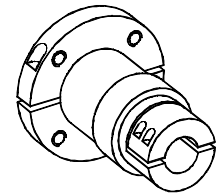


Force sensors

Flange mounted

CI 45 ME340045-00

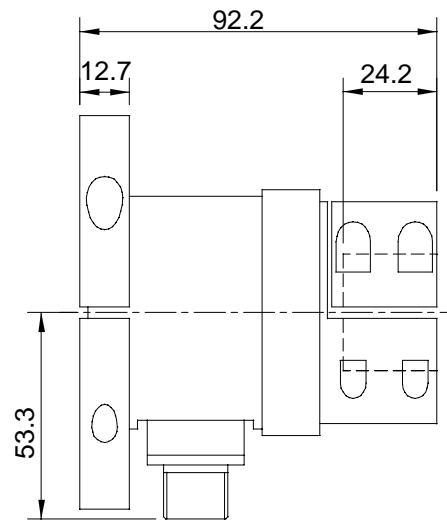
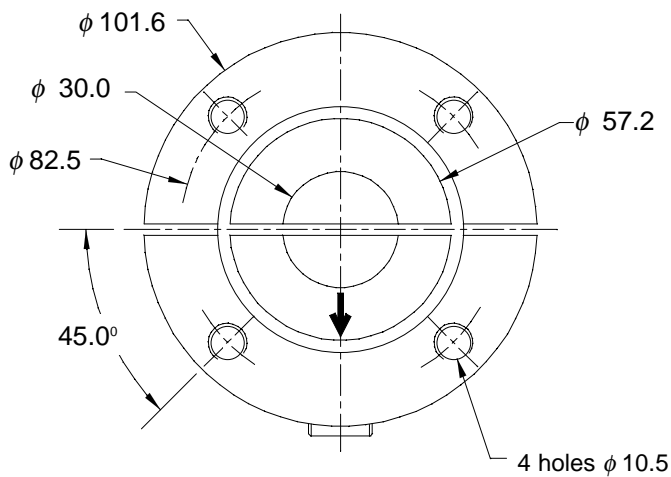
CI 100 ME340100-00



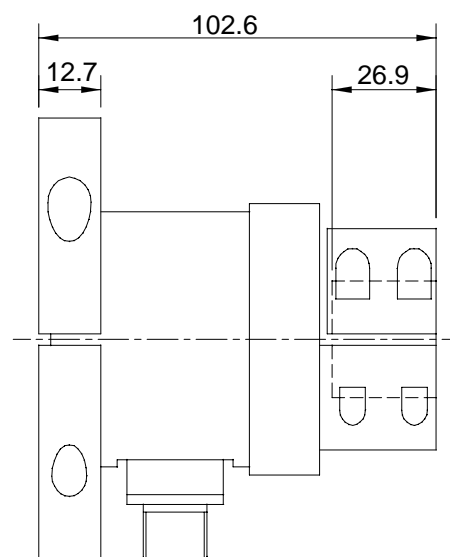
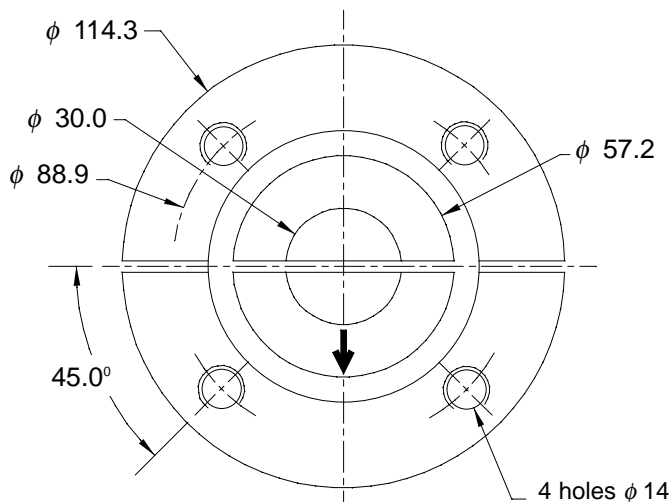
Features :

Type		CI 45	CI 100
Maximum Working Force	[N]	450	1000
Non-destructive Overload Rating	[N]	670	1500
Ultimate Overload Rating	[N]	1300	3000
Operating temperature range	[°C]	-10 to 70	
Repeatability	[%]	+0.5	
Hysteresis + Non-linearity	[%]	+0.2	

CI 45



CI 100



Cable options :

Connector type	Space needed	Cable length	Reference
Straight Connector	60mm	6 m	340 000 00
900 Connector	40mm	6 m	340 000 10

Calculation :

T = Max tension

A = Wrap angle

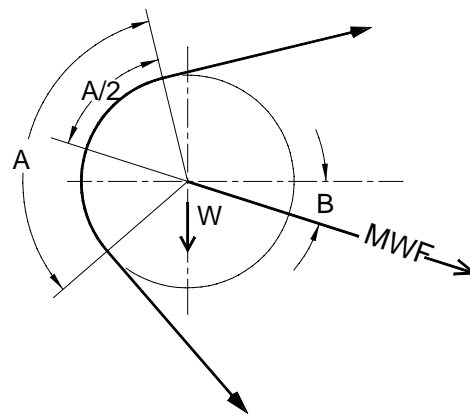
W = Roll weight

B = Angle of Tension Force

k = Overload for transients (1.4 to 2.0)

MWF = Maximum Working Force

$$MWF = 1 \frac{\quad}{\quad}$$



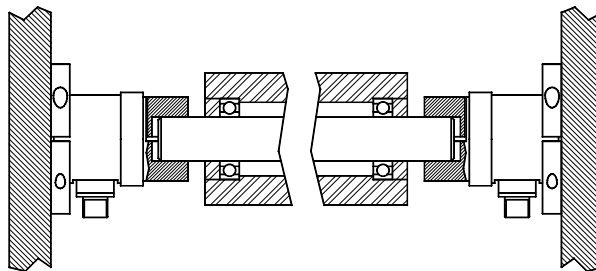
Note :

If angle "B" is below horizontal use "+"

If angle "B" is above horizontal use " - "

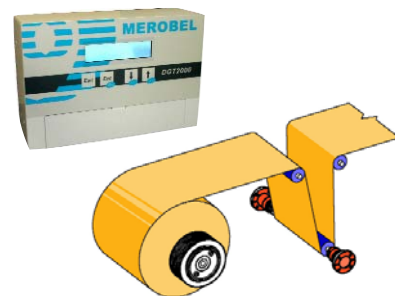
This formula has to be used when 2 sensors are mounted on the same measurement shaft .

Mounting sketch :



Associated electronics :

Digital Controllers dedicated to Tension Control applications, including load cells amplifiers and Digital PID regulator.



Note : MEROBEL is also able to supply these sensors with different Maximum Working Forces.

Ask us about your special applications.