

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
0	ISSUED	10/10/2017	WNJ

- NOTES:
- INGRESS PROTECTION RATING: IP65 (STANDARD) / IP69K (OPTIONAL)
  - ELECTRICAL CHARACTERISTICS:
    - INPUT VOLTAGE:
      - AC: 120V, 240V & 480V
      - DC: 12V, 24V, 48V, 60V & 75V
    - CONNECTOR INFORMATION:

**J1 Power Input Mating Connector:**  
DC or 1-Phase AC (2+PE)

MFG: Souriau Plug Solder Contacts Backshell	UT06142G1SH 82913604A UT0514JCL	Connector Kit: KIT-00003	Cable with Leads: ASM-00297-xxx
---	---------------------------------------	--------------------------	---------------------------------

**J2 Communications Mating Connector:**

Modbus RTU, CANbus (5 Pos M12)		Ethernet based (4 Pos M12)	
Connector Kit: KIT-00003	Cable with Leads: ASM-00301-xxx or Std. DeviceNet	Connector Kit: n/a	Cable with Leads: Std. M12 Ethernet

**J2 Communications Mating Connector:**

Mfg: Souriau Plug Solder Contacts Backshell	UTOW61419PH RM20W3K UT0514JCL	Connector Kit: KIT-00005	Cable with Leads: ASM-00299-xxx
---	-------------------------------------	--------------------------	---------------------------------

- MECHANICAL CHARACTERISTICS:
  - DUTY CYCLE FOR MOTOR 130mm FRAME, 240V WINDING:

Continuous Duty @ 120Vac					Peak @ 120Vac				
	Model	Cyl-in	Force-Lbf (N)	Avg-in/s (mm/s)		Model	Cyl-in	Force-Lbf (N)	Avg-in/s (mm/s)
Speed	8A	1.00	658 (2,926)	8.8 (223)	8A	1.00	2,356 (10,481)	8.8 (223)	
	8A	1.50	2,193 (9,754)	3.3 (83)	8A	1.50	5,301 (23,582)	3.3 (83)	
	8A	2.00	3,900 (17,347)	1.9 (48)	8A	2.00	9,425 (41,924)	1.9 (48)	
	8A	2.50	6,093 (27,101)	1.3 (33)	8A	2.50	14,726 (65,505)	1.3 (33)	
	8A	3.25	10,297 (45,801)	0.7 (17)	8A	3.25	24,887 (110,704)	0.7 (17)	
Force	8A	1.00	2,356 (10,481)	3.5 (89)	8A	1.00	2,356 (10,481)	8.8 (223)	
	8A	1.50	5,301 (23,582)	1.3 (34)	8A	1.50	5,301 (23,582)	3.3 (83)	
	8A	2.00	9,425 (41,924)	0.8 (20)	8A	2.00	9,425 (41,924)	1.9 (48)	
	8A	2.50	14,726 (65,505)	0.5 (13)	8A	2.50	14,726 (65,505)	1.3 (33)	
	8A	3.25	24,887 (110,704)	0.3 (7)	8A	3.25	24,887 (110,704)	0.7 (17)	

- ESTIMATED WEIGHT:

Bore	Base Weight* (lbs)	Add per inch of stroke
1.00	33.30	0.86
1.50	34.50	1.01
2.00	36.00	1.24
2.50	77.30	1.89
3.25	79.50	2.01

\* Base weight includes power unit and cylinder only.

