



Pall Corporation

UR629

UR629 Series Filters ULTIPLEAT® SRT RETURN LINE FILTERS

Port Size 3" and 4"



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 1500 L/min (400 US gpm)
- Pressures to 28 bar (400 psi)
- Port size 3" and 4"

Notes and Specifications

Filter Housing

- **Maximum Working Pressure:**
28 bar (400 psi)
- **Rated Fatigue Pressure:**
23 bar (330 psi)
10⁶ cycles per NFPA T2.06.01R2-2001
- **Typical Burst Pressure:**
145 bar (2100 psi)
- **Temperature Range:**
Fluorocarbon Seals: -29°C to 120°C (-20°F to 250°F)
60°C (140°F) maximum in HWCF or water glycol fluids
Contact sales for other fluid group suitability
- **Materials of Construction:**
Head, tube, manifold and check valve: Aluminum alloy
Cover: Ductile Iron

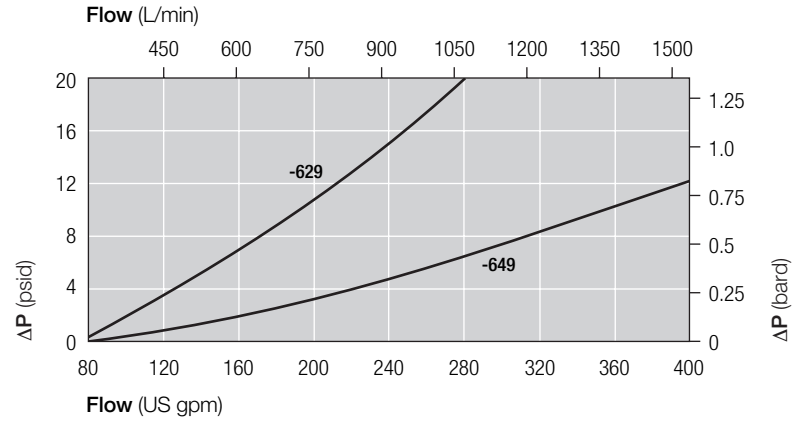
Filter Element

- **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.

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

| Length Code | AZ | AP | AN | AS | AT |
|-------------|--------------|--------------|--------------|--------------|--------------|
| 20 | 1.31 (0.072) | 0.56 (0.030) | 0.43 (0.023) | 0.31 (0.017) | 0.19 (0.011) |
| 40 | 0.70 (0.038) | 0.30 (0.016) | 0.23 (0.013) | 0.17 (0.009) | 0.10 (0.006) |

Sample ΔP calculation

UR629 Series 20" length housing with F48 (3" SAE) split flange ports using AN grade media. Operating conditions 600 L/min flow rate using a hydraulic fluid of 50 cSt and specific gravity (s.g.) 1.2.

Total Filter ΔP

$$\begin{aligned}
 &= \Delta P \text{ housing} + \Delta P \text{ element} \\
 &= (0.48 \times 1.2/0.9) \text{ bard (housing)} \\
 &+ ((600 \times 0.43/1000) \times 50/32 \times 1.2/0.9) \text{ bard (element)} \\
 &= 0.64 \text{ bard (housing)} + 0.54 \text{ bard (element)} \\
 &= \mathbf{1.18 \text{ bard (17.1 psid)}}
 \end{aligned}$$

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.

UR629 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.

Seal Kit P/N:

Table 1: Number of Housing Options

| Code | Port |
|------|-------------------------|
| 2 | 2 housings (1 per side) |
| 4 | 4 housings (2 per side) |
| 6 | 6 housings (3 per side) |
| 8 | 8 housings (4 per side) |

Table 2: Housing Port Options

| Code | Port |
|------|--------------------------------------------------------|
| D48 | 3" Flange J518C code 61 with 5/8"-11 UNC holding bolts |
| D64 | 4" Flange J518C code 61 with 5/8"-11 UNC holding bolts |
| F48 | 3" ISO 6162 split flange with M16 x 2.00 holding bolts |
| F64 | 4" ISO 6162 split flange with M16 x 2.00 holding bolts |

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Table 1
Table 2
Table 3
Table 4

Note: Z indicates fluorocarbon seals are standard. Other options are available; contact Pall. The number '9' at the end of the Housing P/N designates 2 indicator ports per filter tower, one fitted with a plastic shipping plug and the other with a blanking plug.

UR 619 SK Z

*Other seal material options are available; Contact Pall.

Table 3: Housing Length Options

| Code | Length (in)* |
|------|--------------|
| 20 | 20 |
| 40 | 40 |

* Nominal length

Table 4: Housing Bypass Valve Options

| Code | Valve |
|------|--------------------|
| A | 1.7 bard - 25 psid |
| G | 4.5 bard - 65 psid |
| N | Non-Bypass |

Section 2

Element P/N:

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

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Table 1
Table 2

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

Table 2: Filter Element Length Options

| Code | Length (in)* |
|------|--------------|
| 20 | 20 |
| 40 | 40 |

* Nominal length

Section 3 (At least one Differential Pressure Indicator or 'B' type blanking plug must be ordered for each filter tower)

Differential Pressure Indicator P/N:

Note: Two Differential Pressure Indicators can be fitted on each filter tower

Table 1: Differential Pressure Indicator Options*

| Code | Indicator | 'H' Dim. |
|-------|--------------------------------------------------------------------------------------------|---------------|
| 778NZ | 'P' type Visual indicator with thermal lockout | 21mm (0.83in) |
| 860MZ | 'D' type Visual indicator with no thermal lockout | 21mm (0.83in) |
| 861CZ | 'L' type Electrical switch (SPDT) with 6" leads | 38mm (1.50in) |
| 861CZ | 'M' type Electrical switch (SPDT) with DIN43650 connector and matching cap | 78mm (3.07in) |
| 861CZ | 'R' type Electrical switch (SPDT) and neon light indicator with DIN43650 connector and cap | 89mm (3.50in) |
| 771BZ | 'S' type Electrical switch (SPDT) with 3-pin MS connector | 57mm (2.24in) |

* Other indicator options are available; contact Pall.

