

High-pressure fittings and accessories

Nominal pressure of 15,000 ... 60,000 psi [1,034 ... 4,136 bar]

Model HPFA

WIKA data sheet AC 09.32

Applications

- Oil and gas, chemical industry, machine building and automation
- For injection systems, test benches, hydraulic power packs
- Blasting/cutting with water, high-pressure cleaning

Special features

- Large selection of materials and configurations available
- Customer-specific combination with valves and measuring instruments (instrument hook-up) on request



Examples of fittings and accessories

Description

The model HPFA high-pressure fittings and accessories have been developed for high-pressure applications of 15,000 ... 60,000 psi [1,034 ... 4,136 bar]. These are particularly suitable for control panels, where the space is restricted, or for test benches.

The range of model HPFA includes elbow fittings, T-fittings, cross fittings, bulkhead connectors, gland collars, glands, anti-vibration glands and nipples.

The elbow fittings, T-fittings and cross fittings are provided with mounting holes. The connection type of cone/thread fitting is already fitted with gland collars and glands.

The design and the use of high-quality materials ensure long operating times and high leak tightness.

On request, WIKAI offers the professional assembly of valves and pressure measuring instruments and also other accessories into a ready-to-install instrument hook-up. To ensure the functionality of the complete system, an additional leak test is carried out on the instrument hook-up.

Specifications

Model HPFA	
Nominal pressure	<ul style="list-style-type: none"> ■ 15,000 psi [1,034 bar] ■ 20,000 psi [1,379 bar] ■ 60,000 psi [4,136 bar]
Permissible temperature range	-55 ... +210 °C [-67 ... +410 °F]
Version	<ul style="list-style-type: none"> ■ Elbow fitting ■ T-fitting ■ Elbow fitting with male and female thread ¹⁾ ■ T-fitting with male and female thread ¹⁾ ■ Cross fitting ■ Bulkhead connector ■ Anti-vibration gland ■ Gland collar ■ Gland ■ Nipple ■ Sealing cap ■ Blind plug
Connection type	<ul style="list-style-type: none"> ■ Female thread/female thread per ANSI / ASME B1.20.1, code NPT ■ Male thread/female thread per ANSI / ASME B1.20.1, code NPT ■ Cone/thread fitting
Connection size	<ul style="list-style-type: none"> ■ 1/4 NPT ■ 3/8 NPT ■ 1/2 NPT ■ 1/4" cone/thread fitting ■ 3/8" cone/thread fitting ■ 9/16" cone/thread fitting ■ 3/4" cone/thread fitting ²⁾ ■ 1" cone/thread fitting ²⁾
Features	100 % traceability of the parts

1) Not available for cone/thread fittings.

2) The maximum allowable pressure is limited to 20,000 psi [1,379 bar].

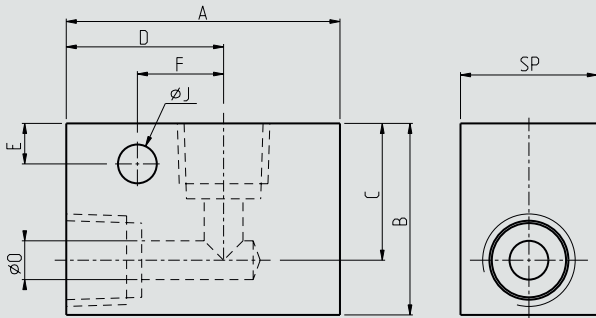
Materials	
Wetted parts	<ul style="list-style-type: none"> ■ Stainless steel 316 (1.4401) ■ Stainless steel 316L (1.4404) ■ Other materials on request
Non-wetted parts	<ul style="list-style-type: none"> ■ Stainless steel 316 (1.4401) ■ Stainless steel 316L (1.4404)

Dimensions in mm [in]

