Desoutter Controllers - Open Protocol MID list

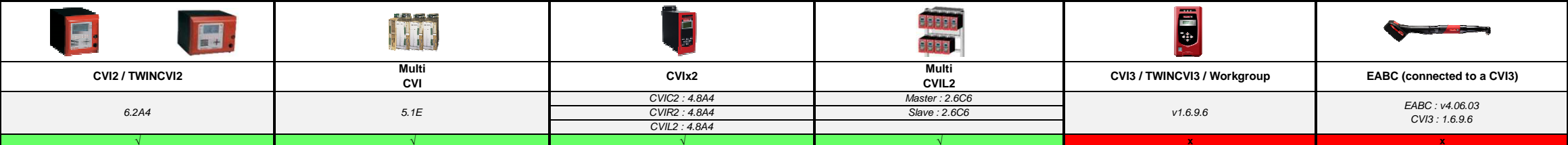**Controllers and Last Firmware version:**

Controller	Last Firmware version
CVI2 / TWINCVI2	6.2A4
Multi CVI	5.1E
CVIx2	CVIC2 : 4.8A4 / CVIR2 : 4.8A4 / CVIL2 : 4.8A4
Multi CVIL2	Master : 2.6C6 / Slave : 2.6C6
CVI3 / TWINCVI3 / Workgroup	v1.6.9.6
EABC (connected to a CVI3)	EABC : v4.06.03 / CVI3 : 1.6.9.6

MID list (√ = supported, x = not supported; revision columns: Rev 0/1, 2, 3, 4, 5, 6, 998, 999)

ID	Description	CVI2/TWINCVI2	Multi CVI	CVIx2	Multi CVIL2	CVI3/TWINCVI3/Workgroup	EABC
	Communication messages						
MID 0001	Communication start	√,x,x,x	√,x,x,x	√,x,x,x	√,x,x,x	√,√,√,√,x	√,√,√,√,x
MID 0002	Communication start acknowledge	√,x,x,x	√,x,x,x	√,x,x,x	√,x,x,x	√,√,√,√,x	√,√,√,√,x
MID 0003	Communication stop	√	√	√	√	√	√
	Request reply messages						
MID 0004	Command error	√	√	√	√	√	√
MID 0005	Command accepted	√	√	√	√	√	√
	Parameter set messages						
MID 0010	Parameter set ID upload request	√	√	√	√	√	√
MID 0011	Parameter set ID upload reply	√	√	√	√	√	√
MID 0012	Parameter set data upload request	√,x,x,x	√,x,x,x	√,x,x,x	√,x,x,x	√,√,x	√,√,x
MID 0013	Parameter set data upload reply	√,x,x,x	√,x,x,x	√,x,x,x	√,x,x,x	√,x,x	√,x,x
MID 0014	Parameter set selected subscribe	√	√	√	√	√	√
MID 0015	Parameter set selected	√	√	√	√	√	√
MID 0016	Parameter set selected acknowledge	√	√	√	√	√	√
MID 0017	Parameter set selected unsubscribe	√	√	√	√	√	√
MID 0018	Select Parameter set	√	√	√	√	√	√
MID 0019	Set Parameter set batch size	√	√	√	√	√	√
MID 0020	Reset Parameter set batch counter	√ (>=6.2A5)	√ (>=6.2A5)	x	x	x	x
MID 0021	Lock at batch done subscribe	x	x	x	x	x	x
MID 0022	Lock at batch done upload	x	x	x	x	x	x
MID 0023	Lock at batch done upload acknowledge	x	x	x	x	x	x
MID 0024	Lock at batch done unsubscribe	x	x	x	x	x	x
MID 0025	Parameter user set download request	x	x	x	x	x	x
	Job message						
MID 0030	Job ID upload request	x,x	x,x	x,x	x,x	√,√	√,√
MID 0031	Job ID upload reply	x,x	x,x	x,x	x,x	√,√	√,√
MID 0032	Job data upload request	x,x,x	x,x,x	x,x,x	x,x,x	√,√,√	√,√,√
MID 0033	Job data upload reply	x,x,x	x,x,x	x,x,x	x,x,x	√,√,√	√,√,√
MID 0034	Job info subscribe	x,x,x,x	x,x,x,x	x,x,x,x	x,x,x,x	√,√,√,x	√,√,√,x
MID 0035	Job info	x,x,x,x	x,x,x,x	x,x,x,x	x,x,x,x	√,√,√,x	√,√,√,x
MID 0036	Job info acknowledge	x,x,x,x	x,x,x,x	x,x,x,x	x,x,x,x	√,√,√,x	√,√,√,x
MID 0037	Job info unsubscribe	x,x,x,x	x,x,x,x	x,x,x,x	x,x,x,x	√,√,√,x	√,√,√,x
MID 0038	Select Job	x,x	x,x	x,x	x,x	√	√
MID 0039	Job restart	x,x	x,x	x,x	x,x	x,x	x,x
	Tool messages						
