

TCR Air Powered Hoists with Pendant and Cord Controls and Hook Suspension

Harrington's TCR Series air hoists offer the benefit of lifting heavier loads while maintaining low headroom and a continuous duty cycle. These hoists are best suited for use in foundries, assembly lines, construction sites and many other demanding applications.

Features and Benefits

Unlimited Duty Cycle

For continuous operation

Spring-Loaded Multi-Vane Motor Design

Permits very fine feathering control

High Strength Cast Iron Housing

Proven weather resistant and durable in harsh environments

Airtight Hoist

Results in efficient use of air

Comfortable Noise Levels

External muffler reduces noise level to 80dBA @ 1 yd. with no load

Heavy Duty Self-Adjusting Brake

For precise braking action

Standard Upper & Lower Limit Stops

Prevents over-travel of hook in either direction

Built-in Load Limiter

Pre-set to stop lifting when load is over rated capacity Adjustable

Wear Resistant Load Chain

Grade 80, case-hardened for superior strength

Standard Hoist Specifications

Capacity Range

1/4 - 6 Ton (see page 24 for 10 - 25 Ton)

Standard Lift

(longer lifts available)

Standard Pendant or Cord Length

4' less than lift (longer lengths available)

Air Supply Requirement

48 - 90 cfm at 60 - 90 psi

Air Lubrication

Minimum 10 to 15 drops of oil per minute (0.2 - 0.3 cc/min.)

Air Filtration

Maximum 5 micron air filter or finer required

Air Inlet Port

1/2" NPT

Air Supply Hose Minimum Size

1/4 - 2 Tons — 1/2" 3 - 6 Tons — 3/4"

Operating Conditions

Temperature range +14° to 140°F Humidity 85% or less

Chain Containers

Optional Canvas or Steel







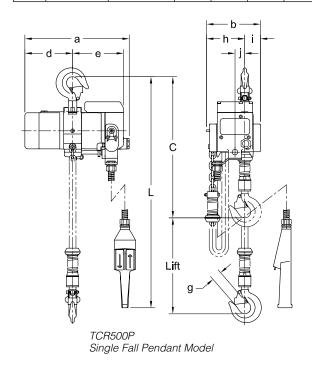
TCR Air Powered Hoists with Pendant and Cord Controls and Hook Suspension

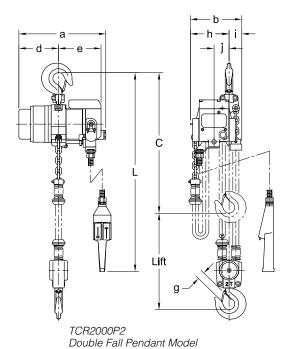
PENDANT MODEL—SPECIFICATIONS

		Otendend	Push Button	Up/Dowi (ft/min @		Air Consum	Down Iption Rates in @ 90 psi)	Load Chain Diameter (mm)	N-4	Weight for Additional
Cap. (Tons)	Product Code	Standard Lift (ft)	Hose L (ft)	No Load	Full Load	No Load	Full Load	X Chain Fall Lines	Net Weight (lbs)	One Foot of Lift (Ibs)
1/4	TCR250P		7.5	68 / 44	52 / 51	63 / 49	48 / 57	6.3 x 1	68	0.6
1/2	TCR500P		7.5	68 / 44	37 / 57	63 / 49	48 / 57	6.3 x 1	68	0.6
1	TCR1000P2		7.5	34 / 22	19 / 29	63 / 49	48 / 57	6.3 x 2	78	1.2
1	TCR1000P	10	7.5	37 / 22	21 / 33	62 / 53	53 / 60	7.1 x 1	77	0.8
2	TCR2000P2		7.5	19 / 11	11 / 16	62 / 53	53 / 60	7.1 x 2	88	1.5
3	TCR3000P		8.0	18 / 11	10 / 15	90 / 65	71 / 74	11.2 x 1	152	2.0
6	TCR6000P2		8.0	9/5	5/7	90 / 65	71 / 74	11.2 x 2	198	4.0

