PT Tank Top Mounted filters

Max. 400 l/min - 10 bar



An economical solution for quality tank top mounted filtration

In to out flow design avoids re-contamination of the hydraulic system

The PT tank top mounted filter features an aluminium filter head and screw-in style filter elements. This offers the opportunity to use the filter element as screw-in style for co-polymer reservoirs. With a Parker design that protects the quality of filtration, the PT offers a modularity and value for money.



Contact Information:

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Product Features:

- Compact tank top mounted return line filter.
- Filter element can be used for direct screw-in mounting with co-polymer reservoirs.
- Parker quality filter element.
- In to Out flow avoids re-contamination of the system.
- Flow capability up to 400 l/min at 10 bar working pressure.

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Features & Benefits

Features	Advantages	Benefits
Aluminium filter head	Low profile, lightweight and durable	Less weight, smaller envelope and cleaner appearance.
In-to-Out filtration	All captured contamination retains inside the element	No recontamination of the system during change of element
Disposable filter cartridge	Easy to change cartridge	New housing cover and seals provided with each element change
Microglass III media	Multi-layered design produces high capacity and efficiency	Reliable performance. Reduced downtime

Typical Applications

- Lorry mounted cranes
- Agricultural equipment
- Grass cutting equipment
- Container hook loaders



The Parker Filtration PT tank top mounted series

The PT Series filter is available in various sizes covering a flow rate up to 400 l/min. Using the Microglass III media in 2, 5, 10 and 20 microns it provides premium particle removal efficiency.

This unique design simply threads into a ported tank ring, which can be bolted to a metal reservoir.

The disposable filter cartridge is a single-piece construction, which incorporates the nylon cover and integral 1.7 bar bypass valve. The flow path is inside-out and requires no special tools for service.

This concept assures minimal installation costs with the least space requirements for return line applications.

Specification

Pressure ratings:
Max. 10 bar.

Connections

PT2: G¾" and G1"

PT4: G1" or G1¼"

Filter housing:
Aluminium

Filter element:
Parker design including cover for filter housing (one disposable unit)

Seal material:
Nitrile, viton

Operation temperature:
-20°C to + 100°C

Bypass:
1.7 bar

Degree of filtration:
Determined by multipass test in accordance to ISO16889

Flow fatigue:
Filter media is supported so that the optimal fatigue life is achieved (ISO3724)

Filter Media:
Microglass III

Indicator options:
Visual and electrical switch (NO/NC) type

Fluid compatibility:
Mineral and HEES type fluids

Principle of Filtration

The PT applies In-to-Out Filtration, this ensures that captured contamination is retained in the element during servicing the filter.
Bypass valve is integrated in the filter bottom element end cap. The filter element is completely disposable.

Safety First

Each spare filter element is including seals for the sealing between tank top mounted filter housing and filter element. Because all seals are pre-mounting, no risk that (incorrect) seals are not replaced.

PT Reservoir 'screw-in' solution to reduce costs and space

The PT applies In-to-Out Filtration, this ensures that captured contamination is retained. The PT element can be integrated directly into a co-polymer reservoir. Parker Filtration can provide cavity details to co-polymer reservoir manufacturers to support this innovative solution.

This cavity includes the integrated return line port and optional connection for the pressure switch.

Thanks to the complete screw-in style solution, typically over 30% of the first fit cost can be reduced, the reservoir surface remains flat and hence can support more compact solutions, in particular for mobile applications.

Compared to the traditional tank top mounted filter, improved sealing between the reservoir and the filter can be achieved, eliminating potential leakage areas by 50% typically.

