

In-tank Filters

DRT DIN Series Filters

Flows to 630 L/min (166 USgpm)
Pressures to 10 bar (145 psi)



Features and Benefits

- Beta Ratio: $\beta_{x(c)} = 1000$ to ISO 16889
- Gauge and electrical switch options available to monitor element loading
- In-tank configuration minimizes space requirements and potential system leakage points
- High efficiency replacement elements in standard configurations (C-Pak) to meet Target Cleanliness Levels

DESIGN SPECIFICATIONS

Rated flow:	040	40 L/min (11USgpm)
	063	63 L/min (17USgpm)
	100	100 L/min (26USgpm)
	160	160 L/min (42USgpm)
	250	250 L/min (66USgpm)
	400	400 L/min (106USgpm)
	630	630L/min (166USgpm)
Fluid compatibility: Compatible with most petroleum oil, oil-in-water and water-in-oil fluids. Optional seals available for phosphate esters		
Temp range: -10°C to + 100°C (+14°F to +212°F)		
Pressure rating: Operating		25 bar (363 psi)
Material:		Aluminum
Dry weight:	040	1,5 kg (3.3lbs)
	063	1,5 kg (3.3lbs)
	100	1,5kg (3.3lbs)
	160	3,8kg (8.4lbs)
	250	3,8kg (8.4lbs)
	400	9,0kg (19.8lbs)
	630	9,0kg (19.8lbs)

DRT	1	***	**	4	**	N	*	*	**
1	2	3	4	5	6	7	8	9	10

DRT Series Filter

Sample model code:

DRT1100BD4XXNBC06

1 Filter Series

DRT - DIN In-Tank

2 Element Collapse Rating

1 - Low Collapse

3 Nominal Size

040 - 40 L/min (11USgpm)
063 - 63 L/min (17USgpm)
100 - 100 L/min (26USgpm)
160 - 160 L/min (42USgpm)
250 - 250 L/min (66USgpm)
400 - 400 L/min (106USgpm)
630 - 630L/min (166USgpm)

4 Port Size

BB - G 1/2 (Length 040 only)
BC - G 3/4 (Length 063 only)
BD - G 1 (Length 100 only)

BE - G 1 1/4 (Length 160 only)

BF - G 1 1/2 (Length 250 only)

BM - 2 1/2 in SAE Flange
Code 61 with metric bolts (DN 64) (Length 400 and 630 only)

5 Valve Options

4 - Bypass set at 3 bar (50 psi) cracking pressure

6 Indicator Options *

XX - No Indicator
GB - 0-10 bar (0-145 psi) gauge
RH - Electrical switch Hirschmann

7 Secondary Port

N - No Secondary Port

8 Seal Material

B - Buna-N
V - Viton-A

9 Element Construction

C - Standard Construction
X - no element

10 Fluid Cleanliness Rating

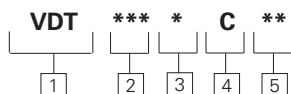
Code	Target fluid cleanliness level
03	16/14/12 or better
06	18/16/14 or better
10	20/18/15 or better
25	22/19/16 or better
XX	no element

* For indicator options, refer to Static Indicators on page 150.

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Element model code

Sample model code:

VDT250BC06

1 Filter Element

VDT - DIN Standard Element

2 Nominal Size

040 - 40 L/min (11USgpm)
063 - 63 L/min (17USgpm)
100 - 100 L/min (26USgpm)
160 - 160 L/min (42USgpm)
250 - 250 L/min (66USgpm)
400 - 400 L/min (106USgpm)
630 - 630L/min (166USgpm)

