made
in
germany

BE **SAFE.**

MARKTECHNICAL
SENSORS & CONTROLS

Product Overview 2024
Sensors & Actuators

pi
safety components

Explosion protection from pi safety – safety made in Germany

Actuators, sensors and system solutions for applications in potentially explosive areas

pi safety develops and manufactures innovative, high-quality products and solutions for explosion protection. Customers all over the word – **e.g. planners, installation companies or system operators** – value the obvious benefits of our devices which far surpass the performance of standard solutions. Renowned companies in the fields of pharmaceutical and chemicals, onshore and offshore as well as the oil and gas sectors have been relying on the quality of our products **for decades.** As your development and system partner for all aspects of explosion protection – we find suitable solutions even for challenging tasks. Benefit from the diverse advantages of our products as well as our comprehensive service.

EASY – easy as pie

pi safety products make your life easy. Right from the start with the **fast and easy set-up and commissioning.** Our devices offer a **universal interface** which renders the integration into new or existing systems very straightforward. Installed like standard components for process or building automation, they require no additional intrinsically-safe circuit or barriers. The intuitive configuration of our components as well as the maintenance-free design **save time and money.**
So EASY!

SAFE – no question

Safety is an integral part of all pi products. The foundation for that lies in our **unique two-component design:** the functional part can be separated simply and quickly from the junction box. This avoids short-term additional explosion hazards, e.g. during maintenance, and ensures continuous protection. All pi safety devices are developed and **manufactured in Germany to the highest quality standards.** It goes without saying that we comply with all the latest applicable standards. Sales are carried out exclusively by experienced regional partners who will also **support you with tailored services** after purchase. There is no question about it – Safety is paramount for us.
Consistently SAFE!

SMART – pretty clever

The intelligent sensor system from pi safety offers you **maximum flexibility.** Our transducers and switching amplifiers can be combined with all of the sensors we offer. The control unit recognizes the type of sensor and is **automatically configured** for it. Having a smart universal device eliminates the need for variants, which in turn offers **savings on procurement and warehousing.**
Now that is really SMART!

CONTENT

What are the Causes for an Explosion

Basically there are three factors that must be encountered when creating a potentially explosive area. Presence of oxygen, an explosive medium and an ignition source. The absence or avoidance of one of the three factors prevents an explosion.

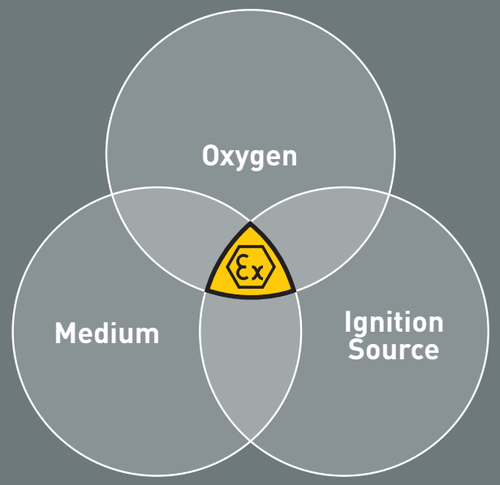
Based on this fact, the three possible strategies to avoid an explosion:

Primary Explosion Protection
Measures which prevent or limit the formation of a potentially explosive atmosphere (avoiding explosive atmospheres).

Secondary Explosion Protection
Measures which prevent the ignition in a dangerous explosive atmosphere (avoiding of ignition sources).

Tertiary Explosion Protection
Measures limiting the effects of an explosion to a safe level (constructional explosion protection).

Thus, the components put on the market by pi are protected to be no sources of ignition and thus are a measure of secondary explosion protection.



Zones – Explanation and Classification

Hazardous areas in which potentially explosive environments can form are classified in zones according to the duration of the potential formation of a dangerous explosive environment

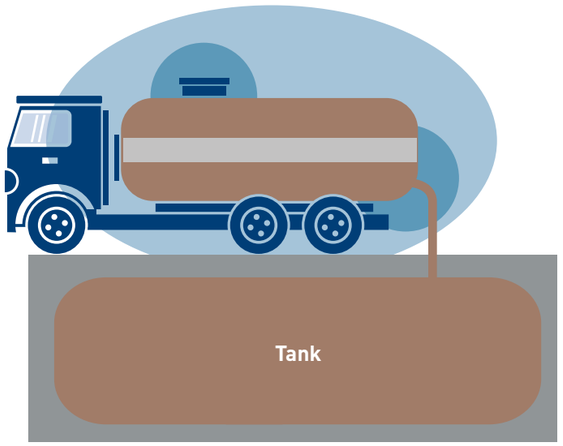
For gases, these are zones 0, 1 and 2. In the case of dusts, a distinction is made between zones 20, 21 and 22.

