



LOW PRESSURE CONNECTORS EUROPE

# TRAINING MODULE QUICK-ACTING COUPLERS

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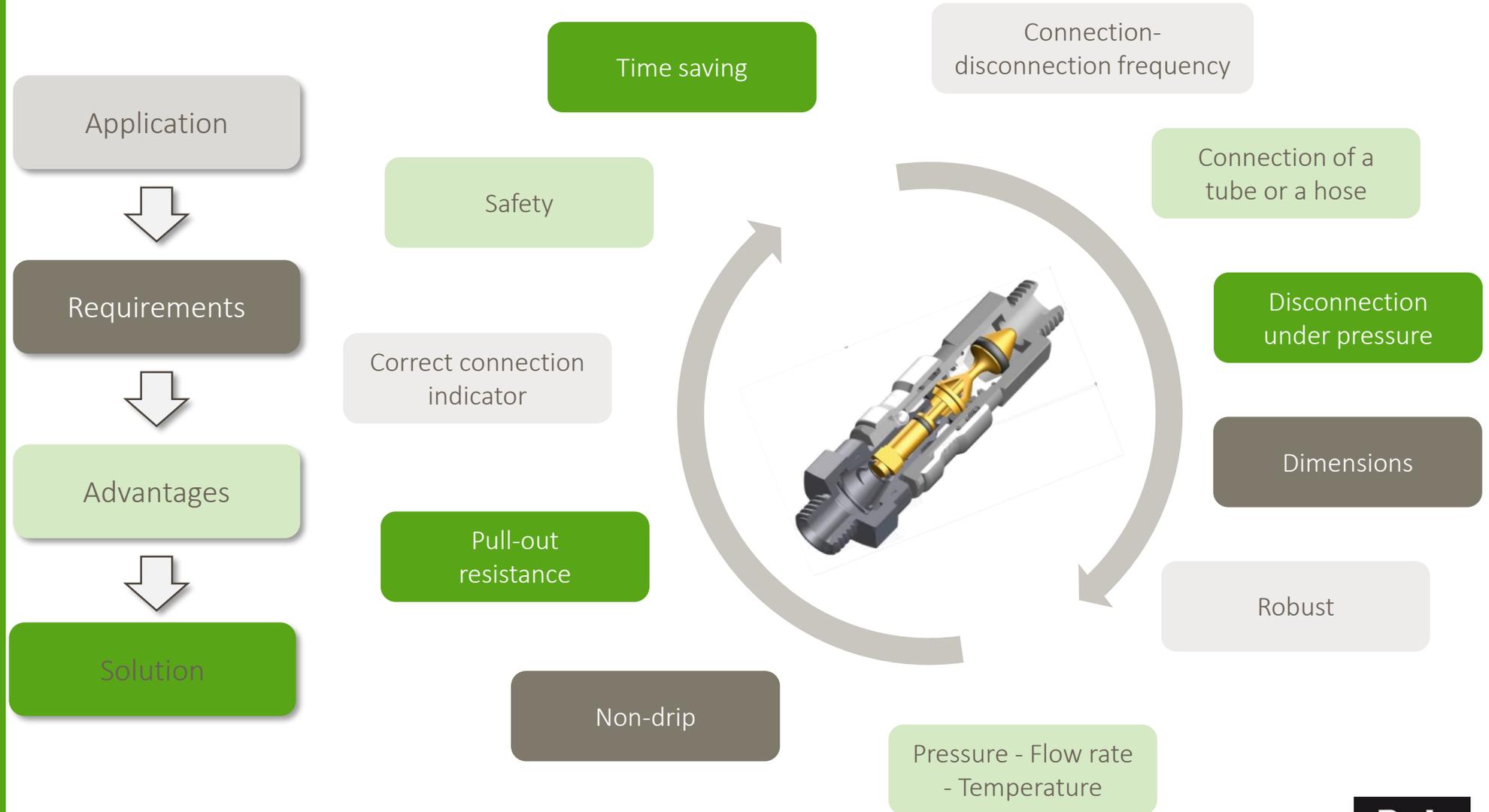
Marketing material

