PNEUMATIC AUTOMATION
CYLINDERS
HIGH-TECH VALVES
AIR TREATMENT ACCESSORIES

AUTOMOTIVE
POWER CLAMPS
PIN UNITS
PIN CLAMPS
GRIPPER UNITS
POWER PIVOTS
MARKING UNITS
ELECTRIC UNITS

MODULAR TOOLING SYSTEM
GR8 TOOLING

PRODUCT RANGE
UNIVER has started its activity in the field of industrial automation during the 1970s, with the production of its first series of pneumatic valves and poppet valves for vacuum.

In the following decades, the widening range of technologically advanced and original pneumatic components has allowed the continuous growth and development of the company, which has become one of the major Italian businesses in the production of industrial automation equipment.

In 2000, after many years of experience in the supply of pneumatic components to the automotive market, the Automotive Division was created, thus developing numbers of solutions for BIW in the automotive industry.

New entry, the Division of Modular Tooling Systems (GR8) represents the new challenge in the press field and handling of metal sheets in Automotive and Industrial Automation.

Some of our customers

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Subject to change
The Electronic Division, supporting both Pneumatic Automation and Automotive divisions, is specialized in the study, design and manufacturing of the electric and electronic devices which are integrated in UNIVER products.

In Italy, the commercial company UNIVER SERVICE S.r.l. controls the domestic market and guarantees a quick and efficient service, thanks to different operational offices and distributors in the whole country.

The UNIVER Group has many direct branches and an active distribution network covering the most important industrialized areas.
STANDARDS-BASED CYLINDERS

<table>
<thead>
<tr>
<th>M</th>
<th>KL</th>
<th>KE/K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microcylinders ISO 6432 Ø8 ÷ 25 mm</td>
<td>Pneumatic Cylinders ISO 15552 Ø32 ÷ 125 mm CLEAN PROFILE</td>
<td>Pneumatic Cylinders ISO 15552 Ø32 ÷ 125 mm</td>
</tr>
</tbody>
</table>

STANDARDS-BASED COMPACT CYLINDERS

<table>
<thead>
<tr>
<th>RP/RM</th>
<th>RO/RN</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNITOP Compact Cylinders (RP Ø16 ÷ 63 mm), ISO 21287 (RM Ø16 ÷ 100 mm)</td>
<td>UNITOP Compact Cylinders (RO Ø16 ÷ 63 mm), ISO 21287 (RN Ø16 ÷ 63 mm) - Octagonal tube NON-ROTATING</td>
</tr>
</tbody>
</table>

OVAL/SHORT STROKE/ROTARY CYLINDERS

<table>
<thead>
<tr>
<th>OV</th>
<th>W</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oval cylinder Ø18 ÷ 80 mm</td>
<td>Short stroke cylinders Ø12 ÷ 100 mm TUBE NEW DESIGN</td>
<td>Pneumatic Rotary Actuators Ø32 ÷ 125 mm</td>
</tr>
</tbody>
</table>
PNEUMATIC AUTOMATION

CYLINDERS

KD
Pneumatic Cylinders ISO 15552
Ø32 ÷ 125 mm
HEAVY SERIES TUBE

K
Pneumatic Cylinders ISO 15552
Ø160/200 - 250/320 mm

RS
STRONG Compact Cylinders
Ø32 ÷ 100 mm

RQ
STRONG Compact Cylinders
Ø32 ÷ 100 mm - Octagonal Tube
NON-ROTATING

KL
CLEAN PROFILE
Easier to clean

QUICK INSTALLATION
Sensors and connections on one side

UNIVER TECHNOLOGY
Strong and Reliable

ISO 15552
Interchangeability

SENSORS

MP
Clamping cylinder

DF/DH
Magnetic and Electronic Proximity Sensors
RODLESS CYLINDERS

S1
Rodless Cylinders standard version
Ø16 ÷ 50 mm

S5
Rodless Cylinders with integrated guides
Ø25 ÷ 50 mm
Technopolymer sliding guides

GUIDED CYLINDERS

J1
Slide Units for pneumatic cylinders
M, KE/K, KD series

J3
Slide Units for rodless cylinders
S1 series

J64RS
Slide Units for STRONG compact cylinders
RS series

J65
Slide Units for compact cylinders
RP Ø25 series

JLS/JLV
Guided Compact Cylinders
Bearings (JLS) - Ball bushing (JLV)

Version with metallic piston rod scraper
(Upon request)

CYLINDER ASSEMBLY KITS

M/KL/K/KE/KD
RP/RM-RO/RN
VL1
Rodless Cylinders with 90° integrated guides
Ø25 ÷ 50 mm
Sliding on ball bearings

