



A pressure filter designed for compact stacked solutions

aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



ENGINEERING YOUR SUCCESS.

A pressure filter designed for compact stacked solutions

Parker's latest CETOP style pressure filter type ESW is designed for sandwich style stacking with valves and manifold blocks. With contamination accounting for typically 80% of the malfunction of hydraulic systems, the Parker CETOP style pressure filter offers dedicated protection to sensitive hydraulic valves.

Modern industrial equipment calls for high levels of reliability with no room for unexpected downtime of systems. The more frequent use of proportional valves like the Parker DFplus requires dedicated protection to ensure a long life time of the valve combined with a quick response needed to control the system.

Parker Advantages:

- Compact filter housing for stacked mounting
- High efficiency Parker filter media
- Designed for protection of sensitive proportional valves



Parker DFplus proportional valve



Parker EWS filter



Specification

Pressure filter

Compact in-line filter with re-usable filter cartridge and CETOP style flange mounting

Flow direction

From Out to Inside

Connection

CETOP A6 DIN24340 / CETOP R35H

Maximum operating pressure

315 bar

Filter housing pressure pulse fatigue:

106 pulses 0-315 bar

Seal material

Nitrile, Fluoroelastomer

Operating temperature

Seal material Nitrile: -40°C to + 100°C

Seal material Fluoroelastomer: -20°C to + 120°C

Housing material

Steel

Weight

2,4 kg

Nominal flow

30 l/min

Bypass valve

No bypass valve

Filter Element

Degree of filtration determined by multipass-test according to ISO16889

Flow fatigue characteristics

Flow media is supported so that the optimum fatigue life is achieved (ISO3724)

Filter media

Quantumfiber® glassfibre media, supported with epoxy coated, or optional stainless steel metal wire mesh.

Collapse rating 20 bar (ISO2941)

High collapse elements

210 bar (ISO2941)

Indicator options

Visual indicator type M3

Electrical indicator type T1

Electronic 4 LED style indicators (PNP, NPN), F range

Fluid compatibility

Hydraulic mineral oils H to class HLPD (DIN51524)

