

## THROUGH BOLT ANCHOR

## KPT-PRO®

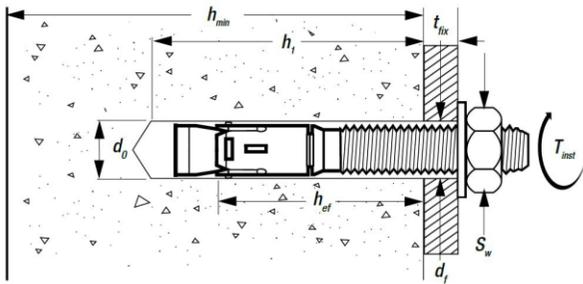
### PRODUCT DESCRIPTION

The KPT-PRO is a fully threaded, torque controlled, wedge expansion anchor which is designed for consistent performance in concrete. The anchor is easy to install and suitable for a variety of base materials. The wide range of available KPT-PRO anchor sizes covers all common capacity

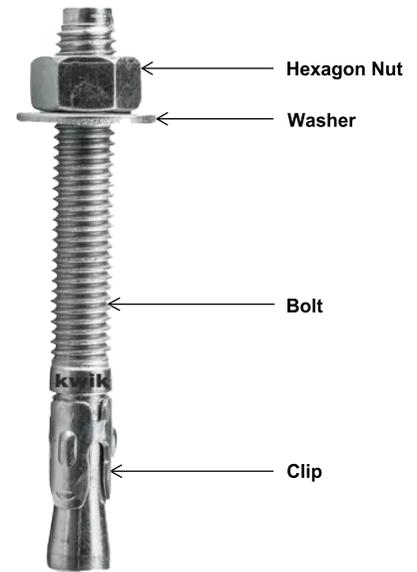
### FEATURES & BENEFITS

- Consistent performance in high and low strength concrete.
- Nominal drill bit size is same as the anchor diameter.
- Anchor can be installed through standard fixture holes.

### INSTALLATION DATA

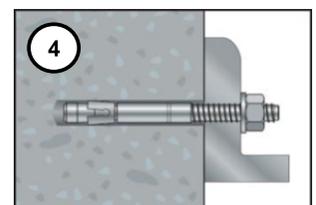
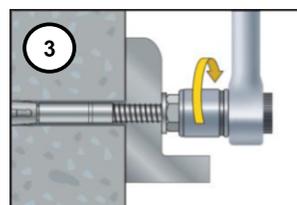
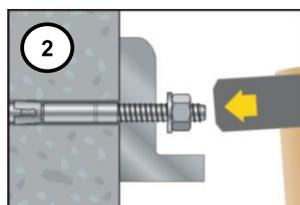
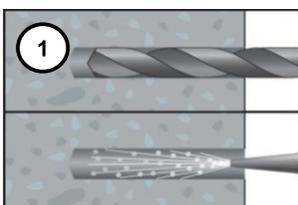


### ASSEMBLY



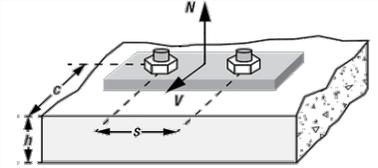
	Notation	Unit	KPT-PRO						KPT-SS-PRO			
			M8	M10	M12	M16	M20	M24	M8	M10	M12	M16
Anchor Diameter	d	[mm]	8	10	12	16	20	24	8	10	12	16
Nominal drill bit diameter	d <sub>0</sub>	[mm]	8	10	12	16	20	24	8	10	12	16
Diameter of hole clearance in fixture	d <sub>f</sub>	[mm]	9	12	14	18	22	26	9	12	14	18
Effective embedment depth 1	h <sub>ef,1</sub>	[mm]	40	60	70	80	110	125	40	60	70	80
Effective embedment depth 2	h <sub>ef,2</sub>	[mm]	60	80	90	100	130	150	60	80	90	100
Drill hole depth for h <sub>ef,1</sub>	h <sub>1,1</sub>	[mm]	55	75	85	100	150	170	55	75	85	100
Drill hole depth for h <sub>ef,2</sub>	h <sub>1,2</sub>	[mm]	75	95	105	120	170	190	75	95	105	120
Minimum member thickness for h <sub>ef,1</sub>	h <sub>min,1</sub>	[mm]	100	120	140	160	200	250	100	120	140	160
Minimum member thickness for h <sub>ef,2</sub>	h <sub>min,2</sub>	[mm]	120	140	160	180	220	270	120	140	160	180
Minimum spacing	s <sub>min</sub>	[mm]	50	55	60	70	95	125	50	55	60	70
Corresponding edge distance	for c ≥	[mm]	90	90	100	130	240	300	90	90	100	130
Minimum edge distance	c <sub>min</sub>	[mm]	55	60	65	85	95	125	55	60	65	85
Corresponding spacing	for s ≥	[mm]	120	150	190	160	240	300	120	150	190	160
Installation torque	T <sub>inst</sub>	[Nm]	25	45	70	120	200	280	25	45	70	120
Torque wrench socket size	S <sub>w</sub>	[mm]	13	17	19	24	30	36	13	17	19	24

