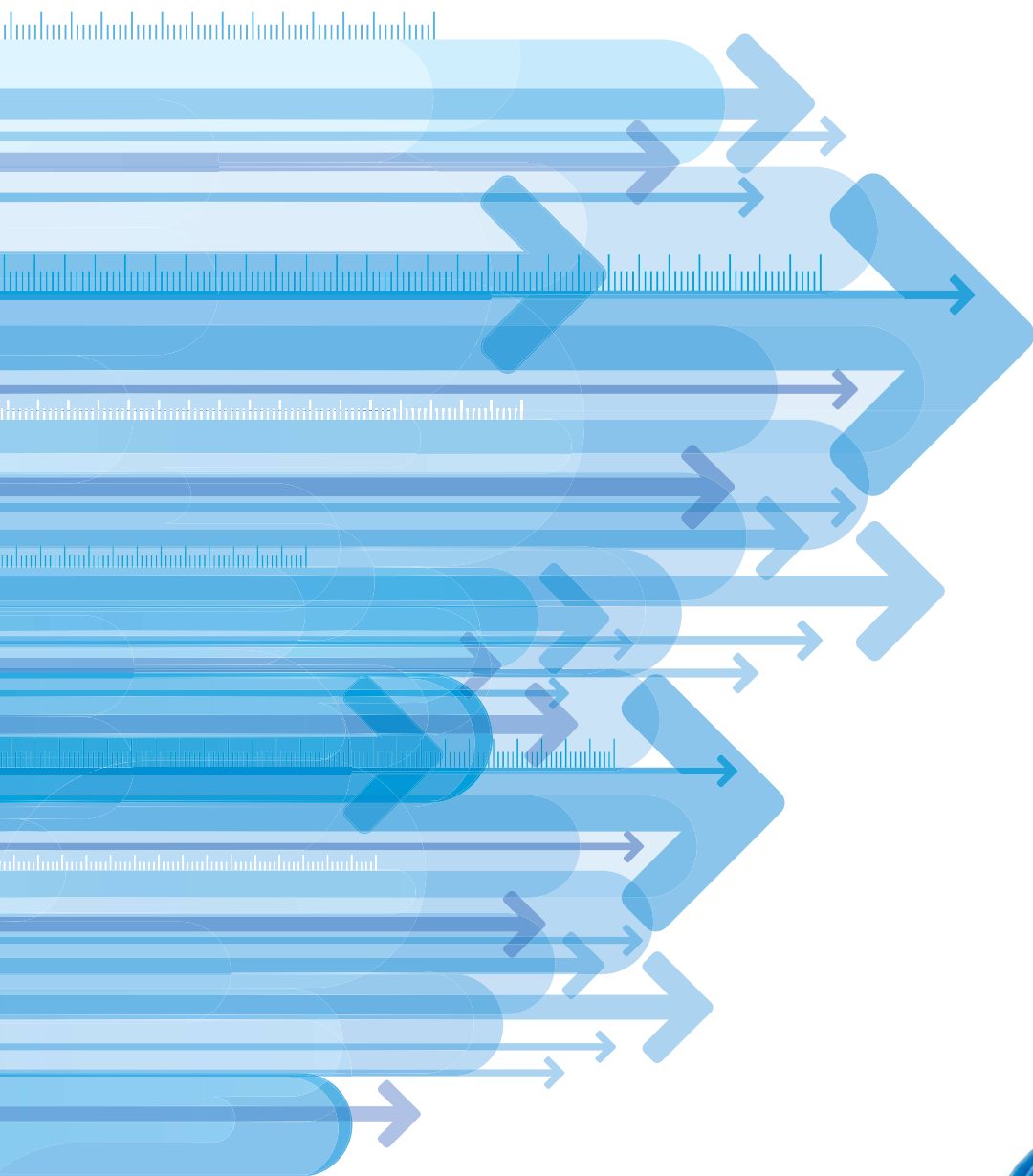




FLOW PRODUCTS

Fittings • Tubes • Valves • Nozzles



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ABOUT TEFEN

Tefen Flow and Dosing Technologies is a manufacturer of fittings and flow products, with more than 40 years of experience in product development. Tefen manufactures and sells a wide range of products in the connecting and fluid categories.

Tefen fittings are simple to use and require no special tools to enable reliable leak-free connections.

Our products serve a broad spectrum of international market sectors such as automation, pneumatics, hydraulics, medical device, and other industrial applications, and are also used for the irrigation industry.

