

PRESSURE PERFORMANCE

Series SK / SKC / LK / RE

Series SK / SKC mm	Base Material of the Installation							
	1	2	3	5	6	7	8	
	ETG-100 / 44SMn28 AISI 1144	C15Pb / 1.0403 ~ SAE 1015 (10L15)	EN 1563: GJS-600-3 ASTM A536: 80-60-03	EN 1561: GJL-250 ASTM A48: NO.35	AlCu4Mg1 / EN AW-2024-T3 AA: 2024 T4/T6*	AlMgSiPb / EN AW-6012-T6 AA: 6012-T6	G-AISI7Mg / EN-AC-42100 ASTM/UNS: A356	
Ø 4 – 10	1600 bar / 23200 psi				500 bar / 7200 psi		1400 bar / 20300 psi	450 bar / 6500 psi
Hole Tolerance	0 / +0.12 mm							
Hole Roughness	R _z 10 – 30 µm				Anchorage in Base Metal			

If SK plugs are used to keep channels separated, allowable working pressure on the insertion side is reduced by 50%.

Series LK 600 mm	Base Material of the Installation						
	1	2	3	5	6	7	8
	ETG-100 / 44SMn28 AISI 1144	C15Pb / 1.0403 ~ SAE 1015 (10L15)	EN 1563: GJS-600-3 ASTM A536: 80-60-03	EN 1561: GJL-250 ASTM A48: NO.35	AlCu4Mg1 / EN AW-2024-T3 AA: 2024 T4/T6*	AlMgSiPb / EN AW-6012-T6 AA: 6012-T6	G-AISI7Mg / EN-AC-42100 ASTM/UNS: A356
Ø 4 – 10	180 bar / 2600 psi			60 bar / 850 psi			
Hole Tolerance	0 / +0.12 mm						
Hole Roughness	R _z 10 – 30 µm					Anchorage in Base Metal	

1 2 3 5 Temperature range for proof pressure testⓈ: – 40 °C to + 150 °C 6 7 8 Temperature range for proof pressure testⓈ: – 40 °C to + 100 °C

Series LK 950 mm	Base Material of the Installation							
	1	2	3	5	6	7	8	
	ETG-100 / 44SMn28 AISI 1144	C15Pb / 1.0403 ~ SAE 1015 (10L15)	EN 1563: GJS-600-3 ASTM A536: 80-60-03	EN 1561: GJL-250 ASTM A48: NO.35	AlCu4Mg1 / EN AW-2024-T3 AA: 2024 T4/T6*	AlMgSiPb / EN AW-6012-T6 AA: 6012-T6	G-AISI7Mg / EN-AC-42100 ASTM/UNS: A356	
Ø 4 – 20	180 bar / 2600 psi			60 bar / 850 psi				
Hole Tolerance	+0.05 / +0.15	0 / +0.12 mm						
Hole Roughness	R _z 10 – 30 µm					R _z 10 – 30 µm	Anchorage in Base Metal	

1 2 3 5 Temperature range for proof pressure testⓈ: – 40 °C to + 150 °C 6 7 8 Temperature range for proof pressure testⓈ: – 40 °C to + 100 °C

KOENIG EXPANDER® sealing plugs series LK are not suitable for pressure load applied on the insertion side of the plug. For special release contact SFC KOENIG.

Series RE mm	Base Material of the Installation			
	1	4	6	8
	ETG-100 / 44SMn28 AISI 1144	EN 1563: GJS-450-10 ASTM A536: 65-45-12	AlCu4Mg1 / EN AW-2024-T3 AA: 2024 T4/T6*	G-AISI7Mg / EN-AC-42100 ASTM/UNS: A356
Ø 4	120 bar / 1740 psi		100 bar / 1450 psi	
Ø 5	180 bar / 2610 psi		150 bar / 2175 psi	
Ø 6	210 bar / 3045 psi		150 bar / 2175 psi	
Ø 7–8	210 bar / 3045 psi		180 bar / 2610 psi	
Ø 9–10	Please Contact Us for Details			

Proof Pressure TestⓈ Max. Allowable Working Pressure = Nominal Pressure *SFC KOENIG's North American Engineering Department utilizes 2024-T4/T6 as a test base material.

Base Material Harder than Expander: To achieve the allowable working pressure, anchorage to the bore roughness of the base material is required. Roughness R_z = 10 – 30 µm.

Base Material Softer than Expander: Anchorage to the bore of the base material occurs automatically due to the serrations on the sleeve of the KOENIG EXPANDER®.

Transition Zone: To achieve the allowable working pressure, anchorage to the bore roughness of the base material is required. Roughness R_z = 10 to 30 µm.

See Anchorage Principle related to the base materials on page 76.