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# QUICK-ACTING COUPLERS

## PRODUCT ADVANTAGES – Quick-acting couplers

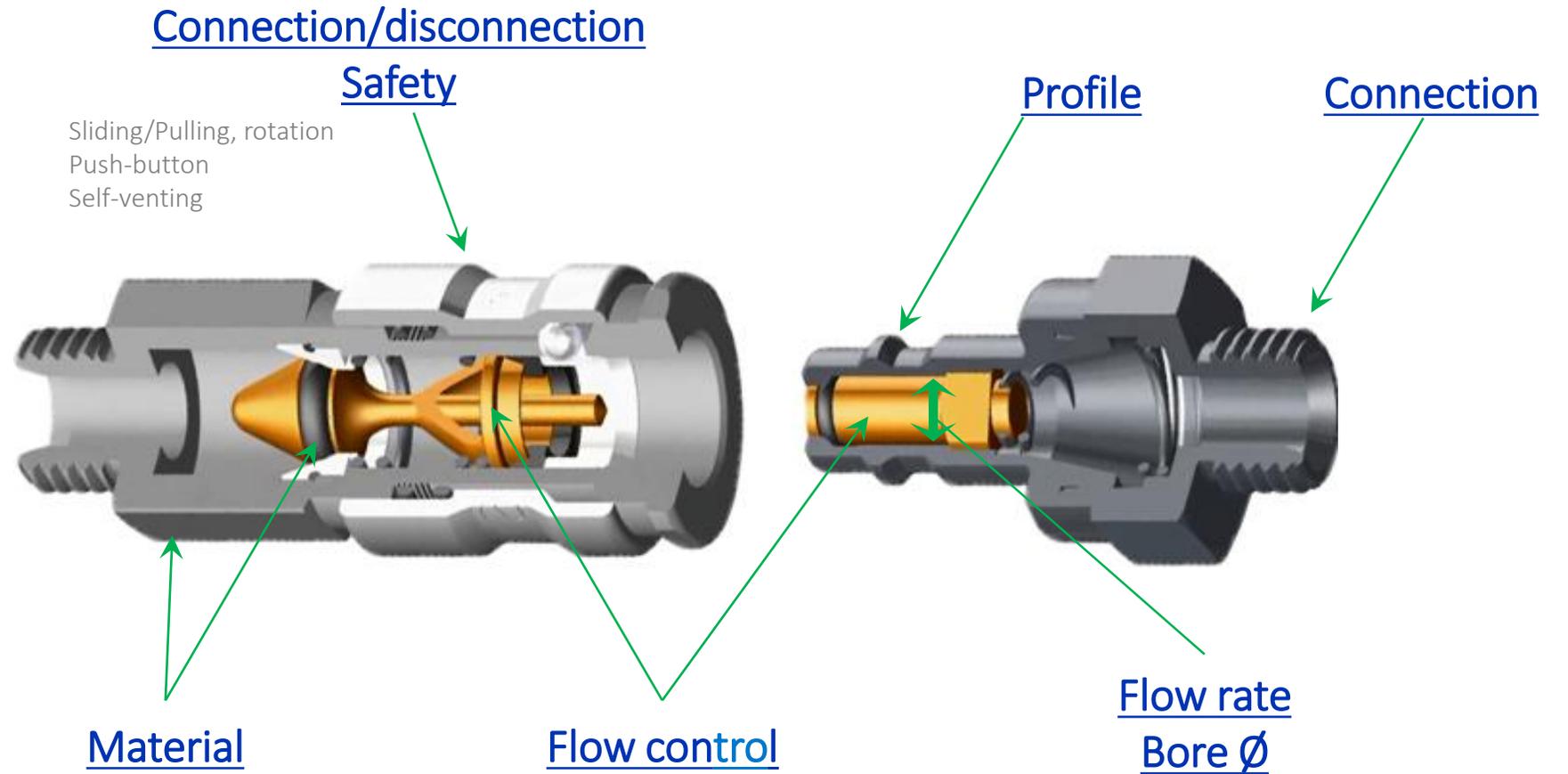
Suitable for all low-pressure connection requirements



# QUICK-ACTING COUPLERS

## OVERVIEW

Connection = coupler + plug



Standards &  
Specifications

Part Numbering

# QUICK-ACTING COUPLERS

## OVERVIEW – The range

Various ways of discovering the range:

### ⇒ Probe profiles

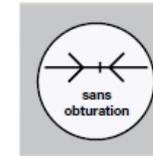
ISO B, ISO C, ARO, European, etc.



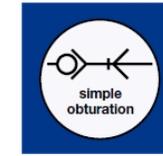
### ⇒ Material



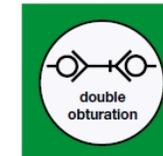
### ⇒ Flow control/Safety



KF: full flow



KA = single shut-off



KB = double shut-off



KL: leak-free disconnection



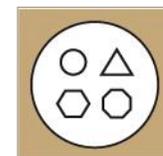
Venting-Safety  
KE - C9000



Safety  
KR-KS-  
KD

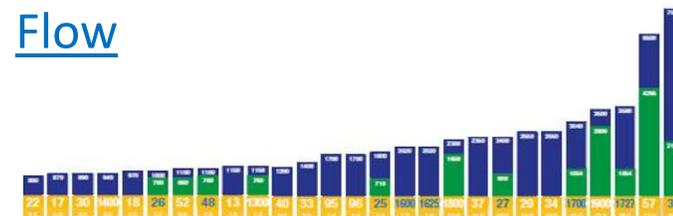


Breathing  
air



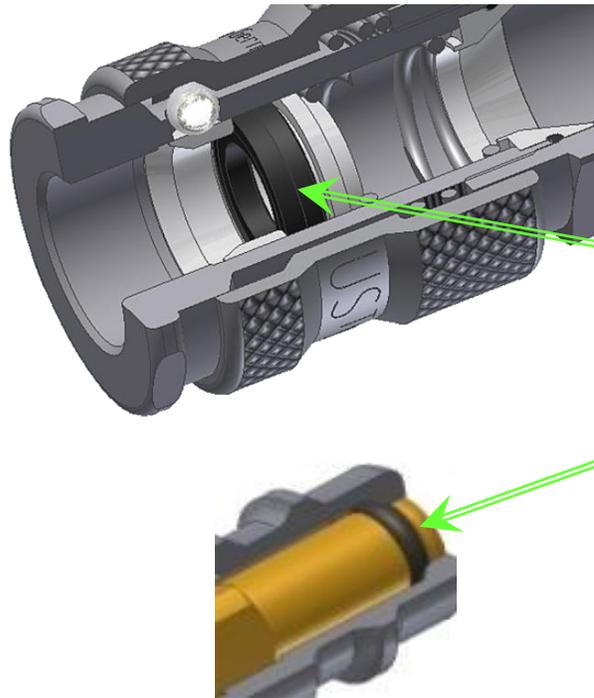
Code

### ⇒ Flow



## OVERVIEW – Materials

Each series may offer several choices of seal material:



### Seal:

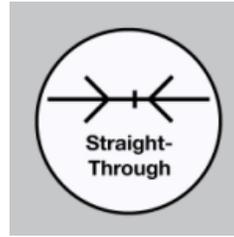
- NBR: compressed air
- FKM: corrosive fluids  
chemical resistance  
high temperatures
- EPDM: water, gas
- FFKM: very high temperatures



