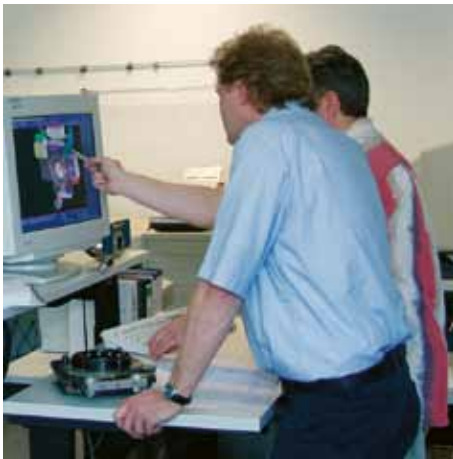


**Updated
& advanced
web version**

Technical Catalogue



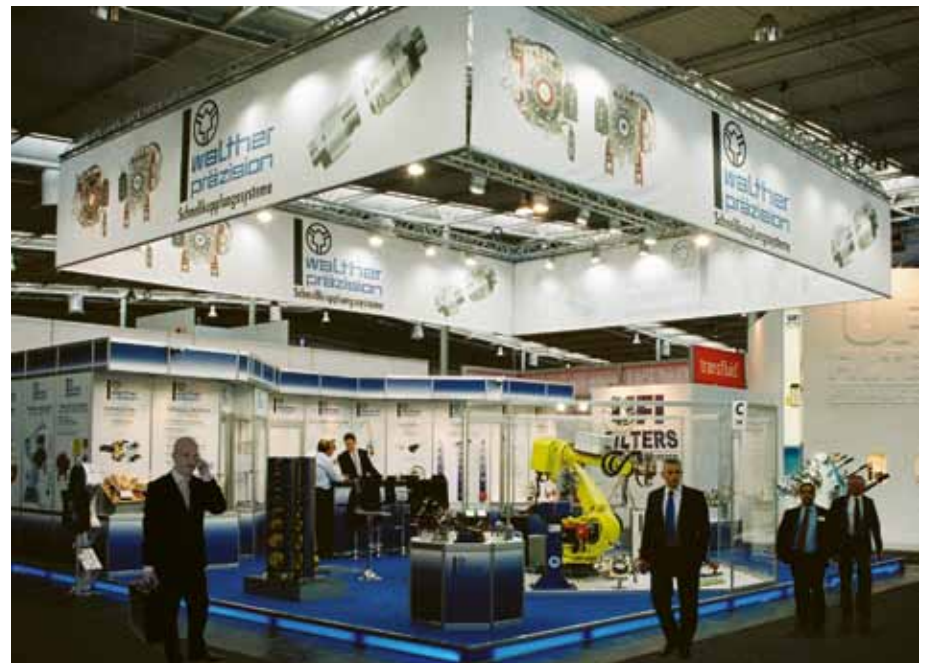
The Company



WALTHER-PRÄZISION is the specialist for problem solutions in the connection technology of fluidic and electric lines and worldwide operating problem solver. The basis of WALTHER-PRÄZISION's success and innovative leadership, with a clear insight into customer-oriented solutions, combined with first class quality and due consideration for the environment resulting in first class products.

WALTHER-PRÄZISION manufactures more than 400.000 varieties of coupling systems with the latest technology at its Haan location (Rhine-land region) with about 300 employees and supplies its products globally to more than 50 countries.

WALTHER-PRÄZISION does not produce mass goods! Whether it is milled, turned, welded, glued, cast, injection-moulded, punched, pressed or shaped, each item is checked. All assembled couplings, whether standard or special, undergo a final performance and leak test before leaving the factory. Convince yourself of our high class and innovative products. The modern quality management system was certified in 1992 for the first time in compliance with DIN EN ISO 9001. Further certifications, e. g. DIN EN ISO 13485, DIN EN ISO 9100 and KTA 1401 are available.



Quick coupling systems

Right for alterations of products reserved without prior notice

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	Seals, Materials Approvals, Test certificates	6 - 7 8
Low pressure	Series LP Working pressure $p_{\max.(\text{stat.})}$ 100 bar. LP-032 and LP-050 not for vacuum Materials: steel, brass, aluminium stainless steel	9 - 34
	Series KL Working pressure $p_{\max.(\text{stat.})}$ 12 bar not for vacuum Materials: polyamide, polyacetal resin	35 - 40
	Series UF Non-interchangeable, UF-032 not for vacuum, Working pressure $p_{\max.(\text{stat.})}$ 40 bar Materials: brass, stainless steel	41 - 48
Medium pressure	Series MD Working pressure $p_{\max.(\text{stat.})}$ 250 bar Vacuum in coupled position Material: steel, brass, stainless steel	49 - 66
High pressure	Series HP Working pressure $p_{\max.(\text{stat.})}$ 2000 bar Materials: steel, stainless steel	67 - 76
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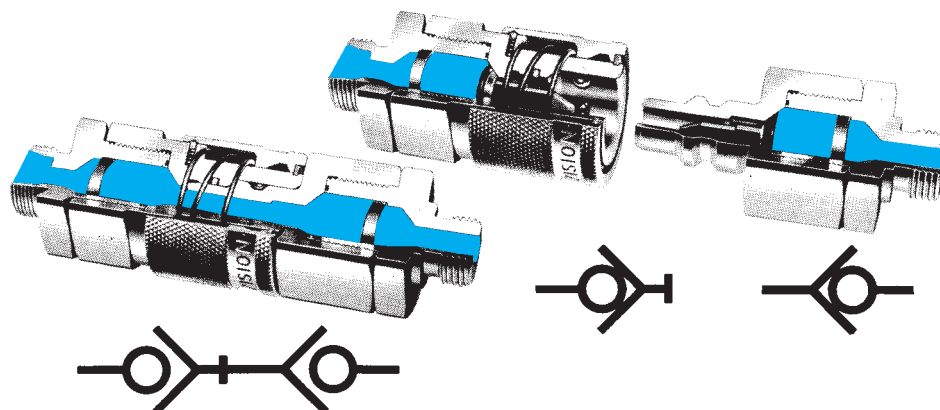
2 Mono-Couplings, Design

Do you have questions regarding the available product types?
Our customer service is always eager to answer your questions. Phone: +49 (0) 2129 567-402.

The system of WALTHER Quick Release Self-Sealing Couplings is made up from four basic units.

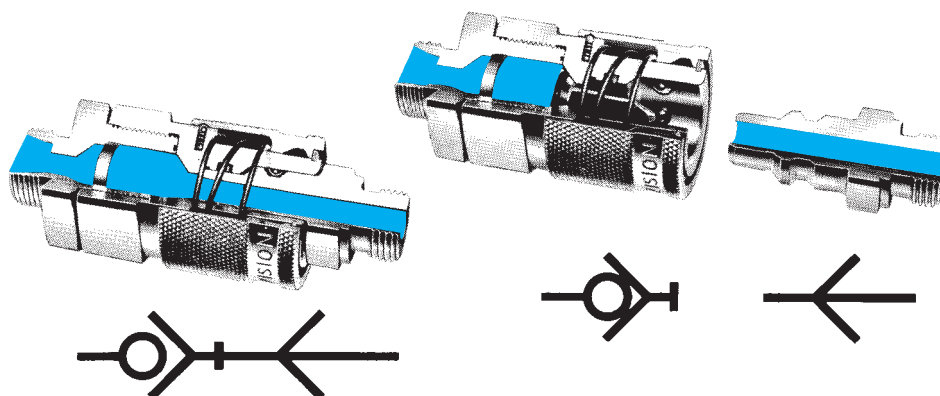


Self-Sealing Coupling and Self-Sealing Adaptor = sealing on both sides.
Upon disconnection the valves of Self-Sealing Coupling and Self-Sealing Adaptor close simultaneously.

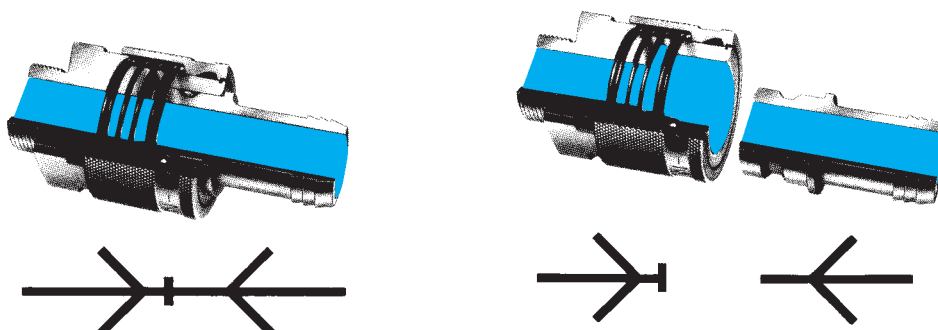


Self-Sealing Coupling and Thru-Type Adaptor = sealing on one side.
Upon disconnection the coupling valve closes.

The combination of thru type coupling and self sealing adaptor is usually not available, however it can be realized for the types LP-006, -007, -012 and -019 as thru type coupling with valve opening tappet.



Thru-Type coupling and Thru-Type Adaptor = full flow.
Upon disconnection both sides are open.



According to the nature of the application either the Self-Sealing Coupling or the Self-Sealing Adaptor can be fitted to the supply line.

By insertion of the adaptor into the coupling the connection is made similar to a plug contact.

As the valves are locked in the open position when coupled, the direction of flow is of no consequence.

Protection rights:

Many patents, registered designs and applications for patents in Germany and abroad prove the technical lead of WALTHER-Mono-Couplings, Multi-Couplings and Docking-Systems.

Part number principle

with annex for optional additional features per example of low pressure self-sealing coupling in stainless steel with additional features

Series or Type		LP (oder LV, SP, 06, 07)		KL , UF , MD (oder SG), HP etc.		
Nominal bore / Nominal size						
Kind of product or component see type sheets						
0 = self-sealing coupling		6 = dust plug				
1 = thru-type adaptor		7 = thru-type coupling with valve plunger				
2 = self-sealing adaptor		8 = thru-type adaptor with valve plunger				
4 = thru-type coupling		9 = airguns and other untypical variations				
5 = dust cap						
Series + nominal bore = type		End connection type see part number				
WR021 = end connection G 1/2 A to DIN ISO 228 = 1/2" BSPP male (XX001 to XX999) = special connections) difined XX connection numbers of one type, cannot be used for other nominal bores / nominal sizes or series						
		regarding content variable area		regarding content and number of digits variable annex		
LP	006	0	WR021	01	2	GL - OV - SI
Material and finish			for optional additional features			
see numbering key in the head of the type sheets see corrosion resistance table on page 6 + 7			see special technical explanations on page 5. Partly several additional features can be used at the same time, some additional features exclude others. Regarding this see explanations in the head of the individual type pages.			
Seal type						
NBR =			1			
FKM =			2			
EPDM =			4			
For special materials or special seal types a 4 figure identification is taken by using letter combinations from AAAA to ZZZZ			See table of characteristic features and compatibility on page 6 + 7			

Special Designs

Over the years WALTHER-PRÄZISION as specialist for quick coupling systems has been confronted with many tasks which could be solved with customized designs only.

This lead to many special types besides the standardized product programme.

Wherever special features of the quick coupling lead to deviations from the standard designs these are exactly defined by letter/number combinations within the

variable part number annex. A "Z" in this place means the connectability with the standard is maintained. When the letter "Y" is used, there is no possibility to connect with the standard designs. However, these special designs are not listed in this catalogue.

Example for the arrangement of the letter/number combination in the variable part number annex for special designs: **LP-006-0-WR021-01-2-Z14...**

4 Standard End Connection

Please note: In case of standardised end connections, please take the max. allowable working pressure of the end connection into account when determining the working pressures.



Do you have questions about the maximum permitted working pressure?

Our customer service is always available to answer your questions. Phone: +49 (0) 2129 567-402.

Please find further information to this topic on our web site.

	Part no. code	end connection Walther	customer's side
British standard pipe parallel (BSPP) male thread to DIN ISO 228	-WR0.. -		
British standard pipe parallel (BSPP) female thread to DIN ISO 228	-WR5.. -		
Metric male thread with 24° sealing cone acc. to DIN 2353, also available as extended bulkhead connection for olive and swivel nut acc. to DIN EN ISO 8434-1 (not part of delivery)	light duty series -L....- heavy duty series -S....-		
Metric male thread with 60° sealing cone to DIN 7631, for sealing cone to DIN 3863 and swivel nut to DIN 3870 also elongated for panel mounting	-D....-		
BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	-VR0.. -		
British standard pipe parallel (BSPP) male thread to DIN ISO 228, with small sealing edge to DIN 3852-2 profile "B"	-WB0.. -		
British standard pipe parallel (BSPP) male thread to DIN ISO 228, sealing profile "E" to DIN 3852-11 for o-ring or sealing ring (not part of delivery)	-WE... -		
Hose connections	-SL0.. -		
conical pipe male thread NPT to US standard	-NP0.. -		
conical pipe female thread NPT to US standard	-NP5.. -		

ATTENTION!

These additional features are not available with all coupling valves and are partly not combinable.

Do you have questions regarding our additional equipment?

Our customer service is always available to answer your questions. Phone: +49 (0) 2129 567-402.

Manufacturing according to 3.1 "BB": In proof of preset materials, a documented manufacturing according to EN 10204/3.1 is necessary

ATEX conformity "EX": An ATEX conform design should be used in explosive areas. This is in compliance with the device group II / category 2 of the explosion protection directive 94/9 EG.

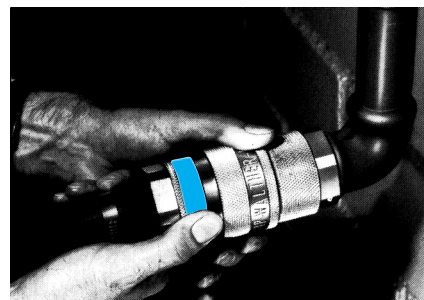
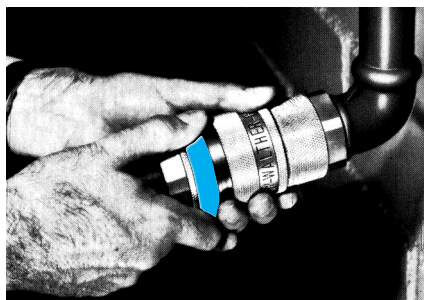
Free of enamel flow disturbing substances "FL": To exclude impairments during the coating process, the enamel flow disturbing (enamel wet disturbing) substances must not be obscured, e. g. with the pressurized air.

Ring grips "GG", "EG": In some applications, e. g. in unfavourable locations, high working temperature, etc. the handling of the couplings can be simplified by additional ring grips.

GW version This version is intended for the use in planned gas plants worked out by engineers for the commercial and industrial gas application.

Ring piston valves "RV": When self-sealing couplings and adaptors are employed under strong pulsating pressure and especially raw working conditions, service life and abrasion resistance can be improved considerably when equipping them with ring piston valves. These valves cannot be connected with standard valves.

Safety locking device "SI" All couplings can be supplied with an additional axial positive safety device. Disconnection is only possible when both locking components – locking sleeve and locking ring – are pulled back against spring force and turned against each other by 90 degrees. Both final positions – secured and released – are fixed by spring-loaded cams. The operator can check the correct locking position by trying to pull back the locking sleeve and thus, disconnecting the coupling. This is not possible in secured position.



TA-Air "TA": With regard to tightness, resp. compliance with specific leakage rate according to TA-Air VDI 2440, extended tests can be carried out.

Venting valves "VE": For long pressurized air lines, it is recommended to use self-sealing couplings and adaptors with venting valves at the hose connection side. Thus the return shock on disconnection is considerably reduced and the air can escape slowly from the hose

Strengthened springs "VF": It is necessary to equip self-sealing couplings and adaptors with stronger valve springs if vacuum occurs in disconnected position.

Locking aid "VH" For easier operation the locking sleeve can be primed in retracted position. When mating both halves, the locking sleeve is released and springs forward into locking position. Thus, it must not be held or hindered otherwise during this action.

6 Seals, Materials

Extract from our tables of seals and materials.

Other indications on request.

The following standard seal types are available:

NBR

main properties:

Resistant to oil and petrol

good ageing characteristics, high abrasion resistance.

FKM

main properties:

Outstanding heat resistance performance, excellent resistance to oils, chemicals, solvents, active oxygen and weather

EPDM Ethylene Propylene

main properties:

High mechanical strength, excellent resistance to high and low temperatures and to active oxygen and weather

good resistance to chemical media

For very aggressive media special constructions with PTFE seals are available.

All specifications for general information only. They apply to 1. pure substances, 2. unless otherwise indicated at room temperature, 3. for salt, acids etc. for hydrous solution of moderate concentration.

The zinc plated surfaces usually used by us are free from hexavalent chrome (Cr VI).

Table of resistance					Table of seals		
fully resistant + partly resistant ○ non-resistant: -					Quality to DIN / ISO 1629		
steel zinc plated	brass passivated	ss AISI 316 ti or similar	Polyamide 11/12	Polyacetal POM	NBR	FKM	EPDM
					● = compatible		
+	+	+	+	+		●	Acetate (Ethyl Acetate & Amyl Acetate)
	-	+	-	+		●	Acetic acid 10 %
+	+	+	+	+		●	Acetone
○	○	+	+		●	●	Acetylene (Ethyne)
+	+	+	+	-	●	●	Aero Engine Fuel BP, ESSO, Avgas 100/130
+	+	+	+	-	●	●	Aero Engine Oil BP: AIRO-120, ESSO: AVIATION-120 Shell: AIRO-120, DERD 2487 DERD 2497, DTD 585
-		+	+			●	Aero hydraulic fluid SKYDROL
+	+	+	+	+	●	●	Air, compressed
+	○	+	○	○		●	Air, hot up to 120°C
+		+	-	-		●	Air, hot up to 200°C
+	+	+	+	+		●	Alcohol
	-	+		+	●	●	Alum
-	○	+	+	○		●	Alkali
○	-	+	+	-		●	Ammonia, liquid
-	-	+	+	○	●		Ammonium Sulphate Solution

Table of resistance					Table of seals		
fully resistant + partly resistant ○ non-resistant: -					Quality to DIN / ISO 1629		
steel zinc plated	brass passivated	ss AISI 316 ti or similar	Polyamide 11/12	Polyacetal POM	NBR	FKM	EPDM
					● = compatible		
+	+	+	+	+		●	Amyl Alcohol
+		+	-	-		●	Aniline
+	+	+	+	+		●	Benzole
+	+	+				●	Borax
+	+	+	+	+	●	●	Butane
+		+			●	●	Butene
+	○	+	+	+	●	●	Butyl Alcohol
	+	+	+	+		●	Carbon Dioxide
	+	+	+		●		Carbon Dioxide, dry
	+	+	+	+		●	Carbon Dioxide, liquid
+	+					●	Carbonic Bisulphide
	+	-	+	+	●	●	Chloride of Barium
-	-	○	-	-		●	Chromic Acid
		+			●	●	Citric Acid
+	+					●	Creosote
+	-	+	-	-		●	Cresol
+	+					●	Cresol, Cresylic Acid
		○	-		●	●	Cupric Chloride
+	+	○	+		●	●	Cyclohexane
+	-	+			●	●	Diethylene glycol
○	+	+	+	+	●	●	Emulsion (Water/Oil)
+	+	+	+	+		●	Ether
+	+	+	+	+	●	●	Ethyl Alcohol
+	+	+	+	+	●	●	Ethylene
+	+	+		-	●		Formalin
-	○	+	-	-		●	Formic Acid
+	+	+	+	+	●	●	Frigen / Freon F 11-12
+		+			●	●	Gasoline, Refined
○	+	+	-	○		●	Gas, Blast Furnace
	+	+	+	+		●	Gas, Coal
-	+	+	-	-		●	Gas, Coke Oven,
+	+	+	+	+	●	●	Gas, Lighting
+	+	+	+	○		●	Gas Naphtalene content
+	+	+		+	●	●	Gas, Natural
+	+	+	+	+	●		Gas, Town
+		+		+	●	●	Gear Oil
	+	+	+	+	●	●	Glucose
+	+	+	+	+	●	●	Glycerine
○	-	○	+	+	●	●	Glycol
+	+	+	+	+	●	●	Helium
+		+	+	+	●	●	Hexane
+		+	+	+		●	Hydrocarbone
+	+	+	+	○	●	●	Hydrogen
	+	+			●	●	Hydrogen Gas 20 °C
	-	+	+	-		●	Hydrogen Sulphide, Humid
+	+		○		●	●	Hydrogene Sulphide, dry

Table of resistance						Table of seals		
fully resistant						Quality to		
partly resistant						DIN / ISO 1629		
non-resistant:								
steel zinc plated	brass passivated	ss AISI 316 ti or similar	Polyamide 11/12	Polyacetal POM		NBR	FKM	EPDM
+	+	+	+	+		●		Hydrogen Peroxide 30 %
+	+	+	+	+		●	●	Isopropyl Alcohol
+	+	+	+	+		●		Kerosene, JP 1
+	+	+	+	+			●	Ketone, Methyl Ethyl
+	+	+	○	○	●			Latex, liquid up to 130°C
		+	+	+	●	●		Lubricating Oil
+	+	+	+	+			●	Lye Caustic
+	+	+	+	○				Lye, Hypochlorous Acid
+	MS 60	+	○	○		●		Lye, Pickling
+		+	+	+	●	●	●	Magensium Carbonate
+	○	+	+	+	●	●	●	Magnesium Hydroxide
	+	+	+	+	●	●	●	Magnesium Sulphate
+	+	+	+	+	●	●	●	Mercury
+	+	+	+	+	●	●		Methane
+	+	+	+	+	●		●	Methanol
+	+	+	○	+	●		●	Methyl Alcohol
+	+	+	+	+			●	Methyl Ethyl Kentone
+		+				●		Methyl Benzene
	+	+	+	+	●	●	●	Milk
+		+		+	●	●		Naphta
+	+	+	+	+		●		Naphtalene
+		+			●		●	Naphtenic Acid
+		+			●		●	Nitrate of Ammonium
+	+	+	+	+	●	●	●	Nitric Acid, up to 35 %
+	+	+	+	+	●	●	●	Nitrogen
+	+	+	+	+	●	●	●	Nitro-Solution (no synstehtiv resin thinners)
+		+	+	○		●		Oil, Coal Tr.
+	+	+	+	+	●	●		Oil, Crude
+	+	+	+	+	●	●		Oil, Diesel
+	○	+	+	+	●			Oil, Diesel up to 120°C
+	○	+	○	+	●	●		Oil, Fuel up to 120°C
○		+	+	+	DF 150 R			Oil, up to 200°C / up to 300°C special type
+	+	+	○	+		●		Oil, Fuel 5 x 5
○	○	+	+	○		●		Oil, Hydraulic Chlorinated
+	+	+	○	○	●	●		Oil , Hydraulic up to 120°C
+	+	+	+	+	●	●		Oil Linseed
○	+	+	+	+	●	●		Oil, Mineral
○	○	+	+	○	●			Oil, Transformer
+	+	+	○	+	●	●	●	Oleic Acid
○	+	+	○	+	●	●		Oxalic Acid
○	+	+	+	○			●	Oxygen, Fat free
+	○	+	+	+	●			Paraffin
+	○	+	+	+	●			Paraffin, (Wax)
+						●		Pentachlorphenole

Table of resistance						Table of seals		
fully resistant						Quality to		
partly resistant						DIN / ISO 1629		
non-resistant:								
steel zinc plated	brass passivated	ss AISI 316 ti or similar	Polyamide 11/12	Polyacetal POM		NBR	FKM	EPDM
	+	+	+	+	●			Petrol Ether
+	+	+	+	+	●	●		Petrol
○	+	+						Phenol Solution
		+	+	+		●	●	Phosphoric Acid 10 %
+	+	+	+	○		●	●	Potassium Cyanide
+	+	+	+	○		●	●	Potassium Dichromate
+		+			●	●	●	Potassium Sulphate
+		+	+	○			●	Potassium Hydroxide
+	+	+	+	+	●	●	●	Propane
+	+	+				●		Prussic Acid
	+	○	+	○	●			Salt Solution
	+	○		+	●	●	●	Sea Water
+	+	+	+	○	●	●	●	Soap Solution
	+	+	+		●	●	●	Soda Solution
		+	+	+		●		Sodium Acetate
		+	+	+	●	●	●	Sodium Bicarbonate
+		+	+	+	●	●	●	Sodium Carbonate
		+	+	+	●	●	●	Sodium Chloride
+		+	○	○	●		●	Sodium Cyanide
+	○	+			●	●	●	Sodium Sulphide
+	+	+	+	+		●		Steam up to 140 °C
+	+	+	+	+	PTFE	●	●	Steam, up to 250 °C
+	○	+	+		●	●	●	Sulphide of Barium
	+	+			●			Sulphur Dioxide, Gas
	+	+	+	+	●			Sulphure of Carbon
+	+	+	○	○	●			Synthetic Resin Thinners, (no nitrosolution)
+	○	+	○	○	●			Tar
+		+			●			Tetrachloride of Titanium
○	+	+	+	+	●			Toluol, dry
+	○	+	○	+	●			Trichlorethylene
+	+	+	+	○	●	●		Turbine Fuel BP: ATK 2494, ESSO: MIL-F-56/16, Shell: ATF 650
+	+	+	+	○	●	●		Turbine Oil, ESSO: 35
○	○	+	+	○	●	●		Turb-oil 1 S (MILL 7808)
+	+	+	+	+	●	●		Vacuum (Strengthened Valve Springs)
+		+	+	+	●	●	●	Vegetable Oils
		+	+	+		●		Water Distilled
		+			●	●		Water Deionized
		+			●			Water Demineralised
○	+	+	○	○	●	●	●	Water, up to 80°C
○	○	+	○	+	●	●		Water, over 80°C
+	+	+	+	+	●	●		Water, Cooling
+	+	+	+	+		●		Xylene

● = compatible

● = compatible

8 Test Certificates / Approvals

You need approved valves or special test certificates?

Our customer service is always eager to answer you. You need approved valves or special test certificates?

Our customer service is always eager to answer your questions. Phone: +49 (0) 2129 567-402.



Please find further information to this topic on our web site.

QA system certification to DIN/EN/ISO 9001 as well as 13485 for medical products and KTA 1401 for nuclear facilities by TÜV Rheinland

QA system certification to DIN/EN/ISO 9001 aerospace by EADS/AECMA-EASE approvals to TA-Air by TÜV-Süd and ATEX by SGS-TÜV

Bundesanstalt für Materialforschung und -prüfung BAM, Berlin

Approval of type UF-019 for Acetylene lines up to 24 bar gauge pressure

Bundesbahnzentralamt Minden

WALTHER quick couplings, low pressure series, for pressurized air-, water- and cleaning lines

Bundesmarine/Blohm & Voss AG, Hamburg

Shock test report of the Bundesmarine / Blohm & Voss AG Hamburg about WALTHER quick couplings, MD series, for high accelerations and shocks

Centrale Dienst der Arbeidsinspectie, 's-Gravenhage:

WALTHER quick couplings for air-, oxygen-, acetylene- and propane lines, etc.

Daimler-Benz Aerospace:

Approval according to the quality requirements of the Federal Association of German Aerospace Industry e. V. (BDLI) to **QSF-C** on the basis of ISO 9001

Fachausschuss Chemie bei der Zentralstelle für Unfallverhütung des Hauptverbandes der gewerblichen Berufsgenossenschaften, Köln:

WALTHER quick couplings at high pressure liquid jets

Institut für Baustoffkunde und Stahlbetonbau der Technischen Universität Braunschweig:

Application of WALTHER quick couplings, MD and HP series, in the hydraulic cycles of test machines with high pressure alternations

RWTÜV Anlagentechnik GmbH, Essen:

WALTHER quick couplings, type 07-003 and SH-004 in TÜV performance-tested design as test connections in nuclear power stations

Schweizerische

Unfallversicherungsanstalt SUVA:

Approval of the Walpresta Series LS (different nominal bores) as safety couplings in the pressurized air sector

Schweizerischer Verein für Schweißtechnik, Basel:

WALTHER quick couplings, low pressure series – non-interchangeable design, as plug connection for oxygen- and fuel gas in the welding sector

Schweizerischer Verein des Gas- und Wasserfaches, SVGW, Zürich:

Recommendation of WALTHER couplings, type LP-019, LP-032 and LP-050 as solid and functional connection between forced-air burner and gas lines for natural gas, town gas, propane/air and liquefied petroleum gas up to 5 bar working pressure.

Siemens AG, Zentralabteilung Reaktortechnik, Erlangen:

WALTHER quick couplings, medium pressure series for radioactively contaminated wastewater systems and demineralized water cycles, also in case of particle contamination and heating

Siemens AG, Unternehmensbereich KWU, Erlangen:

Confirmation for manufacturing of quick couplings, multi couplings and docking systems for nuclear facilities on the basis of QSP4a and KTA 1401

Verkehrsanlagen e. V. STUVA, Düsseldorf:

WALTHER quick couplings for the use in propane gas lines in underground installations (tunnelling)

Verband für Flüssiggas e. V., Frankfurt:

WALTHER quick couplings for the use in liquefied petroleum gas lines

Material certificates

According to EN 10204 2.1 until 3.1 and in-house certificates for quantities, parts, material certification, pressure test, leakage test up to 10⁻⁹ mbar x l/sec., functional test, warranty, based on cost sharing

Documented manufacturing

according to specifications for nuclear engineering, for military use, for medical applications, for offshore technology, etc

Guideline for pressure devices (DGRL):

Our products designed for fluids of the group 2 (acc. to 97/23 EG) must not be labeled with the CE sign.

Special test and approval conditions

must be stated at the latest when order is placed.

ATTENTION!

When determining the working pressure of standardised end connections, the maximum permitted working pressure of the end connections has to be considered.

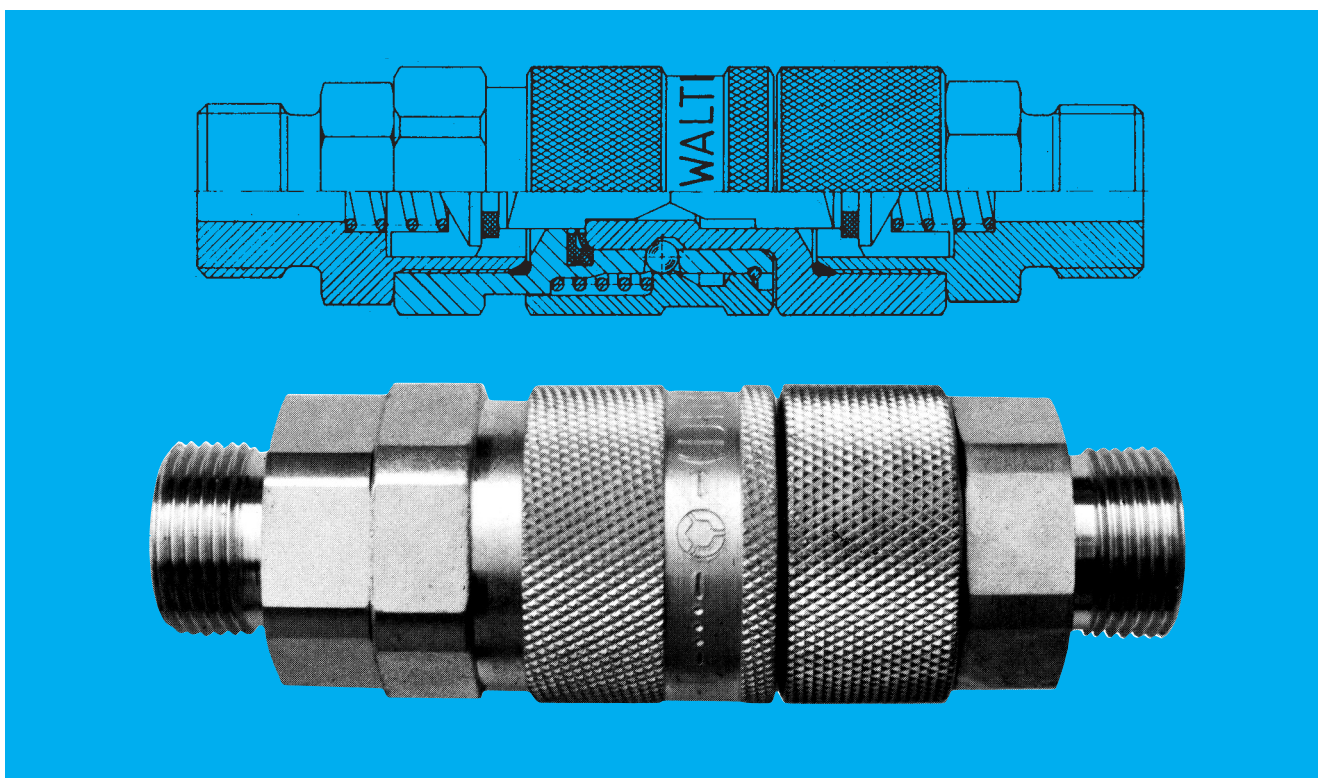
You have questions regarding the maximum permitted working pressure? Our customer service is always available to answer your questions. Phone: +49 (0) 2129 567-402.

Nom. bore	Type	Max. static working pressure [bar/psi]			C _v value		Cross section [mm²]	Page
		steel	brass*	st. st.	both sides self sealing	one side self sealing		
2.5	06-003	–	100/1450	–	0.165	5	11	
3	LP-003	–	200/2900	–	–	0.21	8	12
3	07-003	–	200/2900	200/2900	0.14	–	7.1	13
4	LP-004	110/1595	60/870	20/290	0.3	0.36	13	14
4	LV-004	–	20/290	20/290	0.3	–	13	15
6	LP-006	60/870	40/580	40/580	0.73	1.13	30	16 – 17
6	SP-006	100/1450	60/870	60/870	0.77	1.1	30	18 – 19
7	LP-007	50/725	40/580	40/580	1.17	1.5	40	20 – 21
9	SP-009	100/1450	40/580	40/580	2.1	2.41	64	22 – 23
12	LP-012	50/725	30/435	30/435	3.28	4.34	120	24 – 25
19	LP-019	50/725	30/435	30/435	8.4	11.6	300	26 – 27
32	LP-032	30/435	30/435	30/435	23.8	29.4	800	28 – 29
50	LP-050	30/435	20/290	20/290	59	68	2000	30 – 31
Performance diagrams								32 – 33
Multiway connectors								34

* based on experience, valid up to 100 °C

Please note: In case of standardised end connections, please take the max. allowable working pressure of the end connection into account when determining the working pressures.

The types LV-004, LP-006, SP-006, LP-007, SP-009, LP-012 and LP-019 in stainless steel (1.4404, 1.4571 or equal) are delivered as standard without knurling but in a smooth version (-GL/-GX) with finger grooves. Actual design differs from drawing.



10 Low pressure Series LP

The **series LP** offers couplings with one side or both sides self sealing and valves in nominal bore 2.5 to 50 mm. This series is supplied in different materials and surface coatings.

With the exception of types LP-032 and LP-050 the LP series is also suitable for vacuum applications (in connected condition).



NEW – low pressure series CT

The clean break coupling of the **CT series** is a quick coupling of the latest generation for the low pressure sector up to 64 bar. It is suitable for all applications requiring smallest leakage with easiest handling and high flow.



Please find further information to this topic on our web site.

characteristic features:

- automatic lock (one hand operation)
- mini coupling

optional features:

- OV = without valve
- (no one hand operation)

materials:**standard:**

23 = brass, nickel plated

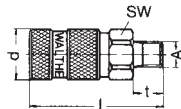
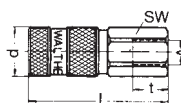
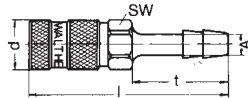
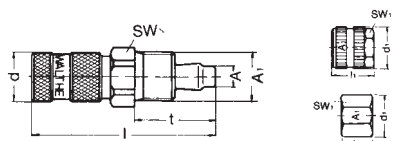
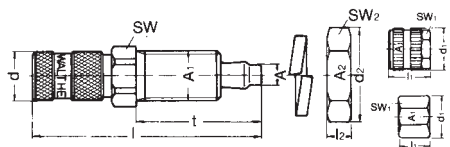
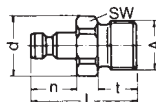
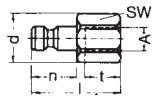
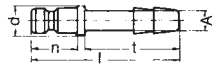
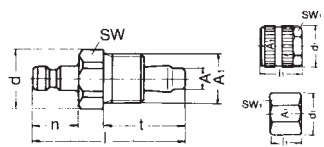
seal qualities:

- 1 = NBR
- 2 = FKM
- 4 = EPDM

Please note the technical data on pages 2 - 7, 32 - 33 and the max. working pressures on page 9

Availability: ● Short ○ Medium ○ Long

Self sealing couplings

	Part No.	Conne- tion A	brass nickel plated	$\frac{A_1}{A_2}$	SW	$\frac{SW_1}{SW_2}$	l	$\frac{l_1}{l_2}$	d	$\frac{d_1}{d_2}$	t	n	weight [g]	
 male thread	06-003-0-XX001-23-.	M 5	●		9		26,5		10		6		8	
	06-003-0-XX010-23-.	M 10	●		11		30,5		10		10		12	
 female thread	06-003-0-XX015-23-.	M 5	●		9		28		10		7		11	
 hose connection	06-003-0-SL004-23-.	4 mm	●		9		39,5		10		19		10	
 re-usable hose connection with swivel nut for plastic pipes	06-003-0-SW003-23-.	OD 5 ID 3 mm	●	$\frac{M\ 7 \times 0,5}{-}$	9	$\frac{7}{-}$	32,5	$\frac{9}{-}$	10	$\frac{8}{-}$	12		11	
	06-003-0-SW004-23-.	OD 6 ID 4 mm	●	$\frac{M\ 10 \times 1}{-}$	11	$\frac{13}{-}$	36,5	$\frac{13,5}{-}$	10	$\frac{14,3}{-}$	16		21	
 re-usable hose connection with swivel nut for plastic pipes and with counternut for bulkhead mounting, max. thickness 4 mm	06-003-0-XX017-23-.	OD 5 ID 3 mm	○	$\frac{M\ 7 \times 0,5}{M\ 7 \times 0,5}$	9	$\frac{7}{11}$	45,5	$\frac{9}{3}$	10	$\frac{8}{12}$	25		24	
	06-003-0-XX006-23-.	OD 6 ID 4 mm	●	$\frac{M\ 10 \times 1}{M\ 10 \times 1}$	11	$\frac{13}{17}$	45,5	$\frac{13,5}{5}$	10	$\frac{14,3}{18,9}$	25		25	
 male thread	06-003-1-XX001-23	M 5	●		9		19		9,9		6	9	4	
	06-003-1-WR010-23	BSPP 1/8"	○		11		21		12		8	9	6	
	 female thread	06-003-1-XX015-23	M 5	○		9		18		9,9		7	9	5
		 hose connection	06-003-1-SL004-23	4 mm	●				29,5		6		19	9
	 re-usable hose connection with swivel nut for plastic pipes		06-003-1-SW003-23	OD 5 ID 3 mm	●	$\frac{M\ 7 \times 0,5}{-}$	8	$\frac{7}{-}$	25	$\frac{9}{-}$	8,9	$\frac{8}{-}$	12	9
		06-003-1-SW004-23	OD 6 ID 4 mm	○	$\frac{M\ 10 \times 1}{-}$	11	$\frac{13}{-}$	29	$\frac{13,5}{-}$	12	$\frac{14,3}{-}$	16	9	17

Thru type adaptors

characteristic features:
- automatic lock (one hand operation)

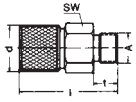
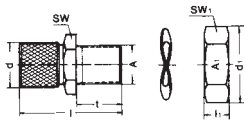
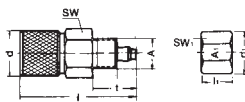
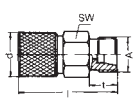
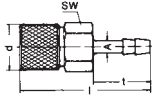
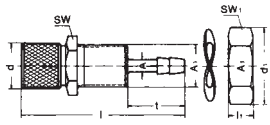
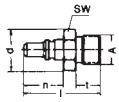
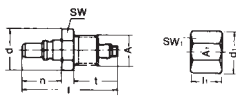
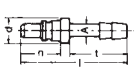
optional features:
OV = without valve

materials:
standard:
23 = brass, nickel plated

seal qualities:
1 = NBR
2 = FKM
4 = EPDM

Please note the technical data on pages 2 - 7, 32 - 33 and the max. working pressures on page 9

Availability: ● Short ○ Medium ○ Long

	Part No.	Connection A/ A ₁	brass nickel-plated	pipe od	n.b.		SF SF ₁	l	l ₁	d	d ₁	t	n	Weight [g]
Self sealing couplings	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-003-0-WR010-23-	BSPP 1/8"	●			14 —	32,5		15		8		32
	 male thread to DIN ISO 228 for bulkhead mounting (max. thickness 2 mm), complete with counter nut	LP-003-0-XX016-23-	BSPP 1/4"	○			17 22	34	6	15	23,9	15		46
	 re-usable hose connection with swivel nut for plastic pipes	LP-003-0-SW004-23-	OD 6 ID 4 mm M 10 x 1	○			14 13	40,5	13,5	15	14,3	16		50
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L)	LP-003-0-L0612-23-	M 12 x 1,5	○	6	4	14 —	34,5		15		10		38
	 hose connection	LP-003-0-SL004-23-	4 mm	●			14 —	44,5		15		19		36
	 male thread with 4 mm hose connection for bulkhead mounting (max. thickness 2 mm) complete with counter nut	LP-003-0-XX004-23-	4 mm M 14 x 1,5	●			17 19	54,5	6	15	25,4	19		50
Thru type adaptors	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-003-1-WR010-23	BSPP 1/8"	●			12 —	25		13,8		8	13	9
	 re-usable hose connection with swivel nut for plastic pipes	LP-003-1-SW004-23	OD 6 ID 4 mm M 10 x 1	○			12 13	33	13,5	13,2	14,3	16	13	17
	 hose connection	LP-003-1-SL004-23	4 mm	●				35		8		19	13	4

characteristic features:

- automatic lock (one hand operation)

materials:**standard:**

23 = brass, nickel plated

special materials:

1 = stainless steel 1.4404/1.4571 or similar

seal qualities:

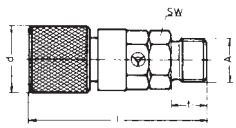
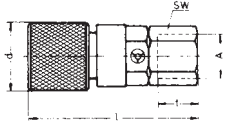
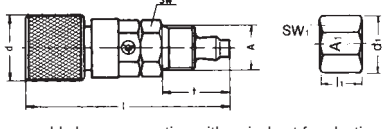
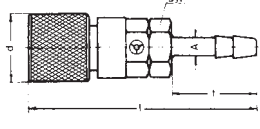
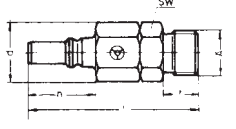
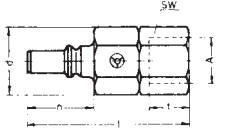
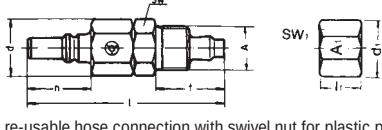
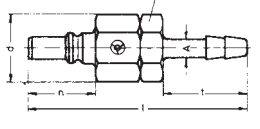
1 = NBR

2 = FKM

4 = EPDM

Please note the technical data on pages 2 - 7, 32 - 33 and the max. working pressures on page 9

Availability: ● Short ○ Medium ○ Long

	Part No.	Connection A/ A ₁	brass nickel plated	AISI 316 ti/L4571	pipe od	n.b.	d	d _i	SW SW ₁	l	l ₁	t	n	Weight [g]
Self sealing couplings	 07-003-0-WR010-...- British standard pipe parallel (BSPP) male thread to DIN ISO 228	BSPP 1/8"	●	○			15		12 —	39,8		8		32
	 07-003-0-WR510-...- British standard pipe parallel (BSPP) female thread to DIN ISO 228	BSPP 1/8"	○	○			15		12 —	37,8		9		30
	 07-003-0-SW004-...- re-usable hose connection with swivel nut for plastic pipes	OD 6 ID 4 mm M 10 x 1	○	○			15	14,3	12 13	47,8	13,5	16		41
	 07-003-0-SL004-...- hose connection	4 mm	○	○			15		12 —	51,8		19		32
Self sealing adaptors	 07-003-2-WR010-...- British standard pipe parallel (BSPP) male thread to DIN ISO 228	BSPP 1/8"	●	○			13,2		12 —	38		8	15	18
	 07-003-2-WR510-...- British standard pipe parallel (BSPP) female thread to DIN ISO 228	BSPP 1/8"	○	○			13,2		12 —	36		9	15	15
	 07-003-2-SW004-...- re-usable hose connection with swivel nut for plastic pipes	OD 6 ID 4 mm M 10 x 1	○	○			13,2	14,3	12 13	46	13,5	16	15	27
	 07-003-2-SL004-...- hose connection	4 mm	○	○			13,2		12 —	50		19	15	17

optional features:
OV = without valve

see also type LV-004 in extended version and with non squirt feature (in stainless steel or alternatively brass passivated)

materials:**standard:**

11 = steel, zinc plated
21 = brass, passivated
23 = brass, nickel plated

special materials:

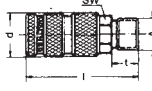
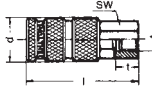
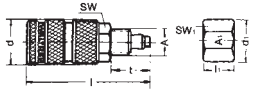
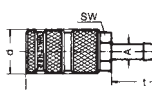
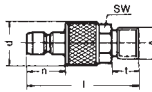
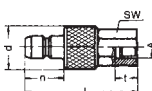
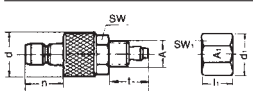
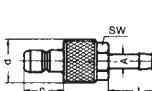
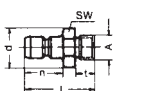
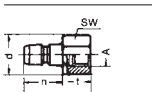
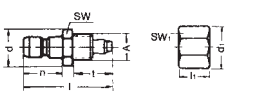
31 = aluminium anodized silver
13 = steel, chem. nickel plated
24 = brass, chem. nickel plated

seal qualities:

1 = NBR
2 = FKM
4 = EPDM

Please note the technical data on pages 2 - 7, 32 - 33 and the max. working pressures on page 9

Availability: ● Short ○ Medium ○ Long

		Part No.	Connection A/ A _i	steel zinc- plated	brass passivated	brass nickel-plated	pipe od	n.b.	d	d _i	SF SF _i	$\frac{l}{l_i}$	t	n	Weight [g]
Self sealing couplings		LP-004-0-WR010-...	BSPP 1/8"	●	●	●			18		$\frac{14}{-}$	$\frac{45,5}{-}$	8		50
		LP-004-0-WR013-...	BSPP 1/4"	●	●	○			18		$\frac{14}{-}$	$\frac{46,5}{-}$	11		55
		LP-004-0-WR510-...	BSPP 1/8"	●	●	●			18		$\frac{14}{-}$	$\frac{45,5}{-}$	9		55
		LP-004-0-SW004-...	OD 6 ID 4 mm M 10 x 1		●	○			18	14,3	$\frac{14}{13}$	$\frac{51,5}{13,5}$	16		60
		LP-004-0-SL004-...	4 mm		○	○			18		$\frac{12}{-}$	$\frac{50}{-}$	19	15	47
		LP-004-0-SL006-...	6 mm	●	●	●			18		$\frac{14}{-}$	$\frac{60,5}{-}$	25		50
Self sealing adaptors		LP-004-2-WR010-...	BSPP 1/8"	●	●	●			18		$\frac{14}{-}$	$\frac{45}{-}$	8	16	36
		LP-004-2-WR013-...	BSPP 1/4"	●	●	○			18		$\frac{14}{-}$	$\frac{46}{-}$	11	16	41
		LP-004-2-WR510-...	BSPP 1/8"	●	●	●			18		$\frac{14}{-}$	$\frac{45}{-}$	9	16	41
		LP-004-2-SW004-...	OD 6 ID 4 mm		●	○			18	14,3	$\frac{14}{13}$	$\frac{51}{13,5}$	16	16	45
		LP-004-2-SL004-...	4 mm	○	○	○			18		$\frac{14}{-}$	$\frac{53}{-}$	18	16	33
		LP-004-2-SL006-...	6 mm	●	●	●			18		$\frac{14}{-}$	$\frac{60}{-}$	25	16	36
Thru type adaptors		LP-004-1-WR010-..	BSPP 1/8"	●	●	●			16,2		$\frac{14}{-}$	$\frac{29}{-}$	8	16	15
		LP-004-1-WR013-..	BSPP 1/4"	○	○	○			16,2		$\frac{14}{-}$	$\frac{32}{-}$	11	16	20
		LP-004-1-4M010-..	M 10 x 1		○	○			14,8		$\frac{13}{-}$	$\frac{28}{-}$	8	16	17
		LP-004-1-WR510-..	BSPP 1/8"	○	○	○			16,2		$\frac{14}{-}$	$\frac{29}{-}$	9	16	18
		LP-004-1-SW004-..	OD 6 ID 4 mm		○	○			13,2	14,3	$\frac{12}{13}$	$\frac{37}{13,5}$	16	16	22
		LP-004-1-SL004-..	4 mm		○	○			12			$\frac{37}{-}$	18	16	9
		LP-004-1-SL006-..	6 mm	●	○	○			12			$\frac{44}{-}$	25	16	11

characteristic features:

- extended version
- non squirt feature
- stainless steel version 1.4404/1.4571 or similar in smooth variant with gripping grooves instead of knurling (-GL/-GX)

optional features:

OV = without valve

materials:**standard:**

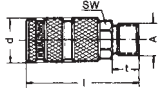
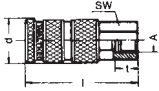
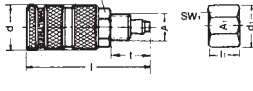
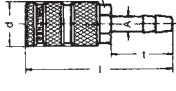
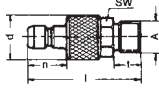
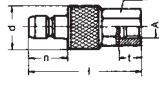
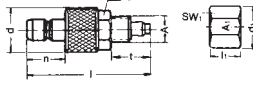
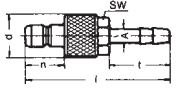
- 21 = brass, passivated
01 = stainless steel 1.4404/1.4571 or similar

seal qualities:

- 1 = NBR
2 = FKM
4 = EPDM

Please note the technical data on pages 2 - 7, 32 - 33 and the max. working pressures on page 9

