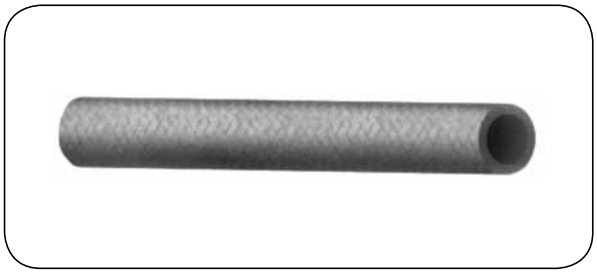
General purpose hoses for fuel and oil

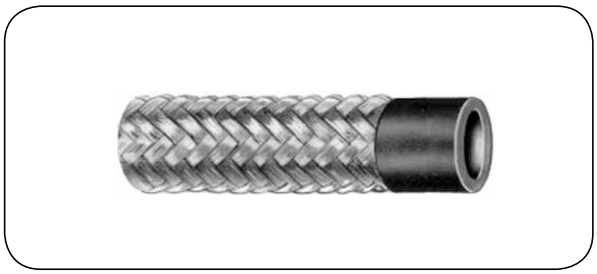


NAFTREX / B

Internal layer: Black NBR rubber
External layer: Black textile braid protecting against heat
Working temp.: From -40°C up to +120°C

Developed for fuel and cooling systems. Working temperature depends on the medium: for fuels with aromatic content up to 50% it is +40°C; for diesel oil, air, non-oxidative liquid detergents it is +80°C; for water, glycol-based cooling liquids it is +90°C. Fulfils DIN 73379 standard.

code	I.D. [mm]	wall thickness [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	standard length [m]
BG-NAFTREX-B-03,2	3.2	1.9	7	10	30	20
BG-NAFTREX-B-03,5	3.5	2	7.5	10	30	20
BG-NAFTREX-B-04	4	2.5	9	10	30	20
BG-NAFTREX-B-04,5	4.5	2.5	9.5	10	30	20
BG-NAFTREX-B-05	5	2.5	10	10	30	20
BG-NAFTREX-B-05,5	5.5	2.5	10.5	10	30	20
BG-NAFTREX-B-06	6	2.5	11	10	30	20
BG-NAFTREX-B-07	7	2.5	12	10	30	20
BG-NAFTREX-B-07,5	7.5	2.5	12.5	10	30	20
BG-NAFTREX-B-08	8	2.5	13	10	30	20
BG-NAFTREX-B-09	9	2.5	14	10	30	20
BG-NAFTREX-B-11,5	11.5	2.75	17	10	30	20



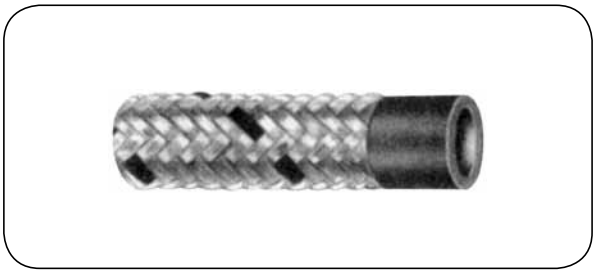
GALVOIL / L

Internal layer: Black NBR rubber
Reinforcement: External steel braid
Working temp.: From -35°C up to +90°C

Delivery hose designed to transfer transmission, heating and diesel oil as well petrochemical products. Internal layer resistant to oil and fuel. Manufactured according to ISO 1307 standard.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
SL-GALVOIL-L-06	6	11	25	75	30	0.16	100
SL-GALVOIL-L-08	8	13	25	75	40	0.23	100
SL-GALVOIL-L-10	10	15	25	75	50	0.28	100
SL-GALVOIL-L-13	13	19	20	60	65	0.38	50
SL-GALVOIL-L-16	16	22	20	60	80	0.46	50

General purpose hoses for fuel and oil

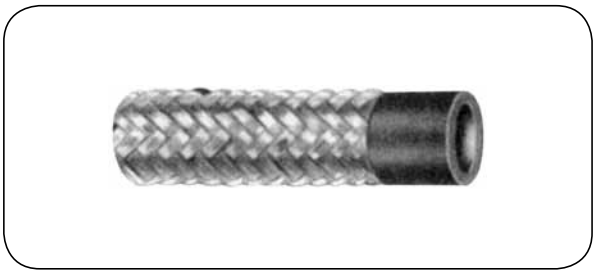


PZ

Internal layer: Black synthetic rubber
Reinforcement: External steel braid
Working temp.: From -35°C up to +80°C

Developed for use in fuel and oil installations. Manufactured according to DIN 73379 standard.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	standard length [m]
EC-101005	4.5	9.5	20	60	100
EC-101006	5.5	10.5	20	60	100
EC-101008	7.5	12.5	15	50	100
EC-101010	9	14	15	50	100
EC-101012	11.5	18	15	50	100
EC-101015	14.5	22	15	50	100
EC-101018	17	25	15	50	100
EC-101020	19	29	10	50	100



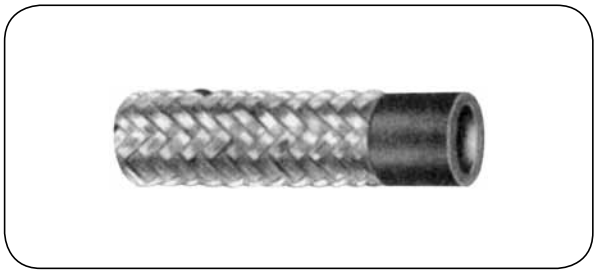
PZVA

Internal layer: Black synthetic rubber
Reinforcement: Stainless steel external braid
Working temp.: From -35°C up to +80°C

Developed for use in fuel and oil installations. Manufactured according to DIN 73379 standard.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	standard length [m]
EC-101356	5.5	10.5	20	60	100
EC-101358	7.5	12.5	15	50	100
EC-101360	9	15	15	50	100
EC-101362	11.5	18	15	50	100

General purpose hoses for fuel and oil

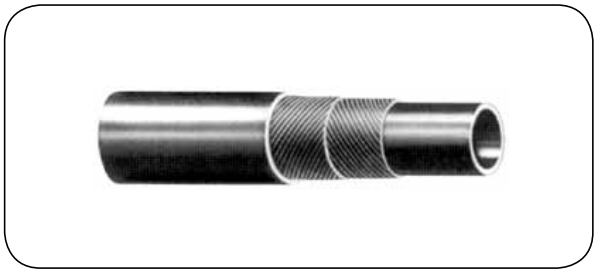


FPM / ECO

Internal layer: Viton (FPM)
Reinforcement: Textile braid
External layer: Synthetic rubber
Working temp.: From -35°C up to +80°C

Special multilayer hose designed to transfer biofuels, particularly those based on rapeseed oil. Resistant to Rapeseed Methyl Ester (RME).