Classification of Zones for Gases:

Zone 0
A dangerous, explosive atmosphere as a mixture of air, combustible gases, vapors or mists is constantly, for long periods of time or frequently present.

Zone 1
A hazardous, explosive atmosphere as a mixture of air, combustible gases, vapors or mists is occasionally present during normal operation.

Zone 2
A dangerous, explosive atmosphere as a mixture of air, flammable gases, vapors or mists is usually not available or only for a short time.



To clarify the principle gas station:

Division of danger zones into zones:
Zone 0: constant or frequent ...
Zone 1: occasional ...
Zone 2: rare ...
... presence of EX atmosphere

Classification of Zones for Dusts:

Zone 20
A dangerous, explosive atmosphere in the form of a cloud of combustible dust is constantly, for long periods or frequently present.

Zone 21
A dangerous, explosive atmosphere in the form of a cloud of combustible dust is occasionally present during normal operation.

Zone 22
A dangerous, explosive atmosphere in the form of a cloud of combustible dust is usually not available or only for a short time.

Legal Basis

As a legal basis for the area of explosion protection, the following norms and regulations apply in addition to the usual standards:

- **ATEX Directive 2014/34/EU**
- **EU Explosion Protection Ordinance ExVo**
- **Ordinance on Industrial Health and Safety**

Also, a distinction is made between operator and manufacturer.
Accordingly, the different labeling:

Operator Identification Ex-Area

Manufacturer Identification Ex-device

Labelling of explosion-proof electrical devices

Type of protection

	Legal basis			EN 60079-0
“e“	Increased safety	eb, ec	Zone 1, 2	EN 60079-7
“d“	Flameproof enclosure	da, db, dc	Zone 0, 1, 2	EN 60079-1
“m“	Encapsulation	ma, mb, mc	Zone 0, 1, 2, 20, 21, 22	EN 60079-18
“i“	Intrinsic safety	ia, ib, ic	Zone 0, 1, 2, 20, 21, 22	EN 60079-11
“h“	Non-electrical	h	Zone 0, 1, 2, 20, 21, 22	EN 80079-36/-37
“t“	Protected by housing	ta, tb, tc	Zone 20, 21, 22	EN 60079-31

Temperatur class

T6	85 °C	Sulfur hydrocarbon
T5	100 °C	None
T4	135 °C	E.g.Ethyl ether
T3	200 °C	E.g. Diesel, Hydrogen sulfide
T2	300 °C	E.g. Butane, Butyl alcohol
T1	450 °C	E.g. Hydrogen, Ammonia
T	XXX °C	Max. surface temperature dust explosion hazardous areas

II	2G	Ex	db eb ib mb	IIC	T6		Gb
II	2D	Ex	tb	IIIC	T130 °C	IP66	Db

Equipment group
- I Mining
- II Other industries

Explosion protection

Category

Hazardous explosive atmosphere
- 1 Constantly, frequently or long-term
- 2 Occasionally
- 3 Seldom and short-term

Atmosphere
- G Gas
- D Dust

Explosion group
- I Mining
  - I Methane
- II Other industries
  - IIA Propane
  - IIB Ethylene
  - IIC Hydrogen
- III Dusts
  - IIIA Combustible lint
  - IIIB Non-conductive dust
  - IIIC Conductive dust

IP Protection – protected against:

Fig. 1 (ingress solid objects)	Fig. 2 (ingress liquids)
0 No protection	0 No protection
1 Solid objects over 50 mm	1 Vertically falling drops of water
2 Solid objects over 12.5 mm	2 Falling drops of water
3 Solid objects over 2.5 mm	3 Sprays of water
4 Solid objects over 1.0 mm	4 Splash water
5 Limited protection against dust ingress.	5 Low pressure water jets
6 Totally protected against dust ingress.	6 High pressure water jets
	7 Short periods of immersion in water
	8 Long periods of immersion in water

Equipment protection level EPL
- Ga Gas: Constantly, frequently or long-term zone 0
- Gb Gas: Occasionally zone 1
- Gc Gas: Seldom and short-term zone 2
- Da Dust: Constantly, frequently or long-term zone 20
- Db Dust: Occasionally zone 21
- Dc Dust: Seldom and short-term zone 22
- Ma Mining: Operation in the event of an explosion hazard
- Mb Mining: Shutdown in the event of an explosion hazard

pi safety components

made in germany

HAZARDOUS AREA APPLICATIONS

QT.Ex-M, electric Actuator, explosion protected

- ATEX / IECEx / UKEx / KC / INMETRO / EAC certified
- Integrated junction box
- Ambient temperature -40...+70 °C
- Optional control / feedback 0...10 V; 4...20 mA
- IP66
- For mounting in zone 1, 2, 21, 22
- Stainless steel / polymer compound material for maximum corrosion resistance
- Optional safety position/spring return

