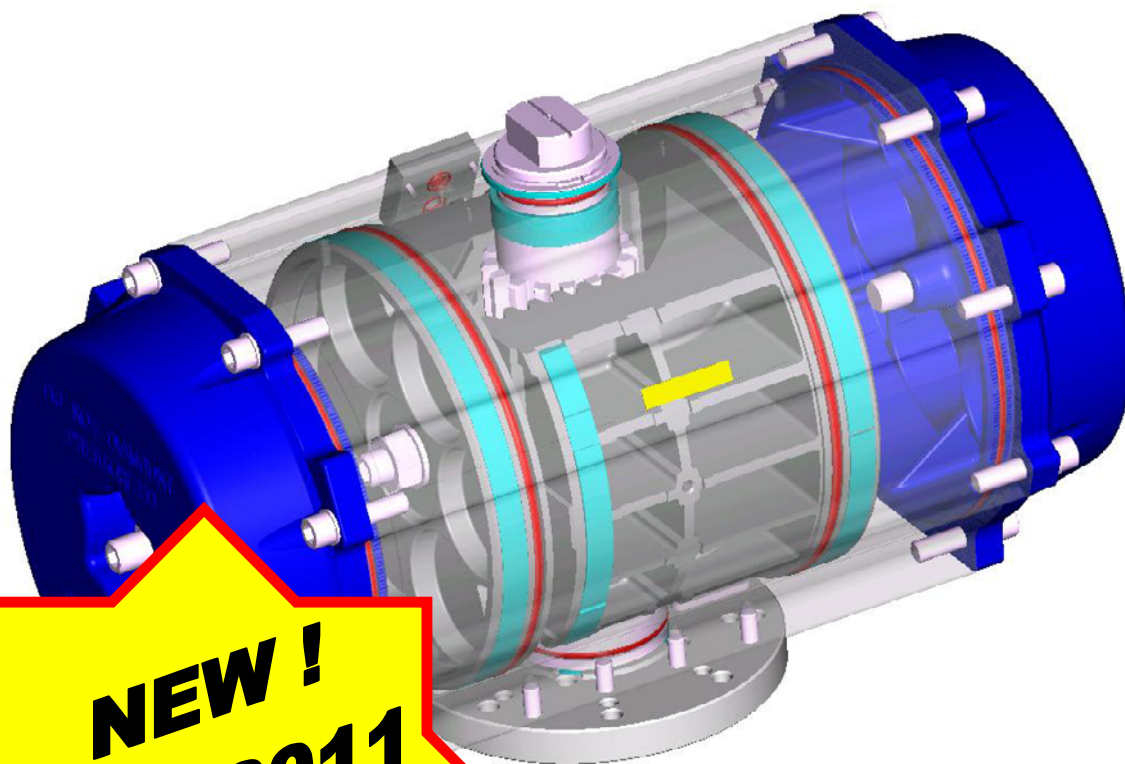
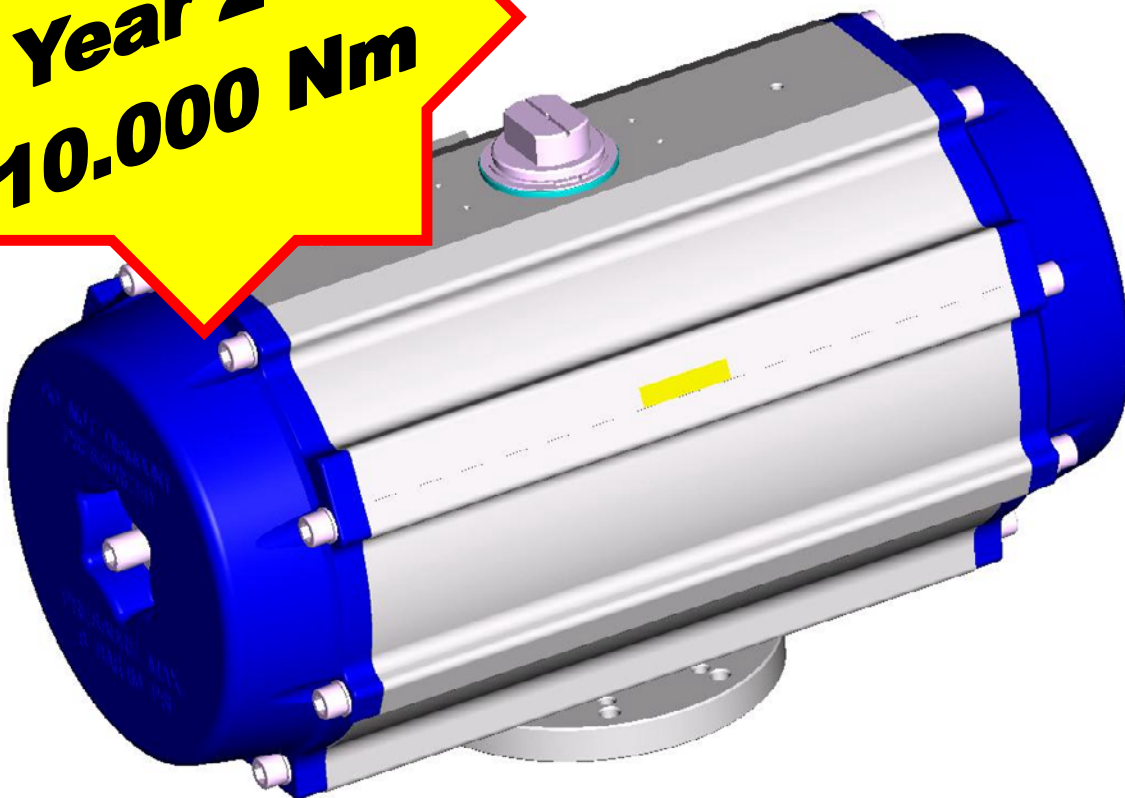


