Filter elements for the installation into old EPE filter housings

Type 1.; 2. and 3. filter elements

RE 51507
Edition: 2022-12

Filter_51_P_sw_MN

- Sizes according to Hengst standard:
  1.0004 ... 1.0270C; 1.10 ... 1801
  2.0003 ... 2.0145; 2.10 ... 2.900; 2.Z30 ... 2.Z180
  3.0003
- Differential pressure resistance up to 330 bar [up to 4786 psi]
- Filter rating: 1 to 800 µm
- Filter area: up to 4.68 m² [7.254 in²]
- Operating temperature: –10 °C ... +100 °C [+14 °F ... +212 °F]

Features

- Filter media made of glass fiber material (optionally water-absorbing), filter paper, wire mesh, non-woven material and non-woven metal fiber for numerous fields of application
- Cleanable wire mesh filter media
- Attainable oil cleanliness up to ISO 10/6/4 (ISO 4406)
- High dirt holding capacity and filtration performance due to multi-layer glass fiber technology and simultaneously a low initial differential pressure (ISO 3968)
- Extended product range for non-mineral oil based fluids
- Filter elements with high differential pressure stability

Contents

Ordering codes
Filter element

Filter element type 1.(E) size 10 ... 225/450

01	02	03		04	05	06		07		08
1			**–**	**A**	**0**	**0**	**–**	**0**	**–**	**0**

Filter element

01	Design **with** valve in the filter housing	**1.**

Size

02	According to **Hengst standard**	**10** **18** **32** **56** **90** **140** **225** **225/360** **225/450**

Filter rating in µm

03	**Nominal**	Stainless steel wire mesh, cleanable	**G10** **G25** **G40** **G60** **G100** **G200** **G500** **G800**
		Filter paper, not reusable (not cleanable)	**P10** **P25**
	Absolute **(ISO 16889; $\beta_{x(c)}$ ≥200)**	Glass fiber material H...XL, not reusable, not cleanable Only available in combination with stainless steel material	**H3XL** **H6XL** **H10XL** **H20XL**
		Glass fiber material PWR... Generation 5, not reusable, not cleanable Not available in combination with stainless steel material	**PWR1** **PWR3** **PWR6** **PWR10** **PWR20**

Differential pressure

04	Max. permissible differential pressure of the filter element 30 bar *[435 psi]*	**A**

Element design

05	Standard adhesive	**0**

Ordering codes
Filter element

Filter element type 1.(E) size 10 ... 225/450

01	02	03		04	05	06		07		08
1			**–**	**A**	**0**	**0**	**–**	**0**	**–**	**0**

Element design

06	Standard material	**0**

Bypass valve

07	**Without** bypass valve	**0**

Seal

08	**Without** seal	**0**

Further filter ratings and seal materials are available upon request.
More detailed information on Hengst filter material configuration is available in RE 51548.

Order example:
1.32 PWR10-A00-0-0

Material no.: R928045217

Other versions available upon request.

Ordering codes
Filter element

Filter element type 1. size 0004 ... 0012

01	02	03		04	05	06		07		08
1.			**–**	**A**	**0**	**0**	**–**	**5**	**–**	**M**

Filter element

01	Design	**1.**

Size

02	According to **Hengst standard**	**0004** **0006** **0010** **0012**

Filter rating in µm

03	**Nominal**	Stainless steel wire mesh, cleanable	**G10** **G25** **G40** **G60** **G100** **G200** **G500** **G800**
		Filter paper, not reusable (not cleanable)	**P10** **P25**
	Absolute **(ISO 16889; $\beta_{x(c)}$ ≥200)**	Glass fiber material PWR... Generation 5, not reusable, not cleanable Not available in combination with stainless steel material	**PWR1** **PWR3** **PWR6** **PWR10** **PWR20**

Differential pressure

04	Max. permissible differential pressure of the filter element 30 bar *[435 psi]*	**A**

Element design

05	Standard adhesive	**0**

Ordering codes
Filter element

Filter element type 1. size 0004 ... 0012

01	02	03		04	05	06		07		08
1.			**–**	**A**	**0**	**0**	**–**	**5**	**–**	**M**

Element design

06	Standard material	**0**

Bypass valve

07	**With** bypass valve – cracking pressure 2.5 bar *[36.3 psi]*	**5**

Seal

08	NBR seal	**M**

Further filter ratings and seal materials are available upon request.
More detailed information on Hengst filter material configuration is available in RE 51548.

