

## PNEUMATIC AUTOMATION

CYLINDERS  
HIGH-TECH  
VALVES  
AIR TREATMENT  
ACCESSORIES



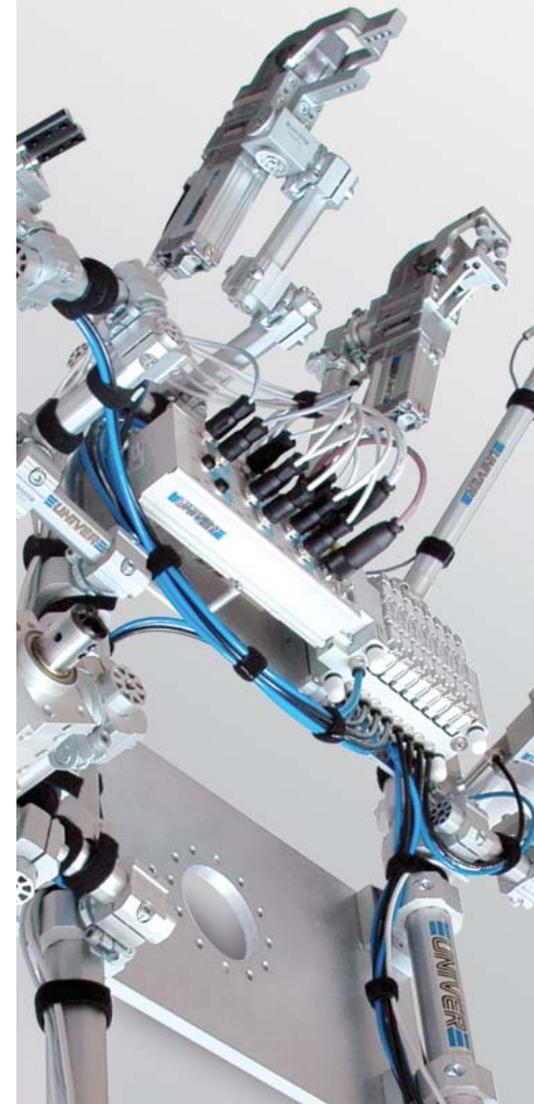
## AUTOMOTIVE

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.



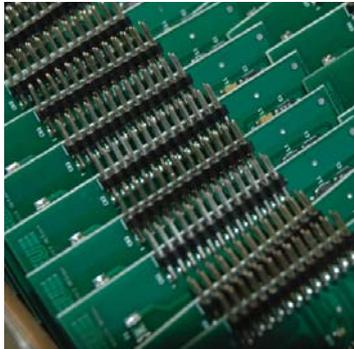
In 2000, after many years of experience in the supply of pneumatic components to the automotive market, the Automotive Division was created, thus developing numbers of solutions for BIW in the automotive industry.



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



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.



## Univer Service



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.



## Univer Group



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

[www.univer-group.com](http://www.univer-group.com)



# STANDARDS-BASED CYLINDERS

<p><b>M</b> Microcylinders ISO 6432 Ø8 ÷ 25 mm</p>	<p><b>KL</b> Pneumatic Cylinders ISO 15552 Ø32 ÷ 125 mm CLEAN PROFILE</p>	<p><b>KE/K</b> Pneumatic Cylinders ISO 15552 Ø32 ÷ 125 mm</p>

# STANDARDS-BASED COMPACT CYLINDERS

<p><b>RP/RM</b> UNITOP Compact Cylinders (RP Ø16 ÷ 63 mm), ISO 21287 (RM Ø16 ÷ 100 mm)</p>	<p><b>RO/RN</b> UNITOP Compact Cylinders (RO Ø16 ÷ 63 mm), ISO 21287 (RN Ø16 ÷ 63 mm) - Octagonal tube NON-ROTATING</p>

# OVAL/SHORT STROKE/ROTARY CYLINDERS

<p><b>OV</b> Oval cylinder Ø18 ÷ 80 mm</p>	<p><b>W</b> Short stroke cylinders Ø12 ÷ 100 mm TUBE NEW DESIGN</p>	<p><b>R</b> Pneumatic Rotary Actuators Ø32 ÷ 125 mm</p>

# PNEUMATIC AUTOMATION CYLINDERS

**KD**

Pneumatic Cylinders ISO 15552  
Ø32 ÷ 125 mm  
HEAVY SERIES TUBE



**K**

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



**KL**

**CLEAN PROFILE**

Easier to clean

**QUICK INSTALLATION**

Sensors and connections on one side

**UNIVER TECHNOLOGY**

Strong and Reliable

**ISO 15552**

Interchangeability



**RS**

**STRONG Compact Cylinders**  
Ø32 ÷ 100 mm



**RQ**

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



## 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

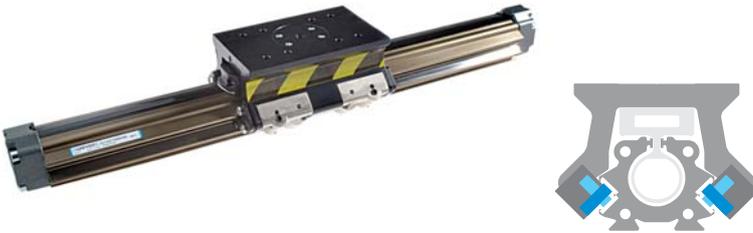


RP/RM-RO/RN

# PNEUMATIC AUTOMATION CYLINDERS

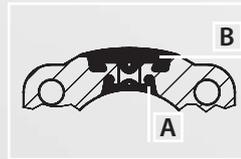
## VL1

Rodless Cylinders with 90° integrated guides  
Ø25 ÷ 50 mm  
Sliding on ball bearings



