

# AIR TORQUE

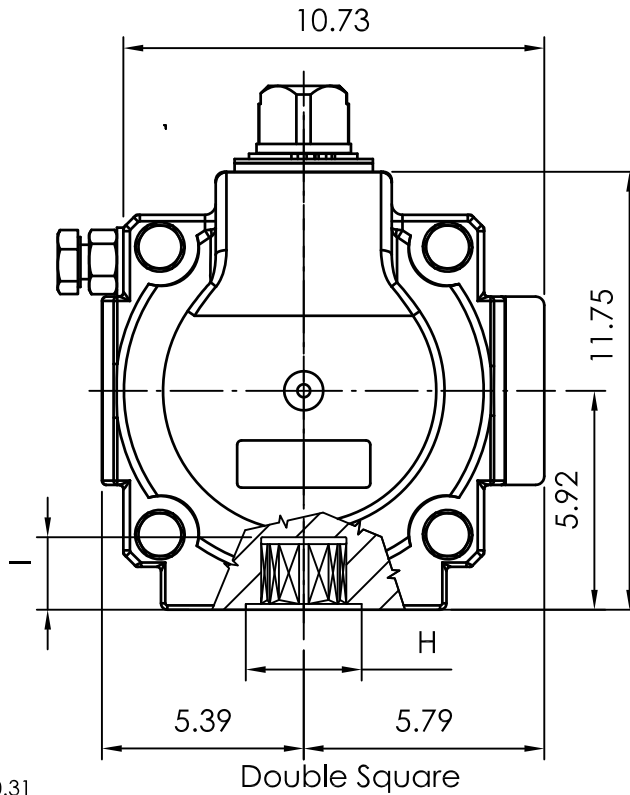
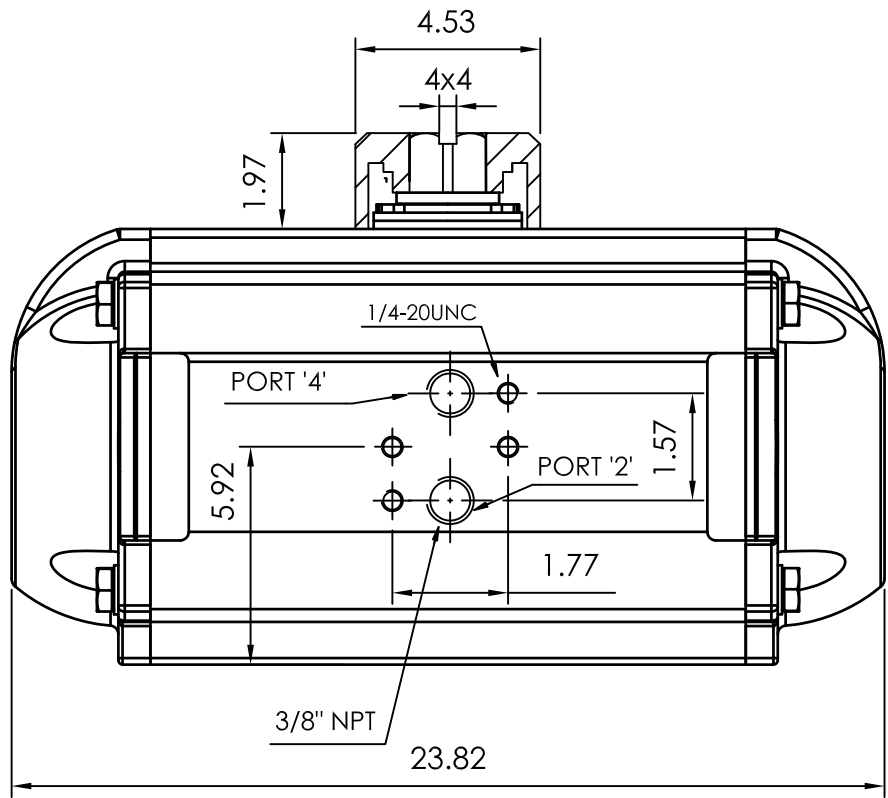
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Technical Data Sheet n° **PT650DU**  
 Issued on: 12/04

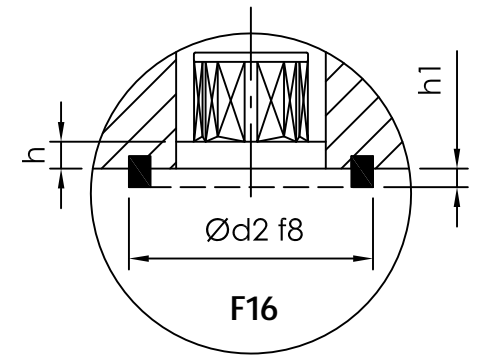
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**Model PT650**  
**DA and SR - 90°**

