



i is for INNOVATION

FIRE SAFE RAIL HOSE

WWW.FLOTECINDUSTRIAL.CO.UK/RAILTEC-RAIL-HOSE



RAILTEC™ HOSES FOR RAIL

EN 45545-2 FIRE SAFE COMPLIANT

Existing rail hoses do not stand up to excessive temperatures and are sometimes non-compliant with EN 45545-2 standards.

Railtec™ branded hoses are manufactured using the latest material technology which makes them a superior and market-leading product when addressing EN 45545-2 fire safe compliance.

The Railtec™ MED-HT hose can withstand temperatures of up to 150°C.



Railtec™ Branded Rail Hoses

After five years of R&D, the Railtec™ range of hose products use the very latest in material technology.

The product range has been independently tested before being externally inspected and officially approved. This process ensures added reliability and confidence to rail clients.

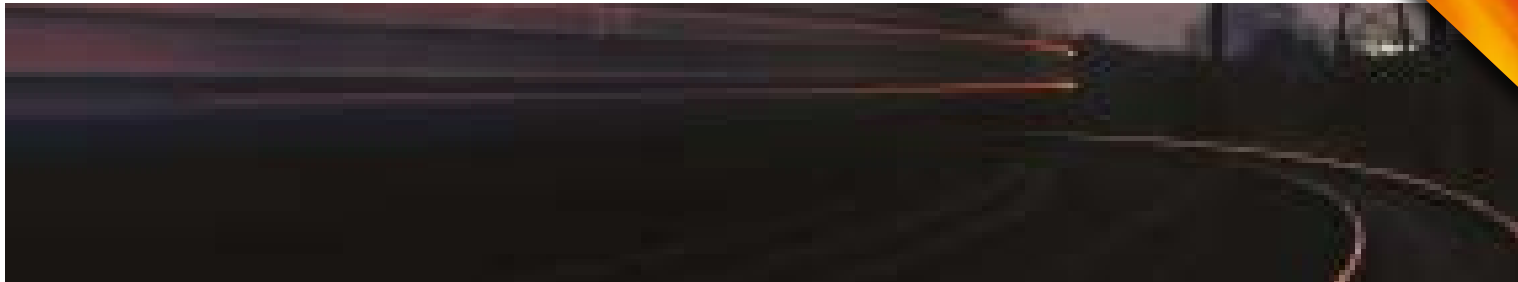
International standards for hydraulic hose assemblies state they must pass 200,000 cycles as standard.

Railtec™ hoses are tested to 600,000 impulse cycles making the life of the product three times longer than other hose products on the market.



EN 45545-2 FIRE SAFE RAIL HOSE

The Railtec™ branded range of hoses and associated couplings and clampings are the perfect solution for passenger train fleets and freight rolling stock!



SOLUTIONS FOR YELLOW PLANT

The MegaTuff® and XtraTuff® hose covering products have been developed for yellow plant rail clients with a specific need to reduce failure to machinery and track maintenance assets.

Track maintenance (yellow plant) machines and their hydraulic hoses are exposed to frequent abrasion by the very nature of work duties such as clearing trees and track ballast maintenance.

Further complications are caused by hoses rubbing together through compact and heavy working conditions.

MegaTuff® and XtraTuff® coverings reduce failure to machinery and track maintenance assets and have been tested and confirmed to be the market leader in abrasion resistance to increase asset efficiency and reduce critical downtime.

MegaTuff®

+300X

ABRASION RESISTANT

XtraTuff®

+25X

ABRASION RESISTANT



EN 45545-2 FIRE SAFE RAIL HOSE

HYDROSTATIC HOSE ISSUES

Poor routing and support are major factors in premature hose failures.

Existing hoses fitted to rail assets do not stand up to excessive temperatures and are sometimes non-compliant with EN 45545-2 standards.

Historical Hydrostatic installations have utilised standard products, with a working temperature of 100°C, where premature failures have occurred caused by a 'baking' of the hose materials.

The Railtec™ MED-HT hose can withstand temperatures of up to 150°C.

This is a significant factor when realising that hoses are placed in a heated engine environment.

International standards for hydraulic hose assemblies state they must pass 200,000 cycles as standard. Railtec™ hoses are tested to **600,000** impulse cycles making the life of the product three times longer than other hose products on the market.





