

Comparison SK550-040 with new SKC550-040

Dimension:		SK550-040	SKC550-040
Sleeve length l1	in mm	4.5	4.5
Mandrel length l2	in mm	39.0	39.0
Pre-assembly length l3	in mm	9.0	8.1
Installation length l4	in mm	6.5	6.5
Sleeve diameter d1	in mm	4.0	4.0
Mandrel diameter d2	in mm	2.5	2.5
Bore diameter d3	in mm	4.0	4.0
Mandrel head diameter d4	in mm	3.6	3.6

Material sleeve and mandrel:

Material sleeve	Case hardening steel	C15Pb / 1.0403	C15Pb / 1.0403
Material mandrel	Heat treatable steel	60SPb22 / 1.0758	EN 33B2 / 1.5514

Pressure performance:

Max. allowable working pressure	in bar	500	500
Proof pressure test B	in bar	1600	1600

Bore tolerance:

Bore tolerance:	in mm	0/+0.12	0/+0.12
-----------------	-------	---------	---------

Bore roughness:

Hard base material (> 150 HB)	Rz	10 - 30 µm	10 - 30 µm
Soft base material (< 150 HB)	Rz	4 - 30 µm	4 - 30 µm

Wall thickness factor f min:

			Ø 4.00	Ø 4.12
① ETG100	f min.	0.5	0.4	0.4
② C15Pb	f min.	0.6	0.5	0.4
③ EN-GJS-600-3	f min.	0.6	0.5	0.4
⑤ EN-GJL-250	f min.	1.0	1.0	1.0
⑥ AlCu4Mg1	f min.	0.8	0.8	0.7
⑦ AlMgSiPb	f min.	1.0	0.9	0.8
⑧ G-AlSi7Mg	f min.	1.0	0.9	0.8

Design Guidelines:

Roundness tolerance of bore	in mm	0.05	0.05
-----------------------------	-------	------	------

Galvanic corrosion:

Galvanic corrosion behavior		equal	identisch
-----------------------------	--	-------	-----------

Installation:

Installation tool		ExTool-030	ExTool-030
Nosepiece		SK/LK4	SC4

General information:

Weight	gram / pcs.	1.7	1.7
Packaging unit	pcs.	1000	1000
Part number	SFC	300116805	300179869

equal or better
non-relevant deviation
unequal or relevant deviation

Comparison SK550-050 with new SKC550-050

Dimension:		SK550-050	SKC550-050
Sleeve length l1	in mm	5.5	5.5
Mandrel length l2	in mm	41.0	41.0
Pre-assembly length l3	in mm	10.0	9.5
Installation length l4	in mm	7.5	7.5
Sleeve diameter d1	in mm	5.0	5.0
Mandrel diameter d2	in mm	3.0	2.8
Bore diameter d3	in mm	5.0	5.0
Mandrel head diameter d4	in mm	4.0	4.3

Material sleeve and mandrel:

Material sleeve	Case hardening steel	C15Pb / 1.0403	C15Pb / 1.0403
Material mandrel	Heat treatable steel	60SPb22 / 1.0758	EN 33B2 / 1.5514

Pressure performance:

Max. allowable working pressure	in bar	500	500
Proof pressure test B	in bar	1600	1600

Bore tolerance:

Bore tolerance:	in mm	0/+0.12	0/+0.12
-----------------	-------	---------	---------

Bore roughness:

Hard base material (> 150 HB)	Rz	10 - 30 µm	10 - 30 µm
Soft base material (< 150 HB)	Rz	4 - 30 µm	4 - 30 µm

Wall thickness factor f min:

			Ø 5.00	Ø 5.12
① ETG100	f min.	0.5	0.4	0.4
② C15Pb	f min.	0.6	0.5	0.4
③ EN-GJS-600-3	f min.	0.6	0.5	0.4
⑤ EN-GJL-250	f min.	1.0	1.0	1.0
⑥ AlCu4Mg1	f min.	0.8	0.8	0.7
⑦ AlMgSiPb	f min.	1.0	0.8	0.7
⑧ G-AlSi7Mg	f min.	1.0	0.8	0.7

Design Guidelines:

Roundness tolerance of bore	in mm	0.05	0.05
-----------------------------	-------	------	------

Galvanic corrosion:

Galvanic corrosion behavior		equal	identisch
-----------------------------	--	-------	-----------

Installation:

Installation tool		ExTool-030	ExTool-030
Nosepiece		SK/LK5	SC5

General information:

Weight	gram / pcs.	2.6	2.5
Packaging unit	pcs.	1000	1000
Part number	SFC	300116806	300179871

equal or better
non-relevant deviation
unequal or relevant deviation

Comparison SK550-060 with new SKC550-060

Dimension:		SK550-060	SKC550-060
Sleeve length l1	in mm	6.5	6.5
Mandrel length l2	in mm	43.0	38.0
Pre-assembly length l3	in mm	12.0	11.5
Installation length l4	in mm	8.0	8.5
Sleeve diameter d1	in mm	6.0	6.0
Mandrel diameter d2	in mm	3.4	3.3
Bore diameter d3	in mm	6.0	6.0
Mandrel head diameter d4	in mm	5.0	5.1

Material sleeve and mandrel:

Material sleeve	Case hardening steel	C15Pb / 1.0403	C15Pb / 1.0403
Material mandrel	Heat treatable steel	60SPb22 / 1.0758	EN 33B2 / 1.5514

Pressure performance:

Max. allowable working pressure	in bar	500	500
Proof pressure test B	in bar	1600	1600

Bore tolerance:

Bore tolerance:	in mm	0/+0.12	0/+0.12
-----------------	-------	---------	---------

Bore roughness:

Hard base material (> 150 HB)	Rz	10 - 30 µm	10 - 30 µm
Soft base material (< 150 HB)	Rz	4 - 30 µm	4 - 30 µm

Wall thickness factor f min:

			Ø 6.00	Ø 6.12
① ETG100	f min.	0.5	0.5	0.4
② C15Pb	f min.	0.6	0.6	0.5
③ EN-GJS-600-3	f min.	0.6	0.7	0.6
⑤ EN-GJL-250	f min.	1.0	1.0	1.0
⑥ AlCu4Mg1	f min.	0.8	0.9	0.8
⑦ AlMgSiPb	f min.	1.0	1.0	0.9
⑧ G-AlSi7Mg	f min.	1.0	1.0	0.9

Design Guidelines:

Roundness tolerance of bore	in mm	0.05	0.05
-----------------------------	-------	------	------

Galvanic corrosion:

Galvanic corrosion behavior		equal	identisch
-----------------------------	--	-------	-----------

Installation:

Installation tool		ExTool-030	ExTool-030
Nosepiece		SK/LK6	SC6

General information:

Weight	gram / pcs.	3.8	3.5
Packaging unit	pcs.	500	500
Part number	SFC	300116807	300179873

equal or better
non-relevant deviation
unequal or relevant deviation

Comparison SK550-070 with new SKC550-070

Dimension:		SK550-070	SKC550-070	
Sleeve length l1	in mm	7.5	7.5	
Mandrel length l2	in mm	38.0	38.0	
Pre-assembly length l3	in mm	14.0	13.0	
Installation length l4	in mm	9.0	9.5	
Sleeve diameter d1	in mm	7.0	7.0	
Mandrel diameter d2	in mm	4.1	4.0	
Bore diameter d3	in mm	7.0	7.0	
Mandrel head diameter d4	in mm	5.7	6.0	
Material sleeve and mandrel:				
Material sleeve	Case hardening steel	C15Pb / 1.0403	C15Pb / 1.0403	
Material mandrel	Heat treatable steel	60SPb22 / 1.0758	EN 33B2 / 1.5514	
Pressure performance:				
Max. allowable working pressure	in bar	500	500	
Proof pressure test B	in bar	1600	1600	
Bore tolerance:				
Bore tolerance:	in mm	0/+0.12	0/+0.12	
Bore roughness:				
Hard base material (> 150 HB)	Rz	10 - 30 µm	10 - 30 µm	
Soft base material (< 150 HB)	Rz	4 - 30 µm	4 - 30 µm	
Wall thickness factor f min:				
			∅ 7.00	∅ 7.12
① ETG100	f min.	0.5	0.5	0.4
② C15Pb	f min.	0.6	0.7	0.6
③ EN-GJS-600-3	f min.	0.6	0.7	0.6
⑤ EN-GJL-250	f min.	1.0	1.2	1.0
⑥ AlCu4Mg1	f min.	0.8	1.2	0.9
⑦ AlMgSiPb	f min.	1.0	1.2	0.9
⑧ G-ALSi7Mg	f min.	1.0	1.2	0.9
Design Guidelines:				
Roundness tolerance of bore	in mm	0.05	0.05	
Galvanic corrosion:				
Galvanic corrosion behavior		equal	identisch	
Installation:				
Installation tool		ExTool-040-1	ExTool-040-1	
Nosepiece		SK/LK7	SC7	
General information:				
Weight	gram / pcs.	5.5	5.1	
Packaging unit	pcs.	500	500	
Part number	SFC	300116808	300179875	

