Parker Worldwide

Europe, Middle East, Africa AE - United Arab Emirates,

parker.me@parker.com Tel: +971 4 8127100

AT – Austria, Wiener Neustadt Tel: +43 (0)2622 23501-0 AT - Eastern Europe, Wiener parker austria@parker.com

parker easteurope@parker.com Tel: +43 (0)2622 23501 900

AZ - Azerbaijan, Baku

Tel: +994 50 2233 458 parker azerbaijan@parker.com **BE/LU – Belgium,** Nivelles Tel: +32 (0)67 280 900

parker.belgium@parker.com BY - Belarus, Minsk

CH - Switzerland, Etoy Tel: +41 (0)21 821 87 00 parker:switzerland@parker.com Tel: +375 17 209 9399 parker belarus@parker.com

CZ – Czech Republic, Klecany Tel: +420 284 083 111 parker.czechrepublic@parker.com

DE - Germany, Kaarst Tel: +49 (0)2131 4016 0 parker.germany@parker.com

DK – Denmark, Ballerup Tel: +45 43 56 04 00 parker.denmark@parker.com ES – Spain, Madrid Tel: +34 902 330 001 parker.spain@parker.com

Tel: +358 (0)20 753 2500 parker.finland@parker.com FI - Finland, Vantaa

FR - France, Contamine s/Arve Tel: +33 (0)4 50 25 80 25 parker.france@parker.com

Tel: +30 210 933 6450 parker greece@parker.com GR - Greece, Athens

HU – Hungary, Budapest Tel: +36 1 220 4155 parker.hungary@parker.com

(from AT, BE, CH, CZ, DE, DK, EE, ES, FI, FR, IE, IL, **EMEA Product Information Centre** Free phone: 00 800 27 27 5374

IS, IT, LU, MT, NL, NO, PL, PT, RU, SE, SK, UK, ZA)

Toll-free number: 1-800-27 27 537 **US Product Information Centre**

Your local authorized Parker distributor

Parker

Tel: +353 (0)1 466 6370 parker ireland@parker.com IT - Italy, Corsico (MI) IE - Ireland, Dublin

KZ - Kazakhstan, Almaty parker.italy@parker.com Tel: +7 7272 505 800

NL - The Netherlands, Oldenzaal parker.easteurope@parker.com

parker.norway@parker.com Tel: +31 (0)541 585 000 parker.nl@parker.com NO - Norway, Asker Tel: +47 66 75 34 00

Tel: +48 (0)22 573 24 00 parker.poland@parker.com PL - Poland, Warsaw

PT - Portugal, Leca da Palmeira Tel: +351 22 999 7360 parker.portugal@parker.com

Tel: +40 21 252 1382 parker.romania@parker.com RO - Romania, Bucharest

parker.russia@parker.com **RU - Russia,** Moscow Tel: +7 495 645-2156

SE – Sweden, Spånga Tel: +46 (0)8 59 79 50 00

SK - Slovakia, Banská Bystrica parker sweden@parker.com parker slovakia@parker.com Tel: +421 484 162 252

parker.slovenia@parker.com SL - Slovenia, Novo Mesto Tel: +386 7 337 6650

parker turkey@parker.com IR – Turkey, Istanbul Tel: +90 216 4997081

UK – United Kingdom, Warwick parker ukraine@parker.com parker.uk@parker.com Tel +380 44 494 2731 UA - Ukraine, Kiev

ZA – South Africa, Kempton Park Tel: +27 (0)11 961 0700 parker.southafrica@parker.com

CA - Canada, Milton, Ontario **US – USA,** Cleveland Tel: +1 216 896 3000 rel: +1 905 693 3000 North America

Asia Pacific

Technical handbook

AU - Australia, Castle Hill Tel: +61 (0)2-9634 7777 **CN – China,** Shanghai Tel: +86 21 2899 5000

HK - Hong Kong Tel: +852 2428 8008

Tel: +91 22 6513 7081-85 IN - India, Mumbai

Industrial Tube Fittings Europe

KR - South Korea, Seoul **JP – Japan,** Tokyo Tel: +81 (0)3 6408 3901 Tel: +82 2 559 0400 MY - Malaysia, Shah Alam Tel: +60 3 7849 0800

fluid & gas handling

electromechanical

climate control filtration sealing & shielding

process control

NZ - New Zealand, Mt Wellington Tel: +64 9 574 1744

SG - Singapore

TH - Thailand, Bangkok TW – Taiwan, Taipei Tel: +886 2 2298 8987 Tel: +662 717 8140