Operating fluids DIN ISO 2943

Lubrication fluids ISO6743, APJ, DIN 51517, ACEA, ASTM

Vegetable oils

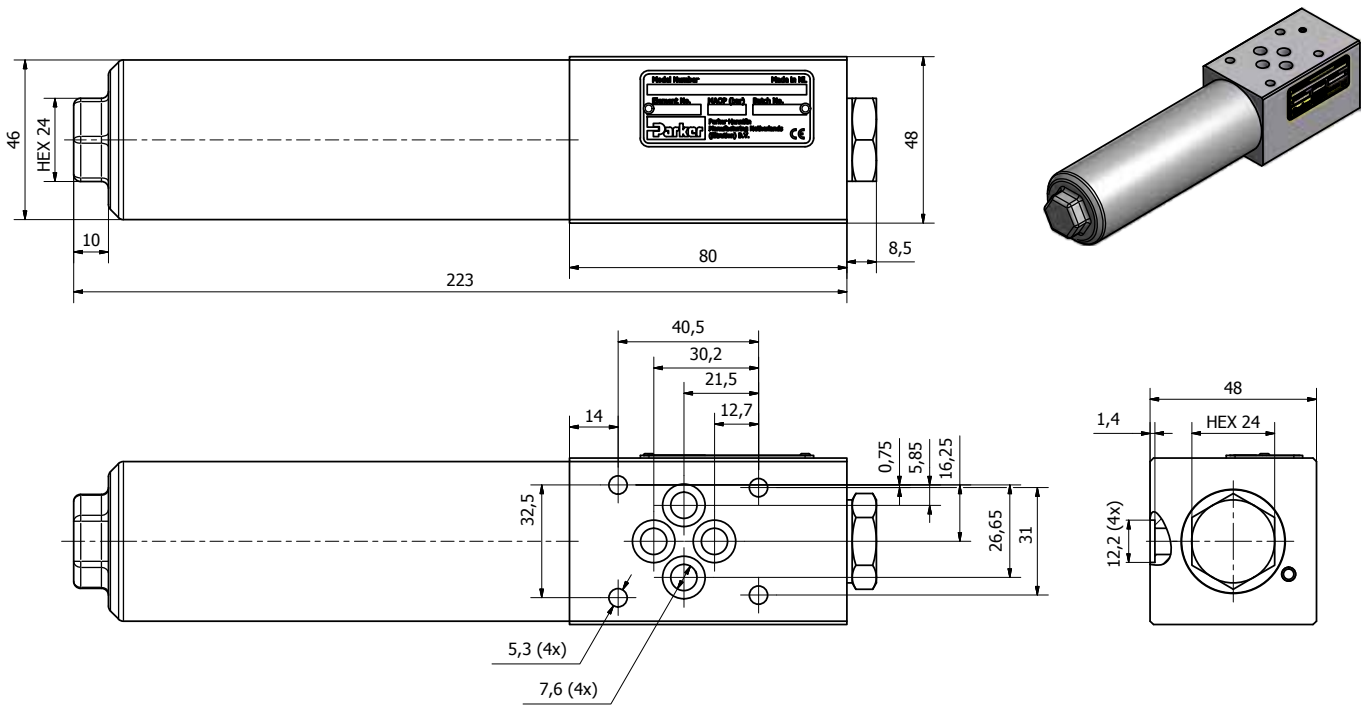
Non aggressive synthetic oils

Non aggressive bio-degradable oils (HETG, HEPG and

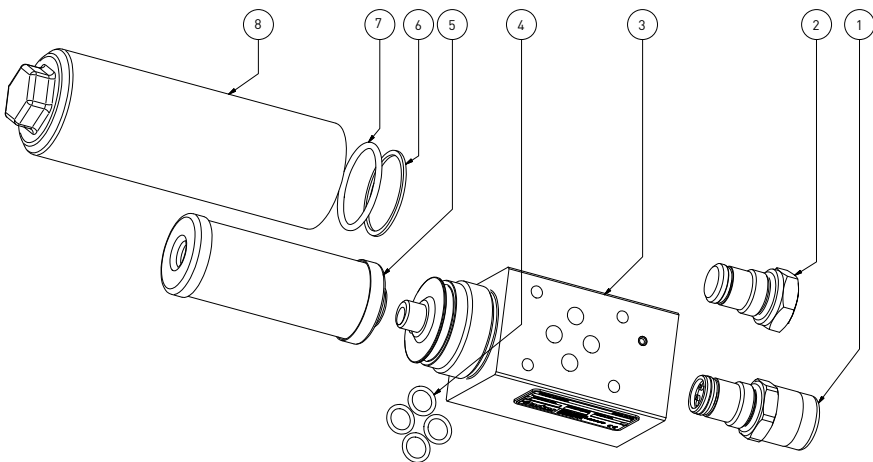
HEES to VDMA 24568)



General dimensions



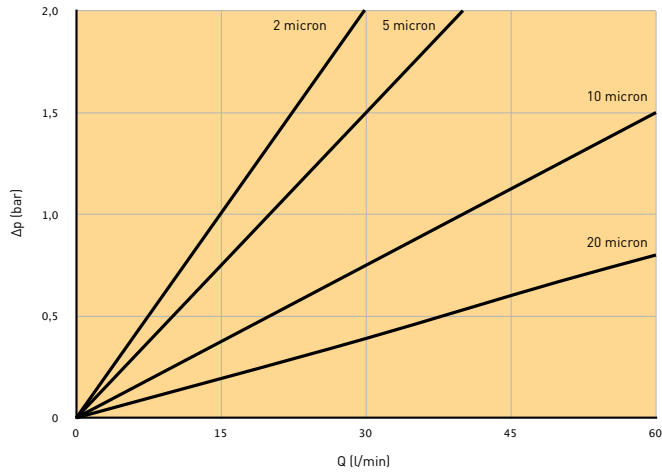
Exploded view & parts list



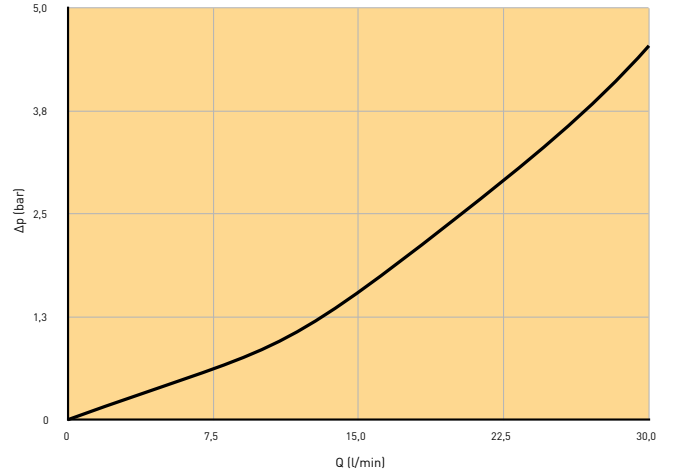
Item	QTY	Description
1	1	Indicator
2	1	Indicator plug
3	1	Filter head
4	4	O-ring 9,25 x 1,78
5	1	Filter element
6	1	Back-up ring
7	1	O-ring 33 x 2,62
8	1	Filter bowl