EN 45545-2 FIRE SAFE RAIL HOSE

SAEMP STANDARD COVER HOSE



- RECOMMENDED FOR** For external use for rail (R23). Medium pressure hydraulic applications.
- TUBE** NBR (Nitrile) based.
- REINFORCEMENT** One braid of high tensile steel wire.
- COVER** NBR/PVC based. MSHA approved.
- TEMPERATURE RANGE** -40°C to +100°C constant and +121°C intermittent.
- STANDARDS** Exceeds ISO 1436 1SN R1ATS. EN 853 1SN. SAE 100R1AT. EN45545-2:2013+A1:2015 R23 HL2 BS6853:1999 Amd1 Categories II & Ib GM/RT2130
- COUPLINGS** -4 to -20: MegaCrimp®; -24, -32: GlobalSpiral Plus.
- TYPE APPROVALS** DNV, GL, LR, BV and ABS.
- CHARACTERISTICS/BENEFITS**
- 50% of SAE 100R1 bend radius at rated working pressure.
 - Superior flex impulse performance: tested to 600,000 impulse cycles.
 - SAEMP hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

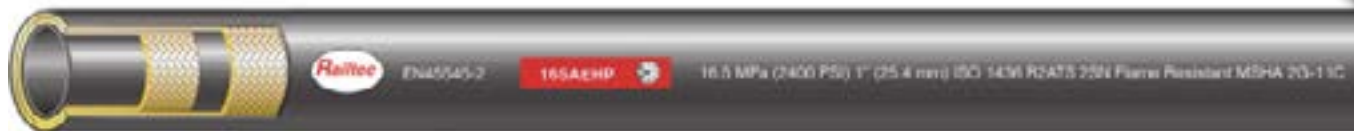
SPECIFICATION TABLE

-size	DN	"	"	mm	PSI	MPa	PSI	MPa	mm	kg/100m	REF.
-4	6	1/4	0.58	15.0	5800	40.0	23200	160.0	50	35	04SAEHP
-5	8	5/16	0.64	16.3	5000	35.0	20000	140.0	55	39	05SAEHP
-6	10	3/8	0.73	18.8	4800	33.0	19200	132.0	65	51	06SAEHP
-8	12	1/2	0.86	21.8	4000	27.5	16000	112.0	90	61	08SAEHP
-10	16	5/8	0.98	25.1	3625	25.0	14500	100.0	100	73	10SAEHP
-12	19	3/4	1.14	29.0	3100	21.5	12400	86.0	120	91	12SAEHP
-16	25	1	1.48	37.6	2400	16.5	9600	66.0	150	129	16SAEHP
-20	31	1.1/4	1.87	47.5	1825	12.5	7300	50.0	210	225	20SAEHP
-24	38	1.1/2	2.15	54.6	1300	9.0	5200	36.0	250	263	24SAEHP
-32	51	2	2.65	67.3	1175	8.0	4700	32.0	315	335	32SAEHP



EN 45545-2 FIRE SAFE RAIL HOSE

SAEHP STANDARD COVER HOSE



- RECOMMENDED FOR** for external use (κ25). High pressure hydraulic applications.
- TUBE** NBR (Nitrile) based.
- REINFORCEMENT** Two braids of high tensile steel wire.
- COVER** NBR/PVC based. MSHA approved.
- TEMPERATURE RANGE** -40°C to +100°C constant and +121°C intermittent.
- STANDARDS** Exceeds ISO 1436 2SN R2ATS. EN 853 2SN. SAE 100R2AT. EN45545-2:2013+A1:2015 R23 HL2 BS6853:1999 Amd1 Categories II & Ib GM/RT2130.
- COUPLINGS** -4 to -20: MegaCrimp®; -24, -32: GlobalSpiral Plus.
- TYPE APPROVALS** DNV, GL, LR, BV and ABS.
- CHARACTERISTICS/BENEFITS**
 - 50% of SAE 100R2 bend radius at rated working pressure based fluids.
 - Superior flex impulse performance: tested to 600,000 impulse cycles.
 - SAEHP hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

SPECIFICATION TABLE

-size	DN	"	"	mm	PSI	MPa	PSI	MPa	mm	kg/100m	REF.
-4	6	1/4	0.58	15.0	5800	40.0	23200	160.0	50	35	04SAEHP
-5	8	5/16	0.64	16.3	5000	35.0	20000	140.0	55	39	05SAEHP
-6	10	3/8	0.73	18.8	4800	33.0	19200	132.0	65	51	06SAEHP
-8	12	1/2	0.86	21.8	4000	27.5	16000	112.0	90	61	08SAEHP
-10	16	5/8	0.98	25.1	3625	25.0	14500	100.0	100	73	10SAEHP
-12	19	3/4	1.14	29.0	3100	21.5	12400	86.0	120	91	12SAEHP
-16	25	1	1.48	37.6	2400	16.5	9600	66.0	150	129	16SAEHP
-20	31	1.1/4	1.87	47.5	1825	12.5	7300	50.0	210	225	20SAEHP
-24	38	1.1/2	2.15	54.6	1300	9.0	5200	36.0	250	263	24SAEHP
-32	51	2	2.65	67.3	1175	8.0	4700	32.0	315	335	32SAEHP



The complete range of 3000 hose is also available with the MegaTuff® Cover.

- 300 times abrasion resistance over the standard 3000-SC cover
- ISO 6945 compliant - Determination of abrasion resistance of the outer cover
- Superior ozone and weathering resistance

The complete range of 3000 hose is also available with the XtraTuff® Cover.

