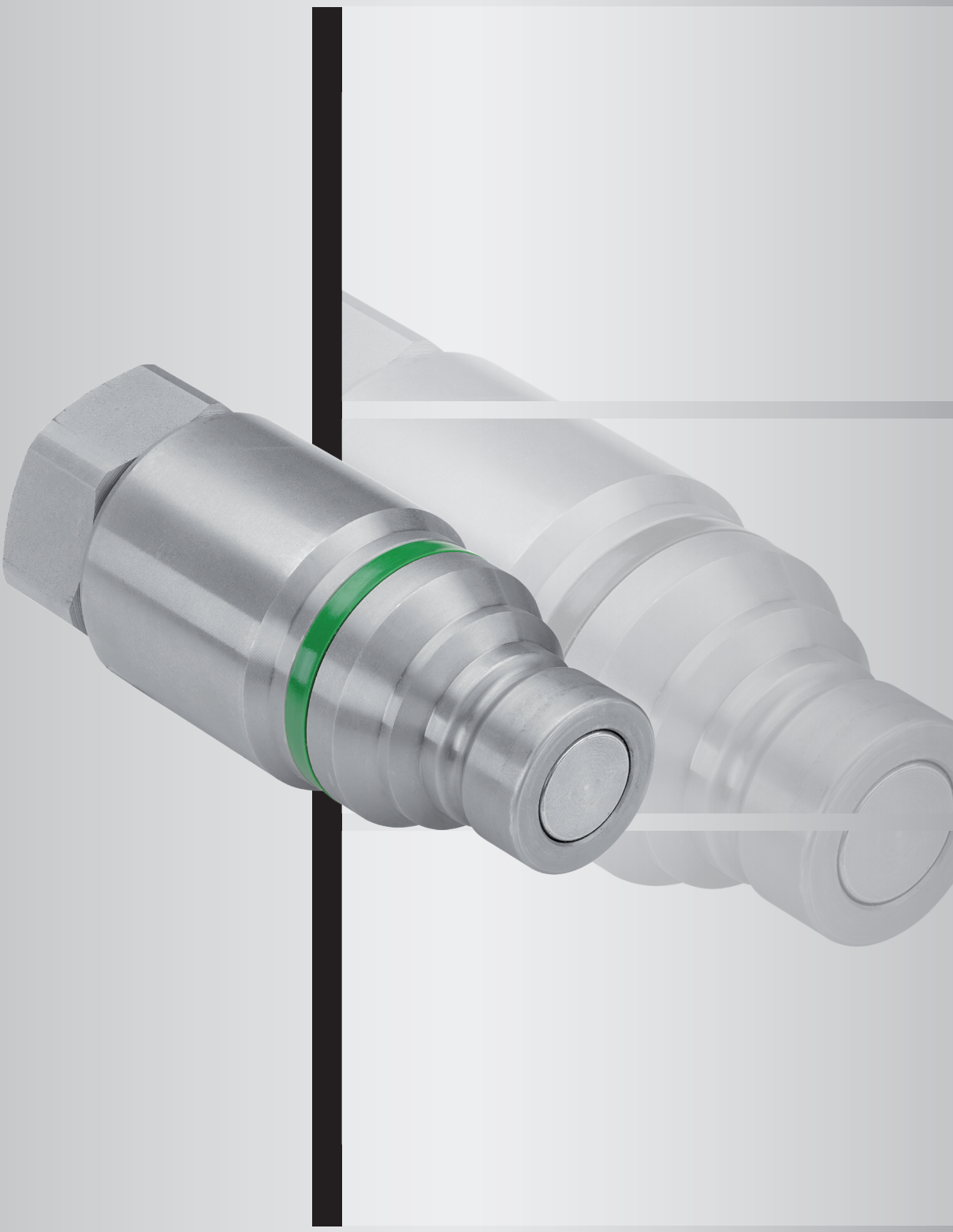
STAUFF®



Series FC

Flat Face Push-to-Connect Couplings

Product Description

Flat Face Push-to-Connect Couplings of the FC series from STAUFF consist of a male tip which is designed according to ISO 16028 and are compatible with couplings of this type.

