

POONA COUPLINGS PVT. LTD.

Industrial Range UJ Couplings

ISO 9001

BUREAU VERITAS
Certification



008



The Correct Solution

UJ Features And Benefits



POONA COUPLINGS have been leaders in the design and manufacture of flexible couplings for over 20 years. with the following capabilities:

- Approved to ISO 9001:2008
- Total quality system
- Latest CAD technology
- Torsional vibration analysis
- Transient and finite element analysis

Applications

- Railway Vehicles
- Construction Plant
- Marine Drive
- Pumps
- Paper Mills
- Steel Mills
- General Machinery
- Power Take Offs

Features

- Intrinsically fail safe
- Control of resonant torsional vibration
- Severe shock load protection
- Maintenance free
- Introduces damping into the driveline

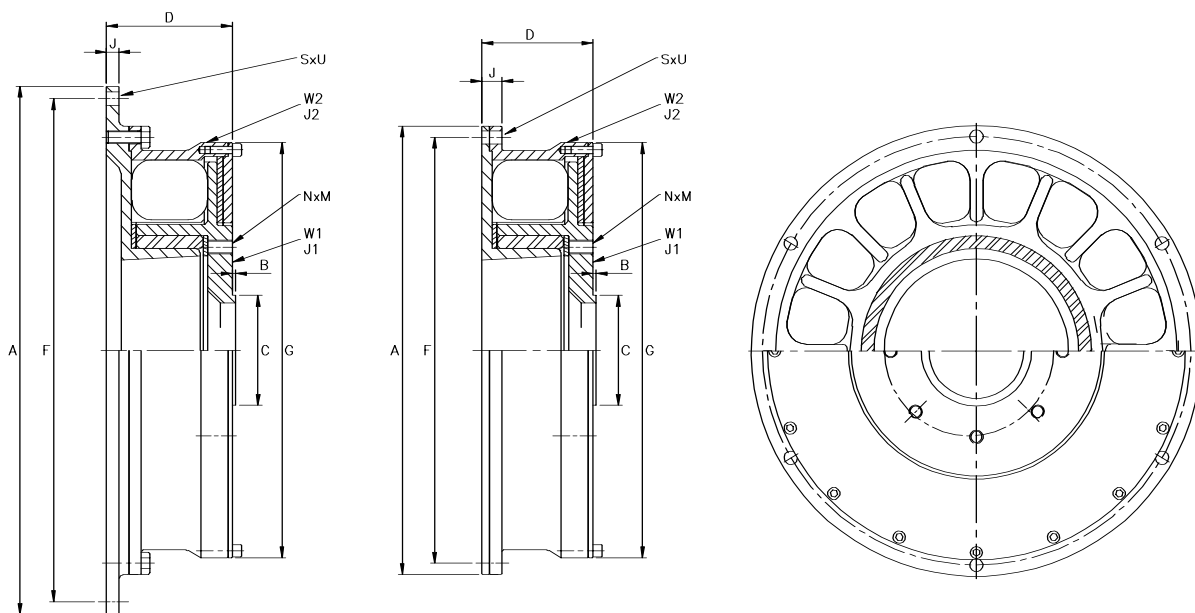
Benefits

- Ensuring continuous operation of the driveline.
- Achieving low vibratory loads in the driveline components by selection of optimum stiffness characteristics.
- Avoiding failure of the driveline under short circuit and other transient conditions .
- With no lubrication or adjustment required resulting in low running costs.
- Reduces the vibratory torque in the driveline and hence increases plant life.

Exploded view of basic coupling parts



UJ Flexible Coupling - Dimensional Data



Dimensional Data									
COUPLING SIZE	UJ1500		UJ2000		UJ5000		UJ10000		UJ18000
	SAE 10	SAE 11.5	SAE 11.5	SAE 14	SAE 14	SAE 18	SAE 18	SAE 21	SAE 21
A	314.3	352.4	352.4	466.7	466.7	571.5	571.5	673.1	673.1
D	84.0	91.0	86.0	96.0	115.0	127	143.5	162.5	183.0
F	295.3	333.4	333.4	438.2	438.2	542.9	542.9	641.4	641.4
G	283.0	283.0	316.0	316.0	426.5	426.5	529.0	529.0	620.0
J	17.5	10	19.5	10	23.0	14	26.0	16	31.5
S	8	8	8	8	8	6	6	12	12
U	10.5	10.5	10.5	13.5	13.5	17.0	17.0	17.0	17.0
Standard Flange N x M	DIN 150		DIN 180		DIN 225		DIN 250		DIN 285
B	8 x M12		10 x M16		8 x M16		8 x M18		8 x M20
C	2.3		2.5		4.0		4.0		5.7
Weight (kg)	6.9		9.2		21.2		43.3		81.5
Inertia (kgm ²)	W1	W2	W1	W2	W1	W2	W1	W2	W1
J1	0.05		0.08		0.38		1.18		3.00
J2	0.25	0.38	0.50	0.83	1.65	2.88	4.40	7.60	10.70

