

**Valve terminal RE-10 with
Multi-pin, AS-Interface or bus connection
4 – 12 valve stations, 300 NI/min (0.305 Cv)**

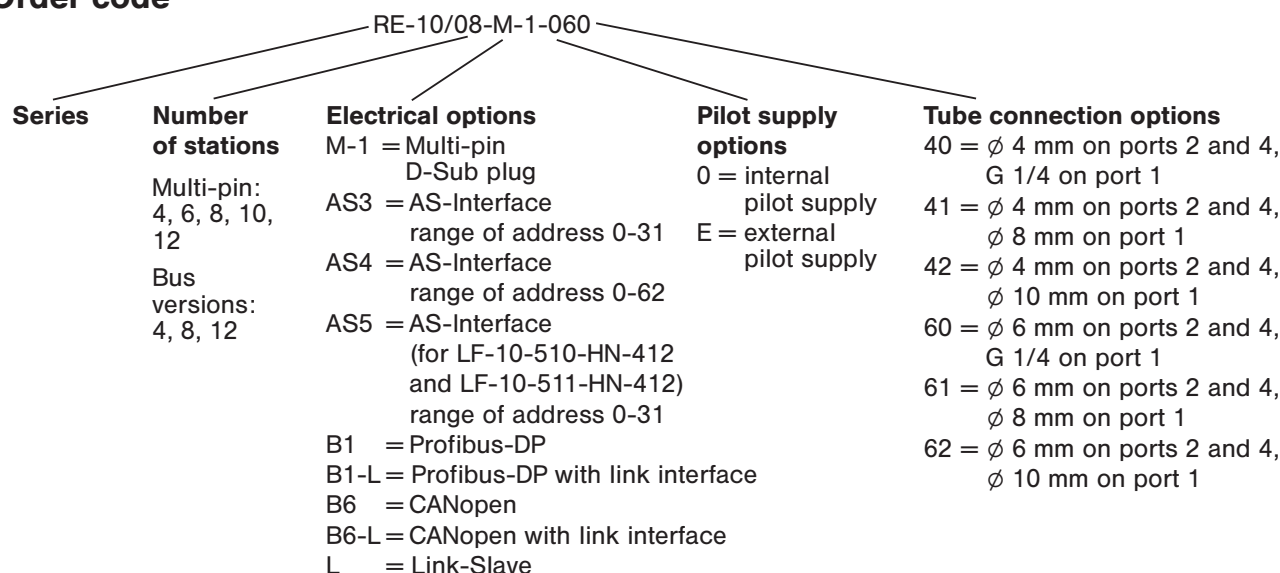


Technical data for series

RE-10



Order code



Design and function

Manifold system with integrated electrical connection including LED indicators. Each station can accommodate two 3/2-way valves or one 5/2- or 5/3-way valve. All connections are accessible from the front.

The valves and the multi-pin plug with cable must be ordered separately.

The manifold can be mounted with 4 M5 screws from bottom or from top using the mounting bracket RE-10-B-01 or on a DIN-rail (screws are included).

The valve terminal is delivered pre-assembled and function-tested. If not specified with the order, valve configuration is as follows:

Valves are mounted according to their order number, starting with high numbers on the side of the multi-pin, ending with low numbers on the opposite side, followed by blind plates (if ordered).

Technical data	AS-Interface	Profibus-DP	Profibus-DP with Link	CANopen	CANopen with Link	Link-Slave	Multi-pin
Number of stations	4, 8, 12	4, 8, 12	4, 8, 12	4, 8, 12	4, 8, 12	4, 8, 12	4,6,8,10,12
Power range	see valve						
Temperature range	+ 5 °C ... 50 °C (41 °F ... + 122 °F)						
Voltage	24 V DC						
Voltage tolerance	- 5 % ... + 10 %						
Voltage bus	18,5 ... 31,6 V DC	-	-	-	-	-	-