In combination with Female Bodies of the STAUFF FF series, Male Tips of the FC Series are used to quick and easy connection (push) and disconnection of tubes, pipes and hoses by hand, i.e. without tools.

The Series was developed for coupling under pressure and is available in the following nominal sizes 10, 12, 16, 19, 25 (3/8“ - 1“).

A maximum operating pressure of 350 bar (5076 PSI) can also be achieved in in combination with Female Bodies of the STAUFF FF series (size 10, 12, 16, 19).

The proven design is suitable for use in agricultural and forestry machinery, construction machinery and hydraulic attachments.

Features

- Flat Face
- Coupling made from carbon steel with Zinc/Nickel surface coating
- Connection under pressure allowed with STAUFF Female Bodys of the QRC-FF Series with Male Tips of the QRC-FC Series
- ISO Interchange acc. to ISO 16028
- Maximum working pressure of 350 bar (5076 PSI) in combination with Female Bodies of the STAUFF FF series (sizes 10, 12, 16, 19)
- Powerful flow characteristics with minimal pressure drop
- Heavy internal components

Applications

Agricultural and Forestry Machinery

Construction machinery

Industrial Hydraulic

Top Features

Zinc/Nickel coating

Designed for secure connection

Connect under pressure

Series FC ▪ Carbon Steel

Material	Carbon Steel
Surface Finishing	Zink/Nickel
Standard Seal Material(s)	NBR (Buna-N®), PTFE, PU, POM
Working Temperature	-25° C ... +100° C / -13° F ... +212° F
Valve Design	Flat Face
Connection	Push
Disconnection	-
Connect Under Pressure	up to 250 bar (3626 PSI) allowed (Only Residual Pressure)
Disconnec Under Pressure	-
Application	Agricultural and Forestry Machinery, Construction Machinery, Industrial Hydraulic
ISO Interchange	-

Technical Data

Series	BG	DN Zoll Inch	DN metric ISO 4397	Q_{max} l/min	Q_{max} US GPM	Working Pressure Connected bar	Working Pressure Connected PSI	Working Pressure Male Tip bar	Working Pressure Male Tip PSI	Spillage ml	Spillage fl oz
FC-10	2	3/8"	10	46	12.15	350	5076	350	5076	0,013	.0004
FC-12	3	1/2"	12,5	90	23.77	350	5076	350	5076	0,013	.0004
FC-16	4A	5/8"	16	148	39.09	350	5076	350	5076	0,03	.001
FC-19	4	3/4"	19	200	52.83	350	5076	350	5076	0,05	.002
FC-25	5	1"	25	378	99.86	260	3771	350	5076	0,03	.001

Series	Bursting Pressure Connected bar	Bursting Pressure Connected PSI	Bursting Pressure Male Tip bar	Bursting Pressure Male Tip PSI	Maximum pressure for connecting bar	Maximum pressure for connecting PSI
FC-10	1300	18854	1800	26107	250	3626
FC-12	1400	20305	1500	21756	250	3626
FC-16	1400	20305	1400	20305	250	3626
FC-19	1400	20305	1400	20305	250	3626
FC-25	1150	16679	1400	20305	250	3626

