



Pall Corporation

# UT279

## UT279 Series Filters ULTIPLEAT® SRT IN-TANK FILTERS

Port Size  $\frac{3}{4}$ ", 1" and 1 $\frac{1}{4}$ "



# UT279

## IN-TANK FILTERS

## UT279 Series Filters

# Technical Information

### Features

- Patented Ultipleat (laid-over pleat) filter medium pack
- Coreless, cageless element configuration
- Pall Stress-Resistant Technology (SRT) Media
- In-to-out filter element flow path
- Flows to 265 L/min (70 US gpm)
- Pressures to 10 bar (150 psi)
- Port size ¾", 1" and 1¼"

### Notes and Specifications

#### Filter Housing

- **Maximum Working Pressure:**  
10 bar (150 psi)
- **Temperature Range:**  
Fluorocarbon Seals:  
-29°C to 120°C (-20°F to 250°F)  
Consult sales for other fluid group suitability

60°C (140°F) maximum in  
HWCF or water glycol fluids

- **Materials of Construction:**  
Aluminum alloy head,  
glass-filled polyamide cover,  
steel shell and diffuser.

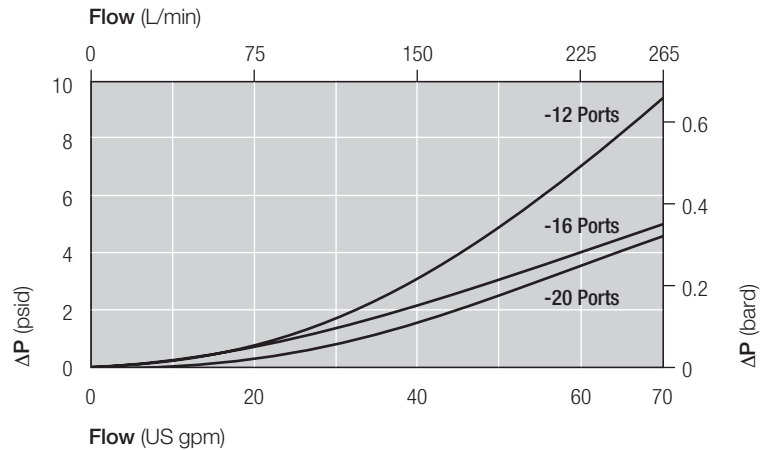
#### Filter Element

- **Filter Element Burst Pressure:**  
10 bard (150 psid)
- **Ultipleat SRT Element Construction:**  
Inorganic fibers impregnated and bonded with epoxy resins. Polymer endcaps. Anti-static media design.

### Pressure Drop Information

#### Housing pressure drop using fluid with 0.9 S.G.

Housing pressure drop is directly proportional to specific gravity.



#### Element Pressure Drop

Multiply actual flow rate times factor in table below to determine pressure drop with fluid at 32 cSt (150 SUS), 0.9 S.G. Correct for other fluids by multiplying new viscosity in cSt/32 (SUS/150) x new S.G./0.9. Note: factors are per 1000 L/min and per 1 US gpm.

#### 299 Series Filter Elements — bard/1000 L/min (psid/US gpm)

Length Code	AZ	AP	AN	AS	AT
04	20.07 (1.102)	8.51 (0.467)	5.72 (0.314)	3.55 (0.195)	2.69 (0.148)
08	9.93 (0.545)	4.21 (0.231)	2.83 (0.155)	1.76 (0.096)	1.33 (0.073)
13	5.95 (0.327)	2.52 (0.139)	1.70 (0.093)	1.05 (0.058)	0.80 (0.044)
20	3.95 (0.217)	1.68 (0.092)	1.13 (0.062)	0.70 (0.038)	0.53 (0.029)

#### Sample ΔP calculation

UT279 Series 8" length housing with C16 (1" BSP) threaded ports using AN grade media. Operating conditions 50 L/min flow rate using a hydraulic fluid of 50 cSt and specific gravity (s.g.) 1.2.