South America

BR - Brazil, Sao Jose dos Campos **AR - Argentina,** Buenos Aires Tel: +54 3327 44 4129 rel: +55 12 4009 3500

MX - Mexico, Apodaca Tel: +52 81 8156 6000 **CL – Chile**, Santiago Tel: +56 2 623 1216

VE – Venezuela, Caracas Tel: +58 212 238 5422





Europe

echnical handbook/Catalogue 4100-10/UK





Industrial Tube Fittings Europe - Technical handbook



For your safety!

Under certain circumstances, tube fittings can be subjected to extreme loadings such as vibration and uncontrolled pressure peaks.

Only by using genuine Parker Components and following Parker assembly instructions can you be assured of the reliability and safety of the products and their conformity to the applicable standards.

Failure to follow this rule can adversely affect the functional safety and reliability of products, cause personal injury, property damage, and result in loss of your guarantee

Subject to alteration

© Copyright 2014, Parker Hannifin Corporation. Rights Reserved.



Catalogue 4100-10/UK

Parker's Motion & Control Technologies

VEROSPACE customers become more prolevels of profitability by engiand control technology need, neering the best systems for their requirements, It means plications from many angles value. What-ever the motion relentless drive to help our ductive and achieve higher to find new ways to create global reach to consistently deliver. No company knows Parker, For further info call Parker has the experience, looking at customer apcontrol technology than breadth of product and more about motion and 00800 27 27 5374











ELECTROMECHANICAL

	Semiconductor & electron cs	• lexile	Hectronic controllers Wire & cable		Hand stutted valves	AC/DC drives & systems	Pressure regulating valves Alectric actuators, gantry robots &	Refrigerant distributors	Safety relief valves Safety relief valves	Electromechanical actuation systems	Trermostatic expansion valves	I irear motors	Shonour motors conto motors Adjus
--	-----------------------------	----------	--	--	---------------------	------------------------	--	--------------------------	---	-------------------------------------	-------------------------------	----------------	-----------------------------------









SEALING & SHIELDING Key Markets

EUMATICS

YDRAULICS

FLUID & GAS HANDLING

Key Markets

Consumer
Energy, cil & gas
Fil. ic power
Concret industrial

Lile solerces Mil tary Semiconcuctor	Telecommunications Transportation	Key Products	Dynamic seals	 Elastomeric o-rings 	 EMI shielding 	 Exmide: 8, precision-cut, fabr
Key Products • Analytical sample concilioring products 8. explores	 Aucr pulymer dremical delivery filtings, valves & pumos 	 High purity gas delivery fittings, valves & regulators 	 Instrumentation fittings, valves & 	regulators	 Medium pressure fittings & velves 	 Process control man folds

Oll & gas • Cover generation & energy • Tuck hyperaulics

(ey Products

restry dustrial machinory

Agriculture
But chemical handing
Construction machinary
Construction machinary
Fund & Rawerage
Fund & Base delivery
Funsiell mechinary
Muddle
Old & gas

Funding

in shortest	Key Products	 Dynamic seals 	Blastomeric o-rings	Emil Sheding Everyday 8 provision as febrical	obstomen sprenke - da, etalical	Homogeneous & inserted alsolon	shapes	
	2	•	•	• •	•	٠		

coupings

Sinctural extrusions

Tremoplastic tubing & fittings

Vactum generators, cups & sersors

Jagnissis et. Jonest

- Julia (og 1968 & acomdans
- Vitala (og 1968 & acomdans
- Julia (og 1968 - acomdans)

Brass fittings & valves
Diagnostic eculoment
Fluid conveyance systems
Incustrial hose
PFF & PFA hinse, tubing & clastic

fittings
• Hutber & Iterrruptestic rose & couplings
• Tube fitting & adapters
• Quick disconnects

ENGINEERING YOUR SUCCESS.

