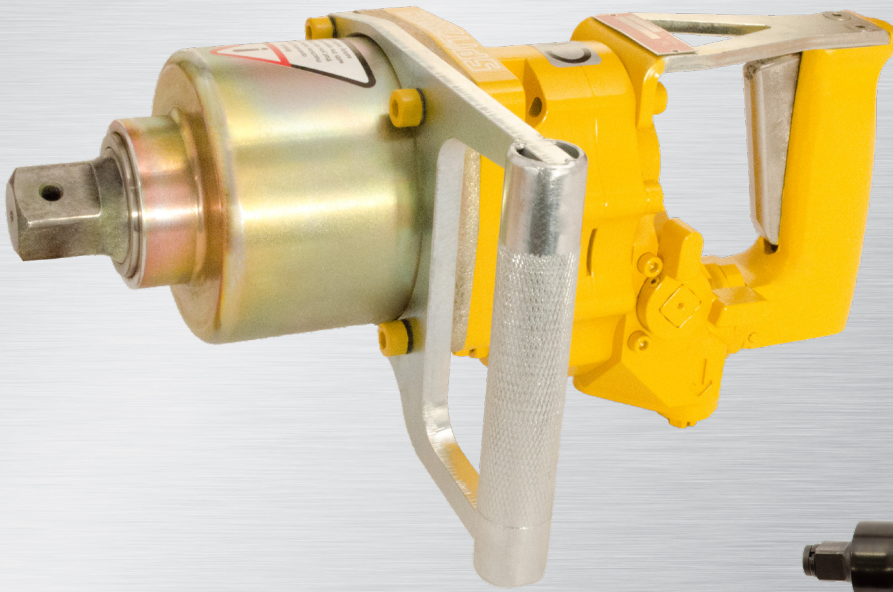


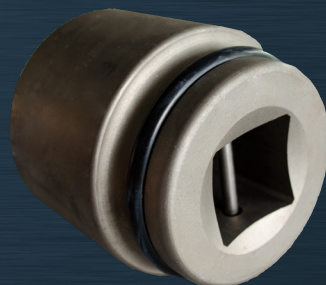


SPITZNAS
CUSTOMIZED POWER SOLUTIONS



IMPACT WRENCHES

TOOLS FOR THE SPECIALIST



PNEUMATIC



HYDRAULIC



ATEX



SYSTEM CONCEPT



Square drive



Torque adjustment



Rotation direction reversible



ATEX-Safets class
approved

Push button actuation



Air inlet and exhaust



Underwater type with additional
exhaust connection



PNEUMATIC

Our handy pneumatic impact wrenches with little weight.



ORDER NO.	ATEX Description	Square drive	for screws up to	Max. tightening torque*	Air consumption	Distance centre/outer edge	Hose ID	Noise level LpA	Vibration level	Weight
			mm	Nm	m³/min	mm	mm	dB(A)	m/s²	kg
6 1034 0010	II2GExhIIBT6Gb	1/2"	M20	610	0.32	47.5	10	90.0	2.6	2.5
6 1035 0010	IM2ExhIMbT6	1/2"	M20	610	0.32	47.5	10	90.0	2.6	3.6

Subject to technical change. *applying on screw strength class 8.8 Performance data at an operating pressure of 6 bar.

PNEUMATIC

Our robust pneumatic impact wrenches for ATEX area of equipment group II.



ORDER NO.	ATEX Description	Square drive	for screws up to	Max. tightening torque*	Air consumption	Distance centre/outer edge	Hose ID	Noise level LpA	Vibration level	Weight
			mm	Nm	m³/min	mm	mm	dB(A)	m/s²	kg
6 1313 0010	II2GExhIIBT6Gb	3/4"	M27	1,300	1.20	47.5	13	102.0	4.8	6.2
6 1317 0010	II2GExhIIBT6Gb	1"	M32	2,100	1.20	47.5	13	102.0	4.0	7.1

Subject to technical change. *applying on screw strength class 8.8 Performance data at an operating pressure of 6 bar.

PNEUMATIC

Our powerful pneumatic impact wrenches with slim design.



