

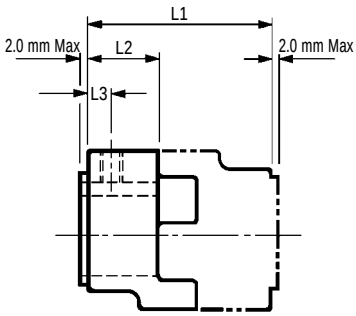
COMPOSITE JAW COUPLERS (SERIES FS)

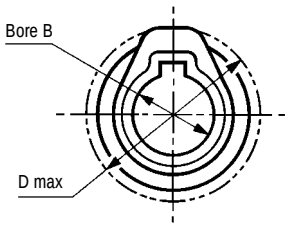


Sizes 032 - 037



Sizes 052 - 085





5

features

- Low mass
- Freedom from corrosion
- Good damping properties
- Low cost
- Reduced noise
- Design flexibility

The Huco FS Series is a 3-part, general purpose coupler produced in 6 sizes. An advanced, high strength plastic composite is used for the hubs to produce a durable, light weight coupler suited to a wide range of industrial applications.

Simple to install, the FS coupler accommodates incidental shaft offsets, absorbs shock loads and damps small amplitude vibrations. It is impervious to moisture grease and oil and can operate in the temperature range -50°C to +120°C.

A range of popular bore diameters, keywayed to ISO 773/774 (BS 4235), are standard in each size of coupler. Where quantities can justify a modest investment in tooling, bores can be moulded to customer's specification. The production process readily allows economic manufacture of non-circular bores. To suit varying operating conditions, the central drive element can be specified in any of 3 standard materials. To gain the maximum flexibility afforded by the 3-part construction, hubs and elements are specified individually.

Standard hubs are supplied with matching steel key.

Hubs

Order Code	Size	Standard Bores	B max	D max	L1	L2	L3	Set Screw
FSH.032.30	032	9	12	32	42	15.0	7	M4
FSH.032.32	032	10	12	32	42	15.0	7	M4
FSH.032.33	032	11	12	32	42	15.1	7	M4
FSH.032.35	032	12	12	32	42	15.2	7	M4
FSH.037.38	037	14	19	37	53	19.5	9	M4
FSH.037.40	037	15	19	37	53	19.5	9	M4
FSH.037.42	037	16	19	37	53	19.5	9	M4
FSH.037.46	037	19	19	37	53	19.5	9	M4
FSH.052.38	052	14	24	52	54	21.0	9	M5
FSH.052.40	052	15	24	52	54	21.0	9	M5
FSH.052.42	052	16	24	52	54	21.0	9	M5
FSH.052.46	052	19	24	52	54	21.0	9	M5
FSH.052.48	052	20	24	52	54	21.0	9	M5
FSH.052.51	052	24	24	52	54	21.0	9	M5
FSH.056.42	056	16	28	56	64	25.5	11	M5
FSH.056.46	056	19	28	56	64	25.5	11	M5
FSH.056.48	056	20	28	56	64	25.5	11	M5
FSH.056.51	056	24	28	56	64	25.5	11	M5
FSH.056.52	056	25	28	56	64	25.5	11	M5
FSH.056.54	056	28	28	56	64	25.5	11	M5
FSH.066.46	066	19	32	66	89	35.0	16	M6
FSH.066.48	066	20	32	66	89	35.0	16	M6
FSH.066.51	066	24	32	66	89	35.0	16	M6
FSH.066.52	066	25	32	66	89	35.0	16	M6
FSH.066.54	066	28	32	66	89	35.0	16	M6
FSH.066.56	066	30	32	66	89	35.0	16	M6
FSH.066.58	066	32	32	66	89	35.0	16	M6

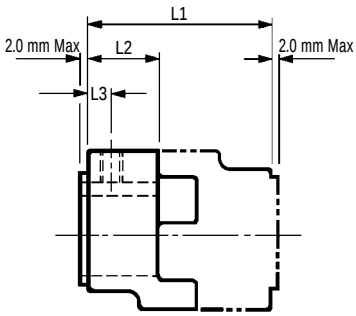
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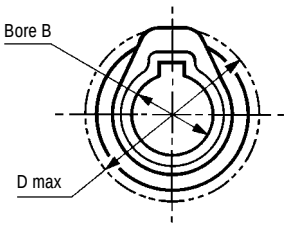


Sizes 032 - 037



Sizes 052 - 085





Hubs (continued)

Order Code	Size	Standard Bores	B max	D max	L1	L2	L3	Set Screw
FSH.085.52	085	25	42	85	108	43.0	20	M6
FSH.085.54	085	28	42	85	108	43.0	20	M6
FSH.085.56	085	30	42	85	108	43.0	20	M6
FSH.085.58	085	32	42	85	108	43.0	20	M6
FSH.085.60	085	35	42	85	108	43.0	20	M6
FSH.085.61	085	38	42	85	108	43.0	20	M6
FSH.085.63	085	40	42	85	108	43.0	20	M6
FSH.085.65	085	42	42	85	108	43.0	20	M6

For complete coupler, select matching hubs + element from the table below.

Elements

Material	Colour	Order Code	Running Torque Nm	Max. speed (rev/min × 1000)
Nitrile	Black	FSE.032.N	3.51	18
		FSE.037.N	5.77	14
		FSE.052.N	11.94	11
		FSE.056.N	25.80	9
		FSE.066.N	55.44	7
		FSE.085.N	105.31	5
Urethane	Blue	FSE.032.U	5.27	18
		FSE.037.U	8.66	14
		FSE.052.U	17.91	11
		FSE.056.U	38.70	9
		FSE.066.U	83.16	7
		FSE.085.U	157.97	5
Hytrel	White	FSE.032.H	7.02	18
		FSE.037.H	11.54	14
		FSE.052.H	23.88	11
		FSE.056.H	51.60	9
		FSE.066.H	110.88	7
		FSE.085.H	173.76	5

Element Characteristics

Material	Colour	Operating Temp Range °C	Maximum Misalignment Angular deg.	Maximum Misalignment Parallell mm	Shore Hardness	Characteristics
Nitrile	Black	–40 to 100	1	0.38	80A	Soft, good damping qualities
Urethane	Blue	–35 to 70	1	0.38	90A	General purpose, abrasion resistant
Hytrel	White	–50 to 70	1/2	0.38	55D	Hard, high load capacity

selection procedure

1. Determine service factor (SF) from table 1 and temperature factor (TF) from table 2.
2. Multiply the power of the prime mover - PM(kW) - by SF and TF to determine the Design Power - P(kW).

$$\text{Design Power } P = PM \times SF \times TF$$

3. Select a suitable element material, and enter the appropriate section of table 3 with the rev/min, then read across until a power equal to or greater than the Design Power is found. The coupler size is given at the head of the column.
4. For intermediate speeds, the coupler size is determined by consideration of the maximum torque capacity of the coupler which varies according to the type of element selected.

