

RDM Series Deflection Mount

Tweco® Robotics RDM-2000 series — is a safety device designed to act as a switch between the conductor tube and the robot.

- Available in three (3) models:
 - Part No. RDM-2000-S (Stock No.3500-1155) – light duty applications.
 - Part No. RDM-2000-M (Stock No.3500-1156) – medium duty applications.
 - Part No. RDM-2000-H (Stock No.3500-1157) – heavy duty applications.
- Units come standard with an air assist feature allowing the robot technician to increase the break-away pressure when required.
- E-Stop Cable Assembly- 18” long - Part No. RDM2000-JC (Stock No. 3044-1842) comes standard with the unit.



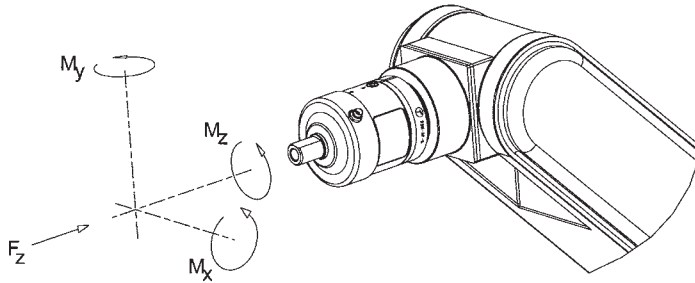
How It Works:

When there is a collision between the conductor tube and fixture/part, the conductor tube will move in the direction with the deflection mount shaft. When this happens, one or more of the three switches located inside of the mount assembly will be activated. This in turn will activate the E-stop circuit, which is in the normally closed position, thus stopping the travel of the robot arm.

The deflection mount detects motion in any direction, whether it is in the Z-axis (head on), a side load, or a torsional load.

RDM Series Deflection Mount

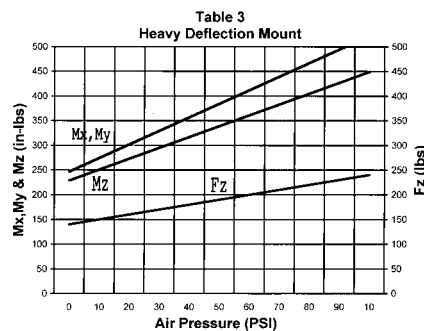
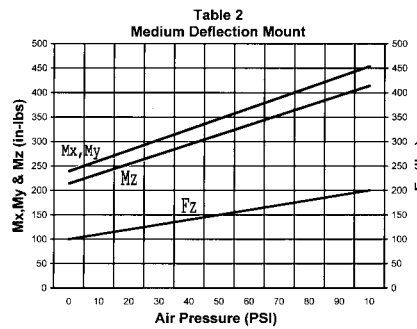
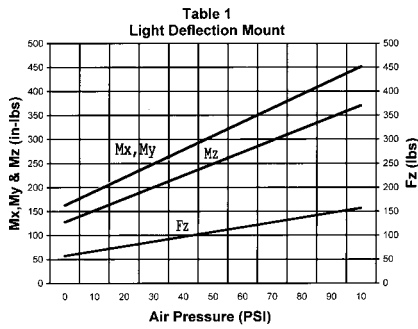
Part No.	Fz	Mx / My	Mz
RDM-2000-S	267 N (60#)	18 Nm (160 In-lbs.)	Ca. 15Nm (130 In-lbs.)
RDM-2000-M	444 N (100#)	27 Nm (245 In-lbs.)	Ca. 25 Nm (220 In-lbs.)
RDM-2000-H	662 N (140#)	28 Nm (250 In-lbs.)	Ca. 26 Nm (230 In-lbs.)

