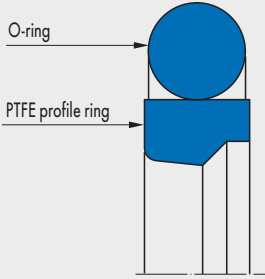
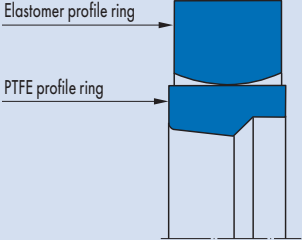
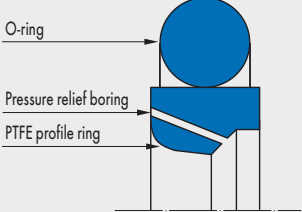
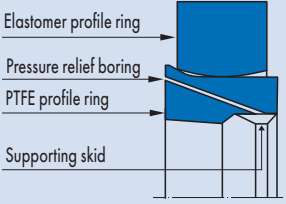


Pre-Selection Hydraulics – Rod Seals

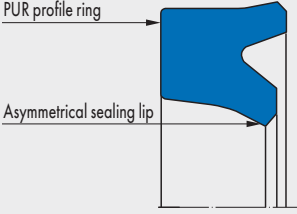
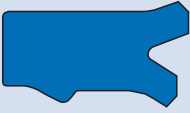
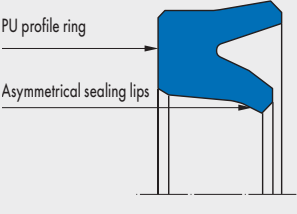
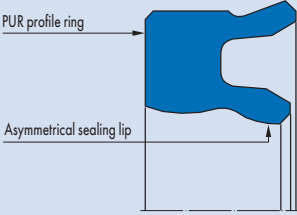
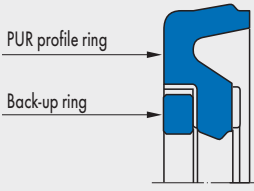
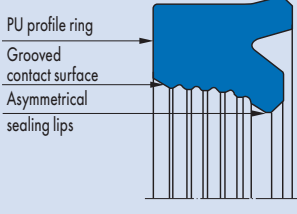
Temperature figures refer to mineral oils. Due to the large choice of media with different and varying additives, which is not always easily comprehensible, the above operating limits are only recommended values. We recommend testing resistance in the specific case.

Individual instances of the operating limits stated may be exceeded taking into account the related operating conditions. With a long duty cycle, stop-start operation or other difficult operating conditions it is recommended that these values are not simultaneously exploited to the full.

Seal		Standard	
Type	Material	DIN/ISO	Examples of use
<p><b>Merkel Omegat OMS-MR</b></p>  <p>O-ring PTFE profile ring</p>	<p>PTFE bronze NBR PTFE bronze FKM PTFE glass NBR</p>	<p>based on 7425/2</p>	<p>For high requirements in sealing systems, low friction, free of stick-slip, high temperature resistance/ high heat dissipation ability.</p>
<p><b>Merkel Omegat OMS-S</b></p>  <p>Elastomer profile ring PTFE profile ring</p>	<p>PTFE glass NBR</p>		<p>Very high resistance to pressure, specifically for heavy duty hydraulic applications, low friction, free of stick-slip, high contact pressure and design which prevents twisting through elastomer profile ring.</p>
<p><b>Merkel Omegat OMS-MR PR</b></p>  <p>O-ring Pressure relief boring PTFE profile ring</p>	<p>PTFE bronze NBR PTFE bronze FKM PTFE glass NBR</p>	<p>based on 7425/2</p>	<p>Patented pressure relief for high reliability, for high requirements in sealing systems, low friction, free of stick-slip, high temperature resistance/ heat dissipation ability.</p>
<p><b>Merkel Omegat OMS-S PR</b></p>  <p>Elastomer profile ring Pressure relief boring PTFE profile ring Supporting skid</p>	<p>PTFE bronze NBR PTFE glass NBR</p>		<p>Patented pressure relief for high reliability, specifically for heavy duty hydraulic applications, low friction, free of stick-slip, high temperature resistance/heat dissipation ability.</p>