Availability: ● Short ○ Medium ○ Long

	Part No.	Connection A/ A ₁	brass passivated	AISI 316 ti/L4571	pipe od	n.b.	d	d ₁	$\frac{AF}{AF_1}$	l	l ₁	t	n	Weight [g]
Self sealing couplings	 LV-004-0-WR010-...-.	BSPP 1/8"	●	○			18		$\frac{14}{-}$	50,5		8		55
	 LV-004-0-WR013-...-.	BSPP 1/4"	●	○			18		$\frac{14}{-}$	51,5		11		60
	 LV-004-0-WR510-...-.	BSPP 1/8"	●	○			18		$\frac{14}{-}$	50,5		9		60
	 LV-004-0-SW004-...-.	OD 6 ID 4 mm	●				18	14,3	$\frac{14}{13}$	56,5	13,5	16		65
	 LV-004-0-SL004-...-.	4 mm	●	○			18		$\frac{14}{-}$	58,5		18		55
	 LV-004-0-SL006-...-.	6 mm	●	○			18		$\frac{14}{-}$	65,5		25		55
Self sealing adaptors	 LV-004-2-WR010-...-.	BSPP 1/8"	●	○			18		$\frac{14}{-}$	50		8	21	38
	 LV-004-2-WR013-...-.	BSPP 1/4"	●	○			18		$\frac{14}{-}$	51		11	21	43
	 LV-004-2-WR510-...-.	BSPP 1/8"	●	○			18		$\frac{14}{-}$	50		9	21	42
	 LV-004-2-SW004-...-.	OD 6 ID 4 mm M 10 x 1	●				18	14,3	$\frac{14}{13}$	56	13,5	16	21	46
	 LV-004-2-SL004-...-.	4 mm	●	○			18		$\frac{14}{-}$	58		18	21	35
	 LV-004-2-SL006-...-.	6 mm	●	○			18		$\frac{14}{-}$	65		25	21	38

characteristic features:

- non squirt feature
- can be coupled with type KL-006 (plastic version)
- stainless steel version 1.4404/1.4571 or similar in smooth variant with gripping grooves instead of knurling (-GL/-GX)

optional features:

- OV = without valve
- SI = with additional axial safety lock (outer diameter 29 mm)
- VH = with locking aid

materials:**standard:**

- 11 = steel, zinc plated
- 21 = brass, passivated
- 22 = brass, chrome plated
- 01 = stainless steel 1.4404/1.4571 or similar

special materials:

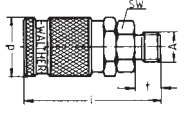
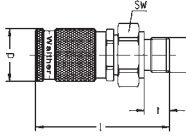
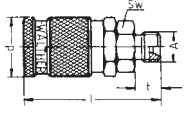
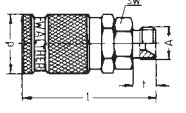
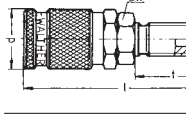
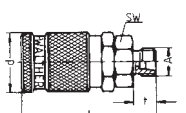
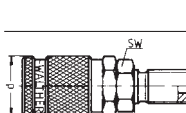
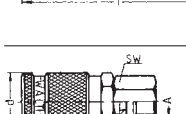
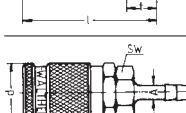
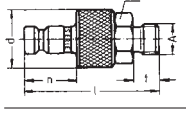
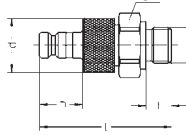
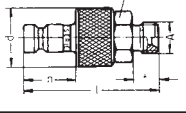
- 13 = steel, chem. nickel plated
- 24 = brass, chem. nickel plated
- 31 = aluminium anodized silver

seal qualities:

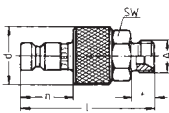
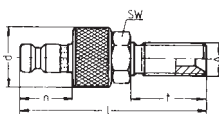
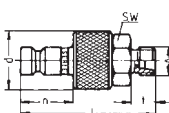
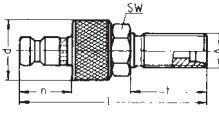
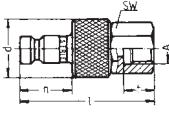
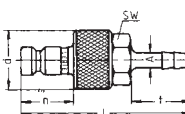
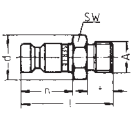
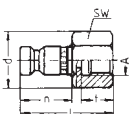
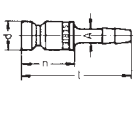
- 1 = NBR
- 2 = FKM
- 4 = EPDM

Please note the technical data on pages 2 - 7, 32 - 33 and the max. working pressures on page 9

Availability: ● Short ○ Medium ○ Long

	Part No.	Connec- tion A	steel zinc plated	brass passivated	brass chrome plated	AlSi 316 ti/ 1.4571	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing couplings	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-006-0-WR013-... LP-006-0-WR017-... LP-006-0-WR021-...	BSPP 1/4" BSPP 3/8" BSPP 1/2"	● ● ●	● ● ●	○ ○ ○				25 25 25	19 19 22	58 59 62	11 12 15		110 120 140
	 British standard pipe parallel (BSPP) male thread to DIN ISO 228, sealing profile "E" to DIN 3852-11 for o-ring or sealing ring.	LP-006-0-WE017-...	BSPP 3/8"	●						25	27	64	12		160
	 BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	LP-006-0-VR013-... LP-006-0-VR017-...	BSPP 1/4" BSPP 3/8"	○ ○		○ ○			6 6	25 25	19 19	58 59	11 12		110 120
	 metric male thread with 60° sealing cone to DIN 7631	LP-006-0-D0614-...	M 14 x 1,5	●		○			6	25	19	57	10		110
	 metric male thread with 60° sealing cone to DIN 7631, extended thread for bulkhead mounting, max. thickness 10 mm	LP-006-0-DV008-...	M 14 x 1,5	○		○			6	25	19	79	32		130
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	LP-006-0-L0612-... LP-006-0-L0814-... LP-006-0-L1016-... LP-006-0-L1218-... LP-006-0-S0816-... LP-006-0-S1018-... LP-006-0-S1220-...	M 12 x 1,5 M 14 x 1,5 M 16 x 1,5 M 18 x 1,5 M 16 x 1,5 M 18 x 1,5 M 20 x 1,5	● ● ● ● ○ ● ●		○ ○ ○ ○ ○ ○ ○	L L L L S S S	6 8 10 12 8 10 12	4 6 8 10 4 6 8	25 25 25 25 25 25 25	19 19 19 19 19 19 22	57 57 58 58 59 59 59	10 10 11 11 12 12 12		110 110 110 110 120 120 130
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S), extended thread, max. bulkhead thickness 10 mm	LP-006-0-LV008-... LP-006-0-XX211-...	M 14 x 1,5 M 16 x 1,5	● ○		○ ○	L L	8 10	6 8	25 25	19 19	79 79	32 32		130 140
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	LP-006-0-WR513-... LP-006-0-WR517-...	BSPP 1/4" BSPP 3/8"	● ●	● ●	○ ○				25 25	19 22	57 58	13 14		120 120
	 hose connection	LP-006-0-SL006-... LP-006-0-SL009-... LP-006-0-SL011-... LP-006-0-SL013-...	6 mm 9 mm 11 mm 13 mm	● ● ● ●	● ● ● ●	○ ○ ○ ○				25 25 25 25	19 19 19 19	72 77 77 77	25 30 30 30		110 110 120 130
Self sealing adaptors	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-006-2-WR013-... LP-006-2-WR017-... LP-006-2-WR021-...	BSPP 1/4" BSPP 3/8" BSPP 1/2"	● ● ●	● ● ●	○ ○ ○				25 25 25	19 19 22	56 57 60	11 12 15	20 20 20	85 90 110
	 British standard pipe parallel (BSPP) male thread to DIN ISO 228, sealing profile "E" to DIN 3852-11 for o-ring or sealing ring.	LP-006-2-WE017-...	BSPP 3/8"	●						25	27	62	12	20	130
	 BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	LP-006-2-VR013-... LP-006-2-VR017-...	BSPP 1/4" BSPP 3/8"	○ ○		○ ○			6 6	25 25	19 19	56 57	11 12	20 20	85 90

Availability: ● Short ● Medium ○ Long

		Part No.	Conne- ction A	steel zinc plated	brass passivated	brass chrome plated	AISI 316 ti/ 1.4571	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing adaptors		metric male thread with 60° sealing cone to DIN 7631	LP-006-2-D0614-... M 14 x 1,5	●			○			6	25	19	55	10	20	85
		metric male thread with 60° sealing cone to DIN 7631, extended thread for bulkhead mounting, max. thickness 10 mm	LP-006-2-DV008-... M 14 x 1,5	○			○			6	25	19	77	32	20	100
		metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	LP-006-2-L0612-... M 12 x 1,5	●			○	L	6	4	25	19	55	10	20	80
			LP-006-2-L0814-... M 14 x 1,5	●			○	L	8	6	25	19	55	10	20	85
			LP-006-2-L1016-... M 16 x 1,5	●			○	L	10	8	25	19	56	11	20	85
			LP-006-2-L1218-... M 18 x 1,5	○			○	L	12	10	25	19	56	11	20	85
			LP-006-2-S0816-... M 16 x 1,5	○			○	S	8	4	25	19	57	12	20	90
LP-006-2-S1018-... M 18 x 1,5			●			○	S	10	6	25	19	57	12	20	90	
LP-006-2-S1220-... M 20 x 1,5	●			○	S	12	8	25	22	57	12	20	100			
	metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S), extended thread, max. bulkhead thickness 10 mm	LP-006-2-LV008-... M 14 x 1,5	●			○	L	8	6	25	19	77	32	20	100	
		LP-006-2-XX211-... M 16 x 1,5	○			○	L	10	8	25	19	77	32	20	110	
	British standard pipe parallel (BSPP) female thread to DIN ISO 228	LP-006-2-WR513-... BSPP 1/4"	●	●	●	○				25	19	55	13	20	90	
		LP-006-2-WR517-... BSPP 3/8"	●	●	●	○				25	22	56	14	20	95	
	hose connection	LP-006-2-SL006-... 6 mm	●	●	●	○				25	19	70	25	20	80	
		LP-006-2-SL009-... 9 mm	●	●	●	○				25	19	75	30	20	85	
		LP-006-2-SL011-... 11 mm	●	●	●	○				25	19	75	30	20	90	
		LP-006-2-SL013-... 13 mm	●	●	●	○				25	19	75	30	20	100	
Thru type adaptors		British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-006-1-WR010-.. BSPP 1/8"	●	○	○	○			15,5	14	35	8	20	22	
			LP-006-1-WR013-.. BSPP 1/4"	●	●	●	○			15,5	14	39	11	20	25	
			LP-006-1-WR017-.. BSPP 3/8"	●	●	○	○			21	19	40,5	12	20	39	
		British standard pipe parallel (BSPP) female thread to DIN ISO 228	LP-006-1-WR510-.. BSPP 1/8"	○	○	○	○			16,5	15	31	9	20	20	
			LP-006-1-WR513-.. BSPP 1/4"	●	●	●	○			18,9	17	36	13	20	28	
			LP-006-1-WR517-.. BSPP 3/8"	●	●	●	○			24	22	38	14	20	44	
		hose connection	LP-006-1-SL006-.. 6 mm	●	●	●	○			12		46		20	16	
			LP-006-1-SL009-.. 9 mm	●	●	●	○			12		51		20	20	
			LP-006-1-SL011-.. 11 mm	●	●	●	○			16		53		20	31	
			LP-006-1-SL013-.. 13 mm	●	●	●	○			16		53		20	41	

characteristic features:

- stainless steel version 1.4404/1.4571 or similar
in smooth variant with gripping grooves instead
knurling (-GL/-GX)

optional features:

OV = without valve

materials:**standard:**

11 = steel, zinc plated
21 = brass, passivated
22 = brass, chrome plated
01 = stainless steel 1.4404/1.4571 or similar

special materials:

31 = aluminium anodized silver
13 = steel, chem. nickel plated
24 = brass, chem. nickel plated

seal qualities:

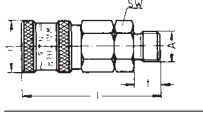
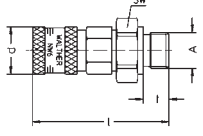
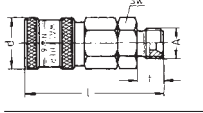
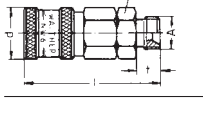
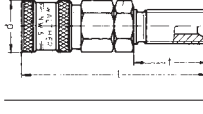
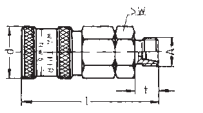
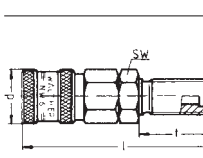
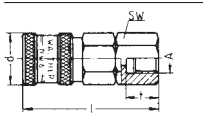
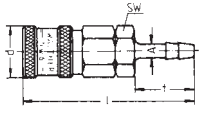
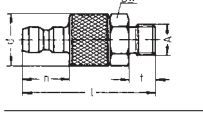
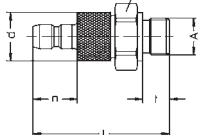
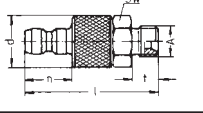
1 = NBR
2 = FKM
4 = EPDM

Please note the
technical data on
pages 2 - 7, 32 - 33 and the
max. working pressures
on page 9

Availability: ● Short ○ Medium ○ Long

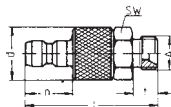
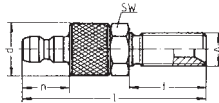
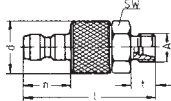
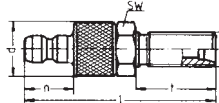
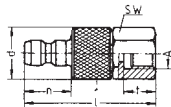
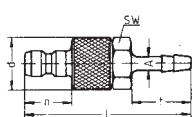
Self sealing couplings

Self sealing adaptors

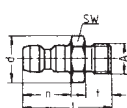
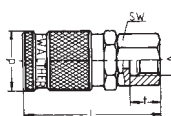
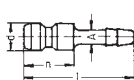
		Part No.	Connec- tion A	steel zinc plated	brass passivated	brass chrome plated	AlSi 316 ti/ 1.4571	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
 British standard pipe parallel (BSPP) male thread to DIN ISO 228  British standard pipe parallel (BSPP) male thread to DIN ISO 228, sealing profile "E" to DIN 3852-11 for o-ring or sealing ring.  BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone  metric male thread with 60° sealing cone to DIN 7631  metric male thread with 60° sealing cone to DIN 7631, extended thread for bulkhead mounting, max. thickness 10 mm  metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)  metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S), extended thread, max. bulkhead thickness 10 mm  British standard pipe parallel (BSPP) female thread to DIN ISO 228  hose connection	SP-006-0-WR013-... SP-006-0-WR017-... SP-006-0-WR021-...	BSPP 1/4" BSPP 3/8" BSPP 1/2"	● ● ●	● ● ●	● ● ●	○ ○ ○					22 22 22	19 19 22	58 59 62	11 12 15		90 95 120
	SP-006-0-WE017-...	BSPP 3/8"	●								22	27	64	12		130
	SP-006-0-VR013-... SP-006-0-VR017-...	BSPP 1/4" BSPP 3/8"	○ ○				○			6 6	22 22	19 19	58 59	11 12		90 95
	SP-006-0-D0614-...	M 14 x 1,5	○				○			6	22	19	57	10		85
	SP-006-0-DV008-...	M 14 x 1,5	○				○			6	22	19	79	32		105
	SP-006-0-L0612-... SP-006-0-L0814-... SP-006-0-L1016-... SP-006-0-L1218-... SP-006-0-S0816-... SP-006-0-S1018-... SP-006-0-S1220-...	M 12 x 1,5 M 14 x 1,5 M 16 x 1,5 M 18 x 1,5 M 16 x 1,5 M 18 x 1,5 M 20 x 1,5	● ● ● ○ ○ ● ●				○	L L L L S S S	6 8 10 12 8 10 12	4 6 8 10 4 6 8	22 22 22 22 22 22 22	19 19 19 19 19 19 22	57 57 58 58 59 59 59	10 10 11 11 12 12 12		85 85 90 90 90 95 100
	SP-006-0-LV008-... SP-006-0-XX211-...	M 14 x 1,5 M 16 x 1,5	● ○				○	L L	8 10	6 8	22 22	19 19	79 79	32 32		100 110
	SP-006-0-WR513-... SP-006-0-WR517-...	BSPP 1/4" BSPP 3/8"	● ●	● ●	● ●	● ○					22 22	19 22	57 58	13 14		95 100
	SP-006-0-SL006-... SP-006-0-SL009-... SP-006-0-SL011-... SP-006-0-SL013-...	6 mm 9 mm 11 mm 13 mm	● ● ● ●	● ● ● ●	● ● ● ●	○ ○ ○ ○					22 22 22 22	19 19 19 19	72 77 77 77	25 30 30 30		85 90 95 110
 British standard pipe parallel (BSPP) male thread to DIN ISO 228  British standard pipe parallel (BSPP) male thread to DIN ISO 228, sealing profile "E" to DIN 3852-11 for o-ring or sealing ring.  BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	SP-006-2-WR013-... SP-006-2-WR017-... SP-006-2-WR021-...	BSPP 1/4" BSPP 3/8" BSPP 1/2"	● ● ●	● ● ●	● ● ●	○ ○ ○					22 22 22	19 19 22	56 57 60	11 12 15	20 20 20	70 75 100
	SP-006-2-WE017-...	BSPP 3/8"	●								22	27	62	12	20	110
	SP-006-2-VR013-... SP-006-2-VR017-...	BSPP 1/4" BSPP 3/8"	○ ○				○			6 6	22 22	19 19	56 57	11 12	20 20	70 75

Availability: ● Short ● Medium ○ Long

Self sealing adaptors

	Part No.	Conne- tion A	steel zinc plated	brass passivated	brass chrome plated	AISI 316 ti/ 1.4571	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
 metric male thread with 60° sealing cone to DIN 7631	SP-006-2-D0614-... M 14 x 1,5	M 14 x 1,5	○			○			6	22	19	55	10	20	70
 metric male thread with 60° sealing cone to DIN 7631, extended thread for bulkhead mounting, max. thick- ness 10 mm	SP-006-2-DV008-... M 14 x 1,5	M 14 x 1,5	○			○			6	22	19	77	32	20	90
 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	SP-006-2-L0612-... M 12 x 1,5	M 12 x 1,5	●			○	L	6	4	22	19	55	10	20	70
	SP-006-2-L0814-... M 14 x 1,5	M 14 x 1,5	●			○	L	8	6	22	19	55	10	20	70
	SP-006-2-L1016-... M 16 x 1,5	M 16 x 1,5	●			○	L	10	8	22	19	56	11	20	70
	SP-006-2-L1218-... M 18 x 1,5	M 18 x 1,5	○			○	L	12	10	22	19	56	11	20	70
	SP-006-2-S0816-... M 16 x 1,5	M 16 x 1,5	○			○	S	8	4	22	19	57	12	20	75
	SP-006-2-S1018-... M 18 x 1,5	M 18 x 1,5	●			○	S	10	6	22	19	57	12	20	75
	SP-006-2-S1220-... M 20 x 1,5	M 20 x 1,5	●			○	S	12	8	22	22	57	12	20	85
 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S), extended thread, max. bulkhead thickness 10 mm	SP-006-2-LV008-... M 14 x 1,5	M 14 x 1,5	●			○	L	8	6	22	19	77	32	20	85
	SP-006-2-XX211-... M 16 x 1,5	M 16 x 1,5	○			○	L	10	8	22	19	77	32	20	95
 British standard pipe parallel (BSPP) female thread to DIN ISO 228	SP-006-2-WR513-... BSPP 1/4"	BSPP 1/4"	●	●	●	●				22	19	55	13	20	75
	SP-006-2-WR517-... BSPP 3/8"	BSPP 3/8"	●	●	●	○				22	22	56	14	20	80
 hose connection	SP-006-2-SL006-... 6 mm	6 mm	●	●	●	○				22	19	70	25	20	70
	SP-006-2-SL009-... 9 mm	9 mm	●	●	●	●				22	19	75	30	20	70
	SP-006-2-SL011-... 11 mm	11 mm	●	●	●	○				22	19	75	30	20	80
	SP-006-2-SL013-... 13 mm	13 mm	●	●	●	○				22	19	75	30	20	90

Thru type adaptors

 British standard pipe parallel (BSPP) male thread to DIN ISO 228	SP-006-1-WR010-.. BSPP 1/8"	BSPP 1/8"		●	●	○				15,5	14	34	8	20	20
	SP-006-1-WR013-.. BSPP 1/4"	BSPP 1/4"	●	●	●	○				15,5	14	37	11	20	23
	SP-006-1-WR017-.. BSPP 3/8"	BSPP 3/8"	●	●	●	○				21,9	19	38	12	20	37
 British standard pipe parallel (BSPP) female thread to DIN ISO 228	SP-006-1-WR513-.. BSPP 1/4"	BSPP 1/4"	●	●	●	○				19,6	17	36	13	20	26
	SP-006-1-WR517-.. BSPP 3/8"	BSPP 3/8"	●	●	●	○				24	22	37	14	20	40
 hose connection	SP-006-1-SL006-.. 6 mm	6 mm	●	●	●	○				11		46		20	13
	SP-006-1-SL009-.. 9 mm	9 mm	●	●	●	○				11		51		20	18

characteristic features:

- non squirt feature
- stainless steel version 1.440/1.4571 or similar in smooth variant with gripping grooves instead knurling (-GL/-GX)

optional features:

- OV = without valve
- S = with additional axial safety lock (outer diameter 34 mm)
- VH = with locking aid

materials:**standard:**

- 11 = steel, zinc plated
- 21 = brass, passivated
- 22 = brass, chrome plated
- 01 = stainless steel 1.440/1.4571 or similar

special materials:

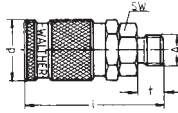
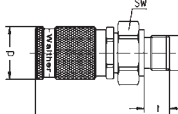
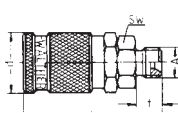
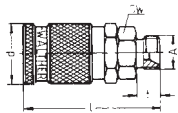
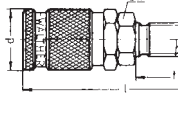
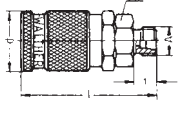
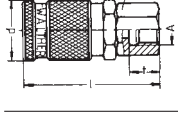
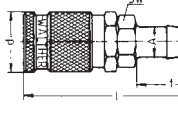
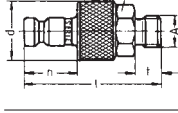
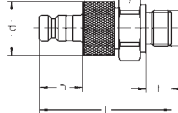
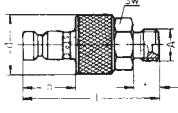
- 13 = steel, chem. nickel plated
- 24 = brass, chem. nickel plated

seal qualities:

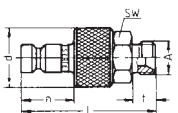
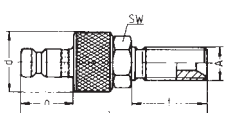
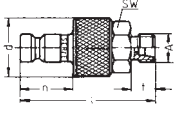
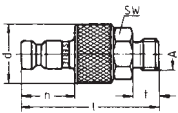
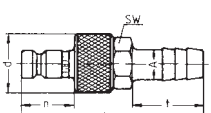
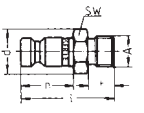
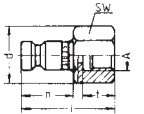
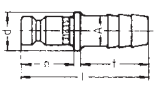
- 1 = NBR
- 2 = FKM
- 4 = EPDM

Please note the technical data on pages 2 - 7, 32 - 33 and the max. working pressures on page 9

Availability: ● Short ● Medium ○ Long

		Part No.	Connec- tion A	steel zinc plated	brass passivated	brass chrome plated	AlSi 316 ti/ 1.4571	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing couplings		LP-007-0-WR017-...-. LP-007-0-WR021-...-.	BSPP 3/8"	●	●	●	●				30	24	68	12		200
			BSPP 1/2"	●	●	●	○				30	24	71	15		210
		LP-007-0-WE017-...-.	BSPP 3/8"	●							30	27	71	12		220
		LP-007-0-VR017-...-.	BSPP 3/8"	○			○			7	30	24	68	12		190
		LP-007-0-D0816-...-.	M 16 x 1,5	○			○			8	30	24	67	11		200
		LP-007-0-DV010-...-.	M 16 x 1,5	○			○			8	30	24	89,5	33,5		210
		LP-007-0-L1016-...-.	M 16 x 1,5	●			○	L	10	8	30	24	67	11		190
		LP-007-0-L1218-...-.	M 18 x 1,5	●			○	L	12	10	30	24	67	11		190
		LP-007-0-S1018-...-.	M 18 x 1,5	●			○	S	10	6	30	24	68	12		200
		LP-007-0-S1220-...-.	M 20 x 1,5	●			○	S	12	8	30	24	68	12		200
		LP-007-0-WR517-...-. LP-007-0-WR521-...-.	BSPP 3/8"	●	●	●	●				30	24	68	14		210
			BSPP 1/2"	●	●	●	○				30	27	71	17		230
Self sealing adaptors		LP-007-0-SL009-...-.	9 mm	●	●	●	○				30	24	86	30		200
		LP-007-0-SL011-...-.	11 mm	●	●	●	○				30	24	86	30		200
		LP-007-0-SL013-...-.	13 mm	●	●	●	●				30	24	86	30		210
		LP-007-2-WR017-...-. LP-007-2-WR021-...-.	BSPP 3/8"	●	●	●	●				30	24	66	12	23,3	150
			BSPP 1/2"	●	●	●	○				30	24	69	15	23,3	170
		LP-007-2-WE017-...-.	BSPP 3/8"	●							30	27	69	12	23,3	170
		LP-007-2-VR017-...-.	BSPP 3/8"	○			○			7	30	24	66	12	23,3	150

Availability: ● Short ● Medium ○ Long

	Part No.	Conne- ction A	steel zinc plated	brass passivated	brass chrome plated	AISI 316 ti/ 1.4571	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing adaptors	 metric male thread with 60° sealing cone to DIN 7631	LP-007-2-D0816-... M 16 x 1,5	○			○			8	30	24	65	11	23,3	150
	 metric male thread with 60° sealing cone to DIN 7631, extended thread for bulkhead mounting, max. thickness 10 mm	LP-007-2-DV010-... M 16 x 1,5	○			○			8	30	24	87,5	33,5	23,3	160
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	LP-007-2-L1016-... M 16 x 1,5	●			○	L	10	8	30	24	65	11	23,3	140
		LP-007-2-L1218-... M 18 x 1,5	●			○	L	12	10	30	24	65	11	23,3	140
		LP-007-2-S1018-... M 18 x 1,5	●			○	S	10	6	30	24	66	12	23,3	150
		LP-007-2-S1220-... M 20 x 1,5	●			○	S	12	8	30	24	66	12	23,3	150
Thru type adaptors	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	LP-007-2-WR517-... BSPP 3/8"	●	●	●	●				30	24	66	14	23,3	160
		LP-007-2-WR521-... BSPP 1/2"	●	●	●	○				30	27	69	17	23,3	180
	 hose connection	LP-007-2-SL009-... 9 mm	●	●	●	○				30	24	84	30	23,3	150
		LP-007-2-SL011-... 11 mm	●	●	●	○				30	24	84	30	23,3	150
		LP-007-2-SL013-... 13 mm	●	●	●	●				30	24	84	30	23,3	160
	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-007-1-WR013-... BSPP 1/4"	●	○	○	○				18,9	17	40,5	11	23,3	35
		LP-007-1-WR017-... BSPP 3/8"	●	○	○	○				21	19	41,5	12	23,3	45
		LP-007-1-WR021-... BSPP 1/2"	●	●	●	○				26,7	24	44,5	15	23,3	70
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	LP-007-1-WR513-... BSPP 1/4"	●	○	○	○				18,9	17	40,5	13	23,3	37
		LP-007-1-WR517-... BSPP 3/8"	●	●	●	○				24	22	41,5	14	23,3	55
		LP-007-1-WR521-... BSPP 1/2"	●	●	●	○				30	27	44,5	17	23,3	75
	 hose connection	LP-007-1-SL009-... 9 mm	●	●	○	○				14		54,5	30	23,3	29
		LP-007-1-SL011-... 11 mm	●	●	●	○				18		56,5	30	23,3	37
		LP-007-1-SL013-... 13 mm	●	●	●	○				18		56,5	30	23,3	46

characteristic features:

- stainless steel version 1.4404/1.4571 or similar
in smooth variant with gripping grooves instead
knurling (-GL/-GX)

optional features:

OV = without valve

materials:**standard:**

11 = steel, zinc plated
21 = brass, passivated
22 = brass, chrome plated
01 = stainless steel 1.4404/1.4571 or similar

special materials:

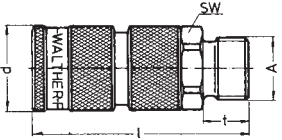
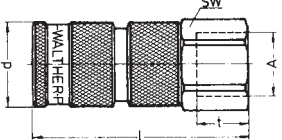
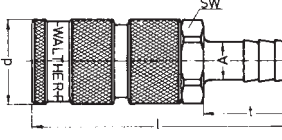
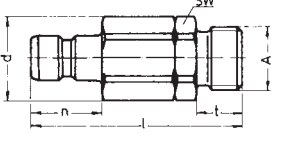
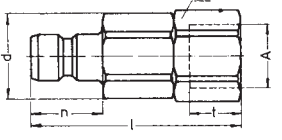
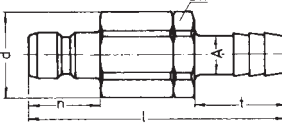
13 = steel, chem. nickel plated
24 = brass, chem. nickel plated

seal qualities:

1 = NBR
2 = FKM
4 = EPDM

Please note the
technical data on
pages 2 - 7, 32 - 33 and the
max. working pressures
on page 9

Availability: ● Short ○ Medium ○ Long

	Part No.	Connec- tion A	steel zinc plated	brass passivated	brass chrome plated	AlSi 316 ti/ 1.4571	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing couplings	 British stan- dard pipe parallel (BSPP) male thread to DIN ISO 228	BSPP 3/8" BSPP 1/2"	● ●	● ●	○ ○	○ ○				28 28	25 25	71 71	12 15		180 190
	 British stan- dard pipe parallel (BSPP) fe- male thread to DIN ISO 228	BSPP 1/2"	●	●	○	○				28	27	71	17		200
	 hose connection	13 mm	●	●	○	○				28	25	86	30		180
Self sealing adaptors	 British stan- dard pipe parallel (BSPP) male thread to DIN ISO 228	BSPP 3/8" BSPP 1/2"	● ●	● ●	○ ○	○ ○				28 28	25 25	69,5 69,5	12 15	23,5 23,5	120 130
	 British stan- dard pipe parallel (BSPP) fe- male thread to DIN ISO 228	BSPP 1/2"	●	●	○	○				28	27	69,5	17	23,5	140
	 hose connection	13 mm	●	●	○	○				28	25	84,5	30	23,5	130

[illegible]

characteristic features:

- non squirt feature
- can be coupled with type KL-012 (plastic version)
- stainless steel version 1.4404/1.4571 or similar in smooth variant with gripping grooves instead of knurling (-GL/-GX)

optional features:

- OV = without valve
- SI = with additional axial safety lock (outer diameter 44 mm)
- VH = with locking aid

materials:**standard:**

- 11 = steel, zinc plated
- 21 = brass, passivated
- 22 = brass, chrome plated
- 01 = stainless steel 1.4404/1.4571 or similar

special materials:

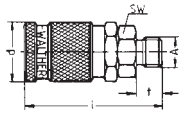
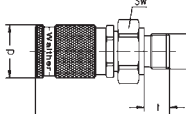
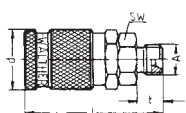
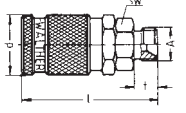
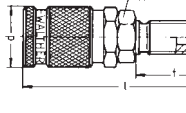
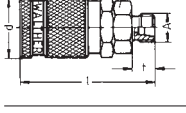
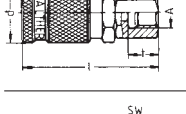
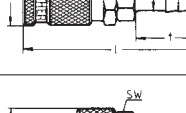
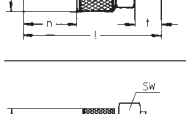
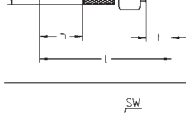
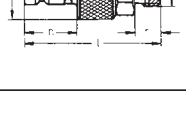
- 13 = steel, chem. nickel plated
- 24 = brass, chem. nickel plated

seal qualities:

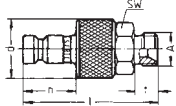
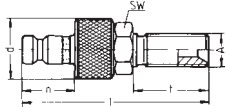
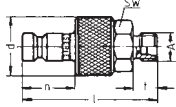
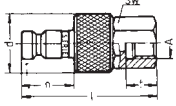
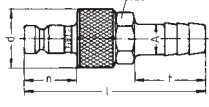
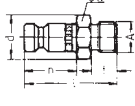
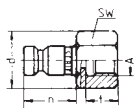
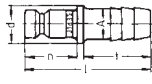
- 1 = NBR
- 2 = FKM
- 4 = EPDM

Please note the technical data on pages 2 - 7, 32 - 33 and the max. working pressures on page 9

Availability: ● Short ○ Medium ○ Long

		Part No.	Connec- tion A	steel zinc plated	brass passivated	brass chrome plated	AISI 316 ti/ 1.4571	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing couplings		British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-012-0-WR021-... LP-012-0-WR026-... LP-012-0-WR033-...	BSPP 1/2" BSPP 3/4" BSPP 1"	● ● ●	● ○ ○	○ ○ ○				40 40 40	32 32 36	82 84 88	15 17 20		380 410 470
		British standard pipe parallel (BSPP) male thread to DIN ISO 228, sealing profile "E" to DIN 3852-11 for o-ring or sealing ring.	LP-012-0-WE021-...	BSPP 1/2"	●						40	32	84	14		390
		BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	LP-012-0-VR021-... LP-012-0-VR026-...	BSPP 1/2" BSPP 3/4"	● ●		○ ○			12 12	40 40	32 32	82 84	15 17		380 400
		metric male thread with 60° sealing cone to DIN 7631	LP-012-0-D1018-... LP-012-0-D1222-...	M 18 x 1,5 M 22 x 1,5	● ●		○			10 12	40 40	32 32	78 79	11 12		370 380
		metric male thread with 60° sealing cone to DIN 7631, extended thread for bulkhead mounting, max. thickness 10 mm	LP-012-0-DV015-...	M 22 x 1,5	○		○			12	40	32	106	39		430
		metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	LP-012-0-L1218-... LP-012-0-L1522-... LP-012-0-S1624-...	M 18 x 1,5 M 22 x 1,5 M 24 x 1,5	● ● ●		○ ○ ○	L L S	12 15 16	10 12 12	40 40 40	32 32 32	78 79 81	11 12 14		370 380 390
		British standard pipe parallel (BSPP) female thread to DIN ISO 228	LP-012-0-WR521-... LP-012-0-WR526-...	BSPP 1/2" BSPP 3/4"	● ●	● ●	○ ●				40 40	32 32	81 83	17 19		420 400
		hose connection	LP-012-0-SL016-... LP-012-0-SL019-...	16 mm 19 mm	● ●	● ●	○ ○				40 40	32 32	102 102	35 35		390 410
Self sealing adaptors		British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-012-2-WR021-... LP-012-2-WR026-... LP-012-2-WR033-...	BSPP 1/2" BSPP 3/4" BSPP 1"	● ● ●	● ○ ○	○ ○ ○				40 40 40	32 32 36	80 82 86	15 17 20	29,5 29,5 29,5	290 320 380
		British standard pipe parallel (BSPP) male thread to DIN ISO 228, sealing profile "E" to DIN 3852-11 for o-ring or sealing ring.	LP-012-2-WE021-...	BSPP 1/2"	●						40	32	82	14	29,5	300
		BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	LP-012-2-VR021-... LP-012-2-VR026-...	BSPP 1/2" BSPP 3/4"	● ●		○ ○			12 12	40 40	32 32	80 82	15 17	29,5 29,5	290 310

Availability: ● Short ● Medium ○ Long

	Part No.	Conne- tion A	steel zinc plated	brass passivated	brass chrome plated	AISI 316 ti/ 1.4571	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing adaptors	 metric male thread with 60° sealing cone to DIN 7631	LP-012-2-D1018-... LP-012-2-D1222-... M 18 x 1,5 M 22 x 1,5	● ●			○			10 12	40 40	32 32	76 77	11 12	29,5 29,5	280 290
	 metric male thread with 60° sealing cone to DIN 7631, extended thread for bulkhead mounting, max. thick- ness 10 mm	LP-012-2-DV015-... M 22 x 1,5	○			○			12	40	32	104	39	29,5	340
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	LP-012-2-L1218-... LP-012-2-L1522-... LP-012-2-S1624-... M 18 x 1,5 M 22 x 1,5 M 24 x 1,5	● ● ●			○ ○ ○	L L S	12 15 16	10 12 12	40 40 40	32 32 32	76 77 79	11 12 14	29,5 29,5 29,5	280 290 290
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	LP-012-2-WR521-... LP-012-2-WR526-... BSPP 1/2" BSPP 3/4"	● ●	● ●	● ●	○ ●				40 40	32 32	79 81	17 19	29,5 29,5	330 310
	 hose connection	LP-012-2-SL016-... LP-012-2-SL019-... 16 mm 19 mm	● ●	● ●	● ●	○ ○				40 40	32 32	100 100	35 35	29,5 29,5	300 320
Thru type adaptors	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-012-1-WR017-... LP-012-1-WR021-... LP-012-1-WR026-... BSPP 3/8" BSPP 1/2" BSPP 3/4"	● ● ●	○ ● ●	○ ● ●	○ ○ ○				30 30 33	27 27 30	49,5 54,5 54,5	12 15 17	29,5 29,5 29,5	90 100 140
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	LP-012-1-WR521-... LP-012-1-WR526-... BSPP 1/2" BSPP 3/4"	● ●	● ○	● ○	○ ○				30 35,5	27 32	50,5 52,5	17 19	29,5 29,5	100 120
	 hose connection	LP-012-1-SL013-... LP-012-1-SL016-... LP-012-1-SL019-... 13 mm 16 mm 19 mm	● ● ●	● ○ ●	● ○ ●	○ ○ ○				21 21 25		61 66 68,5	30 35 35	29,5 29,5 29,5	70 75 110

characteristic features:

- non squirt feature
- stainless steel version 1.4404/1.4571 or similar in smooth variant with gripping grooves instead of knurling (-GL/-GX)

optional features:

- GG= with ring grips (cast aluminium)
- OV= without valve
- SI = with additional axial safety lock (outer diameter 58 mm)
- VH= with locking aid

materials:**standard:**

- 11 = steel, zinc plated
- 21 = brass, passivated
- 22 = brass, chrome plated
- 01 = stainless steel 1.4404/1.4571 or similar

special materials:

- 13 = steel, chem. nickel plated
- 24 = brass, chem. nickel plated

seal qualities:

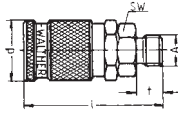
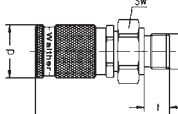
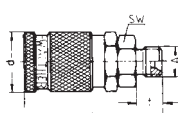
- 1 = NBR
- 2 = FKM
- 4 = EPDM

Please note the technical data on pages 2 - 7, 32 - 33 and the max. working pressures on page 9

Availability: ● Short ○ Medium ○ Long

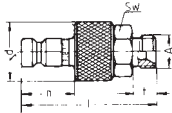
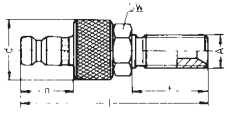
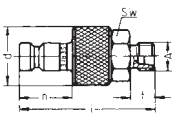
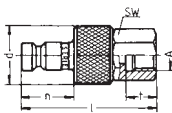
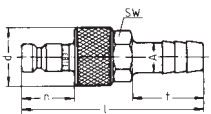
Self sealing couplings

Self sealing adaptors

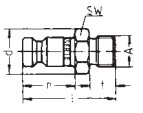
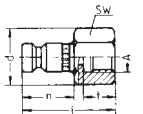
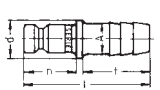
	Part No.	Connec- tion A	steel zinc plated	brass passivated	brass chrome plated	AISI 316 ti/ 1.4571	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
 British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-019-0-WR026-...	BSPP 3/4"	●	○	○	○				54	46	100	17		840
	LP-019-0-WR033-...	BSPP 1"	●	●	○	○				54	46	103	20		870
	LP-019-0-WE026-...	BSPP 3/4"	○							54	46	102	16		850
	LP-019-0-VR026-...	BSPP 3/4"	○			○			19	54	46	100	17		830
	LP-019-0-VR033-...	BSPP 1"	○			○			19	54	46	103	20		870
	LP-019-0-D1526-...	M 26 x 1,5	○			○			15	54	46	95	12		830
	LP-019-0-D1930-...	M 30 x 1,5	○			○			19	54	46	97	14		830
	LP-019-0-DV022-...	M 30 x 1,5	○			○			19	54	46	128	45		920
	LP-019-0-L1826-...	M 26 x 1,5	○			○	L	18	16	54	46	95	12		830
	LP-019-0-L2230-...	M 30 x 2	○			○	L	22	20	54	46	97	14		830
 metric male thread with 60° sealing cone to DIN 7631	LP-019-0-S2030-...	M 30 x 2	○			○	S	20	16	54	46	99	16		850
	LP-019-0-S2536-...	M 36 x 2	○			○	S	25	20	54	46	101	18		860
	LP-019-0-L1826-...	M 26 x 1,5	○			○	L	18	16	54	46	95	12		830
	LP-019-0-L2230-...	M 30 x 2	○			○	L	22	20	54	46	97	14		830
	LP-019-0-S2030-...	M 30 x 2	○			○	S	20	16	54	46	99	16		850
	LP-019-0-S2536-...	M 36 x 2	○			○	S	25	20	54	46	101	18		860
	LP-019-0-WR526-...	BSPP 3/4"	●	●	○	○				54	46	94	19		890
	LP-019-0-WR533-...	BSPP 1"	●	●	○	○				54	46	98	23		880
	LP-019-0-SL019-...	19 mm	○	○	○	○				54	46	118	35		850
	LP-019-0-SL025-...	25 mm	○	○	○	○				54	46	123	40		870
 hose connection	LP-019-0-SL028-...	28 mm	○	○	○	○				54	46	128	45		930
	LP-019-2-WR026-...	BSPP 3/4"	●	○	○	○				54	46	96	17	32,5	690
	LP-019-2-WR033-...	BSPP 1"	●	●	○	○				54	46	99	20	32,5	720
	LP-019-2-WE026-...	BSPP 3/4"	○							54	46	98	16	32,5	700
	LP-019-2-VR026-...	BSPP 3/4"	○			○			19	54	46	96	17	32,5	690
	LP-019-2-VR033-...	BSPP 1"	○			○			19	54	46	99	20	32,5	720
	LP-019-2-WE026-...	BSPP 3/4"	○							54	46	98	16	32,5	700
	LP-019-2-VR026-...	BSPP 3/4"	○			○			19	54	46	96	17	32,5	690
	LP-019-2-VR033-...	BSPP 1"	○			○			19	54	46	99	20	32,5	720
	LP-019-2-WE026-...	BSPP 3/4"	○							54	46	98	16	32,5	700

Availability: ● Short ● Medium ○ Long

Self sealing adaptors

		Part No.	Conne- tion A	steel zinc plated	brass passivated	brass chrome plated	AISI 316 ti/ 1.4571	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
	metric male thread with 60° sealing cone to DIN 7631	LP-019-2-D1526-...-. LP-019-2-D1930-...-.	M 26 x 1,5 M 30 x 1,5	● ●			○ ○			15 19	54 54	46 46	91 93	12 14	32,5 32,5	680 680
	metric male thread with 60° sealing cone to DIN 7631, extended thread for bulkhead mounting, max. thickn- ess 10 mm	LP-019-2-DV022-...-.	M 30 x 1,5	○			○			19	54	46	124	45	32,5	770
	metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	LP-019-2-L1826-...-. LP-019-2-L2230-...-. LP-019-2-S2030-...-. LP-019-2-S2536-...-.	M 26 x 1,5 M 30 x 2 M 30 x 2 M 36 x 2	● ● ● ●			○ ○ ○ ○	L L S S	18 22 20 25	16 20 16 20	54 54 54 54	46 46 46 46	91 93 95 97	12 14 16 18	32,5 32,5 32,5 32,5	680 670 690 710
	British standard pipe parallel (BSPP) female thread to DIN ISO 228	LP-019-2-WR526-...-. LP-019-2-WR533-...-.	BSPP 3/4" BSPP 1"	● ●	● ●	● ●	○ ○				54 54	46 46	90 94	19 23	32,5 32,5	740 730
	hose connection	LP-019-2-SL019-...-. LP-019-2-SL025-...-. LP-019-2-SL028-...-.	19 mm 25 mm 28 mm	● ● ●	● ● ●	● ● ●	○ ○ ○				54 54 54	46 46 46	114 119 124	35 40 45	32,5 32,5 32,5	700 710 780

Thru type adaptors

	British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-019-1-WR021-...-. LP-019-1-WR026-...-. LP-019-1-WR033-...-.	BSPP 1/2" BSPP 3/4" BSPP 1"	● ● ●	● ● ●	● ● ●	○ ○ ○				40 40 40	36 36 36	57,5 59,5 62,5	15 17 20	32,5 32,5 32,5	210 220 260
	British standard pipe parallel (BSPP) female thread to DIN ISO 228	LP-019-1-WR526-...-. LP-019-1-WR533-...-.	BSPP 3/4" BSPP 1"	● ●	● ●	● ●	○ ○				40 45	36 41	57,5 61,5	19 23	32,5 32,5	240 250
	hose connection	LP-019-1-SL019-...-. LP-019-1-SL025-...-.	19 mm 25 mm	● ●	○ ●	○ ●	○ ○				32 32		68,5 73,5	35 40	32,5 32,5	180 190

optional features:

SI = with additional axial safety lock
(outer diameter 89 mm)
GG = with ring grips (cast aluminium)

materials:**standard:**

11 = steel, zinc plated
21 = brass, passivated
22 = brass, chrome plated
01 = stainless steel 1.4404/1.4571 or similar

special materials:

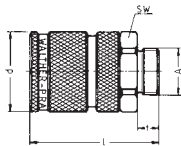
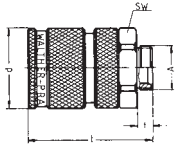
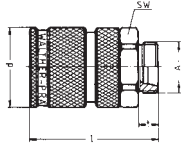
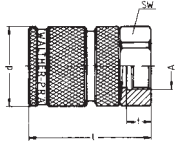
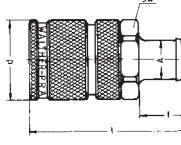
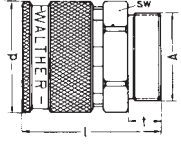
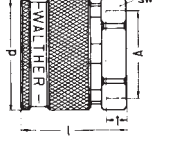
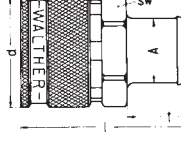
13 = steel, chem. nickel plated
24 = brass, chem. nickel plated
31 = aluminium anodized silver

seal qualities:

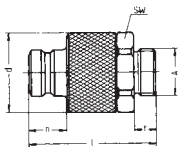
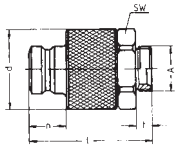
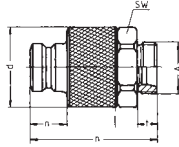
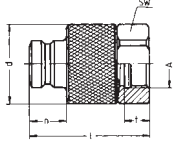
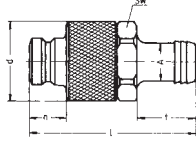
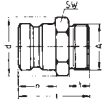
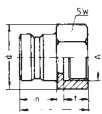
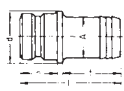
1 = NBR
2 = FKM
4 = EPDM

Please note the technical data on pages 2 - 7, 32 - 33 and the max. working pressures on page 9

Availability: ● Short ○ Medium ○ Long

	Part No.	Conne- ction A	steel zinc plated	brass passivated	brass chrome plated	AlSi 316 ti/ 1.4571	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing couplings	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-032-0-WR048-... LP-032-0-WR060-... BSPP 1 1/2" BSPP 2"	● ○	● ○	● ○	○ ○				82 82	75 75	139 143	22 26		2930 2980
	 metric male thread with 60° sealing cone to DIN 7631	LP-032-0-D3245-... M 45 x 1,5	●						32	82	75	128	16		2720
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	LP-032-0-S3852-... M 52 x 2	●				S	38	32	82	75	134	22		2770
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	LP-032-0-WR548-... LP-032-0-WR560-... BSPP 1 1/2" BSPP 2"	● ●	● ●	● ●	○ ○				82 82	75 75	126 130	25 29		2890 2760
	 hose connection	LP-032-0-SL042-... 42 mm	○	○	○	○				82	75	178	61		3090
Thru type couplings	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-032-4-WR048-... LP-032-4-WR060-... BSPP 1 1/2" BSPP 2"	○ ○	○ ○	○ ○	○ ○				82 82	70 70	109 113	22 26		2230 2490
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	LP-032-4-WR542-... LP-032-4-WR548-... LP-032-4-WR560-... BSPP 1 1/4" BSPP 1 1/2" BSPP 2"	○ ● ○	○ ○ ○	○ ○ ○	○ ○ ○				82 82 82	70 70 70	89 89 89	25 25 29		2000 1930 1690
	 hose connection	LP-032-4-SL042-... 42 mm	○	○	○	○				82	70	143	61		2260

Availability: ● Short ● Medium ○ Long

	Part No.	Connection A	steel zinc plated	brass passivated	brass chrome plated	AISI 316 ti/ 1.4571	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing adaptors	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-032-2-WR048-...-. LP-032-2-WR060-...-.	BSPP 1 1/2" BSPP 2"	● ○	● ○	● ○	○ ○			82 82	75 75	135,5 139,5	22 26	39 39	2460 2500
	 metric male thread with 60° sealing cone to DIN 7631	LP-032-2-D3245-...-.	M 45 x 1,5	●					32	82	75	124,5	16	39	2220
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	LP-032-2-S3852-...-.	M 52 x 2	●			S	38	32	82	75	130,5	22	39	2280
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	LP-032-2-WR548-...-. LP-032-2-WR560-...-.	BSPP 1 1/2" BSPP 2"	● ●	● ●	● ●	○ ○			82 82	75 75	122,5 126,5	25 29	39 39	2390 2260
	 hose connection	LP-032-2-SL042-...-.	42 mm	○	○	○	○			82	75	174,5	61	39	2610
Thru type adaptors	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-032-1-WR048-...-. LP-032-1-WR060-...-.	BSPP 1 1/2" BSPP 2"	● ○	○ ○	○ ○	○ ○			60 72,5	55 65	74,5 78,5	22 26	39 39	600 650
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	LP-032-1-WR542-...-. LP-032-1-WR548-...-. LP-032-1-WR560-...-.	BSPP 1 1/4" BSPP 1 1/2" BSPP 2"	● ● ○	○ ○ ●	○ ○ ●	○ ○ ○			60 65 78	55 60 70	71 71 75	25 25 29	39 39 39	610 640 790
	 hose connection	LP-032-1-SL042-...-.	42 mm	○	○	○	○			54		105	61	39	620

optional features:

SI = with additional axial safety lock
(outer diameter 116 mm)
GG = with ring grips (cast aluminium)

materials:**standard:**

11 = steel, zinc plated
21 = brass, passivated
22 = brass, chrome plated
01 = stainless steel 1.4404/1.4571 or similar

special materials:

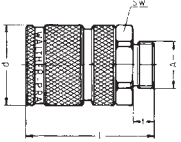
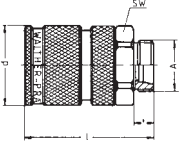
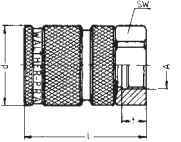
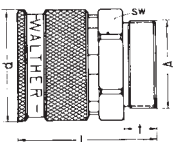
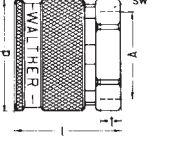
13 = steel, chem. nickel plated
24 = brass, chem. nickel plated
31 = aluminium anodized silver

seal qualities:

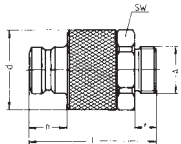
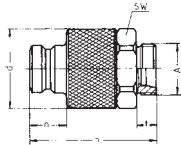
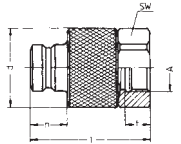
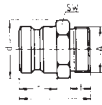
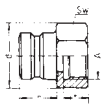
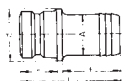
1 = NBR
2 = FKM
4 = EPDM

Please note the technical data on pages 2 - 7, 32 - 33 and the max. working pressures on page 9

Availability: ● Short ○ Medium ○ Long

	Part No.	Connec- tion A	steel zinc plated	brass passivated	brass chrome plated	AISI 316 ti/ 1.4571	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing couplings		British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-050-0-WR060-...-. LP-050-0-WR075-...-.	BSPP 2" BSPP 2 1/2"	● ○	○ ○	○ ○			112 112	100 100	162 164	26 30		5550 5560
		metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	LP-050-0-L4252-...-.	M 52 x 2	●			L	42	36	112	100	158	16	5380
		British standard pipe parallel (BSPP) female thread to DIN ISO 228	LP-050-0-WR560-...-. LP-050-0-WR575-...-.	BSPP 2" BSPP 2 1/2"	● ●	○ ○	○ ○			112 112	100 100	158 167	29 33		6150 5940
Thru type couplings		British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-050-4-WR060-...-. LP-050-4-WR075-...-.	BSPP 2" BSPP 2 1/2"	○ ○	○ ○	○ ○			112 112	100 100	132,5 136,5	26 30		3950 4210
		British standard pipe parallel (BSPP) female thread to DIN ISO 228	LP-050-4-WR560-...-. LP-050-4-WR575-...-.	BSPP 2" BSPP 2 1/2"	● ○	○ ○	○ ○			112 112	100 100	106,5 106,5	27 31		3800 3640

Availability: ● Short ● Medium ○ Long

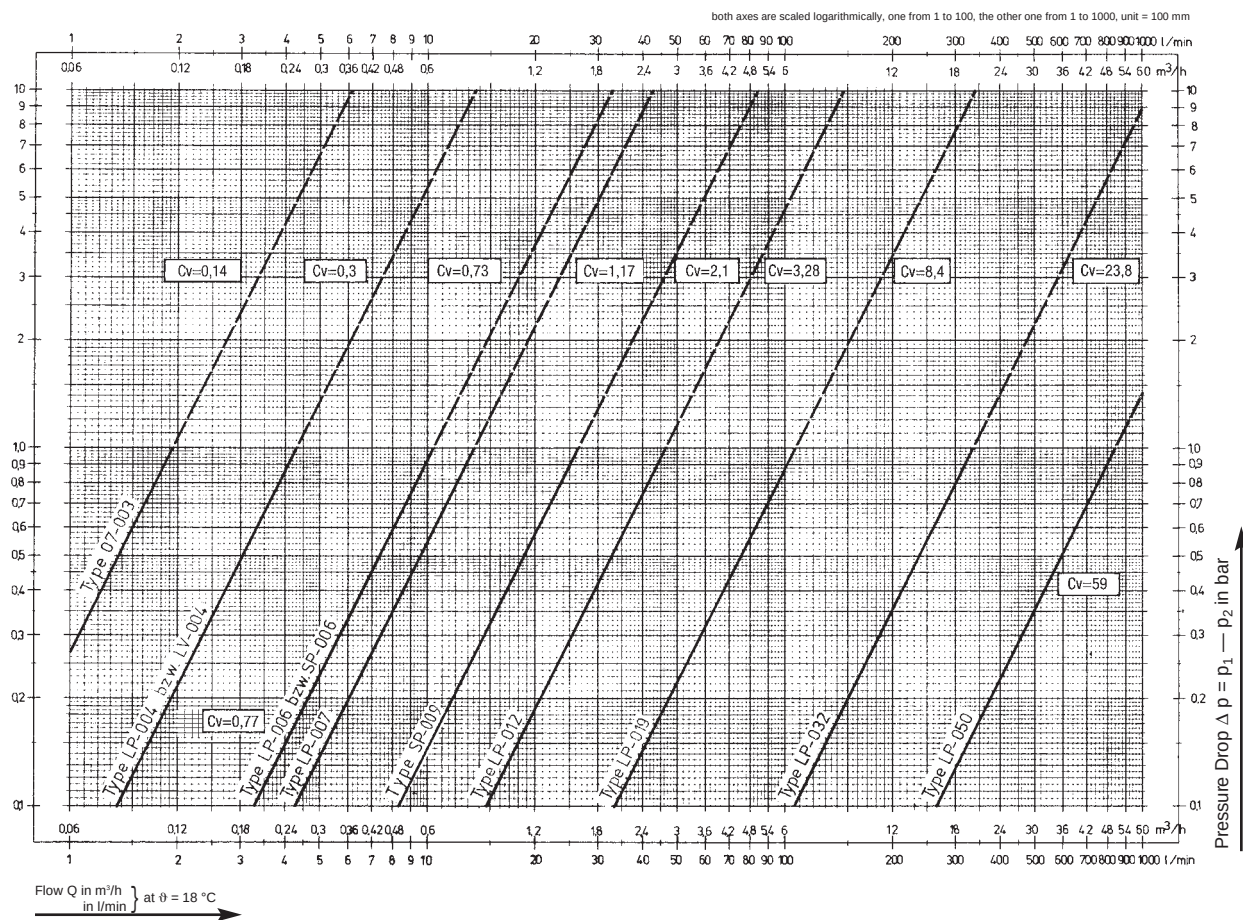
	Part No.	Conne- tion A	steel zinc plated	brass passivated	brass chrome plated	AISI 316 ti/ 1.4571	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing adaptors	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-050-2-WR060-... LP-050-2-WR075-... BSPP 2" BSPP 2 1/2"	●	○	○	○				112 112	100 100	158 160	26 30	46 46	5010 5020
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	LP-050-2-L4252-... M 52 x 2	●				L	42	36	112	100	154	16	46	4840
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	LP-050-2-WR560-... LP-050-2-WR575-... BSPP 2" BSPP 2 1/2"	●	○	○	○				112 112	100 100	154 163	29 33	46 46	5610 5400
Thru type adaptors	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	LP-050-1-WR060-... BSPP 2"	●	○		○				92	85	88	26	46	1590
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	LP-050-1-WR560-... BSPP 2"	●	○		○				92	85	82	29	46	1850
	 hose connection	LP-050-1-SL065-... 65 mm	○	○		○				90		131	75	46	2050

Measurement of flow coefficients C_v
according to DIN EN 60534

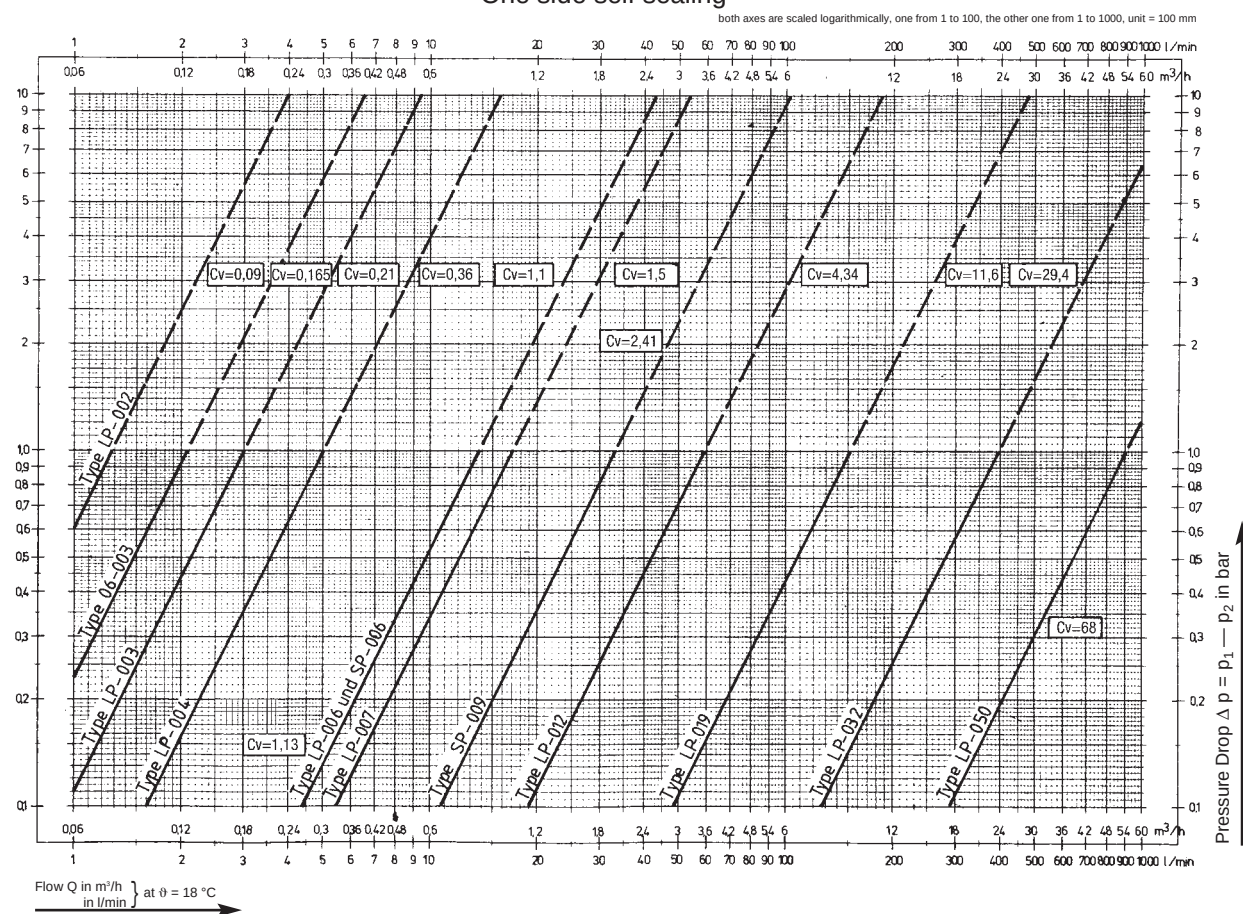
Flow speeds of 8 m/sec
should not be exceeded

1 bar = 14,5 PSI

Both sides self sealing



One side self sealing

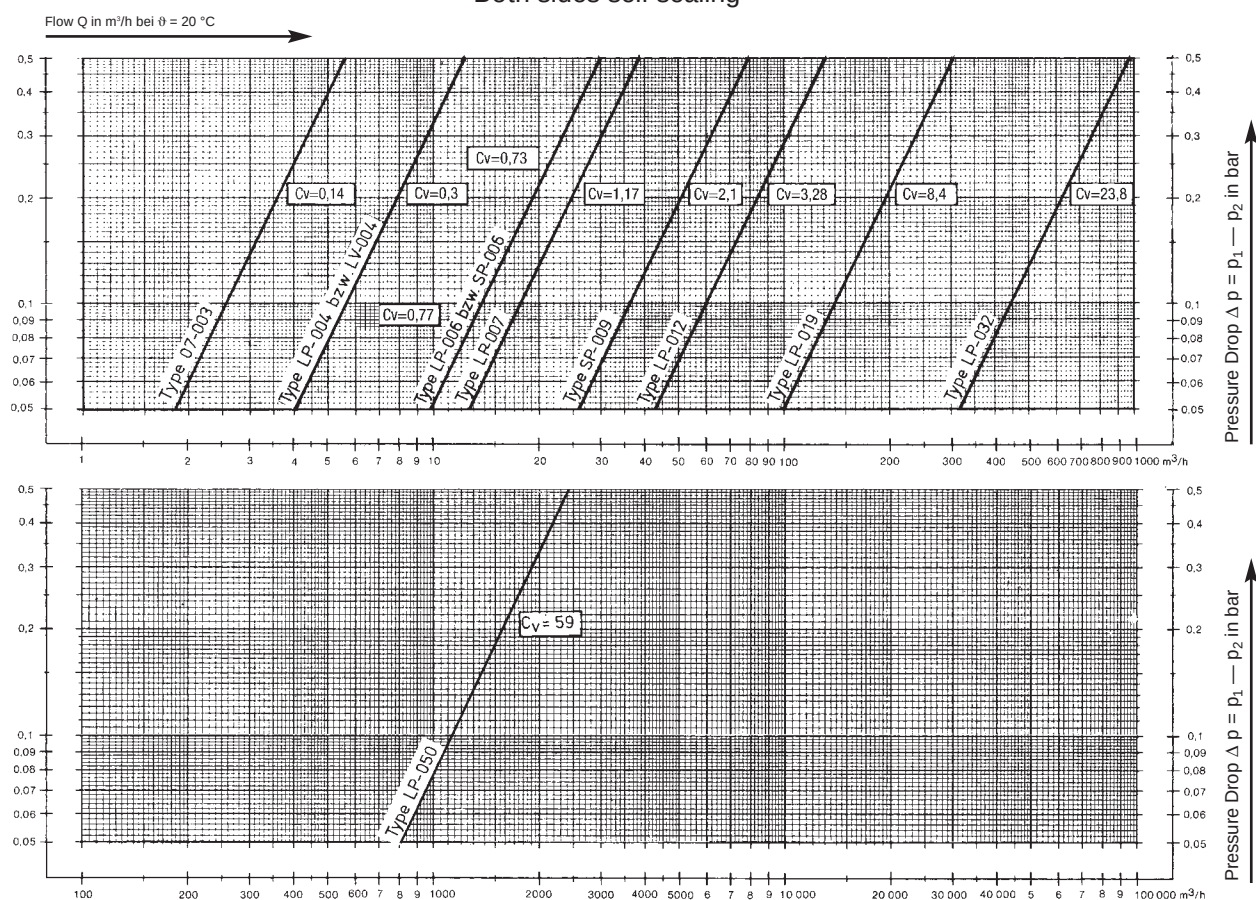


Measurement of flow coefficients C_v according to DIN EN 60534

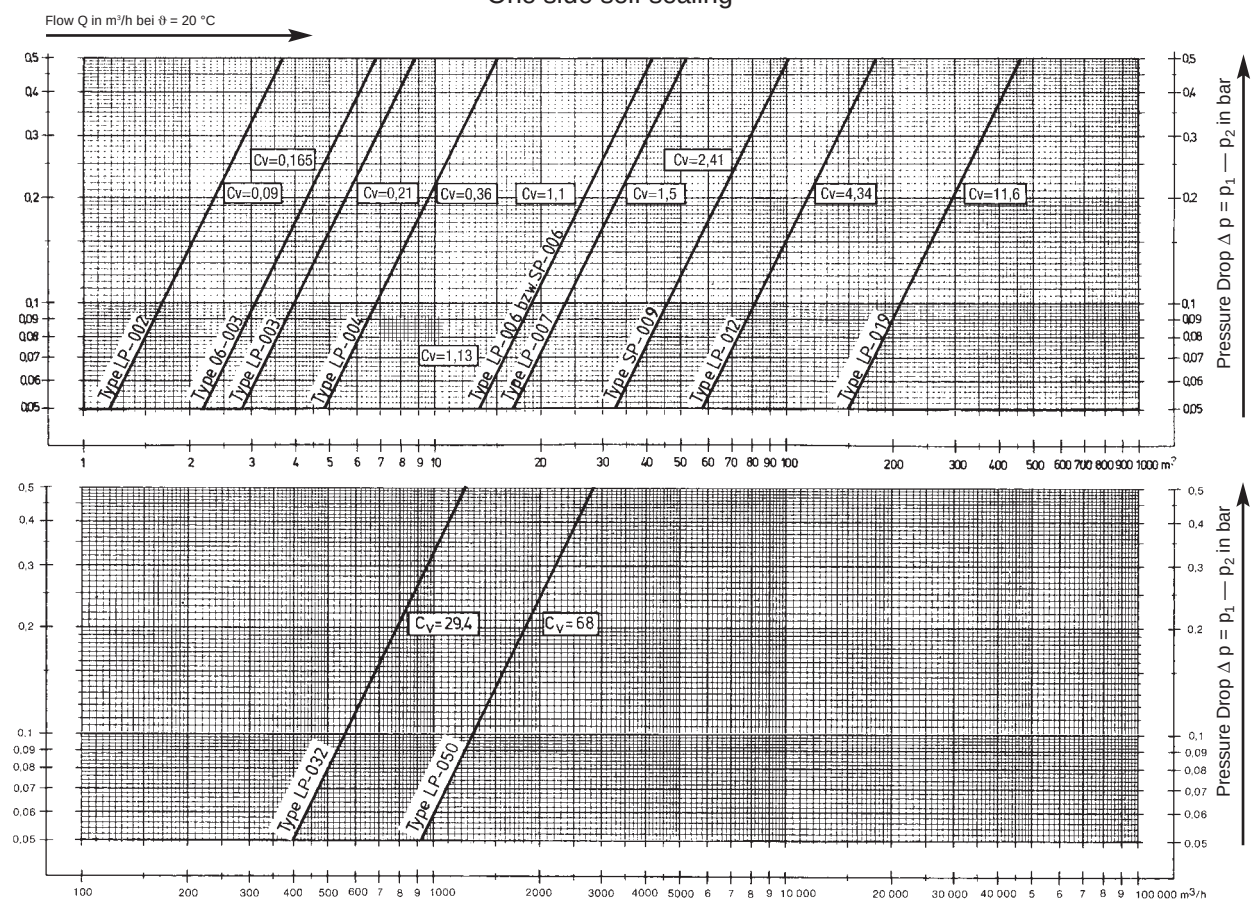
Working pressure 6 bar
gauge pressure

1 bar = 14.5 PSI

Both sides self sealing



One side self sealing

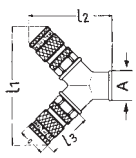
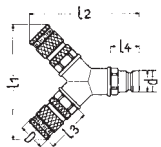


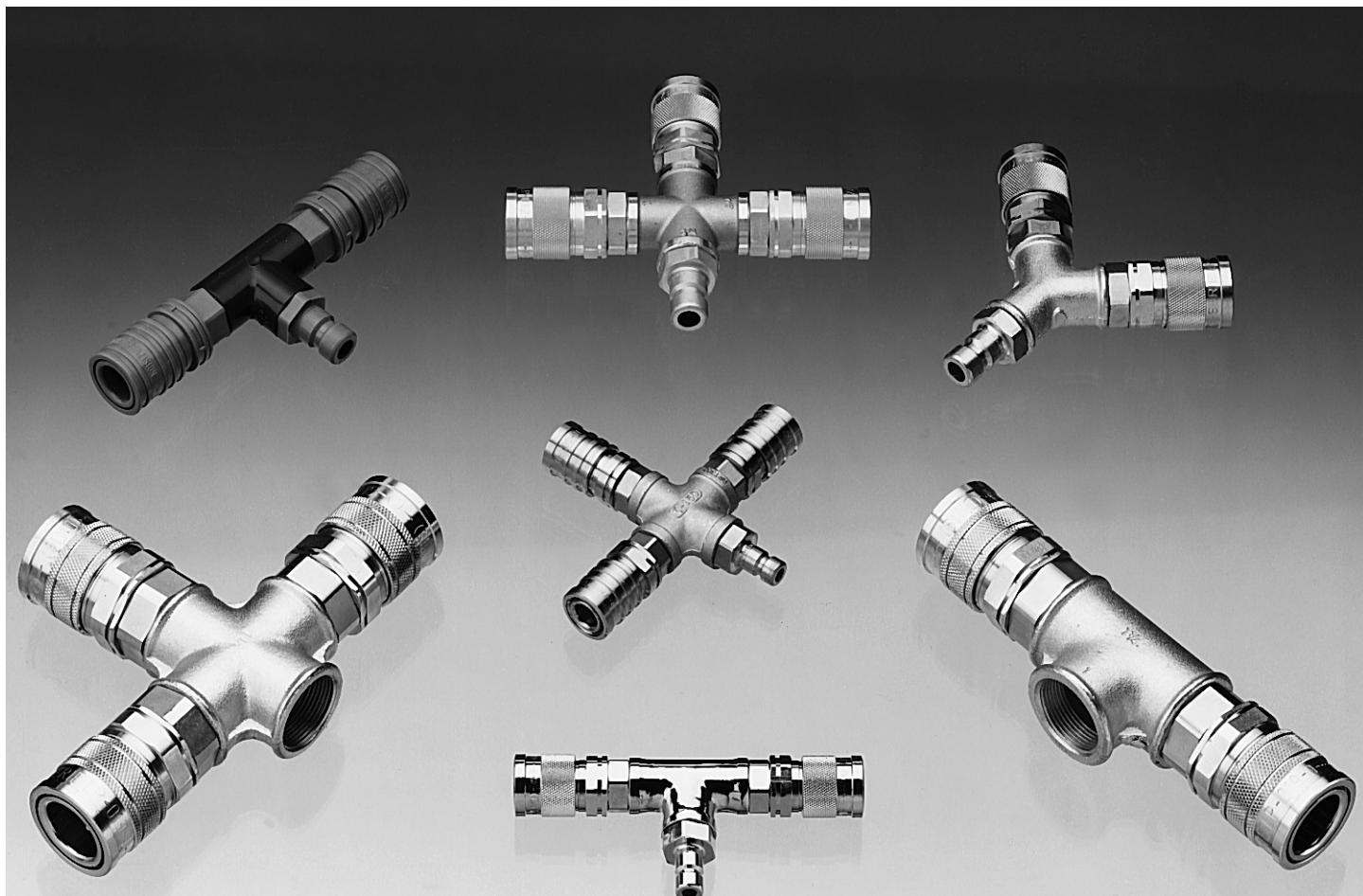
materials:
standard:
 11 = steel, zinc plated

special materials:
 21 = brass, passivated
 01 = stainless steel 1.4404/1.4571 or similar
 50 = polyamide 11/12, grey (PA)

seal qualities:
 1 = NBR
 2 = FKM
 4 = EPDM

Availability: ● Short ○ Medium ○ Long

	Part No.	equipped with	steel zinc-plated	D	n.b.	d	d1	l	l1	l2	l3	l4	Weight [g]
 British standard pipe parallel (BSPP) female thread to DIN ISO 228 and 2 self sealing couplings	2R-006-0-WR517-...-	3/8" BSPP, 2 ssc LP-006	○	25	6				116	81	47,5		430
	2R-007-0-WR521-...-	1/2" BSPP, 2 ssc LP-007	○	30	7				140	96	57		710
	2R-012-0-WR533-...-	1" BSPP, 2 ssc LP-012	○	40	12				178	128	65		1440
 1 thru type adaptors and 2 self sealing couplings, type LP-006	2S-006-0-WR517-...-	1 tta, 2ssc, LP-006	○	25	6	12			116	110	47,5	26	430



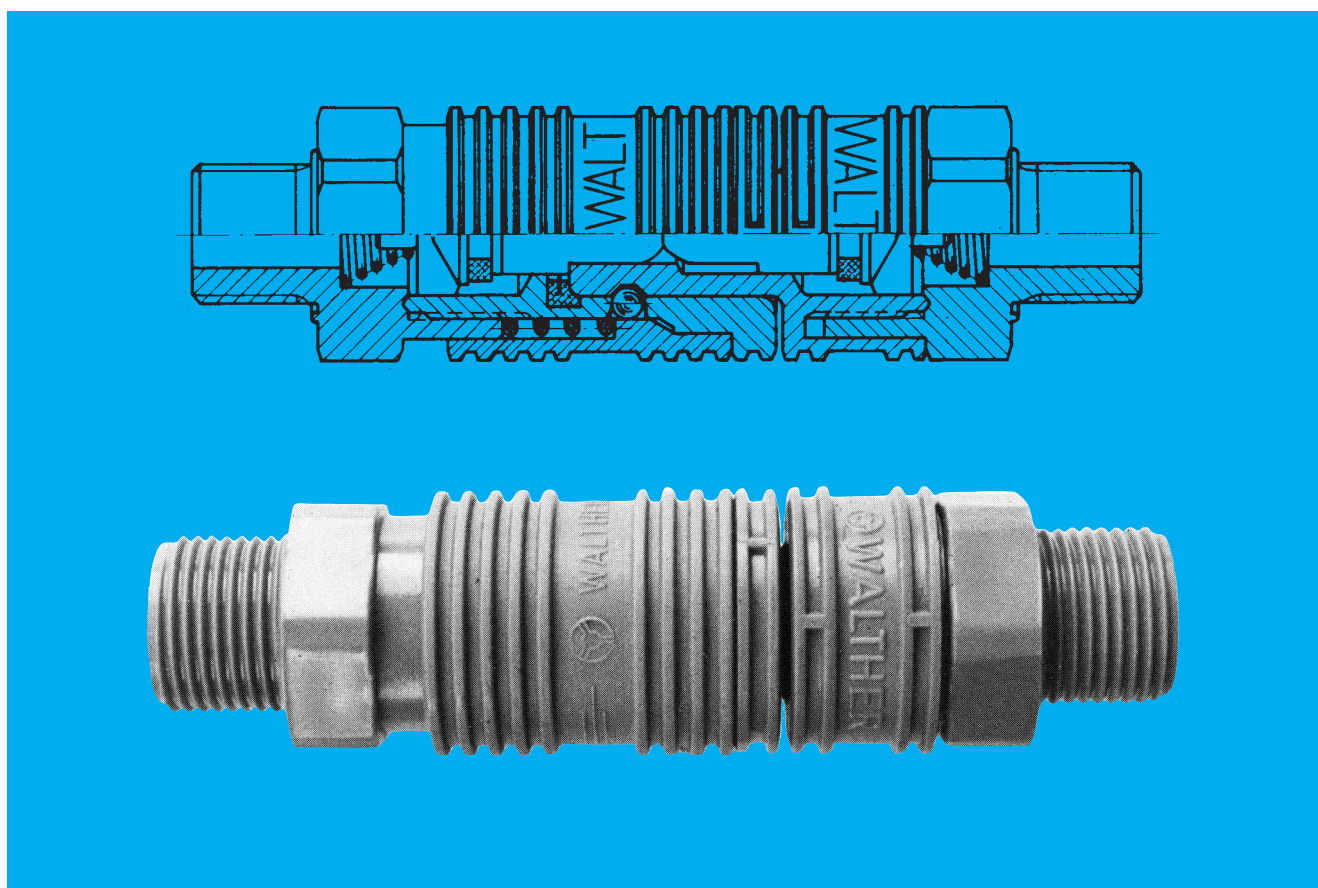
Do you have questions concerning the used plastic materials?
Our customer service is always eager to answer your questions. Phone: +49 (0) 2129 567 402.



Please find further information to this topic on our web site

Nom. bore	Type	Material pressure at 20° C	Max. static working		C _v value		Cross section [mm²]	Page
			both sides [bar]	one side [psi]	both sides self sealing	one side self sealing		
6	KL-006	polyamide 11/12 grey (PA)	12	170	0.73	1.0	30	36
12	KL-012	polyacetal grey (POM)	10	145	2.32	3.1	120	37
30	KL-030	polyacetal grey, black (POM)	10	145	23.3	30.46	710	38
Threaded hose connectors, double and reducing connectors								38
Performance diagrams								39 - 40

Materials: other materials e. g. PVDF, PP, ... as special types on request



characteristic features:
- can be coupled with type LP-006

special version:

Z14 = self sealing couplings and self sealing adaptors in polypropylene (PP) anthracite (p max. static 3 bar at 20° C)

optional features:

OV = without valve
SI = with additional axial safety lock (outer diameter 29 mm)

materials:
standard:
50 = polyamide 11/12, grey (PA)

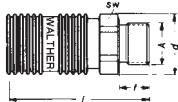
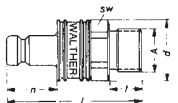
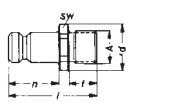
special materials:
other materials as special types on request

seal qualities:

1 = NBR
2 = FKM
4 = EPDM

Please note the technical data on pages 2 - 7, 39 - 40 and the max. working pressures on page 35

Availability: ● Short ○ Medium ○ Long

		Part No.	Connec- tion A	PA grey							d	SW	l	t	n	weight [g]
Self sealing couplings		British standard pipe parallel (BSPP) male thread to DIN ISO 228	KL-006-0-WR013-50-. KL-006-0-WR017-50-. KL-006-0-WR021-50-.	BSPP 1/4" BSPP 3/8" BSPP 1/2"	● ● ●						24 24 24	22 22 22	55,3 55,3 55,3	12 12 12		16 17 18
		British standard pipe parallel (BSPP) female thread to DIN ISO 228	KL-006-0-WR513-50-. KL-006-0-WR517-50-.	BSPP 1/4" BSPP 3/8"	● ●						24 24	22 22	57,3 57,3	14 14		19 18
		hose connection	KL-006-0-SL007-50-. KL-006-0-SL009-50-. KL-006-0-SL011-50-. KL-006-0-SL013-50-.	7 mm 9 mm 11 mm 13 mm	● ● ● ●						24 24 24 24	22 22 22 22	68,3 73,3 73,3 73,3	25 30 30 30		16 17 18 19
Self sealing adaptors		British standard pipe parallel (BSPP) male thread to DIN ISO 228	KL-006-2-WR013-50-. KL-006-2-WR017-50-. KL-006-2-WR021-50-.	BSPP 1/4" BSPP 3/8" BSPP 1/2"	● ● ●						24 24 24	22 22 22	53,5 53,5 53,3	12 12 12	20 20 20	10 10 11
		British standard pipe parallel (BSPP) female thread to DIN ISO 228	KL-006-2-WR513-50-. KL-006-2-WR517-50-.	BSPP 1/4" BSPP 3/8"	● ●						24 24	22 22	55,5 55,5	14 14	20 20	13 12
		hose connection	KL-006-2-SL007-50-. KL-006-2-SL009-50-. KL-006-2-SL011-50-. KL-006-2-SL013-50-.	7 mm 9 mm 11 mm 13 mm	● ● ● ●						24 24 24 24	22 22 22 22	66,5 71,5 71,5 71,5	25 30 30 30	20 20 20 20	10 10 11 12
Thru type adaptors		British standard pipe parallel (BSPP) male thread to DIN ISO 228	KL-006-1-WR010-50 KL-006-1-WR013-50 KL-006-1-WR017-50	BSPP 1/8" BSPP 1/4" BSPP 3/8"	● ● ●						16 20,5 24	15 19 22	32 35 38	7 9 11	20 20 20	3 4 6
		British standard pipe parallel (BSPP) female thread to DIN ISO 228	KL-006-1-WR510-50 KL-006-1-WR513-50	BSPP 1/8" BSPP 1/4"	○ ●						18,5 18,5	17 17	36 36	13,5 13,5	20 20	4 4
		hose connection	KL-006-1-SL007-50 KL-006-1-SL009-50 KL-006-1-SL011-50 KL-006-1-SL013-50	7 mm 9 mm 11 mm 13 mm	● ● ● ●						12 12 16 16		46 51 53 53	25 30 30 30	20 20 20 20	3 3 4 5

characteristic features:

- can be coupled with type LP-012

special version:

Z01 = for partial vacuum couplings with O-ring seal

optional features:

OV = without valve

SI = with additional axial safety lock
(outer diameter 44 mm)**materials:****standard:**40 = polyacetal resin POM, grey
SI-ring, black**special materials:**other materials as special types
on request**seal qualities:**

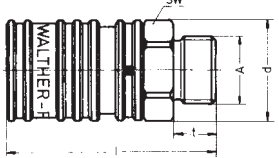
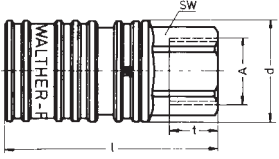
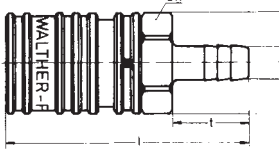
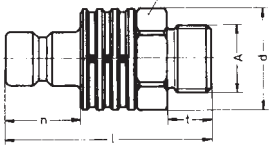
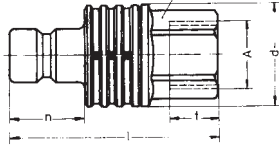
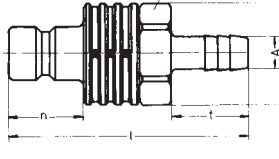
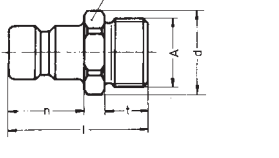
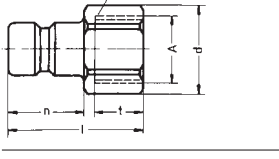
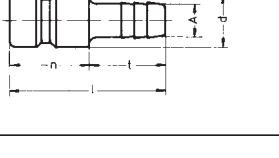
1 = NBR

2 = FKM

4 = EPDM

Please note the
technical data on
pages 2 - 7, 39 - 40 and the
max. working pressures
on page 35

Availability: ● Short ○ Medium ○ Long

	Part No.	Con- nection A	PA grey							d	SW	l	t	n	weight [g]
Self sealing couplings	 British stan- dard pipe par- allel (BSPP) male thread to DIN ISO 228	KL-012-0-WR021-40- KL-012-0-WR026-40- BSPP 1/2" BSPP 3/4"	● ○							40 40	30 30	88 90	15 17		90 90
	 British stan- dard pipe par- allel (BSPP) fe- male thread to DIN ISO 228	KL-012-0-WR521-40- KL-012-0-WR526-40- BSPP 1/2" BSPP 3/4"	● ○							30 30	82,5 84,5	15 17	17 19		85 90
	 hose tailpiece with hose no- zzle	KL-012-0-SL016-40- KL-012-0-SL019-40- 16 mm 19 mm	● ●							40 40	30 30	98 102	35 35		90 90
Self sealing adaptors	 British stan- dard pipe par- allel (BSPP) male thread to DIN ISO 228	KL-012-2-WR021-40- KL-012-2-WR026-40- BSPP 1/2" BSPP 3/4"	● ○							40 40	30 30	86 88	15 17	29,5 29,5	60 60
	 British stan- dard pipe par- allel (BSPP) fe- male thread to DIN ISO 228	KL-012-2-WR521-40- KL-012-2-WR526-40- BSPP 1/2" BSPP 3/4"	● ○							40 40	30 30	82,5 82,5	15 17	29,5 29,5	55 60
	 hose tailpiece with hose no- zzle	KL-012-2-SL016-40- KL-012-2-SL019-40- 16 mm 19 mm	● ●							40 40	30 30	96 100	35 35	29,5 29,5	58 62
Thru type adaptors	 British stan- dard pipe par- allel (BSPP) male thread to DIN ISO 228	KL-012-1-WR021-40 KL-012-1-WR026-40 BSPP 1/2" BSPP 3/4"	● ○							33,1 33,1	30 30	54,5 56,5	15 17	29,5 29,5	17 23
	 British stan- dard pipe par- allel (BSPP) fe- male thread to DIN ISO 228	KL-012-1-WR521-40 KL-012-1-WR526-40 BSPP 1/2" BSPP 3/4"	○ ○							33,1 33,1	30 30	49 51	15 17	29,5 29,5	18 23
	 hose tailpiece with hose no- zzle	KL-012-1-SL013-40 KL-012-1-SL016-40 KL-012-1-SL019-40 13 mm 16 mm 19 mm	● ● ○							21 21 25		61 69,5 68,5	30 35 35	31 29,5 29,5	13 13 18

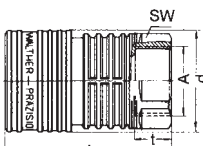
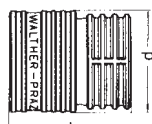
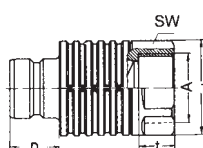
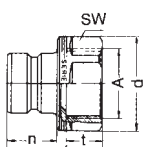
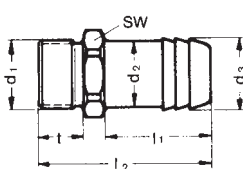
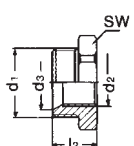
optional features:
OV = without valve

materials:
standard:
40 = polyacetal resin POM, grey, black
46 = polyacetal black (POM)

special materials:
other materials as special types
on request

seal qualities:
1 = NBR
2 = FPM
4 = EPDM

Please note the
technical data on
pages 2 - 7, 39 - 40 and the
max. working pressures
on page 35

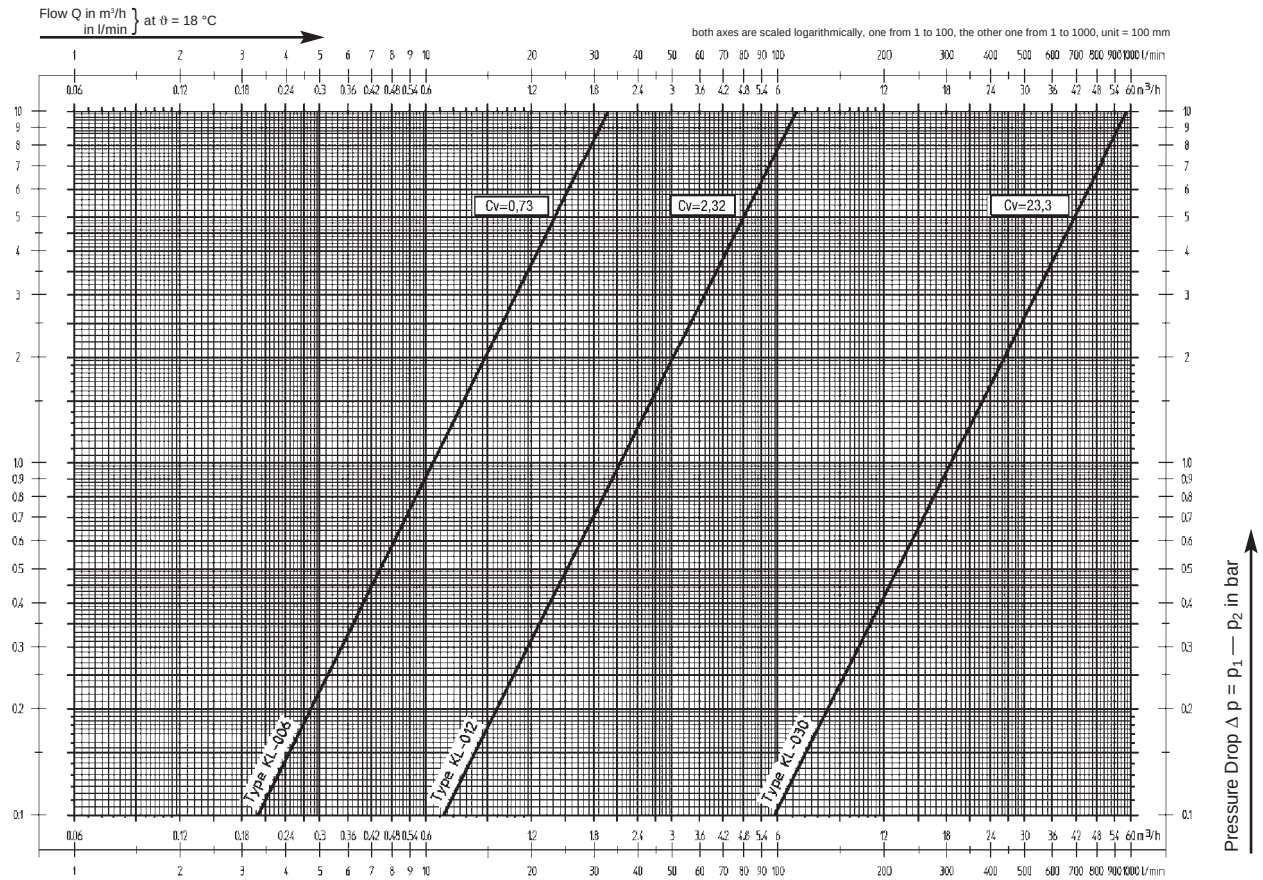
		Part No.	Connection A	POM grey	POM olive	d	SW	l	t	n		Weight [g]	
Self sealing couplings		British standard pipe parallel (BSPP) female thread to DIN ISO 228	KL-030-0-WR548-40-.	BSPP 1 1/2"	●	70	60	114	23,5			330	
			KL-030-0-WR560-40-.	BSPP 2"	○	70	65	116	26			320	
Thru type couplings		British standard pipe parallel (BSPP) female thread to DIN ISO 228	KL-030-4-WR548-40-.	BSPP 1 1/2"	○	70		84	18			240	
			KL-030-4-XX002-43-.	round thread for Vacuflex- hoses	○	70		84	40			250	
Self sealing adaptors		British standard pipe parallel (BSPP) female thread to DIN ISO 228	KL-030-2-WR548-40-.	BSPP 1 1/2"	●	66	60	114	23,5	35		230	
			KL-030-2-WR560-40-.	BSPP 2"	○	66	60	116	26	35		220	
Thru type adaptors		British standard pipe parallel (BSPP) female thread to DIN ISO 228	KL-030-1-WR548-46	BSPP 1 1/2"	●	66	60	66	25	35		95	
			d ₁		t	d ₂	d ₃	l ₁	l ₂	SW	n. b.		
Threaded hose connectors			5-AN0-0SL-025-WR048-40	BSPP 1 1/2"	●	18	25	27	40	73	50	19	65
			5-AN0-0SL-032-WR048-40	BSPP 1 1/2"	●	18	32	34	44	77	50	22	90
			5-AN0-0SL-042-WR048-40	BSPP 1 1/2"	●	18	42	45	61	94	50	32	95
Reducing connectors			5-AN0-0XX-008-WR533-40	BSPP 1 1/2"	●	G 1	38		30,5	60		55	

Measurement of flow coefficients C_v
according to DIN EN 60534

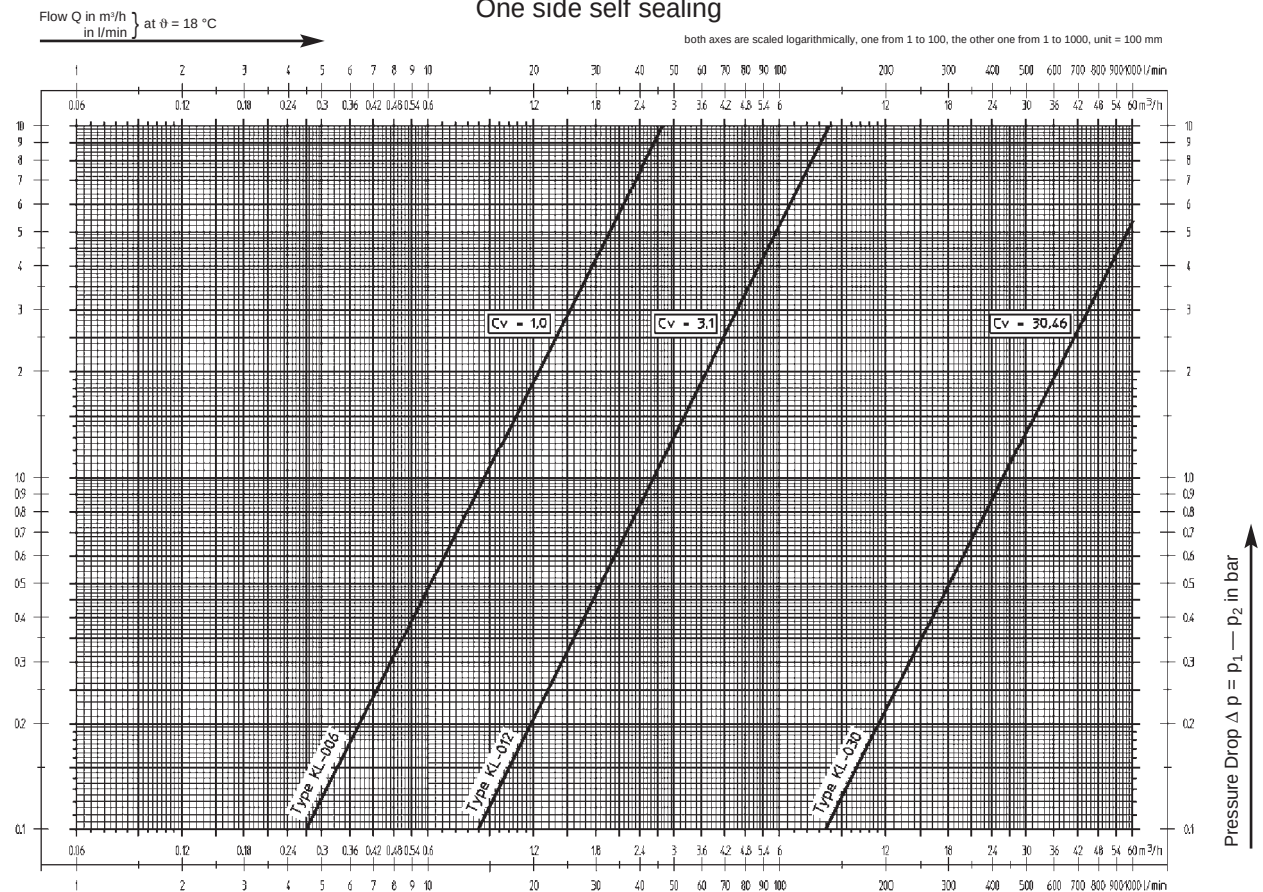
Flow speeds of 8 m/sec
should not be exceeded

1 bar = 14,5 PSI

Both sides self sealing



One side self sealing

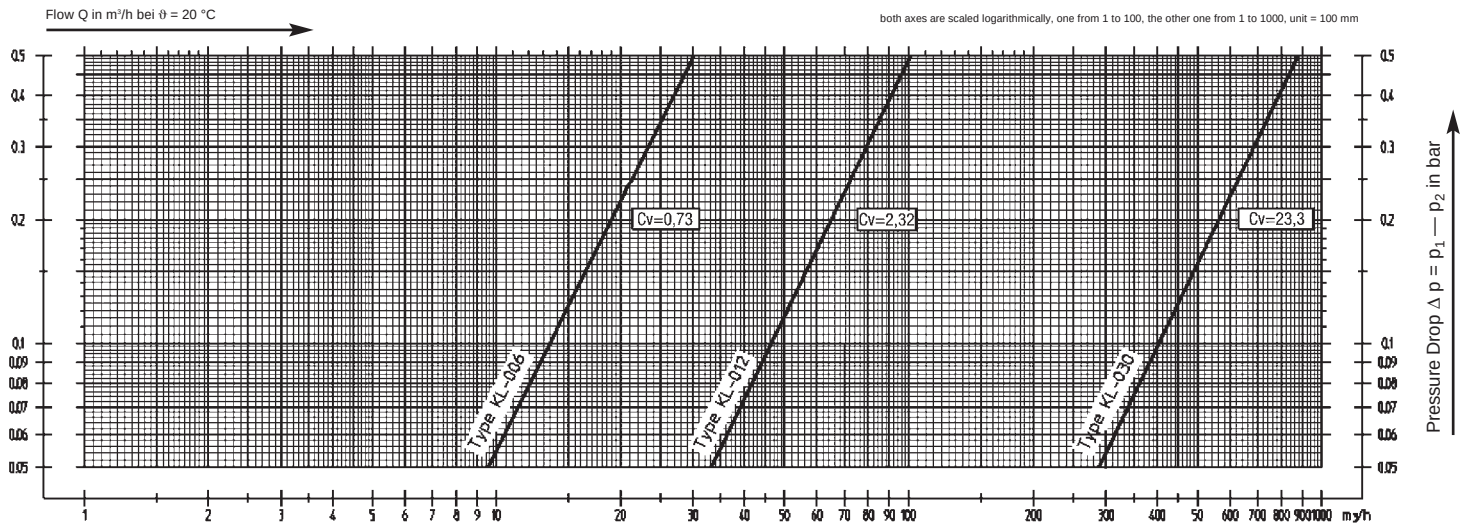


Measurement of flow coefficients C_v
according to DIN EN 60534

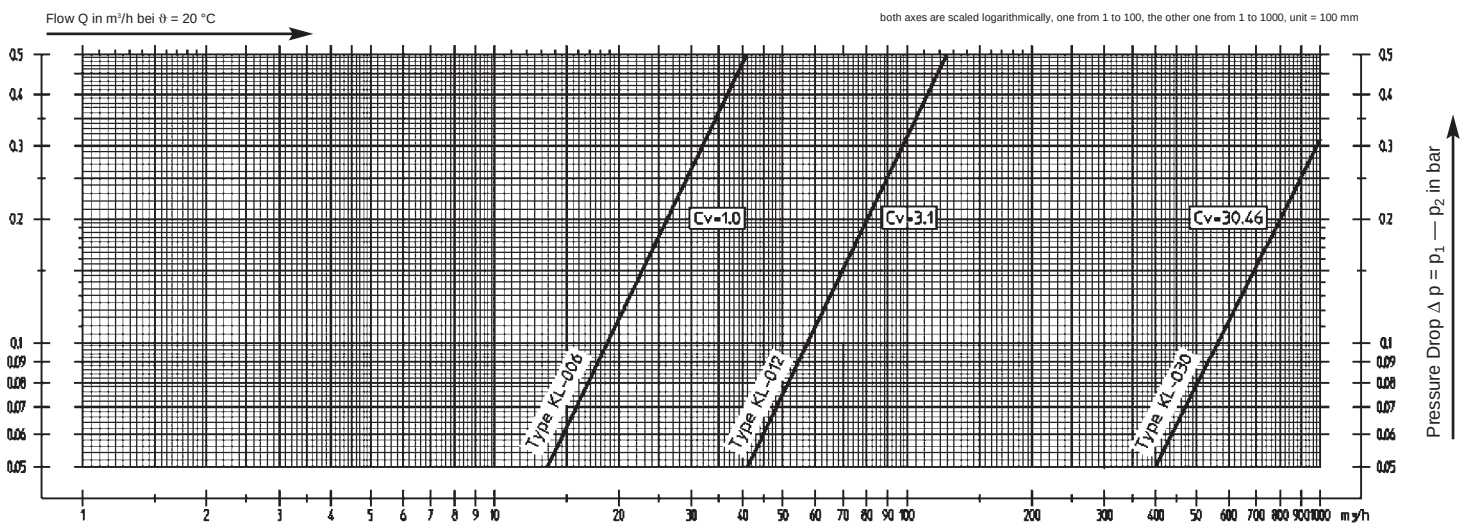
Working pressure 6 bar
gauge pressure

1 bar = 14,5 PSI

Both sides self sealing



One side self sealing



ATTENTION!