   Given the Design Power P(kW) and the speed N(rev/min) the torque T(Nm) is given by:

$$T = \frac{9550 \times P}{N}$$

Note: The torque figures given are the maximum for normal running. FS couplers have capacity to meet normal starting torque requirements in addition.

Table 1 : Service Factor

Driven Load	SF
Uniform Load	1.0
Moderate Shock	1.5
Heavy Shock	2.0

Table 2 : Temperature Factor

Temperature °C	TF
0 – 40	1.0
40 – 80	1.25
80 – 120	1.5

Table 3 : Design Power Ratings – kW

Element Material	Size	Speed rev/min 100	Speed rev/min 720	Speed rev/min 960	Speed rev/min 1440	Speed rev/min 2880	Speed rev/min 3600
Nitrile	032	0.04	0.26	0.35	0.53	1.05	1.32
	037	0.06	0.43	0.58	0.87	1.73	2.17
	052	0.13	0.90	1.20	1.80	3.61	4.51
	056	0.27	1.95	2.59	3.89	7.78	9.73
	066	0.58	4.18	5.58	8.36	16.73	20.91
	085	1.10	7.94	10.59	15.88	31.77	39.71
Urethane	032	0.06	0.39	0.53	0.80	1.58	1.98
	037	0.09	0.65	0.87	1.31	2.60	3.26
	052	0.20	1.35	1.80	2.70	5.42	6.77
	056	0.40	2.93	3.88	5.84	11.67	14.60
	066	0.87	6.27	8.37	12.54	25.10	31.37
	085	1.65	11.91	15.88	23.83	47.66	59.57
Hytrel	032	0.08	0.52	0.70	1.06	2.10	2.64
	037	0.12	0.86	1.16	1.74	3.46	4.34
	052	0.26	1.80	2.40	3.60	7.22	9.02
	056	0.54	3.90	5.18	7.78	15.56	19.46
	066	1.16	8.36	11.16	16.72	33.46	41.82
	085	1.82	13.10	17.47	26.20	52.40	65.52

P-FLEX COUPLERS

- Exceptional flexibility
- Compact design
- Outstanding resistance to acids, alkilis, solvents, oils, greases, ozone
- Operating temperature range –40°C to +100°C
- Tough double-loop elastomeric element made from HYTREL®
- Zinc plated steel hubs

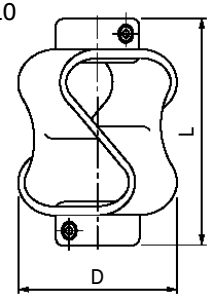


Order Code	Size	Bore Dia. d1	Max Bore d1	Max Dia. D	Length L	Hub Height h	Fastener	Weight (g)	Max Torque (1) Nm	Max Torque (2) Nm	Max Angular Misalignment	Max Radial Misalignment	Max Axial Displacement
047 101 414	10	3	8	26	28	7.9	M3	25	0.5	0.8	10	2.6	4.5
047 102 222	10	6	8	26	28	7.9	M3	25	0.5	0.8	10	2.6	4.5
047 102 828	10	8	8	26	28	7.9	M3	25	0.5	0.8	10	2.6	4.5
047 202 828	20	8	12	48	48	12.7	M4	92	1.8	3	15	3.2	7.5
047 203 232	20	10	12	48	48	12.7	M4	92	1.8	3	15	3.2	7.5
047 203 535	20	12	12	48	48	12.7	M4	92	1.8	3	15	3.2	7.5
047 303 535	30	12	16	54	58	15.9	M5	124	5	8	15	3.2	8.5
047 303 838	30	14	16	54	58	15.9	M5	124	5	8	15	3.2	8.5
047 403 838	40	14	16	54	61	15.9	M6	136	10	18	15	3.2	11
047 404 242	40	16	16	54	61	15.9	M6	136	10	18	15	3.2	11

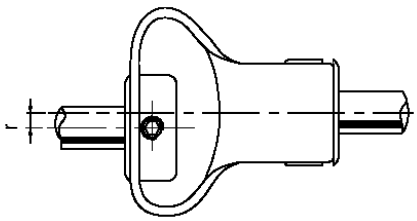
(1) Maximum torque at maximum displacement
(2) Maximum torque at displacement 1° angular, 2mm axial, 0.5mm radial

Other bore sizes available to order

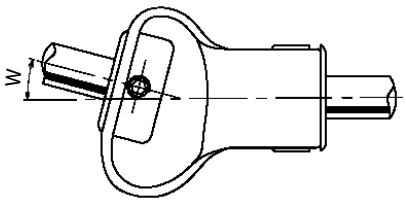
Size 10



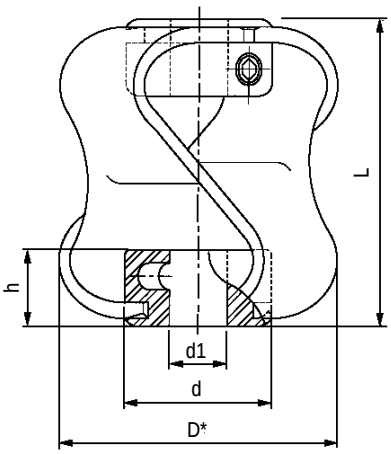
Radial Misalignment



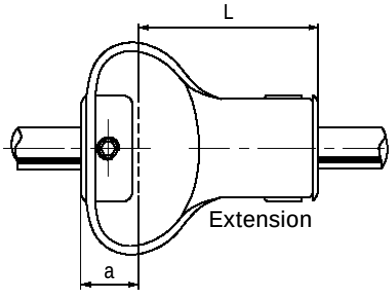
Angular Misalignment

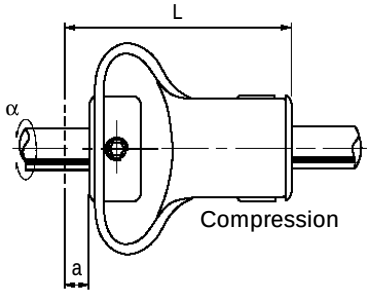


Sizes 20, 30, 40



Axial Displacement





HYTREL® is a registered trade mark of DuPont

GEAR COUPLERS (SERIES NSG)

Huco nylon sleeve gear (NSG) couplers are compact and efficient units capable of transmitting a high level of torque relative to their size and weight. The couplers operate silently, are electrically isolating and maintenance free. They are marginally shock absorbent and easily installed in confined spaces. Also directly interchangeable with some other makes.

