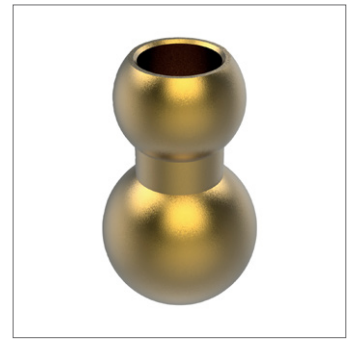
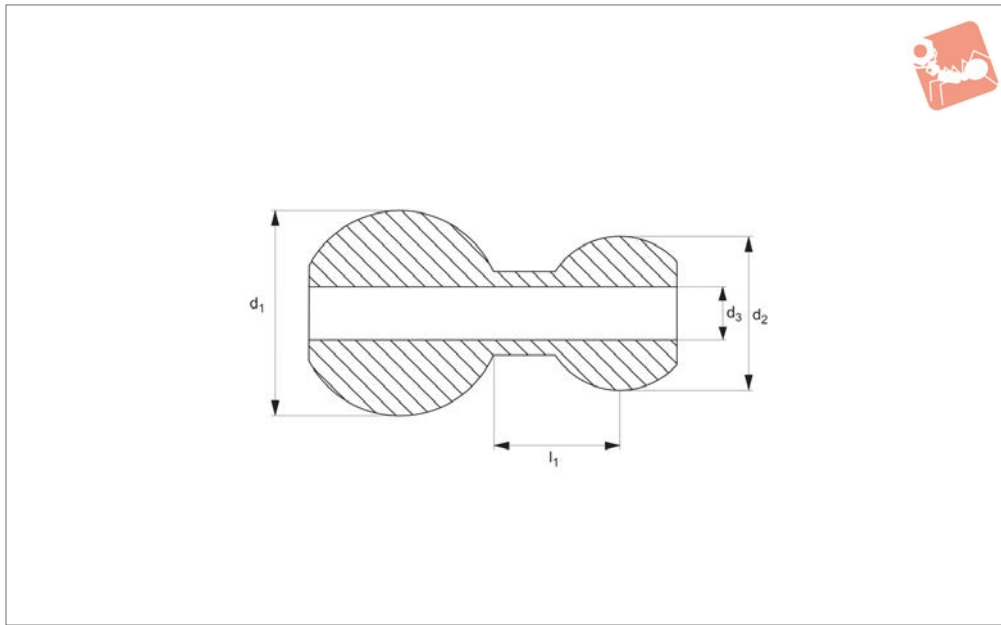




Swivel Max. - Brass Base Element

modular coolant nozzle system - max. 6,7 bar

Coolant Nozzles



20051

COOLANT NOZZLES

Material

Brass.

Max. pressure: 6,7 bar.

Technical Notes

Max. temperature: 43°C.

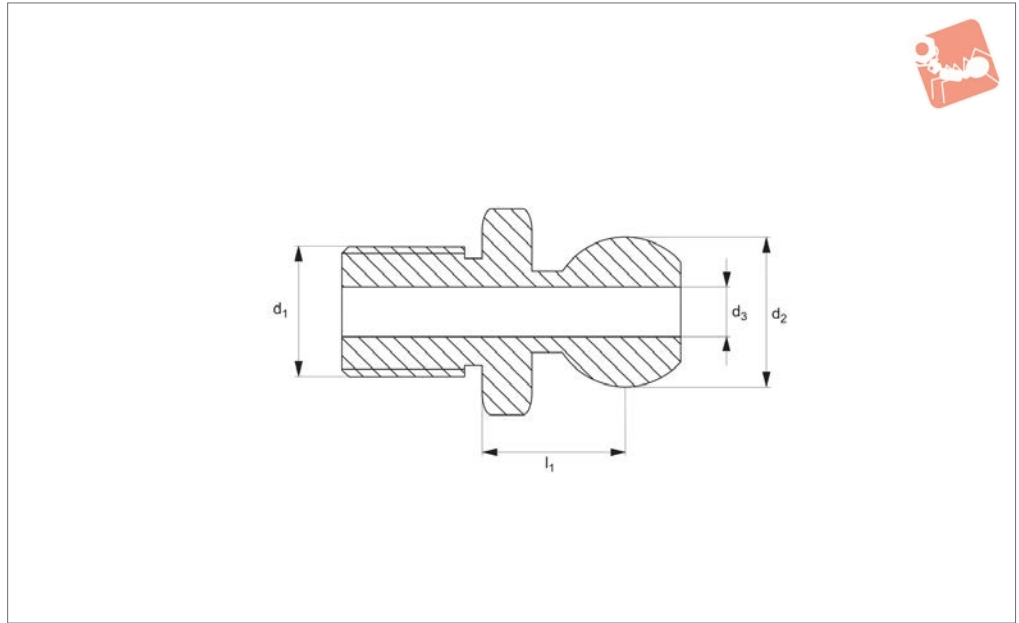
Tips

For use with our Swivel Max. coolant nozzle system (20051 to 20059).

Order No.	d_1	d_2	d_3	l_1
20051.W0100	10	12	5	10.2
20051.W0120	12	12	5	10.2
20051.W0140	14	12	5	10.2
20051.W0150	15	12	5	10.2
20051.W0220	22	12	5	10.2
20051.W2500	1/2"	12	5	10.2
20051.W2630	5/8"	12	5	10.2



20052



Material

Acetal.

Max. pressure: 6,7 bar.

Tips

For use with our Swivel Max. coolant nozzle system (20051 to 20059).

Technical Notes

Max. temperature: 43°C.

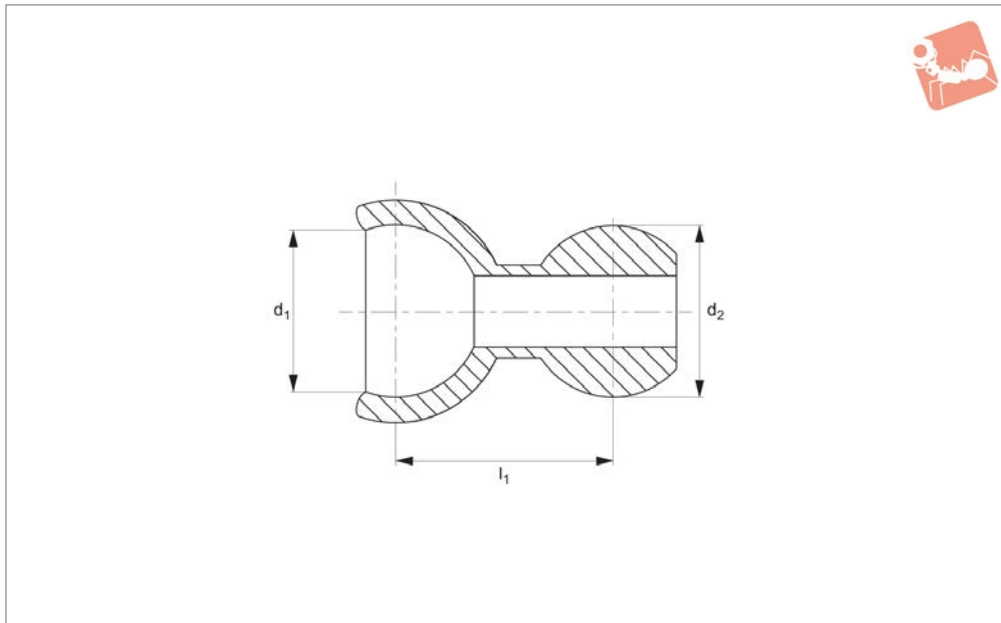
Order No.	Type	d ₁	d ₂	d ₃	l ₁
20052.W0100	Metric Fine	M10x1,25	12	5	10.2
20052.W0120	Metric Fine	M12x1,25	12	5	10.2
20052.W0140	Metric Fine	M14x1,00	12	5	10.2
20052.W1100	Metric Coarse	M10x1,50	12	5	10.2
20052.W1120	Metric Coarse	M12x1,75	12	5	10.2
20052.W1140	Metric Coarse	M14x2,00	12	5	10.2
20052.W2120	NPT/BSPT	1/8"	12	5	10.2
20052.W2250	NPT/BSPT	1/4"	12	5	10.2



Swivel Max. - Intermediate Links

modular coolant nozzle systems - max. 6,7 bar

Coolant Nozzles



20053

COOLANT NOZZLES

Material
Acetal.

Max. pressure: 6,7 bar.

For extension tube see 20090.

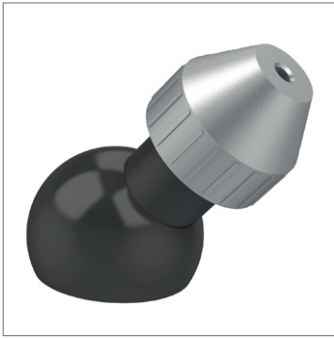
Technical Notes

Max. temperature: 43°C.

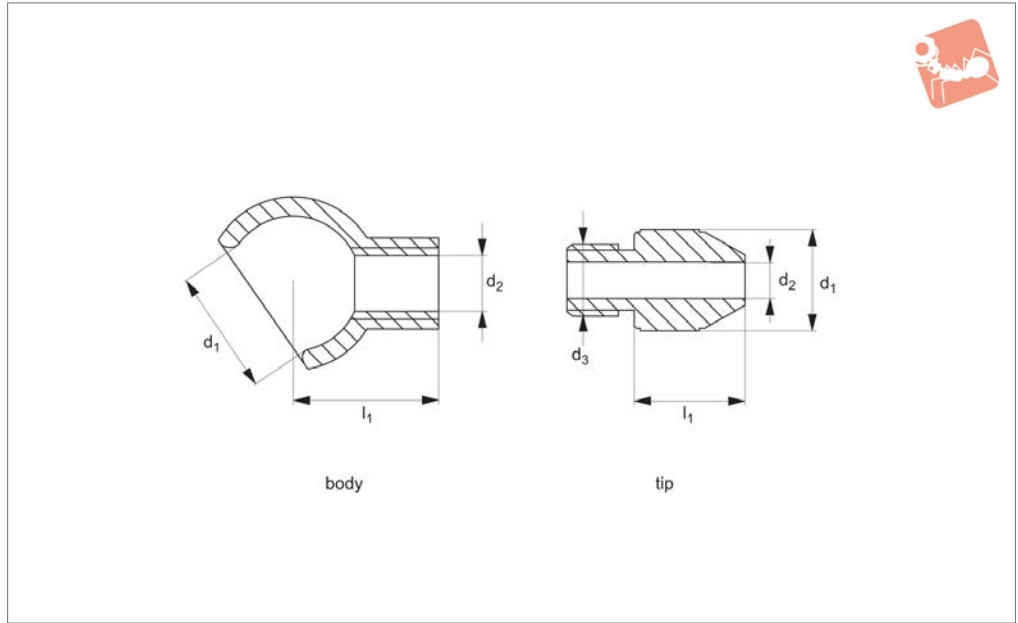
Tips

For use with our Swivel Max. coolant nozzle system (20051 to 20059).

Order No.	Adaptor type	d ₁	d ₂	l ₁	From	To
20053.W0010	Standard Swivel Max Intermediate Link	12,0	12,0	15,2	Swivel Max	Swivel Max
20053.W0020	Reverse link to allow Swivel Max base to be used at both ends of nozzle assembly	12,0	12,0	16,5	Swivel Max	Swivel Max
20053.W0120	From Swivel Max to LocLine - to extend from Swivel Max link to add LocLine spray bar	12,0	6,3	15,7	Swivel Max	LocLine
20053.W0130	From Swivel Max to SnapLoc - to extend from Swivel Max link to add SnapLoc flare nozzle	12,0	6,3	15,7	Swivel Max	SnapLoc
20053.W0140	From SnapLoc to Swivel Max - to attach Swivel Max Fixed Flow Nozzle 20055 to SnapLoc	6,3	12,0	15,7	SnapLock	Swivel Max
20053.W0150	From LocLine to Swivel Max - to attach Swivel Max Vari Flow Nozzle 20056 to LocLine	6,3	12,0	15,7	LockLine	Swivel Max



20055



Material

Body: acetal.

Spray tip: aluminium.

Technical Notes

Max. temperature: 43°C.

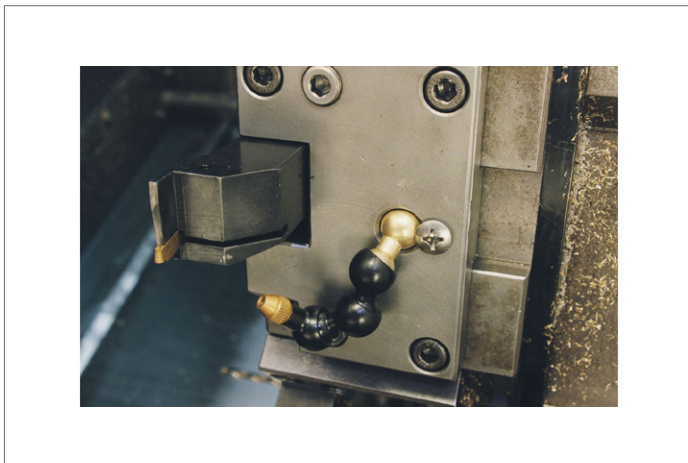
Max. pressure: 6,7 bar.

Please order body and tip separately.

Tips

For use with our Swivel Max. coolant nozzle system (20051 to 20059).

Order No.	Type	d ₁	d ₂	d ₃	l ₁
20055.W1150	Tip	9.1	1.6	1/4"UNF	10.2
20055.W2121	Tip	9.1	2.2	1/4"UNF	10.2
20055.W2122	Tip	9.1	3.0	1/4"UNF	10.2
20055.W2123	Tip	9.1	4.0	1/4"UNF	10.2
20055.W2124	Body	12.0	1/4"UNF	-	12.7

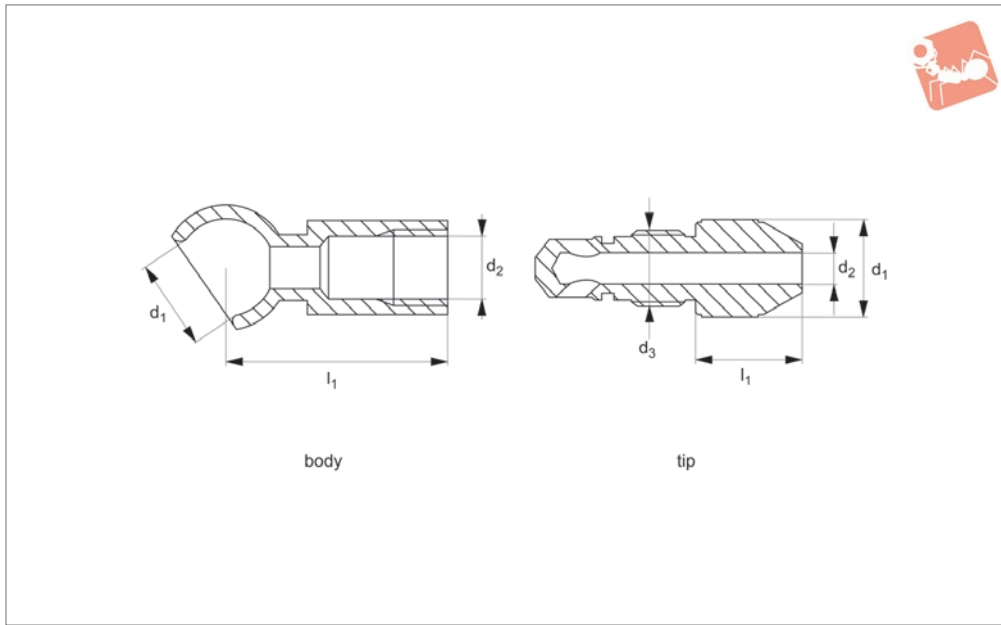




Swivel Max. - Adjustable Spray Nozzle

modular coolant system - max. 6,7 bar

Coolant Nozzles



20056

COOLANT NOZZLES

Material

Body: acetal.
Spray tip: aluminium.

Max. pressure: 6,7 bar.
Please order body and tip separately.

Tips

For use with our Swivel Max. coolant nozzle system (20051 to 20059).

Technical Notes

Max. temperature: 43°C.

Order No.	Type	d ₁	d ₂	d ₃	l ₁
20056.W1150	Tip	12.2	2.2	3/8" UNF	12.7
20056.W2122	Tip	12.2	3.0	3/8" UNF	12.7
20056.W2123	Tip	12.2	4.0	3/8" UNF	12.7
20056.W2124	Body	12.0	3/8" UNF	-	28.5



20059



COOLANT NOZZLES

Tips

For use with our Swivel Max. coolant nozzle system (20051 to 20056).

Order No.
20059.W0001

Type
Assembly Pliers

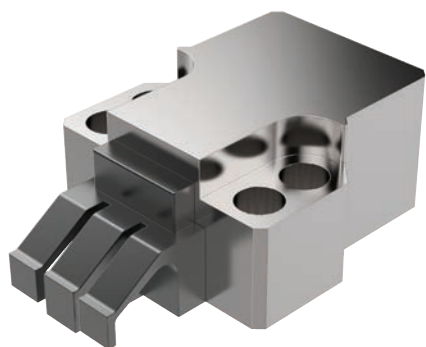


Horizontal Clamping

up to 2.2 tons

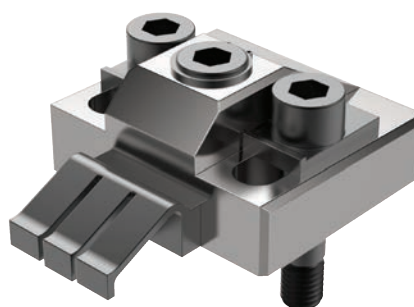
Clamping & Height Setting

Clamping Torque



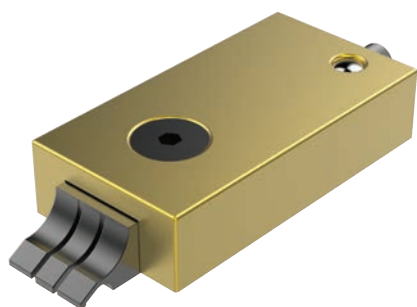
11040/CL2040

Clamping Torque N/m	Clamping Force N
50	23000
40	18000
30	12500
25	11500
20	9500



11070/CL2070

Clamping Torque N/m	Clamping Force N
60	16500
50	15000
40	12000
30	10000
25	8000
20	7000



11081/CL2081

Clamping Torque N/m	Clamping Force N
5	6600
4.5	5500
4	4900



10940/CL0030

Clamping Torque N/m	Clamping Force N
8.5	4000
8	3800
7	3400
6	3000
5	2500
4	2000

COOLANT NOZZLES

ov-W11040-A-T-W10940-A-T-horizontal-clamping-rnh - Updated -13-10-2022



What Flow Rate of Coolant is Required?

Choose a nozzle with an orifice size that matches your pump's capacity.

Select an orifice size too big and coolant pressure will drop off, an orifice size too small and an inadequate amount of coolant will reach the tool tip and can result in damage.

Note: Flow rates are based on water at 20°. Actual results may vary with fluid type, extension length and aiming angle.

System pressure (bar)	0.35	0.7	1.4	2.0	2.8	4.1	5.5
Orifice diameter (mm)	Flow rate (litres/minute)						
1.02	0.32	0.45	0.64	0.77	0.91	1.18	1.41
1.57	0.86	1.14	1.68	2	2.32	2.82	3.32
2.18	1.64	2.32	3.27	3.86	4.55	5.46	6.82
2.79	2.91	4.09	6.36	7.27	8.18	10	11.37
4.06	6.36	9.09	12.73	15.91	18.18	21.82	25.46
5.59	11.37	16.82	23.64	30.46	35.46	42.28	48.19
System pressure (bar)	6.9	10.3	13.8	20.7	34.5	69.0	103.5
Orifice diameter (mm)	Flow rate (litres/minute)						
1.02	1.59	1.86	2.09	2.77	4	5.46	6.36
1.57	3.64	4.55	5.46	6.82	9.55	13.64	17.28
2.18	7.73	9.09	10.46	12.73	16.82	23.64	28.64
2.79	14.09	16.37	18.64	23.64	29.55	40.46	49.55
4.06	28.19	34.55	41.37	49.1	63.65	90.01	110.47
5.59	53.64	65.46	75.01	89.1	114.56	161.39	197.75

Calculating Coolant Velocity

To calculate the average coolant exit velocity (important in some grinding operations where it is often desirable to match or exceed the peripheral velocity of the wheel) refer to the formula below. Choose an orifice size that produces sufficient back pressure to achieve the desired velocity.

$$V = \frac{(17.11 \times 10^{-5}) \times F}{(d \times 10^{-3})^2}$$

Where;

V = Velocity in m/s

C = Constant of 17.11 x 10⁻⁵

F = Flow rate through orifice in litres/min (see table above)

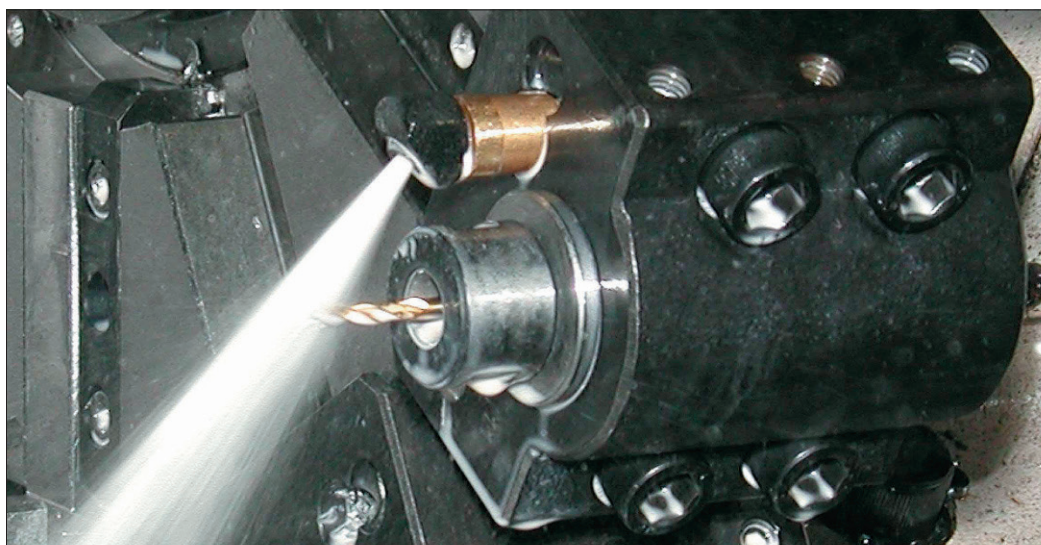
d = Orifice diameter (mm) from product tables

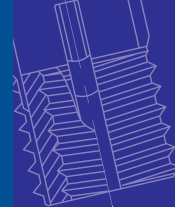
Nozzle Extensions

Choose a nozzle extension that suits your application. Short projections are more compact and less likely to be knocked out of position by swarf or vibration. Longer extensions are easier to aim, produce a more streamline or laminar flow and shoot further.

A Word About Coolant Pumps

The most common coolant pump on CNC machine tools is a single stage centrifugal pump, normally designed to move high volumes of water at low pressure (typically 0.2 to 1.4 bar). Multi-stage centrifugal pumps are capable of higher pressures (typically 1.4 to 14 bar) while still producing high flow rates. Positive displacement pumps are used for very high pressure applications up to 140 bar and are generally used with small diameter orifices due to their lower flow rates.



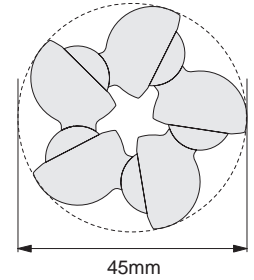


An extremely versatile system with an incredible range of motion in each joint – 72° either side of centreline! It's compact design is ideal for tight spaces. Available with fixed or variable flow nozzles and interchangeable orifices rated to 6.7 bar maximum and available with threaded or spherical bases. Vibration resistant joints provide superior reliability in CNC lathe turrets where inertial forces are high.

Variations

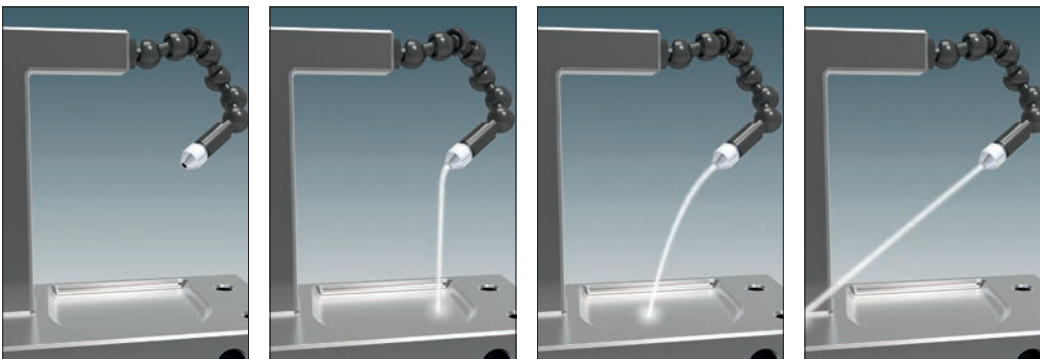


Links swivel 72° either side of centreline enabling it to come full circle within a 45mm inscribed circle.



Applications

The Swival Max coolant nozzle system with fixed flow end nozzles is ideal for CNC lathes due to its compactness and flexibility.



Variable flow end nozzles enable infinite flow control from full shutoff to full flow with fingertip control. They are ideal for manual and CNC mills.



An extremely versatile coolant nozzle system compatible with new and existing installations.

Build your flexible system for your application.

Base



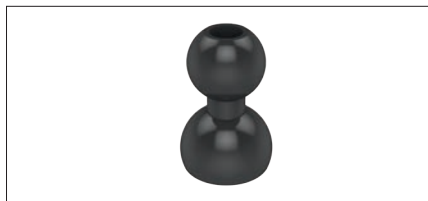
20051 - Brass Base Element
For plain bore and screw location.

OR



20052 - Acetal Base Element
For easy screw in fixing.

Intermediate Links for Maximum Extension and Reach



20053.W0010 - Standard Swivel Max Extension Links

OR



20053.W0120 - Connect from Swivel Max to LocLine.

OR



20053.W0130 - Connect from Swivel Max to SnapLoc.

Alternative Option

Alternatively, connect from either LocLine or SnapLoc to our in-expensive and versatile swivel Max System.



20053.W0140 - Connect from LocLine to Swivel Max

OR



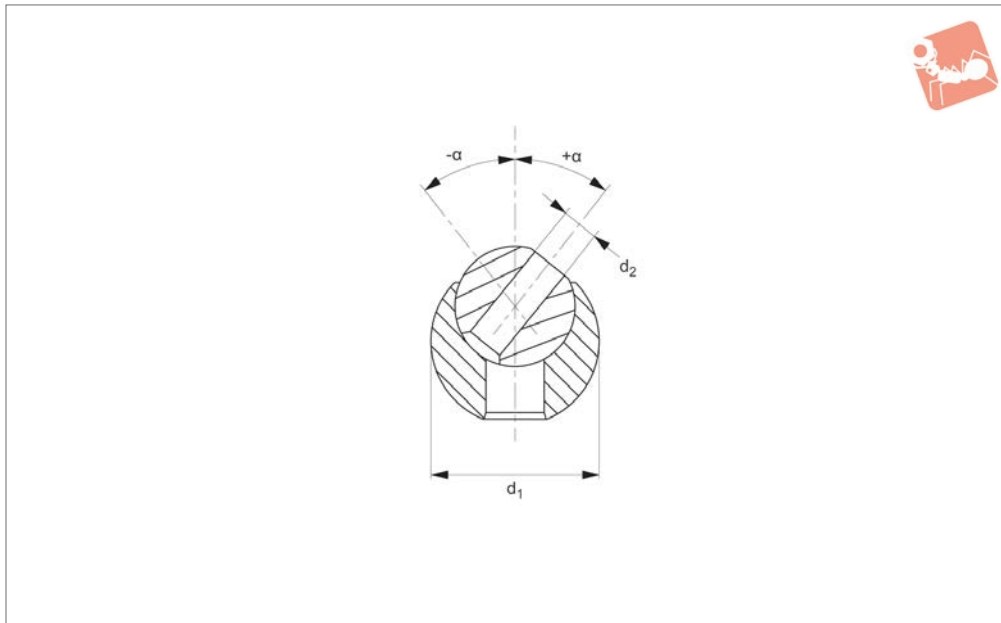
20053.W0150 - Connect from SnapLoc to Swivel Max.



