

ISO and SAE Viscosity Classes: A Comparison

A number of different standards are used in the trade to identify viscosity. Industrial lubricants are normally identified according to the European ISO-VG standard (VG = viscosity grade), the figure given being the average viscosity at 40 °C. With vehicle lubricants, on the other hand, the American SAE classes have become dominant (SAE = Society of Automotive Engineers). Motor oils are arranged in classes from 0W (very low viscosity) to 60 (very high viscosity). The number range 70W to 140 has been created for gear oils.

The following table offers a comparison and classification between industrial lubrications and motor or gear oils in terms of their viscosity.

ISO-VG	SAE-Klassen	
Industrieöle	Motorenöle	Getriebeöle
5	0 W	
7		
10		
15	5 W	70 W 75 W
22	10 W	
32		
46	15 W	80 W
	20 W	
68	25 W	
	20	
100	30	85 W
150	40	90
220	50	
320	60	140
460		
680		
1000		
1500		
		250