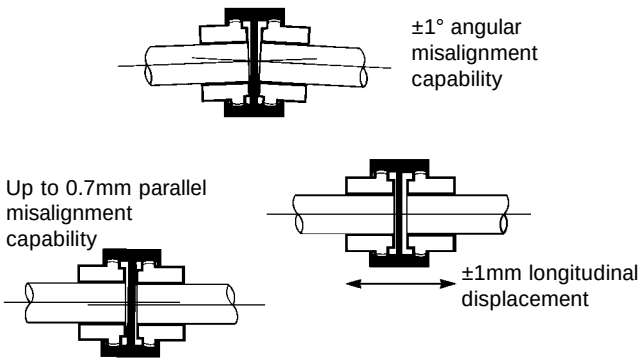
features

- High torque capability
- Angular, parallel and longitudinal shaft misalignment
- Maintenance free
- Easy assembly
- Compact, lightweight design with low inertia

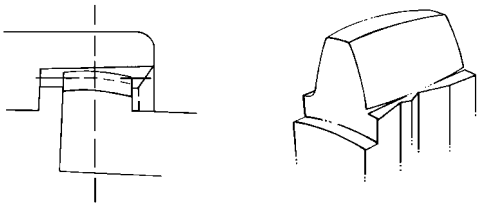
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NSG couplers consist of two identical steel hubs with double crowned teeth which engage in a moulded polyamide sleeve to provide a double cardan coupling. The tooth form in combination with the moulded nylon sleeve allows angular and parallel misalignment of the two shafts, in addition to which the hubs are free to move longitudinally to accommodate end float.



Friction between the mating teeth of the sleeve and hub is minimised by the smooth surface finish. The large tooth contact area also provides low contact pressure, reducing stress under misalignment conditions, and the load is distributed near the centre of the tooth for maximum strength.



The.couplers are suitable for full load operation at temperatures ranging from –25°C to 100°C using a standard nylon sleeve, and special sleeves are available for operating in temperatures up to 125°C.

performance

Coupler Size	Torque Nm		kW/1000 rpm		Max rpm 000	Max Misalignment Compensation			Moment of inertia kgcm*	Weight kg**
	Nominal	Max	Nominal	Max		Parallel	Angular per hub	Axial		
14/40	10	20	1.0	2.1	14	0.3			0.24	0.18
19/48	15	30	1.6	3.1	11.8	0.3			0.47	0.27
24/52	21	42	2.2	4.4	10.5	0.4			0.93	0.36
28/66	45	90	4.7	9.4	8.5	0.4			3.09	0.82
32/76	60	120	6.3	12.6	7.6	0.4	± 1°	± 1	5.48	1.45
38/83	81	162	8.5	17.0	6.7	0.4			8.68	1.82
42/92	100	200	10.5	20.9	6.0	0.4			14.28	2.00
48/100	142	285	14.9	29.8	5.6	0.4			18.34	2.45
65/140	380	760	39.8	79.6	4.0	0.6			109.57	8.50
80/175	700	1400	73.3	146.6	3.1	0.7			400.00	18.60

*Values apply to maximum bore without keyway.
** Values apply to hubs with pilot bores.

selection

For even running applications eg. electric motor drives, select a coupler with a nominal kW/rpm rating which equates to that of the prime mover.

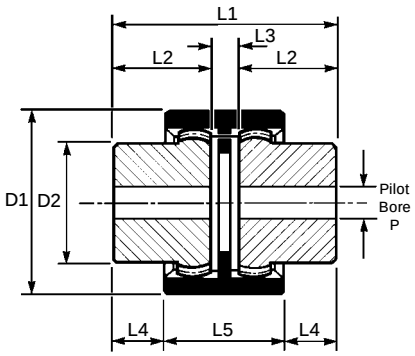
For other drives, eg. gearbox outputs I.C. engines, positive displacement pumps or compressors, consider start-up loads, impact loads and normal running loads and resolve each to a torque value.

In general:

1. Nominal torque ratings allow for 82°C ambient, full misalignment and/or maximum rpm.
2. Starting torque and braking loads should not exceed listed maximum torque.
3. Intermittent, transient peak loads should not exceed three times nominal torque.
4. Applications with uniform loading, well aligned shafts and low speeds will allow for operation at maximum torque levels.

Tel: +44 (0)1992 509888

standard pilot bored couplers



custom bored couplers – supplied to order

to order

Dimensions are as for standard pilot bored couplers.

1. Use order codes as for standard pilot bored couplers.
   Add one bore diameter if specifying hubs only.
   Add both bore diameters if specifying complete couplers even when both bores are the same.
2. Specify your requirement for keyways, fasteners and fastener position.
3. If no keyways or fasteners are required, please state.

5

Hub Only Order Code	Sleeve Only Order Code	Complete Coupler Order Code	Size	D1	D2	L1*	L2	L3*	L4	L5	Nom. P	No. of Teeth	Max bore dia H7 with Keyway	Max bore dia H7 without Keyway
420.14040.00	423.14040	425.14040.0000	14/40	40	25	48	20	8	5.5	37	4.57	20	11	14
420.19048.00	423.19048	425.19048.0000	19/48	48	32	53	22	9	8.0	37	9.35	24	16	19
420.24052.00	423.24052	425.24052.0000	24/52	52	36	56	22	12	7.5	41	9.35	28	19	24
420.28066.00	423.28066	425.28066.0000	28/66	66	44	84	36	12	19.0	46	6.17	34	24	28
420.32076.00	423.32076	425.32076.0000	32/76	76	50	84	36	12	18.0	48	11.94	40	28	32
420.38083.00	423.38083	425.38083.0000	38/83	83	58	84	36	12	18.0	48	10.92	44	32	38
420.42092.00	423.42092	425.42092.0000	42/92	92	65	88	38	12	19.0	50	10.92	50	38	42
420.48100.00	423.48100	425.48100.0000	48/100	100	68	104	46	12	27.0	50	10.92	50	42	48
420.65140.00	423.65140	425.65140.0000	65/140	140	96	145	70	5	35.6	72	12.70	42	48	65
420.80175.00	423.80175	425.80175.0000	80/175	175	124	186	90	6	46.5	93	25.00	46	–	80

*Dimensions with coupler correctly installed.