Coolant Nozzles - Black Eye

max. 10 bar

Coolant Nozzles



20000

COOLANT NOZZLES

Material

Body: acetal.
Ball: stainless steel.

Technical Notes

Max. temperature 70°C.
Max. pressure 10 bar.
symbola/symbol is an angle of adjustment

either side of centre line.
For extension tubes see part nos. 20090 and 20092.
For spray tips see part nos. 20080 and 20082.

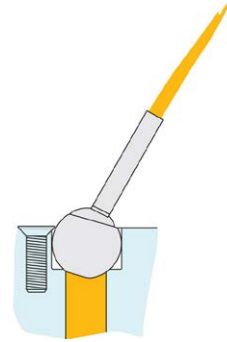
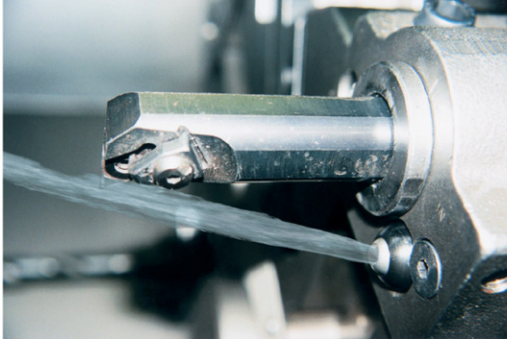
Tips

Easy to aim replacement for basic spherical

coolant nozzles. Install, lock in place then aim the stainless steel ball with the tip of a hex key.

Choose tapped version if you need to use with extension tubes or if occasional plugging of unit is required (set screw included).

Order No.	d ₁	d ₂	Jet bore d ₂	α
20000.W0100	10	2.8	Plain	±35°
20000.W0120	12	4.0	Plain	±35°
20000.W0140	14	4.0	Plain	±35°
20000.W0150	15	4.0	Plain	±35°
20000.W0180	18	4.0	Plain	±35°
20000.W0220	22	5.6	Plain	±35°
20000.W2370	3/8"	2.8	Plain	±35°
20000.W2500	1/2"	4.0	Plain	±35°
20000.W2630	5/8"	4.0	Plain	±35°
20000.W6100	10	M 3,5x0,6	Threaded	±35°
20000.W6120	12	M 4,0x0,7	Threaded	±35°
20000.W6140	14	M 4,0x0,7	Threaded	±35°
20000.W6150	15	M 4,0x0,7	Threaded	±35°
20000.W6180	18	M 5,0x0,8	Threaded	±35°
20000.W6220	22	M 6,0x1,0	Threaded	±35°
20000.W8370	3/8"	M 3,5x0,6	Threaded	±35°
20000.W8500	1/2"	M 4,0x0,7	Threaded	±35°
20000.W8630	5/8"	M 4,0x0,7	Threaded	±35°

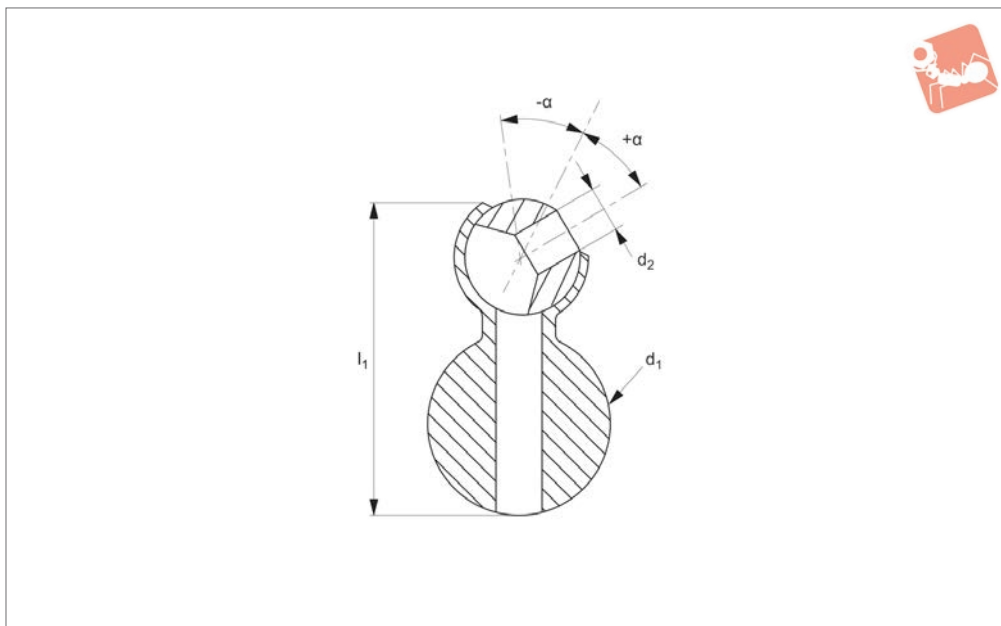




Coolant Nozzles - Bug Eye

max. 10 bar

Coolant Nozzles



20002

COOLANT NOZZLES

Material

Body: acetal.
Ball: stainless steel.

Technical Notes

Max. temperature 70°C.
Max. pressure 10 bar.

symbola/symbol is an angle of adjustment either side of centre line.

For extension tubes see part nos. 20090 and 20092.

For spray tips see part nos. 20080 and 20082.

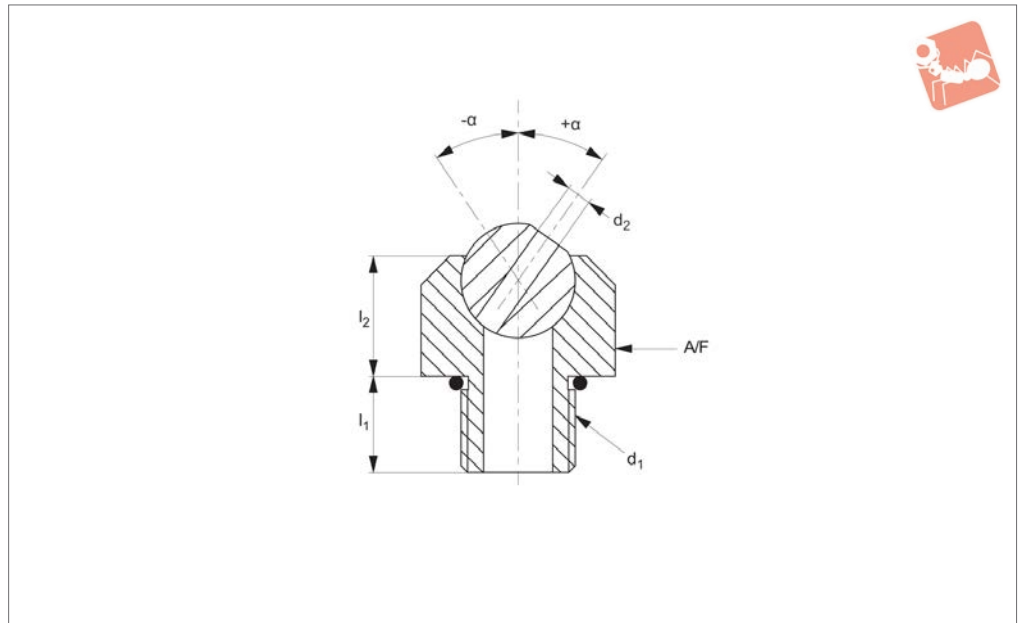
Tips

Extended ball socket for extra „aimability“, still compact. Especially useful for short tool projections.

Order No.	d ₁	d ₂	Jet bore d ₂	l ₁	α
20002.W0120	12	2.8	Plain	28.0	±35°
20002.W0121	12	4.0	Plain	28.0	±35°
20002.W0140	14	2.8	Plain	30.5	±35°
20002.W0141	14	4.0	Plain	30.5	±35°
20002.W0150	15	2.8	Plain	31.2	±35°
20002.W0151	15	4.0	Plain	31.2	±35°
20002.W0220	22	2.8	Plain	38.0	±35°
20002.W0221	22	4.0	Plain	38.0	±35°
20002.W2500	1/2"	2.8	Plain	28.5	±35°
20002.W2501	1/2"	4.0	Plain	28.5	±35°
20002.W2630	5/8"	2.8	Plain	31.2	±35°
20002.W2631	5/8"	4.0	Plain	31.2	±35°
20002.W6120	12	M 6 x 1,0	Threaded	28.0	±35°
20002.W6140	14	M 6 x 1,0	Threaded	30.5	±35°
20002.W6150	15	M 6 x 1,0	Threaded	31.2	±35°
20002.W6220	22	M 6 x 1,0	Threaded	38.0	±35°
20002.W8500	1/2"	M 6 x 1,0	Threaded	28.5	±35°
20002.W8630	5/8"	M 6 x 1,0	Threaded	31.2	±35°



20010



Material

Body: acetal.
Ball: stainless steel.

Technical Notes

Max. temperature 70°C.
Max. pressure 10 bar.
symbol α /symbol is an angle of adjustment

either side of centre line.
For extension tubes see part nos. 20090 and 20092.
For spray tips see part nos. 20080 and 20082.

Tips

Screws into threaded coolant ports. Large

adjustment angle.
Choose large orifice for maximum flow.
Choose smaller orifices when using multiple nozzles.
Choose tapped ends if nozzle will need to be plugged (set screw included).

Order No.	Thread	d ₁	d ₂	Jet bore d ₂	l ₁	l ₂	α	A/F
20010.W0100	Metric Fine	M10x1,25	4.0	Plain	9.1	10.4	$\pm 35^\circ$	17
20010.W0101	Metric Fine	M10x1,25	2.8	Plain	9.1	10.4	$\pm 35^\circ$	17
20010.W1101	Metric Coarse	M10x1,50	4.0	Plain	9.1	10.4	$\pm 35^\circ$	17
20010.W1102	Metric Coarse	M10x1,50	2.8	Plain	9.1	10.4	$\pm 35^\circ$	17
20010.W1120	Metric Coarse	M12x1,75	4.0	Plain	9.1	10.4	$\pm 35^\circ$	17
20010.W1121	Metric Coarse	M12x1,75	2.8	Plain	9.9	10.4	$\pm 35^\circ$	17
20010.W2130	NPT-BSPT	1/8	4.0	Plain	9.9	10.4	$\pm 35^\circ$	17
20010.W2131	NPT-BSPT	1/8	2.8	Plain	12.7	10.4	$\pm 35^\circ$	17
20010.W2250	NPT-BSPT	1/4	4.0	Plain	12.7	10.4	$\pm 35^\circ$	17
20010.W2251	NPT-BSPT	1/4	2.8	Plain	12.7	10.4	$\pm 35^\circ$	17
20010.W2380	NPT-BSPT	3/8	4.0	Plain	12.7	10.4	$\pm 35^\circ$	17
20010.W2381	NPT-BSPT	3/8	5.6	Plain	12.7	10.4	$\pm 35^\circ$	17
20010.W2382	NPT-BSPT	3/8	M 5x0,8	Threaded	9.1	10.4	$\pm 35^\circ$	17
20010.W6100	Metric Fine	M10x1,25	M 5x0,8	Threaded	9.1	10.4	$\pm 35^\circ$	17
20010.W7100	Metric Coarse	M10x1,50	M 5x0,8	Threaded	9.1	10.4	$\pm 35^\circ$	17
20010.W7120	Metric Coarse	M12x1,75	M 5x0,8	Threaded	9.9	10.4	$\pm 35^\circ$	17
20010.W8130	NPT-BSPT	1/8	M 5x0,8	Threaded	12.7	10.4	$\pm 35^\circ$	17
20010.W8131	NPT-BSPT	1/4	M 6x1,0	Threaded	12.7	10.4	$\pm 35^\circ$	17
20010.W8381	NPT-BSPT	3/8	M 6x1,0	Threaded	12.7	10.4	$\pm 35^\circ$	17

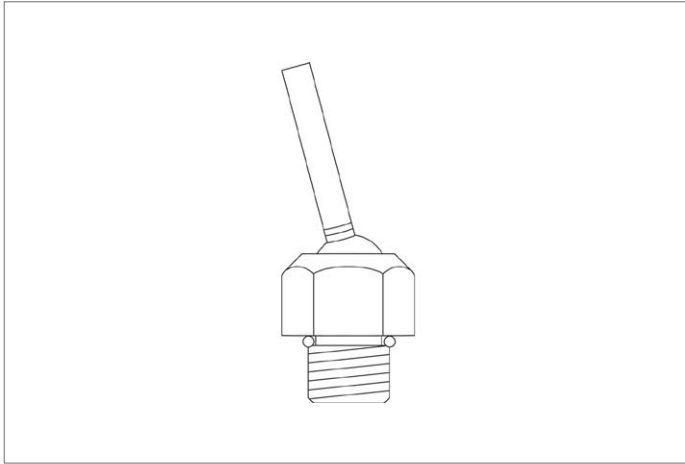


Coolant Nozzles - Jet Bolt - Compact

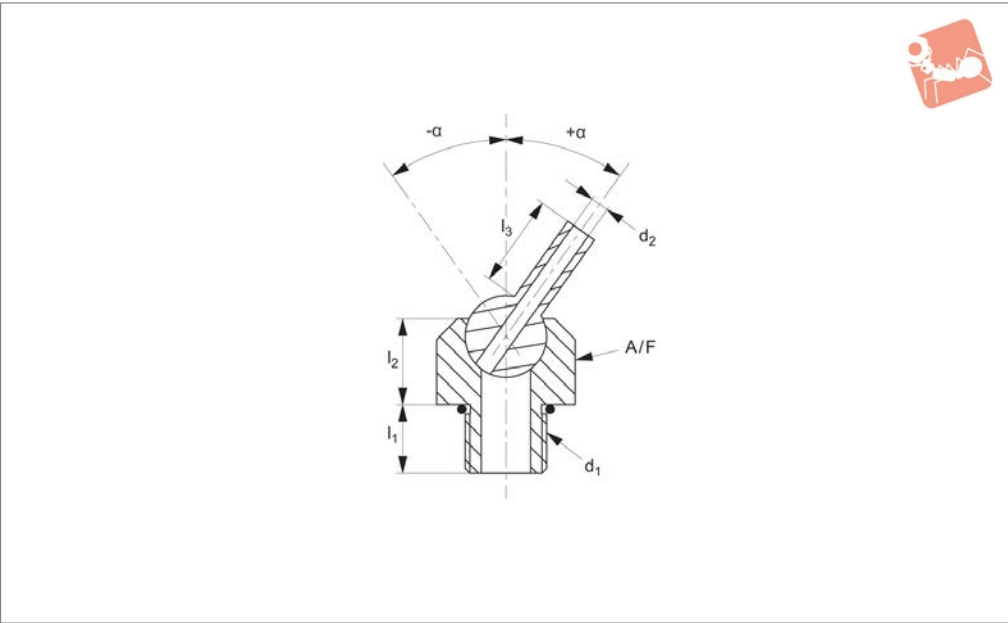
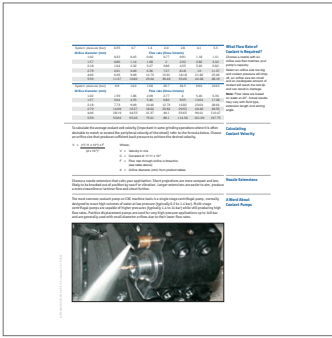
max. 10 bar



Coolant Nozzles



COOLANT NOZZLES



COOLANT NOZZLES

20012

Material

Body: acetal.
Ball and tube: stainless steel.

Technical Notes

Max. temperature 70°C.
Max. pressure 10 bar.

symbola/symbol is an angle of adjustment either side of centre line.

Tips

Screws into threaded coolant ports. Large adjustment angle.
Choose large orifice for maximum flow.

Choose smaller orifices when using multiple nozzles.

Choose tapped ends if nozzle will need to be plugged (set screw included).

Order No.	Thread	d ₁	d ₂	l ₁	l ₂	l ₃	α	A/F
20012.W0100	Metric Fine	M10x1,25	2.8	9.2	10.4	6.4	±35°	17
20012.W0101	Metric Fine	M10x1,25	2.8	9.2	10.4	12.7	±35°	17
20012.W0102	Metric Fine	M10x1,25	2.8	9.2	10.4	31.7	±35°	17
20012.W0103	Metric Fine	M10x1,25	4.0	9.2	10.4	12.7	±35°	17
20012.W0104	Metric Fine	M10x1,25	4.0	9.2	10.4	31.7	±35°	17
20012.W0201	Metric Fine	M20x1,50	4.0	12.7	15.2	19.0	±35°	24
20012.W0202	Metric Fine	M20x1,50	4.0	12.7	15.2	38.0	±35°	24
20012.W0203	Metric Fine	M20x1,50	5.6	12.7	15.2	19.0	±35°	24
20012.W0204	Metric Fine	M20x1,50	5.6	12.7	15.2	38.0	±35°	24
20012.W0205	Metric Fine	M20x1,50	7.1	12.7	15.2	19.0	±35°	24
20012.W0206	Metric Fine	M20x1,50	7.1	12.7	15.2	38.0	±35°	24
20012.W1100	Metric Coarse	M10x1,50	2.8	9.2	10.4	6.4	±35°	17
20012.W1101	Metric Coarse	M10x1,50	2.8	9.2	10.4	12.7	±35°	17
20012.W1102	Metric Coarse	M10x1,50	2.8	9.2	10.4	31.7	±35°	17
20012.W1103	Metric Coarse	M10x1,50	4.0	9.2	10.4	12.7	±35°	17
20012.W1104	Metric Coarse	M10x1,50	4.0	9.2	10.4	31.7	±35°	17
20012.W1121	Metric Coarse	M12x1,75	2.8	9.2	10.4	6.4	±35°	17
20012.W1122	Metric Coarse	M12x1,75	2.8	9.2	10.4	12.7	±35°	17
20012.W1123	Metric Coarse	M12x1,75	2.8	9.2	10.4	31.7	±35°	17
20012.W1124	Metric Coarse	M12x1,75	4.0	9.2	10.4	12.7	±35°	17
20012.W1125	Metric Coarse	M12x1,75	4.0	9.2	10.4	31.7	±35°	17
20012.W2130	NPT-BSPT	1/8"	2.8	9.9	10.4	6.4	±35°	17
20012.W2131	NPT-BSPT	1/8"	2.8	9.9	10.4	12.7	±35°	17
20012.W2132	NPT-BSPT	1/8"	2.8	9.9	10.4	31.7	±35°	17
20012.W2133	NPT-BSPT	1/8"	4.0	9.9	10.4	12.7	±35°	17
20012.W2134	NPT-BSPT	1/8"	4.0	9.9	10.4	31.7	±35°	17
20012.W2250	NPT-BSPT	1/4"	2.8	12.7	10.4	6.4	±35°	17
20012.W2251	NPT-BSPT	1/4"	2.8	12.7	10.4	12.7	±35°	17
20012.W2252	NPT-BSPT	1/4"	2.8	12.7	10.4	31.7	±35°	17
20012.W2253	NPT-BSPT	1/4"	4.0	12.7	10.4	12.7	±35°	17
20012.W2254	NPT-BSPT	1/4"	4.0	12.7	10.4	31.7	±35°	17
20012.W2380	NPT-BSPT	3/8"	2.8	12.7	10.4	12.7	±35°	17



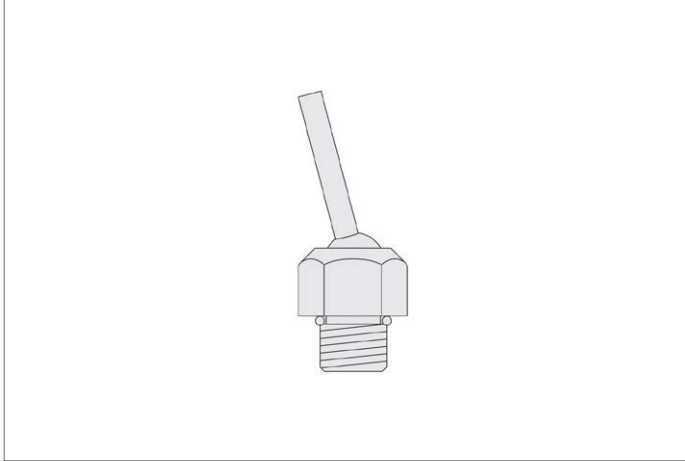
Coolant Nozzles - Jet Bolt

with tube - max. 10 bar

Coolant Nozzles

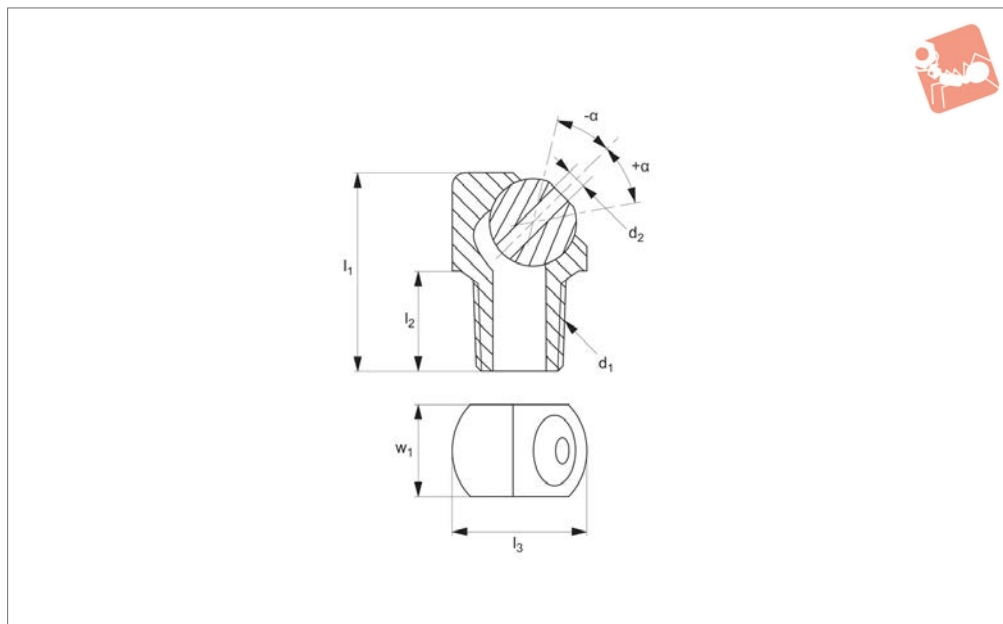


Order No.	Thread	d ₁	d ₂	l ₁	l ₂	l ₃	α	A/F
20012.W2381	NPT-BSPT	3/8"	2.8	12.7	10.4	31.7	±35°	17
20012.W2382	NPT-BSPT	3/8"	4.0	12.7	10.4	12.7	±35°	17
20012.W2383	NPT-BSPT	3/8"	4.0	12.7	10.4	31.7	±35°	17
20012.W2384	NPT-BSPT	3/8"	5.6	12.7	10.4	12.7	±35°	17
20012.W2385	NPT-BSPT	3/8"	5.6	12.7	10.4	31.7	±35°	17





20016



Material

Body: acetal.
Ball: stainless steel.

Technical Notes

Max. temperature 70°C.
Max. pressure 10 bar.
symbol α /symbol is an angle of adjustment either side of centre line.

For extension tubes see part nos. 20090 and 20092.

For spray tips see part nos. 20080 and 20082.

Tips

Converts any NPT or BSPT hole to a fully adjustable nozzle.

Easy adjustment.

Choose large orifice for maximum flow and smaller orifices when using multiple nozzles.

Choose tapped tube if the nozzles needs to be plugged (set screw included).

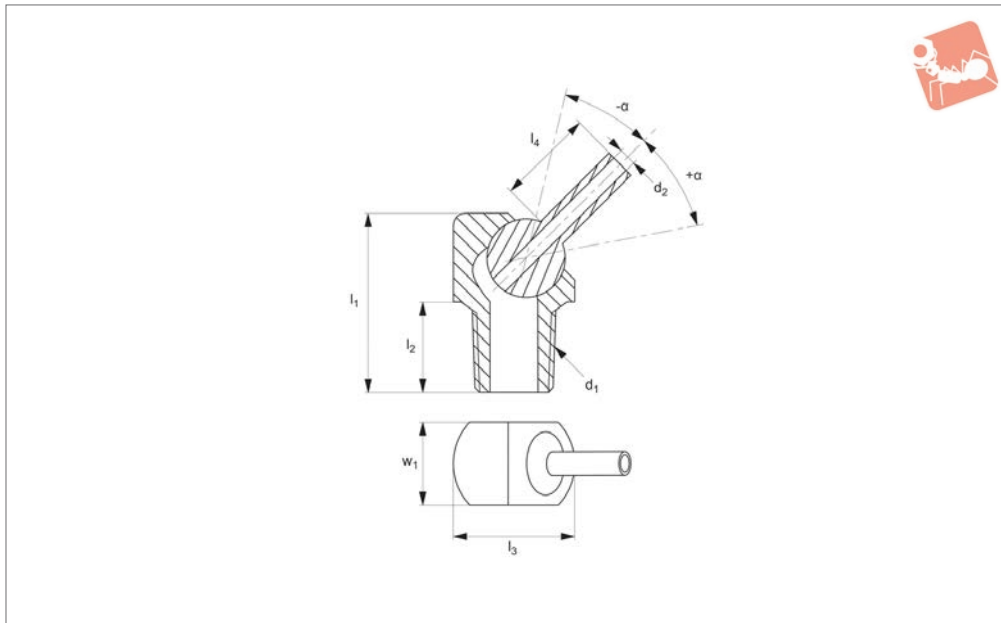
Order No.	d ₁	d ₂	Jet bore d ₂	l ₁	l ₂	l ₃	w ₁	α
20016.W2060	1/16" NPT/BSPT	2.8	Plain	17.5	7.9	12.7	11.2	±35°
20016.W2061	1/16" NPT/BSPT	4.0	Plain	17.5	7.9	12.7	11.2	±35°
20016.W2120	1/8" NPT/BSPT	2.8	Plain	20.8	9.7	16.0	12.7	±35°
20016.W2121	1/8" NPT/BSPT	4.0	Plain	20.8	9.7	16.0	12.7	±35°
20016.W2250	1/4" NPT/BSPT	2.8	Plain	23.9	11.2	19.1	16.0	±35°
20016.W2251	1/4" NPT/BSPT	4.0	Plain	23.9	11.2	19.1	16.0	±35°
20016.W2370	3/8" NPT/BSPT	2.8	Plain	28.7	12.7	22.4	19.1	±35°
20016.W2371	3/8" NPT/BSPT	4.0	Plain	28.7	12.7	22.4	19.1	±35°
20016.W2372	3/8" NPT/BSPT	5.6	Plain	28.7	12.7	22.4	19.1	±35°
20016.W8060	1/16" NPT/BSPT	M 4x0,7	Threaded	17.5	7.9	12.7	11.2	±35°
20016.W8120	1/8" NPT/BSPT	M 5x0,8	Threaded	20.8	9.7	16.0	12.7	±35°
20016.W8250	1/4" NPT/BSPT	M 5x0,8	Threaded	23.9	11.2	19.1	16.0	±35°
20016.W8370	3/8" NPT/BSPT	M 6x1,0	Threaded	28.7	12.7	22.4	19.1	±35°



Coolant Nozzles - Turret Jet

with tube - max. 10 bar

Coolant Nozzles



20018

COOLANT NOZZLES

Material

Body: acetal.
Ball and tube: stainless steel.

Max. pressure 10 bar.
symbola/symbol is an angle of adjustment
either side of centre line.

adjustable nozzle.
Easy adjustment.
Choose large orifice for maximum flow and
smaller orifices when using multiple
nozzles.

Technical Notes

Max. temperature 70°C.

