



**FITS
NPT & BSPT
THREADS**

TurretJet™

**RATED
TO
150 PSI
(10 BAR)**

You can choose
the orifice size and
extension to suit your
application!



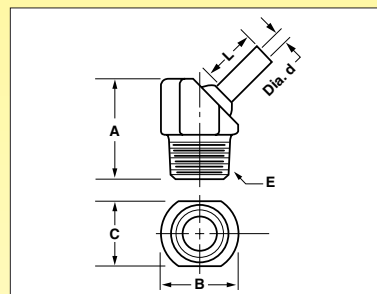
Also
available with
tapped ball to allow
quick plugging!

UNIVERSAL COOLANT NOZZLE FOR CNC MACHINES

- Converts any NPT or BSPT hole to a fully adjustable nozzle
- Hits any target above mounting plane
- Adjusts easily for accurate coolant placement
- Difficult to accidentally knock out of adjustment
- Choose larger orifices for maximum flow
- Choose smaller orifices when using multiple nozzles
- Choose tapped ball if you need to quickly plug the orifice (setscrew included)
- Choose short extensions for tight spaces like CNC Turning Centers and Screw Machines
- Longer extensions are a breeze to aim and shoot farther, great for Machining Centers and CNC Multi-Axis Grinders

DIMENSIONS IN INCHES

Part No.	Thread Size "E"	Orifice Dia. "d"	Extension "L"	A	B	C
TJ00100	1/8 NPT/BSPT	.11	0	.82	.63	.50
TJ00130	1/8 NPT/BSPT	.11	.25	.82	.63	.50
TJ00131	1/8 NPT/BSPT	.11	.50	.82	.63	.50
TJ00132	1/8 NPT/BSPT	.11	1.25	.82	.63	.50
TJ00134	1/8 NPT/BSPT	.16	0	.82	.63	.50
TJ00136	1/8 NPT/BSPT	.16	.50	.82	.63	.50
TJ00138	1/8 NPT/BSPT	.16	1.25	.82	.63	.50
TJ00140	1/8 NPT/BSPT	#10-32 UNF	0	.82	.63	.50
TJ00142	1/4 NPT/BSPT	.11	0	.94	.75	.63
TJ00144	1/4 NPT/BSPT	.11	.25	.94	.75	.63
TJ00145	1/4 NPT/BSPT	.11	.50	.94	.75	.63
TJ00146	1/4 NPT/BSPT	.11	1.25	.94	.75	.63
TJ00101	1/4 NPT/BSPT	.16	0	.94	.75	.63
TJ00148	1/4 NPT/BSPT	.16	.50	.94	.75	.63
TJ00150	1/4 NPT/BSPT	.16	1.25	.94	.75	.63
TJ00152	1/4 NPT/BSPT	#10-32 UNF	0	.94	.75	.63
TJ00166	3/8 NPT/BSPT	.11	0	1.13	.88	.75
TJ00154	3/8 NPT/BSPT	.16	0	1.13	.88	.75
TJ00156	3/8 NPT/BSPT	.16	.50	1.13	.88	.75
TJ00158	3/8 NPT/BSPT	.16	1.25	1.13	.88	.75
TJ00102	3/8 NPT/BSPT	.22	0	1.13	.88	.75
TJ00160	3/8 NPT/BSPT	.22	.50	1.13	.88	.75
TJ00162	3/8 NPT/BSPT	.22	1.25	1.13	.88	.75
TJ00164	3/8 NPT/BSPT	1/4-28 UNF	0	1.13	.88	.75



TurretJet shown installed in lathe turret.



Combine with standard pipefittings to
suit your application.

Material: Body: Acetal Ball & Extension: Stainless Steel
Maximum Pressure: 150 PSI (10 bar) **Maximum Operating Temperature:** 160°F

WE RESERVE THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE OR OBLIGATION.



Pipe Sizes fit
**NPT & BSPT
THREADS**

**RATED
TO
1500 PSI
(100 BAR)**

PressureMax™

Available in
Brass or
Stainless Steel



Available with
extended spray tips
to shoot farther

HIGH PRESSURE COOLANT NOZZLE FOR CNC MACHINES

- High velocity coolant stream increases productivity and tool life in machining and grinding operations
 - Also ideal for low pressure applications where abrasive swarf is a problem
 - Hits any target above mounting plane
 - Interchangeable spray tips available!
 - Easy to aim
 - Choose short extensions for tight spaces like CNC Turning Centers and Screw Machines
- Choose stainless steel bodies when using cutting oils not compatible with brass (i.e. oils containing active sulphur)
 - Choose brass bodies for economy
 - Pipe sizes fit NPT and BSPT threads
 - 1500 PSI Max (100 bar)
- Longer extensions are a breeze to aim and shoot farther, great for Machining Centers and CNC Multi-Axis Grinders



Short extensions aim easily with aiming tool (included).



