

# NOVABLAST



AIRLESS PAINTSPRAY

# TIPS

& SAFETY TIP GUARDS



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# TIPS & TRICKS

## UNDERSTANDING TIPS



### UNDERSTANDING TIP SIZE

To understand what size tip to use, you must first understand what the digits on the tip indicate.

All tips have 3 digits in the size, say 517. The first digit is the fan size or width of the spray, this digit is always doubled and measured in inches. For example, a 517 tip will spray at 10 inches wide, a 417 tip will spray at 8 inches wide, and a 317 tip will spray at 6 inches wide. These calculations for the spray width are based on the gun being held 12" inches from the surface being sprayed.

The second two digits indicate the size of the orifice and are measured in thousandths of an inch. Thus a 517 tip will spray 10 inches wide, through an orifice size of 15 thousandths of an inch and a 513 tip will spray 10 inches wide, through an orifice size of 13 thousandths of an inch.

#### Tip size & Coating

You will notice that thinner coatings such as stain and lacquer use smaller size tips because the coating is thin and runny. Heavier coatings such as shipyard use require larger size tips because the product is thicker.

You need to match the correct tip size for the coating that you plan to spray, you may find that in some cases you can use a smaller tip than recommended and in other situations a larger tip. It's really about what works best for you and it's ideal if you keep a range of tips sizes on hand.

If you are planning on spraying a coating that you are unfamiliar with, we always suggest purchasing additional tips, one size under and one size over the suggested size. Doing this could be the difference between a day of successful painting or a day wasted with tip blockages and frustration.

It is always best to check with the manufacturer of the coating to determine the correct tip size. Many paint manufacturer's produce product data sheets that will have airless spray specifications.

## 4 TYPES OF TIPS

### STANDARD OR CONTRACTOR AIRLESS SPRAY TIPS

1

These are the most common airless spray tip used in a wide variety of industries such as new home construction, metal fabrication and roof coatings.

Common coatings sprayed with standard tips are water-based acrylic in low sheen and flat suitable for painting house interiors and exteriors. The most common size used for this application is the famous 517. The 517 has the right amount of flow and the right spray width and a large part of airless sprayers sold will come with a 517 tip on the gun as standard.

Most people will spray using standard airless spray tips, they will produce a good finish and reduce over spray. It is important that you keep in mind that tips do wear, you should consider changing your spray tip after spraying between 500 and 600 liters of material.

### HEAVY DUTY AIRLESS SPRAY TIPS

3

Heavy duty airless spray tips are most mistaken for lasting longer, this is simply not the case. The tungsten carbide in heavy duty tips is no different to the carbide used in standard tips.

Heavy duty spray tips are designed specifically for pressure up to 7500psi, standard spray tips are only rated to 5000psi. The difference between heavy duty tips and standard tips is the way that the carbide tip is retained in the tip barrel. Standard tips usually have an insert fitted into the rear of the barrel in front of the carbide, this is pushed in and machined to the same diameter of the barrel. Heavy duty tips have a threaded insert screwed into the rear of the barrel, the screw insert is designed so that when the tip is reversed to clear a blockage the higher pressure does not push the carbide out through the rear and become a projectile.

The entire design of heavy-duty tips is based around safety to ensure that when an applicator clears a blockage, the entire guts of the tip are not shot out from the end of the gun which could seriously hurt a person nearby if it were to hit them.

It is important to ensure that if your airless sprayer produces more than 5000psi of fluid pressure that you use heavy duty tips that are rated to 7500psi.

Heavy duty airless spray tips require a minimum fluid pressure of 2000psi or higher to correctly atomize the paint, but they can be used with fluid pressure up to 7500psi unlike standard airless spray tips which can only be used at 5000psi.

Common materials sprayed with these tips at higher pressures are zinc, 2k epoxy and 2K epoxy high build. Generally, machines with fluid pressures between 4500psi and 7250psi are used for these coatings. You can also use heavy duty tips for general spraying as you would with standard tips, the results will be the same.