## S1/S5/VL1

UNIVER Original since 1988



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

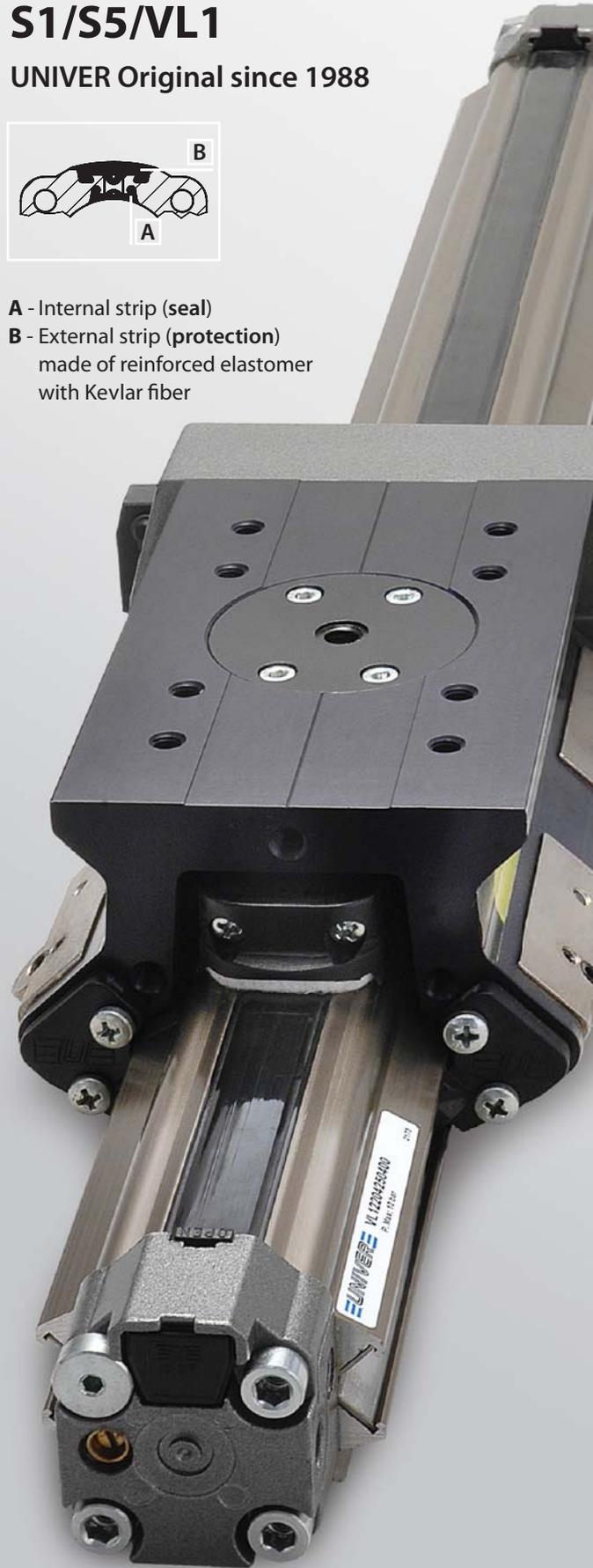
## J64RT2

Slide Units for telescopic cylinders  
RT2 series



## JT/JX

Guided Slides



# LOCKING UNITS

## L1-N

Locking units for cylinders and piston rods



**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

## L6

Locking Units for rodless cylinders S5 - VL1 series



# 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



# 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 CYLINDERS

### RT

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



Telescopic Cylinder  
**3 stages**



# ELECTROPILOTS

## B11- B10 - B12

ISO 15218 - 10 mm Nanovalves  
 B11 Standard  
 B10 Low consumption  
 B12 High flow rate