ORDER NO.	ATEX Description	Square drive	for screws up to	Max. tightening torque*	Air consumption	Distance centre/outer edge	Hose ID	Noise level LpA	Vibration level	Weight
			mm	Nm	m³/min	mm	mm	dB(A)	m/s²	kg
6 1316 0010	IM2ExhIMbT6	1"	M30	1,350	1.40	45.0	13	96.0	4.5	6.5
6 1316 0020	IM2ExhIMbT6	3/4"	M30	1,350	1.40	45.0	13	96.0	4.5	6.4
6 1316 0050	II2GExhIIBT6Gb	3/4"	M30	1,350	1.40	45.0	13	96.0	4.5	5.6
6 1316 0040	II2GExhIIBT6Gb	1"	M30	1,350	1.40	45.0	13	96.0	4.5	5.7

Subject to technical change. *applying on screw strength class 8.8 Performance data at an operating pressure of 6 bar.

PNEUMATIC

Our specially designed pneumatic impact wrenches for underwater use.



ORDER NO.	ATEX Description	Square drive	for screws up to	Max. tightening torque*	Air consumption	Distance centre/outer edge	Hose ID	Noise level LpA	Vibration level	Weight
			mm	Nm	m³/min	mm	mm	dB(A)	m/s²	kg
6 1316 0070	II2GExhIIBT6Gb	3/4"	M30	1,350	1.40	45.0	13	96.0	4.5	5.6
6 1316 0060	II2GExhIIBT6Gb	1"	M30	1,350	1.40	45.0	13	96.0	4.5	5.7

Subject to technical change. *applying on screw strength class 8.8 Performance data at an operating pressure of 6 bar.

TECHNICAL DATA

SYSTEM CONCEPT



Square drive



Impact mechanism



D-Handle

ATEX-Safety class
approved



Rotation direction reversible



Second handle



Air connection



PNEUMATIC

Our most powerful 3/4" pneumatic impact wrench, usable in ATEX area of equipment group I.



ORDER NO.	ATEX Description	Square drive	for screws up to	Max. tightening torque*	Air consumption	Distance centre/outer edge	Hose ID	Noise level LpA	Vibration level	Weight
			mm	Nm	m³/min	mm	mm	dB(A)	m/s²	kg
6 1312 0010	IM2ExhIMbT6	3/4"	M33	1,800	1.10	49.0	13	92.0	3.2	9.0
Subject to technical change.			*applying on screw strength class 8.8			Performance data at an operating pressure of 6 bar.				

PNEUMATIC

Our most powerful 1" pneumatic impact wrench, usable in ATEX area of equipment group I and II.



ORDER NO.	ATEX Description	Square drive	for screws up to	Max. tightening torque*	Air consumption	Distance centre/outer edge	Hose ID	Noise level LpA	Vibration level	Weight
			mm	Nm	m³/min	mm	mm	dB(A)	m/s²	kg
6 1412 0010	IM2ExhIMbT6	1"	M33	1,800	1.10	49.0	13	92.0	3.2	9.0
6 1410 0010	II2GExhIIBT6Gb	1"	M36	2,200	1.60	57.0	13	92.0	6.2	11.0
6 1411 0010	IM2ExhIMbT6	1"	M36	2,200	1.60	57.0	13	92.0	6.2	13.5
Subject to technical change.			*applying on screw strength class 8.8			Performance data at an operating pressure of 6 bar.				

PNEUMATIC

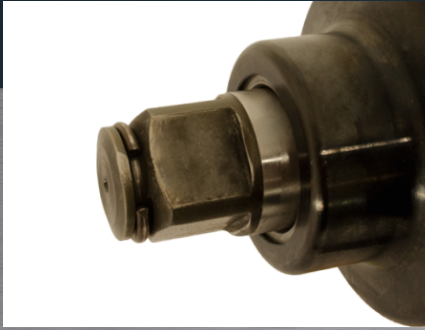
Our most powerful 1 1/2" pneumatic impact wrench, usable in ATEX area of equipment group I and II.



ORDER NO.	ATEX Description	Square drive	for screws up to	Max. tightening torque*	Air consumption	Distance centre/outer edge	Hose ID	Noise level LpA	Vibration level	Weight
			mm	Nm	m³/min	mm	mm	dB(A)	m/s²	kg
6 1417 0040	II2GExhIIBT6Gb	1 1/2"	M56	4,400	1.60	57.0	15	107.0	6.6	12.2
6 1511 0010	IM2ExhIMbT6	1 1/2"	M56	4,400	1.60	57.0	15	92.0	5.5	14.9
Subject to technical change.			*applying on screw strength class 8.8			Performance data at an operating pressure of 6 bar.				

