

**ATEX**   
Certified products



## Directive 2014/34/EU ATEX

Products classified for use in potentially explosive atmospheres

The **ATEX Directive 2014/34/EU** (equipment and protective systems intended for use in potentially explosive atmospheres) of the European Parliament and of the Council of 26 February 2014 concerns the harmonisation of the laws of the Member States relating to equipment and protective systems intended to be used in potentially explosive atmospheres.

The European “**ATmosphère EXplosible**” Directive, called **ATEX**, is required by the law of all the EU Member States since 1 July 2013 and it concerns all the products marketed in the European Union intended for use in potentially explosive areas.

The first issue in 1994 has been replaced by the **2014/34/EU Directive**, which finally came into force on 20 April 2016.

- The Directive includes non electrical equipment and devices, such as pneumatic cylinders
- The devices are assigned to categories that are assigned to specific potentially explosive areas
- The devices must bear the CE-Ex marking
- Products designed for use in potentially explosive areas must be accompanied by instructions for use and declaration of conformity
- Products intended for use in potentially explosive areas due to the presence of dusts as well as hazardous gases are included in the directive.

A potentially explosive atmosphere can be composed of gases, mists, vapours or dusts which can originate in factories or in all areas with constant or occasional presence of flammable substances. An explosion can take place in case of simultaneous presence of flammable substances and a source of ignition in a potentially explosive atmosphere.

A source of ignition can have:

- Electric origin (electric arcs, induced currents, heat generated by the Joule effect)
- Mechanical origin (hot surfaces generated by friction, sparks generated by impact between metal bodies, electrostatic discharge, adiabatic compression)
- Chemical origin (exothermic reactions between materials)
- Open flames

Products implying one or more sources of ignition for potentially explosive atmospheres during normal use or caused by malfunctions are subject to approval.

The producer must ensure the conformity of the product to what is declared and indicated on the marking of the product itself.

The product must always be accompanied by the relevant instruction.

The machinery manufacturer and/or user must identify the risk zone the products are used in, with reference to the Directive 99/92/CE, and buy the product complying with the use in the provided zone, paying attention to the relevant instructions.

**If a product is composed of 2 components with different marking the component belonging to the lower category determines the category of the whole product.**

Example:

Coil suitable for Category 3 (zone 2/22), marked Ex - II 3 EEx...

Valve suitable for Category 2 (zone 1/21), marked Ex - II 2 EEx...

The combination of valve and coil can only work in Category 3 (zone 2/22).

## EQUIPMENT CLASSIFICATION

Group I Mining equipment			Group II Surface equipment				
CATEGORY	PROTECTION LEVEL	APPLICATIONS	CATEGORY	PROTECTION LEVEL	APPLICATIONS	GAS ZONE	DUST ZONE
M1	Very high	Equipment which can be used in presence of explosive atmospheres	1	Very high	Presence of explosive atmosphere: always, frequently and for long periods of time	0	20
M2	High	Equipment which must be not operated in presence of explosive atmospheres	2	High	Presence of explosive atmosphere: probable	1	21
			3	Normal	Presence of explosive atmosphere: low probability and for a short period of time	2	22

### Explosion group

II	For all gases of Group II, if protection class requires it. Ex. "nA" See EN.50021
IIA	For all gases of Group IIA, if protection class requires it. Ex. "ia" See EN.50020
IIB	For all gases of Group IIA - IIB, if protection class requires it. Ex. "ia" See EN.50020
IIC	For all gases of Group IIA - IIB - IIC, if protection class requires it. Ex. "ia" See EN.50020

## TEMPERATURE CLASSIFICATION

### Group I Mining equipment

Temperatures  $\leq 150^{\circ}\text{C}$  or  $\leq 450^{\circ}\text{C}$  according to the dust layer that covers the device

### Group II Surface equipment

T-Class	MAXIMUM SURFACE TEMPERATURE	MINIMUM IGNITION TEMPERATURE OF GASES
T1	450 °C	>450 °C
T2	300 °C	>300 °C - $\leq 450^{\circ}\text{C}$
T3	200 °C	>200 °C - $\leq 300^{\circ}\text{C}$
T4	135 °C	>135 °C - $\leq 200^{\circ}\text{C}$
T5	100 °C	>100 °C - $\leq 135^{\circ}\text{C}$
T6	85 °C	>85 °C - $\leq 100^{\circ}\text{C}$

