

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













Early stages

Pneumatic

Automotive

GR8 Tooling



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

























































Electronic

Univer Service

Univer Group



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.I. 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.











Innovation
Research and Development
Quality
Training
Communication













STANDARDS-BASED CYLINDERS

M

Microcylinders **ISO 6432** Ø8 ÷ 25 mm KL

Pneumatic Cylinders ISO 15552 Ø32 ÷ 125 mm CLEAN PROFILE KE/K

Pneumatic Cylinders **ISO 15552** Ø32 ÷ 125 mm







STANDARDS-BASED COMPACT CYLINDERS

RP/RM

UNITOP Compact Cylinders (RP Ø16 \div 63 mm), **ISO 21287** (RM Ø16 \div 100 mm)

RO/RN

UNITOP Compact Cylinders (RO Ø16 \div 63 mm), **ISO 21287** (RN Ø16 \div 63 mm) - Octagonal tube **NON-ROTATING**









OVAL/SHORT STROKE/ROTARY CYLINDERS

OV

Oval cylinder Ø18 ÷ 80 mm W

Short stroke cylinders Ø12 ÷ 100 mm TUBE NEW DESIGN

Pneumatic Rotary Actuators $Ø32 \div 125 \text{ mm}$











PNEUMATIC AUTOMATION

CYLINDERS

KD

Pneumatic Cylinders ISO 15552 Ø32 ÷ 125 mm HEAVY SERIES TUBE



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





RS

STRONG Compact Cylinders Ø32 ÷ 100 mm



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





SENSORS

MP

Clamping cylinder

DF/DH

Magnetic and Electronic Proximity Sensors





KL

CLEAN PROFILE

Easier to clean

QUICK INSTALLATION

Sensors and connections on one side

UNIVER TECHNOLOGY

Strong and Reliable

ISO 15552

Interchangeability





RODLESS CYLINDERS

S1

Rodless Cylinders standard version $\emptyset 16 \div 50 \text{ mm}$



S5

Rodless Cylinders with integrated guides $\emptyset 25 \div 50 \text{ mm}$ - Technopolymer sliding guides



GUIDED CYLINDERS

J1

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



Slide Units for rodless cylinders S1 series



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)





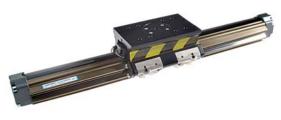






VL1

Rodless Cylinders with 90° integrated guides $\emptyset 25 \div 50$ mm - Sliding on ball bearings





J64RT2

Slide Units for telescopic cylinders RT2 series



JT/JX

Guided Slides





PNEUMATIC AUTOMATION

CYLINDERS

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











TELESCOPIC CYLINDERS

Telescopic cylinders 2 stages (RT2 Ø25 ÷ 63 mm) 3 stages (RT3 Ø40 ÷ 63 mm)



Telescopic Cylinder 2 stages

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





ELECTROPILOTS

B11-B10-B12

В

Α

ISO 15218 - 10 mm Nanovalves

B11 Standard

B10 Low consumption

B12 High flow rate

ISO 15218 - 15 mm Microvalves







10 mm Nanovalves









STANDARDS-BASED VALVES

BE/BE12

ISO 5599/1 Valves- Mixed and spool system



MIXED AND SPOOL SYSTEM

Versions with either mixed or spool system available for all series



MIXED for heavy applications



SPOOL for all applications

AC-N

NAMUR Valves

BD

ISO 15407-1/2 Valves





U1 Miniature Electropilots

AA

U2 Miniature Electropilots

AB





AE

ISO 5599/1 Light Series Valves

Size

1-2

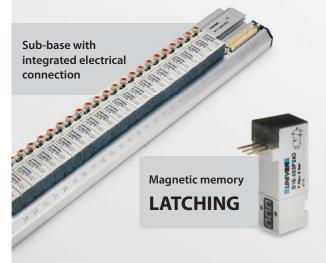


1SO **01-02**



PNEUMATIC AUTOMATION

VALVES



ISO 15407-1/2 Valves

BDE

Integrated electrical connection (ISO 15407/2)





SPOOL VALVES



G7 G6

Valves and Solenoid Valves 26 mm - G1/8

 $20\ mm$ - Valves and Solenoid Valves - Threaded body G1/8



POPPET VALVES

AF/AG CH AI/AI-JET

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

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

Miniature Limit Switches (AI) JET series Pneumatic Switches (AI-JET) Valves with panel operation (AI-JET2)









PS COMBOBOX Valves

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

GL6



AM AC

Pneumatic and Solenoid MIXED Valves G1/8 - G1/4 - G1/2 Foot Valves



PNEUMATIC AUTOMATION

VALVES

ESSENTIAL Valves

EL18/22

HIGH FLOW RATE

800 NI/min (G1/8) **1700 NI/min** (G1/4)

REDUCED DIMENSIONS

18 mm (G1/8) 22 mm (G1/4)