Long extensions aim easily by hand.



Hits any target above mounting plane.



Interchangeable spray tips allow you to easily change orifice size and extension length to suit your application.



PressureMax Spray Tips can be mounted directly to toolholders or manifolds when space is limited, as in screw machine applications. See Page 7 and 8 for port preparation detail.



PressureMax nozzle shown in use on CNC turning center. High velocity coolant stream prolongs tool life and aids chip control.



PressureMax™

Ordering Information: 1. Determine the port thread size required for your machine tool. 2. Choose nozzle body material (brass for general purpose, stainless steel when using cutting oils not compatible with cuprous alloys). 3. Determine orifice diameter required to match your pump's capacity at the desired pressure (refer to table on page 2). 4. Choose the extension length "L" to suit your application (longer extensions give more laminar flow, aim easily and shoot farther, while short extensions are ideal for tight spaces or where stringy swarf is a problem).

DIMENSIONS IN INCHES

Nominal Size: 5/16 - 24 UNF						
Nozzle & Port Detail	Mtl.	Part No. Complete Nozzle *	Orifice Dia. "d"	Extension "L"	Part No. Spray Tip Only	Spray Tip and Mating Port Detail
<p>5/16" - 24 UNF (tapered) 5/16 - 24 UNF x .30 DP. MIN.</p>	BRASS	PM07310	.040	.25	PMT08410	<p>5/16" - 24 UNF O-RING - 6mm ID x 1mm Ø Part No. OR10210 5/16" - 24 UNF x .30 DP MIN.</p>
		PM07315	.062	0	PMT08415	
		PM07320	.062	.25	PMT08420	
		PM07330	.086	0	PMT08430	
	STAINLESS	PM07312-SS	.040	.25	PMT08412-SS	
		PM07316-SS	.062	0	PMT08416-SS	
		PM07322-SS	.062	.25	PMT08422-SS	
		PM07332-SS	.086	0	PMT08432-SS	

*Complete nozzle part no. includes body and spray tip.

DIMENSIONS IN INCHES

Nominal Size: 1/8 NPT/BSPT						
Nozzle & Port Detail	Mtl.	Part No. Complete Nozzle *	Orifice Dia. "d"	Extension "L"	Part No. Spray Tip Only	Spray Tip and Mating Port Detail
<p>1/8" NPT/BSPT 1/8" NPT or 1/8" BSPT</p>	BRASS	PM04010	.040	.25	PMT05020	<p>7/16" - 20 UNF O-RING - 9mm ID x 1mm Ø Part No. OR10220 7/16" - 20 UNF x .30 DP MIN.</p>
		PM05010	.062	.25	PMT04510	
		PM04022	.062	1.25	PMT04514	
		PM06010	.086	.25	PMT04520	
		PM04032	.086	1.25	PMT04523	
		PM07001	.117	0	PMT04525	
		PM04038	.117	.25	PMT04526	
		PM04042	.117	1.25	PMT04528	
	PM04046	.160	0	PMT04534		
	STAINLESS	PM04012-SS	.040	.25	PMT04505-SS	
		PM04020-SS	.062	.25	PMT04512-SS	
		PM04024-SS	.062	1.25	PMT04516-SS	
		PM04030-SS	.086	.25	PMT04522-SS	
		PM04034-SS	.086	1.25	PMT04524-SS	
PM04039-SS		.117	0	PMT04532-SS		
PM04040-SS	.117	.25	PMT04527-SS			
PM04044-SS	.117	1.25	PMT04529-SS			
PM04048-SS	.160	0	PMT04536-SS			

*Complete nozzle part no. includes body and spray tip.