● = very good; ● = good; ○ = possible or satisfactory; ⊗ = not suitable

	Function					Operating Limits		
	single-acting	double-acting	Individual seal	Primary seal	Secondary seal	Pressure (MPa)	Speed (m/s)	Temperature (°C)
	●	⊗	●	●		40	5	-30 ... +100
	●	⊗	●	●		40	5	-30 ... +100
	●	⊗		●	⊗	40	5	-30 ... +100
	●	⊗		●	⊗	40	5	-30 ... +100

Seal		Standard		
Type	Material	DIN/ISO	Examples of use	
<b>Merkel U-Ring T 20</b>  <p>PUR profile ring</p> <p>Asymmetrical sealing lip</p>	95 AU V142	5597/1	Optimal price/performance ratio.	
<b>Merkel U-Ring T 24</b> 	95 AU V142		Very good static and dynamic tightness, specifically for telescopic cylinders and for radially narrow housings.	
<b>Merkel U-Ring TM 20</b>  <p>PU profile ring</p> <p>Asymmetrical sealing lips</p>	95 AU V142		Very good static and dynamic tightness, low breakaway force, specifically for special sizes.	
<b>Merkel U-Ring TMP 20</b>  <p>PUR profile ring</p> <p>Asymmetrical sealing lip</p>	95 AU V167		High tightness, specifically for pneumatic applications.	
<b>Merkel U-Ring Syprim SM</b>  <p>PUR profile ring</p> <p>Back-up ring</p>	95 AU V142/POM	based on 5597/1	Standard buffer seal in sealing systems.	
<b>Merkel U-Ring LF 300</b>  <p>PU profile ring</p> <p>Grooved contact surface</p> <p>Asymmetrical sealing lips</p>	94 AU 925	5597/1	Low friction, optimised with regards to stick-slip behaviour, optimised with regards to hydrodynamic deformation value.	

● = very good; ● = good; ○ = possible or satisfactory; ⊗ = not suitable

	Function					Operating Limits		
	single-acting	double-acting	Individual seal	Primary seal	Secondary seal	Pressure (MPa)	Speed (m/s)	Temperature (°C)
	●	⊗	●	⊗	●	40	0,5 ... 0,8*	-30 ... +110
	●	⊗	●	⊗	●	40	0,5	-30 ... +110
	●	⊗	●	⊗	●	40	0,5	-30 ... +110
	●	⊗	●	⊗	●	2	1,5	-10 ... +80
	●	⊗		●	⊗	40	0,5	-30 ... +110
	●	⊗	●	⊗	●	32	0,6 ... 0,8*	-30 ... +110

Seal		Standard		
Type	Material	DIN/ISO	Examples of use	
<p><b>Merkel U-Ring NI 300</b></p> <p>Asymmetrical sealing lips PUR profile ring Sealing edge</p>	94 AU 925	5597/1	Additional protection against dirt intrusion.	
<p><b>Merkel U-Ring KI 310</b></p> <p>PU profile ring Sealing lips</p>	94 AU 925	5597/1	For narrow housings, high sealing effect at low pressures.	
<p><b>Merkel U-Ring KI 320</b></p> <p>PU profile ring Back-up rings Support edge</p>	94 AU 925/POM	5597/1	For high pressures and large gap widths.	

● = very good; ○ = good; ○ = possible or satisfactory; ⊗ = not suitable

	Function					Operating Limits		
	single-acting	double-acting	Individual seal	Primary seal	Secondary seal	Pressure (MPa)	Speed (m/s)	Temperature (°C)
	●	⊗	●	⊗	●	40	0,5	-30 ... +110
	●	⊗	●	⊗	●	40	0,5	-30 ... +110
	●	⊗	●	⊗	●	50	0,5	-30 ... +110