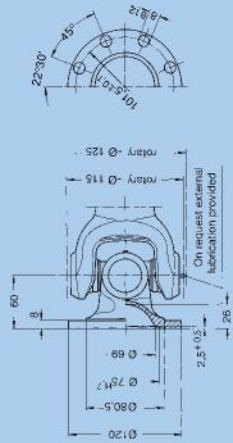
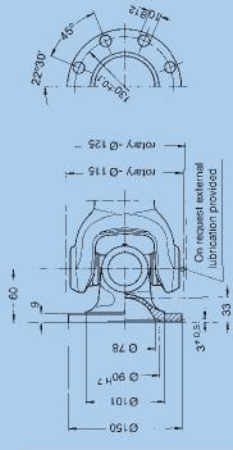


At utilisation of the nominal torque a verification of the flange connection is necessary.

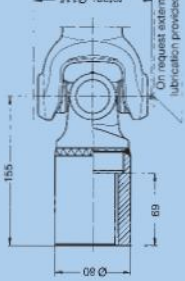


On both sides standard flange  
end number: 0.112.XX0

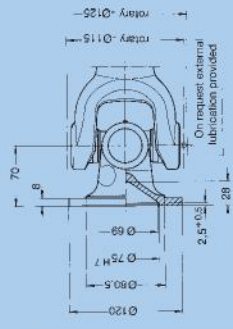
On both sides larger flange  
end number: 0.112.XX1



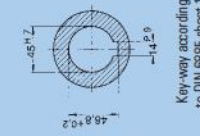
One keyway is not enough to transmit the max. torque. In such case a second keyway or an internal spline is recommended.



On both sides connecting hub without key-way end number: 0.112.XX2 with key-way end number: 0.112.XX3



On both sides flange for larger angle deflection  
end number: 0.112.XX5



$\beta^*$  = Maximum angle of deflection per joint

$J_x$  = Moment of inertia

$G$  = Weight

$S_{min}$  = Minimum length of tubular types

$X_1$  = Extension at  $S_{min}$  resp.  $S_1$

$X_2$  = Extension at  $S_2$

$P_1$  = tube diameter. Dimensions in bold

type for normal applications.

Alternative dimensions are for long

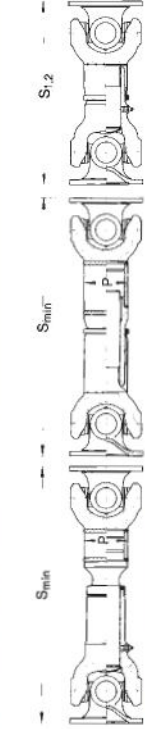
shafts at high speeds, see technical

annex, domain speed

$P_2$  = Alternative tube

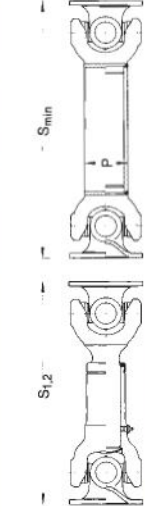
$P_3$

### Universal Cardan Drive-Shafts with extension



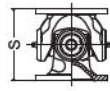
additional spline protection on request

### Cardan Drive-Shafts without extension



additional spline protection on request

### Universal Joints without extension

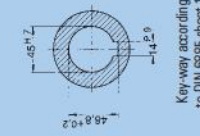


Please indicate requested length „S“ and max. r.p.m. when ordering!

