



Utkarsh

FLEXIBLE COUPLINGS



Together,
we help you turn smooth &
perform high!





Small support for
greater performance!

ISSUE - 10 - August - 2010

Ever since our inception in 1985, it has been our endeavor to ensure that our customers get optimum and long lasting performance from their machines. Having the best couplings in place is one more step towards achieving that goal and we have been consistent in providing that to our clients across India and the developed countries worldover.

Achieving a consistent growth rate between 25-30% over a large period of time, elaborates our reach and the number of customers who have benefitted with our Utkarsh Couplings. Focus on customer requirements, quality standards, competitive pricing and delivering well within time lines are just some of the efforts we take that make us a force to reckon with in this very specialized market. Our unparalleled design capabilities and technical expertise enable us to produce newer and better products for our customers. In addition to this, we can proudly say that Bureau Veritas appreciated our company with awarding ISO-9001 : 2008 Certification.

We provide technical assistance and prompt service as and when required. Utkarsh coupling guarantee you of safety, longevity and higher performance at a competitive price.

Vision

"To emerge as the most dependable system partner for our clients. To create the niche with advanced solutions, reliable service and optimum value sharing."

Mission

To enhance the reach and capabilities to cater to the changing needs of our clients. To create a strong brand identity for excellence in all what we deliver."

Utkarsh Couplings are available at :

- **EUROPE :**
M/s. VeHaGe, Holland bv Amprestraat 24,6716 BN EDE,
The Netherlands. Tel.: +31.318.505093
Fax.: +31.318.556630
- **AUSTRALIA :**
M/s. Naismith Engineering & Manufacturing Co. Pty. Ltd.,
149, Heidelberg Rd, Northcote Vic 3070 Australia,
Po Box 261 Tel.: +61.3.9489981 Fax.: +61.3.94821474

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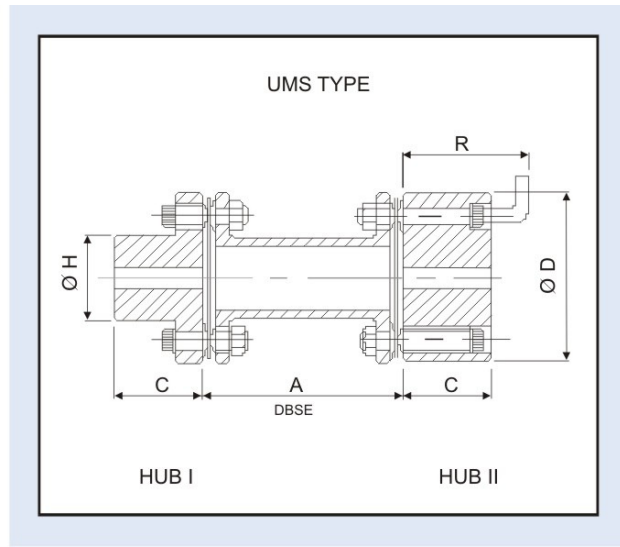
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UMS METAL FLEX
UMS Type Couplings



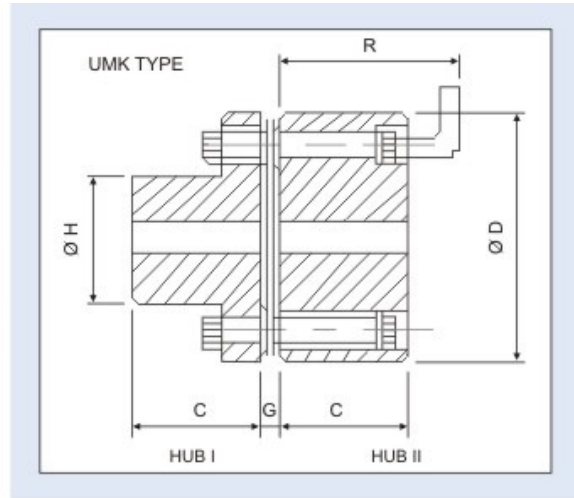
Special Features "UMS" Metal Flex Couplings

- * Power to weight ratio is maximised
- * The spacer makes installation easy
- * Accommodates parallel, angular and axial misalignments
- * Can withstand high operating temperatures
- * Flexible membranes are replaceable
- * Visual inspection is possible without dismantling machinery
- * Inherently balanced
- * Low axial stiffness with high torsional rigidity
- * Zero backlash
- * High-speed capacity
- * High precision standard
- * Spacer lengths, adaptors and materials can be modified as per customer's special requirements.

TECHNICAL DATA

Size	Rated Torque Nm	kW Rating at 100 rpm	Max Speed rpm	Bore			Std DBSE "A"	C	Ø D	Ø H	R	Weight in Kgs Approx		M.I.(WR ²) in Kgm ² Approx		Torsional stiffness Nm/Radian Approx
				Min	Max							Min Std. "A"	Per Mtr Extra "A"	Min Std. "A"	Per Mtr Extra "A"	
					Hub I	Hub II										
5	33	0.35	7500	8	20	22	100	25	55	30	65	0.70	2.00	0.0002	0.0003	0.016
10	64	0.67	7500	10	22	25	140	30	63	35	75	1.10	2.30	0.0003	0.0004	0.031
35	160	1.67	7000	12	30	38		40	82	45	85	2.45	2.41	0.0017	0.00047	0.025
95	515	5.4	6000	17	40	50	100	45	102	57	95	4.50	3.20	0.004	0.001	0.04
170	860	9	5200	17	52	70	140	55	128	77	110	8.30	7.00	0.012	0.005	0.099
220	1337	14	4800	22	65	80	180	60	146	94	120	11.80	8.40	0.036	0.008	0.176
400	2388	25	4400	27	80	100		70	176	115	140	19.50	13.10	0.070	0.0200	0.305
520	3342	35	4200	32	90	115	140	90	197	132	175	29.30	12.22	0.130	0.0355	0.432
1000	5060	53	4000	42	105	130	250	95	225	147	165	43.00	19.62	0.240	0.0541	0.60
1300	7161	75	3800	47	115	140	180	105	250	162	195	62.00	27.10	0.500	0.0700	0.80
2000	10025	105	3700	52	120	155	250	115	275	178	195	81.00	36.30	0.660	0.1486	1.50
2500	13367	140	3600	62	135	165	300	130	300	190	235	107.00	42.80	1.000	0.1000	1.40

UMK METAL FLEX UMK Type Couplings



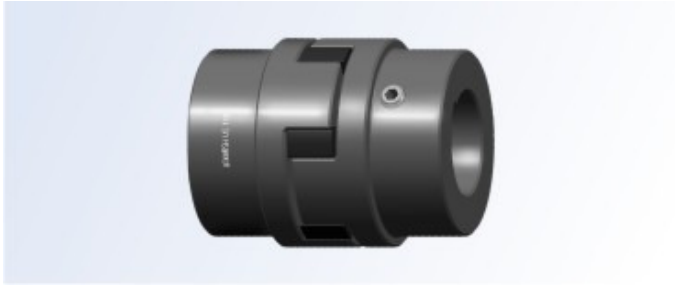
Special Features "UMK" Metal Flex Couplings

- * Power to weight ratio is maximised
- * Accommodates parallel, angular and axial misalignments
- * Can withstand high operating temperatures
- * Flexible membranes are replaceable
- * Visual inspection is possible without dismantling machinery
- * Inherently balanced.
- * Low axial stiffness with high torsional rigidity.
- * Zero backlash.
- * High-speed capacity.
- * High precision standard.