TECHNICAL DATA

SYSTEM CONCEPT



Square drive



Second handle



Rotation direction reversible

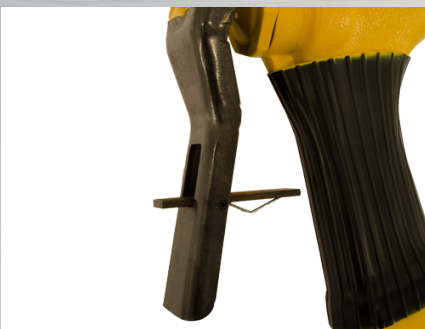


ATEX-Safety class
approved

Latch with locking device

Torque adjustable

Hose couplings



HYDRAULIC

Our hydraulic impact wrenches for the **open hydraulic circuit**.



HYDRAULIC 					OPERATING PRESSURE	140 Bar	ATEX				
ORDER NO.	 ATEX Description	Square drive	for screws up to	Max. torque* (adjustable)	Volume flow	Distance centre/ outer edge	Connection	Noise level LpA	Vibration level	Weight	
			mm	Nm	l/min	mm		dB(A)	m/s ²	kg	
6 1518 0010	IM2ExhIMbT5	3/4"	M30	350-1,700	20-40	45.0	STECKO-10	85.3	3.8	9.0	
6 1519 0010	IM2ExhIMbT5	1"	M30	350-1,700	20-40	45.0	STECKO-10	85.3	3.8	9.0	
Subject to technical change.		*applying on screw strength class 8.8				Performance data at an operating pressure of 140 bar.					

HYDRAULIC

Our hydraulic impact wrenches for the **open hydraulic circuit**,

also usable for underwater operation.

Delivery includes the hydraulic hose set.



HYDRAULIC 					OPERATING PRESSURE	140 Bar	ATEX		UNDERWATER OPERATION 		
ORDER NO.	 ATEX Description	Square drive	for screws up to	Max. torque* (adjustable)	Volume flow	Distance centre/ outer edge	Connection	Noise level LpA	Vibration level	Weight	
			mm	Nm	l/min	mm		dB(A)	m/s ²	kg	
6 1515 0010	II2GExhIIBT5Gb	3/4"	M30	350-1,700	20-40	45.0	M18x1.5	85.3	3.8	7.3	
6 1514 0010	II2GExhIIBT5Gb	1"	M30	350-1,700	20-40	45.0	M18x1.5	85.3	3.8	7.3	
Subject to technical change.		*applying on screw strength class 8.8				Performance data at an operating pressure of 140 bar.					

HYDRAULIC

Our most powerful hydraulic impact wrench for the **open hydraulic circuit**,

also usable for underwater operation.



HYDRAULIC 					OPERATING PRESSURE	140 Bar	ATEX		UNDERWATER OPERATION 		
ORDER NO.	 ATEX Description	Square drive	for screws up to	Max. torque* (adjustable)	Volume flow	Distance centre/ outer edge	Connection	Noise level LpA	Vibration level	Weight	
			mm	Nm	l/min	mm		dB(A)	m/s ²	kg	
6 1520 0010	II2GExhIIBT5Gb	1"	M36	850-2,500	25-45	60.0	3/4"-16UNF-2B	99.2	6.75	10.7	
Subject to technical change.		*applying on screw strength class 8.8				Performance data at an operating pressure of 140 bar.					

HYDRAULIC

Our hydraulic impact wrenches for the **open hydraulic circuit**

also usable for HFA-Emulsion.

Max. operating pressure: 260 bar - Hydraulic oil
300 bar - HFA-Emulsion



HYDRAULIC 					OPERATING PRESSURE	260/300 Bar	ATEX				
ORDER NO.	 ATEX Description	Square drive	for screws up to	Max. torque* (adjustable)	Volume flow Oil/HFA	Distance centre/ outer edge	Connection	Noise level LpA	Vibration level	Weight	
			mm	Nm	l/min	mm		dB(A)	m/s ²	kg	
6 1516 0010	IM2ExhIMbT5	3/4"	M30	350-1,700	9.5/12.0	52.5	STECKO-10	94.5	10.9	7.4	
6 1517 0010	IM2ExhIMbT5	1"	M39	550-3,400	9.5/12.0	52.5	STECKO-10	102.0	14.0	9.3	
Subject to technical change.		*applying on screw strength class 8.8				Performance data at max. operating pressure.					