Technical data

Specification: ..... II2(1)G Ex db eb ib mb [ia] IIC T4 Gb
II2(1)G Ex tb [ia] IIIC T130°C Db
II2 G Ex h IIC T4 Gb
II2 D Ex h IIIC T130 °C Db
Manufacturer: ..... pi safety components
Auxiliary Switches: ..... 5° / 80° Switching points
250 V / 0,1 A min. 5 V / 5 mA
Angle of rotation: ..... 95° (5° Preload)
Hollow shaft: ..... 12 x 12 mm (Double squar)
Power consumption: ... 5 W / 7 VA In holding position
20 W / 30 VA Motor
30 VA / 2 A Layout
Permissible humidity: . 0...95% r.F without condensation
Ambient temperature: . -40...+70 °C
Housing material: High-tech polymer non-halogen, silicone-free
Protection class: IP66
Dimensions: ..... Approx. 320 x 120 x 85 mm

Spring return	Control	Motor running time 90°	Spring running time	Torque	Firetrigger	Power supply	Actuator type
✓	3-Position / Open-Close	ca. 15s	ca. 10 s	18 Nm	–	24 V	**QT.Ex-MF10-SL**
					✓**	24 V	**QT.Ex-MFD10-SL**
					–	230 V	**QT.Ex-MF10-SH**
					✓**	230 V	**QT.Ex-MFD10-SH**
			ca. 3s	15 Nm	–	24 V	**QT.Ex-MF03-SL**
					✓**	24 V	**QT.Ex-MFD03-SL**
					–	230 V	**QT.Ex-MF03-SH**
					✓**	230 V	**QT.Ex-MFD03-SH**
			ca. 2s*	12 Nm	–	24 V	**QT.Ex-MF02-SL**
					✓**	24 V	**QT.Ex-MFD02-SL**
					–	230 V	**QT.Ex-MF02-SH**
					✓**	230 V	**QT.Ex-MFD02-SH**
	0...10 V / 4...20 mA	ca. 15 s	ca. 10 s	18 Nm	–	24 V	**QT.Ex-MF10Y-SL**
						230 V	**QT.Ex-MF10Y-SH**
X	3-Position / Open-Close	ca. 15 s	–	50 Nm	–	24 V	**QT.Ex-M-SL**
						230 V	**QT.Ex-M-SH**
	0...10 V / 4...20 mA	ca. 15 s	–	40 Nm	–	24 V	**QT.Ex-MY-SL**
						230 V	**QT.Ex-MY-SH**
		ca. 5 s		15 Nm		24 V	**QT.Ex-MYQ-SL**
						230 V	**QT.Ex-MYQ-SH**
		ca. 3 s		5 Nm		24 V	**QT.Ex-MYSQ-SL**
						230 V	**QT.Ex-MYSQ-SH**

* Ta -40...+50°C

** Firetrigger FT.Ex is required

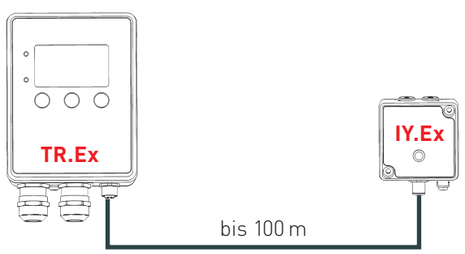
Other types on request

TR.Ex Transducer

- Specification:
  II2(1)G Ex eb mb ib [ia Ga] IIC T4 Gb
  II2(1)D Ex tb ib [ia Da] IIIC T130°C Db
- Universal Transducer for mounting in zone 1 / 2 / 21 / 22
- Ambient temperature -40...+70 °C
- IP66
- Temperature class T4 for all gases and dusts
- Adjustable on site; display
- Stainless steel / polymer compound material for maximum corrosion resistance
- Feedback: 0...10 V oder 4...20 mA
- No further barrier required in the control cabinet
- LED status indication
- Smart installation
- 24 VAC / DC
- For use with IY.Ex-Sensors

IY.Ex Sensors

- Specification:
  II 1/2G Ex ia IIC T6/T5/T4 Ga/Gb
  II 2D Ex ia IIIC T75°C-T145°C Db
- Intelligent sensor concept for connection (M12 connector) to TR.Ex universal Ex-transducer
- Stainless steel / polymer compound material for maximum corrosion resistance
- Fast sampling rate up to 125 ms for pressure sensors
- Room sensor for dircect connection
- For measuring in zone 0, 1, 2, 21, 22
- Other sensors with M12 sensor cable (1 Meter included, other lengths available)
- For use with Tr.Ex Transducer