### FINE FINISH OR LOW PRESSURE AIRLESS SPRAY TIPS

2

Fine finish tips simply have a pre-orifice at the rear of the tip that slows down the paint flow and allows the paint to atomize more softly. The pre-orifice restricts the paint flow going through the tip and producing a lower, finer pressure of fluid leaving the tip which in turn will reduce over spray. The old rule with over spray always applies the lower the pressure the less over spray you will get.

Fine finish tips can spray material at lower pressure, depending on the material being sprayed, you can get down as low as 1200/1300psi while still maintaining a good spray pattern. The only problem with fine finish tips is that they can block more easily and more often than standard tips because of the pre-orifice. It's important to use a finer filter when spraying with fine finish tips.

Generally fine finish tips are better for lacquers, water based gloss, enamel and 2k (high quality finish coats) where a smaller more detailed area is being sprayed.

Again, fine finish tips will wear out at the same rate as all other tips so be sure to replace them regularly to ensure you get the best results when spraying.

### LINE STRIPE OR LINE MARKING AIRLESS SPRAY TIPS

4

Line stripe or line marking tips are designed to produce a sharper edge when sprayed giving the painted line a crisper finish. Standard airless tips tend to make the painted edges feather so when each coat is overlapped the finish appears more even.

Most wheeled line markers such will use this type of tip where the gun distance from the surface is about 10 inches (25cm). The height selection of the gun will have some adjustment of the sprayed line width but you will need to have a few different size tips on hand for varied line widths.

Many factors will effect the quality of the line produced -

Surface condition, smooth even surface will produce a nicer line than a rough uneven surface. A rough surface will also make the machine bounce more thus causing additional vibration on the gun arm.

Machine vibration, this is a big factor. Some low end wheel line markers that are built to a price and not quality have horrible vibration due to poor design and pumps that are really too small for the job that need to be run flat out in order to keep up with the spray tip. The combination of poor design with a small pump that must race to keep up will cause vibration at the gun. Add a rough surface to the formula and you will get a horrible finish of the sprayed line.

Rubbish in the paint, this is the most important choice - always use high quality clean line marking paint. Particles in the paint can cause the obvious tip blockage when nothing comes through, but what is more annoying is partial blockages where the paint flow is constantly interrupted by small particles of debris which distorts the even paint flow. People often mistake this for the machine or the tip having an issue but it's actually rubbish in the paint that causes problems like "jagged edges" or "waves" in the sprayed line edge.

Line striping tips will wear out at the same rate as all other tips so be sure to replace them regularly to ensure you get the best results when spraying.

# AIRLESS FLAT TIPS

## PREMIUM STANDARD

The NOVABLAST Industrial Flat Tips have a top-quality best available Tungsten-Carbide liner and are equivalent to the Graco 163-xxx Silverline tip with sizes ranging from 0.007 to 0.099 inch guaranteeing a huge range of available sizes.



