



*Elemente si sisteme hidraulice  
Elemente si sisteme pneumatice  
Service, proiectare, asistenta tehnica  
Reparatii pompe hidraulice*

Tel: +40 (0) 314 326 326, 7, 8

Fax: +40 (0) 314 326 329

office@progressfluid.ro

www.progressfluid.ro



**Coupleurs Gromelle  
Hansen Couplings**

## OUR COMMITMENT

To listen to  
**YOU**  
To advise  
**YOU**



To define and  
analyse  
your  
**APPLICATION**



To take  
account of  
your **TECHNICAL  
CONSTRAINTS**



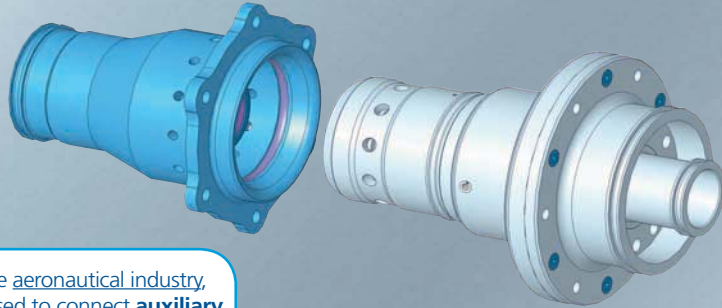
To develop  
a **SOLUTION**



To manufacture  
the **PRODUCT**

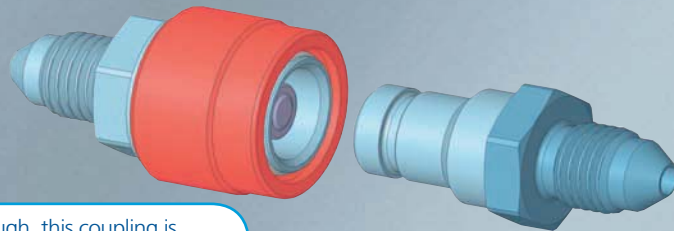
## Some examples...

### Coupling in aluminium



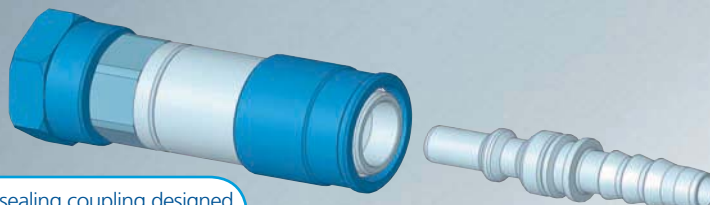
Developed for the aeronautical industry, this coupling is used to connect **auxiliary tanks** on aircraft. It contains **2 separate flow passages** and also allows connection under misalignment.

### Flat-face coupling in aluminium



Ultra-light and very tough, this coupling is designed for **automobile racing and other mechanised sports**. It is used in low or high pressure lines, especially **brake systems**, and gives fast connection and disconnection with complete safety and with no need to bleed the lines.

### Quick coupling in nickel-plated brass



Quick-release, self-sealing coupling designed for external connection of hoses carrying combustible gas to **non-domestic gas fired appliances**, in accordance with the **XPD 36-128 standard**. It gives resistance to aggressive environments at animal husbandry sites.

European Pressure Equipment Directive 

TUTHILL SAS declares that its pneumatic, hydraulic and special quick couplings for all fluids and applications are developed and manufactured in accordance with the requirements of the European Pressure Equipment



## ...of our special developments

You are a manufacturer, installer, specifier... Taking into account your application details is one of the essential elements in our special developments, together with the advice and expertise of our engineers.

Whatever your application (fluid conveyed, working temperature, environmental conditions,...) **we are able to offer you a MADE-TO-MEASURE technical solution.** Please consult us!\*

### Aluminium self-sealing coupling

Standard or flat-face version

#### Application

Electricity industry.  
Evacuation and charging of enclosures (SF<sub>6</sub> gas) in high voltage switchgear.

### 2" stainless steel coupling with bronze release sleeve and handwheel

#### Application

Flushing with nitrogen and helium filling of Ariane rocket launcher firing stage.

### Flat-face multi-coupling manifold

#### Application

Railway equipment.  
This manifold gives connection of different hydraulic service functions between the tank and the bogies.

### Button-release quick coupling with ball-valve in corrosion-resistant materials

Two separate security features

#### Application

Breathing air.

