Multi-Disc Clutches

Series 66H-02



Features

- Clutch does not require adjustment
- Torques can be varied by regulating supply pressure
- Bearing-free design eliminates bearing life considerations
- Speed of engagement can be controlled by varying pressure supply flow rate
- Individual plate separation ensures low drag torque
- Large friction area gives extended plate life
- Multi-disc design results in compact high torque clutch
- No axial thrust transmitted to adjacent components

Series 66H-02 Pressure Applied Multi-Disc Clutches

Rotating Cylinder for Operation in Oil

Series 66H-02 pressure-applied rotating cylinder multi-disc clutches are designed for use in oil. The pressure supply is fed axially along the mounting shaft and radially outwards through the clutch hub into the cylinder. Positive disengagement is achieved by the use of release springs between the inner plates.

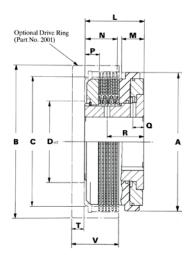
Standard drive rings available as optional extras.

Typical Applications

- Marine Splitter Gearboxes
- Tractor PTO's
- Marine Main Drives and PTO's
- Machine Tools
- Available in double acting version for 2-speed gearboxes

Series 66H-02

Rated Static Torque Nm at 34.5 bar 1630 9400 43350 Rated Dynamic Torque Nm at 34.5 bar 1085 6260 28900 Rated Dynamic Torque Nm at 34.5 bar 1085 6260 28900 Pressure to Overcome Release Springs bar 2.07 3.0 Drag Torque Mm 1.2 5.6 20.3 Tri-lbs 0.9 4.13 15.0 Maximum Speed revs/min 3900 2500 18000 Inertia (kgm ²) = Table Value x 10 ⁻³ revs/min 3900 2500 1800 Inertia (kgm ²) = Table Value x 10 ⁻³ revs/min 3.0 105 1170 Weight (kg) 3.0 105 1170 10 7.8 420 Drive Ring 1.0 7.8 420 100 101 100 Schdzes Torge (H7) Ksysse to 15.0.773 Ss 425:1952 26.8 150 10.1 10.0 10.0 10.0 10.0 10.0 10.0 10.0<	MOD	EL		66H45-02	66H80-02	66H140-02
ft-lbs at 500 psi 1200 6930 31960 Rated Dynamic Torque Nm at 34.5 bar 1085 6260 28900 ft-lbs at 500 psi 800 4615 21310 Pressure to Overcome bar 2.8 2.67 3.0 Release Springs Mm 1.2 5.6 20.3 Drag Torque Nm 1.2 5.6 20.3 Maximum Speed revs/min 3900 2500 1800 Inertia (kgm?) = Table Value x 10 ⁻³ T.4 135 1680 Set of Outer Plates 1.43 14 240 Drive Ring 3.0 105 1170 Weight (kg) 1.0 7.8 42 Dimensional Data (all dimensions in mm) Standard Bores (H7) Keways to I.S.0. 773 14 x 3.8 22 x 5.4 36 x 8.4 Standard Bores (H7) Keyage to I.S.0. 773 14 x 3.8 22 x 5.4 36 x 8.4 Diameters (all dimensions in mm) Standard Bores (H7) Keyage to I.S.0. 10.0 1	Performance Data					
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ft-lbs at 500 psi 800 4615 21310 Pressure to Overcome Release Springs bar 2.8 2.67 3.0 psi 41 39 43 Drag Torque Nm 1.2 5.6 20.3 ft-lbs 0.9 4.13 15.0 Maximum Speed revs/min 3900 2500 18000 Imertia (Kgm ²) = Table Value x 10 ³ 14 240 240 Clutch Less Drive Ring and Outer Plates 7.4 135 1680 Set of Outer Plates 1.43 14 240 Drive Ring 3.0 105 1170 Weight (Kg)		ft-lbs	at 500 psi	1200	6930	31960
