

Dodge DM Moment Couplings

Bulk Material Handling Experts

With over 100 years of experience, Dodge has earned a reputation of developing innovative coupling solutions. That history, combined with industry leading expertise in bulk material handling applications has resulted in the Dodge DM moment coupling.

Highly Engineered for Rigorous Applications

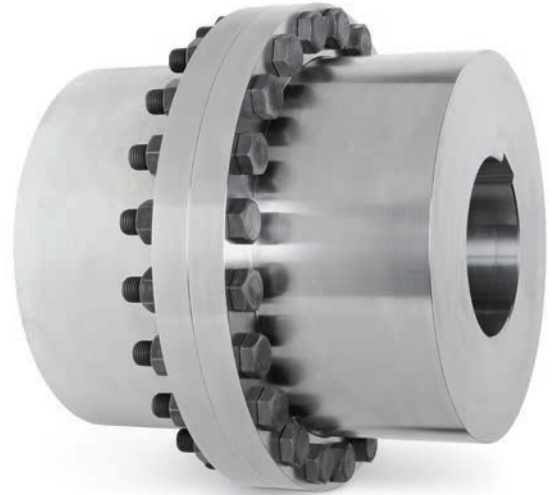
Dodge moment couplings are specifically designed to make the rigid connection between the output shaft of a gearbox and driven equipment. Highly engineered to meet the most rigorous application requirements, DM moment couplings are capable of handling both the required application torque and the bending moment forces of the suspended weight of a drive package – including the gearbox, motor, high-speed couplings, and swing base.

A Cost Saving Option

DM moment couplings enable large gearboxes to be used as alignment-free drives. Allowing customers to save money by eliminating the time consuming process of aligning the gearbox assembly to the head pulley shaft. DM moment couplings also eliminate the expense associated with the additional structural fabrication required for base-mounted drives.

High Strength, High Reliability

Utilizing high-strength 4140 alloy steel and ISO Grade 10.9 bolts, this robust design offers unparalleled strength. When there's no room to compromise on safety, you can trust Dodge to provide a highly reliable solution.



Precision Machining, 100% Verification

Moment couplings require tight tolerances and precision machining. To guarantee performance, every Dodge DM moment coupling is checked for 100% accuracy using a coordinate measurement machine (CMM).



Coordinate Measurement Machine (CMM) verification



Precision machining at Baldor's Dodge Asheville, NC, USA manufacturing facility

Save Time and Money with Hydraulic Removal

Quick removal of moment couplings is often necessary in order to maintain other installed equipment such as gearboxes, bearings, or pulley assemblies.

Traditional methods used to remove interference fit hubs include heating and pulling, or using an open flame torch to cut through the hub. Not only do these methods take an extended length of time, but they pose major safety concerns. These methods also destroy existing coupling hubs and potentially damage critical shafting, requiring customers to incur additional replacement costs.

Dodge DM moment couplings offer hydraulic removal, allowing coupling hubs to be removed quickly and safely, minimizing downtime and reducing total costs. A lightweight dual-pump skid and standard puller tools provide everything needed for easy removal.

