

VSLIDE S TYPE SPU



- Bear horizontal loads in transversal direction
- Allow rotations in any direction
- Allow longitudinal movements and restrain transversal movements

Bearings according to ETA 21/0726

GUIDED BEARING									
DATASHEET FOR A HORIZONTAL LOAD OF 10% THE VERTICAL LOAD AND A LONGITUDINAL DISPLACEMENT OF +/-50MM									
BEARING DESIGNATION	V _{max, ULS} (kN)	V _{max, SLS} (kN)	H _{max, ULS} (kN)	H _{max, SLS} (kN)	UX (mm)	ETA			
						L5 (mm)	B5 (mm)	D2 (mm)	TH (mm)
SPU-2000-H10% ±50	2000	1429	200	143	±50	371	281	221	74
SPU-4000-H10% ±50	4000	2858	400	286	±50	442	362	292	79
SPU-6000-H10% ±50	6000	4286	600	429	±50	494	424	344	88
SPU-8000-H10% ±50	8000	5715	800	572	±50	540	480	390	92
SPU-10000-H10% ±50	10000	7143	1000	714	±50	577	527	427	102
SPU-12000-H10% ±50	12000	8572	1200	857	±50	615	565	465	107
SPU-14000-H10% ±50	14000	10000	1400	1000	±50	647	607	497	112
SPU-16000-H10% ±50	16000	11429	1600	1143	±50	675	635	525	113
SPU-18000-H10% ±50	18000	12858	1800	1286	±50	708	678	558	117
SPU-20000-H10% ±50	20000	14286	2000	1429	±50	735	715	585	118
SPU-22000-H10% ±50	22000	15715	2200	1572	±50	760	750	610	128
SPU-24000-H10% ±50	24000	17143	2400	1714	±50	785	765	635	132
SPU-26000-H10% ±50	26000	18572	2600	1857	±50	809	799	659	137
SPU-28000-H10% ±50	28000	20000	2800	2000	±50	832	832	682	139
SPU-30000-H10% ±50	30000	21429	3000	2143	±50	850	860	700	147
SPU-34000-H10% ±50	34000	24286	3400	2429	±50	894	904	744	148
SPU-38000-H10% ±50	38000	27143	3800	2714	±50	935	955	785	157
SPU-42000-H10% ±50	42000	30000	4200	3000	±50	970	990	820	157
SPU-46000-H10% ±50	46000	32858	4600	3286	±50	1009	1049	859	167
SPU-50000-H10% ±50	50000	35715	5000	3572	±50	1041	1081	891	167
SPU-55000-H10% ±50	55000	39286	5500	3929	±50	1084	1124	934	169
SPU-60000-H10% ±50	60000	42858	6000	4286	±50	1120	1170	970	177
SPU-65000-H10% ±50	65000	46429	6500	4643	±50	1160	1220	1010	179
SPU-70000-H10% ±50	70000	50000	7000	5000	±50	1194	1274	1044	192
SPU-80000-H10% ±50	80000	57143	8000	5714	±50	1267	1357	1117	197
SPU-90000-H10% ±50	90000	64286	9000	6429	±50	1331	1431	1181	222
SPU-100000-H10% ±50	100000	71429	10000	7143	±50	1397	1507	1247	222

