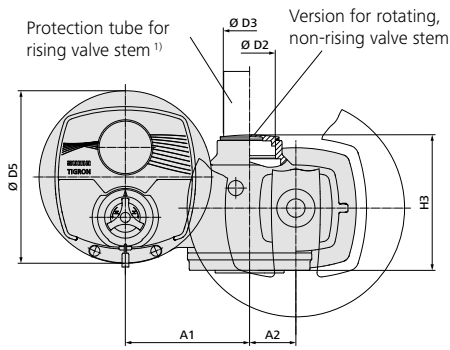


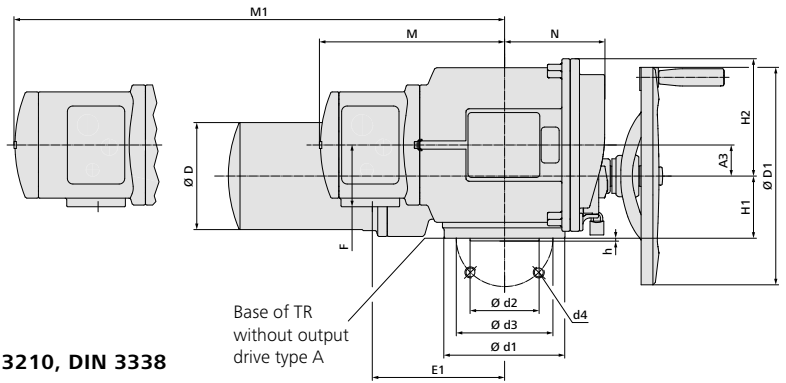
Dimensions Multi-turn actuators with 3-phase AC motors

Ex plug/socket connector with terminal carrier



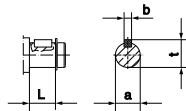
Option
Electrical connection in "Ex d" version

Standard
Electrical connection in "Ex e" version

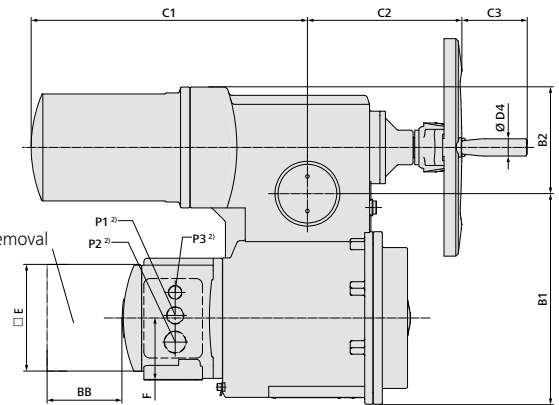


Valve attachments according to EN ISO 5210, DIN 3210, DIN 3338
For dimensions see overleaf

Handwheel shaft



Space required for mounting/removal



1) Only upon specific order

2) Standard, other threads on request

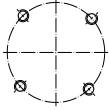
Dimensions	TR-M30X		TR-M60X		TR-M120X	TR-M250X	TR-M500X	TR-M1000X
	F07	F10 (G0)	F07	F10 (G0)	F10 (G0)	F14 (G1/2)	F14 (G1/2)	F16 (G3)
EN ISO 5210 (DIN 3210)								
A1	153		153		160	180	180	200
A2	40		40		50	67	67	80
A3	50		50		50	45	45	36
B1	278		278		285	305	305	325
B2	102		102		121	155	155	186
C1	277		277		292	400	400	441
C2	161		161		159	223	223	234
C3	64		64		64	96	96	96
Ø D	104		104		124	155	155	192
Ø D1	160		160		200	315	315	315
Ø D2	G 1¼"		G 1¼"		G 2"	G 2½"	G 2½"	G 3"
Ø D3	42 x 3.3		42 x 3.3		60 x 3.7	76 x 3.7	76 x 3.7	89 x 4.1
Ø D4	20		20		20	25	25	25
Ø D5	250		250		250	250	250	250
□ E	154		154		154	154	154	154
E1	217		217		217	192	192	190
F	90		90		90	90	90	90
H1	80		80		80	90	90	110
H2	175		175		175	170	170	161
H3	160		160		170	196	196	235
L	20		20		24	38.8	45.8	45.8
M	294		294		294	269	269	267
M1	339		339		339	314	314	312
N	120		120		120	145	145	147
P1 2)	M25 x 1.5		M25 x 1.5		M25 x 1.5	M25 x 1.5	M25 x 1.5	M25 x 1.5
P2 2)	M32 x 1.5		M32 x 1.5		M32 x 1.5	M32 x 1.5	M32 x 1.5	M32 x 1.5
P3 2)	M20 x 1.5		M20 x 1.5		M20 x 1.5	M20 x 1.5	M20 x 1.5	M20 x 1.5
BB min.	50		50		50	50	50	50
Ø a	20 d7		20 d7		20 d7	30 d7	30 d7	30 d7
b	6		6		6	8	8	8
Ø d1	90	125	90	125	125	175	175	210
Ø d2 f12	55	70 (60)	55	70 (60)	70 (60)	100	100	130
Ø d3	70	102	70	102	102	140	140	165
d4	4 x M8	4 x M10	4 x M8	4 x M10	4 x M10	4 x M16	4 x M16	4 x M20
h	3		3		3	4	4	5
t	22.5		22.5		22.5	33	33	33

We reserve the right to alter data according to improvements made. Previous documents become invalid with the issue of this document.

