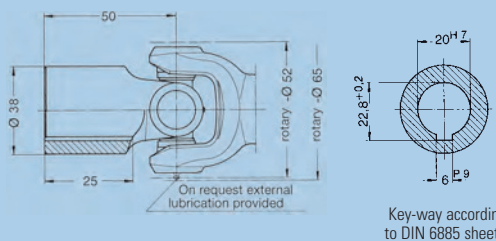
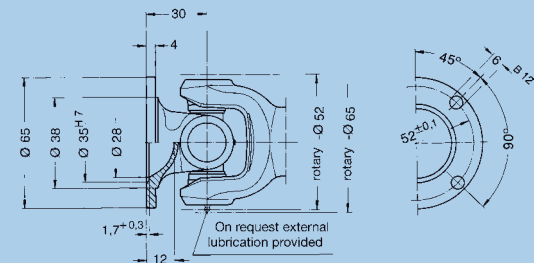
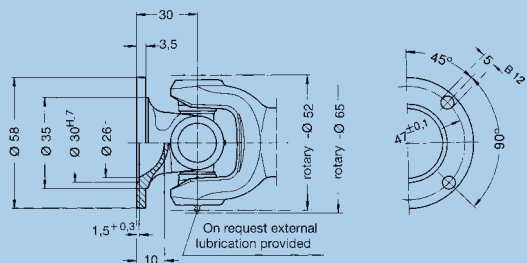


Needle bearing version

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.



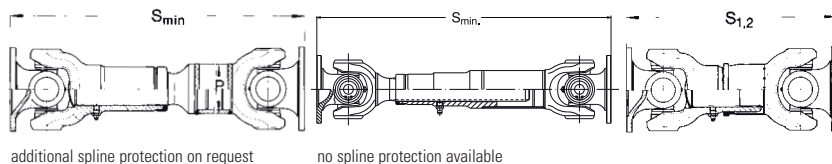
On both sides standard flange end number: 0.105.XX0

On both sides larger flange end number: 0.105.XX1

On both sides connecting hub without key-way end number: 0.105.XX2
with key-way end number: 0.105.XX3

- 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

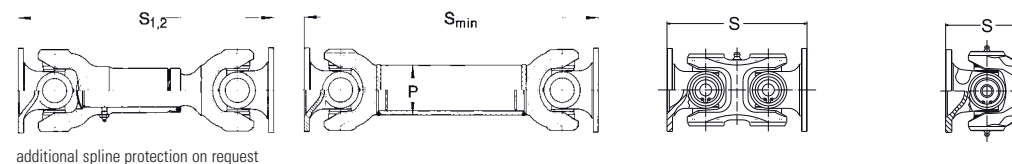


additional spline protection on request

no spline protection available

Cardan Drive-Shafts without extension

Universal Joints without extension



additional spline protection on request

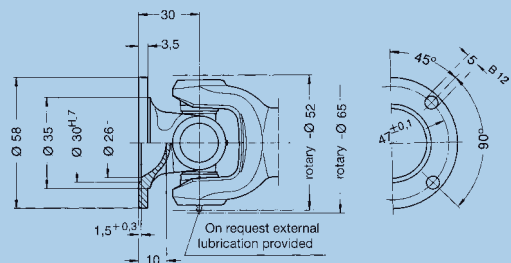
Please indicate requested length „S“ and max. r.p.m. when ordering!

Order number	Tubular Type normal extension				Tubular Type larger extension				Short Type I		
	0.105.100	0.105.101	0.105.102	-	0.105.110	0.105.111	0.105.112	-	0.105.130	0.105.131	0.105.132
Angle of deflection β*	30	25	30	-	30	25	30	-	30	25	30
Flange-Ø	58	65	Hub	-	58	65	Hub	-	58	65	Hub
S _{min} resp. S ₁	240	240	280	-	257	257	297	-	165	165	205
S ₂	-	-	-	-	-	-	-	-	175	175	215
X resp. X ₁	25	25	25	-	40	40	40	-	20	20	20
X ₂	-	-	-	-	-	-	-	-	25	25	25
P ₁	28 x 1,5	28 x 1,5	28 x 1,5	-	28 x 1,5	28 x 1,5	28 x 1,5	-	-	-	-
P ₂	40 x 2	40 x 2	40 x 2	-	40 x 2	40 x 2	40 x 2	-	-	-	-
P ₃	-	-	-	-	-	-	-	-	-	-	-
Spline dim. DIN 5480	20x1,5x12	20x1,5x12	20x1,5x12	-	20x1,5x12	20x1,5x12	20x1,5x12	-	20x1,5x12	20x1,5x12	20x1,5x12
Number of flange holes	4	4	-	-	4	4	-	-	4	4	-
J _m (at S _{min} resp. S ₁)	0,000185	0,00022	0,00019	-	0,00019	0,000225	0,000195	-	0,00018	0,00021	0,000185
J _m (at S ₂)	-	-	-	-	-	-	-	-	0,00021	0,00024	0,000215
J _m /100 mm standard tube	0,000017	0,000017	0,000017	-	0,000017	0,000017	0,000017	-	-	-	-
G (at S _{min} resp. S ₁)	1,18	1,25	1,31	-	1,26	1,33	1,39	-	0,93	1,00	1,07
G (at S ₂)	-	-	-	-	-	-	-	-	0,98	1,05	1,12
G/100 mm standard tube	0,1	0,1	0,1	-	0,1	0,1	0,1	-	-	-	-

