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# **Injection Mould Cooling Components**



**Injection Mould Cooling Components / Systems:** Cooling of Moulds; for providing suitable cooling, features of moulded material, material shape, mould structure and quantity of heat to be transfered should be known. In cooling with water, cooling channels should not be very close to mould surface. Otherwise, temperature changes can cause thermal shocks on mould surface. Cooling channels should not be so far from mould surface, because in this case, heat transfer should not be provided sufficiently.

Cooling channels may be created 2/3 times far of mould plate channel diameters. Water flowing should be provided to keep mould in certain temperature.

### Effect of Cooling Time on Mould:

Injection Errors:	Solution Methods:
<ul> <li>Tensile - Distortion</li> <li>Sinking - Fragility</li> <li>Cracking - Shrinkage</li> <li>Visible ejector traces</li> <li>Tension whitening</li> </ul>	Cooling period should be increased and cooling system / channels should be controlled.
Quick-release Countings	

#### Quick-release Couplings:

Quick-release Couplings and fittings compatible with mould cooling systems and injection machines are commonly used in plastic - metal injection moulds. To use in water - air and oil flowing, different types are available and when desired mounting / demounting facilities on mould, Quick-release Couplings should be used.

For accurate and efficient cooling in mould cooling system, to choose Coupling / Fitting System to be most suitable to the temperature of your mould and mounting area in the correct way is important. Wide options related to this systems are presented at following pages. We have custom-made production service in all our Cooling Components.









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### Quick-release Couplings Series: 590

Fields of Usage: It is used in cooling systems of plastic, zinc - aluminium diecasting moulds and steam lines - hot oil circuits, water, washing & cooling systems of machines.

### Material Info:

Body & Cover Valve = Brass / O-Ring = Viton Spring - Ring & Ball = Stainless / Coupling Fitting = Brass Operating Pressure = 0 - 15 bar / Flow Capacity = 9 mm Operating Temperature = -5 /  $+180^{\circ}$ 



Valved: Controlled water flow is provided. When fitting is removed, water flow is closed in coupling. Non-valved: When fitting is removed, open circuit.

	Quick-release	Code:	<b>590</b>	IG	(no	n-val	ved)
Coupling Code: 590HGB						(val	ved)
	Order Example	d	d1	d2	d3	ι	เา
	Code x 10	10	7.5	22	10	59	23
	Code x 13	13	10	23	13		

	Quick-release Coupling	Code: Code:	590 590	=G =GB	(no	n-val (val	ved) ved)
5	Order Example	d	d1	d2	d3	l	<b>t</b> 1
	Code x 10	10	7.5	22	13	64	20
	Code x 13	13	10	23			28

Quick-release	Code:	590l	G	(nor	1-val	ved)
Conhind / ao.	Code:	<b>590</b> l	.GB		(val	ved)
Order Example	d	d1	d2	d3	ι	เป
Code x 10	10	7.5	22	10	52	29
Code x 13	13	10	23	13		

Quick-release		Code: 590EG			(non-valved)		
(	Coupling / Male	Code: 5	90E	GB		(valv	red)
	Order Example	d	d1	d2	ι	l1	SW
	Code x 13	BSP 1/4"					
	Code x 17	BSP 3/8"	22	13	5	9	21
	Code x 21	BSP 1/2"	23		52		21
	Code x 16M	M16x1.5				10	

Quick-release			Code:	590D	G	(non-\	valved)
Coupling / Female			Code:	590D	GB	()	valved)
	Order Example		d	d1	d2	ι	SW
	Code x 13	BS	P 1/4"				21
	Code x 17	BS	P 3/8"	222	12	50	21
	Code x 21	BS	P 1/2" 23	23 13	13	52	24
	Code x 16M	M	l6x1.5				21

Diverting Coupling Bridge	Code Code	: 590 : 590	KG (r KGB	non-val <sup>ı</sup> (val <sup>ı</sup>	ved) ved)
Order Example	d	d1	d2	l	l1
Code x 125	13				125
Code x 250		23	10x1	52	250
Code x 500					500