High-pressure connections

Quick connect Products for High-pressure Hydraulic Applications

TIFOR Kft.
Attila u. 101.
1012 Budapest
tel 06 1 **212 99 58**
fax 06 1 **375 49 79**
eMail **info@tifor.hu**
url **www.tifor.hu**

For ultra-high pressure hydrauli
the most complete line of high

Series 135 – 300 MPa. Page 15

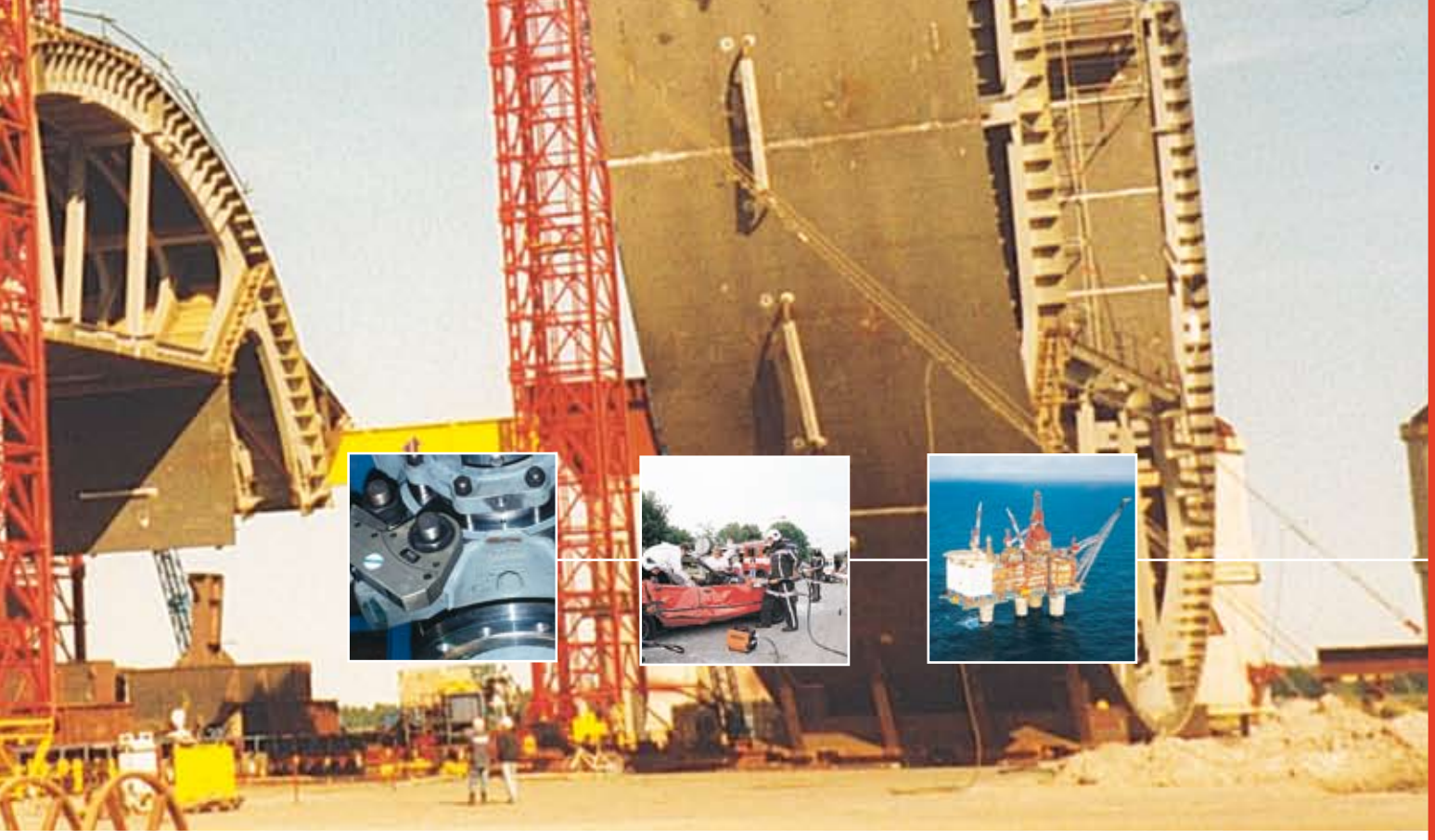
Series 117 – 100 MPa. Page 12

Series 116 – 150 MPa. Page 11

Series 950 – Porting blocks Page 22

Series 230 – Screw-to-connect couplings
70 MPa. Page 16

High pressure hoses – Page 17



cs, CEJN provides industry with performance quick couplings.

Series 115 – 100 MPa. Page 10

Series 125 – 200 MPa. Page 14

Series 950 – Adaptors Pages 20-21

Series 218 – 100 MPa. Page 13

Series 940 – Pressure gauges Pages 18-19

CEJN

CEJN is the world leader in quick connect coupling technology for high pressure hydraulics. With more than 45 years of experience in the industry, we have demonstrated our ability to provide solutions for the most demanding applications. Years of research and development have led to our vast product offering and leading position in non-drip quick couplings technology. Maximum flexibility, safety and reliability are the cornerstones that determine functional design and material selection. The result is a complete range of quick connect couplings especially designed for ultra-high pressure pumps, jacks, clamps, rescue equipment, torque and tensioning tools, diagnostics and other demanding applications.

Quick Connect Features

Although other manufactures may offer couplings under the heading of "quick connect," the ultra-high product range from CEJN is one of the few lines that include a truly quick to connect design; without threads that may bind or only partially connect. The safe, automatic locking system facilitates faster access, particularly suitable for confined areas.

Unique Advantages!

Designed with a non-drip interface, CEJN's series of ultra-high pressure couplings minimize both fluid spillage and air inclusion, saving clean-up costs and our environment, as well as ensuring proper system function.

In order to minimize unexpected downtime and increase reliability, all exposed components are manufactured with hardened steel to provide longer service life in rugged environments. Another advantage of the CEJN ultra-high series is the small envelope size, allowing easy installation and quick access to your fluid lines in confined spaces.

Dust caps are standard

All CEJN couplings are fitted with dust caps as standard. Because dirt and debris have known adverse affects on hydraulic systems, dust caps should always be used whenever the two halves are separated. Additionally, the two dust cap halves should be connected together whenever the coupling halves are connected; thereby preventing contamination from entering the dust caps. As standard practice, both the coupling and nipple halves should be thoroughly inspected and wiped clean prior to every connection.



- a partner to count on with high pressure

High working pressure

With operating pressures as high as 300 MPa, the CEJN product range includes several couplings with a flat-face design, for ease of cleanliness. All coupling halves are designed to withstand the full working pressure while disconnected; however the nipples generally have a lower rated pressure when in the disconnect position.

CEJN's ultra-high pressure product range also includes accessories, such as hose assemblies, adapters, pressure gages and porting blocks.

Quality

Before leaving CEJN's production facility, every coupling is tested multiple times to ensure functionality and performance. Each part is checked before, during and after assembly. Prior to shipment, each coupling is also function and leak tested to ensure that you receive a reliable, proven product.

Low overall cost

CEJN's ultra-high pressure hydraulics range gives you a wide choice of quick connect couplings with cost saving features, such as non-drip valves, dust caps, true "quick-connect" action; plus components made of hardened steel for dependable and repeated cycling, leading to long service life and lower maintenance costs.

Other products from CEJN

CEJN's line of hydraulic products also includes quick connect couplings for low and intermediate pressure applications, as well as multi-couplings and auto-couplings. Contact CEJN for additional information and product bulletins.

Considerations with high pressures

Sealing at ultra-high pressures

CEJN recommends the use of metal-to-metal cone seats for ultra-high pressure hydraulic couplings. For pressures of 70 MPa and above, we have developed a unique seal that incorporates a 120° cone. The 120° cone allows for the seal to take place on a relatively small diameter, which minimizes strain on the threads. Additionally, the threads are straight, not tapered, thereby eliminating the risk of cracked threads under over-torque conditions. Because the CEJN connection has very good sealing properties at low tightening torque, the joint can be reassembled many times without damaging the sealing surfaces.

When using tapered threads, such as NPT or R, we recommend the use of a liquid or paste sealant - not thread tape (i.e. PTFE based tape), which may serve more as a lubricant and lead to cracked components. Thread tape may also become dislodged and find its way into hydraulic components, thereby causing damage or system malfunction.
Rubber-metal seals can be used when sealing parallel threads against boss or components with the appropriate sealing face. Rubber-metal seals should be avoided at pressures above 100 MPa.

Connecting the two halves

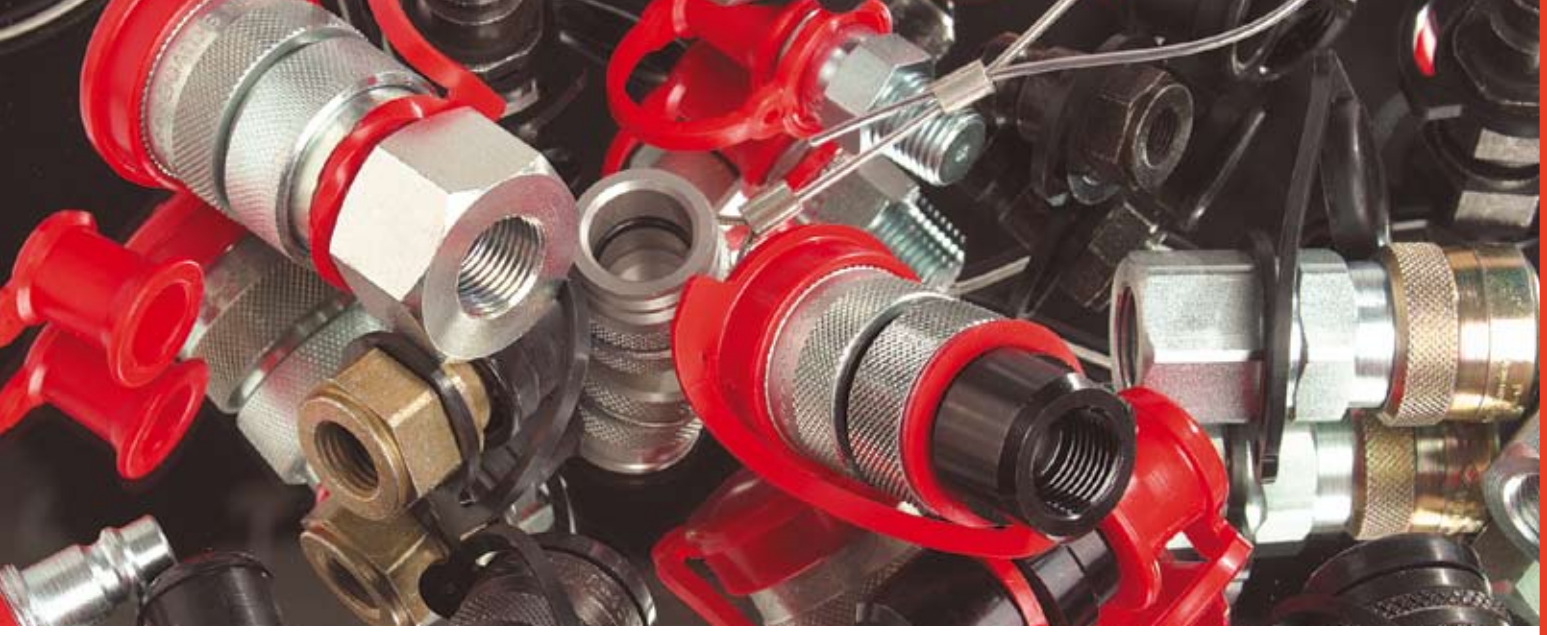
When connecting the two halves, always make sure that the locking sleeve moves forward to ensure a positive lock. Ultra-high pressure series couplings are not designed to be connected under pressure, as seal damage may occur.

