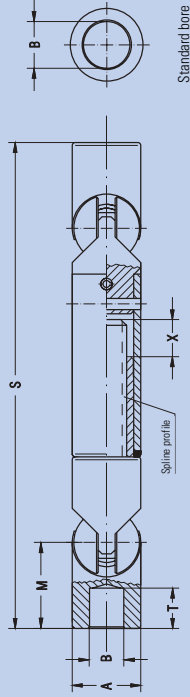
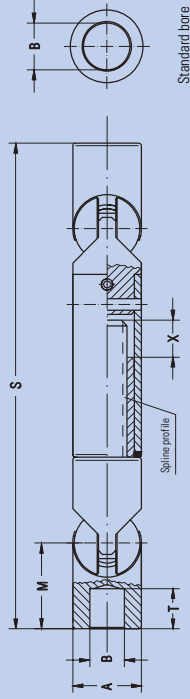


double, with length compensation, Standard bore



When ordering, please indicate compressed length and extension!

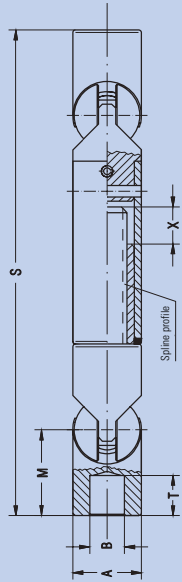
Ball and Socket Shafts, double, Standard bore

Order number	0.820.100	0.824.100	0.828.100	0.832.100	0.836.100	0.840.100	0.845.100
Md <sub>max</sub>	20	30	50	60	120	160	200
Angle of deflection β	35	35	35	35	35	35	35
Weight by S <sub>1</sub>	0,32	0,50	0,78	1,10	1,58	2,17	2,92
Weight by S <sub>2</sub>	0,36	0,58	0,85	1,22	1,72	2,28	3,38
Weight by S <sub>3</sub>	0,40	0,62	0,98	1,33	1,82	2,52	3,68
A	20	24	28	32	36	40	45
*B <sup>1/2</sup>	10	12	14	16	18	20	22
*C <sup>4/2</sup>	-	-	-	-	-	-	-
*D <sup>20</sup>	-	-	-	-	-	-	-
*E <sup>18</sup>	-	-	-	-	-	-	-
M	25	30	35	40	45	50	55
S <sub>1</sub> + X <sub>1</sub>	150 + 20	170 + 25	200 + 30	220 + 30	250 + 35	280 + 40	300 + 40
S <sub>2</sub> + X <sub>2</sub>	170 + 40	200 + 55	220 + 50	250 + 60	280 + 65	300 + 60	350 + 90
S <sub>3</sub> + X <sub>3</sub>	200 + 70	220 + 75	250 + 80	280 + 90	300 + 85	350 + 110	400 + 140
T	13	14	17	19	22	24	26
Spine profile	6x11x14	6x11x14	6x16x20	6x16x20	6x19x22	6x21x25	6x21x25

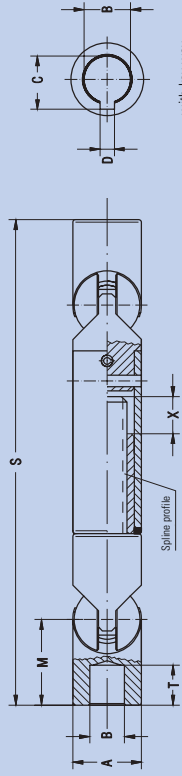
0.850.100	0.855.100	0.860.100	0.865.100	0.870.100	0.880.100	0.890.100	0.896.100
290	440	520	700	820	880	1060	1250
35	35	35	35	35	35	35	35
4,27	5,50	7,78	10,4	13,6	20,1	27,7	35,8
4,58	5,98	8,45	10,8	14,7	21,9	30,6	38,7
5,18	6,62	9,58	11,8	16,2	24,5	33,5	41,7
50	55	60	65	70	80	90	100
25	30	35	40	45	50	60	70
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
62,5	67,5	82,5	95	105	115	130	145
350 + 50	400 + 50	450 + 50	520 + 70	580 + 70	630 + 70	700 + 70	800 + 100
400 + 100	450 + 100	500 + 100	550 + 100	630 + 120	700 + 140	800 + 170	900 + 200
450 + 150	500 + 160	580 + 180	630 + 180	700 + 190	800 + 240	900 + 270	1000 + 300
30	35	42	46	52	58	70	80
6x29x32	6x29x32	6x36x42	6x36x42	52x44x18	58x50x18	62x54x20	62x54x20