Order example:
1.0006 PWR10-A00-5-M

Material no.: R928025249

Other versions available upon request.

Ordering codes
Filter element

Filter element type 1. size 0005; 0013 ... 0270C

01	02	03		04	05	06		07		08
1.			**–**	**A**			**–**	**0**	**–**	

Filter element

01	Design	**1.**

Size

02	According to **Hengst standard**	**0005** **0008** **0013** **0015** **0018** **0020** **0030** **0045** **0055** **0059** **0060** **0061** **0145** **0200** **0270** **0145C** 1) **0200C** 1) **0270C** 1)

Filter rating in µm

03	**Nominal**	Stainless steel wire mesh, cleanable	**G10** **G25** **G40** **G60** **G100** **G200** **G500** **G800**
		Filter paper, not reusable (not cleanable)	**P10** **P25**
	Absolute **(ISO 16889; $\beta_{x(c)}$ ≥200)**	Glass fiber material H...XL, not reusable, not cleanable Only available in combination with stainless steel material	**H3XL** **H6XL** **H10XL** **H20XL**
		Glass fiber material PWR... Generation 5, not reusable, not cleanable Not available in combination with stainless steel material	**PWR1** **PWR3** **PWR6** **PWR10** **PWR20**
	Water-absorbing	Water-absorbing AS, not reusable, not cleanable Only configurable with a max. differential pressure of 30 bar *[435 psi]* Only suitable for use in HLP and HEES fluids	**AS3** **AS6** **AS10** **AS20**

Differential pressure

04	Max. permissible differential pressure of the filter element 30 bar *[435 psi]*	**A**
	Max. permissible differential pressure for the filter element 60 bar *[870 psi]* only possible up to nominal size 0030	**D**
	Max. permissible differential pressure for the filter element 50 bar *[725 psi]* only possible for nominal size 0060 and 0095	**T**

Ordering codes
Filter element

Filter element type 1. size 0005; 0013 ... 0270C

01	02	03		04	05	06		07		08
1.			**–**	**A**			**–**	**0**	**–**	

Element design

05	Standard adhesive	**0**
	Special adhesive, improved temperature and media resistance Only configurable in connection with FKM seal	**H**

Element design

06	Standard material	**0**
	Stainless steel Only configurable in connection with special adhesive and FKM seal	**V**

Bypass valve

07	**Without** bypass valve	**0**

Seal

08	NBR seal	**M**
	FKM seal	**V**

1) Only configurable with glass fiber material "PWR...". Not configurable with special adhesive "H" and stainless steel element design "V"

Further filter ratings and seal materials are available upon request.
More detailed information on Hengst filter material configuration is available in RE 51548.

Order example:
1.0013 PWR10-A00-0-M

Material no.: R928005513

Other versions available upon request.

Ordering codes
Filter element

Filter element type 1. size 360 ... 1801

01	02	03		04	05	06		07		08
1.			**–**				**–**	**0**	**–**	

Filter element

01	Design	**1.**

Size

02	According to **Hengst standard**	**360** **361** **560** **561** **900** **901** **1400** **1401** **1800** **1801**

Filter rating in µm

03	**Nominal**	Stainless steel wire mesh, cleanable	**G10** **G25** **G40** **G60** **G100** **G200** **G500** **G800**
		Filter paper, not reusable (not cleanable)	**P10** **P25**
	Absolute **(ISO 16889; $\beta_{x(c)}$ ≥200)**	Glass fiber material H...XL, not reusable, not cleanable Only available in combination with stainless steel material	**H3XL** **H6XL** **H10XL** **H20XL**
		Glass fiber material PWR... Generation 5, not reusable, not cleanable Not available in combination with stainless steel material	**PWR1** **PWR3** **PWR6** **PWR10** **PWR20**

