

Type **TRC1-TRN1**

WEH[®] Flat-Face Quick Connect Coupling

for fast and leak-free connection and disconnection of hydraulic lines



General

DESCRIPTION



Features

- Flat-sealing design
- Safety lock
- Single-hand operation
- Coupling possible under residual pressure
- Reduced contamination of hydraulics systems
- Leak-free decoupling
- High performance

For hydraulic applications in which lines are frequently connected and disconnected, a quick release coupling is an effective solution.

The WEH® Flat-Face Quick Connect Coupling offers just that – and even more. These couplings withstand hard impacts with dynamic force (hammer strikes up to 8 tons) and sudden changes in flow direction.

The WEH® Flat-Face Couplings feature an impressively long service life, high resistance under “heavy-duty” applications as well as high bursting and operating pressure.

One unique aspect: The TRN1 plug-in fitting is optimized during the manufacturing process using the case hardening method. In this way, we achieve maximum possible surface hardness on the entire front part of the fitting. This is a major advantage in challenging applications.

The WEH® Flat-Face Quick Connect Couplings are not only tough, they are also good for the environment.

In contrast to the old ISO-A or ISO-B couplings with conical valves, the loss of media is significantly lower when changing with a flat-face coupling.

Our flat-sealing system ensures that no hydraulic oil leaks out. This is not only good for the environment, it is also good for your budget. No cleaning costs, no refills of hydraulic oil.

With WEH® Flat-Face Quick Connect Couplings, your work is fast, easy, clean and safe.

Our couplings significantly exceed the requirements of the applied standard ISO 16028 in many aspects.

The WEH® Quick Coupling System comprises the WEH® TRC1 Quick Connect Coupling and the WEH® TRN1 Plug-in Fitting. The coupling system can be connected on both sides to conventional hydraulic hoses with fittings with BSP thread. Other connection sizes and types on request.

Another tip: Order the protection cap as well. In this case, clean work includes not just the coupling itself, but the entire hydraulic system.

Applications

Quick connect coupling system for fast and leak-free connection and disconnection of hydraulic lines.

TECHNICAL DATA

Characteristics	Basic version
Nominal bore (DN)	6.3 – 25 mm (depending on the body size)
Max. allowable operating pressure PS	350 – 500 bar (depending on the body size)
Temperature range	-30 °C up to +100 °C
Medium	Oil
Material	Steel (Zinc/nickel, passivated zinc)
Sealing material	NBR
Actuation	One-hand actuation possible, Decoupling not permitted under pressure
Conformity / Tests / Approvals	Compatible with all coupling systems in accordance with ISO 16028

Other designs on request

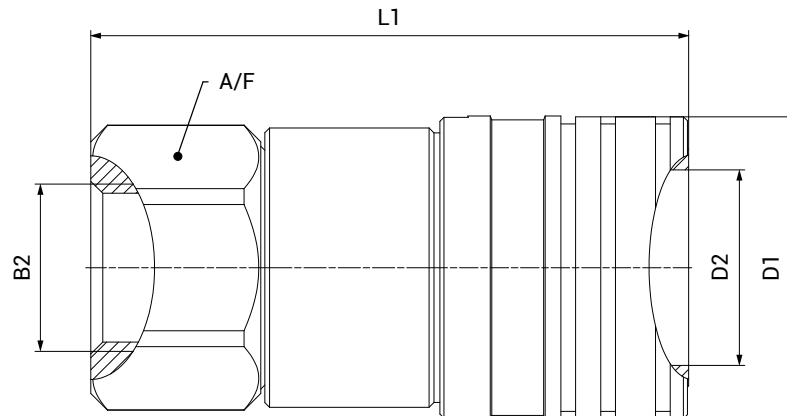
Application example:



Ordering

ORDERING | Flat-Face Quick Connect Coupling WEH® TRC1

approx. dimensions (mm)