- 25 times abrasion resistance over the standard 3000-SC cover
- ISO 6945 compliant - Determination of abrasion resistance of the outer cover

3000-SC ISOBARIC STANDARD COVER HOSE



RECOMMENDED FOR

For external use (R23). High pressure hydraulic applications. Easy to route and to install in extremely tight areas.

TUBE

NBR (Nitrile) based.

REINFORCEMENT

-4 to -8: one braid of high tensile steel wire; -10 to -16: two braids of high tensile steel wire.

COVER

NBR/PVC based. MSHA approved.

TEMPERATURE RANGE

-40°C to +100°C constant and +121°C intermittent. For water emulsions, etc. see Temperature Limits Table.

STANDARDS

Exceeds ISO 11237 R17. SAE 100R17. EN45545-2:2013+A1:2015 R23 HL2 BS6853:1999 Amd1 Categories II & Ib GM/RT2130.

COUPLINGS

MegaCrimp®.

TYPE APPROVALS

DNV, GL, LR, BV and ABS.

CHARACTERISTICS/BENEFITS

- 70% of EN 857 1SC/2SC and 50% of EN 853 1SN/2SN bend radius at rated working pressure.
- Superior flex impulse performance: tested to 600,000 impulse cycles.
- Exceeds working pressure requirements of R17.
- Meets or exceeds EN 857 1SC/2SC performance requirements.
- Lightweight.
- 3000-SC hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

SPECIFICATION TABLE

-size	DN	"	"	mm	PSI	MPa	PSI	MPa	mm	kg/100m	REF.
-4	6	1/4	0.48	12.2	3250	22.5	13000	90.0	40	17	043000-SC
-5	8	5/16	0.59	15.1	3250	22.5	13000	90.0	45	26	053000-SC
-6	10	3/8	0.63	16.0	3250	22.5	13000	90.0	50	28	063000-SC
-8	12	1/2	0.80	20.2	3250	22.5	13000	90.0	70	41	083000-SC
-10	16	5/8	0.99	25.2	3250	22.5	13000	90.0	75	73	103000-SC
-12	19	3/4	1.14	29.0	3250	22.5	13000	90.0	95	91	123000-SC
-16	25	10.48	1.48	37.7	3250	22.5	13000	90.0	115	155	163000-SC



The complete range of 3000 hose is also available with the MegaTuff® Cover.

- 300 times abrasion resistance over the standard 3000-SC cover
- ISO 6945 compliant - Determination of abrasion resistance of the outer cover
- Superior ozone and weathering resistance

The complete range of 3000 hose is also available with the XtraTuff® Cover.

- 25 times abrasion resistance over the standard 3000-SC cover
- ISO 6945 compliant - Determination of abrasion resistance of the outer cover

3000-MTC ISOBARIC STANDARD COVER HOSE



RECOMMENDED FOR

For external use (R23). High pressure hydraulic applications. Easy to route and to install in extremely tight areas.

TUBE

NBR (Nitrile) based.

REINFORCEMENT

-4 to -8: one braid of high tensile steel wire; -10 to -16: two braids of high tensile steel wire.

COVER

NBR/PVC based. MSHA approved.

TEMPERATURE RANGE

-40°C to +100°C constant and +121°C intermittent. For water emulsions, etc. see Temperature Limits Table.

STANDARDS

Exceeds ISO 11237 R17. SAE 100R17. EN45545-2:2013+A1:2015 R23 HL2 BS6853:1999 Amd1 Categories II & Ib GM/RT2130.

COUPLINGS

MegaCrimp®.

TYPE APPROVALS

DNV, GL, LR, BV and ABS.

CHARACTERISTICS/BENEFITS

- 70% of EN 857 1SC/2SC and 50% of EN 853 1SN/2SN bend radius at rated working pressure.
- Superior flex impulse performance: tested to 600,000 impulse cycles.
- Exceeds working pressure requirements of R17.
- Meets or exceeds EN 857 1SC/2SC performance requirements.
- Lightweight.
- 3000-MTC hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

SPECIFICATION TABLE

-size	DN	"	"	mm	PSI	MPa	PSI	MPa	mm	kg/100m	REF.
-4	6	1/4	0.48	12.2	3250	22.5	13000	90.0	40	17	043000-MTC
-5	8	5/16	0.59	15.1	3250	22.5	13000	90.0	45	26	053000-MTC
-6	10	3/8	0.63	16.0	3250	22.5	13000	90.0	50	28	063000-MTC
-8	12	1/2	0.80	20.2	3250	22.5	13000	90.0	70	41	083000-MTC
-10	16	5/8	0.99	25.2	3250	22.5	13000	90.0	75	73	103000-MTC
-12	19	3/4	1.14	29.0	3250	22.5	13000	90.0	95	91	123000-MTC
-16	25	10.48	1.48	37.7	3250	22.5	13000	90.0	115	155	163000-MTC

EN 45545-2 FIRE SAFE RAIL HOSE



The complete range of 3000 hose is also available with the MegaTuff® Cover.