GUIDED BEARING									
DATASHEET FOR A HORIZONTAL LOAD OF 10% THE VERTICAL LOAD AND A LONGITUDINAL DISPLACEMENT OF +/-100MM									
BEARING DESIGNATION	V _{max, ULS} (kN)	V _{max, SLS} (kN)	H _{max, ULS} (kN)	H _{max, SLS} (kN)	UX (mm)	ETA			
						L5 (mm)	B5 (mm)	D2 (mm)	TH (mm)
SPU-2000-H10% ±100	2000	1429	200	143	±100	471	281	221	74
SPU-4000-H10% ±100	4000	2858	400	286	±100	542	362	292	84
SPU-6000-H10% ±100	6000	4286	600	429	±100	594	424	344	92
SPU-8000-H10% ±100	8000	5715	800	572	±100	640	470	390	92
SPU-10000-H10% ±100	10000	7143	1000	714	±100	677	517	427	107
SPU-12000-H10% ±100	12000	8572	1200	857	±100	715	565	465	107
SPU-14000-H10% ±100	14000	10000	1400	1000	±100	747	607	497	117
SPU-16000-H10% ±100	16000	11429	1600	1143	±100	775	635	525	117
SPU-18000-H10% ±100	18000	12858	1800	1286	±100	808	668	558	117
SPU-20000-H10% ±100	20000	14286	2000	1429	±100	835	705	585	123
SPU-22000-H10% ±100	22000	15715	2200	1572	±100	860	740	610	132
SPU-24000-H10% ±100	24000	17143	2400	1714	±100	885	765	635	132
SPU-26000-H10% ±100	26000	18572	2600	1857	±100	909	799	659	142
SPU-28000-H10% ±100	28000	20000	2800	2000	±100	932	822	682	143
SPU-30000-H10% ±100	30000	21429	3000	2143	±100	950	850	700	147
SPU-34000-H10% ±100	34000	24286	3400	2429	±100	994	894	744	153
SPU-38000-H10% ±100	38000	27143	3800	2714	±100	1035	945	785	157
SPU-42000-H10% ±100	42000	30000	4200	3000	±100	1070	990	820	162
SPU-46000-H10% ±100	46000	32858	4600	3286	±100	1109	1039	859	167
SPU-50000-H10% ±100	50000	35715	5000	3572	±100	1141	1071	891	168
SPU-55000-H10% ±100	55000	39286	5500	3929	±100	1184	1114	934	173
SPU-60000-H10% ±100	60000	42858	6000	4286	±100	1220	1170	970	178
SPU-65000-H10% ±100	65000	46429	6500	4643	±100	1260	1210	1010	183
SPU-70000-H10% ±100	70000	50000	7000	5000	±100	1294	1264	1044	193
SPU-80000-H10% ±100	80000	57143	8000	5714	±100	1367	1347	1117	197
SPU-90000-H10% ±100	90000	64286	9000	6429	±100	1431	1421	1181	222
SPU-100000-H10% ±100	100000	71429	10000	7143	±100	1497	1507	1247	222

GUIDED BEARING									
DATASHEET FOR A HORIZONTAL LOAD OF 20% THE VERTICAL LOAD AND A LONGITUDINAL DISPLACEMENT OF +/-50MM									
BEARING DESIGNATION	V _{max, ULS} (kN)	V _{max, SLS} (kN)	H _{max, ULS} (kN)	H _{max, SLS} (kN)	UX (mm)	ETA			
						L5 (mm)	B5 (mm)	D2 (mm)	TH (mm)
SPU-2000-H20% ±50	2000	1429	400	286	±50	371	291	221	77
SPU-4000-H20% ±50	4000	2858	800	572	±50	442	382	292	88
SPU-6000-H20% ±50	6000	4286	1200	857	±50	494	454	344	97
SPU-8000-H20% ±50	8000	5715	1600	1143	±50	540	510	390	102
SPU-10000-H20% ±50	10000	7143	2000	1429	±50	577	577	427	118
SPU-12000-H20% ±50	12000	8572	2400	1714	±50	615	615	465	121
SPU-14000-H20% ±50	14000	10000	2800	2000	±50	647	667	497	131
SPU-16000-H20% ±50	16000	11429	3200	2286	±50	675	705	525	133
SPU-18000-H20% ±50	18000	12858	3600	2572	±50	708	738	558	135
SPU-20000-H20% ±50	20000	14286	4000	2857	±50	735	775	585	140
SPU-22000-H20% ±50	22000	15715	4400	3143	±50	760	820	610	154
SPU-24000-H20% ±50	24000	17143	4800	3429	±50	785	845	635	151
SPU-26000-H20% ±50	26000	18572	5200	3714	±50	809	889	659	163
SPU-28000-H20% ±50	28000	20000	5600	4000	±50	832	922	682	167
SPU-30000-H20% ±50	30000	21429	6000	4286	±50	850	950	700	172
SPU-34000-H20% ±50	34000	24286	6800	4857	±50	894	1004	744	179
SPU-38000-H20% ±50	38000	27143	7600	5429	±50	935	1065	785	187
SPU-42000-H20% ±50	42000	30000	8400	6000	±50	970	1100	820	193
SPU-46000-H20% ±50	46000	32858	9200	6572	±50	1009	1159	859	201
SPU-50000-H20% ±50	50000	35715	10000	7143	±50	1041	1201	891	210
SPU-55000-H20% ±50	55000	39286	11000	7857	±50	1084	1254	934	211
SPU-60000-H20% ±50	60000	42858	12000	8572	±50	1120	1310	970	224
SPU-65000-H20% ±50	65000	46429	13000	9286	±50	1160	1360	1010	225
SPU-70000-H20% ±50	70000	50000	14000	10000	±50	1194	1424	1044	244
SPU-80000-H20% ±50	80000	57143	16000	11429	±50	1267	1507	1117	255
SPU-90000-H20% ±50	90000	64286	18000	12857	±50	1331	1601	1181	268
SPU-100000-H20% ±50	100000	71429	20000	14286	±50	1397	1687	1247	277