Tefen customers rely on innovative products and solutions that provide uncompromising connections, outstanding performance, unmatched reliability and long service life. Our application-specific solutions create value for our customers and provide them with competitive advantage.

Tefen's dedication to quality and fine customer service has won the confidence of loyal and satisfied customers all over the world.

Tefen is certified for ISO 9001:2008 and we meet international standards.



Recommended Tightening Torque

Thread Size	Nylon 66		PP		PVDF	
	Nm	ft lb	Nm	ft lb	Nm	ft lb
1/8"	0.1	0.07	0.01	0.01	0.1	0.07
1/4"	0.8	0.6	0.3	0.2	1	0.8
3/8"	4	3	1	1	5	3
1/2"	6	4	2	2	8	6
3/4"	8	6	5	4	16	12
1"	10	7	8	6	26	19

Fittings Tolerances (According to ISO 2768-c)

Size mm	Tolerance
1-6	±0.3
6-30	±0.5
30-120	±0.8

Chemical Resistance

	Water		Acids		Detergents	
	Cold	Hot	Weak	Strong	Weak	Strong
LDPE	3	1	3	2	3	3
HDPE	3	3	3	3	3	3
Nylon 6-6	3	2	1	1	3	2
Polypropylene	3	3	3	2	3	3
Acetal	3	3	2	1	3	3
PVDF	3	3	3	3	3	3

1 - Bad

2 - Medium

3 - Good

Note:

Notice tube dimension differ between industries.
Fittings' dimensions refer to tube ID or OD, with respect to the common application.

Use thread seal tape

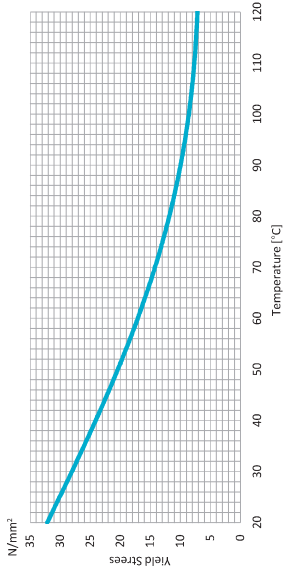


Minimum straight tube segment

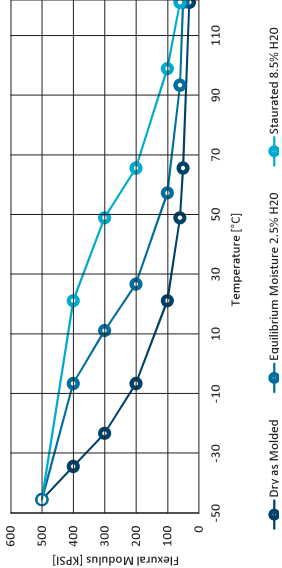


PROPERTIES

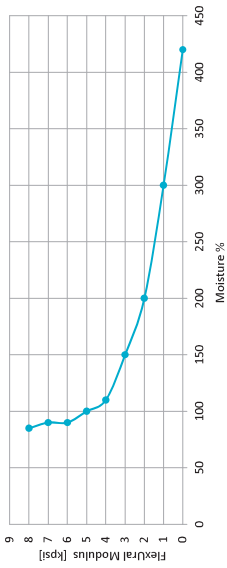
Yield stress of PP as a function of temperature



Flexural modulus VS. temperature



Flexural modulus VS. moisture content at 73 °F



Maintenance

Tefen's fittings require minimum maintenance. Nevertheless, a visual periodic inspection is recommended. If damage or abrasion is spotted, please replace the fitting, and make sure it fits the application.

Disclaimer

All technical data is based on theoretical values and experiments held in Tefen's laboratory. The information in this section is for reference only, and is set to help the designer in his job. Please consult engineering department for further details and advice.

Please Note:

Tefen is constantly seeking ways to improve the specifications of its products. Whilst every effort is made to produce up-to-date literature, this brochure should not be regarded as an infallible guide to current specifications, nor does it constitute an offer for the sale of any particular product. Prospective purchasers of the products from Tefen should satisfy themselves at the time they place the order as to the suitability of the products for the particular application. We have the right to alter specification without prior notice.

Fittings

Tight Push Fittings

Tefen tight push fittings are mechanical compression fittings that can operate with numerous types of common plastic tubes in the range between 4-12 mm (3/16"-1/2").

The fittings sealing system is based on an external NBR oring that seals the tube around it's Outside Diameter. This type of method, can promise full bore passage, for low pressure loss, as well as smooth and uninterrupted internal flow of liquids and air.

