

**Presenting:** 

X

S Y S T E M

The fastest, safest, thinnest most versatile hydraulic torque wrench ever created.







Since its beginning in 1995, Norwolf<sup>™</sup> Tool Works has revolutionized the bolting industry in a variety of innovative ways. We started by creating a flat torque multiplier that had not previously existed. This "Missing Link<sup>®</sup>" torque multiplier is now a standard found at most wind sites and many other industrial concerns worldwide.

Late in 2012 Norwolf took on the unique design challenges brought on by the newly developing US shale oil market. The answer was the X-Driver® hydraulic torque wrench system which soon became the premier and most widely used hydraulic wrench in the major oil shale regions of North Dakota and South Texas. With its wide variety of interchangeable drives, the X-Driver truly fits on ALL bolting applications.

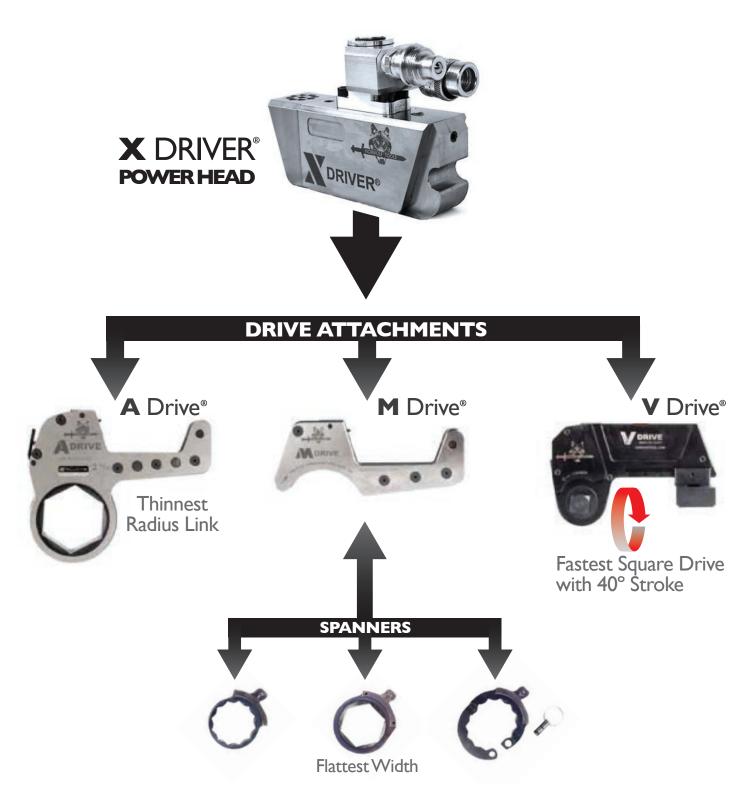


We pride ourselves not only with our unique and patented bolting tools but also our abilities concerning special tools and accessories. Norwolf is well known for its unique ability to manufacture custom solutions for virtually any bolting application. Sometimes we accomplish this in a matter of hours at our state of the art manufacturing facility.

In addition to manufacturing bolting products Norwolf offers full service **calibration, rental and repair services**. Go online to **www.norwolf.com** to view several of our product videos!













#### NORWOLF X-Driver® System Benefits:

- Slimmest design—one piece piston construction.
- Torque line is on center.
- Only one high pressure O'ring—easily changed with four bolts.
- Novel swivel design is 360° or 360 x 360 with one piece add on.
- All alloy steel construction...only true convertible tool.
- Ready for optional handle.

With its ease to get into confined areas and around nuts in hard to access spaces and the durability of solid steel design, less parts and clean-lined construction, this hydraulic torque wrench is so advanced it's not only a tool—it's an entire system. This is the most revolutionary hydraulic torque wrench system ever created. To decrease the chance of failure it has only three o-rings, versus up to nine in other hydraulic torque wrenches. The powerhead locks into the three separate drives without pins or screws, making it completely convertible.







#### NORWOLF A-Drive® Benefits:

- · Slimmest design-no loose shroud-totally enclosed.
- · Reaction arm/pad ready with 2 pin holes.
- · Patented reaction pawl can be easily disengaged with screw.
- · Easily connects to X Driver...no pins...snaps in.
- Deepest reach on the market... fits all flanges— See datasheet.
- Unique reaction pawl position keeps B dimension constant on all sizes unlike the competition. See datasheet.

#### Low Profile

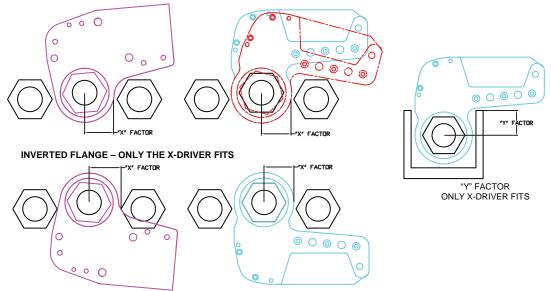
The A Drive is the hex link that the power head locks into, allowing it to fit onto hex nuts in low profile applications like well heads and BOP's. The A Drive has a larger reaction area. There are no roll pins, just screws. Taking apart the drive for repair is simple—there's no need to pry it apart like other hex links. All the screws are the same hex wrench with uniform screws in all sizes of the drives.

#### **Less Parts**

A time tested, three-part design, the A Drive only consists of the drive pawl, the ratchet and the drive gear. Other hex links have many moving parts, increasing breakdowns and complex repairs. The A Drive is more than simple. It's fast. Upon testing, the A Drive is 10-50 percent faster than other hydraulic wrenches. The A Drive has an optional holding pawl. With it, hands-free operation is possible, without it an "anti-lock" feature is possible.

#### **X-Y FACTOR**

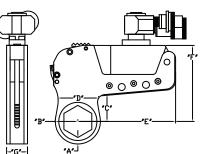
The A Drive fits the nut faster, safer and easier than any other competitive tool bar-none.



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#### CONVENTIONAL FLANGE - COMPETITOR VS. X-DRIVER





#### **IMPERIAL**

A-2 MAX	. TOR	QUE: 1	630 FT	LBS.	@10k F	PSI	
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"
A - 2 with 1-1/16" hex	.375"	.987"	1.50"	1.55"	5.264"	4.10"	1.125"
A - 2 with 1-1/4" hex	.375"	1.096"	1.50"	1.77"	5.264"	4.10"	1.125"
A - 2 with 1-7/16" hex	.375"	1.204"	1.50"	1.99"	5.264"	4.10"	1.125"
A - 2 with 1-5/8" hex	.375"	1.312"	1.50"	2.20"	5.264"	4.10"	1.125"
A - 2 with 1-13/16" hex	.375"	1.420"	1.50"	2.42"	5.264"	4.10"	1.125"
A - 2 with 2" hex	.375"	1.529"	1.50"	2.64"	5.264"	4.10"	1.125"
A - 2 with 2-3/16" hex	.375"	1.639"	1.50"	2.86"	5.264"	4.10"	1.125"
A - 2 with 2-3/8" hex	.375"	1.760"	1.50"	3.10"	5.264"	4.10"	1.125"

