

Picture: nnet Network Terminator pm3/ack

The sync/ack generator pm3/ack defines the boundaries of the nnet network for a group of controllers. The device is programmed using the BIDI data interface to generate either a "sync" signal or to answer to recognized "sync" signals with an "ack" signal. The nnet network uses these signals for synchronisation of data slots.

The "sync/ack" sequence is interrupted if the connection between the unit programmed as "sync" and the one programmed as "ack" is disconnected. Standard panic stop switches interrupting the network conductor provide a safe **passive panic stop system**.

outer	middle	yellow lights Description
Blink	Blink	Alternating: Not Configured Synchronous: Reset (BREAK on BIDI)
On	Off	Configuring Step 1
Off	On	Configuring Step 2
Off	Flash	SYNC Mode, Flashes With SYNC
Flash	Off	ACK Mode, SYNC Recognized
Blink	Off	ACK Mode, No SYNC Recognized
On	On	TBUS Static Low

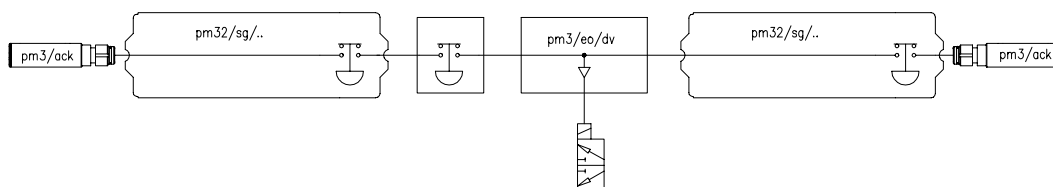
LED's in the cap of the device show internal states. One of the outer LED's is green and lit if power is supplied.

Pin	Description
1	+12 V Power Supply
2	TBUS nnet Data
3	BIDI Communication
4	0 V Ground

Power Supply 6...30 VDC, 3.5 mA  
 Protection Class IP 68  
 Approval ATEX EX I M1 EEx ia I, INERIS 03ATEX 0080  
 Maximum input values  $U_i = 13.2 V, I_i = 2 A$   
 $L_i = 0, C_i = 3 \mu F$  in series with 110  $\Omega$ .  
 Approval MSHA as I.S.C.  
 Approval Russia POCC DE.ГБ05.В02014 NANIO CCVE  
 PPC 00-25498 Rostekhnadzor

**Applications**

pm3/ack is connected to the free adjacent port of the first and the last shield control unit pm32/sg/a in electrohydraulic faces. The shield software automatically programs one side as "sync" and the other side as "ack".



Picture: Example of usage in an electrohydraulic face

Order Number	Release	Description
pm3/ack/a	2.0	nnet Network Terminator
pm3/eo/a	1.0	Panic stop switch
pm32/sg/a	1.0	Controller with special panic stop switch