UJ Flexible Coupling - Technical Data

Technical Information	UJ1500	UJ2000	UJ5000	UJ10000	UJ18000
Nominal Torque T _{KN} (kNm)	1.5	2.0	5.0	10.0	18.0
Maximum Torque TK _{max} kNm)	4.5	6.0	15.0	30.0	54.0
Vibratory Torque TK _w (kNm)	0.5	0.66	1.66	3.33	6.0
Magnifier					
Allowable heat absorbed (w)	400	440	600	770	950
Maximum Speed (rpm)	3790	3345	2460	1985	1690

Dynamic Torsional Stiffness MNm/rad		UJ1500	UJ2000	UJ5000	UJ10000	UJ18000
10% T _{KN}	SM50	0.040	0.055	0.137	0.275	0.490
	SM60	0.050	0.068	0.170	0.335	0.610
	SM70	0.080	0.107	0.270	0.535	0.965
25% T _{KN}	SM50	0.045	0.060	0.145	0.290	0.525
	SM60	0.052	0.070	0.172	0.340	0.615
	SM70	0.082	0.110	0.275	0.540	0.970
50% T _{KN}	SM50	0.58	0.077	0.195	0.385	0.695
	SM60	0.065	0.085	0.215	0.425	0.770
	SM70	0.090	0.125	0.305	0.610	1.100
75% T _{KN}	SM50	0.085	0.112	0.280	0.560	1.005
	SM60	0.092	0.125	0.305	0.615	1.100
	SM70	0.115	0.150	0.380	0.760	1.370
100% T _{KN}	SM50	0.122	0.162	0.405	0.810	1.460
	SM60	0.135	0.180	0.450	0.900	1.620
	SM70	0.150	0.200	0.500	0.990	1.785
Flange Option						
Mechanics Joint		4c	7c	8c	8c	
		5c	8c	8.5c	8.5c	-
		6c		9c	9c	
DIN Flange		90	120 - 8 x M10	150 - 8 x M12		250
		100	120 - 8 x M8	150 - 8 x M10		
		120 - 8 x M10	150 - 8 x M12	180 - 8 x M14	225 - 8 x M16	*285 - 8 x M20
		120 - 8 x M8	150 - 8 x M10	180 - 10 x M16	225 - 12 x M16	315
		*150 - 8 x M12	180 - 8 x M14	*225 - 8 x M16	*250 - 8 x M18	350
	150 - 8 x M10	*180 - 10 x M16	225 - 12 x M16			
SAE Flange			1280	1510		
		1310	1310	1550		1950
		1350	1350	1610	1880	
		1410	1410	1710	1910	2050
				1760		
			1810			



At Poona Coupling Hi-Tec we can also supply the universal joint shaft and companion flange as a complete package with our coupling ensuring trouble free installation.

The universal joint shaft can be supplied with DIN, SAE or MECHANICS flanges for torques up to 270 kNm.



HEAVY DUTY COMMERCIAL VEHICLE



DIESEL LOCOMOTIVE VEHICLE

The Correct Solution



Poona Couplings started as a joint venture between Ashok Mulye and Holset Engineering co. (Wholly owned subsidiary of Cummins USA) to manufacture their entire range of flexible couplings (0.4 kN to 600 kN). The company started commercial production in Sept. 86 and so far over 3,00,000 couplings have been supplied to satisfied customers all over the world. Holset's Coupling Division was acquired by Renold PLC in UK. Poona Couplings is now supplying couplings worldwide including Renold HiTec Couplings.

OTHER PRODUCT RANGE PRODUCED BY POONA COUPLINGS PVT. LTD.



TYPE PM



TYPE RB



TYPE DCB

POONA COUPLINGS PRIVATE LIMITED

REGISTERED OFFICE

49/A/4, Erandwane, Pune- 411 004 (INDIA).
TEL : (020) 25436471, 25420658.
FAX : (020) 25438837
Email : pc@vsnl.com

FACTORY

G.No. 106, Pirangut, Taluka Mulshi, Dist. Pune.
TEL : (020) 64730164, 64730165
FAX : (020) 20291076
Email : poonacouplings@vsnl.net

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