### Coupling in non-corrodible materials

#### Application

LPG (liquid petroleum gas) fuel lines on forklift trucks, giving a fast connection between the LPG bottle and the engine fuel system.

### Aluminium coupling designed for on-board cooling systems

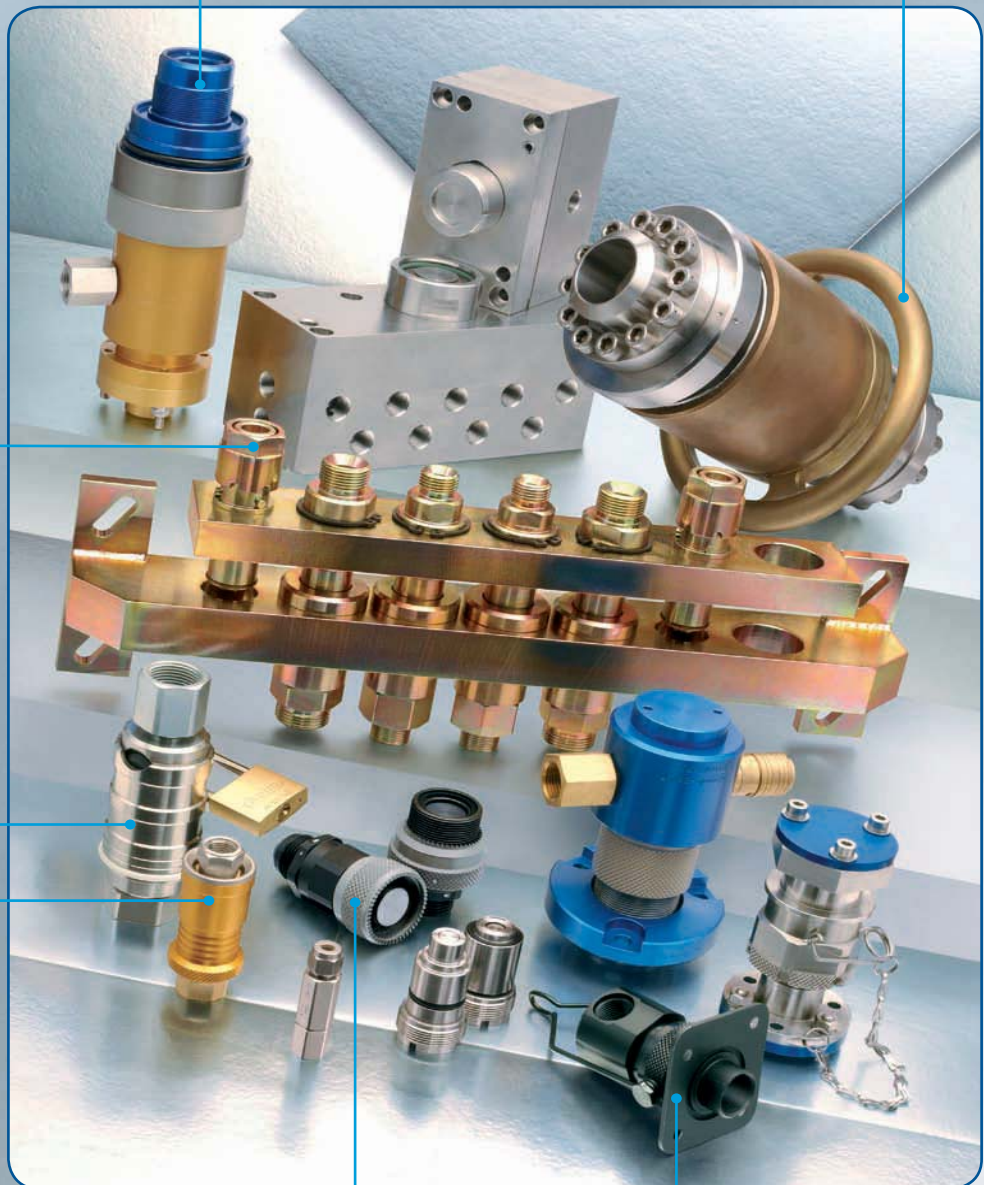
#### Application

Military aircraft.  
Excellent vibration resistance.

### Aluminium coupling incorporating mounting flange and operating handle

#### Application

Military aircraft (combat helicopters).  
Connection between the fuel feed system and releasable tanks.