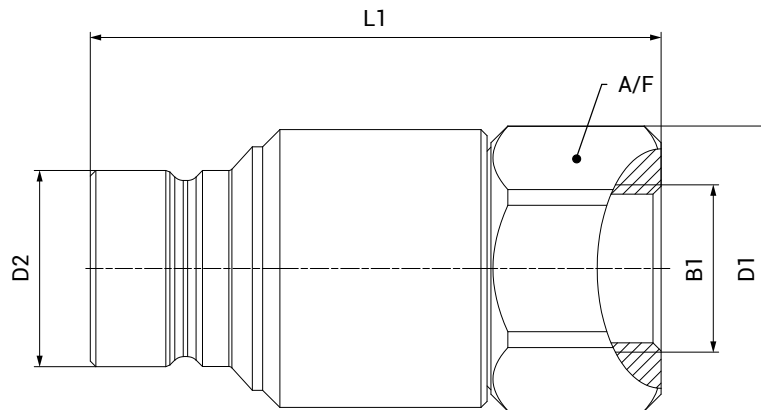


Part no.	Description	DN	Max. allowable operating pressure PS (bar)	Min. bursting pressure (bar)	B2 (Female thread)	L1	D1	D2	A/F	Flow volume in l/min at ΔP 3 bar	Leakage (decoupled) in ml
C1-183781	TRC1-S1	6.3	500	1500	G1/4"	58.2	26.8	16.1	21	24	0.02
C1-183782	TRC1-S2	10.0	400	1200	G3/8"	67.6	30.8	19.7	25	44	0.03
C1-183783	TRC1-S3	12.5	400	1200	G1/2"	75.0	37.8	24.5	32	93	0.04
C1-183784	TRC1-S4	16.0	400	1200	G3/4"	80.0	40.8	27.0	36	139	0.06
C1-183785	TRC1-S5	19.0	400	1200	G3/4"	99.0	45.8	30.0	41	188	0.10
C1-183786	TRC1-S6	25.0	350	1200	G1"	109	55.0	36.0	46	330	0.11

Ordering

ORDERING | Flat-Face Plug-in Fitting WEH® TRN1

approx. dimensions (mm)



Part no.	Description	DN	Max. allowable operating pressure PS (bar)	Min. bursting pressure (bar)	B2 (Female thread)	L1	D1	D2	A/F	Flow volume in l/min at ΔP 3 bar	Leakage (decoupled) in ml
C1-183775	TRN1-S1	6.3	500	1500	G1/4"	48.7	25.2	16.1	21	24	0.02
C1-183776	TRN1-S2	10.0	400	1200	G3/8"	55.2	28.0	19.7	25	44	0.03
C1-183777	TRN1-S3	12.5	400	1200	G1/2"	71.5	35.7	24.5	32	93	0.04
C1-183778	TRN1-S4	16.0	400	1200	G3/4"	75.0	40.0	27.0	36	139	0.06
C1-183779	TRN1-S5	19.0	400	1200	G3/4"	93.0	46.0	30.0	41	188	0.10
C1-183780	TRN1-S6	25.0	350	1200	G1"	92.9	46.0	36.0	41	330	0.11

Accessories

ACCESSORIES

The following accessories are available for the Flat-Face Quick Connect Coupling WEH® TRC1-TRN1:

Protection cap

Protection cap for quick connect coupling and plug-in fitting to prevent dirt from entering when decoupled.



Part no.	Description
W183989	Protection cap for quick connect coupling TRC-S1
W183990	Protection cap for quick connect coupling TRC-S2
W183991	Protection cap for quick connect coupling TRC-S3
W183992	Protection cap for quick connect coupling TRC-S4
W183993	Protection cap for quick connect coupling TRC-S5
W183994	Protection cap for quick connect coupling TRC-S6
W183995	Protection cap for plug-in fitting TRN-S1
W183996	Protection cap for plug-in fitting TRN-S2
W183997	Protection cap for plug-in fitting TRN-S3
W183998	Protection cap for plug-in fitting TRN-S4
W183999	Protection cap for plug-in fitting TRN-S5
W184000	Protection cap for plug-in fitting TRN-S6

