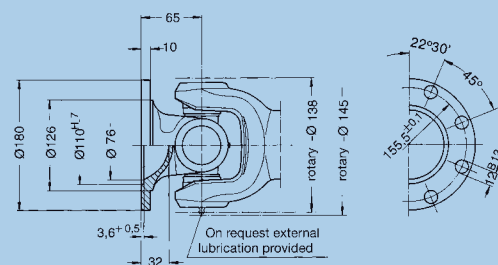
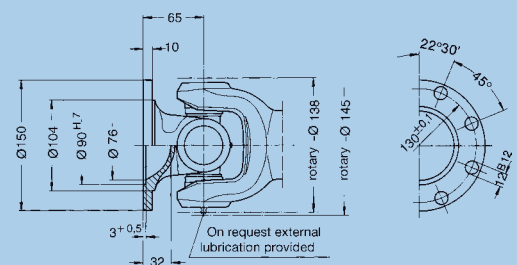


Roller bearing version

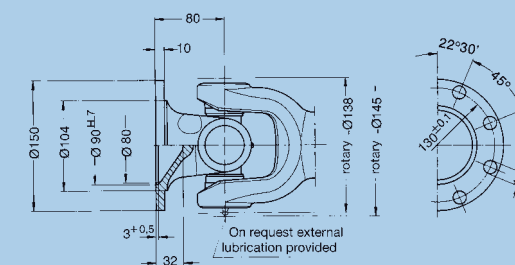
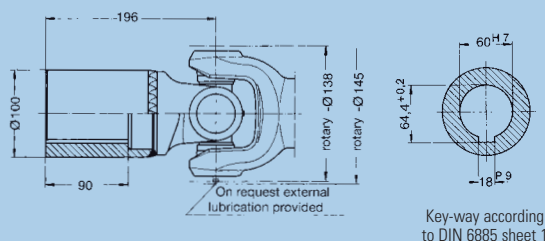
At utilisation of the nominal torque a verification of the flange connection is necessary.

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: 0.148.XX0

On both sides larger flange end number: 0.148.XX1

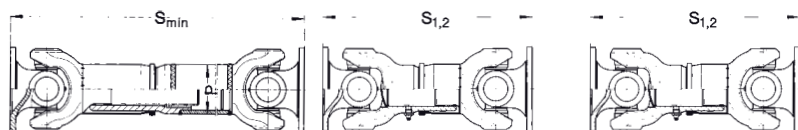


On both sides connecting hub without key-way end number: 0.148.XX2 with key-way end number: 0.148.XX3

On both sides flange for larger angle deflection end number: 0.148.XX5

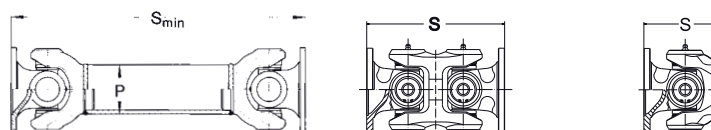
- β* = Maximum angle of deflection per joint
- J_m = Moment of inertia
- G = Weight
- S_{min} = Minimum length of tubular types
- S₁ = Compressed lengths
- S₂ = of short types
- X₁ = Extension at S_{min} resp. S₁
- X₂ = Extension at S₂
- P₁ = Tube diameter. Dimensions in bold type for normal applications. 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



Cardan Drive-Shafts without extension

Universal Joints without extension



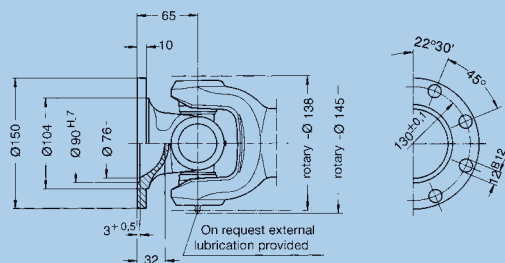
Please indicate requested length „S“ and max. r.p.m. when ordering!

Order number	Tubular Type larger extension				Short Type I			Short Type II			
	0.148.110	0.148.111	0.148.112	0.148.115	0.148.130	0.148.131	0.148.132	0.148.140	0.148.141	0.148.142	0.148.145
Angle of deflection β*	20	20	35	35	20	20	20	20	20	20	35
Flange-Ø	150	180	Hub	120/150	150	180	Hub	150	180	Hub	120/150
S _{min} resp. S ₁	550	550	812	580	360	360	622	460	460	722	490
S ₂	-	-	-	-	400	400	662	-	-	-	-
X resp. X ₁	110	110	110	110	40	40	40	80	80	80	80
X ₂	-	-	-	-	80	80	80	-	-	-	-
P ₁	80 x 4	80 x 4	80 x 4	80 x 4	-	-	-	-	-	-	-
P ₂	90 x 4	90 x 4	90 x 4	90 x 4	-	-	-	-	-	-	-
P ₃	100 x 4	100 x 4	100 x 4	100 x 4	-	-	-	-	-	-	-
Spline dim. DIN 5480	55x2,5x20	55x2,5x20	55x2,5x20	55x2,5x20	55x2,5x20	55x2,5x20	55x2,5x20	55x2,5x20	55x2,5x20	55x2,5x20	55x2,5x20
Number of flange holes	8	8	-	8	8	8	-	8	8	-	8
J _m (at S _{min} resp. S ₁)	0,0323	0,0342	0,0406	0,0332	0,0247	0,0267	0,03414	0,0294	0,0314	0,03884	0,0304
J _m (at S ₂)	-	-	-	-	0,0267	0,0287	0,03614	-	-	-	-
J _m /100 mm standard tube	0,00109	0,00109	0,00109	0,00109	-	-	-	-	-	-	-
G (at S _{min} resp. S ₁)	20,87	22,17	29,77	22,19	15,63	16,93	24,53	18,37	19,67	27,27	19,69
G (at S ₂)	-	-	-	-	16,88	17,55	25,77	-	-	-	-
G/100 mm standard tube	0,75	0,75	0,75	0,75	-	-	-	-	-	-	-