PENDANT MODEL—DIMENSIONS

Cap. (Tons)	Product Code	Headroom C (in)	a (in)	b (in)	d (in)	e (in)	g (in)	h (in)	i (in)	j (in)
1/4	TCR250P	18.2	13.5	6.9	6.1	6.6	1.2	4.9	2.0	1.3
1/2	TCR500P	18.2	13.5	6.9	6.1	6.6	1.2	4.9	2.0	1.3
1	TCR1000P2	20.4	13.5	7.7	6.1	6.6	1.2	5.9	1.9	2.2
1	TCR1000P	18.3	13.5	6.9	6.1	6.6	1.2	4.9	2.0	1.3
2	TCR2000P2	21.8	13.5	8.0	6.1	6.6	1.2	6.0	2.0	2.3
3	TCR3000P	22.2	17.7	8.9	8.0	9.0	1.3	1.9	6.9	1.7
6	TCR6000P2	26.5	17.7	11.1	8.0	9.0	1.7	2.5	8.7	3.4



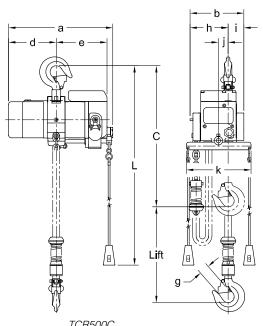


CORD MODEL—SPECIFICATIONS

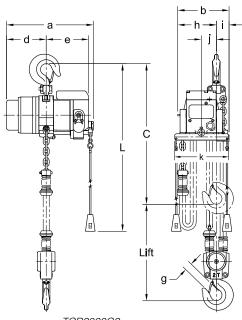
		Otendend	01		n Speeds 9 90 psi)	Air Consum	Down Iption Rates in @ 90 psi)	Load Chain Diameter (mm)	N-4	Weight for Additional
Cap. (Tons)	Product Code	Standard Lift (ft)	Cord L (ft)	No Load	Full Load	No Load	Full Load	X Chain Fall Lines	Net Weight (lbs)	One Foot of Lift (Ibs)
1/4	TCR250C		7.5	68 / 44	52 / 51	63 / 49	48 / 57	6.3 x 1	66	0.6
1/2	TCR500C		7.5	68 / 44	37 / 57	63 / 49	48 / 57	6.3 x 1	66	0.6
1	TCR1000C2		7.5	34 / 22	19 / 29	63 / 49	48 / 57	6.3 x 2	76	1.2
1	TCR1000C	10	7.5	37 / 22	21/33	62 / 53	53 / 60	7.1 x 1	75	0.8
2	TCR2000C2		7.5	19 / 11	11 / 16	62 / 53	53 / 60	7.1 x 2	86	1.5
3	TCR3000C		8.0	18 / 11	10 / 15	90 / 65	71 / 74	11.2 x 1	150	2.0
6	TCR6000C2		8.0	9/5	5/7	90 / 65	71 / 74	11.2 x 2	196	4.0

CORD MODEL — DIMENSIONS

Cap. (Tons)	Product Code	Headroom C (in)	a (in)	b (in)	d (in)	e (in)	g (in)	h (in)	i (in)	j (in)	k (in)
1/4	TCR250C	18.2	13.5	6.9	6.1	6.6	1.2	4.9	2.0	1.3	8.3
1/2	TCR500C	18.2	13.5	6.9	6.1	6.6	1.2	4.9	2.0	1.3	8.3
1	TCR1000C2	20.4	13.5	7.7	6.1	6.6	1.2	5.9	1.9	2.2	8.3
1	TCR1000C	18.3	13.5	6.9	6.1	6.6	1.2	4.9	2.0	1.3	8.3
2	TCR2000C2	21.8	13.5	8.0	6.1	6.6	1.2	6.0	2.0	2.3	8.3
3	TCR3000C	22.2	17.7	8.9	8.0	9.0	1.3	1.9	6.9	1.7	8.3
6	TCR6000C2	26.5	17.7	11.1	8.0	9.0	1.7	2.5	8.7	3.4	8.3



TCR500C Single Fall Cord Model



TCR2000C2 Double Fall Cord Model



TCRM, TCRP and TCRG Air Powered Hoists with Air Powered, Push and Geared Trolleys

Harrington's TCR hoists will couple with our air powered, push or geared trolleys for added mobility. The MCR air powered trolley is the ideal choice for transporting medium to heavy loads in construction and foundry applications. The economical PT or GT manual trolleys are perfect for lighter, infrequent moves and in small workshops.

