

Swaging Diameter Chart - Semperit / VOSS Typ 101 Hoses

Skive											
HOSE	DN	6	8	10	12	16	19	25	31	38	51
	INCH	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"
	DASH	-04	-05	-06	-08	-10	-12	-16	-20	-24	-32
EN 853 1SN SAE 100 R1AT	SKIVE PF11	17,4	18,4	21,3	25,0	27,8	31,2	37,7	46,7	55,0	66,0
	EXTERNAL SKIVE (L1)	22,5	22,5	22,5	26,0	27,0	31,0	39,0	45,0	50,0	58,0
	R.O.D.	10,9	12,7	14,9	17,7	20,8	24,9	32,7	39,8	46,3	60,0
EN 857 1SC	SKIVE PF11	17,0	17,9	20,6	24,0	27,2	30,2	37,5			
	EXTERNAL SKIVE (L1)	22,5	22,5	22,5	26,0	27,0	31,0	39,0			
	R.O.D.	10,1	11,7	13,7	16,7	20,1	23,8	31,1			
EN 857 2SC	SKIVE PF11	17,9	18,8	21,5	25,3	28,5	32,1	38,0			
	EXTERNAL SKIVE (L1)	22,5	22,5	22,5	26,0	27,0	31,0	37,0			
	R.O.D.	11,6	12,9	15,0	18,3	22,2	25,7	33,3			
Semperpac 2SN-K EXCEEDS EN 857 2SC	SKIVE PF11	18,0	18,5	21,6	25,5	28,6	32,1	38,3			
	EXTERNAL SKIVE (L1)	22,5	22,5	22,5	26,0	27,0	31,0	38,0			
	R.O.D.	11,6	12,9	14,8	18,5	22,1	26,0	32,9			
Semperrail 2SN-K EN 45545-2 (HL2 - R23)	SKIVE PF12 / PF13	PF12	PF12	PF12	PF12	PF13	PF13	PF13	PF12	PF12	PF12
	EXTERNAL SKIVE (L1)	21,0	22,0	23,0	23,0	29,0	31,0	38,0	45,0	49,0	60,0
	R.O.D.	12,5	14,0	16,5	19,2	22,5	26,5	34,4	46,7	50,7	62,9
EN 853 2SN SAE 100 R2AT	SKIVE PF12 / PF13	PF12	PF12	PF12	PF12	PF13	PF13	PF13	PF12	PF12	PF12
	EXTERNAL SKIVE (L1)	21,0	22,0	23,0	23,0	29,0	31,0	38,0	45,0	49,0	60,0
	R.O.D.	12,5	14,0	16,5	19,2	22,5	26,5	34,4	46,7	50,7	62,9
EN 856 4SP	SKIVE PF12 / PF13			PF12	PF12	PF13	PF13	PF13	PF12	PF12	PF12
	EXTERNAL SKIVE (L1)			23,0	23,0	29,0	31,0	38,0	45,0	49,0	60,0
	R.O.D.			17,8	20,7	24,7	28,1	35,0	46,5	51,5	64,7
Flexline 4000	SKIVE PF12 / PF13			PF12	PF12	PF13	PF13	PF13			
	EXTERNAL SKIVE (L1)			23,0	23,5	29,0	31,0	38,0			
	R.O.D.			17,4	20,6	24,2	27,9	35,1			
Flexline 5000	SKIVE PF12 / PF13			PF12	PF12	PF13	PF13				
	EXTERNAL SKIVE (L1)			23,0	23,5	29,0	31,0				
	R.O.D.			17,7	20,6	24,2	27,9				
Flexline 6000	SKIVE PF12 / PF13			PF12	PF12	PF13					
	EXTERNAL SKIVE (L1)			23,0	23,0	29,0					
	R.O.D.			17,7	20,5	24,2					