A - 4 MAX.	TOR	QUE: 39	900 FT.	LBS.	@ 10k	PSI	
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"
A - 4 with 1-13/16" hex	.50"	1.55"	2.00"	2.68"	7.02"	5.47"	1.50"
A - 4 with 2" hex	.50"	1.66"	2.00"	2.90"	7.02"	5.47"	1.50"
A - 4 with 2-3/16" hex	.50"	1.76"	2.00"	3.10"	7.02"	5.47"	1.50"
A - 4 with 2-3/8" hex	.50"	1.87"	2.00"	3.32"	7.02"	5.47"	1.50"
A - 4 with 2-9/16" hex	.50"	1.98"	2.00"	3.54"	7.02"	5.47"	1.50"
A - 4 with 2-3/4" hex	.50"	2.09"	2.00"	3.76"	7.02"	5.47"	1.50"
A - 4 with 2-15/16" hex	.50"	2.20"	2.00"	3.98"	7.02"	5.47"	1.50"
A - 4 with 3-1/8" hex	.50"	2.30"	2.00"	4.18"	7.02"	5.47"	1.50"

-							
A - 8 MAX	. TORG	QUE: 75	560 FT.	LBS. (	@ 10k F	PSI	
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"
A - 8 with 2-3/16" hex	.625"	1.94"	2.50"	3.36"	8.78"	6.84"	1.88"
A - 8 with 2-3/8" hex	.625"	2.08"	2.50"	3.64"	8.78"	6.84"	1.88"
A - 8 with 2-9/16" hex	.625"	2.20"	2.50"	3.86"	8.78"	6.84"	1.88"
A - 8 with 2-3/4" hex	.625"	2.34"	2.50"	4.16"	8.78"	6.84"	1.88"
A - 8 with 2-15/16" hex	.625"	2.48"	2.50"	4.44"	8.78"	6.84"	1.88"
A - 8 with 3-1/8" hex	.625"	2.61"	2.50"	4.70"	8.78"	6.84"	1.88"
A - 8 with 3-1/2" hex	.625"	2.75"	2.50"	4.98"	8.78"	6.84"	1.88"
A - 8 with 3-7/8" hex	.625"	2.88"	2.50"	5.24"	8.78"	6.84"	1.88"

A - 16 MAX.	TOR	QUE: 13	3,025 F	T. LBS	. @ 10k	PSI	
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"
A - 16 with 2-3/4" hex	.75"	2.38"	3.00"	4.13"	10.53"	8.20"	2.25"
A - 16 with 2-15/16" hex	.75"	2.45"	3.00"	4.27"	10.53"	8.20"	2.25"
A - 16 with 3-1/8" hex	.75"	2.55"	3.00"	4.47"	10.53"	8.20"	2.25"
A - 16 with 3-1/2" hex	.75"	2.77"	3.00"	4.91"	10.53"	8.20"	2.25"
A - 16 with 3-7/8"" hex	.75"	2.97"	3.00"	5.31"	10.53"	8.20"	2.25"
A - 16 with 4-1/4" hex	.75"	3.20"	3.00"	5.77"	10.53"	8.20"	2.25"
A - 16 with 4-5/8" hex	.75"	3.42"	3.00"	6.21"	10.53"	8.20"	2.25"
A - 16 with 5" hex	.75"	3.64"	3.00"	6.65"	10.53"	8.20"	2.25"

A - 32 MAX.	TORQ	UE: 31	,975 FT	T. LBS.	@ 10k	PSI	
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"
A - 32 with 3-1/2" hex	1.00"	3.02"	4.00"	5.20"	14.00"	10.94"	3.00"
A - 32 with 3-7/8" hex	1.00"	3.24"	4.00"	5.64"	14.00"	10.94"	3.00"
A - 32 with 4-1/4" hex	1.00"	3.45"	4.00"	6.06"	14.00"	10.94"	3.00"
A - 32 with 4-5/8" hex	1.00"	3.67"	4.00"	6.50"	14.00"	10.94"	3.00"
A - 32 with 5" hex	1.00"	3.89"	4.00"	6.94"	14.00"	10.94"	3.00"
A - 32 with 5-3/8" hex	1.00"	4.10"	4.00"	7.36"	14.00"	10.94"	3.00"
A - 32 with 5-3/4" hex	1.00"	4.32"	4.00"	7.80"	14.00"	10.94"	3.00"
A - 32 with 6-1/8" hex	1.00"	4.54"	4.00"	8.24"	14.00"	10.94"	3.00"

A - 64 MAX.	TORG	QUE: 60	),315 F	T. LBS.	@ 10k	: PSI	
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"
A - 64 with 5" hex	1.25"	4.14"	5.00"	7.23"	17.55"	13.68"	3.75"
A - 64 with 5-3/8" hex	1.25"	4.35"	5.00"	7.65"	17.55"	13.68"	3.75"
A - 64 with 5-3/4" hex	1.25"	4.57"	5.00"	8.09"	17.55"	13.68"	3.75"
A - 64 with 6-1/8" hex	1.25"	4.79"	5.00"	8.53"	17.55"	13.68"	3.75"
A - 64 with 6-1/2" hex	1.25"	5.00"	5.00"	8.95"	17.55"	13.68"	3.75"
A - 64 with 6-7/8" hex	1.25"	5.22"	5.00"	9.39"	17.55"	13.68"	3.75"
A - 64 with 7-1/4" hex	1.25"	5.44"	5.00"	9.83"	17.55"	13.68"	3.75"
A - 64 with 7-5/8" hex	1.25"	5.65"	5.00"	10.25"	17.55"	13.68"	3.75"



To determine dimensions of sizes not listed, use next larger hex size. For example, an A8 with an 85mm hex will have approximately the same dimensions as an A8 with 90mm hex.

#### METRIC

A - 2	ΜΑΧ. ΤΟ	RQUE:	2243	Vm @ 7	'00 BAI	7	
Metric Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"
A - 2 with 27mm hex	9.5	25.1	38.1	39.4	133.7	104.1	28.6
A - 2 with 32mm hex	9.5	27.8	38.1	45.0	133.7	104.1	28.6
A - 2 with 36mm hex	9.5	30.6	38.1	50.5	133.7	104.1	28.6
A - 2 with 41mm hex	9.5	33.3	38.1	55.9	133.7	104.1	28.6
A - 2 with 46mm hex	9.5	36.1	38.1	61.5	133.7	104.1	28.6
A - 2 with 50mm hex	9.5	38.8	38.1	67.1	133.7	104.1	28.6
A - 2 with 55mm hex	9.5	41.6	38.1	72.6	133.7	104.1	28.6
A - 2 with 60mm hex	9.5	44.7	38.1	78.7	133.7	104.1	28.6