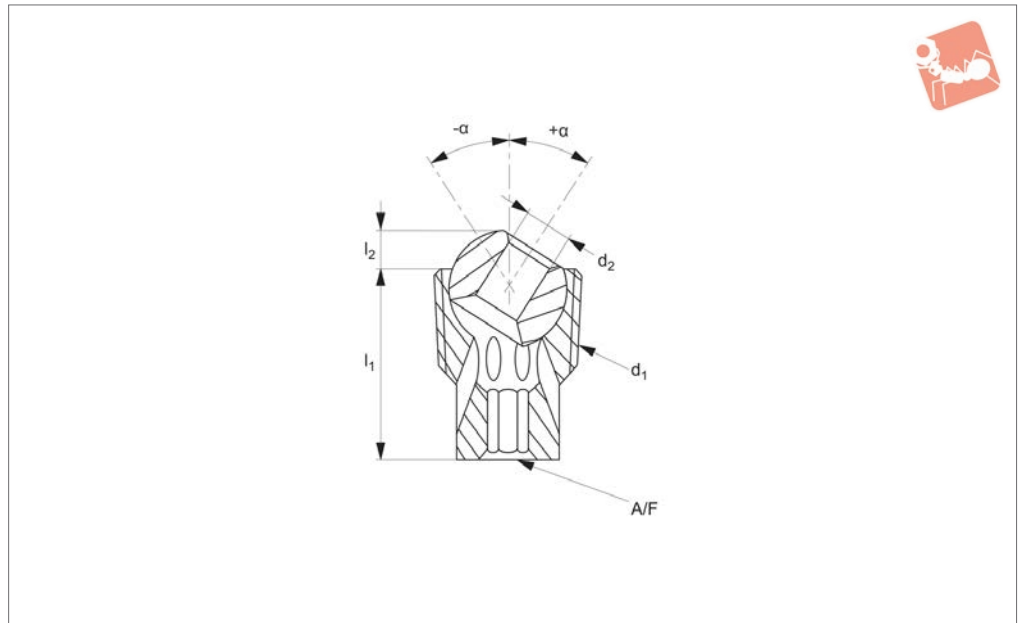
Tips

Converts any NPT or BSPT hole to a fully

Order No.	d ₁	d ₂	l ₁	l ₂	l ₃	l ₄	w ₁	α
20018.W2060	1/16" NPT/BSPT	2.2	17.5	7.9	12.7	6.4	11.2	±35°
20018.W2061	1/16" NPT/BSPT	2.2	17.5	7.9	12.7	12.7	11.2	±35°
20018.W2062	1/16" NPT/BSPT	2.2	17.5	7.9	12.7	31.7	11.2	±35°
20018.W2063	1/16" NPT/BSPT	2.8	17.5	7.9	12.7	6.4	11.2	±35°
20018.W2064	1/16" NPT/BSPT	2.8	17.5	7.9	12.7	12.7	11.2	±35°
20018.W2065	1/16" NPT/BSPT	2.8	17.5	7.9	12.7	31.7	11.2	±35°
20018.W2121	1/8" NPT/BSPT	2.8	20.8	9.7	16.0	6.4	12.7	±35°
20018.W2122	1/8" NPT/BSPT	2.8	20.8	9.7	16.0	12.7	12.7	±35°
20018.W2123	1/8" NPT/BSPT	2.8	20.8	9.7	16.0	31.7	12.7	±35°
20018.W2124	1/8" NPT/BSPT	4.0	20.8	9.7	16.0	12.7	12.7	±35°
20018.W2125	1/8" NPT/BSPT	4.0	20.8	9.7	16.0	31.7	12.7	±35°
20018.W2250	1/4" NPT/BSPT	2.8	23.9	11.2	19.1	6.4	16.0	±35°
20018.W2251	1/4" NPT/BSPT	2.8	23.9	11.2	19.1	12.7	16.0	±35°
20018.W2252	1/4" NPT/BSPT	2.8	23.9	11.2	19.1	31.7	16.0	±35°
20018.W2253	1/4" NPT/BSPT	4.0	23.9	11.2	19.1	12.7	16.0	±35°
20018.W2254	1/4" NPT/BSPT	4.0	23.9	11.2	19.1	31.7	16.0	±35°
20018.W2370	3/8" NPT/BSPT	2.8	28.7	12.7	22.4	31.7	19.1	±35°
20018.W2371	3/8" NPT/BSPT	4.0	28.7	12.7	22.4	12.7	19.1	±35°
20018.W2372	3/8" NPT/BSPT	4.0	28.7	12.7	22.4	31.7	19.1	±35°
20018.W2373	3/8" NPT/BSPT	5.6	28.7	12.7	22.4	12.7	19.1	±35°
20018.W2374	3/8" NPT/BSPT	5.6	28.7	12.7	22.4	31.7	19.1	±35°



20020



Material

Body: acetal.
Ball: stainless steel.

Max. pressure 10 bar.
symbola/symbol is an angle of adjustment
either side of centre line.

Insert hex. key (provided), into the top of
the nozzle until it engages with the hex.
socket. Screw in until the body is flush.

Technical Notes

Max. temperature 70°C.

Tips

Screw-in, flush mount coolant nozzles.

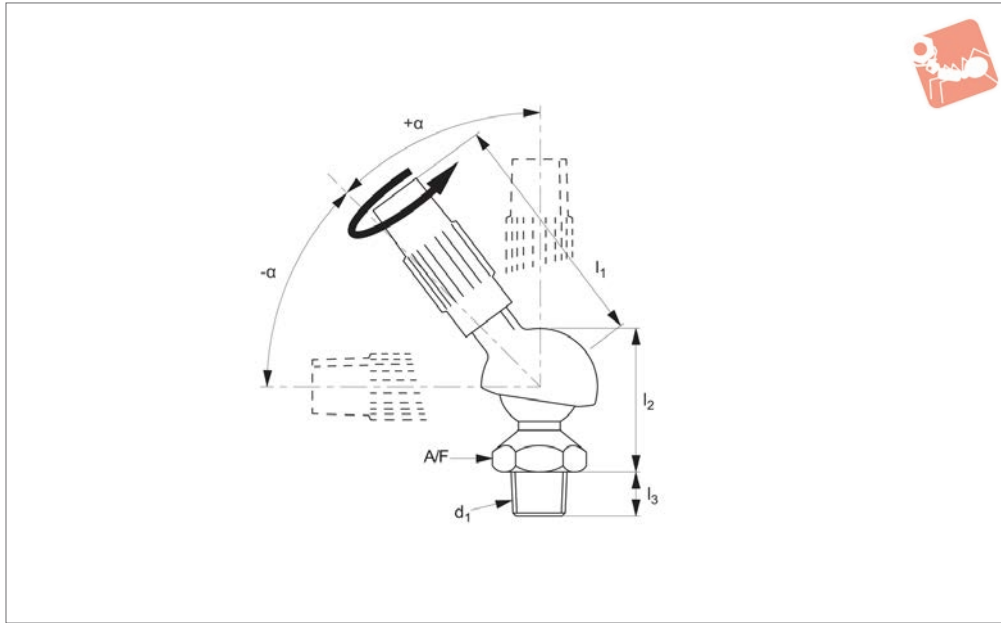
Order No.	d ₁	d ₂	l ₁	l ₂	α	A/F
20020.W2121	1/8" NPT	4.0	12.7	3.0	±35°	9/64"
20020.W2122	1/8" BSPT	4.0	12.7	3.0	±35°	9/64"
20020.W2250	1/4" NPT/BSPT	4.0	15.7	3.8	±40°	9/64"
20020.W2370	3/8" NPT/BSPT	5.6	19.1	4.6	±40°	3/16"



Coolant Nozzles - Mill Jet

max. 6,7 bar

Coolant Nozzles



20024

COOLANT NOZZLES

Material

Acetal.

Technical Notes

Max. temperature 70°C.

Max. pressure 10 bar.

symbol α /symbol is an angle of adjustment either side of centre line.

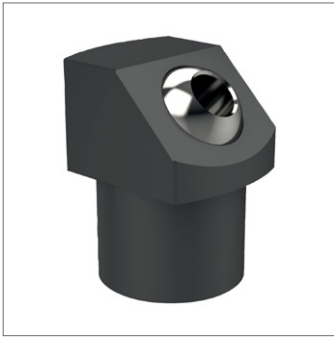
Recommended coolant filtration - 100 microns.

Tips

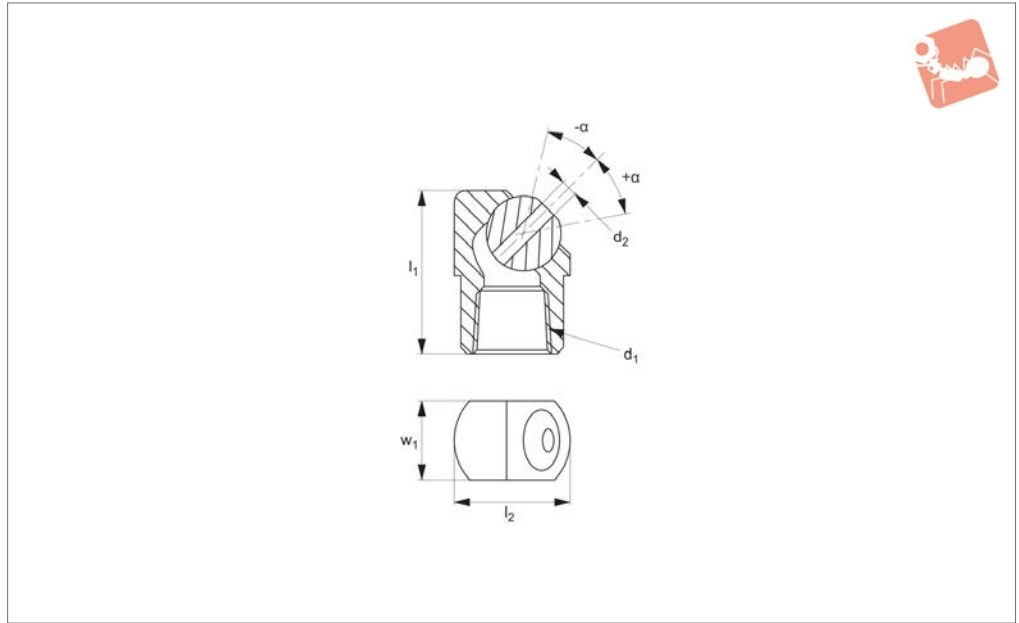
Adjustable spray nozzle, from full shut-off to fine spray, to direct stream.

Remains in position.

Order No.	Angle	Rotation	d_1	l_1	l_2	l_3	α	A/F
20024.W2120	90°	360°	1/4" NPT/BSPT	43	27	11	±45°	16
20024.W2250	90°	360°	1/8" NPT/BSPT	43	27	11	±45°	16



20031



Material

Body: acetal.
Ball: stainless steel.

Technical Notes

Max. temperature 70°C.
Max. pressure 10 bar.

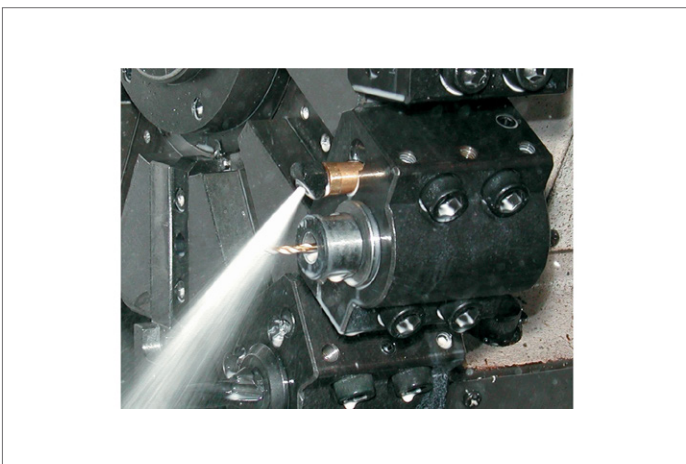
symbola/symbol is an angle of adjustment either side of centre line.
Can be used with brass connector 20034.

Tips

Screws onto any NPT or BSPT pipe.
Choose large orifice for maximum flow and

smaller orifices when using multiple nozzles.
Choose tapped tube if the nozzles needs to be plugged (set screw included).

Order No.	d ₁	d ₂	Jet bore d ₂	l ₁	l ₂	w ₁	α
20031.W2120	1/8" NPT/BSPT	2.8	Plain	20.8	16.0	12.7	±35°
20031.W2121	1/8" NPT/BSPT	4.0	Plain	20.8	16.0	12.7	±35°
20031.W2250	1/4" NPT/BSPT	2.8	Plain	23.9	19.1	16.0	±35°
20031.W2251	1/4" NPT/BSPT	4.0	Plain	23.9	19.1	16.0	±35°
20031.W2370	3/8" NPT/BSPT	2.8	Plain	28.7	22.4	19.1	±35°
20031.W2371	3/8" NPT/BSPT	4.0	Plain	28.7	22.4	19.1	±35°
20031.W2372	3/8" NPT/BSPT	5.5	Plain	28.7	22.4	19.1	±35°
20031.W8120	1/8" NPT/BSPT	M 5x0,8	Threaded	20.8	16.0	12.7	±35°
20031.W8250	1/4" NPT/BSPT	M 5x0,8	Threaded	23.9	19.1	16.0	±35°
20031.W8370	3/8" NPT/BSPT	M 6x1,0	Threaded	28.7	22.4	19.1	±35°

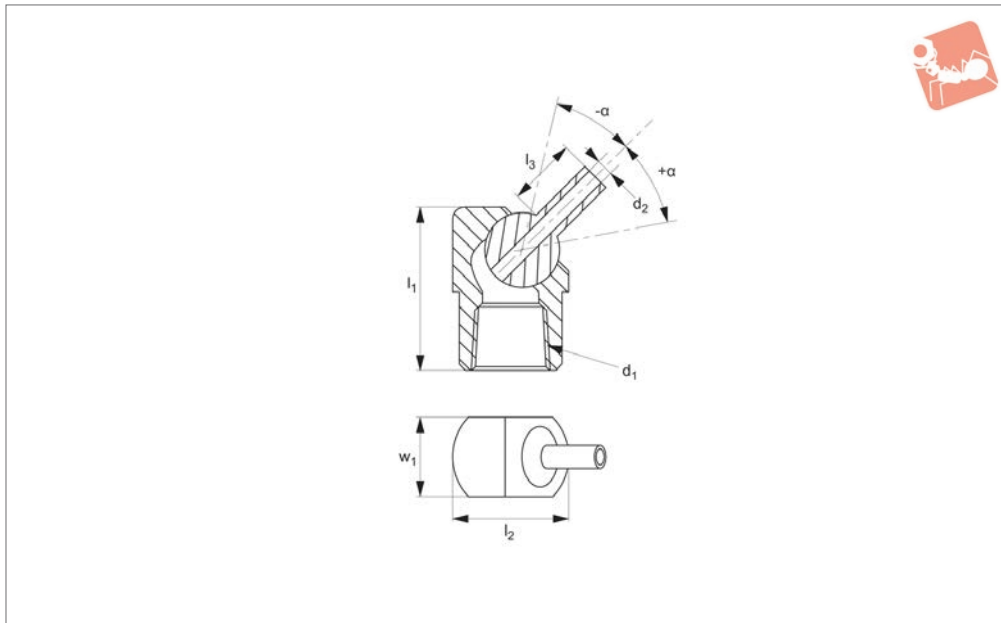




Coolant Nozzles - Cap Jet

with tube - max. 10 bar

Coolant Nozzles



20032

COOLANT NOZZLES

Material

Body: acetal.
Ball and tube: stainless steel.

Technical Notes

Max. temperature 70°C.
Max. pressure 10 bar.

symbola/symbol is an angle of adjustment either side of centre line.

Can be used with brass connector 20034.

Tips

Screws onto any NPT or BSPT pipe.
Choose large orifice for maximum flow and

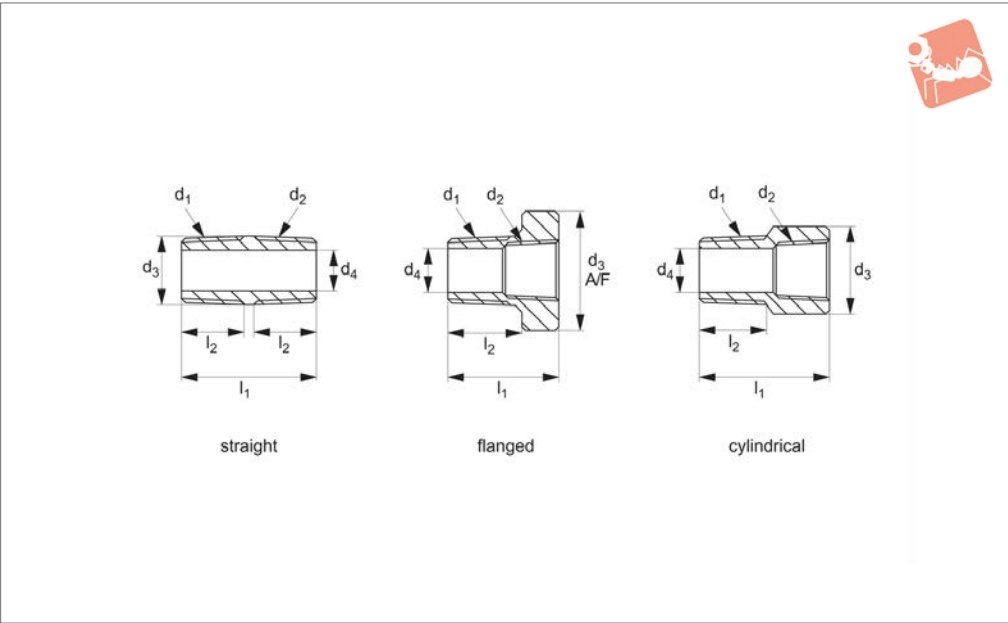
smaller orifices when using multiple nozzles.

Choose tapped tube if the nozzles needs to be plugged (set screw included).

Order No.	d ₁	d ₂	l ₁	l ₂	l ₃	w ₁	α
20032.W2120	1/8" NPT/BSPT	2.8	20.8	16.0	6.4	12.7	±35°
20032.W2121	1/8" NPT/BSPT	2.8	20.8	16.0	12.7	12.7	±35°
20032.W2122	1/8" NPT/BSPT	2.8	20.8	16.0	31.7	12.7	±35°
20032.W2123	1/8" NPT/BSPT	4.0	20.8	16.0	12.7	12.7	±35°
20032.W2124	1/8" NPT/BSPT	4.0	20.8	16.0	31.7	12.7	±35°
20032.W2250	1/4" NPT/BSPT	2.8	23.9	19.1	6.4	16.0	±35°
20032.W2251	1/4" NPT/BSPT	2.8	23.9	19.1	12.7	16.0	±35°
20032.W2252	1/4" NPT/BSPT	2.8	23.9	19.1	31.7	16.0	±35°
20032.W2253	1/4" NPT/BSPT	4.0	23.9	19.1	12.7	16.0	±35°
20032.W2254	1/4" NPT/BSPT	4.0	23.9	19.1	31.7	16.0	±35°
20032.W2370	3/8" NPT/BSPT	4.0	28.7	22.4	31.7	19.1	±35°
20032.W2371	3/8" NPT/BSPT	4.0	28.7	22.4	12.7	19.1	±35°
20032.W2372	3/8" NPT/BSPT	5.6	28.7	22.4	12.7	19.1	±35°
20032.W2373	3/8" NPT/BSPT	5.6	28.7	22.4	31.7	19.1	±35°



20034



Material

Body: acetal or brass.

Technical Notes

Acetal Type:

Max. temperature: 70°C.

Max. pressure: 10 bar.

Brass Type:

Max. temperature: 150°C.

Max. pressure: 100 bar.

Connector only.

Tips

Fits both NPT and BSPT threads - allows you to use inch or metric fittings and nozzles. Particularly useful for 20018 (turret jets) and 20032 (cap jets).

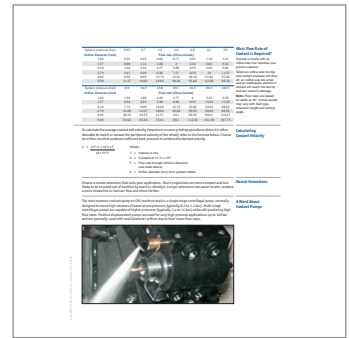
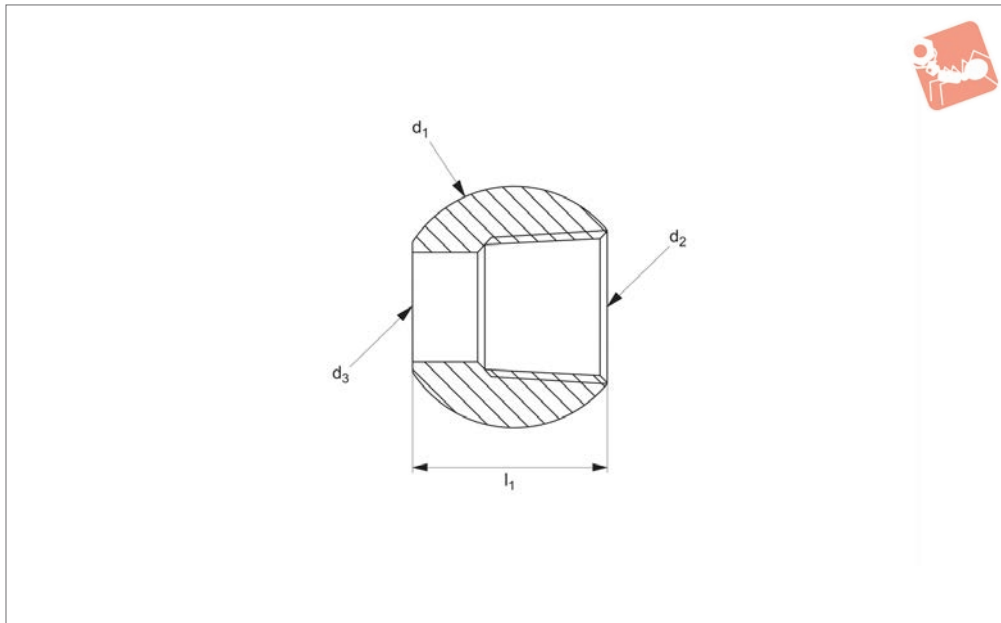
Order No.	Material	Type	d ₃	d ₄	l ₁	l ₂	Thread d ₁	Thread d ₂
20034.W3120-A	Acetal	Straight	10.4	6.4	20.0	10	1/8" NPT/BSPT	1/8" NPT/BSPT
20034.W3250-A	Acetal	Straight	13.5	7.9	22.0	11	1/4" NPT/BSPT	1/4" NPT/BSPT
20034.W3370-A	Acetal	Straight	16.8	11.2	25.0	13	3/8" NPT/BSPT	3/8" NPT/BSPT
20034.W3121-A	Acetal	Straight	10.4	6.4	38.0	9	1/8" NPT/BSPT	1/8" NPT/BSPT
20034.W3251-A	Acetal	Straight	13.5	7.9	38.0	11	1/4" NPT/BSPT	1/4" NPT/BSPT
20034.W3371-A	Acetal	Straight	16.8	11.2	38.0	13	3/8" NPT/BSPT	3/8" NPT/BSPT
20034.W4250-A	Acetal	Flanged	14.2	7.9	16.5	11	1/4" NPT/BSPT	1/8" NPT/BSPT
20034.W4370-A	Acetal	Flanged	19.0	10.7	18.5	13	3/8" NPT/BSPT	1/4" NPT/BSPT
20034.W5120-A	Acetal	Cylindrical	11.7	6.4	20.0	10	1/8" NPT/BSPT	1/8" NPT/BSPT
20034.W5250-A	Acetal	Cylindrical	15.2	7.9	24.0	13	1/4" NPT/BSPT	1/4" NPT/BSPT
20034.W5370-A	Acetal	Cylindrical	18.5	9.4	26.0	14	3/8" NPT/BSPT	3/8" NPT/BSPT
20034.W3120-B	Brass	Straight	10.4	6.3	20.0	10	1/8" NPT/BSPT	1/8" NPT/BSPT
20034.W3250-B	Brass	Straight	13.5	7.9	22.0	11	1/4" NPT/BSPT	1/4" NPT/BSPT
20034.W3370-B	Brass	Straight	16.8	11.2	25.0	13	3/8" NPT/BSPT	3/8" NPT/BSPT
20034.W3121-B	Brass	Straight	10.4	6.4	38.0	9	1/8" NPT/BSPT	1/8" NPT/BSPT
20034.W3251-B	Brass	Straight	13.5	7.9	38.0	11	1/4" NPT/BSPT	1/4" NPT/BSPT
20034.W3371-B	Brass	Straight	16.8	11.2	38.0	13	3/8" NPT/BSPT	3/8" NPT/BSPT
20034.W4120-B	Brass	Flanged	14.2	7.0	20.6	13	M12x1,75	1/8" NPT/BSPT
20034.W4140-B	Brass	Flanged	15.7	7.9	10.2	7	M14x1,00	1/8" NPT/BSPT
20034.W4250-B	Brass	Flanged	14.2	7.9	16.5	11	1/4" NPT/BSPT	1/8" NPT/BSPT
20034.W4370-B	Brass	Flanged	19.0	10.7	18.5	13	3/8" NPT/BSPT	1/4" NPT/BSPT
20034.W5120-B	Brass	Cylindrical	11.7	6.4	20.0	10	1/8" NPT/BSPT	1/8" NPT/BSPT
20034.W5250-B	Brass	Cylindrical	15.2	7.9	24.0	13	1/4" NPT/BSPT	1/4" NPT/BSPT
20034.W5370-B	Brass	Cylindrical	18.5	9.4	26.0	14	3/8" NPT/BSPT	3/8" NPT/BSPT



Coolant Nozzles - Adapter Balls

max. 10 bar

Coolant Nozzles



20035

COOLANT NOZZLES

Material

Acetal or brass.

Technical Notes

Acetal Type:

Max. temperature: 70°C.

Max. pressure: 10 bar.

Brass type:

Max. temperature: 150°C.

Max. pressure: 33 bar.

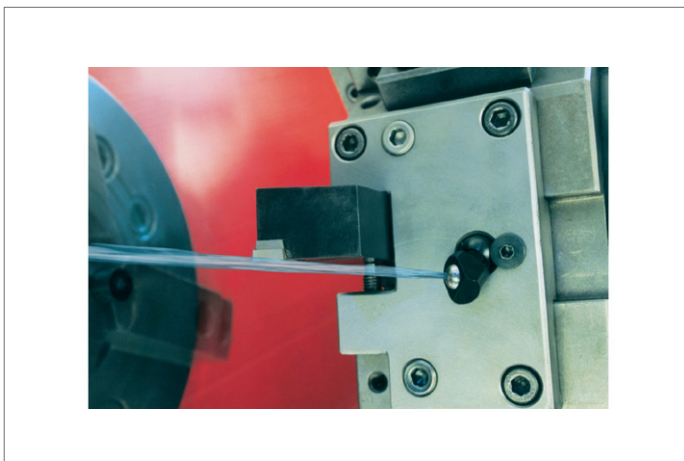
Ball adapter only.

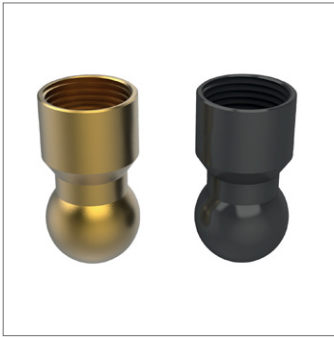
Can be used with our relevant threaded coolant nozzles.

Tips

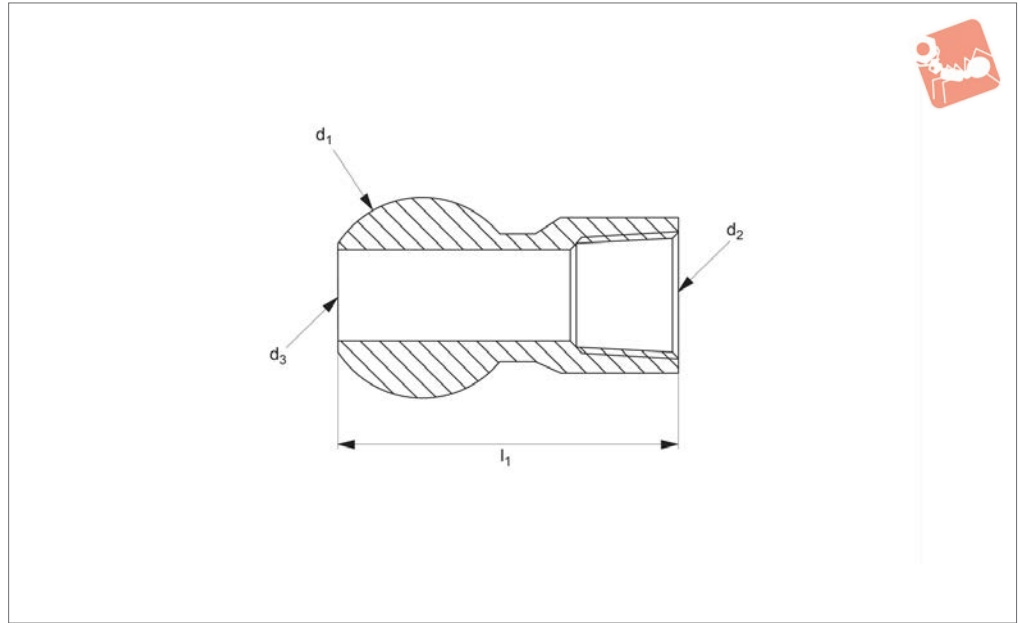
Fits both NPT and BSPT threads - allows you to use inch or metric fittings and nozzles. Particularly useful for 20018 (turret jets) and 20032 (cap jets).