		ORDER INFORMATION:													
		ORDER YOUR TIP WITH THE ITEM NUMBER 89505 AND ADD THE NUMBER BELOW													
INCH	MM	10° 2/3 in.	20° 4/6 in.	30° 6/8 in.	40° 8/10 in.	50° 10/12 in.	60° 12/14 in.	70° 14/16 in.	80° 16/18 in.	90° 18/20 in.	100° 20/22 in.	110° 22/24 in.	120° 24/26 in.	130° 26/28 in.	L/MIN
0.007	0.18														0.18
0.008	0.20														0.22
0.009	0.23	109	209	309	409	509									0.25
0.010	0.25	110	210	310	410	510									0.33
0.011	0.28	111	211	311	411	511	611								0.37
0.012	0.30	112	212	312	412	512	612								0.47
0.013	0.33	113	213	313	413	513	613	713							0.57
0.014	0.35	114	214	314	414	514	614	714	814						0.65
0.015	0.38	115	215	315	415	515	615	715	815						0.72
0.016	0.40	116	216	316	416	516	616	716	816	916					0.91
0.017	0.43	117	217	317	417	517	617	717	817	917	1017				0.98
0.018	0.45	118	218	318	418	518	618	718	818	918	1018				1.10
0.019	0.48	119	219	319	419	519	619	719	819	919	1019	1119			1.30
0.020	0.50	120	220	320	420	520	620	720	820	920	1020	1120			1.40
0.021	0.53	121	221	321	421	521	621	721	821	921	1021	1121	1221		1.52
0.022	0.55	122	222	322	422	522	622	722	822	922	1022	1122	1222		1.65
0.023	0.58		223	323	423	523	623	723	823	923	1023	1123	1223		1.83
0.024	0.60		224	324	424	524	624	724	824	924	1024	1124	1224		1.95
0.025	0.63		225	325	425	525	625	725	825	925	1025	1125	1225		2.13
0.027	0.68		227	327	427	527	627	727	827	927	1027	1127	1227		2.50
0.029	0.73		229	329	429	529	629	729	829	929	1029	1129	1229		2.95
0.031	0.78		231	331	431	531	631	731	831	931	1031	1131	1231		3.42
0.033	0.84		233	333	433	533	633	733	833	933	1033	1133	1233		3.80
0.035	0.89		235	335	435	535	635	735	835	935	1035	1135	1235		4.30
0.037	0.94		237	337	437	537	637	737	837	937	1037	1137	1237		5.10
0.039	0.99		239	339	439	539	639	739	839	939	1039	1139	1239		5.50
0.041	1.04		241	341	441	541	641	741	841	941	1041	1141	1241		6.15
0.043	1.09		243	343	443	543	643	743	843	943	1043	1143	1243		6.80
0.045	1.14		245	345	445	545	645	745	845	945	1045	1145	1245	1345	7.40
0.047	1.19		247	347	447	547	647	747	847	947	1047	1147	1247	1347	7.94
0.049	1.24		249	349	449	549	649	749	849	949	1049	1149	1249	1349	8.50
0.051	1.29		251	351	451	551	651	751	851	951	1051	1151	1251	1351	9.10
0.053	1.35		253	353	453	553	653	753	853	953	1053	1153	1253	1353	9.80
0.055	1.40		255	355	455	555	655	755	855	955	1055	1155	1255	1355	11.00
0.057	1.45			357	457	557	657	757	857	957	1057	1157	1257	1357	11.80
0.059	1.50			359	459	559	659	759	859	959	1059	1159	1259	1359	12.50

INCH	MM	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°	110°	120°	130°	L/MIN
		2/3 in.	4/6 in.	6/8 in.	8/10 in.	10/12 in.	12/14 in.	14/16 in.	16/18 in.	18/20 in.	20/22 in.	22/24 in.	24/26 in.	26/28 in.	
0.061	1.55			361	461	561	661	761	861	961	1061	1161	1261	1361	13.70
0.063	1.60			363	463	563	663	763	863	963	1063	1163	1263	1363	14.31
0.065	1.65				465	565	665	765	865	965	1065	1165	1265	1365	15.22
0.067	1.70				467	567	667	767	867	967	1067	1167	1267	1367	16.00
0.069	1.75				469	569	669	769	869	969	1069	1169	1269	1369	17.09
0.071	1.80				471	571	671	771	871	971	1071	1171	1271	1371	18.07
0.073	1.85				473	573	673	773	873	973	1073	1173	1273	1373	19.07
0.075	1.90				475	575	675	775	875	975	1075	1175	1275		20.09
0.077	1.95				477	577	677	777	877	977	1077	1177	1277		21.13
0.079	2.00				479	579	679	779	879	979	1079	1179			22.20
0.081	2.05				481	581	681	781	881	981	1081	1181			23.30
0.083	2.10				483	583	683	783	883	983	1083	1183			24.41
0.085	2.16				485	585	685	785	885	985	1085	1185			25.55
0.086	2.18				486	586	686	786	886	986	1086	1186			26.13
0.087	2.21				487	587	687	787	887	987	1087	1187			26.72
0.089	2.26				489	589	689	789	889	989	1089	1189			27.91
0.091	2.31				491	591	691	791	891	991	1091	1191			29.12
0.093	2.36				493	593	693	793	893	993	1093				30.35
0.095	2.41				495	595	695	795	895	995					32.00
0.097	2.46				497	597	697	797	897	997					32.90
0.099	2.51				499	599	699	799	899	999					34.00

