

Economical.
Durable.
Easy to operate.

DBR rope hoist





GBCRANES is a manufacturer focusing on special spreaders in the industrial field. We provide special spreadersproduct design and services for the industry users we focus on. We have established a cooperative partnership with the Canadian ROY&POLI industrial product design company and the Department of Physics of Shanghai University, and have long been committed to the design of the spreader in the exclusive field and the research on the surface treatment of materials. Different from general manufacturing enterprises, GBCRANES pays more attention to the training and construction of production quality control team, they are the key to GBCRANES product quality assurance. The spirit of craftsmanship and details determine success or failure. GBCRANES upholds this spirit and continues to provide users with high-quality products and accessories to accompany customers to grow together.

Economical. Durable. Easy to operate.



The Demag DBR rope hoist is designed to the specific needs of your market and is the ideal solution for many applications. Thanks to its uncompromising functionality and quality, it meets the high standards that we maintain as a supplier of reliable lifting solutions.

Due to its versatile configuration, the DBR rope hoist is ideally suited to small workshops as well as large industrial companies and can also be installed on existing girders.

Thanks to its advanced drive control and rugged design, the DBR rope hoist is easy to operate. At the same time, the DBR offers high reliability, good functionality and meets demanding safety standards. It is also designed for ease of maintenance – another feature that makes the Demag DBR rope hoist a highly cost-effective solution.





FOR YOUR SUCCESS:

- Modern, lightweight and compact design
- Optimized load capacities from 2 t up to 40 t
- Versatile trolley for a wide range of monorail profiles and crane girders
- Favourable headroom dimensions
- Two-speed control with smooth starting and stopping

DBR Size		Load capacity [t]											
DBN 3126	2	3.2	5	8	10	16	20	30	40				
DBR 3													
DBR 5													
DBR 10													
DBR 20													

- EK-DBR low-headroom monorail hoist
- F-DBR foot-mounted rope hoist – also for double-girder cranes

DBR rope hoist: Features at a glance

RELIABLE TRANSMISSION:

GEARBOX -

- Advanced technology, proven all over the world
- Made in Europe, fully enclosed gearbox offers maximum durability
- Hardened & precison-ground gear teeth provide smooth running characteristics and low noise emission
- Virtually maintenance-free: lubricating oil does not need to be replaced during the product's life cycle

DURABLE LIFTING:

EFFICIENT HOIST MOTOR

- Two-speed hoist motor with 6:1 speed ratio
- 60% CDF. Oversized with power reserve
- Class F insulation, IP55 protection
- Rugged aluminium housing
- Bimetal switch to protect the motor against overheating
- Quick-acting disc brake, self-adjusting function, life cycle with 1 million braking operations



PERFECTLY GUIDED ROPE:

- Protective rope guide
- Precision rope guidance
- Circumferential design
- Heavy-duty material

OVERSIZED ROPE DRUM

- Rope sheave and rope diameter ratio according to ISO M5 duty class as minimum
- Small horizontal hook travel from upper to lower hook position
- Sheave to rope diameter ratio 20:1



SAFE HANDLING:

STURDY BOTTOM HOOK BLOCK •

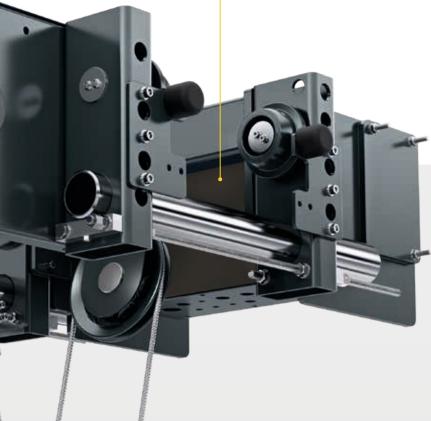
- Hook forging strength class DIN 15400 / DIN 15401
- **■** Spring-loaded safety catch
- 360° rotating load hook