Measurand	Sensor Design	Measurin range	min. Measuring span	Length	Sensor type
Temperature	Room sensor	-40...+125°C	25°C	–	**IY.Ex-RT**
	Duct sensor			50 mm	**IY.Ex-DT-050**
				100 mm	**IY.Ex-DT-100**
				200 mm	**IY.Ex-DT-200**
				370 mm	**IY.Ex-DT-370**
Temperature / Humidity	Room sensor	-40...+125°C 0...100 rF	25°C 15 rF	–	**IY.Ex-RTH**
	Duct sensor			50 mm	**IY.Ex-DTH-050**
				100 mm	**IY.Ex-DTH-100**
				200 mm	**IY.Ex-DTH-200**
				370 mm	**IY.Ex-DTH-370**
Differential pressure / Volume flow	Duct sensor	-60...+60 Pa	18 Pa	–	**IY.Ex-P-0060**
		-100...+100 Pa	30 Pa		**IY.Ex-P-0100**
		-250...+250 Pa	75 Pa		**IY.Ex-P-0250**
		-600...+600 Pa	180 Pa		**IY.Ex-P-0600**
		-1000...+1000 Pa	300 Pa		**IY.Ex-P-1000**
		-2500...+2500 Pa	750 Pa		**IY.Ex-P-2500**
		-4000...+4000 Pa	1200 Pa		**IY.Ex-P-4000**
		-10000...+10000 Pa	3000 Pa		**IY.Ex-P-10000**

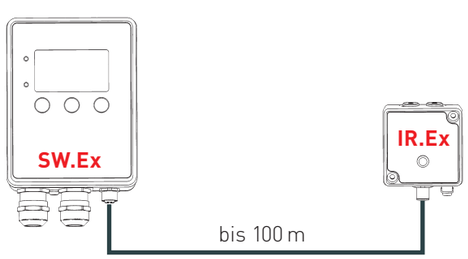
Other types on request

SW.Ex Switching Relais

- Specification:
  II2(1)G Ex eb mb ib [ia Ga] IIC T4 Gb
  II2(1)D Ex tb ib [ia Da] IIIC T130°C Db
- Universal Transducer for mounting in zone 1 / 2 / 21 / 22
- Two adjustable, potential free relay outputs
- Ambient temperature -40...+70 °C
- IP66
- Temperature class T4 for all gases and dusts
- Adjustable hysterisis
- Adjustable on site; display
- Stainless steel / polymer compound material for maximum corrosion resistance
- No further barrier required in the control cabinet
- LED status indication
- Smart installation
- 24 VAC / DC
- For use with IY.Ex-Sensors

IR.Ex Sensors

- Specification:
  II 1/2G Ex ia IIC T6/T5/T4 Ga/Gb
  II 2D Ex ia IIIC T75°C-T145°C Db
- Intelligent sensor concept for connection (M12 connector) to SW.Ex universal Ex-transducer
- Stainless steel / polymer compound material for maximum corrosion resistance
- Room sensor for dircect connection
- For measuring in zone 0, 1, 2, 21, 22
- Other sensors with M12 sensor cable (1 Meter included, other lengths available)
- For use with SW.Ex Transducer



Measurand	Sensor Design	Measurin range	min. Measuring span	Length	Sensor type
Temperature	Room sensor	-40...+125°C	25°C	–	**IR.Ex-RT**
	Duct sensor			50 mm	**IR.Ex-DT-050**
				100 mm	**IR.Ex-DT-100**
				200 mm	**IR.Ex-DT-200**
Humidity	Room sensor	-40...+125°C 0...100 rF	25°C 15 rF	–	**IR.Ex-RH**
	Duct sensor			50 mm	**IR.Ex-DH-050**
				100 mm	**IR.Ex-DH-100**
				200 mm	**IR.Ex-DH-200**
Differential pressure / Volume flow	Duct sensor	-60...+60 Pa	18 Pa	–	**IR.Ex-P-0060**
		-100...+100 Pa	30 Pa		**IR.Ex-P-0100**
		-250...+250 Pa	75 Pa		**IR.Ex-P-0250**
		-600...+600 Pa	180 Pa		**IR.Ex-P-0600**
		-1000...+1000 Pa	300 Pa		**IR.Ex-P-1000**
		-2500...+2500 Pa	750 Pa		**IR.Ex-P-2500**
		-4000...+4000 Pa	1200 Pa		**IR.Ex-P-4000**
		-10000...+10000 Pa	3000 Pa		**IR.Ex-P-10000**

Other types on request

AC.Ex, Volume Flow Controller, explosion protected

- Specification:
  II2(1)G Ex eb mb ib [ia Ga] IIC T4 Gb
  II2(1)D Ex tb ib [ia Da] IIIC T130°C Db
- in zone 1 / 2 / 21 / 22
- Ambient temperature -40...+58°C
- IP66
- Temperature class T4 for all gases and dusts
- Adjustable on site
- Integrated, lighted display for measured value indication
- Stainless steel / polymer compound material for maximum corrosion resistance