Angles in degrees and pattern width in inches at 12" (30 cm) from surfac72

Flow rates at a water pressure of 100 bar.2

# AIRLESS REVERSIBLE TIPS

## PREMIUM STANDARD NOVA 4 TIPS

The NOVABLAST Premium Standard line, reversible tip, is Graco RAC-V compatible. Tip size ranges from 0.007 to 0.061 inch



		ORDER INFORMATION:									
		ORDER YOUR TIP WITH THE ITEM NUMBER 89491 AND ADD THE NUMBER BELOW									
INCH	MM	10° 2/3 in.	20° 4/6 in.	30° 6/8 in.	40° 8/10 in.	50° 10/12 in.	60° 12/14 in.	70° 14/16 in.	80° 16/18 in.	90° 18/20 in.	L/MIN
0.007	0.18	107	207	307	407	507					0.18
0.008	0.20	108	208	308	408	508					0.22
0.009	0.23	109	209	309	409	509	609				0.25
0.010	0.25	110	210	310	410	510	610	710			0.33
0.011	0.28	111	211	311	411	511	611	711	811	911	0.37
0.012	0.30	112	212	312	412	512	612	712	812	912	0.47
0.013	0.33	113	213	313	413	513	613	713	813	913	0.57
0.014	0.35	114	214	314	414	514	614	714	814	914	0.65
0.015	0.38	115	215	315	415	515	615	715	815	915	0.72
0.016	0.40	116	216	316	416	516	616	716	816	916	0.91
0.017	0.43	117	217	317	417	517	617	717	817	917	0.98
0.018	0.45	118	218	318	418	518	618	718	818	918	1.10
0.019	0.48	119	219	319	419	519	619	719	819	919	1.30
0.020	0.50	120	220	320	420	520	620	720	820	920	1.40
0.021	0.53	121	221	321	421	521	621	721	821	921	1.52
0.022	0.55	122	222	322	422	522	622	722	822	922	1.65
0.023	0.58		223	323	423	523	623	723	823	923	1.83
0.024	0.60		224	324	424	524	624	724	824	924	1.95
0.025	0.63		225	325	425	525	625	725	825	925	2.13
0.027	0.68		227	327	427	527	627	727	827	927	2.50
0.029	0.73		229	329	429	529	629	729	829	929	2.95
0.031	0.78		231	331	431	531	631	731	831	931	3.42
0.033	0.84		233	333	433	533	633	733	833	933	3.80
0.035	0.89		235	335	435	535	635	735	835	935	4.30
0.037	0.94			337	437	537	637	737	837	937	5.10
0.039	0.99			339	439	539	639	739	839	939	5.50
0.041	1.04			341	441	541	641	741	841	941	6.15
0.043	1.09			343	443	543	643	743	843	943	6.80
0.045	1.14				445	545	645	745	845	945	7.40
0.047	1.19				447	547	647	747	847	947	7.94
0.049	1.24				449	549	649	749	849	949	8.50
0.051	1.30				451	551	651	751	851	951	9.10
0.053	1.35				453	553	653	753	853	953	9.80
0.055	1.40				455	555	655	755	855		11.00
0.057	1.45				457	557	657	757	857		11.80
0.059	1.50				459	559	659	759	859		12.50
0.061	1.55				461	561	661	761	861		13.70

Angles in degrees and pattern width in inches at 12" (30 cm) from surface.