Dust caps

Extend product life by using dust caps. Dust or dirt on the coupling/nipple can easily enter the hydraulic system and in doing so impair the oil quality and system performance and in the worse possible scenario result in production downtime.

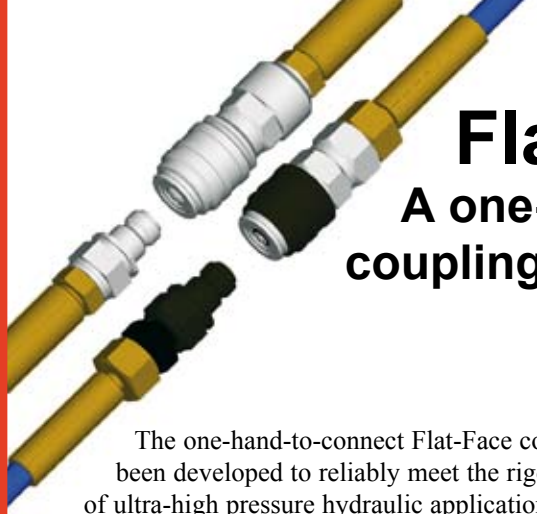
CEJN's dust caps can, as an extra safety precaution, be connected together to prevent dust from becoming attached to them when the nipple and coupling are connected.

Despite these precautions, you should still wipe off the coupling and nipple before connection.



Application guide

Application example	115	115 Flat-Face	116	116 Flat-Face	125	135	218	230
Cylinders	X		X	X	X	X	X	X
Spreader	X						X	X
Presses	X						X	X
Puller	X						X	X
Nut runner	X		X	X	X	X	X	X
Bolt tensioner	X		X	X	X	X	X	X
Rescue tools	X	X					X	X
Torque tools	X	X					X	X
Cable cutters	X	X					X	X
Bearing pullers	X		X	X	X	X	X	X
Alignment benches	X						X	X
Hydrostatic testing	X	X	X	X	X	X	X	X
Clamping tool	X		X	X			X	X
Bending tools	X						X	X
Punches	X						X	X



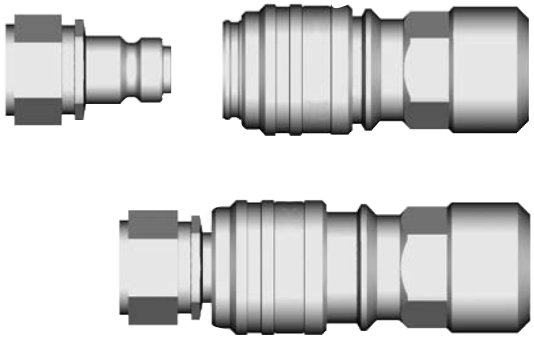
Flat-Face

A one-hand-to-connect, non-drip coupling with built-in safety function

The one-hand-to-connect Flat-Face couplings have been developed to reliably meet the rigorous demands of ultra-high pressure hydraulic applications. Engineered to exacting tolerances, using the most durable materials, CEJN ultra-high pressure couplings hold up where other couplings fail.

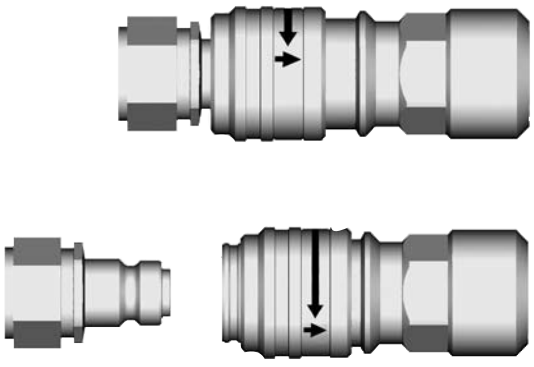
One-hand-to-connect

The nipple is pushed into the coupling and is locked automatically. The locking sleeve does not need to be manually positioned.



Unique automatic safety function eliminates accidental disconnection

Turn the locking sleeve 30° and then pull backwards to release. The Flat-Face design ensures non-drip disconnection



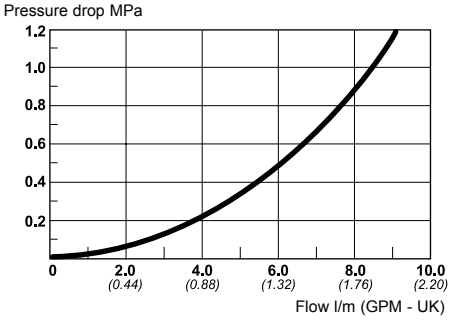
Unique dust cap for nipples, with integrated pressure eliminator

Residual line pressure on the nipple side can sometimes make it difficult to connect the coupling, resulting in unnecessary downtime and frustration. By depressing the button on our new pressure eliminating dust cap, internal pressure is relieved, allowing the two halves to easily connect.

Series 115 FF for rescue equipment

Series 115 in a Flat-Face design has a working pressure of 80 MPa. The series has a light-weight design with an aluminium back-part, which makes the series well adapted for applications where weight has a significance. Series 115 Flat-Face is primarily recommended for rescue equipment, torque tools and cable cutters.

The coupling can be connected to the standard 115 series nipple.



Technical data

Material: Hardened, zinc chromate plated steel
Max. working pressure: 80 MPa
Min. bursting pressure: 280 MPa
Nominal flow diameter: 2.5 mm (3/32")
Temperature range: - 30°C - +100°C (-20°F - + 210°F)
Flow capacity at pressure drop 0,4 MPa: 5.3 l/min (1.16 GPM UK)

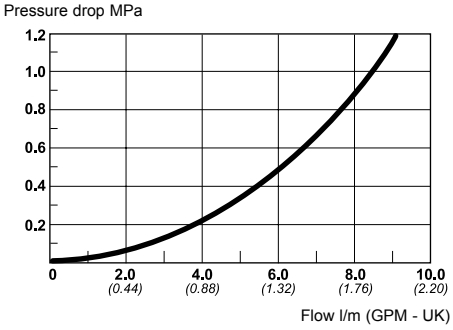
The nipple should not be loaded while disconnected, see also page 26.

		Part No.	Connection	Length	Diamter	Hexagon	Con. stroke	Weight	Rec. torque (Nm)	Rec. Sealing method
COUPLINGS	Female thread	10 115 1200	G 1/4”	70.1	30.0	24	17.3	170	70-80	T

Series 116 FF for industrial applications

Series 116 in a Flat-Face design has a working pressure of 150 MPa. Series 116 Flat-Face is primarily recommended for industrial applications, such as bolt tensioners, splitters and clamping tools.

The coupling can be connected to the standard 116 series nipple.



Technical data

Material: Hardened, zinc chromate plated steel
Max. working pressure: 150 MPa. (3/8" –100 MPa)
Min. bursting pressure: 300 MPa
Nominal flow diameter: 2.5 mm (3/32")
Temperature range: - 30°C - +100°C (-20°F - + 210°F)
Flow capacity at pressure drop 0,4 MPa: 5.3 l/min (1.16 GPM UK)

The nipple should not be loaded while disconnected, see also page 26.

		Part No.	Connection	Length	Diamter	Hexagon	Con. stroke	Weight	Rec. torque (Nm)	Rec. Sealing method
COUPLINGS	Female thread	10 116 1219	G 1/4”	72.1	30.0	24	17.3	215	40-50	CMS
		10 116 1229	G 3/8”	72.6	30.0	24	17.3	225	70-80	T
		10 116 1419	NPT 1/4”	69.1	30.0	24	17.3	225	50-60	-
		10 116 1429	NPT 3/8”	70.6	30.0	24	17.3	220	70-80	-
	Male thread	10 116 1269	G 1/4”	70.6	30.0	24	17.3	205	50-60	T (1*)
		10 116 1279	G 3/8”	70.6	30.0	24	17.3	210	70-80	T
		10 116 1469	NPT 1/4”	70.6	30.0	24	17.3	200	50-60	-
		10 116 1479	NPT 3/8”	70.6	30.0	24	17.3	210	70-80	-

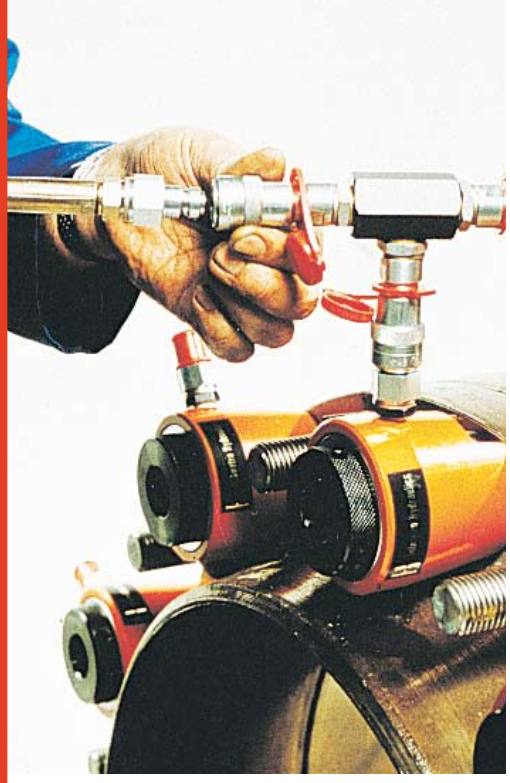
Dust cap in metal for Flat-Face range

For coupling, part no. 10 115 4100

For nipple, part no. 10 115 4101

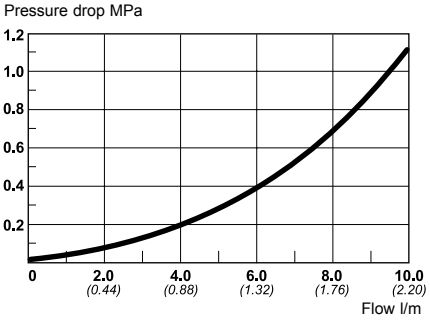
For nipple, with pressure eliminator, part no.10 115 4102

Thread connections are listed according to ISO Standards (see Page 23 for more information). All measurements are in mm (Dimension key, see page 25). Pressure conversion table, see page 24. Check with your local retailer for availability and prices.