Differential pressure

04	Max. permissible differential pressure of the filter element 30 bar *[435 psi]*	**A**
	Max. permissible differential pressure of the filter element 60 bar *[870 psi]*	**D**

Ordering codes
Filter element

Filter element type 1. size 360 ... 1801

01	02	03		04	05	06		07		08
1.			**–**				**–**	**0**	**–**	

Element design

05	Standard adhesive	**0**
	Special adhesive, improved temperature and media resistance Only configurable in connection with FKM seal	**H**

Element design

06	Standard material	**0**
	Stainless steel Only configurable in connection with special adhesive and FKM seal	**V**

Bypass valve

07	**Without** bypass valve	**0**

Seal

08	NBR seal	**M**
	FKM seal	**V**

Further filter ratings and seal materials are available upon request.
More detailed information on Hengst filter material configuration is available in RE 51548.

Order example:
1.560 PWR10-A00-0-M

Material no.: R928028040

Other versions available upon request.

Ordering codes
Filter element

Filter element type 2. size 10 ... 900

01	02	03		04	05	06		07		08
2.			**–**				**–**	**0**	**–**	

Filter element

01	Design	**2.**

Size

02	According to **Hengst standard**	**10** **18** **32** **56** **90** **140** **180** [1)] **225** **360** **460** **560** **900**

Filter rating in µm

03	**Nominal**	Stainless steel wire mesh, cleanable	**G10** **G25** **G40** **G60** **G100** **G200** **G500** **G800**
		Filter paper, not reusable (not cleanable)	**P10** **P25**
		Non-woven material, not reusable (not cleanable)	**VS25**
	Absolute **(ISO 16889; $\beta_{x(c)}$ ≥200)**	Glass fiber material H...XL, not reusable, not cleanable Only available in combination with stainless steel material	**H3XL** **H6XL** **H10XL** **H20XL**
		Glass fiber material PWR... Generation 5, not reusable, not cleanable Not available in combination with stainless steel material	**PWR1** **PWR3** **PWR6** **PWR10** **PWR20**

Ordering codes
Filter element

Filter element type 2. size 10 ... 900

01	02	03		04	05	06		07		08
2.			**–**				**–**	**0**	**–**	

Differential pressure

04	Max. permissible differential pressure of the filter element 30 bar *[435 psi]*	**A**
	Max. permissible differential pressure of the filter element 330 bar *[4786 psi]*	**B**

Element design

05	Standard adhesive	**0**
	Special adhesive, improved temperature and media resistance Only configurable in connection with FKM seal	**H**

Element design

06	Standard material	**0**
	Stainless steel Only configurable in connection with special adhesive and FKM seal	**V**

Bypass valve

07	**Without** bypass valve	**0**

Seal [2)]

08	NBR seal	**M**
	FKM seal	**V**

[1)] Only configurable with differential pressure A = 30 bar [435 psi] and stainless steel element design "V"

Further filter ratings and seal materials are available upon request.
More detailed information on Hengst filter material configuration is available in RE 51548.

Order example:
2.32 PWR10-A00-0-M

Material no.: R928019015

Other versions available upon request.

Ordering codes
Filter element

Filter element type 2. size 0003 ... 0145

01	02	03		04	05	06		07		08
2.			**–**				**–**	**0**	**–**	

Filter element

01	Design	**2.**

Size

02	According to **Hengst standard**	**0003** **0004** **0005** **0008** **0013** **0014** 1) **0015** **0018** **0019** 1) **0020** **0030** **0045** **0055** **0095** **0145**