# AP 420

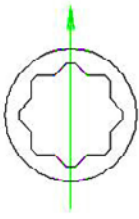
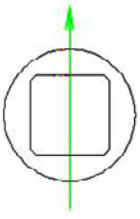
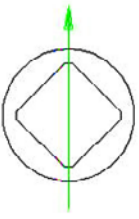
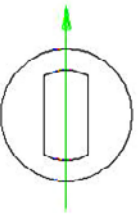
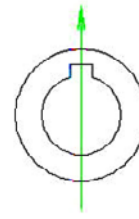
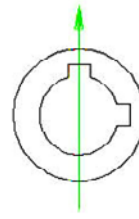


**NEW!**  
**Year 2011**  
**10.000 Nm**



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### ISO 5211 - DIN 3337 AVAILABLE FORCE INTAKES

VDI\UDE 3845 	VDI\UDE 3845 	VDI\UDE 3845 	VDI\UDE 3845 	VDI\UDE 3845 	VDI\UDE 3845 
STANDARD ALPHAIR <b>S = L\D</b>	<b>L</b>	<b>D</b>	<b>H</b>	<b>V</b>	<b>W</b>

TYPE	I SERIES = 90°		Y SERIES = 120°	
			X SERIES = 180°	
	ISO 5211 FLANGE	SHAFT FORCE INTAKE	ISO 5211 FLANGE	SHAFT FORCE INTAKE
AP 032	F03 F04	S = 9	F03	S = 9
AP 042	F03/05 <b>F04</b>	S = 9 - 11	F03\05	S = 9 - 11
AP 050	F03 F03/05 <b>F04</b> F05	S = 9 - 11	F04	S = 9 - 11
AP 063	F03/05 F04 <b>F05</b> F05/07	S = 9 - 11 - 14	F05	S = 9 - 11 - 14
AP 075	F04 <b>F05/07</b>	S = 11 - 14 - 17	F05\07	S = 11 - 14 - 17
AP 085	<b>F05/07</b>	S = 14 - 17	F05\07	S = 14 - 17
AP 100	<b>F07/10</b> F05/07/10	S = 17 - 22	F07\10	S = 17 - 22
AP 115	<b>F07/10</b>	S = 17 - 22	F07\10	S = 17 - 22
AP 125	<b>F07/10</b> F12	S = 17 - 22 - 27	F07\10	S = 17 - 22 - 27
AP 145	<b>F10/12</b>	S = 22 - 27		
AP 160	<b>F10/12</b>	S = 22 - 27		
AP 180	<b>F10/12</b> F14	S = 27 - 36		
AP 200	F10/12 <b>F14</b> F10/12/16	S = 27 - 36		
AP 240	<b>F14</b> F16	S = 36 - 46		
AP 270	F14 <b>F16</b>	S = 36 - 46		
AP 330	<b>F16/25</b>	S = 46 - 55		
AP 420	<b>F(16)/25/30</b>	S = 55 - 75		

**ALPHAIR standard force intake is called "S TYPE" (starlike)**, which enables direct assembly on valves with both L (0°) and D (45°) drive square. It is available in all indicated sizes.