equal or better
non-relevant deviation
unequal or relevant deviation

Comparison HK040CK55-111AK with new SKC550-040

Dimension:		HK040CK55-111AK	SKC550-040
Sleeve length l1	in mm	5.0	4.5
Mandrel length l2	in mm	38.0	39.0
Pre-assembly length l3	in mm	9.5	8.1
Installation length l4	in mm	8.0	6.5
Sleeve diameter d1	in mm	4.0	4.0
Mandrel diameter d2	in mm	2.2	2.5
Bore diameter d3	in mm	4.0	4.0
Mandrel head diameter d4	in mm	3.0	3.6

Material sleeve and mandrel:

Material sleeve	Case hard. steel	C15Pb / 1.0403	C15Pb / 1.0403
Material mandrel	Heat treat. steel	60SPb22 / 1.0758	EN 33B2 / 1.5514

Pressure performance:

Max. allowable working pressure	in bar	350	500
Proof pressure test B	in bar	1200	1600

Bore tolerance:

Bore tolerance:	in mm	0/+0.10	0/+0.12
-----------------	-------	---------	---------

Bore roughness:

Hard base material (> 150 HB)	Rz	10 - 30 µm	10 - 30 µm
Soft base material (< 150 HB)	Rz	10 - 30 µm	4 - 30 µm

Wall thickness factor f min:

			Ø 4.00	Ø 4.12
① ETG100	f min.	0.4	0.4	0.4
② C15Pb	f min.	0.5	0.5	0.4
③ EN-GJS-600-3	f min.	0.5	0.5	0.4
⑤ EN-GJL-250	f min.	0.8	1.0	1.0
⑥ AlCu4Mg1	f min.	0.5	0.8	0.7
⑦ AlMgSiPb	f min.	0.8	0.9	0.8
⑧ G-ALSi7Mg	f min.	0.8	0.9	0.8

Design Guidelines:

Roundness tolerance of bore	in mm	0.05	0.05
-----------------------------	-------	------	------

Galvanic corrosion:

Galvanic corrosion behavior		equal	identisch
-----------------------------	--	-------	-----------

Installation:

Installation tool		ExTool-030	ExTool-030
Nosepiece		HK 4	SC4

General information:

Weight	gram / pcs.	1.4	1.7
Packaging unit	pcs.	1000	1000
Part number	SFC	300114745	300179869

equal or better
non-relevant deviation
unequal or relevant deviation

Comparison HK050CK55-111AK with new SKC550-050

Dimension:		HK050CK55-111AK	SKC550-050
Sleeve length l1	in mm	6.0	5.5
Mandrel length l2	in mm	43.0	41.0
Pre-assembly length l3	in mm	11.5	9.5
Installation length l4	in mm	9.5	7.5
Sleeve diameter d1	in mm	5.0	5.0
Mandrel diameter d2	in mm	2.8	2.8
Bore diameter d3	in mm	5.0	5.0
Mandrel head diameter d4	in mm	3.9	4.3

Material sleeve and mandrel:

Material sleeve	Case hard. steel	C15Pb / 1.0403	C15Pb / 1.0403
Material mandrel	Heat treat. steel	60SPb22 / 1.0758	EN 33B2 / 1.5514

Pressure performance:

