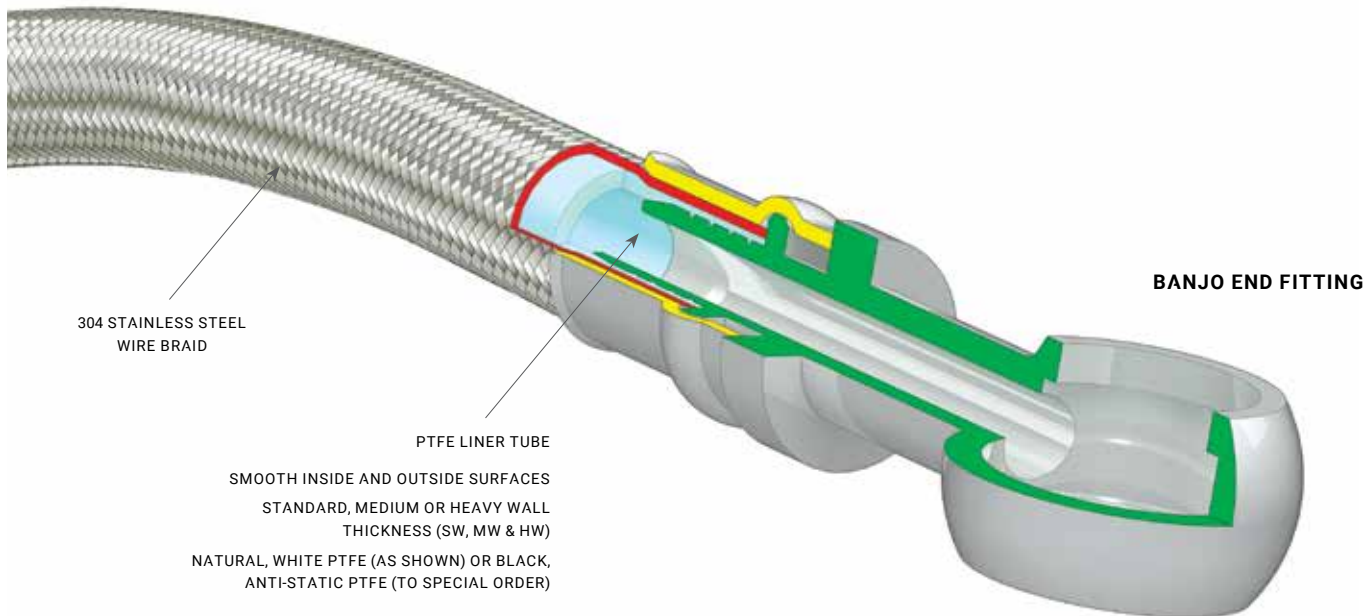


# SMOOTHBORE

PTFE Hose for automotive and general purpose applications

A high temperature and pressure resistant, smooth bore hose compatible with all automotive fluids

## A -3 SMOOTHBORE HOSE ASSEMBLY



## SMOOTHBORE HOSE SPECIFICATIONS

### HOSE BORE SIZE RANGE -

Standard Wall and Heavy Wall  $\frac{1}{8}$ " (3MM) UP TO 1" (25MM)

Medium Wall ('Dash Sizes')

-2 (2MM BORE) TO 1" BIG BORE (BB) (26.4MM BORE)

### HOSE LENGTHS -

-2 SIZE 350 FEET (107 METRES) TO 1" BB 130 FEET (40 METRES)

CUT LENGTHS AND PREFORMED LENGTHS AVAILABLE

### TEMPERATURE LIMITS -

FROM -100°F (-73°C) UP TO +500°F (+260°C), DEPENDING ON PRESSURE

### WORKING PRESSURE RATINGS -

-2 = 6500 PSI (450 BAR) TO 1" BB = 1160 PSI (80 BAR), FOR TEMPERATURES UP TO 266°F (130°C)

### VACUUM LIMITATIONS -

USABLE AT VACUUM TO -0.9BAR FOR HEAVY WALL (HW) HOSE IN SIZES UP TO  $\frac{3}{8}$ " (10MM)

### END FITTING OPTIONS -

BSPT AND NPT MALE AND FEMALE, BSP AND NPSM 60° CONE SEAT AND FLAT SEAT FEMALE UNIONS, JIC THREADED MALE AND FEMALE FITTINGS, STANDPIPE FITTINGS AND MANY MORE

### ALTERNATIVE DESIGN OPTIONS (to special order) -

- DOUBLE BRAID OR 'HIGH PACK' BRAID FOR INCREASED PRESSURE RESISTANCE, HIGH PRESSURE GAS (HPG) GRADE
- PVC, NYLON II, SARLINK AND HYTREL PLASTIC COVERS OVER BRAID WITH PRINTING. DIFFERENT COLOURS AND OTHER PLASTIC COVERS ARE ALSO AVAILABLE.
- FOR LARGER BORE SIZE WHERE IMPROVED FLEXIBILITY IS NEEDED, HYPERLINE FX HOSE IS RECOMMENDED.

## 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	
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 1/2	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 3/8	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 3/8	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)

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

## TEMPERATURE & PRESSURE

- Temperature affects the Maximum Working Pressure (MWP) as listed above, so for temperatures above 266°F (130°C) reduce the MWP by 0.75% for each 1.8°F (1°C) above 266°F (130°C).
- Pressure Ratings above 1500 psi (100 Bar) 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 1500 psi (100 Bar), high pressure gas (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 16643:2016 requirement), multiply the listed value by 0.75.

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A member of Watson-Marlow Fluid Technology Group.  
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