## HOW TO READ THE MARKING

### EXAMPLE OF ATEX MARKING

**CE** **Ex** II 2 Gc IIC T5 II 2 Dc T100°C

### Type of equipment

Mechanical

**CE** = European Community Mark

**Ex** = Conformity Mark with reference to Directive 2014/34/EU and relevant technical rules

II = Group II, equipment for surface industries

2 = Equipment of Category 2

G = Equipment for use with GAS zone 1 and 2

D = Equipment for use with DUSTS zone 21 and 22

c = Type of protection applied, i.e. constructional safety (EN 13463-5)

IIC = GAS Group

T5 = Temperature class (GAS)

T100°C = Maximum surface temperature (DUST)

## COMPONENTS AND ACCESSORIES WITHOUT ATEX CLASSIFICATION

Accessories for UNIVER products (fittings, silencers, nipples, nuts, tubes, reservoirs, pressure gauges, manual valves, check valves, quick exhaust valves, blocking valves, selectors, limit switches and any other accessories which can be attributed to various product families) can be used in ATEX zones 1,2 and 21,22.

The accessories are not sources of ignition if assembled correctly according to instructions for use and maintenance, therefore they can't change in any way the classification of the products they are assembled on, in compliance with the directive 2014/34/EU.

## ATEX Product range Group II - Category 2 and 3

### CYLINDERS - Category II certificate n. 557/EX - Ab2412/15

#### M ISO 6432 Microcylinders - Ø 8 ÷ 25 mm



##### Type

- Stainless steel piston rod
- Chromium-plated steel piston rod

##### Version

- D.A. Standard version
- D.A. Through piston rod
- D.A. With adjustable cushionings
- D.A. Through piston rod with adjustable cushionings
- S.A. Retracted piston rod
- S.A. Extended piston rod

CATEGORY 2

CE  II 2Gc IICT5 II 2Dc T100°C

#### KL/K/KE/KD ISO 15552 Pneumatic Cylinders - Ø 32 ÷ 125 mm



##### Type

- Stainless steel piston rod
- Chromium-plated steel piston rod

##### Version

- D.A. Standard version
- D.A. Through piston rod
- S.A. Retracted piston rod
- S.A. Extended piston rod

CATEGORY 2

CE  II 2Gc IICT5 II 2Dc T100°C

#### K160/200 ISO 15552 Pneumatic Cylinders - Ø 160/200 mm



##### Type

- Stainless steel piston rod
- Chromium-plated steel piston rod

##### Version

- D.A. Standard version
- D.A. Through piston rod

CATEGORY 2

CE  II 2Gc IICT5 II 2Dc T100°C

#### RP UNITOP Compact Cylinders - Ø 16 ÷ 63 mm



##### Type

- Stainless steel female piston rod
- Chromium-plated steel female piston rod
- Stainless steel male piston rod
- Chromium-plated steel male piston rod

##### Version

- D.A. Standard version
- D.A. Through piston rod
- D.A. Long piston
- S.A. Retracted piston rod
- S.A. Extended piston rod

CATEGORY 2

CE  II 2Gc IICT5 II 2Dc T100°C

#### RM ISO 21287 Compact Cylinders - Ø 16 ÷ 100 mm



##### Type

- Stainless steel male piston rod
- Chromium-plated steel male piston rod
- Stainless steel female piston rod
- Chromium-plated steel female piston rod

##### Version

- D.A. Standard version
- D.A. Through piston rod
- D.A. Long piston
- S.A. Retracted piston rod
- S.A. Extended piston rod

CATEGORY 2

CE  II 2Gc IICT5 II 2Dc T100°C

D.A. = Double acting    S.A. = Single acting

**RO UNITOP Compact Cylinders octagonal tube - Ø 16 ÷ 63 mm NON-ROTATING****Type**

- Stainless steel female piston rod with flange
- Chromium-plated steel female piston rod with flange

**Version**

- D.A. Standard version
- D.A. Through piston rod
- D.A. Long piston

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C**RN ISO 21287 Compact Cylinders octagonal tube - Ø 16 ÷ 63 mm NON-ROTATING****Type**

