HYDRAULIC COUPLINGS TEMA®

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

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

Description: Thanks to the double O-Ring seal, this coupling system can be used for pressures of up to 250 bar for the T15000 Series and 200 bar for the T20000 Series. 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 and industrial plants.

Standard Version:
Coupling: Brass, chromatized, nitrile seal.
Valve holder (up to 100°C) Zinc-alloy.
Valve holder (over 100°C) Brass.

Plug: Steel hardened, zinc chromated, nitrile seal.
Valve holder (up to 100°C) Zinc-alloy.
Valve holder (over 100°C) Brass.

Stainless Version: AISI 316, viton seal.

G1.1/2 TEMA Series T15000

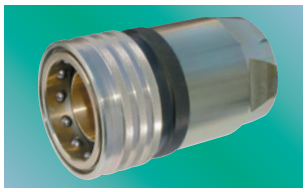
Couplings

0071		bar		Operation
TE-15010	G1.1/2	250	Nitrile	With valve
TE-15010 UV	G1.1/2	250	Nitrile	No valve
TE-15010 V	G1.1/2	250	Viton	With valve
TE-15010 VUV	G1.1/2	250	Viton	No valve

Plugs

0071		bar		Operation
TE-15020	G1.1/2	250	Nitrile	With valve
TE-15020 UV	G1.1/2	250	-	No valve
TE-15020 V	G1.1/2	250	Viton	With valve

G2 TEMA Series T20000



Couplings

0071		bar		Operation
TE-20010	G2	200	Nitrile	With valve
TE-20010 UV	G2	200	Nitrile	No valve
TE-20010 V	G2	200	Viton	With valve

Plugs

0071		bar		Operation
TE-20020	G2	200	Nitrile	With valve
TE-20020 UV	G2	200	-	No valve
TE-20020 V	G2	200	Viton	With valve

Nominal Diameter 35 = 960 mm²

T15000 series

Technical Description
The coupling system is available as straight-through and double shut-off version. Also available in stainless steel and brass.

Connected length in total: 173 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. Pressure eliminator is available for coupling and plug. With pressure eliminator, can be coupled up to operating pressure.

Please note: When ordering a coupling with a pressure eliminator, the corresponding plug must also be equipped with a pressure eliminator.

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

Working Pressure
See chart.

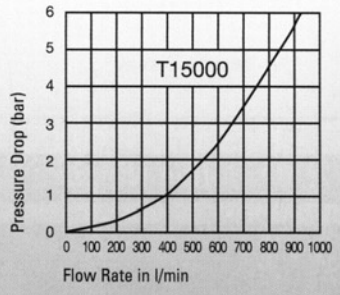
Working Temperature
-40°C up to +100°C (Nitrile)
-25°C up to +200°C (Viton®)

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

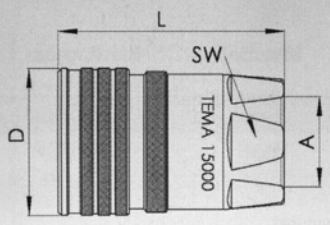
Stainless steel and brass design suitable for use with water.

Material	Standard Version	Stainless Steel	Brass Version
Coupling			
Coupling Body	Steel, Yellow Zinc-plated, Aquarez-treated	AISI 316	Brass
Sleeve	Steel Hardened, Yellow Zinc-plated, Aquarez-treated	AISI 316	Brass
Locking Ring	Brass, Zinc Chromate Conversion Coated	AISI 316	Brass
Valve	Brass	AISI 316	Brass
Springs	AISI 301	AISI 301	AISI 301
Locking Balls	AISI 420 C	AISI 420 C	AISI 420 C
Seals	Nitrile/Viton®	Viton®	Nitrile/Viton®
Valve Holder	AISI 316	AISI 316	AISI 316
Plug			
Plug Connection Face	Steel Hardened, Yellow Zinc-plated, Aquarez-treated	AISI 316	Brass
Valve	Brass	AISI 316	Brass
Springs	AISI 301	AISI 301	AISI 301
Seals	Nitrile/Viton®	Viton®	Nitrile/Viton®
Valve Holder	AISI 316	AISI 316	Brass
Pressures			
Bursting Pressure coupled	>800 bar	>600 bar	>200 bar
Working Pressure uncoupled	180 bar	150 bar	50 bar