TECHNICAL DATA - UMK

Size	Rated Torque Nm	kW Rating at 100 rpm	Max Speed rpm	Bore			G	C	Ø D	Ø H	R	Weight in Kgs Approx	M.L.(WR ²) in kgm ² Approx	Torsional Stiffness Nm / Radian Approx
				Min	Max									
					Hub I	Hub II								
5	33	0.35	7500	8	20	22	5.2	25	55	30	65	0.55	0.0002	0.036
10	64	0.67	7500	10	24	25	6.5	30	63	35	75	0.87	0.0003	0.043
35	160	1.67	7000	12	30	38	7.5	40	82	45	85	1.80	0.0008	0.062
95	515	5.4	6000	17	40	50	8.0	45	102	57	95	3.20	0.0026	0.118
170	860	9	5200	17	52	70	9.5	55	128	77	110	5.83	0.0087	0.260
220	1337	14	4800	22	65	80	12.0	60	146	94	120	8.40	0.017	0.492
400	2388	25	4400	27	80	100	13.0	70	176	115	140	14.10	0.045	1.228
520	3342	35	4200	32	90	115	14.4	90	197	132	175	22.10	0.089	1.926
1000	5060	53	4000	42	105	130	16.2	95	225	147	165	30.70	0.16	3.613
1300	7161	75	3800	47	115	140	19.5	105	250	162	195	42.80	0.27	NO REQUEST
2000	10025	105	3700	52	120	155	21.5	115	275	178	195	57.60	0.44	
2500	13367	140	3600	62	135	165	23.5	130	300	190	235	76.20	0.67	

US & UW TYPE COUPLINGS



Spider Type (US)

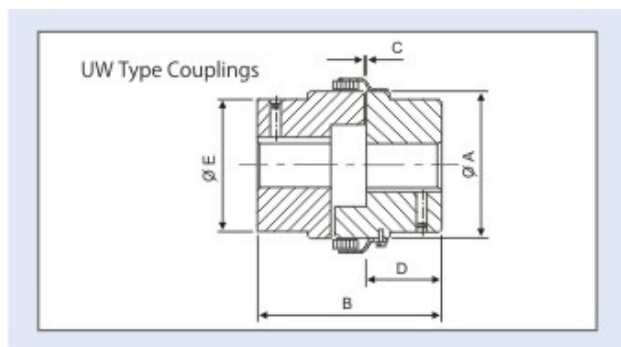
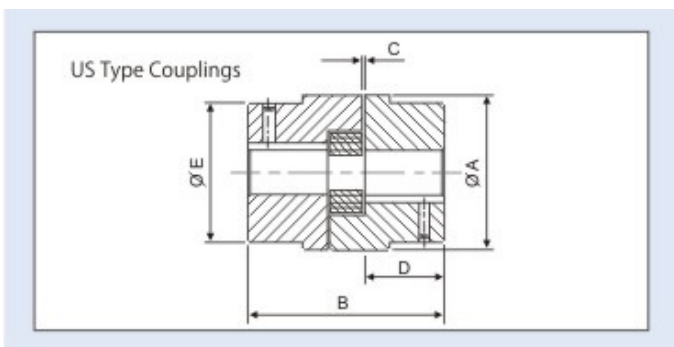
Special Features of "US" Type Couplings

- * Low Cost.
- * Simple construction contains two hubs and a single elastomeric flexible member or element (called a spider).
- * Range up to 4308 Nm Torque-ratings.

Snap-Wrap Type (UW)

Special Features of "UW" Type Couplings

- * The basic "US" coupling with "Snap-Wrap" type elastomer and removable collar. This facilitates inspection and replacement of Snap-Wrap without disturbing the alignment of each hub (drive and driven unit)
- * Inspection and replacement of the elastomer within 5 minutes using only a screw driver
- * Maintenance of machinery is possible through splitting at the centre line of the shaft and is achievable without disturbing the shaft alignment because of Snap-Wrap concept.



TECHNICAL DATA

Size	Rated Torque Nm	kW Rating at			Dimensions in mm								Torsional Stiffness Nm / Radian	Material of Hubs	
		100 rpm	1500 rpm	3000 rpm	Min. Bore	Max. Bore	Ø A		B	C	D	Ø E			
							US	UW							
US 035	0.38	0.004	0.06	0.12	3	10	16	-	19	1	5.5	16	4	SI	AL
US 050	2.50	0.030	0.45	0.90	6	16	28	-	46	1	17	28	36	SI	AL
US 070	4.90	0.050	0.75	1.50	9	20	36	-	51	2	19	36	80	SI	AL
US 075	9.80	0.100	1.50	3.00	9	22	45	-	55	2	21	45	119	CI	AL
US/UW 095	21	0.220	3.30	6.60	10	28	54	64	63	2	25	49	257	CI	AL
US/UW 099	35	0.370	5.55	11.10	10	30	65	78	72	2	27	51	688	CI	AL
US/UW 100	46	0.490	7.35	14.70	10	35	65	78	88	2	35	57	688	CI	AL
US/UW 110	89	0.930	13.95	27.90	15	42	85	96	108	3	43	76	1719	CI	AL
US/UW 150	141	1.490	22.35	44.70	15	48	96	111	115	3	45	80	2120	CI	-
US/UW 190	190	2.010	30.15	60.30	20	60	115	130	133	3	54	102	3495	CI	-
US/UW 225	265	2.760	41.40	82.80	20	65	127	142	153	3	64	111	4584	CI	-
US/UW 226	324	3.430	51.45	102.90	25	70	137	153	178	3	70	119	6990	CI	-
US/UW 276	532	5.600	84.00	168.00	25	75	157	173	200	3	80	127	12720	CI	-
US/UW 280	782	8.200	123.00	246.00	30	80	192	205	200	3	80	140	22517	CI	-
US/UW 295	1279	13.400	201.00	-	40	95	237	251	238	3	95	162	51222	CI	-
US/UW 2955	2132	22.400	336.00	-	50	105	237	251	264	3	108	180	85428	CI	-
US/UW 300	3047	31.900	478.50	-	50	105	254	267	283	3	115	180	126395	CI	-
US/UW 350	4308	45.000	675.00	-	50	115	305	318	309	3	128	200	183633	CI	-

* Cast steel hubs and elastomeric elements made of polyurethane, are available on request to give higher torque and durability.