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	standard length [m]
EC-101402	3.2	9	25	80	100
EC-101155	5.5	11.5	15	50	100
EC-101158	7.5	14.5	15	40	100
EC-101160	9.5	16.5	15	40	100
EC-101162	11.5	18.5	15	40	100



CARBUR 10-20 BAR

Internal layer: Black NBR rubber
Reinforcement: Robust synthetic fabric
External layer: Black PVC/NBR compound
Working temp.: From -20°C up to +70°C

Flexible, delivery hose designed to transfer liquid petrochemical products with aromatic content up to 50%. Suitable for oil systems, lubrication systems, etc. Antistatic internal layer - R ≤ 10^6 Ω/m. External layer resistant to fuel, oil, weather conditions, ozone and abrasion.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
CARBUR 10 bar							
IV-CARBUR10-05	5	12	10	30	40	0.2	100
IV-CARBUR10-06	6	13	10	30	50	0.4	100
IV-CARBUR10-08	8	15	10	30	65	0.7	100
IV-CARBUR10-10	10	17	10	30	80	0.20	100
IV-CARBUR10-13	13	20	10	30	105	0.24	60
IV-CARBUR10-15	15	23	10	30	120	0.32	60
IV-CARBUR10-19	19	27	10	30	150	0.39	60
IV-CARBUR10-25	25	35	10	30	200	0.63	40
CARBUR 20 bar							
IV-CARBUR20-06	6	14	20	60	60	0.17	100
IV-CARBUR20-08	8	17	20	60	65	0.24	100
IV-CARBUR20-10	10	19	20	60	80	0.28	100

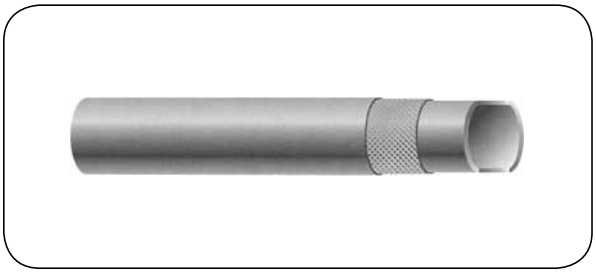
General purpose hoses for fuel and oil

CODAN 3106

Internal layer: Black NBR/PVC compound
External layer: Black polyester braid
Working temp.: From -30°C up to +100°C

Flexible hose for leaded and unleaded petrol. It is used to connect e.g. a carburetor and a fuel pump in cars, motorcycles, mopeds, garden tractors, etc. Not suitable for engines with an injection system. Parameters similar to those of DIN 73379 B:1984 standard.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
CO-3106-032	3.2	7.2	12.5	50	20	0.044	30
CO-3106-035	3.5	7.5	12.5	50	20	0.046	30
CO-3106-040	4	9	11	45	20	0.068	30
CO-3106-045	4.5	9.5	11	45	20	0.073	30
CO-3106-050	5	10	10	42	20	0.080	30
CO-3106-055	5.5	10.5	10	39	20	0.085	30
CO-3106-060	6	11	10	39	20	0.090	30
CO-3106-065	6.5	11.5	10	39	20	0.065	30
CO-3106-070	7	12	9	35	20	0.100	30
CO-3106-075	7.5	12.5	9	35	30	0.105	30
CO-3106-080	8	13	8	32	30	0.110	30
CO-3106-090	9	14	6	23	40	0.123	30
CO-3106-095	9.5	15	6	23	40	0.130	30
CO-3106-100	10	15	6	23	40	0.133	30
CO-3106-110	11	16	5	20	40	0.144	30
CO-3106-120	12	17	5	20	40	0.160	30
CO-3106-127	12.7	17.7	5	15	40	0.180	30



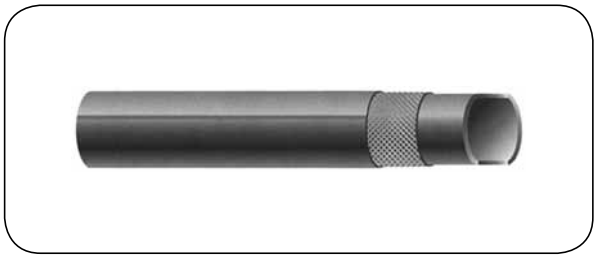
TU 40

Internal layer: Black NBR rubber
Reinforcement: Textile braid
External layer: Black SBR/NVC rubber
Working temp.: From -45°C up to +90°C
(for air from -45°C up to +70°C)

Delivery hose used to transfer fuels, diesel oil, heating oil (EN 590:2010) and air.
Conductive internal layer - R <10^6 Ω/m.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
SP-681760435	4	11	40	160	50	0.11	50
SP-681760635	6	13	40	160	64	0.16	50
SP-681760835	8	15	40	160	73	0.19	50
SP-681761035	10	17	40	160	77	0.22	50

General purpose hoses for fuel and oil

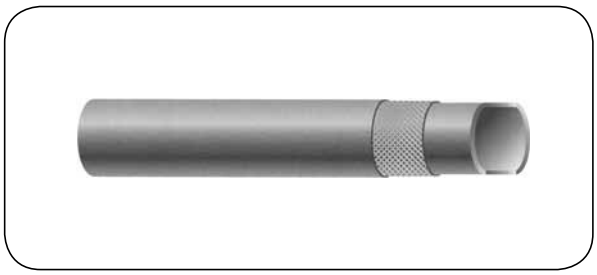


TU 25

Internal layer: Black NBR rubber
Reinforcement: Textile braid
External layer: Black CR/SBR compound
Working temp.: From -40°C up to +80°C

Delivery hose designed to transfer unleaded fuel (EN 228:2008), diesel oil (EN 590:2010), heating oil (DIN 51 603 part 1-5) and air. Internal layer is conductive - R<10^6 Ω/m according to EN ISO 8031:1997.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
SP-681750649	6	14	25	80	40	0.17	100
SP-681750849	8	16	25	80	50	0.19	100
SP-681751040	10	18	25	80	60	0.23	50
SP-681751340	13	21	25	80	80	0.28	50
SP-681751645	16	25	25	80	100	0.38	50
SP-681751950	19	29	25	80	120	0.50	50
SP-681752555	25	36	25	80	150	0.73	50



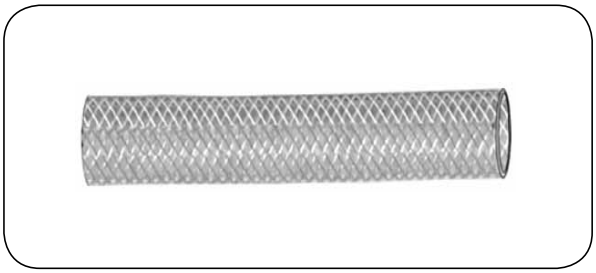
FUB

Internal layer: Black NBR rubber
Reinforcement: Textile braid
External layer: Black CR/NBR compound
Working temp.: From -40°C up to +100°C
(for fuel from -30°C up to +70°C)

Delivery hose designed to transfer unleaded fuel (EN 228:2008), diesel oil (EN 590:2010). Suitable for fuel with methyl alcohol content up to 10%.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
SP-680300330	3.2	9.2	12	40	38	0.08	50
SP-680300331	3.5	9.5	12	40	42	0.08	50
SP-680300430	4	10	12	40	48	0.08	50
SP-680300431	4.5	10.5	12	40	54	0.09	50
SP-680300530	5	11	12	40	60	0.10	50
SP-680300531	5.5	11.5	12	40	66	0.10	50
SP-680300630	6	12	12	40	72	0.10	50
SP-680300631	6.3	12.3	12	40	72	0.10	50
SP-680300730	7	13	12	40	84	0.12	50
SP-680300731	7.5	13.5	12	40	90	0.12	50
SP-680300830	8	14	12	40	96	0.13	50
SP-680300930	9	15	12	40	108	0.14	50
SP-680300931	9.5	15.5	12	40	114	0.15	50
SP-680301030	10	16	12	40	120	0.15	50
SP-680301130	11	17	12	40	132	0.16	50
SP-680301235	12	19	12	40	144	0.21	50

