THERMOPLASTIC TUBING AND HOSES
SINCE 1961



SERIE CNG / *CNG SERIES*

Tubi termoplastici per **Automotive e Industria**

Automotive *and* ***General Industry*** *Thermoplastic Hoses*

ZEC S.p.A.: Flessibilità per scelta

ZEC S.p.A., fondata nel 1961 da Eugenio Zantelli a Colorno, in provincia di Parma, produce tubi termoplastici per applicazioni a bassa, media, alta e altissima pressione.

A partire dal 1990 le attività commerciali sul mercato domestico sono estese all'espansione sui mercati internazionali.
Investimenti in risorse umane particolarmente qualificate, impianti di produzione tecnologicamente avanzati, attività di ricerca e sviluppo e la presenza commerciale favoriscono l'espansione sui mercati globali, dove ZEC S.p.A. oggi è presente in più di 90 paesi.

La considerevole crescita in tutte le aree è stata accompagnata da una gamma di prodotti sempre più ampia, dedicata a numerosi settori applicativi, quali oleodinamica, pneumatica, lubrificazione, automotive, alimentare, navale, refrigerazione, petrochimico-offshore, etc..

La gamma di prodotti di ZEC S.p.A. comprende tubi termoplastici standard o customizzati singoli, multipli e spiralati, con caratteristiche tecniche da 2mm a 40mm di diametro interno, pressioni di lavoro da 5bar a 1280bar e temperature di esercizio da -200°C a +260°C.
Tutti i tubi termoplastici di ZEC S.p.A. sono prodotti di materie prime di primaria qualità accuratamente selezionate. Ogni fase del ciclo produttivo è soggetta a severi controlli qualitativi.

La produzione avviene esclusivamente all'interno dei ns. stabilimenti a Colorno, Italia.

I prodotti finiti sono conformi alle principali normative internazionali dei rispettivi settori applicativi, quali SAE, EN, ISO e DIN.
ZEC S.p.A. opera in regime di qualità UNI EN ISO 9001-2015.

ZEC S.p.A.: Flexibility for Choice

ZEC S.p.A., founded in 1961 by Mr. Eugenio Zantelli in Colorno, Province of Parma, Italy, manufactures thermoplastic tubing and hoses for low, medium, high and very high pressure applications.

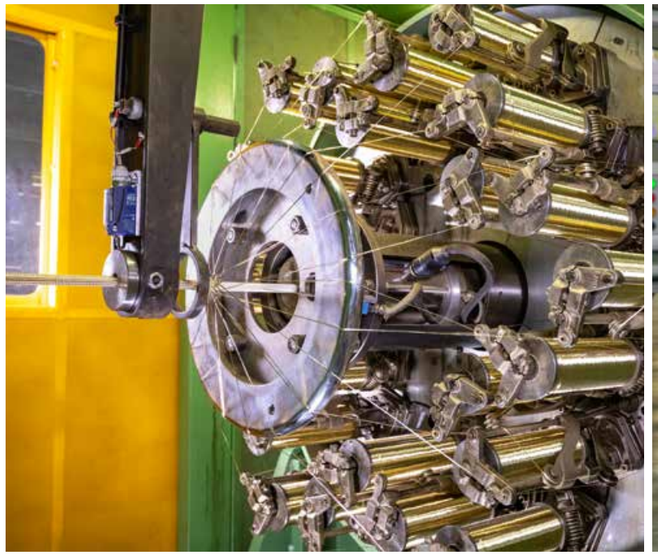
Domestic business activities are boosted by an International breakthrough as of 1990.
Investments in special skilled human resources, manufacturing, product innovations and commercial presence elevates ZEC S.p.A. meanwhile into the global market, covering more than 90 countries world-wide.

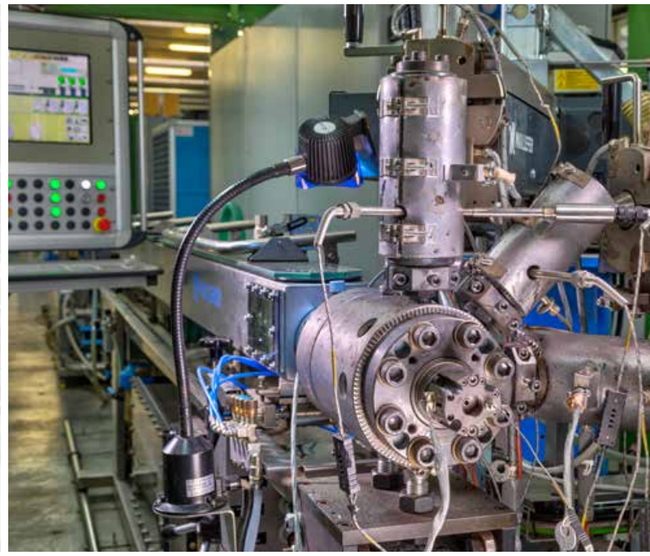
Significant growth in all areas has been accompanied with an ever increasing product range dedicated to a large portfolio of applications such as fluid power, pneumatics, lubrication, automotive, food processing, marine, refrigeration, petrochemical-offshore, and so on.
The ZEC S.p.A. product range includes standard or customized single, multiple and coiled thermoplastic tubing and hoses, with technical characteristics within the range of 2mm to 40mm inner diameter, working pressures from 5bar to 1280bar and operating temperatures from -200°C to +260°C.