ELECTRIC

- Robust contactor control for reliable operation in arduous environments
- Standard 3-phase voltage: 380-415 V, 50 Hz (440-480 V, 60 Hz)
- Standard control voltage 48 V
- Robust IP54 steel control enclosure for cabling and wiring

CONTROL SYSTEM:

- Overload protection
 - with reliable stop function
 - Performance level C (ISO 13849-1)
- Condition monitoring
 - Monitoring of machine functions, e.g. motor starts, number of operations, overload, temperature
 - Enables remaining theoretical service life to be calculated according to FEM
- Load monitor
- Programmable output relay for use with auxiliary signaling device



CONVENIENT OPERATION:

DST 7 AND DST 9 CONTROL PENDANTS

- Ergonomic control with user-friendly design
- DST 7 with 7 control elements (for monorails)
- DST 9 with 9 control elements (for cranes)
- Fatigue-free operation thanks to ergonomic housing design
- Sloping control pendant design permits operators to work in a natural, comfortable posture
- High operating reliability thanks to additional strain relief elements
- Enclosure made of glass fibre-reinforced polyester with high resistance to impacts (IP 65)



EK-DBR low-headroom monorail hoist



Compact design and flexible monorail hoist concept

Thanks to its adjustable trolley concept the Demag DBR enables rope hoists to be installed on all popular overhead girders, including monorail I-beams, European box-section girders as well as the Chinese LD hybrid girder. This flexibility ensures favorable headroom dimensions.



The special trolley configuration is suitable for a variety of girders. It minimizes the overall height of the crane from the top of the crane structure to the lifting hook. This helps to reduce the vertical space needed for crane movement and safety clearances in the building.

EXCELLENT APPROACH DIMENSIONS THANKS TO COMPACT DESIGN

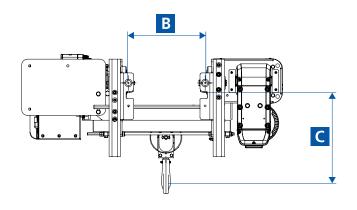
- Optimum utilisation of the available space
- Various hook paths for different building heights
- Load capacities up to 10 t

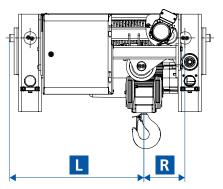
COMPACT AND EFFICIENT

- Travel motor
 - 2-speed motor with DC brake
 - Dual trolley speed 20/5 m/min, 40% CDF
 - Class F insulation, IP55 protection
 - Cast iron wheels for increased durability
- DBR 3 & 5: single gear motor with drive shaft
- DBR 10: two geared motors as standard
- Proven drive solutions with 2 driven wheels
- Infinitely variable flange width adjustment



High safety standard: anti-derailment protection and buffers increase the safety of the trolley.





Frame size	Max. load	Lifting height	Dimensions [mm]						
	capacity [t]	[m]	С	L	R	В			
EK-DBR 3	3.2	6	470-520	527	403	116 - 410			
EK-DBK 3	3.2	9	470-520	709	403	110 - 410			
		6		590					
EK-DBR 5	5.0	9	540-600	774	428	116 - 410			
		12		958					
FK DDD 10	BR 10 10.0	9	670-750	630	495	116 - 490			
EK-DBR 10		12	670-750	780	495	116 - 490			

F-DBR 5 & 10 foot-mounted hoists



Flexible applications

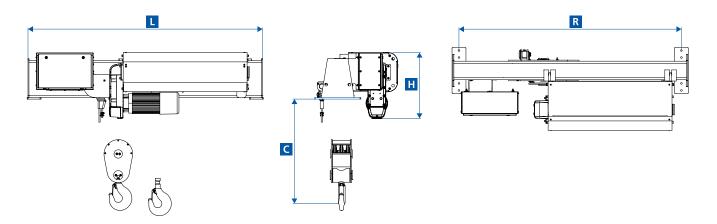
F-DR foot-mounted hoists are the ideal solution for direct installation in cranes and for plant engineering. They can be integrated direct into prepared structures or special crabs with load capacities up to 16 t.