ESW03 Filter Elements



Empty housing



Degree of filtration						Code	
Average filtration beta ratio $\beta x(c)$ (ISO16889) / particle size μm [c]							
$\beta x(c) = 2$	$\beta x(c) = 10$	$\beta x(c) = 75$	$\beta x(c) = 100$	$\beta x(c) = 200$	$\beta x(c) = 1000$	Disposable Element	Disposable High Strength element
% efficiency, based on the above beta ratio (βx)							
50,0%	90,0%	98,7%	99,0%	99,5%	99,9%		
N/A	N/A	N/A	N/A	N/A	4,5	02Q	02QH
N/A	N/A	4,5	5	6	7	05Q	05QH
N/A	6	8,5	9	10	12	10Q	10QH
6	11	17	18	20	22	20Q	20QH



Indicator Options

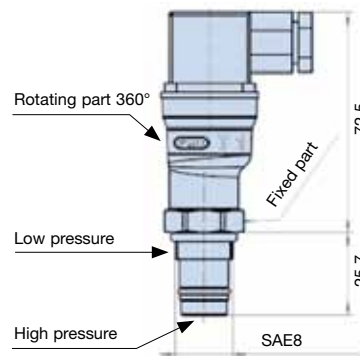
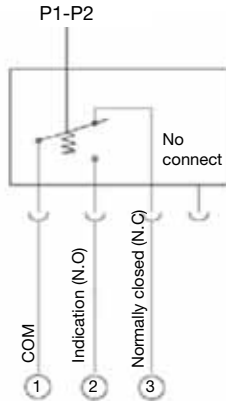
FMU Δp-Indicators and Pressure Indicators

FMUT Electrical

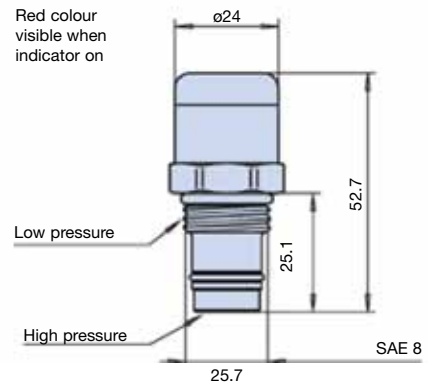
Rated voltage	Non-inductive load (A)				Inductive load (A)				Inrush current (A)	
	Resistive load		Lamp load		Inductive load		Motor load		N.C.	N.O.
	N.C.	N.O.	N.C.	N.O.	N.C.	N.O.	N.C.	N.O.		
125VAC	5		1.5	0.7	3		2.5	1.3	20 max.	10 max.
250VAC	3		1.0	0.5	2		1.5	0.8		
8VDC	5		2		5	4	3			
14VDC	5		2		4	4	3			
30VDC	4		2		3	3	3			
125VDC	0.4		0.05		0.4	0.4	0.05			
250VDC	0.2		0.03		0.2	0.2	0.03			

Enclosure class	IP65
Electrical connector	DIN 43650
Overtoltage category	II (EN61010-1)