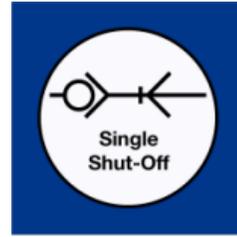
# QUICK-ACTING COUPLERS

## OVERVIEW – Flow control

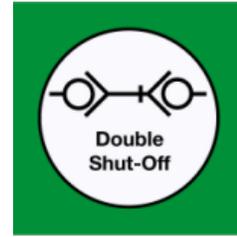
Flow action options:



Full flow



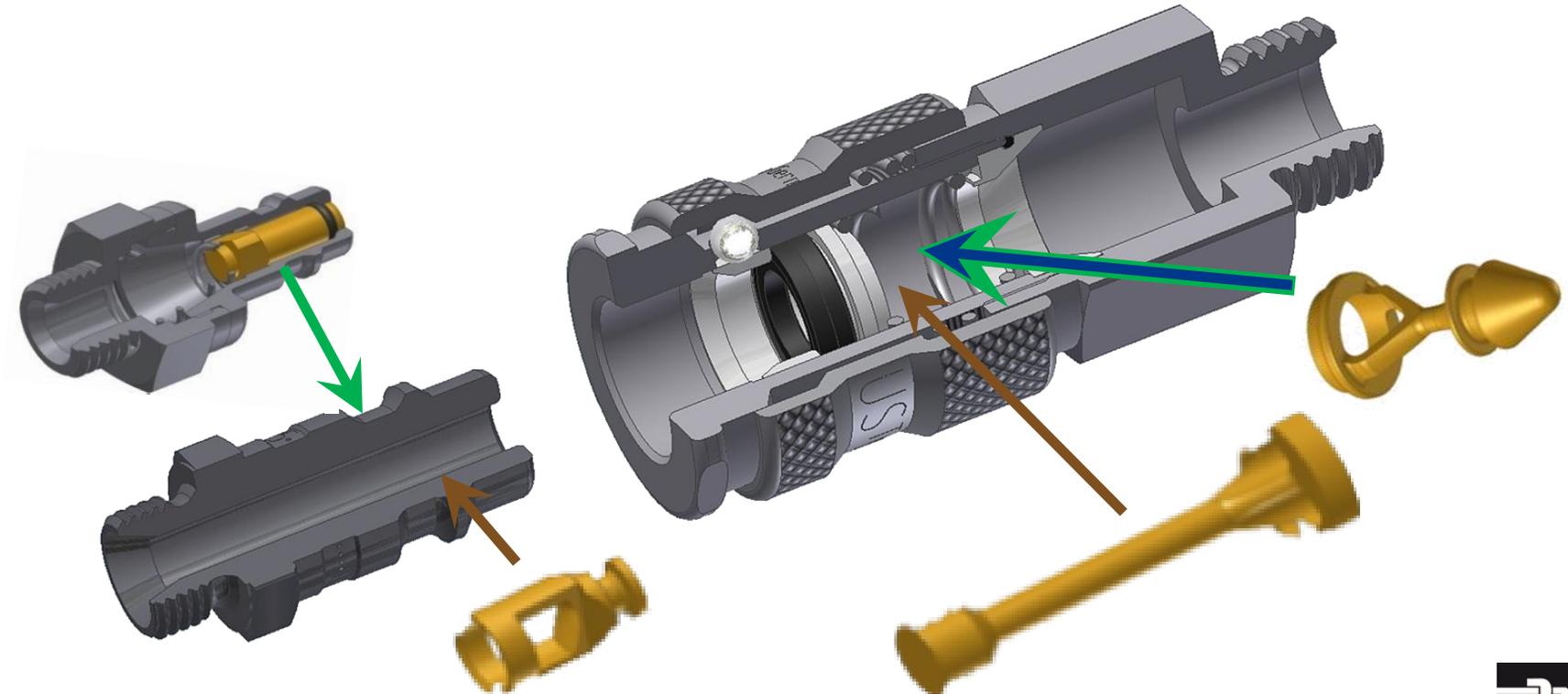
Single Shut-off



Double Shut-off



Leak-free



# QUICK-ACTING COUPLERS

## OVERVIEW – Profiles

Some examples:



**European**  
Series 21SF - ND 5



**ISO 6150 B (USA, ES, N, GR)**  
Series 23SF - ND 5.5



**Scandinavian**  
Series 1300SF - ND 7.4



**Iso C**  
Series 18SF - ND 5.5



**European**  
Series 25/26SF - NW 7.2



**UK (Schrader)**  
Series 17SF - ND 5.5



**ARO (BE, NL, CH, SA)**  
Series 22SF - ND 5.5

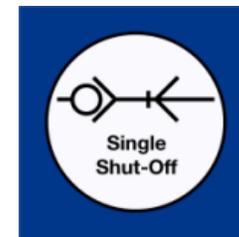


**Asian**  
Series 13SF - ND 5.5

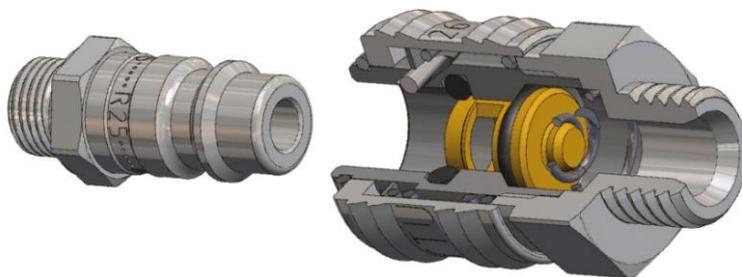


## OVERVIEW

### Valves



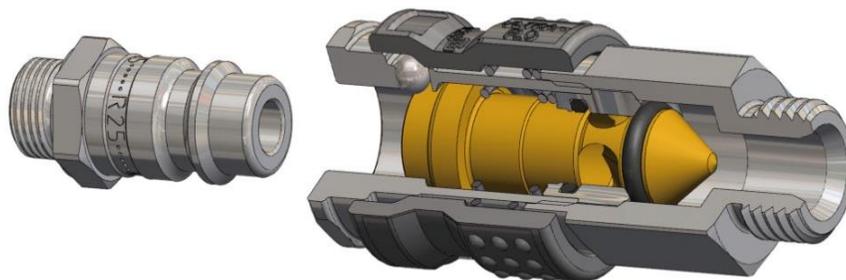
Single  
Shut-off



**Standard valve: e.g Series 26KA – DN 7.4**  
Approximate air flow = 1000 L/min  
Compact and robust



**'UltraFlow' valve: e.g Series 25KA – DN 7.4**  
Approximate air flow = 1800 L/min  
Less turbulence, Flow optimised by 80 %