Flow rates at a water pressure of 100 bar.

# AIRLESS REVERSIBLE TIPS

## PREMIUM HP NOVA 5 TIPS

The NOVABLAST High Pressure line, reversible tip with a very high pressure rating of **517 bar** is the equivalent to the Graco XHD tip. Tip size ranges from 0.007 to 0.061 inch.



		<b>ORDER INFORMATION:</b>									
		ORDER YOUR TIP WITH THE ITEM NUMBER <b>89591</b> AND ADD THE NUMBER BELOW									
<b>INCH</b>	<b>MM</b>	<b>10°</b> 2/3 in.	<b>20°</b> 4/6 in.	<b>30°</b> 6/8 in.	<b>40°</b> 8/10 in.	<b>50°</b> 10/12 in.	<b>60°</b> 12/14 in.	<b>70°</b> 14/16 in.	<b>80°</b> 16/18 in.	<b>90°</b> 18/20 in.	<b>L/MIN</b>
0.007	0.18	107	207	307	407	507					0.18
0.008	0.20	108	208	308	408	508					0.22
0.009	0.23	109	209	309	409	509	609				0.25
0.010	0.25	110	210	310	410	510	610	710			0.33
0.011	0.28	111	211	311	411	511	611	711	811	911	0.37
0.012	0.30	112	212	312	412	512	612	712	812	912	0.47
0.013	0.33	113	213	313	413	513	613	713	813	913	0.57
0.014	0.35	114	214	314	414	514	614	714	814	914	0.65
0.015	0.38	115	215	315	415	515	615	715	815	915	0.72
0.016	0.40	116	216	316	416	516	616	716	816	916	0.91
0.017	0.43	117	217	317	417	517	617	717	817	917	0.98
0.018	0.45	118	218	318	418	518	618	718	818	918	1.10
0.019	0.48	119	219	319	419	519	619	719	819	919	1.30
0.020	0.50	120	220	320	420	520	620	720	820	920	1.40
0.021	0.53	121	221	321	421	521	621	721	821	921	1.52
0.022	0.55	122	222	322	422	522	622	722	822	922	1.65
0.023	0.58		223	323	423	523	623	723	823	923	1.83
0.024	0.60		224	324	424	524	624	724	824	924	1.95
0.025	0.63		225	325	425	525	625	725	825	925	2.13
0.027	0.68		227	327	427	527	627	727	827	927	2.50
0.029	0.73		229	329	429	529	629	729	829	929	2.95
0.031	0.78		231	331	431	531	631	731	831	931	3.42
0.033	0.84		233	333	433	533	633	733	833	933	3.80
0.035	0.89		235	335	435	535	635	735	835	935	4.30
0.037	0.94			337	437	537	637	737	837	937	5.10
0.039	0.99			339	439	539	639	739	839	939	5.50
0.041	1.04			341	441	541	641	741	841	941	6.15
0.043	1.09			343	443	543	643	743	843	943	6.80
0.045	1.14				445	545	645	745	845	945	7.40
0.047	1.19				447	547	647	747	847	947	7.94
0.049	1.24				449	549	649	749	849	949	8.50
0.051	1.30				451	551	651	751	851	951	9.10
0.053	1.35				453	553	653	753	853	953	9.80
0.055	1.40				455	555	655	755	855		11.00
0.057	1.45				457	557	657	757	857		11.80
0.059	1.50				459	559	659	759	859		12.50
0.061	1.55				461	561	661	761	861		13.70



# AIRLESS REVERSIBLE TIPS

## ECOLINE NOVA 4 TIPS

The NOVABLAST Ecoline Tips, our top-quality reversible tips, are our alternative for a.o the Graco FF-LP and L, have a much-reduced overspray and are capable of working at much lower working pressures. Tip size ranges from 0.006 to 0.032 inch. This line presents a.o the equivalent Graco FF-LP and LP, however, the size of the cylinder tip is the same as the Graco RAC-V. We decided to stick to the RAC-V dimensions to keep our system compatible with other brands like Wagner/Titan, Trittech etc. After all the difference of cylinder tip diameter is only 11,4 mm (GRACO) to 11.1 with our NOVABLAST cylinder type size.