## Standard quick-release air couplings

	80 	380 	G-600 
 Profile Interchangeability	 Rectus series 20 & 91 Legris series 20 Walther series 06-003	 Rectus series 21 & 90 Legris series 21	 ISO 6150 B & US A-A-59439 standards
 Nominal diameter	2.7 mm	5 mm	5.5 mm
 Maximum working pressure*	35 bar (508 psi)	35 bar (508 psi)	20 bar (290 psi)
 Materials	Socket body: nickel-plated brass Plug: nickel-plated brass Seals: nitrile	Socket body: nickel-plated brass Plug: nickel-plated brass Seals: nitrile	Socket body: nickel-plated brass Plug: zinc-plated steel Seals: nitrile
 Technical data	Connection: one-handed straight push Ball-locking	Connection: one-handed straight push Ball-locking	Connection: one-handed straight push Ball-locking
 Applications	Compressed air Consult us for other fluids	Compressed air Consult us for other fluids	Compressed air Consult us for other fluids



## Standard quick-release air couplings

	2400 	I-900 	T-1300 
 Profile Interchangeability	 Rectus & Legris: series 25 & 26 CEJN series 320 Prévost series ESC & ESG	 8 mm ISO 6150 B & US A-A-59439 standards	 12 mm Proprietary profile
 Nominal diameter	35 bar (508 psi)	20 bar (290 psi)	20 bar (290 psi)
 Maximum working pressure*	35 bar (508 psi)	20 bar (290 psi)	20 bar (290 psi)
 Materials	Socket body: brass Plug: zinc-plated steel Seals: nitrile	Socket body: nickel-plated brass Plug: zinc-plated steel Seals: nitrile	Socket body: nickel-plated brass Plug: zinc-plated steel Seals: nitrile
 Technical data	Connection: one-handed straight push Pin-locking	Connection: one-handed straight push Ball-locking	Connection: one-handed straight push Ball-locking
 Applications	Compressed air Consult us for other fluids	Compressed air Consult us for other fluids	Compressed air Consult us for other fluids

\* Connected and disconnected working pressures are detailed in our catalogues.

## Safety-type quick-release air couplings

## Accessories

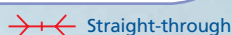
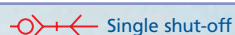
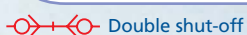
<b>ISO 6150 B profile</b>   <p>ISO 6150 B &amp; US A-A-59439 standards</p>	<b>ISO 6150 C profile</b>   <p>ISO 6150 C standard</p>	<b>ARO 210 profile</b>   <p>ARO 210 profile</p>	
5.5 and 8 mm	5.5 mm   8 mm   11 mm	5.5 mm	
16 bar (232 psi)	12 bar (174 psi)   10 bar (145 psi)   8 bar (116 psi)	16 bar (232 psi)	Please refer to our "Pneumatic Accessories" catalogue
Socket body: aluminium Plug: zinc-plated steel Seals: nitrile	Socket body: aluminium Plug: zinc-plated steel Seals: nitrile	Socket body: aluminium Plug: zinc-plated steel Seals: nitrile	Please refer to our "Pneumatic Accessories" catalogue
Connection: one-handed straight push Button-operated sockets Elimination of hose-whip when disconnecting	Connection: one-handed straight push Button-operated sockets Elimination of hose-whip when disconnecting	Connection: one-handed straight push Button-operated sockets Elimination of hose-whip when disconnecting	Blow-guns Adaptors, Ys, tees, elbows, crosses and hose tails Air-coils and hoses
Compressed air Consult us for other fluids	Compressed air Consult us for other fluids	Compressed air Consult us for other fluids	Compressed air TPVC: compressed air and water (consult us for other fluids)