■ Load beam included for easy and convenient connection to local trolley end carriage structures

smoother operation.

- Generously sized control panel allows inverters and other optional components to be added easily
- Equal wheel load distribution on all four wheels thanks to hook centred in upper and lower positions
- Optimized weight, sufficient and stable in operation



Frame size	Max. load	Lifting height	Dimensions [mm]						
	capacity [t]	[m]	С	L	Н	R			
	5-DBR 5 5.0	6		1,250		1,150			
F-DBR 5		9	570	1,400	535	1,300			
		12		1,600		1,500			
F-DBR 10	10.0	9	765	1,250	716	1,150			
r-DDK 10	10.0	12	705	1,400	710	1,300			
F-DBR 10	16.0	8	1,300	2,150	716	2,000			
F-DBK 10	10.0	15	1,300	2,550	/10	2,400			

F-DBR 20 foot-mounted hoist



Ready to fit: up to 40 t

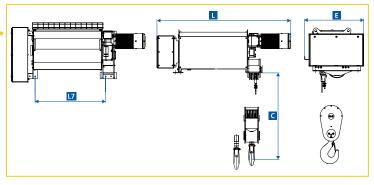
The F-DBR 20 is the strongest member of our DBR rope hoist family: it reliably lifts loads weighing up to 40 t. In addition, we also offer the F-DBR 20 with a matching steel frame, which makes the assembly of crabs easy in conjunction with standard end carriages.

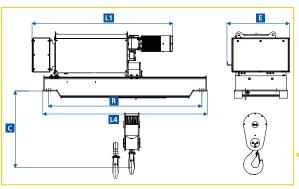
STRONG ARGUMENTS FOR A STRONG HOIST:

- Load beam included for easy and convenient connection to local trolley end carriage structures
- Generously sized control panel allows cross-travel inverters and other components to be added easily
- Equal wheel load distribution on all four wheels thanks to hook centred in upper and lower positions
- Optimized weight, smooth and quiet in operation



Frame size			Lifting	Dimensions [mm]					
	capacity [t]		height [m]	С	L	L7	E		
	20	4/1	10.5	1 206	1,761	591	1 000		
	20	4/ 1	1,306	2,031	861	1,098			
F DDD 20	20 / 25 / 20	C/1	12	1 246	2,031	861	1 000		
F-DBR 20	20 / 25 / 30	6/1	15	1,346	2,221	1,051	1,098		
	22 / 40	0/1	11	1.506	2,221	1,051	1 000		
	32 / 40	8/1	15	1,596	2,471	1,301	1,098		





Frame size			Lifting							
	capacity [t]		height [m]	С	L1	L4	R	E		
	20	4/1	10.5	1 100	1,761	2 500	2,400	1 000		
	20	4/ 1	18	1,100	2,031	2,590		1,098		
DDD 20	20 / 25 / 20	C /1	12	1 100	2,031	2 500	2.400	1 000		
DBR 20	20 / 25 / 30	6/1	15	1,100	2,221	2,590	2,400	1,098		
	32 / 40	0/1	11	1 250	2,221	2 900	2 700	1 000		
	32 / 40	8/1	15	1,350	2,471	2,890	2,700	1,098		