COMPLETE SOLUTION

5/2 - 5/3 - 3/2+3/2

STRONG

Metallic body





COMPACT VALVES



10 mm COMPACT Valves - M5



10 mm COMPACT Valves - For sub-base mounting









P15F

15 mm COMPACT Valves - G1/8



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



In-line CONNECTOR

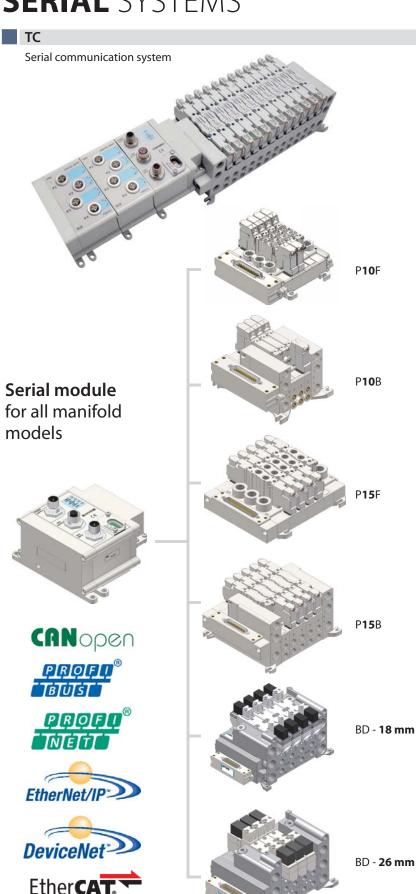








SERIAL SYSTEMS



PNEUMATIC AUTOMATION

VALVES

COMPACT Valves 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





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









PNEUMATIC AUTOMATION

AIR TREATMENT

HZE-D

Filter regulator + Lubricator size 0



Filter + Regulator + Lubricator size 0





HZE-D

Filter regulator + Lubricator size 1-2



Filter + Regulator + Lubricator size 1-2





HZ9464G

Integrated square pressure gauge

HZ9P...

Round gauge





HZE

MODULAR

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

INTEGRATED GAUGE

Standard supplied

COMPLETE SOLUTION

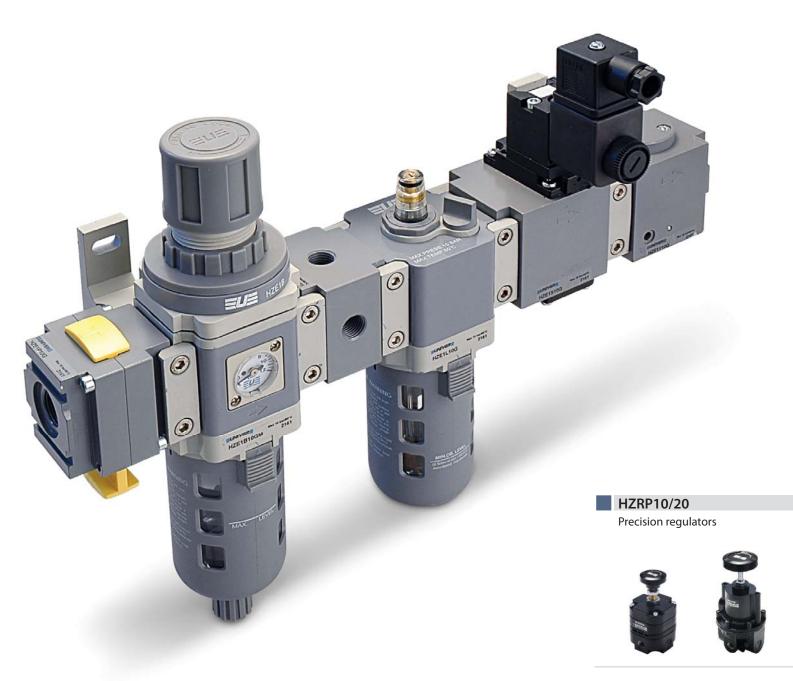
Possibility of assembling combinations complete with accessories





AIR TREATMENT UNITS





AIR TREATMENT

Filter regulator with digital pressure switch

HZE1B

HZE1B10GM



HZE0R08G

Regulator without manometer Size 0



HZE-RL

Lockable regulator size 1-2



HZE-R

Check valve Size 0-1-2



HZE-B

Check valve Size 0-1-2



HZE-S

Size 0 **U05**

Size 1 **U05**

Size 1 U3 CNOMO







HZRE10/20

Electro-pneumatic transducers

HZRM08G

Microregulators for air

HZRM...