**'Ultra HighFlow' valve: e.g Series 1600KA – DN 7.4**  
Approximate air flow = 2100 L/min  
Compact, ultra-rationalised design  
Optimised energy efficiency, Spring isolated  
from the flow, Low connection force

# QUICK-ACTING COUPLERS

## OVERVIEW – Flow rate - Diameter

Each series offers a flow rate to meet all your requirements

- Flow KL (l/min.) – leak-free coupling systems
- Flow KB (l/min.) – double shut-off coupling systems
- Flow KA (l/min.) – single shut-off coupling systems
- Flow KF (l/min.) – straight-through coupling systems

The details refer to the air flow rate in litres/minute.\*

\* (Measurement data generated in accordance with ISO 6358;  
CCTOP RP50P at input pressure 6 bar, pressure drop 0.5 bar)



## OVERVIEW – Range examples

Various groups in the range

**Pneumatic &  
Fluid Transmission**



- Single and double shut-off versions plus breathing protection version
- Materials: Brass/Steel/Stainless steel
- Nominal diameter: 1.5 mm to 25 mm

**Safety**  
Self-venting/  
Breathing air



- Single and double shut-off versions plus breathing protection version
- Self-venting couplers
- Breathing air
- Colour coding

## OVERVIEW – Range examples

Various groups in the range

Mould couplers



- Complete range of Mould couplers for profiles worldwide (International, European, French).
- Max. pressure 20 bar
- Temperature greater than 180 °C

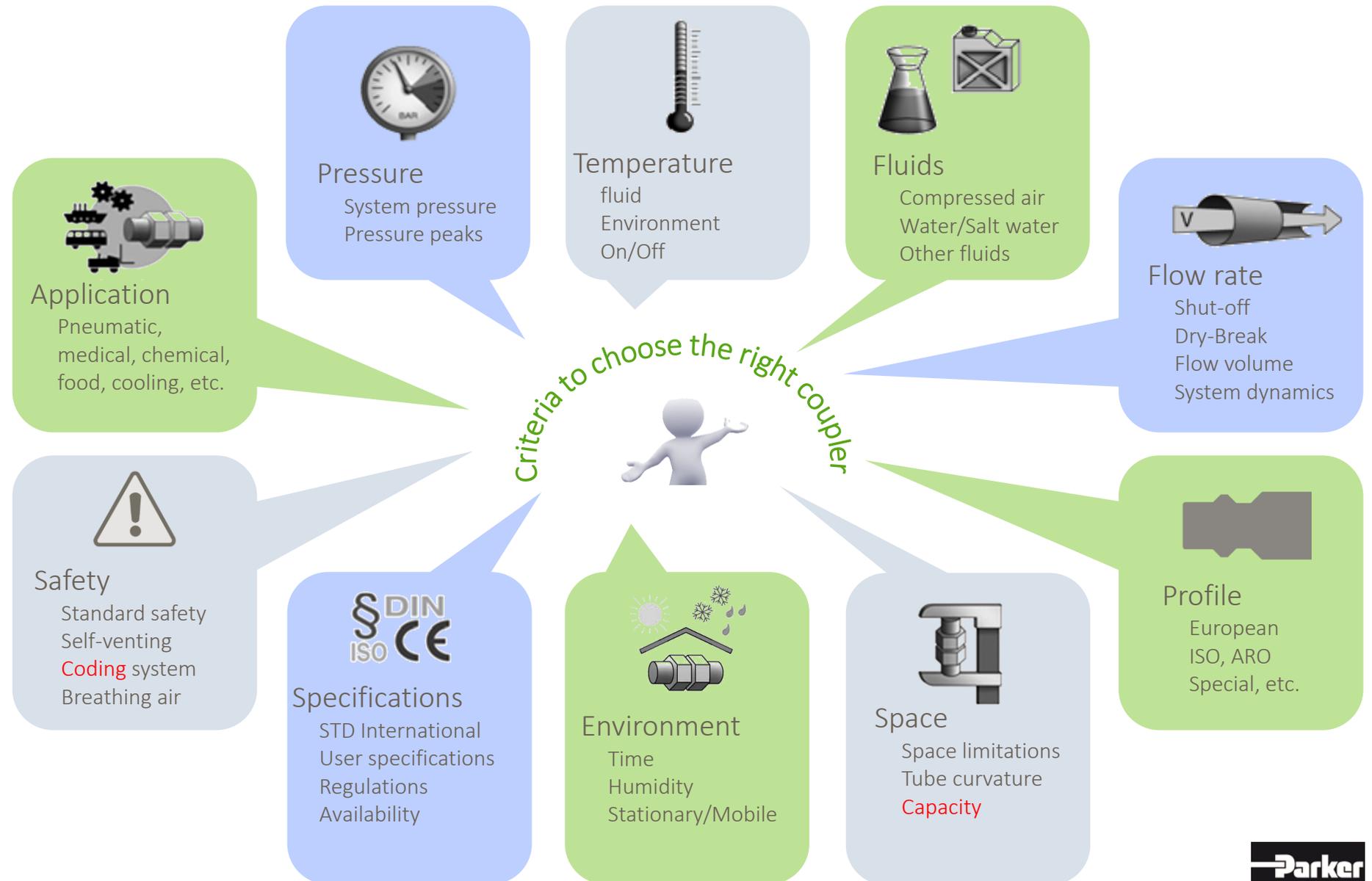
Medical/Life  
Science



- Numerous options for medical and pharmaceutical applications
- Thermoplastic in USP class VI quality.
- Available in diameters 1/10" to 1/4".