Series 115. 100 MPa

Series 115 is available in both standard and Flat-face designs (see page 9). The series is a CEJN original with extremely small outside dimensions and a patented seal design. Non-drip connection and disconnection are standard on the CEJN high pressure range. All exposed components are made of zinc plated steel. The coupling is also available in a design with a safety ring for the locking sleeve to prevent accidental disconnection. Plastic dust caps are standard on both coupling and nipple (dust caps of aluminium can be ordered separately). The nipple is also available in a design with a hose rupture valve, part no. 10 115 6272. In the event of a ruptured hose the nipple closes and prevents the system from being drained of oil, which could have critical consequences for production and the environment. The hose rupture valve closes when the flow exceeds 13.0 litres/minute (2.86 GPM UK).



Technical data

Material: Hardened, zinc chromate plated steel
Max. working pressure: 100 MPa
Min. bursting pressure: 260 MPa.
Nominal flow diameter: 2.5 mm (3/32")
Temperature range: - 30°C - + 100°C (-20°F - + 210°F)
Flow capacity at pressure drop 0,4 MPa: 6.0 l/min (1.32 GPM UK)

The nipple should not be loaded while disconnected, see also page 26.

		Part No.	Connection	Length	Diameter	Hexagon	Con. stroke	Weight (g)	Rec. torque (Nm)	Rec. Sealing method
COUPLINGS	Female thread	10 115 1102	Rc 1/4"	59,3	28,0	24	18,3	170	50-60	-
		10 115 1104	Rc 3/8"	60,8	28,0	24	18,3	165	70-80	-
		10 115 1201	G 1/8"	53,8	28,0	24	18,3	155	40-50	T
		10 115 1202	G 1/4"	61,3	28,0	24	18,3	165	40-50	CMS
		10 115 1204	G 3/8"	63,3	28,0	24	18,3	170	70-80	T
		10 115 1222 safety lock	G 1/4"	61,3	28,0	24	18,3	170	40-50	CMS
		10 115 1401	NPT 1/8"	53,8	28,0	24	18,3	155	40-50	-
		10 115 1402	NPT 1/4"	58,3	28,0	24	18,3	165	50-60	-
		10 115 1404	NPT 3/8"	60,3	28,0	24	18,3	165	70-80	-
		10 115 1422 safety lock	NPT 1/4"	58,3	28,0	24	18,3	170	50-60	-
	Male thread	10 115 1252	G 1/4"	61,3	28,0	24	18,3	151	40-50	T
		10 115 1254	G 3/8"	60,8	28,0	24	18,3	155	70-80	T
		10 115 1452	NPT 1/4"	61,8	28,0	24	18,3	150	50-60	-
		10 115 1454	NPT 3/8"	62,3	28,0	24	18,3	155	70-80	-
NIPPLES	Female thread	10 115 6102	Rc 1/4"	36,7	25,4	22	-	60	30-40	-
		10 115 6104	Rc 3/8"	38,0	27,7	24	-	60	40-50	-
		10 115 6201	G 1/8"	33,3	19,6	17	-	40	40-50	T
		10 115 6202	G 1/4"	38,0	25,4	22	-	60	40-50	CMS
		10 115 6204	G 3/8"	39,5	27,7	24	-	65	70-80	T
		10 115 6401	NPT 1/8"	33,3	19,6	17	-	40	30-40	-
		10 115 6402	NPT 1/4"	35,7	25,4	22	-	55	30-40	-
		10 115 6404	NPT 3/8"	37,0	27,7	24	-	65	40-50	-
	Male thread	10 115 6152	R 1/4"	62,5	25,4	22	-	110	50-60	-
		10 115 6154	R 3/8"	63,0	25,4	22	-	115	70-80	-
		10 115 6212	G 1/4"	50,0	25,4	22	-	80	40-50	T
		10 115 6272 hose rupture valve	G 1/4"	52,0	25,4	22	-	85	40-50	T
		10 115 6452	NPT 1/4"	61,5	25,4	22	-	105	50-60	-
		10 115 6454	NPT 3/8"	62,1	25,4	22	-	115	70-80	-

Plastic dust cap for couplings

Part number 09 115 1002

Plastic dust cap for nipples

Part number 09 115 1053

Thread connections are listed according to ISO Standards (see Page 23 for more information). All measurements are in mm (Dimension key, see page 25). Pressure conversion table, see page 24. Check with your local retailer for availability and prices.

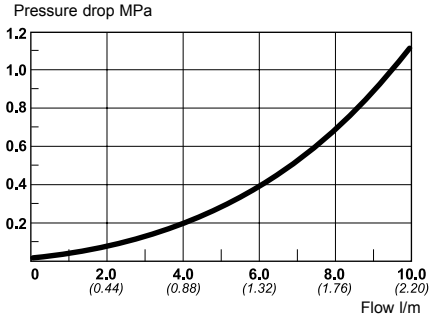
Series 116. 150 MPa.

Series 116 is available in both standard and Flat-face designs (see page 9). The series is a CEJN original with extremely small outside dimensions and a patented seal design. Non-drip connection and disconnection are standard on the CEJN high pressure range. All exposed components are made of zinc plated steel. The coupling is also available in a design with a safety ring for the locking sleeve to prevent accidental disconnection. Plastic dust caps are standard on both coupling and nipple (dust caps of aluminium can be ordered separately). There is a coupling and nipple manufactured of stainless steel and chemically nickel-plated steel available for use in corrosive environments. There is a coupling with a 90°-connection angle for use in confined areas. The range is primarily recommended for cylinders, bolt tensioner tools, bearing pullers, etc.

Technical data

Material: Hardened, zinc chromate plated steel
Max. working pressure: 150 MPa.
Min. bursting pressure: 300 MPa.
Nominal flow diameter: 2.5 mm (3/32")
Temperature range: - 30°C - + 100°C (-20°F - + 210°F)
Flow capacity at pressure drop 0,4 MPa: 6.0 l/min (1.32 GPM UK)

The nipple should not be loaded while disconnected, see also page 26.



		Part No.	Connection	Length	Diameter	Hexagon	Con. stroke	Weight (g)	Rec. torque (Nm)	Rec. Sealing method
COUPLINGS	Female thread									
		10 116 1201	G 1/8”	53,8	28,0	24	18,3	155	40-50	T
		10 116 1202	G 1/4”	61,3	28,0	24	18,3	165	40-50	CMS
		10 116 1222 safety lock	G 1/4”	61,3	28,0	24	18,3	170	40-50	CMS
		10 116 1230 angled connection	G 1/4”	66,6	35	28	18,3	245	50-60	T (1*)
		10 116 1246 safety lock stainless steel (chemical nickel plated steel locking sleeve)	G 1/4”	61,3	28,0	24	18,3	170	40-50	T
		10 116 1402	NPT 1/4”	58,3	28,0	24	18,3	165	50-60	-
		10 116 1422 Safety lock	NPT 1/4”	58,3	28,0	24	18,3	170	50-60	-
NIPPLES	Female thread									
		10 116 6201	G 1/8”	33,3	19,6	17	-	40	40-50	T
		10 116 6202	G 1/4”	38,0	25,4	22	-	60	40-50	CMS
		10 116 6241 stainless steel valve (chemical nickel plated steel body)	G 1/4”	38,0	25,4	22	-	60	40-50	CMS
		10 116 6402	NPT 1/4”	35,7	25,4	22	-	55	30-40	-
	Male thread without valve									
		10 116 5252	G 1/4”	40,5	25,4	22	-	60	80-90	Washer (2*)

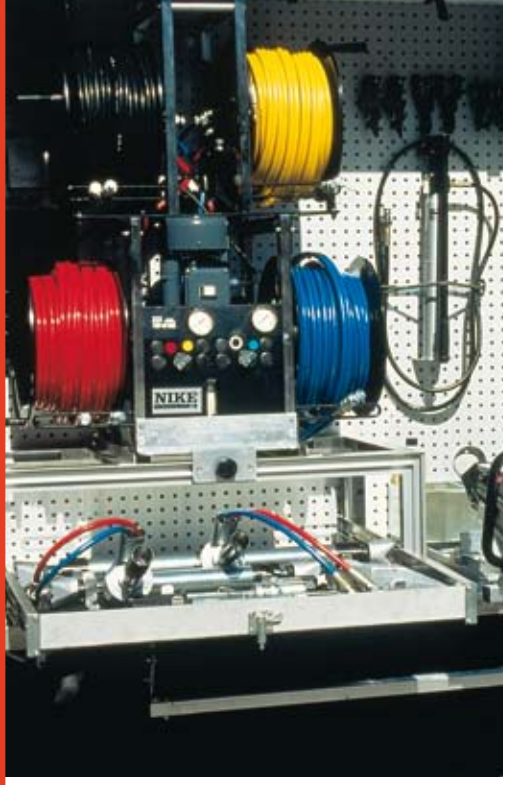
Plastic dust cap for couplings

Part number 09 115 1004

Plastic dust cap for nipples

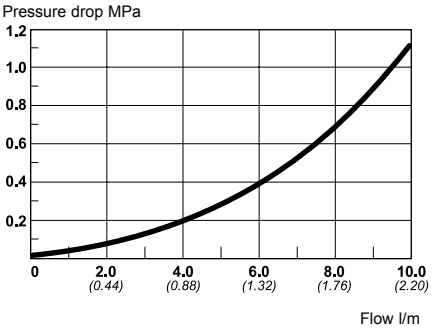
Part number 09 115 1055

Thread connections are listed according to ISO Standards (see Page 23 for more information). All measurements are in mm (Dimension key, see page 25). Pressure conversion table, see page 24. Check with your local retailer for availability and prices.



