

TIE ROD CYLINDER TECHNICAL

HOW TO IDENTIFY TAK - BOK CYLINDERS

Barrel I/D	Barrel I/D	Barrel O/D	*** How to work out closed centre Measure barrel length in (? mm + 203 mm)	Cylinder Size
2"	50.8 mm	61 mm	Example ; TK 2008 -106 (261 + 203) = 464 mm C/C	2"
3"	76.2 mm	86 mm	Example ; TK 3008 -125 (261 + 203) = 464 mm C/C	3"
4"	101.6 mm	112 mm	Example ; TK 4008 -200 (261 + 203) = 464 mm C/C	4"

*** How to work out closed centre with no sample; use (260.4 mm) + (stroke mm) = closed centre in mm

Barrel I/D	Barrel I/D	Barrel O/D	*** How to work out open centre Measure closed centre in (? mm + stroke in mm)	Cylinder Size
2"	50.8 mm	61 mm	Example ; TK 2008 -106 (464 + 203) = 667 mm C/C	2"
3"	76.2 mm	86 mm	Example ; TK 3008 -125 (464 + 203) = 667 mm C/C	3"
4"	101.6 mm	112 mm	Example ; TK 4008 -200 (464 + 203) = 667 mm C/C	4"

How to work out threads

Bore Diameter	2" (50.8 mm)	3" (76.2 mm)	4" (101.6 mm)
Shaft Diameter	1-1/16" (27mm)	1-1/4" (31.75mm)	1-1/2" (38.1mm)
Thread U N F	1-1/16" - 12 UNF	1-1/4" - 12 UNF	1-1/2" - 12 UNF
Ports N P T	3/8"	1/2"	1/2"

NOTE: A* - SHAFT STROKE FOR ASAE TYPE CYLINDERS, YOU MUST ADD AN EXTRA 50.8 mm OR 2"

BUCKLING LOADS FOR TIE ROD CYLINDERS

2" CYLINDER

BUCKLING LOADS		STROKE		
Bore 2"	Shaft 1-1/16"	6" TO 18"	20" TO 24"	28" TO 36"
		Stable Region Safety 3:1	Safety 2:1	Safety 1:1

3" CYLINDER

BUCKLING LOADS		STROKE		
Bore 3"	Shaft 1-1/4"	6" TO 16"	18" TO 20"	24" TO 36"
Bore 3"	Shaft 1-1/2"	6" TO 24"	28" TO 36"	
		Stable Region Safety 3:1	Safety 2:1	Safety 1:1

4" CYLINDER

BUCKLING LOADS		STROKE		
Bore 4"	Shaft 2"	8" TO 36"		
		Stable Region Safety 3:1	Safety 2:1	Safety 1:1

CYLINDER DIMENSIONS

BORE	A***	B	C	E & G	H & I	J	M	Q	V
2"	10.25"	0.188"	3/8"	2.441"	1.125"	2.125"	2"	1-1/16"	2.874"
50.8 mm	260.4 mm	4.8 mm	NPT	62 mm	29 mm	54 mm	50.8 mm	UNF	73 mm
3"	10.25"	0.188"	1/2"	2.717"	1.125"	2.125"	2"	1-1/4"	3.78"
76.2 mm	260.4 mm	4.8 mm	NPT	69 mm	29 mm	54 mm	50.8 mm	UNF	96mm
4"	10.25"	0.25"	1/2"	2.717"	1.125"	2.125"	2.118"	1-1/2"	5.039"
101.6 mm	260.4 mm	6.35 mm	NPT	69 mm	29 mm	54 mm	53.8 mm	UNF	128 mm