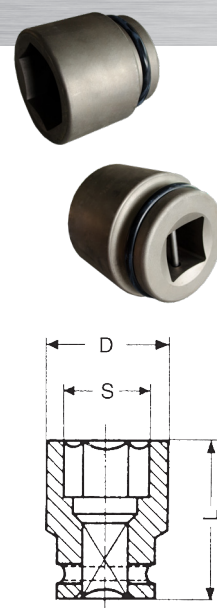
TECHNICAL DATA

SYSTEM ACCESSORIES

HEXAGON SOCKETS, STANDARD LENGTH

The hexagon sockets according to DIN 3129/ISO 2725 are made of super chrome-vanadium-steel, are phosphated and will be supplied with snap ring and pin.

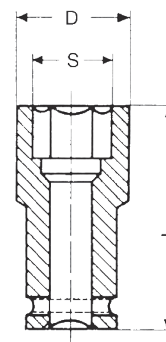
ORDER NO.	Description	Square drive	S	L	D
			mm	mm	mm
9 1408 1290	Hexagon socket, standard length	1/2"	8	40	15
9 1408 1310	Hexagon socket, standard length	1/2"	10	40	17
9 1408 1320	Hexagon socket, standard length	1/2"	13	40	21
9 1408 0110	Hexagon socket, standard length	1/2"	14	40	23
9 1408 0120	Hexagon socket, standard length	1/2"	17	40	26
9 1408 0130	Hexagon socket, standard length	1/2"	19	40	28.5
9 1408 0140	Hexagon socket, standard length	1/2"	22	40	32.5
9 1408 0150	Hexagon socket, standard length	1/2"	24	45	35
9 1408 0160	Hexagon socket, standard length	1/2"	27	50	38
9 1408 0170	Hexagon socket, standard length	1/2"	30	50	42
9 1408 0390	Hexagon socket, standard length	3/4"	17	50	31
9 1408 0400	Hexagon socket, standard length	3/4"	19	50	33.5
9 1408 0410	Hexagon socket, standard length	3/4"	22	50	37
9 1408 0420	Hexagon socket, standard length	3/4"	24	50	40
9 1408 0430	Hexagon socket, standard length	3/4"	27	53	43.5
9 1408 0440	Hexagon socket, standard length	3/4"	30	53	47
9 1408 0450	Hexagon socket, standard length	3/4"	32	57	50
9 1408 0460	Hexagon socket, standard length	3/4"	36	56	52
9 1408 0470	Hexagon socket, standard length	3/4"	41	58	61.5
9 1408 0480	Hexagon socket, standard length	3/4"	46	64	63
9 1408 0580	Hexagon socket, standard length	1"	24	55	42.5
9 1408 0590	Hexagon socket, standard length	1"	27	55	46
9 1408 0600	Hexagon socket, standard length	1"	30	57	50
9 1408 0610	Hexagon socket, standard length	1"	32	57	52
9 1408 0620	Hexagon socket, standard length	1"	36	60	55
9 1408 0630	Hexagon socket, standard length	1"	41	64	64
9 1408 0640	Hexagon socket, standard length	1"	46	69	70
9 1408 0650	Hexagon socket, standard length	1"	50	72	73
9 1408 0660	Hexagon socket, standard length	1"	55	76	82
9 1408 0670	Hexagon socket, standard length	1"	60	82	86
9 1408 0680	Hexagon socket, standard length	1"	65	85	92
9 1408 0790	Hexagon socket, standard length	1 1/2"	41	80	70
9 1408 0800	Hexagon socket, standard length	1 1/2"	46	84	75
9 1408 0810	Hexagon socket, standard length	1 1/2"	50	87	81
9 1408 0820	Hexagon socket, standard length	1 1/2"	55	90	86
9 1408 0830	Hexagon socket, standard length	1 1/2"	60	90	93
9 1408 0840	Hexagon socket, standard length	1 1/2"	65	90	100
9 1408 0850	Hexagon socket, standard length	1 1/2"	70	100	105
9 1408 0860	Hexagon socket, standard length	1 1/2"	75	105	110
9 1408 0870	Hexagon socket, standard length	1 1/2"	80	110	119
9 1408 0880	Hexagon socket, standard length	1 1/2"	85	117	125