A - 4	A - 4 MAX. TORQUE: 5367 Nm @ 700 BAR										
Metric Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"				
A - 4 with 46mm hex	12.7	39.4	50.8	68.1	178.3	138.9	38.1				
A - 4 with 50mm hex	12.7	42.2	50.8	73.7	178.3	138.9	38.1				
A - 4 with 55mm hex	12.7	44.7	50.8	78.7	178.3	138.9	38.1				
A - 4 with 60mm hex	12.7	47.5	50.8	84.3	178.3	138.9	38.1				
A - 4 with 65mm hex	12.7	50.3	50.8	89.9	178.3	138.9	38.1				
A - 4 with 70mm hex	12.7	53.1	50.8	95.5	178.3	138.9	38.1				
A - 4 with 75mm hex	12.7	55.9	50.8	101.1	178.3	138.9	38.1				
A - 4 with 80mm hex	12.7	58.4	50.8	106.2	178.3	138.9	38.1				

A - 8 MA	A - 8 MAX. TORQUE: 10,404 Nm @ 700 BAR									
Metric Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"			
A - 8 with 55mm hex	15.9	49.3	63.5	85.3	223.0	173.7	47.8			
A - 8 with 60mm hex	15.9	52.8	63.5	92.5	223.0	173.7	47.8			
A - 8 with 65mm hex	15.9	55.9	63.5	98.0	223.0	173.7	47.8			
A - 8 with 70mm hex	15.9	59.4	63.5	105.7	223.0	173.7	47.8			
A - 8 with 75mm hex	15.9	63.0	63.5	112.8	223.0	173.7	47.8			
A - 8 with 80mm hex	15.9	66.3	63.5	119.4	223.0	173.7	47.8			
A - 8 with 90mm hex	15.9	69.9	63.5	126.5	223.0	173.7	47.8			
A - 8 with 100mm hex	15.9	73.2	63.5	133.1	223.0	173.7	47.8			

A - 16	ΜΑΧ. ΤΟ	RQUE:	17,924	4 Nm @	700 B/	4R	
Metric Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"
A - 16 with 70mm hex	19.1	60.5	76.2	104.9	267.5	208.3	57.2
A - 16 with 75mm hex	19.1	62.2	76.2	108.5	267.5	208.3	57.2
A - 16 with 80mm hex	19.1	64.8	76.2	113.5	267.5	208.3	57.2
A - 16 with 90mm hex	19.1	70.4	76.2	124.7	267.5	208.3	57.2
A - 16 with 100mm hex	19.1	75.4	76.2	134.9	267.5	208.3	57.2
A - 16 with 105mm hex	19.1	81.3	76.2	146.6	267.5	208.3	57.2
A - 16 with 115mm hex	19.1	86.9	76.2	157.7	267.5	208.3	57.2
A - 16 with 125mm hex	19.1	92.5	76.2	168.9	267.5	208.3	57.2

XA - 32 MAX. TORQUE: 44,003 Nm @ 700 BAR										
Metric Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"			
A - 32 with 90mm hex	25.4	76.7	101.6	132.1	355.6	277.9	76.2			
A - 32 with 100mm hex	25.4	82.3	101.6	143.3	355.6	277.9	76.2			
A - 32 with 105mm hex	25.4	87.6	101.6	153.9	355.6	277.9	76.2			
A - 32 with 115mm hex	25.4	93.2	101.6	165.1	355.6	277.9	76.2			
A - 32 with 125mm hex	25.4	98.8	101.6	176.3	355.6	277.9	76.2			
A - 32 with 135mm hex	25.4	104.1	101.6	186.9	355.6	277.9	76.2			
A - 32 with 145mm hex	25.4	109.7	101.6	198.1	355.6	277.9	76.2			
A - 32 with 155mm hex	25.4	115.3	101.6	209.3	355.6	277.9	76.2			

A - 64 MA	A - 64 MAX. TORQUE: 83,003 Nm @ 700 BAR											
Metric Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"					
A - 64 w ith 125mm hex	31.8	105.2	127.0	183.6	445.8	347.5	95.3					
A - 64 w ith 135mm hex	31.8	110.5	127.0	194.3	445.8	347.5	95.3					
A - 64 with 145mm hex	31.8	116.1	127.0	205.5	445.8	347.5	95.3					
A - 64 with 155mm hex	31.8	121.7	127.0	216.7	445.8	347.5	95.3					
A - 64 with 165mm hex	31.8	127.0	127.0	227.3	445.8	347.5	95.3					
A - 64 w ith 175mm hex	31.8	132.6	127.0	238.5	445.8	347.5	95.3					
A - 64 with 185mm hex	31.8	138.2	127.0	249.7	445.8	347.5	95.3					
A - 64 with 195mm hex	31.8	143.5	127.0	260.4	445.8	347.5	95.3					

# **NDRIVE**<sup>®</sup>







#### It goes where others can't.

#### **NORWOLF M-Drive® Benefits:**

- Fastest... 40° stroke... most accurate with sliding keyways.
- Absolute thinnest... patented totally enclosed system... no exposed teeth.
- · Available in ratchet, spanner or split link design.
- Easiest to use... snaps right in... fits in only one way.

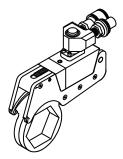


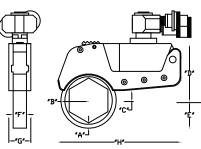
**Three Choices of Hex links:** 1) A totally enclosed ratcheting hyper low-profile hex link. 2) A non-ratcheting spanner link.

3) A swing-open non-ratcheting link fitting jam nuts.

The M Drive is a special application tool for hyper-low clearance applications like BOP's. It has no holding pawl, is lightning fast and has the flattest drive width in the X Driver family. There are no roll pins. A longer lever arm allows for a 40 degree stroke, which is what gives the hex link it's amazing speed. The M Drive is specifically made for the tightest BOP applications (such as a 7" 10m) where no others can fit.







### **NDRIVE**<sup>®</sup> Ratchet Cassette

#### **IMPERIAL**

M - 2	MAX. TO	DRQUE	: 1300	FT. LE	3S. @ 1	0k PSI		
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 2 with 1-1/16" hex	.375"	.99"	.611"	3.28"	.99"	.75"	1.25"	6.96"
M - 2 with 1-1/4" hex	.375"	1.10"	.611"	3.28"	1.10"	.75"	1.25"	6.96"
M - 2 with 1-7/16" hex	.375"	1.20"	.611"	3.28"	1.20"	.75"	1.25"	6.96"
M - 2 with 1-5/8" hex	.375"	1.31"	.611"	3.28"	1.31"	.75"	1.25"	6.96"
M - 2 with 1-13/16" hex	.375"	1.42"	.611"	3.28"	1.42"	.75"	1.25"	6.96"
M - 2 with 2" hex	.375"	1.53"	.611"	3.28"	1.53"	.75"	1.25"	6.96"
M - 2 with 2-3/16" hex	.375"	1.64"	.611"	3.28"	1.64"	.75"	1.25"	6.96"
M - 2 with 2-3/8" hex	.375"	1.75"	.611"	3.28"	1.75"	.75"	1.25"	6.96"