Barb Block Fittings

Tefen barb Block fittings are mechanical push-on compression fittings that can operate with numerous types of common plastic tubes in the range between 6-12 mm (1/4"-1/2").

The fittings sealing system is based on a barb and a tightening nut.

How to make the connection: Insert the nut onto the tube, insert the tube onto the barb and then close and secure the nut tightly on the bar support thread.

Main use: for the connection of plastic tubes on hydraulic and pneumatic systems.

Main Advantages: high chemical resistant, very strong resistant for tube pullout, no rubber seals- long lasting fittings.

Barb Connectors

Tefen barb connectors designed to operate with all LDPE tubes class 2.5 and 4, at the range of 12- 25 mm external diameter.

These fittings can work with other flexible plastic and rubber pipes.

The fittings sealing system is based on a barb that holds the tube from the inside diameter.

The fittings size: indicate the nominal outside diameter of the tube.

For example: 16 mm barb fitting, fits a 16 mm irrigation tube class 2.5, with inner diameter of 13.6 mm.

Hose Fittings

Tefen hose fittings are the perfect choice for connecting all types of flexible rubber and plastic tubes in domestic, industrial and all other general applications.

Main advantages:

Strong and durable, high impact resistant, all sizes are true outside diameter of the fittings, and will match identical inside diameter of the tube. In order to secure tube on the fitting barb, one should use press clip like Tefen snap clip or identical metal or plastic clips.

How to use: push the tube onto the barb all the way to the stopper.

Secure the tube with a proper size pressure clip, -tightly.

Fittings - Threaded Connectors

NYLON 6-6



Working pressure
Up to 14 BAR
(200 psi) at 20 °C



Temperature
-20 °C - 110 °C
(subject to application)

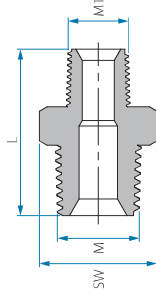
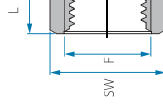
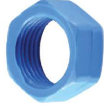
Panel Mounting Nut

Cat. No.	F (BSPT)	L mm	SW	Colour
**32006100042	1/4"	5.0	17	Black
32006100081	1/2"	11.6	26	White
32006100082	1/2"	11.6	26	Black
32006100088	M20	11.6	26	Blue
**32006100201	1/2"	5.0	26	White

Note: Packing 25 unit

* Thin configuration

** Acetal



BSPT Pipe Reducing Nipple

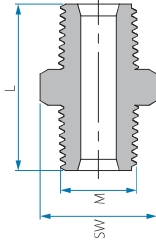
Cat. No.	M (BSPT)	M1 (BSPT)	L mm	SW	Colour
12012304028	1/4"	1/8"	25.2	14	Blue
12012306028	3/4"	1/8"	27.1	17	
12012306048	3/4"	1/4"	28.5	17	
12012308048	1/2"	1/4"	31.5	22	
12012308068	1/2"	3/4"	31.5	22	

Note: Packing 25 unit

NPT Pipe Reducing Nipple

Cat. No.	M (NPT)	M1 (NPT)	L mm	SW	Colour
12012304023	1/4"	1/8"	26.4	14	Grey
12012306023	3/4"	1/8"	26.6	17	
12012308023	1/2"	1/8"	34.3	22	
12012312023	3/4"	1/8"	35.4	27	
12012306043	3/4"	1/4"	33.4	17	
12012308043	1/2"	1/4"	38.7	22	
12012312043	3/4"	1/4"	39.4	27	
12012308063	1/2"	3/8"	38.1	22	
12012312063	3/4"	3/8"	39.6	27	
12012312083	3/4"	1/2"	44.1	27	

Note: Packing 25 unit



BSPT Pipe Hex Nipple

Cat. No.	M (BSPT)	L mm	SW	Colour
12012202028	1/8"	23.2	11	Blue
12012204048	1/4"	27.1	14	
12012206068	3/4"	28.2	17	
12012208088	1/2"	34.1	22	

Note: Packing 25 unit

NPT Pipe Hex Nipple

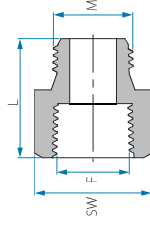
Cat. No.	M (NPT)	L mm	SW	Colour
12012202023	1/8"	23.9	11	Grey
12012204043	1/4"	32.7	14	
12012206063	3/4"	34.4	17	
12012208083	1/2"	43.3	22	
12012212123	3/4"	44.4	27	