Filter rating in µm

03	**Nominal**	Stainless steel wire mesh, cleanable	**G10** **G25** **G40** **G60** **G100** **G200** **G500** **G800**
		Filter paper, not reusable (not cleanable)	**P10** **P25**
		Non-woven material, not reusable (not cleanable)	**VS25**
	Absolute **(ISO 16889; $\beta_{x(c)}$ ≥200)**	Glass fiber material H...XL, not reusable, not cleanable Only available in combination with stainless steel material	**H3XL** **H6XL** **H10XL** **H20XL**
		Glass fiber material PWR... Generation 5, not reusable, not cleanable Not available in combination with stainless steel material	**PWR1** **PWR3** **PWR6** **PWR10** **PWR20**
		Non-woven metal fiber, not reusable (not cleanable)	**M5** **M10**

Ordering codes
Filter element

Filter element type 2. size 0003 ... 0145

01	02	03		04	05	06		07		08
2.			**–**				**–**	**0**	**–**	

Differential pressure

04	Max. permissible differential pressure of the filter element 30 bar *[435 psi]*	**A**
	Max. permissible differential pressure of the filter element 330 bar *[4786 psi]*	**B** [2]

Element design

05	Standard adhesive	**0**
	Special adhesive, improved temperature and media resistance Only configurable in connection with FKM seal	**H**

Element design

06	Standard material	**0**
	Stainless steel Only configurable in connection with special adhesive and FKM seal	**V**

Bypass valve

07	**Without** bypass valve	**0**

Seal [2]

08	NBR seal	**M**
	FKM seal	**V**

[1] Only configurable with stainless steel element design "V"

[2] Not in connection with size 0003

Further filter ratings and seal materials are available upon request.
More detailed information on Hengst filter material configuration is available in RE 51548.

Order example:
2.0008 PWR10-A00-0-M

Material no.: R928006161

Other versions available upon request.

Ordering codes
Filter element

Filter element type 2.Z
for sandwich plate filter 250 ZH

01	02	03		04		05		06
2.Z			**–**	**C00**	**–**	**0**	**–**	

Filter element

01	Design	**2.Z**

Size

02	According to **Hengst standard**	**30** **90** **120** **180** **220**

Filter rating in µm

03	**Absolute** **(ISO 16889; $\beta_{x(c)} \geq 200$)**	Glass fiber material PWR... Generation 5, not reusable, not cleanable Not available in combination with stainless steel material	**PWR1** **PWR3** **PWR6** **PWR10** **PWR20**

Differential pressure

04	Max. permissible differential pressure of the filter element 160 bar *[2321 psi]*	**C00**

Bypass valve

05	**Without** bypass valve	**0**

Seal

06	NBR seal	**M**
	FKM seal	**V**

Further filter ratings and seal materials are available upon request.
More detailed information on Hengst filter material configuration is available in RE 51548.

Order example:
2.Z90 PWR10-C00-0-M

Material no.: R928036119

Ordering codes
Filter element

Filter element type 3.0003
for return flow filter 10 FRE 0003

01	02	03		04		05		06
3.	**0003**		**–**	**A00**	**–**	**7**	**–**	**M**

Filter element

01	Design	**3.**

Size

02	According to **Hengst standard**	**0003**

Filter rating in µm

03	**Nominal**	Stainless steel wire mesh, cleanable	**G10** **G25** **G40** **G60** **G100**
		Filter paper, not reusable (not cleanable)	**P10** **P25**
	Absolute **(ISO 16889; $\beta_{x(c)}$ ≥200)**	Glass fiber material PWR... Generation 5, not reusable, not cleanable Not available in combination with stainless steel material	**PWR3** **PWR6** **PWR10** **PWR20**

Differential pressure

04	Max. permissible differential pressure of the filter element 30 bar *[435 psi]*	**A00**

Bypass valve

05	**With** bypass valve – cracking pressure 3.5 bar *[50.8 psi]*	**7**

Seal

06	NBR seal	**M**

Further filter ratings and seal materials are available upon request.
More detailed information on Hengst filter material configuration is available in RE 51548.