MID 0040	Tool data upload request	√,x,x,x,x	√,x,x,x,x	√,x,x,x,x	√,x,x,x,x	√,√,√,√,x	√,√,√,x,x
MID 0041	Tool data upload reply	√,x,x,x,x	√,x,x,x,x	√,x,x,x,x √(>=3.6BB)	√,x,x,x,x	√,√,x,x,x	√,√,x,x,x
MID 0042	Disable tool	√	√	√ (>=2.6)	√	√	
MID 0043	Enable tool	√	√	√ (>=2.6)	√	√	
MID 0044	Disconnect tool request	x	x	x	x	x	x
MID 0045	Set calibration value request	x	x	x	x	x	x
MID 0046	Set primary tool request	x	x	x	x	x	x
	VIN Messages						
MID 0050	Vehicle ID Number download request	√	√	√	√	√	√
MID 0051	Vehicle ID Number subscribe	√,x	√,x	√,x	√,x	√,√	√,√
MID 0052	Vehicle ID Number	√,x	√,x	√,x	√,x	√,√	√,√
MID 0053	Vehicle ID Number acknowledge	√,x	√,x	√,x	√,x	√,√	√,√
MID 0054	Vehicle ID Number unsubscribe	√,x	√,x	√,x	√,x	√,√	√,√
	Tightening result messages						
MID 0060	Last tightening result data subscribe	√,x,x,x,x,x,x	√,x,x,x,x,x,x	√,x,x,x,x,x,x	√,x,x,x,x,x,x	√,√,√,√,√,√,√	√,√,√,√,√,√,√
MID 0061	Last tightening result data	√,√(>=6.1B),x,x,x,x,x	√,x,x,x,x,x,x	√,x,x,x,x,x,x	√,x,x,x,x,x,x	√,√,√,√,√,√,√	√,√,√,√,√,√,√
MID 0062	Last tightening result data acknowledge	√,x,x,x,x,x,x	√,x,x,x,x,x,x	√,x,x,x,x,x,x	√,x,x,x,x,x,x	√,√,√,√,√,√,√	√,√,√,√,√,√,√
MID 0063	Last tightening result data unsubscribe	√,x,x,x,x,x,x	√,x,x,x,x,x,x	√,x,x,x,x,x,x	√,x,x,x,x,x,x	√,√,√,√,√,√,√	√,√,√,√,√,√,√
MID 0064	Old tightening result upload request	√(>=5.1B),x,x,x,x,x	√(>=5.1B),x,x,x,x,x	√(>=2.6),x,x,x,x,x	√,x,x,x,x,x	√,√,√,√,√,√,√	√,√,√,√,√,√,√
MID 0065	Old tightening result upload reply	√(>=5.1B),x,x,x,x,x	√(>=5.1B),x,x,x,x,x	√(>=2.6),x,x,x,x,x	√,x,x,x,x,x	√,√,√,√,√,√,√	√,√,√,√,√,√,√
	Alarm messages						
MID 0070	Alarm subscribe	√	√	√	√	√	√
MID 0071	Alarm	√	√	√	√	√	√
MID 0072	Alarm acknowledge	√	√	√	√	√	√
MID 0073	Alarm unsubscribe	√	√	√	√	√	√
MID 0074	Alarm acknowledged on controller	√	√	√	√	√	√
MID 0075	Alarm acknowledged on controller acknowledge	√	√	√	√	√	√
MID 0076	Alarm status	√	√	√	√	√	√
MID 0077	Alarm status acknowledge	√	√	√	√	√	√
MID 0078	Acknowledge alarm remotely on controller	x	x	x	x	√	√
	Time messages						
MID 0080	Read time upload request	√	√	√	√	√	√
MID 0081	Read time upload reply	√	√	√	√	√	√
MID 0082	Set Time	√	√	√	√	√	x
	Multi-spindle status messages						
MID 0090	Multi-spindle status subscribe	x	x	x	x	√ >=1.5.1.9	x
MID 0091	Multi-spindle status	x	x	x	x	√ >=1.5.1.9	x
MID 0092	Multi-spindle status acknowledge	x	x	x	x	√ >=1.5.1.9	x
MID 0093	Multi-spindle status unsubscribe	x	x	x	x	√ >=1.5.1.9	x
	Multi-spindle result messages						
MID 0100	Multi-spindle result subscribe	x,x,x	x,x,x	x,x,x	x,x,x	√>=1.5.1.9,x,x	x,x,x
MID 0101	Multi-spindle result	x,x,x	x,x,x	x,x,x	x,x,x	√>=1.5.1.9,x,x	x,x,x