M - 4 N	ЛАХ. ТС	DRQUE	: 3080	FT. LB	IS. @ 1	0k PSI		
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 4 with 1-13/16" hex	.50"	1.55"	.815"	4.38"	1.55"	1.00"	1.67"	9.28"
M - 4 with 2" hex	.50"	1.65"	.815"	4.38"	1.65"	1.00"	1.67"	9.28"
M - 4 with 2-13/16" hex	.50"	1.76"	.815"	4.38"	1.76"	1.00"	1.67"	9.28"
M - 4 with 2-3/8" hex	.50"	1.87"	.815"	4.38"	1.87"	1.00"	1.67"	9.28"
M - 4 with 2-9/16" hex	.50"	1.98"	.815"	4.38"	1.98"	1.00"	1.67"	9.28"
M - 4 with 2-3/4" hex	.50"	2.09"	.815"	4.38"	2.09"	1.00"	1.67"	9.28"
M - 4 with 2-15/16" hex	.50"	2.19"	.815"	4.38"	2.19"	1.00"	1.67"	9.28"
M - 4 with 3-1/8" hex	.50"	2.30"	.815"	4.38"	2.30"	1.00"	1.67"	9.28"

M - 8 N	ΙΑΧ. ΤΟ	RQUE:	6,000	FT. LE	3S. @ 1	0k PSI		
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 8 with 2-3/16" hex	.625"	1.89"	1.02"	5.47"	1.89"	1.25"	2.09"	11.60"
M - 8 with 2-3/8" hex	.625"	2.00"	1.02"	5.47"	2.00"	1.25"	2.09"	11.60"
M - 8 with 2-9/16" hex	.625"	2.10"	1.02"	5.47"	2.10"	1.25"	2.09"	11.60"
M - 8 with 2-3/4" hex	.625"	2.21"	1.02"	5.47"	2.21"	1.25"	2.09"	11.60"
M - 8 with 2-15/16" hex	.625"	2.32"	1.02"	5.47"	2.32"	1.25"	2.09"	11.60"
M - 8 with 3-1/8" hex	.625"	2.43"	1.02"	5.47"	2.43"	1.25"	2.09"	11.60"
M - 8 with 3-1/2" hex	.625"	2.65"	1.02"	5.47"	2.65"	1.25"	2.09"	11.60"
M - 8 with 3-7/8" hex	.625"	2.86"	1.02"	5.47"	2.86"	1.25"	2.09"	11.60"

M - 16 M	AX. TO	RQUE:	10,39	5 FT. L	.BS. @	10k PS	51	
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 16 with 2-3/4" hex	.75"	2.34"	1.22"	6.57"	2.34"	1.50"	2.50"	13.92"
M - 16 with 2-15/16" hex	.75"	2.44"	1.22"	6.57"	2.44"	1.50"	2.50"	13.92"
M - 16 with 3-1/8" hex	.75"	2.55"	1.22"	6.57"	2.55"	1.50"	2.50"	13.92"
M - 16 with 3-1/2" hex	.75"	2.77"	1.22"	6.57"	2.77"	1.50"	2.50"	13.92"
M - 16 with 3-7/8" hex	.75"	2.99"	1.22"	6.57"	2.99"	1.50"	2.50"	13.92"
M - 16 with 4-1/4" hex	.75"	3.20"	1.22"	6.57"	3.20"	1.50"	2.50"	13.92"
M - 16 with 4-5/8" hex	.75"	3.42"	1.22"	6.57"	3.42"	1.50"	2.50"	13.92"
M - 16 with 5" hex	.75"	3.64"	1.22"	6.57"	3.64"	1.50"	2.50"	13.92"

M - 32 I	ИАХ. ТО	RQUE	24,64	M - 32 MAX. TORQUE: 24,640 FT. LBS. @ 10k PSI										
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"						
M - 32 with 3-1/2" hex	1.00"	3.02"	1.63"	8.76"	3.02"	2.00"	3.34"	18.56"						
M - 32 with 3-7/8" hex	1.00"	3.24"	1.63"	8.76"	3.24"	2.00"	3.34"	18.56"						
M - 32 with 4-1/4" hex	1.00"	3.45"	1.63"	8.76"	3.45"	2.00"	3.34"	18.56"						
M - 32 with 4-5/8" hex	1.00"	3.67"	1.63"	8.76"	3.67"	2.00"	3.34"	18.56"						
M - 32 with 5" hex	1.00"	3.89"	1.63"	8.76"	3.89"	2.00"	3.34"	18.56"						
M - 32 with 5-3/8" hex	1.00"	4.10"	1.63"	8.76"	4.10"	2.00"	3.34"	18.56"						
M - 32 with 5-3/4" hex	1.00"	4.32"	1.63"	8.76"	4.32"	2.00"	3.34"	18.56"						
M - 32 with 6-1/8" hex	1.00"	4.53"	1.63"	8.76"	4.53"	2.00"	3.34"	18.56"						

M - 64 I	ΛΑΧ. ΤΟ	RQUE	48,12	25 FT. L	BS. @	10k PS	51	
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 64 with 5" hex	1.25"	4.14"	2.04"	10.95"	4.14"	2.50"	4.18"	23.20"
M - 64 with 5-3/8" hex	1.25"	4.35"	2.04"	10.95"	4.35"	2.50"	4.18"	23.20"
M - 64 with 5-3/4" hex	1.25"	4.57"	2.04"	10.95"	4.57"	2.50"	4.18"	23.20"
M - 64 with 6-1/8" hex	1.25"	4.78"	2.04"	10.95"	4.78"	2.50"	4.18"	23.20"
M - 64 with 6-1/2" hex	1.25"	5.00"	2.04"	10.95"	5.00"	2.50"	4.18"	23.20"
M - 64 with 6-7/8" hex	1.25"	5.22"	2.04"	10.95"	5.22"	2.50"	4.18"	23.20"
M - 64 with 7-1/4" hex	1.25"	5.43"	2.04"	10.95"	5.43"	2.50"	4.18"	23.20"
M - 64 with 7-5/8" hex	1.25"	5.65"	2.04"	10.95"	5.65"	2.50"	4.18"	23.20"

#### METRIC

M - 2	2 MAX.	TORQU	JE: 17	89 Nm	@ 700	BAR		
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 2 with 27mm hex	9.5	25.1	15.5	83.3	25.1	19.1	31.8	176.8
M - 2 with 32mm hex	9.5	27.9	15.5	83.3	27.9	19.1	31.8	176.8
M - 2 with 36mm hex	9.5	30.5	15.5	83.3	30.5	19.1	31.8	176.8
M - 2 with 41mm hex	9.5	33.3	15.5	83.3	33.3	19.1	31.8	176.8
M - 2 with 46mm hex	9.5	36.1	15.5	83.3	36.1	19.1	31.8	176.8
M - 2 with 50mm hex	9.5	38.9	15.5	83.3	38.9	19.1	31.8	176.8
M - 2 with 55mm hex	9.5	41.7	15.5	83.3	41.7	19.1	31.8	176.8
M - 2 with 60mm hex	9.5	44.5	15.5	83.3	44.5	19.1	31.8	176.8