GUIDED BEARING									
DATASHEET FOR A HORIZONTAL LOAD OF 20% THE VERTICAL LOAD AND A LONGITUDINAL DISPLACEMENT OF +/-100MM									
BEARING DESIGNATION	V _{max, ULS} (kN)	V _{max, SLS} (kN)	H _{max, ULS} (kN)	H _{max, SLS} (kN)	UX (mm)	ETA			
						L5 (mm)	B5 (mm)	D2 (mm)	TH (mm)
SPU-2000-H20% ±100	2000	1429	400	286	±100	471	291	221	79
SPU-4000-H20% ±100	4000	2858	800	572	±100	542	382	292	89
SPU-6000-H20% ±100	6000	4286	1200	857	±100	594	444	344	102
SPU-8000-H20% ±100	8000	5715	1600	1143	±100	640	500	390	104
SPU-10000-H20% ±100	10000	7143	2000	1429	±100	677	567	427	123
SPU-12000-H20% ±100	12000	8572	2400	1714	±100	715	605	465	123
SPU-14000-H20% ±100	14000	10000	2800	2000	±100	747	657	497	136
SPU-16000-H20% ±100	16000	11429	3200	2286	±100	775	685	525	134
SPU-18000-H20% ±100	18000	12858	3600	2572	±100	808	728	558	141
SPU-20000-H20% ±100	20000	14286	4000	2857	±100	835	765	585	145
SPU-22000-H20% ±100	22000	15715	4400	3143	±100	860	810	610	155
SPU-24000-H20% ±100	24000	17143	4800	3429	±100	885	835	635	156
SPU-26000-H20% ±100	26000	18572	5200	3714	±100	909	879	659	163
SPU-28000-H20% ±100	28000	20000	5600	4000	±100	932	912	682	168
SPU-30000-H20% ±100	30000	21429	6000	4286	±100	950	940	700	177
SPU-34000-H20% ±100	34000	24286	6800	4857	±100	994	984	744	179
SPU-38000-H20% ±100	38000	27143	7600	5429	±100	1035	1045	785	192
SPU-42000-H20% ±100	42000	30000	8400	6000	±100	1070	1090	820	193
SPU-46000-H20% ±100	46000	32858	9200	6572	±100	1109	1149	859	206
SPU-50000-H20% ±100	50000	35715	10000	7143	±100	1141	1191	891	209
SPU-55000-H20% ±100	55000	39286	11000	7857	±100	1184	1234	934	216
SPU-60000-H20% ±100	60000	42858	12000	8572	±100	1220	1300	970	224
SPU-65000-H20% ±100	65000	46429	13000	9286	±100	1260	1340	1010	230
SPU-70000-H20% ±100	70000	50000	14000	10000	±100	1294	1404	1044	244
SPU-80000-H20% ±100	80000	57143	16000	11429	±100	1367	1487	1117	255
SPU-90000-H20% ±100	90000	64286	18000	12857	±100	1431	1581	1181	268
SPU-100000-H20% ±100	100000	71429	20000	14286	±100	1497	1677	1247	286

