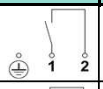
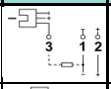
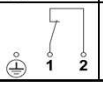
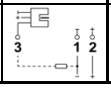
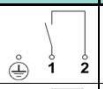
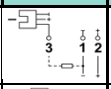
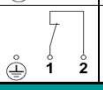
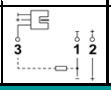
INTERNATIONAL EXPLANATION OF CONTACT FUNCTIONS

CONTACT FUNCTIONS EXPLAINED WITH CLOCKWISE POINTER ROTATION

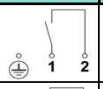
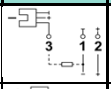
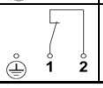
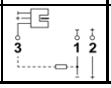
English

STIKO contact	Magnetic	Inductive	Electrical	Translation:		
1				**NO**	**HIGH**	Normally open; makes on rise
2				**NC**	**LOW**	Normally closed, breaks on rise

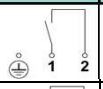
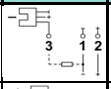
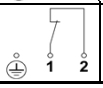
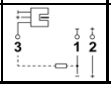
Deutsch

STIKO contact	Magnetspring	Induktiv	Elektronik	Übersetzung:	
1				**NO**	Schließer
2				**NC**	Öffner

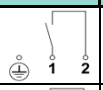
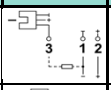
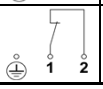
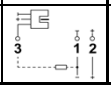
Français

STIKO contact	Magnétique	Inductive	Électronique	Traduction:		
1				**FM**	**MAXI**	Fermeture a maxima
2				**OM**	**MINI**	Ouverture a maxima

Italiano

STIKO contact	Magnetico	Induttivo	Elettrico	Traduzione	
1				**NA**	Normalemente aperto
2				**NC**	Normalemente chiuso

Español

STIKO contact	Magnético	Inductivo	Eléctrico	Traducción	
1				**NA**	Normalemente abierto
2				**NC**	Normalemente cerrado

MINIMUM PRESSURE RANGE FOR PRESSURE GAUGES WITH ELECTRICAL DEVICE

TYPE	TYPE OF CONTACT	M-x	M-xx M-3	M-xxx M-33	I-x E-x	I-xx E-xx	I-xxx E-xxx	Q-3	Q-33	PT5 Add on unit	MECHANICAL TRANSMITTERS	PT-x (max. 1600 bar)
	case dimensions	MINIMUM RANGE (in bar)										
PBX	100	1	1,6	4	1	1,6	1,6	2,5	2,5	0,6	1	1,6
	160	1	1,6	2,5	1	1,6	1,6	2,5	2,5	x	1	1,6
PBX-SF	100	1	1,6	4	1	1,6	1,6	2,5	2,5	0,6	1	1,6
	160	1	1,6	2,5	1	1,6	1,6	2,5	2,5	x	1	1,6
PBQ	100	1,6	1,6	4	1,6	1,6	1,6	2,5	2,5	1,6	1,6	2,5
	160	1,6	1,6	2,5	1,6	1,6	2,5	2,5	2,5	x	1,6	2,5
PBS	100	1,6	1,6	4	1,6	1,6	1,6	2,5	2,5	1,6	1,6	2,5
	160	1,6	1,6	2,5	1,6	1,6	2,5	2,5	2,5	x	1,6	2,5
PFQ	100	1,6	1,6	4	1,6	1,6	1,6	2,5	2,5	1,6	1,6	2,5
	160	1,6	1,6	2,5	1,6	1,6	2,5	2,5	2,5	x	1,6	2,5
PFS	100	1,6	1,6	4	1,6	1,6	1,6	2,5	2,5	1,6	1,6	2,5
	160	1,6	1,6	2,5	1,6	1,6	2,5	2,5	2,5	x	1,6	2,5
PBB*	100	1	1,6	4	1	1,6	1,6	x	x	x	1	1,6
	160	1	1,6	2,5	1	1,6	1,6	x	x	x	1	1,6
PBD	100	1,6	1,6	4	1,6	1,6	1,6	O.D.	O.D.	1,6	1,6	x
	160	1,6	1,6	2,5	1,6	1,6	2,5	O.D.	O.D.	x	1,6	x
PMD	100	1,6	1,6	4	1,6	1,6	1,6	1	1	1,6	1,6	x
	160	1,6	1,6	2,5	1,6	1,6	2,5	1	1	x	1,6	x
POD** Excluding -HS	100	1,6	1,6**	x	1,6	1,6**	x	x	x	0,6	O.D.	x
	160	1,6	1,6**	x	1,6	1,6**	x	x	x	x	O.D.	x
PMX	100	1	1,6	4	1	1,6	1,6	O.D.	O.D.	1,6	1	x
	160	1	1,6	2,5	1	1,6	1,6	O.D.	O.D.	1,6	1	x
PMX-E/G***	160	x	x	x	x	1,6	x	x	x	x	x	x
PBR	100	25	25	25	25	25	25	25	25	25	25	25
	160	25	25	25	25	25	25	25	25	25	25	25
PBT	100	16	16	16	16	16	16	16	16	16	16	16
	160	16	16	16	16	16	16	16	16	x	16	16
PPB****	96x96	1	1,6	4	1	1,6	1,6	2,5	2,5	x	1	1,6
	144x144	1	1,6	4	1	1,6	1,6	2,5	2,5	x	1	1,6
	72x144	1	1,6	2,5	1	1,6	x	2,5	2,5	x	x	1,6
TYPE	case dimensions	MINIMUM RANGE (in mbar)										
PCX***	100	x	x	x	x	x	x	x	x	25	x	x
	160	x	x	x	x	10	x	x	x	4	x	x
PMX	100	40(0)	100	250	40	100	100	O.D.	O.D.	25	x	x
	160	40(0)	100	250	40	100	250	O.D.	O.D.	25	x	x
PMX-E/G***	160	x	x	x	x	40	x	x	x	25	x	x
PMD - low	160	40	100	250	40	100	100	O.D.	O.D.	25	x	x
PPC***	144x144	x	x	x	x	10	x	O.D.	O.D.	x	x	x