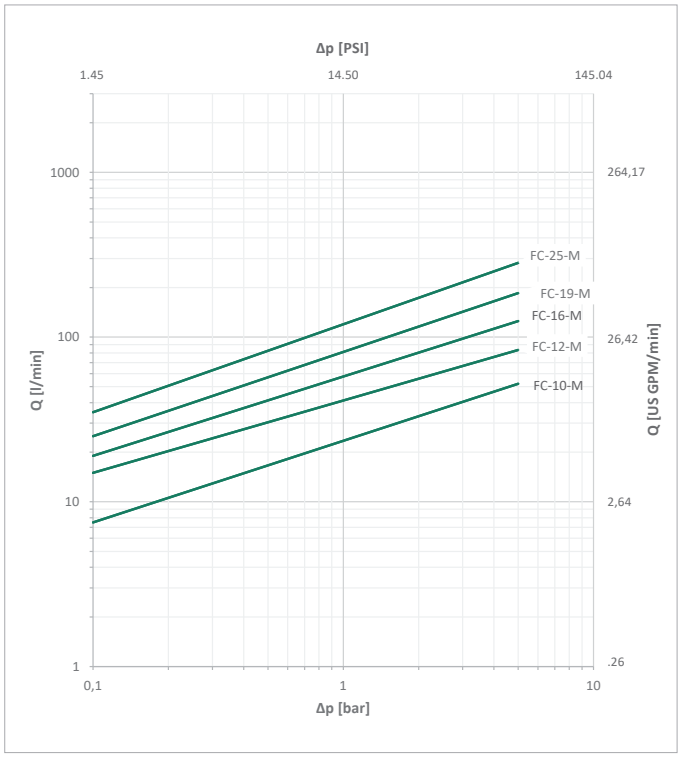
The indicated pressure ratings only apply to the coupling itself and depend on the connection type.

Note:

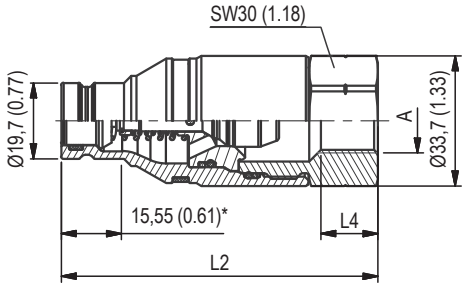
Working pressure only in connection with STAUFF Female Bodys of the QRC-FF Series with Male Tips of the QRC-FC Series.

Bursting pressure connected only in connection with STAUFF Female Bodys of the QRC-FF Series with Male Tips of the QRC-FC Series.

Flow Characteristics

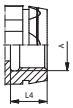


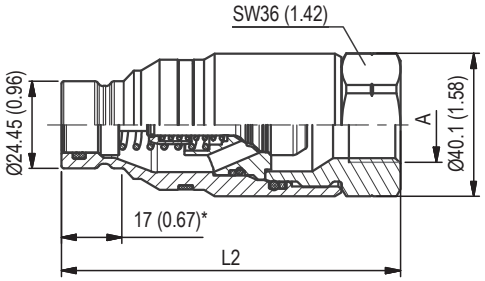
Please note: Unless otherwise stated, all flow characteristics have been determined with hydraulic oil with a kinematic viscosity of 28,8 - 35,2 mm2/s (28,8 - 35,2 cSt) and are only valid for components with non-reducing connections.



* Insertion Male Tip
All dimensions in mm (inch).

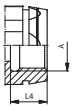
Series FC-10 ▪ BG 2 ▪ Nominal Size 10

	Port A	Dimensions (mm/in) ØD2	L1	L2	L3	L4	Female Body	Weight (kg/lbs) ca. per 100	Male Tip Ordering Codes	Weight (kg/lbs) ca. per 100
	Female Thread according to DIN 3852-2 - ANSI B 1.20.3 - SAE J1926-1 - ISO 11926-1									
	G 3/8"		69	82		13	Connection with STAUFF Female Bodys of the QRC-FF Series with Male Tips of the QRC-FC Series.		QRC-FC-10-M-G06-S5-W3	31,2
			2.72	3.23		.51				68.8
	G 1/2"		69	82		15			QRC-FC-10-M-G08-S5-W3	29,7
			2.72	3.23		.59				65.5
	NPTF 3/8" -18		70	82					QRC-FC-10-M-NF06-S5-W3	31
			7.76	3.23						68.4
	NPTF 1/2"-14		69	82					QRC-FC-10-M-NF08-S5-W3	29,7
			2.72	3.23						65.5
	UNF 9/16" -18		69	82		13			QRC-FC-10-M-U06-S5-W3	31,4
			2.72	3.23		.51				69.2
	UNF 3/4" -16		69	82		14.5			QRC-FC-10-M-U08-S5-W3	30
			2.72	3.23		.57				66.1