## Quick couplings for mould-cooling

## Couplings for refrigerants









## Non-return valves

<b>J-50000</b>   <p>Proprietary profile compatible with other makes of quick couplings of the same design</p>	<b>J-60000</b>   <p>Proprietary profile compatible with other makes of quick couplings of the same design</p>	<b>J-70000</b>   <p>Proprietary profile compatible with other makes of quick couplings of the same design</p>	<b>W-10000</b>   <p>Proprietary profile compatible with other makes of couplings of the same design</p>	<b>R-4000</b>  
6 and 9 mm	6 and 9 mm	8 and 12 mm	Size 8   Size 12   Size 16 10.3 mm   16.2 mm   21 mm	From 3.8 to 34.7 mm
50 bar (725 psi)	10 or 16 bar (145 or 232 psi), depending on working temperature	10 bar (145 psi)	From 50 to 125 bar (725 to 1810 psi), depending on size	From 25 to 700 bar (360 to 10150 psi), depending on size and material
Main components in stainless steel Seals: Viton	Socket: brass and stainless steel Plug: nickel-plated brass Seals: Viton	Nickel-plated brass Seals: Viton	Zinc-plated steel, bichromate Seals: HNBR or Neoprene	Zinc-plated steel, bichromate, nickel-plated brass or AISI 316L stainless steel Seals: nitrile, Viton or EPDM
Ball-locking Pull-to-connect couplings Double seal when connected Minimum entry of air and loss of fluid Vibration-resistant	Ball-locking Pull-to-connect couplings Plug: available with or without valves	Ball-locking Push-to-connect couplings	Connection by screwing up the locking sleeve Minimum entry of air and loss of fluid	Standard cracking pressures: 0.5 and 1 bar (7 and 14.5 psi) Alternative cracking pressures on request
Cooling or heat regulation of injection moulds (thermoplastics, Zamak, aluminium, etc.) Cooling of electronic systems Heat-transfer fluids	Cooling or heat regulation of injection moulds (thermoplastics, Zamak, aluminium, etc.)	Cooling or heat regulation of injection moulds (thermoplastics, Zamak, aluminium, etc.)	Refrigeration Air conditioning  See also our HK series couplings (with the Neoprene seals option)	All industries, agriculture and public works Fluid transfer lines













## Ball-locked hydraulic couplings

<b>H-5000</b>  	<b>HK</b>  	<b>L-7000</b>  	<b>ST</b>  
Proprietary profile From 3.8 to 34.7 mm	ISO 7241-1 B standard From 4.4 to 46 mm	Proprietary profile From 8 to 50 mm	Proprietary profile From 4.4 to 60.4 mm
From 20 to 1000 bar (290 to 14500 psi), depending on size and material	From 27 to 345 bar (390 to 5000 psi), depending on size and material	From 20 to 1000 bar (290 to 14500 psi), depending on size and material	From 17 to 520 bar (245 to 7540 psi), depending on size and material
Zinc-plated steel, bichromate, nickel-plated brass or AISI 316L stainless steel Seals: nitrile, Viton or EPDM	Zinc-plated steel, bichromate, brass or 303 or 316 stainless steel, Seals: nitrile, Viton, EPDM, Kalrez®, Teflon® or Neoprene	Zinc-plated steel, bichromate, brass or AISI 316L stainless steel Seals: nitrile, Viton or EPDM	Zinc-plated steel, bichromate, brass or AISI 303 or 416 stainless steel Seals: nitrile, Viton, EPDM, Teflon® or Neoprene
Pull-to-connect couplings Excellent pressure performance Optional safety locking ring	Pull-to-connect couplings High flow rates Optional safety sleeve lock to prevent accidental disconnection and "High Impulse" version (increased resistance to brinelling)	Pull-to-connect couplings	Pull-to-connect couplings Optional safety locking ring and "High Impulse" version (increased resistance to brinelling)
Automobile, oil, railway and food processing industries Iron and steel, electronics, laboratories, agriculture, public works, aviation, ...	Automobile, oil, railway and food processing industries Iron and steel, electronics, laboratories, agriculture, public works, aviation, ... Refrigeration	Applications where maximum flow capacity is required Pressure washing Some steam-cleaning equipment Fluid transfer lines Refrigerant circuits	Applications where maximum flow capacity is required Pressure washing Some steam-cleaning equipment Fluid transfer lines Refrigerant circuits