		<b>ORDER INFORMATION:</b>										
		ORDER YOUR TIP WITH THE ITEM NUMBER 89492 AND ADD THE NUMBER BELOW										
<b>INCH</b>	<b>MM</b>	<b>10°</b> 2/3 in.	<b>20°</b> 4/6 in.	<b>30°</b> 6/8 in.	<b>40°</b> 8/10 in.	<b>50°</b> 10/12 in.	<b>60°</b> 12/14 in.	<b>70°</b> 14/16 in.	<b>80°</b> 16/18 in.	<b>90°</b> 18/20 in.	<b>L/MIN</b>	
0.006	0.15	106	206	306	406						0.14	
0.007	0.18	107	207	307	407	507					0.18	
0.008	0.20	108	208	308	408	508	608				0.22	
0.009	0.23	109	209	309	409	509	609				0.25	
0.010	0.25	110	210	310	410	510	610	710	810		0.33	
0.011	0.28	111	211	311	411	511	611	711	811		0.37	
0.012	0.30	112	212	312	412	512	612	712	812	912	0.47	
0.013	0.33		213	313	413	513	613	713	813	913	0.57	
0.014	0.35		214	314	414	514	614	714	814	914	0.65	
0.015	0.38		215	315	415	515	615	715	815	915	0.72	
0.016	0.40		216	316	416	516	616	716	816	916	0.91	
0.017	0.43		217	317	417	517	617	717	817	917	0.98	
0.018	0.45		218	318	418	518	618	718	818	918	1.10	
0.019	0.48		219	319	419	519	619	719	819	919	1.30	
0.020	0.50		220	320	420	520	620	720	820	920	1.40	
0.021	0.53		221	321	421	521	621	721	821	921	1.52	
0.022	0.55		222	322	422	522	622	722	822	922	1.65	
0.023	0.58		223	323	423	523	623	723	823	923	1.83	
0.024	0.60		224	324	424	524	624	724	824	924	1.95	
0.025	0.64			325	425	525	625	725	825	925	2.13	
0.026	0.66			326	426	526	626	726	826	926	2.46	
0.027	0.69			327	427	527	627	727	827	927	2.50	
0.028	0.71			328	428	528	628	728	828	928	2.85	
0.029	0.74			329	429	529	629	729	829	929	2.95	
0.030	0.76			330	430	530	630	730	830	930	3.28	
0.031	0.79			331	431	531	631	731	831	931	3.42	
0.032	0.81			332	432	532	632	732	832		3.73	
0.033	0.84			333	433	533	633	733			3.80	
0.034	0.86			334	434	534	634	734			4.12	

Angles in degrees and pattern width in inches at 12" (30 cm) from surface.

Flow rates at a water pressure of 100 bar.