- Stainless steel male piston rod
- Chromium-plated steel male piston rod

**Version**

- D.A. Standard version
- D.A. Through piston rod
- D.A. Long piston

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C**RS STRONG Compact Cylinders - Ø 32 ÷ 100 mm****Type**

- Stainless steel female piston rod
- Chromium-plated steel female piston rod
- Stainless steel male piston rod
- Chromium-plated steel male piston rod

**Version**

- D.A. Standard version
- D.A. Through piston rod
- D.A. Long piston
- S.A. Retracted piston rod
- S.A. Extended piston rod

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C**RQ STRONG Compact Cylinders octagonal tube - Ø 32 ÷ 63 mm****Type**

- Stainless steel female piston rod with flange
- Chromium-plated steel female piston rod with flange
- Stainless steel male piston rod
- Chromium-plated steel male piston rod

**Version**

- D.A. Standard version
- D.A. Through piston rod
- D.A. Long piston

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C**OV Oval Cylinders - Ø 18 ÷ 80 mm****Type**

- Stainless steel female piston rod
- Chromium-plated steel female piston rod
- Stainless steel male piston rod
- Chromium-plated steel male piston rod

**Version**

- D.A. Standard version
- D.A. Through piston rod
- D.A. Hollow through piston rod

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C**W Short Stroke Cylinders - Ø 12 ÷ 100 mm****Type**

- Stainless steel female piston rod
- Stainless steel piston rod with male rear hinge

**Version**

- D.A. Standard version
- D.A. Through piston rod
- D.A. Hollow through piston rod
- S.A. Retracted piston rod
- S.A. Extended piston rod

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C

D.A. = Double acting    S.A. = Single acting

## S1 Rodless Cylinders Standard version - Ø 16 ÷ 50 mm

**Carriage type**

- Standard carriage
- Medium carriage (except for Ø16)
- Long carriage (except for Ø16)

**Stroke (mm)**

- Up to 5000 (Ø16)
- Up to 6000 (Ø25÷50)

CATEGORY 2


 II 2Gc IIC T5 II 2Dc T100°C

## L1-N Locking unit for cylinders and piston rods

**Cylinder bore (mm)**

Ø 16-20-25-32-40-50-63-80-100-125

**Piston rod bore (mm)**

Ø 6-8-10-12-16-20-25-32

CATEGORY 2


 II 2Gc IIC T5 II 2Dc T100°C

## RT 2/3 stage Telescopic Pneumatic Cylinders Ø 25 ÷ 63 mm

**Type**

- Stainless steel piston rod
- Chromium-plated steel piston rod

**Version**

- D.A. Female piston rod
- D.A. Male piston rod

CATEGORY 2


 II 2Gc IIC T5 II 2Dc T100°C

## VALVES - Category II certificate n. 557/Ex - Ab 2411/15

Solenoid valves are supplied without coil and connector. The choice of the coil determines the ATEX category.

## B 10 mm Nanovalves

**Version**

3/2 NC, 3/2 NO

**Connections**

on sub-base

CATEGORY 3


 II 3 GD c nA II T5 -10 °C ≤ Ta ≤ 45 °C

## A ISO 15218 - 15 mm Microvalves

**Version**2/2 NC, 2/2 NO  
3/2 NC, 3/2 NO**Connections**

interface on sub-base

CATEGORY 3


 II 3 GD c nA II T5 -10 °C ≤ Ta ≤ 45 °C

## AA U1 Miniature Electropilots

**Version**2/2 NC  
3/2 NC, 3/2 NO**Connections**

M5, G1/8, CNOMO, for sub-base

CATEGORY 2


 II 2Gc IIC T5 II 2Dc T100°C

## AB U2 Miniature Electropilots

**Version**2/2 NC  
3/2 NC, 3/2 NO**Connections**

G1/8, G1/4, CNOMO, for sub-base

CATEGORY 3


 II 3 GD c nA II T5 -10 °C ≤ Ta ≤ 45 °C

D.A. = Double acting

S.A. = Single acting



## BE ISO 5599/1 Valves size 1-2-3-4

**Version**

- Single/double pneumatic impulse
- Single/double electrical impulse

**Connections**  
on sub-base

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C

## AE ISO 5599/1 Light Series Valves size 1-2

**Version**

- Single/double pneumatic impulse
- Single/double electrical impulse

**Connections**  
on sub-base

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C

## BDA ISO 02 (18 mm), ISO 01 (26 mm) ISO 15407/1-2 Valves

**Version**

- Single/double pneumatic impulse

**Connections**  
on sub-base

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C

## AC-N NAMUR Valves

**Version**

- Single/double pneumatic impulse
- Single/double electrical impulse

**Connections**  
G1/4

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C

## CL/CM UNIVERSAL Valves G1/8 - G1/4

**Version**

- Mechanical operation
- Manual operation
- Single/double pneumatic impulse
- Single/double electrical impulse