## Flat-face hydraulic couplings / Dry-break

<b>FF</b>  	<b>DB</b>  	<b>RW</b>  	<b>HYDRAV</b>  
ISO 16028 standard From 6 to 18 mm	Proprietary profile From 5.5 to 18.5 mm	Proprietary profile 6 and 9 mm	Proprietary profile compatible with other makes of couplings of the same design From 3.6 to 24.3 mm
350 bar (5075 psi)	From 140 to 190 bar (2030 to 2755 psi), depending on size	160 bar (2320 psi)	From 150 to 450 bar (2175 to 6525 psi), depending on size
Zinc-plated steel, bichromate or QPQ finish Seals: nitrile (alternative seal materials on request)	316L stainless steel Seals: Viton or EPDM (Kalrez® or alternative seal materials on request)	Main components in stainless steel Seals: Viton	Aluminium or stainless steel, depending on size EPDM 41 B seals to NF L 17-241
Ball-locking Push-to-connect couplings Sleeve-locking device to prevent accidental disconnection Excellent pressure performance	Ball-locking Push-to-connect couplings High flow-rate High temperature capability (Kalrez® seals)	Ball-locking Pull-to-connect couplings Double seal when connected External dust seal Excellent flow capacity	Connection by fast-screw sleeve Anti-unscrew security feature Minimum entry of air and loss of fluid End connections to SAE AS 4395 standard
Hydraulic circuits Connections to hydraulic pumps, jacks, distributors and accessories Lifting and handling equipment Public works, agriculture, iron and steel, railways and other industries	Chemicals and petrochemicals Pharmaceuticals Cosmetics Food processing industry Resistant to aggressive fluids and corrosion	Rail industry and all industrial applications Good vibration resistance	Mainly intended for the aviation industry, these couplings give connections between test benches and the hydraulic systems of certain aircraft Vibration-resistant

## Screw-to-connect hydraulic couplings

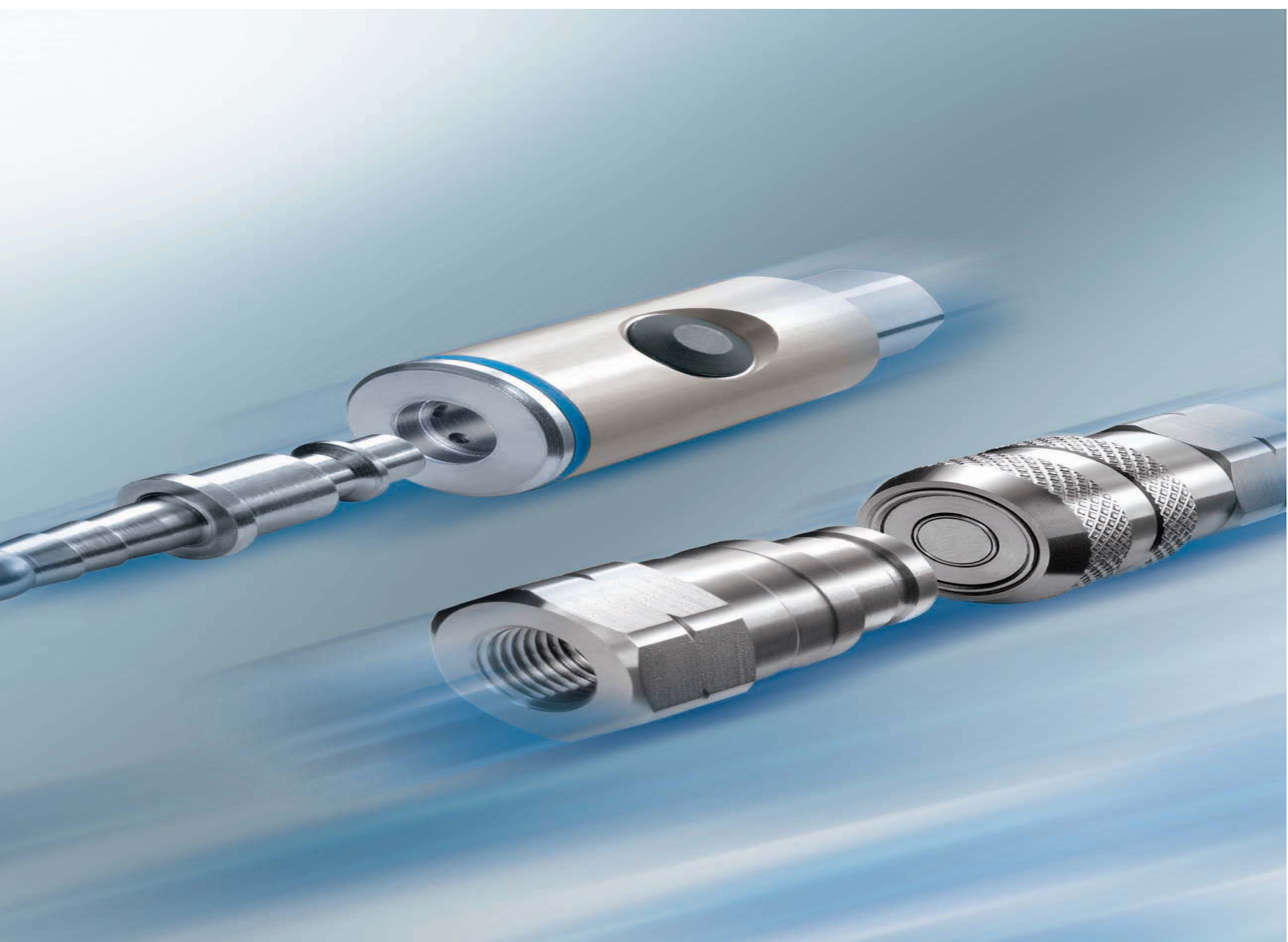
<b>W-6000</b>   Proprietary profile	<b>W-26000</b>   Proprietary profile	<b>W-56000/HP3</b>   Proprietary profiles compatible with other makes of couplings of the same design	<b>96</b>   Proprietary profile compatible with other makes of couplings of the same design
From 5.7 to 34.7 mm	14.2 and 16.5 mm	Series W-56000: 5.7 and 7.6 mm Series HP3: 7.1 mm	From 11.9 to 22.8 mm
From 300 to 1100 bar (4350 to 15950 psi), depending on size	From 450 to 650 bar (6525 to 9425 psi), depending on size	700 bar (10150 psi)	From 190 to 210 bar (2755 to 3045 psi), depending on size
Zinc-plated steel, bichromate or 1.4418 stainless steel Seals: nitrile, Viton or EPDM	Zinc-plated steel, bichromate Seals: nitrile	Series W-56000: zinc-plated steel Series HP3: zinc-plated steel, bichromate Seals: nitrile	Brass Seals: nitrile
Resistance to heavy mechanical demands Can be connected against residual pressure	Lugs on sleeve Coarse trapezoidal screw-thread sleeve (resistance to shock loads and speed of connection) Metal-to-metal sealing in disconnected position Can be connected against residual pressure	Series W-56000: poppet valving Series HP3: ball valving	Wing-nut mechanism O-ring indication allows checking that connection is complete Connection under pressure is possible Minimum air inclusion The plug can be bulkhead-mounted
All industrial and severe applications Public works, offshore, lifting equipment, systems subject to heavy mechanical loads, high pressures, ...	All industrial and severe applications, particularly public works	Hydraulic jacks, clamping systems, lifting and emergency release equipment	Applications needing connection or disconnection under pressure, with low fluid loss (flat-faced valves) Fuel industry Tractor-trailer connections