Refer to page 14 for standard hoist specifications.

Features and Benefits

Air Powered Trolleys

Unlimited Duty Cycle

For continuous operation

Spring-Loaded Multi-Vane Motor Design

Permits smooth operation and controlled travel

High Strength Cast Iron Housing

Proven weather resistant and durable in harsh environments

Internal Disc Brake

Protected from harsh environments

Drop Stops & Rubber Bumpers

To ensure safe operation

Side Guide Rollers

Provide additional stability and smooth travel

Versatile Wheels

Fit flat or tapered beam flange

Trolley Muffler

Produces low noise levels

Manual Trolleys

Shafts

Standard shafts fit wide range of beams Longer shafts available for larger beams Spacers for easy adjustments

Wheels

All steel Sealed ball bearings Fit flat or tapered beam flange

Standard Hoist Specifications

Air Powered Trolleys

Capacity Range

1/4 - 6 Ton

Control Option on Trolley/Hoist

Pendant control only

Standard Pendant Length

4' less than lift (longer lengths available —maximum 30')

Air Supply Requirement

53 cfm at 60 - 90 psi

Air Lubrication

Minimum 10 to 15 drops of oil per minute (0.2 – 0.3 cc/min.)

Air Filtration

Maximum 5 micron air filter or finer required

Air Inlet Port

3/4" NPT

Air Supply Hose Minimum Size

1/4 - 2 Tons — 1/2" 3 - 6 Tons — 3/4"

Operating Conditions

Temperature range +14° to 140°F Humidity 85% or less

Manual Trolleys

Capacity Range

1/4 – 6 Ton

Control Option on Hoist

TCRP and TCRG —Pendant and cord

Standard Hand Chain Length

On geared trolleys 2' less than lift (longer lengths available)







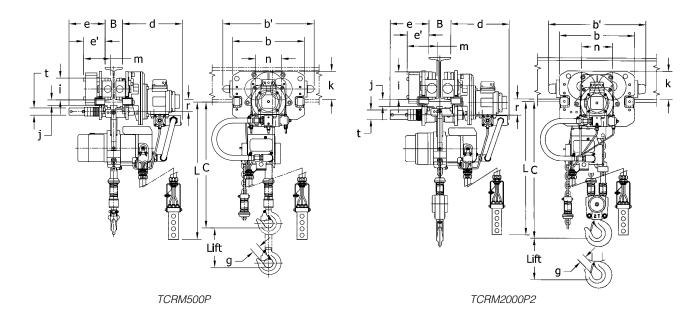
TCRM, TCRP and TCRG Air Powered Hoists with Air Powered, Push and Geared Trolleys

PENDANT MODEL WITH AIR POWERED TROLLEYS—SPECIFICATIONS

			Push	Up/Dow	n Speeds			Up/Down nsumption fm @ 90 ps		Flange	Minimum Allow.	Load Chain Diameter		Weight for
		Standard	Button Hose	(ft/min (@ 90 psi)	Traversing	T	CR	MCR	Width Adjustability	Radius for	(mm) X	Net	Additional One Foot
Cap. (Tons)	Product Code	Lift (ft)	L (ft)	No Load	Full Load	Speed		Full Load	No Load Full Load	B (in)	Curve (in)	Chain Fall Lines	Weight (lbs)	of Lift (lbs)
1/4	TCRM250P			68 / 44	52 / 51		63 / 49	48 / 57	53			6.3 x 1	170	0.6
1/2	TCRM500P			68 / 44	37 / 57		63 / 49	48 / 57	53	2.28 to 5.00	137.8	6.3 x 1	170	0.6
1	TCRM1000P2			34 / 22	19 / 29		63 / 49	48 / 57	53		137.0	6.3 x 2	183	1.2
1	TCRM1000P	10	7.4	37 / 22		62 / 53	53/60	53			7.1 x 1	209	0.8	
2	TCRM2000P2			18.5 / 11	11 / 16	6	62 / 53	53/60	53	3.94 to 6.02	E1 0	7.1 x 2	254	1.5
3	TCRM3000P			18 / 11	10 / 15		90/65	71 / 74	53		51.2	11.2 x 1	254	2.0
6	TCRM6000P2			9/5 5/7		90 / 65	71 / 74	53	4.92 to 7.02	78.7	11.2 x 2	364	4.0	