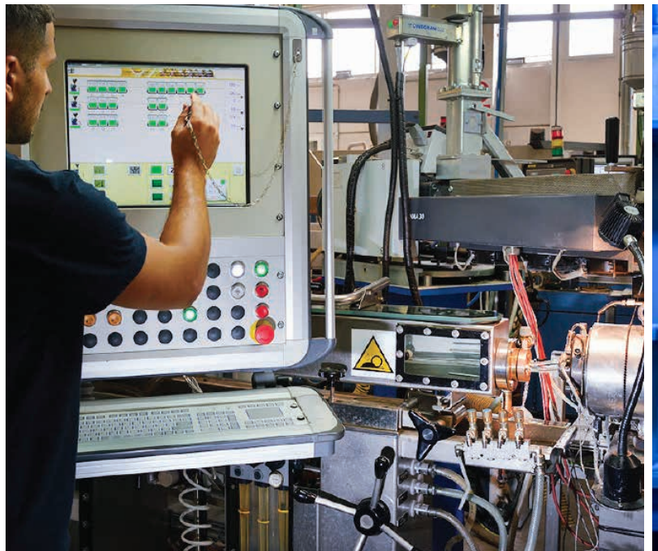
All products manufactured by ZEC S.p.A. are of top quality and carefully selected raw materials. Manufacturing processes are continuously multiple controlled.
The entire production takes place in our facilities located in Colorno, Italy.

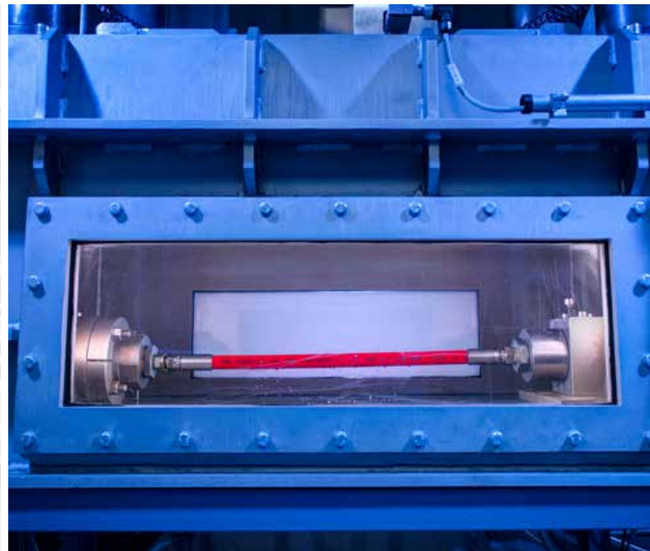
End products comply strictly with major international standards such as SAE, EN, DIN & ISO.
All company sectors and activities are qualified and operate according to UNI EN ISO 9001-2015 quality system.







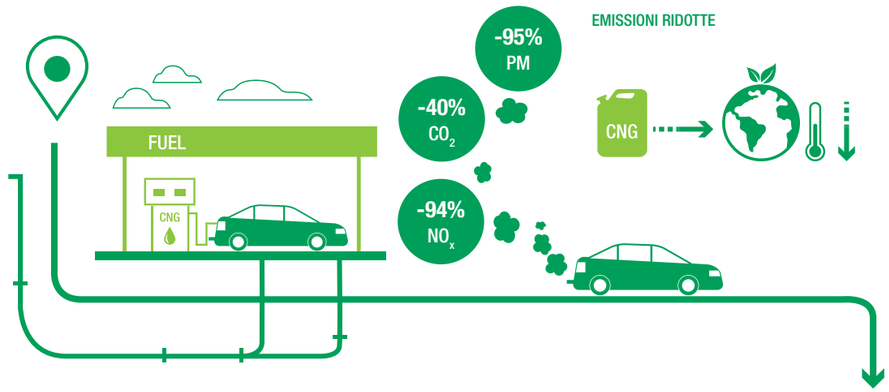




Le soluzioni ZEC per la conduzione ad alta pressione di GAS naturale

La gamma di tubi ZEC Serie CNG è stata sviluppata per la conduzione di gas naturale. In natura questa sostanza si trova comunemente allo stato fossile, insieme al petrolio, al carbone o in giacimenti di gas naturale. Il suo principale componente è il metano, oltre a questo contiene anche idrocarburi come etano e propano e piccole quantità di altri gas come azoto, elio, anidride carbonica, zolfo e vapore acqueo.

Caratteristiche e benefici del gas naturale rispetto ad altri carburanti:



APPLICAZIONI

I tubi CNG sono utilizzati in applicazioni industriali e automotive, tra cui:

- Impianti di estrazione e compressione di gas naturale
- Impianti CNG a bordo veicolo
- Trasferimento di carburante CNG fino alla pompa
- Gestione CNG in ambiente industriale e domestico

NORMATIVE

I tubi e i raccordi ZEC CNG sono testati e certificati da TÜV SÜD in accordo agli standard:
- CSA / ANSI NGV 4.2:2022 (classe A e classe D)
- CSA / ANSI NGV 3.1:2020 (classe B)

Le tubazioni ZEC sono inoltre certificate secondo:
NAG 415/416/417
NAG E409:2005, certificato rilasciato da IRAM