DBR LOW HEADROOM MONORAIL HOIST 2-10 t

	Hoist specifications								L low headroom trolley									
Hoist model	SWL [t]	Hook path [m]	FEM	Lifting speed [m/min]	Hoist motor type	Hoist motor output [kW]	Rope dia. [mm]	Reeving	Travel motor Type	Travel speed [m/min]	Travel motor output [kW]	C dim. [mm]	Flange width [mm]	Total weight [kg]				
	2.0	6	2m	5.0/0.8	P2	3.6/0.5	7	4/1	MF06MA104	20/5				265				
EK-DBR 3	2.0	9	2111	3.0/0.8	ΓZ	3.0/0.3		4/ 1	IVII OOIVIA 104	20/3	1 x 0.3/0.05 470 520					I X	116	280
EK-DDK 3	3.2	6	2m	5.0/0.8	P2	3.6/0.5	7	4/1	MF06MA104	20/5		520	410	265				
	J.Z	9	2111	3.0/0.0	12	3.0/0.3		4/ 1	WII 001VIA 104	20/3				280				
		6									100	540	116	385				
EK-DBR 5	5.0	9	2m	5.0/0.8	P3	4.5/0.7	9	9 4/1	MF06LA104	20/5	1 x 0.45/0.1	600	-	400				
		12									01.107.011		410	415				
	8.0	9	2m	5.0/0.8	P5	9/1.4	12	4/1	MF06LA104	20/5				670				
EK-DBR 10	0.0	12	∠m	5.0/0.8	ro	9/1.4	12	4/ 1	IVIFUOLA 104	20/5	2 x	670	116	720				
EK-DBK 10	10.0	9	2m	5.0/0.8	P5	9/1.4	12	4/1	MF06LA104	20/5	0.45/0.1	750	490	670				
	10.0	12	∠m	5.0/0.8	ro	9/1.4	12	4/1	IVIFUGLA 104	20/5				720				

DBR FOOT-MOUNTED HOIST 5-16 t

		F foot-mounted hoist								
Hoist model	SWL [t]	Hook path [m]	FEM	Lifting speed [m/min]	Hoist motor type	Hoist motor output [kW]	Rope dia. [mm]	Reeving	Track gauge [mm]	Total weight [kg]
		6							1150	250
F-DBR 5	5.0	9	2m	5.0/0.8	P3	4.5/0.7	9	4/1	1300	265
		12							1500	280
	8.0	9	2m	5.0/0.8	P5	9/1.4	12	4.44	1150	505
	8.0	12	∠m	5.0/0.8	P5	9/1.4	12	4/1	1300	530
F-DBR 10	10.0	9	2m	5.0/0.8	P5	9/1.4	12	4.14	1150	505
L-DDK IO	10.0	12	2111	5.0/0.6	F5	9/1.4	12	4/1	1300	530
	16.0	8	2m	3.2/0.5	P5	9/1.4	11	6/1	2000	720
	10.0	15	2111	3.2/0.5	LD	9/1.4	11	0/1	2400	815

DBR ROPE HOIST: PRODUCT RANGE 20-40 t

			Но	ist specificatio	ns				F foot-mounted hoist	
Hoist model	SWL [t]	Hook path [m]	FEM	Lifting speed [m/min]	Hoist motor type	Hoist motor output [kW]	Rope dia. [mm]	Reeving	Total weight without / incl. frame [kg]	
		10,5	1m	5/0.8		18/3 P7 — 15 15/2.5		4/1	980 / 1275	
	20	18	ım	5/0.8	D7		15	4/1	1060 / 1350	
	20	12	3m	4/0.7	F/		15/2 5	15	6/1	1120 / 1490
		15	וווכ	4/0.7				0/1	1175 / 1550	
	25	12	2m	4/0.7	P7	18/3	15	6/1	1120 / 1490	
DBR 20 -	23	15	2111	4/0.7	17				1175 / 1550	
DDR 20	30	12	1Am	3.2/0.5	P7	18/3	15	6/1	1120 / 1490	
	30	15	TAIII	3.2/0.3	Г/	10/3	13	0/1	1175 / 1550	
	32	11	11 2m 3.2/0.5	3.2/0.5	P7	18/3	15	15 8/1	1255 / 1670	
	32	15	2111	3.2/0.3	Г/	18/3	15		1330 / 1745	
	40	11	1Am	2.5/0.4	P7	18/3	15	8/1	1255 / 1670	
	40	15	IAM	2.3/0.4	۲/	10/3			1330 / 1745	

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