** Maximum permissible mis-alignments : Angular 10, parallel 0.4 mm and axial 3 mm. (Initial alignment must be 25% of maximum)

USS & UCWS TYPE COUPLINGS



Spider & Spacer Type - USS

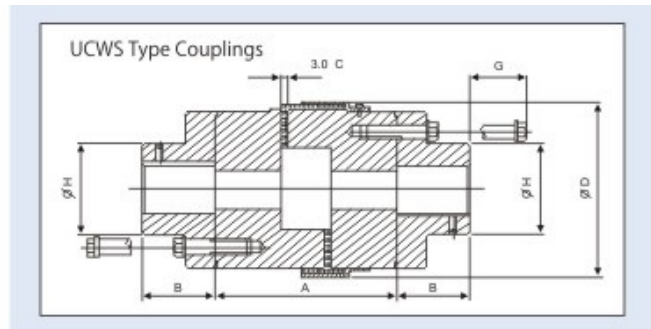
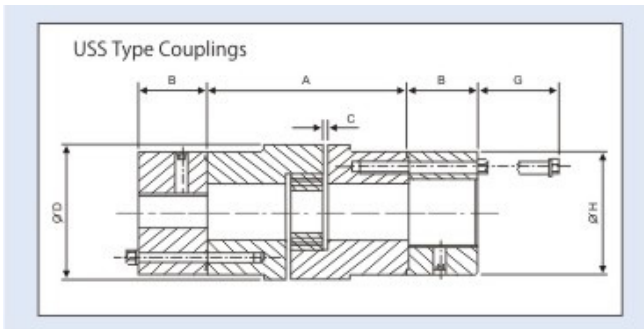


T Cushion & Spacer Type - UCWS

Spider & Spacer Type – USS

Special Features of 'USS' & 'UCWS' Type Couplings

- * Specifically designed for "back pull out pumps". Maintenance can be undertaken without disturbing the pump alignment and piping. Can also be used where disconnection of drive and driven units is required in applications such as compressors, generators, blowers etc.
- * In UCWS Couplings, an individual free load T-Cushion is held in position by an outer collar. This product can also be supplied with snap-wrap type elastomers for USS Couplings.
- Spiders, Snap-wraps and T-Cushions of polyurethane construction are available on request.
- * T-Cushions and Snap Wraps can be easily inspected and replaced if required.
- * Range up to 4308 Nm torque ratings.

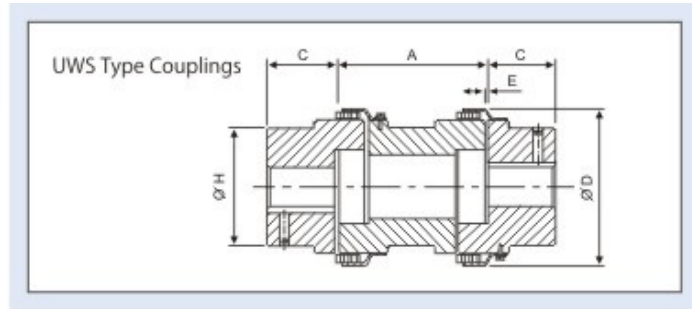


TECHNICAL DATA

Size	Rated Torque Nm	kW Rating at			Dimensions in mm									Torsional stiffness Nm / Radian
		100 rpm	1500 rpm	3000 rpm	Min. Bore	Max. Bore	Spacer length distance between shaft ends (DBSE) A	Spacer OD Ø D	Adaptor body length B	Adaptor body OD Ø H	G	Gap C		
USS 095	21	0.220	3.30	6.60	10	30	90, 100, 135, 140	54	25	54	20	2	275	
USS 100	46	0.490	7.35	14.70	10	38		65	30	65	20	2	688	
USS 110	89	0.930	13.95	27.90	15	42	90, 100, 135, 140, 180	85	35	76	21	3	1719	
USS 150	141	1.490	22.35	44.70	15	48		96	40	90	27	3	2120	
USS 190	190	2.010	30.15	60.30	20	55		115	46	102	27	3	3495	
USS 225	265	2.760	41.40	82.80	20	65		127	52	115	31	3	4584	
UCWS 226	324	3.430	51.45	102.90	25	70		141.5	50	134	40	3	6990	
UCWS 276	532	5.600	84.00	168.00	25	75		161.5	60	135	40	3	12720	
UCWS 280	782	8.200	123.00	246.00	30	75		196.5	60	130	-	3	22517	
UCWS 295	1279	13.400	201.00	-	40	95	135, 140, 180, 250	243	65	160	-	3	51222	
UCWS 2955	2132	22.400	336.00	-	50	100		243	65	160	-	3	85428	
UCWS 300	3047	31.900	478.50	-	50	110		265	80	180	-	3	126395	
UCWS 350	4308	45.000	675.00	-	50	115		318	90	200	-	3	183633	

** Maximum permissible Mis-alignments : Angular 10 ,parallel 0.4 mm and axial 3 mm (Initial alignment must be 25 % of maximum)

UWS TYPE COUPLINGS



Two Snap-Wraps with Spacer Special Features of 'UWS' Type Couplings

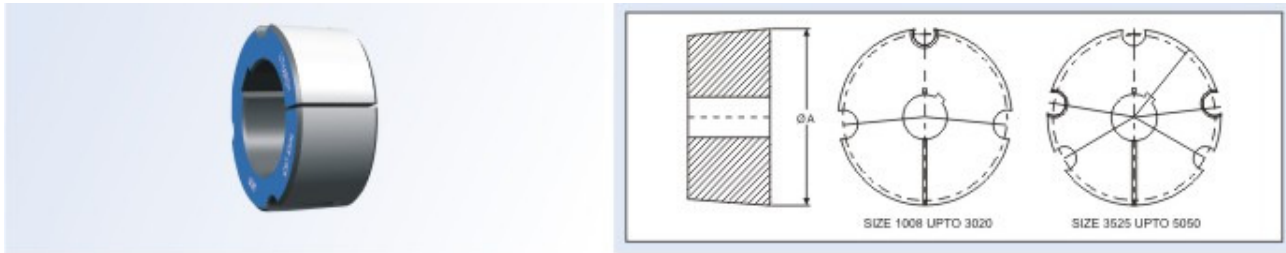
- * Specially designed for machines requiring space for maintenance.
- * Only a screw driver is required to dismantle the coupling for maintenance or inspection.
- * Minimal down time required to undertake maintenance
- * Having two snap-wrap elastomers provides double the flexibility
- * A floating aluminum spacer offers light weight construction

TECHNICAL DATA

Size	Rated Torque Nm	kW Rating at			Dimensions in mm							Torsional stiffness Nm/Radian
		100 rpm	1500 rpm	3000 rpm	Min. Bore	Max. Bore	Spacer length distance between shaft ends (DBSE)	Adaptor OD	Spacer OD	Adaptor body length	Gap	
							A	ØH	ØD	C	E	
UWS - 095	21	0.22	3.3	6.6	10	28	90, 100, 135, 140, 180	49	64	25	2	275
UWS - 100	46	0.49	7.35	14.7	10	35		57	78	35	2	688
UWS - 110	89	0.93	13.95	27.9	15	42		76	96	43	3	1719
UWS - 150	141	1.49	22.35	44.7	15	48		80	111	45	3	2120
UWS - 190	190	2.01	30.15	60.3	20	60		102	130	54	3	3495
UWS - 225	265	2.76	41.4	82.8	20	65		111	142	64	3	4584
UWS - 226	327	3.43	51.45	102.9	25	70		115	153	70	3	6990

- * Elastomeric member like polyurethane available on request for higher durability.
- ** Maximum permissible Mis-alignments : Angular 2 0, parallel 0.8 mm and axial 3 mm (Initial alignment must be 25% of maximum)

TAPER BUSHES



TAPER BUSHES

- * Save time and cost in fitting
- * Eliminates precision taper fitting keys
- * Fully interchangeable with other brands
- * No re-boring and keyway costs

Special Features of 'Taper Bushes'

