

# **FOOD GRADE** HFR SERIES

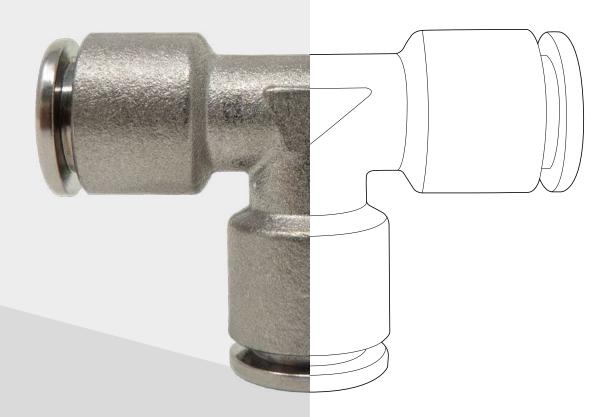
ITALY























# FOOD GRADE HFR SERIES









# **PLUS**

TEA<sup>+</sup> SURFACE TREATMENT ABLE TO GUARANTEE HIGH RESISTANCE TO CORROSION AND CHEMICALS

**RELIABILITY** and **HIGH MECHANICAL EFFICIENCY** as key features for high performances

**COMPLETE RANGE** for any application

Suitable for FOOD & BEVERAGE AND COFFEE MACHINES

TAILOR MADE PRODUCTS ON SPECIFIC CUSTOMERS NEEDS





















p. 9 / **HFRT-G** 







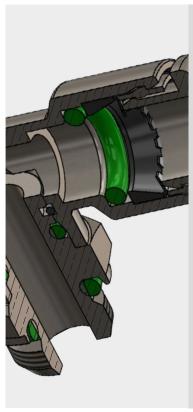














-20°C ÷ 150°C



Working Pressure:

20 Bar

**Negative Pressure:** 

- 0,95 Bar (- 95 Kpa)



Compressed air, vacuum, water and fluids suitable with the construction materials



- Parallel gas BSPP ISO 228 G1/8" - G1/2"

- Metric ISO 262 M5 and M7



Polyamide PA, Polyethylene PE, FEP, and PTFE



**HIGHLY CORROSION RESISTANT** in strong acidic or alkaline environments:

- thicknesses of 2 4  $\mu m$  withstand
- ASS 96h and CASS 48h salt spray tests

**EN 16058** rig test (26 weeks)

**NSF 61** section 8- pH5 Commercial hot (82°C) for taps, sanitary fittings, HVAC **EN 16889** for professional coffee machines and other "food zone" devices.

Body: TEA+ plated brass Collet: TEA+ plated brass

Lock claw: Stainless steel AISI 301

Back ring: PVDF-UHM FDA compliant
O'ring: FKM NSF/ANSI 61 certified

Collar: PVDF-UHM FDA compliant

and FDA compliant

Seal: FKM NSF/ANSI 61 certified and FDA compliant

Retaining ring for swivel system:

Stainless steel AISI 302



NSF/ANSI 169



Food contact materials EC 1935/2004





ICIM certified product food contact materials



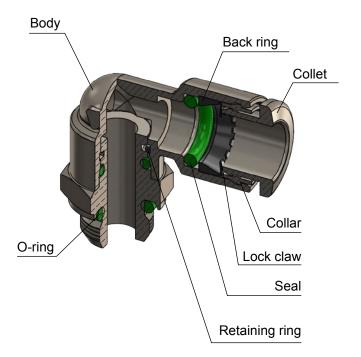


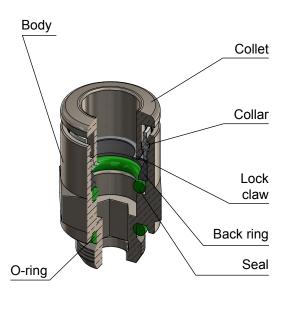
Products in compliance with the directive 1907/2006