# QUICK-ACTING COUPLERS

## PRODUCT ADVANTAGES – Quick-acting couplers



# OVERVIEW – Range examples

Overview of standard industrial couplers



Series 02  
DN 1.5



Series 20  
DN 2.7



Series 21  
DN 5



Series 26/25/1600/1625  
Series 24/23/1400/1423  
DN 7.8



Series 27/1700/1727  
DN 10



Series 38 / 39  
DN 15 / 19

## THE RANGE

**Euro profile - One for All - All for One**

Seven compressed air couplings for different requirements: one universal plug profile

### 26KP

#### Self-venting Push-button Couplers

- Flow Rate: 1.150 l/min.
- Working Pressure : 12 bar
- Coupling force at 6 bar : 110 N
- Available : Brass
- ISO 4414

### 1600KA/1625KA

#### Premium Compressed Air Coupling

- Ultra-High-Flow
- Flow rate: 2.150 l/min.
- Working Pressure: 35 bar
- Coupling force at 6 bar: 75 N
- Available: Steel, with 2-component plastic sleeve (1625KA)

### C9000

#### Venting Coupling by Polymer Sleeve Rotation

- Flow rate: 2.000 l/min.
- Working Pressure: 16 bar
- Available: Technical polymer sleeve
- ISO 4414 DIN EN 983

### 25KA

#### Industrial Compressed Air Coupling

- High-Flow
- Flow rate: 1.800 l/min.
- Working Pressure: 35 bar
- Coupling force at 6 bar: 100 N
- Available: Brass a. Stainless Steel

### 26KA

#### Standard Compressed Air Coupling

- Standard-Flow
- Flow rate: 1.000 l/min.
- Working Pressure: 35 bar
- Coupling force at 6 bar: 120 N
- Available: Brass a. Stainless Steel

### 26KE

#### Self-Venting Coupling with Thermoplastic sleeve

- Standard-Flow
- Flow rate: 1.400 l/min.
- Working Pressure: 8 bar
- Coupling force at 6 bar: 95 N
- Available: Brass
- ISO 4414 DIN EN 983

### 1600KE

#### Self-Venting Coupling with Steel sleeve

- Ultra-High-Flow
- Flow rate: 2.083 l/min.
- Working Pressure: 2-12 bar
- Coupling force at 6 bar: 74 N
- Available: Steel
- ISO 4414 DIN EN 983



#### Standardized plug profile:

- Suitable for all 7 coupling types
- Available in steel or brass

## THE RANGE

### ISO B profile - One for All - All for One

Six compressed air couplings for different requirements: one universal plug profile

#### 24KP & 30KP

##### Self-venting Push-button Couplers

- Flow Rate : 820 l/min. Ø5,5  
1.050 l/min. Ø 8
- Working Pressure: 12 bar
- Coupling force at 6 bar : 110 N
- Available : Brass



#### 23KA

##### Industrial Compressed Air Coupling

- High-Flow
- Flow rate: 900 l/min.
- Working Pressure: 35 bar
- Coupling force at 6 bar: 110 N
- Available: Brass



#### C9000

##### Venting Coupling by Polymer Sleeve Rotation

- Flow rate: Ø5,5 : 1.250 l/min  
Ø8 : 2.400 l/min
- Working Pressure: 16 bar
- Available: Technical polymer sleeve
- ISO 4414 DIN EN 983



#### 24KE

##### Self-Venting Coupling with Thermoplastic sleeve

- Standard-Flow
- Flow rate: 830 l/min.
- Working Pressure: 12 bar
- Coupling force at 6 bar: 80 N
- Available: Brass
- ISO 4414 DIN EN 983



#### 24KA

##### Standard Compressed Air Coupling

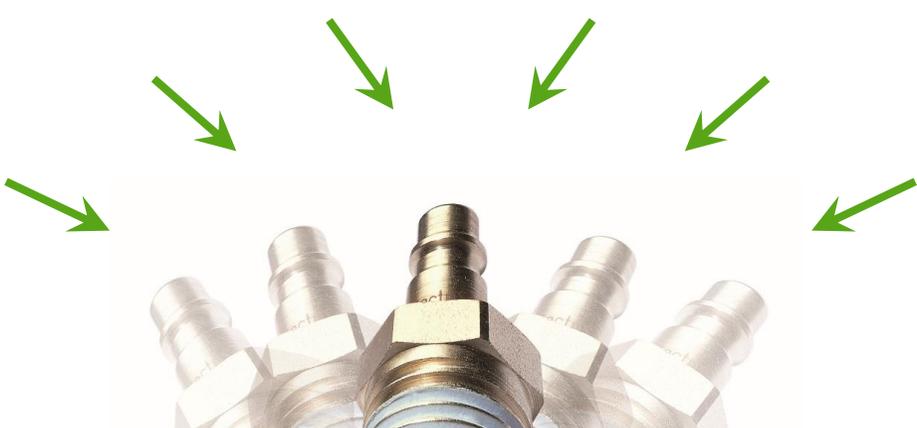
- Standard-Flow
- Flow rate: 550 l/min.
- Working Pressure: 35 bar
- Coupling force at 6 bar: 80 N
- Available: Brass



#### 1400KE

##### Self-Venting Coupling with Steel sleeve

- Ultra-High-Flow
- Flow rate: 980 l/min.
- Working Pressure: 0-12 bar
- Coupling force at 6 bar: 89 N
- Available: Steel
- ISO 4414 DIN EN 983