Keyways to BS4235 Part 1.

2-PIECE JAW COUPLERS

The HUCO 2-piece jaw coupler is moulded in polyamide. The bores are sleeved with an insert-moulded aluminium extrusion, keyed to resist turning. There is an all-plastics option on the smaller sizes.

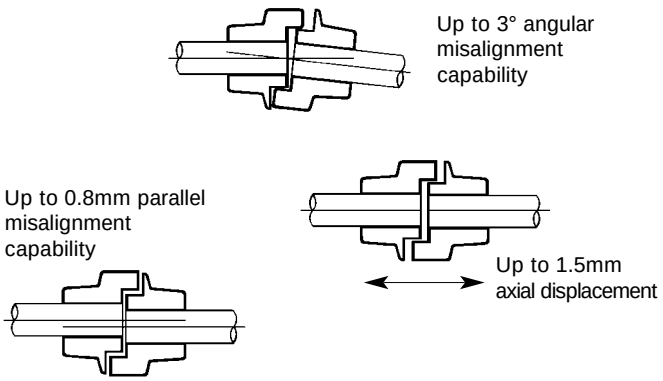
features

- Easily installed
- Angular, parallel & longitudinal compliance
- Corrosion resistant
- Ideal for blind assembly
- Low inertia
- Electrically isolating
- Non-magnetic
- Economic



The two-piece plastics construction offers simplicity of installation and ready connection of two sub-assemblies. The couplers will run submerged in most liquids and are reasonable tolerant of polluted environments.

A 2-piece jaw coupler functions without an intermediary plastics or elastomer insert. Clearances between adjacent jaws permit relative lateral movement sufficient to compensate for nominal misalignment between shafts. As a result the two halves plug together without hindrance, generate low bearing loads in operation and readily accommodate shaft end float.



Intended primarily for uni-directional loads, these couplers are suitable for both horizontal and vertical drive applications in ambient temperatures ranging –25°C to +80°C. Under these conditions and when operating within their rated values, the couplers will have a trouble-free life which can be improved with a once-only initial application of oil or grease. Ambient temperatures up to +100ºC can be sustained for short periods.

performance

Size	Torque Nm Nom	Torque Nm Max	kW/100 rpm Nom	kW/100 rpm Max	Max rpm 000	Weight kg*
1/035	0.29	0.58	0.003	0.006	10	0.04
2/050	2.9	5.8	0.03	0.06	9	0.13
3/065	15	30	0.15	0.3	7	0.33
4/080	39	78	0.4	0.8	5	0.58
5/110	118	236	1.2	2.4	4	1.5
6/140	245	490	3	6	3	2.0

*Values apply to couplers with pilot bores.

	misalignment compensation								
	Up to 500 rpm		Up to 1500 rpm		Up to 3000 rpm		Over 3000 rpm		
Size	Angular	Parallel	Angular	Parallel	Angular	Parallel	Angular	Parallel	Axial
1/035	3.0°	0.8	2.5°	0.6	1.5°	0.4	1.0°	0.2	0.5
2/050	2.0°	0.8	1.5°	0.6	1.0°	0.4	0.5°	0.2	0.5
3/065	1.5°	0.8	1.0°	0.6	1.0°	0.4	0.5°	0.2	1.0
4/080	1.0°	0.8	1.0°	0.6	1.0°	0.4	0.5°	0.2	1.0
5/110	1.0°	0.8	1.0°	0.6	0.5°	0.4	0.5°	0.2	1.5
6/140	1.0°	0.8	0.5°	0.6	0.5°	0.4	–	–	1.5

selection

For even running applications e.g. electric motor drives, select a coupler with a nominal kW/rpm rating which equates to that of the prime mover.

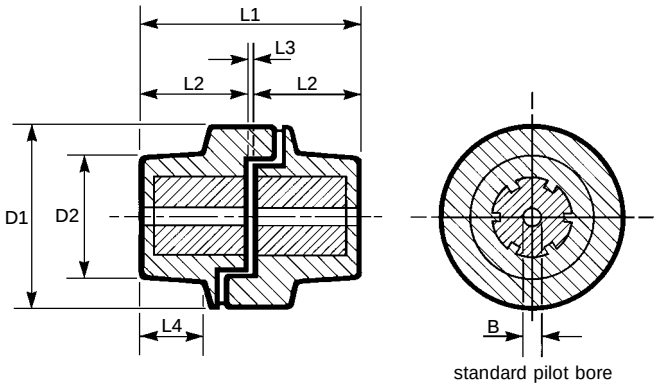
For other drives, e.g. gearbox outputs, I.C. engines, positive displacement pumps or compressors, consider start-up loads, impact loads and normal running loads and resolve each to a torque value.

In general:

1. Select a Nominal torque value that exceeds the normal running torque.
2. Starting torque and braking loads should not exceed listed maximum torque.
3. Intermittent, transient peak loads should not exceed three times nominal torque.
4. Applications with uniform loading, well aligned shafts and low speeds will allow for operation at maximum torque levels..

Tel: +44 (0)1992 509888

standard pilot bored couplers



standard pilot bore

custom bored couplers – supplied to order

to order

Dimensions are as for standard pilot bored couplers.

1. Use order codes as for couplers with pilot bores and *state both* bore diameters even when both bores are the same. Note minimum and maximum permissible diameters.
2. Keyways to BS4235 Part 1 with tapped holes positioned over keyway. Specify if required.

Order Code	Size	+0 –0.20 Bore B	D1	D2	L1†	L2	L3†	L4	Max bore ØB with fastening screw H7 with Keyway	without Keyway
343.035.2020*	1/035	5	35	20	42	20	2	12	–	10*
343.050.2222*	2/050	6	50	35	62	30	2	19	–	18*
344.050.2222	2/050	6	50	35	62	30	2	19	13	18
344.065.2828	3/065	8	65	45	83	40	3	25	20	24
344.080.3535	4/080	12	80	55	103	50	3	34	23	30
344.110.4040	5/110	15	110	70	164	80	4	62	30	38
344.140.4848	6/140	20	140	80	164	80	4	58	32	40

* without aluminium insert
†Dimensions with coupler correctly installed.