MID 0102	Multi-spindle result acknowledge	x,x,x	x,x,x	x,x,x	x,x,x	√>=1.5.1.9,x,x	x,x,x
MID 0103	Multi spindle result unsubscribe	x,x,x	x,x,x	x,x,x	x,x,x	√>=1.5.1.9,x,x	x,x,x
	PowerMACS result data						
MID 0105	Last PowerMACS tightening result data subscribe	x,x,x	x,x,x	x,x,x	x,x,x	x,x,x	x,x,x
MID 0106	Last PowerMACS tightening result Station data	x,x,x	x,x,x	x,x,x	x,x,x	x,x,x	x,x,x
MID 0107	Last PowerMACS tightening result Bolt data	x,x,x	x,x,x	x,x,x	x,x,x	x,x,x	x,x,x
MID 0108	Last PowerMACS tightening result data acknowledge	x,x,x	x,x,x	x,x,x	x,x,x	x,x,x	x,x,x
MID 0109	Last PowerMACS tightening result data unsubscribe	x,x,x	x,x,x	x,x,x	x,x,x	x,x,x	x,x,x

Desoutter Controllers - Open Protocol MID list

		CVI2 / TWINCVI2	Multi CVI	CVIx2	Multi CVIL2	CVI3 / TWINCVI3 / Workgroup	EABC (connected to a CVI3)	
Last Firmware version		6.2A4	5.1E	CVIC2 : 4.8A4 / CVIR2 : 4.8A4 / CVIL2 : 4.8A4	Master : 2.6C6 / Slave : 2.6C6	v1.6.9.6	EABC : v4.06.03 / CVI3 : 1.6.9.6	
Licence		√	√	√	√	x	x	
ID	**Description**	Rev 0/1	Rev 0/1	Rev 0/1	Rev 0/1	Rev 0/1	Rev 0/1	**ID**
	User interface messages							
MID 0110	Display user text on compact	x	x	x	x	x	x	MID 0110
MID 0111	Display user text on graph	√	x	x	x	x	x	MID 0111
MID 0113	Flash green light on tool	√ (>=5.1B)	x	x	x	√	√	MID 0113
	Job messages, advanced							
MID 0120	Job line control info subscribe	x	x	x	x	x	x	MID 0120
MID 0121	Job line control started	x	x	x	x	x	x	MID 0121
MID 0122	Job line control alert 1	x	x	x	x	x	x	MID 0122
MID 0123	Job line control alert 2	x	x	x	x	x	x	MID 0123
MID 0124	Job line control done	x	x	x	x	x	x	MID 0124
MID 0125	Job line control info acknowledge	x	x	x	x	x	x	MID 0125
MID 0126	Job line control info unsubscribe	x	x	x	x	x	x	MID 0126
MID 0127	Abort Job	x	x	x	x	√	√	MID 0127
MID 0128	Job batch increment	x	x	x	x	√	√	MID 0128
MID 0129	Job batch decrement	x (Rev2: x)	x (Rev2: x)	x (Rev2: x)	x (Rev2: x)	√ (Rev2: √)	x (Rev2: x)	MID 0129
MID 0130	Job off	x	x	x	x	√	√	MID 0130
MID 0131	Set Job line control start	x	x	x	x	x	x	MID 0131
MID 0132	Set Job line alert 1	x	x	x	x	x	x	MID 0132
MID 0133	Set Job line alert 2	x	x	x	x	x	x	MID 0133
MID 0140	Execute dynamic Job request	x (999: x)	x	x (999: x)	x (999: x)	√ (999: √)	√ (999: √)	MID 0140
	Multiple identifiers messages							
MID 0150	Identifier download request	x	x	x	x	√	√	MID 0150
MID 0151	Multiple identifiers work order subscribe	x	x	x	x	x	x	MID 0151
MID 0152	Multiple Identifiers work order	x	x	x	x	x	x	MID 0152
MID 0153	Multiple Identifiers work order acknowledge	x	x	x	x	x	x	MID 0153
MID 0154	Multiple Identifiers work order unsubscribe	x	x	x	x	x	x	MID 0154