Note: Packing 25 unit

BSPT Pipe Adaptor

Cat. No.	F (BSPT)	M (BSPT)	L mm	SW	Colour
12012002028	1/8"	1/8"	23.0	14	Blue
12012002048	1/8"	1/4"	23.0	14	
12012002068	1/8"	3/4"	24.0	14	
12012002088	1/8"	1/2"	26.9	14	
12012004028	1/4"	1/4"	22.1	17	
12012004048	1/4"	1/4"	24.0	17	
12012004068	1/4"	3/4"	24.8	17	
12012004088	1/4"	1/2"	27.2	17	
12012006028	3/4"	1/4"	23.1	22	
12012006048	3/4"	1/4"	25.2	22	
12012006068	3/4"	3/4"	25.7	22	
12012006088	3/4"	1/2"	28.2	22	
12012008028	1/2"	1/2"	25.6	26	
12012008048	1/2"	1/4"	27.3	26	
12012008068	1/2"	3/4"	28.0	26	
12012008088	1/2"	1/2"	30.6	26	

Note: Packing 25 unit



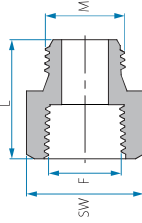
Fittings - Threaded Connectors

NYLON 6-6

Working pressure
Up to 14 BAR
(200 psi) at 20 °C



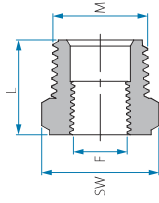
Temperature
-20 °C - 110 °C
(subject to application)



NPT Pipe Adaptor

Cat. No.	F (NPT)	M (NPT)	L mm	SW	Colour
12022002023	1/8"	1/8"	23.4	14	Grey
12022002043	1/8"	1/4"	23.4	14	
12022002063	1/8"	3/8"	27.4	14	
12022002083	1/8"	1/2"	32.5	14	
12022004023	1/4"	1/8"	26.5	17	
12022004043	1/4"	1/4"	30.7	17	
12022004063	1/4"	3/8"	30.5	17	
12022004083	1/4"	1/2"	35.5	17	
12022006023	3/8"	1/8"	26.3	22	
12022006043	3/8"	1/4"	26.5	22	
12022006063	3/8"	3/8"	30.4	22	
12022006083	3/8"	1/2"	35.5	22	
12022008023	1/2"	1/8"	30.0	26	
12022008043	1/2"	1/4"	34.0	26	
12022008063	1/2"	3/8"	36.6	26	
12022008083	1/2"	1/2"	39.0	26	

Note: Packing 25 unit



BSPT Pipe Bushing

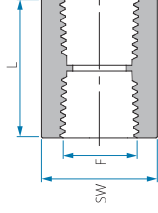
Cat. No.	M (BSPT)	F (BSPT)	L mm	SW	Colour
12010004028	1/4"	1/8"	112	14	Blue
12010006028	3/8"	1/8"	178	17	
12010006048	3/8"	1/4"	178	17	
12010006028	1/2"	1/8"	207	22	
12010006048	1/2"	1/4"	204	22	
12010008068	1/2"	3/8"	207	22	
1201002048	3/4"	1/4"	22.0	27	
1201002068	3/4"	3/8"	22.2	27	
1201002088	3/4"	1/2"	22.4	27	

Note: Packing 25 unit

NPT Pipe Bushing

Cat. No.	M (NPT)	F (NPT)	L mm	SW	Colour
12021004023	1/4"	1/8"	21.0	15	Grey
12021006023	3/8"	1/8"	20.8	18	
12021006043	3/8"	1/4"	20.8	19	
12021008023	1/2"	1/8"	21.2	24	
12021008043	1/2"	1/4"	27.1	19	
12021008063	1/2"	3/8"	27.2	29	
1202102043	3/4"	1/4"	27.0	29	
1202102063	3/4"	3/8"	27.2	29	
1202102083	3/4"	1/2"	27.3	29	

Note: Packing 25 unit



BSPT Female Pipe Coupling

Cat. No.	F (BSPT)	L mm	SW	Colour
12010002021	1/8"	20.0	14	White
12010004042	1/4"	23.6	17	Black
12010032222	3/4"	36.0	34	
12010002028	1/8"	20.0	14	Blue
12010004048	1/4"	23.6	17	
12010006068	3/8"	24.5	21	
12010008088	1/2"	26.7	26	
12010032128	3/4"	36.0	34	

