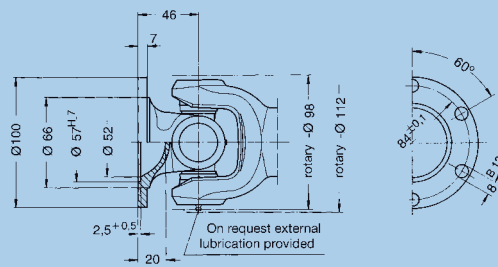


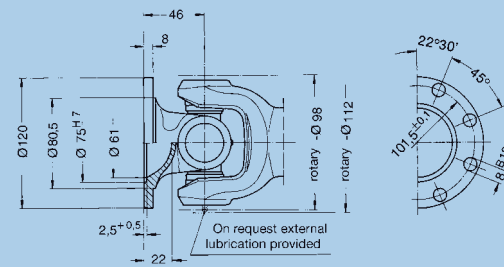
Roller bearing version

At utilisation of the nominal torque a verification of the flange connection is necessary.

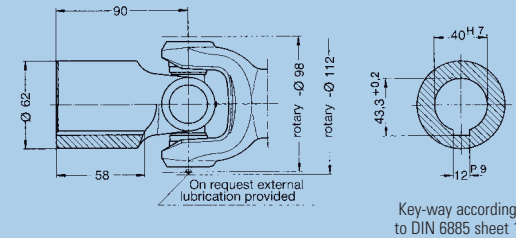
One keyway is not enough to transmit the max. torque. In such case a second keyway or an internal spline is recommended.



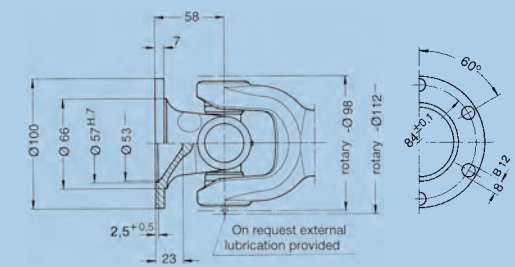
On both sides standard flange end number: 0.110.XX0



On both sides larger flange end number: 0.110.XX1



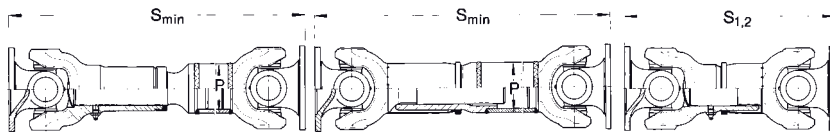
On both sides connecting hub without key-way end number: 0.110.XX2 with key-way end number: 0.110.XX3



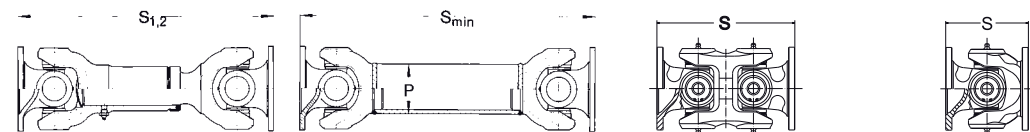
On both sides flange for larger angle deflection end number: 0.110.XX5

- β* = Maximum angle of deflection per joint
- J_m = Moment of inertia
- G = Weight
- S_{min} = Minimum length of tubular types
- S₁ = Compressed lengths
- S₂ = of short types
- X₁ = Extension at S_{min} resp. S₁
- X₂ = Extension at S₂
- P₁ = Tube diameter. Dimensions in bold type for normal applications. Alternative dimensions are for long shafts at high speeds, see technical annex domain speed
- P₂ = Alternative tube
- P₃ = Alternative tube

Universal Cardan Drive-Shafts with extension



additional spline protection on request



additional spline protection on request

Cardan Drive-Shafts without extension

Universal Joints without extension

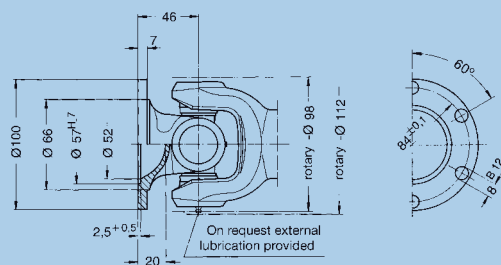
Please indicate requested length „S“ and max. r.p.m. when ordering!