No Skive											
HOSE	DN	6	8	10	12	16	19	25	31	38	51
	INCH	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"
	DASH	-04	-05	-06	-08	-10	-12	-16	-20	-24	-32
EN 853 1SN SAE 100 R1AT	NO SKIVE PF22	17,5	18,3	19,8	23,0	26,6	30,2	37,5	46,7	56,0	69,4
	O.D.	12,9	14,7	16,7	20,0	23,2	27,0	34,7	42,5	50,1	64,5
EN 853 1SN SAE 100 R1AT	NO SKIVE PF24	15,8	17,5	19,4	23,0	26,1	29,5	37,3	47,0		
	O.D.	13,0	14,7	16,8	20,0	23,1	27,1	34,9	42,4		
EN 857 1SC	NO SKIVE PF24	15,4	16,9	18,9	23,1	25,6	28,9	36,7			
	O.D.	12,0	13,8	15,7	19,6	22,2	25,9	33,2			
Semperpac 1SN-K EXCEEDS EN 857 1SC	NO SKIVE PF24	15,5	16,9	19,0	22,9	25,5	28,8	36,6	47,9		
	O.D.	12,1	13,7	15,7	19,2	22,3	26,0	33,2	43,4		
EN 853 2SN SAE 100 R2AT	NO SKIVE PF22	18,2	19,2	21,3	24,1	27,8	31,5	39,3	50,1	59,4	70,8
	O.D.	14,1	16,2	18,3	21,2	24,5	28,3	36,5	49,6	54,5	66,4
EN 857 2SC	NO SKIVE PF24	16,3	17,8	19,7	23,7	27,1	30,3	38,1			
	O.D.	13,2	14,6	16,6	19,7	23,9	27,2	35,6			
Semperpac 2SN-K EXCEEDS EN 857 2SC	NO SKIVE PF24	16,4	18,0	19,9	24,2	26,8	30,6	38,1	47,6		
	O.D.	13,5	15,0	16,8	20,5	23,7	27,7	35,6	42,7		
Semperrail 2SN-K EN 45545-2 (HL2 - R23)	NO SKIVE PF24	16,4	18,0	19,9	24,0	26,9	30,6	38,1			
	O.D.	13,3	15,1	16,8	20,6	23,8	27,8	35,6			

Crimping data of Semperit hydraulic hoses with VOSS fittings based on singular impulse pressure tests

Caution: Given values result from singular impulse pressure tests in accordance with ISO 6803 and may only be considered as guidance levels. Individual practices/conditions of crimping (e. g., choice of crimping machinery or tools), skiving and use may lead to considerably different values. Should you require information about specific individual crimping conditions or values please contact VOSS or Semperit technical support.

Skiving: Hoses that require skiving must be skived down to the wire layer. Wires may not be injured upon skiving under any circumstances. For wire braided hoses a remaining rubber film of 0, 2 to 0,3mm after skiving is acceptable. Verification of correct crimping may only be undertaken by measuring Insert Bore Collapse values. Indicated outside diameters of crimped ferrules (crimp dia reference) are of a non-binding indicative nature only as specific values vary due to the normed tolerances of the diameters of hoses and fittings. The examination of the optimal bore collapse takes place with the help of the mandrel gauge case! (Mandrel gauge case Art.-No.: 7004791900). The given values represent a starting point for the own definition of the swaging dimensions. Correct swaging dimensions lead to optimal bore collapse.

Warning: Use of incorrect parts or incorrect crimping may lead to leakage, failure or bursting of the hose line and may - particularly in operations with high operational pressure - result in material damage and/or personal injury. In case of doubt please seek specialist advice! All information given in this overview has been compiled thoroughly and is given to the best of our knowledge. Semperit and VOSS exclude any and all liability for the information given in this overview and discharge any claims, rights or demands that may be raised in connection therewith against them or their affiliates and users of this data sheet waive any and all respective rights. Subject to change without notice. The current version of this overview can be found at www.voss-fluid.net. All values are given in mm.

Double Skive (Interlock)													
HOSE	DN	6	8	10	12	16	19	25	31	38	51		
	INCH	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"		
	DASH	-04	-05	-06	-08	-10	-12	-16	-20	-24	-32		
EN 856 4SH	DOUBLE SKIVE (INTERLOCK) MPF3					MPF3	MPF3	MPF3	MPF3	MPF3	MPF3		
	EXTERNAL SKIVE (L1)					47,0	52,0	57,0	64,0	79,0	82,0		
	INTERNAL SKIVE (L2)					15,0	17,0	18,0	21,0	25,0	26,0		
SAE 100 R15	DOUBLE SKIVE (INTERLOCK) MPF3 / MPF4						MPF3	MPF3	MPF4				
	EXTERNAL SKIVE (L1)						35,4	41,7	54,3				
	INTERNAL SKIVE (L2)						17,0	18,0	21,0				
Flexline 5000	DOUBLE SKIVE (INTERLOCK) MPF3 / MPF4							MPF3	MPF3				
	EXTERNAL SKIVE (L1)							57,0	64,0				
	INTERNAL SKIVE (L2)							18,0	21,0				
Flexline 6000	DOUBLE SKIVE (INTERLOCK) MPF3					MPF3	MPF3	MPF3	MPF4				
	EXTERNAL SKIVE (L1)					47,0	52,0	57,0	64,0				
	INTERNAL SKIVE (L2)					15,0	17,0	18,0	21,0				
R.O.D.					24,2	28,2	35,4	46,5					