* Only possible with one pointer

** M-11 and M-22 / I-11 and I-22 not possible in POD models

*** PPC, PCX and PMX-E/G only possible with inductive "INTERVALL" Contact type : I-intervall

**** Only possible with stainless steel bourdon tube

(0) If liquid filled minimum range 400 mbar

x NOT POSSIBLE

BUILT-IN LOW-ACTION CONTACT TYPE M

TYPE M Hz

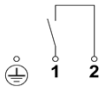
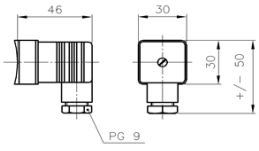
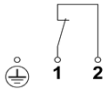
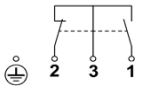
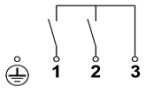
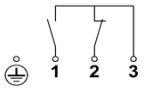
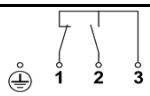
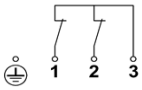
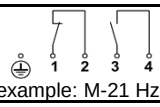
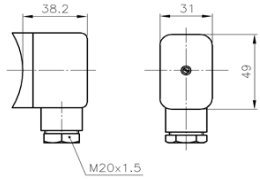
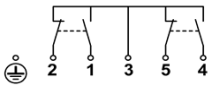
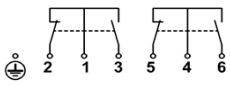
INSTRUMENT	: class 1
MINIMAL RANGE	: As per page 59
CONNECTOR	: cable junction box, SEE BELOW
HYSTERESIS	: max. 1% up and down
SETPOINT(S)	: from outside with key
WINDOW	: PMMA - plexiglass
POINTER	: black
CONTACT POINTER(S)	: red

example:

PBX100XA
+ M-12 Hz

ELECTRICAL SWITCH CAPACITY

AC	**: 50 VA (max. 250V)**
DC	**: 30 W (max. 250V)**

CONTACT TYPE	SWITCH FUNCTION	CABLE JUNCTION BOX	CASE DIMENSIONS				
			100	160	96x96	144x144	72x144
M-1 Hz* *Potential free		 Hirschmann					
M-2 Hz* *Potential free							
M-3 Hz* *Potential free							
M-11 Hz							
M-12 Hz							
M-21 Hz							
M-22 Hz							
M-xx Hz +GS* *Potential free	 example: M-21 Hz GS	 Wiebrock					N.A.
M-33 Hz							N.A.
M-33 Hz+GS* *Potential free							N.A.
M-xxx Hz	functions to be specified at order						N.A.
M-xxxx Hz	functions to be specified at order		O.D.	O.D.	O.D.	O.D.	N.A.
OPTION			**EXTRA COSTS**				
Lx	**LIQUID FILLED CASE (ONDINA)**				N.A.	N.A.	N.A.