Order No.	Type	d ₁	d ₃	l ₁	Thread d ₂
20035.W6140-A	Acetal	14	6.4	9.7	1/8" NPT/BSPT
20035.W6150-A	Acetal	15	6.4	10.9	1/8" NPT/BSPT
20035.W6220-A	Acetal	22	6.4	18.8	1/8" NPT/BSPT
20035.W8630-A	Acetal	5/8"	6.4	11.9	1/8" NPT/BSPT
20035.W6140-B	Brass	14	7/32" Hex.	9.9	1/8" NPT/BSPT
20035.W6150-B	Brass	15	7/32" Hex.	11.4	1/8" NPT/BSPT
20035.W6220-B	Brass	22	7/32" Hex.	19.6	1/8" NPT/BSPT
20035.W8630-B	Brass	5/8"	7/32" Hex.	12.5	1/8" NPT/BSPT





20036



Material

Acetal or brass.

Max. temp: 70°C.
Max. pressure: 10 bar.

Max. pressure: 33 bar.
Extended ball adapter only.

Technical Notes

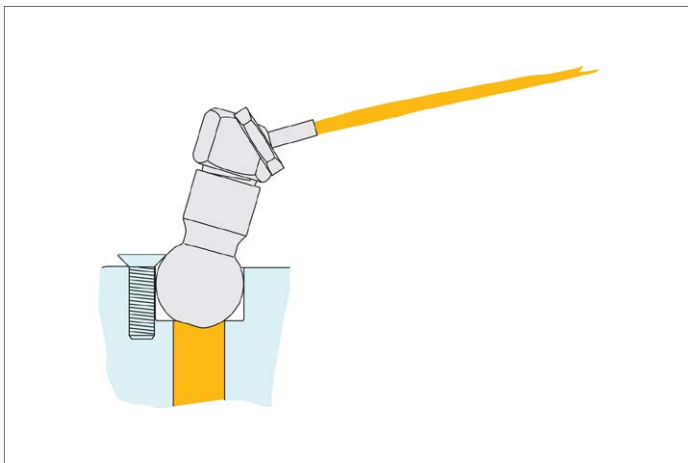
Acetal type:

Brass type:
Max. temperature: 150°C.

Tips

Can be fitted to 1/8" NPT/BSPT fittings.

Order No.	Type	d ₁	d ₃	l ₁	Thread d ₂
20036.W6120-A	Acetal	12	6.4	23.1	1/8" NPT/BSPT
20036.W8500-A	Acetal	1/2"	6.4	23.9	1/8" NPT/BSPT
20036.W6120-B	Brass	12	7/32" Hex.	22.9	1/8" NPT/BSPT
20036.W8500-B	Brass	1/2"	7/32" Hex.	23.9	1/8" NPT/BSPT

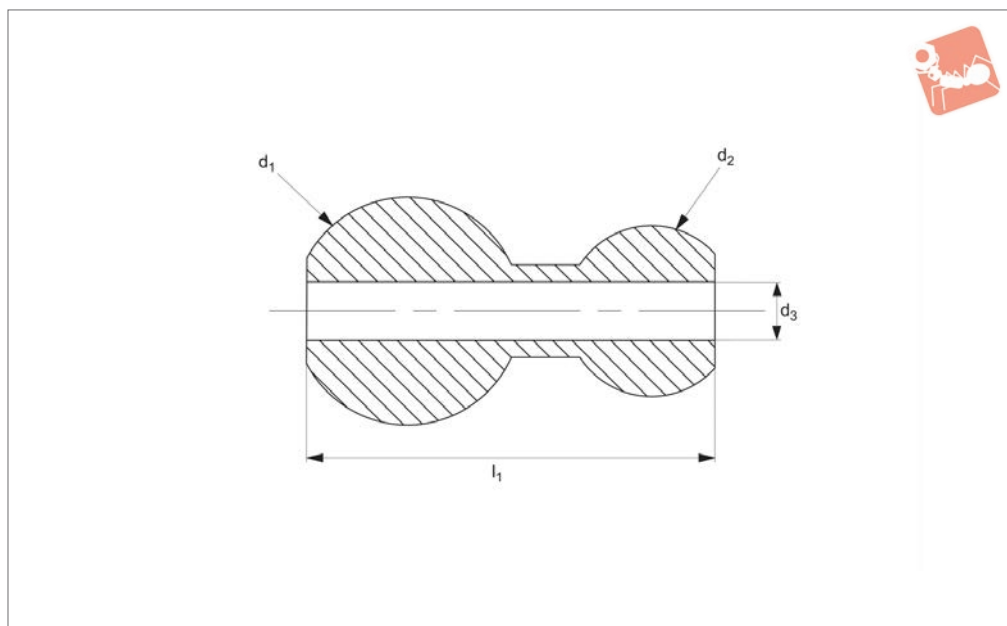




Loc-Line Adapters

max. 10-33 bar

Coolant Nozzles



20037

COOLANT NOZZLES

Material

Acetal or brass.

Technical Notes

Acetal type:

Max. temperature: 70°C.

Max. pressure: 10 bar.

Brass type:

Max. temperature: 150°C.

Max. pressure: 33 bar.

Tips

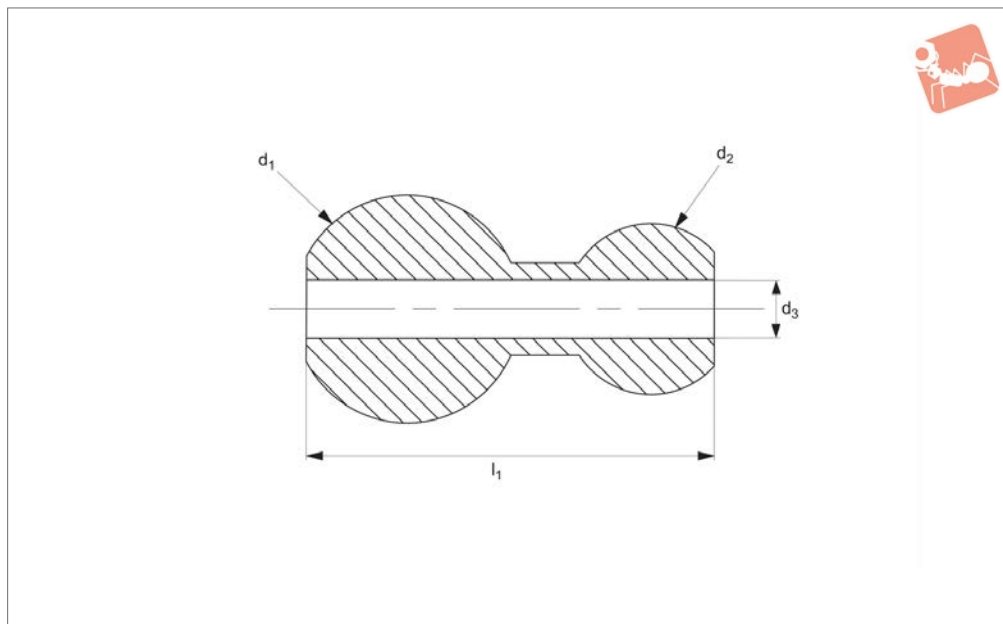
Adapters to allow Loc-Line coolant hose to be used on any machine that employs screw lock balls.

Loc-Line: a trademark of Lockwood Inc.

Order No.	Type	d ₁	d ₂	d ₃	l ₁	Pressure Bar max.
20037.W0100-A	Acetal	10	Loc-Line 1/4"	6.3	16.0	10
20037.W0120-A	Acetal	12	Loc-Line 1/4"	6.3	17.0	10
20037.W0140-A	Acetal	14	Loc-Line 1/4"	6.3	19.3	10
20037.W0150-A	Acetal	15	Loc-Line 1/4"	6.3	20.6	10
20037.W0220-A	Acetal	22	Loc-Line 1/4"	6.3	28.5	10
20037.W0250-A	Acetal	1/2"	Loc-Line 1/4"	6.3	18.0	10
20037.W0265-A	Acetal	5/8"	Loc-Line 1/4"	6.3	22.0	10
20037.W0100-B	Brass	10	Loc-Line 1/4"	6.3	16.3	33
20037.W0120-B	Brass	12	Loc-Line 1/4"	6.3	17.0	33
20037.W0140-B	Brass	14	Loc-Line 1/4"	6.3	19.6	33
20037.W0150-B	Brass	15	Loc-Line 1/4"	6.3	20.6	33
20037.W0220-B	Brass	22	Loc-Line 1/4"	6.3	29.2	33
20037.W0250-B	Brass	1/2"	Loc-Line 1/4"	6.3	18.0	33
20037.W0265-B	Brass	5/8"	Loc-Line 1/4"	6.3	22.0	33



20038



Material
Acetal.

Max. pressure: 10 bar.

screw lock balls.

Technical Notes

Max. temperature: 70°C.

Tips

Adapters to allow Snap-Loc coolant hose to be used on any machine that employs

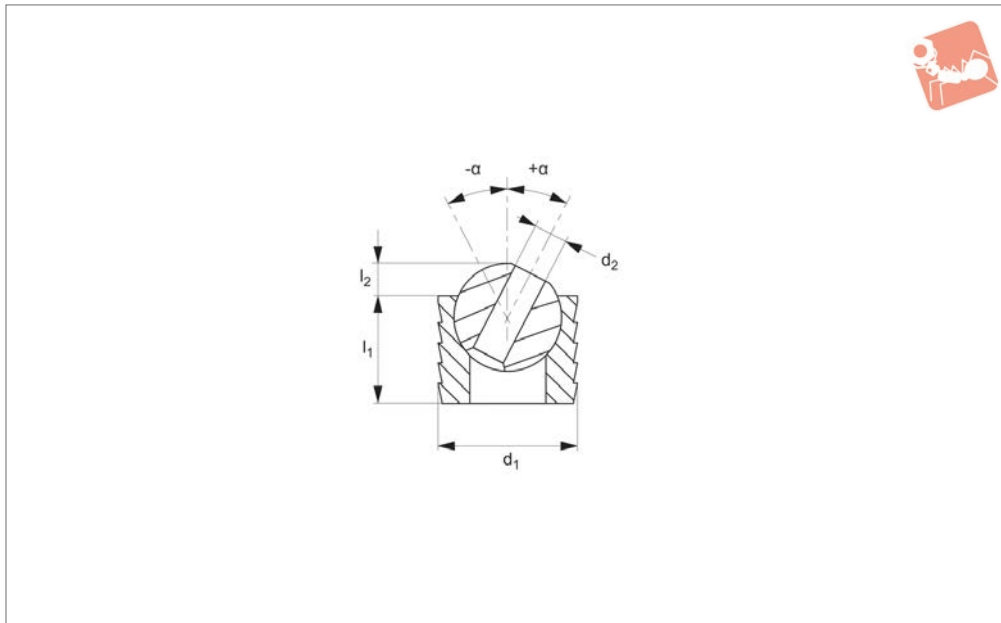
Order No.	d ₁	d ₂	d ₃	l ₁	Pressure Bar max.
20038.W0120	12	Snap-Loc 1/4"	6.3	19.3	10
20038.W0140	14	Snap-Loc 1/4"	6.3	21.3	10
20038.W0150	15	Snap-Loc 1/4"	6.3	22.6	10
20038.W0220	22	Snap-Loc 1/4"	6.3	30.5	10
20038.W0250	1/2"	Snap-Loc 1/4"	6.3	20.1	10
20038.W0263	5/8"	Snap-Loc 1/4"	6.3	24.1	10



Coolant Nozzles - Press In

max. 10 bar

Coolant Nozzles



20042

COOLANT NOZZLES

Material

Body: acetal.
Ball: stainless steel.

Max. pressure 10 bar.
symbola/symbol is an angle of adjustment either side of centre line.

diameter -0, +0,05mm or -0, +0,002"inch) then press in the coolant nozzle until the body is flush.

Technical Notes

Max. temperature 70°C.

Tips

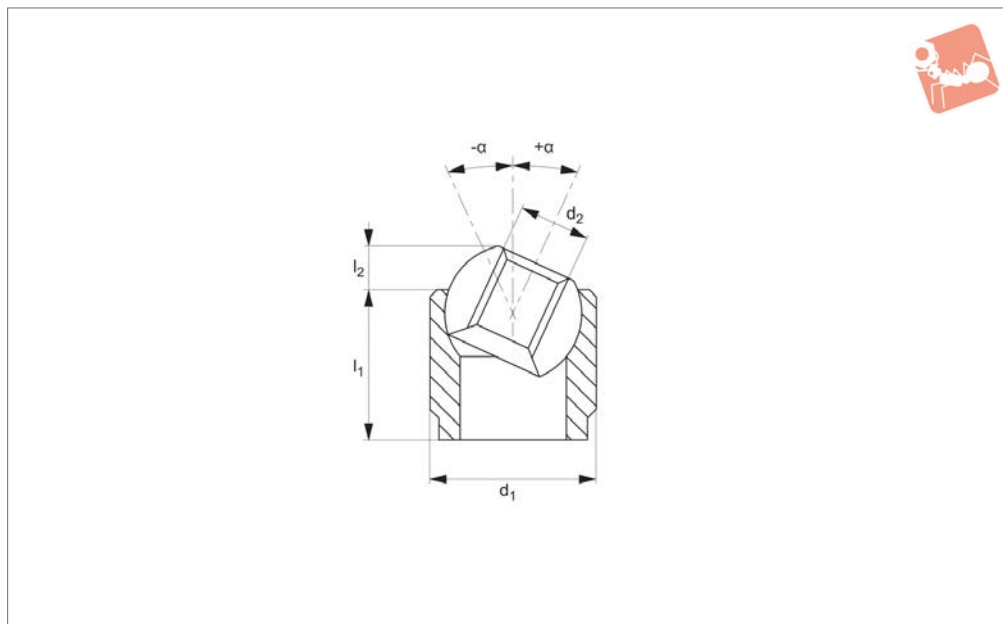
Simply drill and ream hole (to nominal

Ideal for special tooling, CNC lathe tooling etc.

Order No.	For install hole size	d ₁ nom.	d ₂	l ₁	l ₂	α
20042.W0060	6,00 - 6,04	6	1.5	4.8	1.3	±35°
20042.W0061	6,00 - 6,04	6	2.0	4.8	1.3	±35°
20042.W0080	8,00 - 8,05	8	2.8	6.4	1.5	±35°
20042.W0100	10,00 - 10,05	10	4.0	7.9	2.0	±35°
20042.W0120	12,00 - 12,05	12	4.0	9.2	2.5	±35°
20042.W0140	14,00 - 14,05	14	5.6	11.1	3.3	±35°
20042.W0150	15,00 - 15,05	15	5.6	11.1	3.3	±35°
20042.W2120	6,35 - 6,39	1/4"	2.0	4.8	1.3	±35°
20042.W2310	7,94 - 7,99	5/16"	2.8	6.4	1.5	±35°
20042.W2370	9,53 - 9,58	3/8"	4.0	7.9	2.0	±35°
20042.W3440	11,11 - 11,16	7/16"	4.0	9.2	2.5	±35°
20042.W3560	14,29 - 14,34	9/16"	5.6	11.1	3.3	±35°
20042.W2630	15,88 - 15,93	5/8"	5.6	11.1	3.3	±35°



20044



Material

Body: acetal.
Ball: stainless steel.

Technical Notes

Max. temperature: 70°C.
Max. pressure: 10 bar.

symbol α is an angle of adjustment either side of centre line.

Tips

Simply drill and ream hole (to H9) then press in the coolant nozzle until the body is flush.

The threaded hole in the top of the nozzle can be used for an extension tube (20020), a spray tip (20080 or 20082) or plugged with a set screw.

Order No.	d_1 tol. h9	d_2	l_1	l_2	α
20044.W6080	8	M 3,5x0,60	6	1.5	$\pm 35^\circ$
20044.W6100	10	M 4,0x0,70	7	2.0	$\pm 35^\circ$
20044.W6120	12	M 5,0x0,80	8	2.5	$\pm 35^\circ$
20044.W6140	14	M 6,0x1,00	10	3.0	$\pm 35^\circ$
20044.W6150	15	M 6,0x1,00	6	3.0	$\pm 35^\circ$
20044.W6160	16	M 8,0x1,25	10	3.0	$\pm 35^\circ$



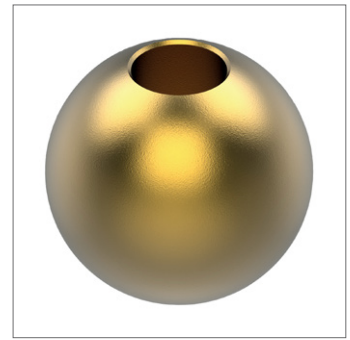
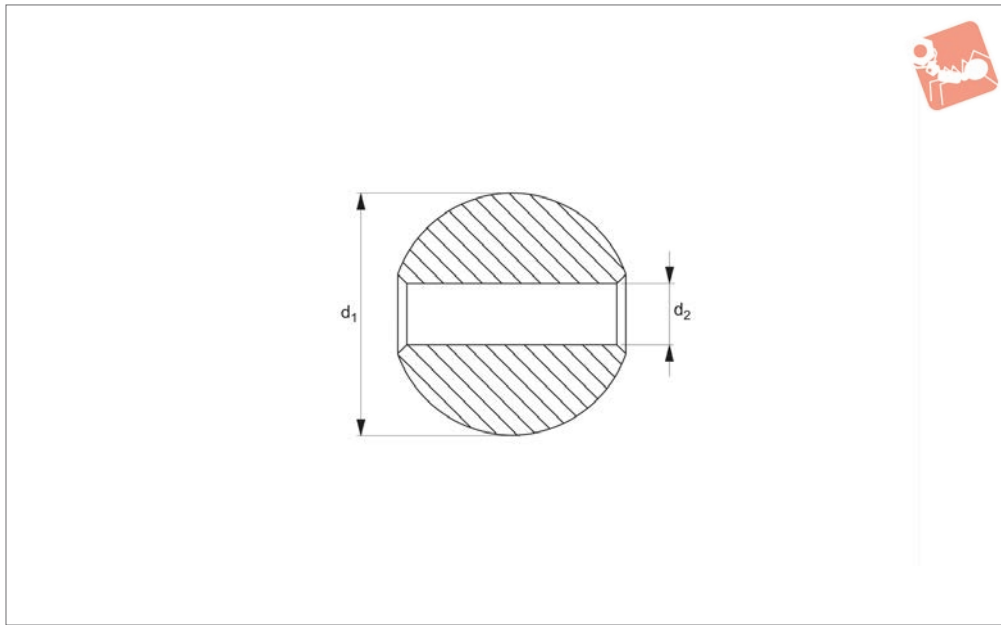


Coolant Nozzles - Brass Ball

max. 33 bar



Coolant Nozzles



20070

COOLANT NOZZLES

Material

Brass.

Max. pressure: 33 bar.

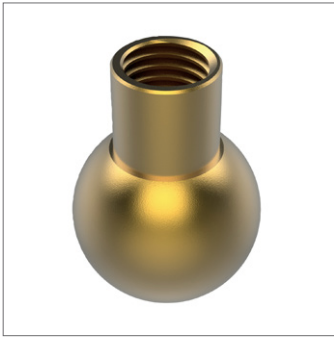
Technical Notes

Max. temperature: 150°C.

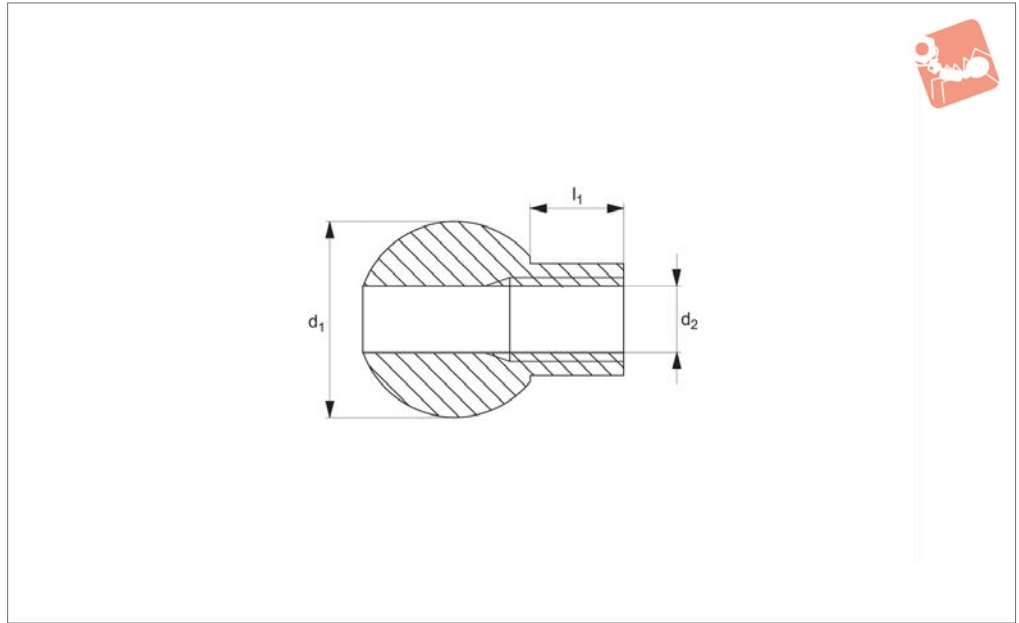
Tips

These are conventional brass ball nozzles.

Order No.	d ₁	d ₂
20070.W0100	10	2.8
20070.W0101	10	4.1
20070.W0110	11	2.8
20070.W0111	11	4.1
20070.W0120	12	4.1
20070.W0121	12	5.6
20070.W0140	14	4.1
20070.W0141	14	5.6
20070.W0150	15	4.1
20070.W0151	15	5.6
20070.W0180	18	4.1
20070.W0181	18	5.6
20070.W0220	22	4.1
20070.W0221	22	5.6
20070.W2500	1/2"	4.1
20070.W2501	1/2"	5.6
20070.W2630	5/8"	4.1
20070.W2631	5/8"	5.6



20072



Material

Brass.

Technical Notes

Max. temperature: 150°C.

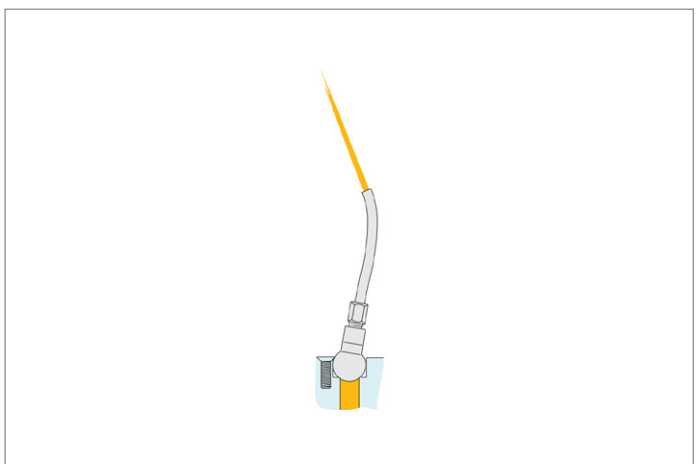
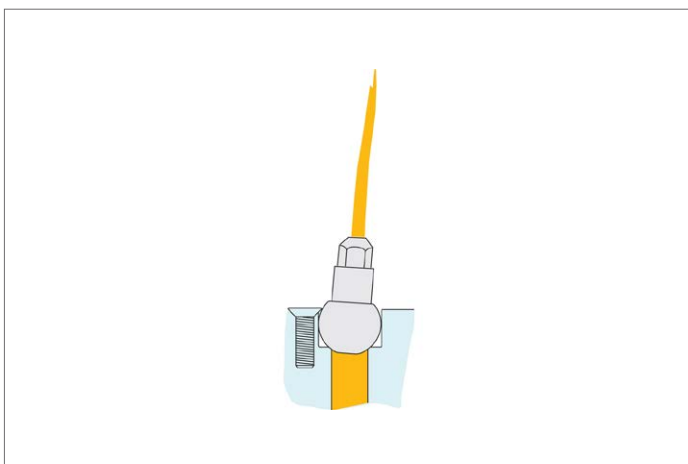
Max. pressure: 33 bar.

Tips

These are conventional threaded brass ball nozzles, and can be used with extension

tubes (20090 and 20092), spray tips (20080 and 20082) or can be plugged with a set screw when required.

Order No.	d ₁	d ₂	l ₁
20072.W5110	11	M 5x0,8	6.0
20072.W5120	12	M 5x0,8	6.0
20072.W6100	10	M 6x1,0	0.0
20072.W6140	14	M 6x1,0	7.9
20072.W6150	15	M 6x1,0	7.9
20072.W6180	18	M 6x1,0	7.9
20072.W6220	22	M 6x1,0	7.9
20072.W8500	1/2"	M 5x0,8	6.0
20072.W8630	5/8"	M 6x1,0	7.9

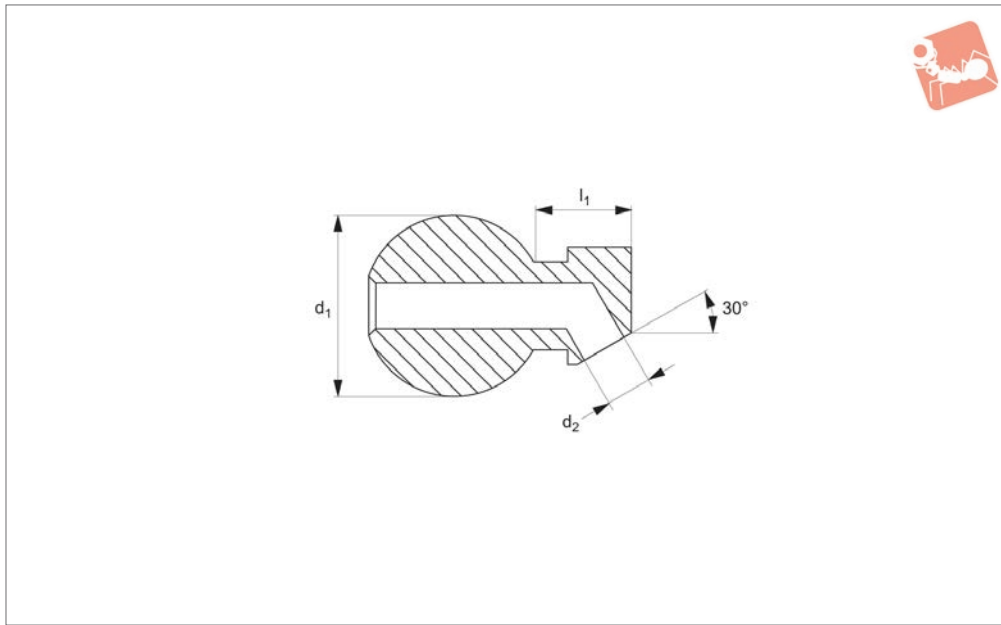




Coolant Nozzles - Brass Ball

angled - max. 33 bar

Coolant Nozzles



20074

COOLANT NOZZLES

Material

Brass.

Max. pressure: 33 bar.