Please consult Parker Filtration for engineered reservoir solutions



Installation Information

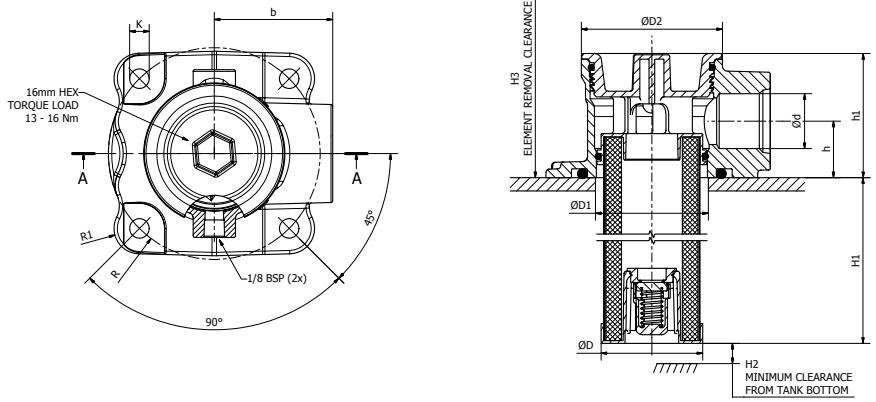
	'Build-in' length in tank (mm)
PT2 Length 1	95
PT2 Length 2	185
PT4 Length 1	98
PT4 Length 2	189
PT4 Length 3	310

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Specification (cont)

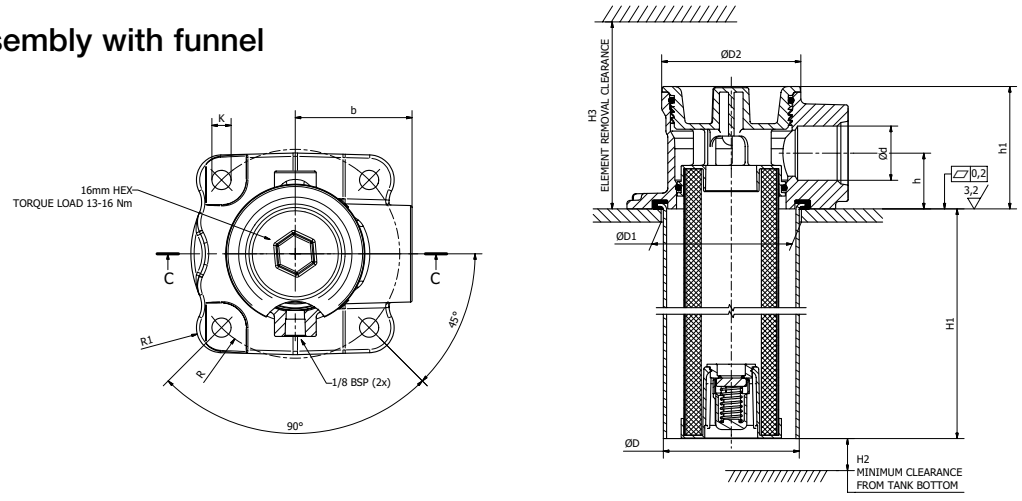
PT2 Assembly without funnel



PT2 Screw-in Filter

Type	Connection Options	H1	H2	H3	h	h1	ØD	ØD1+/-0,5	ØD2	b	R	R1	K
PT2-1	G3/4, G1	89	6,5	190	25.4	56	Ø46	Ø51	Ø64	53	48	12	4x8.8
PT2-2	G3/4, G1	181	6.5	293	25.4	56	Ø46	Ø51	Ø64	53	48	12	4x8.8

