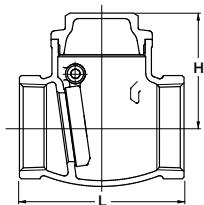


# PN16

# BRONZE SWING CHECK VALVE

Screwed Cap, Swing Type Disc  
Threaded ends to BS21 (JIS B0203)

16 bar at 100°C, 7 bar at 170°C, P-T rating : See page 01



**Fig. PN16R**

• Threaded ends to BS21 (JIS B0203)

## Materials

Parts	Material
Body	Bronze
Cap	Brass
Hinge pin	Brass
Disc	Brass

## Dimensions

Nominal Size	NPS	1/2	3/4	1	1 1/4	1 1/2	2
	DN	15	20	25	32	40	50
<b>L</b> Threaded end to end		53	61	70	81	91	109
<b>H</b> Height		39	45	50	58	65	75

## KITZ Bronze and Brass Materials to JIS Standards

### JIS H5120 (Copper & Copper Alloy Castings)

Cast bronze Class 6	Designation	Chemical composition (%)										Mechanical property	
		Cu	Sn	Zn	Pb	Ni	Fe	P	Sb	Al	Si	Tensile strength	Elongation (%)
	CAC406 (BC6)	83.0-87.0	4.0-6.0	4.0-6.0	4.0-6.0	1.0 Max.	0.3 Max.	0.05 Max.	0.2 Max.	0.01 Max.	0.01 Max.	195 Min. (N/mm <sup>2</sup> )	15 Min.

### JIS H3250 (Copper & Copper Alloy Rods and Bars)

Forged brass Alloy No.3771	Designation		Chemical composition (%)				Mechanical property	
	Extruded	Drawn	Cu	Pb	Fe + Sn	Zn	Tensile strength	Elongation (%)
	C3771BE	C3771BD	57.0-61.0	1.0-2.5	1.0 Max.	Remainder	315 Min. (N/mm <sup>2</sup> )	15 Min.

### JIS H3250 (Copper & Copper Alloy Rods and Bars)

Free-cutting brass Alloy No.3604	Designation		Chemical composition (%)					Mechanical property	
	Extruded	Drawn	Cu	Pb	Fe	Fe + Sn	Zn	Tensile strength	Elongation (%)
	C3604BE	C3604BD	57.0-61.0	1.8-3.7	0.5 Max.	1.0 Max.	Remainder	335 Min. (N/mm <sup>2</sup> )	—

## KITZ Bronze and Brass Materials to ASTM Standards

### ASTM B62

Chemical composition (%)											Mechanical properties		
Copper	Tin	Lead	Zinc	Nickel & Cobalt	Iron	Sulfur	Phosphorus	Antimony	Aluminum	Silicon	Minimum		
84.0-86.0	4.0-6.0	4.0-6.0	4.0-6.0	1.0 Max.	0.30 Max.	0.08 Max.	0.05 Max.	0.25 Max.	0.005 Max.	0.005 Max.	Tensile strength 30 ksi	Yield strength 14 ksi	Elongation in 2 in. 20%

### ASTM B584 C84400

Chemical composition (%)											Mechanical properties		
Copper	Tin	Lead	Zinc	Nickel & Cobalt	Iron	Sulfur	Phosphorus	Antimony	Aluminum	Silicon	Minimum		
78.0-82.0	2.3-3.5	6.0-8.0	7.0-10.0	1.0 Max.	0.40 Max.	0.08 Max.	0.02 Max.	0.25 Max.	0.005 Max.	0.005 Max.	Tensile strength 29 ksi	Yield strength 13 ksi	Elongation in 2 in. 18%

### ASTM B283 C37700

Chemical composition (%)				Mechanical properties		
Copper	Lead	Iron	Zinc	Minimum		
58.0-61.0	1.5-2.5	0.30 Max.	Remainder	Tensile strength 50 ksi	Yield strength 18 ksi	Elongation in 4x thickness 25%