## Hydraulic couplings / Agricultural range

<b>H-15000</b>   ISO 7241-1 A standard	<b>H-55000</b>   Proprietary profile compatible with some other makes of couplings of the same design	<b>K-8000</b>   Proprietary profile compatible with other makes of agricultural couplings of the same design	<b>Q-9000</b>   ISO 5676 & NF U 16-006 standards
From 5.3 to 16.9 mm	5.9 and 7 mm	8 mm	8 mm
From 200 to 315 bar (2900 to 4565 psi), depending on size	250 bar (3625 psi)	250 bar (3625 psi)	150 bar (2175 psi)
Zinc-plated steel, bichromate Seals: nitrile or Viton	Zinc-plated steel Seals: nitrile	Zinc-plated steel or zinc-plated steel, bichromate Seals: nitrile	Zinc-plated steel, bichromate Seals: nitrile
Ball-locking Pull-to-connect couplings 1/2" size available in a push-pull version	Ball-locking Pull-to-connect couplings Ball valving	Agricultural coupling Connection by screwing up the locking sleeve Minimum entry of air and loss of fluid	Brake coupling Ball-locking Pull-to-connect couplings Minimum entry of air and loss of fluid
Hydraulic circuits and equipment Agriculture and public works Hydraulic fluids	Hydraulic circuits and equipment Forestry and agricultural machinery Iron and steel industry	Tractors, agricultural and forestry machinery and equipment	Trailer brake circuits on agricultural and forestry vehicles



*Elemente si sisteme hidraulice  
Elemente si sisteme pneumatice  
Service, proiectare, asistenta tehnica  
Reparatii pompe hidraulice*



## CONTACT:

Bd.Iuliu Maniu, No220, Bucuresti, Sector 6

Tel: +40 (0) 314 326 326  
+40 (0) 314 326 327  
+40 (0) 314 326 328

Fax: +40 (0) 314 326 329

[office@progressfluid.ro](mailto:office@progressfluid.ro)  
[www.progressfluid.ro](http://www.progressfluid.ro)