Threaded connection per ANSI / ASME B1.20.1, female thread/female thread

Elbow fitting

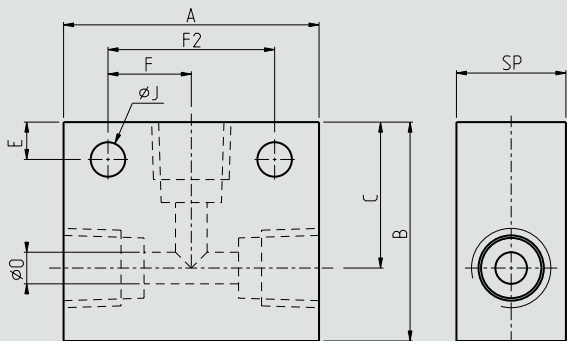
Nominal pressure: 15,000 psi [1,034 bar]



Thread	Dimensions in mm [in]								
	A	B	C	D	E	F	J	SP	Orifice
¼ NPT	38.1 [1.5]	38.1 [1.5]	25.4 [1]	25.4 [1]	6.5 [0.26]	14.5 [0.57]	6 [0.24]	19.05 [0.75]	5.5 [0.22]
⅜ NPT	38.1 [1.5]	38.1 [1.5]	25.4 [1]	25.4 [1]	8 [0.31]	16 [0.63]	7 [0.28]	25.4 [1]	7.5 [0.3]
½ NPT	47.63 [1.88]	47.63 [1.88]	31.75 [1.25]	31.75 [1.25]	9.4 [0.37]	20 [0.79]	9 [0.35]	31.75 [1.25]	9 [0.35]

T-fitting

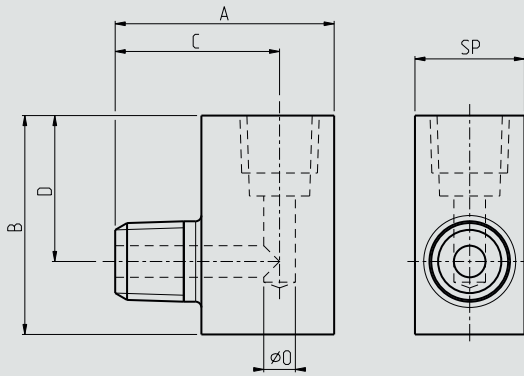
Nominal pressure: 15,000 psi [1,034 bar]



Thread	Dimensions in mm [in]								
	A	B	C	E	F	F2	J	SP	Orifice
¼ NPT	44.45 [1.75]	38.1 [1.5]	25.4 [1]	6.5 [0.26]	14.5 [0.57]	29 [1.14]	6 [0.24]	19.05 [0.75]	5.5 [0.22]
⅜ NPT	50.8 [2]	38.1 [1.5]	25.4 [1]	8 [0.31]	16 [0.63]	32 [1.26]	7 [0.28]	25.4 [1]	7.5 [0.3]
½ NPT	63.5 [2.5]	47.75 [1.88]	31.75 [1.25]	9.4 [0.37]	20 [0.79]	40 [1.57]	9 [0.35]	31.75 [1.25]	9 [0.35]

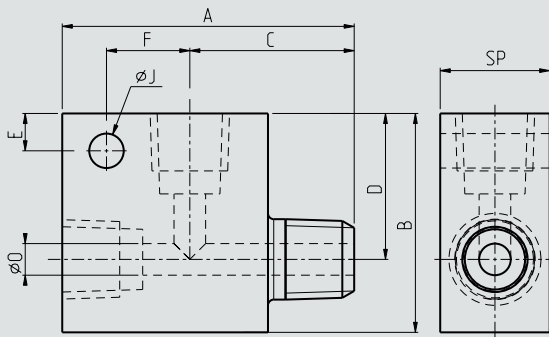
Threaded connection per ANSI / ASME B1.20.1, male thread/female thread

Elbow fitting with male and female thread
Nominal pressure: 15,000 psi [1,034 bar]



Thread	Dimensions in mm [in]					
	A	B	C	D	SP	Orifice
¼ NPT	38.1 [1.5]	38.1 [1.5]	28.6 [1.13]	25.4 [1]	19.05 [0.75]	5.5 [0.22]
⅜ NPT	44.45 [1.75]	38.1 [1.5]	31.75 [1.25]	25.4 [1]	25.4 [1]	7.5 [0.3]
½ NPT	57.15 [2.25]	44.45 [1.75]	41 [1.61]	31.75 [1.25]	31.75 [1.25]	9 [0.35]