3 Seal Material

B - Buna-N
V - Viton-A

4 Element Construction

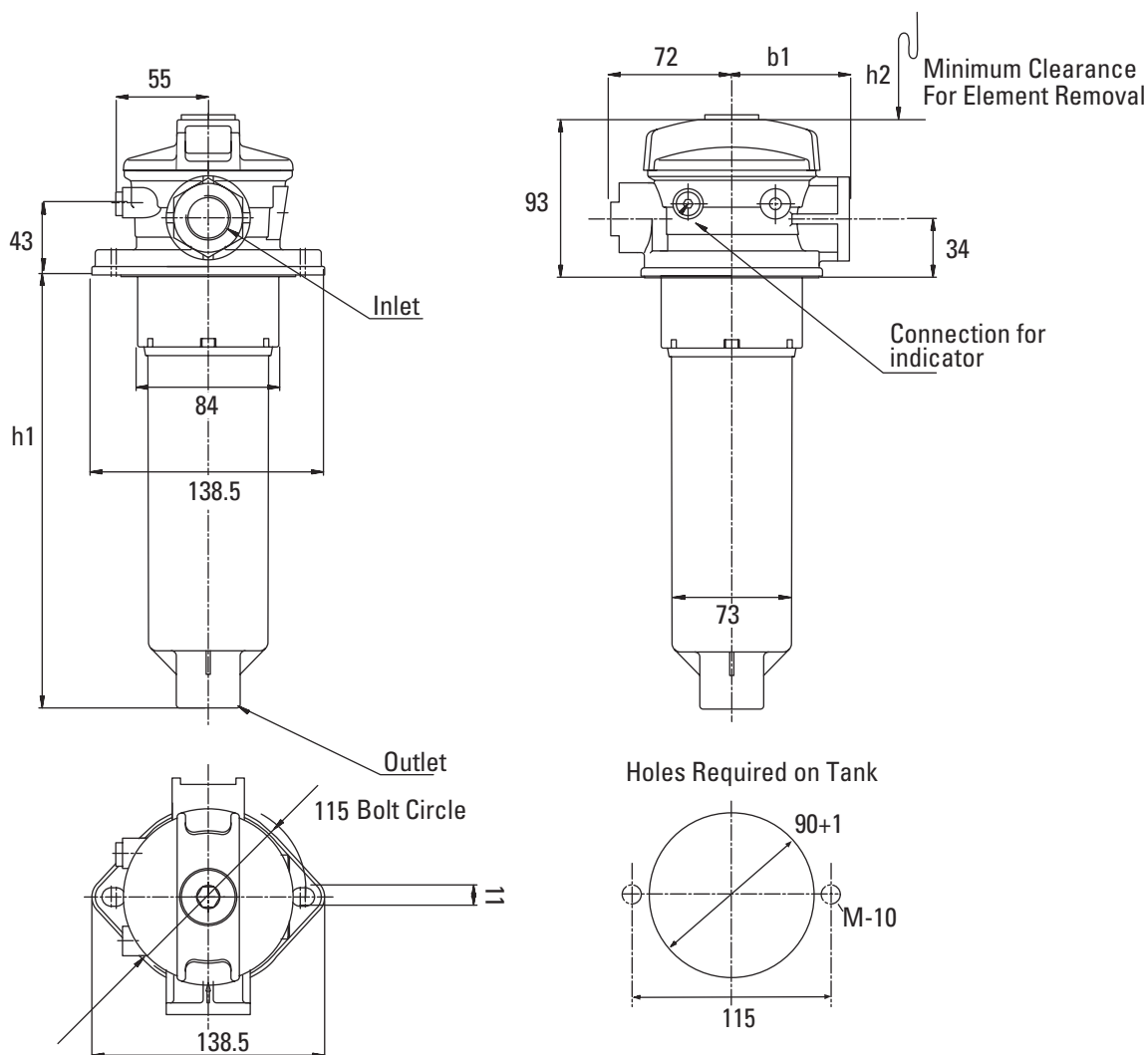
C - Standard Construction

5 Fluid Cleanliness Rating

Code	Target fluid cleanliness level
03	16/14/12 or better
06	18/16/14 or better
10	20/18/15 or better
25	22/19/16 or better