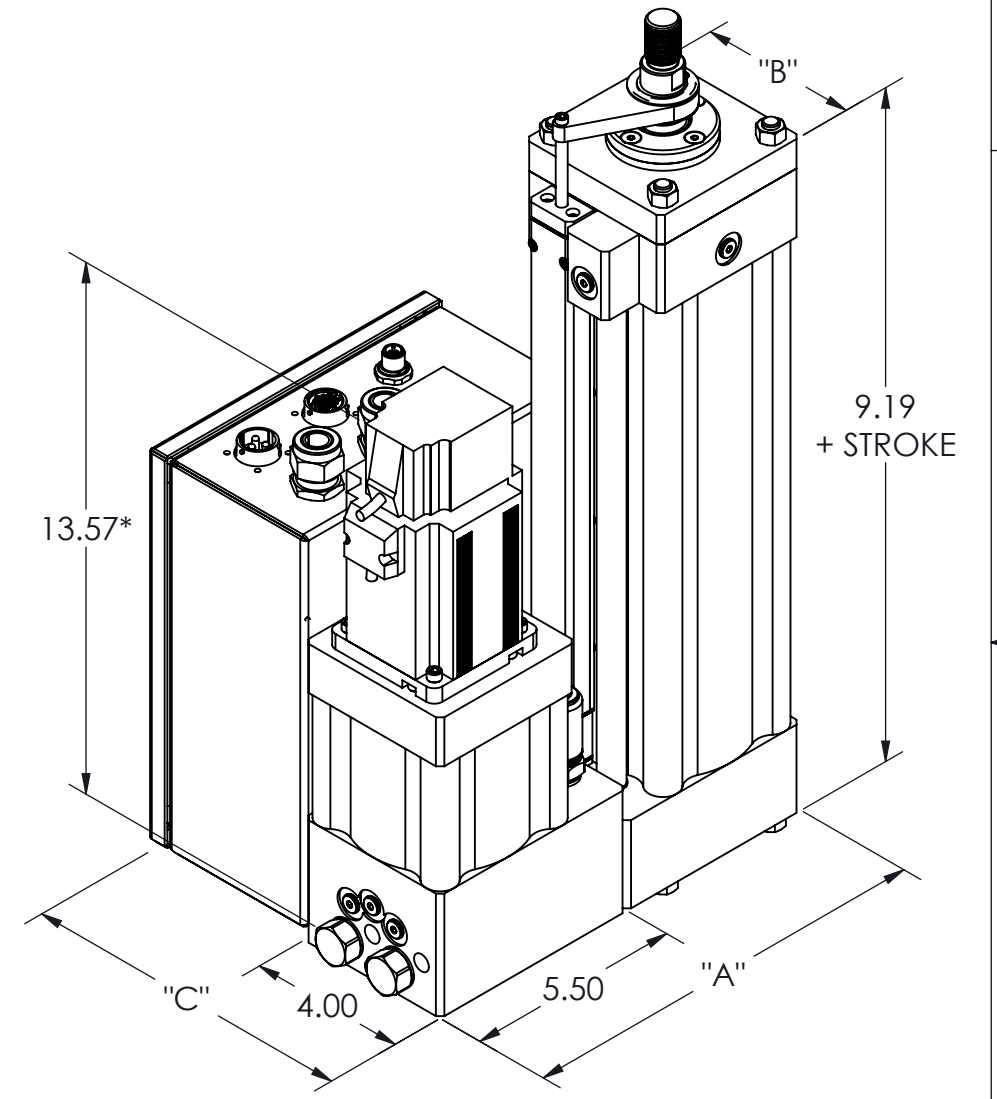
- MAX STATIC CAPACITY:

Bore	Load (lbs)*
1.00	2435
1.50	5478
2.00	9739
2.50	15217
3.25	25717

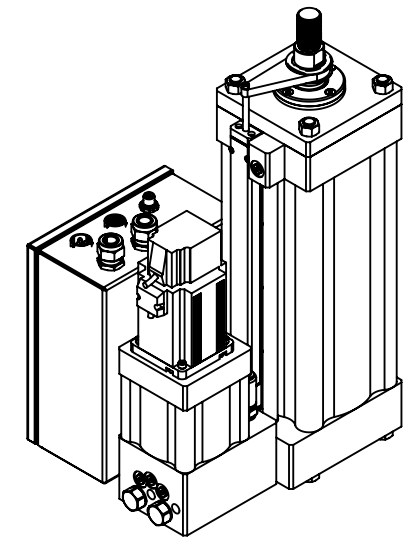
\* Load applied to rod (set by relief valves)

- TEMPERATURE RANGE: 0 - 40°C (CONTINUOUS DUTY CYCLE WITH CONVECTION COOLING) STANDARD
- SHIPPING INFO:
  - RETRACTED
  - TESTED AND SETUP TO REQUIREMENTS
- MANUAL RELEASE:
  - NOTE: USER TO OPERATE AT OWN RISK. OPENING QUICKLY UNDER LOAD COULD CAUSE A HAZARDOUS CONDITION.
  - USE A 5/32 ALLEN AND 9/16 WRENCH. TURN CLOCKWISE (SLOWLY) TO RELEASE LOAD.
- GROUNDING AND BONDING:
  - UNIT MUST BE GROUNDED THROUGH 'PE' TERMINAL OF AC INUT CONNECTOR J1.
  - UNIT MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE SAFETY STANDARDS.
  - UNIT REQUIRES EXTERNAL BRANCH CIRCUIT PRETECTION.
- COOLING/CLEARANCE:
  - MINIMUM 1" ALL AROUND EXCEPT AS NOTED BELOW:
  - CONNECTORS REQUIRE MINIMUM 8" CLEARANCE FOR CABLE EXIT
  - ELECTRICAL ENCLOSURE DOOR REQUIRES CLEARANCE FOR OPENING: 8.5"
- SIDE LOADING:
  - HYDRAULIC CYLINDER IS DESIGNED TO OPERATE WITH A MINIMUM AMOUNT OF SIDE LOAD. ALIGNMENT IN BOTH EXTEND AND RETRACT POSITIONS IS CRITICAL AND MUST BE CHECKED TO ENSURE LONG CYLINDER LIFE.