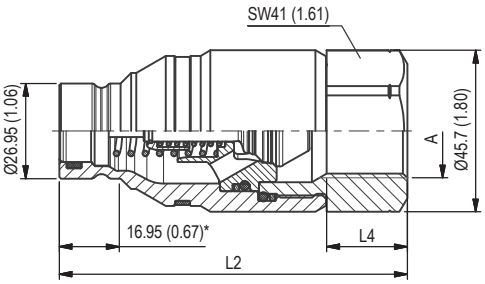


* Insertion Male Tip
All dimensions in mm (inch).

Series FC-12 ▪ BG 3 ▪ Nominal Size 12,5

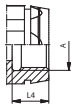
	Port A	Dimensions (mm/in) ØD2	L1	L2	L3	L4	Female Body	Weight (kg/lbs) ca. per 100	Male Tip Ordering Codes	Weight (kg/lbs) ca. per 100
	Female Thread according to DIN 3852-2 - ANSI B 1.20.3 - SAE J1926-1 - ISO 11926-1									
	G 1/2"		84	95		14,5	Connection with STAUFF Female Bodys of the QRC-FF Series with Male Tips of the QRC-FC Series.		QRC-FC-12-M-G08-S5-W3	51,9
			3.31	3.74		.57				114.4
	G 3/4"		84	96		16,5			QRC-FC-12-M-G12-S5-W3	49,5
			3.31	3.77		.64				109.1
	NPTF 1/2" -14		84	95					QRC-FC-12-M-NF08-S5-W3	52,3
			3.31	3.74						115.3
	NPTF 3/4" -14		84	95					QRC-FC-12-M-NF12-S5-W3	49,7
			3.31	3.74						109.6
	UNF 3/4" -16		84	95		16			QRC-FC-12-M-U08-S5-W3	52,3
			3.31	3.74		.63				115.3
	UNF 7/8" -14		84	95		17			QRC-FC-12-M-U10-S5-W3	51
			3.31	3.74		.75				112.4
	UN 1" 1/16 -12		84	97		18			QRC-FC-12-M-U12-S5-W3	49,3
			3.31	3.82		.75				108.7

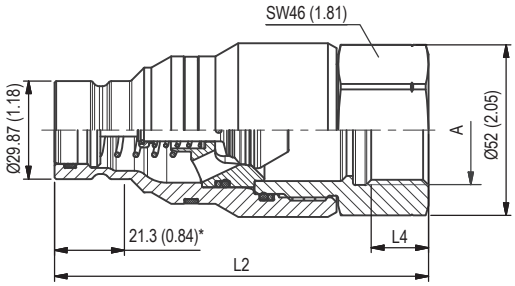
Note: The connection of the two halves of a coupling is achieved depending on the type. It is important to observe the positive engagement of plug-type couplings and the secure tightening of screw-type couplings to the limit stop of the thread. Forced or improper separation will result in malfunction of the coupling.



* Insertion Male Tip
All dimensions in mm (inch).

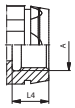
Series FC-16 ▪ BG 4A ▪ Nominal Size 16

	Port A	Dimensions (mm/in) ØD2	L1	L2	L3	L4	Female Body	Weight (kg/lbs) ca. per 100	Male Tip Ordering Codes	Weight (kg/lbs) ca. per 100
	Female Thread according to DIN 3852-2 - ANSI B 1.20.3 - SAE J1926-1 - ISO 11926-1									
	G 3/4"			98,5		22	Connection with STAUFF Female Bodys of the QRC-FF Series with Male Tips of the QRC-FC Series.		QRC-FC-16-M-G12-S5-W3	70
				3.88		.87				154.3
	NPTF 3/4" -14			101,5					QRC-FC-16-M-NF12-S5-W3	68
				3.98						149.9
	UN 1" 1/16 -12			101,5		19			QRC-FC-16-M-U12-S5-W3	69,6
				3.98		.75				153.4

