

SMOOTHBORE HOSE: SPECIFICATIONS FOR STANDARD SINGLE BRAID HOSE

Specifications and size range for Single Stainless Steel wire braid hose; for Standard Grade and AS Grade

STANDARD WALL, SINGLE BRAID (SW, SB)

Bore Size (Nominal)	Bore Size (Actual)		PTFE Tube Wall Thickness		Braid Outside Diameter		Minimum Bend Radius		Maximum Working Pressure		Weight per Unit Length		*Part Number
	mm	in	mm	in	mm	in	mm	in	Bar	Psi	Kg/mt	Lbs/Ft	
1/8	3.17	0.125	0.76	0.030	5.85	0.230	22	7/8	290	4220	.065	.044	70-100-02-01-02
3/16	4.76	0.188	0.76	0.025	7.40	0.291	40	1 5/8	265	3856	.080	.054	70-100-03-01-02
1/4	6.35	0.250	0.63	0.025	8.50	0.335	60	2 3/8	240	3492	.093	.062	70-100-04-01-02
5/16	7.94	0.313	0.63	0.025	10.15	0.400	70	2 7/8	200	2910	.110	.074	70-100-05-01-02
3/8	9.53	0.375	0.63	0.025	11.75	0.463	80	3 3/8	190	2765	.124	.083	70-100-06-01-02
1/2	12.70	0.500	0.76	0.030	14.95	0.589	110	4 3/8	140	2030	.207	.139	70-100-08-01-02
5/8	15.88	0.625	0.76	0.030	18.35	0.722	150	6	110	1601	.255	.171	70-100-10-01-02
3/4	19.05	0.750	0.76	0.030	21.65	0.852	200	7 7/8	80	1164	.315	.211	70-100-12-01-02
1	25.40	1.000	1.00	0.039	28.15	1.108	300	11 7/8	55	800	.430	.288	70-100-16-01-02

HEAVY WALL, SINGLE BRAID (HW, SB)

Bore Size (Nominal)	Bore Size (Actual)		PTFE Tube Wall Thickness		Braid Outside Diameter		Minimum Bend Radius		Maximum Working Pressure		Weight per Unit Length		*Part Number
	mm	in	mm	in	mm	in	mm	in	Bar	Psi	Kg/mt	Lbs/Ft	
1/8	3.17	0.125	1.00	0.039	6.10	0.240	20	7/8	290	4220	.068	.046	70-200-02-01-02
3/16	4.76	0.188	1.00	0.039	7.65	0.301	29	1 1/8	270	3929	.087	.058	70-200-03-01-02
1/4	6.35	0.250	1.00	0.039	9.25	0.364	30	1 2/8	260	3783	.113	.076	70-200-04-01-02
5/16	7.94	0.313	1.00	0.039	10.90	0.429	40	1 5/8	230	3347	.135	.091	70-200-05-01-02
3/8	9.53	0.375	1.00	0.039	12.50	0.492	55	2 2/8	200	2910	.153	.103	70-200-06-01-02
1/2	12.70	0.500	1.00	0.039	15.60	0.614	85	3 3/8	160	2328	.240	.161	70-200-08-01-02
5/8	15.88	0.625	1.30	0.051	19.10	0.752	110	4 3/8	130	1892	.292	.196	70-200-10-01-02
3/4	19.05	0.750	1.30	0.051	22.05	0.868	145	5 5/8	92	1339	.344	.231	70-200-12-01-02
1	25.40	1.000	1.50	0.059	28.80	1.134	260	10 2/8	69	1004	.470	.315	70-200-16-01-02

MEDIUM WALL SINGLE BRAID (MW, SB), also referred to as HYPERLINE SB

The Hyperline MW, SB Range meets or exceeds SAE 100R14 standard.

Bore Size (Nominal) BB=Big Bore	Bore Size (Actual)		Dash Size Reference (If any)	PTFE Tube Wall Thickness		Braid Outside Diameter		Minimum Bend Radius		Max Working Pressure		Weight per Unit Length		*Part Number
	mm	in		mm	in	mm	in	mm	in	Bar	Psi	Kg/mt	Lbs/Ft	
1/16 BB	2.0	0.079	-2	1.00	0.040	5.00	0.197	13	1/2	450	6500	.045	.030	70-300-02-01-02
1/8 BB	3.5	0.138	-3	1.00	0.040	6.45	0.254	20	3/4	350	5076	.070	.047	70-300-03-01-02
3/16 BB	5.0	0.200	-4	0.76	0.030	7.65	0.301	45	1 3/4	290	4206	.078	.052	70-400-03-01-02
1/4 BB	6.7	0.264	-5	0.76	0.030	9.30	0.366	60	2 3/8	240	3480	.110	.074	70-400-04-01-02
5/16 BB	8.4	0.335	-6	0.76	0.030	10.72	0.422	70	2 3/4	220	3190	.136	.091	70-400-05-01-02
3/8 BB	10.0	0.394	-7	0.76	0.030	12.75	0.500	80	3	190	2755	.166	.111	70-400-06-01-02
1/2 BB	13.3	0.536	-10	0.76	0.030	16.35	0.644	130	5	150	2175	.210	.141	70-400-08-01-02
5/8 BB	16.5	0.654	-12	0.84	0.033	19.50	0.768	163	6 1/2	130	1885	.280	.188	70-400-10-01-02
3/4 BB	19.8	0.780		1.00	0.040	22.50	0.860	180	7	110	1595	.327	.219	70-400-12-01-02
1 BB	26.4	1.040		1.00	0.040	30.10	1.190	230	9	80	1160	.524	.351	70-400-16-01-02