GUIDED BEARING									
DATASHEET FOR A HORIZONTAL LOAD OF 30% THE VERTICAL LOAD AND A LONGITUDINAL DISPLACEMENT OF +/-50MM									
BEARING DESIGNATION	V _{max, ULS} (kN)	V _{max, SLS} (kN)	H _{max, ULS} (kN)	H _{max, SLS} (kN)	UX (mm)	ETA			
						L5 (mm)	B5 (mm)	D2 (mm)	TH (mm)
SPU-2000-H30% ±50	2000	1429	600	429	±50	371	311	221	83
SPU-4000-H30% ±50	4000	2858	1200	857	±50	442	412	292	98
SPU-6000-H30% ±50	6000	4286	1800	1286	±50	494	494	344	110
SPU-8000-H30% ±50	8000	5715	2400	1715	±50	540	550	390	116
SPU-10000-H30% ±50	10000	7143	3000	2143	±50	577	617	427	139
SPU-12000-H30% ±50	12000	8572	3600	2572	±50	615	665	465	140
SPU-14000-H30% ±50	14000	10000	4200	3000	±50	647	727	497	156
SPU-16000-H30% ±50	16000	11429	4800	3429	±50	675	765	525	155
SPU-18000-H30% ±50	18000	12858	5400	3857	±50	708	808	558	160
SPU-20000-H30% ±50	20000	14286	6000	4286	±50	735	845	585	169
SPU-22000-H30% ±50	22000	15715	6600	4715	±50	760	890	610	179
SPU-24000-H30% ±50	24000	17143	7200	5143	±50	785	925	635	183
SPU-26000-H30% ±50	26000	18572	7800	5572	±50	809	959	659	192
SPU-28000-H30% ±50	28000	20000	8400	6000	±50	832	1002	682	198
SPU-30000-H30% ±50	30000	21429	9000	6429	±50	850	1040	700	209
SPU-34000-H30% ±50	34000	24286	10200	7286	±50	894	1094	744	212
SPU-38000-H30% ±50	38000	27143	11400	8143	±50	935	1165	785	227
SPU-42000-H30% ±50	42000	30000	12600	9000	±50	970	1210	820	231
SPU-46000-H30% ±50	46000	32858	13800	9857	±50	1009	1269	859	245
SPU-50000-H30% ±50	50000	35715	15000	10715	±50	1041	1321	891	250
SPU-55000-H30% ±50	55000	39286	16500	11786	±50	1084	1384	934	258
SPU-60000-H30% ±50	60000	42858	18000	12857	±50	1120	1440	970	269
SPU-65000-H30% ±50	65000	46429	19500	13929	±50	1160	1500	1010	277
SPU-70000-H30% ±50	70000	50000	21000	15000	±50	1194	1564	1044	302
SPU-80000-H30% ±50	80000	57143	24000	17143	±50	1267	1637	1117	307
SPU-90000-H30% ±50	90000	64286	27000	19286	±50	1331	1701	1181	323
SPU-100000-H30% ±50	100000	71429	30000	21429	±50	1397	1767	1247	343

