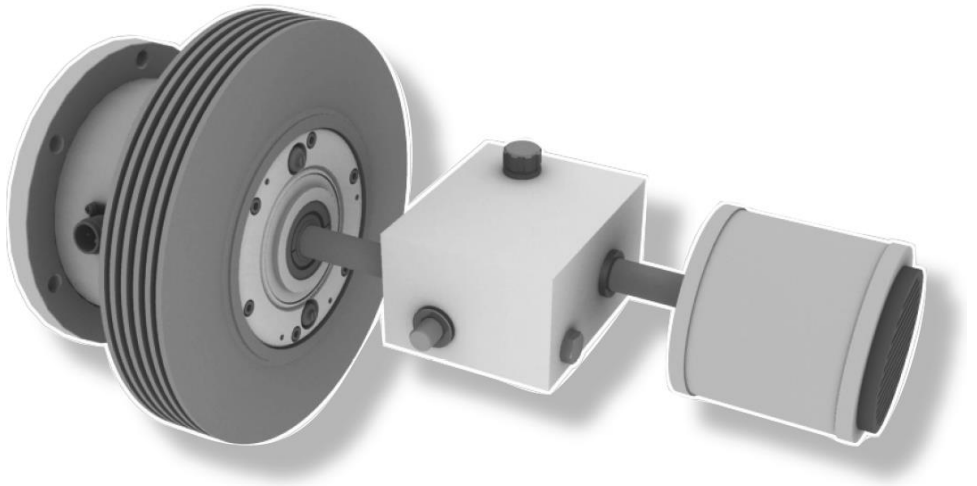




**Test
bench**

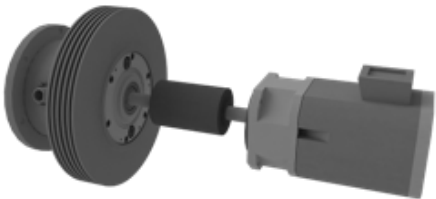
DGT3000⁺
NG



Test bench application
→ Torque control

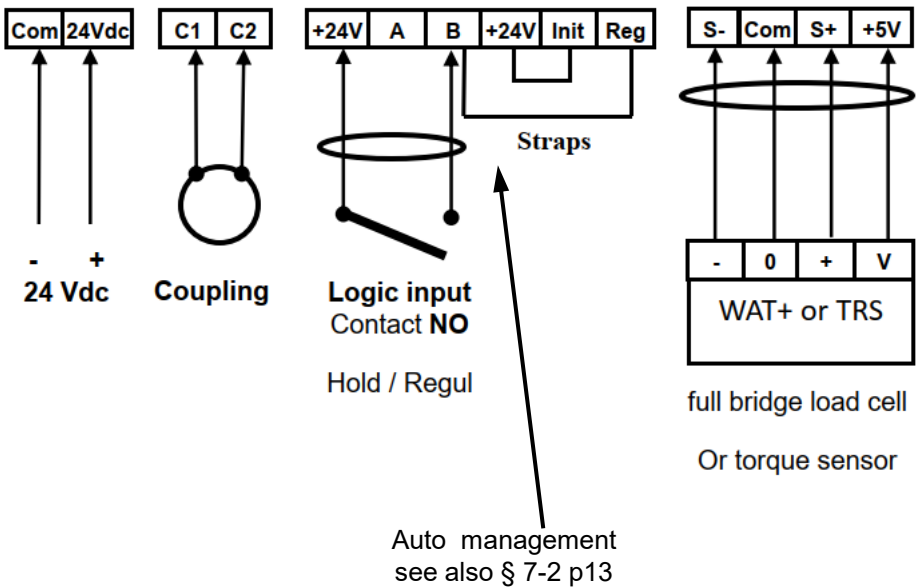
Torque is applied to the actuator by the brake and measured by the torque sensor.

Torque is automatically adjusted through a PID regulator to keep the actual tension / torque as closed as possible to the set point.



01

Wiring



02

Starting parameter set

DISPLAY	Ligne 1	Setpoint
	Ligne 2	Measure
PROCESS	Time delay start	1
	Time delay stop	300
	Hold	10
INPUTS	Max effort	
	Set point value	50
	Diameter filtering	
	Ligne speed filtering	
OUTPUTS	Upper limit	10
	Bottom limit	0
	Power output gain	100
REGULATION	P	100
	I	20
	D	0
	Measure filtering	100
	Open loop coefficient	0
	Close loop coefficient	100
	Speed gain	0
	Speed coefficient	
	Overspeed	0

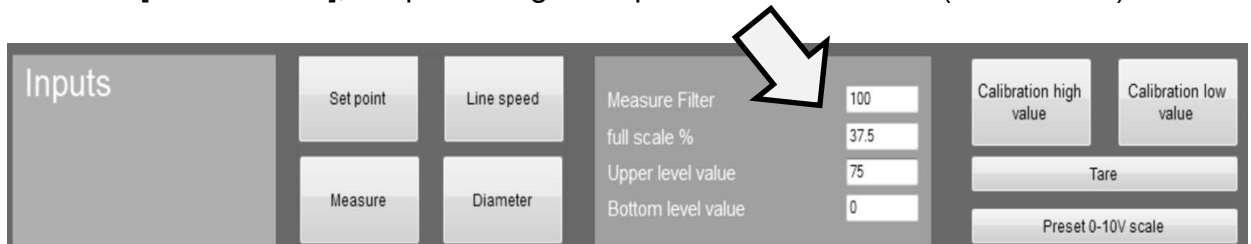
Calibration

1 - Calibration torque or force measurement

Select [Inputs] > Measure and set parameters data

Enter calibration weight value : [Upper level value] (here 75Nm)

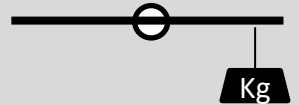
If the weight is not equal to max tension required for the application (here 200Nm), define in [full scale %], its percentage compared to max tension (here 37.5%)



Send parameters to Memory (M1 à M5)



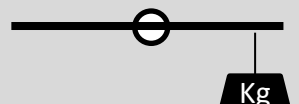
- Simulate the load with a balanced arm and hang the weight.
click [**Calibration high value**]



- Remove the load and any stress on the torque sensor
click [**Calibration low value**]
→ Calibration done



- Check your measure readout for minimum & maximum load



2 – Set point

Set point is required tension level for your application

Select int. or ext. (0-10 V) in menu [Inputs] > Setpoint

See menu [Inputs] > Setpoint

3 - Definition inputs / outputs

see -> Menus [Inputs] & [Outputs] and define relevant values according to your application.

4 – Power output (brake and clutch current setting)

See -> Menu [Output] > power C1 C2 and set relevant power output gain

5 – Special functions

Details of all functions for your application are available in Help menu

(click on icon )

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