General purpose hoses for fuel and oil

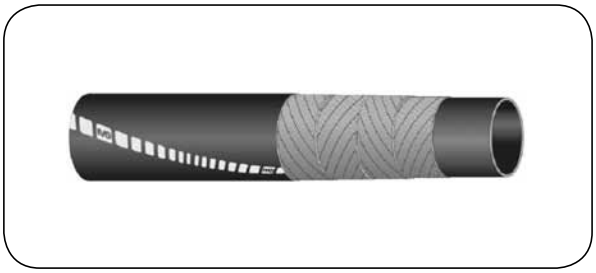


TRICOFUEL®

Internal layer: Transparent, green PVC
Reinforcement: Polyester braid
External layer: Transparent, green PVC
Working temp.: From -15°C up to +60°C

Flexible delivery hose designed for oil and petrochemical products. Widely used in fuel installations, pumps and heaters. The material of the hose is particularly resistant to plasticizer wash-out.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
TR-TRICOFUEL-06	6.3	11	13	39	22	0.08	25
TR-TRICOFUEL-08	8	14	13	39	28	0.13	25
TR-TRICOFUEL-10	10	16	10	30	35	0.15	25
TR-TRICOFUEL-12	12	19	10	30	42	0.21	25
TR-TRICOFUEL-15	15	23	10	30	52.5	0.29	25
TR-TRICOFUEL-20	20	28	10	30	70	0.38	25
TR-TRICOFUEL-25	25	32.5	8	24	87.5	0.42	25
TR-TRICOFUEL-30	30	39	8	24	105	0.61	25



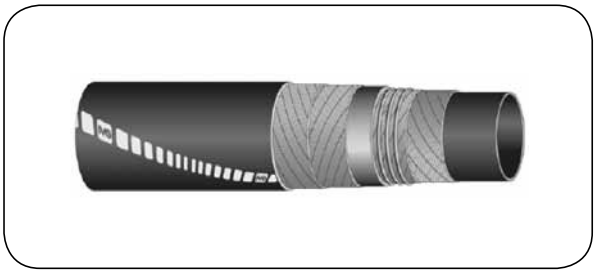
OIL COMPRESSOR®

Internal layer: Black synthetic rubber
Reinforcement: Synthetic braid
External layer: Blue, self-extinguishing synthetic rubber
Working temp.: From -30°C up to +130°C (with peaks up to +150°C)

Robust flexible hose used for oil (except ester-based products), hot air and diluted chemical products. External layer resistant to abrasion and weather conditions. External layer compliant with MSHA standard.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	weight [kg/m]	standard length [m]
IV-COMPRESSOR-13	13	22	40	120	0.32	120
IV-COMPRESSOR-19	19	31	40	120	0.56	120
IV-COMPRESSOR-25	25	37	40	120	0.70	120
IV-COMPRESSOR-32	32	46	40	120	1.10	120
IV-COMPRESSOR-38	38	55	40	120	1.49	120
IV-COMPRESSOR-51	51	67	40	120	1.79	120

General purpose hoses for fuel and oil

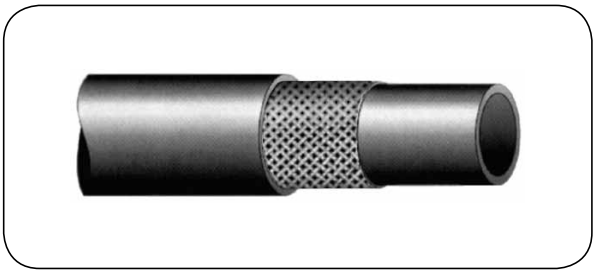


SAE 100 R4

Internal layer: Black synthetic rubber
Reinforcement: Synthetic braid, steel wire helix
External layer: Black synthetic rubber
Working temp.: From -40°C up to +100°C

Robust suction-delivery hose designed to transfer liquid petroleum products with aromatic content up to 30%. In particular used in hydraulic system as an oil return hose. Fulfils SAE 100 R4 standards. External layer resistant to abrasion, oil mist and weather conditions.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
IV-SAE100R4-19	19	30	21	94	125	0.61	120
IV-SAE100R4-25	25	38	17	71	152	0.90	120
IV-SAE100R4-30	30	41	17	60	185	0.91	120
IV-SAE100R4-32	32	43	14	56	200	0.96	120
IV-SAE100R4-35	35	47	13	52	230	1.17	120
IV-SAE100R4-38	38	49.5	10	43	250	1.26	120
IV-SAE100R4-40	40	53	10	35	255	1.44	120
IV-SAE100R4-42	42	54	10	35	260	1.37	120
IV-SAE100R4-45	45	56.5	10	35	280	1.41	120
IV-SAE100R4-51	51	64	7	30	305	1.78	120



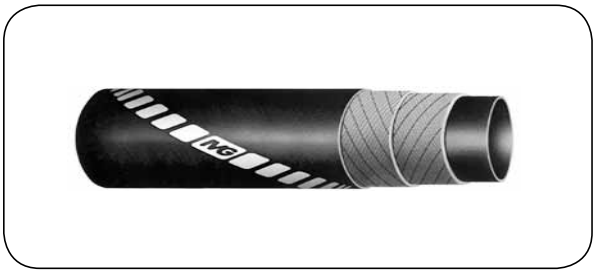
HW - R6

Internal layer: Black synthetic rubber
Reinforcement: Synthetic braid
External layer: Black synthetic rubber
Working temp.: From -40°C up to +100°C

Characteristics: Delivery hose used in low-pressure hydraulic installations and to transfer hydraulic fluids, hydrocarbons, oils, fats, air water, etc. Excellent resistance to weather conditions, mineral and synthetic oils.
Standards: According to SAE 100 R6, EN 854 R6 standards.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]
HW-R6-06	6.4	12.3	28	112	65	0.100
HW-R6-08	7.9	13.9	28	112	80	0.125
HW-R6-10	9.5	15.5	28	112	80	0.150
HW-R6-13	12.7	19	28	112	100	0.200
HW-R6-16	15.9	22.6	24	96	125	0.250
HW-R6-19	19	25.8	21	84	150	0.300
HW-R6-25	25.4	33.2	9	36	170	0.450

General purpose hoses for fuel and oil



POSEIDON®

Internal layer: Black synthetic rubber
Reinforcement: Synthetic braid
External layer: Black, self-extinguishing synthetic rubber
Working temp.: From -30°C up to +100°C (EX: from -20°C up to +100°C)

Softwall, flexible delivery hose designed for fuel systems on boats, motor boats, yachts, etc. Complies with ISO 7840:13 A1 E10/B10, CE 94/25, SAE J 1527:11 USCG A1 type, approved by R.I.N.A.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	weight [kg/m]	standard length [m]
IV-POSEIDON-EX-06	6	14	3.4	13.6	0.21	100
IV-POSEIDON-EX-08	8	16	3.4	13.6	0.25	100
IV-POSEIDON-EX-10	10	19	3.4	13.6	0.34	60
IV-POSEIDON-EX-13	13	22	2.5	10	0.41	60
IV-POSEIDON-EX-16	16	25	2.5	10	0.48	60
IV-POSEIDON-EX-19	19	28	2.5	10	0.55	40
IV-POSEIDON-22	22	32.5	10	30	0.58	120
IV-POSEIDON-25	25	35.5	10	30	0.64	120
IV-POSEIDON-30	30	40.5	10	30	0.75	120
IV-POSEIDON-32	32	42.5	10	30	0.79	120
IV-POSEIDON-35	35	45.5	10	30	0.85	120
IV-POSEIDON-38	38	48.5	10	30	0.92	120
IV-POSEIDON-40	40	50.5	10	30	0.94	120
IV-POSEIDON-45	45	55.5	10	30	1.04	120
IV-POSEIDON-50	50	60.5	10	30	1.14	120
IV-POSEIDON-60	60	71.5	10	30	1.52	120