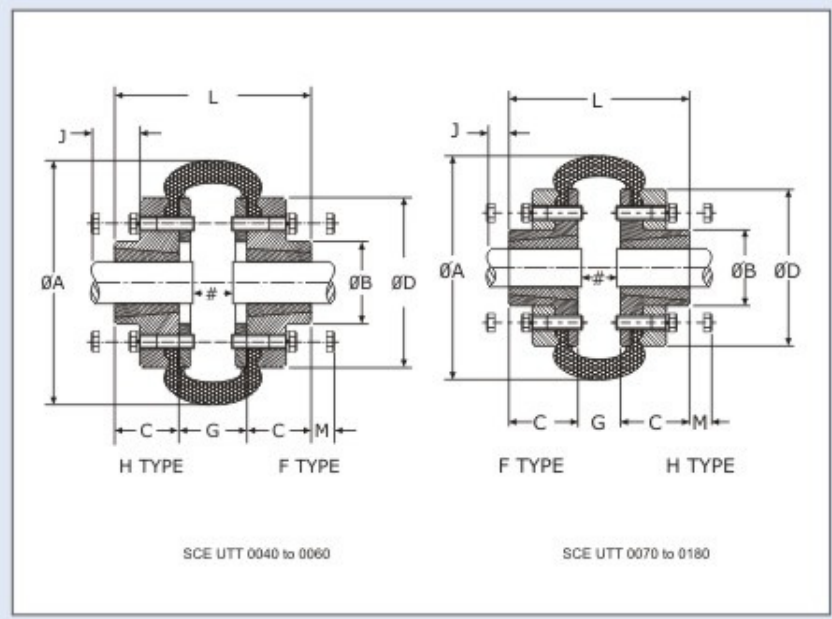
- * Interchangeable
- * Wide range of bores, metric and imperial
- * Bore size may be changed in minutes
- * Easy fixing and removal
- * Clean flush appearance

TECHNICAL DATA

Size	Bore Min Metric	Bore Min Imperial	Bore Max Metric	Bore Max Imperial	Ø A	Weight in Kgs
1008	9	3/8"	25	1.00"	35	0.15
1108	9	3/8"	28	1.00"	38	0.18
1210	11	5/8"	32	1 1/4"	47.5	0.20
1215	11	5/8"	32	1 1/4"	48	0.40
1610	14	1/2"	42	1 5/8"	57	0.40
1615	14	1/2"	42	1 5/8"	57	0.60
2012	14	3/4"	50	2.00"	70	0.80
2017	14	3/4"	50	2.00"	70	1.20
2517	16	3/4"	60	2 1/2"	85.5	1.70
2525	16	3/4"	60	2 1/2"	86	2.10
3020	25	1 1/4"	75	3.00"	108	2.80
3030	35	1 1/4"	76	3.00"	108	4.00
3525	35	1 1/2"	100	4.00"	127	5.00
3535	35	1 1/2"	90	3 1/2"	127	6.50
4030	40	1 3/4"	115	4 1/4"	146	7.40
4040	40	1 3/4"	100	4.00"	146	10.10
4535	55	2 1/4"	125	5.00"	162	13.20
4545	55	2 1/4"	110	4 1/4"	162	13.20
5040	70	2 3/4"	125	5.00"	177.5	15.20
5050	70	2 3/4"	125	5.00"	178	15.20

UTT TYPE COUPLINGS

Tyre Type



TECHNICAL DATA

Size	kW at 100 rpm	Max. Speed rpm	Type	# Bush Size	Max. Bore		Ø A	Ø D	Ø B	M	G	L	C	J	Weight per coupling	Moment of Inertia (WR2) per coupling kgm ²
					Metric	Inch										
UTT - 0040	0.25	4500	F/H	1008	25	1	104	82	-	17	21	65	22	29	1.7	0.00148
UTT - 0050	0.69	4500	F/H	1210	32	1 1/4	133	100	79	19	25	75	25	38	2.7	0.00349
UTT - 0060	1.33	4000	F/H	1610	42	1 5/8	165	125	103	19	30	80	25	38	3.6	0.0103
UTT - 0070	2.62	3600	F	2012	50	2	197	144	82	9	16	80	32	38	6.35	0.0192
			H	1610	42	1 5/8						66	25		6.2	0.0157
UTT - 0080	3.93	3100	F	2517	60	2 1/2	210	167	96	9	21	111	45	42	8.53	0.0303
			H	2012	50	2						85	32		8.5	0.0293
UTT - 0090	5.24	3000	F	2517	60	2 1/2	235	188	110	-	24	114	45	48	12	0.0538
UTT - 0100	7.07	2600	F	3020	75	3	254	216	125	-	20	122	51	48	18.2	0.1062
			H	2517	60	2 1/2						110	45		18.1	0.1058
UTT - 0110	9.16	2300	F/H	3020	75	3	279	233	140	-	21	123	51	55	21.1	0.1461
UTT - 0120	13.9	2050	F	3525	*100	4	314	264	152	-	25	155	65	55	30.33	0.2627
			H	3020	72	3						127	51		30.3	0.2622
UTT - 0140	24.3	1800	F/H	3225	*100	4	359	311	195	-	22	152	65	67	42.6	0.4922
UTT - 0160	39.5	1600	F/H	4030	*115	4 1/2	395	345	216	-	8	162	77	80	72.6	1.1134
UTT - 0180	65.7	1500	F/H	4535	*125	5	470	398	220	-	22	200	89	89	123	1.9514

*All dimensions are in mm unless otherwise specified.

*M is the amount by which clamping screws need to be withdrawn to release the tyre

*J is the wrench clearance to allow for tightening and loosening the bush on the shaft

*Shaft ends, although normally located **G** apart, can project beyond the flanges as shown to allow sufficient space between the shaft ends to accommodate end float and mis-alignment

* Maximum torque figures should be considered only for short durations and overload ratings for direct on line starting. **Angular misalignment capacity up to 40 Weight & Moment of inertia specified are without bores**

** For detailed information about Taper Bush bore, please refer to our Taper Bush Catalogue

** Standard Bore 90 mm, 100 mm, 115 mm, & Max Bore with shallow key 100 mm, 115 mm & 125 mm for bush no. 3525, 4030, 4535 respectively

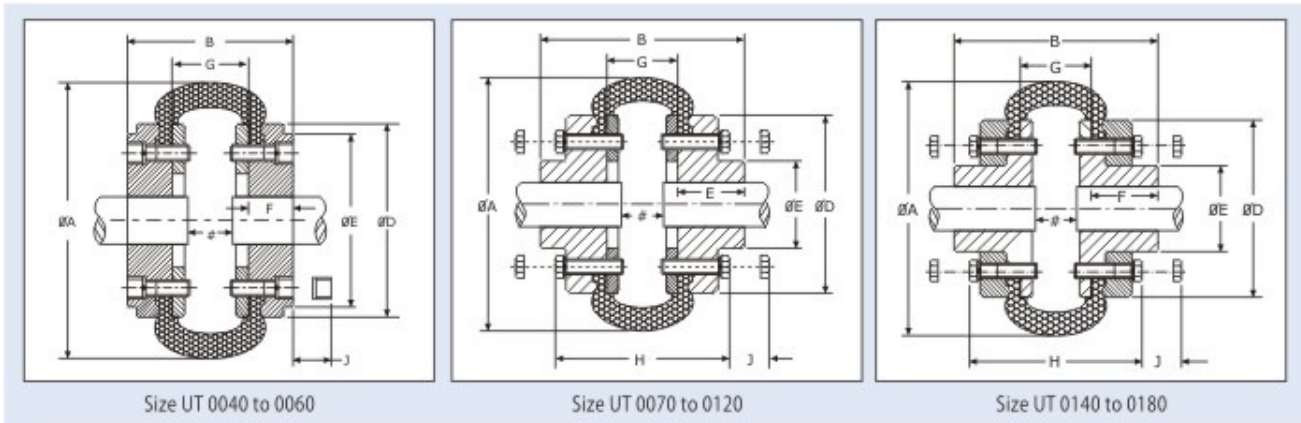
UT TYPE COUPLINGS



Special Features of 'UT' type Couplings

- * Highest mis-alignment tolerances. Parallel - Max 6mm Angular - Max 40 End float - Max 6 mm
- * In case of tyre failure, torque transmission is disengaged, thus protecting the machinery and minimising consequential loss
- * Better protection in impact load and heavy shock loading applications
- * Easy to assemble & disassemble
- * Lubrication free