**Connections**  
G1/8, G1/4

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C

## E COMPA 2 Miniature Valves

**Version**

- Mechanical operation
- Manual operation
- Single/double pneumatic impulse

**Connections**  
M5, for sub-base

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C

**Version**

- Single/double electrical impulse

**Connections**  
M5, for sub-base

CATEGORY 3

CE  II 3 GD c nA II T5 -10 °C ≤ Ta ≤ 45 °C

## F COMPA 4 Miniature Valves



**Version**  
- Single/double pneumatic impulse

**Connections**  
for sub-base

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C



**Version**  
- Single/double electrical impulse

**Connections**  
for sub-base

CATEGORY 3

CE  II 3 GD c nA II T5 -10 °C ≤ Ta ≤ 45 °C

## G6/GL6 20 mm - Valves and Solenoid Valves



**Version**  
- Single/double pneumatic impulse

**Connections**  
G1/8, for sub-base

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C



**Version**  
- Single/double electrical impulse

**Connections**  
G1/8, for sub-base

CATEGORY 3

CE  II 3 GD c nA II T5 -10 °C ≤ Ta ≤ 45 °C

## G7 26 mm - Valves and Solenoid Valves



**Version**  
- Single/double pneumatic impulse  
- Single/double electrical impulse

**Connections**  
G1/8

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C

## PS COMBOBOX Valves



**Version**  
- Single/double pneumatic impulse

**Connections**  
tube Ø 4, 6, 8

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C

## AC MIXED Valves G1/8 - G1/4 - G1/2



**Version**  
- Mechanical operation  
- Manual operation  
- Single/double pneumatic impulse  
- Single/double electrical impulse

**Connections**  
G1/8, G1/4

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C

**Version**  
- Single/double electrical impulse  
(versions with U2 coil)

**Connections**  
G1/2

CATEGORY 3

CE  II 3 GD c nA II T5 -10 °C ≤ Ta ≤ 45 °C

## CH 2/2 - 3/2 Poppet Valves



**Version**  
- Mechanical operation  
- Manual operation

**Connections**  
G1/8

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C



## AF Poppet Valves for compressed air G1/8 ÷ G1 1/2

**Version**

- Single pneumatic impulse
- Single electrical impulse

**Connections**

G1/8 ÷ G1 1/2

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C**Version**

- Single electrical impulse (versions with U2 coil)

**Connections**

G1/4 ÷ G1 1/2

CATEGORY 3

CE  II 3 GD c nA II T5 -10 °C ≤ Ta ≤ 45 °C

## AG Poppet Valves for vacuum G1/8 ÷ G1 1/2

**Version**

- Single pneumatic impulse
- Single electrical impulse

**Connections**

G1/8 ÷ G1 1/2

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C**Version**

- Single electrical impulse (versions with U2 coil)

**Connections**

G1/4 ÷ G1 1/2

CATEGORY 3

CE  II 3 GD c nA II T5 -10 °C ≤ Ta ≤ 45 °C

## AI-JET Pneumatic Switches

**Version**

- Mechanical operation
- Manual operation

**Connections**

M5, tube Ø4

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C

## AI-JET2 Valves with panel operation 3/2 - 5/2 - 5/3

**Version**

- Manual operation

**Connections**

M5, tube Ø4

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C

## AM Pneumatic and Solenoid Foot Valves

**Version**

- Mechanical operation

**Connections**

G1/8, G1/4

CATEGORY 2

CE  II 2Gc IIC T5 II 2Dc T100°C

## P10/P15 COMPACT Valves

**Version**

- Single/double pneumatic impulse

**Connections**

M5, G1/8, for sub-base

CATEGORY 3

CE  II 3 GD c nA II T5 -10 °C ≤ Ta ≤ 45 °C

## AP Binary Counter (flip-flop)



### Version

- Single pneumatic impulse
- Single electrical impulse

**Connections**  
G1/8

CATEGORY 2

CE Ex II 2Gc IIC T5 II 2Dc T100°C

## AM Complementary Valves



### Version

- AM-50 Flow control valve
- AM-51 Signal processing valve
- AM-52 Gradual starter
- AM-53 Economizer
- AM-54 Check valve
- AM-55 Blocking valve