J64RT2
Slide Units for telescopic cylinders
RT2 series

JT/JX
Guided Slides

S1/S5/VL1
UNIVER Original since 1988

A - Internal strip (seal)
B - External strip (protection)
made of reinforced elastomer
with Kevlar fiber
LOCKING UNITS

**L1-N**
Locking units for cylinders and piston rods

**L6**
Locking Units for rodless cylinders S5 - VL1 series

**ORIGINAL**
Locking system
UNIVER Original since 1998

**STATIC/DYNAMIC**
Static locking and dynamic braking in a single device

**POWERFUL**
The highest locking force among market equivalent devices

**SAFE**
No rod slipping even if affected by oil and grease

PROGRAMMABLE PNEUMATIC ACTUATORS

**NTZ**
Pneumatic actuator with integrated digital measuring detector and safety locking device

**NQZ**
Pneumatic actuator with digital measuring system

PNEUMATIC GRIPPERS

**YMA10/YMP10**
Angular and Parallel Pneumatic Gripper

**YMA20**
Angular Pneumatic Gripper 180°

**YMP20**
Parallel Pneumatic Gripper with Linear Guide

**YMP30**
Low Profile Parallel Pneumatic Gripper with Linear Guide

Subject to change
**TELESCOPIC CYLINDERS**

**RT**
Telescopic cylinders
2 stages (RT2 Ø25 + 63 mm) 3 stages (RT3 Ø40 + 63 mm)

**NFZ**
Pneumatic actuator with integrated safety locking device

**YMP40**
Wide-type Parallel Pneumatic Gripper

**YMP50**
Self-centering 3 Jaw Pneumatic Gripper

**PNEUMATIC AUTOMATION**

**HIGH-TECH**

**RT**

**ORIGINAL**
UNIVER Original design and technology

**INDUSTRIALIZED**
Industrialized components and advanced technology

**REDUCED DIMENSIONS**
60% less than standard cylinders

**NON-ROTATING**
Anti-rotation octagonal tube standard supplied

Telescopic Cylinder
2 stages

Telescopic Cylinder
3 stages
ELECTROPILOTS

<table>
<thead>
<tr>
<th>B11 - B10 - B12</th>
<th>B</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 15218 - 10 mm Nanovalves</td>
<td>10 mm Nanovalves</td>
<td>ISO 15218 - 15 mm Microvalves</td>
</tr>
<tr>
<td>B11 Standard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B10 Low consumption</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B12 High flow rate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

STANDARDS-BASED VALVES

<table>
<thead>
<tr>
<th>BE/BE12</th>
<th>Size 1-2-3-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 5599/1 Valves- Mixed and spool system</td>
<td>MIXED AND SPOOL SYSTEM</td>
</tr>
<tr>
<td>Versions with either mixed or spool system available for all series</td>
<td></td>
</tr>
<tr>
<td>MIXED for heavy applications</td>
<td></td>
</tr>
<tr>
<td>SPOOL for all applications</td>
<td></td>
</tr>
</tbody>
</table>

AC-N
NAMUR Valves

BD
ISO 15407-1/2 Valves

Subject to change
**PNEUMATIC AUTOMATION**

**VALVES**

<table>
<thead>
<tr>
<th><strong>AA</strong></th>
<th><strong>AB</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>U1 Miniature Electropilots</td>
<td>U2 Miniature Electropilots</td>
</tr>
</tbody>
</table>

**ISO 5599/1 Light Series Valves**

<table>
<thead>
<tr>
<th><strong>AE</strong></th>
<th><strong>ISO 5599/1 Light Series Valves</strong></th>
</tr>
</thead>
</table>

**Size 1-2**

**ISO 15407-1/2 Valves**

- **BDE**
  - Integrated electrical connection (ISO 15407/2)

- **BDB**
  - M12 connector (Automotive)

- **BDA**
  - Single electrical connection (ISO 15407/1)

**Magnetic memory LATCHING**

- **18 mm (ISO 02)**
- **26 mm (ISO 01)**
**SPOOL VALVES**

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

**E/F**
- COMPA 2 (E series) COMPA 4 (F series)
  - Miniature Valves

**G7**
- Valves and Solenoid Valves 26 mm - G1/8

**G6**
- 20 mm - Valves and Solenoid Valves - **Threaded body G1/8**

**POPPET VALVES**

**AF/AG**
- Poppet Valves for compressed air (AF) and for vacuum (AG) G1/8 + G1 1/2

**CH**
- Poppet valves G1/8 2/2 - 3/2

**AI/AI-JET**
- Miniature Limit Switches (AI)
  - JET series Pneumatic Switches (AI-JET)
  - Valves with panel operation (AI-JET2)
PNEUMATIC AUTOMATION