## B

10 mm Nanovalves



## A

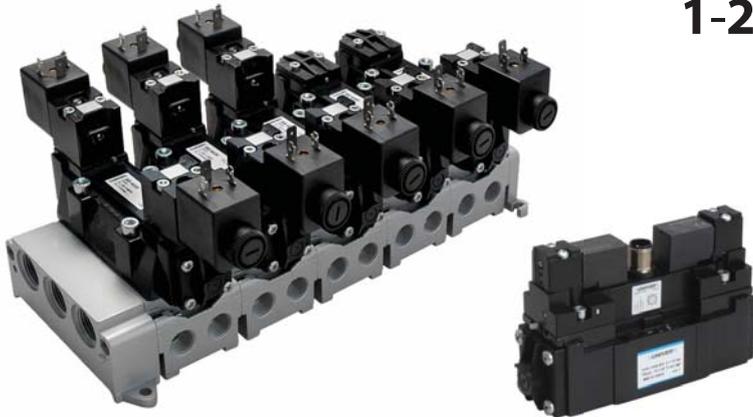
ISO 15218 - 15 mm Microvalves



# STANDARDS-BASED VALVES

## BE/BE12

ISO 5599/1 Valves- Mixed and spool system



M12

Size  
**1-2-3-4**

## MIXED AND SPOOL SYSTEM

Versions with either mixed or spool system available for all series



**MIXED**  
for heavy applications



**SPOOL**  
for all applications

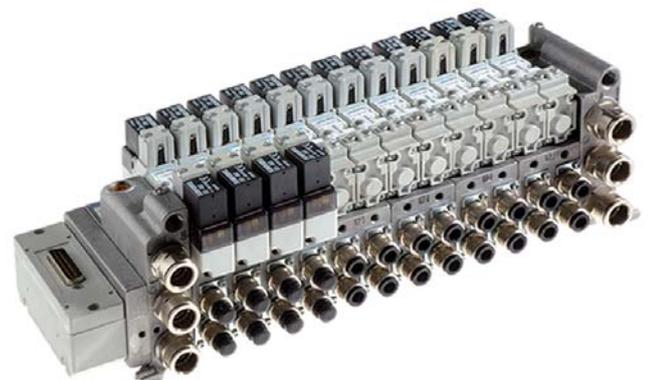
## AC-N

NAMUR Valves



## BD

ISO 15407-1/2 Valves



# PNEUMATIC AUTOMATION VALVES

**AA**

U1 Miniature Electropilots

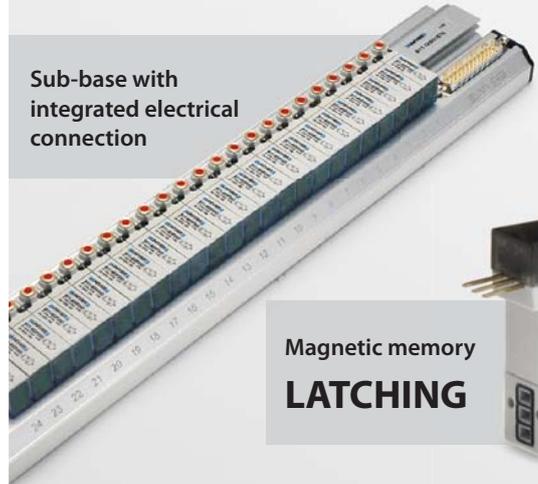


**AB**

U2 Miniature Electropilots



Sub-base with  
integrated electrical  
connection



Magnetic memory  
**LATCHING**



**ISO 15407-1/2 Valves**

**BDE**

Integrated electrical  
connection  
(ISO 15407/2)

**BDB**

M12 connector  
(Automotive)

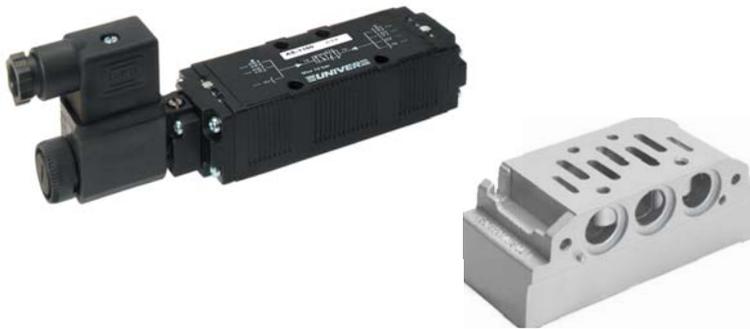
**BDA**

Single electrical  
connection  
(ISO 15407/1)



**AE**

ISO 5599/1 Light Series Valves



Size  
**1-2**

ISO  
**01-02**



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



**AF/AG**

Poppet system  
UNIVER Original since 1973

GL6

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



**MIXED Valves - AC series**

**MIXED SYSTEM**

For heavy applications  
Fast commutation  
Large number of cycles  
High flow rate