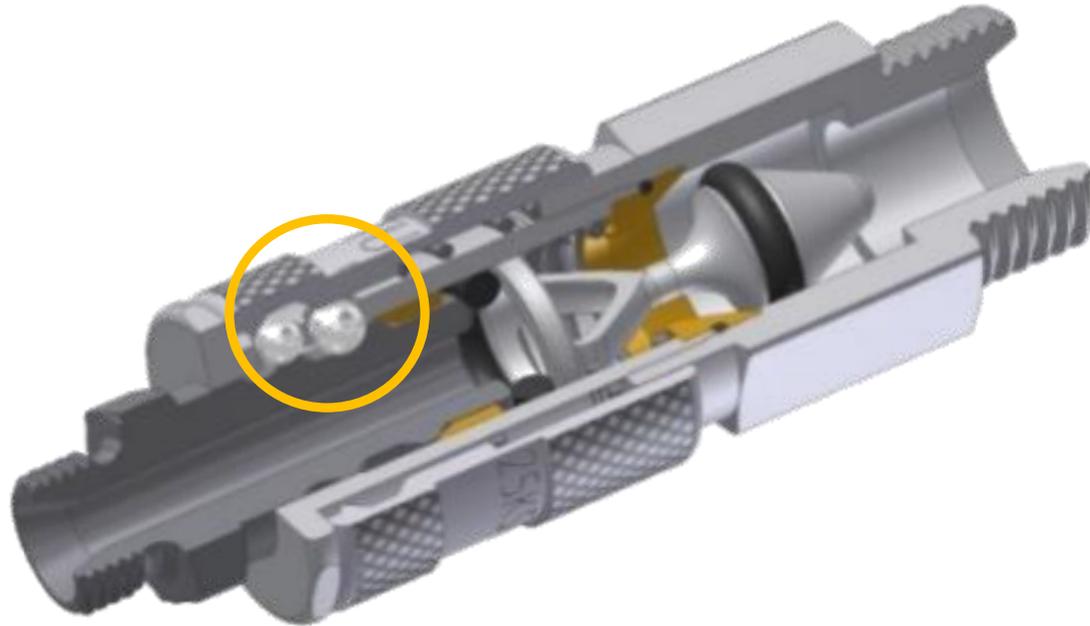
##### Standardized plug profile

- Suitable for all 6 coupling types
- Available in steel or brass

# QUICK-ACTING COUPLERS

## SAFETY

Protection options during **disconnection**:



## SAFETY

Protection options during **disconnection**:

- Mechanical safety locking preventing accidental disconnection
- One-hand connection



- safety coupler – Full flow in the coupler and probe which are not fitted with valves



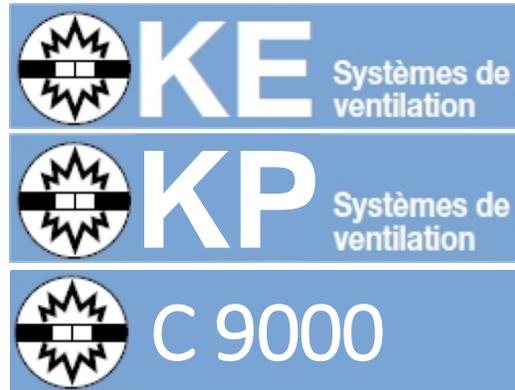
- safety coupler – single shut-off, coupler with valve, straight-through probe
- specific safety coupler for breathing air areas



- safety coupler double shut-off, both coupler and probe are fitted with a shut-off valves

## SAFETY

Protection options during **disconnection**:



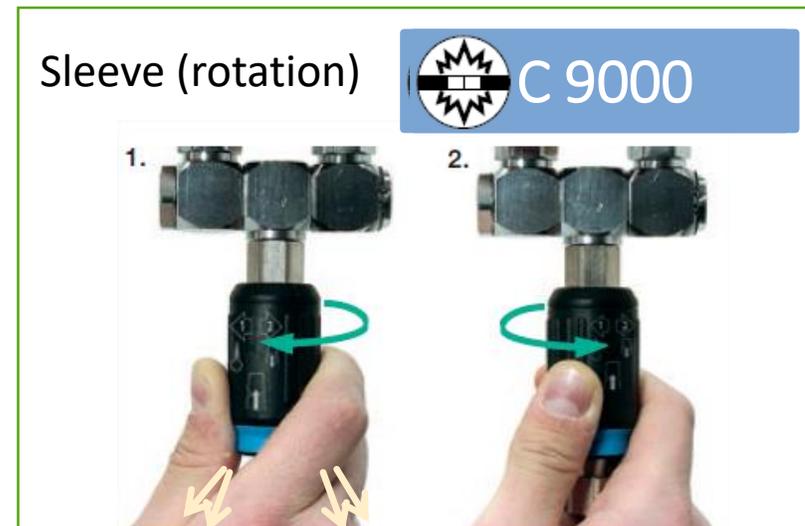
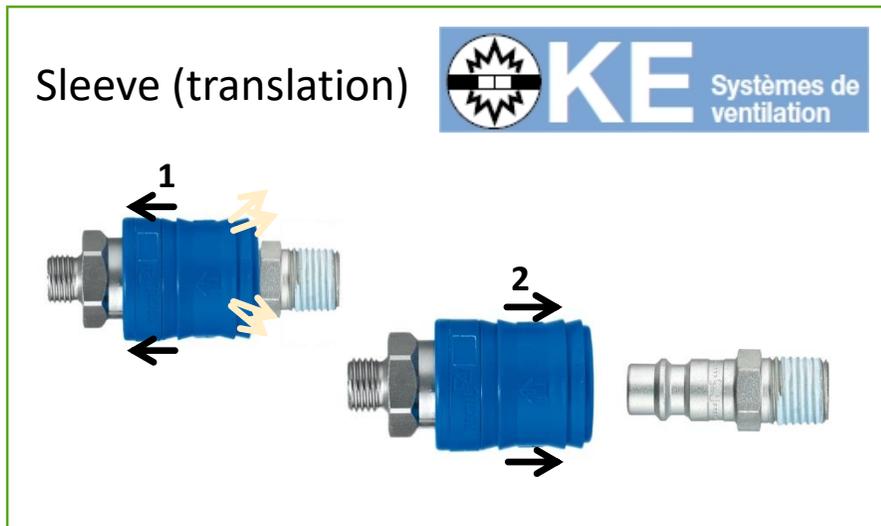
- Safety coupler with self-venting system
- When the sleeve is actuated, the probe remains locked. The air is vented automatically, disconnection is then possible by actuating the sleeve again in complete safety.
- One-hand operation possible