* For Anti-Static Grade, add 10 to the 3-digit part number e.g. 70-100- becomes 70-110

Note: Many of the sizes of hose and fittings listed above are available as ex-stock items and are priced accordingly. However, some of the less popular items are not always in stock, and may therefore incur a minimum order charge or a set-up charge for smaller quantities. Aflex Hose will advise when the enquiry is made.

TEMPERATURE & PRESSURE

- Temperature affects the Maximum Working Pressure (MWP) as listed above, so for temperatures above 130°C reduce the MWP by 0.75% for each 1°C above 130°C. Example: at 180°C, reduce the MWP by $(180 - 130) \times 0.75 = 37.5\%$.
- Pressure Ratings above 100 Bar (1500 psi) only apply for the transfer of non-penetrating fluids. If gases or penetrating fluids are used in the application, or used during pressure testing at pressures above 100 Bar, HPG grade hose is required.
- Maximum Working Pressures (MWP) listed are calculated on the basis of a 3:1 safety factor relative to the burst pressure, so Burst Pressure = 3 x MWP. If MWP is required based on a 4:1 safety factor (e.g EN 16643 requirement), multiply the listed value by 0.75.

SMOOTHBORE HOSE: SPECIFICATIONS FOR STANDARD DOUBLE BRAID HOSE

Specifications and size range for Double Stainless Steel wire braid hose (DB Grade) and Antistatic (AS, DB) Grade.

STANDARD WALL, DOUBLE BRAID (SW, DB)

Bore Size (Nominal)	Bore Size (Actual)		PTFE Tube Wall Thickness		Braid Outside Diameter		Minimum Bend Radius		Maximum Working Pressure		Weight per Unit Length		*Part Number
	mm	in	mm	in	mm	in	mm	in	Bar	Psi	Kg/mt	Lbs/Ft	
1/8	3.17	0.125	0.76	0.030	6.85	0.270	20	7/8	360	5238	.100	.067	70-100-02-02-02
3/16	4.76	0.188	0.76	0.025	8.70	0.343	30	1 1/4	330	4802	.135	.091	70-100-03-02-02
1/4	6.35	0.250	0.63	0.025	10.05	0.396	40	1 5/8	290	4220	.160	.107	70-100-04-02-02
5/16	7.94	0.313	0.63	0.025	11.55	0.455	50	2	250	3638	.190	.127	70-100-05-02-02
3/8	9.53	0.375	0.63	0.025	13.35	0.526	60	2 3/8	230	3347	.214	.143	70-100-06-02-02
1/2	12.70	0.500	0.76	0.030	16.40	0.646	90	3 5/8	180	2629	.341	.229	70-100-08-02-02
5/8	15.88	0.625	0.76	0.030	19.95	0.785	130	5 1/8	135	1964	.416	.279	70-100-10-02-02
3/4	19.05	0.750	0.76	0.030	23.10	0.910	170	6 3/4	100	1455	.503	.337	70-100-12-02-02
1	25.40	1.000	1.00	0.039	29.60	1.165	270	10 3/4	70	1019	.700	.469	70-100-16-02-02

HEAVY WALL, DOUBLE BRAID (HW, DB)