- 300 times abrasion resistance over the standard 3000-SC cover
- ISO 6945 compliant - Determination of abrasion resistance of the outer cover
- Superior ozone and weathering resistance

The complete range of 3000 hose is also available with the XtraTuff® Cover.

- 25 times abrasion resistance over the standard 3000-SC cover
- ISO 6945 compliant - Determination of abrasion resistance of the outer cover

3000-HTC ISOBARIC STANDARD COVER HOSE



RECOMMENDED FOR

For external use (R23). High pressure hydraulic applications. Easy to route and to install in extremely tight areas.

TUBE

NBR (Nitrile) based.

REINFORCEMENT

-4 to -8: one braid of high tensile steel wire; -10 to -16: two braids of high tensile steel wire.

COVER

NBR/PVC based. MSHA approved.

TEMPERATURE RANGE

-40°C to +100°C constant and +121°C intermittent. For water emulsions, etc. see Temperature Limits Table.

STANDARDS

Exceeds ISO 11237 R17. SAE 100R17. EN45545-2:2013+A1:2015 R23 HL2 BS6853:1999 Amd1 Categories II & Ib GM/RT2130.

COUPLINGS

MegaCrimp®.

TYPE APPROVALS

DNV, GL, LR, BV and ABS.

CHARACTERISTICS/BENEFITS

- 70% of EN 857 1SC/2SC and 50% of EN 853 1SN/2SN bend radius at rated working pressure.
- Superior flex impulse performance: tested to 600,000 impulse cycles.
- Exceeds working pressure requirements of R17.
- Meets or exceeds EN 857 1SC/2SC performance requirements.
- Lightweight.
- 3000-HTC hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

SPECIFICATION TABLE

-size	DN	"	"	mm	PSI	MPa	PSI	MPa	mm	kg/100m	REF.
-4	6	1/4	0.48	12.2	3250	22.5	13000	90.0	40	17	043000-HTC
-5	8	5/16	0.59	15.1	3250	22.5	13000	90.0	45	26	053000-HTC
-6	10	3/8	0.63	16.0	3250	22.5	13000	90.0	50	28	063000-HTC
-8	12	1/2	0.80	20.2	3250	22.5	13000	90.0	70	41	083000-HTC
-10	16	5/8	0.99	25.2	3250	22.5	13000	90.0	75	73	103000-HTC
-12	19	3/4	1.14	29.0	3250	22.5	13000	90.0	95	91	123000-HTC
-16	25	10.48	1.48	37.7	3250	22.5	13000	90.0	115	155	163000-HTC



EN 45545-2 FIRE SAFE RAIL HOSE

4000-SC ISOBARIC STANDARD COVER HOSE



RECOMMENDED FOR

For external use (R23). High pressure hydraulic applications. Easy to route and to install in extremely tight areas.

TUBE

NBR (Nitrile) based.

REINFORCEMENT

Two braids of high tensile steel wire.

COVER

NBR/PVC based. MSHA approved.

TEMPERATURE RANGE

-40°C to +100°C constant and +121°C intermittent. For water emulsions, etc. see Temperature Limits Table.

STANDARDS

Exceeds ISO 11237 R19. SAE 100R19. EN45545-2:2013+A1:2015 R23 HL2 BS6853:1999 Amd1 Categories II & Ib GM/RT2130.

COUPLINGS

MegaCrimp®.

TYPE APPROVALS

DNV, GL, LR, BV and ABS.

CHARACTERISTICS/BENEFITS

- 750% of EN 857 2SC and 40% of EN 853 2SN bend radius at rated working pressure.
- Alternative to spiral hoses in high pressure lines where flexibility is required.
- Superior flex impulse performance: tested to 600,000 impulse cycles.
- Meets or exceeds EN 857 2SC performance requirements.
- Lightweight.
- 4000-SC hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

SPECIFICATION TABLE

-size	DN	"	"	mm	PSI	MPa	PSI	MPa	mm	kg/100m	REF.
-4	6	1/4	0.54	13.7	4000	28.0	16000	112.0	40	33	044000-SC
-5	8	5/16	0.61	15.4	4000	28.0	16000	112.0	45	34	054000-SC
-6	10	3/8	0.69	17.5	4000	28.0	16000	112.0	50	45	064000-SC
-8	12	1/2	0.82	20.8	4000	28.0	16000	112.0	70	51	084000-SC
-10	16	5/8	0.98	25.0	4000	28.0	16000	112.0	75	74	104000-SC
-12	19	3/4	1.15	29.1	4000	28.0	16000	112.0	95	93	124000-SC



EN 45545-2 FIRE SAFE RAIL HOSE

4000-MTC ISOBARIC STANDARD COVER HOSE



RECOMMENDED FOR

For external use (R23). High pressure hydraulic applications. Easy to route and to install in extremely tight areas.

TUBE

NBR (Nitrile) based.

REINFORCEMENT

Two braids of high tensile steel wire.