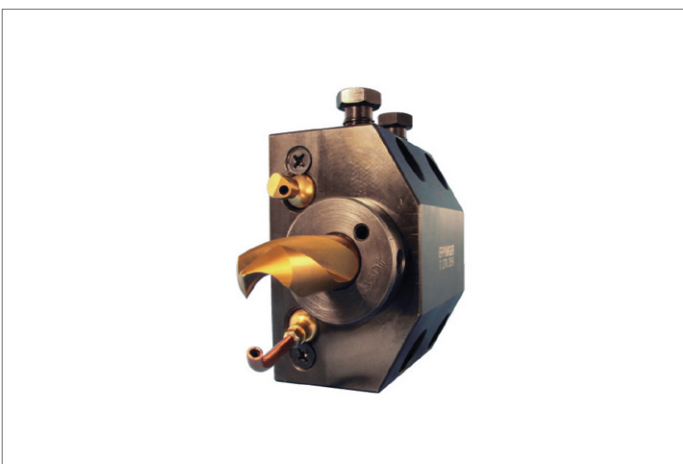
Technical Notes

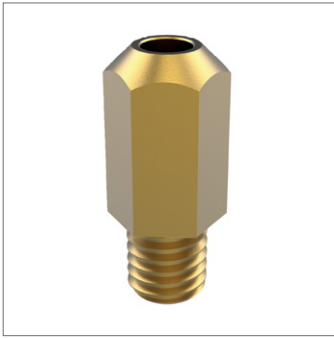
Max. temperature: 150°C.

Tips

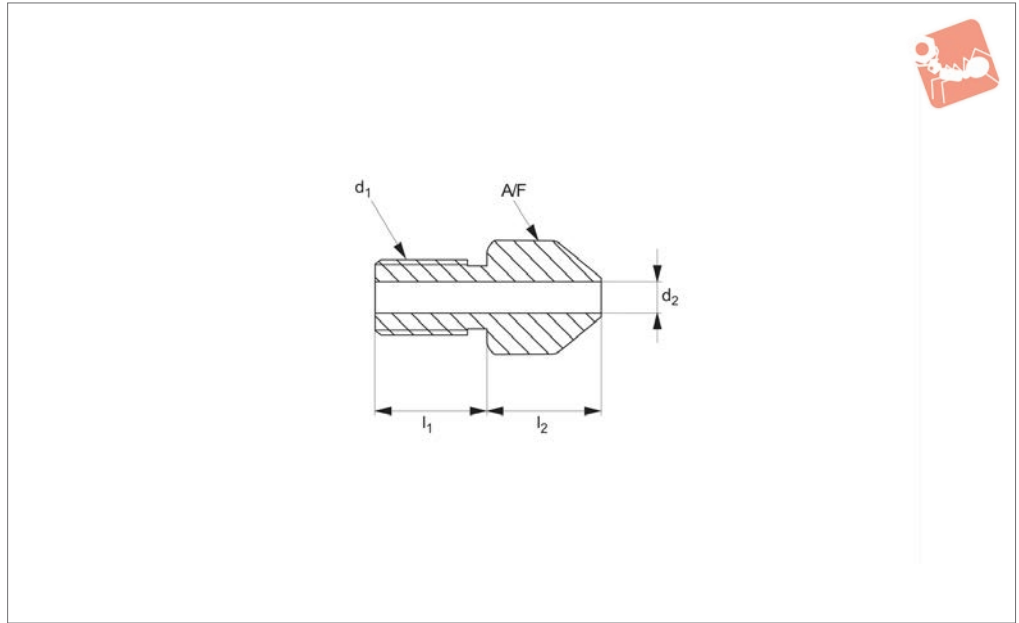
These are conventional brass ball nozzles but with an angled hole.

Order No.	d_1	d_2	l_1
20074.W0100	10	2.8	6.4
20074.W0110	11	4.0	9.2
20074.W0120	12	4.0	9.2
20074.W0140	14	4.0	9.2
20074.W0150	15	4.0	9.2
20074.W0180	18	4.0	9.2
20074.W0220	22	4.0	9.2
20074.W2500	1/2"	4.0	9.2
20074.W2630	5/8"	4.0	9.2





20080



Material

Brass.

Max. pressure: 33 bar.

Tips

Can be used as stand alone units or mounted on many of our coolant nozzles.

Technical Notes

Max. temperature: 150°C.

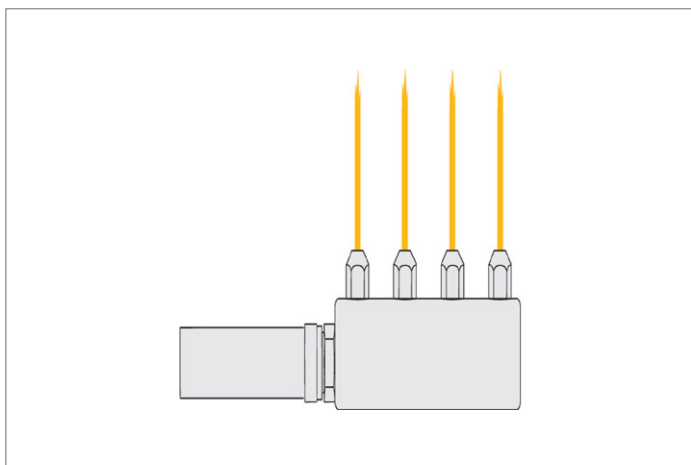
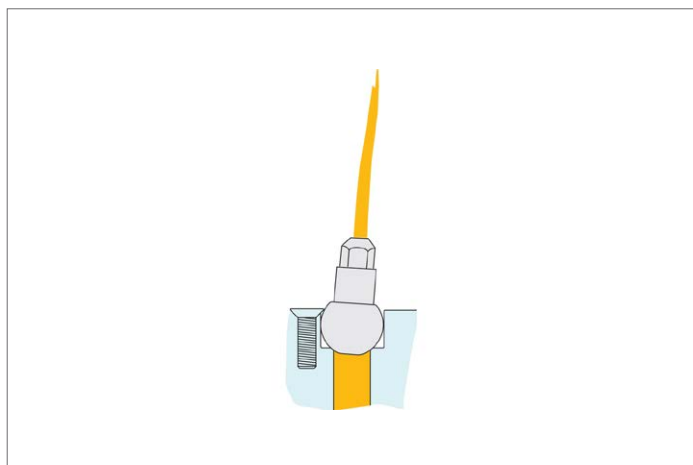
Order No.	d ₁	d ₂	l ₁	l ₂	A/F
20080.W0030	M 3,5x0,60	1.6	3.6	7.1	3/16"
20080.W0031	M 3,5x0,60	2.2	3.6	7.1	3/16"
20080.W0040	M 4x0,70	1.6	4.6	9.1	3/16"
20080.W0041	M 4x0,70	2.2	4.6	9.1	3/16"
20080.W0050	M 5x0,80	1.6	5.3	10.7	1/4"
20080.W0051	M 5x0,80	2.2	5.3	10.7	1/4"
20080.W0052	M 5x0,80	3.0	5.3	10.7	1/4"
20080.W0060	M 6x1,00	1.6	5.3	10.7	1/4"
20080.W0061	M 6x1,00	2.2	5.3	10.7	1/4"
20080.W0062	M 6x1,00	3.0	5.3	10.7	1/4"
20080.W0063	M 6x1,00	3.8	5.3	10.7	1/4"
20080.W0080	M 8x1,25	1.6	7.6	12.7	3/8"
20080.W0081	M 8x1,25	2.2	7.6	12.7	3/8"
20080.W0082	M 8x1,25	3.0	7.6	12.7	3/8"
20080.W0083	M 8x1,25	4.0	7.6	12.7	3/8"
20080.W0084	M 8x1,25	5.6	7.6	12.7	3/8"
20080.W2120	1/8" NPT/BSPT	1.6	9.4	13.5	1/2"
20080.W2121	1/8" NPT/BSPT	2.2	9.4	13.5	1/2"
20080.W2122	1/8" NPT/BSPT	3.0	9.4	13.5	1/2"
20080.W2123	1/8" NPT/BSPT	4.0	9.4	13.5	1/2"
20080.W2124	1/8" NPT/BSPT	5.6	9.4	13.5	1/2"
20080.W2125	1/8" NPT/BSPT	7.1	9.4	13.5	1/2"



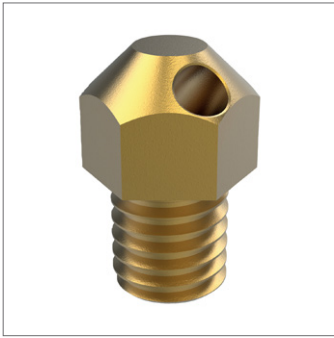
Spray Tips

straight - max. 33 bar

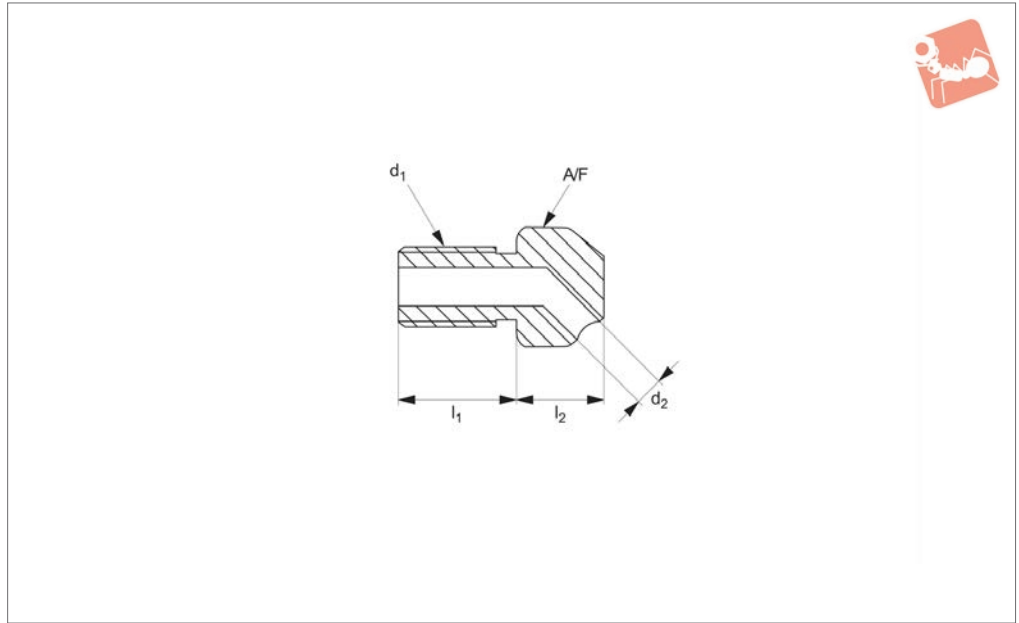
Coolant Nozzles



COOLANT NOZZLES



20082



Material

Brass.

Max. pressure: 33 bar.

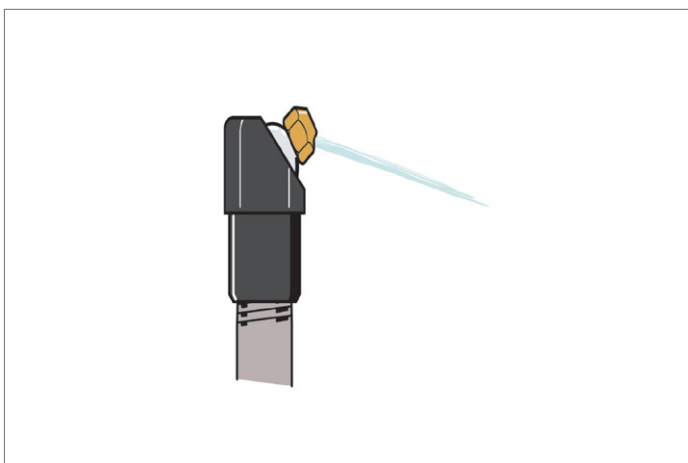
Technical Notes

Max. temperature: 150°C.

Tips

Can be used as stand alone units or mounted on many of our coolant nozzles.

Order No.	d ₁	d ₂	l ₁	l ₂	A/F
20082.W0030	M 3,5x0,6	1.6	3.6	4.6	3/16"
20082.W0040	M 4x0,7	1.6	4.6	4.6	3/16"
20082.W0050	M 5x0,8	2.2	5.3	5.3	1/4"
20082.W0060	M 6x1,0	2.2	5.3	5.3	1/4"
20082.W0061	M 6x1,0	3.0	5.3	5.3	1/4"

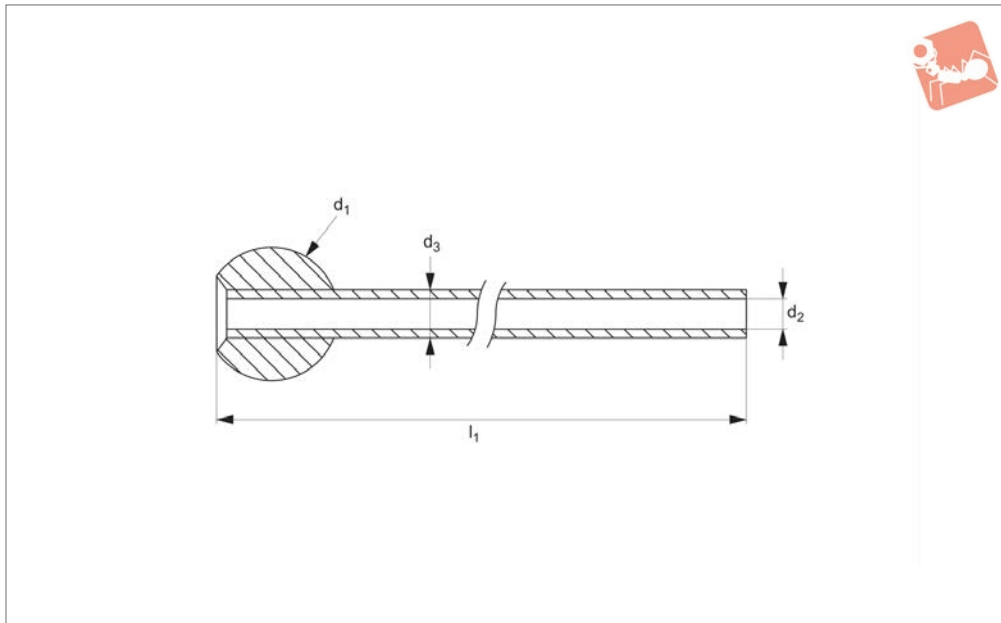




Coolant Nozzles - Single Tube Ball

bendable tube - max. 33 bar

Coolant Nozzles



20084

COOLANT NOZZLES

Material

Ball: brass.
Tube: copper.

Max. pressure: 33 bar.

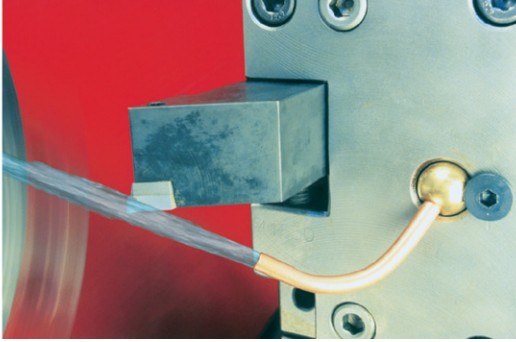
Tips

Bendable extension tubes.

Technical Notes

Max. temperature: 150°C.

Order No.	d ₁	d ₂	d ₃	l ₁
20084.W0090	9	3.0	4.7	152.4
20084.W0100	10	3.0	4.7	152.4
20084.W0110	11	3.0	4.7	152.4
20084.W0120	12	3.0	4.7	152.4
20084.W0121	12	4.6	6.4	152.4
20084.W0140	14	3.0	4.7	152.4
20084.W0141	14	4.6	6.4	152.4
20084.W0150	15	3.0	4.7	152.4
20084.W0151	15	4.6	6.4	152.4
20084.W0180	18	3.0	4.7	152.4
20084.W0181	18	4.6	6.4	152.4
20084.W0220	22	3.0	4.7	152.4
20084.W0221	22	4.6	6.4	152.4
20084.W2370	3/8"	3.0	4.7	152.4
20084.W2500	1/2"	3.0	4.7	152.4
20084.W2501	1/2"	4.6	6.4	152.4
20084.W2630	5/8"	3.0	4.7	152.4
20084.W2631	5/8"	4.6	6.4	152.4



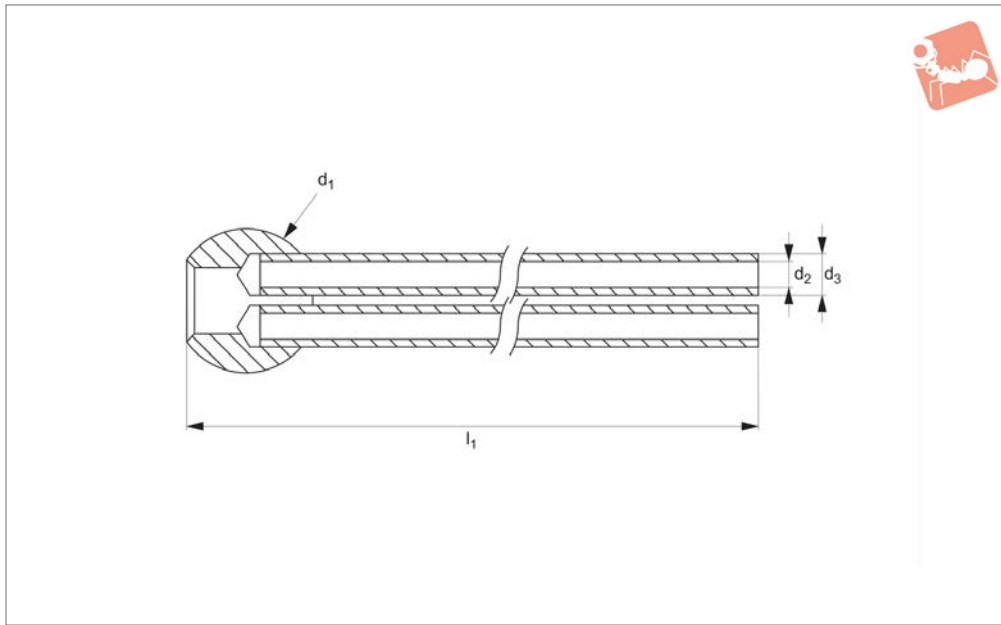


Coolant Nozzles - Double Tube Ball

bendable tube - max. 33 bar



Coolant Nozzles



20085

COOLANT NOZZLES

Material

Ball: brass.
Tube: copper.

Max. pressure: 33 bar.

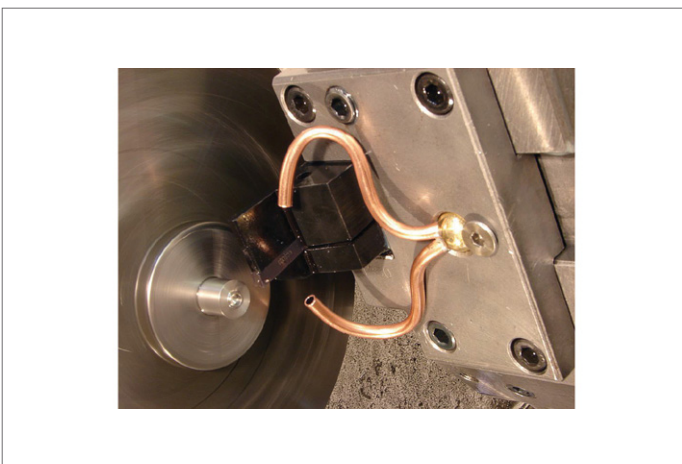
Tips

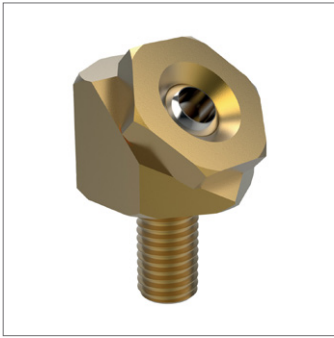
Bendable extension tubes.

Technical Notes

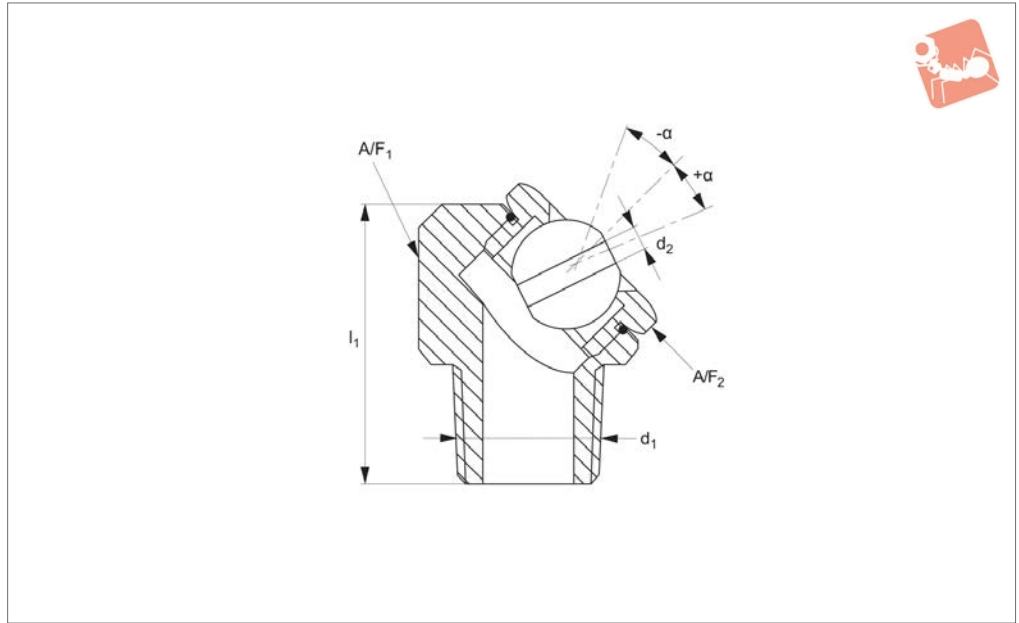
Max. temperature: 150°C.

Order No.	d ₁	d ₂	d ₃	l ₁
20085.W0120	12	3	4.8	152.4
20085.W0140	14	3	4.8	152.4
20085.W0150	15	3	4.8	152.4
20085.W0180	18	3	4.8	152.4
20085.W0220	22	3	4.8	152.4
20085.W2500	1/2"	3	4.8	152.4
20085.W2630	5/8"	3	4.8	152.4





20100



Material

Body: brass or stainless steel.
Ball and tube: stainless steel.

Technical Notes

Max. temperature: 70°C.
Max. pressure: 100 bar.
symbol α /symbol is an angle of adjustment either side of centre line.

Choose the stainless steel body version when using cutting oils not compatible with brass (such as oils containing active sulphur).

Choose the brass versions for lower cost.

Tips

Interchangeable spray tips available allowing the orifice diameter and extension

length to be easily changed to suit the application.

A high velocity coolant stream increases productivity and tool life.

Also useful for low pressure applications where abrasive swarf can be a problem.

Order No.	Thread	Material	A/F ₁	d ₁	d ₂	l ₁	A/F ₂	α
20100.W2061-B	NPT/BSPT	Brass	7/16"	1/16"	2.2	17.5	3/8"	±36°
20100.W2120-B	NPT/BSPT	Brass	9/16"	1/8"	3.0	20.6	1/2"	±41°
20100.W2121-B	NPT/BSPT	Brass	9/16"	1/8"	4.0	20.6	1/2"	±30°
20100.W2250-B	NPT/BSPT	Brass	5/8"	1/4"	3.0	23.8	9/16"	±44°
20100.W2251-B	NPT/BSPT	Brass	5/8"	1/4"	4.0	23.8	9/16"	±36°
20100.W2310-B	UNF	Brass	7/16"	5/16"-24	1.6	17.5	3/8"	±40°
20100.W2311-B	UNF	Brass	7/16"	5/16"-24	2.2	17.5	3/8"	±36°
20100.W2370-B	NPT/BSPT	Brass	3/4"	3/8"	4.0	28.6	11/16"	±42°
20100.W2371-B	NPT/BSPT	Brass	3/4"	3/8"	5.6	28.6	11/16"	±34°
20100.W2060-S	NPT/BSPT	Stainless steel	7/16"	1/16"	1.6	17.5	3/8"	±40°
20100.W2061-S	NPT/BSPT	Stainless steel	7/16"	1/16"	2.2	17.5	3/8"	±36°
20100.W2120-S	NPT/BSPT	Stainless steel	9/16"	1/8"	3.0	20.6	1/2"	±41°
20100.W2121-S	NPT/BSPT	Stainless steel	9/16"	1/8"	4.0	20.6	1/2"	±30°
20100.W2250-S	NPT/BSPT	Stainless steel	5/8"	1/4"	3.0	23.8	9/16"	±44°
20100.W2251-S	NPT/BSPT	Stainless steel	5/8"	1/4"	4.0	23.8	9/16"	±36°
20100.W2310-S	UNF	Stainless steel	7/16"	5/16"-24	1.6	17.5	3/8"	±40°
20100.W2311-S	UNF	Stainless steel	7/16"	5/16"-24	2.2	17.5	3/8"	±36°
20100.W2370-S	NPT/BSPT	Stainless steel	3/4"	3/8"	4.0	28.6	11/16"	±42°
20100.W2371-S	NPT/BSPT	Stainless steel	3/4"	3/8"	5.6	28.6	11/16"	±34°

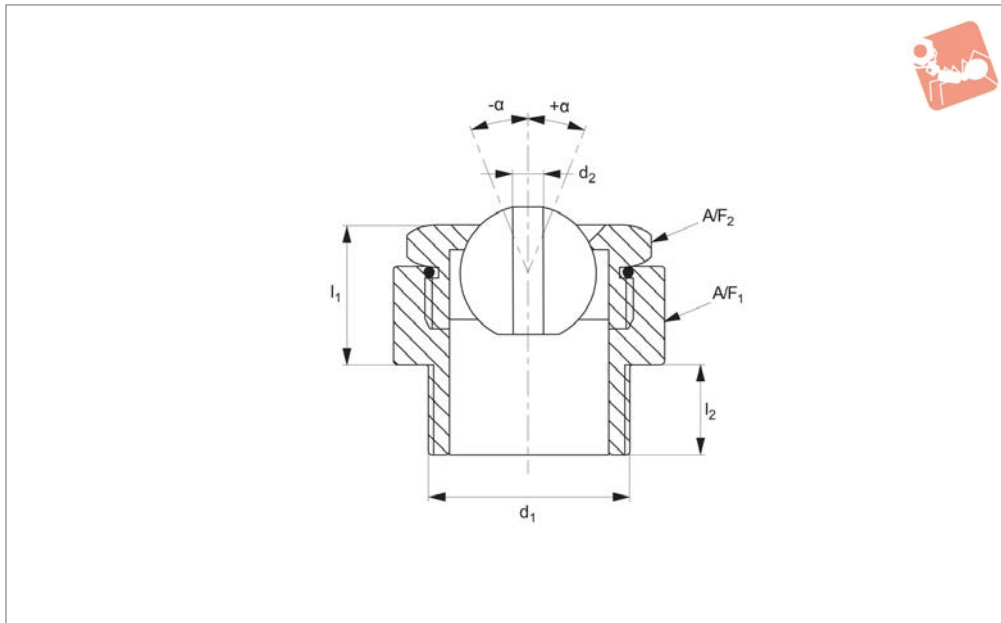


Pressure Max - Coolant Nozzles

straight - max. 100 bar



Coolant Nozzles



20101

COOLANT NOZZLES

Material

Body: stainless steel.
Ball: stainless steel.

Technical Notes

Max. temperature: 70°C.
Max. pressure: 100 bar.
symbol α /symbol is an angle of adjustment

either side of centre line.
Choose the stainless steel body version when using cutting oils not compatible with brass (such as oils containing active sulphur).