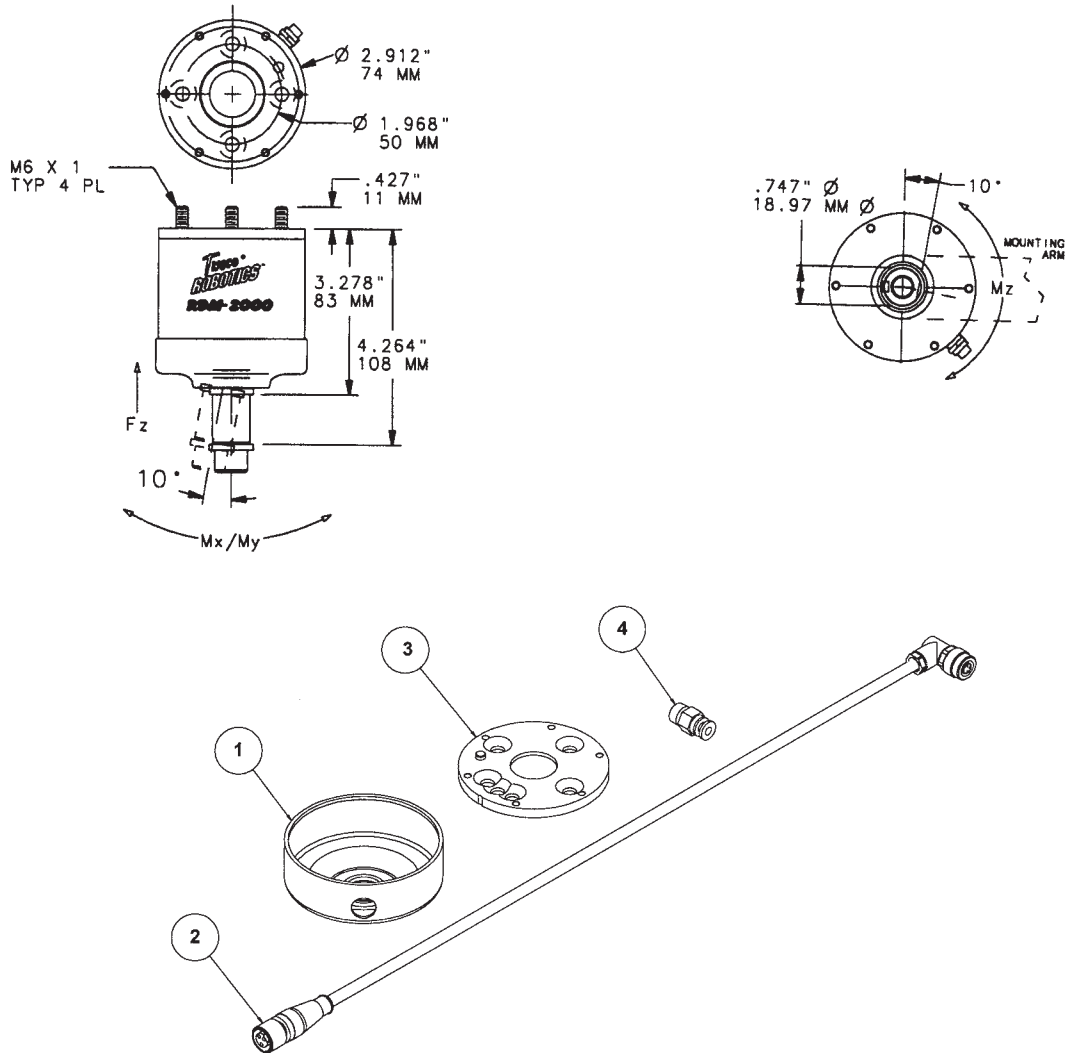


Air Assist Feature

The addition of air pressure to the RDM mount during operation will increase the force that would be required to activate the switches within the mount causing the robot arm to stop.

Tables 1 through 3 for further detail on air pressure versus force (Mx, My, & Mz in-lbs.) and (Fz – lbs.)





Replacement Parts

ITEM NO.	PART NO.	STOCK NO.	DESCRIPTION
1	RDM-2000-B	3500-1197	Protective Dust Boot
2	RDM-2000-JC	3044-1842	E-Stop Cable Assembly - 18" (457.2mm)***
	RDM-2000-EC	3500-1172	E-Stop Cable Assembly – 20' (6,10m)*
3	RDM-2000-AP	3500-1174	Rear Adapter Plate (Aluminum)
4	AF532-18NPT-S	3500-1385	Air Fitting (Accepts 5/32" tubing)

*** Standard on all RDM Deflection Mounts

* E-Stop Cable Assembly, Part No. RDM-2000-EC (Stock No. 3044-1172) is furnished with only one connector which will thread to the RDM deflection mount.