



**LONG<sup>®</sup>**

*Thermal Products*

Engine Oil

# Cooling and Warming Products



# Thermal-Management Products

Dana's engine oil cooling and warming products offer flexibility in design, as well as superior performance in lowering and controlling the engine oil's operating temperature.



Filter-Mounted – Aluminum Self-Contained Style		
Diameter (mm)	95	95
Length (mm)	125	132
Core Height (mm)	Designed to customer specifications	

Filter-Mounted – Aluminum Tank Style		
Diameter (mm)	90	95 110
Core Height (mm)	Designed to customer specifications	

Filter-Mounted – Stainless Steel Tank Style	
Diameter (mm)	90
Core Height (mm)	Designed to customer specifications



Matrix™								
Aluminum	Length (mm)	94	108	110	120	140	140	148
	Width (mm)	62	80	70	80	70	80	74
	Core Height (mm)	Designed to customer specifications						
	Length (mm)	153	155	172	210	278	326	
	Width (mm)	94	110	69	94	80	101	
	Core Height (mm)	Designed to customer specifications						
Stainless Steel	Length (mm)	203						
	Width (mm)	108						
	Core Height (mm)	Designed to customer specifications						



In-Tank								
Aluminum Plate	Length (mm)	210	254	292	300	305		
	Width (mm)	28	28 / 36 / 44.5	44	45	28 / 36 / 44.5		
	Core Height (mm)	Designed to customer specifications						
Stainless Steel Plate	Length (mm)	100	152	178	200	216	250	292 457
	Width (mm)	76.2	76.2	76.2	76.2	63.5	76.2	44.5 76.2
	Core Height (mm)	Designed to customer specifications						
Brass and Aluminum Concentric	Length (mm)	Designed to customer specifications						
	Diameter (mm)	19	22	25.4	28	32	38	44.5



Aluminum Oil-to-Air Plate and Fin Coolers								
	Plate and Fin						Plate	
Length (mm)	158	254	277	280	340	355	104	280
Maximum Number of Rows	30	36	40	40	50	50	72	72
Maximum Core Height (mm)	390	504	560	560	700	700	200	200
Width (mm)	32	32	50	19	32	50	19	19
Fin Density (fins per inch)	12.7	14 & 17	14	17	14 & 17	17	N/A	N/A



Aluminum-Variable Length Cooler (VLC)	
Length (mm)	320 to 800
Width (mm)	32
Height (mm)	Designed to customer specifications

## Dana.com/light-vehicles

### Application Policy

Capacity ratings, features, and specifications vary depending upon the model and type of service. Application approvals must be obtained from Dana; contact your representative for application approval. We reserve the right to change or modify our product specifications, configurations, or dimensions at any time without notice.



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