

### Definitions

Abbreviation	Definition			
Pressure specifications				
PN	Nominal pressure	Nominal pressure after temperature compensation at 15 °C (59 °F)		
PS	Max. allowable operating pressure	Maximum allowable operating pressure acc. to Pressure Equipment Directive 2014/68/EU, Article 2 paragraph 8		
PT	Hydrostatic test pressure	Hydrostatic test pressure acc. to Pressure Equipment Directive 2014/68/EU, Annex I no. 7.4		
PP	Pilot pessure	Actuation pressure for hydraulic and pneumatic components		
PC	Cracking pressure	Pressure at which the check valve opens and the first indication of flow occurs		
WP	Working pressure	'Working pressure' means the maximum pressure to which a component is designed to be subjected to and which is the basis for determining the strength of the component under consideration		
MAWP	Max. allowable working pressure	Max. allowable operating pressure at which the weakest point of the system or the vessel (e.g. cylinder valve) can operate at a certain temperature during normal operation		
Dimensions				
L1, L2, L3	Length specification			
D1, D2, D3	Diameter specification			
A/F(1), A/F(2)	Wrench size specification			
Ports				
A / X	Customer-specific port (test piece, sample, cylinder valve, handwheel respiratory protective equipment)			
B1, B2, B3	Media ports			
C1, C2, C3	Gas recirculation ports			
P1, P2, P3	Pilot pressure ports			
MA1, MA2	Measuring ports			
Q	Drain port filter			
G	Mounting bores			
Others				
DN	Nominal size (DN) acc. to Pressure Equipment Directive 2014/68/EU, whereby the largest, pressurized diameter of the media or pilot pressure connections of the WEH <sup>®</sup> Device (A, B1, B2, B3 or C1, C2, C3 and P1, P2, P3) which faces the customer's pipe system, is relevant.			
μm	Max. diameter of the filtered particle			
Κv	Is the discharge of water in m <sup>3</sup> /h at a pressure drop of 1 bar (14.5 psi), acc. to DIN/EN 60534-2			
Cv	Is the discharge of water in gallons per minute at a pressure drop of 1 psi, acc. to DIN/EN 60534-2			
IR	Infrared data interface			
ENR	Exchangeable data interface (exchangeable nozzle receiver)			
TS	Maximum allowable temperature acc. to Pressure Equipment Directive 2014/68/EU, Article 2 paragraph 9			



### Definitions

Abbreviation	Definition
Breakaway force	Is the force range, in which the breakaway releases
NC	Normally closed (initial position of shut-off valve)
NO	Normally open (initial position of shut-off valve)

## **Technical explanations**

Term	Definition
Temperature range	Is the temperature range in which the WEH® Product can be used.
Media temperature range	Is the temperature range of the medium used, which can flow through the WEH <sup>®</sup> Product (may change depending on the time of measurement).
Ambient temperature range	Is the temperature range of the environment in which the WEH® Product can be used.
Leak rate	Is the maximum external leak rate, which the $WEH^{\textcircled{B}}$ Product exhibits in delivery condition.
Internal leak rate	The internal leak rate depends, among other things, on type of application, medium and pressure difference on the WEH® Product. On request it can be specified more precisely.
Max. side load	Is the max. allowable sum of all external forces that may act on the device under intended use. <b>Note:</b> External forces can affect the life time of WEH <sup>®</sup> Products and can cause damage. Tensile and transverse loads as well as vibrations and pressure impacts need to be considered, e.g. by user side measures such as on site mountings and similar. Therefore, lateral forces such as whipping hoses or other equipment must be avoided. WEH <sup>®</sup> Products should be installed in such a way, that lateral forces which could lead to leakage or damage can not occur. Special applications require a special consultation before selecting the product.
Products with pneumatic actuation	The customer has to ensure there is adequate axial movement when pneumatically actuated WEH® Products are used in automated systems, see maximum side load. Ideally the products should be mounted with a floating joint or introduced individually to prevent the possibly existing clamping jaws getting blocked or jammed in the thread of the test piece.
Sealing material	On request the WEH <sup>®</sup> Product can be adapted to customer specific applications regarding to the sealing materials used. The clarification of the media compatibility and suitability of the adapted WEH <sup>®</sup> Product for the final application is always the responsibility of the end user.
Corrosion resistant	WEH <sup>®</sup> Products are designed for use in temperate climate zones - with low levels of humidity and salinity in the air. An accelerated formation of rust or corrosion may occur at or near the sea. Therefore, reduce the inspection interval recommended for normal use and send in the WEH <sup>®</sup> Product for maintenance immediately if you notice increased soot, rust or corrosion.
Storage / life time of components	There are certain requirements for every WEH <sup>®</sup> Product. WEH <sup>®</sup> Products are generally products which may be subject to wear and fatigue during operation and depending on your individual application/use. For details - in particular regarding the corresponding minimum inspection and maintenance intervals – please refer to the respective operating instructions for the WEH <sup>®</sup> Product.