T-fitting with male and female thread
Nominal pressure: 15,000 psi [1,034 bar]

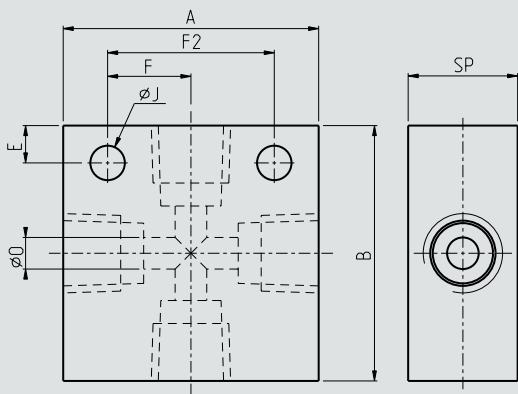


Thread	Dimensions in mm [in]								
	A	B	C	D	E	F	J	SP	Orifice
¼ NPT	50.8 [2]	38.1 [1.5]	28.6 [1.13]	25.4 [1]	6.5 [0.26]	14.5 [0.57]	6 [0.24]	19.05 [0.75]	5.5 [0.22]
⅜ NPT	63.5 [2.5]	38.1 [1.5]	38.1 [1.5]	25.4 [1]	8 [0.31]	16 [0.63]	7 [0.28]	25.4 [1]	7.5 [0.3]
½ NPT	76.2 [3]	47.63 [1.88]	41 [1.61]	31.75 [1.25]	9.5 [0.37]	20 [0.79]	9 [0.35]	31.75 [1.25]	9 [0.35]

Threaded connection per ANSI / ASME B1.20.1, female thread/female thread

Cross fitting

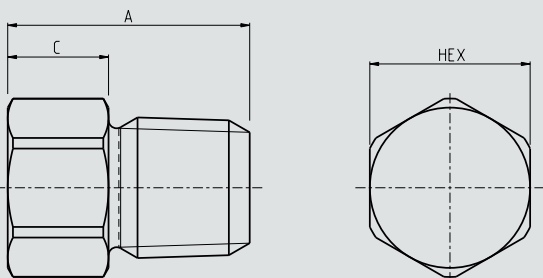
Nominal pressure: 15,000 psi [1,034 bar]



Thread	Dimensions in mm [in]							
	A	B	E	F	F2	J	SP	Orifice
¼ NPT	44.45 [1.75]	44.45 [1.75]	6.5 [0.26]	14.5 [0.57]	29 [1.14]	6 [0.24]	19.05 [0.75]	5.5 [0.22]
⅜ NPT	50.8 [2]	50.8 [2]	8 [0.31]	16 [0.63]	32 [1.26]	7 [0.28]	25.4 [1]	7.5 [0.3]
½ NPT	63.5 [2.5]	63.5 [2.5]	9.4 [0.37]	20 [0.79]	40 [1.57]	9 [0.35]	31.75 [1.25]	9 [0.35]

Blind plug

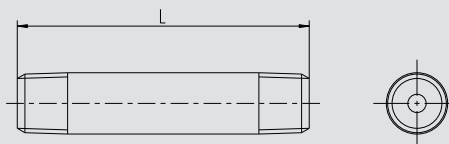
Nominal pressure: 15,000 psi [1,034 bar]



Thread	Dimensions in mm [in]		
	A	C	HEX
¼ NPT	24 [0.94]	10 [0.39]	15.90 [5/8"]
⅜ NPT	30 [1.18]	12 [0.47]	19.05 [¾"]
½ NPT	35 [1.38]	14 [0.55]	23.81 [1 5/16"]