Tyre Type

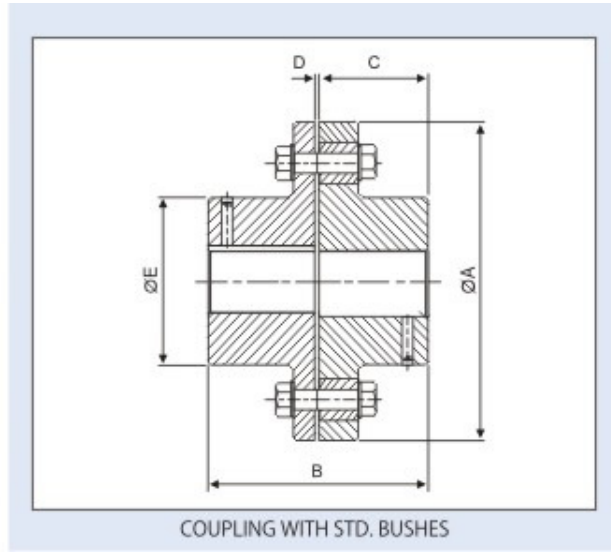


TECHNICAL DATA

Size	Rated Torque Nm	kW Rating At 100 rpm	Min. Bore	Max. Bore	Max Speed rpm	Dimensions in mm								Torsional Stiffness Nm/Radian	Weight In Kgs Approx	Max. Misalignment (mm)	
						Ø A	B	Ø E	F	G	H	J	Ø D			Parallel	End float±
UT 0040	21	0.22	10	30	4500	104	67	-	22	22	-	43	82	286	1.85	1.10	1.30
UT 0045	37	0.39	10	32	4500	120	73	-	25	24	-	43	94	516	2.68	1.20	1.50
UT 0050	53	0.56	14	38	4500	133	92	-	32	25	-	43	100	745	2.98	1.30	1.70
UT 0060	106	1.11	15	48	4000	165	112	73	38	33	-	43	125	1490	5.04	1.60	2.00
UT 0070	162	1.70	15	55	3600	197	132	82	45	40	101	10	144	2349	7.82	1.90	2.30
UT 0080	253	2.65	20	65	3100	211	150	95	51	43	106	10	167	3610	11.03	2.10	2.60
UT 0085	306	3.20	20	70	3000	222	153	103	53	44	107	13	179	4354	14.13	2.20	2.80
UT 0090	365	3.82	20	76	2880	235	164	110	57	46	119	13	188	5214	16.34	2.40	3.00
UT 0100	505	5.29	25	85	2600	254	178	124	60	48	123	13	216	7219	25.98	2.60	3.30
UT 0110	712	7.46	30	90	2300	279	180	134	65	44	127	14	233	10199	30.84	2.90	3.70
UT 0120	1184	12.40	35	102	2050	314	207	152	76	49	140	14	314	16960	45.60	3.20	4.00
UT 0140	1881	19.70	50	120	1800	359	204	195	89	24	152	14	359	26929	61.00	3.70	4.60
UT 0160	3113	32.60	60	140	1600	402	220	216	102	30	156	19	402	45576	86.00	4.20	5.30
UT 0180	5481	57.40	70	150	1500	470	258	266	114	46	188	19	470	79,068	141.00	4.80	6.00

Shaft ends, although normally located "G" apart - can project beyond the flanges as shown. In this event allow sufficient space between shaft ends for the float and misalignment

With plain bushes
UPB TYPE COUPLINGS



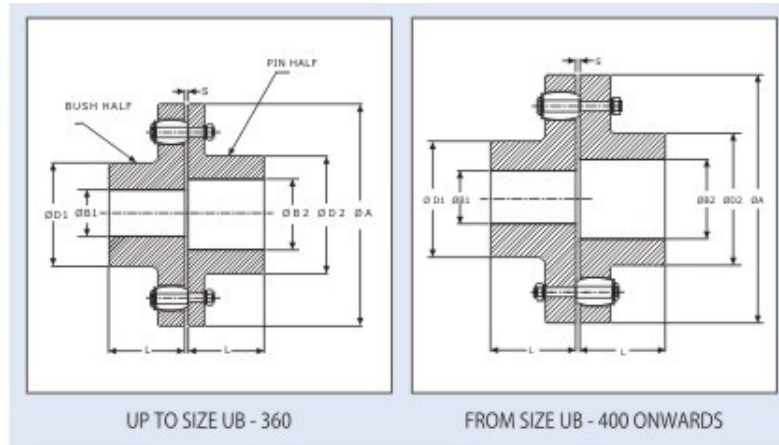
Special Features 'UPB' Type Couplings

- * Age old proven type concept.
- * Better misaligning tolerance.
- * Plain bushes are used as standard. Bushes in other materials such as Nitrile, Viton and Polyurethane are available.
- * Working temperature up to **700 c.**

TECHNICAL DATA

Size	Rated Torque Nm	kW Rating at			Min. Bore	Max. Bore	Max Speed rpm	Dimensions in mm					No. of holes
		100 rpm	1440 rpm	3000 rpm				Ø A	B	C	D	Ø E	
UPB 095	77	0.81	11.66	24.3	12.7	28	6100	95	79	38	3	40	3
UPB 114	310	3.25	46.8	97.5	12.7	30	5100	114	99	48	3	42	4
UPB 130	516	5.4	77.8	162	16	42	4400	130	105	51	3	60	6
UPB 160	621	6.5	93.6	195	16	48	3600	160	107	51	5	68	4
UPB 191	831	8.7	125.3	261	20	65	3000	191	125	60	5	90	4
UPB 191	1241	13	187.5	390	20	65	3000	191	125	60	5	90	6
UPB 200	1241	13	187.5	390	20	65	2800	200	125	60	5	90	6
UPB 225	1662	17.4	250.6	-	25	75	2600	225	157	76	5	105	6
UPB 254	2359	24.7	355.7	-	45	90	2300	254	183	89	5	135	8
UPB 254	2932	30.7	442	-	45	90	2300	254	183	89	5	135	10
UPB 254	3533	37	532.6	-	45	90	2300	254	183	89	5	135	12
UPB 290	4154	43.5	626.4	-	60	115	1950	290	235	115	5	170	12
UPB 300	5195	54.4	783.4	-	60	120	1900	300	235	115	5	180	14
UPB 310	5816	60.9	877	-	65	130	1850	310	255	125	5	195	16
UPB 340	7268	76.1	1096	-	65	135	1650	340	265	130	5	200	18
UPB 360	8729	91.4	1316	-	70	140	1590	360	276	135	6	210	12
UPB 390	9932	104	-	-	80	150	1470	390	316	155	6	225	14
UPB 410	13274	139	-	-	90	160	1400	410	336	165	6	240	15
UPB 440	14420	151	-	-	100	170	1300	440	366	180	6	255	16
UPB 480	18050	181	-	-	110	180	1200	480	386	190	6	270	18
UPB 530	23780	249	-	-	120	190	1080	530	406	200	6	285	20