Bore Size (Nominal)	Bore Size (Actual)		PTFE Tube Wall Thickness		Braid Outside Diameter		Minimum Bend Radius		Maximum Working Pressure		Weight per Unit Length		*Part Number
	mm	in	mm	in	mm	in	mm	in	Bar	Psi	Kg/mt	Lbs/Ft	
1/8	3.17	0.125	1.00	0.039	7.05	0.278	18	3/4	350	5093	.108	.072	70-200-02-02-02
3/16	4.76	0.188	1.00	0.039	8.90	0.350	25	1	320	4656	.140	.094	70-200-03-02-02
1/4	6.35	0.250	1.00	0.039	10.75	0.423	26	1 1/8	310	4511	.183	.123	70-200-04-02-02
5/16	7.94	0.313	1.00	0.039	12.35	0.486	35	1 1/2	275	4001	.210	.141	70-200-05-02-02
3/8	9.53	0.375	1.00	0.039	14.10	0.555	50	2	240	3492	.243	.163	70-200-06-02-02
13/32	10.32	0.406	1.00	0.039	15.05	0.593	60	2 3/8	230	3347	.258	.173	70-500-13-02-02
1/2	12.70	0.500	1.00	0.039	16.90	0.665	75	3	200	2900	.374	.251	70-200-08-02-02
5/8	15.88	0.625	1.30	0.051	20.75	0.817	100	4	155	2255	.452	.303	70-200-10-02-02
3/4	19.05	0.750	1.30	0.051	23.80	0.937	135	5 3/8	110	1601	.532	.356	70-200-12-02-02
1	25.40	1.000	1.50	0.059	30.70	1.209	250	9 7/8	84	1222	.730	.489	70-200-16-02-02
1 1/4	31.75	1.250	1.50	0.059	36.90	1.453	400	15 3/4	75	1091	.905	.637	70-200-20-02-02
1 1/2	38.10	1.500	1.50	0.059	43.75	1.722	800	31 1/2	65	946	1.170	.784	70-200-24-02-02
2	50.80	2.000	1.50	0.059	56.40	2.221	1200	47 1/4	40	582	1.610	1.079	70-200-32-02-02

MEDIUM WALL, DOUBLE BRAID (MW, DB) also referred to as HYPERLINE SB, DB)

Bore Size (Nominal) BB=Big Bore	Bore Size (Actual)		Dash Size Reference (If any)	PTFE Tube Wall Thickness		Braid Outside Diameter		Minimum Bend Radius		Max Working Pressure		Weight per Unit Length		*Part Number
	mm	in		mm	in	mm	in	mm	in	Bar	Psi	Kg/mt	Lbs/Ft	
1/16 BB	2.0	0.079	-2	1.00	0.040	6.00	0.236	11	1/2	540	7800	.075	.050	70-300-02-02-02
1/8 BB	3.5	0.138	-3	1.00	0.040	7.45	0.293	18	3/4	350	5000	.111	.074	70-300-03-02-02
3/16 BB	5.0	0.200	-4	0.76	0.030	8.80	0.347	35	1 3/8	340	4900	.128	.086	70-400-03-02-02
1/4 BB	6.7	0.264	-5	0.76	0.030	11.00	0.433	50	2	320	4600	.170	.114	70-400-04-02-02
5/16 BB	8.5	0.335	-6	0.76	0.030	11.82	0.466	60	2 3/8	270	3900	.215	.144	70-400-05-02-02
3/8 BB	10.0	0.394		0.76	0.030	14.20	0.560	80	3	230	3300	.260	.174	70-400-06-02-02
1/2 BB	13.6	0.536	-10	0.76	0.030	17.35	0.684	110	4 3/8	180	2600	.350	.234	70-400-08-02-02
5/8 BB	16.6	0.654	-12	0.84	0.033	20.80	0.820	140	5 1/2	130	1900	.450	.300	70-400-10-02-02
3/4 BB	19.8	0.780		1.00	0.040	24.00	0.946	160	6 1/2	120	1700	.520	.350	70-400-12-02-02
1 BB	26.4	1.040		1.00	0.040	31.70	1.249	210	8 1/4	100	1400	.830	.550	70-400-16-02-02

* For Anti-Static Grade, add 10 to the 3-digit part number e.g. 70-100 becomes 70-110. For High Pressure Gas Grade, add 20, eg 70-200- becomes 70-220.

Note: A few of the sizes of hose and fittings listed above are available as ex-stock items and are priced accordingly. However, most of the items are not stocked, and will therefore incur a minimum order charge or a set-up charge for small quantities.

TEMPERATURE & PRESSURE

- Temperature affects the Maximum Working Pressure (MWP) as listed above, so for temperatures above 130°C reduce the MWP by 0.75% for each 1°C above 130°C. Example: at 180°C, reduce the MWP by (180 - 130) x 0.75 = 37.5%.

- Pressure Ratings above 100 Bar (1500 psi) only apply for the transfer of non-penetrating fluids. If gases or penetrating fluids are used in the application, or used during pressure testing at pressures above 100 Bar, HPG grade hose is required.

- Maximum Working Pressures (MWP) listed are calculated on the basis of a 3:1 safety factor relative to the burst pressure, so Burst Pressure = 3 x MWP. If MWP is required based on a 4:1 safety factor (e.g EN 16643 requirement), multiply the listed value by 0.75.