Series 117. 100 MPa.

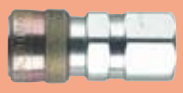
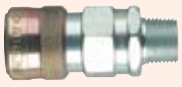
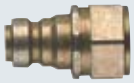
Series 117 is a sister coupling to series 115 and is used alongside the series 115 in applications where the systems must not, under any circumstances, be interconnected. 115 and 117 offer the same performance and qualities, but cannot be connected with one another, which makes them an unbeatable combination for rescue tools, etc. All exposed components are made of zinc plated steel. Plastic dust caps are standard on both coupling and nipple.



Technical data

Material: Hardened, zinc chromate plated steel
Max. working pressure: 100 MPa.
Min. bursting pressure: 260 MPa.
Nominal flow diameter: 2.5 mm (3/32")
Temperature range: - 30°C - + 100°C (-20°F - + 210°F)
Flow capacity at pressure drop 0,4 MPa: 6.0 l/min (1.32 GPM UK)

The nipple should not be loaded while disconnected, see also page 26.

		Part No.	Connection	Length	Diameter	Hexagon	Con. stroke	Weight (g)	Rec. torque (Nm)	Rec. Sealing method
COUPLINGS	Female thread									
		10 117 1202	G 1/4"	61.3	28.0	24	18.3	165	40-50	CMS
		10 117 1232 safety lock	G 1/4"	61.3	28.0	24	18.3	170	40-50	CMS
		10 117 1404	NPT 3/8"	60.3	28.0	24	18.3	165	70-80	-
		10 117 1434 safety lock	NPT 3/8"	60.3	28.0	24	18.3	170	70-80	-
	Male thread									
		10 117 1254	G 3/8"	60.8	28.0	24	18.3	155	70-80	T
		10 117 1454	NPT 3/8"	62.3	28.0	24	18.3	155	70-80	-
NIPPLES	Female thread									
		10 117 6202	G 1/4"	38.0	25.4	22	18.3	60	40-50	CMS
		10 117 6404	NPT 3/8"	37.0	27.7	24	18.3	65	40-50	-

Plastic dust cap for couplings

Part number 09 115 1004

Plastic dust cap for nipples

Part number 09 115 1055

Thread connections are listed according to ISO Standards (see Page 23 for more information). All measurements are in mm (Dimension key, see page 25). Pressure conversion table, see page 24. Check with your local retailer for availability and prices.

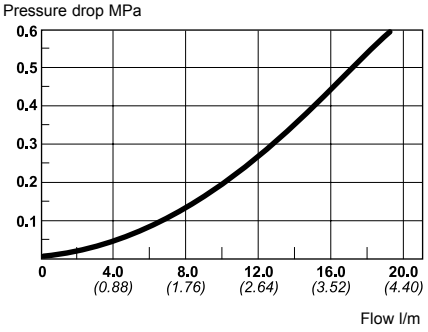
Series 218. 100 MPa.

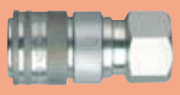
The series 218 is a CEJN original that, despite very small outside dimensions, gives an extremely high flow. Both the patented sealing design and non-drip connection and disconnection are standard on CEJN's high pressure range. The coupling also has a safety ring for the locking sleeve to prevent accidental disconnection. Plastic dust caps are standard on both coupling and nipple. The series is an allround coupling that works well in most applications, even if it is mainly recommended where large flow rates are required.

Technical data

Material: Hardened, zinc chromate plated steel
Max. working pressure: 100 MPa.
Min. bursting pressure: 280 MPa.
Nominal flow diameter: 4.5 mm (11/64")
Temperature range: - 30°C - + 100°C (-20°F - + 210°F)
Flow capacity at pressure drop 0,4 MPa: 15,0 l/min (3.30 GPM UK)

The nipple should not be loaded while disconnected, see also page 26.



	Part No.	Connection	Length	Diameter	Hexagon	Con. stroke	Weight (g)	Rec. torque (Nm)	Rec. Sealing method
COUPLINGS	Female thread								
	10 218 1234	G 3/8"	73,4	34,6	30	20,1	340	70-80	T
	10 218 1434	NPT 3/8"	73,4	34,6	30	20,1	330	70-80	-
NIPPLES	Female thread								
	10 218 6204	G 3/8"	50,5	27,7	24	-	115	70-80	T
	10 218 6404	NPT 3/8"	49,0	27,7	24	-	110	40-50	-

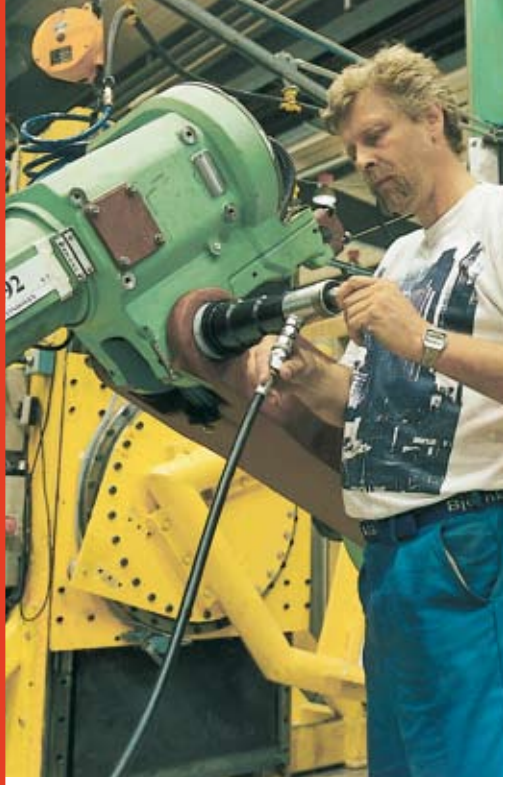
Plastic dust cap for couplings

Part number 09 218 1000

Plastic dust cap for nipples

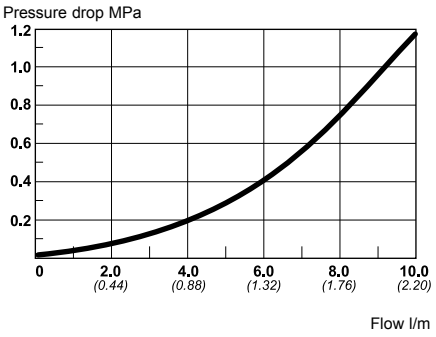
Part number 09 218 1050

Thread connections are listed according to ISO Standards (see Page 23 for more information). All measurements are in mm (Dimension key, see page 25). Pressure conversion table, see page 24. Check with your local retailer for availability and prices.



Series 125. 200 MPa.

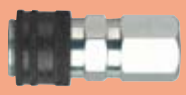
Series 125 is a CEJN original with extremely small outside dimensions and a patented seal design. Non-drip connection and disconnection are standard on the CEJN high pressure range. All exposed components are made of zinc plated steel. Plastic dust caps are standard on both coupling and nipple. The range is primarily recommended for nut runners, bearing pullers, etc.



Technical data

Material: Hardened, zinc chromate plated steel
Max. working pressure: 200 MPa.
Min. bursting pressure: 400 MPa.
Nominal flow diameter: 2.5 mm (3/32")
Temperature range: - 30°C - + 100°C (-20°F - + 210°F)
Flow capacity at pressure drop 0.4 MPa: 5.8 l/min (1.28 GPM UK)

The nipple should not be loaded while disconnected. See also page 26.

		Part No.	Connection	Length	Diameter	Hexagon	Con. stroke	Weight (g)	Rec. torque (Nm)	Rec. Sealing method
COUPLINGS	Female thread									
		10 125 1202	G 1/4"	64.3	30.0	24	20.2	210	40-50	CMS
NIPPLES	Female thread									
		10 125 6202	G 1/4"	38.0	25.4	22	-	60	40-50	CMS
	Male thread without valve									
		10 125 5252	G 1/4"	42.5	25.4	22	-	65	100-110	Washer (2*)

Plastic dust cap for couplings

Part number 09 115 1004

Plastic dust cap for nipples

Part number 09 115 1055

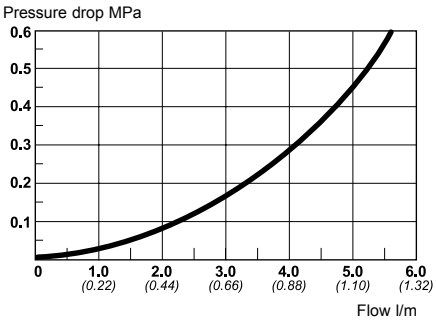
Thread connections are listed according to ISO Standards (see Page 23 for more information). All measurements are in mm (Dimension key, see page 25). Pressure conversion table, see page 24. Check with your local retailer for availability and prices.

Series 135. 300 MPa.

Series 135 is a CEJN original for extremely high working pressure, 300 MPa. The series also withstands pressure up to 300 MPa while disconnected (applies to the coupling and nipple). Non-drip connection and disconnection are standard on the CEJN high pressure range. The coupling also has a safety ring for the locking sleeve to prevent accidental disconnection. Plastic dust caps are standard on both coupling and nipple. Swiveling can cause wear damage over time why the nipple is available in both swivel and non-swivel designs. Each coupling and nipple are pressure tested up to full working pressure before delivery. The series makes it possible to connect pumps and accessories faster, safer and more conveniently, even at extreme pressure. The series is in the first place recommended for bearing pullers, splitters and hydraulic test installations.