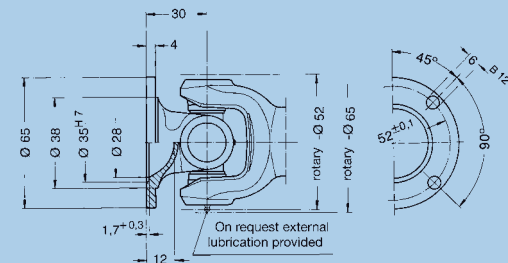
* Please refer to point 6.7 of the technical attachment

Short Type II				Tubular Type				Universal Joint Double			Universal Joint Single			
0.105.140	0.105.141	0.105.142	-	0.105.200	0.105.201	0.105.202	-	0.105.300	0.105.301	0.105.302	0.105.400	0.105.401	0.105.402	-
30	25	30	-	30	25	30	-	30	25	30	30	25	30	-
58	65	Hub	-	58	65	Hub	-	58	65	Hub	58	65	Hub	-
195	195	235	-	160	160	200	-	110	110	150	60	60	100	-
215	215	255	-	-	-	-	-	-	-	-	-	-	-	-
25	25	25	-	-	-	-	-	-	-	-	-	-	-	-
25	25	25	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	28 x 1,5	28 x 1,5	28 x 1,5	-	-	-	-	-	-	-	-
-	-	-	-	40 x 2	40 x 2	40 x 2	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20x1,5x12	20x1,5x12	20x1,5x12	-	-	-	-	-	-	-	-	-	-	-	-
4	4	-	-	4	4	-	-	4	4	-	4	4	-	-
0,00022	0,00025	0,000225	-	0,000152	0,000187	0,000157	-	0,00012	0,00015	0,000125	0,000072	0,00011	0,000077	-
0,00024	0,00027	0,000245	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	0,000017	0,000017	0,000017	-	-	-	-	-	-	-	-
0,99	1,06	1,12	-	0,88	0,95	1,01	-	0,69	0,76	0,83	0,40	0,47	0,53	-
1,3	1,10	1,17	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	0,1	0,1	0,1	-	-	-	-	-	-	-	-

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

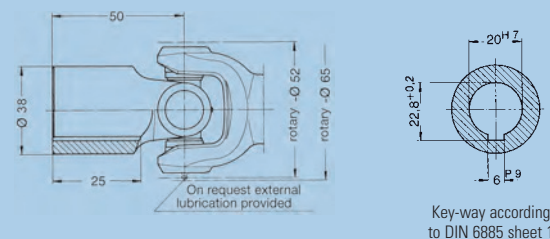


Standard flange
end number: 0.105.XX0



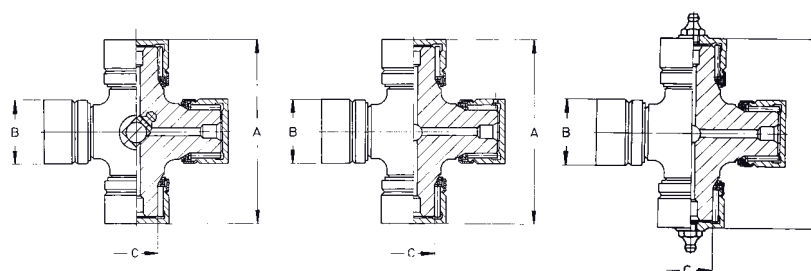
Larger flange
end number: 0.105.XX1

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: 0.105.XX2
with key-way end number: 0.105.XX3

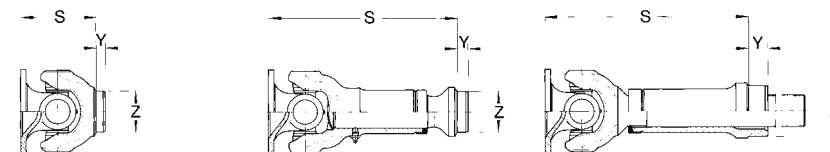
Cross Units, Needle bearing version



	Standard version Needle bearing	Lubrication for version 0.100.3XX Needle bearing	Version suitable for external lubrication Needle bearing
Order number	0.105.010	0.105.011	0.105.012
A	41	41	41
B	17	17	17
C	9	9	9
Snap rings included	J 17 x 1	J 17 x 1	J 17 x 1
Weight	0,098	0,098	0,102

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!

Order number	Needle bearing version											
	without extension				standard extension				larger extension			
Order number	0.105.050	0.105.051	0.105.052	-	0.105.060	0.105.061	0.105.062	-	0.105.070	0.105.071	0.105.072	-
Angle of deflection β*	30	25	30	-	30	25	30	-	30	25	30	-
Weight	0,42	0,46	0,49	-	0,73	0,77	0,80	-	0,79	0,83	0,86	-
Flange-Ø	58	65	Hub	-	58	65	Hub	-	58	65	Hub	-
S	62	62	82	-	150	150	170	-	160	160	180	-
X	-	-	-	-	25	25	25	-	40	40	40	-
Y	13	13	13	-	13	13	13	-	8	8	8	-
Z	25,25	25,25	25,25	-	25,25	25,25	25,25	-	25,25	25,25	25,25	-
Spline dim. DIN 5480	-	-	-	-	20x1,5x12	20x1,5x12	20x1,5x12	-	20x1,5x12	20x1,5x12	20x1,5x12	-
Number of flange holes	4	4	-	-	4	4	-	-	4	4	-	-

* 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.