COVER

NBR/PVC based. MSHA approved.

TEMPERATURE RANGE

-40°C to +100°C constant and +121°C intermittent. For water emulsions, etc. see Temperature Limits Table.

STANDARDS

Exceeds ISO 11237 R19. SAE 100R19. EN45545-2:2013+A1:2015 R23 HL2 BS6853:1999 Amd1 Categories II & Ib GM/RT2130.

COUPLINGS

MegaCrimp®.

TYPE APPROVALS

DNV, GL, LR, BV and ABS.

CHARACTERISTICS/BENEFITS

- 750% of EN 857 2SC and 40% of EN 853 2SN bend radius at rated working pressure.
- Alternative to spiral hoses in high pressure lines where flexibility is required.
- Superior flex impulse performance: tested to 600,000 impulse cycles.
- Meets or exceeds EN 857 2SC performance requirements.
- Lightweight.
- 4000-MTC hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

SPECIFICATION TABLE

-size	DN	"	"	mm	PSI	MPa	PSI	MPa	mm	kg/100m	REF.
-4	6	1/4	0.54	13.7	4000	28.0	16000	112.0	40	33	044000-MTC
-5	8	5/16	0.61	15.4	4000	28.0	16000	112.0	45	34	054000-MTC
-6	10	3/8	0.69	17.5	4000	28.0	16000	112.0	50	45	064000-MTC
-8	12	1/2	0.82	20.8	4000	28.0	16000	112.0	70	51	084000-MTC
-10	16	5/8	0.98	25.0	4000	28.0	16000	112.0	75	74	104000-MTC
-12	19	3/4	1.15	29.1	4000	28.0	16000	112.0	95	93	124000-MTC



EN 45545-2 FIRE SAFE RAIL HOSE

4000-HTC ISOBARIC STANDARD COVER HOSE



RECOMMENDED FOR

For external use (R23). High pressure hydraulic applications. Easy to route and to install in extremely tight areas.

TUBE

NBR (Nitrile) based.

REINFORCEMENT

Two braids of high tensile steel wire.

COVER

NBR/PVC based. MSHA approved.

TEMPERATURE RANGE

-40°C to +100°C constant and +121°C intermittent. For water emulsions, etc. see Temperature Limits Table.

STANDARDS

Exceeds ISO 11237 R19. SAE 100R19. EN45545-2:2013+A1:2015 R23 HL2 BS6853:1999 Amd1 Categories II & Ib GM/RT2130.

COUPLINGS

MegaCrimp®.

TYPE APPROVALS

DNV, GL, LR, BV and ABS.

CHARACTERISTICS/BENEFITS

- 750% of EN 857 2SC and 40% of EN 853 2SN bend radius at rated working pressure.
- Alternative to spiral hoses in high pressure lines where flexibility is required.
- Superior flex impulse performance: tested to 600,000 impulse cycles.
- Meets or exceeds EN 857 2SC performance requirements.
- Lightweight.
- 4000-HTC hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

SPECIFICATION TABLE

-size	DN	"	"	mm	PSI	MPa	PSI	MPa	mm	kg/100m	REF.
-4	6	1/4	0.54	13.7	4000	28.0	16000	112.0	40	33	044000-HTC
-5	8	5/16	0.61	15.4	4000	28.0	16000	112.0	45	34	054000-HTC
-6	10	3/8	0.69	17.5	4000	28.0	16000	112.0	50	45	064000-HTC
-8	12	1/2	0.82	20.8	4000	28.0	16000	112.0	70	51	084000-HTC
-10	16	5/8	0.98	25.0	4000	28.0	16000	112.0	75	74	104000-HTC
-12	19	3/4	1.15	29.1	4000	28.0	16000	112.0	95	93	124000-HTC



EN 45545-2 FIRE SAFE RAIL HOSE

5000-SC ISOBARIC STANDARD COVER HOSE



RECOMMENDED FOR

For external use (R23). High pressure hydraulic applications. Easy to route and to install in extremely tight areas.

TUBE

NBR (Nitrile) based.

REINFORCEMENT

Two braids of high tensile steel wire.

COVER

NBR/PVC based. MSHA approved.

TEMPERATURE RANGE

-40°C to +100°C constant and +121°C intermittent.

STANDARDS

Gates proprietary. EN45545-2:2013+A1:2015 R23 HL2 BS6853:1999 Amd1 Categories II & Ib GM/RT2130.

COUPLINGS

MegaCrimp®.

TYPE APPROVALS

DNV, GL, LR and BV.

CHARACTERISTICS/BENEFITS

- 70% of EN 857 2SC and 50% of EN 853 2SN bend radius at rated working pressure.
- Superior flex impulse performance: tested to 600,000 impulse cycles.
- Superior flex impulse performance: tested to 600,000 impulse cycles.
- Meets or exceeds EN 857 2SC performance requirements.
- Lightweight.
- Meets or exceeds EN 857 2SC performance requirements.