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Technical data	AS-Interface	Profibus-DP	Profibus-DP with Link	CANopen	CANopen with Link	Link-Slave	Multi-pin
Power consumption each solenoid¹⁾	1,1 W	1,1 W	1,1 W	1,1 W	1,1 W	1,1 W	1,1 W
each bus system	–	4,3 W	4,3 W	4,3 W	4,3 W	1,5 W	–
each slave	1,1 W	–	–	–	–	–	–
Status indicator (LED):							
Solenoid active error	yellow red	yellow red	yellow red	yellow red	yellow red	yellow red	yellow –
Power valve active error	green (3 internal circuits) off	green (3 internal circuits) off	green (3 internal circuits) off	green (3 internal circuits) off	green (3 internal circuits) off	green (3 internal circuits) off	– – –
Power fieldbus	–	green	green	green	green	green	–
Status fieldbus active error	green (1x each Slave) red (1 x each Slave)	green red	green red	green red	green red	green red	– –
Fieldbus online	–	green	green	–	–	–	–
Fieldbus error	–	–	–	red	red	–	–
Status system active error	– –	– –	green red	– –	green red	green red	– –
EMC circuit	Power with Polarized circuit protection and built-in surge protection						
Electrical connection							
Power in	AS-Interface clamp	M12 socket 5-pin, A-code	M12 socket 5-pin, A-code	M12 socket 4-pin, A-code	M12 socket 4-pin, A-code	M12 socket 5-pin, A-code	D-Sub 26-pin (high density),
Power out	–	–	–	–	–	M12-Buchse 5-pin, A-code	common GND
Bus in	AS-Interface clamp	M12 socket 5-pin, B-code	M12 socket 5-pin, B-code	M12 socket 5-pin, A-code	M12 socket 5-pin, A-code	–	–
Bus out	–	M12-plug 5-pin, B-code	M12-plug 5-pin, B-code	M12-plug 5-pin, A-code	M12-plug 5-pin, A-code	–	–
Link in	–	–	–	–	–	M8 socket 4-pin	
Link out	–	–	M8-plug 4-pin	–	M8-plug 4-pin	M8-plug 4-pin	–
Address selection	Low voltage switch plug Ø 1.3 mm and Slave selection by DIP-switch	Bus by 2 rotary switches (Adr. 1 ... 99)	Bus by 2 rotary switches (Adr. 1 ... 99) Link over 2 rotary switches (no. of Slaves 1 ... 10)	Bus by 2 rotary switches (Adr. 1 ... 99)	Bus by 2 rotary switches (Adr. 1 ... 99) Link over 2 rotary switches (no. of Slaves 1 ... 10)	Link over 2 rotary switches (no. of bus addresses 1 ... 10)	–
Baud-rate Bus	–	9,6 kbit/s ... 12 Mbit/s	9,6 kbit/s ... 12 Mbit/s	10 kbit/s ... 1 Mbit/s	10 kbit/s ... 1 Mbit/s		–
Link		–	250 kbit/s	–	250 kbit/s	250 kbit/s	
max. cable length depends on Baud-rate Bus	–	50...1200 m	50...1600 m	50...1600 m	50...1600 m	–	–
Link	–	–	max. 100 m	–	max. 100 m	max. 100 m	
Service-Interface		RS232	RS232	RS232	RS232	RS232	–
Bus terminator		over external Profibus-Terminator ²⁾		over external CANopen-Terminator ²⁾		internal Terminator over DIP switch	
Protection	IP 65 acc. EN 60529 in connection with the AIRTEC cable 28-ST-10-M1-26-...						

¹⁾ The status display consumes 0.25 W of the 1.3 W power consumption.

²⁾ Bus termination resistance is available for Profibus-DP and DeviceNet as an accessory (see page 6.056).

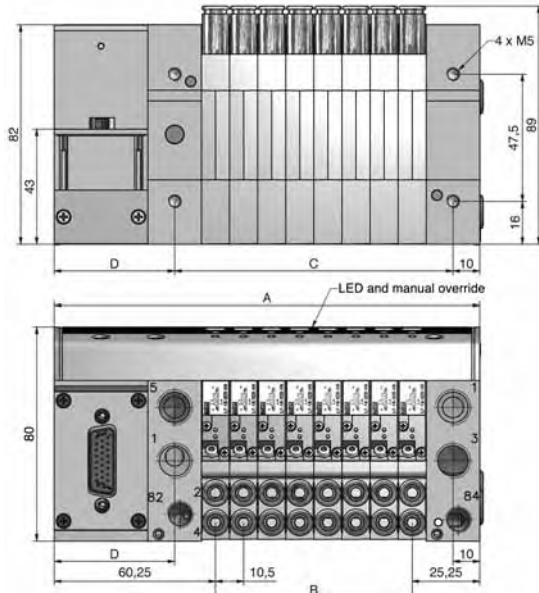
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Dimensions for series