CATEGORY 2

CE Ex II 2Gc IIC T5 II 2Dc T100°C

## COILS

### DA/DB/DC/DD/DE Coils



#### 30 mm (U1/U3)

DC-0502L300Z 24 V DC 5,3 W  
DC-0507L300Z 24 V AC 50/60 Hz 10 VA  
DC-0509L300Z 110 V AC 50/60 Hz 10 VA  
DC-0510L300Z 230 V AC 50/60 Hz 10 VA

CATEGORY 2

CE Ex II 2Gd Ex mb II eT4 Gb

CE Ex II 2Gd Ex mb IIIC T135° CDb



#### 10 mm (U04)

DE-052L030X 24 V DC 1,2 W  
With loose cables  
(length 300 mm)

#### 15 mm (U05)

DD-051L030X 24 V DC 2 W  
With loose cables  
(length 300 mm)

CATEGORY 3



#### 22 mm (U1)

DA-0050X 12 V DC 3,5 W  
DA-0051X 24 V DC 3,5 W  
DA-0106X 24 V AC 50/60 Hz 5 VA  
DA-0108X 110 V AC 50/60 Hz 5 VA  
DA-0124X 230 V AC 50/60 Hz 5 VA

#### 30 mm (U2)

DB-0501X 12 V DC 11 W  
DB-0502X 24 V DC 11 W  
DB-0507X 24 V AC 50/60 Hz 10 VA  
DB-0509X 110 V AC 50/60 Hz 10 VA  
DB-0510X 230 V AC 50/60 Hz 10 VA

#### 30 mm (U3)

DC-0301X 12 V DC 2,5 W  
DC-0302X 24 V DC 2,5 W  
DC-0307X 24 V AC 50/60 Hz 3,3 VA  
DC-0309X 110 V AC 50/60 Hz 3,3 VA  
DC-0310X 230 V AC 50/60 Hz 3,3 VA

Connectors are included.

CE Ex II 3 GD c nA II T5 -10 °C ≤ Ta ≤ 45 °C

## SENSORS

### DF/DH Magnetic and Electronic Proximity Sensors



### Type

- Electromechanical
- Electronic

DF-220  
DF-330  
DF-440

DH-100  
DH-200  
DH-500

CATEGORY 3

CE Ex II 3 GD c nA II T5 -10 °C ≤ Ta ≤ 45 °C

## AIR TREATMENT

### HZE Air Treatment Units


**Size**

- Small size 0 (G1/4)
- Medium size 1 (G3/8 - G1/2)
- Large size 2 (G1/2)

**Connections**

G1/4, G3/8, G1/2

**CATEGORY 3**

CE Ex II 3 GD c nA II T5 -10 °C ≤ Ta ≤ 45 °C

## AUTOMOTIVE - Category II certificate n. 557/Ex - Ab 2413/15

### UBP/UBH/IBP UNIVERSAL Pneumatic Power clamps


**Version**

- UNIVERSAL Pneumatic Power clamp (UBP/UBH)
- UNIVERSAL Pneumatic power clamp interchangeable with size 50/63 mm (IBP)

**Ø Cylinder (mm)**

- 32, 40, 50, 63, 80 (UBP)
- 40, 63 (UBH)
- 40 (IBP)

**CATEGORY 2**

CE Ex II 2Gc II CT4 II 2Dc T135°C

### UNP/UNM/DMS Clamps conforming to the N.A.A.M.S. and CNOMO standard


**Version**

- UNIVERSAL Pneumatic power clamps conforming to the N.A.A.M.S. Standard (UNP)
- UNIVERSAL Pneumatic power clamps with hand lever conforming to the N.A.A.M.S. Standard (UNM)
- Pneumatic power clamps conforming to the CNOMO Standard (DMS)

