



GITA MARKETING CO.

TECHNICAL DATA SHEET

TDS HYDRAULIC HOSE

SAE 100R1AT / R2AT · EN 853 1SN / 2SN · ISO 1436

Gita Marketing Co.

Spl Plot No-4, NGEF Industrial Estate,
Off Whitefield Road, Mahadevapura, Bangalore - 560048
www.gitamarketing.com

Issued 2026



HYDRAULIC HOSE

Technical Data Sheet — SAE 100R1AT / R2AT

Wire-braid reinforced hydraulic hoses for medium and high-pressure hydraulic circuits. Available in single-braid (SAE 100R1AT / EN 853 1SN) and double-braid (SAE 100R2AT / EN 853 2SN) constructions. Suitable for petroleum-based hydraulic fluids, synthetic fire-resistant fluids, water-glycol, and water-oil emulsions. Manufactured by Polyhose India Pvt Ltd (PH253/PH254 series) and distributed by Gita Marketing Co.

SAE 100R1AT — Single Wire Braid (EN 853 1SN / ISO 1436-1)

Synthetic rubber inner tube, single layer high-tensile steel wire braid, synthetic rubber cover. Working pressure range: 580–3,625 PSI depending on bore size.

ID (inch)	ID (mm)	OD (mm)	W.P. (bar)	W.P. (PSI)	Burst (PSI)	Min. Bend Radius (mm)
3/16"	4.8	11.9	248	3,600	14,400	90
1/4"	6.4	13.5	225	3,250	13,000	100
5/16"	7.9	15.1	207	3,000	12,000	115
3/8"	9.5	17.5	190	2,750	11,000	130
1/2"	12.7	21.5	155	2,250	9,000	180
5/8"	15.9	24.5	129	1,875	7,500	200
3/4"	19.1	28.5	103	1,500	6,000	240
1"	25.4	35.7	86	1,250	5,000	300
1-1/4"	31.8	42.9	69	1,000	4,000	420

SAE 100R2AT — Double Wire Braid (EN 853 2SN / ISO 1436-2)

Synthetic rubber inner tube, two layers of high-tensile steel wire braid, synthetic rubber cover. Higher pressure rating than R1 at equivalent bore sizes.

ID (inch)	ID (mm)	OD (mm)	W.P. (bar)	W.P. (PSI)	Burst (PSI)	Min. Bend Radius (mm)
3/16"	4.8	13.4	414	6,000	24,000	90
1/4"	6.4	15.0	400	5,800	23,200	100
5/16"	7.9	16.5	345	5,075	20,300	115
3/8"	9.5	18.9	330	4,785	19,140	125
1/2"	12.7	22.2	275	3,988	15,950	180
5/8"	15.9	25.6	250	3,625	14,500	205
3/4"	19.1	29.3	215	3,118	12,470	240
1"	25.4	37.8	165	2,393	9,570	300

Technical Specifications





Tube Material	Synthetic rubber — NBR (nitrile)
Cover Material	Synthetic rubber — abrasion, ozone, and weather resistant
Temperature Range	-40°C to +100°C · up to +120°C intermittent
Fluid Compatibility	Petroleum hydraulic oils, synthetic fire-resistant fluids, water-glycol, water-oil emulsions
Standards	SAE J517 100R1AT / 100R2AT · EN 853 1SN / 2SN · ISO 1436
Safety Factor	4:1 minimum (burst : working pressure)

Applications

- Mobile hydraulic equipment — excavators, loaders, cranes
- Agricultural machinery — tractors, harvesters
- Construction and earthmoving equipment
- Machine tools, presses, and injection moulding machines
- Industrial hydraulic power units
- Mining and offshore equipment

Assembly & Maintenance Notes

Use only manufacturer-approved crimp fittings matched to hose series. Maintain minimum bend radius at all times — kinking will cause premature failure. Inspect assemblies periodically for wear, abrasion, kinking, or fitting corrosion. Replace immediately upon detection of any damage.

Important — Safety Critical

Never repair a damaged hydraulic hose — replace the complete assembly. High-pressure hydraulic fluid injection injuries are life-threatening. Custom crimp assemblies are available from Gita Marketing Co. — contact us before fabricating hose assemblies.

Authorised Supplier

Manufacturer	Polyhose India Pvt Ltd
Product Series	PH253 (R1AT) · PH254 (R2AT)
Custom Assemblies	Available — crimped to length with fittings
Distributor	Gita Marketing Co., Bangalore
Contact	+91-89040-35515 · info@gitamarketing.com
Website	www.gitamarketing.com

Sources: [Polyhose India Pvt Ltd](#) · [SAE J517](#) · [www.gitamarketing.com](#)