PressureMax™

DIMENSIONS IN INCHES

Nominal Size: 1/4 NPT/BSPT						
Nozzle & Port Detail	Mtl.	Part No. Complete Nozzle *	Orifice Dia. "d"	Extension "L"	Part No. Spray Tip Only	Spray Tip and Mating Port Detail
<p>1/4" NPT/BSPT 1/4" NPT or 1/4" BSPT</p>	BRASS	PM07100	.040	.25	PMT07020	<p>1/2" - 20 UNJF O-RING - 11mm ID x 1mm Ø Part No. OR10230 1/2" - 20 UNF x .30 DP MIN.</p>
		PM07110	.062	.25	PMT08010	
		PM04122	.062	1.25	PMT08014	
		PM07120	.086	.25	PMT08020	
		PM04132	.086	1.25	PMT08024	
		PM07130	.117	0	PMT08030	
		PM04139	.117	.25	PMT08029	
		PM04158	.117	.50	PMT08050	
		PM04142	.117	1.25	PMT08034	
		PM07140	.160	0	PMT08040	
		PM04148	.160	.50	PMT08042	
		PM04152	.160	1.25	PMT08044	
		PM04110-SS	.040	.25	PMT08005-SS	
		PM04120-SS	.062	.25	PMT08012-SS	
		PM04124-SS	.062	1.25	PMT08016-SS	
		PM04130-SS	.086	.25	PMT08022-SS	
		PM04134-SS	.086	1.25	PMT08026-SS	
PM04138-SS	.117	0	PMT08028-SS			
PM04140-SS	.117	.25	PMT08032-SS			
PM04159-SS	.117	.50	PMT08051-SS			
PM04144-SS	.117	1.25	PMT08036-SS			
PM04146-SS	.160	0	PMT08041-SS			
PM04150-SS	.160	.50	PMT08043-SS			
PM04154-SS	.160	1.25	PMT08046-SS			

*Complete nozzle part no. includes body and spray tip.

DIMENSIONS IN INCHES

Nominal Size: 3/8 NPT/BSPT						
Nozzle & Port Detail	Mtl.	Part No. Complete Nozzle *	Orifice Dia. "d"	Extension "L"	Part No. Spray Tip Only	Spray Tip and Mating Port Detail
<p>3/8" NPT/BSPT 3/8" NPT or 3/8" BSPT</p>	BRASS	PM08210	.062	.38	PMT08110	<p>5/8" - 18 UNJF O-RING - 13mm ID x 1mm Ø Part No. OR10240 5/8" - 18 UNF x .30 DP MIN.</p>
		PM08214	.062	1.25	PMT08114	
		PM08220	.086	.38	PMT08120	
		PM08224	.086	1.25	PMT08124	
		PM08230	.117	.50	PMT08130	
		PM08234	.117	1.25	PMT08134	
		PM08238	.160	0	PMT08138	
		PM08240	.160	.50	PMT08140	
		PM08244	.160	1.25	PMT08144	
		PM08258	.197	.50	PMT08158	
		PM08248	.220	0	PMT08148	
		PM08250	.220	.50	PMT08150	
		PM08254	.220	1.25	PMT08154	
		PM08212-SS	.062	.38	PMT08112-SS	
		PM08216-SS	.062	1.25	PMT08116-SS	
		PM08222-SS	.086	.38	PMT08122-SS	
		PM08226-SS	.086	1.25	PMT08126-SS	
PM08232-SS	.117	.50	PMT08132-SS			
PM08236-SS	.117	1.25	PMT08136-SS			
PM08239-SS	.160	0	PMT08139-SS			
PM08242-SS	.160	.50	PMT08142-SS			
PM08246-SS	.160	1.25	PMT08146-SS			
PM08260-SS	.197	.50	PMT08160-SS			
PM08249-SS	.220	0	PMT08149-SS			
PM08252-SS	.220	.50	PMT08152-SS			
PM08256-SS	.220	1.25	PMT08156-SS			

*Complete nozzle part no. includes body and spray tip.



Plug Jet™



SCREW-IN, FLUSH MOUNT COOLANT NOZZLE

- Screws into an NPT or BSPT hole just like a flush plug
- 35 degrees adjustment either side of centerline
- Rated to 150 psi max
- Ideal for machining applications where nozzle projections must be minimized

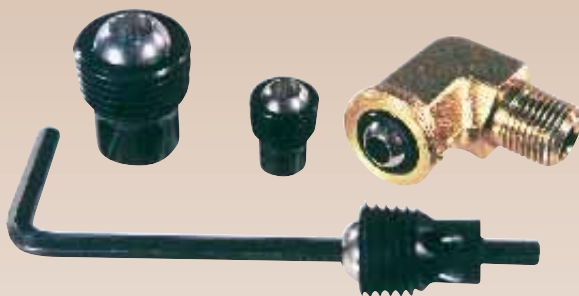
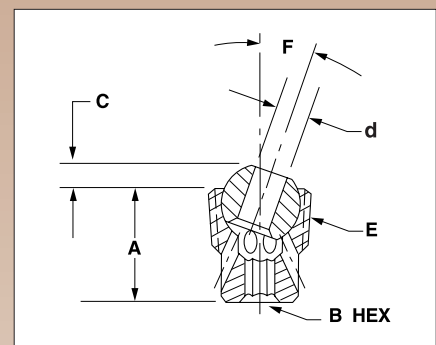
DIMENSIONS IN INCHES

