

Ignition Wiring Rails & Hardware

SHIELDED

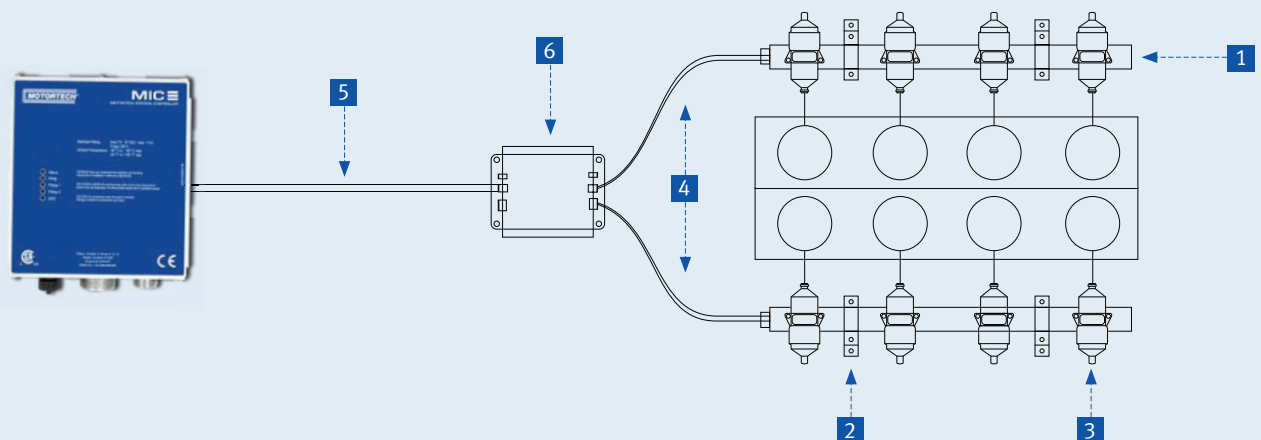
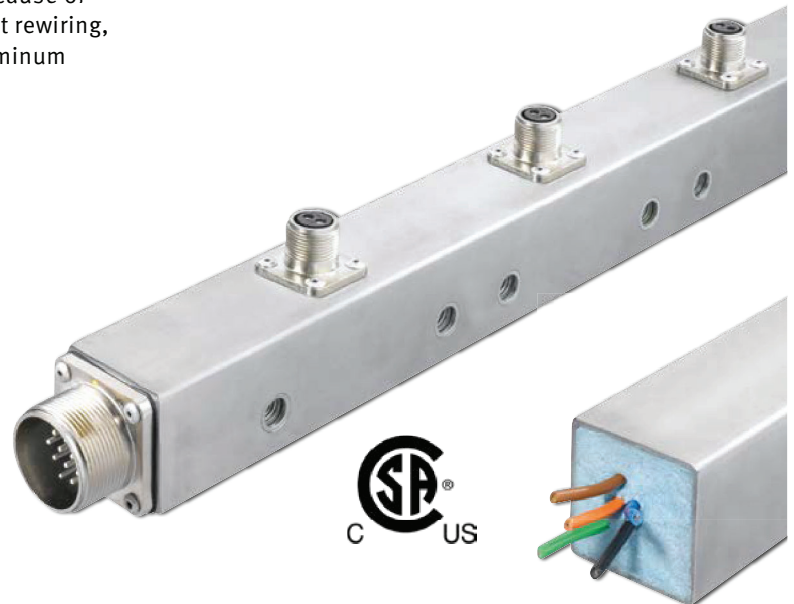
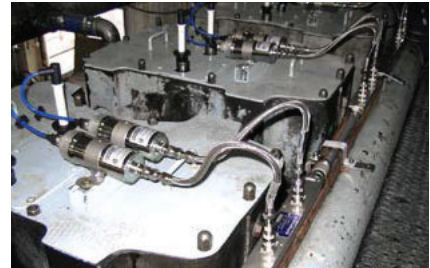


Wiring Rail System for Ignition Control

MOTORTECH stainless steel, vibration resistant rail assembly will withstand any harsh environment commonly found in the oil & gas industry. The proven design is made for engine manufacturers and the global aftermarket.