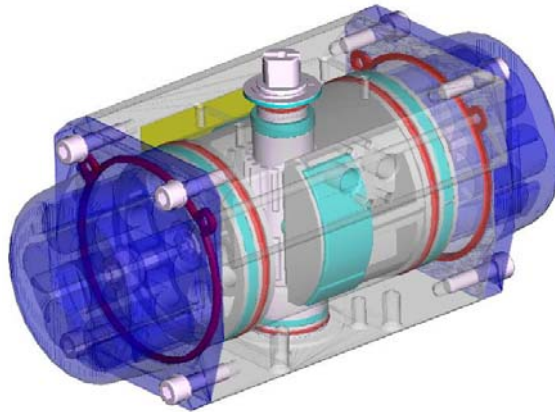
Above mentioned **boldtype** force intakes are available also in L (0°) and D (45°), whereas H (flat-head), V (one key) and W (two Keys) force intake types, can be supplied on request.

Special shaft working is also available on request, for special applications.

All dimensions and tolerances according to ISO 5211 and DIN 3337 standards.

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### DOUBLE ACTING "DA" TORQUE RATINGS IN Nm



**I Series = 90°**  
**Y Series = 120°**  
**X Series = 180°**

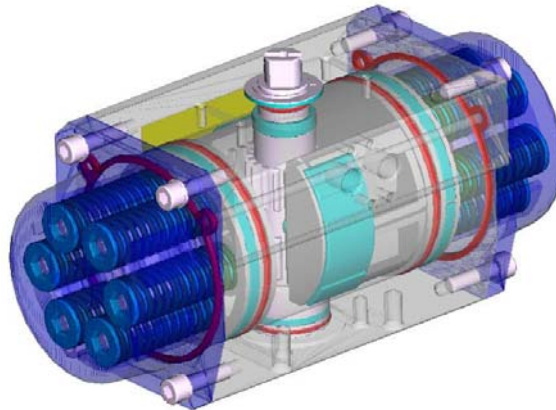
TYPE	AIR SUPPLY IN BAR									
	1	2	3	4	5	6	7	8	9	10
AP 032	-	-	-	5,0	6,3	7,6	8,8	10,0	11,4	12,6
AP 042	-	-	6,5	8,7	10,9	13,0	15,2	17,3	19,5	21,7
AP 050	3,0	6,1	9,2	12,3	15,4	18,5	21,5	24,6	27,7	30,8
AP 063	5,5	11,0	16,5	22,0	27,5	33,0	38,5	44,0	49,5	55,0
AP 075	11,7	23,4	35,1	46,8	58,5	70,2	81,9	93,6	105,3	117,0
AP 085	17,8	35,6	53,4	71,2	89,0	106,9	124,7	142,4	160,3	178,1
AP 100	27,7	55,4	83,2	110,9	138,6	166,4	194,1	221,8	249,5	277,3
AP 115	45,7	91,5	137,2	183,0	228,7	274,5	320,2	366,0	411,7	457,5
AP 125	60,1	120,3	180,5	240,7	300,9	361,1	421,2	481,4	541,6	601,8

**I Series = 90°**

AP 145	86,7	173,4	260,1	346,8	433,5	520,2	606,9	693,6	780,3	867,0
AP 160	118,3	236,7	355,0	473,4	591,7	710,1	828,4	946,8	1065	1183
AP 180	159,7	319,4	479,0	638,6	798,3	958,0	1119	1277	1437	1598
AP 200	221,8	443,7	665,6	887,5	1109	1333	1553	1775	1997	2219
AP 240	372,5	745,0	1118	1490	1863	2235	2608	2980	3353	3725
AP 270	539,2	1078	1617	2157	2696	3235	3774	4314	4853	5392
AP 330	976,5	1953	2929	3906	4882	5859	6835	7812	8788	9765
AP 420	1671	3342	5013	6684	8354	10025	11696	13367	-	-