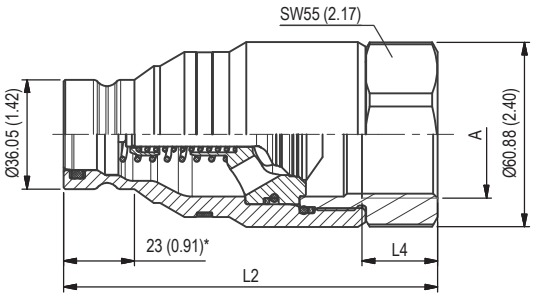


* Insertion Male Tip
All dimensions in mm (inch).

Series FC-19 ▪ BG 4 ▪ Nominal Size 19

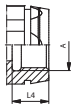
	Port A	Dimensions (mm/in) ØD2	L1	L2	L3	L4	Female Body	Weight (kg/lbs) ca. per 100	Male Tip Ordering Codes	Weight (kg/lbs) ca. per 100
	Female Thread according to DIN 3852-2 - ANSI B 1.20.3 - SAE J1926-1 - ISO 11926-1									
	G 3/4"			114		16,5	Connection with STAUFF Female Bodys of the QRC-FF Series with Male Tips of the QRC-FC Series.		QRC-FC-19-M-G12-S5-W3	102,8
				4.49		.24				226.6
	G 1"			114		17,5			QRC-FC-19-M-G16-S5-W3	95,5
				4.49		.69				210.5
	NPTF 3/4"-14			114					QRC-FC-19-M-NF12-S5-W3	101
				4.49						222.7
	NPTF 1"-11 1/2			114					QRC-FC-19-M-NF16-S5-W3	96,3
				4.49						212.3
	UN 1" 1/16-12			114		19			QRC-FC-19-M-U12-S5-W3	103,7
				4.49		.75				228.6
	UN 1" 5/16-12			114		19			QRC-FC-19-M-U16-S5-W3	96,4
				4.49		.75				212.5

Note: The connection of the two halves of a coupling is achieved depending on the type. It is important to observe the positive engagement of plug-type couplings and the secure tightening of screw-type couplings to the limit stop of the thread. Forced or improper separation will result in malfunction of the coupling.



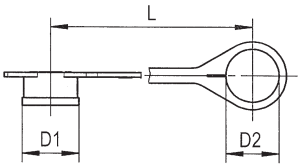
* Insertion Male Tip
All dimensions in mm (inch).

Series FC-25 ▪ BG 5 ▪ Nominal Size 25

	Port A	Dimensions (mm/in) ØD2	L1	L2	L3	L4	Female Body	Weight (kg/lbs) ca. per 100	Male Tip Ordering Codes	Weight (kg/lbs) ca. per 100
Female Thread according to DIN 3852-2 - ANSI B 1.20.3 - SAE J1926-1 - ISO 11926-1										
	G 1" 1/4			123,5		25	Connection with STAUFF Female Bodys of the QRC-FF Series with Male Tips of the QRC-FC Series.		QRC-FC-25-M-G20-S5-W3	134,9
				4.86		.98				297.4
	NPTF 1" 1/4-11 1/2			126,4					QRC-FC-25-M-NF20-S5-W3	137,1
				4.98						302.3
	UN 1" 5/8-12			126,4		20			QRC-FC-25-M-U20-S5-W3	137
				4.98		.79				302

Note: The connection of the two halves of a coupling is achieved depending on the type. It is important to observe the positive engagement of plug-type couplings and the secure tightening of screw-type couplings to the limit stop of the thread. Forced or improper separation will result in malfunction of the coupling.