MID 0155	Bypass Identifier	x	x	x	x	x	x	MID 0155
MID 0156	Reset latest Identifier	x	x	x	x	x	x	MID 0156
MID 0157	Reset all Identifiers	x	x	x	x	x	x	MID 0157
	I/O Interface							
MID 0200	Set externally controlled relays	√	x	√ (>=3.2)	x	√	√	MID 0200
MID 0210	Status externally monitored inputs subscribe	√	x	√ (>=3.6B9)	x	√	√	MID 0210
MID 0211	Status externally monitored inputs	√	x	√ (>=2.6)	x	√	√	MID 0211
MID 0212	Status externally monitored inputs acknowledge	√	x	√ (>=2.6)	x	√	√	MID 0212
MID 0213	Status externally monitored inputs unsubscribe	√	x	√ (>=2.6)	x	√	√	MID 0213
MID 0214	IO device status request	x (Rev2: x)	x (Rev2: x)	x (Rev2: x)	x (Rev2: x)	√ (Rev2: √)	√ (Rev2: √)	MID 0214
MID 0215	IO device status reply	x (Rev2: x)	x (Rev2: x)	x (Rev2: x)	x (Rev2: x)	√ (Rev2: √)	√ (Rev2: √)	MID 0215
MID 0216	Relay function subscribe	x	x	x	x	√	√	MID 0216
MID 0217	Relay function	x	x	x	x	√	√	MID 0217
MID 0218	Relay function acknowledge	x	x	x	x	√	√	MID 0218
MID 0219	Relay function unsubscribe	x	x	x	x	√	√	MID 0219
MID 0220	Digital input function subscribe	x	x	x	x	√	√	MID 0220
MID 0221	Digital input function	x	x	x	x	√	√	MID 0221
MID 0222	Digital input function acknowledge	x	x	x	x	√	√	MID 0222
MID 0223	Digital input function unsubscribe	x	x	x	x	√	√	MID 0223
MID 0224	Set digital input function	x	x	√ (>=3.2)	x	√	√	MID 0224
MID 0225	Reset digital input function	x	x	√ (>=3.2)	x	√	√	MID 0225
	PLC user data messages							
MID 0240	User data download	x	x	x	x	x	x	MID 0240
MID 0241	User data subscribe	x	x	x	x	x	x	MID 0241
MID 0242	User data	x	x	x	x	x	x	MID 0242
MID 0243	User data acknowledge	x	x	x	x	x	x	MID 0243
MID 0244	User data unsubscribe	x	x	x	x	x	x	MID 0244
	Selector messages							
MID 0250	Selector socket info subscribe	√	√	√ (>=3.6B9)	x	√	√	MID 0250
MID 0251	Selector socket info	√	√	√ (>=3.6B9)	x	√	√	MID 0251
MID 0252	Selector socket info acknowledge	√	√	√ (>=3.6B9)	x	√	√	MID 0252
MID 0253	Selector socket info unsubscribe	√	√	√ (>=3.6B9)	x	√	√	MID 0253
MID 0254	Selector control green lights	√	√	x	x	√	x	MID 0254
MID 0255	Selector control red lights	x	x	x	x	√	x	MID 0255
	Tool Tag							
MID 0260	Tool Tag ID request	x	x	x	x	x	x	MID 0260
MID 0261	Tool Tag ID subscribe	x	x	x	x	x	x	MID 0261
MID 0262	Tool Tag ID	x	x	x	x	x	x	MID 0262
MID 0263	Tool Tag ID acknowledge	x	x	x	x	x	x	MID 0263
MID 0264	Tool Tag ID unsubscribe	x	x	x	x	x	x	MID 0264
	Controller reboot							
MID 0270	Controller reboot request	x	x	x	x	x	x	MID 0270
	Statistic messages							
MID 0300	Histogram upload request	x	x	x	x	x	x	MID 0300
MID 0301	Histogram upload reply	x	x	x	x	x	x	MID 0301
