



Data Sheet

Hall

Option for con35 and con50

Version 3.2 - October 2010



Hall

Hall

Option for con35 and con50 Control Unit	Possibility to precise control the start and end position of the actuator and the displacement during application. Furthermore, Hall gives the possibility to operate 2 or more actuators in parallel.
Built-in measure	con35 - additional 10 mm (see data sheet for con35) con50 - additional 15 mm (see data sheet for con50)
Cable	con35 - 1m, 8x0.14mm ² (6xAWG26), diameter ~ 5mm, black/grey con50 - 1m, 8x0.34mm ² (8xAWG22), diameter ~ 7mm, black/grey Maximum recommended cable length is 2.5 m Contact Concens for other cable lengths in special applications
Concens control units	C3 system (see data sheet for C3) Logic Data (see data sheet for Logic Data) C2-20 Concens servosystem
Customer Control Unit	PLC or likewise

Check for updates on www.concens.com

Hall Input/ Output

Information for customer's control unit:

Wiring

GREY Cable colour con35 con50	Yellow	Green	Red	Blue	Brown+Pink	White + Grey
Function	Hall A output open collector	Hall B output open collector	+5 V dc Hall	0V Hall	Actuator +	Actuator -

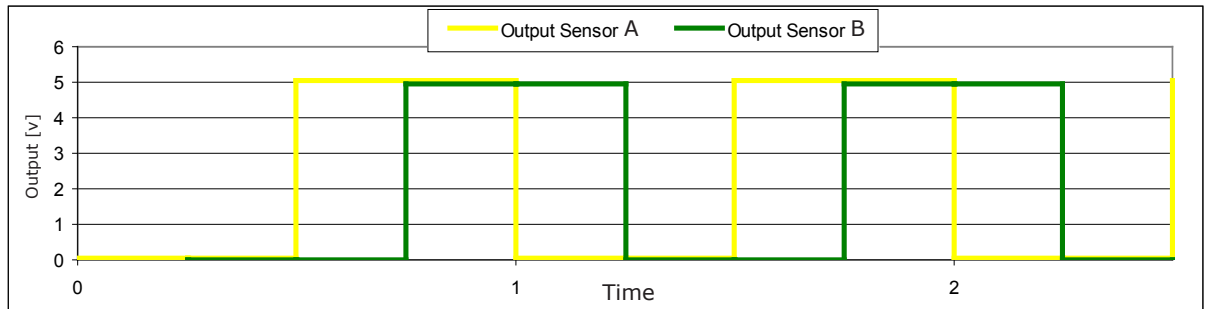
BLACK Cable colour con35	Yellow	Green	Red	Orange	Brown	Black
Function	Hall A output open collector	Hall B output open collector	+5 V dc Hall	0V Hall	Actuator +	Actuator -

BLACK Cable colour con50	Yellow	Green	Red	Blue	Brown+Orange	Black + Purple
Function	Hall A output open collector	Hall B output open collector	+5 V dc Hall	0V Hall	Actuator +	Actuator -

Warning: Power input in red wire must *never* exceed 5 V dc

Note: In a customer designed control unit external pull-up resistors from Hall signals to +5 V DC are necessary. Resistor values of 1 kΩ are preferred.

Hall signal output yellow and green wire. $\frac{1}{4}$ cycle delay between output sensor A and B. Order depends on displacement direction of the actuator.



Hall resolution

C3 + con35		C3 + con50	
Gear ratio	mm/pulse	Gear ratio	mm/pulse
5	0.4	4	0.75
14	0.1429	14	0.2143
19	0.1053	17	0.1765
27	0.0741	24	0.1256
51	0.0392	49	0.0612
71	0.0282	84	0.0357

Note: Table shown for C3 controller. Resolution is 4 times better when using C2-20 servo controller.