PENDANT MODEL WITH AIR POWERED TROLLEYS—DIMENSIONS

Cap. (Tons)	Product Code	Headroom C (in)	b (in)	b' (in)	d (in)	e (in)	e' (in)	g (in)	i (in)	j (in)	k (in)	m (in)	n (in)	r (in)	t (in)
1/4	TCRM250P	19.3	12.4	15.6	10.3	6.2	3.7	1.2	3.7	0.9	4.8	4.6	4.4	2.0	1.2
1/2	TCRM500P	19.3	12.4	15.6	10.3	6.2	3.7	1.2	3.7	0.9	4.8	4.6	4.4	2.0	1.2
1	TCRM1000P2	21.5	12.4	15.6	10.3	6.2	3.7	1.2	3.7	0.9	4.8	4.6	4.4	2.0	1.2
1	TCRM1000P	19.5	12.4	15.6	10.3	6.2	3.7	1.2	3.7	0.9	4.8	4.6	4.4	2.0	1.2
2	TCRM2000P2	23.3	13.4	17.4	10.5	6.9	3.9	1.2	4.9	1.3	5.0	5.1	5.5	2.8	1.7
3	TCRM3000P	21.8	13.4	17.4	10.5	6.9	3.9	1.3	4.9	1.4	5.0	5.1	5.5	2.8	1.7
6	TCRM6000P2	25.9	15.7	19.8	10.8	8.1	4.3	1.7	5.5	1.4	5.5	5.7	6.1	3.9	2.3



PENDANT MODEL WITH PUSH OR GEARED TROLLEYS—SPECIFICATIONS

		Standard	Push Button Hose		vn Speeds	Air Consu	/Down mption Rates	(h Adjustability B in)	Minimum* Allow. Radius for	Load Chain Diameter (mm)	Net	Weight for Additional One Foot
Cap. (Tons)	Product Code	Lift (ft)	L (ft)	(tt/min No Load	@ 90 psi) Full Load	No Load	nin @ 90 psi) Full Load	Standard	Optional	Curve (in)	Chain Fall Lines	Weight (lbs)	of Lift (lbs)
1/4	TCRP(TCRG)250P	(,	7.5	68 / 44	52 / 51	63 / 49	48 / 57	Otanaara	4.01 to 8.00	(,	6.3 x 1	76 (96)	0.6 (1.2)
1/-1	10111 (10114)2001	-	1.0	007 44	02/01	00743	40/01	2.28 to 4.00 (2.28 to 5.00)	(5.01 to 8.00)	13.8	0.0 % 1	70 (30)	0.0 (1.2)
1/2	TCRP(TCRG)500P		7.5	68/44	37 / 57	63 / 49	63 / 49 48 / 57 (2		OR 8.01 to 12.00	(51.2)	6.3 x 1	76 (96)	0.6 (1.2)
1	TCRP(TCRG)1000P2		7.5	34/22	19 / 29	63 / 49	48 / 57	2.28 to 5.00	5.01 to 8.00 OR	17.7	6.3 x 2	94 (108)	1.2 (1.8)
1	TCRP(TCRG)1000P	10	7.5	37 / 22	21/33	62 / 53	53 / 60	2.20 10 5.00	8.01 to 12.00	(51.2)	7.1 x 1	91 (105)	0.8 (1.4)
2	TCRP(TCRG)2000P2		7.5	19 / 11	11 / 16	62 / 53	53 / 60	2.02 to 0.00	C 00 to 10 00	21.7 (59.1)	7.1 x 2	113 (130)	1.5 (2.1)
3	TCRP(TCRG)3000P		8.0	18 / 11	10 / 15	90 / 65 71 / 74		3.23 to 6.02	6.03 to 12.00	25.6 (66.9)	11.2 x 1	190 (207)	2.0 (2.6)
6	TCRP(TCRG)6000P2		8.0	9/5	5/7	90/65	71 / 74	5.50 to 8.66	8.67 to 12.00	118.1	11.2 x 2	409 (444)	4.0 (4.6)