Products in compliance with the directive EU 2015/863

#### **CONSTRUCTION DETAILS**





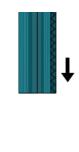


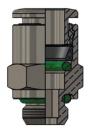
#### INSERTION OF THE TUBE INTO THE FITTING

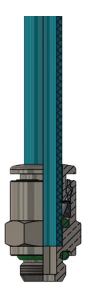
- Make sure the tube is fully inserted into the fitting.
- To insert the tube into the fitting cut the tube off square (90°), insert tube up to the fitting end stop, and pull back gently to make sure it is correctly connected.
- If there is any damage or scratches on the tube surface the tube is an oval shape, air leakage and tube release may occur. Check the tube condition carefully.
- The OD of polyurethane tube expands when pressure is applied. Reinsertion into the fitting may not always be possible. Check the OD of the tube and renew it the expansion is out of tolerance.

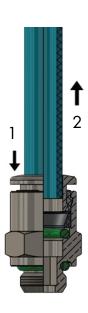
#### DISCONNECTION OF THE TUBE FROM THE FITTING

- Make sure the pressure in the system is zero before releasing the tube from the fitting.
- To release the tube, press the release sleeve towards the fitting with one hand (1) and pull the tube away from the fitting with the other hand (2).
- Always remove the section of tube previously inserted into the fitting before reinserting the tube by cutting back the tube. Always use the correct tube cutter in order to cut the tube square and free of damage.









#### TUBE TOLERANCES

Ø TUBE (mm)	4	6	8	10	12
TOLERANCE (mm)	± 0,1	± 0,1	± 0,1	± 0,15	± 0,15

#### **TUBE INSERTION DEPTH**

Ø TUBE (mm)	4	6	8	10	12
TUBE INSERTION LENGHT (mm)	14	15,5	17,5	19	21

#### **TIGHTENING TORQUE**

PARALLEL GAS BSPP ISO 228 & METRIC ISO 262

THREAD	M5x0,8	M7x1	1/8″	1/4″	3/8″	1/2″
Nm	1 ± 20%	3 ± 20%	6 ± 20%	7,5 ± 20%	9 ± 20%	9 ± 20%



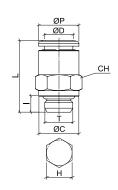
# HFRC-G











## Male connector BSPP & metric thread

CODE	ØD	Т	ØP	ØC	А	L	СН	Н
HFRC04M5		M5x0,8	10	7	4	19,0	9	2,5
HFRC04G01	4	G 1/8"	10	14	5,5	18,0	10	3
HFRC04G02		G 1/4"	10	16	6,5	18,0	10	3
HFRC06M5		M5x0,8	12	7	4	21,0	11	2,5
HFRC06G01	6	G 1/8"	12	14	5,5	19,5	12	4
HFRC06G02		G 1/4"	12	16	6,5	19,5	12	4
HFRC08G01		G 1/8"	14	14	5,5	24,5	14	5
HFRC08G02	8	G 1/4"	14	16	6,5	21,5	14	6
HFRC08G03		G 3/8"	14	20	7,5	21,5	14	6
HFRC10G02	10	G 1/4"	16	16	6,5	27,5	16	7
HFRC10G03	10	G 3/8"	16	20	7,5	25,0	16	8
HFRC12G02		G 1/4"	19	16	6,5	30,0	19	7
HFRC12G03	12	G 3/8"	19	22	7,5	29,5	19	10
HFRC12G04		G 1/2"	19	25	9	28,0	19	10