Series FC ▪ Dust Protection



Dimensions (mm/in) D1	D2	L	Material	Dust Cap for Male Tip Ordering Codes
28	24	170	Plastic (Colour: Red)	QRC-FF-06-DM-22-K-RD
1.10	.94	6.69		
32	27	115	Plastic (Colour: Red)	QRC-FF-10-DM-27-K-RD
1.26	1.06	4.53		
38	35,5	135	Plastic (Colour: Red)	QRC-FF-12-DM-36-K-RD
1.50	1.40	5.31		
42	30	220	Plastic (Colour: Red)	QRC-FF-16-DM-30-K-RD
1.65	1.18	8.66		
48	45,5	150	Plastic (Colour: Red)	QRC-FF-19-DM-46-K-RD
1.89	1.79	5.91		
46	51	290	Plastic (Colour: Red)	QRC-FF-25-DM-51-K-RD
1.81	2.01	11.42		

In addition to the standard colours as stated above,
plastic dust caps are also available in blue, green, yellow and black.
Please use the color codes BU, GN, YE and BK respectively instead of RD.

Colour Marking Rings for Male Tips
Series QRC-FC-M

QRC-FC-10-M

Colour	Ordering Codes
	MR-QRC-28x1.2x4-K-RD
	MR-QRC-28x1.2x4-K-BK
	MR-QRC-28x1.2x4-K-YE
	MR-QRC-28x1.2x4-K-BU
	MR-QRC-28x1.2x4-K-GN
	MR-QRC-28x1.2x4-K-OE
	MR-QRC-28x1.2x4-K-PU
	MR-QRC-28x1.2x4-K-GY

QRC-FC-12-M

Colour	Ordering Codes
	MR-QRC-32.1x1.2x4-K-RD
	MR-QRC-32.1x1.2x4-K-BK
	MR-QRC-32.1x1.2x4-K-YE
	MR-QRC-32.1x1.2x4-K-BU
	MR-QRC-32.1x1.2x4-K-GN
	MR-QRC-32.1x1.2x4-K-OE
	MR-QRC-32.1x1.2x4-K-PU
	MR-QRC-32.1x1.2x4-K-GY

QRC-FC-16-M

Colour	Ordering Codes
	MR-QRC-37.9x1.4x4-K-RD
	MR-QRC-37.9x1.4x4-K-BK
	MR-QRC-37.9x1.4x4-K-YE
	MR-QRC-37.9x1.4x4-K-BU
	MR-QRC-37.9x1.4x4-K-GN
	MR-QRC-37.9x1.4x4-K-OE
	MR-QRC-37.9x1.4x4-K-PU
	MR-QRC-37.9x1.4x4-K-GY

QRC-FC-19-M

Colour	Ordering Codes
	MR-QRC-41.1x1.4x4-K-RD
	MR-QRC-41.1x1.4x4-K-BK
	MR-QRC-41.1x1.4x4-K-YE
	MR-QRC-41.1x1.4x4-K-BU
	MR-QRC-41.1x1.4x4-K-GN
	MR-QRC-41.1x1.4x4-K-OE
	MR-QRC-41.1x1.4x4-K-PU
	MR-QRC-41.1x1.4x4-K-GY

QRC-FC-25-M

Colour	Ordering Codes
	MR-QRC-49.4x1.4x5-K-RD
	MR-QRC-49.4x1.4x5-K-BK
	MR-QRC-49.4x1.4x5-K-YE
	MR-QRC-49.4x1.4x5-K-BU
	MR-QRC-49.4x1.4x5-K-GN
	MR-QRC-49.4x1.4x5-K-OE
	MR-QRC-49.4x1.4x5-K-PU
	MR-QRC-49.4x1.4x5-K-GY

Note: The matching of the colour marking rings applies to all connection types of the couplings in the respective nominal sizes.