QT.Ex und IY.Ex

- Feedback: 0...10 V oder 4...20mA
- No further barrier required in the control cabinet
- LED status indication
- 24 VAC / DC
- For use with IY.Ex-Sensors
- Setpoint specification: 0...10 V oder 4...20mA
- Low power consumption < 3 W
- Measured value recording in zone 0
- Cable length from transmitter to sensor up to 100 m
- Integrated Ex e terminal box
- Alarm contact potential-loaded

Spring return	Control	Motor running time 90°	Spring running time	Torque	Power supply	Actuator type
✓	0...10 V / 4...20 mA	ca. 15s	ca. 10 s	18 Nm	24 V	**QT.Ex-MF10Y-SL**
					230 V	**QT.Ex-MF10Y-SH**
X	0...10 V / 4...20 mA	ca. 15 s	–	40 Nm	24 V	**QT.Ex-MY-SL**
					230 V	**QT.Ex-MY-SH**

Measurand	Sensor Design	Measuring range	min. Measuring span	Length	Sensor type
Differential pressure/ Volume flow	Duct sensor	-60...+60 Pa	18 Pa	–	**IY.Ex-P-0060**
		-100...+100 Pa	30 Pa		**IY.Ex-P-0100**
		-250...+250 Pa	75 Pa		**IY.Ex-P-0250**
		-600...+600 Pa	180 Pa		**IY.Ex-P-0600**

Other types on request

MARKTECHNICAL
SENSORS & CONTROLS

pi
safety components

INDUSTRIAL AREA APPLICATIONS

made in germany

QT.Nc-M, Electric Actuator

- Integrated junction box
- Ambient temperature -40...+70 °C
- Optional fail safe / spring return
- Optional control / feedback 0...10 V; 4...20 mA
- IP66
- Highest corrosion resistance

Technical data

Manufacturer: ..... pi safety components
Auxiliary Switches: ..... 5° / 80° Switching points
max. 250 V / 0,1 A min. 5 V / 5 mA
Angle of rotation: ..... 95° (5° Preload)
Hollow shaft: ..... 12 x 12 mm (Double square)
Power consumption: ..... 5 W / 7 VA In holding position
20 W / 30 VA Motor
30 VA / 2 A Layout
Permissible humidity: .. 0...95% r.F without condensation
Ambient temperature: .. -40...+70 °C
Housing material: ..... non-halogen, silicone-free
Protection class : IP66
Dimensions: ..... approx. 320 x 120 x 85 mm

Spring return	Control	Motor running time 90°	Spring running time	Torque	Firetrigger	Power supply	Actuator type
✓	3-Position / Open-Close	ca. 15 s	ca. 10 s	18 Nm	–	24 V	**QT.Nc-MF10-SL**
					✓**	24 V	**QT.Nc-MFD10-SL**
					–	230 V	**QT.Nc-MF10-SH**
					✓**	230 V	**QT.Nc-MFD10-SH**
			ca. 3s	15 Nm	–	24 V	**QT.Nc-MF03-SL**
					✓**	24 V	**QT.Nc-MFD03-SL**
					–	230 V	**QT.Nc-MF03-SH**
					✓**	230 V	**QT.Nc-MFD03-SH**
			ca. 2s*	12 Nm	–	24 V	**QT.Nc-MF02-SL**
					✓**	24 V	**QT.Nc-MFD02-SL**
					–	230 V	**QT.Nc-MF02-SH**
					✓**	230 V	**QT.Nc-MFD02-SH**
	0...10 V / 4...20 mA	ca. 15 s	ca. 10 s	18 Nm	–	24 V	**QT.Nc-MF10Y-SL**
						230 V	**QT.Nc-MF10Y-SH**
X	3-Position / Open-Close	ca. 15 s	–	50 Nm	–	24 V	**QT.Nc-M-SL**
						230 V	**QT.Nc-M-SH**
	0...10 V / 4...20 mA	ca. 15 s	–	40 Nm	–	24 V	**QT.Nc-MY-SL**
						230 V	**QT.Nc-MY-SH**
		ca. 5 s		15 Nm		24 V	**QT.Nc-MYQ-SL**
						230 V	**QT.Nc-MYQ-SH**
		ca. 3 s		5 Nm		24 V	**QT.Nc-MYSQ-SL**
						230 V	**QT.Nc-MYSQ-SH**

* Ta -40...+50°C
** Firetrigger FT.Ex is required

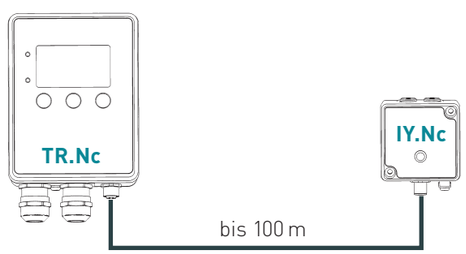
Other types on request

TR.Nc Transducer

- Universal Transducer
- Ambient temperature -40...+70°C
- IP66
- Adjustable on site, display
- Highest corrosion resistance
- Feedback: 0...V oder 4...20 mA
- LED status indication
- Smart installation
- 24 VAC / DC
- For use with IY.NC-Sensors
- Integrated junction box