AM

Pneumatic and Solenoid  
Foot Valves



AC

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



# COMPACT VALVES

## P10F

10 mm COMPACT Valves - M5



## P10B

10 mm COMPACT Valves - For sub-base mounting



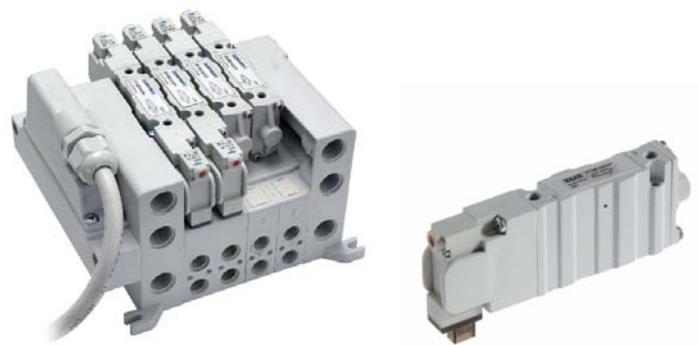
## P15F

15 mm COMPACT Valves - G1/8



## P15B

15 mm COMPACT Valves - For sub-base mounting



## P10F

10 mm COMPACT Valves  
External connector



In-line  
CONNECTOR

## P15F

15 mm COMPACT Valves  
External connector



In-line  
CONNECTOR

## P15EF

15 mm COMPACT Valves - G1/8



# SERIAL SYSTEMS

TC

Serial communication system



Serial module  
for all manifold  
models



CANopen

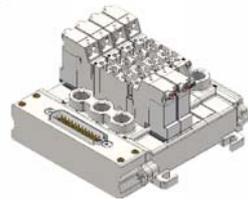
PROFI  
BUS

PROFI  
NET

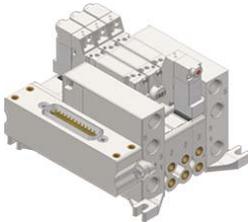
EtherNet/IP

DeviceNet

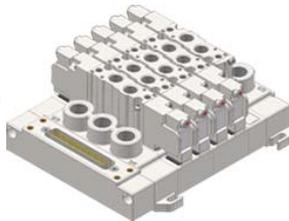
EtherCAT



P10F



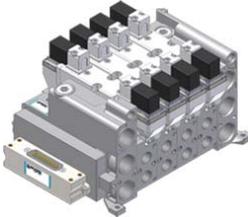
P10B



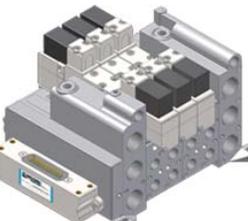
P15F



P15B



BD - 18 mm



BD - 26 mm

# PNEUMATIC AUTOMATION

## 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



### 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



### MODULAR

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

### INTEGRATED GAUGE

Standard supplied

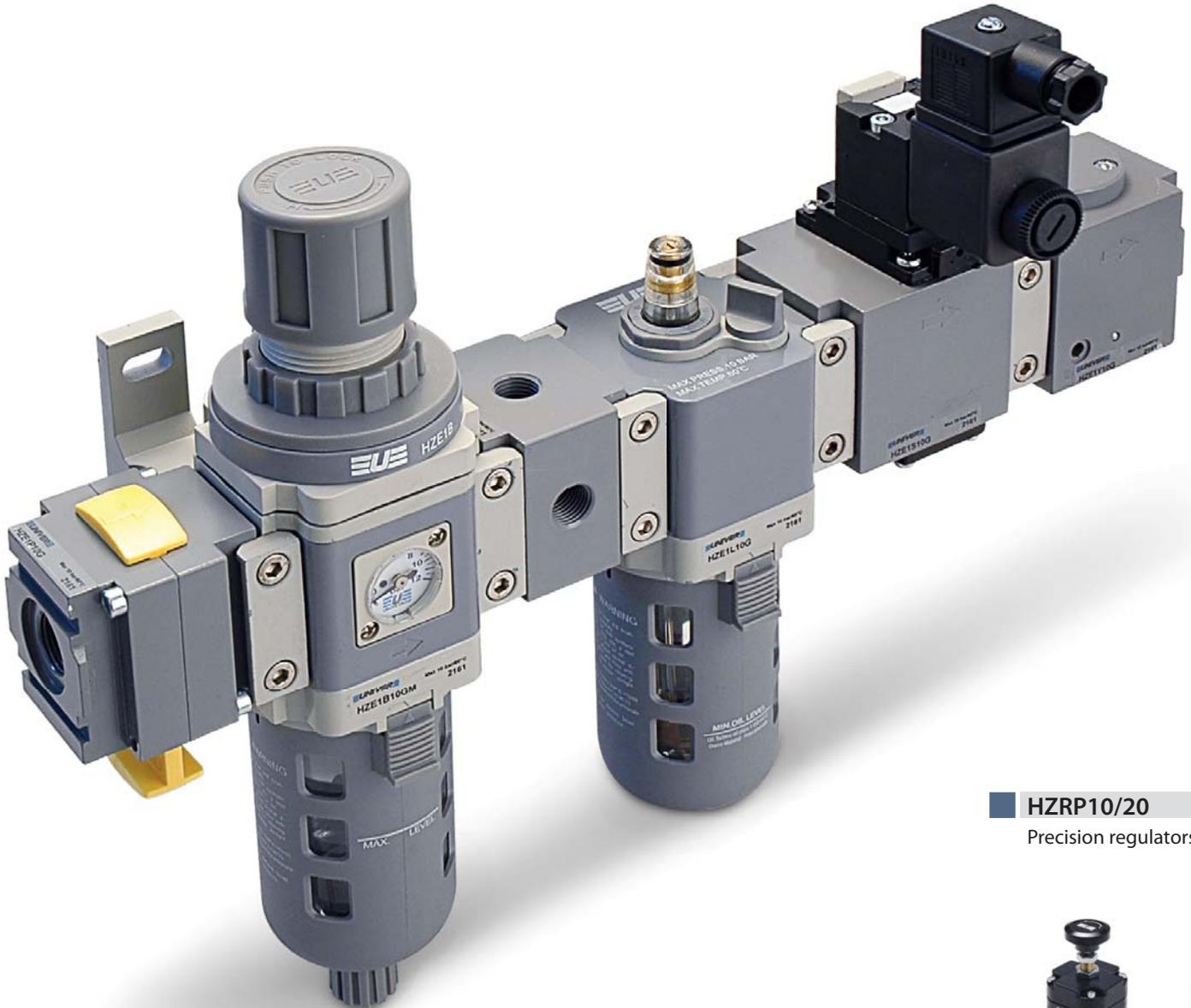
### COMPLETE SOLUTION

Possibility of assembling combinations  
complete with accessories



# AIR TREATMENT UNITS

G1/4 Size 0	G3/8 - G1/2 Size 1	G1/2 Size 2
 <p>FR+L</p> <p><b>600</b> NI/min</p>	 <p>FR+L</p> <p><b>2800</b> NI/min</p>	 <p>FR+L</p> <p><b>4300</b> NI/min</p>