#### Total Filter ΔP

$$\begin{aligned}
 &= \Delta P_{\text{housing}} + \Delta P_{\text{element}} \\
 &= (0.04 \times 1.2/0.9) \text{ bard (housing)} \\
 &+ ((50 \times 2.83/1000) \times 50/32 \times 1.2/0.9) \text{ bard (element)} \\
 &= 0.05 \text{ bard (housing)} + 0.29 \text{ bard (element)} \\
 &= \mathbf{0.34 \text{ bard (4.9 psid)}}
 \end{aligned}$$

The equipment has been assessed in accordance with the guidelines laid down in The European Pressure Directive 97/23/EC and has been classified within Sound Engineering Practice S.E.P. Suitable for use with Group 2 fluids only. Consult Sales for other fluid gas group suitability.

# UT279 Series Filters

## Ordering Information

For new installations, select one complete part number from each section below

### Section 1

#### Housing P/N:

Note: Pall Ultipleat SRT filter housings are supplied without filter elements or warning devices fitted. Never operate the filter unless a filter element is fitted and all warning device ports are sealed.

UT 279  ++  Z   B B

Table 1

Table 2

Table 3

Table 4

Note: Z indicates fluorocarbon seals are standard. Other options are available; contact Pall. The first letter 'B' in the Housing p/n designates the breather. The letter 'B' at the end of the housing p/n designates one gauge port, fitted with a blanking plug.

#### Seal Kit P/N:

#### UT 279 SKZ

\*Other seal material options are available; Contact Pall.

Table 1: Housing Port Options

Code	Port
A12	3/4" SAE J514 straight thread
A16	1" SAE J514 straight thread
A20	1 1/4" SAE J514 straight thread
C12	3/4" BSP ISO 228 threads
C16	1" BSP ISO 228 threads
C20	1 1/4" BSP ISO 228 threads

Table 2: Housing Length Options

Code	Length (in)*
04	4
08	8
13	13
20	20

\* Nominal length

Table 4: Secondary Port Options

Code	Port
N	No secondary port
S	1/2" port. 'A' or 'C' style depending on primary port style.

Table 3: Bypass Valve Options

Code	Valve
A	1.7 bard (25 psid) with shroud
G	4.5 bard (65 psid) with shroud

### Section 2

#### Element P/N:

UE 299   Z

Table 1

Table 2

Note: Z indicates fluorocarbon seals are standard. Other options are available; contact Pall.

Table 1: Filter Element Options

Code	$\beta_{x(c)} \geq 1000$ based on ISO 16889	CST Rating*
AZ	3	08/04/01
AP	5	12/07/02
AN	7	15/11/04
AS	12	16/13/04
AT	22	17/15/08

\* CST: Cyclic Stabilization Test to determine filter rating under stress conditions, based on SAE ARP4205

Table 2: Filter Element Length Options

Code	Length (in)*
04	4
08	8
13	13
20	20

\* Nominal length

### Section 3

#### Gauge/Switch P/N:

See Table 1

#### Replacement Breather Element P/N:

HC229BR

Note: Z indicates fluorocarbon seals are standard. Other options are available; contact Pall.