IY.Nc Sensors

- Intelligent sensor concept for connection (M12 connector) to TR.Nc universal switching relay
- Highest corrosion resistance
- Fast sampling rate up to 125 ms for pressure sensors
- Room sensor for direct connection
- Other sensors with M12 sensor cable (1 Meter included, other lengths available)
- For use with TR.Nc transducer



Measurand	Sensor Design	Measurin range	min. Measuring span	Length	Sensor type
Temperature	Room sensor	-40...+125°C	25°C	–	**IY.Nc-RT**
	Duct sensor			50 mm	**IY.Nc-DT-050**
				100 mm	**IY.Nc-DT-100**
				200 mm	**IY.Nc-DT-200**
				370 mm	**IY.Nc-DT-370**
Temperature / Humidity	Room sensor	-40...+125°C 0...100 rF	25°C 15 rF	–	**IY.Nc-RTH**
	Duct sensor			50 mm	**IY.Nc-DTH-050**
				100 mm	**IY.Nc-DTH-100**
				200 mm	**IY.Nc-DTH-200**
				370 mm	**IY.Nc-DTH-370**
Differential pressure / Volume flow	Duct sensor	-60...+60 Pa	18	–	**IY.Nc-P-0060**
		-100...+100 Pa	30		**IY.Nc-P-0100**
		-250...+250 Pa	75		**IY.Nc-P-0250**
		-600...+600 Pa	180		**IY.Nc-P-0600**
		-1000...+1000 Pa	300		**IY.Nc-P-1000**
		-2500...+2500 Pa	750		**IY.Nc-P-2500**
		-4000...+4000 Pa	1200		**IY.Nc-P-4000**
		-10000...+10000 Pa	3000		**IY.Nc-P-10000**

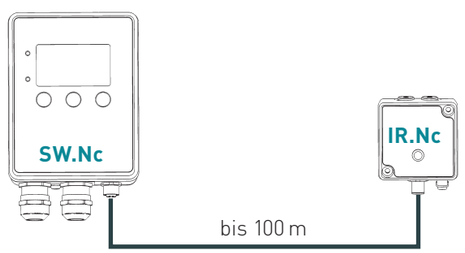
Other types on request

SW.Nc Switching Relais

- Universal Switching Relay
- Two adjustable potential free relay outputs
- Ambient temperature -40...+70 °C
- IP66
- Adjustable on site, display
- Highest corrosion resistance
- Adjustable hysterisis
- LED status indication
- einfache Montage
- 24 VAC / DC
- For use with IR.Nc-Sensors

IR.Nc Sensors

- Intelligent sensor concept for connection (M12 connector) to SW.Nc universal switching relay
- Highest corrosion resistance
- Room sensor for direct connection
- Other sensors for M12 sensor cable (1 meter included, other lenghts available)
- For use with SW.Nc universal switching relay



Measurand	Sensor Design	Measurin range	min. Measuring span	Length	Sensor type
Temperature	Room sensor	-40...+125°C	25°C	–	**IR.Nc-RT**
	Duct sensor			50 mm	**IR.Nc-DT-050**
				100 mm	**IR.Nc-DT-100**
				200 mm	**IR.Nc-DT-200**
Humidity	Room sensor	-40...+125°C 0...100 rF	25°C 15 rF	–	**IR.Nc-RH**
	Kanalsensor			50 mm	**IR.Nc-DTH-050**
				100 mm	**IR.Nc-DTH-100**
				200 mm	**IR.Nc-DH-200**
Differential pressure / Volume flow	Duct sensor	-60...+60 Pa	18 Pa	–	**IR.Nc-P-0060**
		-100...+100 Pa	30 Pa		**IR.Nc-P-0100**
		-250...+250 Pa	75 Pa		**IR.Nc-P-0250**
		-600...+600 Pa	180 Pa		**IR.Nc-P-0600**
		-1000...+1000 Pa	300 Pa		**IR.Nc-P-1000**
		-2500...+2500 Pa	750 Pa		**IR.Nc-P-2500**
		-4000...+4000 Pa	1200 Pa		**IR.Nc-P-4000**
		-10000...+10000 Pa	3000 Pa		**IR.Nc-P-10000**

Other types on request

AC.Nc, Volume Flow Controller

- Ambient temperature -40...+58°C
- IP66
- Adjustable on site
- Integrated, lighted display for measured value indication
- Highest corrosion resistance
- Feedback: 0...10 V oder 4...20mA

related components

QT.Nc und IY.Nc

- LED status indication
- 24 VAC / DC
- For use with IY.Ex-Sensors
- Setpoint specification: 0...10 V oder 4...20mA
- Low power consumption < 3 W
- Cable length from transmitter to sensor up to 100 m
- Integrated Ex e terminal box