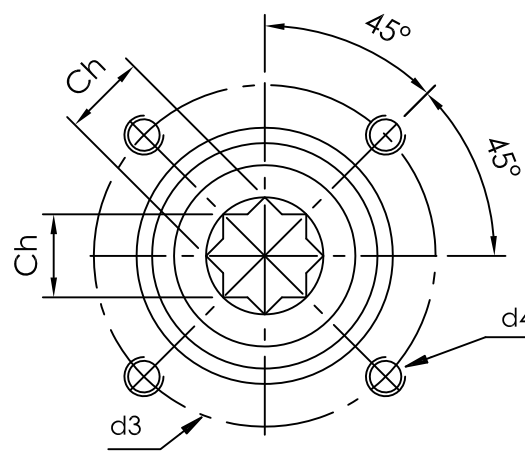
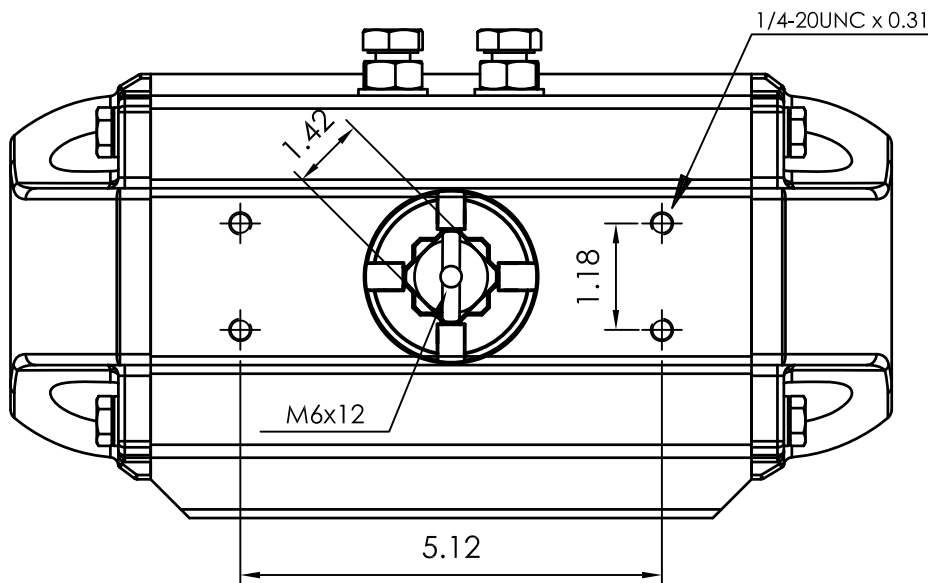
Dimensions in inch



Flange Dimensions	
ISO 5211	F16
d2 f8	5,12
d3	6,5
d4	3/4-10UNC x 1,18
H	5,12
Ch	1,81
l min.	1,89
h min.	0,1
h1	0,16
Pressure connection	N 3
Ancillary Attachment	AA 4



Spigot available only on request



TYPE	OUTPUT TORQUE FOR DOUBLE ACTING IN INCH-LBS								WEIGHT (LBS)										
	40 Psi		50 Psi		60 Psi		70 Psi				80 Psi		90 Psi		100 Psi		116 Psi		
Pressure	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	124.00
D	8725.0		10906.0		13087.0		15269.0		17450.0		19631.0		21812.0		25302.0				

TYPE	OUTPUT TORQUE FOR SPRING RETURN IN INCH-LBS																Spring stroke		WEIGHT (LBS)
	40 Psi		50 Psi		60 Psi		70 Psi		80 Psi		90 Psi		100 Psi		116 Psi		90°	0°	
	Pressure	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	Start	
S 05	5535	4113	7716	6294	9898	8475	12079	10657	14260	12838	16441	15019	18623	17200	22114	20692	4612	3190	138
S 06	4897	3190	7078	5372	9260	7553	11441	9734	13622	11915	15803	14097	17985	16278	21476	19770	5534	3828	140
S 07	4259	2268	6440	4449	8622	6631	10803	8812	12984	10993	15165	13174	17347	15356	20837	18845	6457	4466	143
S 08			5802	3527	7984	5708	10165	7889	12346	10071	14527	12252	16709	14433	20199	17923	7379	5104	146
S 09			5165	2605	7346	4786	9527	6967	11708	9148	13889	11329	16071	13511	19561	17001	8302	5742	148
S 10					6708	3864	8889	6045	11070	8226	13251	10407	15433	12588	18923	16078	9224	6380	151
S 11					6070	2941	8252	5123	10432	7303	12613	9485	14795	11666	18285	15156	10147	7018	153
S 12							7614	4200	9795	6382	11976	8563	14157	10743	17647	14233	11069	7656	156

Max. Pressure	Rotation	Screw stroke Adjustment	Chamber φ (inch)	Air Volume (in <sup>3</sup> )		Moving Time (Sec.) (A)		Operating Temperature (°F) (B)		
				Opening	Closing	Opening	Closing	STD (standard)	HT (high temperature)	LT (low temperature)
116 Psi	90° ±4° at 0° and 90°	For 1° adj. need 1/4 Turn	9,45	610	928	D 3,5 S 4,1	D 4,0 S 4,6	NBR "O" ring - 4 to + 176	FPM "O" ring + 5 to + 300	Silicone "O" ring - 40 to + 176

**Notes:**

- (A) The above indicated moving time of the actuator, are obtained in the following test conditions:  
 (1) Room Temperature, (2) Actuator Stroke 90°, (3) Solenoid Valve with Orifice Of 11 mm and a flow capacity Qn 6000 L/min., (4) Inside pipe diameter 11 mm, (5) Medium clean air, (6) Air supply pressure 5,5 bar (79,75 Psi), (7) Actuator without external resistance load. **Cautions: obviously on the field applications when one or more of the above parameter are different, the moving time will be different.**
- (B) For HT (high temperature) and LT (low temperature) services, a special Lubricant is requested. Please contact Air Torque factory.

**Operating Medium:**

The operating medium must be free of dust and oil. The maximum particle size must not exceed 30µm (ISO 8573 Part1, Class5). In order to prevent water condensation and/or solidification (ice, when actuator work below 0°C), the operating medium must have a dew point equal to -20°C or, at least 10°C below the ambient temperature (ISO 8573 Part1, Class3).