FLEXIBLE JAW COUPLERS

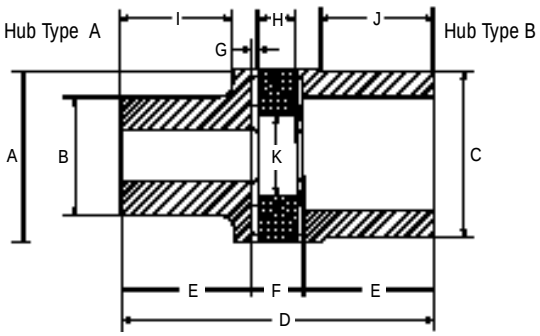
- Zero/Low backlash
- Rated up to 3530 Nm Torque
- Choice of 3 polyurethane elements
- Aluminium or cast iron hubs

For complete coupler, order 2 hubs + 1 element.

Hubs are supplied un-bored or pilot bored as indicated but can be bored (and keywayed) to customers' specifications. Please call Huco sales for more details.

Clamp style hubs also available to order in aluminium.

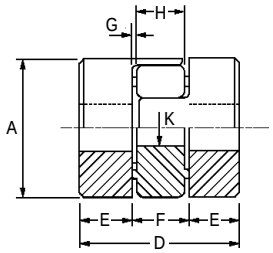




Hubs A and B are interchangeable

Miniature Hubs, Material : Aluminium

Order Code	Size	Hub Type	Pilot Bore	Bore	A	B	C	D	E	F	G	H
GMH.14	14	Miniature	–	7	14	–	–	22	–	–	–	6.0
GMH.20	20	Miniature	–	9	20	–	–	30	–	–	–	8.0
GMH.30	30	Miniature	–	14	30	–	–	34	–	–	–	10.0



Miniature Type

Hubs, Material : Aluminium

Order Code	Size	Hub Type	Pilot Bore	Max Bore	A	B	C	D	E	F	G	H	I	J	K
GMH.40.00	40	A	Unbored	16	40	32	40	66	25	16	2.0	12.0	20	–	18
GMH.55.00	55	B	Unbored	32	55	–	47	78	30	18	2.0	14.0	–	26	27
GMH.65.00	65	B	Unbored	38	65	–	63	90	35	20	2.5	15.0	–	29	30
GMH.80.00	80	B	Unbored	45	80	–	76	114	45	24	3.0	18.0	–	39	38

Hubs, Material : Cast Iron

Order Code	Size	Hub Type	Pilot Bore	Max Bore	A	B	C	D	E	F	G	H	I	J	K
GMH.81.00	80	B	Unbored	45	80	–	77	114	45	24	3	18	–	37	38
GMH.95.00	95	A	Unbored	42	95	75	–	126	50	26	3	20	40	–	46
GMH.105.00	105	A	Unbored	48	105	85	–	140	56	28	3.5	21	45	–	51
GMH.120.00	120	A	Unbored	55	120	98	–	160	65	30	4	22	52	–	60
GMH.135.00	135	A	Unbored	65	135	115	–	185	75	35	4.5	26	61	–	68
GMH.160.00	160	A	Unbored	75	160	135	–	210	85	40	5	30	69	–	80
GMH.200.00	200	A	30	90	200	160	–	245	100	45	5.5	33.9	81	–	100

Elements

Size	Blue - Soft Order Code	White - Standard Order Code	Red - Hard Order Code
14	GME.14.B	GME.14.W	GME.14.R
20	GME.20.B	GME.20.W	GME.20.R
30	GME.30.B	GME.30.W	GME.30.R
40	GME.40.B	GME.40.W	GME.40.R
55	GME.55.B	GME.55.W	GME.55.R
65	GME.65.B	GME.65.W	GME.65.R
80	GME.80.B	GME.80.W	GME.80.R
95	GME.95.B	GME.95.W	GME.95.R
105	GME.105.B	GME.105.W	GME.105.R
120	GME.120.B	GME.120.W	GME.120.R
135	GME.135.B	GME.135.W	GME.135.R
160	GME.160.B	GME.160.W	GME.160.R
200	GME.200.B	GME.200.W	GME.200.R

Misalignment

Size	Max Angular Misalignment x° (Deg. min)	Max Parallel Misalignment	Max Axial Displacement
14*	2	0.1	–
20*	2	0.15	–
30*	2	0.2	–
40*	2	0.4	–
40	1.30	0.4	1.2
55	1.30	0.7	1.5
65	1.30	1.0	1.5
80	1.30	1.0	1.8
95	1.30	1.0	2.0
105	1.30	1.3	2.1
120	1.30	1.3	2.3
135	1.30	1.3	2.6
160	1.30	1.7	3.0
200	1.30	1.7	3.5

*Miniature version

Tel: +44 (0)1992 509888

FLEXIBLE JAW COUPLERS

GM Flexible Jaw Couplers utilise the flexibility and resilience of a polyurethane element between aluminium or cast iron hubs. This combination allows high torque to be transmitted with little or no backlash, even where there is significant angular and/or parallel shaft misalignment.

A unique concave pocket in each hub eliminates edge pressure, giving the element exceptional wear resistance and long service life.

Polyurethane elements are available with three hardness levels; hard, standard and soft which exhibit different operating characteristics as shown in Table 1. Other features of polyurethane elements are:

- Resistance to oils, grease and many solvents.
- Good atmospheric and chemical resistance.
- Excellent shock and vibration damping.
- Operating temperature –40°C to 100°C (Short duration max temp. 120°C)

selection procedure

1. Determine service factor (SF) from table 2 and temperature factor (TF) from table 3.
2. Multiply the power of the prime mover - PM(kW) - by SF and TF to determine the Design Power - P(kW).

   Design Power $P = PM \times SF \times TF$
3. Select a suitable element material, and enter the appropriate section of table 4 with the rev/min, then read across until a power equal to or greater than the Design Power is found. The coupler size is given at the head of the column.
4. For intermediate speeds, the coupler size is determined by consideration of the maximum torque capacity of the coupler which varies according to the type of element selected. Refer to table 1.