When determining the working pressures of standardised end connections, the maximum permitted working pressure of the end connection has to be considered.

Are you looking for non-interchangeable quick couplings for process integration? Our customer service is always eager to answer your questions. Phone: +49 (0) 2129 567-402.

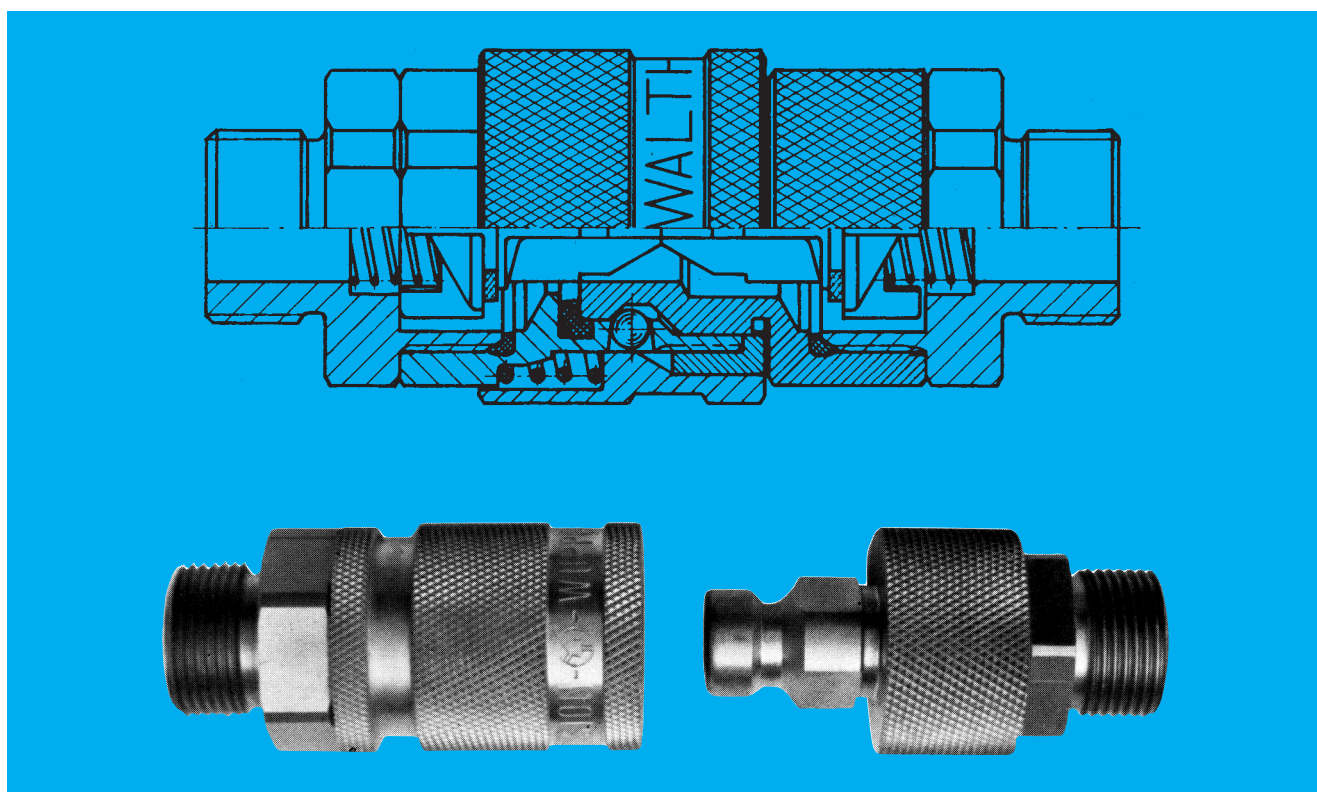


Please find further information to this topic on our web site.

Nom. bore	Type	Max. static working pressure brass and st. st. [bar/psi]*		C _v value		Cross section [mm ²]	Page
		for liquids	for gases	both sides self sealing	one side self sealing		
6	UF-006	40 / 580	30 / 435	0.77	1.1	30	42
7	UF-007	40 / 580	25 / 360	1.07	1.4	40	43
12	UF-012	30 / 435	20 / 290	3.25	4.34	120	44
19	UF-019	30 / 435	20 / 290	7.5	11.2	300	45
32	UF-032	30 / 435	10 / 145	23.8	29.4	800	46
Performance diagrams							47 - 48

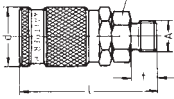
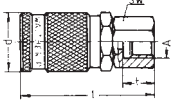
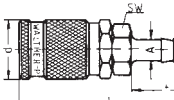
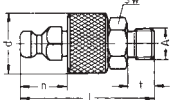
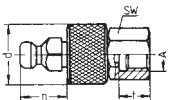
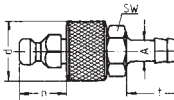
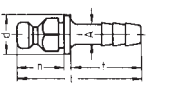
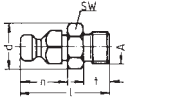
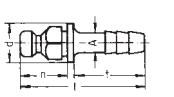
* based on experience, valid up to 100 °C

The types UF-006, UF-007, UF-012 und UF-019 in stainless steel (1.4404, 1.4571 or equal) are delivered as standard without knurling but in a smooth version (-GL/-GX) with finger grooves. Actual design differs from drawing.



Please note the technical data on pages 2 - 7, 47 - 48 and the max. working pressures on page 41

Availability: ● Short ● Medium ○ Long

		Part No.		Con- nection A	brass passivated	brass chrome plated	AISI 316 ti/ 1.4571				d	SW	l	t	n	weight [g]		
Self sealing couplings		British standard pipe parallel (BSPP) male thread to DIN ISO 228	UF-006-0-WR013-...-DR UF-006-0-WR013-...-VI UF-006-0-WR017-...-DR UF-006-0-WR017-...-VI UF-006-0-WR021-...-DR UF-006-0-WR021-...-VI	▲ ■ ▲ ■ ▲ ■	BSPP 1/4" BSPP 1/4" BSPP 3/8" BSPP 3/8" BSPP 1/2" BSPP 1/2"	● ● ● ● ● ●	● ● ● ● ● ●	○ ○ ○ ○ ○ ○			25 25 25 25 25 25	19 19 19 19 22 22	58 58 59 59 62 62	11 11 12 12 15 15		120 120 130 130 150 150		
		British standard pipe parallel (BSPP) fe- male thread to DIN ISO 228	UF-006-0-WR513-...-DR UF-006-0-WR513-...-VI UF-006-0-WR517-...-DR UF-006-0-WR517-...-VI	▲ ■ ▲ ■	BSPP 1/4" BSPP 1/4" BSPP 3/8" BSPP 3/8"	● ● ● ●	● ● ● ●	○ ○ ○ ○			25 25 25 25	19 19 22 22	57 57 58 58	13 13 14 14		120 120 130 130		
		hose connection	UF-006-0-SL006-...-DR UF-006-0-SL006-...-VI UF-006-0-SL009-...-DR UF-006-0-SL009-...-VI UF-006-0-SL011-...-DR UF-006-0-SL011-...-VI UF-006-0-SL013-...-DR UF-006-0-SL013-...-VI	▲ ■ ▲ ■ ▲ ■ ▲ ■	6 mm 6 mm 9 mm 9 mm 11 mm 11 mm 13 mm 13 mm	● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ●	○ ○ ○ ○ ○ ○ ○ ○			25 25 25 25 25 25 25 25	19 19 19 19 19 19 19 19	72 72 77 77 77 77 77 77	25 25 30 30 30 30 30 30		120 120 120 120 130 130 140 140		
	Self sealing adaptors		British standard pipe parallel (BSPP) male thread to DIN ISO 228	UF-006-2-WR013-...-DR UF-006-2-WR013-...-VI UF-006-2-WR017-...-DR UF-006-2-WR017-...-VI UF-006-2-WR021-...-DR UF-006-2-WR021-...-VI	▲ ■ ▲ ■ ▲ ■	BSPP 1/4" BSPP 1/4" BSPP 3/8" BSPP 3/8" BSPP 1/2" BSPP 1/2"	● ● ● ● ● ●	● ● ● ● ● ●	○ ○ ○ ○ ○ ○			25 25 25 25 25 25	19 19 19 19 22 22	56 56 57 57 60 60	11 11 12 12 15 15	20,1 20,1 20,1 20,1 20,1 20,1	90 90 100 100 120 120	
			British standard pipe parallel (BSPP) fe- male thread to DIN ISO 228	UF-006-2-WR513-...-DR UF-006-2-WR513-...-VI UF-006-2-WR517-...-DR UF-006-2-WR517-...-VI	▲ ■ ▲ ■	BSPP 1/4" BSPP 1/4" BSPP 3/8" BSPP 3/8"	● ● ● ●	● ● ● ●	○ ○ ○ ○			25 25 25 25	19 19 22 22	55 55 56 56	13 13 14 14	20,1 20,1 20,1 20,1	95 95 100 100	
			hose connection	UF-006-2-SL006-...-DR UF-006-2-SL006-...-VI UF-006-2-SL009-...-DR UF-006-2-SL009-...-VI UF-006-2-SL011-...-DR UF-006-2-SL011-...-VI UF-006-2-SL013-...-DR UF-006-2-SL013-...-VI	▲ ■ ▲ ■ ▲ ■ ▲ ■	6 mm 6 mm 9 mm 9 mm 11 mm 11 mm 13 mm 13 mm	● ● ● ● ● ● ● ●	● ● ● ● ● ● ● ●	○ ○ ○ ○ ○ ○ ○ ○			25 25 25 25 25 25 25 25	19 19 19 19 19 19 19 19	70 70 75 75 75 75 75 75	25 25 30 30 30 30 30 30	20,1 20,1 20,1 20,1 20,1 20,1 20,1 20,1	85 85 90 90 95 95 110 110	
		Thru type adaptors		British standard pipe parallel (BSPP) male thread to DIN ISO 228	UF-006-1-WR013-...-DR UF-006-1-WR013-...-VI UF-006-1-WR017-...-DR UF-006-1-WR017-...-VI	▲ ■ ▲ ■	BSPP 1/4" BSPP 1/4" BSPP 3/8" BSPP 3/8"	○ ○ ○ ○	○ ○ ○ ○	○ ○ ○ ○			18,9 18,9 21 21	17 17 19 19	37,5 37,5 38,5 38,5	11 11 12 12	20,1 20,1 20,1 20,1	29 29 41 41
				British standard pipe parallel (BSPP) fe- male thread to DIN ISO 228	UF-006-1-WR513-...-DR UF-006-1-WR513-...-VI	▲ ■	BSPP 1/4" BSPP 1/4"	○ ○	○ ○	○ ○			18,9 18,9	17 17	37,5 37,5	13 13	20,1 20,1	31 31
				hose connection	UF-006-1-SL006-...-DR UF-006-1-SL006-...-VI UF-006-1-SL009-...-DR UF-006-1-SL009-...-VI UF-006-1-SL011-...-DR UF-006-1-SL011-...-VI	▲ ■ ▲ ■ ▲ ■	6 mm 6 mm 9 mm 9 mm 11 mm 11 mm	● ● ● ● ○ ○	○ ○ ○ ○ ○ ○	○ ○ ○ ○ ○ ○			16 16 16 16 16 16		48,5 48,5 53,5 53,5 53,5 53,5	25 25 30 30 30 30	20,1 20,1 20,1 20,1 20,1 20,1	20 20 25 25 32 32

characteristic features:

- ▲...DR = with triangular fitting
- ...VI = with square fitting (non-interchangeable versions) special keys on request
- stainless steel version 1.4404/1.4571 or similar in smooth variant with gripping grooves instead of knurling (-GL/-GX)

optional features:

- OV = without valve
- SI = with additional axial safety lock (outer diameter 34 mm)

materials:**standard:**

- 21 = brass, passivated
- 22 = brass, chrome plated
- 01 = stainless steel 1.4404/1.4571 or similar

special materials:

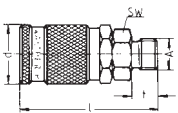
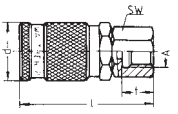
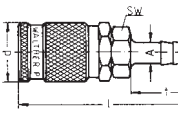
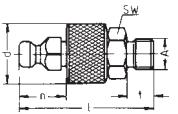
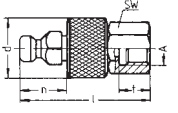
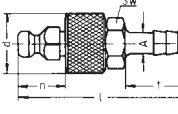
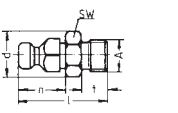
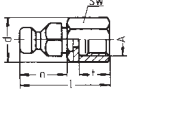
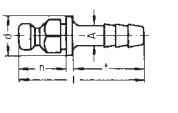
- 24 = brass, chem. nickel plated

seal qualities:

- 1 = NBR
- 2 = FKM
- 4 = EPDM

Please note the technical data on pages 2 - 7, 47 - 48 and the max. working pressures on page 41

Availability: ● Short ● Medium ○ Long

		Part No.		Con- nection A	brass passivated	brass chrome plated	AISI 316 ti/ 1.4571				d	SW	l	t	n	weight [g]
Self sealing couplings		British standard pipe parallel (BSPP) male thread to DIN ISO 228	UF-007-0-WR017-...-DR	▲	BSPP 3/8"	●	●	●			30	24	68	12		210
			UF-007-0-WR017-...-VI	■	BSPP 3/8"	●	●	●			30	24	68	12		210
			UF-007-0-WR021-...-DR	▲	BSPP 1/2"	●	●	○			30	24	71	15		230
			UF-007-0-WR021-...-VI	■	BSPP 1/2"	●	●	○			30	24	71	15		230
		British standard pipe parallel (BSPP) female thread to DIN ISO 228	UF-007-0-WR517-...-DR	▲	BSPP 3/8"	●	●	●			30	24	68	14		230
			UF-007-0-WR517-...-VI	■	BSPP 3/8"	●	●	●			30	24	68	14		230
			UF-007-0-WR521-...-DR	▲	BSPP 1/2"	●	●	○			30	27	71	17		240
			UF-007-0-WR521-...-VI	■	BSPP 1/2"	●	●	○			30	27	71	17		240
		hose connection	UF-007-0-SL009-...-DR	▲	9 mm	○	○	○			30	24	86	30		210
			UF-007-0-SL009-...-VI	■	9 mm	○	○	○			30	24	86	30		210
			UF-007-0-SL011-...-DR	▲	11 mm	○	○	○			30	24	86	30		210
			UF-007-0-SL011-...-VI	■	11 mm	○	○	○			30	24	86	30		210
			UF-007-0-SL013-...-DR	▲	13 mm	●	●	●			30	24	86	30		220
			UF-007-0-SL013-...-VI	■	13 mm	●	●	●			30	24	86	30		220
Self sealing adaptors		British standard pipe parallel (BSPP) male thread to DIN ISO 228	UF-007-2-WR017-...-DR	▲	BSPP 3/8"	●	●	●			30	24	67,5	12	23,5	170
			UF-007-2-WR017-...-VI	■	BSPP 3/8"	●	●	●			30	24	67,5	12	23,5	170
			UF-007-2-WR021-...-DR	▲	BSPP 1/2"	●	●	○			30	24	70,5	15	23,5	190
			UF-007-2-WR021-...-VI	■	BSPP 1/2"	●	●	○			30	24	70,5	15	23,5	190
		British standard pipe parallel (BSPP) female thread to DIN ISO 228	UF-007-2-WR517-...-DR	▲	BSPP 3/8"	●	●	●			30	24	67,5	14	23,5	180
			UF-007-2-WR517-...-VI	■	BSPP 3/8"	●	●	●			30	24	67,5	14	23,5	180
			UF-007-2-WR521-...-DR	▲	BSPP 1/2"	●	●	○			30	27	70,5	17	23,5	200
			UF-007-2-WR521-...-VI	■	BSPP 1/2"	●	●	○			30	27	70,5	17	23,5	200
		hose connection	UF-007-2-SL009-...-DR	▲	9 mm	○	○	○			30	24	85,5	30	23,5	170
			UF-007-2-SL009-...-VI	■	9 mm	○	○	○			30	24	85,5	30	23,5	170
			UF-007-2-SL011-...-DR	▲	11 mm	○	○	○			30	24	85,5	30	23,5	170
			UF-007-2-SL011-...-VI	■	11 mm	○	○	○			30	24	85,5	30	23,5	170
			UF-007-2-SL013-...-DR	▲	13 mm	●	●	●			30	24	85,5	30	23,5	180
			UF-007-2-SL013-...-VI	■	13 mm	●	●	●			30	24	85,5	30	23,5	180
Thru type adaptors		British standard pipe parallel (BSPP) male thread to DIN ISO 228	UF-007-1-WR017-...-DR	▲	BSPP 3/8"	○	○	○			21	19	41,5	12	23,5	48
			UF-007-1-WR017-...-VI	■	BSPP 3/8"	○	○	○			21	19	41,5	12	23,5	48
		British standard pipe parallel (BSPP) female thread to DIN ISO 228	UF-007-1-WR517-...-DR	▲	BSPP 3/8"	○	○	○			24	22	43	14	23,5	60
			UF-007-1-WR517-...-VI	■	BSPP 3/8"	○	○	○			24	22	43	14	23,5	60
		hose connection	UF-007-1-SL009-...-DR	▲	9 mm	○	○	○			18		57,5	30	23,5	31
			UF-007-1-SL009-...-VI	■	9 mm	○	○	○			18		57,5	30	23,5	31
			UF-007-1-SL011-...-DR	▲	11 mm	○	○	○			18		57,5	30	23,5	41
			UF-007-1-SL011-...-VI	■	11 mm	○	○	○			18		57,5	30	23,5	41
			UF-007-1-SL013-...-DR	▲	13 mm	○	○	○			18		57,5	30	23,5	50
			UF-007-1-SL013-...-VI	■	13 mm	○	○	○			18		57,5	30	23,5	50

characteristic features:

▲...DR = with triangular fitting

■...VI = with square fitting
(non-interchangeable versions)
special keys on request- stainless steel version 1.4404/1.4571 or similar
in smooth variant with gripping grooves instead of
knurling (-GL/-GX)**optional features:**

OV = without valve

SI = with additional axial safety lock
(outer diameter 44 mm)**materials:****standard:**

21 = brass, passivated

22 = brass, chrome plated

01 = stainless steel 1.4404/1.4571 or similar

special materials:

24 = brass, chem. nickel plated

seal qualities:

1 = NBR

2 = FKM

4 = EPDM

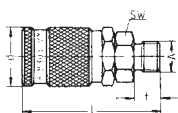
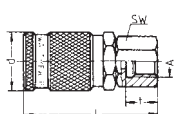
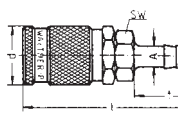
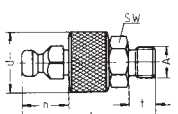
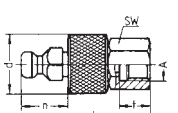
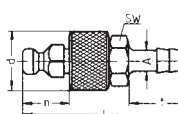
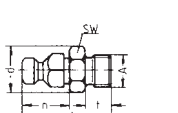
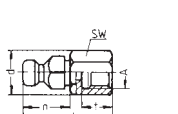
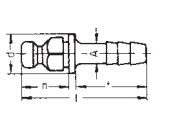
Please note the
technical data on
pages 2 - 7, 47 - 48 and the
max. working pressures
on page 41

Availability: ● Short ○ Medium ○ Long

Self sealing couplings

Self sealing adaptors

Thru type adaptors

	Part No.		Con- nection A	brass passivated	brass chrome plated	AIISI 316 ti/ 1.4571				d	SW	l	t	n	weight [g]
 British standard pipe parallel (BSPP) male thread to DIN ISO 228	UF-012-0-WR021-...-DR	▲	BSPP 1/2"	●	○	○				40	32	82	15		410
	UF-012-0-WR021-...-VI	■	BSPP 1/2"	●	○	○				40	32	82	15		410
	UF-012-0-WR026-...-DR	▲	BSPP 3/4"	●	○	○				40	32	84	17		440
	UF-012-0-WR026-...-VI	■	BSPP 3/4"	●	○	○				40	32	84	17		440
	UF-012-0-WR033-...-DR	▲	BSPP 1"	○	○	○				40	36	88	20		510
	UF-012-0-WR033-...-VI	■	BSPP 1"	○	○	○				40	36	88	20		510
 British standard pipe parallel (BSPP) fe- male thread to DIN ISO 228	UF-012-0-WR521-...-DR	▲	BSPP 1/2"	●	○	○				40	32	81	17		450
	UF-012-0-WR521-...-VI	■	BSPP 1/2"	●	○	○				40	32	81	17		450
	UF-012-0-WR526-...-DR	▲	BSPP 3/4"	●	●	○				40	32	83	19		430
	UF-012-0-WR526-...-VI	■	BSPP 3/4"	●	●	○				40	32	83	19		430
 hose connection	UF-012-0-SL016-...-DR	▲	16 mm	●	○	○				40	32	102	35		420
	UF-012-0-SL016-...-VI	■	16 mm	●	○	○				40	32	102	35		420
	UF-012-0-SL019-...-DR	▲	19 mm	●	○	○				40	32	102	35		440
	UF-012-0-SL019-...-VI	■	19 mm	●	○	○				40	32	102	35		440
 British standard pipe parallel (BSPP) male thread to DIN ISO 228	UF-012-2-WR021-...-DR	▲	BSPP 1/2"	●	○	○				40	32	80	15	29,5	330
	UF-012-2-WR021-...-VI	■	BSPP 1/2"	●	○	○				40	32	80	15	29,5	330
	UF-012-2-WR026-...-DR	▲	BSPP 3/4"	●	○	○				40	32	82	17	29,5	360
	UF-012-2-WR026-...-VI	■	BSPP 3/4"	●	○	○				40	32	82	17	29,5	360
	UF-012-2-WR033-...-DR	▲	BSPP 1"	○	○	○				40	36	86	20	29,5	320
	UF-012-2-WR033-...-VI	■	BSPP 1"	○	○	○				40	36	86	20	29,5	320
 British standard pipe parallel (BSPP) fe- male thread to DIN ISO 228	UF-012-2-WR521-...-DR	▲	BSPP 1/2"	●	○	○				40	32	79	17	29,5	360
	UF-012-2-WR521-...-VI	■	BSPP 1/2"	●	○	○				40	32	79	17	29,5	360
	UF-012-2-WR526-...-DR	▲	BSPP 3/4"	●	●	○				40	32	81	19	29,5	340
	UF-012-2-WR526-...-VI	■	BSPP 3/4"	●	●	○				40	32	81	19	29,5	340
 hose connection	UF-012-2-SL016-...-DR	▲	16 mm	●	○	○				40	32	100	35	29,5	340
	UF-012-2-SL016-...-VI	■	16 mm	●	○	○				40	32	100	35	29,5	340
	UF-012-2-SL019-...-DR	▲	19 mm	●	○	○				40	32	100	35	29,5	360
	UF-012-2-SL019-...-VI	■	19 mm	●	○	○				40	32	100	35	29,5	360
 British standard pipe parallel (BSPP) male thread to DIN ISO 228	UF-012-1-WR021-...-DR	▲	BSPP 1/2"	○	○	○				30	27	52,5	15	29,5	110
	UF-012-1-WR021-...-VI	■	BSPP 1/2"	○	○	○				30	27	52,5	15	29,5	110
 British standard pipe parallel (BSPP) fe- male thread to DIN ISO 228	UF-012-1-WR521-...-DR	▲	BSPP 1/2"	○	○	○				33,5	30	52,5	17	29,5	150
	UF-012-1-WR521-...-VI	■	BSPP 1/2"	○	○	○				33,5	30	52,5	17	29,5	150
 hose connection	UF-012-1-SL016-...-DR	▲	16 mm	○	○	○				25		68,5	35	29,5	95
	UF-012-1-SL016-...-VI	■	16 mm	○	○	○				25		68,5	35	29,5	95

characteristic features:

- ▲...DR = with triangular fitting
- ...VI = with square fitting (non-interchangeable versions) special keys on request
- stainless steel version 1.4404/1.4571 or similar in smooth variant with gripping grooves instead of knurling (-GL/-GX)

optional features:

- OV = without valve
- SI = with additional axial safety lock (outer diameter 62 mm)

materials:**standard:**

- 21 = brass, passivated
- 22 = brass, chrome plated
- 01 = stainless steel 1.4404/1.4571 or similar

special materials:

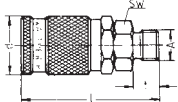
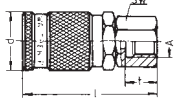
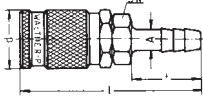
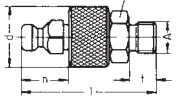
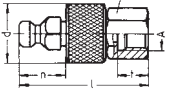
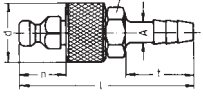
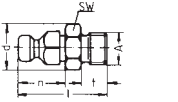
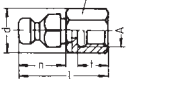
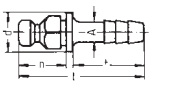
- 24 = brass, chem. nickel plated

seal qualities:

- 1 = NBR
- 2 = FKM
- 4 = EPDM

Please note the technical data on pages 2 - 7, 47 - 48 and the max. working pressures on page 41

Availability: ● Short ● Medium ○ Long

		Part No.		Con- nection A	brass passivated	brass chrome plated	AISI 316 ti/ 1.4571				d	SW	l	t	n	weight [g]
Self sealing couplings		British standard pipe parallel (BSPP) male thread to DIN ISO 228	UF-019-0-WR026-...-DR	▲	BSPP 3/4"	●	○	○			60	46	100	17		1080
			UF-019-0-WR026-...-VI	■	BSPP 3/4"	●	○	○			60	46	100	17		1080
			UF-019-0-WR033-...-DR	▲	BSPP 1"	●	○	○			60	46	103	20		1110
			UF-019-0-WR033-...-VI	■	BSPP 1"	●	○	○			60	46	103	20		1110
		British standard pipe parallel (BSPP) female thread to DIN ISO 228	UF-019-0-WR526-...-DR	▲	BSPP 3/4"	●	○	○			60	46	94	19		1130
			UF-019-0-WR526-...-VI	■	BSPP 3/4"	●	○	○			60	46	94	19		1130
			UF-019-0-WR533-...-DR	▲	BSPP 1"	●	○	○			60	46	98	23		1120
			UF-019-0-WR533-...-VI	■	BSPP 1"	●	○	○			60	46	98	23		1120
		hose connection	UF-019-0-SL019-...-DR	▲	19 mm	●	○	○			60	46	118	35		1110
			UF-019-0-SL019-...-VI	■	19 mm	●	○	○			60	46	118	35		1110
			UF-019-0-SL025-...-DR	▲	25 mm	●	○	○			60	46	123	40		1170
			UF-019-0-SL025-...-VI	■	25 mm	●	○	○			60	46	123	40		1170
			UF-019-0-SL028-...-DR	▲	28 mm	●	○	○			60	46	128	45		1200
			UF-019-0-SL028-...-VI	■	28 mm	●	○	○			60	46	128	45		1200
Self sealing adaptors		British standard pipe parallel (BSPP) male thread to DIN ISO 228	UF-019-2-WR026-...-DR	▲	BSPP 3/4"	●	○	○			54	46	96	17	32,5	760
			UF-019-2-WR026-...-VI	■	BSPP 3/4"	●	○	○			54	46	96	17	32,5	760
			UF-019-2-WR033-...-DR	▲	BSPP 1"	●	○	○			54	46	99	20	32,5	790
			UF-019-2-WR033-...-VI	■	BSPP 1"	●	○	○			54	46	99	20	32,5	790
		British standard pipe parallel (BSPP) female thread to DIN ISO 228	UF-019-2-WR526-...-DR	▲	BSPP 3/4"	●	○	○			54	46	90	19	32,5	830
			UF-019-2-WR526-...-VI	■	BSPP 3/4"	●	○	○			54	46	90	19	32,5	830
			UF-019-2-WR533-...-DR	▲	BSPP 1"	●	○	○			54	46	94	23	32,5	760
			UF-019-2-WR533-...-VI	■	BSPP 1"	●	○	○			54	46	94	23	32,5	760
		hose connection	UF-019-2-SL019-...-DR	▲	19 mm	●	○	○			54	46	114	35	32,5	790
			UF-019-2-SL019-...-VI	■	19 mm	●	○	○			54	46	114	35	32,5	790
			UF-019-2-SL025-...-DR	▲	25 mm	●	○	○			54	46	119	40	32,5	860
			UF-019-2-SL025-...-VI	■	25 mm	●	○	○			54	46	119	40	32,5	860
			UF-019-2-SL028-...-DR	▲	28 mm	●	○	○			54	46	124	45	32,5	890
			UF-019-2-SL028-...-VI	■	28 mm	●	○	○			54	46	124	45	32,5	890
Thru type adaptors		British standard pipe parallel (BSPP) male thread to DIN ISO 228	UF-019-1-WR026-...-DR	▲	BSPP 3/4"	○	○	○			45,5	41	59,5	17	32,5	280
			UF-019-1-WR026-...-VI	■	BSPP 3/4"	○	○	○			45,5	41	59,5	17	32,5	280
		British standard pipe parallel (BSPP) female thread to DIN ISO 228	UF-019-1-WR533-...-DR	▲	BSPP 1"	○	○	○			45,5	41	61,5	23	32,5	310
			UF-019-1-WR533-...-VI	■	BSPP 1"	○	○	○			45,5	41	61,5	23	32,5	310
		hose connection	UF-019-1-SL025-...-DR	▲	25 mm	○	○	○			38		81	40	32,5	270
			UF-019-1-SL025-...-VI	■	25 mm	○	○	○			38		81	40	32,5	270

characteristic features:

- ▲...DR = with triangular fitting
 ■...VI = with square fitting
 (non-interchangeable versions)
 special keys on request

optional features:

- GG = with ring grips (cast aluminium)
 OV = without valve
 SI = with additional axial safety lock
 (outer diameter 89 mm)

materials:

- standard:**
 21 = brass, passivated
 22 = brass, chrome plated
 01 = stainless steel 1.4404/1.4571 or similar

special materials:

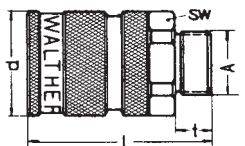
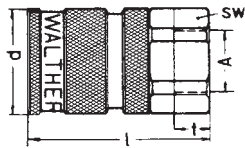
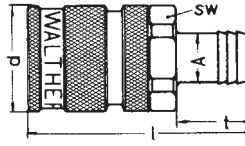
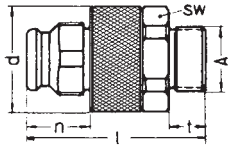
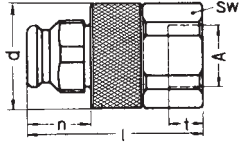
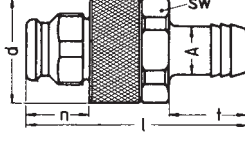
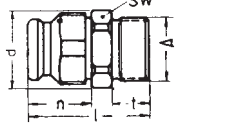
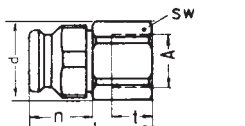
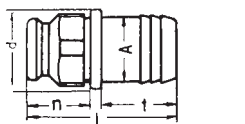
- 24 = brass, chem. nickel plated

seal qualities:

- 1 = NBR
 2 = FKM
 4 = EPDM

Please note the technical data on pages 2 - 7, 47 - 48 and the max. working pressures on page 41

Availability: ● Short ○ Medium ○ Long

	Part No.		Con- nection A	brass passivated	brass chrome plated	AlSi 316 ti/ 1.4571				d	SW	l	t	n	weight [g]
Self sealing couplings	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	UF-032-0-WR048-...-DR	▲ BSPP 1 1/2"	○	○	○				82	75	139	22		3290
		UF-032-0-WR048-...-VI	■ BSPP 1 1/2"	○	○	○				82	75	139	22		3290
		UF-032-0-WR060-...-DR	▲ BSPP 2"	○	○	○				82	75	143	26		3510
		UF-032-0-WR060-...-VI	■ BSPP 2"	○	○	○				82	75	143	26		3510
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	UF-032-0-WR548-...-DR	▲ BSPP 1 1/2"	○	○	○				82	75	126	25		3280
		UF-032-0-WR548-...-VI	■ BSPP 1 1/2"	○	○	○				82	75	126	25		3280
		UF-032-0-WR560-...-DR	▲ BSPP 2"	○	○	○				82	75	130	29		3130
		UF-032-0-WR560-...-VI	■ BSPP 2"	○	○	○				82	75	130	29		3130
	 hose connection	UF-032-0-SL042-...-DR	▲ 42 mm	○	○	○				82	75	178	61		3460
		UF-032-0-SL042-...-VI	■ 42 mm	○	○	○				82	75	178	61		3460
		UF-032-0-SL053-...-DR	▲ 53 mm	○	○	○				82	75	182	70		3840
		UF-032-0-SL053-...-VI	■ 53 mm	○	○	○				82	75	182	70		3840
Self sealing adaptors	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	UF-032-2-WR048-...-DR	▲ BSPP 1 1/2"	○	○	○				82	75	135,5	22	39	2750
		UF-032-2-WR048-...-VI	■ BSPP 1 1/2"	○	○	○				82	75	135,5	22	39	2750
		UF-032-2-WR060-...-DR	▲ BSPP 2"	○	○	○				82	75	139,5	26	39	2980
		UF-032-2-WR060-...-VI	■ BSPP 2"	○	○	○				82	75	139,5	26	39	2980
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	UF-032-2-WR548-...-DR	▲ BSPP 1 1/2"	○	○	○				82	75	122,5	25	39	2740
		UF-032-2-WR548-...-VI	■ BSPP 1 1/2"	○	○	○				82	75	122,5	25	39	2740
		UF-032-2-WR560-...-DR	▲ BSPP 2"	○	○	○				82	75	126,5	29	39	2600
		UF-032-2-WR560-...-VI	■ BSPP 2"	○	○	○				82	75	126,5	29	39	2600
	 hose connection	UF-032-2-SL042-...-DR	▲ 42 mm	○	○	○				82	75	174,5	61	39	2940
		UF-032-2-SL042-...-VI	■ 42 mm	○	○	○				82	75	174,5	61	39	2940
		UF-032-2-SL053-...-DR	▲ 53 mm	○	○	○				82	75	178,5	70	39	3320
		UF-032-2-SL053-...-VI	■ 53 mm	○	○	○				82	75	178,5	70	39	3320
Thru type adaptors	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	UF-032-1-WR048-...-DR	▲ BSPP 1 1/2"	○	○	○				61,3	55	74,5	22	39	680
		UF-032-1-WR048-...-VI	■ BSPP 1 1/2"	○	○	○				61,3	55	74,5	22	39	680
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	UF-032-1-WR548-...-DR	▲ BSPP 1 1/2"	○	○	○				66,5	60	72	25	39	720
		UF-032-1-WR548-...-VI	■ BSPP 1 1/2"	○	○	○				66,5	60	72	25	39	720
	 hose connection	UF-032-1-SL042-...-DR	▲ 42 mm	○	○	○				60		108	61	39	730
		UF-032-1-SL042-...-VI	■ 42 mm	○	○	○				60		108	61	39	730

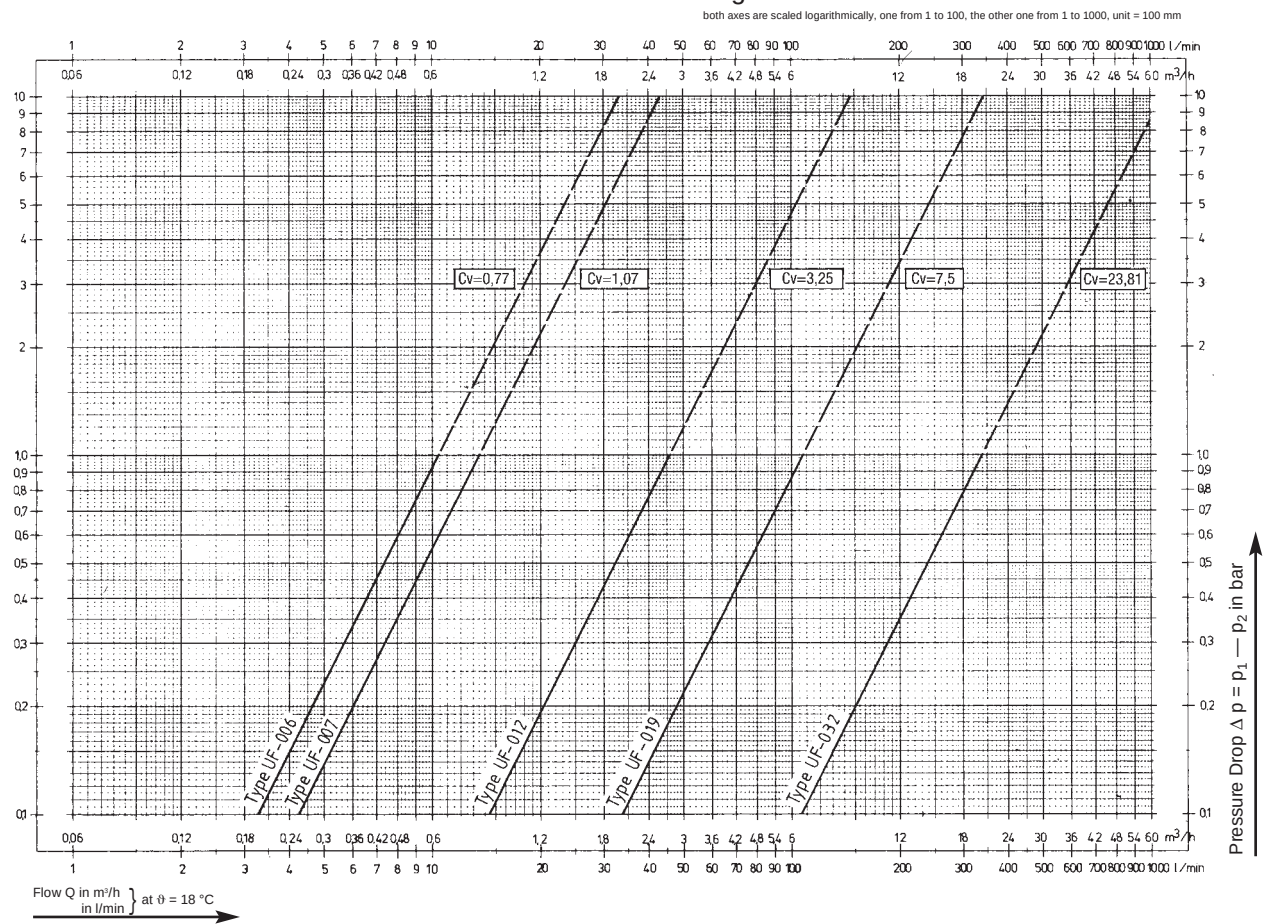
Non-interchangeable
version

Measurement of flow coefficients C_v
according to DIN EN 60534

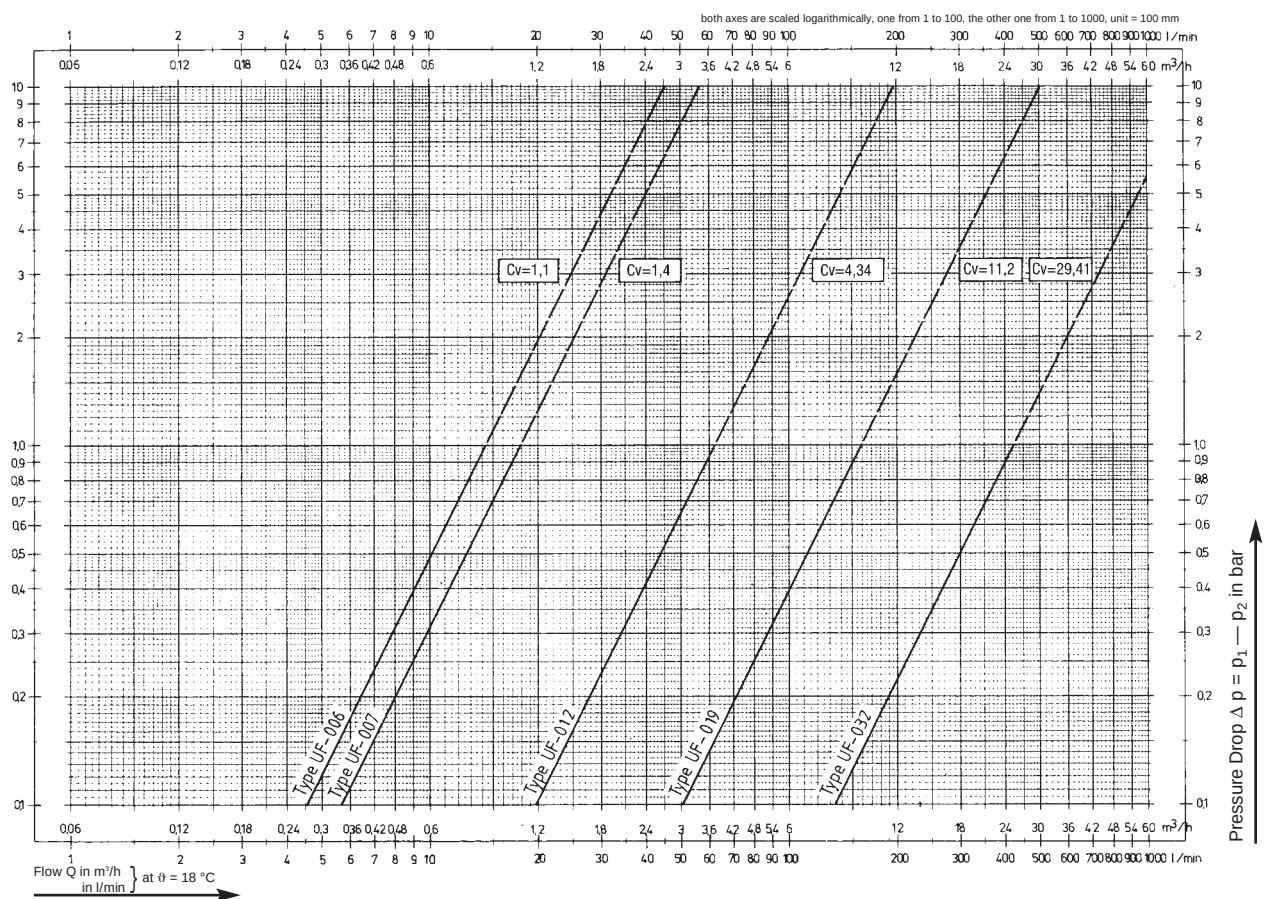
Flow speeds of 8 m/sec
should not be exceeded

1 bar = 14,5 PSI

Both sides self sealing



One side self sealing



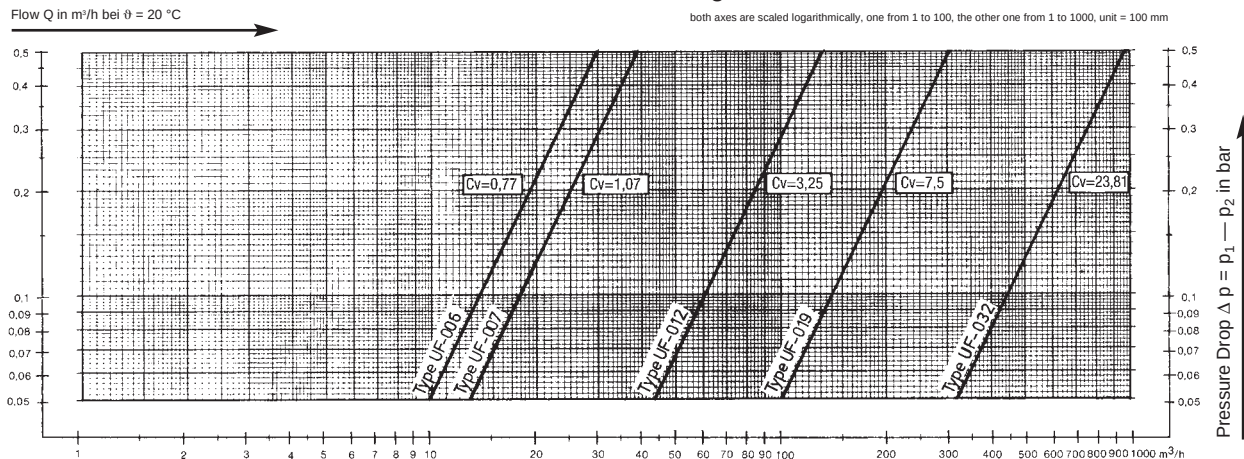
Non-interchangeable
version

Measurement of flow coefficients C_v
according to DIN EN 60534

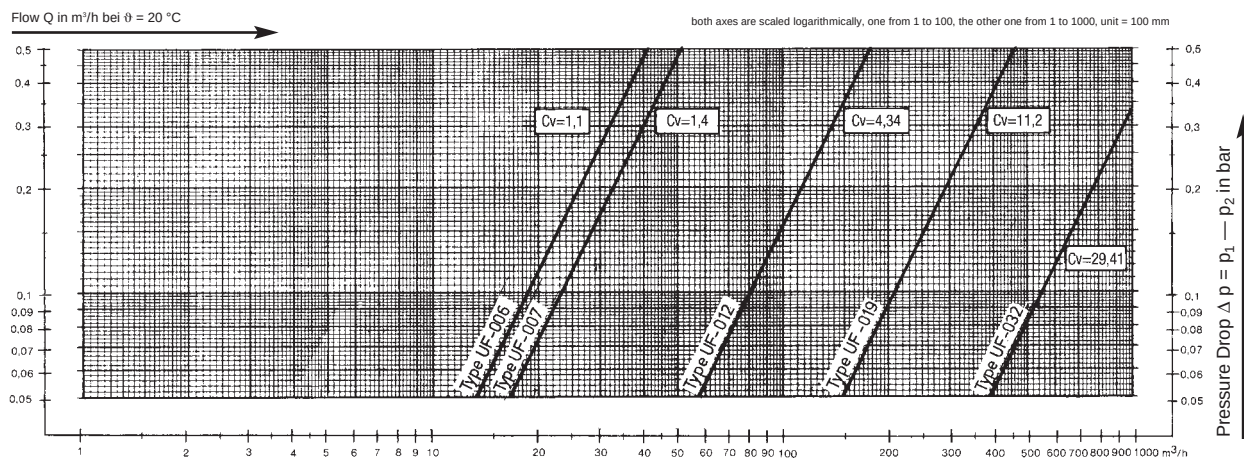
Working pressure 6 bar
gauge pressure

1 bar = 14,5 PSI

Both sides self sealing



One side self sealing



ATTENTION!

For standardised end connections, the maximum permitted working pressure of the end connection has to be considered when determining the working pressures.

For pulsating pressures, we recommend the use of the high pressure series HP.

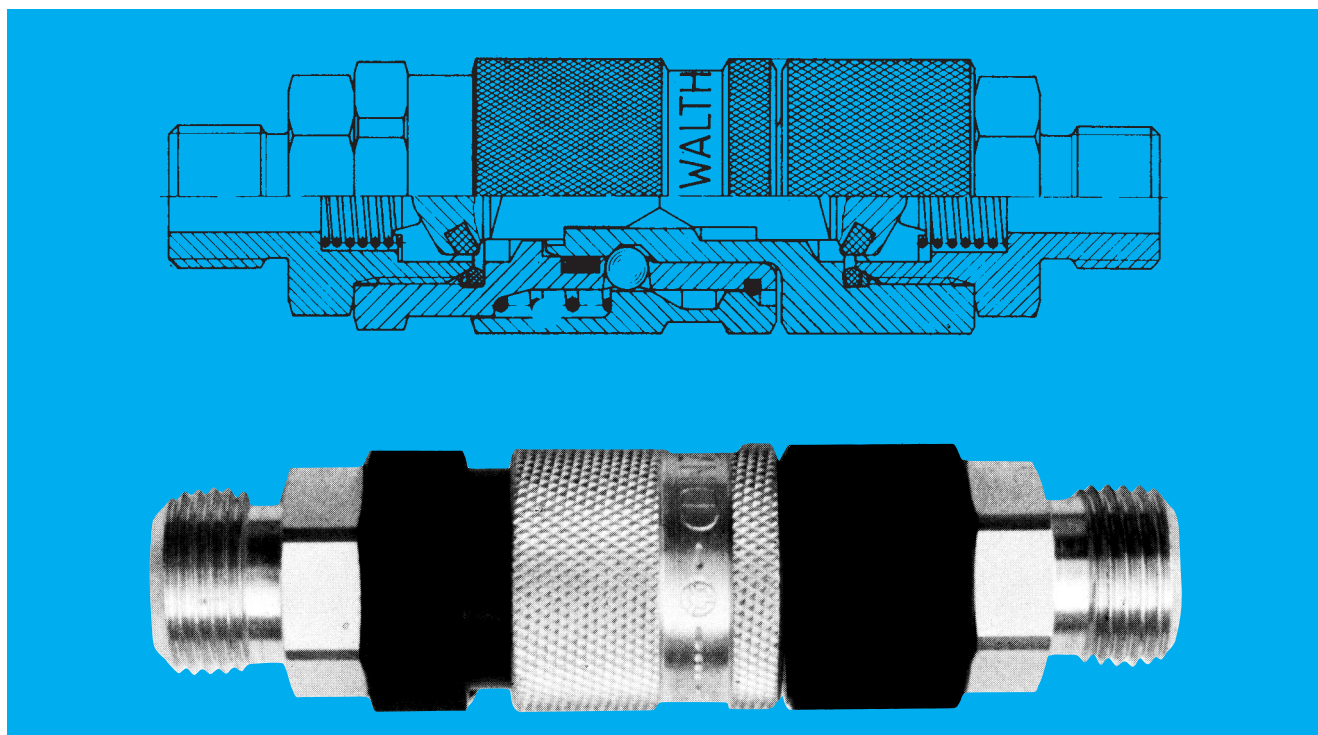
Do you have questions regarding the maximum permitted working pressure?

