

Pin Bush Coupling

Applications

- Conveyors
- Pumps
- Escalators
- Mixers
- Power Transmission
- Process Industries
- Gear Boxes



Bush Type Flexible Coupling Selection

The function of a flexible coupling is to transmit torque from one shaft to another and is particularly use full in cases where limited misalignment may occur and also to absorb shock loads.

The RYDON Pin Bush Coupling of the cushioned drive type transmits the torque through high tensile steel bolts to the machine input shaft. Highly developed rubbers components are used in bushes in absorb loads, tensional vibrations and slight misalignments.

Simple and compact in construction, the RYDON Coupling is capable of transmitting high torques at maximum speeds. The flanges are manufactured with cast iron, Grade material GG25. This type of coupling permits drive in either direction and requires neither lubrication nor adjustment after fitting. The flexible bushes remain unaffected by water, dust and atmospheric conditions.

Machines which are to be coupled by flexible coupling should first be aligned with all possible accuracy. The capacity of the coupling will then deal with misalignments which occur by reason of temperature variations or heavy shaft loading. Setting of machine foundations or bearing wear will also cause extra loading to be imposed on the coupling. Any or all of these conditions can occur once the machines have been coupled.

Flanges are bored to suit requirements and are keyway to British Standard Specification, unless otherwise stated. They can also be supplied with the listed minimum bore to permit machining on side.

Power requirements for the standard couplings range from 0.81 Kw to 249 Kw at 100 r.p.m. and sizes from RPC095 to PRC530.

Details required for coupling selection are:

- Types of driven machine and operating hours per day.
- Speed and power absorbed by driven machine (If absorbed power is not known, it is calculated based on power rating of the prime mover).
- Diameter of shafts to be connected.

PROCEDURE:

- **Service Factor** : Determine the required service factor.
- **Design Power** : Multiply the normal running power by the service factor. This gives the design power which is used as a basis for selecting the coupling.
- **Coupling Size** : Refer to the appropriate speed, read across until a power greater than that required in step (b) is found. The size of coupling required is given at the head of the column.
- **Bore Size** : Check from dimension, whether the chosen flanges can accommodate the required bores.

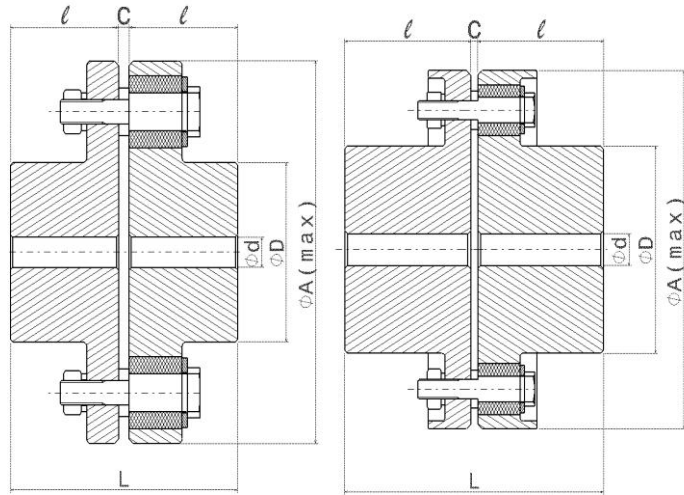
Features:

- Compact Design
- Maintenance free
- Permits drive in either direction
- Smooth & quiet operation
- Effective shocks and vibration absorption
- Easy dismantling with standard spanners
- Flexibility in installation

SERVICE FACTORS					
DRIVEN MACHINE	Electric Motor Steam Turbine Shafting	Steam Engine Water Turbine	IC Engine Multi-Cylinder	IC Engine Single Cylinder Diesel Multi-Cylinder	Diesel Engine Single Cylinder
Even Torque Machines; Smooth Loads, Generators; Centrifugal Pumps; Blowers; Small Fans; Shafting	1	1.25	1.5	2	2.5
Machine Tools (light); Beaters; Exhausters; Wood-working Machines (light); Alternators; Welding Generators; Textile Machines,	1.25	1.5	1.75	2.25	2.75
Multi-Crank Compressors and Pumps; Generators (fluctuating Loads); Rotary Dryers & Screens; Rotary Compressors; Planers; Wood-Working Machines (heavy); Pulp Grinders; Shakers; Mine Fans	1.5	1.75	2	2.75	3
Wire Mills; Cement Mills; Small Printing Presses.	1.75	2	2.25	3	3.25
Single Crank Compressors & Pumps; Hammers; Ball & Tube Mills; Rolling Mills (light); Shearing Machines; Punches; Rocks & Stone Crushers; Brick Mahing and similar Machines; Printing Presses (large); Grinders; Pulverisors; Cranes & Winches; Mechanical Shovels & Dredges; Winding Gears and Drums.	2	2.25	2.5	3.25	3.5
Heavy Rolling Mill Drives; Continuous, Prolonged & Reversing Drives; Traction and Haulage Loads.	2.25	2.5	2.75	3.5	3.75