bar 2.8 2.67 3.0 Release Springs psi 41 39 43 Drag Torque Nm 1.2 5.6 20.3 ft-lbs 0.9 4.13 15.0 Maximum Speed revs/min 3900 2500 1800 Inertia (Kgm ²) = Table Value x 10 ³ Clutch Less Drive Ring and Outer Plates 7.4 135 1680 Set of Outer Plates 1.43 14 240 Drive Ring 3.0 105 1170 Weight (Kg) 1.0 7.8 42 Dimensional Data (all dimensions in mm) Standard Bores (H7) Keways to 1.5.0 773 8.8 235.31972 Pt. 1 45 80 150 DD.IN. 6885: 1986 Pt. 1; NE22-175 14 x 3.8 22 x 5.4 36 x 8.4 (For bores other than specified please consult our Engineering Department) 14 x 3.8 22 x 5.4 36 x 8.4 Diameter of Feed Holes to cylinder 6.4 10.0 10.0 L 59 110 181 Maxi.8	Rated Dynamic Torque	Nm	at 34.5 bar	1085	6260	28900
Inclease Springs psi 41 39 43 Prelease Springs Nm 1.2 5.6 20.3 ft-lbs 0.9 4.13 15.0 Maximum Speed revs/min 3900 2500 1800 Inertia (Kgm³ = Table Value x 10 ⁻³ 143 14 240 Dirke Ring and Outer Plates 7.4 135 1680 Set of Outer Plates 3.0 105 1170 Weight (Kg) 3.0 105 1170 Clutch Less Drive Ring 4.5 26.8 100 Drive Ring 1.0 7.8 42 Dimensional Data (all dimensions in mm) Standard Bores (H7) Keyways to I.S.O. 773 85.423:1972 Pt. 1 36 x 8.4 D.I.N. 6885:1986 Pt. 1; NF:E22-175 45 80 150 10.0 D.I.N. 6885:1996 Pt. 1; NF:E22-175 45 80 150 10.0 D.I.N. 6885:1992 Pt. 1 DI.N. 6885:1986 Pt. 1; NF:E22-175 14 x 3.8 22 x 5.4 36 x 8.4 Por bees offied please consult our Engineering D		ft-lbs	at 500 psi	800	4615	21310
N N 11 0.0 10 Drag Torque Nm 1.2 5.6 20.3 Maximum Speed revs/min 3900 2500 1800 Inertia (kgm?) = Table Value x 10 ³ revs/min 3900 2500 1800 Inertia (kgm?) = Table Value x 10 ³ 1.43 14 240 Orive Ring 3.0 105 1170 Weight (kg) 3.0 105 1170 Clutch Less Drive Ring 4.5 26.8 100 Drive Ring 1.0 7.8 42 Dri	Pressure to Overcome		bar	2.8	2.67	3.0
Drag Torque ft-lbs 0.9 4.13 15.0 Maximum Speed revs/min 3900 2500 1800 Inertia (kgm²) = Table Value x 10³ revs/min 3900 2500 1800 Clutch Less Drive Ring and Outer Plates 7.4 135 1680 Set of Outer Plates 7.4 135 1680 Drive Ring 3.0 105 1170 Weight (kg) 4.5 26.8 100 Drive Ring 4.5 26.8 100 Drive Ring 4.5 26.8 100 Drive Ring 4.5 80 150 Drive Ring 1.0 7.8 42 Dimensional Data (all dimensions in mm) 14 x 3.8 22 x 5.4 36 x 8.4 (For bores other than specified please consult our Engineering Department) 14 x 3.8 22 x 5.4 36 x 8.4 Diameters (all dimensions in mm) 125 220 355 A 125 220 355 A 125 220 355	Release Springs		psi	41	39	43