BUILT-IN INDUCTIVE CONTACT TYPE I

TYPE I Hz

INSTRUMENT	: class 1
MINIMAL RANGE	: As per page 59
CONNECTOR	: cable junction box, SEE BELOW
HYSTERESIS	: max. 1% up and down
SETPOINT(S)	: from outside with key
WINDOW	: PMMA - plexiglass
POINTER	: black
CONTACT POINTER(S)	: red

example:

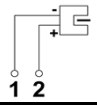
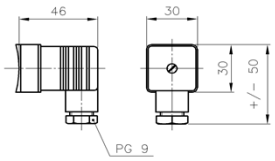
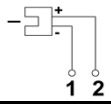
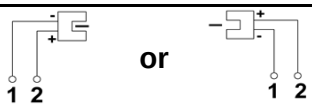
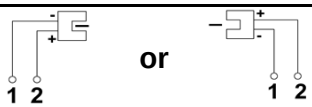
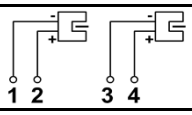
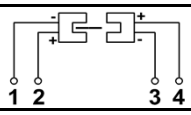
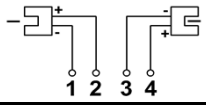
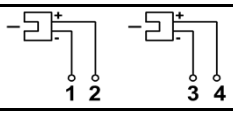
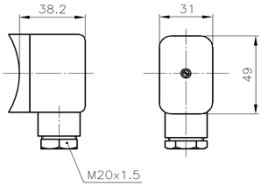
PBX160XA

+ I-xxx Hz

Also available with:

ELECTRICAL SWITCH CAPACITY

Nominal voltage	**: 8VDC (Ri=1 Kohm)**
Explosion proof	**: EEx ia II C T6**
Regulations	**: EN 60947-5-2**

CONTACT TYPE	SWITCH FUNCTION OPERATING CURRENT	CABLE JUNCTION BOX	CASE DIMENSIONS 100	160	96x96	144x144	72x144
I-1 Hz *Si 2-K08-Y1 (Turck)*		 Hirschmann					
I-2 Hz *Si 2-K08-Y1 (Turck)*							
I-x Hz+2SN *SJ 2 SN (Pepperl+Fuchs)*				N.A.		N.A.	
I-x Hz+3.5SN *SJ 3.5 SN (Pepperl+Fuchs)*			N.A.		N.A.		N.A.
I-11 Hz *Si 2-K08-Y1 (Turck)*							
I-12 Hz *Si 2-K08-Y1 (Turck)*				SJ3.5N		SJ3.5N	
I-21 Hz *Si 2-K08-Y1 (Turck)*				SJ3.5N		SJ3.5N	
I-22 Hz *Si 2-K08-Y1 (Turck)*							
I-xx Hz+2SN *SJ 2 SN (Pepperl+Fuchs)*	function to be specified at order			N.A.		N.A.	
I-xx Hz+3.5SN *SJ 3.5 SN (Pepperl+Fuchs)*	function to be specified at order		N.A.		N.A.		N.A.
I-xxx Hz *Si 2-K08-Y1 (Turck)*	function to be specified at order		O.D.	O.D.	O.D.	O.D.	N.A.
I-xxxx Hz *Si 2-K08-Y1 (Turck)*	function to be specified at order	Wiebrock	O.D.	O.D.	O.D.	O.D.	N.A.
OPTION			**EXTRA COSTS**				
Lx	**LIQUID FILLED CASE (ONDINA)**				N.A.	N.A.	N.A.

