

INVERTED DESIGN UNIVERSAL JOINTS



SINGLE & DOUBLE JOINTS
ZERO BACKLASH

PHONE: 516.328.3300 • FAX: 516.326.8827 • WWW.SDP-SI.COM

› **MATERIAL:**

Body - 303 Stainless Steel
Balls - 440 Stainless Steel

› **LUBRICATION:**

Dry film plus oil suspension

› **FEATURES:**

Zero backlash is attained with patented design and close dimensional control of components.
Torque is transmitted by hardened steel balls operating in burnished sockets.
Elastic preload between components eliminates all clearances.
Inverted design reduces size, weight and inertia for a given torque capacity.
Sealed-in lubrication.

› **SPECIFICATIONS:**

Maximum Operating Angle:

Fig. 1 Single Joint: 20° at 2000 rpm

Fig. 2 Double Joint: 40° at 2000 rpm

Torque Ratings:

For static conditions with in-line loading.

These joints can be made into telescoping units by mating them with telescoping miniature ball splines:

S59PY5... pg. 4-24

S59PQ5... pg. 4-25

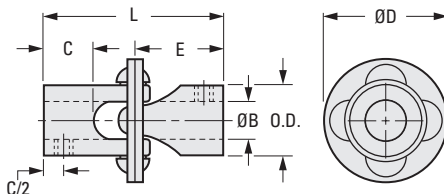
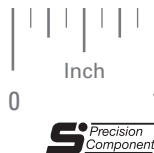
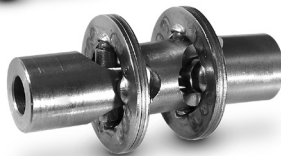


Fig. 1 Single Joint

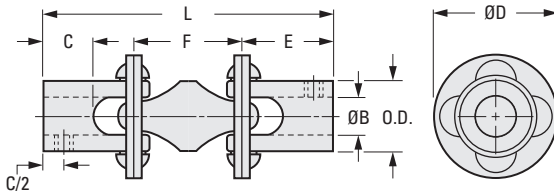


Fig. 2 Double Joint

INCH COMPONENT

Catalog Number	O.D.	B Bore +.001 -.000	C Bore Depth	E End Unit	F Center	L Length	D Flange Dia.	Set Screws	Max. Torque at 0° ozf in.	Max. Oper. Speed at 0° rpm	Max. Angle Degrees
Fig. 1 Single Joint											
S57PY4-SFU0312	3/8	.1875	3/8	3/4		1-1/2	3/4	*	256	4000	20°
S57PY4-SFU0415	1/2	.2500	7/16	13/16		1-5/8	15/16		320		
S57PY4-SFU0622	3/4	.3750	5/8	1		2	1-3/8	480			
S57PY4-SFU0830	1	.5000	7/8	1-5/16		2-5/8	1-7/8	1200Δ			
Fig. 2 Double Joint											
S57PY4-DFU0312	3/8	.1875	3/8	3/4	5/8	2-1/8	3/4	*	256	4000	40°
S57PY4-DFU0415	1/2	.2500	7/16	13/16	25/32	2-13/32	15/16		320		
S57PY4-DFU0622	3/4	.3750	5/8	1	7/8	2-7/8	1-3/8	480			
S57PY4-DFU0830	1	.5000	7/8	1-5/16	1-1/4	3-7/8	1-7/8	1200Δ			

* Set screws available on special order.

Δ 4800 ozf in. torque rating available on special order.

Split hub ends and other bores also available on special order.

7-5
D820

REVISED:
05/23/23

