BÖHLER Kb 85 T-FD

Flux cored wire, seamless, high strength, basic type

Classifications

EN ISO 18276-A	EN ISO 18276-B	AWS A5.36	AWS A5.36M
T69 6 Mn2NiCrMo B M21 3 H5	T766T5-0M21A-N4C1M2-UH5	E110T5-M21A8-K4-H4	E760T5-M21A6-K4-H4

Characteristics and typical fields of application

Seamless basic flux cored wire for welding of high strength Nickel-Chromium-Molybdenum alloyed steels with Ar-CO_2 shielding gas.
Features include: excellent weldability in flat and horizontal positions, smooth and bright bead, low spatter losses easy to remove slag, exceptional mechanical properties at low temperatures (-60°C) with low content of diffusible hydrogen (<3ml/100g).

Base materials

S620Q, S620QL, S690Q, S690QL, S620QL1-S690QL1, alform plate 620 M, 700 M, aldur 620 Q, 620 QL, 620 QL1, aldur 700 Q, 700 QL, 700 QL1

ASTM A 514 Gr. F, H, Q ; A 709 Gr. 100 Type B, E, F, H, Q ; A 709 Gr. HPS 100W

Typical analysis of all-weld metal (wt.-%)

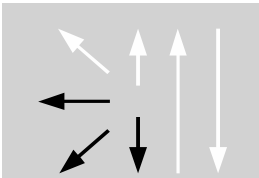
	Gas	C	Si	Mn	Ni	Cr	Mo
wt-%	M21	0.06	0.40	1.40	2.20	0.40	0.40

Mechanical properties of all-weld metal

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V KV J
	MPa	MPa	%	-60°C
u	**740** (≥690)	**800** (770–900)	**20** (≥17)	**80** (≥47)

u untreated, as welded – shielding gas M21

Operating data



Polarity:	Shielding gas:	ø (mm)
DC (+)	(EN ISO 14175) M21	1.0
		1.2
		1.4
		1.6

Welding with standard GMAW power source possible

Approvals

TÜV, ABS, DNV-GL, LR, CE