PT2 Assembly with funnel

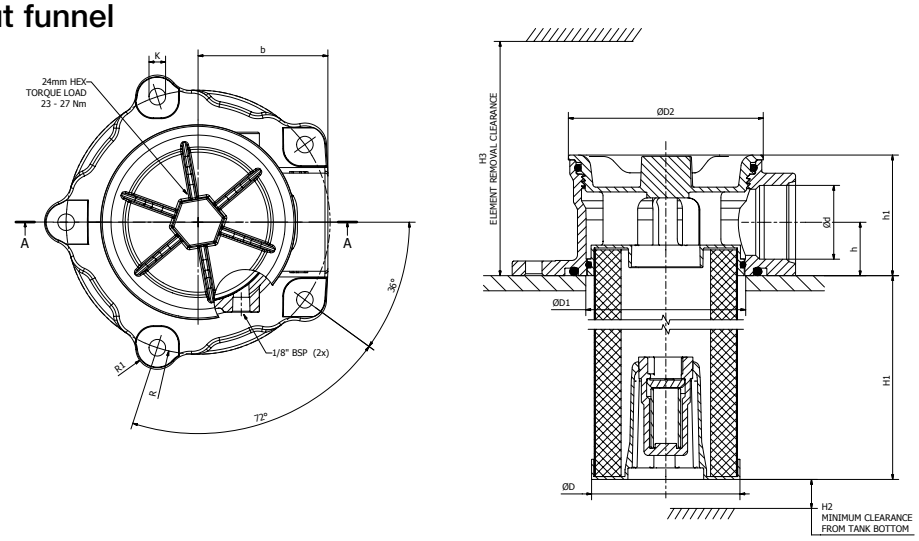


PT2 Screw-in Filter

Type	Connection Options	H1	H2	H3	h	h1	ØD	ØD1 +/–0,5	ØD2	b	R	R1	K
PT2-1	G3/4, G1	89	6,5	190	25.4	56	Ø62	Ø64	Ø64	53	48	12	4x8.8
PT2-2	G3/4, G1	181	6.5	293	25.4	56	Ø62	Ø64	Ø64	53	48	12	4x8.8

Specification (cont)

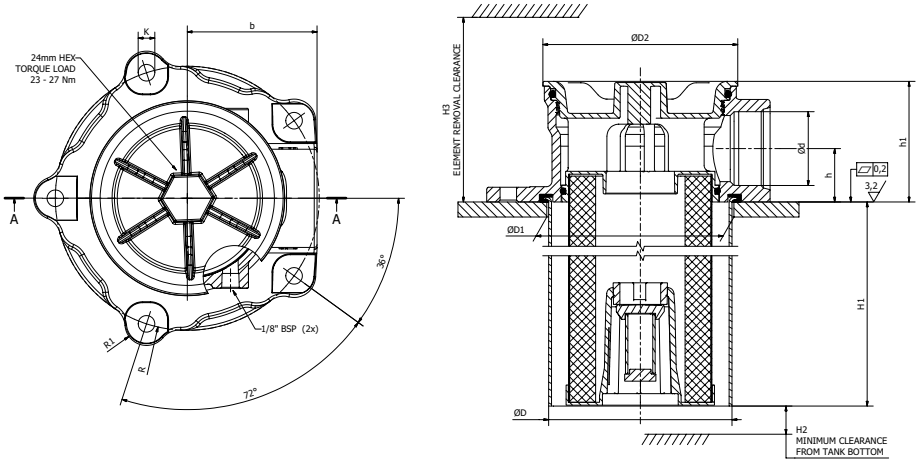
PT4 Assembly without funnel



PT4 Screw-in Filter

Type	Connection Options	H1	H2	H3	h	h1	ØD	ØD1+/-0,5	ØD2	b	R	R1	K
PT4-1	G1, G1-1/4	94	10	222	28.2	64	Ø78.5	Ø85	Ø103	69	70	12	5xØ8.8
PT4-2	G1, G1-1/4	185	10	313	28.2	64	Ø78.5	Ø85	Ø103	69	70	12	5xØ8.8
PT4-3	G1, G1-1/4	306	10	434	28.2	64	Ø78.5	Ø85	Ø103	69	70	12	5xØ8.8

PT4 Assembly with funnel



PT4 Screw-in Filter

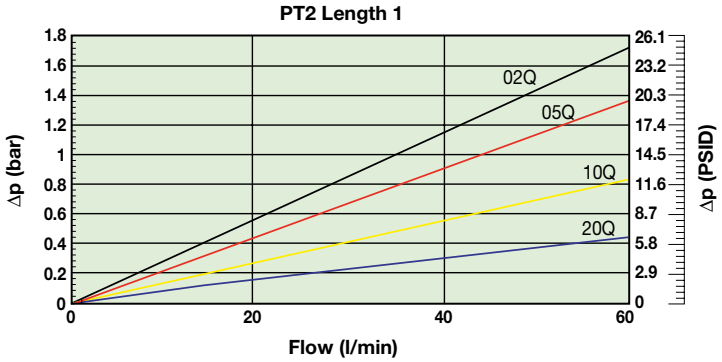
Type	Connection Options	H1	H2	H3	h	h1	ØD	ØD1 +/–0,5	ØD2	b	R	R1	K
PT4-1	G1, G1-1/4	94	10	222	28.2	64	Ø97	Ø99	Ø103	69	70	12	5xØ8.8
PT4-2	G1, G1-1/4	185	10	313	28.2	64	Ø97	Ø99	Ø103	69	70	12	5xØ8.8
PT4-3	G1, G1-1/4	306	10	434	28.2	64	Ø97	Ø99	Ø103	69	70	12	5xØ8.8