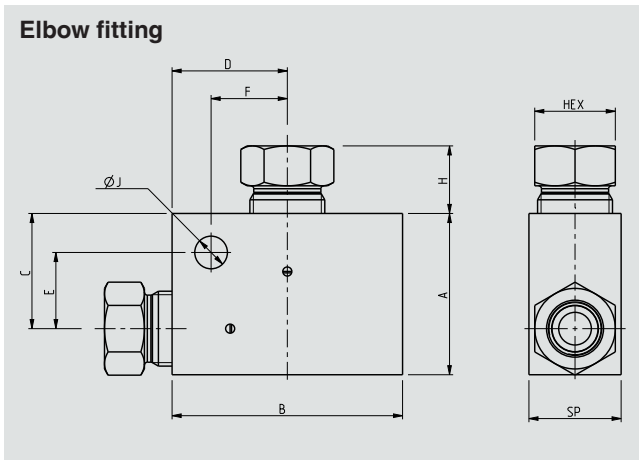
Nipple for pipe Ø: ½"

Nominal pressure: 15,000 psi [1,034 bar]



Dimensions in mm [in]
L
69.85 [2 ¾"]
76.2 [3"]
101.6 [4"]
152.40 [6"]
203.2 [8"]
254 [10"]
304.8 [12"]

Cone/thread fitting



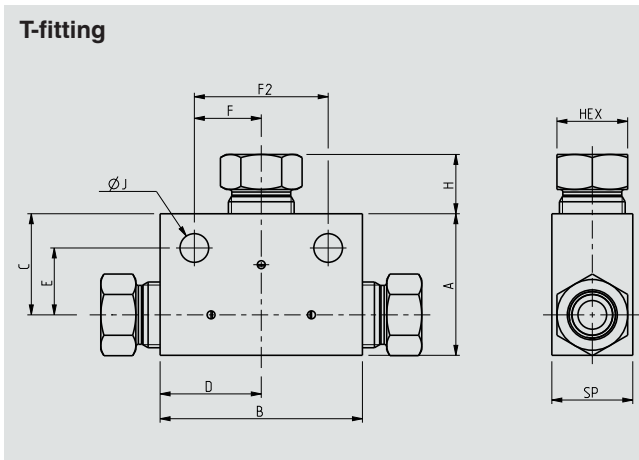
Nominal pressure: 20,000 psi [1,379 bar]

For outer Ø	Dimensions in mm [in]									
	A	B	C	D	E	F	H	J	SP	HEX
¼"	28.45 [11.2]	38.1 [15]	19.05 [7.5]	19.05 [7.5]	12.5 [4.92]	12.5 [4.92]	9.22 [3.63]	6 [2.36]	15.88 [6.25]	12.7 [5]
⅜"	35.05 [13.8]	50.8 [20]	25.4 [10]	25.4 [10]	16 [6.3]	16 [6.3]	12.78 [5.03]	7 [2.76]	19.05 [7.5]	15.87 [6.25]
½"	44.45 [17.5]	63.5 [25]	31.75 [12.5]	31.75 [12.5]	21 [8.27]	21 [8.27]	14.12 [5.56]	9 [3.54]	25.4 [10]	22.2 [8.74]
¾"	57.15 [22.5]	76.2 [30]	38.1 [15]	38.1 [15]	25.4 [10]	25.4 [10]	15.75 [6.2]	11 [4.33]	34.93 [13.75]	28.6 [11.26]
1"	76.2 [30]	104.78 [41.25]	52.4 [20.63]	52.39 [20.63]	35 [13.78]	35 [13.78]	18.3 [7.2]	14 [5.51]	44.45 [17.5]	34.93 [13.75]

Nominal pressure: 60,000 psi [4,136 bar]

For outer Ø	Dimensions in mm [in]									
	A	B	C	D	E	F	H	J	SP	HEX
¼"	38.1 [15]	34.93 [13.75]	25.4 [10]	22.23 [8.75]	20 [7.87]	16.5 [6.5]	14.63 [5.76]	6 [2.36]	25.4 [10]	15.88 [6.25]
⅜"	38.1 [15]	44.45 [17.5]	25.4 [10]	31.75 [12.5]	18.3 [7.2]	17.5 [6.89]	18.68 [7.35]	7 [2.76]	25.4 [10]	20.64 [8.13]
½"	47.63 [18.75]	66.68 [26.25]	28.58 [11.25]	47.63 [18.75]	21 [8.27]	24 [9.45]	26.93 [10.6]	9 [3.54]	38.1 [15]	30.16 [11.87]