**HZRP10/20**  
Precision regulators



# PNEUMATIC AUTOMATION AIR TREATMENT

## 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



## Filter regulator with digital pressure switch



# FITTINGS AND TUBES

- HA**  
Technopolymer Push-In Fittings
- HAR**  
Space-saving Fittings
- HB**  
Nickel-plated Brass Push-in Fittings



- HGC**  
Push-on Fittings
- HGO**  
Olive Compression Fittings
- HGU**  
Quick Couplings for Compressed Air



# COMPLEMENTARY VALVES AND ACCESSORIES

- AP**  
Binary Counter (Flip Flop)
- AM-50**  
Flow regulators with metallic body
- AM-51**  
Signal processing valve



- AM-54**  
Check valve
- AM-55**  
Blocking valve
- AM-5200**  
Pneumoelectrical transducer
- AM-5220**  
Adjustable pressure switch



# PNEUMATIC AUTOMATION ACCESSORIES

## HC

Fittings and Accessories with  
pneumatic functions



## HD

Standard fittings



## HEA/HEC/HED

HEA Polyamide tubes  
HEC Polyurethane tubes  
HED Co-polyurethane tubes



## HFA/HFC

HFA Polyamide Spiral Tubes  
HFC Polyurethane Spiral Tubes



## AM-52

Gradual starter



## AM-53

Economizer



## HZ9N

Digital pressure  
switch