Our customer services is always available to answer your questions. Phone: + 49 (0) 2129 567-402.

Nom. bore	Type	Max. static working pressure [bar/psi]			Min. burst pressure for steel [bar/psi]	C _v value		Cross section [mm ²]	Page
		steel	brass*	st. st.		both sides self sealing	one side self sealing		
6	SG-006	250/3625	–	–	1400/20300	0.73	1.0	30	50 - 51
6	MD-006	200/2900	40/580	100/1450	1000/14500	0.73	–	30	52 - 53
7	MD-007	250/3625	40/580	100/1450	800/11600	1.07	–	40	54 - 55
12	MD-012	250/3625	40/580	100/1450	750/10900	3.25	–	120	56 - 57
19	MD-019	250/3625	40/580	50/725	750/10900	7.5	–	300	58 - 59
25	MD-025	220/3190	40/580	50/725	750/10900	13.5	–	490	60
32	MD-032	200/2900	40/580	40/580	700/10100	23.8	29.4	800	61 - 62
50	MD-050	100/1450	30/435	30/435	450/6500	59	68	2000	63 - 64
Performance diagrams									65 - 66

* based on experience, valid up to 100 °C

The types MD-006, MD-007, MD-012, MD-019 and MD-025 in stainless steel (1.4404, 1.4571 or equal) are delivered as standard without knurling but in a smooth version (-GL/-GX) with finger grooves. Actual design differs from drawing.



optional features:
OV = without valve

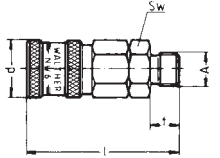
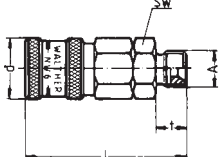
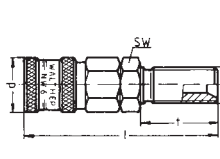
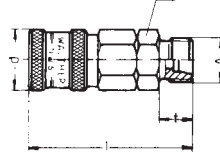
materials:
standard:
19 = steel zinc plated, partially oil burnished
12 = steel, oil burnished
(only valid for thru type adaptor)

seal qualities:
1 = NBR
2 = FPM
4 = EPDM

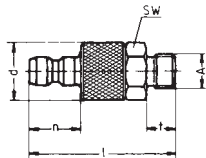
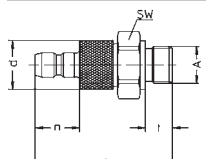
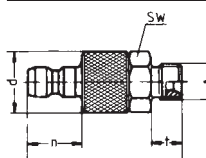
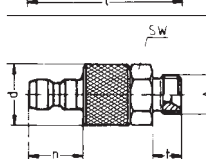
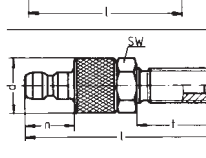
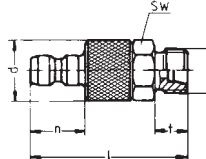
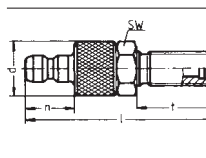
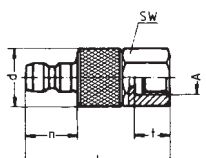
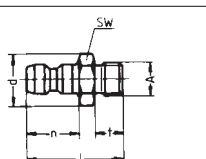
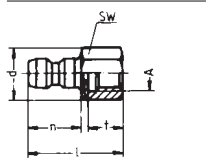
special materials:
13 = steel, chem. nickel plated

Please note the technical data on pages 2 - 7, 65 and the max. working pressures on page 49

Availability: ● Short ○ Medium ○ Long

	Part No.	Connec- tion A	steel zinc/ oil burn.	steel oil burnished			series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing couplings	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	SG-006-0-WR013-... SG-006-0-WR017-... SG-006-0-WR021-...	BSPP 1/4" BSPP 3/8" BSPP 1/2"	● ● ●						22 22 22	19 19 22	58 59 62	11 12 15		90 95 120
		SG-006-0-WE017-...	BSPP 3/8"	●						22	27	64	12		130
		SG-006-0-VR013-... SG-006-0-VR017-...	BSPP 1/4" BSPP 3/8"	○ ○					6 6	22 22	19 19	58 59	11 12		90 95
	 metric male thread with 60° sealing cone to DIN 7631	SG-006-0-D0614-...	M 14 x 1,5	●					6	22	19	57	10		90
	 metric male thread with 60° sealing cone to DIN 7631, extended thread for bulkhead mounting, max. thickness 10 mm	SG-006-0-DV008-...	M 14 x 1,5	○					6	22	19	79	32		110
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	SG-006-0-L0612-... SG-006-0-L0814-... SG-006-0-L1016-... SG-006-0-L1218-... SG-006-0-S0816-... SG-006-0-S1018-... SG-006-0-S1220-...	M 12 x 1,5 M 14 x 1,5 M 16 x 1,5 M 18 x 1,5 M 16 x 1,5 M 18 x 1,5 M 20 x 1,5	● ● ● ○ ○ ● ○			L L L L S S S	6 8 10 12 8 10 12	4 6 8 10 4 6 8	22 22 22 22 22 22 22	19 19 19 19 19 19 22	57 57 58 58 59 59 59	10 10 11 11 12 12 12		85 85 90 90 90 95 100
		SG-006-0-LV008-... SG-006-0-XX211-...	M 14 x 1,5 M 16 x 1,5	○ ○			L L	8 10	6 8	22 22	19 19	79 79	32 32		110 120
		SG-006-0-WR513-... SG-006-0-WR517-...	BSPP 1/4" BSPP 3/8"	● ●						22 22	19 22	57 58	13 14		95 100

Availability: ● Short ● Medium ○ Long

		Part No.	Conne- ction A	steel zinc/ oil burn.	steel oil burnished			series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing adaptors		British standard pipe parallel (BSPP) male thread to DIN ISO 228	SG-006-2-WR013-... SG-006-2-WR017-... SG-006-2-WR021-...	BSPP 1/4" BSPP 3/8" BSPP 1/2"	● ● ●						22 22 22	19 19 22	56 57 60	11 12 15	20 20 20	70 75 100
		British standard pipe parallel (BSPP) male thread to DIN ISO 228, sealing profile "E" to DIN 3852-11 for o-ring or sealing ring.	SG-006-2-WE017-...	BSPP 3/8"	●						22	27	62	12	20	110
		BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	SG-006-2-VR013-... SG-006-2-VR017-...	BSPP 1/4" BSPP 3/8"	○ ○					6 6	22 22	19 19	56 57	11 12	20 20	70 75
		metric male thread with 60° sealing cone to DIN 7631	SG-006-2-D0614-...	M 14 x 1,5	●					6	22	19	55	10	20	70
		metric male thread with 60° sealing cone to DIN 7631, extended thread for bulkhead mounting, max. thickness 10 mm	SG-006-2-DV008-...	M 14 x 1,5	○					6	22	19	77	32	20	90
		metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	SG-006-2-L0612-... SG-006-2-L0814-... SG-006-2-L1016-... SG-006-2-L1218-... SG-006-2-S0816-... SG-006-2-S1018-... SG-006-2-S1220-...	M 12 x 1,5 M 14 x 1,5 M 16 x 1,5 M 18 x 1,5 M 16 x 1,5 M 18 x 1,5 M 20 x 1,5	● ● ● ○ ○ ○ ○	L L L L S S S	6 8 10 12 8 10 12	4 6 8 10 4 6 8	22 22 22 22 22 22 22	19 19 19 19 19 19 22	55 55 56 56 57 57 57	10 10 11 11 12 12 12	20 20 20 20 20 20 20	70 70 75 75 75 80 85		
		metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S), extended thread, max. bulkhead thickness 10 mm	SG-006-2-LV008-... SG-006-2-XX211-...	M 14 x 1,5 M 16 x 1,5	○ ○		L L	8 10	6 8	22 22	19 19	77 77	32 32	20 20	90 100	
		British standard pipe parallel (BSPP) female thread to DIN ISO 228	SG-006-2-WR513-... SG-006-2-WR517-...	BSPP 1/4" BSPP 3/8"	● ●						22 22	19 22	55 56	13 14	20 20	75 80
Thru type adaptors		British standard pipe parallel (BSPP) male thread to DIN ISO 228	SG-006-1-WR010-... SG-006-1-WR013-... SG-006-1-WR017-...	BSPP 1/8" BSPP 1/4" BSPP 3/8"	● ● ●						15,5 19,6 21,9	14 14 19	34 37 38	8 11 12	20 20 20	23 26 37
		British standard pipe parallel (BSPP) female thread to DIN ISO 228	SG-006-1-WR513-... SG-006-1-WR517-...	BSPP 1/4" BSPP 3/8"	● ●						19,6 24	17 22	36 37	13 14	20 20	26 40

characteristic features:

- stainless steel version 1.4404/1.4571 or similar
in smooth variant with gripping grooves instead of knurling (-GL/-GX)

optional features:

OV = without valve
SI = with additional axial safety lock
(outer diameter 29 mm)

materials:**standard:**

19 = steel zinc plated, partially oil burnished
21 = brass, passivated
01 = stainless steel 1.4404/1.4571 or similar

special materials:

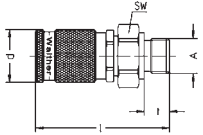
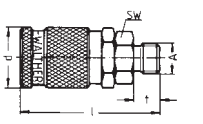
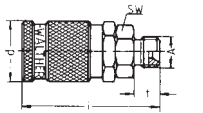
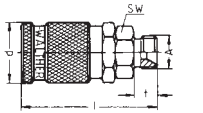
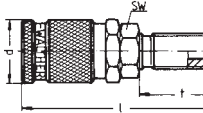
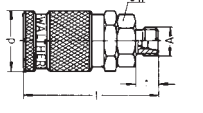
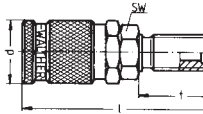
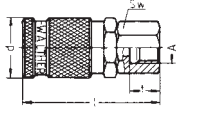
13 = steel, chem. nickel plated
24 = brass, chem. nickel plated
22 = brass, chrome plated

seal qualities:

1 = NBR
2 = FKM
4 = EPDM

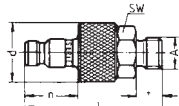
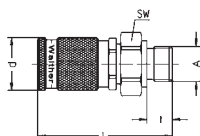
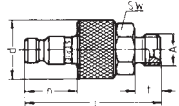
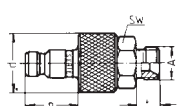
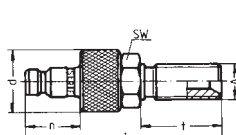
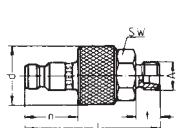
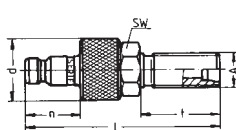
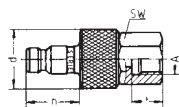
Please note the technical data on pages 2 - 7, 65 and the max. working pressures on page 49

Availability: ● Short ○ Medium ○ Long

	Part No.	Connec- tion A	steel zinc/ oil burn.	brass passivated	AISI 316 Ti/ 1.4571		series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing couplings	 British standard pipe parallel (BSPP) male thread to DIN ISO 228, sealing profile "E" to DIN 3852-11 for o-ring or sealing ring.	MD-006-0-WE017-... BSPP 3/8"	●							25	27	64	12		157
	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	MD-006-0-WR013-... BSPP 1/4"	●	●	○					25	19	58	11		110
		MD-006-0-WR017-... BSPP 3/8"	●	●	○					25	19	59	12		120
		MD-006-0-WR021-... BSPP 1/2"	●	●	○					25	22	62	15		140
	 BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	MD-006-0-VR013-... BSPP 1/4"	○		○				6	25	19	58	11		110
		MD-006-0-VR017-... BSPP 3/8"	●		○				6	25	19	59	12		120
	 metric male thread with 60° sealing cone to DIN 7631	MD-006-0-D0614-... M 14 x 1,5	●		○				6	25	19	57	10		110
	 metric male thread with 60° sealing cone to DIN 7631, extended thread for bulkhead mounting, max. thickness 10 mm	MD-006-0-DV008-... M 14 x 1,5	○						6	25	19	79	32		130
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	MD-006-0-L0612-... M 12 x 1,5	●		○		L	6	4	25	19	57	10		110
		MD-006-0-L0814-... M 14 x 1,5	●		○		L	8	6	25	19	57	10		110
		MD-006-0-L1016-... M 16 x 1,5	●		○		L	10	8	25	19	58	11		110
		MD-006-0-L1218-... M 18 x 1,5	○		○		L	12	10	25	19	58	11		110
		MD-006-0-S0816-... M 16 x 1,5	○		○		S	8	4	25	19	59	12		120
		MD-006-0-S1018-... M 18 x 1,5	●		○		S	10	6	25	19	59	12		120
		MD-006-0-S1220-... M 20 x 1,5	●		○		S	12	8	25	22	59	12		130
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S), extended thread, max. bulkhead thickness 10 mm	MD-006-0-LV008-... M 14 x 1,5	○				L	8	6	25	19	79	32		130
		MD-006-0-XX211-... M 16 x 1,5	○				L	10	8	25	19	79	32		140
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	MD-006-0-WR513-... BSPP 1/4"	●	●	○					25	19	57	13		120
		MD-006-0-WR517-... BSPP 3/8"	●	●	○					25	22	58	14		130

Availability: ● Short ● Medium ○ Long

Self sealing adaptors

	Part No.	Conne- ction A	steel zinc/ oil burn.	brass passivated	AISI 316 ti/ 1.4571		series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
 British standard pipe parallel (BSPP) male thread to DIN ISO 228	MD-006-2-WR013-...- MD-006-2-WR017-...- MD-006-2-WR021-...-	BSPP 1/4" BSPP 3/8" BSPP 1/2"	● ● ●	● ● ●	○ ○ ○					25 25 25	19 19 22	57,5 58,5 61,5	11 12 15	21,7 21,7 21,7	85 90 110
 British standard pipe parallel (BSPP) male thread to DIN ISO 228, sealing profile "E" to DIN 3852-11 for o-ring or sealing ring.	MD-006-2-WE017-...-	BSPP 3/8"	●							25	27	63	12	21,7	127
 BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	MD-006-2-VR013-...- MD-006-2-VR017-...-	BSPP 1/4" BSPP 3/8"	○ ●		○ ○				6 6	25 25	19 19	57,5 58,5	11 12	21,7 21,7	85 95
 metric male thread with 60° sealing cone to DIN 7631	MD-006-2-D0614-...-	M 14 x 1,5	●		○				6	25	19	56,5	10	21,7	85
 metric male thread with 60° sealing cone to DIN 7631, extended thread for bulkhead mounting, max. thickness 10 mm	MD-006-2-DV008-...-	M 14 x 1,5	○						6	25	19	78,5	32	21,7	100
 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	MD-006-2-L0612-...- MD-006-2-L0814-...- MD-006-2-L1016-...- MD-006-2-L1218-...- MD-006-2-S0816-...- MD-006-2-S1018-...- MD-006-2-S1220-...-	M 12 x 1,5 M 14 x 1,5 M 16 x 1,5 M 18 x 1,5 M 16 x 1,5 M 18 x 1,5 M 20 x 1,5	● ● ● ○ ○ ● ●		○ ○ ○ ○ ○ ○ ○		L L L L S S S	6 8 10 12 8 10 12	4 6 8 10 4 6 8	25 25 25 25 25 25 25	19 19 19 19 19 19 22	56,5 56,5 57,5 57,5 58,5 58,5 58,5	10 10 11 11 12 12 12	21,7 21,7 21,7 21,7 21,7 21,7 21,7	85 85 85 85 90 90 100
 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S), extended thread, max. bulkhead thickness 10 mm	MD-006-2-LV008-...- MD-006-2-XX211-...-	M 14 x 1,5 M 16 x 1,5	○ ○				L L	8 10	6 8	25 25	19 19	78,5 78,5	32 32	21,7 21,7	100 110
 British standard pipe parallel (BSPP) female thread to DIN ISO 228	MD-006-2-WR513-...- MD-006-2-WR517-...-	BSPP 1/4" BSPP 3/8"	● ●	● ●	○ ○					25 25	19 22	56,5 57,5	13 14	21,7 21,7	90 95

characteristic features:

- stainless steel version 1.4404/1.4571 or similar
in smooth variant with gripping grooves instead of knurling (-GL/-GX)

optional features:

OV = without valve
SI = with additional axial safety lock
(outer diameter 34 mm)

materials:**standard:**

19 = steel zinc plated, partially oil burnished
21 = brass, passivated
01 = stainless steel 1.4404/1.4571 or similar

special materials:

13 = steel, chem. nickel plated
24 = brass, chem. nickel plated
22 = brass, chrome plated

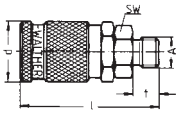
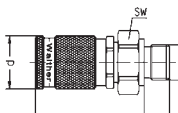
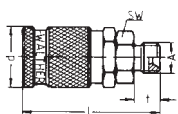
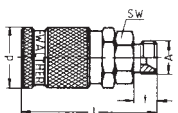
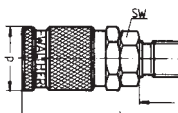
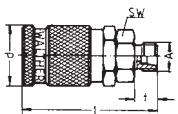
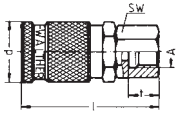
seal qualities:

1 = NBR
2 = FKM
4 = EPDM

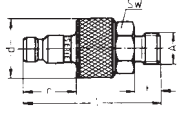
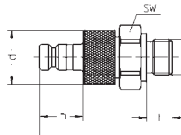
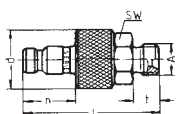
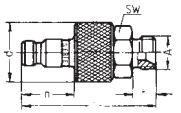
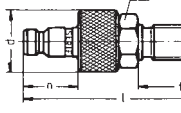
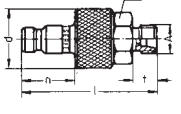
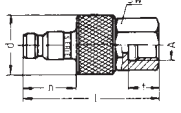
Please note the technical data on pages 2 - 7, 65 and the max. working pressures on page 49

Availability: ● Short ○ Medium ○ Long

Self sealing couplings

	Part No.	Conne- tion A	steel zinc/ oil burn.	brass passivated	AISI 316 ti/ 1.4571		series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
 British standard pipe parallel (BSPP) male thread to DIN ISO 228	MD-007-0-WR017-...	BSPP 3/8"	●	○	○					30	24	68	12		200
	MD-007-0-WR021-...	BSPP 1/2"	●	○	○					30	24	71	15		220
 British standard pipe parallel (BSPP) male thread to DIN ISO 228, sealing profile "E" to DIN 3852-11 for o-ring or sealing ring.	MD-007-0-WE017-...	BSPP 3/8"	○							30	27	71	12		220
 BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	MD-007-0-VR017-...	BSPP 3/8"	○		○				7	30	24	68	12		210
 metric male thread with 60° sealing cone to DIN 7631	MD-007-0-D0816-...	M 16 x 1,5	●		○				8	30	24	67	11		200
 metric male thread with 60° sealing cone to DIN 7631, extended thread for bulkhead mounting, max. thickness 10 mm	MD-007-0-DV010-...	M 16 x 1,5	○						8	30	24	89,5	33,5		220
 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	MD-007-0-L1016-...	M 16 x 1,5	●		○		L	10	8	30	24	67	11		190
	MD-007-0-L1218-...	M 18 x 1,5	○		○		L	12	10	30	24	67	11		190
	MD-007-0-S1018-...	M 18 x 1,5	●				S	10	6	30	24	68	11		200
	MD-007-0-S1220-...	M 20 x 1,5	●		○		S	12	8	30	24	68	12		200
 British standard pipe parallel (BSPP) female thread to DIN ISO 228	MD-007-0-WR517-...	BSPP 3/8"	●	○	○					30	24	68	14		210
	MD-007-0-WR521-...	BSPP 1/2"	●	○	○					30	27	71	17		230

Availability: ● Short ● Medium ○ Long

	Part No.	Conne- tion A	steel zinc/ oil burn.	brass passivated	AISI 316 Ti/ 1.4571		series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing adaptors	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	MD-007-2-WR017-...-. MD-007-2-WR021-...-.	BSPP 3/8" BSPP 1/2"	● ●	● ●	● ○				30 30	24 24	66,5 69,5	12 15	25 25	150 170
	 British standard pipe parallel (BSPP) male thread to DIN ISO 228, sealing profile "E" to DIN 3852-11 for o-ring or sealing ring.	MD-007-2-WE017-...-.	BSPP 3/8"	●						30	27	68	12	25	170
	 BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	MD-007-2-VR017-...-.	BSPP 3/8"	○		○			7	30	24	66,5	12	25	150
	 metric male thread with 60° sealing cone to DIN 7631	MD-007-2-D0816-...-.	M 16 x 1,5	●		○			8	30	24	66,5	11	25	140
	 metric male thread with 60° sealing cone to DIN 7631, extended thread for bulkhead mounting, max. thickness 10 mm	MD-007-2-DV010-...-.	M 16 x 1,5	○					8	30	24	88	33,5	25	170
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	MD-007-2-L1016-...-. MD-007-2-L1218-...-. MD-007-2-S1018-...-. MD-007-2-S1220-...-.	M 16 x 1,5 M 18 x 1,5 M 18 x 1,5 M 20 x 1,5	● ○ ● ●		○ ○ ○ ○	L L S S	10 12 10 12	8 10 6 8	30 30 30 30	24 24 24 24	65,5 65,5 66,5 66,5	11 11 12 12	25 25 25 25	150 150 160 160
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	MD-007-2-WR517-...-. MD-007-2-WR521-...-.	BSPP 3/8" BSPP 1/2"	● ●	● ●	● ○				30 30	24 27	66,5 69,5	14 15	25 25	160 180

characteristic features:

- stainless steel version 1.4404/1.4571 or similar
in smooth variant with gripping grooves instead of knurling (-GL/-GX)

optional features:

OV = without valve
SI = with additional axial safety lock
(outer diameter 44 mm)

materials:**standard:**

19 = steel zinc plated, partially oil burnished
21 = brass, passivated
01 = stainless steel 1.4404/1.4571 or similar

special materials:

13 = steel, chem. nickel plated
24 = brass, chem. nickel plated
22 = brass, chrome plated

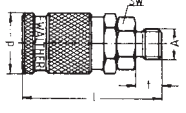
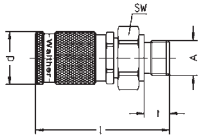
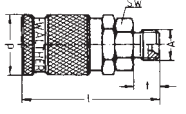
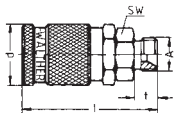
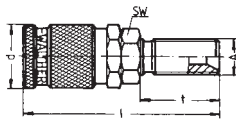
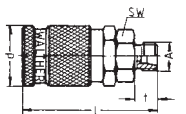
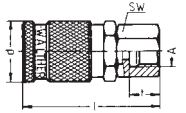
seal qualities:

1 = NBR
2 = FKM
4 = EPDM

Please note the technical data on pages 2 - 7, 65 and the max. working pressures on page 49

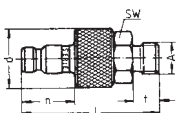
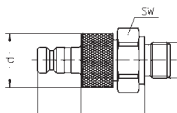
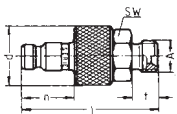
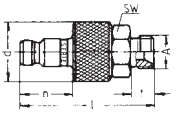
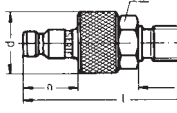
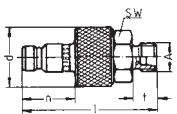
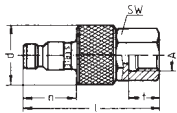
Availability: ● Short ○ Medium ○ Long

Self sealing couplings

	Part No.	Con- nection A	steel zinc/ oil burn.	brass passivated	AISI 316 Ti/ 1.4571		series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
 British standard pipe parallel (BSPP) male thread to DIN ISO 228	MD-012-0-WR021-...	BSPP 1/2"	●	●	○					40	32	82	15		390
	MD-012-0-WR026-...	BSPP 3/4"	●	●	○					40	32	84	17		420
	MD-012-0-WR033-...	BSPP 1"	●	○	○					40	36	88	20		480
 British standard pipe parallel (BSPP) male thread to DIN ISO 228, sealing profile "E" to DIN 3852-11 for o-ring or sealing ring.	MD-012-0-WE021-...	BSPP 1/2"	○							40	32	84	14		400
 BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	MD-012-0-VR021-...	BSPP 1/2"	●		○			12	40	32	82	15			390
	MD-012-0-VR026-...	BSPP 3/4"	○		○			12	40	32	84	17			410
 metric male thread with 60° sealing cone to DIN 7631	MD-012-0-D1018-...	M 18 x 1,5	●					10	40	32	78	11			380
	MD-012-0-D1222-...	M 22 x 1,5	●		○			12	40	32	79	12			390
 metric male thread with 60° sealing cone to DIN 7631, extended thread for bulkhead mounting, max. thickness 10 mm	MD-012-0-DV015-...	M 22 x 1,5	○					13	40	32	106	39			440
 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	MD-012-0-L1218-...	M 18 x 1,5	●		○	L	12	10	40	32	78	11			380
	MD-012-0-L1522-...	M 22 x 1,5	●		○	L	15	12	40	32	79	12			390
	MD-012-0-S1624-...	M 24 x 1,5	●		○	S	16	12	40	32	81	14			400
 British standard pipe parallel (BSPP) female thread to DIN ISO 228	MD-012-0-WR521-...	BSPP 1/2"	●	●	○					40	32	81	17		430
	MD-012-0-WR526-...	BSPP 3/4"	●	●	○					40	32	83	19		410

Availability: ● Short ● Medium ○ Long

Self sealing adaptors

	Part No.	Conne- tion A	steel zinc/ oil burn.	brass passivated	AISI 316 ti/ 1.4571		series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
	MD-012-2-WR021-... MD-012-2-WR026-... MD-012-2-WR033-...	BSPP 1/2" BSPP 3/4" BSPP 1"	● ● ●	● ● ○	○ ○ ○					40 40 40	32 32 36	82 84 88	15 17 20	31,5 31,5 31,5	300 330 390
	MD-012-2-WE021-...	BSPP 1/2"	●							40	32	84	14	31,5	310
	MD-012-2-VR021-... MD-012-2-VR026-...	BSPP 1/2" BSPP 3/4"	● ○		○ ○				12 12	40 40	32 32	82 84	15 17	31,5 31,5	300 320
	MD-012-2-D1018-... MD-012-2-D1222-...	M 18 x 1,5 M 22 x 1,5	● ●		○				10 12	40 40	32 32	78 79	11 12	31,5 31,5	290 300
	MD-012-2-DV015-...	M 22 x 1,5	○						13	40	32	106	39	31,5	350
	MD-012-2-L1218-... MD-012-2-L1522-... MD-012-2-S1624-...	M 18 x 1,5 M 22 x 1,5 M 24 x 1,5	● ● ●		○ ○ ○		L L S	12 15 16	10 12 12	40 40 40	32 32 32	78 79 81	11 12 14	31,5 31,5 31,5	290 300 310
	MD-012-2-WR521-... MD-012-2-WR526-...	BSPP 1/2" BSPP 3/4"	● ●	● ●	○ ●					40 40	32 32	81 83	17 19	31,5 31,5	340 320

characteristic features:

- stainless steel version 1.4404/1.4571 or similar
in smooth variant with gripping grooves instead of knurling (-GL/-GX)

optional features:

GG = with ring grips (cast aluminium)
OV = without valve
SI = with additional axial safety lock
(outer diameter 58 mm)

materials:**standard:**

19 = steel zinc plated, partially oil burnished
21 = brass, passivated
01 = stainless steel 1.4404/1.4571 or similar

special materials:

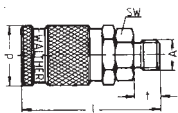
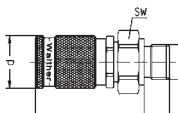
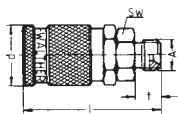
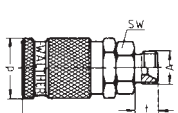
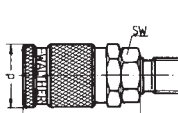
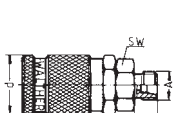
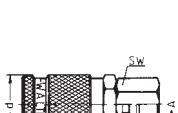
13 = steel, chem. nickel plated
24 = brass, chem. nickel plated
22 = brass, chrome plated

seal qualities:

1 = NBR
2 = FKM
4 = EPDM

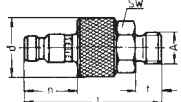
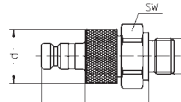
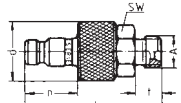
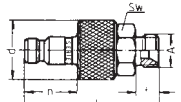
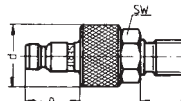
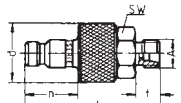
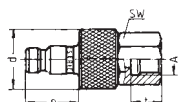
Please note the technical data on pages 2 - 7, 65 and the max. working pressures on page 49

Availability: ● Short ○ Medium ○ Long

	Part No.	Conne- tion A	steel zinc/ oil burn.	brass passivated	AISI 316 Ti/ 1.4571		series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing couplings	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	MD-019-0-WR026-... MD-019-0-WR033-... BSPP 3/4" BSPP 1"	● ●	● ●	○ ○					54 54	46 46	100 103	17 20		840 870
	 British standard pipe parallel (BSPP) male thread to DIN ISO 228, sealing profile "E" to DIN 3852-11 for o-ring or sealing ring.	MD-019-0-WE026-... BSPP 3/4"	●							54	46	102	16		850
	 BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	MD-019-0-VR026-... MD-019-0-VR033-... BSPP 3/4" BSPP 1"	● ●		○ ○				19 19	54 54	46 46	100 103	17 20		850 880
	 metric male thread with 60° sealing cone to DIN 7631	MD-019-0-D1526-... MD-019-0-D1930-... M 26 x 1,5 M 30 x 1,5	● ●		○ ○				15 19	54 54	46 46	95 97	12 14		830 830
	 metric male thread with 60° sealing cone to DIN 7631, extended thread for bulkhead mounting, max. thickness 10 mm	MD-019-0-DV022-... M 30 x 1,5	○						19	54	46	128	45		920
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	MD-019-0-L1826-... MD-019-0-L2230-... MD-019-0-S2030-... MD-019-0-S2536-... M 26 x 1,5 M 30 x 2 M 30 x 2 M 36 x 2	● ● ● ●		○ ○ ○ ○		L L S S	18 22 20 25	16 20 16 20	54 54 54 54	46 46 46 46	95 97 99 101	12 14 16 18		830 830 850 870
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	MD-019-0-WR526-... MD-019-0-WR533-... BSPP 3/4" BSPP 1"	● ●	● ●	○ ○					54 54	46 46	94 98	19 23		900 880

Availability: ● Short ● Medium ○ Long

Self sealing adaptors

	Part No.	Conne- tion A	steel zinc/ oil burn.	brass passivated	AISI 316 ti/ 1.4571		series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
 British standard pipe parallel (BSPP) male thread to DIN ISO 228	MD-019-2-WR026-...-. MD-019-2-WR033-...-.	BSPP 3/4" BSPP 1"	● ●	● ●	○ ○					54 54	46 46	99 102	17 20	35,5 35,5	710 740
 British standard pipe parallel (BSPP) male thread to DIN ISO 228, sealing profile "E" to DIN 3852-11 for o-ring or sealing ring.	MD-019-2-WE026-...-.	BSPP 3/4"	●							54	46	101	16	35,5	720
 BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	MD-019-2-VR026-...-. MD-019-2-VR033-...-.	BSPP 3/4" BSPP 1"	● ●		○ ○				19 19	54 54	46 46	99 102	17 20	35,5 35,5	710 740
 metric male thread with 60° sealing cone to DIN 7631	MD-019-2-D1526-...-. MD-019-2-D1930-...-.	M 26 x 1,5 M 30 x 1,5	● ●		○ ○				15 19	54 54	46 46	94 96	12 14	35,5 35,5	700 700
 metric male thread with 60° sealing cone to DIN 7631, extended thread for bulkhead mounting, max. thickness 10 mm	MD-019-2-DV022-...-.	M 30 x 1,5	○						19	54	46	127	45	35,5	790
 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	MD-019-2-L1826-...-. MD-019-2-L2230-...-. MD-019-2-S2030-...-. MD-019-2-S2536-...-.	M 26 x 1,5 M 30 x 2 M 30 x 2 M 36 x 2	● ● ● ●		○ ○		L L S S	18 22 20 25	16 20 16 20	54 54 54 54	46 46 46 46	94 96 98 100	12 14 16 18	35,5 35,5 35,5 35,5	700 700 720 740
 British standard pipe parallel (BSPP) female thread to DIN ISO 228	MD-019-2-WR526-...-. MD-019-2-WR533-...-.	BSPP 3/4" BSPP 1"	● ●	● ●	○ ○					54 54	46 46	93 97	19 23	35,5 35,5	770 750

characteristic features:

- stainless steel version 1.4404/1.4571 or similar
in smooth variant with gripping grooves instead
knurling (-GL/-GX)

optional features:

GG = with ring grips (cast aluminium)
OV = without valve
SI = with additional axial safety lock
(outer diameter 58 mm)

materials:**standard:**

19 = steel zinc plated, partially oil burnished
21 = brass, passivated
01 = stainless steel 1.4404/1.4571 or similar

special materials:

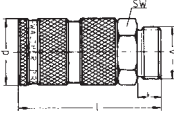
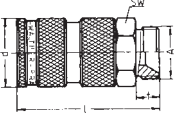
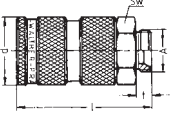
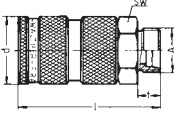
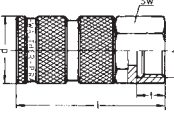
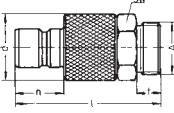
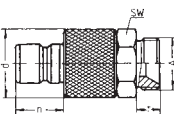
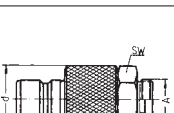
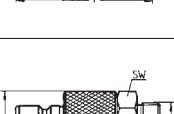
13 = steel, chem. nickel plated
24 = brass, chem. nickel plated
22 = brass, chrome plated

seal qualities:

1 = NBR
2 = FPM
4 = EPDM

Please note the
technical data on
pages 2 - 7, 65 and the
max. working pressures
on page 49

Availability: ● Short ○ Medium ○ Long

	Part No.	Connec- tion A	steel zinc/ oil burn.	brass passivated	AISI 316 Ti/ 1.4571		series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing couplings	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	MD-025-0-WR048-...-	BSPP 1 1/2"	●	○	○				62	55	132	22		1710
	 BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	MD-025-0-VR048-...-	BSPP 1 1/2"	●		○				62	55	132	22		1640
	 metric male thread with 60° sealing cone to DIN 7631	MD-025-0-D2538-...-	M 38 x 1,5	●		○			25	62	55	124	14		1650
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	MD-025-0-S3042-...-	M 42 x 2	●		○	S	30	25	62	55	130	20		1610
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	MD-025-0-WR548-...-	BSPP 1 1/2"	●	○	○				62	55	138,5	25		1740
Self sealing adaptors	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	MD-025-2-WR048-...-	BSPP 1 1/2"	●	○	○				62	55	133	22	45	1370
	 BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	MD-025-2-VR048-...-	BSPP 1 1/2"	●		○				62	55	133	22	45	1300
	 metric male thread with 60° sealing cone to DIN 7631	MD-025-2-D2538-...-	M 38 x 1,5	●		○			25	62	55	125	14	45	1310
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	MD-025-2-S3042-...-	M 42 x 2	●		○	S	30	25	62	55	131	20	45	1280
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	MD-025-2-WR548-...-	BSPP 1 1/2"	●	○	○				62	55	139,5	25	45	1400

optional features:

GG = with ring grips (cast aluminium)
 OV = without valve
 SI = with additional axial safety lock
 (outer diameter 89 mm)

materials:**standard:**

19 = steel zinc plated, partially oil burnished
 21 = brass, passivated
 01 = stainless steel 1.4404/1.4571 or similar

special materials:

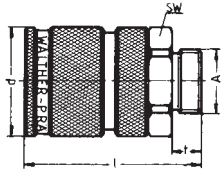
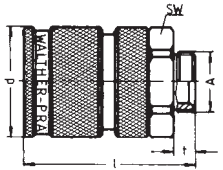
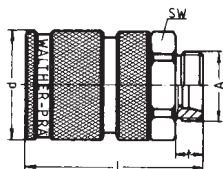
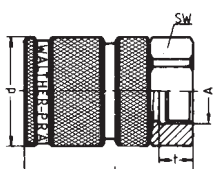
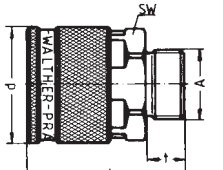
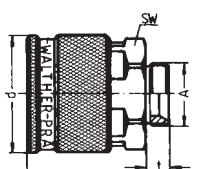
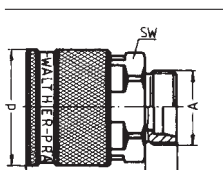
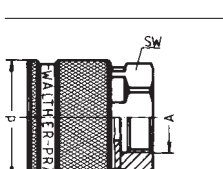
13 = steel, chem. nickel plated
 24 = brass, chem. nickel plated
 22 = brass, chrome plated
 31 = aluminium anodized silver

seal qualities:

1 = NBR
 2 = FKM
 4 = EPDM

Please note the technical data on pages 2 - 7, 65 and the max. working pressures on page 49

Availability: ● Short ● Medium ○ Long

	Part No.	Conne- tion A	steel zinc/ oil burn.	brass passivated	AISI 316 Ti/ 1.4571		series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing couplings	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	MD-032-0-WR048-... MD-032-0-WR060-... BSPP 1 1/2" BSPP 2"	● ○	● ○	○ ○					82 82	75 75	139 143	22 26		3080 3290
	 metric male thread with 60° sealing cone to DIN 7631	MD-032-0-D3245-... M 45 x 1,5	○						32	82	75	128	16		2880
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	MD-032-0-S3852-... M 52 x 2	●				S	38	32	82	75	134	22		2940
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	MD-032-0-WR548-... MD-032-0-WR560-... BSPP 1 1/2" BSPP 2"	● ●	● ●	○ ○					82 82	75 75	126 130	25 29		3050 2920
Thru type couplings	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	MD-032-4-WR048-... MD-032-4-WR060-... BSPP 1 1/2" BSPP 2"	○ ○	○ ○	○ ○					82 82	70 70	110 113	23 26		2190 2390
	 metric male thread with 60° sealing cone to DIN 7631	MD-032-4-D3245-... M 45 x 1,5	○	○	○				32	82	70	103	16		2140
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	MD-032-4-S3852-... M 52 x 2	○	○	○		S	38	32	82	70	109	22		2200
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	MD-032-4-WR548-... MD-032-4-WR560-... BSPP 1 1/2" BSPP 2"	○ ○	○ ○	○ ○					82 82	70 70	87 87	25 27		1890 1700

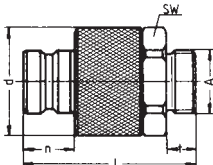
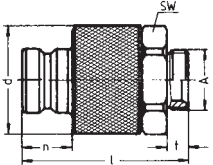
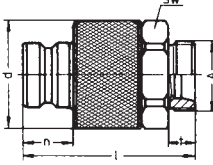
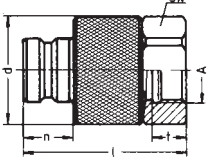
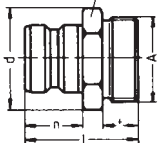
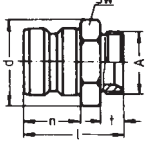
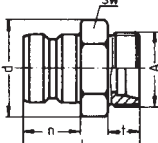
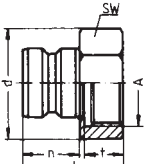
optional features:
OV = without valve

materials:
standard:
19 = steel zinc plated, partially oil burnished
21 = brass, passivated
01 = stainless steel 1.4404/1.4571 or similar
12 = steel, oil burnished
special materials:
13 = steel, chem. nickel plated
24 = brass, chem. nickel plated
22 = brass, chrome plated
31 = aluminium anodized silver

seal qualities:
1 = NBR
2 = FKM
4 = EPDM

Please note the technical data on pages 2 - 7, 65 and the max. working pressures on page 49

Availability: ● Short ○ Medium ○ Long

	Part No.	Connection A	steel zinc/ oil burn.	brass passivated	AISI 316 ti/ 1.4571	steel oil burnished	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]	
Self sealing adaptors		British standard pipe parallel (BSPP) male thread to DIN ISO 228	MD-032-2-WR048-... MD-032-2-WR060-...	BSPP 1 1/2" BSPP 2"	● ○	● ○	○ ○			82 82	75 75	137,5 141,5	22 26	41 41	2600 2810	
		metric male thread with 60° sealing cone to DIN 7631	MD-032-2-D3245-...	M 45 x 1,5	○				32	82	75	126,5	16	41	2400	
		metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	MD-032-2-S3852-...	M 52 x 2	●			S	38	32	82	75	132,5	22	41	2460
		British standard pipe parallel (BSPP) female thread to DIN ISO 228	MD-032-2-WR548-... MD-032-2-WR560-...	BSPP 1 1/2" BSPP 2"	● ●	● ●	○ ○			82 82	75 75	124,5 128,5	25 29	41 41	2570 2440	
Thru type adaptors		British standard pipe parallel (BSPP) male thread to DIN ISO 228	MD-032-1-WR048-... MD-032-1-WR060-...	BSPP 1 1/2" BSPP 2"	○ ○	○ ○	○ ○			60 72,5	55 65	82 88	22 26	41 41	620 670	
		metric male thread with 60° sealing cone to DIN 7631	MD-032-1-D3245-...	M 45 x 1,5	○	○	○			32	61,3	55	70,5	16	41	510
		metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	MD-032-1-S3852-...	M 52 x 2	○	○	○	S	38	32	66,9	60	82	22	41	630
		British standard pipe parallel (BSPP) female thread to DIN ISO 228	MD-032-1-WR548-... MD-032-1-WR560-...	BSPP 1 1/2" BSPP 2"	○ ○	○ ○	○ ○			66 78	60 70	75 77	25 27	41 41	700 820	

optional features:

GG = with ring grips (cast aluminium)
 OV = without valve
 SI = with additional axial safety lock
 (outer diameter 116 mm)

materials:**standard:**

19 = steel zinc plated, partially oil burnished
 21 = brass, passivated
 01 = stainless steel 1.4404/1.4571 or similar

special materials:

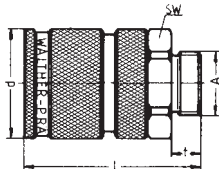
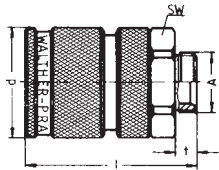
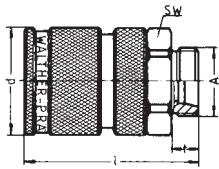
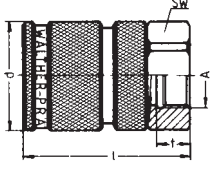
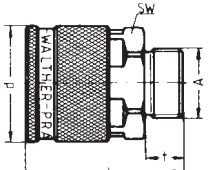
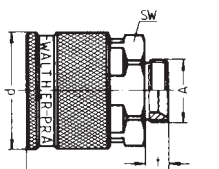
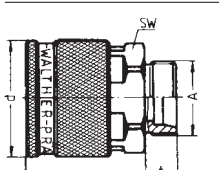
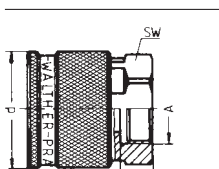
13 = steel, chem. nickel plated
 24 = brass, chem. nickel plated
 22 = brass, chrome plated
 31 = aluminium anodized silver

seal qualities:

1 = NBR
 2 = FKM
 4 = EPDM

Please note the technical data on pages 2 - 7, 65 and the max. working pressures on page 49

Availability: ● Short ● Medium ○ Long

	Part No.	Conne- tion A	steel zinc/ oil burn.	brass passivated	AISI 316 Ti/ 1.4571		series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing couplings	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	MD-050-0-WR060-... BSPP 2" MD-050-0-WR075-... BSPP 2 1/2"	●	○	○					112 112	100 100	162 164	26 30		5530 5540
	 metric male thread with 60° sealing cone to DIN 7631	MD-050-0-D4965-... M 65 x 2							49	112	100	159	18		5460
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	MD-050-0-L4252-... M 52 x 2	○				L	42	36	112	100	158	16		5410
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	MD-050-0-WR560-... BSPP 2" MD-050-0-WR575-... BSPP 2 1/2"	● ○	○ ○	○ ○					112 112	100 100	158 167	29 33		6140 5930
Thru type couplings	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	MD-050-4-WR060-... BSPP 2" MD-050-4-WR075-... BSPP 2 1/2"	○ ○	○ ○	○ ○					112 112	100 100	132,5 137,5	26 30		4090 4340
	 metric male thread with 60° sealing cone to DIN 7631	MD-050-4-D4965-... M 65 x 2							49	112	100	125,5	18		3980
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	MD-050-4-L4252-... M 52 x 2					L	42	36	112	100	122	16		3920
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	MD-050-4-WR560-... BSPP 2" MD-050-4-WR575-... BSPP 2 1/2"	○ ○	○ ○	○ ○					112 112	100 100	112 112	29 33		4600 4100

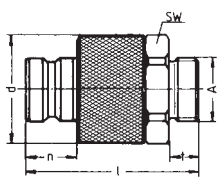
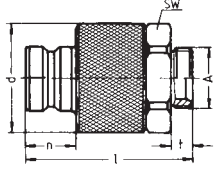
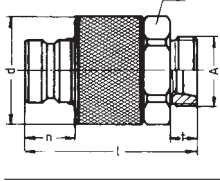
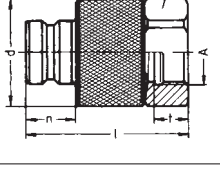
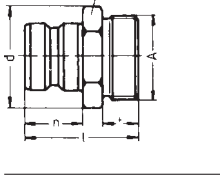
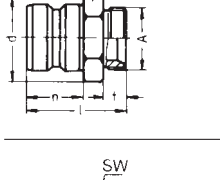
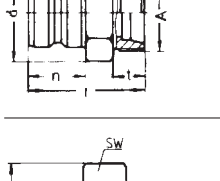
optional features:
OV = without valve

materials:
standard:
19 = steel zinc plated, partially oil burnished
21 = brass, passivated
01 = stainless steel 1.4404/1.4571 or similar
12 = steel, oil burnished
special materials:
13 = steel, chem. nickel plated
24 = brass, chem. nickel plated
22 = brass, chrome plated
31 = aluminium anodized silver

seal qualities:
1 = NBR
2 = FKM
4 = EPDM

Please note the technical data on pages 2 - 7, 65 and the max. working pressures on page 49

Availability: ● Short ○ Medium ○ Long

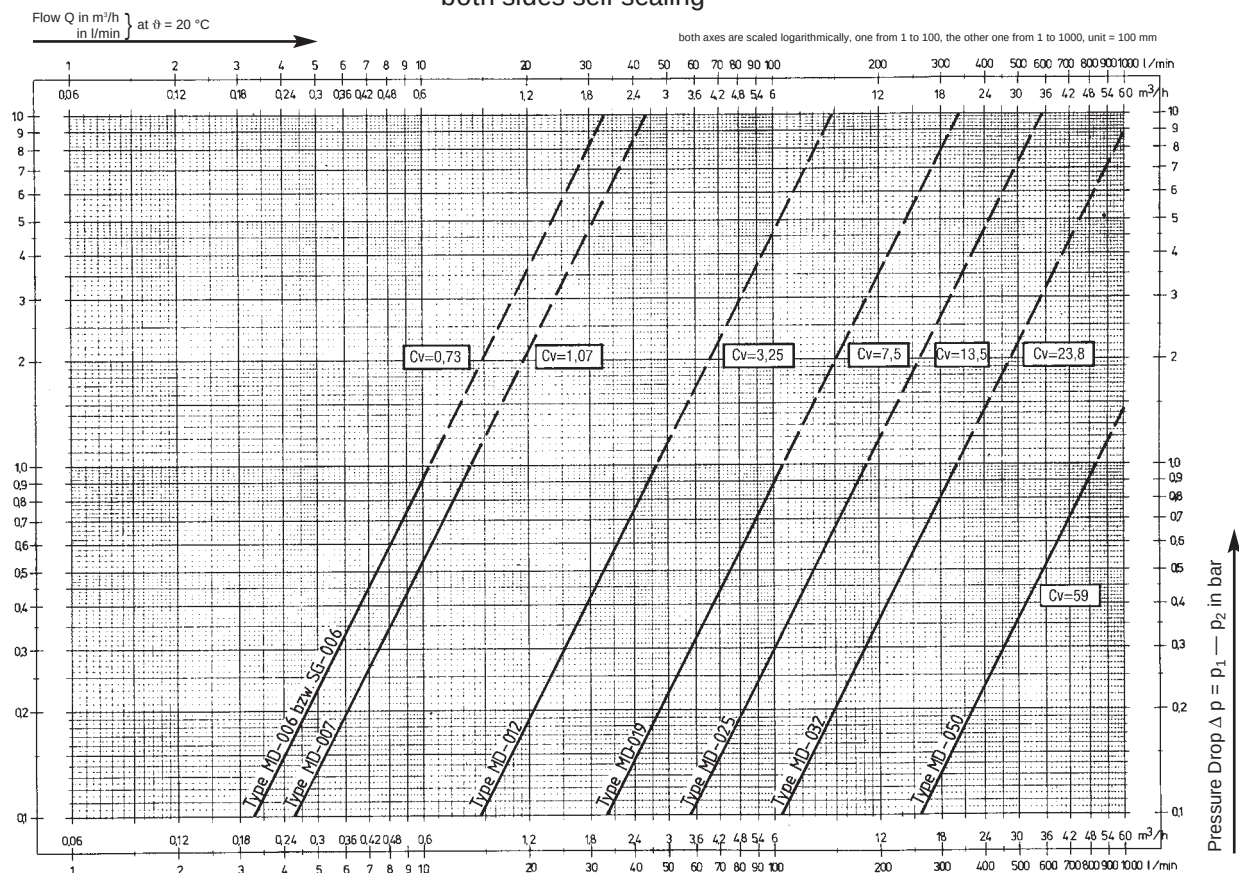
	Part No.	Connec- tion A	steel zinc/ oil burn.	brass passivated	AISI 316 ti/ 1.4571	steel oil burnished	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing adaptors	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	MD-050-2-WR060-... MD-050-2-WR075-...	BSPP 2" BSPP 2 1/2"	● ○	○ ○	○ ○				112 112	100 100	162 164	26 30	50 50	5010 5020
	 metric male thread with 60° sealing cone to DIN 7631	MD-050-2-D4965-...	M 65 x 2						49	112	100	159	18	50	4940
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	MD-050-2-L4252-...	M 52 x 2	○			L	42	36	112	100	158	16	50	4890
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	MD-050-2-WR560-... MD-050-2-WR575-...	BSPP 2" BSPP 2 1/2"	● ○	○ ○	○ ○				112 112	100 100	158 167	29 33	50 50	5620 5410
Thru type adaptors	 British standard pipe parallel (BSPP) male thread to DIN ISO 228	MD-050-1-WR060-... MD-050-1-WR075-...	BSPP 2" BSPP 2 1/2"		○ ○	○ ○	○ ○			92 92	85 85	92 96	26 30	50 50	1660 1720
	 metric male thread with 60° sealing cone to DIN 7631	MD-050-1-D4965-...	M 65 x 2						49	92	85	93	18	50	1550
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	MD-050-1-L4252-...	M 52 x 2				L	42	36	92	85	91	16	50	1510
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	MD-050-1-WR560-... MD-050-1-WR575-...	BSPP 2" BSPP 2 1/2"		○ ○	○ ○	○ ○			92 92	85 85	86 89	29 33	50 50	1930 1580

Measurement of flow coefficients C_v
according to DIN EN 60534

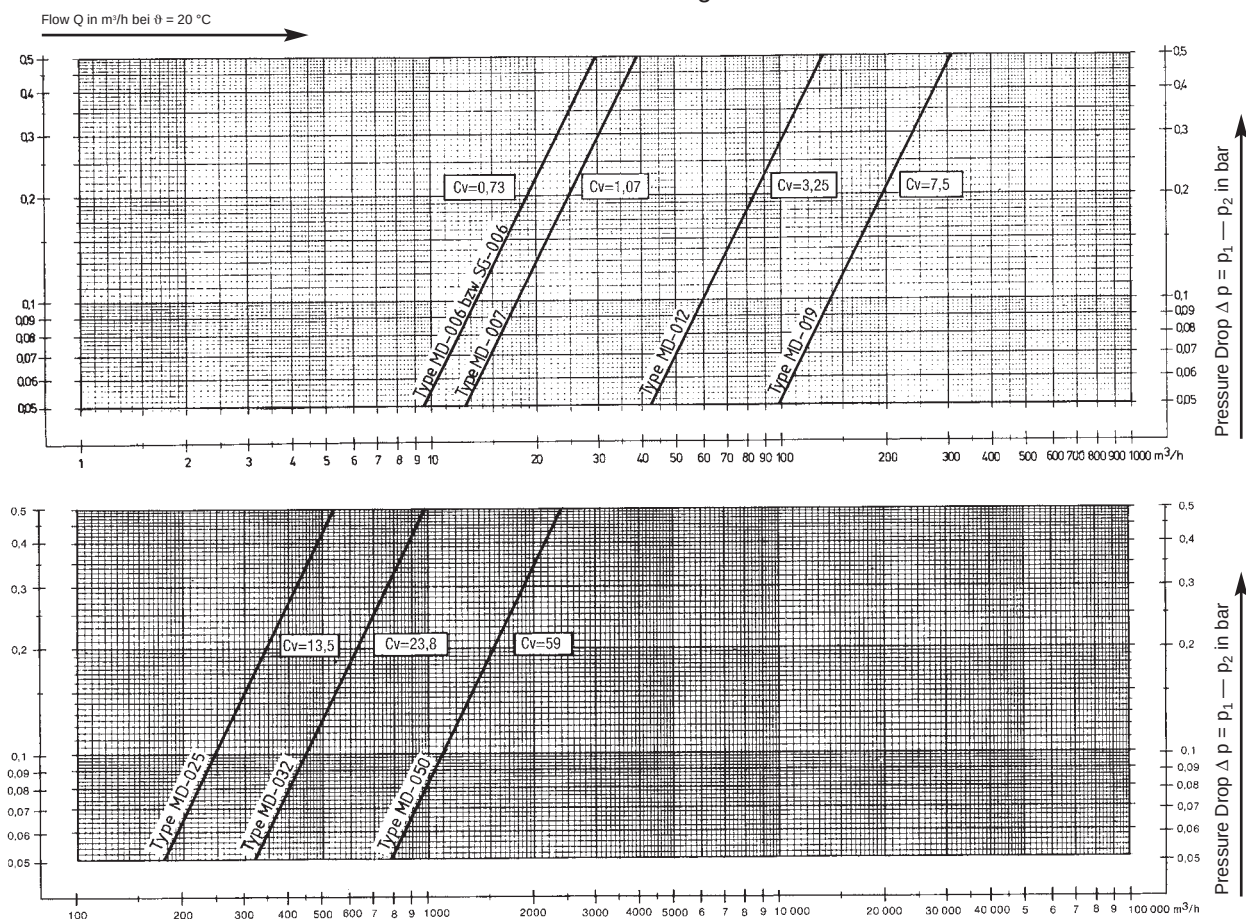
Flow speeds of 8 m/sec
should not be exceeded

1 bar = 14,5 PSI

Medium Water
both sides self sealing



Medium Air working pressure 6 bar gauge pressure
both sides self sealing



66 NEW – medium pressure series CP

The clean break couplings of the CP series are plug couplings for the medium pressure sector up to 250 bar. This series is suitable for all applications requiring smallest leakage with easiest handling and high flow.

