17
Fax: 093-30959 45
Email: polsa@infonegocio.com