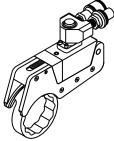
#### M - 4 MAX. TORQUE: 4239 Nm @ 700 BAR Metric Description "A" "B" "C" "D" "E" "F" "G" "H" M - 4 with 46mm hex 12.7 39.4 20.7 111.3 39.4 25.4 42.4 235.7 M - 4 with 50mm hex 12.7 41.9 20.7 111.3 41.9 25.4 42.4 235.7 44.7 M - 4 with 55mm hex 12.7 20.7 111.3 44.7 25.4 42.4 235.7 12.7 47.5 235.7 M - 4 with 60mm hex 20.7 111.3 47.5 25.4 42.4 M - 4 with 65mm hex 12.7 50.3 20.7 111.3 50.3 25.4 42.4 235.7 M - 4 with 70mm hex 12.7 53.1 20.7 25.4 42.4 235.7 111.3 53.1 M - 4 with 75mm hex 12.7 55.6 20.7 111.3 55.6 25.4 42.4 235.7 12.7 58.4 58.4 25.4 42.4 M - 4 with 80mm hex 20.7 111.3 235.7

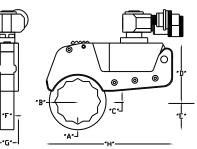
М - а	8 MAX. 1	TORQL	JE: 82	57 Nm (	@ 700	BAR		
Metric Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 8 with 55mm hex	15.9	48.0	25.9	138.9	48.0	31.8	53.1	294.6
M - 8 with 60mm hex	15.9	50.8	25.9	138.9	50.8	31.8	53.1	294.6
M - 8 with 65mm hex	15.9	53.3	25.9	138.9	53.3	31.8	53.1	294.6
M - 8 with 70mm hex	15.9	56.1	25.9	138.9	56.1	31.8	53.1	294.6
M - 8 with 75mm hex	15.9	58.9	25.9	138.9	58.9	31.8	53.1	294.6
M - 8 with 80mm hex	15.9	61.7	25.9	138.9	61.7	31.8	53.1	294.6
M - 8 with 90mm hex	15.9	67.3	25.9	138.9	67.3	31.8	53.1	294.6
M - 8 with 100mm hex	15.9	72.6	25.9	138.9	72.6	31.8	53.1	294.6

M - 16	MAX.	TORQU	E: 14,	305 Nm	@ 700	) BAR		
Metric Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 16 with 70mm hex	19.1	59.4	31.0	166.9	59.4	38.1	63.5	353.6
M - 16 with 75mm hex	19.1	62.0	31.0	166.9	62.0	38.1	63.5	353.6
M - 16 with 80mm hex	19.1	64.8	31.0	166.9	64.8	38.1	63.5	353.6
M - 16 with 90mm hex	19.1	70.4	31.0	166.9	70.4	38.1	63.5	353.6
M - 16 with 100mm hex	19.1	75.9	31.0	166.9	75.9	38.1	63.5	353.6
M - 16 with 105mm hex	19.1	81.3	31.0	166.9	81.3	38.1	63.5	353.6
M - 16 with 115mm hex	19.1	86.9	31.0	166.9	86.9	38.1	63.5	353.6
M - 16 with 125mm hex	19.1	92.5	31.0	166.9	92.5	38.1	63.5	353.6

М - 32	MAX.	TORQU	E: 33,	908 Nm	n @ 700	) BAR		
Metric Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 32 with 90mm hex	25.4	76.7	41.4	222.5	76.7	50.8	84.8	471.4
M - 32 with 100mm hex	25.4	82.3	41.4	222.5	82.3	50.8	84.8	471.4
M - 32 with 105mm hex	25.4	87.6	41.4	222.5	87.6	50.8	84.8	471.4
M - 32 with 115mm hex	25.4	93.2	41.4	222.5	93.2	50.8	84.8	471.4
M - 32 with 125mm hex	25.4	98.8	41.4	222.5	98.8	50.8	84.8	471.4
M - 32 with 135mm hex	25.4	104.1	41.4	222.5	104.1	50.8	84.8	471.4
M - 32 with 145mm hex	25.4	109.7	41.4	222.5	109.7	50.8	84.8	471.4
M - 32 with 155mm hex	25.4	115.1	41.4	222.5	115.1	50.8	84.8	471.4

M - 64	MAX.	TORQU	E: 66,	227 Nn	n @ 700	) BAR		
Metric Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 64 with 125mm hex	31.8	105.2	51.8	278.1	105.2	63.5	106.2	589.3
M - 64 with 135mm hex	31.8	110.5	51.8	278.1	110.5	63.5	106.2	589.3
M - 64 with 145mm hex	31.8	116.1	51.8	278.1	116.1	63.5	106.2	589.3
M - 64 with 155mm hex	31.8	121.4	51.8	278.1	121.4	63.5	106.2	589.3
M - 64 with 165mm hex	31.8	127.0	51.8	278.1	127.0	63.5	106.2	589.3
M - 64 with 175mm hex	31.8	132.6	51.8	278.1	132.6	63.5	106.2	589.3
M - 64 with 185mm hex	31.8	137.9	51.8	278.1	137.9	63.5	106.2	589.3
M - 64 with 195mm hex	31.8	143.5	51.8	278.1	143.5	63.5	106.2	589.3





#### **IMPERIAL**

М-2	MAX. TO	ORQUE	: 1300	FT. LE	3S. @ 1	0k PSI		
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 2 with 1-1/16" hex	.25"	.86"	.611"	3.28"	.86"	.75"	1.25"	6.96"
M - 2 with 1-1/4" hex	.25"	.97"	.611"	3.28"	.97"	.75"	1.25"	6.96"
M - 2 with 1-7/16" hex	.25"	1.08"	.611"	3.28"	1.08"	.75"	1.25"	6.96"
M - 2 with 1-5/8" hex	.25"	1.19"	.611"	3.28"	1.19"	.75"	1.25"	6.96"
M - 2 with 1-13/16" hex	.25"	1.30"	.611"	3.28"	1.30"	.75"	1.25"	6.96"
M - 2 with 2" hex	.25"	1.40"	.611"	3.28"	1.40"	.75"	1.25"	6.96"
M - 2 with 2-3/16" hex	.25"	1.51"	.611"	3.28"	1.51"	.75"	1.25"	6.96"
M - 2 with 2-3/8" hex	.25"	1.62"	.611"	3.28"	1.62"	.75"	1.25"	6.96"