Do not go Low-Tech and take the risk of engine down time because of equipment being under repair. Eliminate the need for constant rewiring, connector exchanges or straightening out weak and bent aluminum wiring rails.

- Made of stainless steel
- Rigid military style connectors
- Rails are filled with special foam to ensure that all wires are separated from ground and will not vibrate
- Water-proof design – built to last in uncovered environment
- Repairable by MOTORTECH's assigned distributors in the event of mechanical damage
- Wiring rails can be used for shielded and unshielded applications
- Due to base rail structure easy for stocking
- Quick service access with quick-disconnect connections



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1 AlphaRail for Ignition Control – Specification Table

P/N 95.8 **A** **B** **C** **D** **E** **F** **G** **H** **J**

A	Ignition Coils per Cylinder
6	Engine with one ignition coil per cylinder
7	Engine with two ignition coils per cylinder ¹⁾

¹⁾ See “HJ” for distance between two ignition coils.

B	Number of Cylinders per Bank		
1	Special version	5	5 cylinders
2	2 cylinders	6	6 cylinders
3	3 cylinders	8	8 cylinders
4	4 cylinders	0	10 cylinders

CD	Distance between the Cylinders		
04	4 in	12	12 in
06	6 in	13	13 in
07	7 in	14	14 in
08	8 in	16	16 in
10	10 in	27	27 in
11	11 in	33	33 in

E	Ignition Coil Mounting
N	STANDARD – NO ignition coil mounted

F	Double Rail ¹⁾ – Length of Flex Conduit		
A	NO Double Rail	E	24 in
B	12 in	F	32 in
C	16 in	G	40 in
D	20 in	H	52 in

¹⁾ Two ignition wiring rails connected by flex conduit.

G	Specification of Ignition Coil
N	STANDARD – NO ignition coil mounted ¹⁾

¹⁾ Ignition coils have to be ordered separately
(See page 32 – Ignition Coils)

HJ	Distance between two Ignition Coils – Only for two Ignition Coils per Cylinder		
04	4 in	16	16 in
06	6 in	18	18 in
08	8 in	20	20 in
10	10 in	22	22 in
12	12 in	24	24 in
14	14 in		