PIN BUSH COUPLING SELECTION																		POWER RATINGS (Kw)		
Speed Rev /Min	COUPLING SIZES																			
	RP 095	RP 114	RP 130	RP 160	RP 191	RP 191 A	RP 225	RP 254	RP 254 A	RP 254 B	RP 290	RP 300	RP 310	RP 340	RP 360	RP 390	RP 410	RP 440	RP 480	RP 530
100	0.81	3.25	5.4	6.5	8.7	13	17.4	24.7	30.7	37	43.5	54.4	60.9	76.1	91.4	104	139	151	189	249
200	1.62	6.5	10.8	13	17.4	26	34.8	49.4	61.4	74	87	108.8	121.8	152.2	182.8	208	278	302	378	498
300	2.43	9.75	16.2	19.5	26.1	39	52.2	74.1	92.1	111	130.5	163.2	182.7	228.3	274.2	312	417	453	567	747
400	3.24	13	21.6	26	34.8	52	69.6	98.8	122.8	148	174	217.6	243.6	304.4	365.6	416	556	604	756	996
500	4.05	16.25	27	32.5	43.5	65	87	123.5	153.5	185	217.5	272	304.5	380.5	457	520	695	755	945	1245
600	4.86	19.5	32.4	39	52.2	78	104.2	148.2	184.2	222	261	326.4	365.4	456.6	548.4	624	834	906	1134	1494
700	5.67	22.75	37.8	45.5	60.9	91	121.8	172.9	214.9	259	304.5	380.8	426.3	532.7	639.8	728	973	1057	1323	1743
720	5.83	23.4	38.9	46.8	62.6	93.6	125.3	177.8	221	266.4	313.2	391.7	438.5	547.9	658	749	1001	1087	1361	1793
800	6.48	26	43.2	52	69.6	104	139.2	197.6	245.6	296	348	435.2	487.2	608.8	731.2	832	1112	1208	1512	1992
900	7.29	29.25	48.6	58.5	78.3	117	156.6	223.3	276	333	391.5	489.6	548.1	684.9	822.6	936	1251	1359	1701	2241
960	7.77	31.2	51.8	62.4	83.5	124.8	167	237.1	294.7	355.2	417.6	522.2	584.6	730.6	877.4	998	1334	1450	1814	2390
1000	8.1	32.5	54	65	87	130	174	247	307	370	435	544	609	761	914	1040	1390	1510	1890	2490
1200	9.72	39	64.8	78	104.4	156	208.8	296.4	368.4	444	522	652.8	730.8	913.2	1097	1284	1668	1812	2268	
1400	11.34	45.5	75.6	91	121.8	182	243.6	345.8	429.8	518	609	761.6	852.6	1065	1280					
1440	11.66	46.8	77.8	93.6	125.3	187.2	250.6	355.7	442	532.8	626.4	783.4	877	1098	1316					
1600	12.96	52	86.4	104	139.2	208	278.4	395.2	491	592	696	870.4	974.4	1218	1462					
1800	14.58	58.5	97.2	117	156.6	234	313.2	444.6	552.6	666	783	979.2								
2000	16.2	65	108	130	174	260	348	494	614	740										
2200	17.82	71.5	118.8	143	191.4	286	382.8	543.4	675.4	814										
2400	19.44	78	129.6	156	208.8	312	417.6													
2600	21.06	84.5	140.4	169	226.2	338	452.4													
2800	22.68	91	151.2	182	243.6	364														
2880	23.33	93.6	155.5	187.2	250.6	374.4														
3000	24.3	97.5	162	195	261	390														
3500	28.35	113.75	189	260																
4000	32.4	130	216																	
4500	36.45	146.25																		

PIN BUSH COUPLING



RP 095-191

RP 225-530

Model No	(∅d) BORE (mm).		Hub (mm)			Overall Size (mm)			Torque (Nm)	Max. Speed (rpm)
	Min. Bore (mm)	Max. Bore (mm)	∅D	ℓ	C	∅A	L	No. of Bolts		
RP 095	12.7	28	44	38	3	95	79	3	77	6100
RP 114	12.7	30	51	48	3	114	99	4	310	5100
RP 130	16	42	67	51	3	130	105	6	516	4400
RP 160	16	48	75	51	5	160	107	4	621	3600
RP 191	20	65	105	60	5	191	125	4	831	3000
RP 191 A								6	1241	
RP 225	25	75	105	76	5	225	157	6	1662	2600
RP 254	45	95	135	89	5	254	183	8	2359	2300
RP 254 A								10	2932	
RP 254 B								12	3533	
RP 290	60	115	170	115	5	290	235	12	4154	1950
RP 300	60	120	180	115	5	300	235	14	5195	1900
RP 310	65	130	195	125	5	310	255	16	5816	1850
RP 340	65	135	200	130	5	340	265	18	7268	1650
RP 360	70	140	210	135	6	360	276	12	8729	1590
RP 390	80	150	225	155	6	390	316	13	9932	1470
RP 410	90	160	240	165	6	410	336	15	13274	1400
RP 440	100	170	255	180	6	440	366	16	14420	1300
RP 480	110	180	270	190	6	480	386	17	18050	1200
RP 530	120	190	285	200	6	530	406	20	23780	1080

All Dimensions are subject to alteration without notice