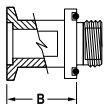


# Vacuum Systems | Connectors & Tubing

## ISO NW Inlet Connectors for High Vacuum Pumps

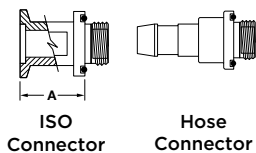
- Aluminum with o-ring
- No sealant required for installation
- For pumps above listed serial number



ISO	Thread Size	Pump Model	Serial No.	B	CAT. No.
NW 16	3/4-20"	1399	>26461	1.12	1393F
NW 16	3/4-20"	1400, 1400N	>18069	1.12	1393F
NW 25	1-20"	1405	>77703	1.2	1393G
NW 25	1-20"	1380	>2114	1.2	1393G
NW 25	1-20"	1402, 1402N	>133218	1.2	1393G
NW 25	1-20"	1376, 1376N	>14594	1.2	1393G
NW 40	1.75-20"	1374	>73519	1.4	1393H
NW 40	1.75-20"	1397	>51217	1.4	1393H
NW 16	3/4-20"	8905	All	1.12	8905K-05

## Exhaust Connectors for High Vacuum Pumps

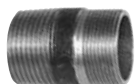
- For adding an exhaust line to a pump
- Connectors for vacuum hose and ISO NW



Pump Models	Hose Connector		Thread Size	ISO Connector		
	Hose I.D.	CAT. No.		ISO NW	A	CAT. No.
1399, 1400, 8905, 8890	7/16"	1393J	3/4-20"	NW 16	1.12	1393F
1402, 1380, 1376, 1405	13/16"	1393K	1-20"	NW 25	1.2	1393G
1374, 1397	1-5/8"	1393L	1 3/4-20"	NW 40	1.4	1393H
1405, 1402	7/16"	1393M	1-20"	NW 25	1.2	1393G

## Male NPT Pipe Inlet and Exhaust Adapters

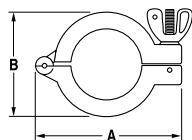
- Black Pipe
- Adapt inlet and exhaust to NPT Thread



Pump Model	Machine Thread	NPT Male Thread	CAT. No.
1400, 1399	3/4-20"	1/2"	1393N
1380, 1402, 1376, 1405	1-20"	3/4"	1393P

## Hinged Clamps

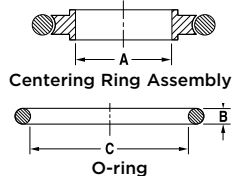
- Aluminum
- Closure by wing and nut bolt



ISO	A	B	Clamp Width	CAT. No.
NW 16	2.612	1.625	0.612	302201
NW 25	2.965	1.950	0.612	302202
NW 40	3.735	2.600	0.625	302203

## Centering Assemblies & Replacement O-Rings

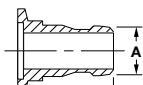
- Stainless steel centering ring with o-ring
- Replaceable Viton® o-ring seal



ISO	Centering Ring Assembly		Replacement O-Ring		
	A	CAT. No.	B	C	CAT. No.
NW 16	0.630	303101	0.210	0.725	304801
NW 25	0.984	303102	0.210	1.100	304802
NW 40	1.575	303103	0.210	1.600	304803

## Rubber Hose Adapters

- ISO NW to rubber vacuum hose



ISO	Hose I.D., in.	Material	A in.	B in.	CAT. No.
NW 16	1/4	Stainless Steel	0.24	1.57	710739
NW 16	7/16	Aluminum	0.625	1.65	501241
NW 16	5/8	Aluminum	0.750	1.65	501251
NW 25	13/16	Aluminum	0.875	1.73	501262
NW 40	1-5/8	Aluminum	1.63	2.17	501283

## Red Vacuum Hose Hose Clamps

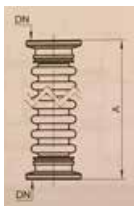


1420H-01

- Very thick walled hose for vacuum or pressure applications
- Convenient worm screw clamps hand tighten

Specifications			Hose Kit CAT. No.				Clamps CAT. No.
I.D.	Wall Thickness	O.D.	5ft. Only	10 ft. Only	15 ft. Only	20 ft. Only	10/Pkg.
3/16"	5/16"	13/16"	331020-5	331020-10	-	-	305320
1/4"	1/4"	3/4"	331030-5	-	-	-	305320
7/16"	5/16"	1-1/16"	331040-5	331040-10	-	-	305340
5/8"	3/8"	1-3/8"	331050-5	331050-10	-	-	305350
3/4"	1/2"	1-3/4"	331060-5	331060-10	331060-15	331060-20	305360
1 5/8"	11/16"	3"	331080-5	331080-10	-	-	305380

## Flexible Metal Hose

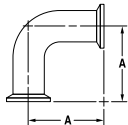


- Alternative to gum rubber vacuum hose
- Cleanable with solvents

Maximum flexibility is achieved using thin wall, annealed, stainless steel accordion tubing. Each end of tubing has a welded DN(NW) flange to allow quick connection. Materials of construction: tubes 1.4404 and flanges 1.4571