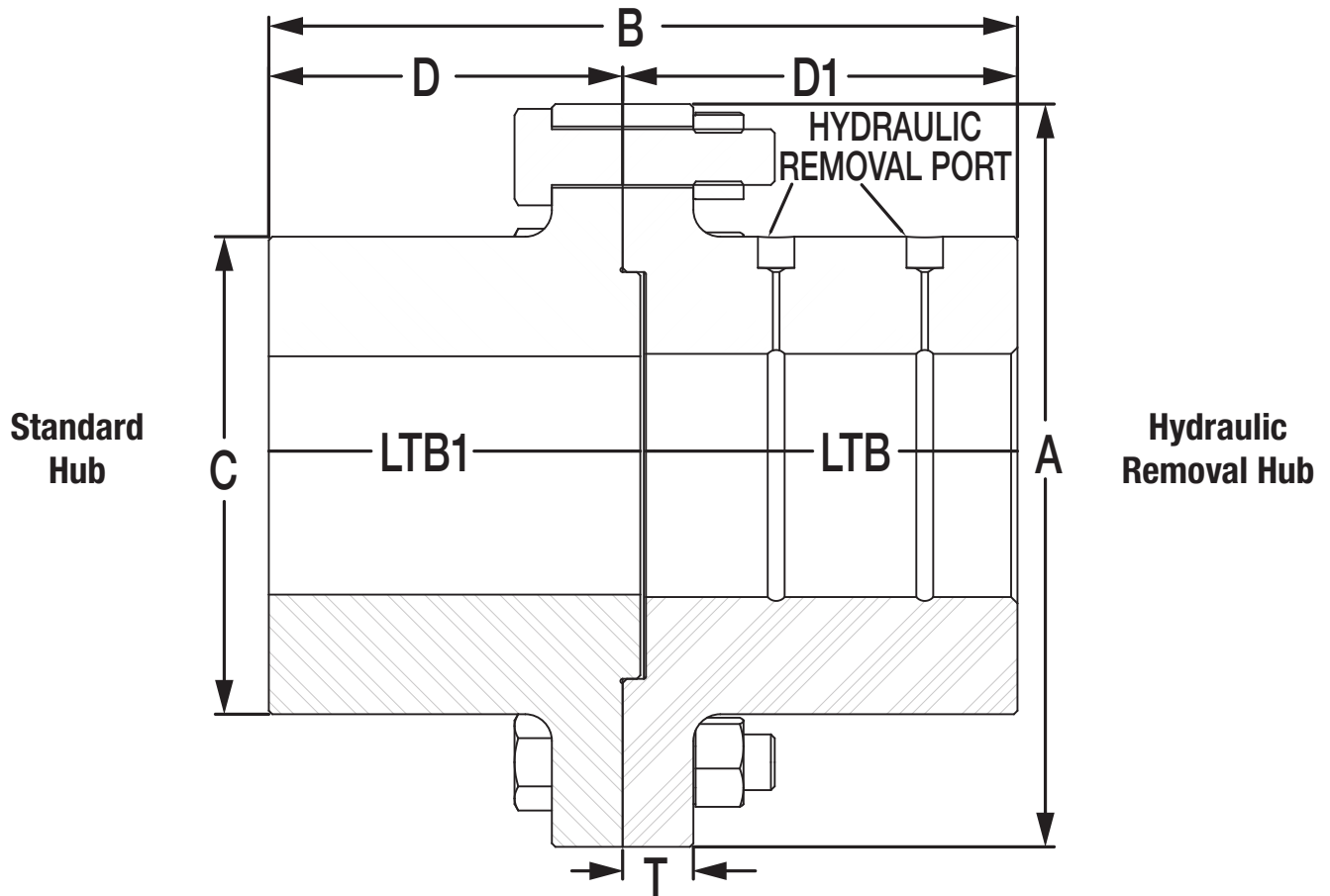
Hydraulic Removal Components

Size	Hydraulic Pump Skid	Hydraulic Fittings
DM50 - DM920	001573	001574
DM1400 - DM3500		001575

Notes:

1. Hydraulic pump skid includes steel frame, low and high pressure pumps, gauges, and rigid connections
2. A complete hydraulic removal package consists of one hydraulic pump skid and the hydraulic fittings for the respective size

Moment Coupling Ratings & Dimensions



Size	Max Bore (in)	Torque (in-lbs)	A	B	C	D	D1	Driven LTB 1	Driver LTB	BSE	Bolt Circle Diameter	Number of Bolts	Weight ¹ (lbs)
DM50	4.50	53,955	10.50	10.58	6.75	5.00	5.58	5.25	5.25	0.08	9.00	7	115
DM75	4.75	81,361	11.00	12.65	7.13	5.69	6.96	5.94	5.94	0.08	9.50	10	131
DM100	4.88	100,203	11.25	11.58	7.91	5.50	6.08	5.75	5.75	0.08	9.75	12	155
DM150	5.50	153,473	12.70	12.08	9.25	5.75	6.33	6.00	6.00	0.08	11.20	16	215
DM210	6.00	220,138	14.50	12.08	10.38	5.75	6.33	6.00	6.00	0.08	12.75	14	297
DM285	7.00	292,028	15.75	14.08	11.50	6.75	7.33	7.00	7.00	0.08	13.93	17	407
DM390	7.00	425,594	17.75	14.26	12.81	6.84	7.42	7.09	7.09	0.08	15.50	14	519
DM525	8.75	554,301	18.75	17.08	14.00	8.25	8.83	8.50	8.50	0.08	16.63	17	681
DM700	10.00	735,473	21.25	19.58	15.75	9.50	10.08	9.75	9.75	0.08	18.75	20	996
DM920	11.00	920,000	23.75	20.58	18.50	10.00	10.58	10.25	10.25	0.08	21.25	22	1404
DM1400	13.50	1,528,694	29.50	23.08	21.50	11.50	11.50	11.42	11.75	0.08	26.75	20	2274
DM2100	15.00	2,228,750	33.00	25.08	25.00	12.50	12.50	12.42	12.75	0.08	30.00	26	3269

Larger sizes available upon request

Notes:

1. Weight of coupling at minimum bore
2. Hydraulic Removal option is available on both driver and driven hubs. All dimensions remain the same for either option.