## HZ9N12

Adjustable diaphragm  
pressure switch



## YF

G1/8 ÷ G1  
Fluid Valves



Air/Oil reservoir  
**RMS** series

**NEW**



# 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**



# AUTOMOTIVE POWER CLAMPS GRIPPER UNITS

## UBS

Safety pneumatic power clamp



## UNP

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



## UFL/UHL

Manual power clamps



## UNM

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



## STEPLESS ADJUSTMENT

Opening angle adjustment  $0 \div 135^\circ$

## 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



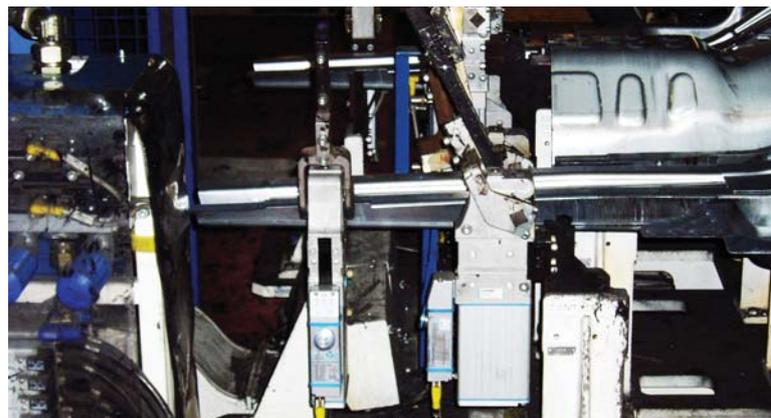
## LNE

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



## LGE

Electric gripper units



# MARKING UNITS

## PRP

Pneumatic marking unit



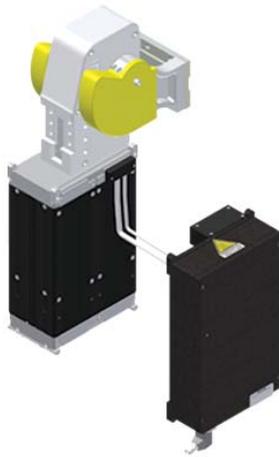
## LCE

Electric retractable locating pin unit

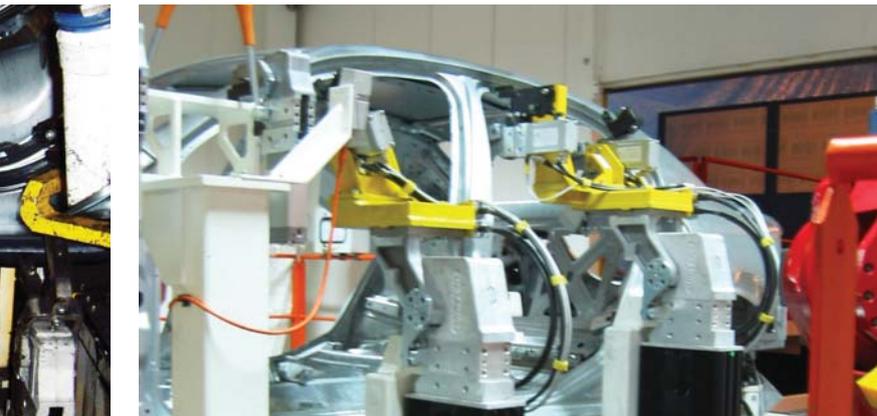


## LAGE

Electric power pivots

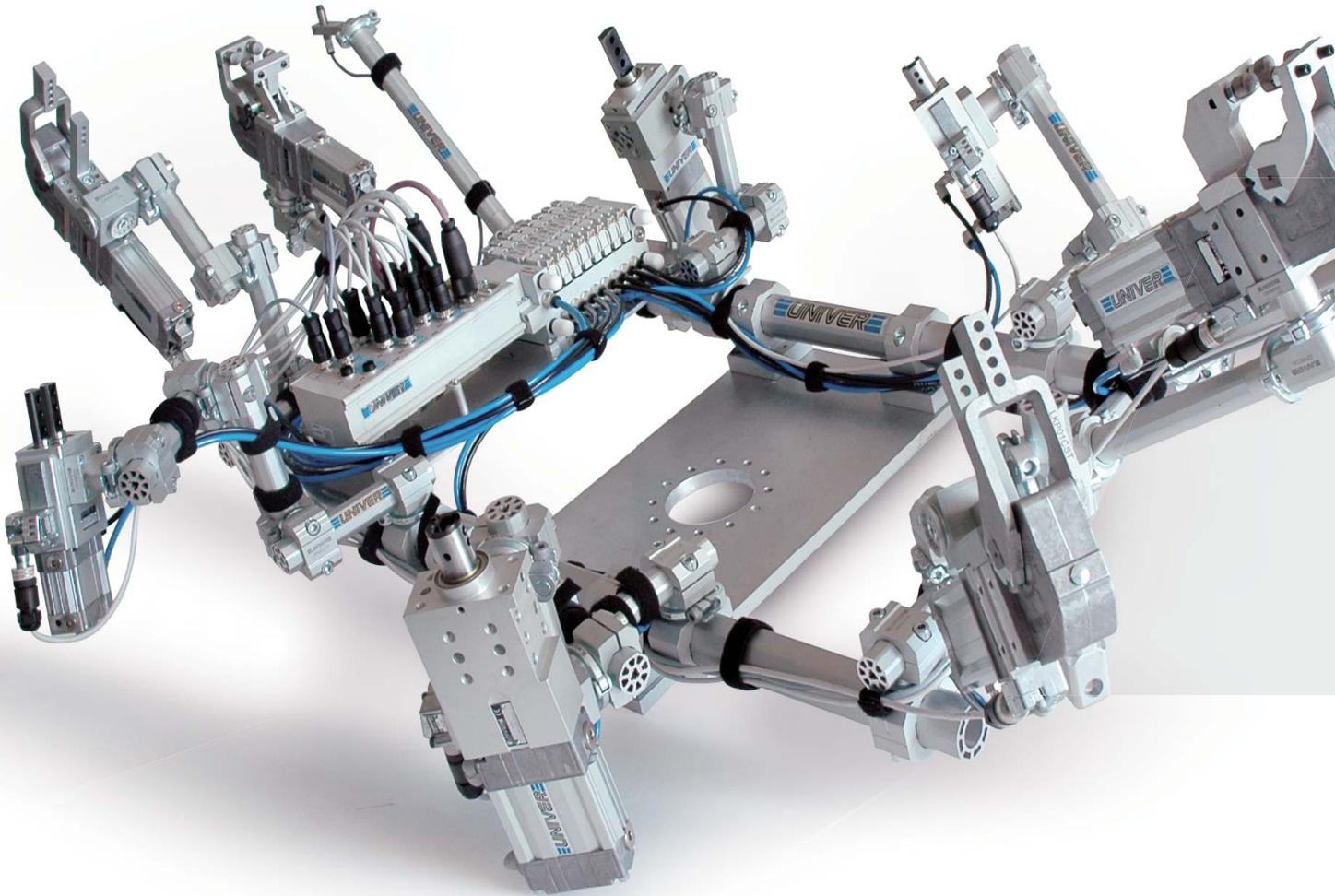


# AUTOMOTIVE POWER PIVOTS MARKING UNITS ELECTRIC UNITS



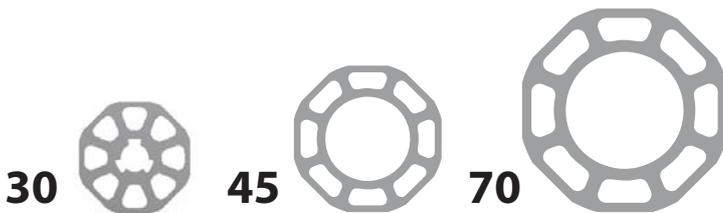
Pneumatic and electric Power Clamp applications

