

A brand of Aqseptence Group

# Male-X-Male NPT drop pipe coupling is available in a wide range of sizes and pipe schedules

The Male-X-Male PVC drop pipe with stainless steel coupling eliminates corrosion issues and provides longer well life than corrosion-sensitive steel drop pipe.

Offered in Schedule 80 and 120, the Male-X-Male drop pipe provides the most economical solution for water well applications.



#### Advantages of the Male-X-Male, NPT drop pipe:

- Coupling can be ordered
- pre-installed on the pipe to eliminate insufficient couplings at the job site
- Loose stainless steel couplings for a variety of sizes; exclusive design for 3 to 8 in. PVC.
- Simple alignment and engagement
- Quick makeup
- Watertight seal
- Sizes range from 1 to 8 in.
- Available in Schedule 80 and 120

### Assembly Tips

- Apply a high quality, non-petroleum, pipe paste sealant, approved for PVC, to each thread joint
- Do not pre-assemble pipe lengths assemble or disassemble one length at a time in a vertical position
- Tighten joints one to a maximum of two turns beyond finger tight DO NOT OVERTIGHTEN
- Avoid using tools which may gouge or damage PVC this can lead to premature failure
- Contact Johnson Screens for PVC handling and storage instructions, and a free PVC Drop Pipe Design Program

### **Best Practices**

- Keep flow rate in pipe lower than 8 fps
- Torque arrestors are recommended in all submersible pump installations
- Water hammer suppressors, 100 psi pressure relief valves placed within 30 ft. of well head, torque arrestors and/or soft start controls are always recommended for PVC pipe (required for 40 HP or higher pumps)
- Good system design will take into consideration appropriate outlet flow rates and pressures when selecting pump size

The above information only applies when Johnson Screens products are stored, handled and installed correctly. Contact your local Johnson Screens product representative for higher or lower pressures or different system design conditions.

# Schedule 120 Male-X-Male Drop Pipe

Nominal Pipe Sizo	OD (in.)	Min. Wall (in.)	Approx. Weight (lbs./ft.)	ASTM Water Pressure Rating (psi)	Flow Rate		Friction Loss	Rec Max Depth (ft.) Surface Discharge Pressure				Tensile Strength
(in.)					GPM	ft./sec.	100 ft.	30 psi	40 psi	50 psi	60 psi	(IDS.)
1	1.32	0.20	0.46	360	11	5	5.20	680	660	640	620	700
					17	8	12.40	590	570	550	540	
					21	10	18.90	530	510	500	480	
			0.65	300	19	5	3.50	580	550	530	510	980
1.25	1.66	0.22			30	8	8.80	520	500	480	460	
					37	10	13.40	480	460	440	420	
	1.90	0.23	0.79	270	26	5	2.90	520	500	480	450	1,180
1.5					41	8	7.20	470	450	430	410	
					52	10	11.60	430	420	400	380	
	2.38	0.25	1.20		43	5	2.20	460	440	420	390	1,670
2				240	69	8	5.60	430	400	390	370	
					86	10	8.80	400	380	360	340	
	3.50	0.35	2.40	220	97	5	1.50	420	400	380	350	Call*
3					155	8	3.80	400	380	360	340	
					192	10	5.90	380	360	340	320	
	4.50	0.44	3.80	215	162	5	1.20	420	400	380	360	Call*
4					260	8	3.00	410	390	360	340	
					322	10	4.50	390	370	350	330	
5	5.56	0.50	5.40	200	260	5	1.00	380	360	340	320	Call*
					410	8	2.50	370	350	330	300	
					510	10	3.80	360	340	320	290	
6	6.63	0.56	7.10	185	370	5	0.80	360	340	320	300	Call*
					590	8	2.00	350	330	310	290	
	1	1			740	10	3.10	340	320	300	280	
		0.72	11.80	180	630	5	0.60	340	320	290	270	
8	8.63				1020	8	1.60	330	310	290	260	Call*
					1260	10	2.40	320	300	280	260	

\*Please contact Customer Service Department Representative for recommendations regarding your installation.

Note

In practice, field installations encompass flow velocities from 5 - 10 ft./sec. To avoid potentially dangerous surge pressures and to minimize friction losses, keep pipe flow velocities below 8 ft./sec. Tensile values assume nominal thread engagement and are based on 6,000 PSI yield and minimum wall with 6:1 safety factor.