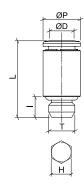
## **HFROC**











# Male connector round body metric thread

	CODE	ØD	Т	ØP	Α	L	Н
	HFROC04M7	4	M7x1	10	6	20,5	2,5
*	HFROC06M7C	6	M7x1	10	5,5	20,5	4

\* compact version

# **HFRCF-G**

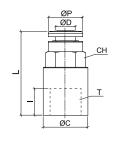






# Female connector BSPP thread





CODE	ØD	Т	ØP	ØC	А	L	СН
HFRCF04G01	4	G 1/8"	10	13	7,5	24,5	13
HFRCF04G02		G 1/4"	10	16	11	27,0	10
HFRCF06G01	6	G 1/8"	12	13	7,5	26,0	12
HFRCF06G02	0	G 1/4"	12	16	11	29,0	12
HFRCF08G01	0	G 1/8"	14	13	7,5	27,0	14
HFRCF08G02	8	G 1/4"	14	16	11	30,0	14



# **HFRMM**

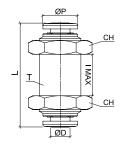






# Bulkhead connector





CODE	ØD	Т	ØP	L	A MAX	СН
HFRMM04	4	M12x1	10	34,0	15	16
HFRMM06	6	M14x1	12	32,0	12	17
HFRMM08	8	M16x1	14	36,5	16	19
HFRMM10	10	M20x1	16	43,0	19	24
HFRMM12	12	M22x1,5	19	44,0	20	25

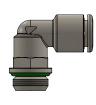
# HFRL-G

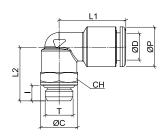






## Swivel male elbow BSPP & metric





CODE	ØD	Т	ØP	ØC	Α	L1	L2	СН
HFRLO4M5		M5x0,8	10	7	4	18,0	15,0	8
HFRL04G01	4	G 1/8"	10	13	5,5	19,5	19,0	13
HFRL04G02		G 1/4"	10	16	6,5	19,5	21,5	13
HFRLO6M5		M5x0,8	12	7	4	19,5	16,0	8
HFRL06G01	6	G 1/8"	12	13	5,5	21,0	19,0	13
HFRL06G02		G 1/4"	12	16	6,5	21,0	21,5	13
HFRL08G01		G 1/8"	14	13	5,5	23,0	19,0	13
HFRL08G02	8	G 1/4"	14	16	6,5	23,0	21,5	13
HFRL08G03		G 3/8"	14	20	7,5	23,0	23,0	13
HFRL10G02	10	G 1/4"	16	16	6,5	26,0	23,0	16
HFRL10G03	10	G 3/8"	16	20	7,5	26,0	26,0	16
HFRL12G02		G 1/4"	19	16	6,5	31,0	25,5	20
HFRL12G03	12	G 3/8"	19	20	7,5	31,0	26,5	20
HFRL12G04		G 1/2"	19	25	9	31,0	29,0	20

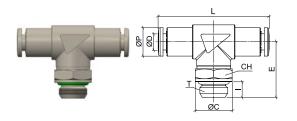
### **HFRT-G**







# Swivel male tee BSPP thread



CODE	ØD	Т	ØP	Α	L1	L2	СН
HFRT04G01	4	G 1/8"	10	5,5	39,0	19,5	13
HFRT06G01	6	G 1/8"	12	5,5	42,0	19,5	13
HFRT06G02		G 1/4"	12	6,5	42,0	22,0	13
HFRT08G01		G 1/8"	14	5,5	46,5	19,5	13
HFRT08G02	- 8	G 1/4"	14	6,5	46,5	22,0	13



# **HFRST-G**

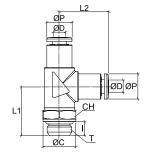












## Swivel male lateral tee BSPP thread

CODE	ØD	Т	ØP	ØC	Α	L1	L2	СН
HFRST04G01	4	G 1/8"	10	13	5,5	19,5	19,5	13

# **HFRA-G**

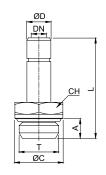






# Stem adapter BSPP thread





CODE	ØD	Т	ØC	А	L	DN	СН
HFRA04G01	4	G 1/8"	13	5,5	28,0	2,0	13
HFRA06G01	4	G 1/8"	13	5,5	29,0	4,0	13
HFRA06G02	- 6	G 1/4"	16	6,5	30,5	4,0	13
HFRA08G01	- 8	G 1/8"	13	5,5	30,0	6,0	13
HFRA08G02	8	G 1/4"	16	6,5	32,0	6,0	13
HFRA10G01	10	G 1/8"	13	5,5	35,0	6,0	13
HFRA10G02	10	G 1/4"	16	6,5	36,5	8,0	13
HFRA12G02	12	G 1/4"	16	6,5	37,5	8,0	13