UB TYPE PIN BUSH COUPLINGS With Curved Bushes



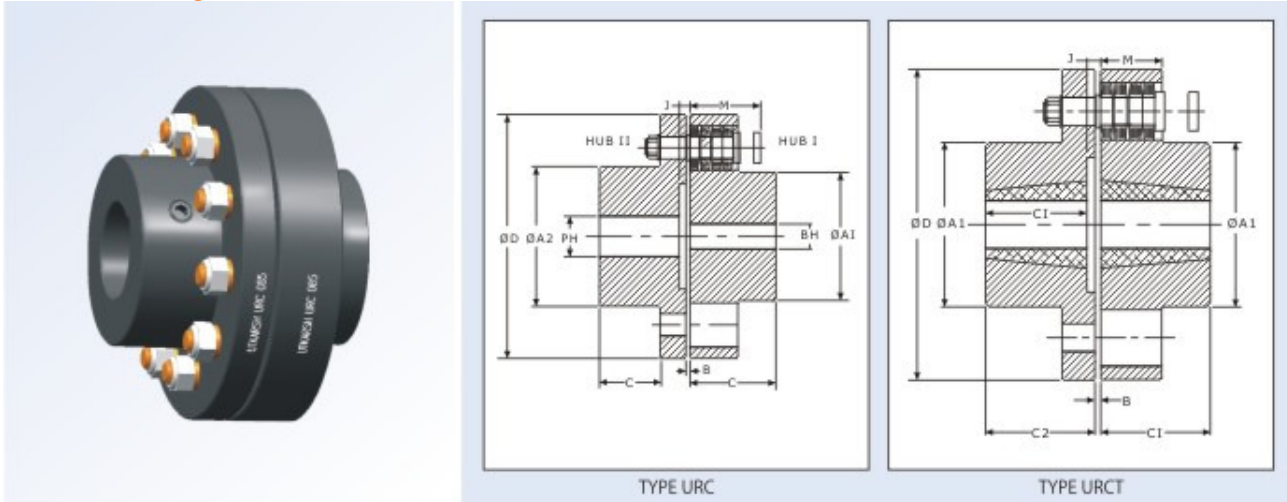
Special Features of 'UB' type Couplings SIMPLE AND EASY MAINTENANCE

- * No complicated mechanism to demand adjustment or maintenance. Inspection and replacement of "Curved Bush" is easy and a replacement can be quickly fitted without dismantling or moving either of the coupled shafts.
- * Range up to 155,000 Nm torque ratings
- * Assembly and dismantling is very easy
- * By removing the pins, the prime mover can be run independently
- * After removal of the pins, the hub with the shaft can be removed upwards without disturbing the alignment
- * Working temperature up to **700 C**
- * Each coupling is capable of withstanding maximum torque of 3 times nominal torque.
- * Better misalignment properties. Bushes in various materials such as Nitrile, Viton and Polyurethane are available.

TECHNICAL DATA

Size	Rated Torque Nm	kW Rating at 100 rpm	Max. Speed rpm	Min. Bore	Maximum Bore		Ø A	Ø D1	Ø D2	L	S	Weight in Kgs	M.I. in Kgm2	Max. Misalignment			No. of holes
					Ø B1	Ø B2								Axial (mm)	Radial (mm)	Angular	
UB 105	95	1.00	7200	11	30	32	105	48	50	45	2-6	2.0	0.003	2	0.3	1°	3
UB 116	146	1.53	6100	12	39	42	116	60	68	45	2-6	2.6	0.005	2	0.3	1°	4
UB 125	165	1.73	5500	14	45	50	125	68	78	50	2-6	3.1	0.007	2	0.4	1°	4
UB 144	318	3.33	4900	18	50	60	144	82	91	55	2-6	4.3	0.012	2	0.4	1°	6
UB 162	525	5.50	4500	22	60	65	162	89	100	60	2-6	7.5	0.030	2	0.4	1°	6
UB 178	643	6.73	3800	24	70	75	178	105	115	70	2-6	10.0	0.040	2	0.5	1°	6
UB 198	1247	13.07	3400	28	80	90	198	124	135	80	2-6	13.0	0.062	2	0.5	1°	10
UB 228	2049	21.47	3000	28	90	100	228	133	146	90	4-10	18.0	0.100	3	0.6	1°	11
UB 252	3068	32.13	2700	38	105	115	252	156	167	100	4-10	24.0	0.170	3	0.6	1°	12
UB 285	4551	47.67	2400	48	115	125	285	170	186	110	4-10	35.0	0.310	3	0.7	1°	11
UB 320	6098	63.87	2100	55	125	135	320	196	212	125	4-10	51.0	0.530	3	0.7	1°	12
UB 360	8899	93.20	1900	65	135	150	360	212	232	140	4-12	73.0	1.020	4	0.9	1°	11
UB 400	12051	126.20	1700	75	160	160	400	230	230	160	4-12	101.0	1.700	4	1.1	1°	10
UB 450	18602	194.80	1500	85	180	180	450	260	260	180	4-12	137.0	2.900	4	1.1	0.5°	12
UB 500	25802	270.20	1350	95	200	200	500	290	290	200	4-12	180.0	4.700	4	1.1	0.5°	14
UB 560	31003	324.67	1200	95	225	225	560	320	320	220	4-8	278.0	10.700	2	1.5	0.5°	10
UB 630	41997	439.80	1050	100	250	250	630	355	355	240	4-8	365.0	17.400	2	1.5	0.5°	12
UB 710	75000	785.40	950	100	260	260	710	385	385	260	5-9	516.0	33.000	2	1.8	0.5°	12
UB 800	100000	1047.20	850	100	280	280	800	420	420	290	5-9	961.0	53.000	2	1.8	0.5°	14
UB 900	154997	1623.13	750	100	305	305	900	465	465	320	5-9	927.0	86.000	2	1.8	0.5°	16

URC COUPLINGS With Cone Rings



Special Features "URC" Type Couplings

- * **Torque to Cost**
High Torque capacity compared to a very compact size which is lightweight
- * **Easy Maintenance**
Simple mechanism with easy inspection capability. Replacement of the flex cone rings can be achieved without moving either shaft or the hub of the coupling.
- * **Minimal Running Costs**
The Flex cone rings are the only wearing parts and are very inexpensive. This makes the URC Cone ring coupling economical in whole life costs

VERY SIMPLE DESIGN

- * Assembling and dismantling is very easy.
- * By removing the pins, the prime mover can be run independently.
- * After removal of the pins, the hub with the shaft can be removed upwards without disturbing the alignment.
- * Range up to 45,000 Nm torque ratings