## Further explanations

Subject	Definition
Technical data	Unless otherwise stated, the technical data in catalogs, data sheets and operating instructions are based on tests with nitrogen that are in the development phase or at the end of development. Leakage data are based on measurements with helium.
Intended use	For the intended use of WEH <sup>®</sup> Products, please refer to the respective operating instructions. The following applications are generally excluded for WEH <sup>®</sup> H <sub>2</sub> and CNG products, unless these are expressly permitted in the operating instructions: • aerospace applications, e.g. in aircrafts • shipping applications • applications offshore and in littoral areas • applications within defense and weapons technology
Safe product selection	Our WEH <sup>®</sup> Products are designed to be operated by qualified professional users (insofar as WEH <sup>®</sup> Products are also designed to be operated by other users in individual cases, this is explicitly stated in the corresponding operating instructions). Please note that WEH does not know your system and therefore - also due to the large number of different potential applications of WEH <sup>®</sup> Products - cannot perform tests on all potential types of application. You alone are responsible for the selection, configuration and suitability of WEH <sup>®</sup> Products, especially according to the requirements of your system. Before purchasing WEH <sup>®</sup> Products, please particularly ensure that our products are compatible with your intended use, your performance data, your material and fluids, your system concept and your system limits according to our product specifications. Please also consider your technical and legal requirements for operation, handling and maintenance. The quality and safety of WEH <sup>®</sup> Products is our highest priority. For this reason, WEH <sup>®</sup> Products may not be used outside the specifications in the relevant data sheets and product descriptions. If you are not sure whether the WEH <sup>®</sup> Product is suitable for your system and intended use, please contact us in advance. We also strongly recommend that you refrain from using third-party spare parts or a combination of WEH <sup>®</sup> Products with unsuitable third-party products. You alone are responsible for reviewing the suitability of third-party products. WEH <sup>®</sup> Products and WEH <sup>®</sup> Products and WEH <sup>®</sup> Products with unsuitable third-party products. You alone are responsible for reviewing the suitability of third-party products. WEH <sup>®</sup> Products and WEH <sup>®</sup> Products and WEH <sup>®</sup> Products.
Explanation on the Pressure Equipment Directive	In general, WEH <sup>®</sup> Products with a maximum allowable operating pressure of more than 0.5 bar (PS) fall within the scope of application of the Pressure Equipment Directive 2014/68/EU, are generally classified as pressure accessories in accordance with Article 2 (5) of the same and are considered to be similar to piping. These WEH <sup>®</sup> Products may not be used as safety accessories. Furthermore, it is pointed out, that these WEH <sup>®</sup> Products are designed and placed on the market in accordance with the requirements of Article 4 (3) of the Pressure Equipment Directive 2014/68/EU. For some products a different classification and/or categorisation is required or can be conducted on request. In these cases, if legally required, a conformity assessment procedure in accordance with Annex III of the Pressure Equipment Directive 2014/68/EU can and will also be conducted and the conformity can be declared by means of an EU Declaration of Conformity is enclosed with the product.
External change management	WEH reserves the right to update, optimise and adjust its products continuously. This may result in corresponding changes of the product. Customers will be informed proactively or unsolicited by WEH only in individual cases about product updates, product optimisations and/or product adaptations that have been carried out. You are free to contact WEH at any time to request information about any product updates, product optimisations and/or product adjustments.



# Symbols

Туре	Pneumatic - NC	Pneumatic - NO	Manual
Shut-off valve			
Shut-off valve with venting			
Shut-off valve with check valve		-	
Shut-off valve with venting and check valve		-	