RE-10

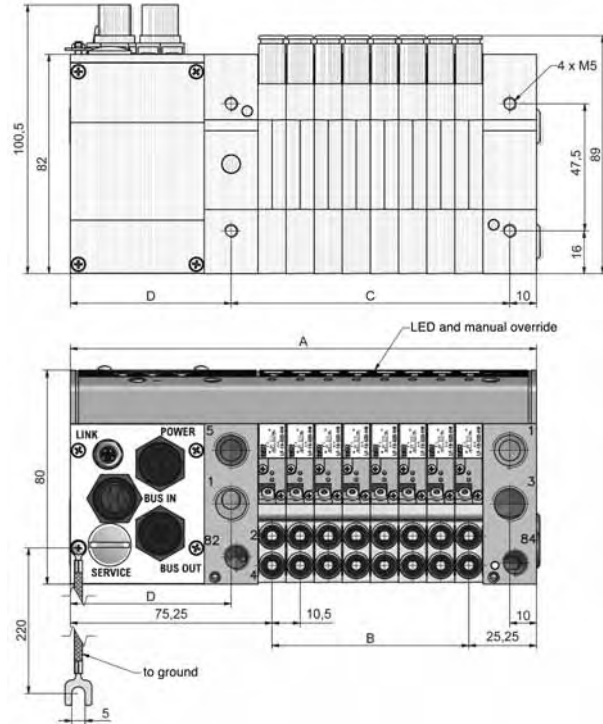
Multi-pin



- 1 = pressure supply, G 1/4
- 2, 4 = outlets, fitting for tube \varnothing 6 mm
- 3, 5 = exhausts, G 1/4
- 82, 84 = solenoid exhaust, G 1/8

Manual override – spring return: press down
detent: press and turn

Bus-Terminal



Order number	A	B	C \pm 0,3	D
RE-10/04-M-1-040 or -060	117	31,5	62	45
RE-10/06-M-1-040 or -060	138	52,5	83	45
RE-10/08-M-1-040 or -060	159	73,5	104	45
RE-10/10-M-1-040 or -060	180	94,5	125	45
RE-10/12-M-1-040 or -060	201	115,5	146	45
RE-10/04-B1-040 or -060 RE-10/04-B1-L-040 or -060 RE-10/04-B6-040 or -060 RE-10/04-B6-L-040 or -060 RE-10/04-L-040 or -060 RE-10/04-ASx-040 or -060 ¹	132	31,5	62	60
RE-10/08-B1-040 or -060 RE-10/08-B1-L-040 or -060 RE-10/08-B6-040 or -060 RE-10/08-B6-L-040 or -060 RE-10/08-L-040 or -060 RE-10/08-ASx-040 or -060 ¹	174	73,5	104	60
RE-10/12-B1-040 or -060 RE-10/12-B1-L-040 or -060 RE-10/12-B6-040 or -060 RE-10/12-B6-L-040 or -060 RE-10/12-L-040 or -060 RE-10/12-ASx-040 or -060 ¹	216	115,5	146	60

¹ASx stays for the versions AS3, AS4 and AS5 according to the order code, see page 6.050.

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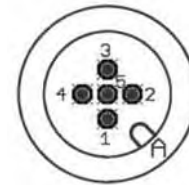


Pin assignment fieldbus-connection for series **RE-10**

Profibus DP

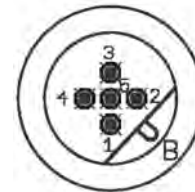
POWER IN Plug M12 5-pin A-code (POWER 24V)¹⁾

Pin	Name	Description
1	+24V	Power supply-terminal
2	n. c.	not connected
3	GND	Ground for 24 V DC
4	n. c.	not connected
5	n. c.	not connected



