

# ACCESSORIES: ALIGNMENT COUPLERS

## Solid Steel self-aligning piston rod couplers

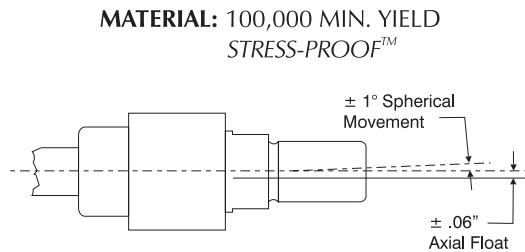
TRD's alignment couplers can virtually pay for themselves by eliminating the need to precisely mount cylinders in your applications. Our couplers prevent binding and erratic movement that misalignment causes, extending the bearing and seal life of your cylinders. Proper use of alignment couplers will allow cylinders to stroke in the shortest time possible, increasing production!

### Benefits

- Rod alignment couplers eliminate expensive machining for mounting fixed or rigid cylinders on guided or slide applications.
- Cylinder efficiency is increased by eliminating friction caused by misalignment. Couplers compensate for 1° angular error and .06" lateral misalignment on push or pull strokes.
- Couplers provide greater reliability, performance, and reduce cylinder component wear.
- Simplifies alignment problems in the field.

### Design Tips

- Alignment couplers can be exposed to high stresses that are not apparent in an application. Always use the largest thread size practical in your application. (see chart for maximum pull yields)
- Use jam nut to lock coupler to rod when used with full diameter threads (example: .63" thread on .63" rod).
- Large thread sizes can be "pinned" in high impact applications, eliminating unwanted loosening of coupler from rod. Always use the smallest pin possible to avoid weakening the piston rod thread. (example: Use a .09" diameter pin for .63" rod threads and larger)



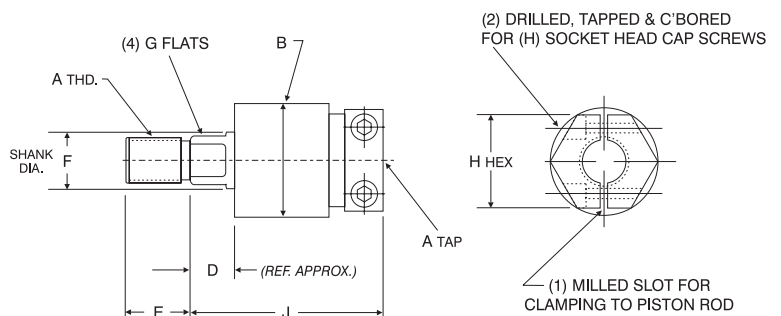
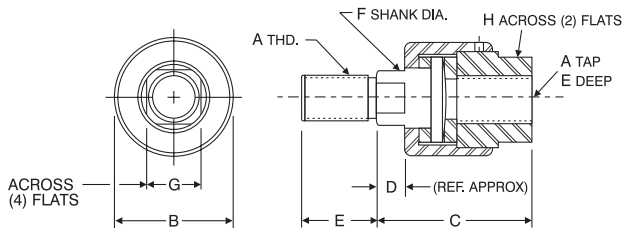
Standard AC Coupler  
AC250 - AC2000



ACH Coupler  
ACH250 - ACH1250

### ACH SERIES

### AC SERIES



ALIGNMENT COUPLER DIMENSIONS											
PART NO.	A	B	C	D	E	F	G	H	H HEX	J	MAX PULL AT YIELD
AC250	.25-28	1.13	1.75	.38	.50	.50	.38	.69	1.25	2	6,000
AC312	.31-24	1.13	1.75	.38	.50	.50	.38	.69	1.25	2	8,300
AC375	.38-24	1.13	1.75	.38	.50	.50	.38	.69	1.25	2	8,300
AC437	.44-20	1.25	2	.44	.75	.63	.50	.81	1.25	2.16	10,000
AC500	.50-20	1.25	2	.44	.75	.63	.50	.81	1.13	2.16	14,000
AC625	.63-18	1.25	2	.44	.75	.63	.50	.81	1.25	2.16	19,000
AC750	.75-16	1.75	2.31	.44	1.13	.97	.81	1.13	1.75	2.50	34,000
AC875	.88-14	1.75	2.31	.44	1.13	.97	.81	1.13	1.75	2.50	39,000
AC1000	1-14	2.50	2.94	.44	1.63	1.34	1.16	1.63	2.50	2.94	64,000
AC1250	1.25-12	2.50	2.94	.44	1.63	1.34	1.16	1.63	2.50	2.94	78,000
AC1375	1.38-12	2.50	2.94	.44	1.63	1.34	1.16	1.63	—	—	78,000
AC1500	1.50-12	3.25	4.38	.88	2.25	1.97	1.75	2.38	—	—	134,000
AC1750	1.75-12	3.25	4.38	.88	2.25	1.97	1.75	2.38	—	—	134,000
AC1875	1.88-12	3.75	5.63	1	3	2.47	2.13	2.75	—	—	134,000
AC2000	2-12	3.75	5.63	1	3	2.47	2.13	2.75	—	—	195,000