VALVES

PS
COMBOBOX Valves

GL6
20 mm - Valves and Solenoid Valves - For sub-base mounting

AM
Pneumatic and Solenoid Foot Valves

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

AF/AG
Poppet system
UNIVER Original since 1973

MIXED Valves - AC series
MIXED SYSTEM
For heavy applications
Fast commutation
Large number of cycles
High flow rate
COMPACT VALVES

**P10F**
10 mm COMPACT Valves - M5

**P10B**
10 mm COMPACT Valves - For sub-base mounting

**P15F**
15 mm COMPACT Valves - G1/8

**P15B**
15 mm COMPACT Valves - For sub-base mounting

**P10F**
10 mm COMPACT Valves
External connector

**P15F**
15 mm COMPACT Valves
External connector

**P15EF**
15 mm COMPACT Valves - G1/8
PNEUMATIC AUTOMATION

SERIAL SYSTEMS

TC
Serial communication system

P10/P15
HIGH FLOW RATE
UNIVER traditional spool technology

COMPACT SIZE
Highest reduction of overall dimensions

EASY INSTALLATION
All pneumatic connections on the same side

COMPLETE SOLUTION
Threaded body and body for sub-base mounting
5/2 - 5/3 - 3/2+3/2

Serial module for all manifold models

Canopen

PROFI "BUS"

PROFI "NET"

EtherNet/IP

DeviceNet

EtherCAT
AIR TREATMENT UNITS

HZE-F
Filter
size 0

HZE-R
Regulator
size 0

HZE-L
Lubricator
size 0

HZE-B
Filter regulator
size 0

HZE-F
Filter
size 1-2

HZE-R
Regulator
size 1-2

HZE-L
Lubricator
size 1-2

HZE-B
Filter regulator
size 1-2

HZE-Y
Gradual starter
size 0-1-2

HZE-N
Diverter block
size 0-1-2

HZE-P
Lockable valve
size 0-1-2

HZE-S
Shut-off valve
size 0-1-2

Subject to change
**PNEUMATIC AUTOMATION**

**AIR TREATMENT**

**MODULAR**
40 mm (HZE0) 63 mm (HZE1) 80 mm (HZE2)

**INTEGRATED GAUGE**
Standard supplied

**COMPLETE SOLUTION**
Possibility of assembling combinations complete with accessories

- **HZE-D**
  - Filter regulator + Lubricator
  - size 0

- **HZE-C**
  - Filter + Regulator + Lubricator
  - size 0

- **HZE-D**
  - Filter regulator + Lubricator
  - size 1-2

- **HZE-C**
  - Filter + Regulator + Lubricator
  - size 1-2

- **HZ9464G**
  - Integrated square pressure gauge

- **HZ9P...**
  - Round gauge
AIR TREATMENT UNITS

G1/4
Size 0
FR+L
600 Nl/min

G3/8 - G1/2
Size 1
FR+L
2800 Nl/min

G1/2
Size 2
FR+L
4300 Nl/min

HZRP10/20
Precision regulators

Subject to change
<table>
<thead>
<tr>
<th><strong>HZE0R08G</strong></th>
<th><strong>HZE-RL</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulator without manometer</td>
<td>Lockable regulator size 1-2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>HZE-R</strong></th>
<th><strong>HZE-B</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Check valve size 0-1-2</td>
<td>Check valve size 0-1-2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>HZE-S</strong></th>
<th><strong>Size</strong></th>
<th><strong>U05</strong></th>
<th><strong>Size</strong></th>
<th><strong>U05</strong></th>
<th><strong>Size</strong></th>
<th><strong>U3 CNOMO</strong></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>HZRE10/20</strong></th>
<th><strong>HZRM08G</strong></th>
<th><strong>HZRM...</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Electro-pneumatic transducers</td>
<td>Microregulators for air</td>
<td>Pressure Microregulators for air and water</td>
</tr>
</tbody>
</table>
## FITTINGS AND TUBES

<table>
<thead>
<tr>
<th>HA</th>
<th>HAR</th>
<th>HB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technopolymer Push-In Fittings</td>
<td>Space-saving Fittings</td>
<td>Nickel-plated Brass Push-in Fittings</td>
</tr>
</tbody>
</table>

## COMPLEMENTARY VALVES AND ACCESSORIES

<table>
<thead>
<tr>
<th>AP</th>
<th>AM-50</th>
<th>AM-51</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binary Counter (Flip Flop)</td>
<td>Flow regulators with metallic body</td>
<td>Signal processing valve</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AM-54</th>
<th>AM-55</th>
<th>AM-5200</th>
<th>AM-5220</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check valve</td>
<td>Blocking valve</td>
<td>Pneumoelectrical transducer</td>
<td>Adjustable pressure switch</td>
</tr>
</tbody>
</table>
**PNEUMATIC AUTOMATION**