\* = Customized bores, key-ways and inner square dimensions possible  
 Md<sub>max</sub> = Max. permissible torque  
 β = Max. angle of deflection per joint  
 S<sub>1</sub> =  
 S<sub>2</sub> = preferred lengths, compressed  
 S<sub>3</sub> =  
 X<sub>1</sub> = Maximum extension for S<sub>1</sub>  
 X<sub>2</sub> = Maximum extension for S<sub>2</sub>  
 X<sub>3</sub> = Maximum extension for S<sub>3</sub>  
 For application criteria and calculations refer to technical annex

double, with length compensation, Bore with key-way DIN 6885, Sheet 1



with key-way  
DIN 6885 sheet 1



with key-way  
DIN 6885 sheet 1

When ordering, please indicate compressed length and extension!

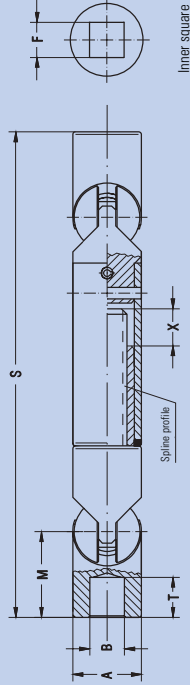
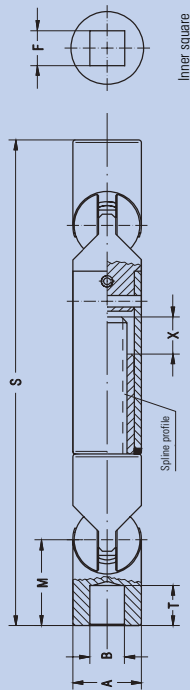
Ball and Socket Shafts, double, Bore with key-way DIN 6885, Sheet 1

Order number	0.820.103	0.824.103	0.828.103	0.832.103	0.836.103	0.840.103	0.846.103
Md <sub>max</sub>	20	30	50	60	120	160	200
Angle of deflection β	35	35	35	35	35	35	35
Weight by S <sub>1</sub>	0,32	0,50	0,78	1,10	1,58	2,17	2,82
Weight by S <sub>2</sub>	0,36	0,58	0,85	1,22	1,72	2,28	3,38
Weight by S <sub>3</sub>	0,40	0,62	0,98	1,33	1,82	2,52	3,68
A	20	24	28	32	36	40	45
*B <sup>1/2</sup>	10	12	14	16	18	20	22
*C <sup>4/2</sup>	11,4	13,8	16,3	18,3	20,8	22,8	24,8
*D <sup>20</sup>	3	4	5	5	6	6	6
*E <sup>18</sup>	-	-	-	-	-	-	-
M	25	30	35	40	45	50	55
S <sub>1</sub> + X <sub>1</sub>	150 + 20	170 + 25	200 + 30	220 + 30	250 + 35	280 + 40	300 + 40
S <sub>2</sub> + X <sub>2</sub>	170 + 40	200 + 55	220 + 50	250 + 60	280 + 65	300 + 60	350 + 90
S <sub>3</sub> + X <sub>3</sub>	200 + 70	220 + 75	250 + 80	280 + 90	300 + 85	350 + 110	400 + 140
T	13	14	17	19	22	24	26
Spline profile	6x11x14	6x11x14	6x16x20	6x18x22	6x21x25	6x21x25	6x21x25