	Automatic/Manual mode messages							
MID 0400	Automatic/Manual mode subscribe	x	x	x	x	x	x	MID 0400
MID 0401	Automatic/Manual mode	x	x	x	x	x	x	MID 0401
MID 0402	Automatic/Manual mode acknowledge	x	x	x	x	x	x	MID 0402
MID 0403	Automatic/Manual mode unsubscribe	x	x	x	x	x	x	MID 0403
MID 0410	AutoDisable settings request	x	x	x	x	x	x	MID 0410
MID 0411	AutoDisable settings reply	x	x	x	x	x	x	MID 0411
	Open Protocol Commands Disabled							
MID 0420	Open Protocol commands disabled subscribe	x	x	x	x	x	x	MID 0420
MID 0421	Open Protocol commands disabled	x	x	x	x	x	x	MID 0421
MID 0422	Open Protocol commands disabled acknowledge	x	x	x	x	x	x	MID 0422
MID 0423	Open Protocol commands disabled unsubscribe	x	x	x	x	x	x	MID 0423
	Keep alive message							
MID 9999	Keep alive message	√	√	√	√	√	√	MID 9999

	CVI2 / TWINCVI2	Multi CVI	CVIx2	Multi CVIL2	CVI3 / TWINCVI3 / Workgroup	EABC (connected to a CVI3)
Last Firmware version	6.2A4	5.1E	CVIC2 : 4.8A4 / CVIR2 : 4.8A4 / CVIL2 : 4.8A4	Master : 2.6C6 / Slave : 2.6C6	v1.6.9.6	EABC : v4.06.03 / CVI3 : 1.6.9.6
Licence	√	√	√	√	x	x
ID	Rev 0/1 2 3 4 5 6 998 999	Rev 0/1 2 3 4 5 6 998 999	Rev 0/1 2 3 4 5 6 998 999	Rev 0/1 2 3 4 5 6 998 999	Rev 0/1 2 3 4 5 6 998 999	Rev 0/1 2 3 4 5 6 998 999	ID

MID	Description	Particularity of some MID functions on CVI controllers	Particularity of some MID functions on CVIx2 and MultiCVIL2 controllers	Particularity of some MID on CVI3 / EABC
MID 0013	Parameter set data upload reply	The values are those of the last final speed phase of the pset.	The values are those of the last final speed phase of the pset.	
MID 0041	Tool data upload reply		Last calibration date field is the date for the last modification in tool memory board. In MultiCVIL, data corresponding to the 1st slave.	
MID 0042	Disable tool	The tool is disabled by using the spindle validation control (check in station parameters menu that the spindle validation source is PLC or Protocol(if existing)).	The tool is disabled by using the spindle validation control (check in station parameters menu that the spindle validation source is PLC). Don't use it if a fieldbus module is used in the controller with spindle validation data.	
MID 0043	Enable tool	The tool is enabled by using the spindle validation control (check in station parameters menu that the spindle validation source is PLC or Protocol(if existing)).	The tool is enabled by using the spindle validation control (check in station parameters menu that the spindle validation source is PLC). Don't use it if a fieldbus module is used in the controller with spindle validation data.	