It-lbs 0.9 4.13 15.0 Maximum Speed revs/min 3900 2500 1800 Inertia (kgm?) = Table Value x 10 ³ 7.4 135 1680 Set of Outer Plates 7.4 135 1680 Set of Outer Plates 1.43 14 240 Drive Ring 3.0 105 1170 Weight (kg) 1.0 7.8 42 Dimensional Data (all dimensions in mm) 510 7.8 42 Dimensional Data (all dimensions in mm) 510 50 150 Standard Bores (H7) 85, 4235, 1972 Pt.1 45 80 150 Standard Bores (H7) 85, 4235, 1972 Pt.1 14 x 3.8 22 x 5.4 36 x 8.4 (For bores other than specified please consult our Engineering Department) 14 x 3.8 22 x 5.4 36 x 8.4 Diameter of Feed Holes 10 oplates 6.4 8.0 10.0 L 59 110 181 M Maximum Engaged 25.2 40.7 83.8 N <			Nm	1.2	5.6	20.3
Inertia (kgm²) = Table Value x 10-3 Clutch Less Drive Ring and Outer Plates 7.4 135 1680 Set of Outer Plates 1.43 14 240 Drive Ring 3.0 105 1170 Weight (kg) 1.0 7.8 42 Dimensional Data (all dimensions in mm) 1.0 7.8 42 Dimensional Data (all dimensions in mm) 5 80 150 D.1.N. 6885:1962 Pt. 1 1.45.8 80 150 D.1.N. 6885:1963 Pt. 1; N.F.E22-175 14 x 3.8 22 x 5.4 36 x 8.4 (For bores other than specified please consult our Engineering Department) 125 220 355 Diameter of Feed Holes 125 220 355 Diameter of Feed Holes 10 otylinder 6.4 8.0 10.0 L 59 110 181 181 181 M Maximum Engaged 25.2 40.7 83.8 125 36.5 Q 10.1 20 33 R 40.0 75 <	Drag lorque		ft-lbs	0.9	4.13	15.0
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Set of Outer Plates 1.43 14 240 Drive Ring 3.0 105 1170 Weight (kg) 4.5 26.8 100 Drive Ring 1.0 7.8 42 Dimensional Data (all dimensions in mm) 5 36.8 42 Standard Bores (H7) Keyways to I.S.0.773 85.4'235.1'968 Pt. 1; NF.E22-175 14 x 3.8 22 x 5.4 36 x 8.4 For bores other than specified please consult our Engineering Department) 14 x 3.8 22 x 5.4 36 x 8.4 Diameters (all dimensions in mm) 220 355 36 x 8.4 Diameter of Feed Holes 125 220 355 36 x 8.4 Diameter of Feed Holes 125 220 355 36 x 8.4 M Maximum Engaged 25.2 40.7 83.8 10.0 L 59 110 181 14 34 36 36 N 13.3 62 98 9 9.5 25 36.5 36 36 36 36 36	Inertia (kgm²) = Table Value x	k 10⁻³				
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Weight (kg) Clutch Less Drive Ring 4.5 26.8 100 Drive Ring 1.0 7.8 42 Dimensional Data (all dimensions in mm) 5 45 80 150 Standard Bores (H7) 45 80 150 0.1N. 6825:1968 Pt. 1; NFE22-175 14 x 3.8 22 x 5.4 36 x 8.4 (For bores other than specified please consult our Engineering Department) 14 x 3.8 22 x 5.4 36 x 8.4 Diameters (all dimensions in mm) 4 125 220 355 Diameter of Feed Holes 125 220 355 Diameter of Feed Holes 10 plates 6.4 8.0 10.0 L 59 110 181 M Maximum Engaged 25.2 40.7 83.8 N 31.3 62 98 P 9.5 25 36.5 Q 10.1 20 33 R 40.0 75 127 Drive Ring 146 245 420 <t< td=""><td>Set of Outer Plates</td><td></td><td></td><td>1.43</td><td>14</td><td>240</td></t<>	Set of Outer Plates			1.43	14	240