Order number	Tubular Type normal extension				Tubular Type larger extension				Short Type I		
	0.110.100	0.110.101	0.110.102	0.110.105	0.110.110	0.110.111	0.110.112	0.110.115	0.110.130	0.110.131	0.110.132
Angle of deflection β*	20	18	20	35	20	18	20	35	20	18	20
Flange-Ø	100	120	Hub	100	100	120	Hub	100	100	120	Hub
S _{min} resp. S ₁	374	374	464	405	464	464	554	490	255	255	343
S ₂	-	-	-	-	-	-	-	-	280	280	368
X resp. X ₁	40	40	40	40	95	95	95	95	30	30	30
X ₂	-	-	-	-	-	-	-	-	40	40	40
P ₁	50 x 3	50 x 3	50 x 3	50 x 3	50 x 3	50 x 3	50 x 3	50 x 3	-	-	-
P ₂	70 x 3	70 x 3	70 x 3	70 x 3	70 x 3	70 x 3	70 x 3	70 x 3	-	-	-
P ₃	80 x 4	80 x 4	80 x 4	80 x 4	80 x 4	80 x 4	80 x 4	80 x 4	-	-	-
Spline dim. DIN 5480	35x2x16	35x2x16	35x2x16	35x2x16	35x2x16	35x2x16	35x2x16	35x2x16	35x2x16	35x2x16	35x2x16
Number of flange holes	6	8	-	6	6	8	-	6	6	8	-
J _m (at S _{min} resp. S ₁)	0,00378	0,0051	0,0040	0,0041	0,00406	0,00538	0,00428	0,00438	0,00389	0,00521	0,00410
J _m (at S ₂)	-	-	-	-	-	-	-	-	0,00404	0,00536	0,00426
J _m /100 mm standard tube	0,00019	0,00019	0,00019	0,00019	0,00019	0,00019	0,00019	0,00019	-	-	-
G (at S _{min} resp. S ₁)	6,32	6,77	7,08	6,56	7,48	7,93	8,23	7,62	5,12	5,57	5,87
G (at S ₂)	-	-	-	-	-	-	-	-	5,44	5,89	6,19
G/100 mm standard tube	0,35	0,35	0,35	0,35	0,35	0,35	0,35	0,35	-	-	-

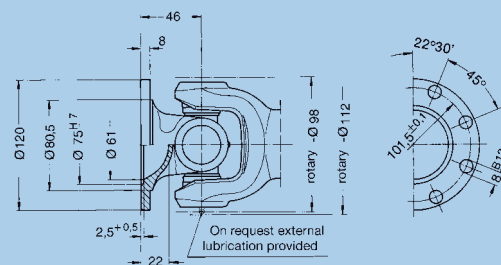
* Please refer to point 6.7 of the technical attachment

Short Type II				Tubular Type				Universal Joint Double			Universal Joint Single			
0.110.140	0.110.141	0.110.142	0.110.145	0.110.200	0.110.201	0.110.202	0.110.205	0.110.300	0.110.301	0.110.302	0.110.400	0.110.401	0.110.402	0.110.405
20	18	20	35	20	18	20	35	18	18	18	20	18	20	35
100	120	Hub	100	100	120	Hub	100	100	120	Hub	100	120	Hub	100
310	310	398	355	250	250	338	270	160	160	248	92	92	180	116
340	340	428	385	-	-	-	-	-	-	-	-	-	-	-
40	40	40	40	-	-	-	-	-	-	-	-	-	-	-
40	40	40	40	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	50 x 3	50 x 3	50 x 3	50 x 3	-	-	-	-	-	-	-
-	-	-	-	70 x 3	70 x 3	70 x 3	70 x 3	-	-	-	-	-	-	-
-	-	-	-	80 x 4	80 x 4	80 x 4	80 x 4	-	-	-	-	-	-	-
35x2x16	35x2x16	35x2x16	35x2x16	-	-	-	-	-	-	-	-	-	-	-
6	8	-	6	6	8	-	6	6	8	-	6	8	-	6
0,00415	0,00547	0,00437	0,00519	0,00352	0,00484	0,00374	0,00456	0,00319	0,00451	0,00340	0,00152	0,00284	0,00173	0,00204
0,00430	0,00562	0,00452	0,00542	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	0,00019	0,00019	0,00019	0,00019	-	-	-	-	-	-	-
5,63	6,08	6,38	6,05	4,9	5,35	5,65	5,02	3,98	4,43	4,73	2,25	2,70	3,00	2,39
5,88	6,33	6,63	6,25	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	0,35	0,35	0,35	0,35	-	-	-	-	-	-	-

At utilisation of the nominal torque a verification of the flange connection is necessary.