80 SERIES POWER UNIT  
80 SERIES HYDRAULIC CYLINDER



80 SERIES POWER UNIT  
120 SERIES HYDRAULIC CYLINDER



SCALE 1:8

TABLE NAME GOES HERE			
	DIM "A"	DIM "B"	DIM "C"
80 PU & 80 HC	10.63" (270mm)	4.00" (102mm)	8.62" (219mm)
80 PU & 120 HC	12.13" (308mm)	5.50" (140mm)	10.12" (257mm)

\* HEIGHT VARIES BASED ON PUMP SIZE

**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF KYNTRONICS. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF KYNTRONICS, PROHIBITED.

UNLESS OTHERWISE SPECIFIED:	
TOLERANCES	SURFACE FINISH
.XX ±.010 .XXX ±.005 .XXXX ±.0015 ANGLES ±30°	125
EDGE BREAKS & RADII	CONCENTRICITY
EXTERIOR: .020 MAX. X 45° INTERIOR: .020 R. MAX.	I.D./O.D. EACH END: .005 T.I.R. END TO END: .010 T.I.R.

**Kyntronics**  
34700 LAKELAND BOULEVARD  
EASTLAKE, OHIO 44095-5223

NAME	DATE
DRAWN BY: WNJ	10/10/17
CHECKED BY:	
APPVD. BY:	
INTERPRET GEOMETRIC TOLERANCING PER: ANSI Y14.5M	CAGE CODE
DO NOT SCALE DRAWING	7XK37

DESC: 80 & 120 SERIES HYDRAULIC ACTUATOR		
SIZE	DWG. NO.	REV
B	ASM-00320	0
SCALE: 1:4	WEIGHT: N/A	SHEET 1 OF 6

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
-	See Sheet 1	-	-

- NOTES:
- INGRESS PROTECTION RATING: IP65 (STANDARD) / IP69K (OPTIONAL)
  - ELECTRICAL CHARACTERISTICS:
    - INPUT VOLTAGE:
      - AC: 120V, 240V & 480V
      - DC: 12V, 24V, 48V, 60V & 75V
    - CONNECTOR INFORMATION:

**J1 Power Input Mating Connector:**

3-Phase AC, 115/130 (3+PE)			
MFG: Harting Plug	912003151	Connector Kit: KIT-00006	Cable with Leads: ASM-00317-xxx
Solder Contacts	9920006207		
Backshell	19620031440		
Cable Grip	19620005084		

**J2 Communications Mating Connector:**

Modbus RTU, CANbus (5 Pos M12)		Ethernet based (4 Pos M12)	
Connector Kit: KIT-00003	Cable with Leads: ASM-00301-xxx or Std. DeviceNet	Connector Kit: n/a	Cable with Leads: Std. M12 Ethernet

**J2 Communications Mating Connector:**

Mfg: Souriau Plug	UTOW61419PH	Connector Kit: KIT-00005	Cable with Leads: ASM-00299-xxx
Solder Contacts	RM20W3K		
Backshell	UTOS14JCL		

- MECHANICAL CHARACTERISTICS:
  - DUTY CYCLE FOR MOTOR 130mm FRAME, 240V WINDING:

Continuous Duty @ 230Vac					Peak @ 230Vac				
	Model	Cyl-in	Force-Lbf (N)	Avg-in/s (mm/s)		Model	Cyl-in	Force-Lbf (N)	Avg-in/s (mm/s)
Speed	3C	1.00	1,264 (5,621)	19.0 (483)	3C	1.00	2,356 (10,481)	19.0 (483)	
	3C	1.50	1,683 (7,488)	17.0 (431)	3C	1.50	5,301 (23,582)	17.0 (431)	
	3C	2.00	2,993 (13,312)	10.1 (256)	3C	2.00	9,425 (41,924)	10.1 (256)	
	3C	2.50	4,676 (20,800)	6.7 (171)	3C	2.50	14,726 (65,505)	6.7 (171)	
	3C	3.25	7,903 (35,152)	3.6 (92)	3C	3.25	24,887 (110,704)	3.6 (92)	
Force	3C	1.00	2,356 (10,481)	14.4 (366)	3C	1.00	2,356 (10,481)	19.0 (481)	
	3C	1.50	5,301 (23,582)	5.4 (136)	3C	1.50	5,301 (23,582)	17.0 (431)	
	3C	2.00	9,425 (41,924)	3.2 (81)	3C	2.00	9,425 (41,924)	10.1 (256)	
	3C	2.50	14,726 (65,505)	2.1 (54)	3C	2.50	14,726 (65,505)	6.7 (171)	
	3C	3.25	24,887 (110,704)	1.1 (29)	3C	3.25	24,887 (110,704)	3.6 (92)	