Cone/thread fitting



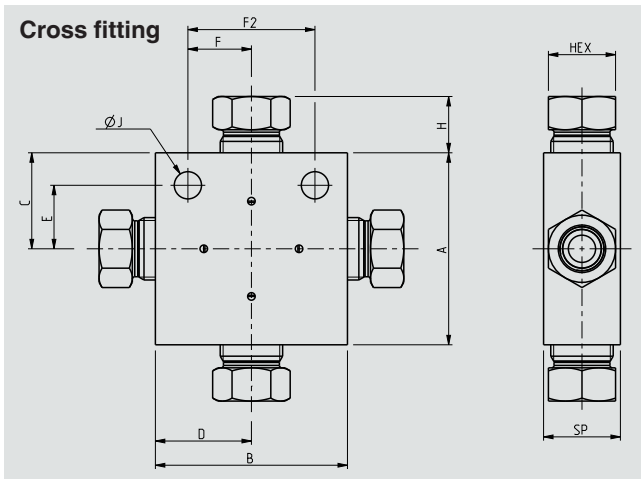
Nominal pressure: 20,000 psi [1,379 bar]

For outer Ø	Dimensions in mm [in]										
	A	B	C	D	E	F	F2	H	J	SP	HEX
¼"	28.45 [11.2]	38.1 [15]	19.05 [7.5]	19.05 [7.5]	12.5 [4.92]	12.5 [4.92]	25 [9.84]	9.22 [3.63]	6 [2.36]	15.88 [6.25]	12.7 [5]
⅜"	35.05 [13.8]	50.8 [20]	25.4 [10]	25.4 [10]	16 [6.3]	16 [6.3]	32 [12.6]	12.78 [5.03]	7 [2.76]	19.05 [7.5]	15.87 [6.25]
½"	44.45 [17.5]	63.5 [25]	31.75 [12.5]	31.75 [12.5]	21 [8.27]	21 [8.27]	42 [16.54]	14.12 [5.56]	9 [3.54]	25.4 [10]	22.2 [8.74]
¾"	57.15 [22.5]	76.2 [30]	38.1 [15]	38.1 [15]	25.4 [10]	25.4 [10]	50.8 [20]	15.75 [6.2]	11 [4.33]	34.93 [13.75]	28.6 [11.26]
1"	76.2 [30]	104.78 [41.25]	52.4 [20.63]	52.4 [20.63]	35 [13.78]	35 [13.78]	70 [27.56]	18.3 [7.2]	14 [5.51]	44.45 [17.5]	34.93 [13.75]

Nominal pressure: 60,000 psi [4,136 bar]

For outer Ø	Dimensions in mm [in]										
	A	B	C	D	E	F	F2	H	J	SP	HEX
¼"	34.93 [13.75]	50.8 [20]	22.23 [8.75]	25.4 [10]	16.5 [6.5]	16.5 [6.5]	33 [12.99]	14.63 [5.76]	6 [2.36]	25.4 [10]	15.88 [6.25]
⅜"	39.69 [15.63]	50.8 [20]	26.99 [10.63]	25.4 [10]	17.5 [6.89]	17.5 [6.89]	35 [13.78]	18.68 [7.35]	7 [2.76]	25.4 [10]	20.64 [8.13]
½"	53.98 [21.25]	66.68 [26.25]	34.93 [13.75]	33.34 [13.13]	24 [9.45]	24 [9.45]	48 [18.9]	26.93 [10.6]	9 [3.54]	38.1 [15]	30.16 [11.87]

Cone/thread fitting



Nominal pressure: 20,000 psi [1,379 bar]