Dimensions DRT 040, 063, 100 Series

Dimensions in mm

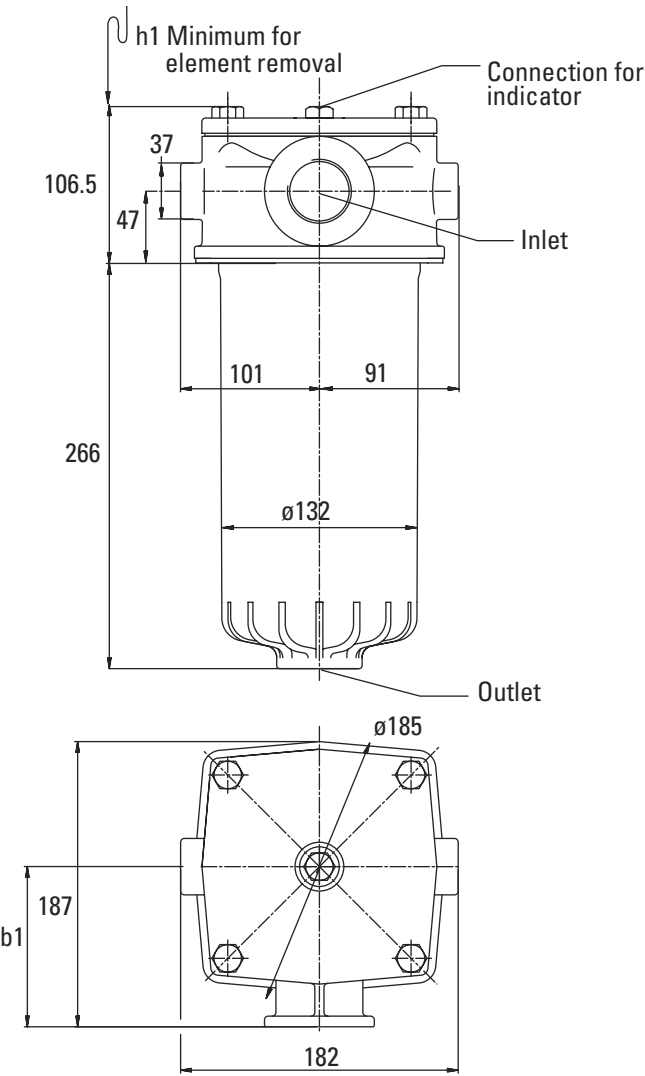
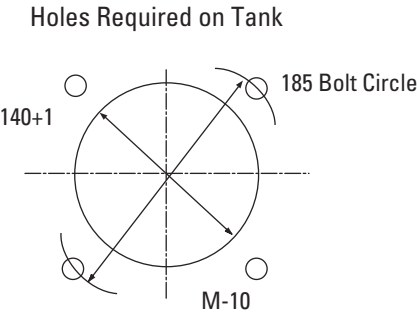


In-tank Filters
DRT DIN Series
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Dimensions DRT 160 and 250 Series

Dimensions in mm



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Housing Flow Data

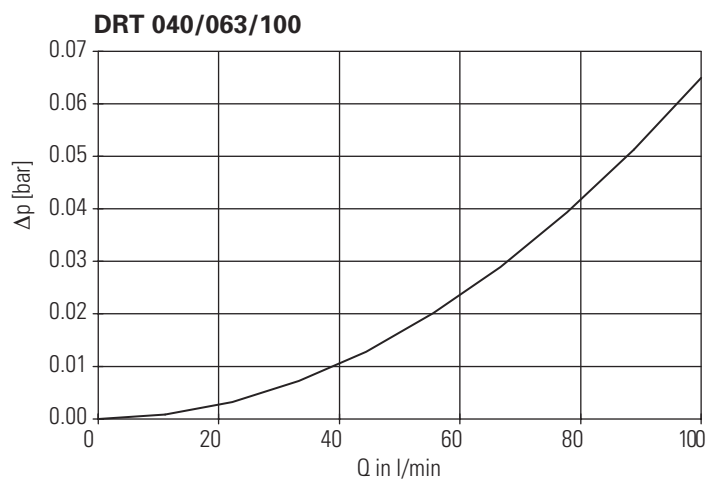
DRT 040, 063, 100 Series Housing Data

Flow versus pressure drop:

32 cSt oil with specific gravity of ≤ 0.9

(See page 5 for specific gravity corrections for pressure drop.)

TYPE	INLET PORT	b1	h1	h2
DRT 040	G 1/2	81	122	150
DRT 063	G 3/4	70	206	200
DRT 100	G 1	70	260	290



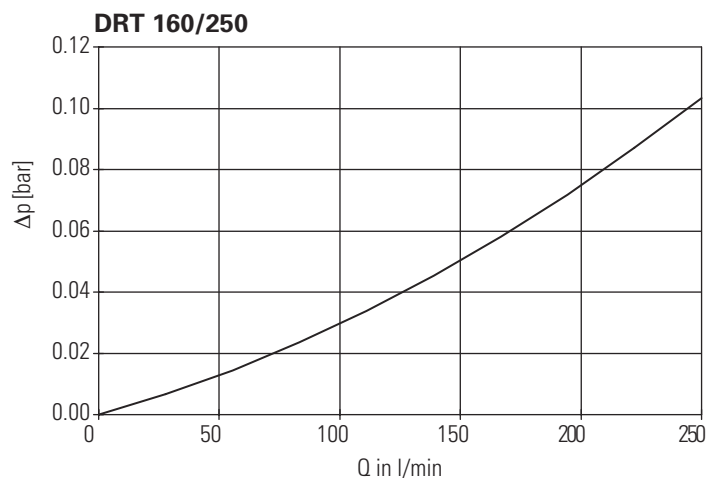
DRT 160 and 250 Series Housing Data

Flow versus pressure drop:

32 cSt oil with specific gravity of ≤ 0.9

(See page 5 for specific gravity corrections for pressure drop.)