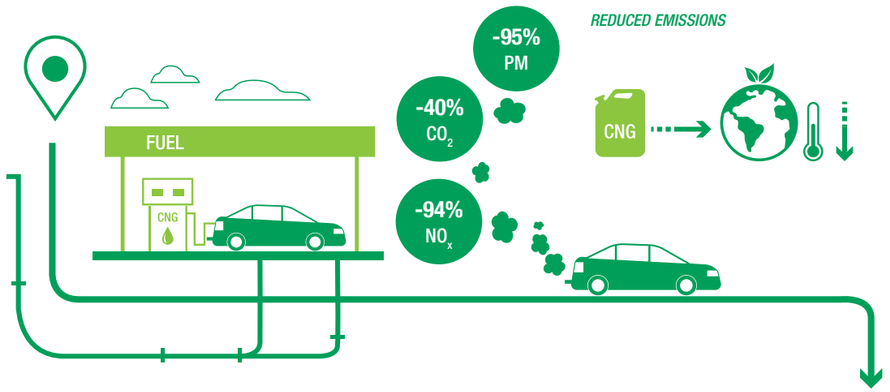
CARATTERISTICHE E BENEFICI

- **Flessibilità**
- **Copertura antiabrasione**
- **Disponibilità di tutte le connessioni richieste dal mercato**
- **Possibilità di marcatura personalizzata**
- **Disponibilità di tubi multipli**

ZEC solutions for the high pressure conduction of CNG

ZEC CNG thermoplastic hoses series has been created for the high pressure conduction of CNG. In nature this substance is commonly found at fossil state, together with petroleum, coal or in natural gas fields. Its main component is methane, in addition to this it also contains hydrocarbons such as ethane and propane and small amounts of other gases such as nitrogen, helium, carbon dioxide, sulfur and water vapor.

Features and benefits of Natural Gas compared to other fuels:



APPLICATIONS

CNG hoses are used in industrial and automotive applications, as:

- *Natural gas extraction and compression plants*
- *CNG systems onboard vehicles*
- *CNG fuel transfer up to the pump*
- *Industrial and domestic CNG handling*

STANDARDS

ZEC hoses and fittings have been tested and approved by TÜV SÜD according to the following standards:
- CSA / ANSI NGV 4.2:2022 (class A and class D)
- CSA / ANSI NGV 3.1:2020 (class B)

ZEC CNG hoses are also certified according to:
NAG 415/416/417
NAG E409:2005, certificate issued by IRAM

FEATURES AND BENEFITS

- ***Flexibility***
- ***Abrasion resistant outer cover***
- ***Availability of all connections required by the market***
- ***Marking customization***
- ***Availability of multiple hoses***











CNG



Certified by TÜV SÜD NGV 3.1 NGV 4.2

Caratteristiche principali

- **Pressione di esercizio costante 345 bar / 5000 psi**
- **Conformi a NGV 4.2:2022 e NGV 3.1:2020**
- **Anima interna elettricamente conduttiva**
- **Molto flessibile, facile da installare**
- **Resistente a sollecitazioni, corrosione ed effetti ambientali**

Main Features

- ***Constant pressure 345 bar / 5000 psi***
- ***Comply to NGV 4.2:2022 and NGV 3.1:2020***
- ***Electrically conductive inner tube***
- ***Very flexible, easy to install***
- ***Resistant against mechanical stress, corrosion and environmental effects***

Caratteristiche tecniche

- **Caratteristiche tecnico-costruttive:**

Anima interna in poliammide conduttiva, rinforzo con trecce in fibre tessili ad alta tenacità, ricopertura esterna in poliuretano antiabrasione, microforato, resistente agli agenti atmosferici. Disponibili a richiesta in versione binata.

- **Temperature di utilizzo:**

-40°C +65°C – NGV 4.2 classe A
-40°C +85°C – NGV 4.2 classe D e NGV 3.1

- **Pressioni d'esercizio:**

Rapporto di sicurezza 1:4

- **Normative:**

CSA/ANSI NGV 4.2:2022 classe A e classe D
CSA/ANSI NGV 3.1:2020 classe B
NPFA 52:2023

Technical Features

- ***Technical-constructive features:***

Inner core in conductive polyamide, reinforcement of high tensile textile braid, external cover in abrasion resistant, pinpricked polyurethane, resistant to weathering.
Twin-line available upon request.

- ***Working temperatures:***

-40°C +65°C – NGV 4.2 class A
-40°C +85°C – NGV 4.2 class D and NGV 3.1

- ***Working pressures:***

Safety ratio 1:4

- ***Standard:***

CSA/ANSI NGV 4.2:2022 class A and D
CSA/ANSI NGV 3.1:2020 class B
NPFA 52:2023

Scheda tecnica - *Data Sheet*

ID OD WP R MIN g

CODE	inch	-dash	mm	DN	inch	mm	bar	psi	mm	inch	g/m	lbs/ft	FERRULE CODE	NGV
CNG37105	1/4"	-4	6.4	6	0.492	12.5	345	5000	45	1.77	105	0.071	BP14MT1	
CNGM37105*	1/4"	-4	6.4	6	0.591	15.0	345	5000	50	1.97	162	0.109	BP14MT2	✓
CNG47105	5/16"	-5	8.0	8	0.591	15.0	345	5000	60	2.36	142	0.095	BP516R7V	✓
CNG57105	3/8"	-6	9.7	10	0.650	16.5	345	5000	75	2.95	155	0.104	BP38R7V	✓
CNG67105	1/2"	-8	13.0	12	0.866	22.0	345	5000	95	3.74	245	0.165	BP12R9R	✓
CNG87105	3/4"	-12	19.2	19	1.142	29.0	345	5000	185	7.28	360	0.242	BP34MTKM	✓
CNG97105	1"	-16	25.6	25	1.484	37.7	345	5000	250	9.84	670	0.450	BP1CNG	
CNG107105	1"1/4	-20	32.0	32	1.85	47.0	345	5000	500	19.7	1010	0.679	BPI114CNG	