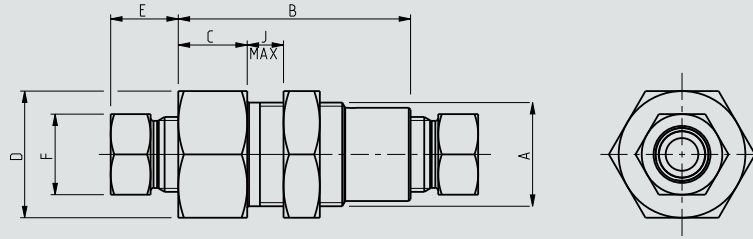
For outer Ø	Dimensions in mm [in]										
	A	B	C	D	E	F	F2	H	J	SP	HEX
¼"	38.1 [15]	38.1 [15]	19.05 [7.5]	19.05 [7.5]	12.5 [4.92]	12.5 [4.92]	25 [9.84]	9.22 [3.63]	6 [2.36]	15.88 [6.25]	12.7 [5]
⅜"	50.8 [20]	50.8 [20]	25.4 [10]	25.4 [10]	16 [6.3]	16 [6.3]	32 [12.6]	12.78 [5.03]	7 [2.76]	19.05 [7.5]	15.87 [6.25]
½"	63.5 [25]	63.5 [25]	31.75 [12.5]	31.75 [12.5]	21 [8.27]	21 [8.27]	42 [16.54]	14.12 [5.56]	9 [3.54]	25.4 [10]	22.2 [8.74]
¾"	76.2 [30]	76.2 [30]	38.1 [15]	38.1 [15]	25.4 [10]	25.4 [10]	50.8 [20]	15.75 [6.2]	11 [4.33]	34.93 [13.75]	28.6 [11.26]
1"	104.78 [41.25]	104.78 [41.25]	52.4 [20.63]	52.4 [20.63]	35 [13.78]	35 [13.78]	70 [27.56]	18.3 [7.2]	14 [5.51]	44.45 [17.5]	34.93 [13.75]

Nominal pressure: 60,000 psi [4,136 bar]

For outer Ø	Dimensions in mm [in]										
	A	B	C	D	E	F	F2	H	J	SP	HEX
¼"	38.1 [15]	50.8 [20]	19.05 [7.5]	25.4 [10]	13 [5.12]	16.5 [6.5]	33 [12.99]	14.63 [5.76]	6 [2.36]	25.4 [10]	15.88 [6.25]
⅜"	50.8 [20]	50.8 [20]	25.4 [10]	25.4 [10]	16 [6.3]	16 [6.3]	32 [12.6]	18.68 [7.35]	7 [2.76]	19.05 [7.5]	15.87 [6.25]
½"	63.5 [25]	63.5 [25]	31.75 [12.5]	31.75 [12.5]	21 [8.27]	21 [8.27]	42 [16.54]	26.93 [10.6]	9 [3.54]	25.4 [10]	30.16 [11.87]

Cone/thread fitting

Bulkhead connector



Nominal pressure: 20,000 psi [1,379 bar]

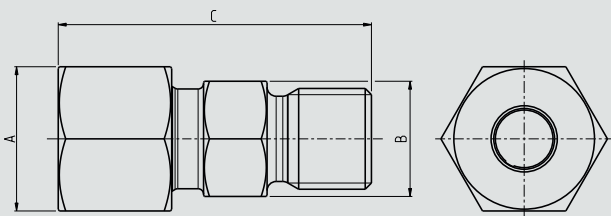
For outer Ø	Dimensions in mm [in]						
	A	B	C	D	E	F	J
¼"	20 [7.87]	48 [18.9]	13.5 [5.31]	25.4 [10]	9.22 [3.63]	12.7 [5]	10 [3.94]
⅜"	23 [9.06]	55 [21.65]	16 [6.3]	30.16 [11.87]	12.78 [5.03]	15.87 [6.25]	10 [3.94]
½"	30 [11.81]	64 [25.2]	19 [7.48]	34.9 [13.74]	14.12 [5.56]	22.2 [8.74]	10 [3.94]

Nominal pressure: 60,000 psi [4,136 bar]

For outer Ø	Dimensions in mm [in]						
	A	B	C	D	E	F	J
¼"	23 [9.06]	50.8 [20]	12.7 [5]	30.16 [11.87]	14.63 [5.76]	15.88 [6.25]	10 [3.94]
⅜"	30 [11.81]	60.33 [23.75]	19 [7.48]	34.9 [13.74]	18.68 [7.35]	20.64 [8.13]	10 [3.94]
½"	43 [16.93]	69.85 [27.5]	25.4 [10]	47.63 [18.75]	26.93 [10.6]	30.16 [11.87]	10 [3.94]