\*Please specify AC or ACH coupler when ordering:  
i.e.: AC750 (Std. Coupler) or ACH750 (Hex Coupler)

### How to Order:

AC 250 - 312 FEMALE

(Optional alternative size\*)

SERIES	SIZE	SIZE
AC	250	250
AC	312	312
ACH	375	375
	437	437
	500	500
	625	625
	750	750
	875	875
	1000	1000
	1250	1250
	1375	1375
	1500	1500
	1750	1750

\*You can order different thread sizes within the same size of coupler DIA. (Refer to "B" Diameter in dimension chart)

#### Ordering Examples:

- AC250 (AC with male & female .25-28 thread)
- ACH500 (ACH with male & female .50-20 thread)
- AC437-625 FEMALE (AC with .44-20 male and .63-18 female thread)

# ACCESSORIES: ALIGNMENT COUPLERS

## Solid Stainless Steel self-aligning piston rod couplers

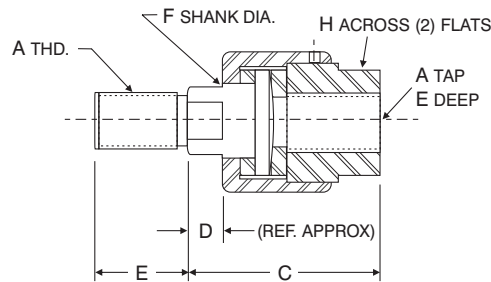
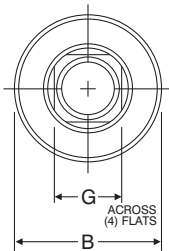
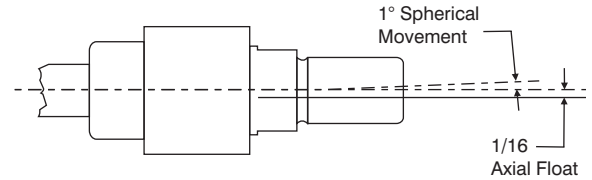
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### Benefits

- Rod alignment couplers eliminate expensive machining for mounting fixed or rigid cylinders on guided or slide applications.
- Cylinder efficiency is increased by eliminating friction caused by misalignment. Couplers compensate for 1° angular error and 1/16" lateral misalignment on push or pull strokes.
- Couplers provide greater reliability, performance, and reduce cylinder component wear.
- Simplifies alignment problems in the field.

### Design Tips

- Alignment couplers can be exposed to high stresses that are not apparent in an application. Always use the largest thread size practical in your application. (see chart for maximum pull yields)
- Use jam nut to lock coupler to rod when used with full diameter threads (example: 5/8" thread on 5/8" rod).
- Large thread sizes can be "pinned" in high impact applications, eliminating unwanted loosening of coupler from rod. Always use the smallest pin possible to avoid weakening the piston rod thread. (example: Use a 3/32" diameter pin for 5/8" rod threads and larger)



ALIGNMENT COUPLERS									
PART NO.	A	B	C	D	E	F	G	H	MAX PULL AT YIELD
SS-AC250	1/4-28	1 1/8	1 3/4	3/8	1/2	1/2	3/8	11/16	1,000 LBS.
SS-AC312	5/16-24	1 1/8	1 3/4	3/8	1/2	1/2	3/8	11/16	1,800 LBS.
SS-AC375	3/8-24	1 1/8	1 3/4	3/8	1/2	1/2	3/8	11/16	2,900 LBS.
SS-AC437	7/16-20	1 1/4	2	7/16	3/4	5/8	1/2	13/16	4,000 LBS.
SS-AC500	1/2-20	1 1/4	2	7/16	3/4	5/8	1/2	13/16	5,500 LBS.
SS-AC625	5/8-18	1 1/4	2	7/16	3/4	5/8	1/2	13/16	7,000 LBS.
SS-AC750	3/4-16	1 3/4	2 5/16	7/16	1 1/8	31/32	13/16	1 1/8	10,300 LBS.
SS-AC875	7/8-14	1 3/4	2 5/16	7/16	1 1/8	31/32	13/16	1 1/8	12,000 LBS.
SS-AC1000	1-14	2 1/2	2 15/16	7/16	1 5/8	1 11/32	1 5/32	1 5/8	15,000 LBS.
SS-AC1250	1 1/4-12	2 1/2	2 15/16	7/16	1 5/8	1 11/32	1 5/32	1 5/8	17,000 LBS.
SS-AC1500	1 1/2-12	3 1/4	4 3/8	7/8	2 1/4	1 31/32	1 3/4	2 3/8	20,000 LBS.

### SS-AC250 to SS-AC1500

±1° SPHERICAL MOVEMENT  
±1/16" AXIAL FLOAT

THREADS RANGE FROM  
1/4-28 UNF to 1 1/2-12 UNF