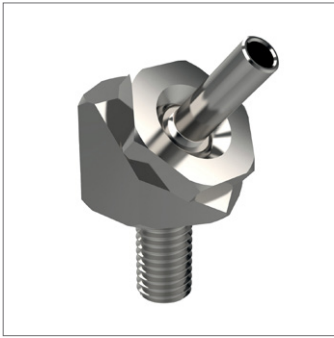
Tips

Interchangeable spray tips available allo-

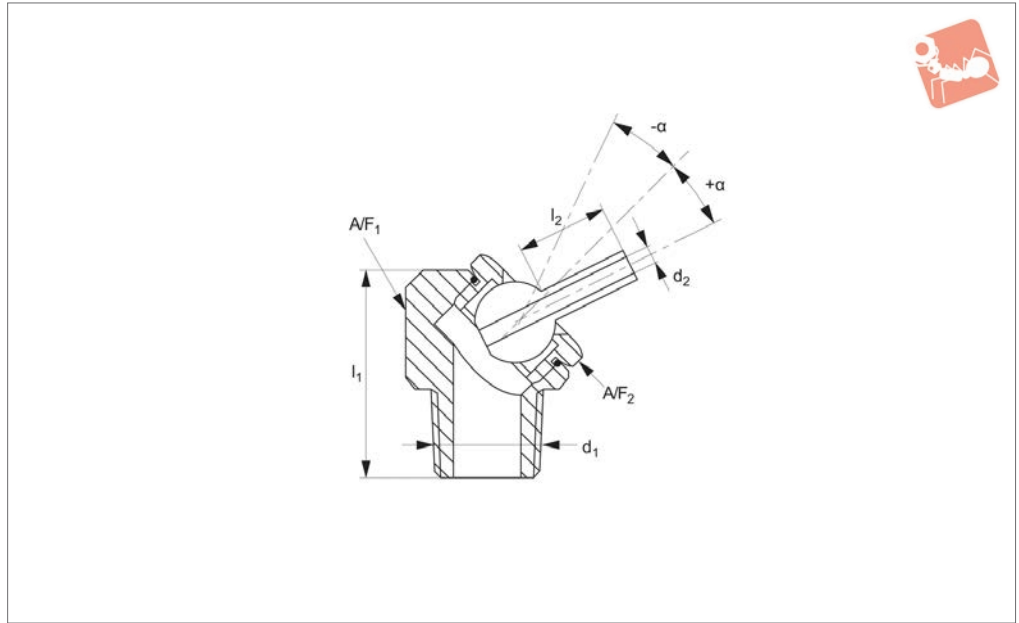
wing the orifice diameter and extension length to be easily changed to suit the application.

A high velocity coolant stream increases productivity and tool life.
Also useful for low pressure applications where abrasive swarf can be a problem.

Order No.	Type	A/F ₁	d ₁	d ₂	l ₁	l ₂	A/F ₂	α
20101.W0100	Metric fine	7/16"	M10x1,25	1.6	9.5	9.1	3/8"	±40°
20101.W0101	Metric fine	7/16"	M10x1,25	2.2	9.5	9.1	3/8"	±36°
20101.W1060	Metric coarse	7/16"	M 6x1,00	1.6	9.5	7.6	3/8"	±40°
20101.W1061	Metric coarse	7/16"	M 6x1,00	2.2	9.5	7.6	3/8"	±36°
20101.W1080	Metric coarse	7/16"	M 8x1,25	1.6	9.5	8.4	3/8"	±40°
20101.W1081	Metric coarse	7/16"	M 8x1,25	2.2	9.5	8.4	3/8"	±36°
20101.W1100	Metric coarse	7/16"	M10x1,50	1.6	9.5	9.1	3/8"	±40°
20101.W1101	Metric coarse	7/16"	M10x1,50	2.2	9.5	9.1	3/8"	±36°



20102



COOLANT NOZZLES

Material

Body: stainless steel or brass.
Ball and tube: stainless steel.

Technical Notes

Max. temperature 70°C.
Max. pressure 100 bar.
symbol α /symbol is an angle of adjustment

either side of centre line.

Stainless steel version for use with cutting oils not compatible with brass.

Tips

Interchangeable spray tips available allowing the orifice diameter and extension

length to be easily changed to suit the application.

A high velocity coolant stream increases productivity and tool life.

Also useful for low pressure applications where abrasive swarf can be a problem.

Order No.	Thread	Body material	A/F ₁	d ₁	d ₂	l ₁	l ₂	A/F ₂	α
20102.W2060-S	NPT/BSPT	Stainless Steel	7/16"	1/16"	1.0	11/16"	6.4	3/8"	±34°
20102.W2061-S	NPT/BSPT	Stainless Steel	7/16"	1/16"	1.6	11/16"	6.4	3/8"	±34°
20102.W2120-S	NPT/BSPT	Stainless Steel	9/16"	1/8"	1.0	20.6	6.4	1/2"	±37°
20102.W2121-S	NPT/BSPT	Stainless Steel	9/16"	1/8"	1.6	20.6	6.4	1/2"	±37°
20102.W2122-S	NPT/BSPT	Stainless Steel	9/16"	1/8"	1.6	20.6	31.7	1/2"	±26°
20102.W2123-S	NPT/BSPT	Stainless Steel	9/16"	1/8"	2.2	20.6	6.4	1/2"	±37°
20102.W2124-S	NPT/BSPT	Stainless Steel	9/16"	1/8"	2.2	20.6	31.7	1/2"	±26°
20102.W2125-S	NPT/BSPT	Stainless Steel	9/16"	1/8"	3.0	20.6	6.4	1/2"	±30°
20102.W2126-S	NPT/BSPT	Stainless Steel	9/16"	1/8"	3.0	20.6	31.7	1/2"	±26°
20102.W2250-S	NPT/BSPT	Stainless Steel	5/8"	1/4"	1.0	23.8	6.4	9/16"	±36°
20102.W2251-S	NPT/BSPT	Stainless Steel	5/8"	1/4"	1.6	23.8	6.4	9/16"	±36°
20102.W2252-S	NPT/BSPT	Stainless Steel	5/8"	1/4"	1.6	23.8	31.7	9/16"	±32°
20102.W2253-S	NPT/BSPT	Stainless Steel	5/8"	1/4"	2.2	23.8	6.4	9/16"	±36°
20102.W2254-S	NPT/BSPT	Stainless Steel	5/8"	1/4"	2.2	23.8	31.7	9/16"	±32°
20102.W2255-S	NPT/BSPT	Stainless Steel	5/8"	1/4"	3.0	23.8	6.4	9/16"	±36°
20102.W2256-S	NPT/BSPT	Stainless Steel	5/8"	1/4"	3.0	23.8	12.7	9/16"	±36°
20102.W2257-S	NPT/BSPT	Stainless Steel	5/8"	1/4"	3.0	23.8	31.7	9/16"	±32°
20102.W2258-S	NPT/BSPT	Stainless Steel	5/8"	1/4"	4.0	23.8	12.7	9/16"	±32°
20102.W2259-S	NPT/BSPT	Stainless Steel	5/8"	1/4"	4.0	23.8	31.7	9/16"	±32°
20102.W2310-S	UNF	Stainless Steel	7/16"	5/16"-24	1.0	11/16"	6.4	3/8"	±34°
20102.W2311-S	UNF	Stainless Steel	7/16"	5/16"-24	1.6	11/16"	6.4	3/8"	±34°
20102.W2370-S	NPT/BSPT	Stainless Steel	3/4"	3/8"	1.6	28.6	9.86	11/16"	±40°
20102.W2371-S	NPT/BSPT	Stainless Steel	3/4"	3/8"	1.6	28.6	31.7	11/16"	±40°
20102.W2372-S	NPT/BSPT	Stainless Steel	3/4"	3/8"	2.2	28.6	9.80	11/16"	±40°
20102.W2373-S	NPT/BSPT	Stainless Steel	3/4"	3/8"	2.2	28.6	31.7	11/16"	±40°
20102.W2374-S	NPT/BSPT	Stainless Steel	3/4"	3/8"	3.0	28.6	12.7	11/16"	±40°
20102.W2375-S	NPT/BSPT	Stainless Steel	3/4"	3/8"	3.0	28.6	31.7	11/16"	±40°
20102.W2376-S	NPT/BSPT	Stainless Steel	3/4"	3/8"	4.0	28.6	12.7	11/16"	±40°
20102.W2377-S	NPT/BSPT	Stainless Steel	3/4"	3/8"	4.0	28.6	31.7	11/16"	±40°
20102.W2379-S	NPT/BSPT	Stainless Steel	3/4"	3/8"	5.0	28.6	12.7	11/16"	±34°



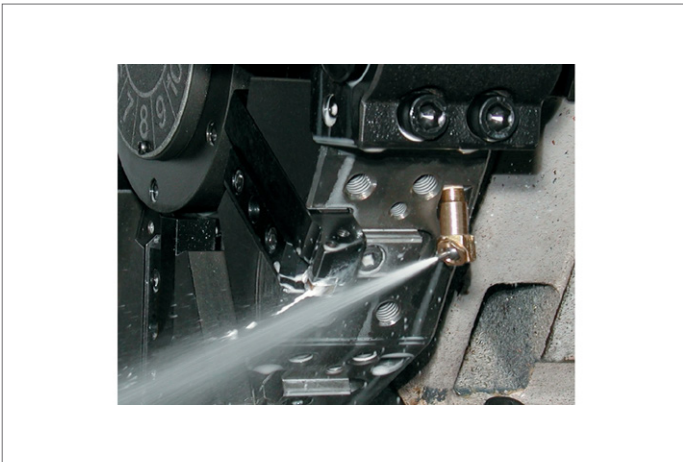
Pressure Max - Coolant Nozzles

angled - with tube - max. 100 bar - stainless or brass

Coolant Nozzles

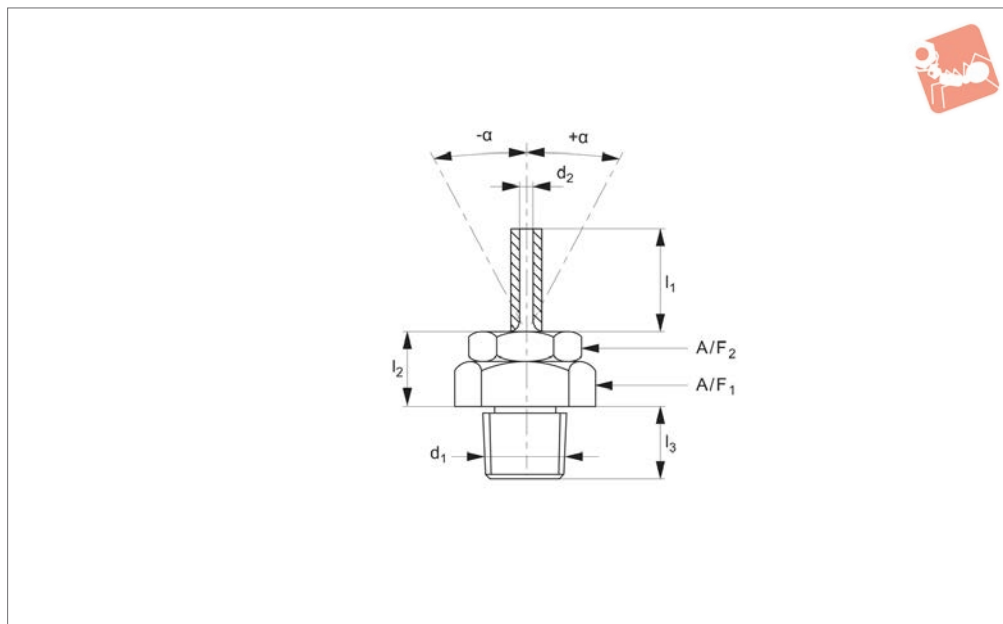
Order No.	Thread	Body material	A/F ₁	d ₁	d ₂	l ₁	l ₂	A/F ₂	α
20102.W2380-S	NPT/BSPT	Stainless Steel	3/4"	3/8"	5.6	28.6	12.7	11/16"	±34°
20102.W2381-S	NPT/BSPT	Stainless Steel	3/4"	3/8"	5.6	28.6	31.7	11/16"	±34°
20102.W2060-B	NPT/BSPT	Brass	7/16"	1/16"	1.0	11/16"	6.4	3/8"	±34°
20102.W2061-B	NPT/BSPT	Brass	7/16"	1/16"	1.6	11/16"	6.4	3/8"	±34°
20102.W2120-B	NPT/BSPT	Brass	9/16"	1/8"	1.0	20.6	6.4	1/2"	±37°
20102.W2121-B	NPT/BSPT	Brass	9/16"	1/8"	1.6	20.6	6.4	1/2"	±37°
20102.W2122-B	NPT/BSPT	Brass	9/16"	1/8"	1.6	20.6	31.7	1/2"	±26°
20102.W2123-B	NPT/BSPT	Brass	9/16"	1/8"	2.2	20.6	6.4	1/2"	±37°
20102.W2124-B	NPT/BSPT	Brass	9/16"	1/8"	2.2	20.6	31.7	1/2"	±26°
20102.W2125-B	NPT/BSPT	Brass	9/16"	1/8"	3.0	20.6	6.4	1/2"	±30°
20102.W2126-B	NPT/BSPT	Brass	9/16"	1/8"	3.0	20.6	31.7	1/2"	±26°
20102.W2250-B	NPT/BSPT	Brass	5/8"	1/4"	1.0	23.8	6.4	9/16"	±36°
20102.W2251-B	NPT/BSPT	Brass	5/8"	1/4"	1.6	23.8	6.4	9/16"	±36°
20102.W2252-B	NPT/BSPT	Brass	5/8"	1/4"	1.6	23.8	31.7	9/16"	±32°
20102.W2253-B	NPT/BSPT	Brass	5/8"	1/4"	2.2	23.8	6.4	9/16"	±36°
20102.W2254-B	NPT/BSPT	Brass	5/8"	1/4"	2.2	23.8	31.7	9/16"	±32°
20102.W2255-B	NPT/BSPT	Brass	5/8"	1/4"	3.0	23.8	6.4	9/16"	±36°
20102.W2256-B	NPT/BSPT	Brass	5/8"	1/4"	3.0	23.8	12.7	9/16"	±36°
20102.W2257-B	NPT/BSPT	Brass	5/8"	1/4"	3.0	23.8	31.7	9/16"	±32°
20102.W2258-B	NPT/BSPT	Brass	5/8"	1/4"	4.0	23.8	12.7	9/16"	±32°
20102.W2259-B	NPT/BSPT	Brass	5/8"	1/4"	4.0	23.8	31.7	9/16"	±32°
20102.W2310-B	UNF	Brass	7/16"	5/16"-24	1.0	11/16"	6.4	3/8"	±34°
20102.W2311-B	UNF	Brass	7/16"	5/16"-24	1.6	11/16"	6.4	3/8"	±34°
20102.W2370-B	NPT/BSPT	Brass	3/4"	3/8"	1.6	28.6	9.8	11/16"	±40°
20102.W2371-B	NPT/BSPT	Brass	3/4"	3/8"	1.6	28.6	31.7	11/16"	±40°
20102.W2372-B	NPT/BSPT	Brass	3/4"	3/8"	2.2	28.6	9.8	11/16"	±40°
20102.W2373-B	NPT/BSPT	Brass	3/4"	3/8"	2.2	28.6	31.7	11/16"	±40°
20102.W2374-B	NPT/BSPT	Brass	3/4"	3/8"	3.0	28.6	12.7	11/16"	±40°
20102.W2375-B	NPT/BSPT	Brass	3/4"	3/8"	3.0	28.6	31.7	11/16"	±40°
20102.W2376-B	NPT/BSPT	Brass	3/4"	3/8"	4.0	28.6	12.7	11/16"	±40°
20102.W2377-B	NPT/BSPT	Brass	3/4"	3/8"	4.0	28.6	31.7	11/16"	±40°
20102.W2378-B	NPT/BSPT	Brass	3/4"	3/8"	5.0	28.6	12.7	11/16"	±34°
20102.W2380-B	NPT/BSPT	Brass	3/4"	3/8"	5.6	28.6	12.7	11/16"	±34°
20102.W2381-B	NPT/BSPT	Brass	3/4"	3/8"	5.6	28.6	31.7	11/16"	±34°

COOLANT NOZZLES





20103



Material

Stainless steel body, ball and tube.

Technical Notes

Max. temperature: 70°C.

Max. pressure: 100 bar.

symbol/alpha is an angle of adjustment

either side of centre line.

Tips

Interchangeable spray tips available allowing the orifice diameter and extension length to be easily changed to suit the application.

A high velocity coolant stream increases productivity and tool life.

Also useful for low pressure applications where abrasive swarf can be a problem.

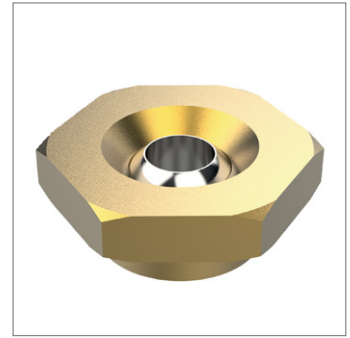
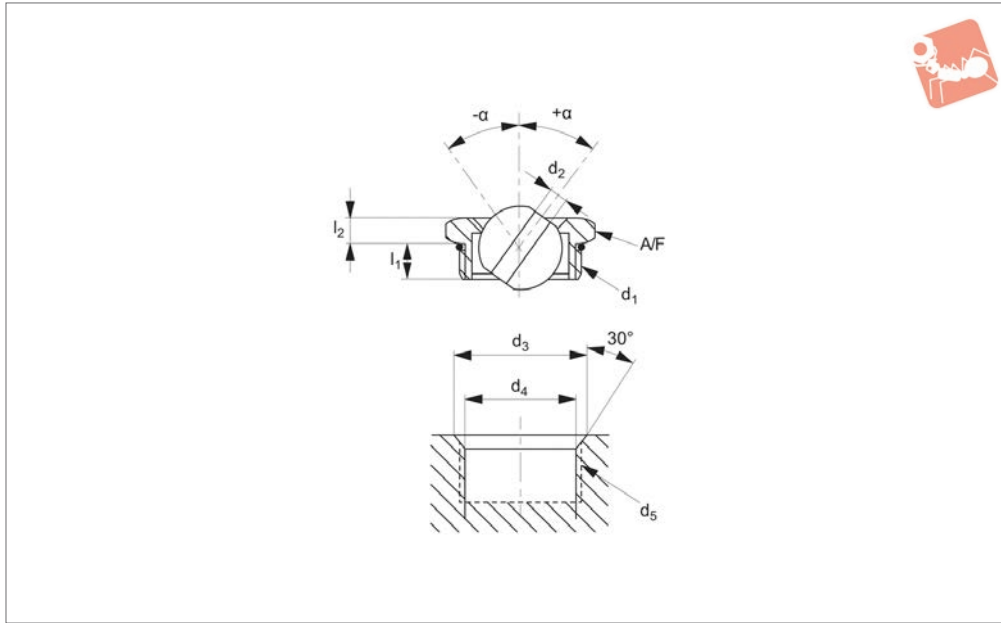
Order No.	Type	A/F ₁	d ₁	d ₂	l ₁	l ₂	l ₃	A/F ₂	α
20103.W0100	Metric Fine	7/16"	M10x1,25	1.0	6.4	9.5	9.2	3/8"	±34°
20103.W0101	Metric Fine	7/16"	M10x1,25	1.6	6.4	9.5	9.1	3/8"	±34°
20103.W1060	Metric Coarse	7/16"	M 6x1,00	1.0	6.4	9.5	7.6	3/8"	±34°
20103.W1061	Metric Coarse	7/16"	M 6x1,00	1.6	6.4	9.5	7.6	3/8"	±34°
20103.W1080	Metric Coarse	7/16"	M 8x1,25	1.0	6.4	9.5	8.4	3/8"	±34°
20103.W1081	Metric Coarse	7/16"	M 8x1,25	1.6	6.4	9.5	8.6	3/8"	±34°
20103.W1100	Metric Coarse	7/16"	M10x1,50	1.0	6.4	9.5	9.1	3/8"	±34°
20103.W1101	Metric Coarse	7/16"	M10x1,50	1.6	6.4	9.5	9.1	3/8"	±34°



Pressure Max - Spray Tips

max. 100 bar

Coolant Nozzles



20104

COOLANT NOZZLES

Material

Body: brass or stainless steel.
Ball and tube: stainless steel.

Technical Notes

Max. temperature: 70°C.
Max. pressure: 100 bar.
symbol α /symbol is an angle of adjustment either side of centre line.
Choose the stainless steel body version

when using cutting oils not compatible with brass (such as oils containing active sulphur).
Choose the brass versions for lower cost.

Tips

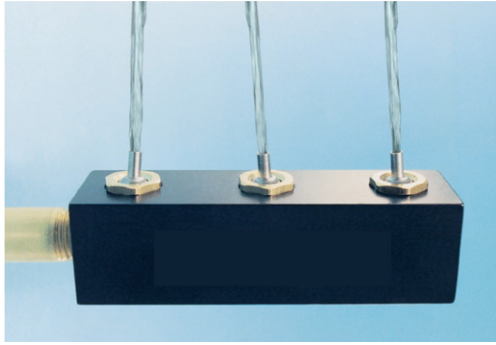
Interchangeable spray tips available allowing the orifice diameter and extension

length to be easily changed to suit the application.
A high velocity coolant stream increases productivity and tool life.
Also useful for low pressure applications where abrasive swarf can be a problem.

Order No.	Body material	d ₁	d ₂	d ₃ max.	d ₄ max.	d ₅	l ₁	l ₂	A/F	α
20104.W2310-B	Brass	5/16"-24 UNF	1.6	8.8	7.1	5/16"-24	3.5	2.3	3/8"	±40°
20104.W2311-B	Brass	5/16"-24 UNF	2.2	8.8	7.1	5/16"-24	3.5	2.3	3/8"	±36°
20104.W2440-B	Brass	7/16"-20 UNF	3.0	12.0	10.0	7/16"-20	4.0	2.3	1/2"	±41°
20104.W2441-B	Brass	7/16"-20 UNF	4.0	12.0	10.1	7/16"-20	4.0	2.3	1/2"	±30°
20104.W2500-B	Brass	1/2"-20 UNF	3.0	13.6	11.6	1/2"-20	4.0	2.3	9/16"	±44°
20104.W2501-B	Brass	1/2"-20 UNF	4.0	13.6	11.7	1/2"-20	4.0	2.3	9/16"	±36°
20104.W2630-B	Brass	5/8"-18 UNF	4.0	16.8	14.7	5/8"-18	5.3	2.3	11/16"	±42°
20104.W2631-B	Brass	5/8"-18 UNF	5.6	16.8	14.7	5/8"-18	5.3	2.3	11/16"	±34°
20104.W2310-S	Stainless Steel	5/16"-24 UNF	1.6	8.8	7.1	5/16"-24	3.5	2.3	3/8"	±40°
20104.W2311-S	Stainless Steel	5/16"-24 UNF	2.2	8.8	7.1	5/16"-24	3.5	2.3	3/8"	±36°
20104.W2440-S	Stainless Steel	7/16"-20 UNF	3.0	12.0	10.1	7/16"-20	4.0	2.3	1/2"	±41°
20104.W2441-S	Stainless Steel	7/16"-20 UNF	4.0	12.0	10.1	7/16"-20	4.0	2.3	1/2"	±30°
20104.W2500-S	Stainless Steel	1/2"-20 UNF	3.0	13.6	11.7	1/2"-20	4.0	2.3	9/16"	±44°
20104.W2501-S	Stainless Steel	1/2"-20 UNF	4.0	13.6	11.7	1/2"-20	4.0	2.3	9/16"	±36°
20104.W2630-S	Stainless Steel	5/8"-18 UNF	4.0	16.8	14.7	5/8"-18	5.3	2.3	11/16"	±42°
20104.W2631-S	Stainless Steel	5/8"-18 UNF	5.6	16.8	14.7	5/8"-18	5.3	2.3	11/16"	±34°



COOLANT NOZZLES

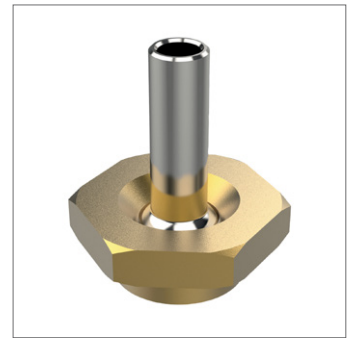




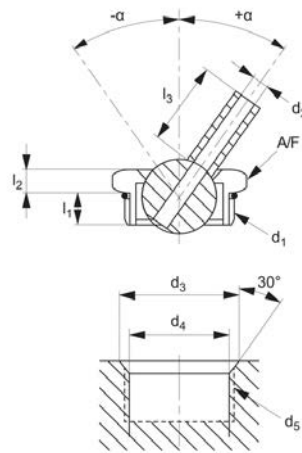
Pressure Max - Spray Tips - Brass

with tube - max. 100 bar

Coolant Nozzles



20106



COOLANT NOZZLES

Material

Body: stainless or brass.
Ball and tube: stainless steel.

Technical Notes

Max. temperature: 70°C.
Max. pressure: 100 bar.
symbol α /symbol is an angle of adjustment

either side of centre line.
Lower cost brass version.
Stainless steel version available when using cutting oils not compatible with brass.

Tips

Interchangeable spray tips available allo-

wing the orifice diameter and extension length to be easily changed to suit the application.
A high velocity coolant stream increases productivity and tool life.
Also useful for low pressure applications where abrasive swarf can be a problem.