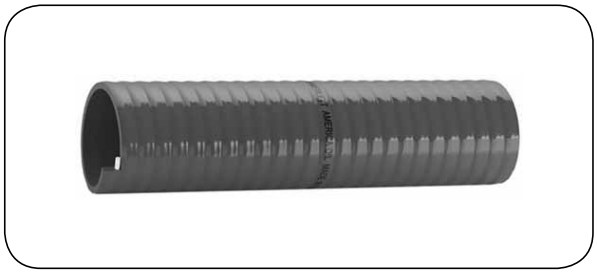
POSEIDON / LL®

Internal layer: Black synthetic rubber
Reinforcement: Synthetic braid, steel wire helix
External layer: Black, self-extinguishing synthetic rubber
Working temp.: From -30°C up to +100°C

Softwall, flexible suction-delivery hose designed for fuel systems on boats, motor boats, yachts, etc. Complies with ISO 7840:13 A1 E10/B10, CE 94/25, SAE J 1527:11 USCG A1 type, approved by R.I.N.A.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bursting pressure [bar]	weight [kg/m]	standard length [m]
IV-POSEIDON-LL-19	19	30.5	10	30	57	0.70	120
IV-POSEIDON-LL-25	25	36.5	10	30	75	0.86	120
IV-POSEIDON-LL-35	35	47	10	30	105	1.21	120
IV-POSEIDON-LL-38	38	50	10	30	114	1.29	120
IV-POSEIDON-LL-45	45	58	10	30	135	1.64	120
IV-POSEIDON-LL-50	50	63	10	30	150	1.79	120
IV-POSEIDON-LL-63	63.5	77	10	30	190	2.45	120

Re-fueling and transfer hoses for fuel and oil

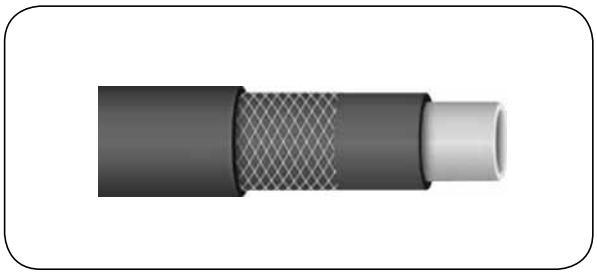


SPIRABEL® OIL

Material: Blue PVC
Reinforcement: Rigid PVC wire helix
Working temp.: From -25°C up to +60°C

Lightweight, very flexible, durable suction-delivery hose designed to convey mineral and synthetic oils as well as some other hydrocarbons.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	vacuum [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
TR-SPIRABEL-OIL-025	25	33	5	0.95	88	0.49	30
TR-SPIRABEL-OIL-032	32	40	5	0.95	112	0.59	30
TR-SPIRABEL-OIL-038	38	46	5	0.95	133	0.72	30
TR-SPIRABEL-OIL-051	51	60.2	5	0.95	179	1.11	30
TR-SPIRABEL-OIL-063	63	73	4	0.9	221	1.47	30
TR-SPIRABEL-OIL-076	76	86.6	4	0.9	266	1.78	30
TR-SPIRABEL-OIL-102	102	114.6	3	0.85	357	2.82	30
TR-SPIRABEL-OIL-152	152	166	2	0.7	680	4.82	20



TECHNOBEL PU

Internal layer: Black PU
Reinforcement: Polyester braid
External layer: Black PVC
Working temp.: From -15°C up to +60°C

Very lightweight hose with small bending radius. Resistant to kinking. External layer resistant to oils, hydrocarbons and many organic solvents. The external layer is resistant to hydrocarbon mist and solvent mist produced e.g. during spray painting. Used for pneumatic tools, spray guns, for painting, transfer of fairly abrasive powders or granules, plant protection products, insecticides etc. Suitable for hose reels.

code	I.D. [mm]	O.D. [mm]	working pressure 20°C [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
TR-TECHNOBEL-PU-06	6	11	20	40	0.09	50
TR-TECHNOBEL-PU-08	8	14	20	55	0.13	25
TR-TECHNOBEL-PU-09	9	15	20	60	0.15	50
TR-TECHNOBEL-PU-10	10	16	20	65	0.16	25
TR-TECHNOBEL-PU-13	12.7	19	20	80	0.20	25
TR-TECHNOBEL-PU-16	16	23	20	110	0.28	25
TR-TECHNOBEL-PU-19	19	26	20	140	0.32	25
TR-TECHNOBEL-PU-25	25	33	15	180	0.49	25
TR-TECHNOBEL-PU-32	32	41	12	235	0.67	25

Re-fueling and transfer hoses for fuel and oil

VACUPRESS OIL

Internal layer: PVC/PU/NBR compound
Reinforcement: Polyester braid, steel wire helix
External layer: PVC/PU/NBR compound
Working temp.: From -25°C up to +55°C

Robust, flexible, abrasion resistant suction-delivery hose designed to transfer hydraulic oils and fuels. Widely used in tank trucks to deliver heating oil to central heating systems of many households. Hoses with diameters 76 ÷ 102 mm have antistatic wires and polyurethane external layer.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	vacuum [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
ME-VACUPROIL-019	19	28	16	48	0.9	70	0.45	60
ME-VACUPROIL-025	25	35.6	16	48	0.9	80	0.64	60
ME-VACUPROIL-032	32	42.6	16	48	0.9	100	0.80	60
ME-VACUPROIL-035	35	48	14	42	0.9	120	1.05	60
ME-VACUPROIL-038	38	51	14	42	0.9	125	1.20	40
ME-VACUPROIL-040	40	53	14	42	0.9	130	1.25	40
ME-VACUPROIL-045	45	58	12	36	0.9	140	1.34	40
ME-VACUPROIL-050	50	63	12	36	0.9	150	1.73	40
ME-VACUPROIL-060	60	74	12	36	0.9	180	1.95	40
ME-VACUPROIL-063	63	77	12	36	0.9	190	2.03	40
ME-VACUPROIL-076	76	90.5	10	30	0.9	210	2.70	30
ME-VACUPROIL-080	80	94.5	10	30	0.9	220	2.80	30
ME-VACUPROIL-090	90	106	10	30	0.9	250	3.25	30
ME-VACUPROIL-102	102	117.5	10	30	0.9	300	3.70	30

FLEXSTEEL® VAPOR ASSIST

Internal layer: Black NBR rubber
Reinforcement: Steel wire braid
External layer: Futurin™ synthetic rubber
Working temp.: From -40°C up to +60°C

Hose developed to refuel vehicles with petrol at the petrol stations. During refuelling, a pump in the dispenser pulls the petrol vapours away from the tank through the vehicle fill pipe. Special construction of the hose provides excellent kink resistance and long service life. Supplied only as a complete hose assembly with M34x1.5 male thread fittings made from chrome-plated brass. The internal hose is made from nylon. Manufactured according to EN 13483.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	length [m]
GY-VASSIST-019-4	19.1	28.7	16	300	130	4
GY-VASSIST-019-5						5
GY-VASSIST-019-6						6

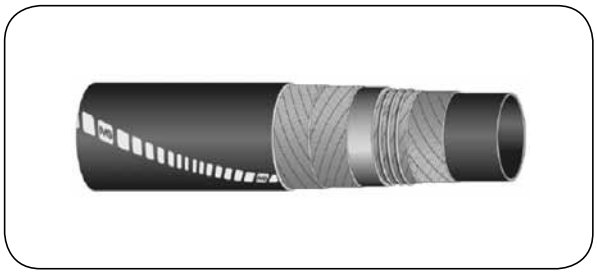
Re-fueling and transfer hoses for fuel and oil

