



Coupling Products

Products - Key products

- GROMELLE / HANSEN couplings: one of the largest range of quick couplings on the market:
 - Pneumatic couplings
 - Pneumatic accessories
 - Hydraulic couplings
 - Fluid transfer couplings
 - Check valves
- QUICK SEAL connectors, for a fast and straight connection:
 - Tube connectors
 - Filling connectors
 - Expanding seal plugs



Pneumatic couplings

- GROMELLE / HANSEN offer a large range of pneumatic couplings:
 - Standard couplings with a wide choice of standardized & proprietary profiles
 - Push-button safety couplings
 - Full flow safety couplings
- And some accessories for a complete offer:
 - Blowguns
 - Fittings
 - Hoses, Air-coils, Air Hose-reel

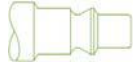


Pneumatic - Standard couplings

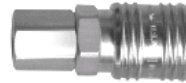
ISO 6150 - B



ARO



G600/I900



1000



3000/4000/5000/6000

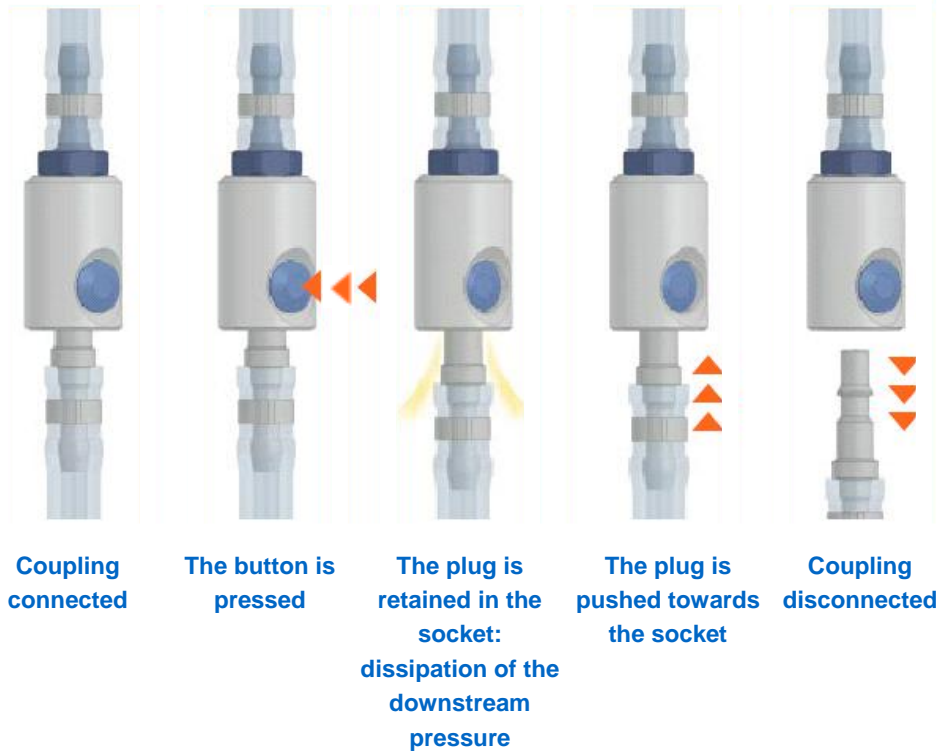


210/310



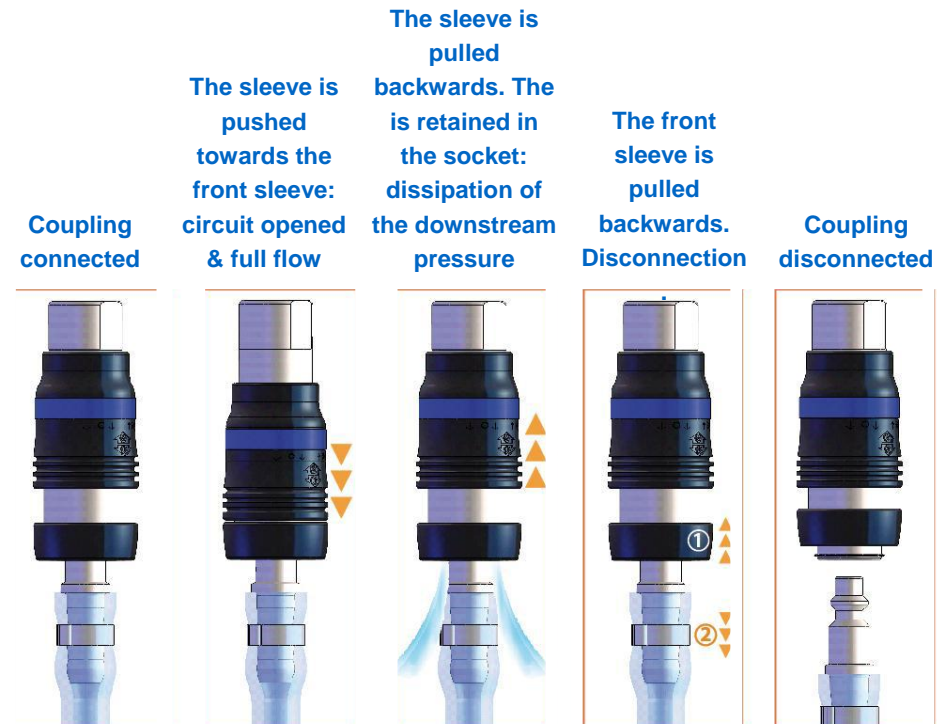
Profile	ISO 6150 B	5,5 & 8 mm	5,5 mm	5,5 - 8 - 11 & 15 mm	-
	ARO	-	-	-	5 & 8 mm
Material	Plug	Steel	AISI 303 stainless steel	Steel	Steel
	Socket	Brass & steel		Brass	Steel
Working pressure (bar)		20	140	up to 140	17
Automatic coupling		X	-	X	X
EATON Series		-	FD43	FD40	FD41
Benefits		<ul style="list-style-type: none"> Robust thanks to the steel sleeve Corrosion resistant (Nickel plating and Cataphoresis) 	<ul style="list-style-type: none"> High working pressure Nitrile seals. Alternative seals: FKM, EPDM or silicone 	<ul style="list-style-type: none"> High working pressure Corrosion resistant (Optional brass or SS valve & plug in brass available, e.g. water application) Optional sleeve lock prevents accidental disconnection Some sizes are available with nitrile, FKM, EPDM, silicone seals 	<ul style="list-style-type: none"> Robust thanks to the steel sleeve
Competitors		CEJN 310 - PARKER PB - PREVOST IRM/IRP - RECTUS 23, 24			CEJN 300 - PARKER HA RECTUS 14, 22