Order example:
3.0003 PWR10-A00-7-M

Material no. R928025675

Filter element assignment to filter series

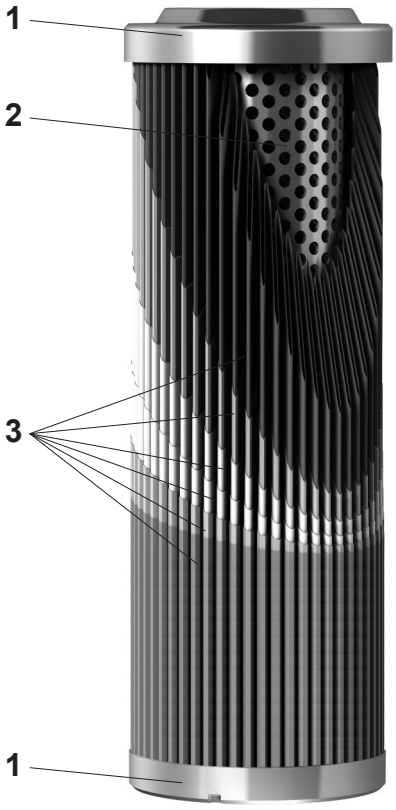
Element type	Series	Application
1.10 - 225/450	16 RA 10 - 225/450 with valve	Return flow filter
1.E10 - 225/450	16 RA 10 - 225/450 without valve	
1.360(1) - 1800(1)	16 RL/DR 360(1) - 1800(1)	
	25/100 L/D 360(1) - 1800(1)	Inline filter
1.0004 - 0012	10 RE	Return flow filter
1.0005; 1.0008; 0013 - 0120	10 FRE/FRD 0005-0120; 40 FLDK 0008-0120; 40/100 FLE/FLD 0020-0120; 16 FLD 0190-0300	Return flow filter; double return flow filter; inline filter; duplex filter
1.0145(C) - 0270 (C)	40 FLE 0145(C) - 0270(C); 40 FLD 0146(C) - 0274(C)	Inline filter; duplex filter

2.10 - 900	25/100 - 250/400 D/ED	Duplex filter
	250/450 L /EL/F	Inline filter
2.180	10 DLW	
2.Z30 - 180	250 ZH	Sandwich plate filter
2.0003 (without valve)	10 FRE 0003	Return flow filter
3.0003 (with valve)		
2.0004 - 0145	40/160/250/450 LE/LD 0003 - 0145; 250 FE 0003 - 0055; 450 FE 0003 - 0145 40/100 EL 0004-0045; 450 EL 0004 - 0145; 690 EL 0004 - 0014; 1000 EL 0004: 40/100 ED 0004 - 0019	Inline filter; duplex filter

Function, section

The filter element is the main component of industrial filters. It is in the filter element where the actual filtration takes place. The main filter variables, such as retention capacity, dirt holding capacity and pressure loss are determined by the filter elements construction and the filter media used. Hengst filter elements are used for the filtration of various hydraulic fluids, lubrication fluids, other industrial fluids and gases.

Filter elements consist of a combination of star-like pleated filter media (3) which are laid around a perforated support tube (2). In longitudinal direction, the filter element is sealed using a 2-component adhesive and support tube and filter element mat are connected with both end disks (1). Sealing between the filter element and the filter housing is effectively done by means of one or two seals.
For the sizes 1.(E)10 to 1.(E)225/460, the seal is a part of the filter housing.
The general flow pattern is from the outside to the inside of the filter element.



Technical data preferred program
(For applications outside these values, please consult us!)

General			
Filtration direction			from the outside to the inside
Ambient temperature range		°C *[°F]*	–10 ... +65 *[+14 ... +149]* (for short periods down to –30 *[–22]*)
Storage conditions	▶ Seal NBR	°C *[°F]*	–40 ... +65 *[–40 ... +149]*; max. relative air humidity 65%
	▶ Seal FKM	°C *[°F]*	–20 ... +65 *[–4 ... +149]*; max. relative air humidity 65%
Material	▶ Cover/base		steel galvanized/aluminum/polyamide or stainless steel
	▶ Support tube		steel galvanized/tin-coated or stainless steel
	▶ Seals		NBR or FKM