AVIO GLOBAL C

Internal layer: Black NBR rubber
Reinforcement: Synthetic braid
External layer: Black CR rubber
Working temp.: From -25°C up to +70°C

Delivery hose developed to transfer jet fuel A1 (direct refuelling of aircrafts) and liquid petrochemical products with aromatic content up to 50%. Suitable for hose reels application. The external layer resistant to abrasion, oil and weather conditions. Complies with BS 3158, API 1529, EN 1361, AS 2683, VG 95955, NFPA 407.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	weight [kg/m]	standard length [m]
IV-AVIO-C-019	19	32.5	20	80	0.64	60
IV-AVIO-C-025	25	38.5	20	80	0.79	60
IV-AVIO-C-032	32	45.5	20	80	0.97	60
IV-AVIO-C-038	38	52	20	80	1.15	60
IV-AVIO-C-050	50	68	20	80	1.93	60
IV-AVIO-C-063	63.5	81	20	80	2.28	60
IV-AVIO-C-075	75	92.5	20	80	2.65	60
IV-AVIO-C-100	100	119	20	80	3.67	60



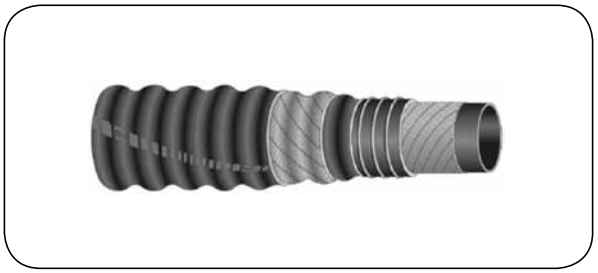
AVIO GLOBAL E

Internal layer: Black NBR rubber
Reinforcement: Synthetic braid, steel wire helix
External layer: Black CR rubber
Working temp.: From -25°C up to +70°C

Suction-delivery hose designed to transfer jet fuel A1 and liquid petrochemical products with aromatic content up to 50%. The external layer is antistatic, resistant to abrasion, oil and weather conditions. The hose features copper wires to ensure electrical conductivity. Not suitable for direct refuelling of aircrafts (check AVIO GLOBAL C). Complies with BS 3158, API 1529, EN 1361,AS 2683, VG 95955, NFPA 407. Vacuum: 0.85 bar.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	weight [kg/m]	standard length [m]
IV-AVIO-E-025	25	39	20	80	0.68	60
IV-AVIO-E-038	38	52	20	80	1.56	60
IV-AVIO-E-050	50	67.5	20	80	1.98	60
IV-AVIO-E-063	63.5	82.5	20	80	2.12	60
IV-AVIO-E-075	75	94	20	80	2.41	60
IV-AVIO-E-100	100	118.5	20	80	3.16	60

Reloading hoses for fuel and oil

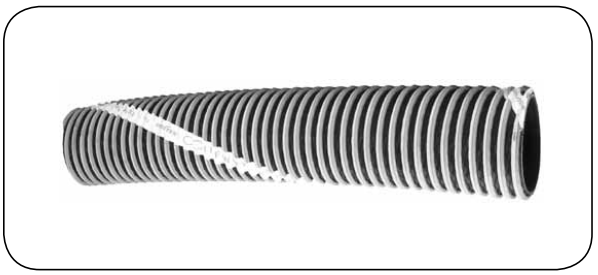


IVALO®

Internal layer: Black NBR rubber
Reinforcement: Synthetic braid, steel wire helix
External layer: Black, corrugated, self-extinguishing CR rubber
Working temp.: From -30°C up to +120°C

Lightweight, flexible suction-delivery hose designed to transfer liquid petrochemical products with aromatic content up to 30% (except ester-based products). External layer complies with ASTM C 542, resistant to abrasion, oil, ozone and weather conditions. Vacuum 0.5 bar.

code	I.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
IV-IVALO-016	16	5	15	48	0.35	60
IV-IVALO-019	19	5	15	50	0.40	60
IV-IVALO-022	22	5	15	55	0.45	60
IV-IVALO-025	25	5	15	60	0.50	60
IV-IVALO-032	32	5	15	80	0.60	60
IV-IVALO-035	35	5	15	90	0.67	60
IV-IVALO-038	38	5	15	95	0.70	60
IV-IVALO-045	45	5	15	110	0.80	60
IV-IVALO-051	51	5	15	130	1.00	60
IV-IVALO-063	63	5	15	160	1.30	60
IV-IVALO-076	76	3	9	190	1.70	60
IV-IVALO-090	90	3	9	230	2.00	60
IV-IVALO-102	102	3	9	260	2.40	60



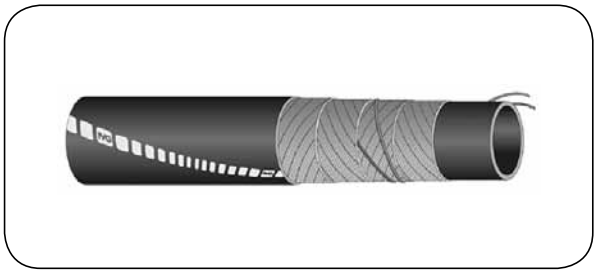
INFINITY™

Internal layer: Black NBR rubber
Reinforcement: Textile braid
External layer: Black Chemivic™ synthetic rubber + orange-green Pliovic® external helix
Working temp.: From -40°C up to +70°C

Suction-delivery hose designed to transfer liquid petrochemical products with aromatic content up to 60%. Very lightweight, flexible and easy to handle due to the exclusive construction based on the double external helix. The hose features copper wires to ensure electrical conductivity.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	vacuum [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
GY-INFINITY-050	51	71	10	0.77	38	1.52	30.5
GY-INFINITY-075	76	96	6.9	0.77	50	2.18	30.5
GY-INFINITY-100	102	122	5.2	0.77	65	2.57	30.5

Reloading hoses for fuel and oil

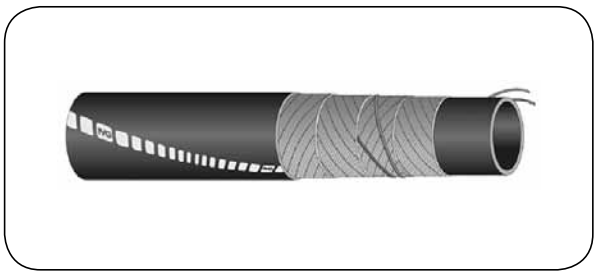


AUSTRALIA®

Internal layer: Black NBR compound
Reinforcement: Synthetic braid
External layer: Black CR compound
Working temp.: From -20°C up to +70°C

Delivery hose designed to transfer liquid petrochemical products with aromatic content up to 30%. The hose features copper wires to ensure electrical conductivity. External layer resistant to abrasion, oil and weather conditions.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	weight [kg/m]	standard length [m]
IV-AUSTRALIA-010	10	17	10	30	0.20	120
IV-AUSTRALIA-013	13	20	10	30	0.25	120
IV-AUSTRALIA-016	15	23	10	30	0.31	120
IV-AUSTRALIA-019	19	27	10	30	0.39	120
IV-AUSTRALIA-022	22	30	10	30	0.59	120
IV-AUSTRALIA-025	25	35	10	30	0.66	120
IV-AUSTRALIA-028	28	38	10	30	0.72	120
IV-AUSTRALIA-032	32	42	10	30	0.82	120
IV-AUSTRALIA-035	35	45	10	30	0.86	120
IV-AUSTRALIA-038	38	47	10	30	0.88	120
IV-AUSTRALIA-040	40	50	10	30	0.90	120
IV-AUSTRALIA-045	45	55	10	30	1.01	120
IV-AUSTRALIA-051	51	61	10	30	1.12	120
IV-AUSTRALIA-060	60	73	10	30	1.82	120
IV-AUSTRALIA-063	63.5	74	10	30	1.46	120
IV-AUSTRALIA-076	76	89	10	30	2.14	120
IV-AUSTRALIA-090	90	105	10	30	2.87	120
IV-AUSTRALIA-102	102	115.5	10	30	2.97	120