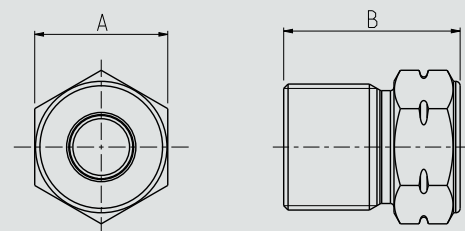
Anti-vibration gland

Nominal pressure: 20,000 psi [1,379 bar]



Anti-vibration gland

Nominal pressure: 60,000 psi [4,136 bar]



DN	Dimensions in mm [in]		
	A	B	C
¼"	15.88 [6.25]	12.7 [5]	34.5 [13.58]
⅜"	19.05 [7.5]	15.88 [6.25]	38.71 [15.24]
½"	25.4 [10]	22.2 [8.74]	47.69 [18.78]

DN	Dimensions in mm [in]	
	A	B
¼"	15.88 [6.25]	22 [8.66]
⅜"	20.64 [8.13]	30 [11.81]
½"	30.16 [11.87]	40 [15.75]

Cone/thread fitting

Nipple for pipe \varnothing : 1/4", 3/8", 9/16"

Nominal pressure: 20,000 psi [1,379 bar] and 60,000 psi [4,136 bar]



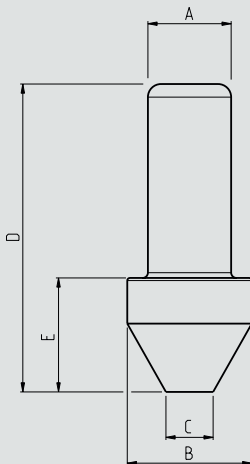
Dimensions in mm [in]

L
69.85 [2 3/4"] ¹⁾
76.2 [3"] ¹⁾
101.6 [4"]
152.40 [6"]
203.2 [8"]
254 [10"]
304.8 [12"]

1) Not available for for pipe \varnothing : 9/16"

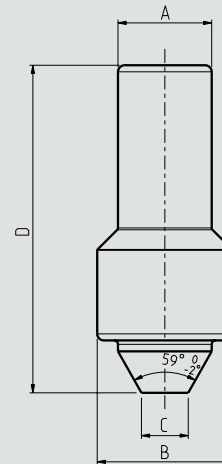
Blind plug

Nominal pressure: 20,000 psi [1,379 bar]



Blind plug

Nominal pressure: 60,000 psi [4,136 bar]



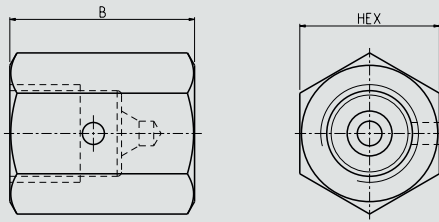
For outer \varnothing	Dimensions in mm [in]				
	A	B	C	D	E
1/4"	6.35 [2.5]	9.5 [3.74]	3.6 [1.42]	23.5 [9.25]	8.7 [3.43]
3/8"	9.5 [3.74]	12.4 [4.88]	6.35 [2.5]	30.5 [12.01]	11.1 [4.37]
9/16"	14.3 [5.63]	18.3 [7.2]	10.3 [4.06]	40 [15.75]	12.7 [5]
3/4"	18.9 [7.44]	23.8 [9.37]	14.3 [5.63]	42 [16.54]	15.4 [6.06]
1"	25.2 [9.92]	31.8 [12.52]	18.3 [7.2]	56.5 [22.24]	20.4 [8.03]

For outer \varnothing	Dimensions in mm [in]			
	A	B	C	D
1/4"	6.35 [2.5]	9.5 [3.74]	3.18 [1.25]	28 [11.02]
3/8"	9.5 [3.74]	12.7 [5]	5.56 [2.19]	37 [14.57]
9/16"	14.3 [5.63]	20.64 [8.13]	7.14 [2.81]	50 [19.69]