Hydraulic		
Minimum conductivity of the medium	pS/m	300

Permissible operating temperature range, depending on material combination

		Operating temperature range °C *[°F]*		
Filter material configuration	**Code letter**	**Sealing material NBR "M"** adhesive (standard) "0" material (standard) "0"	**Sealing material (FKM) "V"** adhesive (standard) "0" material (standard) "0"	**High-temperature "HV-V"** adhesive (standard) "H" material (standard) "V"
Aquasorb	AS...	–0 ... +100 *[32 ... +212]*	–0 ... +100 *[32 ... +212]*	*not configurable*
Stainless steel wire mesh	G...	-40 ... +100 *[-40 ... +212]*	–20 ... +100 *[–4 ... +212]*	-20 ... +170 *[-4 ... +338]*
Glass fiber material H...XL	H...XL	-40 ... +100 *[-40 ... +212]*	–20 ... +100 *[–4 ... +212]*	-20 ... +160 *[-4 ... +320]*
Glass fiber material PWR...	PWR...	-40 ... +100 *[-40 ... +212]*	–20 ... +100 *[–4 ... +212]*	*not configurable*
Non-woven metal fiber	M...	-40 ... +100 *[-40 ... +212]*	–20 ... +100 *[–4 ... +212]*	-20 ... +170 *[-4 ... +338]*
Filter paper	P...	-40 ... +100 *[-40 ... +212]*	–20 ... +100 *[–4 ... +212]*	*not configurable*
Non-woven material	VS...	-40 ... +80 *[-40 ... +176]*	–20 ... +80 *[–4 ... +176]*	–20 ... +80 *[–4 ... +176]*

For temperatures up to 170 °C, the high-temperature configuration "...HV-V" is required.
That means:
- ▶ Filter element adhesive (special) "H"
- ▶ Filter element material (stainless steel) "V"
- ▶ Sealing material (FKM) "V"

Compatibility with permitted hydraulic fluids

Hydraulic fluid		**Classification**	**Suitable sealing materials**	**Suitable adhesive**	**Standards**
Mineral oil		HLP	NBR	Standard	DIN 51524
Bio-degradable	– insoluble in water	HETG	NBR		VDMA 24568
		HEES	FKM		
	– soluble in water	HEPG	FKM		VDMA 24568
Flame-resistant	– water-free	HFDU, HFDR	FKM		VDMA 24317
	– containing water	HFAS	NBR		DIN 24320
		HFAE	NBR		
		HFC	NBR		VDMA 24317

☞ **Important information on hydraulic fluids!**
- ▶ For further information and data on the use of other hydraulic fluids, please refer to data sheet 90220 or contact us!
- ▶ Flame-resistant – containing water: Due to possible chemical reactions with materials or surface coatings of machine and system components, the service life with these hydraulic fluids may be less than expected.

Filter materials made of filter paper P may not be used, filter elements with glass fiber filter material are to be used instead.
- ▶ Bio-degradable: If filter materials made of filter paper are used, the filter life may be shorter than expected due to material incompatibility of and swelling.

Assembly, commissioning, maintenance

When must the filter element be replaced or cleaned?
As soon as the back pressure or the differential pressure setting of the maintenance indicator has been reached, the red pushbutton of the mechanical/visual maintenance indicator pops out. If an electronic switching element is present, an electric signal will be generated. In this event, the filter element should be replaced or cleaned. It is not advisable to operate a filter housing without a filter element maintenance indicator, however, in the event that the filter housing is not fitted with an indicator, we recommend exchanging or cleaning the filter elements at least every 6 months.

Filter element exchange

- For single filters:
  Switch off the system and discharge the filter on the pressure side.
- For duplex switch filters:
  See relevant maintenance instructions according to the data sheet.

Detailed instructions with regard to the filter element exchange can be found in the data sheet of the relevant filter series.

Environment and recycling

⚠ WARNING!