Part No.	Size "E"	A	B(HEX)	C	d	F(degrees)
PJ00510	1/8 NPT	.50	9/64	.12	.16	0-35
PJ00520	1/8 BSPT	.50	9/64	.12	.16	0-35
PJ00530	1/4 NPT/BSPT	.62	9/64	.15	.16	0-40
PJ00540	3/8 NPT/BSPT	.75	3/16	.18	.22	0-40

Material: Body - Acetal Ball - Stainless Steel

Maximum Operating Temperature: 160°F

Maximum Pressure: 150 PSI (10 bar)



Simply insert the end of allen wrench (included) into the hole in the stainless ball until it engages the hex hole in the acetal body, then tighten the **PlugJet** into the tapped hole until the body is flush.



Mill Jet™



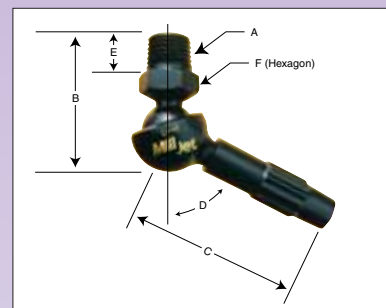
COOLANT NOZZLE FOR VERTICAL & HORIZONTAL MACHINING CENTERS

- Adjusts from full shutoff to fine fan spray to direct stream
- Aimable from zero to 90° with 360° sweep
- Stays put (doesn't vibrate out of place)
- No interference problems with clamps, fixtures or swarf
- Fits NPT and BSPT threads
- Rated to 100 psi (6.7 bar) maximum

DIMENSIONS IN INCHES

Part No.	Size A	B	C	D (Degrees)	E	F
MJ03010	1/8 NPT/BSPT	1.50	1.70	0-90	.44	.625
MJ00117	1/4 NPT/BSPT	1.50	1.70	0-90	.44	.625
– Recommended coolant filtration - 100 microns –						

Material: Acetal **Maximum Pressure:** 100 PSI (6.7 bar)
Max Operating Temperature: 160° F



MillJets shown in use at various angles and spray widths.

MillJets shown installed on Vertical Machining Center showing wide and narrow spray.



JiffyJet™



PRESS-IN COOLANT NOZZLE

- Just drill and ream a hole, press in a **JiffyJet**, and you've got an easily aimable coolant nozzle!
- Ideal for special tooling, VDI holders, CNC lathe tooling, screw machines, etc.
- Rated to 150 psi (10 bar) maximum ■ ±35° of adjustment either side of centerline



1 Drill coolant passage, leaving reaming allowance.



2 Ream hole to nominal size $-0 +.002$."



3 Press in **JiffyJet** until body is flush.

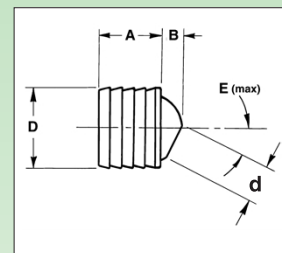


Cutaway view showing **JiffyJet** installed.

DIMENSIONS IN INCHES (except as noted)

Part No.	Nom. Dia. "D"	A	B	Orifice Dia. "d"	E(degrees)	Prepared Hole Dia.
JJ07050	1/4 inch	.190	.05	.08	35°	.250/.2515
JJ00103	5/16 inch	.250	.06	.11	35°	.3125/.3145
JJ00104	3/8 inch	.312	.08	.16	35°	.375/.377
JJ00105	7/16 inch	.360	.10	.16	35°	.4375/.4395
JJ00106	9/16 inch	.437	.13	.22	35°	.5625/.5645
JJ00118	5/8 inch	.437	.13	.22	35°	.625/.627
JJ07160	6 mm	.190	.05	.06	35°	.2362/.2377
JJ07150	6 mm	.190	.05	.08	35°	.2362/.2377
JJ00119	8 mm	.250	.06	.11	35°	.315/.317
JJ00113	10 mm	.312	.08	.16	35°	.3937/.3957
JJ00114	12 mm	.360	.10	.16	35°	.4724/.4744
JJ00115	14 mm	.437	.13	.22	35°	.551/.553
JJ00116	15 mm	.437	.13	.22	35°	.5906/.5926

– Please contact us for availability of other sizes or for special orders –



Material:
Body - Acetal
Ball - Stainless Steel

Max Operating Temperature: 160° F

Maximum Pressure: 150 PSI (10 bar)