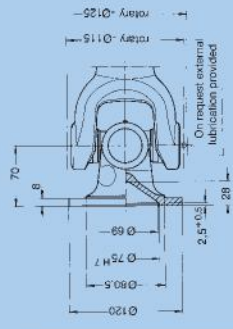
Order number	Tubular Type normal extension		Tubular Type larger extension		Short Type I						
	20	35	20	18	20	35					
Angle of deflection $\beta^*$	0.112.100	0.112.101	0.112.102	0.112.105	0.112.110	0.112.111	0.112.112	0.112.115	0.112.130	0.112.131	0.112.132
Range- $\beta$	20	18	20	35	20	18	20	35	20	18	20
$S_{min}$ resp. $S_1$	120	150	120	120	120	150	120	150	120	150	120
$S_2$	473	664	564	564	523	523	714	560	325	325	515
X resp. $X_1$	60	60	60	60	120	120	120	120	360	360	550
$X_2$	60 x 4	60 x 4	60 x 4	60 x 4	60 x 4	60 x 4	60 x 4	60 x 4	50	50	50
$P_1$	80 x 4	80 x 4	80 x 4	80 x 4	80 x 4	80 x 4	80 x 4	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	90 x 4	90 x 4	90 x 4	90 x 4	90 x 4	90 x 4	90 x 4
$P_3$	42 x 2 x 20	42 x 2 x 20	42 x 2 x 20	42 x 2 x 20	42 x 2 x 20	42 x 2 x 20	42 x 2 x 20	42 x 2 x 20	42 x 2 x 20	42 x 2 x 20	42 x 2 x 20
Spline dim. DIN 5480	8	8	8	8	8	8	8	8	8	8	8
Number of flange holes	0.01021	0.07390	0.01210	0.01278	0.0108	0.01449	0.01270	0.01560	0.01039	0.01408	0.01230
$J_x$ (at $S_{min}$ resp. $S_1$ )	kgm <sup>2</sup>	kgm <sup>2</sup>	kgm <sup>2</sup>	kgm <sup>2</sup>	kgm <sup>2</sup>	kgm <sup>2</sup>	kgm <sup>2</sup>	kgm <sup>2</sup>	kgm <sup>2</sup>	kgm <sup>2</sup>	kgm <sup>2</sup>
$J_x$ (at $S_2$ )	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045
$J_x/100$ mm standard tube	10.66	12.02	15.24	10.82	11.55	12.91	16.14	12.63	8.75	10.11	13.33
G (at $S_{min}$ resp. $S_1$ )	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg
G (at $S_2$ )	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
G/100 mm standard tube	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55

\* Please refer to point 6.7 of the technical attachment

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

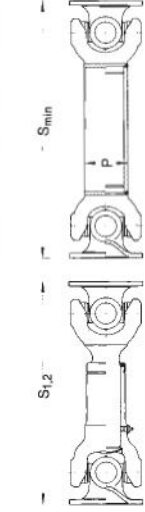


On both sides connecting hub without key-way end number: 0.112.XX2 with key-way end number: 0.112.XX3



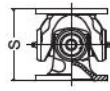
On both sides flange for larger angle deflection  
end number: 0.112.XX5

### Cardan Drive-Shafts without extension



additional spline protection on request

### Universal Joints without extension



Short Type II	Tubular Type		Universal Joint Double		Universal Joint Single									
	20	35	20	18	20	18								
0.112.140	0.112.141	0.112.142	0.112.145	0.112.200	0.112.201	0.112.202	0.112.205	0.112.300	0.112.301	0.112.302	0.112.400	0.112.401	0.112.402	0.112.405
20	18	20	35	20	18	35	35	20	18	20	20	18	35	35
120	150	120	150	120	150	120	150	120	150	120	150	120	150	120
400	400	400	590	435	301	301	430	320	200	350	120	120	310	140
430	430	620	470	-	-	-	-	-	-	-	-	-	-	-
60	60	60	60	-	-	-	-	-	-	-	-	-	-	-
60	60	60	60	60 x 4	60 x 4	60 x 4	60 x 4	-	-	-	-	-	-	-
-	-	-	-	80 x 4	80 x 4	80 x 4	80 x 4	-	-	-	-	-	-	-
-	-	-	-	90 x 4	90 x 4	90 x 4	90 x 4	-	-	-	-	-	-	-
42 x 2 x 20	42 x 2 x 20	42 x 2 x 20	42 x 2 x 20	42 x 2 x 20	42 x 2 x 20	42 x 2 x 20	42 x 2 x 20	-	-	-	-	-	-	-
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
0.01195	0.01564	0.01384	0.01323	0.00961	0.01133	0.0115	0.01089	0.00904	0.01273	0.0109	0.00354	0.00723	0.00543	0.00596
0.01199	0.01568	0.01388	0.01327	0.00965	0.01137	0.0115	0.0109	0.00904	0.01273	0.0109	0.00354	0.00723	0.00543	0.00596
9.66	11.02	14.24	9.99	7.88	9.24	12.45	8.13	6.44	7.8	11.02	3.71	5.07	8.29	3.97
9.99	11.35	14.57	10.32	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	0.55	0.55	0.55	0.55	-	-	-	-	-	-	-
-	-	-	-	0.55	0.55	0.55	0.55	-	-	-	-	-	-	-