Pneumatic - Safety couplings



SAFELINE Series

CC Series



Pneumatic - Safety couplings

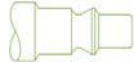
ISO 6150 - B



ISO 6150 - C



ARO



EUROPEAN



SAFELINE
GD10500/ID10900



SAFELINE GD18500
ID18900 /TD18300



2CC



24CC

Profile	ISO 6150 B	5,5 & 8 mm	-	5,5 mm	-
	ISO 6150 C	-	5,5 - 8 & 11 mm	-	-
	European	-	-	-	7,2 mm
	ARO	-	-	5 mm	-
Material	Plug	Steel			
	Socket	Aluminium & brass		ABS PC & brass	
Working pressure (bar)		16		17	
Automatic coupling		X		X	
Benefits		<ul style="list-style-type: none">▪ Safety device protects users during disconnection in compliance with anti hose-whip requirements of ISO 4414▪ Easy-to-use thanks to the button▪ Design protects against accidental disconnection▪ Robust		<ul style="list-style-type: none">▪ Full flow = reduces air consumption (energy saving)▪ Sleeves in ABS PC = chemical durability and high shock resistance▪ Design protects against accidental disconnection▪ Reliability, durable▪ 2CC suitable for different profiles ISO 6150 B - ARO 210 - Truflate▪ Safety device protects users during disconnection in compliance with anti hose-whip requirements of ISO 4414	
Competitors		CEJN 310 LEGRIS C9000 PREVOST ISC/IRP	OETIKER SV PREVOST CSP/CRV STAUBLI RCS/RBE TRANSAIR 9D/9A	CEJN 310 LEGRIS C9000 PREVOST ISC/IRP	CEJN 320 PARKER TOOL-MATE PREVOST ERC/ERP

Pneumatic - Accessories



S100/S200



E700/M200/M280



SPUBD/TPVC/TAS



ENR

Material	Brass	X	X	-	Steel guard
	Steel	-	X	-	-
	Plastic	Nylon	-	Polyurethane - PVC SBR/NR & NBR/PVC	Polyurethane braid hose
Working pressure (bar)		up to 20 bar	up to 250	up to 20 bar	14
EATON Series		-	-	-	-
Benefits		<ul style="list-style-type: none"> Progressive flow control S100: air-screen version available S200 complies with OSHA STD 01-13-2001 Low noise level, S200 complies with 2003/10/EC Directive & OSHA 1910.95(b) standard 	<ul style="list-style-type: none"> Large range of fittings 	<ul style="list-style-type: none"> Air-coil with swivel connections TPVC hose complies with 2007/19/EC Directive 	<ul style="list-style-type: none"> 180° rotating support

Pneumatic applications



Industrial, garage, do-it-yourself markets:

- Ring main drops
- Connection of compressed air tools
- Compressor outlet
- Connection of spray guns
- Vacuum until $1 \cdot 10^{-2}$ mbar
- Water and light chemicals conveyance



Hydraulic & Fluid transfer couplings

- GROMELLE / HANSEN: a complete range of hydraulic quick couplings for the European market:
 - Ball-locked couplings
 - Straight-through couplings
 - Screw-to-connect couplings
 - Flat face couplings
 - Fluid transfer couplings



Hydraulic - Ball-locked couplings



H5000



H15000/IA



HK



HKIG-L

Profile		Gromelle	ISO 7241-1 A	ISO 7241-1 B	Hansen
Size		1/8" to 2"	1/4" to 1"	1/8" to 3"	1/4"
Material	Steel	X	X	X	-
	Brass	X	-	X	-
	Stainless steel	X	-	X	X
Working pressure (bar)		up to 1000	up to 315	up to 345	100
EATON Series		-	5600	FD45	-
Benefits		<ul style="list-style-type: none"> High pressure performance in connected and disconnected positions Optional safety locking ring to prevent accidental disconnection 	<ul style="list-style-type: none"> High flow rate 1/2 size available in push-pull configuration IA: wide offer of end connections 	<ul style="list-style-type: none"> High flow rate Many seal materials available Guiding between plug and socket Available in one way shut-off version or without valve Optional safety sleeve lock to prevent accidental disconnection 	<ul style="list-style-type: none"> Non interchangeable profiles Color-coded system to identify each series Available with nitrile, teflon, FKM, EPDM seals
Competitors		FASTER NV (until 3/4")	FASTER ANV PARKER 6600 STUCCHI BIR	FASTER HNV PARKER 60 STUCCHI IRB	-