AUSTRALIA® EN1360

Internal layer: Black NBR compound
Reinforcement: Synthetic braid
External layer: Black CR compound
Working temp.: From -20°C up to +70°C

Delivery hose designed to transfer liquid petrochemical products with aromatic content up to 30%. Internal layer is antistatic - R < 1 MΩ/m. External layer is resistant to abrasion, oil and weather conditions. The hose has copper wire to ensure electrical conductivity between hose ends (R < 10^2 Ω/lgth.). Complies with EN1360:05 standard type 1 category M.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	weight [kg/m]	standard length [m]
IV-AUSTRALIA-EN-016	16	28	16	48	0.51	120
IV-AUSTRALIA-EN-019	19	31	16	48	0.58	120
IV-AUSTRALIA-EN-025	25	37	16	48	0.72	120

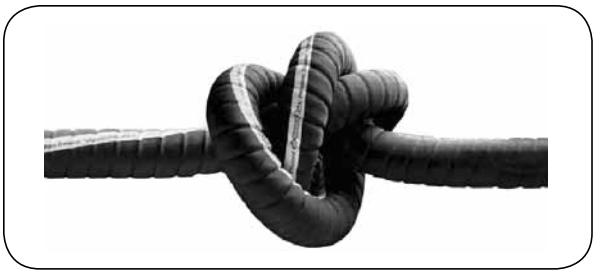
Reloading hoses for fuel and oil

CARACAS®

Internal layer: Black NBR rubber
Reinforcement: Synthetic braid, steel wire helix
External layer: Black, corrugated CR rubber
Working temp.: From -20°C to +70°C (CARACAS 30%)
From -54°C to +70°C (CARACAS 50%)

Lightweight, flexible suction-delivery hose designed to transfer liquid petrochemical products. The hose features copper wires to ensure electrical conductivity. Excellent for reloading applications. External layer resistant to abrasion, oil, ozone and weather conditions.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	vacuum [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
for products with up to 30% aromatic contents								
IV-CARACAS-032	32	43.5	6	18	0.54	90	0.93	60
IV-CARACAS-038	38	50	6	18	0.54	105	1.19	60
IV-CARACAS-051	51	63	6	18	0.54	135	1.54	60
IV-CARACAS-063	63.5	77	6	18	0.54	180	2.27	60
IV-CARACAS-076	76	90	6	18	0.54	210	2.65	60
IV-CARACAS-102	102	117	6	18	0.54	275	3.68	60
for products with up to 50% aromatic contents								
IV-CARACAS50-051	51	62	6	18	0.54	125	1.39	60
IV-CARACAS50-063	63.5	77	6	18	0.54	165	1.77	60
IV-CARACAS50-076	76	89	4	12	0.54	190	2.20	60
IV-CARACAS50-102	102	117	4	12	0.54	250	2.90	60



EXTREMEFLEX®

Internal layer: Black NBR rubber
Reinforcement: Textile braid, steel wire helix
External layer: Black, corrugated Chemivic™ rubber compound
Working temp.: From -40°C up to +93°C

Extremely flexible, suction-delivery hose developed to transfer liquid petrochemical products with aromatic content up to 60%. A corrugated external layer provides perfect abrasion resistance and ease while dragging the hose. Also available with a red external layer.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	vacuum [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
GY-EXTREMEFLEX-019	19.1	30.5	17	0.9	19.5	0.65	30.5
GY-EXTREMEFLEX-025	25.4	36.8	17	0.9	25.4	0.81	30.5
GY-EXTREMEFLEX-038	38.1	48.5	17	0.9	38.1	1.08	30.5
GY-EXTREMEFLEX-051	50.8	61.8	17	0.9	50.8	1.43	30.5
GY-EXTREMEFLEX-063	63.5	76.1	13	0.9	63.5	2.10	30.5
GY-EXTREMEFLEX-076	76.2	88.8	13	0.9	76.2	2.51	30.5
GY-EXTREMEFLEX-102	101.6	115.7	10	0.9	101.6	3.61	30.5

Reloading hoses for fuel and oil

RAFFINERIA / CLC

Internal layer: Black, antistatic NBR rubber
Reinforcement: Synthetic braid, steel wire helix
External layer: Black, corrugated synthetic rubber
Working temp.: From -30°C up to +80°C (with peaks up to +120°C depending on medium)

Lightweight, flexible, suction-delivery hose developed to transfer liquid petrochemical products with aromatic content up to 50%. Antistatic internal layer R <10^6 Ω. The hose has copper wire to ensure electrical conductivity between hose ends. Excellent solution for loading and unloading systems and other applications that require small bending radius. External layer is resistant to abrasion, mineral oils, ozone, ageing, weather conditions and brief contact with hydrocarbons. Vacuum 0.9 bar.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
MT-RAFFINERIA-CLC-019	19	30	16	48	60	0.56	40
MT-RAFFINERIA-CLC-025	25	36	16	48	75	0.58	40
MT-RAFFINERIA-CLC-032	32	43	16	48	100	0.90	40
MT-RAFFINERIA-CLC-038	38	51	16	48	120	1.10	40
MT-RAFFINERIA-CLC-040	40	53	16	48	120	1.15	40
MT-RAFFINERIA-CLC-045	45	59	16	48	150	1.48	40
MT-RAFFINERIA-CLC-050	50	64	16	48	180	1.60	40
MT-RAFFINERIA-CLC-063	63.5	77.5	12	36	250	2.05	40
MT-RAFFINERIA-CLC-070	70	85	12	36	280	2.43	40
MT-RAFFINERIA-CLC-076	76	91	10	30	300	2.60	40
MT-RAFFINERIA-CLC-080	80	95	10	30	320	2.73	40
MT-RAFFINERIA-CLC-102	102	122	10	30	400	3.73	40

Reloading hoses for fuel and oil

★★★★★

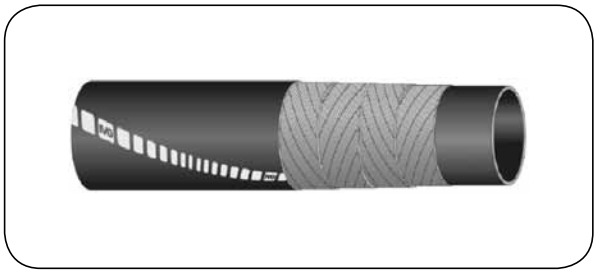
OILSTAR / SD

Internal layer: Black NBR rubber
Reinforcement: Synthetic braid, steel wire helix
External layer: Black SBR/NBR rubber
Working temp.: From -30°C up to +70°C