Technical data

Material: Hardened black finish steel
Max. working pressure: 300 MPa.
Min. bursting pressure: 600 MPa.
Nominal flow diameter: 2.5 mm (3/32")
Temperature range: -20°C - +80°C (0°F - +175°F)
Flow capacity at pressure drop 0.4 MPa: 4.6 l/min (1.01 GPM UK)
Max. recommended number of pressure cycles
with nipple 10 135 6505: 1000.
with nipple 10 135 6506: 5000.



COUPLINGS

female thread with 60° sealing cone *(interchangeable with both nipple designs)*

Part No.	Connection	Length	Diameter	Key handle	Con. stroke	Weight (g)	Rec. torque (Nm)	Rec. Sealing method
10 135 1505	M16x1.5	64.0	30.0	22	20.6	210	40-50	

Max. working pressure: 300 MPa
Min. bursting pressure: 600 MPa
Temperature range: -20° C - +80° C (0°F - +175°F)
Max. no. of pressure cycles (to max. working pressure) connected with nipple 10 135 6505: 1000
nipple 10 135 6506: 5000

Seal material: Nitrile rubber
Flow diameter: 2.5 mm (3/32")

NIPPLES

Female thread with 60° sealing cone
Standard design

Part No.	Connection	Length	Diameter	Key handle	Con. stroke	Weight (g)	Rec. torque (Nm)	Rec. Sealing method
10 135 6505	M16x1.5	55.3	25.0	22	-	125	40-50	

Max. working pressure: 300 MPa
Min. bursting pressure: 600 MPa
Temperature range: -20° C - +80° C (0°F - +175°F)
Max. no. of pressure cycles connected (to max. working pressure): 1000

Seal material: Nitrile rubber
Flow diameter: 2.5 mm (3/32")

Female thread with 60° sealing cone
Non-swivel design

Part No.	Connection	Length	Diameter	Key handle	Con. stroke	Weight (g)	Rec. torque (Nm)	Rec. Sealing method
10 135 6506	M16x1.5	55.3	25.0	22	-	125	40-50	

Max. working pressure: 300 MPa
Min. bursting pressure: 600 MPa
Temperature range: -20° C - +80° C (0°F - +175°F)
Max. no. of pressure cycles connected (to max. working pressure): 5000

Non-swivel model. Six optional positions are possible when connecting.

Seal material: Nitrile rubber
Flow diameter: 2.5 mm (3/32")

Plastic dust cap for couplings

Part number 09 140 1000

Plastic dust cap for nipples

Part number 09 140 1050

Thread connections are listed according to ISO Standards (see Page 23 for more information). All measurements are in mm (Dimension key, see page 25). Pressure conversion table, see page 24. Check with your local retailer for availability and prices.

Series 230. 70 MPa. Screw-to-connect couplings.

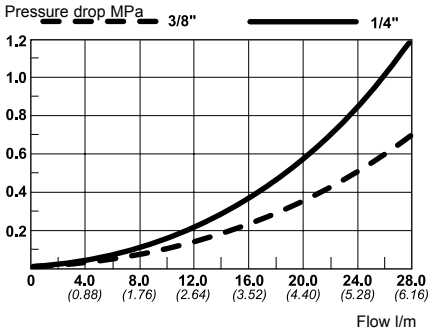
Series 230 is a screw-to-connect series and a good complement to CEJN's large range of quick connect couplings. The series is also characterised by CEJN's quality approach and has a high flow rate capacity. The series can be connected under pressure and is interchangeable with most screw-to-connect couplings. Hand pumps, cylinders and jacks are just a few examples of application areas.

Technical data

Material, coupling: Zinc plated steel.
Material, dust cap: Steel.
Seal: Nitrile NBR.
Max. working pressure: 70 MPa
Min. bursting pressure:

Connected:	1/4" 220 MPa
	3/8" 185 MPa
Coupling disconnected:	1/4" 180 MPa
	3/8" 185 MPa
Nipple disconnected:	1/4" 149 MPa
	3/8" 150 MPa

Nominal flow diameter: 1/4" 5 mm, 3/8" 7 mm
Flow capacity at pressure drop 0,4 MPa:
1/4" 16,1 l/min (3.54 GPM UK)
3/8" 21,2 l/min (4.64 GPM UK)
Temperature range: -30°C - +100°C
(-20°F - + 210°F)



	Part No.	Connection	Length	Diamter	Hexagon	Con. stroke	Weight	Rec. torque (Nm)	Rec. Sealing method
COUPLINGS	Male thread								
	10 230 1452	NPT 1/4"	60.8	28.0	22	18.8	120	50-60	-
	10 230 1484	NPT 3/8"	72.3	35.0	24	25.4	220	70-80	-
NIPPLES	Female thread								
	10 230 6402	NPT 1/4"	32.5	28.0	19	-	75	50-60	-
	10 230 6434	NPT 3/8"	40.0	35.0	32	-	140	70-80	-

Dust caps

10 230 4101
For 1/4" coupling 10 230 1452

10 230 4100
For 1/4" nipple 10 230 6402

10 230 4103
For 3/8" coupling 10 230 1484

10 230 4102
For 3/8" nipple 10 230 6434

Thread connections are listed according to ISO Standards (see Page 23 for more information). All measurements are in mm (Dimension key, see page 25). Pressure conversion table, see page 24. Check with your local retailer for availability and prices.

High pressure hoses 0-262 MPa

Safety in every detail also applies to this special selection of high pressure hoses for hydraulics. Unique material and manufacturing methods guarantee superior characteristics in comparison with traditional rubber hoses. All types can be supplied ready assembled and factory tested in the required length. More connection options than those listed are available on request.

The primary features of the hoses are:

- Small outside dimensions
- Unique wear properties
- Low weight
- Small volumetric expansion
- Superior ageing characteristics
- Maintained flexibility through entire life

Cejn 1000 black - 100 MPa, part no. 99 950 1000

Technical data
Design: inner tube of polyamide (PA) 4 layers of spiral wound steel wire, outer sheath of polyurethane (PUR)
Max. working pressure: 100 MPa.
Min. bursting pressure: 300 MPa.
I.D. x O.D.: 5,9 x 12,0 mm
Min. bending radius: 80 mm
Weight: 237 g/m
Temperature range: -30°C to +60°C (-20°F to +140°F)
- Also available in twin designs

End connections	Part no.
1/4" G male thread with 60° int. sealing cone and seat for Tredo rubber metal seal	99 950 0711
1/4" G male thread with seat for USIT rubber metal seal	99 950 0718
1/4" G male with flat end for cupper washer	99 950 9902
1/4" G male thread with 120° ext. sealing cone (CMS)	99 950 0712
1/4" NPT male thread	99 950 0713
3/8" NPT male thread	99 950 0714
3/8" R male thread	99 950 0715
24° male cone + 1/4" G female svivel nut	99 950 9905 + 99 950 1814
24° male cone + M14*1,5 female svivel nut	99 950 0716 + 99 950 0717

Cejn 1800 blue - 180 MPa, part no. 99 950 1800

Technical data
Design: inner tube of polyoxymethylene (POM) 4 layers of spiral wound steel wire, outer sheath of polymide (PA)
Max. working pressure: 180 MPa.
Min. bursting pressure: 450 MPa.
I.D. x O.D.: 5,0 x11,2 mm
Min. bending radius: 150 mm
Weight: 260 g/m
Temperature range: -30°C to +60°C (-20°F to +140°F)

End connections	Part no.
1/4" G male thread with 60° int. sealing cone and seat for Tredo rubber metal seal	99 950 1811
1/4" G male thread with flat end for cupper washer and seat for USIT rubber metal seal	99 950 9912
1/4" G male thread with 120° ext. sealing cone (CMS)	99 950 1812
24° male cone + 1/4" G female svivel nut	99 950 1813 + 99 950 1814

Cejn 2620 red - 262 MPa, part no. 99 950 2620

Technical data
Design: inner tube of polyoxymethylene (POM) 6 layers of spiral wound steel wire, outer sheath of polymide (PA)
Max. working pressure: 262 MPa.
Min. bursting pressure: 655 MPa.
I.D. x O.D.: 5,0 x 13,4 mm
Min. bending radius: 200 mm
Weight: 450 g/m
Temperature range: -30°C to +60°C (-20°F to +140°F)

End connections	Part no.
1/4" G male thread with 120° ext. sealing cone (CMS)	99 950 2631
24° male cone + 1/4" G female svivel nut	99 950 2632 + 99 950 1814
24° male cone + 9/16"-18 UNF female svivel nut	99 950 2633 + 99 950 2634
M16 x 1.5 male thread with 60° ext. sealing cone	99 950 2635
1/4" G male thread with flat end for cupper washer	99 950 2636

- More connection options available on request.

Thread connections are listed according to ISO Standards (see Page 23 for more information). All measurements are in mm (Dimension key, see page 25). Pressure conversion table, see page 24. Check with your local retailer for availability and prices.

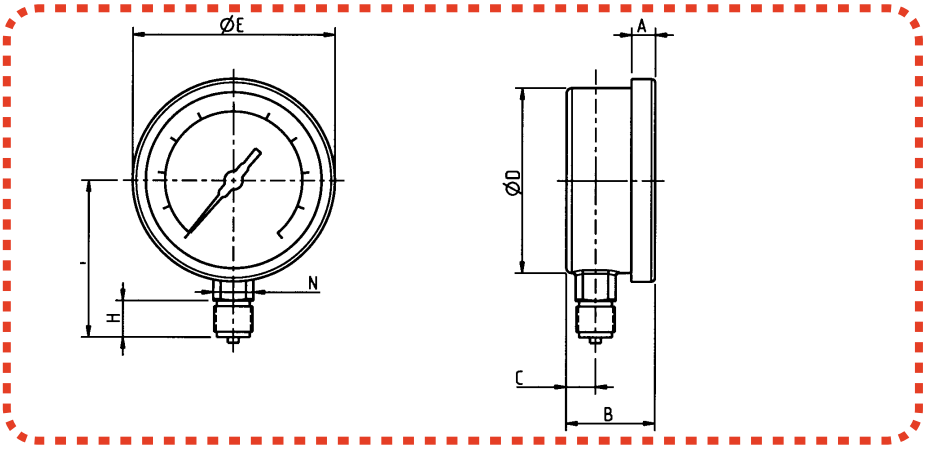
Series 940. Pressure gauges.

CEJN's range comprises of both bottom and panel mounted pressure gauges in models up to 2000 bar (200 MPa). All models are glycerine filled for improved performance and long life. The gauges are made of stainless steel, which means they can be used in dirty and rugged environments. The pressure gauges can be connected by means of a porting block (see page 22).