Cone/thread fitting

Sealing cap

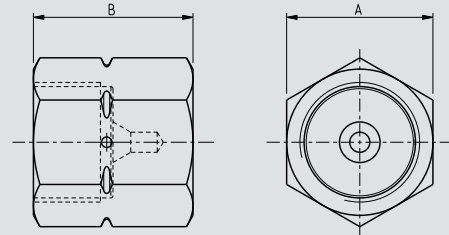
Nominal pressure: 20,000 psi [1,379 bar]



For outer Ø	Dimensions in mm [in]	
	HEX	B
¼"	15.87 [6.25]	21 [8.27]
⅜"	19.05 [7.5]	29 [11.42]
½"	25.4 [10]	35 [13.78]
¾"	34.92 [13.75]	44.5 [17.52]
1"	44.45 [17.5]	57 [22.44]

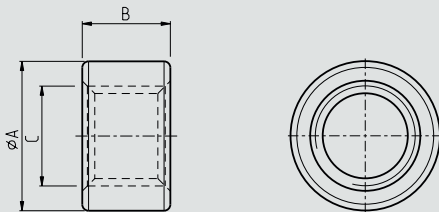
Sealing cap

Nominal pressure: 60,000 psi [4,136 bar]



For outer Ø	Dimensions in mm [in]	
	A	B
¼"	19.05 [7.5]	22.23 [8.75]
⅜"	25.4 [10]	31.75 [12.5]
½"	34.93 [13.75]	38.1 [15]

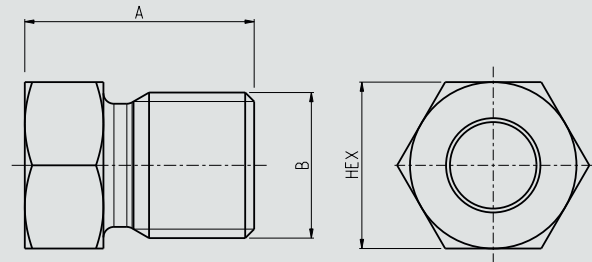
Gland collar



Nominal pressure: 20,000 psi [1,379 bar]

For outer Ø	Dimensions in mm [in]		
	A	B	C
¼"	9.5 [3.74]	5.6 [2.2]	1/4-28 UNF-LH-2B
⅜"	12.4 [4.88]	6.3 [2.48]	3/8-24 UNF-LH-2B
½"	18.4 [7.24]	8 [3.15]	9/16-18 UNF-LH-2B
¾"	23.8 [9.37]	9.6 [3.78]	3/4-16 UNF-LH-2B
1"	31.8 [12.52]	12.9 [5.08]	1-14 UNF-LH-2B

Gland



Nominal pressure: 20,000 psi [1,379 bar]

For outer Ø	Dimensions in mm [in]		
	A	B	HEX
¼"	17.5 [6.89]	7/16-20 UNF-2A	12.7 [5]
⅜"	20.5 [8.07]	9/16-18 UNF-2A	15.87 [6.25]
½"	27 [10.63]	13/16-16 UNF-2A	22.2 [8.74]
¾"	28.5 [11.22]	3/4-14 NPSM	28.6 [11.26]
1"	38.1 [15]	1 3/8-12 UNF-2A	34.93 [13.75]

Nominal pressure: 60,000 psi [4,136 bar]

For outer Ø	Dimensions in mm [in]		
	A	B	C
¼"	9.5 [3.74]	9.5 [3.74]	1/4-28 UNF-LH-2B
⅜"	12.7 [5]	13.5 [5.31]	3/8-24 UNF-LH-2B
½"	20.64 [8.13]	15.8 [6.22]	9/16-18 UNF-LH-2B

Nominal pressure: 60,000 psi [4,136 bar]

For outer Ø	Dimensions in mm [in]		
	A	B	HEX
¼"	22 [8.66]	9/16-18 UNF-2A	15.88 [6.25]
⅜"	30 [11.81]	3/4-16 UNF-2A	20.64 [8.13]
½"	40 [15.75]	1 1/8-12 UNF-2A	30.16 [11.87]

Certificates

- 3.1 inspection certificate per EN 10204 (option)
Material certificate for all wetted parts ¹⁾

1) With the connection type of cone/thread fitting, gland collars and glands are not included within the material certificate.

Ordering information

Model / Nominal pressure / Version / Connection type / Connection size / Material / Options

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