Note: Packing 25 unit

NPT Female Pipe Coupling

Cat. No.	F (NPT)	L mm	SW	Colour
12020002023	1/8"	19.7	14	Grey
12020004043	1/4"	23.5	17	
12020006063	3/8"	24.6	22	
12020008083	1/2"	26.5	27	

Note: Packing 25 unit

BSPT Pipe Reducing Coupling

Cat. No.	F (BSPT)	F1 (BSPT)	L mm	SW	Colour
12019004028	1/4"	22.0	17		Blue
12019006028	3/8"	1/8"	24.5	21	
12019006048	3/8"	1/4"	24.5	21	
12019008048	1/2"	1/4"	22.0	26	
12019008068	1/2"	3/8"	22.0	26	
1201912048	3/4"	1/4"	30.1	34	
1201912088	3/4"	1/2"	35.0	34	

Note: Packing 25 unit

NPT Pipe Reducing Coupling

Cat. No.	F (NPT)	F1 (NPT)	L mm	SW	Colour
12021904023	1/4"	1/8"	22.0	17	Grey
12021906023	3/8"	1/8"	24.4	22	
12021906043	3/8"	1/4"	24.8	22	
12021908043	1/2"	1/4"	22.0	26	
12021908063	1/2"	3/8"	26.8	26	

Note: Packing 25 unit

Fittings - Threaded Connectors

NYLON 6-6

Working pressure
Up to 14 BAR
(200 psi) at 20 °C

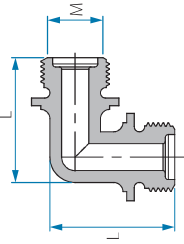


Temperature
-20 °C - 110 °C
(subject to application)

BSPT Threaded Elbow

Cat. No.	M (BSPT)	L mm	Colour
12016502008	1/8"	24.4	Blue
12016504008	1/4"	26.4	
12016506008	3/8"	31.8	
12016508008	1/2"	40.2	
12016502002	1/8"	24.4	Black
12016504001	1/4"	26.4	White
12016504002	1/4"	26.4	Black
12016504007	1/4"	26.4	Green

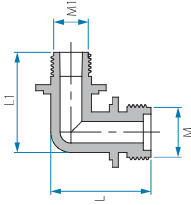
Note: Packing 25 unit



NPT Threaded Elbow

Cat. No.	M (NPT)	L mm	Colour
12026502003	1/8"	23.8	Grey
12026504003	1/4"	28.4	

Note: Packing 25 unit



BSPT Reducing Threaded Elbow

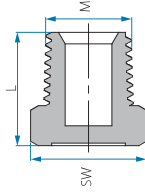
Cat. No.	M (BSPT)	M1 (BSPT)	L mm	L1 mm	Colour
12016904028	1/4"	1/8"	26.4	24.4	Blue
12016906048	3/8"	1/4"	31.8	31.5	
12016908068	1/2"	3/8"	40.0	38.1	

Note: Packing 25 unit

NPT Reducing Threaded Elbow

Cat. No.	M (NPT)	M1 (NPT)	L mm	L1 mm	Colour
12026904023	1/4"	1/8"	28.4	24.0	Grey

Note: Packing 25 unit



BSPT Hex Threaded Plug

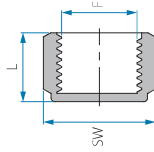
Cat. No.	M (BSPT)	L mm	SW	Colour
1201202008	1/8"	13.6	11	Blue
1201204008	1/4"	16.6	14	
1201206008	3/8"	16.1	17	
1201208008	1/2"	19.6	22	
1201212008	3/4"	22.0	27	
1201216008	1"	27.0	36	
1201204001	1/4"	16.6	14	White
1201204002	1/4"	16.6	14	Black

Note: Packing 25 unit

NPT Hex Threaded Plug

Cat. No.	M (NPT)	L mm	SW	Colour
12022102003	1/8"	14.7	11	Grey
12022104003	1/4"	19.4	14	
12022106003	3/8"	20.4	17	
12022108003	1/2"	25.6	22	
1202212003	3/4"	26.0	27	

Note: Packing 25 unit



BSPT Pipe Cap

Cat. No.	F (BSPT)	L mm	SW	Colour
12010802008	1/8"	10.4	13	Blue
12010804008	1/4"	14.2	17	
12010806008	3/8"	14.2	20	
12010808008	1/2"	17.1	24	
12010812008	3/4"	17.1	30	