0.850.103	0.855.103	0.860.103	0.865.103	0.870.103	0.880.103	0.890.103	0.896.103
290	440	520	700	820	880	1060	1250
35	35	35	35	35	35	35	35
4,27	5,50	7,78	10,4	13,6	20,1	27,7	35,8
4,58	5,98	8,45	10,8	14,7	21,9	30,6	38,7
5,18	6,62	9,58	11,8	16,2	24,5	33,5	41,7
50	55	60	65	70	80	90	100
25	30	35	40	45	50	60	70
28,3	33,3	38,3	43,3	48,8	53,8	64,4	74,9
8	8	10	12	14	14	18	20
-	-	-	-	-	-	-	-
62,5	67,5	82,5	95	105	115	130	145
350 + 50	400 + 50	450 + 50	520 + 70	580 + 70	630 + 70	700 + 70	800 + 100
400 + 100	450 + 100	500 + 100	550 + 100	600 + 120	700 + 140	800 + 170	900 + 200
450 + 150	500 + 160	580 + 180	630 + 180	700 + 190	800 + 240	900 + 270	1000 + 300
30	35	42	46	52	58	70	80
6x28x32	6x28x32	6x36x42	6x36x42	52x44x18	58x50x18	62x54x20	62x54x20

\* = Customized bores, key-ways and inner square dimensions possible  
 Md<sub>max</sub> = Max. permissible torque  
 β = Max. angle of deflection per joint  
 S<sub>1</sub> =  
 S<sub>2</sub> = preferred lengths, compressed  
 S<sub>3</sub> =  
 X<sub>1</sub> = Maximum extension for S<sub>1</sub>  
 X<sub>2</sub> = Maximum extension for S<sub>2</sub>  
 X<sub>3</sub> = Maximum extension for S<sub>3</sub>  
 For application criteria and calculations refer to technical annex

double, with length compensation, inner square



When ordering, please indicate compressed length and extension!

Ball and Socket Shafts, double, Inner square

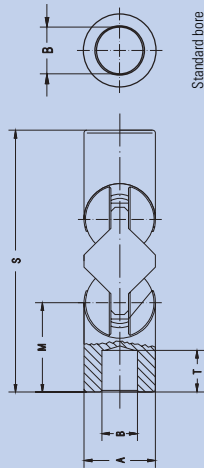
Order number	0.820.104	0.824.104	0.828.104	0.832.104	0.836.104	0.840.104	0.845.104
Md <sub>max</sub>	20	30	50	60	120	160	200
Angle of deflection β	35	35	35	35	35	35	35
Weight by S <sub>1</sub>	0,32	0,50	0,78	1,10	1,58	2,17	2,82
Weight by S <sub>2</sub>	0,36	0,58	0,85	1,22	1,72	2,28	3,38
Weight by S <sub>3</sub>	0,40	0,62	0,98	1,33	1,82	2,52	3,68
A	20	24	28	32	36	40	45
*B <sup>17</sup>	-	-	-	-	-	-	-
*C <sup>4/2</sup>	-	-	-	-	-	-	-
*D <sup>28</sup>	-	-	-	-	-	-	-
*E <sup>18</sup>	10	12	14	16	18	20	22
M	25	30	35	40	45	50	55
S <sub>1</sub> + X <sub>1</sub>	150 + 20	170 + 25	200 + 30	220 + 30	250 + 35	280 + 40	300 + 40
S <sub>2</sub> + X <sub>2</sub>	170 + 40	200 + 55	220 + 50	250 + 60	280 + 65	300 + 60	350 + 90
S <sub>3</sub> + X <sub>3</sub>	200 + 70	220 + 75	250 + 80	280 + 90	300 + 85	350 + 110	400 + 140
T	13	14	17	19	22	24	26
Spine profile	6x11x14	6x11x14	6x16x20	6x16x20	6x18x22	6x21x25	6x21x25

0.850.104	0.855.104	0.860.104	0.865.104	0.870.104	0.880.104	0.890.104	0.896.104
290	440	520	700	820	880	1060	1250
35	35	35	35	35	35	35	35
4,27	5,50	7,78	10,4	13,6	20,1	27,7	35,8
4,68	5,98	8,45	10,8	14,7	21,9	30,6	38,7
5,18	6,62	9,58	11,8	16,2	24,5	33,5	41,7
50	55	60	65	70	80	90	100
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
25	30	32	36	40	42	50	54
62,5	67,5	82,5	95	105	115	130	145
350 + 50	400 + 50	450 + 50	520 + 70	580 + 70	630 + 70	700 + 70	800 + 100
400 + 100	450 + 100	500 + 100	550 + 100	630 + 120	700 + 140	800 + 170	900 + 200
450 + 150	500 + 160	580 + 180	630 + 180	700 + 190	800 + 240	900 + 270	1000 + 300
30	35	42	46	52	58	70	80
6x28x32	6x28x32	6x36x42	6x36x42	52x44x18	58x50x18	62x54x20	62x54x20