Meight (kg) 4.5 26.8 100 Drive Ring 1.0 7.8 42 Dimensional Data (all dimensions in mm) James (M7) 45 80 150 Standard Bores (H7) 45 80 150 Jbmes (M7) Keyways to I.S.O. 773 BS. 4235:1972 Pt. 1 45 80 150 DI.N. 6885:1968 Pt. 1; NFE22-175 14 x 3.8 22 x 5.4 36 x 8.4 (For bores other than specified please consult our Engineering Department) 14 x 3.8 22 x 5.4 36 x 8.4 Diameters (all dimensions in mm) Image: Construct the second text of th	Drive Ring			3.0	105	1170
Clutch Less Drive Ring 4.5 26.8 100 Drive Ring 1.0 7.8 42 Dimensional Data (all dimensions in mm) 45 80 150 Standard Bores (H7) Keyways to I.S.O. 773 8.5 425.1972 Pt. 1 45 80 150 D.I.N. 6885:1968 Pt. 1; NF.E22-175 .14 x 3.8 22 x 5.4 36 x 8.4 (For bores other than specified please consult our Engineering Department) 14 x 3.8 22 x 5.4 36 x 8.4 (For bores other than specified please consult our Engineering Department) 10.0 <t< td=""><td>Weight (kg)</td><td></td><td></td><td></td><td></td><td></td></t<>	Weight (kg)					
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Standard Bores (H7) 45 80 150 B.S. 4235:1972 Pt.1 14 x 3.8 22 x 5.4 36 x 8.4 D.I.N. 6885:1968 Pt.1; NFE22-175 14 x 3.8 22 x 5.4 36 x 8.4 For bores other than specified please consult our Engineering Department) 125 220 355 Diameters (all dimensions in mm) 125 220 355 Diameter of Feed Holes to cylinder 6.4 10.0 10.0 L 59 110 181 M Maximum Engaged 25.2 40.7 83.8 N 31.3 62 98 P 9.5 25 36.5 Q 10.1 20 33 R 40.0 75 127 Drive Ring 146 245 420 C 117.7 207.7 359.3 D (H7) 74 130 220 T 11 17 27 V 44 79 136 D (H7) 48 67 122 D.P. 10/12 8/10 <td< td=""><td>Drive Ring</td><td></td><td></td><td>1.0</td><td>7.8</td><td>42</td></td<>	Drive Ring			1.0	7.8	42
Standard Bores (H7) 45 80 150 B.S. 4235:1972 Pt.1 14 x 3.8 22 x 5.4 36 x 8.4 D.I.N. 6885:1968 Pt.1; NFE22-175 14 x 3.8 22 x 5.4 36 x 8.4 For bores other than specified please consult our Engineering Department) 125 220 355 Diameters (all dimensions in mm) 125 220 355 Diameter of Feed Holes to cylinder 6.4 10.0 10.0 L 59 110 181 M Maximum Engaged 25.2 40.7 83.8 N 31.3 62 98 P 9.5 25 36.5 Q 10.1 20 33 R 40.0 75 127 Drive Ring 146 245 420 C 117.7 207.7 359.3 D (H7) 74 130 220 T 11 17 27 V 44 79 136 D (H7) 48 67 122 D.P. 10/12 8/10 <td< td=""><td>Dimensional Data (all dimensional Data</td><td>ons in mm)</td><td></td><td></td><td></td><td></td></td<>	Dimensional Data (all dimensional Data	ons in mm)				
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bit or cylinder 6.4 10.0 10.0 Diameter of Feed Holes to cylinder 6.4 8.0 10.0 Lengths 6.4 8.0 10.0 L 59 110 181 M Maximum Engaged 25.2 40.7 83.8 N 31.3 62 98 P 9.5 25 36.5 Q 10.1 20 33 R 40.0 75 127 Drive Ring 146 245 420 C 117.7 207.7 359.3 D (H7) 74 130 220 T 11 17 27 V 44 79 136 Number of Teeth 48 67 122 D.P. 10/12 8/10 3 Module	Diameters (all dimensions in mi	m)				