BUILT-IN ELECTRONIC CONTACT TYPE E

TYPE E Hz

INSTRUMENT	: class 1
MINIMAL RANGE	: As per page 59
CONNECTOR	: cable junction box, SEE BELOW
HYSTERESIS	: max. 1% up and down
SETPOINT(S)	: from outside with key
WINDOW	: PMMA - plexiglass
POINTER	: black
CONTACT POINTER(S)	: red

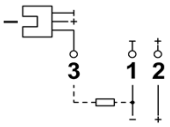
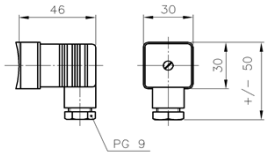
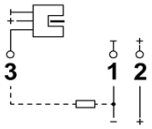
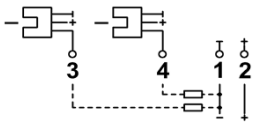
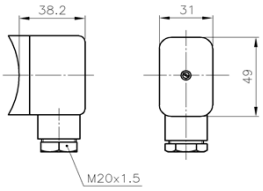
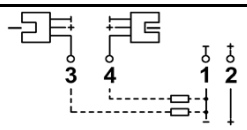
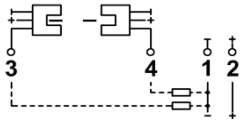
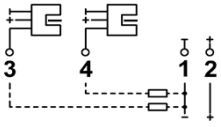
example:

PBX100XA

+ E-12 Hz

ELECTRICAL SWITCH CAPACITY

Nominal voltage	: 10...30 V dc
Proximity sensor	: Si-K08-AP6 (Turck)
Output	: 3-wire, PNP
Regulations	: EN 60947-5-2

CONTACT TYPE	SWITCH FUNCTION	CABLE JUNCTION BOX	CASE DIMENSIONS				
			100	160	96x96	144x144	72x144
E-1 Hz		 Hirschmann					
E-2 Hz							
E-11 Hz		 Wiebrock					
E-12 Hz							
E-21 Hz							
E-22 Hz							
E-xxx Hz	function to be specified with order		O.D.	O.D.	O.D.	O.D.	N.A.
E-xxxx Hz	function to be specified with order		O.D.	O.D.	O.D.	O.D.	N.A.

OPTION		EXTRA COSTS				
Lx	**LIQUID FILLED CASE (ONDINA)**			N.A.	N.A.	N.A.

PRESSURE GAUGE WITH LOW HYSTERESIS BUILT-IN MICROSWITCH TYPE Q

TYPE Q-3 Hz and Q-33 Hz

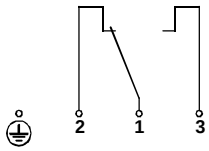
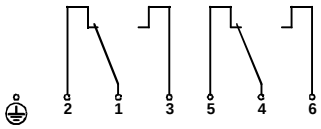
STANDARD MODEL

INSTRUMENT	: class 1
MINIMAL RANGE	: see page 59
ELECTRICAL CONNECTION	: cable junction box
HYSTERESIS	: max. 1% up and down
SETPOINT(S)	: from outside
WINDOW	: PMMA - plexiglass
POINTER	: micro adjustable
CONTACT POINTER(S)	: first red, (second yellow)

ELECTRICAL SWITCH CAPACITY

125 Vac	**: 5A (ind. load 3A)**
250 Vac	**: 3A (ind. load 2A)**
DC 30 V	**: 5A (ind. load 3A)**
DC 125 V	**: 0.4A (ind. load 0,4A)**
DC 250 V	**: 0.2A (ind. load 0,2A)**

Class 1 and 5 Amp!!

CONTACT TYPE	TYPE	SWITCH FUNCTION	CASE DIAMETER (Ø in mm) 100	160
Q - 3 Hz* *Potential free* ***SPDT***	**SINGLE**			
Q - 33 Hz* *Potential free* ***DPDT***	**DOUBLE**			
OPTION			**EXTRA COSTS**	
SETPOINT	**FIXED SETPOINT**	WITHOUT SETPOINT(S) ADJUSTMENT	0	0

LIQUID FILLING NOT POSSIBLE WITH MICROSWITCH

ADD-ON UNITS WITH ELECTRICAL CONTACTS FOR PRESSURE GAUGES

ADD-ON UNIT (contact device on top of dial) with PG cable conduit and 1500 mm cable