AlphaRail Wiring Rails System for Ignition Control

Ignition Wiring Rails & Hardware

1 AlphaRail for Ignition Control – Wiring Rails for common Applications ¹⁾

P/N	Description	Engine Make	Model	Required Quantity per Engine
95.87.420-NBN-05	AlphaRail wiring rail	CATERPILLAR®	G399	2
95.86.406-NAN	AlphaRail wiring rail	CATERPILLAR®	G3304	1
95.86.606-NAN	AlphaRail wiring rail	CATERPILLAR®	G3306	1
95.86.607-NAN	AlphaRail wiring rail	CATERPILLAR®	G3406	1
95.86.407-NAN	AlphaRail wiring rail	CATERPILLAR®	G3408	2
95.86.607-NAN	AlphaRail wiring rail	CATERPILLAR®	G3412	2
95.86.411-NAN	AlphaRail wiring rail	CATERPILLAR®	G3508	2
95.86.611-NAN	AlphaRail wiring rail	CATERPILLAR®	G3512	2
95.86.811-NAN	AlphaRail wiring rail	CATERPILLAR®	G3516	2
95.87.631-NGN-08	AlphaRail wiring rail	CLARK®	HBA-6T	1
95.87.531-NAN-08	AlphaRail wiring rail	CLARK®	HBA-10T	2
95.87.637-NAN	AlphaRail wiring rail	CLARK®	TCVD-12	2
95.87.631-NGN-10	AlphaRail wiring rail	CLARK®	TLA-6T	1
95.87.544-NGN-06	AlphaRail wiring rail	COOPER®	GMVH-10	2
95.87.541-NGN-10	AlphaRail wiring rail	COOPER®	GMW-10	2
95.87.340-NAN	AlphaRail wiring rail	COOPER®	GMWC-6	2
95.87.822-NGN-06	AlphaRail wiring rail	COOPER®	LSV-16	2
95.87.633-NFN-22	AlphaRail wiring rail	INGERSOLL RAND®	KVR-412	2
95.87.344-NAN-04	AlphaRail wiring rail	INGERSOLL RAND®	KVS-6	2
95.86.427-NDN	AlphaRail wiring rail	INGERSOLL RAND®	PKVG-8	2
95.86.627-NDN	AlphaRail wiring rail	INGERSOLL RAND®	PKVG-12	2
95.86.627-NFN	AlphaRail wiring rail	INGERSOLL RAND®	PKVGR-12	2
95.86.437-NAN	AlphaRail wiring rail	INGERSOLL RAND®	XVG-8	2
95.86.606-NAN	AlphaRail wiring rail	WAUKESHA®	F817	1
95.86.614-NAN	AlphaRail wiring rail	WAUKESHA®	F1197GL/GU	1
95.86.608-NAN	AlphaRail wiring rail	WAUKESHA®	VG F18	1
95.86.808-NAN	AlphaRail wiring rail	WAUKESHA®	VG F H24	1
95.86.609-NAN	AlphaRail wiring rail	WAUKESHA®	VG F L36	2
95.86.809-NAN	AlphaRail wiring rail	WAUKESHA®	VG F P48	2
95.86.614-NAN	AlphaRail wiring rail	WAUKESHA®	VHP F2895GL/GSI	1
95.86.614-NAN	AlphaRail wiring rail	WAUKESHA®	VHP F3521GSI	1
95.86.614-NAN	AlphaRail wiring rail	WAUKESHA®	VHP L5790GSI	2
95.86.614-NAN	AlphaRail wiring rail	WAUKESHA®	VHP L7042G/GL/GU/GSI	2
95.86.614-NAN	AlphaRail wiring rail	WAUKESHA®	VHP L7044GL/GSI	2
95.86.814-NFN	AlphaRail wiring rail	WAUKESHA®	VHP P9390GL/GSI	2
95.86.815-NAN	AlphaRail wiring rail	WAUKESHA®	8L-AT27GL	1
95.86.618-NAN	AlphaRail wiring rail	WAUKESHA®	12V-AT27GL	2
95.86.818-NAN	AlphaRail wiring rail	WAUKESHA®	16V-AT27GL	2
95.86.814-NAN	AlphaRail wiring rail	WHITE SUPERIOR®	2408G	1
95.86.613-NAN	AlphaRail wiring rail	WHITE SUPERIOR®	6G/GT/GTL825	1
95.86.813-NAN	AlphaRail wiring rail	WHITE SUPERIOR®	8G/GTL825	1
95.86.616-NAN	AlphaRail wiring rail	WHITE SUPERIOR®	12GTLA825	2
95.86.616-NAN	AlphaRail wiring rail	WHITE SUPERIOR®	12SGT	2
95.86.816-NAN	AlphaRail wiring rail	WHITE SUPERIOR®	16GT/GTLB825	2
95.86.816-NAN	AlphaRail wiring rail	WHITE SUPERIOR®	16SGT	2
95.87.531-NAN-08	AlphaRail wiring rail	WORTHINGTON®	UTC-10	2

¹⁾ **NOTE:** Applications may vary due to different variants or attachments, which could affect the installation of mentioned wiring rails. Consult factory for details and final confirmation.

Ignition Wiring Rails & Hardware

2 Bracket Configuration

P/N ¹⁾	Figure	Description
75.10.303	2A	Bracket, 40x40 mm (Standard)
75.10.097	2B	Flat bar, 180° (Standard)
75.10.120	2C	Flat bar, 150°
75.10.280	2D	Flat bar, 90°

¹⁾ For packs of ten please add suffix "-10" to part number (e.g. 75.10.303-10).

3 Primary Lead Kits for Ignition Coils – Unshielded ¹⁾

P/N	Figure	Description	For use with Ignition Coil P/N
06.99.200-1	3A	Primary lead kit incl. fastening material for ignition coil	06.50.003, 06.50.053, 06.50.054, 06.50.055, 06.50.060, 06.50.065
06.99.200-2	3B	Primary lead kit incl. fastening material for ignition coil	06.50.100, 06.50.102, 06.50.104, 06.50.105, 06.50.112, 06.50.113, 06.50.300, 06.50.301
06.99.200-3	3C	Primary lead kit incl. fastening material for ignition coil	06.50.103

¹⁾ Primary lead kits have to be ordered separately in required quantity.