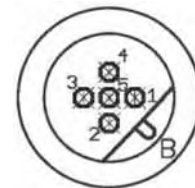
BUS IN Plug M12 5-pin B-code

Pin	Name	Description
1	n. c.	not connected
2	A	RS485A (Tx/Rx-N)
3	n. c.	not connected
4	B	RS485B (Tx/Rx-P)
5	Shield ²⁾	Shield



BUS OUT Socket M12 5-pin B-code³⁾

Pin	Name	Description
1	+5V	Power supply termina
2	A	RS485A (Tx/Rx-N)
3	GND	Ground for +5V
4	B	RS485B (Tx/Rx-P)
5	Shield	Shield



LINK OUT Socket M8 4-pin (only for Link Master)

Pin	Name	Description
1	LINK H	Data cable high
2	LINK GND	Data cable GND
3	LINK L	Data cable low
4	LINK SHLD	Data cable shield



¹⁾ The pin assignment is according DESINA-Norm Rev. 2.0 for M12 actuators. The pins 2, 4 and 5 are not connected.

²⁾ The shield can be connected to the metal collar of the plug (improves the shield and is recommended) or at pin 5.

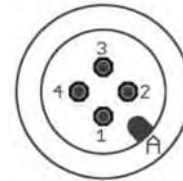
³⁾ An unused socket connection must be terminated with the termination resistance.

**Pin assignment fieldbus-connection for series
RE-10**

CANopen

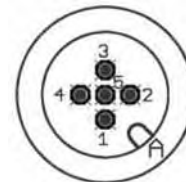
POWER IN Plug M12 4-pin A-code (POWER 24V)¹⁾

Pin	Name	Description
1	+24V	Power supply-terminal
2	n. c.	not connected
3	GND	Ground for 24 V DC
4	n. c.	not connected



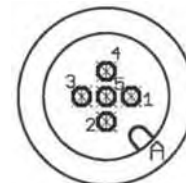
BUS IN Plug M12 5-pin A-code

Pin	Name	Description
1	SHLD	Shield ²⁾
2	CAN V+	CAN Supply
3	GND	CAN Ground
4	CAN H	CAN high
5	CAN L	CAN low



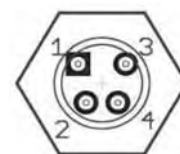
BUS OUT Socket M12 5-pin A-code³⁾

Pin	Name	Description
1	SHLD	Shield ²⁾
2	CAN V+	CAN Supply
3	GND	CAN Ground
4	CAN H	CAN high
5	CAN L	CAN low



LINK OUT Socket M8 4-pin (only for Link Master)

Pin	Name	Description
1	LINK H	Data cable high
2	LINK GND	Data cable GND
3	LINK L	Data cable low
4	LINK SHLD	Data cable shield



¹⁾ The pin assignment is according DESINA-Norm Rev. 2.0 for M12 actuators. The pins 2, 4 and 5 are not connected.

²⁾ The shield can be connected to the metal collar of the plug (improves the shield and is recommended) or at pin 5.

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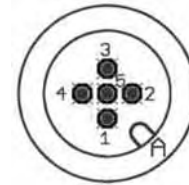


Pin assignment fieldbus-connection for series **RE-10**

Link Slave

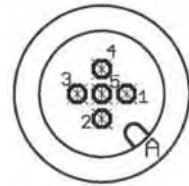
POWER IN Plug M12 5-pin A-code (POWER 24V)¹⁾

Pin	Name	Description
1	+24V	Power supply-terminal
2	n. c.	not connected
3	GND	Ground for 24 V
4	n. c.	not connected
5	n. c.	not connected



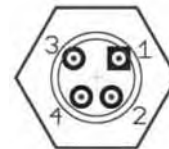
POWER OUT Socket M12 5-pin A-code (POWER 24V)¹⁾

Pin	Name	Description
1	+24V	Power supply-terminal
2	n. c.	not connected
3	GND	Ground for 24 V
4	n. c.	not connected
5	n. c.	not connected



LINK IN Plug M8 4-pin

Pin	Name	Description
1	LINK H	Data cable high
2	LINK GND	Data cable GND
3	LINK L	Data cable low
4	LINK SHLD	Data cable shield



LINK OUT Socket M8 4-pin

Pin	Name	Description
1	LINK H	Data cable high
2	LINK GND	Data cable GND
3	LINK L	Data cable low
4	LINK SHLD	Data cable shield



¹⁾ The pin assignment is according DESINA-Norm Rev. 2.0 for M12 actuators. The pins 2, 4 and 5 are not connected.