SPECIFICATION TABLE

-size	DN	"	"	mm	PSI	MPa	PSI	MPa	mm	kg/100m	REF.
-4	6	1/4	0.54	13.7	5000	35.0	20000	140.0	50	30	045000-SC
-5	8	5/16	0.61	15.4	5000	35.0	20000	140.0	55	34	065000-SC
-8	12	1/2	0.86	21.9	5000	35.0	20000	140.0	90	66	085000-SC



EN 45545-2 FIRE SAFE RAIL HOSE

5000-MTC ISOBARIC STANDARD COVER HOSE



RECOMMENDED FOR

For external use (R23). High pressure hydraulic applications. Easy to route and to install in extremely tight areas.

TUBE

NBR (Nitrile) based.

REINFORCEMENT

Two braids of high tensile steel wire.

COVER

NBR/PVC based. MSHA approved.

TEMPERATURE RANGE

-40°C to +100°C constant and +121°C intermittent.

STANDARDS

Gates proprietary. EN45545-2:2013+A1:2015 R23 HL2 B56853:1999 Amd1 Categories II & Ib GM/RT2130.

COUPLINGS

MegaCrimp®.

TYPE APPROVALS

DNV, GL, LR and BV.

CHARACTERISTICS/BENEFITS

- 70% of EN 857 2SC and 50% of EN 853 2SN bend radius at rated working pressure.
- Superior flex impulse performance: tested to 600,000 impulse cycles.
- Superior flex impulse performance: tested to 600,000 impulse cycles.
- Meets or exceeds EN 857 2SC performance requirements.
- Lightweight.
- Meets or exceeds EN 857 2SC performance requirements.

SPECIFICATION TABLE

-size	DN	"	"	mm	PSI	MPa	PSI	MPa	mm	kg/100m	REF.
-4	6	1/4	0.54	13.7	5000	35.0	20000	140.0	50	30	045000-MTC
-5	8	5/16	0.61	15.4	5000	35.0	20000	140.0	55	34	065000-MTC
-8	12	1/2	0.86	21.9	5000	35.0	20000	140.0	90	66	085000-MTC



EN 45545-2 FIRE SAFE RAIL HOSE

5000-HTC ISOBARIC STANDARD COVER HOSE



RECOMMENDED FOR

For external use (R23). High pressure hydraulic applications. Easy to route and to install in extremely tight areas.

TUBE

NBR (Nitrile) based.

REINFORCEMENT

Two braids of high tensile steel wire.

COVER

NBR/PVC based. MSHA approved.

TEMPERATURE RANGE

-40°C to +100°C constant and +121°C intermittent.

STANDARDS

Gates proprietary. EN45545-2:2013+A1:2015 R23 HL2 BS6853:1999 Amd1 Categories II & Ib GM/RT2130.

COUPLINGS

MegaCrimp®.

TYPE APPROVALS

DNV, GL, LR and BV.

CHARACTERISTICS/BENEFITS

- 70% of EN 857 2SC and 50% of EN 853 2SN bend radius at rated working pressure.
- Superior flex impulse performance: tested to 600,000 impulse cycles.
- Superior flex impulse performance: tested to 600,000 impulse cycles.
- Meets or exceeds EN 857 2SC performance requirements.
- Lightweight.
- Meets or exceeds EN 857 2SC performance requirements.

SPECIFICATION TABLE

-size	DN	"	"	mm	PSI	MPa	PSI	MPa	mm	kg/100m	REF.
-4	6	1/4	0.54	13.7	5000	35.0	20000	140.0	50	30	045000-HTC
-5	8	5/16	0.61	15.4	5000	35.0	20000	140.0	55	34	065000-HTC
-8	12	1/2	0.86	21.9	5000	35.0	20000	140.0	90	66	085000-HTC



EN 45545-2 FIRE SAFE RAIL HOSE

MED2-HT MEDIUM PRESSURE HOSE



RECOMMENDED FOR

For external use (R23). High-temperature, high pressure hydraulic applications such as engine compartments.

TUBE

CPE (Chlorinated polyethylene) based.

REINFORCEMENT

Two braids of high tensile steel wire.

COVER

CSM (Chlorosulfinated polyethylene) based. Blue. MSHA approved.

TEMPERATURE RANGE

-40°C to +150°C. For water emulsions, etc. see Temperature Limits Table.

STANDARDS

Exceeds ISO 1436 2SN R2ATS. EN 853 2SN. SAE 100R2AT. EN45545-2:2013+A1:2015 R23 HL2 B56853:1999 Amd1 Categories II & Ib GM/RT2130.

COUPLINGS

Superior flex impulse performance: tested to 600,000 impulse cycles.

CHARACTERISTICS/BENEFITS

-4 to -20: MegaCrimp®; -24 to -32: GlobalSpiral Plus.