Spring return	Control	Motor running time 90°	Spring running time	Torque	Power supply	Actuator type
✓	0...10 V / 4...20 mA	ca. 15 s	ca. 10 s	18 Nm	24 V	**QT.Nc-MF10Y-SL**
					230 V	**QT.Nc-MF10Y-SH**
X	0...10 V / 4...20 mA	ca. 15 s	–	18 Nm	24 V	**QT.Nc-MY-SL**
					230 V	**QT.Nc-MY-SH**

Measurand	Sensor Design	Measuring range	min. Measuring span	Length	Sensor type
Differential pressure/ Volume flow	Duct sensor	-60...+60 Pa	18 Pa	–	**IY.Nc-P-0060**
		-100...+100 Pa	30 Pa		**IY.Nc-P-0100**
		-250...+250 Pa	75 Pa		**IY.Nc-P-0250**
		-600...+600 Pa	180 Pa		**IY.Nc-P-0600**

Other types on request

pi
safety components

ACCESSORIES

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Accessoires for actuators

WS.Va-M

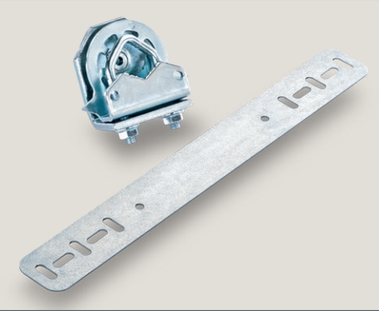
Stainless steel protection against harsh ambient conditions, vandalism etc.

TJ.Va-M

Insulation Housing for ambient temperature -60...+40 °C

KR.Vz-12

Clamping adapter and anti-rotation device for mounting on round shafts (10-20 mm) and square square (VK 10-16 mm), galvanized



AH-12-08

Adapter 12mm square to 8 mm square

AH-12-10

Adapter 12mm square to 10 mm square

AH.-12-11

Adapter 12mm square to 11 mm square

Ex i sensors and switching amplifiers

CP.Ex-FROST3

Capillary frost protection, adjustable from -10°C - +15°C, length 3 meters, incl. fixing material, in conjunction with CP.Ex-DT1361

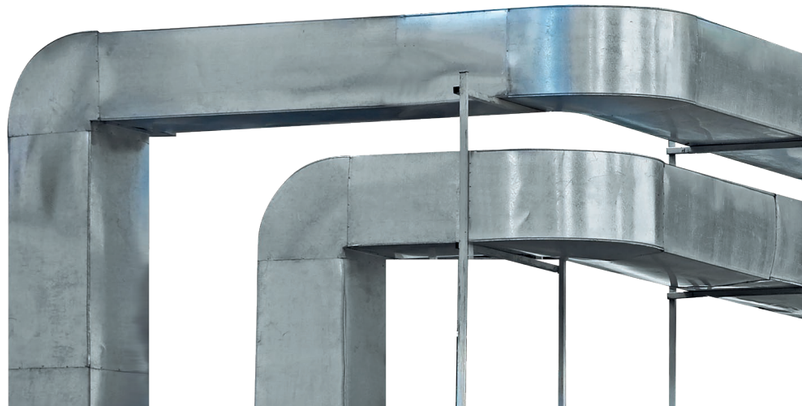
CP.Ex-FROST6

Capillary frost protection, adjustable from -10°C - +15°C, length 6 meters, incl. fixing material, in conjunction with CP.Ex-DT1361

CP.Ex-DT1361

Barrier for control cabinet mounting for CP.Ex-FROST*

§ You can find our terms and conditions in the download area on our website pi-safety.com



Accessoires for sensors

MA.Pa-06

Installation set for pressure sensors, incl. duct connectors, pressure hose and fixing screws for IY.Nc-P..., IY.Ex-P..., IR.Nc-P... und IR.Ex-P...

TH.VA-....

Thermowell, stainless steel, G ½ ', different lengths available

SC.Pu-01

M12 sensor cable, 5-wire, shielded, 1 meter

SC.Pu-05

M12 sensor cable, 5-wire, shielded, 5 meter

SC.Pu-10

M12 sensor cable, 5-wire, shielded, 10 meter

LK.Pa

Level sensor kit for pressure sensors

SR.Va-200

Pitot tube for measuring flow rate, l=200 mm

CS.Ms-M12

M12 connector set for on-site cables 5-wire, shielded, one set = 2 connectors

Zubehör Kalibrierung

KA.Pi

Calibration of humidity, temperature, pressure sensors in our in-house calibration laboratory including factory certificate (on request)