# **HFRUC**

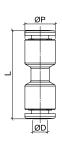






# Union connector





CODE	ØD	ØP	L
HFRUC04	4	10	29,0
HFRUC06	6	12	32,0
HFRUC08	8	14	35,5
HFRUC10	10	16	39,5
HFRUC12	12	19	44,0



**HFRUL** 

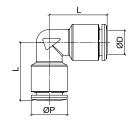






#### Union elbow





CODE	ØD	ØP	L
HFRUL04	4	10	18,0
HFRUL06	6	12	19,5
HFRUL08	8	14	22,5
HFRUL10	10	16	25,5
HFRUL12	12	19	29,0

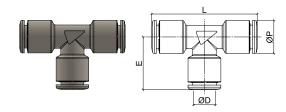
**HFRUT** 







Union tee



CODE	ØD	ØP	L1	L2
HFRUTO4	4	10	18,0	36,0
HFRUT06	6	12	19,5	39,0
HFRUT08	8	14	22,5	45,0
HFRUT10	10	16	25,5	51,0
HFRUT12	12	19	29,0	58,0

**HFRGJ** 

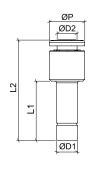






## Stem reduction





CODE	ØD1	ØD2	ØP	L1	L2
HFRGJ0604	6	4	10	17,0	28,5
HFRGJ0806	8	6	12	19,5	34,5
HFRGJ1008	10	8	14	24,0	37,5
HFRGJ1210	12	10	16	25,0	40,0

#### **NSF CERTIFICATION FOR TIERRE GROUP S.P.A.**

# **NSF** International

789 N. Dixboro Road, Ann Arbor, MI 48105 USA

RECOGNIZES

Tierre Group S.p.A.

Italy

AS COMPLYING WITH NSF/ANSI 169 AND ALL APPLICABLE REQUIREMENTS.
PRODUCTS APPEARING IN THE NSF OFFICIAL LISTING ARE
AUTHORIZED TO BEAR THE NSF MARK.









Certification Progra Accredited by the Standards Council

This certificate is the property of NSF International and must be returned upon request. This certificate remains valid as long as this client has products in NSF's Official Listings for the referenced standards. For the most current and complete Listing information, please access NSF's website (www.nsf.org).

July 10, 2019

Certificate# C0484626 - 01

Sarah Krol

Global Managing Director, Food Safety Product Certification

#### **FOOD CONTACT MATERIALS DECLARATION - EC 1935/2004\***

\* Full certification available on our website (www.tierrefittings.com) or on request.



Tierre Group S.p.a.

Headquarter: Via Dell'Industria 18 – 20032 Cormano (MI) – Italy
Warehouse: Via Dell'Artigianato 2 – 20032 Cormano (MI) – Italy
Production: Via Marco Biagi 1 – 25045 Castegnato (BS) – Italy
C.F. e P.IVA IT 12437570158 – Capital €120.000,00 i.v.