### INSTALLATION INSTRUCTIONS



### RECOMMENDED LOADS

- The Following table are meant to give the designer aid in the preliminary design process.
- No responsibility is taken for the correctness of these data.
- The given values are valid for normal concrete C20/25 an static/quasi-static loads with the exact dimensional information given.
- The values in the tables below are design level loads. This assumes a safety factor is included both on the loading and the resistance.



ANCHOR SIZE		M8	M10	M12	M16	M20	M24						
Effective anchorage depth $h_{ef,1}$ & $h_{ef,2}$	[mm]	40	60	60	80	70	90	80	100	110	130	125	150
<b>Tensile <math>N_{rec}</math></b>													
KPT-PRO	[KN]	4.8	6.3	7.7	8.7	10.0	12.5	14.3	18.3	24.0	29.7	28.6	34.6
KPT-SS-PRO	[KN]	4.3	5.7	6.9	7.8	9.0	11.3	12.9	16.5	21.6	26.7	25.7	31.1
<b>Shear <math>V_{rec}</math></b>													
KPT-PRO	[KN]	4.9	5.8	8.5	10.5	12.9	16.9	24.2	24.2	31.0	31.0	44.5	44.5
KPT-SS-PRO	[KN]	4.9	5.8	8.5	10.5	12.9	16.9	24.2	24.2	31.0	31.0	44.5	44.5

Recommended loads are with overall partial safety factor for action = 1.40. The partial safety factors for action depend on the type of loading and shall be taken from national regulations.

### KPT-PRO THROUGH BOLT PRODUCT RANGE

KPT-PRO (Zinc Plated) PRODUCT DESCRIPTION	ARTICLE NO.	FIXTURE THK. $t_{fix}$	WRENCH SIZE $S_w$	BOX QTY.
KPT-PRO M6x75	KPT06075	20	10	100
KPT-PRO M8x75	KPT08075	15	13	100
KPT-PRO M8x100	KPT08100	50	13	100
KPT-PRO M10x75	KPT10075	5	17	50
KPT-PRO M10x100	KPT10100	30	17	50
KPT-PRO M10x125	KPT10125	55	17	50
KPT-PRO M12x100	KPT12100	10	19	25
KPT-PRO M12x125	KPT12125	35	19	25
KPT-PRO M12x150	KPT12150	60	19	25
KPT-PRO M12x200	KPT12200	115	19	25
KPT-PRO M16x100	KPT16100	10	24	20
KPT-PRO M16x125	KPT16125	15	24	20
KPT-PRO M16x150	KPT16150	35	24	20
KPT-PRO M16x200	KPT16200	85	24	20
KPT-PRO M16x250	KPT16250	135	24	20
KPT-PRO M16x300	KPT16300	185	24	20
KPT-PRO M20x125	KPT20125	10	30	10
KPT-PRO M20x150	KPT20150	25	30	10
KPT-PRO M20x200	KPT20200	60	30	10
KPT-PRO M20x250	KPT20250	110	30	10
KPT-PRO M20x300	KPT20300	160	30	10
KPT-PRO M24x200	KPT24200	30	36	10
KPT-PRO M24x300	KTB24300	130	36	10