- Filters are containers under pressure. Before opening the filter housing, check whether the system pressure in the filter has been decreased to ambient pressure. Only then may the filter housing be opened for maintenance.
- Filter elements must be unpacked outside ATEX zones

☞ **Notice:**

- Due to the high viscosity at cold start conditions, the pre-set signal value of the visual maintenance indicator may be exceeded at start-up.
  Once the operating temperature has been reached, the mechanical/visual indicator can be reset manually. The electrical signal will reset once the operating temperature has been reached.
- If the maintenance indicator alarm is disregarded, the disproportional, increasing differential pressure may damage the filter element (collapse).
- Information on dirt holding capacity characteristic values exclusively refer to the measurement results obtained under laboratory conditions according to ISO 16889. These may deviate from measurements obtained in real applications due to various influencing factors.
  It is expected that a higher comparable dirt holding capacity, according to ISO 16889 at a comparable filtration ratio $ß_{x(c)}$, can be achieved under real operating conditions.
- Warranty expires in the event that the delivered item is changed by the ordering party or third parties or improperly mounted, installed, maintained, repaired, used or exposed to environmental conditions that do not comply with the installation conditions.
- Technical characteristic values such as retention rate and dirt holding capacity have been determined at a temperature of 40 °C (+/- 5 °C).

Guidelines and standards

Product validation

Hengst filter elements are tested and quality-controlled according to various ISO test standards:

Filtration performance test (multipass test)	ISO 16889:2008-06
Δ*p* (pressure loss) characteristic curves	ISO 3968:2001-12
Compatibility with hydraulic fluid	ISO 2943:1998-11
Collapse pressure test	ISO 2941:2009-04
Fluid power, hydraulic filters, part 2, evaluation criteria and requirements	DIN 24550-2:2006-09

The development, manufacture and assembly of Hengst industrial filters and Hengst filter elements are carried out within the framework of a certified quality management system in accordance with ISO 9001:2015.

Use in potentially explosive areas according to directive 2014/34/EU (ATEX):

The filter elements are not equipment or components in the sense of directive 2014/34/EU and are not provided with the CE marking.
It has been proven with the ignition risk analysis that these filter elements do not have own ignition sources according to DIN EN ISO 80079-36.

The filter elements can be used for the following potentially explosive atmospheres:

	Zone suitability	
Gas	1	2
Dust	21	22

⚠ WARNING!

- For use of the filter elements in potentially explosive areas, ATEX suitability of the complete filter assembly is an imperative requirement.
- Conductivity of the medium: at least 300 pS/m.
- During filter element exchange, the packaging material is to be removed from the replacement element outside the potentially explosive atmosphere.
- Maintenance to be conducted only by specialists, as per the instruction by the machine end-user according to DIRECTIVE 1999/92/EC appendix II, section 1.1

Intended use

The filter elements serve as components as per the EC Machinery Directive 2006/42/EC in hydraulic machinery for the separation of dirt particles.
The filter elements are to be used under the following boundary conditions and limits:

- Only in hydraulic systems with fluids of group 2, according to Pressure Equipment Directive 2014/68/EU
- Only according to the application and environmental conditions in the chapter "Technical data"
- Only in compliance with the specified performance limits in the section "Technical data"; extended operational durability/load cycles on request
- Only with hydraulic fluids and the intended seals according to the section "Compatibility with hydraulic fluids"
- Use in potentially explosive atmospheres according to the chapter "Guidelines and standards"
- Compliance with application and environmental conditions according to the technical data
- Compliance with the specified performance limits
- The filter elements are intended exclusively for professional use and not for private use.

Improper use

Any use deviating from the intended use is deemed as improper and thus not permissible.
Improper use of the filter elements includes:

- Incorrect storage
- Incorrect transport
- Lack of cleanliness during storage and assembly
- Incorrect installation
- Use of inappropriate/non-permissible hydraulic fluids
- Exceedance of the specified maximum pressures and load cycles
- Operation outside the approved temperature range
- Installation and operation in impermissible device group and category

Hengst Filtration GmbH does not assume any liability for damage caused by improper use. The user assumes all risks involved with improper use.

Your Contact

FILCOM GmbH
Schönbuchstr. 1
D-73760 Ostfildern

Phone: +49 (0) 711-4413322-0
Fax: +49 (0) 711-4413322-22
Mail: info@filcom.de

www.filcom.de