Robust suction-delivery hose designed to transfer fuel, liquid petrochemical products with aromatic content up to 50%. The hose features two copper wires to ensure electrical conductivity. Conductive external layer - R <10^6 Ω/m, resistant to abrasion, oil, ozone and weather conditions. Vacuum 0.9 bar.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
SO-OILSTAR-SD-019	19	29	10	30	95	0.55	40
SO-OILSTAR-SD-025	25	35	10	30	125	0.69	40
SO-OILSTAR-SD-032	32	42	10	30	160	0.84	40
SO-OILSTAR-SD-038	38	48	10	30	190	1.05	40
SO-OILSTAR-SD-040	40	50	10	30	200	1.10	40
SO-OILSTAR-SD-045	45	55	10	30	225	1.19	40
SO-OILSTAR-SD-051	51	61	10	30	255	1.33	40
SO-OILSTAR-SD-060	60	71	10	30	300	1.81	40
SO-OILSTAR-SD-063	63	75	10	30	315	2.05	40
SO-OILSTAR-SD-076	76	88	10	30	380	2.42	40
SO-OILSTAR-SD-080	80	92	10	30	400	2.54	40
SO-OILSTAR-SD-090	90	104	10	30	450	3.45	40
SO-OILSTAR-SD-100	100	114	10	30	500	3.90	40
SO-OILSTAR-SD-110	110	124	10	30	550	4.59	40
SO-OILSTAR-SD-150	150	170	10	30	750	9.49	20

Reloading hoses for fuel and oil

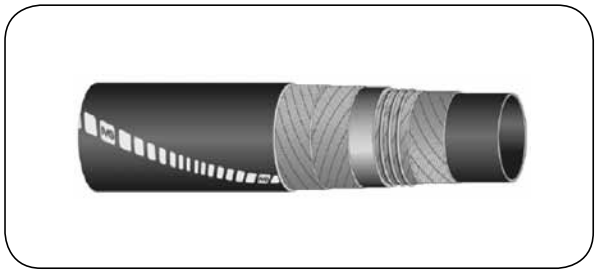


GENOVA® GLOBAL „OHM”

Internal layer: Black NBR1 rubber
Reinforcement: Synthetic braid
External layer: Black, antistatic synthetic rubber
Working temp.: From -20°C up to +70°C

Delivery hose developed to transfer liquid petrochemical products with aromatic content up to 50%. The hose features copper wires to ensure electrical conductivity. External layer resistant to abrasion, oil, ozone and weather conditions. Complies with: EN 12115:11, EN 1761, ISO 2929, TRbF. Electrical resistance: OHM/T - electrically conductive hose, R ≤ 10^6 Ω/lgth. Tested and approved by INERIS for work in ATEX potentially explosive atmospheres.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	weight [kg/m]	standard length [m]
IV-GENOVA-EN-019	19	30	16	64	0.51	120
IV-GENOVA-EN-025	25	37	16	64	0.67	120
IV-GENOVA-EN-032	32	45	16	64	0.88	120
IV-GENOVA-EN-038	38	51	16	64	1.04	120
IV-GENOVA-EN-050	50	66	16	64	1.73	120
IV-GENOVA-EN-063	63.5	79.5	16	64	2.10	120
IV-GENOVA-EN-075	75	91	16	64	2.44	120
IV-GENOVA-EN-100	100	116	16	64	2.97	120



GENOVA / LL® GLOBAL „OHM”

Internal layer: Black NBR1 rubber
Reinforcement: Synthetic braid, steel wire helix
External layer: Black, antistatic synthetic rubber
Working temp.: From -20°C up to +70°C

Suction-delivery hose developed to transfer liquid petrochemical products with aromatic content up to 50%. The hose features copper wires to ensure electrical conductivity. The external layer resistant to abrasion, oil, ozone and weather conditions. Complies with: EN 12115:11, EN 1761, ISO 2929, TRbF. Electrical resistance: OHM/T - electrically conductive hose, R ≤ 10^6 Ω/lgth. Tested and approved by INERIS for work in ATEX potentially explosive atmospheres. Vacuum 0.9 bar.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
IV-GENOVA-LL-EN-019	19	32	16	64	114	0.77	120
IV-GENOVA-LL-EN-025	25	38	16	64	150	0.94	120
IV-GENOVA-LL-EN-032	32	45	16	64	176	1.14	120
IV-GENOVA-LL-EN-038	38	52	16	64	228	1.46	120
IV-GENOVA-LL-EN-050	50	65.5	16	64	275	2.04	120
IV-GENOVA-LL-EN-063	63.5	78.5	16	64	285	2.59	120
IV-GENOVA-LL-EN-075	75	90	16	64	337	3.09	120
IV-GENOVA-LL-EN-100	100	116	16	64	450	4.42	120

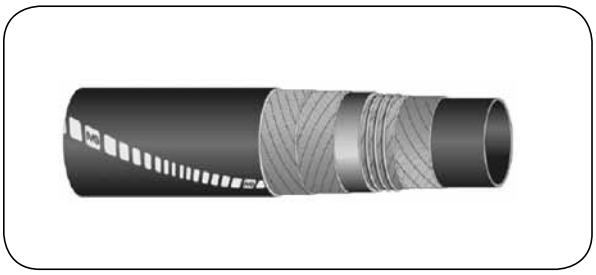
Reloading hoses for fuel and oil

FUEL SOFTWALL®

Internal layer: Black PVC/NBR compound
Reinforcement: Synthetic braid
External layer: Black CR compound
Working temp.: From -25°C up to +90°C

Delivery hose designed to transfer liquid petrochemical products with aromatic content up to 50%. The hose features copper wires to ensure electrical conductivity. Flame retardant external layer resistant to abrasion, oil, sea water and weather conditions. It is a specialist hose designed to serve oil-rigs. Widely used in the North Sea.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	standard length [m]
IV-FUEL-SW-076	76	91.5	17	60	120
IV-FUEL-SW-102	102	118	17	60	120
IV-FUEL-SW-127	127	145	17	60	120
IV-FUEL-SW-152	152	174	17	60	120
IV-FUEL-SW-203	203	225	17	60	60



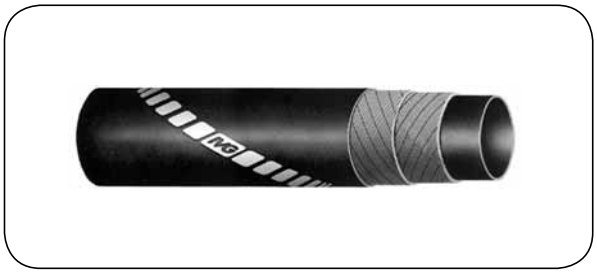
FUEL HARDWALL®

Internal layer: Black PVC/NBR compound
Reinforcement: Synthetic braid, steel wire helix
External layer: Black CR compound
Working temp.: From -25°C up to +90°C
From -20°C up to +90°C (FUEL/HW/30)

Suction-delivery hose designed to transfer liquid petrochemical products with aromatic content up to 50%. The hose features copper wires to ensure electrical conductivity. Flame retardant external layer resistant to abrasion, oil, sea water and weather conditions. The hose has a tensile strength of up to 4 tons. It is a specialist hose designed to serve oil-rigs. Widely used in the North Sea.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	standard length [m]
FUEL HARDWALL					
IV-FUEL-HW-076	76	94	17	60	120
IV-FUEL-HW-102	102	120.5	17	60	120
IV-FUEL-HW-127	127	151	17	60	60
IV-FUEL-HW-152	152	181.5	17	60	60
IV-FUEL-HW-203	203	238	17	60	60
FUEL HARDWALL-30					
IV-FUEL-HW-30-102	102	127	30	90	60
IV-FUEL-HW-30-127	127	155.5	30	90	60
IV-FUEL-HW-30-152	152	188	30	90	60

Hot asphalt hoses

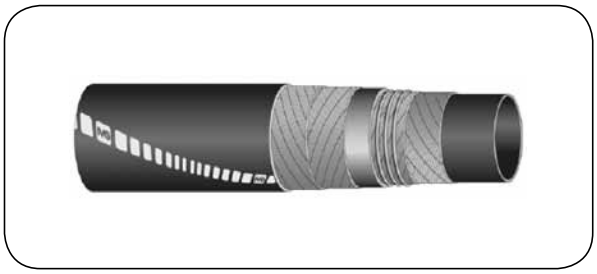


SEVEN CORD®

Internal layer: Black polyacrylic compound
Reinforcement: Steel braid
External layer: Black polyacrylic compound
Working temp.: From -15°C up to +200°C

Robust, flexible delivery hose designed to transfer liquid asphalt. Excellent for reloading applications. External layer resistant to abrasion, oil, ozone, tar and weather conditions.