Contact configuration Electrical Indicator Type T1

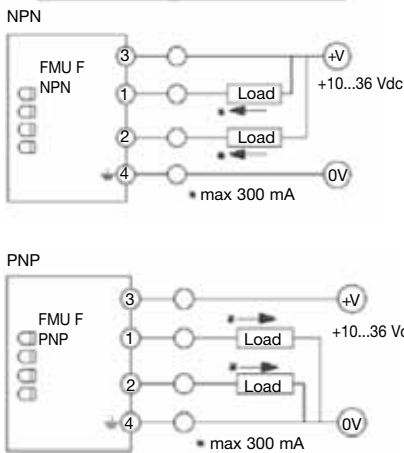


FMUM3 Visual Auto Reset Operation

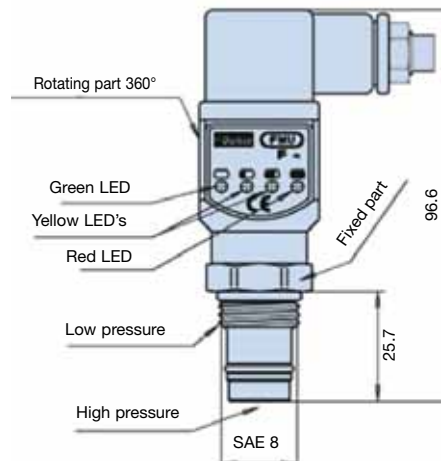


FMUF Electronic

Contact configuration



S08 model



Thermal lock-out (standard setting +20 °C)

- Indicator operates only when temperature is above setting.

Ind. press. setting	LED status				Output
	G	Y1	Y2	R	
< 50 %	⊗				-
50 %	⊗	⊗			-
75 %	⊗	⊗	⊗		2 active
100 %	⊗	⊗	⊗	⊗	1 active

Enclosure class	IP65
Electrical connector	DIN 43650, cable connection PG9 or optionally M12 4-pin
Input supply voltage	+10 to 36 Vdc
*Indication output	max. 300 mA/36 Vdc
Output type:	N.O. or N.C./NPN or PNP

Note: Do not connect output terminals 1 or 2 directly (without load) to power supply terminals, because this will damage the equipment.

ESW High Pressure Filter

Ordering Information

Table 1 Table 2 Table 3 Table 4 Table 5 Table 6 Table 7 Table 8

Table 1

Housing type	
Model	Code
CETOP style filter	ESW30

Table 2

Housing size	
Length	Code
Length 1	1

Table 3

Filter Media	
Media	Code
2 micron glassfibre	02Q
5 micron glassfibre	05Q
10 micron glassfibre	10Q
20 micron glassfibre	20Q
2 micron high strength glassfibre	02QH
5 micron high strength glassfibre	05QH
10 micron high strength glassfibre	10QH
20 micron high strength glassfibre	20QH

Table 4

Seals	
Material	Code
Nitrile	B
Fluorelastomer	V

Table 5

Indicator	
Indicator type	Code
Visual	M3
Electrical	T1
Electronic 4 LED, PNP, NO	F1
Electronic 4 LED, NPN, NO	F2
Electronic 4 LED, PNP, NC	F3
Electronic 4 LED, NPN, NC	F4
Plugged with steel plug	P

Table 6

Bypass Setting		
Indicator setting		Code
No bypass	No indicator	X
No bypass	5 bar	M

Table 7

Connections	
4 ports	B
A6 DIN 24340 / Cetop R 35 H	

Table 8

Options	
Details	Code
Standard	1

Please note that the options shown in bold are standard options with reduced lead-time. Other options are on request.

Table A

Visual Indicators	Part number	Setting (bar)
	FMUM3MVMS08	5

Table B

Electrical Indicators	Part number	Setting (bar)	Switch type	Additional
	FMUT1MVMS08	5	NO/NC	
	FMUF1MVMS08	5	NO	Electronic, PNP, 4 LED
	FMUF2MVMS08	5	NO	Electronic, NPN, 4 LED
	FMUF3MVMS08	5	NC	Electronic, PNP, 4 LED
	FMUF4MVMS08	5	NC	Electronic, NPN, 4 LED

Spare Filter Element Numbers	
Filter Configuration	Spare part
ESW30 Length 1 2 micron element	944667Q
ESW30 Length 1 5 micron element	944666Q
ESW30 Length 1 10 micron element	944695Q
ESW30 Length 1 20 micron element	944696Q
ESW30 Length 1 2 micron high strength element	944697Q
ESW30 Length 1 5 micron high strength element	944698Q
ESW30 Length 1 10 micron high strength element	944699Q
ESW30 Length 1 20 micron high strength element	944700Q

