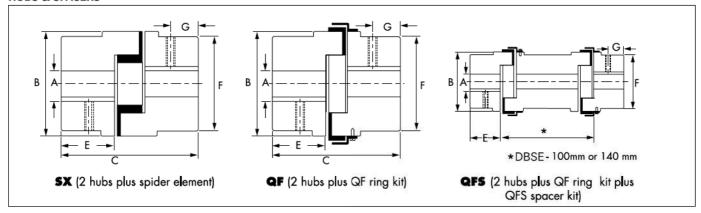
### Jaw Couplings

Fenner Jaw Couplings offer a range of hub and element variants to meet the demand for low cost, general purpose and spacer type flexible couplings. They cater for incidental misalignment, absorb shock loads and damp out small amplitude vibrations.

### **HUBS & SPACERS**



#### **DIMENSIONS: SX, QF AND QFS**

Pilot Bore Hub Code*	Size	А		В		С	Е	F	G	Set	Approx†	Max.
		Pilot	Max	SX	QF	J	_		J	Screw	(kg)	(rev/min)
968G0099	035	3	9	16.0	_	27	13	16.0	3.0	M3	0.03	31000
968A0099	050	6	14	27.5	_	44	16	27.5	6.5	M6	0.10	18000
968B0099	070	9	19	35.0	_	51	19	35.0	9.5	M6	0.25	14000
968C0099	075	9	24	44.5	-	54	21	44.5	8.0	M6	0.45	11000
968H0099	090	9	24	54.0	_	54	21	54.0	8.7	M6	0.55	9000
968D0099	095	9	28	54.0	64	64	25	54.0	11.5	M6	0.65	9000
968E0099	100	12	35	65.0	77	89	35	65.0	12.5	M8	1.55	7000
968F0099	110	15	42	84.0	97	108	43	84.0	20.5	M10	3.00	5000
968J0099	150	15	48	96.0	112	115	45	96.0	22.5	M10	4.85	4000
968K0099	190	19	55	115.0	130	133	54	102.0	22.5	M12	7.00	3600
968L0099	225	19	60	127.0	143	153	64	108.0	25.5	M12	9.00	3600

All dimensions in millimetres unless otherwise stated

Hub material is high grade cast iron. Spacer material is aluminium

DBSE = distance between shaft ends

## **ASSEMBLY VARIANTS - SEE DIAGRAM TO RIGHT**

- Simple coupling of two close-coupled shafts using 2 x SX hubs + a spider shaped element.

  The element petals are connected by an inner ring to maintain location between the 'jaws' on the hubs.

  Urethane and Hytrel® spider elements are available to enhance the coupling power rating. (see page 119).
- On sizes 095 and above, the SX hubs are drilled/tapped for fixing a pressed steel 'ring' or sleeve.

  The ring retains a QF type nitrile rubber element on which the petals are joined by an outer band.

  Unscrewing and withdrawing the ring allows the element to be removed for replacement without disturbing the hubs.

  The retaining ring and elemnt are supplied together as a 'ring kit'.
- Used when the machine shafts to be coupled are set apart by a DBSE (distance between shaft ends) of 100 or 140mm.
   This arrangement is common with centrifugal pump applications.
   A QF coupling is used with a light alloy spacer, which is supplied complete with a second ring kit, to create a spacer coupling which is easily disassembled by removing the two elements.

<sup>†</sup> Mass of complete SX or QF type with pilot bore hubs

<sup>\*</sup> Bored or bored and keywayed hubs can be supplied.

# Jaw Couplings

### JAW COUPLING ELEMENTS

		Temperature	Max Misa	Power		
Code	Туре	Range (°C)	Ango	Par. (mm)	Factor	
968-9000	Nitrile (Spider)	-40 to 100	1	0.38	1	
968-9100	Nitrile (QF)	-40 to 100	1	0.38	1	
968-9500	Urethane	-35 to 70	1	1 0.38		
968–9400	Hytrel <sup>®</sup>	-50 to 120	1/2	0.38	3*	

4th digit = Alpha character for coupling size

Note: Sizes 90 and 95 SX couplings use the same spider element.

# SELECTION

- Find Service Factor for application from table right. a)
- b) Multiply normal running power by Service Factor (and Temperature Factor from table above for CEC hubs) to give design power.
- Select a standard nitrile element coupling size from Power Ratings table below by c) reading across from the appropriate speed until a power equal to or greater than the design power is found. Coupling size is at the head of the column.
- d) For alternative elements divide the design power from step (b) by the Element Power Factor in table above and repeat step (c) with the new design power.
- For speeds other than those listed use the nominal torque ratings from the Power e) Ratings table below.

Required Torque (Nm) = Design power (kW) x 9550 rev/min

f) Check from the hub Dimensions tables that bore capacity is adequate for the coupled shafts.

Note: Orders for complete couplings should include hubs, elements, ring kits and spacer kits seperatly.

## **POWER RATINGS (KW) - NITRILE ELEMENTS**

Speed (rev/min)	Coupling Size										
	035	050	070	075	090	095	100	110	150	190	225
100	0.05	0.037	0.06	0.12	0.20	0.27	0.58	1.10	1.56	2.09	2.93
720	0.04	0.260	0.43	0.90	1.44	1.95	4.18	7.94	11.23	15.07	21.09
960	0.05	0.350	0.58	1.20	1.93	2.59	5.58	10.59	14.98	20.09	28.13
1440	0.07	0.530	0.87	1.80	2.89	3.89	8.36	15.88	22.46	30.14	42.20
2880	0.15	1.730	3.61	5.78	7.78	16.73	31.77	44.93	60.28	84.40	84.40
3600	0.19	2.170	4.51	7.22	9.73	20.91	39.71	56.16	75.35	105.50	105.50
Nominal Torque (Nm)	0.50	3.510	5.77	11.90	19.20	25.80	55.4	105.00	150.00	200.00	280.00

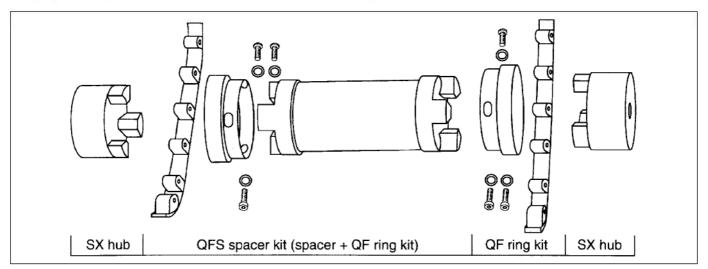
# **SPACERS AND OF RETAINING RINGS - CODES**

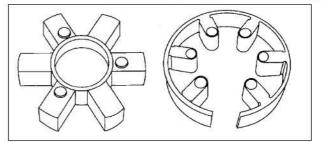
All codes first 4 digits: 968-

4th digit: Alpha character for coupling size

5/6th digits: Spacer kit = 33; Retaining ring kit = 99

7/8th digits: Retaining ring kit = 00; Spacer kit 100mm = 10; Spacer kit 140mm = 14





## SERVICE FACTORS

Driven Load	Prime Mover				
Driven Load	Electric Motor				
Uniform Load	1.0				
Moderate Shock	1.5				
Heavy Shock	2.0				

<sup>\*</sup>Power factor = 2 when used with CEC hubs