**ACCESSORIES**

<table>
<thead>
<tr>
<th>HEA/HEC/HED</th>
<th>HFA/HFC</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEA Polyamide tubes</td>
<td>HFA Polyamide Spiral Tubes</td>
</tr>
<tr>
<td>HEC Polyurethane tubes</td>
<td>HFC Polyurethane Spiral Tubes</td>
</tr>
<tr>
<td>HED Co-polyurethane tubes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AM-52</th>
<th>AM-53</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gradual starter</td>
<td>Economizer</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HZ9N</th>
<th>HZ9N12</th>
<th>YF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital pressure switch</td>
<td>Adjustable diaphragm pressure switch</td>
<td>G1/8 ÷ G1 Fluid Valves</td>
</tr>
</tbody>
</table>

*NEW*

Air/Oil reservoir

**RMS series**
POWER CLAMPS

UBP
UNIVERSAL Pneumatic power clamp

UBH
UNIVERSAL Pneumatic power clamp

IBP
UNIVERSAL Pneumatic power clamp interchangeable with size 50/63 mm

UDP
Pneumatic power clamp with 2 arms

UBM/UBQ
UNIVERSAL Pneumatic power clamp with handlever

IBM
Pneumatic power clamp with handlever interchangeable with size 50/63 mm

UBT
Pneumatic power clamp with central handlever

DMS
Pneumatic power clamps conforming to the CNOMO Standard

UGP/UGM
Pneumatic gripper units (UGP) with handlever (UGM)

LGP
Pneumatic gripper PATENT PENDING

NEW

NEW

NEW
AUTOMOTIVE
POWER CLAMPS
GRIPPER UNITS

STEPLESS ADJUSTMENT
Opening angle adjustment 0° ÷ 135°

LIGHT-WEIGHT
Clamping arm and clamp housing in aluminium alloy

UNIVER ORIGINAL LINKAGE DESIGN
Ensures positional repeatability

UNIVER ORIGINAL METAL SENSOR
Metal case
M12 swivel connector

Pneumatic Power Clamp applications
RETRACTABLE LOCATING PIN UNITS

**LCP**
- Pneumatic retractable locating pin units with single rod

**LCG**
- Pneumatic retractable locating pin units with single rod

**LCZ**
- Pneumatic retractable locating pin units with single rod and toggle-joint mechanism

**LCM**
- Pneumatic retractable locating pin unit with handlever

**LCL**
- Manual retractable locating pin unit

**LCO**
- Pneumatic retractable locating pin unit with double rod and handlever

PNEUMATIC PIN CLAMPS

**LSP**
- Pneumatic pin clamp

**LSP50U**
- Pneumatic pin clamp - horizontal shape

**LTP**
- Pneumatic pin clamp with vanishing hook

**LUP**
- Pneumatic pin clamp with vanishing hook and pin
AUTOMOTIVE
PIN UNITS
PIN CLAMPS

LCA
Pneumatic retractable locating pin units with double rod

LCT
Pneumatic retractable locating pin units with double rod and toggle-joint mechanism

LCY
Pneumatic retractable locating pin unit with handlever and toggle-joint mechanism

LCX
Pneumatic retractable locating pin unit with double rod and handlever and toggle-joint mechanism

LSL
Manual pin clamp

Pneumatic Power Clamps and Pin Clamp applications
POWER PIVOTS

DMA
Pneumatic power pivots, CNOMO mounting

LAGP
Pneumatic power pivots

ELECTRIC UNITS

LAE
Electric power clamps

LNE
Electric power clamps, fixing conforming to the N.A.A.M.S. Standard

LGE
Electric gripper units
MARKING UNITS

PRP
Pneumatic marking unit

LCE
Electric retractable locating pin unit

LAGE
Electric power pivots

Pneumatic and electric Power Clamp applications
GR8 MODULAR TOOLING SYSTEM

Ø 30 - 45 - 70 mm BOOMS
Maximum stiffness and minimum weight

LOCKING RING
Precise and efficient system to guarantee a high level of positional accuracy
HIGH PRECISION
High level of positional repeatability; low deflection

MODULAR COMPONENTS
Considerable reduction of mounting components

QUICK INSTALLATION AND SET UP
No welding or dowelng required, easily replaceable components

FULLY ADJUSTABLE
Unlimited orientation in space and free configurations

KIT
Considerable reduction of mounting elements

BALL MOUNTING
Unlimited swivel rotation
GR8 MODULAR TOOLING SYSTEM
Applications and details of the components

Unlimited and complex configurations
Weight-optimized standard components and brackets
Quick installation and adjustment
Modular components
MODULAR TOOLING SYSTEM
GR8 TOOLING

COMPLETE SOLUTION WITH UNIVER COMPONENTS