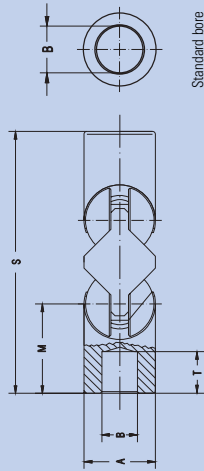
\* = Customized bores, key-ways and inner square dimensions possible  
 Md<sub>max</sub> = Max. permissible torque  
 β = Max. angle of deflection per joint  
 S<sub>1</sub> =  
 S<sub>2</sub> = preferred lengths, compressed  
 S<sub>3</sub> =  
 X<sub>1</sub> = Maximum extension for S<sub>1</sub>  
 X<sub>2</sub> = Maximum extension for S<sub>2</sub>  
 X<sub>3</sub> = Maximum extension for S<sub>3</sub>  
 For application criteria and calculations refer to technical annex



double, Standard bore



Standard bore



Standard bore

## Ball and Socket Joints, double, Standard bore

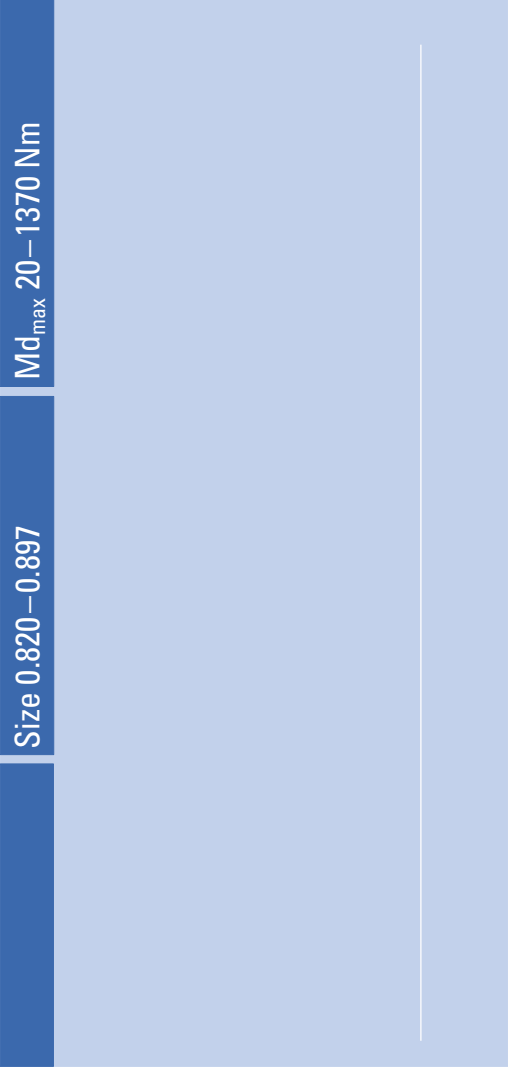
Order number	0.820.300	0.824.300	0.828.300	0.832.300	0.836.300	0.840.300	0.845.300	
Md <sub>max</sub>	Nm	20	30	50	60	120	160	200
Angle of deflection β	°	35	35	35	35	35	35	35
Weight	kg	0,14	0,22	0,38	0,55	0,78	1,08	1,48
A	mm	20	24	28	32	36	40	45
*B <sup>1/2</sup>	mm	10	12	14	16	18	20	22
*C <sup>4/2</sup>	mm	–	–	–	–	–	–	–
*D <sup>2/3</sup>	mm	–	–	–	–	–	–	–
*E <sup>1/3</sup>	mm	–	–	–	–	–	–	–
M	mm	25	30	35	40	45	50	55
S	mm	74	88	103	118	133	148	163
T	mm	13	14	17	19	22	24	26