Pressure Microregulators for air and water









FITTINGS AND TUBES



COMPLEMENTARY VALVES AND ACCESSORIES













PNEUMATIC AUTOMATION

ACCESSORIES







HEA Polyamide tubes HEC Polyurethane tubes HED Co-polyurethane tubes



HFA Polyamide Spiral Tubes HFC Polyurethane Spiral Tubes









HZ9N

Digital pressure switch

Adjustable diaphragm pressure switch

Fluid Valves











POWER CLAMPS

UBP

UNIVERSAL Mini clamp

UBP/UBH

UNIVERSAL Pneumatic power clamp

IBP

UNIVERSAL Pneumatic power clamp interchangeable with size 50/63 mm

Ø25/32







UBM/UBQ

UNIVERSAL Pneumatic power clamp with hand lever

IBM

UNIVERSAL Pneumatic power clamp with hand lever interchangeable with size 50/63 mm

UBT

Pneumatic power clamp with central hand lever







GRIPPER UNITS

UGP

Pneumatic gripper units

UGM

Pneumatic gripper units with hand lever

LGPS

Pneumatic gripper **NEW**

UNIVER Original







AUTOMOTIVE

POWER CLAMPS GRIPPER UNITS

UDP

Pneumatic power clamp with 2 arms

UNP

UNIVERSAL Pneumatic power clamps conforming to the N.A.A.M.S. Standard





UFL/UHL

Manual power clamps

UNM

UNIVERSAL Pneumatic power clamps with hand lever conforming to the N.A.A.M.S. Standard







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





RETRACTABLE LOCATING PIN UNITS

LCP

Pneumatic retractable locating pin units with single rod



LCG

Pneumatic retractable locating pin units, conforming to the CNOMO Standard with single rod



LCB/LCC

Compact pneumatic retractable pin unit with double guide



LCZ

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



LCT

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



LCM

Pneumatic retractable locating pin unit with hand lever and single rod



LCL

Manual retractable locating pin unit with single rod



LCO

Pneumatic retractable locating pin unit with hand lever and double rod



PIN CLAMPS

LSP

Pneumatic pin clamp



LSP50U

Pneumatic pin clamp horizontal shape



LSPL

Pneumatic pin clamp for laser beam applications



ITE

Pneumatic pin clamp with vanishing hook



AUTOMOTIVE

PIN UNITS PIN CLAMPS



Pneumatic retractable locating pin units with double rod



LCS

Pneumatic retractable locating pin unit with compact end-caps with double rod



LCY

Pneumatic retractable locating pin unit with hand lever, toggle-joint mechanism and single rod



Pneumatic retractable locating pin unit with hand lever, toggle-joint mechanism and doble rod