Moment Coupling Selection Worksheet

Dodge Verified Selections

To ensure safety and proper selection, details for each DM moment coupling application must be reviewed by Dodge Engineering.

Dodge CO Engineering
864-284-5700
brgpttechsupport@baldor.abb.com

Customer Name: _____

Contact Name / Field Sales Contact: _____

Phone Number: _____

Email Address: _____

1) Driver Information

A) Motor Parameters:

Power: _____
(Hp or Kw)

Speed: _____
(RPM)

Efficiency: _____

Weight: _____
(lbs or Kg)

Frame Size: _____
(Specify NEMA or IEC)

If frame size is unknown provide motor dimensions in the dimensional section of this worksheet

B) High Speed Coupling Parameters:

Type: _____
(Gear, Grid, Tire, Sleeve, Fluid, etc.)

Fluid Coupling Delay: _____
(Single or Double Delay)

Style: _____
(Close Coupled or Spacer)

Size: _____
(Manufacturer's Coupling Size)

Weight: _____
(lbs or Kg)

Distance Between Shaft Ends: _____
(in or mm)

C) Gearbox Parameters:

Output Speed: _____
(RPM)

Weight: _____
(lbs or Kg)

D) Swing Base Parameters:

Swing Base Parameters: _____
(lbs or Kg)

If Manufacturer's details are unknown then provide gearbox dimensions in the dimensional section of this worksheet.

2) Dimensional Information

A) Drive Package Dimensions:

Motor:

Height (O): _____
(in or mm)

Length (C): _____
(in or mm)

Gearbox:

Length (L): _____
(in or mm)

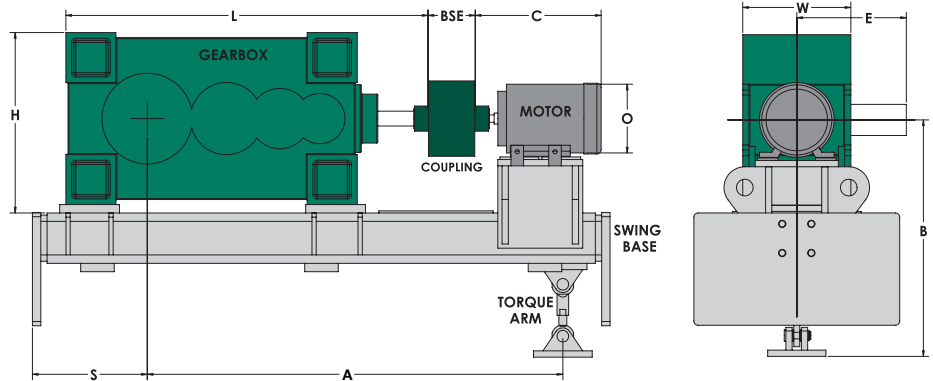
Height (H): _____
(in or mm)

Width (W): _____
(in or mm)

LSS to Side (S): _____
(in or mm)

LSS to Center Line: _____
(in or mm)

Output Shaft Size: _____
(in or mm)



System Dimensions:

Torque Arm to LSS (A): _____
(in or mm)

Base to LSS (B): _____
(in or mm)

System Weight: _____
(lbs or Kg)

3) Application Details

Description (Belt Conveyor, Bucket Elevator, etc.) _____

Severity: _____
(Light, Medium, Severe)

Driven Shaft Size: _____
(in or mm)

Is Hydraulic Removal Desired?: _____
(yes or no)

This form should be filled out in its entirety and is required for any Moment Coupling selection. This form should be submitted to Dodge Engineering when complete. Contact Dodge Engineering with any questions on the form or selection.



P.O. Box 2400, Fort Smith, AR 72902-2400 U.S.A., Ph: (1) 479.646.4711, Fax (1) 479.648.5792, International Fax (1) 479.648.5895

Baldor - Dodge

6040 Ponders Court, Greenville, SC 29615-4617 U.S.A., Ph: (1) 864.297.4800, Fax: (1) 864.281.2433

www.baldor.com