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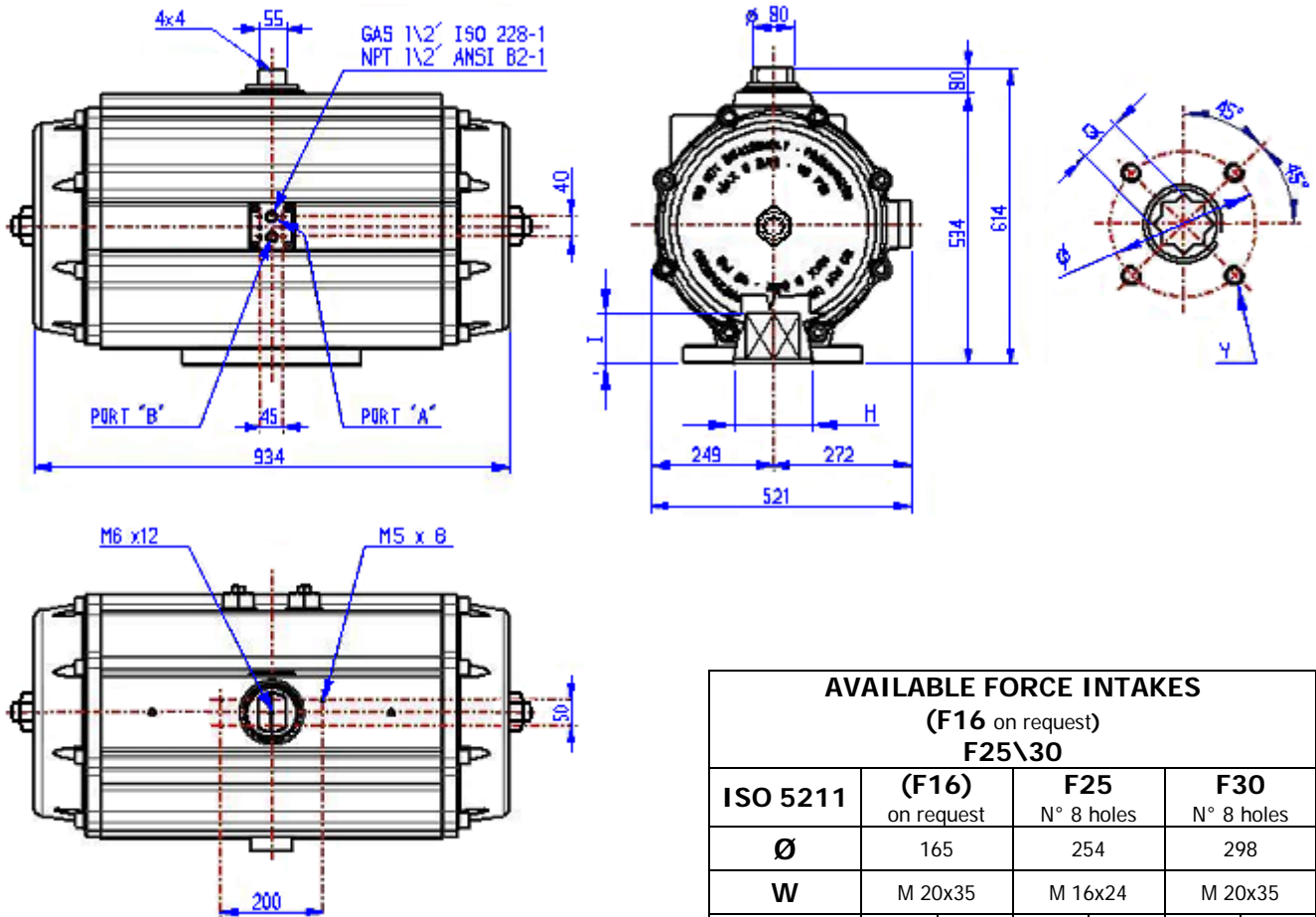
### SPRING RETURN "SR" TORQUE RATINGS IN Nm