\* – Customized bores, key-ways and inner square dimensions possible

Md<sub>max</sub> = Max. permissible torque

For application criteria and calculations refer to technical annex

0.850.300	0.855.300	0.860.300	0.865.300	0.870.300	0.880.300	0.890.300	0.896.300	0.897.300
290	440	520	700	820	880	1060	1250	1370
35	35	35	35	35	35	35	35	35
2,08	2,62	3,85	4,78	5,88	8,52	11,7	15,5	21,8
50	55	60	65	70	80	90	100	110
25	30	35	40	45	50	60	70	75
–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–
62,5	67,5	82,5	95	105	115	130	145	160
185	200	237	267	292	322	362	404	444
30	35	42	46	52	58	70	80	85

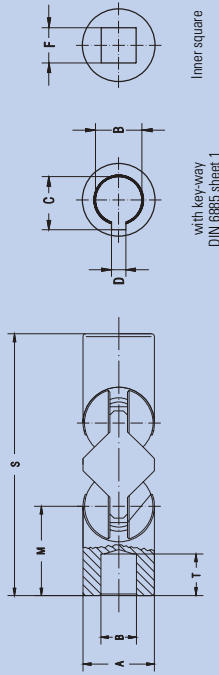


Size 0.820 - 0.897

$Md_{max}$  20 - 1370 Nm

008'0

double, Bore with key-way DIN 6885, Sheet 1; Inner square



with key-way  
DIN 6885 sheet 1

Inner square

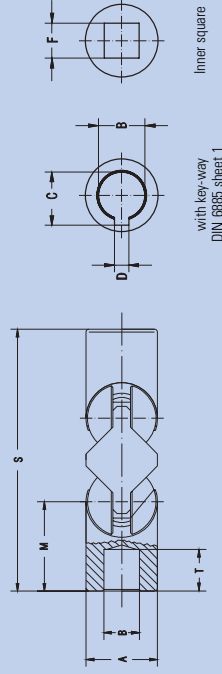
Ball and Socket Joints, double, Bore with key-way DIN 6885, Sheet 1

Order number	0.820.303	0.824.303	0.828.303	0.832.303	0.836.303	0.840.303	0.845.303
Md <sub>max</sub>	Nm	20	30	50	60	120	200
Angle of deflection β	°	35	35	35	35	35	35
Weight	kg	0.14	0.22	0.38	0.55	0.78	1.48
A	mm	20	24	28	32	36	40
*B <sup>17</sup>	mm	10	12	14	16	18	20
*C <sup>18,2</sup>	mm	11.4	13.8	16.3	18.3	20.8	24.8
*D <sup>19</sup>	mm	3	4	5	5	6	6
*E <sup>18</sup>	mm	-	-	-	-	-	-
M	mm	25	30	35	40	45	50
S	mm	74	88	103	118	133	148
T	mm	13	14	17	19	22	24

Ball and Socket Joints, double, Inner square

Order number	0.820.304	0.824.304	0.828.304	0.832.304	0.836.304	0.840.304	0.845.304
Md <sub>max</sub>	Nm	20	30	50	60	120	200
Angle of deflection β	°	35	35	35	35	35	35
Weight	kg	0.14	0.22	0.38	0.55	0.78	1.48
A	mm	20	24	28	32	36	40
*B <sup>17</sup>	mm	-	-	-	-	-	-
*C <sup>18,2</sup>	mm	-	-	-	-	-	-
*D <sup>19</sup>	mm	-	-	-	-	-	-
*E <sup>18</sup>	mm	10	12	14	16	18	20
M	mm	25	30	35	40	45	50
S	mm	74	88	103	118	133	148
T	mm	13	14	17	19	22	24

\* = Customized bores, key-ways and inner square dimensions possible  
Md<sub>max</sub> = Max. permissible torque  
For application criteria and calculations refer to technical annex



with key-way  
DIN 6885 sheet 1

Inner square

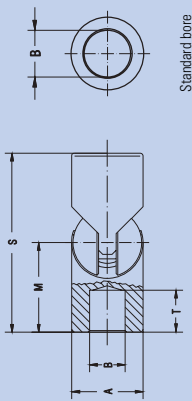
Ball and Socket Joints, double, Bore with key-way DIN 6885, Sheet 1