LUP

Pneumatic pin clamp with vanishing hook and pin



Manual pin clamp









Pneumatic Power Clamps and Pin Clamp applications



POWER PIVOTS



Pneumatic power pivots









ELECTRIC UNITS

LAE

Electric power clamps

LNE

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

LGE

Power Unit

Electric gripper units







TCE

Modular Control System for Electric Units



Flexible compatible with I/O modules and valve Manifolds







MARKING UNITS



LCE
Electric retractable locating pin unit
Electric power pivots







Pneumatic and electric Power Clamp applications

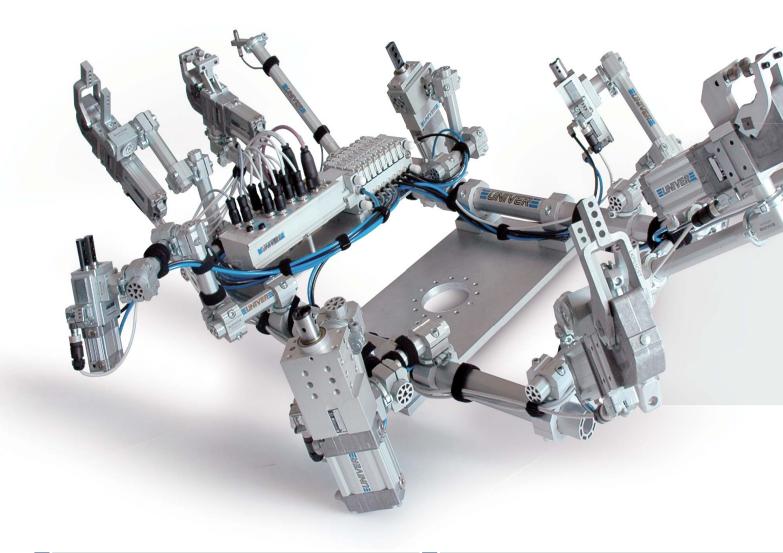
AUTOMOTIVE

POWER PIVOTS MARKING UNITS ELECTRIC UNITS





GR8 MODULAR TOOLING SYSTEM



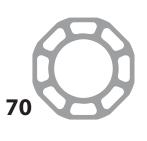
Ø 30 - 45 - 70 mm BOOMS

Maximum stiffness and minimun weight

LOCKING RING

Precise and efficient system to guarantee a high level of positional accuracy









MODULAR TOOLING SYSTEM GR8 TOOLING



HIGH PRECISION

High level of positional repeatability; low deflection

MODULAR COMPONENTS

Considerable reduction of mounting components

QUICK INSTALLATION AND SET UP

No welding or douweling required, easily replaceable components

FULLY ADJUSTABLE

Unlimited orientation in space and free configurations

UNIVER Original NEW



BALL MOUNTING

Unlimited swivel rotation



KIT

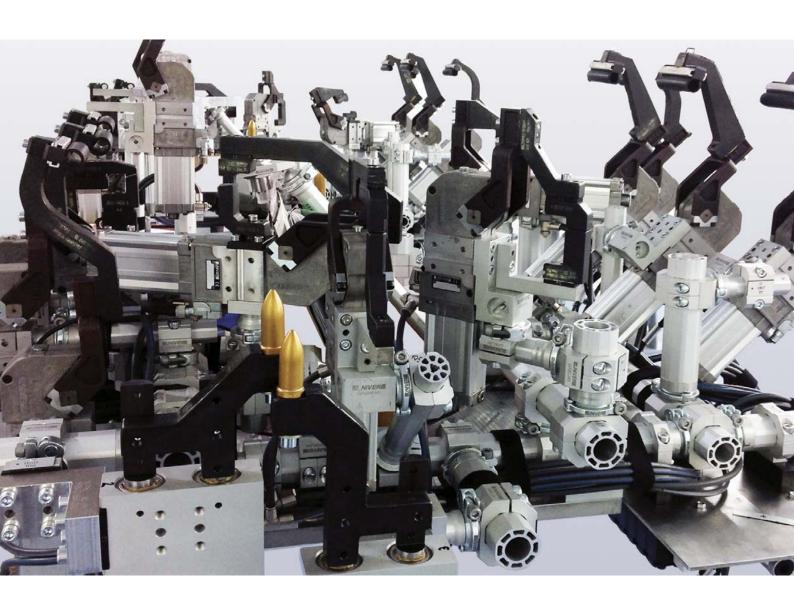
Considerable reduction of mounting elements





GR8 MODULAR TOOLING SYSTEM

Applications and details of the components

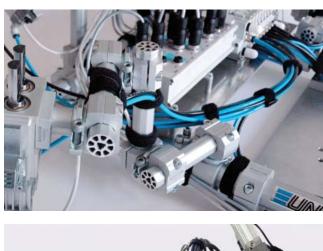


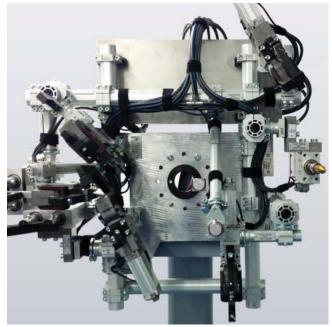
Unlimited and complex configurations Weight-optimized standard components and brackets Quick installation and adjustment Modular components

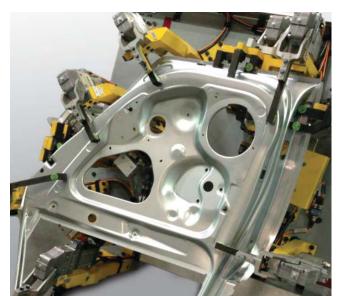
MODULAR **TOOLING** SYSTEM

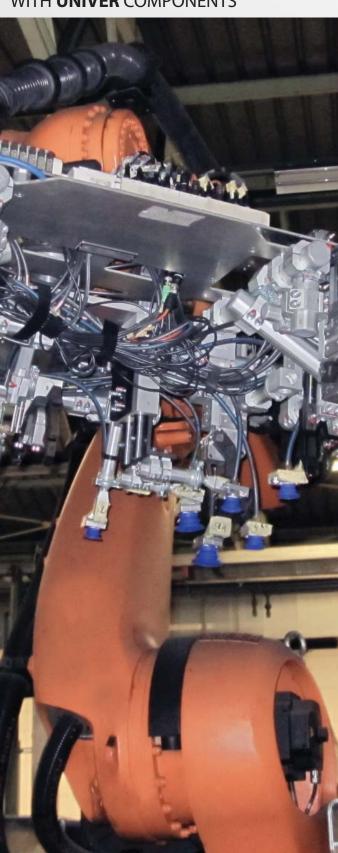
GR8 TOOLING

COMPLETE SOLUTION WITH **UNIVER** COMPONENTS











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