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Table 1
Table 2
Table 3
Table 4

Note: A differential pressure indicator or a 'B' Type blanking plug (P/N HA9000-P8-Kit Z) must be ordered separately for each filter tower on the housing and fitted to replace the plastic shipping plug. For typical installations, only 2 indicators are required - only one housing per side requires an indicator. Replace other shipping plugs with blanking plugs.

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

Table 2: Indicator Pressure Setting Option*

| Code | Valve |
|------|---------------------------------------------------------------|
| 084 | For 'A' Valve Option - Housings (1.1 bard - 16 psid) |
| 091 | For 'G' and 'N' Valve Options - Housings (3.5 bard - 50 psid) |

* Other setting options are available; contact Pall.

Table 3: 'M' & 'R'-Type Indicator Codes*

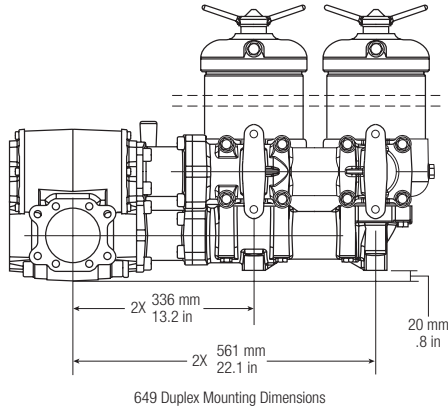
| Code | Option |
|------|------------|
| YM | 'M' option |
| YR | 'R' option |

* Use only if 'R' or 'M' Indicator is selected from Table 1

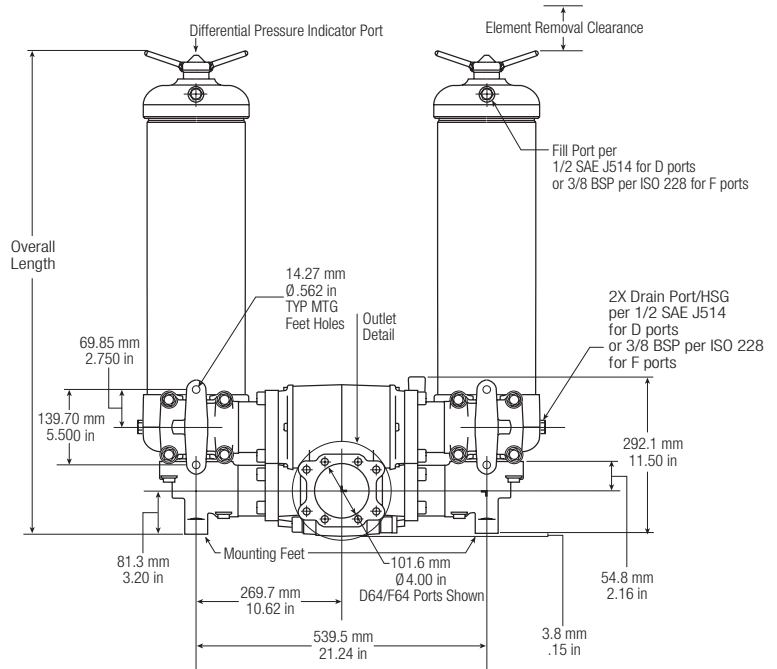
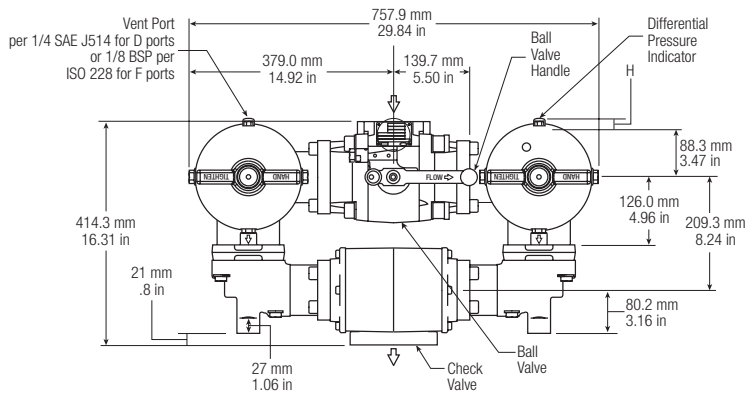
Table 4: 'R' Indicator Options

| Code | Option |
|-------|---------|
| 110AC | 110V AC |
| 220AC | 220V AC |
| 24DC | 24V DC |

* Use only if 'R' Indicator is selected from Table 1



| Length Code | Overall Length mm (in) | Element Removal Clearance mm (in) | Empty Weight kg (lb) |
|-------------|---------------------------|--------------------------------------|-------------------------|
| 20 | 897.1 (35.32) | 442.7 (17.43) | 88.9 (196) |
| 40 | 1405.1 (55.32) | 950.7 (37.43) | 112.5 (248) |



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