	ΛΑΧ. ΤΟ		. 2000		C @ 4			
IVI - 4 I	<i>пах. т</i> с	RQUE		FI.LD	s. ⊛⊺	06 - 31		
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 4 with 1-13/16" hex	.333"	1.38"	.815"	4.38"	1.38"	1.00"	1.67"	9.28"
M - 4 with 2" hex	.333"	1.49"	.815"	4.38"	1.49"	1.00"	1.67"	9.28"
M - 4 with 2-13/16" hex	.333"	1.60"	.815"	4.38"	1.60"	1.00"	1.67"	9.28"
M - 4 with 2-3/8" hex	.333"	1.70"	.815"	4.38"	1.70"	1.00"	1.67"	9.28"
M - 4 with 2-9/16" hex	.333"	1.81"	.815"	4.38"	1.81"	1.00"	1.67"	9.28"
M - 4 with 2-3/4" hex	.333"	1.92"	.815"	4.38"	1.92"	1.00"	1.67"	9.28"
M - 4 with 2-15/16" hex	.333"	2.03"	.815"	4.38"	2.03"	1.00"	1.67"	9.28"
M - 4 with 3-1/8" hex	.333"	2.14"	.815"	4.38"	2.14"	1.00"	1.67"	9.28"

M - 8 N	ΙΑΧ. ΤΟ	RQUE:	6,000	) FT. LE	3 <b>S</b> . @ 1	0k PSI		
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 8 with 2-3/16" hex	.410"	1.67"	1.02"	5.47"	1.67"	1.25"	2.09"	11.60"
M - 8 with 2-3/8" hex	.410"	1.78"	1.02"	5.47"	1.78"	1.25"	2.09"	11.60"
M - 8 with 2-9/16" hex	.410"	1.89"	1.02"	5.47"	1.89"	1.25"	2.09"	11.60"
M - 8 with 2-3/4" hex	.410"	2"	1.02"	5.47"	2"	1.25"	2.09"	11.60"
M - 8 with 2-15/16" hex	.410"	2.1"	1.02"	5.47"	2.1"	1.25"	2.09"	11.60"
M - 8 with 3-1/8" hex	.410"	2.21"	1.02"	5.47"	2.21"	1.25"	2.09"	11.60"
M - 8 with 3-1/2" hex	.410"	2.42"	1.02"	5.47"	2.42"	1.25"	2.09"	11.60"
M - 8 with 3-7/8" hex	.410"	2.65"	1.02"	5.47"	2.65"	1.25"	2.09"	11.60"

M - 16 M	AX. TO	RQUE:	10,39	5 FT. L	BS. @	10k PS	51	
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 16 with 2-3/4" hex	.50"	2.09"	1.22"	6.57"	2.09"	1.50"	2.50"	13.92"
M - 16 with 2-15/16" hex	.50"	2.19"	1.22"	6.57"	2.19"	1.50"	2.50"	13.92"
M - 16 with 3-1/8" hex	.50"	2.30"	1.22"	6.57"	2.30"	1.50"	2.50"	13.92"
M - 16 with 3-1/2" hex	.50"	2.52"	1.22"	6.57"	2.52"	1.50"	2.50"	13.92"
M - 16 with 3-7/8" hex	.50"	2.74"	1.22"	6.57"	2.74"	1.50"	2.50"	13.92"
M - 16 with 4-1/4" hex	.50"	2.95"	1.22"	6.57"	2.95"	1.50"	2.50"	13.92"
M - 16 with 4-5/8" hex	.50"	3.17"	1.22"	6.57"	3.17"	1.50"	2.50"	13.92"
M - 16 with 5" hex	.50"	3.39"	1.22"	6.57"	3.39"	1.50"	2.50"	13.92"

M - 32 I	ΛΑΧ. ΤΟ	RQUE	24,64	0 FT. L	.BS. @	10k PS	81	
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 32 with 3-1/2" hex	.666"	2.69"	1.63"	8.76"	2.69"	2.00"	3.34"	18.56"
M - 32 with 3-7/8" hex	.666"	2.90"	1.63"	8.76"	2.90"	2.00"	3.34"	18.56"
M - 32 with 4-1/4" hex	.666"	3.12"	1.63"	8.76"	3.12"	2.00"	3.34"	18.56"
M - 32 with 4-5/8" hex	.666"	3.33"	1.63"	8.76"	3.33"	2.00"	3.34"	18.56"
M - 32 with 5" hex	.666"	3.55"	1.63"	8.76"	3.55"	2.00"	3.34"	18.56"
M - 32 with 5-3/8" hex	.666"	3.77"	1.63"	8.76"	3.77"	2.00"	3.34"	18.56"
M - 32 with 5-3/4" hex	.666"	3.98"	1.63"	8.76"	3.98"	2.00"	3.34"	18.56"
M - 32 with 6-1/8" hex	.666"	4.20"	1.63"	8.76"	4.20"	2.00"	3.34"	18.56"

M - 64 I	ИАХ. ТО	RQUE	: 48,12	25 FT. L	BS. @	10k PS	51	
Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 64 with 5" hex	.820"	3.71"	2.04"	10.95"	3.71"	2.50"	4.18"	23.20"
M - 64 with 5-3/8" hex	.820"	3.92"	2.04"	10.95"	3.92"	2.50"	4.18"	23.20"
M - 64 with 5-3/4" hex	.820"	4.14"	2.04"	10.95"	4.14"	2.50"	4.18"	23.20"
M - 64 with 6-1/8" hex	.820"	4.35"	2.04"	10.95"	4.35"	2.50"	4.18"	23.20"
M - 64 with 6-1/2" hex	.820"	4.57"	2.04"	10.95"	4.57"	2.50"	4.18"	23.20"
M - 64 with 6-7/8" hex	.820"	4.79"	2.04"	10.95"	4.79"	2.50"	4.18"	23.20"
M - 64 with 7-1/4" hex	.820"	5.00"	2.04"	10.95"	5.00"	2.50"	4.18"	23.20"
M - 64 with 7-5/8" hex	.820"	5.22"	2.04"	10.95"	5.22"	2.50"	4.18"	23.20"

#### " 6.96" M - 2 with 27n " 6.96" M - 2 with 32n

**METRIC** 

Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 2 with 27mm hex	6.4	21.8	15.5	83.3	21.8	19.1	31.8	176.8
M - 2 with 32mm hex	6.4	24.6	15.5	83.3	24.6	19.1	31.8	176.8
M - 2 with 36mm hex	6.4	27.4	15.5	83.3	27.4	19.1	31.8	176.8
M - 2 with 41mm hex	6.4	30.2	15.5	83.3	30.2	19.1	31.8	176.8
M - 2 with 46mm hex	6.4	33.0	15.5	83.3	33.0	19.1	31.8	176.8
M - 2 with 50mm hex	6.4	35.6	15.5	83.3	35.6	19.1	31.8	176.8
M - 2 with 55mm hex	6.4	38.4	15.5	83.3	38.4	19.1	31.8	176.8
M - 2 with 60mm hex	6.4	41.2	15.5	83.3	41.2	19.1	31.8	176.8