*** Soluzione "anti-kinking" raccomandata in particolare per collegamento valvola ed attacco veicolo.**

**** Recommended "anti-kinking" solution in particular between valve and vehicle connection.***

Tubi binati con linea di ventilazione
Twin line with vent hose



Twin line Part nr.	CNG		VENT	
	Part nr.	ID	Part nr.	ID
CNGM3RVE83N	CNGM37105	1/4"	VE837100	1/4"
CNG4RVE83N	CNG47105	5/16"	VE837100	1/4"
CNG5RVE83N	CNG57105	3/8"	VE837100	1/4"
CNG6RVE83N	CNG67105	1/2"	VE837100	1/4"
CNG8RVE83N	CNG87105	3/4"	VE837100	1/4"

Tubo VE8 singolo per ventilazione
VE8 single vent hose



ID OD WP R MIN g

CODE	inch	-dash	mm	DN	inch	mm	bar	psi	mm	inch	g/m	lbs/ft	FERRULE CODE
VE837100	1/4"	6.4	-4	6	0.465	11.8	350	5075	50	1.97	83	0.056	BP14R7*

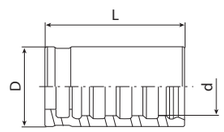
*** Si raccomanda la stessa serie di raccordi in uso per CNG**

**** Use of same range of CNG fittings is recommended***

Boccole a pressare - Acciaio AVP zincato
Swaged ferrules - Zinc plated carbon steel

Codice boccola / Ferrule code	Tubo Hose	Dimensioni boccola / Ferrule Dimensions		
		d	D	L
BP14R7	1/4" VENT	12.4	17	29
BP14MT1	1/4"	13.0	18	29
BP14MT2	1/4" M	15.4	20	30
BP516R7V	5/16"	15.4	20	30
BP38R7V	3/8"	17.0	22	32
BP12R9R	1/2"	23.0	30	45
BP34MTKM	3/4"	32.5	42	55
BP1CNG	1"	40.5	49	65
BPI114CNG**	1"1/4	50.0	62	85





**** Disponibile solo in acciaio Inox AISI316L.**

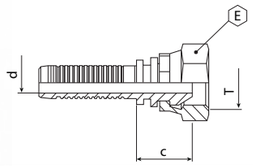
***** Only available in stainless steel AISI 316L.***

Raccordi serie CNG - Acciaio AVP zincato *CNG series fittings - Zinc plated carbon steel*

RACCORDO FEMMINA BSP 60°
BSP FEMALE FITTING 60°

DKR



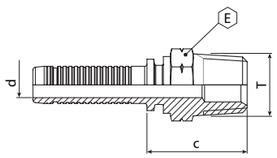


Codice Part nr	Tubo / Hose			Filetto / Thread	d		E		Cut-off C	
	in	-dash	mm	T	inch	mm	inch	mm	inch	mm
RGPFD14BP14C	1/4"	-4	6.4	1/4"-19 BSP	0.14	3.5	3/4"	19	0.68	17.3
RGPFD14BP516C	5/16"	-5	8.0	1/4"-19 BSP	0.20	5.0	3/4"	19	0.68	17.3
RGPFD38BP38C	3/8"	-6	9.7	3/8"-19 BSP	0.26	6.5	7/8"	22	0.77	19.5
RGPFD12BP12L	1/2"	-8	13.0	1/2"-14 BSP	0.35	9.0	1" 1/16	27	0.90	22.8
RGPFD34BP34L	3/4"	-12	19.2	3/4"-14 BSP	0.55	14.0	1" 1/4	32	0.94	23.8

RACCORDO MASCHIO NPT 60°
NPT MALE FITTING 60°

AGNN



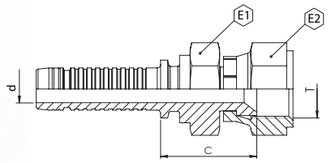


Codice Part nr	Tubo / Hose			Filetto / Thread	d		E		Cut-off C		NGV
	in	-dash	mm	T	inch	mm	inch	mm	inch	mm	
RGPMD18NC14CH	1/4"	-4	6.4	1/8"-27 NPT	0.14	3.5	9/16"	14.29	0.92	23.3	✓
RGPMD14NC14C	1/4"	-4	6.4	1/4"-18 NPT	0.14	3.5	-	15	1.08	27.5	
RGPMD14NC14CH	1/4"	-4	6.4	1/4"-18 NPT	0.14	3.5	9/16"	14.29	1.08	27.5	✓
RGPMD14NC516C	5/16"	-5	8.0	1/4"-18 NPT	0.20	5.0	-	15	1.08	27.5	
RGPMD14NC516CH	5/16"	-5	8.0	1/4"-18 NPT	0.20	5.0	9/16"	14.29	1.08	27.5	✓
RGPMD38NC516C	5/16"	-5	8.0	3/8"-18 NPT	0.20	5.0	3/4"	19	1.08	27.5	✓
RGPMD14NC38CH	3/8"	-6	9.7	1/4"-18 NPT	0.26	6.5	11/16"	17.46	1.10	28.0	✓
RGPMD38NC38C	3/8"	-6	9.7	3/8"-18 NPT	0.26	6.5	3/4"	19	1.10	28.0	✓
RGPMD12NC12L	1/2"	-8	13.0	1/2"-14 NPT	0.35	9.0	7/8"	22	1.39	35.3	✓
RGPMD34NC34L	3/4"	-12	19.2	3/4"-14 NPT	0.55	14.0	11/16"	27	1.52	38.7	✓
RGPMD1NC1C	1"	-16	25.6	1"-11.1/2 NPT	0.75	19.0	17/16"	36	1.79	45.5	