# SAFETY

Securisation option of the **disconnection** :

3 self-venting couplers technologies

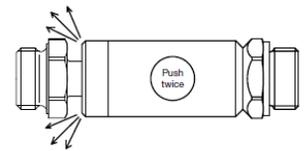


Push-Button:



# COUPLEURS AUTOMATIQUES

## SAFETY



### Safety

Push button with 2-step disconnection :  
1 – self venting 2- disconnection

### Security

No unintentional disconnection and whiplash  
Effect to prevent the risk of accident

### Ergonomy

Easy-to-use and ergonomics for an intuitive  
and easy handling

### Reliability

Proven endurance

### Robustness and lightweight

Aluminium body  
Brass threads

### Recognizability

Profile marked on the body to  
prevent mistakes due to bad  
connection

### Handling

Orientable, to facilitate assembly

### Interchangeability

EURO - ISO C - ISO B  
profiles

### Silicon free

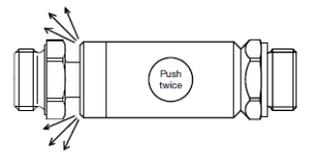
### Regulations

Compliant with ISO 4414, RoHS, REACH



# COUPLEURS AUTOMATIQUES

## SAFETY

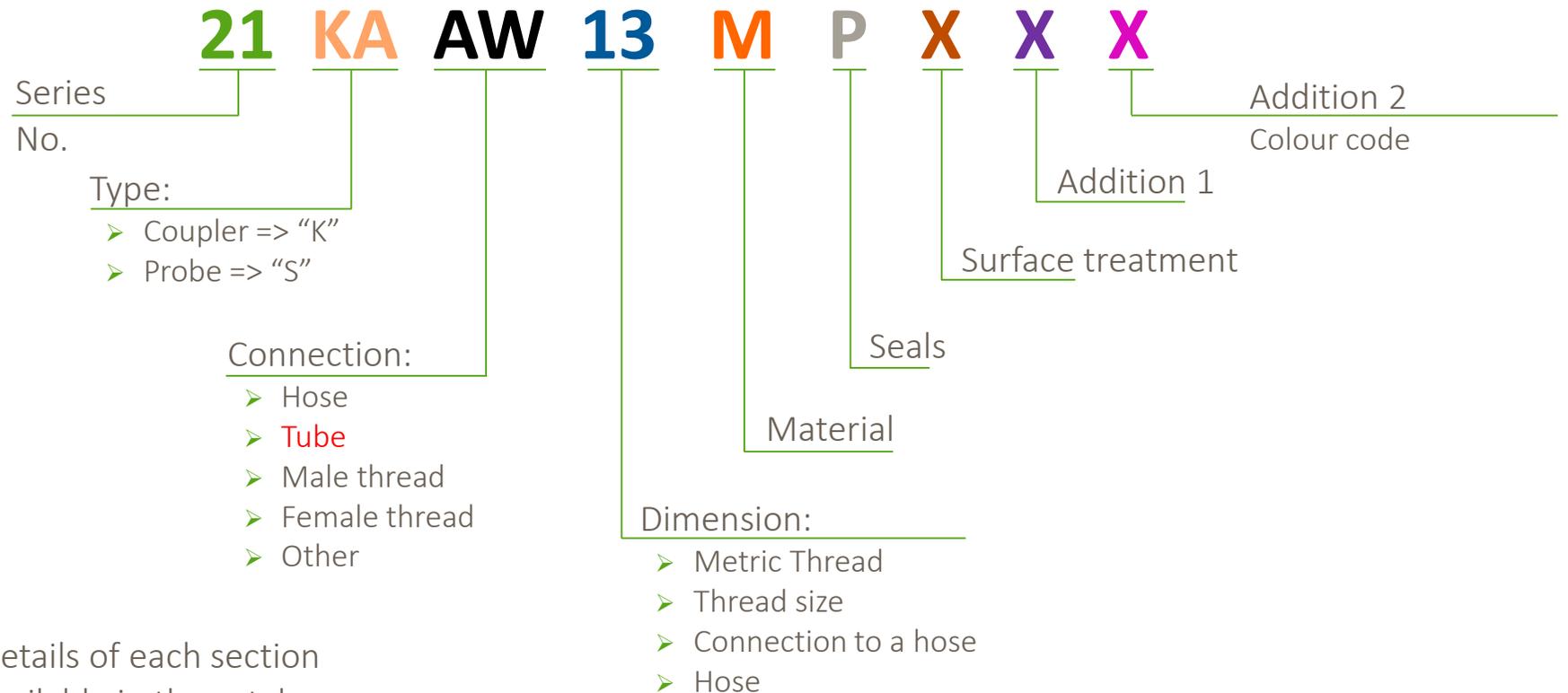
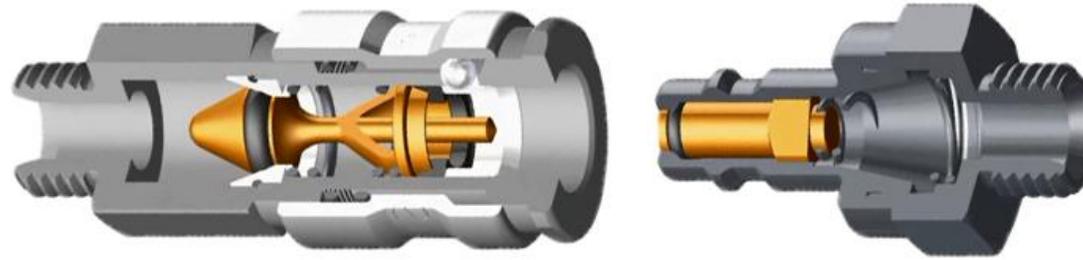


