

## Pall-Fit Filter Element for Hydraulic Excavators and Shovels

### Description

In the mining industry, maintenance expenditure over the life of a hydraulic shovel or excavator can be many times its original purchase price. Expenses associated with pump failures, oil changes, and unscheduled downtime are key contributors to the equipment's Total Cost of Ownership (TCO).

The Pall-Fit element for mining shovel and excavator hydraulic return line applications now incorporates Pall's Ultipor® SRT (Stress-Resistant Technology) filtration medium. This filter maintains contaminants at low levels, thereby reducing hydraulic system failures and maintenance costs associated with contaminated hydraulic oil. The Ultipor SRT filter features high strength, high void volume, low clean differential pressure, and high removal efficiencies. Among the resulting benefits are low system contamination—which allows for improved hydraulic system operation—and longer filter element service life.

### Specifications

#### Materials of construction

- Medium: Epoxy-resin-bonded inorganic fibers
- Core and end caps: Corrosion-protected carbon steel

#### Temperature range

Nitrile seals:

-43°C to 107°C / -45°F to 225°F

Fluorocarbon seals:

-29°C to 120°C / -20°F to 250°F

HWCF: 60°C / 140°F max

Phosphate fluids: 93°C / 199°F max

#### Collapse pressure rating

(ISO2941):<sup>1</sup>

10 bard / 150 psid

#### Fluid compatibility (ISO2943):<sup>2</sup>

- All petroleum-based oils
- Specified synthetic hydrocarbons<sup>3</sup>



Pall-Fit filter element

#### Filter element rating

| Part No.         | $\beta_{x(c)} \geq 1000$<br>(ISO 16889) <sup>4</sup> | CST<br>Rating <sup>5</sup> |
|------------------|--|----------------------------|
| HC2263FMN17HY550 | 6 $\mu\text{m}(c)$                                   | 17/13/05                   |
| HC2263FMS17HY550 | 12 $\mu\text{m}(c)$                                  | 19/16/06                   |

<sup>1</sup> ISO 2941: "Hydraulic fluid power—Filter elements—Verification of collapse/burst pressure rating"

<sup>2</sup> ISO 2943: "Hydraulic fluid power—Filter elements—Verification of material compatibility with fluids"

<sup>3</sup> Use fluorocarbon seals.

<sup>4</sup> ISO 16889: "Hydraulic fluid power—Multi-pass method for evaluating filtration performance of a filter element"

<sup>5</sup> Cyclic stabilization test to determine filter rating under stress conditions. Based on SAE ARP4205: "Aerospace Fluid Power—Hydraulic Filter Elements—Method for Evaluating Dynamic Efficiency with Cyclic Flow"

## Part Numbers / Ordering Information

The Pall-Fit Ultipor SRT filter can be used in the following hydraulic excavators, shovels, and wheel loaders.

### Hitachi Excavator and Shovels

|             |          |
|-------------|----------|
| EX1200      | ZX270LC  |
| EX3600      | ZX280LC  |
| EX5500      | ZX280LCN |
| EX400       | ZX400    |
| EX450       | ZX450    |
| EX550       | ZX450H   |
| EX550LC-5   | ZX450LC  |
| EX600H-3    | ZX450LCH |
| EX600LC     | ZX450MTH |
| EX600LCH    | ZX450T   |
| EX750       | ZX500H   |
| EX800H      | ZX500LC  |
| EX8000      | ZX500LCH |
| EX1200      | ZX600    |
| EX1900      | ZX600LC  |
| Zaxis460LCH | ZX650    |
| Zaxis480MT  | ZX650H   |
| Zaxis480MTH | ZX650LCH |
| ZX270       |          |

### John Deere Excavators

|        |
|--------|
| 450CLC |
| 550LC  |
| 600CLC |

### Samsung Excavator and Shovels

|         |
|---------|
| SE280LC |
| SE350LC |
| SE450LC |
| SE280LC |
| SE350LC |

### Komatsu Excavator and Wheel Loaders

|            |             |
|------------|-------------|
| PC1100     | PC400LC-6MH |
| PC1100-6   | PC450-6     |
| PC1100LC-6 | WA450-5     |
| PC1100SE-6 | WA470-5     |
| PC1100SP-6 | WA480-5     |
| PC400-6    | 80001       |
| PC400LC-6  | WA500-3     |

### Volvo Excavators

|       |
|-------|
| EC360 |
| EC460 |

### Filter Cross-Reference

| OE/OEM  | Part Number |
|---------|-------------|
| Fiat    | 4287634     |
| Fiat    | 76580323    |
| Hitachi | 4287634     |
| Hitachi | 4333469     |
| Komatsu | 2086061150  |
| Komatsu | 70630138    |
| Samsung | 104100840   |
| Volvo   | 104100840   |

| Filter Manufacturer | Part Number |
|---------------------|-------------|
| Baldwin             | PT8478      |
| Carquest            | 84158       |
| Donaldson           | P550574     |
| Fleetguard          | HF28910     |
| Luber-Finer         | LH4742      |
| Napa Gold           | 7158        |
| Wix                 | 57158       |



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