RACCORDO FEMMINA JIC 74°
JIC FEMALE FITTING 74°

DKJ



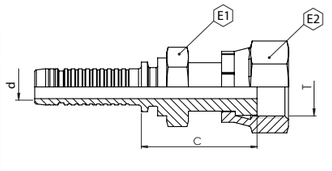


Codice Part nr	Tubo / Hose			Filetto / Thread	d		E1		E2		Cut-off C		NGV
	in	-dash	mm	T	inch	mm	inch	mm	inch	mm	inch	mm	
RGPFD716J14CH	1/4"	-4	6.4	7/16"-20	0.14	3.5	9/16"	14.29	9/16"	14.29	0.76	19.2	✓
RGPFD12J14C	1/4"	-4	6.4	1/2"-20	0.14	3.5	-	15	-	17	0.82	21.0	
RGPFD916J14CH	1/4"	-4	6.4	9/16"-18	0.14	3.5	9/16"	14.29	3/4"	19	0.88	22.3	✓
RGPFD916J516C	5/16"	-5	8.0	9/16"-18	0.20	5.0	-	16	3/4"	19	0.88	22.3	
RGPFD916J516CH	5/16"	-5	8.0	9/16"-18	0.20	5.0	9/16"	14.29	3/4"	19	0.88	22.3	✓
RGPFD916J38C	3/8"	-6	9.7	9/16"-18	0.26	6.5	-	17	3/4"	19	0.90	21.7	
RGPFD916J38CH	3/8"	-6	9.7	9/16"-18	0.26	6.5	11/16"	17.46	3/4"	19	0.90	22.8	✓
RGPFD34J38C	3/8"	-6	9.7	3/4"-16	0.26	6.5	3/4"	19	15/16"	24	0.92	23.4	✓
RGPFD34J12L	1/2"	-8	13.0	3/4"-16	0.35	9.0	7/8"	22	15/16"	24	1.01	25.7	✓
RGPFD78J12L	1/2"	-8	13.0	7/8"-14	0.35	9.0	7/8"	22	1"1/16	27	1.10	27.7	✓
RGPFD1P116J12L	1/2"	-8	13.0	1"1/16-12	0.35	9.0	-	25	1"1/4	32	1.14	29.0	✓
RGPFD1P116J34L	3/4"	-12	19.2	1"1/16-12	0.55	14.0	1"1/16	27	1"1/4	32	1.21	30.7	✓
RGPFD1516J1C	1"	-16	25.6	1"5/16-12	0.75	19.0	1"1/4	32	1"5/8	41	1.66	42.2	

RACCORDI FEMMINA ORFS
ORFS FEMALE FITTINGS

F-ORFS



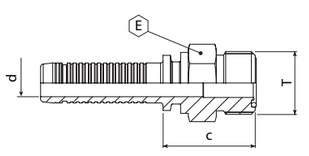


Codice Part nr	Tubo / Hose			Filetto / Thread	d		E1		E2		Cut-off C		NGV
	in	-dash	mm	T	inch	mm	inch	mm	inch	mm	inch	mm	
RGPFD916014CH	1/4"	-4	6.4	9/16"-18	0.14	3.5	9/16"	14.29	11/16"	17.46	1.20	30.5	✓
RGPFD1116014CH	1/4"	-4	6.4	11/16"-16	0.14	3.5	11/16"	17.46	7/8"	22	1.24	31.5	✓
RGPFD11160516CH	5/16"	-5	8.0	11/16"-16	0.20	5.0	11/16"	17.46	7/8"	22	1.24	31.5	✓
RGPFD1116038CH	3/8"	-6	9.7	11/16"-16	0.26	6.5	11/16"	17.46	7/8"	22	1.26	32.0	✓
RGPFD1316038C	3/8"	-6	9.7	13/16"-16	0.26	6.5	3/4"	19	15/16"	24	1.50	38.0	✓
RGPFD1316012L	1/2"	-8	13.0	13/16"-16	0.35	9.0	3/4"	19	15/16"	24	1.55	39.3	✓
RGPFD1012L	1/2"	-8	13.0	1"-14	0.35	9.0	15/16	24	1"3/16	30	1.65	41.8	✓
RGPFD1P316034L	3/4"	-12	19.2	1"3/16-12	0.55	14.0	1"3/16	30	1"7/16	36	1.82	46.3	✓

RACCORDO MASCHIO ORFS
ORFS MALE FITTINGS

M-ORFS



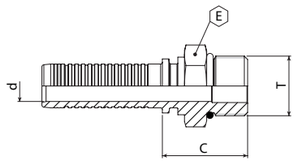


Codice Part nr	Tubo / Hose			Filetto / Thread	d		E		Cut-off C		NGV
	in	-dash	mm	T	inch	mm	inch	mm	inch	mm	
RGPMD916014CH	1/4"	-4	6.4	9/16"-18	0.14	3.5	5/8"	15.87	0.91	23.2	✓
RGPMD1116014C	1/4"	-4	6.4	11/16"-16	0.14	3.5	3/4"	19	1.01	25.7	✓
RGPMD11160516C	5/16"	-5	8.0	11/16"-16	0.20	5.0	3/4"	19	1.01	25.7	✓
RGPMD1116038C	3/8"	-6	9.7	11/16"-16	0.26	6.5	3/4"	19	1.03	26.2	✓
RGPMD1316038C	3/8"	-6	9.7	13/16"-16	0.26	6.5	7/8"	22	1.14	29.0	✓
RGPMD1316012L	1/2"	-8	13.0	13/16"-16	0.35	9.0	7/8"	22	1.19	30.3	✓