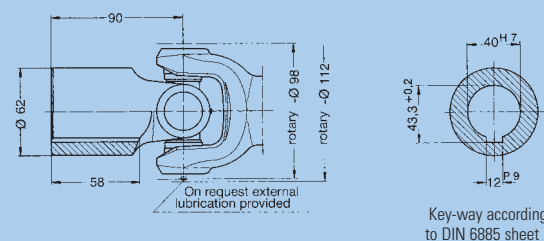


Standard flange
end number: 0.110.XX0

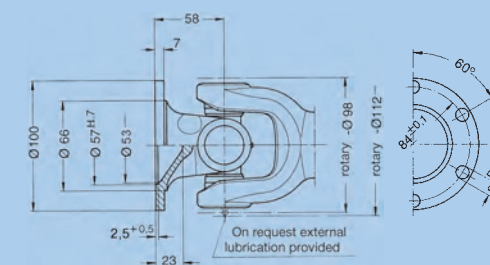


Larger flange
end number: 0.110.XX1

One keyway is not enough to transmit the max. torque. In such case a second keyway or an internal spline is recommended.

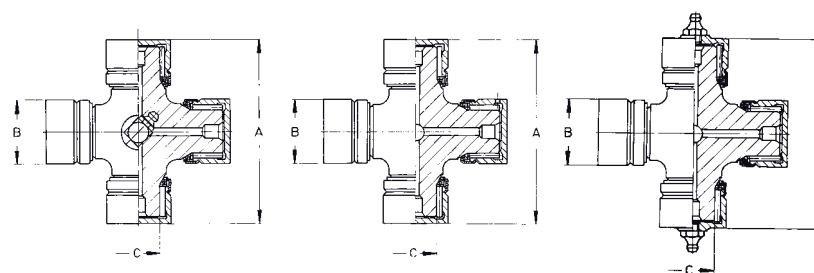


Connecting hub
without key-way end number: 0.110.XX2
with key-way end number: 0.110.XX3



Flange for larger deflection
end number: 0.110.XX5

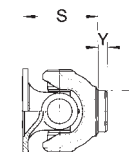
Cross Units, Roller bearing version



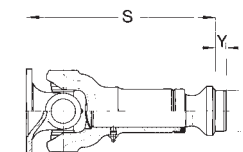
	Standard version Roller bearing	Lubrication for version 0.100.3XX Roller bearing	Version suitable for external lubrication Roller bearing
Order number	0.110.015	0.110.017	0.110.016
A	mm 83	mm 83	mm 83
B	mm 30	mm 30	mm 30
C	mm 20,02	mm 20,02	mm 20,02
Snap rings included	mm J 30 x 1,2	mm J 30 x 1,2	mm J 30 x 1,2
Weight	kg 0,66	kg 0,65	kg 0,66

β* = Maximum angle of deflection per joint
X = Preferred extension (larger extension available up to approx. 9 x spline o. D.)

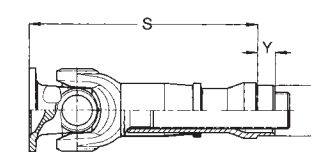
Fixed joint



Slip joint



Slip joint (sliding sleeve type)



Please indicate compressed length „S“, extension and required type of flange when ordering!

	Roller bearing version											
	without extension				standard extension				larger extension			
Order number	0.110.050	0.110.051	0.110.052	0.110.055	0.110.060	0.110.061	0.110.062	0.110.065	0.110.070	0.110.071	0.110.072	0.110.075
Angle of deflection β*	20	18	20	35	20	18	20	35	20	18	20	35
Weight	2,38	2,60	2,75	2,45	3,83	4,06	4,20	4,01	4,70	4,92	5,07	4,77
Flange-Ø	100	120	Hub	100	100	120	Hub	100	100	120	Hub	100
S	105	105	149	117	237	237	281	256	244	244	288	256
X	-	-	-	-	40	40	40	40	95	95	95	95
Y	15	15	15	15	15	15	15	15	18	18	18	18
Z	44,25	44,25	44,25	44,25	44,25	44,25	44,25	44,25	44,25	44,25	44,25	44,25
Spline dim. DIN 5480	-	-	-	-	35x2x16	35x2x16	35x2x16	35x2x16	35x2x16	35x2x16	35x2x16	35x2x16
Number of flange holes	6	8	-	6	6	8	-	6	6	8	-	6

* Please refer to point 6.7 of the technical attachment.

The dimensions Z, Y and S will be changed within a product change. Please contact us for further questions.