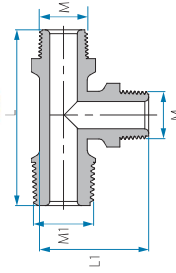
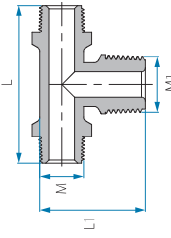
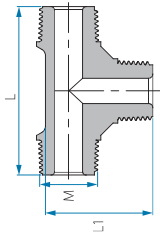
Note: Packing 25 unit

Fittings - Threaded Connectors

NYLON 6-6

Working pressure
Up to 14 BAR
(200 psi) at 20 °C

Temperature
-20 °C - 110 °C
(subject to application)



BSPT Pipe T

Cat. No.	M (BSPT)	L mm	L1 mm	Colour
12016A02008	1/4"	39.8	24.1	Blue
12016A04008	1/4"	44.0	26.2	
12016A06008	3/8"	50.5	32.0	
12016A08008	1/2"	64.0	40.3	

Note: Packing 25 unit

NPT Pipe T

Cat. No.	M (NPT)	L mm	L1 mm	Colour
12026A02003	1/8"	39.3	24.0	Grey
12026A04003	1/4"	48.4	28.5	

Note: Packing 25 unit

BSPT Pipe Reducing Branch T

Cat. No.	M (BSPT)	M1 (BSPT)	L mm	L1 mm	Colour
1207102048	1/8"	1/4"	39.7	26.4	Blue
1207104028	1/4"	1/8"	43.3	24.2	
1207104068	1/4"	3/8"	43.3	38.2	
1207106048	3/8"	1/4"	60.2	26.4	
1207108068	1/2"	3/8"	64.2	38.2	
1207106088	3/8"	1/2"	60.2	40.4	

Note: Packing 25 unit

NPT Pipe Reducing Branch T

Cat. No.	M (BSPT)	M1 (BSPT)	L mm	L1 mm	Colour
12027104023	1/4"	1/8"	46.4	24.0	Grey

Note: Packing 25 unit

BSPT Pipe Reducing Run T

Cat. No.	M (BSPT)	M1 (BSPT)	L mm	L1 mm	Colour
12017204028	1/4"	1/8"	41.8	26.3	Blue
12017206048	3/8"	1/4"	46.3	30.8	
12017208068	1/2"	3/8"	62.0	40.0	
12017202048	1/8"	1/4"	42.7	25.5	
12017204068	1/4"	3/8"	46.5	31.0	
12017206088	3/8"	1/2"	62.0	38.2	

Note: Packing 25 unit

NPT Pipe Reducing Run T

Cat. No.	M (NPT)	M1 (NPT)	L mm	L1 mm	Colour
12027204023	1/4"	1/8"	41.8	26.3	Grey

Note: Packing 25 unit

Fittings - Quick Release

Working pressure
Up to 14 BAR
(200 psi) at 20 °C

Temperature
4 °C - 90 °C
(subject to application)

The special quick connector offers a fast and reliable push-to-connect mechanism. When the plug is disconnected, the socket acts as a shut-off valve. A variety of plugs can be connected and used, according to hydraulic or pneumatic needs.

Quick Release Socket

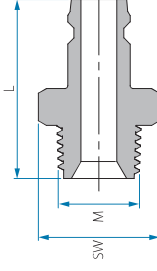
Cat. No.	F (BSPT)	L mm	SW	O-ring	Colour
22081004000	1/4"	44.0	19	NBR	Red
2208104002	1/4"	44.0	19	EPDM	



Plug - External Thread

Cat. No.	M (BSPT)	L mm	SW	Colour
1208104006	1/4"	31.2	17	Red

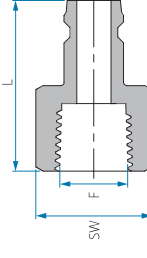
Note: Packing 25 unit



Plug - Internal Thread

Cat. No.	F (BSPT)	L mm	SW	Colour
12081504006	1/4"	28.6	17	Red

Note: Packing 25 unit



Plug - Hose Connector

Cat. No.	ID mm	L mm	D	Colour
12081645006	5	37.8	16.7	Red
12081646006	6	39.8	16.7	
12081648006	8	43.2	16.8	
12081650006	10	43.2	16.8	
12081652006	12	43.2	16.8	

Note: Packing 25 unit