Maintenance

MAINTENANCE INSTRUCTIONS

- Never put excessive strain on the quick connect coupling. Observe the maximum permitted operating pressure indicated in the data sheet. The information listed for burst pressure refer to products under unintended overload, without corrosion, without damages etc. Improper operation of the quick connect coupling can lead to personal injuries or death as well as material damages.
- Keep the quick connect coupling and plug-in fitting clean and protect against additional moisture. Before use, please wipe off.
- When decoupled, place the protection caps on the quick connect coupling and the plug-in fitting.
- Avoid damages to the front end surfaces.
- Regularly check the seal of the quick connect coupling and the moving parts. Replace the quick connect coupling if it is damaged.
- Check the plug-in fitting regularly. If ball indentations or abrasion are detected on the plug-in fitting, replace it. Worn plug-in fittings lead to a high level of wear on the quick connect coupling.
- Choose the appropriate port for your application. Ports that are too large cause unnecessary abrasion on the quick connect coupling.
- The protection caps can be stuck together when the quick connect coupling and plug-in fitting are coupled. This prevents any contamination of the protection cap.

Technical explanations

TECHNICAL EXPLANATIONS

Abbreviations/Definitions

For explanation of abbreviations, definitions of terms and further explanations, see the applicable Technical Appendix of the corresponding catalog or visit www.weh.com

Illustrations

The illustrations and/or images used in these data sheet are particularly provided for illustrative purposes only and may differ in some details from the actual product. For binding information, please refer to your individual orders.

Safe product selection

Our WEH® Products are designed to be operated by qualified professional users (insofar as WEH® Products are also designed to be operated by other users in individual cases, this is explicitly stated in the corresponding operating instructions). Please note that WEH does not know your system and therefore - also due to the large number of different potential applications of WEH® Products - cannot perform tests on all potential types of application. You alone are responsible for the selection, configuration and suitability of WEH® Products, especially according to the requirements of your system. Before purchasing WEH® Products, please particularly ensure that our products are compatible with your intended use, your performance data, your material and fluids, your system concept and your system limits according to our product specifications. Please also consider your technical and legal requirements for operation, handling and maintenance. The quality and safety of WEH® Products is our highest priority. For this reason, WEH® Products may not be used outside the specifications in the relevant data sheets and product descriptions. If you are not sure whether the WEH® Product is suitable for your system and intended use, please contact us in advance. We also strongly recommend that you refrain from using third-party spare parts or a combination of WEH® Products with unsuitable third-party products. You alone are responsible for reviewing the suitability of third-party products. WEH® Products and WEH® Spare parts comply with our quality and safety standards.

Service life

WEH® Products are generally products which may be subject to wear and fatigue during operation and depending on your individual application/use. For details - in particular regarding the corresponding minimum inspection and maintenance intervals - please refer to the respective operating instructions for the WEH® Product.

Explanation on the Pressure Equipment Directive

These WEH® Products are generally classified as pressure accessories in accordance with Article 2 (5) of the Pressure Equipment Directive 2014/68/EU and are considered to be similar to piping. These WEH® Products may not be used as safety accessories. Furthermore, it is pointed out, that these WEH® Products are designed and placed on the market in accordance with the requirements of Article 4 (3) of the Pressure Equipment Directive 2014/68/EU. The assessment with regard to a different classification can, however, be made on request.

External change management

WEH reserves the right to update, optimise and adjust its products continuously. This may result in corresponding changes of the product. Customers will be informed proactively or unsolicited by WEH only in individual cases about product updates, product optimisations and/or product adaptations that have been carried out. You are free to contact WEH at any time to request information about any product updates, product optimisations and/or product adjustments.

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» Contact

More questions? – Great! Don't hesitate to contact our experts.

Manufacturer:

WEH GmbH Precision Connectors

Josef-Henle-Str. 1
89257 Illertissen / Germany

Phone: +49 7303 9609-0

E-Mail: sales@weh.com

Website: www.weh.com