

15K NOZZLES

15K AP Standard Nozzles The economical APS stainless steel AP Standard style nozzles come in pressure ratings to match your flex or rigid lances. The 15K-AP features FNPT threads to go with lances with MNPT threads, a slimline design that makes it easy to move through almost any size of tubing, and a wide range of options for precision drilled orifices.



Part #	15K-AP FNPT	Diameter	Length
15-001-001	1/16" NPT	0.375" (9.53mm)	0.875" (22.23mm)
15-001-011	1/8" NPT	0.468" (11.91mm)	0.937" (23.81mm)
15-001-021	1/4" NPT	0.625" (15.88mm)	1.250" (31.75mm)
15-001-031	3/8" NPT	0.875" (22.23mm)	1.437" (36.50mm)
15-001-041	1/2" NPT	1.000" (25.40mm)	1.625" (41.28mm)
15-001-051	3/4" NPT	1.250" (31.75mm)	2.000" (50.80mm)
15-016-061	1" NPT	1.625" (41.28mm)	2.250" (57.15mm)

15K FNPT Nozzles The FNPT nozzles are to be used in rotary applications for the removal of hardened plugs in heat exchanger tubes. This 15K nozzle FNPT threads to go with lances with MNPT threads, a slimline design that makes it easy to move through almost any size of tubing, and a wide range of options for precision drilled orifices.



Part #	15K-FNPT	Diameter	Length
15-002-001	1/16" FNPT	0.375" (9.53mm)	0.875" (22.23mm)
15-002-011	1/8" FNPT	0.468" (11.91mm)	0.937" (23.81mm)
15-002-021	1/4" FNPT	0.625" (15.88mm)	1.250" (31.75mm)
15-002-031	3/8" FNPT	0.875" (22.23mm)	1.437" (36.50mm)
15-002-041	1/2" FNPT	1.000" (25.40mm)	1.625" (41.28mm)

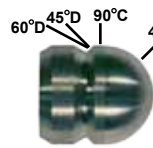
15K Multi-Groove Nozzles The APS high production stainless steel Multi-Groove nozzles come in pressure ratings to match your flex or rigid lances. The 15K-MG features FNPT threads to go with lances with MNPT threads. The Multi-Grooves have wrench flats for easy installation on the lance, and offer many options for up to 4 rows of precision drilled orifices. Please specify drilling pattern, pressure and flow when ordering.

Part #	15K-MG FNPT	Diameter	Length
15-003-001	1/16" NPT	0.375" (9.53mm)	1.281" (32.54mm)
15-003-011	1/8" NPT	0.468" (11.91mm)	1.625" (41.28mm)
15-003-021	1/4" NPT	0.625" (15.88mm)	1.625" (41.28mm)
15-003-031	3/8" NPT	0.875" (22.23mm)	1.875" (47.62mm)
15-003-041	1/2" NPT	1.000" (25.40mm)	2.043" (51.89mm)



15K Button Tip Flex Lance Nozzles The APS Button-Tip compact stainless steel nozzles come in pressure ratings to match your flex lances. They are ideal for cleaning small diameter tubes with small radius bends. The 15K-BT features FNPT threads to go with lances with MNPT threads. All offer many options for precision drilled orifices.

Part #	15K-BT FNPT	Diameter	Length
15-004-001	1/16" NPT	0.375" (9.53mm)	0.500" (12.70mm)
15-004-011	1/8" NPT	0.468" (11.91mm)	0.590" (14.98mm)
15-004-021	1/4" NPT	0.625" (15.88mm)	0.825" (20.96mm)
15-004-031	3/8" NPT	0.875" (22.23mm)	1.000" (25.40mm)
15-004-041	1/2" NPT	1.000" (25.40mm)	1.125" (28.58mm)



15K Penetrator Nozzles The APS Penetrator stainless steel nozzles are used with rigid or flex lances with MNPT threads. The rounded nose shape permits a range of forward and side drilling patterns while the backwards facing ridge allows a large number of pulling orifices to more efficiently clean fouled tubing. Wrench flats allow for easy installation.



Part #	15K-PT FNPT	Diameter	Length
15-005-001	1/16" NPT	0.375" (9.53mm)	1.312" (33.32mm)
15-005-011	1/8" NPT	0.468" (11.91mm)	1.500" (38.10mm)
15-005-021	1/4" NPT	0.625" (15.88mm)	1.750" (44.45mm)
15-005-031	3/8" NPT	0.875" (22.23mm)	1.812" (46.02mm)
15-005-041	1/2" NPT	1.000" (25.40mm)	2.062" (52.37mm)

15K Evaporator Nozzles The APS Evaporator stainless steel nozzles are used with rigid or flex lances with MNPT threads. The design permits a range of forward and side drilling patterns while the backwards facing ridge allows a large number of pulling orifices to more efficiently clean fouled tubing. Wrench flats allow for easy installation.