Order number	0.850.303	0.855.303	0.860.303	0.865.303	0.870.303	0.880.303	0.890.303	0.896.303	0.897.303
Md <sub>max</sub>	Nm	290	440	520	700	820	1060	1250	1370
Angle of deflection β	°	35	35	35	35	35	35	35	35
Weight	kg	2.08	2.62	3.65	4.78	5.88	8.52	11.7	21.8
A	mm	50	55	60	65	70	80	90	100
*B <sup>17</sup>	mm	25	30	35	40	45	50	60	70
*C <sup>18,2</sup>	mm	28.3	33.3	38.3	43.3	48.8	53.8	64.4	74.9
*D <sup>19</sup>	mm	8	8	10	12	14	14	18	20
*E <sup>18</sup>	mm	-	-	-	-	-	-	-	-
M	mm	62.5	67.5	82.5	95	105	115	130	145
S	mm	185	200	237	267	292	322	362	404
T	mm	30	35	42	46	52	58	70	85

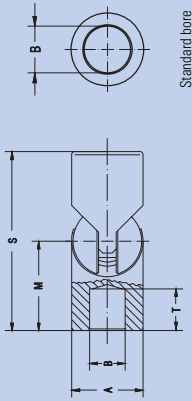
Ball and Socket Joints, double, Inner square

Order number	0.850.304	0.855.304	0.860.304	0.865.304	0.870.304	0.880.304	0.890.304	0.896.304	0.897.304
Md <sub>max</sub>	Nm	290	440	520	700	820	1060	1250	1370
Angle of deflection β	°	35	35	35	35	35	35	35	35
Weight	kg	2.08	2.62	3.65	4.78	5.88	8.52	11.7	21.8
A	mm	50	55	60	65	70	80	90	100
*B <sup>17</sup>	mm	-	-	-	-	-	-	-	-
*C <sup>18,2</sup>	mm	-	-	-	-	-	-	-	-
*D <sup>19</sup>	mm	-	-	-	-	-	-	-	-
*E <sup>18</sup>	mm	25	30	32	36	40	42	50	58
M	mm	62.5	67.5	82.5	95	105	115	130	145
S	mm	185	200	237	267	292	322	362	404
T	mm	30	35	42	46	52	58	70	85

\* = Customized bores, key-ways and inner square dimensions possible  
Md<sub>max</sub> = Max. permissible torque  
For application criteria and calculations refer to technical annex



Standard bore



Standard bore

Ball and Socket Joints, single, Standard bore

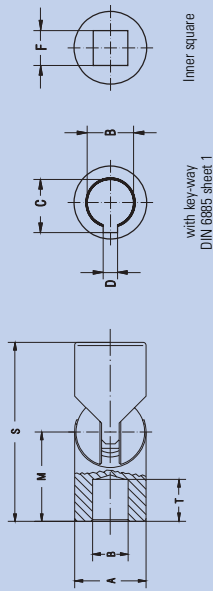
Order number	0.813.400	0.816.400	0.820.400	0.824.400	0.828.400	0.832.400	0.836.400	0.840.400
Md <sub>max</sub> Nm	6	8	20	30	50	60	120	160
Angle of deflection β °	35	35	35	35	35	35	35	35
Weight kg	0,03	0,05	0,09	0,15	0,24	0,36	0,53	0,72
A mm	13	16	20	24	28	32	36	40
*B <sup>17</sup> mm	6	8	10	12	14	16	18	20
*C <sup>4/2</sup> mm	-	-	-	-	-	-	-	-
*D <sup>28</sup> mm	-	-	-	-	-	-	-	-
*E <sup>18</sup> mm	-	-	-	-	-	-	-	-
M mm	17,5	20	25	30	35	40	45	50
S mm	35	40	50	60	70	80	90	100
T mm	10	10	13	14	17	19	22	24

\* = Customized bores. Key-ways an inner square dimensions possible  
 Md<sub>max</sub> = Max. permissible torque  
 For application criteria and calculations refer to technical annex