HEXAGON SOCKETS, EXTRA LONG

The hexagon sockets according to DIN 3129/ISO 2725 are made of super chrome-vanadium-steel, are phosphated and will be supplied with snap ring and pin.

ORDER NO.	Description	Square drive	S	L	D
			mm	mm	mm
9 1408 0190	Hexagon socket, extra long	1/2"	14	80	21
9 1408 0200	Hexagon socket, extra long	1/2"	17	80	24
9 1408 0210	Hexagon socket, extra long	1/2"	19	80	26
9 1408 0220	Hexagon socket, extra long	1/2"	22	80	30
9 1408 0230	Hexagon socket, extra long	1/2"	24	80	32
9 1408 0240	Hexagon socket, extra long	1/2"	27	80	36.5
9 1408 0510	Hexagon socket, extra long	3/4"	22	95	38
9 1408 0520	Hexagon socket, extra long	3/4"	24	95	40
9 1408 0530	Hexagon socket, extra long	3/4"	27	95	43
9 1408 0540	Hexagon socket, extra long	3/4"	30	95	47
9 1408 0550	Hexagon socket, extra long	3/4"	32	95	49
9 1408 0560	Hexagon socket, extra long	3/4"	36	95	54
9 1408 0690	Hexagon socket, extra long	1"	24	100	42
9 1408 0700	Hexagon socket, extra long	1"	27	100	46
9 1408 0710	Hexagon socket, extra long	1"	30	100	50
9 1408 0720	Hexagon socket, extra long	1"	32	100	51
9 1408 0730	Hexagon socket, extra long	1"	36	100	54
9 1408 0740	Hexagon socket, extra long	1"	41	100	63
9 1408 0750	Hexagon socket, extra long	1"	46	100	70
9 1408 0760	Hexagon socket, extra long	1"	50	110	75
9 1408 0770	Hexagon socket, extra long	1"	55	112	80
9 1408 0780	Hexagon socket, extra long	1"	60	114	85
9 1408 0940	Hexagon socket, extra long	1 1/2"	41	115	70
9 1408 0950	Hexagon socket, extra long	1 1/2"	46	115	77
9 1408 0960	Hexagon socket, extra long	1 1/2"	50	135	82
9 1408 0970	Hexagon socket, extra long	1 1/2"	55	140	88
9 1408 0980	Hexagon socket, extra long	1 1/2"	60	150	94
9 1408 0990	Hexagon socket, extra long	1 1/2"	65	150	101
9 1408 1000	Hexagon socket, extra long	1 1/2"	70	160	107
9 1408 1010	Hexagon socket, extra long	1 1/2"	75	170	113
9 1408 1020	Hexagon socket, extra long	1 1/2"	80	170	120
9 1408 1030	Hexagon socket, extra long	1 1/2"	85	170	126

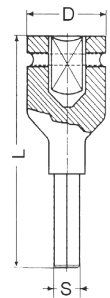


SYSTEM ACCESSORIES

SYSTEM ACCESSORIES

HEXAGON SOCKETS FOR ALLEN HEAD SCREWS

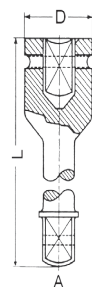
The hexagon sockets for allen head screws according to DIN 3129/ISO 2725 are made of super chrome-vanadium-steel, are phosphated and will be supplied with snap ring and pin.