MID 0044	Disconnect tool	The tool cannot be disconnected from CVI controllers. An error message is returned to this frame.	The tool cannot be disconnected from CVI controllers. An error message is returned to this frame.	CVI3 : The tool cannot be disconnected from CVI controllers. An error message is returned to this frame.
MID 0065	Old tightening result upload reply	Batch counter and Batch status are always 0. They are not stored in the result memory.	Batch counter and Batch status are always 0. They are not stored in the result memory.	
MID 0071	Alarm Upload	Error codes returned by this function are those of CVI (E001 to E012).	Error codes returned by this function are those of CVI (E001 to E012).	
MID 0074	Alarm Acknowledged on torque controller	Alarms are acknowledged on the CVI controller after that the problem is resolved and a "start cycle" is done.	Alarms are acknowledged on the CVI controller after that the problem is resolved and a "start cycle" is done.	
MID 0076	Alarm Status	Error codes returned by this function are those of CVI (from E001 to E012).	Error codes returned by this function are those of CVI (from E001 to E012).	
MID 0091	Multi-spindle status			CVI3 : Parameter number of spindles can have value from 1 to 99 (ACTA from 2 to 10)
MID 0101	Multi-spindle result			CVI3 : Parameter number of spindles can have value from 1 to 99 (ACTA from 2 to 10). Tolerance and target come from the first tool.
MID 0111	Display user text on graph	This functionality does not exist for MULTICVI.		This functionality does not exist for CVI3 and EABC.
MID 0113	Flash green light on tool			EABC : flash all lights 5 times
MID 0140	Execute dynamic Job request			CVI3 : TU#1 - Ch ID = 0 / TU#2 - Ch ID = 1 EABC : TU#51 - Ch ID = 51
MID 0200	Set "external controlled" relays	This functionality is enabled for one channel CVI, and for synchronous TWINCVI. In that case, 10 pins of I/O port n°2 are used as external outputs. The list of outputs is the following: Open Protocol relay id - CVI output id (on I/O port 2) - Pin number 1 - 7 - 6 2 - 8 - 5 3 - 9 - 3 4 - 10 - 2 5 - 11 - 18 6 - 12 - 19 7 - 13 - 14 8 - 14 - 12 9 - 15 - 10 10 - 16 - 35 The "flash" mode for relays is not supported; it acts the same as "do not care". When trying to use this command with asynchronous TWIN CVI, the command error code 53 ("Faulty IO device number") is returned.	MultiCVII2 : set ISaGRAF outputs : relay 1 = Output ISA 1 slave 1 / … / relay 8 = Output 4 slave 2 / … / relay 10 = Outputs ISA 2 slave 3 CVIxII : only 8 outputs can be driven. They have to be configured as Pass Thru The "flash" mode is not supported.	"OP external outputs" only
MID 0211	Status "external monitored inputs" upload	This functionality is enabled for one channel CVI, and for synchronous TWIN CVI. In that case, 8 pins of I/O port n°2 are used as external inputs. The list of inputs is the following: Open Protocol input id - CVI input id (on I/O port 2) - Pin number 1 - 1 - 24 2 - 2 - 25 3 - 3 - 27 4 - 4 - 29 5 - 5 - 31 6 - 6 - 32 7 - 7 - 33 8 - 8 - 34	MultiCVIL 2 : read master controller inputs	"OP external inputs" only
MID 0217	Relay function			All outputs are not available
MID 0221	Digital input function		CVIxII: only item 008 is available (start cycle cont)	All inputs are not available
MID 0224	Set digital input function		CVIxII: only item 008 is available (start cycle cont)	All inputs are not available
MID 0225	Reset digital input function		CVIxII: only item 008 is available (start cycle cont)	All inputs are not available
MID 0251	Selector socket info		On CVIx2, the 5 first inputs are used for socket detection. With CVIL2, the quick stop2 (input 5) is read as a socket lift.	
	Other	"No ack flag" not managed	"No ack flag" not managed	"No ack flag" managed