RACCORDO MASCHIO O-RING BOSS
O-RING BOSS MALE FITTING

OR-BOSS



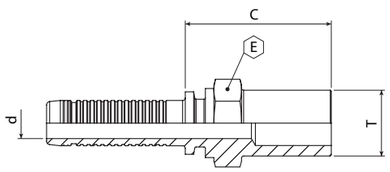


Codice Part nr	Tubo / Hose			Filetto / Thread	d		E		Cut-off C		NGV
	in	-dash	mm	T	inch	mm	inch	mm	inch	mm	
RGPMD716OB14CH	1/4"	-4	6.4	7/16"-20	0.14	3.5	9/16"	14.29	0.98	25.0	✓
RGPMD9160B14CH	1/4"	-4	6.4	9/16"-18	0.14	3.5	11/16"	17.46	1.04	26.5	✓
RGPMD9160B516CH	5/16"	-5	8.0	9/16"-18	0.20	5.0	11/16"	17.46	1.04	26.5	✓
RGPMD9160B38CH	3/8"	-6	9.7	9/16"-18	0.26	6.5	11/16"	17.46	1.06	27.0	✓
RGPMD340B38C	3/8"	-6	9.7	3/4"-16	0.26	6.5	7/8"	22	1.20	30.5	✓
RGPMD9160B12L	1/2"	-8	13.0	9/16"-18	0.35	9.0	7/8"	22	1.17	29.8	
RGPMD780B12L	1/2"	-8	13.0	7/8"-14	0.35	9.0	1"	25.4	1.35	34.3	✓
RGPMD1P1160B12L	1/2"	-8	13.0	1"1/16-12	0.35	9.0	1"1/4	32	1.45	36.8	✓
RGPMD1P1160B34L	3/4"	-12	19.2	1"1/16-12	0.55	14.0	1"1/4	32	1.52	38.5	✓

RACCORDO TUBOLARE
STUB END TUBE FITTING

TSE



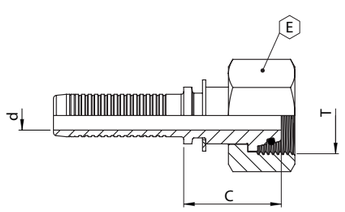


Codice Part nr	Tubo / Hose			Cordolo / Pipe T		d		E		Cut-off C		NGV
	in	-dash	mm	inch	mm	inch	mm	inch	mm	inch	mm	
EGP14DE14CH	1/4"	-4	6.4	1/4"	6.35	0.14	3.5	9/16"	14.29	1.20	30.5	✓
EGP38DE14CH	1/4"	-4	6.4	3/8"	9.50	0.14	3.5	9/16"	14.29	1.28	32.5	✓
EGP38DE516CH	5/16"	-5	8.0	3/8"	9.50	0.20	5.0	9/16"	14.29	1.28	32.5	✓
EGP38DE38C	3/8"	-6	9.7	3/8"	9.50	0.26	6.5	3/4"	19	1.30	33.0	✓
EGP12DE38C	3/8"	-6	9.7	1/2"	12.70	0.26	6.5	3/4"	19	1.54	39.0	✓
EGP12DE12L	1/2"	-8	13.0	1/2"	12.70	0.35	9.0	7/8"	22	1.67	42.3	✓
EGP34DE12L	1/2"	-8	13.0	3/4"	19.05	0.35	9.0	7/8"	22	1.67	42.3	✓

RACCORDO FEMMINA DKOS 24°
DKOS 24° FEMALE FITTINGS

DKOS





Codice Part nr	Tubo / Hose			Filetto / Thread	Codolo / Pipe	d		E		Cut-off C	
	in	-dash	mm	T		inch	mm	inch	mm	inch	mm
RGPFD18S14C	1/4"	-4	6.4	M18x1.5	10	0.14	3.5	7/8"	22	0.99	24.3
RGPFD18S38C	3/8"	-6	9.7	M18x1.5	10	0.26	6.5	7/8"	22	0.99	24.3
RGPFD20S38C	3/8"	-6	9.7	M20x1.5	12	0.26	6.5	1" 3/16	24	1.05	26.6
RGPFD24S12L	1/2"	-8	13.0	M24x1.5	16	0.35	9.0	-	30	1.22	31
RGPFD36S34L	3/4"	-12	19.0	M36x2	25	0.55	14.0	-	46	1.67	42.4
RGPFDI52S114DFL*	1"1/4	-20	32.0	M52x2	38	0.98	25.0	-	60	1.85	47.0

*** Disponibile solo in acciaio Inox AISI316L.**

**** Only available in stainless steel AISI 316L.***

IMPORTANTE

• Tutti i raccordi sono disponibili anche in acciaio Inox AISI316L.

• I raccordi con la spunta sono approvati NGV sia in AVP zincato sia in acciaio inox (vedere il report TUV per il corretto ambito di applicazione).

• Per evitare invecchiamento precoce delle guarnizioni, tutti i raccordi sono forniti privi di o-ring sulla connessione. Contattare ZEC per le specifiche sugli o-ring.

