Temperature Range:
-40°C up to +100°C (Nitrile)
-25°C up to +200°C (Viton)
Depending on the medium

Max Working Pressure:
Maximum static working pressure with safety factor 4:1

Description: Thanks to the O-Ring seal, this coupling system can be used for pressures up to 450 bar. The coupling system is available with double shut-off, straight through or with single shut-off. Also available in stainless steel.

Advantages: Straight through minimum pressure drop. Double safety through double O-Ring seal. A safety closing ring prevents unintentional uncoupling. Corrosion resistant.

Applications: Chemical industries, off-shore, deep-sea technology, elevating mechanism, building machinery, materials handling technology.

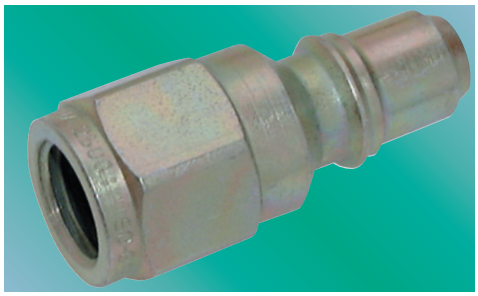
Standard Version:
Coupling: Brass, chromatized, nitrile seal.
Plug: Brass, chromatized, nitrile seal.

Stainless Version: AISI 316, viton seal.

G1/4 TEMA Series T2500

Couplings

0071		bar		Operation
TE-2510	G1/4	500	Nitrile	With valve
TE-2510 UV	G1/4	500	Nitrile	No valve
TE-2510 V	G1/4	500	Viton	With valve
TE-2510 VUV	G1/4	500	Viton	No valve
TE-2510 RV	G1/4	250	Viton	With valve
TE-2510 RVUV	G1/4	250	Viton	No valve

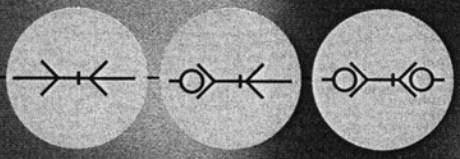


Plugs

0071		bar		Operation
TE-2520	G1/4	500	Nitrile	With valve
TE-2520 UV	G1/4	500	-	No valve
TE-2520 V	G1/4	500	Viton	With valve
TE-2520 RV	G1/4	250	Viton	With valve
TE-2520 RUV	G1/4	250	-	No valve

Nominal Diameter 6,5 = 32 mm²

T2500 series



Technical Description
The coupling system is available as double shut-off, straight-through or with single shut-off version. Single shut-off only on the side of the coupling.
Also available in stainless steel. From series 2500 double O-ring seal.

Connected length in total: 81 mm

Advantages
Straight-through – minimum pressure drop. Double safety through a double O-ring seal. A safety closing ring prevents unintentional uncoupling. Corrosion-resistant. Compact dimensions.

Applications
Chemical industries, Off-Shore, deep-sea technology, elevating mechanism, building machinery, materials-handling technology, industrial plant.

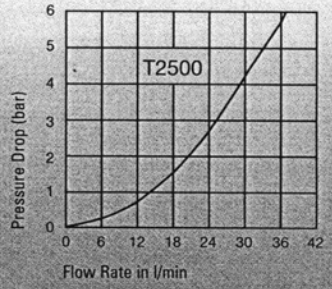
Working Pressure
See chart.

Working Temperature
-40°C up to +100°C (Nitrile)
-25°C up to +200°C (Viton®)

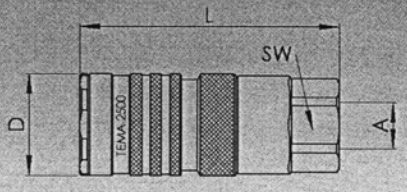
- The sealing material also depends on the flow medium.
- Couplings for higher temperatures on request.

Material	Standard Version	Stainless Steel	Diver's Coupling
Coupling			
Coupling Body	Brass, Chromated	AISI 316	Brass, Chromated
Sleeve	Brass, Chromated	AISI 316	Brass, Chromated
Locking Ring	Brass, Zinc Chromate Conversion Coated	AISI 316	Brass, Zinc Chromate Conversion Coated
Valve	Brass	AISI 316	Brass
Adapter	Brass, Chromated		Brass, Chromated
Springs	AISI 301	AISI 301	AISI 301
Locking Balls	AISI 420 C	AISI 420 C	AISI 304
Seals	Nitrile/Viton®	Viton®	Nitrile
Valve Holder (up to 100°C)	Zinc Casting	AISI 316	Zinc Casting
Valve Holder (over 100°C)	Brass	AISI 316	–
Plug			
Plug Connection Face	Steel Hardened, Yellow Zinc-plated, Aquarez-treated	AISI 316	
Valve	Brass	AISI 316	
Springs	AISI 301	AISI 301	
Seals	Nitrile/Viton®	Viton®	
Pressures			
Bursting Pressure coupled	> 1800 bar	> 1000 bar	> 100 bar
Working Pressure uncoupled	300 bar	250 bar	10 bar