   Given the Design Power P(kW) and the speed N(rev/min) the torque T(Nm) is given by:

$$T = \frac{9550 \times P}{N}$$

Table 1 : Torque Ratings

Size	Running Torque Nm			Max Speed Rev/min
	Blue element soft 80 Shore A	White element standard 92 Shore A	Red element hard 98 Shore A	
14	0.7	1.5	2	40000
20	2	3	5	28000
30	4	7	12	19000
40	5	10	17	14000
55	17	35	60	10600
65	46	95	160	8500
80	93	190	320	7100
95	130	260	440	6000
105	150	305	515	5600
120	180	375	615	4750
135	205	420	630	4250
160	475	955	1430	3550
200	–	2400	3530	3550

Table 2 : Service Factors

Driven Load	SF
uniform load	1.0
intermittent load	2.0
reversing load	4.0

Table 3 : Temperature Factor

Temperature °C	TF
0 – 40	1.0
40 – 80	1.25
80 – 120	4.0

Table 4 : Design Power Ratings kW

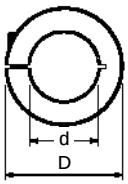
	Speed rev/min	40	55	65	80	95	105	120	135	160	200
Blue	100	0.05	0.18	0.48	0.97	1.36	1.57	1.88	2.14	4.97	–
	720	0.37	1.28	3.46	7.01	9.80	11.30	13.56	15.44	35.78	–
	960	0.50	1.70	4.62	9.34	13.06	15.07	18.08	20.59	47.71	–
	1440	0.75	2.55	6.93	14.01	19.59	22.61	27.12	30.88	71.57	–
	2880	1.50	5.11	13.86	28.02	39.19	45.21	54.24	61.76	143.13	–
	3600	1.87	6.39	17.32	35.03	48.99	56.52	67.80	77.20	178.92	–
White	100	0.10	0.36	0.98	1.95	2.72	3.19	3.90	4.37	10.00	25.06
	720	0.74	2.60	7.02	14.04	19.58	22.98	28.09	31.49	72.01	180.45
	960	0.99	3.46	9.36	18.73	26.10	30.64	37.45	41.99	96.01	240.60
	1440	1.48	5.19	14.04	28.09	39.15	45.96	56.18	62.99	144.02	360.90
	2880	2.96	10.38	28.09	56.18	78.31	91.93	112.36	125.98	288.04	721.80
	3600	3.70	12.98	35.11	70.22	97.89	114.91	140.45	157.47	360.05	902.25
Red	100	0.17	0.61	1.64	3.33	4.61	5.39	6.41	6.57	15.01	36.94
	720	1.26	4.43	11.83	24.00	33.20	38.81	46.18	47.28	108.10	266.00
	960	1.68	5.90	15.78	32.00	44.26	51.75	61.57	63.04	144.13	354.66
	1440	2.52	8.85	23.66	48.01	66.39	77.63	92.35	94.57	216.20	531.99
	2880	5.04	17.71	47.33	96.01	132.78	155.25	184.71	189.13	432.40	1063.98
	3600	6.30	22.13	59.16	120.02	165.98	194.07	230.88	236.42	540.50	1329.98

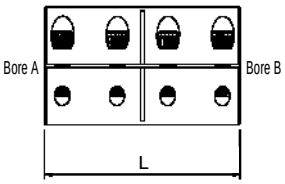
RIGID COUPLERS

- Do not score the shaft
- Precision honed bore
- Easy installation & adjustment

One-piece couplers have superior holding power and maintain alignment. Supplied with four clamping screws.







5

Order Code	Type	Material	Bores (d) A	Bores (d) B	D	L	Forged Clamp Screw
046 501 006	One-Piece	Steel	6	6	17	30	M3 × 8
046 501 008	One-Piece	Steel	8	8	19	30	M3 × 8
046 501 010	One-Piece	Steel	10	10	25	35	M4 × 12
046 501 012	One-Piece	Steel	12	12	28	45	M4 × 12
046 501 014	One-Piece	Steel	14	14	33	50	M5 × 16
046 501 015	One-Piece	Steel	15	15	33	50	M5 × 16
046 501 016	One-Piece	Steel	16	16	33	50	M5 × 16
046 501 020	One-Piece	Steel	20	20	40	65	M6 × 16
046 501 025	One-Piece	Steel	25	25	45	65	M6 × 16
046 501 030	One-Piece	Steel	30	30	50	75	M6 × 16
046 501 035	One-Piece	Steel	35	35	55	80	M6 × 16
046 501 040	One-Piece	Steel	40	40	60	90	M6 × 16
046 501 050	One-Piece	Steel	50	50	80	120	M8 × 25
046 502 006	One-Piece	Stainless Steel	6	6	17	30	M3 × 8
046 502 008	One-Piece	Stainless Steel	8	8	19	30	M3 × 8
046 502 010	One-Piece	Stainless Steel	10	10	25	35	M4 × 12
046 502 012	One-Piece	Stainless Steel	12	12	28	45	M4 × 12
046 502 014	One-Piece	Stainless Steel	14	14	33	50	M5 × 16
046 502 015	One-Piece	Stainless Steel	15	15	33	50	M5 × 16
046 502 016	One-Piece	Stainless Steel	16	16	33	50	M5 × 16
046 502 020	One-Piece	Stainless Steel	20	20	40	65	M6 × 16
046 502 025	One-Piece	Stainless Steel	25	25	45	65	M6 × 16
046 502 030	One-Piece	Stainless Steel	30	30	50	75	M6 × 16
046 502 035	One-Piece	Stainless Steel	35	35	55	80	M6 × 16
046 502 040	One-Piece	Stainless Steel	40	40	60	90	M6 × 16
046 502 050	One-Piece	Stainless Steel	50	50	80	120	M8 × 25

Bore tolerance +0.051mm / –0mm

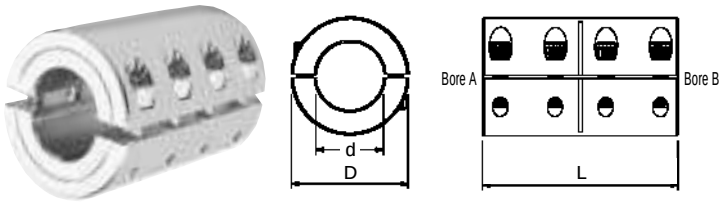
Other sizes available to special order

Tel: +44 (0)1992 509888

RIGID COUPLERS

- Do not score the shaft
- Precision honed bore
- Easy installation & adjustment

Split, two-piece couplers can be installed and removed without machine disassembly. They provide reliable holding power and maintain alignment. Supplied with eight clamping screws.