Max. allowable working pressure	in bar	350	500
Proof pressure test B	in bar	1200	1600

Bore tolerance:

Bore tolerance:	in mm	0/+0.10	0/+0.12
-----------------	-------	---------	---------

Bore roughness:

Hard base material (> 150 HB)	Rz	10 - 30 µm	10 - 30 µm
Soft base material (< 150 HB)	Rz	10 - 30 µm	4 - 30 µm

Wall thickness factor f min:

			Ø 5.00	Ø 5.12
① ETG100	f min.	0.4	0.4	0.4
② C15Pb	f min.	0.5	0.5	0.4
③ EN-GJS-600-3	f min.	0.5	0.5	0.4
⑤ EN-GJL-250	f min.	0.8	1.0	1.0
⑥ AlCu4Mg1	f min.	0.5	0.8	0.7
⑦ AlMgSiPb	f min.	0.8	0.8	0.7
⑧ G-ALSi7Mg	f min.	0.8	0.8	0.7

Design Guidelines:

Roundness tolerance of bore	in mm	0.05	0.05
-----------------------------	-------	------	------

Galvanic corrosion:

Galvanic corrosion behavior		equal	identisch
-----------------------------	--	-------	-----------

Installation:

Installation tool		ExTool-030	ExTool-030
Nosepiece		HK 5	SC5

General information:

Weight	gram / pcs.	2.8	2.5
Packaging unit	pcs.	1000	1000
Part number	SFC	300114746	300179871

equal or better
non-relevant deviation
unequal or relevant deviation

Comparison HK060CK55-111AK with new SKC550-060

Dimension:		HK060CK55-111AK	SKC550-060	
Sleeve length l1	in mm	6.5	6.5	
Mandrel length l2	in mm	43.0	38.0	
Pre-assembly length l3	in mm	12.5	11.5	
Installation length l4	in mm	10.0	8.5	
Sleeve diameter d1	in mm	6.0	6.0	
Mandrel diameter d2	in mm	2.8	3.3	
Bore diameter d3	in mm	6.0	6.0	
Mandrel head diameter d4	in mm	3.9	5.1	
Material sleeve and mandrel:				
Material sleeve	Case hard. steel	C15Pb / 1.0403	C15Pb / 1.0403	
Material mandrel	Heat treat. steel	60SPb22 / 1.0758	EN 33B2 / 1.5514	
Pressure performance:				
Max. allowable working pressure	in bar	350	500	
Proof pressure test B	in bar	1200	1600	
Bore tolerance:				
Bore tolerance:	in mm	0/+0.10	0/+0.12	
Bore roughness:				
Hard base material (> 150 HB)	Rz	10 - 30 µm	10 - 30 µm	
Soft base material (< 150 HB)	Rz	10 - 30 µm	4 - 30 µm	
Wall thickness factor f min:			Ø 6.00	Ø 6.12
① ETG100	f min.	0.4	0.5	0.4
② C15Pb	f min.	0.5	0.6	0.5
③ EN-GJS-600-3	f min.	0.5	0.7	0.6
⑤ EN-GJL-250	f min.	0.8	1.0	1.0
⑥ AlCu4Mg1	f min.	0.5	0.9	0.8
⑦ AlMgSiPb	f min.	0.8	1.0	0.9
⑧ G-ALSi7Mg	f min.	0.8	1.0	0.9
Design Guidelines:				
Roundness tolerance of bore	in mm	0.05	0.05	
Galvanic corrosion:				
Galvanic corrosion behavior		equal	identisch	
Installation:				
Installation tool		ExTool-030	ExTool-030	
Nosepiece		HK 6	SC6	
General information:				
Weight	gram / pcs.	3.2	3.5	
Packaging unit	pcs.	1000	500	
Part number	SFC	300114747	300179873	

equal or better
non-relevant deviation
unequal or relevant deviation

Comparison HK070CK55-111AK with new SKC550-070

Dimension:		HK070CK55-111AK	SKC550-070
Sleeve length l1	in mm	7.5	7.5
Mandrel length l2	in mm	43.0	38.0
Pre-assembly length l3	in mm	14.0	13.0
Installation length l4	in mm	11.0	9.5
Sleeve diameter d1	in mm	7.0	7.0
Mandrel diameter d2	in mm	3.8	4.0
Bore diameter d3	in mm	7.0	7.0
Mandrel head diameter d4	in mm	4.95	6.0

