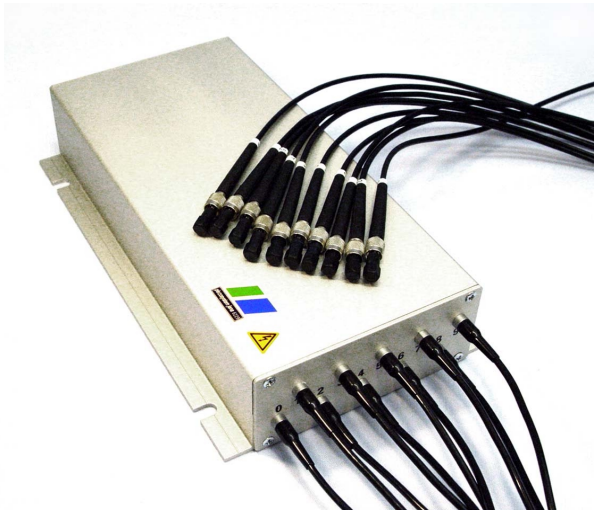
Multimode Fiberswitch 1x3 to 1x9

COMPETENCE IN PRECISION

- ***fast switching time***
- ***low insertion loss***
- ***high optical isolation***
- ***compact design***
- ***no additional wavelength dependence***



applications:

- optical measurement systems
- spectroscopy
- optical engineering
- telecommunications

technical data:

OPTICAL CHARACTERISTICS

insertion loss:	typ.* 0.9 dB	(max. 1.2 dB) for 1 x 3 switch
	typ.* 1.4 dB	(max. 1.8 dB) for 1 x 4 to 1 x 9 switch
cross talk:	typ.* -60 dB	(max. -55 dB)
repeatability (1000 cycles over 20 h):	typ.* 0.02 dB	(max. 0.03 dB)

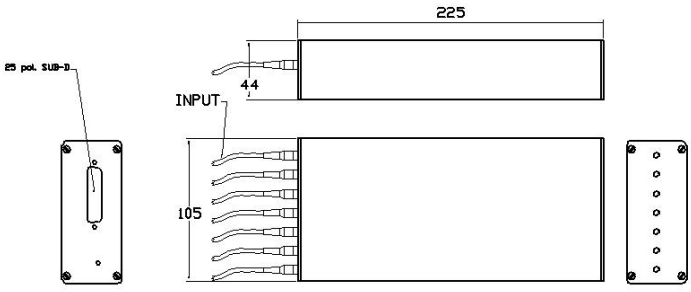
TECHNICAL CHARACTERISTICS

switching time:	typ. 2 ms	(max. 3 ms)
lifetime:	10.000.000 cycles	
operating temperature:	0°C to 60 °C	
storage temperature:	-40 to +80 °C	
humidity:	55 % RH	>55 % RH-special version

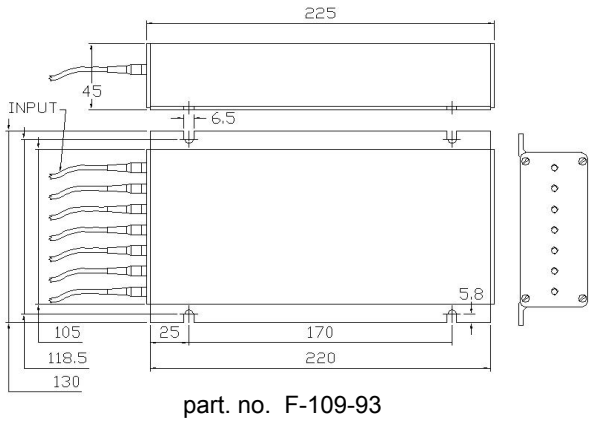
ELECTRICAL CHARACTERISTICS

operating voltage:	5 V DC
power consumption typ:	100 mA (f=0Hz 50mA ; f=50Hz 300mA)
control signal	binary code (BCD)

*depends on fiber core diameter



part. no. F-109-03



part. no. F-109-93

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types of switches

No. of channels	1x3		1x4			1x6		1x9	
Fiber core diameter	≤100/140 µm	200/220 µm	≤100/140 µm	200/220 µm	400/440 µm	≤100/140 µm	200/220 µm	≤100/140 µm	200/220 µm
Housing L/B/H	175/105/44 mm	225/105/44 mm	175/105/44 mm	225/105/44 mm	285/105/44 mm	175/105/44 mm	225/105/44 mm	175/105/44 mm	225/105/44 mm
Part.-No.	**F-103-05**	**F-103-03**	**F-104-05**	**F-104-03**	**F-104-06**	**F-106-05**	**F-106-03**	**F-109-05**	**F-109-03**

All casings available as a screw slot version on request.

Ordering Instructions:

Please note: when ordering you will need the part number of the switch and also the part no. of the fiber (which includes the optical connector). For each switch you need one input fiber and various numbers of output fibers depending of the switching channels.
All fibers must be assembled with connector!
For custom configuration, piezosystem jena retains the right to cancel an order if unforeseen additional efforts are needed which may cause the cost of the systems to exceed the quoted cost. This is related especially to special fiber types piezosystem jena has never worked with or which are supplied by our customers.

Standard fiber length will be 1m (± 15%). Cost for additional fiber length will be added.

piezosystem jena is using the following types of fibers and connectors for all standard applications:

Fiber [µm]		Index-Profile	Numerical aperture	Wavelength range	part. no. for fiber (without optical connector)
Core	Cladding				
50	125	Graded-index	0.22	850/1300nm	**C-319- ***
62.5	125	Graded-index	0.28	850/1300nm	**C-329- ***
100	140	Graded-index	0.29	850/1300nm	**C-339- ***
100	110	Step-index	0.22	180-1100nm	**C-230- ***
100	140	Step-index	0.22	350-2600nm	**C-130- ***
200	220	Step-index	0.22	350-2600nm	**C-140- ***
200	220	Step-index	0.22	180-1100nm	**C-240- ***
400	440	Step-index	0.22	350-2600nm	**C-160- ***
400	440	Step-index	0.22	180-1100nm	**C-260- ***

* when ordering please use the end number of the optical connectors as follows:

ST = end number –10; SMA = end number –20
FC/PC= end number –30; FC/APC= end number –50

Accessories

Describtion	*part.no.*
connecting cable for fiberswitch 1x3 - 1x9	***Z-950-10***
polishing surface	***C-800-00***

Additional fiber extension or a reduction of fiber length available on request.

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