Order Code	Type	Material	Bores (d) A	Bores (d) B	D	L	Forged Clamp Screw
046 601 006	Two-Piece	Steel	6	6	17	30	M3 × 8
046 601 008	Two-Piece	Steel	8	8	19	30	M3 × 8
046 601 010	Two-Piece	Steel	10	10	25	35	M4 × 12
046 601 012	Two-Piece	Steel	12	12	28	45	M4 × 12
046 601 014	Two-Piece	Steel	14	14	33	50	M5 × 16
046 601 015	Two-Piece	Steel	15	15	33	50	M5 × 16
046 601 016	Two-Piece	Steel	16	16	33	50	M5 × 16
046 601 020	Two-Piece	Steel	20	20	40	65	M6 × 16
046 601 025	Two-Piece	Steel	25	25	45	65	M6 × 16
046 601 030	Two-Piece	Steel	30	30	50	75	M6 × 16
046 601 035	Two-Piece	Steel	35	35	55	80	M6 × 16
046 601 040	Two-Piece	Steel	40	40	60	90	M6 × 16
046 601 050	Two-Piece	Steel	50	50	18	120	M8 × 25
046 602 006	Two-Piece	Stainless Steel	6	6	17	30	M3 × 8
046 602 008	Two-Piece	Stainless Steel	8	8	19	30	M3 × 8
046 602 010	Two-Piece	Stainless Steel	10	10	25	35	M4 × 12
046 602 012	Two-Piece	Stainless Steel	12	12	28	45	M4 × 12
046 602 014	Two-Piece	Stainless Steel	14	14	33	50	M5 × 16
046 602 015	Two-Piece	Stainless Steel	15	15	33	50	M5 × 16
046 602 016	Two-Piece	Stainless Steel	16	16	33	50	M5 × 16
046 602 020	Two-Piece	Stainless Steel	20	20	40	65	M6 × 16
046 602 025	Two-Piece	Stainless Steel	25	25	45	65	M6 × 16
046 602 030	Two-Piece	Stainless Steel	30	30	50	75	M6 × 16
046 602 035	Two-Piece	Stainless Steel	35	35	55	80	M6 × 16
046 602 040	Two-Piece	Stainless Steel	40	40	60	90	M6 × 16
046 602 050	Two-Piece	Stainless Steel	50	50	80	120	M8 × 25

Bore tolerance +0.051mm / –0mm

Other sizes available to special order

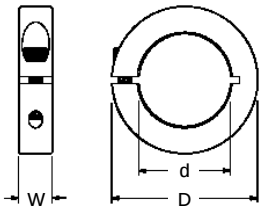
COLLARS

- Do not score the shaft
- Easy installation & adjustment

Clamp type collars hug the shaft with an all around grip.
Effective on both hardened and plain shafts.



One-piece collar



5

Steel

Order Code	Type	Bore d	Diameter D	Width W	*Forged Clamp Screw	Recommended Max Screw Torque (Nm)
046 101 003	One-Piece	3	16	9	M3 × 8	2.1
046 101 005	One-Piece	5	16	9	M3 × 8	2.1
046 101 006	One-Piece	6	16	9	M3 × 8	2.1
046 101 008	One-Piece	8	18	9	M3 × 8	2.1
046 101 010	One-Piece	10	24	9	M3 × 10	2.1
046 101 012	One-Piece	12	28	11	M4 × 12	4.6
046 101 014	One-Piece	14	30	11	M4 × 14	4.6
046 101 015	One-Piece	15	34	13	M5 × 16	9.5
046 101 016	One-Piece	16	34	13	M5 × 16	9.5
046 101 018	One-Piece	18	36	13	M5 × 16	9.5
046 101 020	One-Piece	20	40	15	M6 × 16	16
046 101 025	One-Piece	25	45	15	M6 × 16	16
046 101 030	One-Piece	30	54	15	M6 × 18	16
046 101 035	One-Piece	35	57	15	M6 × 18	16
046 101 040	One-Piece	40	60	15	M6 × 18	16
046 101 045	One-Piece	45	73	19	M8 × 25	39
046 101 050	One-Piece	50	78	19	M8 × 25	39

Stainless Steel

Order Code	Type	Bore d	Diameter D	Width W	*Forged Clamp Screw	Recommended Max Screw Torque (Nm)
046 102 003	One-Piece	3	16	9	M3 × 8	2.1
046 102 005	One-Piece	5	16	9	M3 × 8	2.1
046 102 006	One-Piece	6	16	9	M3 × 8	2.1
046 102 008	One-Piece	8	18	9	M3 × 8	2.1
046 102 010	One-Piece	10	24	9	M3 × 10	2.1
046 102 012	One-Piece	12	28	11	M4 × 12	4.6
046 102 014	One-Piece	14	30	11	M4 × 14	4.6
046 102 015	One-Piece	15	34	13	M5 × 16	9.5
046 102 016	One-Piece	16	34	13	M5 × 16	9.5
046 102 018	One-Piece	18	36	13	M5 × 16	9.5
046 102 020	One-Piece	20	40	15	M6 × 16	16
046 102 025	One-Piece	25	45	15	M6 × 16	16
046 102 030	One-Piece	30	54	15	M6 × 18	16
046 102 035	One-Piece	35	57	15	M6 × 18	16
046 102 040	One-Piece	40	60	15	M6 × 18	16
046 102 045	One-Piece	45	73	19	M8 × 25	39
046 102 050	One-Piece	50	78	19	M8 × 25	39

Other sizes available to special order

Tel: +44 (0)1992 509888

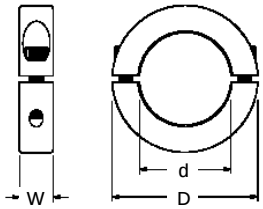
COLLARS

- Do not score the shaft
- Easy installation & adjustment

Clamp type collars hug the shaft with an all around grip.
Effective on both hardened and plain shafts.
Easily installed or removed without machine disassembly.



Two-Piece collar



Order Code	Type	Bore d	Diameter D	Width W	*Forged Clamp Screw	Recommended Max Screw Torque (Nm)
046 201 003	Two-Piece	3	16	9	M3 × 8	2.1
046 201 005	Two-Piece	5	16	9	M3 × 8	2.1
046 201 006	Two-Piece	6	16	9	M3 × 8	2.1
046 201 008	Two-Piece	8	18	9	M3 × 8	2.1
046 201 010	Two-Piece	10	24	9	M3 × 10	2.1
046 201 012	Two-Piece	12	28	11	M4 × 12	4.6
046 201 014	Two-Piece	14	30	11	M4 × 14	4.6
046 201 015	Two-Piece	15	34	13	M5 × 16	9.5
046 201 016	Two-Piece	16	34	13	M5 × 16	9.5
046 201 018	Two-Piece	18	36	13	M5 × 16	9.5
046 201 020	Two-Piece	20	40	15	M6 × 16	16
046 201 025	Two-Piece	25	45	15	M6 × 16	16
046 201 030	Two-Piece	30	54	15	M6 × 18	16
046 201 035	Two-Piece	35	57	15	M6 × 18	16
046 201 040	Two-Piece	40	60	15	M6 × 18	16
046 201 045	Two-Piece	45	73	19	M8 × 25	39
046 201 050	Two-Piece	50	78	19	M8 × 25	39