GUIDED BEARING									
DATASHEET FOR A HORIZONTAL LOAD OF 30% THE VERTICAL LOAD AND A LONGITUDINAL DISPLACEMENT OF +/-100MM									
BEARING DESIGNATION	$V_{max, ULS}$ (kN)	$V_{max, SLS}$ (kN)	$H_{max, ULS}$ (kN)	$H_{max, SLS}$ (kN)	UX (mm)	ETA			
						L5 (mm)	B5 (mm)	D2 (mm)	TH (mm)
SPU-2000-H30% ±100	2000	1429	600	429	±100	471	301	221	85
SPU-4000-H30% ±100	4000	2858	1200	857	±100	542	402	292	99
SPU-6000-H30% ±100	6000	4286	1800	1286	±100	594	474	344	115
SPU-8000-H30% ±100	8000	5715	2400	1715	±100	640	540	390	122
SPU-10000-H30% ±100	10000	7143	3000	2143	±100	677	607	427	140
SPU-12000-H30% ±100	12000	8572	3600	2572	±100	715	655	465	146
SPU-14000-H30% ±100	14000	10000	4200	3000	±100	747	717	497	156
SPU-16000-H30% ±100	16000	11429	4800	3429	±100	775	745	525	160
SPU-18000-H30% ±100	18000	12858	5400	3857	±100	808	788	558	164
SPU-20000-H30% ±100	20000	14286	6000	4286	±100	835	835	585	170
SPU-22000-H30% ±100	22000	15715	6600	4715	±100	860	880	610	184
SPU-24000-H30% ±100	24000	17143	7200	5143	±100	885	905	635	183
SPU-26000-H30% ±100	26000	18572	7800	5572	±100	909	949	659	193
SPU-28000-H30% ±100	28000	20000	8400	6000	±100	932	982	682	202
SPU-30000-H30% ±100	30000	21429	9000	6429	±100	950	1010	700	209
SPU-34000-H30% ±100	34000	24286	10200	7286	±100	994	1074	744	217
SPU-38000-H30% ±100	38000	27143	11400	8143	±100	1035	1145	785	227
SPU-42000-H30% ±100	42000	30000	12600	9000	±100	1070	1190	820	235
SPU-46000-H30% ±100	46000	32858	13800	9857	±100	1109	1249	859	245
SPU-50000-H30% ±100	50000	35715	15000	10715	±100	1141	1301	891	254
SPU-55000-H30% ±100	55000	39286	16500	11786	±100	1184	1364	934	259
SPU-60000-H30% ±100	60000	42858	18000	12857	±100	1220	1420	970	273
SPU-65000-H30% ±100	65000	46429	19500	13929	±100	1260	1470	1010	278
SPU-70000-H30% ±100	70000	50000	21000	15000	±100	1294	1544	1044	302
SPU-80000-H30% ±100	80000	57143	24000	17143	±100	1367	1637	1117	307
SPU-90000-H30% ±100	90000	64286	27000	19286	±100	1431	1701	1181	333
SPU-100000-H30% ±100	100000	71429	30000	21429	±100	1497	1767	1247	343

Bearings have been designed with the following parameters :

VSLide™-M sliding material according to ETA 21/0726

Concrete on deck is H60 ($f_{ck} = 60$ MPa)

Concrete on piers and abutment is H50 ($f_{ck} = 50$ MPa)

Bearing designation: bearing type – $V_{max, ULS}$ (kN) – % $H_{max, ULS}$ (kN) – Longitudinal displacement capacity ULS (mm)

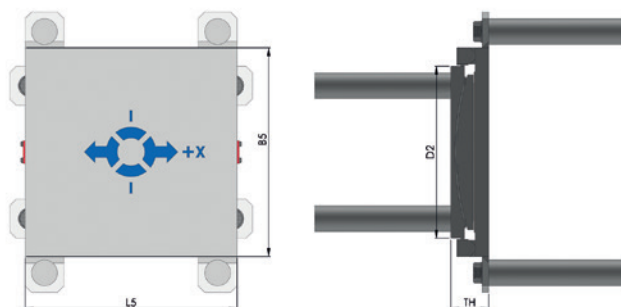
*% of horizontal load in ULS in comparison with vertical load in ULS

Minimum vertical load at SLS and ULS is 25% of maximum vertical load at SLS

Rotation 0,01 rad (EN)

Other models are available on request.

The dimensions given are indicative. Designs and dimensions may be modified by VSL without prior notification.



Notes

L5 = upper plate length
B5 = upper plate width
D2 = lower plate diameter
TH = total height