Hydraulic - Ball-locked couplings



H55000



TH



Q9000



Beverage

Profile		Gromelle	Snap-Tite H	ISO 5676	Hansen
Size		3/8" to 1/2"	1/4" to 1"	8 mm	1/4" to 1"
Material	Steel	X	X	X	-
	Brass	-	-	-	X
	Stainless steel	-	X	-	X
Working pressure (bar)		250	up to 450	150	-
EATON Series		-	-	-	-
Benefits		<ul style="list-style-type: none"> Robust 	<ul style="list-style-type: none"> High flow rate Robust 	<ul style="list-style-type: none"> Minimum entry of air & loss of fluid Robust 	<ul style="list-style-type: none"> Large choice of fittings
Competitors		FASTER NS PARKER 4000 STUCCHI IR	SNAP-TITE H FASTER TNV/TNL	DNP PFT FASTER VF	-

Hydraulic - Straight-through couplings



L7000



ST

Profile		Gromelle	Parker ST
Size		1/8" to 2"	1/8" to 2"1/2
Material	Steel	X	Plug only
	Brass	X	X
	Stainless steel	X	X
Working pressure (bar)		up to 1000	up to 520
EATON Series		-	-
Benefits		<ul style="list-style-type: none"> High working pressure Resistant to aggressive fluids and corrosion 	<ul style="list-style-type: none"> End connection: male threads, female threads and hose stems Optional safety locking ring High impulse versions of the stainless steel plug (1/4" and 3/8"only) give increased resistance to brinelling
Competitors		-	PARKER ST

Hydraulic - Screw-to-connect couplings



W6000



W36000



W46000



K8000

Profile		Gromelle	"German" / ISO 14541	Edbro	Arelco
Size		1/4" to 2"	1/4" to 1"1/4	3/4" to 1"	8 mm
Material	Steel	X	X	X	X
	Stainless steel	X	-	-	-
Working pressure (bar)		up to 1100	up to 450	up to 250	250
EATON Series		-	-	-	-
Benefits		<ul style="list-style-type: none"> High pressure performance in connected and disconnected positions Superior mechanical and hydraulic performances Connect under 30 bar 	<ul style="list-style-type: none"> High pressure performance in connected and disconnected positions Plug design ensures protection of the sealing area when disconnected Connect under 50 bar O'ring indication allows checking that connection is complete thus guaranteeing full flow 	<ul style="list-style-type: none"> Can be connected against residual pressure The plug can be bulkhead mounted Design ensures protection of the sealing area when disconnected 	<ul style="list-style-type: none"> Robust Minimum entry of air
Competitors		INTEVA TGW	FASTER CVV VOSWINKEL HS	EDBRO FASTER CVE	ARELCO DNP VVT

Hydraulic - Flat-Face couplings



FF



DB



MLDB

Profile		ISO 16028	Gromelle/Hansen	Gromelle/Hansen
Size		1/4" to 1"	1/4" to 1"	1/4" to 1"
Material	Steel	X	-	-
	Stainless steel	-	X	X
Working pressure (bar)		350	up to 190	25
EATON Series		FD89 / FD99	-	-
Benefits		<ul style="list-style-type: none"> • Push to connect • Dry break • Minimum entry of air & loss of fluid • Sleeve locking device to prevent accidental disconnection • High working pressure • Colored rings available to identify circuits 	<ul style="list-style-type: none"> • Push to connect • Dry break • Minimum entry of air & loss of fluid • High flow rate • High temperature capacity • Resistant to aggressive fluids and corrosion 	DB benefits and: <ul style="list-style-type: none"> • Sleeve locking device to prevent accidental disconnection • Colored rings available to identify circuits
Competitors		FASTER 2FFI PARKER IF/FEM STUCCHI FIRG/A	-	

Hydraulic - High pressure couplings



2UH



W56000



HP3

Profile	CEJN 116	"Enerpac" / ISO14540	"Enerpac" / ISO14540
Size	1/4" to 1"	1/4" & 3/8"	3/8"
Material Steel	X	X	X
Working pressure (bar)	1500	700	700
EATON Series	-	-	FD31
Benefits	<ul style="list-style-type: none"> ▪ Very high working pressure ▪ Minimum entry of air & loss of fluid ▪ Dry break 	<ul style="list-style-type: none"> ▪ High working pressure 	<ul style="list-style-type: none"> ▪ High working pressure
Competitors	CEJN 116 PARKER HP1500	DNP PVM FASTER PVVM SNAP-TITE 76	DNP PVS ENERPAC C-604 PARKER 3000 STUCCHI IVHP