# AIRLESS REVERSIBLE TIPS

## LINE MARKING TIPS



		<b>ORDER INFORMATION:</b>								
		ORDER YOUR TIP WITH THE ITEM NUMBER 89490 AND ADD THE NUMBER BELOW								
<b>INCH</b>	<b>MM</b>	<b>20°</b> 4/6 in.	<b>30°</b> 6/8 in.	<b>40°</b> 8/10 in.	<b>50°</b> 10/12 in.	<b>60°</b> 12/14 in.	<b>70°</b> 14/16 in.	<b>80°</b> 16/18 in.	<b>90°</b> 18/20 in.	<b>L/MIN</b>
0.011	0.28	211	311	411						0.37
0.012	0.30	212	312	412						0.47
0.013	0.33	213	313	413	513					0.57
0.014	0.35	214	314	414	514					0.65
0.015	0.38	215	315	415	515	615				0.72
0.016	0.40	216	316	416	516	616				0.91
0.017	0.43	217	317	417	517	617	717			0.98
0.018	0.45	218	318	418	518	618	718			1.10
0.019	0.48	219	319	419	519	619	719	819		1.30
0.020	0.50	220	320	420	520	620	720	820		1.40
0.021	0.53	221	321	421	521	621	721	821		1.52
0.022	0.55	222	322	422	522	622	722	822	922	1.65
0.023	0.58	223	323	423	523	623	723	823	923	1.83
0.024	0.60	224	324	424	524	624	724	824	924	1.95
0.025	0.63	225	325	425	525	625	725	825	925	2.13
0.027	0.68	227	327	427	527	627	727	827	927	2.50
0.029	0.73	229	329	429	529	629	729	829	929	2.95
0.031	0.78	231	331	431	531	631	731	831	931	3.42
0.033	0.84	233	333	433	533	633	733	833	933	3.80
0.035	0.89	235	335	435	535	635	735	835	935	4.30
0.037	0.94		337	437	537	637	737	837	937	5.10
0.039	0.99		339	439	539	639	739	839	939	5.50
0.041	1.04		341	441	541	641	741	841	941	6.15
0.043	1.09		343	443	543	643	743	843	943	6.80
0.045	1.14			445	545	645	745	845		7.40
0.047	1.19			447	547	647	747	847		7.94
0.049	1.24			449	549	649	749			8.50
0.051	1.30			451	551	651	751			9.10
0.053	1.35			453	553	653	753			9.80

# AIRLESS REVERSIBLE TIPS

## TWIN TIPS



		<b>ORDER INFORMATION:</b>			
ORDER YOUR TIP WITH THE ITEM NUMBER 89493 AND ADD THE NUMBER BELOW					
INCH	MM	40°	50°	60°	L/MIN
		8/10 in.	10/12 in.	12/14 in.	
0.012	0.30	412	512	612	0.47
0.013	0.33	413	513	613	0.57
0.014	0.35	414	514	614	0.65
0.015	0.38	415	515	615	0.72
0.016	0.40	416	516	616	0.91
0.017	0.43	417	517	617	0.98
0.018	0.45	418	518	618	1.10
0.019	0.48	419	519	619	1.30
0.020	0.50	420	520	620	1.40
0.021	0.53	421	521	621	1.52
0.022	0.55	422	522	622	1.65

The first tip has a standard angle of 20°.

For the second tip you can choose an angle from the table above.

Flow rates at a water pressure of 100 bar.

# SAFETY TIP GUARDS



## SAFETY TIP GUARD BLACK

ITEM NUMBER	DESCRIPTION	THREAD	MAX. WORK PRESSURE
89559000	STANDARD	$\frac{7}{8}$ "	340 BAR
89560000	STANDARD	$\frac{11}{16}$ "	340 BAR



## SAFETY TIP GUARD ORANGE

ITEM NUMBER	DESCRIPTION	THREAD	MAX. WORK PRESSURE
89452000	EASY CLEAN	$\frac{7}{8}$ "	340 BAR
89457000	EASY CLEAN	$\frac{11}{16}$ "	340 BAR

Suitable for NOVA 4 (RAC V equivalent)

Other thread sizes available on request



## SAFETY TIP GUARD PURPLE

ITEM NUMBER	DESCRIPTION	THREAD	MAX. WORK PRESSURE
89552000	HIGH PRESSURE, EASY CLEAN	$\frac{7}{8}$ "	517 BAR
89557000	HIGH PRESSURE, EASY CLEAN	$\frac{11}{16}$ "	517 BAR

Suitable for NOVA 5 (GRACO XHD equivalent)

Other thread sizes available on request