Flange Type	A mm (in.)	CAT. No.
DN 16(NW16)	250 (9.8)	710758
	500(19.7)	710761
	1000(39.4)	710764
	2000(78.7)	710775
DN 25 (NW25)	250 (9.8)	710759
	500(19.7)	710762
	1000(39.4)	710765
	2000(78.7)	710776
DN 40 (NW40)	250 (9.8)	710760
	500(19.7)	710763
	1000(39.4)	710766
	2000(78.7)	710777

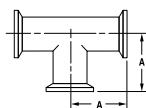
## 90° Degree Elbows



- Stainless steel
- Same size flange on both ports

ISO	A	CAT. No.
NW 16	1.50	383101
NW 25	2.04	383102

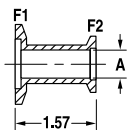
## Tees



- Stainless steel
- Same size flanges on all ports

ISO	A	CAT. No.
NW 16	1.50	384101
NW 25	2.04	384102

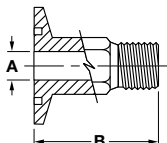
## Reducers



- Stainless steel

ISO F1	ISO F2	A	CAT. No.
NW 25	NW 16	0.555	387121
NW 40	NW 25	0.900	387132

## Female Pipe Adapters



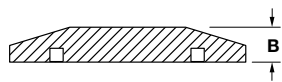
- Male stubs have 1/4 - 18 NPT
- Hex shank
- Stainless steel

ISO	NPT	A	B	CAT. No.
NW 16	1/4"	0.281	1.1	505121
NW 25	1/4"	0.281	1.1	505122

# Vacuum Systems | Fine and High Vacuum Valves

## Blank Off Flanges

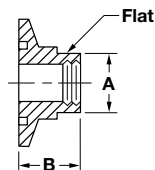
- Stainless steel
- To close off unused ports



ISO	B	CAT. No.
NW 16	0.20	388101
NW 25	0.20	388102

## Female Pipe Adapters

- Female threads have 1/4 in. to 1/2 in. NPT
- Stainless steel
- Can be used with brass hose barbs



ISO	NPT	A	B	CAT. No.
NW 16	1/4"	0.62	0.50	506121
NW 25	1/4"	0.88	0.50	506122
NW 25	1/2"	0.88	0.50	506142

## Vacuum Oven Adapter Kit

- Easy connection of vacuum pump with DN 16 KF(NW16) or DN 25 KF (NW25) flange to vacuum oven
- Kit includes 2.5 m(8.2 ft) vacuum hose, hose to flange adapters, hinge clamps, and centering rings



Use with Pump Model	CAT. No.
CRVpro 4, 6, 8, 16; MPC 1201T, 1801Z, 2401E, 601 Tp Ex; 2052, 2054, 2163, 2062, 2064, 2067	404005

## Freeze Dryer and Concentrator Adapter Kit

- Quick connection of CHEMVAC to freeze dryer or concentrator
- Kit includes hose to flange connector, hinge clamp ring, centering ring and 1.5 m(4.9 ft) of vacuum hose.



Use with Pump Model	CAT. No.
P6Z-101, CRVpro 4, 6, 8	330044
P12Z-301, P23Z-301, CRVpro 16	330045

## Hose Adapter Kits

- Kits ensure proper sized tubing adaptors, and clamps for vacuum tight connections
- Kits include at least 5 ft.(1.5m) of thick walled rubber vacuum hose



Adapter Kits For Pump Models	Pump Inlet O.D.	Appliance Connector O.D.	CAT. No.
8890 (GEM)	3/8"	7/16" and 1/2"	1420H-01
1400, 1405, 1399, 8905	7/16"	1/4" and 3/8"	1420H-01
1402, 1380, CRVpro 4, 6, 8, 16	13/16"	1/4" and 3/8"	1420H-02

## Tubing Connectors

- Plastic tubing connectors for gum rubber vacuum hose



Type	Description	Length, in (cm)	Mating Tubing, ID in. (mm)	CAT. No.
Stopcock	Polyethylene two-piece valve. Vacuum tight to to 29.9 in. Hg(1 torr/1.3 mbar), Quarter turn shuts off flow	3.1 (8)	3/8 (9)	1395K
Hose Reducer	Polyethylene stepped straight connector; connect larger ID tubing to smaller ID tubing	3.5 (9)	7/16 to 3/8 (11 to 9)	357220
Hose Reducer	Polyethylene stepped straight connector; connect larger ID tubing to smaller ID tubing	3.5 (9)	13/16 to 3/8(21 to 9)	357630
Y- connector	PP (Polypropylene) barbed connector	3.5 (9)	3/8 (9)	829923
Hose Barb	PP barbed to thread connector, DN 8 male 1/8 in.	2 (5)	3/8 (8)	710953
Hose Barb	PP barbed to thread connector, DN 10 male 1/4 in.	2 (5)	3/8 (10)	710955