Fluid transfer couplings - Molding



J50000



J60000



J70000



FLO-TEMP

Profile		Staubli SPI	Staubli RMI	Staubli RPL	DME
Size		6 & 9 mm	6 & 9 mm	8 & 12 mm	6, 9 & 16 mm
Material	Brass	X	X	X	X
	Stainless steel	X	X	-	-
Working pressure (bar)		50	16	10	14
EATON Series		-	-	-	-
Benefits		<ul style="list-style-type: none"> ▪ Dry break ▪ Minimum entry of air & loss of fluid ▪ Vibration resistant ▪ Double seal when connected 	<ul style="list-style-type: none"> ▪ Plugs available with or without valves 	<ul style="list-style-type: none"> ▪ Large range of end connection 	<ul style="list-style-type: none"> ▪ Sockets available with or without valves
Competitors		STAUBLI SPI/CBI	STAUBLI RMI	STAUBLI RPL	DME PARKER MOLDMATE

Fluid transfer couplings & Check-Valves



W10000



HPC



P2HK* & P2/3ST



R4000

Profile		Aeroquip 5400	CPC PLC	ISO 7241-1 B & ST	-
Size		Dash 8 to 16	1/4"	1/4" & 3/8"	1/8" to 2"
Material	Steel	X	-	-	X
	Brass	X	-	-	X
	Plastic	-	Acetal or Polypropylene	Polypropylene	-
	Stainless steel	-	-	-	X
Working pressure (bar)		up to 125	8	4 & 8	up to 700
EATON Series		5400	-	-	-
Benefits		<ul style="list-style-type: none"> ▪ Dry break ▪ Minimum entry of air & loss of fluid ▪ The plug can be bulkhead mounted ▪ Replacement parts for servicing 	<ul style="list-style-type: none"> ▪ Ergonomically designed for easier handling while making connections ▪ Single mold barb design eliminates leak points ▪ Improved barb design increases tube pull off resistance ▪ High flow rate 	<ul style="list-style-type: none"> ▪ Light weight ▪ Excellent chemical resistance 	<ul style="list-style-type: none"> ▪ Large range of cracking pressure values ▪ Resistant to aggressive fluids and corrosion
Competitors		PARKER 5400 FASTER RF	CPC PLC VALUE PLASTICS XQC LINK TECH 40AC	*PARKER 72KB	-

Hydraulic applications



Industry, transport, construction, mining, oil & gas markets:

- Excavator, handling & lifting equipment hydraulic circuit
- Road sweeper hydraulic connection
- Tractor/trailer hydraulic and breaking circuit connection
- Truck & trailer, crane
- Ride on mower
- Machine tool, hydraulic cylinder, hydraulic test bench
- Tram hydraulic circuit
- ...



Fluid transfer applications



Industry, chemical, energy, medical, transport markets:

- Chemical loading arms - degassing circuit
- Railway, tractor air conditioning circuit
- Refrigerant circuit on food truck
- Chemical, gas fuel transfer
- Wastewater conveyance in nuclear applications
- Moulding or electronic regulation circuits
- Cosmetic substances blending equipment
- SF6 filling in GIS
- ...

