

FIBER-OPTIC INPUT FLOW SIGNAL CONDITIONER

for Use with the LIGHTSPEED™ Paddlewheel Flow Sensor

FLSC90-A



PATENTED
Covered by U.S. and
International patents and
pending applications



NEMA 4 Enclosure

FLSC90-A Signal Conditioner
Shown smaller than actual size

Dimensions: 114.5 L x 63.5 W x 35 mm H
(4.51 x 2.50 x 1.38")

Storage Temperature:
-20 to 65°C (-4 to 149°F)

Enclosure/Class:
Die cast aluminium, NEMA 4 (IP66)

CE Approved: Yes

Weight: 238 g (8.3 oz)

FP9001A fiber
optic flow sensor
sold separately.

- **0.15% Accuracy**
- **4 to 20 mA or 1 to 5 Vdc Output**
- **Compact Industrial Design**
- **CE Marked**
- **NEMA 4 Enclosure**

Ambient Operating Range:

0 to 49°C (32 to 120°F)

Power: 8-32 Vdc @ 40 mA

Outputs (3-Wire Configuration):

4-20 mA/1-5 Vdc (Field Selectable)

Maximum Loop Resistance:

(Vsupply-8V)/.020 A = Ω

OMEGA's Model FLSC90-A fiber-optic signal conditioner has been designed to interface directly with OMEGA's FP-9000A series LIGHTSPEED™ paddlewheel flow sensors. The FLSC90-A provides a high intensity light source to the patented paddlewheel sensor through a semi-flexible duplex fiber-optic cable. Returning light pulses are measured and converted by the signal conditioner's electronics to a scalable analog output that is proportional to the flowrate. The ability of the paddlewheel flow sensor to operate in harsh and heavy electrical noise environments via the fiber optic cable link makes this system ideal for such applications. The industry standard 4 to 20 mA or 1 to 5 Vdc analog output can connect directly to many of OMEGA's process meters, controllers, dataloggers or data acquisition systems.

SPECIFICATIONS

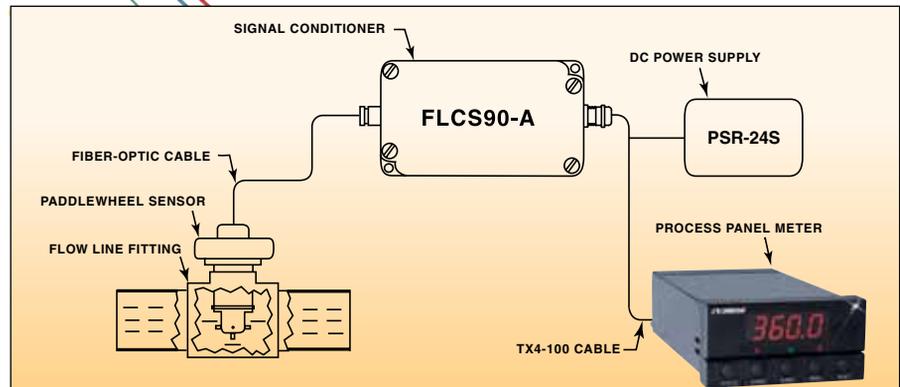
Accuracy: ±0.15% of full scale

Repeatability: ±0.025

Input: Light pulses from fiber optic flow sensor (FP-9000 Series) See Note*

Minimum Input Frequency: 65 Hz

Maximum Input Frequency: 960 Hz



Paddlewheel is covered by U.S. and international patents and pending applications.

To Order

Model No.	Description
FLSC90-A	Fiber optic signal conditioner

Ordering Example: FLSC90-A, fiber-optic signal conditioner, plus TX4-100, 4-conductor power/output cable, plus PSR-24S, 24 Vdc regulated power supply plus OCW-3, OMEGACARE™ extends standard 1-year warranty to a total of 4 years for an additional cost.

Accessories

Model No.	Description
TX4-100	4-conductor power/output cable 30 m (100')
PSR-24S	24 Vdc regulated power supply
FLSC90-CA9*	Fiber-optic extension cable 2.7 m (9')

* Note: Only one extension cable can be used to extend the paddlewheel a maximum of 5.4 m (18') from the FLSC90-A signal conditioner.