Parker Worldwide

Europe, Middle East, Africa

AE – United Arab Emirates, Dubai

Tel: +971 4 8127100
parker.me@parker.com

AT – Austria, Wiener Neustadt

Tel: +43 (0)2622 23501-0
parker.austria@parker.com

AT – Eastern Europe, Wiener Neustadt

Tel: +43 (0)2622 23501 900
parker.easteurope@parker.com

AZ – Azerbaijan, Baku

Tel: +994 50 2233 458
parker.azerbaijan@parker.com

BE/LU – Belgium, Nivelles

Tel: +32 (0)67 280 900
parker.belgium@parker.com

BY – Belarus, Minsk

Tel: +375 17 209 9399
parker.belarus@parker.com

CH – Switzerland, Etoy

Tel: +41 (0)21 821 87 00
parker.switzerland@parker.com

CZ – Czech Republic, Klecany

Tel: +420 284 083 111
parker.czechrepublic@parker.com

DE – Germany, Kaarst

Tel: +49 (0)2131 4016 0
parker.germany@parker.com

DK – Denmark, Ballerup

Tel: +45 43 56 04 00
parker.denmark@parker.com

ES – Spain, Madrid

Tel: +34 902 330 001
parker.spain@parker.com

FI – Finland, Vantaa

Tel: +358 (0)20 753 2500
parker.finland@parker.com

FR – France, Contamine s/Arve

Tel: +33 (0)4 50 25 80 25
parker.france@parker.com

GR – Greece, Athens

Tel: +30 210 933 6450
parker.greece@parker.com

HU – Hungary, Budapest

Tel: +36 1 220 4155
parker.hungary@parker.com

IE – Ireland, Dublin

Tel: +353 (0)1 466 6370
parker.ireland@parker.com

IT – Italy, Corsico (MI)

Tel: +39 02 45 19 21
parker.italy@parker.com

KZ – Kazakhstan, Almaty

Tel: +7 7272 505 800
parker.easteurope@parker.com

NL – The Netherlands, Oldenzaal

Tel: +31 (0)541 585 000
parker.nl@parker.com

NO – Norway, Asker

Tel: +47 66 75 34 00
parker.norway@parker.com

PL – Poland, Warsaw

Tel: +48 (0)22 573 24 00
parker.poland@parker.com

PT – Portugal, Leca da Palmeira

Tel: +351 22 999 7360
parker.portugal@parker.com

RO – Romania, Bucharest

Tel: +40 21 252 1382
parker.romania@parker.com

RU – Russia, Moscow

Tel: +7 495 645-2156
parker.russia@parker.com

SE – Sweden, Spånga

Tel: +46 (0)8 59 79 50 00
parker.sweden@parker.com

SK – Slovakia, Banská Bystrica

Tel: +421 484 162 252
parker.slovakia@parker.com

SL – Slovenia, Novo Mesto

Tel: +386 7 337 6650
parker.slovenia@parker.com

TR – Turkey, Istanbul

Tel: +90 216 4997081
parker.turkey@parker.com

UA – Ukraine, Kiev

Tel: +380 44 494 2731
parker.ukraine@parker.com

UK – United Kingdom, Warwick

Tel: +44 (0)1926 317 878
parker.uk@parker.com

ZA – South Africa, Kempton Park

Tel: +27 (0)11 961 0700
parker.southafrica@parker.com

North America

CA – Canada, Milton, Ontario

Tel: +1 905 693 3000

US – USA, Cleveland

Tel: +1 216 896 3000

Asia Pacific

AU – Australia, Castle Hill

Tel: +61 (0)2-9634 7777

CN – China, Shanghai

Tel: +86 21 2899 5000

HK – Hong Kong

Tel: +852 2428 8008

IN – India, Mumbai

Tel: +91 22 6513 7081-85

JP – Japan, Tokyo

Tel: +81 (0)3 6408 3901

KR – South Korea, Seoul

Tel: +82 2 559 0400

MY – Malaysia, Shah Alam

Tel: +60 3 7849 0800

NZ – New Zealand, Mt Wellington

Tel: +64 9 574 1744

SG – Singapore

Tel: +65 6887 6300

TH – Thailand, Bangkok

Tel: +662 186 7000-99

TW – Taiwan, Taipei

Tel: +886 2 2298 8987

South America

AR – Argentina, Buenos Aires

Tel: +54 3327 44 4129

BR – Brazil, Sao Jose dos Campos

Tel: +55 800 727 5374

CL – Chile, Santiago

Tel: +56 2 623 1216

MX – Mexico, Apodaca

Tel: +52 81 8156 6000

EMEA Product Information Centre

Free phone: 00 800 27 27 5374

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