Material sleeve and mandrel:

Material sleeve	Case hard. steel	C15Pb / 1.0403	C15Pb / 1.0403
Material mandrel	Heat treat. steel	60SPb22 / 1.0758	EN 33B2 / 1.5514

Pressure performance:

Max. allowable working pressure	in bar	350	500
Proof pressure test B	in bar	1200	1600

Bore tolerance:

Bore tolerance:	in mm	0/+0.10	0/+0.12
-----------------	-------	---------	---------

Bore roughness:

Hard base material (> 150 HB)	Rz	10 - 30 µm	10 - 30 µm
Soft base material (< 150 HB)	Rz	10 - 30 µm	4 - 30 µm

Wall thickness factor f min:

			Ø 7.00	Ø 7.12
① ETG100	f min.	0.4	0.5	0.4
② C15Pb	f min.	0.5	0.7	0.6
③ EN-GJS-600-3	f min.	0.5	0.7	0.6
⑤ EN-GJL-250	f min.	0.8	1.2	1.0
⑥ AlCu4Mg1	f min.	0.5	1.2	0.9
⑦ AlMgSiPb	f min.	0.8	1.2	0.9
⑧ G-ALSi7Mg	f min.	0.8	1.2	0.9

Design Guidelines:

Roundness tolerance of bore	in mm	0.05	0.05
-----------------------------	-------	------	------

Galvanic corrosion:

Galvanic corrosion behavior		equal	identisch
-----------------------------	--	-------	-----------

Installation:

Installation tool		ExTool-040-1	ExTool-040-1
Nosepiece		HK 7	SC7

General information:

Weight	gram / pcs.	5.3	5.1
Packaging unit	pcs.	500	500
Part number	SFC	300114748	300179875

equal or better
non-relevant deviation
unequal or relevant deviation

Comparison HK080CK55-111AK with existing SK550-080

Dimension:		HK080CK55-111AK	SK550-080
Sleeve length l1	in mm	8.5	8.5
Mandrel length l2	in mm	38.0	40.0
Pre-assembly length l3	in mm	14.0	15.0
Installation length l4	in mm	11.5	10.5
Sleeve diameter d1	in mm	8.0	8.0
Mandrel diameter d2	in mm	4.5	4.2
Bore diameter d3	in mm	8.0	8.0
Mandrel head diameter d4	in mm	5.95	6.2

Material sleeve and mandrel:

Material sleeve	Case hard. steel	C15Pb / 1.0403	C15Pb / 1.0403
Material mandrel	Heat treat. steel	60SPb22 / 1.0758	60SPb22 / 1.0758

Pressure performance:

Max. allowable working pressure	in bar	350	500
Proof pressure test B	in bar	1200	1600

Bore tolerance:

Bore tolerance:	in mm	0/+0.10	0/+0.12
-----------------	-------	---------	---------

Bore roughness:

Hard base material (> 150 HB)	Rz	10 - 30 µm	10 - 30 µm
Soft base material (< 150 HB)	Rz	10 - 30 µm	4 - 30 µm

Wall thickness factor f min:

① ETG100	f min.	0.4	0.5
② C15Pb	f min.	0.5	0.6
③ EN-GJS-600-3	f min.	0.5	0.6
⑤ EN-GJL-250	f min.	0.8	1.0
⑥ AlCu4Mg1	f min.	0.5	0.8
⑦ AlMgSiPb	f min.	0.8	1.0
⑧ G-ALSi7Mg	f min.	0.8	1.0

Design Guidelines:

Roundness tolerance of bore	in mm	0.05	0.05
-----------------------------	-------	------	------

Galvanic corrosion:

Galvanic corrosion behavior		equal	identisch
-----------------------------	--	-------	-----------

Installation:

Installation tool		ExTool-040-1	ExTool-040-1
Nosepiece		HK 8	SL 8

General information:

Weight	gram / pcs.	6.8	6.4
Packaging unit	pcs.	500	500
Part number	SFC	300117708	300118382

equal or better
non-relevant deviation
unequal or relevant deviation

Comparison HK090CK55-111AK with existing SK550-090

Dimension:		HK090CK55-111AK	SK550-090
Sleeve length l1	in mm	9.5	9.5
Mandrel length l2	in mm	41.0	43.0
Pre-assembly length l3	in mm	14.5	17.0
Installation length l4	in mm	13.0	11.0
Sleeve diameter d1	in mm	9.0	9.0
Mandrel diameter d2	in mm	4.5	4.5
Bore diameter d3	in mm	9.0	9.0
Mandrel head diameter d4	in mm	6.90	7.0

Material sleeve and mandrel:

Material sleeve	Case hard. steel	C15Pb / 1.0403	C15Pb / 1.0403
Material mandrel	Heat treat. steel	60SPb22 / 1.0758	60SPb22 / 1.0758

Pressure performance:

Max. allowable working pressure	in bar	350	500
Proof pressure test B	in bar	1200	1600

Bore tolerance:

Bore tolerance:	in mm	0/+0.10	0/+0.12
-----------------	-------	---------	---------

Bore roughness:

Hard base material (> 150 HB)	Rz	10 - 30 µm	10 - 30 µm
Soft base material (< 150 HB)	Rz	10 - 30 µm	4 - 30 µm

Wall thickness factor f min:

① ETG100	f min.	0.4	0.5
② C15Pb	f min.	0.5	0.6
③ EN-GJS-600-3	f min.	0.5	0.6
⑤ EN-GJL-250	f min.	0.8	1.0
⑥ AlCu4Mg1	f min.	0.5	0.8
⑦ AlMgSiPb	f min.	0.8	1.0
⑧ G-ALSi7Mg	f min.	0.8	1.0

Design Guidelines:

Roundness tolerance of bore	in mm	0.05	0.05
-----------------------------	-------	------	------

Galvanic corrosion:

Galvanic corrosion behavior		equal	identisch
-----------------------------	--	-------	-----------

Installation:

Installation tool		ExTool-040-1	ExTool-040-1
Nosepiece		HK 9	SL9

General information:

Weight	gram / pcs.	8.4	8.2
Packaging unit	pcs.	500	250
Part number	SFC	300119917	300118383

equal or better
non-relevant deviation
unequal or relevant deviation

Comparison HK100CK55-111AK with existing SK550-100

Dimension:		HK100CK55-111AK	SK550-100
Sleeve length l1	in mm	10.5	10.5
Mandrel length l2	in mm	41.0	45.0
Pre-assembly length l3	in mm	15.5	19.0
Installation length l4	in mm	13.5	12.5
Sleeve diameter d1	in mm	10.0	10.0
Mandrel diameter d2	in mm	4.5	4.8
Bore diameter d3	in mm	10.0	10.0
Mandrel head diameter d4	in mm	6.90	7.7

Material sleeve and mandrel:

Material sleeve	Case hard. steel	C15Pb / 1.0403	C15Pb / 1.0403
Material mandrel	Heat treat. steel	60SPb22 / 1.0758	60SPb22 / 1.0758

Pressure performance:

Max. allowable working pressure	in bar	350	500
Proof pressure test B	in bar	1200	1600

Bore tolerance:

Bore tolerance:	in mm	0/+0.10	0/+0.12
-----------------	-------	---------	---------

Bore roughness:

Hard base material (> 150 HB)	Rz	10 - 30 µm	10 - 30 µm
Soft base material (< 150 HB)	Rz	10 - 30 µm	4 - 30 µm

Wall thickness factor f min:

① ETG100	f min.	0.4	0.5
② C15Pb	f min.	0.5	0.6
③ EN-GJS-600-3	f min.	0.5	0.6
⑤ EN-GJL-250	f min.	0.8	1.0
⑥ AlCu4Mg1	f min.	0.5	0.8
⑦ AlMgSiPb	f min.	0.8	1.0
⑧ G-ALSi7Mg	f min.	0.8	1.0

Design Guidelines:

Roundness tolerance of bore	in mm	0.05	0.05
-----------------------------	-------	------	------

Galvanic corrosion:

Galvanic corrosion behavior		equal	identisch
-----------------------------	--	-------	-----------

Installation:

Installation tool		ExTool-040-1	ExTool-040-1
Nosepiece		HK 10	SL10

General information:

Weight	gram / pcs.	9.7	10.1
Packaging unit	pcs.	250	250
Part number	SFC	300117709	300118384

equal or better
non-relevant deviation
unequal or relevant deviation

PRESSURE PERFORMANCE - SERIES SK / SKC

Series SK / SKC mm	Base Material of the Installation						
	① ETG100	② C15Pb	③ EN-GJS-600-3	⑤ EN-GJL-250	⑥ AlCu4Mg1	⑦ AlMgSiPb	⑧ G-AlSi7Mg
Ø 4-10	1600 bar / 23200 psi 500 bar / 7200 psi				1400 bar / 20300 psi 450 bar / 6500 psi		
Ø 12	1600 bar / 23200 psi 400 bar / 5800 psi						
Hole Tolerance	0/+0.12 mm						
Hole Roughness	Rz 10 - 30 µm				Anchorage in Base Metal		

Proof Pressure Test B

Max. Allowable Working Pressure = Nominal Pressure

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

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

Base Material Softer than Expander: Anchorage to the bore of the base material occurs automatically due to the serrations of the KOENIG-Expander.

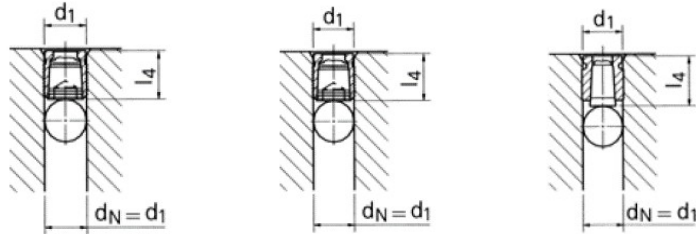
DESIGN GUIDELINES - WALL THICKNESS / DISTANCE FROM EDGE

		①	②	③	⑤	⑥	⑦	⑧
Base Material	Description	ETG100	C15Pb	EN-GJS-600-3	EN-GJL-250	AlCu4Mg1	AlMgSiPb	G-ALSi7Mg
	Avg. Tensile Strength Rm [N/mm²]	1000	560	650	300	480	340	260
	Minimum Elongation A5 [%]	6	10	3	0.3	8	8	2
	Avg. Ultimate Strength Rp 0.2 [N/mm²]	900	300	425	200	380	290	220
KOENIG-Exander Series		Factor f min.						
HK	∅ 4 - 10 mm	0.4	0.5	0.5	0.8	0.5	0.8	0.8
SK	∅ 4 - 12 mm	0.5	0.6	0.6	1.0	0.8	1.0	1.0
SKC	∅ 4 mm	0.4	0.5	0.5	1.0	0.8	0.9	0.9
SKC	∅ 5 mm	0.4	0.5	0.5	1.0	0.8	0.8	0.8
SKC	∅ 6 mm	0.5	0.6	0.7	1.0	0.9	1.0	1.0
SKC	∅ 7 mm	0.5	0.7	0.7	1.2	1.2	1.2	1.2

Wall thickness factor fmin. in large bore (∅ x.12 mm)

KOENIG-Exander Series		Factor f min.						
SKC	∅ 4 mm	0.4	0.4	0.4	1.0	0.7	0.8	0.8
SKC	∅ 5 mm	0.4	0.4	0.4	1.0	0.7	0.7	0.7
SKC	∅ 6 mm	0.4	0.5	0.6	1.0	0.8	0.9	0.9
SKC	∅ 7 mm	0.4	0.6	0.6	1.0	0.9	0.9	0.9

DESIGN GUIDELINES - REQUIRED INSTALLATION LENGTHS



Expander	SK	SKC	HK
d_1	l_4 max.	l_4 max.	l_4 max.
3.0			7.0
4.0	6.5	6.5	8.0
5.0	7.5	7.5	9.5
6.0	8.0	8.5	10.0
7.0	9.0	9.5	11.0
8.0	10.5		11.5
9.0	11.0		13.0
10.0	12.5		13.5
12.0	16.5		