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Technical data for series

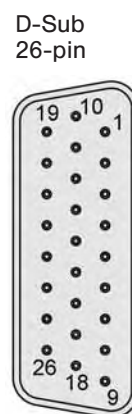
RE-10

Pin assignment

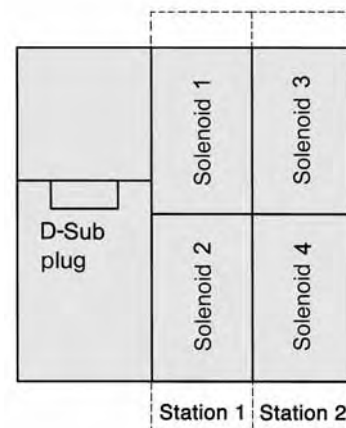
Connector cable 28-ST-10-M1-26-...
For valve terminals with 4 ... 12 stations.

Pin	Solenoid	Wire colour	Pin	Solenoid	Wire colour
1	1	white	14	14	brown/green
2	2	brown	15	15	white/yellow
3	3	green	16	16	yellow/brown
4	4	yellow	17	17	white/grey
5	5	grey	18	18	grey/brown
6	6	pink	19	19	white/pink
7	7	blue	20	20	pink/brown
8	8	red	21	21	white/blue
9	9	black	22	22	brown/blue
10	10	violet	23	23	white/red
11	11	grey/pink	24	24	brown/red
12	12	red/blue	25	0V	white/black
13	13	white/green	26	0V	(brown/black)

View on
valve terminal
(Plug)



Solenoid layout

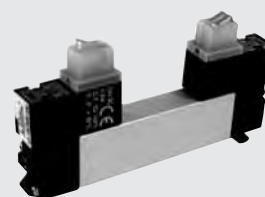


Wiring colour acc. to DIN 47100 (coloured or assigned with numbers).

Valve and accessories for series RE-10

Valves

LF-10-310/2-HN-412	2 x 3/2-way closed
LF-10-312/2-HN-412	2 x 3/2-way open
LF-10-314/2-HN-412	2 x 3/2-way open/closed
LF-10-510-HN-412	5/2-way with air spring
LF-10-511-HN-412	5/2-way with mech. spring
LF-10-520-HN-412	5/2-way double solenoid
LF-10-530-HN-412	5/3-way center position closed
LF-10-533-HN-412	5/3-way center position exhausted
LF-10-534-HN-412	5/3-way center position pressurized



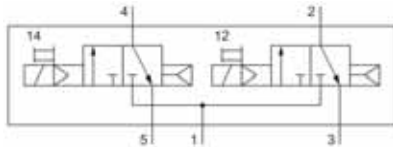
Single elements

RE-10-DT-01	Dividing plate for P-channel
RE-10-DT-02	Dividing plate for R + S-channel
RE-10-ES	Element for external pilot supply
RE-10-P-01	Element for additional air supply
RE-10-V-EP	Blind plate for valve and solenoid position
RE-10-B-01	Bracket for flange mounting
RE-10-MS-01	Kit for DIN rail mounting
28-ST-10-M1-26-105	Multi-pin connector, D-Sub 26-pin, 5 m cable
28-ST-10-M1-26-110	Multi-pin connector, D-Sub 26-pin, 10 m cable

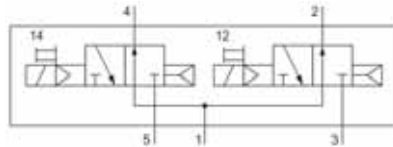
Cable for fieldbus on request.