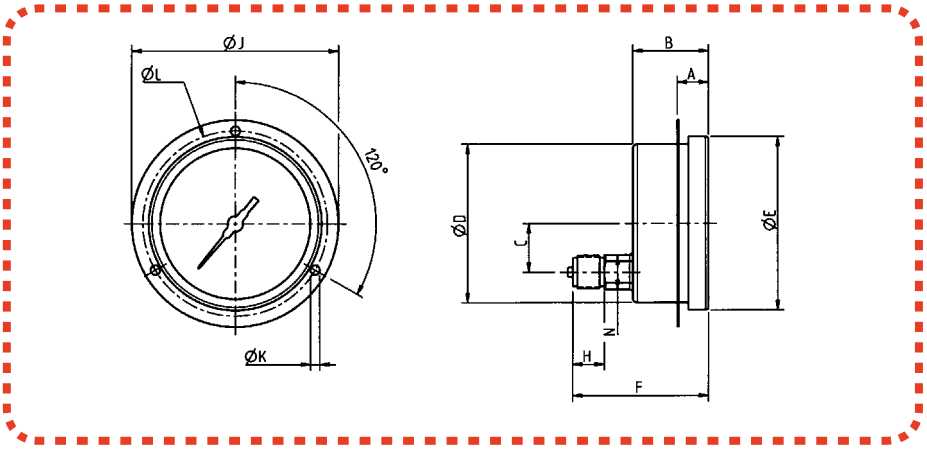
Technical data

Max. recommended working pressure:
75% of the full scale range.
Material: Stainless steel AISI 316 and AISI 304.
Dial face of aluminium with black graduations.
Pointer of aluminium or stainless steel.
Gasket of polychloroprene.
Window of plexiglass.
Units: bar and PSI.
Protection class: IP 65.
Liquid filled with 98% glycerine.
Accuracy: Ø 63 mm +- 1.6% of full scale.
Ø 100 and 150 mm +- 1% of full scale
Temperature range: +15° C - +65° C (+60°F - +150° F)
Miscellaneous: Ø 100 and 150 mm manufactured in accordance with EN 837-1.

Bottom connection. Ø 63 mm. Ø 100 mm. Ø 150 mm.



Panel mounting, rear connection. Ø 63 mm (connection in the centre of the housing). Ø 100 mm. Ø 150 mm.



Product range

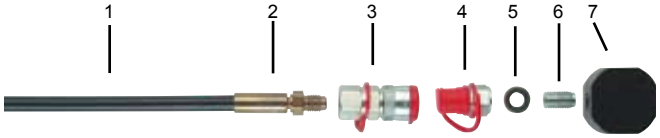
		Part No.	Connection	Scale max. work pressure. bar (PSI)	Dimensions mm A	B	C	D	E	F	H	J	K	L	N
Ø 63 MM	Bottom connection Male thread	19 940 2120	G 1/4"	1000 (14 500)	5,6	28	10	62,6	68	55,3	13	-	-	-	14
		19 940 2121	NPT 1/4"	1000 (14 500)	5,6	28	10	62,6	68	54,3	13	-	-	-	14
Ø 63 MM	Panel mounting Male thread	19 940 2320	G 1/4"	1000 (14 500)	6,6	28	0	62,6	68	54,8	13	85	3,6	75	14
		19 940 2321	NPT 1/4"	1000 (14 500)	6,6	28	0	62,6	68	53,8	13	85	3,6	75	14
Ø 100 MM	Bottom connection Male thread	19 940 3120	G 1/2"	1000 (14 500)	13	48,6	16,1	101	110,6	86	20	-	-	-	22
		19 940 3140	NPT 1/2"	1000 (14 500)	13	48,6	16,1	101	110,6	86	20	-	-	-	22
		19 940 3121	G 1/2"	1600 (23 200)	13	48,6	16,1	101	110,6	86	20	-	-	-	22
		19 940 3122	G 1/2"	2060 (29 870)	13	48,6	16,1	101	110,6	86	20	-	-	-	22
Ø 100 MM	Panel mounting Male thread	19 940 3320	G 1/2"	1000 (14 500)	20	48,6	31	101	110,6	86,8	20	132	6	118	22
		19 940 3321	G 1/2"	1600 (23 200)	20	48,6	31	101	110,6	86,8	20	132	6	118	22
		19 940 3322	G 1/2"	2060 (29 870)	20	48,6	31	101	110,6	86,8	20	132	6	118	22
Ø 150 MM	Bottom connection Male thread	19 940 4120	G 1/2"	1000 (14 500)	15	50,5	16,5	149,6	161	118	20	-	-	-	22
		19 940 4121	G 1/2"	1600 (23 200)	15	50,5	16,5	149,6	161	118	20	-	-	-	22
		19 940 4122	G 1/2"	2060 (29 870)	15	50,5	16,5	149,6	161	118	20	-	-	-	22
Ø 150 MM	Panel mounting Male thread	19 940 4320	G 1/2"	1000 (14 500)	25,5	50,5	47,8	149,6	161	85	20	190	6	175*	22
		19 940 4321	G 1/2"	1600 (23 200)	25,5	50,5	47,8	149,6	161	85	20	190	6	175*	22
		19 940 4322	G 1/2"	2060 (29 870)	25,5	50,5	47,8	149,6	161	85	20	190	6	175*	22

* not in accordance with EN 837-1

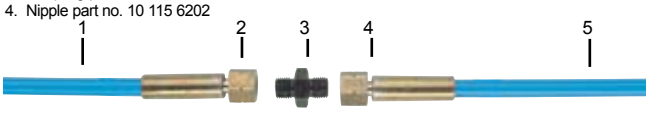
Thread connections are listed according to ISO Standards (see Page 23 for more information). All measurements are in mm (Dimension key, see page 25).
Pressure conversion table, see page 24. Check with your local retailer for availability and prices.

Series 950. Adapters. 100-300 MPa

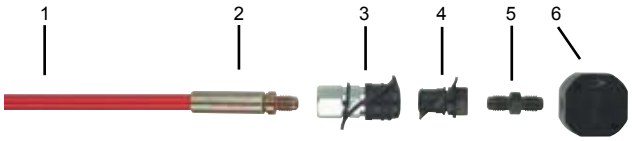
A safe and trouble free connection is essential in all situations. CEJN's extensive range of adapters cover a very wide connection range suitable for most couplings and hoses. All adapters are manufactured of black-zinc plated steel. Working pressure varies between 100 MPa and 300 MPa, see product table for data on respective adapters.



1. Hose type Cejn 1000
2. 1/4" G male thread with 120° ext. sealing cone (CMS) part no. 99 950 0712
3. Coupling part no. 10.115 1202
4. Nipple part no. 10 115 6202
5. Rubber metal seal part no. 19 950 0062
6. Adapter part no. 19 950 0015
7. Porting block part no. 19 950 1680

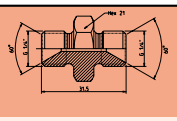
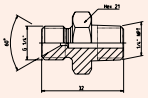
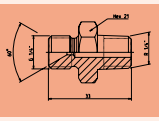
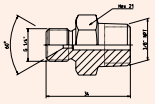
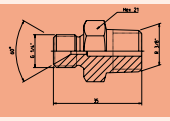
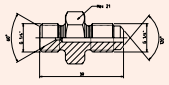
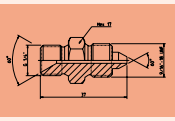
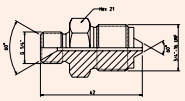
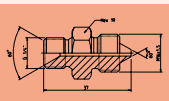


1. Hose type Cejn 1800
2. 1/4" G thread, female swivel with 24°/60° ext. cone part no. 99 950 1813 + 99 950 1814
3. Adapter part no. 19 950 1622
4. 1/4" G thread, female swivel with 24°/60° ext. cone part no. 99 950 1813 + 99 950 1814
5. Hose type Cejn 1800

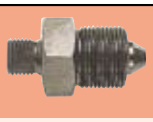
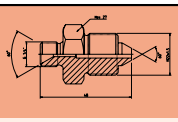
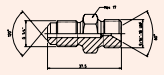
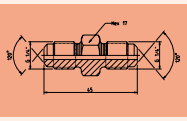
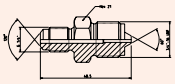
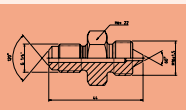
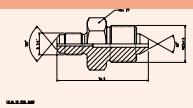
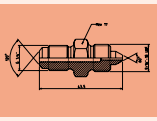
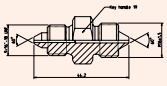
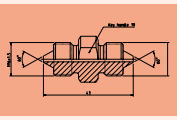
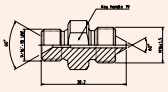
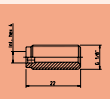
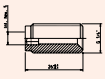
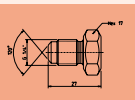


1. Hose type Cejn 2620
2. 1/4" G male thread with 120° ext. sealing cone Cejn metal seal part no. 99 950 2631
3. Coupling part no. 10.125 1202
4. Nipple part no. 10.125 6202
5. Adapter part no. 19 950 1601
6. Porting block part no. 19 950 1680

Product range

Part No. Max. Rec. Working pressure.	Connection 1	Connection 2	Key
19 950 1622 with rubber metal seal 100 MPa with 24/60° cone 200 MPa			1. G 1/4" male thread with 60° internal cone . 2. G 1/4" male thread with 60° internal cone
19 950 1623 100 MPa			1. G 1/4" male thread with 60° internal cone 2. NPT 1/4" male thread
19 950 1621 100 MPa			1. G 1/4" male thread with 60° internal cone 2. R 1/4" male thread
19 950 1603 100 MPa			1. G 1/4" male thread with 60° internal cone 2. NPT 3/8" male thread
19 950 1604 100 MPa			1. G 1/4" male thread with 60° internal cone 2. R 3/8" male thread
19 950 1602 200 MPa			1. G 1/4" male thread with 60° internal cone 2. G 1/4" male thread with 120° external cone
19 950 1605 200 MPa			1. G 1/4" male thread with 60° internal cone 2. 9/16"-18 UNF thread with 60° external cone
19 950 1606 200 MPa			1. G 1/4" male thread with 60° internal cone 2. 3/4"-16 UNF male thread with 60° external cone
19 950 1607 200 MPa			1. G 1/4" male thread with 60° internal cone 2. M16x1.5 male thread with 60° external cone

Thread connections are listed according to ISO Standards (see Page 23 for more information). All measurements are in mm (Dimension key, see page 25). Pressure conversion table, see page 24. Check with your local retailer for availability and prices.