I Series = 90°

TYPE	SPRINGS FOR EACH SIDE	AIR SUPPLY IN BAR										SPRINGS TORQUE			
		3		4		5		6		7		8		90°	0°
		0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°		
AP 145	3	158,0	92,0	245,0	179,0	332,0	265,0	418,0	352,0	505,0	439,0	592,0	526,0	168,0	102,0
	4			211,0	123,0	298,0	210,0	384,0	269,0	471,0	383,0	558,0	470,0	224,0	136,0
	5					264,0	154,0	350,0	240,0	437,0	327,0	524,0	414,0	280,0	170,0
	6					230,0	98,0	316,0	184,0	403,0	271,0	490,0	358,0	336,0	204,0
AP 160	3	222,4	132,6	340,7	251,0	459,1	369,3	577,4	487,6	695,7	605,9	814,0	724,2	222,4	132,6
	4			296,5	176,9	414,9	295,2	533,2	413,5	651,5	531,8	769,8	650,1	296,5	176,9
	5					370,7	221,1	489,0	339,4	607,3	457,7	725,6	576,0	370,7	221,1
	6					326,5	147,0	444,8	265,3	563,1	383,6	681,4	501,9	444,8	265,3
AP 180	3	287,9	191,0	447,6	350,7	607,3	510,4	766,9	670,0	926,6	829,7	1068	989,1	287,9	191,0
	4			383,9	254,7	543,6	414,4	703,3	574,0	862,9	733,7	1022	893,1	383,9	254,7
	5					479,9	318,4	639,6	478,1	792,2	637,7	958,6	797,1	479,9	318,4
	6					416,2	222,4	575,9	382,1	735,6	541,8	894,9	701,1	575,9	382,1
AP 200	3	423,6	242,0	644,7	463,8	867,4	685,8	1089	907,7	1311	1130	1533	1351	423,6	242,0
	4			564,8	322,6	786,7	544,6	1008	766,5	1230	988,4	1452	1209	564,8	322,6
	5					706,0	403,4	927,9	625,3	1150	847,2	1372	1068	706,0	403,4
	6					625,3	262,2	847,2	484,1	1069	706,0	1291	927,0	847,2	484,1
AP 240	3	664,0	453,6	1037	826,2	1409	1199	1782	1571	2154	1944	2527	2316	664,0	453,6
	4			885,4	604,8	1258	977,4	1630	1350	2003	1722	2376	2095	885,4	604,8
	5					1107	756,0	1479	1129	1852	1501	2224	1874	1107	756,0
	6					955,5	534,7	1328	907,2	1701	1280	2073	1653	1328	907,2
AP 270	3	912,5	705,1	1452	1244	1991	1783	2530	2323	3069	2862	3608	3401	912,5	705,1
	4			1216,7	940,2	1756	1479	2295	2019	2834	2558	3373	3097	1217	940,1
	5					1521	1175	2060	1714	2599	2144	3138	2793	1521	1175
	6					1286	871,0	1825	1410	2364	1954	2903	2489	1825	1410
AP 330	3	1739	1193	2717	2171	3695	3149	4672	4126	5650	5104	6628	6082	1739	1193
	4			2319	1591	3297	2569	4275	3547	5252	4524	6230	5502	2319	1591
	5					2899	1989	3877	2967	4854	3944	5832	4922	2899	1989
	6					2501	1409	3479	2387	4457	3365	5434	4342	3479	2387
AP 420	3	2999	2014	4670	3685	6340	5356	8011	7026	9682	8697	11353	10368	2999	2014
	4			3998	2685	5669	4356	7340	6027	9011	7698	10682	9369	3998	2685
	5					4998	3356	6669	5027	8340	6698	10010	8369	4998	3356
	6					4327	2357	5997	4028	7668	5698	9339	7369	5997	4028
Torques rated by air supply												Torques rated by spring return			
0° = closed pistons, extened springs										90° = opened pistons, compressed springs					
Air\springs balanced torques															
<div style="display: flex; justify-content: space-between;"> <span style="background-color: yellow; padding: 2px;"> </span> <span style="background-color: lightgreen; padding: 2px;"> </span> </div>															
0° - MAXIMUM OPENING BREAK TORQUE BY AIR							0° - MINIMUM CLOSING TORQUE BY SPRINGS								