M - 2 MAX. TORQUE: 1789 Nm @ 700 BAR

**M DRIVE**<sup>®</sup>

M	4 MAX.	TORQL	JE: 42	39 Nm 🛛	@ 700	BAR		
Metric Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 4 with 46mm hex	8.5	35.0	20.7	111.3	35.0	25.4	42.4	235.7
M - 4 with 50mm hex	8.5	37.8	20.7	111.3	37.8	25.4	42.4	235.7
M - 4 with 55mm hex	8.5	40.5	20.7	111.3	40.5	25.4	42.4	235.7
M - 4 with 60mm hex	8.5	43.3	20.7	111.3	43.3	25.4	42.4	235.7
M - 4 with 65mm hex	8.5	46.0	20.7	111.3	46.0	25.4	42.4	235.7
M - 4 with 70mm hex	8.5	48.8	20.7	111.3	48.8	25.4	42.4	235.7
M - 4 with 75mm hex	8.5	51.5	20.7	111.3	51.5	25.4	42.4	235.7
M - 4 with 80mm hex	8.5	54.3	20.7	111.3	54.3	25.4	42.4	235.7

M - 8	MAX.	TORQL	JE: 82	57 Nm 🛛	@ 700	BAR		
Metric Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 8 with 55mm hex	10.4	42.5	25.9	138.9	42.5	31.8	53.1	294.6
M - 8 with 60mm hex	10.4	45.2	25.9	138.9	45.2	31.8	53.1	294.6
M - 8 with 65mm hex	10.4	48.0	25.9	138.9	48.0	31.8	53.1	294.6
M - 8 with 70mm hex	10.4	50.7	25.9	138.9	50.7	31.8	53.1	294.6
M - 8 with 75mm hex	10.4	53.5	25.9	138.9	53.5	31.8	53.1	294.6
M - 8 with 80mm hex	10.4	56.2	25.9	138.9	56.2	31.8	53.1	294.6
M - 8 with 90mm hex	10.4	61.5	25.9	138.9	61.5	31.8	53.1	294.6
M - 8 with 100mm hex	10.4	67.2	25.9	138.9	67.2	31.8	53.1	294.6

M - 16	M - 16 MAX. TORQUE: 14,305 Nm @ 700 BAR								
Metric Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	
M - 16 w ith 70mm hex	12.7	53.0	31.0	166.9	53.0	38.1	63.5	353.6	
M - 16 w ith 75mm hex	12.7	55.8	31.0	166.9	55.8	38.1	63.5	353.6	
M - 16 w ith 80mm hex	12.7	58.5	31.0	166.9	58.5	38.1	63.5	353.6	
M - 16 w ith 90mm hex	12.7	64.0	31.0	166.9	64.0	38.1	63.5	353.6	
M - 16 w ith 100mm hex	12.7	69.5	31.0	166.9	69.5	38.1	63.5	353.6	
M - 16 w ith 105mm hex	12.7	75.0	31.0	166.9	75.0	38.1	63.5	353.6	
M - 16 w ith 115mm hex	12.7	80.5	31.0	166.9	80.5	38.1	63.5	353.6	
M - 16 with 125mm hex	12.7	86.0	31.0	166.9	86.0	38.1	63.5	353.6	

M - 32	MAX.	TORQU	E: 33,	908 Nm	a @ 700	) BAR		
Metric Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 32 with 90mm hex	16.9	68.2	41.4	222.5	68.2	50.8	84.8	471.4
M - 32 with 100mm hex	16.9	73.7	41.4	222.5	73.7	50.8	84.8	471.4
M - 32 with 105mm hex	16.9	79.2	41.4	222.5	79.2	50.8	84.8	471.4
M - 32 with 115mm hex	16.9	84.7	41.4	222.5	84.7	50.8	84.8	471.4
M - 32 with 125mm hex	16.9	90.2	41.4	222.5	90.2	50.8	84.8	471.4
M - 32 with 135mm hex	16.9	95.7	41.4	222.5	95.7	50.8	84.8	471.4
M - 32 with 145mm hex	16.9	101.2	41.4	222.5	101.2	50.8	84.8	471.4
M - 32 with 155mm hex	16.9	106.7	41.4	222.5	106.7	50.8	84.8	471.4

M - 64	MAX.	TORQU	E: 66,	227 Nn	n @ 700	) BAR		
Metric Description	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
M - 64 with 125mm hex	20.9	94.1	51.8	278.1	94.1	63.5	106.2	589.3
M - 64 with 135mm hex	20.9	99.6	51.8	278.1	99.6	63.5	106.2	589.3
M - 64 with 145mm hex	20.9	105	51.8	278.1	105	63.5	106.2	589.3
M - 64 with 155mm hex	20.9	110.6	51.8	278.1	110.6	63.5	106.2	589.3
M - 64 with 165mm hex	20.9	116.1	51.8	278.1	116.1	63.5	106.2	589.3
M - 64 with 175mm hex	20.9	121.6	51.8	278.1	121.6	63.5	106.2	589.3
M - 64 with 185mm hex	20.9	127.1	51.8	278.1	127.1	63.5	106.2	589.3
M - 64 with 195mm hex	20.9	132.6	51.8	278.1	132.6	63.5	106.2	589.3

**Spanner Link** 

U.S. and International Patents Approved and Pending.

9







#### **NORWOLF V-Drive® Benefits:**

- Push through drive with ball locks.
- Fastest...40° stroke.
- Most versatile, patented reaction arm. Arm never needs to come off tool for resetting unlike competitors. Adjusts in all directions with posi lock locator buttons. Totally unique design.
- Thinnest width square drive tool on the market...totally enclosed.
- Optional solid reaction arm available.

#### The fastest, most versatile square drive.

The V Drive completes the X Driver system with a dedicated square drive. Lock in the X Driver to complete the tool. The V Drive boasts a 40 degree power stroke making the tool 30 percent faster per stroke. With a push through square drive, reaction pawl, lack of shroud and aluminum body, the V Drive is the tool of choice for socket driven applications.

#### Get the biggest reaction.

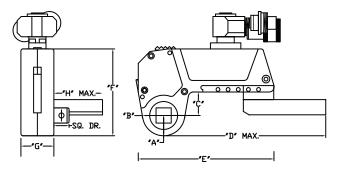
The multi-plane universal V Drive reaction arm has the largest reaction area of any tool. There are eight different settings along the length of the tool, 360 degree adjustability and height adjustable settings to fit more applications than ever.