Tube fittings catalogue/Table of contents

Introduction	page 2
Detailed table of contents	page 11
Function of fittings	A
Systematic fitting selection	B
Performance data	C
Dimensioning	D
Tube assembly	E
Fitting assembly	F
Trouble shooting guide	G
Tooling	H
DIN fittings	1
O-Lok®	J
Triple-Lok [®]	K
Ferulok®	L
Weld fittings	M
High Pressure Hydraulic Flanges	N
Adapters	О
Valves	P
Rotary fittings	Q
Parker SensoControl® Diagnostic equipment	R
Tubes	S
Tube clamps	Т
Custom Products	U
Alphanumerical index	V



D

G

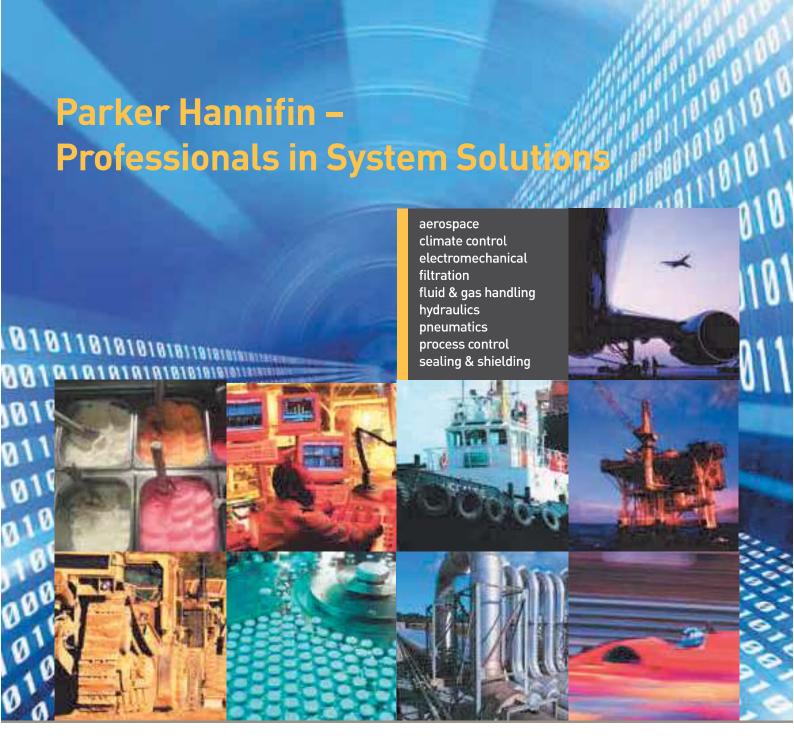
M

N

0

P

Q



Parker Hannifin is the world's leading manufacturer of motion and control technologies. The company develops and designs systems and precision solutions for mobile and industrial applications as well as the aerospace industry. Parker Hannifin employs around 58,000 people in 49 countries.

The Company's main business objective is to help customers achieve maximum productivity for their applications with the support of professional Parker engineers. This is achieved through innovative, top quality and reliable proprietary products. These can be delivered quickly thanks to a worldwide sales network. Parker is the consummate provider of customized system solutions.

Video





The strength of Parker

Under the umbrella of the Fluid Connectors Group Europe, Parker Hannifin brings together the connector technology of the brands Ermeto, Legris Transair, Legris Connectic, Legris Autoline, Polyflex, ITR, Rectus, and Tema. Whether it be tube fittings, hose fittings, or hoses, Parker offers the most comprehensive range available from a single supplier. As part of the Fluid Connectors Group Europe, Tube Fittings Division Europe (TFDE) is one of the largest businesses in Parker. The foundation stone for enduring business success was laid with the development of the Erneto cutting ring. Nowadays, flanges, valves, tubing, measuring systems, and tube forming and pre-assembly machines, besides the classic DIN and SAE fittings, are manufactured in several locations.

Video





Whether standard parts or application-specific special developments, the Parker product programme offers an appropriate solution for every customer requirement.

Always new product ideas Innovations secure the future

Without new product ideas there would be no progress: Parker has an efficient product development program in the form of the Winovation Program. From the initial idea through to market readiness, every stage is checked to exacting criteria before it moves on to the next project phase. This is how the customers are guaranteed beneficial products ready for series production, that work reliably from the first use and over the long term.



Complete Piping Solutions

Complete Piping Solutions is the high-quality complete solution in weld-free connection technology for hydraulic systems. From advice on construction and pre-assembly through to delivery and installation - all in the best quality and reliability. Saves a huge amount of time and money.

www.completepipingsolutions.com

Video







The Parflange F37 program is operation-friendly and environmentally friendly technology. Production times are reduced by more than half when compared to conventional welding.