- ESTIMATED WEIGHT:

Bore	Base Weight* (lbs)	Add per inch of stroke
1.00	33.30	0.86
1.50	34.50	1.01
2.00	36.00	1.24
2.50	99.50	1.89
3.25	101.50	2.01

\* Base weight includes power unit and cylinder only.

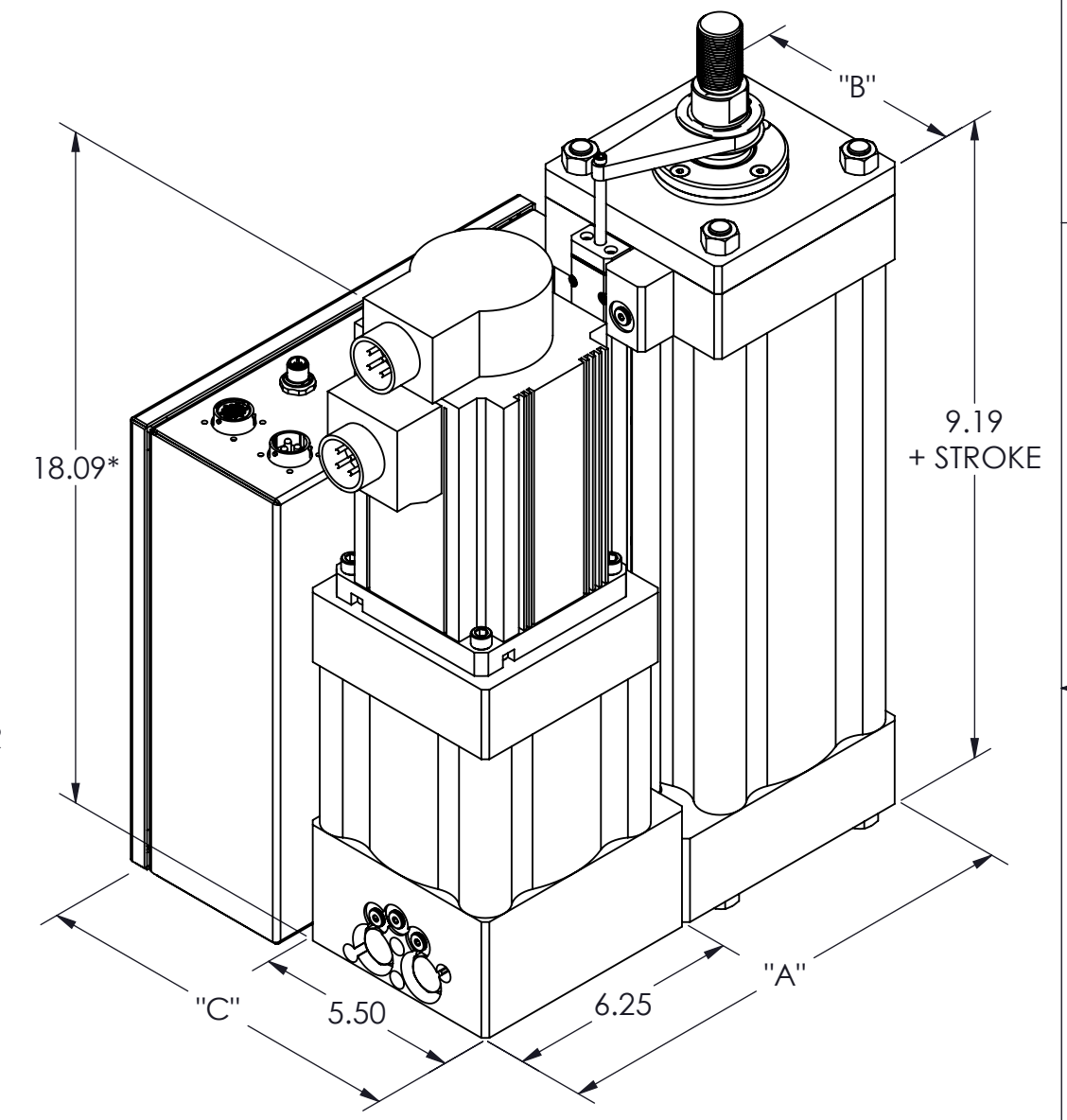
- MAX STATIC CAPACITY:

Bore	Load (lbs)*
1.00	2435
1.50	5478
2.00	9739
2.50	15217
3.25	25717

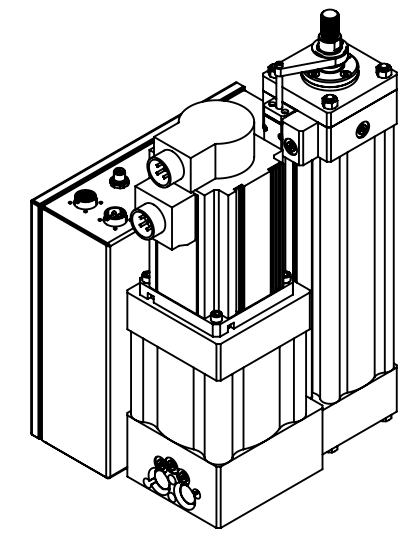
\* Load applied to rod (set by relief valves)

- TEMPERATURE RANGE: 0 - 40°C (CONTINUOUS DUTY CYCLE WITH CONVECTION COOLING) STANDARD
- SHIPPING INFO:
  - RETRACTED
  - TESTED AND SETUP TO REQUIREMENTS
- MANUAL RELEASE:
  - NOTE: USER TO OPERATE AT OWN RISK. OPENING QUICKLY UNDER LOAD COULD CAUSE A HAZARDOUS CONDITION.
  - USE A 5/32 ALLEN AND 9/16 WRENCH. TURN CLOCKWISE (SLOWLY) TO RELEASE LOAD.
- GROUNDING AND BONDING:
  - UNIT MUST BE GROUNDED THROUGH 'PE' TERMINAL OF AC IN UT CONNECTOR J1.
  - UNIT MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE SAFETY STANDARDS.
  - UNIT REQUIRES EXTERNAL BRANCH CIRCUIT PROTECTION.
- COOLING/CLEARANCE:
  - MINIMUM 1" ALL AROUND EXCEPT AS NOTED BELOW:
  - CONNECTORS REQUIRE MINIMUM 8" CLEARANCE FOR CABLE EXIT
  - ELECTRICAL ENCLOSURE DOOR REQUIRES CLEARANCE FOR OPENING: 12.5"
- SIDE LOADING:
  - HYDRAULIC CYLINDER IS DESIGNED TO OPERATE WITH A MINIMUM AMOUNT OF SIDE LOAD. ALIGNMENT IN BOTH EXTEND AND RETRACT POSITIONS IS CRITICAL AND MUST BE CHECKED TO ENSURE LONG CYLINDER LIFE.

120 SERIES POWER UNIT  
120 SERIES HYDRAULIC CYLINDER



120 SERIES POWER UNIT  
80 SERIES HYDRAULIC CYLINDER



SCALE 1:8

TABLE NAME GOES HERE			
	DIM "A"	DIM "B"	DIM "C"
120 PU & 120 HC	13.88" (353mm)	5.50" (140mm)	10.12" (257mm)
120 PU & 80 HC	12.42" (316mm)	4.00" (102mm)	10.12" (257mm)

\* HEIGHT VARIES BASED ON PUMP SIZE

<p><b>PROPRIETARY AND CONFIDENTIAL</b></p> <p>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF KYNTRONICS. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF KYNTRONICS, IS PROHIBITED.</p>	UNLESS OTHERWISE SPECIFIED:		<p>34700 LAKELAND BOULEVARD EASTLAKE, OHIO 44095-5223</p>	NAME	DATE	DESC: 80 & 120 SERIES HYDRAULIC ACTUATOR  SIZE: B DWG. NO.: ASM-00320 REV: 0  SCALE: 1:4 WEIGHT: N/A SHEET 2 OF 6
	TOLERANCES	SURFACE FINISH		DRAWN BY:	WNJ	
	.XX ±.010 .XXX ±.005 .XXXX ±.0015 ANGLES ±30'	125	CHECKED BY:			
	EDGE BREAKS & RADII	CONCENTRICITY	APPVD. BY:			
EXTERIOR: .020 MAX., X 45° INTERIOR: .020 R. MAX.	I.D./O.D. EACH END: .005 T.I.R. END TO END: .010 T.I.R.	FINISH	INTERPRET GEOMETRIC TOLERANCING PER: ANSI Y14.5M DIMENSIONS IN INCHES THIRD ANGLE PROJECTION	CAGE CODE	7XK37	