# GR8 MODULAR TOOLING SYSTEM



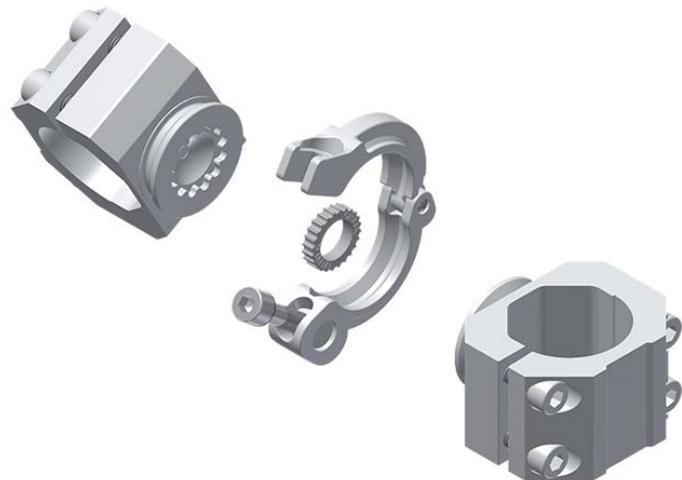
## Ø 30 - 45 - 70 mm BOOMS

Maximum stiffness and minimum weight



## LOCKING RING

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



# MODULAR TOOLING SYSTEM GR8 TOOLING

## KIT

Considerable reduction  
of mounting elements



### 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

PATENT PENDING