TECHNICAL DATA

Type	Size	Rated Torque Nm	kW Rating At 100 rpm	Max. Speed rpm	Dimensions													Weight in kgs Approx (min bore)		M.I.(WR) in kgm ² Approx (min bore)		
					URC Max Bore			URCT		URC Ø D	A1	A2	C	URCT		M	Shaft Gap J					
					Min.	Hub-I	Hub-II	Bush Size	Bore Range					C 1	C 2		URC	URCT				
URC	20	50	0.56	6500	12	20	28	-	-	89	35	44	33	-	-	73	6	-	1.8	-	0.002	-
	30	110	1.2	4600	12	30	38	-	-	127	51	66	41	-	-	88	6	-	3.5	-	0.007	-
	38	190	2.0	4400	15	38	42	-	-	132	64	72	48	-	-	88	6	-	4.9	-	0.009	-
URC/ URCT	42	290	3.0	4000	15	42	48	1215	12-32	146	70	82	56	38	41	88	6	6	6.3	5.5	0.013	0.013
	48	480	5.0	3400	21	48	55	1615	14-42	171	82	94	61	38	41	114	6	6	10.4	9.0	0.034	0.032
	58	760	8.0	3000	21	58	65	2017	14-50	193	97	110	68	45	47	114	6	6	14.2	13.0	0.055	0.053
	70	1000	11.0	2700	21	70	75	2525	16-60	216	117	130	76	64	68	114	6	6	19.8	18.1	0.092	0.088
	75	2600	27.0	2300	28	75	80	2525	16-60	254	127	142	88	64	68	179	6	6	36.9	35.2	0.269	0.265
	85	3500	37.0	2090	28	85	90	3030	24-75	279	147	160	100	76	80	179	6	7	48.5	44.1	0.408	0.39
	105	5300	56.0	1760	34	105	120	3535	35-90	330	180	210	117	89	93	179	6	6	76.5	72.1	0.832	0.773
	120	9000	94.0	1570	61	120	130	4040	40-100	370	206	225	132	102	106	244	9	10	121.0	108.0	1.811	1.718
	135	12000	128.0	1390	67	135	150	4545	55-115	419	230	260	147	114	119	244	9	11	163.0	144.0	2.998	2.869
URC	170	25000	258.0	1090	96	170	190	-	-	533	292	320	188	-	-	318	11	-	305.0	-	9.998	-
	190	34000	360.0	975	122	190	215	-	-	597	330	380	211	-	-	318	6	-	397.0	-	15.900	-
	215	45000	467.0	880	135	215	240	-	-	660	368	430	237	-	-	318	6	-	508.0	-	24.950	-

All dimensions are in mm. unless otherwise specified.

B = 3MM FOR SIZE 020 TO 105

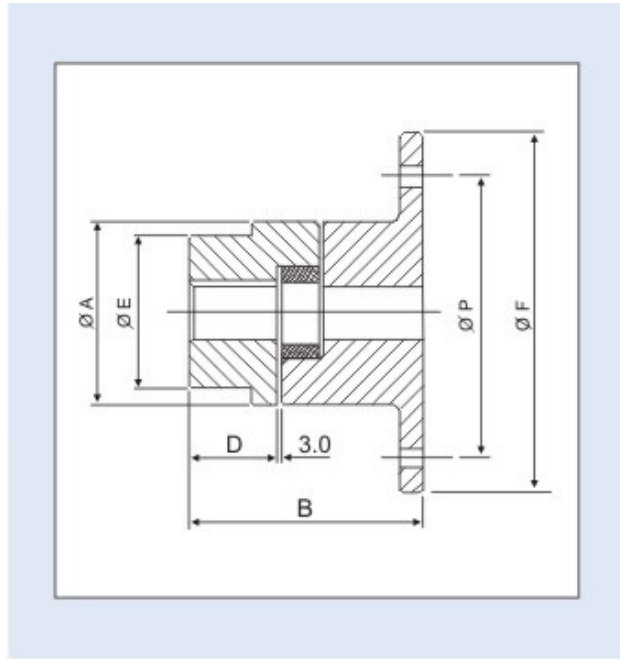
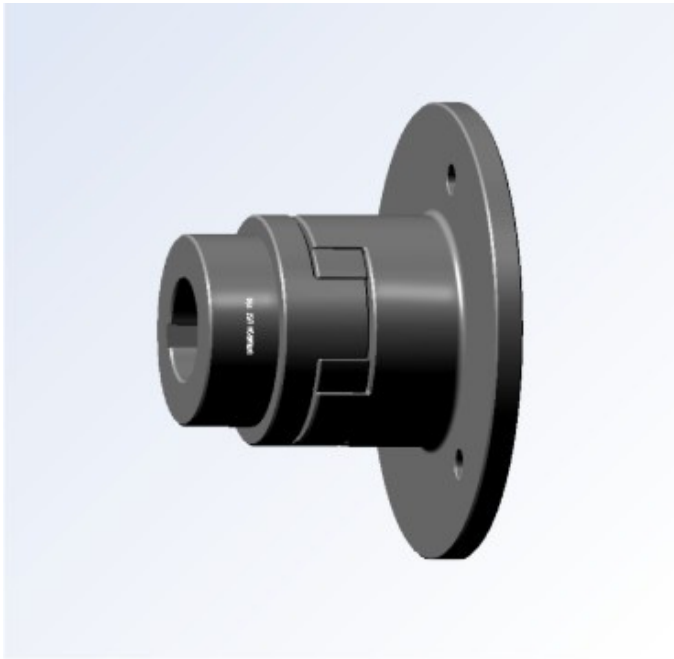
6 MM FOR SIZE 120 TO 215

For detail information about taper bush bore, Please refer to our taper bush catalogue.

.HUB I = BUSH HALF (DRIVEN)

. HUB II = PIN HALF (DRIVE)

USF / UWF TYPE COUPLINGS



Special Features "USF" & "UWF" Type Couplings

- * Specially designed for engine applications.
- * Easy to assemble and disassemble.
- * Elimination of the shaft extension reduces the total cost of the equipment
- * Coupling mounted directly on engine flywheel.

TECHNICAL DATA

Size	Rated Torque Nm	kW Rating at 100 rpm	SAE Size Inches	Flange dimensional in mm				Hub dimensions in mm					B mm
				ØF	ØP	No. of holes	Holes Dia	ØA UWF / USF	ØE	D	Bore Min	Bore Max	
UWF / USF 150	141	1.49	5.5	190.0	137.0	3	12	111 / 96	80	45	15	48	122
UWF / USF 190	190	2.01	11.5	352.4	333.4	8	10.3	130 / 115	102	54	20	55	107
UWF / USF 225	265	2.76	11.5	352.4	333.4	8	10.3	142 / 127	108	64	20	60	117
UWF / USF 226	324	3.43	6.5	216.0	200.0	6	8.5	153 / 137	115	70	22	65	136
			8.0	263.5	244.5	6	10.3						
			10.0	314.3	295.3	8	10.3						
			11.5	352.4	333.4	8	10.3						
			14.0	466.7	438.3	8	13.5						
UWF 276	532	5.60	8.0	263.5	244.5	6	10.3	170 / 161.5	127	80	22	73	148
			11.5	352.4	333.4	8	10.3						
			14.0	466.7	438.2	8	13.5						
UWF 280	782	8.20	10.0	314.3	295.3	8	10.3	205 / 196.5	140	80	30	75	148
			11.5	352.4	333.4	8	10.3						
			14.0	466.7	438.2	8	13.5						
UWF 295	1279	13.40	11.5	352.4	333.4	8	10.3	252 / 243	160	95	40	90	171
			14.0	466.7	438.2	8	13.5						
UWF 2955	2132	22.40	11.5	352.4	333.4	8	10.3	252 / 243	180	108	50	100	184
			14.0	466.7	438.2	8	13.5						

SPARE ELASTOMERS



Special Features of "Various Elastomers"

- * Spider, Snap wrap & T-Cushions are made from petroleum oil resistant, highly resilient, abrasion resistant, elastic and high strength rubber.
- * This superior quality rubber allows Utkarsh Couplings to work in a temperature range of **400 c** to **1000 C**
- * Conforms to ASTM specifications
- * A built in spacing feature (raised dots)' maintains correct gap between the jaws.
- * Spiders, T-Cushions and Snap wraps are also available in polyurethane for higher torque and prolonged service life
- * Tyres and Bushes are made from natural rubber. Can withstand up to **700 C**
- * Metal Elastomers are made from special Stainless Steel to ASTM specification.