Features:

- Smallest leakage during disconnection
- Minimum air introduction during connection
- Absolutely squirt-free

Efficient:

- High flow rates and low pressure loss
- Connection against residual pressure possible
- Non-lubricating media connectable without high coupling force

Robust and durable:

- Stainless steel design

Temperature area:

- 20 °C up to 130 °C in FKM seal quality

Options:

- Interlocking device against unintended disconnection ATEX design



Please find further information to this topic on our web site.

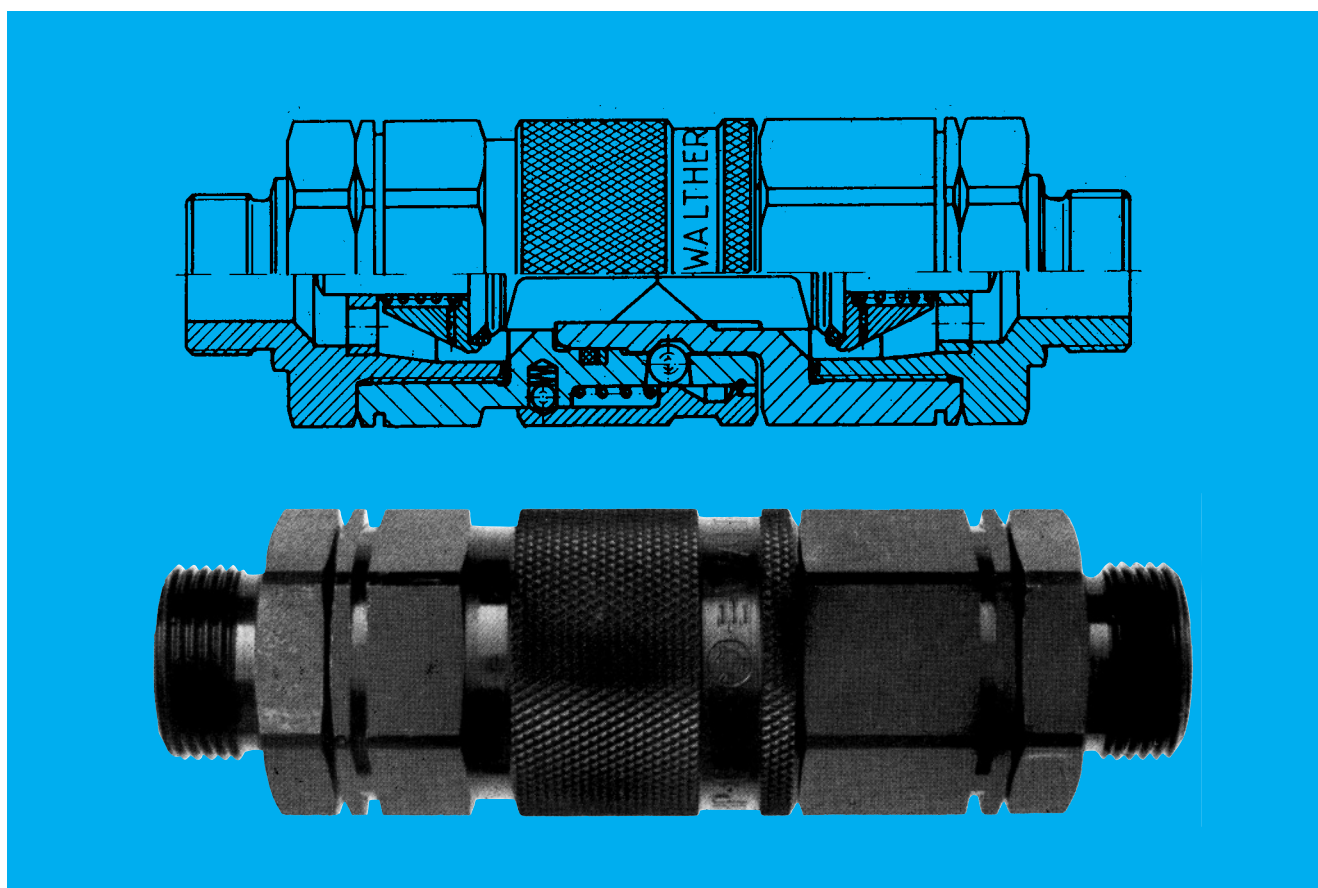
ATTENTION!

When determining the working pressure of standardised end connections, the maximum permitted working pressure of the end connections has to be considered.

You have questions regarding the maximum permitted working pressure? Our customer service is always available to answer your questions. Phone: +49 (0) 2129 567-402.

Nom. bore	Type	Max. static working pressure [bar/psi]			Min. burst pressure for steel [bar/psi]	C _v value		Cross section [mm ²]	Page
		steel	1.4404/1.4571 ss	1.4404/1.4571 ss with 1.4418 QT900		both sides self sealing	one sides self sealing		
2.5	02-003	500/7250	–	–	2350/34075	0.10	–	5	68
4	HP-004	2000/29000	500/7250	1000/14500	4000/58000	0.24	0.4	13	69
6	HP-006	1000/14500	320/4640	650/9425	2300/33350	0.65	1.0	30	70
10	HP-010	600/8700	300/4350	470/6815	2000/29000	1.9	2.5	80	71
16	HP-016	500/7250	250/3625	450/6525	1800/26100	5.5	8.1	200	72
20	HP-020	400/5800	180/2610	350/5075	1600/22700	8.5	13.0	315	73
32	HP-032	300/4350	180/2610	250/3625	1300/18850	23.8	29.4	800	74
50	HP-050	200/2900	–	–	1000/14500	65	–	2000	75
Performance diagrams									76
Fitted hose lines, nom. bore 2.5; p. n. 500									68

When determining the working pressure of the coupling the max. permissible working pressure of the end connection is to be taken into account if standardized threads are used.



characteristic features:

- can only be used self sealing both sides

materials:**standard:**

12 = steel, oil burnished

special materials:

13 = steel, chem. nickel plated

seal qualities:

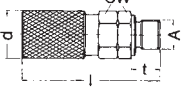
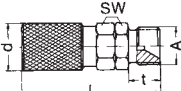
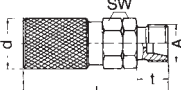
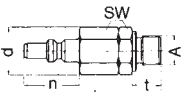
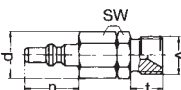
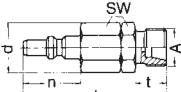
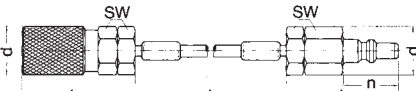
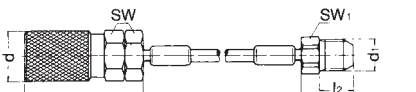
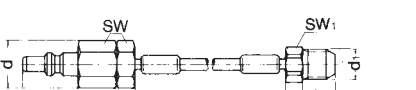
1 = NBR

2 = FKM

4 = EPDM

Please note the technical data on pages 2 - 7, 76 and the max. working pressures on page 67

Availability: ● Short ○ Medium ○ Long

	Part No.	Connection A	steel oil burnished	d	d _i	SW	SW _i	l	l _s	l ₁	l ₂	t	n	weight [g]
Self sealing couplings	 British standard pipe parallel (BSPP) male thread to DIN ISO 228, screwed plug to DIN 3852-2 form B	02-003-0-WB010-...	BSPP 1/8"	●	16,2		14	46				9,5		42
	 BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	02-003-0-VR013-...	BSPP 1/4"	●	16,2		14	47,5				11,5		45
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	02-003-0-L0612-...	M 12 x 1,5	●	16,2		14	46,5				10		42
Self sealing adaptors	 British standard pipe parallel (BSPP) male thread to DIN ISO 228, screwed plug to DIN 3852-2 form B	02-003-2-WB010-...	BSPP 1/8"	●	16,2		14	45,5				9,5	18,5	30
	 BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	02-003-2-VR013-...	BSPP 1/4"	●	16,2		14	47				11	18,5	33
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	02-003-2-L0612-...	M 12 x 1,5	●	16,2		14	46				10	18,5	30
Hose lines fitted with:	 Self sealing coupling Self sealing adaptor	95021-0-LG020-...	self sealing coupling	○	16,2		14	200		38	37,5		18,5	75
		95021-0-LG040-...	self sealing coupling	○	16,2		14	400		38	37,5		18,5	80
		95021-0-LG063-...	self sealing coupling	○	16,2		14	630		38	37,5		18,5	80
		95021-0-LG080-...	self sealing coupling + sealing adaptor	○	16,2		14	800		38	37,5		18,5	85
		95021-0-LG100-...	self sealing coupling + sealing adaptor	○	16,2		14	1000		38	37,5		18,5	90
				○	16,2		14							
	 Self sealing coupling Self sealing adaptor	95020-0-LG020-...	self sealing coupling	○	16,2	M 10 x 1	14	11	200	19	38	11		60
		95020-0-LG040-...	self sealing coupling	○	16,2	M 10 x 1	14	11	400	19	38	11		65
		95020-0-LG063-...	self sealing coupling	○	16,2	M 10 x 1	14	11	630	19	38	11		65
		95020-0-LG080-...	self sealing coupling + thread connection	○	16,2	M 10 x 1	14	11	800	19	38	11		70
		95020-0-LG100-...	self sealing coupling + thread connection	○	16,2	M 10 x 1	14	11	1000	19	38	11		75
				○	16,2	M 10 x 1	14	11						
	 Self sealing coupling Self sealing adaptor	95020-2-LG020-...	self sealing adaptor	○	16,2	M 10 x 1	14	11	200	19	37,5	11	18,5	44
		95020-2-LG040-...	self sealing adaptor	○	16,2	M 10 x 1	14	11	400	19	37,5	11	18,5	48
		95020-2-LG063-...	self sealing adaptor	○	16,2	M 10 x 1	14	11	630	19	37,5	11	18,5	50
		95020-2-LG080-...	self sealing adaptor + thread connection	○	16,2	M 10 x 1	14	11	800	19	37,5	11	18,5	55
		95020-2-LG100-...	self sealing adaptor + thread connection	○	16,2	M 10 x 1	14	11	1000	19	37,5	11	18,5	60
				○	16,2	M 10 x 1	14	11						

characteristic features:

- with vibration lock
- with ring valve

test pressure 3000 bar / 43500 PSI
when using a suitable steel end connection

materials:**standard:**

12 = steel, oil burnished

special materials:

13 = steel, chem. nickel plated

W1 = AISI 316 ti/1.4571, adaptor front part 1.4418 QT900

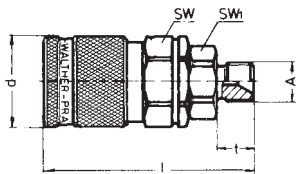
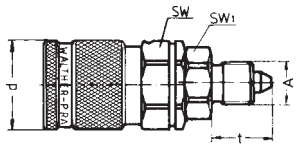
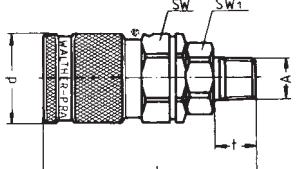
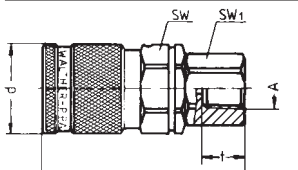
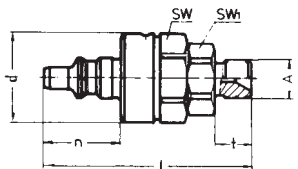
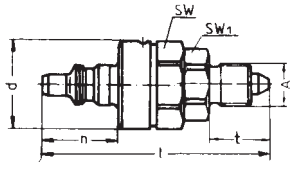
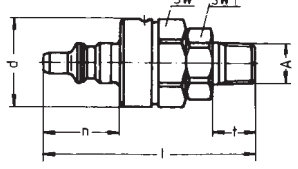
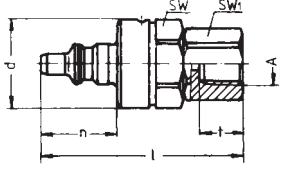
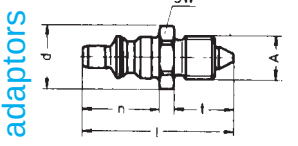
01 = stainless steel 1.4404/1.4571 or similar

seal qualities:

- 1 = NBR
- 2 = FKM
- 4 = EPDM

Please note the technical data on pages 2 - 7, 76 and the max. working pressures on page 67

Availability: ● Short ● Medium ○ Long

	Part No.	Conne- tion A	steel oil burnished	AISI 316 ti/ 1.4571	1.4404/ 1.4418 QT900		d	SW	SW ₁	l	t	n	weight [g]
Self sealing couplings	 end connection male thread G 1/4 A with 60° sealing cone	HP-004-0-XX001-...	BSPP 1/4" male 60° sealing cone	●	○		30	27	22	69,5	12		220
	 end connection UNF 9/16 male thread with 58° sealing cone	HP-004-0-XX002-...	UNF 9/16" male 58° sealing cone	●	○		30	27	22	75,5	18		220
	 conical pipe thread NPT, male	HP-004-0-NP013-...	NPT 1/4"	●	○		30	27	22	71,5	14		220
	 conical pipe thread NPT, female	HP-004-0-NP513-...	NPT 1/4"	●	○		30	27	22	68,5	14		230
Self sealing adaptors	 end connection male thread G 1/4 A with 60° sealing cone	HP-004-2-XX001-...	BSPP 1/4" male 60° sealing cone	●	○	○	30	27	22	69,5	12	25,5	160
	 end connection UNF 9/16 male thread with 58° sealing cone	HP-004-2-XX002-...	UNF 9/16" male 58° sealing cone	●	○	○	30	27	22	75,5	18	25,5	160
	 conical pipe thread NPT, male	HP-004-2-NP013-...	NPT 1/4"	●	○	○	30	27	22	71,5	14	25,5	160
	 conical pipe thread NPT, female	HP-004-2-NP513-...	NPT 1/4"	●	○	○	30	27	22	68,5	14	25,5	170
Thru type adaptors	 end connection UNF 9/16 male thread with 58° sealing cone	HP-004-1-XX002-...	UNF 9/16" male 58° sealing cone	●	○	○	18,9	17		51	18	25,5	45

characteristic features:

- with vibration lock

optional features:

OV = without valve

SI = with additional axial safety lock
(outer diameter 38 mm)

RV = with ring valve

(cannot be coupled with standard valve)
Recommended for high pulsating pressures
and rough working conditions.**materials:****standard:**

12 = steel, oil burnished

special materials:

13 = steel, chem. nickel plated

W1 = AISI 316 ti/1.4571, adaptor front part 1.4418 QT900

01 = stainless steel 1.4404/1.4571 or similar

seal qualities:

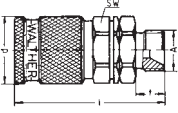
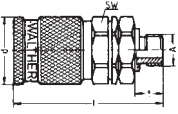
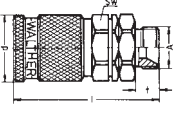
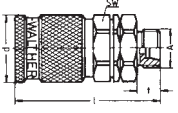
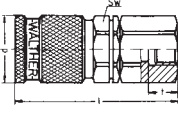
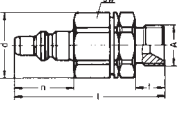
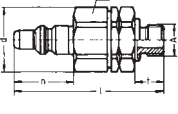
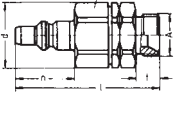
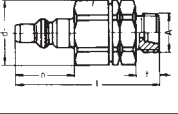
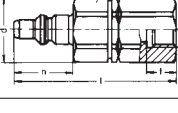
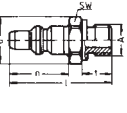
1 = NBR

2 = FKM

4 = EPDM

Please note the
technical data on
pages 2 - 7, 76 and the
max. working pressures
on page 67

Availability: ● Short ○ Medium ○ Long

		Part No.	Connec- tion A	steel oil burnished	AISI 316 ti/ 1.4571	1.4404/ 1.4418 QT900		series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing couplings		HP-006-0-VR017-...-	BSPP 3/8"	●	○					6	34	30	77,5	12		250
		HP-006-0-NP017-...-	NPT 3/8"	●	○					6	34	30	80,5	15		260
		HP-006-0-WB017-...-	BSPP 3/8"	●	○					6	34	30	80	14,5		320
		HP-006-0-D0614-...-	M 14 x 1,5	●	○					6	34	30	75,5	10		300
		HP-006-0-D0816-...-	M 16 x 1,5	○	○					8	34	30	76,5	11		300
		HP-006-0-S0816-...-	M 16 x 1,5	●	○			S	8	4	34	30	77,5	12		320
		HP-006-0-S1018-...-	M 18 x 1,5	●	○			S	10	6	34	30	77,5	12		310
		HP-006-0-S1220-...-	M 20 x 1,5	●	○			S	12	8	34	30	77,5	12		330
		HP-006-0-WR517-...-	BSPP 3/8"	●	○					6	34	30	75	15		350
		HP-006-0-NP517-...-	NPT 3/8"	○	○					6	34	30	81,5	15		320
Self sealing adaptors		HP-006-2-VR017-...-	BSPP 3/8"	●	○	○				6	34	30	77,5	12	30,5	210
		HP-006-2-NP017-...-	NPT 3/8"	●	○	○				6	34	30	80,5	15	30,5	220
		HP-006-2-WB017-...-	BSPP 3/8"	●	○	○				6	34	30	80	14,5	30,5	210
		HP-006-2-D0614-...-	M 14 x 1,5	●	○	○				6	34	30	75,5	10	30,5	190
		HP-006-2-D0816-...-	M 16 x 1,5	○	○	○				8	34	30	76,5	11	30,5	190
		HP-006-2-S0816-...-	M 16 x 1,5	●	○	○		S	8	4	34	30	77,5	12	30,5	210
		HP-006-2-S1018-...-	M 18 x 1,5	●	○	○		S	10	6	34	30	77,5	12	30,5	200
		HP-006-2-S1220-...-	M 20 x 1,5	●	○	○		S	12	8	34	30	77,5	12	30,5	220
		HP-006-2-WR517-...-	BSPP 3/8"	●	○	○				6	34	30	75	15	30,5	270
		HP-006-2-NP517-...-	NPT 3/8"	○	○	○				6	34	30	81,5	15	30,5	240
Thru type adaptors		HP-006-1-WB017-..	BSPP 3/8"	●	○	○				6	25	22	54	14,5	30,5	70

characteristic features:

- with vibration lock

optional features:

OV = without valve

SI = with additional axial safety lock
(outer diameter 50 mm)RV = with ring valve
(cannot be coupled with standard valve)
Recommended for high pulsating pressures
and rough working conditions.**special version:**

2 non-interchangeable versions

materials:**standard:**

12 = steel, oil burnished

special materials:

13 = steel, chem. nickel plated

W1 = AISI 316 ti/1.4571, adaptor front part 1.4418 QT900

01 = stainless steel 1.4404/1.4571 or similar

seal qualities:

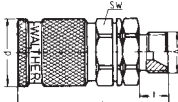
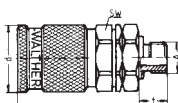
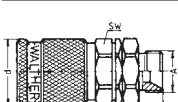
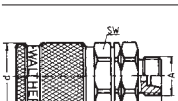
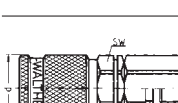
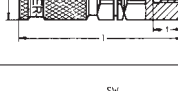
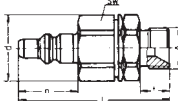
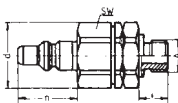
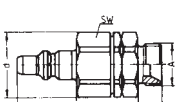
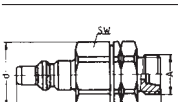
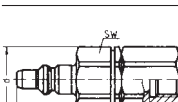
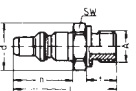
1 = NBR

2 = FKM

4 = EPDM

Please note the
technical data on
pages 2 - 7, 76 and the
max. working pressures
on page 67

Availability: ● Short ● Medium ○ Long

	Part No.	Conne- tion A	steel oil burnished	AISI 316 ti/ 1.4571	1.4404/ 1.4418 QT900	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing couplings	 BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	HP-010-0-VR021-...-.	BSPP 1/2"	●	○			10	46	41	95,5	15		680
	 British standard pipe parallel (BSPP) male thread to DIN ISO 228, screwed plug to DIN 3852-2 form B	HP-010-0-WB021-...-.	BSPP 1/2"	●	○			10	46	41	97,5	17		690
	 metric male thread with 60° sealing cone to DIN 7631	HP-010-0-D1018-...-. HP-010-0-D1222-...-.	M 18 x 1,5 M 22 x 1,5	○ ○	○ ○			10 12	46 46	41 41	91,5 92,5	11 12		670 670
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	HP-010-0-S1220-...-. HP-010-0-S1422-...-. HP-010-0-S1624-...-.	M 20 x 1,5 M 22 x 1,5 M 24 x 1,5	● ○ ●	○ ○ ○	S S S	12 14 16	8 10 12	46 46 46	41 41 41	92,5 94,5 94,5	12 14 14		670 670 680
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	HP-010-0-WR521-...-.	BSPP 1/2"	●	○			10	46	41	96,5	17		840
	 conical pipe thread NPT female	HP-010-0-NP521-...-.	NPT 1/2"	○	○			10	46	41	100,5	18		850
Self sealing adaptors	 BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	HP-010-2-VR021-...-.	BSPP 1/2"	●	○			10	46	41	95,5	15	36	460
	 British standard pipe parallel (BSPP) male thread to DIN ISO 228, screwed plug to DIN 3852-2 form B	HP-010-2-WB021-...-.	BSPP 1/2"	●	○			10	46	41	97,5	17	36	470
	 metric male thread with 60° sealing cone to DIN 7631	HP-010-2-D1018-...-. HP-010-2-D1222-...-.	M 18 x 1,5 M 22 x 1,5	○ ○	○ ○			10 12	46 46	41 41	91,5 92,5	11 12	36 36	450 450
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	HP-010-2-S1220-...-. HP-010-2-S1422-...-. HP-010-2-S1624-...-.	M 20 x 1,5 M 22 x 1,5 M 24 x 1,5	● ○ ●	○ ○ ○	S S S	12 14 16	8 10 12	46 46 46	41 41 41	92,5 94,5 94,5	12 14 14	36 36 36	460 460 470
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	HP-010-2-WR521-...-.	BSPP 1/2"	●	○			10	46	41	96,5	17	36	620
	 conical pipe thread NPT female	HP-010-2-NP521-...-.	NPT 1/2"	○	○			10	46	41	100,5	18	36	630
Thru type adaptors	 British standard pipe parallel (BSPP) male thread to DIN ISO 228, screwed plug to DIN 3852-2 form B	HP-010-1-WB021-...	BSPP 1/2"	●	○			10	30	27	63	17	36	130

characteristic features:

- with vibration lock

optional features:

OV = without valve

SI = with additional axial safety lock
(outer diameter 62 mm)

RV = with ring valve

(cannot be coupled with standard valve)
Recommended for high pulsating pressures
and rough working conditions.**materials:****standard:**

12 = steel, oil burnished

special materials:

13 = steel, chem. nickel plated

W1 = AISI 316 ti/1.4571, adaptor front part 1.4418 QT900

01 = stainless steel 1.4404/1.4571 or similar

seal qualities:

1 = NBR

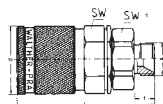
2 = FKM

4 = EPDM

Please note the
technical data on
pages 2 - 7, 76 and the
max. working pressures
on page 67

Availability: ● Short ○ Medium ○ Long

Self sealing couplings

BSPP male thread to
DIN ISO 228/BS 5200
with 60° sealing cone**HP-016-0-VR026-...**Connec-
tion
A

BSPP 3/4"

steel oil
burnishedAISI 316 ti/
1.45711.4404/
1.4418 QT900

Series

pipe OD

n. b.

d

SW

l

t

n

weight [g]

16

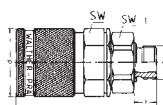
56

46

113,5

17

1130

British standard pipe
parallel (BSPP) male
thread to DIN ISO 228,
screwed plug to DIN
3852-2 form B**HP-016-0-WB026-...**

BSPP 3/4"

●

○

16

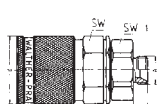
56

46

115,5

19

1140

metric male thread
with 60° sealing cone
to DIN 7631**HP-016-0-D1222-...**

M 22 x 1,5

○

○

12

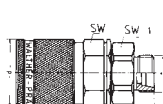
56

46

108,5

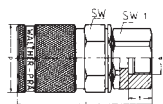
12

1110

metric male thread
with 24° sealing cone
to DIN 2353 (light duty
series L, heavy duty
series S)**HP-016-0-S1624-...**
HP-016-0-S2030-...M 24 x 1,5
M 30 x 2

●

○

S
S16
2012
1656
5646
46110,5
112,514
161120
1140British standard pipe
parallel (BSPP) female
thread to DIN ISO 228**HP-016-0-WR526-...**

BSPP 3/4"

○

○

16

56

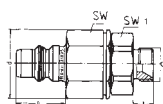
46

110,5

19

1360

Self sealing adaptors

BSPP male thread to
DIN ISO 228/BS 5200
with 60° sealing cone**HP-016-2-VR026-...**

BSPP 3/4"

●

○

○

16

56

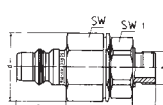
46

112,5

17

41

780

British standard pipe
parallel (BSPP) male
thread to DIN ISO 228,
screwed plug to DIN
3852-2 form B**HP-016-2-WB026-...**

BSPP 3/4"

●

○

○

16

56

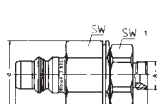
46

114,5

19

41

790

metric male thread
with 60° sealing cone
to DIN 7631**HP-016-2-D1222-...**

M 22 x 1,5

○

○

○

12

56

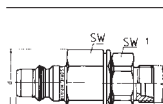
46

107,5

12

41

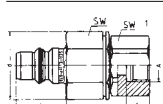
760

metric male thread
with 24° sealing cone
to DIN 2353 (light duty
series L, heavy duty
series S)**HP-016-2-S1624-...**
HP-016-2-S2030-...M 24 x 1,5
M 30 x 2

●

○

○

S
S16
2012
1656
5646
46109,5
111,514
1641
41770
790British standard pipe
parallel (BSPP) female
thread to DIN ISO 228**HP-016-2-WR526-...**

BSPP 3/4"

○

○

○

16

56

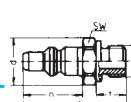
46

109,5

19

41

1000

Thru type
adaptorsBritish standard pipe
parallel (BSPP) male
thread to DIN ISO 228,
screwed plug to DIN
3852-2 form B**HP-016-1-WB026-..**

BSPP 3/4"

●

○

○

16

56

36

72

19

41

250

characteristic features:

- with vibration lock

optional features:

GG = with ring grips (cast aluminium)

OV = without valve

SI = with additional axial safety lock
(outer diameter 68 mm)

RV = with ring valve

(cannot be coupled with standard valve)

Recommended for high pulsating pressures
and rough working conditions.**materials:****standard:**

12 = steel, oil burnished

special materials:

13 = steel, chem. nickel plated

W1 = AISI 316 ti/1.4571, adaptor front part 1.4418 QT900

01 = stainless steel 1.4404/1.4571 or similar

seal qualities:

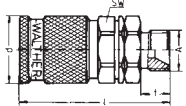
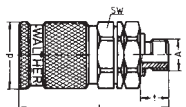
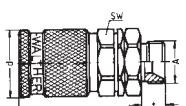
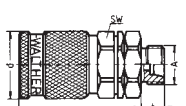
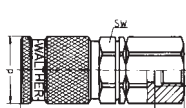
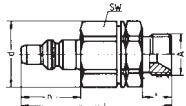
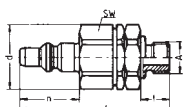
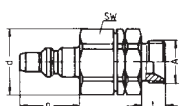
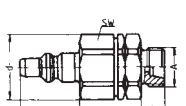
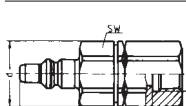
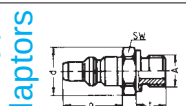
1 = NBR

2 = FKM

4 = EPDM

Please note the
technical data on
pages 2 - 7, 76 and the
max. working pressures
on page 67

Availability: ● Short ● Medium ○ Long

	Part No.	Conne- tion A	steel oil burnished	AISI 316 ti/ 1.4571	1.4404/ 1.4418 QT900	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing couplings	 BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	HP-020-0-VR033-...- BSPP 1"	○	○				20	62	55	118,5	20		1450
	 British standard pipe parallel (BSPP) male thread to DIN ISO 228, screwed plug to DIN 3852-2 form B	HP-020-0-WB033-...- BSPP 1"	●	○				20	62	55	119,5	21		1450
	 metric male thread with 60° sealing cone to DIN 7631	HP-020-0-D1526-...- M 26 x 1,5 HP-020-0-D1930-...- M 30 x 1,5	○ ●	○ ○				15 19	62 62	55 55	110,5 112,5	12 14		1400 1410
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	HP-020-0-S2030-...- M 30 x 2 HP-020-0-S2536-...- M 36 x 2	○ ●	○ ○		S S	20 25	16 20	62 62	55 55	114,5 116,5	16 18		1410 1440
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	HP-020-0-WR533-...- BSPP 1"	○	○				20	62	55	123	23		1720
Self sealing adaptors	 BSPP male thread to DIN ISO 228/BS 5200 with 60° sealing cone	HP-020-2-VR033-...- BSPP 1"	○	○	○			20	62	55	118,5	20	43	1070
	 British standard pipe parallel (BSPP) male thread to DIN ISO 228, screwed plug to DIN 3852-2 form B	HP-020-2-WB033-...- BSPP 1"	●	○	○			20	62	55	119,5	21	43	1070
	 metric male thread with 60° sealing cone to DIN 7631	HP-020-2-D1526-...- M 26 x 1,5 HP-020-2-D1930-...- M 30 x 1,5	○ ●	○ ○	○ ○			15 19	62 62	55 55	110,5 112,5	12 14	43 43	1030 1040
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	HP-020-2-S2030-...- M 30 x 2 HP-020-2-S2536-...- M 36 x 2	○ ●	○ ○	○ ○	S S	20 25	16 20	62 62	55 55	114,5 116,5	16 18	43 43	1030 1060
	 British standard pipe parallel (BSPP) female thread to DIN ISO 228	HP-020-2-WR533-...- BSPP 1"	○	○	○			20	62	55	123	23	43	1340
Thru type adaptors	 British standard pipe parallel (BSPP) male thread to DIN ISO 228, screwed plug to DIN 3852-2 form B	HP-020-1-WB033-...- BSPP 1"	○	○	○			20	45	41	74	21	43	310

characteristic features:

- with vibration lock

optional features:

GG = with ring grips (cast aluminium)

OV = without valve

SI = with additional axial safety lock
(outer diameter 96 mm)

RV = with ring valve

(cannot be coupled with standard valve)

Recommended for high pulsating pressures
and rough working conditions.**materials:****standard:**

12 = steel, oil burnished

special materials:

13 = steel, chem. nickel plated

W1 = AISI 316 ti/1.4571, adaptor front part 1.4418 QT900

01 = stainless steel 1.4404/1.4571 or similar

seal qualities:

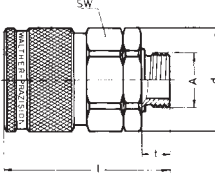
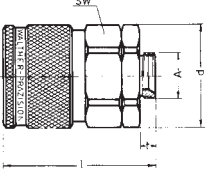
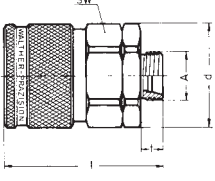
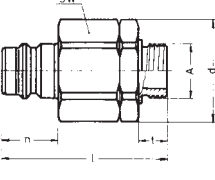
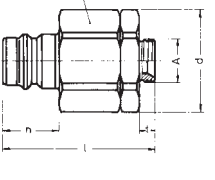
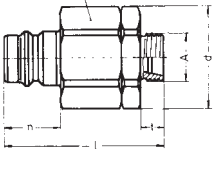
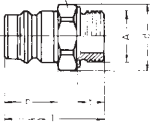
1 = NBR

2 = FPM

4 = EPDM

Please note the
technical data on
pages 2 - 7, 76 and the
max. working pressures
on page 67

Availability: ● Short ○ Medium ○ Long

	Part No.	Connec- tion A	steel oil burnished	AISI 316 ti/ 1.4571	1.4404/ 1.4418 QT900	series	pipe OD	n. b.	d	SW	l	t	n	weight [g]
Self sealing couplings	 British standard pipe parallel (BSPP) male thread to DIN ISO 228, screwed plug to DIN 3852-2 form B	HP-032-0-WB048-... HP-032-0-WB060-...	BSPP 1 1/2"	○	○			32	90	80	144,5	25		3790
			BSPP 2"	○	○			32	90	80	149,5	30		4290
	 metric male thread with 60° sealing cone to DIN 7631	HP-032-0-D2538-... HP-032-0-D3245-...	M 38 x 1,5 M 45 x 1,5	○	○			25 32	90 90	80 80	133,5 135,5	14 16		3690 3680
				○	○									
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	HP-032-0-S3042-... HP-032-0-S3852-...	M 42 x 2 M 52 x 2	●	○	S S	30 38	25 32	90 90	80 80	139,5 141,5	20 22		3730 3790
				●	○									
Self sealing adaptors	 British standard pipe parallel (BSPP) male thread to DIN ISO 228, screwed plug to DIN 3852-2 form B	HP-032-2-WB048-... HP-032-2-WB060-...	BSPP 1 1/2"	○	○			32	90	80	144	25	49,5	2740
			BSPP 2"	○	○			32	90	80	149	30	49,5	3240
	 metric male thread with 60° sealing cone to DIN 7631	HP-032-2-D2538-... HP-032-2-D3245-...	M 38 x 1,5 M 45 x 1,5	○	○			25 32	90 90	80 80	133 135	14 16	49,5 49,5	2630 2620
				○	○									
	 metric male thread with 24° sealing cone to DIN 2353 (light duty series L, heavy duty series S)	HP-032-2-S3042-... HP-032-2-S3852-...	M 42 x 2 M 52 x 2	●	○	S S	30 38	25 32	90 90	80 80	139 141	20 22	49,5 49,5	2670 2730
				●	○									
Thru type adaptors	 British standard pipe parallel (BSPP) male thread to DIN ISO 228, screwed plug to DIN 3852-2 form B	HP-032-1-WB048-... HP-032-1-WB060-...	BSPP 1 1/2" BSPP 2"	○	○			32 32	61,5 86	55 75	90,5 92,5	25 27	49,5 49,5	690 1190

characteristic features:
 - with vibration lock
 - with ring grips (cast aluminium)

optional features:
 OV = without valve
 RV = with ring valve
 (cannot be coupled with standard valve)

materials:
standard:
 12 = steel, oil burnished

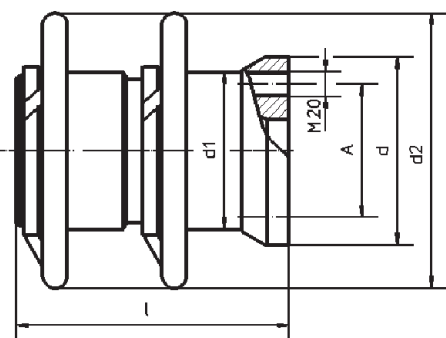
special materials:
 13 = steel, chem. nickel plated

seal qualities:
 1 = NBR
 2 = FKM
 4 = EPDM

Please note the technical data on pages 2 - 7, 76 and the max. working pressures on page 67

Availability: ● Short ● Medium ○ Long

Self sealing couplings



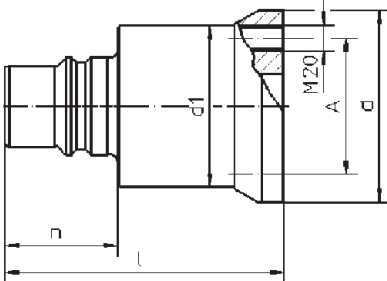
HP-050-0-XX007-...-

Connection A
 SAE-flange for pipe OD 65
 4xM20
 44,5x96,8

steel oil burnished
 series
 pipe OD
 n. b.
 d
 d1
 d2
 l
 n
 weight (kg)

65 50 150 126 220 219 15,3

Self sealing adaptors



HP-050-2-XX007-...-

SAE-flange for pipe OD 65
 4xM20
 44,5x96,8

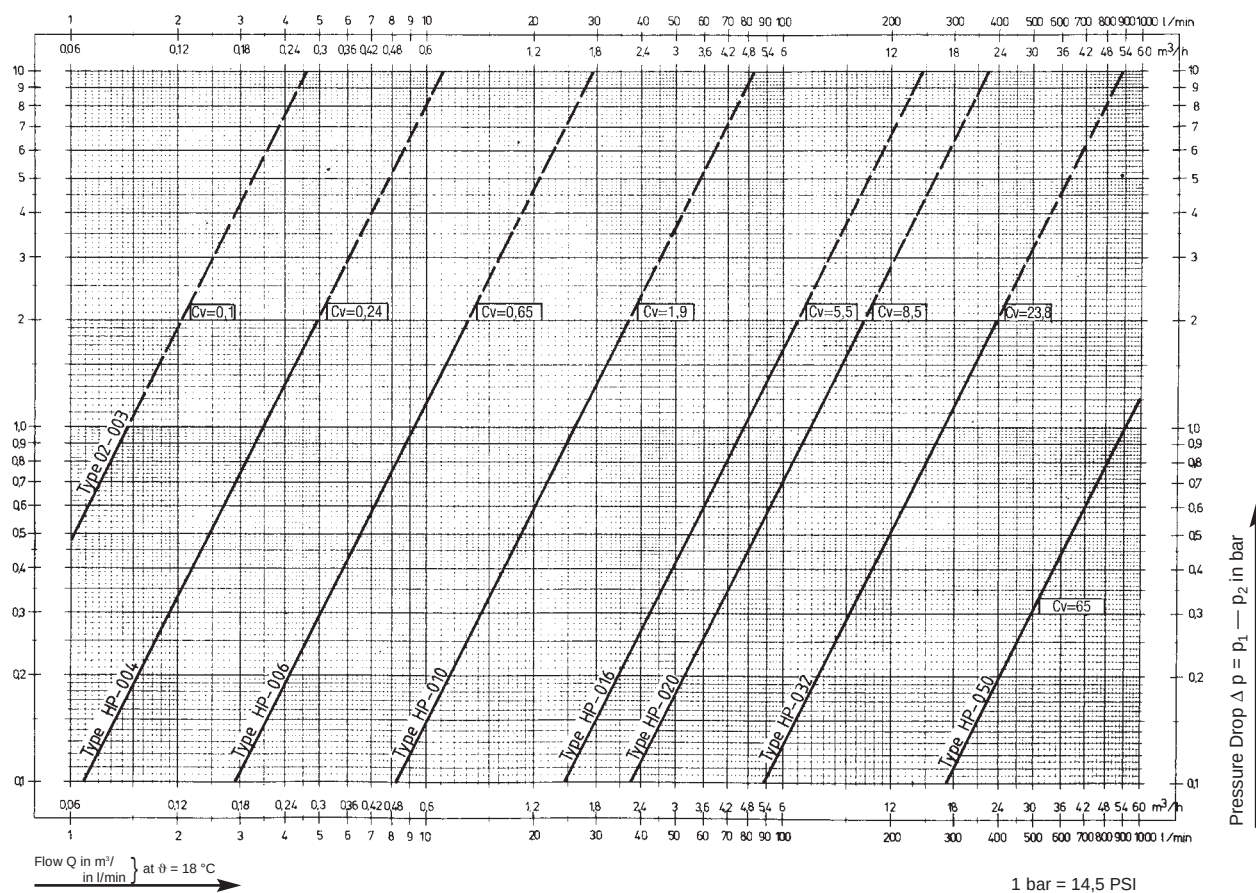
65 50 150 126 217,5 87,5 11,4

Measurement of flow coefficients C_v
according to DIN EN 60534

Flow speeds of 8 m/sec
should not be exceeded

Both sides self sealing

both axes are scaled logarithmically, one from 1 to 100, the other one from 1 to 1000, unit = 100 mm



ATTENTION!

When determining the working pressure of standardised end connections, the maximum permitted working pressure of the end connections has to be considered.

You have questions regarding the maximum permitted working pressure?

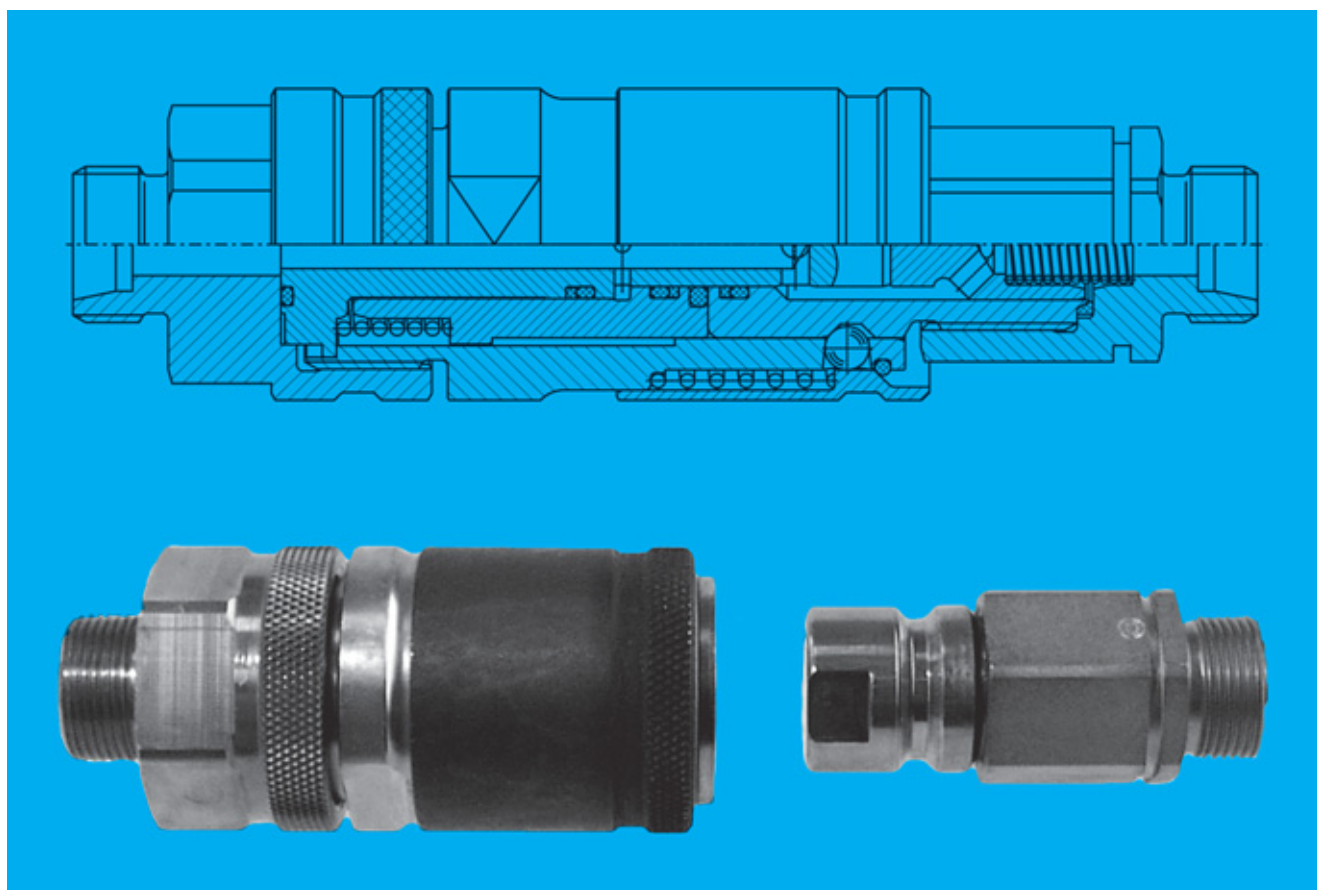
Our customer service is always available to answer your questions. Phone: +49 (0) 2129 567-402.

Nom. bore	Type	Max. static working pressure [bar/psi] steel	C _v value both sides self sealing	Page
6	HC-G06	650/9500	0.5	78
8	HC-G08	600/8700	1.0	78
12	HC-G12	600/8700	2.3	78
16	HC-G16	600/8700	3.4	78
20	HC-G20	600/8700	5.7	78
performance diagrams				79

Please note: In case of standardised end connections, please take the max. allowable working pressure of the end connection into account when determining the working pressures.