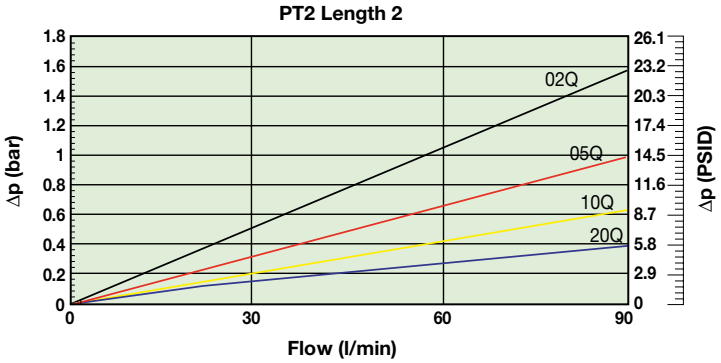
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Pressure Drop Curves

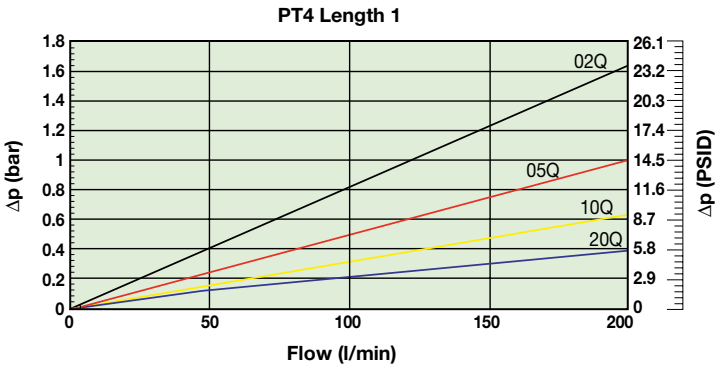
Flow Performance Charts - PT2 Series

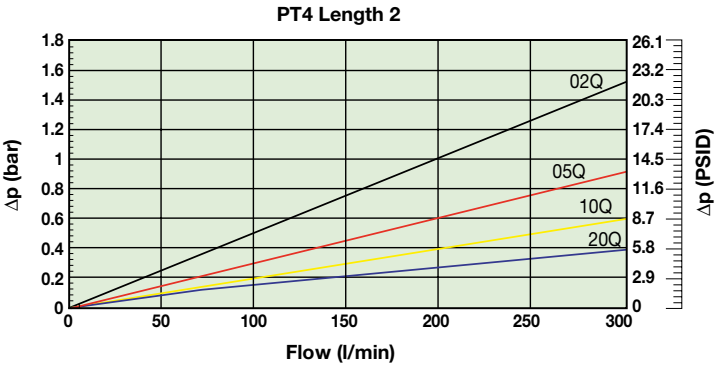




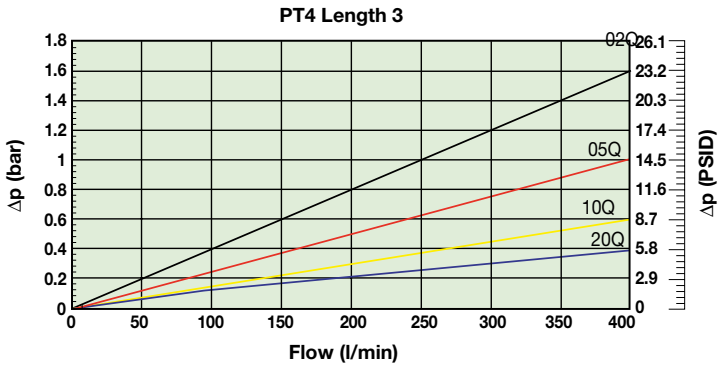
All delta-p values are based on 30 cSt fluid and 0,87 kg/l density