ORDER NO.	Description	Square drive	S	L	D
			mm	mm	mm
9 1424 0570	Hexagon sockets for allen head screws	1/2"	5	55	30
9 1424 0580	Hexagon sockets for allen head screws	1/2"	6	55	30
9 1424 0590	Hexagon sockets for allen head screws	1/2"	8	55	30
9 1424 0600	Hexagon sockets for allen head screws	1/2"	10	55	30
9 1424 0610	Hexagon sockets for allen head screws	1/2"	12	55	30
9 1424 0540	Hexagon sockets for allen head screws	3/4"	17	85	44
9 1424 0550	Hexagon sockets for allen head screws	3/4"	19	85	44
9 1424 0660	Hexagon sockets for allen head screws	3/4"	22	85	44
9 1424 0670	Hexagon sockets for allen head screws	3/4"	24	85	44
9 1424 0440	Hexagon sockets for allen head screws	1"	17	75	54
9 1424 0450	Hexagon sockets for allen head screws	1"	19	75	54
9 1424 0460	Hexagon sockets for allen head screws	1"	22	75	54
9 1424 0470	Hexagon sockets for allen head screws	1"	24	75	54
9 1424 0710	Hexagon sockets for allen head screws	1 1/2"	17	120	57
9 1424 0720	Hexagon sockets for allen head screws	1 1/2"	19	120	57
9 1424 0730	Hexagon sockets for allen head screws	1 1/2"	22	120	57
9 1424 0740	Hexagon sockets for allen head screws	1 1/2"	24	120	57

EXTENSIONS

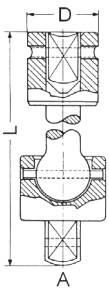
The extensions according to DIN 3129/ISO 2725 are made of super chrome-vanadium-steel, are phosphated and will be supplied with snap ring and pin.



ORDER NO.	Description	Square drive	A	L	D
			mm	mm	mm
9 1420 0050	Extension	1/2"	1/2"	125	25
9 1420 0060	Extension	1/2"	1/2"	250	25
9 1420 0100	Extension	3/4"	3/4"	175	44
9 1420 0110	Extension	3/4"	3/4"	250	44
9 1420 0120	Extension	3/4"	3/4"	330	44
9 1420 0140	Extension	1"	1"	175	54
9 1420 0150	Extension	1"	1"	250	54
9 1420 0160	Extension	1"	1"	330	54
9 1420 0170	Extension	1 1/2"	1 1/2"	250	57
9 1420 0180	Extension	1 1/2"	1 1/2"	380	57
9 1420 0190	Extension	1 1/2"	1 1/2"	500	57

UNIVERSAL JOINTS

The universal joints according to DIN 3129/ISO 2725 are made of super chrome-vanadium-steel, are phosphated and will be supplied with snap ring and pin.



ORDER NO.	Description	Square drive	A	L	D
			mm	mm	mm
9 1422 0040	Universal joint	1/2"	1/2"	75	30
9 1422 0070	Universal joint	3/4"	3/4"	65	44
9 1422 0090	Universal joint	1"	1"	100	54
9 1422 0110	Universal joint	1 1/2"	1 1/2"	175	57

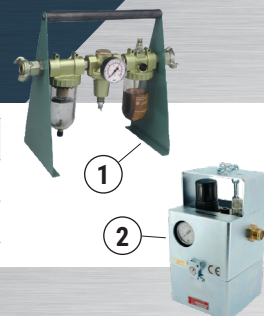


SYSTEM
ACCESSORIES

SYSTEM ACCESSORIES

SERVICE UNITS

ORDER NO.	Pos.	Description
9 2406 0260	1	Portable service unit with pressure regulator 3/4"
9 2406 0650	2	Portable service unit with protection housing and pressure regulator 3/4"



HOSES

ORDER NO.	Description	For type
9 3610 0410	Pneumatic pressure hose ID 13 mm, 2.5 m length, screw-on claw clamp	6 1034, 6 1035
9 3610 0420	Pneumatic pressure hose ID 16 mm, 2.5 m length, screw-on claw clamp	6 1312-6 1412
9 3610 0430	Pneumatic pressure hose ID 19 mm, 2.5 m length, screw-on claw clamp	6 1410-6 1511
2 1317 9010	Hydraulic hose set	6 1515, 6 1514
1 5080 9020	Hydraulic hose set	6 1520



MISC. ACCESSORIES

ORDER NO.	Description
9 9902 0120	Multi oil for cleaning and protection



More accessories on request.

EXAMPLES OF APPLICATION



e.g. ASSEMBLING OF
SUPPORTING MASTS



e.g. DISASSEMBLING OF
UNDERGROUND ROOF
SUPPORTS

0720E