On request: Two-Tone Colour Marking Rings for Male Tips Series QRC-FC-M

QRC-FC-10-M

Colour	Ordering Codes
	MR-QRC-28x1.2x2-K-RD
	MR-QRC-28x1.2x2-K-BK
	MR-QRC-28x1.2x2-K-YE
	MR-QRC-28x1.2x2-K-BU
	MR-QRC-28x1.2x2-K-GN
	MR-QRC-28x1.2x2-K-OE
	MR-QRC-28x1.2x2-K-PU
	MR-QRC-28x1.2x2-K-GY

QRC-FC-12-M

Colour	Ordering Codes
	MR-QRC-32.1x1.2x2-K-RD
	MR-QRC-32.1x1.2x2-K-BK
	MR-QRC-32.1x1.2x2-K-YE
	MR-QRC-32.1x1.2x2-K-BU
	MR-QRC-32.1x1.2x2-K-GN
	MR-QRC-32.1x1.2x2-K-OE
	MR-QRC-32.1x1.2x2-K-PU
	MR-QRC-32.1x1.2x2-K-GY

QRC-FC-16-M

Colour	Ordering Codes
	MR-QRC-37.9x1.4x2-K-RD
	MR-QRC-37.9x1.4x2-K-BK
	MR-QRC-37.9x1.4x2-K-YE
	MR-QRC-37.9x1.4x2-K-BU
	MR-QRC-37.9x1.4x2-K-GN
	MR-QRC-37.9x1.4x2-K-OE
	MR-QRC-37.9x1.4x2-K-PU
	MR-QRC-37.9x1.4x2-K-GY

QRC-FC-19-M

Colour	Ordering Codes
	MR-QRC-41.1x1.4x2-K-RD
	MR-QRC-41.1x1.4x2-K-BK
	MR-QRC-41.1x1.4x2-K-YE
	MR-QRC-41.1x1.4x2-K-BU
	MR-QRC-41.1x1.4x2-K-GN
	MR-QRC-41.1x1.4x2-K-OE
	MR-QRC-41.1x1.4x2-K-PU
	MR-QRC-41.1x1.4x2-K-GY

QRC-FC-25-M

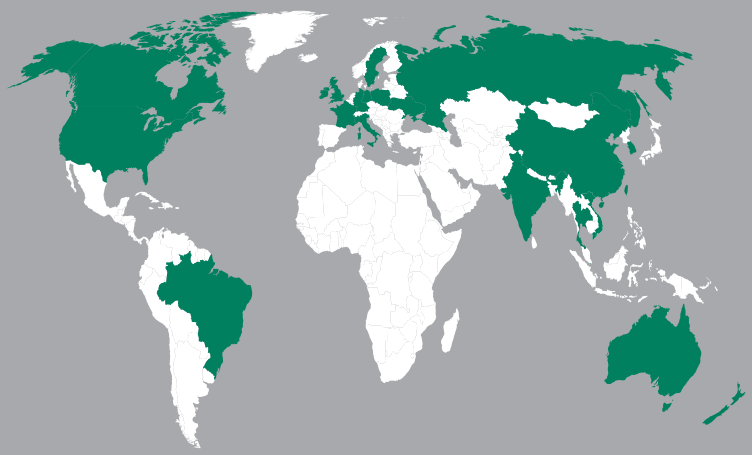
Colour	Ordering Codes
	MR-QRC-49.4x1.4x.2.5-K-RD
	MR-QRC-49.4x1.4x2.5-K-BK
	MR-QRC-49.4x1.4x2.5-K-YE
	MR-QRC-49.4x1.4x2.5-K-BU
	MR-QRC-49.4x1.4x2.5-K-GN
	MR-QRC-49.4x1.4x2.5-K-OE
	MR-QRC-49.4x1.4x2.5-K-PU
	MR-QRC-49.4x1.4x2.5-K-GY

Note: Two-Tone Colour Marking Rings are available on request. Please contact STAUFF for an individual offer.

Note: The matching of the colour marking rings applies to all connection types of the couplings in the respective nominal sizes.

Series FC

Flat Face Push-to-Connect Couplings



Germany

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58791 Werdohl

STAUFF products and services are globally available through wholly-owned subsidiaries and a tight network of authorised distributors and representatives in all major industrial regions of the world.

Contact STAUFF:

www.stauff.com/contact

Product Brochure Series FC ▪ English ▪ 9910000612 ▪ 09/2022