Figures in parenthesis are data for geared trolley

CORD MODEL WITH PUSH OR GEARED TROLLEYS—SPECIFICATIONS

		Standard	Cord		vn Speeds	Air Consu	/Down mption Rates	(h Adjustability B in)	Minimum* Allow. Radius for	Load Chain Diameter (mm)	Net	Weight for Additional One Foot
Cap. (Tons)	Product Code	Lift (ft)	L (ft)	(ft/min	@ 90 psi) Full Load	No Load	nin @ 90 psi) Full Load	Standard	Optional	Curve (in)	x Chain Fall Lines	Weight (lbs)	of Lift (lbs)
1/4	TCRP(TCRG)250C	()	7.5	68 / 44	52 / 51	63 / 49	48 / 57		4.01 to 8.00		6.3 x 1	74 (94)	0.6 (1.2)
1/2	TCRP(TCRG)500C		7.5	68 / 44	37 / 57	63 / 49	48 / 57	2.28 to 4.00 (2.28 to 5.00)	(5.01 to 8.00) OR 8.01 to 12.00	13.8 (51.2)	6.3 x 1	73 (94)	0.6 (1.2)
1	TCRP(TCRG)1000C2		7.5	34/22	19 / 29	63 / 49	48 / 57		5.01 to 8.00	17.7	6.3 x 2	91 (106)	1.2 (1.8)
1	TCRP(TCRG)1000C	10	7.5	37 / 22	21 / 33	62 / 53	53 / 60	2.28 to 5.00	OR 8.01 to 12.00	(51.2)	7.1 x 1	89 (103)	0.8 (1.4)
2	TCRP(TCRG)2000C2		7.5	19 / 11	11 / 16	62 / 53	53 / 60	0.00 to 0.00	0.00 +- 10.00	21.7 (59.1)	7.1 x 2	111 (128)	1.5 (2.1)
3	TCRP(TCRG)3000C		8.0	18 / 11	10 / 15	90 / 65 71 / 74 3.		3.23 to 6.02	6.03 to 12.00	25.6 (66.9)	11.2 x 1	188 (205)	2.0 (2.6)
6	TCRP(TCRG)6000C2		8.0	9/5	5/7	90/65	71 / 74	5.50 to 8.66	8.67 to 12.00	118.1	11.2 x 2	407 (442)	4.0 (4.6)

Figures in parenthesis are data for geared trolley

[&]quot;Minimum flange width for curved beam: 1 Ton Push and 1/8 to 1Ton Geared = 2.87 in.
3 Ton Push and Geared = 3.50 in.

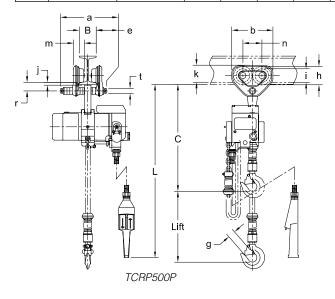
^{*}Minimum flange width for curved beam: 1 Ton Push and 1/8 to 1Ton Geared = 2.87 in. 3 Ton Push and Geared = 3.50 in.