Stainless Steel

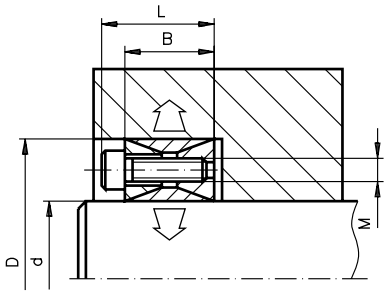
Order Code	Type	Bore d	Diameter D	Width W	*Forged Clamp Screw	Recommended Max Screw Torque (Nm)
046 201 003	Two-Piece	3	16	9	M3 × 8	2.1
046 201 005	Two-Piece	5	16	9	M3 × 8	2.1
046 201 006	Two-Piece	6	16	9	M3 × 8	2.1
046 201 008	Two-Piece	8	18	9	M3 × 8	2.1
046 201 010	Two-Piece	10	24	9	M3 × 10	2.1
046 201 012	Two-Piece	12	28	11	M4 × 12	4.6
046 201 014	Two-Piece	14	30	11	M4 × 14	4.6
046 201 015	Two-Piece	15	34	13	M5 × 16	9.5
046 201 016	Two-Piece	16	34	13	M5 × 16	9.5
046 201 018	Two-Piece	18	36	13	M5 × 16	9.5
046 201 020	Two-Piece	20	40	15	M6 × 16	16
046 201 025	Two-Piece	25	45	15	M6 × 16	16
046 201 030	Two-Piece	30	54	15	M6 × 18	16
046 201 035	Two-Piece	35	57	15	M6 × 18	16
046 201 040	Two-Piece	40	60	15	M6 × 18	16
046 201 045	Two-Piece	45	73	19	M8 × 25	39
046 201 050	Two-Piece	50	78	19	M8 × 25	39

Other sizes available to special order

CLAMPING ELEMENTS

- Keyless shaft - hub connection
- Ideal for heavy transmission
- Reduced machining costs





5

Keyless shaft-hub connection eliminates play between the shaft and the hub distributes the power transmission on a limited area only.

This allows savings in materials because the shaft diameters can be designed smaller, making these ideal for heavy transmissions, with overload or continuous reversing, or where angular synchronisation is required, with several hubs mounted on a single shaft.

Simple mounting and dismounting means easy and quick changing of the hubs fitted on the shaft; the high pressure between the contact surfaces helps avoid corrosion and, years after installation, allows a quick removal of the hub.

Order Code	d	D	B	L	M	Ts (Nm)	T (Nm)	F (kN)	P (N/mm^2)	Weight (kg)
109 615 520	20	47	20	26	M6	16	320	32	110	0.21
109 615 522	22	47	20	26	M6	16	340	32	110	0.20
109 615 524	24	50	20	26	M6	16	420	35	110	0.22
109 615 525	25	50	20	26	M6	16	430	34	110	0.22
109 615 528	28	55	20	26	M6	16	600	44	110	0.27
109 615 530	30	55	20	26	M6	16	650	44	110	0.25
109 615 532	32	60	20	26	M6	16	770	48	120	0.3
109 615 535	35	60	20	26	M6	16	830	48	120	0.29
109 615 538	38	65	20	26	M6	16	1110	56	140	0.33
109 615 540	40	65	20	26	M6	16	1150	58	140	0.32
109 615 542	42	75	24	32	M8	38	1800	86	150	0.56
109 615 545	45	75	24	32	M8	38	2000	90	160	0.53
109 615 548	48	80	24	32	M8	38	2100	90	150	0.59
109 615 550	50	80	24	32	M8	38	2200	90	150	0.56

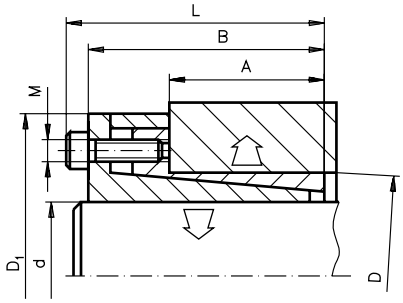
Key:
T_S = Screw tightening torque
T = Torque transmissible with tightening torque T_S
F = Axial force transmissible with tightening torque T_S
P = Hub surface pressure

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CLAMPING ELEMENTS

- Self-centering
- Suitable for small and thin walled hubs
- Eliminates keyways





Order Code	d	D	D_1	A	B	L	M	Ts (Nm)	T (Nm)	F (kN)	P (N/mm^2)	Weight (kg)
109 615 612	12	18	32	14	26	31	M4	5	60	10	105	0.14
109 615 614	14	23	38	14	26	31	M4	5	75	10	90	0.15
109 615 616	16	24	45	16	36	42	M6	17	145	18	120	0.22
109 615 618	18	26	47	18	38	44	M6	17	200	22	120	0.23
109 615 619	19	27	49	18	38	44	M6	17	210	22	120	0.25
109 615 620	20	28	49	18	38	44	M6	17	220	22	120	0.25
109 615 622	22	32	54	25	45	51	M6	17	250	22	120	0.32
109 615 624	24	34	56	25	45	51	M6	17	270	22	120	0.34
109 615 625	25	34	56	25	45	51	M6	17	280	22	120	0.33
109 615 628	28	39	61	25	45	51	M6	17	500	35	150	0.41
109 615 630	30	41	62	25	45	51	M6	17	530	35	150	0.41
109 615 632	32	43	65	30	50	56	M6	17	750	45	150	0.48
109 615 635	35	47	69	30	50	56	M6	17	850	48	140	0.55
109 615 638	38	50	72	30	50	56	M6	17	930	48	140	0.58
109 615 640	40	53	75	30	50	56	M6	17	980	48	130	0.63
109 615 642	42	55	78	40	65	73	M8	41	1000	48	130	0.88
109 615 645	45	59	85	40	65	73	M8	41	1900	84	130	1.03
109 615 648	48	62	87	45	70	78	M8	41	2000	84	130	0.98
109 615 650	50	65	92	45	70	78	M8	41	2700	110	140	1.27

Key:
T_S = Screw tightening torque
T = Torque transmissible with tightening torque T_S
F = Axial force transmissible with tightening torque T_S
P = Hub surface pressure

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