DIN16085/16196 TYPE	Switch function in clockwise direction	EXTRA COSTS CASE DIMENSIONS (in mm)	
MAGNETIC ADD-ON CONTACT (=30W/~50VA), TYPE: M		**Ø 100**	**Ø 160**
M -1	contact closes		
M -2	contact opens		
M -3	single change-over contact (SPDT)		
M -11	1st contact closes, 2nd contact closes		
M -12	1st contact closes, 2nd contact opens		
M -21	1st contact opens, 2nd contact closes		
M -22	1st contact opens, 2nd contact opens		
M -xx+GS	double acting contact with separate circuits		
M -xxx	triple acting contact, 1=closes, 2=opens		
INDUCTIVE ADD-ON CONTACT (=8V, Ri=1 kohm, EEx ia IIC T6), TYPE: I		**Ø 100**	**Ø 160**
I -1	contact closes (operating current)		
I -2	contact opens		
I -x+SN	single contact with safety oscillator (SN)		
I -11	1st contact closes, 2nd contact closes		
I -12	1st contact closes, 2nd contact opens		
I -21	1st contact opens, 2nd contact closes		
I -22	1st contact opens, 2nd contact opens		
I -xx+SN	double contact with safety oscillator (SN)		

OPTIONS FOR ELECTRICAL CONTACTS

OPTIONS	DESCRIPTION	Ø 100	Ø 160	96 x 96	144 x 144	72 x 144
OIL FILLING	for HZ electrical contacts: only for AISI304/1.4301 cases			N.A.	N.A.	N.A.
CABLE	Cable connected to junction box for HZ electrical contacts	First 1500 mm:			per 1000 mm extra:	
MSR-010	Protection relay for single acting contacts (supply 230Vac)					
MSR-020	Protection relay for double acting contacts (supply 230Vac)					
WE 77/Ex-1	Protection relay for single inductive contacts Eex ia ib IIC (230Vac)					
WE 77/Ex-2	Protection relay for double inductive contacts Eex ia ib IIC (230Vac)					

BUILT-IN TRANSMITTER DEVICES FOR PRESSURE GAUGES

BUILT-IN EXECUTION (HZ) C.W. CABLE JUNCTIONBOX

TYPE	DESCRIPTION	EXTRA COSTS CASE DIMENSIONS (in mm)				
MECHANICAL TRANSMITTER DRIVEN BY POINTER		**Ø 100**	**Ø 160**	**96 x 96**	**144 x 144**	**72 x 144**
R	potentiometer with 0-100 ohm/3-wire output					N.A.
BUILT-IN TRANSMITTER (SPAN: min. 1.6 bar (max. 1400 bar))		**Ø 100**	**Ø 160**	**96 x 96**	**144 x 144**	**72 x 144**
PT2	4-20 mA, 2-wire, +13..+35Vdc					
PT3	0-20 mA, 3-wire, +13..+35Vdc					
PT5	4-20 mA, 3-wire, +13..+35Vdc			N.A.	N.A.	N.A.
PTV	0-10 Vdc, 3-wire, +13..+35Vdc					

Transmitter / add on system for low pressure, differential gauges and thermometers

APPLICATION

MODEL PT5

Suitable for following instruments of ø100 mm and ø160mm:

Low pressure capsule gauge: type PCX, PMX

Differential pressure gauges: type PBD, PDD, PMD, POD

Bourdon pressure gauges: type PBX, PBX-SF

Pressure gauges with chemical seal: type PBQ, PBS, PBR

PBT, PFQ, PFS

Thermometers: type TXR, TXC and RTX

4…20 mA transmitter and 2 contacts (sample: capsule gauge PCX100XA 0 - 25 mbar)

FEATURES

Transmitter and contacts have no effect on the pointer.

Electronics with RF technology and not mechanically driven for both contacts and transmitter.

EMC according to EN61326:1998

Accuracy equal for the gauge as for the 4…20 mA transmitter

EMC according to EN61326:1998

Power supply 8 - 28 VDC; max. 50 mA

Electrical connections with cable. Protection class IP55.

CONTACTS

Contacts capable to drive relays, PLC inputs.

Operating voltage max. +28 VDC

Output current max. 50 mA continuously, with over current - and short protection

TRANSMITTER

Output 4…20 mA; 3 -wire

Transmitter can be calibrated non lineair, according to the dial.

Load impedance RL [kOhm] <= (VPSU-8)/20.

	CASE DIAMETER	
	100	**160**

OPTION

LIQUID FILLING	***With type PCX starting from 100 mbar, only ONDINA***	**100**	**160**
SETPOINTS	**FIXED SETPOINTS SET BY STIKO**		