	Euro Profile	ISO C Profile		ISO B Profile	
					
Series	26 KP	18 KP	84 KP	24 KP	30 KP
Nominal Diameter	7,4	5,5	8	5,5	8
Working Pressure	12 bar				
Working Temperature	-20 at +100 °C				
Flow rate at 6 bar $\Delta P=0,6$	1225 l/min	810 l/min	2110 l/min	675 l/min	1470 l/min
Materials	<b>Coupling</b> : Anodised Aluminium, NP Brass <b>Plug</b> : Steel hardened, zinc plated <b>Seal</b> : NBR	<b>Coupling</b> : Anodised Aluminium, NP Brass <b>Plug</b> : Steel hardened, zinc plated <b>Seal</b> : NBR	<b>Coupling</b> : Anodised Aluminium, NP Brass <b>Plug</b> : Steel hardened, zinc plated <b>Seal</b> : NBR	<b>Coupling</b> : Anodised Aluminium, NP Brass <b>Plug</b> : Steel hardened, zinc plated <b>Seal</b> : NBR	<b>Coupling</b> : Anodised Aluminium, NP Brass <b>Plug</b> : Steel hardened, zinc plated <b>Seal</b> : NBR

# QUICK-ACTING COUPLERS

## PART NUMBERS

Structure of the coupler part numbers:



Full details of each section are available in the catalogue

# COUPLEURS AUTOMATIQUES

## COMMUNICATION TOOLS

### CUSTOMER PRESENTATION

FR, EN, DE



### LEAFLET recto-verso



### BROCHURE

24 pages



### SAMPLE CASE

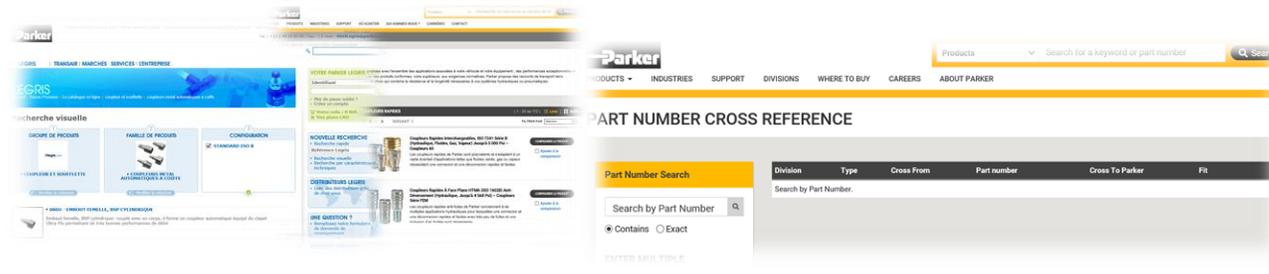


### PROFILE CHECKER



ROLL UP  
200x80 cms

WEBSITES  
[www.parkerlegris.com](http://www.parkerlegris.com)  
[www.parker.com](http://www.parker.com)



# QUICK-ACTING COUPLERS

## MAIN APPLICATIONS

Safety, performance, durability

COMPRESSED AIR NETWORKS

THERMAL

PLASTIC INJECTION

MACHINERY

RAIL

LIFE SCIENCE

AUTOMOTIVE

APPLICATIONS



## MAIN APPLICATIONS

- Reliable anti-contamination solution for:
  - Cooling of electronics
  - Electricity production
  - Industrial cooling
  - Semiconductor industry
  - etc.



200KL cartridge

## THERMAL



**Thermal Management**  
Quick Connect Couplings for Tempering and Cooling

aerospace  
climate control  
electromechanical  
filtration  
fluid & gas handling  
hydraulics  
pneumatics  
process control  
sealing & shielding

**Parker** ENGINEERING YOUR SUCCESS.

## MAIN APPLICATIONS

### LIFE SCIENCE

- Standard couplers made of various polymers or metals:



- System of customised solutions:



**Life Science**  
Quick Connect Couplings for Medical-  
and Bio-Technology

- aerospace
- climate control
- electromechanical
- filtration
- fluid & gas handling
- hydraulics
- pneumatics
- process control
- sealing & shielding

**Parker** ENGINEERING YOUR SUCCESS.

## MAIN APPLICATIONS

### AUTOMOTIVE

- Standard couplers made of various metals:
  - Easy connection/disconnection
  - Easy one-hand operation
  - Various shut-off configurations available
  - etc.



# QUICK-ACTING COUPLERS

## MAIN APPLICATIONS

- Main applications: pneumatic and hydraulic brakes
- Couplers resistant to impact and vibration
- Resistance to dust and dirt for outdoor applications



Series	7000	303
Nominal diameter (mm)	9/12/16/20	3
Application	Cooling	Pneumatic brakes

## Rail network

**Transportation – Railway**  
Quick Connect Coupling Systems for Rail Vehicle Applications

**Parker** ENGINEERING YOUR SUCCESS.

## MAIN APPLICATIONS

### PLASTIC INJECTION

- Mould cooling coupler:
  - High temperature versions available
  - Industrial cooling
  - Plastic injection industry
  - Versions with safety locking available
  - etc.