REA MI-1558390

Phone. +39 02 663088.1 – Fax +39 02 66304172 www.tierregroup.com – info@tierregroup.com

#### **DECLARATION OF CONFORMITY**

#### **FCMs**

Food Contact Materials



#### TIERRE GROUP S.p.a. DECLARES

That the items related to the following product range

# BRASS PUSH-IN FITTINGS WITH TEA<sup>+</sup> SURFACE TREATMENT HFR SERIES

items produced with the following materials
UNI EN 12164 CW 614 N brass - UNI EN 12164 CW 617 N brass
Viton - EPDM (option)
TEA+ surface treatment - AISI 302 Stainless Steel

#### ARE IN COMPLIANCE WITH

To the following General Community Legislation:

**EC 1935/2004** regulation of the European Parliament and of the Council dated 27<sup>th</sup> October 2004 on materials and articles intented to come into contact with food and abrogating the Directives 80/590/EEC and 89/109/EEC.

Commission Regulation **EC 2023/2006** dated 22<sup>nd</sup> December 2006 on good manufacturing practice for materials and articles intended to come into contact with food.

Commission Regulation **EU 2020/1245** dated 2<sup>nd</sup> September 2020, on plastic materials and articles intended to come into contact with food.

To the following General National Legislation:

**Art. 1, art. 3, art 4 paragraph 5, art. 6 of the Presidential Decree dated 23rd August 1982, No. 777,** Implementation of the Directive (EEC) No. 76/893 and subsequent amendments, starting from the entry into force of the Legislative Decree dated 10<sup>th</sup> February 2017, No. 29, Sanctioning discipline for the violation of the provisions as listed in the CE regulations regarding materials and objects intended to come into contact with food products and food in general.

To the following Specific National Legislation:

**Ministerial Decree No. 34 dated 21st March 1973,** Hygienic regulations for packaging, containers, utensils intended to come into contact with food substances or substances for personal use and subsequent updates and modifications.

These materials are in compliance with the applicable community and national regulations concerning materials and articles intended to come into contact with food. Consequently, the products meet the requirements of the European Regulations and National Legislation as listed above.



M2DC rev.0 Gennaio 2020





PRD Nº 004 I

documento annulla e sostituisce il certificato di ri numero emesso in data 13/05/2021.

nte c



# Certificazione di Prodotto Product Certification

Certificate No.

ICIM-MOC-009809-00

ALL'AZIENDA / TO THE FIRM

#### **TIERRE GROUP S.P.A.**

VIA DELL'INDUSTRIA, 18 20032 CORMANO MI IT - Italia

PER I SEGUENTI PRODOTTI / FOR THE FOLLOWING PRODUCTS

Raccordi ad innesto rapido in acciaio inox AISI 316L.
Raccordi ad innesto rapido in ottone con trattamento T.E.A.
Raccordi ad innesto rapido in ottone CW510L
AISI 316L stainless steel push-in fittings.
Brass push-in fittings with T.E.A. plating
CW510L Brass push-in fittings

CON DENOMINAZIONE COMMERCIALE / WITH TRADE NAME/S

Serie XVR INOX AISI 316L / XVR SERIES INOX AISI 316L Food grade serie HFR/ Food grade HFR SERIES Serie LFR(P) / LFR(P) Series Serie HLFR (P)/ HLFR(P) Series

CONFORMEMENTE AL DOCUMENTO NORMATIVO ICIM / IN COMPLIANCE WITH ICIM NORMATIVE DOCUMENT

#### 0445CS

PRODOTTI E COMPONENTI A CONTATTO CON ALIMENTI SECONDO DISPOSIZIONI MOCA PRODUCTS AND COMPONENTS IN CONTACT WITH FOOD ACCORDING TO FCM REGULATIONS

Rappresentante Direzione / Management Representat

ICIM S.p.A.

PRIMA EMISSIONE FIRST ISSUE EMISSIONE CORRENTE CURRENT ISSUE DATA DI SCADENZA EXPIRING DATE

13/02/2020

09/11/20

12/02/2025

ICIM S.p.A. - Piazza Don Enrico Mapelli, 75 - 20099 Sesto San Giovanni (MI) Società soggetta all'attività di direzione e coordinamento di ICIM GROUP SrI

549CM 00 IT



# NOTES







# Tierre Group S.p.a.

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