

# GURLEY MODELS SCA, SCD, AND SCE SHAFT COUPLINGS

The Models **SCA**, **SCD** and **SCE** are flexible-diaphragm, zero-backlash shaft couplings that are designed to accurately transmit system motion to an encoder while protecting the encoder's bearings from overloads caused by moderate amounts of installation misalignment. The **SCD** attaches to each shaft with an M2 set screw and is for smaller instrument-grade encoders with shaft diameters of 4 mm max. The **SCA** and **SCE** have clamp-style shaft attachment and are recommended for most industrial encoders.



## SPECIFICATIONS

MODEL	SCD	SCA	SCE
LENGTH X DIA, MM [IN]	20.2 x 16 [0.8 x 0.6]	22 x 30 [0.9 x 1.2]	38 x 70 [1.5 x 2.8]
KINEMATIC ACCURACY WITH PARALLEL OFFSET P MM AND ANGULAR MISALIGNMENT 0.09	±30 arcs (P = 0.1)	±10 arcs (P = 0.1)	±2 arcs (P = 0.05)
TORSIONAL RIGIDITY, N-M/RAD [IN-OZ/ARCS]	50 [0.3]	150 [0.1]	4000 [2.7]
MAXIMUM PARALLEL OFFSET, MM [IN]	0.2 [0.008]	0.2 [0.008]	0.3 [0.012]
MAXIMUM AXIAL EXTENSION OR COMPRESSION, MM [IN]	0.2 [0.008]	0.2 [0.008]	0.2 [0.008]
MAXIMUM ANGULAR MISALIGNMENT	0.5°	1°	0.5°
MOMENT OF INERTIA	$1.9 \times 10^{-7}$ [ $2.7 \times 10^{-5}$ ]	$3 \times 10^{-6}$ [ $4.2 \times 10^{-4}$ ]	$2 \times 10^{-4}$ [ $2.8 \times 10^{-2}$ ]
WEIGHT, G [OZ]	7 [0.25]	27 [0.95]	220 [7.8]
MAX. SPEED, RPM	10,000	16,000	3,000
	Metric Dimension:	F7	
COUPLING ID TOLERANCE	English Dimension:	1/8" + 0.0005; 1/4"-3/8" + 0.0006; 1/2" + 0.0007 (all -0.0000)	

## ORDERING INFORMATION: MODEL - $\phi A$ (larger end) - $\phi B$ (smaller end)

$\phi A$ or $\phi B$	14M	08E	10M	06E	08M	05E	04E	06M	04M	02E	03M
Shaft dia	14 mm	1/2"	10 mm	3/8"	8 mm	5/16"	1/4"	6 mm	4 mm	1/8"	3 mm
Availability	SCE		SCE, SCA		SCA			SCA, SCD			

ISO  
9001  
CERTIFIED

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