TYPE	INLET PORT	b1	h1
DRT 160	G 1 1/4	141	210
DRT 250	G 1 1/2	105	300



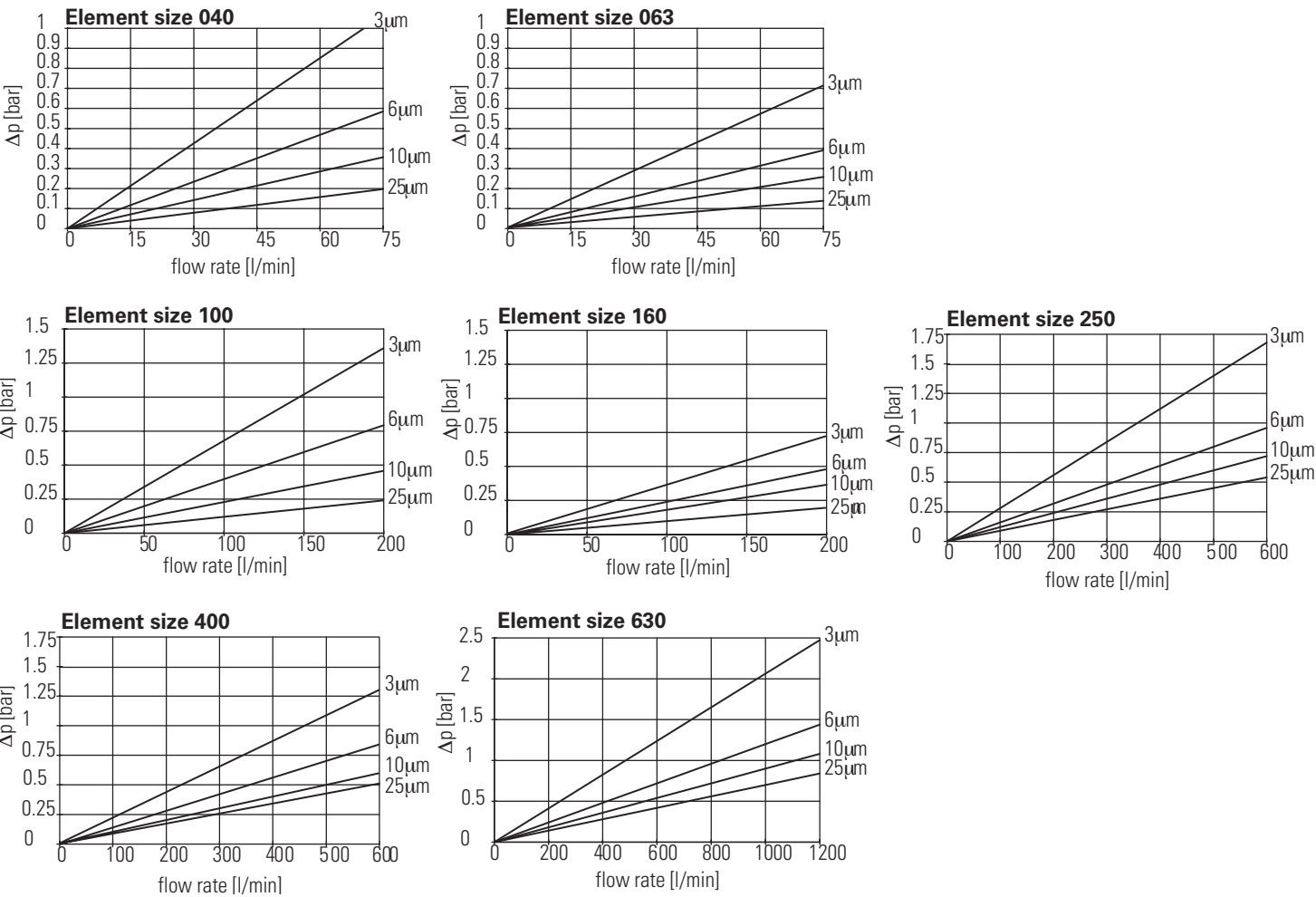
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Element Flow Data



Sample ΔP Calculation : DRT1100BD4XXNBC06 - Filter assembly having filter element with micron rating code '06' at 100 L/min flow rate using a hydraulic fluid at 46 cSt viscosity & specific gravity (sp.gr.)0.8.

ΔP Assembly	=	ΔP Housing	+	ΔP Element
	=	Housing ΔP from graph x sp.gr.(actual)/0.9	+	Element ΔP valve from from graph(bar/lpm) x [actual cSt / 32] x [Sp.Gr(actual) / 0.9]
	=	0.065 x 0.8/0.9	+	0.3 x 46/32 x 0.8/0.9
	=	0.057	+	0.38
	=	0.43 bar		