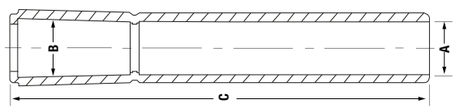
IMPORTANT

• *All the fittings are available also in stainless steel AISI 316L.*

• *The fitting with the NGV tick are NGV approved both in carbon steel and in stainless steel (see the TUV report for the reference of the approval scope).*

• *In order to avoid premature ageing of the seals, all fittings are supplied without o-rings already installed on the connections. Contact ZEC for the o-rings specifications.*

Protezione per tubi / *Hose bend restrictor*





- **Descrizione:**
Manicotti di protezione in vinile di colore nero, idonei per la riduzione dello stress a flessione della tubazione nella zona della raccordatura.

- **Temperature di esercizio:**
da +5°C a +80°C (da -41°F a +176°F)

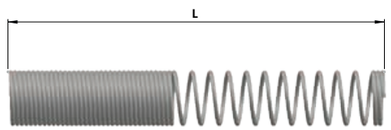
- ***Description:***
Black vinyl protection sleeves, suitable to reduce hose bending stress in the crimping area.

- ***Working temperature:***
from +5°C to +80°C (from -41°F to +176°F)

Scheda tecnica - *Data Sheet*

Codice / Code	A (mm)	B (mm)	C (mm)	Tubo / Hose
HBR10	13.2	16.0	151	1/4"-1/4" VENT
HBR20	15.6	17.7	134	1/4"M - 5/16"
HBR40	17.0	19.2	146	3/8"
HBR100	22.1	25.3	197	1/2"
HBR140	38.5	41.1	285	1"

Molle di protezione / *Protection springs*



Codice / Code	Tubo / Hose inch	L (mm)
PCOL8DN6PV	1/4" VENT	136
PC14	1/4"	136
PC14M	1/4"M	143.5
PC516	5/16"	151
PC38	3/8"	178
PC12	1/2"	188
PC34	3/4"	220
PC1	1"	232.5



Molle di protezione in acciaio al carbonio zincato.
Galvanized carbon steel protection springs.

Approvazione TÜV SÜD NGV
TÜV SÜD NGV approval

I tubi raccordati ZEC sono stati testati ed approvati da TÜV SÜD America in accordo alle normative:

«CSA/ANSI NGV 4.2:2022 · Hoses for natural gas dispensing systems».
«CSA/ANSI NGV 3.1:20 Fuel system components for compressed natural gas powered vehicles».

I raccordi in AVP zincato e quelli in acciaio inox sono approvati secondo NGV 4.2. Solo i raccordi in acciaio inox sono approvati secondo NGV 3.1.

Fare riferimento al report ufficiale TÜV SÜD per la lista delle combinazioni tubo e raccordo approvate.

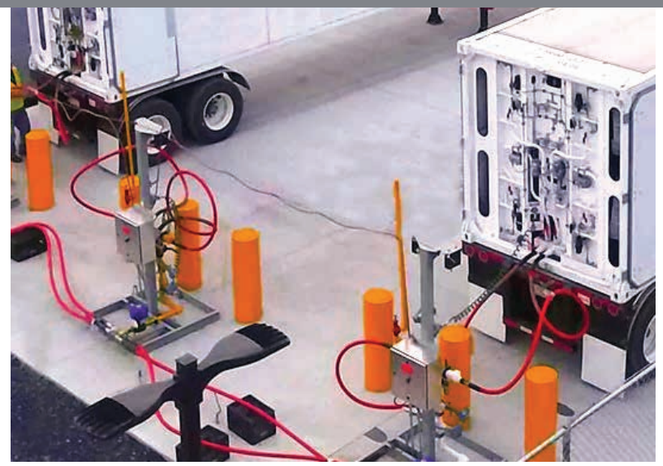
ZEC hose assemblies has been tested and approved by TÜV SÜD America according to:

«CSA/ANSI NGV 4.2:2022 · Hoses for natural gas dispensing systems».
«CSA/ANSI NGV 3.1:20 Fuel system components for compressed natural gas powered vehicles».

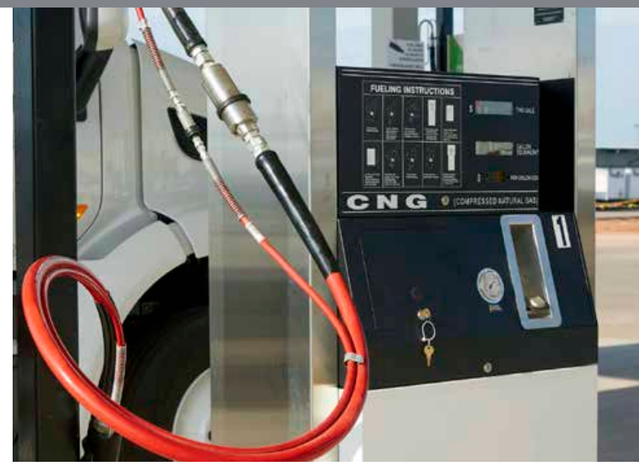
The fittings made in both carbon steel and stainless steel are approved under NGV 4.2. Only the fittings in stainless steel are approved under NGV 3.1.

Refer to the official TÜV SÜD report for the official approval scope and the list of the hose and fittings combinations approved.

