

DESIGN ENVELOPE 4312 TWIN | 8020-018.5 | SUBMITTAL

File No: 100.4772IN
Date: AUGUST 14, 2015
Supersedes: 100.4772IN
Date: MAY 27, 2015

Job: _____ Representative: _____

Order No: _____ Date: _____

Engineer: _____ Submitted by: _____ Date: _____

Contractor: _____ Approved by: _____ Date: _____

PUMP DESIGN DATA

No. of pumps: _____ Tag: _____
 Capacity: _____ m³/h(USgpm) Head: _____ m (ft)
 Liquid: _____ Viscosity: _____
 Temperature: _____ °C (°F) Specific gravity: _____
 Suction: 80mm (3") Discharge: 80mm (3")

MOTOR DESIGN DATA

kW: _____ RPM: _____ Enclosure: _____
 Volts: _____ Hertz: 50 Hz Phase: 3
 Efficiency: IE2 Frame size: _____

MAXIMUM PUMP OPERATING CONDITIONS

PN 16

16 bars at 149°C (232 psig at 300°F)
 7 bars at 150°C (100 psig at 300°F)

PN 25

25 bars at 149°C (375 psig at 300°F)
 21 bars at 150°C (260 psig at 300°F)

- Tolerance of ±3 mm (±0.125") should be used
- For exact installation, data please write factory for certified dimensions

MECHANICAL SEAL DESIGN DATA

See file no. 43.50 for standard mechanical seal details as indicated below

Armstrong seal reference number

c1 (a) Others: _____

CONTROLS DATA

Sensorless control: Standard

Minimum system pressure to be maintained: _____ m (ft)*

Protocol (standard): Modbus RTU BACnet™ MS/TP
 Johnson® N2 Siemens® FLN

Protocol (optional): LonWorks®

Enclosure: Indoor - IP55
 Outdoor - IP66

Fused disconnect switch:

Duty/standby pre-wired bridge:

EMI/RFI control: Integrated filter designed to meet EN61800-3

Harmonic suppression: Dual dc-link reactors (Equivalent: 5% AC line reactor) Supporting IEEE 519-1992 requirements**

Cooling: Fan-cooled through back channel

Ambient temperature: -10°C to +45°C up to 1000 meters above sea level (-14°F to +113°F, 3300 ft)

Analog I/O: Two current or voltage inputs, one current output

Digital I/O: Six programmable inputs (two can be configured as outputs)

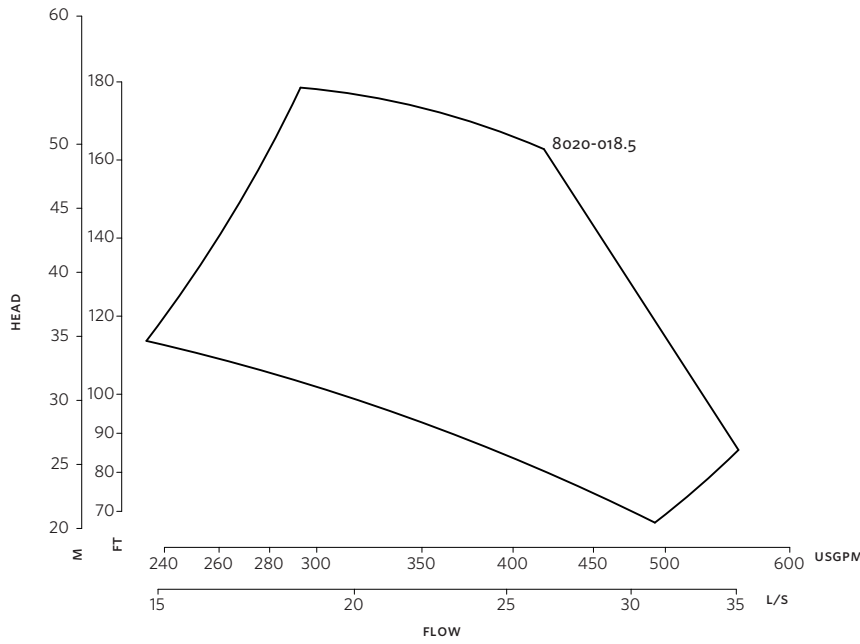
Pulse inputs: Two programmable

Relay outputs: Two programmable

Communication port: 1-RS485, 1-USB

*If minimum maintained system pressure is not known: Default to 40% of design head
 **The IVS 102 drive is a low harmonic drive via built-in dc line reactors. This does not guaranty performance to any system wide harmonic specification or the costs to meet a system wide specification. If supplied with the system electrical details, Armstrong will run a computer simulation of the system wide harmonics. If system harmonic levels are exceeded Armstrong can also recommend additional harmonic mitigation and the costs for such mitigation.

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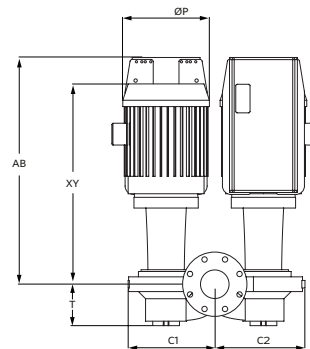
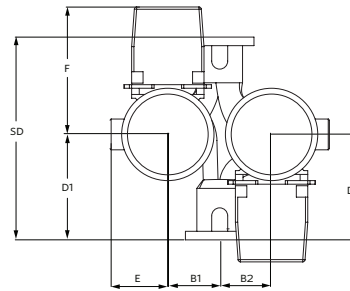
DIMENSION DATA

INDOOR	
IP55	
Frame size:	160L
Size:	8020-018.5
kW:	18.5
RPM:	3000
AB:	935(36.81)
B1:	250(10.28)
B2:	250(10.28)
C1:	412(16.22)
C2:	412(16.22)
D1:	200(07.96)
D2:	230(09.14)
E:	208(08.27)
F:	430(16.92)
P:	315(12.40)
SD:	400(15.74)
T:	158(06.22)
XY:	938(36.92)
Weight:	235.42(519)

Performance curves are for reference only.
Confirm current performance data with Armstrong ACE Online selection software.

Dimensions - mm (inch)
Weight - kg (lbs)

INDOOR



TORONTO
+1 416 755 2291

BUFFALO
+1 716 693 8813

BIRMINGHAM
+44 (0) 8444 145 145

MANCHESTER
+44 (0) 8444 145 145

BANGALORE
+91 (0) 80 4906 3555

SHANGHAI
+86 21 3756 6696