Features:

- Z12 = Self sealing coupling and self sealing adaptor with dirt protection
- Z11 = Self sealing coupling and self sealing adaptor with pressure relief (starting from DN 12)
- Z13 = Self sealing coupling and self sealing adaptor with dirt protection and pressure relief (starting from DN 12)



characteristic features:

- automatic lock (one hand operation)
- disconnection without loss of medium
- connection without air inclusion

materials:

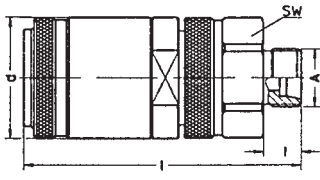
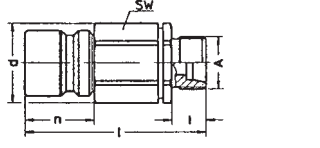
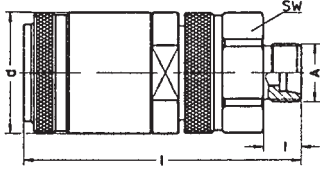
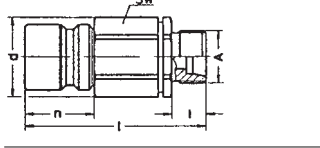
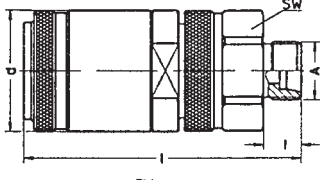
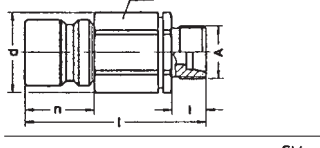
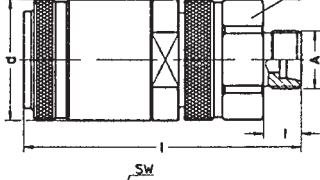
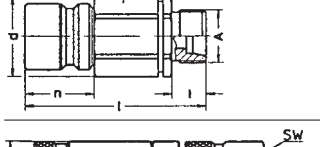
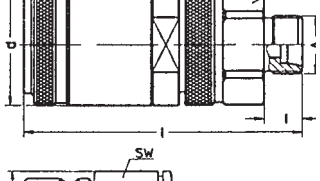
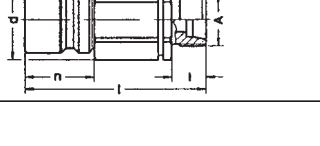
- standard:**
- steel, zinc plated, yellow chromated
 - locking sleeve, black phosphatized

seal qualities:

- special seals
- suitable for hydraulic fluids on mineral oil basis, HFA and HFB liquids

Please note the technical data on pages and the 2 - 7, 79 max. working pressures on page 77

Availability: ● Short ○ Medium ○ Long

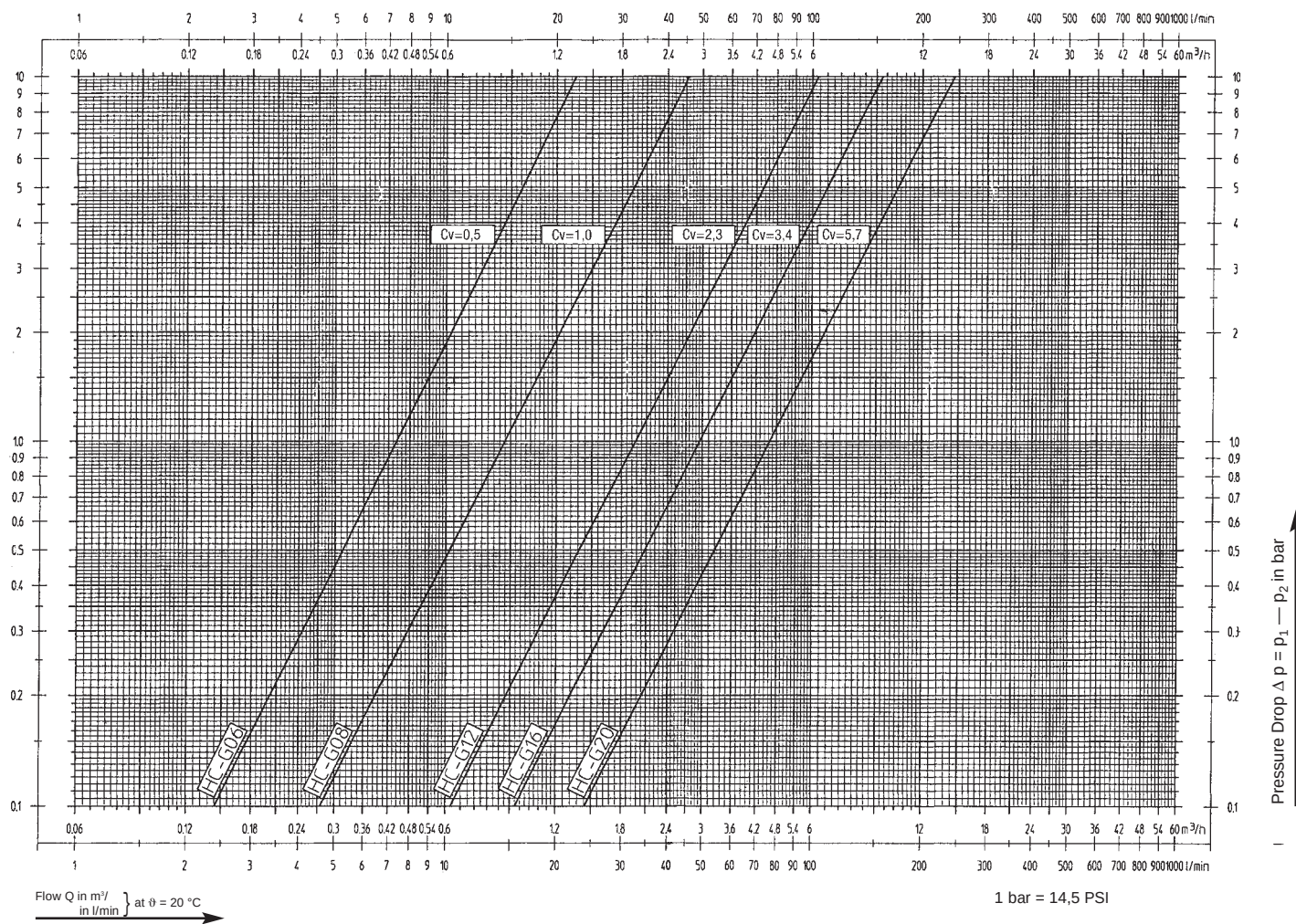
	Part No.	Connec- tion A	Steel zinc plated	series	pipe OD	d	SW	l	t	n	weight [g]
 	HC-G06-0-S1018-AABA-Z10	M 18 x 1,5	●	S	10	34	27	98,8	12		455
	HC-G06-2-S1018-AABB-Z10	M 18 x 1,5	●	S	10	30,1	27	69	12	23,4	177
 	HC-G08-0-S1220-AABA-Z10	M 20 x 1,5	●	S	12	42,4	32	104,8	12		660
	HC-G08-2-S1220-AABB-Z10	M 20 x 1,5	●	S	12	30,1	27	69,2	12	26,8	220
 	HC-G12-0-S1624-AABB-Z10	M 24 x 1,5	●	S	16	47,2	41	102,6	14		818
	HC-G12-2-S1624-AABB-Z10	M 24 x 1,5	●	S	16	33,5	30	74,2	14	28,5	251
 	HC-G16-0-S2030-AABA-Z10	M 30 x 2	●	S	20	57,8	50	112,4	16		1406
	HC-G16-2-S2030-AABB-Z10	M 30 x 2	●	S	20	45,6	41	80,4	16	31	487
 	HC-G20-0-S2536-AABA-Z10	M 36 x 2	●	S	25	63,2	50	145,6	18		2005
	HC-G20-2-S2536-AABB-Z10	M 36 x 2	●	S	25	51,2	46	111,5	18	36	909

Measurement of flow coefficients C_v
according to DIN EN 60534

A flow speed of 8 m/sec
should not be exceeded

Both sides
self sealing

both axes are scaled logarithmically, one from 1 to 100, the other one from 1 to 1000,



1. Type 15-005 / FF-005

Extremely small leakage with locking automation. Preferred for hydraulic training units / didactics

2. CG series

Resistance to vibration according to EN61373, category 1, class B (railway certification), optimized seals, depending on media and temperature

3. CI series

For low and high temperatures, e. g. cryogenic gases, temperature applications or laboratory operations

4. CK series

Plastic design, applicable for cooling water or in chemical and pharmaceutical industries

5. CT series

Plug coupling of the latest generation. For challenging media in the process and laboratory technology, transport and loading of fluids

6. CN series

With curve locking for large volume flows, mainly applied in the chemical industry

7. CP series

With locking automation, interlocking device and optional dirt protection in coupled state

8. CH series

Screw-type coupling for hydraulic applications in the heavy industry. The special round thread of the locking is resistant against pollution.

9. Type 40-030

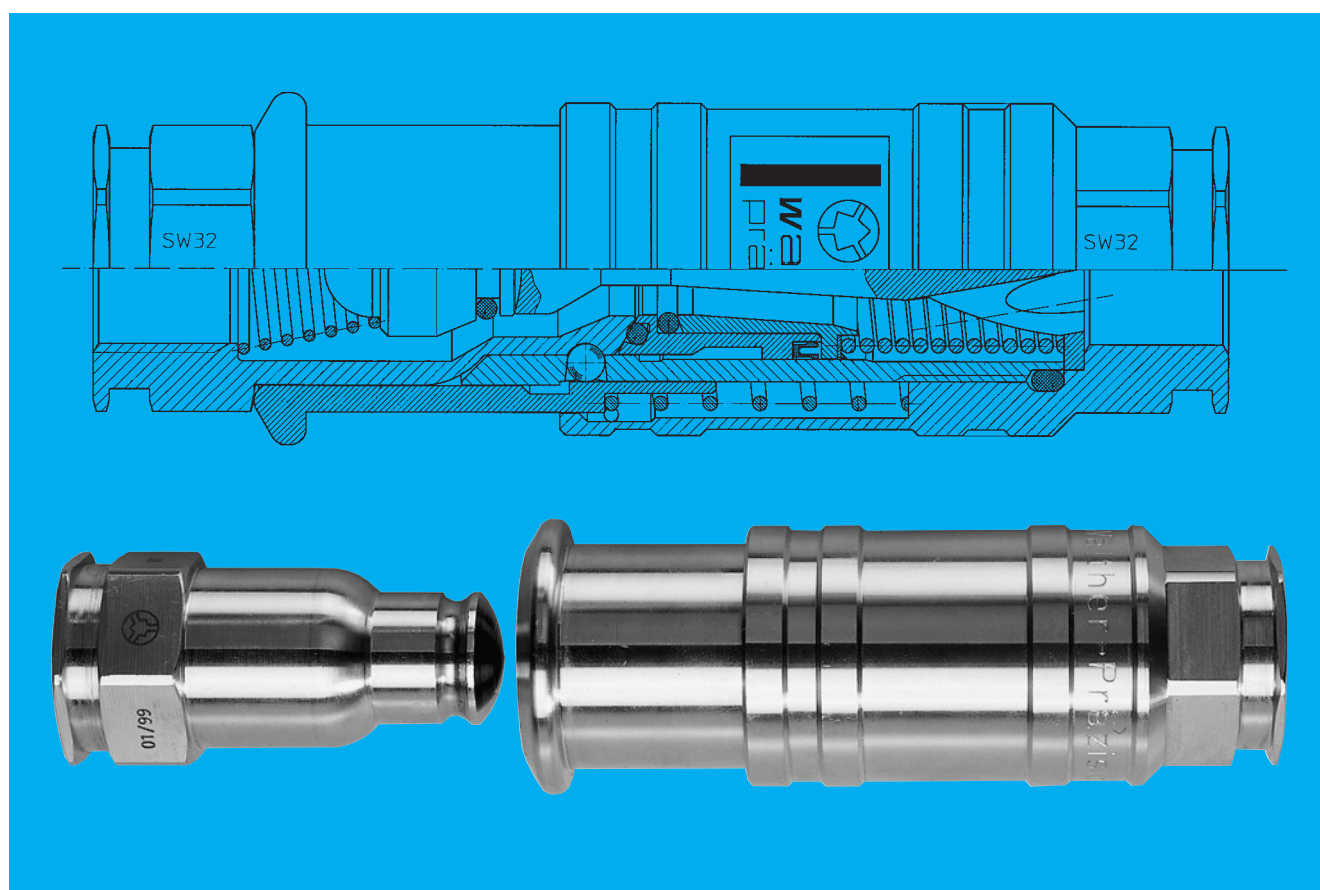
Sterilizable quick coupling for the transport of fluids. The coupling is dead space free as well as CIP-compatible (Clean-In-Place) and SIP-compatible (Sterilization-In-Place)



Nom. bore	Type	Max. static working pressure [bar/psi] stainless steel	C _v value both sides self sealing	Page
5	BF-005	64/930*	0.8	82
9	BF-009	64/930*	4.0	82
12	BF-012	64/930*	8.0	82
25/50	BF-025/BF-050	40*/16*	14,7/59,4	83
Performance diagrams				84

* Restrictions possible when using perfluorelastomer seals.

Characteristics: Coupling in stainless steel, particularly for challenging fluids or gaseous media. Highest safety standard and optimal handling through automatic lock. Can be used for both, non-lubricating media (such as demineralized water, "dry gases") as well as self-lubricating media (such as oils and soap solutions). Long-term proven for solvents, chemical fluids, thermal oils and steam. Also used for lyes, various acids and many other media.



characteristic features:

- automatic lock (one hand operation)
- disconnection without loss of medium
- connection without air inclusion
- easy cleaning

materials:

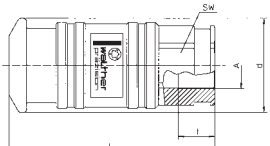
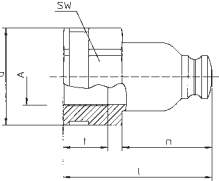
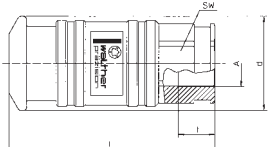
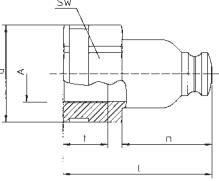
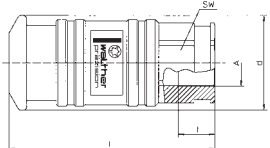
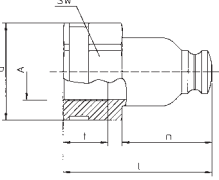
standard:
1 = stainless steel 1.4404/1.4571 or similar

seal qualities:

2 = FKM
4 = EPDM
FFKM = perfluorine elastomers

Please note the technical data on pages and the 2 - 7, 84 max. working pressures on page 81

Availability: ● Short ○ Medium ○ Long

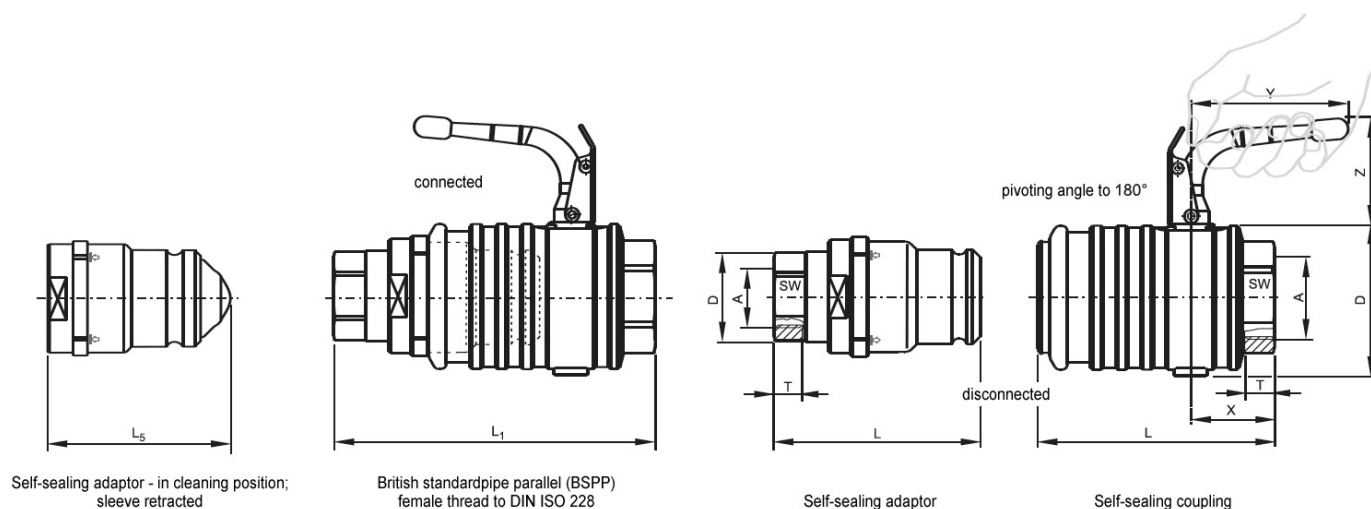
	Part No.	Connection A	AISI 316 or 1.4571		series	pipe OD	d	SW	l	t	n	weight [g]
  British standard pipe parallel (BSPP) female thread to DIN ISO 228	BF-005-0-WR513-...-	BSPP 1/4"	●				29	22	64	13		165
	BF-005-2-WR513-...-	BSPP 1/4"	●				24,5	22	37,5	13	23,5	50
  British standard pipe parallel (BSPP) female thread to DIN ISO 228	BF-009-0-WR521-...-	BSPP 1/2"	●				44	32	118	17		630
	BF-009-2-WR521-...-	BSPP 1/2"	●				35,7	32	68	15	47,8	190
  British standard pipe parallel (BSPP) female thread to DIN ISO 228	BF-012-0-WR526-...-	BSPP 3/4"	●				64	46	137	19		1300
	BF-012-2-WR526-...-	BSPP 3/4"	●				51,2	46	78,3	17,5	54,2	440

Restriction possible when using perfluor elastomer seals

Features: Clean break coupling made of stainless steel, especially for difficult fluid or gaseous media. Highest safety standard. Optimal handling due to locking automation. Mainly developed for chemistry usage. Suitable for non-lubricating media (e. g. demineralized water, "dry gases") and for lubricating media (e. g. oils and soap solutions). Long-term proven for solvents, chemical fluids and water vapour. Also used in lyes, different acids, etc.

	Bestellnummer	Anschluss A	T	D	L	L ₁	L ₅	SW	X	Y	Z
Verschlusskupplung	BF-025-0-WR548-.. □	G 1 1/2	25	96	159	247		55	53	90	55
Verschlussnippel	BF-025-2-WR533-.. □	G 1	31,5	68	131		112	41			
Verschlusskupplung	BF-050-0-WR575-.. □	G 2 1/2	33	137	233	436		95	80	150	105
Verschlussnippel	BF-050-2-WR560-.. □	G 2	35	114	195		169	75			

□ = Bestellcode für Dichtungsqualitäten auf Anfrage

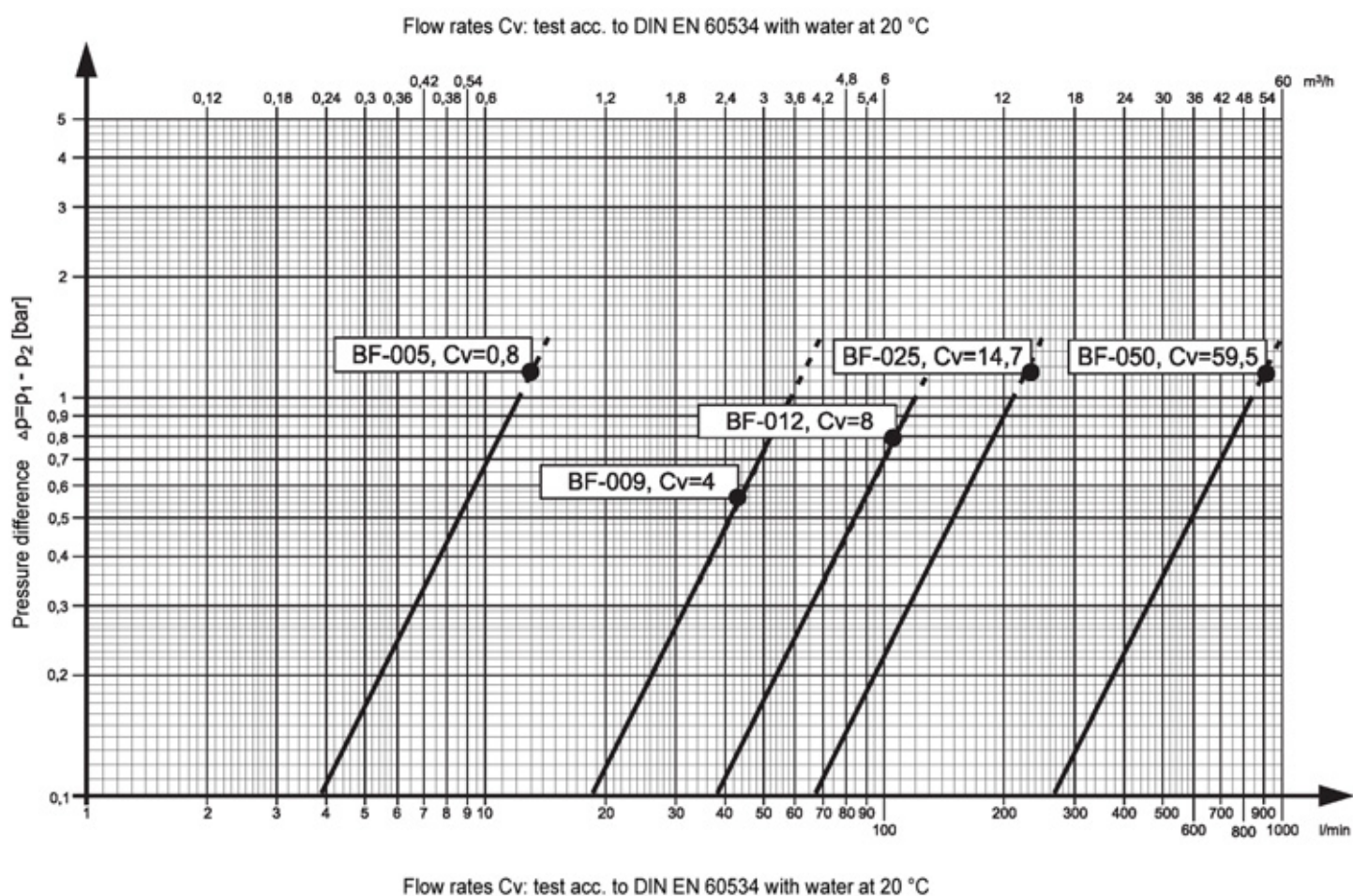


Measurement of flow coefficients C_v according to DIN EN 60534

A flow speed of 8 m/sec should not be exceeded.



Please find further information to this topic on our web site.



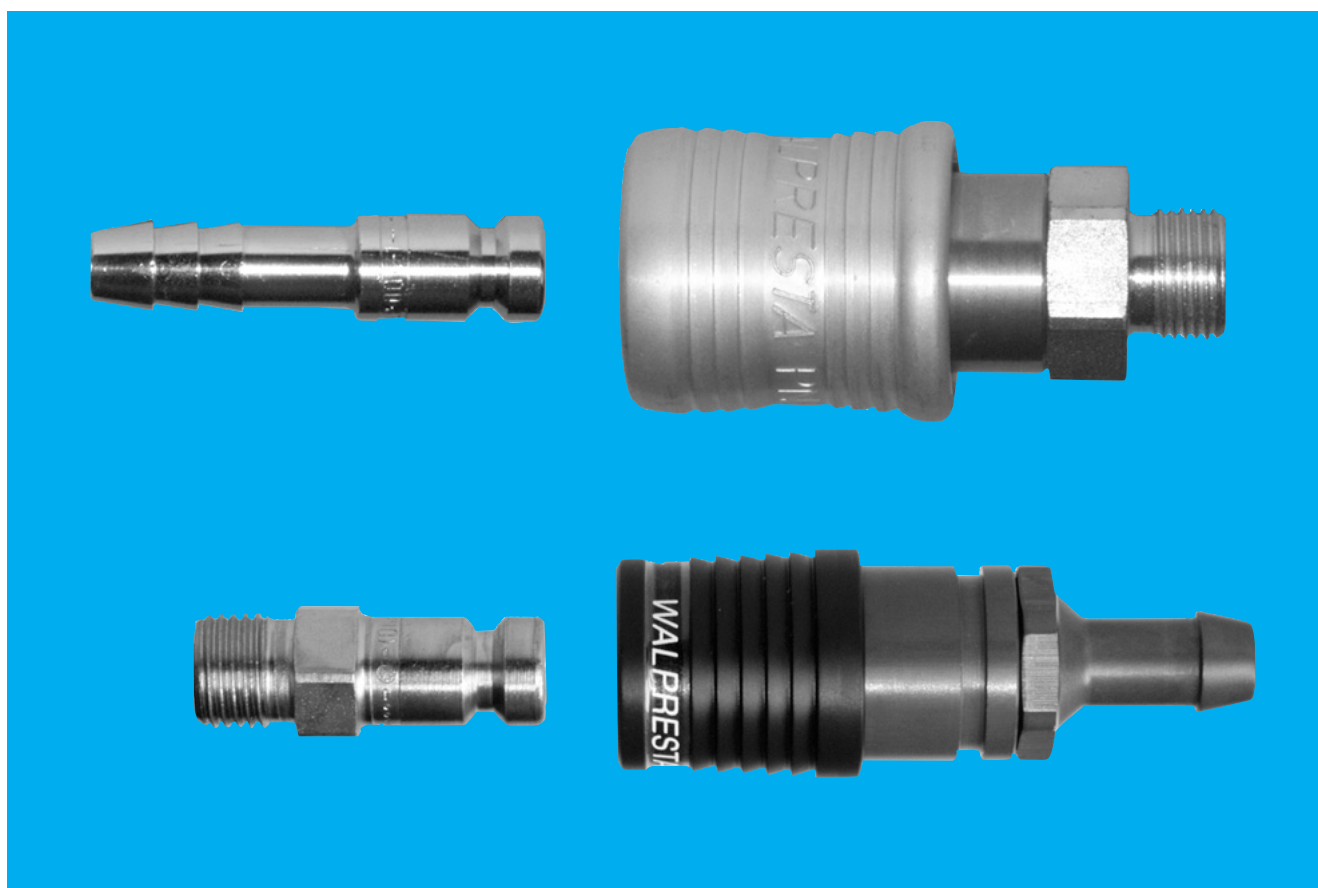
Nom. bore	Type	Max. stat working pressure [bar/psi] for Air	C _v value one side selfsealing	Page
6,5	LS-006	12/175	1.71	86
9	LS-009	12/175	4.32	86
11	LS-E11	12/175	5.14	86
6,5	LT-006	12/175	1.71	87
9	LT-009	12/175	4.32	87
11	LT-E11	12/175	5.14	87
Performance diagrams				88

The safety coupling for compressed air type LS-006 is the first coupling to work pressure controlled. It denies by a positive lock false operation. This abandons the dangerous whip effect completely.

The pressurized air coupling type LT-006 is intended for use at the tool and prooves itself by very good flow characteristics.

Both couplings are designed to fit on two widely spread nipple contours – the Walther LP-006 and DIN 14152 (the so called Euronipple)

For LS-006 use only hardened thin-type adaptors.



characteristic features:

- automatic lock (one hand operation)
- safety unlocking (dependent on residual pressure)
- connectable on adaptor contour LP-006-1 and DIN 14152 (so-called "Euro" adaptor)

materials:

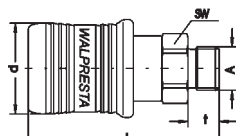
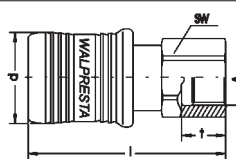
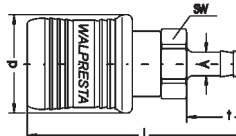
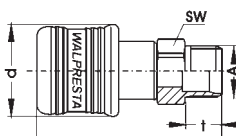
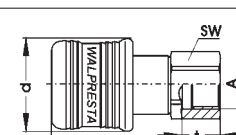
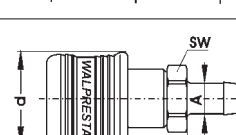
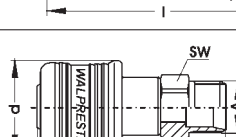
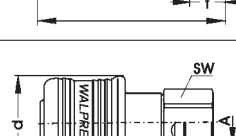
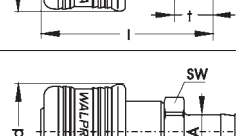
- standard:**
- coupling housing: steel chem. nickel plated
- locking sleeve: brass passivated
- connecting pieces: steel, zinc plated

seal qualities:

1 = NBR

Please note the technical data on pages and the 2 - 7, 88 max. working pressures on page 85

Availability: ● Short ○ Medium ○ Long

		Part No.	Conne- ction A	steel zinc plated		series	pipe OD	d	SW	l	t	n	weight [g]
	British standard pipe parallel (BSPP) male thread to DIN ISO 228	LS-006-0-WR013-AAAA-Z01 LS-006-0-WR017-AAAA-Z01 LS-006-0-WR021-AAAA-Z01	BSPP 1/4" BSPP 3/8" BSPP 1/2"	● ● ●				37 37 37	24 24 24	72,5 73,5 76,5	11 12 15		255 265 275
	British standard pipe parallel (BSPP) female thread to DIN ISO 228	LS-006-0-WR513-AAAA-Z01 LS-006-0-WR517-AAAA-Z01 LS-006-0-WR521-AAAA-Z01	BSPP 1/4" BSPP 3/8" BSPP 1/2"	● ● ●				37 37 37	24 24 27	74,5 75,5 78,5	13 14 17		275 275 295
	hose connection	LS-006-0-SL009-AAAA-Z01 LS-006-0-SL011-AAAA-Z01 LS-006-0-SL013-AAAA-Z01	9 mm 11 mm 13 mm	● ● ●				37 37 37	24 24 24	91,5 91,5 91,5	30 30 30		265 265 275
	British standard pipe parallel (BSPP) male thread to DIN ISO 228	LS-009-0-WR021-AAAA	BSPP 1/2 A	●				40,6	25	82,6	15		300
	British standard pipe parallel (BSPP) female thread to DIN ISO 228	LS-009-0-WR521-AAAA LS-009-0-WR526-AAAA	BSPP 1/2" BSPP 3/4"	● ●				40,6 40,6	27 32	79,6 81,6	17 19		315 334
	hose connection	LS-009-0-SL013-AAAA	13 mm	●				40,6	25	94,4	30		298
	British standard pipe parallel (BSPP) male thread to DIN ISO 228	LS-E11-0-WR021-AAAA	BSPP 1/2"	●				40,6	25	81	15		290
	British standard pipe parallel (BSPP) female thread to DIN ISO 228	LS-E11-0-WR521-AAAA LS-E11-0-WR526-AAAA	BSPP 1/2" BSPP 3/4"	● ●				40,6 40,6	27 32	78 80	17 19		305 324
	hose connection	LS-E11-0-SL013-AAAA	13 mm	●				40,6	25	93	30		293

Further end connections on request.

Suitable thru type adaptors for LS-006 are listed on page 17 (Type LP-006-1)

Suitable thru type adaptors for LS-009 are listed on page 23 (Type SP-009-1)

Suitable thru type adaptors for LS-E11 on request.

characteristic features:

- connectable on adaptor contour LP-006-1 and DIN 14152 (so-called "Euro" adaptor)
- compact design
- extremely low weight

materials:

standard:

- coupling housing: Alu hc
- locking sleeve: plastic
- connecting pieces: AAAA = Alu anodized
- connecting pieces: AAFF = Alu anodized

seal qualities:

1 = NBR

Please note the technical data on pages 2 - 7, 88 max. working pressures on page 85

Availability: ● Short ◐ Medium ○ Long

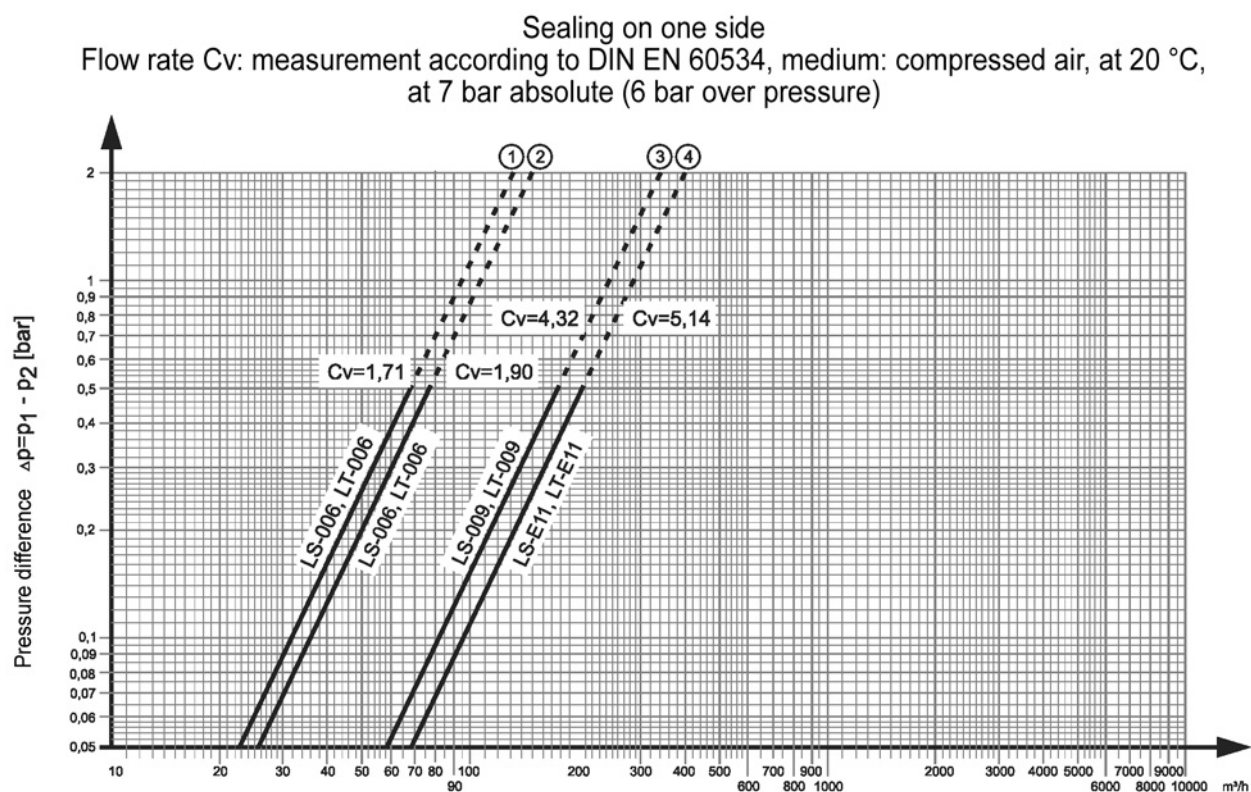
[illegible]

Further end connections on request.

Suitable thru type adaptors for LT-006 are listed on page 17 (Type LP-006-1)

Suitable thru type adaptors for LT-009 are listed on page 23 (Type SP-009-1)

Suitable thru type adaptors for LT-E11 on request.



- ① LS-006, LT-006 with through type adaptor LP-006-1-... (DN 7) → CV = 1,71
- ② LS-006, LT-006 with through type adaptor LS-E06-1-... (DN 8) → CV = 1,90
- ③ LS-009, LT-009 with through type adaptor SP-009-1-... (DN 9) → CV = 4,32
- ④ LS-E11, LT-E11 with through type adaptor LS-E11-1-... (DN 11) → CV = 5,14



Number of connections	Type	Nom. bore	Max. static working pressure [bar/psi] per element	Page
4	90405	4	10/145	90
8	90405	2	10/145	90
18	90405	2	10/145	91
8	90408	4	10/145	91
20	90408	3	10/145	92
12 - 20	90410	2 and 4	10/145	93
Accessories, individual parts				94

Applications:

Pneumatic measuring, control and monitoring loops with logic circuits and/or direct valve actuation.

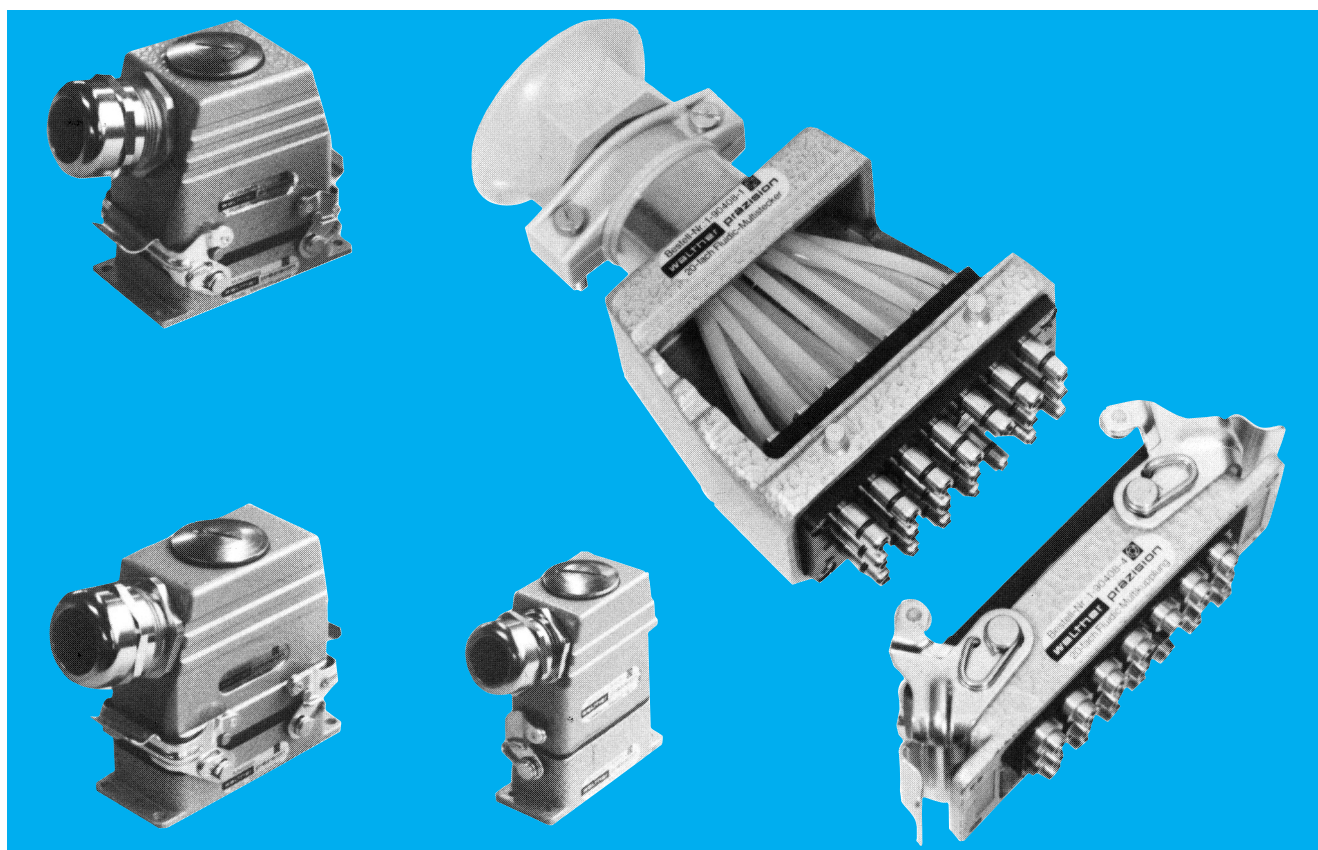
Ready made:

Ready made and tested complete assemblies as requested.

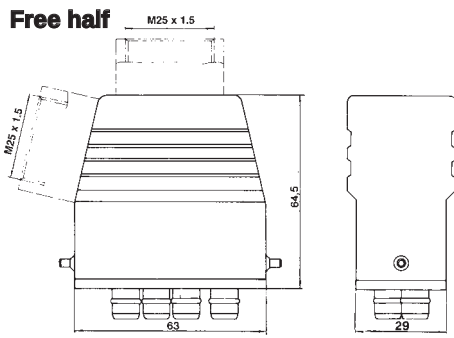
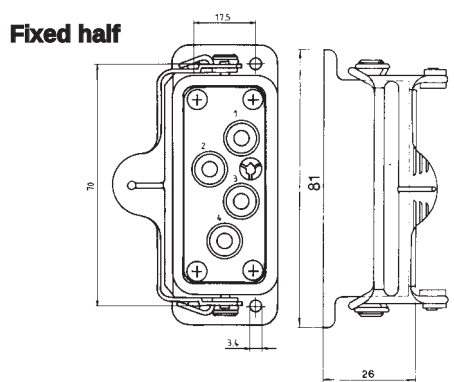
Special version:

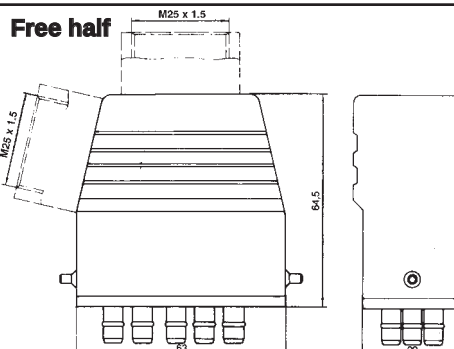
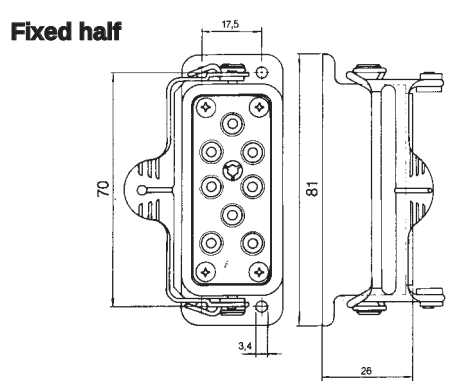
With additional electrical plug elements – on request

With self sealing valves – on request



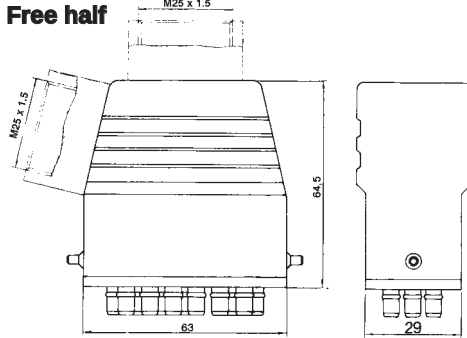
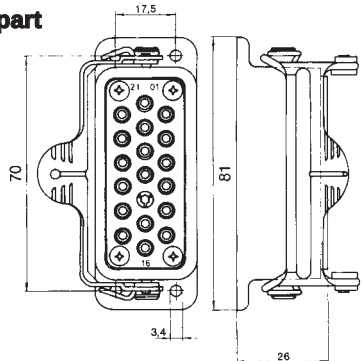
Please note the technical data on pages 2-7 and the max. working pressure on page 89

Availability:		● Short	● Medium	○ Long	max. working pressure on page 89	
	Number of elements	n.b.	Part No.	End connections		Weight [g]
Free half  Fixed half 	4	4	90405-1-LT016-31-1-Z30-AN	Quick push connection for hose od 6 mm id 4 mm	●	290
	4	4	90405-1-LT016-31-1-Z60-AN	straight conduit angled conduit	●	290
	4	4	90405-4-FT016-31-1-Z10-AN	Quick push connection for hose od 6 mm id 4 mm	●	150
Materials: Carrier plates: aluminium anodized Elements: brass nickel-plated			Quick push connections: brass passivated Housing: light alloy hammergey enamel Seals: NBR, low friction			

Free half  Fixed half 	8	2	90405-1-LT019-31-1-Z30-AO	Quick push connection for hose od 4 mm id 2 mm	●	280
	8	2	90405-1-LT019-31-1-Z60-AO	straight conduit angled conduit	●	280
	8	2	90405-4-FT019-31-1-Z10-AO	Quick push connection for hose od 4 mm id 2 mm	●	140
Materials: Carrier plates: aluminium anodized Elements: brass nickel-plated			Quick push connections: brass passivated Housing: light alloy hammergey enamel Seals: NBR, low friction			

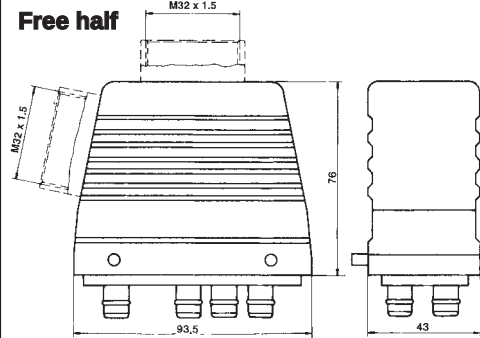
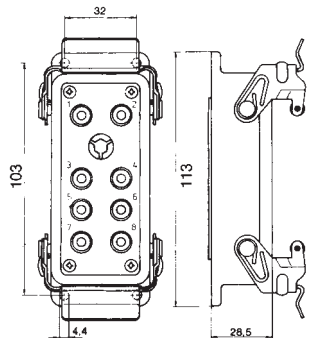
Please note the technical data on pages 2-7 and the max. working pressure on page 89

Availability: ● Short ○ Medium ○ Long

	Number of elements	n.b.	Part No.	End connections		Weight [g]
Free half  Fixed part 	18	2	90405-1-LT001-PA-1-Z30-AA	Push ferrule connection for hose od 4 mm id 2 mm straight conduit	●	240
	18	2	90405-1-LT001-PA-1-Z30-AB	Standard pattern: U1-type pattern	●	
	18	2	90405-1-LT001-PA-1-Z30-AC	U2-type pattern	●	
	18	2	90405-1-LT001-PA-1-Z60-AA	angled conduit	●	240
	18	2	90405-1-LT001-PA-1-Z60-AB	Standard pattern: U1-type pattern	●	
	18	2	90405-1-LT001-PA-1-Z60-AC	U2-type pattern	●	
	18	2	90405-4-FT002-PA-0-Z10-AA	Push ferrule connection for hose od 4 mm id 2 mm straight conduit	●	110
	18	2	90405-4-FT002-PA-0-Z10-AB	Standard pattern: U1-type pattern	●	
	18	2	90405-4-FT002-PA-0-Z10-AC	U2-type pattern	●	
	Non-interchangeability: 3 different patterns: Standard, U1 or U2					

Materials:
Carrier plates: polyamide 6.6, 30 % glas fibre reinforced
Plug elements: brass, nickel-plated

Housings: light alloy, hammergrey enamel
Seals: NBR, low friction
Ferrules for push-ferrule-connections must be ordered separately.

Free half  Fixed half 	8	4	90408-1-LT006-PA-1-Z30-AF	Quick push connection for hose od 6 mm id 4 mm carrier plates made of polyamide	●	440
	8	4	90408-1-LT006-PA-1-Z60-AF	straight conduit	●	440
	8	4	90408-1-LT006-31-1-Z30-AF	angled conduit	●	520
	8	4	90408-1-LT006-31-1-Z60-AF	carrier plates made of anodized aluminium	●	520
	8	4	90408-4-FT006-PA-1-Z01-AF	Quick push connection for hose od 6 mm id 4 mm carrier plates made of polyamide	●	210
	8	4	90408-4-FT006-31-1-Z01-AF	carrier plates made of anodized aluminium	●	310

Materials:
Carrier plates: polyamide 6.6, 25 % glas fibre reinforced or aluminium anodized
Plug elements: brass, nickel-plated

Quick push connections: brass passivated
Housings: light alloy, hammergrey enamel
Seals: NBR, low friction

Availability: ● Short ◐ Medium ○ Long

Quick push connections: brass passivated
Housings: light alloy, hammergrey enamel
Seals: NBR, low friction

Housings: light alloy, hammergrey enamel
Seals: NBR, low friction
Ferrules for push-ferrule-connections must be ordered separately.