# Schedule 80 Male-X-Male Drop Pipe

Nominal Pipe	OD (in.)	Min. Wall (in.)	Approx. Weight (lbs./ft.)	ASTM Water Pressure Rating (psi)	Flow Rate		Friction Loss	Rec Max Depth (ft.) Surface Discharge Pressure			Tensile Strength	
5120 (in.)					GPM	ft./sec.	psı/ 100 ft.	30 psi	40 psi	50 psi	60 psi	(IDS.)
1	1.32	0.18	0.42	270	11	5	4.10	610	590	570	550	640
					18	8	11.10	530	510	500	480	
					22	10	16.60	480	470	450	430	
			0.56	225	20	5	3.20	490	470	450	430	880
1.25	1.66	0.19			32	8	8.30	450	420	400	390	
					40	10	12.90	410	390	370	360	
			0.67		28 5 2.80 460 430	410	390					
1.5	1.90	0.20		200	44	8	7.00	420	400	380	360	1,070
					55	10	11.00	390	370	350	330	
	2.38	0.22	0.93		46	5	2.10	370	350	330	310	1,480
2				175	74	8	5.50	350	330	310	290	
					92	10	8.50	330	310	290	270	
	3.50	0.30	1.90	160	103	5	1.40	360	330	310	290	Call*
3					165	8	3.60	340	320	300	280	
					206	10	5.70	330	300	290	270	
	4.50	0.34	2.78	140	180	5	1.10	290	270	250	230	Call*
4					287	8	2.80	280	260	240	220	
					360	10	4.30	270	250	230	210	
5	5.56	0.38	3.87	125	285	5	0.90	250	230	200	180	Call*
					455	8	2.20	240	220	200	180	
					570	10	3.50	230	210	190	170	
6	6.63	0.43	5.31	120	410	5	0.70	250	230	200	180	Call*
					650	8	1.80	240	220	200	180	
					820	10	2.90	240	220	190	170	
8		0.50	8.06	105	720	5	0.60	200	180	160	140	<b>a</b> ·
	8.63				1140	8	1.40	200	180	160	130	Call*
					1440	10	2.20	200	180	150	130	

\*Please contact Customer Service Department Representative for recommendations regarding your installation.

Note

In practice, field installations encompass flow velocities from 5 - 10 ft./sec. To avoid potentially dangerous surge pressures and to minimize friction losses, keep pipe flow velocities below 8 ft./sec. Tensile values assume nominal thread engagement and are based on 6,000 PSI yield and minimum wall with 6:1 safety factor.

## **PVC Drop Pipe Stainless Steel Couplings**

Option of pre-installed Male-X-Male couplings eliminate insufficient couplings at the job site

08:25		Nominal	Stainless Steels Coupling (for PVC only)				
17.	Pople	(in.)	Approx. OD (in.)	Length (in.)	Weight (lbs.)		
		3	3.9	4.4	3		
	DUL	4	4.6	4.5	4		
		5	5.8	4.7	8		
		6	6.8	4.9	11		
		8	8.9	5.7	23		

PVC pipe exhibits a decreasing pressure rating and stiffness with increasing temperature. As with dimensions, the pressure ratings and published pipe stiffness figures for PVC pipe are listed at an ambient temperature of 73°F.

To determine the pressure ratings and stiffness of PVC pipe at higher or lower temperatures, multiply the pressure rating, pressure class, and the stiffness/deflection by the pipe's conversion factor.

Consult the manufacturer of your pipe for specific data. The typical upper limit for continuous use of PVC pipe is 140°F.

The PVC materials used in the Johnson Screens brands are listed by NSF International and comply to NSF Standard 61, safe for use in potable water applications. ASTM Standard D1784, standard specification for rigid PVC compounds, uses a cell classification system to call out minimum physical property requirements (base resin, minimum impact strength, tensile strengths, modulus of elasticity, heat deflection temperature under load, and flammability when tested per applicable ASTM standards) of compounds that are used in the production of PVC pipe and fittings. Rigid PVC compound used for manufacture of pipe has a Cell Classification of 12454 per ASTM D1784 and is also known as Type I, Grade I PVC, or PVC 1120.

#### Johnson Screens Water Well Screens

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