Part #	15K-EVNPT	Diameter	Length
15-006-001	1/16" NPT	0.375" (9.53mm)	1.343" (34.11mm)
15-006-011	1/8" NPT	0.468" (11.91mm)	1.437" (36.50mm)
15-006-021	1/4" NPT	0.625" (15.88mm)	1.687" (42.85mm)
15-006-031	3/8" NPT	0.875" (22.23mm)	1.812" (46.02mm)
15-006-041	1/2" NPT	1.000" (25.40mm)	2.060" (52.32mm)

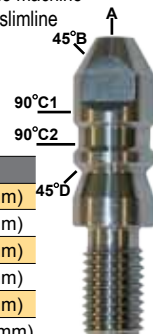
15K TLX Nozzles The APS stainless steel TLX nozzles come in pressure ratings to match your flex or rigid lances. The 15K-TLX features FNPT threads to go with lances with MNPT threads. All offer many options for 3 or 4 rows of precision drilled orifices.

Part #	15K-TLX NPT	Diameter	Length
15-007-001	1/16" NPT	0.375" (9.53mm)	1.468" (37.29mm)
15-007-011	1/8" NPT	0.468" (11.91mm)	1.625" (41.27mm)
15-007-021	1/4" NPT	0.625" (15.88mm)	1.875" (47.63mm)
15-007-031	3/8" NPT	0.875" (22.23mm)	2.813" (71.45mm)
15-007-041	1/2" NPT	1.000" (25.40mm)	3.000" (76.20mm)



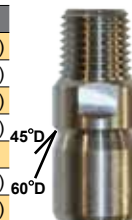
15K MMS Nozzles The APS stainless steel Male Machine Screw nozzles come in pressure ratings to match your flex or rigid lances with female machine screw threads (UNF or UNC). The compact 15K-MMS has a special slimline design that assures that the outside diameter matches the OD of the lance, and have wrench flats for easy installation. All offer many options for 3 or 4 rows of precision drilled orifices.

Part #	15K-MMS NPT	Diameter	Length
15-008-000	10-24 UNF	0.250" (6.35mm)	1.062" (26.97mm)
15-008-001	12-28 UNF	0.250" (6.35mm)	1.062" (26.97mm)
15-008-002	1/4"-28 UNF	0.312" (7.92mm)	1.250" (31.75mm)
15-008-003	5/16"-24 UNF	0.406" (10.32mm)	1.437" (36.50mm)
15-008-005	3/8"-24 UNF	0.562" (14.27mm)	1.750" (44.45mm)
15-008-006	1/2"-20 UNF	0.687" (17.45mm)	1.875" (47.625mm)



15K Thruster Nozzles The APS Thruster stainless steel nozzles are used with flex lances in conjunction with another tube cleaning nozzle. It allows one to "stack" the nozzles so that additional jets can be used for a more thorough cleaning.

Part #	15K-Thruster	Diameter	Length
15-101-001	1/16" NPT	0.375" (9.53mm)	1.250" (31.75mm)
15-101-011	1/8" NPT	0.468" (11.89mm)	1.437" (36.50mm)
15-101-021	1/4" NPT	0.625" (15.88mm)	1.500" (38.10mm)
15-101-031	3/8" NPT	0.875" (22.23mm)	1.843" (46.81mm)
15-101-041	1/2" NPT	1.0" (25.40mm)	2.0" (50.80mm)
15-101-051	3/4" NPT	1.25" (31.75mm)	2.250" (57.15mm)
15-101-061	1" NPT	1.625" (41.28mm)	2.437" (61.90mm)



15K Standard Nozzles with Carbide Blade The APS tungsten carbide tipped tube nozzles are to be used in rotary applications for the removal of hardened plugs in heat exchanger tubes.



Part #	15K-SCBN	Diameter	Length
15-029-101	1/16" NPT	0.375" (9.53mm)	0.875" (22.23mm)
15-029-111	1/8" NPT	0.468" (11.89mm)	0.937" (23.80mm)
15-029-121	1/4" NPT	0.625" (15.88mm)	1.250" (31.75mm)
15-029-131	3/8" NPT	0.875" (22.23mm)	1.437" (36.50mm)
15-029-141	1/2" NPT	1.0" (25.40mm)	1.625" (41.28mm)

Please specify drilling pattern, pressure and flow when ordering.