Spezial versions:

spezial codings
with fluidical and electrical
elements on request

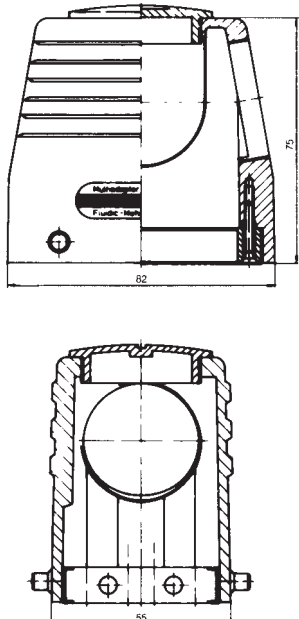
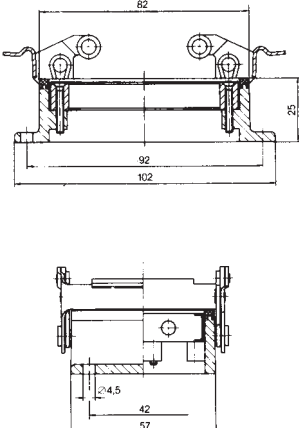
Materials:

Carrier plates free half:
Carrier plates fixed half:
Retaining bar:
Thru Type Adaptors:
Quick push connections:
Coding pins and bushes:
Housing:
Seals:

Polyamide PA 6.6, 25 % glass fibre reinforced
Trogamid TG 35
Z 410 nickel-plated
brass nickel-plated
brass passivated
stainless steel 1.4305
light alloy, hammergey enamel
NBR, low friction

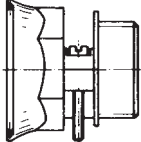
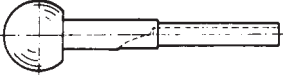
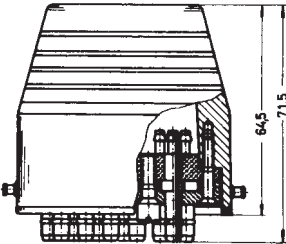
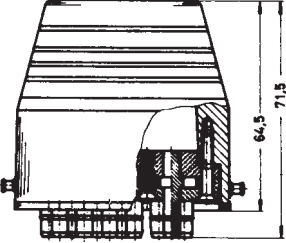
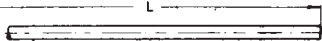
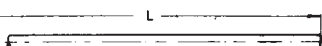
Please note the
technical data on
pages 2-7 and the
max. working pressure
on page 89

Availability: ● Short ○ Medium ○ Long

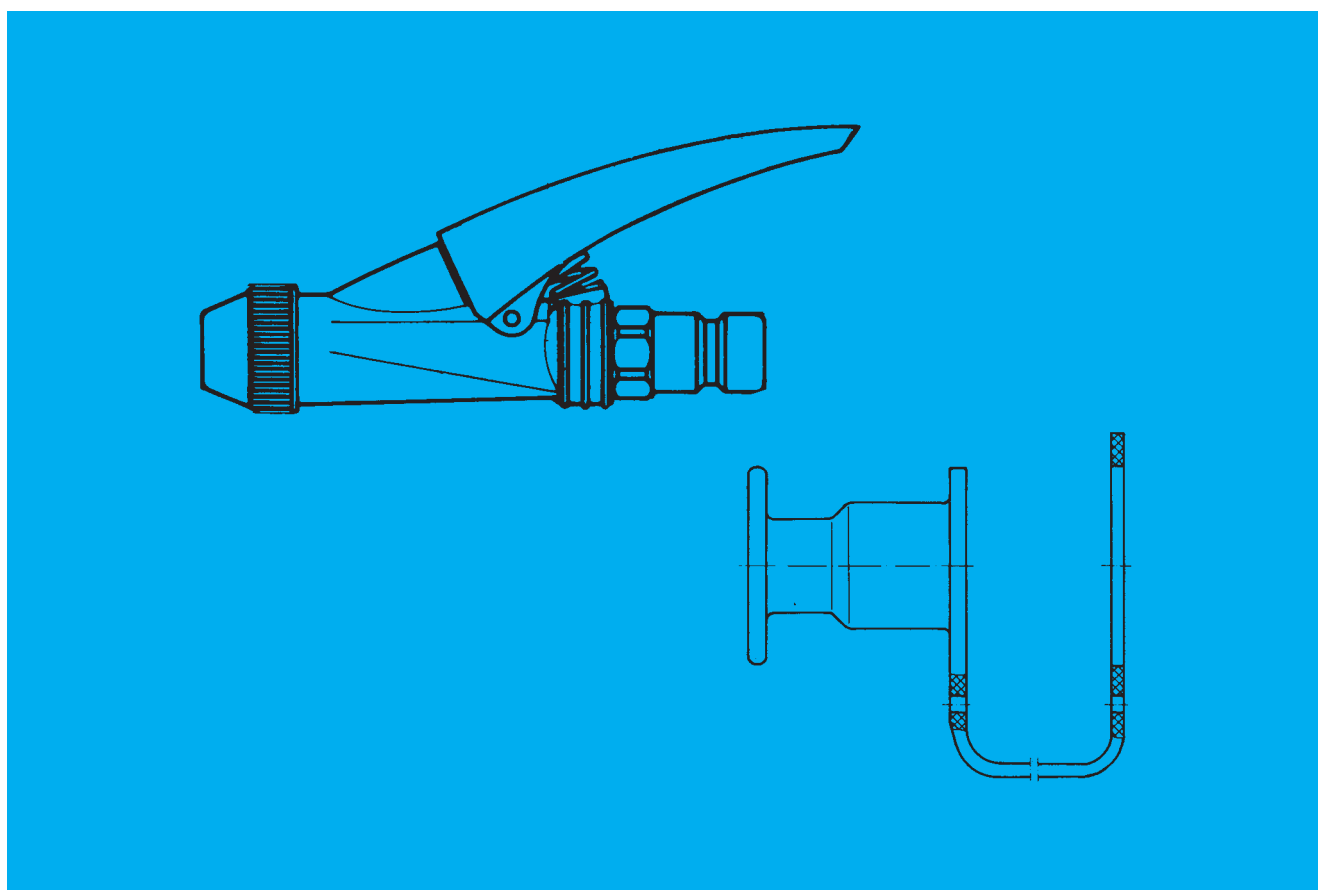
	Number of elements	End connections: A Connection for flexible, numbered plastic lines, made of Rilsan od 4 mm, id 2 mm or od 4 mm id 2,7 mm B Connection for flexible, numbered plastic lines, made of Rilsan od 6 mm, id 4 mm	Part No.		Weight [g]
			Free half	Fixed half	
Free half Straight and inclined entry 	12	12 x Quick push connection B	90410-1-LT002-PA-1-Z04-AB	90410-4-FT002-PA-1-Z03-AB	550
	13	4 x Quick push connection A 9 x Quick push connection B	90410-1-LT004-PA-1-Z04-AD	90410-4-FT004-PA-1-Z03-AD	520
	14	8 x Quick push connection A 6 x Quick push connection B	90410-1-LT003-PA-1-Z04-AC	90410-4-FT003-PA-1-Z03-AC	510
	15	12 x Quick push connection A 3 x Quick push connection B	90410-1-LT005-PA-1-Z04-AE	90410-4-FT005-PA-1-Z03-AE	490
	20	20 x Quick push connection A	90410-1-LT001-PA-1-Z04-AA	90410-4-FT001-PA-1-Z03-AA	520
Fixed half 					

Please note the technical data on pages 2-7 and the max. working pressure on page 89

Availability: ● Short ○ Medium ○ Long

		Part No.	Materials		Weight [g]
	Hose-clamp PG 21 PG 29 M 25 x 1,5 M 32 x 1,5	96001-9-PG021-PCAA 96001-9-PG029-PCAA 96001-9-6M025-23-1 96001-9-6M032-23-1	plastic plastic brass nickel-plated brass nickel-plated	● ● ● ●	25 48 79 144
	Ferrule for hose OD4/ID2 for hose OD6/ID4	90405/510 90405/512	brass nickel-plated brass nickel-plated	● ●	1 1
	Assembly tool for push ferrule connection for hose OD4 for hose OD6	90405/550 90405/558	steel, oil-burnished steel, oil-burnished	● ●	27 43
Bridge connector 	Bridge connector for Type 90405 / 18-way	Standard: 90405-1-LT001-PA-1-Z03-AA Version U1: 90405-1-LT001-PA-1-Z03-AB Version U2: 90405-1-LT001-PA-1-Z03-AC	Housing: light alloy hammergrey enamel Carrier plates: Polyamide Elements: brass nickel-plated Seals: Buna, low friction	● ● ●	230
Blind half 	Ferrules for push-ferrule-connections must be ordered separately. Blind half for fixed side for Type 90405 / 18-way	Blind half for fixed 90405-6-LT003-PA-1-Z03-AA		●	190
  	Hoselines for Fluidic-Multicouplings numbered single hose 4x1 (od 4 mm / id 2 mm) numbers 01-06, 11-16, 21-26 numbered 19-way hosebundle 4x1 (od 4 mm / id 2 mm) numbers 01-06, 11-16, 21-26 + neutral bending radius: min. 170 mm Single hose 6x1 (od 6 mm / id 4 mm)	7-112-04010-0000-WP 7-113-04010-0019-WP 7-112-06010-0000-WP	Soft Polyethylene Soft Polyethylene Soft Polyethylene, black	● ● ●	

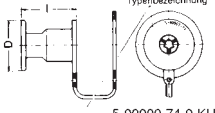
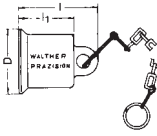
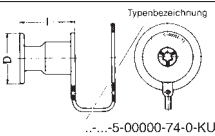
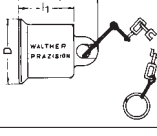
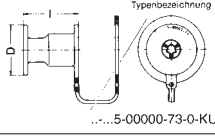
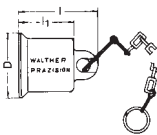
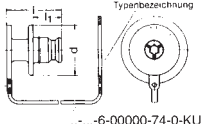
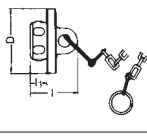
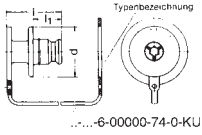
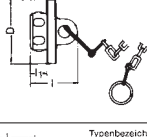
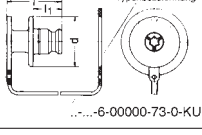
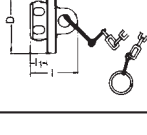
	page
Dust caps, Dust plugs	92 - 93
Air blowers	94
Air guns	95
Threaded hose connectors, Revolving connectors	96



Plastic version

Materials:
 Soft-PVC
 Polyurethane

Availability: ● Short ○ Medium ○ Long

	Materials	For Series / Type			Part No.	d	l	l ₁		Weight [g]
		low pressure	medium pressure	high pressure						
Dust caps for self-sealing adaptors and thru types adaptors	 Typenbezeichnung5-00000-74-0-KU	Polyurethane LP/LV-004 SP-006 LP-006 LP-007 LP-012 LP-019			LP-004-5-74-KU SP-006-5-74-KU LP-006-5-74-KU LP-007-5-74-KU LP-012-5-74-KU LP-019-5-74-KU	18 22 22 25 32 44	23 24 24 27 33,5 37,5		● ● ● ● ● ●	4 5 5 7 12 20
	 WÄLTER PRÄZISION	soft-PVC grey chains + rings: steel nickel-plated	SP-009 LP-032 LP-050		SP-009-5-74-KK LP-032-5-74-KK LP-050-5-74-KK	25,5 73 114,5	46 76 110	31 58 92	● ● ●	16 65 110
	 Typenbezeichnung5-00000-74-0-KU	soft-PVC grey		SG-006 MD-006 MD-007 MD-012 MD-019	SP-006-5-74-KU MD-006-5-74-KU MD-007-5-74-KU MD-012-5-74-KU LP-019-5-74-KU	22 22 25 32 44	24 24 27 33,5 37,5		● ● ● ● ●	7 7 7 11 20
	 WÄLTER PRÄZISION	soft-PVC grey chains + rings: steel nickel-plated		MD-032 MD-050	LP-032-5-74-KK LP-050-5-74-KK	73 114,5	76 110	58 92	● ●	65 110
	 Typenbezeichnung5-00000-73-0-KU	soft-PVC black		HP-004 HP-006 HP-010 HP-016 HP-020	HP-004-5-73-KU HP-006-5-73-KU HP-010-5-73-KU HP-016-5-73-KU HP-020-5-73-KU	23 30 34 41 45	27,5 33 38 43 45		● ● ● ● ●	7 11 16 20 25
	 WÄLTER PRÄZISION	soft-PVC grey chains + rings: steel nickel-plated		HP-032 HP-050	HP-032-5-74-KK HP-050-5-74-KK	73 114,5	76 110	58 92	● ●	65 110
Dust plugs for self-sealing couplings and thru type couplings	 Typenbezeichnung6-00000-74-0-KU	Polyurethane soft-PVC grey	LP/LV-004 SP-006 LP-006 LP-007 LP-012 LP-019		LP-004-6-74-KU SP-006-6-74-KU LP-006-6-74-KU LP-007-6-74-KU LP-012-6-74-KU LP-019-6-74-KU	18 22 22 25 32 44	24 25 30 34 43 46	12 13 18 18 23 26	● ● ● ● ● ●	5 7 8 10 19 34
	 WÄLTER PRÄZISION	soft-PVC grey chains + rings: steel nickel-plated	SP-009 LP-032 LP-050		SP-009-6-74-KK LP-032-6-74-KK LP-050-6-74-KK	34 82 112	35 60 66	19 32 37	● ● ●	19 160 240
	 Typenbezeichnung6-00000-74-0-KU	soft-PVC grey		SG-006 MD-006 MD-007 MD-012 MD-019	SP-006-6-74-KU MD-006-6-74-KU MD-007-6-74-KU MD-012-6-74-KU LP-019-6-74-KU	22 22 25 32 44	25 30 34 43 46	13 18 18 23 26	● ● ● ● ●	7 8 9 19 34
	 WÄLTER PRÄZISION	soft-PVC grey chains + rings: steel nickel-plated		MD-032 MD-050	LP-032-6-74-KK LP-050-6-74-KK	82 112	60 66	32 37	● ●	160 240
	 Typenbezeichnung6-00000-73-0-KU	soft-PVC black		HP-004 HP-006 HP-010 HP-016 HP-020	HP-004-6-73-KU HP-006-6-73-KU HP-010-6-73-KU HP-016-6-73-KU HP-020-6-73-KU	20 30 34 41 45	27,5 33 42 45 47	15,5 17 22 25 27	● ● ● ● ●	7 13 23 32 40
	 WÄLTER PRÄZISION	soft-PVC grey chains + rings: steel nickel-plated		HP-032 HP-050	HP-032-6-74-KK HP-050-6-74-KK	82 112	60 66	32 37	● ●	160 240

Dust caps – Dust plugs

97

pressure tight version

Materials:

Dichtungen

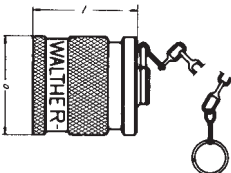
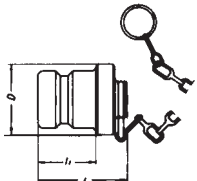
1 = NBR
2 = FKM
4 = EPDM

working pressure:
as matching Type

Standard:

11 = steel zinc-plated
19 = steel zinc-plated/oil burnished
12 = steel oil burnished

Availability: ● Short ○ Medium ○ Long

	Materials	For Series / Type			Part No.	d	l	l ₁		Weight [g]
		low pressure	medium pressure	high pressure						
Dust caps with chain and ring for self-sealing adaptors and thru type adaptors 	steel zinc-plated chains + rings: steel, nickel-plated	SP-006			SP-006-5-11-.	22	38		●	100
		LP-006			LP-006-5-11-.	25	45		●	120
		LP-007			LP-007-5-11-.	30	52		●	200
		LP-012			LP-012-5-11-.	40	58		●	340
		LP-019			LP-019-5-11-.	54	64		●	610
		LP-032			LP-032-5-11-.	82	88		●	2150
		LP-050			LP-050-5-11-.	112	103		●	4400
	steel zinc-plated/oil-burnished chains + rings: steel, nickel-plated		MD-006		MD-006-5-19-.	25	45		●	120
			MD-007		MD-007-5-19-.	30	52		●	200
			MD-012		MD-012-5-19-.	40	58		●	350
			MD-019		MD-019-5-19-.	54	64		●	610
			MD-032		MD-032-5-19-.	82	88		●	2150
			MD-050		MD-050-5-19-.	112	103		●	4400
	steel oil-burnished chains + rings: steel, nickel-plated			HP-006	HP-006-5-12-.	34	52		●	250
				HP-010	HP-010-5-12-.	46	60		●	400
				HP-016	HP-016-5-12-.	56	73		●	870
				HP-020	HP-020-5-12-.	62	73		●	1000
				HP-032	HP-032-5-12-.	90	94		●	2650
Dust plugs with chain and ring for self-sealing couplings 	brass passivated	LP-004			LP-004-6-21	18	28	16	●	36
	steel zinc-plated chains + rings: steel, nickel-plated	SP-006			SP-006-6-11	22	33	20	●	60
		LP-006			LP-006-6-11	25	38	20	●	75
		LP-007			LP-007-6-11	25	38	23,3	●	70
		LP-012			LP-012-6-11	30	44	29,5	●	110
		LP-019			LP-019-6-11	40	50	32,5	●	200
		LP-032			LP-032-6-11	65	58	39	●	580
		LP-050			LP-050-6-11	100	66	46	●	1650
	steel oil-burnished chains + rings: steel, nickel-plated		MD-006		MD-006-6-12	25	38	21,7	●	70
			MD-007		MD-007-6-12	25	38	25	●	60
			MD-012		MD-012-6-12	30	44	31,5	●	95
			MD-019		MD-019-6-12	40	50	35,5	●	200
			MD-032		MD-032-6-12	65	58	41	●	520
			MD-050		MD-050-6-12	100	70	50	●	1630
	steel oil-burnished chains + rings: steel, nickel-plated			HP-006	HP-006-6-12	30	48	30,5	●	100
				HP-010	HP-010-6-12	40	50	36	●	150
				HP-016	HP-016-6-12	40	58	41	●	210
				HP-020	HP-020-6-12	40	60	43	●	250
				HP-032	HP-032-6-12	62	71,5	49,5	●	570

98 Air Blowers

Blast pipes, nozzles,
self-sealing, with lever operation,
flexible

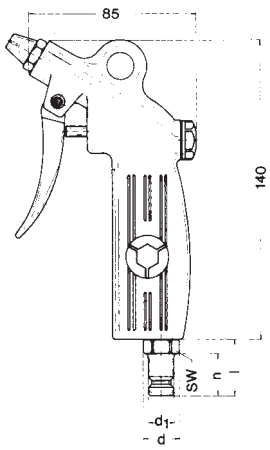
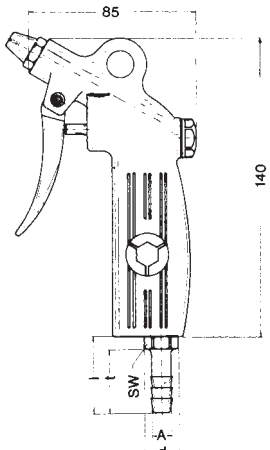
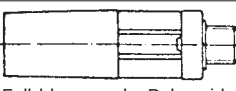
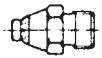
Availability: ● Short ○ Medium ○ Long

	Material	Part No.	Connection A	d	l	t		Weight [g]
Hose tailpiece	Polyamide	95001-9-SL009	9 mm	33	153	30	●	180
		95001-9-SL011	11 mm	33	153	30	●	180
		95001-9-SL013	13 mm	33	153	30	●	190
		95001-9-SL016	16 mm	33	158	35	●	220
		95001-9-SL019	19 mm	33	158	35	●	220
			Nozzle size 3 mm, other nozzles of 4 mm, 6 mm and 8 mm available on request					
Hose tailpiece	Brass passivated	95002-9-SL006	6 mm	22	126	25	●	200
		95002-9-SL009	9 mm	22	138	30	●	210
		95002-9-SL011	11 mm	22	138	30	●	220
		95002-9-SL013	13 mm	22	138	30	●	220
			Nozzle size 2 mm, other nozzles of 2,5 mm, 3 mm, 4 mm and 5 mm available on request					
	Soft-PVC	95000-9-SL009	9 mm	24	135	30	●	100
		95000-9-SL011	11 mm	24	135	30	●	100
		95000-9-SL013	13 mm	24	135	30	●	110
			Also available with suspension hook					
Thru type adaptor connection	Polyamide	95001-9-ST006	LP-006-1	33	143	20	●	180
		95001-9-ST007	LP-007-1	33	146,5	23,3	●	190
		95001-9-ST012	LP-012-1	33	152,5	29,5	●	220
			Nozzle size 3 mm, other nozzles of 4 mm, 6 mm and 8 mm available on request					
	Brass passivated	95002-9-ST006	LP-006-1	21	128	20	●	220
		95002-9-ST007	LP-007-1	21	133	23,3	●	230
			Nozzle size 2 mm, other nozzles of 2,5 mm, 3 mm, 4 mm and 5 mm available on request					
	Soft-PVC	95000-9-ST006	LP-006-1	24	123	20	●	100
		95000-9-ST007	LP-007-1	24	126,5	23,3	●	110
			Also available with suspension hook					

Materials:

gun body – Aluminium
nozzle 1,5 mm – brass nickel-plated
extension piece – brass nickel-plated
plug connection (thru type adaptor) – steel, hardened, zinc-plated
hose tailpiece – brass passivated

Availability: ● Short ○ Medium ○ Long

	Part No.	Connection A	SW	l	t	n	d	d ₁		Weight [g]
	95003-9-ST006	Thru type adaptor LP-006-1	14	26		20	15,5	12	●	250
	95003-9-ST007	LP-007-1	17	29,5		23,3	18,9	14	●	260
	95003-9-SL006	Hose tailpiece 6 mm	14	31	25		15,5		●	250
	95003-9-SL009	9 mm	17	36	30		18,5		●	250
	95003-9-SL011	11 mm	17	36	30		18,5		●	260
	95003-9-SL013	13 mm	17	36	30		18,5		●	270
	95004-9-LG100	Length 100 mm	For better aiming in inaccessible places. Air consumption as regular nozzle.						●	40
	95004-9-LG150	150 mm							●	46
	95004-9-LG250	250 mm							○	60
	95012	Muffling nozzles reduce noise substantially, without reduction of blowing force. The air consumption is approx. 50% higher than a regular nozzle.							●	6
	95013	This nozzle increases the quantity of blown air 3 or 4-fold by sucking more air. The full jet is especially suitable for blowing off large areas (e.g. drying). The air consumption is approx. like the muffling nozzle.							●	12
	95014	Around the blowing jet a cone-sharper air jacket is located, which prevents recoiling of whirled up particles							●	6
	95015	The protection shield, 70 mm dia, made of plastic, serves as protection for the eyes against recoiling, sharp articles. It is recommended by associations for safety-at-work.							●	9

Threaded Hose Connector

21 = brass passivated
40 = Polyacetals (POM)

40 = Polyacetals (POM)

- Short

● Medium

☐ Long

Threaded Hose Connector

Material:
brass passivated

Material:
Polyacetals (POM)

[illegible]

WALTHER-PRÄZISION develops and manufactures mono and multi couplings as well as docking systems. These single or multi-channel media interfaces are used wherever pipe systems for fluids, vapours, gases, electric or optical signals as well as power current have to be disconnected and connected quickly and safely.

Do you wish confidential project consultation on-site or detailed information? Please feel free to call or send an e-mail to entwicklung@walther-praezision.de. We are at your service!

Selected examples	page
Hook-in couplings	103
Mono couplings with proximity initiators	103
Hock-in couplings	104
Couplings with PTFE seals	104
Tear-away couplings	105
Multi couplings	106

You require quality – we construct and manufacture in compliance with

- DIN EN ISO 9001
- EN ISO 13485 (medical technology)
- EN 9100 P2 (aerospace technology)
- KTA 1401 (nuclear technology)

You need approved valves – we deliver according to:

- ATEX (explosion protection)
- DVGW (gas, water)
- FDA (Food and Drug Administration)
- SAE J2600 (Automotive, hydrogen fuelling)
- DIN EN 60068-2-14 (Automotive, micro hydraulics)
- TA-Air according to VDI 2440
- DIN EN 10204-3.1 (acceptance test certificate)
- DIN EN 61373 (rail vehicles)
- DNV design type approvals (navy, offshore)

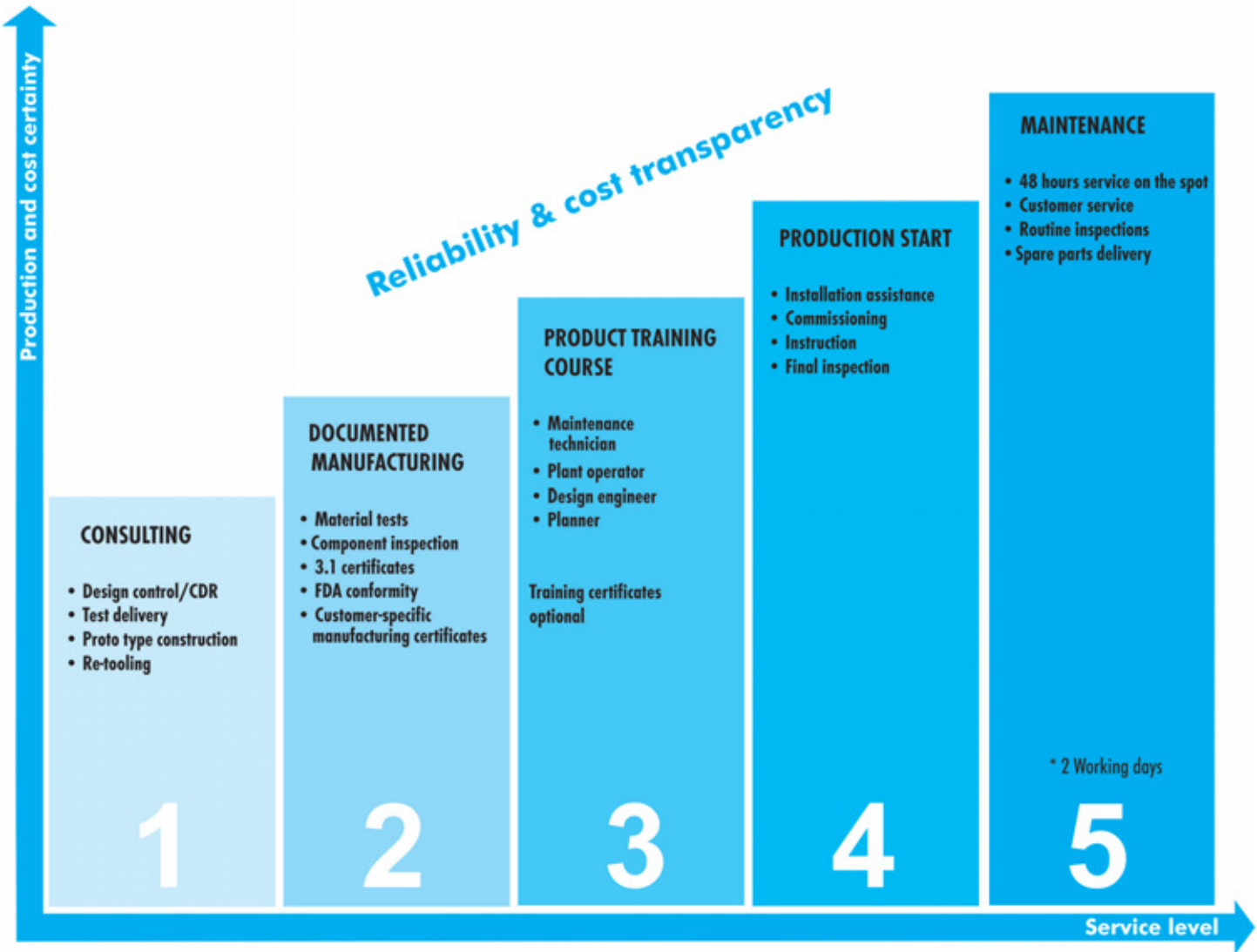
Your advantages:

- Cooperation with a partner who has built up years of experience regarding media interfaces with one or more channels.
- You draw your supply from the world's largest standard program with more than 400.000 varieties, mainly deliverable ex stock.
- You receive quick coupling systems which meet extensive quality and approval requirements
- You profit from a modern construction department with quick internet-based communication channels
- Made in GERMANY

Your benefits:

- WALTHER-PRÄZISION supplies your media interfaces
- WALTHER-PRÄZISION designs and constructs accessory to your project implementation in 2D/3D
- WALTHER-PRÄZISION follows the approval procedures

To ensure an optimum availability of WALTHER quick coupling systems during the entire operating time, WALTHER PRÄZISION offers individual service concepts. They also include an express factory reconditioning or re-tooling of tool changing systems for industrial robots.



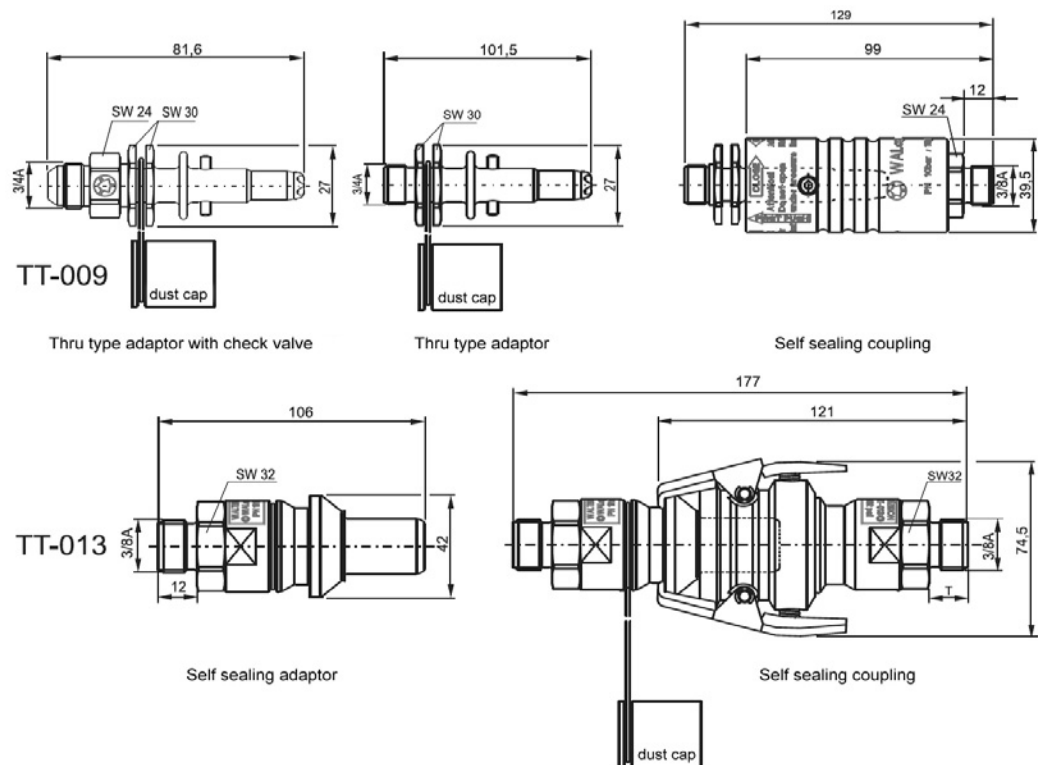
Do you have any questions regarding the services of WALTHER-PRÄZISION?
Our customer service is always available to answer your questions. Phone: +49 (0) 2129 567-402



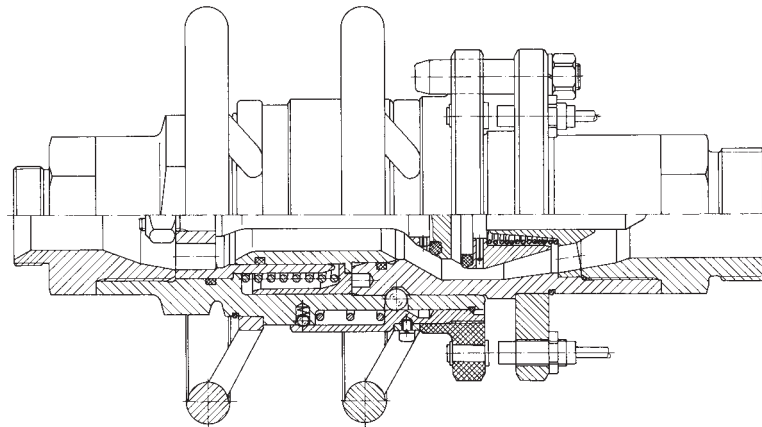
Please find further information to this topic on our web site.

Quick couplings for cryogenic

Quick couplings for cryogenic applications
Quick coupling for cryogenic gas application, mainly in the laboratory sector at temperatures down to $-200\text{ }^{\circ}\text{C}$ (e. g. LN₂) and a working pressure up to 10 bar. The valve is oil and fat free and thus suitable for many gases. Connection takes place via bayonet locking (TT-009) or with a catch locking (TT-013), simple, quick and safe.



Couplings with Proximity Switches



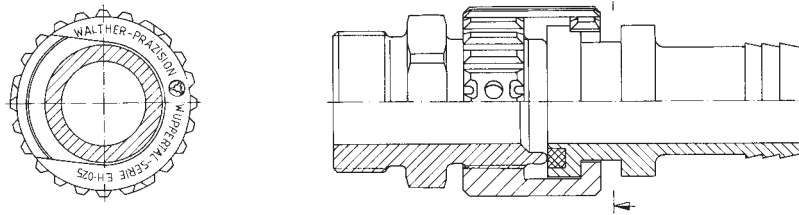
A control of the coupling position is possible when proximity switches are integrated into the coupling. As required the following data can be inquired and controlled:

- yes/no-indication of the coupled and locked state
- yes/no-indication of the opened state of the valves
- identification which of several free halves is connected with which counterpart by coding with several sensors and contacts (see drawing).

By BCD-coding of the switches product processing can be checked and monitored by computers.

Request further information.

Hook-in Couplings



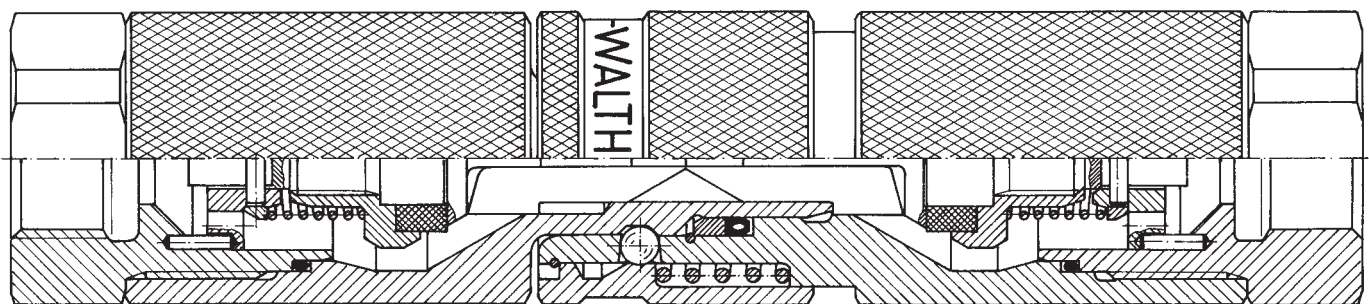
The thru-type adaptor with its front face seal is hooked into the slit on the coupling nut. When the nut is tightened the seal is pressed against the face of the coupling housing. This design allows a free media flow without interference from valves.

The advantages of a hook-in coupling are:

- suitability for paste and powdery media
- easy cleaning of couplings
- extremely short design
- due to the low axial couple stroke also applicable for pipe lines with limited movement
- very easy maintenance
- nearly smooth inner bore without recesses, thus suitability for food because all medium touched surface can be cleaned easy and without problems (no dirt traps).

Request further information.

Couplings with PTFE Seals

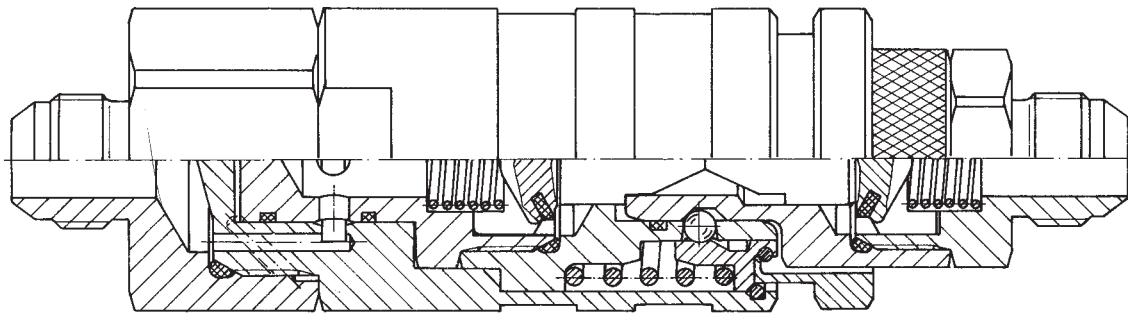


Couplings with PTFE seals have to show other constructional features as such which are outlined for elastomers to make up for the bad readjusting properties of the sealing material PTFE. The couplings of the TE-Series offer this feature and can be used for

- especially aggressive media
- media combinations which have no common elastomeric seal
- temperatures up to +250 °C (+482 °F).
- temperatures up to -50 °C (-58 °F).

Request further information.

Tear-away Couplings



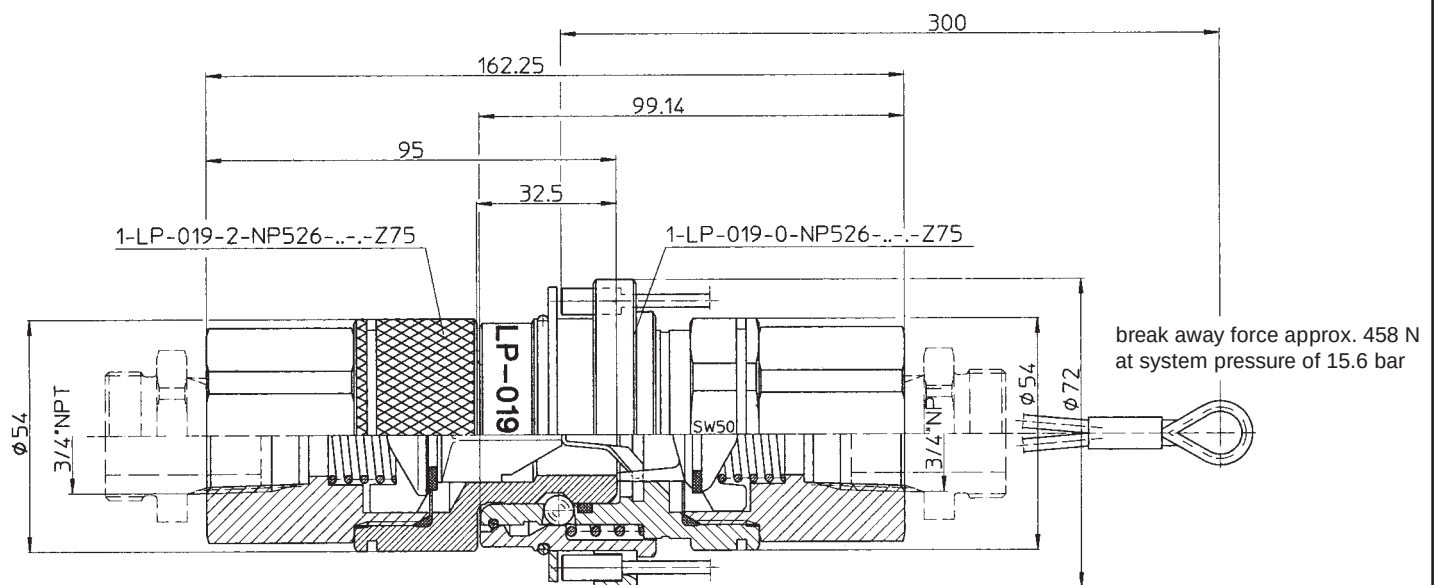
Tear-away couplings protect environment and expensive loading equipment from damage resulting from destruction of media lines at high tensile strain. Mobile facilities which are being filled, e.g. tank lorries, wagons or ships can be moved when insufficient secured or emergency situations occur, before lines were properly disconnected.

Tear-away couplings avoid damages by

- automatic disconnection on tensile loads, thus preserving the loading equipment from damages
- sealing both line sides automatically during disconnection and consequently prevent medium loss
- releasing alarm through integrated proximity switches.

Contrary to many other kinds of safety devices against “tear away”, these quick connect couplings are re-usable and can be tested on all functions at any time.

Approved break-away couplings for LPG stations

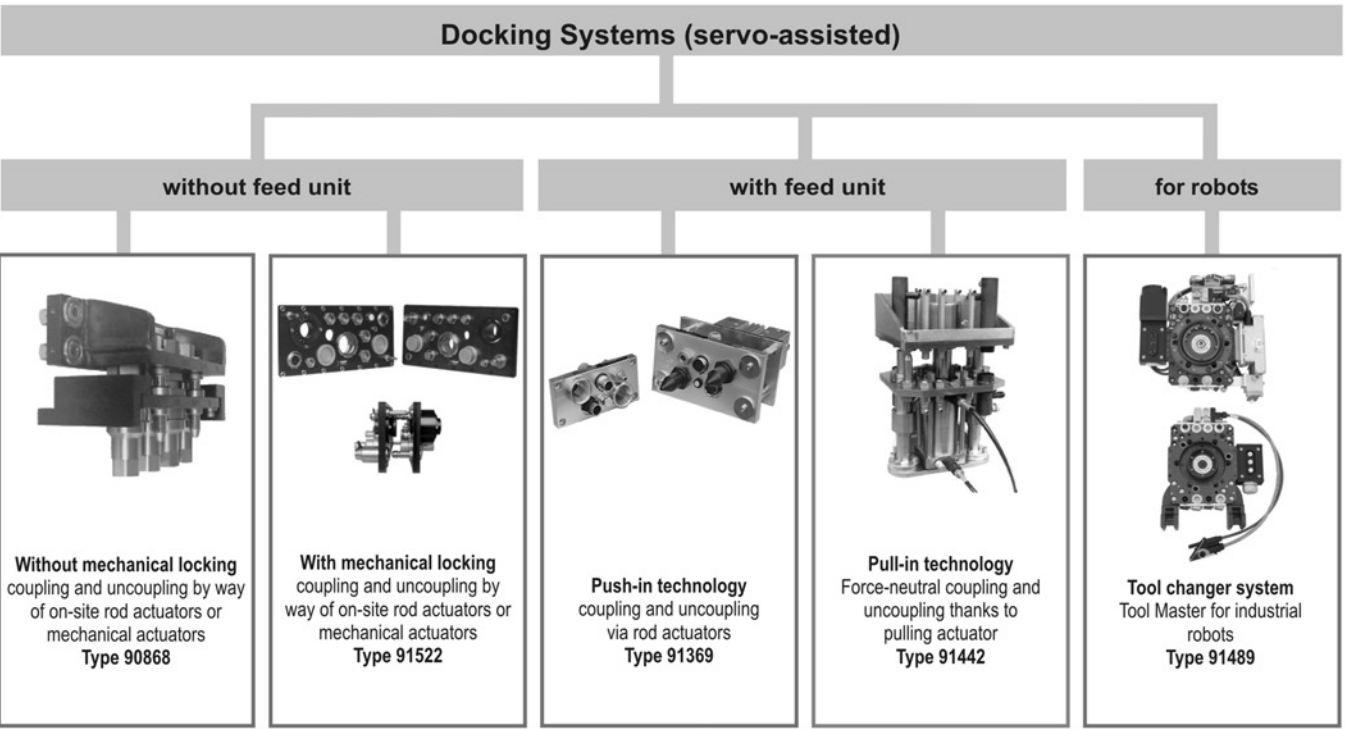
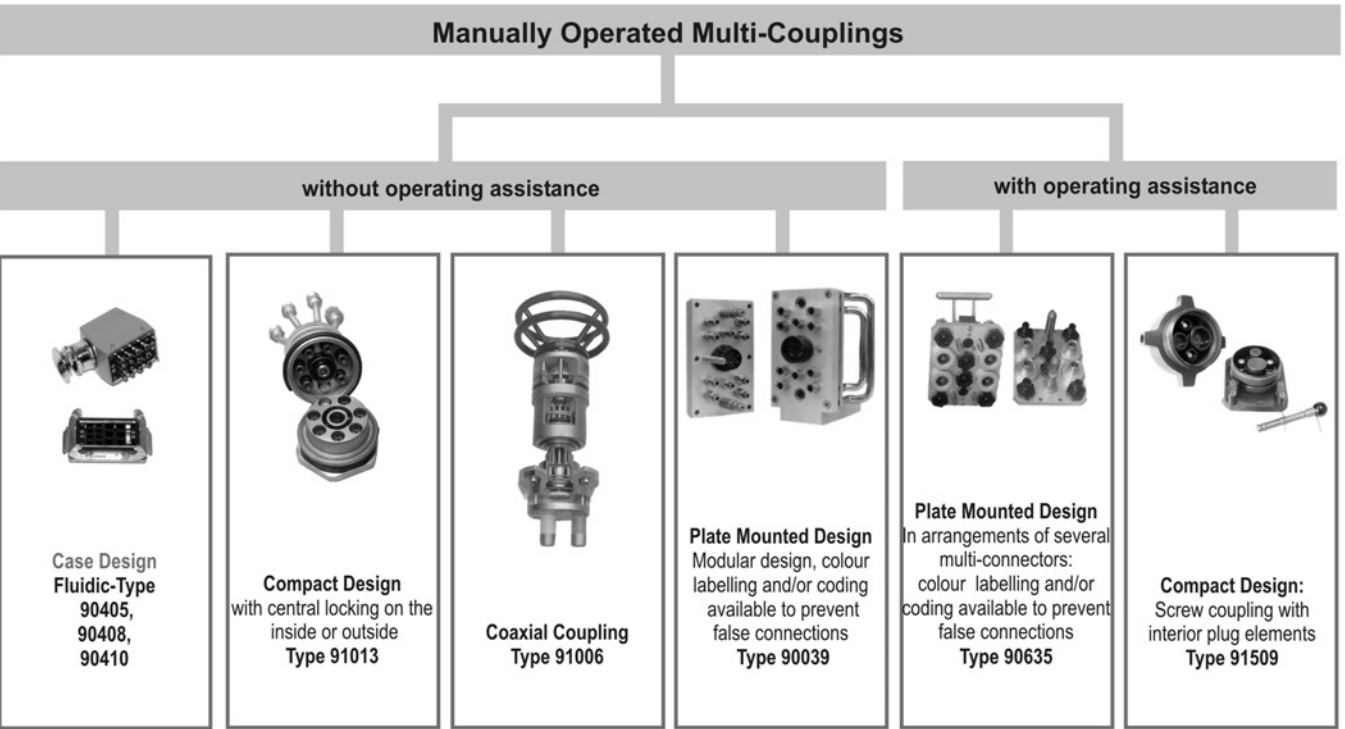


To avoid release of gas to atmosphere by hose rupture because of prematurely moving vehicles, the requirement for quick disconnection points was established. With certificate of 3/9/2001 the German Federal Authority TÜV approved the break-away coupling LP-019-Z75 in stainless steel and brass to be a suitable safety service.

Approval No. **TÜV.ST.BCD.006 – 99.LPG.PN 40**

Muliti-Couplings & Docking Systems

Multi-couplings provide for simultaneous manual or automated operation of several pneumatic, hydraulic or electrical lines. They are used wherever several lines need to be connected quickly and safely. Multi-connectors and/or docking systems com-prise a fixed and a free half. The free half moves to the fixed half during the connection process. The respective arrangement of the coupling-elements in the coupling-system is designed to match the respective requirements. Automated production, testing, controlling and operating processes are preferred applications for multi-couplings and docking systems. Guide systems ensure exact alignment. The fixed arrangement of the connector elements on the coupling-system eliminates the risk of false connections.



Tool changing system for industrial robots

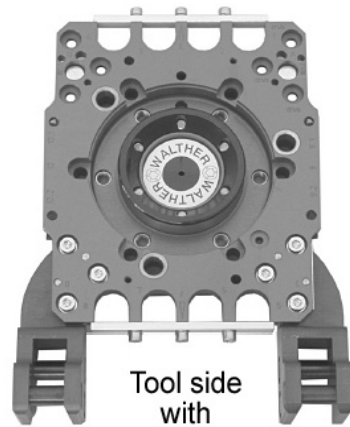
Due to its modular system, the WALTHER tool changing system is especially designed for individual customer wishes. It offers different fields of application for welding as well as for gripping tools and can be equipped with different electric or fluid transmission elements, depending on the purpose. A gravity parking station for the reception of welding pliers at a robot cell which allows a safe parking is available, matching to the tool changer. Both, tool changer and parking station, are modularly constructed and can be assembled with single components.

Please feel free to request further information to our products.

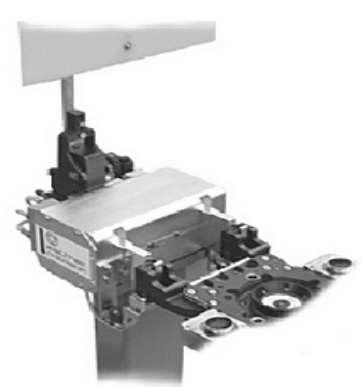
Tool changing system TOOL MASTER



Robot side

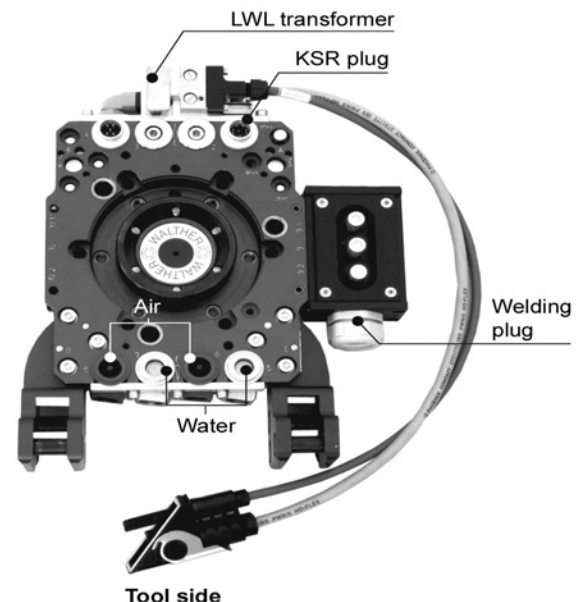
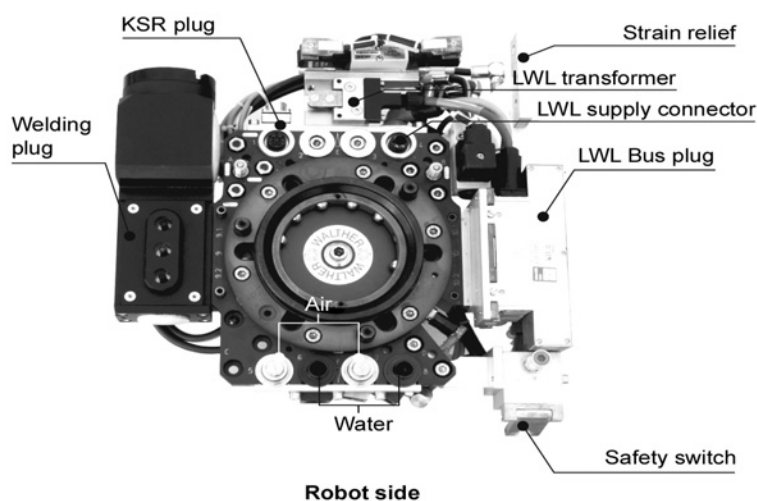


Tool side
with
parking arms

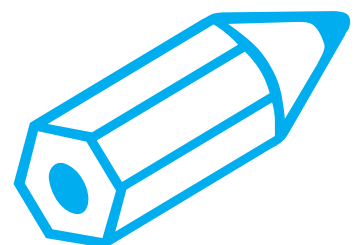


Parking station Type 95813

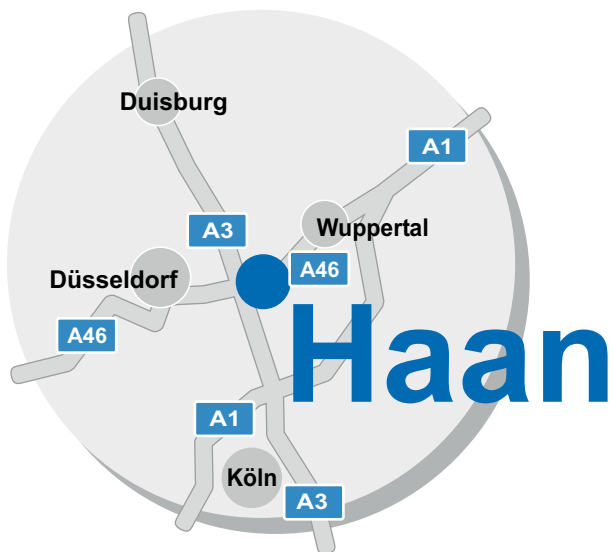
Sub modules for TOOL MASTER



Please feel free to request further information to our products.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

International Representations



With more than 20 bases in Germany and more than 30 further partners abroad
WALTHER-PRÄZISION is always close by.

You will find all current addresses on the internet under:
www.walther-praezision.de/english/index.html



Please find the national and international contact addresses as well
as further possibilities to get into contact with us on our web site.

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