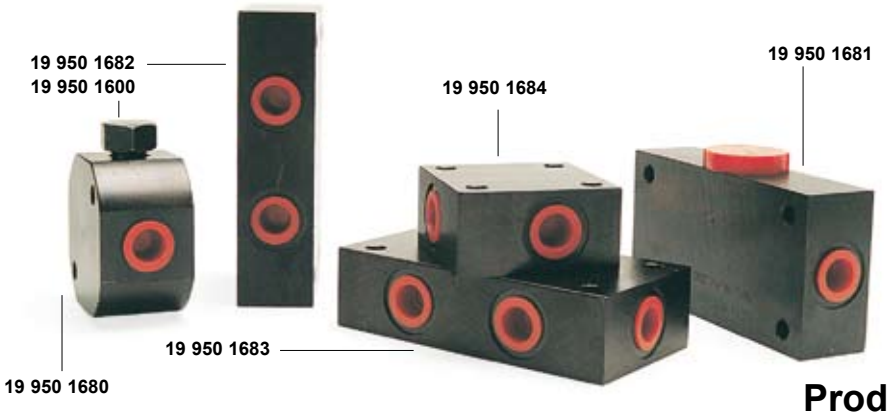
Part No. Max. Rec. Working pressure.	Connection 1	Connection 2	Key
19 950 1608 200 MPa			1. G 1/4” male thread with 60° internal cone 2. M22x1.5 male thread with 60° external cone
19 950 0029 200 MPa			1. G1/4” male thread with 120° external cone 2. 9/16”-18 UNF male thread with 60° internal cone
19 950 1601 300 MPa			1. G 1/4” male thread with 120° external cone 2. G 1/4” male thread with 120° external cone
19 950 1611 200 MPa			1. G 1/4” male thread with 120° external cone 2. 3/4”-16 UNF male thread with 60° external cone
19 950 1610 300 MPa			1. G1/4” male thread with 120° external cone 2. M16x1.5 male thread with 60° external cone
19 950 1609 200 MPa			1. G 1/4” male thread with 120° external cone 2. M22x1.5 male thread with 60° external cone
19 950 0022 300 MPa			1. G 1/4” male thread with 120° external cone 2. 9/16”-18 UNF male thread with 60° external cone
19 950 1613 300 MPa			1. 9/16”-18 UNF male thread with 60° external cone 2. M16x1.5 male thread with 60° external cone
19 950 1612 300 MPa			1. M16x1.5 male thread with 60° external cone 2. M16x1.5 male thread with 60° external cone
19 950 1614 200 MPa			1. 9/16”-18 UNF male thread with 60° internal cone 2. M16x1.5 male thread with 60° external cone
19 950 0016 100 MPa			G 1/8” male, fully threaded
19 950 0015 100 MPa			G 1/4” male, fully threaded
19 950 1600 300 MPa			1. G 1/4” male thread with 120° external cone 2. -

Rubber metal seals

		Part number	Size	Max. working pressure
Tredo		19 950 0061	1/8”	100 MPa
		19 950 0062	1/4”	100 MPa
		19 950 0064	3/8”	100 MPa
		High strength 19 950 0083	1/4”	150 MPa Bursting pressure 260 MPa
USIT		19 950 0084	1/4"	100 MPa
Cupper washer		09 950 4600	1/4"	200 MPa

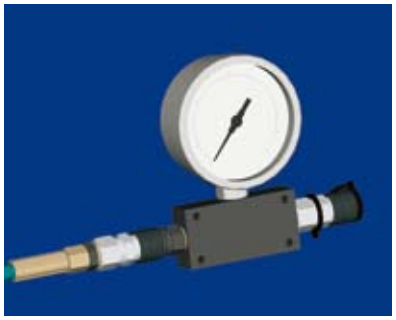
Thread connections are listed according to ISO Standards (see Page 23 for more information). All measurements are in mm (Dimension key, see page 25).
Pressure conversion table, see page 24. Check with your local retailer for availability and prices.

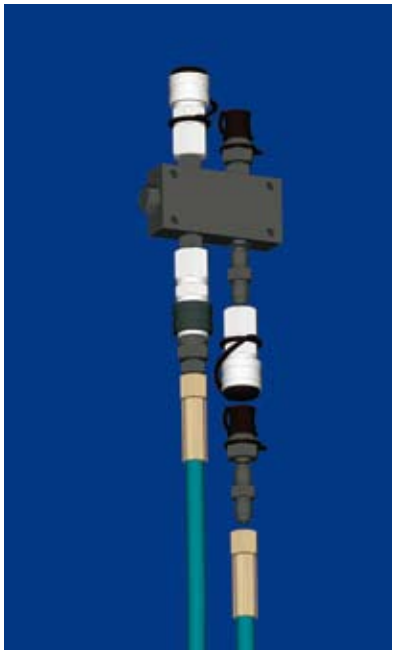
Series 950. Porting blocks 300 MPa.

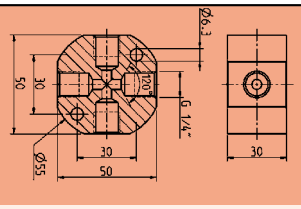
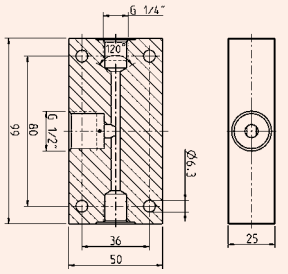
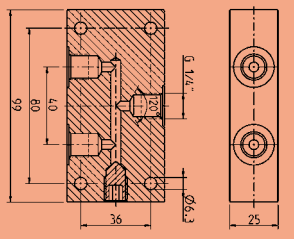
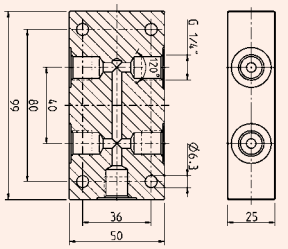
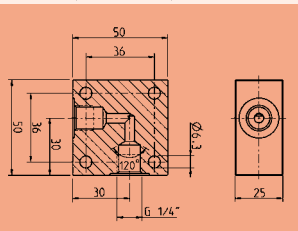


CEJN's porting blocks make it possible to utilise/connect several hydraulic lines from a single pump to numerous tools as well as the possibility of connecting a pressure gauge. The blocks are available in five different sizes and designs with a varying number of ports, see the product table for data on respective blocks. Five different blocks all in black-zinc plated steel. Flow diameter: 5 mm (3/16").

Product range

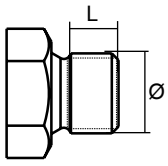
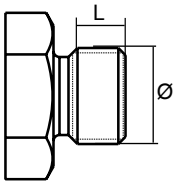
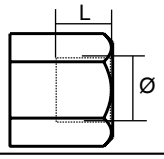
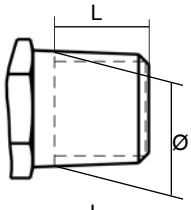
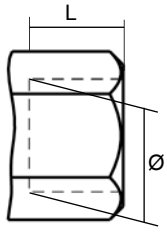
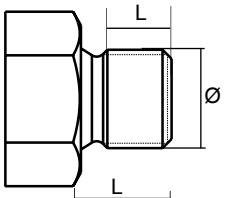
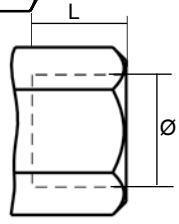
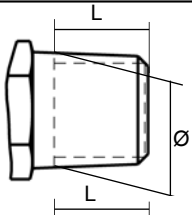
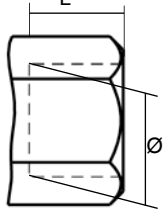




		Part No.	Connection	Max. Working pressure.
PORTING BLOCKS		19 950 1680 4-way distribution block	G 1/4" female thread Seal with 120° sealing cone or rubber metal seal Supplied with one blind plug	300 MPa (100 MPa with rubber metal seal)
		19 950 1681 3-way gauge block	G 1/4" female thread Seal with 120° sealing cone or rubber metal seal Gauge connection G 1/2" Supplied with sealing washer	200 MPa (100 MPa with rubber metal seal)
		19 950 1682 3-way distribution block	G 1/4" female thread. Seal with 120° sealing cone or rubber metal seal	300 MPa (100 MPa with rubber metal seal)
		19 950 1683 5-way distribution block	G 1/4" female thread. Seal with 120° sealing cone or rubber metal seal	300 MPa (100 MPa with rubber metal seal)
		19 950 1684 2-way L-Block	G 1/4" female thread. Seal with 120° sealing cone or rubber metal seal	300 MPa (100 MPa with rubber metal seal)
	Blind plug	19 950 1600	G 1/4" male with 120° sealing cone (CMS)	

Thread connections are listed according to ISO Standards (see Page 23 for more information). All measurements are in mm (Dimension key, see page 25).
Pressure conversion table, see page 24. Check with your local retailer for availability and prices.