Diameter of Feed Holes to plates 6.4 8.0 10.0 Lengths 59 110 181 M Maximum Engaged 25.2 40.7 83.8 N 31.3 62 98 P 9.5 25 36.5 Q 10.1 20 33 R 40.0 75 127 Drive Ring 146 245 420 C 117.7 207.7 359.3 D (H7) 74 130 220 T 11 17 27 V 44 79 136 Number of Teeth 48 67 122 D.P. 10/12 8/10 3 Module	А			125	220	355
to plates 6.4 8.0 10.0 Lengths 59 110 181 M Maximum Engaged 25.2 40.7 83.8 N 31.3 62 98 P 9.5 25 36.5 Q 10.1 20 33 R 40.0 75 127 Drive Ring 146 245 420 C 117.7 207.7 359.3 D (H7) 74 130 220 T 11 17 27 V 44 79 136 Number of Teeth 48 67 122 D.P. 10/12 8/10 3 Module	Diameter of Feed Holes		to cylinder	6.4	10.0	10.0
L59110181M Maximum Engaged25.240.783.8N31.36298P9.52536.5Q10.12033R40.075127Drive RingB146245420C117.7207.7359.3D (H7)74130220T111727V4479136Number of Teeth4867122D.P.10/128/103 Module			to plates	6.4	8.0	10.0
M Maximum Engaged 25.2 40.7 83.8 N 31.3 62 98 P 9.5 25 36.5 Q 10.1 20 33 R 40.0 75 127 Drive Ring 146 245 420 C 117.7 207.7 359.3 D (H7) 74 130 220 T 11 17 27 V 44 79 136 Number of Teeth 48 67 122 D.P. 10/12 8/10 3 Module	Lengths					
N 31.3 62 98 P 9.5 25 36.5 Q 10.1 20 33 R 40.0 75 127 Drive Ring 31.3 62 98 B 146 245 420 C 117.7 207.7 359.3 D (H7) 74 130 220 T 11 17 27 V 44 79 136 Number of Teeth 48 67 122 D.P. 10/12 8/10 3 Module	L			59	110	181
P 9.5 25 36.5 Q 10.1 20 33 R 40.0 75 127 Drive Ring 9.5 245 420 B 146 245 420 C 117.7 207.7 359.3 D (H7) 74 130 220 T 11 17 27 V 44 79 136 Number of Teeth 48 67 122 D.P. 10/12 8/10 3 Module	M Maximum Engage	d		25.2	40.7	83.8
Q 10.1 20 33 R 40.0 75 127 Drive Ring 40.0 75 127 B 146 245 420 75 127 Drive Ring 1 1 75 127	Ν			31.3	62	98
R40.075127Drive RingB146245420C117.7207.7359.3D (H7)74130220T111727V4479136Number of Teeth4867122D.P.10/128/103 Module	Р			9.5	25	36.5
Drive Ring 146 245 420 B 146 245 420 C 117.7 207.7 359.3 D (H7) 74 130 220 T 11 17 27 V 44 79 136 Number of Teeth 48 67 122 D.P. 10/12 8/10 3 Module	Q			10.1	20	33
B 146 245 420 C 117.7 207.7 359.3 D (H7) 74 130 220 T 11 17 27 V 44 79 136 Number of Teeth 48 67 122 D.P. 10/12 8/10 3 Module	R			40.0	75	127
C117.7207.7359.3D (H7)74130220T111727V4479136Number of Teeth4867122D.P.10/128/103 Module	Drive Ring					
D (H7) 74 130 220 T 11 17 27 V 44 79 136 Number of Teeth 48 67 122 D.P. 10/12 8/10 3 Module	В			146	245	420
T 11 17 27 V 44 79 136 Number of Teeth 48 67 122 D.P. 10/12 8/10 3 Module	C			117.7	207.7	359.3
V 44 79 136 Number of Teeth 48 67 122 D.P. 10/12 8/10 3 Module	D (H7)			74	130	220
Number of Teeth 48 67 122 D.P. 10/12 8/10 3 Module	Т			11	17	27
D.P. 10/12 8/10 3 Module	V			44	79	136
	Number of Teeth			48	67	122
PA 20° 20° 20°	D.P.			10/12	8/10	3 Module
	P.A.			20°	20°	20°
P.C.D. 121.92 212.72 366	P.C.D.			121.92	212.72	366



• More models available