	X DRIVE	R™ WITH "V" DR	IVE
Model	Sq. drive	Maximum Torque @ ?	10k PSI / 700 BAR
V - 2	.75"	1,300 ft. lbs.	1,762 Nm
V - 4	1.00"	3,080 ft. lbs.	4,175 Nm
V - 8	1.50"	6,015 ft. lbs.	8,155 Nm
V - 16	1.50"	10,400 ft. lbs.	14,100 Nm
V - 32	2.50"	24,650 ft. lbs.	33,420 Nm
V - 64	2.50"	48,150 ft. lbs.	65,280 Nm



Model	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
V - 2	1.00"	2.10"	1.16"	8.00"	6.88"	4.28"	1.63"	2.50"
V - 4	1.33"	2.80"	1.55"	10.67"	9.17"	5.70"	2.17"	3.33"
V - 8	1.66"	3.50"	1.94"	13.33"	11.46"	7.13"	2.71"	4.16"
V - 16	2.00"	4.20"	2.33"	16.00"	13.75"	8.55"	3.26"	5.00"
V - 32	2.66"	5.60"	3.10"	21.34"	18.34"	11.40"	4.34"	6.66"
V - 64	3.33"	7.00"	3.88"	26.68"	22.93"	14.25"	5.43"	8.33"

Metric Data	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
V - 2	25.4	53.3	29.5	203.2	174.8	108.7	41.4	63.5
V - 4	33.8	71.1	39.4	271.0	232.9	144.8	55.1	84.6
V - 8	42.2	88.9	49.3	338.6	291.1	181.1	38.8	105.7
V - 16	50.8	106.7	59.2	406.4	349.3	217.2	82.8	127.0
V - 32	67.6	142.2	78.7	542.0	465.8	289.6	110.2	169.2
V - 64	84.6	177.8	98.6	677.7	582.4	362.0	137.9	211.6









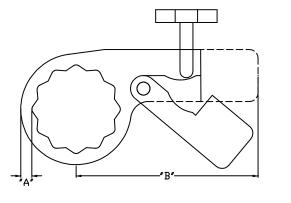
Holding wrench—To stop opposite nut from turning.



- Fits on all standard API flange applications.
- 1/2 turn of screw releases all torsion.
- · No more hammering off of knocker wrenches.
- Custom configuration available.

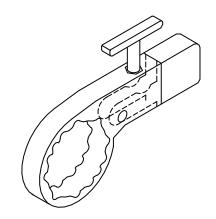








UNI-BACK - IMPERIAL						
PART NO.	HEX SIZE	"A"	"B"	"C"		
BK-062	5/8"	.25"	5.25"	.75"		
BK-068	11/16"	.25"	5.25"	.75"		
BK-075	3/4"	.25"	5.25"	.75"		
BK-081	13/16"	.25"	5.25"	.75"		
BK-087	7/8"	.25"	5.25"	.75"		
BK-093	15/16"	.25"	5.25"	.75"		
BK-106	1-1/16"	.25"	5.25"	.75"		
BK-112	1-1/8"	.25"	5.25"	.75"		
BK-118	1-3/16"	.25"	5.25"	.75"		
BK-143	1-7/16"	.25"	5.25"	.75"		
BK-150	1-1/2"	.25"	5.25"	.75"		
BK-156	1-9/16"	.25"	5.25"	.75"		
BK-162	1-5/8"	.25"	5.25"	.75"		
BK-168	1-11/16"	.25"	5.25"	.75"		
BK-175	1-3/4"	.25"	5.25"	.75"		
BK-181	1-13/16"	.25"	5.25"	.75"		
BK-187	1-7/8"	.25"	5.25"	.75"		
BK-193	1-15/16"	.25"	5.25"	.75"		
BK-200	2"	.25"	5.25"	.75"		
BK-218	2-3/16"	.25"	5.25"	.75"		
BK-237	2-3/8"	.25"	5.25"	.75"		
BK-256	2-9/16"	.33"	7.00"	1.00"		
BK-275	2-3/4"	.33"	7.00"	1.00"		
BK-293	2-15/16"	.33"	7.00"	1.00"		
BK-312	3-1/8"	.33"	7.00"	1.00"		
BK-350	3-1/2"	.50"	10.50"	1.50"		
BK-387	3-7/8"	.50"	10.50"	1.50"		
BK-425	4-1/4"	.50"	10.50"	1.50"		
BK-462	4-5/8"	.50"	10.50"	1.50"		
BK-500	5"	.66"	14.00"	2.00"		
BK-537	5-3/8"	.66"	14.00"	2.00"		
BK-575	5-3/4"	.66"	14.00"	2.00"		
BK-612	6-1/8"	.66"	14.00"	2.00"		



UNI-BACK - METRIC						
PART NO.	HEX SIZE	"A"	"B"	"C"		
BK-24MM	24MM	6.4MM	133MM	19MM		
BK-27MM	27MM	6.4MM	133MM	19MM		
BK-30MM	30MM	6.4MM	133MM	19MM		
BK-32MM	32MM	6.4MM	133MM	19MM		
BK-34MM	34MM	6.4MM	133MM	19MM		
BK-36MM	36MM	6.4MM	133MM	19MM		
BK-38MM	38MM	6.4MM	133MM	19MM		
BK-41MM	41MM	6.4MM	133MM	19MM		
BK-43MM	43MM	6.4MM	133MM	19MM		
BK-45MM	45MM	6.4MM	133MM	19MM		
BK-46MM	46MM	6.4MM	133MM	19MM		
BK-48MM	48MM	6.4MM	133MM	19MM		
BK-50MM	50MM	6.4MM	133MM	19MM		
BK-55MM	55MM	6.4MM	133MM	19MM		
BK-60MM	60MM	6.4MM	133MM	19MM		
BK-65MM	65MM	8.5MM	178MM	25MM		
BK-70MM	70MM	8.5MM	178MM	25MM		
BK-75MM	75MM	8.5MM	178MM	25MM		
BK-80MM	80MM	8.5MM	178MM	25MM		
BK-85MM	85MM	8.5MM	178MM	25MM		
BK-90MM	90MM	12.7MM	267MM	38MM		
BK-95MM	95MM	12.7MM	267MM	38MM		
BK-100MM	100MM	12.7MM	267MM	38MM		
BK-105MM	105MM	12.7MM	267MM	38MM		
BK-110MM	110MM	12.7MM	267MM	38MM		
BK-115MM	115MM	12.7MM	267MM	38MM		
BK-120MM	120MM	16.9MM	356MM	50MM		
BK-125MM	125MM	16.9MM	356MM	50MM		
BK-130MM	130MM	16.9MM	356MM	50MM		
BK-135MM	135MM	16.9MM	356MM	50MM		
BK-140MM	140MM	16.9MM	356MM	50MM		
BK-145MM	145MM	16.9MM	356MM	50MM		
BK-150MM	150MM	16.9MM	356MM	50MM		

<u>SIZES</u>	THICKNESS	MAXIMUM TORQUE
1-7/16" THRU 2-3/8"	3/4"	1400 FT. LBS.
2-9/16" THRU 3-1/8"	1"	3200 FT. LBS.
3-1/2" THRU 4-5/8"	1-1/2"	10800 FT. LBS.
5" THRU 6-1/8"	2"	25000 FT. LBS.

## HYDRAULIC PUMPS





NTW-EPM-02 NTW-EPM-2D-220V



4-Port Manifold NTW-MANI-4PT-D

NORWOLF® Hydraulic Pump:

Available in electric or air powered.

Electric pumps available with 110 or 220 volt.

Also Available: Hoses ~ Fittings ~ Gauges ~ Manifolds

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Norwolf offers a wide variety of both standard sockets & custom sockets, drives and reaction arms to suit your needs.







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