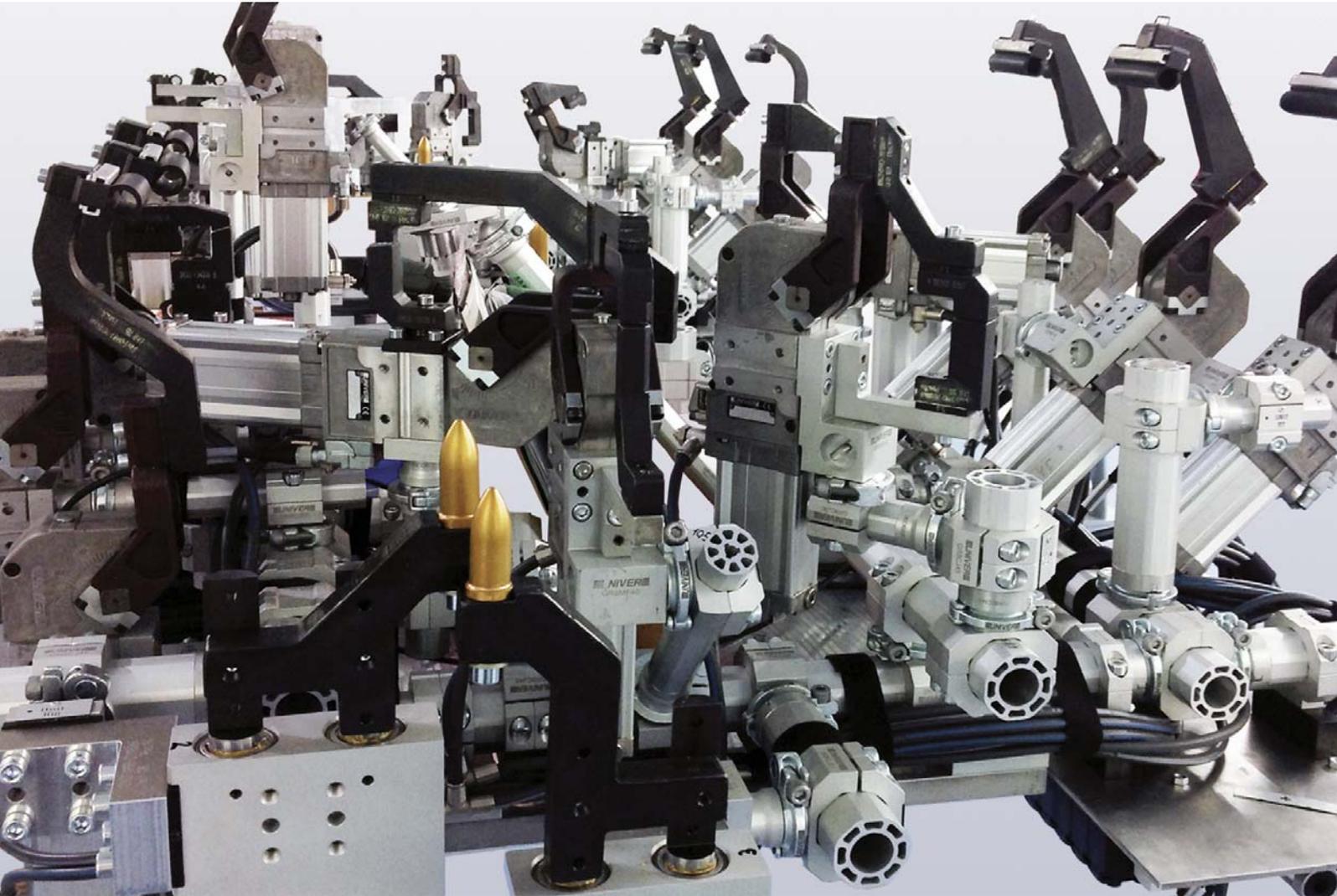
### BALL MOUNTING

Unlimited swivel rotation



# GR8 MODULAR TOOLING SYSTEM

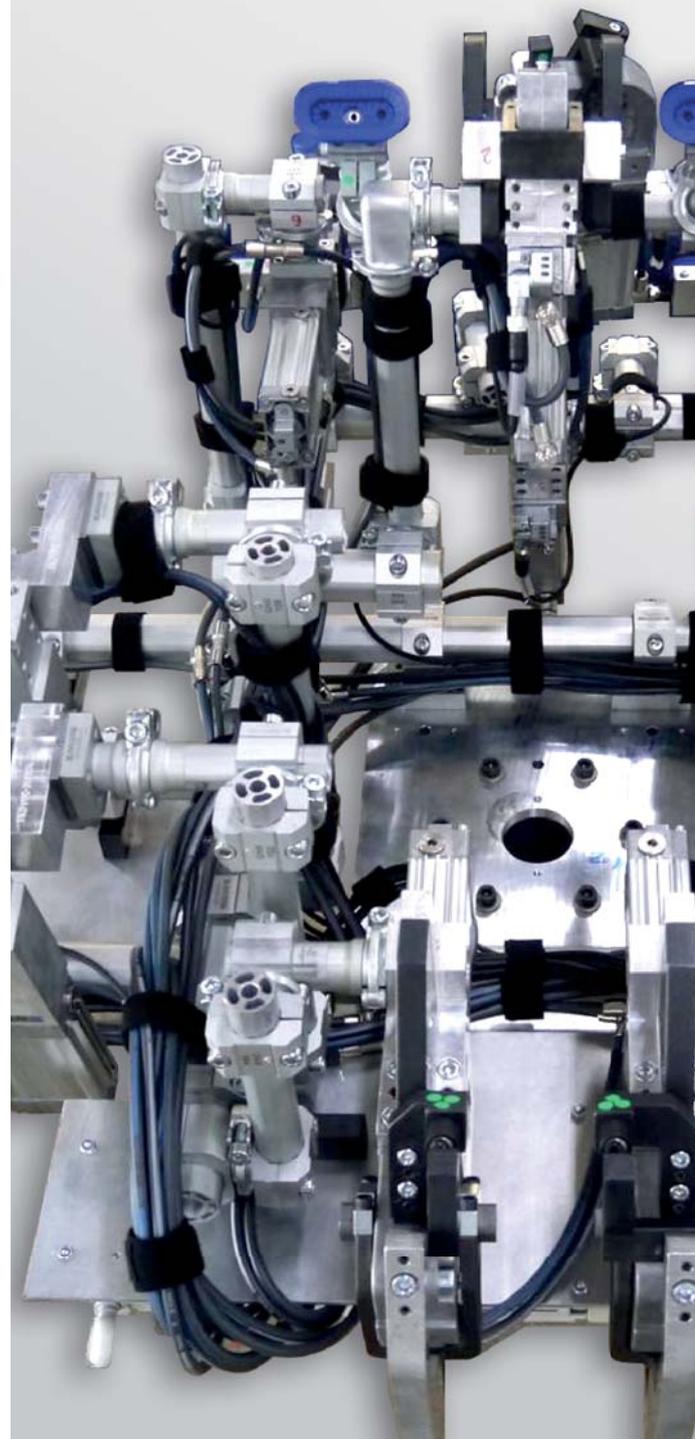
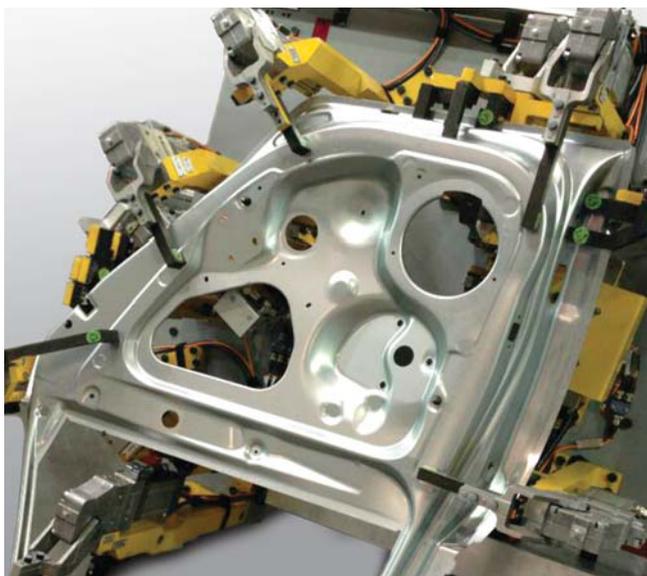
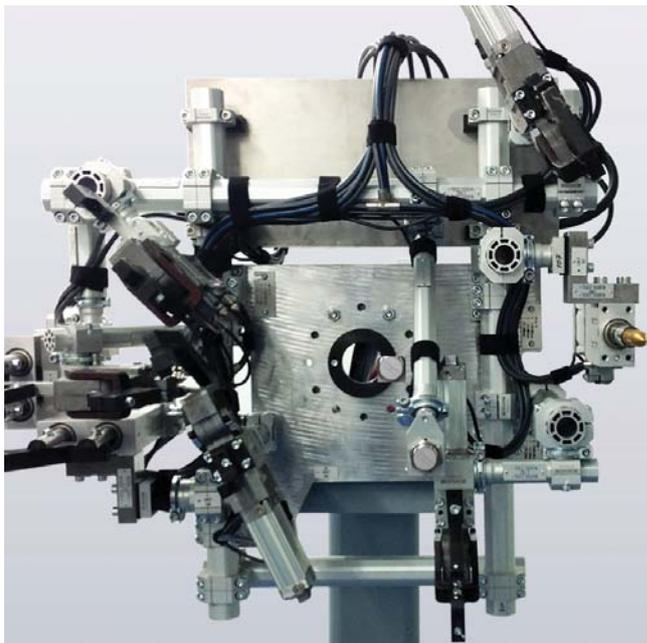
## Applications and details of the components



- 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





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