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



Couplings

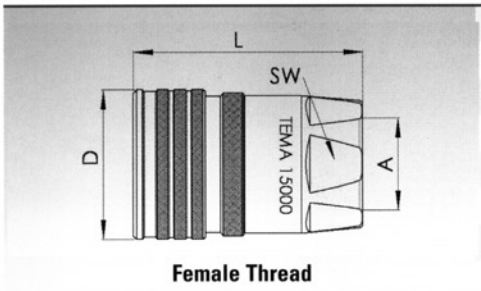


Female Thread

Connection A	SW* mm	L mm	D mm	Valve	Working pressure connected in bar	Version	Seal	Part Number
G 1 1/2 IG	60	112	73	with	200	Standard	Nitrile	T15010
G 1 1/2 IG	60	112	73	with	200	Standard	Viton®	T15010 V
G 1 1/2 IG	60	112	73	with	50	Brass	Nitrile	T15010 M
G 1 1/2 IG	60	112	73	with	50	Brass	Viton®	T15010 MV
G 1 1/2 IG	60	112	73	with	150	Stainless Steel	Viton®	T15010 RV 2)
G 1 1/2 IG	60	112	73	without	200	Standard	Nitrile	T15010 UV
G 1 1/2 IG	60	112	73	without	200	Standard	Viton®	T15010 VUV
G 1 1/2 IG	60	112	73	without	50	Brass	Nitrile	T15010 MUV
G 1 1/2 IG	60	112	73	without	50	Brass	Viton®	T15010 MVUV
G 1 1/2 IG	60	112	73	without	150	Stainless Steel	Viton®	T15010 RVUV 2)

* SW = dimension over flats

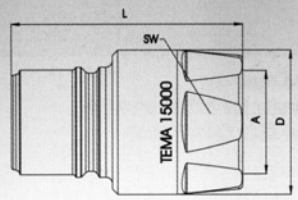
Couplings with Pressure Eliminator



Female Thread

Connection A	SW* mm	L mm	D mm	Valve	Working pressure connected in bar	Version	Seal	Part Number
G 1 1/2 IG	60	112	73	with	200	Standard	Nitrile	T15011
G 1 1/2 IG	60	112	73	with	200	Standard	Viton®	T15011 V

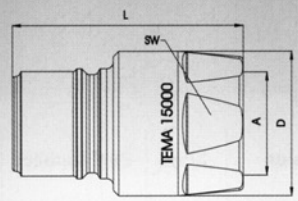
Plugs



Female Thread

Connection A	SW* mm	L mm	D mm	Valve	Working pressure connected in bar	Version	Seal	Part Number
G 1 1/2 IG	60	107	67	with	200	Standard	Nitrile	T15020
G 1 1/2 IG	60	107	67	with	200	Standard	Viton®	T15020 V
G 1 1/2 IG	60	107	67	with	50	Brass	Nitrile	T15020 M
G 1 1/2 IG	60	107	67	with	50	Brass	Viton®	T15020 MV
G 1 1/2 IG	60	107	67	with	150	Stainless Steel	Viton®	T15020 RV [2]
G 1 1/2 IG	60	107	67	without	200	Standard	–	T15020 UV
G 1 1/2 IG	60	107	67	without	50	Brass	–	T15020 MUV
G 1 1/2 IG	60	107	67	without	150	Stainless Steel	–	T15020 RVUV [2]

Plugs with Pressure Eliminator



Female Thread

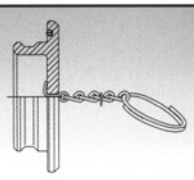
Connection A	SW* mm	L mm	D mm	Valve	Working pressure connected in bar	Version	Seal	Part Number
G 1 1/2 IG	60	107	67	with	200	Standard	Nitrile	T15021
G 1 1/2 IG	60	107	67	with	200	Standard	Viton®	T15021 V
G 1 1/2 IG	60	107	67	with	200	Stainless Steel	Viton®	T15021 RV [2]
G 1 1/2 IG	60	107	67	with	200	Stainless Steel	Viton®	T15021 RFV [1] [2]

Seal-Kit

Description	Material	Part Number
Coupling	Nitrile	T15000-PSN
Coupling	Viton®	T15000-PSV

Further sealing materials on request.

Dust Protection



Description	L mm	D mm	Material	Colour	Part Number
Coupling	310	56	EBA	Black	T15015
Plug	300	56	EBA	Black	T15025

[1] Valve made of brass

[2] For pulsating pressure, the pressure must not exceed 50% of the given value.

* SW = dimension over flats

Nominal Diameter 45 = 1590 mm²

T20000 series

Technical Description
The coupling system is available as straight-through and double shut-off version. Also available in stainless steel.

Connected length in total: 224 mm

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

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

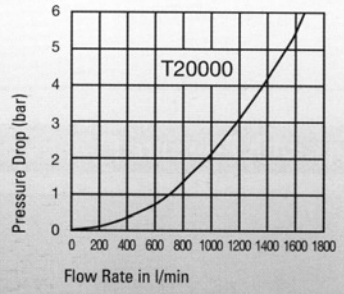
Working Pressure
See chart.