0.845.400	0.850.400	0.855.400	0.860.400	0.865.400	0.870.400	0.880.400	0.890.400	0.896.400	0.897.400
200	280	440	520	700	820	930	1060	1250	1370
35	35	35	35	35	35	35	35	35	35
1,02	1,40	1,75	2,52	3,32	4,15	6,02	8,04	10,6	15,3
45	50	55	60	65	70	80	90	100	110
22	25	30	35	40	45	50	60	70	75
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
55	62,5	67,5	82,5	95	105	115	130	145	160
110	125	135	165	190	210	230	260	290	320
26	30	35	42	46	52	58	70	80	85



single, Bore with key-way DIN 6885, Sheet 1; Inner square

with key-way  
DIN 6885 sheet 1

Inner square

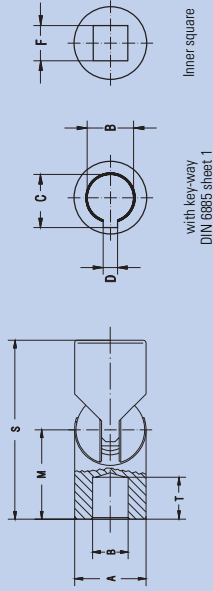
Ball and Socket Joints, single, Bore with Key-way DIN 6885, Sheet 1

Order number	0.820.403	0.824.403	0.828.403	0.832.403	0.836.403	0.840.403
Md <sub>max</sub>	Nm	20	30	50	60	120
Angle of deflection β	°	35	35	35	35	35
Weight	kg	0,09	0,15	0,24	0,36	0,53
A	mm	20	24	28	32	36
*B <sup>1/2</sup>	mm	10	12	14	16	18
*C <sup>1/2</sup>	mm	11,4	13,8	16,3	18,3	20,8
*D <sup>1/2</sup>	mm	3	4	5	5	6
*E <sup>1/2</sup>	mm	-	-	-	-	-
M	mm	25	30	35	40	45
S	mm	50	60	70	80	90
T	mm	13	14	17	19	22

Ball and Socket Joints, single, Inner square

Order number	0.820.404	0.824.404	0.828.404	0.832.404	0.836.404	0.840.404
Md <sub>max</sub>	Nm	20	30	50	60	120
Angle of deflection β	°	35	35	35	35	35
Weight	kg	0,09	0,15	0,24	0,36	0,53
A	mm	20	24	28	32	36
*B <sup>1/2</sup>	mm	-	-	-	-	-
*C <sup>1/2</sup>	mm	-	-	-	-	-
*D <sup>1/2</sup>	mm	-	-	-	-	-
*E <sup>1/2</sup>	mm	-	-	-	-	-
M	mm	10	12	14	16	18
S	mm	25	30	35	40	45
T	mm	13	14	17	19	22

\* = Customized bores, key-ways an inner square dimensions possible  
Md<sub>max</sub> = Max. permissible torque  
For application criteria and calculations refer to technical annex

with key-way  
DIN 6885 sheet 1

Inner square

0.845.403	0.850.403	0.855.403	0.860.403	0.865.403	0.870.403	0.880.403	0.890.403	0.896.403	0.897.403
200	280	440	520	700	820	930	1060	1250	1370
35	35	35	35	35	35	35	35	35	35
1,02	1,40	1,75	2,52	3,32	4,15	6,02	8,04	10,6	15,3
45	50	55	60	65	70	80	90	100	110
22	25	30	35	40	45	50	60	70	75
24,8	28,3	33,3	38,3	43,3	48,8	53,3	64,4	74,9	79,9
6	8	8	10	12	14	14	18	20	20
-	-	-	-	-	-	-	-	-	-
55	62,5	67,5	82,5	95	105	115	130	145	160
110	125	135	165	190	210	230	260	290	320
26	30	35	42	46	52	58	70	80	85

0.845.404	0.850.404	0.855.404	0.860.404	0.865.404	0.870.404	0.880.404	0.890.404	0.896.404	0.897.404
200	290	440	520	700	820	930	1060	1250	1370
35	35	35	35	35	35	35	35	35	35
1,02	1,40	1,75	2,52	3,32	4,15	6,02	8,04	10,6	15,3
45	50	55	60	65	70	80	90	100	110
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
22	25	30	32	36	40	42	50	54	58
55	62,5	67,5	82,5	95	105	115	130	145	160
110	125	135	165	190	210	230	260	290	320
26	30	35	42	46	52	58	70	80	85