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AVAILABLE FORCE INTAKES (F16 on request) F25\30					
ISO 5211	(F16) on request		F25 N° 8 holes		F30 N° 8 holes
Ø	165		254		298
W	M 20x35		M 16x24		M 20x35
Q	55	75	55	75	55   75
I	60	80	60	80	60   80
H	143		200		200

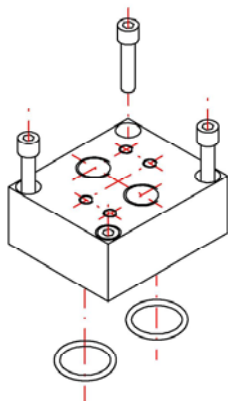
DOUBLE ACTING TORQUE RATINGS IN NEWTONxMETRE (Nm)							WEIGHT kg
AP 420 DA	AIR SUPPLY IN BAR						
	3	4	5	6	7	8	
	5013	6684	8354	10025	11696	13367	210,0

SPRING RETURN TORQUE RATINGS IN NEWTONxMETRE (Nm)													WEIGHT kg		
AP 420 SR	AIR SUPPLY IN BAR											SPRINGS			
	3		4		5		6		7		8			END	START
	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	0°	90°	90°	0°	
SR 3\3	2999	2014	4670	3685	6340	5356	8011	7026	9682	8697	11353	10368	2999	2014	244,5
SR 4\4	2327	1014	3998	2685	5669	4356	7340	6027	9011	7698	10682	9369	3999	2685	256,0
SR 5\5			3327	1685	4998	3356	6669	5027	8340	6698	10010	8369	4998	3357	267,5
SR 6\6					4327	2357	5997	4028	7668	5698	9339	7369	5998	4028	279,0

ADDITIONAL DATA						
Chamber Diam.	MAX.PRESSURE	ROTATION	VOLUME	CLOSING TIME	OPENING TIME	STD. GREASE
420 mm	8 BAR	90° ± 5°	131 litres	9,0 seconds	8,0 seconds	SYNTHETIC

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## PLATES FOR NAMUR SOLENOID VALVES

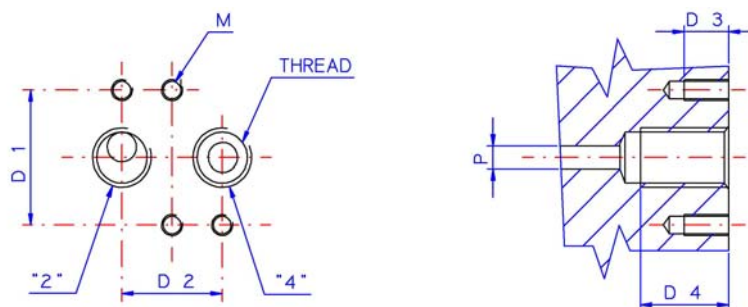


### FEATURES

Aluminium  
Anodising

According to CEN\TC69\WG1\SG10-0-N023

CODE	ACTUATOR	THREAD	DIMENSIONS	ACCESSORIES
032 B2\N2 - 1\8"	AP 032	1\8" GAS or NPT horizontal	50x44 H=15	N° 2 screws M5x25 (countersunk head + hexagon socket) N° 1 FLAT GASKET
270 B2\N2 - 1\4"	AP 240, 270	1\4" GAS or NPT horizontal	52x62 H=25	N° 4 screws TCEI M5x25 N° 2 O-Ring 3081 (d.20,24x2,62)
240 B3\N3 - 3\8"	AP 240, 270, 330	3\8" GAS or NPT horizontal	82x66 H=35	N° 4 screws TCEI M6x25 N° 2 O-Ring 3081 (d.20,24x2,62)
270 B4\N4 - 1\2"	AP 240, 270, 330	1\2" GAS or NPT horizontal		
330 B4\N4 - 1\2"	AP 330 STANDARD	1\2" GAS or NPT vertical	82x82 H=25	
420 B4\N4 - 1\2"	AP 420 STANDARD	1\2" GAS or NPT vertical	92x82 H=25	N° 4 screws TCEI M8x30 N° 2 O-Ring 3100 (d.25,07x2,62)



THREAD	P	D 1	D 2	D 3	D 4	M
1\4"	DIAM. 6	32	24	8	12	M5
3\8"	DIAM. 10	45	40	10	13	M6
1\2"	DIAM. 14				16	

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