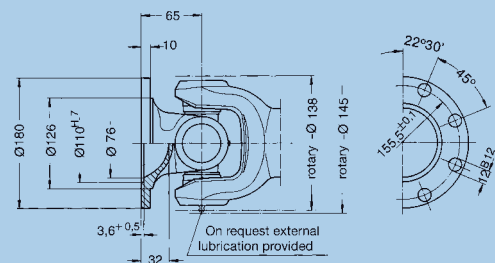
Tubular Type	Universal Joint Double			Universal Joint Single							
	0.148.200	0.148.201	0.148.202	0.148.205	0.148.300	0.148.301	0.148.302	0.148.400	0.148.401	0.148.402	0.148.405
20	20	35	35	20	20	20	20	20	20	35	35
150	180	Hub	120/150	150	180	Hub	150	180	Hub	120/150	
345	345	607	375	235	235	497	130	130	392	160	
-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	
80 x 4	80 x 4	80 x 4	80 x 4	-	-	-	-	-	-	-	
90 x 4	90 x 4	90 x 4	90 x 4	-	-	-	-	-	-	-	
100 x 4	100 x 4	100 x 4	100 x 4	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	
8	8	-	8	8	8	-	8	8	-	8	
0,0217	0,0237	0,03144	0,0227	0,0149	0,0161	0,0162	0,0106	0,0126	0,02004	0,0117	
-	-	-	-	-	-	-	-	-	-	-	
0,00109	0,00109	0,00109	0,00109	-	-	-	-	-	-	-	
14,53	15,83	23,43	15,85	11,92	13,22	20,82	6,75	8,05	15,54	8,08	
-	-	-	-	-	-	-	-	-	-	-	
0,75	0,75	0,75	0,75	-	-	-	-	-	-	-	

* Please refer to point 6.7 of the technical attachment

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

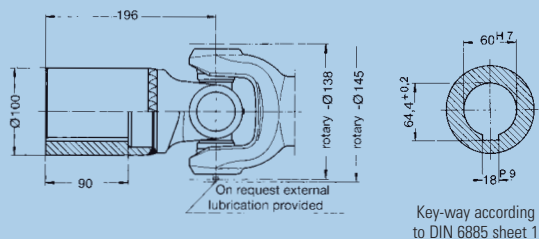


Standard flange
end number: 0.148.XX0

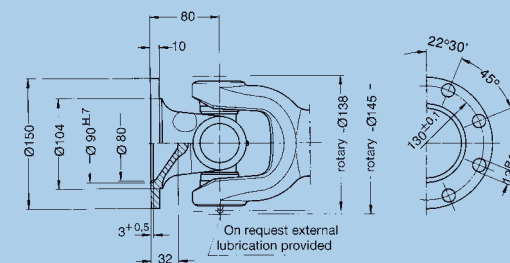


Larger flange
end number: 0.148.XX1

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: 0.148.XX2
with key-way end number: 0.148.XX3



Flange for larger angle of deflection
end number: 0.148.XX5

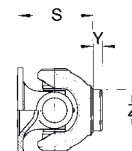
Cross Units, Roller bearing version



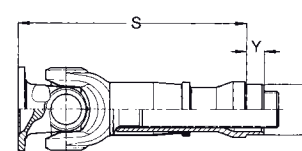
	Standard version Roller bearing	Version suitable for external lubrication Roller bearing
Order number	0.148.015	0.148.016
A	mm 117,5	117,5
B	mm 42	42
C	mm 27,8	27,8
Snap rings included	mm J 42 x 1,75	J 42 x 1,75
Weight	kg 1,69	1,7

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 (sliding sleeve type)



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

	Roller bearing version							
	without extension				larger extension			
Order number	0.148.050	0.148.051	0.148.052	0.148.055	0.148.070	0.148.071	0.148.072	0.148.075
Angle of deflection β*	20	20	35	35	20	20	20	35
Weight	kg 7,06	7,71	11,51	7,72	13,23	13,88	17,68	13,89
Flange-Ø	mm 150	180	Hub	120/150	150	180	Hub	120/150
S	mm 145	145	276	160	328	328	459	343
X	mm -	-	-	-	110	110	110	110
Y	mm 25	25	25	25	25	25	25	25
Z	mm 72,25	72,25	72,25	72,25	72,25	72,25	72,25	72,25
Spline dim. DIN 5480	mm -	-	-	-	55x2,5x20	55x2,5x20	55x2,5x20	55x2,5x20
Number of flange holes	8	8	-	8	8	8	-	8

* 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.