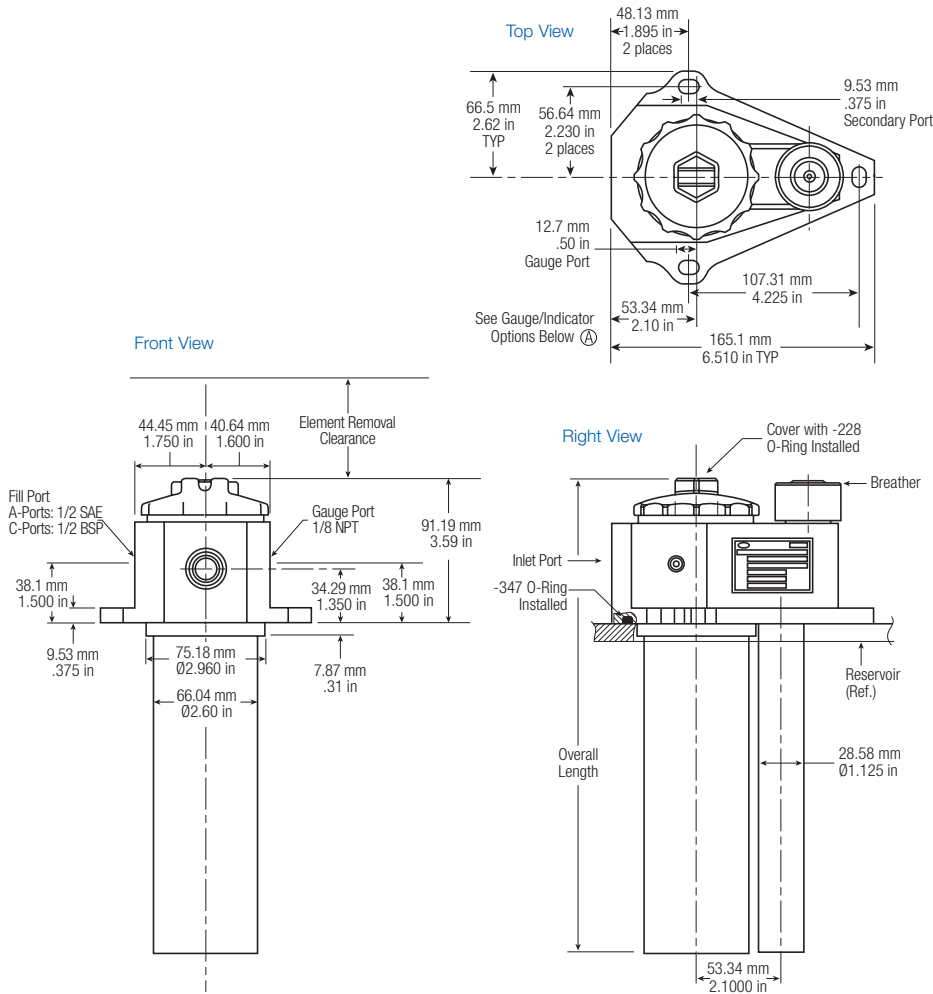
Table 1: Gauge / Switch Options

Part No	Rating	Indicator	'H' Dim
9004D370-11	0-10 bar (150 psi)	'A' type Pressure Gauge	32mm (1.3 in)
9004D370-34	0-10 bar (150 psi)	'G' type Pressure Gauge	32mm (1.3 in)
HC0379-11	1.1 bar (16 psi)	Electrical absolute pressure switch 24VDC	54mm (2.1 in)
HCA132-35	3.5 bar (50 psi)		
HC0380-11	1.1 bar (16 psi)	Electrical absolute pressure switch 220VAC with 3 (15") flying leads	55mm (2.2 in)
HC0380-35	3.5 bar (50 psi)		

Note: Use 1.1 bar (16 psi) rating for A valve options  
Use 3.5 bar (50 psi) rating for G, 3 and 7 valve options

# UT279

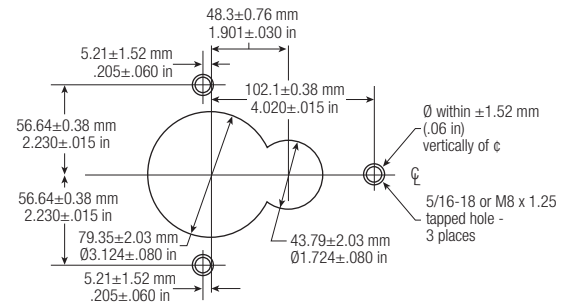
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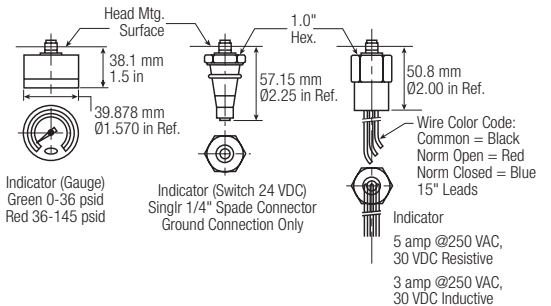
Length Code	Overall Length mm (in)	Element Removal Clearance mm (in)	Empty Weight kg (lb)
04	196 (7.7)	111 (4.4)	1.4 (3.0)
08	297 (11.7)	213 (8.4)	1.6 (3.5)
13	432 (17.0)	356 (14.0)	1.9 (4.2)
20	602 (23.7)	518 (20.4)	2.3 (5.1)

### Reservoir Mounting Detail

Reservoir surface to be flat within 0.51 mm (0.020 in)



### Ⓐ Gauge/Indicator Layout



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