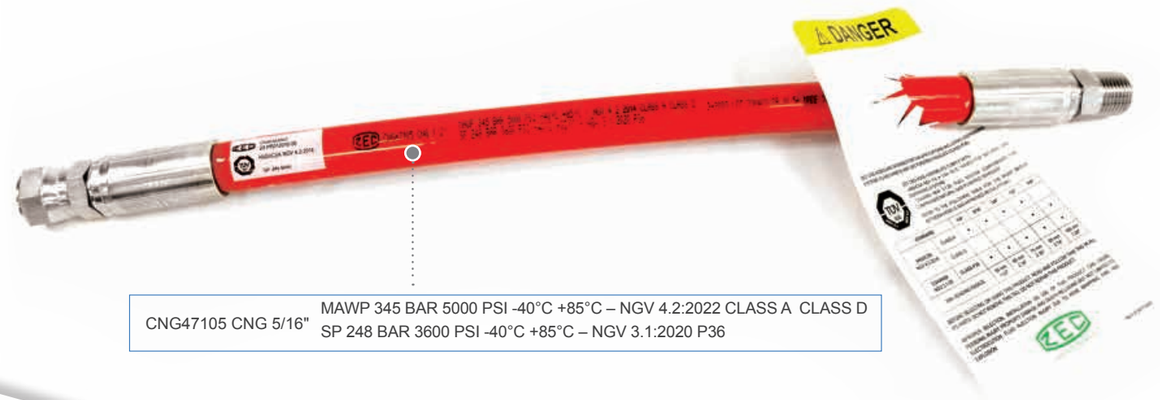
Codice Part nr	*ID*			*NGV 4.2*		*NGV 3.1*
	-dash	*DN*	*inch*	*class A*	*class D*	*class B*
CNGM37105	-4	6	1/4"	✓		✓
CNG47105	-5	8	5/16"	✓		✓
CNG57105	-6	10	3/8"	✓		✓
CNG67105	-8	12	1/2"	✓	✓	✓
CNG87105	-12	19	3/4"		✓	✓



Impianti CNG a bordo veicolo
On-Vehicle Applications



Applicazioni di erogazione
Dispensing applications



CNG47105 CNG 5/16" — MAWP 345 BAR 5000 PSI -40°C +85°C – NGV 4.2:2022 CLASS A CLASS D
SP 248 BAR 3600 PSI -40°C +85°C – NGV 3.1:2020 P36



La serie di tubi e raccordi CNG ZEC sono in accordo alle normative:
- CSA / ANSI NGV 4.2:2022
- CSA / ANSI NGV 3.1:2020

The ZEC Serie CNG Hoses and fittngs meet the requirements of:
- CSA / ANSI NGV 4.2:2022
- CSA / ANSI NGV 3.1:2020

Sistema qualità certificato / *Certified quality system*

Il Sistema qualità certificato di ZEC garantisce un controllo costante della conformità dei prodotti alle specifiche. Per ogni lotto di tubo prodotto vengono controllate:

- dimensioni
- pressione di scoppio
- variazione di lunghezza in esercizio
- conducibilità

Anche i tubi raccordati sono sottoposti a controlli costanti:

- collaudo in pressione a 200% della pressione di lavoro
- conducibilità
- lunghezza di lavoro

Sia il tubo sia l'assemblato sono marcati con un numero identificativo che ne garantisce la totale rintracciabilità.

The ZEC certified quality system guarantees a constant control of the conformity of the products to the specifications. For each hose batch, the following are checked:

- *diameters*
- *burst pressure*
- *length variation at the service pressure*
- *conductivity*

Even the assemblies are subjected to constant checks:

- *proof test at 200% service pressure*
- *conductivity*
- *working length*

Both the tube and the assembly are marked with a distinctive identification number which guarantees total traceability.



Banco per il collaudo con azoto della raccordatura
Bench for nitrogen pressure test



Tester invecchiamento accelerato UV
UV accelerated weathering tester

Istruzioni e diametri di pressatura sono disponibili e sempre aggiornati nell'Area Riservata sul sito ZEC: www.zecspa.com/it/area-riservata

Instructions and crimping diameters are available and always updated in the Reserved Area on ZEC's website: www.zecspa.com/en/reserved-area

THERMOPLASTIC TUBING AND HOSES
MADE IN ITALY

Le immagini e i valori menzionati in questo documento sono forniti a titolo puramente indicativo al fine di consentire una prima valutazione sulle possibilità di impiego dei prodotti. La Nostra produzione potrà essere variata senza impegno di alcun preavviso alla Nostra clientela.
Si raccomanda di verificare sul sito www.zecspa.com la presenza di possibili adeguamenti per scaricare le schede tecniche di prodotto aggiornate.

È responsabilità del cliente verificare che i tubi e i raccordi siano adatti alla propria applicazione e soddisfino le specifiche e gli standard richiesti.

Per condizioni di vendita: www.zecspa.com/it/condizioni-generali-di-vendita.

Condizioni generali di vendita

The images and values indicated in the present document are to be intended only as an indication, with the purpose of permitting the customer a first evaluation of the products application possibilities. Our production can be modified without any obligation of prior notice to our customers.
Therefore we recommend to consult our website www.zecspa.com for the latest version of the technical data sheets.

It's the Customer's responsibility to check that hoses and fittings are suitable for his application and meet the required specifications and standards.

For Terms of Sale please refer to www.zecspa.com/en/general-conditions-of-sale.

General conditions of sale

THERMOPLASTIC TUBING AND HOSES
MADE IN ITALY

ZEC S.p.A.
Via Lungolorno 11, 43052 Colorno (PR) - Italy
Tel. +39 0521 816631 - Fax +039 0521 816772

www.zecspa.com
info@zecspa.com