SPECIAL NOTE

- * Non standard couplings such as drum and V groove pulleys are also manufactured to order
- * Coupling hubs, produced in special materials are also manufactured on request

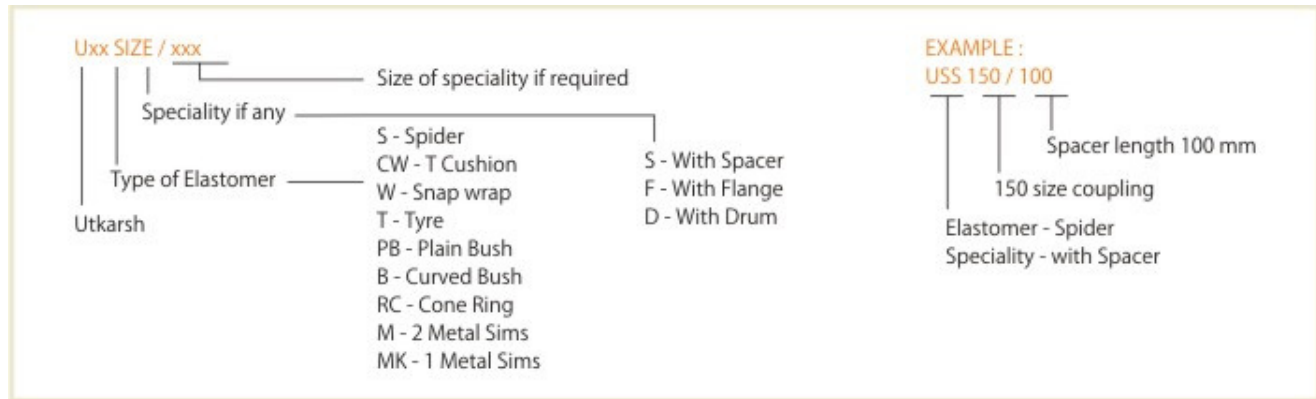
FINISH BORE INSTRUCTIONS

- * While machining finish bore, ensure that it is concentric to jaw OD.
- * Pilot bore = Min. bore - 2 mm
- * Key-way should be at the centre of two jaws.
- * For higher torque with fluctuations, clearance at the top of the key is recommended.

ALIGNMENT PROCEDURE

- * During alignment, hold a straight edge on both the jaws & see that there is no gap. Check the gap at least at three different positions.
- * The gap between jaw and body should be equal and as specified.
- * All the foundation bolts should be properly tight.
- * The coupling should be free to rotate after alignment.
- * Check periodically that all foundation bolts are tight properly and the gap between the jaws is maintained.

NOMENCLATURE FOR UTKARSH COUPLINGS



NOTE : In consequence of modifications or developments in design we reserve the right to amend or change the specifications without prior notice.

APPLICATION CLASSIFICATION TABLES

PRIME MOVER	OPERATIONAL HOURS PER DAY	SERVICE FACTORS RELATED TO NATURE OF LOAD AND PRIME MOVER		
		UNIFORM	MODERATE SHOCK	HEAVY SHOCK
Electric Motor	24	1.2	1.5	2.0
	12	1.0	1.2	1.7
	8	0.9	1.1	1.6
	less than 8	0.8	1.0	1.3
Multi - Cylinder Int. Combustion Engine	24	1.5	1.7	2.2
	12	1.2	1.5	2.0
	8	1.1	1.3	1.9
	less than 8	0.9	1.2	1.6
Single Cylinder Int. Combustion Engine	24	1.7	2.0	2.5
	12	1.5	1.7	2.2
	8	1.3	1.6	2.1
	less than 8	1.2	1.4	1.8

APPLICATION	NATURE LOAD				NATURE LOAD		
	UNIFORM	MODERATE SHOCK	HEAVY SHOCK		UNIFORM	MODERATE SHOCK	HEAVY SHOCK
AGITATORS				HOISTS			
Pure Liquids	●			Heavy Duty			●
Liquids and Solids		●		Medium Duty		●	
Liquid - Variable Density		●		Skip		●	
BLOWERS				LAUNDRY MACHINES			
Centrifugal	●			Reversing Washers		●	
Roots		●		Tumblers		●	
BREWING & DISTILLING				MILLS			
Bottling Machinery	●			Hammer			●
Can Filling Machines	●			Tumblers			●
CLAY WORKING MACHINERY				PAPER MILLS			
Brick Press			●	Bleachers	●		
Briquette Machines			●	Beater & Pulper		●	
CONVEYORS				Loghaul			●
Belt, Bucket or Chain	●			PUMPS			
Reciprocating		●		Centrifugal	●		
CRANES				Gear	●		
Main Hoists	●			Reciprocating (3 or more cyl.)		●	
CRUSHERS				Reciprocating (1 or 2 cyl.)			●
Ore and Stone			●	RUBBER & PLASTICS			
ELEVATORS				Mixing Mills			●
Escalators	●			Laboratory Equipment		●	
Freight		●		Masticator			●
FEEDERS				SCREENS			
Reciprocating			●	Rotary - Stone or Gravel		●	
Screw		●		Vibrating			●
FOOD INDUSTRY				TEXTILES			
Dough Mixer		●		Cards, Dryers, Looms		●	
Grinder		●					

NOTE : Certain applications outside those listed above may necessitate special consideration. In such cases refer to, Utkarsh.

For higher speeds, Couplings are required in Cast - Steel only. Any couplings with Steel construction are also available on request.

$$\text{TORQUE Nm} = \frac{30000 \times \text{KW}}{3.1416 (\pi) \times \text{RPM}}$$

MULTIPLY
FOOT _ LBS
KILOGRAM - METER (Kg-m)
HORSEPOWER (UK)
HORSEPOWER (METRIC)

BY
1.3558
9.8066
0.746
0.7355

TO OBTAIN
NEWTON - METER (Nm)
NEWTON - METER (Nm)
KILOWATTS (KW)
KILOWATTS (KW)

GUIDE LINES FOR SELECTION

- * Service Factor : Determine service factor from application table. Design Power : Multiply running power of driven machinery by the service factor.
- * Coupling Size : Refer to the selection chart for your required coupling so that the rating is equal or greater than design power. If the rpm is different than available in the charts then the torque should be calculated from the equation above and the coupling should be selected with the rated torque exceeding that of the calculated torque.
- * Bore Size : Refer to the related coupling dimensional table to check that the required bores can be accommodated. If not select the higher size which will accommodate the shaft size.



Perform up for the global market!

MANUFACTURED BY



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