Quick connectors

- QUICK SEAL connectors allow easy, quick and direct connection and disconnection of a hose of different shapes:
 - Tube
 - Threaded bore
 - Smooth bore
- They can also be used as dust plugs



Quick connectors



**PR/TC/L-LR-/LB-
LBR/SBP/THV-TH-TK**



B-Q/E-EQ



H-K



CV-XCV

Products	Tube connectors	Self-sealing plugs & filling connectors	Expanding plugs & filling connectors	Connecto-valves
Material	Steel, aluminium and stainless steel			
Working pressure (bar)	up to 44	35	up to 7	up to 4
Benefits	<ul style="list-style-type: none"> PR: independent locking & sealing actuation PR: automatic self-locking retention End tube, inside or outside diameter type seals Straight, expanded, beaded, barbed tubes 	<ul style="list-style-type: none"> Smooth bore & threaded bore connection 	<ul style="list-style-type: none"> Smooth bore & threaded bore connection 	<ul style="list-style-type: none"> Smooth bore & threaded bore connection Include a built-in automatic valve for connecting gas or any low pressure lines to standard threaded opening
Competitors	WEH - FASTER - CINCINNATI TEST SYSTEMS - RAMER - STERLING PCU - NITTO KOHKI			

Fluid transfer applications



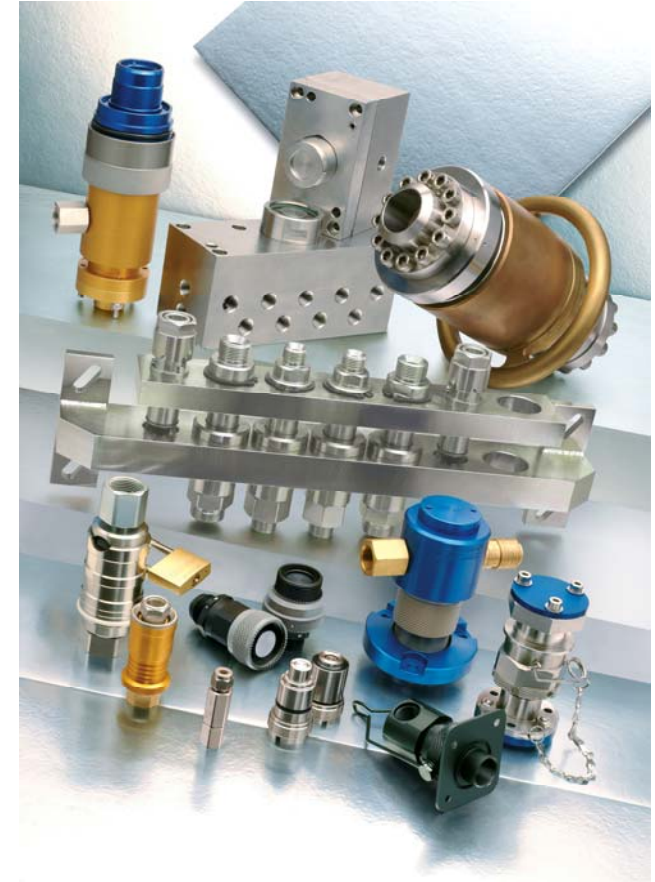
Industry, chemical, energy, automotive markets:

- Thermal lance used with oxygen to clear the pour in steel mill.
- Refrigeration testing and filling
- Connection to a gas cylinder
- Filling automotive radiator
- Gas appliance
- ...



Customized couplings

- A made-to-measure solution to meet users' requirements.
- Couplings developed and manufactured in accordance with 97/23/EC Directive and other Directives to meet the application requirements
- Please contact us!



Customized couplings



For all markets, all applications:

- Aerospace
- Automotive
- Chemical
- Defense
- Gas
- Industry
- Military
- Railway
- Off-shore
- ...



Products - Cross references

- Which EATON and GROMELLE / HANSEN products are similar?

	EATON	GROMELLE HANSEN		EATON	GROMELLE HANSEN
	FD35	UP10		FD31	HP3
	FD45	HK		5400	W10000
	5100	96		FD40	3000/ 4000/ 5000
	5600	H1500/ IA		FD41	210
	FD89/ FD99	FF		FD43	1000/ 400/500

- Cross part numbers can be found in the eRoom