3 Primary Lead Kits for Ignition Coils – Shielded ¹⁾

P/N	Figure	Description	For use with Ignition Coil P/N
95.99.200-1	3D	Primary lead kit incl. fastening material for ignition coil	95.08.003, 95.08.070
95.99.200-2	3E	Primary lead kit incl. fastening material for ignition coil	95.09.005, 95.09.054, 95.09.055, 95.09.070, 95.09.074, 95.09.075
95.99.200-2-X	3E	Primary lead kit incl. fastening material for ignition coil	95.09.053, 95.09.073

¹⁾ Primary lead kits have to be ordered separately in required quantity. See page 70 for primary leads for use with flange or integral ignition coils.

4 Harnesses to connect Wiring Rail and Junction Box ¹⁾

P/N	Figure	Description	Connector	Length
95.40.114-L	4A	Harness, with fitting for 1/2 in flex conduit	MIL, 14 pole, socket, 180°	L= 5/15/25/50 ft
95.40.314-L	4B	Harness, with fitting for 1/2 in flex conduit	MIL, 14 pole, socket, 90°	L= 5/15/25/50 ft

¹⁾ For CSA applications flex conduit has to be ordered separately or supplied by customer.



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5 Harnesses to connect Ignition Controller and Junction Box – Specification Table

P/N 95.4 **A** **B** **C** **D** **E**

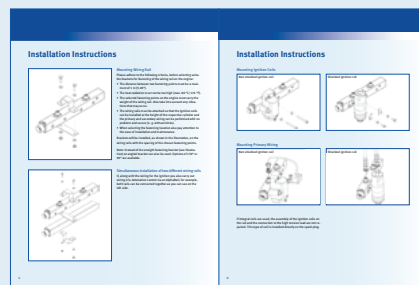
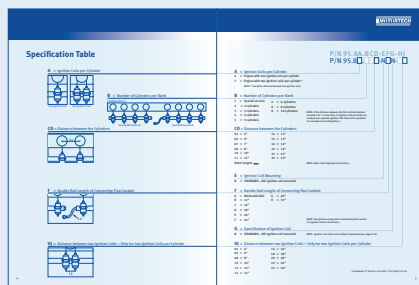
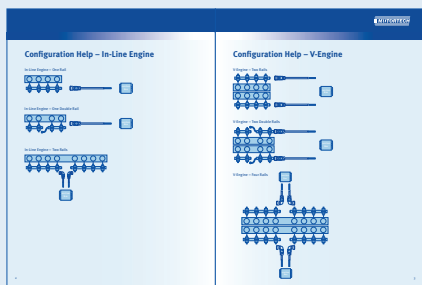
A	Harness
0	Standard harness, with fitting for 1/2 in or 3/4 in flex conduit

B	Connector Arrangement
1	socket 180°
2	pin 180°
3	socket 90°
4	pin 90°

CD	Number of Sockets/Pins in Connector
05	5 pole, with fitting for 1/2 in flex conduit
07	7 pole, with fitting for 1/2 in flex conduit
10	10 pole, with fitting for 1/2 in flex conduit
14	14 pole, with fitting for 1/2 in flex conduit
17	17 pole, with fitting for 3/4 in flex conduit
19	19 pole, with fitting for 3/4 in flex conduit
35	35 pole, with fitting for 3/4 in flex conduit

E	Length of Harness
5	5 ft
15	15 ft
25	25 ft
50	50 ft

Specification Table:



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6 Accessories

P/N	Figure	Description	Equivalent to
06.05.075	6A	Junction box	593600-1
15.07.112	6B	Flex conduit, 1/2 in, black ¹⁾	
15.07.221	6C	Fitting, 1/2 in, junction box to flex conduit	
15.07.134	6B	Flex conduit, 3/4 in, black ¹⁾	
15.07.231	6C	Fitting, 3/4 in, junction box to flex conduit	

¹⁾ Flex conduit needs to be ordered in m/ft in required length.

AlphaRail Wiring Rails System for Ignition Control