For tubes and tubing connections. With excellent sealing and high mechanical stability thanks to continuous orbital tube forming. Intended for tubes with an external diameter of 16 to 165 mm, a wall thickness of up to 9 mm and a pressure of up to 420 bar.

www.completepipingsolutions.com

Video



Serviceman Plus

Mobile measuring technology for daily use. "Plug & Play" through automatic sensor detection. Simply plug in and measure. New storage concept with Nano USB stick. USB interface to the PC for comfortable analysis and documentation of the measurements via the SensoWin software.

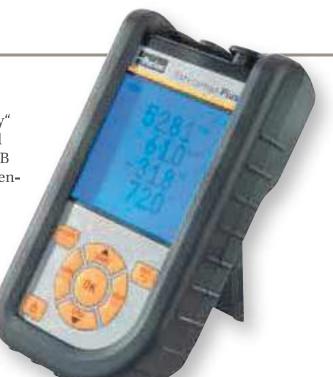
www.parker.com/tfde

Video



Serviceman Plus – the benefits in hand

The Serviceman Plus is a mobile, very robust, and easy-to-operate measuring device for various measuring tasks in mobile hydraulics or stationary hydraulic systems.



Markets Create Brand Names

Suitable Designs for Every Need

Partnership through cooperation with the customer is the defining characteristic of Parker's product policy. With a keen sense of the customer's needs and the requirements of different markets, Parker's engineers develop appropriate solutions.

Finally, these are products which have world-wide recognition as a byword for consistently high quality of materials and manufacture, and reliable functionality.

www.parker.com/tfde



EO-PSR



The world's most widespread high-pressure fittings system. Highest pressure resistance and extreme corrosion resistance thanks to Cr(VI)-free surfaces. Perceptibly reduced tightening torques. Considerable assembly advantages.



EO-3®

E0-3®, a world first: The innovative tube fitting system with visual installation recognition. For tube and hose applications.



The tried and tested Dry Technology concept.

Has a large volume elastomeric seal on the tube side and Cr(VI)-free surfaces, which are very corrosion resistant. Suitable for 800 bar (PN) in S Series and up to 500 bar (PN) in the L Series.

E0-2











E02-Form

The positively locking highpressure form connector.

Special features — classical E0-2 sealing ring and cold-formed tubing. Impressively superior mechanical strength and maximum pull-out resistance. For 800 bar (PN) in S Series and up to 500 bar (PN) in L Series.



0-Lok®



Fittings series with face-side O-ring seal.

Suitable for a wide range of tube wall thicknesses. Applicable to metric and inch tubes and hose connections.



37° flare system.

The most widely used fittings system for inch tubes. For pressures up to 500 bar for smaller sizes and up to 140 bar for larger dimensions.

Triple-Lok®





The Parker Service Master Plus. Portable multi-function handheld measuring instrument.

Measures, stores, monitors and analyses pressure, temperature, flow and rotational speeds. Multiple measurement and triggering methods. Measurement and display of more than 50 channels.

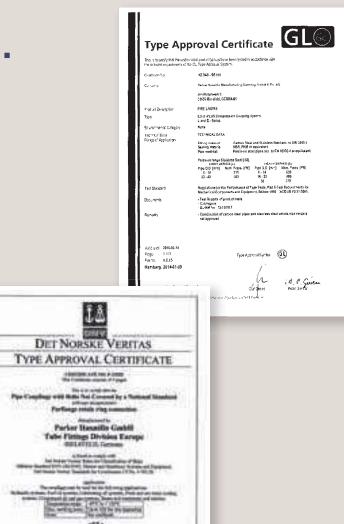






Certified products are...





...official proof for the user that Parker components satisfy the highest standards for design features, material quality and machining. When applying the product at the point of installation, approval is frequently an absolute necessity.

Whether ABS, LR or DNV, Parker products regularly pass the international and independent accreditation bodies' stringent tests. So suitability for reliable application even under the toughest conditions is officially confirmed.