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

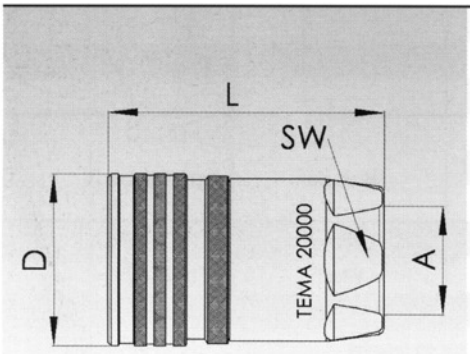
- The sealing material also depends on the flow medium.
- Couplings for higher temperatures on request.

Material	Standard Version	Stainless Steel	Stainless Steel, Hardened
Coupling			
Coupling Body	Steel, Yellow Zinc-plated, Aquarez-treated	AISI 316	AISI 316
Sleeve	Steel Hardened, Yellow Zinc-plated, Aquarez-treated	AISI 316	AISI 420
Locking Ring	Brass, Zinc Chromate Conversion Coated	AISI 316	AISI 316
Valve	Brass	AISI 316	AISI 316
Springs	AISI 301	AISI 301	AISI 301
Locking Balls	AISI 420 C	AISI 420 C	AISI 420 C
Seals	Nitrile/Viton®	Viton®	Nitrile
Valve Holder	AISI 316	AISI 316	AISI 316
Plug			
Plug Connection Face	Steel, Yellow Zinc-plated, Aquarez-treated	AISI 316	AISI 420
Valve	Brass	AISI 316	AISI 316
Springs	AISI 301	AISI 301	AISI 301
Seals	Nitrile/Viton®	Viton®	Viton®
Valve Holder	AISI 316	AISI 316	AISI 316
Pressures			
Bursting Pressure coupled	>720 bar	>480 bar	>520 bar
Working Pressure uncoupled	150 bar	120 bar	130 bar

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



Couplings



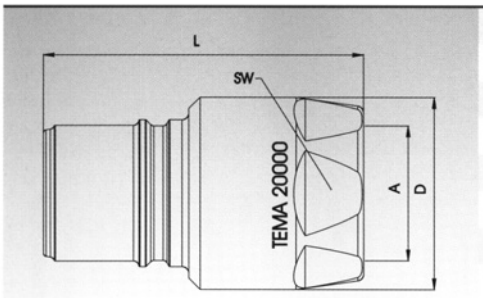
Female Thread

Connection A	SW* mm	L mm	D mm	Valve	Working pressure connected in bar	Version	Seal	Part Number
G 2 IG	75	144	90	with	180	Standard	Nitrile	T20010
G 2 IG	75	144	90	with	180	Standard	Viton®	T20010 V
G 2 IG	75	144	90	with	120	Stainless Steel	Viton®	T20010 RV 1)
G 2 IG	75	144	90	with	130	Stainless Steel, Hard.	Viton®	T20010 RHV 1) 2)
G 2 IG	75	144	90	without	180	Standard	Nitrile	T20010 UV
G 2 IG	75	144	90	without	180	Standard	Viton®	T20010 VUV
G 2 IG	75	144	90	without	120	Stainless Steel	Viton®	T20010 RVUV 1)
G 2 IG	75	144	90	without	130	Stainless Steel, Hard.	Viton®	T20010 RHVUV 1) 2)

Further connections on request.

* SW = dimension over flats

Plugs



Female Thread

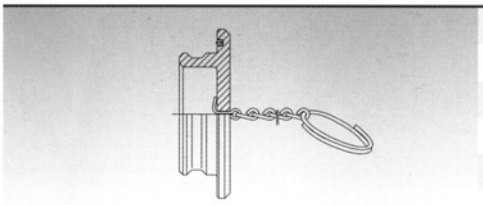
Connection A	SW* mm	L mm	D mm	Valve	Working pressure connected in bar	Version	Seal	Part Number
G 2 IG	75	142	85	with	180	Standard	Nitrile	T20020
G 2 IG	75	142	85	with	180	Standard	Viton®	T20020 V
G 2 IG	75	142	85	with	120	Stainless Steel	Viton®	T20020 RV [1]
G 2 IG	75	142	85	with	130	Stainless Steel, Hard.	Viton®	T20020 RHV [1] [2]
G 2 IG	75	142	85	without	180	Standard	–	T20020 UV
G 2 IG	75	142	85	without	120	Stainless Steel	–	T20020 RUV [1]
G 2 IG	75	142	85	without	130	Stainless Steel, Hard.	–	T20020 RHUV [1] [2]

Seal-Kit

Description	Material	Part Number
Coupling	Nitrile	T20000-PSN
Coupling	Viton®	T20000-PSV

Further sealing materials on request.

Dust Protection



Description	L mm	D mm	Material	Colour	Part Number
Coupling	380	63	EBA	Black	T20015
Plug	380	63	EBA	Black	T20025

[1] For pulsating pressure, the pressure must not exceed 50 % of the given value.
[2] Sleeve and Plug Connection Face made of material AISI 420 hardened

* SW = dimension over flats