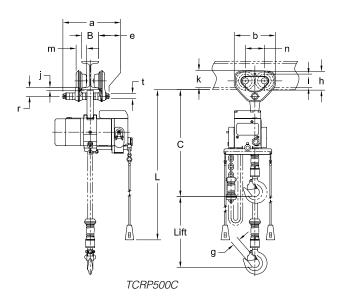


TCRM, TCRP and TCRG Air Powered Hoists with Air Powered, Push and Geared Trolleys

PENDANT AND CORD MODELS WITH PUSH TROLLEYS—DIMENSIONS

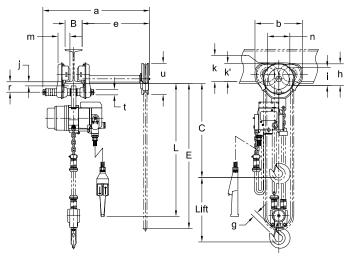
Cap. (Tons)	Product Code	Headroom C (in)	a (in)	b (in)	e (in)	g (in)	h (in)	i (in)	j (in)	k (in)	m (in)	n (in)	r (in)	t (in)
1/4	TCRP250C/P	18.6	8.0	7.2	1.8	1.1	3.2	2.36	0.5	3.0	1.9	3.3	1.5	0.87
1/2	TCRP500C/P	18.6	8.0	7.2	1.8	1.1	3.2	2.36	0.5	3.0	1.9	3.3	1.5	0.87
1	TCRP1000C2/P2	21.3	9.8	9.3	2.2	1.1	4.2	2.80	0.9	3.7	2.2	4.4	2.0	0.98
1	TCRP1000C/P	19.2	9.8	9.3	2.2	1.1	4.2	2.80	1.0	3.7	2.2	4.4	2.0	0.98
2	TCRP2000C2/P2	21.9	11.8	11.0	2.7	1.1	5.0	3.35	1.0	4.4	2.8	5.2	2.4	1.26
3	TCRP3000C/P	21.6	12.6	12.8	3.1	1.3	5.8	3.94	1.5	5.3	3.1	6.0	2.7	1.42
6	TCRP6000C2/P2	29.0	17.6	18.9	4.1	1.7	7.3	6.10	3.8	6.7	3.4	7.7	6.0	2.76



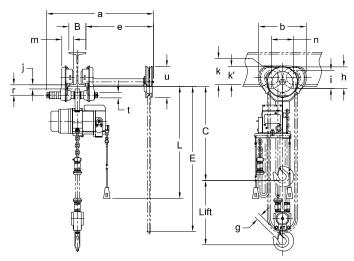


PENDANT AND CORD MODELS WITH GEARED TROLLEYS—DIMENSIONS

Cap. (Tons)	Product Code	Headroom C (in)	E (ft)	a (in)	b (in)	e (in)	g (in)	h (in)	i (in)	j (in)	k (in)	k' (in)	m (in)	n (in)	r (in)	t (in)	u (in)
1/4	TCRG250C/P	19.0	10.5	20.9	9.3	13.3	1.1	4.2	2.80	1.0	3.7	4.2	2.2	4.4	2.0	0.98	7.2
1/2	TCRG500C/P	19.0	10.5	20.9	9.3	13.3	1.1	4.2	2.80	1.0	3.7	4.2	2.2	4.4	2.0	0.98	7.2
1	TCRG1000C2/P2	21.3	10.5	20.9	9.3	13.3	1.1	4.2	2.80	0.9	3.7	4.2	2.2	4.4	2.0	0.98	7.2
1	TCRG1000C/P	19.2	10.5	20.9	9.3	13.3	1.1	4.2	2.80	1.0	3.7	4.2	2.2	4.4	2.0	0.98	7.2
2	TCRG2000C2/P2	21.9	10.5	24.8	11.0	13.3	1.1	5.0	3.35	1.0	4.4	4.3	2.8	5.2	2.4	1.26	7.2
3	TCRG3000C/P	21.6	11.0	25.4	12.8	15.9	1.3	5.8	3.94	1.5	5.3	4.5	3.1	6.0	2.7	1.42	7.2
6	TCRG6000C2/P2	29.0	11.4	20.6	18.9	7.0	1.7	7.3	6.10	3.8	6.7	6.5	10.6	7.7	6.0	2.76	8.4



TCRG2000P2



TCRG2000C2