**Ø Cylinder (mm)**

- 50, 63, 80 (UNP)
- 50, 63 (UNM)
- 32, 40, 50, 63 (DMS)

**CATEGORY 2**

CE Ex II 2Gc II CT4 II 2Dc T135°C

### UBM/UBQ/UBT/IBM Pneumatic Power clamps with hand lever


**Version**

- UNIVERSAL Pneumatic power clamp with hand lever (UBM)
- UNIVERSAL Pneumatic power clamp with hand lever (UBQ)
- UNIVERSAL Pneumatic power clamp with hand lever interchangeable with size 50/63 mm (IBM)
- UNIVERSAL Pneumatic power clamp with central hand lever (UBT)

**Ø Cylinder (mm)**

- 40, 50, 63, 80 (UBM)
- 40, 63 (UBQ)
- 40 (IBM, UBT)

**CATEGORY 2**

CE Ex II 2Gc II CT4 II 2Dc T135°C

### UDP Pneumatic power clamp with 2 arms


**Version**

- Pneumatic power clamp with 2 arms

**Ø Cylinder (mm)**

- 40, 63

**CATEGORY 2**

CE Ex II 2Gc II CT4 II 2Dc T135°C

**LCP/LCJ/LCR/LCZ/LCG** Pneumatic retractable locating pin units, single rod
**Version**

- Pneumatic retractable locating pin units (LCP)
- Pneumatic retractable locating pin units, higher traction force (LCJ)
- Pneumatic retractable locating pin units compact end caps (LCR)
- Pneumatic retractable locating pin unit toggle-joint mechanism (LCZ)
- Pneumatic retractable locating pin units conforming to CNOMO Standard with electronic sensor (LCG)

**Ø Cylinder (mm)**

- 32, 50, 63 (LCP)
- 50 (LCJ)
- 40 (LCZ)
- 50, 63 (LCR, LCG)

CATEGORY 2


 II 2Gc IIC T4 II 2Dc T135°C

**LCM/LCY/LCQ** Pneumatic retractable locating pin units with hand lever, single rod
**Version**

- Pneumatic retractable locating pin units with hand lever (LCM)
- Pneumatic retractable locating pin units with hand lever and toggle-joint mechanism (LCY)
- Pneumatic retractable locating pin units with hand lever and electronic sensor (LCQ)

**Ø Cylinder (mm)**

- 50 (LCM)
- 40 (LCY)
- 50, 63 (LCQ)

CATEGORY 2


 II 2Gc IIC T4 II 2Dc T135°C

**LCA/LCS/LCT** Pneumatic retractable locating pin units, double rod
**Version**

- Pneumatic retractable locating pin units (LCA)
- Pneumatic retractable locating pin units compact end caps (LCS)
- Pneumatic retractable locating pin units toggle-joint mechanism (LCT)

**Ø Cylinder (mm)**

- 40, 63 (LCA)
- 63 (LCS)
- 50 (LCT)

CATEGORY 2


 II 2Gc IIC T4 II 2Dc T135°C

**LCO/LCX** Pneumatic retractable locating pin units with hand lever, double rod
**Version**

- Pneumatic retractable locating pin units with hand lever (LCO)
- Pneumatic retractable locating pin units with hand lever and toggle-joint mechanism (LCX)

**Ø Cylinder (mm)**

- 50

CATEGORY 2


 II 2Gc IIC T4 II 2Dc T135°C

**LSP/LTP** Pneumatic pin clamp
**Version**

- Pneumatic pin clamp (LSP)
- Pneumatic pin clamp- horizontal shape (LSP50U)
- Pneumatic pin clamp with vanishing hook (LTP)

**Ø Cylinder (mm)**

- 32, 50 (LSP)
- 40 (LSP50U)
- 50 (LTP)

CATEGORY 2


 II 2Gc IIC T4 II 2Dc T135°C

**UGP/UGM/LGPS** Pneumatic gripper units for assembly
**Version**

- Pneumatic gripper unit (UGP)
- Pneumatic gripper unit with hand lever (UGM)
- Single and double pneumatic gripper unit (LGPS)

**Ø Cylinder (mm)**

- 40 (UGP)
- 40 (UGM)
- 32, 40 (LGPS)

CATEGORY 2


 II 2Gc IIC T4 II 2Dc T135°C