Order No.	Body material	d ₁	d ₂	d ₃ max.	d ₄ max.	d ₅	l ₁	l ₂	l ₃	A/F	α
20106.W2310-B	Brass	5/16"-24 UNF	1.0	8.8	7.1	5/16"-24	3.5	2.3	6.4	3/8"	±34°
20106.W2311-B	Brass	5/16"-24 UNF	1.6	8.8	7.1	5/16"-24	3.5	2.3	6.4	3/8"	±34°
20106.W2440-B	Brass	7/16"-20 UNF	1.0	12.0	10.1	7/16"-20	4.0	2.3	6.4	1/2"	±37°
20106.W2441-B	Brass	7/16"-20 UNF	1.6	12.0	10.1	7/16"-20	4.0	2.3	6.4	1/2"	±37°
20106.W2442-B	Brass	7/16"-20 UNF	1.6	12.0	10.1	7/16"-20	4.0	2.3	31.7	1/2"	±26°
20106.W2443-B	Brass	7/16"-20 UNF	2.2	12.0	10.1	7/16"-20	4.0	2.3	6.4	1/2"	±37°
20106.W2444-B	Brass	7/16"-20 UNF	2.2	12.0	10.1	7/16"-20	4.0	2.3	31.7	1/2"	±26°
20106.W2445-B	Brass	7/16"-20 UNF	3.0	12.0	10.0	7/16"-20	4.0	2.3	6.4	1/2"	±30°
20106.W2446-B	Brass	7/16"-20 UNF	3.0	12.0	10.1	7/16"-20	4.0	2.3	31.7	1/2"	±26°
20106.W2500-B	Brass	1/2"-20 UNF	1.0	13.6	11.7	1/2"-20	4.0	2.3	6.4	9/16"	±36°
20106.W2501-B	Brass	1/2"-20 UNF	1.6	13.6	11.7	1/2"-20	4.0	2.3	6.4	9/16"	±36°
20106.W2502-B	Brass	1/2"-20 UNF	1.6	13.6	11.7	1/2"-20	4.0	2.3	31.7	9/16"	±32°
20106.W2503-B	Brass	1/2"-20 UNF	2.2	13.6	11.7	1/2"-20	4.0	2.3	6.4	9/16"	±36°
20106.W2504-B	Brass	1/2"-20 UNF	2.2	13.6	11.7	1/2"-20	4.0	2.3	31.7	9/16"	±32°
20106.W2505-B	Brass	1/2"-20 UNF	3.0	13.6	11.7	1/2"-20	4.0	2.3	6.4	9/16"	±36°
20106.W2506-B	Brass	1/2"-20 UNF	3.0	13.6	11.7	1/2"-20	4.0	2.3	12.7	9/16"	±36°
20106.W2507-B	Brass	1/2"-20 UNF	3.0	13.6	11.7	1/2"-20	4.0	2.3	31.7	9/16"	±32°
20106.W2508-B	Brass	1/2"-20 UNF	4.0	13.6	11.7	1/2"-20	4.0	2.3	12.7	9/16"	±32°
20106.W2509-B	Brass	1/2"-20 UNF	4.0	13.6	11.7	1/2"-20	4.0	2.3	31.7	9/16"	±32°
20106.W2630-B	Brass	5/8"-18 UNF	1.6	16.8	14.7	5/8"-18	5.3	2.3	9.7	11/16"	±40°
20106.W2631-B	Brass	5/8"-18 UNF	1.6	16.8	14.7	5/8"-18	5.3	2.3	31.7	11/16"	±40°
20106.W2632-B	Brass	5/8"-18 UNF	2.2	16.8	14.7	5/8"-18	5.3	2.3	9.7	11/16"	±40°
20106.W2633-B	Brass	5/8"-18 UNF	2.2	16.8	14.7	5/8"-18	5.3	2.3	31.7	11/16"	±42°
20106.W2634-B	Brass	5/8"-18 UNF	3.0	16.8	14.7	5/8"-18	5.3	2.3	12.7	11/16"	±40°
20106.W2635-B	Brass	5/8"-18 UNF	3.0	16.8	14.7	5/8"-18	5.3	2.3	31.7	11/16"	±40°
20106.W2636-B	Brass	5/8"-18 UNF	4.0	16.8	14.7	5/8"-18	5.3	2.3	12.7	11/16"	±40°
20106.W2637-B	Brass	5/8"-18 UNF	4.0	16.8	14.7	5/8"-18	5.3	2.3	31.7	11/16"	±40°
20106.W2638-B	Brass	5/8"-18 UNF	5.0	16.8	14.7	5/8"-18	5.3	2.3	12.7	11/16"	±34°
20106.W2639-B	Brass	5/8"-18 UNF	5.6	16.8	14.7	5/8"-18	5.3	2.3	12.7	11/16"	±34°
20106.W2640-B	Brass	5/8"-18 UNF	5.6	16.8	14.7	5/8"-18	5.3	2.3	31.7	11/16"	±34°



COOLANT NOZZLES

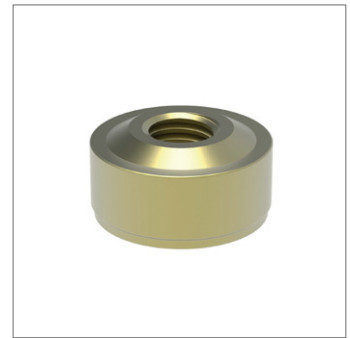
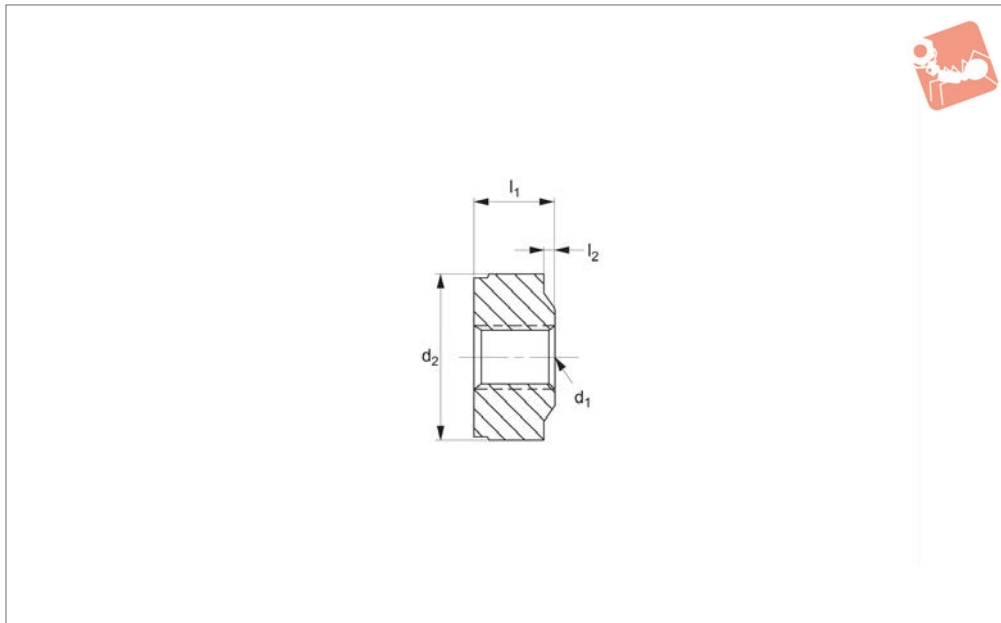
Order No.	Body material	d ₁	d ₂	d ₃ max.	d ₄ max.	d ₅	l ₁	l ₂	l ₃	A/F	α
20106.W2310-S	Stainless	5/16"-24 UNF	1.0	8.8	7.1	5/16"-24	3.5	2.3	6.4	3/8"	±34°
20106.W2311-S	Stainless	5/16"-24 UNF	1.6	8.8	7.1	5/16"-24	3.5	2.3	6.4	3/8"	±34°
20106.W2440-S	Stainless	7/16"-20 UNF	1.0	12.0	10.1	7/16"-20	4.0	2.3	6.4	1/2"	±37°
20106.W2441-S	Stainless	7/16"-20 UNF	1.6	12.0	10.1	7/16"-20	4.0	2.3	6.4	1/2"	±37°
20106.W2442-S	Stainless	7/16"-20 UNF	1.6	12.0	10.1	7/16"-20	4.0	2.3	31.7	1/2"	±26°
20106.W2443-S	Stainless	7/16"-20 UNF	2.2	12.0	10.0	7/16"-20	4.0	2.3	6.4	1/2"	±37°
20106.W2444-S	Stainless	7/16"-20 UNF	2.2	12.0	10.1	7/16"-20	4.0	2.3	31.7	1/2"	±26°
20106.W2445-S	Stainless	7/16"-20 UNF	3.0	12.0	10.1	7/16"-20	4.0	2.3	6.4	1/2"	±34°
20106.W2446-S	Stainless	7/16"-20 UNF	3.0	12.0	10.1	7/16"-20	4.0	2.3	31.7	1/2"	±26°
20106.W2500-S	Stainless	1/2"-20 UNF	1.0	13.6	11.7	1/2"-20	4.0	2.3	6.4	9/16"	±36°
20106.W2501-S	Stainless	1/2"-20 UNF	1.6	13.6	11.7	1/2"-20	4.0	2.3	6.4	9/16"	±36°
20106.W2502-S	Stainless	1/2"-20 UNF	1.6	13.6	11.7	1/2"-20	4.0	2.3	31.7	9/16"	±32°
20106.W2503-S	Stainless	1/2"-20 UNF	2.2	13.6	11.7	1/2"-20	4.0	2.3	6.4	9/16"	±36°
20106.W2504-S	Stainless	1/2"-20 UNF	2.2	13.6	11.7	1/2"-20	4.0	2.3	31.7	9/16"	±32°
20106.W2505-S	Stainless	1/2"-20 UNF	3.0	13.6	11.7	1/2"-20	4.0	2.3	6.4	9/16"	±36°
20106.W2506-S	Stainless	1/2"-20 UNF	3.0	13.6	11.7	1/2"-20	4.0	2.3	12.7	9/16"	±36°
20106.W2507-S	Stainless	1/2"-20 UNF	3.0	13.6	11.7	1/2"-20	4.0	2.3	31.7	9/16"	±32°
20106.W2508-S	Stainless	1/2"-20 UNF	4.0	13.6	11.7	1/2"-20	4.0	2.3	12.7	9/16"	±32°
20106.W2509-S	Stainless	1/2"-20 UNF	4.0	13.6	11.7	1/2"-20	4.0	2.3	31.7	9/16"	±32°
20106.W2630-S	Stainless	5/8"-18 UNF	1.6	16.7	14.7	5/8"-18	5.3	2.3	9.8	11/16"	±40°
20106.W2631-S	Stainless	5/8"-18 UNF	1.6	16.8	14.7	5/8"-18	5.3	2.3	31.7	11/16"	±40°
20106.W2632-S	Stainless	5/8"-18 UNF	2.2	16.8	14.7	5/8"-18	5.3	2.3	9.70	11/16"	±40°
20106.W2633-S	Stainless	5/8"-18 UNF	2.2	16.8	14.7	5/8"-18	5.3	2.3	31.7	11/16"	±40°
20106.W2634-S	Stainless	5/8"-18 UNF	3.0	16.8	14.7	5/8"-18	5.3	2.3	12.7	11/16"	±40°
20106.W2635-S	Stainless	5/8"-18 UNF	3.0	16.8	14.7	5/8"-18	5.3	2.3	31.7	11/16"	±40°
20106.W2636-S	Stainless	5/8"-18 UNF	4.0	16.8	14.7	5/8"-18	5.3	2.3	12.7	11/16"	±40°
20106.W2637-S	Stainless	5/8"-18 UNF	4.0	16.8	14.7	5/8"-18	5.3	2.3	31.7	11/16"	±40°
20106.W2638-S	Stainless	5/8"-18 UNF	5.0	16.8	14.7	5/8"-18	5.3	2.3	12.7	11/16"	±34°
20106.W2639-S	Stainless	5/8"-18 UNF	5.6	16.8	14.7	5/8"-18	5.3	2.3	12.7	11/16"	±34°
20106.W2640-S	Stainless	5/8"-18 UNF	5.6	16.8	14.7	5/8"-18	5.3	2.3	31.7	11/16"	±34°



Port Adaptors - Press Fit

high pressure - max. 100 bar

Coolant Nozzles



20107

COOLANT NOZZLES

Material

Brass.

Technical Notes

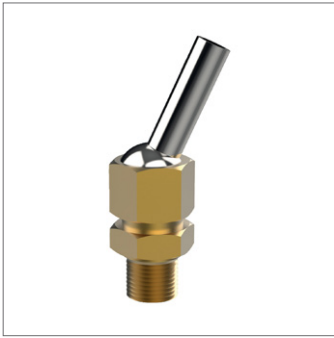
Max. temperature: 150°C.

Max. pressure: 100 bar.

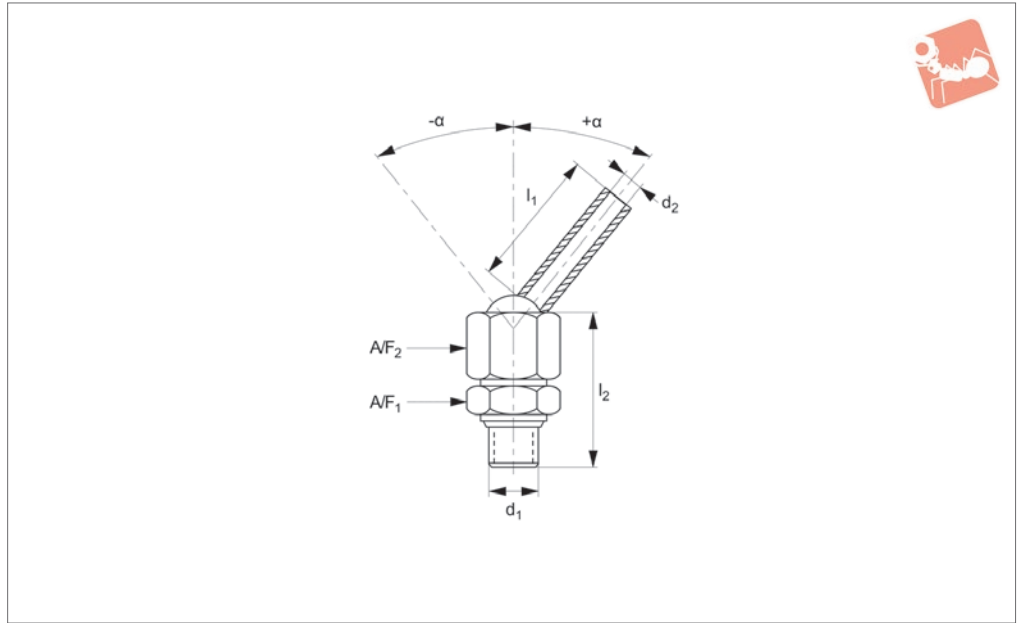
Converts low pressure screwball type parts to high pressure fixed, threaded parts.

Hole tolerance for d_2 H9.

Order No.	d_1	d_2	l_1	l_2
20107.W6080	M 6x1,0	8	6.0	-
20107.W6100	M 6x1,0	10	6.0	-
20107.W6121	M 6x1,0	12	6.0	-
20107.W6141	M 6x1,0	14	7.1	1
20107.W6151	M 6x1,0	15	7.1	1
20107.W6161	M 6x1,0	16	7.1	1
20107.W6120	1/8" NPT/BSPT	12	6.0	-
20107.W6140	1/8" NPT/BSPT	14	6.0	-
20107.W6150	1/8" NPT/BSPT	15	6.0	-
20107.W6160	1/8" NPT/BSPT	16	6.0	-



20108



Material

Body and nut: brass.
Ball and extension: stainless steel.
152,4mm long tubes brass/copper.

Technical Notes

Max. temperature: 150°C.

Max. pressure: 100 bar.
symbola/symbol is an angle of adjustment either side of centre line.
These units fit both NPT and BSPT ports.
Through tightening of nut A/F₂ these nozzles can be locked in position. Ideal for

applications where the nozzles could be knocked out of position.

Tips

The balls and tube are easily interchangeable - see part no. 20109 for replacement balls and tubes.

Order No.	A/F ₁	d ₁	d ₂	l ₁	l ₂	A/F ₂	α
20108.W2120	1/2"	1/8"-NPT/BSPT	1.6	6.4	28.4	9/16"	±33°
20108.W2121	1/2"	1/8"-NPT/BSPT	1.6	31.7	28.4	9/16"	±28°
20108.W2122	1/2"	1/8"-NPT/BSPT	2.2	6.4	28.4	9/16"	±33°
20108.W2123	1/2"	1/8"-NPT/BSPT	2.2	31.7	28.4	9/16"	±28°
20108.W2124	1/2"	1/8"-NPT/BSPT	3.0	12.7	28.4	9/16"	±33°
20108.W2125	1/2"	1/8"-NPT/BSPT	3.0	31.7	28.4	9/16"	±28°
20108.W2126	1/2"	1/8"-NPT/BSPT	3.2	152.4	28.4	9/16"	±28°
20108.W2127	1/2"	1/8"-NPT/BSPT	4.0	12.7	28.4	9/16"	±28°
20108.W2128	1/2"	1/8"-NPT/BSPT	4.0	31.7	28.4	9/16"	±28°
20108.W2250	9/16"	1/4"-NPT/BSPT	1.6	9.7	31.2	5/8"	±33°
20108.W2251	9/16"	1/4"-NPT/BSPT	1.6	31.7	31.2	5/8"	±33°
20108.W2252	9/16"	1/4"-NPT/BSPT	2.2	9.7	31.2	5/8"	±33°
20108.W2253	9/16"	1/4"-NPT/BSPT	2.2	31.7	31.2	5/8"	±33°
20108.W2254	9/16"	1/4"-NPT/BSPT	3.0	12.7	31.2	5/8"	±33°
20108.W2255	9/16"	1/4"-NPT/BSPT	3.0	31.7	31.2	5/8"	±33°
20108.W2256	9/16"	1/4"-NPT/BSPT	3.2	152.4	31.2	5/8"	±33°
20108.W2257	9/16"	1/4"-NPT/BSPT	4.0	12.7	31.2	5/8"	±33°
20108.W2258	9/16"	1/4"-NPT/BSPT	4.0	31.7	31.2	5/8"	±33°
20108.W2259	9/16"	1/4"-NPT/BSPT	5.6	12.7	31.2	5/8"	±27°
20108.W2260	9/16"	1/4"-NPT/BSPT	5.6	31.7	31.2	5/8"	±27°
20108.W2370	13/16"	3/8"-NPT/BSPT	3.2	152.4	35.8	3/4"	±38°
20108.W2371	13/16"	3/8"-NPT/BSPT	4.0	19.0	35.8	3/4"	±33°
20108.W2372	13/16"	3/8"-NPT/BSPT	4.0	38.1	35.8	3/4"	±33°
20108.W2373	13/16"	3/8"-NPT/BSPT	4.8	152.4	35.8	3/4"	±33°
20108.W2374	13/16"	3/8"-NPT/BSPT	5.6	19.0	35.8	3/4"	±27°
20108.W2375	13/16"	3/8"-NPT/BSPT	5.6	38.1	35.8	3/4"	±27°
20108.W2376	13/16"	3/8"-NPT/BSPT	7.1	19.0	35.8	3/4"	±23°
20108.W2377	13/16"	3/8"-NPT/BSPT	7.1	38.1	35.8	3/4"	±23°

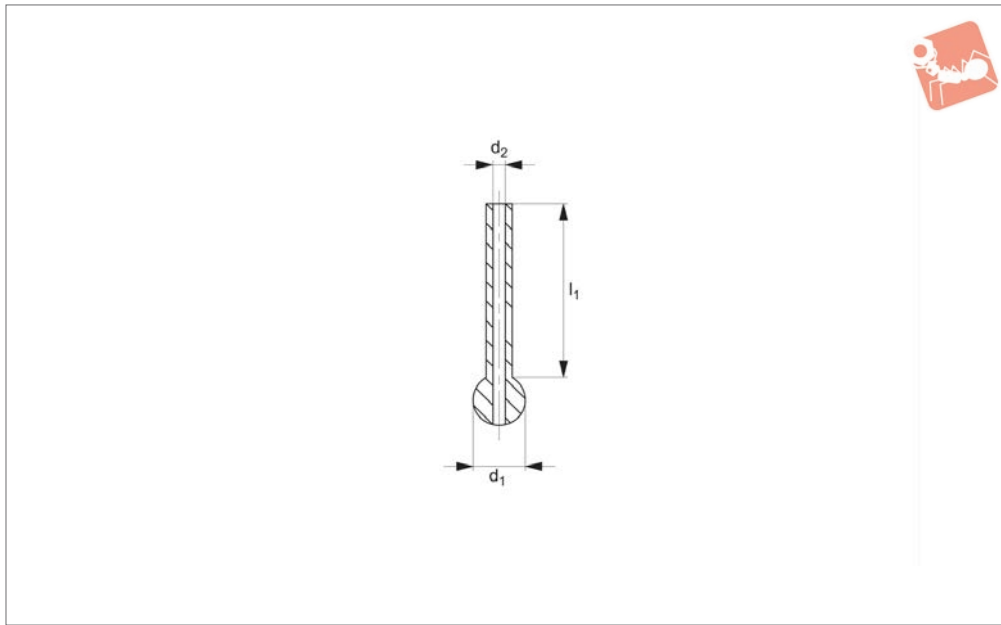


Coolant Nozzles - Lock Jet

single tube ball - max.100 bar - for part 20108



Coolant Nozzles



20109

COOLANT NOZZLES

Material

Ball: stainless steel.
Tube: copper.

Max. pressure: 100 bar.

To be used with part no. 20108 as replacement units, or to provide a wider range of use with a single lock jet unit.

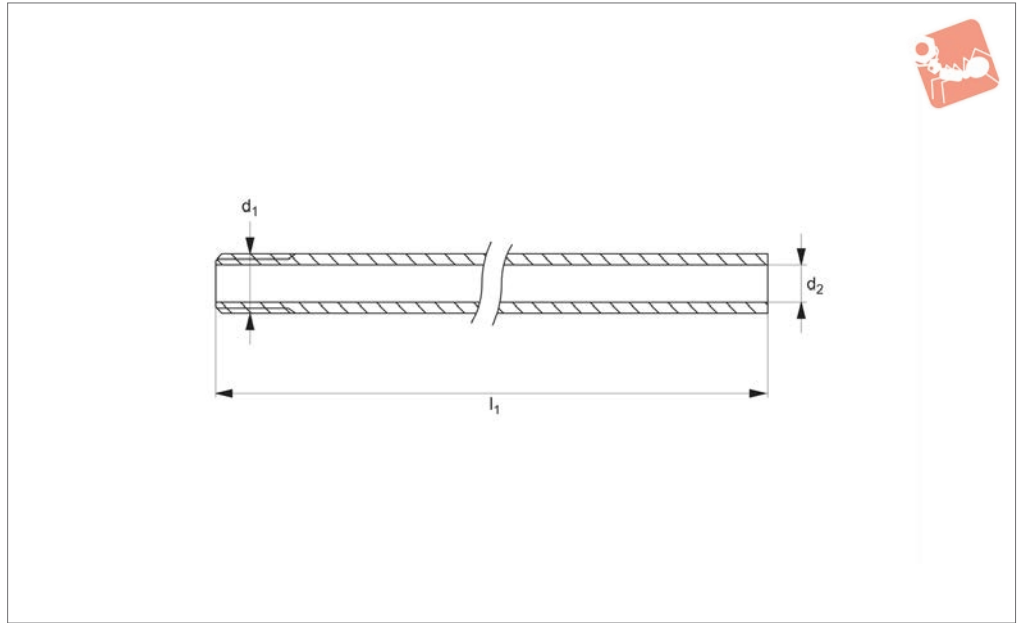
Technical Notes

Max. temperature: 150°C.

Order No.	To suit lock jet of thread	d ₁	d ₂	l ₁
20109.W2370	1/8" - NPT/BSPT	9.5	1.6	6.4
20109.W2371	1/8" - NPT/BSPT	9.5	1.6	31.7
20109.W2372	1/8" - NPT/BSPT	9.5	2.2	6.4
20109.W2373	1/8" - NPT/BSPT	9.5	2.2	31.7
20109.W2374	1/8" - NPT/BSPT	9.5	3.0	12.7
20109.W2375	1/8" - NPT/BSPT	9.5	3.0	31.7
20109.W2376	1/8" - NPT/BSPT	9.5	4.0	12.7
20109.W2377	1/8" - NPT/BSPT	9.5	4.0	31.7
20109.W0120	1/4" - NPT/BSPT	12.0	1.6	9.7
20109.W0121	1/4" - NPT/BSPT	12.0	1.6	31.7
20109.W0122	1/4" - NPT/BSPT	12.0	2.2	9.7
20109.W0123	1/4" - NPT/BSPT	12.0	2.2	31.7
20109.W0124	1/4" - NPT/BSPT	12.0	3.0	12.7
20109.W0125	1/4" - NPT/BSPT	12.0	3.0	31.7
20109.W0126	1/4" - NPT/BSPT	12.0	4.0	12.7
20109.W0127	1/4" - NPT/BSPT	12.0	4.0	31.7
20109.W0128	1/4" - NPT/BSPT	12.0	5.6	12.7
20109.W0129	1/4" - NPT/BSPT	12.0	5.6	31.7
20109.W0150	3/8" - NPT/BSPT	15.0	4.0	19.0
20109.W0151	3/8" - NPT/BSPT	15.0	4.0	38.1
20109.W0152	3/8" - NPT/BSPT	15.0	5.6	19.0
20109.W0153	3/8" - NPT/BSPT	15.0	5.6	38.1
20109.W0154	3/8" - NPT/BSPT	15.0	7.1	19.0
20109.W0155	3/8" - NPT/BSPT	15.0	7.1	38.1



20090



Material

Brass.

Max. pressure: 33 bar.

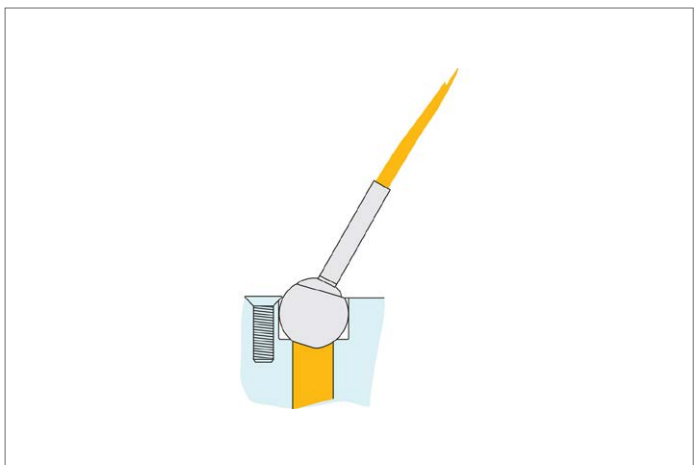
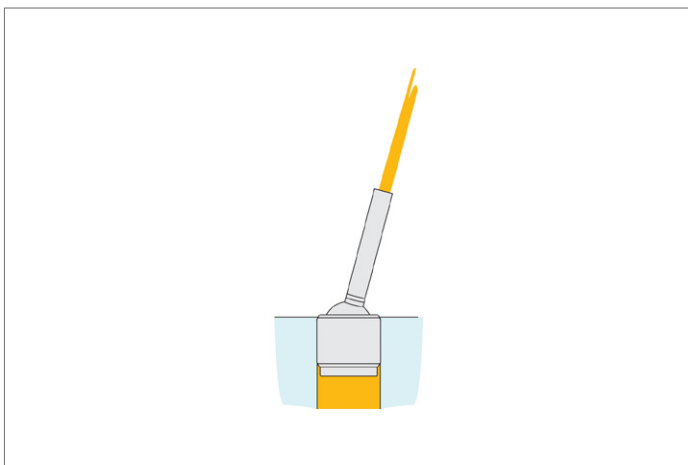
Tips

For use with many of our coolant nozzles, or as stand alone units.

Technical Notes

Max. temperature: 150°C.

Order No.	d ₁	d ₂	l ₁
20090.W0030	M 3,5x0,60	2.0	30
20090.W0040	M 4x0,70	2.0	30
20090.W0050	M 5x0,80	3.0	40
20090.W0060	M 6x1,00	4.0	50
20090.W0070	M 7x1,00	5.0	55
20090.W0080	M 8x1,25	5.5	55

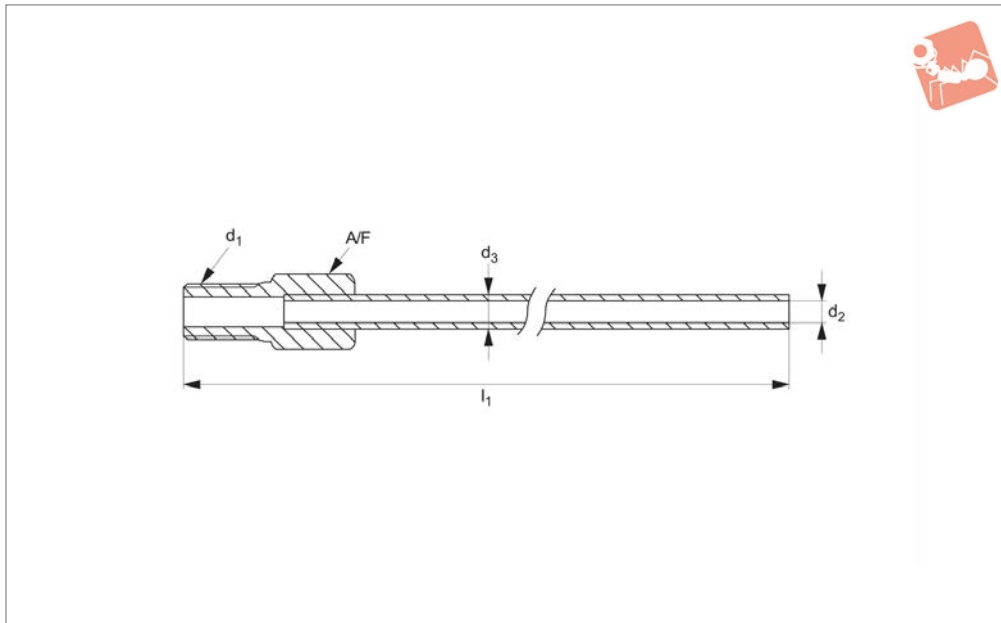




Extension Tube - For Coolant Nozzles

bendable - max. 33 bar

Coolant Nozzles



20092

COOLANT NOZZLES

Material

Tube: copper.
Connector: threaded brass.

Max. pressure: 33 bar.
Bend and cut to length as required.

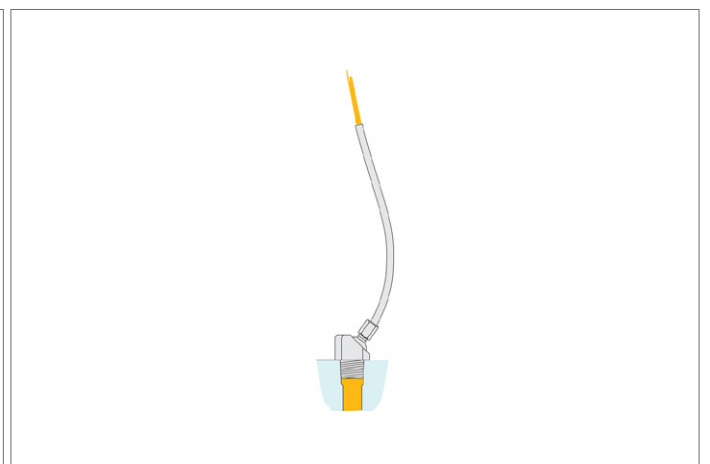
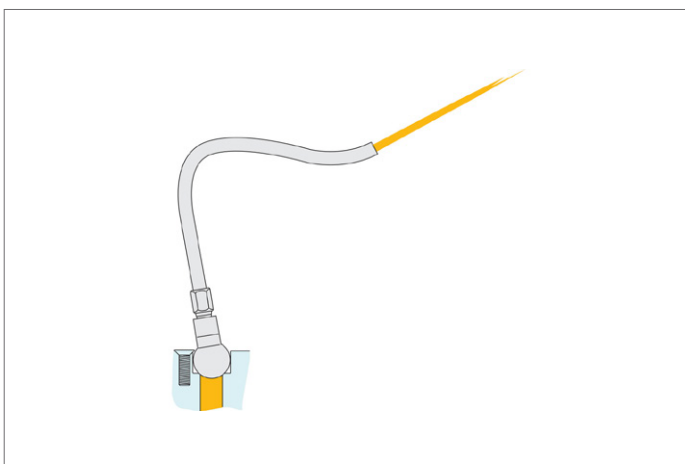
Tips

For use with many of our coolant nozzles,
or as stand alone units.