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
IV-SEVENCORD-13	13	25	10	40	104	0.55	120
IV-SEVENCORD-16	16	28	10	40	128	0.63	120
IV-SEVENCORD-19	19	31	10	40	152	0.72	120
IV-SEVENCORD-25	25	39	10	40	200	1.23	120
IV-SEVENCORD-32	32	45	10	40	256	1.19	120
IV-SEVENCORD-40	40	54	10	40	300	1.53	120
IV-SEVENCORD-51	51	65	10	40	408	1.89	120



SEVEN®

Internal layer: Black polyacrylic compound
Reinforcement: Steel braid, steel wire helix
External layer: Black synthetic rubber
Working temp.: From -15°C up to +200°C

Robust, flexible suction-delivery hose designed to transfer liquid asphalt. Excellent for reloading applications. External layer resistant to abrasion, oil, ozone, tar and weather conditions. Available manufactured according to EN 13482:2001 (diameters DN51, DN63, DN 76, DN 102).

code	I.D. [mm]	O.D. [mm]	working pressure [bar]	bursting pressure [bar]	bending radius [mm]	weight [kg/m]	standard length [m]
IV-SEVEN-019	19	32	10	40	75	0.93	120
IV-SEVEN-025	25	40	10	40	100	1.24	120
IV-SEVEN-032	32	48	10	40	125	1.71	120
IV-SEVEN-038	38	53.5	10	40	150	1.92	120
IV-SEVEN-051	51	69.5	10	40	200	2.66	120
IV-SEVEN-063	63.5	81	10	40	250	3.12	120
IV-SEVEN-076	76	95.5	10	40	300	4.95	120
IV-SEVEN-090	90	109.5	10	40	330	5.73	60
IV-SEVEN-102	102	125	10	40	400	7.82	60

Oil exploration hoses

ROTARY VIBRATOR / DRILLING

Internal layer: Modified NBR rubber
Reinforcement: Multiple layers of high tensile plated steel cables and polyester braid embedded in rubber
External layer: Modified NBR rubber
Working temp.: From -20°C up to +82°C

Heavy duty, flexible hose designed to crude oil, drilling fluid and bailings. Widely used as a flexible connection between standpipe and swivel (ROTARY DRILLING) or between pump and standpipe (ROTARY VIBRATOR). External layer resistant to abrasion, corrosion, cutting, oil and water. Available as complete API 7K certified hose assemblies with HAMMER LUG unions, API flanges or NPT threads.

I.D. [mm]	O.D. [mm]	working pressure		test pressure		bursting pressure		API class	bending radius [mm]	max. length [m]
		[bar]	[PSI]	[bar]	[PSI]	[bar]	[PSI]			
65	105	344	5000	689	10000	861	12500	D	914	27
75	117								1219	
90	133								1371	
100	142								1371	
65	131	517	7500	1034	15000	1292	18750	E	1219	
75	143								1219	
90	153								1371	
100	164								1524	

CHOKE & KILL

Internal layer: Viton
Reinforcement: Multiple layers of high tensile plated steel cables and polyester braid embedded in rubber
External layer: Modified NBR rubber
Working temp.: From -20°C up to +93°C

Hose designed to BOP (Blow Out Preventer) systems to control well kicks during exploration work. During drilling, pockets of high pressure gas may get into the drill string. As the gas moves upward it expands making the drilling mud too lightweight to control pressure in the hole. If the kick is too strong, it can blow out the well. To prevent this high pressure, mud, up to 15.000 PSI, is pumped down the choke line to force the gas back into the formation. If this is not successful, high pressure cement, up to 15.000 PSI, is pumped down the well through the kill line and seals it permanently.

I.D. [mm]	O.D. [mm]	working pressure		test pressure		bursting pressure		bending radius [mm]	max. length [m]
		[bar]	[PSI]	[bar]	[PSI]	[bar]	[PSI]		
65	105	344	5000	689	10000	1034	15000	914	27
75	117							1219	
90	133							1371	
100	162							1524	
65	130	689	10000	1034	15000	1551	22500	1219	
75	143							1219	
90	153							1371	
65	143	1034	15000	1551	22500	2326	33750	1524	
75	156							1524	

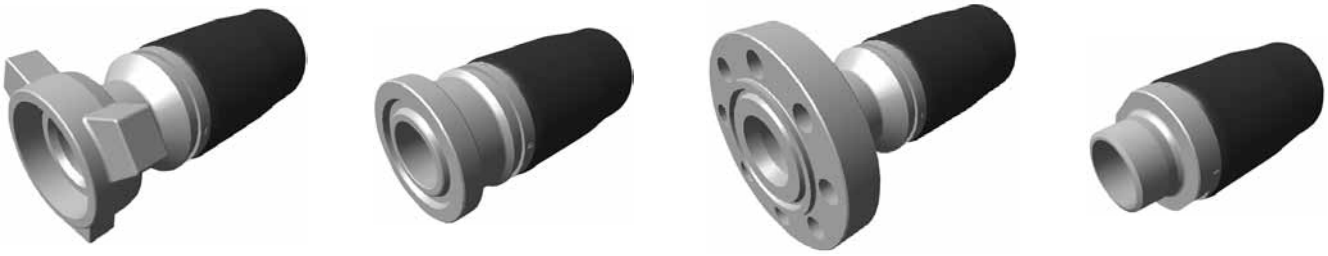
Oil exploration hoses

Complete hose assemblies for drilling equipment

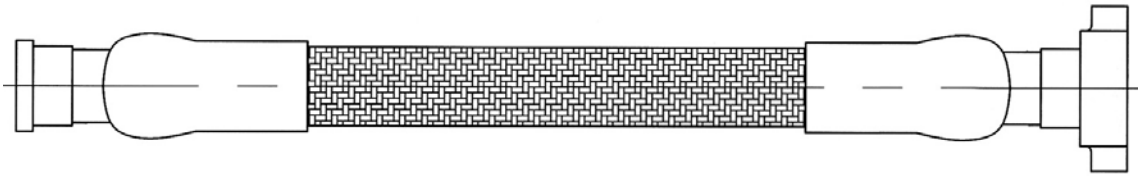
Hose assemblies designed for drilling applications are pressure tested and supplied with vulcanised or specially crimped fittings.

Most often used fittings:
- HAMMER LUG unions (fig. 602, fig.1002, fig. 1003, fig. 1502, fig. 2002, fig. 2202),
- API 16BX hub connections,
- API 6B, 6BX type flanges,
- fittings with API LPT (NPT) thread.

For HAMMER LUG unions please chapter COUPLINGS,VALVES AND CLAMPS.



Example of ROTARY DRILLING DN 75 hose assembly



HAMMER LUG union fig. 1502 (female) 3”, NPT female thread

ROTARY DRILLING DN 75 hose with 3” NPT male fittings

HAMMER LUG union fig. 1502 (male) 3”, NPT female thread + nut