MED-HT hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

SPECIFICATION TABLE

-size	DN	"	"	mm	PSI	MPa	PSI	MPa	mm	kg/100m	REF.
-4	6	1/4	0.59	14.9	6000	42.0	24000	168.0	100	42	04MED-HT
-6	10	3/8	0.74	18.8	5000	35.0	20000	132.0	130	54	06MED-HT
-8	12	1/2	0.86	21.8	4250	29.0	17000	116.0	180	65	08MED-HT
-10	16	5/8	0.99	25.1	3625	25.0	14500	100.0	200	77	10MED-HT
-12	19	3/4	1.15	29.1	3100	21.5	12400	86.0	240	94	12MED-HT
-16	20	1	1.48	37.6	2500	17.5	10000	70.0	300	141	16MED-HT
-20	31	1 1/4	1.86	47.2	2250	15.5	9000	62.0	420	212	20MED-HT
-24	38	1 1/2	2.15	54.6	1800	12.4	6000	42.0	500	209	24MED-HT
-32	51	2	2.65	67.3	1500	10.3	5200	35.9	630	293	30MED-HT



EN 45545-2 FIRE SAFE RAIL HOSE

EXHI-SC HIGH PRESSURE HOSE



RECOMMENDED FOR

For external use (R23). Extremely high pressure and high impulse hydraulic applications.

TUBE

NBR (Nitrile) based.

REINFORCEMENT

Four (six for -20 to -32) alternating layers of spiralled, high tensile steel wire.

COVER

CR (Chloroprene) based. MSHA approved.

TEMPERATURE RANGE

-40°C to +121°C. For water emulsions, etc. see Temperature Limits Table.

STANDARDS

Exceeds ISO 3862 R15. SAE 100R15. EN45545-2:2013+A1:2015 R23 HL2 BS6853:1999 Amd1 Categories II & Ib GM/RT2130.

COUPLINGS

-6 to -20: GlobalSpiral; -24, -32: GlobalSpiral Maximum.

TYPE APPROVALS

DNV, GL, LR, BV and ABS.

CHARACTERISTICS/BENEFITS

- 7Up to 40% of EN 856 4SP/4SH bend radius at rated working pressure.
- Extremely Flexible.
- Superior flex impulse performance: tested to 1,000,000 impulse cycles at 50% of SAE 100R15 bend radii (except -32).
- Meets or exceeds performance requirements of EN 856 4SP (-8 to -32) and EN 856 4SH (-12 to -32).
- EXHI hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

SPECIFICATION TABLE

-size	DN	"	"	mm	PSI	MPa	PSI	MPa	mm	kg/100m	REF.
-6	10	3/8	0.80	20.2	6000	42.0	24000	168.0	65	71	06EXHI
-8	12	1/2	0.95	24.0	6000	42.0	24000	168.0	90	89	08EXHI
-10	16	5/8	1.09	27.6	6000	42.0	24000	168.0	100	115	10EXHI
-12	19	3/4	1.24	31.4	6000	42.0	24000	168.0	120	144	12EXHI
-16	25	1	1.53	38.7	6000	42.0	24000	168.0	150	223	16EXHI
-20	31	1.1/4	1.97	50.0	6000	42.0	24000	168.0	210	399	20EXHI
-24	38	1.1/2	2.26	57.4	6000	42.0	24000	168.0	250	482	24EXHI
-32	51	2	2.80	71.1	6000	42.0	24000	168.0	635	719	32EXHI



EN 45545-2 FIRE SAFE RAIL HOSE

EXHI-HTC HIGH PRESSURE HOSE



RECOMMENDED FOR

For external use (R23). Extremely high pressure and high impulse hydraulic applications.

TUBE

NBR (Nitrile) based.

REINFORCEMENT

Four (six for -20 to -32) alternating layers of spiralled, high tensile steel wire.

COVER

CR (Chloroprene) based. MSHA approved.

TEMPERATURE RANGE

-40°C to +121°C. For water emulsions, etc. see Temperature Limits Table.

STANDARDS

Exceeds ISO 3862 R15. SAE 100R15. EN45545-2:2013+A1:2015 R23 HL2 BS6853:1999 Amd1 Categories II & Ib GM/RT2130.

COUPLINGS

-6 to -20: GlobalSpiral; -24, -32: GlobalSpiral Maximum.

TYPE APPROVALS

DNV, GL, LR, BV and ABS.

CHARACTERISTICS/BENEFITS

- 7Up to 40% of EN 856 4SP/4SH bend radius at rated working pressure.
- Extremely Flexible.
- Superior flex impulse performance: tested to 1,000,000 impulse cycles at 50% of SAE 100R15 bend radii (except -32).
- Meets or exceeds performance requirements of EN 856 4SP (-8 to -32) and EN 856 4SH (-12 to -32).
- EXHI hose is compatible with biodegradable hydraulic fluids like synthetic esters, polyglycols and vegetable oils as well as petroleum-based fluids.