Technical data for valve

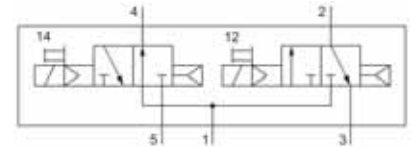
LF-10



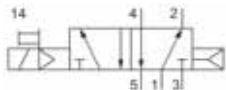
LF-10-310/2-HN-412



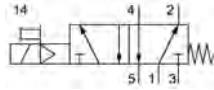
LF-10-312/2-HN-412



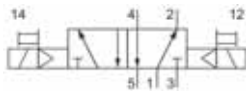
LF-10-314/2-HN-412



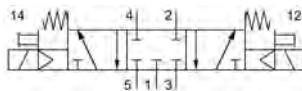
LF-10-510-HN-412



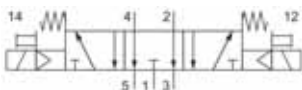
LF-10-511-HN-412



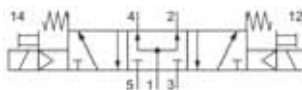
LF-10-520-HN-412



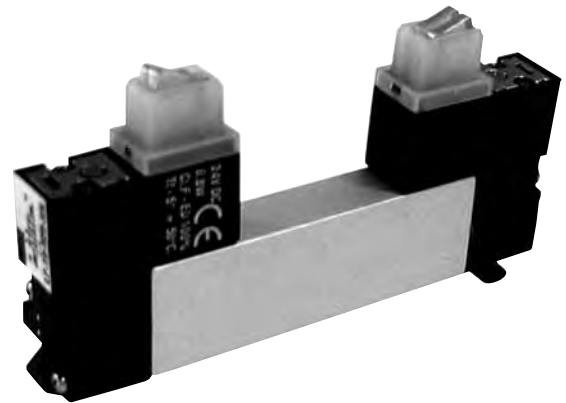
LF-10-530-HN-412



LF-10-533-HN-412



LF-10-534-HN-412



Design and function

Spool valve actuated by an electrical signal.

Order number ¹⁾	LF-10-310/2-...	LF-10-312/2-...	LF-10-314/2-...	LF-10-510-...	LF-10-511-...	LF-10-520-...	LF-10-530-...	LF-10-533-...	LF-10-534-...
Function	2 x 3/2-way closed	2 x 3/2-way open	2 x 3/2-way open/closed	5/2-way air spring	5/2-way mechanical spring return	5/2-way double solenoid	5/3-way center pos. closed	5/3-way center pos. exhausted	5/3-way center pos. pressurized
Connection	Flange								
Nominal size	4 mm								
Nominal flow Qv²⁾	300 (0.305 Cv)	220 (0.224 Cv)	220 / 300 (0.224/0.305 Cv)	300 (0.305 Cv)	300 (0.305 Cv)	300 (0.305 Cv)	280 (0.285 Cv)		300 (0.305 Cv)
Pressure range³⁾	1,5 ... 8 bar (21.75 ... 116 psi)			1,5...8bar (21.75...116 psi)	3... 8 bar (43.5...116 psi)	1,5...8bar (21.75...116 psi)	3,5 ... 8 bar (50.75...116 psi)		
Pressure range⁴⁾	1,5 ... 8 bar (21.75 ... 116 psi)								
External pilot pressure	1,5 ... 8 bar (21.75 ... 116 psi)			1,5...8bar (21.75...116 psi)	3... 8 bar (43.5...116 psi)	1,5...8bar (21.75...116 psi)	3,5 ... 8 bar (50.75...116 psi)		
Response on time⁵⁾ off	14 ms 22 ms			18 ms 28 ms	14 ms 30 ms	15 ms	20 ms 30 ms	16 ms 30 ms	
Temperature range	- 5 °C ... + 50 °C (+ 23 °F ... + 122 °F)								
Materials	Body: Al (anodized), plastic, Seals: NBR, plastic, Inner parts: Al, POM, stainless steel and brass								
Operating voltage	24 V DC - 5 % / + 10 % (22,8 V ... 26,4 V)								
Power consumption	0,8 W je Pilotventil								
Degree of protection	IP 65 according to EN 60529, when assembled on RE-10								
Weight	0,050 kg (0.10 lb.)			0,044 kg (0.09 lb.)	0,042 kg (0.092 lb.)	0,052 kg (0.11 lb.)	0,050 kg (0.115 lb.)		

¹⁾ Please complete according to order code (see circuit symbols).

²⁾ Flow Qy from 1 to 2 (1 to 4) in NI/min.

³⁾ For internal pilot pressure.

⁴⁾ For external pilot pressure.

⁵⁾ Response time at 6 bar acc. CETOP 111 P.