Connections and Thread Standards

		Connection	Ø mm	L mm
UNF thread connetion Unified threads according to ISO 68, ANSI B1.1 Male: ie. 9/16"-18 UNF		Male thread 9/16"-18 UNF 3/4"-16 UNF	 14.15 18.89	 9.28 13.08
Metric thread connetion Metric threads according to ISO 68/ISO 724 Male and female: ie. M16x1.5	 	Male thread M16x1.5 M22x1.5 Female thread M16x1.5	 15.85 21.85 14.5	 8.81 15.7 9.0
BSPT thread connetion Conical pipe thread according to ISO 7/1 Male: ie. R 1/4"	 	Male thread R 1/4" R 3/8" Female thread Rc 1/4" Rc 3/8"	 13.6 17.2 11.0 14.5	 11.0 11.4 11.0 11.4
Female: ie. Rc 1/4" (taper)	 	Male thread G 1/4" G 3/8" Female thread G 1/8" G 1/4" G 3/8"	 13.0 16.5 8.75 11.8 15.25	 12.0 12.0 7.4 11.0 12.0
BSP thread connection Cylindrical pipe thread according to ISO 228/1 Male: ie. G 1/4" Female (ISO 1179): ie. G 1/4"	 	Male thread 1/8" NPT 1/4" NPT 3/8" NPT Female thread 1/8" NPT 1/4" NPT 3/8" NPT	 10.5 14.0 17.5 8.5 11.0 14.5	 6.7 10.2 10.4 6.9 10.0 10.3

Units, Conversion Tables and Formulas

Pressure

From	To	Multiply by	Example
MPa (Megapascal) *	bar	10	10 MPa x 10 = 100 bar
MPa	kp/cm^2	10.197	10 MPa x 10.197 = 101.97 kp/cm^2
MPa	PSI	145.0	10 MPa x 145.0 = 1450 PSI
bar (Bar)	kp/cm^2	1.020	10 bar x 1.020 = 10.2 kp/cm^2
bar	MPa	0.1	10 bar x 0.1 = 1.0 MPa
bar	PSI	14.504	10 bar x 14.504 = 145 PSI
kp/cm^2 (kilopound / cm^2)	bar	0.981	10 kp/cm^2 x 0.981 = 9.81 bar
kp/cm^2	MPa	0.0981	10 kp/cm^2 x 0.0981 = 0.981 MPa
kp/cm^2	PSI	14.223	10 kp/cm^2 x 14.223 = 142.2 PSI
PSI (Pounds / square inch)	bar	0.0689	100 PSI x 0.0689 = 6.89 bar
PSI	kp/cm^2	0.0703	100 PSI x 0.0703 = 7.03 kp/cm^2
PSI	MPa	0.00689	100 PSI x 0.00689 = 0.689 MPa
atm (Atmosphere)	bar	1.01325	1.1 atm x 1.01325 = 1.115 bar
atm	kp/cm^2	1.0332	1.1 atm x 1.0322 = 1.137 kp/cm^2
atm	PSI	14.696	1.1 atm x 14.695 = 16.166 PSI
atm	MPa	0.10132	1.1 atm x 0.10132 = 0.111 MPa

Flow

From	To	Multiply by	Example
l/s (liter / second) *	l/min	60	10 l/s x 60 = 600 l/min
l/min (litre / minute)	l/s	0.0167	100 l/min x 0.0167 = 1.7 l/s
l/min	GPM (US)	0.26417	10 l/min x 0.26417= 2.6417 US gallon/min
l/min	GPM (Imperial)	0.22	10 l/min x 0.22 = 2.2 Imperial gallon/min
GPM (US)	l/min	3.7854	10 US gallon/min x 3.7854 = 37.854 l/min
GPM (Imperial)	l/min	4.5461	10 Imperial gallon x 4.5461 = 45.461 l/min

Volume

From	To	Multiply by	Example
m^3 (cubic meter) *	liter	1000	10 m^3 x 1000 = 10 000 liter
m^3	ft^3	35.3	10 m^3 x 35.3 = 353 ft^3
liter (liter)	m^3	0.001	100 liter x 0.001 = 0.1 m^3
liter	ft^3	0.0353	100 liter x 0.0353 = 3.53 ft^3
liter	gallon (US)	0.264	100 liter x 0.264 = 26.4 gallon (US)
liter	gallon (Imperial)	0.220	100 liter x 0.220 = 22.0 gallon (Imperial)
ft^3 (cubic feet)	m^3	0.0283	10 ft^3 x 0.0283 = 0.283 m^3
ft^3	liter	28.32	10 ft^3 x 28.32 = 283.2 liter
gallon (US)	liter	3.785	10 gallon (US) x 3.785 = 37.85 liter
gallon (Imperial)	liter	4.546	10 gallon (Imperial) x 4.546 = 45.46 liter
in^3 (cubic inch)	cm^3	16.387	10 in^3 x 16.387 = 163.87 cm^3
cm^3 (cubic centimeter)	in^3	0.0610	10 cm^3 x 0.0610 = 0.610 in^3

Length

From	To	Multiply by	Example
m (meter) *	ft	3.28083	10 m x 3.28083 = 32.8083 feet
Ft (feet)	m	0.3048	10 feet x 0.3048 = 3.048 m
mm (millimeter)	Inch	0.0393	10 mm x 0.0393 = 0.393 inch
Inch	mm	25.4	10 inch x 25.4 = 254 mm

* SI-unit. international unit according to "Systèm International d'Unités."

Force

From	To	Multiply by	Example
N (Newton) *	kp	0.1020	10 N x 0.1020 = 1.02 kp
N	lbf	0.2248	10 N x 0.2248 = 2.25 lbf
kp (kilogram force)	N	9.806	10 kp x 9.806 = 98.06 N
kp	lbf	2.205	10 kp x 2.204 = 22.05 lbf
lbf (pound force)	kp	0.454	10 lbf x 0.454 = 4.54 kp
lbf	N	4.448	10 lbf x 4.448 = 44.48 N

Mass

From	To	Multiply by	Example
kg (kilogram) *	lb	2.205	10 kg x 2.205 = 22.05 lb
lb (pound)	kg	0.454	10 lb x 0.454 = 4.54 kg

Torque

From	To	Multiply by	Example
Nm (Newton meter)	kpm	0.1020	10 Nm x 0.1020 = 1.02 kpm
Nm	lbfft	0.7376	10 Nm x 0.7376 = 7.38 lbfft
kpm (Kilo pound meter)	Nm	9.81	10 kpm x 9.81 = 98.1 Nm
kpm	lbfft	7.233	10 kpm x 7.233 = 72.33 lbfft
ibfft (pound force foot)	Nm	1.356	10 kpm x 1.356 = 13.56 Nm
ibfft	Nm	0.1383	10 kpm x 0.1383 = 1.38 kpm

Technical Data – Measurement and Units

All technincal data are measured according to CEJN standards, Contact CEJN for more detailed information.

Oil flow: The oil flow is measured within an accuracy of ±5%. The flow rate is valid at viscosity 30 cSt (30 mm^2/s)

Working pressure: Specified in MPa. The working pressure is often stipulated in the varying national and international standards for quick connect coupling.

Burst pressure: Specified in MPa and measured with an accuracy of ±3%.

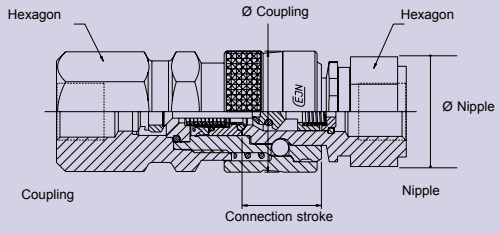
Weight: The weight is measured in "g" (gram) as an average of 10 pcs.

Temperature range: The temperature is measured in Celsius degrees within an accuracy of ±2°C (±3.6°F).

Table key for pages 9-22 – Sealing Method and Dimensions

T - Rubber metal seal, see page 21.
CMS - Cejn Metal Seal (120° cone)

1* = High strength rubber metal seal 19 950 0083
2* = Copper seal 09 950 4600



Sealing Material – Overview

Material	Features	Temperature Range	Media
NBR Nitril Rubber "Buna-N"	Resistant to water, gasoline, grease mineral oil, heat, and alkalis. Sensitive to ozone.	-20°C– +100°C (-4°F– +212°F)	Compressed air Oil, water
FPM Fluorocarbon Rubber "Viton"	It's recommended for gasoline, oils, and acids. Weather-proof. Not recommended for hot steam.	-15°C– +200°C (-5°F– +392°F)	Chemicals Hot air
EPDM Etylene Propylene Rubber "EPDM"/ "EPM"	Good qualities for hot water, alkalines, and acids. Not recommended for mineral oil.	-40°C– +150°C (-40°F– +302°F)	Water

Contact CEJN for more detailed information regarding sealing material and chemical compatibility with CEJN couplings.

Maintanence Advise – High pressure hydraulics Couplings and Nipples

To guarantee a coupling's function, quality and lifetime, be sure to:

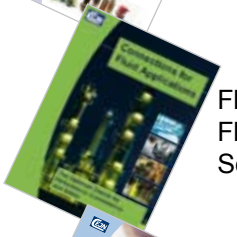
- Dynamic load on nipple while disconnected may lead to seal damage causing leakage in disconnected position. Min. burst pressure on disconnected nipple is always the same as for the corresponding coupling.
- Never over-load the products. Check max.working pressure from catalogue (stated min. burst pressure is only valid for new products that have not been exposed to over-load, impacts, corrosion etc.)
- Keep the coupling and nipple clean and dry. Wipe them off before connection.
- Put the dust caps on when coupling and nipple are in disconnected position.
- In order to keep the dust caps clean, connect them together when coupling and nipple are in connected position.
- Avoid front-end impacts to the coupling and nipple.
- Check the sealing of the coupling and its moving parts regularly. If necessary, replace the coupling.
- Check the nipples on a regular basis. If they are heavily worn or marked, replace them. Worn nipples lead to greater wear on the couplings.
- Choose the proper connection for the application. Oversized connections cause unnecessary wear to the coupling.

Other Products Available from CEJN

To obtain product information or product brochures, contact your nearest CEJN office or representative, or visit us on the Internet at – ***www.cejn.com***

General Product Range

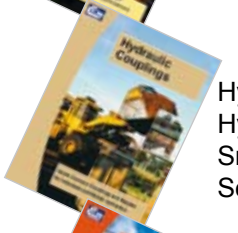
Gas Couplings, complete range



Fluid Couplings, standard range
Fluid Couplings, flat-face
Series 223, cooling water applications

Pneumatic Products, complete range
FRL Products

Breathing Air, complete range



Hydraulic Couplings, standard range
Hydraulic Couplings, flat-face
Snap-Check Pressure Testing System
Series 525, with pressure eliminator

High-Pressure Hydraulic Products, complete range

WEO Plug-In Hose Fittings, image brochure
WEO Plug-In Hose Fittings, product range

Autocouplings, multiple connection system applications
Quick-Seal
Multi-Snap

The Global

Quick Connect Specialist

Traditions and Innovations.
Quick connect couplings and systems for compressed air, low and high pressure hydraulics, fluids, gases and breathing air applications.

www.cejn.com

TIFOR Kft.
Attila u. 101.
1012 Budapest
tel 06 1 **212 99 58**
fax 06 1 **375 49 79**
eMail **info@tifor.hu**
url **www.tifor.hu**

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