SPECIFICATION TABLE

-size	DN	"	"	mm	PSI	MPa	PSI	MPa	mm	kg/100m	REF.
-6	10	3/8	0.80	20.2	6000	42.0	24000	168.0	65	71	06EXHI
-8	12	1/2	0.95	24.0	6000	42.0	24000	168.0	90	89	08EXHI
-10	16	5/8	1.09	27.6	6000	42.0	24000	168.0	100	115	10EXHI
-12	19	3/4	1.24	31.4	6000	42.0	24000	168.0	120	144	12EXHI
-16	25	1	1.53	38.7	6000	42.0	24000	168.0	150	223	16EXHI
-20	31	1.1/4	1.97	50.0	6000	42.0	24000	168.0	210	399	20EXHI
-24	38	1.1/2	2.26	57.4	6000	42.0	24000	168.0	250	482	24EXHI
-32	51	2	2.80	71.1	6000	42.0	24000	168.0	635	719	32EXHI



EN 45545-2 FIRE SAFE RAIL HOSE

BLUE STRIPE™



RECOMMENDED FOR

For external use (R23). High-temperature coolant, water and air applications. Suitable for OAT (organic additive technology) engine fluids.

TUBE

EPDM.

REINFORCEMENT

-4 to -12 and -16: 4230SB - aramid spiral; -14 and -18 to -36: 4175SC - nylon cord.

COVER

EPDM Based.

TEMPERATURE RANGE

-40°C to +150°C.

STANDARDS

4230SB - normal duty heater hose to SAE 20R3 EC Class D-1.
4175SC - heavy duty radiator hose to SAE 20R1 EC Class D-1, standard wall.
EN45545-2:2013+A1:2015 R23 HL2 BS6853:1999 Amd1 Categories II & Ib GM/RT2130.

CHARACTERISTICS/BENEFITS

- Premium engine hose
- Compounded to resist electro-chemical degradation, the leading cause of hose failure
- Wrapped cover on size 7/8" and as of size 1.1/8"



Do not use for fuel or oil transfer applications.

NOTE:

Also available as customer-made curved hose to SAE 20R4 EC D-1 to fit specific applications and meeting customer specifications. Curved hose recommended for upper, lower, by-pass, heater and other coolant applications. Can be installed without buckling, bending out of shape or straining at the connections.

Can be used with PowerGrip® Shrink Band Clamps, made from a heat-sensitive thermoplastic with a memory to prevent over- or under-tightening. Retains dynamic tension and never needs retightening. Eliminates the risk for antifreeze leaks and ground water contamination. Can be installed with an ordinary heat gun.



Who says leak-free is not guaranteed?

The MegaCrimp® coupling solution uses a unique tooth profile which 'bites' into the wire to remain inserted during the crimping process whilst providing superior coupling retention.

Within the MegaCrimp® is a remarkable 'C-insert' component ensuring the connection stays round to the shape of the hose, eliminating the issue of the 'polygon' effect which is known to contribute to leak paths.

Combining these features with the Gates TuffCoat™ plating application helps to provide **4x more resistance to corrosion.**



Gates Global Spiral™ couplings are specifically designed for spiral-wire hoses such as the Railtec™ EXHI high pressure hose.

An added advantage is they are a 'no skive' coupling, reducing the risk of contamination and labour costs, in the assembly process.



MOBILE CRIMPING MACHINE

MAKING YOUR OWN HOSE IS SIMPLE!

ELIMINATE THE NEED FOR EXPENSIVE HOSE VANS!

Flotec can loan a Gates self-assembly machine for **FREE** - all you have to do is buy the hoses and fittings to be used with the machine*.

Also available:

- Free site survey to provide a relevant stock package to cover machine requirements
- Yearly service and calibration from Flotec's site engineers
- Binning and stocking service
- Cutting equipment
- Multiple packages for multi-site use

Benefits:

- Free Crimper training and certification for your operators
- Safe hydraulics courses available
- Easy-to-make, factory standard hose assemblies
- Fully tested crimp data
- 24/7 availability
- Proven cost savings
- Low maintenance machinery

*Terms and conditions apply. Subject to an initial stock order and regular spend. Service/calibration charges apply,

Please call 01509 230100 for more information.



About Flotec

Established in 1995, Flotec specialises in a wide variety of hydraulics fluid power solutions.

From its purpose built facility in Loughborough Leicestershire, Flotec offers hydraulic fluid power solutions, hydraulic hose production, extensive stock holding, an online store and trade counter service.

Flotec holds the prestigious title of Gates Hydraulics OEM Partner.

Keeping Rolling Stock Moving...

Flotec Industrial Limited provides a range of hydraulic rail hose and connection solutions for the maintenance and overhaul of traction fleets and rolling stock.

The Flotec Rail Mission:

- Deliver rail cost savings
- Provide long-term engineering solutions
- Reduce critical down time







Flotec Industrial Ltd

Jubilee Drive, Pavilion Way, Loughborough, Leicestershire LE11 5GW

Tel: +44 (0) 1509 230 100

Email: sales@floteconline.com

Website: www.flotecindustrial.co.uk

Online Store: www.floteconline.co.uk