Flow Performance Charts - PT4 Series



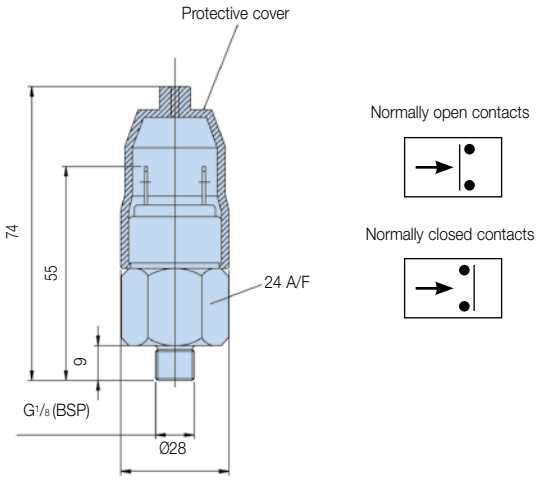


Flow Performance Charts - PT4 Series



Indicator Information

Indicator PS NO/NC pressure switch



Pressure Switches	
Elec. rating	42V / 2A
Thread connection	G1/8
Elec. connection	AMP terminal 6.3 x 0.8
Protection	IP65 (terminal IP00)
Switch type	NO or NC
Indicator setting	1.2 bar
Code	FMUS2EBMG02L (NO switch)
	FMUS3EBMG02L (NC switch)

Visual Indicator	Code
1.2 bar	FMUG2EBPG02L

Ordering Information

Product configurator

Configurator example PT filter

Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8
PT2	**1**	**10Q**	**B**	**P**	**G**	**G12**	**I**

Box 1

Housing	Code
PT2	**PT2**
PT4	**PT4**

Highlights Key (Denotes part number availability)

123	Item is standard
123	Item is semi standard
123	Item is non standard

Box 2

Element Length	Code
Length 1	**1**
Length 2	**2**
Length 3 (PT4 only)	**3**

Box 3

Filter media (Microglass III)	Code
2 micron	02Q
5 micron	05Q
10 micron	**10Q**
20 micron	20Q

Box 4

Seal Material	Code
Nitrile	**B**
Fluoroelastomer	V

Box 5

Indicator	Code
Plugged port	**P**
Pressure Switch 42V, 1.2 bar setting, NO	S2
Pressure Switch 42V, 1.2 bar setting, NC	S3
Pressure gauge, setting 1.2 bar, G1/8	G2

Box 6

Bypass Valve	Code
1.7 bar	**G**

Box 7

Ports	Code
G3/4 (PT2 only)	G12
G1	**G16**
G1 1/4 (PT4 only)	**G20**

Box 8

Options	Code
No diffuser required	1
Airtight diffuser	**4**

Spare Filter Elements

Media	PT2-1	PT2-2	PT4-1	PT4-2	PT4-3
02Q	936750Q	936754Q	936742Q	936746Q	936876Q
05Q	936751Q	936755Q	936743Q	936747Q	936877Q
10Q	936752Q	936756Q	936744Q	936748Q	936878Q
20Q	936753Q	936757Q	936745Q	936749Q	936879Q

Filter Media Efficiency

Degree of filtration						
Average filtration ratio **ß** (ISO 16889) / particle size µm [c]						
Code	**2**	**10**	**75**	**100**	**200**	**1000**
Q002	N/A	N/A	N/A	N/A	**4**	**4.5**
Q005	N/A	N/A	**4.5**	**5**	**6**	**7**
Q010	N/A	**5**	**7.5**	**8**	**9**	**11**
Q020	**5**	**9**	**15**	**16**	**18**	**21**

Note 1: Part numbers featured with bold highlighted codes will ensure a 'standard' product selection.
Note 2: Alternate displayed part number selection will require you to contact Parker Filtration for availability.