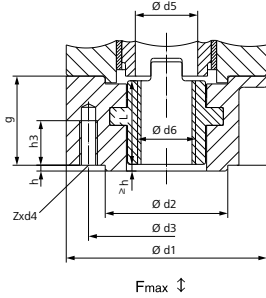
Dimensions Valve attachments according to EN ISO 5210, DIN 3338, DIN 3210

Stem nut

Type
EN ISO 5210 **A**
DIN 3210 **A**



Arrangement of holes d4

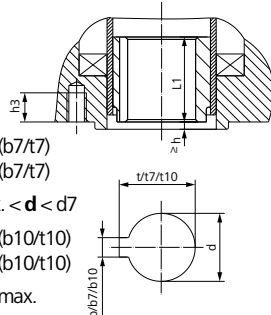


TR-M		30X/60X			120X		250X/500X		1000X	
EN ISO 5210	DIN 3210	F07	F10	G0	F10	G0	F14	G1/2	F16	G3
F max. kN		40	70		70		160		250	
Ø d1		90	125		125		175		210	
Ø d2		55	70	60	70	60	100		130	
Ø d3		70	102		102		140		165	
d4		M8	M10		M10		M16		M20	
Ø d5			36		44		62		80	
Ø d6 max. 5)		Tr 26 ACME 1"	Tr 32 6)		Tr 40 ACME 1½"		Tr 55 ACME 2¼"		Tr 75 ACME 3"	
g		40	50		50		65		80	
h			3		3		4		5	
h3		12	15		15		25		35	
L		37.5	47.5		47.5		61.5		76.5	
Z			4		4		4		4	
Weight kg		1.1	2.8		2.8		6.8		11.7	
Bore with keyway according to DIN 6885-1		Ø d6 H9 max.	22	38		38	57		70	
Square		AF max.	20	32		32	42		on request	
Hexagon		AF max.	22	32		32	48		on request	

Special bores

Output drive sleeve 3)

Type
EN ISO 5210 **B1** d = d7 (b7/t7)
DIN 3210 **B** d = d7 (b7/t7)
EN ISO 5210 **B2** 1) d10 max. < d < d7
EN ISO 5210 **B3** d = d10 (b10/t10)
DIN 3210 **E** d = d10 (b10/t10)
EN ISO 5210 **B4** 1) d ≤ d10 max.



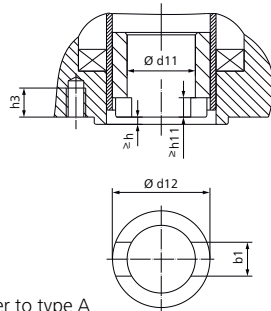
For missing dimensions, refer to type A

Special bores

Square	AF max.	22	30		30		45		60	
Hexagon	AF max.	24	32		32		50		on request	

Dog coupling 3)

Type
EN ISO 5210 **C** = d11
DIN 3338 **C** = d11

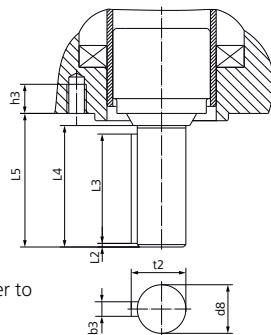


For missing dimensions, refer to type A

TR-M		30X/60X			120X		250X/500X		1000X	
EN ISO 5210	DIN 3210	F07	F10	G0	F10	G0	F14	G1/2	F16	G3
b1 H11		14 4)	14		14		20		24	
Ø d11 H11		28 4)	28		28		38		47	
Ø d11 min.		–	20		20		30		40	
Ø d11 max.		–	42 2) 6)		42		60		80	
Ø d12		36.8	51.8		51.8		73.8		98	
h3		12	18		15		25		30	
h11		7 4)	7		7		8		10	

Shaft end

Type
EN ISO 5210 **D**
DIN 3210 **D**



For missing dimensions, refer to type A

TR-M		30X/60X			120X		250X/500X		1000X	
EN ISO 5210	DIN 3210	F07	F10	G0	F10	G0	F14	G1/2	F16	G3
Ø d8 g6			20		20		30		40	
b3 h9			6		6		8		12	
h3		12	18		15		25		30	
L2			1.5		1.5		2		3	
L3			45		45		63		80	
L4			50		50		70		90	
L5			55		55		76		97	
t2			22.5		22.5		33		43	
Weight kg			0.4		0.7		2		4.3	

1) Dimensions b, t depend on Ø d, refer to DIN 6885-1

2) For rising valve stem Ø d11 max. = Ø d5 of type A

3) Weight included in actuator

4) Dimensions neither complying with EN ISO 5210 nor with DIN 3338

5) Nominal diameter for trapezoidal thread Tr according to DIN 103 or ACME according to ANSI/ASME B 1.5

6) For stem protection tube made of PMMA max. Tr 30 or ACME 1½"

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