Technical Notes

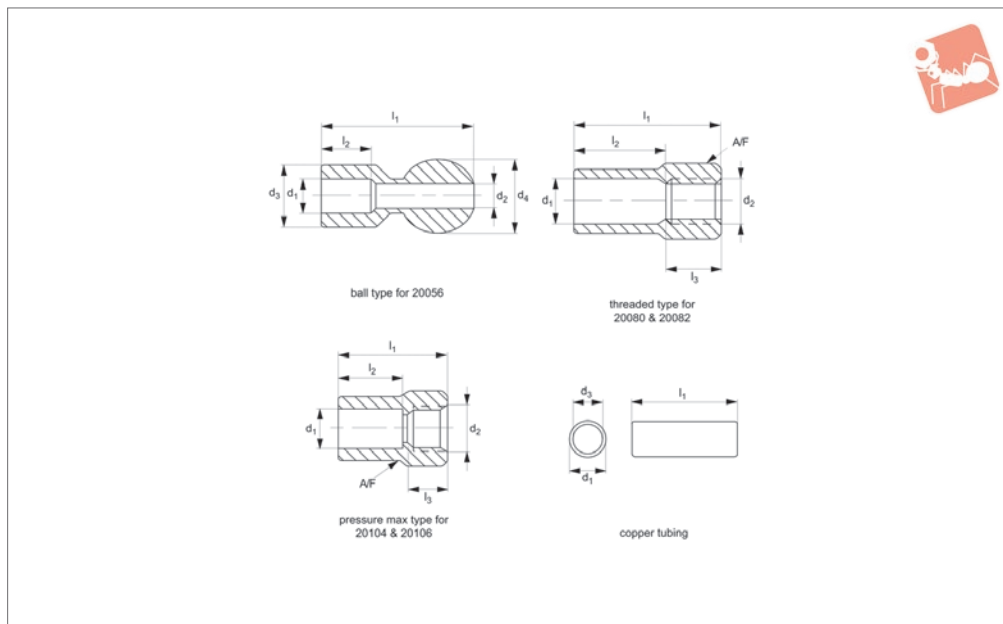
Max. temperature: 150°C.

Order No.	d ₁	d ₂	d ₃	l ₁	A/F
20092.W0030	M 3,5x0,60	1.8	3.2	155.5	3/16"
20092.W0040	M 4x0,70	1.8	3.2	155.5	3/16"
20092.W0050	M 5x0,80	3.0	4.8	155.5	1/4"
20092.W0060	M 6x1,00	3.0	4.8	155.5	1/4"
20092.W0070	M 7x1,00	4.6	6.4	155.5	5/16"
20092.W0080	M 8x1,25	4.6	6.4	155.5	5/16"
20092.W0081	M 8x0,50	3.0	4.8	155.5	6
20092.W0082	M 8x0,50	4.6	6.4	155.5	7
20092.W0100	M10x0,50	3.0	4.8	155.5	6
20092.W0101	M10x0,50	4.6	6.4	155.5	8
20092.W0120	M12x0,50	3.0	4.8	155.5	6
20092.W0121	M12x0,50	4.6	6.4	155.5	8
20092.W0122	M12x0,50	6.4	7.9	155.5	10





20093



Material

Brass.

Technical Notes

Max. temperature: 70°C.

Max. pressure: 33 bar.

Tips

Sweat fittings allow a wide variety of coolant nozzles to be mounted to copper tubing, increasing reliability through use of short rigid hose. For use with coolant

nozzles 20056, 20080, 20082, 20104 and 20106. See table for compatibility. Easy to solder.

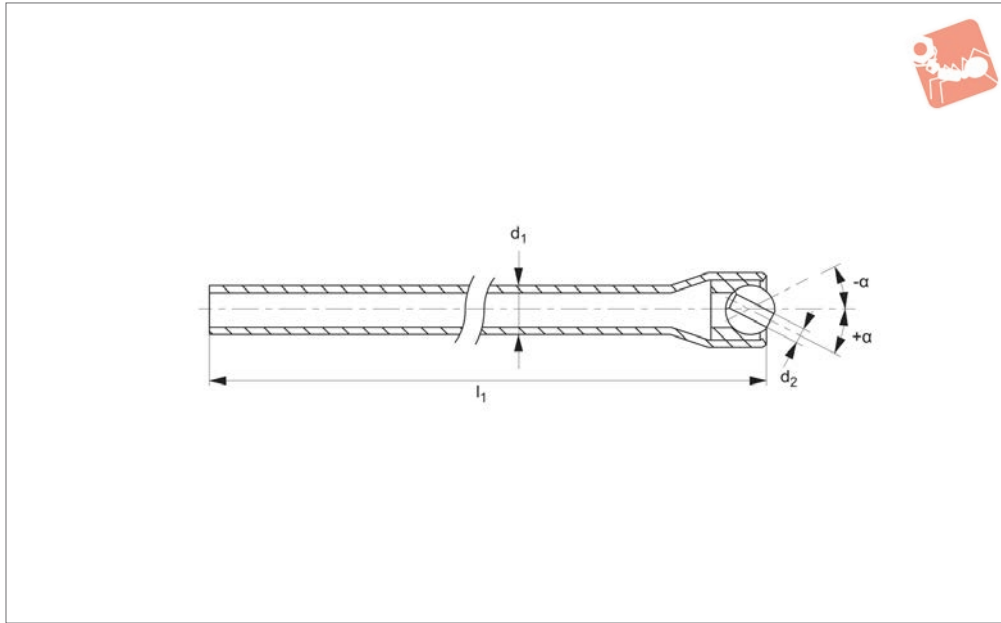
Order No.	Type	For use with	d ₁	d ₂	d ₃	d ₄	l ₁	l ₂	l ₃	A/F
20093.W0250	Ball Type	20056	6.4	5.6	9.6	12	25.1	9.6	-	-
20093.W0310	Ball Type	20056	7.9	5.6	11.2	12	26.7	11.2	-	-
20093.W0370	Ball Type	20056	9.5	5.6	12.4	12	29.2	12.4	-	-
20093.W1190	Threaded Type	20080/20082	4.8	M 5x0,80	-	-	14.2	7.9	6.4	6.4
20093.W1250	Threaded Type	20080/20082	6.4	M 6x1,00	-	-	15.7	9.4	6.4	7.9
20093.W1340	Threaded Type	20080/20082	7.9	M 8x1,25	-	-	20.6	12.7	7.9	9.7
20093.W1370	Threaded Type	20080/20082	9.5	1/8" NPT/BSPT	-	-	23.9	14.2	6.4	12.7
20093.W2250	Pressure Max Type	20104/20106	6.4	5/16"-24 UNJF	-	-	17.3	9.7	5.0	11.2
20093.W2251	Pressure Max Type	20104/20106	6.4	7/16"-20 UNJF	-	-	19.0	10.7	5.0	14.2
20093.W2310	Pressure Max Type	20104/20106	7.9	7/16"-20 UNJF	-	-	19.0	11.2	5.0	14.2
20093.W2311	Pressure Max Type	20104/20106	7.9	1/2"-20 UNJF	-	-	25.4	14.2	6.3	15.7
20093.W2370	Pressure Max Type	20104/20106	9.5	7/16"-20 UNJF	-	-	19.0	11.2	5.0	14.2
20093.W2371	Pressure Max Type	20104/20106	9.5	1/2"-20 UNJF	-	-	25.4	14.2	6.3	15.7
20093.W5190	Copper Tubing	Copper Tube	4.8	-	3.0	-	3000.0	-	-	-
20093.W5250	Copper Tubing	Copper Tube	6.4	-	4.6	-	3000.0	-	-	-
20093.W5310	Copper Tubing	Copper Tube	7.9	-	6.3	-	3000.0	-	-	-
20093.W5370	Copper Tubing	Copper Tube	9.5	-	7.9	-	3000.0	-	-	-



Directional Spray - Single Tube

bendable - max. 33 bar

Coolant Nozzles



20094

COOLANT NOZZLES

Material

Tube: copper.
 Inserts: acetal.
 Ball: stainless steel.

Max. pressure: 33 bar.
 symbola/symbol is an angle of adjustment
 either side of centre line.

(right angle) or 20096 (straight).

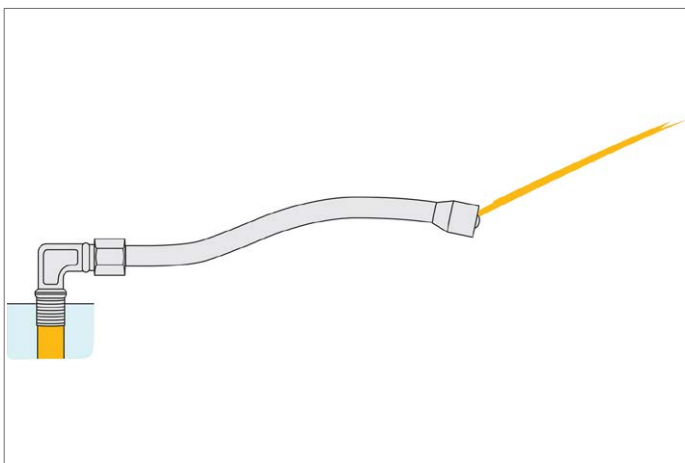
Tips

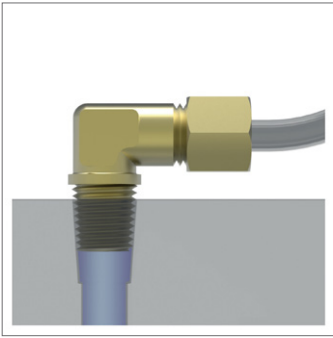
Adjustable direction ball on tip.
 Can be combined with connectors 20095

Technical Notes

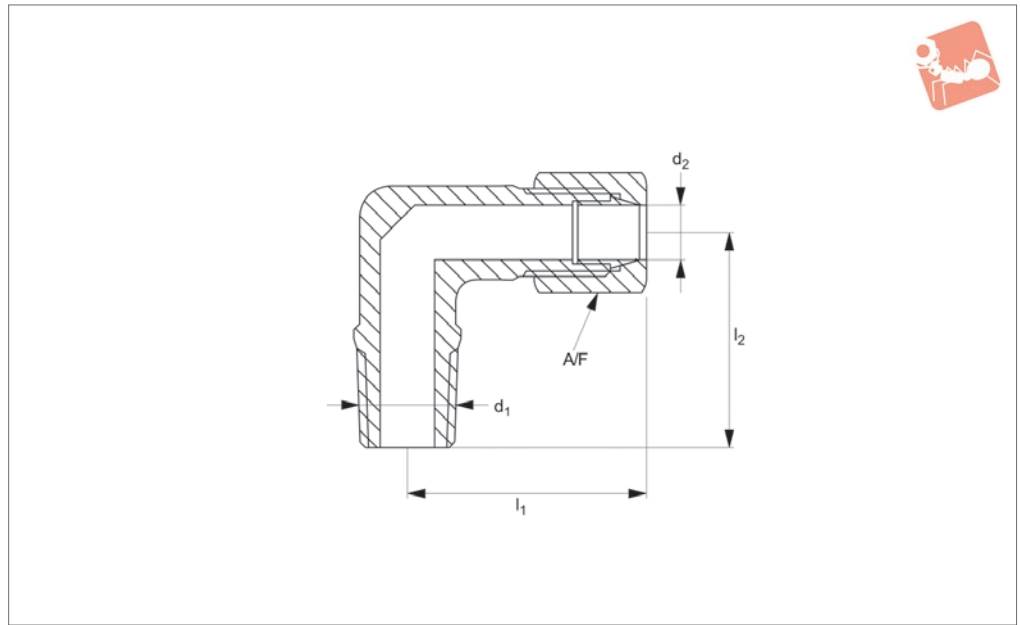
Max. temperature: 70°C.

Order No.	d ₁	d ₂	Jet bore d ₂	l ₁	α
20094.W0040	4.8	2	Plain	146.0	±35°
20094.W6060	6.4	M 3,5x0,6	Threaded	146.0	±35°
20094.W6070	7.9	M 4x0,7	Threaded	298.5	±35°
20094.W6090	9.5	M 5x0,8	Threaded	298.5	±35°





20095



Material

Brass connector (supplied with olive).

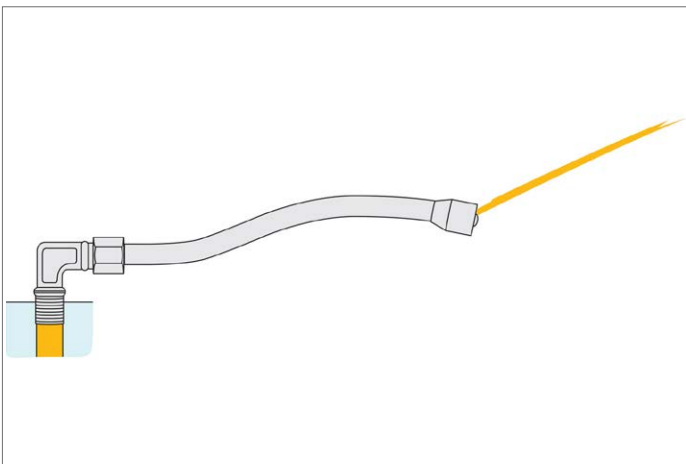
Max. pressure: 33 bar.

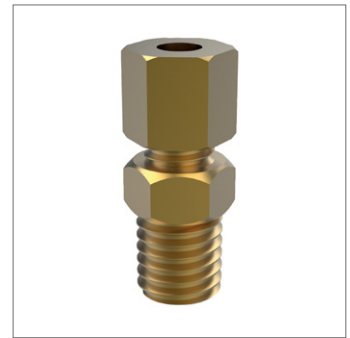
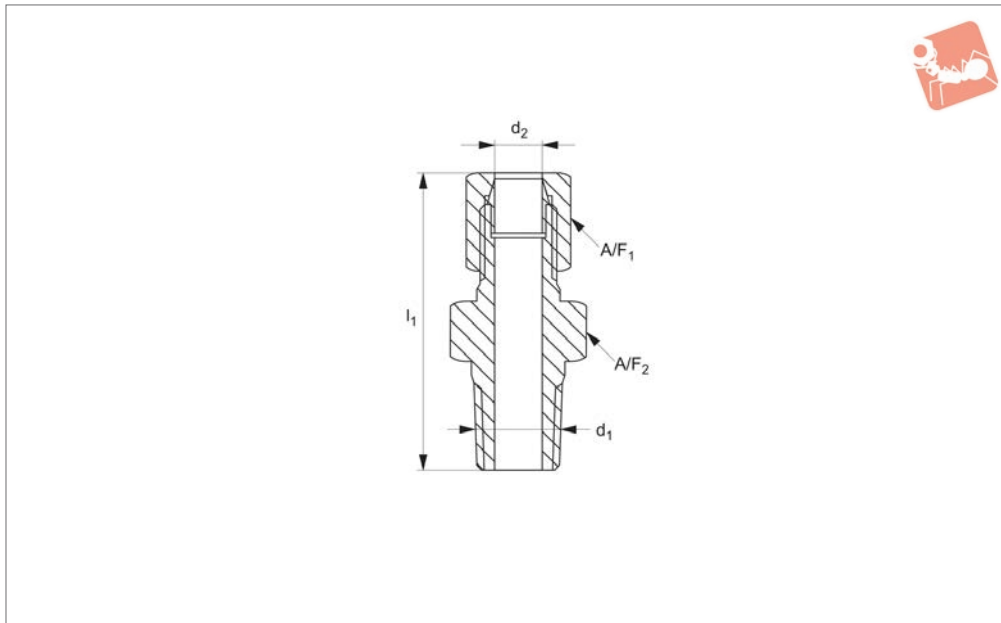
For use with adjustable direction spray nozzle tube 20094.

Technical Notes

Max. temperature: 150°C.

Order No.	Type	Tube size mm	d ₁	d ₂	l ₁	l ₂	A/F
20095.W1120	1/8" NPT/BSPT	3/16"	1/8"	3/8" - 24 UN	21.3	17.5	7/16"
20095.W1121	1/8" NPT/BSPT	1/4"	1/8"	7/16" - 24 UN	21.8	18.8	1/12"
20095.W1122	1/8" NPT/BSPT	5/16"	1/8"	1/2" - 24 UN	22.4	18.8	9/16"
20095.W1250	1/4" NPT/BSPT	3/16"	1/4"	3/8" - 24 UN	21.8	23.6	7/16"
20095.W1251	1/4" NPT/BSPT	1/4"	1/4"	7/16" - 24 UN	21.8	23.9	1/2"
20095.W1252	1/4" NPT/BSPT	5/16"	1/4"	1/2" - 24 UN	24.1	23.6	9/16"
20095.W1253	1/4" NPT/BSPT	3/8"	1/4"	9/24" - 24 UN	26.2	23.6	5/8"
20095.W1370	3/8" NPT/BSPT	3/8"	3/8"	9/24" - 24 UN	26.2	25.4	5/8"





20096

COOLANT NOZZLES

Material

Brass connector (supplied with olive).

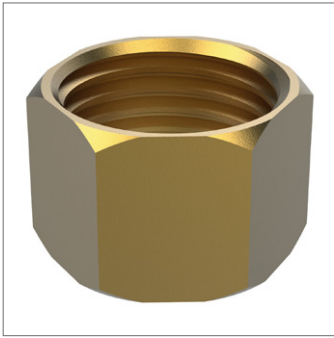
Max. pressure: 33 bar.

For use with adjustable direction spray nozzle tube 20094.

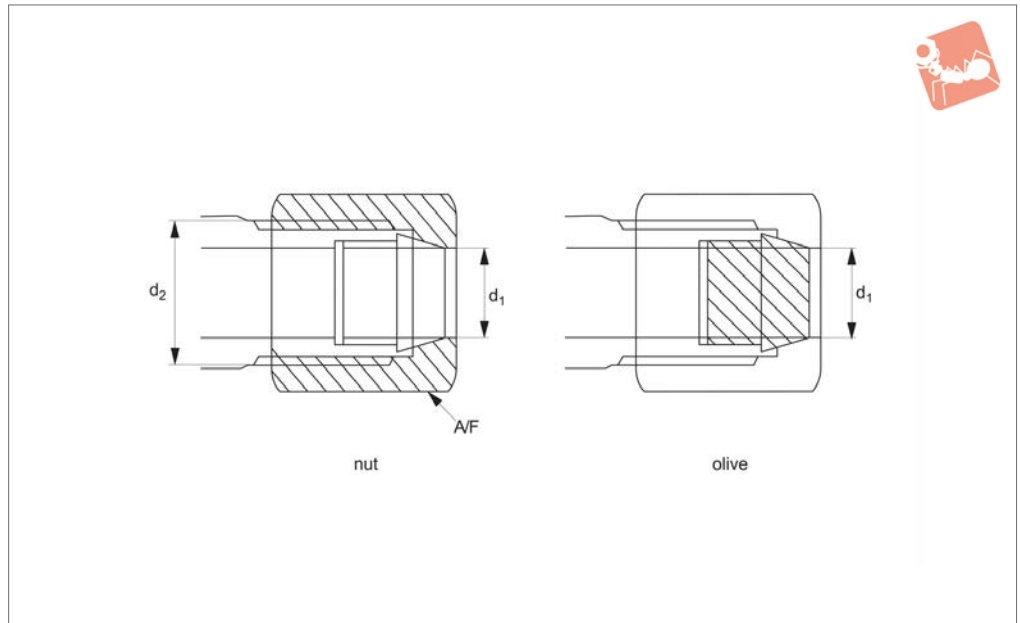
Technical Notes

Max. temperature: 70°C.

Order No.	Type	d ₁	d ₂	l ₁	A/F ₁	A/F ₂
20096.W0080	Metric fine	M 8x1,00	4.8	28.0	7/16"	7/16"
20096.W0100	Metric fine	M10x1,25	4.8	28.7	7/16"	7/16"
20096.W1101	Metric fine	M10x1,00	4.8	28.7	7/16"	7/16"
20096.W1080	Metric coarse	M 8x1,25	4.8	28.0	7/16"	7/16"
20096.W1100	Metric coarse	M10x1,50	4.8	28.7	7/16"	7/16"
20096.W1120	Metric coarse	M12x1,75	6.4	30.5	1/2"	1/2"
20096.W2060	NPT/BSPT	1/16"	4.8	27.4	7/16"	7/16"
20096.W1130	NPT/BSPT	1/8"	4.8	27.4	7/16"	7/16"
20096.W1131	NPT/BSPT	1/8"	6.4	28.0	1/2"	7/16"
20096.W1132	NPT/BSPT	1/8"	7.9	29.2	9/16"	1/2"
20096.W1250	NPT/BSPT	1/4"	4.8	32.3	7/16"	9/16"
20096.W1251	NPT/BSPT	1/4"	6.4	33.0	1/2"	9/16"
20096.W1252	NPT/BSPT	1/4"	7.9	33.8	9/16"	9/16"
20096.W1253	NPT/BSPT	1/4"	9.5	36.0	5/8"	9/16"
20096.W1370	NPT/BSPT	3/8"	9.5	36.6	5/8"	5/8"



20097



Material

Brass.

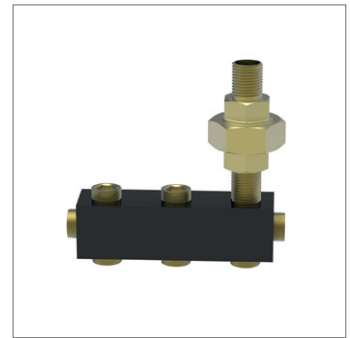
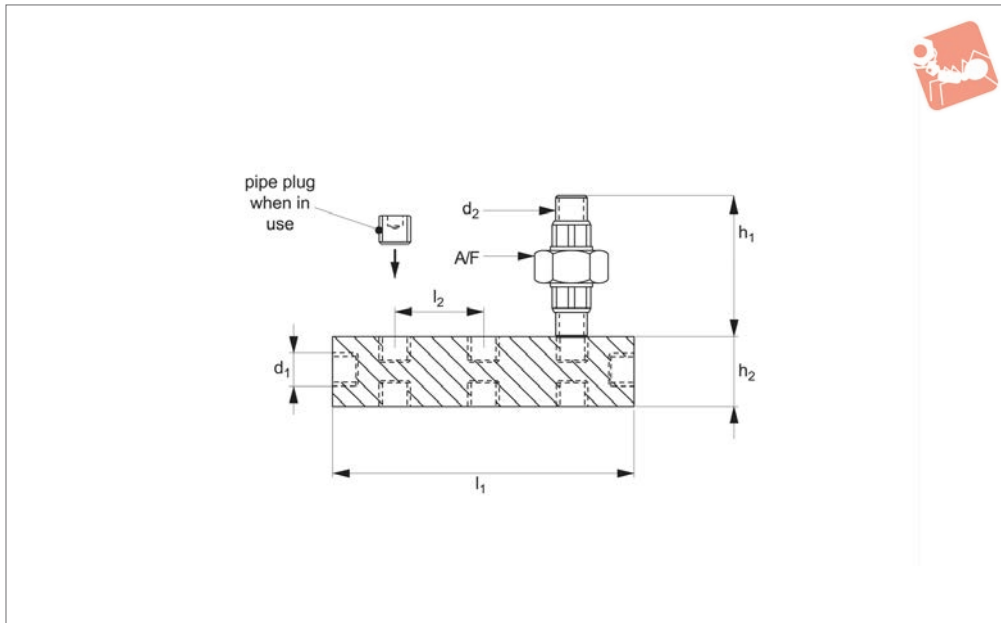
Max. pressure: 33 bar.

For angled or straight connectors 20095 and 20096.

Technical Notes

Max. temperature: 150°C.

Order No.	Type	d ₁	Internal thread d ₂	A/F
20097.W1040	Nut	4.8	3/8" - 24 UNF	7/16"
20097.W1060	Nut	6.4	7/16" - 24 UNF	1/2"
20097.W1070	Nut	7.9	1/2" - 24 UNF	9/16"
20097.W1090	Nut	9.5	9/16" - 24 UNF	5/8"
20097.W2040	Olive	4.8	-	-
20097.W2060	Olive	6.4	-	-
20097.W2070	Olive	7.9	-	-
20097.W2090	Olive	9.5	-	-



20114

COOLANT NOZZLES

Material

Manifold: anodized aluminium.
 Thread connectors: brass.
 Pipe plugs: plated steel.

Thread union: brass.

Max. pressure: 33 bar.

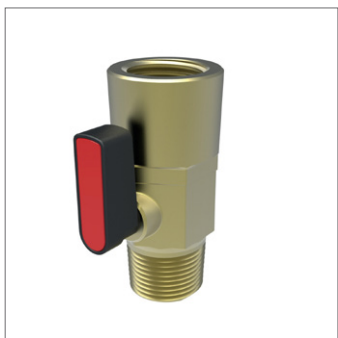
Technical Notes

Max. temperature: 70°C.

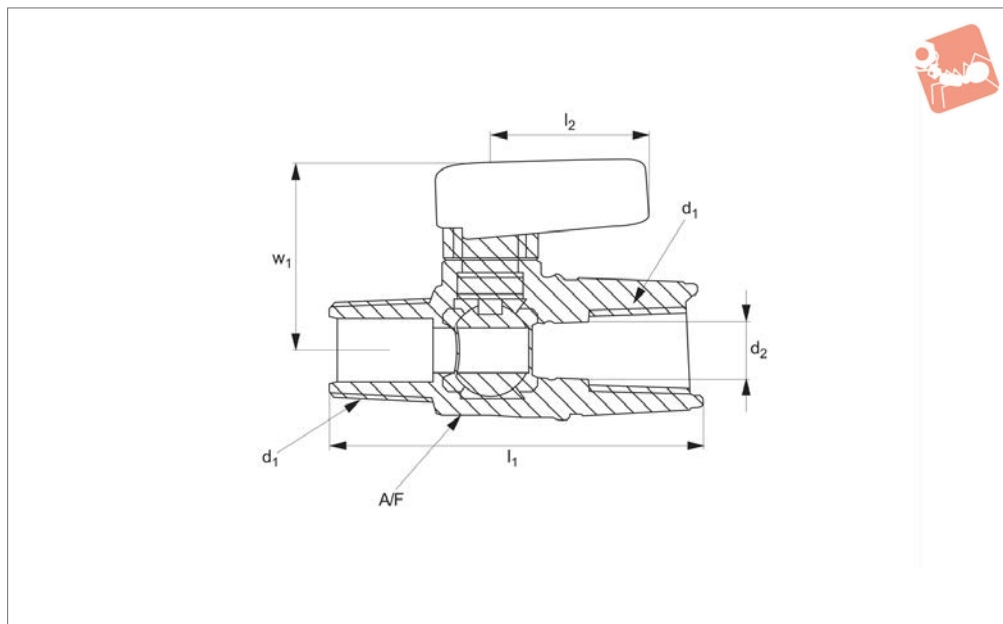
Order No.	d_1	d_2	h_1	h_2	l_1	l_2	A/F
20114.W2250	1/4" NPT	1/4" NPT/BSPT	76.2	25.4	88.9	31.8	1-3/16"



COOLANT NOZZLES



20118



Material

Brass, chrome plated.
Teflon seals.

Technical Notes

Max. temperature: 80°C.
Max. pressure: 16 bar.

Order No.	d ₁	d ₂	l ₁	l ₂	w ₁	A/F	Handle colour
20118.W1120	1/8" BSPT	5.3	36.0	18.8	21.8	14	Red
20118.W1250	1/4" BSPT	5.3	43.2	18.8	21.8	14	Red
20118.W1370	3/8" BSPT	7.9	46.0	18.8	23.4	18	Red
20118.W3120	1/8" NPTF	5.3	36.8	18.8	21.8	14	Blue
20118.W3250	1/4" NPTF	5.3	43.2	18.8	21.8	14	Blue
20118.W3370	3/8" NPTF	7.9	48.0	18.8	23.4	18	Blue