Flow Capacity
Viscosity for 32cSt at 40°C as per ISO 7241/2-2000



Couplings



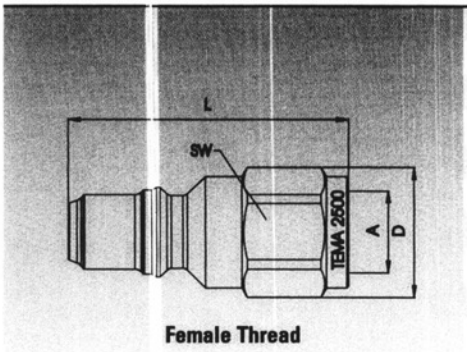
Female Thread

Connection A	SW* mm	L mm	D mm	Valve	Working pressure connected in bar	Version	Seal	Part Number
G 1/4 IG	21	64	25	with	450	Standard	Nitrile	T2510
G 1/4 IG	21	64	25	with	450	Standard	Viton®	T2510 V
G 1/4 IG	21	64	25	with	250	Stainless Steel	Viton®	T2510 RV 3)
G 1/4 IG	21	64	25	without	450	Standard	Nitrile	T2510 UV
G 1/4 IG	21	64	25	without	450	Standard	Viton®	T2510 VUV
G 1/4 IG	21	64	25	without	250	Stainless Steel	Viton®	T2510 RVUV 3)
G 1/4 IG	21	64	25	with	10	Diver's Coupling	Nitrile	T2510 ELRF

Further connections on request.

* SW = dimension over flats

Plugs



Female Thread

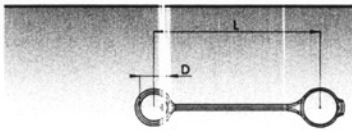
Connection A	SW* mm	L mm	D mm	Valve	Working pressure connected in bar	Version	Seal	Part Number
G 1/4 IG	19	45	21	with	450	Standard	Nitrile	T2520
G 1/4 IG	19	45	21	with	450	Standard	Viton®	T2520 V
G 1/4 IG	19	45	21	with	250	Stainless Steel	Viton®	T2520 RV 3)
G 1/4 IG	19	45	21	with	250	Stainless Steel	Viton®	T2520 RFV 1) 3)
G 1/4 IG	19	45	21	with	170	Stainless Steel	Viton®	T2520 RFV2 1) 2) 3)
G 1/4 IG	19	45	21	without	450	Standard	–	T2520 UV
G 1/4 IG	19	45	21	without	250	Stainless Steel	–	T2520 RUV 3)
G 1/4 IG	19	45	21	without	450	Stainless Steel	–	T2520 RHUV 4)
G 1/4 IG	19	45	21	without	170	Stainless Steel	–	T2520 RFUV 2) 3)

Seal-Kit

Description	Material	Part Number
Coupling	Nitrile	T2500-PSN
Coupling	Viton®	T2500-PSV

Further sealing materials on request.

Dust Protection



Description	L mm	D mm	Material	Colour	Part Number
Coupling	145	44	PVC	Blue	T2516
Plug	145	42	PVC	Blue	T2526

Further colours on request.

1) Valve made of brass
2) Suitable for high pressure water, AISI 303
3) For pulsating pressure, the pressure must not exceed 50% of the given value.
4) Material, AISI 420 hardened
* SW = dimension over flats

The most important sealing materials in TEMA couplings

Sealing-material	TEMA abbreviation	Temperature range	Characteristic properties (general)
Nitrile	N	-40°C - +100°C	Can be used with compressed air. Resistant to heat and many fluids, for example mineral oils, fuel (not biodiesel), water, glycol and grease.
Rubberfluoride Viton	V	-25°C - +200°C	Very high resistance to heat and fluids incl. petrol, oils, biodiesel, grease and aromatic oils. Can be used for steam up to max. +150°C.
EPDM	EP	-50°C - +150°C	Heat-resistant and specially suitable for hot water and steam. Good resistance to brake fluids, glycol and incombustible oils. Not suitable for mineral-based oils and petrol.

Further sealing materials for other media and/or higher temperatures on request.