**CONTACT
US FOR CUSTOM
ORDERS**

ScrewBall™

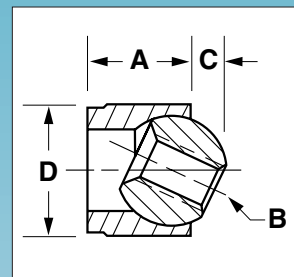


PRESS-IN COOLANT NOZZLE WITH TAPPED HOLE

- Just drill and ream a hole, press in a **ScrewBall**, and you've got an easily aimable coolant nozzle
- Threaded hole can be fitted with an extension tube (ideal for machining centers) or easily plugged with a setscrew
- ±35 degrees of adjustment either side of centerline
- Ideal for quick change toolholders with multiple ports
- Rated to 150 PSI (10 bar) max

DIMENSIONS IN MILLIMETERS

Part No.	Nominal Dia. "D"	A	Thread "B"	C	Prepared Hole Tolerance	Body Color
SB09505	8 mm	6mm	M 3.5 x .6	1.5	H9	White
SB09506	8 mm	6mm	M 3.5 x .6	1.5	H9	Black
SB09510	10 mm	7mm	M 4 x .7	2.0	H9	White
SB09511	10 mm	7mm	M 4 x .7	2.0	H9	Black
SB09520	12 mm	8mm	M 5 x .8	2.5	H9	White
SB09521	12 mm	8mm	M 5 x .8	2.5	H9	Black
SB09530	14 mm	10mm	M 6 x 1.0	3.0	H9	White
SB09531	14 mm	10mm	M 6 x 1.0	3.0	H9	Black
SB09540	15 mm	6mm	M 6 x 1.0	3.0	H9	Black



Material: Body: Acetal Ball: Stainless Steel **Maximum Operating Temperature:** 160°F
Maximum Pressure: 150 PSI (10 bar)

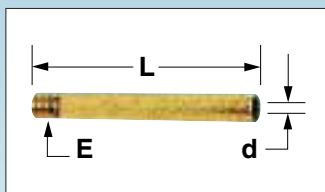
EXTENSION TUBES

Extension tubes install in seconds. They shoot farther and make aiming a breeze.

DIMENSIONS IN MILLIMETERS

Part No.	Thread "E"	L	Inside Dia. "d"
SBT09710	M 4 x .7	35mm	2mm
SBT09720	M 5 x .8	40mm	3mm
SBT09730	M 6 x 1.0	50mm	4mm

Material: Brass





Black Eye™

Available with tapped ball to allow quick plugging!



SCREW-LOCK COOLANT NOZZLE FOR CNC LATHES

- An easy-to-aim replacement for screw-lock spherical coolant nozzles.
- Rated to 150 psi (10 bar) maximum ■ Sizes available to fit almost every machine or toolholder.
- Just install and tighten lock-screw once, then aim the stainless steel ball with the tip of your allen wrench.
- Choose tapped balls if your toolholders have multiple ports that occasionally need plugging (setscrew included).

Black Eye™ Nozzles replace these:



DIMENSIONS IN INCHES (except as noted)

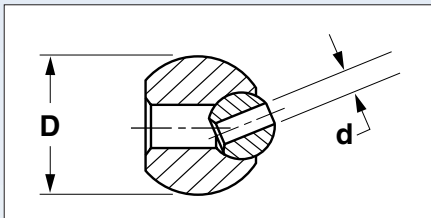
Part No.	Nom. Dia. "D"	Orifice Dia. "d"
BE00112	10 mm	.11
BE00210	10 mm	#6-32 UNC
BE00107	12 mm	.16
BE00220	12 mm	#8-32 UNC
BE00108	14 mm	.16
BE00230	14 mm	#8-32 UNC
BE00109	15 mm	.16
BE00240	15 mm	#8-32 UNC
BE02020	18 mm	.16
BE02030	18 mm	#10-32 UNF
BE00110	22 mm	.22
BE00250	22 mm	1/4-28 UNF
BE00120	3/8 inch	.11
BE00260	3/8 inch	#6-32 UNC
BE00111	1/2 inch	.16
BE00270	1/2 inch	#8-32 UNC
BE02010	5/8 inch	.16
BE00280	5/8 inch	#8-32 UNC



Black Eyes shown in boring bar holder.



Black Eyes shown in boring bar holder.



Black Eye installed on quick change turning tool.



Close up view of installed **Black Eye**.

Material: Body - Acetal Ball - Stainless Steel
Max Operating Temperature: 160° F
Maximum Pressure: 150 PSI (10 bar)

Ordering Information: Measure the diameter of the original ball in your machine and order the nominal diameter to suit.