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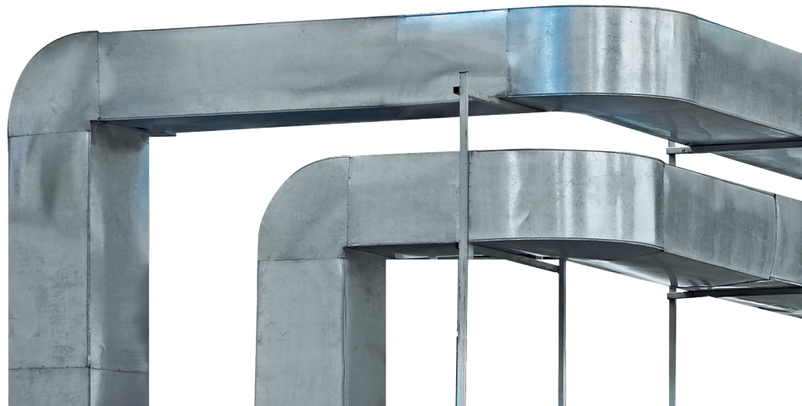

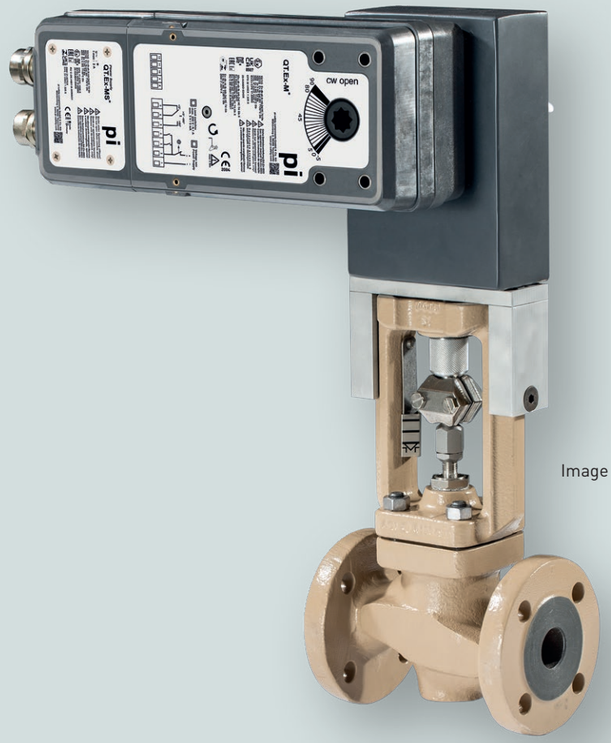

Image similar

Linear Valve Transmission LT.Qt

- For proper LV.Lt-... please contact us for support.
- The pi solution for globe and linear valves consists of three parts.
  - Actuator QT.Ex-... / QT.Nc-....
  - Linear transmission LT.Qt-...
  - Linkage valve to linear transmission parts LV.Lt-.....

TYPE	LT.Qt-10	LT.Qt-15	LT.Qt-20	LT.Qt-30	LT.Qt-42
Hub / Kraft	10 mm	15 mm	20 mm	30 mm	42 mm
500 N	QT.Ex-MF02-S... QT.Ex-MF10(Y)-S... QT.Ex-MF03-S...	QT.Ex-MF02-S... QT.Ex-MF10(Y)-S... QT.Ex-MF03-S...	QT.Ex-MF02-S... QT.Ex-MF10(Y)-S... QT.Ex-MF03-S...	QT.Ex-MF10(Y)-S... QT.Ex-MF03-S...	–
800 N			QT.Ex-MF10(Y)-S... QT.Ex-MF03-S...	–	–
1.000 N		QT.Ex-MF10(Y)-S... QT.Ex-MF03-S...	–	–	–
1.500 N	QT.Ex-MF10(Y)-S... QT.Ex-MF03-S...	–	–	–	–
2.000 N	–	–	–	–	–
2.500 N	–	–	–	–	–
3.000 N	–	–	–	–	–

TYPE	LT.Qt-10	LT.Qt-15	LT.Qt-20	LT.Qt-30	LT.Qt-42
Hub / Kraft	10 mm	15 mm	20 mm	30 mm	42 mm
500 N	QT.Ex-MYQ-S...	QT.Ex-MYQ-S...	QT.Ex-MYQ-S...	QT.Ex-M(Y)-S...	QT.Ex-M(Y)-S...
800 N			QT.Ex-M(Y)-S...		
1.000 N		QT.Ex-M(Y)-S...			QT.Ex-M-S...
1.500 N	QT.Ex-M(Y)-S...			QT.Ex-M-S...	–
2.000 N			QT.Ex-M-S...	–	–
2.500 N		QT.Ex-M-S...	–	–	–
3.000 N			–	–	–

Option Y : Modulating (0...10V and 4...20mA)

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Contact person

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