Please look for approvals at www.parker.com/tfde





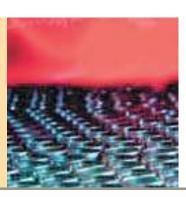
...of excellent quality

The manufacture of quality high-performance fitting components starts already at the ordering stage for the crack-tested primary material, which must be in accordance with Parker material specifications specially determined for product manufacture. Through the processing stages required both before and after production, those properties which will fulfil constantly increasing material requirements are guaranteed.

To ensure that the high quality of the materials used and the tube fittings made from them are guaranteed, continuous tests e.g. spectral analysis and dye penetration tests, are carried out in our own laboratories and testing facilities. The fittings systems' resistance to corrosion and static and dynamic loads are put through their paces on in-house test stands.



Top-class products result from selected materials and the most up-to-date manufacturing methods. Functionally reliable and durable. Quality pays off.





The Parker Training Programme

The Tube Fittings Division Europe's education programme is widely diversified. From theoretical product training through to practical instruction, a large variety of training opportunities is offered. This multiple choice training concept from Tube Fittings Division Europe, in addition to the regular events at the Bielefeld location, also offers the possibility of arranging customer-tailored in-house training. These

training units are executed with the support of the very latest media and take place in modern teaching rooms. With the knowledge they will have gained, participants are in a position to operate more efficiently and to select and use the TFDE fittings programme advantageously and safely. Ask Your Parker sales office for this training programme.



Service before and after sales

To support its products, Parker offers its customers a comprehensive selection of services, i.e.

The Parker Store

Providing outstanding expert consultation, it was one of the first self-service shops for hydraulic and pneumatic fittings – and much more besides. It offers immediate manufacture of hose assemblies. Up to 3,000 items from stock.

Parker Hose Doctor

This emergency service can be reached via a toll-free hotline 24 hours a day, 7 days a week. Hose Doctor vans have fully-equipped workshops, spare parts and hydraulic oils on board. This enables the technician to rapidly replace faulty assemblies on site.

Tech Services

Together with the customer, Parker engineers

assess on site the optimal operation of the equipment in question. They are present from the design stage through to installation and carry out training for operatives.

More than a product: Parker offers an elaborated service to the customers.

Kitting Services

Should the customer require a particular set of fittings and related items, Parker can supply these items under a single reference number as a totally complete assembly set.

Parker Logistic Services

Parker products can be supplied either directly from Parker or through a certified distributor on a just-in-time basis straight to the assembly point.

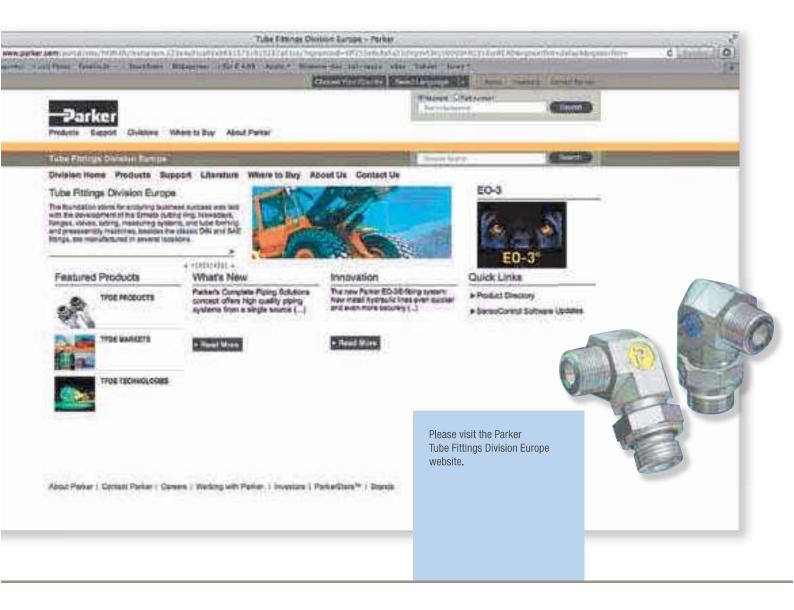
www.parkerstore.com







Online: Tube Fittings Division Europe



Whether it be product information, catalogues, brochures or approvals, all the information you may require can quickly be found on, and downloaded from, our website

www.parker.com/tfde

Or if in your design activities you need CAD data for any TFDE product, simply visit our website

http://parker.partcommunity.com/portal/portal/parker

and you can then download the relevant data after prior registration.





